

Xerox® VersaLink® C7000 Color Printer & C7030 Family Color Multifunction Printer Service Manual



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About This Manual

This manual is part of a multinational service documentation system that is structured in the standard Xerox service manual format.

Organization

The service manual is the document used as the primary information source for repairing and maintaining this family of products and is available as EDOC on a CDROM, or in PDF format on a CDROM. The information within the manual is divided into an introduction and 8 other sections.

Section 1 Service Call Procedures

This section is used to start and complete a service call. The procedures in this section will either direct you to a Repair Analysis Procedure (RAP), or identify a faulty component or sub-assembly.

Section 2 Status Indicator Repair Analysis Procedures

This section contains the Repair Analysis Procedures (RAPs) and checkouts necessary to diagnose, isolate and repair faults other than image quality faults.

Section 3 Image Quality

This section contains the Image Quality Repair Analysis Procedures (IQ RAPs), checkouts and setup procedures necessary to diagnose, isolate and repair image quality faults.

Section 4 Repairs and Adjustments

This section contains the instructions for removal, replacement, and adjustment of parts within the machine.

Section 5 Parts List

This section contains the detailed and illustrated spare parts list. Any part that is spared or that must be removed to access a spared part is illustrated.

Section 6 General Procedures and Information

This section contains all other procedures, product specifications and general information. It also contains Tag/MOD information. The abbreviations used in this Manual are in **GP 40** Glossary of Terms, Acronyms and Abbreviations.

Section 7 Wiring Data

This section contains the PJ locations, wiring diagrams and block schematic diagrams (BSDs).

Section 8 Product Technical Overview

This section contains technical details of the machine.

Publication Comments Sheet

A Publication Comment Sheet is provided at the rear of the PDF version of the manual.

How To Use This Manual

Always start with the Service Call Procedures, Section 1. Perform Initial Actions and verify the problem, then follow the directions given.

How to Differentiate Between Machine Variants

When a procedure, parts list description or other reference is unique across different machine variants, the appropriate variant name will be quoted. For example, C7030F (multi-function printers) or C7000 (single-function printer). Any artwork will also be variant-specific.

C7030F includes the following model variants:

- Xerox® VersaLink® C7020 Color Multifunction Printer
- Xerox® VersaLink® C7025 Color Multifunction Printer
- Xerox® VersaLink® C7030 Color Multifunction Printer

C7000 refers to the following model only:

- Xerox® VersaLink® C7000 Color Printer

NOTE: This manual services all configurations of the machine. Ignore references to options not installed on the machine.

Warnings, Cautions And Notes



A warning is used whenever an operating or maintenance procedure, practice, condition or statement, if not strictly observed, could result in personal injury.

A translated version of all warnings is in **Translation of Warnings**.



A caution is used whenever an operation or maintenance procedure, practice, condition or statement, if not strictly observed, could result in damage to the equipment.

NOTE: A note is used where it is essential to highlight a procedure, practice, condition or statement.

Use of the Block Schematic Diagrams

Block schematic diagrams (BSDs) are included in Section 7 (Wiring Data). The BSDs show the functional relationship of the electrical circuitry to any mechanical, or non-mechanical, inputs or outputs throughout the machine. Inputs and outputs such as motor drive, mechanical linkages, operator actions, and air flow are shown. The BSDs will provide an overall view of how the entire subsystem works.

It should be noted that the BSDs do not contain an input power block referring to Chain 1. It will be necessary to refer to the **Wiring Diagrams** in order to trace a wire back to its source.

Change History

This page gives information on major changes to the service manual. Go to the relevant update.

- [BUS Update December 2017](#)

BUS Update December 2017

The following procedures are updated:

- SCP 3 Fault Analysis
- SCP 4 Subsystem Maintenance
- 005-122 DADF Simplex/Side 1 Pre Registration Sensor On Jam RAP
- 005-123 DADF Simplex/Side 1 Registration Sensor On Jam RAP
- 005-125, 005-145 DADF Registration Sensor Off Jam RAP
- 005-131, 005-132 DADF Invert Sensor On Jam During Inverting RAP
- 005-134, 005-139 DADF Invert Sensor Off Jam RAP
- 005-135 DADF Side 2 Pre Registration Sensor On Jam RAP
- 005-136 DADF Side 2 Registration Sensor On Jam RAP
- 005-147 DADF Pre Registration Sensor Off Jam During Inverting RAP
- 005-288 Home Position Sensor Fail RAP
- 016-210, 506, 777, 780, 798 HDD Error RAP
- 016-513 SMTP Server Reception Error RAP
- 016-574 FTP Host Name Solution Error RAP
- 016-579 FTP Scanning Picture Preservation Place Error RAP
- 016-580 FTP File Name Acquisition Failure RAP
- 016-583, 016-584 FTP Folder Creation Failure RAP
- 016-748, 774, 775, 778, 981 HD Full RAP
- 016-757 Auditron Invalid User RAP
- 016-758 Auditron Disabled Function RAP
- 016-759 Auditron Limit Reached RAP
- 016-767 Invalid Email Address RAP
- 016-768 Invalid Sender Address RAP
- 016-770 Direct Fax Function Canceled RAP
- 016-781 Server Connect Error RAP
- 017-714 SMTP Over SSL Fail RAP
- 018-406 Setting Status of IP Address (IPv4) RAP
- 018-407 Setting Status of IP Address (IPv6) RAP
- 018-427 Duplicate IP Address Range WiFi and WiFi Direct RAP
- 018-500, 501, 503, 504, 506, 507, 508 CA Server Error RAP
- 018-502 SMB Login Failure RAP
- 018-505 SMB-DOS Protocol Error RAP
- 018-590 Same Name Exists RAP
- 018-592, 018-593 Lock Folder Fail RAP
- 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP
- 116-314 Ethernet Address Fail RAP
- 116-324 Exception Fail RAP
- 116-348, 349, 358, 360, 374 Redirecter Fail RAP
- 116-355, 363, 367, 370, 373, 376 Fatal Error RAP
- 116-378, 379, 395 MCR/MCC Soft Fail RAP
- 116-399 Initialization RAP
- 116-714 HP-GL/2 Command Error RAP
- 124-312, 124-357 DC132 Error 12 RAP
- 124-313, 124-356 DC132 Error 10 RAP
- 124-315, 317, 355 DC132 Error 02, 04 and 14 RAP
- 124-319 DC132 Error 08 RAP
- 124-323 DC132 06 RAP
- 124-325 Billing Restoration Fail RAP
- IQ1 Image Quality Entry RAP
- REP 13.13 Stack Height Sensors 1 and 2
- dC945 IIT Calibration
- GP 1 Diagnostics Entry
- GP 4 Machine Software
- GP 10 How to Switch Off the Machine or Switch On the Machine
- GP 13 Network Clone Procedure
- GP 15 Paper and Media Size Specifications
- GP 25 Ethernet Crossover Cable Setup
- GP 29 System Administrator Password Reset
- GP 41 Foreign Device Interface Setup
- Change Tags TAG:002
- PTO - System Overview
- PTO - Main Power
- PTO - DADF
- PTO - Paper Supply and Feed
- PTO - Bypass tray, revised Figure 18
- PTO - Drum Cartridge (Overview)
- PTO - Fuser Life
- PTO - Tray APS Sensors and Size Sensors
- PTO - Print Transportation Overview
- GP 1 Diagnostics Video added to service manual interface
- GP 4 Software Video added to service manual interface

Mod/Tag Identification

Figure 1 shows the Mod/Tag identification symbols.

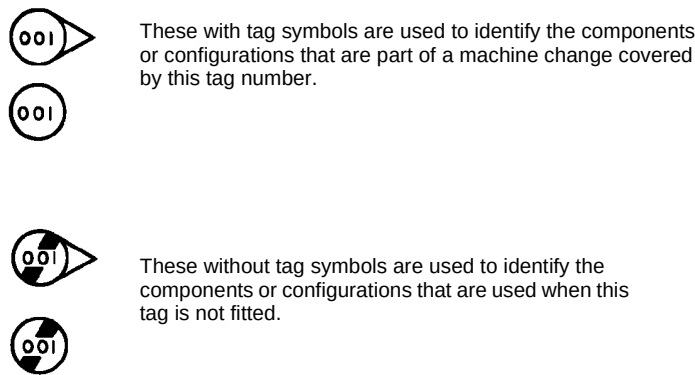


Figure 1 Mod/Tag identification symbols

C-1-0419-A

Voltages Resistances and Tolerances

For AC power specifications, refer to GP 17 Electrical Power Requirements.

DC Voltage Levels and Tolerances

DC voltages should be measured between an available test point and a machine ground. Table 1 shows the range of the common voltages.

Table 1 DC Voltage Levels	
Nominal Voltage	Voltage Tolerance Range
0V	0.00 to 0.10V
+3.3V standby	+3.23V to +3.43V
+3.3V	+3.23V to +3.43V
+5V and +5V standby	+4.75V to +5.25V
+12V	+11.4V to +12.6V
+24V	+23.28V to +25.73V

Non-standard voltage levels will be quoted on the relevant wiring diagram or BSD. All other voltage levels are plus or minus 10%.

Resistance Tolerances

All resistance measurement tolerances are plus or minus 10%, unless otherwise stated in the procedure.

DC Signal Nomenclature

Figure 1 shows the signal nomenclature used in the BSDs.

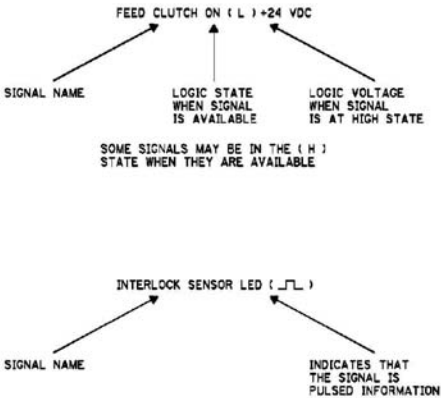


Figure 1 Signal Nomenclature

TC-1-0158-A

Table 2 shows the signal tolerances.

Table 2 Signal tolerances

Signal Voltage	(H) Logic Level	(L) Logic Level
+5V	+3.85V or greater	At or near 0.8V
+3.3V	+2V or greater	At or near 0.8V

Non standard signal tolerances will be quoted on the relevant circuit diagram.

NOTE: The logic level shown with the signal name will be the actual signal as measured with a service meter. This will not necessarily be the same as the logic state shown on the diagnostic screen.

Safety Information

The WARNING that follows is for general guidance when live working.



WARNING

Do not work in a confined space. 1m (39 inches) space is needed for safe working.

Safety Icons

The safety icons that follow are displayed on the machine:

ESD Caution Symbol



CAUTION

Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Location Arrow Symbol

The location arrow symbol points to the location to install, to gain access to, or to release an object.



Hot Surface Symbol

This symbol indicates hot surfaces. Take care when servicing the machine.



Lethal Voltage Symbol

This symbol indicates potentially lethal voltages. Take care when servicing the machine when the power cord is connected.



Toner Cartridge

The product contains a toner cartridge that is recyclable. Under various state and local laws, it may be illegal to dispose of the cartridge into the municipal waste. Check with the local waste officials for details on recycling options or the proper disposal procedures.

Fuses



Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

Part Replacement

Only use genuine Xerox approved spare parts or components to maintain compliance with legislation and safety certification. Also refer to [GP 21](#) Restriction of Hazardous Substances (RoHS).

Disassembly Precautions

Do not leave the machine with any covers removed at a customer location.

Reassembly Precautions

Use extreme care during assembly. Check all harnesses to ensure they do not contact moving parts and do not get trapped between components.

General Procedures

Observe all warnings displayed on the machine and written in the service procedures. Do not attempt to perform any task that is not specified in the service procedures.

Health and Safety Incident reporting

I. Summary

This section defines requirements for notification of health and safety incidents involving Xerox products (equipment and materials) at customer locations.

II. Scope

Xerox Corporation and subsidiaries worldwide.

III. Objective

To enable prompt resolution of health and safety incidents involving Xerox products and to ensure Xerox regulatory compliance.

IV. Definitions

Incident:

An event or condition occurring in a customer account that has resulted in injury, illness or property damage. Examples of incidents include machine fires, smoke generation, physical injury to an operator or service representative. Alleged events and product conditions are included in this definition.

V. Requirements

Initial Report:

1. Xerox organizations shall establish a process for individuals to report product incidents to Xerox Environment Health and Safety within 24 hours of becoming aware of the event.
2. The information to be provided at the time of reporting is contained in Appendix A (Health and Safety Incident Report involving a Xerox product).
3. The initial notification may be made by the method that follows:
 - Email Xerox EH&S at: usa.product.incident@xerox.com.
 - Fax Xerox EH&S at: 1-585-422-8217 (internet 8*222-8217).

NOTE: If sending a fax, please also send the original via internal mail.

Responsibilities for resolution:

1. Business Groups/Product Design Teams responsible for the product involved in the incident shall:
 - a. Manage field bulletins, customer correspondence, product recalls, safety retrofits.
 - b. Fund all field retrofits.
2. Field Service Operations shall:
 - a. Preserve the Xerox product involved and the scene of the incident inclusive of any associated equipment located in the vicinity of the incident.
 - b. Return any affected equipment/part(s) to the location designated by Xerox EH&S and/or the Business Division.
 - c. Implement all safety retrofits.
3. Xerox EH&S shall:
 - a. Manage and report all incident investigation activities.
 - b. Review and approve proposed product corrective actions and retrofits, if necessary.
 - c. Manage all communications and correspondence with government agencies.
 - d. Define actions to correct confirmed incidents.

VI. Appendices

The Health and Safety Incident Report involving a Xerox Product (Form # EH&S-700) is available in the locations that follow:

- On electronic documentation (EDOC), located in the Library.
- In the hardcopy, located at the end of the manual.

Translation of Warnings



WARNING

A warning is used whenever an operating or maintenance procedure, practice, condition or statement, if not strictly observed, could result in personal injury.

DANGER: Une note Danger est utilisée chaque fois qu'une procédure d'utilisation ou de maintenance peut être cause de blessure si elle n'est pas strictement respectée.

AVVERTENZA: Un segnale di avvertenza è utilizzato ogni volta che una procedura operativa o di manutenzione, una pratica, una condizione o un'istruzione, se non strettamente osservata, potrebbe causare lesioni personali.

VORSICHT: Weist darauf hin, dass ein Abweichen von den angeführten Arbeits- und Wartungsanweisungen gesundheitliche Schäden, möglicherweise sogar schwere Verletzungen zur Folge haben kann.

AVISO: Un aviso se utiliza siempre que un procedimiento de operación o mantenimiento, práctica o condición puede causar daños personales si no se respetan estrictamente.



WARNING

Do not work in a confined space. 1 m (39 inches) space is needed for safe working.

DANGER : Ne pas travailler dans un espace restreint. 1 mètre d'espace est nécessaire pour un dépannage en toute sécurité.

AVVERTENZA: Non lavorare in uno spazio limitato; è necessario uno spazio di almeno un metro attorno alla macchina per la sicurezza dell'operatore.

VORSICHT: Nur mit ausreichendem Bewegungsspielraum (1 m) arbeiten.

AVISO: No trabaje en un espacio reducido. Se necesita 1 metro de espacio para trabajar con seguridad.



WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

DANGER : Ne pas installer de fusible de type ou de calibre différent. Il existe un risque de surchauffe voire d'incendie.

AVVERTENZA: per evitare rischi di surriscaldamento o d'incendio, non installare un fusibile di tipo o carica diversi da quelli esistenti.

VORSICHT: Keine Sicherungen anderer Art oder anderer Leistung auf dem IOT-PWB installieren - Überhitzungs- und Brandgefahr.

AVISO: No instale un fusible de potencia o tipo distinto. Un fusible de potencia o tipo distinto puede producir sobrecalentamiento y el riesgo de incendio.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP XX. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Assurez-vous que la machine est hors tension lorsque vous effectuez des tâches ne nécessitant pas d'alimentation électrique. Reportez-vous à GP XX. Débranchez le câble d'alimentation pour prévenir tout risque d'électrocution. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves. De plus, certaines pièces, lorsqu'elles sont en mouvement, peuvent être source de blessures graves.

AVVERTENZA: Accertarsi di isolare la macchina dall'alimentazione elettrica quando si eseguono attività che non richiedono elettricità. Vedere GP XX. Scollegare il cavo di alimentazione. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Sicherstellen, dass die Stromversorgung des Geräts bei Arbeiten, die keinen Strom erfordern, ausgeschaltet ist. Siehe auch GP XX. Den Netzstecker ziehen. Andernfalls besteht Stromschlaggefahr und Verletzungsgefahr durch bewegliche Teile.

AVISO: Asegúrese de mantener la máquina aislada de la energía eléctrica mientras realiza tareas que no necesitan electricidad. Consulte GP XX. Desconecte el cable de alimentación. La energía eléctrica puede producir lesiones o incluso la muerte. Las piezas sueltas pueden producir lesiones.



WARNING

Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Mettez la machine hors tension. Reportez-vous à GP 10. Déconnectez le cordon d'alimentation de l'alimentation du client lorsque vous réalisez des tâches qui ne nécessitent pas d'électricité. L'électricité peut être à l'origine de blessures, voire d'un accident mortel. Les pièces amovibles peuvent être à l'origine de blessures.

AVVERTENZA: Spegner la macchina. Vedere GP 10. Scollegare il cavo di alimentazione dall'alimentatore quando si eseguono attività che non richiedono elettricità. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Schalten Sie die Stromversorgung der Maschine ab. Siehe auch GP 10. Ziehen Sie das Stromkabel ab, wenn Sie Aufgaben ausführen, für die keine Stromversorgung benötigt wird. Stromschläge können Todesfällen oder Verletzungen verursachen. Bewegliche Teile können zu Verletzungen führen.

AVISO: Apague la electricidad de la máquina. Consulte el GP 10. Desconecte el cable de alimentación eléctrica de la toma de pared mientras esté realizando tareas que no necesiten corriente. La electricidad puede causar daños o la muerte. Las partes móviles pueden causar daños.



WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

DANGER : Prendre des précautions lors du relevé de la tension de la prise de courant alternatif. L'électricité peut entraîner des blessures graves voire mortelles.

AVVERTENZA: Procedere con cautela durante la misurazione della tensione CA della rete. L'elettricità può causare infortuni o morte.

VORSICHT: Bei der Netzspannungsprüfung stets vorsichtig vorgehen

AVISO: Tenga cuidado al medir la tensión de la línea de alimentación de corriente alterna. La electricidad puede causar lesiones e incluso la muerte.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Assurez-vous que la machine est hors tension lorsque vous effectuez des tâches ne nécessitant pas d'alimentation électrique. Reportez-vous à GP 10. Débranchez le câble d'alimentation pour prévenir tout risque d'électrocution. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves. De plus, certaines pièces, lorsqu'elles sont en mouvement, peuvent être source de blessures graves.

AVVERTENZA: Accertarsi di isolare la macchina dall'alimentazione elettrica quando si eseguono attività che non richiedono elettricità. Vedere GP 10. Scollegare il cavo di alimentazione. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Sicherstellen, dass die Stromversorgung des Geräts bei Arbeiten, die keinen Strom erfordern, ausgeschaltet ist. Siehe auch GP 10. Den Netzstecker ziehen. Andernfalls besteht Stromschlaggefahr und Verletzungsgefahr durch bewegliche Teile.

AVISO: Asegúrese de mantener la máquina aislada de la energía eléctrica mientras realiza tareas que no necesitan electricidad. Consulte GP XX. Desconecte el cable de alimentación. La energía eléctrica puede producir lesiones o incluso la muerte. Las piezas sueltas pueden producir lesiones.



WARNING

Do not touch the fuser while it is hot.

DANGER : Ne pas toucher au four pendant qu'il est encore chaud.

AVVERTENZA: Non toccare il fonditore quando è caldo.

VORSICHT: Fixierbereich erst berühren, wenn dieser abgekühlt ist.

AVISO: No toque el fusor mientras está caliente.



WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

DANGER : Exécuter cette procédure avec précaution. La présence de bords tranchants peut entraîner des blessures.

AVVERTENZA: procedere con cautela durante questa procedura. Possono essere presenti oggetti con bordi taglienti pericolosi.

VORSICHT: Bei diesem Vorgang vorsichtig vorgehen, damit keine Verletzungen durch die scharfen Kanten entstehen.

AVISO: Tenga cuidado al efectuar este procedimiento. Puede haber bordes afilados que podrían producir lesiones.



WARNING

Do not use the power button as a safety disconnect device. The power button is not a disconnect device. Disconnect the power cord from the supply to isolate the equipment.

DANGER : Ne vous servez pas de l'interrupteur comme d'un dispositif de déconnexion. L'interrupteur n'est pas un dispositif de déconnexion. Débranchez le câble d'alimentation de la prise électrique pour isoler l'appareil.

AVVERTENZA: L'interruttore di alimentazione non è un dispositivo di disconnessione di sicurezza e pertanto non va utilizzato come tale. Per isolare la macchina, scollegare il cavo di alimentazione dalla presa elettrica.

VORSICHT: Zur Unterbrechung der Gerätestromzufuhr nicht den Betriebsschalter verwenden, sondern das Netzkabel aus der Steckdose ziehen, an die das Gerät angeschlossen ist. Nur dann ist der Drucker vollständig vom Stromnetz getrennt.

AVISO: No utilice el botón de encendido/apagado como dispositivo de desconexión de seguridad. El botón de encendido/apagado no es un dispositivo de desconexión. Desconecte el cable de alimentación de la fuente de energía para aislar el equipo.

1 Service Call Procedures

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SCP 1 Initial Actions

Service Call Procedures are used at the beginning of a service call. Use Initial Actions to collect information about the machine performance.

Also refer to [SCP 6](#) Machine Features.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.



Do not work in a confined space. 1m (39 inches) space is needed for safe working.

1. Take note of problems, error messages or error codes. If necessary, refer to [GP 2](#) Fault Codes and History Files.
2. Switch off, then switch on the machine, [GP 10](#).
3. Ask the operator to describe or demonstrate the problem.
4. If the problem is the result of an incorrect action by the operator, refer the operator to the user documentation.
5. Check the steps that follow:
 - a. The power lead is connected to the wall outlet and to the machine.
 - b. Documents are not loaded in the DADF or on the document glass.
 - c. The paper is loaded correctly.
 - d. All paper trays are closed.
 - e. All doors are closed.
 - f. If telephone line cables are installed, ensure that the cables are connected between the line socket and the wall jack.
 - g. If telephone line cables are installed, ensure that the customer telephone line is functioning.
6. Check the machine service log book for previous actions that are related to this call.
7. Go to [SCP 2](#) Call Actions.

SCP 2 Call Actions

Use Call Actions to perform any general actions before starting to diagnose the fault.

Procedure

1. If this is the first service call to this machine, if possible, perform the actions that follow:
 - a. If the Install Wizard has failed to install the information from the dongle, obtain a new install dongle, go to [GP 26](#) Replacement Dongle Process
 - b. Check the machine configuration with the customer. Check that all the required hardware and software is installed. Check that all the required hardware and software is enabled.
 - c. Check that all the machine settings are entered correctly.
 - d. Mark off the hardware options, software options or Tags installed on the Tag matrix cards.
 - e. Enter the machine information and the customer information in the service log book.
2. Review the copy, print and fax samples.
3. Ensure the user access settings are correct. If necessary refer to the user documentation.
4. If necessary, perform [GP 13](#) Network Clone Procedure.

NOTE: The clone file must be taken whenever the customer changes the network controller setting or after the system software is changed.

5. Before switching off the machine or clearing the memory, check for a customer job in the memory.
6. Check and record the total impressions usage counter.
7. Go to [SCP 3](#) Fault Analysis.

SCP 3 Fault Analysis

Use Fault Analysis to identify the appropriate RAP to perform based on the machine fault or symptoms.

Procedure



CAUTION

Do not expose the drum cartridges, PL 90.20 to light for more than 30 minutes. If necessary, remove the drum cartridges, then place in a black bag.

Fault Codes

If a fault code is displayed, go to the relevant RAP. Also refer to [Unresolved Faults](#).

Image Quality Defects

If the image quality is defective, go to the [IQ1](#) Image Quality Entry RAP.

Unresolved Faults

If a fault cannot be resolved using the appropriate RAP, and only if instructed by 2nd level support, obtain a device log. Refer to [GP 19](#) Obtaining Audit and Device Logs. Escalate the problem to 2nd level support.

Other Problems

- For suspected power distribution faults, refer to the following:
 - [01A](#) AC Power RAP.
 - [01B](#) +5VDC Power Fault RAP.
 - [01C](#) +24VDC Power Fault RAP.
 - [Wiring Diagrams](#)
- Scan to file failure when using FTP or SMP protocols. Perform the [016A](#) Scan to Network Error Entry RAP.
- For unresolved faults that occur during start up of the device, perform the [OF1](#) POST Error RAP.
- For fax faults without a fault code, perform the [020A](#) Fax Entry RAP.
- If the customer requires a billing plan or region change, go to [GP 27](#) Billing Plan/Region Conversion Process.
- If the customer requires a billing impression mode change, go to [GP 28](#) Billing Impression Mode Change Process.

Additional Information

If necessary, refer to the general procedures and information that follow:

- [GP 1](#) Diagnostics Entry.
- [GP 2](#) Fault Codes and History Files.
- [GP 3](#) Device Information.
- [GP 4](#) Machine Software.
- [GP 5](#) Miscellaneous Checks.
- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

- [GP 9](#) How to Check a Switch.
- [GP 10](#) How to Switch Off the Machine or Switch On the Machine.
- [GP 11](#) How to Safely Lift or Move Heavy Modules.
- [GP 12](#) Machine Lubrication.
- [GP 13](#) Network Clone Procedure.
- [GP 14](#) Printing Reports.
- [GP 15](#) Paper and Media Size Specifications.
- [GP 16](#) Installation Space Requirements.
- [GP 17](#) Electrical Power Requirements.
- [GP 18](#) Environmental Data.
- [GP 19](#) Obtaining Audit and Device Logs.
- [GP 20](#) First Copy/Print Out Time and Power On Time.
- [GP 21](#) Restriction of Hazardous Substances (RoHS).
- [GP 22](#) Special Boot Modes.
- [GP 23](#) Customer Administration Tools.
- [GP 24](#) How to Set the Date and Time.
- [GP 25](#) Ethernet Crossover Cable Setup.
- [GP 26](#) Replacement Dongle Process.
- [GP 27](#) Billing Plan/Region Conversion Process.
- [GP 28](#) Billing Impression Mode Change Process.
- [GP 29](#) System Administrator Password Reset.
- [GP 30](#) How to Print the Fax Reports.
- [GP 31](#) Print/Copy Orientation Definitions.
- [GP 40](#) Glossary of Terms, Acronyms and Abbreviations.
- [GP 41](#) Foreign Device Interface Setup.

SCP 4 Subsystem Maintenance

Use Subsystem Maintenance to identify potentially worn components that should be replaced to prevent further faults, and to perform routine cleaning and lubrication of the machine.

Procedure



WARNING

Switch off the electricity to the machine, **GP 10**. Disconnect the power lead from the customer supply while performing tasks that do not need electricity. Electricity can cause the death or injury. Moving components can cause the injury.

Go to the correct procedure:

- [Service Checks](#)
- [Installation of New Parts](#)
- [HFSI](#)
- [How to Clean the Machine](#)
- [Drum Cartridge Handling](#)

Service Checks

Perform the actions in [Table 1](#) at the indicated service interval.

Table 1 Service actions

Servicing Items	Service Details	Service Interval
IQ check	Check the overall copy quality using a test chart. Check for uneven density, blank areas, drum scratches, heat roll scratches, etc. in A3 halftone.	Every visit
Clean the machine interior	Check and clean the paper transport roller (including the bypass tray). Clean any toner residue in the paper transport path. Clean any contamination and paper dust from the jam sensors.	300K feeds
	Clean the operating parts around the toner cartridges, PL 90.05 and drum cartridges, PL 90.20 .	Every visit
	Use the cleaning assembly, PL 28.05 Item 4 , stored in the front cover, PL 28.05 Item 5 , to clean each of the 4 print head assemblies, PL 60.35 Item 1 .	
Clean the optics and DADF	1. Clean the document cushion, PL 5.05 Item 1 . Use an optical cleaning cloth to clean the surface of the document glass, PL 60.10 Item 9 and the CVT glass, PL 60.10 Item 8 . 2. Clean the DADF nudger and feed rolls, PL 5.25 Item 2 and the retard roll, PL 5.65 Item 4 .	1. Every visit 2. 10K feeds

Table 1 Service actions

Servicing Items	Service Details	Service Interval
Safety Check	Ensure that the power cords are not cracked and no wires are exposed. Ensure that an extension cord with insufficient length or power cord outside the specification, such as an off-the-shelf power strip, is being used. Ensure that a single socket does not have multiple power plugs plugged into it.	Every visit

Installation of New Parts

The design life of the major components is shown in [Table 2](#).

Table 2 Design life

Part	Life	PL Ref.
DADF feed, nudger and retard rolls	200K feeds	PL 5.25 Item 2 and PL 5.65 Item 4
Fuser	100K prints or when IOT power on time exceeds 18,000,000 seconds.	PL 10.05 Item 2
IBT unit	20000K prints	PL 90.45 Item 3
2nd BTR unit	20000K prints	PL 90.40 Item 5
Drum cartridges (Y, M,C,K)	80K pages	PL 90.20
Developer Units (Y, M,C,K)	20/25ppm = 400K Prints 30/35ppm = 480K prints	PL 90.30 Item 1
Tray 1 feed, nudger and retard rolls	300K feeds	PL 80.11
Bypass tray feed and nudger rolls and retard pad	50K feeds	PL 70.40
Tray 2 feed, nudger and retard rolls	300K feeds	PL 80.25
Tray 3 feed, nudger and retard rolls	300K feeds	PL 80.25
Tray 4 feed, nudger and retard rolls	300K feeds	PL 80.25

HFSI

For High Frequency Service Items (HFSI), refer to [dC135](#) CRU/HFSI Status.

How to Clean the Machine

Use a dry lint free cloth or a lint free cloth moistened with water for all cleaning unless directed otherwise. Wipe with a dry lint free cloth if a moistened cloth is used.

1. Feed Components (Rolls and Pads)

Use a dry lint free cloth or a lint free cloth moistened with water. Wipe with a dry lint free cloth if a moistened cloth is used.

2. Toner Dispense Units

Vacuum the toner dispense units.

3. Jam Sensors

Clean the sensors with a dry cotton swab.

4. Scanner

- a. Switch off the power and allow the exposure lamp to cool off.
- b. Using the optical cleaning cloth, clean the front and rear of the document glass, document cover, white reference strip, reflector, and mirror.
- c. Clean the exposure lamp with a clean cloth and film remover.
- d. Clean the lens with lens and mirror cleaner and lint free cloth.

5. DADF

Check the paper path for debris or damage. Clean the rolls with a clean cloth and film remover as required.

6. Document Glass and Constant Velocity Transport Glass

Refer to [ADJ 60.5](#) Optics Cleaning Procedure.

7. Finisher

Check the paper path for debris or damage. Clean the finisher with a dry lint free cloth.

Drum Cartridge Handling

- The drum cartridges must be protected from light shock and mechanical damage.
- Do not expose the photoreceptor drum to bright lights for extended periods.
- Whenever the drum cartridge is removed, place the drum cartridge in the black plastic bag supplied with the machine. Store the drum cartridge in a safe place on a clean flat surface, to avoid damage to the photoreceptor drum surface.
- Place the drum cartridge in the black bag if the left door is opened for long periods.

SCP 5 Final Actions

Use Final Actions to verify the correct operation of the machine and to complete the service call.

Procedure

Perform the steps that follow. If a fault is identified, go to [SCP 3](#) Fault Analysis:

1. If necessary, re-connect the machine to the customer's network.
2. If necessary, perform [GP 13](#) Network Clone Procedure.

NOTE: The clone file will need to be taken whenever the system software is changed.

3. Perform the relevant maintenance procedures. Refer to [SCP 4](#) Subsystem Maintenance.
4. Ensure that the machine has the latest available software loaded.
5. Operate the machine in all modes. Make the copies and prints from all trays. Use the DADF and the document glass.
6. Make copies and/or prints from all trays. Check the registration and copy quality. To reset the registration, perform [dC126](#) System Registration Adjustment. For copy quality defects, perform the [IQ1](#) Image Quality Entry RAP.
7. Make a proof copy or print of a customer document.
8. If some of the customer's selections were changed, return the selections to the customer settings.
9. Mark off the hardware options, software options or Tags installed on the Tag matrix cards.
10. If some changes were made to the configuration or options were added, print the configuration report. Store the configuration report with the machine log book. Discard the previous version of the configuration report.
11. Log the usage counters.
12. If necessary, provide the customer with training.
13. Remove and destroy all copies of test patterns.
14. Ensure the machine and service area are clean.

SCP 6 Machine Features

Configuration Options

The Xerox® VersaLink® C7025/C7030/C7035 Color Multifunction Printer and the Xerox® VersaLink® C7000 Color Printer are available as a basic machine with tray 1. It is also available in various configurations using the options that follow:

General

For the space requirements, environment range and the print out time. Refer to:

- GP 16 Installation Space Requirements.
- GP 18 Environmental Data.
- GP 20 First Copy / Print Out Time and Power On / Off Time.

Paper Supply and Paper Handling Options

- One 520 sheet paper tray (tray 1).
- 100 sheet bypass tray.
- 110 sheet document feeder (DADF).
- Single tray module (STM) (tray 2).
- One tray module (1TM) (tray 2).
- Three tray module (3TM) (trays 2, 3 and 4).
- Tandem tray module (TTM) (trays 2, 3 and 4).
- 2000 sheet high capacity feeder (HCF).
- Envelope tray.
- Exit 2 tray.

Output Options

- Integrated office finisher.
- Office finisher LX.
- Booklet maker.

NOTE: A horizontal transport is also installed when an office finisher LX is fitted.

Accessories and Kits

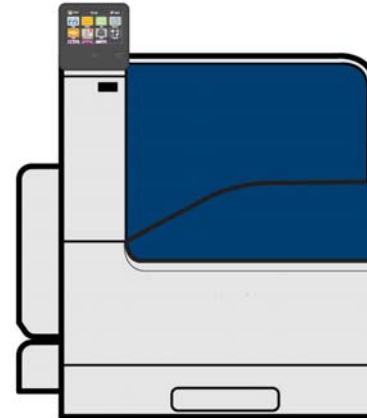
- 1 Line Fax kit.
- 3 Line Fax kit.
- Adobe PS.
- Common access card.
- Convenience stapler.
- Foreign device interface kit.
- Hard disk drive (standard on machines with more than 1 tray).
- VOIP fax.
- Wireless print kit.
- Work surface.

NOTE: The service manual covers all of the above configurations. Within the manual, ignore any references to options that are not installed.

Machine Identification

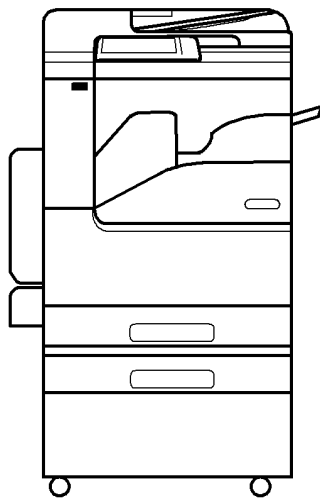
The diagrams that follow illustrate some of the machine configurations:

- Xerox® VersaLink® C7000 desktop, Figure 1.
- Xerox® VersaLink® C7020/C7025/C7030 with integrated finisher and 1TM, Figure 2.
- Xerox® VersaLink® C7020/C7025/C7030 with office finisher LX and 3TM, Figure 3.
- Xerox® VersaLink® C7020/C7025/C7030 with office finisher LX, booklet maker, HCF and TTM, Figure 4.



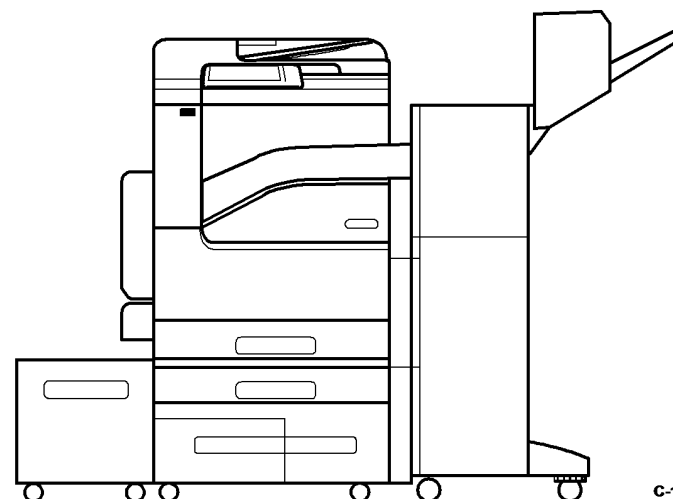
C-1-0475-A

Figure 1 Desktop machine



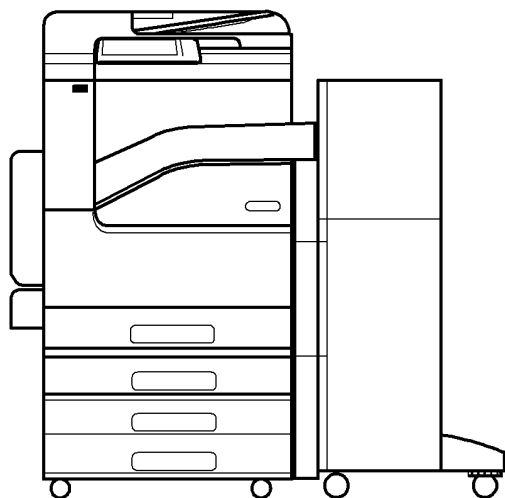
C-1-0476-A

Figure 2 With integrated finisher and 1TM



C-1-0478-A

Figure 4 With finisher LX/booklet maker/HCF/TTM



C-1-0477-A

Figure 3 With office finisher LX and 3TM

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01A AC Power RAP

BSD-ON: [BSD 1.1.Main Power On \(1 of 2\)](#)

BSD-ON: [BSD 1.2 Main Power On \(2 of 2\)](#)

Use this procedure to identify AC power input and output failures.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.



WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

Switch off the main power switch, [GP 10](#). Check the voltage between [J10](#) and [J18](#) on the inlet GFI breaker. The voltage measured is within electrical power requirements, [GP 17](#).

Y N

Disconnect the power cord from the outlet. Check the AC mains (line) voltage at the customers power outlet. The voltage measured is within electrical power requirements, [GP 17](#).

Y N

If the voltage is incorrect, or the wiring of the main supply is found to be defective, inform your technical manager and the customer. Do not attempt to repair or adjust the customer supply.

Check the power cord for open circuit and poor contact. The main power cord is good.

Y N

Install a new power cord.

Install a new inlet GFI breaker, [PL 1.15 Item 7](#).

Switch on the main power switch, [GP 10](#). Check the voltage between [P1](#) pin 1 and pin 3 on the LVPS. The AC power supply is within specification, [GP 17](#).

Y N

Switch off the power, then unplug the power cord from the outlet. Check the wiring:

- Between the GFI breaker ([J10](#) pin 1) and the main power switch ([P/J12](#) pin 1).
- Between the main power switch ([P/J14](#) pin 1) and the LVPS ([P1](#) pin 3).
- Between the inlet GFI breaker ([J18](#) pin 1) and the LVPS ([P1](#) pin 1).

Install new components as necessary:

- Main power switch, [PL 1.05 Item 3](#).
- LVPS, [PL 1.10 Item 3](#).

Check the AC circuit to each component. Refer to the [Wiring Diagrams](#).

01B +5VDC Power Fault RAP

BSD-ON: [BSD 1.2 Main Power On \(2 of 2\)](#)

BSD-ON: [BSD 1.4 DC Power Generation \(1 of 2\)](#)

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.



WARNING

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

Check the voltage between the LVPS ([P/J501](#) pin 8) and ground. +5VDC is measured.

Y N

Check the voltage between [P1](#) pin 1 and pin 3 on the LVPS. The AC power supply is within specification, [GP 17](#).

Y N

Perform the [01A AC Power RAP](#).

Switch off the machine, [GP 10](#). Disconnect [P/J501](#) from the LVPS. Wait 15 seconds, then switch on the machine, [GP 10](#). Check the voltage between the LVPS ([P/J501](#) pin 8) and ground. +5VDC is measured.

Y N

Install a new LVPS, [PL 1.10 Item 3](#).

Check the +5VDC circuit for a short circuit to frame. Refer to Chapter 7 Wiring Data.

Check the wiring of the suspect component for an open circuit or poor contact. Refer to Chapter 7 Wiring Data.

01C +24VDC Power Fault RAP

BSD-ON: [BSD 1.2 Main Power On \(2 of 2\)](#)

BSD-ON: [BSD 1.5 DC Power Generation \(2 of 2\)](#)

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.



Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

Check the voltage between the LVPS ([P/J501](#) pin 1) and ground. **+24VDC is measured.**

Y N

Check the voltage between [P1](#) pin 1 and pin 3 on the LVPS. The AC power supply is within specification, [GP 17](#).

Y N

Perform the [01A](#) AC Power RAP.

Switch off the machine, [GP 10](#). Disconnect [P/J501](#) from the LVPS. Wait 15 seconds, then switch on the machine, [GP 10](#). Check the voltage between the LVPS ([P/J501](#) pin 1) and ground. **+24VDC is measured.**

Y N

Install a new LVPS, [PL 1.10](#) Item 3.

Check the +24VDC circuit for a short circuit to frame. Refer to Chapter 7 Wiring Data.

Check the wiring of the suspect component for an open circuit or poor contact. Refer to Chapter 7 Wiring Data.

002-500 UI Error RAP

BSD-ON: [BSD 2.1 Control Panel \(C7030F\)](#)

BSD-ON: [BSD 2.2 Control Panel \(C7000\)](#)

002-500 CUI scan panel UI detection error.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the UI assembly, [PL 2.05 Item 7 \(C7030F\)](#) or [PL 2.10 Item 1 \(C7000\)](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure that all surface mounted modules on the ESS PWB are securely connected.
3. Check the wiring between the ESS PWB and the UI assembly.
4. Reload the software, [GP 4](#).
5. If the fault persists, install a new components as necessary:
 - UI assembly, [PL 2.05 Item 7 \(C7030F\)](#) or [PL 2.10 Item 1 \(C7000\)](#).
 - ESS PWB, [PL 3.10 Item 6](#).

003-311 IIT CDI I/F Mismatch RAP

003-311 During controller initialization, the IIT CDI I/F has insufficient information from the IIT.

Procedure

Reload the software, [GP 4](#).

003-318, 003-319 IIT Software Fail RAP

003-318 IIT software is corrupt.

003-318 Video driver detection fail.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2](#) Special Boot Modes RAP.

003-320 to 003-343 IISS-ESS Communication Fail RAP

003-320 IISS sending error detected by the controller. An abnormal parameter is set as the argument for the send function.

003-321 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-322 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-323 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-324 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-325 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-326 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-327 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-328 IISS sending error detected by the controller. After commands were sent twice from the controller, the controller could not receive acknowledgment from the IISS.

003-329 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-330 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-331 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-332 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-333 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-334 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-335 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-336 IISS receiving error detected by the controller. The NAK that notifies of the occurrence of a transmission failure is received.

003-337 There was no response to the power on command sent to the IISS after restoring from power saver mode.

003-338 Incorrect argument error for sending.

003-339 Transmission establishing error for sending.

003-340 Synchronous send error.

003-341 Transmission error for sending.

003-342 Incorrect argument error for receiving.

003-343 Synchronous receive error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2 Special Boot Modes RAP](#).

003-344 Hotline Fail RAP

003-344 Hotline failure during power on.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.

003-345, 003-346 X PIO Mismatch RAP

003-345 When a job fail was received from the IISS, an error of the X hot line was detected.

003-345 When IIT image delivered was received from the IISS, an error of the X hot line was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.

003-700 Returned Documents Error RAP

003-700 When the originals are ejected, the number of ejected originals is more than the number that were fed.

Procedure

Reload the originals, then re-run the job.

003-701 Duplication Prevention Code RAP

003-701 A copy restriction code is detected in the document data.

Procedure

Perform the steps that follow:

1. Advise the customer not to attempt to copy documents that are restricted.
2. If the fault persists, reload the software, [GP 4](#).

003-702 Different Magnification RAP

003-702 Different magnification settings, for side 1 and side 2 of a document.

Procedure

Perform the steps that follow:

1. Advise the customer to correct the magnification settings.
2. If the fault persists, reload the software, [GP 4](#).

003-703, 003-704 Color Correction RAP

003-703 Color correction patch position error during 2 sided simultaneous scan.

003-704 Color correction color difference error during 2 sided simultaneous scan.

Procedure

Perform the steps that follow:

1. Advise the customer to load the 2 sided simultaneous scan correction chart correctly.
2. If the fault persists, reload the software, [GP 4](#).

003-705 Energy Saving Paper Size Mismatch RAP

003-705 A paper size mismatch error was detected when exiting energy saver mode.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-750 Insufficient Documents Duplex Book RAP

003-750 The number of documents is insufficient for duplex book print.

Procedure

Perform the steps that follow:

1. Advise the customer to change the parameters, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-751 Capacity RAP

003-751 According to the document area settings and the scan area, processing image data with a size smaller than the one that can be processed was detected.

Procedure

Perform the steps that follow:

1. Advise the customer to increase the resolution or enlarge the scan area (width x length), then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-752, 932, 935 600dpi Cannot be Scanned RAP

003-752 600dpi is unavailable for DADF mixed 2-sided mode scan.

003-932 For scanning in the DADF mix duplex mode, 600dpi is not available.

003-935 For scanning in the DADF mix duplex mode, 600dpi is not available (when the next document exists).

Procedure

Perform the steps that follow:

1. Advise the customer to perform scanning below 400 dpi resolution.
2. If the fault persists, reload the software, [GP 4](#).

003-753, 930, 933 300dpi Cannot be Scanned RAP

003-753 300/400/600dpi unavailable for DADF mixed 2-sided mode scan.

003-930 For scanning in the DADF mix duplex mode, 300dpi, 400dpi and 600dpi are not available.

003-933 For scanning in the DADF mix duplex mode, 300dpi, 400dpi and 600dpi are not available (when the next document exists).

Procedure

Perform the steps that follow:

1. Advise the customer to perform scanning below 200 dpi resolution or perform scanning in other than mixed mode.
2. If the fault persists, reload the software, [GP 4](#).

003-754 to 003-756 S2X Error RAP

003-754 A recoverable error was detected.

003-755 Command error returned from the PWB.

003-756 All scanned documents were detected as blank.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-757, 931, 934 400dpi Cannot be Scanned RAP

003-757 400/600dpi unavailable for DADF mixed 2-sided mode scan.

003-931 For scanning in the DADF mix duplex mode, 400dpi and 600dpi are not available.

003-934 For scanning in the DADF mix duplex mode, 400dpi and 600dpi are not available (when the next document exists).

Procedure

Perform the steps that follow:

1. Advise the customer to perform scanning below 300 dpi resolution or perform scanning in other than mixed mode.
2. If the fault persists, reload the software, [GP 4](#).

003-760, 003-761, 003-763 Scan Settings Error RAP

003-760 The job properties are incorrect.

003-761 Tray selection error.

003-763 The adjustment chart patch could not be detected.

Procedure

Perform the steps that follow:

1. Advise the customer to correct the job properties.
2. If the fault persists, reload the software, [GP 4](#).

003-764 Insufficient Documents RAP

003-764 Insufficient documents for image overlay.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job.
2. If the fault persists, reload the software, **GP 4**.

003-780 Scan Image Compression Error RAP

003-765 Fax scan compression error.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job then to change the scan resolution parameter and then retry the job.
2. If the fault persists, reload the software, **GP 4**.

003-795 AMS Limit Error RAP

003-795 AMS (auto reduce/enlarge) limit error.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job then to change the job properties.
2. If the fault persists, reload the software, [GP 4](#).

003-930, 932, 934, 935, 940 Insufficient Memory RAP

003-930 Insufficient memory detected.

003-932 Insufficient memory detected.

003-934 Insufficient memory detected.

003-935 Insufficient memory detected.

003-940 Insufficient memory detected.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job then to clear the B/W setting for color mode or the side 2 cover image setting, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-941 Insufficient Page Memory RAP

003-941 There is not enough page memory to store the image.

Procedure

Perform the steps that follow:

1. Advise the customer to change the job parameters, then retry the job.
2. Ensure the memory SD card, [PL 3.10 Item 11](#) is installed.
3. If the fault persists, reload the software, [GP 4](#).

003-942, 956 Document Size Auto Detect RAP

003-942 The document size cannot be automatically detected.

003-956 Undefined document size was detected when platen is selected and only APS requires document size selection.

Procedure

Perform the steps that follow:

1. Advise the customer to input an appropriate value for the document size, then retry the job.
2. Perform the procedures that follow as necessary:
 - [005-194](#) Size Mismatch Jam on SS Mix-Size RAP
 - [005-196, 198, 199, 946, 948, 949, 950](#) Size Mismatch Jam RAP
3. If the fault persists, reload the software, [GP 4](#).

003-944 Repeat Image Count Fail RAP

003-944 Incorrect image repeat count (even one image cannot be pasted).

Procedure

Perform the steps that follow:

1. Advise the customer to change the image repeat count parameter, then retry the job.
2. If the fault persists, reload the software, **GP 4**.

003-946 Image Rotation (Copy APS) RAP

003-946 Part of the image will be lost if the image is not rotated. However, a paper size that does not support rotation was selected.

Procedure

Perform the steps that follow:

1. Advise the customer to manually select an appropriate paper tray, then retry the job.
2. If the fault persists, reload the software, **GP 4**.

003-947, 948, 951, 955 Document Error RAP

003-947 An additional number of documents are required.

003-948 Returned document size mismatch.

003-951 Stored pages limit for a job exceeded.

003-955 When loading a document with mixed size originals prohibited, a document of different size/orientation from the initial document was detected.

Procedure

Perform the steps that follow:

1. Advise the customer to reload the correct number and size of documents, and to correctly program the job on the UI. Retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-952 Document Color Mismatch RAP

003-952 Returned document color mismatch (different color detected before/after return).

Procedure

Perform the steps that follow:

1. Advise the customer to correct the job settings, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-963, 965, 966 APS RAP

003-963 No APS compatible tray to set the relevant size.

003-965 There was no paper in the tray that can be selected for APS.

003-966 There is no APS tray that is set to a specific size selected.

Procedure

Perform the steps that follow:

1. Advise the customer to select a tray that has the correct size of paper, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-968 Punch Position Error RAP

003-968 Unable to punch at the selected position.

Procedure

Perform the steps that follow:

1. Advise the customer to specify an appropriate punch position or cancel punch, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-969 Punch Size Error RAP

003-969 Punch unavailable for the selected paper size.

Procedure

Perform the steps that follow:

1. Advise the customer to specify correct job options or cancel punch, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-970, 003-976 Fax Line Memory RAP

003-970 The number of slow-scan lines has exceeded the upper limit due to Fax parallel composition, long- document enlargement, etc.

003-976 Number of lines in the slow scan direction exceeded during Fax N-up.

Procedure

Perform the steps that follow:

1. Advise the customer to press the continue button to store as much data as the memory capacity, then continue scanning the next document. Otherwise, cancel the job.
2. Switch off, then switch on the machine, [GP 10](#).
3. Ensure the memory SD card, [PL 3.10 Item 11](#) is installed.
4. If the fault persists, reload the software, [GP 4](#).

003-971 Copy Prevention Code RAP

003-971 Copy restriction codes detected in document to be copied.

Procedure

For information only, no service action necessary.

003-972 Maximum Stored Page RAP

003-972 When scanning a document, the number of pages that has accumulated in the machine has exceeded the value of Maximum Stored Number of Copy Sheets' set in system data.

Procedure

Perform the steps that follow:

1. Advise the customer to set the number of pages of the document to be within the maximum number of pages that can be stored.
2. If the fault persists, reload the software, [GP 4](#).

003-973 Image Rotation RAP

003-973 The document and the image are different in orientation (except when poster is specified). When rotation is not available even though the orientation of the document and the image are different and part of the image will be lost if it is not rotated.

Procedure

Perform the steps that follow:

1. Advise the customer to verify the image loss and use a larger paper size if available. Or use reduction to make a smaller document, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

003-974 Next Original Specification RAP

003-974 Next document specified. Scanning has been completed for all loaded documents.

Procedure

Perform the steps that follow:

1. Ask the customer to verify that scanning is complete or if other documents should be loaded.
2. If the fault persists, reload the software, [GP 4](#).

003-977 Document Mismatch (Multi Scan) RAP

003-977 Document size mismatch (document exchange during multi scan).

Procedure

Perform the steps that follow:

1. Ask the customer to load a correct size document, then retry the job.
2. If the fault persists, reload the software, **GP 4**.

003-978 Color Document Mismatch (Multi Scan) RAP

003-978 Document color mismatch (document replacement during multi scan).

Procedure

Perform the steps that follow:

1. Advise the customer to reload the correct size paper, then retry the job.
2. If the fault persists, reload the software, **GP 4**.

003-980, 003-981 Staple Error RAP

003-980 Staple is not available at the specified position.

003-981 Staple could not be done for the selected paper size.

Procedure

Perform the steps that follow:

1. Advise the customer to specify a staple position again or cancel staple, then retry the job.
2. If the fault persists, reload the software, [GP 4](#).

005-122 DADF Simplex/Side 1 Pre Registration Sensor On Jam RAP

BSD-ON: [BSD 5.4 Document Feeding \(1 of 2\)](#)

005-122 After pre-feed started for the first sheet (DADF feed motor on (CCW)) in simplex and duplex, the DADF pre registration sensor did not turn on within the specified time.

After pre-feed started for the second sheet onwards (DADF feed motor on (CCW)) in duplex, the DADF pre registration sensor did not turn on within the specified time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the feed roll and nudger roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.25](#).
3. Enter [dC330](#), code 005-206. Check the DADF pre registration sensor, [PL 5.70 Item 3](#).
4. Enter [dC330](#), code 005-062. Check the DADF feed clutch, (W/O [TAG 002](#), [PL 5.35 Item 2](#)), (W/[TAG 002](#), [PL 5.36 Item 2](#)).
5. Enter [dC330](#), code 005-004. Check the DADF feed motor, [PL 5.30 Item 3](#).
6. Check the drive gears, (W/[OTAG 002](#), [PL 5.35](#)), (W/[TAG 002](#), [PL 5.36](#)) for wear or damage. Install new components as necessary.
7. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-123 DADF Simplex/Side 1 Registration Sensor On Jam RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-123 The DADF registration sensor does not turn on within the specified time after the DADF pre registration sensor on.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the takeaway roll and registration roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.50](#).
3. Enter [dC330](#), code 005-110. Check the DADF registration sensor, [PL 5.70 Item 3](#).
4. Enter [dC330](#), code 005-206. Check the DADF pre registration sensor, [PL 5.70 Item 3](#).
5. Enter [dC330](#), code 005-098. Check the DADF takeaway clutch, (W/O [TAG 002](#), [PL 5.35 Item 2](#)), (W/[TAG 002](#), [PL 5.36 Item 2](#)).
6. Enter [dC330](#), code 005-008. Check the DADF feed motor, [PL 5.30 Item 3](#).
7. Check the drive gears, (W/[OTAG 002](#), [PL 5.35](#)), (W/[TAG 002](#), [PL 5.36](#)) for wear or damage. Install new components as necessary.
8. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-125, 005-145 DADF Registration Sensor Off Jam RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-125 After the DADF pre registration sensor turned off at scan operation, the DADF registration sensor did not turn off within the specified time.

005-145 After the DADF pre registration sensor turned off at invert operation, the DADF registration sensor did not turn off within the specified time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the registration roll, out roll and exit roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.50](#).
3. Enter [dC330](#), code 005-110. Check the DADF registration sensor, [PL 5.70 Item 3](#).
4. Enter [dC330](#), code 005-206. Check the DADF pre registration sensor, [PL 5.70 Item 3](#).
5. Enter [dC330](#), code 005-008. Check the DADF feed motor, [PL 5.30 Item 3](#).
6. Check the drive gears, ([W/OTAG 002, PL 5.35](#)), ([W/TAG 002, PL 5.36](#)) for wear or damage. Install new components as necessary.
7. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-131, 005-132 DADF Invert Sensor On Jam During Inverting RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-131 After the DADF registration sensor turned on at invert operation, the DADF invert sensor did not turn on within the specified time.

005-132 DADF invert sensor will not turn on after DADF registration sensor on in simplex.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the out roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.50](#).
3. Enter [dC330](#), code 005-211. Check the DADF invert sensor, [PL 5.50 Item 8](#).
4. Enter [dC330](#), code 005-110. Check the DADF registration sensor, [PL 5.70 Item 3](#).
5. Enter [dC330](#), code 005-008. Check the DADF feed motor, [PL 5.30 Item 3](#).
6. Check the drive gears, ([W/OTAG 002, PL 5.35](#)), ([W/TAG 002, PL 5.36](#)) for wear or damage. Install new components as necessary.
7. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-134, 005-139 DADF Invert Sensor Off Jam RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-134 During invert when there is another document, after the DADF registration sensor turned off, the DADF invert sensor did not turn off within the specified time.

005-139 During a scan, after the DADF registration sensor turned off, the DADF invert sensor did not turn off within the specified time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the out roll and exit roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.50](#).
3. Enter [dC330](#), code 005-211. Check the DADF invert sensor, [PL 5.50 Item 8](#).
4. Enter [dC330](#), code 005-110. Check the DADF registration sensor, [PL 5.70 Item 3](#).
5. Enter [dC330](#), code 005-008. Check the DADF feed motor, [PL 5.30 Item 3](#).
6. Check the exit nip roll, [PL 5.65 Item 17](#). Enter [dC330](#), code 005-072. Check the exit nip release solenoid, (W/OTAG 002, [PL 5.35 Item 8](#)), (W/TAG 002, [PL 5.36 Item 8](#)).
7. Check the drive gears, (W/OTAG 002, [PL 5.35](#)), (W/TAG 002, [PL 5.36](#)) for wear or damage. Install new components as necessary.
8. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-135 DADF Side 2 Pre Registration Sensor On Jam RAP

BSD-ON: [BSD 5.4 Document Feeding \(1 of 2\)](#)

005-135 After the DADF feed motor started the reverse rotation at invert operation, the DADF pre registration sensor did not turn on within the specified time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the exit roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.50](#).
3. Enter [dC330](#), code 005-206. Check the DADF pre registration sensor, [PL 5.70 Item 3](#).
4. Enter [dC330](#), code 005-008. Check the DADF feed motor, [PL 5.30 Item 3](#).
5. Check the exit nip roll, [PL 5.65 Item 17](#). Enter [dC330](#), code 005-072. Check the exit nip release solenoid, (W/O TAG 002, [PL 5.35 Item 8](#)), (W/TAG 002, [PL 5.36 Item 8](#)).
6. Check the drive gears, (W/OTAG 002, [PL 5.35](#)), (W/TAG 002, [PL 5.36](#)) for wear or damage. Install new components as necessary.
7. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-136 DADF Side 2 Registration Sensor On Jam RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-136 After the DADF pre registration sensor turned on at invert operation, the DADF registration sensor did not turn on within the specified time.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the exit roll, takeaway roll and registration roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.50](#).
3. Enter [dC330](#), code 005-110. Check the DADF registration sensor, [PL 5.70 Item 3](#).
4. Enter [dC330](#), code 005-206. Check the DADF pre registration sensor, [PL 5.70 Item 3](#).
5. Enter [dC330](#), code 005-008. Check the DADF feed motor, [PL 5.30 Item 3](#).
6. Enter [dC330](#), code 005-098. Check the DADF takeaway clutch, [PL 5.35 Item 2](#).
7. Check the exit nip roll, [PL 5.65 Item 17](#). Enter [dC330](#), code 005-072. Check the exit nip release solenoid, (W/OTAG 002, [PL 5.35 Item 8](#)), (W/TAG 002, [PL 5.36 Item 8](#)).
8. Check the drive gears, (W/OTAG 002, [PL 5.35](#)), (W/TAG 002, [PL 5.36](#)) for wear or damage. Install new components as necessary.
9. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-147 DADF Pre Registration Sensor Off Jam During Inverting RAP

BSD-ON: [BSD 5.4 Document Feeding \(1 of 2\)](#)

005-147 After the DADF feed motor started the reverse rotation at invert operation, the DADF pre registration sensor did not turn off within the specified time.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for a foreign substance in the document path.
2. Check the surface of the exit roll, takeaway roll, registration roll and out roll for foreign substances or wear. Clean or install new components as necessary, [PL 5.50](#).
3. Enter [dC330](#), code 005-206. Check the DADF pre registration sensor, [PL 5.70 Item 3](#).
4. Enter [dC330](#), code 005-008. Check the DADF feed motor, [PL 5.30 Item 3](#).
5. Check the exit nip roll, [PL 5.65 Item 17](#). Enter [dC330](#), code 005-072. Check the exit nip release solenoid, (W/OTAG 002, [PL 5.35 Item 8](#)), (W/TAG 002, [PL 5.36 Item 8](#)).
6. Check the drive gears, (W/OTAG 002, [PL 5.35](#)), (W/TAG 002, [PL 5.36](#)) for wear or damage. Install new components as necessary.
7. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-194 Size Mismatch Jam on SS Mix-Size RAP

BSD-ON: [BSD 5.3 DADF Document Size Sensing \(2 of 2\)](#)

005-194 When 'Slow Scan MIX' is specified, it was detected that the size in the fast scan direction was different from that of the document guide width.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check the size of the document that was fed by the user.
2. Enter [dC330](#). Check the sensors that follow:
 - Code 005-215, tray APS sensor 1, [PL 5.55 Item 6](#).
 - Code 005-216, tray APS sensor 2, [PL 5.55 Item 6](#).
 - Code 005-217, tray APS sensor 3, [PL 5.55 Item 6](#).
 - Code 005-218, DADF APS sensor 1, [PL 5.50 Item 8](#).
 - Code 005-219, DADF APS sensor 2, [PL 5.50 Item 8](#).
 - Code 005-220, DADF APS sensor 3, [PL 5.50 Item 8](#).
3. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-196, 198, 199, 946, 948, 949, 950 Size Mismatch Jam RAP

BSD-ON: [BSD 5.5 Document Feeding \(2 of 2\)](#)

005-196 The 2nd sheet or later of the set was detected to be of a different size to the 1st sheet.

005-198 The length of the vertical scanning direction is less than the specified value, simplex 85mm (3.3 inches), duplex 110mm (4.3 inches).

005-199 The length of vertical scanning direction is the specified value or more, simplex 1275mm (50.1 inches), duplex 480.1mm (18.9 inches).

005-946 In no mix mode, a document with a shorter size in slow scan (SS) direction was fed.

005-948 In no mix mode, a document with a shorter size in slow scan (SS) direction was fed.

005-949 In no mix mode, a document with a longer size in slow scan (SS) direction was fed.

005-950 In no mix mode, a document with a longer size in slow scan (SS) direction was fed.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check the size of the document that was fed by the user.
2. Enter [dC330](#). Check the sensors that follow:
 - Code 005-206, DADF pre registration sensor, [PL 5.70 Item 3](#).
 - Code 005-221, tray size sensor 1, [PL 5.55 Item 6](#).
 - Code 005-222, tray size sensor 2, [PL 5.55 Item 6](#).
3. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-197 Prohibited Size Combination RAP

BSD-ON: [BSD 5.3 DADF Document Size Sensing \(2 of 2\)](#)

005-197 A prohibited size combination was detected.

Procedure

Refer the customer to the user documentation regarding document size combinations.

005-210 DADF Download Fail RAP

BSD-ON: [BSD 3.5 PWB Communications \(ESS PWB to DADF\)](#)

005-210 When the IISS starts up (including at power on and sleep recovery), it was detected that the DADF is in download mode. There was an error in DADF download, the ROM is corrupted.

Procedure

Reload the software, [GP 4](#).

005-275, 005-280 DADF RAM or EEPROM Write Fail RAP

BSD-ON: [BSD 3.5 PWB Communications \(ESS PWB to DADF\)](#)

005-275 RAM failure on the DADF PWB was detected at power on.

005-280 Write failure to the DADF EEPROM or communication failure with EEPROM was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the problem persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-288 Home Position Sensor Fail RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-288 The invert mechanism failed to return to the home position.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check the operation of the driven link between the cams.
2. Enter [dC330](#), code 005-234. Check the DADF home position sensor, (W/OTAG [002](#), PL [5.35](#) Item 20), W/TAG [002](#), PL [5.36](#) Item 10).
3. Check the exit nip roll, [PL 5.65](#) Item 17. Enter [dC330](#), code 005-072. Check the exit nip release solenoid, (W/OTAG [002](#), PL [5.35](#) Item 8), (W/TAG [002](#), PL [5.36](#) Item 8).
4. Enter [dC330](#), code 005-110. Check the DADF registration sensor, [PL 5.70](#) Item 3.
5. If the fault persists, install a new DADF PWB, [PL 5.10](#) Item 11.

005-305 DADF Feeder Cover Interlock Open RAP

BSD-ON: [BSD 5.1 DADF Interlock and Document Setting](#)

005-305 The DADF feeder cover was opened during DADF operation.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check the actuator on the upper feeder assembly, [PL 5.10 Item 10](#). If the actuator is damaged, install a new upper feeder assembly, [PL 5.10 Item 10](#).
2. Enter [dC330](#), code 005-212. Check the CVT feeder cover sensor, [PL 5.10 Item 14](#).
3. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-500 Write to DADF-ROM Error RAP

005-500 An error was detected while writing data to the DADF-ROM.

Procedure

Resubmit the job.

005-907 DADF Pre Registration Sensor Static Jam RAP

BSD-ON: [BSD 5.4 Document Feeding \(1 of 2\)](#)

005-907 DADF pre registration sensor detected paper when powering on, closing the feeder cover or closing the DADF.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 005-206. Check the DADF pre registration sensor, [PL 5.70 Item 3](#).
2. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-908 DADF Registration Sensor Static Jam RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-908 DADF registration sensor detected paper when powering on, closing the feeder cover or closing the DADF.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 005-110. Check the DADF registration sensor, [PL 5.70 Item 3](#).
2. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-913 DADF Invert Sensor Static Jam RAP

BSD-ON: [BSD 5.6 Document Scan, Invert and Exit Transportation](#)

005-913 DADF invert sensor detected paper when powering on, closing the feeder cover or closing the DADF.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 005-211. Check the DADF invert sensor, [PL 5.50 Item 8](#).
2. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-915 DADF APS Sensor 1 Static Jam RAP

BSD-ON: [BSD 5.5 Document Feeding \(2 of 2\)](#)

005-915 DADF APS sensor 1 detected paper when powering on, closing the feeder cover or closing the DADF.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 005-218. Check the DADF APS sensor 1, [PL 5.50 Item 8](#).
2. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-916 DADF APS Sensor 2 Static Jam RAP

BSD-ON: [BSD 5.5 Document Feeding \(2 of 2\)](#)

005-916 DADF APS sensor 2 detected paper when powering on, closing the feeder cover or closing the DADF.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 005-219. Check the DADF APS sensor 2, [PL 5.50 Item 8](#).
2. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-917 DADF APS Sensor 3 Static Jam RAP

BSD-ON: [BSD 5.5 Document Feeding \(2 of 2\)](#)

005-917 DADF APS sensor 3 detected paper when powering on, closing the feeder cover or closing the DADF.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 005-220. Check the DADF APS sensor 3, [PL 5.50 Item 8](#).
2. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-921 Letter SEF Detect Error

BSD-ON: [BSD 5.3 DADF Document Size Sensing \(2 of 2\)](#)

005-921 The DADF document guide width detected a letter SEF width.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check the size of the document that was fed by the user.
2. Enter [dC330](#). Check the sensors that follow:
 - Code 005-215, tray APS sensor 1, [PL 5.55 Item 6](#).
 - Code 005-216, tray APS sensor 2, [PL 5.55 Item 6](#).
 - Code 005-217, tray APS sensor 3, [PL 5.55 Item 6](#).
3. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

005-940, 005-941 DADF No Original RAP

BSD-ON: [BSD 5.1 DADF Interlock and Document Setting](#)

005-940 A document was pulled out during document feed.

005-941 Missing originals were detected.

Procedure

Reload the document.

005-945, 005-947 Fast Scan Size Mismatch Jam RAP

BSD-ON: [BSD 5.5 Document Feeding \(2 of 2\)](#)

005-945 Fast scan direction (width) size mismatch was detected during CVT no-mix, or CVT slow scan.

005-947 Fast scan direction (width) size mismatch was detected during CVT no-mix, or CVT slow scan.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check the size of the document that was fed by the user.
2. Enter [dC330](#). Check the sensors that follow:
 - Code 005-218, DADF APS sensor 1, [PL 5.50 Item 8](#).
 - Code 005-219, DADF APS sensor 2, [PL 5.50 Item 8](#).
 - Code 005-220, DADF APS sensor 3, [PL 5.50 Item 8](#).
3. If the fault persists, install a new DADF PWB, [PL 5.10 Item 11](#).

010-327 Fusing On Time Fail RAP

BSD-ON: [BSD 10.1 Fusing Heat Control \(1 of 2\)](#)

BSD-ON: [BSD 10.2 Fusing Heat Control \(2 of 2\)](#)

010-327 The main lamp or sub lamp has been on continuously for longer than the setting time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that the fuser is installed correctly.
3. Ensure that the power supply voltage is within specification, refer to [GP 17](#) Electrical Power Requirements.
4. Check the drawer connector between the fuser and the main unit ([DP612](#)) for damage.
5. Check the connections and wiring between the fuser ([DP612](#)) and the LVPS ([P2](#)) for an open circuit, short circuit or poor contact.
6. Check the connections and wiring between the fuser ([DP612](#)) and the drive PWB ([P/J416](#)) for an open circuit, short circuit or poor contact.
7. If the fault persists, install new components as necessary:
 - Fuser, [PL 10.05 Item 2](#).
 - LVPS, [PL 1.10 Item 3](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

010-329 Fuser Fuse Cut Fail RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

010-329 After installation of a new fuser, the fuse (F1) for detection is not open within the correct time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that the fuser is installed correctly.
3. Check the drawer connector between the fuser and the main unit ([DP612](#)) for damage.
4. Check the connections and wiring between the fuser fuse PWB ([P/J567](#)) and the drive PWB ([P/J416](#)) for an open circuit, short circuit or poor contact.
5. Check the connection between the fuser ([DP612](#)) and the drive PWB ([P/J416](#)) for an open circuit, short circuit or poor contact.
6. If the fault persists, install new components as necessary:
 - Fuser, [PL 10.05 Item 2](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

010-331, 010-333 Over Temperature Fail RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

010-331 Fuser thermistor detected temperature monitor AD value that is the specified value or more 10 consecutive times.

010-333 Fuser NC sensor detected a temperature that is the specified value or more 10 consecutive times.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Remove the fuser. Check whether foreign substances or paper is wound around the heat roll.
- Ensure J416 on the drive PWB is securely connected.

Procedure

Perform the steps that follow:

1. Install new components as necessary:
 - LVPS, [PL 1.10 Item 3](#).
 - Fuser, [PL 10.05 Item 2](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).
2. To clear this fault, first remove the cause, then reset the value of NVM location 744-002 (Error Detection Flag) to 0. Switch off, then switch on the machine, [GP 10](#).

NOTE: The relationship between the displayed value and the sensor that detected the high temperature error is as follows:

- 0: Normal.
- 1: High temperature error of heat roll nc sensor.
- 2: High temperature error of heat roll thermistor.
- 3: Abnormal temperature increase of heat roll NC sensor, heat roll thermistor.
- 4: Hardware high temperature error of heat roll thermistor.

010-332, 010-379 Heat Roll NC Sensor Fail RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

010-332 Fuser NC Sensor compensation AD value or detection AD value was 1020 or more 10 consecutive times.

010-379 The time taken to recover from a high temperature not ready state has exceeded the specified time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that the fuser is installed correctly.
3. Check the drawer connector between the fuser and the main unit ([DP612](#)) for damage.
4. Check the connections and wiring between the fuser ([DP612](#)) and the drive PWB ([P/J416](#)) for an open circuit, short circuit or poor contact.
5. If the fault persists, install new components as necessary:
 - Fuser, [PL 10.05 Item 2](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

010-334, 010-335 Heat Roll NC Sensor Fail RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

010-334 Heat roll NC sensor temperature - heat roll thermistor temperature was detected at 90 (NVM) degrees or higher 10 consecutive times or more. Heat roll thermistor temperature - heat roll NC sensor temperature was detected at 70 (NVM) degrees or higher 10 consecutive times or more.

010-335 Fuser NC sensor compensation output AD value was detected below 130 degrees for 10 consecutive times or more. Fuser NC sensor detection output AD value was detected below 150 degrees for 10 consecutive times or more.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that the fuser is installed correctly.
3. Check the drawer connector between the fuser and the main unit ([DP612](#)) for damage.
4. Check the connections and wiring between the heat roll sensor ([P/J124](#)) and the drive PWB ([P/J416](#)) for an open circuit, short circuit or poor contact.
5. If the fault persists, install new components as necessary:
 - Fuser, [PL 10.05 Item 2](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

010-337 Heat Roll Paper Winding RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

010-337 From the value of the fuser thermistor and NC sensor, paper was wrapped around the heat roll.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Remove any jammed paper from the fuser. Ensure the customer is using paper within specification, [GP 15](#).
2. If no jammed paper was found, install a new fuser, [PL 10.05 Item 2](#).
3. Reset the value of NVM location 744-002 (Error Detection Flag) to 0. Switch off, then switch on the machine, [GP 10](#).

NOTE: The relationship between the displayed value and the sensor that detected the high temperature error is as follows:

- 0: Normal.
- 1: High temperature error of heat roll nc sensor.
- 2: High temperature error of heat roll thermistor.
- 3: Abnormal temperature increase of heat roll NC sensor, heat roll thermistor.
- 4: Hardware high temperature error of heat roll thermistor.

010-418, 420 Fuser Near Life Warning RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

010-418 Fuser replacement time is approaching.

010-420 Fuser replacement time is approaching.

Procedure

No service action necessary. Advise the customer that the fuser is near of life.

010-421 Fuser Life Warning RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

010-421 Fuser replacement time.

Procedure

Install a new fuser, [PL 10.05 Item 2](#).

012-132 Entrance Sensor On Jam Entry RAP

012-132 Finisher entrance sensor does not actuate within a specified time after receiving the sheet exit command (the sheet to be ejected has actuated the IOT exit sensor 1).

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-132A](#) Entrance Sensor On Jam RAP.
- Office finisher LX installed, [012-132B](#) Entrance Sensor On Jam RAP.

012-132A Entrance Sensor On Jam RAP

BSD-ON: [BSD 12.3 Integrated Office Finisher Transportation](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-132](#) Entrance Sensor On Jam Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the finisher entrance sensor, [PL 12.12 Item 19](#) is correctly installed and free from foreign objects and that the actuator is not broken.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the specifications of paper, [GP 15](#). **Paper is in specification.**

Y N
Load paper that is in specification.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

Y N
Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part or paper dust. **The transport path is good.**

Y N
Repair the deformed part(s) or remove the foreign object(s) and paper dust.

Check that the finisher is installed correctly. **The finisher is correctly installed and correctly connected to the IOT.**

Y N
Reinstall the finisher correctly.

Enter [dC330](#) code 012-140. Actuate the finisher entrance sensor. **The display changes.**

Y N
Check the connections of [P/J8709](#) and [P/J8729](#). **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between [P/J8709](#) and [P/J8729](#). **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8709](#) pin 6 (+) and ground (-). **The voltage is approximately +5VDC.**

A

Y N

Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8709](#) pin 5 (+) and ground (-). Actuate the finisher entrance sensor. **The voltage changes.**

Y N

Install a new finisher entrance sensor, [PL 12.12 Item 19](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

012-151 Compiler Exit Sensor Off Jam Entry RAP

012-151 The compiler exit sensor does not deactuate within a specified time.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-151A](#) Compiler Exit Sensor Off Jam RAP.
- Office finisher LX installed, [012-151B](#), [012-152B](#) Compiler Exit Sensor Jam RAP.

012-151A Compiler Exit Sensor Off Jam RAP

BSD-ON: [BSD 12.3 Integrated Office Finisher Transportation](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-151 Compiler Exit Sensor Off Jam Entry RAP](#)



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the compiler exit sensor, [PL 12.12 Item 16](#) is correctly installed and free from foreign objects and that the actuator is not binding.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the specifications of paper, [GP 15](#). **Paper is in specification.**

Y **N**
Load paper that is in specification.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

Y **N**
Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part or paper dust. **The transport path is good.**

Y **N**
Repair the deformed part(s) or remove the foreign object(s) and paper dust.

Check the exit roll, [PL 12.11 Item 10](#) for wear, deterioration or paper dust. **The exit roll is good.**

Y **N**
Remove the paper dust or install a new exit roll, [PL 12.11 Item 10](#).

Check the drive mechanism to the exit roll for a deformed, broken part, and/or belt damage. **The drive mechanism is free of defects.**

Y **N**
Repair defects or damage to the drive mechanism. Install new components as necessary, [PL 12.11](#).

Enter [dC330](#) code 012-150. Actuate the compiler exit sensor. **The display changes.**

Y **N**
Check the connections of [P/J8709](#) and [P/J8728](#). **The connectors are good.**
Y **N**
Secure the connections.

A B

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Check for an open or short circuit between [P/J8709](#) and [P/J8728](#). **The wiring is good.**

Y **N**
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8709](#) pin 3 (+) and ground (-). **The voltage is approximately +5VDC.**

Y **N**
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8709](#) pin 2 (+) and ground (-). Actuate the compiler exit sensor. **The voltage changes.**

Y **N**
Install a new compiler exit sensor, [PL 12.12 Item 16](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-095. **The finisher transport motor runs.**

Y **N**
Check the connections of [P/J8706](#) and [P/J8739](#). **The connectors are good.**

Y **N**
Secure the connections.

Check for an open or short circuit between [P/J8706](#) and [P/J8739](#). **The wiring is good.**

Y **N**
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8706](#) pin 5 (+) and ground (-), and [P/J8706](#) pin 7 (+) and ground (-). **Each voltage is approximately +24VDC.**

Y **N**
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new components as necessary:

- Finisher transport motor, [PL 12.12 Item 17](#).
- Finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-013. **The sub paddle solenoid energizes and the sub paddle shaft assembly moves vertically.**

Y **N**
Check the sub paddle mechanism for damage **The sub paddle mechanism is good.**

Y **N**
Repair defects, or install new components as necessary, [PL 12.10](#).

Check the connections of [P/J8705](#) and [P/J8734](#). **The connectors are good.**

Y **N**
Secure the connections.

Check for an open or short circuit between [P/J8705](#) and [P/J8734](#). **The wiring is good.**

Y **N**
Repair the open or short circuit.

C D

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Measure the voltage between the finisher PWB [P/J8705](#) pin 1 (+) and ground (-). **The voltage is approximately +24VDC.**

Y N

Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the circuit is good, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-013. Measure the voltage between the finisher PWB [P/J8705](#) pin 2 (+) and ground (-). **The voltage changes.**

Y N

Install a new finisher PWB, [PL 12.14 Item 1](#).

Install a new sub paddle solenoid, [PL 12.10 Item 27](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

012-152 Compiler Exit Sensor On Jam Entry RAP

012-152 The compiler exit sensor does not actuate within a specified time after receiving the sheet exit command (the paper to be ejected has actuated the IOT exit sensor 1).

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-152A](#) Compiler Exit Sensor On Jam RAP.
- Office finisher LX installed, [012-151B](#), [012-152B](#) Compiler Exit Sensor Jam RAP.

012-152A Compiler Exit Sensor On Jam RAP

BSD-ON: [BSD 12.3 Integrated Office Finisher Transportation](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-152 Compiler Exit Sensor On Jam Entry RAP](#).



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the compiler exit sensor, [PL 12.12 Item 16](#) is correctly installed and free from foreign objects and that the actuator is not broken.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the specifications of paper, [GP 15](#). **Paper is in specification.**

Y N
Load paper that is in specification.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

Y N
Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part, and paper dust. **The transport path is good.**

Y N
Repair the deformed part(s) and remove the foreign object(s) and paper dust.

Check the exit roll, [PL 12.11 Item 10](#) for wear, deterioration or paper dust. **The exit roll is good.**

Y N
Remove the paper dust or install a new exit roll, [PL 12.11 Item 10](#).

Check the drive mechanism to the transport roll for a deformed parts, broken parts, and/or belt damage. **The drive mechanism is good.**

Y N
Repair defects or damage to the drive mechanism. Install new components as necessary, [PL 12.11](#).

Check that the finisher is installed correctly. **The finisher is correctly installed and correctly connected to the IOT.**

Y N
Reinstall the finisher correctly.

Enter [dC330](#) code 012-150. Actuate the compiler exit sensor. **The display changes.**

Y N
Check the connections of [P/J8709](#) and [P/J8728](#). **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between [P/J8709](#) and [P/J8728](#). **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8709](#) pin 3 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8709](#) pin 2 (+) and ground (-). Actuate the compiler exit sensor. **The voltage changes.**

Y N
Install a new compiler exit sensor, [PL 12.12 Item 16](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-095. **The finisher transport motor runs.**

Y N
Check the connections of [P/J8706](#) and [P/J8739](#). **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between [P/J8706](#) and [P/J8739](#). **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8706](#) pin 5 (+) and ground (-), and [P/J8706](#) pin 7 (+) and ground (-). **Each voltage is approximately +24VDC.**

Y N
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new components as necessary:

- Finisher transport motor, [PL 12.12 Item 17](#).
- Finisher PWB, [PL 12.14 Item 1](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

012-161 Set Eject Jam Entry RAP

012-161 In the eject motor's ejecting operation, eject home sensor on was detected within a specified time after the start of the reverse operation of the eject motor.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-161A](#) Set Eject Jam RAP.
- Office finisher LX installed, [012-161B](#) Set Eject Jam RAP.

012-161A Set Eject Jam RAP

BSD-ON: [BSD 12.6 Integrated Office Finisher Set Eject \(1 of 2\)](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-161](#) Set Eject Jam Entry RAP



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the eject home sensor, [PL 12.26 Item 9](#) is correctly installed, not broken, and has no foreign object.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the specification of the paper, [GP 15](#). **The paper is in specification.**

Y N
Load paper that is in specification.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

Y N
Resolve any problem that causes the paper to be bent or caught.

Check the eject mechanism, [PL 12.25](#) for deformed parts, broken parts, and/or belt damage. **The eject mechanism is good.**

Y N
Repair the eject mechanism or install new components as necessary, [PL 12.25](#).

Enter [dC330](#) code 012-252. Use a piece of paper to actuate the eject home sensor. **The display changes.**

Y N
Check the connections of [P/J8700](#) and [P/J8725](#). **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between [P/J8700](#) and [P/J8725](#). **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8700](#) pin 9 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8700](#) pin 2 (+) and ground (-). Use a piece of paper to actuate the eject home sensor. **The voltage changes.**

A

Y N

Install a new eject home sensor, [PL 12.26 Item 9](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-054 and 012-056 alternately. **The eject motor runs.**

Y N

Check the connections of [P/J8706](#) and [P/J8741](#). **The connectors are good.**

Y N

Secure the connections.

Check for an open or short circuit between [P/J8706](#) and [P/J8741](#). **The wiring is good.**

Y N

Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8706](#) pin 13 (+) and ground (-), and between [P/J8706](#) pin 15 (+) and ground (-). **The voltage is approximately +24VDC.**

Y N

Check the +24VDC circuit. Refer to Chapter 7 Wiring Data.

Check the eject motor drive mechanism for deformed parts, broken parts, and/or belt damage **The drive mechanism is good.**

Y N

Repair defects or damage to the drive mechanism. Install new components as necessary, [PL 12.25](#).

Install a new eject motor, [PL 12.25 Item 15](#). If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

012-189 Finisher Jam Entry RAP

012-189 The finisher entry sensor was detected on before the previous sheet had left the finisher.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-210A](#) NVM Fail RAP.
- Office finisher LX installed, [012-210B](#) NVM Fail RAP.

012-189A Finisher Jam RAP

Procedure

Clear the paper jam and repeat the job.

012-210 NVM Fail Entry RAP

012-210 An error is detected at NVM access.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-210A](#) NVM Fail RAP.
- Office finisher LX installed, [012-210B](#) NVM Fail RAP.

012-210A NVM Fail RAP

BSD-ON: [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the [012-210 NVM Fail Entry RAP](#).



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the wiring between the finisher and the IOT.
2. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

012-211 Stacker Tray Fail Entry RAP

012-211 This fault is raised when:

- Within a specified time after the stacker tray started lifting up, the stack height sensor did not detect the lifting up of the stacker tray.
- Within a specified time after the stacker tray started going down at initialization and during a job, the lower position of the tray (full) could not be detected based on the changes in the stacker stack sensor 1 and the stacker stack sensor 2.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-211A](#) Stacker Tray Fail RAP.
- Office finisher LX installed, [012-211B](#) Stacker Tray Fail RAP.

012-211A Stacker Tray Fail RAP

BSD-ON: [BSD 12.8 Integrated Office Finisher Stacker Tray Control](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-211 Stacker Tray Fail Entry RAP](#).



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the stack height sensor, [PL 12.26 Item 9](#) is correctly installed, not broken, and has no foreign object.
- Check the stacker stack sensors 1 and 2, [PL 12.20 Item 18](#) are correctly installed and have no foreign objects and that their actuators are not broken.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the drive mechanism to the stacker tray for a deformed or broken part and not-seated gears. **The mechanism is good.**

Y N
Repair the mechanism or install new components as necessary, [PL 12.20](#).

Enter [dC330](#) code 012-267. Use a piece of paper to actuate the stack height sensor. **The display changes.**

Y N
Check the connections of [P/J8708](#) and [P/J8727](#). **The connectors are good.**
Y N
Secure the connections.

Check for an open or short circuit between [P/J8708](#) and [P/J8727](#). **The wiring is good.**
Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8708](#) pin 3 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8708](#) pin 2 (+) and ground (-). Use a piece of paper to actuate the stack height sensor. **The voltage changes.**

Y N
Install a new stack height sensor, [PL 12.26 Item 9](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

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Status Indicator RAPs

012-211A

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Enter [dC330](#) code 012-278. Actuate the stacker stack sensor 1 by rotating the actuator. **The display changes.**

Y N
Check the connections of [P/J8707](#) and [P/J8722](#). **The connectors are good.**
Y N
Secure the connections.

Check for an open or short circuit between [P/J8707](#) and [P/J8722](#). **The wiring is good.**
Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8707](#) pin 6 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8707](#) pin 5 (+) and (-). Actuate the stacker stack sensor 1 by rotating the actuator. **The voltage changes.**

Y N
Install a new stacker stack sensor 1, [PL 12.20 Item 18](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-279. Actuate the stacker stack sensor 2 by rotating the actuator. **The display changes.**

Y N
Check the connections of [P/J8707](#) and [P/J8721](#). **The connectors are good.**
Y N
Secure the connections.

Check for an open or short circuit between [P/J8707](#) and [P/J8721](#). **The wiring is good.**
Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8707](#) pin 3 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8707](#) pin 2 (+) and ground (-). Actuate the stacker stack sensor 2 by rotating the actuator. **The voltage changes.**

Y N
Install a new stacker stack sensor 2, [PL 12.20 Item 18](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-060 and 012-061 alternately. **The stacker motor runs.**

Y N
Check the connections of [P/J8711](#) and [P/J8736](#). **The connectors are good.**

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Y N

Secure the connections.

Check for an open or short circuit between P/J8711 and P/J8736. **The wiring is good.**

Y N

Repair the open or short circuit.

Enter dC330 code 012-060. Measure the voltage between the finisher PWB P/J8711 pin 1 (+) and ground (-). **The voltage changes.**

Y N

Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Enter dC330 code 012-061. Measure the voltage between the finisher PWB P/J8711 pin 2 (+) and ground (-). **The voltage changes.**

Y N

Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Check the wires and connectors for an intermittent open and short circuit. If the fault persists, install a new stacker motor, PL 12.20 Item 9.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

012-221, 012-223 Front Tamper Home Sensor Fail Entry RAP

012-221 The front tamper home sensor failed to actuate within the specified time.

012-223 The front tamper home sensor failed to deactivate within the specified time.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, 012-221A, 012-223A Front Tamper Home Sensor Fail. RAP
- Office finisher LX installed, 012-221B, 012-223B Front Tamper Home Sensor Fail RAP.

012-221A, 012-223A Front Tamper Home Sensor Fail RAP

BSD-ON:BSD 12.4 Integrated Office Finisher Tamping and Offset

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the 012-221, 012-223 Front Tamper Home Sensor Fail Entry RAP.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the front tamper home sensor, PL 12.26 Item 6 is correctly installed and has no foreign object and that the actuator is not broken.
- Switch off, then switch on the machine, GP 10.

Procedure

Check the front tamper for any foreign object, deformation and binding that prevents it from moving. **The front tamper is good.**

Y N
Repair the deformation or remove the foreign object(s) and the binding. Install new components as necessary, PL 12.26.

Check the drive mechanism to the front tamper for a deformed or broken part and not-seated gears. **The drive mechanism is good.**

Y N
Repair the front tamper mechanism. Install new components as necessary, PL 12.26.

Enter dC330 code 012-220. Manually move the front tamper to actuate the front tamper home sensor. **The display changes.**

Y N
Check the connections of P/J8700 and P/J8724. **The connectors are good.**
Y N
Secure the connections.
Check for an open or short circuit between P/J8700 and P/J8724. **The wiring is good.**
Y N
Repair the open wire or short circuit.
Measure the voltage between the finisher PWB P/J8700 pin 6 (+) and ground (-). **The voltage is approximately +5VDC.**
Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.
Measure the voltage between the finisher PWB P/J8700 pin 5 (+) and ground (-). Manually move the front tamper to actuate the front tamper home sensor. **The voltage changes.**

A

Y N
Install a new front tamper home sensor, PL 12.26 Item 6.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Enter dC330 code 012-020 and 012-023 alternately. **The front tamper motor runs.**

Y N
Check the connections of P/J8710 and J8738. **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between P/J8710 and J8738. **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB P/J8710 pin 5 (+) and ground (-), and between P/J8710 pin 7 (+) and ground (-). **The voltage is approximately +24VDC.**

Y N
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Install a new front tamper motor, PL 12.26 Item 15. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

A

012-224, 012-263 Rear Tamper Home Sensor Fail Entry RAP

012-224 The rear tamper home sensor failed to actuate within the specified time.

012-263 The rear tamper home sensor failed to deactivate within the specified time.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-224A](#), [012-263A](#) Rear Tamper Home Sensor Fail RAP.
- Office finisher LX installed, [012-224B](#), [012-263B](#) Rear Tamper Home Sensor Fail RAP.

012-224A, 012-263A Rear Tamper Home Sensor Fail RAP

BSD-ON: [BSD 12.4 Integrated Office Finisher Tamping and Offset](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-224](#), [012-263](#) Rear Tamper Home Sensor Fail Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the rear tamper home sensor, [PL 12.25 Item 9](#) is correctly installed and has no foreign object and that the actuator is not broken.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the rear tamper for any foreign object, deformation and binding that prevents it from moving. **The rear tamper is good.**

Y N

Repair the deformation and remove the foreign object(s) and the binding. Install new components as necessary, [PL 12.26](#).

Check the drive mechanism to the rear tamper for a deformed or broken part and not-seated gears. **The drive mechanism is good.**

Y N

Repair the rear tamper drive mechanism. Install new components as necessary, [PL 12.26](#).

Enter [dC330](#) code 012-221. Manually move the rear tamper to actuate the front tamper home sensor. **The display of changes.**

Y N

Check the connections of [P/J8700](#) and [P/J8726](#). **The connectors are good.**

Y N

Secure the connections.

Check for an open or short circuit between [P/J8700](#) and [P/J8726](#). **The wiring is good.**

Y N

Repair the open wire or short circuit.

Measure the voltage between the finisher PWB [P/J8700](#) pin 12 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N

Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8700](#) pin 11 (+) and ground (-). Manually move the rear tamper to actuate the front tamper home sensor. **The voltage changes.**

A

A

Y N

Install a new rear tamper home sensor, [PL 12.25 Item 9](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-026 and 012-029 alternately. **The rear tamper motor runs.**

Y N

Check the connections of [P/J8710](#) and [J8737](#). **The connectors are good.**

Y N

Secure the connections.

Check for an open wire or short circuit between [P/J8710](#) and [J8737](#). **The wiring is good.**

Y N

Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8710](#) pin 1 (+) and ground (-), and between [P/J8710](#) pin 3 (+) and ground (-). **The voltage is approximately +24VDC.**

Y N

Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Install a new rear tamper motor, [PL 12.26 Item 15](#). If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

012-259, 012-280 Eject Home Sensor Fail RAP

BSD-ON: [BSD 12.6 Integrated Office Finisher Set Eject \(1 of 2\)](#)

012-259 The eject home sensor failed to actuate within the specified time.

012-280 The eject home sensor failed to deactuate within the specified time.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the eject home sensor, [PL 12.26 Item 9](#) is correctly installed, not broken and has no foreign object.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the eject mechanism, [PL 12.25](#) for a deformed or broken part and not-seated belts.

The mechanism is good.

Y N

Repair the mechanism. Install new components as necessary, [PL 12.25](#).

Enter [dC330](#) code 012-252. Actuate the eject home sensor. **The display changes.**

Y N

Check the connections of [P/J8700](#) and [P/J8725](#). **The connectors are good.**

Y N

Secure the connections.

Check for an open wire or short circuit between [P/J8700](#) and [P/J8725](#). **The wiring is good.**

Y N

Repair the open wire or short circuit.

Measure the voltage between the finisher PWB [P/J8700](#) pin 9 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N

Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8700](#) pin 2 (+) and ground (-). Actuate the eject home sensor. **The voltage changes**

Y N

Install a new eject home sensor, [PL 12.26 Item 9](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Enter [dC330](#) code 012-054 and 012-056 alternately. **The eject motor runs.**

Y N
 Check the connections of P/J8706 and P/J8741. **The connectors are good.**
 Y N
 Secure the connections.
 Check for an open or short circuit between P/J8706 and P/J8741. **The wiring is good.**
 Y N
 Repair the open wire or short circuit.
 Measure the voltage between the finisher PWB P/J8706 pin 13 (+) and ground (-), and between P/J8706 pin 15 (+) and ground (-). **Each voltage is approximately +24VDC.**
 Y N
 Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.
 Install a new eject motor, PL 12.25 Item 15. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.
 Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

012-283, 012-284 Set Clamp Home Sensor Fail Entry RAP

012-283 The set clamp home sensor failed to actuate within the specified time.

012-284 The set clamp home sensor failed to deactuate within the specified time.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, 012-283A, 012-284A Set Clamp Home Sensor Fail RAP.
- Office finisher LX installed, 012-283B, 012-284B Set Clamp Home Sensor Fail RAP.

012-283A, 012-284A Set Clamp Home Sensor Fail RAP

BSD-ON: [BSD 12.7 Integrated Office Finisher Set Eject \(2 of 2\)](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-283](#), [012-284](#) Set Clamp Home Sensor Fail Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the set clamp home sensor, [PL 12.11 Item 7](#) is correctly installed and has no foreign object and that the actuator is not broken.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Check the set clamp mechanism, [PL 12.25](#) for a deformed or broken part and not-seated belts. **The mechanism is good.**

Y N
Repair the set clamp mechanism. Install new components as necessary, [PL 12.25](#).

Enter [dC330](#) code 012-251. Manually rotate the set clamp shaft to actuate the set clamp home sensor. **The display changes.**

Y N
Check the connections of [P/J8707](#), [J8742B](#), [J8742A](#) and [P/J8723](#). **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between [P/J8707](#) and [J8742B](#), and between [J8742A](#) and [P/J8723](#). **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8707](#) pin 9 (+) and ground (-). **The voltage is approximately +5VDC.**

Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

Measure the voltage between the finisher PWB [P/J8707](#) pin 8 (+) and ground (-). Manually rotate the set clamp shaft to actuate the set clamp home sensor. **The voltage changes.**

Y N
Install a new set clamp home sensor, [PL 12.11 Item 7](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

A
Enter [dC330](#) code 012-017. **The set clamp motor runs.**

Y N
Check the connections of [P/J8708](#) and [P/J8740](#). **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between [P/J8708](#) and [P/J8740](#). **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB [P/J8708](#) pin 9 (+) and ground (-), and between [P/J8708](#) pin 11 (+) and ground (-). **Each voltage is approximately +24VDC.**

Y N
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Install a new set clamp motor, [PL 12.25 Item 15](#). If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

A

012-291 Stapler Fail Entry RAP

012-291 Within a specified time after the staple motor started rotating in reverse direction, the staple head home sensor was not detected turning on.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-291A](#) Stapler Fail RAP.
- Office finisher LX installed, [012-291B](#) Stapler Fail RAP.

012-291A Stapler Fail RAP

BSD-ON: [BSD 12.5 Integrated Office Finisher Staple Control](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-291](#) Stapler Fail Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the staple assembly and cartridge are correctly installed, not broken and include no foreign objects.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#) 012-046 and 012-047 alternately. **The staple motor runs.**

Y	N
	Check the connections of P/J8705 and P/J8735 . The connectors are good.
Y	N
	Connect P/J8705 and P/J8735 securely.
	Check for an open or short circuit between P/J8705 and P/J8735 . The wiring is good.
Y	N
	Repair the open wire or short circuit.
	Enter dC330 012-046 and 012-047 alternately. Measure the voltages between finisher PWB P/J8705 pins 3, 4, 5, 6 (+) and ground (-). Each voltage changes.
Y	N
	Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.
	Install a new staple assembly, PL 12.11 Item 2.

Enter again [dC330](#) code 012-046 and 012-047 alternately. **The display changes.**

Y	N
	Check the connections of P/J8701 and P/J8731 . The connectors are good.
Y	N
	Secure the connections.
	Check for an open or short circuit between P/J8701 and P/J8731 . The wiring is good.
Y	N
	Repair the open or short circuit.
	Measure the voltage between the finisher PWB P/J8701 pin 9 (+) and ground (-). The voltage is approximately +5VDC.
Y	N
	Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.

A B

A B
 Measure the voltage between the finisher PWB **P/J8731** pin 5 (+) and ground (-). Enter **dC330** 012-046 and 012-047 alternately. **The voltage changes.**
 Y N
 Install a new staple assembly, **PL 12.11 Item 2.**
 Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, **PL 12.14 Item 1.**

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, **PL 12.14 Item 1.**

012-301 Top Cover Interlock Open RAP

BSD-ON: **BSD 12.1 Integrated Office Finisher DC Power and Interlock Switching**

012-301 The top cover interlock open was detected.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the top cover can be opened and closed.
- Check the finisher top cover interlock sensor and the finisher top cover interlock +24V switch, **PL 12.10** are correctly installed and undamaged.
- Switch off, then switch on the machine, **GP 10.**

Procedure

Enter **dC330** code 012-300. Open, then close the top cover to actuate the finisher top cover interlock sensor. **The display changes.**

Y N
 Check the connections of **P/J8701** and **P/J8730**. **The connectors are good.**
 Y N
 Secure the connections.
 Check for an open or short circuit between **P/J8701** and **P/J8730**. **The wiring is good.**
 Y N
 Repair the open or short circuit.
 Measure the voltage between the finisher PWB **P/J8701** pin 3 (+) and ground (-). **The voltage is approximately +5VDC.**
 Y N
 Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.
 Measure the voltage between the finisher PWB **P/J8701** pin 2 (+) and ground (-). Open, then close the top cover to actuate the finisher top cover interlock sensor. **The voltage changes.**
 Y N
 Install a new finisher top cover interlock sensor, **PL 12.10 Item 20.**
 Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, **PL 12.14 Item 1.**
 Measure the voltage between the finisher PWB **P/J8702** pin 1 (+) and ground (-). **The voltage is approximately +24VDC.**
 Y N
 Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, **PL 12.14 Item 1.**
 Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, **PL 12.14 Item 1.**

012-302 Front Cover Interlock Open Entry RAP

012-302 The front cover interlock open was detected.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, 012-302A Front Cover Interlock Open RAP.
- Office finisher LX installed, 012-302B Front Cover Interlock Open RAP

012-302A Front Cover Interlock Open RAP

BSD-ON: BSD 12.1 Integrated Office Finisher DC Power and Interlock Switching

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the 012-302 Front Cover Interlock Open Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the front cover can be opened and closed.
- Check that the finisher front door interlock switch, PL 12.14 Item 12 is correctly installed and undamaged.
- Switch off, then switch on the machine, GP 10.

Procedure

Enter dC330 code 012-302. Open, then close the front cover to actuate the finisher front interlock switch. **The display changes.**

Y N
Check the connections of P/J8702 and P/J8733. **The connectors are good.**

Y N
Secure the connections.

Check for an open or short circuit between P/J8702 and P/J8733. **The wiring is good.**

Y N
Repair the open or short circuit.

Measure the voltage between the finisher PWB P/J8702 pin 4 (+) and ground (-). Open, then close the front cover to actuate the finisher front interlock switch. **The voltage changes.**

Y N
Install a new finisher front door interlock switch, PL 12.14 Item 12.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Measure the voltage between the finisher PWB P/J8702 pin 1 (+) and (-). **The voltage is approximately +24VDC.**

Y N
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

012-334 Download Fail Entry RAP

012-334 Download failure.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, [012-334A](#) Download Fail RAP.
- Office finisher LX installed, [012-334B](#) Download Fail RAP.

012-334A Download Fail RAP

BSD-ON: [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the [012-334](#) Download Fail Entry RAP.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the wiring between the finisher and the IOT.
2. Reload the software, [GP 4](#)
3. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#).

012-903 Compiler Exit Sensor On Entry RAP

012-903 The compiler exit sensor was detected on.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, 012-903A Compiler Exit Sensor On RAP.
- Office finisher LX installed, 012-903B Compiler Exit Sensor On RAP.

012-903A Compiler Exit Sensor On RAP

BSD-ON: [BSD 12.3 Integrated Office Finisher Transportation](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the 012-903 Compiler Exit Sensor On Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the power supply voltage at the customer site for a drop.
- Check the compiler exit sensor, PL 12.12 Item 16 is correctly installed and free from foreign objects and that the actuator is not binding.
- Switch off, then switch on the machine, GP 10.

Procedure

Enter dC330 code 012-150. Actuate the compiler exit sensor. **The display changes.**

Y N
Check the connections of P/J8709 and P/J8728. **The connectors are good.**
Y N
Secure the connections.
Check for an open or short circuit between P/J8709 and P/J8728. **The wiring is good.**
Y N
Repair the open or short circuit.
Measure the voltage between the finisher PWB P/J8709 pin 3 (+) and ground (-). **The voltage is approximately +5VDC.**
Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.
Measure the voltage between the finisher PWB P/J8709 pin 2 (+) and ground (-). Actuate the compiler exit sensor. **The voltage changes.**
Y N
Install a new compiler exit sensor, PL 12.12 Item 16.
Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.
Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

012-935 Entrance Sensor Entry RAP

012-935 The finisher entry sensor was detected on.

Procedure

Go to the relevant procedure:

- Integrated office finisher installed, 012-935A Entrance Sensor RAP.
- Office finisher LX installed, 012-935B Entrance Sensor RAP.

012-935A Entrance Sensor RAP

BSD-ON:BSD 12.3 Integrated Office Finisher Transportation

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the 012-935 Entrance Sensor Entry RAP



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the power supply voltage at the customer site for a drop.
- Check the finisher entrance sensor, PL 12.12 Item 19 is correctly installed and free from foreign objects and that the actuator is not binding.
- Switch off, then switch on the machine, GP 10.

Procedure

Enter dC330 code 012-140. Actuate the finisher entrance sensor. **The display changes.**

Y N
Check the connections of P/J8709 and P/J8729. **The connectors are good.**
Y N
Secure the connections.
Check for an open or short circuit between P/J8709 and P/J8729. **The wiring is good.**
Y N
Repair the open or short circuit.
Measure the voltage between P/J8709 pin 6 (+) on the finisher PWB and ground (-).
The voltage is approximately +5VDC.
Y N
Check the +5VDC circuit. Refer to Chapter 7 Wiring Data.
Measure the voltage between P/J8709 pin 5 (+) on the finisher PWB and ground (-).
Actuate the Finisher Entrance Sensor. **The voltage changes.**
Y N
Install a new finisher entrance sensor, PL 12.12 Item 19.
Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Check the wires and connectors for an intermittent open or short circuit. If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

012-111 to 012-131 Horizontal Transport Entrance Sensor Jam RAP

BSD-ON: [BSD 13.5 Office Finisher LX Horizontal Transport](#)

012-111 The horizontal transport entrance sensor did not deactuate within the specified time.

012-112 After the fuser exit sensor was actuated, the horizontal transport entrance sensor did not deactuate within the specified time.

012-126 After the horizontal transport entrance sensor was actuated, the horizontal transport entrance sensor did not deactuate within the specified time.

012-131 After the fuser exit sensor was actuated, the horizontal transport entrance sensor did not deactuate within the specified time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the horizontal transport drive rolls, [PL 13.08](#) and nip rolls, [PL 13.07](#) for wear or contamination. Check for obstructions or damage in the paper path. **The paper path is good.**

Y N
Clean or install new components as necessary.

Enter [dC330](#) code 012-190. Actuate the horizontal transport entrance sensor, [PL 13.08 Item 6](#). **The display changes.**

Y N
Check the wiring between [J8861](#) pin 2 and [P8987](#) pin 6 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Measure the voltage between [P8987](#) pins 4 and 5 on the finisher PWB. **The voltage is approximately +5VDC.**

Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P8987](#) pin 6 on the finisher PWB and ground. Actuate the horizontal transport entrance sensor. **The voltage changes.**

Y N
Install a new horizontal transport entrance sensor, [PL 13.08 Item 6](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Switch off the machine, [GP 10](#). Open the horizontal transport top cover. Check the horizontal transport interlock sensor. Switch on the machine, [GP 10](#). **The horizontal transport belt is driven.**

Y N
Check the wiring between [P/J8862](#) on the horizontal transport motor and [P8987](#) on the finisher PWB for an open or short circuit, or a loose or damaged connector. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Measure the resistance of the horizontal transport motor between [P/J8862](#) pins 1, 2, 5 and 6. **The resistance is approximately 20 Ohms.**

Y N
Install a new horizontal transport motor, [PL 13.08 Item 13](#).

Install a new finisher PWB, [PL 13.45 Item 2](#). If the fault persists, install a new horizontal transport motor, [PL 13.08 Item 13](#).

Check the horizontal transport entrance sensor and horizontal transport Motor circuits for an intermittent condition. If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-132B Entrance Sensor On Jam RAP

BSD-ON: [BSD 13.7 Office Finisher LX Transportation](#)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the [012-132 Entrance Sensor On Jam Entry RAP](#).



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter [dC330](#) code 012-100. Actuate the finisher transport entrance sensor, [PL 13.35 Item 10](#). The display changes.

Y N
Check the wiring between [J8868](#) pin 2 and [P/J8988](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.
Measure the voltage between [P/J8988](#) pins 1 and 3 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).
Measure the voltage between [P/J8988](#) pin 2 on the finisher PWB and ground. Actuate the finisher entrance sensor. **The voltage changes.**
Y N
Install a new finisher transport entrance sensor, [PL 13.35 Item 10](#).
Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-038. **The transport motor runs.**

Y N
Check the wiring between [P/J8879](#) on the transport motor and [P/J8983](#) on the finisher PWB for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.
Measure the resistance of the transport motor between [P/J8879](#) pins 1, 2, 5 and 6. **The resistance is approximately 20 Ohms.**
Y N
Install a new transport motor, [PL 13.08 Item 13](#).
Install a new finisher PWB, [PL 13.45 Item 2](#). If the fault persists, install a new transport motor, [PL 13.08 Item 13](#).

A

Check the components that follow:

- The entrance roller, paddle shaft and eject belt, [PL 13.29](#) for wear, damage or contamination.
 - The finisher entrance sensor and transport motor circuits for an intermittent condition.
- If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

A

012-151B, 012-152B Compiler Exit Sensor Jam RAP

BSD-ON: [BSD 13.7 Office Finisher LX Transportation](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-151 Compiler Exit Sensor Off Jam Entry RAP](#) or the [012-152 Compiler Exit Sensor On Jam Entry RAP](#).



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- **(012-152 Only)** Ensure that the chute assembly, [PL 13.35 Item 16](#) is installed correctly.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#) code 012-150. Actuate the compiler exit sensor, [PL 13.35 Item 10](#). The display changes.

Y N
Check the wiring between [J8869](#) pin 2 and [P/J8988](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.
Measure the voltage between [P/J8988](#) pins 4 and 6 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).
Measure the voltage between [P/J8988](#) pin 5 on the finisher PWB and ground. Actuate the compiler exit sensor. **The voltage changes.**
Y N
Install a new compiler exit sensor, [PL 13.35 Item 10](#).
Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) 012-038. **The transport motor runs.**

Y N
Check the wiring between [P/J8879](#) on the transport motor and [P/J8983](#) on the finisher PWB for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.
Measure the resistance of the transport motor between [P/J8879](#) pin 1, 2, 5 and 6. **The resistance is approximately 20 Ohms.**
Y N
Install a new transport motor, [PL 13.08 Item 13](#).

A B

Install a new finisher PWB, [PL 13.45 Item 2](#). If the fault persists, install a new transport motor, [PL 13.08 Item 13](#).

Check the components that follow:

- The exit roller, paddle shaft and eject belt for wear, damage or contamination, [PL 13.29](#).
- The compiler exit sensor and transport motor circuits for an intermittent condition.

If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

A B

012-161B Set Eject Jam RAP

BSD-ON: [BSD 13.10 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

BSD-ON: [BSD 13.13 Office Finisher LX Eject Control \(1 of 2\)](#)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the [012-161 Set Eject Jam Entry RAP](#).



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter [dC330](#) 012-151. Actuate the compiler tray no paper sensor, [PL 13.28 Item 9](#). The display changes.

Y N

Check the wiring between [J8880](#) pin 2 and [P/J8994](#) pin 2 on the finisher PWB for an open or short circuit, or a loose or damaged connector. **The wiring is good.**

Y N

Reconnect or repair as necessary.

Measure the voltage between [P/J8994](#) pins 1 and 3 on the finisher PWB. **The voltage is approximately +5VDC.**

Y N

Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8994](#) pin 2 on the finisher PWB and ground. Actuate the compiler tray no paper sensor. **The voltage changes.**

Y N

Install a new compiler tray no paper sensor, [PL 13.28 Item 9](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-055. **The eject motor runs.**

Y N

Check the wiring between [P/J8878](#) on the eject motor and [P/J8983](#) on the finisher PWB for an open or short circuit, or a loose or damaged connector. **The wiring is good.**

Y N

Reconnect or repair as necessary.

Measure the resistance of the eject motor between [P/J8878](#) pins 1, 3, 4 and 6. **The resistance is approximately 20 Ohms.**

Y N

Install a new eject motor, [PL 13.27 Item 4](#).

Install a new eject motor, [PL 13.27 Item 4](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

A

Check the components that follow:

- The exit roller, entrance roller, paddle shaft and eject belt for wear, damage or contamination, [PL 13.29](#).
 - The compiler tray no paper sensor and eject motor circuits for an intermittent condition.
- If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

A

012-189B Finisher Jam RAP

Procedure

Clear the paper jam and repeat the job.

012-210B NVM Fail RAP

BSD-ON: [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the [012-210 NVM Fail Entry RAP](#).



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the wiring between the finisher and the IOT.
2. If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-211B Stacker Tray Fail RAP

BSD-ON: [BSD 13.15 Office Finisher LX Stacker Tray Control](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-211 Stacker Tray Fail Entry RAP](#).



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions under the tray.
- Check the operation of the stack height sensor 1, [PL 13.27 Item 16](#) actuator.
- Check the tray raise/lower mechanism for damage or contamination.

Procedure

Enter [dC330](#) code 012-264. Actuate the stack height sensor 1, [PL 13.27 Item 16](#). The display changes.

Y N
Check the wiring between [J8873](#) pin 2 and [P/J8988](#) pin 17 for an open or short circuit, or a loose or damaged connector. The wiring is good.

Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 16 and 18 on the finisher PWB. The voltage is approximately +5VDC.

Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 17 on the finisher PWB and ground. Actuate the stacker height sensor 1. The voltage changes.

Y N
Install a new stack height sensor 1, [PL 13.27 Item 16](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-263. Manually rotate the encoder, [PL 13.15 Item 19](#) to actuate the stacker encoder sensor. The display changes.

Y N
Check the wiring between [J8875](#) pin 2 and [P/J8988](#) pin 23 for an open or short circuit, or a loose or damaged connector. The wiring is good.

Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 22 and 24 on the finisher PWB. The voltage is approximately +5VDC.

Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

A B

Measure the voltage between [P/J8988](#) pin 23 on the finisher PWB and ground. Manually rotate the encoder, [PL 13.15 Item 19](#) to actuate the stacker encoder sensor. The voltage changes.

Y N
Install a new stacker encoder sensor, [PL 13.15 Item 32](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-060 and 012-061 alternatively. The stacker motor runs.

Y N
Measure the voltage between [P/J8986](#) pin 12 and ground. The voltage is approximately +24 VDC.

Y N
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data.

Check the wiring between [P/J8986](#) pins 11 and 12 and the stacker motor for an open or short circuit, or a loose or damaged connector. The wiring is good.

Y N
Reconnect or repair as necessary.

Install a new stacker motor, [PL 13.15 Item 29](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

A B

012-212 Stacker Tray Upper Limit Failure RAP

BSD-ON: [BSD 13.15 Office Finisher LX Stacker Tray Control](#)

012-212 The stacker has continued to elevate after the defined period of time has passed since stacker no paper sensor is on during stacker elevation.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions under the tray.
- Check the operation of the stack height sensor, [PL 13.27 Item 2](#).
- Check the tray raise/lower mechanism for damage or contamination.

Procedure

Enter [dC330](#) code 012-264. Actuate stack height sensor 1. **The display changes.**

Y N
Check the wiring between [J8873](#) pin 2 and [P/J8988](#) pin 17 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 16 and 18 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 17 on the finisher PWB and ground. Actuate the stack height sensor 1. **The voltage changes.**
Y N
Install a new stack height sensor 1, [PL 13.27 Item 16](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-265. Actuate the stack height sensor 2. **The display changes.**

Y N
Check the wiring between [J8874](#) pin 2 and [P/J8988](#) pin 20 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 19 and 21 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

A B

A B

Measure the voltage between [P/J8988](#) pin 20 on the finisher PWB and ground. Actuate the stack height sensor 2. **The voltage changes.**

Y N
Install a new stack height sensor 2, [PL 13.27 Item 16](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-263. Manually rotate the encoder, [PL 13.15 Item 19](#) to actuate the stacker encoder sensor. **The display changes.**

Y N
Check the wiring between [J8875](#) pin 2 and [P/J8988](#) pin 23 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 22 and 24 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 23 on the finisher PWB and ground. Manually rotate the encoder, [PL 13.15 Item 19](#) to actuate the stacker encoder sensor. **The voltage changes.**
Y N
Install a new stacker encoder sensor, [PL 13.15 Item 32](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-262. Actuate the stacker paper sensor, [PL 13.15 Item 32](#). **The display changes.**

Y N
Check the wiring between [J8872](#) pin 2 and [P/J8988](#) pin 14 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 13 and 15 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 14 on the finisher PWB and ground. Actuate the stacker paper sensor **The voltage changes.**
Y N
Install a new stacker paper sensor, [PL 13.15 Item 32](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

012-213 Stacker Tray Lower Limit Failure RAP

BSD-ON: [BSD 13.15 Office Finisher LX Stacker Tray Control](#)

012-213 Stacker descended lower than normal levels, below low limit height.

Initial Actions

- Check for obstructions under the tray.
- Check the operation of the stack height sensor, [PL 13.27](#) actuators.
- Check the tray raise/lower mechanism for damage or contamination.

Procedure

Enter [dC330](#) code 012-264. Actuate the stack height sensor 1. **The display changes.**

Y N
Check the wiring between [J8873](#) pin 2 and [P/J8988](#) pin 17 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 16 and 18 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 17 on the finisher PWB and ground. Actuate the stack height sensor 1. **The voltage changes.**
Y N
Install a new stack height sensor 1, [PL 13.27 Item 16](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-265. Actuate the stack height sensor 2. **The display changes.**

Y N
Check the wiring between [J8874](#) pin 2 and [P/J8988](#) pin 20 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 19 and 21 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 20 on the finisher PWB and ground. Actuate the stack height sensor 2. **The voltage changes.**
Y N
Install a new stack height sensor 2, [PL 13.27 Item 16](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

A

Enter [dC330](#) code 012-263. Manually rotate the encoder, [PL 13.15 Item 19](#) to actuate the stacker encoder sensor. **The display changes.**

Y N
Check the wiring between [J8875](#) pin 2 and [P/J8988](#) pin 23 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 22 and 24 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 23 on the finisher PWB and ground. Manually rotate the encoder, [PL 13.15 Item 19](#) to actuate the stacker encoder sensor. **The voltage changes.**
Y N
Install a new stacker encoder sensor, [PL 13.15 Item 32](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-262. Actuate the stacker paper sensor, [PL 13.15 Item 32](#). **The display changes.**

Y N
Check the wiring between [J8872](#) pin 2 and [P/J8988](#) pin 14 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 13 and 15 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 14 on the finisher PWB and ground. Actuate the stacker paper sensor. **The voltage changes.**
Y N
Install a new stacker paper sensor, [PL 13.15 Item 32](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

A

012-221B, 012-223B Front Tamper Home Sensor Fail RAP

BSD-ON: [BSD 13.3 Office Finisher LX Interlock Switching](#)

BSD-ON: [BSD 13.9 Office Finisher LX Tamping and Offset \(1 of 2\)](#)

BSD-ON: [BSD 13.10 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the [012-221](#), [012-223](#) Front Tamper Home Sensor Fail Entry RAP.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Manually operate the tamper mechanism. **The tamper mechanism moves smoothly.**

Y N
Install a new components as necessary, [PL 13.28](#).

Enter [dC330](#) code 012-220 front tamper home sensor. Manually operate the tamper mechanism to actuate the front tamper home sensor. **The display changes.**

Y N
Check the wiring between [J8881](#) pin 2 and [J8984](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Measure the voltage between [J8984](#) pins 6 and 4 on the finisher PWB. **The voltage is approximately +5VDC.**

Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [J8984](#) pin 5 on the finisher PWB and ground. Manually operate the tamper mechanism to actuate the front tamper home sensor. **The voltage changes.**

Y N
Install a new front tamper home sensor, [PL 13.28 Item 8](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) 012-020 and 012-023 alternately. **The front tamper motor runs.**

Y N
Measure the voltage between [J8984](#) pin 19 on the finisher PWB and ground. **The voltage is approximately +24VDC.**

Y N
Measure the voltage between [J8982](#) pin 4 on the finisher PWB and ground. **The voltage is approximately +24VDC.**

A B

A B

Y N
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Check the wiring between [J8984](#) pins 18 to 22 on the finisher PWB and the front tamper motor [P/J8884](#) for an open or short circuit, or a loose or damaged connector. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Install a new front tamper motor, [PL 13.28 Item 6](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

012-224B, 012-263B Rear Tamper Home Sensor Fail RAP

BSD-ON: BSD 13.3 Office Finisher LX Interlock Switching

BSD-ON: BSD 13.9 Office Finisher LX Tamping and Offset (1 of 2)

BSD-ON: BSD 13.10 Office Finisher LX Tamping and Offset (2 of 2)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the 012-224, 012-263 Rear Tamper Home Sensor Fail Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Manually operate the tamper mechanism. The tamper mechanism moves smoothly.

Y N
Install a new components as necessary, PL 13.28.

Enter dC330 code 012-221. Manually operate the tamper mechanism to actuate the rear tamper home sensor. The display changes.

Y N
Check the wiring between J8882 pin 2 and J8984 pin 8 for an open or short circuit, or a loose or damaged connector. The wiring is good.

Y N
Reconnect or repair as necessary.

Measure the voltage between J8984 pins 9 and 7 on the finisher PWB. The voltage is approximately +5VDC.

Y N
Install a new finisher PWB, PL 13.45 Item 2.

Measure the voltage between J8984 pin 8 on the finisher PWB and ground. Manually operate the tamper mechanism to actuate the rear tamper home sensor. The voltage changes.

Y N
Install a new rear tamper home sensor, PL 13.28 Item 8.

Install a new finisher PWB, PL 13.45 Item 2.

Enter dC330 012-026 and 012-029. The rear tamper motor runs.

Y N
Measure the voltage between J8984 pin 14 on the finisher PWB and ground. The voltage is approximately +24VDC.

Y N
Measure the voltage between J8984 pin 4 on the finisher PWB and ground. The voltage is approximately +24VDC.

A B
Y N
Check the +24VDC circuit. Refer to Chapter 7 Wiring Data. If the fault persists, install a new finisher PWB, PL 13.45 Item 2.
Install a new finisher PWB, PL 13.45 Item 2.
Check the wiring between J8984 pins 13 to 17 on the finisher PWB, and the rear tamper motor P/J8883 for an open or short circuit, or a loose or damaged connector. The wiring is good.
Y N
Reconnect or repair as necessary.
Install a new rear tamper motor, PL 13.28 Item 6. If the fault persists, install a new finisher PWB, PL 13.45 Item 2.
Install a new finisher PWB, PL 13.45 Item 2.

012-231 Punch Home Sensor Fail RAP

BSD-ON: [BSD 13.6 Office Finisher LX Punch](#)

012-231 The punch home sensor did not turn on within the specified time after the punch motor started running.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the punch home actuator for deformation.
- Check the punch home sensor, [PL 13.09 Item 5](#) for proper installation.

Procedure

Enter [dC330](#) code 12-074 and 12-078 alternately to run the punch motor. **The punch motor runs.**

- | | |
|--|---|
| Y | N |
| Check the wiring to the punch motor. Install new components as necessary: | |
| <ul style="list-style-type: none">• Punch motor, PL 13.09 Item 1.• Finisher PWB, PL 13.45 Item 2. | |

Enter [dC330](#) code 12-271. Use a piece of paper to actuate the punch home sensor. **The display changes.**

- | | |
|--|---|
| Y | N |
| Check the wiring to the punch motor. Install new components as necessary: | |
| <ul style="list-style-type: none">• Punch home sensor, PL 13.09 Item 5.• Finisher PWB, PL 13.45 Item 2. | |

If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-243, 012-265 Booklet Folder Home Sensor Fail RAP

BSD-ON: [BSD 13.8 Office Finisher LX Folding](#)

012-243 Folder home sensor is not actuated after the lapse of 500ms from motor on while folder knife is returning to home.

012-265 When the booklet home moves from home position, the folder home sensor did not turn off within the specified time.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the folder home sensor, [PL 13.40 Item 16](#) for improper installation.
- Check the knife drive mechanism, [PL 13.40](#) for a foreign substance.

Procedure

Enter [dC330](#) code 013-022 and 013-023 alternately to run the folder knife motor. **The fold knife motor runs.**

- | | |
|---|---|
| Y | N |
| Check the wiring between P/J8905 and P/J8990 on the finisher PWB and between P/J8994 on the booklet PWB and J8985 on the finisher PWB for an open or short circuit, or a loose or damaged connector. The wiring is good. | |

- | | |
|-----------------------------------|---|
| Y | N |
| Reconnect or repair as necessary. | |

Install a new booklet folder knife motor, [PL 13.40 Item 15](#). If the fault persists, install a new booklet PWB, [PL 13.70 Item 4](#).

Enter [dC330](#) code 013-101. Actuate the folder home sensor. **The display changes.**

- | | |
|--|---|
| Y | N |
| Check the wiring between J8904 pin 2 and P/J8990 pin 2 on the finisher PWB for an open or short circuit, or a loose or damaged connector. The wiring is good. | |

- | | |
|-----------------------------------|---|
| Y | N |
| Reconnect or repair as necessary. | |

Measure the voltage between [P/J8990](#) pins 3 and 1 on the finisher PWB. **The voltage is approximately +5VDC.**

- | | |
|---|---|
| Y | N |
| Install a new finisher PWB, PL 13.45 Item 2 . | |

Measure the voltage between [P/J8990](#) pin 2 on the finisher PWB and ground. Actuate the folder home sensor. **The voltage changes.**

- | | |
|--|---|
| Y | N |
| Install a new folder home sensor, PL 13.40 Item 16 . | |

Install a new finisher PWB, [PL 13.45 Item 2](#).

If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-249 Booklet Front Stapler Fail RAP

BSD-ON: [BSD 13.4 Office Finisher LX Booklet Interlock Switching](#)

BSD-ON: [BSD 13.17 Office Finisher LX Booklet Staple Control \(1 of 2 - Front\)](#)

012-249 The booklet front staple home switch is not on (does not return to home position) within the specified time after the booklet front staple motor starts to reverse.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the booklet front stapler for jammed staples or an incorrectly installed staple cartridge.

Procedure

Enter [dC330](#) code 12-024 then 12-025 to cycle the front booklet stapler. **The front booklet stapler cycles normally.**

Y N
Measure the voltage between [P/J8993](#) pin 5 on the booklet PWB and ground. **The voltage is approximately +24VDC.**

Y N
Check the circuit from the booklet PWB to the booklet stapler cover switch. Repair the wiring or install new components as necessary, [PL 13.70](#).

Switch off the machine, [GP 10](#). Check the wiring between [P/J8995](#) on the booklet PWB and [J8894](#) on the front booklet stapler for a loose or damaged connector, or an open or short circuit. If the wiring is good, install a new front booklet stapler assembly, [PL 13.60 Item 13](#). If the problem persists, install a new booklet PWB, [PL 13.70 Item 4](#).

Switch off the machine, [GP 10](#). Check the wiring between [P/J8995](#) pin 5 on the booklet PWB and [P/J8994](#) pin 3 on the front booklet stapler for a loose or damaged connector, or an open or short circuit. If the wiring is good, install a new front booklet stapler assembly, [PL 13.60 Item 13](#). If the problem persists, install a new booklet PWB, [PL 13.70 Item 4](#).

012-260, 012-282 Eject Clamp Home Sensor Fail RAP

BSD-ON: [BSD 13.13 Office Finisher LX Eject Control \(1 of 2\)](#)

012-260 After the eject clamp started ascending, the eject clamp home sensor did not turn on within 500ms.

012-282 After the eject clamp started descending, the eject clamp home sensor did not turn off within 200ms.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Manually operate the eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the eject clamp home sensor, [PL 13.27 Item 16](#) for damage

Procedure

Enter [dC330](#) code 012-250. Actuate the eject clamp home sensor. **The display changes.**

Y N
Check the wiring between [J8870](#) pin 2 on the eject clamp home sensor and [P/J8988](#) pin 8 on the finisher PWB for an open or short circuit, or loose or damaged connectors. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8988](#) pins 9 and 7 on the finisher PWB. **The voltage is approximately +5VDC.**

Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8988](#) pin 8 on the finisher PWB and ground. Actuate the eject clamp home sensor. **The voltage changes.**

Y N
Install a new eject clamp home sensor, [PL 13.27 Item 16](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-052 and 012-053 alternately. **The eject motor runs.**

Y N
Check the wiring between [P/J8878](#) pins 1 to 6 on the eject motor and [P/J8983](#) pins 5 to 8 on the finisher PWB for an open or short circuit, or loose or damaged connectors. **The wiring is good.**

Y N
Reconnect or repair as necessary.

A B

A B
Measure the resistance of the eject motor between each pin of P/J8878 pins 1, 3, 4 and 6. **The resistance is approximately 2 Ohm.**
Y N
Install a new eject motor, PL 13.27 Item 4.
Install a new finisher PWB, PL 13.45 Item 2. If the problem persists, install a new eject motor, PL PL 13.27 Item 4.

Check for an intermittent circuit or intermittent mechanical problem. If the check is good, install a new finisher PWB, PL 13.45 Item 2.

012-268 Booklet Rear Stapler Fail RAP

BSD-ON: BSD 13.4 Office Finisher LX Booklet Interlock Switching

BSD-ON: BSD 13.18 Office Finisher LX Booklet Staple Control (2 of 2 - Rear)

012-268 The booklet rear staple home switch is not on (does not return to home position) within the specified time after the booklet rear staple motor starts to reverse.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the booklet rear stapler for jammed staples or an incorrectly installed staple cartridge.

Procedure

Enter dC330 code 12-026 then 12-027 to cycle the front booklet stapler. **The rear booklet stapler cycles normally**

Y N
Measure the voltage between P/J8993 pin 5 on the booklet PWB and ground. **The voltage is approximately +24VDC.**

Y N
Check the circuit from the booklet PWB to the booklet stapler cover switch. Repair the wiring or install new components as necessary, PL 13.70.

Switch off the machine, GP 10. Check the wiring between P/J8995 on the booklet PWB and J8895 on the rear booklet stapler for a loose or damaged connector, or an open or short circuit. If the wiring is good, install a new rear booklet stapler assembly, PL 13.65 Item 13. If the problem persists, install a new booklet PWB, PL 13.70 Item 4.

Switch off the machine, GP 10. Check the wiring between P/J8995 pin 12 on the booklet PWB and J8895 pin 3 on the rear booklet stapler for a loose or damaged connector, or an open or short circuit. If the wiring is good, install a new rear booklet stapler assembly, PL 13.65 Item 13. If the problem persists, install a new booklet PWB, PL 13.70 Item 4.

012-269 Booklet PWB Communications Fail RAP

012-269 Communications between the finisher PWB and the booklet PWB failed.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the connectors at the finisher PWB and the booklet PWB are connected or seated correctly
- Check the wiring between the finisher PWB and the booklet PWB for damage.

Procedure

Switch off, then on switch on the machine, **GP 10**. Enter **dC330** code 013-161 to detect the booklet maker. **The fault is resolved.**

Y N
Reload the software, **GP 4**. **The fault is resolved.**
Y N
Install a new finisher PWB, **PL 13.45 Item 2**. If the fault persists, install a new booklet PWB, **PL 13.70 Item 4**.
Perform **SCP 5** Final Actions.

Perform **SCP 5** Final Actions.

012-283B, 012-284B Set Clamp Home Sensor Fail RAP

BSD-ON: **BSD 13.13 Office Finisher LX Eject Control (1 of 2)**

BSD-ON: **BSD 13.14 Office Finisher LX Eject Control (2 of 2)**

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the **012-283, 012-284 Set Clamp Home Sensor Fail Entry RAP**.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Manually operate the eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the set clamp home sensor, **PL 13.27 Item 16** for damage

Procedure

Enter **dC330** code 012-251. Actuate the set clamp home sensor. **The display changes.**

Y N
Check the wiring between **J8871** pin 2 on the set clamp home sensor and **P/J8988** pin 11 on the finisher PWB for an open or short circuit, or loose or damaged connectors. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Measure the voltage between **P/J8988** pins 12 and 10 on the finisher PWB. **The voltage is approximately +5VDC.**

Y N
Install a new finisher PWB, **PL 13.45 Item 2**.

Measure the voltage between the **P/J8988** pin 11 on the finisher PWB and ground. Actuate the eject clamp home sensor. **The voltage changes.**

Y N
Install a new eject clamp home sensor, **PL 13.27 Item 16**.

Install a new finisher PWB, **PL 13.45 Item 2**.

Enter **dC330** code 012-052 then 012-053 alternately. **The eject motor, PL 13.27 Item 4 runs.**

Y N
Check the wiring between **P/J8878** pins 1 to 6 on the eject motor and **P/J8983** pins 5 to 8 on the finisher PWB for an open or short circuit, or loose or damaged connectors. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Measure the resistance of the eject motor between each pin of **P/J8878-1, 3, 4 and 6**. **The resistance is approximately 2 Ohm.**

A

A

Y N

Install a new eject motor, [PL 13.27 Item 4](#).

Install a new finisher PWB, [PL 13.45 Item 2](#). If the problem persists, install a new eject motor, [PL 13.27 Item 4](#).

Enter [dC330](#) code 012-050. **The set clamp clutch energizes.**

Y N

Check the wiring between [P/J8877](#) pins 1 and 2 on the set clamp clutch and [P/J8983](#) pins 3 and 4 on the finisher PWB for an open or short circuit, or loose or damaged connectors. **The wiring is good.**

Y N

Reconnect or repair as necessary.

Measure the voltage between the Finisher PWB [P/J8983](#) pin 4 (+) and ground (-). **The voltage is approximately +24VDC.**

Y N

Install a new set clamp clutch, [PL 13.27 Item 12](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

012-291B Stapler Fail RAP

BSD-ON: [BSD 13.12 Office Finisher LX Staple Control](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-291 Stapler Fail Entry RAP](#).



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the stapler for jammed staples or an incorrectly installed staple cartridge.

Procedure

Enter [dC330](#) code 012-046 then 012-047. **The stapler cycles.**

Y N

Check the wiring between [J8887](#) pins 1 to 4 on the stapler assembly and [P/J8981](#) pins 9 to 12 on the finisher PWB for an open or short circuit, or loose or damaged connectors. If the wires are good, install a new stapler assembly, [PL 13.20 Item 4](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

Enter [dC330](#) code 012-244 to check the staple home sensor. **The value is L.**

Y N

Measure the voltage between [P/J8988](#) pins 1 to 5 on the stapler assembly. **The voltage is approximately +5VDC.**

Y N

Check the wirings from [P/J8981](#) pins 4 and 8 to [J8886](#) pins 5 and 1 for an open circuit. If the wires are good, install a new finisher PWB, [PL 13.45 Item 2](#).

Check the wiring from [J8886](#) pin 4 to [P/J8981](#) pin 5 for an open circuit. If the wiring is good, install a new stapler assembly, [PL 13.20 Item 4](#).

Check for an intermittent connection. If the check is good, install a new stapler assembly, [PL 13.20 Item 4](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-295, 012-296 Stapler Move Position Sensor Fail RAP

BSD-ON: [BSD 13.11 Office Finisher LX Staple Positioning](#)

012-295 occurs when:

- After the stapler started moving to the staple position, the stapler move position sensor did not turn on within 2 seconds.
- After the stapler completed moving to the staple position, the stapler move position sensor did not turn on.

012-296 occurs when:

- After the stapler started moving to the staple position and the staple move sensor turned off, the staple move sensor did not turn off within 500ms.
- After the staple position had been fixed, the staple move sensor turned off.
- After the staple move sensor actuated when paper passed through the dual staple 1 position while moving to the rear staple position, the staple move sensor did not deactuate within 500ms.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the stapler, base frame and rail, [PL 13.20](#) for freedom of movement.

Procedure

Enter [dC330](#) code 012-241. Manually move the stapler from the home position to the staple position and back to actuate the stapler move position sensor, [PL 13.20 Item 8](#). The display changes.

Y N

Check the wiring between [J8885](#) pin 2 on the stapler move position sensor and [P/J8981](#) pin 2 on the finisher PWB for an open or short circuit, or loose or damaged connectors. The wiring is good.

Y N

Reconnect or repair as necessary.

Measure the voltage between [P/J8981](#) pins 3 and 1 on the finisher PWB. The voltage is approximately +5VDC.

Y N

Install a new finisher PWB, [PL 13.45 Item 2](#).

Measure the voltage between [P/J8981](#) pin 2 on the finisher PWB and ground. Manually move the stapler from the home position to the staple position and back. The voltage changes.

Y N

Install a new stapler move position sensor, [PL 13.20 Item 8](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

A

Enter [dC330](#) code 012-045 and 012-042 alternately. The stapler move motor runs.

Y N

Check the wiring between [P/J8981](#) pins 13 to 16 on the finisher PWB and [P/J8888](#) on the stapler move motor for an open or short circuit, or loose or damaged connectors. The wiring is good.

Y N

Reconnect or repair as necessary.

Install a new stapler move motor, [PL 13.20 Item 20](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

Check for an intermittent connection. If the check is good, install a new stapler assembly, [PL 13.20 Item 4](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

A

012-300 Eject Cover Open RAP

BSD-ON: [BSD 13.3 Office Finisher LX Interlock Switching](#)

012-300 Eject cover switch open was detected.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure that the eject cover, [PL 13.25 Item 1](#) is closed.
- Check the eject cover switch, [PL 13.27 Item 19](#) for improper installation.
- Check eject cover switch connectors for connection failure.
- Check the switch actuator for damage.

Procedure

Enter [dC330](#) code 012-300. Actuate the eject cover switch. **The display changes**

- | | |
|---|---|
| Y | N |
| | Check the wiring between J8889 pin 1 and 2 for an open or short circuit, or loose or damaged connectors. The wiring is good. |
| Y | N |
| | Install a new eject cover switch, PL 13.27 Item 19 . |
| | Check the wiring between J8889 on the eject cover switch and J8982 on the finisher for an open or short circuit, or loose or damaged connectors. If the check is good, install a new finisher PWB, PL 13.45 Item 2 . The wiring is good. |
| Y | N |
| | Reconnect or repair as necessary. |
| | Install a new finisher PWB, PL 13.45 Item 2 . |

Install a new finisher PWB, [PL 13.45 Item 2](#).

012-302B Front Cover Interlock Open RAP

BSD-ON: [BSD 13.3 Office Finisher LX Interlock Switching](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-302 Front Cover Interlock Open Entry RAP](#).



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the installation of the front door interlock switch, [PL 13.45 Item 19](#).
- Check that the front cover can be opened and closed.

Procedure

Enter [dC330](#) code 012-302. Open then close the finisher front cover to actuate the front door interlock switch. **The display changes.**

- | | |
|---|---|
| Y | N |
| | Cheat the front door interlock switch. The display changes. |
| Y | N |
| | Check the wiring between J8982 pin 3 and J8891 pin 2B, and from J8891 pin 2A to J8982 pin 2 for an open or short circuit, or a loose or damaged connector. The wiring is good. |
| Y | N |
| | Reconnect or repair as necessary. |
| | Remove the cheater. Measure the voltage between J8891 pin 2A on the front door interlock switch and ground. The voltage is approximately +5VDC. |
| Y | N |
| | Check the wiring from J8891 pin 2A to J8982 pin 3 for an open or short circuit, or a loose or damaged connector. If the wires are good, install a new finisher PWB, PL 13.45 Item 2 . |
| | Cheat the interlock switch. The voltage drops to 0VDC. |
| Y | N |
| | Install a new front door interlock switch, PL 13.45 Item 19 . |
| | Install a new finisher PWB, PL 13.45 Item 2 . |
| | Check the actuator for damage or misalignment |

Check the interlock circuit for an intermittent condition. If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-303 Finisher horizontal Transport Cover Open RAP

BSD-ON: [BSD 13.5 Office Finisher LX Horizontal Transport](#)

012-303 The finisher horizontal transport cover is open.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the installation of the horizontal transport open sensor, [PL 13.08 Item 3](#).
- Check that the finisher horizontal transport cover can be opened and closed

Procedure

Enter [dC330](#) code 012-303. Actuate the horizontal transport open sensor. The display changes.

Y N
Check the wiring between [J8860](#) pin 2 and [J8897](#) pin 2 for an open or short circuit, or a loose or damaged connector. The wiring is good.
Y N
Reconnect or repair as necessary.
Measure the voltage between [J8897](#) pins 3 and 1 on the finisher PWB. The voltage is approximately +5VDC.
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).
Measure the voltage between [J8897](#) pin 2 on the finisher PWB and ground. Actuate the horizontal transport open sensor. The voltage changes.
Y N
Install a new horizontal transport open sensor, [PL 13.08 Item 3](#).
Install a new finisher PWB, [PL 13.45 Item 2](#).

If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-334B Download Fail RAP

BSD-ON: [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)

Procedure

NOTE: Ensure the correct RAP is performed, refer to the [012-334 Download Fail Entry RAP](#).



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the wiring between the finisher and the IOT.
2. Reload the software, [GP 4](#)
3. If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-901 Horizontal Transport Entrance Sensor Static Jam RAP

012-901 Paper remains on the horizontal transport entrance sensor.

Procedure

Perform the [012-111 to 012-131](#) Horizontal Transport Entrance Sensor Jam RAP.

012-903B Compiler Exit Sensor On RAP

BSD-ON: [BSD 13.7 Office Finisher LX Transportation](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-903](#) Compiler Exit Sensor On Entry RAP.



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the paper path for jammed pieces paper.
- Clean the compiler exit sensor, [PL 13.35 Item 10](#).

Procedure

Enter [dC330](#) code 012-150. Actuate the compiler exit sensor. **The display changes.**

Y	N
	Check the wiring between J8869 pin 2 and P/J8988 pin 5 for an open or short circuit, or a loose or damaged connector. The wiring is good.
Y	N
	Reconnect or repair as necessary.
	Measure the voltage between P/J8988 pins 6 and 4 on the finisher PWB. The voltage is approximately +5VDC.
Y	N
	Install a new finisher PWB, PL 13.45 Item 2 .
	Measure the voltage between P/J8988 pin 5 on the finisher PWB and ground. Actuate the compiler exit sensor. The voltage changes.
Y	N
	Install a new compiler exit sensor, PL 13.35 Item 10 .
	Install a new finisher PWB, PL 13.45 Item 2 .

If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-905 Compiler Tray No Paper Sensor Static Jam RAP

BSD-ON: [BSD 13.10 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

012-905 Paper remains on the compiler tray no paper sensor.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the paper path for jammed pieces paper.
- Clean the compiler tray no paper sensor, [PL 13.28 Item 9](#).

Procedure

Enter [dC330](#) code 012-151. Actuate the compiler tray no paper sensor. **The display changes.**

Y N
Check the wiring between [J8880](#) pin 2 and [P/J8994](#) pin 2 on the finisher PWB for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.
Measure the voltage between [P/J8994](#) pins 3 and 1 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).
Measure the voltage between [P/J8994](#) pin 2 on the finisher PWB and ground. Actuate the compiler tray no paper sensor. **The voltage changes.**
Y N
Install a new compiler tray no paper sensor, [PL 13.28 Item 9](#).
Install a new finisher PWB, [PL 13.45 Item 2](#).

If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

012-935B Entrance Sensor RAP

BSD-ON: [BSD 13.7 Office Finisher LX Transportation](#)

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the [012-935 Entrance Sensor Entry RAP](#).



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check for obstructions in the paper path
- Check that the finisher is docked correctly to ensure proper transport gate operation.

Procedure

Enter [dC330](#) code 012-100. Actuate the transport entrance sensor, [PL 13.35 Item 10](#). **The display changes.**

Y N
Check the wiring between [J8868](#) pin 2 and [P/J8988](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.
Measure the voltage between [P/J8988](#) pins 3 and 1 on the finisher PWB. **The voltage is approximately +5VDC.**
Y N
Install a new finisher PWB, [PL 13.45 Item 2](#).
Measure the voltage between [P/J8988](#) pin 2 on the finisher PWB and ground. Actuate the finisher entrance sensor. **The voltage changes.**
Y N
Install a new transport entrance sensor, [PL 13.35 Item 10](#).
Install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

013-210, 013-211 Booklet Staple Move Home Sensor Fail RAP

BSD-ON: [BSD 13.16 Office Finisher LX Booklet Staple Positioning](#)

013-210 Booklet staple move home sensor does not actuate within designated time period.

013-211 Booklet staple move home sensor does not deactuate within designated time period.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure the staple head is free from obstructions.
- Check [dC122](#) Fault History for 013-306 or 013-307 faults. If either fault is listed, first perform the relevant procedure:
 - [013-306](#) Booklet Safety Switches Open RAP.
 - [013-307](#) Booklet Left Cover Open RAP.

Procedure

Enter [dC330](#) code 013-143. Move the booklet staplers to actuate the booklet staple move home sensor, [PL 13.55 Item 13](#). **The display changes.**

Y N
Check the wiring between [J8897](#) pin 2 and [P/J8991](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**
Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8991](#) pins 3 and 1 on the booklet PWB. **The voltage is approximately +5VDC.**
Y N
Install a new booklet PWB, [PL 13.70 Item 4](#).

Measure the voltage between [P/J8991](#) pin 2 on the booklet PWB and ground. Move the booklet staplers to actuate the booklet staple move home sensor. **The voltage changes.**
Y N
Install a new booklet staple move home sensor, [PL 13.55 Item 13](#).

Install a new booklet PWB, [PL 13.70 Item 4](#).

Enter [dC330](#) code 013-028 and 013-029 alternately. **The stapler move motor runs.**

Y N
Check the wiring between [P/J8992](#) pins 1 to 6 on the booklet PWB and [P/J8906](#) on the booklet stapler move motor for an open or short circuit, or loose or damaged connectors. **The wiring is good.**
Y N
Reconnect or repair as necessary.

A B
Monitor the voltage at [J8904](#), pin 3. Enter [dC330](#) code 013-028 and 013-029 alternately. **An AC clock pulse is detected.**
Y N
Check the wiring between [J8904](#) pin 3 and [J8985](#) pin 4. If the wiring is good, install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new booklet stapler move motor, [PL 13.55 Item 9](#). If the fault persists, install a new booklet PWB, [PL 13.70 Item 4](#).

Check the wiring for an intermittent fault.

A B

013-212, 013-213 Booklet Staple Move Position Sensor Fail RAP

BSD-ON: [BSD 13.16 Office Finisher LX Booklet Staple Positioning](#)

013-212 Booklet staple move position sensor does not actuate within designated time period.

013-213 Booklet staple move position sensor does not deactuate within designated time period.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure the staple head is free from obstructions.
- Check [dC122](#) Fault History for 013-306 or 013-307 faults. If either fault is listed, first perform the relevant procedure:
 - [013-306](#) Booklet Safety Switches Open RAP.
 - [013-307](#) Booklet Left Cover Open RAP.

Procedure

Enter [dC330](#) code 013-144. Move the booklet stapler to actuate the booklet staple move position sensor, [PL 13.55 Item 13](#). **The display changes.**

Y N
Check the wiring between [J8898](#) pin 2 and [P/J8991](#) pin 5 and between [J8904](#) pin 5 and [J8985](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Measure the voltage between [P/J8991](#) pins 4 and 6 on the booklet PWB. **The voltage is approximately +5VDC.**

Y N
Install a new booklet PWB, [PL 13.70 Item 4](#).

Measure the voltage between [P/J8991](#) pin 5 on the booklet PWB and ground. Actuate the booklet staple move position sensor. **The voltage changes.**

Y N
Install a new booklet staple move position sensor, [PL 13.55 Item 13](#).

Measure the voltage between [J8895](#) pin 5 on the finisher PWB and ground. Actuate the booklet staple move position sensor. **The voltage changes.**

Y N
Install a new booklet PWB, [PL 13.70 Item 4](#). If the fault persists, install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new finisher PWB, [PL 13.45 Item 2](#).

A
Enter [dC330](#) code 013-028 and 013-029 alternately. **The stapler move motor runs.**

Y N
Check the wiring between [P/J8992](#) pins 1 to 6 on the booklet PWB and [P/J8906](#) on the booklet stapler move motor for an open or short circuit, or loose or damaged connectors. **The wiring is good.**

Y N
Reconnect or repair as necessary.

Monitor the voltage at [J8904](#) pin 3. Enter [dC330](#) code 013-028 and 013-029 alternately. **An AC clock pulse is detected.**

Y N
Check the wiring between [J8904](#) pin 3 and [J8985](#) pin 4. If the wiring is good, install a new finisher PWB, [PL 13.45 Item 2](#).

Install a new booklet stapler move motor, [PL 13.55 Item 9](#). If the fault persists, install a new booklet PWB, [PL 13.70 Item 4](#).

Check the wiring for an intermittent fault.

013-220 Folder Detect Fail RAP

BSD-ON: [BSD 13.8 Office Finisher LX Folding](#)

013-220 Control logic cannot detect the folder assembly.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter [dC330](#) code 013-160 to detect the folder. The displayed state is Low.

- Y N
- Measure the voltage at [P/J8990](#) pin 4. Less than +1VDC is measured.
- Y N
- Check the wiring between [P/J8990](#) pins 4 and 5. Also ensure that [P8903](#) is securely fastened.
- Install a new finisher PWB, [PL 13.45 Item 2](#).

Check the wiring for an intermittent fault.

013-306 Booklet Safety Switches Open RAP

BSD-ON: [BSD 13.4 Office Finisher LX Booklet Interlock Switching](#)

013-306 Control logic senses that one or more booklet safety switch is open.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check [dC122](#) Fault History for a 013-307 fault. If the fault is listed, perform the [013-307 Booklet Left Cover Open RAP](#).

Procedure

Measure the voltage between [P/J8993](#) pin 3 on the booklet PWB and ground. +24VDC is measured.

- Y N
- Measure the voltage between [P/J8993](#) pin 6 on the booklet PWB and ground. +24VDC is measured.
- Y N
- Perform the [013-307 Booklet Left Cover Open RAP](#).
- Check the circuit through the booklet safety switches, [PL 13.70 Item 2](#).

Install a new booklet PWB, [PL 13.70 Item 4](#).

013-307 Booklet Left Cover Open RAP

BSD-ON: [BSD 13.4 Office Finisher LX Booklet Interlock Switching](#)

013-307 Control logic senses that the booklet left cover is open.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Ensure the left cover, [PL 13.50 Item 8](#) is closed.

Procedure

Measure the voltage between [P/J8993](#) pin 5 on the booklet PWB and ground. **+24VDC** is measured.

Y

N

Check the circuit from [P/J8993](#) to and from [J8899](#) on the booklet stapler cover switch, [PL 13.70 Item 10](#).

Install a new booklet PWB, [PL 13.70 Item 4](#).

016-210, 506, 777, 780, 798 HDD Error RAP

BSD-ON: [BSD 3.9 ESS](#)

016-210 One of the SW option functions cannot be executed due to a HDD error or HDD not installed.

016-506 The log image storage area on the disk is full, a job cannot be continued.

016-777 An error other than disk full was detected when opening/reading/writing file for compression conversion/image processing operation.

016-780 An error other than HDD full was detected when opening/writing file for operation.

016-798 A HDD unavailable error was returned when the decomposer called the S-image library.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the wiring between the ESS PWB, [PL 3.10 Item 6](#) and the hard disk. Ensure that all surface mounted modules on the ESS PWB are securely connected.
3. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
4. Perform the [OF2](#) Special Boot Modes RAP.
5. Install a new hard disk, [PL 3.10 Item 2](#).

016-211, 016-212 SW Option Fail Memory Low RAP

016-211 Insufficient system memory was detected.

016-212 Insufficient Page Memory was detected.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Refer the customer to the User Guide to check memory usage.

016-213 SW Option Fail (Printer Card) RAP

016-213 The PRT_CARD was not installed or an error was detected when optional function software (internet fax kit) was enabled.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).

016-214 SW Option Fail (Fax Card) RAP

016-214 The fax card was not installed or an error was detected when SW optional function was enabled.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure all fax PWBs are correctly installed, [PL 20.05](#).

016-215, 016-216 SW Option Fail RAP

016-215 The scanner functions cannot be executed due to a JPEG board error or JPEG board not installed.

016-216 The system detected that the extension memory was not installed.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Install a new ESS PWB, [PL 3.10 Item 6](#).

016-217 SW Option Fail (Controller ROM) RAP

016-217 Controller ROM does not support printer kit.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).

016-218 PS Kit Not Installed for XDOD RAP

016-218 The PS Kit required for XDOD function was not installed.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Advise the customer that the postscript kit is required.

016-219 License Required (Printer Kit) RAP

016-219 The ROM was replaced without license (printer kit software key not set).

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Set the printer kit SW key to 'Enabled'.

016-220 to 016-226, 240 S2X Error RAP

016-220 A unrecoverable error was detected at the S2X PWB.

016-221 Communication with the S2X PWB has failed.

016-222 An error has occurred in the S2X PWB self-diagnostics.

016-223 The S2X PWB has failed the write/read test of the internal SDRAM.

016-224 The S2X PWB has failed to access to the internal PCI space.

016-225 The S2X PWB failed the ROM check sum test.

016-226 The S2X PWB failed to detect the video clocks sent from the IIT.

016-227 The S2X PWB failed the write/read test of the internal DDR memory.

016-228 The S2X PWB failed the desired value comparison of the high-compression process results using the internal test patterns.

016-240 The high compression PDF board (S2X) failed the NVM checksum

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Reload the software, GP 4.
3. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

016-230 License Required (PS Image Log Kit) RAP

016-230 The PS-ROM was installed with 'SW key: Image Log Kit for PS' in disabled state.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Set the image log kit SW key to 'Enabled'.

016-232 MRC HW Initialize Error RAP

016-232 MRC HW initialize error. an error has occurred during high compression board initialization.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Reload the software, **GP 4**.
3. Install a new ESS PWB, **PL 3.10 Item 6**.

016-233 SW Option Fail (USB Host Not Installed) RAP

016-233 Any one of the SW optional functions cannot be used because the USB host has a failure or is not installed.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Reload the software, **GP 4**.
3. Install a new ESS PWB, **PL 3.10 Item 6**.

016-234, 016-235 XCP Error RAP

016-234 Lack of memory causes the XCP to stop.

016-235 Another internal error causes the XCP function to stop.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.

016-242 System GMT Clock Fail RAP

016-242 System GMT clock fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Reload the software, **GP 4**.
3. Install a new ESS PWB, **PL 3.10** Item 6.

016-244 Self-Signed Certificate Auto Update Fail RAP

016-244 Self-signed certificate auto update failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.

016-245, 016-246 Invalid Accessory Mode RAP

016-245 Invalid accessory in auth and account mode.

016-246 Invalid accessory kind in auth and account mode.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Disconnect the invalid accessory.

016-310 SSMM Job Log Full RAP

016-310 A job log file was not retrieved from the external application (AWAS) and the number of files stored exceeded the specified value (280).

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).

016-311, 315, 319 Scanner Not Detected RAP

016-311 The system detected that the scanner was not installed.

016-315 An error in the I/F between the scanner and the main processor was detected.

016-319 An error in the I/F between the scanner and the main unit was detected.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, [GP 4](#).
4. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

016-312, 313, 314 SW Option Fail (Hybrid WaterMark) RAP

016-312 When the SW optional function is being enabled, the system detected that the hybrid watermark detection H/W is not installed.

016-313 The hybrid watermark detection H/W was detected but the SW option (secure watermark kit) was not enabled.

016-314 The board for detecting the back (side 2) of a document is not installed. Therefore (paper security) is unavailable.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure that all connectors on the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, GP 4.
4. Perform the OF2 Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

016-316, 317, 318, 329, 333, 334 Page Memory Error RAP

016-316 The system detected that the page memory (standard) of the scanner was not installed.

016-317 The system detected an error in the Page Memory (standard) of the scanner.

016-318 The system detected an error in the Page Memory (option) of the scanner.

016-329 Long boot diag page memory not detected fail.

016-333 Long boot diag page memory broken standard fail.

016-334 Long boot diag page memory broken option fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure that all connectors on the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, GP 4.
4. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

016-321 Fax Module Error RAP

016-321 Fax related error at booting.

Procedure

Perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

016-322 JBA Account Full RAP

016-322 The cumulated accounting data reached the specified value (15,000).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Advise the customer to perform a manual retrieval of machine data from their accounting server.
3. Initialise the hard disk. Refer to dC355 Image Disk Diagnostics. Advise the customer to push the user accounts to the machine from their accounting server.
4. Ensure that all connectors on the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules are securely connected.
5. Reload the software, GP 4.
6. Perform the OF2 Special Boot Modes RAP.
7. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

016-323 B-Formatter Fatal Error RAP

016-323 Fatal error has occurred in the B-formatter task.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.

016-324 Scheduled Image Overwrite RAP

016-324 Scheduled image overwrite.

Procedure

For information only, no service action necessary. Wait until the Scheduled Image Overwrite to complete.

016-325 Using Personal Certificate RAP

016-325 The IC card personal certificate is set in the certificate for signing.

Procedure

Perform the steps that follow:

1. Enter **dC131**. Set NVM value 790-389 to 0.

016-326, 016-607 UI Cable Connection Fail RAP

BSD-ON: [BSD 2.1 Control Panel](#)

016-326 The controller has detected a failure at its cable connection with the UI.

016-607 Cont-UI Cable Connection Fail

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the wiring between the ESS PWB and the UI
2. Install new components as necessary:
 - ESS PWB, [PL 3.10 Item 6](#).
 - UI assembly (C7030F), [PL 2.05 Item 7](#).
 - UI assembly (C7000), [PL 2.10 Item 1](#).

016-327, 016-328 Connection Fail RAP

016-327 Backplane connection fail.

016-328 The controller has detected a failure at its cable connection with the drive PWB.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.

016-330, 331, 332 Cont System Memory Fail RAP

016-330 Cont system memory diagnostic fail 1.

016-331 Cont system memory diagnostic fail 2.

016-332 Cont system memory diagnostic fail 3.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-335 to 016-351 Controller Fail RAP

016-335 Cont program ROM diagnostic fail 1.

016-336 Cont program ROM diagnostic fail 2.

016-337 Cont program ROM diagnostic fail 3.

016-338 Cont font ROM diagnostic fail 1.

016-339 Cont font ROM diagnostic fail 2.

016-340 Cont font ROM diagnostic fail 3.

016-341 Cont font ROM diagnostic fail 4.

016-342 Cont RTC diagnostic fail.

016-343 Long boot diag timer fail.

016-345 Cont NVM diagnostic fail.

016-346 Cont A4 fax modem diagnosis fail.

016-347 Cont page memory diagnostic fail 1.

016-348 Cont page memory fail 2.

016-349 Cont MAC address data fail.

016-350 Cont SEEP-ROM diagnostic fail 1.

016-351 Cont SEEP-ROM diagnostic fail 2.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure that all connectors on the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, GP 4.
4. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

016-352 Internal Network Initialize Fail RAP

016-352 Internal network initialization error.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Reload the software, GP 4.

016-353, 016-354 IOT-Controller Communication Fail RAP

016-353 Communication cannot be established between the IOT and the ESS.

016-354 Communication cannot be established between the IIT and the controller.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new components as necessary:
 - ESS PWB, **PL 3.10 Item 6**.
 - Drive PWB, **PL 1.10 Item 4**.

016-355, 016-356 Controller ASIC Fail RAP

016-355 Cont IO ASIC diagnostic fail.

016-356 Cont video ASIC diagnostic fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-357 Controller EP Communication Fail RAP

016-357 Controller to EP-controller communication fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-358 Controller Parallel Card Fail RAP

016-358 Controller parallel port diagnostic fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Reload the software, **GP 4**.
3. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-359, 016-361 Controller USB Fail RAP

016-359 Cont USB HUB diagnostic fail.

016-361 Cont USB 3.0 device diagnostic fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Install a new ESS PWB, **PL 3.10 Item 6**.

016-360, 016-362 Controller UI Fail RAP

016-360 Cont UI diagnostic fail 1.

016-362 Cont UI diagnostic fail 2.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Check the wiring between the ESS PWB and the UI
3. Install new components as necessary:
 - ESS PWB, **PL 3.10 Item 6**.
 - UI assembly, **PL 2.05 Item 7**.
 - UI assembly (C7000), **PL 2.10 Item 1**.

016-363 Controller LyraCard Fail RAP

016-363 Cont JPEG card diagnosed as having a failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-364, 016-365 Controller USB 2.0 Fail RAP

016-364 Cont USB 2.0 host diagnostic fail.

016-365 Cont USB 2.0 device diagnostic fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-366, 016-367 Controller HDD Fail RAP

BSD-ON: [BSD 3.9 ESS](#)

016-366 Cont HDD diagnostic fail 1.

016-367 Cont HDD diagnostic fail 2.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the wiring between the ESS PWB, [PL 3.10 Item 6](#) and the hard disk.
3. Reload the software, [GP 4](#).
4. Install new components as necessary:
 - ESS PWB, [PL 3.10 Item 6](#).
 - Hard disk, [PL 3.10 Item 2](#).

016-368, 369, 370 Controller Diagnostic Fail RAP

016-368 Cont torino diagnostic fail.

016-369 Cont S2X board diagnostic fail.

016-370 Cont rendering engine diagnosed as having a failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, [GP 4](#).
4. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

016-371 Controller USB 1.1 Host Fail RAP

016-371 A defect was detected during a diagnostic check of USB 1.1 host (no communication with the fax card could be established).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the fax PWBs, **PL 20.05** are securely connected.
3. Reload the software, **GP 4**.
4. Install new components as necessary:
 - Line 1 fax PWB, **PL 20.05 Item 10**.
 - Line 2 fax PWB, **PL 20.05 Item 15**.
 - Line 3 fax PWB, **PL 20.05 Item 15**.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-383 Controller OS Communication Fail RAP

016-383 Communication failure between linux and VX works

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-400, 402, 427, 429 802.1x Authentication Failure RAP

016-400 802.1x Authentication error (incorrect user name or password). The user name or password that has been set in the machine is incorrect. The settings are different from those in the authentication device switch that is physically connected to the machine via the network.

016-402 802.1x authentication time-out (there was no response signal from the authentication device). The authentication was timed-out because there was no response signal from the authentication device switch that is physically connected to the machine via the network.

016-427 802.1x authentication failure (network 2).

016-429 802.1x authentication failure by timing out (network 2).

Procedure

Advise the customer to:

1. Enter the correct user name or password for 802.1x authentication from the machine panel.
2. Check the switch settings and network connections of the authentication device switch that is physically connected to the machine via the network and connect it correctly.
3. Check the settings in the Authentication Device switch that is physically connected to the machine via the network.

016-401 802.1x EAP Type Not Supported RAP

016-401 802.1x Authentication method mismatch (the authentication server does not support the authentication method of the machine). A fail signal, which indicates that the authentication method set in the machine cannot be processed, was received from the authentication device switch that is physically connected to the machine via the network.

Procedure

Advise the customer to:

1. Set the authentication method of the machine to be the same as the one set in the authentication server.
2. Check the 802.1x authentication method from the UI.

016-403, 016-430 802.1x Certificate Failure RAP

016-403 802.1x authentication certificate mismatch. The root server certificate for the authentication server is not stored in the machine or it is mismatched.

016-430 The root certificate of the server certificate (for network 2) of the authentication server is not stored in the machine or it does not match.

Procedure

Advise the customer to:

1. Store the root server certificate for the authentication server in the machine.
2. If the root certificate of the server certificate cannot be obtained, disable the 802.1x setting item 'Verify Server Certificate' in the device.

016-404, 016-431 802.1x Inside Failure RAP

016-404 An internal error has occurred in the 802.1x supplicant function of the machine. An incorrect protocol signal was received from the authentication server.

016-431 An internal error has occurred in the 802.1x supplicant function of the machine. An incorrect protocol signal was received from the authentication server in network 2.

Procedure

Advise the customer to repeat the operation.

016-405 Certificate DB File Error RAP

016-405 Certificate database file is wrong.

Procedure

Advise the customer to start 'Initialize certificate' under Maintenance.

016-406 802.1x Client Certificate Failure RAP

016-406 An error in setting up client certificate for 802.1x authentication. Although 'EAP-TLS' is selected as the authentication method for 802.1x authentication, SSL client certificate is not set up or deleted.

Procedure

Advise the customer to:

1. Store SSL client certificate in this machine and set it up as SSL client certificate.
2. If SSL client certificate cannot be set up, select an authentication method other than 'EAP-TLS'.

016-407 to 016-412 XCP Error RAP

016-407 The package management function has detected security exception.

016-408 The package management function has detected the damaged JAR file.

016-409 The package management function has detected a version mismatch.

016-410 The package management function has detected the invalid definition file.

016-411 The package management function has detected an unsupported class file version.

016-412 The package management function has detected the plug-in has caused an error that is included in a miscellaneous group of errors.

Procedure

Advise the customer to modify the plug-in, then re-install.

016-417 Invalid Network Settings RAP

016-417 An invalid or improper network setting has prevented communication.

Procedure

Ensure all network settings are correct.

016-421 Input Tray Removed RAP

016-421 The paper tray is removed.

Procedure

Ensure all paper trays are fully inserted.

016-422, 016-423 Offline RAP

016-422 Diag Offline

016-423 Offline

Procedure

Perform the steps that follow:

1. If a remote access session in progress, wait for it to end.
2. If the fault persists, switch off, then switch on the machine, GP 10.

016-424, 016-425 Power Mode RAP

016-424 Low power mode.

016-425 Sleep mode.

Procedure

Perform the steps that follow:

1. Cancel the power save mode.
2. If the fault persists, switch off, then switch on the machine, [GP 10](#).

016-426 SMart eSolutions Connect Fail RAP

016-426 Could not connect to SMart eSolutions server.

Procedure

Switch off, then switch on the machine, [GP 10](#).

016-428 802.1x EAP Type Not Supported (Network 2) RAP

016-428 802.1x Authentication method mismatch (authentication server does not support the authentication method of this device: network 2)

Procedure

Advise the customer to:

1. Set the authentication method of network 2 of this machine to the same authentication method as the one set in the authentication server.
2. Check the 802.1x authenticating method on the UI.

016-432 802.1x Client Certificate Failure (Network 2) RAP

016-432 802.1x setting error of the client certificate of the authentication (network 2).

Procedure

Advise the customer to:

1. Store the client certificate to this machine SSL and set as SSL client certificate.
2. If the setting of SSL client certificate cannot be made, select other than (EAP-TLS) as the authentication method.

016-450 SMB Host Name Duplicated RAP

016-450 A PC of the same host name exists on the network.

Procedure

Advise the customer to:

1. Check whether the device host name setting of the same host name is the same as another device. If the setting is duplicated, change the host name of the device or duplicate device.
2. If a duplicated setting is not confirmed, change the device host name.

016-453, 016-454 Dynamic DNS - IPv6 NG RAP

016-453 Failed to update of the IPv6 address and host name to the DNS server.

016-454 Dynamic DNS - dynamic update failed.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check that DNS server address is set correctly in the device.
 - b. Check with the System Administrator whether the DNS server settings that allow dynamic DNS using IPv6 address have been set.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

016-455, 016-456 SNTP Time Out RAP

016-455 There is no response from the SNTP server within the specified time (60sec).

016-456 A standard time synchronized source message and an asynchronous message was received from the SNTP server.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check the time on the machine, if the time on the machine is incorrect, manually set the time.
 - b. Check that the SNTP server address is set correctly in the device.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

016-461 Under Non-transmitted Image Log Stagnation RAP

016-461 Creation of a new job is being restricted because image logs yet to be transferred are piled up and delayed.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check the image log management server status and the network status, and clear any cause that may impede the transfer of image logs to the image log server.
 - b. Check the transfer settings and transfer all logs that are yet to be transferred. Or, change the transfer guarantee level to 'Low'.

NOTE: *Setting the transfer guarantee level to 'Low' may cause the image logs to get deleted in sequence even before they are transferred.*

2. If the fault persists, reload the software, **GP 4**.

016-500, 016-501 ROM Write Error (During DLD Method) RAP

016-500 An error has occurred during the process of writing data to the cont-ROM.

016-501 An error has occurred during the process of writing data to the S2X-ROM.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Reload the software, **GP 4**.
2. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-502 ROM Write Error (During PJJ Method) RAP

016-502 An error was detected when writing data to one of the ROMs in the machine.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
2. Reload the software, **GP 4**.
3. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-503 SMTP Server Fail for Redirector RAP

016-503 The SMTP server name could not be resolved (though the machine tried to connect to the server).

Procedure

Perform the steps that follow:

1. Advise the customer to specify the correct SMTP server name or specify the IP address.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

016-504 POP Server Fail for Redirector RAP

016-504 The POP server name could not be resolved (though the machine tried to connect to the server).

Procedure

Perform the steps that follow:

1. Advise the customer to specify the correct POP server name or specify the IP address.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

016-505 POP Authentication Fail for Redirector RAP

016-505 Incorrect POP Server authentication information was detected.

Procedure

Perform the steps that follow:

1. Advise the customer to specify the correct POP Server authentication information.
2. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

016-507, 016-508 Image Log Send Fail RAP

016-507 A log image transfer fails, making it impossible to continue a target job which will consist of created images.

016-508 A log image transfer fails, making it impossible to continue an image transfer job.

Procedure

Perform the steps that follow:

1. Advise the customer to check the state of the destination image log control server and that of the network. Clear any factor preventing image logs from being transferred to the image log control server.
2. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
3. If the fault persists, install a new hard disk, [PL 3.10 Item 2](#).

016-509, 016-510 Image Log No Send Rule RAP

016-509 Because rules for log image transfer are not registered, a job cannot be continued.

016-510 Rules for log image transfer are not registered.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to register rules for transfer from the destination image log control server to the device.
2. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
3. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
4. Install a new hard disk, **PL 3.10 Item 2**.

016-511, 016-512 Image Log Invalid Send Rule RAP

016-511 Rules for log image transfer are illegal, causing a job to be discontinued.

016-512 Rules for log image transfer are illegal.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to overwrite rules for transfer from the destination image log control server to the device.
2. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
3. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
4. Install a new hard disk, **PL 3.10 Item 2**.

016-513 SMTP Server Reception Error RAP

016-513 Error when receiving response from the SMTP server (after connecting to the server).

Procedure

Perform the steps that follow:

1. Advise the customer to wait 5 minutes before resubmitting the job.
2. Check that SMTP send port number is correct.
3. Check the SSL/TLS settings and Port number:
On the embedded web server, under Connectivity, SMTP, Connection Security. Ensure that the customer is using the appropriate encryption type for their mail server.
4. If the fault persists, advise the customer to consult with their network administrator for the correct configuration.

016-514 XPS Error RAP

016-514 During XPS Bridge processing, invalid schema, parameter error, damage to XPS file, or an error internal to XPS decomposer occurred.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure that all connectors on the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules are securely connected.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A Scan to Network Error Entry RAP](#).

016-515 XPS Short of Memory

016-515 During XPS Bridge processing, a lack of memory was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to check the print mode. If print mode is set to High Resolution, change it to Standard. If print mode is set to Standard, change it to High Speed.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** and hard disk, **PL 3.10 Item 2** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, perform the **016A Scan to Network Error Entry RAP**.

016-516 XPS Print Ticket Description Error RAP

016-516 XPS Print Ticket description error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to check whether the application that sends a print job and the print instructions has a problem.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** and hard disk, **PL 3.10 Item 2** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.

016-517 PS Booklet Illegal Color Mode Change RAP

016-517 PS documents to be printed into a booklet have black and white and color areas.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to resubmit the job with corrected parameters. Rewrite the PostScript file so that the page device and process color model cannot be changed in the process.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** and hard disk, **PL 3.10 Item 2** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.

016-518 PS Booklet Conflict WM RAP

016-518 PS booklet and watermarks were specified at the same time.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. PS booklet and watermark/UUID cannot be specified at the same time. Advise the customer to cancel either one.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** and hard disk, **PL 3.10 Item 2** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.

016-519 Device DV Limit Reached RAP

016-519 Number of printable sides limit full.

Procedure

Ask the System Administrator to increase the limit of printable sides.

016-520 MRC HW Job Error RAP

016-520 An error has occurred during the usage of high compression board.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to repeat the operation or change the output file format/color mode.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** and hard disk, **PL 3.10 Item 2** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.

016-521 SmartCard Not Found RAP

016-521 After a personal signature scan job has started up, the Smart Card was removed or the Card Reader was detached, which causes the personal signature to fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to insert the smart card into the reader then recheck the PIN before performing the personal signature scan.
2. Check the wiring between the card reader and the machine.

016-522 LDAP SSL Error 112 RAP

016-522 LDAP-SSL authentication error 112 has occurred (the client certificate cannot be obtained).

Procedure

Advise the customer to install the SSL client certificate into the device as the LDAP server will request it.

016-523 LDAP SSL Error 113 RAP

016-523 LDAP-SSL authentication error 112 has occurred (the client certificate cannot be obtained).

Procedure

The device cannot trust the SSL certificate of the LDAP server. Advise the customer to register the root certificate of the LDAP server SSL certificate in the device.

016-524, 016-525 LDAP SSL Error 114 and 115 RAP

016-524 LDAP-SSL authentication error 114 has occurred (the server certificate is close to expiring).

016-525 LDAP-SSL authentication error 115 has occurred (the server certificate has expired).

Procedure

Advise the customer to change the LDAP server SSL certificate to one that is valid.

016-526 LDAP SSL Error 116 RAP

016-526 LDAP-SSL authentication error 116 has occurred (the server name and the certificate does not match)

Procedure

Advise the customer to ensure that the address of the LDAP server set in the device matches the address of the LDAP server defined in the SSL certificate.

016-527 LDAP SSL Error 117 RAP

016-526 LDAP-SSL authentication error 116 has occurred (the server name and the certificate does not match)

Procedure

For information only, an internal error has occurred in the program.

016-528 SmartCard Not Authorized RAP

016-528 After a personal signature scan job started, the smart card PIN check status was cleared, which causes the personal signature to fail.

Procedure

Advise the customer to check the PIN, then perform the personal signature scan.

016-529 Remote Download Server Timeout RAP

016-529 There was no response within the specified time (45 sec) when connecting to the remote download server.

Procedure

Check the network connection. Advise the customer to check that the remote download server is correctly configured and operating on the network.

016-533 Kerberos Attestation Protocol Error 37 RAP

016-533 A Kerberos server Attestation protocol error has occurred.

Procedure

Advise the customer to:

1. The clock difference between the device and the Kerberos server has exceeded the clock skew limit of the Kerberos server. Check that the clocks of the device and Kerberos server are set correctly.
2. Check that the daylight saving time and time zone settings for the device and the Kerberos server are the same.

016-534 Kerberos Attestation Protocol Error 41 and 42 RAP

016-534 A Kerberos server Attestation protocol error has occurred.

Procedure

Advise the customer to check that the realm name and server address in the Kerberos settings of the device are set correctly.

016-535 Remote Download File Access Error RAP

016-535 There are no FW update files in the remote download server.

Procedure

Advise the customer to check the remote download server for the FW update file.

016-536 Host Name Solution Error in Remote Download RAP

016-536 Remote download server name resolution error.

Procedure

Advise the customer to check the connection to the DNS and whether the remote download server name has been registered in the DNS.

016-537 Remote Download Server Connection Error RAP

016-537 Remote download server connection error.

Procedure

Advise the customer to check the network connection setting (port) of the remote download server.

016-538 Remote Download File Write Error RAP

BSD-ON: [BSD 3.9 ESS](#)

016-538 Remote download file write to HDD error.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the wiring between the ESS PWB, [PL 3.10 Item 6](#) and the hard disk.
3. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
4. Install a new hard disk, [PL 3.10 Item 2](#).

016-539 Kerberos Attestation Other Protocol Error RAP

016-539 A Kerberos Server Attestation protocol error has occurred.

Procedure

For information only, an internal error has occurred in the program.

016-543 Attestation Agent Error 543 RAP

016-543 The specified realm/domain has disappeared from the ApeosWare authentication agent (the domain was manually deleted at the ApeosWare authentication agent after obtaining the realm name list from the device).

Procedure

Advise the customer to:

1. Update the realm list, using the Update Realm button on the device, or add the domain to the ApeosWare authentication agent. To update the device realm information, perform the steps that follow:
 - a. Press the Authentication Agent button on the Authentication window of the device.
 - b. The Authentication Agent window appears. Press the Update button.

016-545 Attestation Agent Error 545 RAP

016-545 A Clock skew error has occurred in attestation. The time of ApeosWare Authentication Agent and ActiveDirectory is out of sync with the upper limit of the Kerberos ClockSkew set in the ActiveDirectory.

Procedure

Advise the customer to match the time of the PC where the ApeosWare Authentication agent is installed with the time of the PC where the ActiveDirectory is. Furthermore, if the Windows Time Service in the PC where the ApeosWare Authentication Agent is installed is stopped, start it.

016-546, 558, 569 Attestation Agent Errors RAP

016-546 A general user has attempted to obtain other user's information.

016-558 The machine has received an unknown error from the ApeosWare Authentication Agent.

016-569 Attestation agent errors other than listed previously.

Procedure

Switch off, then switch on the machine, [GP 10](#).

016-548 Attestation Agent Error 548 RAP

016-548 The information of the machine that is performing the authentication operation is not in the database.

Procedure

Advise the customer to register the device in the ApeosWare Authentication Agent.

016-553 Attestation Agent Error 553 RAP

016-553 The version information written in the SOAP header cannot be understood. The ApeosWare Authentication Agent does not support the version of the device interface.

Procedure

The version of the ApeosWare Authentication Agent needs to be upgraded. Advise the customer to check that the machine is a product that is supported by the upgraded version of the ApeosWare Authentication Agent.

016-554 Attestation Agent Error 554 RAP

016-554 The existence check for the specified user in the event of an authentication error has failed.

Procedure

Advise the customer to correctly set the domain user reference login name or the reference password of the ApeosWare Authentication Agent domain.

016-555 Attestation Agent Error 555 RAP

016-555 The ApeosWare Authentication Agent cannot connect to the database or the Active Directory.

Procedure

Advise the customer to check that the ApeosWare Authentication Agent can connect to the database or the active directory.

016-556 Attestation Agent Error 556 RAP

016-556 Error has occurred in the database that the ApeosWare Authentication Agent is connected to due to overloading.

Procedure

Advise the customer to wait 5 minutes before authenticating again as the service is overloaded.

016-557 Attestation Agent Error 557 RAP

016-557 An internal error has occurred in the ApeosWare Authentication Agent.

Procedure

Advise the customer to check the ApeosWare Authentication Agent.

016-559 Remote Download Parameter Error RAP

016-559 When performing the remote download, an invalid value is set in the required system data.

Procedure

Advise the customer to check that all system data that must be set to perform the remote download are correct.

016-560 Attestation Agent Error 560 RAP

016-560 A communication error has occurred between the ApeosWare Authentication Agent and the machine.

Procedure

Advise the customer to:

1. Check that the network cable is connected and check the settings of the authentication agent function.
2. If DNS address of the server is set as the server name/IP address of the ApeosWare Authentication Agent in the printer function settings list, check that DNS is enabled.

016-562 Detected User Duplication RAP

016-562 Two or more entries with the same IC card information were found in the temporary user DB of Active Directory or Authentication Agent.

Procedure

Advise the customer to make corrections so that the temporary user entries of the Active Directory or Authentication Agent do not have the same IC card information.

016-564 Remote Download Server Authentication Failed RAP

016-564 When accessing the remote download server, an authentication error notification was issued from the server.

Procedure

Advise the customer to check that the correct user name and password was specified when accessing the remote download server.

016-565 Backup Restore Error RAP

016-565 Backup/restore error.

Procedure

Perform the steps that follow:

1. For USB backup, check that the USB memory is correctly installed. If the fault persists, use a PC to check the USB memory for a 'backup' directory. If it is not there, create it.
2. When performing restore or deletion of backup files from the USB backup file, check that the USB memory is correctly installed.

016-566 Backup Restore Condition Error RAP

016-566 NVM backup/restore condition error.

Procedure

Advise the customer to:

1. During backup, save the FW download file into the 'dwdl' directory in the USB memory, connect it the machine, then perform the backup.
2. During restore, use the same IOT and IIT ROM versions as those during backup. When performing restore using a USB backup file, also use the same HDD configuration.
3. If there is no HDD, use the same ESS ROM versions as well. If the same configuration cannot be attained, delete the backup file from the panel.
4. If the problem occurred at an attempt to restore a backed-up file from an external place, check that the ESS/IIT/IOT/fax ROM version is still the same as the version used when the backed-up file was created. Furthermore, check the device is the same as the one that generated the backed-up file.

016-567 Backup Capacity Full RAP

016-567 NVM data to back up is over the capacity of the destination to save it.

Procedure

Perform the steps that follow:

1. Before performing the HDD backup, delete existing backup files through to increase the capacity.
2. Before performing USB backup, delete the backup files in the USB memory, or use a PC to delete unnecessary files on the USB memory to increase the capacity.

016-568 Backup Restore Failed RAP

016-568 NVM data could not be backed up or restored.

Procedure

Perform the steps that follow:

1. Format the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
2. Before performing the restore using the HDD backup file, delete backup files.
3. For USB backup, check that the USB memory is correctly installed. If the fault persists, use a PC to format the USB Memory.
4. When performing restore using USB backup files, check that the USB memory is correctly installed. If the fault persists, delete the backup files.
5. If the problem still persists, use a PC to format the USB memory.

016-570 Job Ticket Out of Memory RAP

016-570 XPIF memory is low.

Procedure

Increase memory size for job ticket on UI Panel. Switch off, then switch on the machine, GP
10. Run the job.

016-571 Job Ticket Wrong Parameters RAP

016-571 XPIF parameter mismatch.

Procedure

Advise the customer to check for a mismatch between parameters specified by the job ticket.
Correct the parameters, then resend the job.

016-572 Job Ticket Media Error RAP

016-572 XPIF media conversion error.

Procedure

Advise the customer to check that the device that receives data can print it onto paper whose properties (size/type/weight/color/punched) are specified by job ticket.

016-573 Job Ticket Parse Error RAP

016-573 XPIF Interpret error.

Procedure

Advise the customer to ensure the that software is correctly installed on client that generates job ticket; operational requirements are met; and software version matches device version.

016-574 FTP Host Name Solution Error RAP

016-574 Unable to resolve host name during FTP scan.

Procedure

1. Advise the customer to check the connection to the DNS and whether the destination server name has been registered in the DNS.
2. Ask the customer to verify the FTP server host name is correct.

016-575 FTP DNS Server Error RAP

016-575 The DNS server was not set during FTP scan.

Procedure

Advise the customer to set the DNS address or set the destination server address using IP address.

016-576 FTP Server Connection Error RAP

016-576 Problem with connection to server during FTP scan.

Procedure

Advise the customer to check that the network communication between the transfer destination FTP server and the machine is available. For example:

- Check that the server IP address is correct.
- Check the connection of network cables.

016-577 FTP Service RAP

016-577 Failed to connect to the FTP service of the destination server.

Procedure

Advise the customer to:

1. Check that the server IP address is correct.
2. Check the connection of the network cables.

016-578 FTP Login Name or Password Error RAP

016-578 FTP scan login name or password error.

Procedure

Advise the customer to check that the login name (user name) and password are correct.

016-579 FTP Scanning Picture Preservation Place Error RAP

016-579 Problem with scanned image storage destination of FTP scan.

Procedure

Advise the customer to check that the scanned image storage destination on the FTP scan server is correct.

NOTE: *Ensure the FTP user has proper permissions to the image storage destination.*

016-580 FTP File Name Acquisition Failure RAP

016-580 Unable to obtain file name/folder name on the FTP scan server.

Procedure

1. Advise the customer to check the access rights to the FTP scan server.
2. Advise the customer to check the image storage destination folder name.

016-581 FTP File Name Suffix Limit RAP

016-581 The FTP scan file name/folder name suffix has exceeded the limit.

Procedure

Advise the customer to change the file name/destination folder or move or delete the files in the destination folder.

016-582, 016-588 FTP File Creation Failure RAP

016-582 When creating a file in the server after connecting to the FTP server, the file creation has failed.

016-588 Failed to write data into the server after connecting to the FTP server.

Procedure

Advise the customer to:

1. Check that the specified name is a file name that can be created in the storage destination.
2. Check that the storage destination has enough free space.

016-583, 016-584 FTP Folder Creation Failure RAP

016-583 When creating a lock folder in the server after connecting to the FTP server, the lock folder creation has failed.

016-584 When creating a folder in the server after connecting to the FTP server, the folder creation has failed.

Procedure

Advise the customer to:

1. If a lock directory (*.LCK) remains in the transfer destination, delete it then retry the job.
2. Check that the specified name is a folder name that can be created in the storage destination.
3. Check whether a folder with the same name as the specified name already exists.
4. Check that the storage destination has enough free space.
5. Confirm that the FTP user has correct permissions for the scanned image destination.

016-585, 587, 589 FTP File Delete/Read Failure RAP

016-585 When deleting a file in the server after connecting to the FTP server, the deletion has failed.

016-587 When deleting a folder in the server after connecting to the FTP server, the deletion has failed.

016-589 Failed to read data from the FTP server after connecting to the FTP server during scanner (save to PC) FTP transfer.

Procedure

Advise the customer to check whether there is access right to the FTP server and grant the proper rights.

016-586 FTP Lock Folder Delete Failure RAP

016-586 When deleting a lock folder in the server after connecting to the FTP server, the deletion has failed.

Procedure

Advise the customer to:

1. Check the access right to the server.
2. If a lock directory (*.LCK) remains in the transfer destination, delete it then retry the job.

016-590 FTP Data Reading Failure RAP

016-590 Unable to save a file after connecting to the FTP server during scanner (save to PC) FTP transfer because 'File Name Conflict' is set to 'Cancel Job'.

Procedure

Advise the customer to set 'File Name Conflict' to other than 'Cancel Job'.

016-591 FTP Scan Filing Policy RAP

016-591 Incorrect filing policy (when additional items are selected) was detected after connecting with the FTP server.

Procedure

When 'Add' is selected for 'File Name Conflict', Advise the customer to check that the file format is not set to Multi-page.

016-592 FTP DAT File Access Error RAP

016-592 An error has occurred when accessing the NEXTNAME.DAT file after connecting to the FTP server during scanner (Save to PC) FTP transfer.

Procedure

When 'Add' is selected for 'File Name Conflict', Advise the customer to check that the NEXT-NAME.DAT file is correct.

016-593 to 016-596 FTP Error RAP

016-593 An internal error has occurred after connecting to the FTP server.

016-594 The TYPE command has failed after connecting to the FTP server.

016-595 The PORT command has failed after connecting to the FTP server.

016-596 The CDUP command has failed after connecting to the FTP server.

Procedure

Advise the customer to repeat the operation.

016-597 Same File on FTP Server RAP

016-597 The process was cancelled because a file/folder with the same name was detected after connecting to the FTP server.

Procedure

Advise the customer to perform the same operation again without multiple machines accessing the same folder in the same server.

016-598, 016-599 Email Message Size RAP

016-598 Email message size is over spec.

016-599 Email message size is over spec.

Procedure

Advise the customer to:

1. Reduce a resolution send parameter (image-to-send quality) then resend the job.
2. Reduce a magnification send parameter, then resend the job.
3. Increase the maximum message size (10MB recommended default).

016-600 KO Authentication Locked RAP

016-600 The number of incorrect Key Operator log in attempts reached the limit.

Procedure

If required, refer to [GP 19](#) to reset password to 1111 (default) if the System Administrator ID is unavailable.

NOTE: Default is 5 events. NVM value 700-563 can be set between 1 to 10 events.

With this feature enabled, the machine denies access when an incorrect System Administrator ID is entered the selected number of times.

016-601 Illegal Access Detection RAP

016-601 The number of incorrect authentication log in attempts reached the limit.

Procedure

If required, refer to [GP 19](#) to reset password to 1111 (default) if the System Administrator ID is unavailable.

NOTE: Default is 10 users. NVM value 700-564 can be set between 1 to 600 users.

016-604 Debug Log Created RAP

016-604 Debug log auto creation by system.

Procedure

Switch off, then switch on the machine, [GP 10](#).

016-606, 016-608 Controller Connection Fail RAP

016-606 Cont-BP cable connection fail.

016-608 Cont-Drive PWB cable connection fail.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. If the fault persists, install a new components as necessary:
 - ESS PWB, [PL 3.10 Item 6](#).
 - Drive PWB, [PL 1.10 Item 4](#).

016-609, 016-610 PCI Option Fail RAP

016-609 PCI option no support device fail.

016-610 PCI EX option no support device fail.

Procedure

Remove unknown PCI or PCIEX option.

016-611 SD Card Connection Fail RAP

016-611 SD card connection fail.

Procedure

Ensure the SD card, [PL 3.10 Item 11](#) is correctly installed.

016-612 Log Image Creation Failure RAP

016-612 Creation of log image has failed.

Procedure

For information only, no service action necessary.

016-700 Password Below Minimum RAP

016-700 The number of digits used for the password for security and authentication prints is less than the minimum.

Procedure

Advise the customer to increase the number of password digits for the print job.

016-701 Out of ART EX Memory RAP

016-701 Insufficient memory was detected while using the ART EX.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Increase the allocated memory of the ART EX.
 - b. Lower the print mode.
 - c. Lower the resolution.
 - d. Set Page Print mode to Enabled.
 - e. Execute Image Compression in the Graphics tab of the printer driver.
2. If the fault persists, reload the software, [GP 4](#).

016-702 Out of Page Buffer RAP

016-702 Unable to compress any page due to insufficient print page buffer.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Set Print Mode to High Speed and reduce the print resolution. Retry the operation.
 - b. Increase the memory to increase the page buffer.
 - c. Retry the operation in Print Page Mode.
2. If the fault persists, reload the software, [GP 4](#).

016-703 Email To Invalid Box RAP

016-703 When receiving Email, fax or internet fax, an invalid (not setup) mailbox number is selected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to:
 - a. Check whether the selected mailbox is set up correctly.
 - b. Have Email, fax or internet fax sent to a valid mailbox.
2. Ensure all fax PWBs are correctly installed, [PL 20.05](#).
3. Reload the software, [GP 4](#).
4. Check the wiring between the ESS PWB, [PL 3.10 Item 6](#) and the hard disk.
5. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
6. Install a new hard disk, [PL 3.10 Item 2](#).

016-704 Mailbox Full RAP

016-704 The system detected that a mailbox was full (it exceeded the maximum number of documents per box) and aborted a job.

Procedure

Perform the steps that follow:

1. Advise the customer to delete unnecessary documents, then repeat the operation.
2. If the fault persists, reload the software, [GP 4](#).

016-705 Secure Print Fail RAP

016-705 Unable to perform secure print/mailbox print/pay for print storing from the printer driver. Unable to store scanned documents into a mailbox.

Procedure

Perform the steps that follow:

1. Advise the customer to check that the required optional software is installed and enabled. Also check that the correct print driver is being used.
2. If the fault persists, perform the steps that follow:
 - a. Reload the software, [GP 4](#).
 - b. Check the wiring between the ESS PWB, [PL 3.10 Item 6](#) and the hard disk.
 - c. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
 - d. Install new components as necessary:
 - Hard disk, [PL 3.10 Item 2](#).
 - ESS PWB, [PL 3.10 Item 6](#).

016-706 Maximum User Number Exceeded RAP

016-706 The system detected that a job exceeded the maximum number of users for secure and sample prints and aborted the job.

Procedure

Perform the steps that follow:

1. Advise the customer to delete unnecessary documents or users, then repeat the operation.
2. If the fault persists, reload the software, [GP 4](#).

016-707 Sample Print Fail RAP

016-707 When receiving Email, fax or internet fax, an invalid (not setup) mailbox number is selected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to:
 - a. Remove the conditions that disable sample print.
 - b. If the fault occurred at installation, check whether the operations for Sample Print are correct.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
5. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
6. Install a new hard disk, **PL 3.10 Item 2**.
7. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-708 Annotation/Watermark HDD Full RAP

016-708 When an annotation or watermark image was to be stored in the HDD, full status was detected and the job was aborted.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to:
 - a. Cancel annotation or watermark, then repeat the operation.
 - b. Reduce the number of document pages. In Mixed Size mode, only a single size is available.
 - c. For printing Stored Document, delete unnecessary documents from the hard disk, then repeat the operation.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
5. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
6. Install a new hard disk, **PL 3.10 Item 2**.
7. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-709 ART EX Command Error RAP

016-709 An ART EX command error occurred during PLW processing.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to:
 - a. Switch off parallel bi-directional communication in the printer driver.
 - b. Set a longer time for Auto Output Time.
 - c. Change the PC BIOS settings.
 - d. Use a shorter, genuine, parallel cable.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
5. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
6. Install a new hard disk, **PL 3.10 Item 2**.
7. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-710 Delayed Print Fail RAP

016-710 Process conditions for delay print were not met.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to:
 - a. If secure print, proof print or knowledge storage print is specified, disable them.
 - b. Reduce the delay print jobs waiting to 100 jobs or less.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
5. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
6. Install a new hard disk, **PL 3.10 Item 2**.
7. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-711 Email Transmission Size Limit RAP

016-711 The size of data to send exceeds the system data value (before connection to the server).

Procedure

Advise the customer to:

1. Reduce the resolution level, which is a transmission parameter, then resend the job.
2. Reduce the magnification ratio, which is a transmission parameter, then resend the job
3. Use System Settings to raise the data size upper limit (recommended default is 2MB).

016-712 Panther Capacity RAP

016-712 Capability of Panther deteriorated.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to increase the resolution or enlarge the scan area.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-713 Security Box Password Error RAP

016-713 Password check error was detected during data storage in a mailbox.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to set a correct password and try again.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-714 Security Box Not Enabled RAP

016-714 The mailbox specified for the job does not exist.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to open the appropriate mailbox and then try again.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-715 ESCP Form Invalid Password RAP

016-715 Unable to access the ESCP form because ESCP form password did not match

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to input the correct password to use ESCP form.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-716 TIFF Data Overflow RAP

016-716 The system detected that the files to be spooled in TIFF exceeded the disk capacity.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
2. Reload the software, **GP 4**.
3. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
4. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
5. Install a new hard disk, **PL 3.10 Item 2**.
6. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

016-717 Fax Send Result Not Found RAP

016-717 The fax or internet fax send result information is not saved in the controller.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to:
 - a. Split any internet fax documents that would exceed 2GB in document storage size into several jobs and control the usage amount of memory.
 - b. If there is a large amount of scan or internet fax documents being processed, wait until the other jobs are completed before performing additional jobs.
2. Reload the software, GP 4.
3. Check the wiring between the ESS PWB, PL 3.10 Item 6 and the hard disk.
4. Initialise the hard disk. Refer to dC355 Image Disk Diagnostics.
5. Install a new hard disk, PL 3.10 Item 2.
6. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

016-718 Out of PCL6 Memory RAP

016-718 Insufficient PCL6 decomposer memory.

Procedure

Perform the steps that follow:

1. Advise the customer to decrease the resolution to reduce the PLW memory.
2. If the fault persists, reload the software, GP 4.

016-719 Out of PCL Memory RAP

016-719 An insufficient memory was detected while using the PCL.

Procedure

Perform the steps that follow:

1. Advise the customer to increase the PCL memory size. Increasing the memory for the whole system will increase the memory to be allocated to the Decomposer in some measure.
2. If the fault persists, reload the software, [GP 4](#).

016-720 PCL Command Error RAP

016-720 A PCL command error occurred during PCL processing.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job then execute the command again.
2. If the fault persists, reload the software, [GP 4](#).

016-721 to 016-724 Settings Error RAP

016-721 Paper types cannot be determined because all the settings for custom paper priority are set to disabled.

016-722 Staple position that is not supported by this machine or a paper size that is not supported by the Finisher was specified.

016-723 Punch position that is not supported by this machine or the paper size that is not supported by the Finisher was specified.

016-724 Job canceled due to invalid combination of staple and punch positions.

Procedure

Perform the steps that follow:

1. Advise the customer to correct the settings, then execute the command again.
2. If the fault persists, reload the software, [GP 4](#).

016-725 B-Formatter Library Image Conversion Error RAP

016-725 An error has occurred in the B-Formatter during the image conversion of scanned document to fax sending document.

Procedure

Perform the steps that follow:

1. Advise the customer to directly scan the document and send it to the fax recipient.
2. If the fault persists, reload the software, [GP 4](#).

016-726 PDL Auto Switch Fail RAP

016-726 Print language auto judgment fail.

Procedure

Perform the steps that follow:

1. Advise the customer to fix, then select the decomposer from the UI or with a command.
2. If the fault persists, reload the software, **GP 4**.

016-727 Unstorable Document RAP

016-727 The 0 page condition is detected in the print job mailbox storage.

Procedure

Perform the steps that follow:

1. Advise the customer to to switch off paper saving, then print the job again.
2. If the fault persists, reload the software, **GP 4**.

016-728 Unsupported TIFF Data RAP

016-728 Unsupported TIFF data.

Procedure

For information only, no service action necessary. Refer the customer to the User Guide.

016-729 TIFF Data Size RAP

016-720 The files to be spooled in the TIFF exceeded the disk capacity.

Procedure

Perform the steps that follow:

1. Advise the customer to refer to the User Guide to correct the valid range.
2. If the fault persists, reload the software, [GP 4](#).

016-731, 016-732 Invalid Data RAP

016-731 The TIFF data is broken or discontinued halfway.

016-732 The decomposer detected that the form specified is not registered.

Procedure

Perform the steps that follow:

1. Advise the customer to resend the data or form data.
2. If the fault persists, reload the software, [GP 4](#).

016-733 Destination Address Resolution Error RAP

016-733 A failure to resolve a P2P address problem (before connection to the server).

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check if the destination address has been entered correctly.
 - b. Set a correct DNS server address.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

016-735 Updating Job Template RAP

016-735 The system attempted to output the job template list while the job template was being updated.

Procedure

Perform the steps that follow:

1. Advise the customer to perform the operation again after the Job Template update completes.
2. If the fault persists, reload the software, [GP 4](#).

016-738, 739, 740 Booklet Size RAP

016-738 Invalid paper size for PS booklet print.

016-739 The combination of the specified document/paper sizes is incorrect.

016-740 The specified tray is invalid.

Procedure

Perform the steps that follow:

1. Advise the customer to specify the correct settings that allow booklet printing.
2. If the fault persists, reload the software, [GP 4](#).

016-741 Download Mode Fail RAP

016-741 Not able to change into download mode.

Procedure

Perform the steps that follow:

1. Advise the customer to cancel the download prohibited mode then check that the jobs have completed before retrying the operation.
2. Enter **dC131**. Set NVM value 700-420 to 0, the retry the operation.

016-742 Download Data Product ID Mismatch RAP

016-742 A mismatch in the product ID of download data was detected.

Procedure

Advise the customer to obtain the download data again, then retry the job.

016-743 Device Model/Panel Type Error RAP

016-743 The supported model in the download data does not match the device model.

Procedure

Advise the customer to source a download file that has the same model with the device VerUP then retry the job.

016-744 Download Data CheckSum Error RAP

016-744 CheckSum error of download data.

Procedure

Perform the steps that follow:

1. Ensure that the cable connected to the device is secured correctly, then retry the job.

016-745 Download Data XPJL Fatal Error RAP

016-744 XPJL fatal error during download.

Procedure

Switch off, then switch on the machine, [GP 10](#).

016-746, 016-751 Unsupported PDF File RAP

016-746 PDF error due to unsupported function sent.

016-751 Syntax error, usage of undefined command, parameter error, damaged PDF file, internal error of the PDF decomposer has occurred during PDF bridge process.

Procedure

Perform the steps that follow:

1. Advise the customer to print via the driver from Acrobat Reader.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

016-747 Drawing Annotation Memory RAP

016-747 When drawing an annotation image with the copy repeat function specified, there would be insufficient memory.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Increase the annotation image size.
 - b. Reduce the number of repeat images for the repeat function.
2. If the fault persists, reload the software, [GP 4](#).

016-748, 774, 775, 778, 981 HD Full RAP

016-748 HDD full when mailbox is accessed.

016-774 Disk full was detected when opening/writing file for compression type conversion.

016-775 Disk full was detected when opening/writing file for image processing operation.

016-778 HDD full was detected when opening/writing file for operation.

016-981 When accessing it, the HD is detected being full.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Split the job into pages in order to prevent the full state. Reduce the resolution if possible.
 - b. Delete documents that are no longer needed, such as; mailbox documents, fax send wait documents, secure print documents and delayed print documents.
 - c. Retrieve each page from the EWS.
 - d. Log in as administrator via the EWS then perform a Disk Overwrite; touch **System, Security**, then in the Data Overwrite After Job Completion area touch **Edit**. Enable **Data Overwrite After Job Completion**, touch **Overwrite Now**, then **OK**.
2. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
3. Install a new hard disk, [PL 3.10 Item 2](#).
4. If the fault persists, reload the software, [GP 4](#).

016-749 JCL Syntax Error RAP

016-749 The PJL/XPJL detected a print language that cannot be printed.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Use the printer driver of the machine to print.
 - b. Not use ContentsBridge to print a PDF file.
 - c. Request the other party to resend the internet fax document using a print language that can be printed by the machine.
2. If the fault persists, reload the software, [GP 4](#).

016-750 Print Job Ticket Description Error RAP

016-750 When the customer uses applications such as 'ContentsBridge2005', etc. to send PDF directly, the machine received the print job ticket that was sent together with the PDF. However, the print job ticket data has text that is not supported in this machine or print instruction that is not supported by the machine.

Procedure

Perform the steps that follow:

1. Advise the customer to refer to the user Guide.
2. If the fault persists, reload the software, [GP 4](#).

016-752 PDF Short of Memory RAP

016-752 Insufficient memory was detected during PDF bridge processing.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Change the print mode. When the print mode is set to High Quality, change the setting to Normal. When the print mode is set to Standard, change the setting to High Speed.
 - b. Print using a driver from Acrobat Reader.
2. If the fault persists, reload the software, [GP 4](#).

016-753 PDF Password Mismatched RAP

016-753 When processing a PDF file that is protected by a password, the password in the UI panel settings and the password specified using XPJL (set in the contents bridge utility) do not match.

Procedure

Perform the steps that follow:

1. Advise the customer to specify the correct password using the UI or the contents bridge.
2. If the fault persists, reload the software, [GP 4](#).

016-755 PDF Print Prohibited RAP

016-755 The system processed a PDF file prohibited for printing.

Procedure

Perform the steps that follow:

1. Advise the customer to use Acrobat to clear the print prohibition setting then print the PDF file.
2. If the fault persists, reload the software, [GP 4](#).

016-756 Auditron Prohibited Service RAP

016-756 Illegal User Detected

Procedure

Perform the steps that follow:

1. Advise the customer to request the Account Administrator for access to use the service.
2. If the fault persists, reload the software, [GP 4](#).

016-757 Auditron Invalid User RAP

016-756 The account has not been registered.

Procedure

Perform the steps that follow:

1. Advise the customer to set the correct account, then resubmit the job.
2. If the fault persists, reload the software, **GP 4**.

016-758 Auditron Disabled Function RAP

016-758 An illegal account was detected.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Set the new function that is allowed for that account then try again.
 - b. Try a different user account.
 - c. Configure the printer to permit user access to this feature.
 - d. Request that the Accounting Administrator add access rights to the account.
2. If the fault persists, reload the software, **GP 4**.

016-759 Auditron Limit Reached RAP

016-759 The number of registered users reached the limit.

Procedure

Perform the steps that follow:

1. Advise the customer additional users can be added to the device with expanded storage options. The productivity kit increases the maximum amount of users available for this device.
2. Advise the customer to delete unnecessary users or combine user accounts
3. If the fault persists, reload the software, [GP 4](#).

016-760 PS Decompose Failure RAP

016-760 An error occurred in decompose processing.

Procedure

Perform the steps that follow:

1. Advise the customer to resend the job.
2. If the fault persists, reload the software, [GP 4](#).

016-761 FIFO Empty RAP

016-761 Image enlargement error (FIFO empty).

Procedure

Perform the steps that follow:

1. Advise the customer to print in the high speed mode. If the fault persists, use print guaranteed mode.
2. If the fault persists, reload the software, [GP 4](#).

016-762 Print Language Not Installed RAP

016-762 The system requested functions (print language, print utility, etc.) that are not installed.

Procedure

Perform the steps that follow:

1. Advise the customer to correct then select the decomposer from the UI or with a command.
2. If the fault persists, reload the software, [GP 4](#).

016-763 POP Server Connect RAP

016-763 The machine cannot connect to the POP server.

Procedure

Advise the customer to:

1. Print a configuration report and confirm that the DNS settings are correct.
2. Confirm that the POP3 server settings are correct.
3. Enter the IP Address of their POP3 server into the machine.
4. If the fault persists, refer the customer to the System Administrator Guide to check that the machine is correctly configured.

016-764 SMTP Server Connect RAP

016-764 The machine failed to connect to the SMTP server.

Procedure

Advise the customer to:

1. Print a configuration report and confirm that the DNS settings are correct.
2. Confirm that the SMTP server settings are correct.
3. Enter the IP Address of their SMTP server into the machine.
4. If the fault persists, refer the customer to the System Administrator Guide to check that the machine is correctly configured.

016-765, 016-766 SMTP Server Error RAP

016-765 The SMTP server HDD is full.

016-766 The memory capacity allocated by the SMTP server is exceeded.

Procedure

Advise the customer to:

1. Delete jobs on their server because the machine is receiving communication from their SMTP (email) server that the server disk drive or mailboxes are full.
2. If the fault persists, refer to the System Administrator Guide to ensure that the machine is configured correctly.

016-767 Invalid Email Address RAP

016-767 The system detected that the E-mail destination address is incorrect.

Procedure

Perform the steps that follow:

1. Check the email address is correct and is a valid email address.
2. If the fault persists, reload the software, [GP 4](#).

016-768 Invalid Sender Address RAP

016-768 The SMTP server refused to accept the sender address.

Procedure

Advise the customer to:

1. Check the sender address is valid and has been spelled correctly.
2. Check that the correct SMTP authentication settings have been enabled.
3. Check the SMTP user name and password.
4. Check that the sender address is correct.

016-769 SMTP Server Unsupported DSN RAP

016-769 The SMTP server refused to accept the sender address.

Procedure

Advise the customer to contact the network administrator for advice and ensure that the SMTP server supports DSN.

016-770 Direct Fax Function Canceled RAP

016-770 The direct fax function is canceled by NVM.

Procedure

Advise the customer to release the direct fax job prohibition (set the target system to 0).

016-772 Scan Data Repository Error RAP

016-772 An error occurred while recalling the DNS resolution library.

Procedure

Perform the steps that follow:

1. Advise the customer to set the DNS address. Or, set the scan data repository address using IP address.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

016-776 Image Conversion Error RAP

016-776 Error due to other than HDD access during image conversion processing by S-format-ter.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. If a failure occurred during Salutation/Fax to Email, attempt to retrieve each page from the mailbox via the web browser.
 - b. For occurrences when the password, or signature is specified by the Digital Certificate, perform the steps that follow.
 - Check the validity of the certificate.
 - Set the correct date and time of the machine.
 - c. When scanning is done with the TWAIN driver, change the file format to JFIF, single-page TIFF.
 - d. Switch off FIPS mode, or remove PDF encryption setting in the instructions document.
 - e. Set to Single File for Each Page, or set the Image Format setting to Drawing Object.
2. If the fault persists, perform the [016A Scan to Network Error Entry RAP](#).

016-779 Scan Image Conversion Error RAP

016-779 An error was detected in the Image conversion library.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Repeat the operation.
 - b. Reduce the scan resolution to 400dpi or less then repeat the operation.
2. Reload the software, [GP 4](#).

016-781 Server Connect Error RAP

016-781 SMTP server not found.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Correctly set the device TCP/IP, IP address, subnet mask and gateway.
 - b. Check that the SMTP server, IP address or host name and port number are correct.
 - c. Check whether characters other than ASCII are set for the host name of the device. Set the host name of the device to ASCII characters.
2. If the fault persists, perform the 016A Scan to Network Error Entry RAP.

016-786 HD Full Scan Write Error RAP

016-786 When performing the scan function, files cannot be written in the HDD.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure all paper trays are loaded.
3. If this occurs when sending email, Advise the customer to:
 - Reduce the resolution then resend it.
 - Reduce the size then resend it.
 - Reduce the number of pages and separate the job into several batches when sending.
 - Set the output color to Black then resend it.
4. Check the wiring between the ESS PWB, PL 3.10 Item 6 and the hard disk.
5. Initialise the hard disk. Refer to dC355 Image Disk Diagnostics.
6. Reload the software, GP 4.
7. Install a new hard disk, PL 3.10 Item 2.

016-788 Retrieve to Browser Failed RAP

016-788 SMTP server not found.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Advise the customer to:
 - a. Reload the browser page then perform retrieval operation again.
 - b. Re-activate the browser, then perform retrieval operation again.
 - c. Improve the connection status to a network.
 - d. Check whether there are problems such as duplicated IP addresses.
3. If the fault persists, perform the 016A Scan to Network Error Entry RAP.

016-790 Email Fragment Over RAP

016-790 Email fragment quantity is over spec.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Reduce resolution (image to send quality), then resend the job.
 - b. Reduce magnification, then resend the job.
 - c. Increase the maximum fragment quantity.
2. If the fault persists, perform the 016A Scan to Network Error Entry RAP.

016-792 Specified Job Not Found RAP

016-792 An error was detected in the Image conversion library.

Procedure

Perform the steps that follow:

1. Advise the customer to repeat the operation.
2. If the fault persists, reload the software, **GP 4**.

016-794 Media Not Inserted RAP

016-794 Media not inserted.

Procedure

Perform the steps that follow:

1. Advise the customer to check that the media is inserted.
2. If the fault persists, reload the software, **GP 4**.

016-795 Media Reader Format Error RAP

016-795 The MediaLib detected this error while performing the operation that requires access to media.

Procedure

Perform the steps that follow:

1. Advise the customer to check the media content from the PC. Check the file format/directory in the media and the selected mode (Digital Camera Print/Document Print), then reset the settings.
2. If the fault persists, reload the software, [GP 4](#).

016-796 Document Insert Operation Error RAP

016-796 The MediaLib detected this error while performing the operation that requires access to Media.

Procedure

Perform the steps that follow:

1. Advise the customer to check the media content from the PC. Check whether the print file attribute data is displayed on the PC, then reset the settings.
2. If the fault persists, reload the software, [GP 4](#).

016-797 Image File Read Error RAP

016-797 The MediaLib detected this error while performing the operation that requires access to media.

Procedure

Perform the steps that follow:

1. Advise the customer to check the media content from the PC. Check whether the print file images are displayed on the PC, then reset the settings.
2. If the fault persists, reload the software, [GP 4](#).

016-799 PLW Print Instruction Fail RAP

016-799 The specified print parameter is abnormal.

Procedure

Perform the steps that follow:

1. Advise the customer to repeat the operation.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

016-910, 016-911 Required Resource Not Ready RAP

016-910 The paper and staples requested by the selected print parameters are not installed.

016-911 The paper and staples requested by the print specification are not loaded or different sizes and/or types of paper switching are requested from the same tray.

Procedure

Perform the steps that follow:

1. Advise the customer to correctly load paper or install the staples.
2. If the fault persists, reload the software, [GP 4](#).

016-917, 016-918, 016-919 Y/M/C Toner Cartridge Empty RAP

016-917 The yellow toner cartridge is empty.

016-918 The magenta toner cartridge is empty.

016-918 The cyan toner cartridge is empty.

Procedure

Perform the [024-923 to 024-925](#) Y/M/C Toner Cartridge Empty RAP.

016-920 Destination Error RAP

016-920 The paper specified for printing can not be detected.

Procedure

Perform the steps that follow:

1. Advise the customer to correctly set the paper settings.
2. Reload the software, [GP 4](#).

016-981, 982 HDD Access Error 2 RAP

BSD-ON: [BSD 3.9 ESS](#)

016-981 HDD was determined to be full due to scan to email, scan to fax, secure print, delayed print or sample print was specified when the HDD capacity is low.

016-982 HDD was determined to be full due to collate, stored or interrupted jobs.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Process or delete the jobs (documents) stored in the same HDD partition, then repeat the operation.
 - b. If step A does not resolve the problem, expand the HDD partition size of the relevant service.
2. Reload the software, [GP 4](#).
3. Check the wiring between the ESS PWB, [PL 3.10 Item 6](#) and the hard disk.
4. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.
5. Install a new hard disk, [PL 3.10 Item 2](#).

016-983 Image Log HDD Full RAP

016-983 With the system data level of ensuring log image creation set to High, the log image storage area on the disk becomes full (during processing a copy/scan job).

Procedure

Advise the customer to:

1. Cancel the job.
2. Re-run the job.
3. Delete unnecessary documents saved on the machine or change the level of ensuring creation (to Low).

016-985 Scan to Email Data Size RAP

016-985 Scan to email data size exceeded.

Procedure

Perform the steps that follow:

1. Advise the customer to reduce the number of documents, reduce the resolution, or increase the compression ratio if the job is multi-value scan.
2. If the fault persists, reload the software, [GP 4](#).

016A Scan to Network Error Entry RAP

Use this RAP when the customer reports network failures. e.g. cannot connect to the scan server when using the FTP or SMB protocols or when a folder on the scan server cannot be opened.

Initial Actions

Consult with your manager before troubleshooting the customer's network, as the policy varies according to region. Also consult with the customer's IT personnel or System Administrator.

Procedure

NOTE: Network errors can be complex to diagnose and resolve. Actions are limited to checking for fundamental faults and to collect system information, before contacting 2nd level support.

NOTE: If it is possible to log in to the Embedded Web Server by entering the IP address of the machine, then the network controller on the ESS PWB is good.

Check that the date and time are set correctly on the machine, refer to [GP 24](#) How to Set the Date and Time. **The time and date are correct.**

Y N
Set the time and date parameters correctly.

Check the LED link lights at the ESS PWB ethernet connection. **The LEDs illuminate.**

Y N
If possible, perform the following to try and eliminate the problem of a faulty network port:

- Check the connections at the network port and ESS PWB are good.
- Connect the machine to another network port.
- Advise the customer to provide a new network port to ESS PWBA cable.
- Check the operation of a known good machine to the network port.

If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#). **The LEDs illuminate.**

Y N
Contact 2nd level support.

Perform the [Final Actions](#).

Perform the [Final Actions](#).

Final Actions

Perform the steps that follow:

1. Attempt to ping the machine:
 - a. Print a configuration report to obtain the IP address of the machine, [GP 14](#).
 - b. From an internet connected PC or laptop, select **Start** and in the Search box above the Start button, type **CMD**, then press **Enter** to open a command window.

NOTE: If the Windows key is enabled (the key located in the lower left corner with the Microsoft logo), hold the Windows key down, press R and release both keys to open the Run window.

- c. In the Command window (where the blinking cursor is) type ping. Press the space bar once, then enter the IP address of the machine. Press **Enter**.

- d. If the ping command is successful, the machine will reply four times. This should not take more than two or three seconds.
 - e. If the ping command times out, or responds with 'host unreachable', check the IP address that was entered. If the IP address is correct, contact 2nd level support.
2. Attempt to send a scan job from the machine, if the scan to job did not complete, contact 2nd level support.

017-500 Job Limit Illegal Response RAP

017-500 Invalid response from job limit server.

Procedure

Advise the customer to:

1. Check the job parameter settings, then re-run the job.
2. Check the response packet from the job limit server.

017-501 Multiple Permission Restrictions RAP

017-501 A print rights violation has occurred.

Procedure

Advise the customer to change the user privileges.

017-503 Password Over Maximum RAP

017-503 Password has exceeded maximum number of digits.

Procedure

Advise the customer to lower the number of password digits.

017-504, 017-505 Job Limit RAP

017-504 An error occurred when communicating with JobLimit server.

017-505 An error occurred when communicating with JobLimit server.

Procedure

Advise the customer to check the network status and the operating status of JobLimit server.

017-506 Job Limit Rejected RAP

017-506 The job was canceled because the JobLimitServer sent Reject.

Procedure

Advise the customer to contact the System Administrator.

017-507 Job History Full RAP

017-507 The job was cancelled because the job history is full.

Procedure

Advise the customer to clear the job history and repeat the job.

017-713 Start TLS Unsupported Fail RAP

017-713 Start TLS unsupported fail.

Procedure

Advise the customer to change the SSL operation mode setting to other than STARTTLS mode.

017-714 SMTP Over SSL Fail RAP

017-714 SSL communication failure with SMTP server.

Procedure

Perform the steps that follow:

1. Advise the customer to check if this fault occurred in TLS Mode, it may be due to an incorrect port number. Check the Port Number settings of the SMTP Server.
2. Confirm that the SSL or TLS encryption type matches the appropriate port the customer selected.
3. If the fault persists, reload the software, [GP 4](#).

017-715 SSL Certificate Fail RAP

017-715 An SSL Server Authentication Error has occurred because there is something wrong in the Server Certificate Data.

Procedure

Advise the customer to register the root certificate of the SMTP server SSL certificate in the machine.

017-716, 717, 718 SSL Certificate (SMTP) Fail RAP

017-716 The validity period of the server certificate has not started.

017-717 The validity period of the server certificate has expired.

017-718 The server name does not match the server address of the server certificate.

Procedure

Advise the customer to:

1. Check that the SMTP server clock and machine clock are correct.
2. Check the validity period of the SMTP server certificate.
3. Check that the server name that are registered in the SMTP server certificate and the server address are correct.
4. If the clocks are correct, change the SMTP server SSL certificate to one that is valid.

NOTE: This problem can also be fixed by switching off the machines SSL Server Verification setting. This will render the machine unable to guarantee the authenticity of the SMTP server that it is connecting to.

017-719 SMTP Over SSL Internal Fail RAP

017-719 Internal software error has occurred during SMTP over SSL process.

Procedure

Perform the steps that follow:

1. Advise the customer to repeat the operation.
2. If the fault persists, reload the software, **GP 4**.

017-720, 017-721 PJJ Command Fail RAP

017-720 Contract type value is incorrect.

017-721 Geographic region value is incorrect.

Procedure

Advise the customer to correct the contract type or geographic region value specified by PJJ command, then try again.

017-722 Total Impressions Over Fail RAP

017-722 The total impressions of billing meter in the data for PjL diag is 9,999,900 or more.

Procedure

Advise the customer to perform the operation when the value of total impressions is between 0 and 9,999,900.

017-723 DocuWorks Unsupported Character Fail RAP

017-723 When the DocuWorks decomposer is working, it detected some text that cannot be output is in use.

Procedure

Perform the steps that follow:

1. Advise the customer to print from the DocuWorks viewer using the print driver (ART-EX, PCL, etc.).
2. If the fault persists, reload the software, [GP 4](#).

017-725 Forced Annotation Syntax Fail RAP

017-725 Syntax error in Forced Annotation instructions is detected.

Procedure

Perform the steps that follow:

1. Advise the customer to check the driver settings.
2. If the fault persists, reload the software, **GP 4**.

017-728 Scan Job Flow Document Fail RAP

017-728 MS Word or MS Excel is specified as the output format in the instructions, but the target document for processing does not possess the conditions required for format processing.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Change output format to other than MS Word, MS Excel.
 - b. Start Job Flow Service after satisfying all conditions below:
 - The document for processing is a scan document.
 - The document for processing is full color.
 - Size of the document for processing is 50x50mm or more, 297x432mm or less.
 - Color space of the document for processing is standard color space.
 - Resolution of the document for processing is 300dpi.
 - Magnification of the of the document for processing is 100%.
2. If the fault persists, reload the software, **GP 4**.

017-729 Temporary Error in PDL Transfer RAP

017-729 Temporary inability to send due to maximum jobs exceeded at the destination machine, or spool area of print data full, etc.

Procedure

Advise the customer to:

1. Set the spooling of the print data at the destination machine to hard disk.
2. Change spooling setting to Spool to Hard Disk.

017-730 Network Error in PDL Transfer RAP

017-730 Network occurred during PDL data transfer.

Procedure

Advise the customer to:

1. Check the connection of the network cable.
2. Check the destination machine is powered on.
3. Check that the IPP port of the destination machine is enabled.

017-731 POP Server Not Connected RAP

017-731 Failed to connect to the POP server.

Procedure

Perform the steps that follow:

1. Advise the customer to check that network communication between the POP server and the machine is available:
 - a. Check that the POP server IP address that is set in the machine is correct.
 - b. Check the connection of network cables.

017-732 Offline Error in PDL Transfer RAP

017-732 Unable to send because destination printer is offline.

Procedure

Advise the customer to disable the offline status of the destination machine.

017-733 Internal Error in PDL Transfer RAP

017-733 Unable to send because destination printer is offline.

Procedure

Advise the customer to repeat the operation.

017-734 IPP Data Error RAP

017-734 Syntax error, usage of undefined command, parameter error, damage of the file, or internal error of the decomposer has occurred during the decomposer process of a direct print job that used IPP in its network protocol.

Procedure

Perform the steps that follow:

1. Advise the customer to print by using a different print method (printer driver or utility other than print from IPP) that is supported by the machine.
2. If the fault persists, reload the software, [GP 4](#).

017-735 Unauthorized Auditron User RAP

017-735 Unauthorized user is detected.

Procedure

Perform the steps that follow:

1. Advise the customer to get permission to use the machine from the account administrator.
2. If the fault persists, reload the software, [GP 4](#).

017-737 Custom Transfer Out of Memory RAP

017-737 A HDD unavailable error was returned when the decomposer called the S-image library.

Procedure

Perform the steps that follow:

1. Advise the customer to deactivate or delete all unnecessary plug-ins.
2. Switch off, then switch on the machine, [GP 10](#).
3. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.

017-738, 017-746 HDD Internal Fail RAP

017-738 The system detected that the JVM has stopped due to internal error.

017-746 Custom transfer plug-in local disk malfunction.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Initialise the hard disk. Refer to [dC355](#) Image Disk Diagnostics.

017-739, 017-740 Transfer Service Not Available RAP

017-739 Custom transfer XCP not activated error.

017-740 Custom transfer plug-in not activated error.

Procedure

Advise the customer to:

1. Enable the embedded plug-in feature.
2. Input the software key for the customization kit.

017-741 Custom Transfer Invalid Plug-In RAP

017-741 The instruction that was specified by the instruction set to the plug-in and the feature provided by the plug-in (API) are mismatched when the custom transfer job is in progress.

Procedure

Advise the customer to:

1. Upgrade the embedded plug-in feature (install the latest version).
2. Check the contents of the instruction set that is being used. If the instruction set was generated by a custom service, revise the custom service contents.

017-742, 743, 744 Custom Transfer Plug-In Connection RAP

017-742 Custom transfer plug-in server connection error.

017-743 Custom transfer plug-in authentication error.

017-744 Custom transfer plug-in server access error.

Procedure

Advise the customer to:

1. Check whether the transfer destination server, etc. and the machine are able to communicate via the network.
2. Check whether it is possible to log in to the transfer destination server, etc. by using the specified user name and password.
3. Check whether it is possible to log in to the transfer destination server, etc. by using the specified user name and password.

017-745 Custom Transfer Plug-in Disk Full RAP

017-745 Insufficient hard disk area for processing was detected.

Procedure

Perform the steps that follow:

1. Advise the customer to take any one of the actions that follow:
 - a. Lower the resolution, then re-send.
 - b. Reduce the size, then re-send.
 - c. Reduce the page count, then re-send the job in several batches.
 - d. Change the output color to black & white, then re-send.

017-747 Custom Transfer Plug-In Connection Timeout RAP

017-747 Custom transfer plug-in communication timed out error.

Procedure

Advise the customer to:

1. Wait a while, then re-run the job.
2. If the situation does not improve, consult with the Network Administrator.

017-748 Custom Transfer Plug-In Invalid machine RAP

017-748 Custom transfer plug-in invalid machine settings data error.

Procedure

Advise the customer to check the machine settings required for file transfer.

017-749 Custom Transfer Plug-In XML Fail RAP

017-749 When extracting the custom transfer parameter from XML file, the obtaining of the parameter has failed, the parameter format is inconsistent, or the parameter value cannot be processed due to wrong grammar.

Procedure

Advise the customer to check the contents of the instruction set that is being used. If the instruction set was generated by a custom service, revise the custom service contents.

017-750 Custom Transfer Plug-In Internal Fail RAP

017-750 An internal logic error was detected in the custom transfer plug-in.

Procedure

Perform the steps that follow:

1. Advise the customer to revise the custom transfer plug-in and then reinstall it.
2. Switch off, then switch on the machine, [GP 10](#).

017-751 Custom Transfer Plug-In Other Fail RAP

017-751 An error specific to the custom transfer plug-in was detected.

Procedure

Advise the customer to refer to the error details in the job undelivered transmission report, then take appropriate action.

017-755 Software Download Via Network Fail RAP

017-755 A software download via the network was performed when the software download via network set as prohibited.

Procedure

Perform the steps that follow:

1. Either set the software download via network to allowed or perform the software download using a USB.
2. If the fault persists, reload the software, [GP 4](#).

017-759 Download Data Inspection Error RAP

017-759 Electronic signature verification error of download data.

Procedure

Advise the customer to re-obtain the download data then perform the operation again.

017-760, 017-766 POP Over SSL Fail RAP

017-760 SSL communication failure with POP server.

017-766 SSL communication failure with POP Server.

Procedure

Perform the steps that follow:

1. If this had occurred in TSL mode, it may be due to different port number. Advise the customer to check the port number settings of the POP server.
2. If the fault persists, reload the software, [GP 4](#).

017-761, 017-767 SSL Server Cert Untrusted (POP) RAP

017-761 An SSL server authentication error has occurred as there is something wrong in the server certificate data.

017-767 An SSL server authentication error has occurred as there is something wrong in the server certificate data.

Procedure

The machine is unable to trust the SSL certificate of the POP server. Advise the customer to register the root certificate of the POP server SSL certificate in the machine.

017-762, 763, 764, 768, 769, 770 SSL Certificate (POP) Fail RAP

017-762 The validity period of the server certificate has not started yet.

017-763 The validity period of the server certificate has expired.

017-764 The server name does not match the server address of the server certificate.

017-768 The validity period of the Server Certificate has not started yet.

017-769 The validity period of the server certificate has expired.

017-770 The server name does not match the server address of the server certificate.

Procedure

Advise the customer to:

1. Check that the clock of the POP server and the machine are correct. If the clock is correct, change the POP server SSL certificate to one that is valid.
2. Check the validity period settings of the POP server certificate.
3. Check that the server name that are registered in the POP server certificate and the server address are correct.

NOTE: This problem can also be fixed by switching off the machines SSL Server Verification setting. This will render the machine unable to guarantee the authenticity of the POP server that it is connecting to.

017-765, 017-771 POP Over SSL Internal Fail RAP

017-765 Software internal error has occurred when POP over SSL process is in progress.

017-771 Software internal error has occurred when POP over SSL process is in progress.

Procedure

Advise the customer to repeat the operation.

017-772 Scan All Blank Page Fail RAP

017-772 It was detected that all the pages are blank.

Procedure

Advise the customer to:

1. Darken the density during scan.
2. Turn off the blank suppression instruction.

017-773 Netlog Task Error RAP

017-773 Detected fatal error during Netlog operation.

Procedure

Advise the customer to check the setting related to the Netlog function.

017-774 Message Lost Error RAP

017-774 Message discard error.

Procedure

For information only, no service action necessary.

017-775 Network API Error RAP

017-775 Sending message was discarded due to sending API error.

Procedure

Advise the customer to check if there is any issues on the network route to the Syslog server.

017-776, 017-777 Syslog Server Error RAP

017-776 The sending message was discarded because the server sent an invalid response or did not respond.

017-777 The sending queue became full and discarded the message sending request.

Procedure

Advise the customer to check the status of the Syslog server, address value of the Syslog that is set to the machine, whether there is an issue in the network route between the machine and the Syslog server, or a network cable failure.

017-778 Queue Error RAP

017-778 The sending queue became full due to no IP address being set or assigned, and discarded the message sending.

Procedure

Advise the customer to check if the IP address of the machine is set.

017-779 Link Error RAP

017-779 Detected unplugged network cable on the machine side.

Procedure

Check the connection state of the network cable.

017-780 Held Job Timeout RAP

017-780 Auto delete due to the timeout of held Job that has been overtaken.

Procedure

Perform the steps that follow:

1. Advise the customer to disable the auto delete setting or change the timer setting (1-7200 minutes) to an appropriate value.
2. Switch off, then switch on the machine, [GP 10](#).

017-782, 784, 785, 786 Custom Image Processing Plug-In RAP

017-782 Detected mismatch of the version of image processing module.

017-784 Custom image processing XML error.

017-785 Detected an error that is custom image processing plug-in specific.

017-786 Image processing error of custom image processing plug-in.

Procedure

Perform the steps that follow:

1. Advise the customer to reinstall after correcting the custom image processing plug-in.
2. Switch off, then switch on the machine, **GP 10**.

017-783 Custom Image Processing Memory RAP

017-783 The operation was unable to continue due to the memory shortage of the image processing module that is executed in the controller.

Procedure

Perform the steps that follow:

1. Advise the customer to take any one of the actions that follow:
 - a. Lower the resolution.
 - b. Change the output color to black & white.
2. Switch off, then switch on the machine, **GP 10**.

017-787 Google Cloud Print Data Error RAP

017-787 Syntax error, undefined command, parameter error, file corruption, decomposer internal error occurred when the decomposer is processing at the Google Cloud Print processing path.

Procedure

Perform the steps that follow:

1. Advise the customer to use a different print method supported by the machine (print driver, utility other than Google Cloud Print).
2. If the fault persists, reload the software, [GP 4](#).

017-789 Job Limit Estimation Logic Fail RAP

017-789 During job limit estimate acquisition, a logic error was detected in the ComlDvm_GetEstimation.

Procedure

Advise the customer to check the job settings, then re-run the job.

017-790 to 017-799 Print Permission RAP

017-790 Color print made in a time zone that is prohibited.

017-791 Print made in a time zone that is prohibited.

017-792 Printing performed despite being prohibited.

017-793 Color printing performed despite being prohibited.

017-794 Print made from a prohibited application.

017-795 Color print made from a prohibited application.

017-796 Single sided print made from a prohibited application.

017-797 Print made from a paper tray that is prohibited.

017-798 Job type print made that is prohibited.

017-799 Single sided print made despite being prohibited.

Procedure

Advise the customer to set the permissions as required.

018-400 IPSEC Configuration Mismatch RAP

018-400 IPSEC error (setting mismatch).

Procedure

Advise the customer to clear the IPSEC setting mismatch and re-enable the IPSEC.

NOTE: *Mismatched IPSEC settings occur when the password is not set because the authentication method is set to pre-shared key, or when IPSEC certificate is not set because the authentication method is set to digital signature.*

018-405 User Account Disabled RAP

018-405 User account disabled error.

Procedure

Perform the steps that follow:

1. Advise the customer that there is a check mark at Account Invalid for the relevant user in the active directory of the LDAP authentication destination server. The server has been set to prohibit access from the relevant user.
2. Advise the customer to consult with the Server Administrator.

018-406 Setting Status of IP Address (IPv4) RAP

018-406 Setting state of the same IP address (IPv4).

Procedure

Perform the steps that follow:

1. Advise the customer to change the setting to a different IP address.
2. Change the IP address to DHCP.
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

018-407 Setting Status of IP Address (IPv6) RAP

018-407 Setting state of the same IP address (IPv6).

Procedure

1. Advise the customer to change the setting to a different IP address. Either that or allow the same IP address setting.
2. If the fault persists advise the customer try switching the DHCPv6 configuration to be directed by router and disable the manual address.

018-408 Duplicate IPv4 Address RAP

018-408 The same IP address machine as the IPv4 address of this machine exists on the network in the network environment where the Ether 2 side is connected.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Change the IPv4 address of this machine or the IPv4 address of the network upper apparatus.
 - b. For manual address setting, ensure that the IP address specified by the client is not used in other places.
 - c. Check the respective server setting environments with the client.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

018-409, 412, 413 Duplicate IPv6 Address 1 RAP

018-409 The same IP address machine as the IPv6 of this machine exists on the network in the network environment where the Ether 2 is connected.

018-412 The same IP address machine as the state-less auto setting address 2 of this machine exists on the network in the network environment where Ether 2 is connected.

018-413 The same IP address machine as the IPv6 state-less auto setting address 3 of this machine exists on the network in the network environment where the Ether 2 is connected.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Change the IPv6 address of the network upper apparatus that is duplicated to resolve the IP address duplication.
 - b. Check if the IP address that was set in state-less address auto setting is not used in other places.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

018-410, 018-411 Dynamic DNS Update Failure RAP

018-410 For Ethernet 2, failed to update the IPv4 address and host name to the DNS server.

018-411 For Ethernet 2, failed to update the IPv6 address and host name to the DNS server.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check if the DNS server address is correctly set to the machine.
 - b. Check if the DNS server is set so that the dynamic DNS can be operated.
2. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

018-414 Duplicate IPv6 Address 2 RAP

018-414 The IPv6 manual setting address that was set in this machine in a network environment connected to Ether 2 is invalid.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Change the IPv6 manual setting address of this machine to the IPv6 address that can be used in the machine address.
 - b. Check if the IPv6 address that was automatically set as manual address is a valid address.
2. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

018-415 Duplicate IPv6 Address 3 RAP

018-415 The same IP address machine as the IPv6 manual setting address of this machine exists on the network in the network environment where the Ether 2 is connected.

Procedure

Advise the customer to change the IPv6 manual setting address of this machine or the IPv6 address of the network upper apparatus.

018-416 Duplicate IPv6 Address 4 RAP

018-416 The same IP address machine as the IPv6 link local address of this machine exists on the network in the network environment where Ether 2 is connected.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Change the IPv6 address of the network upper apparatus that is duplicated to resolve the IP address duplication.
 - b. Check if the IPv6 address that was automatically set as link local address is not used in other places.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

018-424 to 018-426 WLAN WPA Enterprise Certificate Failure RAP

018-424 The WLAN WPA enterprise certificate is empty.

018-425 The WLAN WPA enterprise certificate is unavailable.

018-426 The WLAN WPA enterprise certificate has failed.

Procedure

Advise the customer to request their network administrator to configure the WPA-Enterprise and validate the server certificate.

018-427 Duplicate IP Address Range WiFi and WiFi Direct RAP

018-427 A duplicate range setting was detected in the machine's Wi-Fi IP addresses and Wi-Fi Direct IP addresses.

Procedure

Perform the following

1. Change the IP address of the machine's Wi-Fi Direct DHCP server to be outside the duplicate range of the IP addresses set for Wi-Fi.
2. If the fault persists modify the printer's Wifi Direct IP address to be outside the guest's DHCP range.

018-428 WLAN Module Connection Failure RAP

018-428 There is a connection failure between the WIFI module and the ESS PWBA.

Procedure

Perform the steps that follow:

1. Switch off the machine, GP 10. Remove, then install the WIFI module. Switch on the machine, GP 10.
2. If the fault persists, install new components as necessary:
 - WiFi dongle, PL 3.10 Item 10.
 - ESS PWB, PL 3.10 Item 6.

018-429 to 018-436 Duplicate IP Address IPv4 (WiFi) RAP

018-429 There is an IP address conflict with another system on the network (WIFI).

018-430 There is an IP address conflict with another system on the network (WIFI direct).

018-431 There is an IP address conflict with another system on the network (WIFI).

018-432 There is an IP address conflict with another system on the network (WIFI).

018-433 There is an IP address conflict with another system on the network (WIFI).

018-434 There is an IP address conflict with another system on the network (WIFI).

018-435 There is an IP address conflict with another system on the network (WIFI).

018-436 There is an IP address conflict with another system on the network (WIFI).

Procedure

Advise the customer to request their network administrator to change the IP address of the systems the machine is connected to, to something different.

018-439 WiFi Direct Setting Conflict RAP

018-439 When activating the Wi-Fi Direct, the conflict setting for Wi-Fi Network Type Ad-hoc is detected.

Procedure

Advise the customer to request their network administrator to change the setting for the Wi-Fi network type to Infrastructure.

018-440 WiFi Direct Setting IPv6 Conflict RAP

018-440 When activating the Wi-Fi Direct of this machine, the setting for the IPv6 mode is detected in the conflict configuration information related to the IP protocol stack.

Procedure

Advise the customer to request their network administrator to change the setting for the configuration information related to the IP protocol stack to Dual or the IPv4 mode.

018-441 WiFi Direct Setting 5GHz Conflict RAP

018-441 When activating the Wi-Fi Direct of this machine, the setting for the 5GHz mode is detected in the conflict Wi-Fi Band.

Procedure

Advise the customer to request their network administrator to change the setting for the Wi-Fi band of this machine to Auto or the 2.4GHz mode.

018-500, 501, 503, 504, 506, 507, 508 CA Server Error RAP

018-500 The SSL server that is necessary for CA could not start because there was no server certificate or private key at an attempt to start the machine.

018-501 The machine could not connect to the CA server when trying to do CA authentication. The machine has failed in communication.

018-503 The machine received a message from the CA server and was waiting for a JRM/UI judgment, but received no response in time.

018-504 During communication between the machine and the CA server for authentication, a mismatch in Session ID between both has occurred.

018-506 During communication between the machine and the CA server, a mismatch in Field ID between both has occurred.

018-507 The CA authentication server requested an entry of user info, and the server determined that the entered info was different.

018-508 In process of CA authentication, the machine has received a server exception message from the CA authentication server.

Procedure

Advise the customer to:

1. Enter the correct user name and password.
2. Make the IOT and the controller the same in agreement info.
3. Check the address of the CA server, or recheck the connection to the network.
4. Retry the authentication operation.
5. Set up the server certificate, or set the CA function to off.
6. Check the status of the CA server. Reboot it if necessary.

018-502 SMB Login Failure RAP

018-502 When logging in to the SMB server, it was detected that the workstations that can log in during SMB scan are limited.

Procedure

Advise the customer to:

1. Check that the SMB login name and password are correct.
2. Check the printer software version is up to date, [GP 4](#).
3. Verify that the server SMB share is configured properly.
4. Verify that the server firewall is configured properly.
5. Check that they have not reached the maximum number of available connections to the share.

018-505 SMB-DOS Protocol Error RAP

018-505 SMB user authentication failed/unable to log into SMB scanner.

Procedure

1. Have the customer contact the network administrator to confirm the following: for the correct user name or password.
 - a. Server user name and password
 - b. Server host name or IP address
 - c. Share name
 - d. Server firewall settings
 - e. In the case of Windows Server 2003, ensure that the time of the SMB server is synchronized with that of the device.

NOTE: *If the user forgets his/her password, he/she needs to set up a new password.*

2. This is how to reset Password:
 - a. On the domain controller for the active directory that has user info, select (Start) menu > (All Programs) > (Management Tool) > (Active Directory Users and Computers).
 - b. From the left frame of the (Active Directory Users and Computers) window, select (Active Directory Users and Computers (Server) > (Domain) > (Users), and list user information.
 - c. Right-click the target user on the right frame of the (Active Directory Users and Computers) window and select (Reset Password)
 - d. Confirm users that are allowed to use Share Windows.
3. This is how to confirm users. (MacOS X v10.4)
 - a. From (Dock), start the (System Environment Settings) icon.
 - b. On the (System Environment Settings) window, click the (Share) icon.
 - c. From the Select Service window, select 'Share Windows' and click the (Account) button.

018-509 Template Parameter Conflict RAP

018-509 CUI scan: an invalid job template is specified.

Procedure

Advise the customer to check whether the settings in the job template are correct. For example:

1. A setting that cannot be used in the machine is set.
2. The transfer repository is not set correctly.
3. A nonexistent template name is specified.

018-524 Invalid machine Network Setting RAP

018-524 CUI scan: an invalid job template is specified.

Procedure

Advise the customer to:

1. Check whether the port and network related settings that are required to execute the scan job are set correctly in the machine.
2. Check whether the DNS server setting is correct.
3. Check whether the port for the specified protocol is activate.

018-525 HDD full or Access Error RAP

018-525 CUI scan: HDD-related error during processing of job template.

Procedure

Perform the steps that follow:

1. Advise the customer to wait for a while, then perform the same operation again.
2. If the fault persists, perform the [016-210](#), [506](#), [777](#), [780](#), [798](#) HDD Error RAP.

018-526 to 018-529, 531, 532 CUI Scan Error RAP

018-526 A CUI scan start request was received when the job template is being polled.

018-527 CUI scan: internal error occurred when processing job template.

018-528 CUI scan: soap argument error.

018-529 CUI scan: duplication of soap job startup request.

018-531 Other errors during start-up of a CUI scan job.

018-532 Failed to create CUI scan job.

Procedure

Advise the customer to wait for a while, then perform the same operation again.

018-530 Authentication Error RAP

018-530 Authentication/DV-related error during start-up of a CUI scan job.

Procedure

Advise the customer to either perform the correct authentication operation or check the limitations (color mode, number of sheets, services) that was set by the administrator.

018-543 Shared Name Error in SMB Server RAP

018-543 Problem with the shared name of the SMB scan server.

Procedure

Advise the customer to:

1. Check the shared name specified then set the correct name.
2. Check that the user has the right to access the shared name specified.

018-547 SMB Scan Users Restriction RAP

018-547 The number of SMB scan users has exceeded the limit.

Procedure

Advise the customer to:

1. Check the limit for the number of users that can connect to the shared folder.
2. Check whether the number of users who are concurrently using the server has exceeded the maximum number.

018-556 HTTP Server Script Error RAP

018-556 HTTP error - invalid script.

Procedure

Advise the customer to:

1. Check that the drive and directory that are specified in the HTTP server that sends scanned documents are accessible.
2. Repeat the operation.

018-557 HTTP Invalid Character in Filename RAP

018-557 HTTP file - invalid characters.

Procedure

Advise the customer to ensure that the file name that is specified in the scanned document destination does not contain any invalid characters.

018-558 HTTP File Not Found RAP

018-558 The HTTP directory/file name does not exist.

Procedure

Advise the customer to:

1. Check that the directory that is specified in the scanned document destination HTTP server exists.
2. Check that the file name that is specified in the scanned document destination HTTP server exists.

018-559 HTTP File Duplication Fail RAP

018-559 File name conflict stop.

Procedure

Advise the customer that when performing scan Jobs, set File Name Conflict to other than Cancel Job.

018-560 to 018-563 HTTP Server Login Fail RAP

018-560 HTTP user authentication error.

018-561 HTTP error - not found.

018-562 HTTP response client error.

018-563 HTTP response server error.

Procedure

Advise the customer to:

1. Check whether the scanned document destination HTTP server is accessible from the PC.
2. Check the login user name.
3. Check the login password.
4. Check the name of scanned document destination HTTP server.
5. Check the server path name of scanned document destination HTTP server.

018-564 Host Name Solution Error in HTTP RAP

018-564 Failed to resolve host name in HTTP.

Procedure

Advise the customer to:

1. Check whether the scanned document destination HTTP server has been registered in the DNS.
2. Check whether it is connected to the DNS server.
3. Check whether the DNS server address is set.

018-565 Proxy Name Solution Error in HTTP RAP

018-565 Failed to resolve proxy name error in HTTP.

Procedure

Advise the customer to:

1. Check whether the proxy server name that is set in the machine has been registered in the DNS.
2. Check whether it is connected to the DNS server.
3. Check whether the DNS server address is set.

018-566, 018-567 Server Connect Error in HTTP RAP

018-566 Failed to connect to the HTTP server.

018-567 HTTP error - access error.

Procedure

Advise the customer to:

1. Check the network cable of the machine.
2. Check whether the scanned document destination HTTP server is accessible from the PC.

018-568 HTTP Server SSL Access Fail RAP

018-568 HTTP error - abnormal SSL connection.

Procedure

Advise the customer to:

1. Check whether the scanned document destination HTTP server is accessible from the PC.
2. Check whether the SSL setting of the scanned document destination HTTP server is valid.
3. Check the name of scanned document destination HTTP server.
4. Check the server path name of scanned document destination HTTP server.

018-569 HTTP Server Certificate Fail RAP

018-569 HTTP error - invalid certificate.

Procedure

Advise the customer to:

1. Check whether the scanned document destination HTTP server is accessible from the PC.
2. Check whether the SSL server certificate of the scanned document destination HTTP server is registered in the machine.
3. Check whether the SSL server certificate of the scanned document destination HTTP server is valid. For example, check the items that follow:
 - The certificate has not expired yet.
 - The time that is set in the machine is correct.
 - It is not in the discard list.
 - The certificate path of the SSL server certificate and import any necessary CA certificate.
4. If the certificate is not registered in the scanned document destination HTTP server, disable the machine certificate validation.

018-570 HTTP Certificate Fail RAP

018-570 HTTP error - invalid client certificate.

Procedure

Advise the customer to:

1. Check whether the scanned document destination HTTP server is accessible from the PC.
2. Check whether the SSL client certificate is set correctly in the machine.
3. Check whether a valid machine certificate is registered in the scanned document destination HTTP server.

018-571 Internal Error in Scan RAP

018-571 Scan network sending software internal error.

Procedure

Advise the customer to repeat the operation.

018-587 File Duplication Fail RAP

018-587 File name conflict stop.

Procedure

Advise the customer to set File Name Conflict to other than Cancel Job.

018-588 Scan Filing Policy Invalid RAP

018-588 Invalid filing policy.

Procedure

Advise the customer that when Add is selected for File Name Conflict, check that the file format is not set to Multi-page.

018-589 NEXTNAME File Error RAP

018-589 NEXTNAMEDAT file access error.

Procedure

Advise the customer that when Add is selected for File Name Conflict, check that the NEXT-NAME.DAT file is correct.

018-590 Same Name Exists RAP

018-590 A file/folder with the same name was detected on the server.

Procedure

1. Advise the customer to perform the same operation again without multiple machines accessing the same folder in the same server.
2. Change file name of scan, or move or delete files from the file server using that file name.
3. Check user permissions to the share or file folder.

018-591 File Name Suffix Over Limit RAP

018-591 The scan file name has exceeded the suffix limit value.

Procedure

Advise the customer to change the file name/destination folder on the scan server. Else, move or delete the files in the destination folder.

018-592, 018-593 Lock Folder Fail RAP

018-592 Scan lock folder creation failed.

018-593 Failed to delete the scan lock folder.

Procedure

Advise the customer to:

1. Check if a lock directory (*.LCK) remains in the transfer destination, delete it manually then retry the job.
2. Check whether there is a folder that has the same name as the specified name.

018-595 Detected User Duplication RAP

018-595 Duplicate IDs were detected at ICCG external authentication (LDAP protocol).

Procedure

Advise the customer to make corrections so that the user entries in the database of the LDAP server do not have the same IC card information.

018-596, 018-700 Network Error RAP

018-596 An undefined protocol error, and other errors with LDAP protocol.

018-700 Network stack is not initialized fail.

Procedure

Advise the customer to wait for a while, then perform the same operation again.

018-701 to 018-705 LDAP Protocol Errors 01 to 05 RAP

018-701 LDAP protocol error 01 at address book operation (operation error).

018-702 LDAP protocol error 02 at address book operation (operation error).

018-703 LDAP protocol error 03 at address book operation.

018-704 LDAP protocol error 04 at address book operation (too many search results to be processed).

018-705 LDAP protocol error 05 at Address Book operation (comparison request result is false)

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y	N
	Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-706 LDAP Protocol Error 06 RAP

018-706 LDAP protocol error 06 at address book operation (comparison request result is true).

Procedure

Perform the steps that follow:

1. For a single occurrence, take no action.
2. If the fault persists, switch off, then switch on the machine, [GP 10](#).

018-707, 018-708 LDAP Protocol Errors 07 and 08 RAP

018-707 LDAP protocol error 07 at address book operation (the specified authentication method is not supported).

018-708 LDAP protocol error 08 at address book operation (strong authentication is required)

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-709 Active Communication is Unavailable Now Fail RAP

018-709 Active communication is unavailable now fail.

Procedure

1. In case of IPv4 environment, advise the customer to:
 - a. Check whether the address that is being used as the IPv4 address of the machine is undefined, or whether it has become the Auto IP address.
 - b. Check if the network has been connected correctly.
 - c. Check with the network administrator on whether the DHCP server address has been exhausted.
2. In case of IPv6 environment, advise the customer to:
 - a. Check whether the address that is being used as the IPv6 address of the machine has been allocated with a global address that uses the network address distributed by the IPv6 router.
 - b. Check if the network has been connected correctly.
 - c. Check with the network administrator on whether the IPv6 router has been configured correctly.

018-710 to 018-714 LDAP Protocol Errors 10 to 14 RAP

018-710 LDAP protocol error 10 at address book operation (not registered in search range).

018-711 LDAP protocol error 11 at address book operation (admin limit is exceeded).

018-712 LDAP protocol error 12 at address book operation (extended function cannot be used).

018-713 LDAP protocol error 13 at address book operation (secrecy is required).

018-714 LDAP protocol error 14 at Address Book operation (SASL bind in progress).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-715 Kerberos Attestation Protocol Error 73 RAP

018-715 Kerberos Attestation protocol error 73

Procedure

Advise the customer that:

1. If the error occurred in the case of smart card authentication, algorithm not supported by the machine is specified by KDC.
2. In the case of password authentication, KDC does not support any of the machine's algorithms.
3. KDC settings should be reviewed. Also, in the case of machines supporting FIPS, disabling FIPS mode may correct the problem.

018-716 to 018-721 LDAP Protocol Errors 16 to 21 RAP

018-716 LDAP protocol error 16 at address book operation (the requested attribute does not exist).

018-717 LDAP protocol error 17 at address book operation (the specified attribute is not defined)

018-718 LDAP protocol error 18 at address book operation (unsuitable combination).

018-719 LDAP protocol error 19 at address book operation (limit violation).

018-720 LDAP protocol error 20 at address book operation (the specified attribute already exists)

018-721 The server returned RFC2251 standard result message 21 (syntax error of the specified attribute value) in response to the address book inquiry.

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-722 GCP Network Fail RAP

018-722 GCP network connection error.

Procedure

Perform the steps that follow:

1. Advise the customer to confirm the network connection status, network settings status with the system administrator.
2. If the fault persists, reload the software, [GP 4](#).

018-723, 018-740 GCP Certification Fail RAP

018-723 GCP certificate connection error.

018-740 Connection error of certificate has occurred during communication through XMPP protocol with Google server.

Procedure

Perform the steps that follow:

1. Advise the customer to confirm with the network administrator the correct root CA certificate is present, certificate authentication settings are correct.
2. If the fault persists, reload the software, [GP 4](#).

018-724 GCP SSL Connection Fail RAP

018-724 GCP SSL connection error.

Procedure

Perform the steps that follow:

1. Advise the customer to confirm with the network administrator the network (SSL Communication) connection status, SSL settings status.
2. If the fault persists, reload the software, GP 4.

018-725 Kerberos Attestation Protocol Error 22 RAP

018-725 Duplicate IDs were detected at ICCG external authentication (LDAP protocol).

Procedure

Advise the customer that the user Kerbeors password set on the Kerbeors server has expired, it is necessary to ask the server administrator to extend the expiration date of it.

018-726 Kerberos Attestation Protocol Error 70 RAP

018-726 Duplicate IDs were detected at ICCG external authentication (LDAP protocol).

Procedure

Advise the customer to check if a higher CA certificate in the user SmartCard is registered with the machine. If not, register it with the machine.

018-727 Kerberos Attestation Protocol Error 71 RAP

018-727 The certificate in the user SmartCard is incorrect (rejected by the Kerbeors server).

Procedure

Advise the customer to check if the certificate in the user SmartCard is valid. If it has become invalid or expired, renew it, or if the Kerberos server prohibits the use of the certificate, it is necessary to ask the server administrator to authorise the server permit it.

018-728 Kerberos Attestation Protocol Error 72 RAP

018-728 The Kerbeors server KDC certificate is incorrect (the root CA certificate is not registered with the machine; the KDC certificate has expired; or the KDC certificate address is different from that written on the certificate.)

Procedure

Advise the customer to:

1. Check if the root CA certificate of KDC certificate is registered with the machine. If not, register the root CA certificate.
2. If the KDC certificate has expired, renew the Kerbeors server KDC certificate
3. Check that the Kerberos server address set on the machine is the same as that written on the Kerbeors server KDC certificate. If they are different, change the Kerbeors server address set on the machine, or check the Kerbeors server KDC certificate. In this case, there is a possibility of a wrong setting or Kerbeors server impersonation.

018-729, 730, 738, 739, 743, 744, 745, 746 GCP Network Fail RAP

018-729 GCP connection timeout error.

018-730 GCP other network error.

018-738 Network-related error has occurred during communication through XMPP protocol with Google server.

018-739 Network-related internal error has occurred during communication through XMPP protocol with Google server.

018-743 A network related (proxy connection) error has occurred when communicating with Google server via HTTP.

018-744 A network related (DNS name resolution) error has occurred when communicating with Google server via HTTP.

018-745 A network related (proxy connection) error has occurred when communicating with Google server via XMPP protocol.

018-746 A network related (DNS name resolution) error has occurred when communicating with Google server via XMPP protocol.

Procedure

Perform the steps that follow:

1. Advise the customer to check the network connection status, settings status as the network might be congested.
2. If the fault persists, reload the software, [GP 4](#).

018-731 GCP HDD Limit Fail RAP

018-731 Job is aborted because there is not enough capacity in the HDD.

Procedure

Perform the steps that follow:

1. Advise the customer to check the HDD available capacity, and free up space. Print again after executing all print jobs which are being spooled.
2. If the fault persists, reload the software, **GP 4**.

018-732 to 018-736 LDAP Protocol Errors 32 to 36 RAP

018-732 LDAP protocol error 32 at address book operation (applicable object does not exist).

018-733 LDAP protocol error 33 at address book operation (wrong alias).

018-734 LDAP protocol error 34 at address book operation (wrong DN format, wrong password).

018-735 LDAP protocol error 35 at address book operation (object is terminated).

018-736 LDAP protocol error 36 at address book operation (cannot refer to alias).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-737, 018-741 GCP Other Fail RAP

018-737 Other internal error has occurred during GCP module processing.

018-741 Other internal error has occurred during GCP module (XMPP library) processing.

Procedure

Perform the steps that follow:

1. Advise the customer to check the settings.
2. If the fault persists, reload the software, **GP 4**.

018-747 Server Not Found in SMB RAP

018-747 Unable to find the SMB server during SMB scan.

Procedure

Advise the customer to:

1. **Check the Communication Environment:**
Check that network communication between the transfer destination SMB server and this machine is available, by the performing the steps that follow:
 - a. Network cable connection.
 - b. If the transfer destination address is specified using IP Address, check whether the IP address is correct.
 - c. Check with the System Administrator on whether the SMB related ports (*1) are blocked (whether there are blocked ports at the transfer destination server, between the MFD and the server, etc.)
2. **Check the SMB Server:**
Check the network settings that follow to check if the computer operates as an SMB server:
 - a. Whether the SMB related ports (*1) are blocked by software, such as anti-virus or a firewall, on the server.
3. **Check the Resolution Server Name:**
Check the network settings that follows to check if the computer operates as an SMB server:
 - a. For communication that goes beyond the subnet and the server name is 15 characters or shorter, check the WINS server settings and check whether the server name address can be resolved correctly.
4. If there is no problem, login to the SMB server from another PC using the same user name and check whether a file can be written to the same storage destination on that SMB server. If write is possible, try to perform the same operation again from the machine.

018-748, 018-750 to 018-754 LDAP Protocol Errors 48, 50 to 56 RAP

018-748 LDAP protocol error 48 at address book operation (authentication denied).

018-750 LDAP protocol error 49 at address book operation (the specified authentication certificate is invalid, login name is invalid).

018-751 LDAP protocol error 51 at address book operation (busy).

018-752 LDAP protocol error 52 at address book operation (cannot be processed).

018-753 LDAP protocol error 53 at address book operation (execution denied).

018-754 LDAP protocol error 54 at address book operation (loop detected).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-749 LDAP Protocol Error 49 RAP

018-749 There is a LDAP (Lightweight Directory Access Protocol) error (Designated authentication certificate is invalid/Login name is invalid).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to re-verify user name and password to be used for authentication to cancel incorrect search login name. Check with the network administrator to verify authentication setting of server side when the status is not improved. Verify the machine LDAP setups. If the check is OK, there may be a problem with the remote LDAP server.

018-755 Server Connection Error in SMB RAP

018-755 There is no response from the server and failed to establish TCP/IP session.

Procedure

Advise the customer to:

1. Check the transfer destination server, the router that exists between the multifunction machine and the server, and the anti-virus software, firewall software, etc.
2. If there is no problem, login to the SMB server from another PC using the same user name and check whether a file can be written to the same storage destination on that SMB server. If write is possible, try to perform the same operation again from the machine.

NOTE: *If the situation does not improve, it is highly likely that there is a problem occurring at the server.*

018-756 Server Login Response Timeout in SMB RAP

018-756 Unable to receive a response from the server within the specified time during the scanner (scan to PC) SMB authentication.

Procedure

Advise the customer to:

1. If the transfer destination server belongs to the Active Directory domain, check for delays in the communication between transfer destination server and Domain Controller by the method that follows:
 - a. Check whether it is taking a long time to access the transfer destination server from a PC client.
 - b. If it is taking a long time, consult with the System Administrator.
2. If there is no problem, login to the SMB server from another PC using the same user name and check whether a file can be written to the same storage destination on that SMB server. If write is possible, try to perform the same operation again from the machine.

NOTE: *If the situation does not improve, there is a possibility of bad connection status in the customers environment. Advise them to consult with the System Administrator.*

018-757 Host Name Solution Error in SMB RAP

018-757 The system has failed to resolve the SMB server name of the SMB that is specified as the transfer destination during the scanner (scan to PC).

Procedure

Advise the customer to:

1. For communication that goes beyond the subnet, check the DNS server settings and check whether the server name address can be resolved correctly.
2. If there is no problem, login to the SMB server from another PC using the same user name and check whether a file can be written to the same storage destination on that SMB server. If write is possible, try to perform the same operation again from the machine.

018-758, 018-759 Picture Preservation or File Name Error RAP

018-758 SMB Scan image storage location or file name error.

018-759 SMB Scan image storage location or file name error.

Procedure

Advise the customer to:

1. Check whether the storage location is correct.
2. Check whether the specified file name is one that can be created on the SMB server.
3. Check whether the storage destination or file name of the scan image that is set at the main unit contains restricted characters.

018-760 DFS Link Error in SMB RAP

018-760 The specified storage location gets linked to other shared folder during scanner (scan to PC) SMB transfer as it is set to Distributed File System (DFS).

Procedure

Advise the customer to check the settings of the distributed file system (DFS) with the system administrator.

018-761 Out of Server Memory in SMB RAP

018-761 The memory at the storage destination PC was detected to have ran out during scanner (scan to PC) SMB transfer.

Procedure

Advise the customer to:

1. Check whether the usage condition at the storage destination PC has caused all the memory to be used.
2. Terminate the applications that are currently not in use.
3. Check the memory usage status and perform upgrades to increase the memory.
4. Reboot the server.

018-762 Server Response Timeout in SMB RAP

018-762 The response from the storage destination PC has taken a long time and caused a timeout during scanner (scan to PC) SMB transfer.

Procedure

Advise the customer to:

1. Check whether an anti-virus software is operating at the storage destination PC. If operating, reduce the number of document copies to make the transmission file smaller.
2. Check that there is no cable unplugged or any issues with the router or the hub in the network route.

018-763 Character Convert Error in SMB RAP

018-763 The character code conversion process in the multifunction machine has failed during the scanner (scan to PC) SMB transfer.

Procedure

Advise the customer to:

1. Check whether the server name, shared name, path name, etc. contains machine-dependent characters such as (special symbol), (number symbol), IV (roman numeral), and etc.
2. If it contains any machine-dependent characters, edit it so that the name no longer contain any and operate.

018-764 LDAP Protocol Errors 64 to 69 and 71 RAP

018-764 LDAP protocol error 64 at address book operation (naming violation).

018-765 LDAP protocol error 65 at address book operation (object class specification error).

018-766 LDAP protocol error 66 at address book operation (entries other than termination cannot be executed).

018-767 LDAP protocol error 67 at Address Book operation (cannot be executed at RDN).

018-768 LDAP protocol error 68 at address book operation (the specified entry already exists).

018-769 LDAP protocol error 69 at address book operation (object class cannot be changed).

018-771 LDAP protocol error 71 at address book operation (influence on multiple DSA).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-770 LDAP Protocol Error 70 RAP

018-770 LDAP protocol error 70 at Address Book operation (search target is too large).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

Ask the customer to retry search with narrower search target by changing search condition/search start position in Address Book internal data. If the check is OK, there may be a problem with the remote LDAP server.

018-772 Shared Name Not Found in Server RAP

018-772 The shared name that was set does not exist on the transfer destination server during scanner (scan to PC) SMB transfer.

Procedure

Advise the customer to check whether the shared name that is set at the main unit exists on the transfer destination PC.

018-773 Shared Name Error in Server RAP

018-773 Invalid shared name at the SMB scan server.

Procedure

Advise the customer to:

1. Check whether the shared name that is set at the main unit contains restricted characters.
2. Check whether the beginning or the end of the shared name that is set at the main unit contain any blank space.
3. Check whether the shared name that is set at the main unit is only specified by a period.
4. If the transfer destination is a Macintosh, the permission setting must be changed for the user of the shared folder. For the settings, check with the System Administrator.

018-780 to 018-784 LDAP Protocol Errors 80 and 82 to 84 RAP

018-780 LDAP protocol error 80 at address book operation (an unknown error has occurred).

018-782 LDAP protocol error 82 at address book operation (program error or SASL authentication error).

018-783 LDAP protocol error 83 at address book operation (outgoing message encoding error).

018-784 LDAP protocol error 84 at address book operation (incoming message decoding error).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

018-781 LDAP Protocol Error 81 RAP

018-781 LDAP protocol error 81 at address book operation (cannot connect to server).

Procedure

Advise the customer to:

1. Check if the network cable is connected.
2. If it is connected, check the start up state of the target request server.
3. Check whether the shared name that is set at the main unit is only specified by a period.
4. Check that the server name is correct.

018-785 LDAP Protocol Error 85 RAP

018-785 LDAP protocol error 85 at address book operation (search timeout).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

Ask the customer to retry search with narrower search target by changing search condition/ search start position in Address Book internal data. Ask the customer to verify the machine LDAP setups. If the check is OK, there may be a problem with the remote LDAP server.

018-786 LDAP Protocol Errors 86 to 97 RAP

018-786 LDAP protocol error 86 at address book operation (an unknown authentication method has been specified).

018-787 LDAP protocol error 87 at address book operation (mistake in definition of search filter).

018-788 LDAP protocol error 88 at address book operation (instruction canceled).

018-789 LDAP protocol error 89 at address book operation (an incorrect parameter was passed).

018-790 LDAP protocol error 90 at address book operation (insufficient memory).

018-791 LDAP protocol error 91 at address book operation (server connection prohibited).

018-792 LDAP protocol error 92 at address book operation (unsupported function).

018-793 LDAP protocol error 93 at address book operation (result is not returned).

018-794 LDAP protocol error 94 at address book operation (result no longer exist).

018-795 LDAP protocol error 95 at address book operation (result still exist).

018-796 LDAP protocol error 96 at address book operation (client loop detected).

018-797 LDAP protocol error 97 at address book operation (maximum hop number for reference is exceeded).

Procedure

Verify that print jobs are printing or print a configuration report and verify that network setup settings are indicated. **The printer is operational or the configuration report indicates valid network settings.**

Y N

Check for damage with the network connection. If there is no damage then there is a problem with the network. Inform the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer to verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.

020A Fax Entry RAP

Use this RAP to isolate components which contribute to a fax communications failure.

Initial Actions

- Check that the fax line cables are correctly connected. Fax Line 1 from the telephone line outlet connects to the line 1 socket on the machine. Fax line 2 (if installed) from the telephone line outlet connects to the line 2 socket on the machine. Fax line 3 (if installed) from the telephone line outlet connects to the line 3 socket on the machine.
- Use a handset to dial a remote number. Listen to the dial type, Dual Tone Multiple Frequency (DTMF or 'tone') or 'pulse'.
- Check **dC125** Active Faults. If fax faults are listed, perform the appropriate RAP.
- Print a protocol report, **GP 30**. Check for error codes.
- From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Check for any active feature that would inhibit the sending or receiving of a fax for each installed fax line, such as:
 - Fax Receive Mode is set to 'Auto Answer Fax'.
 - Incoming Fax Filtering.
 - Dialing Mode setting is correct (Tone/Pulse 10 pps/Pulse 20 pps).
 - Line Type setting is correct (PSTN/PBX).

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The fax is connected to an analogue network.

Y N
Perform the **020H** Fax Problems on Digital Networks RAP.

The Fax App is available.

Y N
Perform the **020F** Fax App Not Available RAP.

The machine will send a fax to all machines.

Y N
The machine will send a fax to some machines.
Y N
Perform the **020B** Unable To Send A Fax RAP.

Perform the **020C** Unable To Send A Fax To Some Machines RAP.

The machine will receive a fax from the remote machine.

Y N
Perform the **020D** Unable To Receive A Fax RAP.

A

The fax prints out.

Y N
Perform the **020E** Fax Will Not Print RAP.

The fault is cleared.

Y N
Perform the **020G** Fax Module Checkout RAP.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report, **GP 30**. Check for errors.

NOTE: If applicable, ensure that any sending or receiving feature adjustments that were made during this procedure are reset to the customer's preferences.

A

020B Unable To Send A Fax RAP

Use this RAP to isolate components which contribute to a fax send failure.

Procedure

NOTE: Refer to the [020A Fax Entry RAP](#). Complete all of the Initial Actions.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Verify with the customer that Public Switched Telephone Network/Private Automatic Branch Exchange (PSTN/PABX) line is operational. Connect a telephone handset into the line outlet. Listen for a dial tone. Use a known good telephone handset. **The dial tone is present.**

Y N
Use a telephone handset to dial a known good number. **The ring back is heard.**

Y N
Ask the customer to request a line check by the telephone company.

Enable audio line monitor. Refer to [How to Enable Audio Line Monitor](#).

Dial the fax number. Listen for dial tones or dialing and answer tones. **Fax tones are present.**

Y N
Perform the [020G Fax Module Checkout](#).
Install new components as necessary:

- Line 1 fax PWB, [PL 20.05 Item 10](#).
- Line 2 or 3 fax PWB, [PL 20.05 Item 15](#).
- Telephone cable.

The dial tone/dialling answer tones are present.

Y N
The exchange is receiving the digits too quickly or is not processing the digits correctly. Ask the customer if the exchange uses 'tone' or 'pulse' dialing. Perform the steps that follow:

- From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Check that the Dialing Mode setting is correct (Tone/Pulse 10 pps/Pulse 20 pps).
- Advise the customer to insert a pause (,) between the first and second digit of the dial string.

The fax only dials once and hangs up, or the busy tone has unusual timing, frequency or level. **The busy tones are recognized.**

Y N
Check the number for a voice or tone answer.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report, [GP 30](#). Check for errors. Re-enter the details from the Fax options.

A
Check that the customer is dialing the correct number. **The number is correct.**

Y N
Ask the customer to dial the number using the appropriate access codes.

Enable audio line monitor. Refer to [How to Enable Audio Line Monitor](#).

Dial the fax number. Listen for a dial tone or dialing and answer tones. **Fax tones are present.**

Y N
Perform the [020G Fax Module Checkout](#).
Install new components as necessary:

- Line 1 fax PWB, [PL 20.05 Item 10](#).
- Line 2 or 3 fax PWB, [PL 20.05 Item 15](#).
- Telephone cable.

The dial tone/dialling answer tones are present.

Y N
The exchange is receiving the digits too quickly or is not processing the digits correctly. Ask the customer if the exchange uses 'tone' or 'pulse' dialing. Perform the steps that follow:

- From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Check that the Dialing Mode setting is correct (Tone/Pulse 10 pps/Pulse 20 pps).
- Advise the customer to insert a pause (,) between the first and second digit of the dial string.

The fax only dials once and hangs up, or the busy tone has unusual timing, frequency or level. **The busy tones are recognized.**

Y N
Check the number for a voice or tone answer.

- From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Check that the country setting is correct.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report, [GP 30](#). Check for errors.

How to Enable Audio Line Monitor

1. Enter Customer Administration Tools, [GP 23](#).
2. Touch **Device**.
3. Touch **General**, then **Sounds**.
4. Touch **Fax Processing Tones**:
 - 0 = Off (Default)
 - 1 = Low
 - 2 = Medium
 - 3 = High

A

020C Unable To Send A Fax To Some Machines RAP

Use this RAP to isolate components which contribute to a failure to send a fax to some machines.

Procedure

NOTE: Refer to the [020A Fax Entry RAP](#). Complete all of the Initial Actions.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Ensure the correct number is being dialed to make the connection. **The connection is made.**

Y N

The exchange is not processing the digits correctly. The machine needs a longer pause between digits. Advise the customer to insert a pause (,) between the first and second digit of the dial string.

Call the fax number from a known good telephone. Listen for the answer fax tones. **The fax tones are heard.**

Y N

The fax on the remote end is not picking up, or no fax is connected. Advise the customer to check the machine at the remote end.

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report, [GP 30](#). The protocol report shows Receive Not Ready (RNR) is received from the remote fax repeatedly until timeout and Disconnect (DCN). Check for a communication failure after 'V34-PH2/V34-PH3' or 'DCS/TCF'. **The remote fax receives and prints the fax.**

Y N

There is a compatibility problem with the remote fax. Check the items that follow:

- Check the protocol report for communication errors.
- The fax line quality is too poor for V34 (Super G3) to function correctly. This is possibly caused by mains interference on the line.
- From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Disable Super G3.

If mains noise persists, install and use line 2 or 3 instead of line 1 (if available).

The protocol report shows Message Confirmation (MCF) is not sent by the remote fax (last page), only DCN. **The failure report is printed, but the remote fax prints multiple copies of the job or failed page.**

Y N

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report, [GP 30](#). Check for errors.

The machine will resend up to 5 times before printing the failure report.

Enter Customer Administration Tools, [GP 23](#). Select **Service Settings / Embedded Fax Settings / Transmission Defaults / Automatic Resend**. Set the number of resends to 1 or 2.

020D Unable To Receive A Fax RAP

Use this RAP to isolate components which contribute to a fax receive failure.

Procedure

NOTE: Refer to the [020A Fax Entry RAP](#). Complete all of the Initial Actions.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Verify with the customer that Public Switched Telephone Network/Private Automatic Branch Exchange (PSTN/PABX) line is operational. Use a known good telephone handset or use a line test tool to check the fax line. **The dial tone is present.**

Y N

Ask the customer to request a line check by the telephone company.
Ensure the fax service is enabled and supported on that line by a PBX administrator.

Call the handset from another telephone. **The phone rings.**

Y N

Ask the customer to request a line check by the telephone company.
Ensure the fax service is enabled and supported on that line by a PBX administrator.

Reconnect the fax. Call the fax number from another telephone. Listen for fax tones. **The machine answers and fax tones are heard.**

Y N

Print a fax activity report, [GP 30](#). Check for received calls on the activity report. The machine probably does not 'beep' to indicate an incoming call.

Call the fax number from another telephone. Listen for fax tones. **The machine answers and fax tones are heard.**

Y N

Perform the [020G Fax Module Checkout](#).
Install new components as necessary:

- Line 1 fax PWB, [PL 20.05 Item 10](#).
- Line 2 or 3 fax PWB, [PL 20.05 Item 15](#).

The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report, [GP 30](#). Check for errors.

Receive a 3 page test fax from the original fax machine. The fax is working correctly. Send a 3 page test fax to a known good fax machine. Print a protocol report, [GP 30](#). Check for errors. The protocol report may show a communication failure after 'Called Subscriber Identified/Digital Identification Signal' (CSI/DIS) or 'Digital Command Signal/Training Check' (DCS/TCF) or after 'V34-PH2/V34-PH3' or 'Eye Quality Monitor' (EQM) value greater than 5000. **The protocol report shows a communication failure.**

Y N

The problem may be intermittent. Inform the operator of the remote machine that they should report the problem to the telephone company.

A

Perform the steps that follow:

- Confirm the fax line is a standard PSTN/PBX analogue line.
- The fax line quality is too poor for Super G3 or G3 to function correctly. There is possibly mains interference on the line. The DSL line may not be correctly filtered.
- Ask the customer to request a fax capable service from telephone company.
- If mains noise is apparent, install a new line 1 fax PWB, [PL 20.05 Item 10](#) or line 2 or 3 fax PWB, [PL 20.05 Item 15](#) as necessary.
- From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Disable Super G3.
- Send a 3 page test fax from a known good fax machine.

020E Fax Will Not Print RAP

Use this RAP to solve fax printing problems.

Initial Actions

- Check the condition of the paper in all trays.
- Check that the paper trays are loaded with the appropriate paper sizes for printing the fax. Refer to [GP 15](#).
- Enter Customer Administration Tools, [GP 23](#). Touch **Device**, then **Apps**. Touch **Fax**, then ensure **Secure Fax Receive** is off.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Check that:

- Auto Tray Switching is set to **Use Same or Larger Paper Size**.
- Auto Reduce on Receipt is set to **On**.
- Fax Receive Tray is set to all available trays.

020F Fax App Not Available RAP

Use this RAP to isolate the problem when the Fax App is not available, or is greyed out.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **System**, then **Fax**. Check that the fax is enabled.

Exit Customer Administration Tools, **GP 23**. Press the Home button on the UI. **The Fax App is displayed.**

Y N

Check that the fax PWBs, **PL 20.05** are installed correctly.

Perform the steps that follow:

1. Switch off the machine, **GP 10**.
2. Check the fax USB harness, **PL 20.05 Item 2**.
3. Switch on the machine, **GP 10**.

The Fax App is displayed.

Y N

Reload the software, **GP 4**.

NOTE: Software should only be loaded on a working machine. Loading or reloading software onto a machine (or fax module) that has a fault will not work.

Perform **SCP 5** Final Actions.

Perform **SCP 5** Final Actions.

020G Fax Module Checkout RAP

Use this RAP to check for problems with the fax PWBs.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off, then switch on the machine, **GP 10**.
- For image quality defects, perform the **IQ27** Unfused Copy/Toner Offset RAP.
- Initialize the System NVM, refer to **dC301**.

Procedure

Switch off the machine **GP 10**. Disconnect the components that follow:

- If installed, the line 2 and 3 fax PWBs, **PL 20.05 Item 15**.
- The line 1 fax PWB, **PL 20.05 Item 10** from the riser PWB.
- The the fax USB harness, **PL 20.05 Item 2** from the ESS PWB.

Check that the connectors are clean and not damaged. If the connectors are damaged, install new components as necessary:

- Line 1 fax PWB, **PL 20.05 Item 10**.
- Line 2 or 3 fax PWB, **PL 20.05 Item 15**.
- Riser PWB, **PL 20.05 Item 16**.
- Fax USB harness, **PL 20.05 Item 2**.
- ESS PWB, **PL 3.10 Item 6**.

020H Fax Problems on Digital Networks RAP

Use this RAP to isolate fax problems when using digital networks.

The fax option was designed as an analogue Group 3 device. This will have the best performance when connected to a dedicated analogue phone Public Switched Telephone Network (PSTN) line or 'Plain Old Telephone System' (POTS).

- The fax option will function on the technologies that follow:
 - Asymmetric Digital Subscriber Line (ADSL).
 - Digital Subscriber Line (DSL).
 - Voice Over Internet Protocol (VOIP).
 - Fax Over Internet Protocol (FOIP), (T.38 protocol).
 - T1 Trunk/E1 Trunk (Europe).

NOTE: Due to the compression used on the technologies, the level of performance will be lower than on a PSTN or POTS.

- The fax option will not function on Integrated Services Digital Network (ISDN).
- The fax over IP is a customer option. The feature allows the machine to send and receive faxes over an IP based network using SIP and VoIP Gateway industry standard protocols and services. The FoIP enabled machine can send and receive faxes from a variety of analog and digital devices.

Fax over IP uses devices at each end of the IP network (fax modems) to decode the fax audio (analog) back into fax protocol (digital), and send the data over an IP network. This is known as Fax Relay and ITU standard is T.38.

If the customer is experiencing poor performance when using fax over IP, it may be because the machine is configured for embedded fax. The machine cannot run both fax over IP and embedded fax concurrently, the machine must be configured for one or the other.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Switch off, then switch on the machine, [GP 14](#).
- Check with the customer or IT person on what network the fax service is being used and what is the quality of service.
- Check that an analogue adapter or a connection for analogue terminals is available.
- Ask the customer to check with the service provider that an analogue port for fax service has been provided and enabled.

Procedure

Perform the steps that follow:

1. From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Disable Super G3.
2. If problems are still not resolved after these actions, escalate the problem using the normal escalation process.

021-210, 211, 212 USB IC Card Reader Error RAP

021-210 USB IC card reader connection status error.

021-211 The USB IC card reader is broken.

021-212 USB IC card reader activation failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Check the wiring between the card reader and the machine.
3. Enter **dC131**. Ensure NVM value 700-885 is set correctly:
 - Internal IC card reader: 0
 - IC card reader (HID support): 1
4. If the fault persists, advise the customer that the card reader is faulty.

021-213 Controller Price Table Error RAP

021-213 An error in setting up EPA controller unit price table.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to save the unit price table to a file. Then set a value between 1 and 9999999 at the location(s) where a value out of the range is set. Then save the file containing the corrected unit price table.
2. To not use the new type of subtraction system (M/C Unit-Price Table system), enter **dC131**. Set the value of NVM 850-027 to 0.
3. To use the new type of subtraction system, enter **dC131**. Set every available unit price (NVM values 855-xxx) to a value between 1 and 9999999. Switch off, then switch on the machine, **GP 10**.

NOTE: Obtain consent from the customer as to the values to set the prices to.

4. Perform the **OF2** Special Boot Modes RAP.

021-214 USB IC Card Reader Encryption Setting RAP

021-214 Failure in the USB IC card reader encryption settings.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Advise the customer that the encryption settings of the connected USB IC card reader are wrong. Connect an USB IC card reader that has never been used before, or one that has had its encryption settings initialized as factory default settings to the machine. Switch off, then switch on the machine, GP 10.

021-215 Invalid Accessory Type Setting RAP

021-215 Invalid accessory type setting.

Procedure

Perform the steps that follow:

1. Enter dC131. Set NVM value 850-007 to the appropriate one for the connected accessory. Switch off, then switch on the machine, GP 10.
2. Or replace the connected accessory with the appropriate one for the setting. Switch off, then switch on the machine, GP 10.

021-360 EP Accessory Fail RAP

021-360 An error occurred in the connection to the EP accessory. The accessory that should be installed is not found.

Procedure

Perform the **016-357** Controller EP Communication Fail RAP.

021-361 EP Accessory Type Configuration Error RAP

021-361 EP accessory type setting error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Enter **dC131**. Ensure NVM value 850-007 is set correctly.
2. If the fault persists, perform the **016-357** Controller EP Communication Fail RAP.

021-401 USB IC Card Reader Connection Error RAP

021-401 USB IC card reader connection status is incorrect.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Advise the customer to disconnect the USB IC card reader that caused this error to occur from the USB connector.

021-500 EP Accessory Job Exclusion RAP

021-500 When the fax send billing function is enabled, the errors that follow occurred:

- There was an attempt to start up a job for accessory billing in the middle of a fax send job operation.
- There was an attempt to start up a Fax send Job in the middle of a Job for accessory billing operation. This fault is not detected when the fax send billing function is disabled.

Procedure

Advise the customer to wait for the current running job to complete, and then restart the job.

021-501 Invalid URL Detected RAP

021-501 The server URL is grammatically incorrect.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Advise the customer to check the URL of the EP server.

021-502, 503, 504 Couldn't Resolve Proxy Name RAP

021-502 Proxy server address resolution error.

021-503 Server address resolution error.

021-504 Server connection error.

Procedure

Advise the customer to:

1. Check the connection of the LAN cable.
2. Check the DNS server address settings.
3. Check the default gateway settings.
4. Check the subnet mask settings.

021-505, 021-506 SSL Error RAP

021-505 An error has occurred during SSL/TLS handshake.

021-506 The SSL certificate of the server is invalid.

Procedure

Switch off, then switch on the machine, [GP 10](#).

021-507 Unauthorized Proxy Access RAP

021-507 Authentication of the proxy server has failed.

Procedure

Advise the customer to:

1. Check the EP proxy server authentication user.
2. Check the EP proxy server authentication password.
3. If the problem persists after checking the settings, there may be a network failure or the proxy server settings may have changed/failed.

021-508, 520, 521 Host/Proxy Connection Timed Out RAP

021-508 Communication timeout has occurred.

021-520 CA communication error.

021-521 CA communication timeout.

Procedure

Advise the customer to:

1. Check the connection of the LAN cable.
2. Check the default gateway settings.
3. Check the subnet mask settings.

021-509, 515, 516, 522 Invalid Message Detected RAP

021-509 The server detected an invalid message.

021-515 Invalid product code.

021-516 Invalid serial number.

021-522 Certificate library error.

Procedure

Switch off, then switch on the machine, [GP 10](#).

021-510, 021-511 SOAP Fault RAP

021-510 Recall status mismatch (EP system).

021-511 Installation status mismatch (EP system)

Procedure

For information only. No service action required.

021-512, 513, 514, 517, 518, 519 Installation Conflict RAP

021-512 EP-SV installation conflict (EP system).

021-513 EP-DX installation conflict (EP system).

021-514 TRESS installation conflict (EP system).

021-517 Communication failure (EP center)

021-518 An internal error has occurred in the server.

021-519 High load status detected (EP center).

Procedure

Advise the customer to check with the EP Center for the EP contract status, registration status and system operation status.

021-523 Internal Error RAP

021-523 Software failure where processing can still continue was detected.

Procedure

Perform the steps that follow:

1. If the SOAP port has stopped, advise the customer to restart it.
2. If the fault persists, switch off, then switch on the machine, [GP 10](#).

021-524 to 012-527 Communications Error RAP

021-524 Installation status mismatch.

021-525 Recall status mismatch.

021-526 Communication library error.

021-527 Invalid communication message (edge server).

Procedure

Switch off, then switch on the machine, [GP 10](#).

021-528, 021-529 Communication Settings RAP

021-528 Communication setting error.

021-529 The latest version is detected (software update).

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, advise the customer to check with the EP Center for the EP contract status, registration status and system operation status.

021-530, 012-531 Update Server Error RAP

021-530 An error internal to the server (software update).

021-531 A large load on the server is detected (software update).

Procedure

Advise the customer to:

1. Wait a while, then perform the same operation again.
2. If the fault persists, advise the customer to check with the EP Center for the EP contract status, registration status and system operation status.

021-532 to 021-535 Unsupported ROM Set RAP

021-532 An unsupported set of ROM versions is detected.

021-533 The user cannot do an update.

021-534 An unsupported submodule is detected.

021-535 An unsupported accessory is detected.

Procedure

Reload the software, [GP 4](#).

021-700 Accessory Failure RAP

021-700 EP accessory - service canceled by USB accessory failure or disconnect.

Procedure

Perform the steps that follow:

1. Check the fault history, [dC122](#) for fault 021-210, 021-211 or 021-212. If any of the faults is listed, perform the relevant RAP.
2. If none of the faults are listed, reload the software, [GP 4](#).

021-701 Accessory Preparing RAP

021-701 EP accessory - service canceled by USB accessory preparing.

Procedure

Perform the steps that follow:

1. Advise the customer to wait for a minimum of 3 minutes for the USB accessory to start, then re-run the job
2. If the fault persists, reload the software, [GP 4](#).

021-732, 941, 943, 945 EP Accessory Error RAP

021-732 EP accessory - service canceled by disable.

021-941 EP accessory - scan service paused by disable.

021-943 EP accessory - print service paused by disable.

021-945 EP accessory - service paused by disable.

Procedure

Perform the steps that follow:

1. Advise the customer to insert a Xerox card, copy card or cash into the accessory, and ensure that there are sufficient fees or card value.
2. If the fault persists, reload the software, [GP 4](#).

021-733, 742, 944, 946 EP Accessory Color Error RAP

021-733 EP accessory service canceled by color mode restriction.

021-742 EP accessory - scan service paused by color mode restriction.

021-944 EP accessory - print service paused by color mode restriction.

021-946 EP accessory - service paused by color mode restriction.

Procedure

Perform the steps that follow:

1. Advise the customer to operate the color restriction key SW to allow color. Or, replace the card with another card that does not reach its upper limit in color mode.
2. If the fault persists, reload the software, **GP 4**.

021-947, 948, 949 Subtractive Accessory Disable (Scan) RAP

021-947 The remaining rate subtractive accessory is insufficient (scan service paused by subtractive accessory disable).

021-948 The remaining rate subtractive accessory has is insufficient (print service paused by subtractive accessory disable).

021-949 The remaining rate subtractive accessory has is insufficient (service paused by subtractive accessory disable).

Procedure

Advise the customer that in the case of dispenser, to insert a card that has a remaining rate enough to continue the job. In the case of coin kit, to add a necessary amount of money to continue the job.

023-500 UI ROM Download Fail RAP

023-500 Panel ROM data write processing error detection.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Reload the software, **GP 4**.
2. If the fault persists, install a new UI assembly, **PL 2.05 Item 7**.

023-600, 023-601 UI Key Error RAP

023-600 A hard key on the panel has been found to be held down for one or more consecutive minutes.

023-601 The touch panel has been found to be held down for one or more consecutive minutes.

Procedure

For information only, no service action necessary.

024-340 to 024-360 IOT-ESS Communication Fail 1 RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

024-340 Drive PWB sending error detected by controller (invalid parameter was used).

024-341 Drive PWB sending error detected by controller (sequence number error).

024-342 Drive PWB sending error detected by controller (packet number error).

024-343 Drive PWB sending error detected by controller (message length error).

024-345 Drive PWB sending error detected by controller (check code error).

024-346 Drive PWB sending error detected by controller (parity error detected by the IOT).

024-347 Drive PWB sending error detected by controller (framing error detected by the IOT).

024-348 Drive PWB sending error detected by controller (overflow error detected by the IOT).

024-349 Drive PWB sending error detected by controller (receive abort detected by the IOT after the header had been recognized).

024-350 Drive PWB receiving error detected by controller (sequence number of the received message packet is incorrect).

024-351 Drive PWB receiving error detected by controller (packet number error).

024-352 Drive PWB receiving error detected by controller (message length error).

024-353 Drive PWB receiving error detected by controller (check code error).

024-354 Drive PWB receiving error detected by controller (parity error detected by the UART).

024-355 Drive PWB receiving error detected by controller (framing error detected by the UART).

024-356 Drive PWB receiving overflow error detected by controller (overflow error detected by the UART).

024-357 Drive PWB receiving error detected by controller (receiving abort detected after the header had been recognized).

024-358 Print sequence error detected by controller (paper feed and paper output that are not applicable to the number detected.)

024-359 Drive PWB transmission receiving error detected by controller (invalid parameter used).

024-360 Initialization error between IOT and ESS.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2 Special Boot Modes RAP](#).
5. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

024-361 Invalid IOT Paper Size RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

024-361 Invalid IOT paper size group information.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Initialize the user NVM, refer to [dC301](#) NVM Initialization.
4. Reload the software, [GP 4](#).
5. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

024-362, 024-363 Page Sync Illegal Start or Stop RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

024-362 Page-sync occurred before video output preparation completes.

024-363 Page-sync completion error during video output.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2](#) Special Boot Modes RAP.
5. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

024-364 DMA Transfer Fail RAP

024-364 DMA transfer error. Reduction/enlargement was not completed even though the specified data was entered.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure the connectors on the hard disk are securely connected.
3. Remove, then re-install the SD card, PL 3.10 Item 11. If necessary, install a new memory card.
4. Format the hard disk drive, refer to dC355 Image Disk Diagnostics.
5. Reload the software, GP 4.
6. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

024-365 Overflow on Loop Back Write RAP

024-365 Loop back write overflow.

Procedure

This fault is currently not displayed. No service action necessary.

024-366 JBIG Library Other Fail RAP

024-366 Other errors in JBIG Lib.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

024-367 Decompress Other Fail RAP

BSD-ON: **BSD 3.9 ESS**

024-367 Incorrect line synchronization was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure the connectors on the hard disk are securely connected.
3. Format the hard disk drive, refer to **dC355** Hard Disk Diagnostics.
4. Reload the software, **GP 4**.
5. Perform the **OF2** Special Boot Modes RAP.
6. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

024-368 PCI Error RAP

BSD-ON: [BSD 3.9 ESS](#)

024-368 PCI access error occurred due to a faulty PCI bus.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure the connectors on the hard disk are securely connected.
3. Format the hard disk drive, refer to [dC355](#) Hard Disk Diagnostics.
4. Reload the software, [GP 4](#).
5. Perform the [OF2](#) Special Boot Modes RAP.
6. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

024-370 Marker Code Detection Fail RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

024-370 Marker code detection error. During enlarge, when the file was enlarged only by the specified size, the end code (FF02) cannot be found in the compressed data.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Change the Print mode (Normal/High Quality/High Resolution). Inform the customer of any print mode setting changes.
3. Remove, then re-install the SD card, [PL 3.10 Item 11](#). If necessary, install a new memory card.
4. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
5. Reload the software, [GP 4](#).
6. Perform the [OF2](#) Special Boot Modes RAP.
7. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).
 - SD card, [PL 3.10 Item 11](#).

024-371 to 024-373, 024-375 IOT-ESS Communication Fail 2 RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

024-371 Communication between the ESS and IOT has not been established.

024-372 Sending error detected by the controller (incorrect parameter instruction).

024-373 DLL communication failure recovery error detected by the controller.

024-375 DLL receiving error detected by the controller (incorrect parameter instruction).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2 Special Boot Modes RAP](#).
5. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

024-374 RegiCon PLL Parameter Fail RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

024-374 RegiCon adjustment value setting error detected by the controller (incorrect parameter instruction).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

024-376 IOT-ESS Communication Fail 3 RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

BSD-ON: [BSD 6.4 LED Control \(Y, M\)](#), [BSD 6.5 LED Control \(C, K\)](#).

024-376 Drive PWB image signal truncation detected by the controller.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Check the FFC ribbon cable between the ESS PWB and the LPH, [PL 60.35 Item 4](#), [PL 60.35 Item 5](#), [PL 60.35 Item 6](#), and [PL 60.35 Item 7](#).
4. Reload the software, [GP 4](#).
5. Perform the [OF2 Special Boot Modes RAP](#).
6. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

024-600 to 024-614 Counter Repair RAP

024-600 The billing master counter is automatically repaired.

024-601 The billing backup counter 1 is automatically repaired.

024-602 The billing backup counter 2 is automatically repaired.

024-603 The SW key master counter is automatically repaired.

024-604 The SW key backup counter 1 is automatically repaired.

024-605 The SW key backup counter 2 is automatically repaired.

024-606 Billing meter type is automatically repaired (ESS SEEP repaired).

024-607 Billing meter type is automatically repaired (ESS NVM repaired).

024-608 Billing meter type is automatically repaired (IOT NVM repaired).

024-609 Billing count type is automatically repaired (ESS SEEP repaired).

024-610 Billing count type is automatically repaired (ESS NVM repaired).

024-611 Billing count type is automatically repaired (IOT NVM repaired).

024-612 Modal break point is automatically repaired (ESS SEEP repaired).

024-613 Modal break point is automatically repaired (ESS NVM repaired).

024-614 Modal break point is automatically repaired (IOT NVM repaired).

Procedure

For information only, no service action necessary.

024-615 IOT Unsupported Drum Shut Off RAP

024-615 IOT unsupported drum shut off.

Procedure

For information only, no service action necessary.

024-616 to 024-621 Serial/Product Number Restore RAP

024-616 Serial number master was restored automatically.

024-617 Serial number backup 1 was restored automatically.

024-618 Serial number backup 2 was restored automatically.

024-619 Product number master was restored automatically.

024-620 Product number backup 1 was restored automatically.

024-621 Product number backup 2 was restored automatically.

Procedure

For information only, no service action necessary.

024-700 Memory Shortage or No Hard Disk RAP

BSD-ON: [BSD 3.9 ESS](#)

024-700 A job that could not be printed due to insufficient system memory or hard disk not installed was received.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Remove, then re-install the SD memory card, [PL 3.10 Item 11](#). If necessary, install a new memory card.
2. Ensure that the connectors from the hard disk drive, [PL 3.10 Item 2](#) to the ESS PWB, [PL 3.10 Item 6](#) are securely connected.
3. If the fault persists, install a new hard disk drive, [PL 3.10 Item 2](#).

024-701 Invalid Instruction of Face Inversion RAP

024-701 Job cancellation due to invalid invert instruction.

Procedure

Advise the customer to use paper that is in specification. Refer to [GP 15](#) Paper and Media Size Specifications.

024-702 Paper Jam RAP

024-702 Job cancellation due to paper jam.

Procedure

Clear the paper jam.

024-703, 742, 775 Booklet Sheets Count Over RAP

024-703 Number of booklet sheets exceeded fail has occurred during printing.

024-742 The number of sheets per set exceeds a specific allowable number for a booklet.

024-775 A job that exceeds booklet paper quantity is cancelled.

Procedure

Perform the steps that follow:

1. Advise the customer to use paper of a lighter weight so as not to exceed the maximum output limit or use less pages.
2. If the fault persists, reload the software, [GP 4](#).

024-707 Duplex Inversion Prohibited (Duplex) RAP

024-707 A duplex print instruction was received for duplex/invert prohibited paper.

Procedure

Perform the steps that follow:

1. Advise the customer to use paper that is in specification or to print simplex. Refer to [GP 15](#) Paper and Media Size Specifications.
2. If the fault persists, reload the software, [GP 4](#).

024-708 Duplex Inversion Prohibited (Face Down) RAP

024-708 A face down output instruction was received for duplex/invert prohibited paper.

Procedure

Perform the steps that follow:

1. Advise the customer to use paper that is in specification or to print face up. Refer to [GP 15](#) Paper and Media Size Specifications.
2. If the fault persists, reload the software, [GP 4](#).

024-746, 024-747 Print Request Failure RAP

024-746 There are parameters that are incompatible with the specified paper type.

024-747 The specified combination of parameters (stored file size, paper size, paper tray, duplex command, output tray) cannot be executed or continued.

Procedure

Advise the customer to use the correct print parameters.

024-748 Bates Numbering Digit Exceeded RAP

024-748 The number of bates numbering digits is exceeded.

Procedure

Perform the steps that follow:

1. Advise the customer to reduce the number of documents to less than the user-specified number or reduce the number of numbering digits.
2. If the fault persists, reload the software, [GP 4](#).

024-910, 946, 959 Tray 1 Size Mismatch RAP

024-910 Size mismatch tray 1, measured length mismatch.

024-945 Tray 1 out of place.

024-959 Tray 1 size mismatch.

Procedure

Perform the **071-212** Tray 1 Paper Size Sensor Fault RAP.

024-911, 947, 960 Tray 2 Size Mismatch RAP

024-911 Size mismatch tray 2, measured length mismatch.

024-947 Tray 2 out of place.

024-960 Tray 2 size mismatch.

Procedure

Perform the **072-212** Tray 2 Paper Size Sensor Fault RAP.

024-912, 948, 961 Tray 3 Size Mismatch RAP

024-912 Size mismatch tray 3, measured length mismatch.

024-948 Tray 3 out of place.

024-961 Tray 3 size mismatch.

Procedure

Perform the **073-212** Tray 3 Paper Size Sensor Fault RAP.

024-913, 949, 962 Tray 4 Size Mismatch RAP

024-913 Size mismatch tray 4, measured length mismatch.

024-949 Tray 4 out of place.

024-962 Tray 4 size mismatch.

Procedure

Perform the **074-212** Tray 4 Paper Size Sensor Fault RAP.

024-914, 915 Tray 6 and 7 Size Mismatch RAP

024-914 Size mismatch tray 6, measured length mismatch.

024-915 Size mismatch tray 7, measured length mismatch.

Procedure

For information only, no service action necessary.

024-916, 980, 981 Full Stack RAP

024-916 One of the conditions that follow was met during mix full position detection:

- When the paper size of the next job (either in feed direction or width direction) is larger than the uppermost paper size loaded for the previous job.
- When changed to staple mode, the uppermost paper size loaded for the previous job is less than 279.4mm (11 inches).
- When uppermost paper size loaded for the previous job is 'unknown'

024-980 Finisher stacker tray full stack.

024-981 Finisher top tray paper full.

Procedure

Perform the [012-211](#) Stacker Tray Fail Entry RAP.

024-917 Stacker Tray Staple Set Over Count

BSD-ON: [BSD 13.15 Office Finisher LX Stacker Tray Control](#)

024-136 The staple set count exceeded 50 sets on the stacker tray during the staple set eject operation.

Procedure

Perform the [012-212](#) Stacker Tray Upper Limit Failure RAP.

024-919 Face Up Tray Close RAP

024-919 When output was sent to the face up tray, the face up tray was detected as closed.

Procedure

For information only, no service action necessary.

024-920 Face Down Tray 1 Full RAP

024-920 The paper output to the face down tray 1 is full.

Procedure

For information only, no service action necessary.

024-923 to 024-925 Y/M/C Toner Cartridge Empty RAP

024-923 The yellow toner cartridge is empty.

024-924 The magenta toner cartridge is empty.

024-925 The cyan toner cartridge is empty.

Procedure

Install new components as necessary:

- Yellow toner cartridge, [PL 90.05 Item 10](#).
- Magenta toner cartridge, [PL 90.05 Item 11](#).
- Cyan toner cartridge, [PL 90.05 Item 12](#).

024-926, 963, 990 Puncher Waste Bin Not Set RAP

BSD-ON: [BSD 13.6 Office Finisher LX Punch](#)

024-926 The puncher waste bin is not installed correctly or there is a failure in the punch box set sensor or related circuitry.

024-963 The amount of waste has become equal to or over the number that makes the punch dust box full.

024-990 Punch dust full.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Empty the punch box, [PL 13.06 Item 11](#).
- Check for any debris or obstructions in the path of the punch waste bin or the punch box set sensor.

Procedure

Enter [dC330](#), code 012-275, punch box set sensor. Remove, then reinstall the punch waste bin. **The display changes.**

Y N

Check the punch box set sensor, refer to [GP 7](#) How to Check a Sensor. Install new components as necessary:

- Punch box set sensor, [PL 13.09 Item 5](#).
- (Integrated office finisher) finisher PWB, [PL 12.14 Item 1](#).
- (Office finisher LX) finisher PWB, [PL 13.45 Item 2](#).

Reload the software, [GP 4](#). If the fault persists, install a new finisher PWB (integrated office finisher), [PL 12.14 Item 1](#) or (office finisher LX), [PL 13.45 Item 2](#).

024-928 Scratch Sheet Compile Entry RAP

024-928 Abnormal paper (scratch sheet), which is notified from the IOT via the sheet integrity command, was output to the finisher.

Procedure

Perform the relevant procedure:

- Integrated office finisher installed, [024-928A](#) Scratch Sheet Compile RAP.
- Office finisher LX installed, [024-928B](#) Scratch Sheet Compile RAP.

024-928A Scratch Sheet Compile RAP

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the 024-928 Scratch Sheet Compile Entry RAP.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the finisher top cover, PL 12.05 Item 10 can be opened, then closed.
- Switch off, then switch on the machine, GP 10.

Procedure

Check the specification of the paper, refer to GP 15 Paper and Media Size Specifications.

The paper is within specification.

Y N
| Load new paper that is in specification.

Check the condition of the paper. **The paper is in good condition.**

Y N
| Load new paper that is in specification.

Check the fault history, dC122 for a fault code. **Another fault code is displayed.**

Y N
| If the fault persists, install a new finisher PWB, PL 12.14 Item 1.

Perform the relevant RAP.

024-928B Scratch Sheet Compile RAP

Initial Actions

NOTE: Ensure the correct RAP is performed, refer to the 024-928 Scratch Sheet Compile Entry RAP.



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Ensure that the eject cover, PL 13.25 Item 1 is closed.

Procedure

Check the specification of the paper, refer to GP 15 Paper and Media Size Specifications.

The paper is within specification.

Y N
| Load new paper that is in specification.

Check the condition of the paper. **The paper is in good condition.**

Y N
| Load new paper that is in specification.

Check all connectors on the finisher PWB. **The connectors are connected correctly.**

Y N
| Connect the connectors.

Switch off, then switch on the machine, GP 10. Open, then close the eject cover. If the fault persists, install a new finisher PWB, PL 13.45 Item 2.

024-933, 024-940, 024-941 Drum Cartridge End of Life RAP

024-933 The yellow drum cartridge has reached end of life.

024-940 The magenta drum cartridge has reached end of life.

024-941 The cyan drum cartridge has reached end of life.

Procedure

Install new components as necessary:

- Yellow toner cartridge, [PL 90.05 Item 10](#).
- Magenta toner cartridge, [PL 90.05 Item 11](#).
- Cyan toner cartridge, [PL 90.05 Item 12](#).

024-934 Paper Type Mismatch RAP

024-934 The fed paper is different from that specified in the controller (plain paper and heavy-weight cannot be recognized).

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Load the specified media.
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).

024-939 OHP Type Mismatch RAP

024-939 Paper type mismatch. the system is shut down (stop) if transparencies with borders are detected regardless of the paper type setting in the controller.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the UI settings, ensure that bypass tray is selected and the correct media used.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.

024-942, 024-975 Booklet Sheet Count RAP

024-942 Booklet sheets over count. The number of sheets in a booklet is over the limit.

024-975 Number of Booklet sheets exceeded (occurs at process with no images).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure that the job is programmed in compliance with the maximum number of sheets for a booklet.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.

024-943, 978, 984, 989 Booklet Staple RAP

024-943 Both front and rear booklet staples are running low, or a staple cartridge was removed.

024-978 Ready signal remains not ready when the specified time has passed since booklet staple operation has begun.

024-984 Booklet low front staple.

024-989 Booklet low rear staple.

Procedure

Perform the [012-268](#) Booklet Rear Stapler Fail RAP.

024-950 Tray 1 Empty RAP

BSD-ON: [BSD 7.7 Tray 1 Paper Stacking](#)

024-950 Tray 1 is empty.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 071-101, tray 1 no paper sensor. Manually actuate the tray 1 no paper sensor, [PL 80.10 Item 6](#). **The display changes.**

Y N

Check the tray 1 no paper sensor. Refer to [GP 7](#) How to Check a Sensor.

Perform the [071-210](#) Tray 1 Lift Fail RAP. Check the tray 1 feed/lift motor. If the fault persists, install new components as necessary:

- Tray 1 no paper sensor, [PL 80.10 Item 6](#).
- Drive PWB, [PL 1.10 Item 4](#).

024-951 Tray 2 Empty RAP

BSD-ON: [BSD 7.8 Tray 2 Paper Stacking \(STM\)](#)

BSD-ON: [BSD 7.9 Tray 2 Paper Stacking \(1TM\)](#)

BSD-ON: [BSD 7.10 Tray 2 Paper Stacking \(3TM\)](#)

024-951 Tray 2 is empty.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 072-101, tray 2 no paper sensor. Manually actuate the tray 2 no paper sensor, [PL 80.20 Item 6](#). The display changes.

Y N

Check the tray 2 no paper sensor. Refer to [GP 7](#) How to Check a Sensor.

Perform the [072-210](#) Tray 2 Lift Fail RAP. Check the tray 2 feed/lift motor. If the fault persists, install new components as necessary:

- Tray 2 no paper sensor [PL 80.20 Item 6](#).
- 1TM PWB, [PL 70.17 Item 5](#).
- 3TM PWB, [PL 70.23 Item 5](#).
- STM PWB, [PL 70.28 Item 4](#).
- TTM PWB, [PL 70.90 Item 1](#).

024-952 Tray 3 Empty RAP

BSD-ON: [BSD 7.11 Tray 3 Paper Stacking \(3TM\)](#)

024-952 Tray 3 is empty.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 073-101, tray 3 no paper sensor. Manually actuate the tray 3 no paper sensor, [PL 80.20 Item 6](#). The display changes.

Y N

Check the tray 3 no paper sensor. Refer to [GP 7](#) How to Check a Sensor.

Perform the [073-210](#) Tray 3 Lift Fail RAP. Check the tray 3 feed/lift motor. If the fault persists, install new components as necessary:

- Tray 3 no paper sensor, [PL 80.20 Item 6](#).
- 3TM PWB, [PL 70.23 Item 5](#).
- TTM PWB, [PL 70.90 Item 1](#).

024-953 Tray 4 Empty RAP

BSD-ON: [BSD 7.12 Tray 4 Paper Stacking \(3TM\)](#)

024-953 Tray 4 is empty.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 074-101, tray 4 no paper sensor. Manually actuate the tray 4 no paper sensor, [PL 80.20 Item 6](#). The display changes.

Y **N**
| Check the tray 4 no paper sensor. Refer to [GP 7](#) How to Check a Sensor.

Perform the [074-210](#) Tray 4 Lift Fail RAP. Check the tray 4 feed/lift motor. If the fault persists, install new components as necessary:

- Tray 4 no paper sensor, [PL 80.20 Item 6](#).
- 3TM PWB, [PL 70.23 Item 5](#).
- TTM PWB, [PL 70.90 Item 1](#).

024-954, 024-958 Bypass Tray Fault RAP

BSD-ON: [BSD 7.13 Bypass Tray Paper Sensing](#)

024-954 The bypass tray is empty.

024-958 Bypass tray paper size mismatch.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 075-100, bypass tray no paper sensor. Manually actuate the bypass tray no paper sensor, [PL 70.40 Item 12](#). The display changes.

Y **N**
| Check the bypass tray no paper sensor, refer to [GP 7](#) How to Check a Sensor.

Install new components as necessary:

- Bypass tray no paper sensor, [PL 70.40 Item 12](#).
- Drive PWB, [PL 1.10 Item 4](#).

024-955 Tray 6 Empty RAP

BSD-ON: [BSD 7.15 HCF Paper Stacking](#)

024-955 Tray 6 is empty.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 078-200, HCF no paper sensor. Manually actuate the HCF no paper sensor, [PL 80.61 Item 19](#). The display changes.

Y **N**
| Check the HCF no paper sensor. Refer to [GP 7](#) How to Check a Sensor.

Perform the [078-250](#) HCF Lift Fault RAP. Check the HCF feed/lift motor. If the fault persists, install new components as necessary:

- HCF no paper sensor, [PL 80.61 Item 19](#).
- HCF PWB, [PL 70.60 Item 9](#).

024-956, 971, 973 Tray 7 RAP

024-956 Tray 7 is empty.

024-971 Tray 7 out of place.

024-973 Tray 7 size mismatch.

Procedure

For information only, no service action necessary.

024-957, 024-974 Interposer RAP

024-957 Interposer is empty.

024-974 Interposer tray size mismatch.

Procedure

For information only, no service action necessary.

024-965, 024-966 ATS/APS RAP

024-965 The paper specified for printing is not loaded in the tray.

024-966 The paper specified for printing cannot be detected.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Reload the relevant paper tray.
2. If the fault persists, perform the steps that follow:
 - a. Switch off, then switch on the machine, [GP 10](#).
 - b. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
 - c. Reload the software, [GP 4](#).

024-967 Mixed Width Paper RAP

024-967 Mixed width was detected with settings only available for stapling the same paper width.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Cancel the stapling job. Refer the customer to the user documentation.
2. If the fault persists, perform the steps that follow:
 - a. Switch off, then switch on the machine, **GP 10**.
 - b. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
 - c. Reload the software, **GP 4**.

024-968 Stapler/Punch Concurrency RAP

BSD-ON: **BSD 13.6 Office Finisher LX Punch**

024-968 Staple position and punch position are the same.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check if the specified paper is loaded in the tray.
- Switch off, then switch on the machine, **GP 10**.

Procedure

Cancel staple mode and punch mode. **The fault persists.**

Y **N**
Correct the settings.

Check the connectors on the finisher PWB. **The connectors are securely connected.**

Y **N**
Connect the connectors securely.

Check the connection of the harness between the machine and the finisher. **The harness is securely connected.**

Y **N**
Connect the harness securely.

Perform the steps that follow:

1. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
2. Reload the software, **GP 4**.
3. If the fault persists, install a new finisher PWB, **PL 12.14 Item 1** (integrated office finisher) or **PL 13.45 Item 2** (office finisher LX).

024-969 Different Width Mix Punch RAP

BSD-ON: [BSD 13.6 Office Finisher LX Punch](#)

024-969 Mixed punch paper of different widths was detected while printing in punch mode.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check if the specified paper is loaded in the tray.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Cancel punch mode. **The fault persists.**

Y **N**
Correct the settings.

Check the connectors on the finisher PWB. **The connectors are securely connected.**

Y **N**
Connect the connectors securely.

Check the connection of the harness between the machine and the finisher. **The harness is securely connected.**

Y **N**
Connect the harness securely.

Perform the steps that follow:

1. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
2. Reload the software, [GP 4](#).
3. If the fault persists, install a new finisher PWB, [PL 12.14 Item 1](#) (integrated office finisher) or [PL 13.45 Item 2](#) (office finisher LX).

024-970 Tray 6 Out of Place RAP

BSD-ON: [BSD 7.14 HCF Paper Size Sensing and Tray Set](#)

024-970 Tray 6 out of place.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 078-204, HCF tray in sensor. Manually actuate the HCF tray in sensor, [PL 70.45 Item 3](#). **The display changes.**

Y **N**
Check the HCF tray in sensor. Refer to [GP 7](#) How to Check a Sensor.

Check for damage to the actuator on the HCF tray. If the fault persists, install new components as necessary:

- HCF tray in sensor, [PL 70.45 Item 3](#).
- HCF PWB, [PL 70.60 Item 9](#).

024-972 Tray 6 Size Mismatch RAP

BSD-ON: [BSD 7.14 HCF Paper Size Sensing and Tray Set](#)

024-972 Tray 6 size mismatch.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure that the HCF is loaded correctly and the paper guides correctly set.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Enter [dC330](#), code 078-202, HCF size sensor A. Manually actuate the HCF size sensor A, [PL 70.60 Item 11](#). The display changes.

Y **N**
|
Check the HCF size sensor A. Refer to [GP 7](#) How to Check a Sensor.

Enter [dC330](#), code 078-203, HCF size sensor B. Manually actuate the HCF size sensor B, [PL 70.60 Item 11](#). The display changes.

Y **N**
|
Check the HCF size sensor B. Refer to [GP 7](#) How to Check a Sensor.

Check for damage to the actuator on the HCF tray. If the fault persists, install new components as necessary:

- HCF size sensor A, [PL 70.60 Item 11](#).
- HCF size sensor B, [PL 70.60 Item 11](#).
- HCF PWB, [PL 70.60 Item 9](#).

024-976, 977, 979 Finisher Staple Error RAP

024-976 After the staple motor started forward rotation, the staple home sensor did not turn on within 450ms, and after the staple motor started reverse rotation, the stapler head home sensor turned on within 200ms.

024-977 Stapler feed ready fail.

024-977 Staple near empty or staple feed failure was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Install a new staple cartridge as necessary, (integrated office finisher), [PL 12.11 Item 3](#) or (office finisher LX), [PL 13.20 Item 15](#).
2. If the fault persists, perform the [012-291](#) Stapler Fail Entry RAP.

024-982 Stacker Tray Lower Safety RAP

024-982 Finisher stacker tray lower safety.

Procedure

Perform the 012-213 Stacker Tray Lower Limit Failure RAP.

024-985 Bypass Tray Obstructed RAP

024-985 Bypass tray stopped due to an obstruction.

Procedure

Advise the customer to ensure the correct paper size or type is loaded in the bypass tray in the correct orientation. Resubmit the job.

025-596, 025-597 HDD Diagnostics RAP

025-596 An NG occurred when HDD fail forecast of diagnostics was executed.

025-597 An error occurred when HDD initialization of diagnostics was executed.

Procedure

Perform the 016-210, 506, 777, 780, 798 HDD Error RAP.

026-400 USB Host Connection Number Exceeded RAP

026-400 The number of machines that are connected to the USB Host Port of this machine has exceeded the maximum permissible number of connections.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Advise the customer to disconnect some of the machines that are connected to this USB host port and ensure that the number of connected machines are below the maximum permissible number of connections.

026-402 Changed IOT Speed RAP

026-402 The IOT has started the print at a low speed.

Procedure

For information only, no service action necessary.

026-403 Stop printing and wait for toner cooling RAP

026-403 When IOT sends notification that cooling related to the toner is required when the IOT internal temperature is high.

Procedure

Inform the customer to give the machine time to cool down before proceeding.

026-700 LDAP Protocol Error RAP

026-700 It was detected that the error response returned from the server does not exist in the LDAP protocol definitions.

Procedure

Perform the steps that follow:

1. Advise the customer that this fault is caused when the server uses an undefined LDAP protocol that is not supported by the machine. Correct any mistakes in server settings or client operation.
2. If the fault persists, reload the software, [GP 4](#).

026-701 Address Book Request Overflow RAP

026-701 The software in the machine was subjected to a large amount of simultaneous address queries from multiple machine panel and Web UI input machines. The processing capacity of the JRM directory service has been exceeded.

Procedure

Perform the steps that follow:

1. Advise the customer that when performing simultaneous queries on the address book in the machine from multiple machine panel and Web UI input machines, lower the query interval.
2. If the fault persists, reload the software, [GP 4](#).

026-702 Address Book Directory Service Overflow RAP

026-702 The JRM directory service, which is an internal software of the machine, has simultaneously received two or more requests for the same operation.

Procedure

Reload the software, [GP 4](#).

026-703 Abort With Logout RAP

026-703 At installation of additional document, authentication is already cancelled.

Procedure

Advise the customer to make it impossible for authentication to be cancelled at additional document loading.

026-704 DocuWorks Error RAP

026-704 In process of operating DocuWorks decomposer, there has occurred; a syntax error, use of an undefined command, a parameter error, damage to DocuWorks file, or an internal error of DocuWorks decomposer.

Procedure

Advise the customer to print from DocuWorks viewer by use of printer driver (ART-EX, PCL, etc.).

026-705 DocuWorks Short of Memory RAP

026-705 In process of operating DocuWorks decomposer, lack of memory has been detected.

Procedure

Advise the customer to:

1. Change print mode from High Resolution to Standard or from Standard to High Speed.
2. Print from DocuWorks viewer by use of printer driver (ART-EX, PCL, etc.).

026-706, 026-707 DocuWorks Error RAP

026-706 DocuWorks decomposer has processed a DocuWorks document printing of which is prohibited.

026-707 In the processing of a security-protected DocuWorks file, either of the password set on the UI panel and the XPJL specified password (set in ContentsBridge utility) does not match.

Procedure

Advise the customer to:

1. Enter the correct password.
2. Enter Full Access Password, etc. from DocuWorks viewer then disable printing prohibited. Print using printer driver (ART-EX, PCL, etc.).

026-708 URL Data Over Size RAP

026-708 The size of a scan to URL job has exceeded the upper limit of the size of scanned data per job.

Procedure

Advise the customer to:

1. Reduce a resolution send parameter (image-to-send quality) then re-send the job.
2. Reduce a magnification send parameter, then re-send the job.
3. Increase the maximum file accumulated data size.

026-709 URL HDD Full RAP

026-709 The HDD partition for accumulated scan to URL data has become full, causing the job to fail.

Procedure

For information only, no service action necessary. Advise the customer to wait for approximately one day until an automatic deletion of documents makes space available. Then re-run the job.

026-710 S/MIME Unsupported Cipher RAP

026-710 The machine has received a S/MIME encrypted mail that is encrypted by an unsupported encryption method.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Ask the sender of the S/MIME encrypted mail to encrypt the mail by the encryption method (3DES), then re-send it.
 - b. Set FIPS140 Authentication Mode of the machine to off.
2. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

026-711 Multi-Page File Size RAP

026-711 The upper limit size of the multi-page file format generated in scan service has been exceeded.

Procedure

Advise the customer to:

1. Reduce the resolution level (scanned-image quality), then re-run the job.
2. Reduce the number of documents, then re-run the job.

026-712 HTTP Out Job Overlap Error RAP

026-712 The high compression/OCR processing module has detected that a job that specifies high compression/OCR processing and is to be taken out using HTTP has started while another job to be sent via the network is undergoing high compression/OCR processing.

Procedure

For information only, no service action necessary. Advise the customer that as a job specifying high compression/OCR processing is in progress, wait until the job is complete before running another job.

026-718 PS Print Instruction Fail RAP

026-718 An erroneous combination of print parameters selected (finishing, paper size, paper tray, Duplex instructions, output tray) prevents the machine from running the job.

Procedure

Perform the steps that follow:

1. Advise the customer to correctly set finishing, paper size, paper tray, duplex instructions, and output tray options, then re-run the job.
2. If the fault persists, reload the software, [GP 4](#).

026-719 Internal Error in Scan RAP

026-719 An internal error has occurred.

Procedure

Perform the steps that follow:

1. Advise the customer to retry the same operation.
2. If the fault persists, reload the software, **GP 4**.

026-720 to 026-723 Media Error RAP

026-720 The media does not have enough space available.

026-721 An attempt to access media has failed.

026-722 The media is not formatted.

026-723 An attempt to access media has failed.

Procedure

Advise the customer to:

1. Check that the media exists where scanned documents will be sent.
2. Check that the PC can access the media where scanned documents will be sent.
3. Check that a file can be created in a specified storage.
4. Check that the media is neither removed nor reinserted while being referred to or that during that time, other media is not inserted.

026-724, 026-725 Remote Download File Error RAP

026-724 The size of the remote download file reported from the EP center is different from that of the actual downloaded file.

026-725 The checksum of the remote download file reported from the EP center does not match that of the downloaded file.

Procedure

Advise the customer that it is necessary to check the size of the file registered with the EP center and the size stored in the SW repository.

026-726 Inconsistent Options RAP

026-726 The machine configuration info included in XPJL does not match the actual configuration.

Procedure

Advise the customer to set up the machine configuration info on the printer driver screen so that it can match the actual configuration.

026-727 Media Filepath Fail RAP

026-727 The storage path with the specified character string length (including the filename) cannot be created in the media.

Procedure

Advise the customer to shorten the specified storage location or the filename.

026-728, 026-729 WSD Scan Error RAP

026-728 An error occurred during communication with the WSD scan client. WSD scan client cancelled the job.

026-729 An error occurred during communication with the WSD scan client. WSD scan client cancelled the job or a scan from the DADF was performed from an application other than Windows fax and scan.

Procedure

Advise the customer to:

1. Check whether the transfer destination WSD scan client and the machine are able to communicate via the network. For example:
 - Check whether the WSD scan client has enough free capacity.
 - Check the connection of the network cable.
2. When using DADF, perform the scan using Windows Fax & Scan. Or, change to the platen to perform the scan.

026-730 Tray Paper Size Not Detected RAP

026-730 The paper size of the paper tray selected is unknown.

Procedure

Ensure the paper guides in the selected tray are set correctly.

026-731 to 026-733 PJI Fail RAP

026-731 The PIN number that is specified by PJI command is different from the number that is calculated from the machine's serial number.

026-732 The print count that is specified by PJI command has exceeded the machine's total impression meter value by +100.

026-733 The password that is specified by PJI command is different from the one that is set in the machine.

Procedure

Advise the customer to correct the PIN number, print count or password that is specified by PJI Command, then try again.

026-734 PjL Diag Mode RAP

026-734 Unable to transition to the PjL Diag Mode.

Procedure

Advise the customer to:

1. Ensure that the job has completed, then try again.
2. After completing a panel operation, wait at least 1 minute before starting the download operation.

026-739 Waiting Scan Job Deleted RAP

026-739 When there are paused scan jobs during the successful completion of a login/logout.

Procedure

For one occurrence, take no action. If the fault persists, reload the software, [GP 4](#).

027-442, 443, 444 Duplicate IP Address 1 RAP

027-442 IPv6 - stateless auto setting IP address 1 is duplicated.

027-443 IPv6 - stateless auto setting IP address 2 is duplicated.

027-444 IPv6 - stateless auto setting IP address 3 is duplicated.

Procedure

Perform the steps that follow:

1. Advise the customer to either change the IPv6 Stateless Auto Setting Address 1, 2 or 3 of this machine or the IPv6 address of the other machine on the network.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

027-445 Illegal IP Address RAP

027-445 IPv6 - manually set IP address is invalid.

Procedure

Perform the steps that follow:

1. Advise the customer to change the IPv6 (Manual Setting Address) of this machine to the IPv6 address that can be used as the self-machine address.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

027-446 Duplicate IP Address 2 RAP

027-446 IPv6 - automatically set IP address is duplicated.

Procedure

Perform the steps that follow:

1. Advise the customer to change the IPv6 (Manual Setting Address) of this machine to the IPv6 address that can be used as the self-machine address.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

027-447 Duplicate IP Address 3 RAP

027-447 IPv6 - link local IP address is duplicated.

Procedure

Perform the steps that follow:

1. Advise the customer to change the IPv6 Link Local Address of this machine or the IPv6 address of the other machine on the network.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP

027-452 Duplicate IP Address 4 RAP

027-452 A PC with the same IP address exists on the network.

Procedure

Perform the steps that follow:

1. Advise the customer to change the duplicated IP address of the PC.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

027-500 SMTP Server Fail for Mail IO RAP

027-500 SMTP server address resolution fail for mail IO.

Procedure

Advise the customer to:

1. Check with the System Administrator that the mail server has been launched and the environment is already used for other purposes (such as for PC).
2. Check that a correct SMTP server address is reflected in the machine setting list:
 - a. When the SMTP server address is specified using IP address, set a correct IP address.
 - b. When the SMTP server address is specified using FQDN, check that the FQDN name is correct. Also check that a correct DNS server address is set for the machine, and set a correct IP address.

027-501 POP Server Fail for Mail IO RAP

027-501 Incorrect POP server name was detected.

Procedure

Advise the customer to:

1. Check with the System Administrator that the mail server has been launched and the environment is already used for other purposes (such as for PC).
2. Check that a correct POP server address is reflected in the machine setting list:
 - a. When the POP server address is specified using IP address, set a correct IP address.
 - b. When the POP server address is specified using FQDN, check that FQDN name is correct. Also check that a correct DNS server address is set for the machine, and set a correct IP address.

027-502 POP Authentication Fail for Mail IO RAP

027-502 POP authentication fail for mail IO.

Procedure

Perform the steps that follow:

1. Advise the customer to specify the correct POP server authentication information.
2. Perform the **027-501** POP Server Fail for Mail IO RAP, then advise the customer to specify a correct POP User Name.
3. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

027-503, 504, 533, 773, 785, 786 Server Communication Timeout RAP

027-503 Time to communicate with the POP server ran out (after connection to the server).

027-504 Internal error or unexpected server response received (at any time).

027-533 An internal error has occurred during SMB scan

027-773 Time to communicate with the SMTP server ran out (after connection to the server).

027-785 Response timeout occurs from the destination WebDAV server.

027-786 WebDAV server timeout is answered.

Procedure

Advise the customer to wait for a while, then perform the operation again.

027-513 SMB Scan Client Access RAP

027-513 In scan to SMB, the user has no right to access the SMB server.

Procedure

Advise the customer to check if the specified user has read/write access in a file or folder in the specified place.

027-514 Host Name Solution Error in SMB RAP

027-514 Unable to resolve hostname during SMB scan.

Procedure

Advise the customer to check the connection to the DNS. Or, check whether the SMB server name of the transfer destination has been registered in the DNS.

027-515 DNS Server Setup in SMB RAP

027-515 The DNS server was not set during SMB scan.

Procedure

Advise the customer to set the DNS server address. Or, set the SMB server address of the transfer destination using IP address.

027-516 Server Connection Error in SMB RAP

027-516 Problem with connection to server during SMB scan.

Procedure

Advise the customer to:

1. Check that network communication between the transfer destination SMB server and this machine is available, by checking:
 - a. The connection of network cables.
 - b. The TCP/IP settings.
 - c. For communication through port 137 (UDP), port 138 (UDP) and port 139 (TCP).
2. Check the network settings that follow to see if the computer operates as an SMB server.
 - a. Check that the file sharing service for Microsoft network is enabled.
 - b. Check that NetBIOS over TCP/IP is enabled in the TCP/IP settings.
 - c. Check the file sharing service (communications through port 137 (UDP), port 138 (UDP) and port 139 (TCP)) is allowed in the firewall settings.
3. For communication that goes beyond the subnet, check the WINS server settings and check whether the server name address can be resolved correctly.
4. Check whether the NetBIOS interface machine at the transfer destination SMB server has started.

027-518 Login Name or Password Error in SMB RAP

027-518 Login name or a password error in SMB.

Procedure

Advise the customer to check the password that was set for the shared folder.

027-519 Scanning Picture Preservation Place Error RAP

027-519 Scan image storage destination or file name specification error during scanner (save to PC) SMB transfer.

Procedure

Advise the customer to:

1. Check if the storage destination is correct.
2. Check if a prohibited character was detected in the specified storage destination or file name.
3. Check if the specified storage destination is linked to a different shared folder due to the distributed file system (DFS).

027-520 File Name Acquisition Failure RAP

027-520 Unable to obtain the file/folder name on the SMB scan server.

Procedure

Switch off, then switch on the machine, [GP 10](#).

027-521 File Name Suffix Limit Over in SMB RAP

027-521 The SMB scan file name/folder name suffix has exceeded the limit value.

Procedure

Advise the customer to change the file name/destination folder on the SMB scan server. Else, move or delete the files in the destination folder.

027-522 File Creation Failure in SMB RAP

027-522 Failed to create an SMB scan file.

Procedure

Advise the customer to:

1. Check if the specified file name already exists on the server.
2. Check if the specified file name is in use.
3. Check if the specified file name already exists as a directory.
4. Check if a prohibited character was detected in the specified file name.

027-523 Lock Folder Creation Failure in SMB RAP

027-523 Failed to create an SMB scan lock folder.

Procedure

Advise the customer to:

1. Manually delete the lock directory (*.LCK) from the transfer destination.
2. Check whether a folder with the same name as the specified name already exists.

027-524 Folder Creation Failure in SMB RAP

027-524 Failed to create an SMB scan folder.

Procedure

Advise the customer to check if a file or folder with the same name as the specified name exists on the SMB server.

027-525, 027-527 File Delete Failure in SMB RAP

027-525 Failed to delete an SMB scan file.

027-527 Failed to delete an SMB scan folder.

Procedure

Advise the customer to check whether the file in the specified storage destination is being used by another user.

027-526 Lock Folder Delete Failure in SMB RAP

027-526 Failed to delete an SMB scan lock folder.

Procedure

Advise the customer to manually delete the lock directory (*.LCK) from the transfer destination, then retry the job.

027-528 Data Write Failure to SMB Server RAP

027-528 The storage destination on the SMB scan data server has no free space.

Procedure

Advise the customer to check that the storage destination has enough free space.

027-529 Data Read Failure From SMB Server RAP

027-529 Unexpected error of the SMB scan data server.

Procedure

Advise the customer to log in to the SMB server from another PC using the same user name and check whether they can write a file into the same storage destination on that SMB server.

027-530 File Name Duplicate Failure in SMB RAP

027-530 Cancel Job is selected for SMB scan File Name Conflict.

Procedure

Advise the customer to set File Name Conflict to other than Cancel Job.

027-531 SMB Scan Filing Policy Injustice RAP

027-531 Incorrect SMB scan filing policy (when additional items are selected).

Procedure

Advise the customer to check that the file format is not set to Multi-page When Add is selected for File Name Conflict.

027-532 NEXTNAME File Access Error in SMB RAP

027-532 A file access error has occurred during scanner (save to PC) SMB transfer.

Procedure

Advise the customer to check that the NEXTNAME.DAT file is correct when Add is selected for File Name Conflict.

027-543 SMB Server Name Specification Error RAP

027-543 The SMB server (NetBIOS) name specification is incorrect.

Procedure

Advise the customer to check that the server name of the SMB server is correct.

027-547, 027-548 SMB Protocol Errors 1 RAP

027-547 SMB protocol error (4-007), the scan domain name specification is incorrect.

027-548 SMB protocol error (4-008), the scan user name specification is incorrect

Procedure

Advise the customer to have the system administrator set the domain name and user name correctly.

027-549, 027-572 to 027-576 SMB Protocol Error 4-009 RAP

027-549 SMB protocol error (4-009), the specification of password is incorrect.

027-572 SMB protocol error (4-032), incorrect parameter.

027-573 SMB protocol error (4-033), incorrect character code.

027-574 SMB protocol error (4-034), incorrect data size.

027-576 SMB protocol error (4-036), incorrect domain data size.

Procedure

Advise the customer to perform the operation again.

027-564 SMB Protocol Error 4-024 RAP

027-564 SMB protocol error (4-024), the host is missing.

Procedure

Advise the customer to:

1. Check that the authentication server and the machine can communicate through the network (check the network group, TCP/IP settings, check the communication at Port No. 137 (UDP)/Port No. 138 (UDP)/Port No. 139 (TCP)).
2. If the authentication server and the machine are connected to different subnets, check that the machine has settings that can resolve the address of the authentication server.
3. Check if the NetBIOS over TCP/IP has become enabled at the authentication server settings:
 - a. Check if the authentication server and the machine can resolve the addresses from the WINS server.
 - b. Check if the authentication server and the machine can resolve the addresses from the DNS server.
4. Check if the NetBIOS over TCP/IP has become enabled at the authentication server settings.
5. Check at the Internet connection firewall if the communication through Ports 137, 138 and 139 are not blocked.

027-565, 027-578 SMB Protocol Errors 2 RAP

027-565 SMB protocol error (4-025), cannot connect.

027-578 SMB protocol error (4-038), communication timeout has occurred.

Procedure

Advise the customer to check that the authentication server and the machine can communicate through the network (check the network group, TCP/IP settings, check the communication at Port No. 137 (UDP)/Port No. 138 (UDP)/Port No. 139 (TCP)).

027-566 SMB Protocol Error 4-026 RAP

027-566 SMB protocol error (4-026), the library has not been initialized.

Procedure

Advise the customer to check if the SMB client has been started.

027-569 SMB (TCP/IP) Not Started RAP

027-569 SMB (TCP/IP) is not started

Procedure

Advise the customer to check that SMB (TCP/IP) is enabled.

027-584 SMB Protocol Error 4-044 RAP

027-584 SMB protocol error (4-044), authentication server common security mode is operating.

Procedure

Advise the customer to set the authentication server to Windows other than Win95/Win98/Me.

027-585 SMB Protocol Error 4-045 RAP

027-585 SMB protocol error (4-045), scan login not available time period.

Procedure

Advise the customer to check with the system administrator for the time period when logging in is allowed.

027-586 SMB Protocol Error 4-046 RAP

027-586 SMB protocol error (4-046), the password has expired.

Procedure

Advise the customer to obtain a valid password from the system administrator.

027-587 SMB Protocol Error 4-047 RAP

027-587 SMB protocol error (4-047), the password must be changed.

Procedure

Advise the customer to request the system administrator to disable the change password at next login setting.

027-588, 027-589 SMB Protocol Errors 3 RAP

027-588 SMB protocol error (4-048), the user account is disabled.

027-589 SMB protocol error (4-049), locked out.

Procedure

Advise the customer to request the system administrator to enable or unlock the user account.
as necessary.

027-590 SMB Protocol Error 4-050 RAP

027-590 SMB protocol error (4-050), the user account has expired.

Procedure

Advise the customer to obtain a valid user account from the system administrator or request the system administrator extend the validity period of the account.

027-591 SMB Protocol Error 4-051 RAP

027-591 SMB protocol error (4-051), the user account is restricted. Blank password is not allowed.

Procedure

Advise the customer to request the system administrator set a user password.

027-600 External Print Check Mode Error RAP

027-600 External print check mode error.

Procedure

Switch off, then switch on the machine, [GP 10](#).

027-700 Mail Address Domain Error RAP

027-700 The domain of the destination mail address is designated as a prohibited domain.

Procedure

Advise the customer to check that the domain of the destination mail address is not designated as a prohibited domain.

027-701 Disconnected Network Cable RAP

027-701 In external authentication, the disconnected cable is detected.

Procedure

Ensure the network cable is connected correctly.

027-702 to 027-709 Certificate for Addresses Error RAP

027-702 No certificate for the destination exists (before connection to the server).

027-703 The certificate for the destination expired (before connection to the server).

027-704 The certificate for the destination is not reliable (before connection to the server).

027-705 The certificate for the destination existed on a list of revoked certificates (before connection to the server).

027-706 No machine certificate exists (before connection to the server).

027-707 The machine certificate expired (before connection to the server).

027-708 The machine certificate is not reliable (before connection to the server).

027-709 The certificate for the destination existed on a list of revoked certificates (before connection to the server).

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Store the correct certificate for the destination in the machine. Check the items that follow:
 - i. That the term for which the certificate is valid.
 - ii. The machine's time is correct.
 - b. Check the certification path for the destination certificate and import the necessary CA certificate.
 - c. Store in this machine a destination certificate that is not on the list of revoked certificates.
 - d. Check that the mail address written on the machine certificate is the same as that set up on the machine.
2. If the fault persists, reload the software, [GP 4](#).

027-710 to 027-715 S/MIME Mail Error RAP

027-710 The mail I/O received S/MIME mail even though S/MIME was disabled.

027-711 S/MIME mail certificate retrieval error.

027-712 Invalid S/MIME mail certificate error.

027-713 Receive S/MIME mail tampered error.

027-714 S/MIME mail sender impersonation error.

027-715 S/MIME mail certificate not supported.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Enable S/MIME setting in the machine.
 - b. Register the sender certificate in the machine or change the mailer options so that the S/MIME signature mails from the sender will be sent with the certificate.
 - c. Check that the signature bearer of the CA certificate is registered in the machine.
 - d. Check that the mail address written on the machine certificate is the same as that set up on the machine.
2. Advise the customer that the sender needs to send a mail that is signed with a valid certificate because the sender certificate has expired.
3. Advise the customer that the machine may be blocking the attacks.
4. Reload the software, [GP 4](#).
5. If the fault persists, perform the [016A Workflow Scanning Error Entry RAP](#).

027-716 Unsigned Mail Receipt Was Rejected RAP

027-716 Prohibited unsigned mail was detected. All the S/MIME unsigned mails (including standard mails and S/MIME encrypted mails) are discarded.

Procedure

Perform the steps that follow:

1. Reload the software, **GP 4**.
2. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

027-717 No MX Record at DNS RAP

027-717 An enquiry was sent to the DNS server for the MX record, but it cannot be obtained.

Procedure

Advise the customer to:

1. Check with the DNS server administrator on the existence of DNS/MX record.
2. Check that the DNS server settings of the machine are set correctly.

027-720, 027-721 Extension Server Error RAP

027-720 Server for application interface cannot be found during web service interface.

027-721 Application interface destination during web service interface - not found.

Procedure

Perform the steps that follow:

1. Advise the customer to check that the DNS server address is set correctly. Check that the PC running the application interface is registered in DNS.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

027-722 Extension Server Timeout RAP

027-722 Application interface during web service interface - timeout.

Procedure

Perform the steps that follow:

1. Advise the customer:
 - a. That if a number of documents is specified for scanning, scan one document and store it.
 - b. That when scanning and storing are successful, change the application interface timeout value. If scanning and storing are not successful,
 - c. To check that the scan document can be uploaded from the PC browser. When uploading is successful, change the application interface timeout value.
2. If the fault persists, reload the software, [GP 4](#).

027-723 Extension Server Authentication Fail RAP

027-723 Application interface during web service interface - authentication failure.

Procedure

Perform the steps that follow:

1. Advise the customer to check the user name and password to be entered for creating a job flow.
2. If the fault persists, reload the software, [GP 4](#).

027-724, 725, 726 Extension Server Access Fail RAP

027-724 Application interface during web service interface - access failure.

027-725 Application interface during web service interface - job operation failure.

027-726 Application interface during web service interface - unknown job status.

Procedure

Perform the steps that follow:

1. Advise the customer to check that the application interface is working correctly.
2. If the fault persists, reload the software, [GP 4](#).

027-727 Extension Server Parameters RAP

027-727 Application interface during web service - invalid parameter.

Procedure

Perform the steps that follow:

1. Advise the customer to check the parameters for creating a job flow.
2. If the fault persists, reload the software, [GP 4](#).

027-728 Extension Server File Exceeded RAP

027-728 The number of files requested to be sent exceeded the maximum number of files that can be sent during Web service interface (this occurs when a single-page document is being stored).

Procedure

Perform the steps that follow:

1. Advise the customer to set a job so that the maximum number of files that can be sent will not be exceeded.
2. If the fault persists, reload the software, [GP 4](#).

027-730 SMTP Mail Division Error RAP

027-730 A mail was split in linking to the system.

Procedure

Advise the customer to increase the preset pagination value, or reduce the number of original pages scanned.

027-732 Server Access Error RAP

027-732 Job template server access error.

Procedure

Advise the customer to check that the server disk is normal and has free space, and then retry the operation.

027-733 Server SSL Error RAP

027-733 The SSL setting for the job template server did not become enabled.

Procedure

Advise the customer to check that the SSL setting for the job template server is enabled.

027-734 Server Certificate Error RAP

027-734 The SSL setting for the job template server did not become enabled.

Procedure

Advise the customer to:

1. Using the HTTPS protocol, check whether the job template server is accessible from the PC.
2. Check whether the SSL server certificate of the job template server is registered in the machine.
3. Check whether the SSL server certificate of the job template server is valid. For example, check that:
 - a. The certificate has not expired yet.
 - b. The time that is set in the machine is correct.
 - c. It is not in the discard list.
 - d. The certificate path of the SSL server certificate and import any necessary CA certificate.
4. If the certificate is not registered in the job template server, disable the machine certificate validation.

027-735 machine SSL Configuration Error RAP

027-735 When SSL transfer was instructed, the SSL setting of the machine is disabled.

Procedure

Advise the customer to enable the SSL settings of the machine or specify HTTP as the transfer protocol.

027-736 machine Certificate Error RAP

027-736 When server certificate validation is instructed, the server certificate validation of the machine is disabled.

Procedure

Advise the customer to enable the server certificate validation settings of the machine or disable the server certificate validation setting during transfer.

027-737 Template Server Read Error RAP

027-737 An error was received from the server to a FTP command 'TYPE A', 'LIST', or 'RETR'.

Procedure

Perform the steps that follow:

1. Advise the customer to check that Read Authorization is established for the storage destination server directory set as a resource.
2. If the fault persists, reload the software, [GP 4](#).

027-739 Invalid Template Server Path RAP

027-739 An error was received from the server to the FTP command 'CWD'.

Procedure

Perform the steps that follow:

1. Advise the customer to set the resource of the storage destination path from the client PC.
2. If the fault persists, reload the software, [GP 4](#).

027-740 Template Server Login Error RAP

027-740 Login to the FTP Server failed.

Procedure

Perform the steps that follow:

1. Advise the customer to check the user information:
 - a. Set the log-in name and password in the job template file storage destination.
 - b. From some other PC connected to the network, check that they can log in with the relevant account.
 - c. From a client PC, set a login name and password as a resource
2. If the fault persists, reload the software, [GP 4](#).

027-741 Template Server Connect Fail RAP

027-741 Cannot connect to the job template pool server.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check hat the network cable is connected correctly.
 - b. From the destination server, ping the machine.
 - c. Perform the ping test on the destination server from PSW.
 - d. From a client PC, check that the FTP connection to the destination server is possible.
2. If the fault persists, reload the software, [GP 4](#).

027-742 HDD File System Full RAP

027-742 The HDD was full when writing to a local HDD job template or when writing temporary work files.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Wait a while then try again as scanned images may cause the HDD to be full.
 - b. Delete the files in the HDD.
2. If the fault persists, perform the [016-210](#), [506](#), [777](#), [780](#), [798](#) HDD Error RAP.

027-743 Template Server Install Error RAP

027-743 The address format of the job template pool server is incorrect.

Procedure

Perform the steps that follow:

1. Advise the customer to set the parameters related to the job template pool server.
2. If the fault persists, reload the software, [GP 4](#).

027-744 Template Server Error 1 RAP

027-744 An error occurred while calling the DNS resolution library.

Procedure

Perform the steps that follow:

1. Advise the customer to check the connection to the DNS and whether the job template pool server domain name has been registered in the DNS.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

027-745 Template Server Error 2 RAP

027-745 The job template pool server address cannot be resolved (the DNS address is not set).

Procedure

Perform the steps that follow:

1. Advise the customer to set the DNS address or set the job template pool server address using IP address.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

027-746 Job Template Pool Server Not Ready RAP

027-746 The port of the protocol specified in job template pool server settings has not started.

Procedure

Perform the steps that follow:

1. Advise the customer to start the port of the protocol (FTP client or SMB) specified in job template pool server settings.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP.

027-750 Fax Document Inhibited RAP

027-750 Transfer instruction when internet fax transfer is prohibited, or scan and printer document print instruction during interruption.

Procedure

Perform the steps that follow:

1. Advise the customer to change the transfer settings to receive internet fax.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016A](#) Scan to Network Error Entry RAP

027-751 Job Template Analysis Error RAP

027-751 Instruction analysis error.

Procedure

Perform the steps that follow:

1. Advise the customer to re-examine the contents of the instruction.
2. If the fault persists, reload the software, **GP 4**.

027-752 Required User Entry Not Entered RAP

027-752 With the required user entry not entered, the instruction to start the job was given.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Not link the box to the instruction that requires user entry.
 - b. Set preset values for the items in the instruction requiring user entry.
2. If the fault persists, reload the software, **GP 4**.

027-753 Job Flow Service Request Disabled RAP

027-753 Job is executed by instruction when the service is disabled.

Procedure

Perform the steps that follow:

1. Advise the customer to enable the service.
2. If the fault persists, reload the software, **GP 4**.

027-754 Job Flow Service File Signature Mismatch RAP

027-754 File signature settings mismatch in instruction.

Procedure

Perform the steps that follow:

1. Advise the customer to check the system data setting of the XDW/PDF signature and the signature setting that is specified in the instruction. If the system data setting is different from the setting in the instruction, either change the instruction or change the system data.
2. If the fault persists, reload the software, **GP 4**.

027-757 Extension Server SSL Fail RAP

027-757 Web application linkage during service linkage SSL access failed.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check the server/network connection.
 - b. Check the communication route that can be reached.
 - c. Ping the DNS server.
 - d. Check if the CA certificate of the connection destination server is imported to the machine by using the browser.
 - e. Check if the machine does not go through the proxy that SSL has the function to check the communication details SSL.
 - f. Specify the machine as out of the SSL proxy target.
 - g. Check if the server supports the relevant encryption method.
 - h. Set the client certificate to the machine.
 - i. Import the client certificate to the machine and set to use as the client certificate.
 - j. Check the daylight saving time difference to see if the date/time of the machine is correct.
2. If the fault persists, reload the software, **GP 4**.

027-758 System Credential Setting Error RAP

027-758 Login credential setting error at remote authentication LDAP.

Procedure

Advise the customer to:

1. Check whether the login name and password have been set correctly.
2. Consult with the Network Administrator to check the authentication settings at the LDAP Server.

027-759 Reference Server Connection Error RAP

027-759 Reference server connection fail at remote authentication LDAP.

Procedure

Advise the customer to:

1. Check whether the machines network settings are set correctly.
2. Consult with the network administrator to check the connection status from the machine to the reference server.

027-760 XJT Command Fail RAP

027-760 Incorrect command from XDOD client.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check if the parameter setting specified in XDOD client is out of system specifications.
 - b. Check the XDOD client and controller versions.
2. If the fault persists, reload the software, [GP 4](#).

027-761 Web Print Timeout RAP

027-761 Although a web print job was received, the machine did not start printing on time.

Procedure

Advise the customer to:

1. If on-demand print for multiple documents was instructed using the external access function, reduce the number of documents then retry it.
2. Either extend the print on demand print duration or set it to 0.

027-762 Illegal Web Print Job Ticket RAP

027-762 Although a web print job was received, the attached job execution ticket is incorrect.

Procedure

Advise the customer to repeat the print instruction.

027-763 Auditron Cannot Verify User RAP

027-763 The machine cannot check user info with the external accounting server.

Procedure

Advise the customer to:

1. Check if the external accounting server is working correctly.
2. Connect the cable correctly.
3. Set up the machine so that it can correctly communicate with the external accounting server.

027-764 AirPrint Scan Data Transfer Fail RAP

027-764 The machine cannot check user info with the external accounting server.

Procedure

Advise the customer to:

1. Check that network communication between the transfer destination AirPrint scan client and the machine is available.
2. Check whether the AirPrint scan client has enough free capacity.
3. Check the network cable connection.

027-765 Host Name Solution Error in WebDAV RAP

027-765 DNS failed to resolve the specified host name.

Procedure

Advise the customer to:

1. Check that the scan document destination WebDAV server is registered in DNS.
2. Check that the DNS server connection is good.
3. Check that the DNS server is correctly configured.

027-766 Proxy Name Solution Error in WebDAV RAP

027-766 DNS failed to resolve the proxy server name.

Procedure

Advise the customer to:

1. Check that the proxy server name that is configured on the machine is registered in DNS.
2. Check that the DNS server connection is good.
3. Check that the address of the DNS server is correctly configured.

027-767 WebDAV Server SSL Access Fail RAP

027-767 An error has occurred during the SSL/TLS connection.

Procedure

Advise the customer to:

1. Check the access from the PC to the scan document destination WebDAV server.
2. Check the scan document SSL settings of the destination WebDAV server.
3. Check the scan document destination WebDAV server name and server path name.

027-768 WebDAV Server Certificate Fail RAP

027-768 There is a problem with the SSL certificate of the server.

Procedure

Advise the customer to:

1. Check the access from the PC to the scan document destination WebDAV server.
2. Ensure the machine is registered.
3. Ensure the scan SSL server certificate of the document destination WebDAV server is correct. For example:
 - a. Check the expiration date.
 - b. Check that the machine time is correct.
 - c. Check that they are not on the disposal list.
 - d. Check the SSL server certificate of the certification path.
4. If the Scan document certificate to the destination WebDAV server is not registered, disable the certificate validation of the machine.

027-769 WebDAV Server Access Fail RAP

027-769 WebDAV server connection error.

Procedure

Advise the customer to:

1. Check the network cable connection.
2. Check the access from the PC to the Scan document destination WebDAV server.
3. Ensure the correct network interface is selected.

027-770 PDL Error RAP

027-770 The DFE detected a failure in PDL during job processing.

Procedure

Perform the steps that follow:

1. Advise the customer to change the job conditions then try again.
2. If the fault persists, reload the software, [GP 4](#).

027-771 DFE Disk Full RAP

027-771 The remaining HDD capacity in the DFE became less than 500Mb when printing from DFE.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Change the job parameters, then try again.
 - b. Delete unnecessary files from the HDD in the DFE.
2. If the fault persists, reload the software, [GP 4](#).

027-772, 774, 776 SMTP Server Error RAP

027-772 The SMTP server refused the HELO command (after connection to the server).

027-774 Unavailable letters were specified as a destination address (after connection to the server).

027-776 The SMTP server refused the EHLO command (after connection to the server).

Procedure

Advise the customer to use only ASCII letters for the machine host name and destination address.

027-775 Too Many SMTP Addresses RAP

027-775 The SMTP server refused the EHLO command (after connection to the server).

Procedure

Advise the customer to reduce the number of mail addresses.

027-777 SMTP Server Non Support RAP

027-777 The SMTP server does not support SMTP-AUTH (after connection to the server).

Procedure

Advise the customer to send mail without setting SMTP-AUTH.

027-778 No Mode Specified by SMTP-AUTH RAP

027-778 The mode specified by SMTP-AUTH was not found (after connection to the server).

Procedure

Advise the customer to contact the network administrator to check what SMTP authentication method the server uses.

027-779 Authentication Failure by SMTP-AUTH RAP

027-779 Authentication fail (after connecting to the server).

Procedure

Advise the customer to check if the authentication information (user name/password) has been set correctly.

027-780 WebDAV Network Interface Fail RAP

027-780 The specified network interface can not be used.

Procedure

Advise the customer to select the network interface that can be used.

027-781 WebDAV Spool Size Over RAP

027-781 Writing of scan data spool file failed because the disk is full.

Procedure

Advise the customer to split the scan data.

027-782 WebDAV Server Redirector Limit RAP

027-782 Maximum number of WebDAV server redirections has occurred.

Procedure

Advise the customer to check the redirection settings of the WebDAV server.

027-783 WebDAV User Authentication RAP

027-783 WebDAV server is not authenticated.

Procedure

Advise the customer to:

1. Check the access from the PC to the scan document destination WebDAV server.
2. Check the login user name and password.
3. Check the scan document destination WebDAV server name and server path name.

027-784 WebDAV Proxy Server Authentication RAP

027-784 WebDAV proxy server authentication failure.

Procedure

Advise the customer to check that the user name and password for the proxy server that was configured on the machine are correct.

027-787 WebDAV File Name Duplication Fail RAP

027-787 Override is selected in the scan file name duplication when processing.

Procedure

Advise the customer to set the processing of duplicated filenames at the time of scanning job execution to anything other than Stop the Job (Not Save).

027-788, 027-793 WebDAV Request Fail RAP

027-788 Bad request answered from WebDAV server.

027-793 Error number 400 from the WebDAV server has been answered.

Procedure

Advise the customer to:

1. Check whether access to the directory is possible.
2. Perform the operation again.

027-789, 791, 795 Access Forbidden RAP

027-789 Access forbidden reply from WebDAV server.

027-791 WebDAV server method not allowed.

027-795 WebDAV server not implemented.

Procedure

Advise the customer to:

1. Check the connection to the WebDAV server.
2. Check if read/write access in a file or folder in the specified place is set.
3. Check the specified file path.

027-790, 029-792 WebDAV File Not Found RAP

027-790 WebDAV server not found.

027-792 WebDAV server conflict.

Procedure

Advise the customer to ensure that the WebDAV storage path and directory specified in the server exist.

027-794 WebDAV Server Internal Fail RAP

027-794 WebDAV server internal error.

Procedure

Advise the customer to:

1. Check that the WebDAV server is up and running.
2. Check the access from the PC to the scan document destination WebDAV server.

027-796 Email Not Printed RAP

027-796 Email print control through user settings.

Procedure

Perform the steps that follow:

1. Advise the customer to correct the settings, then repeat the operation.
2. If the fault persists, reload the software, **GP 4**.

027-797 Invalid Output Destination RAP

027-797 Incorrect output destination of received mail.

Procedure

Perform the steps that follow:

1. Advise the customer to specify the output destination that can be processed by the machine, then repeat the operation.
2. If the fault persists, reload the software, **GP 4**.

027-798 JFS Target Document Not Found RAP

027-798 The execution target document in the instruction set does not exist.

Procedure

Perform the steps that follow:

1. Advise the customer to select another document, then repeat the operation.
2. If the fault persists, reload the software, **GP 4**.

027-799 WebDAV Server Insufficient Storage RAP

027-799 There is no free space in the storage location on the WebDAV server.

Procedure

Advise the customer to check whether or not there is free space in the storage location.

028-910 Wrong Fuser Type RAP

028-910 The fuser needs to be replaced.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Install a new fuser, **PL 10.05 Item 2**.

028-987 Tray Size Mismatch RAP

028-987 ATS/APS no destination, tray can not detect paper size.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Reload the relevant paper tray.
2. Set the specified paper on the specified tray.
3. If the fault persists, perform the steps that follow:
 - a. Switch off, then switch on the machine, **GP 10**.
 - b. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
 - c. Reload the software, **GP 4**.

029-700, 029-701 WebDAV Server Response RAP

029-700 Error No.500 bill from the WebDAV server has been answered.

029-701 The response from the server does not meet the specifications of the WebDAV.

Procedure

Advise the customer to:

1. Ensure that the WebDAV server is up and running.
2. Verify the configuration of the server.
3. Check the access from the PC to the scan document destination WebDAV server.

029-702 WebDAV Client RAP

029-702 An unexpected error has occurred in the internal library.

Procedure

Advise the customer to retry the same operation.

029-703 AirPrint Scan Client RAP

029-703 An error has occurred during the communication with the AirPrint scan client.

Procedure

Advise the customer to:

1. Check the connection of the network cable.
2. Check the transfer destination AirPrint scan client status.

029-704, 711 Invalid PACFile RAP

029-704 In WiFi mode, the contents of the proxy configuration file (PACFile) acquired by the proxy auto- detection function (WPAD) has detected that it is a fraud.

029-711 In Ethernet 1 mode, the contents of the proxy configuration file (PACFile) acquired by the proxy auto- detection function (WPAD) has detected that it is a fraud.

Procedure

Advise the customer to check the proxy configuration file that is stored in the HTTP server, it may be an invalid format, such as JavaScript or too large (greater than 64KB).

029-705, 706, 709, 712, 713, 716 PACFile Communications RAP

029-705 In WiFi mode, communication time-out at the time of the proxy configuration file (PACFile) acquisition occurs in a proxy auto detection function (WPAD).

029-706 In WiFi mode, the proxy configuration file (PACFile) the time of acquisition in a proxy auto-detection function (WPAD), connection error has occurred.

029-709 In WiFi mode, communication time-out of the storage destination URL of the PACFile proxy auto-detection function (WPAD).

029-712 In Ethernet 1 mode, communication time-out at the time of the proxy configuration file (PACFile) acquisition occurs in a proxy auto-detection function (WPAD).

029-713 In Ethernet 1 mode, the proxy configuration file (PACFile) the time of acquisition in a proxy auto-detection function (WPAD), connection error has occurred.

029-716 In Ethernet 1 mode, communication time-out of the storage destination URL of the PACFile proxy auto-detection function (WPAD).

Procedure

Advise the customer to:

1. Check the connection of the network cable.
2. Check the default gateway configuration.
3. Verify the subnet mask setting.
4. Check the DNS server address setting.

029-707, 029-708, 714, 715 PACFile Not Found RAP

029-707 In WiFi mode, failed to find the proxy settings file (PACFile) in the proxy automatic detection function (WPAD).

029-708 In WiFi mode, incorrect format of the storage destination URL of PACFile acquired by the proxy auto- detection function (WPAD).

029-714 In Ethernet 1 mode, failed to find the proxy settings file (PACFile) in the proxy automatic detection function (WPAD).

029-715 In Ethernet 1 mode, incorrect format of the storage destination URL of PACFile acquired by the proxy auto- detection function (WPAD).

Procedure

Advise the customer to:

1. Check the URL setting of PACFile storage destination server.
2. Check the URL information PACFile set in the DHCP server is correct (if the proxy server acquisition method is WPAD).
3. If the URL is correct, check that the PACFile to the HTTP server has been registered.

029-710, 0129-717 PACFile URL Not Found RAP

029-710 In WiFi mode, failed to locate the storage destination URL of PACFile the proxy auto-detection function (WPAD).

029-717 In Ethernet 1 mode, failed to locate the storage destination URL of PACFile the proxy auto-detection function (WPAD).

Procedure

Advise the customer to check whether the URL information of the PACFile in the DHCP server is correctly registered.

029-718 EIP Print Network Timeout RAP

029-718 Timeout error has occurred during HTTP communication with server.

Procedure

Advise the customer to confirm the network connection status or after a while, repeat the operation.

029-719 EIP Print Error With Remote Server RAP

029-719 An error on the server side has occurred, during HTTP communication with server.

Procedure

A corresponding document does not exist or the server cannot be accessed. Advise the customer to confirm the server setting.

029-720 EIP Print Error With Server Permission RAP

029-720 A rejection error on the server side has occurred during HTTP communication with server.

Procedure

The file server cannot be accessed. Advise the customer to confirm the proxy server setting, the user name, the password, and the user setting for access again.

029-721, 029-722 EIP Print Fail RAP

029-721 Network-related (proxy connection) error has occurred during HTTP communication with server.

029-722 Communication failed because network-related error has occurred during HTTP communication with server.

Procedure

Advise the customer to confirm the server setting and connection status.

029-723 EIP Print SSL Connection Fail RAP

029-723 An SSL communication error has occurred during HTTP communication with server.

Procedure

An error related to SSL has occurred. The server cannot be accessed. Advise the customer to confirm the access authentication and the SSL setting.

029-724, 029-727 EIP Print Other Network Fail RAP

029-724 Other network-related error has occurred during HTTP communication with server.

029-727 Other error has occurred during the process of the EIP Print module.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, advise the customer to contact the System Administrator.

029-725 EIP Print Network DNS Resolve Fail RAP

029-725 A network-related (DNS name resolution) error has occurred during HTTP communication with server.

Procedure

The file server cannot be accessed. Advise the customer to confirm the DNS server setting or the file server setting again.

029-726 EIP Print Software Error RAP

029-726 A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, advise the customer to contact the System Administrator.

033-310 Fax Charge Function Fail RAP

033-310 The fax send billing function was turned on although multiple lines are installed.

Procedure

Advise the customer to switch off the fax send billing function or change to a single-line installation.

033-311 Invalid Address Book Data RAP

033-311 The registered contents in the address book are invalid.

Procedure

Perform **dC301** NVM initialization.

033-312, 033-313, 033-315 to 033-327 Fax Fault RAP

BSD-ON: [BSD 20.1 Fax](#)

033-312 The fax PWB was unable to detect the power off at the ESS PWB side within the specified time.

033-313 After the initialization of fax card has completed, it was detected that communication cannot be established with the fax card.

033-315 USB fax class driver notifies that a fatal error has occurred.

033-316 An error has occurred at the machine cont section in fax controller.

033-317 An error has occurred at the fax machine section in fax controller.

033-318 A fatal error has occurred at the fax image processing.

033-319 Due to an error during fax cont 2 software processing, subsequent processes cannot be performed.

033-320 The system side did not respond within the specified time on booting.

033-321 The fax card did not respond within the specified time on booting.

033-322 An I/F timeout with the fax.

033-323 An error was detected in fax cont 2.

033-324 The USB has transitioned to an unexpected state.

033-325 A fatal error has occurred at the fax card.

033-326 The fax card has detected a fatal error.

033-327 During fax communication, the FCM stopped responding and even though a communication interrupt request was issued to the FCM, it remained unresponsive.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: For additional fax fault finding procedures, refer to [020A Fax Entry RAP](#).

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check that the telephone cables and network cable are securely connected.
3. Ensure that the fax PWBs, [PL 20.05](#) are installed correctly.

NOTE: Line 2 and 3 fax PWBs are options. If phone lines are not connected to the line 2 fax pwb or line 3 fax pwb, ensure they are set for receive only.

4. Check the connections and wiring between the ESS PWB, [PL 3.10 Item 6](#) and the line 1 fax PWB, [PL 20.05 Item 10](#) for an open circuit, short circuit or poor contact.
5. Check the fax module ground connection.
6. Reload the software, [GP 4](#).
7. Check that the customer fax line is operational. Plug a phone into the fax line. Check for a dial tone. If the fax line has a fault, inform the customer to have the fax line checked by the telephone company.
8. If the fault persists, install new components as necessary:
 - Line 1 fax PWB, [PL 20.05 Item 10](#).
 - ESS PWB, [PL 3.10 Item 6](#).
 - Line 2 fax PWB, [PL 20.05 Item 15](#).
 - Line 3 fax PWB, [PL 20.05 Item 15](#).
 - Riser PWB, [PL 20.05 Item 16](#).

033-314 Controller and Fax Card ROM Mismatch RAP

033-314 The controller detected software version mismatch.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, reload the software, [GP 4](#).

033-328, 329, 340 Failed to Initialize Fax Log RAP

033-328 The initialization of communication log library has failed.

033-329 A fax cont error was detected.

033-340 The Pflite communication log write function returned an error.

Procedure

Perform the steps that follow:

1. Perform [dC301](#) NVM Initialization.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-330 to 033-335 FoIP Error RAP

033-330 A fatal software error has occurred within the FoIP

033-331 The initialization process with the FoIP controller has failed.

033-332 The FoIP controller did not respond within the specified time on booting.

033-333 The FoIP controller did not respond within the specified time after entering sleep mode.

033-334 Unable to send messages to the FoIP controller.

033-335 A fault notification due to invalid fault code was received from the fax card or FoIP.

Procedure

Perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-336 Non-mounted Channel RAP

033-336 A message meant for a channel that is not installed was received.

Procedure

Perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-339 Fax 2 Not Responding RAP

033-339 When transitioning to sleep, there is no response from fax controller 2.

Procedure

Switch off, then switch on the machine, [GP 10](#).

033-341 Fax Kit 3 Not Detected RAP

033-341 Something other than fax kit 3 is connected to the machine.

Procedure

Inform the customer that the line 3 fax kit is required.

033-363 Fax Card Reset (Reboot) RAP

033-363 The controller reset the fax card because the fax card did not respond.

Procedure

Perform the [033-312](#), [033-313](#), [033-315](#) to [033-327](#) Fax Fault RAP.

033-500 to 033-507 Remote Machine Error RAP

033-500 Modem CS operation error.

033-501 The number of receive line is 0.

033-502 There was no response for up to the 3rd post message.

033-503 T1 timeout has occurred.

033-504 T2 timeout has occurred.

033-505 T5 timeout has occurred.

033-506 DCN received.

033-507 No receiving capability in the remote machine.

Procedure

Perform the steps that follow:

1. Advise the customer to check the status of the remote machine, If the remote machine is good, repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315](#) to [033-327](#) Fax Fault RAP.

033-508, 033-511 Destination Polling Error RAP

033-508 No polling document in the remote machine.

033-511 DTS/NSC re-sending exceeded the limit.

Procedure

Perform the steps that follow:

1. Advise the customer to check the destination machine for a problem, for example a document jam or mismatched password or request a polling document to prepared. Then repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-509 DCS/NSS Re-send Exceeded RAP

033-509 DCS/NSS re-send over.

Procedure

Perform the steps that follow:

1. Advise the customer to repeat the operation. If the problem persists after repeating the operation, check the status of the receiver at the destination side.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-510 Fallback Error RAP

033-510 FTT was received at 2400 bps.

Procedure

Perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-512, 513, 518, 519, 520, 534 Remote Machine Function RAP

033-512 The remote machine did not support relay broadcast.

033-513 The remote machine does not have the mailbox function.

033-518 No SUB receive function in the receiver.

033-519 No SEP receive function in the receiver.

033-520 No PWD/SID receive function in the receiver.

033-534 No remote collate copy function in the remote machine.

Procedure

Perform the steps that follow:

1. Advise the customer to check if the remote machine has the relevant function.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-514, 516, 517, 521, 522, 033-526 to 033-529 Remote Machine Error 1 RAP

033-514 Carrier broken.

033-516 EOR-Q was received.

033-517 Timeout has occurred between the ECM frames.

033-521 The system sent a reject command signal and stopped the transmission.

033-522 DTMF I/F timed out. Correct operation was not performed within the specified time.

033-526 An ECM error has occurred.

033-527 EOR-Q was sent.

033-528 RTN was sent.

033-529 RTN was received.

Procedure

Perform the steps that follow:

1. Advise the customer to request for the sender to check the remote machine for an error, then re-send.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-523, 524, 525, 542, 546, 574 Line Not Connected RAP

033-523 Channel 1 not connected.

033-524 Channel 2 not connected.

033-525 Channel 3 not connected.

033-542 The process was requested for uninstalled channel.

033-546 The dial tone could not be detected.

033-574 An instruction was issued to a channel that is not installed.

Procedure

Perform the steps that follow:

1. Ensure the relevant telephone cable is connected correctly.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-530 DTMF Illegal Procedure RAP

033-530 An invalid procedure signal was received.

Procedure

Perform the steps that follow:

1. Advise the customer that there may be a mistake in how the operator is performing the DTMF procedure.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-531, 532, 533, 544, 552, 578 Remote Machine Error 2 RAP

033-531 A reject command signal was received.

033-532 An illegal command was received.

033-533 An error has occurred at the T.30 protocol.

033-544 Busy tone was detected.

033-552 When receiving G3 image data, the detected total number of error lines exceeded the threshold value indicated in the system data.

033-578 The frame size of received command exceeded the specification value.

Procedure

Perform the steps that follow:

1. Advise the customer to request for the sender to check the remote machine for an error, then re-send.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-535 DCN Receive at Phase B Send RAP

033-535 Phase B instruction command (DCS/NSS/NSC/DTC) was rejected at the DCN.

Procedure

Perform the steps that follow:

1. Advise the customer to check the recipient's address, folder information, etc. then repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-536 to 033-540, 568, 575, 577 Send/Receive Error RAP

033-536 The ringing stops before the resource was released.

033-537 A conflict between outgoing and incoming calls has occurred and the sending was cancelled.

033-538 During the image processing of fax send, an error has occurred in the fax card.

033-539 During the image processing of fax receive, an error has occurred in the fax card.

033-540 During the image processing for fax print format, an error has occurred.

033-568 During fax communication, there was no response from the FCM for the specified time.

033-575 Polarity inversion was detected.

033-577 An underrun has occurred at the modem.

Procedure

Perform the steps that follow:

1. Advise the customer to repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-541, 033-566 No Destination Specified RAP

033-541 The Fax Card is not able to call because there is no dial.

033-566 The fax card is unable to call because there is no dial.

Procedure

Perform the steps that follow:

1. Advise the customer to specify the appropriate address by using the speed dial number that is registered with the correct fax address number, etc.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-543, 567, 576, 702, 703 Dial Error RAP

033-543 There is incorrect (illegal) data in the dial data.

033-567 There is incorrect (illegal) data in the dial data.

033-576 The dial data is invalid.

033-702 Digits of the indicated dial data exceeds the number of allowed number of digits.

033-703 The indicated dial data digits exceed the number of allowed digits.

Procedure

Perform the steps that follow:

1. Advise the customer to check the dial data, then repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-545 T0 Timeout RAP

033-545 The remote machine might not be a facsimile, or it is not in the facsimile mode.

Procedure

Perform the steps that follow:

1. Advise the customer to check the address number and whether the remote party is a fax machine.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-547 Abort During Transmission RAP

033-547 Aborted during transmission (operation was cancelled).

Procedure

For information only. No service action necessary.

033-548 No Manual Send Line RAP

033-548 There are no lines for manual transmission.

Procedure

Perform the steps that follow:

1. Use a phone to establish communications, then Advise the customer to repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-549, 551, 583 Fax Service Disabled RAP

033-549 The system cannot receive the service because it was prohibited to do the operation.

033-551 When a phone or fax communication was about to end, an operation was performed on that job.

033-583 The request received a connection refused response because the target connection is temporarily out of resource.

Procedure

Perform the steps that follow:

1. Advise the customer to wait for a while, then repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-550 Cannot Disable Fax Service RAP

033-550 The system is attempting to transition to the diagnostic mode, etc., but was unable to do so because fax communication is in progress.

Procedure

Perform the steps that follow:

1. Advise the customer to wait for the job to complete its transmission, then repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-553 No Folder/Relay RAP

033-553 The F code that was sent from the remote machine is instructing a function that does not exist in the local machine.

Procedure

Perform the steps that follow:

1. Advise the customer to consult with the operator of the remote machine on whether the wrong F Code was input.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-554 Wrong Password/Receive Banned RAP

033-554 Data received without a password/a mismatch of passwords, or a mismatch of the select receive number. Mismatch of password or communication from the user other than those who are in the select receive list.

Procedure

Perform the steps that follow:

1. For a single occurrence, take no action.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-555, 033-556 Incorrect Password RAP

033-555 The machine password of local machine does not match the one that was sent from the remote machine.

033-556 The remote ID was not sent from the remote machine. The sending password and the remote ID do not match.

Procedure

Perform the steps that follow:

1. Advise the customer to consult with the operator of the remote machine on whether the wrong machine password was input.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-557, 033-565 Destinations or Services Exceeded RAP

033-557 The total number of requested services or total number of addresses exceeded the number defined by the specifications.

033-565 The total number of requested addresses exceeded the number defined by the specifications.

Procedure

Perform the steps that follow:

1. Advise the customer to wait for the jobs that are waiting to be sent to decrease or reduce the number of addresses, then try again.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-558, 033-559 Remote ID Rejection RAP

033-558 The remote ID of the remote terminal is registered in the blacklist of the local machine.

033-559 The remote ID was not sent from the remote terminal.

Procedure

Perform the steps that follow:

1. Advise the customer to change the fax machine setting to be able to receive fax messages even if destination does not send remote ID.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-560, 561, 562 TRESS/RCC RAP

033-560 For TRESS and RCC, the authentication ID that was sent from the remote terminal was invalid.

033-561 TRESS and RCC cannot be performed as the operation is prohibited or a Job is in progress.

033-562 RCC execution was put on hold as it is in the operation prohibited mode.

Procedure

Perform the steps that follow:

1. For a single occurrence, take no action.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-563, 033-569 No Printable Paper Size RAP

033-563 When formatting, registered paper that is not applicable to the document size to be printed was loaded.

033-569 The paper tray status is such that paper with orientation that can be output can only be supplied from the SMH.

Procedure

Perform the steps that follow:

1. Advise the customer to specify the correct paper size and check that the paper trays are correctly loaded with the paper guides correctly adjusted.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-564, 033-570 Power Off During Transmission RAP

033-564 An error due to power off during transmission. The power switch was turned off, or the system was reset.

033-570 An error due to power off during transmission. the power switch was turned off, or the system was reset.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Wait for a while then check the fax function settings and dial numbers, then re-send data if needed.
 - b. Check the self-terminal status and line status, then perform the operation again.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-571, 033-588 Manual Send Job Cancelled RAP

033-571 At the start of the Job, the report area for fax was detected to be full and the job was cancelled.

033-588 T38 packet loss causing unrecoverable error was detected.

Procedure

Perform the steps that follow:

1. Advise the customer to wait for some of the jobs that are queued to be completed or cancelled, then retry the operation.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-572 Fax Report Print Job Cancelled RAP

033-572 At the start of the job, job full was detected, only the fax report document is stored, and the printing of fax report was cancelled.

Procedure

Perform the steps that follow:

1. For a single occurrence, take no action.
2. If the fault persists, perform the **033-312, 033-313, 033-315 to 033-327** Fax Fault RAP.

033-573 Domain Regulation Check Error RAP

033-573 The address was specified with a prohibited domain.

Procedure

Perform the steps that follow:

1. Advise the customer to check the address and input the correct one.
2. If the fault persists, perform the **033-312, 033-313, 033-315 to 033-327** Fax Fault RAP.

033-580 Missing VoIP Gateway RAP

033-580 There is no existing VoIP gateway that correspond to the phone number that was input.

Procedure

Perform the steps that follow:

1. Advise the customer to set the correct machine VoIP gateway address to correspond with the phone number that was input.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-581 Access Authentication Failure RAP

033-581 The request was asked for authentication and it failed the authentication.

Procedure

Perform the steps that follow:

1. Advise the customer to check the proxy server authentication user name, authentication password, and sip server settings at the machine.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-582 Mismatched Ability RAP

033-582 The request received a connection refused response because the target connection has mismatched capability data.

Procedure

Perform the steps that follow:

1. Advise the customer to check the machine at the recipient side. If the recipient side is guaranteed to be a supported machine, check the sip server settings between the recipient side and the machine.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-584 SIP Request Timeout RAP

033-584 SIP communication timeout has occurred.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Check whether the correct address or phone number was input.
 - b. Check whether the network cable is connected.
 - c. Check whether the SIP server is running.
 - d. Check the connection status of the network cable between the machine and the SIP server, as well as between the machine and the recipient side.
 - e. Check whether the SIP server and the recipient side are able to communicate.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-585 SIP Request Error RAP

033-585 Other error has occurred during SIP communication.

Procedure

Perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-586 T38 Protocol Not Ready RAP

033-586 Unable to communicate as the IP address is unresolved. Unable to communicate as the registration to registrar server was not completed when using a SIP server.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Wait for a while, then try to send again.
 - b. Make it so that the IP address can be obtained and registered to the registrar server.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-587, 589, 590, 592 Remote Machine Error 3 RAP

033-587 Unable to establish T38 session (including RTP session).

033-589 The received T38 protocol data contains invalid content (including ASN.1 decode error).

033-590 Unable to continue the job as an error has occurred at the packet send (TCP, UDP, RTP) of T38 protocol.

033-592 A timeout caused by other than timeout notification (image data receive timeout and FoIP internal timeout) has occurred.

Procedure

Perform the steps that follow:

1. Advise the customer to request for the sender to check the remote machine for an error, then re-send.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-591 FoIP Max Sessions Over RAP

033-591 A new send request was initiated when the system is already communicating using the maximum number of sessions for FoIP.

Procedure

Perform the steps that follow:

1. Wait for the IP fax send that is in progress to complete, then try to send again.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-593 Cancelled By Remote Peer RAP

033-593 An interrupt process was performed at the communication partner side.

Procedure

Perform the steps that follow:

1. Advise the customer to request for the sender to re-send.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-700 T1 Timeout Fail RAP

033-700 T1 timeout has occurred when sending or at phase B and later when receiving.

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Repeat the operation if the fault occurs while sending.
 - b. Request for the sender to re-send if the fault occurs when receiving.
 - c. Check the remote machine for an error.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-701 Retry Timeout RAP

033-701 The communication did not end normally within the retry timeout time.

Procedure

Perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-710, 711, 712, 713, 717, 718, 719, 721 Document Not Found RAP

033-710 The specified document cannot be found.

033-711 The specified page cannot be found or contains invalid data.

033-712 Invalid document, host memory full.

033-713 Incorrect chain-link number.

033-717 The verification result of the specified password was NG.

033-718 The document was not found in the polling sending box or the specified folder.

033-719 The document was not found in the polling sending box or the specified folder.

033-721 The specified page cannot be generated.

Procedure

Perform the steps that follow:

1. Advise the customer to repeat the operation.
2. If the fault persists, perform the 033-312, 033-313, 033-315 to 033-327 Fax Fault RAP.

033-716 No Specified Folder RAP

033-716 The status in which the job cannot be performed was detected during EP-TRESS operation.

Procedure

Perform the steps that follow:

1. For a single occurrence, take no action.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-724 Fax Receive Memory Over Flow RAP

033-724 Receive operation was aborted because the maximum limit of the image data amount that can be received for one Fax communication was exceeded.

Procedure

Perform the steps that follow:

1. Inform the customer that the optional hard disk is required.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-725, 033-742 Insufficient Hard Disk Space RAP

033-725 The HD was full when fax was received, or when the format or report was created.

033-742 Timed out by page read close instruction (ran out of memory during manual send).

Procedure

Advise the customer to delete unnecessary data from the hard disk.

Procedure

Perform the steps that follow:

1. Advise the customer to delete unnecessary data from the hard disk.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-726, 728, 734, 737, 738, 751 Fax Printing Error RAP

033-726 Two sided printing not available when receiving fax (mixed size).

033-728 Formatting for fax auto print was aborted because the instruction for fax manual print was sent during the operation.

033-734 Job was cancelled because fax print and fax auto report were started at the same time.

033-737 The fax cont detected a failure and could not continue processing the job.

033-738 The fax cont detected an error in JBIG data during coding/decoding of the JBIG data.

033-751 An activity report is generated during the time period where print is prohibited and since the machine is in sleep mode, it started the process to place the report on hold.

Procedure

Perform the steps that follow:

1. For a single occurrence, take no action.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

033-731, 732, 736, 740, 747, 748, 749 Inconsistent Instructions RAP

033-731 Transmission closed due to start transmission from fax card and stop transmission from controller.

033-732 Print job received was cancelled at forced polling.

033-736 The data amount for fax transfer exceeded the threshold during fax transfer of internet fax off ramp.

033-740 The user cancelled immediate printing upon receiving.

033-747 When requesting to start the service from the fax card, the job could not be generated due to causes such as job number overflow.

033-748 During service sequencing, an illegal operation was detected.

033-749 During fax formatting, the extended image data is larger than the memory reserved.

Procedure

For information only. No service action necessary.

033-733, 735, 741, 742, 743, 744, 745, 746, 750 Fax Document Number Error RAP

033-733 The number of job documents related to the job could not be obtained.

033-735 Fax receive - buffer allocate timeout.

033-741 When transferring image data to the fax card, the conditions for sending the response to the fax card did not match.

033-742 When transferring image data to the fax card, the conditions for sending the response to the fax card did not match.

033-743 When receiving image data from the fax card, the conditions for sending the response to the fax card did not match.

033-744 When receiving image data from the fax card, the conditions for sending the response to the fax card did not match.

033-745 When receiving image data from the fax card, the conditions for sending the response to the fax card did not match.

033-746 When transferring image data to the fax card, the conditions for sending the response to the fax card did not match.

033-750 During formatting, when image data was retrieved from the fax card, even though the image data was determined to be free from error, extension failed.

Procedure

Perform the steps that follow:

1. Advise the customer to repeat the operation.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

041-310 IM Logic Fail RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

041-310 IM software control error detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).
3. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

041-333 Drive PWB F10 Blown RAP

BSD-ON: [BSD 1.5 DC Power Generation \(2 of 2\)](#)

BSD-ON: [BSD 1.7 Option DC Power Distribution](#)

041-333 Drive PWB fuse 10 open circuit was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the tray module for overcurrent and overvoltage. Repair the wiring or install new components as necessary.
2. After the faulty circuit has been repaired, install a new drive PWB, [PL 1.10 Item 3](#).

041-334 Drive PWB F11 Blown RAP

BSD-ON: [BSD 1.5 DC Power Generation \(2 of 2\)](#)

BSD-ON: [BSD 1.7 Option DC Power Distribution](#)

041-334 Drive PWB fuse 11 open circuit was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the finisher for overcurrent and overvoltage. Repair the wiring or install new components as necessary.
2. After the faulty circuit has been repaired, install a new drive PWB, [PL 1.10 Item 3](#).

041-335 Drive PWB F12 Blown RAP

BSD-ON: [BSD 1.5 DC Power Generation \(2 of 2\)](#)

BSD-ON: [BSD 10.5 Fused Paper Exit 2](#)

041-335 Drive PWB fuse 12 open circuit was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the fuser exhaust fan for overcurrent and overvoltage. Repair the wiring or install new components as necessary.
2. After the faulty circuit has been repaired, install a new drive PWB, [PL 1.10 Item 3](#).

041-340, 041-341 Drive PWB NVM (EEPROM) Fail RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

041-340 NVM (EEPROM) data abnormality.

041-341 NVM (EEPROM) access error.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Fault code 041-340 Only. Enter [dC131](#). Check that the NVM values that follow are set to 0:

- 740-016 Range Over Chain No
- 740-017 Range Over Link No
- 740-018 Range Over Chain Link
- 740-019 Range Over Value
- 740-020 Write in Progress Range Over Chain No
- 740-021 Write in Progress Range Over Link No

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).
3. [dC301](#) NVM Initialization.
4. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

041-371 Productivity Not Set RAP

041-371 Productivity not set.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, perform [dC132](#).

041-388, 041-391 Logic Fail RAP

041-388 When fatal abnormality was detected in marking control.

041-391 Finisher module fatal error was detected.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).

041-603, 041-604 Environment Sensors Fail RAP

041-603 The value of the temperature sensor exceeds the upper limit.

041-604 The value of the humidity sensor exceeds the upper limit.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that the fusing unit exhaust fan and the marking unit fan are operating correctly, refer to:
 - [042-330](#) Fuser Exhaust Fan Fail RAP.
 - [043-344](#) Marking Fan Fail RAP.
3. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

NOTE: The temperature sensor and humidity sensor are both surface mounted on the ESS PWB.

042-325 Main Motor Fail RAP

BSD-ON: [BSD 4.1 Main Drive Control](#)

042-325 Main motor run fault.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 6](#) How to Check a Motor.

Enter [dC330](#) code 042-003 to run the main motor, [PL 40.10 Item 1](#). The main motor runs.

Y	N
	Check the +24V power supply to the main motor. The power supply is good.
Y	N
	Check the power supply circuit to the main motor.
	Check the items that follow:
	• The connection between the main motor (P/J213) and the drive PWB (P/J405) for open circuit, short circuit or poor contact. • The drive gear for wear, damage or bearing blockage. • Load towards the main motor.
	Install new components as necessary:
	• Main motor, PL 40.10 Item 1. • Drive PWB, PL 1.10 Item 3.

The fault may be intermittent. Check the connection between the main motor ([P/J213](#)) and the drive PWB ([P/J405](#)) for open circuit, short circuit or poor contact.

Install new components as necessary:

- Drive PWB, [PL 1.10 Item 3](#).
- ESS PWB, [PL 3.10 Item 6](#).

042-330 Fuser Exhaust Fan Fail RAP

BSD-ON: [BSD 10.4 Fusing](#)

042-330 Fuser exhaust fan fault.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 6](#) How to Check a Motor.

Enter [dC330](#) code 042-050 to run the fuser exhaust fan. The fuser exhaust fan runs.

Y	N
	Check the +24V power supply to the fuser exhaust fan. The power supply is good.
Y	N
	Check the power supply circuit to the fuser exhaust fan.
	Check the items that follow:
	• The connection between the fuser exhaust fan (P/J210) and the drive PWB (P/J413) for open circuit, short circuit or poor contact. • Load towards the fuser exhaust fan.
	Install new components as necessary:
	• Fuser exhaust fan, PL 40.15 Item 4. • Drive PWB, PL 1.10 Item 3.

The fault may be intermittent. Check the connection between the fuser exhaust fan ([P/J210](#)) and the drive PWB ([P/J413](#)) for open circuit, short circuit or poor contact.

Install new components as necessary:

- Drive PWB, [PL 1.10 Item 3](#).
- ESS PWB, [PL 3.10 Item 6](#).

043-342 Sub Motor Fail RAP

BSD-ON: [BSD 4.1 Main Drive Control](#).

043-342 A rotation abnormality of the sub motor was detected.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 6](#) How to Check a Motor.

Enter [dC330](#) code 042-004 to run the sub motor. **The sub motor runs.**

Y N
Check the +24V power supply to the sub motor. **The power supply is good.**

Y N
Check the power supply circuit to the sub motor.

Check the items that follow:

- The connection between the sub motor ([P/J214](#)) and the drive PWB ([P/J405](#)) for open circuit, short circuit or damage.
- The sub motor drive gear for wear, damage or bearing blockage.
- Load towards the marking fan.

Install new components as necessary:

- Sub motor, [PL 40.10 Item 11](#).
- Drive PWB, [PL 1.10 Item 3](#).

The fault may be intermittent. Check the connection between the sub motor ([P/J214](#)) and the drive PWB ([P/J405](#)) for open circuit, short circuit or damage.

Install new components as necessary:

- Drive PWB, [PL 1.10 Item 3](#).
- ESS PWB, [PL 3.10 Item 6](#).

043-343 YMC Link Sensor Fail RAP

BSD-ON: [BSD 4.1 Main Drive Control](#), [BSD 4.2 Sub Drive Control](#)

043-343 A YMC Link Sensor detection error was detected (Mismatch of print mode and YMC Link Sensor driven state register information).

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 8](#) How to Check a Solenoid.
- [GP 7](#) How to Check a Sensor.

Enter [dC330](#) code 042-011 to initialise the 1st BTR. **The operating link bar moves up and down.**

Y N
Check the items that follow:

- The connection between the YMC link solenoid ([P/J203](#)) and the drive PWB ([P/J413](#)) for open circuit, short circuit or damage.
- The drive gears of the drive assembly for wear or damage.

If the fault persists, install new components as necessary:

- Drive assembly, [PL 40.05 Item 1](#).
- Drive PWB, [PL 1.10 Item 3](#).
- ESS PWB, [PL 3.10 Item 6](#).

Check the items that follow:

- The YMC link sensor, [PL 40.10 Item 12](#).
- The connection between the YMC link sensor ([P/J108](#)) and the drive PWB ([P/J407](#)) for open circuit, short circuit or damage.

If the fault persists, install new components as necessary:

- Drive assembly, [PL 40.05 Item 1](#).
- Drive PWB, [PL 1.10 Item 3](#).
- ESS PWB, [PL 3.10 Item 6](#).

043-344 Marking Fan Fail RAP

BSD-ON: [BSD 9.14 Marking Fan Control](#)

043-344 Marking fan fault.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 6](#) How to Check a Motor.

Enter [dC330](#) code 042-052 to run the marking fan. **The marking fan runs.**

Y N
Check the +24V power supply to the marking fan. **The power supply is good.**

Y N
Check the power supply circuit to the marking fan.

Check the items that follow:

- The connection between the marking fan and the drive PWB ([P/J410](#)) for open circuit, short circuit or poor contact.
- Load towards the marking fan.

Install new components as necessary:

- Marking fan, [PL 40.15 Item 7](#).
- Drive PWB, [PL 1.10 Item 3](#).

The fault may be intermittent. Check the connection between the marking fan and the drive PWB ([P/J410](#)) for open circuit, short circuit or poor contact.

Install new components as necessary:

- Drive PWB, [PL 1.10 Item 3](#).
- ESS PWB, [PL 3.10 Item 6](#).

044-312, 044-313 Timeout Error RAP

044-312 IM software control error was detected (MK).

044-313 M software control error was detected (PH).

Procedure

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).

044-329 Shut Down Fail RAP

044-329 Shut down fail detected

Procedure

Switch off, then switch on the machine, [GP 10](#).

045-310 Image Ready RAP

045-310 Controller image preparation failure detected.

Procedure

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).

045-311, 045-396 Controller Communication Fail RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

045-311 Communication failure between ESS PWB and DRIVE PWB was detected.

045-396 IO setup error of HASIC installed on drive PWB.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the connection between the ESS PWB ([P/J1334](#)) and the drive PWB ([P/J401](#)).
3. Install new components as necessary:
 - ESS PWB, [PL 3.10 Item 6](#).
 - Drive PWB, [PL 1.10 Item 3](#).

045-370, 045-371 LPH DL RAP

BSD-ON: [BSD 6.4 LED Control \(Y, M\)](#), [BSD 6.5 LED Control \(C, K\)](#).

045-370 ASIC register error during IBY initial DL confirmation. Fail has occurred simultaneously in LPHs of all colors. Possibility of common parts (board power connector, etc) error.

045-371 ASIC register error during IBY initial DL confirmation. Fail has occurred simultaneously in multiple LPHs (2 or 3 colors). Possibility of common parts (board power connector, etc) error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Enter [dC131](#) code 749-115 to determine which LPHs have failed. An NVM value of 1 in the bits listed below indicates a failure in the LPH of that color:
 - Bit 0: Yellow LPH.
 - Bit 1: Magenta LPH.
 - Bit 2: Cyan LPH.
 - Bit 3: Black LPH.
3. Check the LPH for debris or contamination.
4. Check the FFC cable between the LPH and the ESS PWB (Yellow: [P/J1360](#), Magenta: [P/J1361](#), Cyan: [P/J1362](#), Black: [P/J1363](#)) for open circuit, short circuit or damage.
5. Check the power supply to the LPH, Refer to [01B +5VDC Power Fault RAP](#).
6. If the fault persists, install new components as necessary:
 - LPH, [PL 60.35 Item 1](#).
 - FFC Cable:
 - FFC Cable (K), [PL 60.35 Item 4](#).
 - FFC Cable (C), [PL 60.35 Item 5](#).
 - FFC Cable (M), [PL 60.35 Item 6](#).
 - FFC Cable (Y), [PL 60.35 Item 7](#).
 - ESS PWB, [PL 3.10 Item 6](#).

045-382, 045-398 Drive PWB NVM (EEPROM) Verify Fail RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

045-382 NVM (EEPROM) write verify error.

041-398 NVM (EEPROM) read verify error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).
3. Install new components as necessary:
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

045-399 Drive PWB Power Fail RAP

BSD-ON: [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)

BSD-ON: [BSD 1.4 DC Power Generation \(1 of 2\)](#)

BSD-ON: [BSD 1.5 DC Power Generation \(2 of 2\)](#)

045-399 Power supply to drive PWB error. The IOT_PWR_ON signal from ESS PWB did not become active due to an error. This occurs at ESS circuit error, cable open circuit or no +5V power supply from LVPS.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the items that follow: connections:
 - Between the LVPS ([P/J502](#)) and the drive PWB ([P/J400](#)).
 - Between the ESS PWB ([P/J1334](#)) and the drive PWB ([P/J401](#)).
3. Check the drive PWB +5V power supply line. If the +5V is not being supplied, install a new LVPS, [PL 1.10 Item 3](#).
4. Install new components as necessary:
 - ESS PWB, [PL 3.10 Item 6](#).
 - Drive PWB, [PL 1.10 Item 3](#).

047-213, 047-216 Finisher Communication RAP

BSD-ON: [BSD 1.7 Option DC Power Distribution](#)

BSD-ON: [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)

047-213 The connected finisher is of an incorrect type.

047-216 Reply from the finisher was determined as a communication error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the connection between the drive PWB ([P/J590](#) and [P/J591](#)) and the finisher PWB (P/J401) for open circuit, short circuit or poor contact.
3. Install new components as necessary:
 - (Integrated office finisher) finisher PWB, [PL 12.14 Item 1](#).
 - (Office finisher LX) finisher PWB, [PL 13.45 Item 2](#).
 - Drive PWB, [PL 1.10 Item 3](#).

047-217 HCF Communication RAP

BSD-ON: [BSD 3.15 PWB Communications \(ESS to HCF\)](#)

047-217 Reply from the HCF was determined as a communication error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the connection between the drive PWB, [PL 1.10 Item 3](#) and the HCF PWB, [PL 70.60 Item 9](#) for open circuit, short circuit or poor contact.
3. Install new components as necessary:
 - HCF PWB, [PL 70.60 Item 9](#).
 - Drive PWB, [PL 1.10 Item 3](#).

047-320 All Destination Tray Broken RAP

047-320 All trays connected to the IOT have become unusable.

Procedure

Check the fault history, dC122 for any tray faults. Perform the relevant procedures.

057-310, 057-312 Drive PWB Communication Fail RAP

057-310 SPI communication data abnormality between the drive PWB and the ESS PWB.

057-312 SPI communication data abnormality between the drive PWB and the ESS PWB.

Procedure

Perform the [045-311](#), [045-396](#) Controller Communication Fail RAP.

057-311, 313, 314, 315 Drive PWB Fail RAP

057-311 Abnormality in the WDT circuit that monitors the SPI communication status in which the drive PWB is mounted.

057-313 Drive PWB fuse 13 open circuit was detected.

057-314 Drive PWB fuse 14 open circuit was detected.

057-315 Drive PWB fuse 15 open circuit was detected.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, install a new drive PWB, [PL 1.10 Item 3](#).

057-316 Drive PWB F16 Blown RAP

BSD-ON: [BSD 1.10 Power Interlock Switching \(3 of 3\)](#)

057-316 Drive PWB fuse 16 open circuit was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the components that follow for overcurrent and overvoltage. Repair the wiring or install new components as necessary:
 - Takeaway clutch, [PL 40.10 Item 5](#).
 - Bypass tray feed clutch, [PL 70.40 Item 4](#).
 - Registration clutch, [PL 80.55 Item 11](#).
 - Marking fan, [PL 40.15 Item 6](#).
 - Exit 1 offset solenoid, [PL 10.15 Item 11](#).
 - Duplex clutch, [PL 80.50 Item 28](#).
2. After the faulty circuit has been repaired, install a new drive PWB, [PL 1.10 Item 3](#).

057-317 Drive PWB F17 Blown RAP

BSD-ON: [BSD 1.10 Power Interlock Switching \(3 of 3\)](#)

057-317 Drive PWB fuse 17 open circuit was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the components that follow for overcurrent and overvoltage. Repair the wiring or install a new exit gate solenoid, [PL 10.22 Item 9](#) as necessary.
2. After the faulty circuit has been repaired, install a new drive PWB, [PL 1.10 Item 3](#).

058-310 to 058-321 Fuser Checkout RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

BSD-ON: [BSD 10.3 Fusing Heat Control \(2 of 2\)](#)

058-310 At warm up, the heat roll NC sensor temperature has exceeded the check temperature.

058-311 At warm up, the heat roll thermistor temperature has exceeded the check temperature.

058-318 After inspection start, the side temperature rises from the measurement start temperature to the target temperature sooner than the specified time.

058-319 The heater assessment time has arrived, the center temperature or side temperature is the setting value or less.

058-320 The side temperature does not rise to the measurement start temperature within the specified time from the inspection start.

058-321 The side temperature does not rise from the measurement start temperature to the target temperature within the specified time from the inspection start.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Remove the fuser. Check whether foreign substances or paper is wound around the heat roll.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. **(Fault code 058-310 only)** Check the heat roll NC sensor for correct installation and loose connections.
3. **(Fault code 058-311 only)** Check the heat roll thermistor for correct installation and loose connections.
4. **(Fault code 058-319 only)** Check the heater for a wiring error.
5. **(Fault code 058-320 only)** Check the main heater rod for open circuit or poor contact.
6. **(Fault code 058-321 only)** Check the sub heater rod for open circuit or poor contact.
7. Ensure that the fuser is installed correctly and is the correct voltage for the region.
8. Check the drawer connector between the fuser ([DJ612](#)) and the main unit ([DP612](#)) for damage.
9. Check the connections and wiring between the fuser ([DJ612](#)) and the LVPS ([P2](#)) for an open circuit, short circuit or poor contact.

10. Check the connections and wiring between the heat roll NC sensor ([P/J124](#)) and the drive PWB ([P/J416](#)) for open circuit, short circuit or poor contact.
11. If the fault persists, install new components as necessary:
 - Fuser, [PL 10.05 Item 2](#).
 - LVPS, [PL 1.10 Item 3](#).
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

059-326 Heat Roll STS Fail RAP

BSD-ON: [BSD 10.3 Fusing Heat Control \(2 of 2\)](#)

059-326 The system detected an open circuit of the heat roll thermistor.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Ensure that the fuser is installed correctly.
- Check the drawer connector between the fuser ([DJ612](#)) and the main unit ([DP612](#)) for damage.
- Ensure [P/J416](#) on the drive PWB is connected correctly.

Procedure

Remove the fuser. Measure the resistance between DJ612S pin 7 and pin 8 (across the heat roll thermistor). **An open circuit is measured.**

Y N

Check the items that follow: connections for open circuits, short circuits or poor contacts:

- Between [DJ612S](#) pin 8 and [P/J416](#) pin 4 on the drive PWB.
- Between [DJ612S](#) pin 7 and [P/J416](#) pin 5 on the drive PWB.

If the wiring is good, install a new drive PWB, [PL 1.10 Item 3](#).

Install a new fuser, [PL 10.05 Item 2](#).

059-372 Heat Roll NC Sensor Differential Fail RAP

BSD-ON: [BSD 10.3 Fusing Heat Control \(2 of 2\)](#)

059-372 Abnormal temperature monitor AD value of the heat roll NC sensor was detected 10 consecutive times.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that the fuser is installed correctly.
3. Check the drawer connector between the fuser ([DJ612](#)) and the main unit ([DP612](#)) for damage.
4. Check the connections and wiring between the fuser ([DJ612S](#)) and the drive PWB ([P/J416](#)) for an open circuit, short circuit or poor contact.
5. If the fault persists, install new components as necessary:
 - Fuser, [PL 10.05 Item 2](#).
 - Drive PWB, [PL 1.10 Item 3](#).
6. After correcting the fault, reset the value of NVM location 744-003 (Differential Amplification Error Detection Flag) to 0 (Normal). Switch off, then switch on the machine, [GP 10](#).

059-383 Warm Up Time Fail RAP

BSD-ON: [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)

BSD-ON: [BSD 10.3 Fusing Heat Control \(2 of 2\)](#)

010-383 When transitioning from the wait state, the specified temperature is not reached within the specified time.

NOTE: This fault may occur when the temperature in the installation environment is low (10 degrees C or lower).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that the fuser is installed correctly.
3. Check the drawer connector between the fuser ([DJ612](#)) and the main unit ([DP612](#)) for damage.
4. Check the connections and wiring between the fuser ([DJ612](#)) and the LVPS ([P2](#)) for an open circuit, short circuit or poor contact.
5. Check the connections and wiring between the fuser ([DJ612S](#)) and the drive PWB ([P/J416](#)) for an open circuit, short circuit or poor contact.
6. If the fault persists, install new components as necessary:
 - Fuser, [PL 10.05 Item 2](#).
 - LVPS, [PL 1.10 Item 3](#).
 - Drive PWB, [PL 1.10 Item 3](#).

060-341 to 060-356 LPH Fault RAP

BSD-ON: [BSD 6.4 LED Control \(Y, M\)](#), [BSD 6.5 LED Control \(C, K\)](#)

060-341 Large pixel count error between the video output and yellow LPH. Image abnormality may occur.

060-342 Large pixel count error between the video output and magenta LPH. Image abnormality may occur.

060-343 Large pixel count error between the video output and cyan LPH. Image abnormality may occur.

060-344 Large pixel count error between the video output and black LPH. Image abnormality may occur.

060-345 Communication error between ESS and yellow LPH. Possibly caused by an external noise.

060-346 Communication error between ESS and magenta LPH. Possibly caused by an external noise.

060-347 Communication error between ESS and cyan LPH. Possibly caused by an external noise.

060-348 Communication error between ESS and black LPH. Possibly caused by an external noise.

060-349 Yellow LPH reset due to a noise was detected. Possibly caused by an external noise.

060-350 Magenta LPH reset due to a noise was detected. Possibly caused by an external noise.

060-351 Cyan LPH reset due to a noise was detected. Possibly caused by an external noise.

060-352 Black LPH reset due to a noise was detected. Possibly caused by an external noise.

060-353 Large pixel count error between the video output and yellow LPH. Image abnormality may occur.

060-354 Large pixel count error between the video output and magenta LPH. Image abnormality may occur.

060-355 Large pixel count error between the video output and cyan LPH. Image abnormality may occur.

060-356 Large pixel count error between the video output and black LPH. Image abnormality may occur.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the connections and ribbon cable between the LPH and the ESS PWB (Yellow, [P/J1360](#), Magenta [P/J1361](#), Cyan, [P/J1362](#), Black, [P/J1363](#)).
3. If the fault persists, install new components as necessary:
 - LPH, [PL 60.35 Item 1](#).
 - LPH FFC:
 - Black LPH FFC, [PL 60.35 Item 4](#).
 - Cyan LPH FFC, [PL 60.35 Item 5](#).
 - Magenta LPH FFC, [PL 60.35 Item 6](#).
 - Yellow LPH FFC, [PL 60.35 Item 7](#).
 - ESS PWB, [PL 3.10 Item 6](#).

061-354 to 357, 061-362 to 365, 061-366 to 369, 061-370 to 373, 061-390 to 393 LPH Communications Fault RAP

061-354 ASIC register error in IBY initial DL check. It may be an error in the yellow LPH (ASIC or memory). It may also be an ASIC malfunction due to poor power supply or a communication error due to poor connection with the ESS.

061-355 ASIC register error in IBY initial DL check. It may be an error in the magenta LPH (ASIC or memory). It may also be an ASIC malfunction due to poor power supply or a communication error due to poor connection with the ESS.

061-356 ASIC register error in IBY initial DL check. It may be an error in the cyan LPH (ASIC or memory). It may also be an ASIC malfunction due to poor power supply or a communication error due to poor connection with the ESS.

061-357 ASIC register error in IBY initial DL check. It may be an error in the black LPH (ASIC or memory). It may also be an ASIC malfunction due to poor power supply or a communication error due to poor connection with the ESS.

061-362 Communication error between ESS and yellow LPH (data read error from LPH). It may occur due to external noise, poor connection of FFC, poor power supply, etc.

061-363 Communication error between ESS and magenta LPH (data read error from LPH). It may occur due to external noise, poor connection of FFC, poor power supply, etc.

061-364 Communication error between ESS and cyan LPH (data read error from LPH). It may occur due to external noise, poor connection of FFC, poor power supply, etc.

061-365 Communication error between ESS and black LPH (data read error from LPH). It may occur due to external noise, poor connection of FFC, poor power supply, etc.

061-366 Communication error between ESS and yellow LPH (data write error to LPH). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-367 Communication error between ESS and magenta LPH (data write error to LPH). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-368 Communication error between ESS and cyan LPH (data write error to LPH). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-369 Communication error between ESS and black LPH (data write error to LPH). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-370 Communication error between ESS and yellow LPH (error in the communication IC or cable). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-371 Communication error between ESS and magenta LPH (error in the communication IC or cable). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-372 Communication error between ESS and cyan LPH (error in the communication IC or cable). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-373 Communication error between ESS and black LPH (error in the communication IC or cable). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

061-399 Large pixel count error between the video output and yellow LPH. Image abnormality may occur.

061-391 Large pixel count error between the video output and magenta LPH. Image abnormality may occur.

061-392 Large pixel count error between the video output and cyan LPH. Image abnormality may occur.

061-393 Large pixel count error between the video output and black LPH. Image abnormality may occur.

Procedure

Perform the [060-341 to 060-356 LPH Fault RAP](#).

061-358 to 361 LPH Configuration RAP

BSD-ON: [BSD 6.4 LED Control \(Y, M\)](#), [BSD 6.5 LED Control \(C, K\)](#)

061-358 The model number of the installed yellow LPH does not match. It may also be a memory error in the LPH.

061-359 The model number of the installed magenta LPH does not match. It may also be a memory error in the LPH.

061-360 The model number of the installed cyan LPH does not match. It may also be a memory error in the LPH.

061-361 The model number of the installed black LPH does not match. It may also be a memory error in the LPH.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, [GP 10](#).
2. Check that a valid LPH is installed.
3. If the fault persists, install new components as necessary:
 - Print head assembly, [PL 60.35 Item 1](#).
 - ESS PWB, [PL 3.10 Item 6](#).

062-277 DADF Communication Fail RAP

BSD-ON: [BSD 3.5 PWB Communications \(ESS PWB to DADF\)](#)

062-277 Communications cannot be established between the ESS PWB and the DADF PWB.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the connections and wiring between the ESS PWB ([P/J750](#)) and the DADF PWB ([P/J751](#)) for an open circuit, short circuit or poor contact.
3. If the fault persists, install new components as necessary:
 - DADF PWB, [PL 5.10 Item 11](#).
 - ESS PWB, [PL 3.10 Item 6](#).

062-300 Platen Interlock Open RAP

BSD-ON: [BSD 6.1 Platen Document Sensing](#)

062-300 Any of the faults that follow was detected:

- DADF Job was stopped by opening the platen cover.
- DADF was opened when the document was set in DADF.
- DADF was opened while feeding.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Ensure that the DADF open and closes correctly. If necessary, install new DADF counter-balances, [PL 5.15](#).
2. Check the connections and wiring between the ESS PWB ([P/J750](#)) and the DADF PWB ([P/J751](#)) for an open circuit, short circuit or poor contact.
3. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

062-311 IIT Software Logic Fail RAP

062-311 Error detected in IISS software.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).
3. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

062-345 IIT EEPROM Fail RAP

BSD-ON: [BSD 6.3 Document Illumination and Image Input](#)

062-345 Write failure to IEEPROM, or communication failure with EEPROM.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, install a new CCD Assembly, [PL 60.10 Item 4](#).

062-360, 062-389 Carriage Position Fail RAP

BSD-ON: [BSD 6.2 Carriage Control](#)

062-360 Any of the faults that follow was detected:

- An error with the count value of the carriage position control.
- No IIT registration sensor input during carriage initialization.
- Abnormality in detected position of IIT registration sensor.

062-389 A Carriage overrun was detected.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Remove the document glass. Manually move the full rate carriage to right and left. **The carriage moves smoothly, with no interference.**

Y N

Check the carriage operation for mechanical load, the carriage cable for winding failure, the rail for contamination/foreign substances, and the full rate/half rate carriage for improper position. Refer to [ADJ 60.1](#). Install new components as necessary, [PL 60.15](#).

Enter [dC330](#) code 062-212. Manually move the carriage to actuate IIT registration sensor, [PL 60.30 Item 7](#). **The display changes.**

Y N

Check the IIT registration sensor. Refer to [GP 7](#) How to Check a Sensor.

Enter [dC330](#) code 062-005 (scan) or 062-006 (return) to run the IIT scan motor, [PL 60.30 Item 5](#). **The IIT scan motor runs and drives the carriage.**

Y N

Check the items that follow:

- The IIT scan motor. Refer to [GP 6](#) How to Check a Motor.
- The timing belt, [PL 60.30 Item 1](#).

Install new components as necessary.

The fault may be intermittent. If the fault persists, install new components as necessary:

- IIT registration sensor, [PL 60.30 Item 7](#).
- IIT scan motor, [PL 60.30 Item 5](#).
- ESS PWB, [PL 3.10 Item 6](#).

062-362 X Hard Fail RAP

062-362 Hard modification of authentication machine was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, **GP 10**.
2. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

062-371, 380, 386, 393 Lamp Illumination Fail RAP

BSD-ON: [BSD 6.3 Document Illumination and Image Input](#)

062-371 Insufficient light from Lamp detected in CCD (during white gradation correction/agg before scan starts)

062-380 Insufficient lamp brightness was detected when performing AGC.

062-386 A CCD output error was detected when performing AOC.

062-393 Write failure to the Shading Memory has occurred.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform **ADJ 60.5** Optics Cleaning Procedure.

Procedure

1. Check the ribbon cable between the ESS PWB and the lamp assembly. If necessary, install a new FFC LED cable assembly, **PL 60.20 Item 10**.
2. If the fault persists, install new components as necessary:
 - Lamp assembly, **PL 60.20 Item 9**.
 - ESS PWB, **PL 3.10 Item 6**.

062-396 CCD Cable Connection Fail RAP

062-396 A CIS flat cable connection error was detected.

Procedure

Perform the 060-341 to 060-356 LPH Fault RAP.

062-790 Recognition Fail RAP

062-790 The document being scanned is prohibited by law.

Procedure

Advise the customer to refer to the Legal Notices in the User Guide to check the types of document available for copying.

071-100 Tray 1 Misfeed RAP

BSD-ON: [BSD 7.7 Tray 1 Paper Stacking](#)

BSD-ON: [BSD 8.1 Tray 1 and Bypass Tray Paper Transportation](#)

071-100 Paper does not actuate the tray 1 feed out sensor within the specified time after tray 1 feed start.

Initial Actions

- Check the condition of the paper in tray 1. Refer to [GP 15](#) Paper and Media Size Specifications.
- Check that the tray 1 paper guides are set correctly.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 1 feed roll, nudger roll and retard roll, [PL 80.11](#) for foreign substances or wear. Clean or install new components as necessary.
3. Check the registration roll and takeaway roll 1, [PL 80.55](#) for foreign substances or wear. Clean or install new components as necessary.
4. Enter [dC330](#), code 071-105. Check the tray 1 pre feed sensor, [PL 80.10 Item 22](#).
5. Enter [dC330](#), code 071-002. Check the tray 1 feed/lift up motor, [PL 80.10 Item 4](#).
6. Check the drive gears, [PL 80.10](#) for wear or damage. Install new components as necessary.
7. If the fault persists, install a new drive PWB, [PL 1.10 Item 4](#).

071-105 Registration Sensor Jam (Tray 1) RAP

BSD-ON: [BSD 7.7 Tray 1 Paper Stacking](#)

BSD-ON: [BSD 8.5 Registration](#)

071-105 The registration sensor did not actuate within the specified time after the registration clutch initialized during paper feed from tray 1.

Initial Actions

Check the condition of the paper in tray 1. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 1 feed roll, nudger roll and retard roll, [PL 80.11](#) for foreign substances or wear. Clean or install new components as necessary.
3. Enter [dC330](#), code 077-104. Check the registration sensor, [PL 80.55 Item 4](#).
4. Enter [dC330](#), code 077-002. Check the registration clutch, [PL 80.55 Item 11](#).
5. Enter [dC330](#), code 077-001. Check the PH drive assembly, [PL 40.10 Item 3](#).
6. Enter [dC330](#), code 071-002. Check the tray 1 feed/lift up motor, [PL 80.10 Item 4](#).
7. Enter [dC330](#), code 042-003. Check the main motor, [PL 40.10 Item 10](#).
8. Check the drive assembly, [PL 40.10 Item 1](#) for wear or damage.
9. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

071-210 Tray 1 Lift Fail RAP

BSD-ON: [BSD 7.7 Tray 1 Paper Stacking](#)

071-210 Tray 1 lift NG has occurred three consecutive times.

Initial Actions

- Check for obstructions behind the tray.
- Ensure that the tray is loaded correctly.
- Ensure the tray is pushed fully home.
- Check the drive system between the bottom plate and the tray 1 feed/lift motor for operation failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 071-102. Check the tray 1 level sensor, [PL 80.10 Item 6](#).
2. Enter [dC330](#), code 071-002. Check the tray 1 feed/lift up motor, [PL 80.10 Item 4](#).
3. Enter [dC330](#), code 042-003. Check the main motor, [PL 40.10 Item 10](#).
4. Check the drive gears, [PL 80.10](#) for wear or damage. Install new components as necessary.
5. If the fault persists, install a new drive PWB, [PL 1.10 Item 4](#).

071-212 Tray 1 Paper Size Sensor Fault RAP

BSD-ON: [BSD 7.1 Tray 1 Paper Size Sensing](#)

071-212 Abnormal output AD value from tray 1 paper size sensor was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Load the correct paper in tray 1.
2. Ensure that the customer is programming the job correctly.
3. Remove tray 1. Check underneath the tray for damage to the link mechanism. Also check the actuator at the rear of tray 1. If necessary, install a new tray assembly, [PL 70.10 Item 1](#).
4. Enter [dC140](#) Analog Monitor, code 071-200. Check the tray 1 size sensor, [PL 70.05 Item 6](#).
5. Check the wiring between the tray 1 size sensor and J403 on the drive PWB.
6. Reload the software, [GP 4](#).
7. If the fault persists, install new components as necessary:
 - Tray 1 size sensor, [PL 70.05 Item 6](#).
 - Drive PWB, [PL 1.10 Item 4](#).

072-101, 072-900 Tray 2 Misfeed RAP

BSD-ON: [BSD 8.2 Tray Module Paper Transportation \(STM\)](#)

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(1TM\)](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3TM\)](#)

BSD-ON: [BSD 8.9 Tray Module Paper Transportation \(TTM\) \(1 of 2\)](#)

072-101 Paper does not actuate the tray 2 feed out sensor within the specified time after tray 2 feed start.

072-900 The tray 2 feed out sensor detected remaining paper.

Initial Actions

Check the condition of the paper in tray 2. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 2 feed roll, nudge roll and retard roll, [PL 80.25](#) for foreign substances or wear. Clean or install new components as necessary.
3. Perform the relevant procedure:
 - [1TM Checkout](#)
 - [3TM Checkout](#)
 - [STM Checkout](#)
 - [TTM Checkout](#)

1TM Checkout

Perform the steps that follow:

1. Check the takeaway roll, [PL 80.15 Item 19](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 072-103. Check the tray 2 feed out sensor, [PL 80.15 Item 22](#).
3. Enter [dC330](#), code 072-001. Check the tray 2 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the takeaway motor, [PL 70.17 Item 4](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - 1TM PWB, [PL 70.17 Item 5](#).
 - ESS PWB, [PL 3.10 Item 6](#).

3TM Checkout

Perform the steps that follow:

1. Check the takeaway roll, [PL 70.22 Item 13](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 072-103. Check the tray 2 feed out sensor [PL 70.22 Item 10](#).
3. Enter [dC330](#), code 072-001. Check the tray 2 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the takeaway motor, [PL 70.23 Item 4](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - 3TM PWB, [PL 70.23 Item 5](#).
 - ESS PWB, [PL 3.10 Item 6](#).

STM Checkout

Perform the steps that follow:

1. Check the takeaway roll, [PL 70.26 Item 4](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 072-103. Check the tray 2 feed out sensor, [PL 70.26 Item 1](#).
3. Enter [dC330](#), code 072-001. Check the tray 2 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the takeaway motor, [PL 70.28 Item 2](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - STM PWB, [PL 70.28 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

TTM Checkout

Perform the steps that follow:

1. Check the takeaway roll, [PL 80.65 Item 17](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 072-103. Check the tray 2 feed out sensor, [PL 80.65 Item 7](#).
3. Enter [dC330](#), code 072-001. Check the tray 2 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the take away motor, [PL 70.85 Item 2](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - TTM PWB, [PL 70.90 Item 1](#).
 - ESS PWB, [PL 3.10 Item 6](#).

072-105 Registration Sensor Jam (Tray 2) RAP

BSD-ON: [BSD 8.5 Registration](#)

072-105 The registration sensor did not actuate within the specified time after the registration clutch initialized during paper feed from tray 2.

Initial Actions

Check the condition of the paper in tray 2. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 2 feed roll, nudge roll and retard roll, [PL 80.25](#) for foreign substances or wear. Clean or install new components as necessary.
3. Enter [dC330](#), code 077-104. Check the registration sensor, [PL 80.55 Item 4](#).
4. Enter [dC330](#), code 077-002. Check the registration clutch, [PL 80.55 Item 11](#).
5. Enter [dC330](#), code 077-001. Check the PH Drive assembly, [PL 40.10 Item 3](#).
6. Enter [dC330](#), code 077-033. As necessary, perform the steps that follow:
 - Check the 1TM takeaway motor, [PL 70.17 Item 4](#).
 - Check the 3TM takeaway motor, [PL 70.23 Item 4](#).
 - Check the STM takeaway motor, [PL 70.28 Item 2](#).
 - Check the TTM takeaway motor, [PL 70.85 Item 1](#).
7. Check the drive gears, [PL 80.10](#) for wear or damage. Install new components as necessary.
8. Check the drive assembly, [PL 40.10 Item 1](#) for wear or damage.
9. If the fault persists, install new components as necessary:
 - 1TM PWB, [PL 70.17 Item 5](#).
 - 3TM PWB, [PL 70.23 Item 5](#).
 - STM PWB, [PL 70.28 Item 4](#).
 - TTM PWB, [PL 70.90 Item 1](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

072-210 Tray 2 Lift Fail RAP

BSD-ON: [BSD 7.8 Tray 2 Paper Stacking \(STM\)](#)

BSD-ON: [BSD 7.9 Tray 2 Paper Stacking \(1TM\)](#)

BSD-ON: [BSD 7.10 Tray 2 Paper Stacking \(3TM\)](#)

BSD-ON: [BSD 7.19 Tray 2 Paper Stacking \(TTM\)](#)

071-210 Tray 2 lift NG has occurred three consecutive times.

Initial Actions

- Check for obstructions behind the tray.
- Ensure that the tray is loaded correctly.
- Ensure the tray is pushed fully home.
- Check the drive system between the bottom plate and the tray 2 feed/lift motor for operation failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 072-102. Check the tray 2 level sensor, [PL 80.20 Item 6](#).
2. Enter [dC330](#), code 072-002. Check the tray 2 feed/lift motor, [PL 80.20 Item 4](#).
3. Check the drive gears, [PL 80.20](#) for wear or damage. Install new components as necessary.
4. If the fault persists, install new components as necessary:
 - 1TM PWB, [PL 70.17 Item 5](#).
 - 3TM PWB, [PL 70.23 Item 5](#).
 - STM PWB, [PL 70.28 Item 4](#).
 - TTM PWB, [PL 70.90 Item 1](#).

072-212 Tray 2 Paper Size Sensor Fault RAP

BSD-ON: [BSD 7.2 Tray 2 Paper Size Sensing \(STM\)](#)

BSD-ON: [BSD 7.3 Tray 2 Paper Size Sensing \(1TM\)](#)

BSD-ON: [BSD 7.4 Tray 2 Paper Size Sensing \(3TM\)](#)

BSD-ON: [BSD 7.16 Tray 2 Paper Size Sensing \(TTM\)](#)

072-212 Abnormal output AD value from tray 2 paper size sensor was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Load the correct paper in tray 2.
2. Ensure that the customer is programming the job correctly.
3. Remove tray 2. Check underneath the tray for damage to the link mechanism. Also check the actuator at the rear of tray 2. If necessary, install a new tray assembly, [PL 70.10 Item 1](#).
4. Enter [dC140](#) Analog Monitor, code 072-200. Check the tray 2 size sensor:
 - (1TM) [PL 80.15 Item 16](#).
 - (3TM) [PL 70.22 Item 9](#).
 - (STM) [PL 70.25 Item 7](#).
 - (TTM) [PL 70.80 Item 10](#).
5. Check the wiring between:
 - (1TM) the tray 2 size sensor and J549 on the 1TM PWB.
 - (3TM) the tray 2 size sensor and J549 on the 3TM PWB.
 - (STM) the tray 2 size sensor and J548 on the STM PWB.
 - (TTM) the tray 2 size sensor and J548 on the TTM PWB.
6. Reload the software, [GP 4](#).
7. If the fault persists, install new components as necessary:
 - (1TM) Tray 2 size sensor, [PL 80.15 Item 16](#).
 - (3TM) Tray 2 size sensor, [PL 70.22 Item 9](#).
 - (STM) Tray 2 size sensor, [PL 70.25 Item 7](#).
 - (TTM) Tray 2 size sensor, [PL 70.80 Item 10](#).
 - 1TM PWB, [PL 70.17 Item 5](#).
 - 3TM PWB, [PL 70.23 Item 5](#).
 - STM PWB, [PL 70.28 Item 4](#).
 - TTM PWB, [PL 70.90 Item 1](#).

073-101, 073-900 Tray 3 Misfeed RAP

BSD-ON: [BSD 7.11 Tray 3 Paper Stacking \(3TM\)](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3TM\)](#)

BSD-ON: [BSD 7.20 Tray 3 Paper Stacking \(TTM\)](#)

BSD-ON: [BSD 8.9 Tray Module Paper Transportation \(TTM\) \(1 of 2\)](#)

073-101 Paper does not actuate the tray 3 feed out sensor within the specified time after tray 2 feed start.

073-900 The tray 3 feed out sensor detected remaining paper.

Initial Actions

Check the condition of the paper in tray 3. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 3 feed roll, nudger roll and retard roll, [PL 80.25](#) for foreign substances or wear. Clean or install new components as necessary.
3. Perform the relevant procedure:
 - [3TM Checkout](#)
 - [TTM Checkout](#)

3TM Checkout

Perform the steps that follow:

1. Check the tray 3 takeaway roll, [PL 70.22 Item 13](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 073-103. Check the tray 3 feed out sensor [PL 70.22 Item 10](#).
3. Enter [dC330](#), code 073-001. Check the tray 3 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the takeaway motor, [PL 70.23 Item 4](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - 3TM PWB, [PL 70.23 Item 5](#).
 - ESS PWB, [PL 3.10 Item 6](#).

TTM Checkout

Perform the steps that follow:

1. Check the tray 3 takeaway roll, [PL 80.65 Item 17](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 073-103. Check the tray 3 feed out sensor, [PL 80.65 Item 7](#).
3. Enter [dC330](#), code 073-001. Check the tray 3 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the take away motor, [PL 70.85 Item 2](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - TTM PWB, [PL 70.90 Item 1](#).
 - ESS PWB, [PL 3.10 Item 6](#).

073-105 Registration Sensor Jam (Tray 3) RAP

BSD-ON: [BSD 8.5 Registration](#)

073-105 The registration sensor did not actuate within the specified time after the registration clutch initialized during paper feed from tray 3.

Initial Actions

Check the condition of the paper in tray 3. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 3 feed roll, nudge roll and retard roll, [PL 80.25](#) for foreign substances or wear. Clean or install new components as necessary.
3. Enter [dC330](#), code 077-104. Check the registration sensor, [PL 80.55 Item 4](#).
4. Enter [dC330](#), code 077-002. Check the registration clutch, [PL 80.55 Item 11](#).
5. Enter [dC330](#), code 077-001. Check the PH Drive assembly, [PL 40.10 Item 3](#).
6. Enter [dC330](#), code 077-033. As necessary, perform the steps that follow:
 - Check the 3TM takeaway motor, [PL 70.23 Item 4](#).
 - Check the TTM takeaway motor, [PL 70.85 Item 2](#).
7. Check the drive gears, [PL 80.10](#) for wear or damage. Install new components as necessary.
8. Check the drive assembly, [PL 40.10 Item 1](#) for wear or damage.
9. If the fault persists, install new components as necessary:
 - 3TM PWB, [PL 70.23 Item 5](#).
 - TTM PWB, [PL 70.90 Item 1](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

073-106 Tray 2 Feed Out Sensor RAP

073-106 Paper does not deactuate the tray 2 feed out sensor within the specified time after each tray feed start.

Procedure

Perform the [072-101](#), [072-900](#) Tray 2 Misfeed RAP.

073-210 Tray 3 Lift Fail RAP

BSD-ON: [BSD 7.11 Tray 3 Paper Stacking \(3TM\)](#)

BSD-ON: [BSD 7.20 Tray 3 Paper Stacking \(TTM\)](#)

073-210 Tray 3 lift NG has occurred three consecutive times.

Initial Actions

- Check for obstructions behind the tray.
- Ensure that the tray is loaded correctly.
- Ensure the tray is pushed fully home.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 073-102. Check the tray 3 level sensor, [PL 80.20 Item 6](#).
2. Enter [dC330](#), code 073-002. Check the tray 3 feed/lift up motor, [PL 80.20 Item 4](#).
3. Enter [dC330](#), code 042-003. Check the main motor, [PL 40.10 Item 10](#).
4. Check the drive gears, [PL 80.20](#) for wear or damage. Install new components as necessary.
5. **(3TM Only)** Check the drive system between the bottom plate and the tray 3 feed/lift motor for operation failure. Install new components as necessary, [PL 70.20](#).
6. **(TTM Only)** Check the drive system between the bottom plate and the tray 3 feed/lift motor for operation failure. Also check the bottom plate lift mechanism. Install new components as necessary, [PL 70.66](#).
7. If the fault persists, install new components as necessary:
 - 3TM PWB, [PL 70.23 Item 5](#).
 - TTM PWB, [PL 70.90 Item 1](#).

073-212 Tray 3 Paper Size Sensor Fault RAP

BSD-ON: [BSD 7.5 Tray 3 Paper Size Sensing \(3TM\)](#)

BSD-ON: [BSD 7.17 Tray 3 Paper Size Sensing \(TTM\)](#)

073-212 Abnormal output AD value from tray 3 paper size sensor was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Load the correct paper in tray 3.
2. Ensure that the customer is programming the job correctly.
3. Perform the relevant procedure:
 - [3TM Checkout](#)
 - [TTM Checkout](#)

3TM Checkout

Perform the steps that follow:

1. Remove tray 3. Check underneath the tray for damage to the link mechanism. Also check the actuator at the rear of tray 3. If necessary, install a new tray assembly, [PL 70.10 Item 1](#).
2. Enter [dC140](#) Analog Monitor, code 073-200. Check the tray 3 size sensor, [PL 70.22 Item 9](#).
3. Check the wiring between the tray 3 size sensor and J549 on the 3TM PWB.
4. Reload the software, [GP 4](#).
5. If the fault persists, install new components as necessary:
 - Tray 3 size sensor, [PL 70.22 Item 9](#).
 - 3TM PWB, [PL 70.23 Item 5](#).

TTM Checkout

Perform the steps that follow:

1. Remove tray 3. Check the actuator at the rear of tray 3. If necessary, install a new tray assembly, [PL 70.66 Item 1](#).
2. Enter [dC140](#) Analog Monitor, code 073-200. Check the tray 3 size sensor, [PL 70.80 Item 1](#).
3. Check the wiring between the tray 3 size sensor and J549 on the TTM PWB.
4. Reload the software, [GP 4](#).
5. If the fault persists, install new components as necessary:
 - Tray 3 size sensor, [PL 70.80 Item 1](#).
 - TTM PWB, [PL 70.90 Item 1](#).

074-101, 103, 900 Tray 4 Misfeed RAP

BSD-ON: [BSD 7.12 Tray 4 Paper Stacking \(3TM\)](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3TM\)](#)

BSD-ON: [BSD 8.10 Tray Module Paper Transportation \(TTM\) \(2 of 2\)](#)

074-101 Paper does not actuate the tray 4 feed out sensor within the specified time after tray 2 feed start.

074-103 The tray 4 feed out sensor detected remaining paper.

074-900 The tray 4 feed out sensor detected remaining paper.

Initial Actions

Check the condition of the paper in tray 4. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 4 feed roll, nudger roll and retard roll, [PL 80.25](#) for foreign substances or wear. Clean or install new components as necessary.
3. Perform the relevant procedure:
 - [3TM Checkout](#)
 - [TTM Checkout](#)

3TM Checkout

Perform the steps that follow:

1. Check the tray 4 takeaway roll, [PL 70.22 Item 13](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 074-103. Check the tray 4 feed out sensor [PL 70.22 Item 10](#).
3. Enter [dC330](#), code 074-001. Check the tray 3 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the takeaway motor, [PL 70.23 Item 4](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - 3TM PWB, [PL 70.23 Item 5](#).
 - ESS PWB, [PL 3.10 Item 6](#).

TTM Checkout

Perform the steps that follow:

1. Check the tray 4 takeaway roll, [PL 80.70 Item 14](#) for foreign substances or wear. Clean or install new components as necessary.
2. Enter [dC330](#), code 074-103. Check the tray 4 feed out sensor, [PL 80.70 Item 6](#).
3. Enter [dC330](#), code 074-001. Check the tray 4 feed/lift motor, [PL 80.20 Item 4](#).
4. Enter [dC330](#), code 077-033. Check the take away motor, [PL 70.23 Item 4](#).
5. Check the drive gears, [PL 80.20](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - TTM PWB, [PL 70.90 Item 1](#).
 - ESS PWB, [PL 3.10 Item 6](#).

074-105 Registration Sensor Jam (Tray 4) RAP

BSD-ON: [BSD 8.5 Registration](#)

074-105 The registration sensor did not actuate within the specified time after the registration clutch initialized during paper feed from tray 4.

Initial Actions

Check the condition of the paper in tray 3. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the tray 4 feed roll, nudger roll and retard roll, [PL 80.25](#) for foreign substances or wear. Clean or install new components as necessary.
3. Enter [dC330](#), code 077-104. Check the registration sensor, [PL 80.55 Item 4](#).
4. Enter [dC330](#), code 077-002. Check the registration clutch, [PL 80.55 Item 11](#).
5. Enter [dC330](#), code 077-001. Check the PH Drive assembly, [PL 40.10 Item 3](#).
6. **(3TM Only)** Enter [dC330](#), code 077-033. Check the 3TM takeaway motor, [PL 70.23 Item 4](#).
7. **(TTM Only)** Enter [dC330](#), code 077-035. Check the TTM takeaway motor 2, [PL 70.85 Item 2](#).
8. Check the drive gears, [PL 80.10](#) for wear or damage. Install new components as necessary.
9. Check the main drive assembly, [PL 40.10 Item 1](#) for wear or damage.
10. If the fault persists, install new components as necessary:
 - 3TM PWB, [PL 70.23 Item 5](#).
 - TTM PWB, [PL 70.90 Item 1](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

074-210 Tray 4 Lift Fail RAP

BSD-ON: [BSD 7.12 Tray 4 Paper Stacking \(3TM\)](#)

BSD-ON: [BSD 7.21 Tray 4 Paper Stacking \(TTM\)](#)

074-210 Tray 4 lift NG has occurred three consecutive times.

Initial Actions

- Check for obstructions behind the tray.
- Ensure that the tray is loaded correctly.
- Ensure the tray is pushed fully home.
- **(3TM Only)** Check the drive system between the bottom plate and the tray 4 feed/lift motor for operation failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Enter [dC330](#), code 074-102. Check the tray 3 level sensor, [PL 80.20 Item 6](#).
2. Enter [dC330](#), code 074-002. Check the tray 3 feed/lift up motor, [PL 80.20 Item 4](#).
3. Enter [dC330](#), code 042-003. Check the main motor, [PL 40.10 Item 10](#).
4. Check the drive gears, [PL 80.20](#) for wear or damage. Install new components as necessary.
5. **(3TM Only)** Check the drive system between the bottom plate and the tray 4 feed/lift motor for operation failure. Install new components as necessary, [PL 70.20](#).
6. **(TTM Only)** Check the drive system between the bottom plate and the tray 4 feed/lift motor for operation failure. Also check the bottom plate lift mechanism. Install new components as necessary, [PL 70.67](#).
7. If the fault persists, install new components as necessary:
 - 3TM PWB, [PL 70.23 Item 5](#).
 - TTM PWB, [PL 70.90 Item 1](#).

074-212 Tray 4 Paper Size Sensor Fault RAP

BSD-ON: [BSD 7.6 Tray 4 Paper Size Sensing \(3TM\)](#)

BSD-ON: [BSD 7.21 Tray 4 Paper Stacking \(TTM\)](#)

074-212 Abnormal output AD value from tray 4 paper size sensor was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Load the correct paper in tray 4.
2. Ensure that the customer is programming the job correctly.
3. Perform the relevant procedure:
 - [3TM Checkout](#)
 - [TTM Checkout](#)

3TM Checkout

Perform the steps that follow:

1. Remove tray 4. Check underneath the tray for damage to the link mechanism. Also check the actuator at the rear of tray 4. If necessary, install a new tray assembly, [PL 70.10 Item 1](#).
2. Enter [dC140](#) Analog Monitor, code 074-200. Check the tray 4 size sensor, [PL 70.22 Item 9](#).
3. Check the wiring between the tray 4 size sensor and J549 on the 3TM PWB.
4. Reload the software, [GP 4](#).
5. If the fault persists, install new components as necessary:
 - Tray 4 size sensor, [PL 70.22 Item 9](#).
 - 3TM PWB, [PL 70.23 Item 5](#).

TTM Checkout

Perform the steps that follow:

1. Remove tray 4. Check the actuator at the rear of tray 4. If necessary, install a new tray assembly, [PL 70.67 Item 1](#).
2. Enter [dC140](#) Analog Monitor, code 074-200. Check the tray 4 size sensor, [PL 70.80 Item 1](#).
3. Check the wiring between the tray 4 size sensor and J549 on the TTM PWB.
4. Reload the software, [GP 4](#).
5. If the fault persists, install new components as necessary:
 - Tray 4 size sensor, [PL 70.80 Item 1](#).
 - TTM PWB, [PL 70.90 Item 1](#).

075-135 Registration Sensor Jam (Bypass Tray) RAP

BSD-ON: [BSD 8.1 Tray 1 and Bypass Tray Paper Transportation](#)

BSD-ON: [BSD 8.5 Registration](#)

075-135 Paper does actuate the registration sensor in the specified time after the registration clutch is energized when feeding from the bypass tray.

Initial Actions

- Check the condition of the paper in the bypass tray. Refer to [GP 15](#) Paper and Media Size Specifications
- Check that the paper guides are set correctly.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the bypass tray feed roll, bypass tray nudger roll and retard pad, [PL 70.40](#) foreign substances or wear. Clean or install new components as necessary.
3. Check the registration roll and takeaway roll 1, [PL 80.55](#) for foreign substances or wear. Clean or install new components as necessary.
4. Enter [dC330](#), code 077-104. Check the registration sensor, [PL 80.55 Item 4](#).
5. Enter [dC330](#), code 077-002. Check the registration clutch, [PL 80.55 Item 11](#).
6. Enter [dC330](#), code 075-001. Check the bypass tray feed clutch, [PL 70.40 Item 4](#).
7. Enter [dC330](#), code 077-001. Check the PH Drive assembly, [PL 40.10 Item 3](#).
8. Check the main drive assembly, [PL 40.10 Item 1](#) for wear or damage.
9. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-101, 077-900 Registration Sensor Jam RAP

BSD-ON: [BSD 8.5 Registration](#)

077-101 The trail edge of the paper does not deactuate the registration sensor within the specified time after the registration clutch is energized.

077-900 The registration sensor detected remaining paper.

Initial Actions

- Check the condition of the paper in all trays. Refer to [GP 15](#) Paper and Media Size Specifications
- Ensure that all the trays are loaded correctly.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the registration roll and takeaway roll 1, [PL 80.55](#) for foreign substances or wear. Clean or install new components as necessary.
3. Enter [dC330](#), code 077-104. Check the registration sensor, [PL 80.55 Item 4](#).
4. Enter [dC330](#), code 042-003. Check the main motor, [PL 40.10 Item 10](#).
5. Enter [dC330](#), code 077-002. Check the registration clutch, [PL 80.55 Item 11](#).
6. Check the drive assembly, [PL 40.10 Item 1](#) for wear or damage.
7. Check the registration transport assembly, [PL 80.55 Item 1](#) for wear or damage.
8. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-104, 109, 113, 901 Fuser Exit Sensor Jam RAP

BSD-ON: [BSD 10.3 Fusing](#)

077-104 The trail edge of the paper deactuated the fuser exit sensor earlier than the specified time.

077-109 The fuser exit sensor did not actuate within the specified time after the registration clutch energized.

077-113 The trail edge of the paper deactuated the fuser exit sensor later than the specified time.

077-901 The fuser exit sensor detected remaining paper.

Initial Actions

- Check the condition of the paper in all trays. Refer to [GP 15](#) Paper and Media Size Specifications
- Ensure that the fuser is installed correctly.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.



Do not touch the fuser while it is hot.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the exit 2 roll and nip rolls, [PL 10.22](#) for foreign substances or wear. Clean or install new components as necessary.
3. Remove the fuser. Check whether foreign substances or paper is wound around the heat roll.
4. Enter [dC330](#), code 077-101. Check the fuser exit sensor, part of the fuser, [PL 10.05 Item 2](#).
5. Enter [dC330](#), code 042-003. Check the main motor, [PL 40.10 Item 10](#).
6. Enter [dC330](#), code 077-014. Check the exit 2 motor, [PL 10.21 Item 4](#).
7. Enter [dC330](#), code 077-002. Check the registration clutch, [PL 80.55 Item 11](#).
8. Check the exit 2 drive gears, [PL 10.21](#) for wear or damage.
9. Check the registration transport assembly, [PL 80.55 Item 1](#) for wear or damage.
10. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-105 Exit Sensor 2 Jam RAP

BSD-ON: [BSD 10.5 Fused Paper Exit 2](#)

077-105 The trail of the paper was late from the exit 2 sensor.

Initial Actions

Check the condition of the paper in all trays. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.



Do not touch the fuser while it is hot.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the exit 2 roll and nip rolls, [PL 10.22](#) for foreign substances or wear. Clean or install new components as necessary.
3. Enter [dC330](#), code 077-100. Check the exit 2 sensor, [PL 10.21 Item 12](#).
4. Enter [dC330](#), code 077-014. Check the exit 2 motor, [PL 10.21 Item 4](#).
5. Check the exit 2 drive gears, [PL 10.21](#) for wear or damage.
6. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-123 Registration Sensor Jam (Duplex) RAP

BSD-ON: [BSD 8.5 Registration](#)

BSD-ON: [BSD 10.7 Duplex Transport](#)

077-123 Paper does not actuate the registration sensor in the specified time after the registration clutch is energized in duplex mode.

Initial Actions

Check the condition of the paper in all trays. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the exit 2 roll and nip rolls, [PL 10.22](#) for foreign substances or wear. Clean or install new components as necessary.
3. Check the duplex rolls and nip rolls, [PL 80.50](#) for foreign substances or wear. Clean or install new components as necessary.
4. Enter [dC330](#), code 077-104. Check the registration sensor, [PL 80.55 Item 4](#).
5. Enter [dC330](#), code 077-003. Check the duplex clutch, [PL 80.50 Item 28](#).
6. Enter [dC330](#), code 042-001. Check the sub motor, [PL 40.10 Item 11](#).
7. Enter [dC330](#), code 077-014. Check the exit 2 motor, [PL 10.21 Item 4](#).
8. Check the duplex drive gears and belts, [PL 80.50](#) for wear or damage.
9. Check the drive assembly, [PL 40.10 Item 1](#) for wear or damage.
10. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-126, 077-902 Exit 2 Sensor Jam RAP

BSD-ON: [BSD 10.5 Fused Paper Exit 2](#)

077-126 After actuating the fuser exit sensor, paper did not actuate the exit 2 sensor within the specified time.

077-902 The exit 2 sensor detected remaining paper.

Initial Actions

Check the condition of the paper in all trays. Refer to [GP 15](#) Paper and Media Size Specifications

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the exit 2 roll and nip rolls, [PL 10.22](#) for foreign substances or wear. Clean or install new components as necessary.
3. Remove the fuser. Check whether foreign substances or paper is wound around the heat roll.
4. Enter [dC330](#), code 077-100. Check the exit 2 sensor, [PL 10.21 Item 12](#).
5. Enter [dC330](#), code 077-014. Check the exit 2 motor, [PL 10.21 Item 4](#).
6. Enter [dC330](#), code 077-004. Check the exit gate solenoid, [PL 10.22 Item 9](#).
7. Enter [dC330](#), code 042-003. Check the main motor, [PL 40.10 Item 10](#).
8. Check the exit 2 drive gears, [PL 10.21](#) for wear or damage.
9. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-211 Tray Module Mismatch RAP

BSD-ON: [BSD 3.2 PWB Communications \(ESS PWB/Drive PWB to STM\)](#)

BSD-ON: [BSD 3.3 PWB Communications \(ESS PWB/Drive PWB to 1TM/3TM\)](#)

077-211 A tray module mismatch has occurred.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the connections between the tray module and the machine.
3. Enter [dC131](#). Ensure that the tray module type is correctly set in NVM value 742-205:
 - 1TM = 0
 - 3TM = 1
 - TTM = 2
 - STM = 6
4. If the fault persists, install new components as necessary:
 - 1TM PWB, [PL 70.17 Item 5](#).
 - 3TM PWB, [PL 70.23 Item 5](#).
 - STM PWB, [PL 70.28 Item 4](#).
 - TTM PWB, [PL 70.90 Item 1](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-212, 214, 215, 314 Tray Module Communication Fail RAP

BSD-ON: [BSD 1.7 Option DC Power Distribution](#)

BSD-ON: [BSD 3.2 PWB Communications \(ESS PWB/Drive PWB to STM\)](#)

BSD-ON: [BSD 3.3 PWB Communications \(ESS PWB/Drive PWB to 1TM/3TM/TTM\)](#)

077-212 Tray module reset was detected.

077-214 Tray module fatal error was detected.

077-215 Reply from the tray module was detected as a communication error.

077-314 Tray module fatal error was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the items that follow: connections between the tray module and the machine:
 - The connection between the drive PWB (J592) and the STM PWB (J541).
 - The connection between the drive PWB (J592) and the 1TM PWB (J541).
 - The connection between the drive PWB (J592) and the 3TM PWB (J541).
 - The connection between the drive PWB (J592) and the TTM PWB (J541).
 - The connection between the drive PWB (J401) and the ESS PWB (J1334).
3. If the fault persists, install new components as necessary:
 - 1TM PWB, [PL 70.17 Item 5](#).
 - 3TM PWB, [PL 70.23 Item 5](#).
 - STM PWB, [PL 70.28 Item 4](#).
 - TTM PWB, [PL 70.90 Item 1](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-300 Front Cover Open RAP

BSD-ON: [BSD 1.8 Power Interlock Switching \(1 of 3\)](#)

077-300 Front cover was opened during run.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 9](#) How to Check a Switch

Perform the steps that follow:

1. Check the actuator on the front cover for damage. If necessary, install a new front cover, [PL 28.05 Item 2](#).
2. Enter [dC330](#) code 077-303. Check the front cover interlock switch, [PL 1.05 Item 4](#).
3. If the fault persists, install new components as necessary:
 - LVPS PWB, [PL 1.10 Item 3](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-301 L/H Cover Open RAP

BSD-ON: [BSD 1.8 Power Interlock Switching \(1 of 3\)](#)

077-301 L/H cover was opened during run.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 9](#) How to Check a Switch

Perform the steps that follow:

1. Check the actuator on the L/H cover for damage. If necessary, install a new L/H cover, [PL 80.40 Item 8](#).
2. Enter [dC330](#) code 077-300. Check the left hand cover interlock switch, [PL 80.40 Item 1](#).
3. If the fault persists, install new components as necessary:
 - LVPS PWB, [PL 1.10 Item 3](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-305 TM Left Cover Open RAP

BSD-ON: [BSD 1.9 Power Interlock Switching \(2 of 3\)](#)

077-301 Tray module left cover was opened during run.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 9](#) How to Check a Switch

Perform the steps that follow:

1. Check the actuator on the tray module left cover for damage. If necessary, install a new tray module left cover:
 - (1TM), [PL 70.16 Item 6](#).
 - (3TM), [PL 70.21 Item 6](#).
 - (STM), [PL 70.25 Item 2](#).
 - (TTM), [PL 70.70 Item 7](#).
2. Enter [dC330](#), code 077-306. As necessary, perform the steps that follow:
 - Check the 1TM left cover switch, [PL 80.15 Item 3](#).
 - Check the 3TM left cover switch, [PL 80.30 Item 8](#).
 - Check the STM left cover switch, [PL 80.35 Item 4](#).
 - Check the TTM left cover switch, [PL 70.95 Item 18](#).
3. If the fault persists, install new components as necessary:
 - 1TM PWB, [PL 70.17 Item 5](#).
 - 3TM PWB, [PL 70.23 Item 5](#).
 - STM PWB, [PL 70.28 Item 4](#).
 - TTM PWB, [PL 70.90 Item 1](#).
 - Drive PWB, [PL 1.10 Item 3](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-308 L/H High Cover Open RAP

BSD-ON: [BSD 10.5 Fused Paper Exit 2](#)

077-308 L/H high cover was opened during run.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 9](#) How to Check a Switch

Perform the steps that follow:

1. Check the actuator on the left hand transport assembly, [PL 10.20 Item 2](#) for damage. If necessary, install a new left hand transport assembly,
2. Enter [dC330](#) code 077-302. Check the left hand high cover switch, [PL 10.21 Item 3](#).
3. If the fault persists, install new components as necessary:
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

077-967, 968 Paper Mismatch RAP

077-967 The paper loaded is different from the specified paper type.

077-968 The paper loaded is different from the specified paper type.

Procedure

Switch off, then switch on the machine, [GP 10](#). **The fault persists.**

Y **N**
Perform [SCP 5](#) Final Actions.

Load the specified paper, then resubmit the job.

078-102 Registration Sensor Jam (HCF) RAP

BSD-ON: [BSD 8.5 Registration](#)

BSD-ON: [BSD 8.8 HCF Paper Transportation](#)

078-102 Paper fed from the HCF did not actuate the registration sensor within the specified time.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in the HCF. Refer to [GP 15](#) Paper and Media Size Specifications.
- Check for obstructions in the paper path.

Procedure

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.
- [GP 8](#) How to Check a Solenoid or Clutch.

Enter [dC330](#), code 077-104. Manually actuate the registration sensor, [PL 80.55 Item 4](#). **The display changes.**

Y **N**
Check the registration sensor, [PL 80.55 Item 4](#).

Enter [dC330](#) code 078-093 to run the HCF takeaway motor. **The motor runs.**

Y **N**
Check the wiring between the HCF takeaway motor (JF57) and the HCF PWB (JF06). **The wiring is good.**

Y **N**
Repair as necessary.

Check that the resistance through the HCF takeaway motor is approximately 0.8 ohms between:

- JF57 pin 3 to pins 1 and 2.
- JF57 pin 4 to pins 5 and 6.

The resistances are good.

Y **N**
Install a new HCF takeaway motor, [PL 70.60 Item 7](#).

Check the voltage between JF06 pins 9 and 10 and ground. **+24V is measured.**

Y **N**
Check the +24VDC circuit.

A **B**

A

B

Install a new HCF takeaway motor, [PL 70.60 Item 7](#). If the fault persists, install a new HCF PWB, [PL 70.60 Item 9](#).

Check the items that follow:

- Check the HCF feed roll, nudger roll, [PL 80.61](#) and retard roll, [PL 80.62](#) for foreign substances or wear. Clean or install new components as necessary.
- Check the registration roll and takeaway roll 1, [PL 80.55](#) for foreign substances or wear. Clean or install new components as necessary.
- Takeaway roll and nip rolls, [PL 70.55](#) for foreign substances or wear.
- HCF and IOT for a poor docking
- Drive gears, [PL 80.60](#).

If the fault persists, install a new HCF PWB, [PL 70.60 Item 9](#).

078-104, 078-901 HCF Feed Out Sensor Fault RAP

BSD-ON: [BSD 8.8 HCF Paper Transportation](#)

078-104 Paper fed from the HCF did not actuate the HCF feed out sensor within the specified time.

078-104 The HCF feed out sensor detected paper.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in the HCF. Refer to [GP 15](#) Paper and Media Size Specifications.
- Check for obstructions in the paper path.

Procedure

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Enter [dC330](#) code 078-101. Manually actuate the HCF feed out sensor, [PL 70.55 Item 25](#).

The display changes.

Y N

Check the HCF feed out sensor.

Enter [dC330](#) code 078-093 to run the HCF takeaway motor. **The motor runs.**

Y N

Check the wiring between the HCF takeaway motor (JF57) and the HCF PWB (JF06).

The wiring is good.

Y N

Repair as necessary.

Check that the resistance through the HCF takeaway motor is approximately 0.8 ohms between:

- JF57 pin 3 to pins 1 and 2.
- JF57 pin 4 to pins 5 and 6.

The resistances are good.

Y N

Install a new HCF takeaway motor, [PL 70.60 Item 7](#).

Check the voltage between JF06 pins 9 and 10 and ground. **+24V is measured.**

Y N

Check the +24VDC circuit.

Install a new HCF takeaway motor, [PL 70.60 Item 7](#). If the fault persists, install a new HCF PWB, [PL 70.60 Item 9](#).

Check the HCF take away components. Install new components as necessary, [PL 70.55](#).

078-216, 078-219 HCF Communication Failure RAP

078-216 Cannot read from and/or write to the NVM in the HCF.

078-219 HCF soft download fail.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check wires and connectors between the HCF and the IOT.
3. Reload the software, [GP 4](#).
4. If the fault persists, install a new HCF PWB, [PL 70.60 Item 9](#).

078-250 HCF Lift Fault RAP

BSD-ON: [BSD 7.15 HCF Paper Stacking](#)

078-250 HCF tray lift failure. The tray 6 level sensor is not actuated within the specified time.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check the condition of the paper in the HCF. Refer to [GP 15](#) Paper and Media Size Specifications.
- Check for obstructions in the paper tray.

Procedure

Refer to the procedures that follow as necessary:

- [GP 6](#) How to Check a Motor.
- [GP 7](#) How to Check a Sensor.

Open, then close the HCF door. **The HCF lift/feed motor runs.**

Y	N
	Check the wiring between the HCF lift/feed motor (JF58) and the HCF PWB (JF06). The wiring is good.
Y	N
	Repair as necessary.
	Check that the resistance through the HCF lift/feed motor is approximately 0.8 ohms between:
	• JF58 pin 3 to pins 1 and 2. • JF58 pin 4 to pins 5 and 6.
	The resistances are good.
Y	N
	Install a new HCF lift/feed motor, PL 80.60 Item 23 .
	Check the voltage between JF06 pins 3 and 4 and ground. +24V is measured.
Y	N
	Check the +24VDC circuit.
	Install a new HCF lift/feed motor, PL 80.60 Item 23 . If the fault persists, install a new HCF PWB, PL 70.60 Item 9 .
	Check the installation of the HCF stack height sensor, PL 80.61 Item 19 and the operation of the actuator. The sensor and actuator are good.
Y	N
	Correctly install the HCF stack height sensor, or install new components as necessary, PL 80.61 .

A

A

Enter **dC330** code 078-201. Manually actuate the HCF stack height sensor, **PL 80.61 Item 19**.

The display changes.

Y

N

Check the HCF stack height sensor.

Check the mechanical components of the lift mechanism for dirty or damaged gears, broken or out of place cables, **PL 70.51**. If the fault persists, install a new HCF PWB, **PL 70.60 Item 9**.

078-300 HCF Top Cover Interlock Open RAP

BSD-ON: **BSD 1.11 DC Power Distribution - HCF**

078-300 The HCF top cover interlock is open.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- **GP 9** How to Check a Switch.

Enter **dC330** code 078-300. Open then close the top cover, **PL 70.55 Item 7** to actuate the HCF top cover interlock switch. **The display changes.**

Y

N

Measure the voltage between JF05 pin 2 on the HCF PWB and ground. **+24V is measured.**

Y

N

Measure the voltage between JF05 pin 1 on the HCF PWB and ground. **+24V is measured.**

Y

N

Measure the voltage between JF04 pin 1 and 2 on the HCF PWB and ground. **+24VDC is measured.**

Y

N

Check the +24VDC circuit.

Install a new HCF PWB, **PL 70.60 Item 9**.

Check the items that follow: wiring:

- JF05 pin 1 on the HCF PWB and FS001 on the HCF top cover interlock switch.
- JF05 pin 2 on the HCF PWB and FS002 on the HCF top cover interlock switch.

If the wiring is good, install a new HCF top cover interlock switch, **PL 70.55 Item 26**.

Install a new HCF PWB, **PL 70.60 Item 9**.

The fault could be caused by misalignment of the HCF top cover interlock switch. Ensure the switch and HCF top cover are correctly installed. Check if the actuator is damaged, install new components as necessary, **PL 70.55**.

If the fault persists, install a new components as necessary:

- HCF PWB, **PL 70.60 Item 9**.
- Drive PWB, **PL PL 1.10 Item 3**.

078-301 HCF Docking interlock Open RAP

BSD-ON: [BSD 1.11 DC Power Distribution - HCF](#)

078-301 HCF1 side out switch open. The HCF and the IOT were undocked.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

- Check that the HCF and the IOT are correctly docked.
- Switch off, then switch on the machine, [GP 10](#).

Procedure

Refer to the procedure that follows as necessary:

- [GP 9](#) How to Check a Switch.

Enter [dC330](#) code 078-301. Dock then undock the HCF to actuate the HCF1 side out switch.

The display changes.

Y	N	Undock the HCF. Actuate the HCF1 side out switch, PL 70.60 Item 8 . The display changes.
Y	N	Measure the voltage between JF08 pin 2 on the HCF PWB and ground. The voltage drops to less than +1VDC when the switch is actuated
Y	N	Check the wiring between: • JF08 pin 1 on the HCF PWB and FS003 on the HCF1 side out switch. • JF08 pin 2 on the HCF PWB and FS004 on the HCF1 side out switch. If the wiring is good, install a new HCF1 side out switch, PL 70.60 Item 8 .
		Install a new HCF PWB, PL 70.60 Item 9 .
		Check the alignment of the HCF docking base and the IOT.

The fault may be intermittent. Check HCF1 side out switch wiring. If the fault persists, install new components as necessary:

- HCF1 side out switch, [PL 70.60 Item 8](#).
- HCF PWB, [PL 70.60 Item 9](#).

Chain 089 Entry RAP

When multiple Chain 89 fault codes are indicated in the active fault list (dC125) fixing higher priority faults can result in automatically fixing other, lower priority faults. Fix faults in the order indicated in Table 1.

Chain 89 Fault Priority

Table 1 Chain 89 RAP Priority

Priority	Fault Code	Fault
1 (High)	089-616	RC Data Overflow Fail-B
2	089-604, 606, 607, 609, 610, 612, 613, 615	RC Sample Block Fail-B
3	089-601, 089-603	Sample Block Fail-A1
4	089-600	RC Sample Lateral Fail-A1
5	089-617	RC Data Over Range
6 (Low)	089-623, 629, 674, 676, 677, 679	MOB LED Fail

089-600 RC Sample Lateral Fail-A1 RAP

089-600 An error with the Cyan fast scan position that is used as a reference during A1 (fine adjustment pattern) and C patch detection.

Initial Actions

Enter dC125, if multiple chain 89 faults are indicated, refer to Chain 089 Entry RAP to determine the highest priority fault.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the installation and condition of the IBT Belt Unit, PL 90.45 Item 1. The IBT Belt unit is good.

Y N

Install the IBT belt unit correctly.

Install a new IBT belt unit, PL 90.40 Item 3. After installing a new IBT belt unit, enter dC135 code 954-820 to reset the HFSI value for the BTR Unit. If the fault persists install a new drive PWB, PL 1.10 Item 4. Enter dC675, perform the registration control setup cycle.

089-601, 089-603 RC Sample Block Fail-A1 RAP

BSD-ON: [BSD 9.9 ADC and Environment Sensing](#).

089-601 During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB ADC Sensor In did not satisfy the defined number of valid sample blocks.

089-603 During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB ADC Sensor Out did not satisfy the defined number of valid sample blocks.

Initial Actions

Enter [dC125](#), if multiple chain 89 faults are indicated, refer to [Chain 089 Entry RAP](#) to determine the highest priority fault.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Perform the steps that follow:

1. Check the applicable MOB ADC sensor for contamination, open circuits, short circuits or damage:
2. If the fault persists, install a new MOB ADC sensor assembly, [PL 90.40 Item 6](#).
3. Enter [dC675](#), perform the registration control setup cycle.

089-604, 606, 607, 609, 610, 612, 613, 615 RC Sample Block Fail-B RAP

BSD-ON: [BSD 9.9 ADC and Environment Sensing](#), [BSD 9.4 Development \(1 of 2\)](#).

089-604 During the yellow B (rough adjustment pattern) patch detection, the patch at the MOB ADC In Sensor did not satisfy the defined number of valid sample blocks.

089-606 During the yellow B (rough adjustment pattern) patch detection, the patch at the MOB ADC Out Sensor did not satisfy the defined number of valid sample blocks.

089-607 During the magenta B (rough adjustment pattern) patch detection, the patch at the MOB ADC In Sensor did not satisfy the defined number of valid sample blocks.

089-609 During the magenta B (rough adjustment pattern) patch detection, the patch at the MOB ADC Out Sensor did not satisfy the defined number of valid sample blocks.

089-610 During the cyan B (rough adjustment pattern) patch detection, the patch at the MOB ADC In Sensor did not satisfy the defined number of valid sample blocks.

089-612 During the cyan B (rough adjustment pattern) patch detection, the patch at the MOB ADC Out Sensor did not satisfy the defined number of valid sample blocks.

089-613 During the black B (rough adjustment pattern) patch detection, the patch at the MOB ADC In Sensor did not satisfy the defined number of valid sample blocks.

089-615 During the black B (rough adjustment pattern) patch detection, the patch at the MOB ADC Out Sensor did not satisfy the defined number of valid sample blocks.

Initial Actions

Enter [dC125](#), if multiple chain 89 faults are indicated, refer to [Chain 089 Entry RAP](#) to determine the highest priority fault.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Check the wiring between the drive PWB and the applicable MOB ADC sensor for open circuits, short circuits or damage. **The connection is good.**

Y N

Reconnect or repair the wiring between the drive PWB and the MOB ADC sensor.

Check the magnet roll at the applicable MOB ADC sensor position for contamination, damage or distortion. **The magnet roll is good.**

Y N
Install a new MOB ADC sensor assembly, [PL 90.40 Item 6](#).

Check the IBT Belt, [PL 90.45](#), at the applicable MOB ADC Sensor position for damage and distortion. **The IBT Belt is good.**

Y N
Install a new IBT belt unit, [PL 90.45 Item 1](#). Enter [dC135](#) code 954-820 to reset the HFSI value for the BTR Unit.

Check the Drum Cartridge, [PL 90.20](#), for damage and deformation. **The drum cartridge is good.**

Y N
Install a new drum cartridge, [PL 90.20 Item 5](#) (Black), [PL 90.20 Item 8](#) (Yellow), [PL 90.20 Item 7](#) (Magenta), [PL 90.20 Item 6](#) (Cyan).

Install a new MOB ADC sensor assembly, [PL 90.40 Item 6](#). If the fault persists install a new drive PWB, [PL 1.10 Item 4](#). Enter [dC675](#), perform the registration control setup cycle.

089-616 RC Data Overflow Fail-B RAP

089-616 The correction setting value of the calculation result has exceeded the allowed range.

Initial Actions

Enter [dC125](#), if multiple chain 89 faults are indicated, refer to [Chain 089 Entry RAP](#) to determine the highest priority fault.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter [dC675](#), perform the registration control setup cycle and compare the correction amount with the value in [Table 1](#).

Table 1 Registration control adjustment ranges

Correction item	Adjustment Range	
	Minimum	Maximum
Fast Scan Margin	-90	+90
Slow Scan Margin	-4720	+4720
Skew	-800	+800

Fast Scan Margin or Slow Scan Margin have reached the minimum or maximum adjustment value.

Y N
Check the position of the drum cartridge of each color. **The drum cartridge positions are good.**

Y N
Correctly position all drum cartridges.

Install a new drum cartridge as necessary:

- Yellow drum cartridge, [PL 90.20 Item 8](#).
- Magenta drum cartridge, [PL 90.20 Item 7](#).
- Cyan drum cartridge, [PL 90.20 Item 6](#).
- Black drum cartridge, [PL 90.20 Item 5](#).

If the fault persists, install a new LPH, [PL 60.35 Item 1](#), as necessary.

Check if **Fast Scan Margin** or **Slow Scan Margin** have reached the minimum or maximum adjustment value. **Slow Scan Margin** has reached the minimum or maximum adjustment value.

Y N
Raise/lower the LPH (Y, M, C, K) 2 to 3 times to check the LPH lift up/down mechanism. If no fault is found, install a new LPH, [PL 60.35 Item 1](#), as necessary.

Install a new drive PWB, [PL 1.10 Item 4](#). Enter [dC675](#), perform the registration control setup cycle.

089-617 RC Data Over Range RAP

089-617 The result from adding the offset value to the correction value has exceeded the settable range.

Initial Actions

Enter **dC125**, if multiple chain 89 faults are indicated, refer to **Chain 089 Entry RAP** to determine the highest priority fault.

Procedure

Enter **dC131**, check the NVM values that follow:

- 759-319 (Lead Registration Offset).
- 759-321 (Side 1 Registration Offset).
- 759-322 (Side 2 Registration Offset).

089-623, 629, 674, 676, 677, 679 MOB ADC Sensor Fail RAP

BSD-ON: **BSD 9.9 ADC and Environment Sensing**

089-623 The amount of reflected light was not stabilized during MOB ADC In Sensor LED brightness correction.

089-629 The amount of reflected light was not stabilized during MOB ADC Out Sensor LED brightness correction.

089-674 The LED light amount setting value does not converge in gain correction of the MOB ADC In Sensor LED Brightness Correction.

089-676 The LED light amount setting value does not converge in gain correction of the MOB ADC Out Sensor LED Brightness Correction.

089-677 An error occurs in the output voltage value of the IBT Belt Sensor during MOB ADC In Sensor LED Brightness Correction.

089-679 An error occurs in the output voltage value of the IBT Belt Sensor during MOB ADC Out Sensor LED Brightness Correction.

Initial Actions

Enter **dC125**, if multiple chain 89 faults are indicated, refer to **Chain 089 Entry RAP** to determine the highest priority fault.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- **GP 7** How to Check a Sensor.

Check the wiring between the drive PWB and the applicable MOB ADC sensor for open circuits, short circuits or damage. **The connection is good.**

Y N

Reconnect or repair the wiring between the drive PWB and the MOB ADC sensor.

Check the IBT Belt, **PL 90.45**, at the applicable MOB ADC Sensor position for damage and distortion. **The IBT Belt is good.**

Y N

Install a new IBT belt unit, **PL 90.45 Item 1**. Enter **dC135** code 954-820 to reset the HFSI value for the BTR Unit.

Check the detection area of the applicable MOB ADC sensor for obstruction or contamination. **The MOB ADC sensor is good.**

Y N

Clean the detection area of the MOB ADC sensor.

A

A

Install a new MOB ADC sensor assembly, [PL 90.40 Item 6](#). **The fault persists.**

Y N

Perform [SCP 5](#) Final Actions.

Install a new IBT belt unit, [PL 90.45 Item 1](#). After installing a new IBT belt unit, enter [dC135](#) code 954-820 to reset the HFSI value for the BTR Unit. **The fault persists.**

Y N

Perform [SCP 5](#) Final Actions.

If the fault persists, install a new drive PWB [PL 1.10 Item 4](#). Enter [dC675](#), perform the registration control setup cycle.

091-328 to 091-331, 091-921, 091-927 to 091-929 Drum CRUM Communication Error RAP

BSD-ON: [BSD 9.1 Xero Life Control \(Y, M\)](#), [BSD 9.2 Xero Life Control \(C, K\)](#)

091-328 Black Drum cartridge CRUM authentication IC communication error.

091-329 Yellow Drum cartridge CRUM authentication IC communication error.

091-330 Magenta Drum cartridge CRUM authentication IC communication error.

091-331 Cyan Drum cartridge CRUM authentication IC communication error.

091-921 Black Drum cartridge CRUM is not installed in the correct position.

091-927 Yellow Drum cartridge CRUM is not installed in the correct position.

091-928 Magenta Drum cartridge CRUM is not installed in the correct position.

091-929 Cyan Drum cartridge CRUM is not installed in the correct position.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Remove, then reinstall the drum cartridge.
3. Check the drum cartridge CRUM connector for damage and contamination.
4. Check the wiring between the drum cartridge CRUM and the drive PWB for an open circuit, short circuit or poor contact:
 - Check the wiring between the black drum cartridge CRUM, [P/J109](#), and the drive PWB, [P/J409](#).
 - Check the wiring between the yellow drum cartridge CRUM, [P/J112](#), and the drive PWB, [P/J409](#).
 - Check the wiring between the magenta drum cartridge CRUM, [P/J111](#), and the drive PWB, [P/J409](#).
 - Check the wiring between the cyan drum cartridge CRUM, [P/J110](#), and the drive PWB, [P/J409](#).
5. If the fault persists, install new components as necessary:
 - Black drum cartridge, [PL 90.20 Item 5](#).
 - Yellow drum cartridge, [PL 90.20 Item 8](#).
 - Magenta drum cartridge, [PL 90.20 Item 7](#).
 - Cyan drum cartridge, [PL 90.20 Item 6](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

091-400, 091-405, 091-911 Waste Toner Bottle RAP

091-400 Waste toner bottle is nearly full.

091-405 Waste toner bottle is nearly full.

091-911 Waste toner bottle is full.

Procedure

Empty, then reinstall the waste toner bottle, [PL 90.20 Item 4](#).

091-401, 091-411, 091-421, 091-431, 091-406, 091-416, 091-426, 091-436 Drum Cartridge Near End of Life RAP

091-401 Black drum cartridge is near end of life.

091-411 Yellow drum cartridge is near end of life.

091-421 Magenta drum cartridge is near end of life.

091-431 Cyan drum cartridge is near end of life.

091-406 Black drum cartridge is near end of life.

091-416 Yellow drum cartridge is near end of life.

091-426 Magenta drum cartridge is near end of life.

091-436 Cyan drum cartridge is near end of life.

Procedure

Information only. No service action necessary. Advise the customer that the drum cartridge is near end of life.

091-402, 091-424, 091-480, 091-481, 091-482, 091-913 Black Drum Cartridge End of Life RAP

091-402 Black drum cartridge over end of life.

091-424 Black drum cartridge end of life.

091-480 Yellow drum cartridge over end of life.

091-481 Magenta drum cartridge over end of life.

091-482 Cyan drum cartridge over end of life.

091-913 Black drum cartridge end of life.

Procedure

Install new components as necessary:

- Black drum cartridge, [PL 90.20 Item 5](#).
- Yellow drum cartridge, [PL 90.20 Item 8](#).
- Magenta drum cartridge, [PL 90.20 Item 7](#).
- Cyan drum cartridge, [PL 90.20 Item 6](#).

091-916, 091-943, 091-944, 091-945 Drum CRUM Data Mismatch RAP

BSD-ON: [BSD 9.1 Xero Life Control \(Y, M\)](#), [BSD 9.2 Xero Life Control \(C, K\)](#).

091-916 Invalid authentication area data of black drum cartridge CRUM detected.

091-943 Invalid authentication area data of yellow drum cartridge CRUM detected.

091-944 Invalid authentication area data of magenta drum cartridge CRUM detected.

091-945 Invalid authentication area data of cyan drum cartridge CRUM detected.

Procedure

Perform the steps that follow:

1. Remove, then reinstall the drum cartridge.
2. If the fault persists, install a genuine Xerox drum cartridge:
 - Black drum cartridge, [PL 90.20 Item 5](#).
 - Yellow drum cartridge, [PL 90.20 Item 8](#).
 - Magenta drum cartridge, [PL 90.20 Item 7](#).
 - Cyan drum cartridge, [PL 90.20 Item 6](#).

092-606 ADC Sensor Contamination Fail RAP

BSD-ON: [BSD 9.9 ADC and Environment Sensing](#).

092-606 Contamination on the ADC sensor was detected.

Procedure

Perform the [089-601](#), [089-603](#) RC Sample Block Fail-A1 RAP.

092-651 RC Sample Block Fail-B RAP

BSD-ON: [BSD 9.9 ADC and Environment Sensing](#), [BSD 9.4 Development \(1 of 2\)](#).

092-651 An abnormal read value of the IBT sensor was detected.

Initial Actions

Power off then power on the machine, [GP 10](#).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 7](#) How to Check a Sensor.

Check the wiring between the drive PWB and the applicable MOB ADC sensor for open circuits, short circuits or damage. **The connection is good.**

Y	N
	Reconnect or repair the wiring between the drive PWB and the MOB ADC sensor.

Install new parts as necessary:

- MOB ADC sensor assembly, [PL 90.40 Item 6](#). Enter [dC675](#), perform the registration control setup cycle
- Drive PWB, [PL 1.10 Item 4](#).
- IBT belt unit, [PL 90.45 Item 1](#).

NOTE: Following installation of the new IBT belt unit, enter [dC135](#) code 954-820 to reset the HFSI value for the BTR Unit

- LVPS, [PL 1.10 Item 3](#).
- ESS PWB, [PL 3.10 Item 6](#).

092-312 to 315, 092-657 to 660, 092-665 to 668 ATC Sensor Fault RAP

BSD-ON: [BSD 9.5 Development \(2 of 2\)](#)

092-312 Toner density in the developer unit as detected by the yellow ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-313 Toner density in the developer unit as detected by the magenta ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-314 Toner density in the developer unit as detected by the cyan ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-315 Toner density in the developer unit as detected by the black ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-657 Toner density in the developer unit as detected by the yellow ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-658 Toner density in the developer unit as detected by the magenta ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-659 Toner density in the developer unit as detected by the cyan ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-660 Toner density in the developer unit as detected by the black ATC sensor abnormal. This fault occurs when the difference between the maximum and minimum values in the ATC sensor measurement set is lower than the threshold value.

092-665 Toner density in the developer unit as detected by the yellow ATC sensor abnormal. This fault occurs when the average value of the ATC sensor measurement values is not between the upper and lower limit values.

092-666 Toner density in the developer unit as detected by the magenta ATC sensor abnormal. This fault occurs when the average value of the ATC sensor measurement values is not between the upper and lower limit values.

092-667 Toner density in the developer unit as detected by the cyan ATC sensor abnormal. This fault occurs when the average value of the ATC sensor measurement values is not between the upper and lower limit values.

092-668 Toner density in the developer unit as detected by the black ATC sensor abnormal. This fault occurs when the average value of the ATC sensor measurement values is not between the upper and lower limit values.

Initial Actions

- Perform IQ1 to check for a blank page image quality defect.
- Enter dC125. Check for the below faults and perform the applicable procedures as necessary:
 - 024-923 to 024-925 Y/M/C Toner Cartridge Empty RAP
 - 093-912 Black Toner Cartridge Empty RAP

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: When this fault occurs, toner density control, by the ATC sensor, is not performed and ICDC (pixels) based toner supply control is performed instead. If the fault remains for a long time, image density error (too dark or too light) may occur.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Check the wiring between the applicable ATC sensor, yellow (P/J120), magenta (P/J119), cyan (P/J118), black (P/J117) and the drive PWB (P/J414) for an open circuit, short circuit or damage.
3. If the fault persists, install new components as necessary:
 - Drum cartridge:
 - Black drum cartridge, PL 90.20 Item 5.
 - Yellow drum cartridge, PL 90.20 Item 8.
 - Magenta drum cartridge, PL 90.20 Item 7.
 - Cyan drum cartridge, PL 90.20 Item 6.
 - Toner cartridge:
 - Black toner cartridge, PL 90.05 Item 13.
 - Yellow toner cartridge, PL 90.05 Item 10.
 - Magenta toner cartridge, PL 90.05 Item 11.
 - Cyan toner cartridge, PL 90.05 Item 12.
 - Drive PWB, PL 1.10 Item 4.
 - ESS PWB, PL 3.10 Item 6.
 - HVPS, PL 1.05 Item 7.

092-670 to 673, 092-675 to 678 ADC Patch Fail RAP

BSD-ON: [BSD 9.9 ADC and Environment Sensing](#), [BSD 9.4 Development \(1 of 2\)](#).

092-670 The yellow ADC electric patch is abnormally light or a fault in the ADC sensor was detected.

092-671 The magenta ADC electric patch is abnormally light or a fault in the ADC sensor was detected.

092-672 The cyan ADC electric patch is abnormally light or a fault in the ADC sensor was detected.

092-673 The black ADC electric patch is abnormally light or a fault in the ADC sensor was detected.

092-675 The yellow ADC tone patch is abnormally light or a fault in the ADC sensor was detected.

092-676 The yellow ADC tone patch is abnormally light or a fault in the ADC sensor was detected.

092-677 The yellow ADC tone patch is abnormally light or a fault in the ADC sensor was detected.

092-678 The yellow ADC tone patch is abnormally light or a fault in the ADC sensor was detected.

Initial Actions

- Perform IQ1 to check for a low density color or white vertical streaks image quality defect.
- Enter dC125. Check for the below faults and perform the applicable procedures as necessary:
 - 042-325 Main Motor Fail RAP
 - 043-342 Sub Motor Fail RAP
 - 061-xxx LPH System Fail RAPs
 - 089-xxx Registration Control System Failure RAPs
 - 093-400, 093-406 to 093-409 Toner Cartridge Near End of Life RAP
 - 094-420, 094-422 IBT Belt Unit / 2nd BTR Roll End of Life RAP

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. If the fault persists, install new components as necessary:

- MOB ADC sensor assembly, [PL 90.40 Item 6](#). Enter [dC675](#), perform the registration control setup cycle
- IBT belt unit, [PL 90.45 Item 1](#).

NOTE: Following installation of the new IBT belt unit, enter [dC135](#) code 954-820 to reset the HFSI value for the BTR Unit

- IBT cleaner, [PL 90.45 Item 2](#).
- Toner cartridge:
 - Black toner cartridge, [PL 90.05 Item 13](#).
 - Yellow toner cartridge, [PL 90.05 Item 10](#).
 - Magenta toner cartridge, [PL 90.05 Item 11](#).
 - Cyan toner cartridge, [PL 90.05 Item 12](#).
- Drum cartridge:
 - Black drum cartridge, [PL 90.20 Item 5](#).
 - Yellow drum cartridge, [PL 90.20 Item 8](#).
 - Magenta drum cartridge, [PL 90.20 Item 7](#).
 - Cyan drum cartridge, [PL 90.20 Item 6](#).
- LPH, [PL 60.35 Item 1](#).
- LPH FFC:
 - Black LPH FFC, [PL 60.35 Item 4](#).
 - Cyan LPH FFC, [PL 60.35 Item 5](#).
 - Magenta LPH FFC, [PL 60.35 Item 6](#).
 - Yellow LPH FFC, [PL 60.35 Item 7](#).
- HVPS, [PL 1.05 Item 7](#).
- Drive PWB, [PL 1.10 Item 4](#).

092-911 to 092-914 Toner Cartridge False Empty RAP

092-911 The yellow toner cartridge became empty during new cartridge period.

092-912 The magenta toner cartridge became empty during new cartridge period.

092-913 The cyan toner cartridge became empty during new cartridge period.

092-914 The black toner cartridge became empty during new cartridge period.

Procedure

Perform the steps that follow:

1. Remove the toner cartridge. Shake, then reinstall the toner cartridge.
2. If the fault persists, install new components as necessary:
 - Black toner cartridge, [PL 90.05 Item 13](#).
 - Yellow toner cartridge, [PL 90.05 Item 10](#).
 - Magenta toner cartridge, [PL 90.05 Item 11](#).
 - Cyan toner cartridge, [PL 90.05 Item 12](#).

093-335 to 093-338, 093-916, 093-970 to 093-972 Toner CRUM Communication Error RAP

BSD-ON: [BSD 9.6 Toner Cartridge Life Control \(Y, M\)](#), [BSD 9.7 Toner Cartridge Life Control \(C, K\)](#).

093-335 Black toner CRUM authentication IC communication error.

093-336 Yellow toner CRUM authentication IC communication error.

093-337 Magenta toner CRUM authentication IC communication error.

093-338 Cyan toner CRUM authentication IC communication error.

093-916 Black Toner cartridge CRUM is not installed in the predetermined position.

093-970 Yellow toner cartridge CRUM is not installed in the predetermined position.

093-971 Magenta toner cartridge CRUM is not installed in the predetermined position.

093-972 Cyan toner cartridge CRUM is not installed in the predetermined position.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off, then switch on the machine, [GP 10](#).
2. Remove, then reinstall the toner cartridge.
3. Check the toner cartridge CRUM connector for damage and contamination. Use a dry cloth to wipe the joining terminal between the toner cartridge CRUM PWB and the connector assembly.
4. Check the wiring between the drive PWB Yellow/Magenta connector ([P/J412](#)) or Black/Cyan connector ([P/J411](#)) and the cyan ([P/J114](#)), magenta ([P/J115](#)), yellow ([P/J116](#)), or black ([P/J113](#)), toner CRUM connector assembly for an open circuit, short circuit or poor contact.
5. If the fault persists, install new components as necessary:
 - Toner cartridge:
 - Black toner cartridge, [PL 90.05 Item 13](#).
 - Yellow toner cartridge, [PL 90.05 Item 10](#).
 - Magenta toner cartridge, [PL 90.05 Item 11](#).
 - Cyan toner cartridge, [PL 90.05 Item 12](#).
 - Toner CRUM connector assembly:
 - Black CRUM connector assembly, [PL 90.15 Item 7](#).
 - Yellow CRUM connector assembly, [PL 90.15 Item 10](#).
 - Magenta CRUM connector assembly, [PL 90.15 Item 9](#).
 - Cyan CRUM connector assembly, [PL 90.15 Item 8](#).
 - Drive PWB, [PL 1.10 Item 4](#).
 - ESS PWB, [PL 3.10 Item 6](#).

093-400, 093-406 to 093-409, 093-423 to 093-425 Toner Cartridge Near End of Life RAP

093-400 Black toner cartridge is near end of life.

093-406 Black toner cartridge is near end of life.

093-407 Yellow toner cartridge is near end of life.

093-408 Magenta toner cartridge is near end of life.

093-409 Cyan toner cartridge is near end of life.

093-423 Yellow toner cartridge is near end of life.

093-424 Magenta toner cartridge is near end of life.

093-425 Cyan toner cartridge is near end of life.

Procedure

Information only. No service action necessary. Advise the customer that the toner cartridge is almost empty.

093-413, 093-418 to 093-420, 093-944 to 093-947 Developer Unit End of Life RAP

093-413 The black developer unit has passed end of life.

093-418 The yellow developer unit has passed end of life.

093-419 The magenta developer unit has passed end of life.

093-420 The cyan developer unit has passed end of life.

093-944 The yellow developer unit has reached end of life.

093-945 The magenta developer unit has reached end of life.

093-946 The cyan developer unit has reached end of life.

093-947 The black developer unit has reached end of life.

Procedure

Install a new developer unit:

- Black developer unit, **PL 90.05 Item 9**. Enter **dC135** code 954-833 to reset the HFSI value for the black developer unit.
- Yellow developer unit, **PL 90.05 Item 6**. Enter **dC135** code 954-830 to reset the HFSI value for the yellow developer unit.
- Magenta developer unit, **PL 90.05 Item 7**. Enter **dC135** code 954-831 to reset the HFSI value for the magenta developer unit.
- Cyan developer unit, **PL 90.05 Item 8**. Enter **dC135** code 954-832 to reset the HFSI value for the cyan developer unit.

093-414, 415, 416, 417 Developer Near End of Life RAP

093-414 The black developer unit is near end of life.

093-415 The yellow developer unit is near end of life.

093-416 The magenta developer unit is near end of life.

093-417 The cyan developer unit is near end of life.

Procedure

For information only. No service action necessary. Advise the customer that the indicated developer unit is almost at end of life.

093-912 Black Toner Cartridge Empty RAP

093-912 The black toner cartridge is empty.

Procedure

Install a new toner cartridge, [PL 90.05 Item 13](#).

093-926, 960, 961, 962 Toner CRUM Data Mismatch RAP

BSD-ON: [BSD 9.6 Toner Cartridge Life Control \(Y, M\)](#), [BSD 9.7 Toner Cartridge Life Control \(C, K\)](#).

093-926 Invalid authentication area data of black toner cartridge CRUM detected.

093-960 Invalid authentication area data of yellow toner cartridge CRUM detected.

093-961 Invalid authentication area data of magenta toner cartridge CRUM detected.

093-962 Invalid authentication area data of cyan toner cartridge CRUM detected.

Procedure

Perform the steps that follow:

1. Remove, then reinstall the toner cartridge.
2. If the fault persists, install a genuine Xerox toner cartridge:
 - Black toner cartridge, [PL 90.05 Item 13](#).
 - Yellow toner cartridge, [PL 90.05 Item 10](#).
 - Magenta toner cartridge, [PL 90.05 Item 11](#).
 - Cyan toner cartridge, [PL 90.05 Item 12](#).

094-414, 094-417, 094-419 IBT / 2nd BTR Near End of Life RAP

094-414 IBT is near end of life.

094-417 IBT is near end of life.

094-419 2nd BTR unit is near end of life.

Procedure

Information only. No service action necessary. Advise the customer that the IBT or 2nd BTR unit is almost at end of life.

094-420, 094-422 IBT Belt Unit / 2nd BTR Roll End of Life RAP

094-420 IBT end of life.

094-422 2nd BTR unit end of life.

Procedure

Install new components as necessary:

- IBT Belt unit, [PL 90.40 Item 3](#).
- 2nd BTR roll, [PL 90.40 Item 5](#).

099-364, 099-396 to 099-399 Fuser Temperature Fault RAP

099-364 The recovery time from low temperature not ready state has become longer than the setting time.

099-396 The centre temperature does not reach the required threshold within the specified time.

099-397 The centre temperature does not reach the required threshold within the specified time.

099-398 The centre temperature reaches the required threshold faster the specified time.

099-399 The centre temperature is detected as higher than the specified level.

Procedure

Perform the following procedures as necessary:

- 010-327 Fusing On Time Fail RAP.
- 010-334, 010-335 Heat Roll NC Sensor Fail RAP.

102-311 to 102-319 USB Dongle Errors RAP

102-311 USB dongle access failed during the initial installation by the USB dongle.

102-312 It was detected that MAC address of another M/C was recorded in the dongle during the initial installation by the USB dongle.

102-313 An illegal IOT speed setting key was detected during the initial installation by the USB dongle.

102-314 Setting the IOT speed setting key failed during the initial installation by the USB dongle.

102-315 Setting the SW Key failed during the initial installation by the USB dongle.

102-316 Setting the supply setting failed during the initial installation by the USB dongle.

102-317 Setting the page pack failed during the initial installation by the USB dongle.

102-318 Setting the country code failed during the initial installation by the USB dongle.

102-319 The NVM rewriting list process failed during the initial installation by the USB dongle.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure the USB dongle is installed correctly.
2. Switch off, then switch on the machine, **GP 10**.
3. Ensure that all connectors on the drive PWB, **PL 1.10 Item 3** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, **GP 4**.
5. Perform the **OF2** Special Boot Modes RAP.
6. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

102-356 EWS Soft Fail RAP

102-356 Fatal error related to EWS.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 3** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Initialise the hard disk, refer to **dC355** Image Disk Diagnostics.
4. Reload the software, **GP 4**.
5. Perform the **OF2** Special Boot Modes RAP.
6. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

103-310 to 103-313 Hybrid Water Mark RAP

103-310 The secure watermark kit cannot be made available because the hybrid watermark detection hardware is not installed.

103-311 The secure watermark Kit is not enabled.

103-312 The secure watermark kit cannot be made available because the hybrid watermark detection hardware for document side 2 is not installed.

103-313 The secure watermark kit did not become available because of insufficient IISS extension memory.

Procedure

For information only. No service action necessary.

103-314 Prohibited Originals RAP

103-314 Possible prohibited originals (system fail).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 3](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Initialise the hard disk, refer to [dC355](#) Image Disk Diagnostics.
4. Reload the software, [GP 4](#).
5. If the fault persists, install new ESS PWB, [PL 3.10 Item 6](#).

112-700 Punch Bin Almost Full RAP

112-700 The punch debris bin is almost full.

Procedure

Advise the customer to empty the punch debris bin.

116-210, 116-211 Media Reader Error RAP

116-210 Fatal error of reader.

116-211 Connection cable disconnected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-212, 116-220, 116-310 to 116-311 ESS Error RAP

116-212 MediaLib internal logic error has occurred.

116-220 The downloader software that processes downloads within the ESS failed to initialize during transition into download mode.

116-310 An error was detected when the ESS font ROM DIMM #2 was checked.

116-311 A fail is detected during a check of ESS font ROM DIMM #3.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-312, 116-313 HDD Encrypt Key Fail RAP

116-312 An error in the encryption key was detected on booting.

116-313 An encryption setting error was detected on booting.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Initialise the hard disk, refer to **dC355** Image Disk Diagnostics.
2. When the system has been recovered, advise the customer to set a correct HDD encryption key.

116-314 Ethernet Address Fail RAP

116-314 An Ethernet error was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to check that the TCP/IP ports are correctly configured.
2. Switch off, then switch on the machine, **GP 10**.
3. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, **GP 4**.
5. Perform the **016A** Scan to Network Error Entry RAP.
6. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-319 Controller and UI Configuration RAP

BSD-ON: [BSD 2.1 Control Panel](#)

116-319 A mismatch between the installed ROM and UI.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the UI assembly, [PL 2.05 Item 7](#) or [PL 2.10 Item 1](#), and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. If the fault persists, install new components as necessary:
 - UI assembly (C7030F), [PL 2.05 Item 7](#).
 - UI assembly (C7000), [PL 2.10 Item 1](#)
 - ESS PWB, [PL 3.10 Item 6](#).

116-320, 116-345 Process Error RAP

116-320 Fatal error of the STREAMZ. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

116-345 Token Ring Control IC Access error.

Procedure

Switch off, then switch on the machine, [GP 10](#).

116-321, 322, 323, 328, 329, 338 Software Error RAP

116-321 Due to an error in software processing, subsequent processes cannot be performed.

116-322 Due to an error in software processing, subsequent processes cannot be performed.

116-323 During a read/write check at power on, OS/DD detects an error with the ESS-NVRAM board.

116-328 A failure was detected in the level 2 cache built in the CPU.

116-329 A system call error related to the serial I/F was detected.

116-338 Overall JBA fatal error. Due to an error in software processing, subsequent processes cannot be performed.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2 Special Boot Modes RAP](#).
5. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

116-324 Exception Fail RAP

116-324 A fatal software exception error has occurred in the controller PWB CPU.

Initial Actions

NOTE: This fault can be caused by a corrupt print job.

1. Switch off the machine, [GP 10](#).
2. Disconnect the network cable.
3. Switch on the machine [GP 10](#).
 - If the fault persists continue with the [Procedure](#) below.
 - If the fault clears connect the network cable, then continue with Initial Actions from step 4.
4. Use the Embedded Web Sever (EWS) to print a test page. From the EWS Home page under Quick Links select **Submit File**, select a file (note the on screen specified file formats), then touch **Submit**.
 - a. If the job prints, advise the customer to inform their IT department that there could be a corrupt print job causing the fault and to ensure all user of the device are using the correct print driver when submitting print jobs.
 - b. If the fault persists continue with the [Procedure](#) below.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Check the wiring between the ESS PWB, [PL 3.10 Item 6](#) and the hard disk.
5. Initialise the hard disk. Refer to [dC355 Hard Disk Diagnostics](#).
6. Initialize the Sys - System NVM, refer to [dC301](#).
7. Install a new ESS PWB, [PL 3.10 Item 6](#).

116-325 ESS Fan Fail RAP

BSD-ON: [BSD 3.9 ESS](#)

116-325 An error occurred in the rotation of the ESS fan.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the wiring between [P/J311](#) on the ESS PWB and the ESS fan for an open or short circuit, or a loose or damaged connector.
3. If the fault persists, install new components as necessary:
 - ESS fan, [PL 3.10 Item 9](#).
 - ESS PWB, [PL 3.10 Item 6](#).

116-330, 331, 336, 337, 339 HDD File System Fail RAP

116-330 HDD check at power on detected that an error has occurred or the HDD was not formatted.

116-331 A log related error was detected.

116-336 An error was detected when the HDD was accessed.

116-337 Overall SNTP fatal error. Due to an error in software processing, subsequent processes cannot be performed.

116-339 When the JBA is started up, the HDD is not installed.

Procedure

Perform the [016-210](#), [506](#), [777](#), [780](#), [798](#) HDD Error RAP.

116-334 ESS NVRAM Data Compare Fail

116-334 ESS NVRAM data compare fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Enter **dC125** Faults. If a 124-3XX fault code is also displayed, perform the relevant RAP.
3. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, **GP 4**.
5. Perform the **OF2** Special Boot Modes RAP.
6. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-340 Not Enough Memory RAP

116-340 Insufficient memory was detected during initialization. A PS option requiring an additional memory was installed but memory was not added.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**.

116-341, 342, 393, 394 ROM Version Incorrect RAP

116-341 Versions of the multiple ROM DIMMs installed are incorrect.

116-342 Fatal error related to the SNMP agent.

116-393 AAA manager fatal error.

116-394 Abnormal authentication mode and accounting mode settings detected during AAA manager boot sequence.

Procedure

Reload the software, [GP 4](#).

116-343, 346, 357, 359 ESS PWB Error RAP

116-343 An error was detected in the IC in the ESS PWB.

116-346 A response such as system function recall error was detected.

116-357 PS Fatal System Error

116-359 Fatal error in PLW.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2 Special Boot Modes RAP](#).
5. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

116-348, 349, 358, 360, 374 Redirecter Fail RAP

116-348 Various fatal errors detected in the redirecter.

116-349 An error occurred when calling the Pflite function using the SIF.

116-358 Fatal error related to salutation.

116-360 Fatal error related to SMB.

116-374 Fatal error of auto SW.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to check that the TCP/IP ports are correctly configured.
2. Switch off, then switch on the machine, **GP 10**.
3. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, **GP 4**.
5. Perform the **016A** Scan to Network Error Entry RAP.
6. Perform the **OF2** Special Boot Modes RAP.
7. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-353, 354, 356, 361, 362 HDD Fail RAP

116-353 The HDD was not booted due to a physical HDD failure detected on booting.

116-354 The M/C was not started up due to a product code error detected in the HDD on booting.

116-356 The M/C was not started up due to an insufficient HDD capacity error detected during HDD formatting.

116-361 Fatal error of SPL HDD.

116-362 SSDP Software Fail.

Procedure

Perform the **016-210, 506, 777, 780, 798** HDD Error RAP.

116-355, 363, 367, 370, 373, 376 Fatal Error RAP

116-355 Fatal error related to the SNMP Agent.

116-363 BMLinkS/print service software failure.

116-367 Overall fatal error of Parallel.

116-370 Fatal error of XJCL.

116-373 Fatal error related to dynamic DNS.

116-376 Port 9100 software fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to check that the TCP/IP ports are correctly configured.
2. Switch off, then switch on the machine, **GP 10**.
3. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, **GP 4**.
5. Perform the **016A** Scan to Network Error Entry RAP.
6. Perform the **OF2** Special Boot Modes RAP.
7. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-364, 365, 366, 368, 371, 372, 375, 377 Timer Fail RAP

116-364 An error in the timer was detected.

116-365 Fatal error of the SPL.

116-366 Print utility operational failure, report generator operational failure.

116-368 Fatal error of DumpPrint.

116-371 PCL decomposer software failure.

116-372 Fatal error of P-formatter.

116-375 A response such as system function recall error was detected.

116-377 Video DMA failure was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-378, 379, 395 MCR/MCC Soft Fail RAP

116-378 Fatal error related to MCR. Due to an error in software processing, subsequent processes cannot be performed.

116-369 Fatal error related to MCC. Due to an error in software processing, subsequent processes cannot be performed.

116-395 Fatal error related to USB.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to check that the TCP/IP ports are correctly configured.
2. Switch off, then switch on the machine, GP 10.
3. Ensure that all connectors on the drive PWB, PL 1.10 Item 4 and the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, GP 4.
5. Perform the 016A Scan to Network Error Entry RAP.
6. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

116-380 ESS Font ROM DIMM #1 Check Fail RAP

116-380 ESS Font ROM DIMM #1 check failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure that all connectors on the drive PWB, PL 1.10 Item 4 and the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Ensure that the fax PWBs, PL 20.05 are installed correctly.

NOTE: Line 2 and 3 fax PWBs are options.

4. Reload the software, GP 4.
5. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

116-381 ABL Version Fail RAP

116-381 ABL did not match the ABL version information on the NVM, or corrupted data was detected.

Procedure

Initialize the NVM, refer to [dC301](#) NVM Initialization.

NOTE: Inform the customer that this will clear all address information.

116-382 ABL Initialize Fail RAP

116-382 ABL has failed to access the NVM or HDD.

Procedure

Perform the steps that follow:

1. Enter [dC131](#). Set NVM value 790-664 to 0.
2. Reload the software, [GP 4](#).
3. If the fault persists, perform the [016-210](#), [506](#), [777](#), [780](#), [798](#) HDD Error RAP.

116-383 PIT Lib Failure RAP

116-383 Board Fault/non-installation, or HDD access error.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check [dC125](#) Faults. If a new fault is listed, perform the relevant RAP.
3. If the fault persists, perform the [016-210](#), [506](#), [777](#), [780](#), [798](#) HDD Error RAP.

116-384, 385, 387, 389 DCS/IDC Software Fail RAP

116-384 DCS-related fatal error. Due to an error in software processing, subsequent processes cannot be performed.

116-385 Fatal error related to IDC. Due to an error in software processing, subsequent processes cannot be performed.

116-387 A fatal error has occurred during the usage of high compression board.

116-389 The necessary additional RAM was not installed.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2](#) Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

116-386 Fax USB Port RAP

116-386 At startup, the fax USB cable was connected to an incorrect port.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that the fax USB cable is connected to the correct USB port.

116-388 No HDD RAP

116-388 The system detected that the HDD was not installed, even though the system configuration (with Fax and Finisher) requires a HDD.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. If the fault persists, perform the **016-210, 506, 777, 780, 798** HDD Error RAP.

116-390 ROM and NVM Version Mismatch RAP

116-390 Incompatible versions of the standard ROM and NVM were detected.

Procedure

Perform the steps that follow:

1. Initialize the NVM, refer to **dC301** NVM Initialization.

NOTE: Inform the customer that this will clear all address information.

2. Reload the software, **GP 4**.

116-391 Illegal Code RAP

116-391 Country code/territory code/paper size group setting error detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. If the fault persists, enter **dC131**. Ensure NVM values 700-165, 700-338 and 700-402 are correct. Change the values as necessary.

116-392 Machine Code Check Fail RAP

116-392 Machine code check fail.

Procedure

For information only. No service action necessary.

116-396 FIPS140 Self Test Fail RAP

116-396 At start, the FIPS140 encryption module self-test has detected a failure. Self test error due to illegal ROM (FW).

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Reload the software, GP 4.

116-397 Illegal Setting Area Coverage Threshold RAP

116-397 The plain total color judge threshold setting is incorrect.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Enter **dC131**. Ensure the value of 720-061 is higher than 720-060. Adjust the values as necessary.

116-399 Initialization RAP

116-399 The machine remains in initializing state even after 10 minutes has passed since it has started up (not including the startup after power save).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the Special Boot Mode function NVRAM INIT MODE, **GP 22**.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

116-701, 116-710 Out of Memory Duplex Fail RAP

116-701 One page data was printed on multiple pages during two sided print.

116-710 HP-GL spool file overflow.

Procedure

Advise the customer that the optional hard disk is required.

116-702 Print with Substitute Font RAP

116-702 Printing performed with substitute font.

Procedure

Advise the customer that additional fonts are required.

116-703 Postscript Language RAP

116-703 There is a problem in the PostScript data and an error occurred in PostScript grammar interpretation or language interpretation.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).

116-704 Media Reader RAP

116-704 The MediaLib detected this error while performing the operation that requires access to media.

Procedure

Ensure that all paper trays are loaded with the correct media.

116-705 to 116-709, 716, 717 Media Reader Format RAP

116-705 The MediaLib detected this error while performing the operation that requires access to media.

116-706 The MediaLib detected this error while performing the operation that requires access to media.

116-707 The MediaLib detected this error while performing the operation that requires access to media.

116-708 The MediaLib detected this error while performing the operation that requires access to media.

116-709 The MediaLib detected this error while performing the operation that requires access to media.

116-716 The MediaLib detected this error while performing the operation that requires access to media.

116-717 The MediaLib detected this error while performing the operation that requires access to media.

Procedure

Perform the steps that follow:

1. Advise the customer to check the contents in the media for errors from the PC:
 - a. Check the file format/directory and selected mode (digital camera print/document print).
 - b. Check whether the printed file attribute information is displayed.
 - c. Check whether the print file images are displayed.
 - d. Check whether the printed file attribute information is displayed.
 - e. If the fault persists, inform the customer that the media may be defective.
2. If the fault persists, inform the customer that the media may be defective.

116-713, 116-751 HDD Full RAP

116-713 Collate operation was split when HDD full occurred in print service.

116-751 When a Booklet job is writing into the HDD, the job is aborted because the HDD became full

Procedure

Perform the steps that follow:

1. Advise the customer to:
 - a. Delete the stored documents to clear HDD full condition.
 - b. Split the job so that HDD full does not occur.
2. If the fault persists, perform the [016-210](#), [506](#), [777](#), [780](#), [798](#) HDD Error RAP.

116-714 HP-GL/2 Command Error RAP

116-714 HP-GL/2 command error occurred.

Procedure

Perform the steps that follow:

1. Reload the software, **GP 4**.
2. If a HDD is installed, perform the **016-210, 506, 777, 780, 798** HDD Error RAP.
3. If the fault persists, perform the **016A** Scan to Network Error Entry RAP.

116-719 XPIF Parameter Cancelled RAP

116-719 Cancellation of the parameter(s) disabled by XPIF.

Procedure

Some of the parameters are disabled by XPIF so the machine cannot execute them. Advise the customer to cancel the disabled parameter(s).

116-720 PCL Memory Low Page Simplified RAP

116-720 PCL memory low, page simplified.

Procedure

Advise the customer to:

1. Deactivate the unnecessary ports.
2. Adjust buffer memory sizes.
3. That if the fault persists, the optional hard disk is required.

116-721 to 116-724, 726, 727, 728 Color Print Permissions RAP

116-721 Color printing is prohibited in this time zone. Output changed to monochrome.

017-722 Color printing prohibited. Output changed to monochrome.

017-723 Color print attempted from a prohibited application. Output changed to monochrome.

017-724 Single sided print attempted from a prohibited application. Output changed to duplex.

017-726 Color, single sided print attempted. Output changed to monochrome, duplex.

017-727 Single sided print attempted. Output changed to duplex.

017-728 Prohibited print attempted. Output changed to acceptable output.

Procedure

Advise the customer to set the permissions as required.

116-725 HDD Image Log Full RAP

116-725 The log image storage area on the disk is full.

Procedure

Advise the customer to:

1. Rerun the job.
2. If the situation persists despite re-attempts, delete unnecessary documents saved in the machine.

116-738 Size/Orientation Mismatch RAP

017-738 Form overlay is impossible because the size/orientation of the form's drawing is different from that of the paper.

Procedure

Advise the customer to select paper that has the same size and orientation as the registered form.

116-739, 116-741 to 116-743 Out of Disk Area RAP

017-739 The form/logo data cannot be registered due to insufficient ram or hard disk space.

017-741 The form data cannot be registered due to the restriction on the no. of forms.

017-742 The logo data cannot be registered due to the restriction on the no. of logos.

017-743 The received data (form/logo) exceeded the registered buffer size.

Procedure

Advise the customer to delete the unnecessary forms/logos. Otherwise, if not already installed, inform the customer that the optional hard disk is required.

116-740 Arithmetic Error RAP

017-740 The value calculated in the interpreter exceeded the limit.

Procedure

Advise the customer to upgrade the driver.

116-746 Selected Form Not Registered RAP

017-746 The specified form is not registered.

Procedure

Advise the customer to use a registered form or register the required form.

116-747, 116-748 Invalid Page Data RAP

017-747 After subtracting the paper margin from the valid coordinate area, the result of the calculation will be negative.

017-748 Drawing data does not exist in the page data.

Procedure

Advise the customer to repeat the operation.

116-749 PostScript Font Error RAP

017-749 Job was aborted because the specified font is not found.

Procedure

Advise the customer to add the necessary font, or specify a substitute font.

116-750 Banner Sheet Cancelled RAP

017-750 Banner sheet was cancelled.

Procedure

Advise the customer to set the banner sheet feed tray status to normal or change the banner sheet feed tray.

116-752 Print Job Ticket RAP

116-752 The machine received a print job ticket sent together with a PDF but the job ticket data includes printing instructions that are not supported by the machine.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to:
 - a. Re-run the job.
 - b. Print to a machine that supports the printing instructions.
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).

116-771 to 116-778, 116-780 Invalid JBIG Parameter RAP

116-771 An incorrect JBIG parameter DL was automatically corrected.

116-772 An incorrect JBIG parameter D was detected and automatically corrected.

116-773 An incorrect JBIG parameter P was detected and automatically corrected.

116-774 An incorrect JBIG parameter YD was detected and automatically corrected.

116-775 An incorrect JBIG parameter L0 was detected and automatically corrected.

116-776 An incorrect JBIG parameter MX was detected and automatically corrected.

116-777 An incorrect JBIG parameter MY was detected and automatically corrected.

116-778 An incorrect JBIG parameter VLENGTH was detected and automatically corrected.

116-780 The system detected an error in the document attached to the E-mail to XXX

Procedure

For information only. No service action necessary.

116-790 Stapling Canceled RAP

017-750 Either all or one of the lead stapler is canceled during print.

Procedure

Advise the customer not to cancel stapling during a job.

117-310 WSD Scan S/W Fail RAP

117-310 A problem occurred in the processing of WSD scan service software, causing the processing to discontinue.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

117-311 Incorrect Installation of Security Enhancing Kit RAP

117-311 The security enhancing kit is installed in the incorrect slot.

Procedure

Install the security enhancing kit in the correct slot.

117-312 Machine Self Test Error RAP

117-312 In an OS self program determination test, it was detected that the checksum value and the mini OS/program were different.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Reload the software, GP 4.
2. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

117-313, 117-314 Geographic Region Change Fail RAP

117-313 The geographic region change command from the PJJL can not be implemented.

117-314 The contract type change command from the PJJL can not be implemented.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure that all connectors on the drive PWB, PL 1.10 Item 4 and the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, GP 4.
4. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

117-315 Contract Type/Geographic Region Changed RAP

117-315 The geographic region and contract type change command from the PjL was implemented.

Procedure

Advise the customer to install the correct CRUs for the changed geographic region and contract type.

117-316 Contract Manager Software Fail RAP

117-316 When the contract manager is running, it can no longer perform task control due to software malfunction.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, reload the software, [GP 4](#).

117-317, 117-318 Contract Manager PPP RAP

117-317 The contract manager detected that the PPP contract has ended.

117-318 The contract manager detected that the DC command write that was performed at the end of a PPP contract has failed.

Procedure

Advise the customer to wait for the machine to reboot.

117-319 SD Card Program or Font Data Access RAP

117-319 SD card program or font data access fail.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure the SD card, [PL 3.10 Item 11](#) is correctly installed. Also, ensure that the write protection switch, to the left of the SD card, is not enabled. If the installation of the SD card and the write protection switch setting are good, advise the customer to rewrite the program and font data into the SD Card. If the problem persists after the rewrite, install a new SD card, [PL 3.10 Item 11](#).
3. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, [GP 4](#).
5. Perform the [OF2](#) Special Boot Modes RAP.
6. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

117-320 to 117-323, 324, 327, 329, 338 SD Card Fail RAP

117-320 When starting, the SD card hardware error was detected by SysCheckSD.

117-321 When starting, the installed SD card was detected to be unsupported by SysCheckSD.

117-322 When starting, SD encryption error was detected by SysCheckSD.

117-323 When starting, SD card file system access error was detected by SysCheckSD.

117-324 When the OS is starting up, the system detected that the SD card is meant for another product and an error is issued.

117-327 Hardware fault processing of NVRAM area/access on the SD card.

117-329 When starting up, the SD card was detected to be not connected by the OS or SysCheckSD.

117-338 Fault in the connection with SD card is detected by the controller.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure the SD card, [PL 3.10 Item 11](#) is the correct variant for the machine and securely installed.
2. Switch off, then switch on the machine, [GP 10](#).
3. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, [GP 4](#).
5. Perform the [OF2 Special Boot Modes RAP](#).
6. If the fault persists, install a new components as necessary:
 - SD card, [PL 3.10 Item 11](#).
 - ESS PWB, [PL 3.10 Item 6](#).

117-325, 117-326 Access Fail RAP

117-325 Failed to obtain RTC timer value due to hardware problem in the contract function.

117-326 Software fault processing of NVRAM area/access.

Procedure

Switch off, then switch on the machine, [GP 10](#).

117-330 XBDS Soft Fail RAP

117-330 An Ethernet error was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Advise the customer to check whether HTTP and HTTPS have started up normally and are operable.
3. Advise the customer to check that the TCP/IP ports are correctly configured.
4. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
5. Reload the software, **GP 4**.
6. Perform the **016A** Scan to Network Error Entry RAP.
7. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

117-331, 117-355 Uninitialized HDD RAP

117-331 An uninitialized HDD that was used for another machine was recognized.

117-355 HDD is not recognized in this startup.

Procedure

Perform the **016-210, 506, 777, 780, 798** HDD Error RAP.

117-332, 117-335 Uninitialized Used NVM RAP

117-332 An uninitialized NVM that was used for another machine was recognized.

117-335 Invalid NVM detection.

Procedure

Initialize the NVM, perform **dC301** NVM Initialization.

117-333 Uninitialized Used SD Card RAP

117-333 An uninitialized SD card that was used for another device was detected.

Procedure

Perform the steps that follow:

1. Initialize the NVM, perform **dC301** NVM Initialization.
2. If a HDD is installed, initialise the HDD, refer to **dC355** Hard Disk Diagnostics.

117-336, 337 PCI(EX) Option No Support Device Fail RAP

117-336 An unknown PCI option was detected.

117-337 An unknown PCIEX option was detected.

Procedure

Perform the steps that follow:

1. Ensure the PCI(EX) option is supported.
2. Check the PCI(EX) option is correctly installed.
3. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

117-339 NVM Backup Fail RAP

117-339 NVM backup is not carried out fail.

Procedure

Initialise the HDD, refer to [dC355](#) Hard Disk Diagnostics.

117-340, 117-342 Other HDD Fail RAP

117-340 A hard disk that was formatted by another machine was detected.

117-342 A hard disk that was formatted by another machine was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Install a new hard disk, **PL 3.10 Item 2**.
2. If the fault persists:
 - a. Switch off, then switch on the machine, **GP 10**.
 - b. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
 - c. Reload the software, **GP 4**.
 - d. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

117-343 Log Sending Parameter Fail RAP

117-343 An incorrect setting of the log transfer function was detected:

1. When the image log function is disabled and the auto transfer function is enabled, transfer in job units is set.
2. When the job log auto transfer function is disabled (no hard disk), the auto transfer function of the log is set to enabled.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to change the settings of the log transfer function:
 - For detection condition 1, change the operation method for Log Auto Transfer to anything other than Transfer in Job Units.
 - For detection condition 2, check whether a hard disk is installed or change the Auto Transfer function of the log to disable it.
2. Reload the software, **GP 4**.
3. Perform the **OF2 Special Boot Modes RAP**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

117-344 Invalid User Job Type Fail RAP

117-344 The applicable user job cannot be executed at the system level.

Procedure

Advise the customer to check if public print it is set to be stored as charge print.

117-345 SSMM Batch Setting Duration Fail RAP

117-345 During the batch setting of LoDeM, a reboot occurred due to a change in system data.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. For a single occurrence, take no action.
2. If the fault persists, perform the steps that follow:
 - a. Switch off, then switch on the machine, GP 10.
 - b. Ensure that all connectors on the drive PWB, PL 1.10 Item 4 and the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
 - c. Reload the software, GP 4.
 - d. Perform the OF2 Special Boot Modes RAP.
 - e. Install a new ESS PWB, PL 3.10 Item 6.

117-347, 349, 350 Service Fail RAP

117-347 When the SEEP extension billing counter have been used and billing count cannot be performed as new extension counter cannot be obtained.

117-349 Detects this fail when enters a state where it is unable to continue operating as GRS.

117-350 A problem has occurred in the AirPrint scan service software processing and it is unable to continue with the subsequent processes.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. Perform the [OF2 Special Boot Modes RAP](#).
5. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

117-348 Uninitialized Used SD Card RAP

117-348 An un-initialized SD card that had been used in another machine was recognized.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Initialize the NVM, perform [dC301 NVM Initialization](#).
3. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, [GP 4](#).
5. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

117-354, 356, 358 Job Limit System Fail RAP

117-354 Before Job execution, an error occurs in Coml_SsmilsJoblimit.

117-356 During Job estimate acquisition, an error occurs.

117-358 Fatal error of JAL relationship in software processing.

Procedure

Switch off, then switch on the machine, [GP 10](#).

117-357 TPM Fail RAP

117-357 A Trusted Platform Module has failed.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

117-360 Date Limit Exceeding Fail RAP

117-360 Date limit exceeded.

Procedure

Advise the customer to set the correct time and date.

117-362, 117-363 USB Dongle Fail RAP

117-362 During the initial installation by USB dongle, it fails to set the TSC contract mode.

117-363 During the initial installation by USB dongle, it fails to set the count-up mode.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure the correct USB dongle is installed.

117-364 Key Fail RAP

117-364 TPM encryption key data corrupted.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#), 2 times if necessary.
2. If the fault persists perform [dC355](#) Initialize Hard Disk.
3. Switch off, then switch on the machine, [GP 10](#).

117-365 WiFi Diagnostics Test Failure RAP

117-365 Error during WiFi diagnostics test.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Check the connection of the WiFi dongle, [PL 3.10 Item 10](#).
3. If the fault persists install a new WiFi dongle, [PL 3.10 Item 10](#).

118-310, 118-311 Internal Fail RAP

118-310 An internal error was detected during initialization of the IPSEC.

118-311 GCP related fatal error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

121-310, 121-327 EPSV-Accessory Communication Fail RAP

121-310 Transmission has failed between the EP-SV and the accessories.

121-327 EPSV accessory not in service fail.

Procedure

For information only, no service action necessary.

121-311, 312, 313 IC Card Auditron Password Fail RAP

121-311 IC card auditron config fail 01.

121-312 IC card auditron config fail 02.

121-313 IC card auditron config fail 03.

Procedure

For information only, no service action necessary.

121-314 Customize User Prompts Fail RAP

121-314 Customize user prompts fail.

Procedure

For information only, no service action necessary.

121-316 Accessory Conflict RAP

117-316 Prohibited combination of EP accessory connection and secure access authentication.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Disconnect the FDI accessory.
2. Set the authentication method to an option other than Secure Access (either Authentication Off, Local Authentication or Remote Authentication).
3. Reconnect the FDI accessory.

121-317 Continuous Job Setting Mismatch RAP

117-317 Prohibited combination of EP accessory connection and secure access authentication.

Procedure

Enter **dC131**. Set NVM value 700-540 to 1.

121-318 Auth/Account Settings Not Supported RAP

117-318 Auth/account settings not supported.

Procedure

For information only. No service actions necessary.

121-319 Fax Send Charging and Internet Fax Setting Confliction RAP

121-319 Fax send charging and internet fax setting conflict.

Procedure

Advise the customer to disable the fax send billing function or the internet fax kit functions.
Switch off, then switch on the machine, [GP 10](#).

121-322 Controller Price Table Error RAP

121-322 EPA - controller unit price table settings error.

Procedure

For information only. No service actions necessary.

121-323 Web EP Software Fail RAP

121-323 Fatal error related to Web EP.

Procedure

Switch off, then switch on the machine, [GP 10](#).

121-324 Fax Send Charging Conflicition RAP

117-317 It is detected that with fax send charging enabled, blank document detection is enabled or blank document detection display (display on KO screen) is enabled.

Procedure

Perform the steps that follow:

1. Enter [dC131](#). Set NVM value 850-021 to 0 to disable fax send charging or set NVM values 820-123 and 790-670 to 0.
2. Switch off, then switch on the machine, [GP 10](#).

121-325 ICCR and Panel Setting Confliction RAP

121-325 ICCR and panel auth setting confliction.

Procedure

For information only. No service actions necessary.

121-328 to 121-332, 341, 342, 343 EP Communication Fail RAP

117-328 Cannot detect the connection of related products or there is no response from the transmission path, or protocol error.

117-329 A communications error was detected during transmission of the message change answer.

117-330 The disconnect boot of related products in the product is not the correct specification.

117-331 Related products settings contradiction.

117-332 The wake command from this machine to related products has elapsed.

117-341 Undefined accessory information was detected in the wake up answer message.

117-342 fatal error of related products in the job disable message.

117-343 fatal error of related products in the accessory status message.

Procedure

For information only. No service actions necessary.

121-339 Price Table Error RAP

117-339 EPA unit price table error.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer to correct the unit price settings in the coin kit. Switch off, then switch on the machine, **GP 10**.
2. If the fault persists:
 - a. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
 - b. Reload the software, **GP 4**.
 - c. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

121-340 EP Accessory MisMatch RAP

117-340 The combination of accessories that are installed does not match the specifications.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Make any accessories are installed correctly and are the correct specification.
2. Switch off, then switch on the machine, **GP 10**.
3. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Reload the software, **GP 4**.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

123-310 to 123-353 UI Error 1 RAP

123-310 The data sent from the UI to the controller exceeded the upper limit for the processing capability.

123-311 The data received from the controller exceeded the upper limit for the processing capability in the UI.

123-312 The data received from the controller has exceeded the upper limit of the processing capability in the UI.

123-325 The specified UI internal object could not be created due to a setting/specification error. UI-SW failure in the ESS PWB.

123-326 The memory in the GUAM exceeded the upper limit.

123-333 The H/W connection in the UI is faulty or the internal connection could not be correctly detected.

123-343 UI-SW failure in the ESS PWB.

123-344 UI-SW failure in the ESS PWB.

123-350 MCW panel one-touch key fail.

123-352 An error internal to the con-panel (an abnormal value in EEPROM for Sys) has been detected.

123-343 UI-SW failure in the ESS PWB.

123-344 UI-SW failure in the ESS PWB.

123-350 MCW panel one-touch key fail.

123-353 The control panel has detected that the UI cable is disconnected.

Procedure

Perform the [002-500](#) UI Error RAP.

123-354 to 123-381 UI Error 2 RAP

123-354 The control panel has detected a drop in +24V power voltage.

123-355 The control panel has detected a drop in +5V power voltage.

123-356 The control panel has detected that FFC is disconnected from one touch key for fax or that one touch key has a problem.

123-357 The control panel has detected that writing in the EEPROM has failed.

123-358 The control panel has detected that writing in the EEPROM for logging failed.

123-362 UI-SW failure in the ESS PWB.

123-368 There is insufficient memory or the connection failed.

123-369 UI-SW failure in the ESS PWB.

123-371 The parameter sent from the controller was incorrect.

123-374 The job ID parameter sent from the controller was incorrect.

123-377 UI-SW failure in the ESS PWB.

123-379 UI-SW failure in the ESS PWB.

123-380 UI-SW failure in the ESS PWB.

123-381 UI-SW failure in the ESS PWB.

Procedure

Perform the [002-500](#) UI Error RAP.

123-382 to 123-399 UI Error 3 RAP

123-382 UI-SW failure in the ESS PWB.

123-383 UI-SW failure in the ESS PWB.

123-384 UI-SW failure in the ESS PWB.

123-389 UI-SW failure in the ESS PWB.

123-390 UI-SW failure in the ESS PWB.

123-392 UI-SW failure in the ESS PWB.

123-393 UI-SW failure in the ESS PWB.

123-395 UI-SW failure in the ESS PWB.

123-396 UI-SW failure in the ESS PWB.

123-397 UI-SW failure in the ESS PWB.

123-398 UI-SW failure in the ESS PWB.

123-399 UI-SW failure in the ESS PWB.

Procedure

Perform the 002-500 UI Error RAP.

124-310, 311, 314, 316, 318, 322, 324, 344, 380 DC132 Error RAP

124-310 Product number not specified.

124-311 Serial number not specified.

124-314 Stored data mismatch.

124-316 Stored data mismatch.

124-318 Stored data mismatch.

124-322 Stored data mismatch.

124-324 All billing counter mismatch.

124-344 All the billing meter types kept at multiple locations are different.

124-380 The CRUM destinations stored in three positions match, but their values are not set (0).

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. If the fault persists, install a new components as necessary:
 - Drive PWB, **PL 1.10 Item 4**
 - ESS PWB, **PL 3.10 Item 6**.

124-312, 124-357 DC132 Error 12 RAP

124-312 Stored data mismatch. The product number did not match.

124-357 Product number 1 point mismatch.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. The fault persists.

Y	N
	Perform SCP 5 Final Actions.

Enter **dC132** Device ID and Billing Data. The 3 values match.

Y	N
	Perform dC132 . Make all three values the same.

Perform Software Loading via the Special Boot Menu, **GP 4**.

If the fault persists, install a new components as necessary:

- ESS PWB, **PL 3.10 Item 6**.
- Drive PWB, **PL 1.10 Item 4**

124-313, 124-356 DC132 Error 10 RAP

124-313 Stored data mismatch. The serial numbers do not match.

124-356 Serial number 1 point mismatch.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. **The fault persists.**

Y **N**
| Perform **SCP 5** Final Actions.

Enter **dC132** Device ID and Billing Data. **The 3 values match.**

Y **N**
| Perform **dC132**. Make all three values the same.

Perform Software Loading via the Special Boot Menu, **GP 4**.

If the fault persists, install a new components as necessary:

- ESS PWB, **PL 3.10 Item 6**.
- Drive PWB, **PL 1.10 Item 4**

124-315, 317, 355 DC132 Error 02, 04 and 14 RAP

124-315 Stored data mismatch. Internal control error was detected.

124-317 Stored data mismatch. Internal control error was detected.

124-355 At least one set of territory information at the 3 locations is different.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. **The fault persists.**

Y **N**
| Perform **SCP 5** Final Actions.

Enter **dC131** Compare NVM values 700-600, 700-601 and 700-602. **The 3 values match.**

Y **N**
| Perform **dC132**. Make all three values the same.

Perform Software Loading via the Special Boot Menu, **GP 4**.

If the fault persists, install a new components as necessary:

- ESS PWB, **PL 3.10 Item 6**.
- Drive PWB, **PL 1.10 Item 4**

124-319 DC132 Error 08 RAP

124-319 Stored data mismatch. Internal control error was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. **The fault persists.**

Y **N**
Perform **SCP 5** Final Actions.

Enter **dC131**. Compare NVM values 700-606, 700-607 and 700-608. **The 3 values match.**

Y **N**
Perform **dC132**. Make all three values the same.

Perform Software Loading via the Special Boot Menu, **GP 4**.

If the fault persists, install a new components as necessary:

- ESS PWB, **PL 3.10 Item 6**.
- Drive PWB, **PL 1.10 Item 4**

124-320 SEEPROM Fail RAP

124-320 Write error occurred in the SEEPROM on the ESS PWB.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

124-321 Backup SRAM Fail RAP

124-321 Write error occurred in the NVM on the ESS PWB.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Ensure that the fax PWBs, **PL 20.05** are installed correctly.

NOTE: Line 2 and 3 fax PWBs are options.

4. Reload the software, **GP 4**.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

124-323 DC132 06 RAP

124-323 Internal control error was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. **The fault persists.**

Y **N**
Perform **SCP 5** Final Actions.

Enter **dC131**. Compare NVM values 700-603, 700-604 and 700-605. **The 3 values match.**

Y **N**
Perform **dC132**. Make all three values the same.

Perform Software Loading via the Special Boot Menu, **GP 4**.

If the fault persists, install a new components as necessary:

- ESS PWB, **PL 3.10 Item 6**.
- Drive PWB, **PL 1.10 Item 4**

124-325 Billing Restoration Fail RAP

124-325 Billing counter mismatch (1 position).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. The fault persists.

Y **N**
| Perform **SCP 5** Final Actions.

Enter **dC132** Device ID and Billing Data. The 3 values match.

Y **N**
| Perform **dC132**. Make all three values the same.

Perform Software Loading via the Special Boot Menu, **GP 4**.

If the fault persists, install a new components as necessary:

- ESS PWB, **PL 3.10 Item 6**.
- Drive PWB, **PL 1.10 Item 4**

124-326 IOT Speed Not Registered RAP

124-326 IOT Speed not registered.

Procedure

Advise the customer to follow the instructions on the UI in order to enter the SW key for changing IOT speed.

124-327 IOT Speed Change Fail RAP

124-327 A SW error was detected during the procedure for changing IOT speed.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, **GP 4**.
4. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

124-328 Punch Unit User Initial Set Up RAP

124-328 Punch unit user initial installation screen displayed.

Procedure

Have the customer select the punch unit according to the instruction on the UI.

124-331 to 124-339 ESS ROM DIMM RAP

124-331 The system detected that the ESS ROM DIMM #1 was not installed.

124-333 An error was detected in the Panther.

124-334 An error was detected in the standard built-in font ROM.

124-335 The installation of the font ROM was not detected.

124-337 An error was detected in the ESS built-in standard RAM.

124-338 The system detected that a duplicate font ROM was installed.

124-339 The system detected that the ROM DIMM for another model was installed.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

124-340, 360, 390 CRUM Market Fail All RAP

124-340 The CRUM destinations stored in three positions match but their values are not set (0).

124-360 The CRUM enable/disable settings stored in three positions match but their values are not set (0).

124-390 The CRUM OEM destinations stored in three positions match but their values are not set (0).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the fault persists, install a new drive PWB, [PL 1.10 Item 4](#).

124-341, 351, 361, 381, 391 CRUM Market Fail RAP

124-341 One of CRUM destinations is different from the others (IOT).

124-351 One of CRUM OEM destinations is different from the others (IOT).

124-361 One of CRUM Enable/Disable settings is different from the others (IOT).

124-381 One of CRUM destinations is different from the others (IOT).

124-391 One of CRUM OEM destinations is different from the others (IOT).

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Enter **dC132** Device ID and Billing Data. Make all three values the same.
3. If the fault persists, install a new drive PWB, **PL 1.10 Item 4**.

124-342, 343, 352, 353, 362, 363, 382, 383, 392, 393 CRUM Market Fail SYS 1 RAP

124-342 One of CRUM destinations is different from the others (SYS 1).

124-343 One of CRUM destinations is different from the others (SYS 2).

124-352 One of CRUM OEM destinations is different from the others (SYS 1).

124-353 One of CRUM OEM destinations is different from the others (SYS 2).

124-362 One of CRUM enable/disable settings is different from the others (SYS 1).

124-363 One of CRUM enable/disable settings is different from the others (SYS 2).

124-382 One of CRUM destinations is different from the others (SYS 1).

124-383 One of CRUM destinations is different from the others (SYS 2).

124-392 One of CRUM OEM destinations is different from the others (SYS 1).

124-393 One of CRUM OEM destinations is different from the others (SYS 2).

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. **The fault persists.**

Y N

Perform **SCP 5** Final Actions.

Enter **dC132** Device ID and Billing Data. Make all three product numbers the same. **The fault persists.**

Y N

Perform **SCP 5** Final Actions.

Reinstall the SD card, **PL 3.10 Item 11**. **The fault persists.**

Y N

Perform **SCP 5** Final Actions.

Install a new SD card, **PL 3.10 Item 11**. **The fault persists.**

Y N

Perform **SCP 5** Final Actions.

Install a new ESS PWB, **PL 3.10 Item 6**.

124-345 Billing Meter Type Restoration Fail RAP

124-345 Billing meter type fail (one mismatches the others but cannot be automatically repaired.)

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, **GP 10**. The fault persists.

Y **N**
| Perform **SCP 5** Final Actions.

Enter **dC131**. Compare NVM values 720-002 and 720-062. Both values are different.

Y **N**
| Install a new drive PWB, **PL 1.10** Item 4.

Install a new ESS PWB, **PL 3.10** Item 6.

124-346, 348, 354 Information Mismatch RAP

124-346 Billing count type fail (all the three are different from each other).

124-348 Modal break point fail (all the three are different from each other).

124-354 Territory info fail (contents corrupted, the controller PWB was replaced).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. If the fault persists, install a new components as necessary:
 - ESS PWB, **PL 3.10** Item 6.
 - Drive PWB, **PL 1.10** Item 4.

124-347 Billing Count Type Restoration Fail RAP

124-347 Billing count type fail (one mismatches the others but cannot be automatically repaired.)

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 10. The fault persists.

Y N
Perform SCP 5 Final Actions.

Enter dC131. Compare NVM values 720-052 and 720-063. Both values are different.

Y N
Install a new drive PWB, PL 1.10 Item 4.

Install a new ESS PWB, PL 3.10 Item 6.

124-349 Modal Break Point Restoration Fail RAP

124-349 Modal break point fail (one mismatches the others but cannot be automatically repaired.)

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Switch off, then switch on the machine, GP 10. The fault persists.

Y N
Perform SCP 5 Final Actions.

Enter dC131. Compare NVM values 720-057 and 720-064. Both values are different.

Y N
Install a new drive PWB, PL 1.10 Item 4.

Install a new ESS PWB, PL 3.10 Item 6.

124-350 CRUM OEM Fail RAP

124-350 All three CRUM OEM destinations are not set (0 or different values are set).

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Enter dC132 Device ID and Billing Data. Make all three product numbers the same.
3. Ensure that all connectors on the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules are securely connected.
4. Reload the software, GP 4.
5. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

124-372, 373, 374 IOT Soft Fail RAP

124-372 IOT controller software failure.

124-373 IOT manager software failure.

124-374 IOT IM device driver software failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 10.
2. Ensure that all connectors on the ESS PWB, PL 3.10 Item 6 are securely connected. Ensure all surface mounted modules are securely connected.
3. Reload the software, GP 4.
4. Perform the OF2 Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, PL 3.10 Item 6.

124-701, 702, 710 Output Tray Change RAP

124-701 The machine changed output tray from side tray to another and continued printing.

124-702 The machine changed output tray from stacker to another and continued printing.

124-710 The machine changed output tray from sorter to another and continued printing.

Procedure

Advise the customer to use the correct paper type and size for the job.

124-705, 124-706 Canceled Instructions RAP

124-705 Punching instruction was canceled and printing continued.

124-706 Folding instruction was canceled and printing continued.

Procedure

Check [dC120](#) Fault History for associated faults. Perform the relevant RAP.

124-708 Changed to Sub Tray RAP

124-708 The machine changed output tray from the selected tray to sub tray and continued printing.

Procedure

Perform the steps that follow:

1. Ensure that the customer is using the correct paper type and size for the job.
2. Check **dC120** Fault History for faults 012-231, 012-232, 012-233 or 012-234. If any of the faults is listed, perform the relevant RAP.

124-709 Stapler Sheets Counts Over Warning RAP

124-709 The number of stapler sheets exceeded and printing continued.

Procedure

For information only. No service actions necessary.

125-311 PSW Controller Unexpected Fail RAP

125-311 PSW controller software failure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Ensure that all connectors on the drive PWB, [PL 1.10 Item 4](#) and the ESS PWB, [PL 3.10 Item 6](#) are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, [GP 4](#).
4. If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

127-310 to 127-315, 342 ESS Error RAP

127-310 A fatal error occurred in ESR task.

127-311 Fatal error related to ExtPRTc.

127-312 DFE detected a video link error.

127-313 ESS detected a video link error.

127-314 ESS detected a video link error.

127-315 A problem has occurred with software processing, causing the processing to stop.

127-342 A response such as system function recall error was detected.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
3. Reload the software, **GP 4**.
4. Perform the **OF2** Special Boot Modes RAP.
5. If the fault persists, install a new ESS PWB, **PL 3.10 Item 6**.

127-320 DFE Critical Fail RAP

127-320 An error occurred in the connection to the DFE. Or the DFE needs to treat the device as SystemFail.

Procedure

Advise the customer to:

1. To take the corrective actions based on the fault code displayed in the DFE monitor, then reboot the system.
2. Check the device settings.
3. Check the connection to the DFE.
4. Check the DFE hardware.

127-353 to 127-399 Fatal Error RAP

127-353 Fatal error related to LPD.

127-354 Fatal error of FTP server was detected.

127-396 Fatal error related to mail IO.

127-398 Fatal error related to IPP.

127-399 Fatal error related to JME.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Perform the **016A** Scan to Network Error Entry RAP.

127-337 Job Template HDD Write Error RAP

127-337 An error occurred when the job template was stored on the HDD.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 10**.
2. Check the wiring between the ESS PWB, **PL 3.10 Item 6** and the hard disk.
3. Ensure that all connectors on the drive PWB, **PL 1.10 Item 4** and the ESS PWB, **PL 3.10 Item 6** are securely connected. Ensure all surface mounted modules on both PWBs are securely connected.
4. Initialise the hard disk. Refer to **dC355** Image Disk Diagnostics.
5. Reload the software, **GP 4**.
6. Perform the **OF2** Special Boot Modes RAP.
7. If the fault persists, install a new components as necessary:
 - Hard disk, **PL 3.10 Item 2**.
 - ESS PWB, **PL 3.10 Item 6**.

127-700 SIP Registration Fail RAP

127-700 An error has occurred in registering device info with the SIP registration server.

Procedure

Have the customer:

1. Check what the SIP registration server is set to on the device.
2. Check that the SIP registration server is available.

133-210 to 133-217 Fax Parameter Incorrect RAP

133-210 The parameter value was inappropriate.

133-211 The PV exceeds the range.

133-212 The specified data was not found (incorrect number or channel).

133-213 The specified data cannot be read due to reasons such as the specified data is broken.

133-214 Detected by FAPE (create instance failed).

133-215 Sent to the FAPE as an asynchronized event.

133-216 Sent to the FAPE as an asynchronized event.

133-217 Sent to the FAPE as an asynchronized event.

Procedure

Perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

133-218 Fax Card Message Memory RAP

133-218 Insufficient fax card message library memory.

Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 10](#).
2. Reload the software, [GP 4](#).

133-219 to 133-223 Fax Card Error 1 RAP

133-219 Due to insufficient memory, the system was unable to reserve the memory required for processing.

133-220 Due to an error during fax controller software processing, subsequent processes cannot be performed.

133-221 The fax card did not respond within the specified time on booting.

133-222 The fax card did not respond within the specified time.

133-223 Fax card reset.

Procedure

Perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

133-224 Controller ROM Fax Card ROM Mismatch RAP

133-224 Version mismatch between the controller ROM and the fax card ROM.

Procedure

Reload the software, [GP 4](#).

133-226 Illegal Country RAP

133-226 The code that does not provide fax service is set in the system data country code.

Procedure

Set a correct country code.

133-280 to 133-283 Fax Card Error 2 RAP

133-280 Due to either a fax card failure or fax cont SW failure, subsequent processes could not be performed.

133-281 A message not specified in the I/F settings was received from the fax card.

133-282 As downloading of fax card could not be completed due to either a fax card failure or fax cont SW failure, subsequent processes could not be performed.

133-283 Mailbox not open was detected when fax report is stored in a mailbox.

Procedure

Perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

133-700 Staple/Punch Canceled RAP

133-700 The code that does not provide fax service is set in the system data country code.

Procedure

Have the customer Change the staple/punch position or select paper according to the staple/punch position.

133-701 Replacement Character Detected RAP

133-701 Character replacement has occurred in destination name, sender name, comment, station name.

Procedure

Perform the steps that follow:

1. Have the customer set the character that can be used by referring to the User Documentation. If the customer does not know the type of letter that can be used, advise them to use only alphanumeric characters.
2. If the fault persists, perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

133-710 Tray Select Fail RAP

133-710 When printing fax-received documents, it was performed via the bypass tray since the selected tray cannot be used for fax.

Procedure

Perform the steps that follow:

1. Have the customer load the correct the paper size and type for fax printing or specify the tray for fax printing.
2. If the fault persists, perform the steps that follow:
 - a. Switch off, then switch on the machine, [GP 10](#).
 - b. Reload the software, [GP 4](#).

500-030 DC612 IOT Wait State RAP

500-030 The machine changed state during dC612.

Procedure

Allow the machine to return from the wait state, then re-run the routine.

500-033, 500-035 Diagnostic Documents RAP

500-033 The document is not loaded or the documents are not enough when a diagnostics routine is performed.

500-035 The document size is different when a Diagnostic routine is performed.

Procedure

Load the required number and size of documents, then re-run the routine.

500-990 DC612 Print Error RAP

500-990 Printing could not start due to unknown reason in dC612 test pattern print, or it was aborted.

Procedure

Re-run the routine.

OF1 POST Error RAP

Use this RAP when the UI has stalled and shows the splash-logo screen, or the system appears to have power but the UI is blank.

- Power on Self Test (POST) occurs each time the machine is powered on. POST verifies the functionality of key subsystems.
- POST begins when power is switched on before higher level machine functions (such as the user interface) are operational.
- POST is performed by the ESS PWB.
- The fault is communicated via an eight LED display on the ESS PWB. This is to help diagnose common faults which prevent the machine from powering up correctly to the point where faults are displayed and service mode can be entered.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

To check for the system power up error:

1. Switch off, then switch on the machine, [GP 10](#).
2. If the system power up sequence has failed, check the code on the eight LED display. Refer to:
 - [BSD 3.10 ESS Status LED \(1 of 5\)](#)
 - [BSD 3.11 ESS Status LED \(2 of 5\)](#)
 - [BSD 3.12 ESS Status LED \(3 of 5\)](#)
 - [BSD 3.13 ESS Status LED \(4 of 5\)](#)
 - [BSD 3.14 ESS Status LED \(5 of 5\)](#)

If the eight LED display indicates a related fault code, perform the relevant RAP. If a related fault code is not listed, Perform the [OF2 Special Boot Modes RAP](#). If the fault persists, install a new ESS PWB, [PL 3.10 Item 6](#).

OF2 Special Boot Modes RAP

Use this RAP to solve boot up errors. If directed here from another procedure, always return to that procedure.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Enter special boot mode, [GP 22](#).
2. Perform the special boot modes in the order that follows:
 - a. LONGDIAG MODE.
 - b. 01. JOB LOG CLEAR MODE.
 - c. 06. HDD INITIALIZE MODE.
 - d. 04. HDD FORMAT MODE.
 - e. 03. NVRAM INIT MODE.

Image Quality RAPs

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IQ1 Image Quality Entry RAP

Use this RAP to determine the source of an image quality problem.

Initial Actions

Refer to [Figure 1](#) for print/copy definitions.

Perform the steps that follow:

- Discuss the IQ problem with the customer to fully understand the defect and the modes in which it occurs. Produce the customer job that displays the customer's IQ defect.
- Check the condition of the paper. Do not use incorrectly cut paper, damp paper, paper with rough edges, badly drilled paper, paper with wrapper wax or glue. Paper and media should be stored flat, enclosed in wrappers, in a cool dry environment.
- Check that the paper is within specifications, [GP 15](#).
- Check that paper tray guides are set to the correct paper size.
- Check that the document guides on the DADF are set correctly.
- Use the cleaning assembly, [PL 28.05 Item 4](#), stored in the front cover, [PL 28.05 Item 5](#), to clean each of the 4 print head assemblies, [PL 60.35 Item 1](#).
- Ensure that the image adjustment mode selections are those used by the customer.
- Check the original documents for defects.
- If image density has degraded, perform [ADJ 90.2](#) Marking Refresh.
- Perform [ADJ 90.3](#) Color Calibration - Automatic.

Procedure

Enter [dC612](#) Print Test Patterns. Select a suitable test pattern (pattern 51 Total Chart recommended). Select simplex. Select quantity 3. Select Start Test. **The printed image of the second print is good, with reference to [IQS 1](#) Color Reproduction.**

Y N
Place the test pattern 82E13120 face up in the DADF input tray. Check the document guides on the DADF are set to just touch the test pattern. Make a duplex scan to USB file. View the resultant file on a computer screen. **The file image for side 1 is good.**

Y N
Go to the [IQ28](#) DADF, Document Glass and Scanner RAP.

Produce the customer job that displays the customer's IQ defect. **The image quality fault persists.**

Y N
Perform [SCP 5](#) Final actions.

Enter [dC612](#) Print Test Patterns. Select the required internal test pattern, refer to [Table 1](#). Select simplex. Select Start Test. **The printed image of the internal test pattern is good.**

Y N
Perform the [IQ2](#) IOT IQ Defects RAP.

Check the back of the prints for toner contamination. **The back of the prints are clean.**

Y N
Perform the [IQ2](#) IOT IQ Defects RAP.

A B
Select a suitable duplex internal test pattern. Select duplex. Select Start Test. **The printed images of the internal test pattern are good.**

Y N
Perform the [IQ2](#) IOT IQ Defects RAP.

Check the prints for damage. **The prints are good.**

Y N
Perform the [IQ26](#) Print Damage RAP.

If a fax module is installed, send a test fax to the machine. **The fax image quality is good.**

Y N
Compare the fax print with an internal test pattern print. **The fax print and the internal test pattern print display the same defect.**

Y N
Perform the [IQ27](#) Unacceptable Received Fax Image Quality RAP.

Perform the [IQ2](#) IOT IQ Defects RAP.

No specific image quality defect has been identified. If necessary, modify the print quality to meet the customer requirements.

Make a simplex scan to USB file of test pattern 82E13120 from the document glass. Ensure that the test pattern is correctly registered against the document guides and is not disturbed when the DADF is lowered. View the resultant file on a computer screen. **The file image is good.**

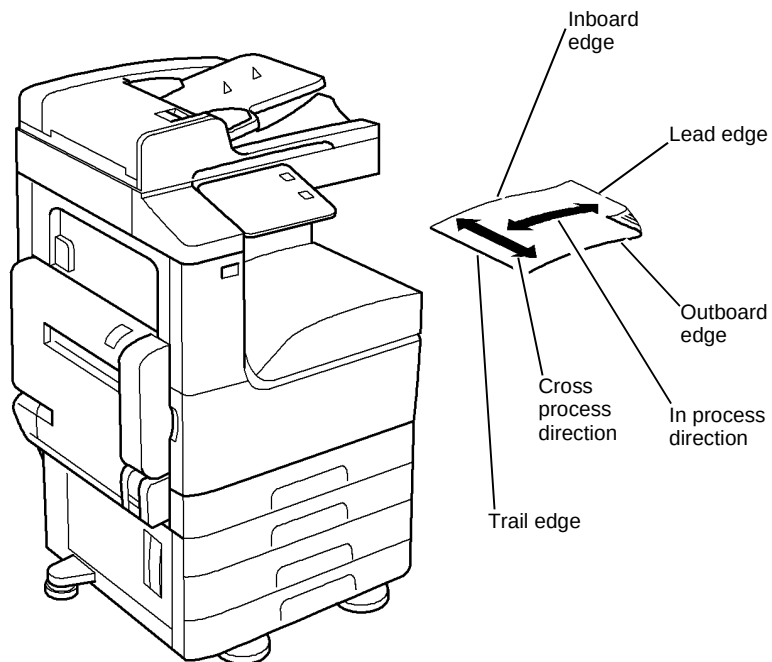
Y N
Perform the [IQ28](#) Document Glass and Scanner IQ Defects RAP.

Place the test pattern 82E13120 face down in the DADF input tray. Check the document guides on the DADF are set to just touch the test pattern. Make a duplex scan to USB file. View the resultant file on a computer screen. **The file image for side 2 is good.**

Y N
Perform the [IQ28](#) Document Glass and Scanner IQ Defects RAP.

No specific image quality defect has been identified. If necessary, modify the print quality to meet the customer requirements.

A B



C-1-0431-A

Figure 1 Print/copy definitions

IQ1 Internal Test Patterns

Table 1 describes the test patterns and the purpose for which they should be used to identify image quality defects. To access internal test patterns, refer to dC612 Print Test Pattern.

If the settings for a test pattern are wrong, the message appears: 'Invalid parameter. Please re-enter'. and the Print Test Pattern cannot be performed. In this case, change the settings to ensure that they match the requirements listed in Table 1, and repeat the test print.

Test patterns 1-11 are IOT patterns. Test patterns 51 and above are Controller patterns. Ensure that the correct Screen settings are made for either IOT or controller.

The Paper Supply setting shows both which tray is selected, and the paper size for that tray. For best results, select tray to match listed paper size.

For Cin%, leave setting a 0% unless a range is specified. Where a range is specified, the lower the number entered, the lighter the test patter print will be.

Table 1 Internal test patterns

Internal Test Pattern Number	Name	Intended Use	Paper Supply Paper Size	Paper Supply Paper Tray	Output Color	Cin%	Screen	1-Sided/ 2-Sided
1	Grid	Used for isolating problems (cannot be used for registration adjustment)	Not Fixed	1-4, Bypass	Any		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	Any Default is 1-sided
2	A1 Patch Pattern	For visual checking of Registration Control A1 Patch	Not Fixed	1-4, Bypass	Full Color		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	Any Default is 1-sided
3	B Patch Pattern	For visual checking of Registration Control B Patch	Not Fixed	1-4, Bypass	Full Color		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	Any Default is 1-sided
4	C Patch Pattern	For visual checking of Registration Control C Patch	Not Fixed	1-4, Bypass	Full Color		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	Any Default is 1-sided
5	Full Halftone	For defect detection/shipment inspection (discharge carbon fiber)	A3	1-4, Bypass	Any	1% to 100%	150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	Any Default is 1-sided
6	Procon Patch Y Color	Process Control, Gradation, Defect detection (Y color)	A3	1-4, Bypass	Yellow		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	1-sided

Table 1 Internal test patterns

Internal Test Pattern Number	Name	Intended Use	Paper Supply Paper Size	Paper Supply Paper Tray	Output Color	Cin%	Screen	1-Sided/ 2-Sided
7	Procon Patch M Color	Process Control, Gradation, Defect detection (M color)	A3	1-4, Bypass	Magenta		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	1-sided
8	Procon Patch C Color	Process Control, Gradation, Defect detection (C color)	A3	1-4, Bypass	Cyan		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	1-sided
9	Procon Patch K Color	Process Control, Gradation, Defect detection (K color)	A3	1-4, Bypass	Black (Color)		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	1-sided
10	LPH Chart LM	For LPH line detection	A3	1-4, Bypass	Full Color		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	1-sided
11	LPH Chart IBY	For LPH line detection and for identifying causes of Video data failure	A3	1-4, Bypass	Full Color		150 Dot, 200 Dot, 200 Line, 300 Dot, 600 Dot	1-sided
51	Total Chart	For detection. For adjustment in the market/determining problems. This chart is the same as TCMC. Resolution is 600 dpi	A3	1-4, Bypass	Full Color Black (Mono)		Standard Fineness Special Usage	Any Default is 1-sided
52	Binary C-TRACS Check PG (Print)	For Gradation Correction. Gradation pattern for gradation correction for Print	A4	1-4, Bypass	Full Color		Standard Fineness Special Usage	1-sided
53	Binary Procon PG	For gradation, defect detection	A4	1-4, Bypass	Full Color		Standard Fineness Special Usage	1-sided
54	Multi-value C-TRACS Check PG (Print)	For Gradation Correction. Gradation pattern for gradation correction for Print	A4	1-4, Bypass	Full Color		Standard Fineness Special Usage	1-sided
55	Multi-value Procon PG	For gradation, defect detection	A4	1-4, Bypass	Full Color		Standard Fineness Special Usage	1-sided
56	SDTP123600 (Black Grid)	For shipment inspection	A3	1-4, Bypass	Full Color Black (Mono)		Standard Fineness Special Usage	Any Default is 1-sided
57	Full Halftone	For defect detection	A3	1-4, Bypass	Any	1% to 100%	Standard Fineness Special Usage	Any Default is 1-sided
58	Ladder Pattern	For defect detection/banding	A3	1-4, Bypass	Full Color Black (Mono)		Standard Fineness Special Usage	Any Default is 1-sided
59	Drum Pitch Halftone	For defect detection/shipment inspection. This chart is the same as CKGM 50%	A3	1-4, Bypass	Full Color		Standard Fineness Special Usage	Any Default is 1-sided
60	Production Banding Chart	For shipment inspection	A3	1-4, Bypass	Full Color		Standard Fineness Special Usage	Any Default is 1-sided
61	HT60M Ladder	For defect detection/banding (magenta)	A3	1-4, Bypass	Magenta		Standard Fineness Special Usage	Any Default is 1-sided

Table 1 Internal test patterns

Internal Test Pattern Number	Name	Intended Use	Paper Supply Paper Size	Paper Supply Paper Tray	Output Color	Cin%	Screen	1-Sided/ 2-Sided
62	HT60C Ladder	For defect detection/banding (cyan)	A3	1-4, Bypass	Cyan		Standard Fineness Special Usage	Any Default is 1-sided
63	HT60K Ladder	For defect detection/banding (black (K))	A3	1-4, Bypass	Black (Mono) Black (Color)		Standard Fineness Special Usage	Any Default is 1-sided
64	MQ-ALL	For evaluating pixel position	A3	1-4, Bypass	Full Color		Standard Fineness Special Usage	Any Default is 1-sided
65	SIQA_IN_OUT Adjustment (Primary Color) Chart	For gradation correction	A3	1-4, Bypass	Full Color Black (Mono)		Standard Fineness Special Usage	Any Default is 1-sided
66	SIQA_IN_OUT Adjustment (Secondary/Process Color) Chart	For gradation correction	A3	1-4, Bypass	Full Color Black (Mono)		Standard Fineness Special Usage	Any Default is 1-sided
68	LPH Line Chart	For line defect detection. This chart is the same as CKGM 60%	A3	1-4, Bypass	Full Color Black (Mono)		Standard Fineness Special Usage	Any Default is 1-sided
71	No Paper Run	For specifying the DC710 No Paper Run function	A4	Tray 1 only	Full Color Black (Mono)			1-sided
72	SDTP957A3S600		A3	1-4, Bypass	Full Color Black (Mono)		Standard Fineness Special Usage	Any Default is 1-sided
92	DC940 (Procon On/Off Print#3)	Print mode that uses the current Procon Data with the Procon (Process Control)	A3	1-4, Bypass	Full Color		Standard Fineness Special Usage	1-sided
102	Process Control PG/Binary		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	
104	Auto Gradation Correction/Binary	For Document Creation		1-4, Bypass	Full Color		Copy Error Diffusion	
106	Calibration/Binary	For Gradation check	Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
108	Highlight PG/Binary		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
113	Pre IPS/FS Increment RGB		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
117	Pre IPS/SS Increment RGB		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
122	Pre IPS/Shading Data Color		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
124	Pre IPS/YMCK Vertical Streak		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided

Table 1 Internal test patterns

Internal Test Pattern Number	Name	Intended Use	Paper Supply Paper Size	Paper Supply Paper Tray	Output Color	Cin%	Screen	1-Sided/ 2-Sided
125	Pre IPS/8 Shades Patch		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
126	Pre IPS/Solid		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
127	Post IPS/Grid/4C		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
128	Post IPS/Grid/BW		Not Fixed	1-4, Bypass	Black (Color)		Copy Error Diffusion	1-sided
129	Post IPS/FSRE/Grid		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
130	Post IPS/FSRE/Slanting Grid		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
168	Copy ED 24 Shades Patch FC1		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
169	Copy ED 24 Shades Patch FC2		Not Fixed	1-4, Bypass	Full Color		Copy Error Diffusion	1-sided
170	Copy ED 24 Shades Patch BW		Not Fixed	1-4, Bypass	Black (Mono)		Copy Error Diffusion	1-sided

IQ2 IOT IQ Defects RAP

Use this RAP to resolve image quality defects produced in the IOT.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Procedure

Refer to **Table 1**, then perform the appropriate action.

Table 1 IQ defects

Image Quality Defect	Subsystem	Symptom	Action
2.5mm (0.1 inch) diagonal streaks	Xerographics	Diagonal streaks may occur due to BCR (bias charge roll) flow coating unevenness.	Install a new relevant drum cartridge, PL 90.20 .
3mm pitch line	Transfer	Lines occur at the rib pitch interval of holder DTS.	Perform the IQ18 In Process 3mm Pitch Line RAP.
Background	Xerographics	The whole page or part of the page is contaminated by toner. The contamination appears as very light grayish color.	Perform the IQ23 Background RAP.
Banding (print head assembly periodical line)	LED printhead assembly	Narrow banding in the process direction, approximately 10.7mm (0.4 inch) apart, for any of the four colors.	Install a new relevant print head assembly, PL 60.35 Item 1 .
BCR pitch 38mm (1.5 inches) density unevenness	Xerographics	Charging failure occurs in weak contact parts which lowers the surface potential and the density of the half-tone image darkens with a BCR pitch (38mm/1.5 inches).	Perform the IQ3 White Streaks, Spots or Unevenness in BCR Pitch Axial Direction RAP.
Caterpillar mark	Transfer	Removal of electricity with dielectric material is performed in the charged state after the paper discharges the secondary transfer part. If the adhesion of the toner to the paper is weak and the amount of electricity removal is big, the toner image scatters and a round shaped pattern appears continuously in the vertical direction.	Perform the IQ13 Caterpillar Mark (Transfer) RAP.
Circular stamping marks	Transfer	When paper is peeled off by the secondary transfer, the toner which is not fused on the sheet is scattered in a semicircular arc.	Perform the IQ16 Circular Stamping Marks RAP.
Color streaks	Transfer	Presence of paper dust in between the intermediate transfer belt and the cleaner blade causes poor cleaning.	Perform the IQ12 Color Streaks RAP.
Cross ghost	Transfer	Streaks in the cross process direction that occurs after 94.5mm (3.7 inches) in high image density images of upstream engine (Y color, M color)	Perform the IQ20 Cross Process Ghosting RAP.
Dark lines	Xerographics	Fine lines in the cross process direction due to abnormal electric discharge between BCR and the photo receptor.	Perform the IQ5 Dark Lines RAP.
DC charging ghosting	Xerographics	As DC charging has weak charging capability compared to AC charging, ghosting may worsen with the environment or paper. Also see residual image (ghosting).	Perform the IQ22 DC Charging Ghosting RAP.
Deletions	Xerographics	Part of the image is missing.	Perform the IQ24 Deletions RAP.
Heat haze/mock heat haze	Transfer	A scattering of toner around solid patches.	Perform the IQ14 Heat Haze/ Mock Heat Haze RAP.
Kiss marks	Transfer	As system resistance of the primary transfer is high, the charge voltage of the primary transfer to the toner on the Photoreceptor is increased, causing kiss-shaped discharge marks.	Perform the IQ15 Kiss Marks RAP.

Table 1 IQ defects

Image Quality Defect	Subsystem	Symptom	Action
Line color of photo receptor pitch (94.5mm)	Xerographics	Vibrations during the drum transportation may cause scrapes and friction in the BCR and the photoreceptor, resulting in leftover electrostatic memory on the photoreceptor, which generates thin white streaks in the cross process direction on the highlight portion at the photoreceptor pitch.	Perform the IQ4 Color Line of Photoreceptor Pitch in the Cross Process Direction RAP.
Line or spots appear at regular intervals on prints	Other	Fault or dirt on one of the IBT belt, fusing, or exit components.	Perform the IQ32 Repeated Defects RAP.
Micro white spots (Side 2)	Transfer	When the resistance in the secondary transfer section is high, e.g. in the early mornings (low humidity environment), the transfer latitude between multi color and mono color is narrow and the setting voltage favors multi color. In other words, the voltage is a little high for mono color, and this causes the Transfer NIP discharge phenomenon that creates the white spots.	Perform the IQ11 Micro White Spots (Side 2) RAP.
Missing color from image	Other	Paper is missing one color completely.	Perform the IQ31 Missing Color from Image RAP.
Multi color transfer failure	Transfer	Paper that has had its side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. As the resistance in the secondary transfer increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment). This setting controls the micro white spots within the limit.	Perform the IQ10 Multi Color Transfer Failure RAP.
Print damage	Other	The prints have nicks, tears, creases, folds, curled edges or wrinkles.	Perform the IQ26 Print Damage RAP
Poor resolution	LED printhead assembly	Images appear out of focus	Remove, clean and re-seat the LED printhead assemblies (4).
Residual image (ghosting)	Xerographics	Ghost images appear on the paper. Parts of the previous page or current page may appear as ghost images on the paper. Also see DC charging ghosting.	Perform the IQ21 Residual Image (Ghosting) RAP.
Reverse dark lines	Transfer	Phenomenon of part of the solid patch of K-color having partial dark lines (multiple) at the FS direction. Toner charge amount before secondary transfer is insufficient causing transfer failure.	Perform the IQ17 Reverse Dark Lines RAP.
Rough black	Transfer	On paper that is not flat or has poor hue, the toner may not have been transferred properly due to the irregular paper surface, creating a rough transferred image.	Perform the IQ8 Rough Black RAP.
Scalelike defect	Transfer	Removal of electricity with diselectrification material is performed in the charged state after the paper discharges the secondary transfer part. If the adhesion of the toner to the paper is weak and the amount of electricity removal is big, the toner image scatters and semicircle shaped pattern appears.	Perform the IQ19 Scalelike Defect (Transfer) RAP.
Skew	Xerographics	Printed images are not parallel to the edges of the paper.	Perform the IQ25 IOT Skew RAP.
Smear	Transfer	When the lead edge of paper reaches the secondary transfer, it immediately increases the secondary transfer section load and causes the IBT drive roll speed to change (decrease in speed). This change in speed changes the difference in relative speed between the photoreceptor and the IBT belt surface in the K-color primary transfer section, hence creating a smear (distorted image).	Perform the IQ7 Smear RAP.
Solid color in prints	Other	Paper is printed solidly on one of the colors	Perform the IQ30 Solid Color in Prints RAP.
Toner contamination at lead/tail edge	Transfer	Lead Edge: Paper lead edge contacts the belt when it is transported from registration to transfer. Tail Edge: The tail edge of the paper that loops between the transfer-fusing sections, at the release of the secondary transfer NIP, moves opposite to the feed direction and contacts the 2nd BTR surface, or bounds up and contacts the belt	Perform the IQ9 Toner Contamination at Lead or Trail Edge RAP.
Toner droplet contamination	Developer	A contamination consisting of random spatters of toner in sizes of a few millimeters.	Perform the IQ6 Toner Droplet Contamination RAP.
Transfer wrinkle	PH, transfer	Paper wrinkles occur between registration-transfer and transfer voids occur.	Check the paper in the Tray for moisture. Use fresh paper.

Table 1 IQ defects

Image Quality Defect	Subsystem	Symptom	Action
Unfused image	Fusing	Printed images are not correctly fused onto the paper. When rubbed, the image comes off easily.	Perform the IQ27 Unfused Copy/Toner Offset RAP.
White streaks, spots or unevenness in BCR (38mm/1.5 inches) pitch axial direction	Xerographics	If the BCR is deformed at the BCR and photoreceptor NIP sections, the trace may appear as thin white streaks in the cross process direction on the highlight portion at the charging roll pitch.	Perform the IQ3 White Streaks, Spots or Unevenness in BCR Pitch Axial Direction RAP.
White spots in BCR (bias charge roll) pitch 38mm (1.5 inches) apart in axial direction.	Xerographics	If the substances contained in the cleaner roll get stuck to the BCR at the BCR and cleaner roll NIP sections, the resistance on the BCR gets reduced and may cause the appearance of white streaks in the cross process direction.	Perform the IQ3 White Streaks, Spots or Unevenness in BCR Pitch Axial Direction RAP.

IQ3 White Streaks, Spots or Unevenness (38mm/1.5 inches) in the Cross Process Direction RAP

Perform this RAP if the prints have white streaks, spots or unevenness in the cross process direction at 38mm (1.5 inches) intervals.

In the BCR (bias charge roll) and photoreceptor nip sections, when BCR deformation remains, thin white streaks in the cross process direction at the BCR pitch occur. These streaks may occur after storage in low temperature/humidity environment.

If the substances contained in the cleaner roll get stuck to the BCR at the BCR and cleaner roll NIP sections, intermittent white spots may occur at the BCR pitch. These spots may occur when the machine has been resting for a long time or in the early mornings.

Unevenness from charging failure occurs in weak contact parts which lowers the surface potential and the density of the half-tone image darkens with a BCR pitch.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Enter **dC612** Print Test Pattern. Print test patterns 6 to 9. Check which color has the image quality defect.
2. If the defect appears in a color, make 30 full color copies of a test pattern. If the defect appears only in black, make 30 black and white copies of a test print.
3. If the image quality defect remains, install a new drum cartridge of the relevant color, **PL 90.20**.

IQ4 Color Line of Photoreceptor Pitch (94mm/3.7 inches) in the Cross Process Direction RAP

Perform this RAP if the prints have a color line in the cross process direction at 94mm (3.7 inches) intervals.

From the vibration in the drum cartridge or moving unit, a frictional charge is created by the position of BCR, cleaner blade that touches the photo receptor and creates a dark line of photo receptor pitch (approximately 94mm/3.7 inches).

This problem may occur after installation of a new drum cartridge.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Procedure



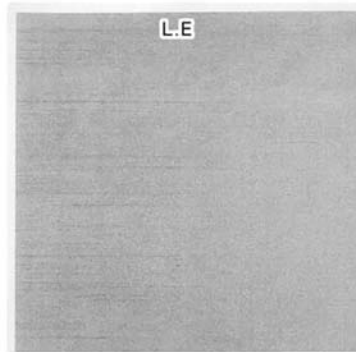
Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Enter **dC612** Print Test Pattern. Print test pattern 5. Check that lines with 94mm (3.7 inches) pitch appear in the cross process direction.
2. If the defect appears in a color, make 30 full color copies of a test pattern. If the defect appears only in black, make 30 black and white copies of a test print.
3. If the image quality defect remains, install a new drum cartridge of the relevant color, **PL 90.20**.

IQ5 Dark Lines RAP

Perform this RAP if dark lines appear in the cross process direction on half-tone images. This is a unique phenomenon of a charged DC by BCR. Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0658-A

Figure 1 Example

Cause

Uneven DC charge of the BCR.

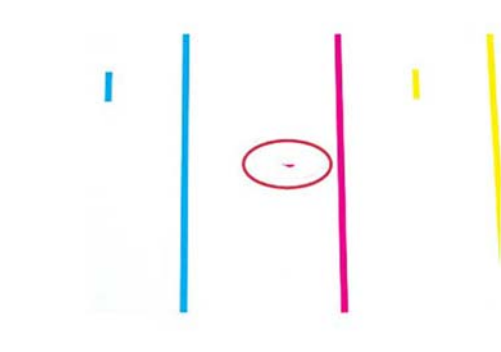
Procedure

1. Enter [dC612](#) Print Test Pattern. Print test pattern 5.
2. If thin, dark lines appear randomly, enter [dC131](#). Set the value of NVM location 740-205 to 1 (on).

IQ6 Toner Droplet Contamination RAP

Perform this RAP if the prints have contamination consisting of random spatters of toner in sizes of a few millimeters. Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0659-A

Figure 1 Example

Cause

When the developer unit cover is badly contaminated. The cover is likely to be contaminated when there are rapid changes in humidity or a certain amount of low and high density images are copied repeatedly.

Procedure

1. Check if there is extreme contamination of developer unit or drum cartridge on any of the four colors. If contamination is present, clean as necessary.
2. If the image quality defect remains after cleaning, install new components as necessary:
 - Relevant developer unit, [PL 90.05](#).
 - Relevant drum cartridge, [PL 90.20](#).

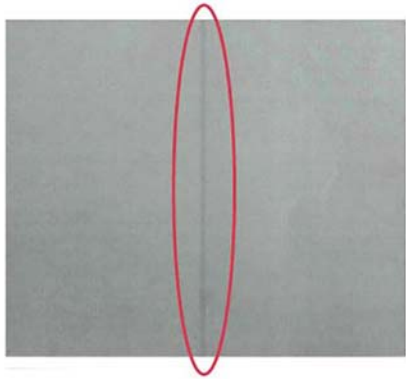
IQ7 Smear

Perform this RAP when prints have a line in the in the cross process direction 125mm (4.9 inches) away from the lead edge, primarily on heavyweight paper. Refer to [Figure 1](#).

When the lead edge of paper reaches the secondary transfer, it immediately increases the secondary transfer section load and causes the IBT drive roll speed to change (decrease in speed).

This change in speed changes the difference in relative speed between the photoreceptor and the IBT belt surface in the K-color primary transfer section, hence creating a smear (distorted image). This occurs in the BW mode for heavyweight paper

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0660-A

Figure 1 Example

Procedure

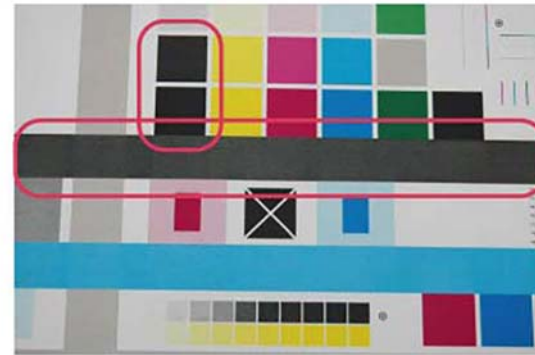
1. Enter [dC612](#) Print Test Pattern. Print test pattern 5. If the print has a line in the in the cross process direction 125mm (4.9 inches) away from the lead edge, enter [dC131](#). Set the NVM values that follow:
 - 740-033 (Plain Paper B Smear Countermeasure SW) to 1.
 - 740-034 (Plain Paper E Smear Countermeasure SW) to 1.
 - 740-035 (Plain Paper G Smear Countermeasure SW) to 1.
 - 740-036 (Heavyweight 1S Smear Countermeasure SW) to 1.
 - 740-037 (Heavyweight 2S Smear Countermeasure SW) to 1.

NOTE: The above NVM changes cause the IOT to operate in the FC mode, regardless of the color mode setting (color priority, BW priority, ACS) in the controller, when performing monochrome printing for the above paper types.

IQ8 Rough Black RAP

Perform this RAP if blacks appear poor. When apparent on paper that is not flat or has poor hue, the toner may not have been transferred properly due to the irregular paper surface, creating a rough transferred image. This occurs in modes other than transparencies Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0661-A

Figure 1 Example

Initial Actions

Advise the customer to change the paper or use paper with a better hue.

Procedure

1. Perform [dC1215](#) Transfer Voltage Adjustment.
 - a. While the nominal value is 0, perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
 - b. Nominal variable range: 10%/1 step. If necessary, enter [dC131](#). Adjust NVM value 746-034 as necessary.

IQ9 Toner Contamination at Lead or Trail Edge RAP

Perform this RAP if the prints have toner contamination on either the lead or trail edge. Refer to [Figure 1](#).

Toner contamination suddenly appears on the 2nd BTR or IBT belt:

- Lead Edge: Paper lead edge contacts the belt when it is transported from registration to Transfer.
- Trail Edge: The tail edge of paper that loops between the transfer-fusing sections, at the release of the secondary transfer nip, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the belt

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0662-A

Figure 1 Example

Initial Actions

Make a 1 sided print to check on which side (transfer side or side 2) the contamination occurs.

Procedure

1. Enter [dC131](#). Set the NVM values that follow:
 - 744-108 (126mm/s Plain ABC) to -40.
 - 744-109 (126mm/s Plain DEFG) to -40.
 - 744-110 (126mm/s Plain S) to 0.
 - 744-111 (126mm/s Heavyweight 1, Label 1 BW) to -20.
 - 744-112 (126mm/s Coated 1 BW) from -20 to 0.
 - 744-113 (63mm/s Heavyweight 1, Label FC) to -20.
 - 744-114 (63mm/s Coated 1 FC) to 0.
 - 744-115 (63mm/s Heavyweight 2, Label 2, Envelope) to 0.
 - 744-116 (63mm/s Coated 2) to 0.

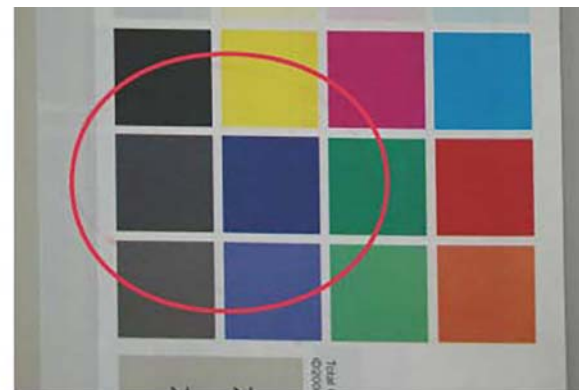
NOTE: If the fusing unit heat roll speed is changed, paper wrinkle, wetting or caterpillar marks may occur.

IQ10 Multi Color Transfer Failure RAP

Paper that has had side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. Refer to [Figure 1](#).

Since the resistance in the secondary transfer section also increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0663-A

Figure 1 Example

Cause

Due to the characteristics of the EA-ECO toner, high Rsys (in the early morning low temperature and low humidity environment) requires a transfer voltage for the areas where multiple transfers and MWS cannot be used at the same time.

Because the machine is adjusted for multiple transfer priority by default, micro white spots may be visible from side 1.

Initial Actions

1. Verify that the hue on side 2 becomes lighter when printing a high density image in a low temperature and low humidity environment.
2. Change the secondary transfer voltage setting up or down, then compare the hue to the paper with defective image.

Procedure

1. Increase the secondary transfer voltage by decreasing the single color density or by changing the permissible range for MWS.
2. Perform [dC1215](#) Transfer Voltage Adjustment.

- a. While the nominal value is 0, perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
- b. Nominal variable range: 10%/1 step. If necessary, enter **dC131**. Adjust NVM value 746-034 as necessary.

IQ11 Micro White Spots (Side 2) RAP

Perform this RAP if side 2 has small white spots. In the early morning of a low humidity environment, the resistance of the secondary transfer is high. Refer to [Figure 1](#).

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

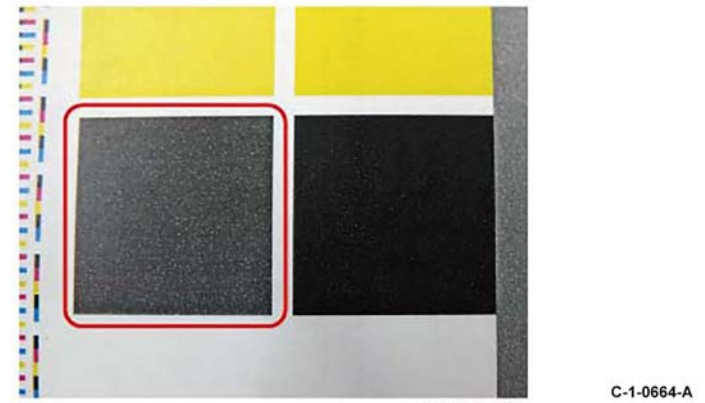


Figure 1 Example

Cause

Occurs on side 2 in a low humidity environment. Occurs due to the discharge of transfer nip as the multi-color and monochrome transfer latitude is narrow, and the set voltage of multiple colors causes excessive voltage for monochrome.

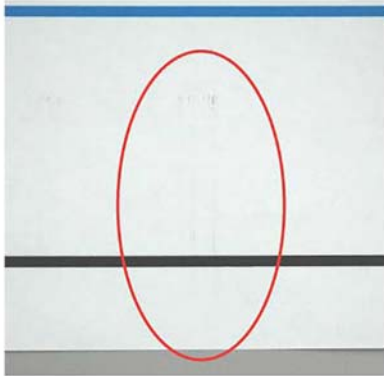
Procedure

1. Use the NVM to decrease the secondary transfer voltage as a trade-off with the multi color.
2. Perform **dC1215** Transfer Voltage Adjustment.
 - a. While the nominal value is "0", perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
 - b. Nominal variable range: 10%/1 step. If necessary, enter **dC131**. Adjust NVM value 746-034 as necessary.

IQ12 Color Streaks RAP

At Cin50% and Cin30%, the lines in the process direction have reversed black and white colors. Width is approximately 1mm. Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0665-A

Figure 1 Example

Cause

This can occur when paper that is prone to flaking is used at high relative humidity.

Initial Actions

1. Remove the IBT cleaner assembly [PL 90.45 Item 2](#) to check if foreign substances exist at the tip of the blade.
2. If the side that is opposite to the intermediate transfer belt has toner scrapes or if the color streaks disappear after the tip of the blade is cleaned, it can be identified as this problem.

Procedure

1. Enter [dC131](#). Change the NVM to change the frequency and amount of intermediate transfer belt reverse rotation.

NOTE: Default is the reverse rotation starts at job end after 70 prints.

- a. Reverse rotation switch: NVM 746-130:
 - 0: Reverse at job end
 - 1: Reverse during job
 - 2: Do not perform reverse rotation
- b. Lowering the value of reverse rotation frequency, change NVM: 746-131, 746-132 (Reverse Rotation Execution pv at Job End or Job Split) increases the frequency of reverse rotation.

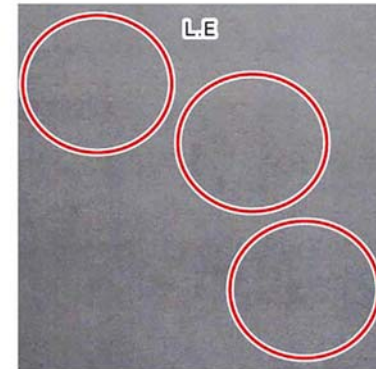
NOTE: Nominal 7000 (= 70 prints).

IQ13 Caterpillar Mark (Transfer) RAP

Removal of electricity with diselectrification material is performed in the charged state after the paper discharges the secondary transfer part. Refer to [Figure 1](#).

If the adhesion of the toner to the paper is weak and the amount of electricity removal is big, the toner scatters and a round shaped pattern appears continuously in the vertical direction.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0666-A

Figure 1 Example

Cause

This is caused by low electric charge in the toner,

Initial Actions

1. Take a sample from a half-tone image with uniformed entire surface and check by comparing with image sample.
2. Judge if this phenomenon is solved or improved by raising the secondary transfer voltage.

Procedure

1. Perform [dC1215](#) Transfer Voltage Adjustment.
 - a. While the nominal value is "0", perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
 - b. Nominal variable range: 10%/1 step. If necessary, enter [dC131](#). Adjust NVM value 746-034 as necessary.

IQ14 Heat Haze/Mock Heat Haze RAP

The heat haze/mock heat haze is generated in various places and in different ways. This can be affected by transfer of the paper path at the transfer exit. Refer to [Figure 1](#).

Mock heat haze occurrence differs according to the sampling chart.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

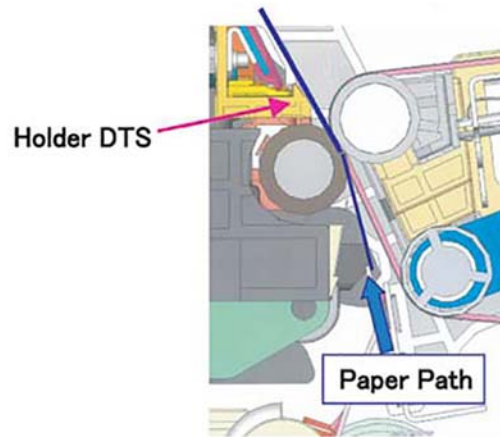


Figure 1 Paper path

- Heat haze

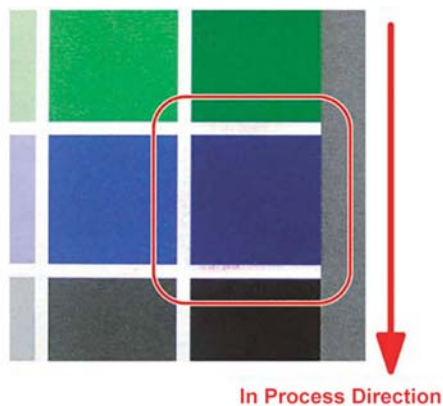


Figure 2 Heat haze example

C-1-0667-A

C-1-0668-A

- Mock heat haze (line/text image)

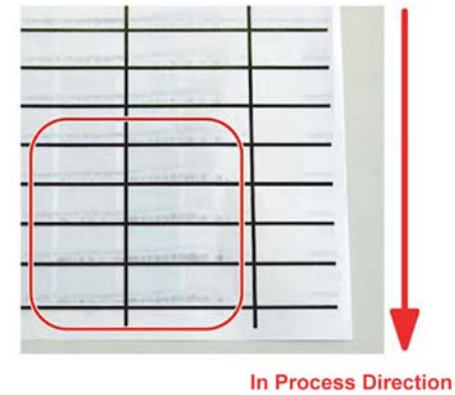


Figure 3 Mock heat haze example: line/text

C-1-0669-A

- Mock heat haze (halftone image)

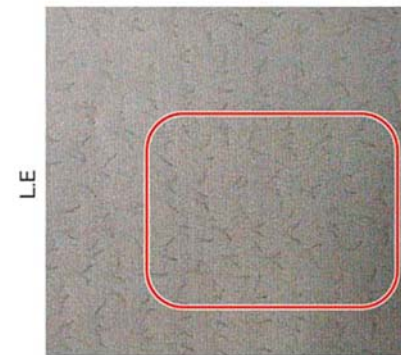


Figure 4 Mock head haze example: halftone

C-1-0670-A

Cause

The heat haze occurs at the place where paper is peeled off from the IBT belt. The toner scatters in small clouds all around the solid patch. Refer to [Figure 2](#).

The mock heat haze (line/text image) occurs when the transported paper rubs against the holder DTS (chute at the transfer exit), which charges it electrically and causes the toner to scatter at the lead and tail edges of the solid section. Refer to [Figure 3](#).

Also, for mock heat haze (halftone images), the paper is charged strongly at the negative side so that a positive corona discharge occurs between the holder DTS and the paper grounded to it, and along the portion where it occurs, toner is scattered, and branch-like (pulsating-like) discharge patterns can be seen. Refer to [Figure 4](#).

Initial Actions

1. Obtain the chart for secondary transfer offset mode to check whether the defect occurs for single K color or multi colors and whether it changes at the secondary transfer voltage. Also, when the secondary transfer voltage is increased, see if branch-like patterns change by sampling 2 sided halftone images in single K color (45%).

Procedure

1. When a heat haze or mock heat haze occurs during installation, print 25 sheets of a test chart on A3.
2. Increase the secondary voltage.
Increase the secondary transfer voltage based on the result of 1. Perform [dC1215](#) Transfer Voltage Adjustment.
 - a. While the nominal value is "0", perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
 - b. Nominal variable range: 10%/1 step. If necessary, enter [dC131](#). Adjust NVM value 746-034 as necessary.
3. Increase the primary transfer current value

NOTE: If this adjustment is made, ghosting (see [IQ22](#)) may worsen.

Print and check a test pattern. If the level is bad and unacceptable, check if (1), (2) is performed, decrease the scope of change.

- a. For mock heat haze, enter [dC131](#). Set the NVM values that follow:
 - 746-008 (Primary Transfer Output Mock Heat Haze Correction Run Environment) to 1.
 - 746-009 (Primary Transfer Output Mock Heat Haze Area Coverage Threshold Value) to 1.
 - 746-010 (Primary Transfer Output Mock Heat Haze Correction Coefficient (63mm/s)) to 120.
 - 746-011 (Primary Transfer Output Mock Heat Haze Correction Coefficient (126mm/s)) to 120.
 - 746-012 (Primary Transfer Output Mock Heat Haze Correction Coefficient (175mm/s)) to 120.If the result is insufficient, proceed to b.
- b. Increase the primary transfer output control.
 - If the defect only occurs in black. Enter [dC131](#). Increase the value of NVM 747-605 (the Primary Transfer Output Adjustment Value (BW mode K)) to 130.
 - If the default occurs with multiple colors. Enter [dC131](#). Increase NVM values 747-606 (Y), 747-607 (M), 747-608 (C), and 747-609 (K) to 130.



CAUTION

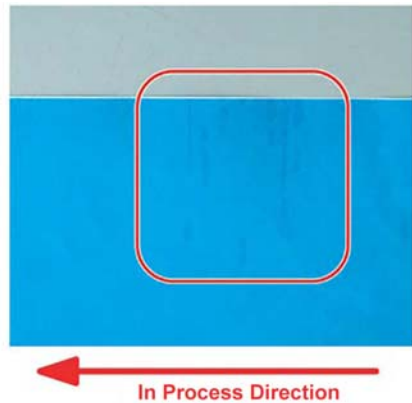
Occurrence of both heat haze and mock heat haze are easily influenced by the paper orientation. As final step, copy an image which have solid portions located at various positions to check for them.

Especially for the secondary voltage offset chart, only one patch in the area is useful because the secondary transfer voltage changes between lead and trail edges.

IQ15 Kiss Marks RAP

As system resistance of the primary transfer is high, the charge voltage of the primary transfer to the toner on the Photoreceptor is increased, causing kiss-shaped discharge marks. Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0671-A

Figure 1 Example

Cause

1. Occurs if cloud toner enters the IBT unit, 1st BTR, IBT belt is contaminated.

Initial Actions

1. Sample whole, uniform halftone images of each color, and check the color (engine) in which it occurs and the position of the in process direction (front side, rear side, etc.).

Procedure

1. Clean the contamination of 1st BTR of the relevant color (empty wipe is recommended). See NOTE.
2. Decrease the primary transfer output control.
 - If the defect only occurs in black, enter [dC131](#). Decrease the value of NVM 747-605 (the Primary Transfer Output Adjustment Value (BW mode K)) to 90.
 - If the default occurs with multiple colors, enter [dC131](#). Decrease NVM values 747-606 (Y), 747-607 (M), 747-608 (C) and 747-609 (K) to 90.

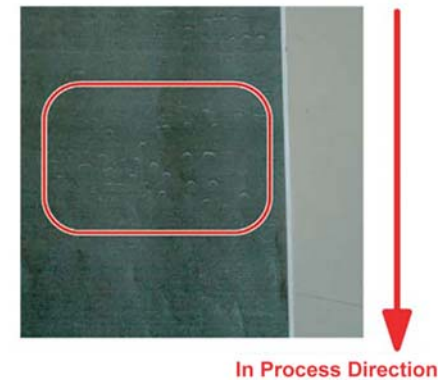
NOTE: When using a drum cleaner for tough toner which is stuck, allow it to dry completely before attaching the IBT belt.

NOTE: Decreasing the primary transfer current value tends to cause white spots.

IQ16 Circular Stamping Marks RAP

Perform this RAP when the prints have a semicircular arc pattern. Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0672-A

Figure 1 Example

Cause

Occurs if the charge of the toner is too low. Also, it tends to occur when the charge elimination of paper is insufficient.

Initial Actions

Take a sample from a half-tone image with uniformed entire surface and check by comparing with image sample.

Procedure

Enter [dC612](#) Print Test Pattern. Print test pattern 5. If semicircular arc patterns are visible, perform the steps that follow:

1. Perform [dC1215](#) Transfer Voltage Adjustment.
 - a. While the nominal value is "0", perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
 - b. Nominal variable range: 10%/1 step. If necessary, enter [dC131](#). Adjust NVM value 746-034 as necessary.
2. If the image quality defect persists, perform the steps that follow:
 - If the defect only occurs in black, enter [dC131](#). Increase the NVM value 747-605 ((Increase the Primary Transfer Output Adjustment Value (BW mode K)) to 130.
 - If the default occurs with multiple colors, enter [dC131](#). Increase the NVM values that follow to 130:
 - 747-606
 - 747-607

- 747-608
- 747-609

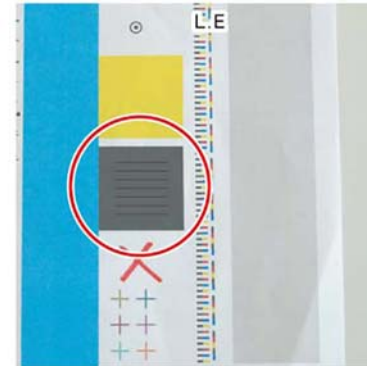
NOTE: Increasing the primary transfer current value can cause ghosting. If the fusing unit heat roll speed is changed, paper wrinkle, wetting or caterpillar marks may occur.

IQ17 Reverse Dark Lines RAP

Perform this RAP if part of the K color solid patch and a phenomenon that partly becomes a thick line (multiple) in the cross process direction

Transfer defect occurred due to lack of electric charge in the toner before the secondary transfer.

Ensure IQ1 Image Quality Entry RAP is performed before starting this RAP.



C-1-0673-A

Figure 1 Example

Cause

Occurs when the developer ability drops.

Initial Actions

Enter dC612 Print Test Patterns. Select a suitable test pattern (pattern 51 Total Chart recommended). Check by comparing with image sample, Figure 1.

Procedure

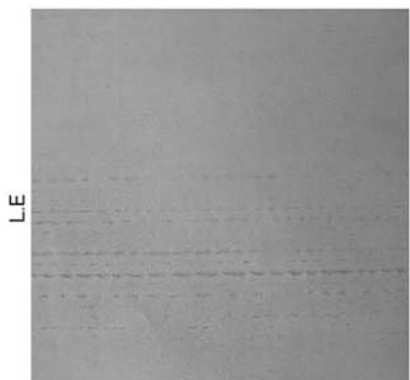
1. Perform dC1215 Transfer Voltage Adjustment.
 - a. While the nominal value is "0", perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
 - b. Nominal variable range: 10%/1 step. If necessary, enter dC131. Adjust NVM value 746-034 as necessary.
2. Increase the primary transfer output control.
 - If the defect only occurs in black, enter dC131. Increase the value of NVM 747-605 (the Primary Transfer Output Adjustment Value (BW mode K)) to 130.
 - If the default occurs with multiple colors, enter dC131. Increase NVM values 747-606 (Y), 747-607 (M), 747-608 (C) and 747-609 (K) to 130.

IQ18 In Process 3mm Pitch Line RAP

Use this RAP if the prints have 3mm (0.12 inch) pitched lines in the process direction. Refer to [Figure 1](#).

The paper loop amount between the secondary transfer and fusing unit is large, and the rib of the holder DTS is friction-charged by being strongly rubbed against, and toner is attracted by static, causing streaks to be generated at intervals of the rib pitch.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0674-A

Figure 1 Example

Cause

Rib of holder DTS increases the contact area by wear, and friction charge amount increases causing streaks.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Clean the ribs of the 2nd BTR roll assembly, [PL 90.40 Item 5](#).
2. If necessary, install a new 2nd BTR roll assembly, [PL 90.40 Item 5](#).

IQ19 Scalelike Defect (Transfer) RAP

Use this RAP if the prints have a scalelike defect. Refer to [Figure 1](#).

Removal of electricity with dielectric material is performed in the charged state after the paper discharges the secondary transfer part.

If the adhesion of the toner to the paper is weak and the amount of electricity removal is big, the toner image scatters and semicircle shaped pattern appears.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0675-A

Figure 1 Example

Cause

This is caused by low electric charge in the toner. The stress conditions are:

- Plain paper (lightweight paper)
- Mid humidity - high temperature environment
- New toner cartridge
- Job first thing in the morning (less than 10 copies)

Procedure

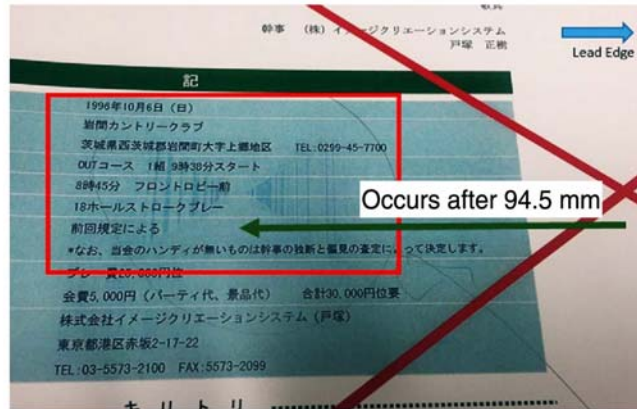
1. Make 12 prints.
2. Advise the customer change the paper (paper with high basis weight), or change the feed direction.
3. If the image quality defect remains. Perform [dC1215](#) Transfer Voltage Adjustment.
 - a. While the nominal value is "0", perform variable output (between -5 and 10, low to high voltage) for secondary voltage, and register the optimal value.
 - b. Nominal variable range: 10%/1 step. If necessary, enter [dC131](#). Adjust NVM value 746-034 as necessary.

IQ20 Cross Process Ghosting RAP

Ghost images in the cross process direction that occur after 94.5mm (3.7 inches) in high image density images of upstream engine (Y color and M color). Refer to [Figure 1](#).

This occurs in C color and K color and more likely to happen at half speed rather than full speed.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



C-1-0676-A

Figure 1 Example

Cause

Uneven charging due to localized poor electric discharge.

Procedure

1. Enter [dC131](#). Perform the steps that follow:
 - For cross process ghosting that occurs at half speed, change NVM value 740-205 (White Streaks Countermeasure Switch) to 1 (on).
 - For cross process ghosting that occurs at full speed, increase the NVM values 747-608 and 747-609 to 130.

IQ21 Residual Image Ghosting RAP

Parts of the previous page or current page may appear as ghost images on the paper.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Remove, then reinstall the drum cartridges, [PL 90.20](#). Switch off, then switch on the machine, [GP 10](#). Make a print. **The image quality defect persists.**

Y N

Perform [SCP 5](#) Final Actions.

Install a new drum cartridge of the relevant color, [PL 90.20](#). Switch off, then switch on the machine, [GP 10](#). Make a print. **The image quality defect persists.**

Y N

Perform [SCP 5](#) Final Actions.

Remove the fuser, [PL 10.05 Item 2](#). Check for contamination on the surface of the heat roll. **The surface of the heat roll is clean.**

Y N

If possible, remove the contamination. If necessary, install a new fuser, [PL 10.05 Item 2](#).

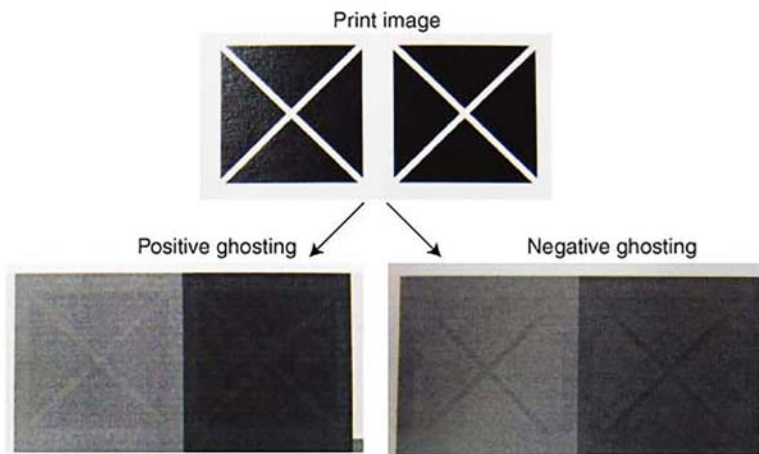
Install new components as necessary:

- Drive PWB, [PL 1.10 Item 4](#).
- ESS PWB, [PL 3.10 Item 6](#).

IQ22 DC Charging Ghosting RAP

As DC charging has weak charging capability compared to AC charging, ghosting may worsen with the environment or paper. Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.



TC-1-0690-A

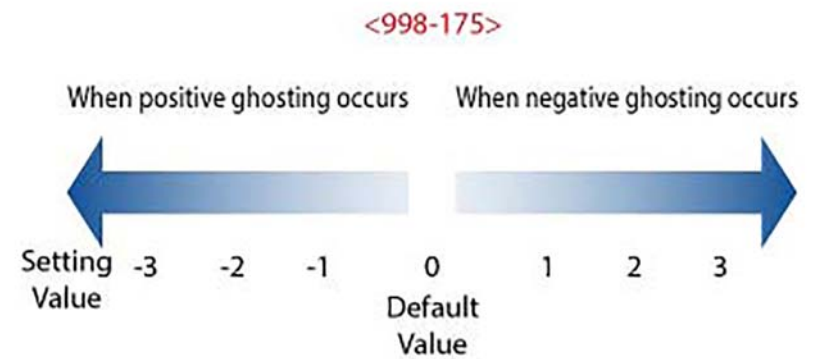
Figure 1 Example

Positive ghosting: The print appears darker after half-tone of one rotation (94.5mm/3.7 inches) of the photoreceptor.

Negative ghosting: The unprinted blank spaces (white spaces of image gaps) appear darker at half-tone after one rotation (94.5mm/3.7 inches) of the photoreceptor.

Procedure

1. Enter [dC612](#) Print Test Pattern. Print a suitable test pattern. Identify if the ghosting is positive or negative.
2. Refer to [Figure 2](#). Enter [dC131](#). Perform the steps that follow:
 - For positive ghosting, reduce the value of NVM 998-175.
 - For negative ghosting, increase the value NVM 998-175.



TC-1-0691-A

Figure 2 NVM 998-175 setting

IQ23 Background RAP

The page has uniform darkening across all the non print areas.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check for contamination on the document glass. **The document glass is clean.**

Y N

Clean the document glass. If necessary, install new document glass, **PL 60.10 Item 9**.

Remove, then reinstall the drum cartridges, **PL 90.20**. Switch off, then switch on the machine, **GP 10**. Make a print. **The image quality defect persists.**

Y N

Perform **SCP 5** Final Actions.

Install a new drum cartridge of the relevant color, **PL 90.20**. Switch off, then switch on the machine, **GP 10**. Make a print. **The image quality defect persists.**

Y N

Perform **SCP 5** Final Actions.

Check the surface of the 2nd BTR for contamination or distortion. **The surface of the BTR is good.**

Y N

Clean the 2nd BTR. If necessary, install a new 2nd BTR roll assembly, **PL 90.40 Item 5**.

Remove, then reinstall the HVPS. Switch off, then switch on the machine, **GP 10**. Make a print. **The image quality defect persists.**

Y N

Perform **SCP 5** Final Actions.

Install new components as necessary:

- Drive PWB, **PL 1.10 Item 4**.
- HVPS, **PL 1.05 Item 7**.
- ESS PWB, **PL 3.10 Item 6**.

IQ24 Deletions RAP

Part of the image is missing.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 10**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

- If the deletions are small and align with the stripper fingers in the drum cartridges, clean the stripper fingers. If necessary, install a new drum cartridge of the relevant color, **PL 90.20**.
- If the deletions are small and align with the stripper fingers in the fuser, clean the stripper fingers. If necessary, install a new fuser, **PL 10.05 Item 2**.

Procedure

Check the paper type, refer to **GP 15**. **Paper used is within specifications.**

Y N

Use paper within specifications.

Use a new ream of paper. **The image quality defect persists.**

Y N

Perform **SCP 5** Final Actions.

Remove, then reinstall the drum cartridge of the relevant color, **PL 90.20**. Switch off, then switch on the machine, **GP 10**. Make a print. **The image quality defect persists.**

Y N

Perform **SCP 5** Final Actions.

Install a new drum cartridge of the relevant color, **PL 90.20**. Switch off, then switch on the machine, **GP 10**. Make a print. **The image quality defect persists.**

Y N

Perform **SCP 5** Final Actions.

Check the surface of the 2nd BTR for distortion. **The surface of the BTR is good.**

Y N

Install a new 2nd BTR roll assembly, **PL 90.40 Item 5**.

Install new components as necessary:

- Drive PWB, **PL 1.10 Item 4**.
- ESS PWB, **PL 3.10 Item 6**.

IQ25 IOT Skew RAP

Printed images are not parallel to the edges of the paper.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter **dC612**. Select the a relevant internal test pattern. Make 5 simplex prints. Check the prints for skew. Refer to **IQS 5** Skew. **The prints are skewed.**

Y N
Make 5 duplex prints of the same internal test pattern. Check the prints for skew, refer to **IQS IQS 5** Skew. **Side 2 of the prints are skewed.**

Y N
No IOT skew is present. Re-define the image quality defect. Refer to **IQ1** Image Quality Entry RAP.

The skew occurs in the duplex paper path.

- Check the nip and drive rolls in the exit 2 transport assembly, **PL 10.22** for wear, damage and contamination.
- Check the exit 2 drive assembly ribs, **PL 10.22** for wear, damage and contamination.
- Check the drive and idler rolls in the duplex L/H assembly, **PL 80.50** for wear, damage and contamination.
- Check the duplex cover chute ribs, **PL 80.50 Item 6** for wear, damage and contamination.

Clean or install new components as necessary.

Using the prints made from **dC612**, check the prints for distortion by measuring between the lines produced. **The lines are parallel to each other.**

Y N
Install a new print head assembly, **PL 60.35 Item 1**.

Make 5 prints from each tray and the bypass tray to identify the source of skew:

- Check the feed rolls and guides for contamination. Clean the components as necessary.
- Check the feed rolls and transport rolls for wear. Install new components as necessary.
- Check that there is no variation in the size or weight of the sheets of paper in each tray.
- Check that the paper weight and type is within the specification. Refer to **GP 15** Paper and Media Size Specifications.
- Check that the paper size guides are set correctly.
- Check that the bypass tray width guides are set correctly.
- Check the bypass tray lower feeder assembly, **PL 70.35 Item 2** for contamination, wear or damage
- Check the registration chute, **PL 80.55 Item 2** for wear, damage or contamination. If necessary clean the housing or install a new registration chute.
- Check the paper path for obstructions. Refer to the **IQ26** Print Damage RAP.

IQ26 Print Damage RAP

The prints have nicks, tears, creases, folds, curled edges or wrinkles.

Ensure **IQ1** Image Quality Entry RAP is performed before starting this RAP.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Enter **dC612**. Select a relevant internal test pattern. Make prints to identify where the prints are damaged.

Check for curled paper in the paper trays:

- Ensure the paper is in specification. Refer to **GP 15**.

Check the paper path, for the problems that follow:

- Obstructions.
- Damaged guides and rolls. Pay particular attention to the areas that align with the damage on the prints. For example, fuser stripper fingers.
- Protruding objects on the edges of the paper path.
- If the paper feed is introducing skew to the paper, perform the **IQ25** IOT Skew RAP.
- If the paper does not correctly strip from the drum cartridges, ensure the contacts on the HV housing assembly, **PL 90.20 Item 9** and the contact housing assembly, **PL 90.20 Item 10** are good.
- Check that the fuser roll stripper fingers are clean. If possible remove any contamination. If the stripper fingers are missing, damaged or worn, install a new fuser, **PL 10.05 Item 2**.
- Check that the drum cartridge stripper fingers are clean. If possible remove any contamination. If the stripper fingers are missing, damaged or worn, install a new drum cartridge of the relevant color, **PL 90.20**.
- Check the registration transport assembly, **PL 80.55 Item 1** for damage or wear.
- Check the LH cover assembly, **PL 80.45 Item 1** and inner duplex chute, **PL 80.45 Item 3** for damage or wear.

If the paper path and the duplex path are good, check that the paper and other media used, is of the correct weight and size, refer to **GP 15**.

IQ27 Unfused Copy/Toner Offset RAP

Printed images are not correctly fused onto the paper. When rubbed, the image comes off easily.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Check the paper type, refer to [GP 15](#). Paper used is within specifications.

Y N
Use paper within specifications.

Use paper stored under room conditions. The image quality defect persists.

Y N
Perform [SCP 5](#) Final Actions.

Check the paper settings for the tray being used. The settings are correct.

Y N
Correct the tray settings.

Check the fuser rolls for contamination. The rolls are clean.

Y N
Clean the fuser rolls. If necessary, install a new fuser, [PL 10.05 Item 2](#).

Check the power supply voltage. The voltage is within the specified range.

Y N
Connect a power supply with voltage within the specified range.

Enter [dC140](#), codes 010-200, 010-201, 010-202 and 010-203. Check the fusing temperature. Normal fusing temperatures are detected.

Y N
Adjust the fusing temperatures as necessary.

Install a new fuser, [PL 10.05 Item 2](#).

IQ28 DADF, Document Glass and Scanner RAP

Defects caused by the DADF, document glass and the scanner.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

- [DADF Checkout](#)
- [Document Glass Checkout](#)
- [Scan Carriage Assembly Checkout](#)

DADF Checkout

Perform the steps that follow:

- Clean the underside of the DADF.
- Use a microfibre wiper dampened with water to clean the DADF rolls and nip rolls.
- If the documents are skewed. Check that the DADF document input guides are correctly adjusted.
- Check that the DADF is seated correctly.
- Make scan to file or scan to USB files from the DADF. If the images are skewed, perform the steps that follow:
 - Check that the DADF document input guides are correctly adjusted.
 - [ADJ 5.1](#) DADF Lead Edge Skew.

Document Glass Checkout

Perform the steps that follow:

- If the copies of the internal test pattern have white lines or deletions in the process direction that are continuous from edge to edge of the image, clean the CVT glass, [PL 60.10 Item 8](#).
- If necessary, perform [ADJ 60.5](#) Optics Cleaning Procedure.
- Check the condition of the document cushion, If necessary clean the cushion or install a new document cushion, [PL 5.05 Item 1](#).

Scan Carriage Assembly Checkout

Perform the steps that follow:

- If the copy of the internal test pattern (made from the [IQ1](#) Image Quality Entry RAP) is fragmented and displaced, perform the steps that follow:
 - Refer to [BSD 9.3 Charging and Exposure](#). Check the ribbon cable and connectors between the print head assembly and PJ1363 on the ESS PWB. if necessary, install a new FFC cable of the relevant color, [PL 60.35](#).
- Check the scan carriage for contamination. Refer to [ADJ 60.5](#) Optics Cleaning Procedure.

IQ29 Unacceptable Received Fax Image Quality RAP

Use this RAP to identify the causes of poor reception.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

The condition of the original transmission document is good.

Y N
Generate a new document from the original.

If possible, establish voice contact using the same telecommunication link as used to receive the document. **The line is free of interference sounds and the normal voice can be heard clearly.**

Y N
Perform the [020A](#) Fax Entry RAP.

From the Embedded Web Server Home screen, select **Log In**, then **Admin**. Enter the password '1111' (default setting). Select **Log In**. Select **Apps**. From the Installed Apps list, select **Fax**. Disable Super G3.

Y N
The telecommunication links and harnesses are connected correctly.

Y N
Correct the connections.

Check the condition of the telecommunication links and harnesses. **The telecommunication links and harnesses are good.**

Y N
Install a new telephone cable.

Verify the operation of the machine and the communication link by transmitting between machines over a known good link. **All received documents have an acceptable image quality.**

Y N
Install a new components as necessary:

- Line 1 fax PWB, [PL 20.05 Item 10](#).
- Line 2 fax PWB, [PL 20.05 Item 15](#).
- Line 3 fax PWB, [PL 20.05 Item 15](#).

Perform the [033-312](#), [033-313](#), [033-315 to 033-327](#) Fax Fault RAP.

Inform the remote user of the required changes to the settings.

IQ30 Solid Color in Prints RAP

Paper is printed completely in one of the four colors.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

BSD-Reference: [BSD 6.4 LED Control \(Y, M\)](#)

BSD-Reference: [BSD 6.5 LED Control \(C, K\)](#)

BSD-Reference: [BSD 9.3 Charging and Exposure](#)

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

For the relevant color.

Remove, then reinstall the drum cartridge, [PL 90.20](#). Switch off, then switch on the machine, [GP 10](#). Make a print. **The image quality defect persists.**

Y N
Perform [SCP 5](#) Final Actions.

Install a new drum cartridge, [PL 90.20](#). Switch off, then switch on the machine, [GP 10](#). Make a print. **The image quality defect persists.**

Y N
Perform [SCP 5](#) Final Actions.

Check the wiring and connectors between PJ408 on the HVPS and [P/J425](#) on the drive PWB. **The wiring and connectors are good.**

Y N
Correct the connections or repair the wiring as necessary.

Check the ribbon cable and connectors for the relevant color:

- Between the (Y) print head assembly and [P/J1360](#) on the ESS PWB.
- Between the (M) print head assembly and [P/J1361](#) on the ESS PWB.
- Between the (C) print head assembly and [P/J1362](#) on the ESS PWB.
- Between the (K) print head assembly and [P/J1363](#) on the ESS PWB.

The ribbon cable and connectors are good.

Y N
Correct the connections. If necessary, install a new FFC cable for the relevant color, [PL 60.35](#).

Check the connections to the components that follow, install new components as necessary:

- HVPS, [PL 1.05 Item 7](#).
- Print head assembly (for the relevant color), [PL 60.35 Item 1](#).
- Drive PWB, [PL 1.10 Item 4](#).
- ESS PWB, [PL 3.10 Item 6](#).

IQ31 Missing Color from Image RAP

Paper has no visible print from one of the four colors.

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

BSD-Reference: [BSD 6.4 LED Control \(Y, M\)](#)

BSD-Reference: [BSD 6.5 LED Control \(C, K\)](#)

BSD-Reference: [BSD 9.3 Charging and Exposure](#)

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

For the relevant color.

Check the installation of the print head assembly, [PL 60.35 Item 1](#). **The print head assembly is installed correctly.**

Y N
Correctly install the print head assembly.

Check the drum ground contact point, positioned on the front underside of the drum cartridge for contamination or distortion. **The drum ground contact point is good.**

Y N
Clean the drum ground contact point. Correct any distortion.

Remove, then reinstall the drum cartridge, [PL 90.20](#). Switch off, then switch on the machine, [GP 10](#). Make a print. **The image quality defect persists.**

Y N
Perform [SCP 5](#) Final Actions.

Install a new drum cartridge, [PL 90.20](#). Switch off, then switch on the machine, [GP 10](#). Make a print. **The image quality defect persists.**

Y N
Perform [SCP 5](#) Final Actions.

Print a page that is entirely of the missing color. During the print cycle, switch off the power after the paper has been fed out of the tray (stop the transfer in mid-progress). Check the surface of the IBT belt. **There is a considerable amount of toner on the surface of the IBT belt.**

Y N
Check the ribbon cable and connectors between the relevant print head assembly and the ESS PWB. **The ribbon cable and connectors are good.**

Y N
Correct the connections. If necessary, install a new FFC cable for the relevant color, [PL 60.35](#).

A B

A B

Check the connections to the components that follow, install new components as necessary:

- HVPS, [PL 1.05 Item 7](#).
- Print head assembly (for the relevant color), [PL 60.35 Item 1](#).
- Drive PWB, [PL 1.10 Item 4](#).
- ESS PWB, [PL 3.10 Item 6](#).

Check the connections to the components that follow, install new components as necessary:

- 2nd BTR roll assembly, [PL 90.40 Item 5](#).
- HVPS, [PL 1.05 Item 7](#).
- Drive PWB, [PL 1.10 Item 4](#).

IQ32 Repeated Defects RAP

Use this RAP to identify the cause of repeated defects.

Repeated defects can be caused by a variety of issues in the print engine. Refer to [Figure 1](#).

Ensure [IQ1](#) Image Quality Entry RAP is performed before starting this RAP.

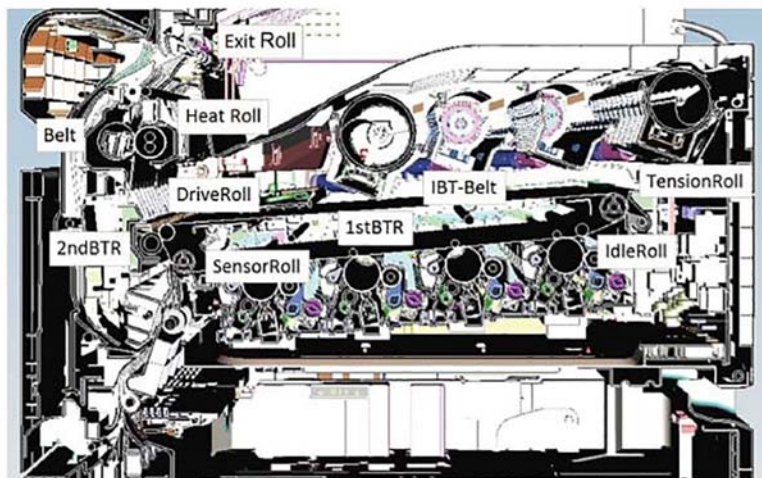


Figure 1 Print engine

Initial Actions

Refer to [Table 1](#). Observe any lines or defects to see if space between them match any values in the table.

Table 1 Defect periods

Sub System	Device	Print Period (imm)	Print Period (inches)	Part List Reference
Exit	Exit Roll	47.1	1.85	PL 10.10 Item 5
	Pinch Roll	31.4	1.24	PL 10.22 Item 6
	Drive Roll	41.0	1.61	PL 10.22 Item 8

Table 1 Defect periods

Sub System	Device	Print Period (imm)	Print Period (inches)	Part List Reference
Fusing	Heat Roll (part of the fuser unit)	82.5	3.25	PL 10.05 Item 2
	Belt	95.1	3.74	PL 80.50 Item 20 PL 80.50 Item 21
Transfer	2nd-BTR Roll	56.5	2.22	PL 90.40 Item 5
IBT	IBT-Belt	795.0	31.3	PL 90.50 Item 7
	Tension Roll	70.9	2.79	PL 90.50 Item 6
	Idle Roll	31.7	1.25	Part of IBT unit belt Assy PL 90.50 Item 1
	1st-BTR Roll	19.1	0.75	Part of IBT unit belt Assy PL 90.50 Item 1
	Sensor Roll	56.8	2.24	Part of IBT unit belt Assy PL 90.50 Item 1
Developer	Developer Unit	28.7	1.13	PL 90.30 Item 1
Xerographics	Drum Cartridge	94.5	3.72	PL 90.20 Item 5 (K) PL 90.20 Item 6 (C) PL 90.20 Item 7 (M) PL 90.20 Item 8 (Y)
	BCR	38.0	1.5	Part of drum cartridge PL 90.20
	BCR Cleaner	29.3	1.15	Part of drum cartridge PL 90.20

Procedure

Clean or install new components as necessary.

NOTE: Some of the items cannot be cleaned or replaced as they are contained within a larger part. For example the idle roll, 1st BTR roll and sensor roll are contained within the IBT unit belt assembly.

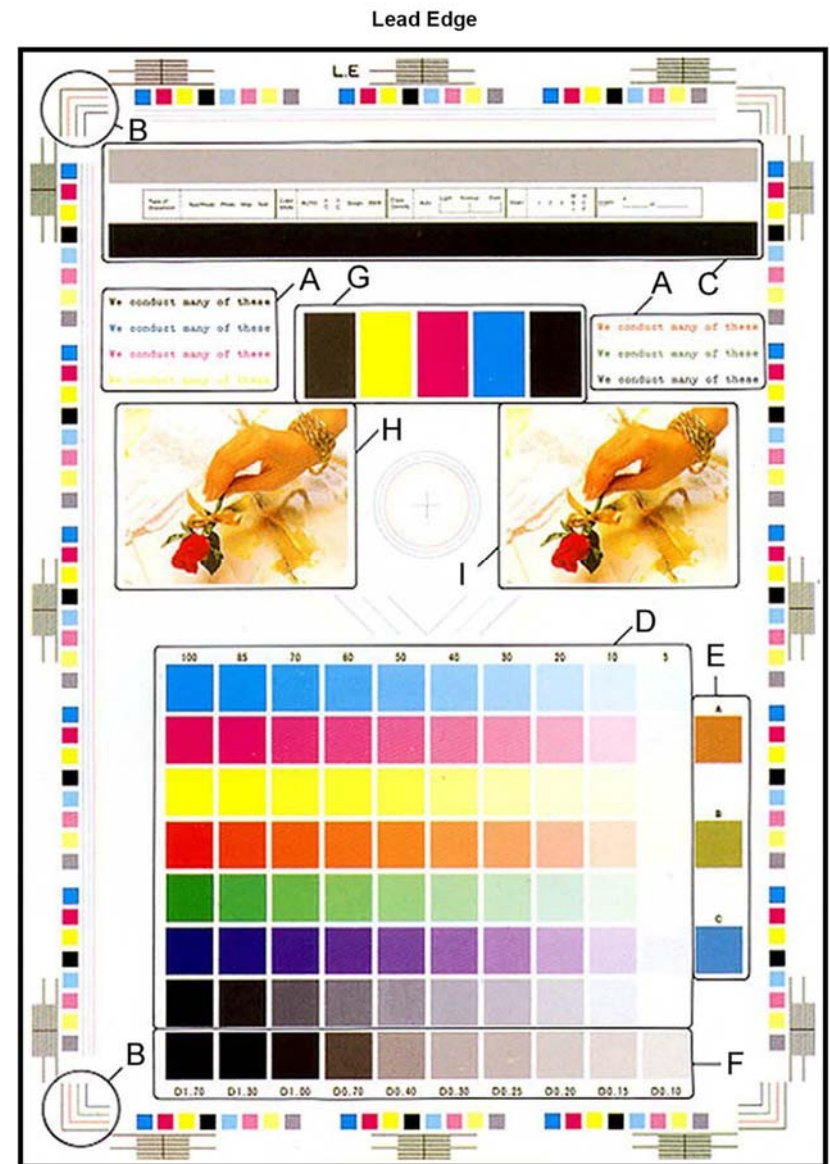
IQS 1 Color Reproduction

The following steps are used to set up the machine for the purpose of making test pattern copies to judge output image color reproduction.

1. Ensure that the image adjustment mode selections are those used by the customer.
2. Place the color test pattern 82E13120, [Figure 1](#) on the platen. Load 24# Xerox Color Xpressions 11 X 17 inch (USCO), or 90 GSM Colortech A3 (XL) paper in Tray 1. Make a copy of the test pattern.
3. Compare the copy to the test pattern. Refer to [Figure 1](#) and [Table 1](#) for this evaluation.

Table 1 Copy Color specifications check locations

Area (on Figure 1)	Check for the Following Results
A	Text Reproduction. Each of the seven sentences in this area are fully reproduced with no missing letters or portions of letters. The sentences are reproduced in Black, Cyan, Magenta, Yellow, Red, Green and Blue. If the copy does not meet this definition, perform the IQ24 Deletions RAP.
B	Color Registration. The patterns in location B should be properly registered to provide Black, Red, Green and Blue lines. If the copy does not meet this definition, perform the dC126 System Registration Adjustment and/or IQ2 IOT IQ Defects RAP.
C	Front to Rear Density. The density of both the low density and high density bands should be uniform from front to rear. This can be tested by folding the copy in the center and comparing the front side of the copy to the rear side of the copy at location C. Both the high density and low density locations should exhibit even front to rear density, perform the dC991 Toner Density Adjustment and/or IQ2 IOT IQ Defects RAP.
D	Color Gradation. This area should exhibit a decreasing density of each of the colors from 100% density to 5% density. In a properly adjusted machine, the 10% patches should be visible and the 5% patches should be barely visible or not visible on the test pattern copy (except for the bottom row). If the copy does not meet this definition, perform the dC991 Toner Density Adjustment.
E	Routine Color. Location E represents three general tests for the machine to reproduce colors common to customer originals. Location A is a general skin tone test. Location B represents the color of grass or other common foliage. Location C represents the color of the sky. If the copy does not meet this definition, perform the dC991 Toner Density Adjustment.
F	Photo Gradation. Not used.
G	IIT Calibration Patches. Not used
H	100 Lines/Inch Image. A Moire defect will show on this image. Moire on a 100 Line/Inch image is within specification.
I	175 Lines/Inch Image. This image is used to test for Moire. Depending on the degree of the defect, moire seen on this image should be considered out of specification, go to IQ2 IOT IQ Defects RAP.



C-1-0657-A

Figure 1 Color test pattern 82E13120

IQS 2 Magnification

Documents

Perform [dC126](#), make selections to print the test pattern on A3 or 11x17 inch paper.

Specifications

Refer to [Table 1](#).

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

Table 1 Magnification

Parameter	Nominal	Minimum	Maximum	Dimension Lss	Dimension Lfs
In process direction from the platen. A3 80gsm (8.5x11 inch 20lb) papers.	100%	99.3%	100.7%	400+/- 2.8mm (15.75 +/- 0.11inch)	-
Cross process direction from the platen. A3 80gsm (8.5x11 inch 20lb) papers.	100%	99.3%	100.7%	-	277+/- 1.9mm (10.91 +/- 0.075 inch)
From CVT or DADF. A3 80gsm (8.5x11 inch 20lb) papers.	100%	99.5%	101%	398to 404mm (15.67 to 15.91inch)	274.2 to 279.8mm (10.80 to 11.02 inch)
In process and cross process direction print. A3 80gsm (8.5x11 inch 20lb) papers.	100%	99.6%	100.4%	400+/- 1.6mm (15.75 +/- 0.063 inch)	277 +/- 1.1mm (7.48 +/- 0.043 inch)
In process and cross process direction print. For all other papers.	100%	99.5%	100.5%	400+/- 2mm (15.75 +/- 0.079 inch)	277 +/- 1.39mm (7.48 +/- 0.055 inch)

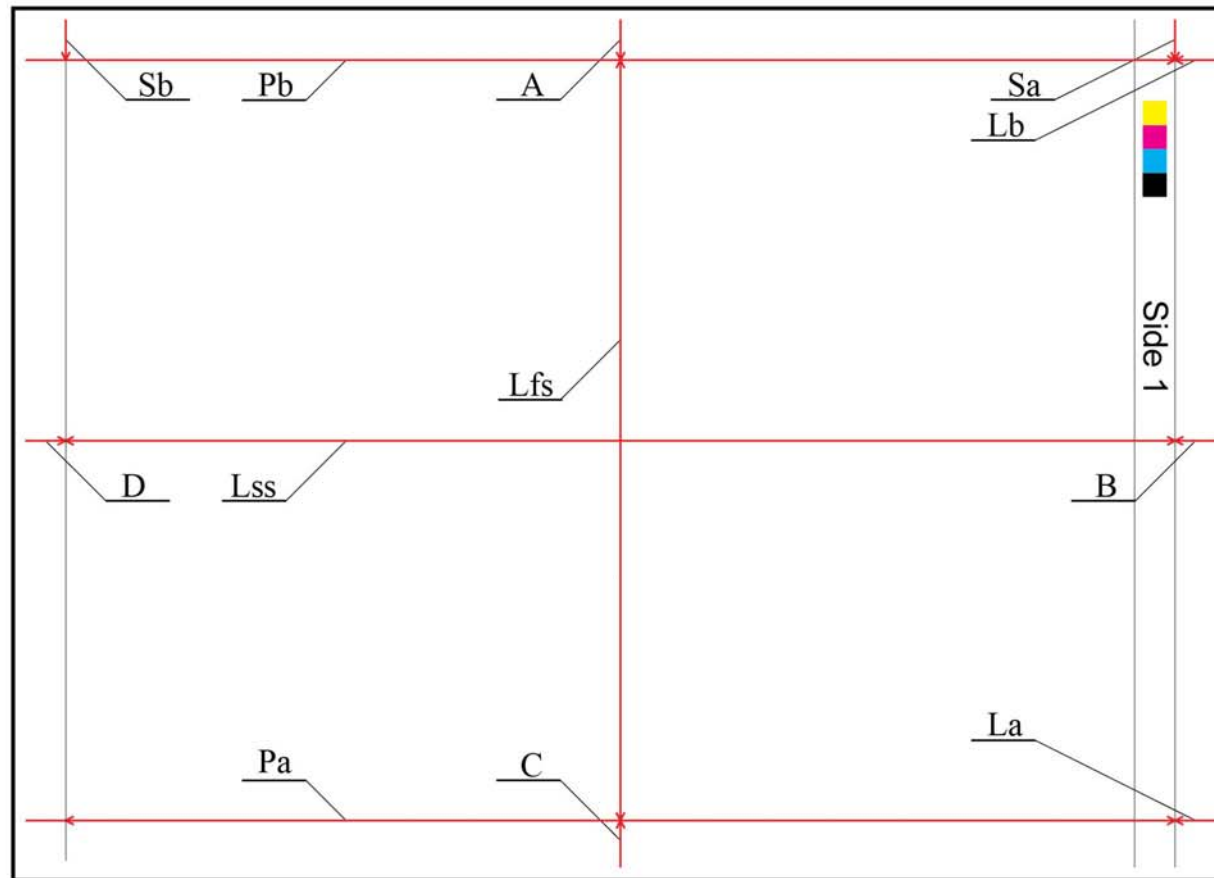
Magnification measurement

Make copies of the registration test pattern from the document glass and through the DADF. Compare the dimensions Lss between the original print and the copies, [Figure 1](#) and [Figure 2](#).

Corrective action

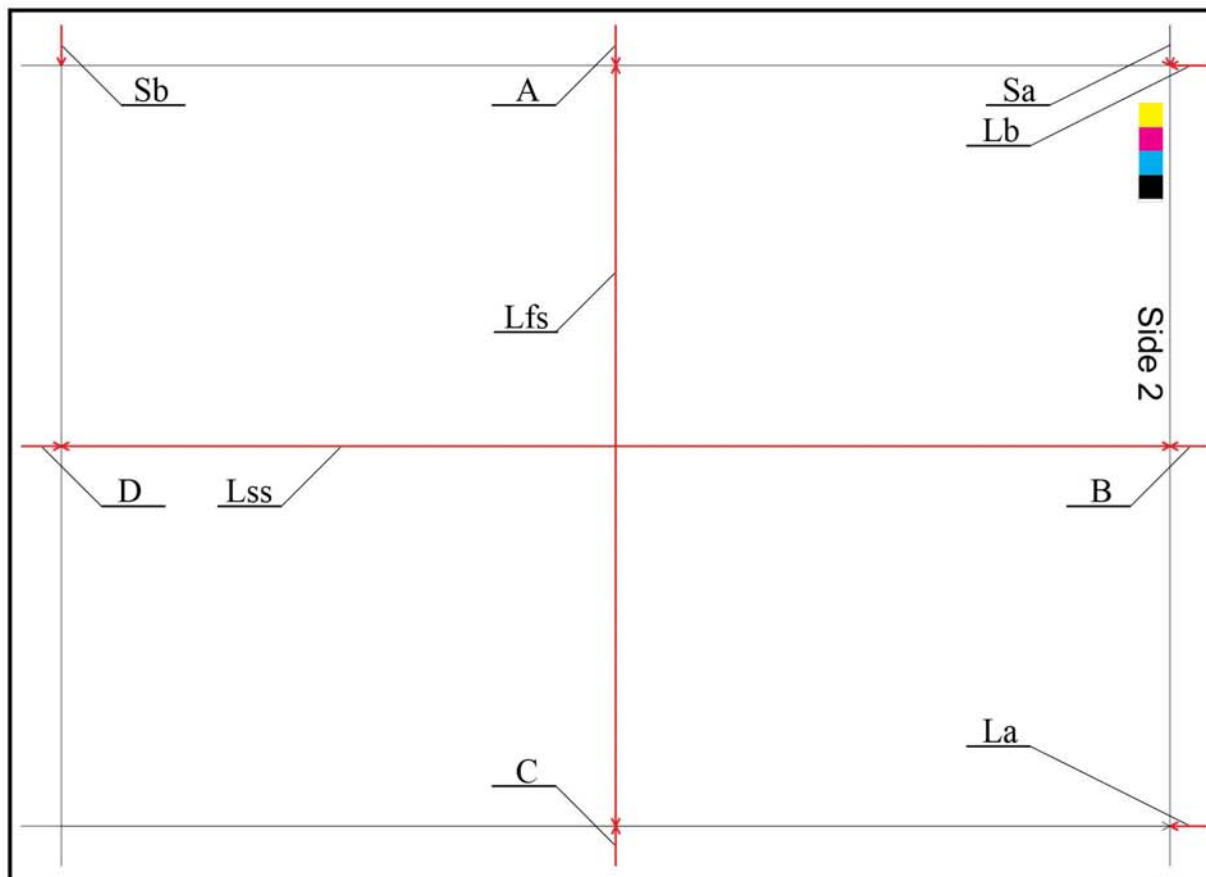
Perform [ADJ 60.4](#) IIT Image Ratio Adjustment.

NOTE: There are no cross process direction adjustments.



C-1-0684-A

Figure 1 Test pattern side 1



C-1-0685-A

Figure 2 Test pattern side 2

IQS 4 Resolution

Documents

Test patterns: 82E2000 (A3 and 11x17) 82E2010 (A4) 82E2020 (8.5x11).

Specification

Copy

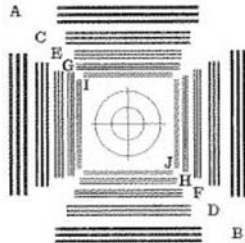
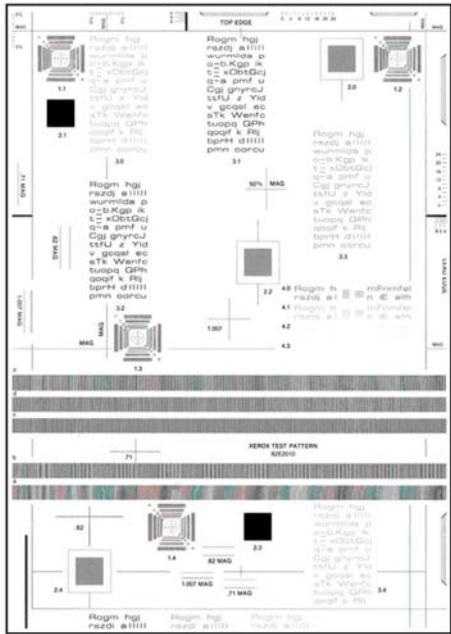
Make 3 copies of a test pattern from the document glass. Examine the targets of the second copy to determine the overall resolution of the copy. The lines identified by the letter H, [Figure 1](#), should be clearly reproduced at 100%.

Print

Make 3 prints of internal test pattern 51 or 52. Examine the lines of the second print. All lines should be resolved.

Corrective Action

If the resolution specification is not met, refer to [IQ2](#) IOT IQ Defects RAP.



C-1-0687-A

Figure 1 Test pattern

IQS 5 Skew

Documents

Test patterns: 82E2000 (A3 and 11x17), 82E2010 (A4), 82E2020 (8.5x11). Use for checking copy skew with border erase turned off or scan skew.

Procedure

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

Go to the relevant procedure:

- [Print Skew](#)
- [Copy Skew](#)

Print Skew

Specification

Refer to [Table 1](#).

Table 1 Print skew measurement

Source of Paper	Maximum Allowable Skew
Trays 1, 2, 3 and 4	1mm
Bypass tray	2.2mm

Skew Measurement

To check for skew, perform the steps that follow:

1. Enter [dC612](#). Make a simplex print of internal test pattern 28.
2. Determine the amount of skew. Measure the distance from a printed line to the lead edge of the paper at the inboard and outboard edges.
3. If skew is not within specification on either side, perform the [IQ25](#) IOT Skew RAP.

Copy Skew

Specification

Refer to [Table 2](#).

Table 2 Copy skew measurement

Type of Copy	Maximum Allowable Skew from Trays 1, 2, 3 and 4	Maximum Allowable Skew from Bypass Tray
Platen	1.4mm	1.9mm
DADF	2.5mm	3.1mm

Skew Measurement

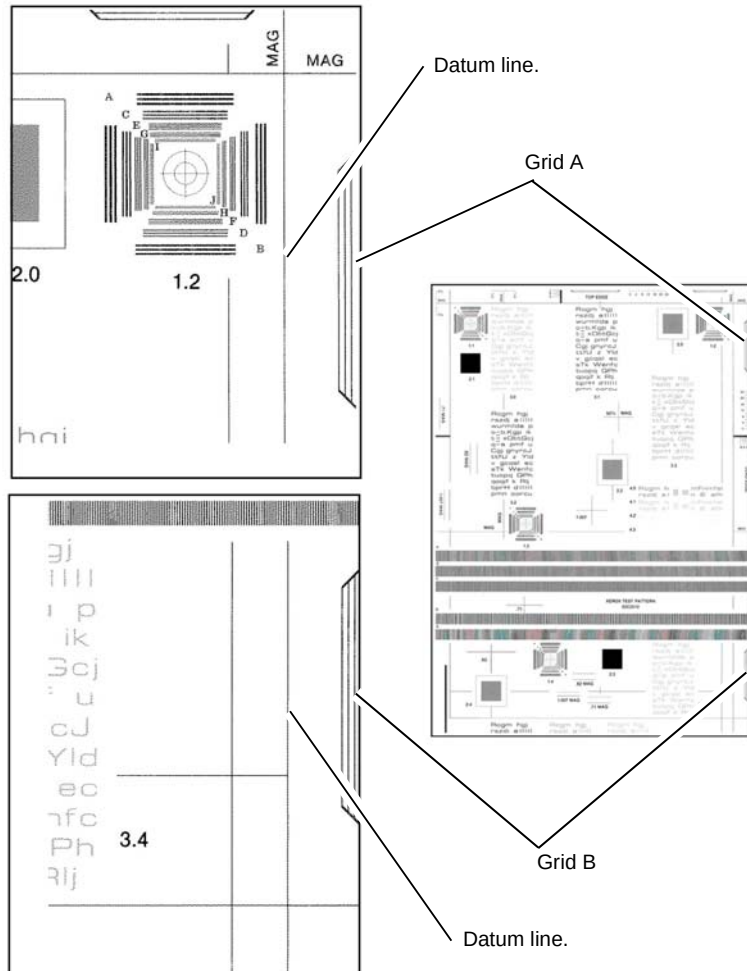
To check for skew, perform the steps that follow:

1. Make a simplex copy of test pattern 82E2000 (A3 and 11x17), 82E2010 (A4) or 82E2020 (8.5x11).
2. Refer to [Figure 1](#). Determine the amount of skew by either:

- Measuring the distance between the datum line and the lead edge of the paper at the inboard and outboard edges.
- Using the grid A and grid B areas of the test pattern to directly measure the skew difference.

NOTE: Grid A and grid B are small areas of parallel lines 1mm apart.

3. If skew is not within specification, perform the [IQ28](#) DADF, Document Glass and Scanner RAP.



C-1-0688-A

Figure 1 Copy and scan skew measurement

IQS 6 Copy/Print Defects

The machine should produce copies/prints free of defects. Any defects not explicitly covered by this specification should be considered as a fault.

Show Through

No show through of the underside of the document handler should be visible when using Xerox 80gsm (20lb) or heavier paper as an input document. The check is made with the document handler closed and in normal copy/print mode. Some show through may occur using 60gsm (15lb) paper as documents.

Corrective action

If show through of the underside of the document handler is visible, ensure that the platen cushion is clean. If necessary, install a new document cushion, [PL 5.05 Item 1](#).

Dark Spots

Dark spots are toner deposits in the background area of a copy/print. The specification is for the total image area. To assess for dark spots use the [dC612](#) internal test pattern 55.

- Spots of 0.4mm (0.016 inch) and larger - none allowed.
- Spots 0.3mm to 0.4mm (0.012 to 0.015 inch) - no more than 1 spot per A4 (8.5 x 11 inch) page.
- Spots 0.2mm to 0.3mm (0.008 to 0.012 inch) - no more than 6 spots per A4 (8.5 x 11 inch) page.
- Spots 0.15mm to 0.2mm (0.006 to 0.008 inch) - no more than 10 spots per A4 (8.5 x 11 inch) page.

Corrective Action

Go to the [IQ2](#) IOT IQ Defects RAP.

White Spots

White spots are areas visible on a half tone or solid area where the toner has failed to be deposited. The specification is for the total image area. To assess for white spots use the [dC612](#) internal test pattern 123.

- Spots of 1mm (0.04 inch) and larger - none allowed.
- Spots 0.5mm to 1mm (0.02 to 0.04 inch) - no more than 1 spot per A4 (8.5 x 11 inch) page.
- Spots 0.25mm to 0.5mm (0.01 to 0.02 inch) - no more than 4 spots per A4 (8.5 x 11 inch) page.
- Spots 0.125mm to 0.25mm (0.005 to 0.01 inch) - no more than 20 spots per A4 (8.5 x 11 inch) page.

Corrective Action

Go to the [IQ2](#) IOT IQ Defects RAP.

Paper Wrinkle

Paper wrinkles which result in the loss of information are unacceptable at any level. In any mode, copies/prints containing wrinkles or creases of 84mm (3.3 inch) or less in length which do not result in the loss of information may occur less frequently than 1 in 10 consecutive copies/prints in that mode. This is applicable to all base line papers; to simplex prints, provided the paper is stored inside the printer and that the printer is operated within the environmental specification.

Corrective Action

Perform the checks that follow:

- That the paper stock conforms to the specification. Refer to [GP 15](#) Paper and Media Size Specifications. Inform the customer if the paper is outside of the specifications.
- The customer's paper storage conditions. Paper must be stored in unopened packs in cool dry conditions. Inform the customer if the storage conditions are not good.
- The environmental conditions. Refer to [GP 18](#) Environmental Data. Inform the customer if the environmental conditions are outside of the specifications.
- For damaged rollers in the paper path.
 - Wrinkles occurring before image transfer can be flattened by the fuser, resulting in a wrinkled image even though the paper is flat.
 - Wrinkles occurring after transfer tend to be creased into the paper and can be caused in the fuser.

IQS 7 Registration

Documents

Test patterns: 82E2010 (A4), 82E2020 (8.5 X 11).

Print Registration Specifications

Refer to [Table 1](#).

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31](#) Print/Copy Orientation Definitions.

Table 1 Registration measurement

Parameter	Measurement/Tolerance
Lead edge registration error on a simplex sheet	10 +/- 1.6 mm (0.39 +/- 0.063 inch)
Lead edge registration error on a duplex sheet	10 +/- 2 mm (0.39 +/- 0.079 inch)
Top edge registration error on a simplex sheet	10 +/- 2.1 mm (0.39 +/- 0.082 inch)
Top edge registration error on a duplex sheet	10 +/- 2.1 mm (0.39 +/- 0.082 inch)

Registration Measurement

Perform [dC126](#), make selections to print the test pattern on A3 or 11x17 inch paper.

Use the measurements Sa and Sb at each end of the inboard edge to measure the displacement of the top of the image from the paper inboard edge, refer to [IQ1](#) Figure 1.

Use the measurements La and Lb at each end of the lead edge to measure the displacement of the side of the image from the paper lead edge.

NOTE: If a there is a difference between any pair of measurements, refer to [IQS 5](#) Skew.

Corrective Action

Perform [dC126](#) System Registration.

Copy Registration Specifications

Refer to [Table 2](#).

Table 2 Registration measurement

Parameter	Tolerance
Lead edge registration error on a simplex sheet	+/- 1.6 mm (0.063 inch)
Lead edge registration error on a duplex sheet	+/- 2 mm (0.079 inch)
Top edge registration error on a simplex sheet	+/- 2.1 mm (0.082 inch)
Top edge registration error on a duplex sheet	+/- 2.1 mm (0.082 inch)

Registration measurement

Make a copy of test pattern 82E2010 (A4) or 82E2020 (8.5x11).

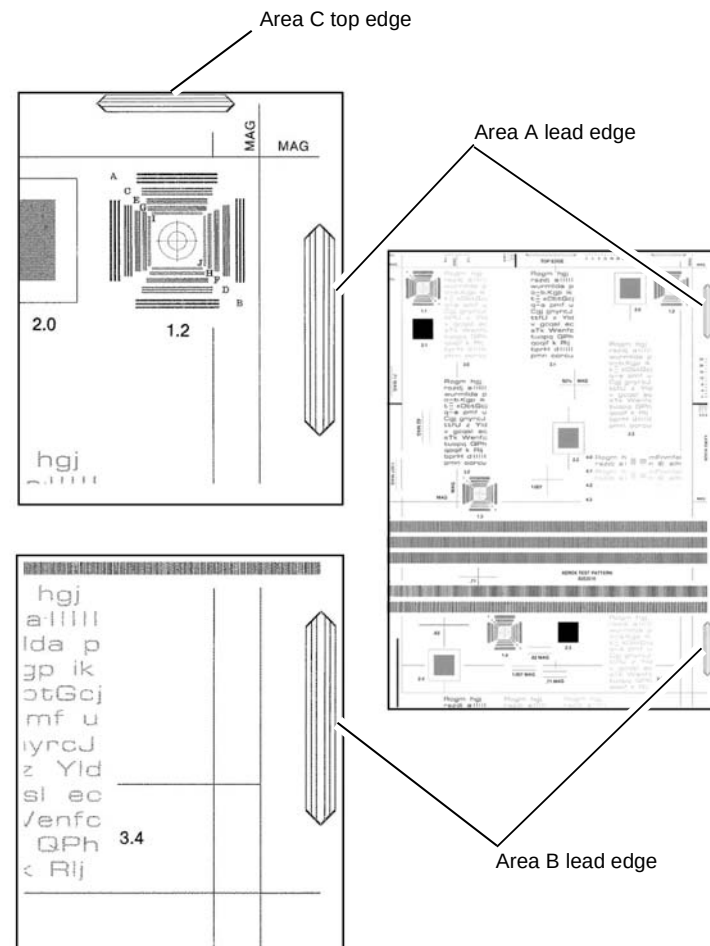
Use the grids A and B on the copy, [Figure 1](#), to measure the displacement of the lead edge compared to the test pattern. Use the grid C to measure the top edge displacement. The displacement measured at A and B should be equal.

NOTE: Grid A and grid B of test patterns 82E2000, 82E2010, 82E2020 are small areas of parallel lines 1mm apart. These can be used to directly measure the registration displacement.

NOTE: If a there is a difference between measurements at A and B, refer to [IQS 5 Skew](#).

Corrective Action

As necessary, perform [ADJ 60.2 IIT Lead Edge Registration](#) or [ADJ 60.3 Side Edge Registration](#).



C-1-0689-A

Figure 1 Registration measurement

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REP 1.1 HVPS

Parts List on [PL 1.10](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



Observe ESD procedures during this procedure.

1. Remove the right cover, [REP 28.3](#).
2. Remove the HVPS, [Figure 2](#).
 - a. Disconnect the connector (1).
 - b. Remove the screws (2).
 - c. Remove the HVPS (3).

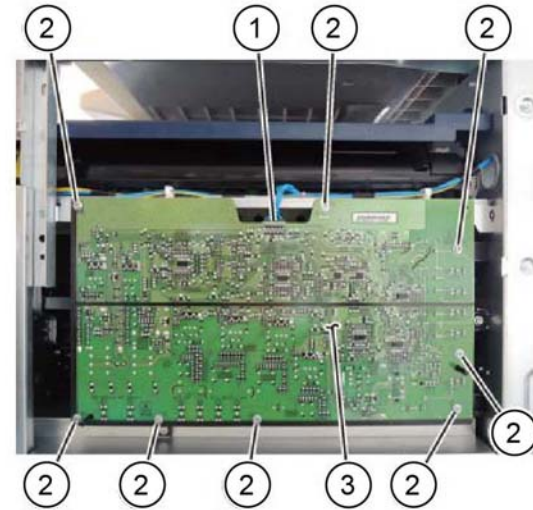


Figure 2 HVPS

C-1-0600-A

Replacement

The replacement is the reverse of the removal procedure.

REP 1.2 Drive PWB

Parts List on [PL 1.10](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.



CAUTION

When installing a new drive PWB and a new ESS PWB at the same time, first install the new ESS PWB, then switch on the machine, [GP 10](#). If the new ESS PWB installation is successful, switch off the machine, then install the new drive PWB.

1. If possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Remove the upper rear cover, [REP 28.5](#).
3. Remove the lower rear cover, [REP 28.6](#).

4. Carefully disconnect the ribbon cable (1) by releasing the side clips, [Figure 2](#).

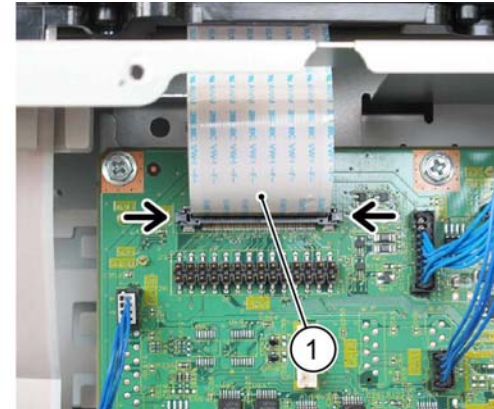


Figure 2 Ribbon cable

C-1-0004-A

5. Disconnect all connectors from the drive PWB (1), [Figure 3](#).

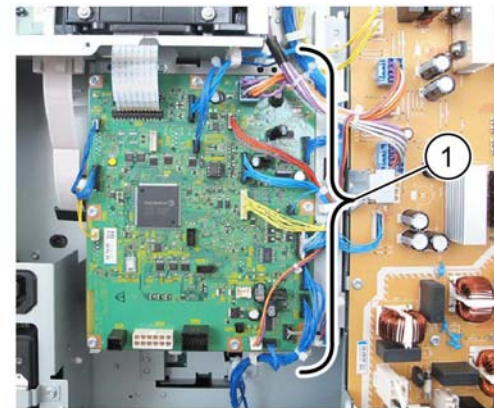


Figure 3 Connectors

C-1-0005-A

6. Remove 8 screws (1), then the drive PWB (2), [Figure 4](#).

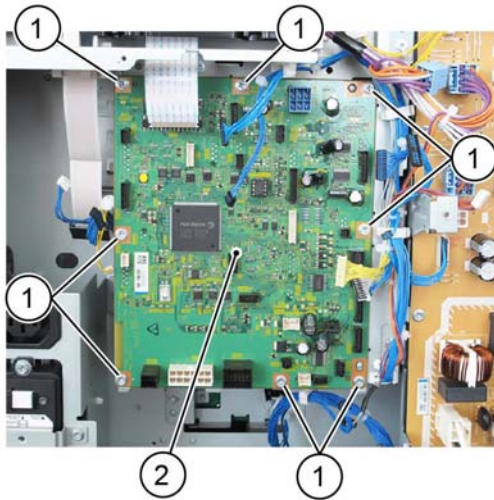


Figure 4 Drive PWB removal

C-1-0006-A

CAUTION

If the original EEPROM cannot be reused, the feed count, jam count and HFSI count will be lost.

3. If the EEPROM is damaged during removal and cannot be reused, enter [dC131](#) NVM read/Write. Enter all NVM settings listed on the NVM Setting List that was supplied with the machine:

NOTE: The list is located in tray 1, beneath the RAI cover, [PL 70.05 Item 10](#).

4. Ensure that the device ID and billing data is correct, perform [dC132](#).
5. Check the machines current software level against the software level recorded prior to installation of the new drive PWB. If necessary, reload the software, [GP 4](#).

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new drive PWB is to be installed, remove the EEPROM (1) from the old drive PWB, then install it onto the new drive PWB, [Figure 5](#).

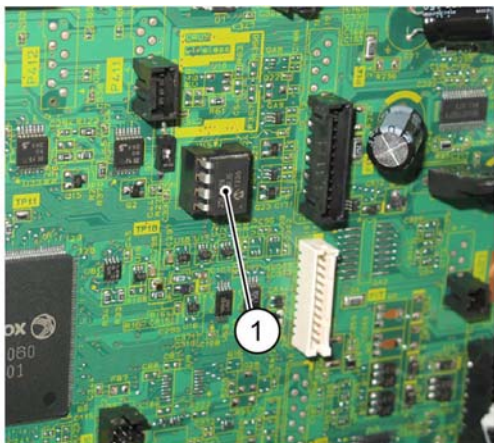


Figure 5 EEPROM

C-1-0007-A

REP 1.3 LVPS

Parts List on [PL 1.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).
3. Disconnect all connectors from the LVPS, [Figure 2](#).

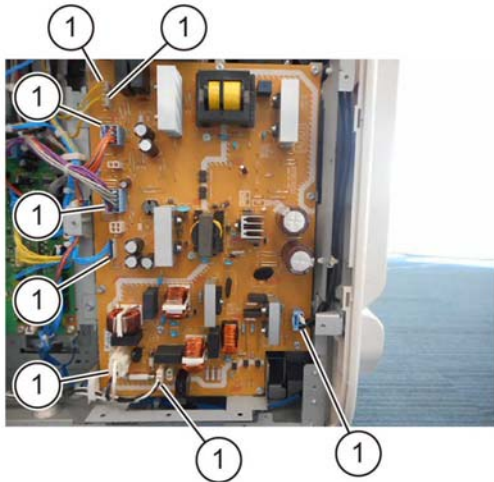


Figure 2 Connectors

C-1-0008-A

4. Remove the LVPS, [Figure 3](#):
 - a. Remove 12 screws (1).
 - b. Release the stand off (2), then remove the LVPS (3).

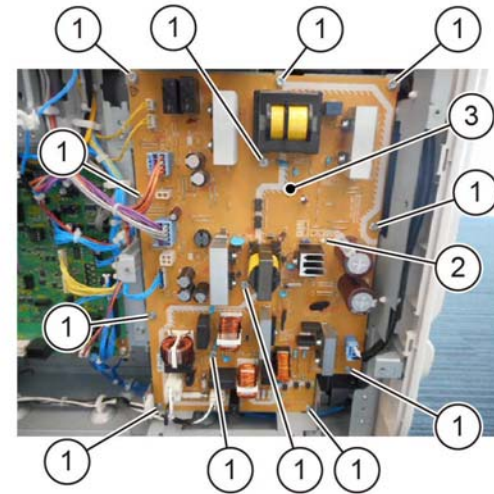


Figure 3 LVPS removal

C-1-0009-A

Replacement

The replacement is the reverse of the removal procedure.

REP 1.4 LVPS Assembly

Parts List on [PL 1.10](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).
3. Prepare to remove the LVPS assembly, [Figure 2](#):
 - a. Disconnect eight connectors (1).
 - b. Release the harness from the clamp (2).
 - c. Remove both harness clamps (3) from the frame.

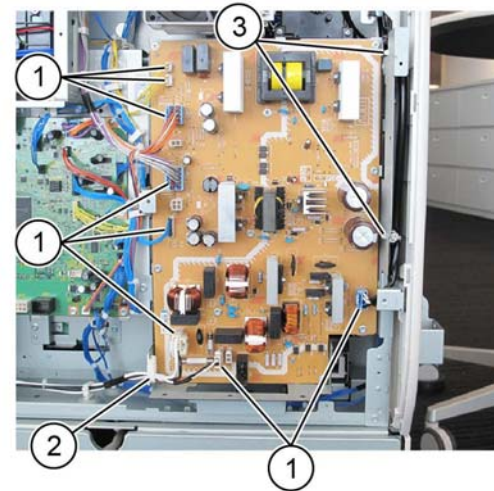


Figure 2 Preparation

C-1-0011-A

4. Remove four screws (1), then the LVPS assembly (2), [Figure 3](#).

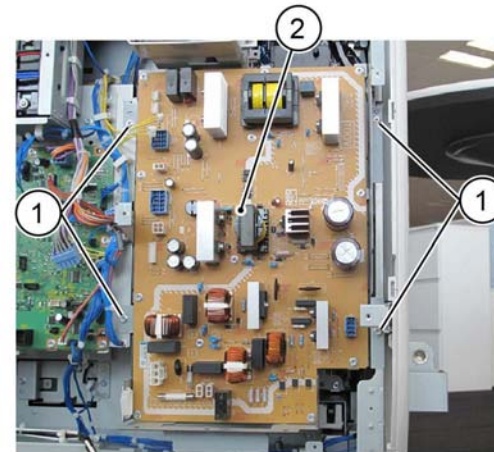


Figure 3 LVPS removal

C-1-0012-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the smaller 2 pin connector is connected to PJ3, not PJ4.

REP 1.5 Drive PWB Assembly

Parts List on [PL 1.10](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



Observe ESD procedures during this procedure.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).
3. Carefully disconnect the ribbon cable (1) by releasing the side clips, [Figure 2](#).

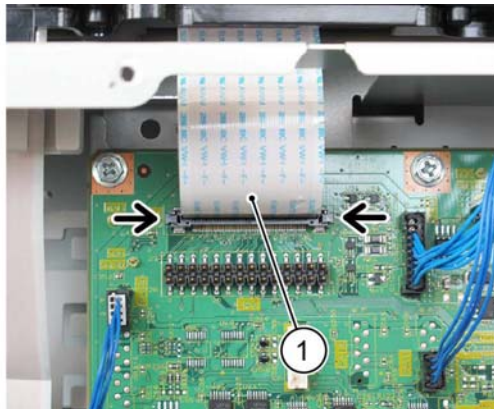
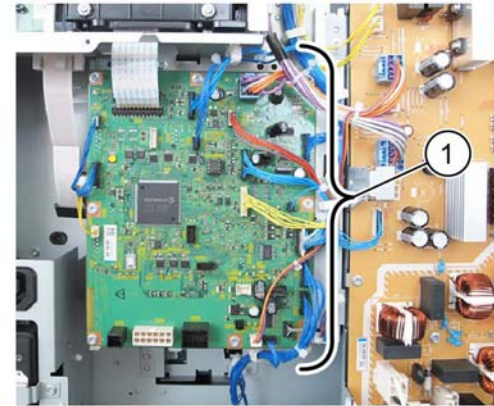


Figure 2 Ribbon cable

C-1-0004-A

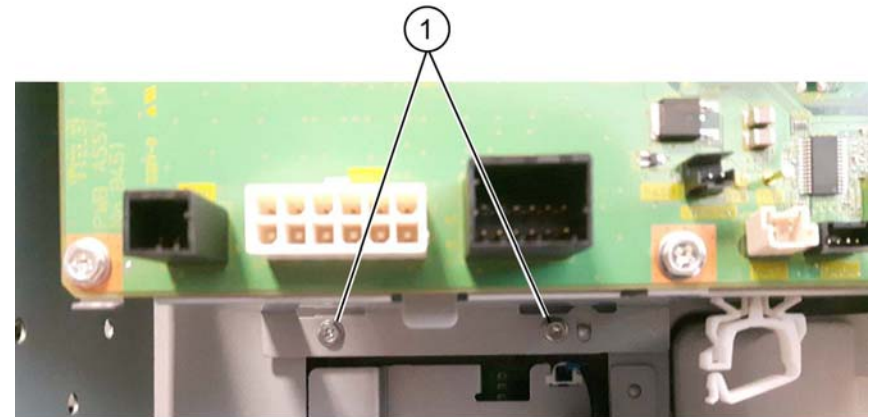
4. Disconnect all connectors from the drive PWB (1), [Figure 3](#).



C-1-0005-A

Figure 3 Connectors

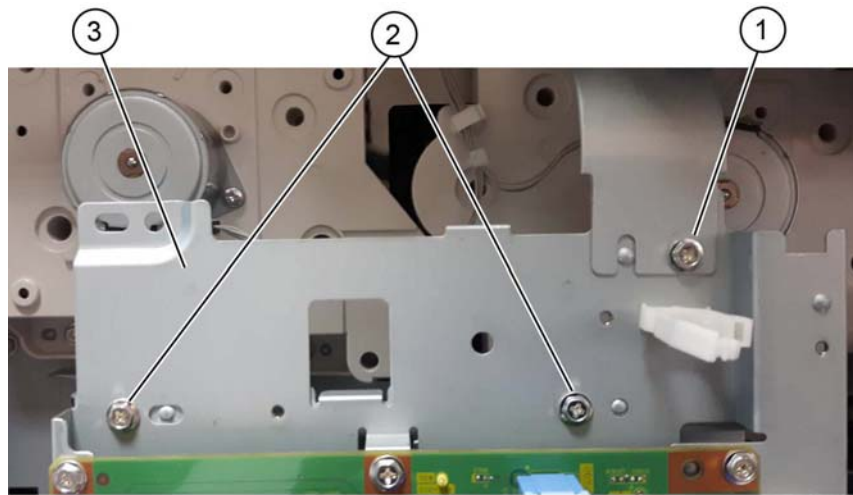
5. Remove two lower screws (1), [Figure 4](#).



C-1-0601-A

Figure 4 Drive PWB lower screws

6. Remove the drive PWB assembly, [Figure 5](#).
 - a. Remove the screw connected to the harness upper bracket (1).
 - b. Remove two upper screws (2) and then the drive PWB assembly (3).



C-1-0602-A

Figure 5 Drive PWB upper screws and drive PWB removal

Replacement

1. The replacement is the reverse of the removal procedure.

REP 2.1 User Interface Assembly (C7030F)

Parts List on [PL 2.05](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



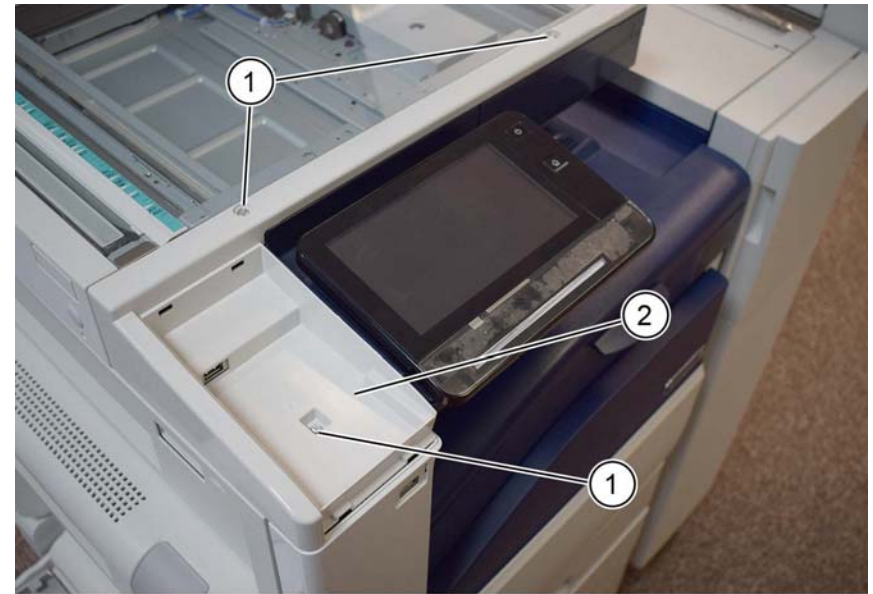
WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. If possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Open the DADF.
3. Remove the ICCR cover, [PL 2.05 Item 12](#).

NOTE: The ICCR cover is secured by 2 clips at the front.

4. Remove the upper cover, [Figure 1](#):
 - a. Remove 3 screws (1).
 - b. Remove the upper cover (2).

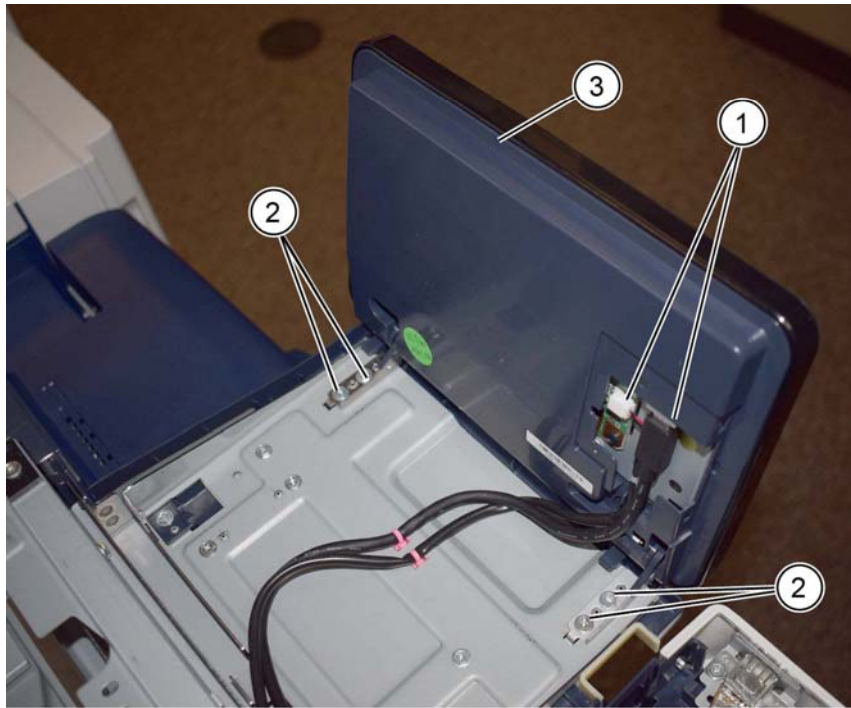


C-1-0515-A

Figure 1 Upper cover

5. Fully raise the UI assembly, then remove the cable cover, [PL 2.05 Item 8](#).
6. Remove the inner cover, [PL 2.05 Item 10](#).

7. Remove the UI assembly, [Figure 2](#):
 - a. Disconnect both connectors (1).
 - b. Remove 4 screws (2), then the UI assembly (3).



C-1-0516-A

Figure 2 UI assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Check the machine's current software level against the software level recorded prior to installation of the new user interface assembly. If necessary, reload the software, [GP 4](#).

REP 2.2 User Interface Assembly (C7000)

Parts List on [PL 2.10](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. If possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Remove the UI rear cover, [Figure 1](#).
 - a. Lift the UI assembly (1) in the direction of arrow.
 - b. Insert a flat screwdriver in the gap between the UI rear cover and the UI assembly (2).



Figure 1 User interface rear cover

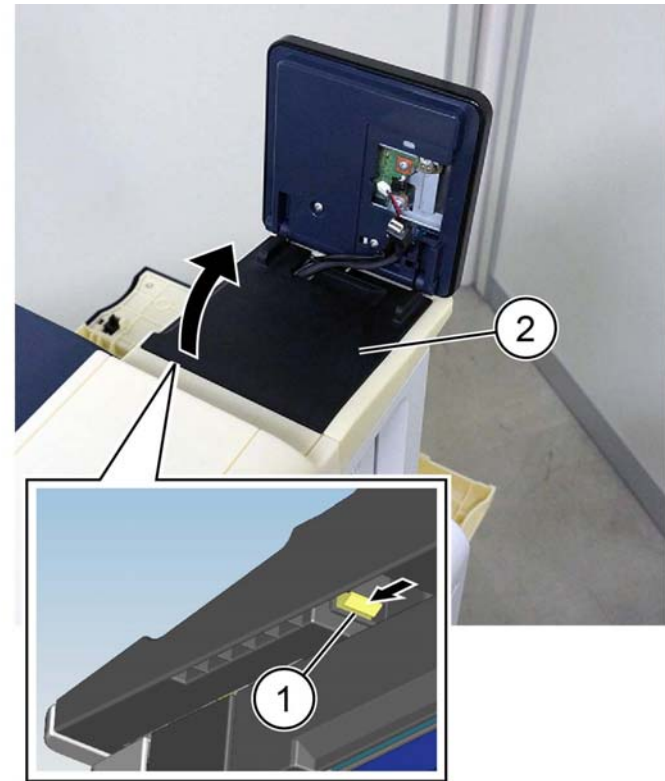
3. Disconnect two connectors, [Figure 2](#).



C-1-0604-A

Figure 2 User interface connectors

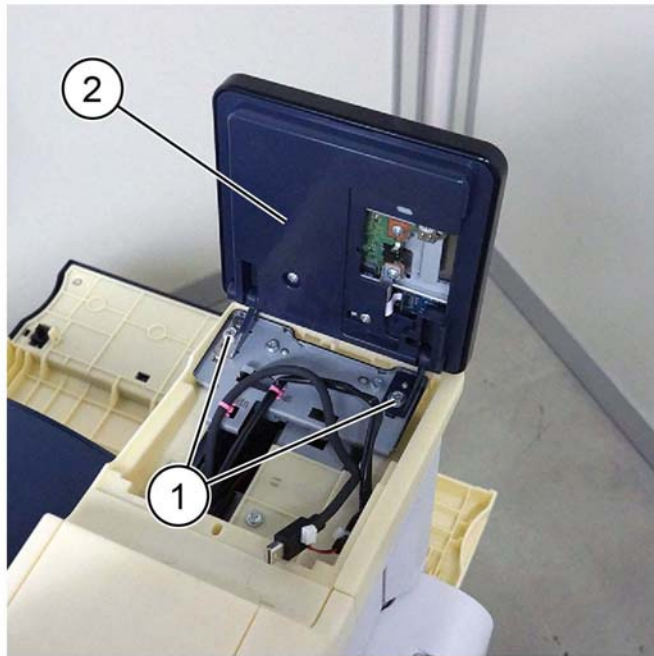
4. Remove the UI inner cover, [Figure 3](#).
- Release the hook (1) inside the inner cover by pressing it in the direction of the arrow.
 - Lift the inner cover (2) in the direction of the arrow.



C-1-0605-A

Figure 3 User interface inner cover

5. Remove the UI assembly, [Figure 4](#).
 - a. Remove two screws (1).
 - b. Remove the UI assembly (2).



C-1-0606-A

Figure 4 User interface connectors

Replacement

1. The replacement is the reverse of the removal procedure.
2. Check the machines current software level against the software level recorded prior to installation of the new user interface assembly. If necessary, reload the software, [GP 4](#).

REP 3.1 ESS PWB

Parts List on PL 3.10

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.



CAUTION

Do not touch the battery. Do not peel off the protective tape.

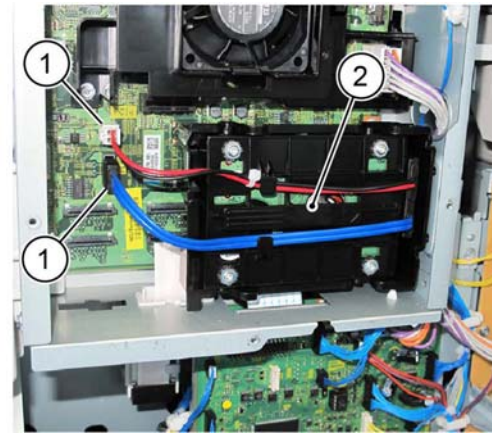


CAUTION

When installing a new ESS PWB and a new drive PWB at the same time, first install the new ESS PWB, then switch on the machine, GP 10. If the new ESS PWB installation is successful, switch off the machine, then install the new drive PWB.

1. If possible, record the current software level by either:
 - Printing the configuration report, GP 14.
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Remove the upper rear cover, REP 28.5.

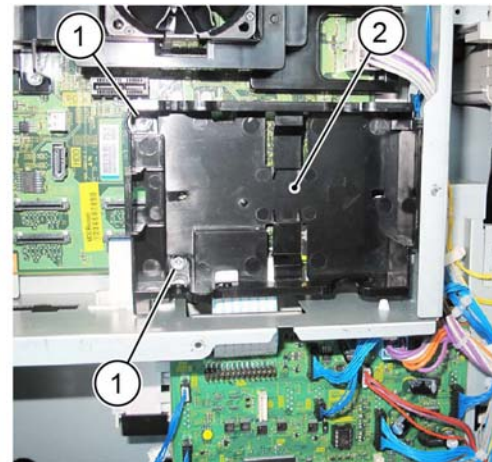
3. If the machine has an HDD assembly installed, remove the HDD assembly, Figure 2:
 - a. Disconnect the connectors (1).
 - b. Remove the HDD assembly (2).



C-1-0018-A

Figure 2 HDD removal

4. If the machine had an HDD assembly installed, remove both screws (1), then the HDD bracket (2), Figure 3.



C-1-0019-A

Figure 3 HDD bracket removal

5. Carefully disconnect the ribbon cable (1) by releasing the side clips, [Figure 4](#).

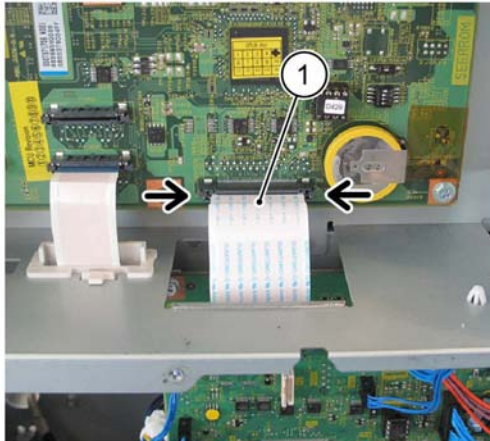


Figure 4 Ribbon cable

C-1-0020-A

6. Disconnect the four FFC cables, [Figure 5](#) :
Note that each cable is marked with a Y, M, C, and K.

 - a. Note which cable goes to which connector.
 - b. Carefully disconnect the FFC cable (1) by releasing the side clips.
 - c. Pull down the FFC cable through the gap in the ESS chassis (2).

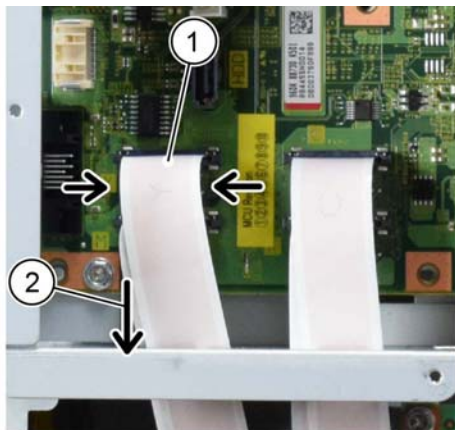


Figure 5 FFC cables

C-1-0021-A

7. Disconnect the USB, DADF I/F and UI cables, [Figure 6](#):
 - a. Disconnect the USB cable (1).
 - b. Disconnect the DADF I/F cable (2). **(C7030F only)**.
 - c. Disconnect the UI cable (3).

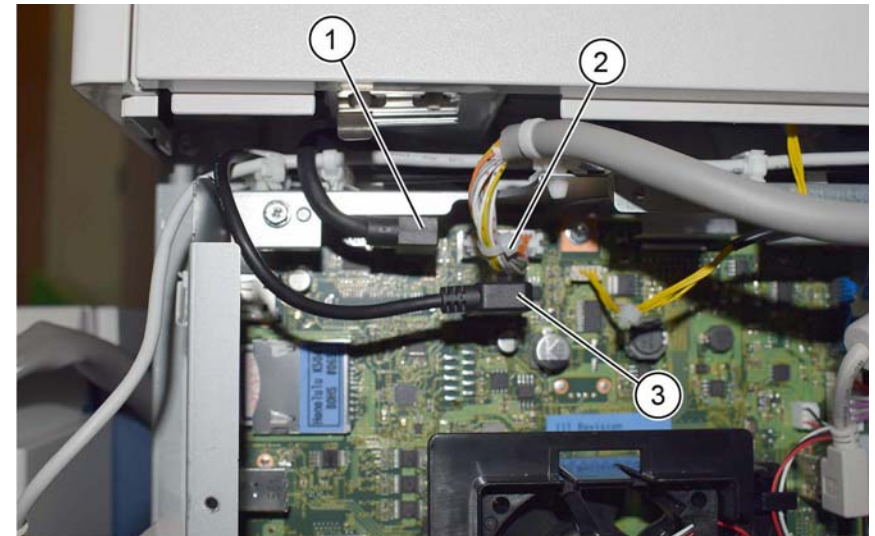


Figure 6 Cables

8. If the machine has a fax installed, disconnect the connection between the connector and the USB cable, [Figure 7](#):
 - a. Disconnect the USB cable (1).
 - b. Release the USB cable clamp (2).
 - c. Disconnect the connector (3).

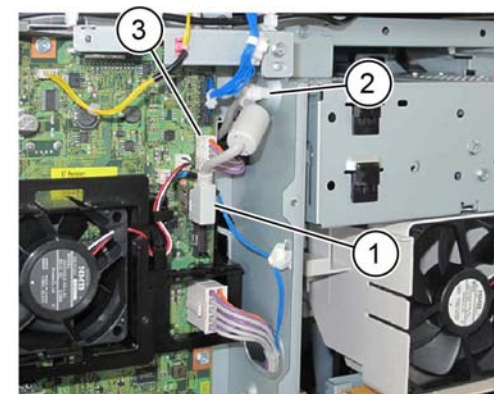


Figure 7 USB cable

9. Disconnect the connectors, **Figure 8**:
 - a. Disconnect the three connectors (1), then release the associated harness clamps.
 - b. Pull the harness through the hole in the chassis (2).

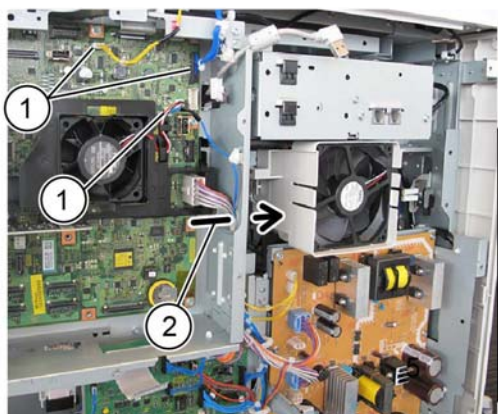


Figure 8 Connectors



Take not to damage or dislodge the rear cover ground clip (3) when removing the ESS upper panel.

10. Remove the ESS upper panel, **Figure 9**.
 - a. Remove both screws (1).
 - b. Remove the ESS upper panel (2).
 - c. Release all remaining harness clamps from the ESS upper panel.

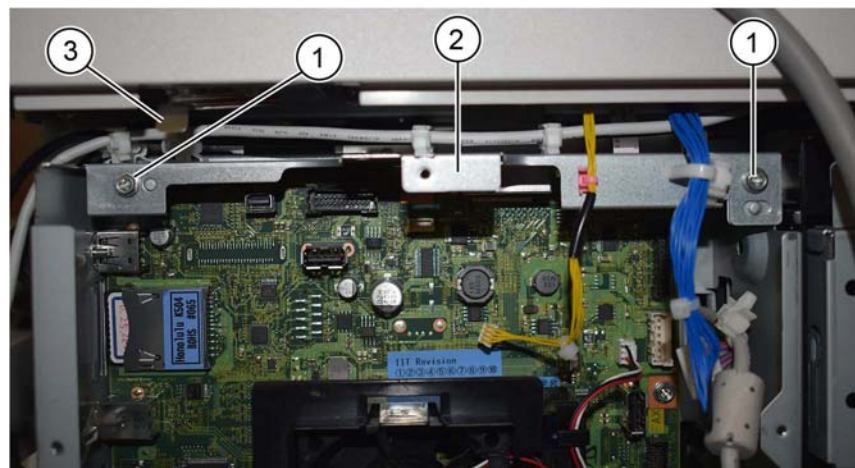


Figure 9 ESS upper panel removal



The FFC LED cable is secured by a clamp. Carefully lift both ends of the cable clamp simultaneously to release the cable.

11. **(C7030F only)**. Carefully disconnect the CCD ribbon cable (1) and the FFC LED cable (2), **Figure 10**.



C-1-0026-A

Figure 10 Cables

12. Disconnect the connectors and fittings from side of ESS PWB, **Figure 11**.
 - a. If fitted, remove the wireless dongle (1).
 - b. Disconnect the USB cable (2).
 - c. Remove screw for the USB connector (3).
 - d. Remove screws for the D-type connector (4).

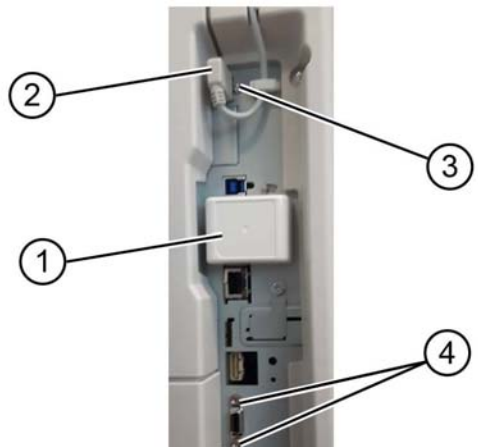


Figure 11 ESS PWB side connectors

13. Remove the ESS PWB, [Figure 12](#):

- a. Remove eight screws (1).
- b. Remove the ESS fan (2).
- c. For machines without an HDD, remove both screws (3).

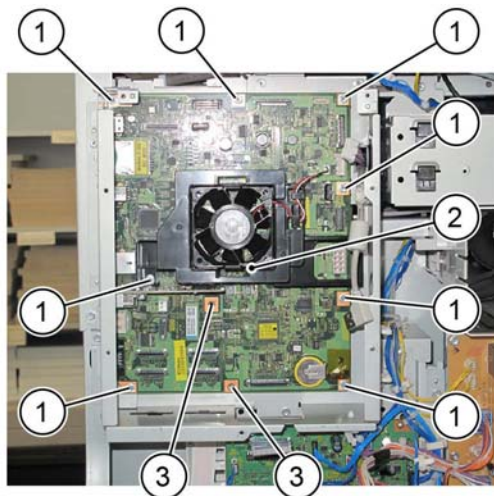


Figure 12 ESS PWB removal

C-1-0027-A

Replacement

CAUTION

Take care not to insert the harness at an angle as this could damage the PWB.

1. The replacement is the reverse of the removal procedure.
2. If a new ESS PWB is to be installed:

CAUTION

Take care when removing and reinstalling the SEEPROM. The pins are easily damaged.

- a. Remove the SEEPROM (1) from the old ESS PWB, then install it onto the new ESS PWB, [Figure 13](#).

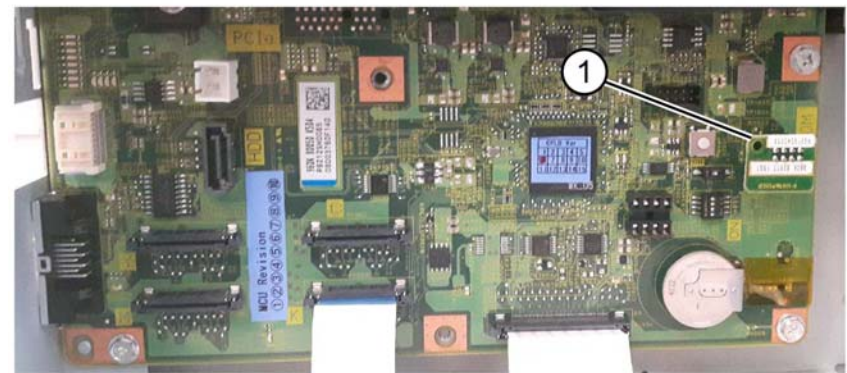


Figure 13 SEEPROM

- b. Remove the SD card from the old ESS PWB, then install it onto the new ESS PWB.
3. Be aware of that when connecting the FFC cable and the ribbon cable:
 - a. When connecting the ribbon cable, insert it straight into the connector housing until it locks.
 - b. Ensure that the cable is connected securely at both ends.

4. Be aware that when connecting the FFC LED cable, [Figure 14](#):
 - a. The black lines serve as a guide for whether the FFC LED cable is inserted correctly. Insert the connector so that the back lines are parallel.

NOTE: The black lines remain visible even after the FFC connector is inserted.

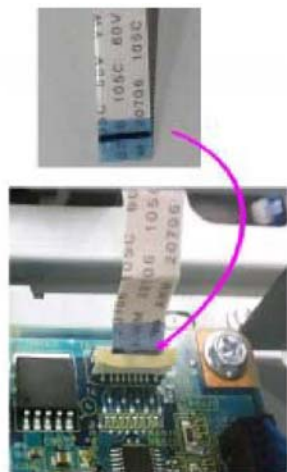
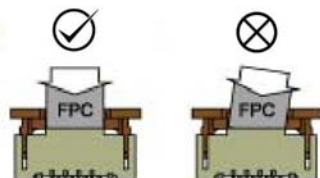


Figure 14 FFC LED cable



C-1-0030-A

5. Ensure that the device ID and billing data is correct, perform [dC132](#).
6. Check the machines current software level against the software level recorded prior to installation of the new ESS PWB. If necessary, reload the software, [GP 4](#).

REP 3.2 ESS PWB Chassis Assembly

Parts List on [PL 3.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.



CAUTION

Do not touch the battery. Do not peel off the protective tape.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).
3. Remove the RH top cover, [PL 28.06 Item 2](#).
4. Remove the RH rear cover, [PL 28.06 Item 3](#).

5. If the machine has an HDD assembly installed, remove the HDD assembly, [Figure 2](#):
 - a. Disconnect the connectors (1).
 - b. Remove the HDD assembly (2).

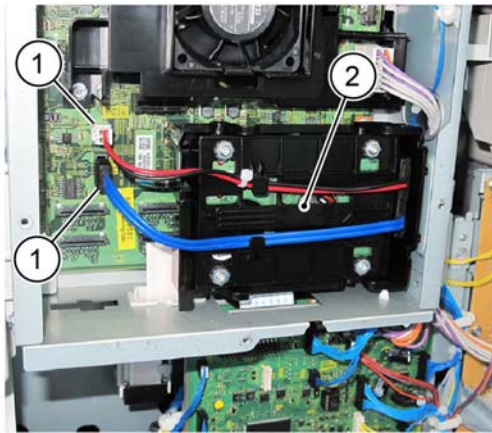


Figure 2 HDD removal

C-1-0519-A

6. If the machine had an HDD assembly installed, remove both screws (1), then the HDD bracket (2), [Figure 3](#).

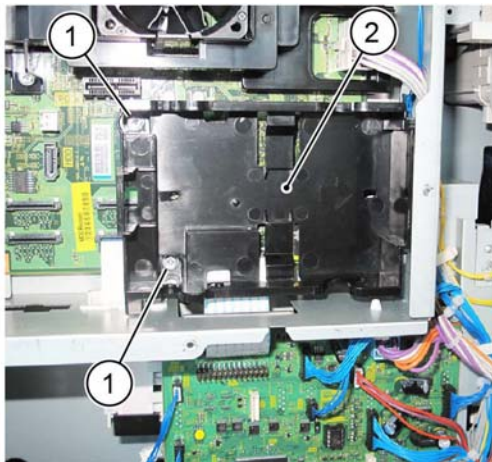


Figure 3 HDD bracket removal

C-1-0520-A

7. Carefully disconnect the ribbon cable (1) by releasing the side clips, [Figure 4](#).

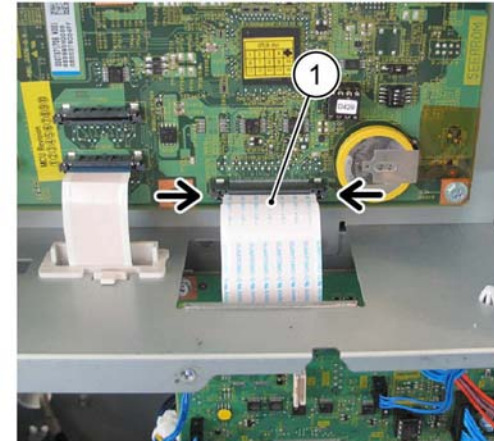


Figure 4 Ribbon cable

C-1-0521-A

8. Disconnect the four FFC cables, [Figure 5](#):
 - a. Note that each cable is marked with a Y, M, C, and K.
 - b. Carefully disconnect the FFC cable (1) by releasing the side clips.
 - c. Pull down the FFC cable through the gap in the ESS chassis (2).

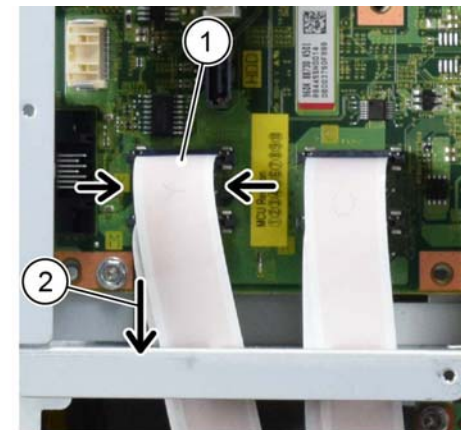


Figure 5 FFC cables

C-1-0522-A

9. Disconnect the USB, DADF I/F and UI cables, **Figure 6:**
 - a. Disconnect the USB cable (1).
 - b. Disconnect the DADF I/F cable (2). **(C7030F only).**
 - c. Disconnect the UI cable (3).

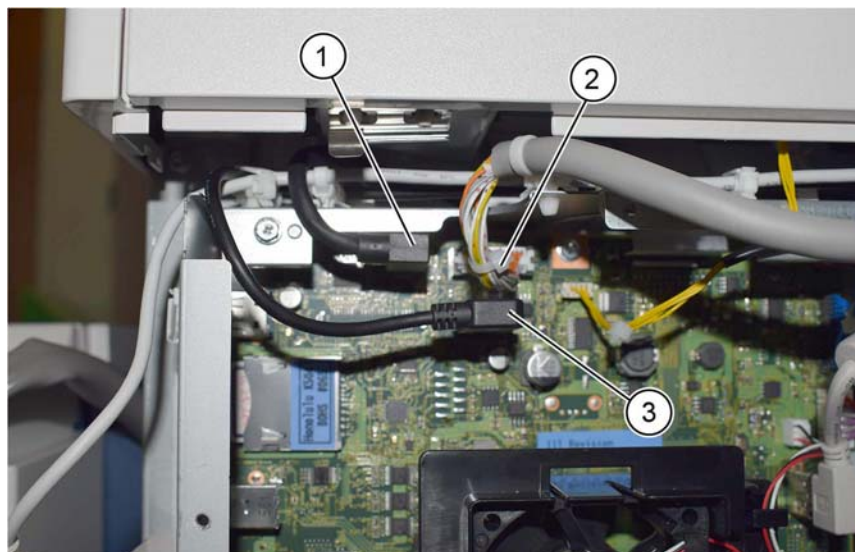


Figure 6 Cables

10. Disconnect the connection between the connector and the USB Cable, **Figure 7:**
 - a. Disconnect the USB cable (1).
 - b. Release the USB cable clamp (2).
 - c. Disconnect the connector (3).

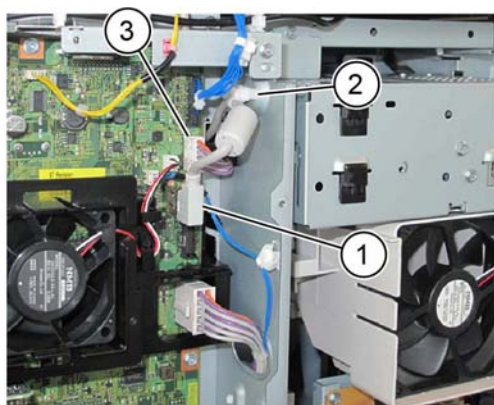
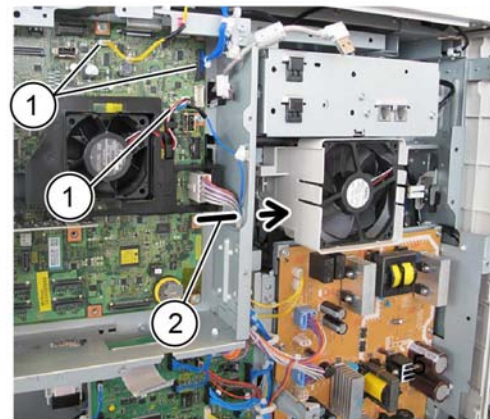


Figure 7 USB cable

C-1-0524-A

11. Disconnect the connectors, **Figure 8:**
 - a. Disconnect the three connectors (1), then release the associated harness clamps.
 - b. Pull the harness through the hole in the chassis (2).



C-1-0525-A

Figure 8 Connectors

!
CAUTION

Take not to damage or dislodge the rear cover ground clip (3) when removing the ESS upper panel.

12. Remove the ESS upper panel, **Figure 9**:
 - a. Remove both screws (1).
 - b. Remove the ESS upper panel (2).
 - c. Release all remaining harness clamps from the ESS upper panel.

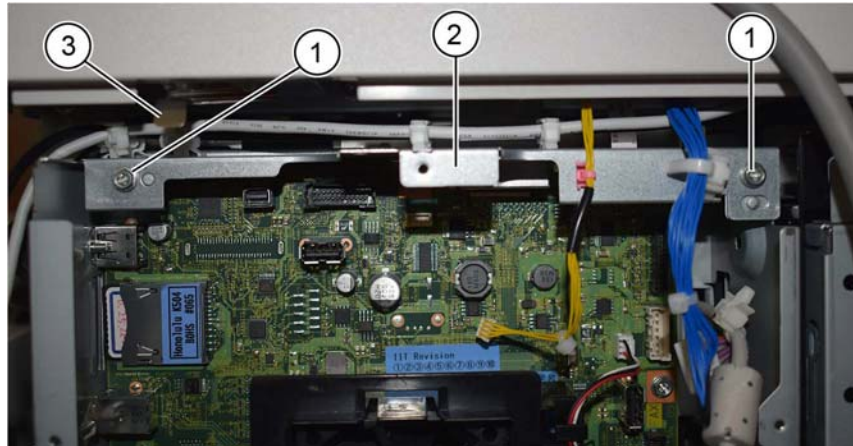


Figure 9 ESS upper panel removal

CAUTION

The FFC LED cable is secured by a clamp. Carefully lift both ends of the cable clamp simultaneously to release the cable.

13. **(C7030F only)**. Carefully disconnect the CCD ribbon cable (1) and the FFC LED cable (2), **Figure 10**.

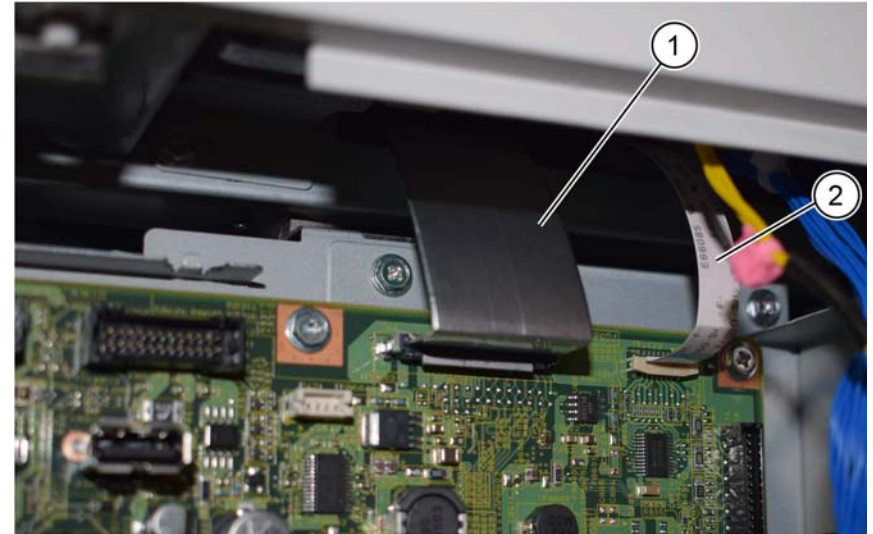


Figure 10 Cables

14. Carefully flex the corner of the right cover away from the machine, then remove the screw (1), [Figure 11](#).

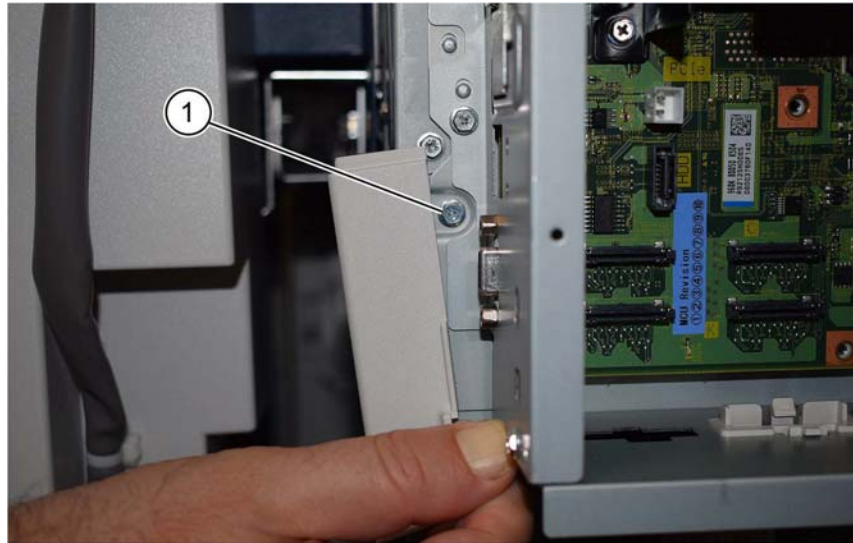


Figure 11 Lower right screw

C-1-0528-A

15. Remove two screws (1), [Figure 12](#).

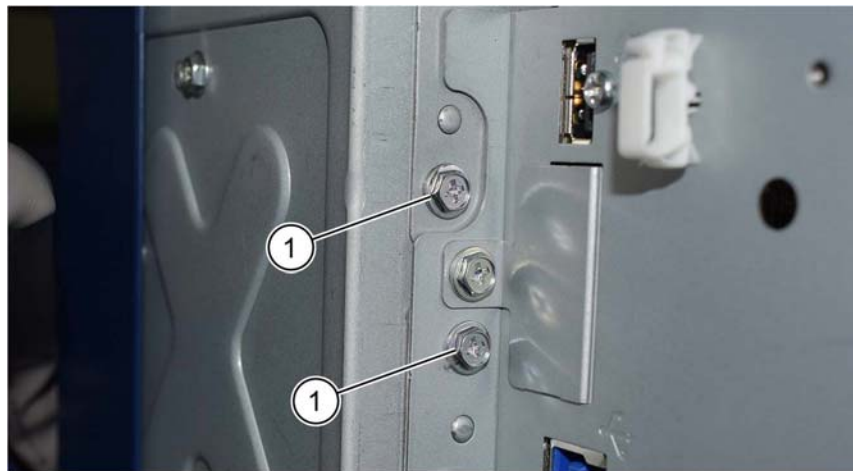


Figure 12 Upper right screws

C-1-0529-A

16. Remove two screws (1), [Figure 13](#).

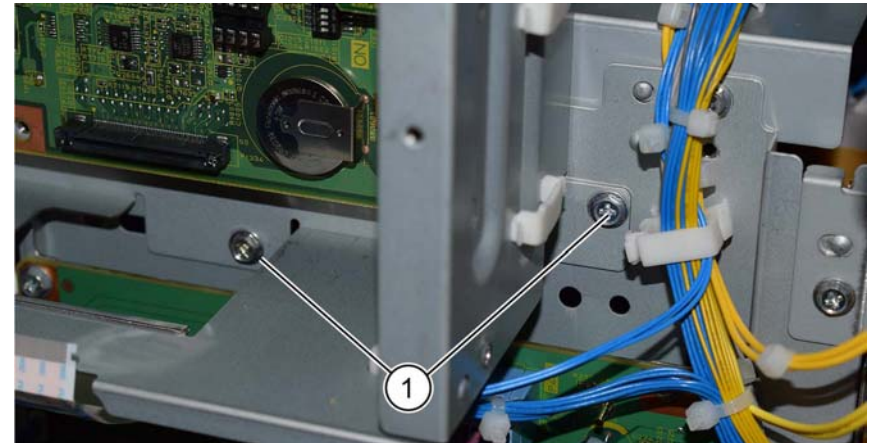


Figure 13 Lower left screws



CAUTION

For machines with a fax, the USB cable and connector are still secured by the clamp. Do not forcibly pull the ESS PWB chassis assembly.

17. Remove two screws (1), then the ESS PWB chassis assembly (2), [Figure 14](#):

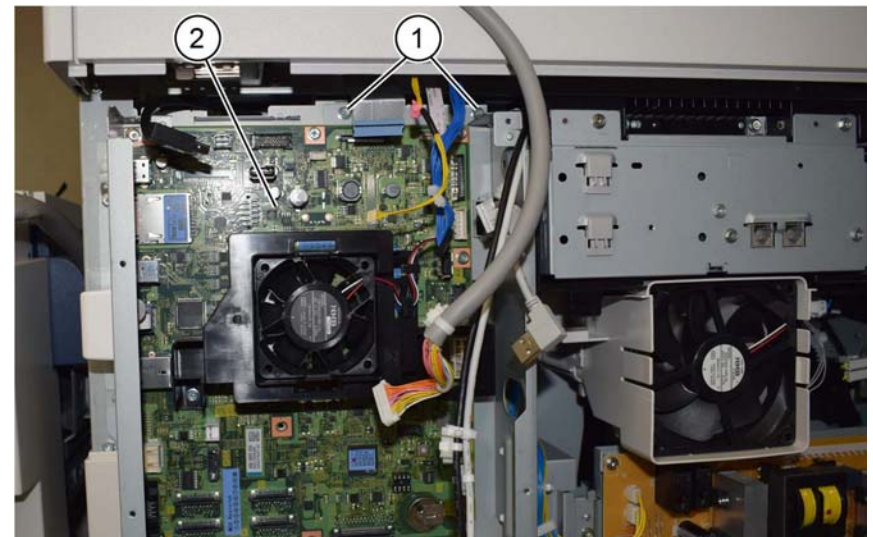


Figure 14 ESS PWB chassis assembly removal

18. If the machine has a fax installed, release the USB cable and connector from the clamp (1), [Figure 15](#).

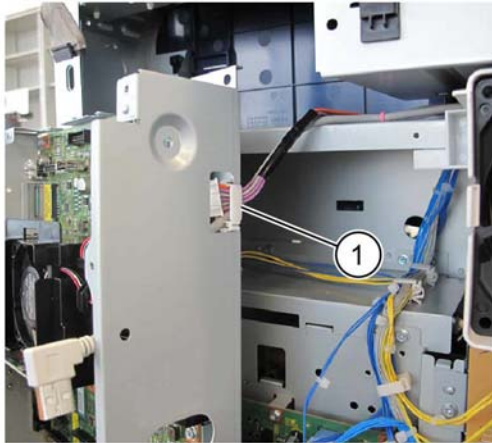


Figure 15 USB cable and connector

Replacement

The replacement is the reverse of the removal procedure.

REP 3.3 SD Card

Parts List on [PL 3.10](#)

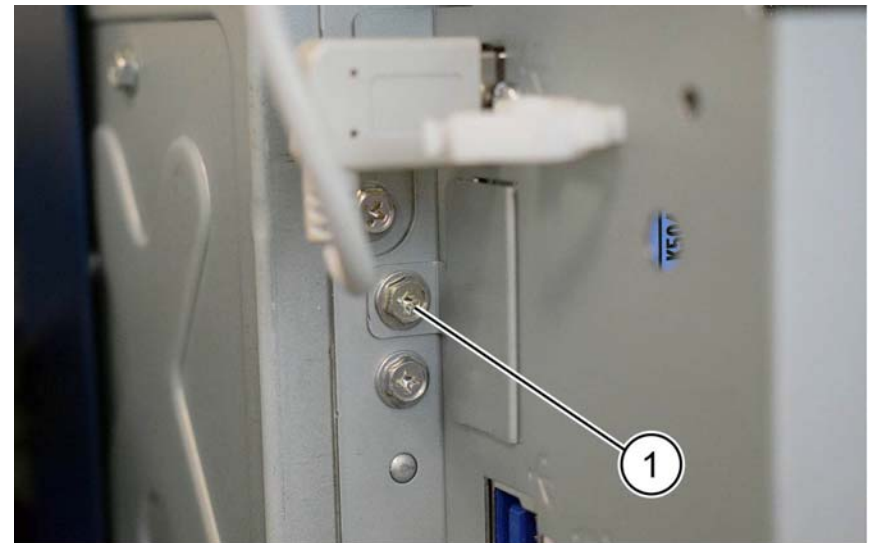
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).
3. Remove the RH top cover, [PL 28.06 Item 2](#).
4. Remove the RH rear cover, [PL 28.06 Item 3](#).
5. Remove one screw (1), then the SD card cover, [Figure 1](#).



C-1-0693-A

Figure 1 SD card cover removal

6. Remove the SD card, [PL 3.10 Item 11](#).

Replacement

1. The replacement is the reverse of the removal procedure.
2. Reload the software, [GP 4](#).

REP 5.1 DADF Removal

Parts List on [PL 5.05](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. If a new DADF is to be installed, if possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Remove the upper rear cover, [REP 28.5](#).
3. Disconnect the cable clamps (1), then the connector (2), [Figure 1](#).

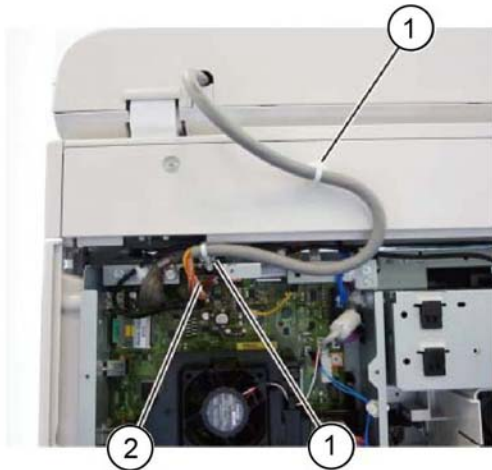


Figure 1 Connector

C-1-0031-A

4. Remove the DADF, [Figure 2](#).



Figure 2 DADF removal

C-1-0032-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install the DADF by inserting the tabs of the counter balance into the grooves of the installation holes (1).

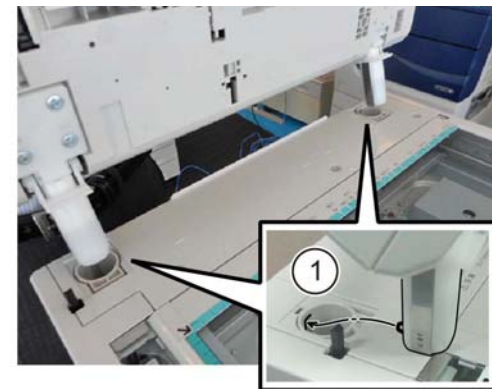


Figure 3 DADF replacement

C-1-0033-A

3. If a new DADF is installed perform the steps that follow:
 - a. Enter [dC135](#) HFSI Counter. Reset the HFSI counters that follow:
 - Chain-Link: 955-806
 - Chain-Link: 955-807
 - Chain-Link: 955-808
 - Chain-Link: 955-810

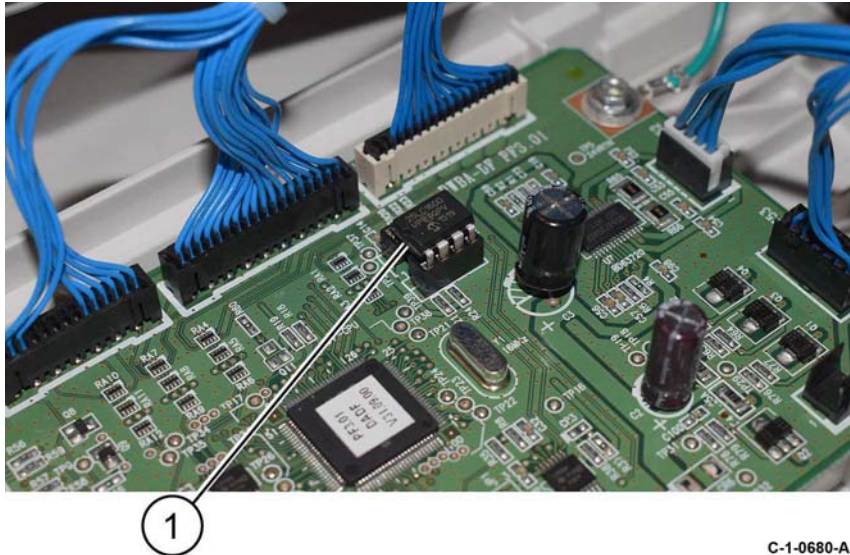
- Chain-Link: 955-812
- Chain-Link: 955-826
- Chain-Link: 955-828



CAUTION

Take care when removing and reinstalling the SEEPROM. The pins are easily damaged.

- b. Remove the SEEPROM (1) from the old DADF PWB, then install it onto the new DADF PWB, [Figure 4](#).



C-1-0680-A

Figure 4 SEEPROM



CAUTION

If the original SEEPROM cannot be reused, the feed count, jam count and HFSI count will be lost.

- c. If the SEEPROM is damaged during removal and cannot be reused, enter [dC131](#) NVM read/Write. Enter the DADF NVM settings listed below according to the NVM Setting List that was supplied with the machine:
 - 711-140
 - 711-141
 - 711-142
 - 711-143
 - 711-144
 - 711-270
 - 711-271
 - 711-272

- 711-273
- 711-274
- 711-275

NOTE: The list is located in tray 1, beneath the RAI cover, [PL 70.05 Item 10](#).

- d. Check the machines current software level against the software level recorded prior to installation of the new DADF. If necessary, reload the software, [GP 4](#).

REP 5.2 DADF Document Cushion

Parts List on [PL 5.05](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: The DADF document cushion is attached with double sided adhesive tape.

1. Peel off the DADF document cushion, [Figure 1](#).

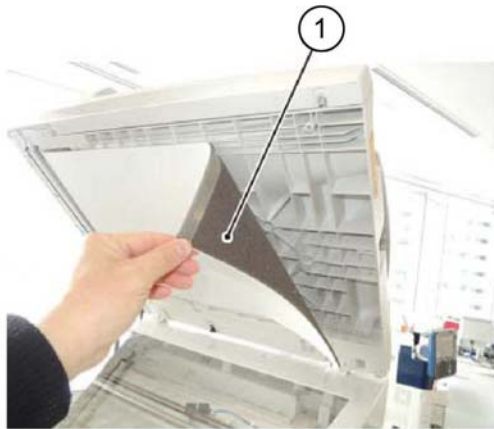


Figure 1 Document cushion removal

C-1-0034-A

Replacement

1. Attach the new DADF document cushion, [Figure 2](#):
 - a. Place the DADF document cushion (1) on the document glass.
 - b. Set the gaps (2) between the document cushion and the document guide (4) and the registration guide (5).
 - c. Slowly lower the DADF to adhere the DADF document cushion (3).

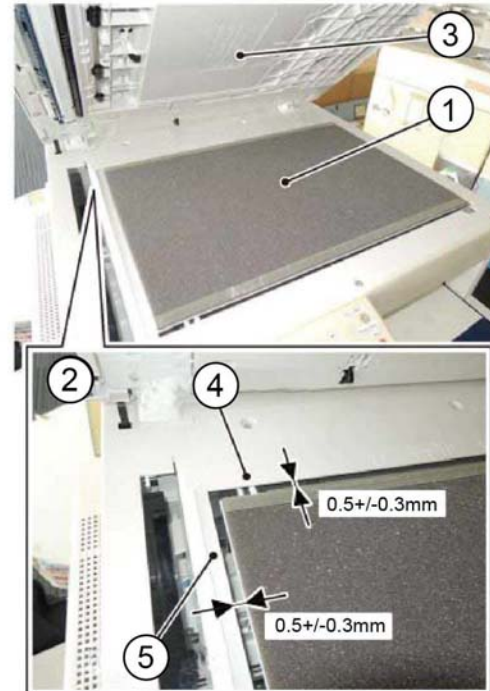


Figure 2 Document cushion installation

C-1-0035-A

REP 5.3 DADF Front Cover

Parts List on [PL 5.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the upper feeder assembly.
2. Open the DADF.
3. Remove the DADF front cover, [Figure 1](#):
 - a. Remove four screws (1).
 - b. Remove the DADF front cover in the direction of the arrow.

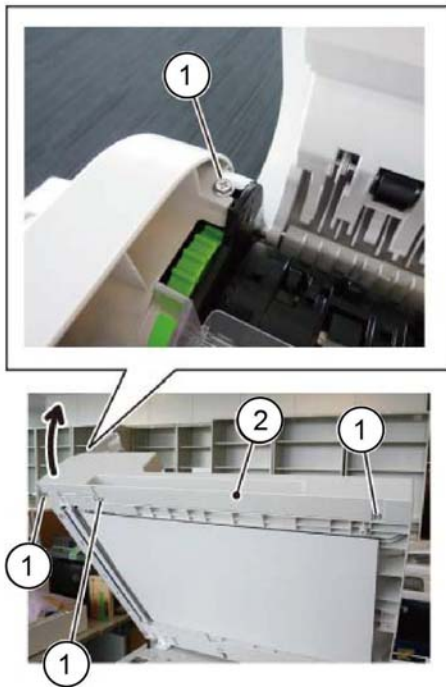


Figure 1 Front cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.4 DADF Rear Cover

Parts List on [PL 5.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the left screw that secures the DADF rear cover, [Figure 1](#):
 - a. Open the upper feeder assembly (1).
 - b. Remove the left screw (2).

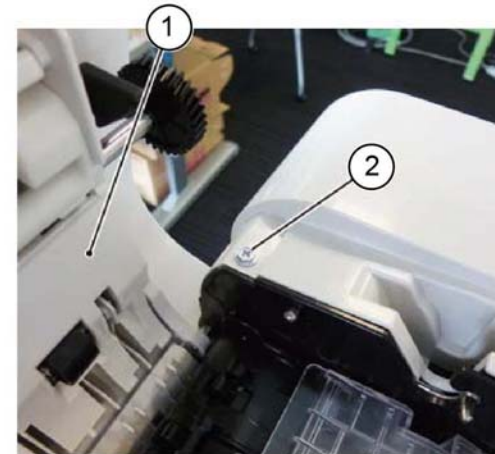
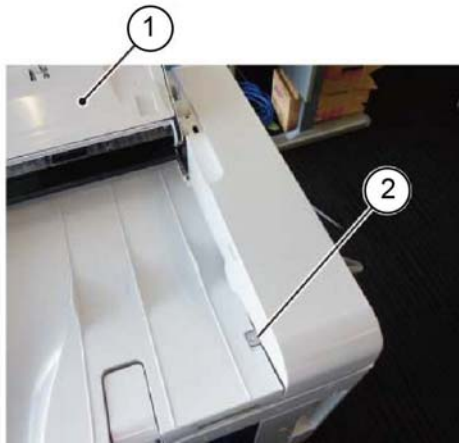


Figure 1 Left screw removal

C-1-0037-A

C-1-0036-A

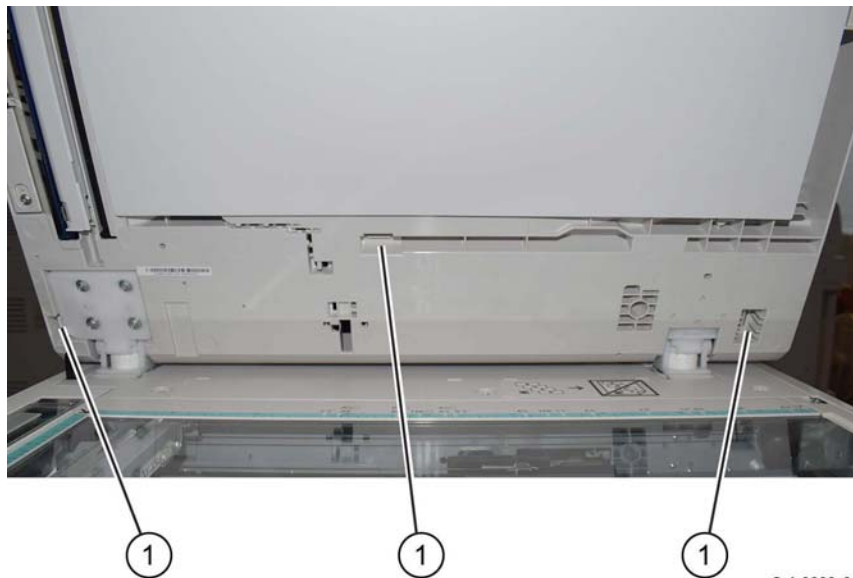
2. Remove the right screw that secures the DADF rear cover, **Figure 2**:
 - a. Raise the document tray (1).
 - b. Remove the right screw (2).



C-1-0038-A

Figure 2 Right screw removal

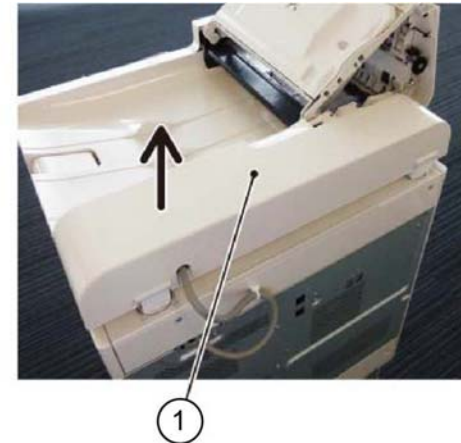
3. Release the three hooks (1) that secure the DADF rear cover, **Figure 3**.



C-1-0039-A

Figure 3 Hooks

4. Remove the DADF rear cover in the direction of the arrow, **Figure 4**.



C-1-0040-A

Figure 4 Rear cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.5 DADF PWB

Parts List on [PL 5.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.

1. If possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Remove the DADF rear cover, [REP 5.4](#).
3. Disconnect six connectors (1), [Figure 2](#).

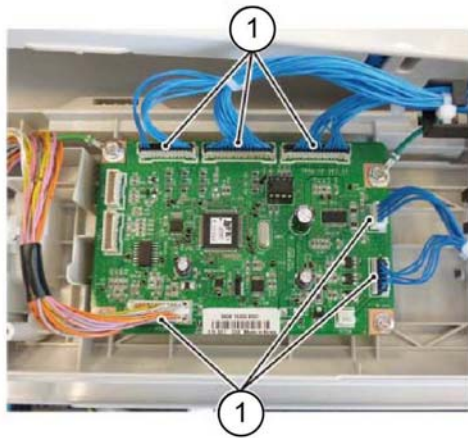


Figure 2 Connectors

C-1-0041-A

4. Remove the DADF PWB, [Figure 3](#):
 - a. Disconnect the two screws with ground wires (1).
 - b. Remove the other two screws (2).
 - c. Remove the DADF PWB (3).

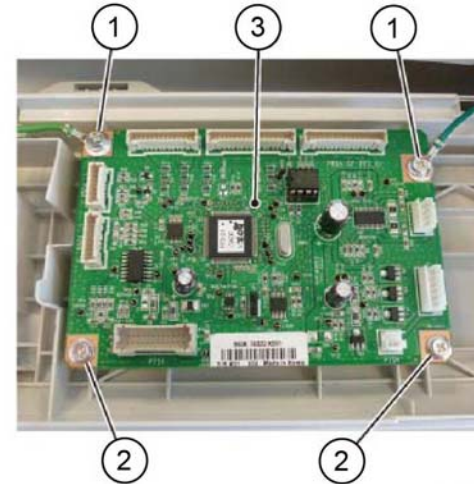


Figure 3 DADF PWB removal

C-1-0042-A

Replacement

1. The replacement is the reverse of the removal procedure.



CAUTION

Take care when removing and reinstalling the SEEPROM. The pins are easily damaged.

2. Remove the SEEPROM (1) from the old DADF PWB, then install it onto the new DADF PWB, [Figure 4](#).

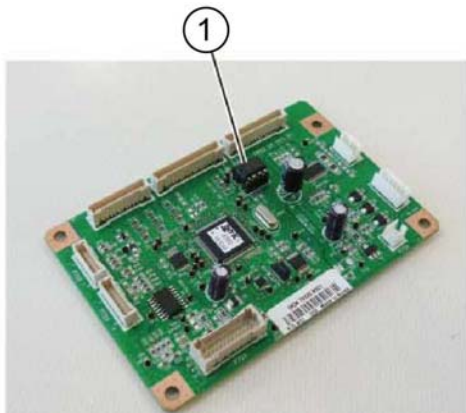


Figure 4 SEEPROM



CAUTION

If the original SEEPROM cannot be reused, the feed count, jam count and HFSI count will be lost.

3. If the SEEPROM is damaged during removal and cannot be reused, enter [dC131](#) NVM read/Write. Enter the DADF NVM settings listed below according to the NVM Setting List that was supplied with the machine:
 - 711-140
 - 711-141
 - 711-142
 - 711-143
 - 711-144
 - 711-270
 - 711-271
 - 711-272
 - 711-273
 - 711-274
 - 711-275

NOTE: The list is located in tray 1, beneath the RAI cover, [PL 70.05 Item 10](#).

4. Check the machine's current software level against the software level recorded prior to installation of the new DADF PWB. If necessary, reload the software, [GP 4](#).

REP 5.6 Upper Feeder Assembly

Parts List on [PL 5.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, [REP 5.3](#).
2. Remove the DADF rear cover, [REP 5.4](#).
3. Remove the front hinge bracket, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the front hinge bracket (2).

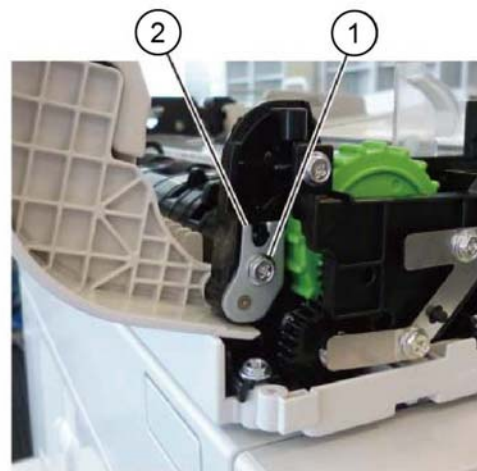


Figure 1 Front hinge bracket removal

C-1-0044-A

4. Remove the upper feeder assembly, [Figure 2](#):
 - a. Remove the screw (1).
 - b. Remove the rear hinge bracket (2).
 - c. Remove the upper feeder assembly (3).

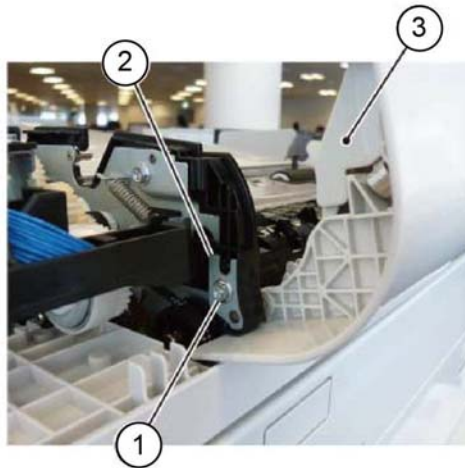


Figure 2 Upper feeder assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.7 DADF Feeder Assembly

Parts List on [PL 5.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, [REP 5.3](#).
2. Remove the DADF rear cover, [REP 5.4](#).
3. Remove the upper feeder assembly, [REP 5.6](#).
4. Remove the document tray, [REP 5.14](#).
5. Remove the harness guide and wire harness, [REP 5.11](#).
6. Remove two screws (1) that secure the DADF feeder assembly at the rear, [Figure 1](#).

NOTE: On some machines, the DADF feeder assembly may be secured by a third screw (2).

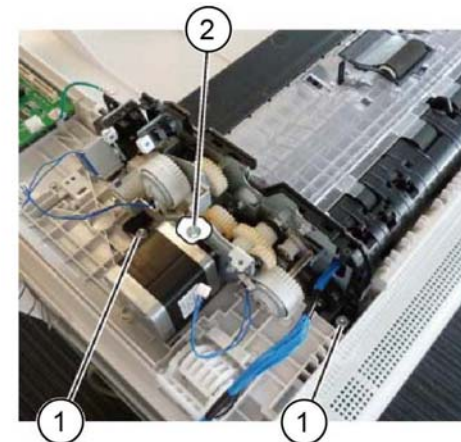


Figure 1 Screw removal

7. Remove the DADF feeder assembly, [Figure 2](#):
 - a. Remove three screws (1).
 - b. Remove the DADF feeder assembly (2).

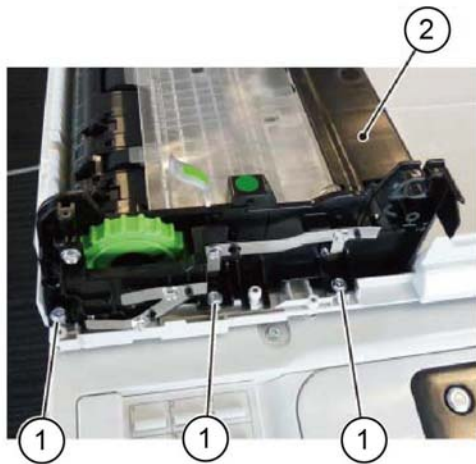


Figure 2 DADF feeder assembly removal

NOTE: The removed DADF feeder assembly is shown in [Figure 3](#).

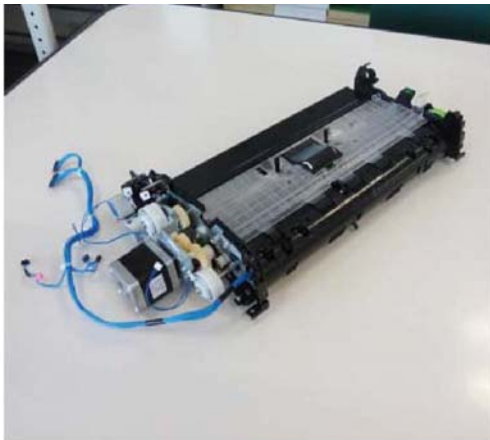


Figure 3 Removed feeder assembly

Replacement

The replacement is the reverse of the removal procedure.

REP 5.8 Left Counter Balance

Parts List on [PL 5.15](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF, [REP 5.1](#).
2. Turn the DADF upside down.
3. Remove the left counter balance, [Figure 1](#):
 - a. Remove four screws (1).
 - b. Remove the left counter balance (2).

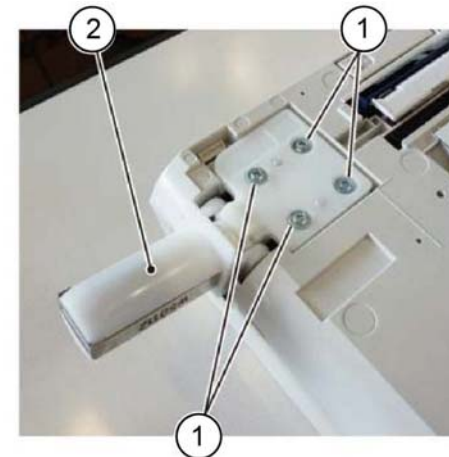


Figure 1 Counter balance removal

C-1-0049-A

Replacement

The replacement is the reverse of the removal procedure.

C-1-0047-A

C-1-0048-A

REP 5.9 Right Counter Balance

Parts List on [PL 5.15](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF rear cover, [REP 5.4](#).
2. Remove the DADF, [REP 5.1](#).
3. Record the position of right counter balance, [Figure 1](#).



Figure 1 Position

C-1-0050-A

4. Remove the right counter balance, [Figure 2](#):
 - a. Disconnect the ground wire (1).
 - b. Remove four screws (2).
 - c. Remove the right counter balance (3).

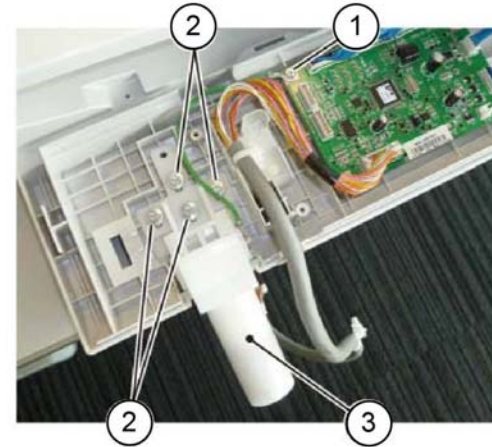


Figure 2 Counter balance removal

C-1-0051-A

Replacement

The replacement is the reverse of the removal procedure.

REP 5.10 Feed/Nudger Roll Assembly

Parts List on [PL 5.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: A new feed/nudger roll assembly and retard roll assembly must both be installed at the same time. Refer to [REP 5.19](#).

1. Open the upper feeder assembly.
2. Remove the feed roll nudger roll assembly, [Figure 1](#):
 - a. Release the hooks (1) of the feed front/rear handle.
 - b. Move the feed/nudger roll assembly (2) in the direction of the arrow, then remove it.

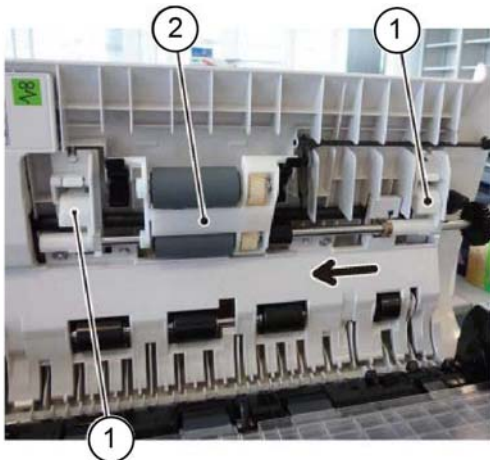


Figure 1 Assembly removal

C-1-0052-A

NOTE: The removed feed/nudger roll assembly is shown in [Figure 2](#).



C-1-0053-A

Figure 2 Removed feed/nudger roll assembly

3. Remove the roll assemblies, [Figure 3](#):
 - a. Release the hook to remove the feed front handle (1).
 - b. Release the hook to remove the nudger CRU housing (2).
 - c. Remove the roll assemblies (3).

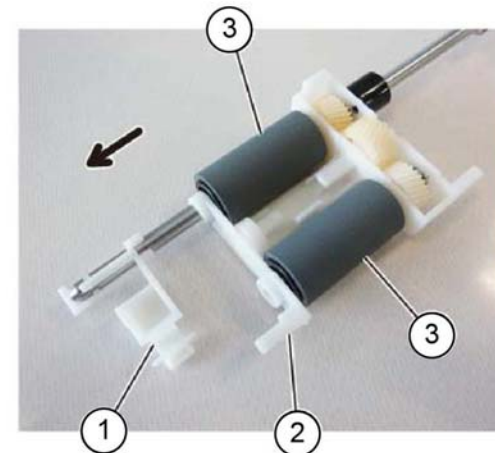


Figure 3 Roll assembly removal

C-1-0054-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install the new roll assemblies so that they rotate in a clockwise direction.
3. Ensure the feed/nudger roll assembly is installed to correctly align with the front and rear set links (1), [Figure 4](#).

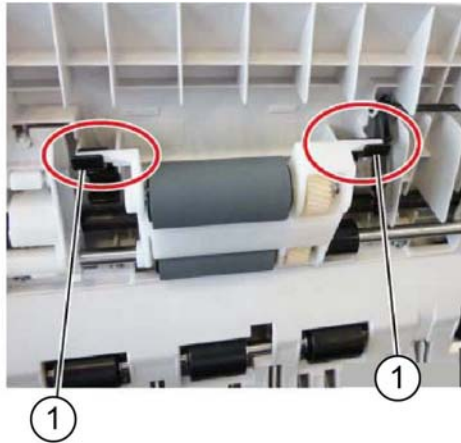


Figure 4 Set link alignment

C-1-0055-A

4. If new feed roll assemblies are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 955-806.

REP 5.11 Harness Guide and Wire Harness

Parts List on [PL 5.30](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, [REP 5.3](#).
2. Remove the DADF rear cover, [REP 5.4](#).
3. Remove the document tray, [REP 5.14](#).
4. Remove the harness from the harness guide, [Figure 1](#):
 - a. Disconnect two connectors (1).
 - b. Disconnect the sensor connectors (2).
 - c. Remove the harness retainer (3) from the guide.
 - d. Disconnect the sensor connector (4).
 - e. Remove the harness (5) from the harness guide.

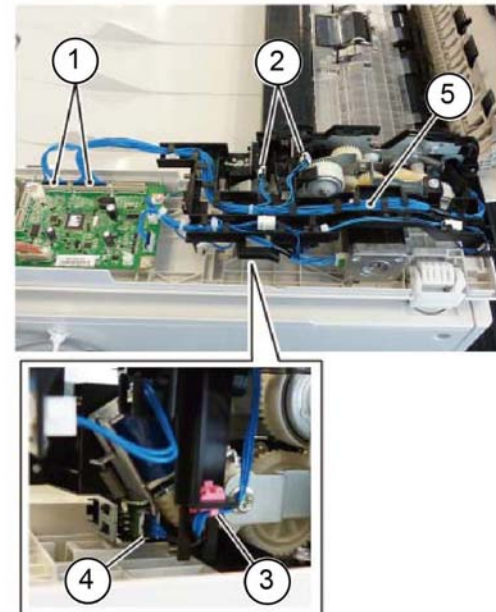


Figure 1 Harness removal

C-1-0056-A

5. Disconnect the DADF PWB connectors (1), [Figure 2](#).

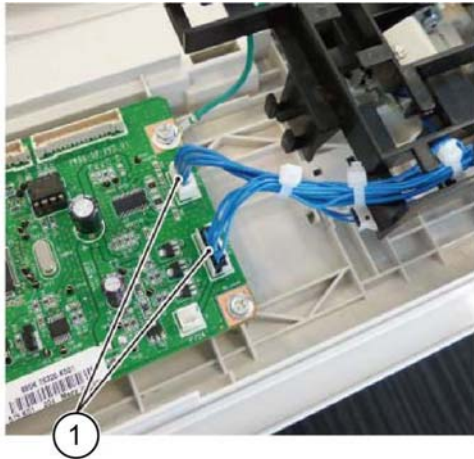


Figure 2 DADF PWB connectors

6. Disconnect the solenoid, [Figure 3](#):
- Disconnect the connector (1).
 - Remove the harness from the harness guide (2).

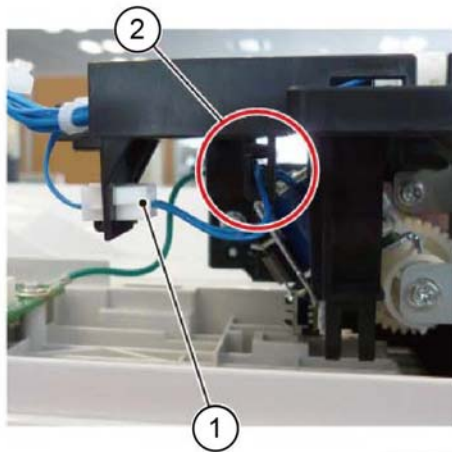


Figure 3 Solenoid harness

7. Disconnect the DADF feed clutch, [Figure 4](#):
- Disconnect the connector (1).
 - Remove the harness from the harness guide (2).

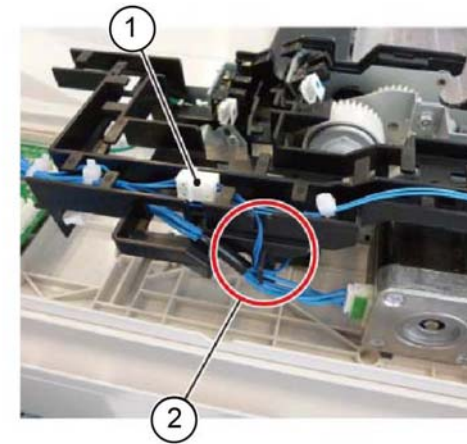


Figure 4 DADF feed clutch harness

8. Disconnect the DADF feed motor assembly connector (1), [Figure 5](#).

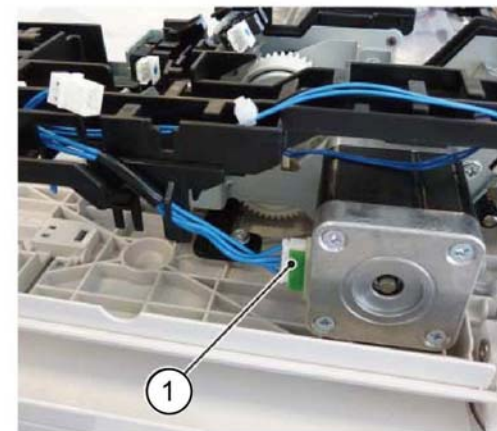


Figure 5 DADF feed motor assembly connector

9. Disconnect the DADF T/A clutch, **Figure 6**:
 - a. Disconnect the connector (1).
 - b. Remove the harness from the harness guide (2).

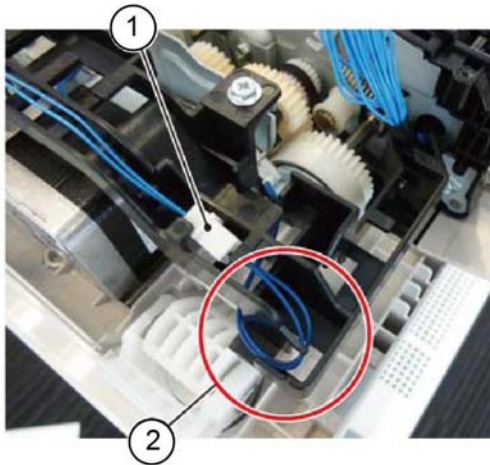


Figure 6 DADF T/A clutch connector

10. Remove the harness guide and wire harness, **Figure 7**:
 - a. Disconnect the ground wire (1).
 - b. Remove the screw (2).
 - c. Remove the harness guide and wire harness (3).

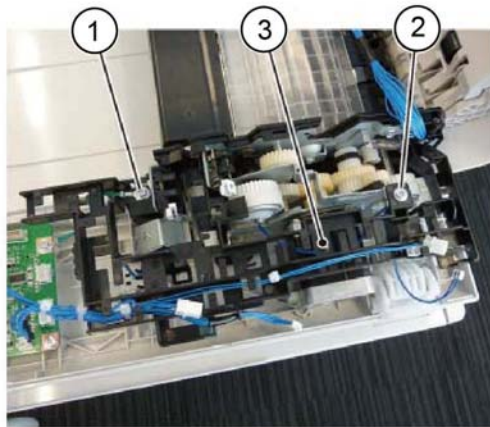
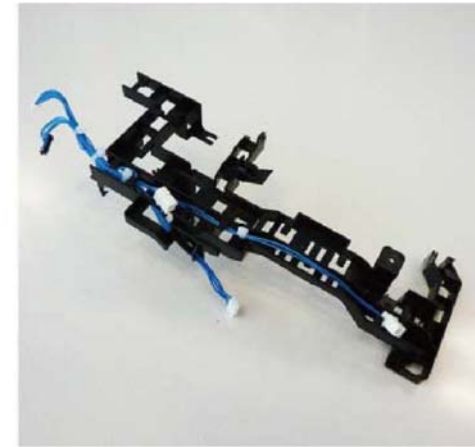


Figure 7 Harness guide removal

NOTE: The removed harness guide and wire harness is shown in **Figure 8**.



C-1-0063-A

Figure 8 Removed harness guide

C-1-0061-A

Replacement

The replacement is the reverse of the removal procedure.

C-1-0062-A

REP 5.12 DADF Feed Motor Assembly

Parts List on [PL 5.30](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, [REP 5.3](#).
2. Remove the DADF rear cover, [REP 5.4](#).
3. Remove the document tray, [REP 5.14](#).
4. Remove the harness guide and wire harness, [REP 5.11](#).
5. Remove the DADF feed motor assembly, [Figure 1](#):
 - a. Remove three screws (1).
 - b. Remove the DADF feed motor assembly (2).

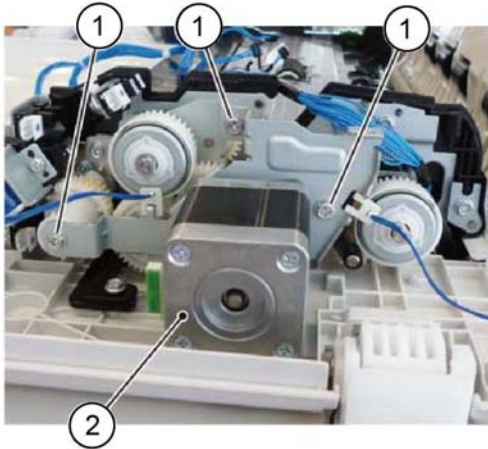


Figure 1 Feed motor assembly removal

C-1-0064-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the DADF feed motor assembly is correctly aligned with the DADF feed clutch and the DADF T/A clutch, [Figure 2](#).

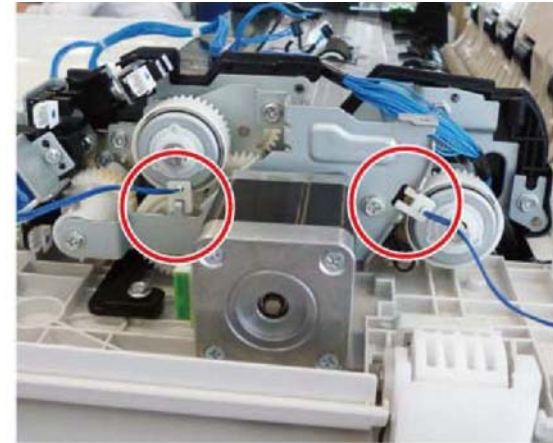


Figure 2 Alignment

C-1-0065-A

REP 5.13 DADF Drive Belt

Parts List on PL 5.35

Removal



WARNING

Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, REP 5.3.
2. Remove the DADF rear cover, REP 5.4.
3. Remove the document tray, REP 5.14.
4. Remove the harness guide and wire harness, REP 5.11.
5. Remove the DADF feed motor assembly, REP 5.12.
6. Remove the stopper link, Figure 1.

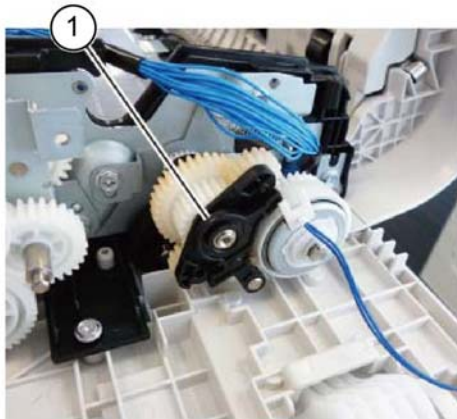


Figure 1 Stopper link removal

C-1-0066-A

7. Remove the idler gear bracket, Figure 2:
 - a. Remove the washer (1).
 - b. Remove two gears, then the idler gear bracket (2).

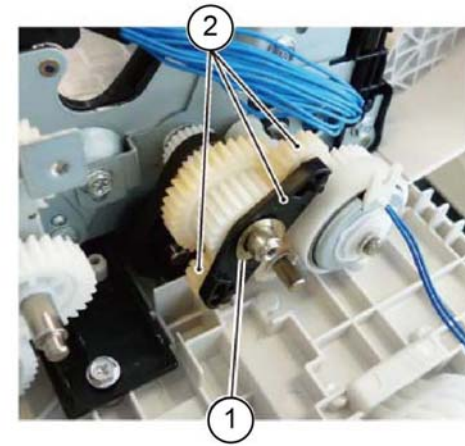


Figure 2 Idler gear bracket removal

C-1-0067-A

8. Remove the DADF T/A clutch, Figure 3:
 - a. Remove the E-clip (1).
 - b. Remove the DADF T/A clutch (2).

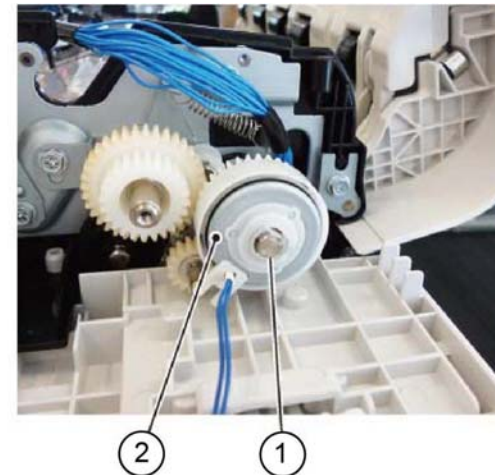


Figure 3 T/A clutch removal

C-1-0068-A

9. Remove the gear pulley, [Figure 4](#):
 - a. Loosen the screw (1).
 - b. Remove the tension spring (2).
 - c. Remove the gear pulley (3).

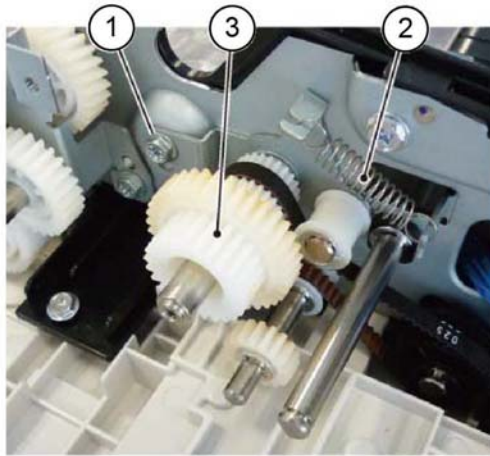


Figure 4 Gear pulley removal

10. Remove the DADF drive belt (1), [Figure 5](#).

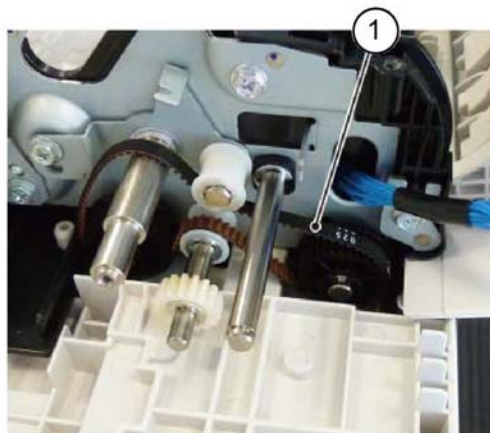


Figure 5 Drive belt removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the belt is fully tensioned before tightening the screw, refer to [Figure 4](#).

REP 5.14 Document Tray

Parts List on [PL 5.45](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, [REP 5.3](#).
2. Remove the DADF rear cover, [REP 5.4](#).
3. Remove the document tray harness, [Figure 1](#):
 - a. Disconnect the connector (1).
 - b. Remove the harness from the harness guide (2).

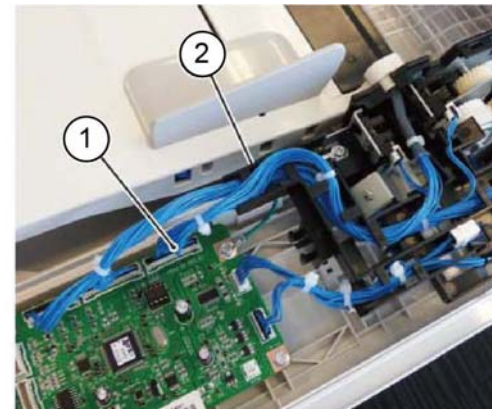


Figure 1 Harness removal

C-1-0071-A

C-1-0069-A

C-1-0070-A

NOTE: The removed harness is shown in [Figure 2](#).

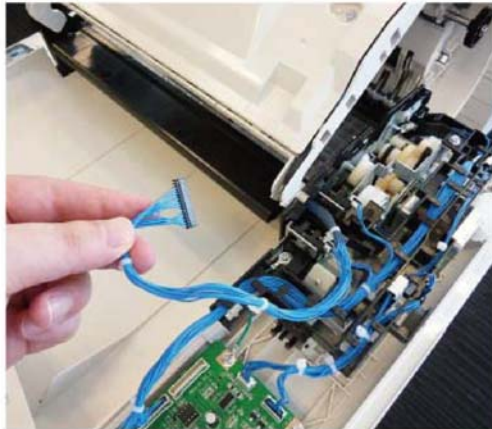


Figure 2 Removed harness

C-1-0072-A

4. Remove the document tray, [Figure 3](#):
 - a. At the front, squeeze the boss (1) in the direction of the arrow, then remove it from the hole.
 - b. Remove the document tray (2).

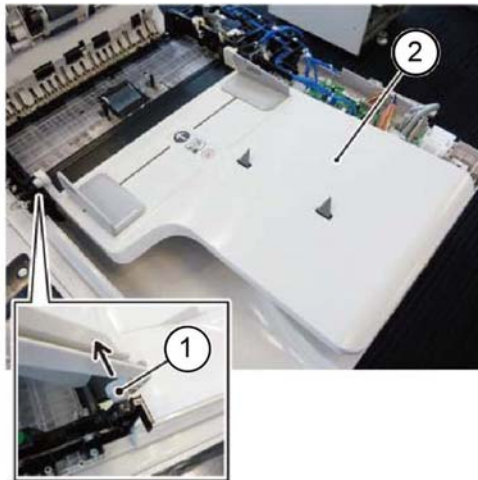


Figure 3 Document tray removal

C-1-0073-A

Replacement

The replacement is the reverse of the removal procedure.

REP 5.15 Retard Chute Assembly

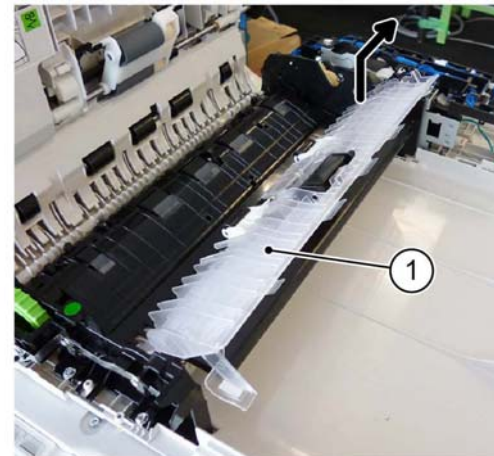
Parts List on [PL 5.45](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, [REP 5.3](#).
2. Remove the DADF rear cover, [REP 5.4](#).
3. Remove the document tray, [REP 5.14](#).
4. Open the retard chute assembly.
5. Remove the retard chute assembly in the direction of the arrow, [Figure 1](#).



C-1-0074-A

Figure 1 Retard chute assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.16 Invert Chute Assembly

Parts List on [PL 5.45](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the upper feeder assembly, [PL 5.10 Item 10](#).
2. Open the retard chute assembly, [PL 5.45 Item 2](#).
3. Remove the invert chute assembly, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the invert chute assembly (2).

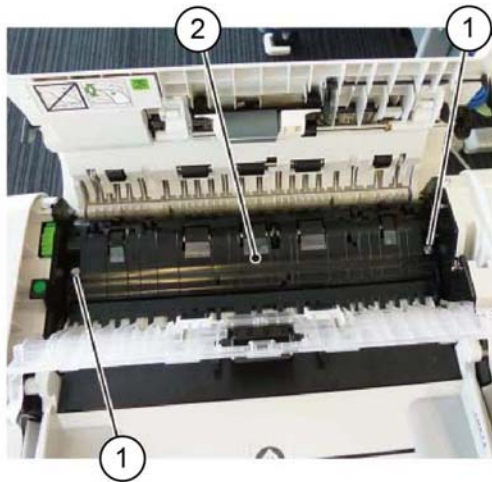


Figure 1 Invert chute assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 5.17 DADF Takeaway Roll

Parts List on [PL 5.50](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, [REP 5.3](#).
2. Remove the DADF rear cover, [REP 5.4](#).
3. Remove the upper feeder assembly, [REP 5.6](#).
4. Remove the invert chute assembly, [REP 5.16](#).
5. Remove the document tray, [REP 5.14](#).
6. Remove the harness guide and wire harness, [REP 5.11](#).
7. Remove the DADF feed motor assembly, [REP 5.12](#).
8. Remove the stopper link, [Figure 1](#).

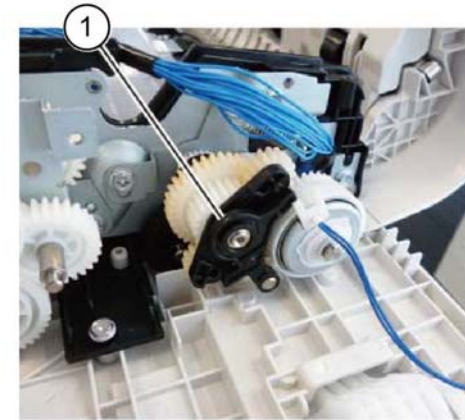


Figure 1 Stopper link removal

C-1-0075-A

C-1-0076-A

9. Remove the idler gear bracket, **Figure 2**:
 - a. Remove the washer (1).
 - b. Remove two gears, then the idler gear bracket (2).

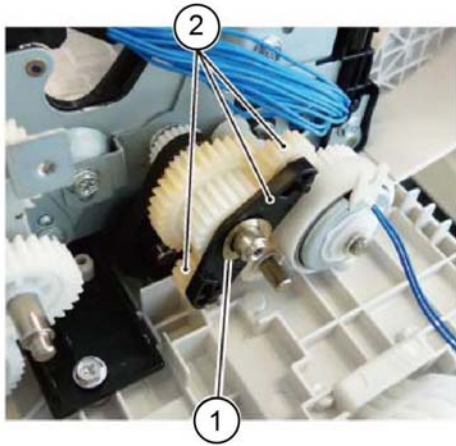


Figure 2 Idler gear bracket removal

10. Remove the DADF T/A clutch, **Figure 3**:
 - a. Remove the E-clip (1).
 - b. Remove the DADF T/A clutch (2).

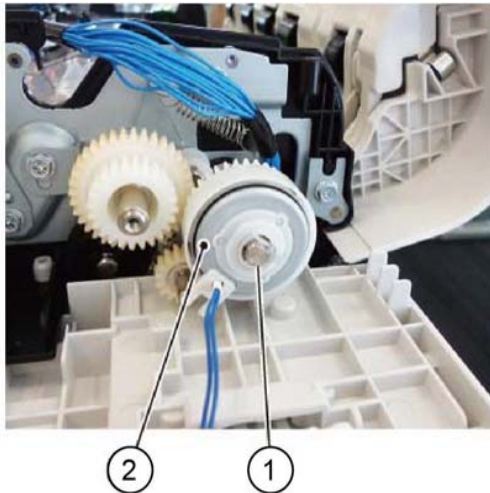


Figure 3 T/A clutch removal

11. Remove the gear pulley, **Figure 4**:
 - a. Loosen the screw (1).
 - b. Remove the tension spring (2).
 - c. Remove the gear pulley (3).

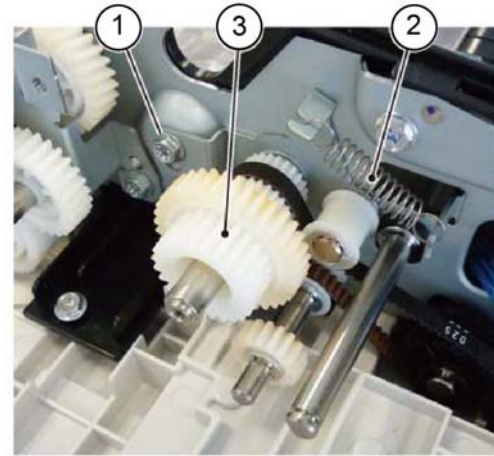


Figure 4 Gear pulley removal



CAUTION

Do not lose the gear on the rear of the front bracket. Refer to Figure 6.

12. Remove the front bracket and ground roll plate, **Figure 5**:
 - a. Remove two screws (1).
 - b. Loosen the screw (2).
 - c. Remove the front bracket and ground roll plate (3).

C-1-0077-A

C-1-0079-A

C-1-0078-A

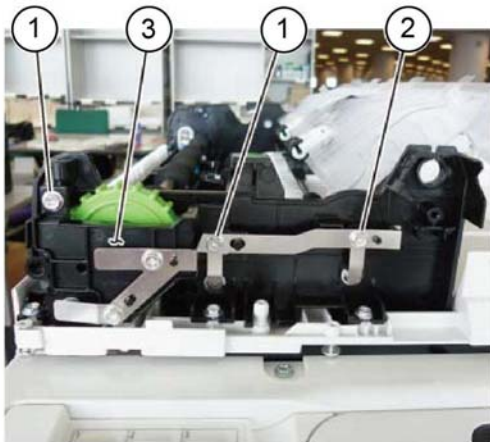


Figure 5 Front bracket removal

C-1-0080-A

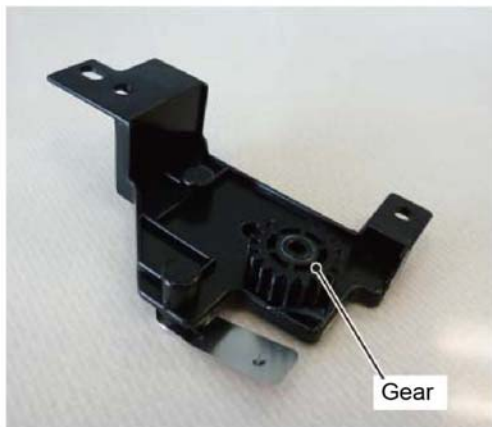


Figure 6 Gear

C-1-0081-A

13. Remove the knob, [Figure 7](#):
 - a. Remove the gear (1).
 - b. Remove handle knob (2).

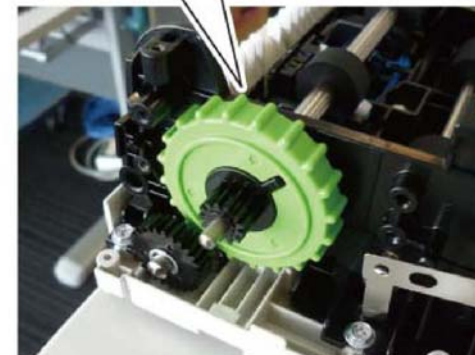
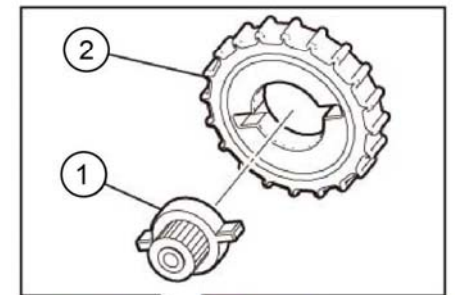


Figure 7 Knob

14. Remove the front bearing, [Figure 8](#):
 - a. Remove the KL-clip (1).
 - b. Remove the bearing (2).

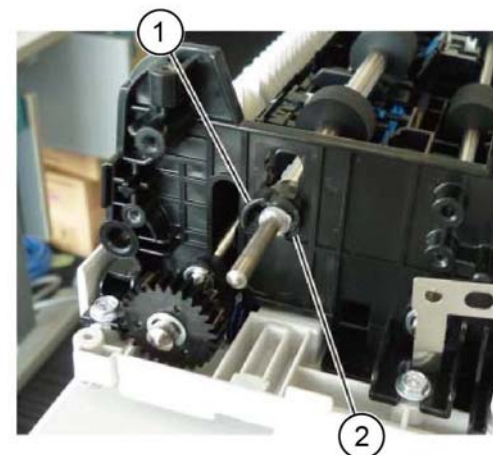


Figure 8 Bearing removal

C-1-0083-A

15. Remove the rear bearing, then the DADF takeaway roll, **Figure 9**:
 - a. Remove the E-clip (1).
 - b. Remove the bearing (2).
 - c. Remove the DADF takeaway roll (3).

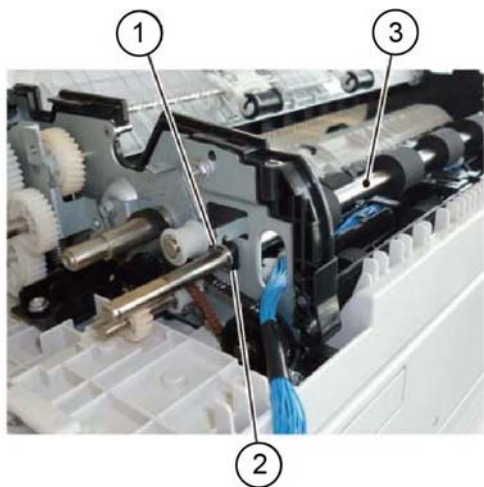


Figure 9 Takeaway roll removal

C-1-0084-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install the front bracket and ground roll plate as shown in **Figure 10**.

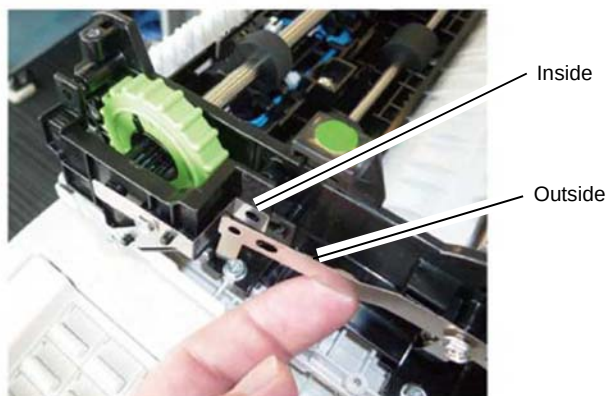


Figure 10 Ground plate installation

C-1-0085-A

REP 5.18 Sensor Bracket Assembly

Parts List on **PL 5.50**

Removal



Switch off the electricity to the machine. Refer to **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF front cover, **REP 5.3**
2. Remove the DADF rear cover, **REP 5.4**.
3. Remove the document tray, **REP 5.14**.
4. Remove the harness guide and wire harness, **REP 5.11**.
5. Remove the upper feeder assembly, **REP 5.6**.
6. Remove the DADF feeder assembly, **REP 5.7**.
7. Remove the retard chute assembly, **REP 5.15**.
8. Remove the invert chute assembly, **REP 5.16**.
9. Remove the DADF feed motor assembly, **REP 5.12**.
10. Remove the DADF takeaway roll, **REP 5.17**.
11. Remove the sensor bracket assembly, **Figure 1**:
 - a. Disconnect the connector (1).
 - b. Remove four screws (2).
 - c. Remove the wire harness (3) through the hole.
 - d. Remove the sensor bracket assembly (4).

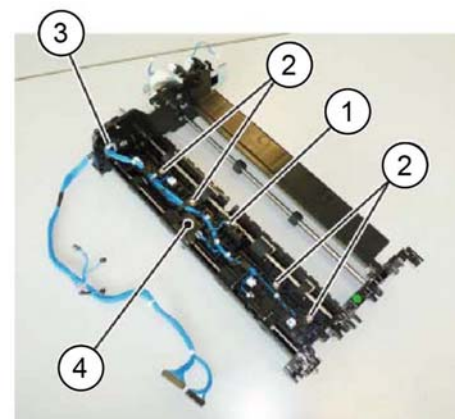


Figure 1 Sensor bracket assembly removal

C-1-0086-A

NOTE: The removed sensor bracket assembly is shown in [Figure 2](#).

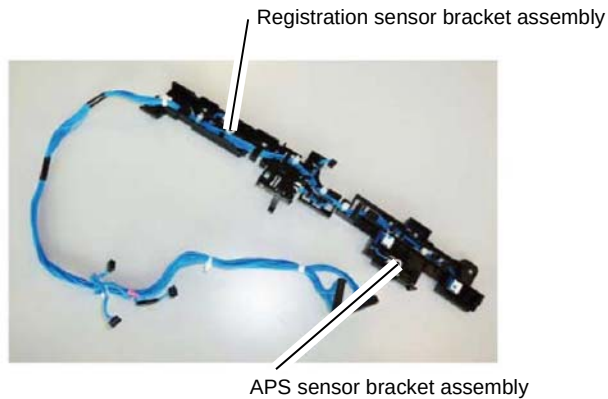


Figure 2 Removed sensor bracket assembly

C-1-0087-A

Replacement

The replacement is the reverse of the removal procedure.

REP 5.19 Retard Roll Assembly

Parts List on [PL 5.65](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: A new retard roll assembly and feed/nudger roll assembly must both be installed at the same time. Refer to [REP 5.10](#).

1. Open the upper feeder assembly.
2. Release the hook (1), then open the retard CRU cover assembly in the direction of the arrow, [Figure 1](#).

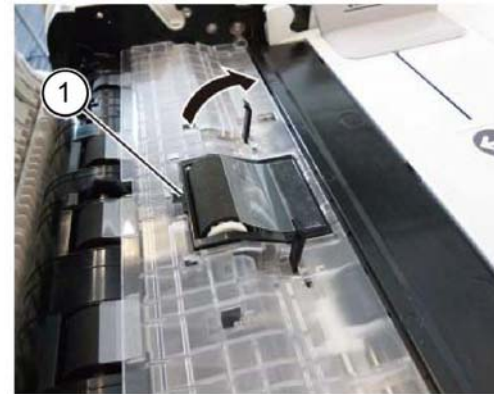
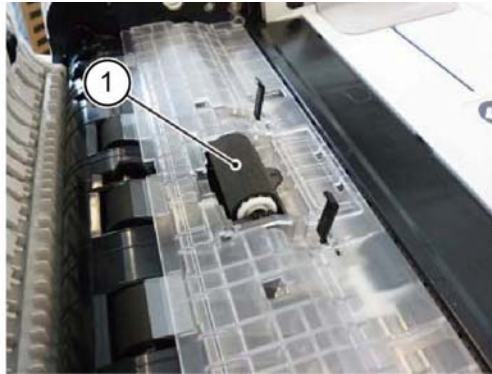


Figure 1 Retard CRU cover assembly

C-1-0088-A

3. Remove the retard roll assembly (1), [Figure 2](#).



C-1-0089-A

Figure 2 Retard roll assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new retard roll assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 955-806.

REP 10.1 Exit 1 OCT Assembly

Parts List on [PL 10.10](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the exit 2 transport assembly, refer to [REP 10.2](#).
2. Remove the exit front cover, [PL 28.05 Item 10](#).
3. Remove the fusing fan duct assembly, [REP 10.4](#).
4. Move the bearing (1) toward the front, [Figure 1](#).

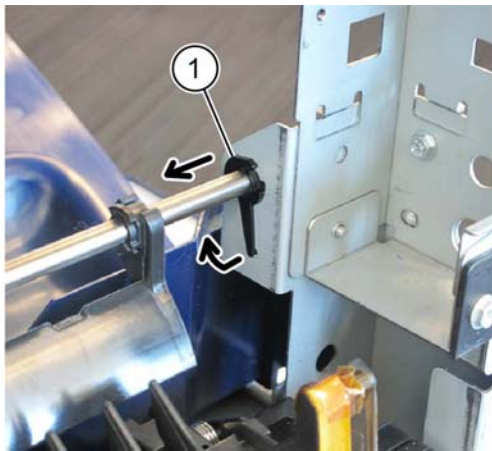


Figure 1 Bearing

C-1-0090-A

5. Remove the Exit 1 OCT assembly toward the rear, [Figure 2](#):
 - a. Disconnect the connector (1).
 - b. Remove three screws (2).
 - c. Remove the exit 1 OCT assembly (3) toward the rear.

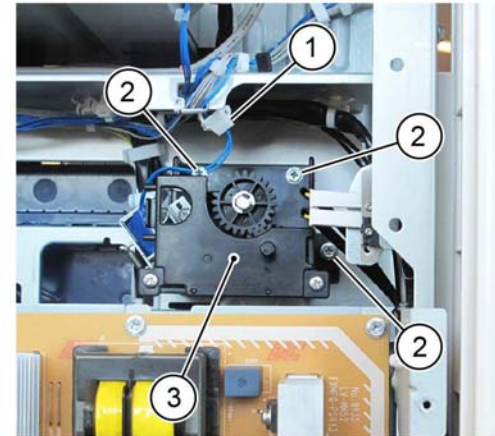


Figure 2 Exit 1 OCT assembly removal

C-1-0091-A

Replacement

The replacement is the reverse of the removal procedure.

REP 10.2 Exit 2 Roll

Parts List on [PL 10.22](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Disengage the hooks, then remove the paper exit 1 weight assembly, (1), [Figure 1](#).

NOTE: Take note of the orientation of the paper guides (2).

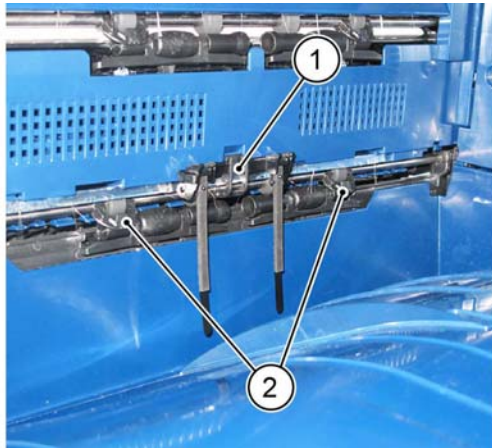
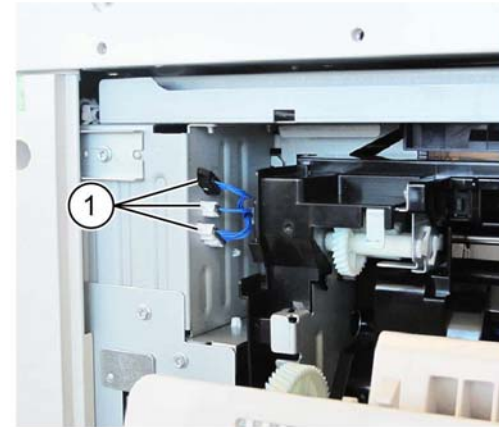


Figure 1 Weight assembly removal

2. Open the front cover.
3. Open the L/H cover.
4. Remove the pillar left cover, [PL 28.05 Item 13](#).
5. Open the exit 2 transport assembly.
6. Remove the LH top cover, [PL 28.05 Item 14](#).

C-1-0092-A

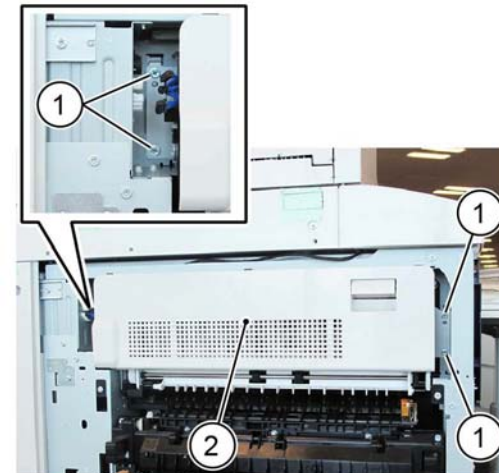
7. Disconnect three connectors (1), [Figure 2](#).



C-1-0093-A

Figure 2 Connectors

8. Close the exit 2 transport assembly.
9. Remove the exit 2 transport assembly, [Figure 3](#):
 - a. Remove four screws (1).
 - b. Remove the exit 2 transport assembly (2).



C-1-0094-A

Figure 3 Transport assembly removal

10. Disengage two hooks (1), then remove the rear cover (2), **Figure 4**.

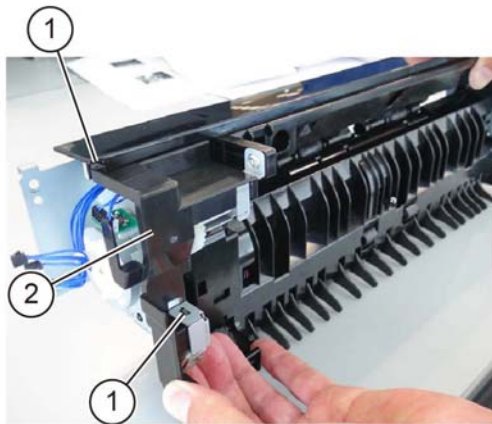


Figure 4 Rear cover removal

11. Remove the rear bracket and exit 2 motor, **Figure 5**:
 - a. Release the clamp, then remove the harness (1).
 - b. Disconnect the connector (2).
 - c. Remove four screws (3).
 - d. Disengage the hook (4),
 - e. Remove the rear bracket and exit 2 motor (5).

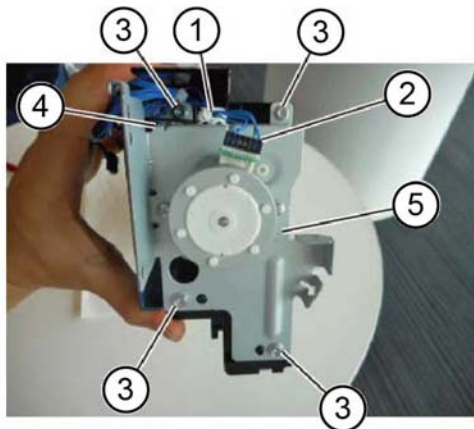


Figure 5 Motor removal

C-1-0095-A

12. Remove the front bracket, **Figure 6**:
 - a. Remove two screws (1).
 - b. Remove the E-clip (2).
 - c. Remove the front bracket (3).

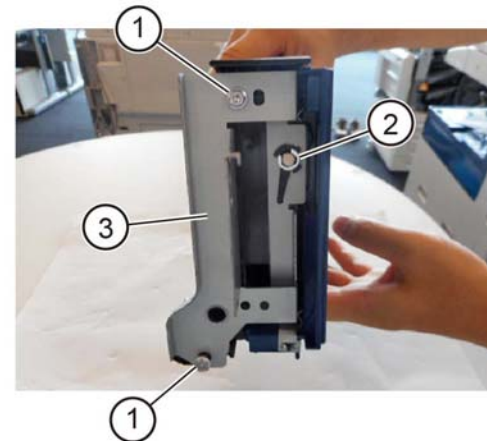


Figure 6 Front bracket removal

C-1-0097-A

13. Remove the helical gear, **Figure 7**:
 - a. Remove the E-clip (1).
 - b. Move the exit roll in the direction of the arrow (2).
 - c. Disengage the hook to remove the helical gear (3).

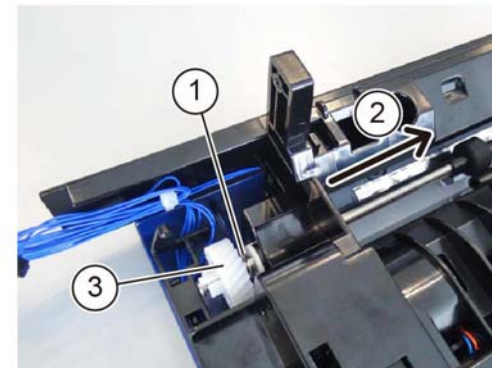


Figure 7 Helical gear removal

C-1-0098-A

14. Remove the exit 2 roll, **Figure 8**:
 - a. Move, then release the exit roll in the direction of the arrow (1).
 - b. Remove the exit roll (2).

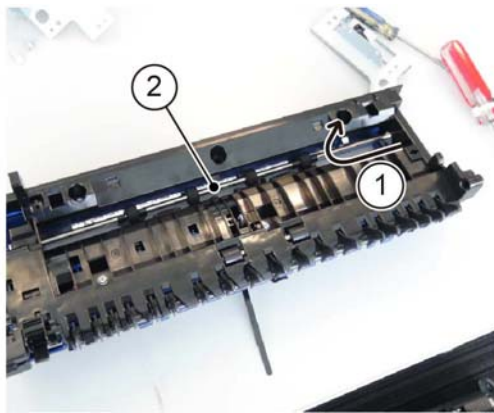


Figure 8 Exit 2 roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the paper guides are orientated correctly, refer to **Figure 1**.

REP 10.3 Fuser Removal

Parts List on **PL 10.05**

Removal



Switch off the electricity to the machine. Refer to **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Do not touch the fuser while it is hot.

1. Open the LH transport assembly.
2. Remove the fuser, **Figure 1**:
 - a. Loosen two screws (1).
 - b. Remove the fuser (2).

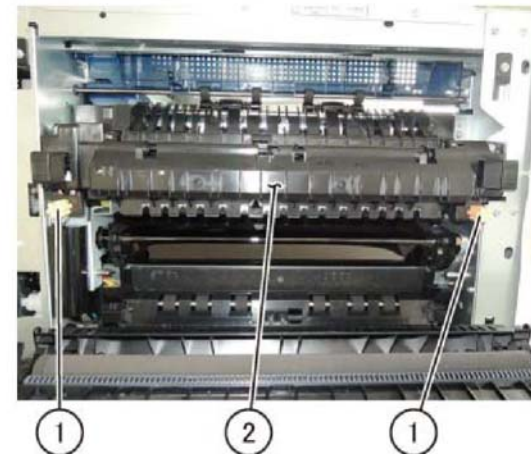


Figure 1 Fuser removal

C-1-0607-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new fuser is installed, enter **dC135** HFSI Counter. Ensure that the HFSI counters that follow have been reset:
 - Chain Link: 954-850
 - Chain Link: 954-851

NOTE: Both counters should be automatically reset when a new fuser is installed.

REP 10.4 Rear Duct Fuser A

Parts List on [PL 40.15](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the rear duct fuser A, [Figure 1](#):
 - a. Disconnect the connector (1).
 - b. Remove the screw (2).
 - c. Disengage the right and left hooks (3), then remove the fuser rear duct A (4).

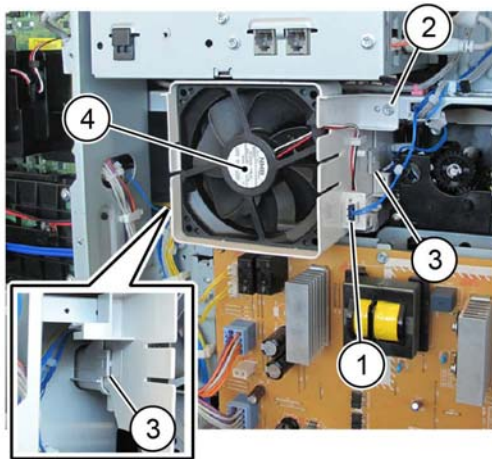


Figure 1 Fuser rear duct A removal

C-1-0122-A

Replacement

The replacement is the reverse of the removal procedure.

REP 10.5 Fuser Fan

Parts List on [PL 40.15](#)

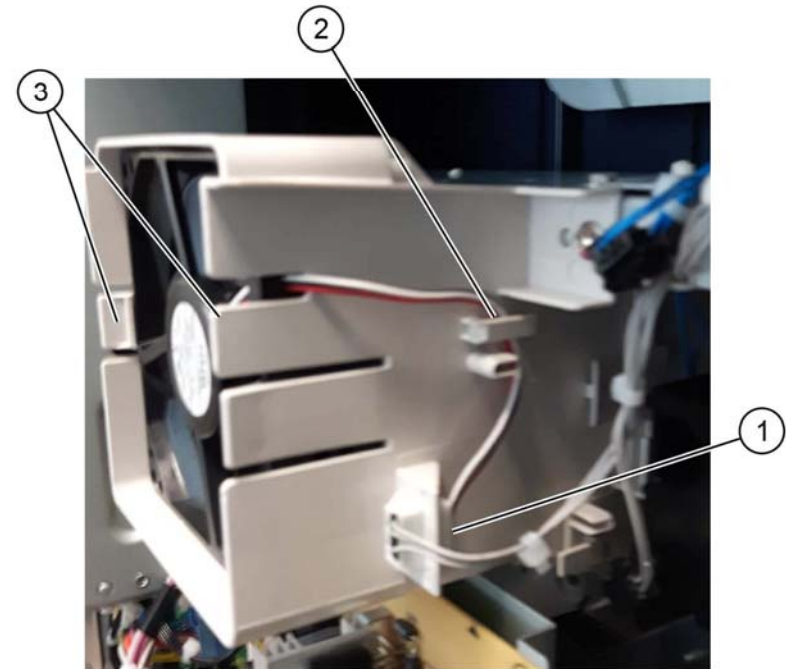
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the fuser fan from the rear duct fuser A, [Figure 1](#):
 - a. Disconnect the connector facing the chassis (1).
 - b. Remove the wire harness from the hook (2).
 - c. Disengage the right and left hooks at the front of the rear duct fuser A (3), then remove the fuser fan.



C-1-0608-A

Figure 1 Fuser fan removal

Replacement

The replacement is the reverse of the removal procedure.

REP 10.6 Rear Duct Fuser B

Parts List on [PL 40.15](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the rear duct fuser A, [REP 10.4](#).
3. Release the two clips on rear duct fuser B and remove rear duct fuser B.

Replacement

The replacement is the reverse of the removal procedure.

REP 12.1 Integrated Office Finisher Removal

Parts List on [PL 12.05](#) and [PL 12.10](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the STM cover, [PL 28.06 Item 1](#).
2. Disconnect the integrated office finisher harnesses, [Figure 1](#):
 - a. Release the cable clamp (1).
 - b. Disconnect two connectors (2).

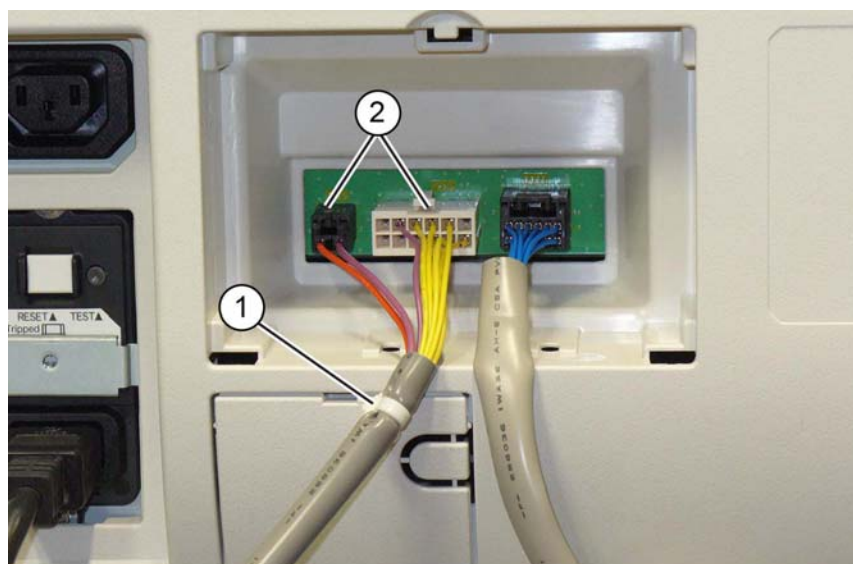
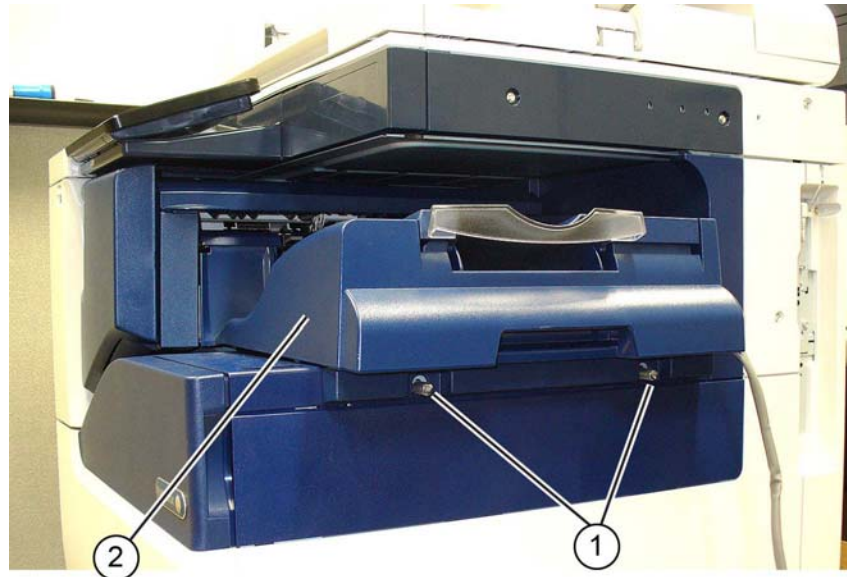


Figure 1 Connectors

C-1-0491-A

3. Remove the integrated office finisher, [Figure 2](#):
 - a. Remove two thumbscrews (1).
 - b. Remove the integrated office finisher (2) towards the front of the machine.



C-1-0492-A

Figure 2 Finisher removal

Replacement

Reverse the removal procedure for replacement.

REP 12.2 Paddle Belts

Parts List on [PL 12.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the compiler assembly, [REP 12.19](#).
3. Remove the front pulley, [Figure 1](#):
 - a. Remove the E-clip (1).
 - b. Remove the flange (2).
 - c. Disengage the front paddle belt (3) from the front pulley.
 - d. Remove the front pulley (4).

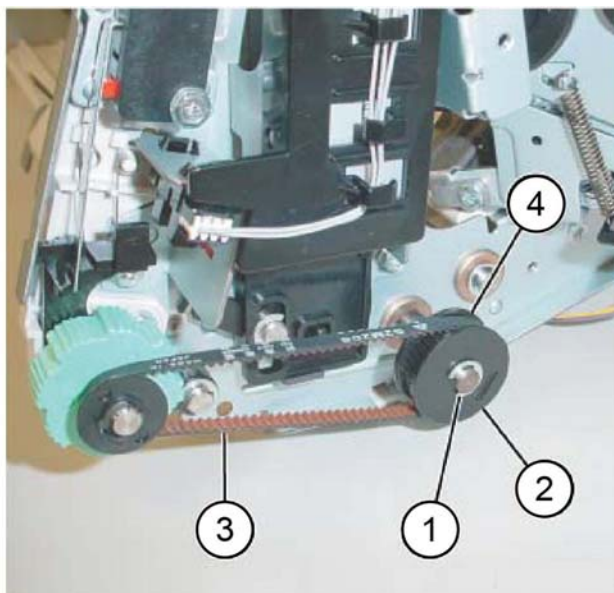


Figure 1 Front pulley removal

C-1-0237-A

4. Remove the front bearing (1), [Figure 2](#):

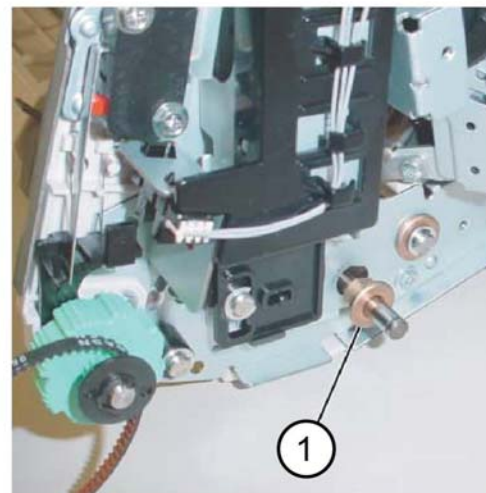


Figure 2 Front bearing removal

C-1-0238-A

5. Remove the rear gear, [Figure 3](#).
 - a. Remove the E-clip (1).
 - b. Remove the rear gear (2).

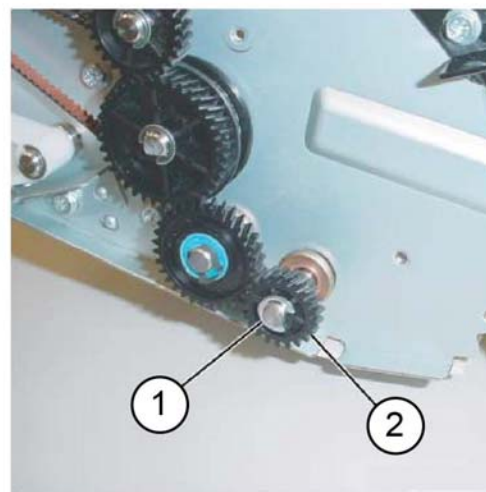


Figure 3 Rear gear removal

C-1-0239-A

6. Remove the rear bearing (1), [Figure 4](#).

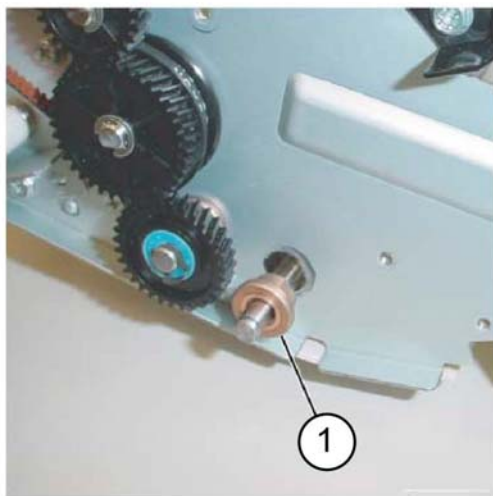


Figure 4 Rear bearing removal

C-1-0240-A

7. Remove the paddle link assembly (1), [Figure 5](#) :

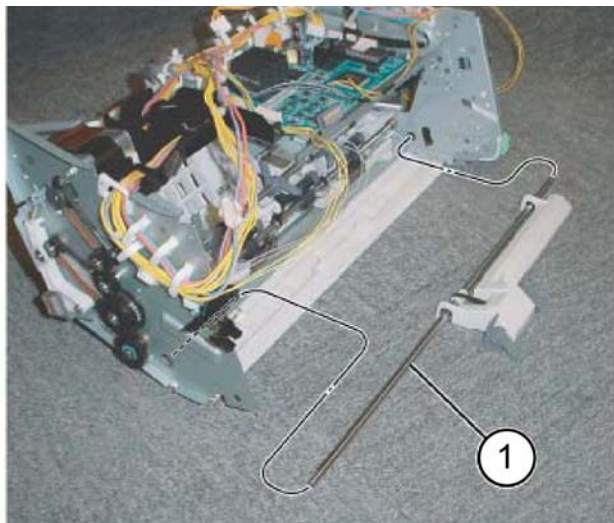


Figure 5 Paddle link assembly removal

C-1-0241-A

8. Remove the bearing, [Figure 6](#):
a. Remove the E-clip (1).
b. Remove the bearing (2).

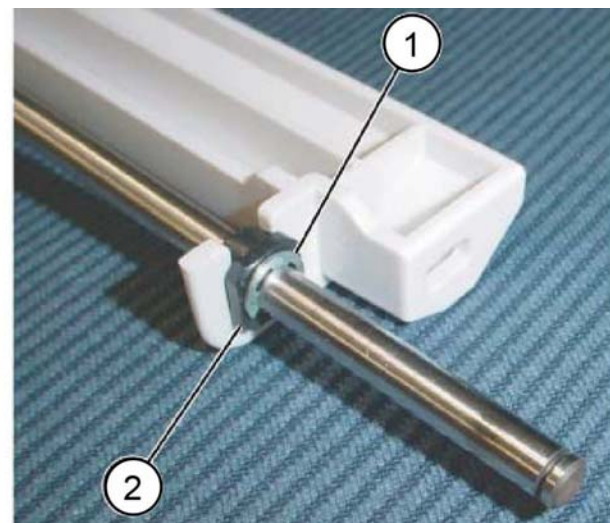


Figure 6 Bearing removal

C-1-0242-A

9. Remove the shaft assembly, [Figure 7](#):
a. Remove the paddle belt (1) from the pulley.
b. Remove the shaft assembly (2) in the direction of the arrow.

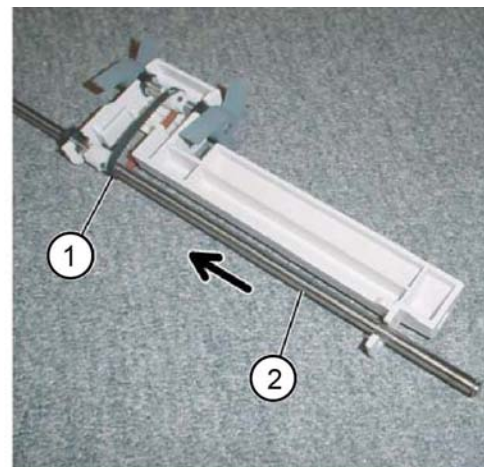


Figure 7 Shaft assembly removal

YC1-0243-A

10. Remove the paddle belt, [Figure 8](#) :
 - a. Remove two E-clips (1).
 - b. Move the two bearings (2) in the direction of the arrow.
 - c. Remove the sub paddle shaft assembly (3).
 - d. Remove the rear paddle belt (4).

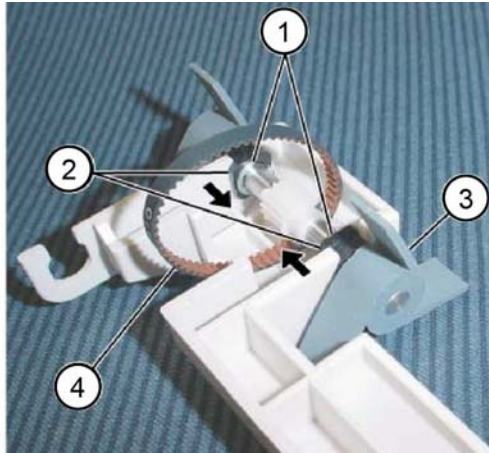


Figure 8 Rear paddle belt removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install the paddle link assembly (1) as shown in [Figure 9](#).

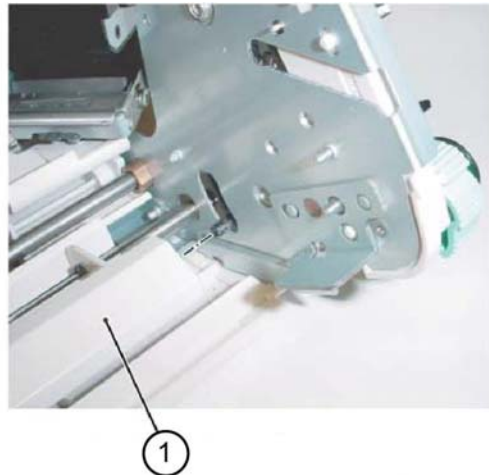


Figure 9 Paddle link assembly installation

REP 12.3 Sub Paddle Solenoid

Parts List on [PL 12.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Turn over the integrated office finisher.
4. Remove the bottom cover, [PL 12.06 Item 1](#).
5. Disconnect the connector, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect the connector (2).

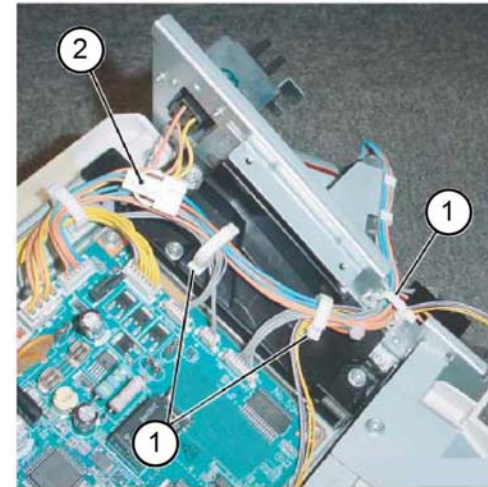


Figure 1 Connector

C-1-0246-A

6. Turn over the integrated office finisher.
7. Remove the sub paddle solenoid assembly, [Figure 2](#):
 - a. Disconnect the connector (1).
 - b. Release the harness from the retainers (2).
 - c. Remove two screws (3).
 - d. Remove the sub paddle solenoid assembly (4).

C-1-0245-A

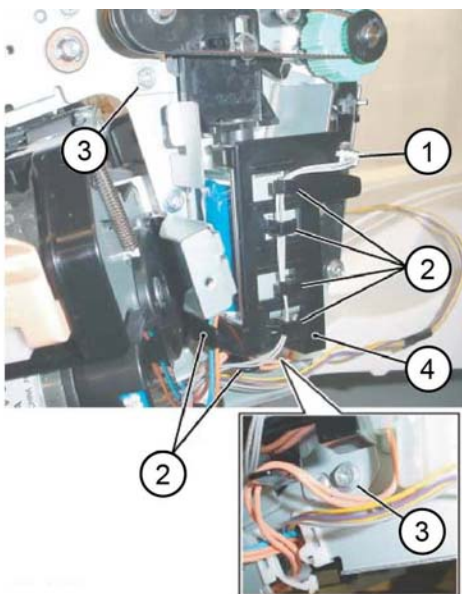


Figure 2 Sub paddle solenoid assembly removal

8. Remove the support, [Figure 3](#):
 - a. Remove the screw (1).
 - b. Remove the support (2).

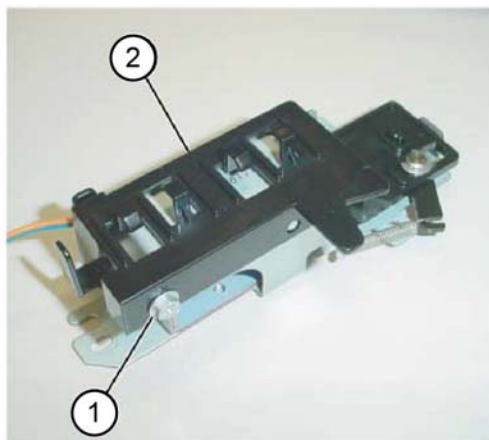


Figure 3 Support removal

9. Remove the sub paddle solenoid, [Figure 4](#):
 - a. Remove two screws (1).
 - b. Remove the sub paddle solenoid (2).

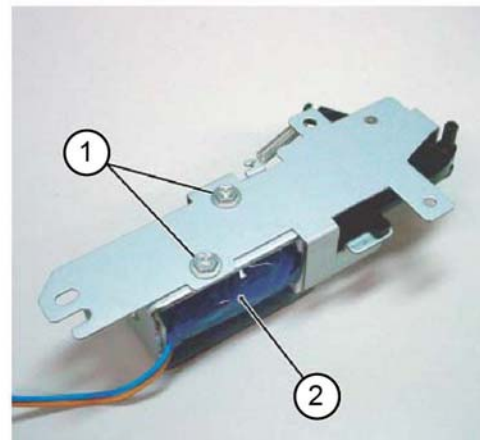


Figure 4 Sub paddle solenoid removal

C-1-0249-A

C-1-0247-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install the sub paddle assembly as shown in [Figure 5](#).

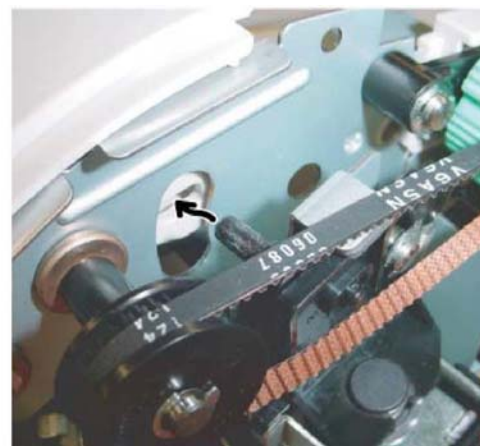


Figure 5 Sub paddle assembly installation

C-1-0250-A

C-1-0248-A

REP 12.4 Stapler Assembly

Parts List on [PL 12.11](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the power and disconnect the power cord.
2. Remove the integrated office finisher, [REP 12.1](#).
3. Remove the front inner cover, [PL 12.05 Item 6](#).
4. Remove the stapler assembly, [Figure 1](#):
 - a. Remove the clamps (1).
 - b. Disconnect the connectors (2).
 - c. Remove two screws (3).
 - d. Remove the stapler assembly (4).

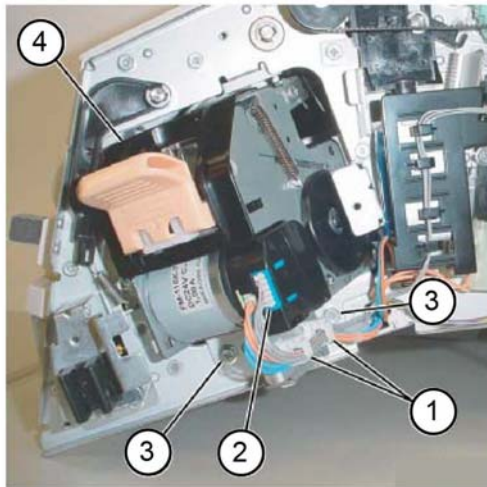


Figure 1 Stapler assembly removal

C-1-0251-A

5. Remove the bracket from the stapler assembly, [Figure 2](#):
 - a. Remove two screws (1).
 - b. Remove the bracket (2).

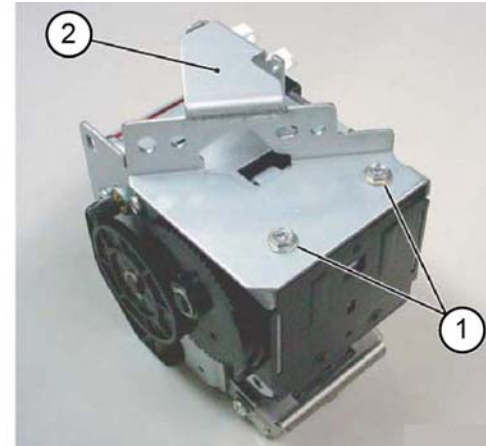


Figure 2 Bracket removal

C-1-0252-A

Replacement

The replacement is the reverse of the removal procedure.

REP 12.5 Set Clamp Home Sensor

Parts List on [PL 12.11](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the rear cover, [PL 12.05 Item 14](#).
3. Disconnect the connector, [Figure 1](#):
 - a. Release the harness from the clamps (1).
 - b. Disconnect the connector (2).

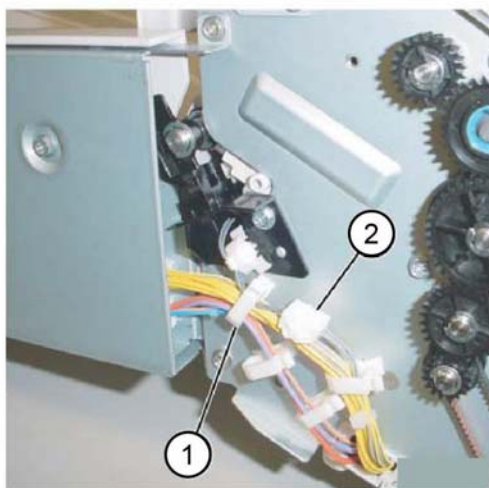


Figure 1 Connector

C-1-0253-A

4. Remove the set clamp home sensor assembly, [Figure 2](#):
 - a. Remove the screw (1).
 - b. Remove the set clamp home sensor assembly (2).

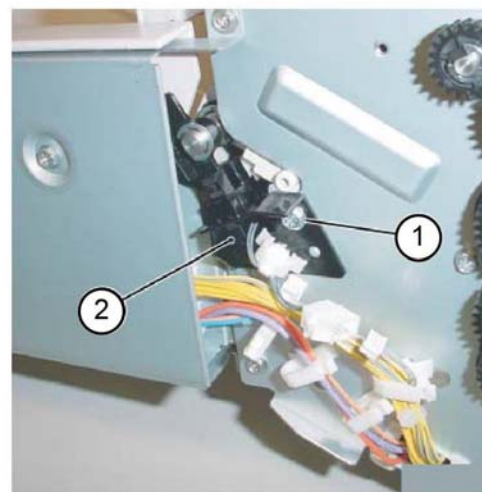


Figure 2 Set clamp home sensor assembly removal

C-1-0254-A

5. Remove the set clamp home sensor, [Figure 3](#):
 - a. Remove the set clamp home sensor (1) from the bracket.
 - b. Disconnect the connector (2).

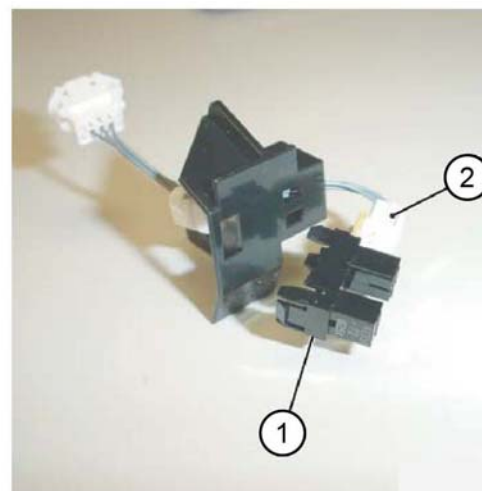


Figure 3 Set clamp home sensor removal

C-1-0255-A

Replacement

The replacement is the reverse of the removal procedure.

REP 12.6 Exit Roll Assembly

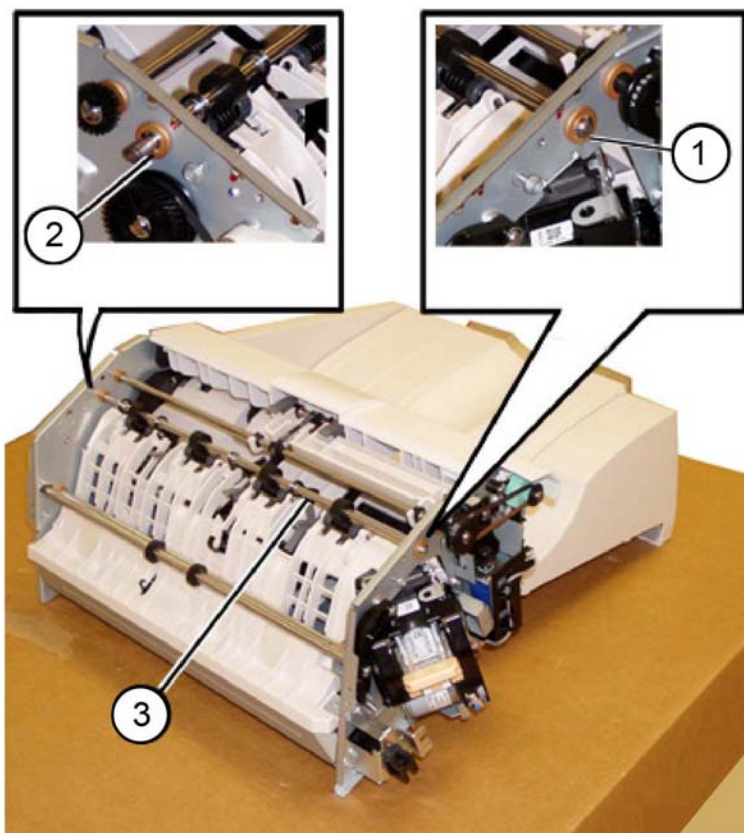
Parts List on [PL 12.11](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper chute assembly, [2](#).
2. Remove the exit roll assembly, [Figure 1](#):
 - a. Remove the E-ring, then the bearing (1).
 - b. Remove the E-ring, then the bearing (2).
 - c. Remove the exit roll assembly (3).



C-1-0256-A

Figure 1 Exit roll assembly removal

Replacement

The replacement is the reverse of the removal procedure.

NOTE: Ensure that the paper guides on the upper chute, [PL 12.13 Item 4](#) are not folded back on top of the exit roll assembly.

REP 12.7 Nip Roll

Parts List on [PL 12.12](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the compiler assembly, [REP 12.19](#).
3. Remove the pinch roll, [Figure 1](#):
 - a. Raise the four springs (1) in the direction of the arrow.
 - b. Remove the four nip rolls (2).

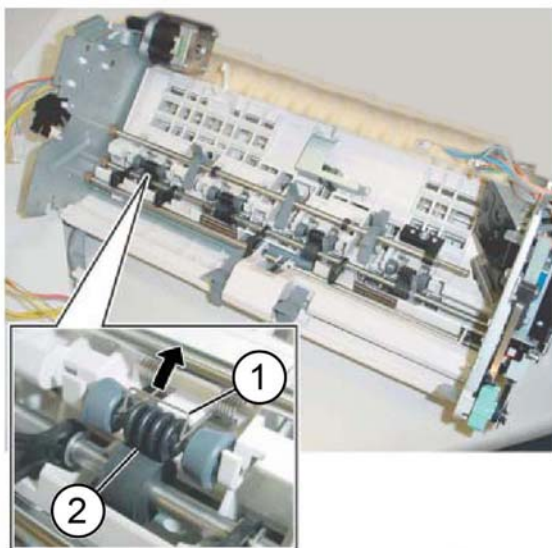


Figure 1 Nip rolls removal

C-1-0257-A

Replacement

The replacement is the reverse of the removal procedure.

REP 12.8 Finisher Entry Sensor

Parts List on [PL 12.12](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Turn over the integrated office finisher.
3. Remove the bottom cover, [PL 12.06 Item 1](#).
4. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect the connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

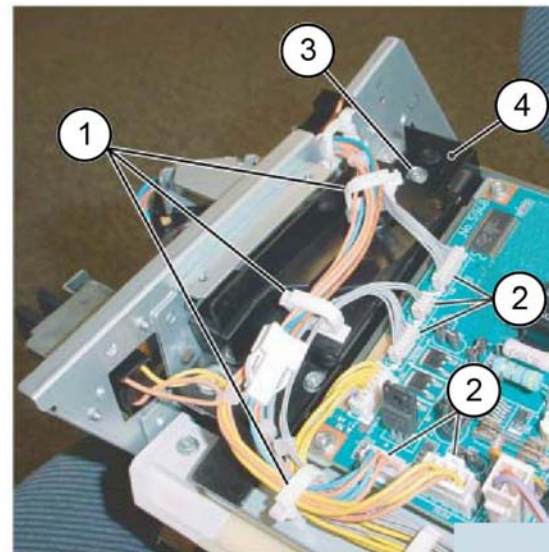


Figure 1 Connector bracket removal

C-1-0258-A

5. Remove the bottom plate, [Figure 2](#):
 - a. Release the harness from the 5 clamps (1).
 - b. Disconnect eight connectors (2).
 - c. Remove the harness from the retainers (3).
 - d. Remove four screws (4).
 - e. Remove the bottom plate (5).

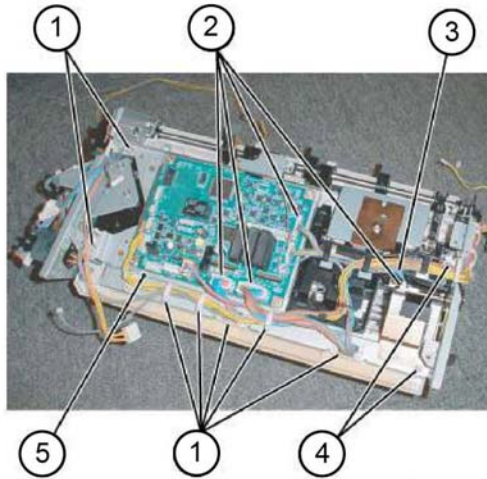


Figure 2 Bottom plate removal

C-1-0259-A

6. Remove the finisher entrance sensor assembly, [Figure 3](#):
 - a. Disconnect the connector (1).
 - b. Remove the self-tapping screw (2).
 - c. Remove the finisher entrance sensor assembly (3).

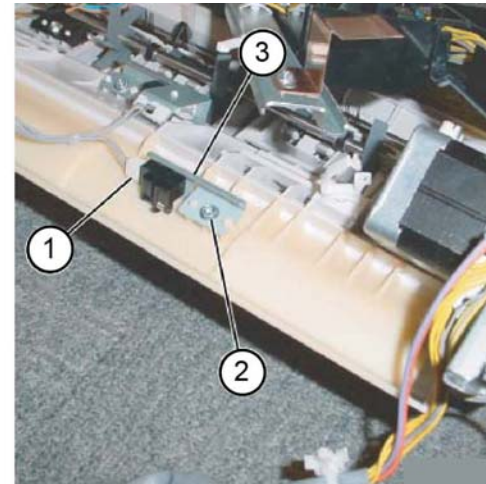


Figure 3 Entrance sensor assembly removal

C-1-0260-A

7. Remove the finisher entry sensor (1) from the bracket, [Figure 4](#).

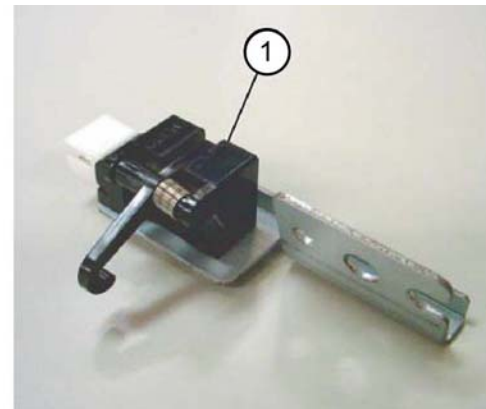


Figure 4 Finisher entry sensor removal

C-1-0261-A

Replacement

The replacement is the reverse of the removal procedure.

REP 12.9 Compiler Exit Sensor

Parts List on [PL 12.12](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Turn over the integrated office finisher.
3. Remove the bottom cover, [PL 12.06 Item 1](#).
4. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect five 5 connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

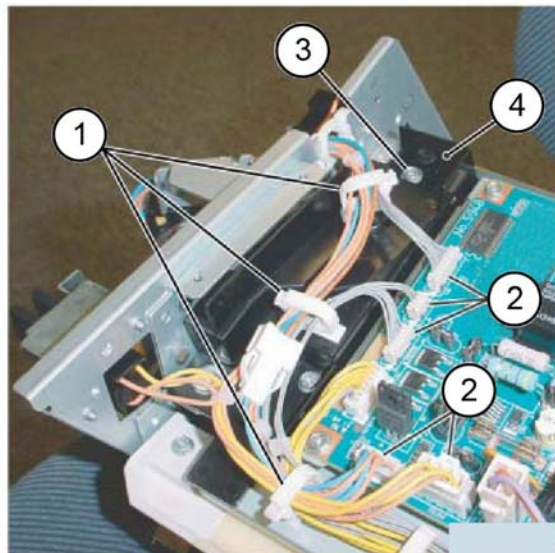


Figure 1 Connector bracket removal

C-1-0262-A

5. Remove the bottom plate, [Figure 2](#):
 - a. Release the harness from the five clamps (1).
 - b. Disconnect eight connectors (2).
 - c. Release the harness from the retainers (3).
 - d. Remove four screws (4).
 - e. Remove the bottom plate (5).

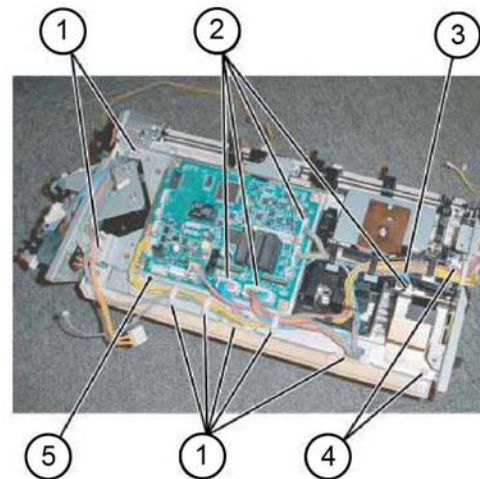


Figure 2 Bottom plate removal

C-1-0263-A

6. Remove the compiler exit sensor assembly, [Figure 3](#):
 - a. Remove the screw (1).
 - b. Remove the compiler exit sensor assembly (2).

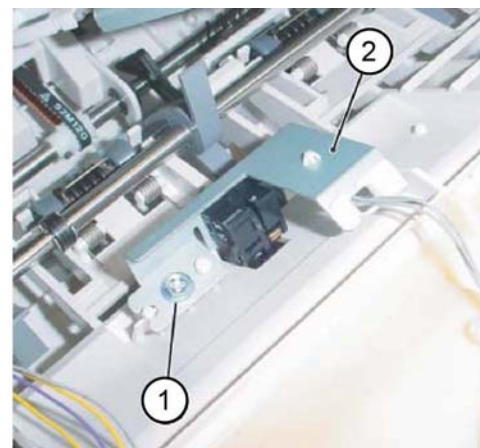


Figure 3 Compiler exit sensor assembly removal

C-1-0264-A

7. Remove the compiler exit sensor, [Figure 4](#):
 - a. Release the harness from the two clamps (1).
 - b. Disconnect the connector (2).
 - c. Remove the compiler exit sensor (3).

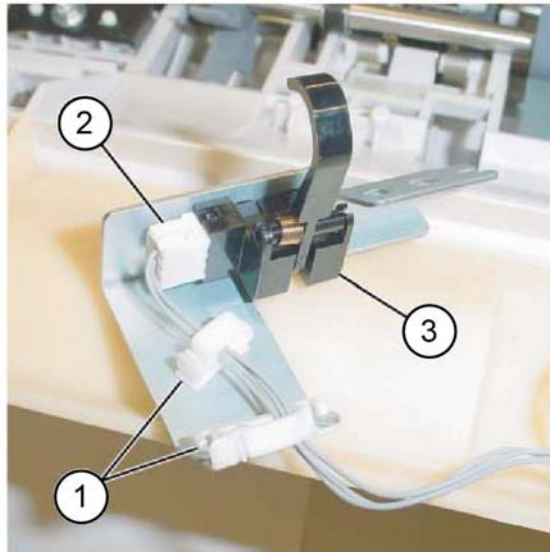


Figure 4 Compiler exit sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.10 Main Paddle Shaft Assembly

Parts List on [PL 12.12](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the compiler assembly, [REP 12.19](#).
3. Remove the gear, [Figure 1](#):
 - a. Remove the E-clip (1).
 - b. Remove the gear (2).
 - c. Remove the KL-clip (3).
 - d. Remove the gear (4).

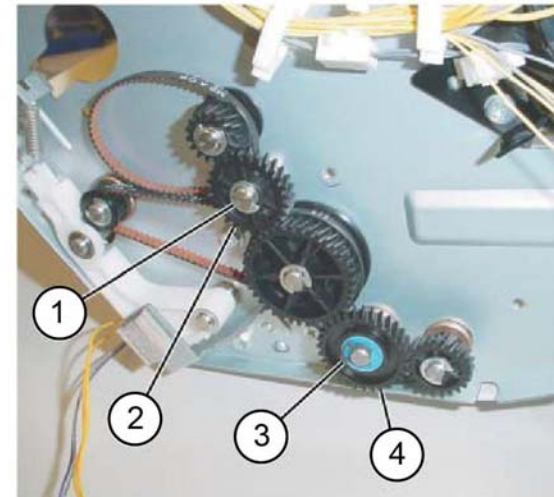


Figure 1 Gear removal

4. Remove the gear pulley, [Figure 2](#):
 - a. Remove the E-clip (1).
 - b. Remove the gear (2).
 - c. Remove the flange (3).

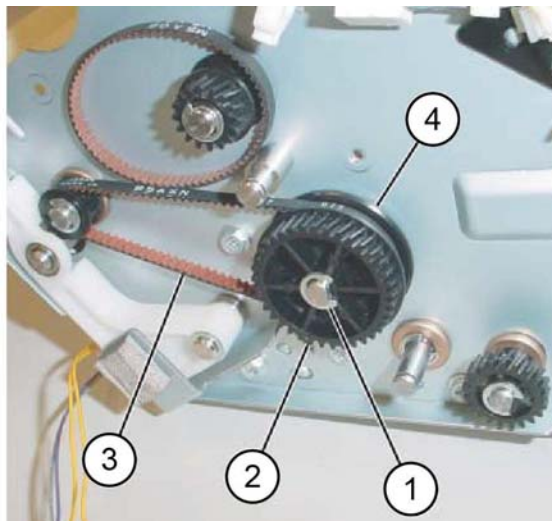


Figure 2 Gear pulley removal

C-1-0267-A

6. Remove the support bearing from the entrance lower chute assembly, [Figure 4](#):
 - a. Remove the self-tapping screw (1).
 - b. Remove the support bearing (2).

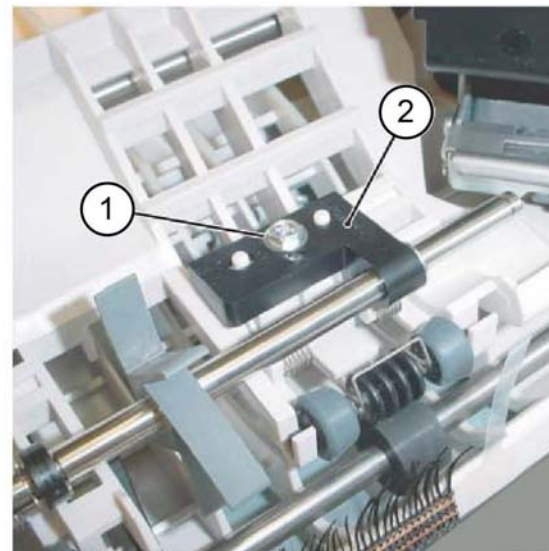


Figure 4 Support bearing removal

C-1-0269-A

5. Remove the bearing, [Figure 3](#).

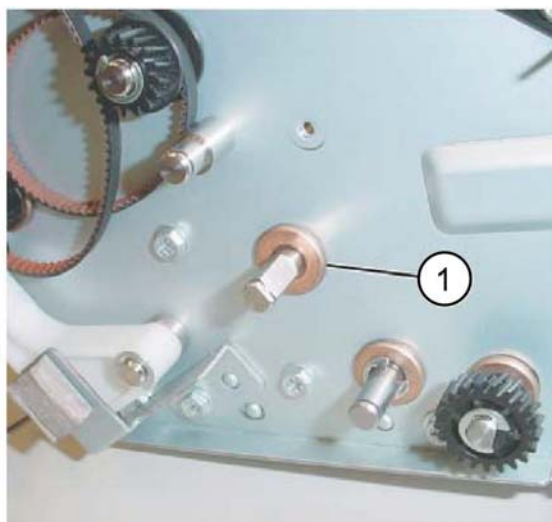


Figure 3 Bearing removal

C-1-0268-A

7. Remove the main paddle shaft assembly, [Figure 5](#).

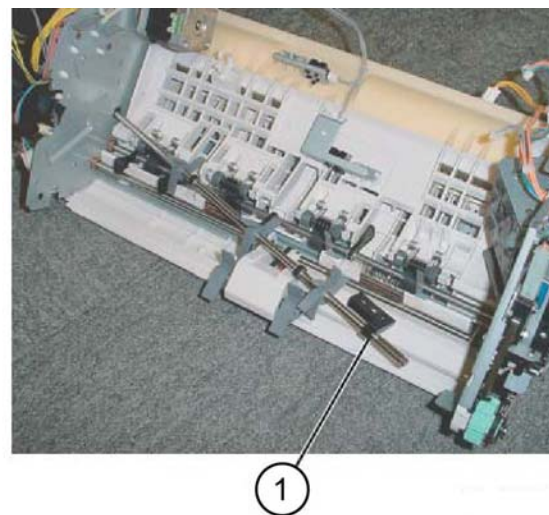


Figure 5 Main paddle shaft assembly removal

C-1-0270-A

8. Remove the support bearing from the main paddle shaft assembly, [Figure 6](#):
 - a. Remove the E-clip (1).
 - b. Remove the support bearing (2).

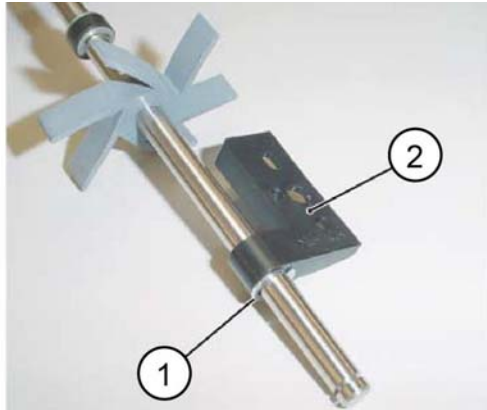


Figure 6 Support bearing removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.11 Lower Chute Assembly

Parts List on [PL 12.12](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the staple assembly, refer to [REP 12.4](#).
2. Turn over the integrated office finisher.
3. Remove the transport motor, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the belt (2) from the pulley.
 - c. Remove the transport motor (3).

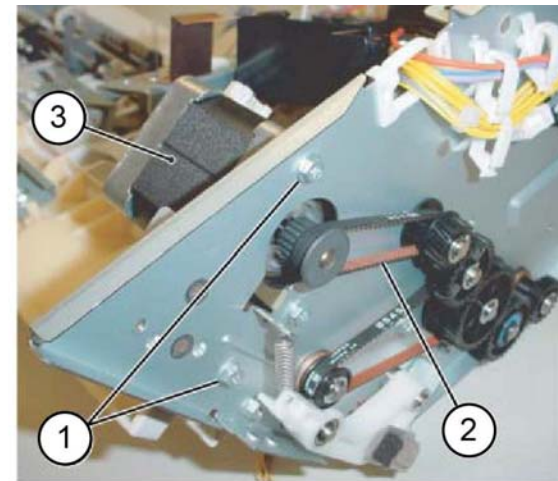


Figure 1 Transport motor removal

4. Remove the gear, [Figure 2](#):
 - a. Remove the E-clip (1).
 - b. Remove the gear (2).
 - c. Remove the KL-clip (3).
 - d. Remove the gear (4).

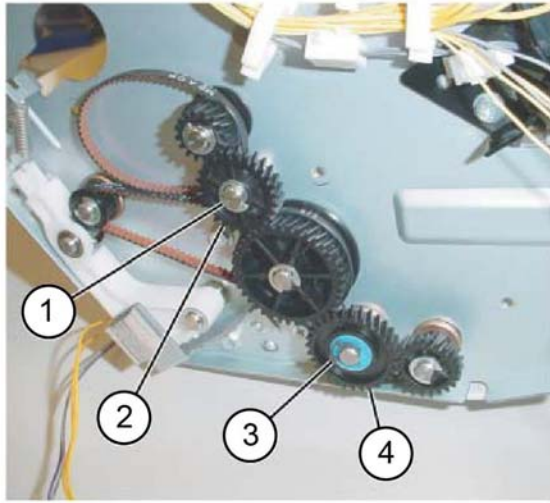


Figure 2 Gear removal

5. Remove the gear pulley, [Figure 3](#):
 - a. Remove the E-clip (1).
 - b. Remove the gear (2).
 - c. Remove the belt (3) from the pulley.
 - d. Remove the flange (4).

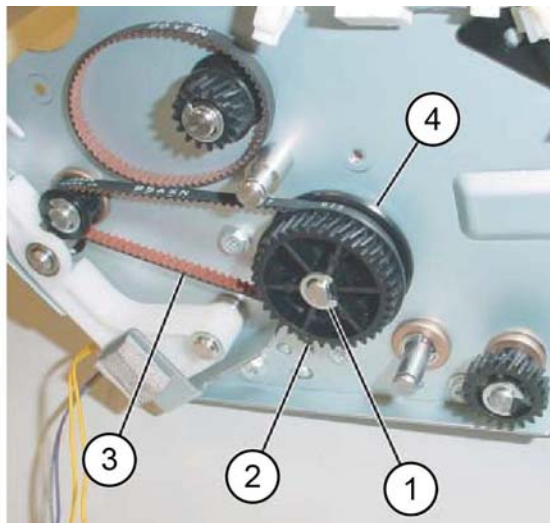


Figure 3 Gear pulley removal

6. Remove the bearing, [Figure 4](#).

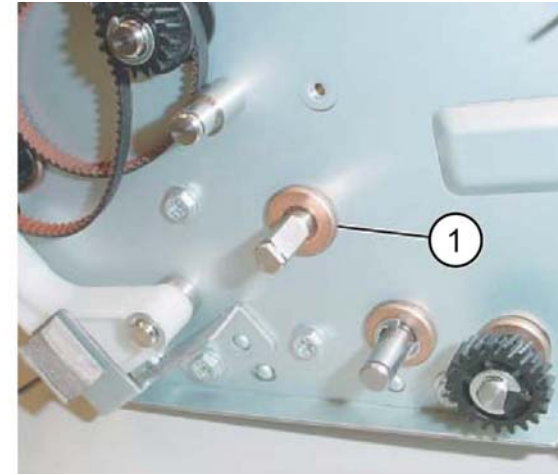


Figure 4 Bearing removal

7. Remove the entrance lower chute assembly, [Figure 5](#) :
 - a. Remove two screws (1).
 - b. Loosen two screws (2).
 - c. Remove the entrance lower chute assembly (3).

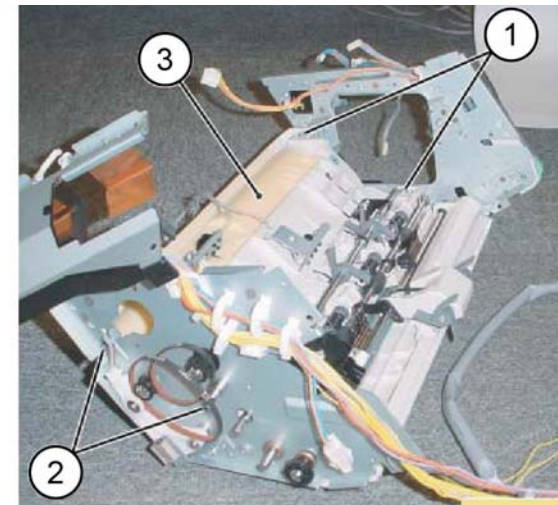


Figure 5 Entrance lower chute assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.12 Entry Roll

Parts List on [PL 12.13](#)

Removal

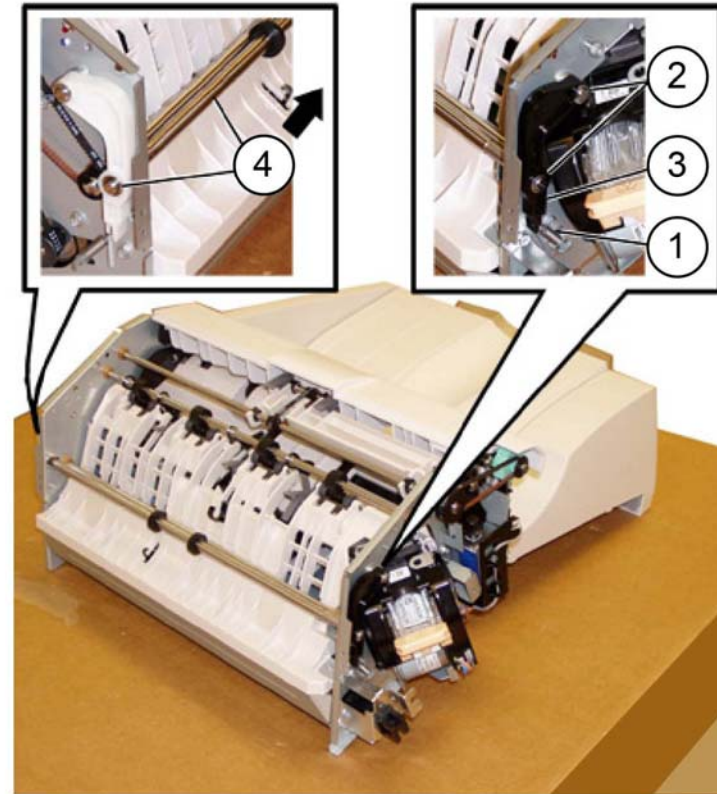


WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper chute assembly, [2](#).
2. Remove the entry roll, [Figure 1](#):
 - a. Disconnect the spring (1).
 - b. Remove two E-clips (2).
 - c. Remove the arm (3).
 - d. Slide the shaft (4) out of the bearing in the arm.

NOTE: Capture the bearing.



C-1-0277-A

Figure 1 Roll removal

Replacement

The replacement is the reverse of the removal procedure.

NOTE: Ensure that the paper guides on the upper chute, [PL 12.13 Item 4](#) are not folded back on top of the exit roll assembly.

REP 12.13 Upper Chute Assembly

Parts List on [PL 12.13](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Remove the rear cover, [PL 12.05 Item 14](#).
4. Remove the left cover, [PL 12.06 Item 4](#).
5. Remove the upper frame section, [Figure 1](#):
 - a. Remove the screw, then the bracket (1).
 - b. Remove two screws (2).
 - c. Remove the screw, then the bracket (3).
 - d. Remove two screws (4).
 - e. Remove the upper frame section (5).

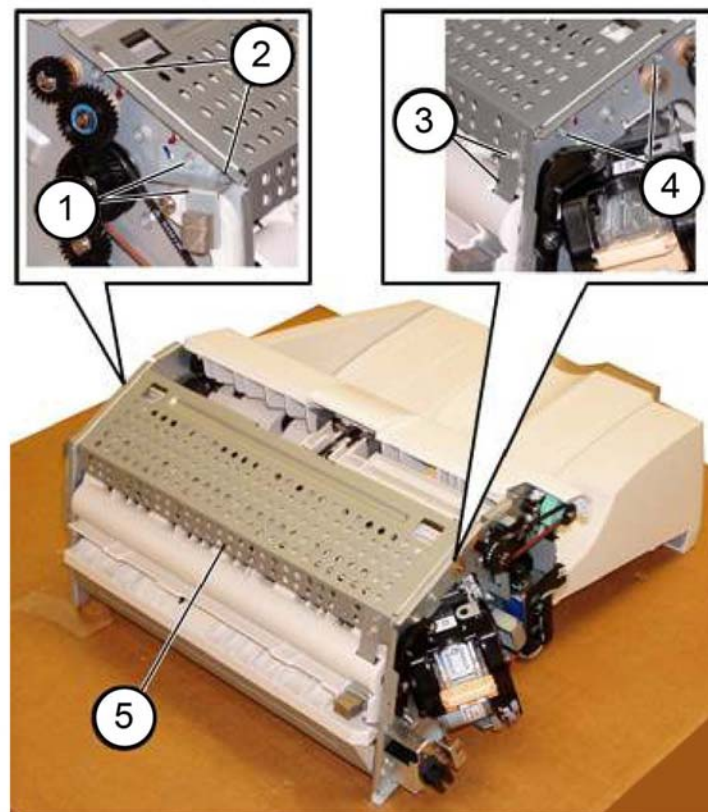


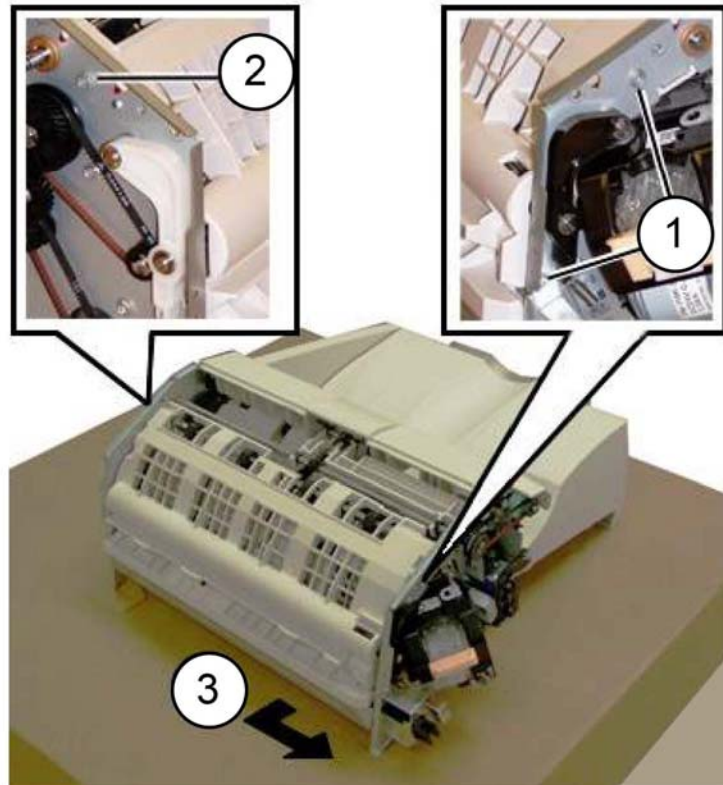
Figure 1 Upper frame section removal

C-1-0278-A

6. Remove the upper chute assembly, [Figure 2](#):

NOTE: The screws do not thread into the upper chute. They are used like pins to secure the upper chute in place.

- a. Remove two screws (1).
- b. Remove the screw (2).
- c. Carefully remove the upper chute assembly (3).



C-1-0279-A

Figure 2 Upper chute assembly removal

Replacement

The replacement is the reverse of the removal procedure.

NOTE: Ensure that the paper guides on the upper chute, [PL 12.13 Item 4](#) are not folded back on top of the exit roll assembly.

REP 12.14 Finisher PWB

Parts List on [PL 12.14](#)

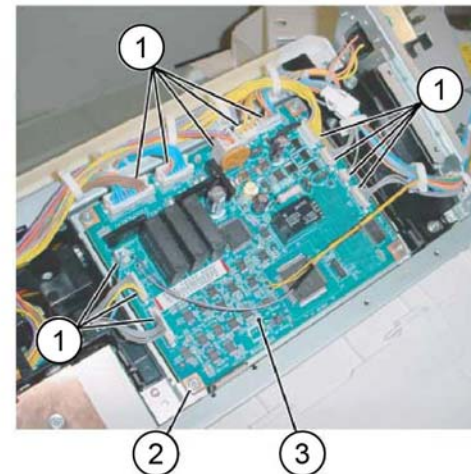
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. If possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Remove the integrated office finisher, [REP 12.1](#).
3. Turn over the integrated office finisher.
4. Remove the bottom cover, [PL 12.06 Item 1](#).
5. Remove the finisher PWB, [Figure 1](#):
 - a. Disconnect 12 connectors (1).
 - b. Remove four screws (2).
 - c. Remove the finisher PWB (3).



C-1-0280-A

Figure 1 Finisher PWB removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Check the machine's current software level against the software level recorded prior to installation of the new finisher PWB. If necessary, reload the software, [GP 4](#).

REP 12.15 Stacker Tray Assembly

Parts List on PL 12.06

Removal



Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, REP 12.1.
2. Remove the front inner cover, PL 12.05 Item 6.
3. Remove the rear cover, PL 12.05 Item 14.
4. Turn over the integrated office finisher.
5. Remove the bottom cover, PL 12.06 Item 1.
6. Remove the tray cover, PL 12.06 Item 3.
7. Disconnect the connector, Figure 1:
 - a. Release the clamp (1).
 - b. Remove the clamp (2).
 - c. Release the harness (3) from the retainer.
 - d. Release the clamp (4).
 - e. Disconnect the connector (5).
 - f. Release the harness (6) from the retainer.

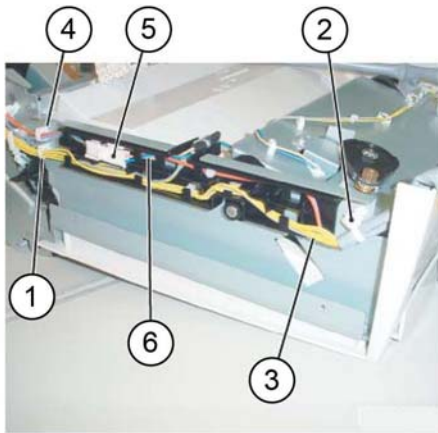


Figure 1 Connector

C-1-0281-A

8. Release the wiring, Figure 2:
 - a. Release five clamps (1).
 - b. Release the harness (2) from the retainers.

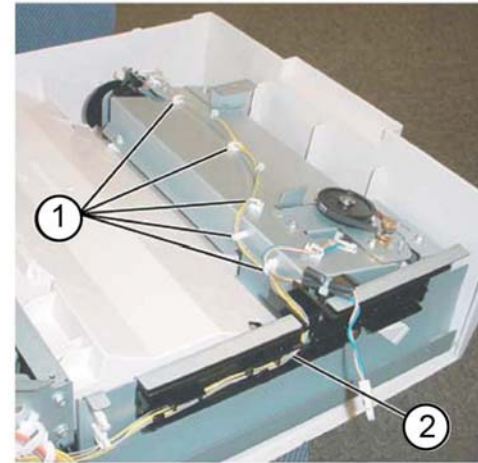


Figure 2 Harness release

C-1-0282-A

9. Remove the stacker sensor assembly, Figure 3:
 - a. Remove the screw (1).
 - b. Remove the stacker sensor assembly (2).
 - c. Release the four clamps (3).
 - d. Disconnect two connectors (4).

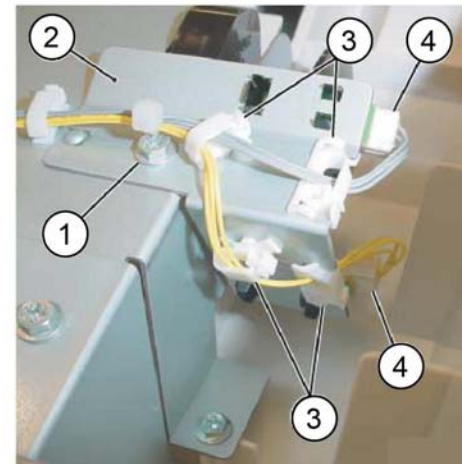


Figure 3 Stacker sensor assembly removal

C-1-0283-A

10. Remove the stacker tray assembly, [Figure 4](#):
 - a. Remove five screws (1).
 - b. Remove the stacker tray assembly (2).

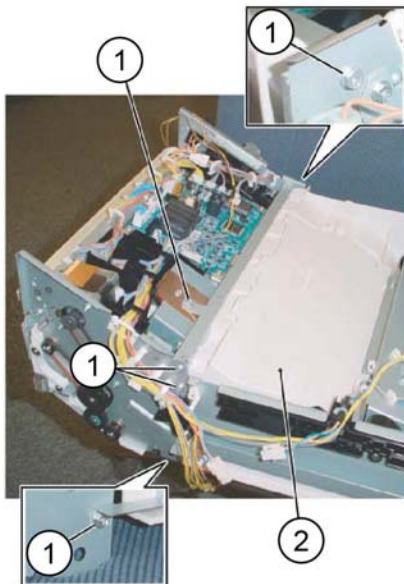


Figure 4 Stacker tray assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install the stacker tray assembly and integrated office finisher as shown in [Figure 5](#).



Figure 5 Stacker tray assembly installation

REP 12.16 Stacker Shaft Assembly

Parts List on [PL 12.20](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the rear cover, [PL 12.05 Item 14](#).
3. Turn over the integrated office finisher.
4. Remove the tray cover, [PL 12.06 Item 3](#).
5. Remove the rear bracket, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the bracket (2).

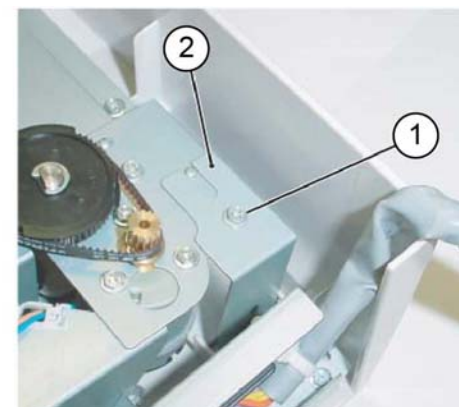


Figure 1 Rear bracket removal

C-1-0284-A

C-1-0286-A

C-1-0285-A

6. Remove the front bracket, **Figure 2:**

- a. Remove the screw (1).
- b. Remove the bracket (2).

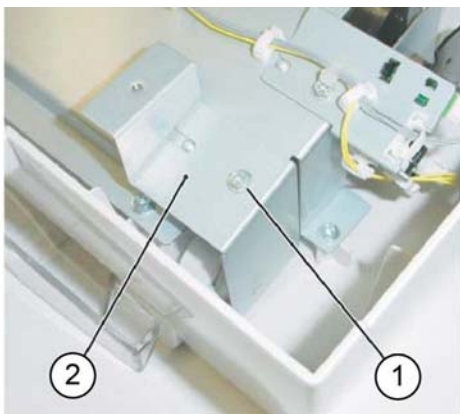


Figure 2 Front bracket removal

C-1-0287-A

7. Remove the top tray, **Figure 3:**

- a. Raise the integrated office finisher slightly in the direction of the arrow (1).
- b. Remove the top tray (2).

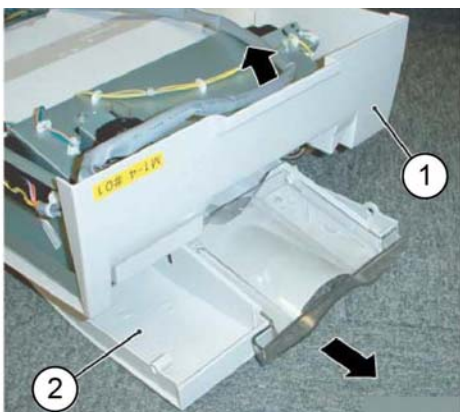


Figure 3 Top tray removal

C-1-0288-A

8. Remove the stacker sensor assembly, **Figure 4:**

- a. Remove the screw (1).
- b. Remove the stacker sensor assembly (2).
- c. Disconnect the connectors, then release the harness from the clamps.

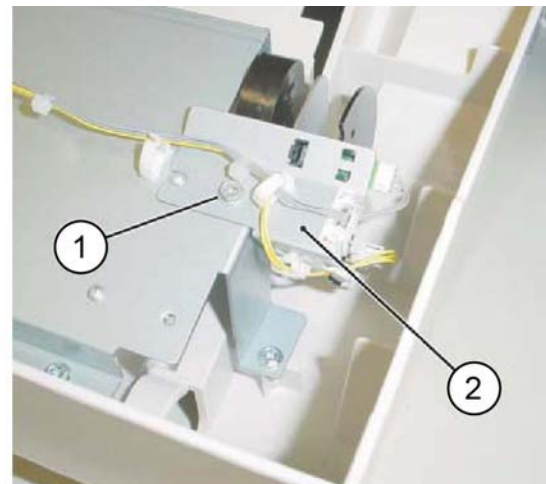


Figure 4 Stacker sensor assembly removal

9. Remove the stacker assembly, **Figure 5:**

- a. Remove five self-tapping screws (1).
- b. Remove the screw (2).
- c. Remove the stacker assembly (3).

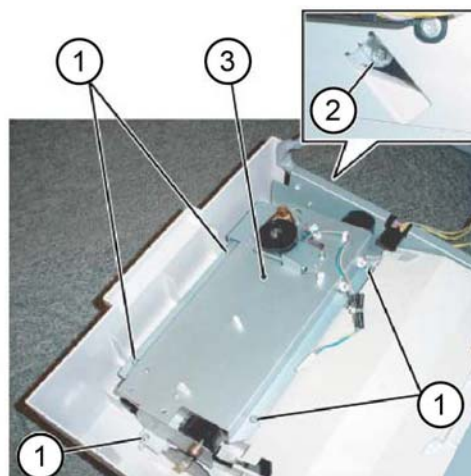


Figure 5 Stacker assembly removal

10. Unhook (1), then remove the actuator (2), [Figure 6](#).

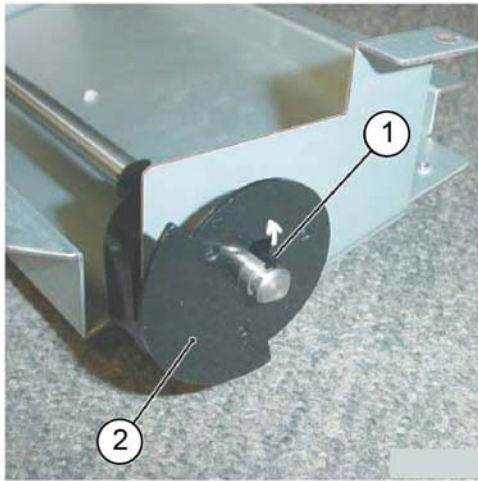


Figure 6 Actuator removal

11. Prepare to remove the stacker shaft assembly, [Figure 7](#):
- Remove the E-clip (1).
 - Move the bearing (2) in the direction of the arrow.

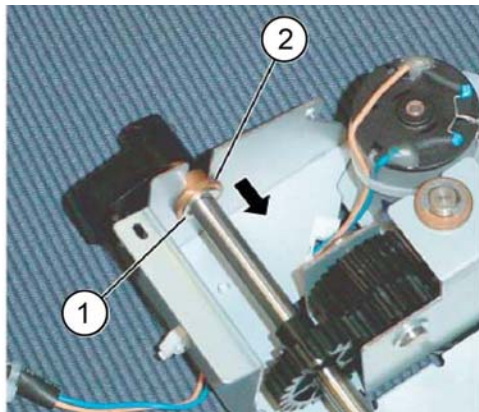


Figure 7 Preparation

12. Remove the stacker shaft assembly in the direction of the arrow, [Figure 8](#).

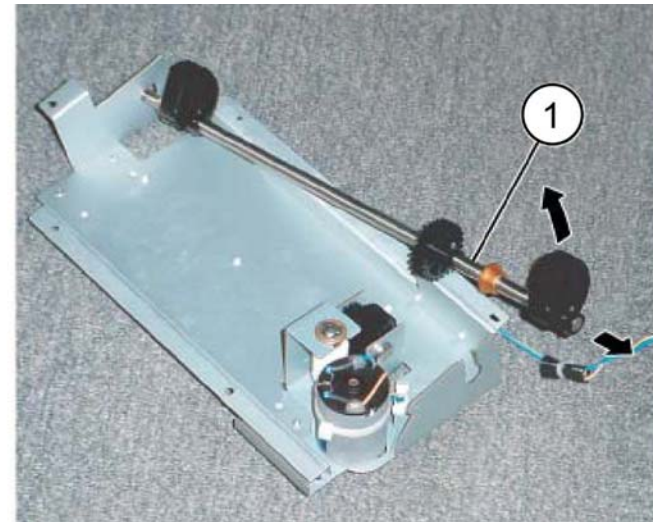


Figure 8 Stacker shaft assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.17 Stacker Motor

Parts List on [PL 12.20](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the rear cover, [PL 12.05 Item 14](#).
3. Turn over the integrated office finisher.
4. Remove the tray cover, [PL 12.06 Item 3](#).
5. Disconnect the connector, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Release the harness from the retainer (2).
 - c. Disconnect the connector (3).

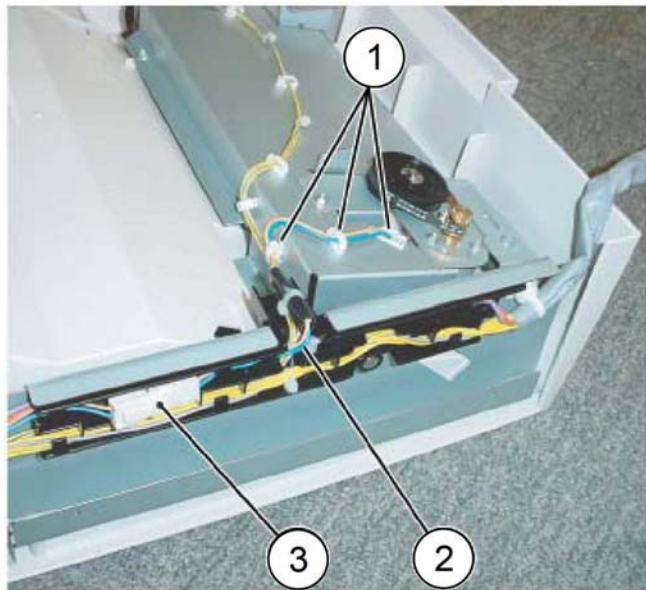


Figure 1 Connector

C-1-0294-A

6. Remove the bracket, [Figure 2](#):
 - a. Remove the screw (1).
 - b. Remove the bracket (2).

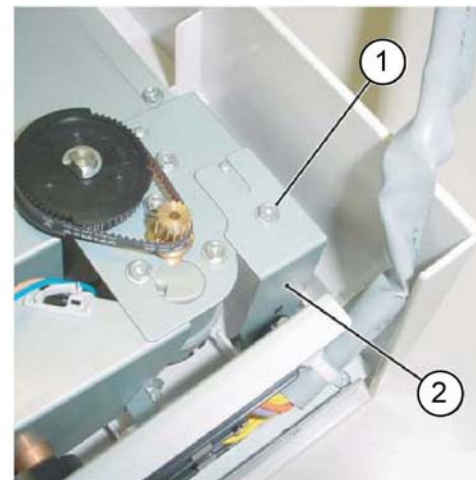


Figure 2 Bracket removal

C-1-0295-A

7. Remove the stacker motor assembly, [Figure 3](#):
 - a. Remove two screws (1).
 - b. Remove the stacker motor assembly (2).

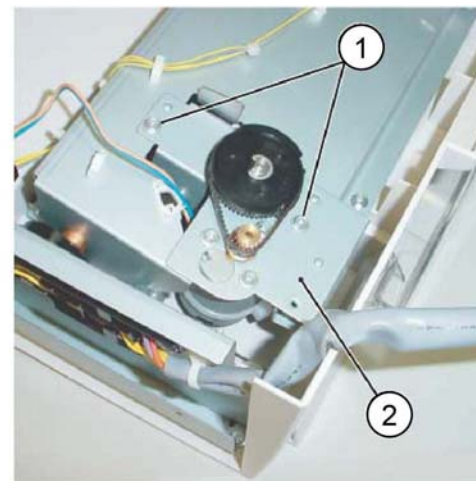


Figure 3 Stacker motor assembly removal

C-1-0296-A

8. Remove the stacker motor, [Figure 4](#):
 - a. Remove three screws (1).
 - b. Remove the belt (2) from the pulley.
 - c. Remove the stacker motor (3).

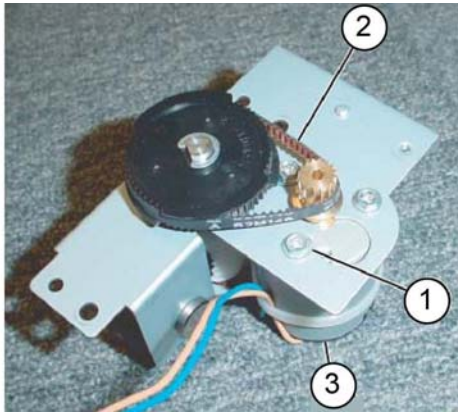


Figure 4 Stacker motor removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install the stacker motor as shown in [Figure 5](#).

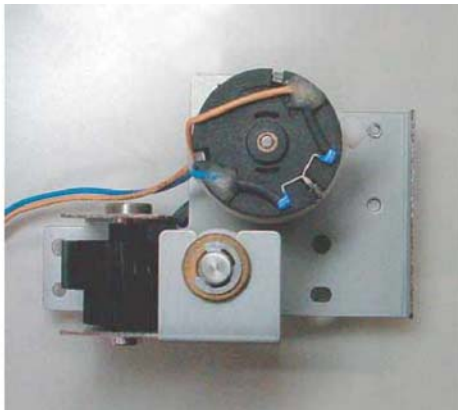


Figure 5 Stacker motor installation

REP 12.18 Stacker Sensor

Parts List on [PL 12.20](#)

Removal

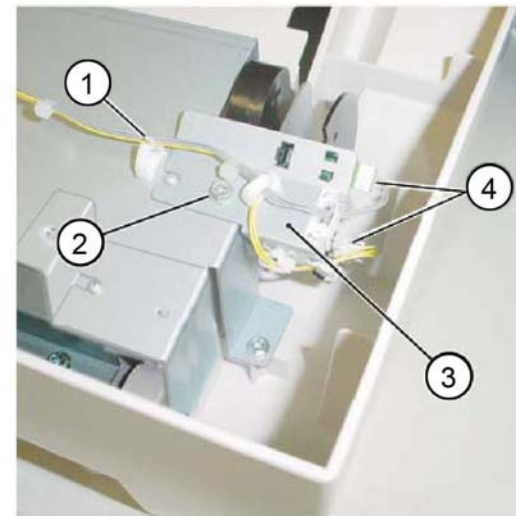


WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the rear cover, [PL 12.05 Item 14](#).
3. Turn over the integrated office finisher.
4. Remove the tray cover, [PL 12.06 Item 3](#).
5. Remove the stacker sensor assembly, [Figure 1](#):
 - a. Release the harness from the lamp (1).
 - b. Remove the screw (2).
 - c. Remove the stacker sensor assembly (3).
 - d. Disconnect the sensor connector (4), then remove the sensor from the bracket.

C-1-0297-A



C-1-0299-A

Figure 1 Stacker sensor assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.19 Compiler Assembly

Parts List on [PL 12.25](#) and [PL 12.26](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Remove the rear cover, [PL 12.05 Item 14](#).
4. Turn over the integrated office finisher.
5. Remove the bottom cover. [PL 12.06 Item 1](#).
6. Remove the tray cover, [PL 12.06 Item 3](#).
7. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect five connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

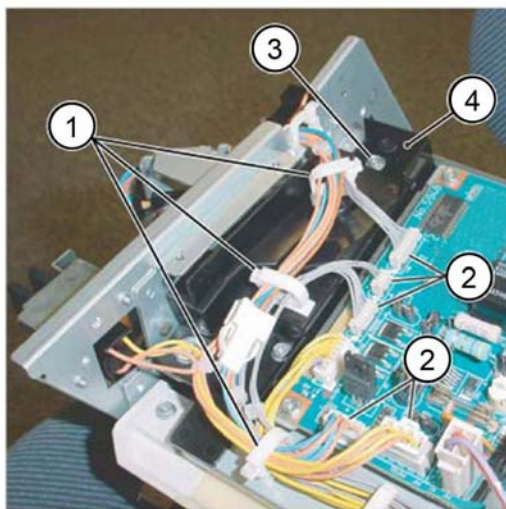


Figure 1 Connector bracket removal

C-1-0300-A

8. Remove the bottom plate, [Figure 2](#):
 - a. Release the harness from the five clamps (1).
 - b. Disconnect 8 connectors (2).
 - c. Release the harness from the retainer (3).
 - d. Remove four screws (4).
 - e. Remove the bottom plate (5).

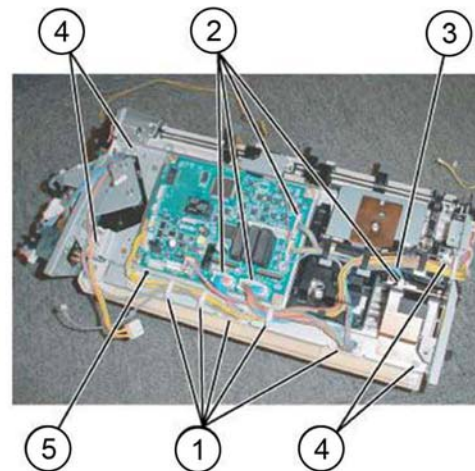


Figure 2 Bottom plate removal

C-1-0301-A

9. Release the harness from the clamp, [Figure 3](#).

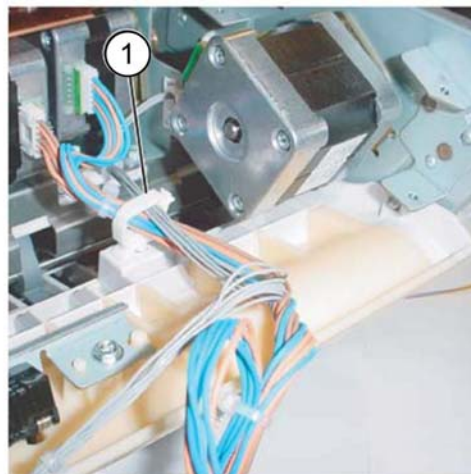


Figure 3 Harness release

C-1-0302-A

10. Remove the stacker tray, [Figure 4](#):
 - a. Release the harness from the five clamps (1).
 - b. Disconnect the connector (2).
 - c. Remove seven screws (3).
 - d. Remove the stacker tray (4).

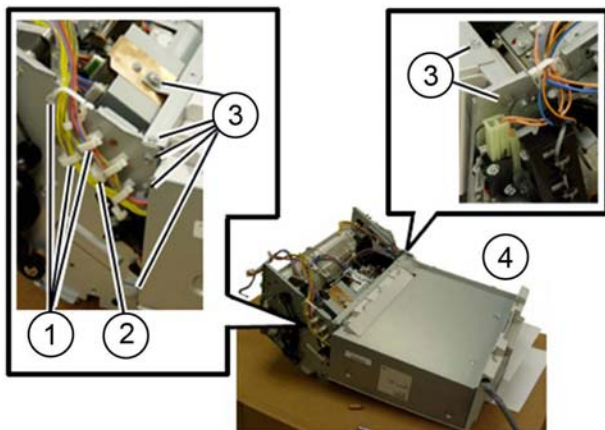


Figure 4 Stacker tray removal

11. Remove the front self-tapping screw (1), [Figure 5](#).

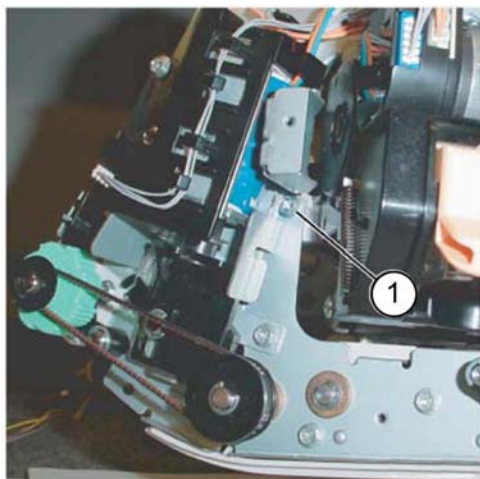


Figure 5 Front screw removal

12. Remove the rear screw (1), [Figure 6](#).

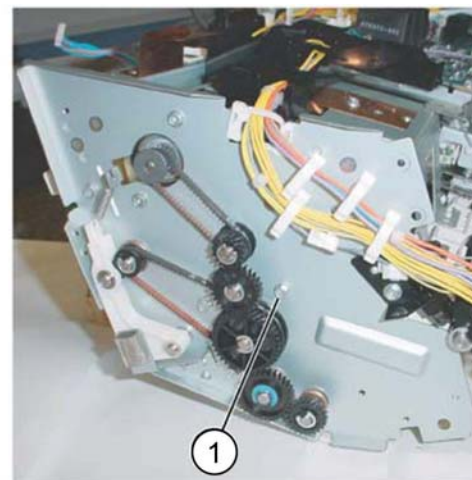


Figure 6 Rear screw removal

13. Remove the compiler assembly (1), [Figure 7](#).

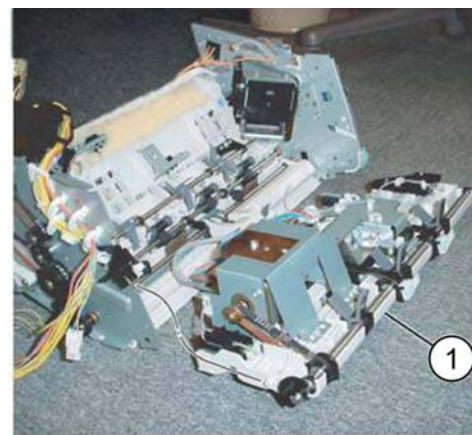


Figure 7 Compiler assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.20 Set Clamp Shaft

Parts List on [PL 12.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the compiler assembly, [REP 12.19](#).
2. Remove the eject shaft assembly, [REP 12.24](#).
3. Remove the actuator and the bearing, [Figure 1](#):
 - a. Remove the E-clip (1).
 - b. Remove the actuator (2).
 - c. Remove E-clip (3).
 - d. Remove the bearing (4).

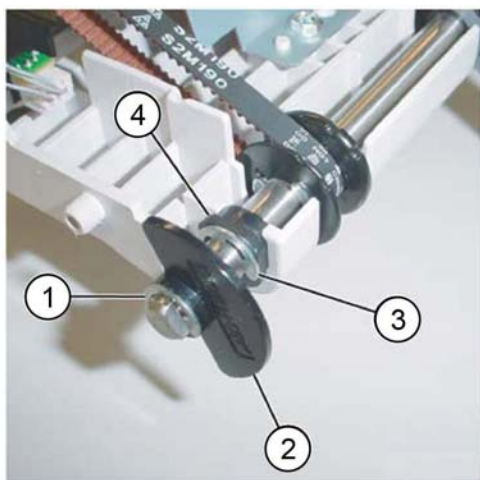


Figure 1 Actuator and bearing removal

C-1-0307-A

4. Remove the bearing, [Figure 2](#):
 - a. Remove the E-clip (1).
 - b. Remove the bearing (2).

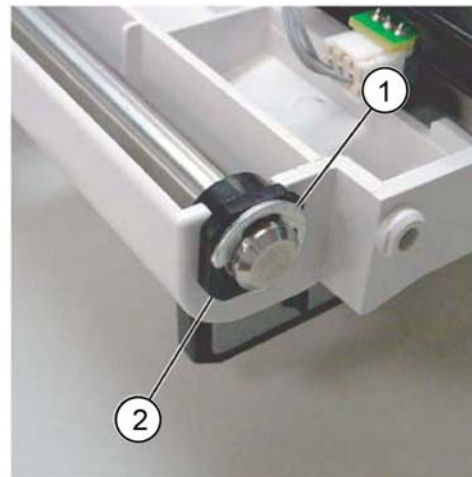


Figure 2 Bearing removal

C-1-0308-A

5. Remove the set clamp shaft, [Figure 3](#):
 - a. Move the set clamp shaft (1) in the direction of the arrow.
 - b. Remove the three belts (2) from the pulleys.
 - c. Remove the set clamp shaft in the direction of the arrow (3).

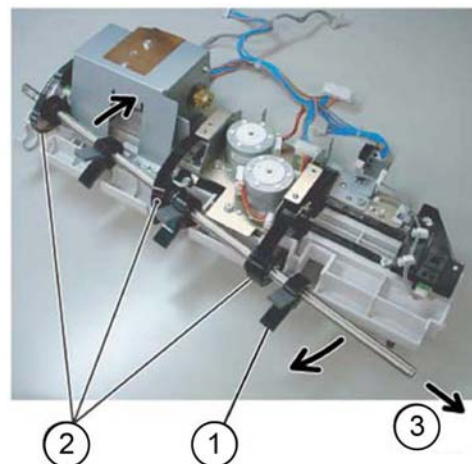


Figure 3 Set clamp shaft removal

C-1-0309-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the eject belt is aligned with the marks on the pulleys, [Figure 4](#).

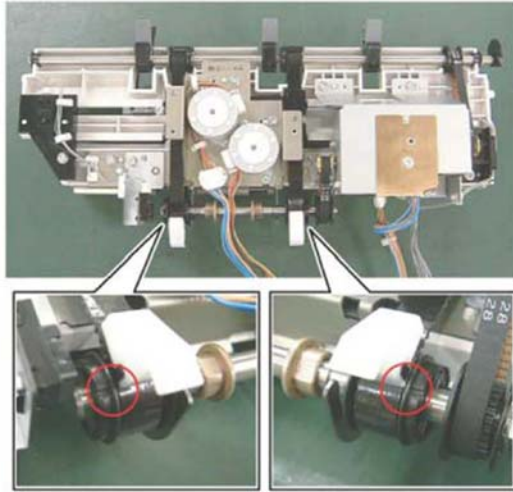


Figure 4 Eject belt installation

C-1-0310-A

REP 12.21 Eject Belt

Parts List on [PL 12.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the compiler assembly, [REP 12.19](#).
2. Remove the front/rear tamper motor assembly, [REP 12.25](#).
3. Move the eject home sensor assembly, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Move the eject home sensor assembly (2).

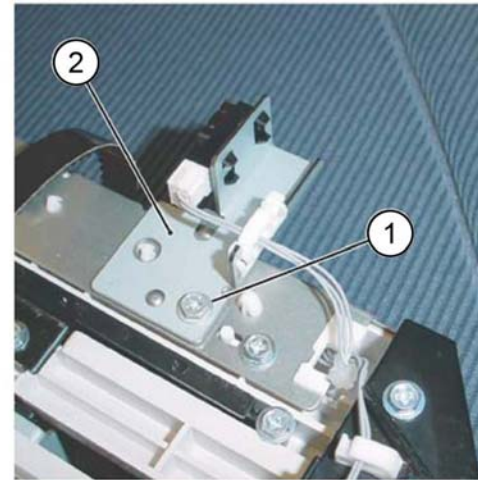


Figure 1 Eject home sensor assembly

C-1-0311-A

4. Remove the eject belt, [Figure 2](#):
 - a. Move the blades of the set clamp shaft (1) in the direction of the arrow.
 - b. Remove the eject belt (2) in the direction of the arrow.

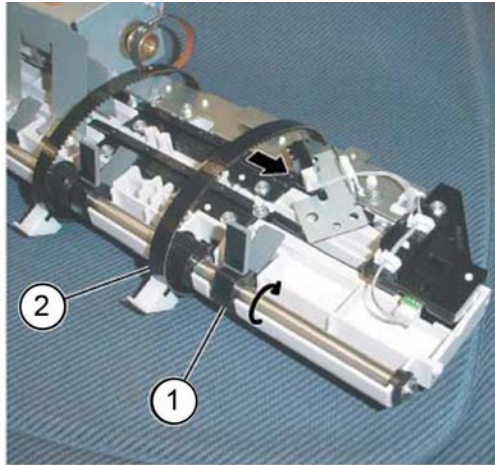


Figure 2 Eject belt removal

C-1-0312-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the eject belt is aligned with the marks on the pulleys, [Figure 3](#).

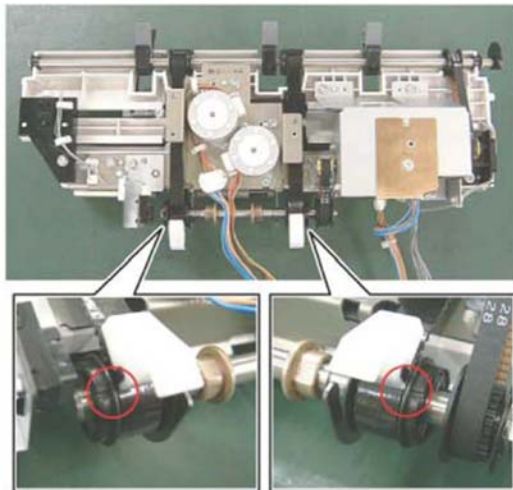


Figure 3 Eject belt installation

C-1-0313-A

REP 12.22 Eject/Set Clamp Motor Assembly

Parts List on [PL 12.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Remove the rear cover, [PL 12.05 Item 14](#).
4. Turn over the integrated office finisher.
5. Remove the bottom cover, [PL 12.06 Item 1](#).
6. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect five connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

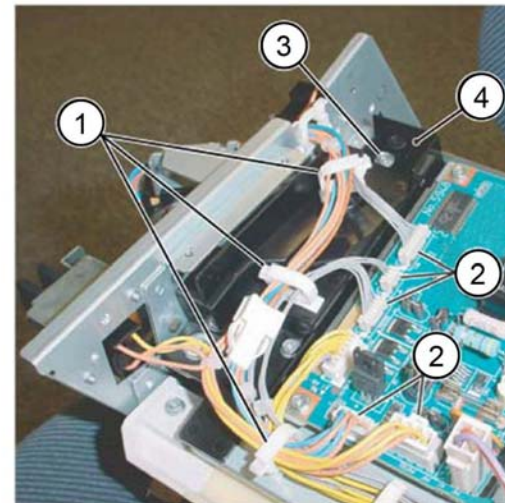


Figure 1 Connector bracket removal

C-1-0314-A

7. Remove the bottom plate, **Figure 2**:
 - a. Release the harness from the five clamps (1).
 - b. Disconnect eight connectors (2).
 - c. Release the harness from the retainer (3).
 - d. Remove four screws (4).
 - e. Remove the bottom plate (5).

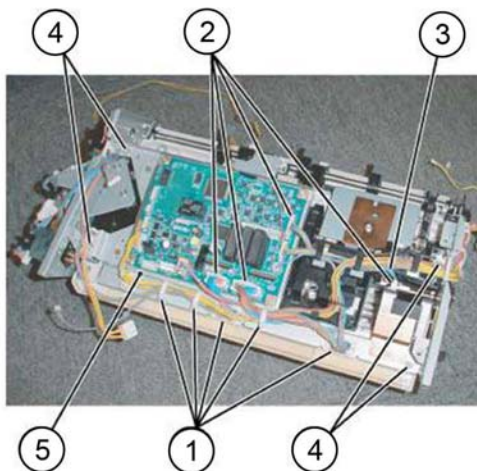


Figure 2 Bottom plate removal

C-1-0315-A

8. Remove the stacker tray, **Figure 3**:
 - a. Release the harness from the five clamps (1).
 - b. Disconnect the connector (2).
 - c. Remove seven screws (3).
 - d. Remove the stacker tray (4).

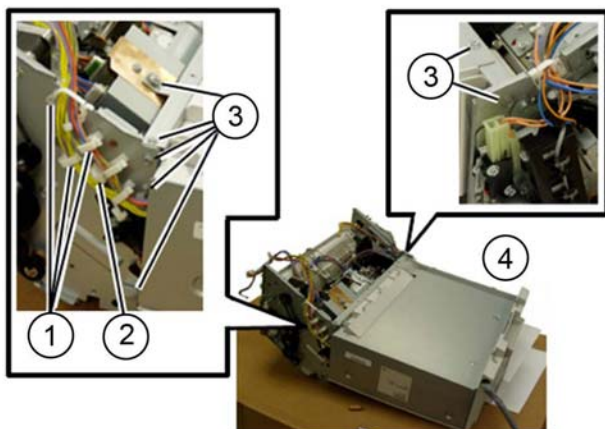


Figure 3 Stacker tray removal

C-1-0316-A

9. Remove the screws securing the eject/set clamp motor assembly, **Figure 4**:
 - a. Release the harness from both clamps (1).
 - b. Remove both screws (2).
 - c. Remove both self-tapping screws (3).

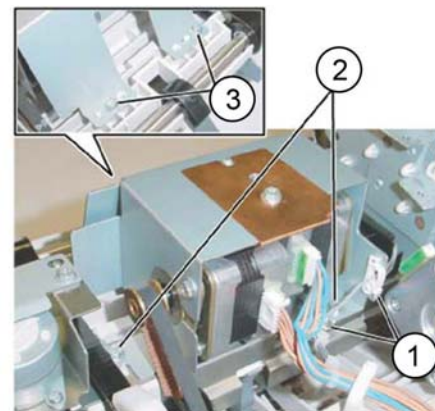


Figure 4 Screw removal

C-1-0317-A

10. Remove the eject/set clamp motor assembly, [Figure 5](#):
 - a. Remove both belts (1) from the Pulleys.
 - b. Remove the eject/set clamp motor assembly (2).

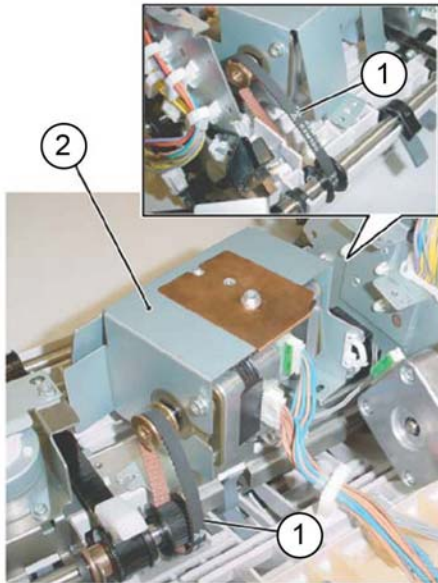


Figure 5 Eject/set clamp motor assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.23 Rear Tamper Home Sensor

Parts List on [PL 12.25](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Remove the rear cover, [PL 12.05 Item 14](#).
4. Turn over the integrated office finisher.
5. Remove the bottom cover, [PL 12.06 Item 1](#).
6. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect the connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

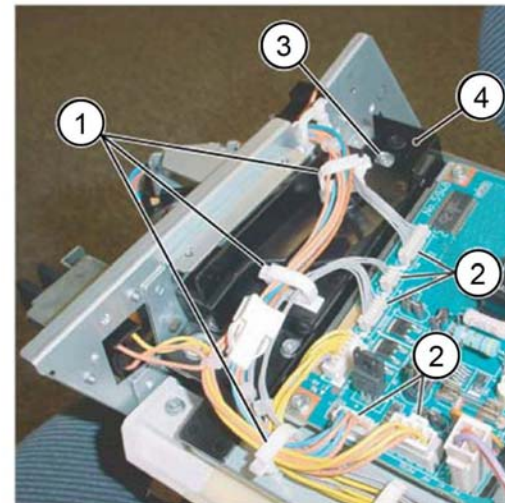


Figure 1 Connector bracket removal

C-1-0319-A

C-1-0318-A

7. Remove the bottom plate, [Figure 2](#):
 - a. Release the harness from the 5 clamps (1).
 - b. Disconnect eight connectors (2).
 - c. Remove the harness from the retainers (3).
 - d. Remove four screws (4).
 - e. Remove the bottom plate (5).

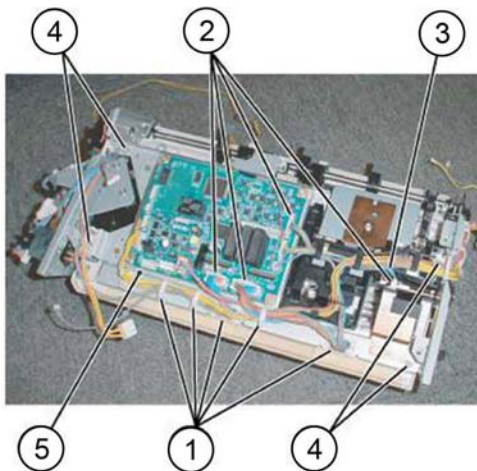
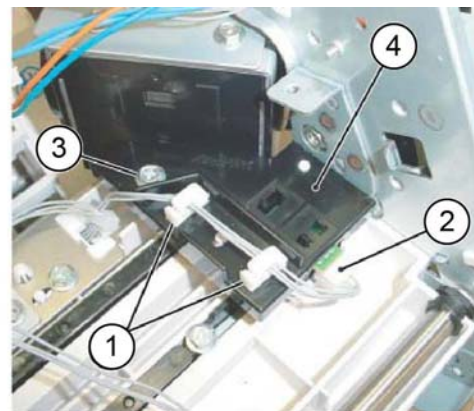


Figure 2 Bottom plate removal

C-1-0320-A

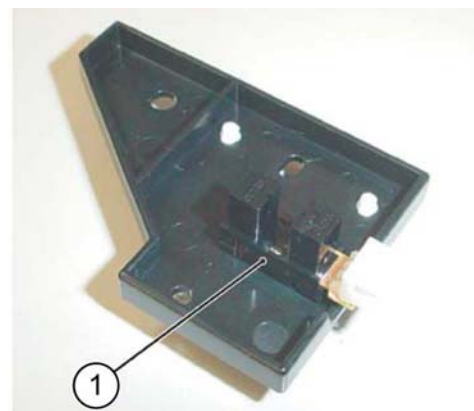
8. Remove the rear tamper home sensor assembly, [Figure 3](#):
 - a. Release the harness from both clamps (1).
 - b. Remove the self-tapping screw (2).
 - c. Move the rear tamper home sensor assembly (3) in order to disconnect the connector.



C-1-0321-A

Figure 3 Rear tamper home sensor assy removal

9. Remove the rear tamper home sensor (1) from the bracket, [Figure 4](#).



C-1-0332-A

Figure 4 Rear tamper home sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 12.24 Eject Shaft Assembly

Parts List on [PL 12.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the compiler assembly, [REP 12.19](#).
2. Remove the bracket assembly, [Figure 1](#):
 - a. Release the harness from the two clamps (1).
 - b. Remove two screws (2).
 - c. Remove the bracket assembly (3).

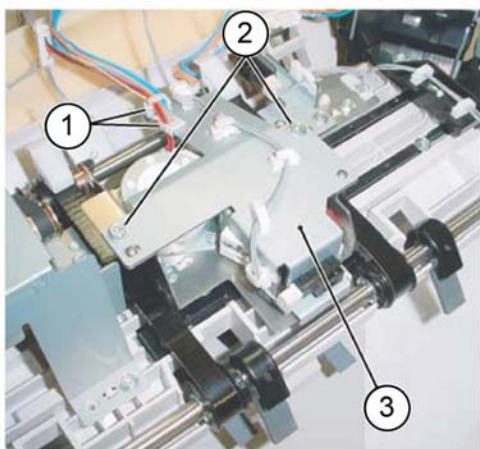
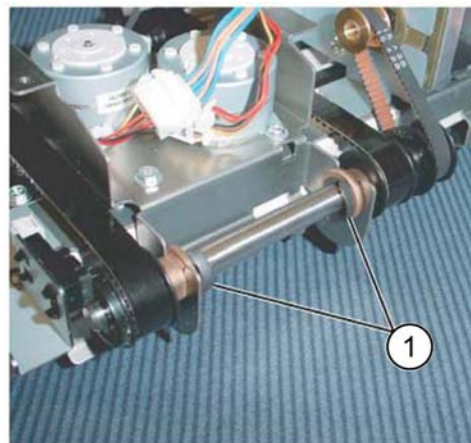


Figure 1 Bracket assembly removal

C-1-0323-A

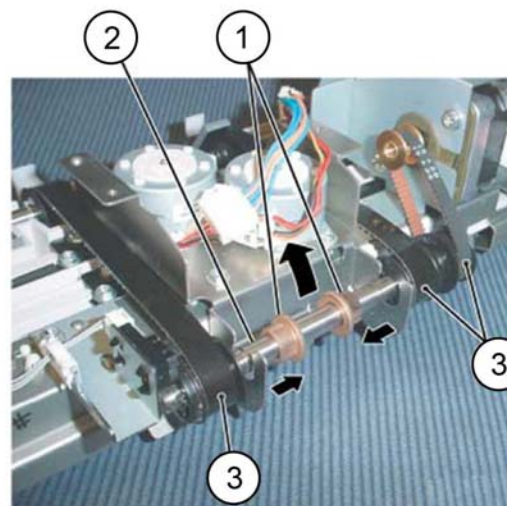
3. Remove the KL-clips (2) from the eject shaft, [Figure 2](#).



C-1-0324-A

Figure 2 KL-clips

4. Remove the eject shaft from the front/rear tamper motor assembly, [Figure 3](#):
 - a. Move the bearings (1) in the direction of the arrow.
 - b. Remove the eject shaft (2) in the direction of the arrow.
 - c. Remove the belts (3) from the pulley.



C-1-0325-A

Figure 3 Eject shaft removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the eject belt is aligned with the marks on the pulleys, [Figure 4](#).

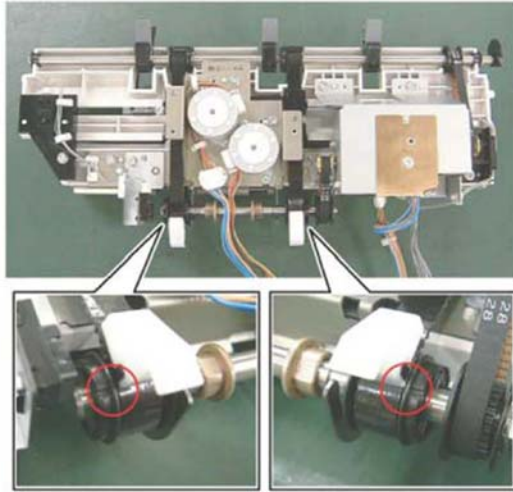


Figure 4 Eject belt installation

C-1-0326-A

REP 12.25 Front /Rear Tamper Motor Assembly

Parts List on [PL 12.26](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the compiler assembly, [REP 12.19](#).
2. Remove the eject shaft assembly, [REP 12.24](#).
3. Remove the front/rear tamper motor assembly, [Figure 1](#):
 - a. Remove two self-tapping screws (1).
 - b. Remove the screw (2).
 - c. Remove the front/rear tamper motor assembly (3).

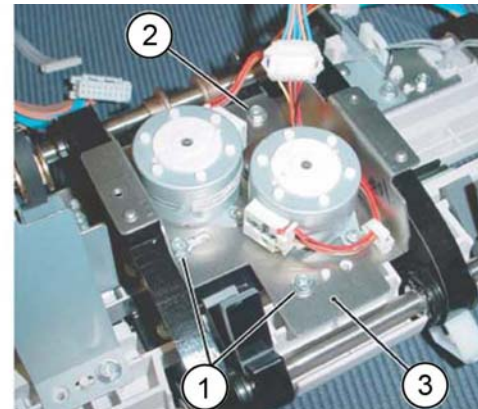


Figure 1 Tamper motor assembly removal

C-1-0327-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the eject belt is aligned with the marks on the pulleys, [Figure 2](#).

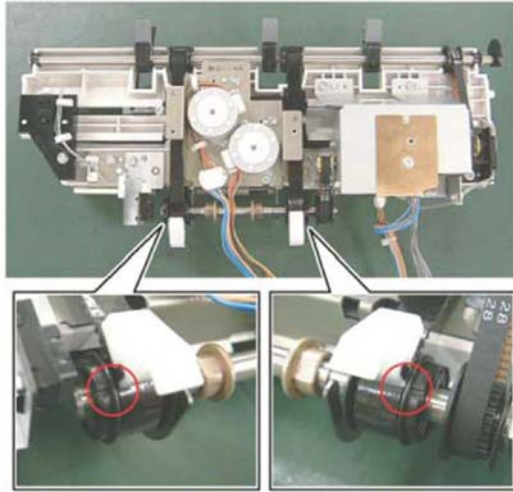


Figure 2 Eject belt installation

C-1-0328-A

REP 12.26 Front Tamper Home Sensor

Parts List on [PL 12.26](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Remove the rear cover, [PL 12.05 Item 14](#).
4. Turn over the integrated office finisher.
5. Remove the bottom cover, [PL 12.06 Item 1](#).
6. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect the connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

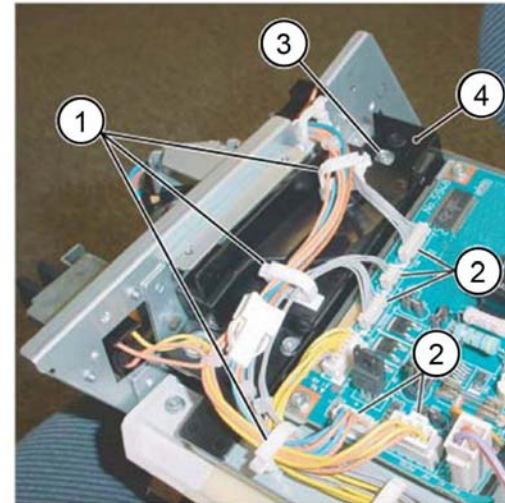


Figure 1 Connector bracket removal

C-1-0329-A

7. Remove the bottom plate, **Figure 2**:
 - a. Release the harness from the 5 clamps (1).
 - b. Disconnect eight connectors (2).
 - c. Remove the harness from the retainers (3).
 - d. Remove four screws (4).
 - e. Remove the bottom plate (5).

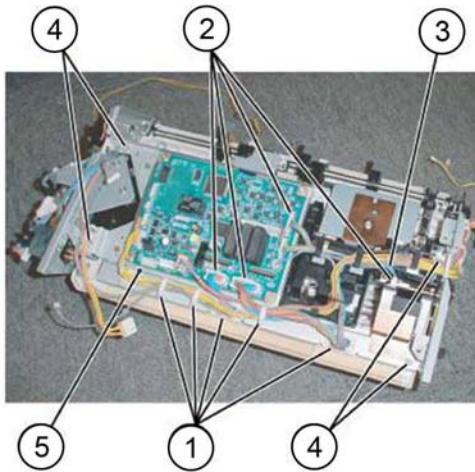


Figure 2 Bottom plate removal

8. Remove the front tamper home sensor assembly, **Figure 3**:
 - a. Remove the screw (1).
 - b. Remove the front tamper home sensor assembly (2).

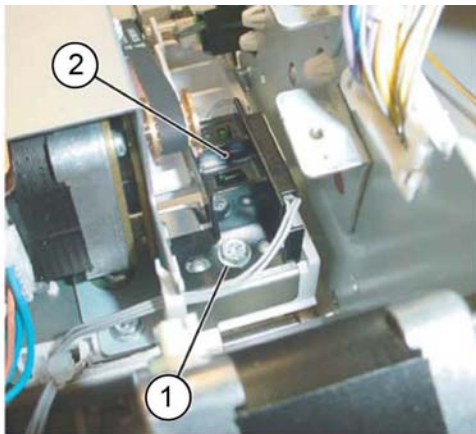


Figure 3 Front tamper home sensor assy removal

9. Remove the front tamper home sensor, **Figure 4**:
 - a. Disconnect the connector (1).
 - b. Remove the front tamper home sensor (2).

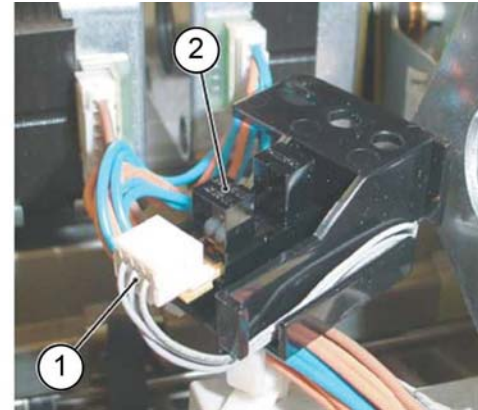


Figure 4 Front tamper home sensor removal

C-1-0332-A

Replacement

The replacement is the reverse of the removal procedure.

C-1-0330-A

C-1-0331-A

REP 12.27 Eject Clamp Home Sensor

Parts List on [PL 12.26](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Remove the rear cover, [PL 12.05 Item 14](#).
4. Turn over the integrated office finisher.
5. Remove the bottom cover, [PL 12.06 Item 1](#).
6. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect the connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

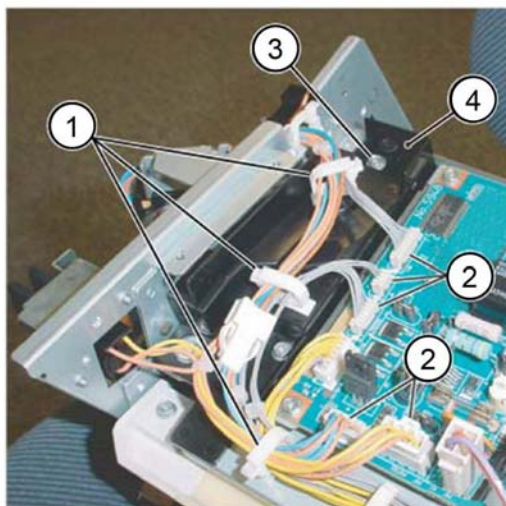


Figure 1 Connector bracket removal

7. Remove the bottom plate, [Figure 2](#):
 - a. Release the harness from the 5 clamps (1).
 - b. Disconnect eight connectors (2).
 - c. Remove the harness from the retainers (3).
 - d. Remove four screws (4).

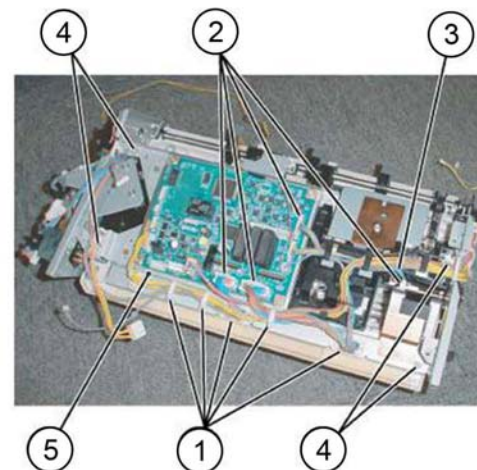


Figure 2 Bottom plate removal

C-1-0334-A

8. Remove the eject home sensor, [Figure 3](#):
 - a. Release the harness from the clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove the eject home sensor (3) from the bracket.

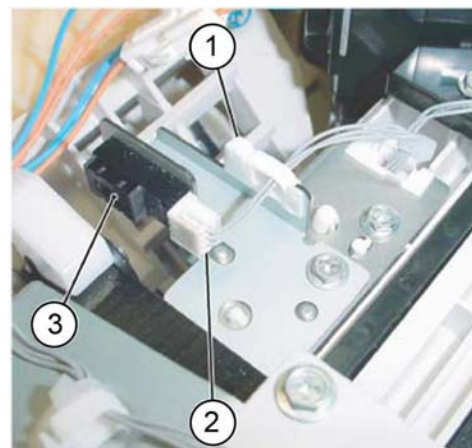


Figure 3 Eject home sensor removal

C-1-0335-A

Replacement

The replacement is the reverse of the removal procedure.

REP 12.28 Stack Height Sensor

Parts List on [PL 12.26](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the integrated office finisher, [REP 12.1](#).
2. Remove the front inner cover, [PL 12.05 Item 6](#).
3. Remove the rear cover, [PL 12.05 Item 14](#).
4. Turn over the integrated office finisher.
5. Remove the bottom cover, [PL 12.06 Item 1](#).
6. Remove the connector bracket, [Figure 1](#):
 - a. Release the harness from the three clamps (1).
 - b. Disconnect the connectors (2).
 - c. Remove two screws (3).
 - d. Remove the connector bracket (4).

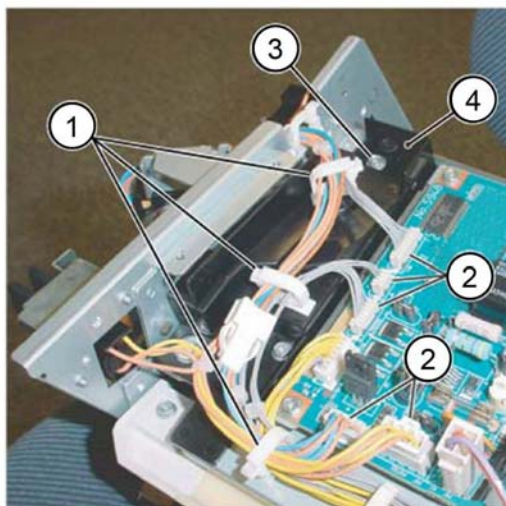


Figure 1 Connector bracket removal

7. Remove the bottom plate, [Figure 2](#):
 - a. Release the harness from the 5 clamps (1).
 - b. Disconnect eight connectors (2).
 - c. Remove the harness from the retainers (3).
 - d. Remove four screws (4).

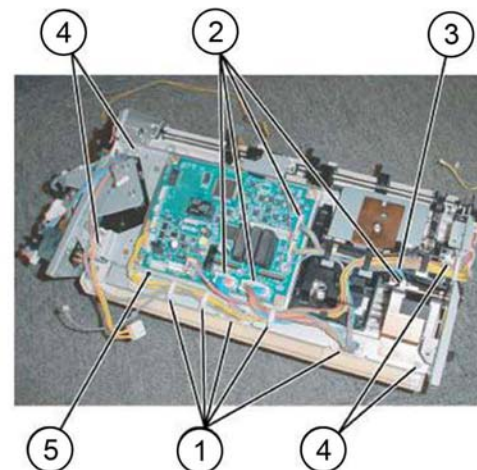


Figure 2 Bottom plate removal

C-1-0336-A

8. Remove the stacker tray, [Figure 3](#):
 - a. Release the harness from the five clamps (1).
 - b. Disconnect the connector (2).
 - c. Remove seven screws (3).
 - d. Remove the stacker tray (4).

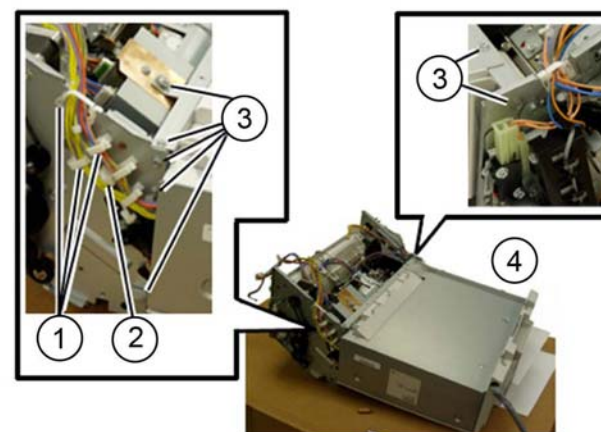


Figure 3 Stacker tray removal

C-1-0338-A

9. Remove the bracket assembly, **Figure 4**:
 - a. Release the harness from both clamps (1).
 - b. Remove two screws (2).
 - c. Remove the bracket assembly (3).

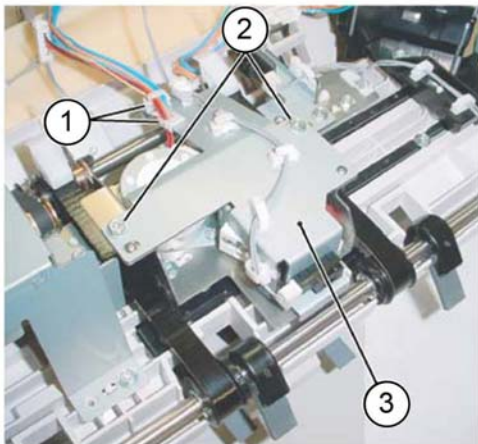


Figure 4 Bracket assembly removal

C-1-0339-A

10. Remove the stack height sensor, **Figure 5** :
 - a. Remove the clamp (1).
 - b. Release the harness from the clamps (2).
 - c. Disconnect the connector (3).
 - d. Remove the stack height sensor (4) from the bracket.

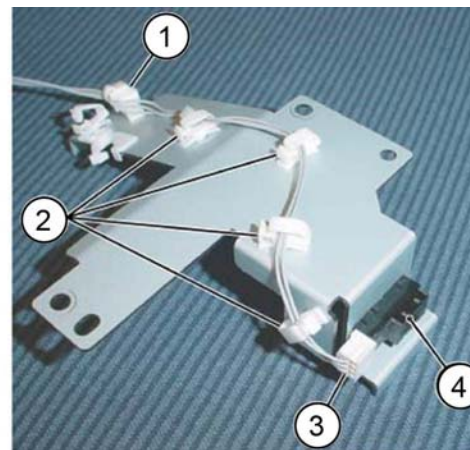


Figure 5 Stack height sensor removal

C-1-0340-A

Replacement

The replacement is the reverse of the removal procedure.

REP 13.1 H-Transport Assembly

Parts List on [PL 13.05](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the finisher, [REP 13.5](#).
2. Remove the H-transport assembly, [Figure 1](#):
 - a. Disconnect the harness (1).
 - b. Remove two screws (2).
 - c. Remove the docking plate (3).
 - d. Remove the H-transport (4).

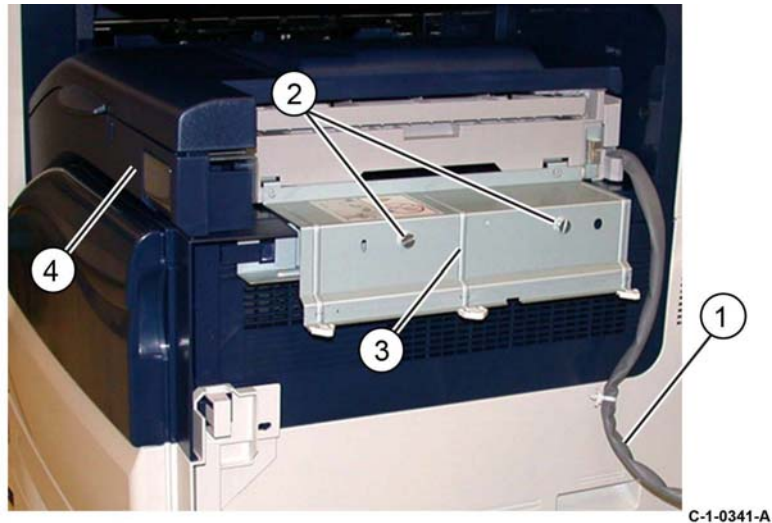


Figure 1 H-transport removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.2 Hole Punch Assembly

Parts List on [PL 13.06](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: For clarity, the H-transport is shown removed from the machine in [Figure 1](#).

1. Hold open the H-transport top cover.
2. Open the H-transport front cover.
3. Remove the hole punch assembly, [Figure 1](#):
 - a. Release the cable clamp (1).
 - b. Remove the connector cover (2), then disconnect the connector.
 - c. Remove the thumbscrew (3).
 - d. Remove the hole punch assembly (4).

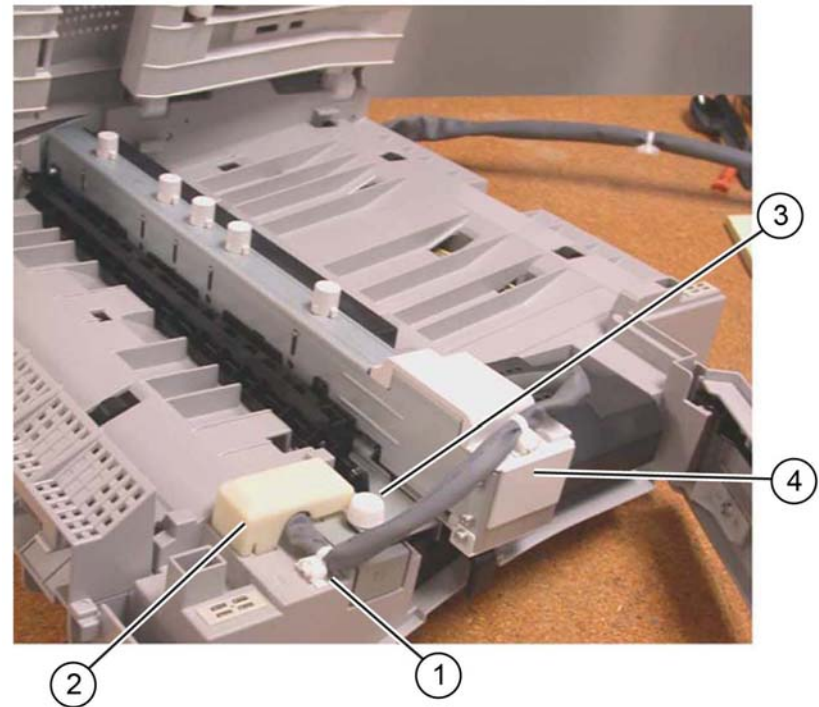


Figure 1 Hole punch assembly removal

Replacement

1. Insert the hole punch assembly rear locating pin into the H-transport frame.
2. The replacement is the reverse of the removal procedure.
3. Perform [ADJ 13.1](#) Finisher LX Hole Punch Position.

REP 13.3 H-Transport Belt

Parts List on [PL 13.08](#)

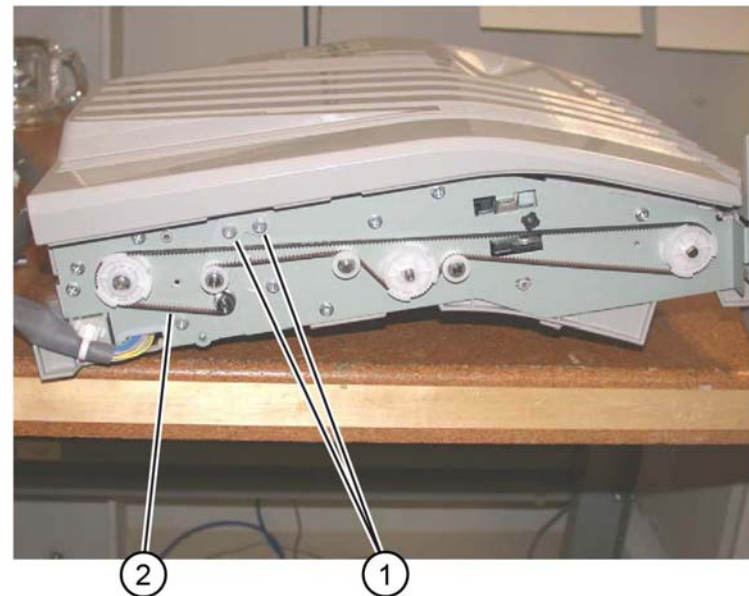
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the H-transport assembly, [REP 13.1](#).
2. Remove the H-transport rear cover, [PL 13.06](#) Item 9.
3. Remove the H-transport belt, [Figure 1](#):
 - a. Loosen two screws to release the belt tension (1).
 - b. Remove the belt (2).



C-1-0343-A

Figure 1 H-transport belt removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.4 H-Transport Motor

Parts List on [PL 13.08](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the H-transport assembly, [REP 13.1](#).
2. Remove the H-transport rear cover, [PL 13.06 Item 9](#).
3. Place the H-transport top down on a work surface.
4. Remove the H-transport motor, [Figure 1](#):
 - a. Remove the screw, then the shield (1).
 - b. Disconnect the connector (2).
 - c. Loosen two screws to release the belt tension (3).
 - d. Remove two screws (3), then remove the H-transport motor.

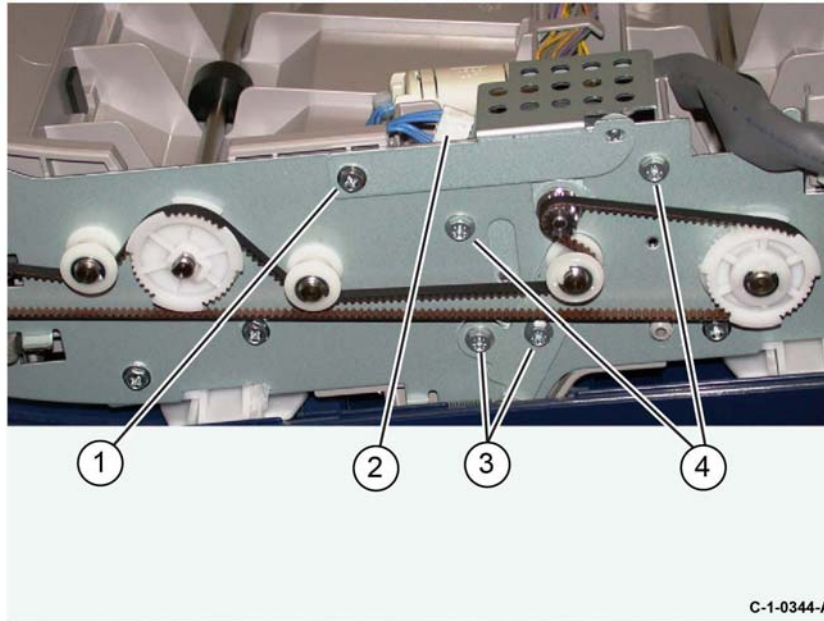


Figure 1 H-transport motor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.5 Finisher LX Undocking

Parts List on [PL 13.05](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

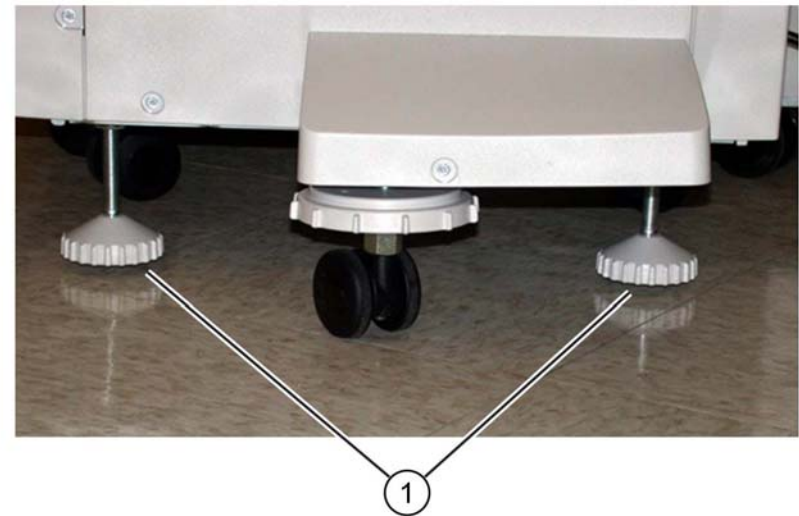
1. Disconnect the finisher power cord, the H-transport connector and the finisher connector from the IOT.



CAUTION

Take care not to topple the finisher. The finisher is unstable when un-docked from the machine.

2. Raise the feet (1) to free the finisher, [Figure 1](#).

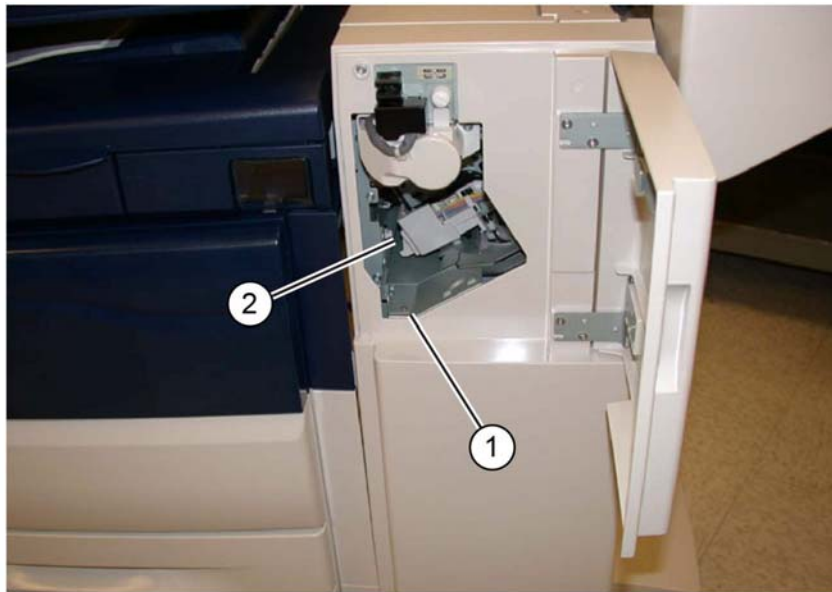


Y-1-0345-A

Figure 1 Finisher feet

3. Open the finisher front door.

4. Undock the finisher, [Figure 2](#):
 - a. Remove the screw (1).
 - b. Pull the docking plate lever (2) forwards to detach the finisher.



C-1-0346-A

Figure 2 Finisher undocking

Replacement

1. Align the machine docking bracket with the cut outs in the finisher docking bracket.
2. Mate the finisher to the machine until it latches.
3. Check that the finisher is firmly latched to the machine.
4. Perform the remainder of the replacement procedure in reverse of the removal procedure.

REP 13.6 Front Cover

Parts List on [PL 13.10](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the finisher, [REP 13.5](#).



Take care not drop the booklet maker thumb screw into the finisher.

2. Remove the booklet maker, [REP 13.31](#).
3. Open the finisher front door, [PL 13.10 Item 5](#).
4. Remove the five screws, then the front cover, [PL 13.10 Item 4](#).

Replacement

The replacement is the reverse of the removal procedure.

REP 13.7 Rear Upper Cover

Parts List on [PL 13.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the finisher, [REP 13.5](#).
2. Remove the booklet maker, [REP 13.31](#).
3. Remove four screws, then the rear upper cover, [PL 13.10 Item 9](#).

Replacement

The replacement is the reverse of the removal procedure.

REP 13.8 Rear Lower Cover

Parts List on [PL 13.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the finisher, [REP 13.5](#).
2. Remove three screws, then the rear lower cover, [PL 13.10 Item 8](#).

Replacement

The replacement is the reverse of the removal procedure.

REP 13.9 Eject Cover

Parts List on [PL 13.26](#)

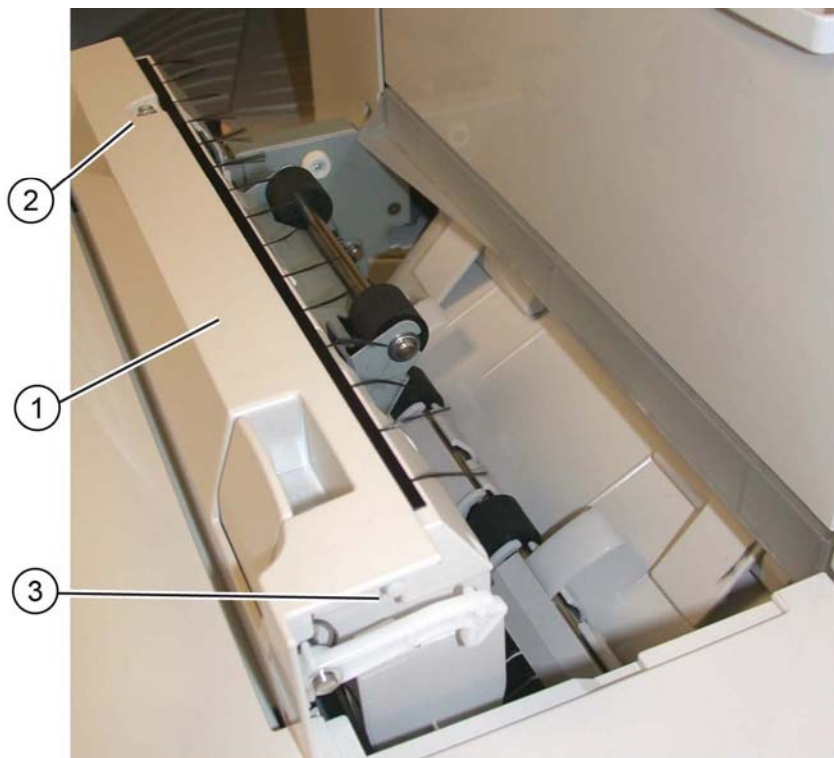
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the eject cover, [Figure 1](#):
 - a. Unlatch the eject cover (1), then move it to the left.
 - b. Remove the retaining screw (2).
 - c. Push the latch (3) through the hole in the cover.
 - d. Remove the cover by moving it to the left.



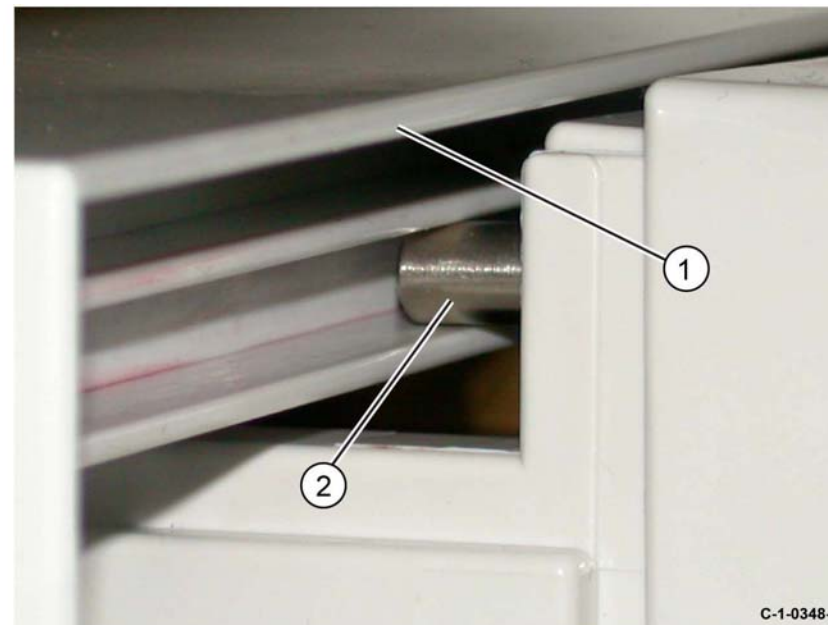
C-1-0347-A

Figure 1 Eject cover removal

Replacement

1. Align the eject cover (1) with the pins (2) on both sides, then slide it to the right, [Figure 2](#).

NOTE: The left side of the cover will be captured by the pins and cannot be lifted up.

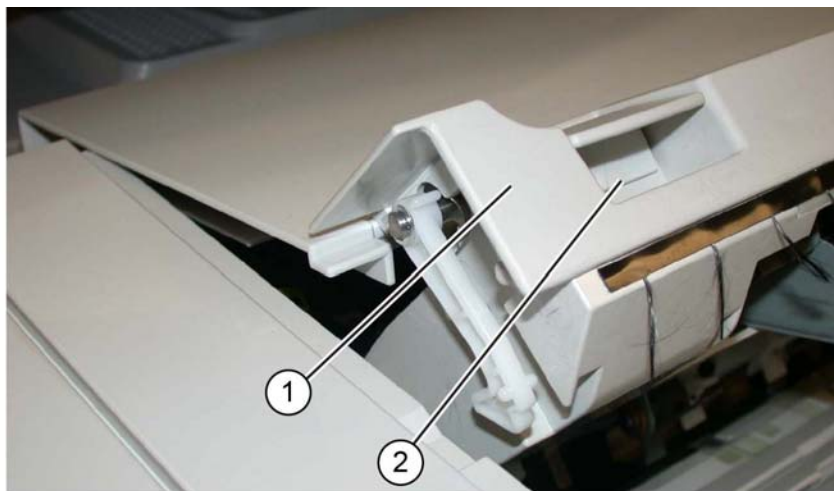


C-1-0348-A

Figure 2 Eject cover alignment

2. Position the eject cover (1) so that the latch (2) is inserted in the hole, [Figure 3](#).

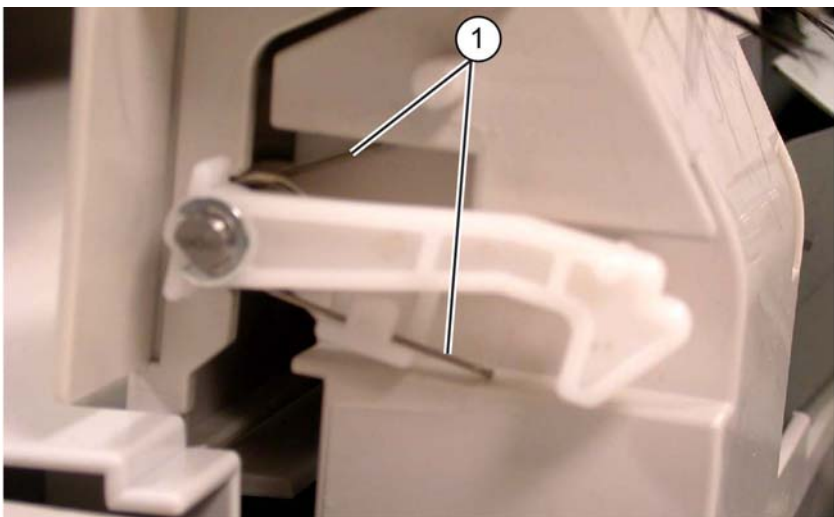
NOTE: The Latch must be outside the hole.



Y-1-0349-A

Figure 3 Inserting the Latch

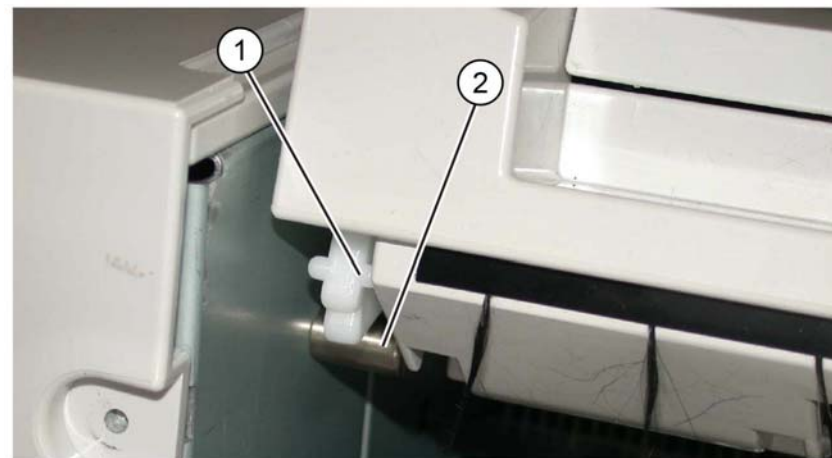
3. Position the latch spring (1) as shown, [Figure 4](#).



C-1-0350-A

Figure 4 Latch spring position

4. Position the latch hook (1) and latch pin (2) as shown, [Figure 5](#).



C-1-0351-A

Figure 5 Latch hook and latch pin positioning

5. Install the retaining screw (1), [Figure 6](#).

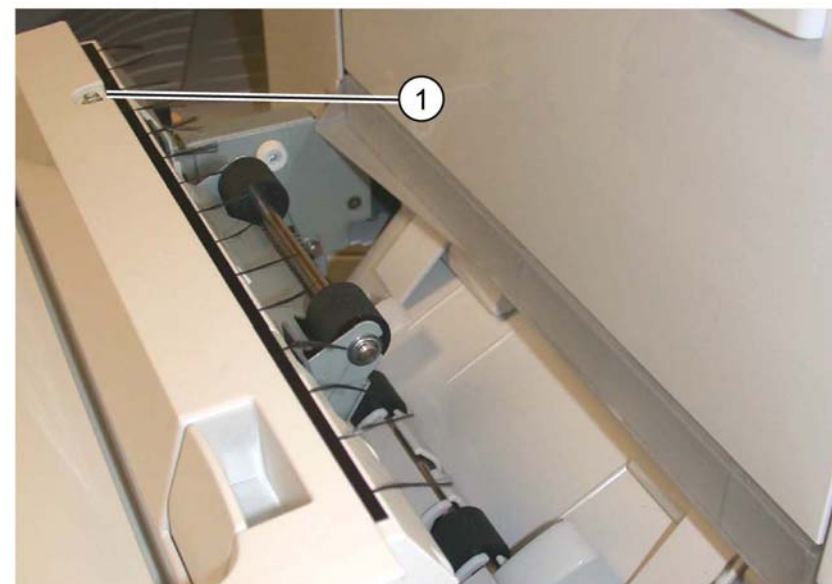


Figure 6 Retaining screw

REP 13.10 Foot Cover

Parts List on [PL 13.10](#)

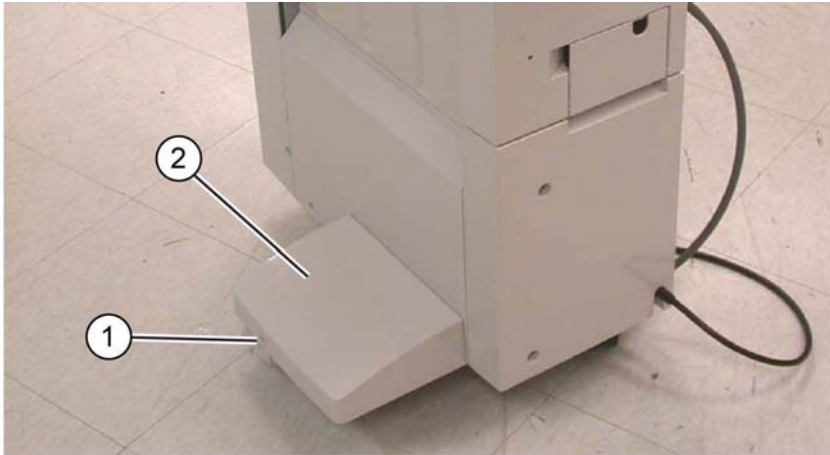
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the screw (1), then the foot cover (2), [Figure 1](#).



C-1-0353-A

Figure 1 Foot cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.11 Stacker Lower Cover

Parts List on [PL 13.10](#)

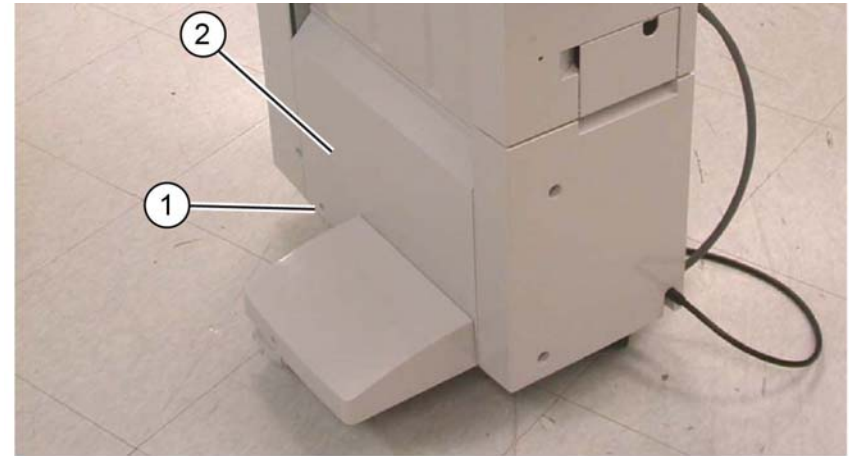
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the foot cover, [REP 13.10](#).
2. Remove the two screws (1), then the stacker lower cover (2), [Figure 1](#).



C-1-0354-A

Figure 1 Stacker lower cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.12 Stacker Upper Cover

Parts List on [PL 13.15](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the stacker tray, [REP 13.20](#).
2. Remove the stacker lower cover, [REP 13.11](#).
3. Remove six screws (1), then the stacker upper cover (2), [Figure 1](#).

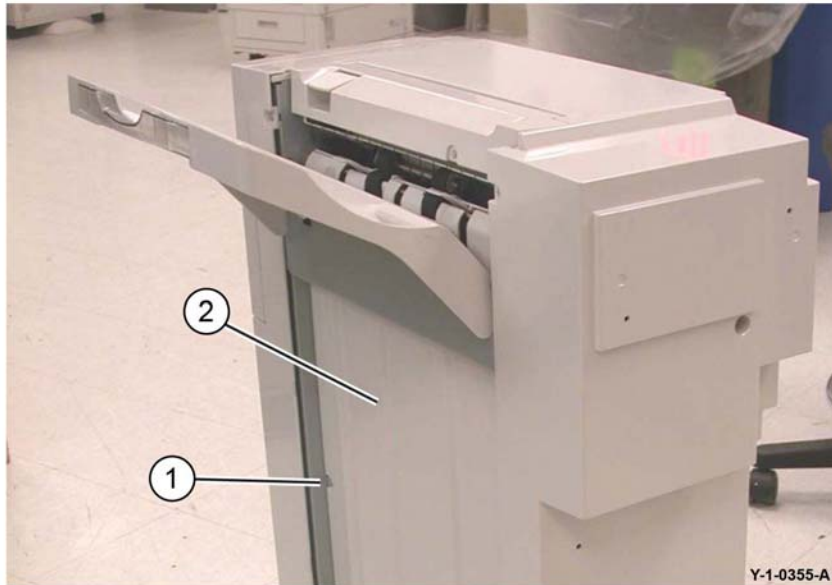


Figure 1 Stacker upper cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.13 Stack Height Sensors 1 and 2

Parts List on [PL 13.27](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear upper cover, [REP 13.7](#).
2. Remove the relevant stack height sensor, [Figure 1](#):
 - a. Disconnect the relevant connector (1).
 - b. Remove either stack height sensor 1 (2) or stack height sensor 2 (3).

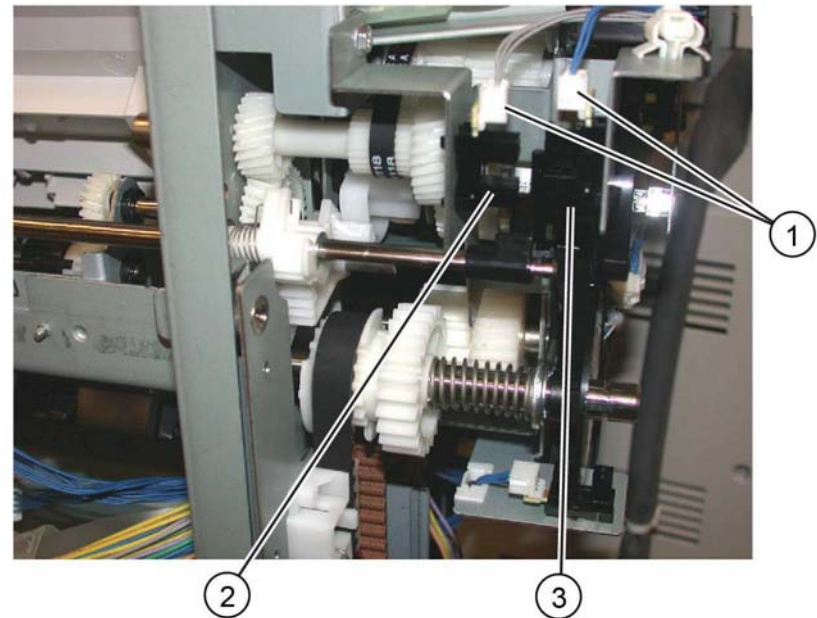


Figure 1 Sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.14 Sub Paddle Solenoid Assembly

Parts List on [PL 13.26](#)

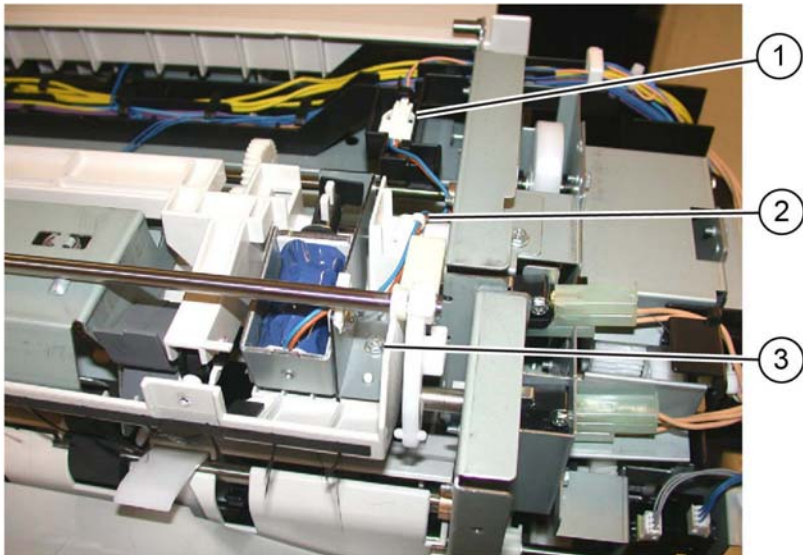
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the eject cover, [REP 13.9](#).
2. Remove the sub paddle solenoid assembly, [Figure 1](#):
 - a. Disconnect the connector (1).
 - b. Release the harness from the clamps (2).
 - c. Remove the screw (3), then the sub paddle solenoid assembly.



C-1-0357-A

Figure 1 Sub paddle solenoid assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.15 Stapler Motor

Parts List on [PL 13.20](#)

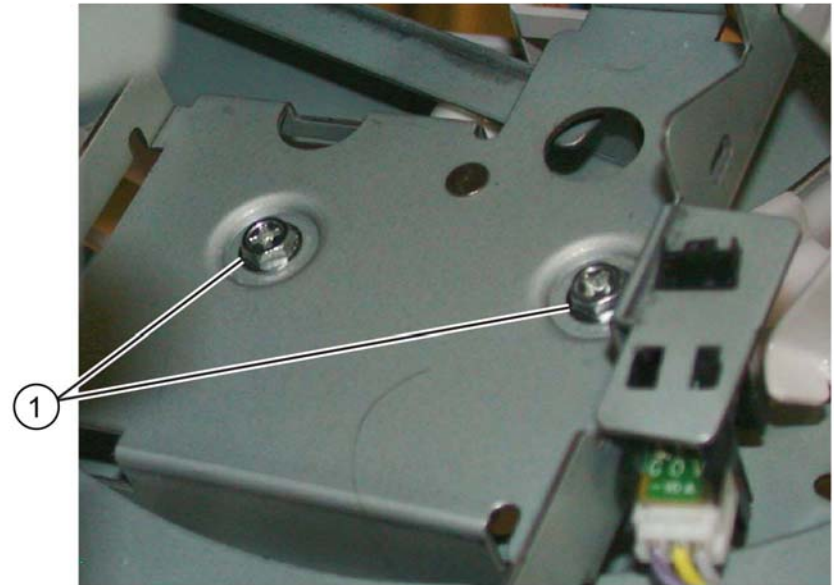
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the finisher stapler assembly, [REP 13.16](#).
2. Remove two screws (1), [Figure 1](#).



C-1-0410-A

Figure 1 Screw removal

3. Remove the wire guide, **Figure 2**:
 - a. Pull out the cable clamps (1), then remove the wires from the wire guide.
 - b. Remove two screws (2).
 - c. Remove the wire guide (3).

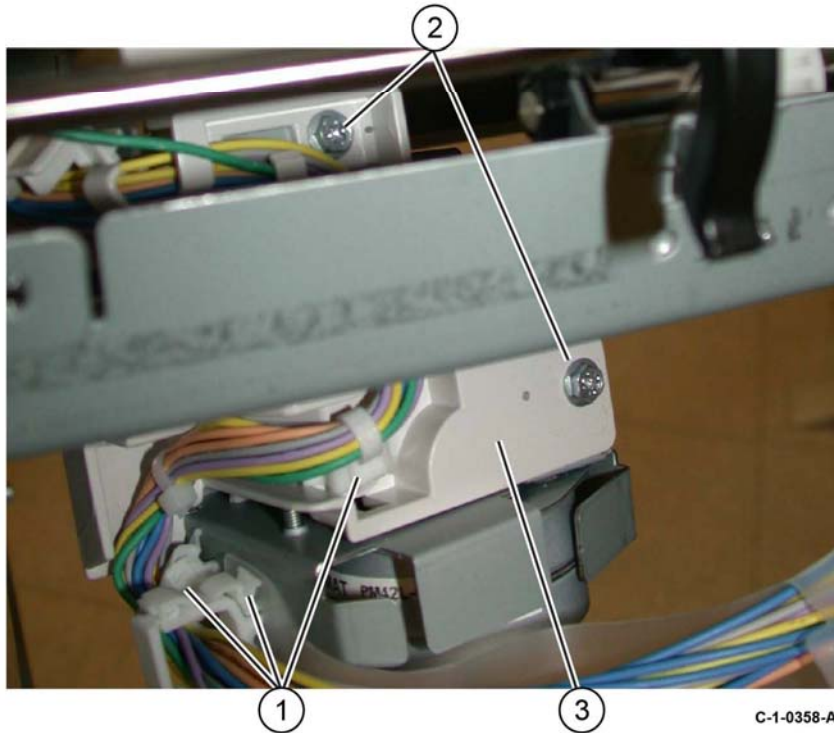


Figure 2 Wire guide removal

C-1-0358-A

4. Remove the stapler motor, **Figure 3**:
 - a. Release the wires from the cable clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove two screws (3).
 - d. Remove the stapler motor (4).

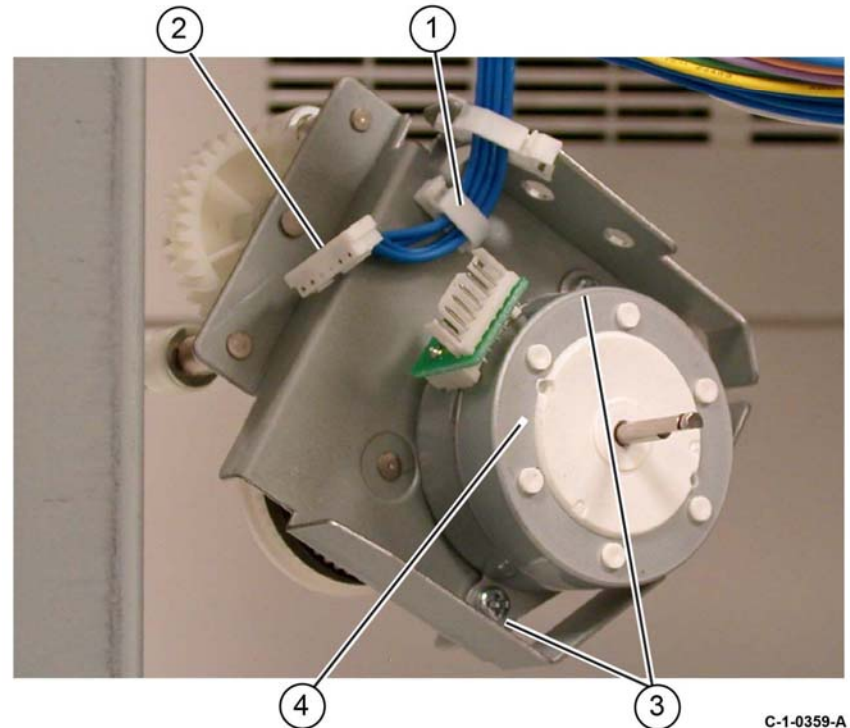


Figure 3 Stapler motor removal

C-1-0359-A

Replacement

The replacement is the reverse of the removal procedure.

REP 13.16 Finisher Stapler Assembly

Parts List on [PL 13.20](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the creaser knife assembly, [REP 13.18](#).
2. Remove the front cover assembly, [REP 13.6](#).
3. Remove the stapler cover, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the stapler cover (2).

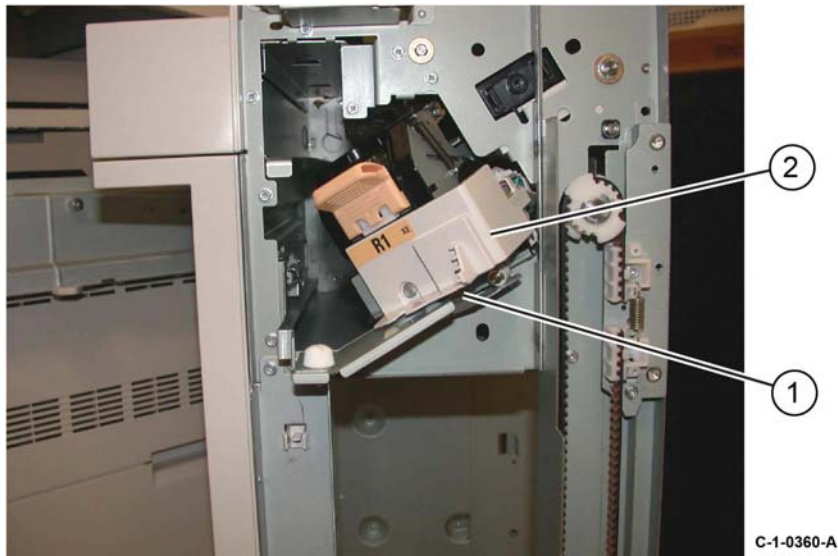
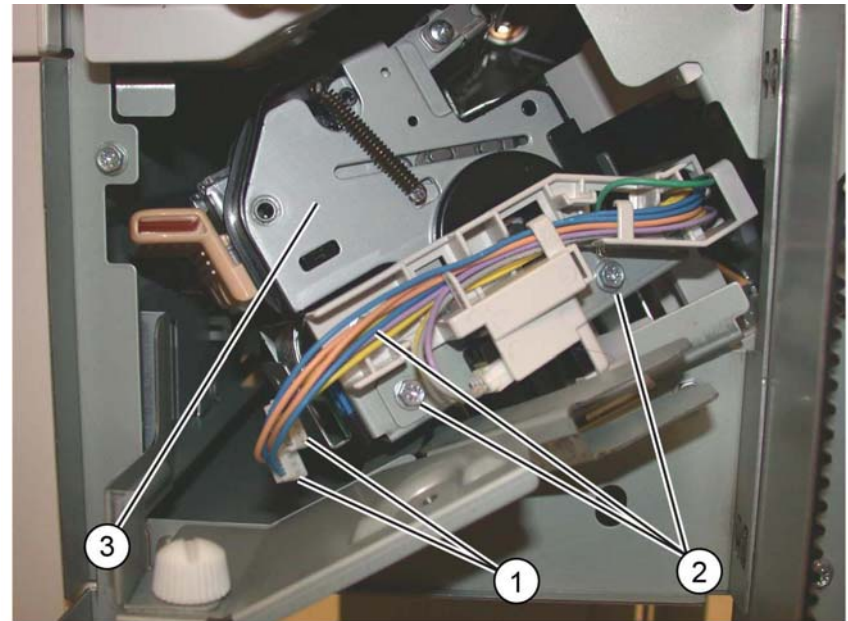


Figure 1 Stapler cover removal

4. Remove the finisher stapler assembly, [Figure 2](#):
 - a. Disconnect the connectors (1).
 - b. Remove three screws (2).
 - c. Remove the finisher stapler assembly (3).



C-1-0361-A

Figure 2 Finisher stapler assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform [ADJ 13.2](#) Finisher LX Booklet Crease/Staple Position.

REP 13.17 Compiler Tray Assembly

Parts List on [PL 13.28](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

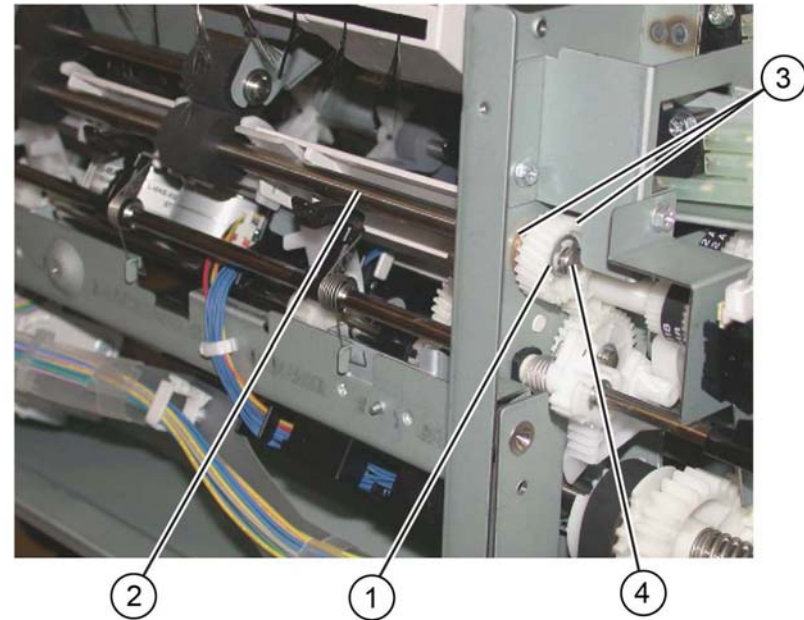
1. Undock the finisher, [REP 13.5](#).
2. Remove the front cover, [REP 13.6](#).
3. Remove the rear upper cover, [REP 13.7](#).
4. Remove the foot cover, [REP 13.10](#).
5. Remove the stacker lower cover, [REP 13.11](#).
6. Remove the stacker tray, [REP 13.20](#).
7. Remove the stacker upper cover, [REP 13.12](#).
8. Remove the eject cover, [REP 13.9](#).
9. Remove the E-ring and brass bearing from the front of the shaft (1), [Figure 1](#).



C-1-0362-A

Figure 1 E-ring and bearing removal

10. Remove the eject roll shaft, [Figure 2](#):
 - a. Remove the E-ring (1).
 - b. Slide the eject roller shaft (2) toward the front.
 - c. Remove the gear and brass bushing (3).
 - d. Remove the eject roll shaft (4) from the finisher.

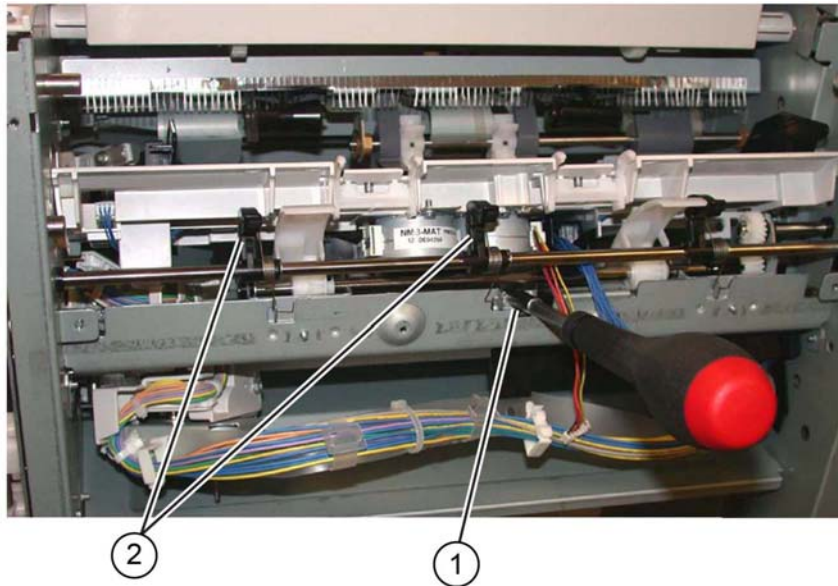


C-1-0363-A

Figure 2 Eject roll shaft removal

11. Remove the compiler tray screw (1), [Figure 3](#).

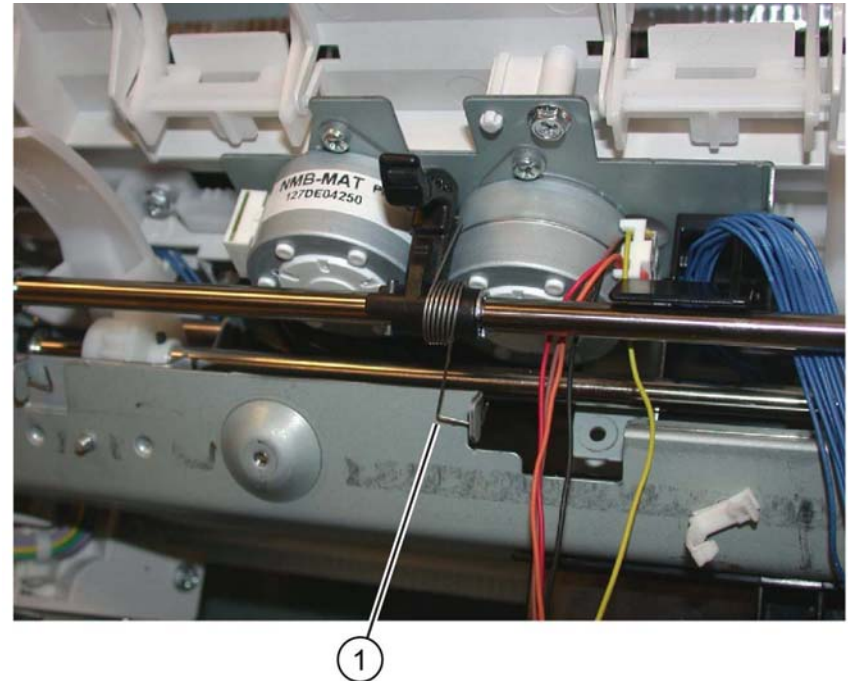
NOTE: Note the position of the set clamp holders (2).



C-1-0364-A

Figure 3 Compiler tray screw removal

12. Disengage the three springs (1) from the set clamp holders, [Figure 4](#).



C-1-0365-A

Figure 4 Set clamp holder springs

13. Remove the front E-ring and the bushing (1) from the set clamp shaft assembly, [Figure 5](#).



Figure 5 Front E-ring removal

14. Prepare to remove the set clamp shaft, [Figure 7](#):
- Remove the rear E-ring (1) from the set clamp shaft
 - Slide the gear (2) away from the frame.
 - Disconnect the spring (3) from the gear.

NOTE: Note the position and orientation of the set clamp shaft gear and the cam gear that it engages (1). When installing the set clamp shaft, these gears must engage in the same manner, [Figure 6](#).

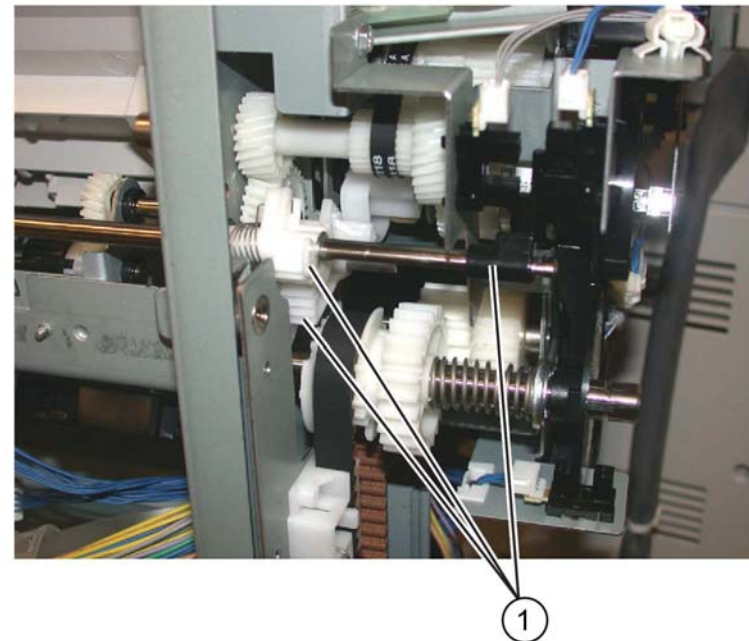


Figure 6 Gear orientation

C-1-0367-A

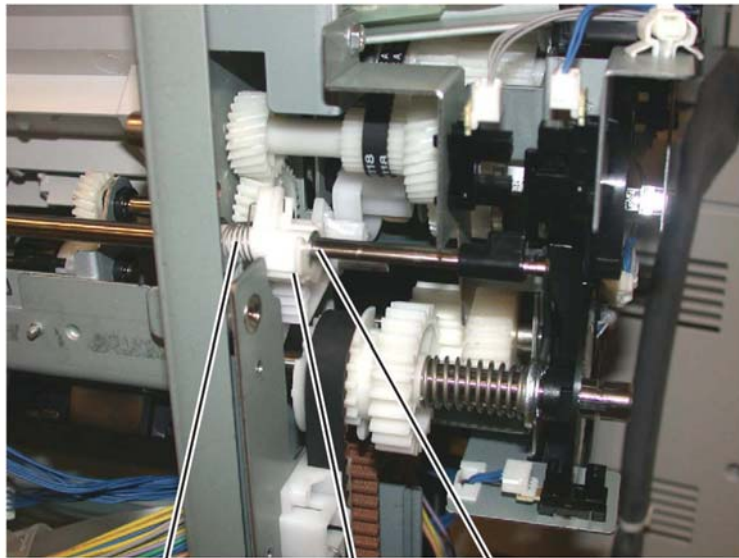


Figure 7 Prepare to remove the set clamp shaft

C-1-0368-A

15. Slide the gear, spring and the bushing away from the frame, [Figure 8](#):
 - a. Unlock, then remove the flag (1).
 - b. Slide the gear, spring and the bushing (2) away from the frame.

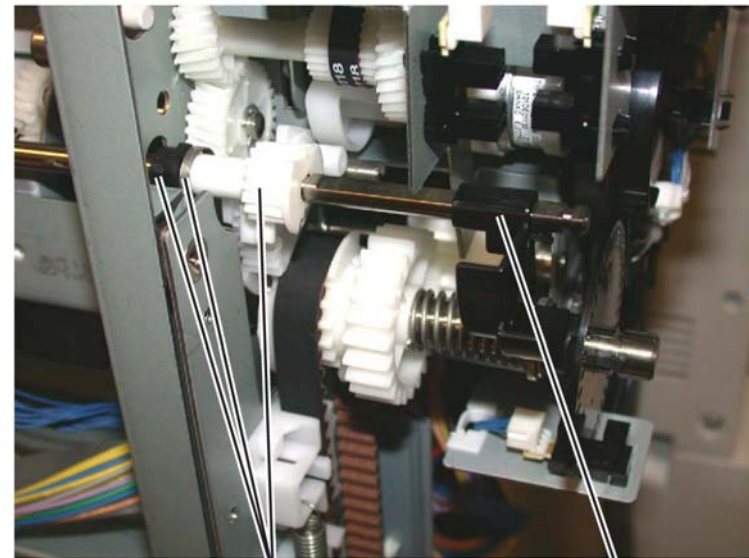


Figure 8 Flag removal

C-1-0369-A

16. Remove the set clamp shaft, **Figure 9**:
- Slide the shaft toward the front (1).
 - Slide the shaft toward the rear, then remove (2).

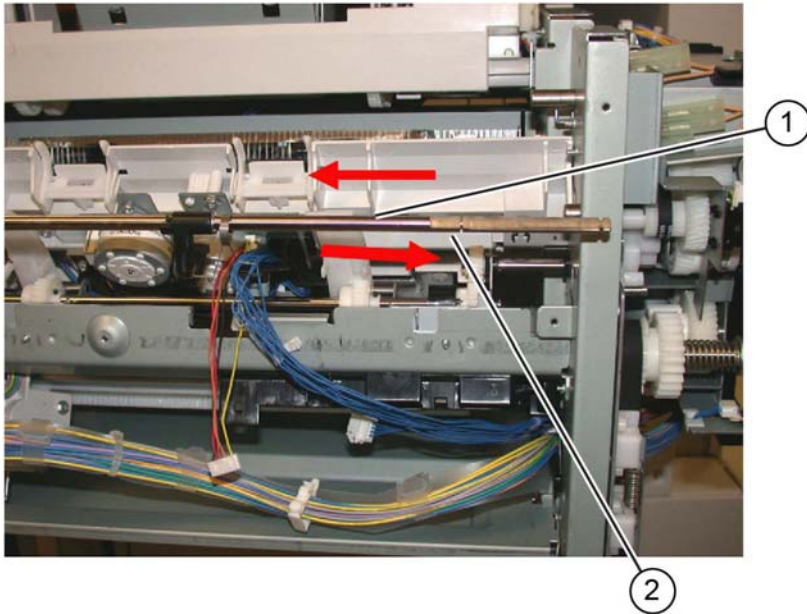
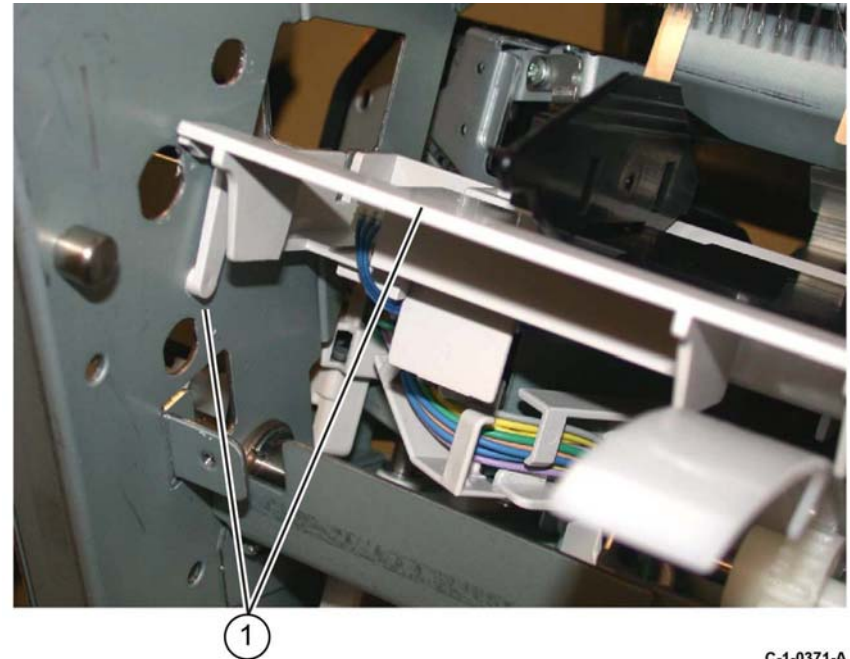


Figure 9 Set clamp shaft removal

C-1-0370-A

17. Remove the compiler tray assembly (1), **Figure 10**.



C-1-0371-A

Figure 10 Compiler tray assembly removal

18. Usually this level of compiler tray assembly removal is to facilitate removal of the front or rear tamper motors, tamper home sensors or compiler tray no paper sensor. However, if the compiler tray assembly is to be completely removed, it will be necessary to disconnect all the connectors to the tamper motors, tamper home sensors and no paper sensor and release the harnesses from the guides.

Replacement

1. Route the harness through the wire guides and connect the proper connectors to the no paper sensor, tamper home sensors and tamper motors.
2. Place the compiler tray assembly into position.
3. Install the set clamp shaft front end into the front frame, **Figure 11**:
 - a. Insert the front end of the shaft into the front frame (1).
 - b. Slide the shaft toward the front until the rear end of the shaft can be inserted into the rear frame (2).

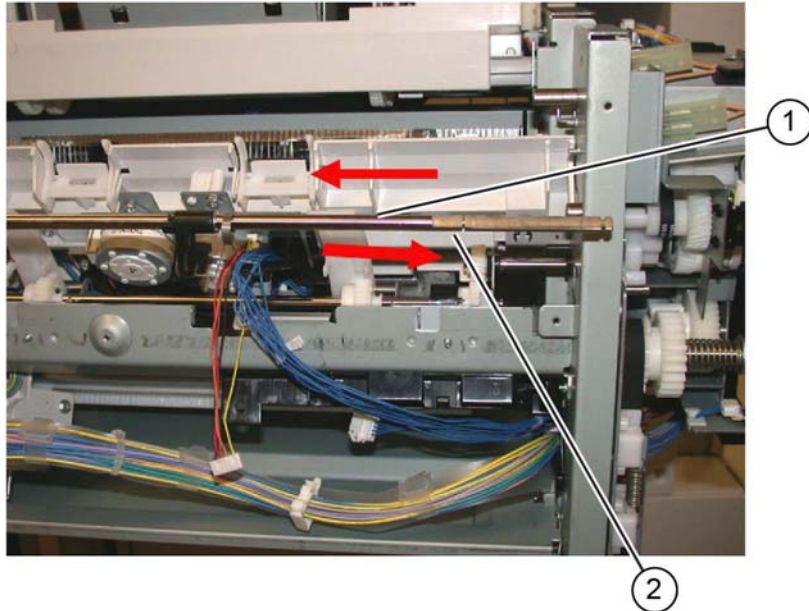


Figure 11 Set clamp shaft installation

C-1-0372-A

4. Slide the three set clamp holders with springs (1) into the correct location on the shaft, **Figure 12**.

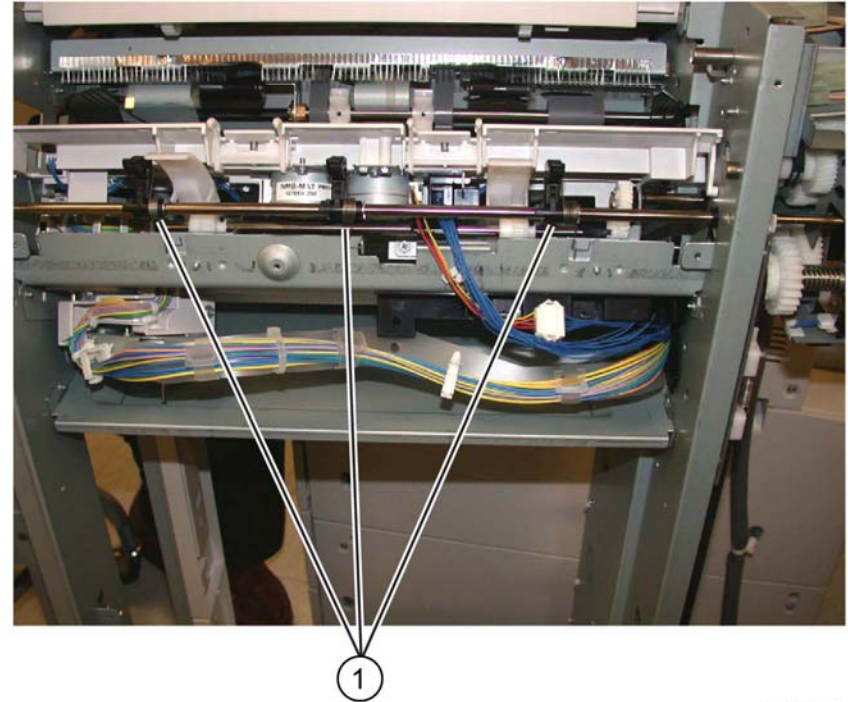


Figure 12 Preparing to install holder springs

C-1-0373-A

5. Install the bushing, spring and gear onto the rear end of the set clamp shaft, **Figure 13**:
 - a. Install the bushing (1).
 - b. Install the spring (2).
 - c. Install the gear (3).
 - d. Install the stack height sensor flag (4) onto the rear end of the shaft as shown.

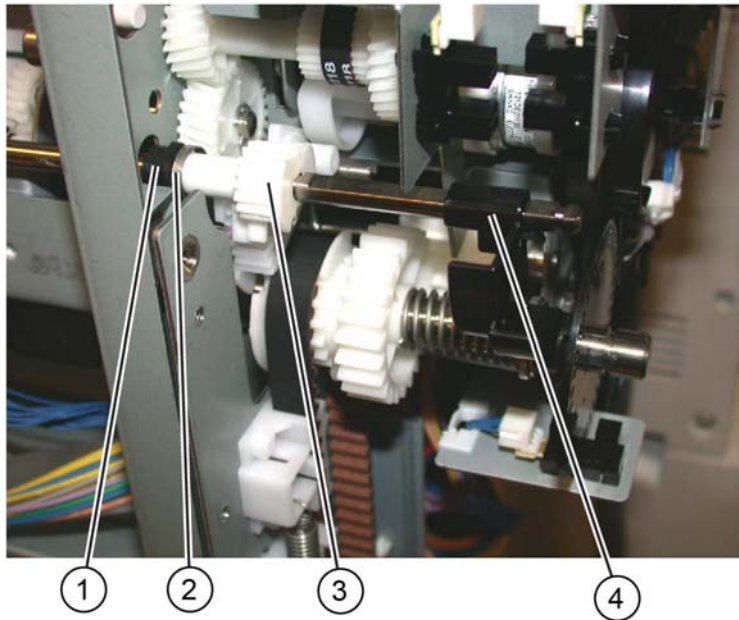


Figure 13 Bushing, spring and gear installation

C-1-0374-A

6. Rotate the set clamp shaft until the stack height sensor flag (1) is in the correct position, then correctly align both gears (2), **Figure 14**.

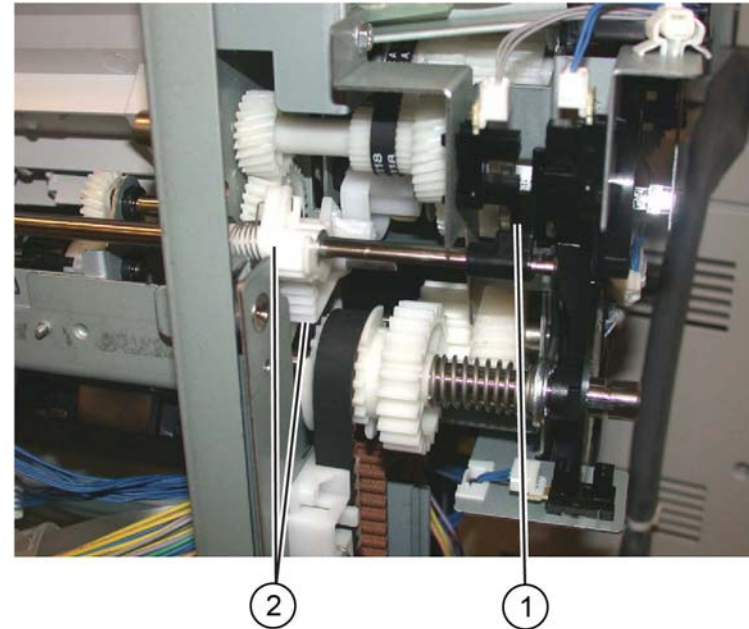


Figure 14 Sensor flag and gear alignment

C-1-0375-A

7. Attach the spring to the gear and slide the gear into position.

8. Ensure that the shaft gear (1), pinion gear (2) and the stack height sensor flag (3) are position as shown in [Figure 15](#), then install the E-ring (4).

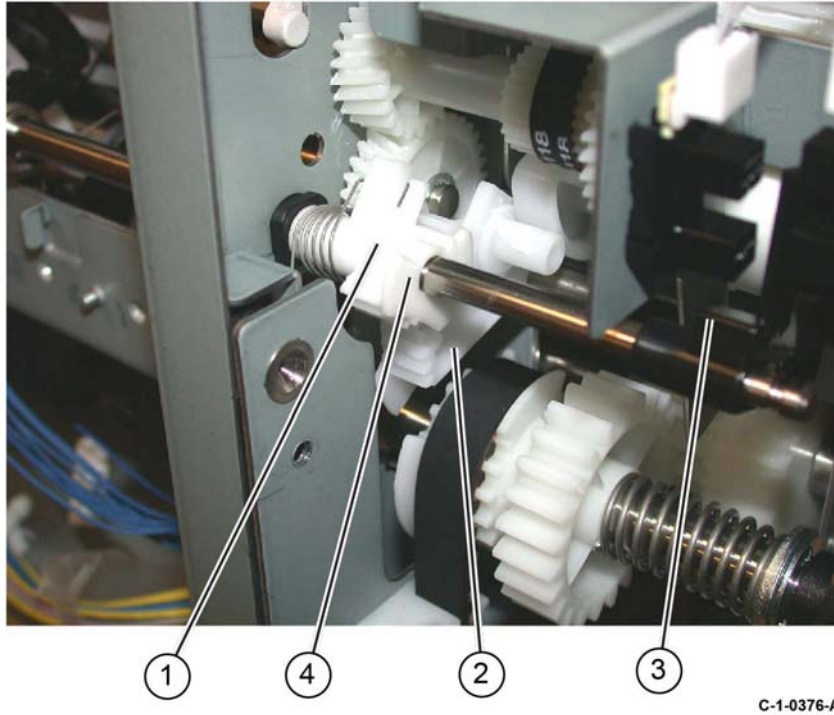


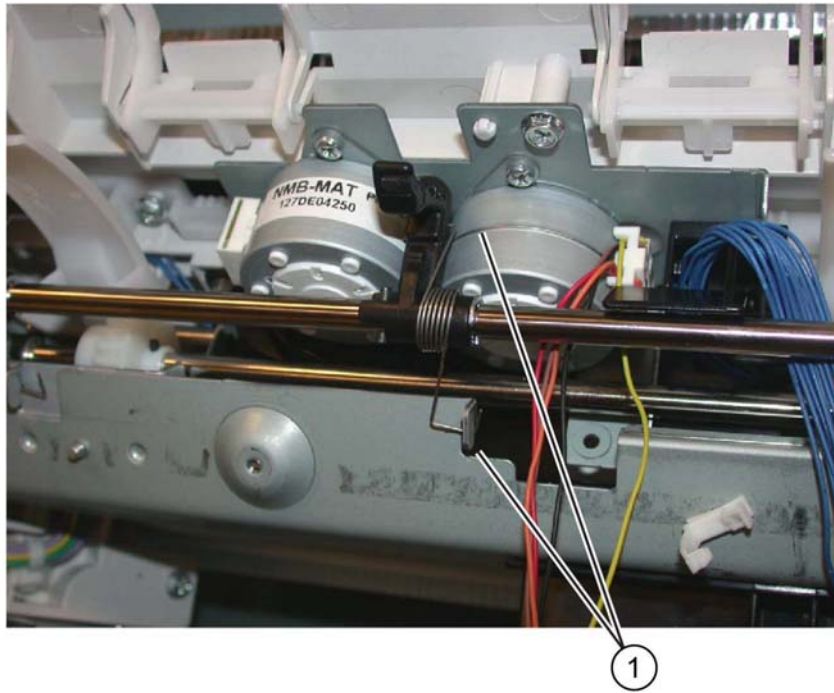
Figure 15 Gears and stack height sensor flag

9. Install the bushing onto the front end of the set clamp shaft, then install the E-ring (1), [Figure 16](#).



Figure 16 Bushing and E-ring

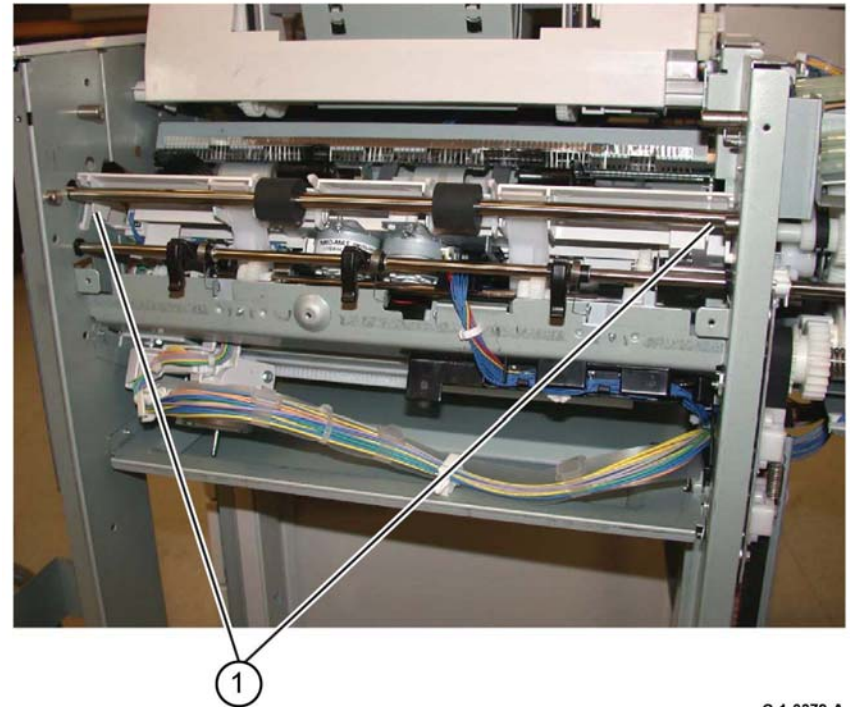
10. Ensure that the set clamp holder springs (1) are connected, [Figure 17](#).



C-1-0378-A

Figure 17 Set clamp holder springs

11. Install the eject roll shaft (1) into position in the front and rear frame, [Figure 18](#).



C-1-0379-A

Figure 18 Eject roll shaft installation

12. Install the brass bearing (1), gear (2) and E-ring (3) onto the rear of the eject roll shaft, [Figure 19](#).

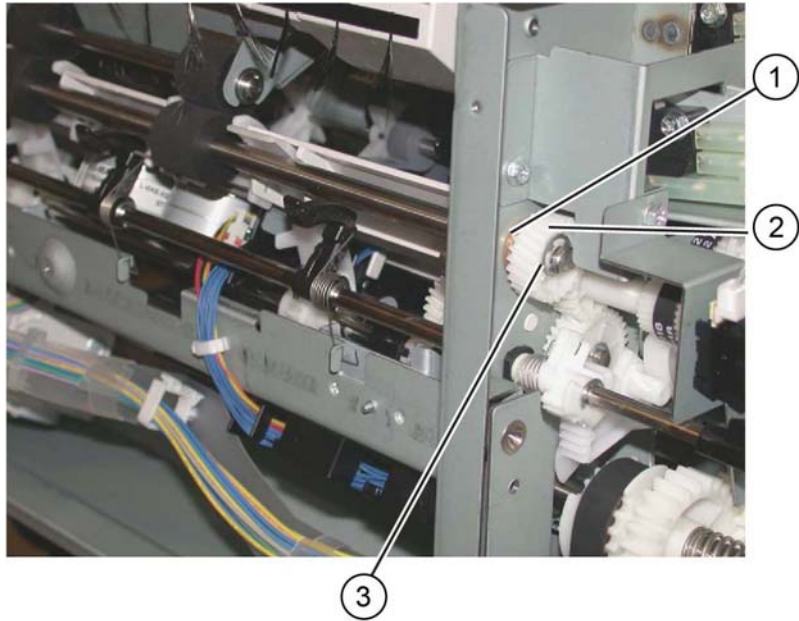
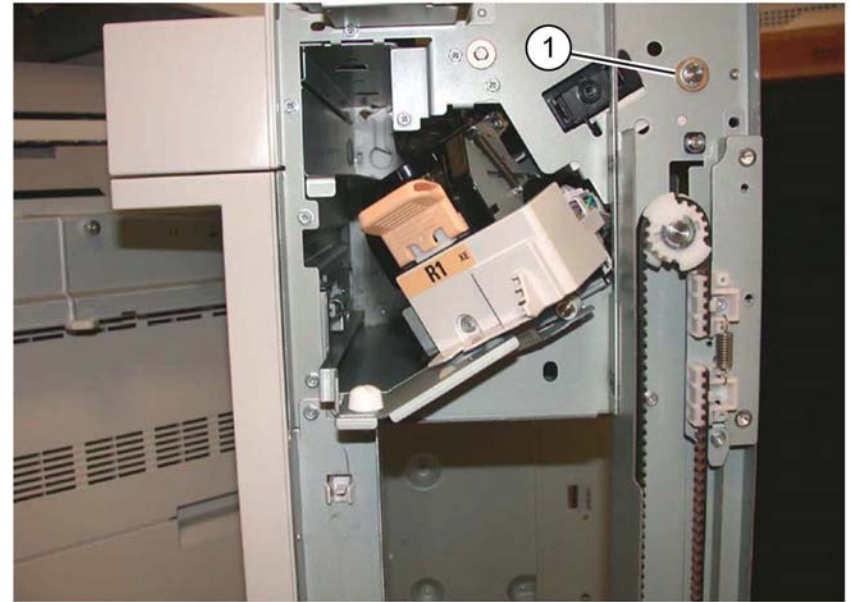


Figure 19 Eject roll shaft rear components

C-1-0380-A

13. Install the brass bearing and E-ring onto the front of the eject roll shaft (1), [Figure 20](#).



C-1-0381-A

Figure 20 Eject roll shaft front components

14. Perform the remainder of the replacement procedure in reverse of the removal procedure.

REP 13.18 Crease Assembly

Parts List on [PL 13.35](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the crease assembly, [Figure 1](#):

- a. Open the finisher front door.
- b. Remove the guard (1).
- c. Disconnect the cable (2).

NOTE: Pull out the cable tie (3) to obtain additional slack in the cable.

- d. Remove the thumbscrew (4).
- e. Pull out the crease assembly (5).

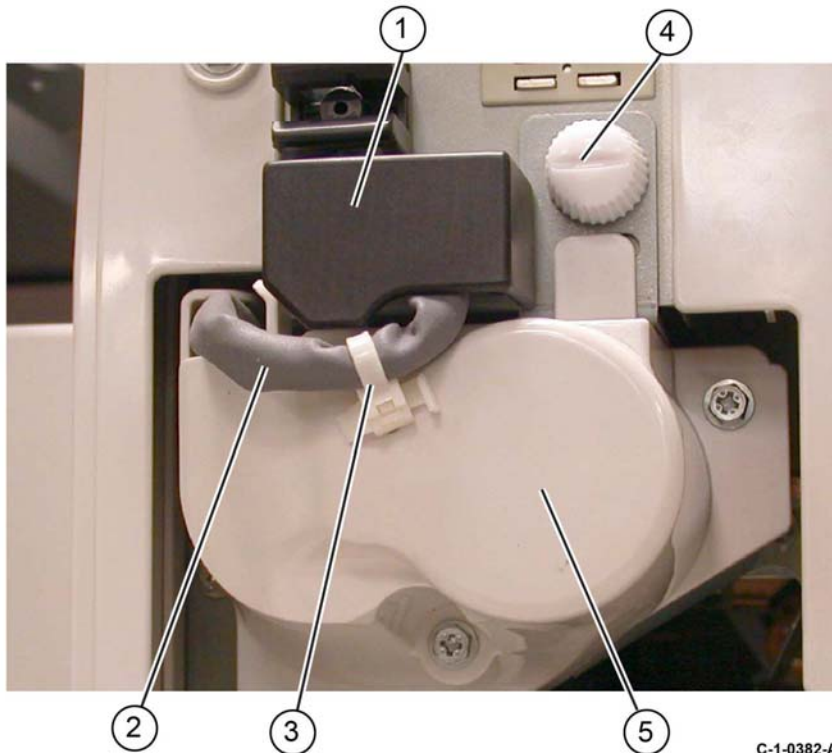


Figure 1 Crease assembly removal

C-1-0382-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure the locating pins (1) are correctly engaged, [Figure 2](#).

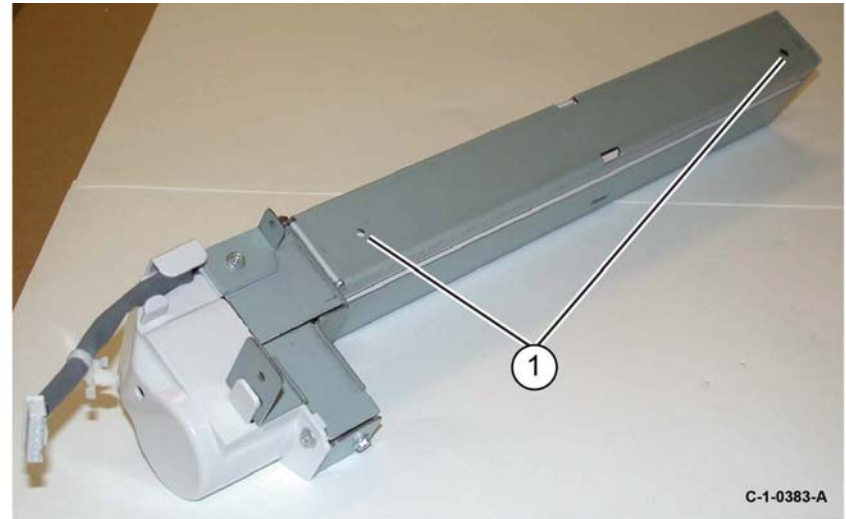


Figure 2 Crease assembly

3. Perform [ADJ 13.2](#) Finisher LX Booklet Crease/Staple Position.

REP 13.19 Stacker Elevator Motor

Parts List on [PL 13.15](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the finisher rear upper cover, [REP 13.7](#).
2. Disconnect PJ8988 on the finisher control PWB.
3. Release the harness from the clamps.
4. Remove the wires from the wire guide, remove two screws, then move the wire guide to one side.
5. Use a 5.5 mm combination wrench to remove both screws from the motor mount.
6. Remove the stacker elevator motor.

Replacement

The replacement is the reverse of the removal procedure.

REP 13.20 Stacker Tray

Parts List on [PL 13.15](#)

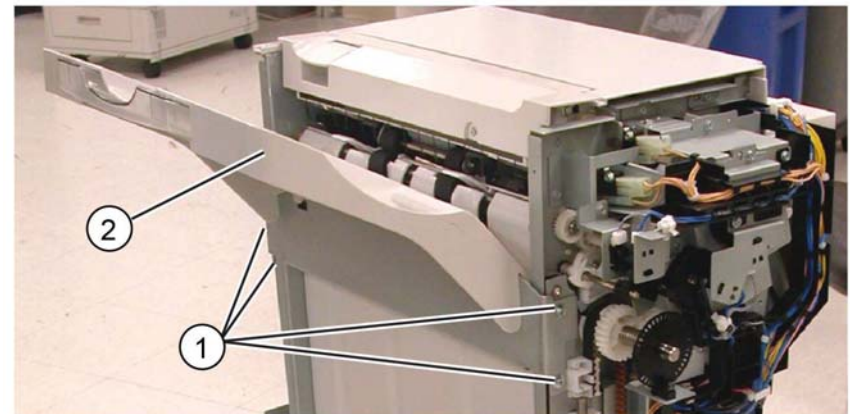
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. If installed, remove the booklet maker assembly, [REP 13.31](#).
2. Remove the front cover assembly, [REP 13.6](#).
3. Remove the rear upper cover, [REP 13.7](#).
4. Remove the stacker tray, [Figure 1](#):
 - a. Remove four screws (1).
 - b. Remove the stacker tray (2).



C-1-0384-A

Figure 1 Stacker tray removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.21 Eject Belt

Parts List on [PL 13.29](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the finisher, [REP 13.5](#).
2. Remove the booklet maker, [REP 13.31](#).
3. Remove the rear upper cover, [REP 13.7](#).
4. Remove the eject motor, [REP 13.25](#).
5. Remove the eject belt, [PL 13.29 Item 10](#).

Replacement

The replacement is the reverse of the removal procedure.

REP 13.22 Eject Motor Assembly

Parts List on [PL 13.27](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the finisher, [REP 13.5](#).
2. Remove the booklet maker, [REP 13.31](#).
3. Remove the rear upper cover, [REP 13.7](#).
4. Prepare to remove the eject motor assembly, [PL 13.27 Item 3](#).
 - a. Disconnect the eject motor connector.
 - b. Remove the harness from the harness guide.
 - c. Disconnect both wire harness clamps.
 - d. Remove both screws from the harness guide, then move the harness guide aside.
 - e. Disconnect the spring.
5. Remove four screws, then eject motor assembly.

Replacement

The replacement is the reverse of the removal procedure.

REP 13.23 Finisher PWB

Parts List on [PL 13.45](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. If possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Remove the rear upper cover, [REP 13.7](#).

3. Remove the finisher PWB, [Figure 1](#):
 - a. Disconnect the all connectors from the finisher PWB.
 - b. Remove the five screws (1).
 - c. Remove the finisher PWB (2).

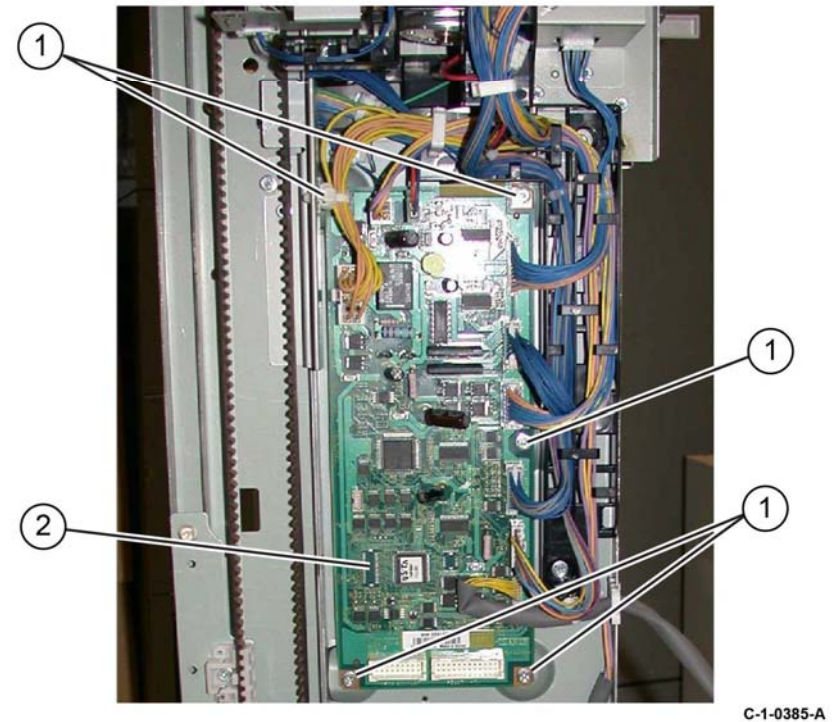


Figure 1 Finisher PWB removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Check the machines current software level against the software level recorded prior to installation of the new finisher PWB. If necessary, reload the software, [GP 4](#).

REP 13.24 Finisher LVPS

Parts List on PL [PL 13.45](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear lower cover, [REP 13.8](#).
2. Remove the finisher LVPS, [Figure 1](#):
 - a. Disconnect both Connectors (1).
 - b. Remove four screws (2).
 - c. Remove the finisher LVPS (3).

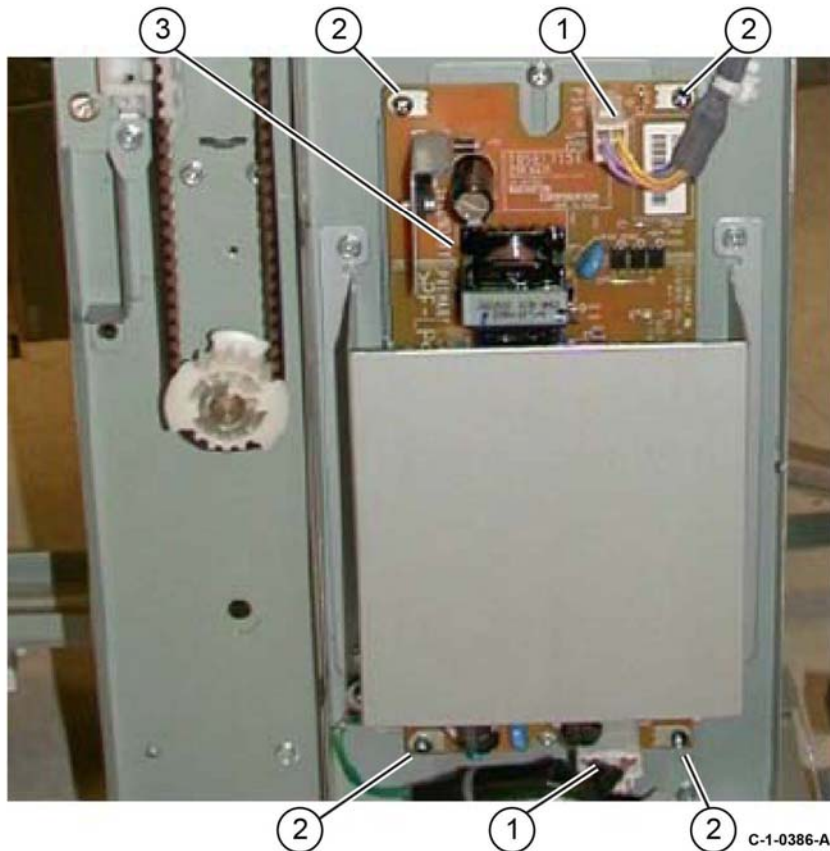


Figure 1 Finisher LVPS removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.25 Eject Motor

Parts List on [PL 13.27](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the finisher, [REP 13.5](#).
2. Remove the booklet maker, [REP 13.31](#).
3. Remove the rear upper cover, [REP 13.7](#).
4. Remove the eject motor assembly, [REP 13.22](#).
5. Remove four screws, then the eject motor, [PL 13.27 Item 4](#).

Replacement

The replacement is the reverse of the removal procedure.

REP 13.26 Front/Rear Tamper Motor

Parts List on [PL 13.28](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the compiler tray, [REP 13.17](#).
2. Place the compiler tray upside down on a work surface.
3. Remove the tamper motor, [Figure 1](#):
 - a. Release the harness (1) from the harness guide.
 - b. Remove the screw (2), then the harness guide.
 - c. Disconnect the tamper motor connector (3).
 - d. Remove both screws, then the relevant tamper motor (4).

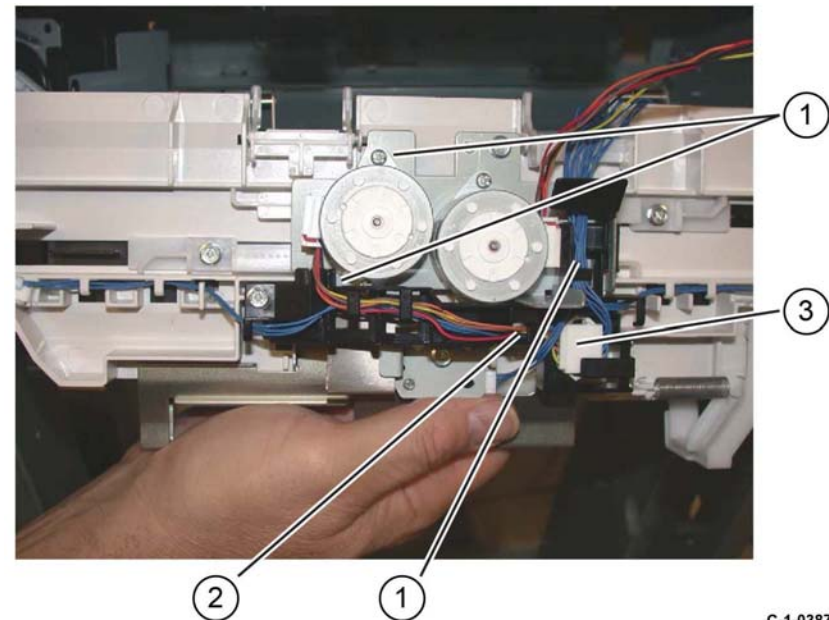


Figure 1 Tamper motor removal

C-1-0387-A

Replacement

The replacement is the reverse of the removal procedure.

REP 13.27 Front/Rear Tamper Home Sensors

Parts List on [PL 13.28](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the compiler tray assembly, [REP 13.17](#).
2. Place the compiler tray upside down on a work surface.
3. Remove the front or rear tamper home sensor, [Figure 1](#):
 - a. Disconnect the connector (1).
 - b. Remove the front or rear tamper home sensor (2).

NOTE: The removal of the rear tamper home sensor is shown in [Figure 1](#).

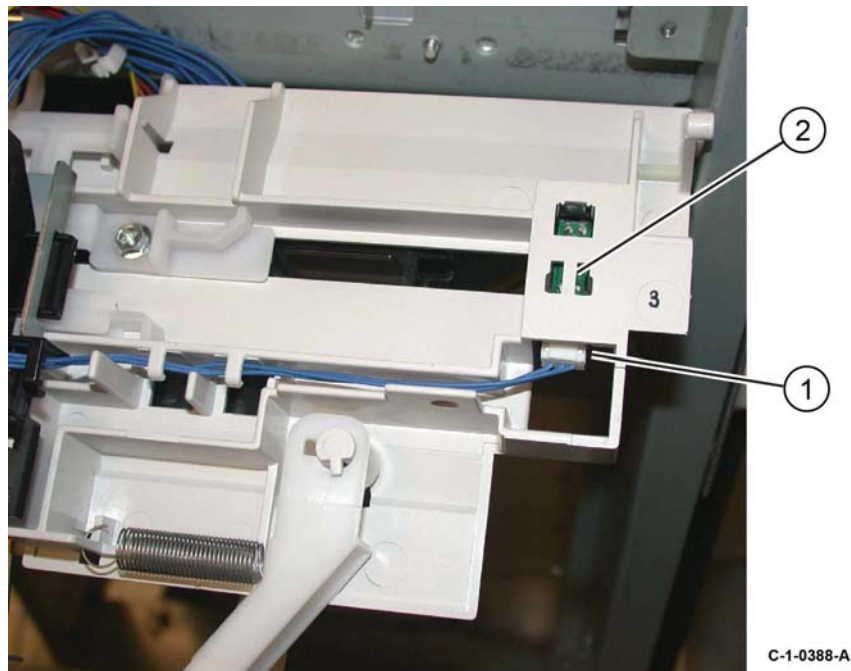


Figure 1 Tamper home sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.28 Compiler Tray No Paper Sensor

Parts List on [PL 13.28](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the compiler tray assembly, [REP 13.17](#).
2. Place the compiler tray upside down on a work surface.
3. Remove the screw (1) that secures the bracket, [Figure 1](#).

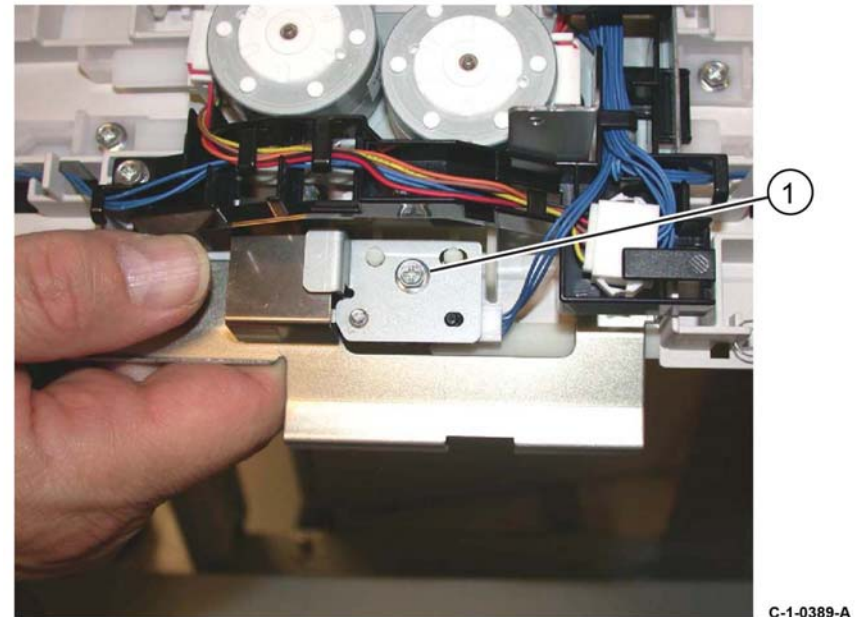
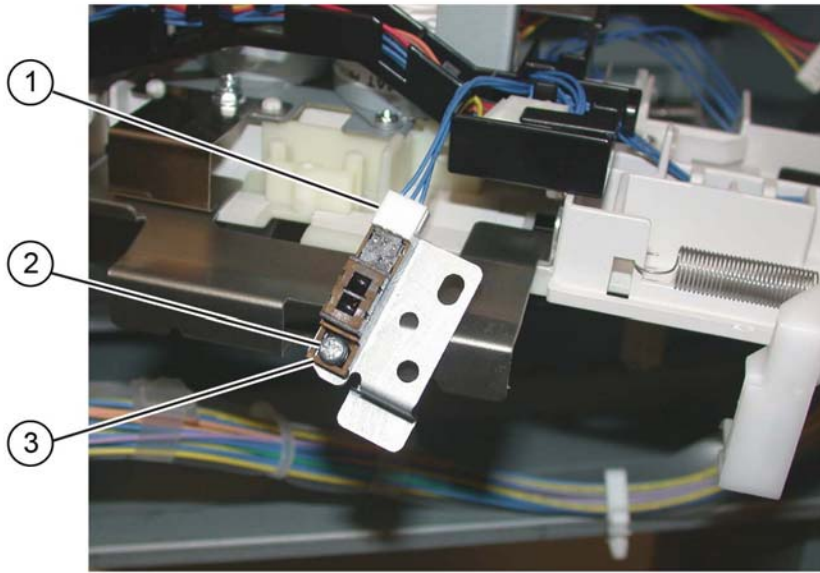


Figure 1 Bracket removal

4. Remove the compiler no paper sensor, [Figure 2](#):
 - a. Disconnect the connector (1).
 - b. Remove the screw (2).
 - c. Remove the compiler tray no paper sensor (3).



C-1-0390-A

Figure 2 Compiler tray no paper sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.29 Front/Rear Carriage Assembly

Parts List on [PL 13.15](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Enter [dC330](#), code 12-060 stacker motor up, to fully raise the stacker tray.
2. Remove the finisher front cover, [REP 13.6](#).
3. Remove the rear upper cover, [REP 13.7](#).
4. Remove the rear lower cover, [REP 13.8](#).
5. Remove the stacker tray, [REP 13.20](#).
6. Removing the carriage assembly, [Figure 1](#):
 - a. Disconnect, then remove the spring (1).
 - b. Use a flat bladed screwdriver to release the belt clamp latch (2).aside and
 - c. Remove the stacker belt and carriage assembly.

NOTE: The carriage bearings (2 each assembly) are not fastened to the shafts. Ensure the bearings are retained when the carriage assembly is removed.

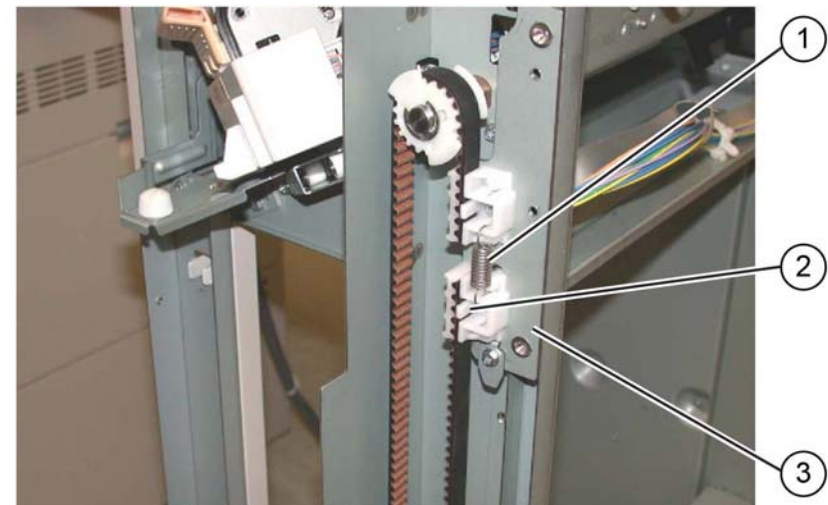


Figure 1 Carriage assembly removal

Replacement



CAUTION

Ensure that the front and rear carriage assemblies are installed at the same height. The replacement is the reverse of the removal procedure.

REP 13.30 Booklet PWB

Parts List on [PL 13.70](#)

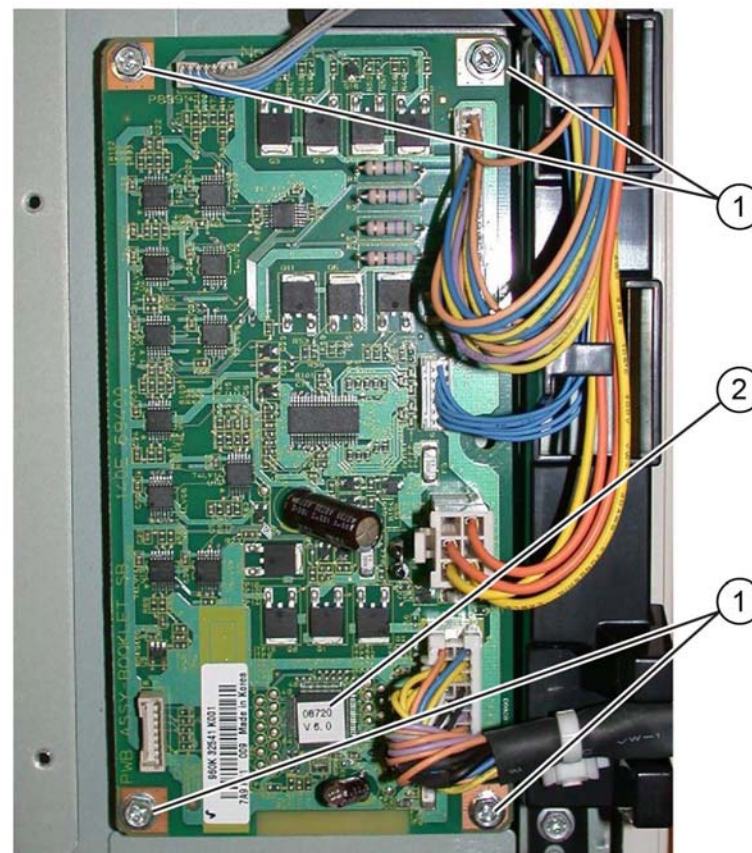
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the booklet PWB cover, [REP 13.35](#).
2. Remove the booklet PWB, [Figure 1](#):
 - a. Disconnect all connectors from the booklet PWB.
 - b. Remove four screws (1).
 - c. Remove the booklet PWB (2).



C-1-0392-A

Figure 1 Booklet PWB removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.31 Booklet Maker Assembly

Parts List on [PL 13.10](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Prepare to remove the booklet maker assembly, [Figure 1](#):
 - a. Unlatch the eject cover (1), then move it all the way to the left.
 - b. Remove the front and rear thumbscrews (2).



C-1-0393-A

Figure 1 Preparation

2. Remove the connector cover (1), [Figure 2](#).



C-1-0394-A

Figure 2 Connector cover

3. Disconnect the booklet maker assembly from the finisher, **Figure 3**:
 - a. Disconnect the connector (1).
 - b. Pull out the four cable ties (2).

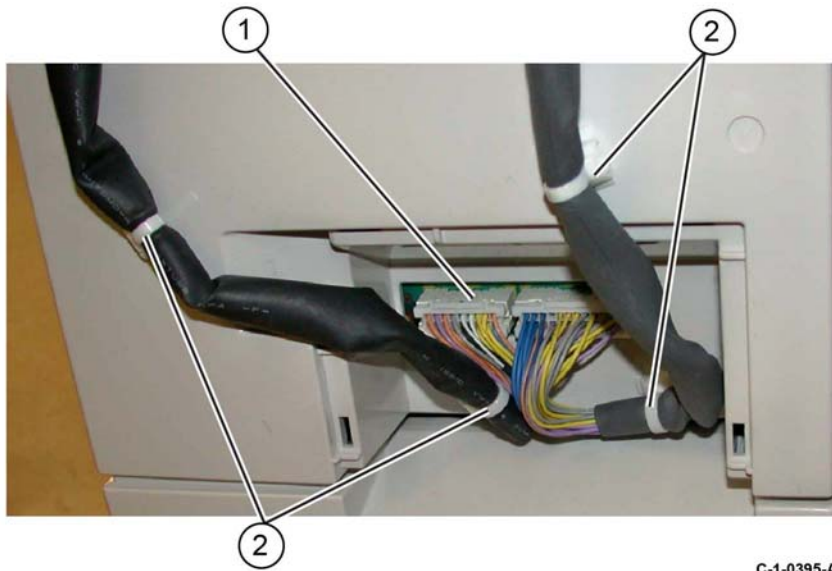


Figure 3 Booklet maker assembly disconnection

4. Lift the booklet maker assembly (1) off the four locating pins (4), then remove, **Figure 4**.

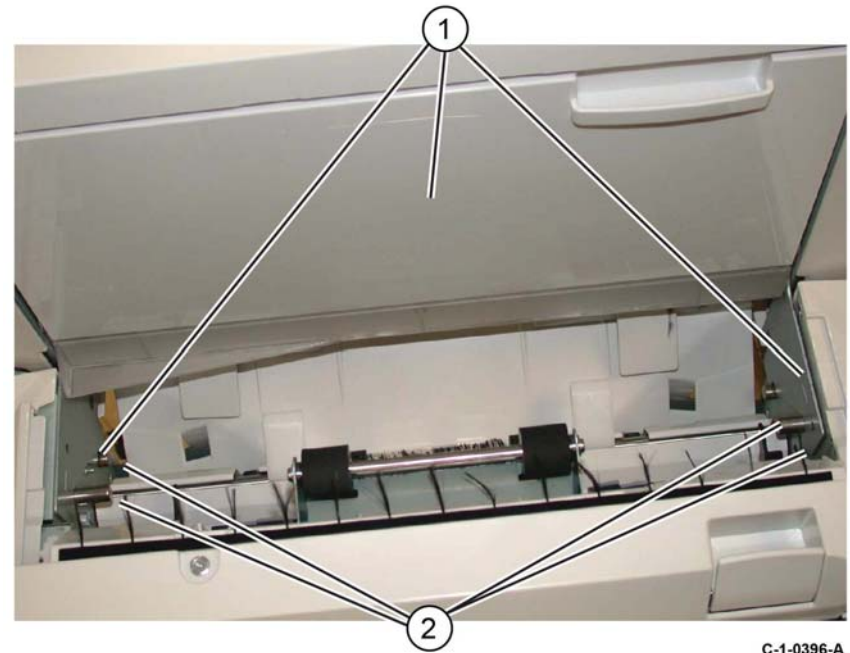


Figure 4 Booklet maker assembly removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.32 Booklet Front Cover

Parts List on [PL 13.50](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

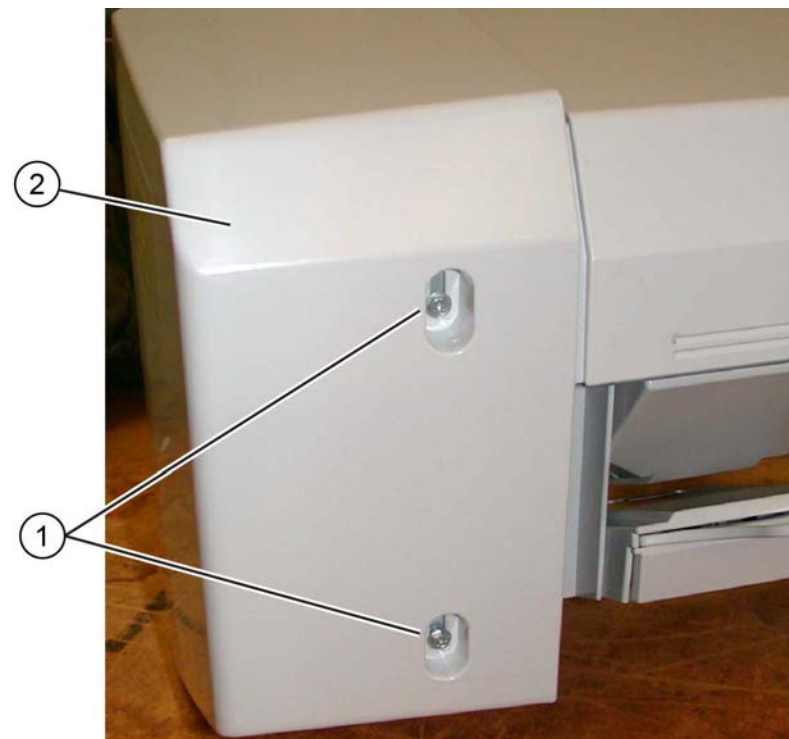
1. Remove the booklet maker assembly from the finisher, [REP 13.31](#).
2. Remove the screw (1), [Figure 1](#).



Figure 1 Screw removal

C-1-0397-A

3. Remove two screws (1), then the booklet front cover (2), [Figure 2](#).



C-1-0398-A

Figure 2 Booklet front cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.33 Booklet Rear Cover

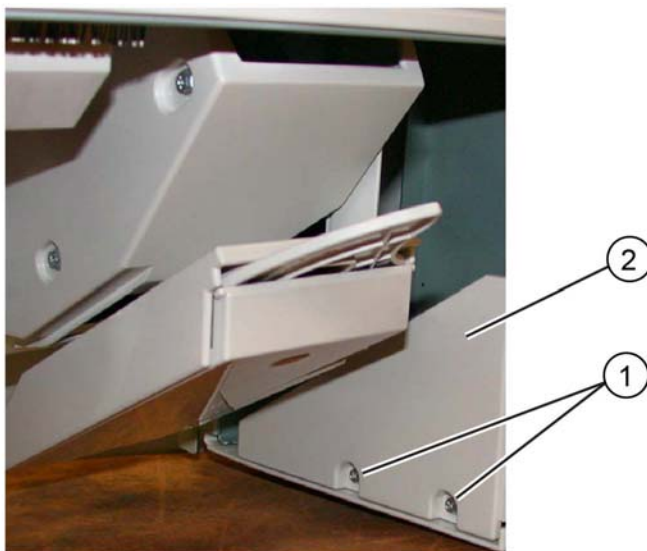
Parts List on [PL 13.50](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the booklet maker assembly from the finisher, [REP 13.31](#).
2. Remove the booklet PWB cover, [REP 13.35](#).
3. Prepare to remove the booklet rear cover, [Figure 1](#):
 - a. Remove both self-tapping screws (1).
 - b. Remove the booklet side cover (2).



C-1-0399-A

Figure 1 Preparation

4. Remove the screw (1), then the booklet rear cover (2), [Figure 2](#).



C-1-0400-A

Figure 2 Booklet rear cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.34 Booklet Top Cover

Parts List on [PL 13.50](#)

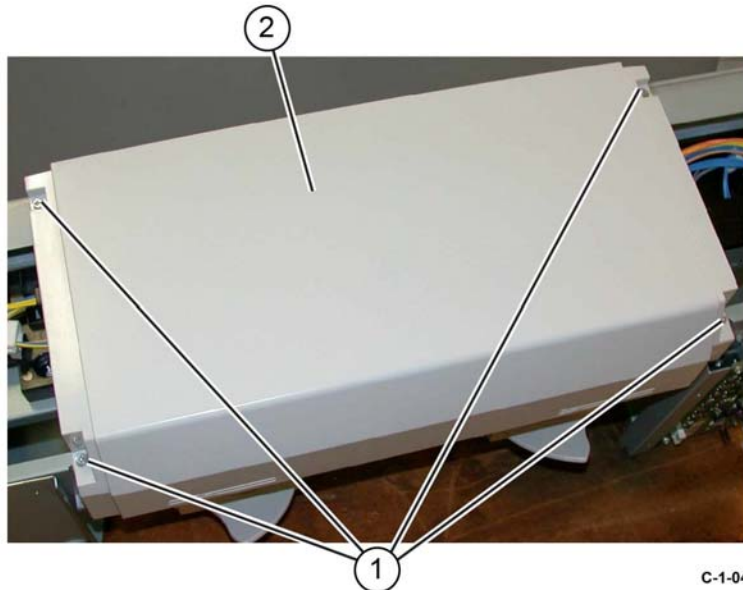
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the booklet front cover, [REP 13.32](#).
2. Remove the booklet rear cover, [REP 13.33](#).
3. Remove the booklet top cover, [Figure 1](#):
 - a. Remove four screws (1).
 - b. Remove the booklet top cover (2).



C-1-0401-A

Figure 1 Booklet top cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.35 Booklet PWB Cover

Parts List on [PL 13.50](#)

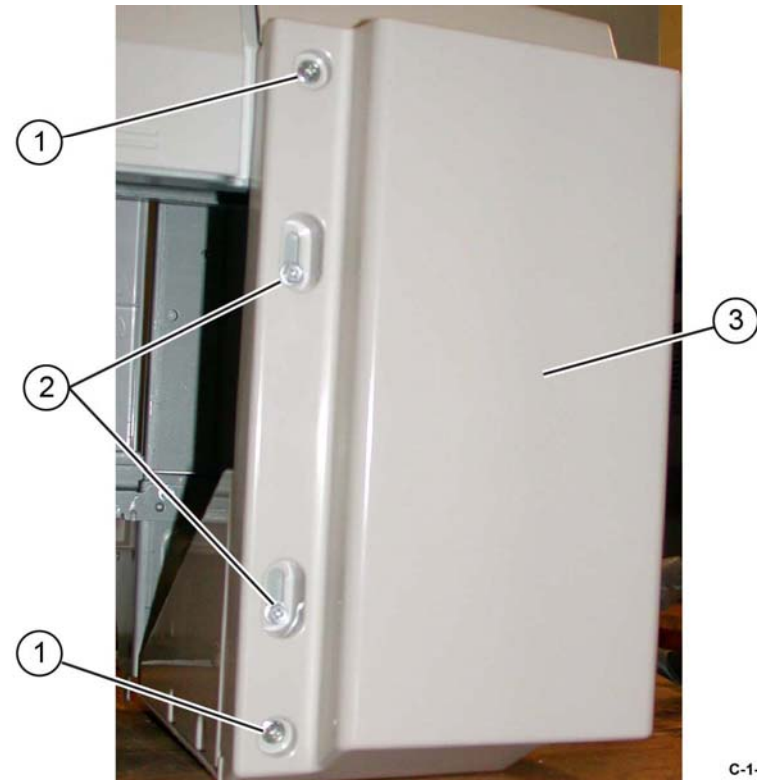
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the booklet PWB cover, [Figure 1](#):
 - a. Remove both self-tapping screws (1).
 - b. Remove both screws (2).
 - c. Remove the booklet PWB cover (3).



C-1-0402-A

Figure 1 Booklet PWB cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 13.36 Booklet Left Cover

Parts List on [PL 13.50](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the booklet maker from the finisher, [REP 13.31](#).
2. Remove the booklet maker left cover:
 - a. Align the slots at the front and rear of the booklet maker left cover with the flats on the mounting pins.
 - b. Move the booklet maker left cover by allowing the flats on the mounting pins to slide through the slots in the cover.

Replacement

The replacement is the reverse of the removal procedure.

REP 13.37 Booklet Front/Rear Stapler

Parts List on [PL 13.60](#) and [PL 13.65](#)

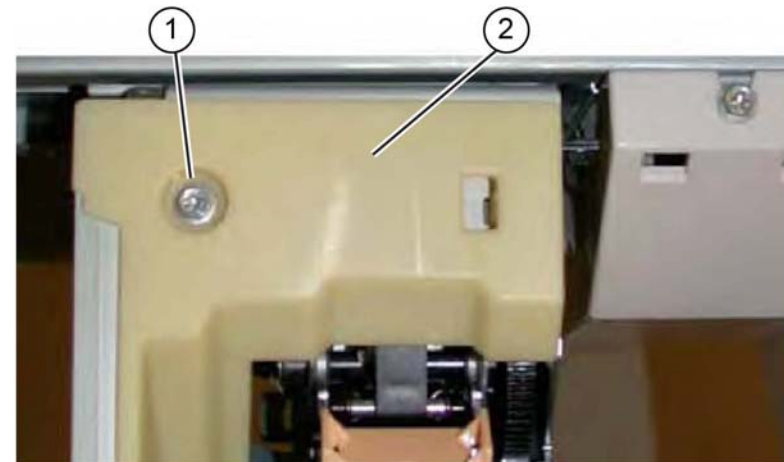
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

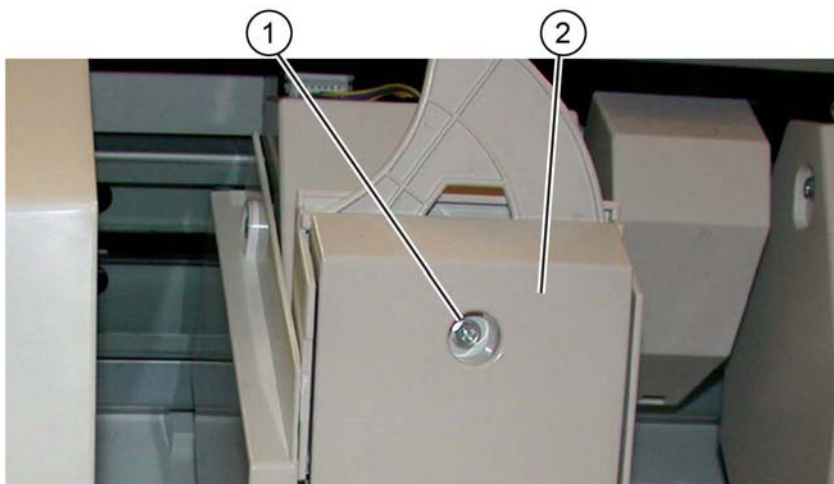
1. Remove the booklet maker from the finisher, [REP 13.31](#).
2. Remove the stapler guide, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the stapler guide (2).



C-1-0403-A

Figure 1 Stapler guide removal

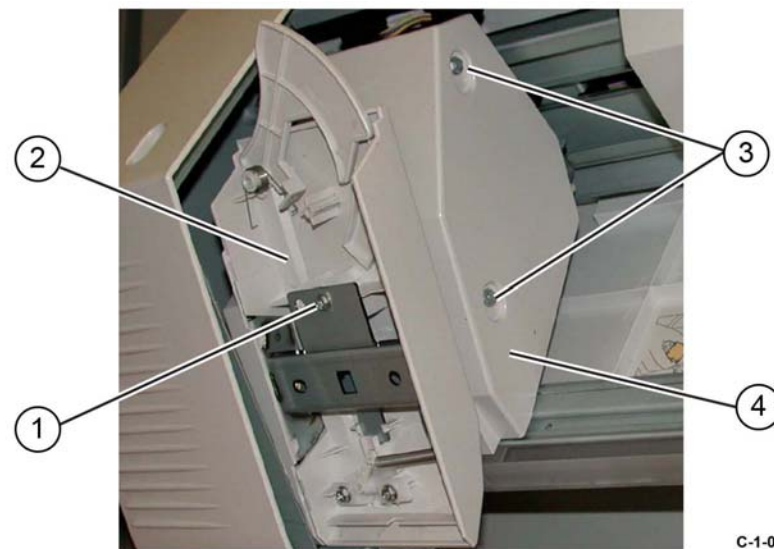
3. Remove the stapler lower cover, **Figure 2**:
 - a. Remove the screw (1).
 - b. Remove the stapler lower cover (2).



C-1-0404-A

Figure 2 Stapler lower cover removal

4. Prepare to remove the stapler, **Figure 3**:
 - a. Remove the screw (1).
 - b. Remove the chute (2).
 - c. Remove both screws (3).
 - d. Remove the stapler rear cover (4).



C-1-0405-A

Figure 3 Preparation

5. Remove the stapler, [Figure 4](#):
 - a. Release the harness from the clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove three screws (3).
 - d. Remove the stapler (4).

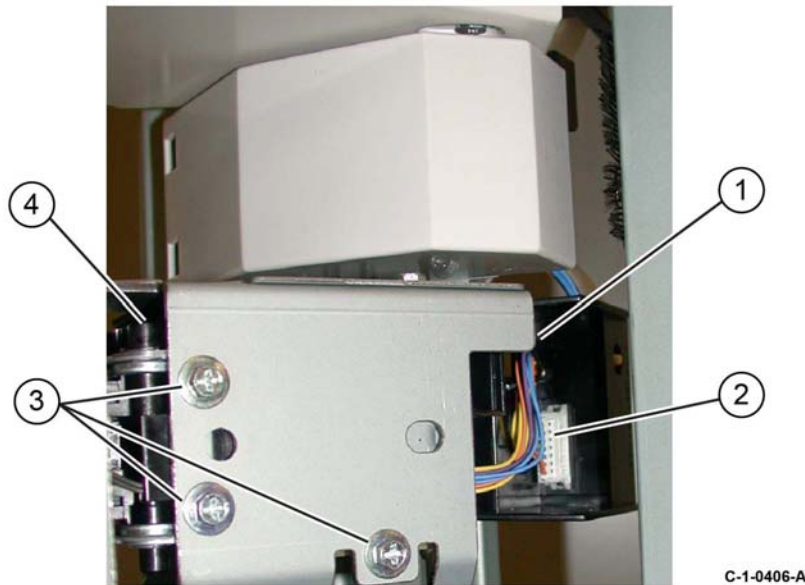


Figure 4 Stapler removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform [ADJ 13.2](#) Finisher LX Booklet Crease/Staple Position.

REP 13.38 Booklet Stapler Move Motor

Parts List on [PL 13.55](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the booklet maker assembly, [REP 13.31](#).
2. Remove the cover for the booklet stapler move motor, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the cover (2).

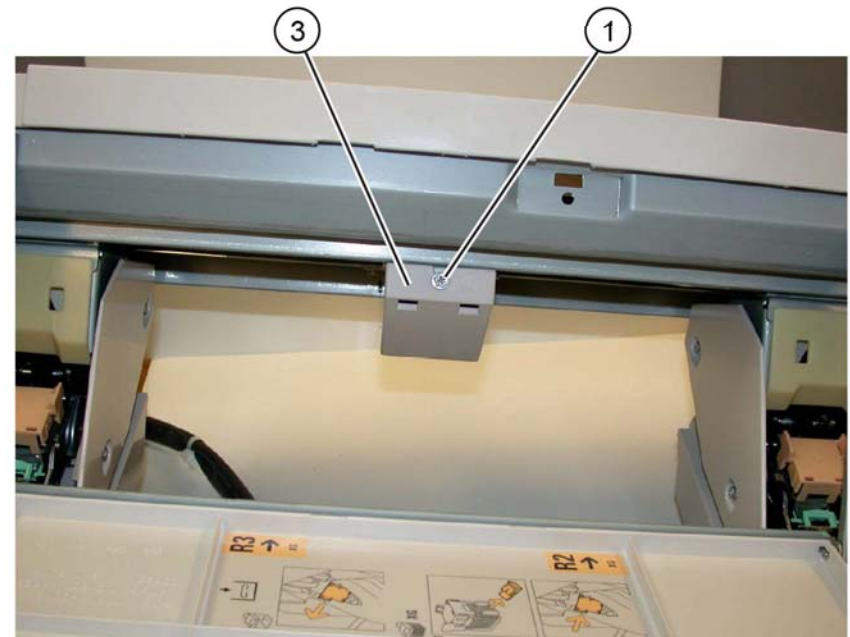


Figure 1 Cover removal

3. Remove the booklet stapler move motor, **Figure 2**:
 - a. Release the harness from the clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove three screws (3).
 - d. Remove the booklet stapler move motor (4).

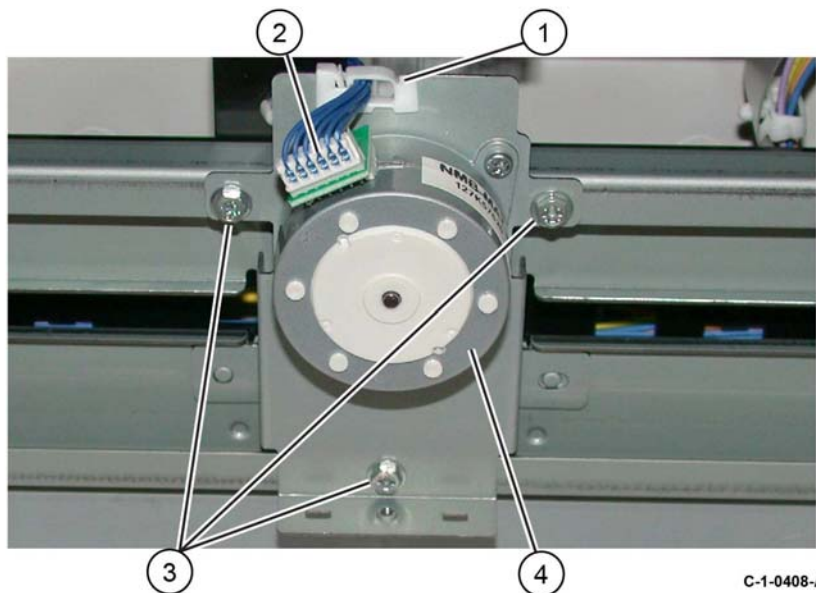


Figure 2 Booklet stapler move motor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 28.1 Front Cover

Parts List on [PL 28.05](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the front cover.
2. Remove the front cover, [Figure 1](#):
 - a. Rotate the two strap (1) 90 degrees, then disconnect.
 - b. Press the stopper (2), then move the front cover (3) to the left. Remove the front cover from the boss (4).

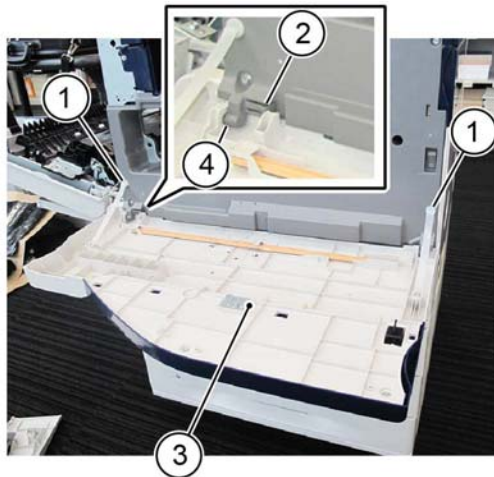


Figure 1 Front cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 28.2 Inner Cover

Parts List on [PL 28.05](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. As necessary, remove the:
 - Integrated finisher, [REP 12.1](#).
 - Office finisher LX, [REP 13.5](#).
 - Horizontal transport, [REP 13.1](#).
2. Remove the front cover, [REP 28.1](#).
3. Remove the waste bottle, [REP 90.6](#).
4. Remove the pillar left cover, [PL 28.05 Item 13](#).
5. Remove the top cover, [REP 28.4](#).
6. Remove the inner cover, [Figure 1](#):
 - a. Remove the screws (1).
 - b. Remove the inner cover (2).

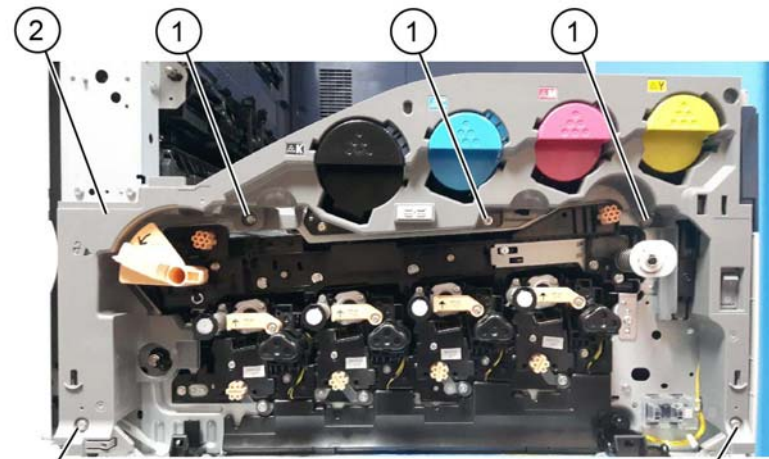


Figure 1 Inner cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 28.3 Right Cover

Parts List on [PL 28.05](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. If a finisher LX is installed, undock the finisher LX, [REP 13.5](#).
2. If a finisher LX is installed, remove the vertical infill covers, [PL 13.40](#).
3. Open the front cover.
4. Pull out tray 1.
5. Remove the right cover, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the right cover (2).

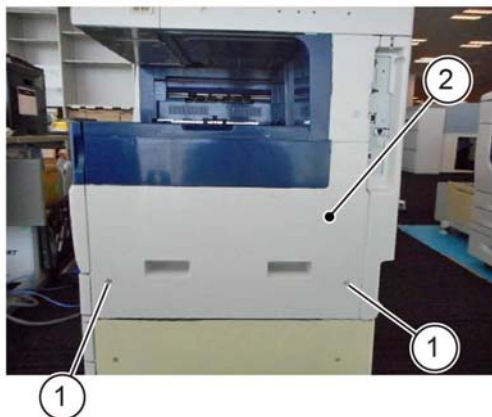


Figure 1 Right cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 28.4 Top Cover

Parts List on [PL 28.05](#)

Removal

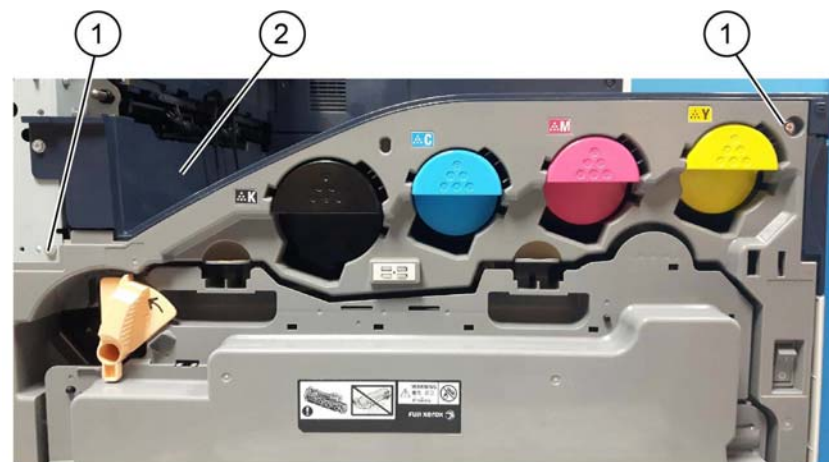
NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. As necessary, remove the:
 - Integrated finisher, [REP 12.1](#).
 - Office finisher LX, [REP 13.5](#).
 - Horizontal transport, [REP 13.1](#).
2. Open the front cover.
3. Remove the pillar left cover, [PL 28.05 Item 13](#).
4. Remove the exit front cover, [PL 28.05 Item 10](#).
5. Remove the top cover, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the top cover (2).



C-1-0110-A

Figure 1 Top cover removal

NOTE: The removed top cover is shown in [Figure 2](#).



Figure 2 Removed top cover

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the top cover, align the bosses on the rear of the top cover with the mounting holes.

REP 28.5 Upper Rear Cover

Parts List on [PL 28.06](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [Figure 1](#):
 - a. Remove ten screws (1).
 - b. Remove the upper rear cover (2).

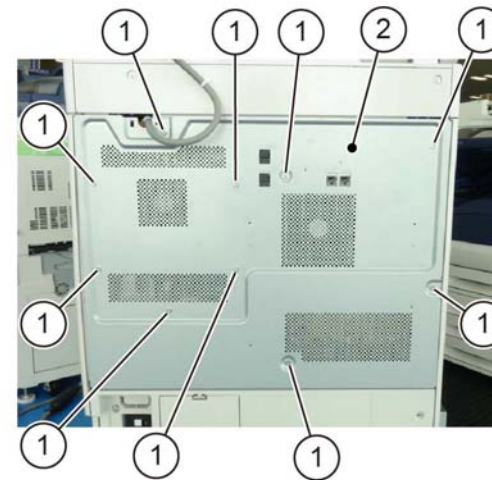


Figure 1 Upper rear cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 28.6 Lower Rear Cover

Parts List on [PL 28.06](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the AC stopper bracket, [PL 1.15 Item 5](#).
3. Remove the cover (1), disconnect all connectors (2), [Figure 1](#).

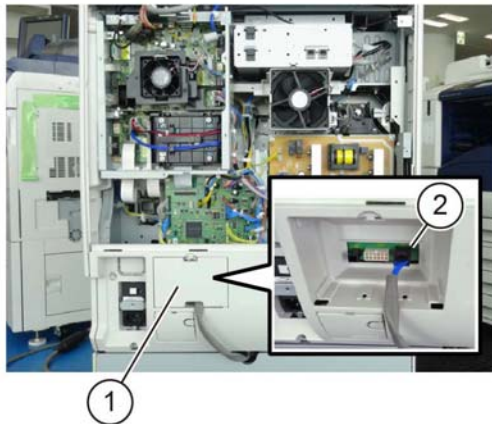
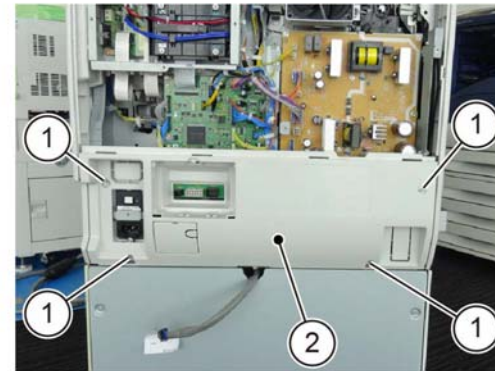


Figure 1 Connector

C-1-0114-A

4. Remove the lower rear cover, [Figure 2](#):
 - a. Remove four screws (1).
 - b. Remove the lower rear cover (2).



C-1-0115-A

Figure 2 Lower rear cover removal

Replacement

The replacement is the reverse of the removal procedure.

REP 40.1 Drive Assembly

Parts List on PL 40.05

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, REP 28.5.
2. Remove the lower rear cover, REP 28.6.
3. Remove the right cover, REP 28.3.
4. Remove the ESS PWB chassis assembly, REP 3.2.
5. Remove the LVPS assembly, REP 1.4.
6. Remove the harness upper bracket PL 1.10 Item 6.
7. Remove the drive PWB assembly, REP 1.5.
8. Release the hook (1) to move the FCC cable guide, FCC cables and wire harness (2), Figure 1.

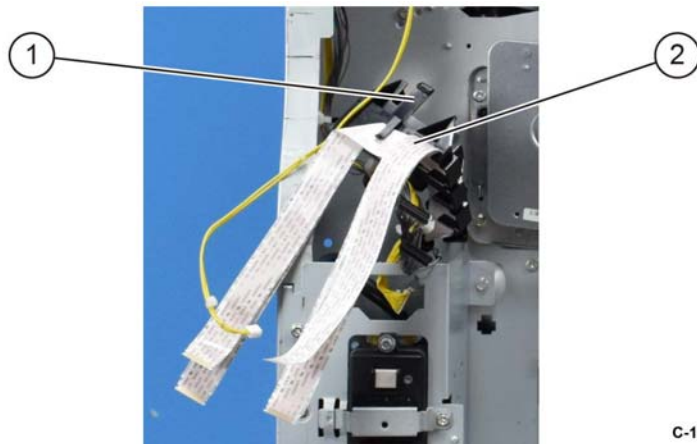


Figure 1 FCC cable guide and cables

9. Pull out the four drum units.

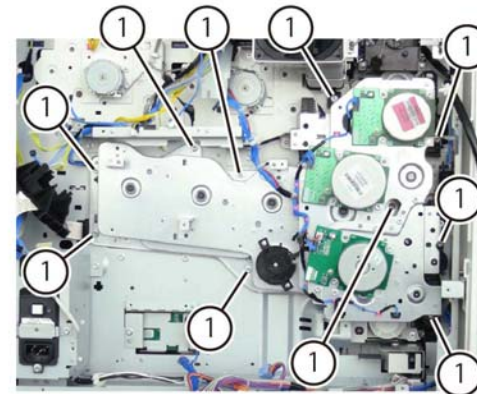
10. Disconnect the drive assembly connector (1), Figure 2.



C-1-0632-A

Figure 2 Drive assembly connector

11. Remove ten screws (1) that secure the drive assembly, Figure 3.



C-1-0633-A

Figure 3 Drive assembly screw fittings

12. Remove the rear duct marking, [Figure 4](#).
 - a. Remove two screws (1).
 - b. Disengage the right and left hooks (2), then remove the rear duct marking.

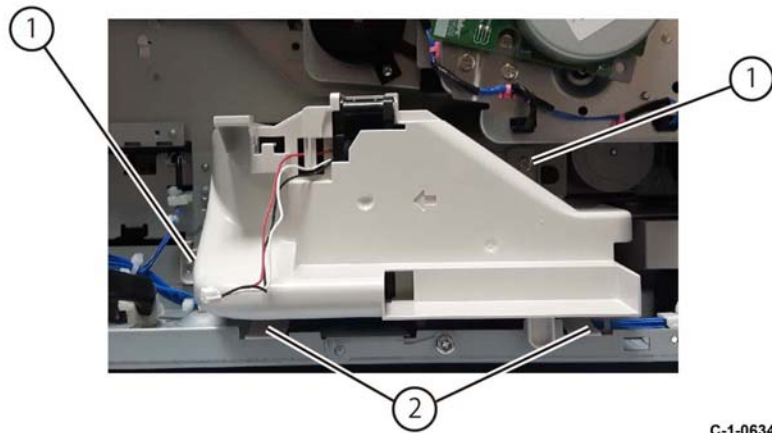


Figure 4 Rear duct marking removal

C-1-0634-A

13. Release the hook (1), carefully move the drive assembly down and remove the drive assembly, [Figure 5](#).



Figure 5 Drive assembly removal

C-1-0635-A

This shows the removed drive assembly, [Figure 6](#).



C-1-0636-A

Figure 6 Removed drive assembly

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the drive assembly, align each of the four bosses on the assembly with the receptacles in the chassis, [Figure 7](#).

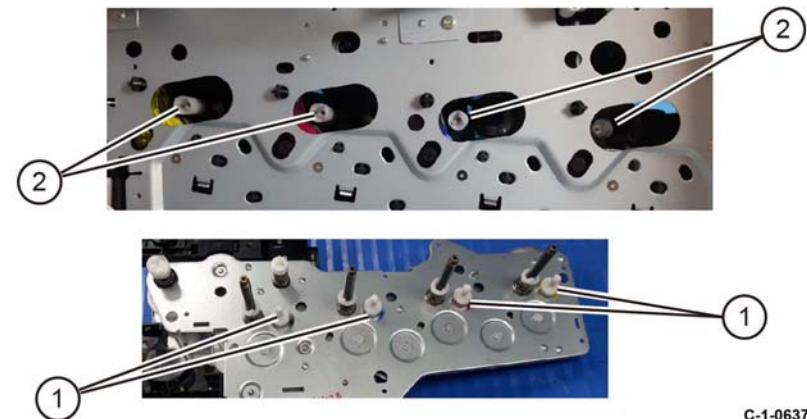


Figure 7 Drive assembly alignment

C-1-0637-A

- When installing the FCC cable guide, FCC cables and wire harness, insert the three hooks of the FCC Cable Guide into the installation holes on the metal chassis, [Figure 8](#).



C-1-0638-A

Figure 8 FCC guide insertion

- Enter [dC330](#) code 042-011 to initialize the 1st BTR

REP 40.2 Fusing Unit Drive Motor PWB

Parts List on [PL 40.10](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

- Remove the upper rear cover, [REP 28.5](#).
- Remove the lower rear cover, [REP 28.6](#).
- Remove the LVPS assembly, [REP 1.4](#).
- Remove the fusing unit drive motor PWB, [Figure 1](#).
 - Remove the connector (1).
 - Remove two screws (2).
 - Remove the fusing unit drive motor PWB (3).



C-1-0642-A

Figure 1 Fusing unit drive removal

Replacement

- The replacement is the reverse of the removal procedure.

REP 40.3 Main Motor PWB

Parts List on [PL 40.10](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).
3. Remove the LVPS assembly, [REP 1.4](#).
4. Remove the main motor PWB, [Figure 1](#).
 - a. Remove the connector (1).
 - b. Remove two screws (2).
 - c. Remove the main motor PWB (3).



C-1-0643-A

Figure 1 Main motor PWB removal

Replacement

1. The replacement is the reverse of the removal procedure.

REP 40.4 Sub Motor PWB

Parts List on [PL 40.10](#)

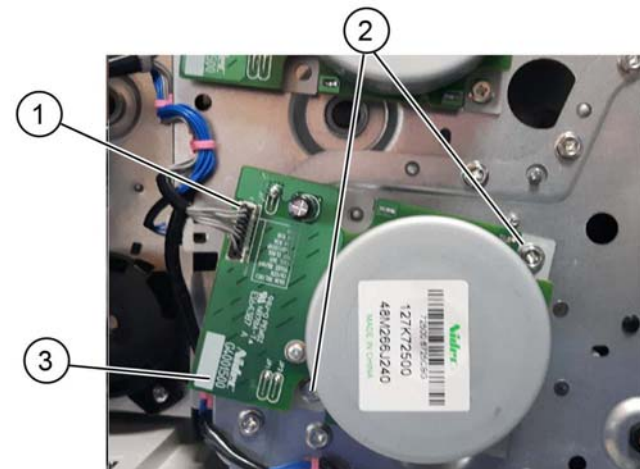
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).
3. Remove the LVPS assembly, [REP 1.4](#).
4. Remove the sub motor PWB, [Figure 1](#).
 - a. Remove the connector (1).
 - b. Remove two screws (2).
 - c. Remove the sub motor PWB (3).



C-1-0644-A

Figure 1 Sub motor PWB removal

Replacement

1. The replacement is the reverse of the removal procedure.

REP 60.1 Document Glass

Parts List on [PL 60.10](#)

Removal



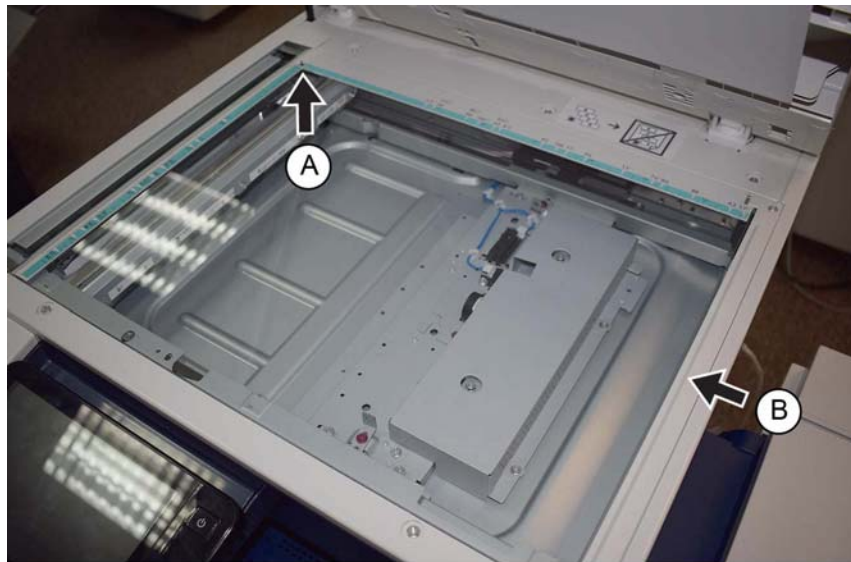
WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the DADF.
2. Remove the right plate, [PL 60.10 Item 11](#).
3. Remove the document glass, [PL 60.10 Item 9](#).

Replacement

1. The replacement is the reverse of the removal procedure.
2. Before tightening the two screws, align the document glass in the direction of arrow A and the right plate in the direction of arrow B, [Figure 1](#).



C-1-0125-A

Figure 1 Alignment

3. Enter [dC945](#) IIT Calibration. perform the routines that follow:
 - White Reference Adjustment - Side 1.
 - CCD Calibration - Side 1.

REP 60.2 CCD Lens Assembly

Parts List on [PL 60.10](#)

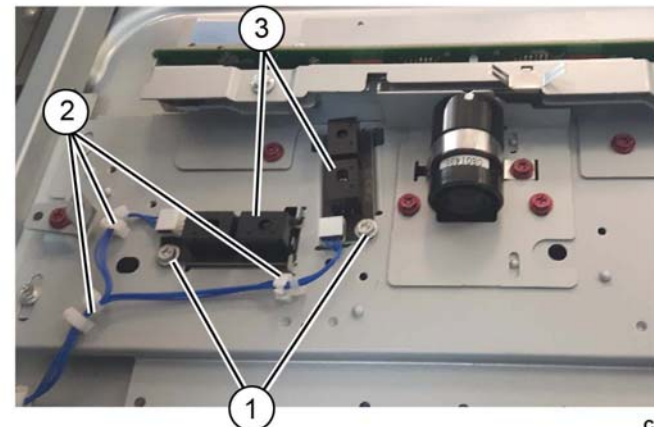
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the document glass, [REP 60.1](#).
2. Remove the lens cover assembly, [PL 60.10 Item 12](#).
3. Move the APS sensor, [Figure 1](#).
 - a. Remove two screws (1).
 - b. Release the harness from the retainers (2).
 - c. Move the APS sensors (3).



C-1-0126-A

Figure 1 APS sensors

4. Release the hooks, then disconnect the FFC CCD ribbon cable, [Figure 2](#).

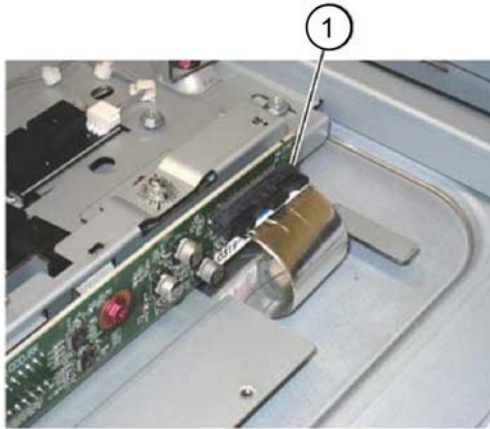


Figure 2 FFC CCD ribbon cable

C-1-0127-A

5. Remove the CCD lens assembly, [Figure 3](#):
- Remove four screws (1).
 - Remove the CCD lens assembly (2).

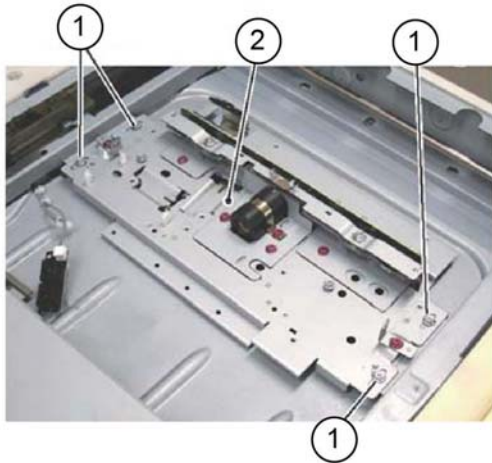


Figure 3 CCD lens assembly removal

C-1-0128-A

Replacement

- Reconnect the FFC CCD ribbon cable.
- Reinstall the APS sensor and lens cover assembly.
- Reinstall the document glass.

NOTE: Do not install the right plate at this time.

- Enter [dC131](#) NVM read/Write. Enter the IIT NVM settings listed below according to the NVM Setting List that was supplied with the machine:
 - 715-015
 - 715-020
 - 715-050
 - 715-051
 - 715-053
 - 715-097
 - 715-098
 - 715-099
 - 715-100
 - 715-106
 - 715-307

NOTE: The list is located in tray 1, beneath the RAI cover, [PL 70.05 Item 10](#).

- Check the history. If there are individual NVMs that are configured by market, correctly set them.
- Copy an appropriate A3 (11x17 inch) test chart. Check the registration. Refer to [IQS 7](#) Registration.
- Reinstall the removed parts if no problem is found.
- Enter [dC945](#) IIT Calibration. perform the routines that follow:
 - White Reference Adjustment - Side 1.
 - CCD Calibration - Side 1.
- Perform [ADJ 60.6](#) CDD Lens Optical Axis Correction.

REP 60.3 Front/Rear Carriage Cables

Parts List on PL 60.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present can cause injury.

NOTE: The edge of the IIT frame has a burr. Be careful when disconnect the carriage cable.

NOTE: The color of the front and rear carriage cables are different. The front cable is silver, the rear cable is black.

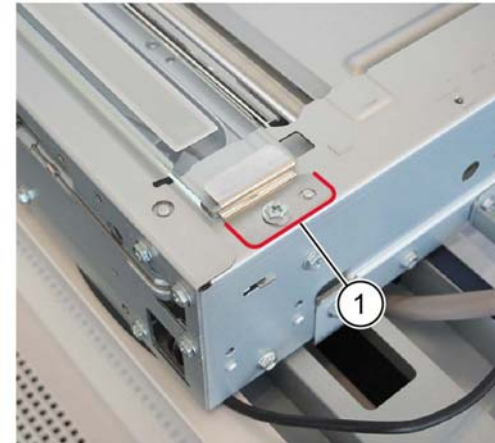
NOTE: The installation of a new rear carriage cable is described in this procedure. The replacement procedure for the front carriage cable is the same.

CAUTION

Carriage cables must be replaced one at a time. Do not remove both front and rear cables at the same time.

1. Open the DADF.
2. Remove the document glass, REP 60.1.
3. Remove the UI assembly, REP 2.1.
4. Remove the left cover, PL 60.05 Item 1.

5. Take note of the installation position of the front glass support (1), Figure 1.

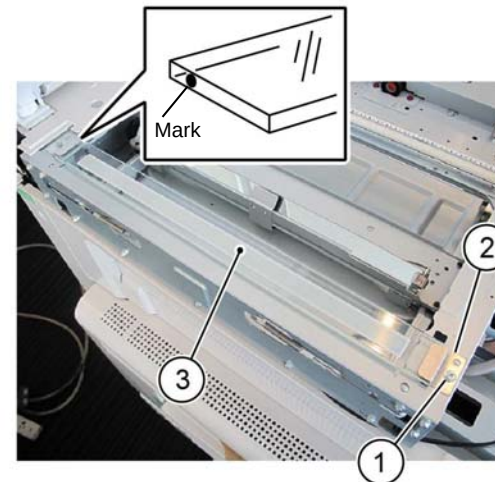


C-1-0129-A

Figure 1 Front glass support

6. Remove the CVT glass, Figure 2:
 - a. Remove the screw (1).
 - b. Remove the front glass support (2).
 - c. Remove the CVT glass (3).

NOTE: The CVT glass must be reinstalled with the mark toward the rear of the machine. Refer to Figure 2.



C-1-0130-A

Figure 2 CVT glass removal

7. Detach the carriage cable from the full rate carriage, **Figure 3**:
 - a. Move the full rate carriage (1) to the cutout in the frame.
 - b. Remove the screw (2).

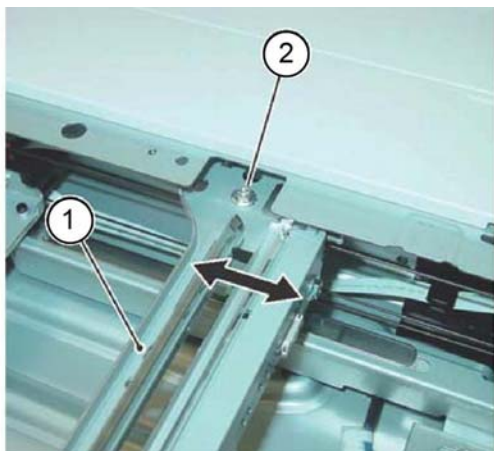


Figure 3 Cable detachment

8. Prepare to remove the carriage cable, **Figure 4**:
 - a. Unhook the extension spring (1) from the frame.
 - b. Detach the cable (2) from the extension spring.

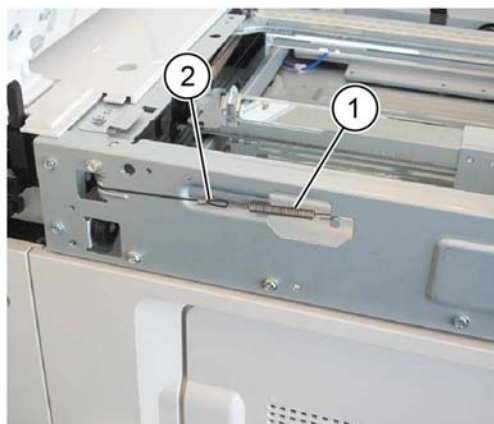


Figure 4 Preparation

9. Remove the anchor ball (1) from the notch in the frame, then remove the carriage cable, **Figure 5**.

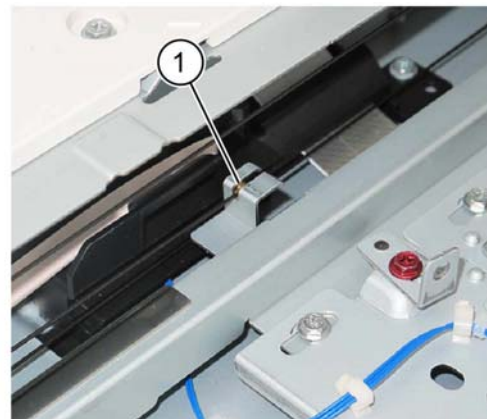


Figure 5 Cable removal

Replacement

1. Insert the anchor ball of the carriage cable into the groove in the capstan, **Figure 6**.

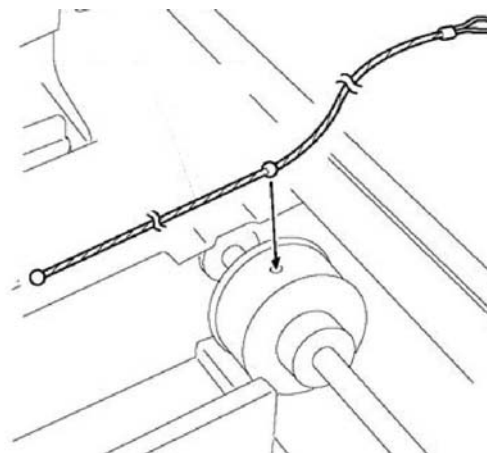


Figure 6 Anchor ball

2. Wind the extension spring loop end of the carriage cable around the capstan, **Figure 7**:
 - a. Wind the cable (1) 2.5 turns.
 - b. Use adhesive tape (2) to affix the extension spring loop end of the cable to the frame.

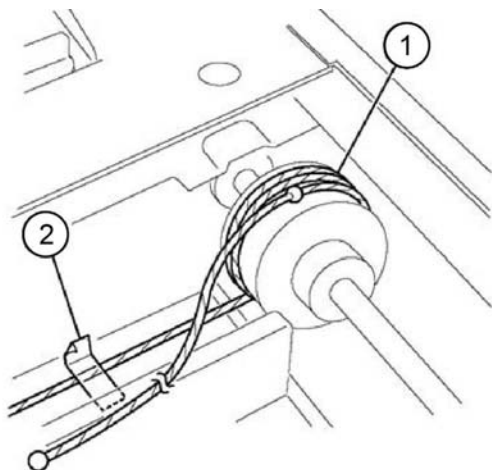


Figure 7 Capstan winding (1)

3. Wind the end-ball end of the carriage cable around the capstan, **Figure 8**:
 - a. Wind the cable (1) 3 turns.
 - b. Use adhesive tape (2) to affix the cable to the capstan.

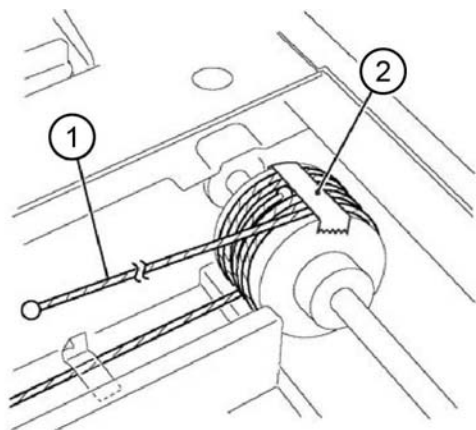


Figure 8 Capstan winding (2)

4. **Figure 9** shows the correct arrangement of the cables, front and rear.

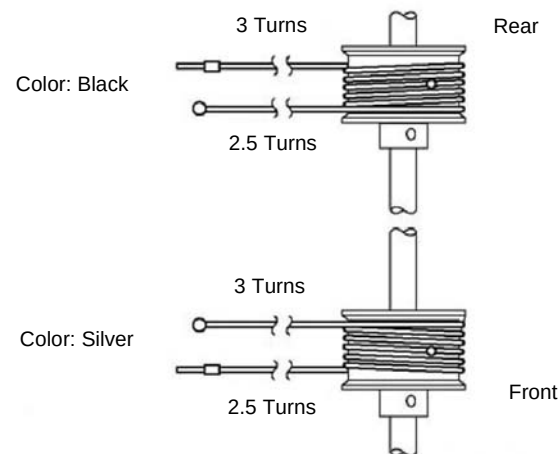


Figure 9 Cable arrangement

5. Install the end-ball end of the carriage cable, **Figure 10**:
 - a. Wrap the cable on the pulley at the front of the half rate carriage (1).
 - b. Put the end-ball in the notch in the frame (2).

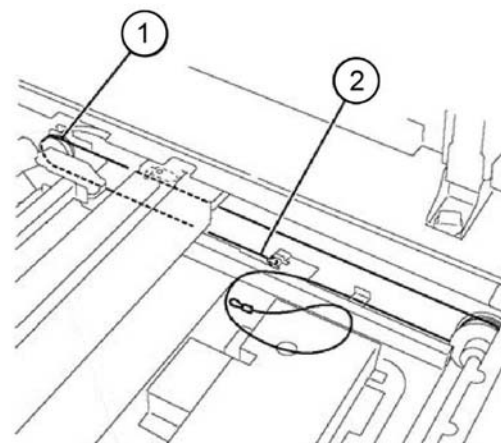


Figure 10 End-ball end installation

6. Attach the extension spring hanger end of the carriage cable, [Figure 11](#):
 - a. Remove the tape (1) that secures the cable.
 - b. Wrap the cable on the pulley (2).
 - c. Wrap the cable on the pulley at the rear of the half rate carriage (3).
 - d. Attach the extension spring on the cable and hook it to the Frame (4).

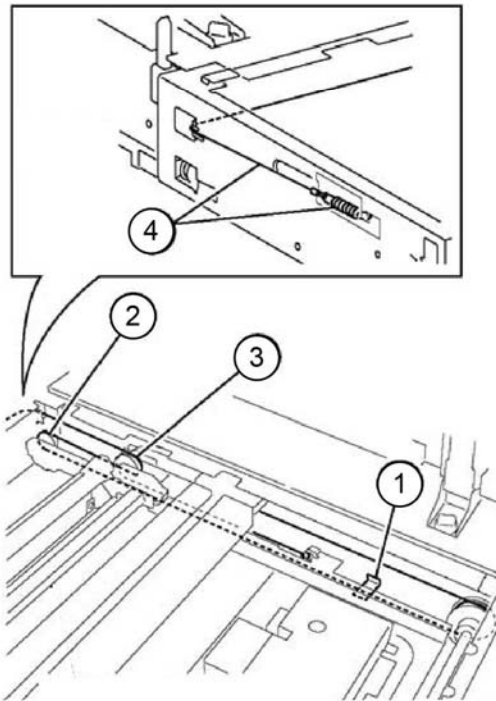


Figure 11 Spring attachment

C-1-0139-A

7. Loosely attach the cable to the full rate carriage, [Figure 12](#):
 - a. Remove the tape (1).
 - b. Move the full rate carriage (2) to the cutout (4) in the frame.
 - c. Loosely attach the cable to the full rate carriage (3).

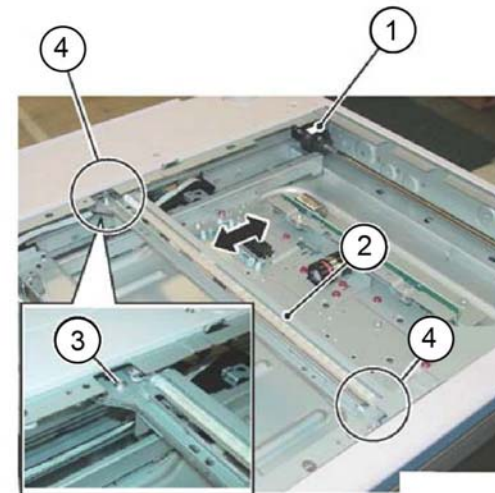


Figure 12 Full rate carriage attachment

C-1-0140-A

8. Perform [ADJ 60.1](#) Full/Half Rate Carriage Position Adjustment.
9. Reinstall all removed components.

REP 60.4 Lamp Assembly

Parts List on **PL 60.20**

Removal



WARNING

Switch off the electricity to the machine. Refer to **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



CAUTION

Do not touch the chip on the lamp assembly.

1. Open the DADF.
2. Remove the document glass, **REP 60.1**
3. Move the full rate carriage to the cutouts in the frame.
4. Disconnect the FFC LED cable assembly, **Figure 1**:
 - a. Move the connector housing catch (2) in the direction of the arrows.
 - b. Disconnect the FFC LED cable assembly.

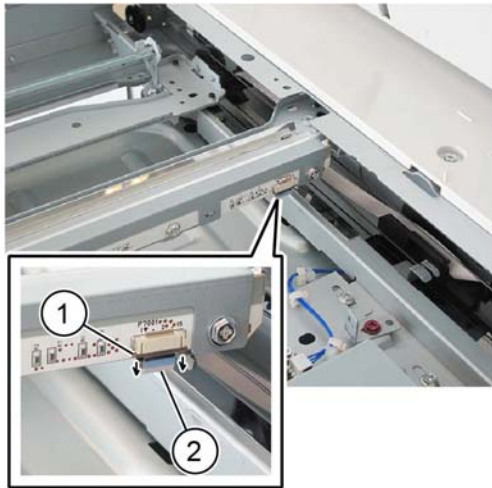


Figure 1 FFC LED cable assembly

C-1-0141-A

5. Remove the LED bracket, **Figure 2**:
 - a. Remove three screws (1).
 - b. Remove the LED bracket (2).

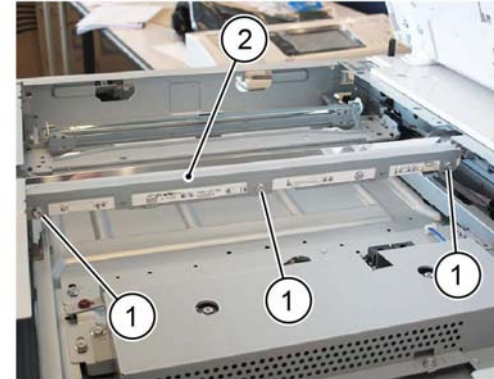


Figure 2 LED bracket removal

C-1-0142-A

6. Remove the lamp assembly, **Figure 3**:
 - a. Remove two screws (1).
 - b. Remove the lamp assembly (2).

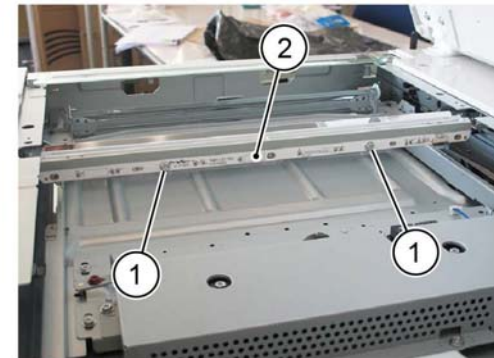


Figure 3 Lamp assembly removal

C-1-0143-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the lamp assembly, first tighten screw (1), then screw (2), [Figure 4](#).
3. When installing the LED bracket, first tighten screw (3), then screw (4), then screw (5), [Figure 4](#).

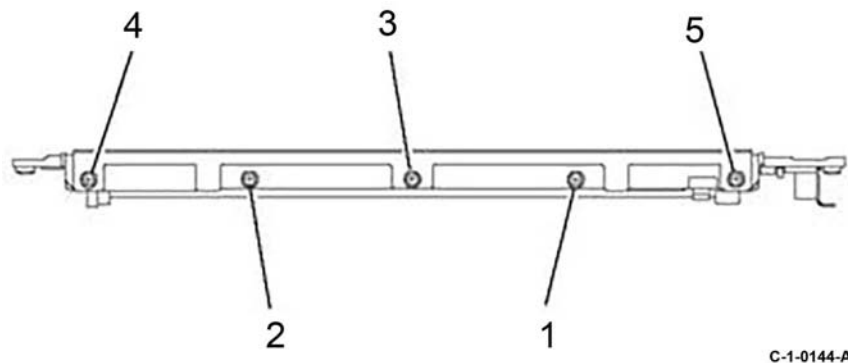


Figure 4 Screws

4. Enter [dC945](#) IIT Calibration. perform the routines that follow:
 - White Reference Adjustment - Side 1.
 - CCD Calibration - Side 1.
5. If a new lamp assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counters that follow:
 - Chain-Link: 956-803
 - Chain-Link: 956-804

REP 60.5 FFC LED Cable Assembly

Parts List on [PL 60.20](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Do not touch the chip on the lamp assembly.

1. Remove the DADF, [REP 5.1](#).
2. Remove the upper rear cover, [REP 28.5](#).
3. Disconnect the FFC LED cable assembly, [Figure 1](#):
 - a. Move the connector housing catch (2) in the direction of the arrows.
 - b. Disconnect the FFC LED cable assembly (1).

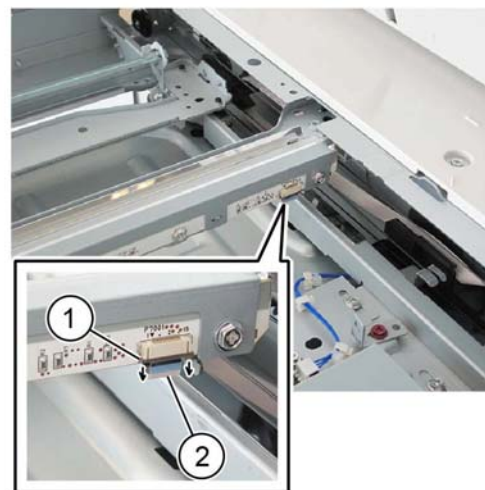


Figure 1 FFC LED cable assembly



Be careful when lifting out the full rate carriage. It is still connected to the FFC cable and cannot be fully removed from the scanner assembly.

4. Lift out the full rate carriage from the scanner assembly, **Figure 2**:
 - a. Move the full rate carriage (1) to the cutouts in the frame.
 - b. Remove two screws (2).
 - c. Carefully lift out the full rate carriage.

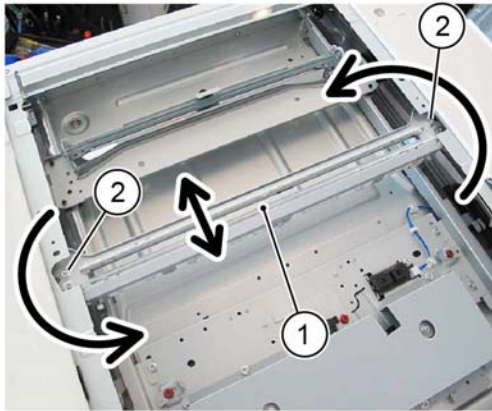


Figure 2 Full rate carriage removal

C-1-0146-A

5. Turn the full rate carriage upside down.
6. Disconnect the FFC LED cable assembly from the full rate carriage, **Figure 3**:
 - a. Remove the screw, then remove the plate (1).
 - b. Disconnect the FFC LED cable assembly (2).

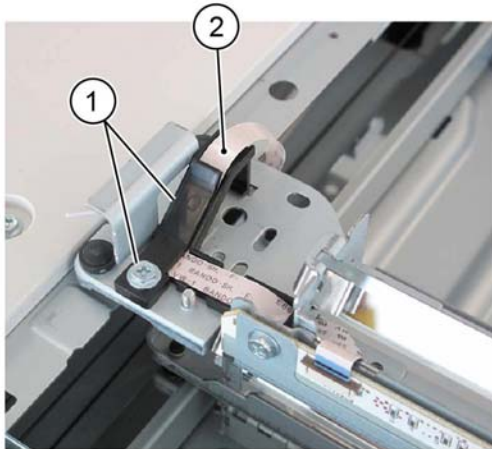


Figure 3 Cable assembly disconnection (1)

C-1-0147-A

7. Disconnect the FFC LED cable assembly (1) from the half rate carriage harness guide (2), **Figure 4**.

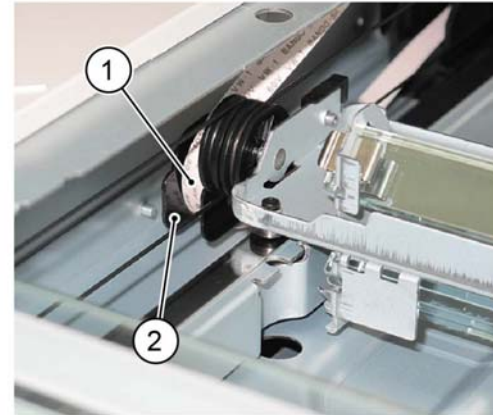


Figure 4 Harness guide

C-1-0148-A

8. Disconnect the FFC LED cable assembly from the guide, **Figure 5**.

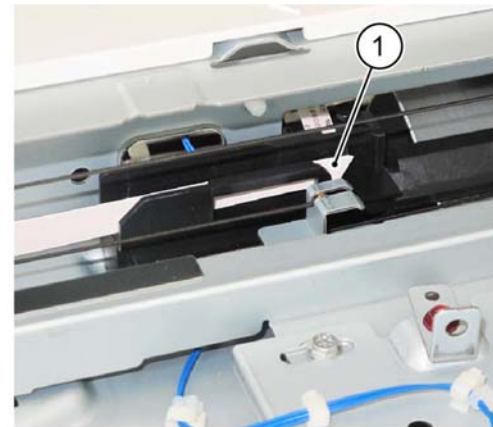


Figure 5 Cable assembly disconnection (2)

C-1-0149-A

9. Disconnect the FFC LED cable assembly from the ESS chassis assembly, [Figure 6](#):
 - a. Move the connector housing catch (1) in the direction of the arrow.
 - b. Disconnect the FFC LED cable assembly (2).

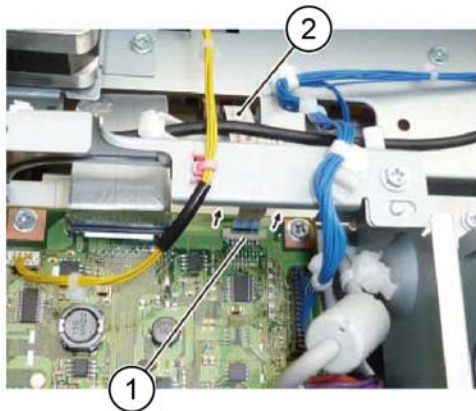


Figure 6 Cable assembly disconnection (3)

C-1-0150-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform [ADJ 60.1](#) Full/Half Rate Carriage Position Adjustment.

REP 60.6 Light Guide

Parts List on [PL 60.20](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



CAUTION

Do not touch the light guide with bare hands.

1. Remove the DADF, [REP 5.1](#).
2. Remove the document glass, [REP 60.1](#).
3. Move the full rate carriage to the cutouts in the frame.
4. Remove the LED bracket, [Figure 1](#):
 - a. Remove three screws (1).
 - b. Remove the LED bracket (2).

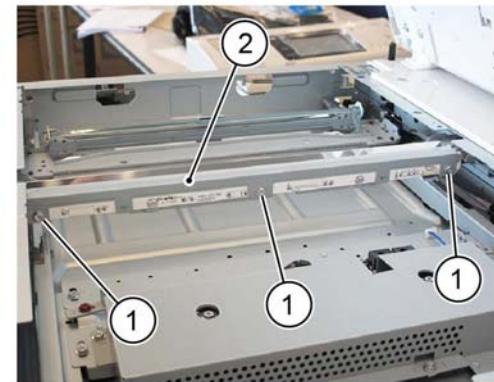


Figure 1 LED bracket removal

C-1-0151-A

5. Remove the light guide, **Figure 2**:
 - a. Remove the screw (1).
 - b. Remove the spring guide (2).
 - c. Remove the screw (3).
 - d. Remove the spring guide (4).
 - e. Remove the light guide (5).

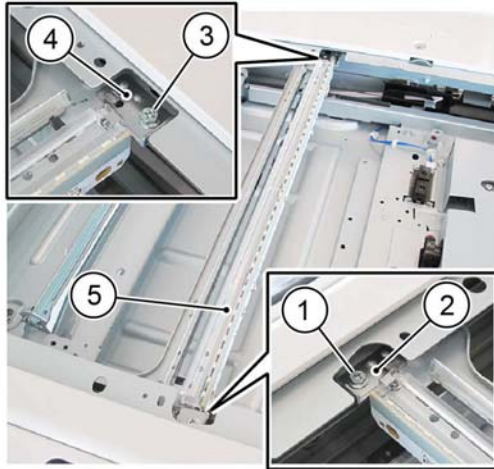


Figure 2 Light guide removal

C-1-0152-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the light guide, insert the boss into the locating hole in the full rate carriage.

REP 60.7 IIT Scan Motor Assembly

Parts List on **PL 60.30**

Removal



WARNING

Switch off the electricity to the machine. Refer to **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF, **REP 5.1**.
2. Remove the IIT rear cover, **PL 60.05 Item 4**.
3. Remove the IIT top cover, **PL 60.05 Item 3**.
4. Remove the IIT scan motor assembly, **Figure 1**:
 - a. Release the cable clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove the extension spring (3).
 - d. Remove three screws (4).
 - e. Remove the IIT scan motor assembly (5).

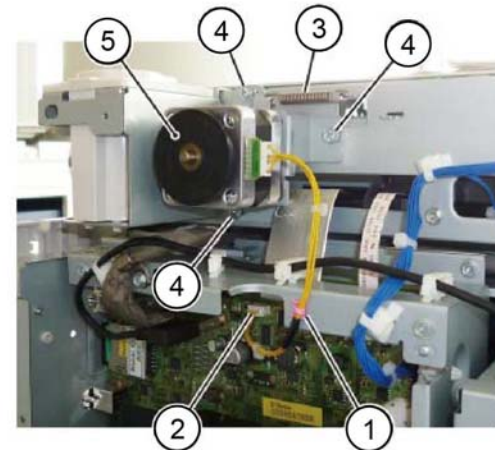


Figure 1 IIT scan motor assembly removal

C-1-0153-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Attach the timing belt (1) to the IIT scan motor pulley, [Figure 2](#).

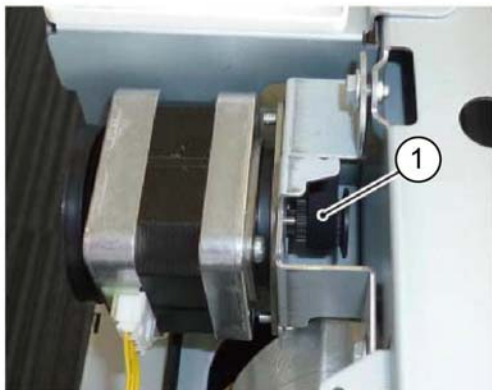


Figure 2 Timing belt

3. Be aware of the steps that follow when reinstalling the IIT scan motor assembly:
 - a. Attach the extension spring.
 - b. Loosely install the IIT scan motor assembly and timing belt.
 - c. Ensure that the timing belt is correctly attached to the carriage.
 - d. Fully tighten the screws that secure the IIT scan motor assembly.
4. After installing the IIT scan motor assembly, check that the full rate carriage moves smoothly.

REP 60.8 LPH (LED Print Head) Assembly (Y, M, C, K)

Parts List on [PL 60.35](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.



CAUTION

To prevent light fatigue, either wrap the removed drum cartridge in a sheet of black paper or store it in a black bag.



CAUTION

Do not touch the surface of the drum cartridge.

Because the removal procedure for the LPH assembly (Y, M, C, K) is the same, the following describes only the procedure for the LPH assembly (K).

1. Open the front cover.
2. Open the LH transport assembly.
3. Remove the Y, M, C, K drum cartridges, [REP 90.12](#)
4. Remove the Y, M, C, K developer unit, [REP 90.1](#)
5. Remove the IBT belt unit, [REP 90.7](#)
6. Remove the inner cover, [REP 28.2](#)
7. LPH (Y) Only: Remove the right cover, [REP 28.3](#).
8. LPH (Y) Only: Remove the HVPS, [REP 1.1](#).

9. Remove the screw (1) that secures LPH (K), [Figure 2](#).

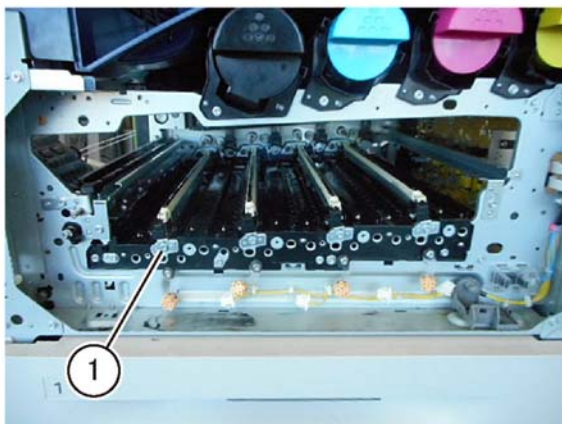


Figure 2 LPH (K) screw

10. Move the LPH (K) to the front until it stops, [Figure 3](#)

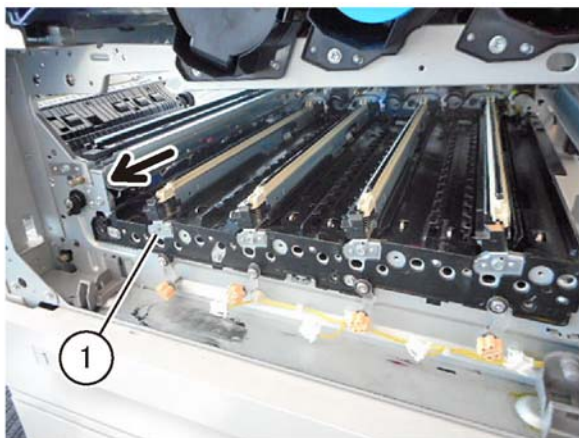


Figure 3 Move the LPH

11. Push down LPH (K) (1) in the direction of the arrow and place it such that the right side of LPH (K) is on the top, [Figure 4](#).

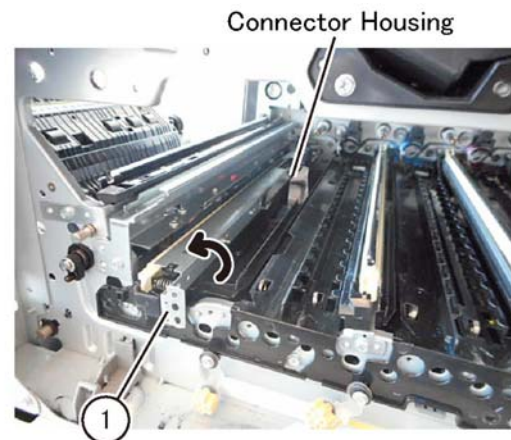


Figure 4 Preparation

12. Push the two ends (2) simultaneously towards the direction of the arrow and remove the FFC cable, [Figure 5](#).

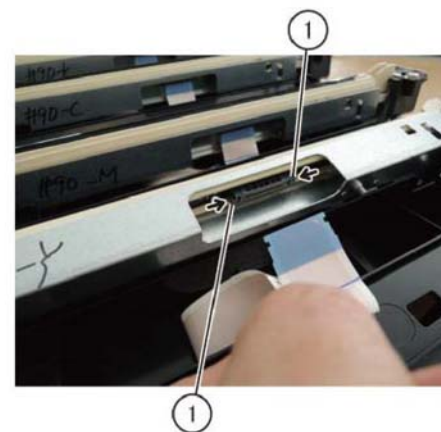


Figure 5 FFC cable

13. Remove the LPH (K), [Figure 6](#).



Figure 6 Removed LPH

C-1-0613-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the LPH, insert the tab at the bottom of the LPH into the installation hole of the marking guide, [Figure 7](#).

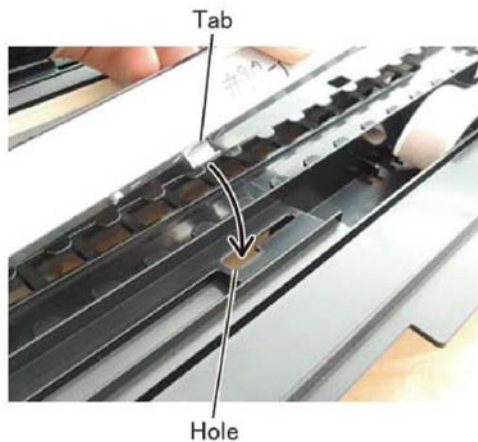


Figure 7 Block

C-1-0614-A

3. Perform [dC675](#) Registration Control Setup Cycle.

REP 60.9 FFC Cable

Parts List on [PL 60.35](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.



CAUTION

To prevent light fatigue, either wrap the removed drum cartridge in a sheet of black paper or store it in a black bag.



CAUTION

Do not touch the surface of the drum cartridge.

1. Remove the upper rear cover, [REP 28.5](#).
2. Remove the lower rear cover, [REP 28.6](#).

3. If the machine has an HDD assembly installed, remove the HDD assembly, [Figure 2](#):
 - a. Disconnect the connectors (1).
 - b. Remove the HDD assembly (2).

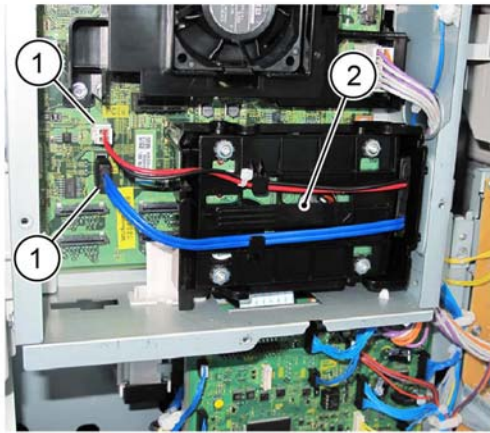


Figure 2 HDD removal

C-1-0162-A

4. If the machine had an HDD assembly installed, remove both screws (1), then the HDD bracket (2), [Figure 3](#).

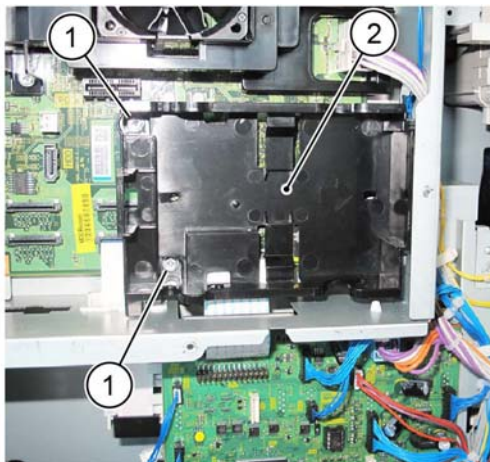


Figure 3 HDD bracket removal

C-1-0163-A

5. Disconnect the four FFC cables, [Figure 4](#):
 - a. Carefully disconnect the FFC cables (1) by releasing the side clips.
 - b. Pull down the FFC cables through the ESS chassis.



Figure 4 FFC cables

C-1-0615-A

6. Disconnect cables (1) from drive PWB, remove the harness clips (2), and remove the harness from FFC guide, [Figure 5](#).



Figure 5 Wire harness removal

C-1-0616-A

7. Disengage the hook (1), and remove the FFC guide (2), [Figure 6](#).



Figure 6 FFC guide removal

C-1-0617-A

8. Remove the ferrite core and FFC cables from the FFC guide.
9. Carefully pull each FFC cable through the ferrite core.
Reference: This shows the rear of the unit with FCC cables removed from ferrite core, [Figure 7](#).



Figure 7 FFC cables removed at rear of unit

C-1-0618-A

10. Remove the front cover, [REP 28.1](#).
11. Remove the inner cover, [REP 28.2](#).
12. Remove the Y, M, C, K drum cartridges, [REP 90.12](#).
13. Remove the Y, M, C, K developer units, [REP 90.1](#).

14. Remove the IBT belt unit, [REP 90.7](#).
15. Remove the right cover, [REP 28.3](#)
16. Remove the HVPS, [REP 1.1](#)
17. Release the hook and remove the container support (1) [Figure 8](#).

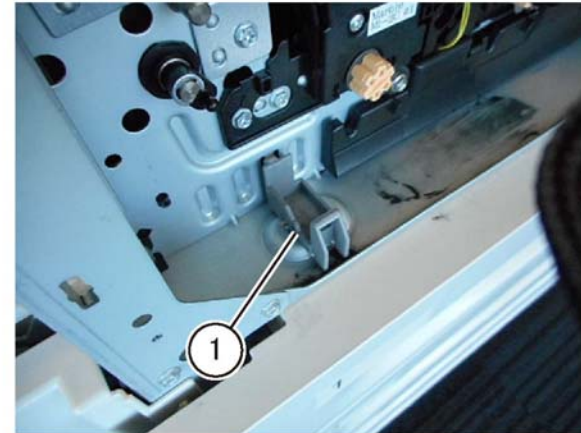


Figure 8 Container support

C-1-0619-A

18. Remove the screws that secure the LPH and marking guide, [Figure 9](#).
 - a. Remove the screws that secure each LPH.
 - b. Remove two screws indicated with a triangle mark that secure the marking guide.

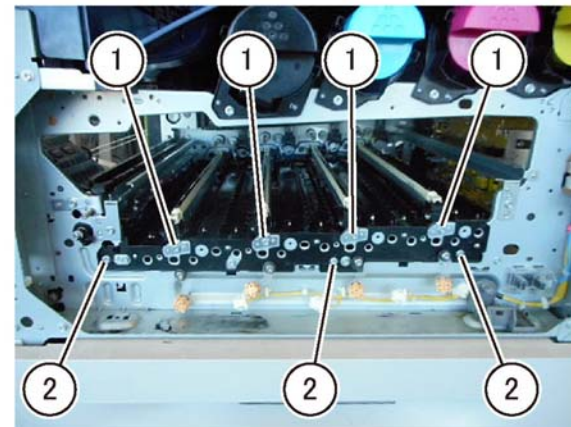


Figure 9 FFC cables

C-1-0620-A

19. Pull out the marking guide (1) including the four LPHs by approximately 10cm (4 inches), [Figure 10](#).

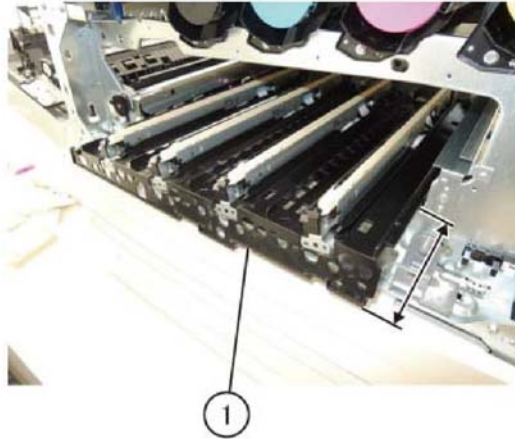


Figure 10 Marking guide

C-1-0621-A

20. Insert the FFC cable (1) and the wire harness (2) into the machine, [Figure 11](#).

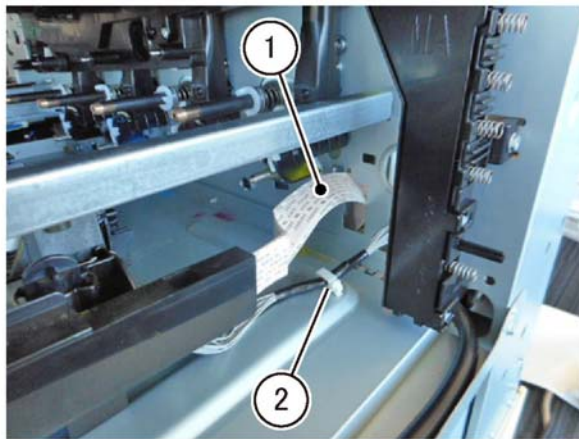


Figure 11 FFC cable

C-1-0622-A

21. Remove the marking guide including the four LPHs.

22. Move the LPH (Y) (1) to the front until it stops, [Figure 12](#).

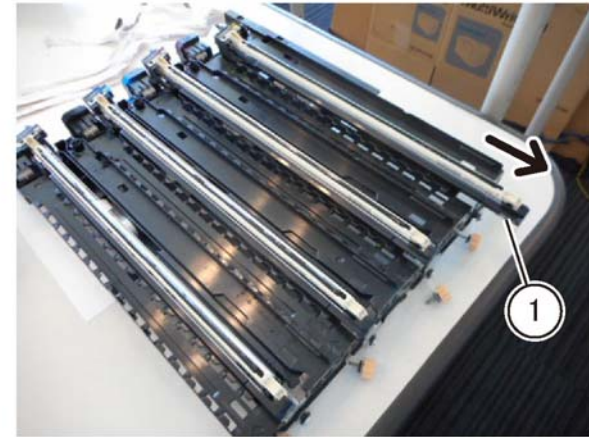


Figure 12 LPH

C-1-0623-A

23. Push the LPH (Y) towards the direction of the arrow, and place it so the right side of LPH (Y) is on the top, [Figure 13](#).



Figure 13 Alignment

C-1-0624-A

24. Push the buttons (1) simultaneously towards the direction of the arrow and remove the FFC cable, [Figure 14](#).

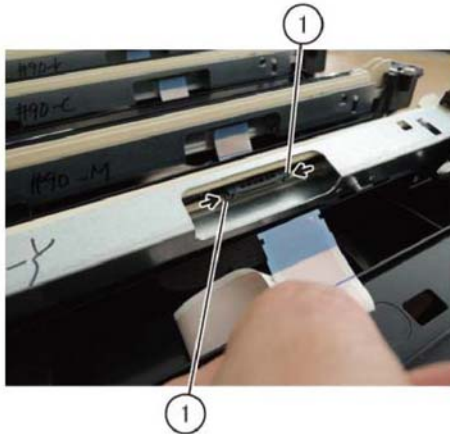


Figure 14 FFC cable removal

C-1-0625-A

25. Repeat for all FFC cables, removing in the order of Y, M, C, K, [Figure 15](#).

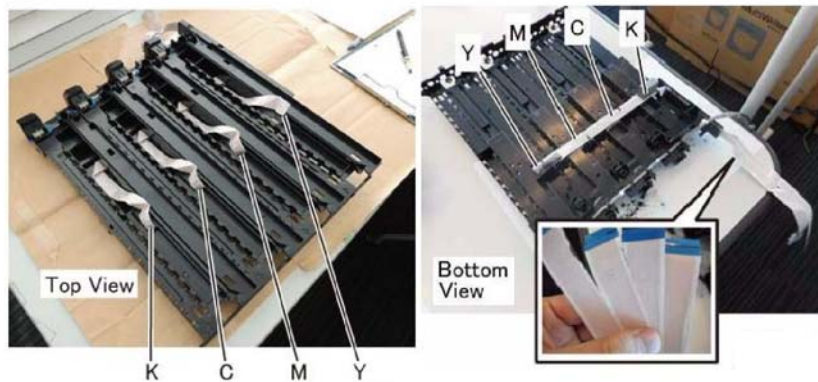


Figure 15 FFC cables

C-1-0626-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When replacing the K FFC cable, insert the cable in the correct position of the gasket within the marking guide, [Figure 16](#).



Figure 16 FFC cable

C-1-0627-A

3. When installing the LPH, insert the tab at the bottom of the LPH into the installation hole of the marking guide, [Figure 17](#).

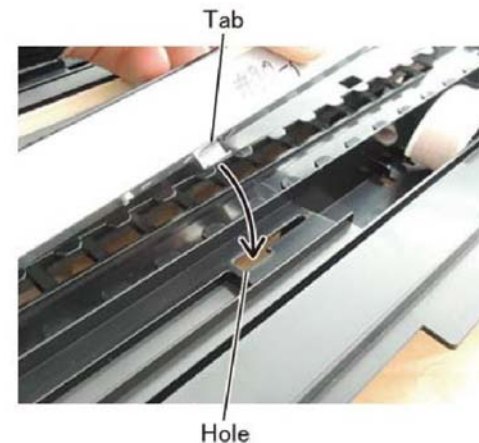
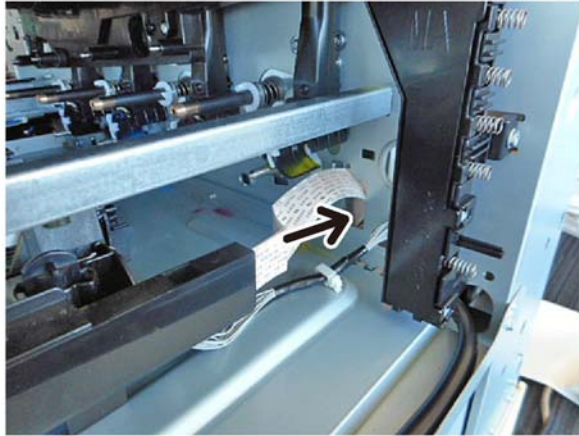


Figure 17 FFC cable

C-1-0628-A

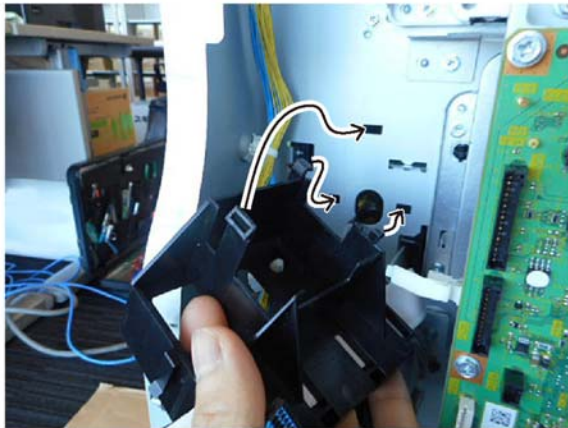
4. When installing the marking guide, insert the rear frame of the marking guide into the installation hole, [Figure 18](#).



C-1-0629-A

Figure 18 Marking guide

5. When installing the FFC cable guide, insert the hooks into the installation holes, [Figure 19](#).



C-1-0630-A

Figure 19 FFC cable guide

REP 70.1 Tray 1 Size Sensor

Parts List on [PL 70.05](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove tray 1.
2. Remove the tray 1 size sensor, [Figure 1](#):
 - a. Disconnect the connector (1).
 - b. Remove the screw (2).
 - c. Remove the tray 1 size sensor (3).

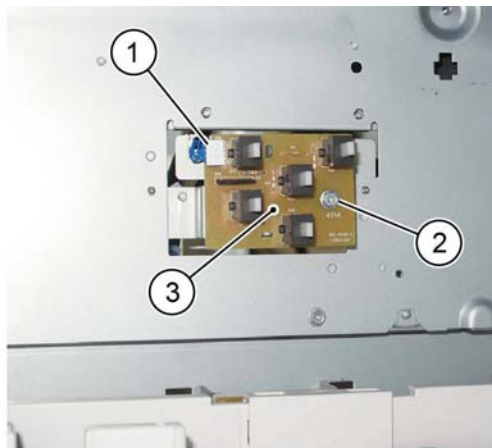


Figure 1 Tray 1 size sensor removal

C-1-0172-A

Replacement

The replacement is the reverse of the removal procedure.

REP 70.2 Bypass Tray

Parts List on [PL 70.30](#)

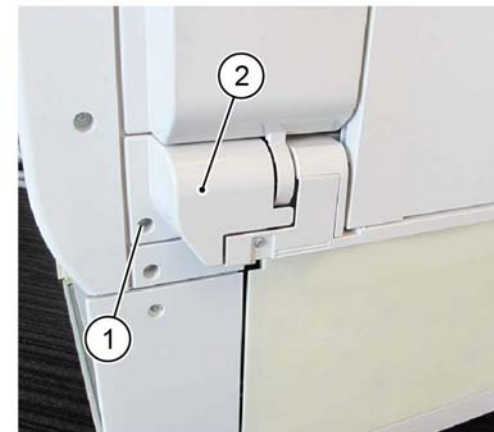
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the hinge rear cover, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the hinge rear cover (2).



C-1-0202-A

Figure 1 Hinge rear cover removal

2. Disconnect the connector, **Figure 2:**
 - a. Release the harness from the clamp (1).
 - b. Disconnect the connector (2).

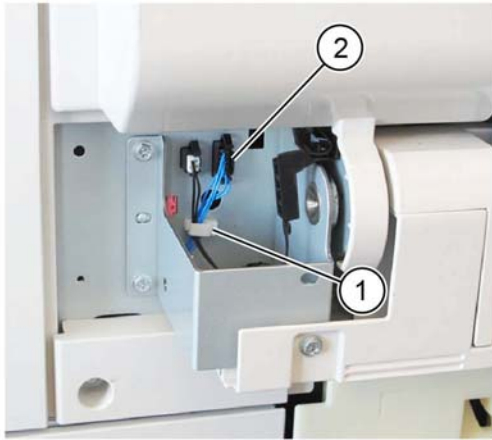


Figure 2 Harness release

C-1-0203-A

3. Remove the bypass tray, **Figure 3:**
 - a. Remove two screws (1).
 - b. Remove the bypass tray (2).

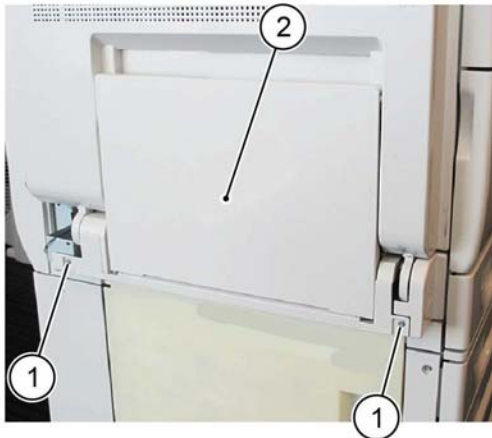


Figure 3 Bypass tray removal

C-1-0204-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the bypass tray, insert the two bypass tray bosses into the holes in the frame, **Figure 4.**



Figure 4 Replacement

C-1-0205-A

3. After installing bypass tray, open then close the L/H cover unit once.

REP 70.3 HCF Tray

Parts List on [PL 70.45](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the HCF tray by pulling the tray forward.
2. Remove all paper from the HCF tray.
3. Using a small screwdriver, or other small, blunt instrument, release the stopper on each rail of the tray by inserting the screwdriver into the hole of the stopper and pulling the tray toward you.
4. Remove the HCF tray by pulling the tray forward.

Replacement

1. Slide the two rails into the HCF housing.
2. Line up the rails of the tray with the adjoining rails of the HCF and push the tray into place.
3. Reload the paper.

REP 70.4 HCF Undocking

Parts List on [PL 70.45](#)

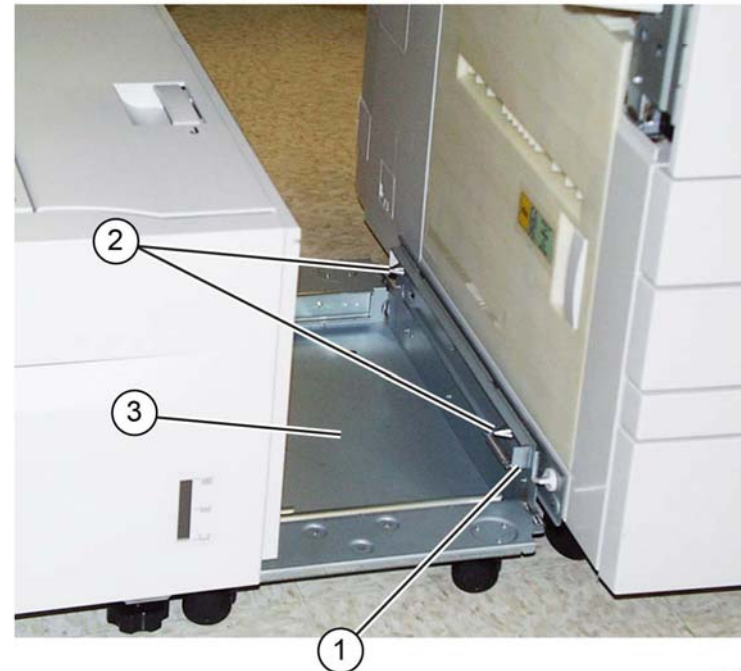
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Disconnect the HCF power cable from the machine.
2. Pull the HCF away from the machine.
3. Release the docking latch spring lever (1) on the right side of the docking base, [Figure 1](#).



C-1-0458-A

Figure 1 Docking base

4. Undock the HCF from the machine.

Replacement

1. Align the holes in the HCF docking base (3) with the docking points (2) on the left side of the machine. Refer to [Figure 1](#).

NOTE: It may be necessary to rotate the machine caster so that it does not interfere with docking.

2. Push the HCF into place.
3. Reconnect the HCF power cable.

REP 70.5 HCF Tray Rear Cables

Parts List on [PL 70.51](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the HCF tray, [REP 70.3](#).
2. Remove the gear bracket assembly, [Figure 1](#):
 - a. Remove the oval shaped plate (1).
 - b. Remove two gears (2).
 - c. Remove three screws (3).
 - d. Remove the gear bracket assembly (4).

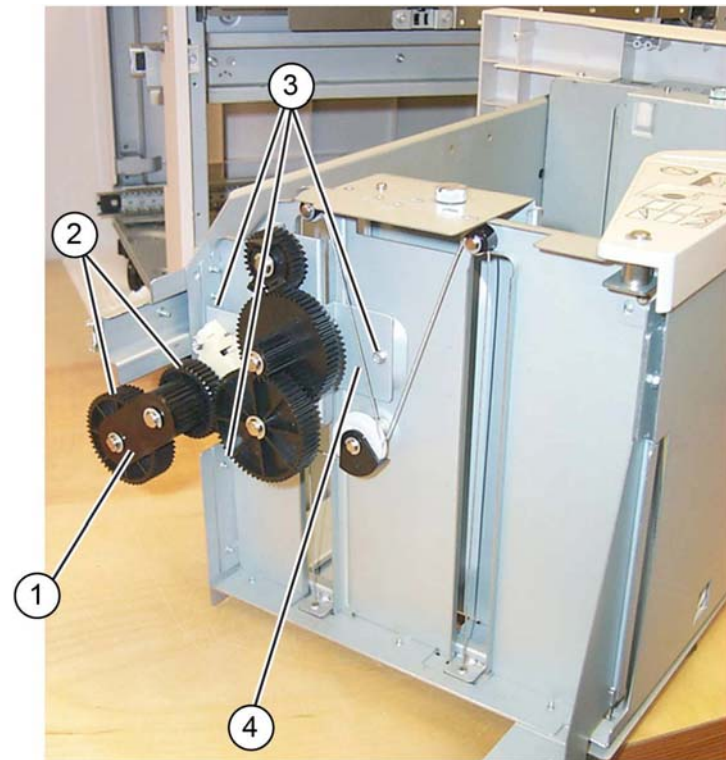


Figure 1 Gear bracket assembly

3. Free movement of the tray cable pulley (1), [Figure 2](#):
 - a. Remove the E-ring (2).
 - b. Slide the bushing (3) away from the frame.

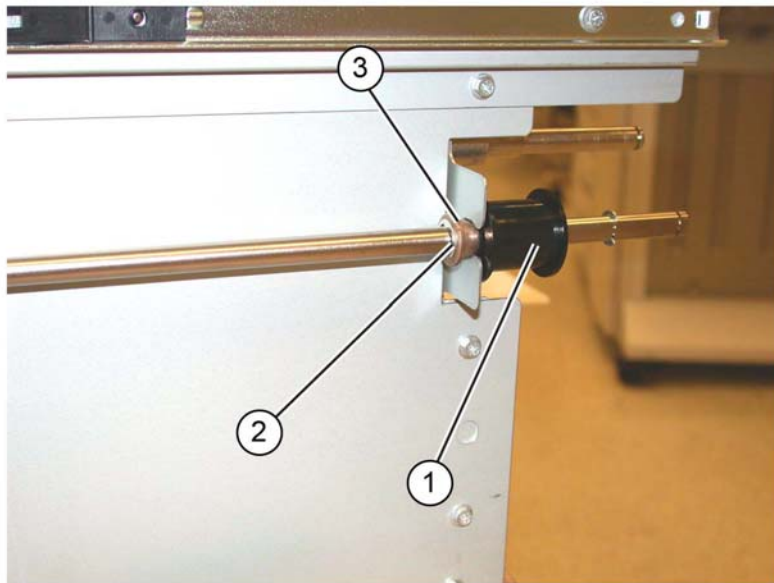


Figure 2 Tray cable pulley

C-1-0460-A

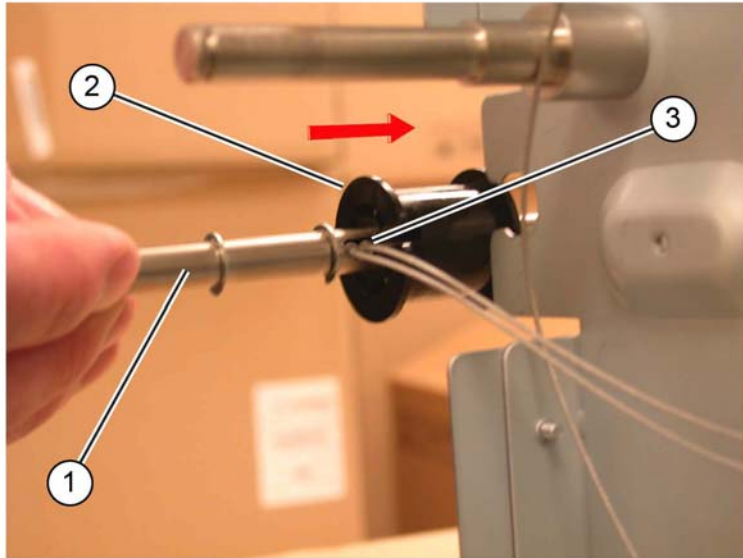
4. Prepare to remove the tray rear cables. Remove two E-rings, wire guides and pulleys (1), [Figure 3](#).



C-1-0461-A

Figure 3 Preparation

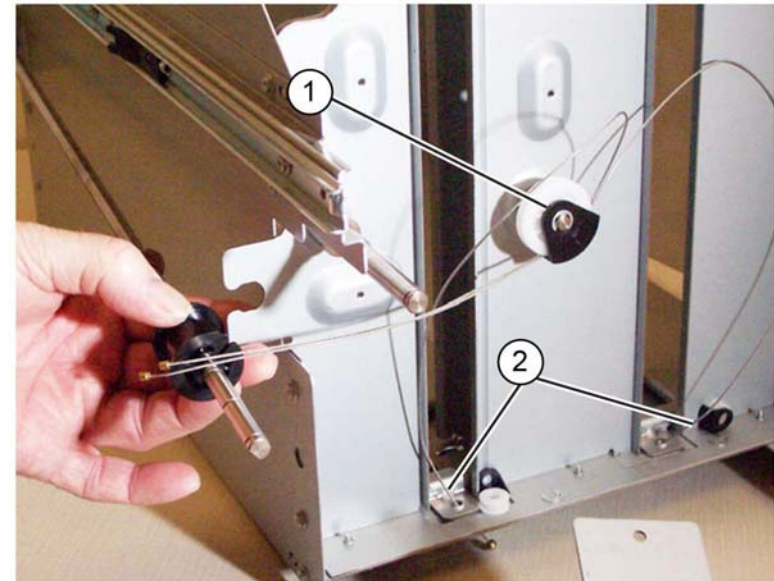
5. When both cables are slack, disengage the lift shaft (1) from the frame. Then slide the tray cable pulley (2) to the front of the lift shaft to release the rear lift cable ends (3) that are trapped in the pocket underneath the tray cable pulley, [Figure 4](#).



C-1-0462-A

Figure 4 Releasing the cable ends

6. Remove the rear tray cables, [Figure 5](#):
- Remove the E-ring, wire guide and pulley (1).
 - Remove the cables (2).



C-1-0463-A

Figure 5 Rear cables removal

Replacement

The replacement is the reverse of the removal procedure. Refer to [Figure 6](#).

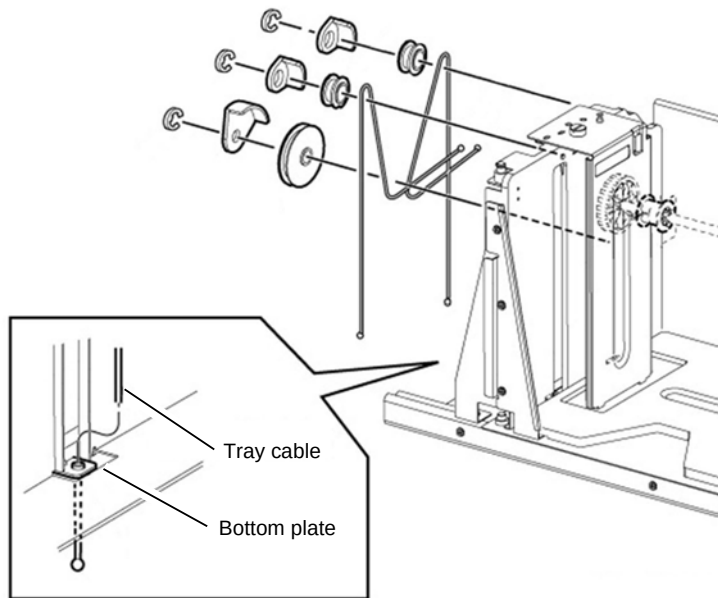


Figure 6 Replacement

C-1-0464-A

REP 70.6 HCF Tray Front Cables

Parts List on [PL 70.51](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the HCF tray front cover, [PL 70.50 Item 7](#).
2. Free movement of the front tray cable pulley, [Figure 1](#).
 - a. Remove the E-ring (1) on the lift shaft.
 - b. Slide the bearing (2) to the rear on the lift shaft.
 - c. Front tray cable pulley (3).

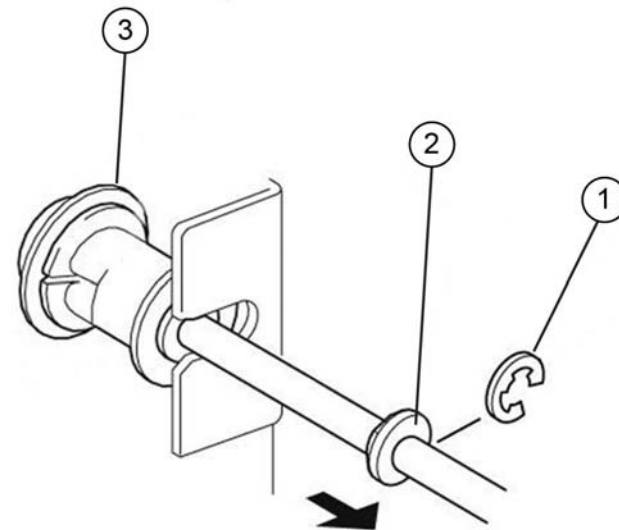
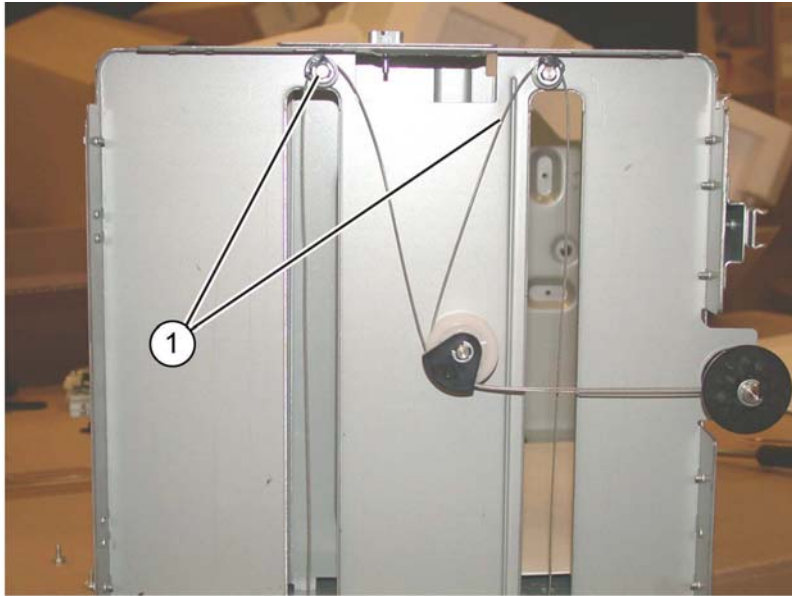


Figure 1 Tray cable pulley

C-1-0465-A

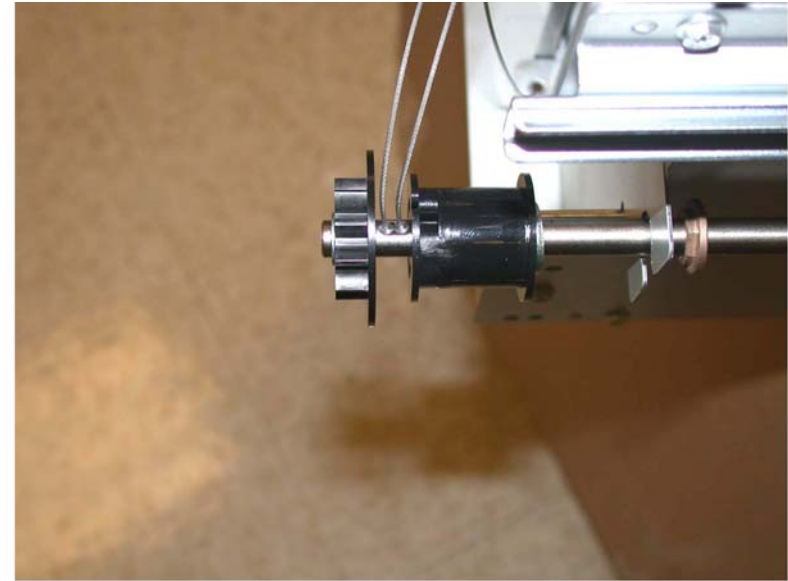
3. Prepare to remove the tray front cables. Remove two E-rings, wire guides and pulleys (1) from the front of the HCF tray, [Figure 2](#).



C-1-0466-A

Figure 2 Preparation

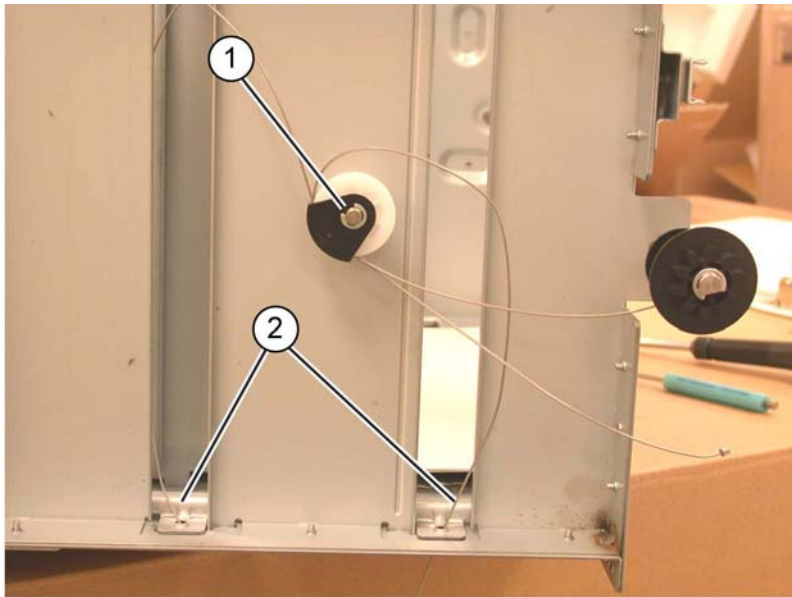
4. When both cables are slack, disengage the lift shaft from the frame, Then slide the tray cable pulley to the front of the lift shaft to release the rear lift cable ends that are trapped in the pocket underneath the tray cable pulley, [Figure 3](#).



C-1-0467-A

Figure 3 Releasing the cable ends

5. Remove the front tray cables, [Figure 4](#):
 - a. Remove the E-ring, wire guide and pulley (1).
 - b. Remove the cables (2).

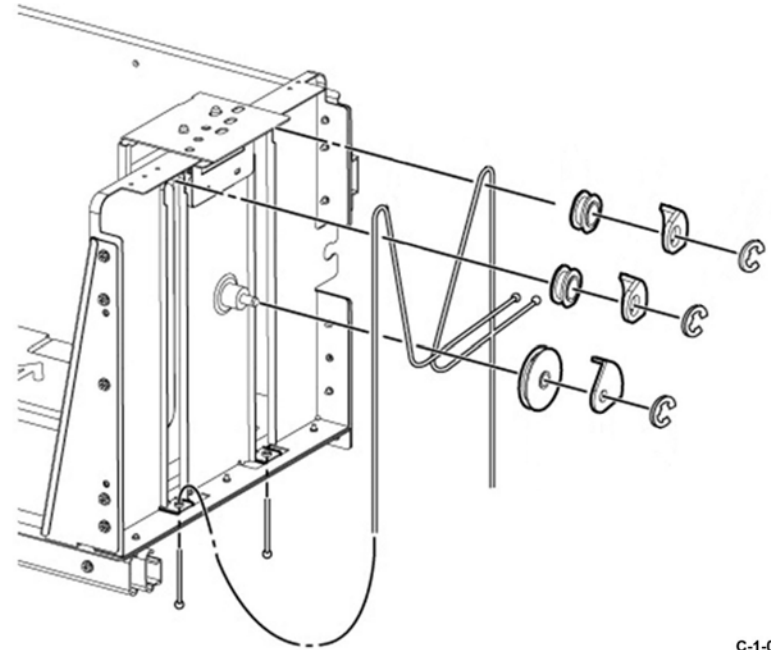


C-1-0468-A

Figure 4 Front cables removal

Replacement

1. The replacement is the reverse of the removal procedure. Refer to [Figure 5](#).



C-1-0469-A

Figure 5 Replacement

2. When reinstalling the HCF tray front cover, raise the gear on the indicator shaft so that it meshes with the adjoining lift shaft gear.

REP 70.7 HCF Casters

Parts List on [PL 70.60](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the HCF, [REP 70.4](#).
2. Remove all paper from the HCF tray.
3. Move the HCF away from the machine.
4. Turn the HCF over onto its left side to expose the casters on the underside of the HCF.
5. Remove the relevant caster, [PL 70.60 Item 2](#).

Replacement

The replacement is the reverse of the removal procedure.

REP 70.8 HCF PWB

Parts List on [PL 70.60](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



Observe ESD procedures during this procedure.

1. If possible, record the current software level by either:
 - Printing the configuration report, [GP 14](#).
 - From the user interface Home screen, touch Device, then About. Scroll down to view the Software Version.
2. Undock the HCF, [REP 70.4](#).
3. Remove the rear cover, [PL 70.45 Item 10](#).
4. Disconnect all connectors from the HCF PWB.
5. Remove the HCF PWB, [PL 70.60 Item 9](#).

Replacement

1. The replacement is the reverse of the removal procedure.
2. Check the machines current software level against the software level recorded prior to installation of the new user interface assembly. If necessary, reload the software, [GP 4](#).

REP 70.9 TTM Tray 3 Lift Shaft and Brake

Parts List on **PL 70.66**

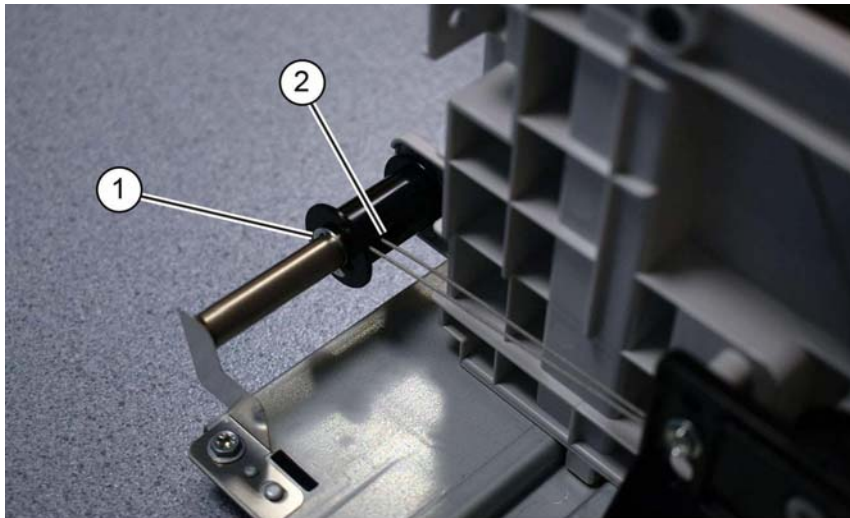
Removal



WARNING

Switch off the electricity to the machine. Refer to **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

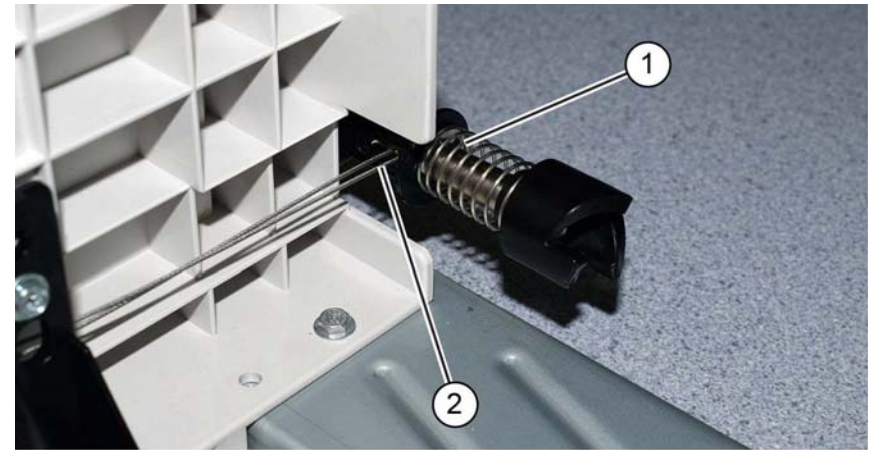
1. Remove the paper from tray 3.
2. Fully pull out tray 3. Remove the paper from tray 3. Lift out tray 3.
3. Remove the tray 3 front cover, **PL 70.65 Item 18**.
4. Release the front lift cables, **Figure 1**:
 - a. Remove the E-clip (1).
 - b. Release the front lift cables (2).



C-1-0479-A

Figure 1 Front cables

5. Release the rear lift cables, **Figure 2**:
 - a. Pull the spring away from the pulley, then remove the E-clip (1).
 - b. Release the rear lift cables (2).



C-1-0480-A

Figure 2 Rear cables

6. Remove the E-clip (1), **Figure 3**:



C-1-0481-A

Figure 3 Rear E-clip

CAUTION

The lift shaft brake, item 3 in Figure 4, is secured on the lift shaft by a pin. Do not lose the pin when the lift shaft is removed.

7. Remove the lift shaft, Figure 4:
 - a. Release the front and rear bearings (1).
 - b. Remove the lift shaft (2).

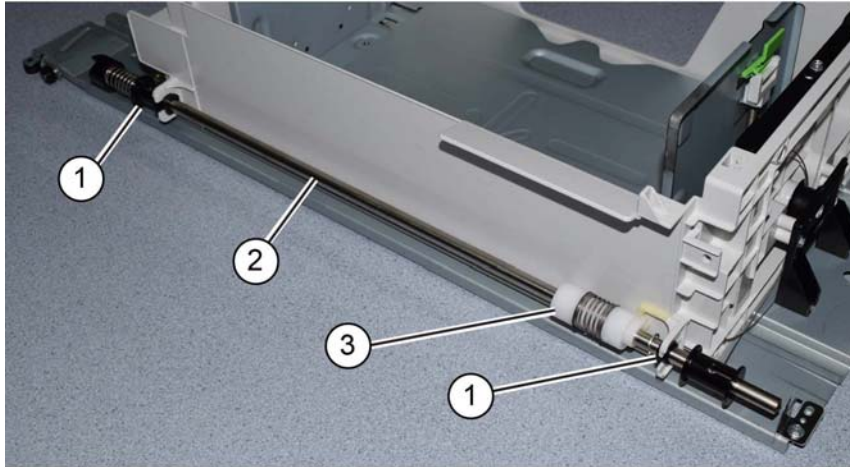


Figure 4 Lift shaft removal

C-1-0482-A

8. If necessary, remove the front pulley bearing, E-clip and brake.

Replacement

1. The replacement is the reverse of the removal procedure.

NOTE: The thick E-clips secure the bearings, the thinner E-clips secure the pulleys.

2. Ensure the brake securing pin (1) is installed correctly, Figure 5.

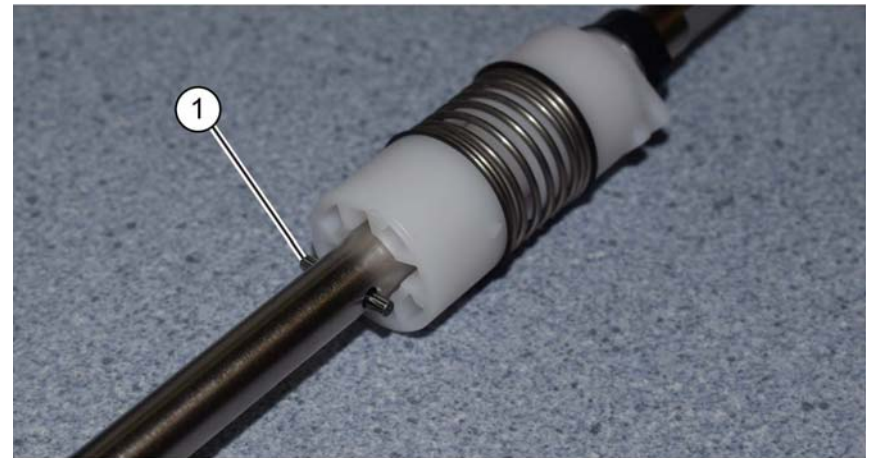


Figure 5 Pin

3. Ensure the brake (1) is correctly positioned against the tray frame, Figure 6.



Figure 6 Brake

C-1-0484-A

REP 70.10 TTM Tray 4 Lift Shaft and Brake

Parts List on PL 70.67

Removal



WARNING

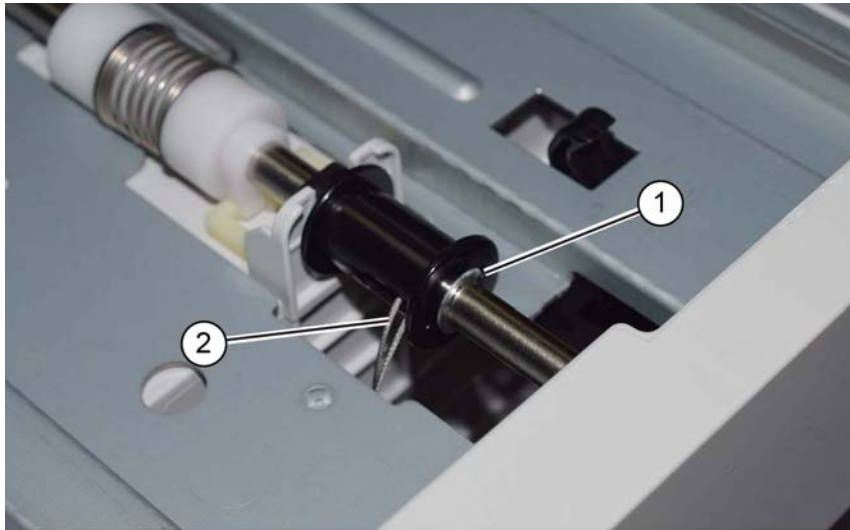
Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



CAUTION

Ensure the tray 4 transport assembly, PL 80.70 Item 11 is supported when removing tray 4.

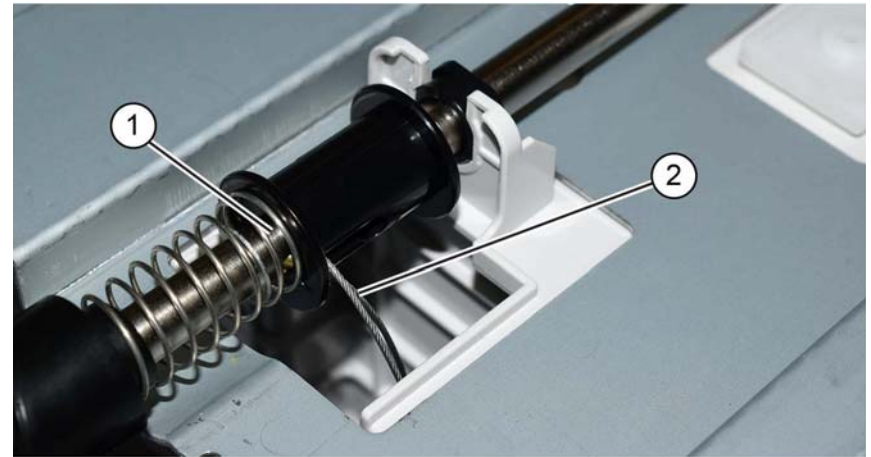
1. Fully pull out tray 4. Remove the paper from tray 4. Lift out tray 4.
2. Remove the tray 4 transport assembly, PL 80.70 Item 11.
3. Remove the tray 4 front cover, PL 70.65 Item 3.
4. Turn tray 4 upside down.
5. Release the front lift cables, Figure 1:
 - a. Remove the E-clip (1).
 - b. Release the front lift cables (2).



C-1-0485-A

Figure 1 Front cables

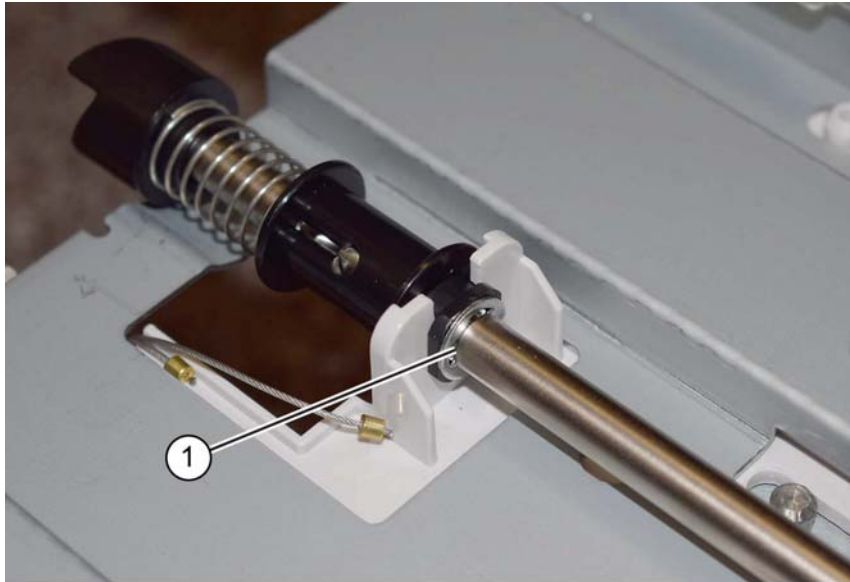
6. Release the rear lift cables, Figure 2:
 - a. Pull the spring away from the pulley, then remove the E-clip (1).
 - b. Release the rear lift cables (2).



C-1-0486-A

Figure 2 Rear cables

7. Remove the E-clip (1), **Figure 3**:



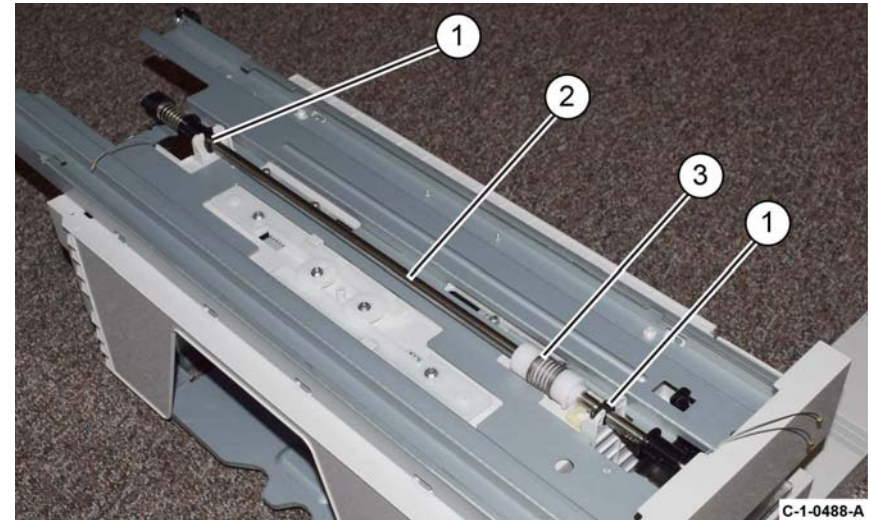
C-1-0487-A

Figure 3 Rear E-clip

CAUTION

*The lift shaft brake, item 3 in **Figure 4**, is secured on the lift shaft by a pin. Do not lose the pin when the lift shaft is removed.*

8. Remove the lift shaft, **Figure 4**:
- Release the front and rear bearings (1).
 - Remove the lift shaft (2).



C-1-0488-A

Figure 4 Lift shaft removal

9. If necessary, remove the front pulley bearing, E-clip and brake.

Replacement

1. The replacement is the reverse of the removal procedure.

NOTE: The thick E-clips secure the bearings, the thinner E-clips secure the pulleys.

2. Ensure the brake securing pin (1) is installed correctly, [Figure 5](#).



Figure 5 Pin

3. Ensure the brake (1) is correctly positioned against the tray frame, [Figure 6](#).

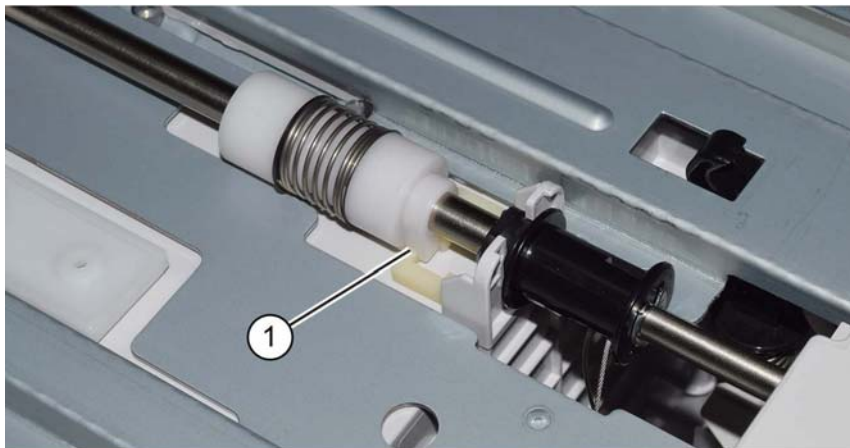


Figure 6 Brake

REP 70.11 Tray 1 Assembly

Parts List on [PL 70.05](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove tray 1.
2. Remove the tray 1 RAI cover, [PL 70.05 Item 10](#).

Replacement

1. Install the RAI cover onto the new tray 1.
2. Install the new tray 1 assembly.

REP 80.1 Tray 1 Feeder Assembly

Parts List on [PL 80.10](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 1.
2. Open the LH transport assembly.
3. Remove the bypass tray, [REP 70.2](#).
4. Remove the bypass tray R cover, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the bypass tray R cover (2).

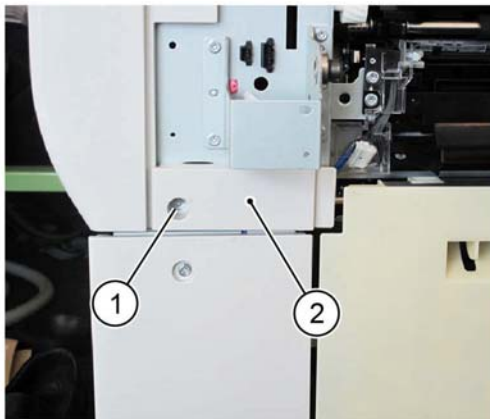


Figure 1 Bypass tray R cover removal

C-1-0173-A

5. Disconnect the connectors, [Figure 2](#):
 - a. Release the harness from the retainer (1).
 - b. Release the harness from the harness holder (2).
 - c. Disconnect two connector (3).

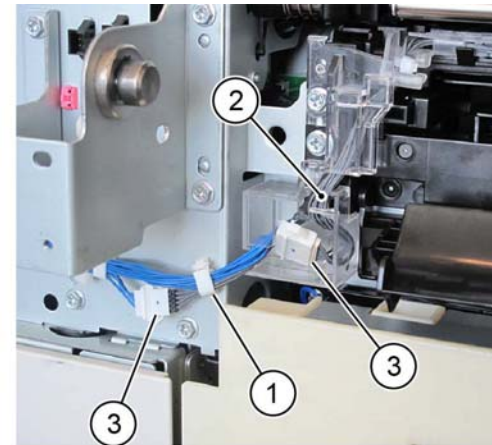


Figure 2 Connectors

C-1-0174-A

6. Remove the harness holder, [Figure 3](#):
 - a. Remove the screw (1).
 - b. Remove the harness holder (2).

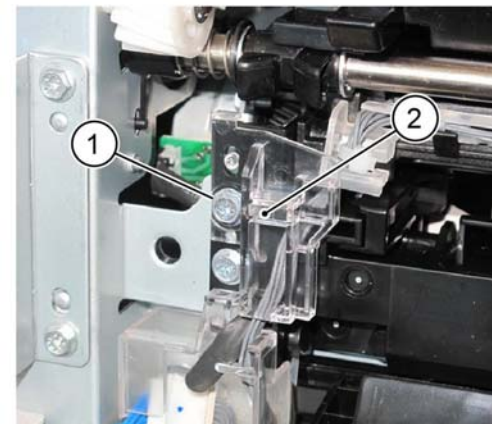


Figure 3 Harness holder removal

C-1-0175-A

7. Remove the feed out chute (1), [Figure 4](#).

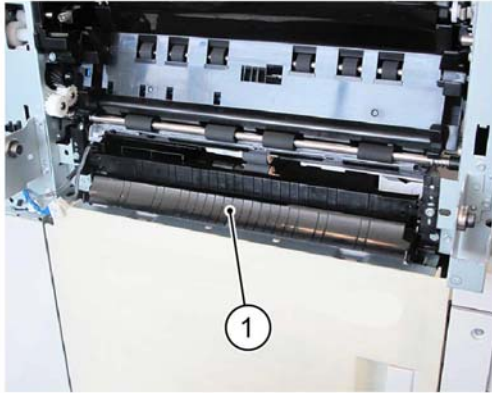


Figure 4 Feed out chute removal

8. Remove the tray 1 feeder assembly, [Figure 5](#):
 - a. Remove two screws (1).
 - b. Remove the tray 1 feeder assembly (2).

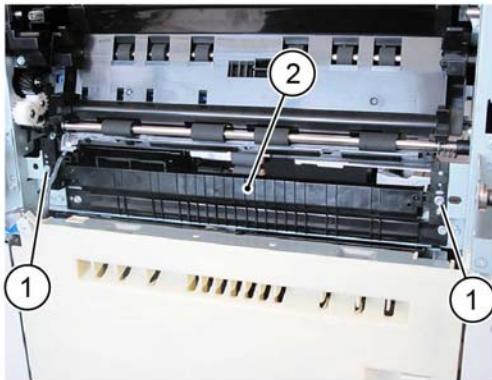


Figure 5 Tray 1 feeder assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new tray 1 feeder assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-800.

REP 80.2 Tray 1 Feed/Retard/Nudger Roll

Parts List on [PL 80.11](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: New feed, retard and nudger rolls must be installed at the same time.

1. Pull out tray 1.
2. Remove the tray 1 feed, retard and nudger rolls, [Figure 1](#):
 - a. Slide the chute (1) forwards.
 - b. Release the clip, then remove the tray 1 feed, retard and nudger rolls (2).

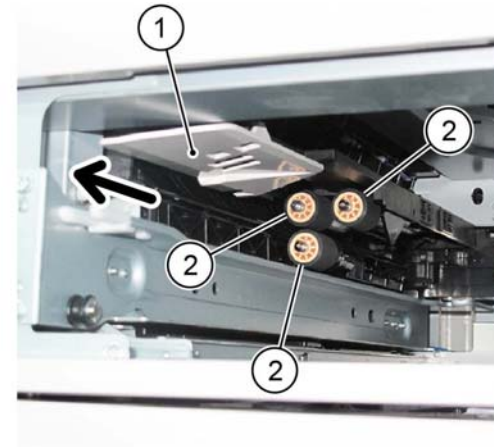


Figure 1 Roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new tray 1 feed, retard and nudger rolls are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-800.

REP 80.3 Tray 2 Feeder Assembly (1TM)

Parts List on [PL 80.15](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 2. Remove the paper.
2. Remove tray 2.
3. Open the left cover assembly, [PL 70.15 Item 12](#).
4. Remove the ESD cover, [Figure 1](#):
 - a. Disengage the hook (1).
 - b. Remove the ESD cover (2).

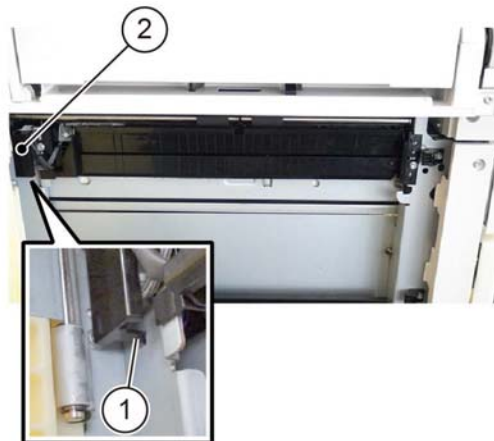
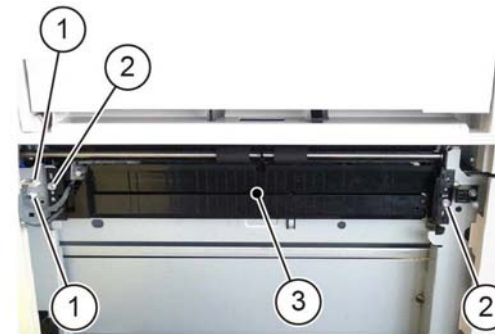


Figure 1 ESD cover removal

C-1-0179-A

5. Remove the tray 2 feeder assembly, [Figure 2](#):
 - a. Disconnect the connectors (1).
 - b. Remove two screws (2).
 - c. Remove the tray 2 feeder assembly (3).



C-1-0180-A

Figure 2 Tray 2 feeder assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new tray 2 feeder assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-801.

REP 80.4 1TM PWB

Parts List on [PL 70.17](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.

1. Remove the rear cover, [Figure 2](#):
 - a. Remove four screws (1).
 - b. Remove the rear cover (2).

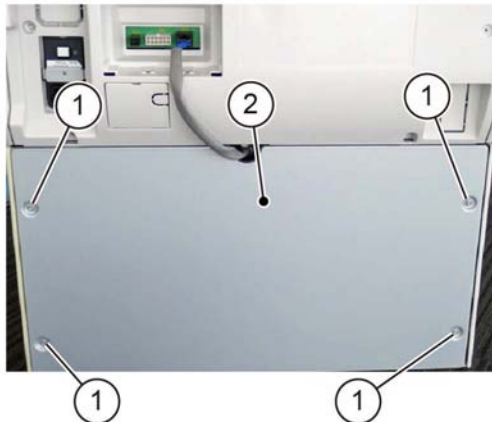


Figure 2 Rear cover removal

C-1-0181-A

2. Remove the 1TM PWB, [Figure 3](#):
 - a. Disconnect five connectors (1).
 - b. Remove four screws (2).
 - c. Remove the 1TM PWB (3).

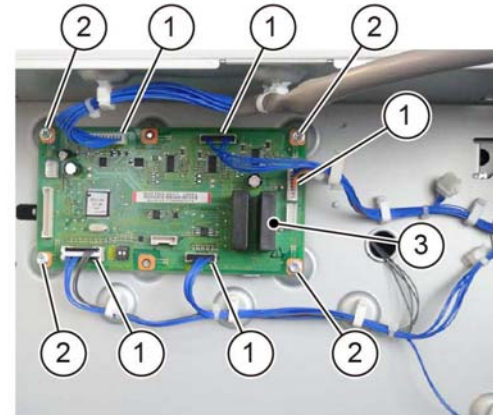


Figure 3 1TM PWB removal

C-1-0182-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new 1TM PWB is installed, enter [dC131](#). Change the value of NVM ID 742-205 to '0'.

REP 80.5 1TM Takeaway Motor

Parts List on **PL 70.17**

Removal



WARNING

Switch off the electricity to the machine. Refer to **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, **Figure 1**:
 - a. Remove four screws (1).
 - b. Remove the rear cover (2).

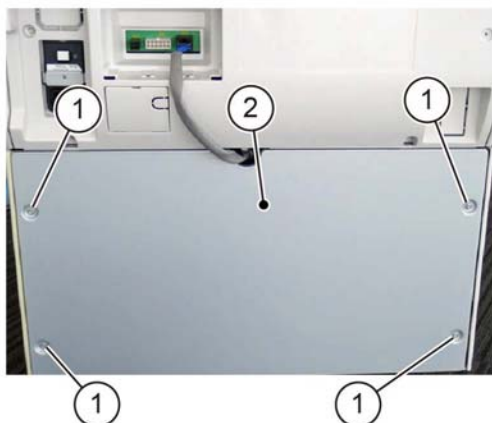


Figure 1 Rear cover removal

C-1-0183-A

2. Remove the 1TM takeaway motor, **Figure 2**:
 - a. Release the clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove two screws (3).
 - d. Remove the 1TM takeaway motor (4).

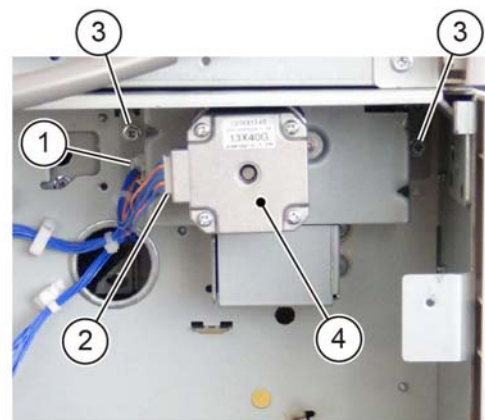


Figure 2 1TM takeaway motor removal

C-1-0184-A

Replacement

The replacement is the reverse of the removal procedure.

REP 80.6 Tray 2 Feed/Retard/Nudger Roll (1TM)

Parts List on [PL 80.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: New feed, retard and nudger rolls must be installed at the same time.

1. Pull out tray 1 and tray 2. Remove the paper.
2. Remove tray 1 and tray 2.
3. Open the left cover assembly, [PL 70.15 Item 12](#).
4. Remove the tray 2 feed, retard and nudger rolls (1TM), [Figure 1](#):
 - a. Slide the chute (1) forwards.
 - b. Release the clip, then remove the tray 2 feed, retard and nudger rolls (2).

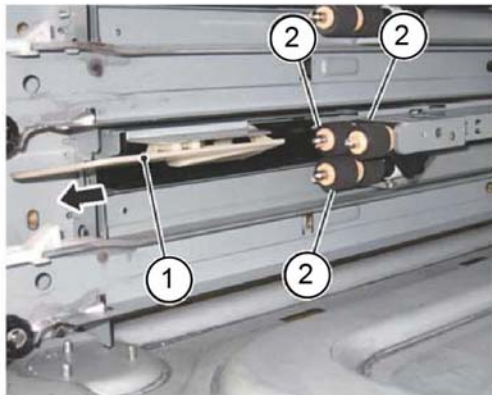


Figure 1 Roll removal

C-1-0185-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new tray 2 feed, retard and nudger rolls are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-801.

REP 80.7 Tray 2 Feeder Assembly (3TM)

Parts List on [PL 80.30](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 2. Remove the paper.
2. Remove tray 2.
3. Open the left cover assembly, [PL 70.20 Item 11](#).
4. Remove the ESD cover, [Figure 1](#):
 - a. Disengage the hook (1).
 - b. Remove the ESD cover (2).

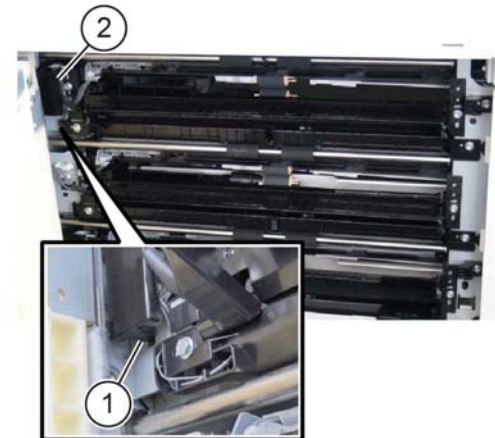


Figure 1 ESD cover removal

C-1-0186-A

5. Remove the tray 2 feeder assembly, [Figure 2](#):
 - a. Disconnect two connectors (1).
 - b. Remove two screws (2).
 - c. Remove the tray 2 feeder assembly (3).

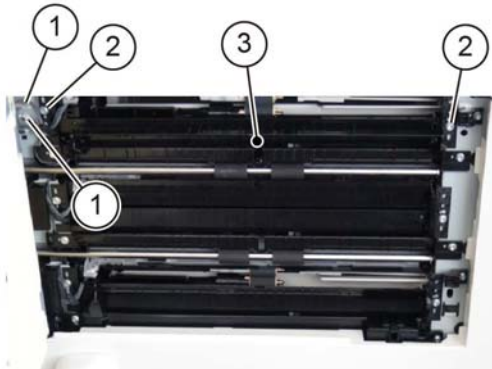


Figure 2 Tray 2 feeder assembly removal

C-1-0187-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new tray 2 feeder assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-801.

REP 80.8 Tray 3 Feeder Assembly (3TM)

Parts List on [PL 80.30](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 3. Remove the paper.
2. Remove tray 3.
3. Open the left cover assembly, [PL 70.20 Item 11](#).
4. Remove the ESD cover, [Figure 1](#):
 - a. Disengage the hook (1)
 - b. Remove the ESD cover (2).

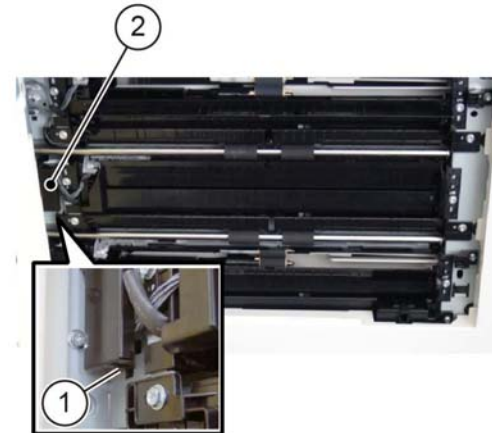


Figure 1 ESD cover removal

C-1-0188-A

5. Remove the tray 3 feeder assembly, [Figure 2](#):
 - a. Disconnect two connectors (1).
 - b. Remove two screws (2).
 - c. Remove the tray 3 feeder assembly (3).

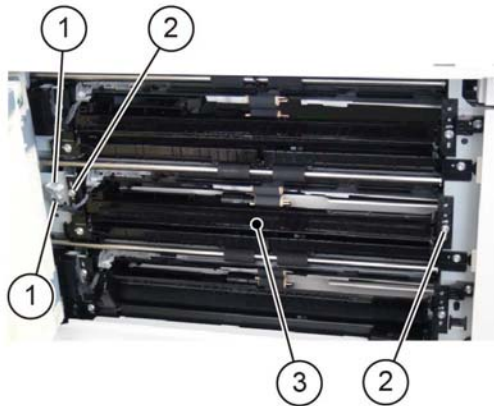
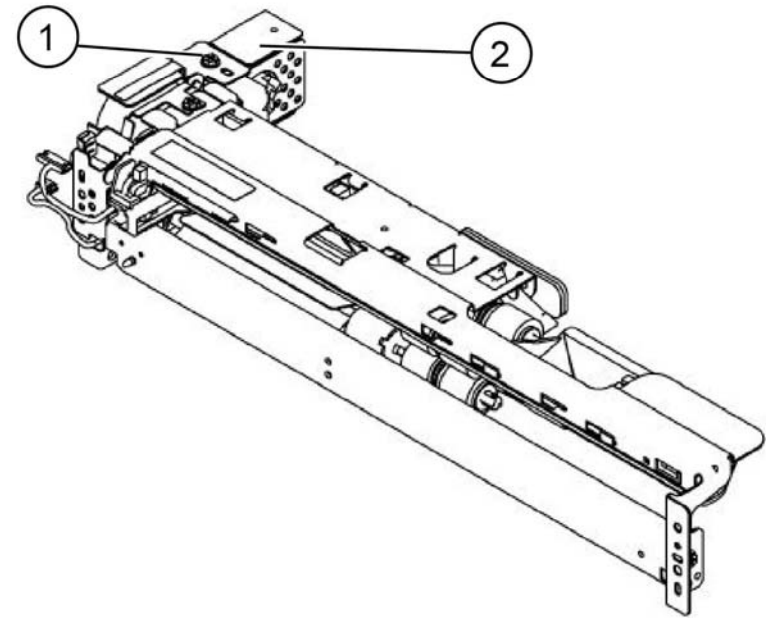


Figure 2 Tray 3 feeder assembly removal

C-1-0189-A

6. Remove the FDR 2T cover from the main tray 3 feeder, [Figure 3](#).
 - a. Remove the screw (1).
 - b. Remove the FDR 2T cover (2). Retain the cover for installation onto the new tray 4 feeder assembly.



C-1-0535-A

Figure 3 Tray 3 bracket removal

Replacement



Ensure that the FDR 2T cover is installed onto the new tray 3 feeder assembly. Refer to [Figure 3](#).

1. The replacement is the reverse of the removal procedure.
2. If new tray 3 feeder assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-802.

REP 80.9 Tray 4 Feeder Assembly (3TM)

Parts List on [PL 80.30](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 4. Remove the paper.
2. Remove tray 4.
3. Open the left cover assembly, [PL 70.20 Item 11](#).
4. Remove the ESD cover, [Figure 1](#):
 - a. Disengage the hook (1)
 - b. Remove the ESD cover (2).

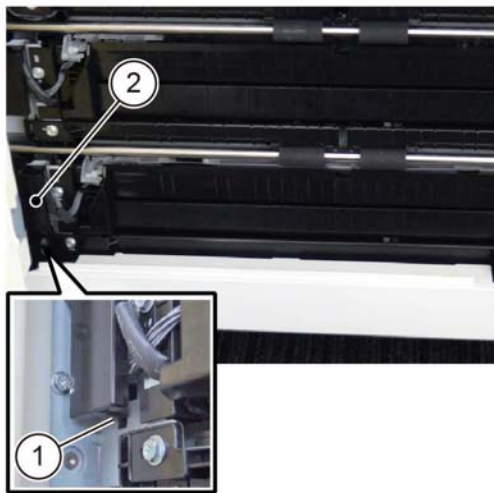


Figure 1 ESD cover removal

5. Remove the tray 4 feeder assembly, [Figure 2](#):
 - a. Disconnect two connectors (1).
 - b. Remove two screws (2).
 - c. Remove the tray 4 feeder assembly (3).

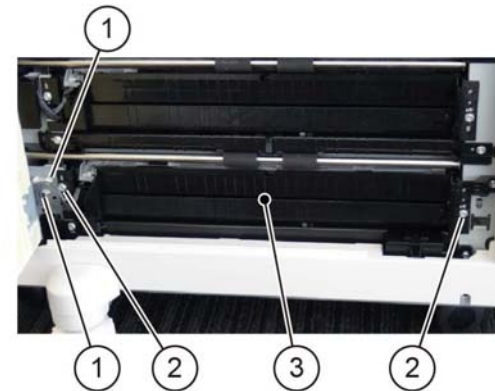


Figure 2 Tray 4 feeder assembly removal

C-1-0191-A

6. Remove the FDR 2T cover from the main tray 4 feeder, [Figure 3](#).
 - a. Remove the screw (1).
 - b. Remove the FDR 2T cover (2). Retain the cover for installation onto the new tray 4 feeder assembly.

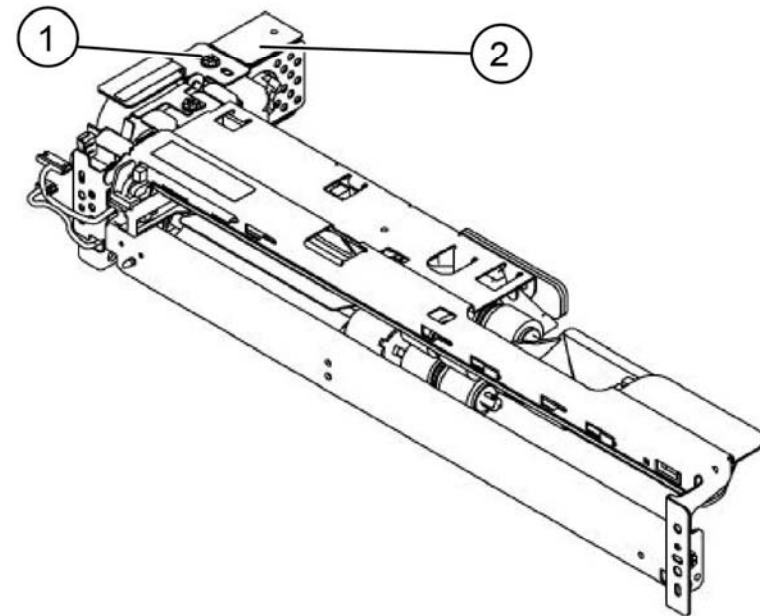


Figure 3 Tray 4 bracket removal

C-1-0190-A

Replacement



CAUTION

Ensure that the FDR 2T cover is installed onto the new tray 3 feeder assembly. Refer to [Figure 3](#).

1. The replacement is the reverse of the removal procedure.
2. If new tray 4 feeder assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-803.

REP 80.10 3TM PWB

Parts List on [PL 70.23](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.

1. Remove the rear cover, [Figure 2](#):
 - a. Remove four screws (1).
 - b. Remove the rear cover (2).

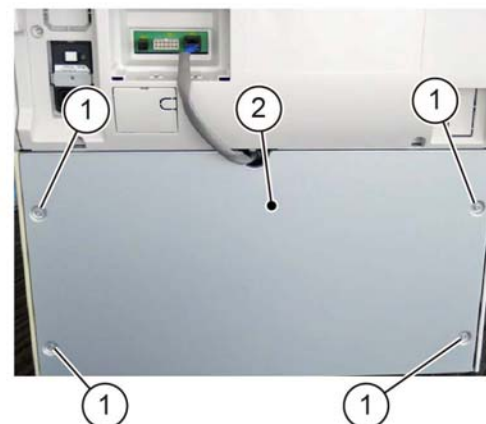


Figure 2 Rear cover removal

C-1-0192-A

2. Remove the 3TM PWB, [Figure 3](#):
 - a. Disconnect six connectors (1).
 - b. Remove four screws (2).
 - c. Remove the 3TM PWB (3).

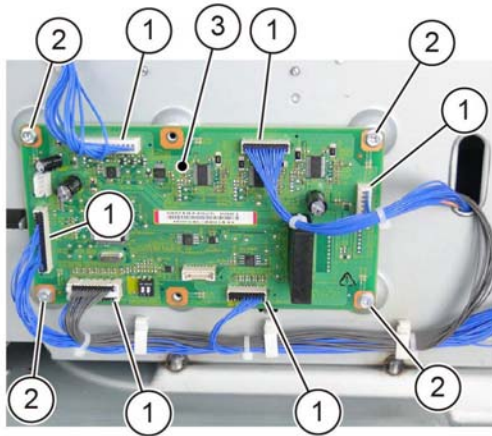


Figure 3 3TM PWB removal

C-1-0193-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new 3TM PWB is installed, enter [dC131](#). Change the value of NVM ID 742-205 to '1'.

REP 80.11 3TM Takeaway Motor

Parts List on [PL 70.23](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, [Figure 1](#):
 - a. Remove four screws (1).
 - b. Remove the rear cover.

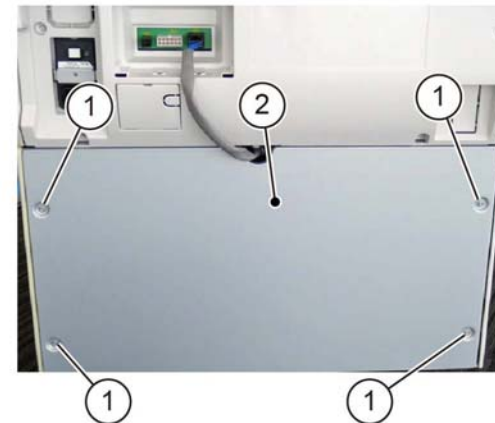


Figure 1 Rear cover removal

C-1-0194-A

2. Remove the 3TM takeaway motor, [Figure 2](#):
 - a. Release the clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove four screws (3).
 - d. Remove the 3TM takeaway motor (4).

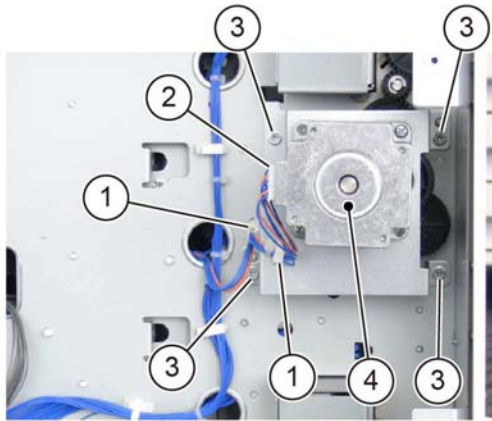


Figure 2 3TM takeaway motor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.12 Tray 2/3/4 Feed/Retard/Nudger Roll (3TM)

Parts List on [PL 80.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: New feed, retard and nudger rolls must be installed at the same time.

1. Pull out trays 2, 3 and 4. Remove the paper.
2. Remove trays 2, 3 and 4.
3. Open the left cover assembly, [PL 70.20 Item 11](#).
4. Remove the tray 2, 3 or 4 feed, retard and nudger rolls, [Figure 1](#):
 - a. Slide the chute (1) forwards.
 - b. Release the clip, then remove the tray 2, 3 or 4 feed, retard and nudger rolls (2).

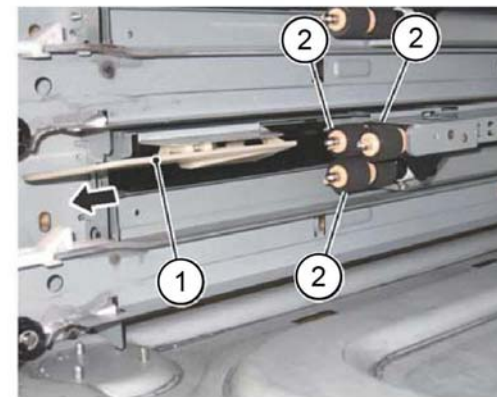


Figure 1 Roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new rolls are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counters that follow:
 - Tray 2 Chain-Link: 954-801
 - Tray 3 Chain-Link: 954-802
 - Tray 4 Chain-Link: 954-803

REP 80.13 STM PWB

Parts List on [PL 70.28](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol

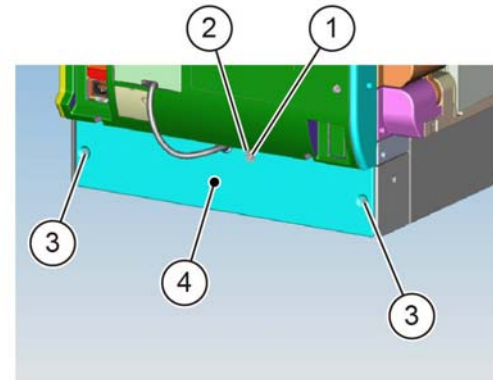


CAUTION

Observe ESD procedures during this procedure.

NOTE: The instructions for recording the NVM value specified in this procedure are also included with the new STM PWB.

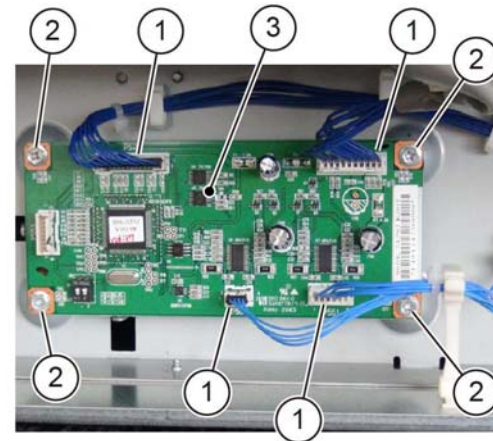
1. Enter [dC131](#). Record the value of NVM location 742-003.
2. Remove the rear cover, [Figure 2](#):
 - a. Remove the docking screw (1).
 - b. Remove the docking bracket (2).
 - c. Remove two screws (3).
 - d. Remove the rear cover (4).



C-1-0197-A

Figure 2 Rear cover removal

3. Remove the STM PWB, [Figure 3](#):
 - a. Disconnect four connectors (1).
 - b. Remove four screws (2).
 - c. Remove the STM PWB (3).



C-1-0198-A

Figure 3 STM PWB Removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new STM PWB is installed, enter [dC131](#). Change the value of NVM location 742-003 to the value recorded at the beginning of this procedure.

REP 80.14 STM Takeaway Motor

Parts List on [PL 70.28](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, [Figure 1](#):
 - a. Remove the docking screw (1).
 - b. Remove the docking bracket (2).
 - c. Remove two screws (3).
 - d. Remove the rear cover (4).

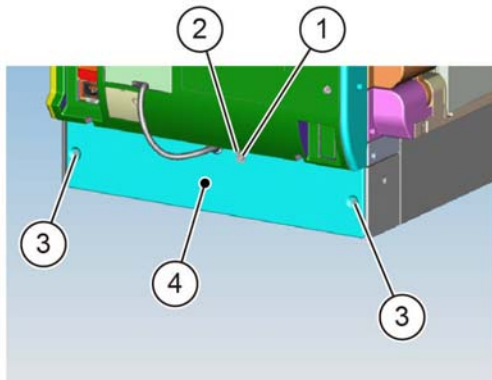


Figure 1 Rear cover removal

2. Remove the STM takeaway motor, [Figure 2](#):
 - a. Disconnect the connector (1).
 - b. Remove two screws (2).
 - c. Remove the STM takeaway motor (3).

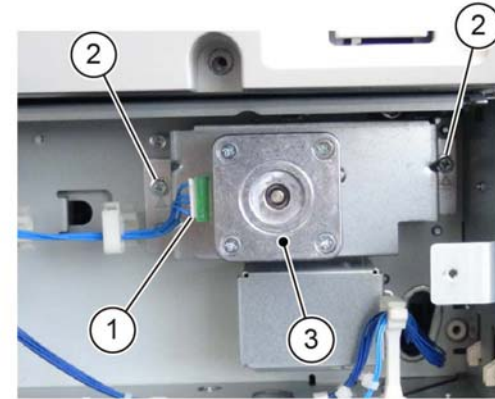


Figure 2 STM takeaway motor removal

C-1-0200-A

Replacement

The replacement is the reverse of the removal procedure.

C-1-0199-A

REP 80.15 Tray 2 Feed/Retard/Nudger Roll (STM)

Parts List on [PL 80.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: New feed, retard and nudger rolls must be installed at the same time.

1. Pull out tray 1 and tray 2. Remove the paper.
2. Remove tray 1 and tray 2.
3. Open the left cover assembly, [PL 70.25 Item 2](#).
4. Remove the tray 2 feed, retard and nudger rolls (1TM), [Figure 1](#):
 - a. Slide the chute (1) forwards.
 - b. Release the clip, then remove the tray 2 feed, retard and nudger rolls (2).

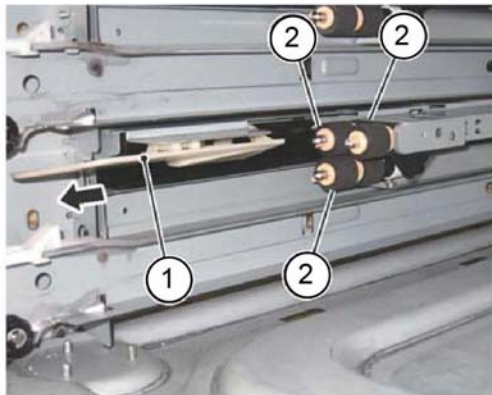


Figure 1 Roll removal

C-1-0185-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new tray 2 feed, retard and nudger rolls are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-801.

REP 80.16 Bypass Tray Nudger/Feed Roll

Parts List on [PL 70.40](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: New feed and nudger rolls and a retard pad must be installed at the same time. Refer to [REP 80.17](#).

1. Remove the bypass tray, [REP 70.2](#).
2. Remove the upper frame, [Figure 1](#):
 - a. Remove the spring (1).
 - b. Remove two crews (2).
 - c. Remove the upper frame (3).

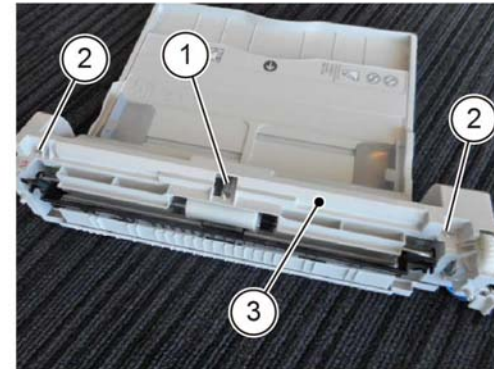
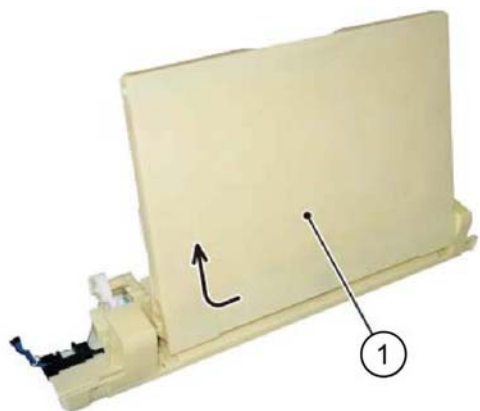


Figure 1 Upper frame removal

C-1-0206-A

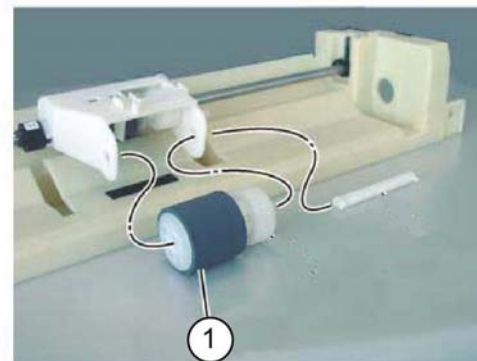
3. Remove the bypass tray assembly in the direction of the arrow, [Figure 2](#).



C-1-0207-A

Figure 2 Tray assembly removal

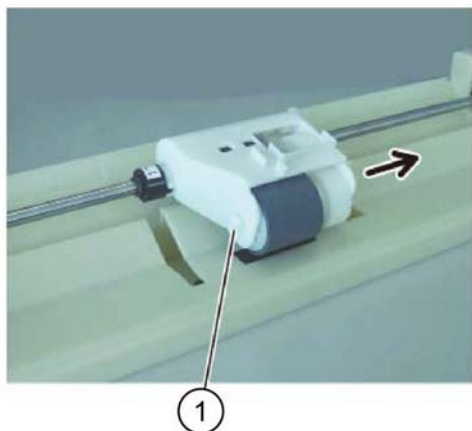
5. Remove the bypass tray nudger roll (1), [Figure 4](#).



C-1-0209-A

Figure 4 Nudger roll removal

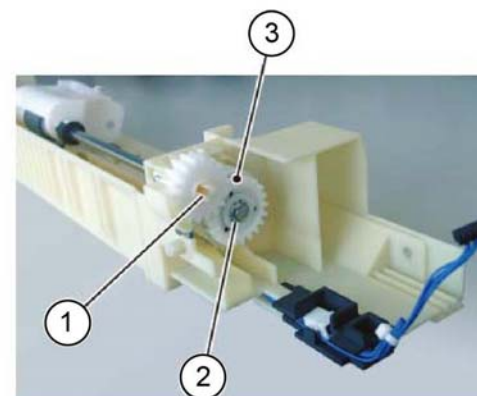
4. Release the shaft, then remove the shaft in the direction of the arrow, [Figure 3](#).



C-1-0208-A

Figure 3 Shaft removal

6. Remove the bypass tray feed clutch, [Figure 5](#):
- Release the hook, then remove the gear (1).
 - Remove the E-clip (2).
 - Remove the bypass tray feed clutch from the shaft (3).



C-1-0210-A

Figure 5 Feed clutch removal

7. Remove the bypass tray feed roll assembly, [Figure 6](#):
 - a. Remove two E-Clips (1).
 - b. Remove the bypass tray feed roll assembly (2).

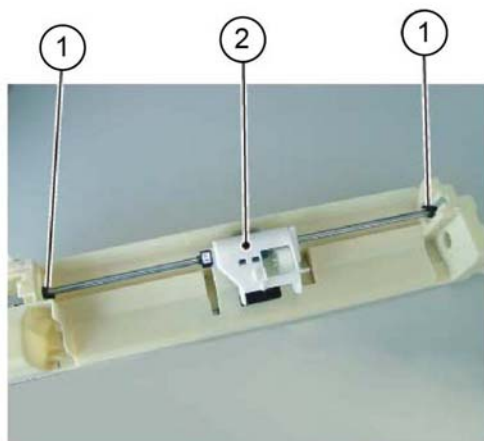


Figure 6 Feed roll assembly removal

C-1-0211-A

8. Move the housing, [Figure 7](#):
 - a. Remove the bearing (1).
 - b. Remove the E-clip (2).
 - c. Move the housing, in the direction of the arrow, to the end of the shaft.

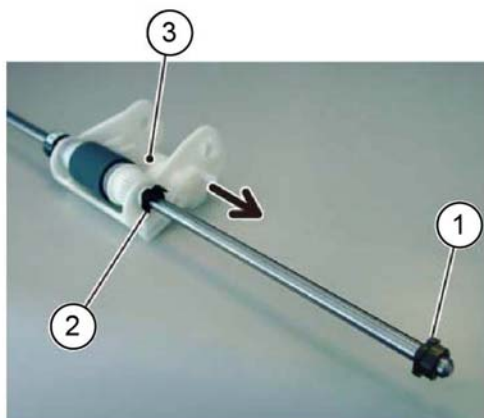


Figure 7 Shaft

C-1-0212-A

9. Remove the bypass tray feed roll, [Figure 8](#):
 - a. Remove the gear (1).
 - b. Remove the bypass tray feed roll (2).

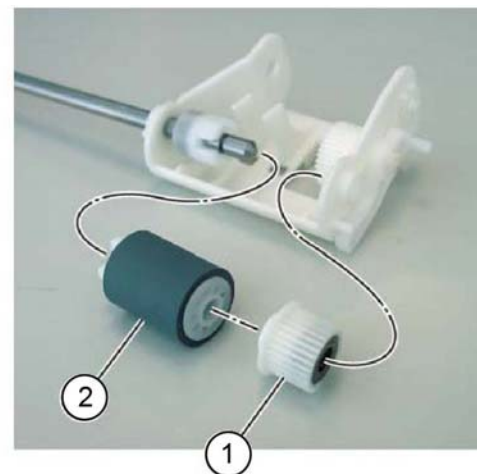


Figure 8 Feed roll removal

C-1-0213-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the bypass tray feed clutch, align the cutout of the bypass tray feed clutch with the tab, [Figure 9](#).

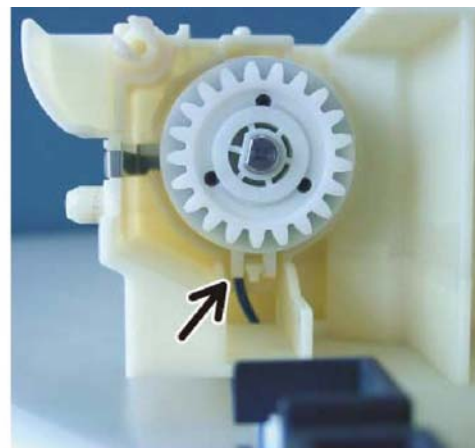


Figure 9 Feed clutch alignment

C-1-0214-A

3. If new bypass tray feed and nudger rolls are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-805.

REP 80.17 Bypass Tray Retard Pad

Parts List on [PL 70.40](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: A new retard pad and feed and nudger rolls must be installed at the same time. Refer to [REP 80.16](#).

1. Remove the bypass tray, [REP 70.2](#).
2. Remove the bypass tray low chute, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the bypass tray low chute (2).

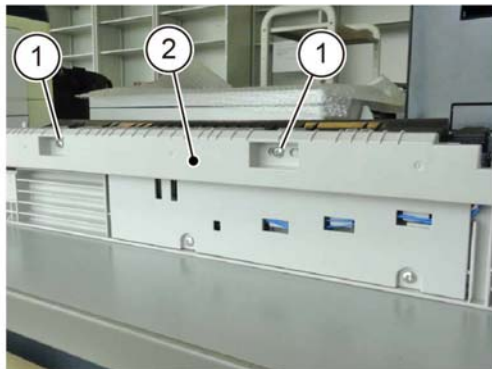
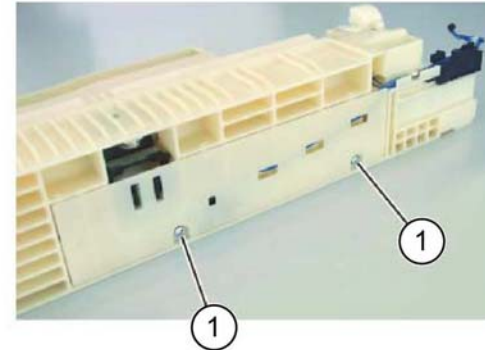


Figure 1 Low chute removal

C-1-0215-A

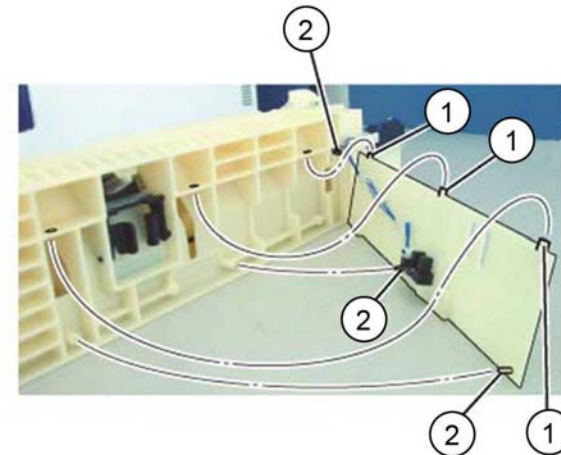
3. Remove two screws (1) that secure the bypass tray lower cover at the bottom of the bypass tray, [Figure 2](#).



C-1-0216-A

Figure 2 Bypass tray lower cover

4. Release three hooks (1) and three bosses (2) from the installation holes to open the bypass tray lower cover, [Figure 3](#).



C-1-0217-A

Figure 3 Bypass tray lower cover removal

5. Remove the bypass tray retard pad, [Figure 4](#).
 - a. Remove the spring (1).
 - b. Release the bosses (2), then remove the bypass tray retard pad.

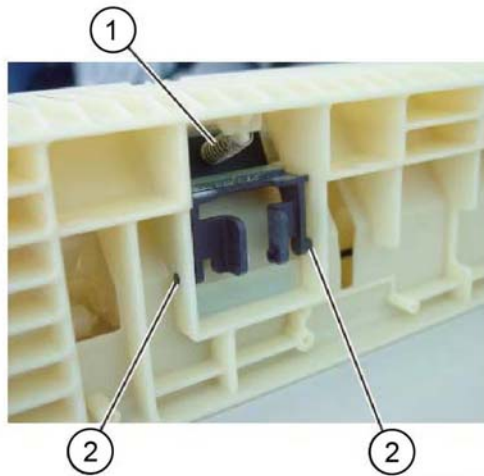


Figure 4 Retard pad removal

C-1-0218-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new bypass tray retard pad is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-805.

REP 80.18 L/H Cover

Parts List on [PL 80.40](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the bypass tray, [REP 70.2](#).
2. Pull out tray 1. Remove the screw (1) that secures the hinge front cover, [Figure 1](#).

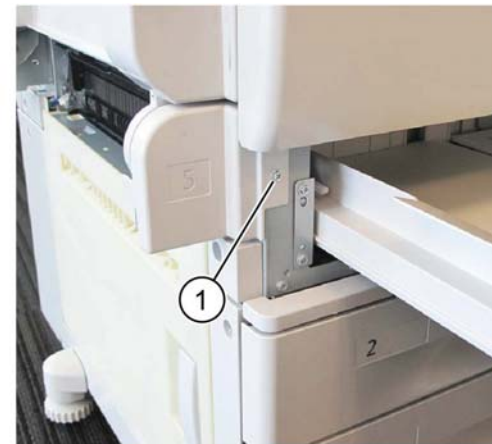


Figure 1 Hinge front cover

C-1-0219-A

3. Pull out the bossed (1) from the mounting holes. Release the hook (2), then remove the hinge front cover, **Figure 2**.

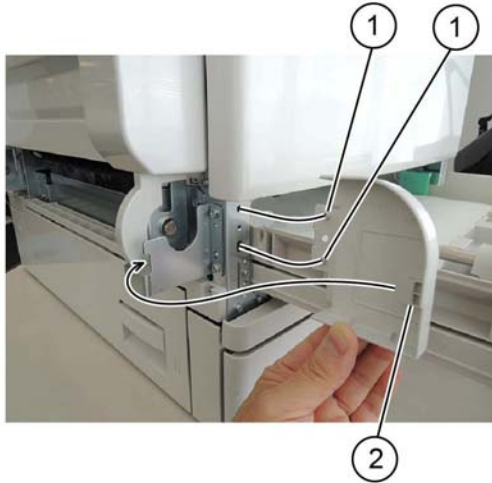


Figure 2 Hinge front cover removal

4. Disconnect the connector, **Figure 3**:
- Release the harness from the retainer (1).
 - Disconnect the connector (2).

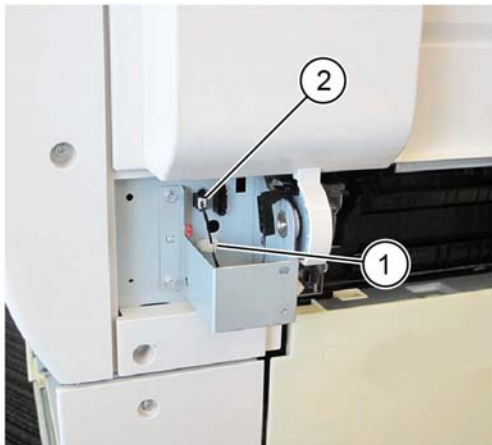


Figure 3 Connector

5. Remove the L/H cover, **Figure 4**:
- Open the LH cover.
 - Rotate by 90 degrees, then disconnect the rear support (1).
 - Rotate by 90 degrees, then disconnect the front support (2).
 - Hold the L/H cover (3) open at 90 degrees.
 - Remove the L/H cover in the direction of the arrow (4).

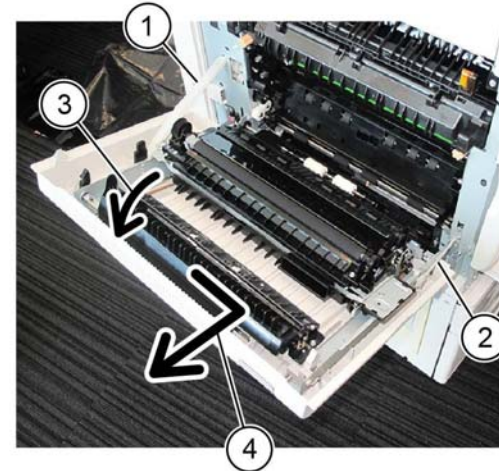


Figure 4 LH cover removal

C-1-0220-A

C-1-0222-A

C-1-0221-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Align the tab on the LH cover front frame with the cutout on the bypass tray front frame assembly then move the LH cover backwards, [Figure 5](#).

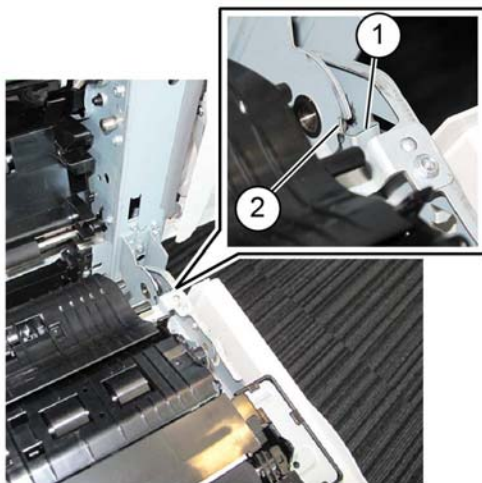


Figure 5 Alignment

C-1-0224-A



CAUTION

When reinstalled the LH cover, do not let the rear harness guide (1) contact the bracket. Refer to [Figure 6](#).

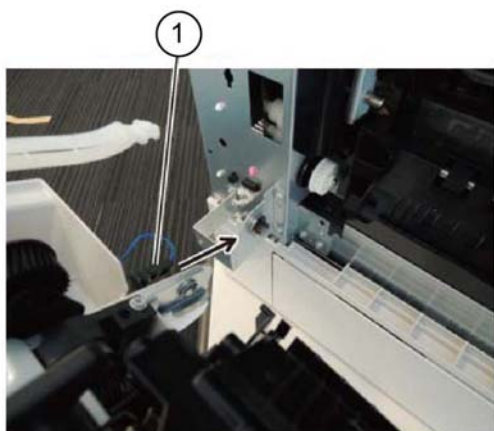


Figure 6 Harness guide

C-1-0223-A

REP 80.19 Registration Transport Assembly

Parts List on [PL 80.55](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the bypass tray, [REP 70.2](#).
2. Remove the L/H cover, [REP 80.18](#).
3. Remove the connector cover, [Figure 1](#):
 - a. Remove the screw (1).
 - b. Remove the connector cover (2).

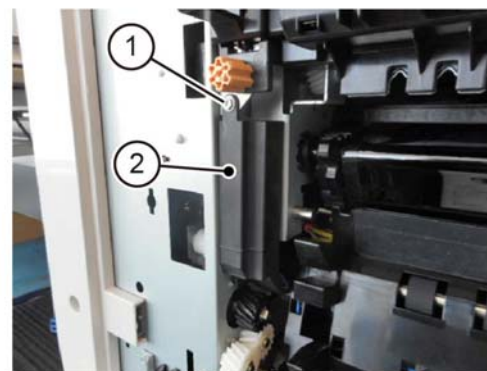


Figure 1 Connector cover removal

C-1-0639-A

4. Disconnect the connector, [Figure 2](#).
 - a. Release the clamp (1) and remove the wire harness.
 - b. Remove the cable band (2).
 - c. Disconnect the connector (3).

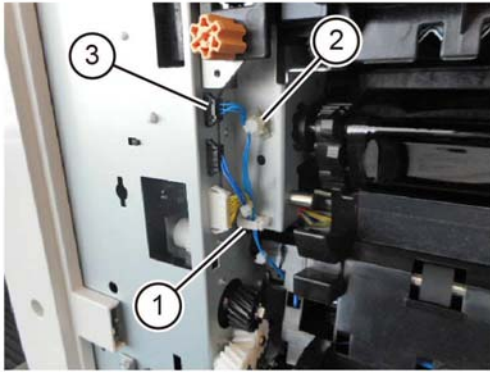


Figure 2 Connector removal

5. Remove the registration transport assembly, Figure 3:
 - a. Remove the screw (1).



CAUTION

Take care not to damage the paper guide when removing the registration transport assembly. Damage to the paper guide may result in paper jams.

- b. Move the registration transport assembly (2) to the rear, then forward, (as shown by direction of the arrows) and remove.

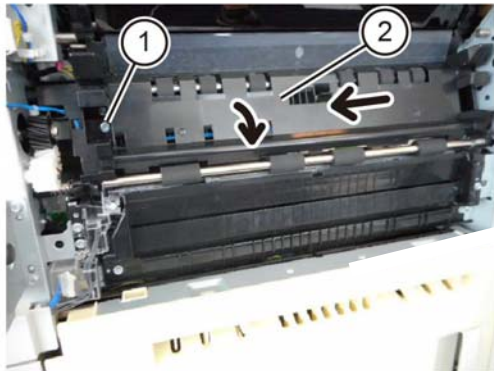


Figure 3 Registration transport assembly removal

C-1-0640-A

REP 80.20 Registration Roll

Parts List on [PL 80.55](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the drum cartridges, [REP 90.12](#).
2. Remove the front cover, [REP 28.1](#).
3. Remove the inner cover, [REP 28.2](#).
4. Remove the bypass tray, [REP 70.2](#).
5. Remove the LH cover, [REP 80.18](#).
6. Remove the registration transport assembly, [REP 80.19](#).
7. Remove the drive assembly, [REP 40.1](#).
8. Remove the registration clutch assembly, Figure 1:
 - a. Release the harness from the guide (1).
 - b. Disconnect the connector (2).
 - c. Remove the E-clip (3).
 - d. Remove the registration clutch gear (4).
 - e. Remove the registration clutch assembly (5).

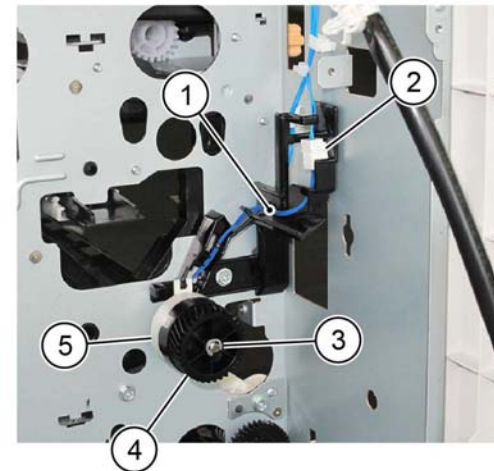


Figure 1 Registration clutch assembly removal

C-1-0228-A

C-1-0641-A

Replacement

The replacement is the reverse of the removal procedure.

9. Remove the front bearing, **Figure 2**:
 - a. Remove the E-clip (1).
 - b. Remove the registration coupling (2).
 - c. Remove the bearing (3).

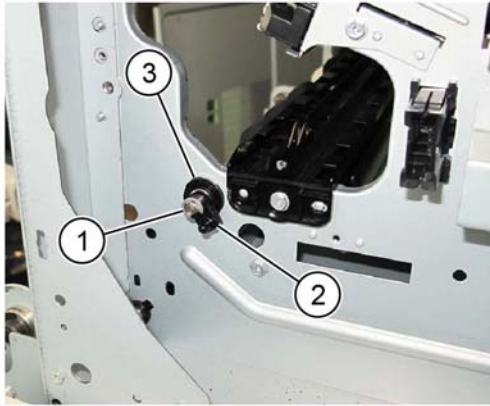


Figure 2 Front bearing removal

10. Remove the rear bearing, **Figure 3**.

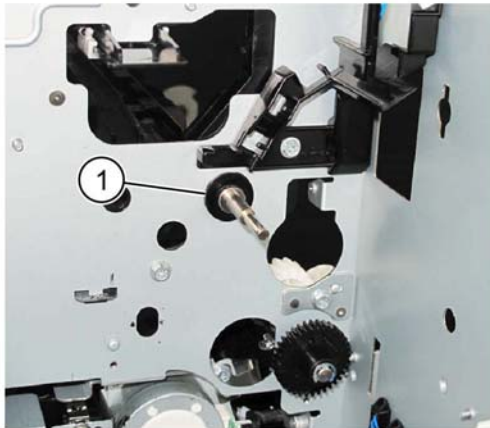


Figure 3 Rear bearing removal

11. Remove the registration roll, **Figure 4**.



C-1-0231-A

Figure 4 Registration roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the registration clutch assembly, align the cutout with the harness guide tab, **Figure 5**.



C-1-0232-A

Figure 5 Alignment

C-1-0229-A

C-1-0230-A

REP 80.21 HCF Feeder

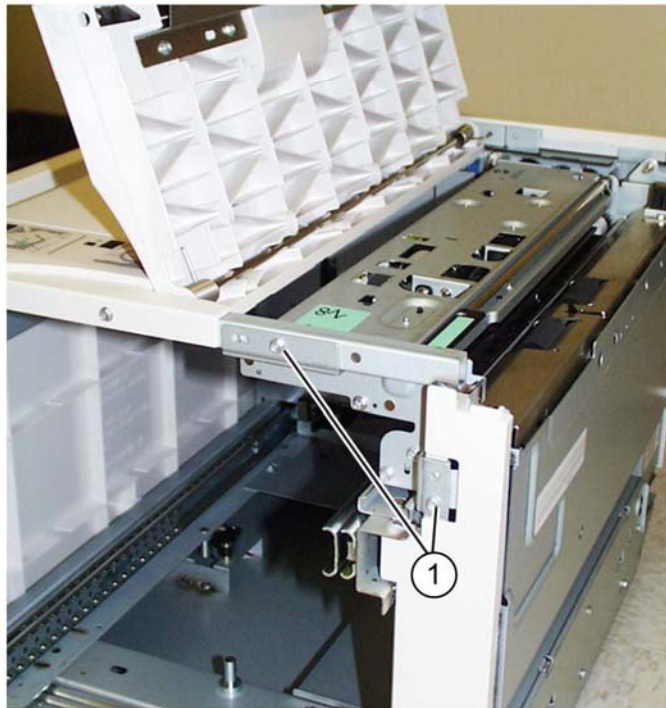
Parts List on [PL 80.60](#), [PL 80.61](#) and [PL 80.62](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Move the HCF away from the machine.
2. Open the feeder top cover, [PL 70.55 Item 7](#).
3. Remove two screws (1) that secure the HCF feeder to the rail, [Figure 1](#).



C-1-0457-A

Figure 1 Feeder securing screws

4. Slide the HCF feeder forwards to remove.

Replacement

1. Position the HCF feeder guides onto the internal HCF rail.
2. Slide the HCF feeder back into the HCF until it seats.



Do not over tighten the HCF Feeder screws.

3. Reinstall the two securing screws.

REP 80.22 HCF Feed, Nudger and Retard Rolls

Parts List on [PL 80.61](#) and [PL 80.62](#)

Removal

NOTE: New feed, retard and nudger rolls must be installed at the same time.



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the feeder top cover, [PL 70.55 Item 7](#).
2. Release the green lever to open the upper feeder assembly to reveal the three rolls.

NOTE: For reference purposes, the single roll in the upper feeder assembly is the nudger roll. The double roll in the upper feeder assembly is the feed roll. The larger double roll in the lower feeder component is the retard roll.

3. Remove each roll by squeezing the roll's shaft at both ends and lifting the roll up and out of the HCF.

Replacement

1. Install each new roll by squeezing its shaft at both ends and sliding the roll into place.
2. Check that the rolls turn freely.
3. Close the upper feeder assembly.
4. Close the feeder top cover of the HCF.

REP 80.23 HCF Feed Shaft Assembly

Parts List on [PL 80.61](#)

Removal



Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the HCF feeder, [REP 80.21](#).
2. Place the feeder on a flat surface.
3. Open the upper feeder assembly by releasing the green lever.
4. Remove the nudger roll by squeezing the roll's shaft at both ends (with the thumb and forefinger of one hand) and lifting the roll up and out of the HCF.
5. Remove the E-ring and bearing on the feed shaft (at the nudger roll end of the shaft).
6. Move the bearing at the opposite end of the shaft to the right, and slide the feed shaft to the right to remove.

Replacement

The replacement is the reverse of the removal procedure.

REP 80.24 HCF Retard Lever Spring

Parts List on [PL 80.62](#)

Removal



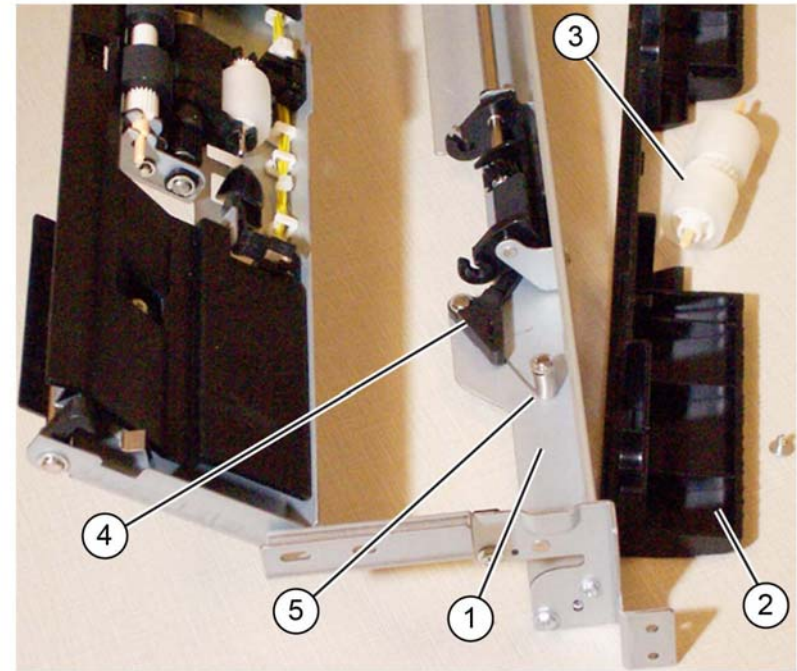
WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the HCF feeder, [REP 80.21](#).
2. Place the feeder on a flat surface. Release the green lever to open the upper feeder assembly.
3. Remove the retard lever spring, [Figure 1](#):
 - a. Remove the lower chute (1).
 - b. Remove the plastic cover (2).
 - c. Remove the retard roll (3).
 - d. Remove the E-rings on the lever and spring.
 - e. Remove the lever (4).

NOTE: Note how the spring extension fits into the lever.

- f. Remove the retard lever spring (5).



C-1-0470-A

Figure 1 Retard lever spring

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure that the plastic pads on the lower chute fit in the track before pushing it in.

REP 80.25 HCF Nudger Bracket/Nudger Lever/Torsion Spring

Parts List on [PL 80.62](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the HCF feed shaft, [REP 80.23](#).
2. Disassemble the feed shaft by removing (4) E-rings and unscrewing the nudger support that retains the torsion spring.

Replacement

The replacement is the reverse of the removal procedure.

REP 80.26 HCF Takeaway Roll

Parts List on [PL 70.55](#)

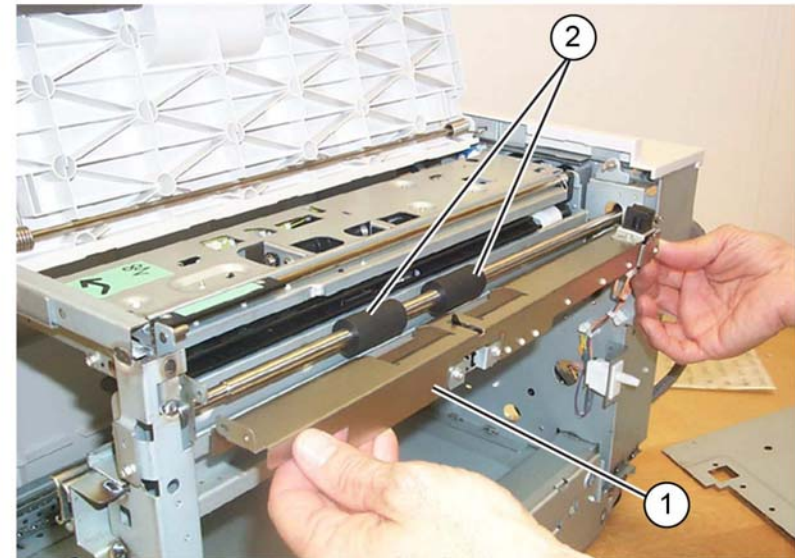
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the HCF feed motor, [REP 80.27](#).
2. Remove the takeaway roll, [Figure 1](#):
 - a. Remove two screws, then the lower chute (1).
 - b. Slide the takeaway roll (2) to the rear until the front end is released, then lower the roll to remove.



C-1-0471-A

Figure 1 Lower chute removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.27 HCF Feed/Lift Motor

Parts List on [PL 80.60](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Undock the HCF, [REP 70.4](#).
2. Remove rear cover, [PL 70.45 Item 10](#).
3. Disconnect the connector from the motor.

NOTE: Be careful when removing the motor as it is meshed to a hidden gear.

4. While supporting the motor with one hand, remove two screws then the HCF feed/lift motor (1), [Figure 1](#).

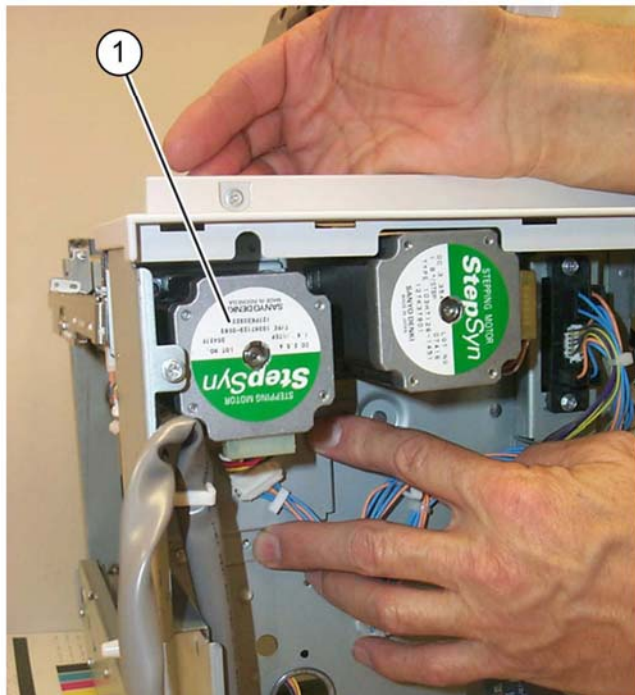


Figure 1 HCF feed/lift motor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.28 TTM Drive Belt

Parts List on [PL 70.85](#)

Removal



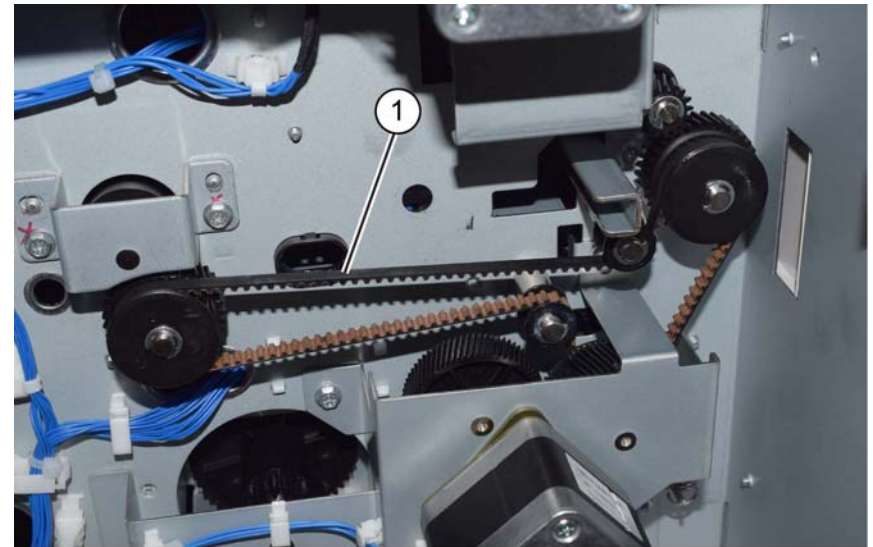
WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the TTM rear cover, [PL 70.95 Item 8](#).
2. Remove the takeaway motor 2, [REP 80.37](#).
3. Remove the TTM drive belt, [PL 70.85 Item 10](#).

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure that the drive belt (1) is installed as shown in [Figure 1](#).



C-1-0493-A

Figure 1 Belt installation

REP 80.29 Tray 4 Lower Feed Chute (TTM)

Parts List on [PL 80.70](#)

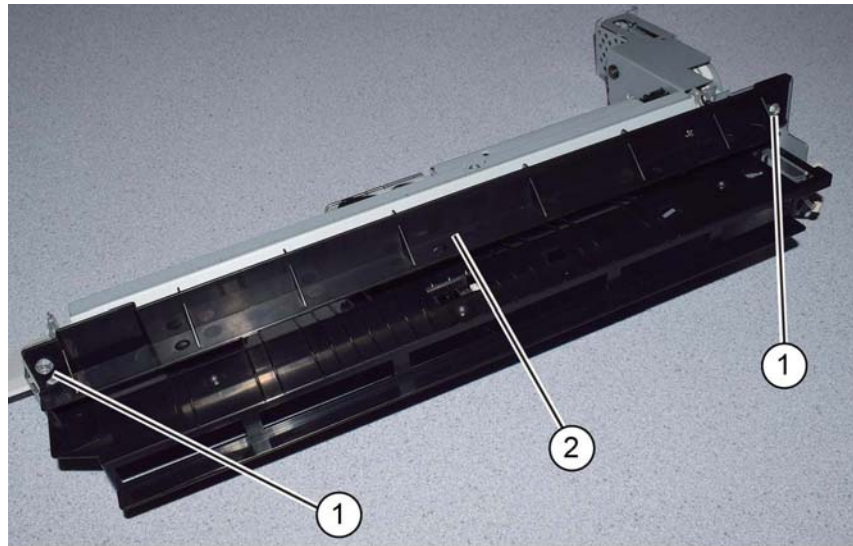
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the tray 4 feeder assembly, [REP 80.35](#).
2. Turn the tray 4 feeder assembly upside down.
3. Remove the lower feed chute, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the lower feed chute (2).



C-1-0494-A

Figure 1 Lower feed chute removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.30 TTM Chute

Parts List on [PL 80.65](#)

Removal

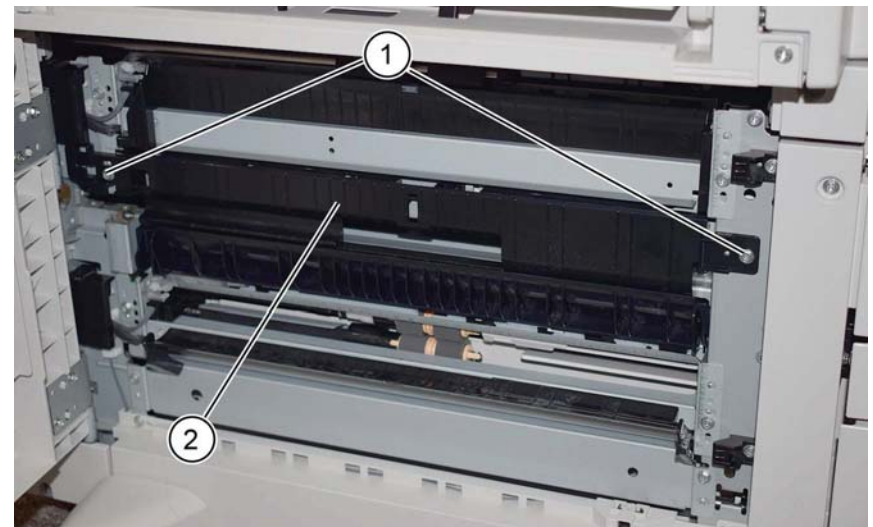


WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the lower (tray 3 and 4) takeaway roll, [REP 80.41](#).
2. Remove the TTM chute, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Move the TTM chute (2) towards the rear, then remove the TTM chute.

NOTE: The TTM chute is secured in the centre by a clip feature.



C-1-0517-A

Figure 1 TTM chute removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.31 Tray 4 Upper Feed Chute (TTM)

Parts List on [PL 80.70](#)

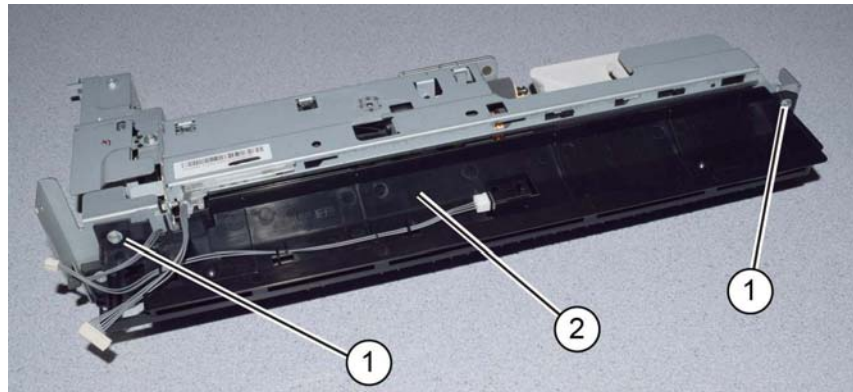
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the tray 4 feeder assembly, [REP 80.35](#).
2. Remove the upper feed chute, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the lower feed chute (2).



C-1-0495-A

Figure 1 Upper feed chute removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.32 Tray 4 Transport Assembly Nip Rolls (TTM)

Parts List on [PL 80.70](#)

Removal



WARNING

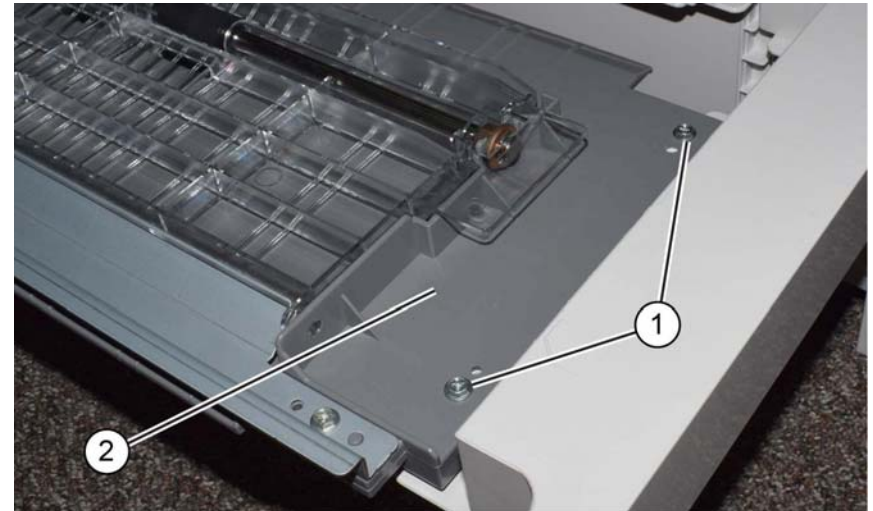
Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



CAUTION

Ensure that the tray 4 transport assembly, [PL 80.70 Item 11](#) is supported when removing the tray 4 assembly.

1. Fully pull out tray 4. Lift out the tray 4 assembly, [PL 70.65 Item 1](#).
2. Remove the tray 4 transport assembly from the tray 4 assembly, [Figure 1](#):
 - a. Remove two screws (1).
 - b. Remove the tray 4 transport assembly (2).



Y-1-0496-A

Figure 1 Transport assembly removal

3. Release the springs (1), then remove the nip rolls (2), [Figure 2](#).

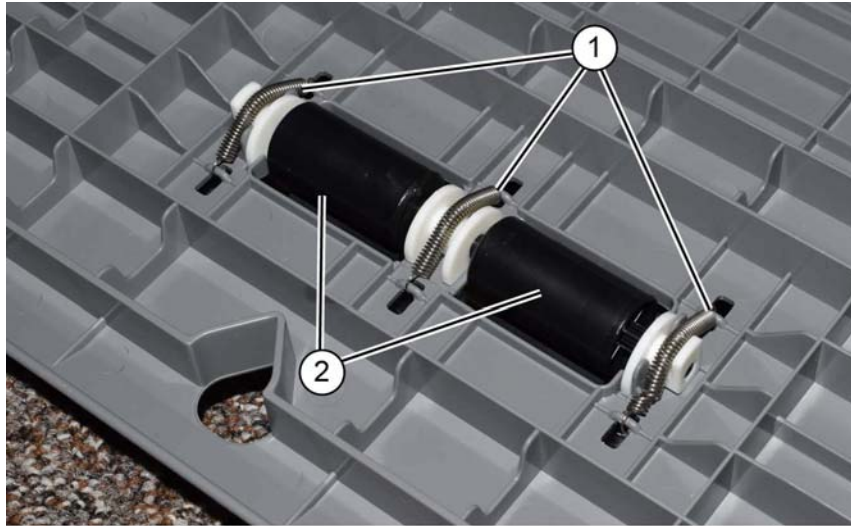


Figure 2 Nip rolls removal

C-1-0497-A

Replacement

The replacement is the reverse of the removal procedure.

REP 80.33 Tray 2 Feeder Assembly (TTM)

Parts List on [PL 80.30](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 2. Remove the paper.
2. Remove tray 2.
3. Open the left cover assembly, [PL 70.70 Item 7](#).
4. Remove the ESD cover (1), [Figure 1](#):

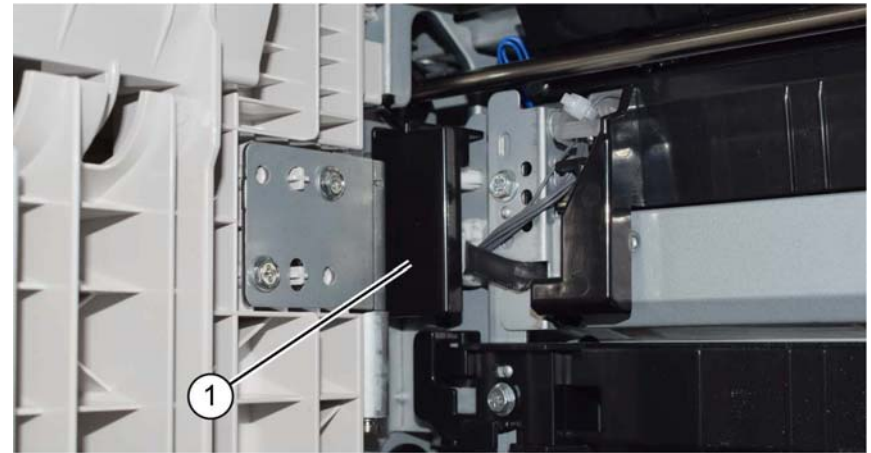
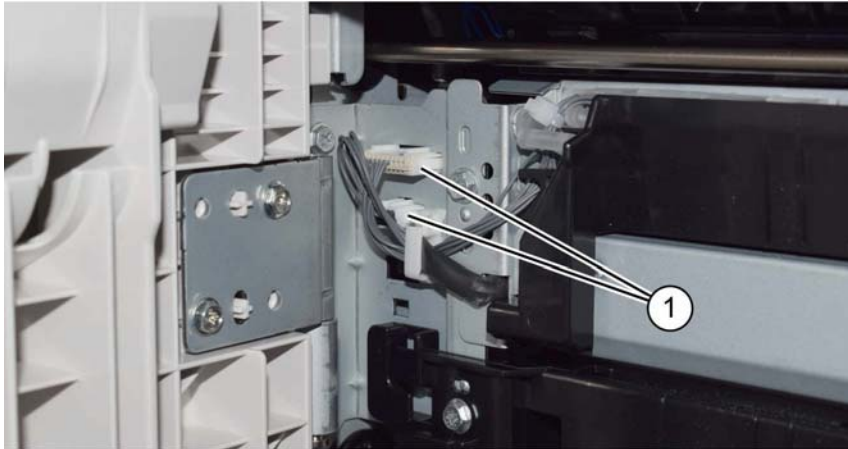


Figure 1 ESD cover removal

C-1-0498-A

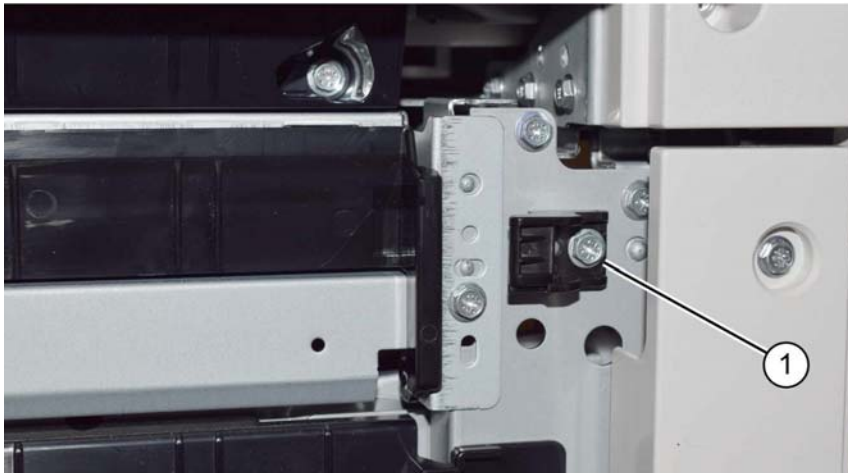
5. Disconnect 2 connectors (1), [Figure 2](#).



C-1-0499-A

Figure 2 Connectors

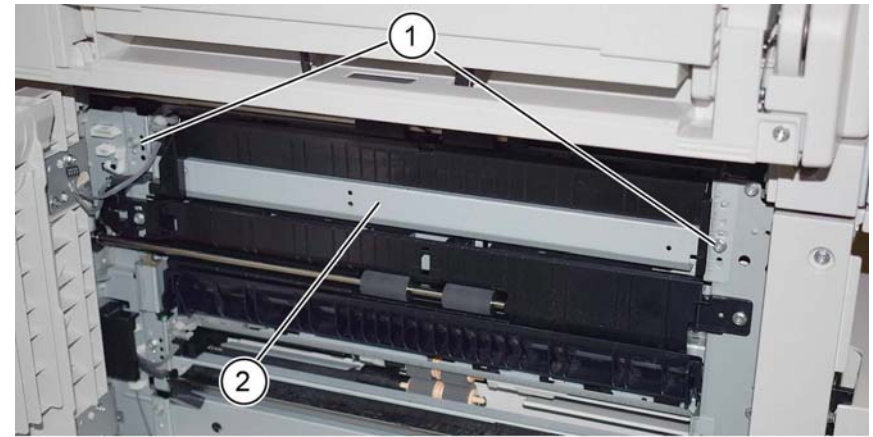
6. Remove the upper door catch (1), [Figure 3](#).



C-1-0500-A

Figure 3 Door catch

7. Remove the tray 2 feeder assembly, [Figure 4](#):
- Remove two screws (1).
 - Remove the tray 2 feeder assembly (2).



C-1-0518-A

Figure 4 Tray 2 feeder assembly removal

Replacement

- The replacement is the reverse of the removal procedure.
- If new tray 2 feeder assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-801.

REP 80.34 Tray 3 Feeder Assembly (TTM)

Parts List on [PL 80.65](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 3. Remove the paper.
2. Lift out tray 3.
3. Open the left cover assembly, [PL 70.70 Item 7](#).
4. Remove the ESD cover (1) [Figure 1](#):

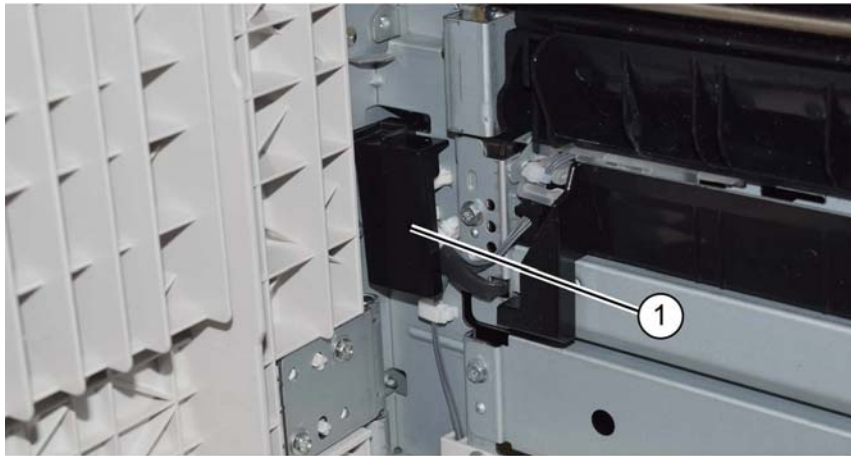


Figure 1 ESD cover removal

C-1-0501-A

5. Disconnect 2 connectors (1), [Figure 2](#).



Figure 2 Connectors

C-1-0502-A

6. Remove the lower door catch (1), [Figure 3](#).

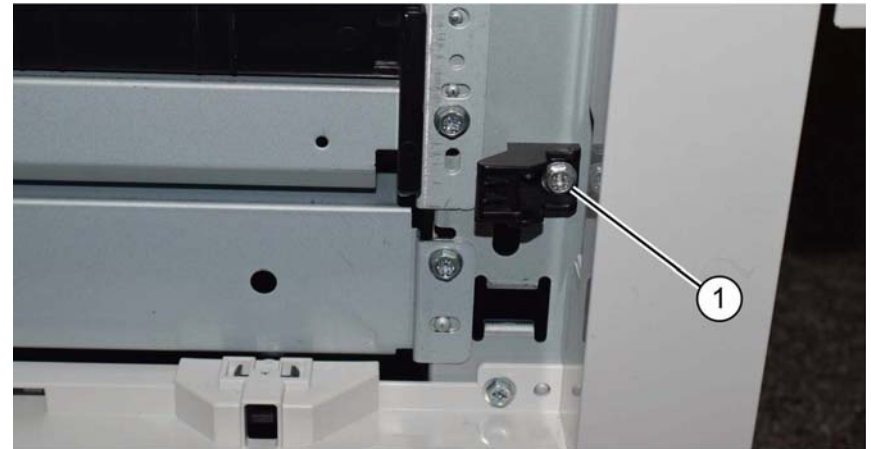


Figure 3 Door catch

C-1-0503-A

7. Remove two screws (1), [Figure 4](#):

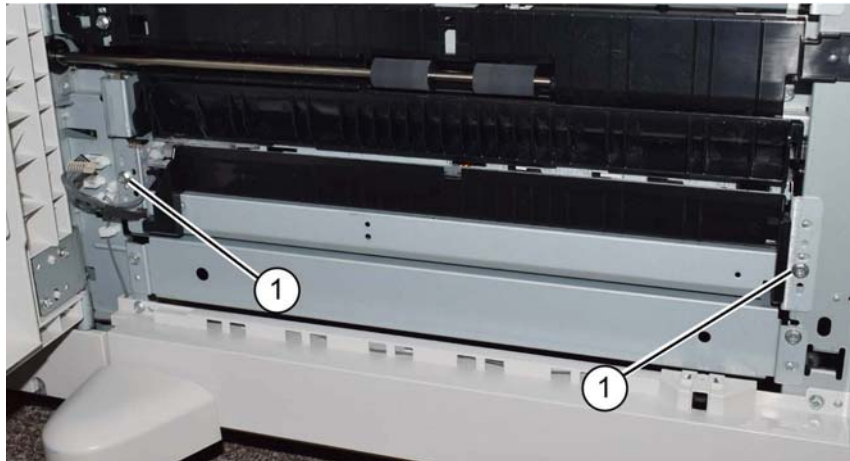


Figure 4 Tray 3 feeder assembly left side fittings

8. Remove the complete tray 3 feeder assembly including bracket, [Figure 5](#).
- Remove the screw (1).
 - Remove the tray 3 feeder assembly (2).

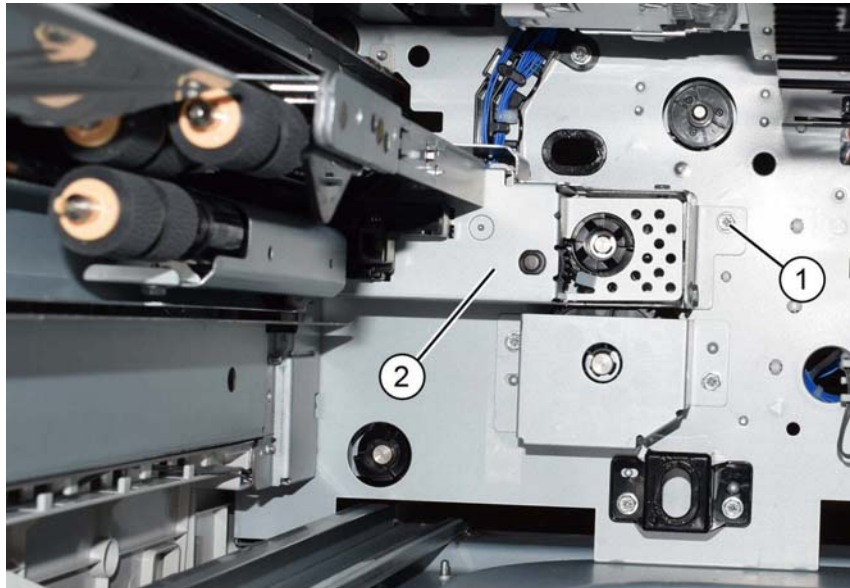


Figure 5 Tray 3 feeder assembly removal

9. Remove the feeder cover from the main tray 3 feeder, [Figure 6](#).
- Remove two screws (1).
 - Remove the feeder cover (2). Retain the cover for installation onto the new tray 3 feeder assembly.

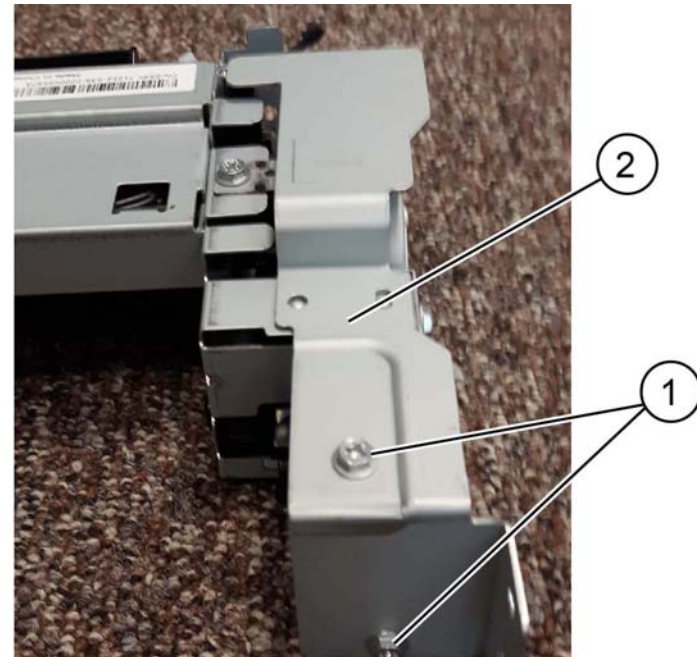


Figure 6 Feeder cover removal

Replacement



Ensure that the feeder cover is installed onto the new tray 3 feeder assembly. Refer to [Figure 6](#).

- The replacement is the reverse of the removal procedure.
- If new tray 3 feeder assembly is installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-802.

REP 80.35 Tray 4 Feeder Assembly (TTM)

Parts List on [PL 80.70](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

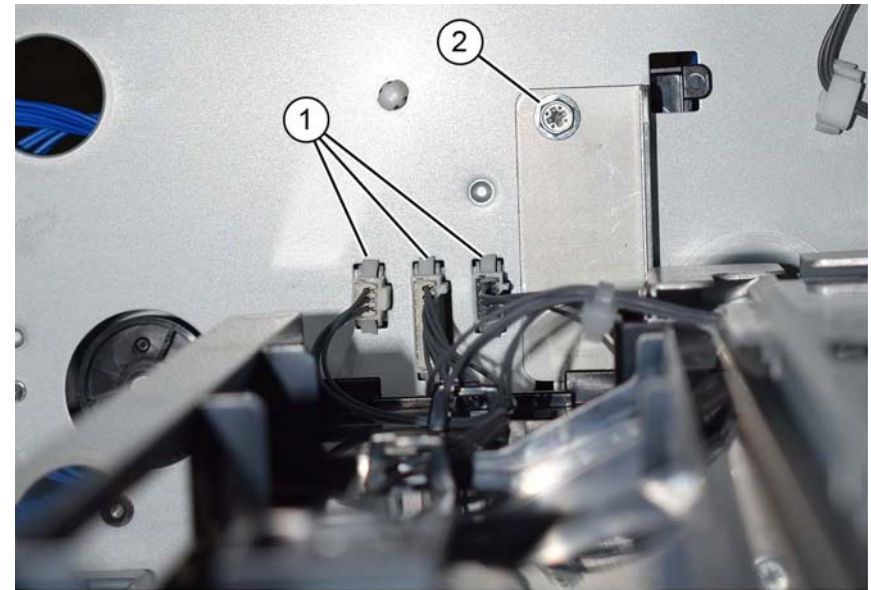
1. Pull out tray 2, 3 and 4. Remove the paper.
2. Lift out tray 3 and 4. Remove tray 2.
3. Remove the support bracket (1), [Figure 1](#).



C-1-0505-A

Figure 1 Support bracket removal

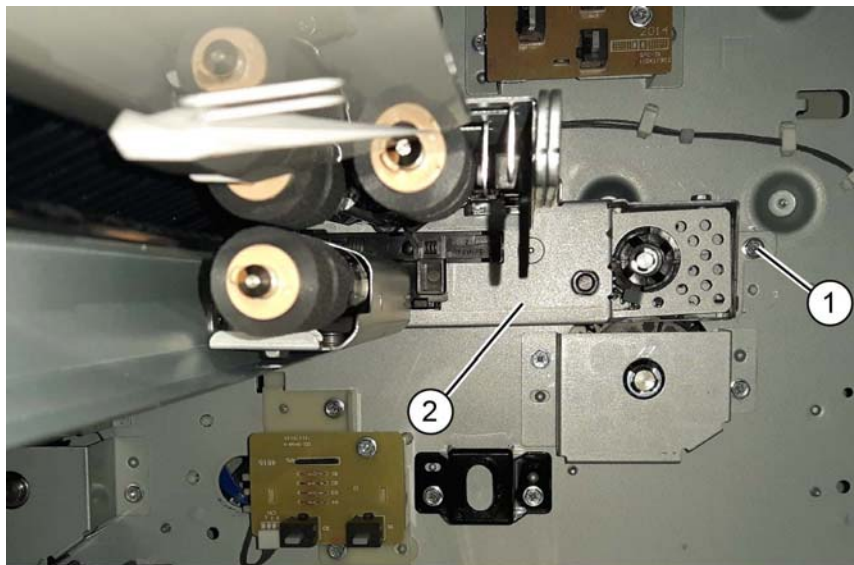
4. Prepare to remove the tray 4 feeder assembly, [Figure 2](#):
 - a. Disconnect 3 connectors (1).
 - b. Remove the screw (2).



C-1-0506-A

Figure 2 Preparation

5. Remove the tray 4 feeder assembly, [Figure 3](#):
 - a. Remove the screw (1).
 - b. Remove the tray 4 feeder assembly (2).



C-1-0507-A

Figure 3 Tray 4 feeder assembly removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new tray 4 feeder assembly is installed, enter **dC135** HFSI Counter. Reset the HFSI counter 954-803.

REP 80.36 Tray 2 Feed Out Sensor (TTM)

Parts List on **PL 80.65**

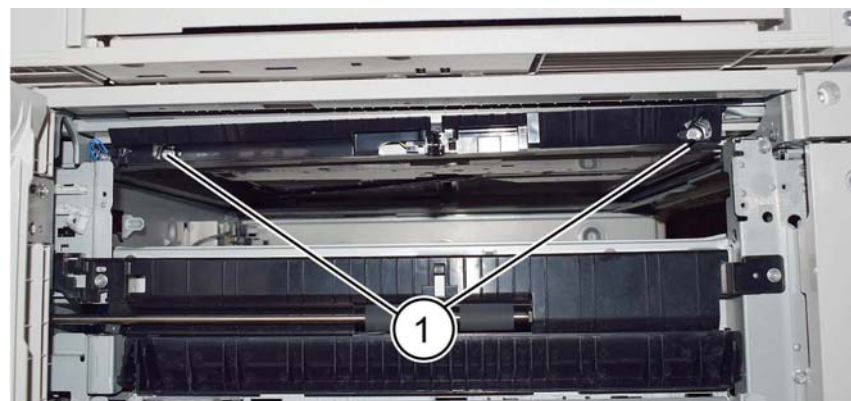
Removal



WARNING

Switch off the electricity to the machine. Refer to **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

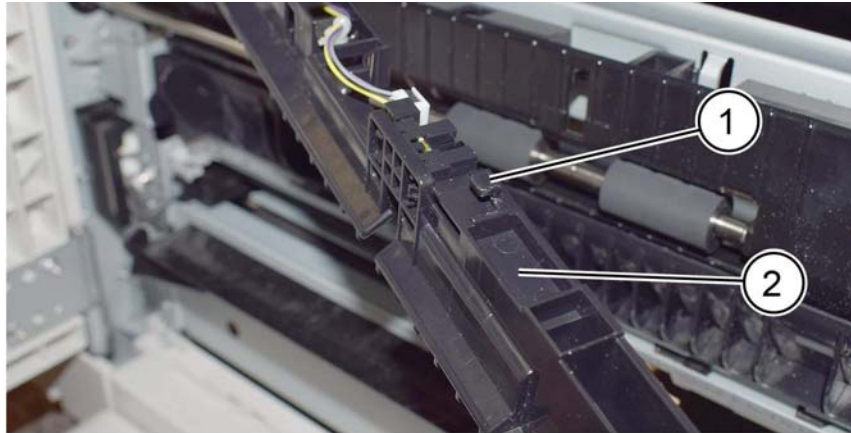
1. Remove the upper (tray 2) takeaway roll, **REP 80.41**.
2. Remove two screws (1), **Figure 1**.



C-1-0645-A

Figure 1 Screw removal

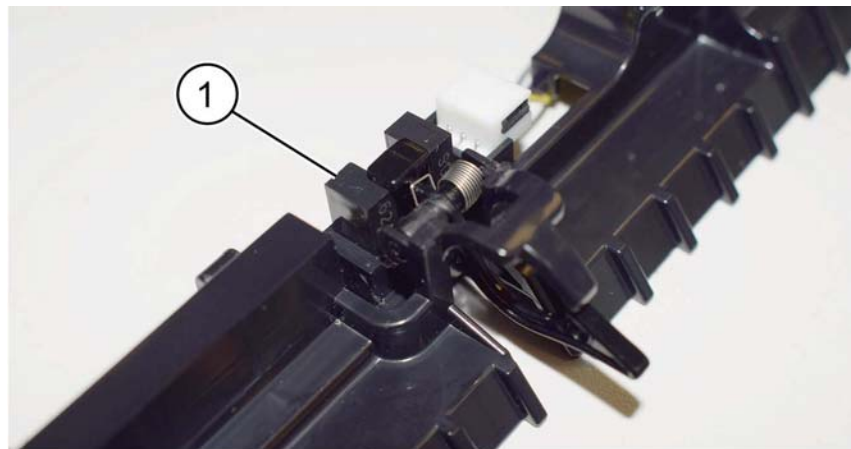
3. Remove the takeaway chute, [Figure 2](#):
 - a. Move the takeaway chute to the rear to release the hook (1).
 - b. Disconnect the connector at the rear of the takeaway chute.
 - c. Remove the takeaway chute (2).



C-1-0646-A

Figure 2 Takeaway chute removal

4. Remove the tray 2 feed out sensor (1), [Figure 3](#).



C-1-0647-A

Figure 3 Sensor removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.37 Takeaway Motor 2 (TTM)

Parts List on [PL 70.85](#)

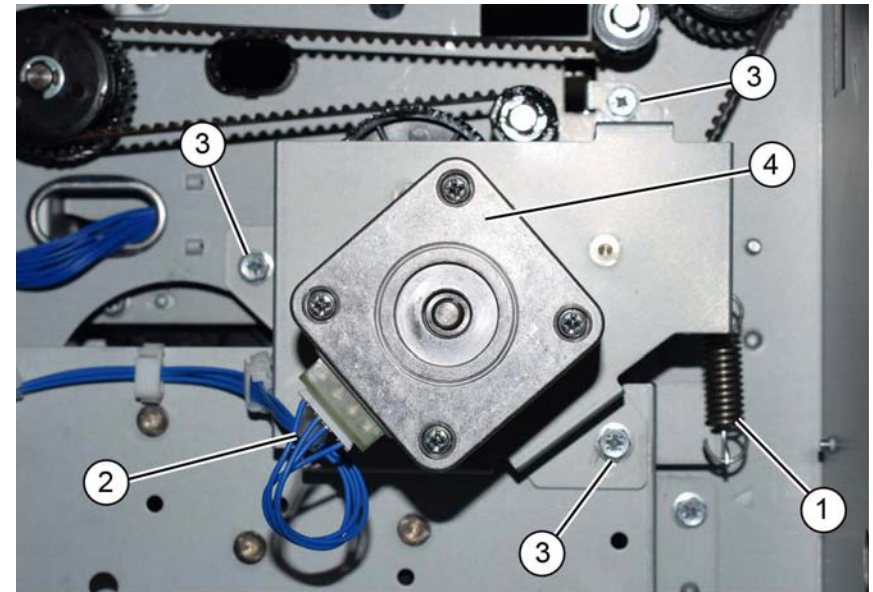
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the TTM rear cover, [PL 70.95 Item 8](#).
2. Remove the takeaway motor, [Figure 1](#):
 - a. Unhook the spring (1).
 - b. Disconnect the PJ and release the harness (2).
 - c. Remove three screws (3).
 - d. Remove takeaway motor 2 (4).



C-1-0508-A

Figure 1 Motor removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. Ensure that the drive belt is correctly installed, refer to [REP 80.28](#).

REP 80.38 Tray 2 and 3 Feed/Retard/Nudger Roll (TTM)

Parts List on [PL 80.25](#)

Removal

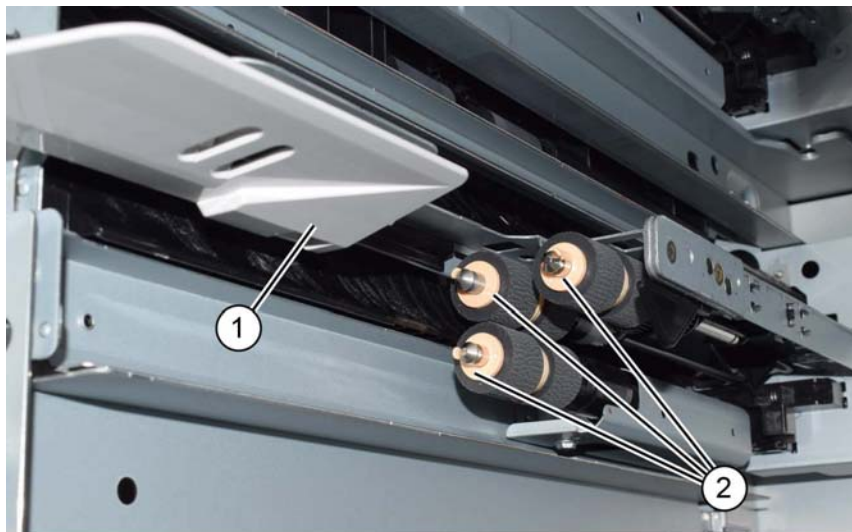


WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: New feed, retard and nudger rolls must be installed at the same time.

1. Pull out trays 2, 3 and 4. Remove the paper.
2. Remove trays 2, 3 and 4.
3. Open the left cover assembly, [PL 70.70 Item 7](#).
4. Remove the tray 2 or 3 feed, retard and nudger rolls, [Figure 1](#):
 - a. Slide the chute (1) forwards.
 - b. Release the clip, then remove the tray 2 or 3 feed, retard and nudger rolls (2).



C-1-0509-A

Figure 1 Roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new rolls are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counters that follow:
 - Tray 2 Chain-Link: 954-801
 - Tray 3 Chain-Link: 954-802

REP 80.39 Tray 4 Feed/Retard/Nudger Roll (TTM)

Parts List on [PL 80.25](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: New feed, retard and nudger rolls must be installed at the same time.

1. Pull out trays 2, 3 and 4. Remove the paper.
2. Remove trays 2, 3 and 4.
3. Open the left cover assembly, [PL 70.70 Item 7](#).
4. Remove the tray 4 feed, retard and nudger rolls, [Figure 1](#):
 - a. Slide the chute (1) forwards.
 - b. Release the clip, then remove the tray 4 feed, retard and nudger rolls (2).

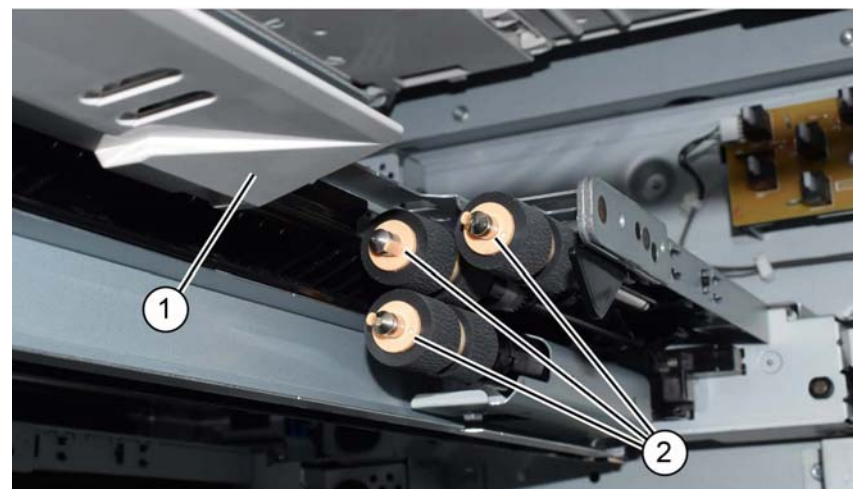


Figure 1 Roll removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If new rolls are installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter that follows:
 - Tray 4 Chain-Link: 954-803

REP 80.40 Transfer Gear (TTM)

Parts List on [PL 70.85](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Pull out tray 3. Remove the paper.
2. Remove the bracket assembly, [PL 70.85 Item 9](#).
3. Remove the transfer gear, [PL 70.85 Item 8](#) from the bracket.

Replacement

The replacement is the reverse of the removal procedure.

REP 80.41 TTM Takeaway Rolls and Bearings

Parts List on [PL 80.65](#)

Removal



WARNING

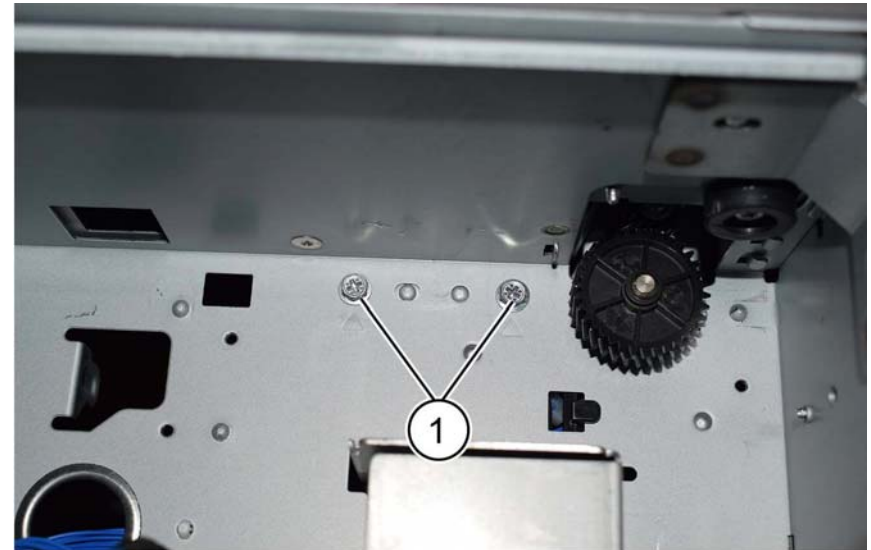
Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Perform the relevant procedure:

- [Upper \(Tray 2\) Takeaway Roll](#)
- [Lower \(Tray 3 and 4\) Takeaway Roll](#)

Upper (Tray 2) Takeaway Roll

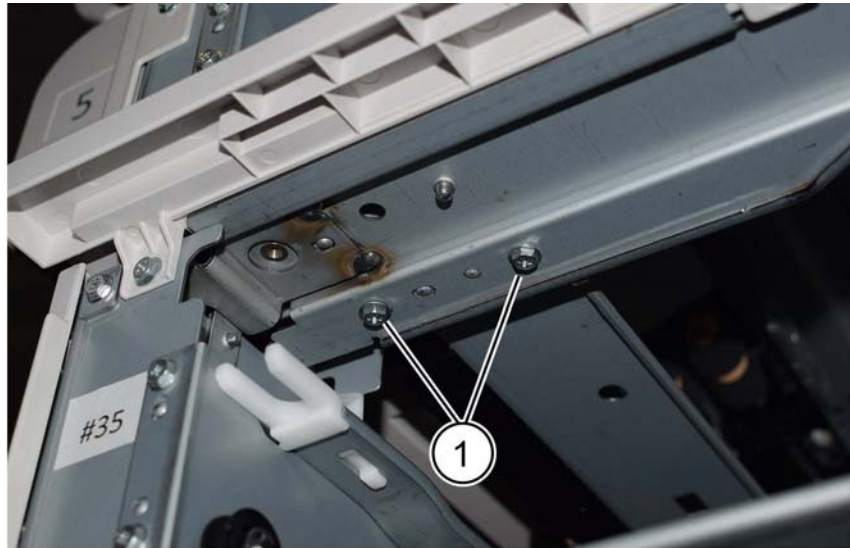
1. Pull out trays 2, 3 and 4. Remove the paper.
2. Remove trays 2, 3 and 4.
3. Remove the tray 2 feeder assembly, [REP 80.33](#).
4. Remove the rear cover, [PL 70.95 Item 8](#).
5. Remove the takeaway motor assembly, [PL 70.85 Item 1](#).
6. Remove two rear screws (1), [Figure 1](#).



C-1-0648-A

Figure 1 Rear screw removal

7. Remove two front screws (1), [Figure 2](#).



C-1-0649-A

Figure 2 Front screw removal

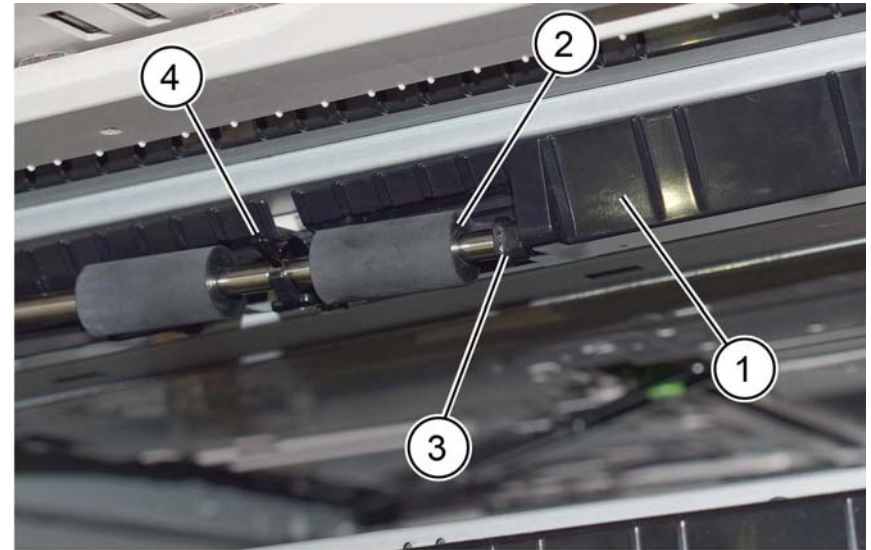


CAUTION

Take care not to damage the tray 2 feed out sensor actuator (4) when releasing or removing the takeaway roll.

8. Move the takeaway chute assembly (1) to the right, then release the front of the takeaway roll (2) from the chute, [Figure 3](#).

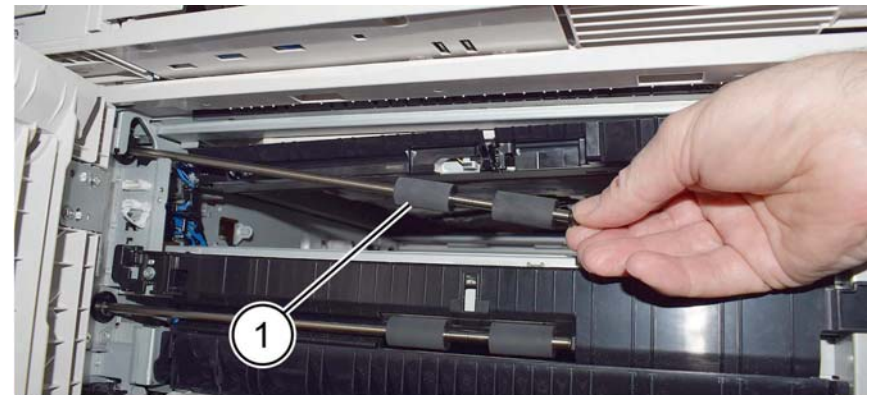
NOTE: Do not lose the front plastic bearing (3).



C-1-0650-A

Figure 3 Front bearing release

9. Remove the takeaway roll (1), [Figure 4](#).



C-1-0651-A

Figure 4 Takeaway roll removal

Replacement

The replacement is the reverse of the removal procedure.

Lower (Tray 3 and 4) Takeaway Roll

1. Remove the rear cover, PL 70.95 Item 8.
2. Open the left cover assembly, PL 70.70 Item 7.
3. Remove the E-clip (1), then the gear (2), Figure 5.

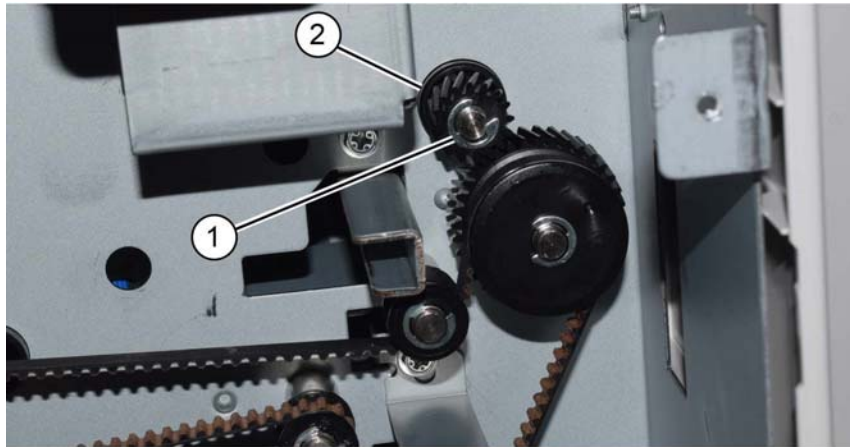


Figure 5 Gear removal

C-1-0511-A

4. Remove the KL-clip (1), then the release the bearing (2), Figure 6.

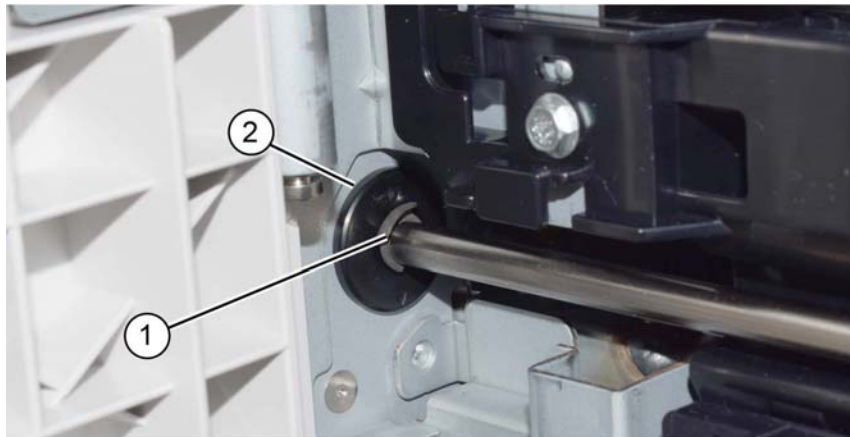
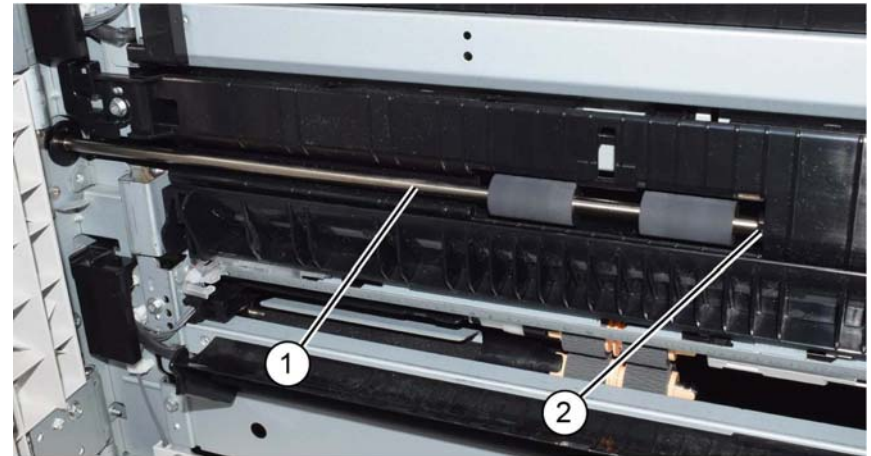


Figure 6 KL-clip removal

C-1-0512-A

5. Remove the lower takeaway roll (1) and bearing (2), Figure 7.



C-1-0513-A

Figure 7 Roll removal

Replacement

The replacement is the reverse of the removal procedure.

REP 80.42 TTM PWB

Parts List on [PL 70.90](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



Figure 1 ESD Symbol



CAUTION

Observe ESD procedures during this procedure.

1. Remove the TTM rear cover, [PL 70.95 Item 8](#).
2. Remove the TTM PWB, [Figure 2](#):
 - a. Disconnect seven connectors.
 - b. Remove six screws.
 - c. Remove the TTM PWB (1). [Figure 2](#).



C-1-0514-A

Figure 2 TTM PWB removal

Replacement

1. The replacement is the reverse of the removal procedure.
2. If a new TTM PWB is installed, enter [dC131](#). Change the value of NVM ID 742-205 to '2'.

REP 90.1 Developer Unit (Y, M, C, K)

Parts List on PL 90.05

Removal

! WARNING

Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

! CAUTION

To prevent light fatigue, either wrap the removed drum cartridge in a sheet of black paper or store it in a black bag.

! CAUTION

Do not touch the surface of the drum cartridge.

1. Prepare a sheet of black paper or a black bag.
2. Open the front cover.
3. Remove the waste bottle. REP 90.6.
4. Turn the lever of the color to be replaced in the direction of the arrow.
5. Remove the drum cartridge of the color to be replaced, Figure 1.
 - a. Remove the thumbscrew (1).
 - b. Remove the drum cartridge (2).

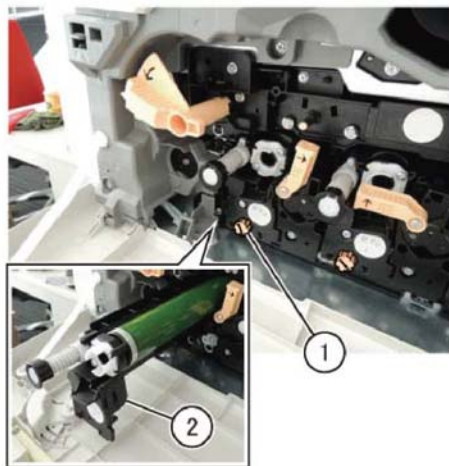
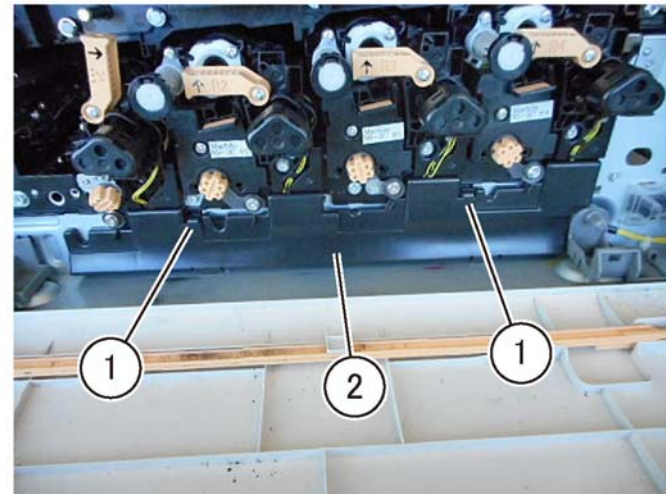


Figure 1 Drum cartridge removal

C-1-0538-A

6. Wrap the removed drum cartridge by using a sheet of black paper or store it in a black bag.
7. Push down the two hooks (1) to remove the cover harness (2), Figure 2.



C-1-0539-A

Figure 2 Cover harness removal

! CAUTION

When removing the developer unit, make sure to lift the developer unit from the rear and be careful so as to not damage the IBT Belt.

8. Remove the developer unit, Figure 3.
 - a. Disconnect the connector (1).
 - b. Remove the screw (2).
 - c. Turn and hold the lever (3) and remove the developer unit.

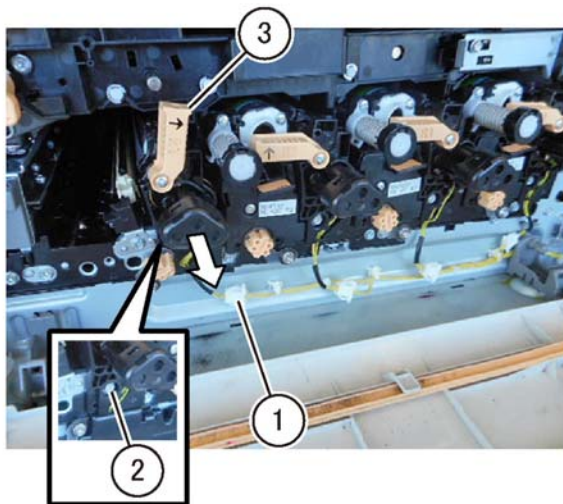


Figure 3 Developer unit removal

C-1-0540-A

3. If a new developer unit has been installed, enter **dC135** HFSI Counter. Reset the relevant HFSI counter:
 - Chain-Link: 954-830.
 - Chain-Link: 954-831.
 - Chain-Link: 954-832.
 - Chain-Link: 954-833.
4. Perform **dC675** Registration Control Setup Cycle.

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the developer unit, align the developer unit rib to the main unit guide, [Figure 4](#).

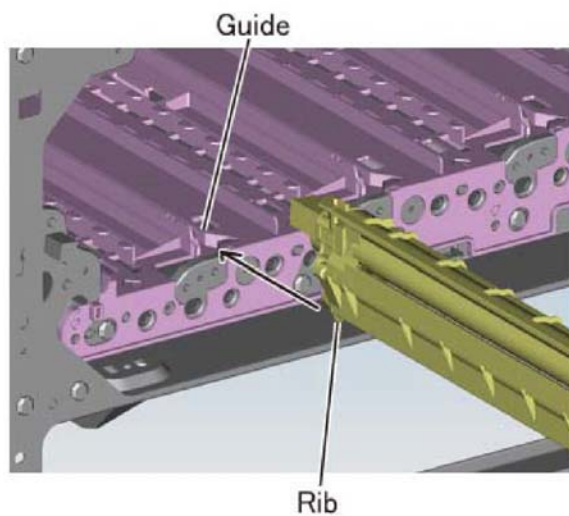


Figure 4 Developer unit replacement alignment

C-1-0541-A

REP 90.2 Dispenser Drive (YM)

Parts List on PL 90.15

Removal

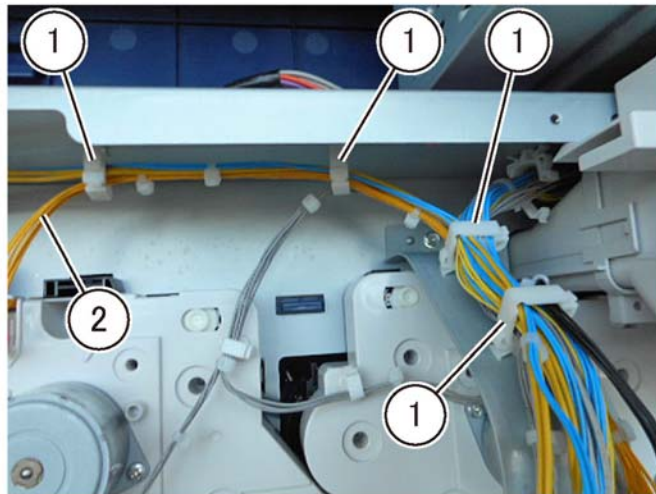
NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to GP 10. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

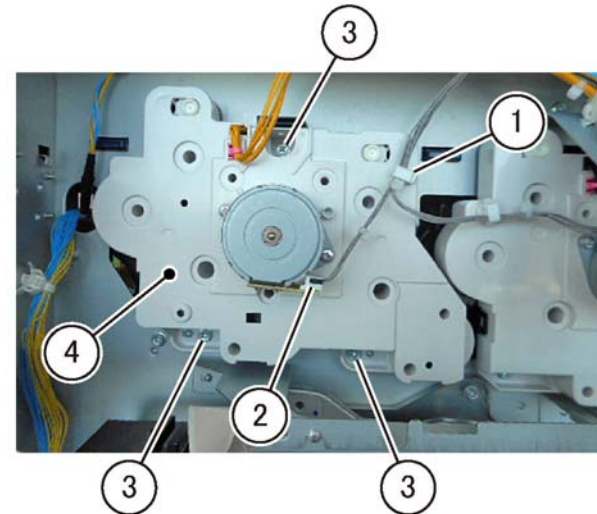
1. Remove the Y and M toner cartridges, PL 90.05.
2. Remove the upper rear cover, REP 28.5.
3. Remove the lower rear cover, REP 28.6.
4. Remove the right cover, REP 28.3.
5. Remove the ESS PWB chassis assembly, REP 3.2.
6. Remove the LVPS assembly, REP 1.4.
7. Remove the harness upper bracket PL 1.10 Item 6.
8. Remove the drive PWB assembly, REP 1.5.
9. Release the wire harness (2) of dispenser drive (YM) from the clamps (1), Figure 1.



C-1-0542-A

Figure 1 Harness removal

10. Remove the dispenser drive (YM), Figure 2.
 - a. Release the clamp (1).
 - b. Disconnect the connector (2).
 - c. Remove three screws (3).
 - d. Remove the YM dispenser drive (4).



C-1-0543-A

Figure 2 YM dispenser drive removal

Replacement

1. The replacement is the reverse of the removal procedure.

REP 90.3 Dispenser Drive (CK)

Parts List on [PL 90.15](#)

Removal

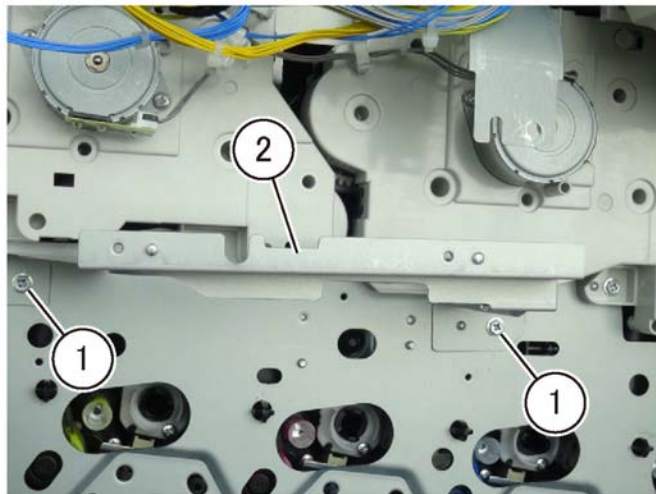
NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the C and K toner cartridges, [PL 90.05](#).
2. Remove the upper rear cover, [REP 28.5](#).
3. Remove the lower rear cover, [REP 28.6](#).
4. Remove the right cover, [REP 28.3](#).
5. Remove the ESS PWB chassis assembly, [REP 3.2](#).
6. Remove the LVPS assembly, [REP 1.4](#).
7. Remove the harness upper bracket [PL 1.10 Item 6](#).
8. Remove the drive PWB assembly, [REP 1.5](#).
9. Remove the rear duct A, [REP 10.4](#).
10. Remove two screws (1) then the drive PWB bracket, [Figure 1](#).



C-1-0544-A

Figure 1 Drive PWB bracket

11. Remove the drive assembly, [REP 40.1](#).

12. Release the wire harness (2) of dispenser drive (YM) from the clamps (1), [Figure 2](#).

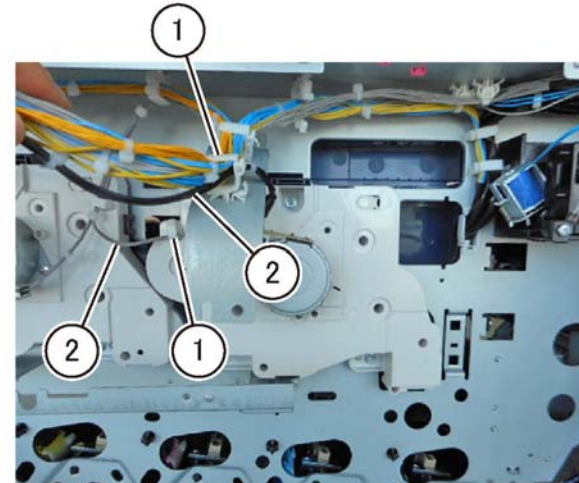
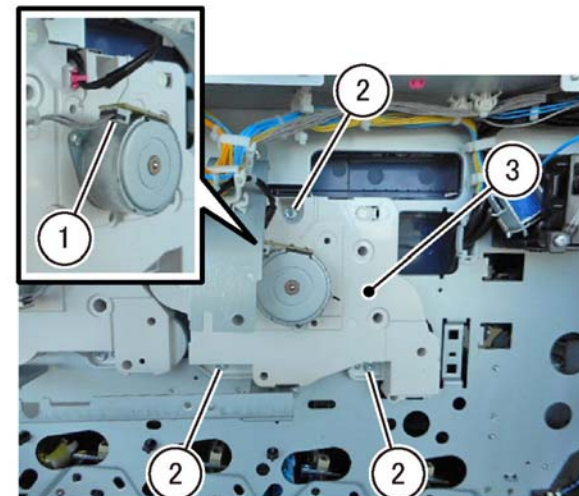


Figure 2 Harness removal

13. Remove the dispenser drive (CK), [Figure 3](#).
 - a. Disconnect the connector (1).
 - b. Remove the screws (2).
 - c. Remove the dispenser drive (CK) (3).



C-1-0546-A

Figure 3 CK dispenser drive removal

Replacement

1. The replacement is the reverse of the removal procedure.

REP 90.4 Dispenser (Y, M, C, K)

Parts List on [PL 90.10](#)

Removal

WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

To prevent light fatigue, either wrap the removed drum cartridge in a sheet of black paper or store it in a black bag.

NOTE: Because the removal procedure for Dispenser (Y, M, C, K) is the same, the following describes only the procedure for Dispenser (K).

NOTE: Place the drop cloth or newspapers at the servicing area to keep the site clean.

1. Prepare a sheet of black paper or a black bag.
2. Remove the toner cartridge (K). [PL 90.05 Item 13](#).
3. Remove the Y, M, C, K drum cartridges, [REP 90.12](#).
4. Remove developer unit (K), [REP 90.1](#).
5. Remove the IBT belt unit, [REP 90.7](#).
6. Remove the front cover, [REP 28.1](#).
7. Remove the inner cover, [REP 28.2](#).
8. Remove the top cover, [REP 28.4](#).
9. Remove the right cover, [REP 28.3](#).
10. Remove the HVPS, [REP 1.1](#).
11. Remove the conductor housing assembly, [Figure 1](#).
 - a. Remove the screw (1).
 - b. Remove the conductor housing assembly (2) in the direction of the arrow.

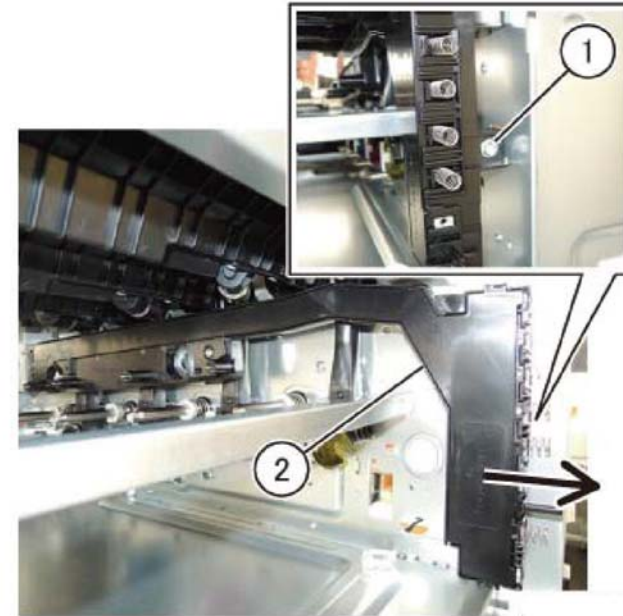


Figure 1 Conductor housing assembly removal

C-1-0547-A

12. Remove dispenser (K), [Figure 2](#).

- a. Remove the screw (1).
- b. Remove dispenser (K) (2).

NOTE: [Figure 3](#) shows the removed dispenser (K).

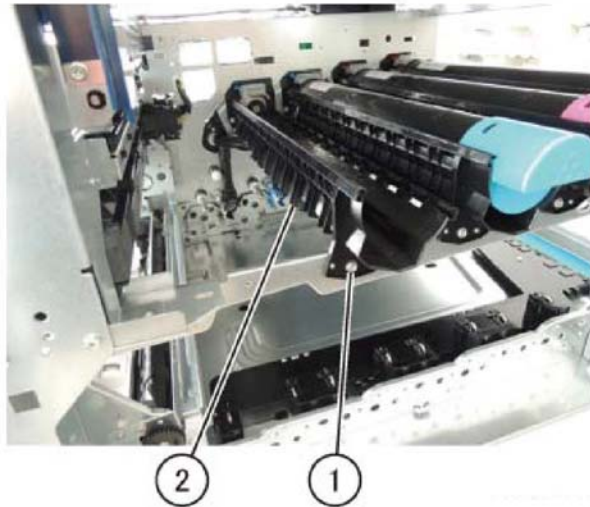


Figure 2 Dispenser K

C-1-0548-A



Figure 3 Dispenser K after removal

C-1-0549-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing dispenser (K), insert the boss (x4) at the rear of dispenser (K) into the installation holes, [Figure 4](#).

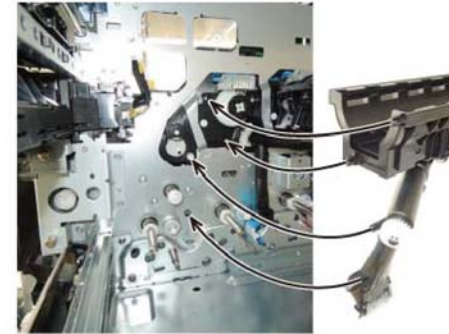


Figure 4 Dispenser K install

C-1-0550-A

3. When installing the conductor housing assembly, insert the boss at the rear of the conductor housing assembly into the installation hole, [Figure 5](#).

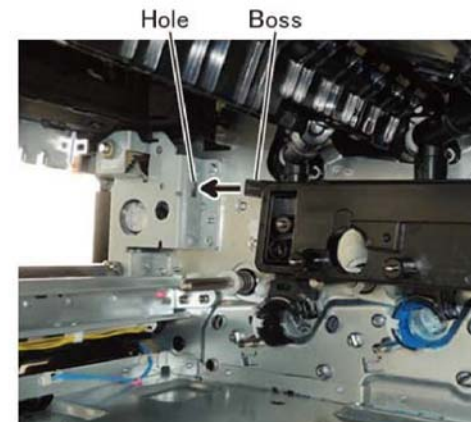


Figure 5 Conductor housing assembly install

C-1-0551-A

REP 90.5 Developer

Parts List on [PL 90.30](#)

Removal

WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

To prevent light fatigue, either wrap the removed drum cartridge in a sheet of black paper or store it in a black bag.

NOTE: Place the drop cloth or newspapers at the servicing area to keep the site clean.

1. Remove the relevant developer unit, [REP 90.1](#).
2. Remove the developer front cover, [Figure 1](#).
 - a. Lower the lever (1).
 - b. Remove the developer front cover (2) in the direction of the arrow.

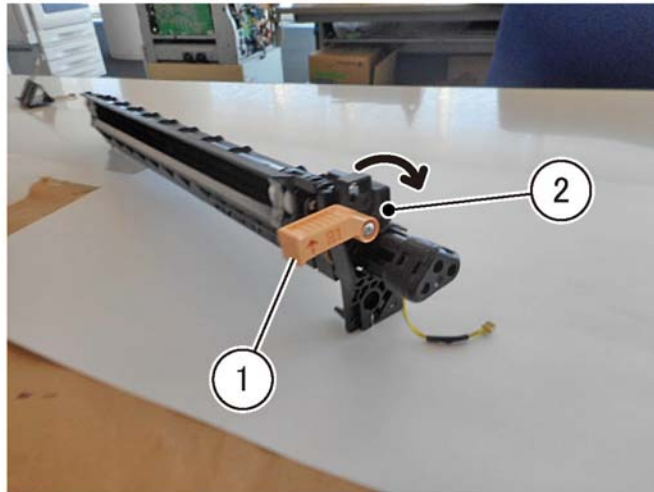


Figure 1 Developer front cover removal

C-1-0554-A

3. Cover the pipe opening of developer rear cover with paper and tape (1), [Figure 2](#).

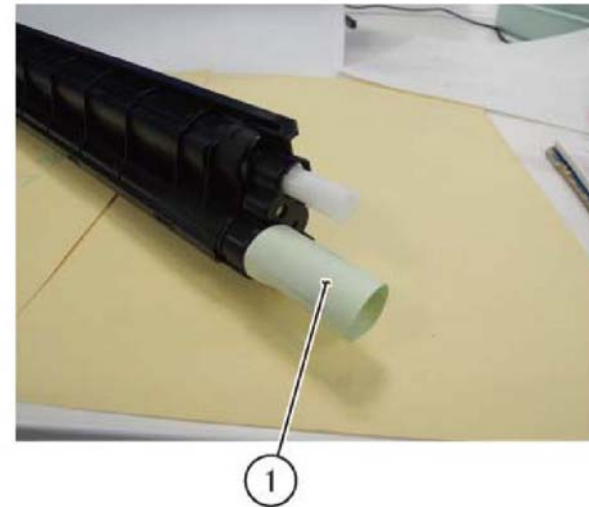


Figure 2 Pipe opening cover

C-1-0555-A

4. Store the developer unit in the collection bag.
5. Cover the pipe opening of developer rear cover of the new developer unit with paper and tape.
6. Remove the new upper SUB cover assembly, [Figure 3](#).
 - a. Release the five hooks (1).
 - b. Remove the upper SUB cover assembly (2).

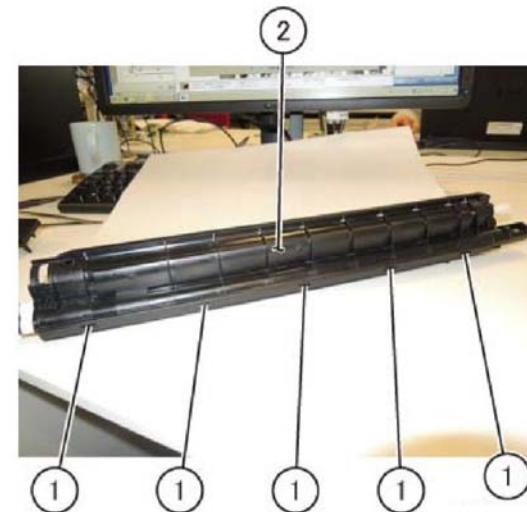


Figure 3 New upper SUB cover assembly

C-1-0556-A

7. Install the developer front cover to the new developer assembly in order to use as a stand, [Figure 4](#).

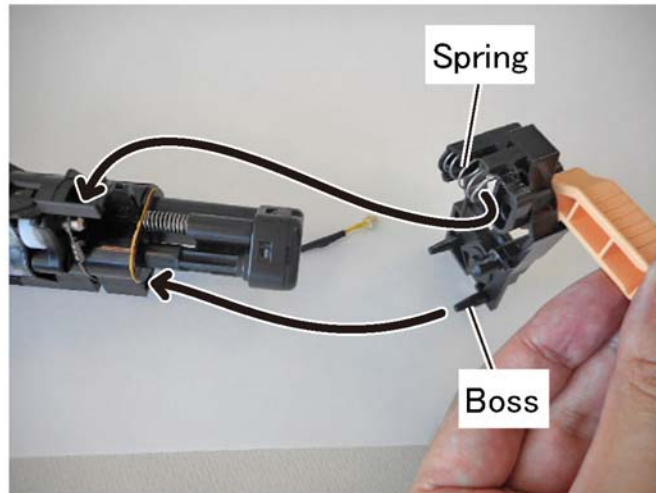


Figure 4 Developer front cover

C-1-0557-A

8. Insert the screw (long) that was securing the developer unit into the hole to function as a stopper for the lever of developer front cover, [Figure 5](#).
- a. Insert the long screw (1) into the hole.

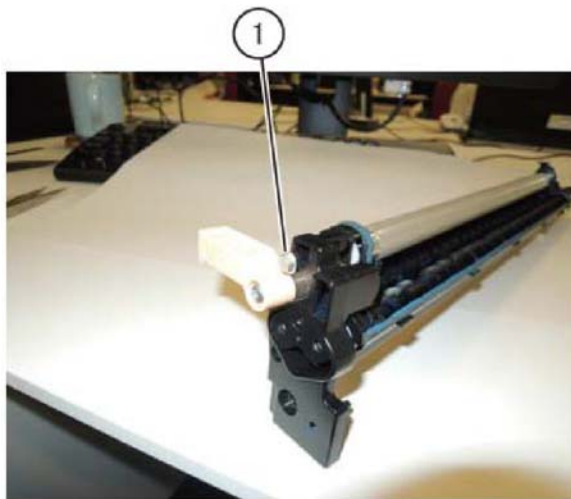


Figure 5 Long screw

C-1-0558-A

9. Use the lever of developer front cover as a stand and place the developer assembly with its right side facing up.
10. Put in the developer, [Figure 6](#).

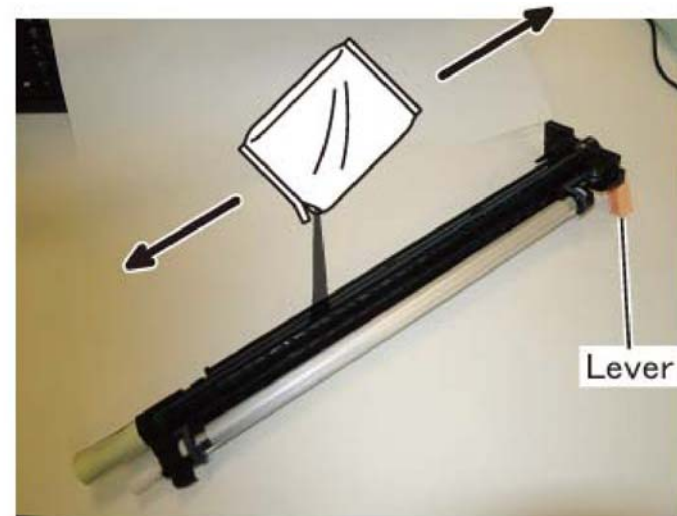


Figure 6 Developer

C-1-0559-A

11. Uniform the developer, [Figure 7](#).
- a. Rotate the coupling in the direction of the arrow.



Figure 7 Coupling rotation

12. Remove the screw (long) that was used as a stopper for the lever of developer front cover.
13. Remove the developer front cover.
14. Install the upper SUB cover assembly, [Figure 8](#).
 - a. Insert the two hooks (1) of the upper SUB cover assembly into the lower part of the lower sub COH housing assembly.

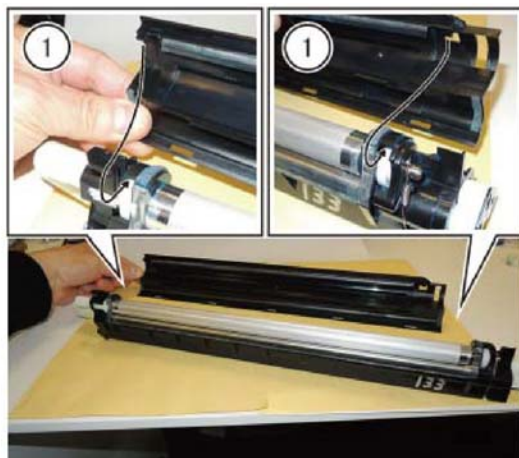


Figure 8 Upper SUB cover assembly

15. Secure the upper SUB cover assembly, [Figure 9](#).
 - a. Press the openings (1).

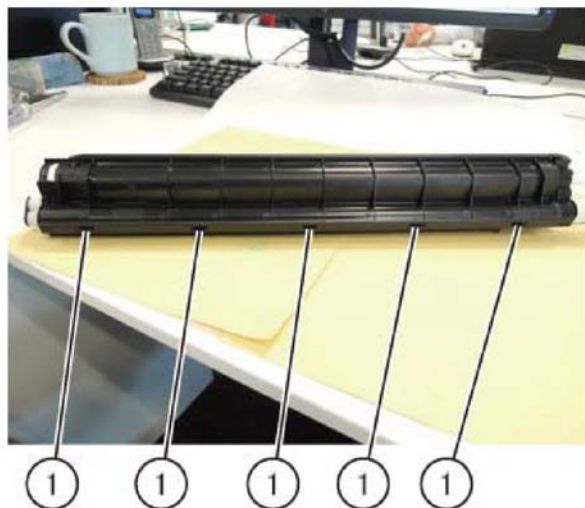


Figure 9 Secure the upper SUB cover assembly

C-1-0562-A

16. Paste on two seals (1) to the lower sub COH housing assembly mark, [Figure 10](#).

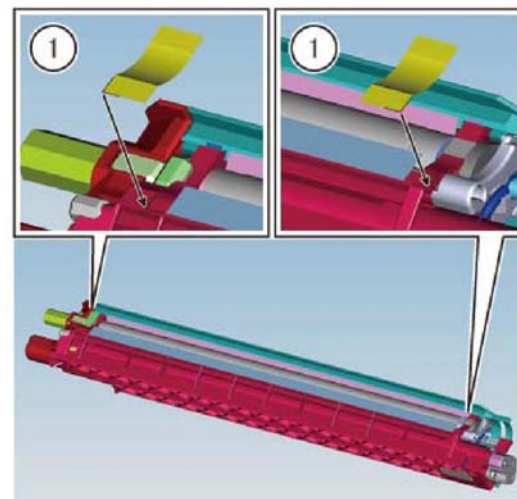


Figure 10 Seals

C-1-0563-A

Replacement

1. Install the developer front cover, [Figure 11](#).

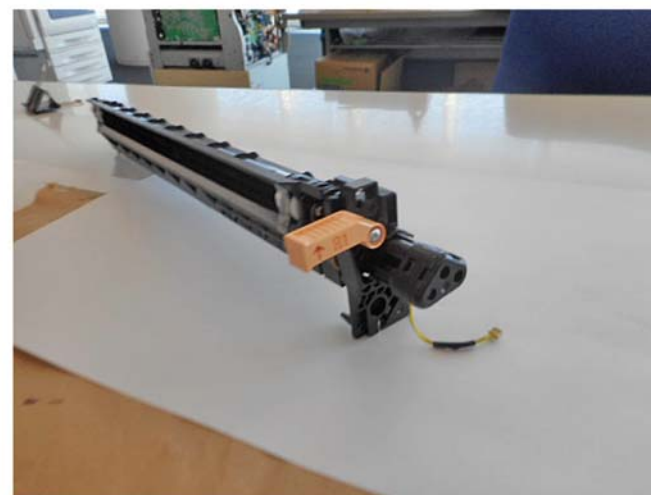


Figure 11 Developer front cover

C-1-0564-A

2. Ensure that the spring of developer front cover should be contacting the upper SUB cover assembly, [Figure 12](#).

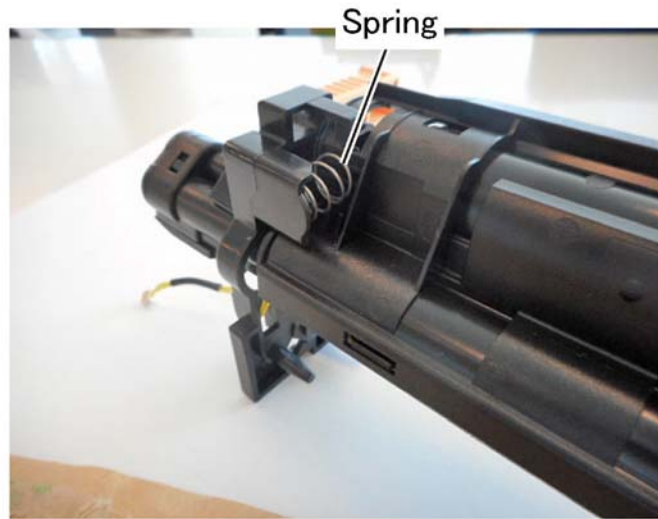


Figure 12 Spring

C-1-0565-A

3. Remove the paper and tape that closed the pipe opening of the developer rear cover.
4. Install the developer unit, [Figure 13](#).
 - Align the developer unit rib to the main unit guide.

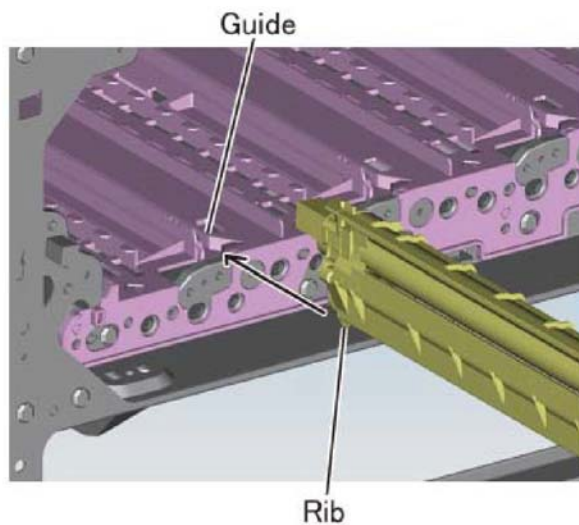


Figure 13 Alignment

C-1-0566-A

5. Return the drum cartridge to the original state.
6. Return the waste bottle to the original state.
7. Close the front cover.
8. Perform [dC950](#) ATC Sensor Setup, then [dC949](#) Default Developer ATC Setup.
9. Perform [dC675](#) Registration Control Setup Cycle.
10. Enter [dC135](#) HFSI Counter. Reset the relevant HFSI counter:
 - Chain-Link: 954-830.
 - Chain-Link: 954-831.
 - Chain-Link: 954-832.
 - Chain-Link: 954-833.

REP 90.6 Waste Bottle

Parts List on [PL 90.20](#)

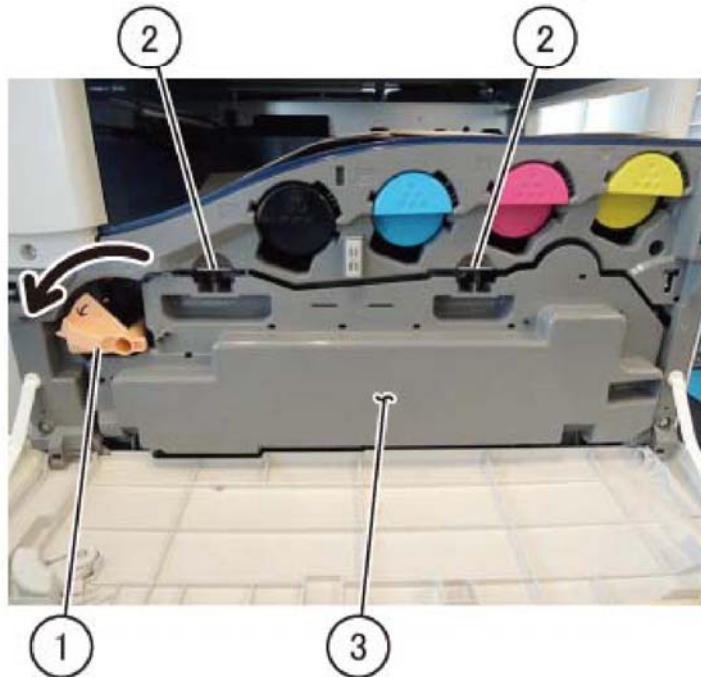
Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the front cover.
2. Turn the retract handle (1) in a counterclockwise direction, [Figure 1](#).
3. Push down the two levers (2) and remove the waste bottle (3).



C-1-0567-A

Figure 1 Waste bottle removal

Replacement

1. The replacement is the reverse of the removal procedure.

REP 90.7 IBT Belt Unit

Parts List on [PL 90.40](#)

Removal



WARNING

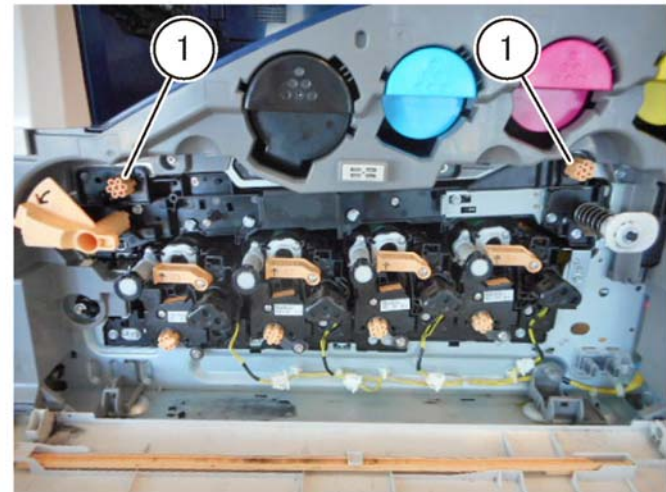
Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



CAUTION

Do not touch the IBT belt surface.

1. Open the front cover.
2. Remove the waste bottle, [REP 90.6](#).
3. Open the LH transport assembly.
4. Loosen the screws (1) that secure the IBT belt unit, [Figure 1](#).



C-1-0568-A

Figure 1 IBT belt unit thumbscrews

5. Remove the IBT belt unit, [Figure 2](#).
 - a. Hold Handle A and pull out the IBT belt unit until Handle B can be seen.
 - b. Hold Handle B and the right side housing and remove the IBT belt unit.

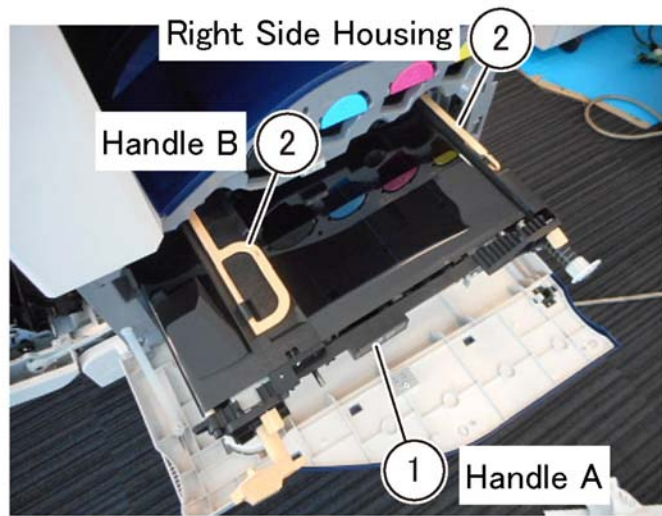


Figure 2 IBT belt unit removal

C-1-0569-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. When installing the IBT belt unit, make sure the retract handle is at the position shown in [Figure 3](#).

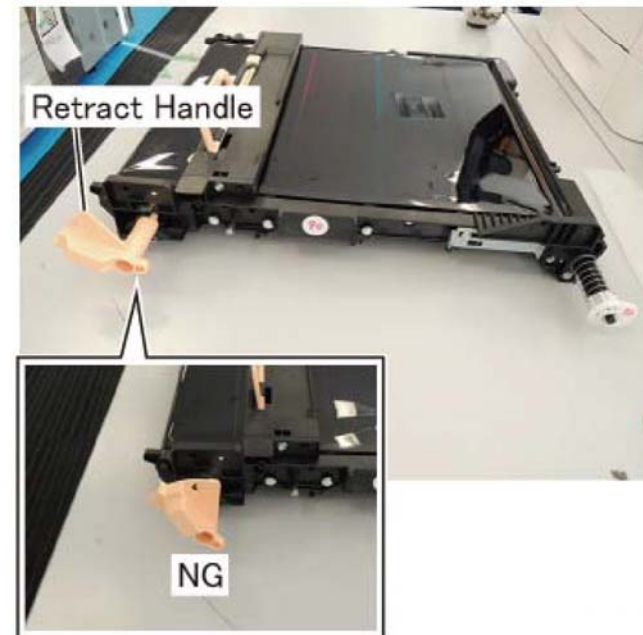


Figure 3 Correct retract handle position

C-1-0570-A

3. If a new IBT belt unit has been installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-820.
4. Enter [dC330](#) code 042-011 to initialize the 1st BTR.
5. Perform [dC675](#) Registration Control Setup Cycle.

REP 90.8 2nd BTR Roll

Parts List on [PL 90.40](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the LH transport assembly.
2. Disengage the hooks (1) on front and rear, then remove the BTR assembly (2), [Figure 1](#).

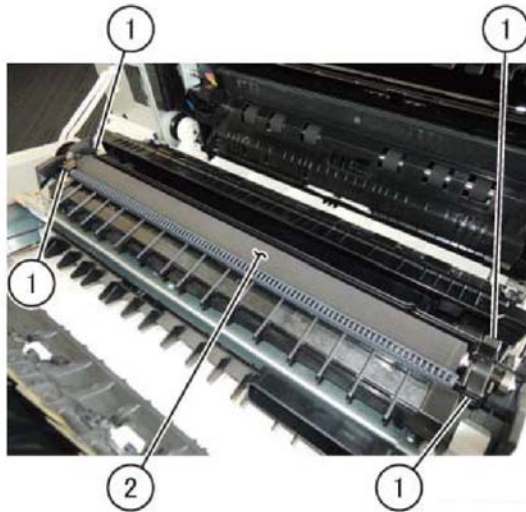


Figure 1 BTR roll assembly removal

C-1-0571-A

Reference: [Figure 2](#) shows the removed 2nd BTR Roll.



Figure 2 Removed BTR roll

Replacement

1. To install, carry out the removal steps in reverse order.
2. If a new 2nd BTR roll has been installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-821.
3. Perform [dC675](#) Registration Control Setup Cycle.

REP 90.9 MOB ADC Assembly

Parts List on [PL 90.40](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.



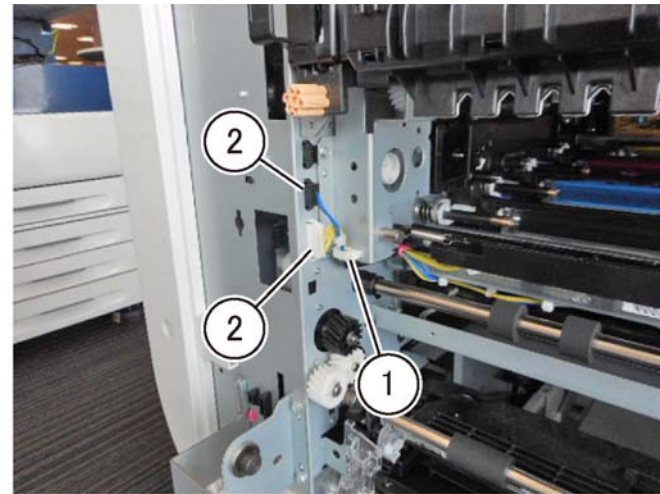
CAUTION

To prevent light fatigue, either wrap the removed drum cartridge in a sheet of black paper or store it in a black bag.

NOTE: Place the drop cloth or newspapers at the servicing area to keep the site clean.

1. Prepare a sheet of black paper (x4) or a black bag (x4).
2. Remove the Y, M, C, K drum cartridges, [REP 90.12](#).
3. Remove the IBT belt unit, [REP 90.7](#).
4. Remove the front cover, [REP 28.1](#).
5. Remove the inner cover, [REP 28.2](#).
6. Remove the bypass tray, [REP 70.2](#).
7. Remove the L/H cover, [REP 80.18](#).
8. Remove the registration chute, [REP 80.19](#).

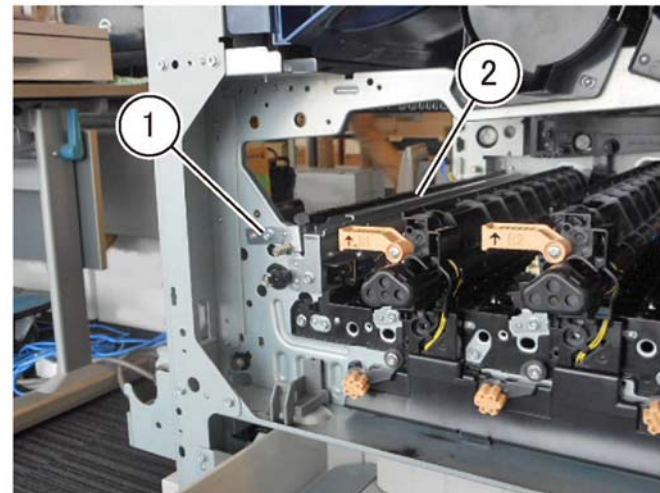
9. Disconnect the connectors, [Figure 1](#).
 - a. Release the clamp and remove the wire harness (1).
 - b. Disconnect two connectors (2).



C-1-0573-A

Figure 1 Connectors

10. Remove the MOB ADC assembly, [Figure 2](#).
 - a. Remove the screw.
 - b. Remove the MOB ADC assembly.



C-1-0574-A

Figure 2 MOB ADC assembly removal

Replacement



CAUTION

Do not touch the sensor unit and the bracket positioning sections (highlighted) of the MOB ADC assembly with your hands. Refer to [Figure 3](#).

1. The replacement is the reverse of the removal procedure.

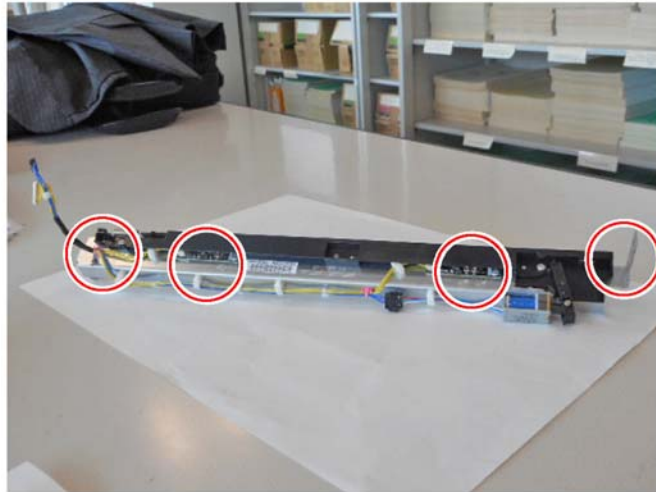
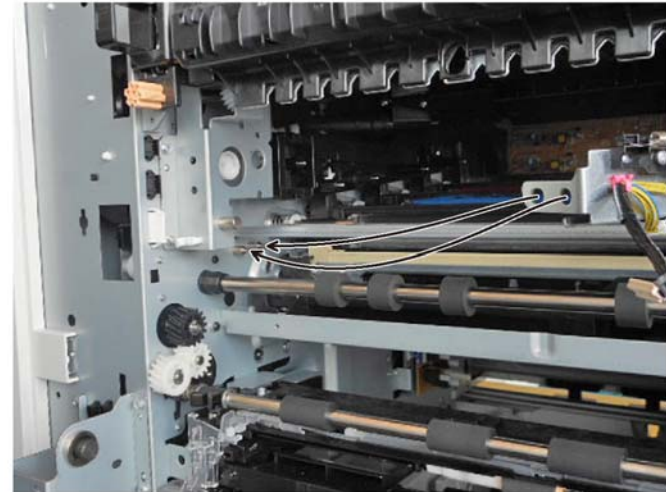


Figure 3 Sensor unit and bracket positioning sections

C-1-0576-A

2. When installing the MOB ADC assembly, insert the boss (x2) of the rear frame into the installation holes of the MOB ADC assembly, [Figure 4](#).



C-1-0577-A

Figure 4 MOB ADC assembly install

3. Perform [dC950](#) ATC Sensor Setup.

REP 90.10 Belt Cleaner Blade

Parts List on [PL 90.45](#)

Removal



WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

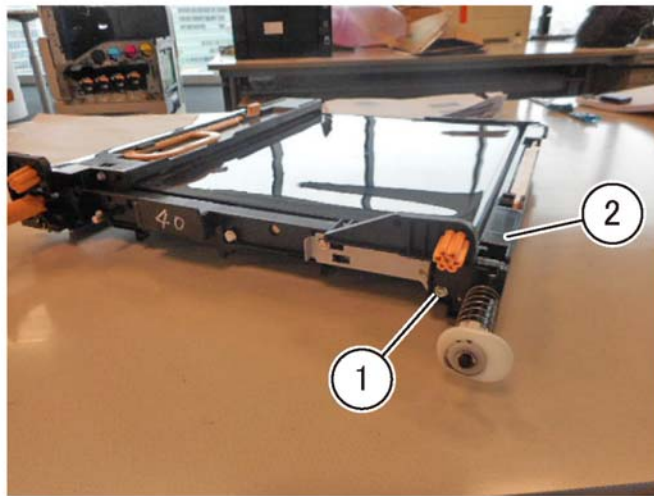


CAUTION

Do not touch the IBT belt surface.

NOTE: Place the drop cloth or newspapers at the servicing area to keep the site clean.

1. Open the front cover.
2. Open the L/H cover.
3. Remove the IBT belt unit, [REP 90.7](#).
4. Remove the IBT cleaner assembly, [Figure 1](#).
 - a. Remove the screw (1).
 - b. Remove the IBT cleaner assembly (2).



C-1-0578-A

Figure 1 IBT cleaner assembly

5. Remove two screws (1) and remove the blade assembly (2), [Figure 2](#).

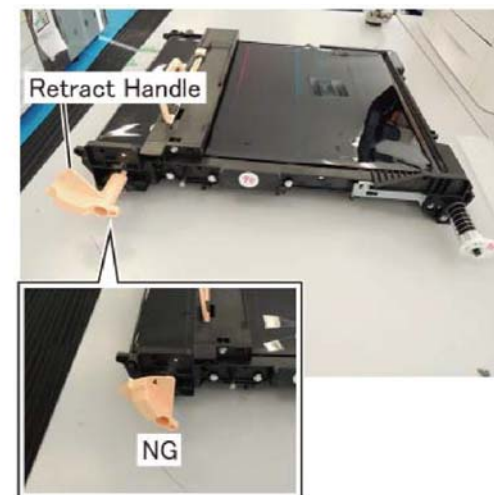


C-1-0579-A

Figure 2 Blade assembly

Replacement

1. The replacement is the reverse of the removal procedure.
2. Do not over tighten when installing the blade assembly.
3. When installing the IBT belt unit, make sure the retract handle is in the position as shown, [Figure 3](#).



C-1-0580-A

Figure 3 Correct retract handle position

4. Perform [dC675](#) Registration Control Setup Cycle.

REP 90.11 IBT Belt

Parts List on [PL 90.50](#)

Removal

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.

WARNING

Switch off the electricity to the machine. Refer to [GP 10](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not touch the IBT belt surface.

NOTE: Close the main unit cover when the IBT belt unit is removed to protect the drum from light-induced fatigue.

NOTE: Place the drop cloth or newspapers at the servicing area to keep the site clean.

1. Open the front cover.
2. Remove the IBT belt unit, [REP 90.7](#).
3. Remove the belt cleaner blade, [REP 90.10](#).
4. Remove the screw (1) securing the handle holder at the rear, [Figure 1](#).

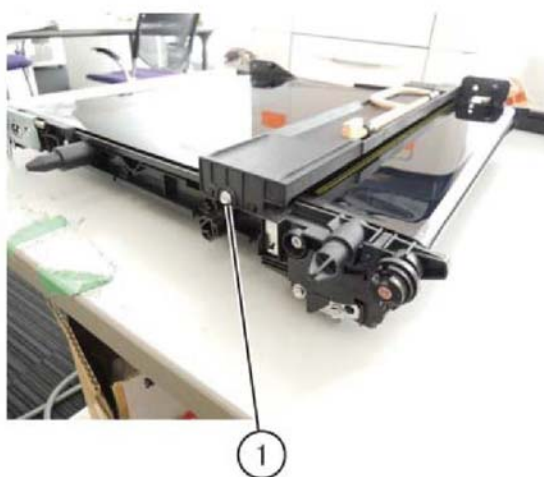


Figure 1 Handle holder rear screw

C-1-0581-A

5. Remove the screw (1) securing the handle holder at the front and remove the handle (2), [Figure 2](#).

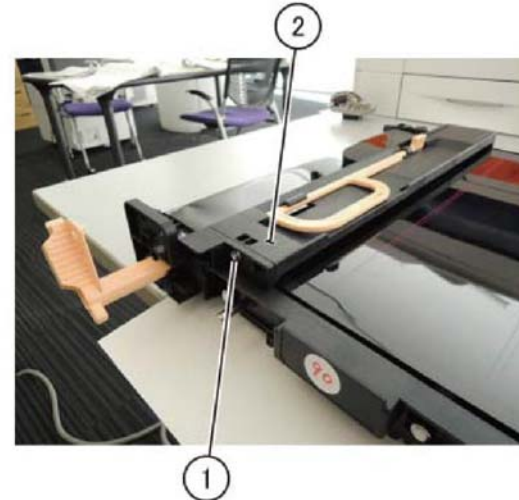


Figure 2 Handle holder front screw

C-1-0582-A

6. Remove two screws (1) and remove the IBT belt unit bottom guide, [Figure 3](#).

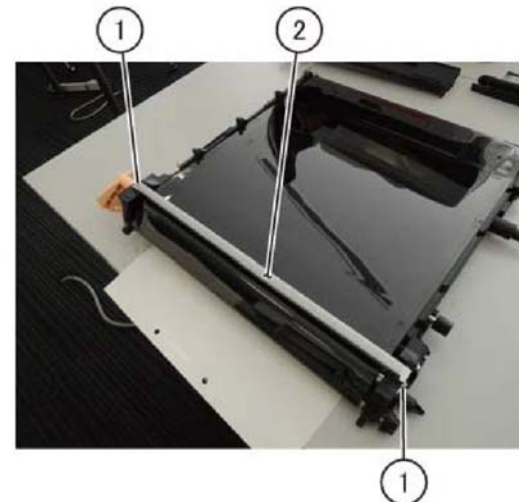


Figure 3 IBT belt unit bottom guide

C-1-0583-A

7. Remove the screw (1) and remove the retract handle, [Figure 4](#).

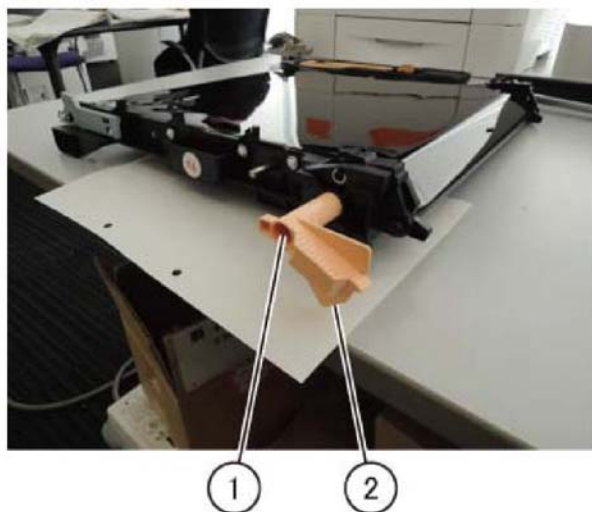


Figure 4 Retract handle

C-1-0584-A

8. Move the front tension plate towards the direction of the arrow and maintain a loose IBT belt tension. Put the removed screw in the frame hole, [Figure 5](#).

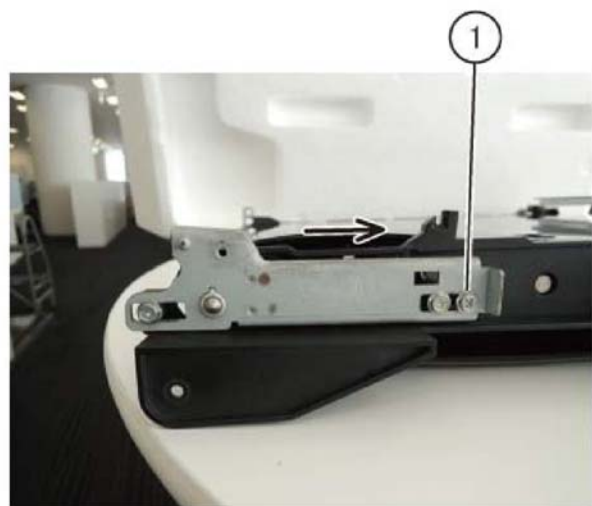


Figure 5 Front tension plate

C-1-0585-A

9. Move the rear tension plate towards the direction of the arrow and maintain a loose IBT belt tension. Put the removed screw in the frame hole, [Figure 6](#).

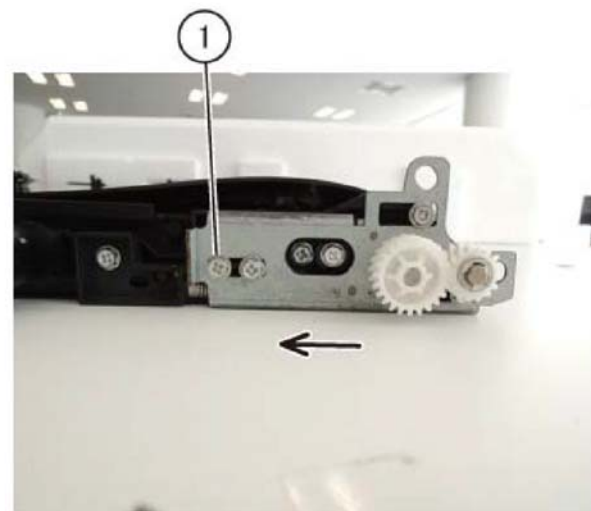


Figure 6 Rear tension plate

C-1-0586-A

10. Install the guide removed in step 6 on the front IBT belt unit in order to use it as a stand, [Figure 7](#).
- Install the guide.
 - Secure with tapping screw that was removed.



Figure 7 IBT belt unit bottom guide install

C-1-0587-A

11. Place the rear of the IBT belt unit facing Up, [Figure 8](#).



Guide

Figure 8 IBT belt unit

C-1-0588-A

13. Remove the rear holder and the tension roll, [Figure 10](#).

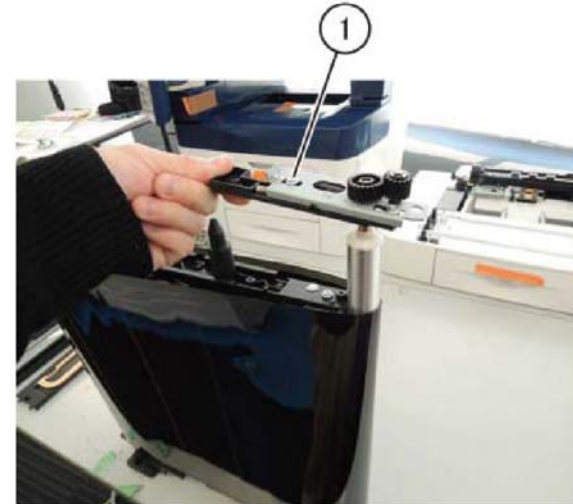


Figure 10 Rear holder and tension roll removal

C-1-0590-A

12. Remove two screws (1) that secure the rear holder, [Figure 9](#).

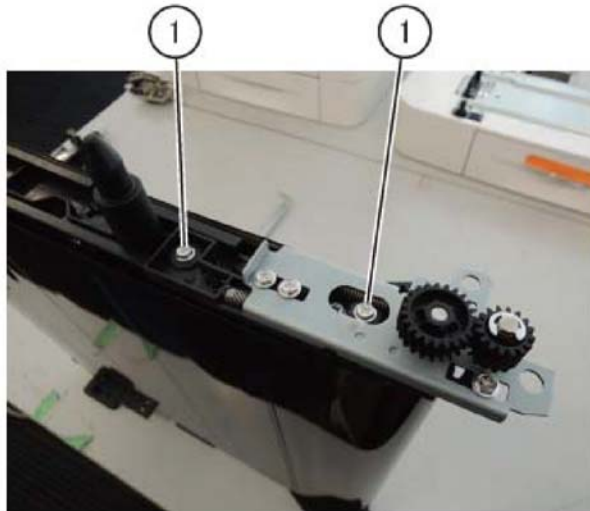


Figure 9 Rear holder screws

C-1-0589-A

Reference: This shows the removed rear holder and tension roll, [Figure 11](#).



Figure 11 Rear holder and tension roll

C-1-0591-A

14. Remove the IBT belt, [Figure 12](#).

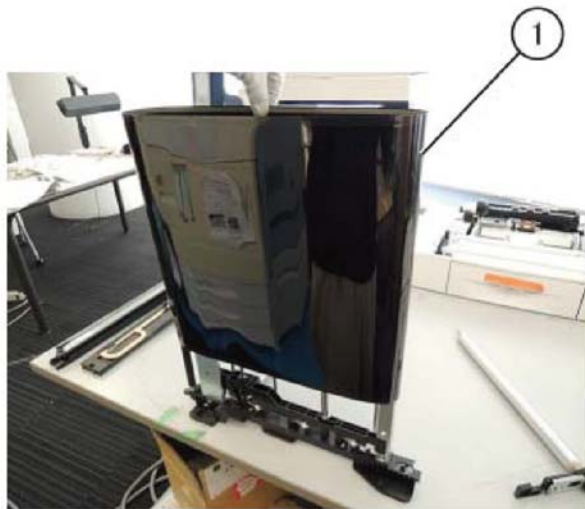


Figure 12 IBT belt unit replacement

C-1-0592-A

NOTE: Assemble so the mark is facing up when assembling the IBT belt.



Figure 13 IBT belt mark

C-1-0593-A

Replacement

1. The replacement is the reverse of the removal procedure.
2. Install so the IBT belt mark is on the rear side, [Figure 13](#).

3. When installing the rear holder and the tension roll, insert the shaft of the tension roll to the bearing on the IBT belt unit side, [Figure 14](#).

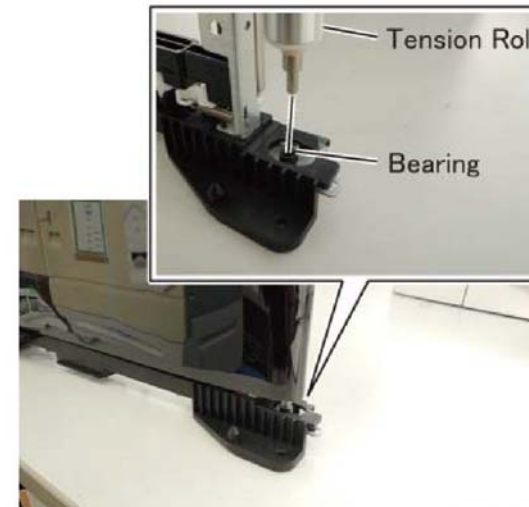


Figure 14 Tension roll shaft

C-1-0594-A

4. When installing the rear holder and the tension roll, align the tab of the bearing to the cut-out of the bearing installation hole, [Figure 15](#).

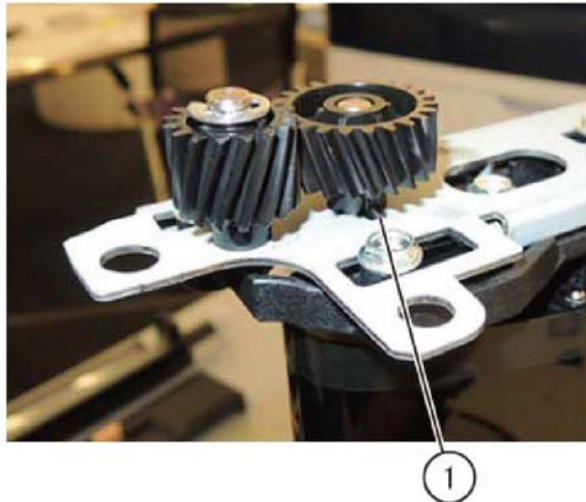


Figure 15 Tension roll tab alignment

C-1-0595-A

5. Before returning the front/rear tension plate to the original state, turn the IBT belt to make the IBT belt even, [Figure 16](#).

NOTE: Turn the gear towards the arrow direction and spin the IBT belt.

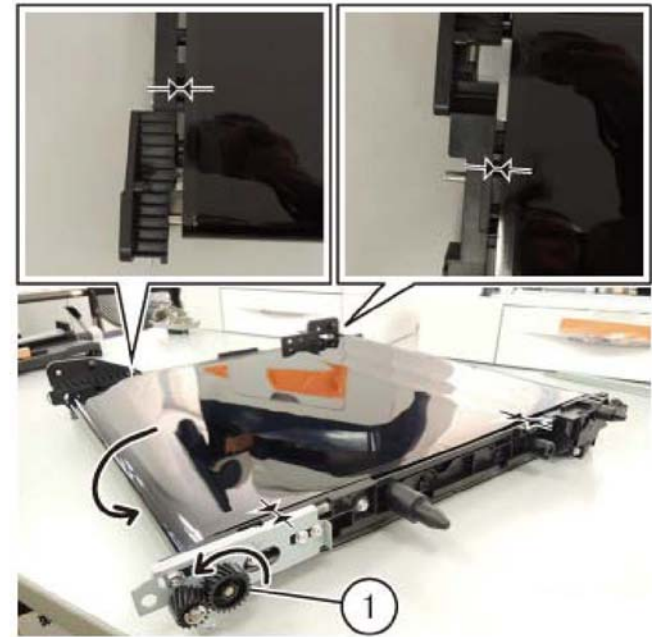


Figure 16 Tension plates with IBT belt unit

C-1-0596-A

6. If a new IBT belt has been installed, enter [dC135](#) HFSI Counter. Reset the HFSI counter 954-820.
7. Enter [dC330](#) code 042-011 to initialize the 1st BTR.
8. Perform [dC675](#) Registration Control Setup Cycle.

REP 90.12 Drum Cartridge (Y, M, C, K)

Parts List on [PL 90.20](#)

Removal



CAUTION

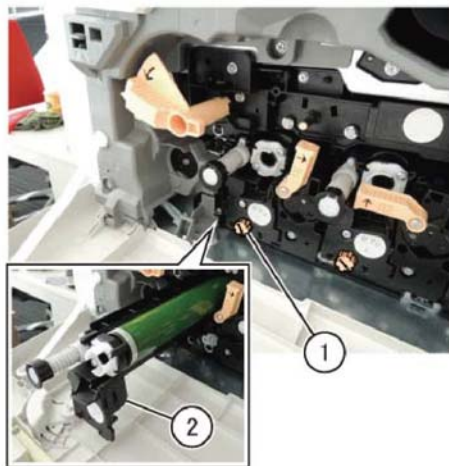
To prevent light fatigue, either wrap the removed drum cartridge in a sheet of black paper or store it in a black bag.



CAUTION

Do not touch the surface of the drum cartridge.

1. Prepare a sheet of black paper or a black bag.
2. Open the front cover.
3. Remove the waste bottle. [REP 90.6](#).
4. Turn the lever of the color to be replaced in the direction of the arrow.
5. Remove the drum cartridge of the color to be replaced, [Figure 1](#).
 - a. Remove the thumbscrew (1).
 - b. Remove the drum cartridge (2).



C-1-0597-A

Figure 1 Drum cartridge removal

6. Wrap the removed drum cartridge by using a sheet of black paper or store it in a black bag.

Replacement

1. The replacement is the reverse of the removal procedure.
2. Perform [dC950](#) ATC Sensor Setup.

ADJ 5.1 DADF Lead Edge Skew

Purpose

To correct the feeding of the original by adjusting the position of the DADF.

Preparation

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

Perform the steps that follow:

1. Clean the CVT glass. Refer to [ADJ 60.5 Optics Cleaning Procedure](#).
2. Check that the document width guides are adjusted correctly.
3. Check the document path for obstructions or foreign objects.
4. Perform the Skew Check.

Skew Check

1. Enter [dC612](#). Print internal test pattern 128.
2. Make 5 copies of the test pattern from the DADF.
3. Check for skew. Refer to [IQS 5 Skew](#).

NOTE: Skew is always measured on the lead edge, irrespective of paper orientation.

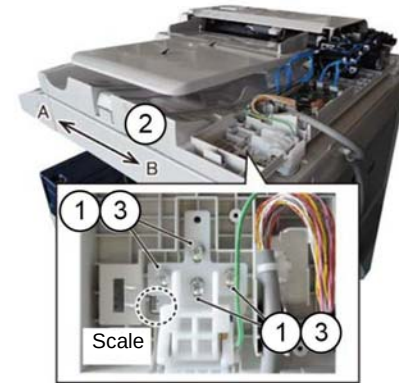
4. If necessary, perform the Adjustment.

Adjustment

1. Remove the DADF rear cover, [REP 5.4](#).
2. Adjust the position of the DADF by moving the DADF in direction A or B, [Figure 1](#):
 - a. Loosen four screws (1).
 - b. Move the DADF in direction A or B (2):
 - DADF moved in direction A (clockwise) is shown in [Figure 2](#).
 - DADF moved in direction B (counter-clockwise) is shown in [Figure 3](#).

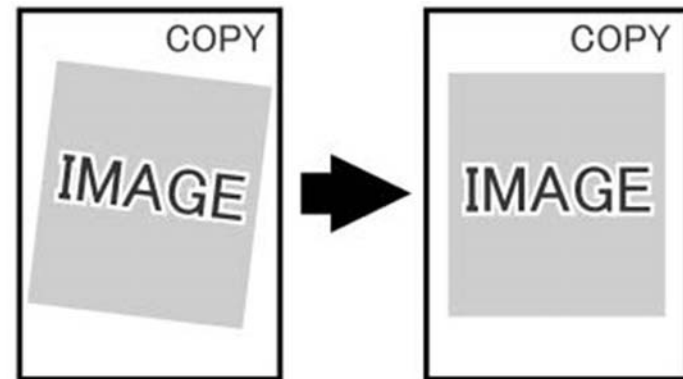
NOTE: Each mark on the scale represents movement of 1mm (0.04 inch).

- c. Tighten four screws (3).



TC-1-0453-A

Figure 1 Skew adjustment



TC-1-0174-A

Figure 2 Direction A

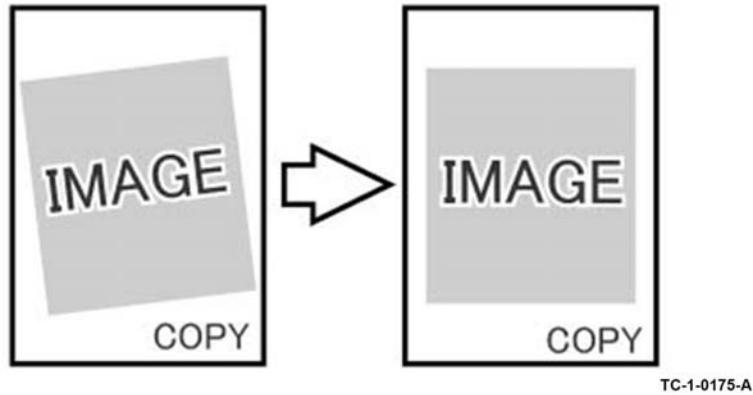


Figure 3 Direction B

ADJ 5.2 DADF Side Edge Registration

Purpose

To correct DADF side edge registration.

Initial Actions

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

Before performing this procedure, perform the procedures that follow:

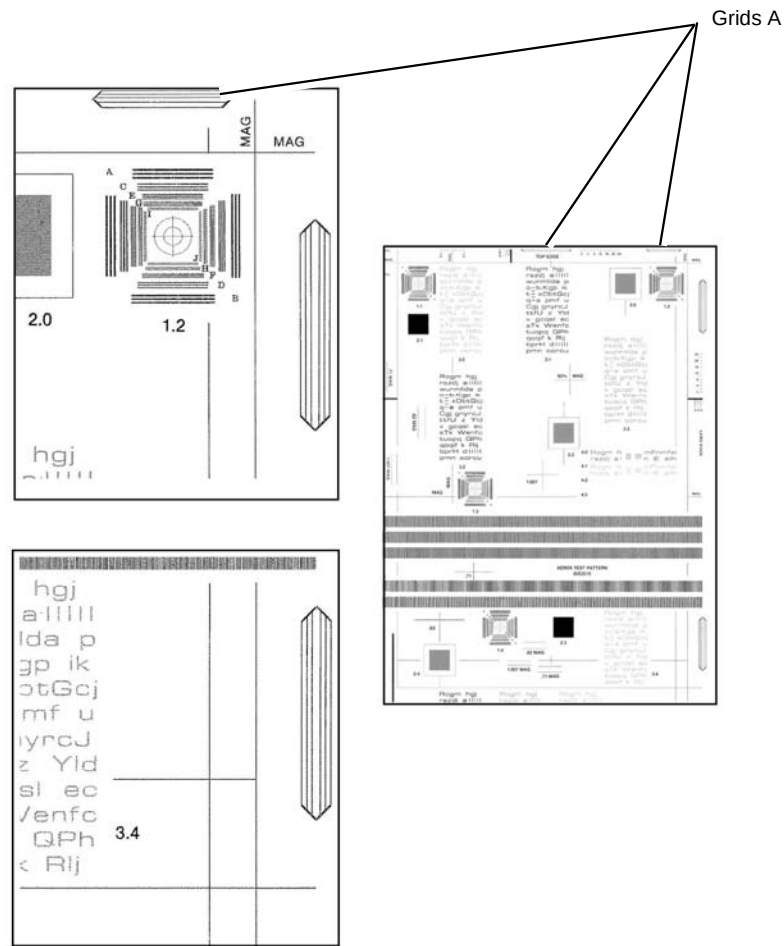
1. [dC126 System Registration](#).
2. [ADJ 60.3 IIT Side Edge Registration](#).
3. [ADJ 5.1 DADF Lead Edge Skew](#).

3. Reinstall the DADF rear cover.
4. After adjustment, perform [ADJ 5.2 DADF Side Edge Registration](#) and [ADJ 5.3 DADF Lead Edge Registration](#).

Side 1 Check

- 1. Place the test pattern 82E2010 (A4) or 82E2020 (8.5 x11 inch) face up in the DADF input tray. Ensure that the document guides are correctly adjusted.
- 2. Make a simplex copy.
- 3. [Figure 1](#), use the grids A to measure the side edge displacement. Check that the side edge registration error is within +/- 2.1 mm (0.082 inch).

NOTE: Grid A and grid B of test patterns 82E2010, 82E2020 are small areas of parallel lines 1mm apart. These can be used to directly measure the registration displacement.



Side 1 Adjustment

- 1. Enter [dC131](#). Change NVM value 711-272 to correct side edge registration for all document sizes. Refer to [Table 1](#). Increasing the NVM value moves the image towards the inboard edge of the copy.

NOTE: An increment of 1 in NVM = 0.1mm (0.04 inch).

Table 1 Side 1 NVM values

NVM	Document Width	Document Size
711-272	For all sizes	For all sizes
715-056	139.7 to 148 mm	A5 SEF, 5.5x8.5 SEF
715-058	182 to 194mm	B5 SEF, 16K SEF
715-060	203.2mm	8x10 SEF, 8x10.5 SEF
715-062	210mm	A4 SEF, A5 LEF
715-064	214.9 to 215.9mm	Letter SEF, Legal SEF, 5.5x8.5 LEF, 8.46x12.4 SEF, 8.5x13 SEF
715-066	254 to 257mm	B4 SEF, B5 LEF, 8x10 LEF
715-068	266.7 to 267mm	16K LEF, 8K LEF, 8x10.5 LEF
715-070	279.4mm	Letter LEF, 11x15 SEF, 11x17 SEF
715-072	297mm	A4 LEF, A3 SEF

- 2. If required, NVM values 715-056 to 715-072 can be changed to correct side edge registration for each individual document size. Refer to [Table 1](#).
- 3. Repeat the [Side 1 Check](#). If the side 1 side edge registration is good, perform the [Side 2 Check](#).

C-1-0654-A

Figure 1 Test pattern

Side 2 Check

1. Place the test pattern 82E2010 (A4) or 82E2020 (8.5 x11 inch) face down in the DADF input tray. Ensure that the document guides are correctly adjusted.
2. Make a duplex (2 to 1 sided) copy.
3. [Figure 1](#), use the grids to measure the side edge displacement. Check that the side edge registration error is within +/- 2.1 mm (0.082 inch).

Side 2 Adjustment

1. Enter [dC131](#). Change NVM value 711-274 to correct side edge registration for all document sizes. Refer to [Table 1](#). Increasing the NVM value moves the image towards the inboard edge of the copy.

NOTE: An increment of 1 in NVM = 0.1mm (0.04 inch).

Table 2 Side 2 NVM values

NVM	Document Width	Document Size
711-274	For all sizes	For all sizes
715-057	139.7 to 148 mm	A5 SEF, 5.5x8.5" SEF
715-059	182 to 194mm	B5 SEF, 16K SEF
715-061	203.2mm	8x10" SEF, 8x10.5" SEF
715-063	210mm	A4 SEF, A5 LEF
715-065	214.9 to 215.9mm	Letter SEF, Legal SEF, 5.5x8.5" LEF, 8.46x12.4" SEF, 8.5x13" SEF
715-067	254 to 257mm	B4 SEF, B5 LEF, 8x10" LEF
715-069	266.7 to 267mm	16K LEF, 8K LEF, 8x10.5" LEF
715-071	279.4mm	Letter LEF, 11x15" SEF, 11x17" SEF
715-073	297mm	A4 LEF, A3 SEF

2. If required, NVM values 715-057 to 715-073 can be changed to correct side edge registration for each individual document size. Refer to [Table 2](#).
3. Repeat the [Side 2 Check](#).

ADJ 5.3 DADF Lead Edge Registration

Purpose

To correct DADF lead edge registration.

Initial Actions

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

Before performing this procedure, perform the procedures that follow:

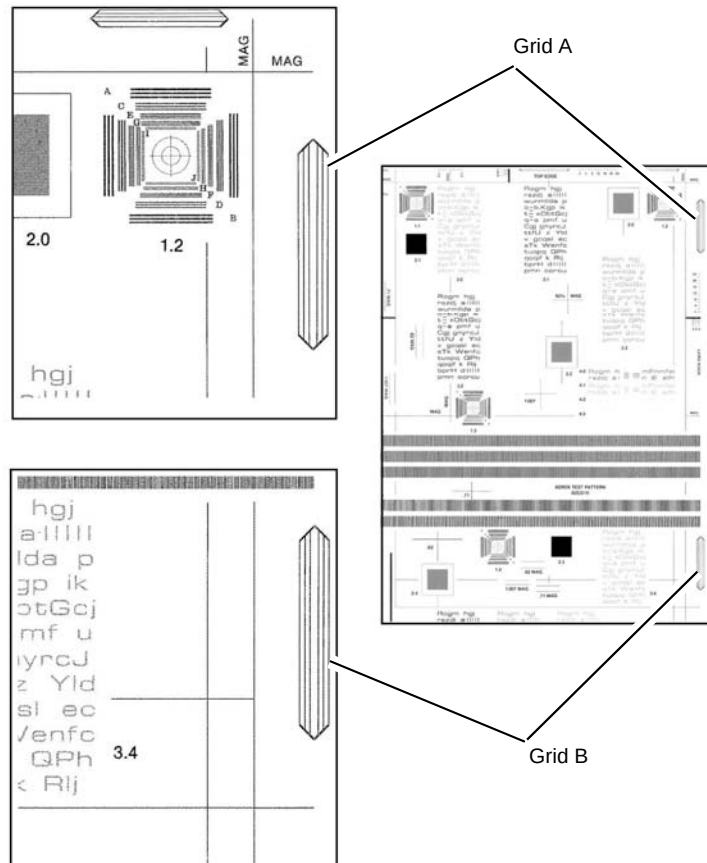
1. [dC126](#) System Registration.
2. [ADJ 60.2](#) IIT Lead Edge Registration.
3. [ADJ 5.1](#) DADF Lead Edge Skew.

Side 1 Check

1. Place the test pattern 82E2010 (A4) or 82E2020 (8.5 x11 inch) face up in the DADF input tray. Ensure that the document guides are correctly adjusted.
2. Make two simplex copies.
3. Use the grids A and B on the copy, [Figure 1](#), measure the lead edge displacement. Check that the lead edge registration error is within +/- 1.6 mm (0.063 inch). The displacement measured at A and B should be equal.

NOTE: Grid A and grid B of test patterns 82E2010, 82E2020 are small areas of parallel lines 1mm apart. These can be used to directly measure the registration displacement.

NOTE: If there is a difference between measurements at A and B, refer to [IQS 5 Skew](#).



C-1-0655-A

Figure 1 Test pattern

Side 1 Adjustment

1. Enter **dC131**. Change NVM value 711-140 to correct side 1 lead edge registration. If the measurement is:
 - Too large, increase the NVM value.
 - Too small, decrease the NVM value.

NOTE: An increment of 1 in NVM = 0.1mm (0.004 inch).

2. Repeat the [Side 1 Check](#). If the side 1 lead edge registration is good, apply the same change to the NVM values that follow:
 - 711-002 DADF lead registration adjustment (side 1)
 - 711-003 DADF lead registration adjustment (side 1)
 - 711-004 DADF lead registration adjustment (side 1)
3. Perform the [Side 2 Check](#).

Side 2 Check

1. Place the test pattern 82E2010 (A4) or 82E2020 (8.5 x11 inch) face down in the DADF input tray. Ensure that the document guides are correctly adjusted.
2. Make two duplex (2 to 1 sided) copies.
3. Use the grids A and B on the copy, [Figure 1](#), measure the lead edge displacement. Check that the lead edge registration error is within +/- 2.0 mm (0.079 inch).
4. If the measurement is not within the specified range, perform the [Side 2 Adjustment](#).

Side 2 Adjustment

1. Enter **dC131**. Change NVM value 711-141 to correct side 2 lead edge registration. If the measurement is:
 - Too large, increase the NVM value.
 - too small, decrease the NVM value.

NOTE: An increment of 1 in NVM = 0.1mm (0.004 inch).

2. Repeat the [Side 2 Check](#). If the side 2 lead edge registration is good, apply the same change to the NVM values that follow:
 - 711-022 DADF lead registration adjustment (side 2)
 - 711-023 DADF lead registration adjustment (side 2)
 - 711-024 DADF lead registration adjustment (side 2)

4. If the measurement is not within the specified range, perform the [Side 1 Adjustment](#). If the measurement is within the specified range go to the [Side 2 Check](#).

ADJ 13.1 Hole Punch Position

Purpose

To adjust the position of the hole punch position.

NOTE: This adjustment can also be performed by the customer.

Procedure

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

1. Enter Customer Administrator Tools, [GP 23](#).
2. Touch **Device**, then **Support**.
3. Touch **Hole Punch Position**.
4. Follow the on screen instructions.
5. Exit Customer Administrator Tools, [GP 23](#).

ADJ 13.2 Booklet Folding and Staple Position

Purpose

To adjust the position of the booklet fold and staple position.

NOTE: This adjustment can also be performed by the customer.

Procedure

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

1. Enter Customer Administrator Tools, [GP 23](#).
2. Touch **Device**, then **Support**.
3. Touch **Fold Position**.
4. Follow the on screen instructions.
5. Exit Customer Administrator Tools, [GP 23](#).

ADJ 60.1 Full/Half Rate Carriage Position Adjustment

Parts List on PL 60.15

Purpose

To adjust the position of the full/half rate carriage.

Adjustment



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: Adjust the position of full/half rate carriage at the front and rear separately. Only the procedure for the rear is described here. The procedure for the front is the same.

1. Open DADF.
2. Remove the document glass, REP 60.1.



CAUTION

Do not remove the four screws that secure the lens base.

3. Remove the alignment pins from the lens assembly, Figure 1:
 - a. Remove two screws (1).
 - b. Remove the alignment pins (2).

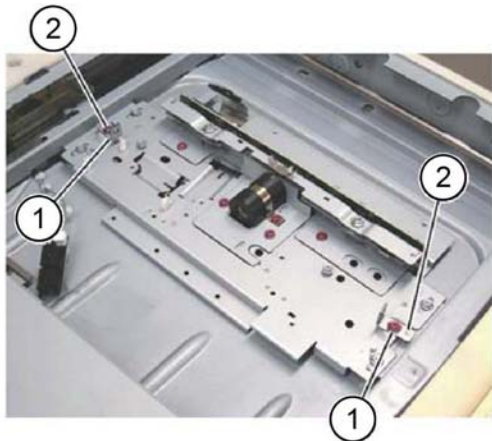


Figure 1 Jig pins

C-1-0442-A

4. Check that the pulley at the front side is firmly secured. If the pulley is loose, tighten both set screws, Figure 2.

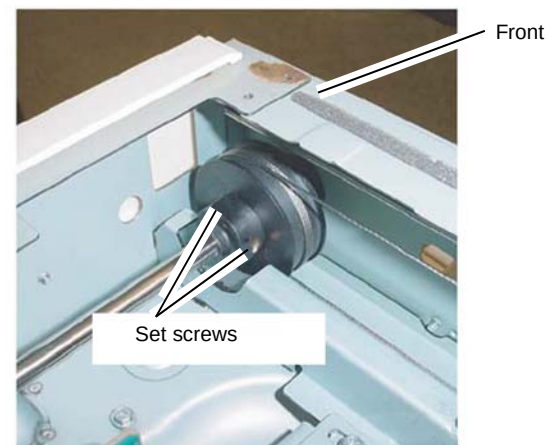


Figure 2 Front set screws

C-1-0443-A

5. Loosen the two set screws that secure the pulley at the rear, Figure 3.

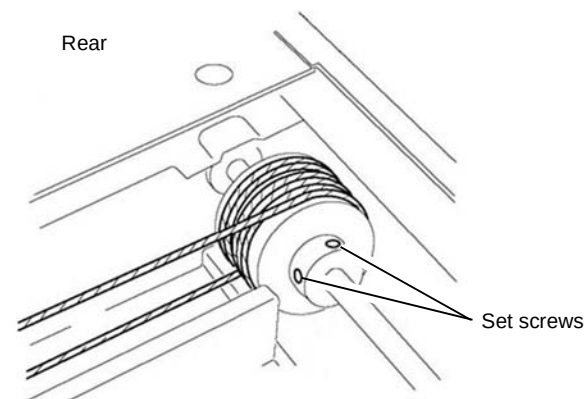


Figure 3 Rear set screws

C-1-0444-A

6. Position the half rate carriage, [Figure 4](#):
 - a. Move the half rate carriage (1) to the alignment pin insertion position (the slots in the lower guide rails).
 - b. Install the two alignment pins (2).
 - c. Tighten the two screws (3).

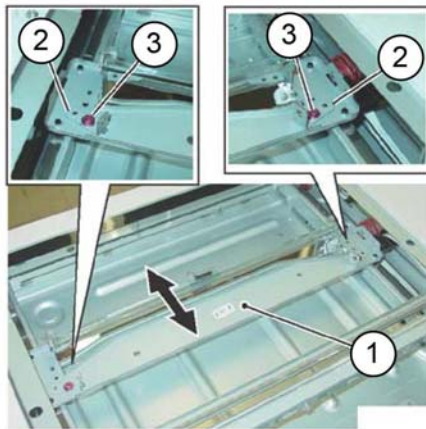


Figure 4 Half rate carriage positioning

7. Tighten one of the rear set screws, [Figure 5](#).

NOTE: The second set screw will not be accessible at this time.

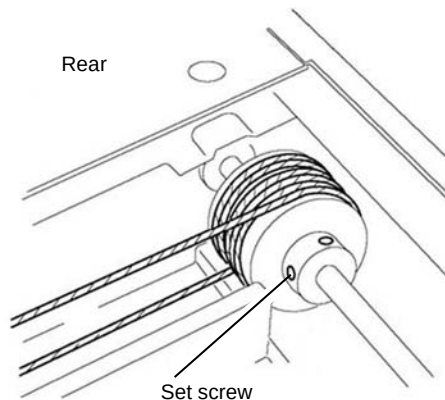


Figure 5 First rear set screw

C-1-0445-A

8. Secure the rear cable to the full rate carriage, [Figure 6](#):
 - a. Remove the alignment pin from the front of the half rate carriage. Install the alignment pin (1) to the rear of the full rate carriage.
 - b. Tighten the rear cable securing screw (5).

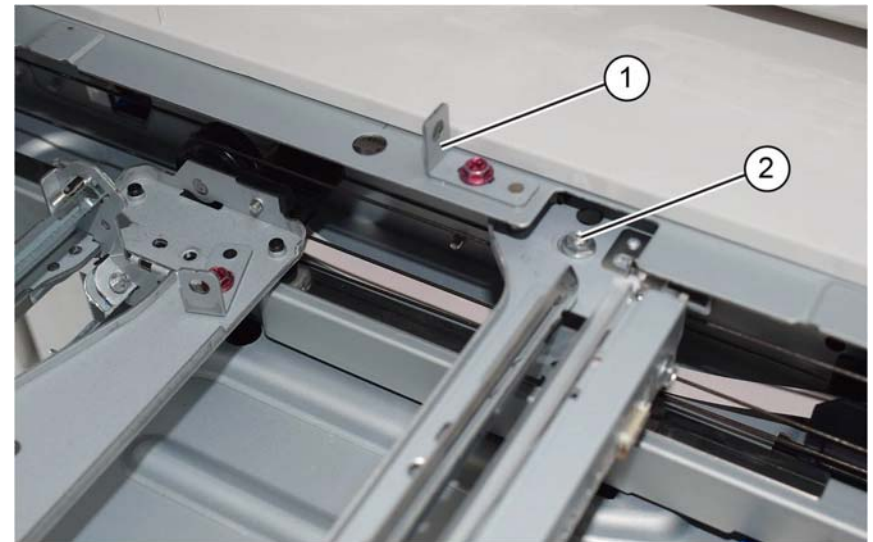


Figure 6 Carriage setting

C-1-0447-A

9. Tighten the other rear set screw, [Figure 7](#).

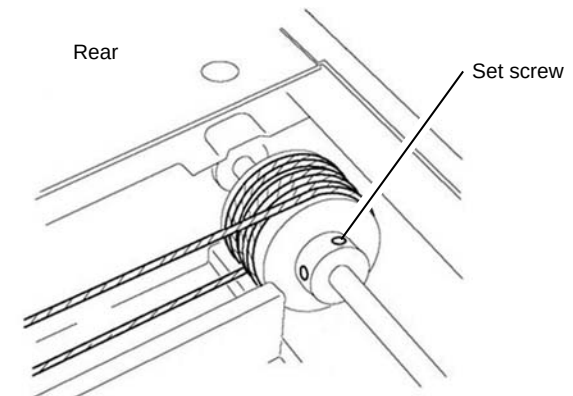


Figure 7 Second rear set screw

C-1-0448-A

10. Manually move the full rate carriage to ensure that it moves smoothly.
11. Restore the tool pins to their original positions.
12. Reinstall the lens cover assembly.

ADJ 60.2 IIT Lead Edge Registration

Purpose

To adjust the IIT scan timing in the process direction and to correct the copy position.

Check



Only perform this procedure if absolutely necessary. IIT lead registration affects the precision of document size detection.

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

1. Ensure that the IOT lead edge registration is correct. Refer to [dC126 System Registration](#).
2. Make two, 100% copies of test pattern 82E8220 from the document glass.
3. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the LE2 scale is 10mm +/- 2.1mm (0.4 inch +/- 0.1 inch), [Figure 1](#).

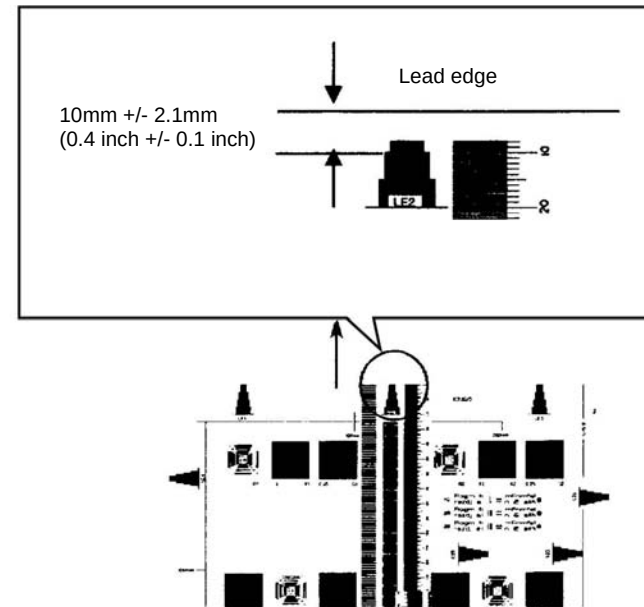


Figure 1 IIT lead edge registration

C-1-0449-A

4. If the value is not within the specified range, perform the Adjustment.

Adjustment

1. Enter **dC131**. Change the value of NVM location 715-050 to correct lead edge registration:
 - Increase the value to move the image towards the trail edge of the copy.
 - Decrease the value to move the image towards the lead edge of the copy.

NOTE: An increment of 1 in NVM = 0.34mm (0.014inch).

2. Repeat the Check.

ADJ 60.3 IIT Side Edge Registration

Purpose

To adjust the IIT scan timing in the cross process direction and to correct the copy position.

Check

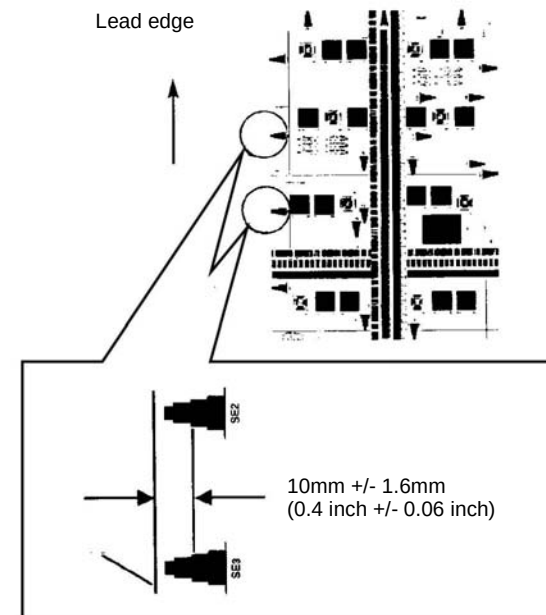


CAUTION

Only perform this procedure if absolutely necessary. IIT side registration affects the precision of document size detection.

NOTE: For a description of the print/copy orientation definitions, refer to **GP 31** Print/Copy Orientation Definitions.

1. Ensure that the IOT side registration is correct. Refer to **dC126** System Registration.
2. Make two, 100% copies of test pattern 82E8220 from the document glass.
3. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the SE2 and SE3 scales is 10mm +/- 1.6mm (0.4 inch +/- 0.06 inch), **Figure 1**.



C-1-0450-A

Figure 1 IIT side edge registration

4. If the value is not within the specified range, perform the Adjustment.

Adjustment

1. Enter **dC131**. Change the value of NVM location 715-053 to correct side edge registration:
 - Increase the value to move the image towards the inboard edge of the copy.
 - Decrease the value to move the image towards the outboard edge of the copy.

NOTE: An increment of 1 in NVM = 0.85mm (0.033 inch).

2. Repeat the Check.

ADJ 60.4 IIT Image Ratio Adjustment

Purpose

To correct the in process and cross process direction ratio for a 100% copy.



CAUTION

Perform this procedure only if absolutely required. Adjusting IIT magnification may adversely affect resolution due to ASIC shift.

NOTE: For a description of the print/copy orientation definitions, refer to **GP 31** Print/Copy Orientation Definitions.

Check

1. Make two, 100% copies of test pattern 82E8220 from the document glass.
2. Check the 2nd copy:
 - a. To check the cross process direction magnification: measure the 200mm line running from near LE1 to near LE3. Check that the dimension is 200mm +/- 1mm (7.9 inches +/- 0.04 inch). Refer to **Figure 1**.

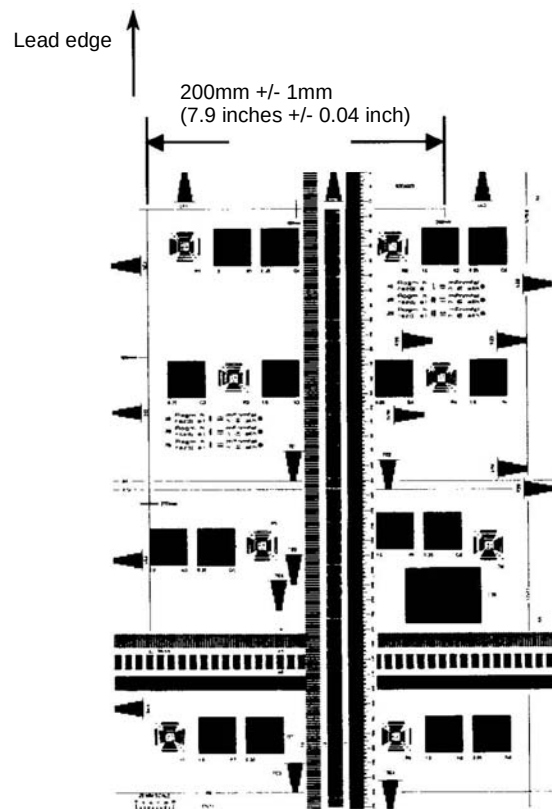


Figure 1 Cross process direction magnification

- b. To check the in process direction magnification: measure the 300mm line running from near LE1 to the trail edge of the 1.8lp ladder. Check that the dimension is 300mm +/- 1mm (11.8 inches +/- 0.04 inch). Refer to Figure 2.

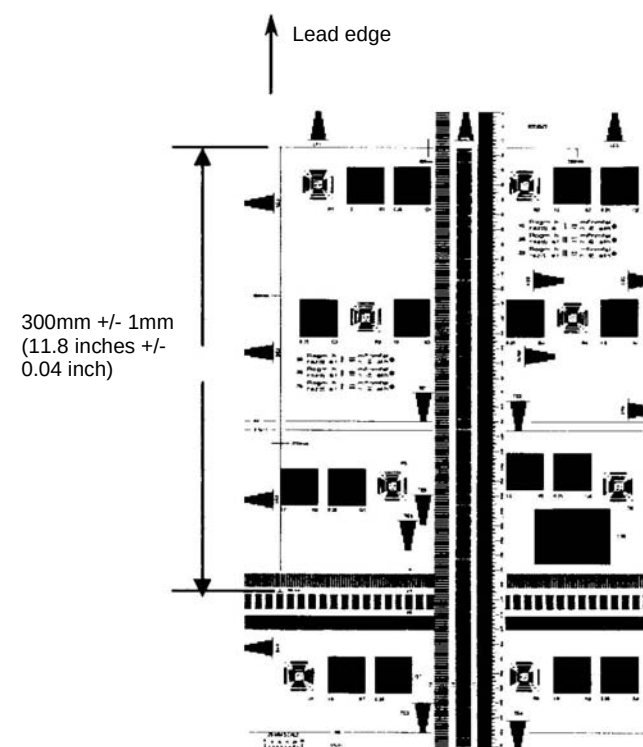


Figure 2 In process direction magnification

3. If either measurement is not in specification, perform the relevant Adjustment.

Adjustment

Cross Process Direction Magnification

1. Enter **dC131** NVM value 715-702.
2. Change the value.
 - 1 increment: 0.1%.
 - Increase the value to increase the cross process direction image size.
 - Decrease the value to decrease the cross process direction image size.
3. Repeat the Check.

In Process Direction Magnification

1. Enter **dC131** NVM value 715-051.
2. Change the value.
 - 1 increment: 0.1%.
 - Increase the value to increase the in process direction image size.
 - Decrease the value to decrease the in process direction image size.
3. Repeat the Check.

ADJ 60.5 Optics Cleaning Procedure

Parts List on [PL 60.10](#)

Purpose

To clean the optics components of the scanner ensuring optimum image quality.

NOTE: This adjustment must only be performed if directed to from an Image Quality RAP, or if the optics cavity was opened to install a new component and contamination can be seen on the optics components.

Procedure



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the document glass, [REP 60.1](#).
2. Inspect the cleanliness of the optics mirrors, if necessary, clean them as follows:
 - a. Vacuum clean the area to remove all visible contamination, taking care not to touch the mirrors with the cleaning nozzle. It may be necessary to move the carriages to gain reasonable access, do this by hand rotation of the flywheel on the capstan shaft.
 - b. Wash your hands.
 - c. Carefully clean the mirrors using a dry micro fiber wiper. It may be necessary to use a cleaning cloth dampened with film remover on stubborn contamination.
 - d. Polish the mirrors with a dry micro fiber wiper.
 - e. Check that the mirror surfaces are now clean. Repeat the cleaning operation if necessary.
 - f. Examine the lenses of the APS sensors, [PL 60.10 Item 10](#). Clean if necessary with a micro fiber wiper.
3. Inspect the cleanliness of the document glass and CVT glass, if necessary, clean them as follows:
 - a. Clean the under side of document glass and CVT glass using a micro fiber wiper, dampened with film remover.
 - b. Polish the under side of document glass and CVT glass with a dry micro fiber wiper.
 - c. Install the document glass and CVT glass, taking care not to smear the cleaned underside.
 - d. Clean the upper side of document glass and CVT glass using a micro fiber wiper, dampened with film remover.
 - e. Polish the upper side of document glass and CVT glass using a dry micro fiber wiper.
4. Re-install the remainder of the removed components.

ADJ 60.6 CDD Lens Optical Axis Correction

Parts List on [PL 60.10](#)

Purpose

To correctly set the CCD lens optical axis after installation of a new CCD lens.

Check

1. Enter [dC945](#) IIT Calibration.
2. Perform the Optical Axis Correction procedure.
3. On the result screen, if OK is displayed, no further action is necessary. If NG is displayed, perform the Adjustment. Refer to [Table 1](#).

Table 1 Result

Optical Axis Correction	
Optical Axis Correction Result	NG
Front Nut Correction Angle -: Left rotation	+90
Rear Nut Correction Angle +: Right rotation	-260

Adjustment

1. The result screen will show the information depicted in [Table 1](#):
 - Front nut refers to the nut at the front of the CCD lens assembly, refer to [Figure 1](#).
 - Rear nut refers to the nut at the rear of the CCD lens assembly, refer to [Figure 1](#).
 - + Refers to clockwise rotation.
 - - Refers to counter-clockwise rotation.
 - Numeral: refers to the adjustment angle (degrees).Using the content of [Table 1](#) as an example:
 - The front nut must be rotated 90 degrees clockwise.
 - The rear nut must be rotated 260 degrees counter clockwise.
2. Rotate each nut the required amount.

NOTE: If the value is abnormally high, for example 990, it may be due to the light path being blocked. Perform [ADJ 60.5 Optics Cleaning Procedure](#), then repeat the Check.

NOTE: It may be necessary to mark the nut runner to track the rotation.

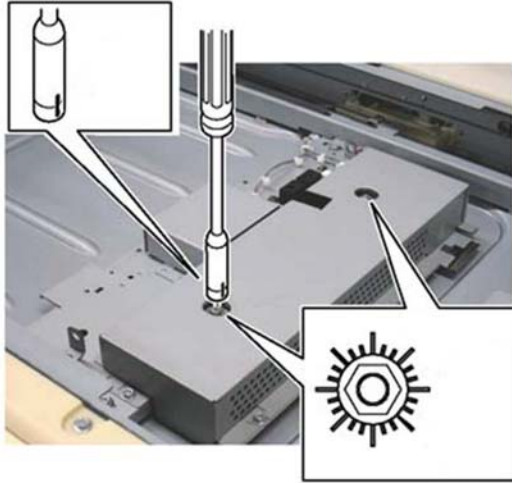


Figure 1 Nut adjustment

C-1-0473-A

3. After the adjustment, perform the Check.

ADJ 60.7 Image Position

Purpose

To adjust the position of the image on the page.

NOTE: This adjustment can also be performed by the customer.

Procedure

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

1. Enter Customer Administration Tools, [GP 23](#).
2. Touch **Device**, then **Support**.
3. Touch **Image Position**.
4. Follow the on screen instructions.
5. Exit Customer Administrator Tools, [GP 23](#).

ADJ 90.1 Edge Erase

Purpose

To adjust side (inboard), lead edge and trail edge erase values.

Check

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

1. Ensure that the IOT lead registration and side registration is correct. Refer to [dC126 System Registration](#).
2. Open the DADF.
3. Make a black copy.
4. Check that the margins on the copy are 4mm (0.16 inch) at the lead edge and 2mm (0.08 inch) at the trail edge and both sides.
5. If the value is not within the specified range, perform the Adjustment.

Adjustment

1. Adjust the NVM values such that the measured value is 4mm (0.16 inch) at the lead edge and 2mm (0.08 inch) at the trail edge and both sides. Refer to [Table 1](#).

NOTE: If the setting value is increased, the erase value increases.

Table 1 NVM values

Chain-Link	Name	Min	Default	Max	Step
998-035	Lead Image Loss Amount	0	40	255	0.1mm (0.004 inch)
998-036	Side Image Loss Amount	0	20	255	0.1mm (0.004 inch)
998-037	Trail Image Loss Amount	0	20	255	0.1mm (0.004 inch)

2. Repeat the Check.

ADJ 90.2 Marking Refresh

Purpose

To adjust the density level.

NOTE: This adjustment is only available when the machine determines that the density level has degraded. This adjustment can also be performed by the customer.

Procedure

1. Enter Customer Administrator Tools, [GP 23](#).
2. Touch **Device**, then **Supplies**.
3. Touch **Drum Cartridge**.
4. Touch **Marking Refresh**.
5. Exit Customer Administrator Tools, [GP 23](#).

ADJ 90.3 Color Calibration - Automatic

Purpose

To automatically adjust the color calibration.

NOTE: This adjustment can also be performed by the customer.

Procedure

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

1. Enter Customer Administration Tools, [GP 23](#).
2. Touch **Device**, then **Support**.
3. Touch **Color Calibration - Automatic**.
4. Follow the on screen instructions.
5. Exit Customer Administrator Tools, [GP 23](#).

ADJ 90.4 Color Calibration - Advanced

Purpose

To adjust the color calibration.

NOTE: This adjustment can also be performed by the customer.

Procedure

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

1. Enter Customer Administration Tools, [GP 23](#).
2. Touch **Device**, then **Support**.
3. Touch **Color Calibration - Advanced**.
4. Follow the on screen instructions.
5. Exit Customer Administrator Tools, [GP 23](#).

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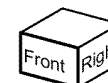
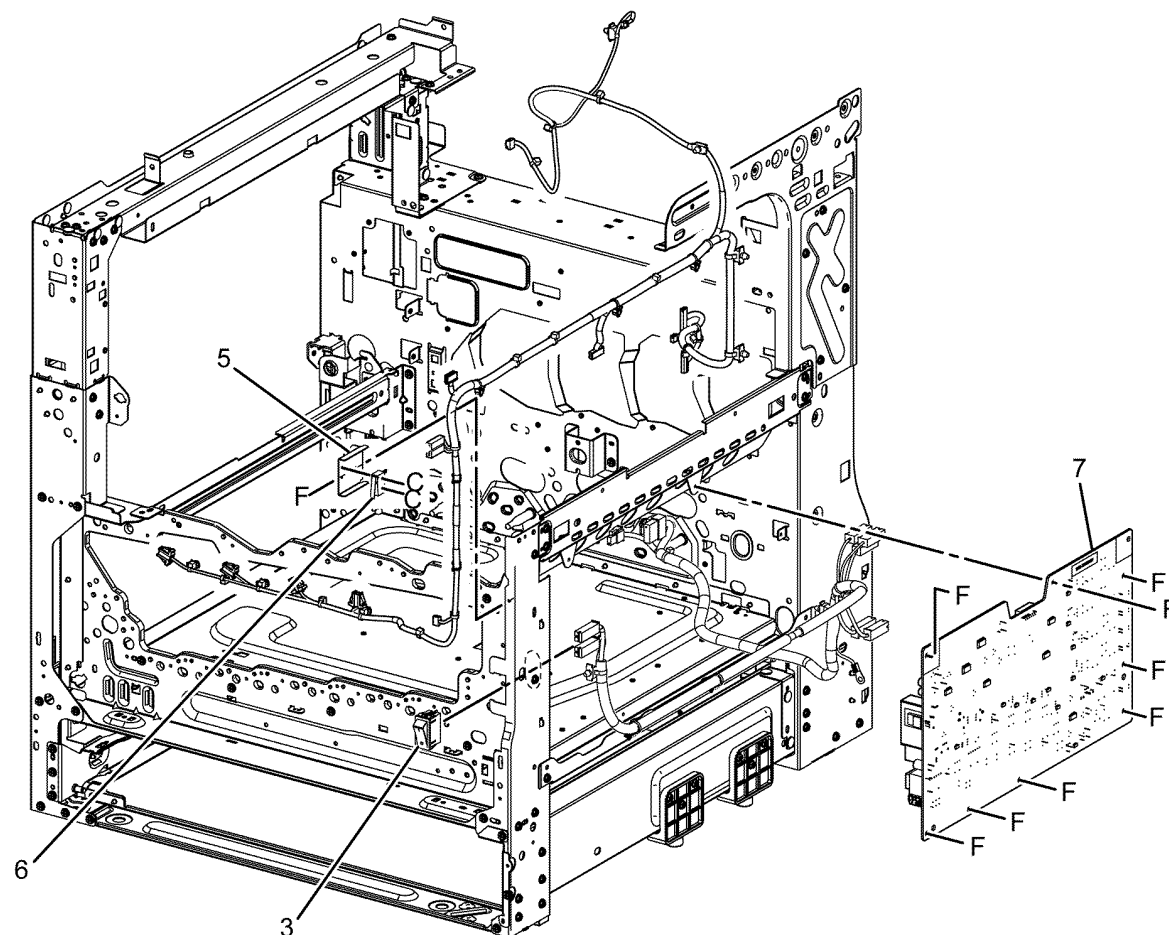
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PL 1.05 Electrical-Front Upper

Item	Part	Description
1	—	Not used
2	—	Not used
3	110E15080	Main power switch
4	110K18110	Interlock switch assembly
5	—	Interlock switch bracket (P/O PL 1.05 Item 4)
6	—	Front cover interlock switch (P/O PL 1.05 Item 4)
7	105K32183	HVPS (REP 1.1)

4 { 5, 6

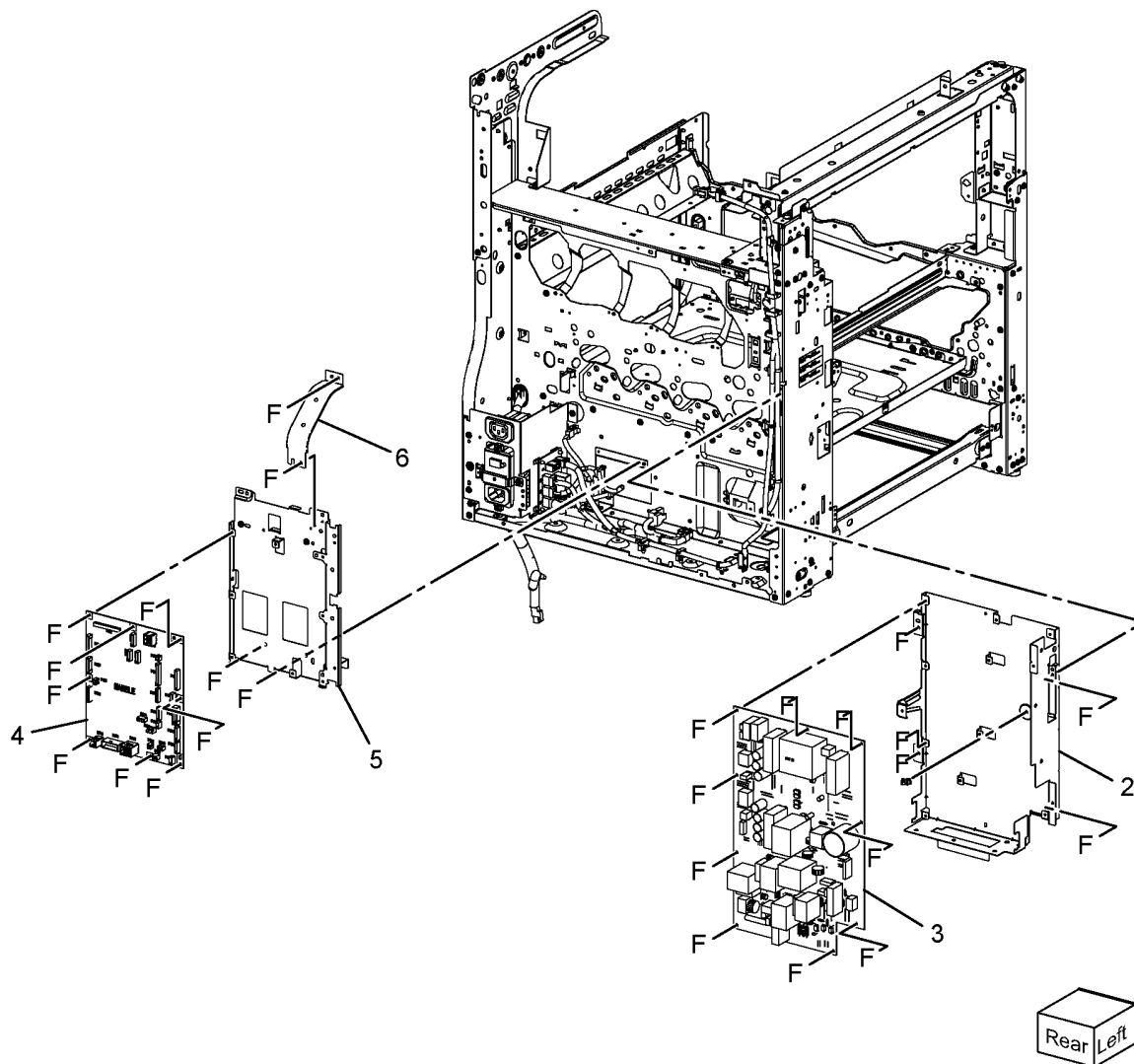


C-8-0067-A

PL 1.10 Electrical-Lower Rear

Item	Part	Description
1	105E21800	LVPS assembly (REP 1.4)
2	—	LVPS chassis (P/O PL 1.10 Item 1)
3	—	LVPS (P/O PL 1.10 Item 1) (REP 1.3)
4	960K82653	Drive PWB (REP 1.2)
5	—	PWB drive bracket (Not Spared) (REP 1.5)
6	—	Harness upper bracket (Not Spared)

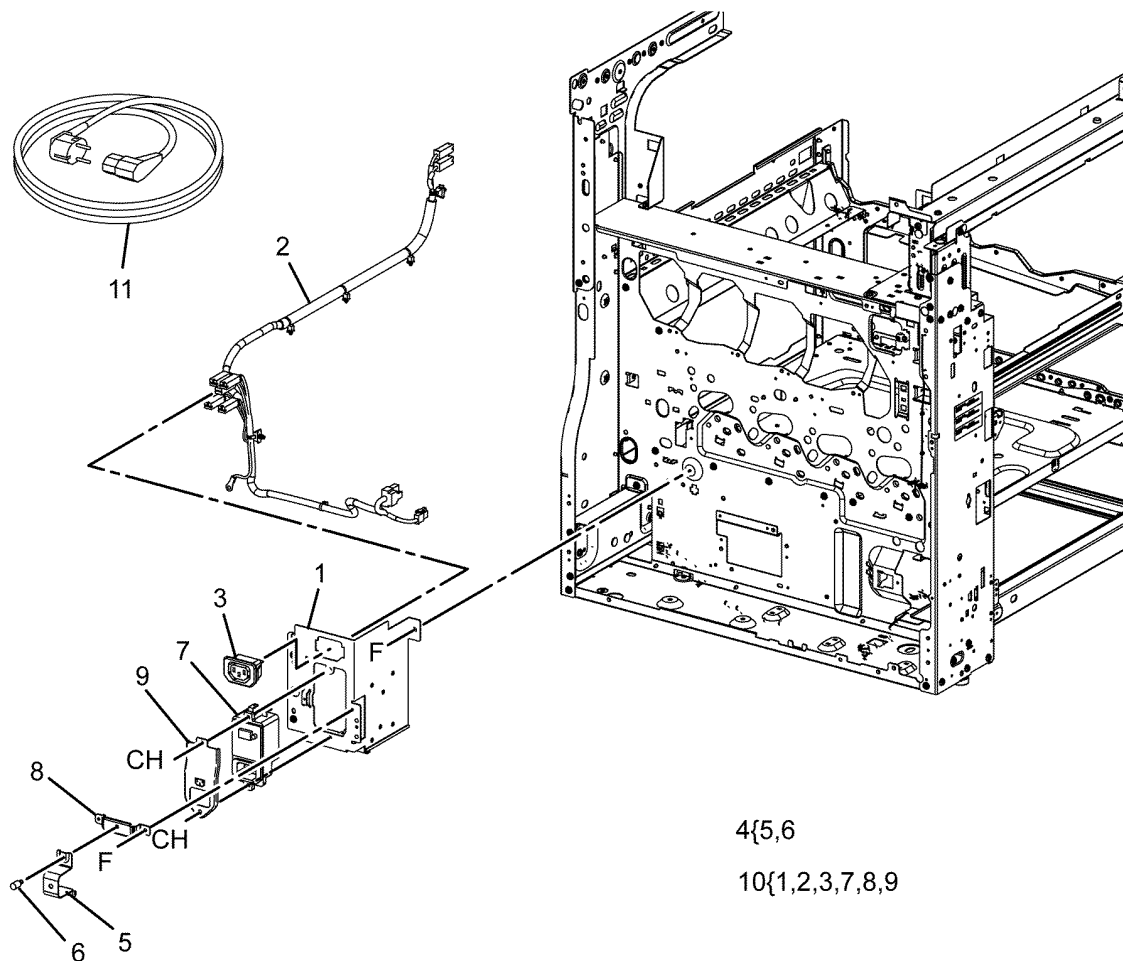
1 { 2, 3



C-8-0068-A

PL 1.15 GFI Breaker

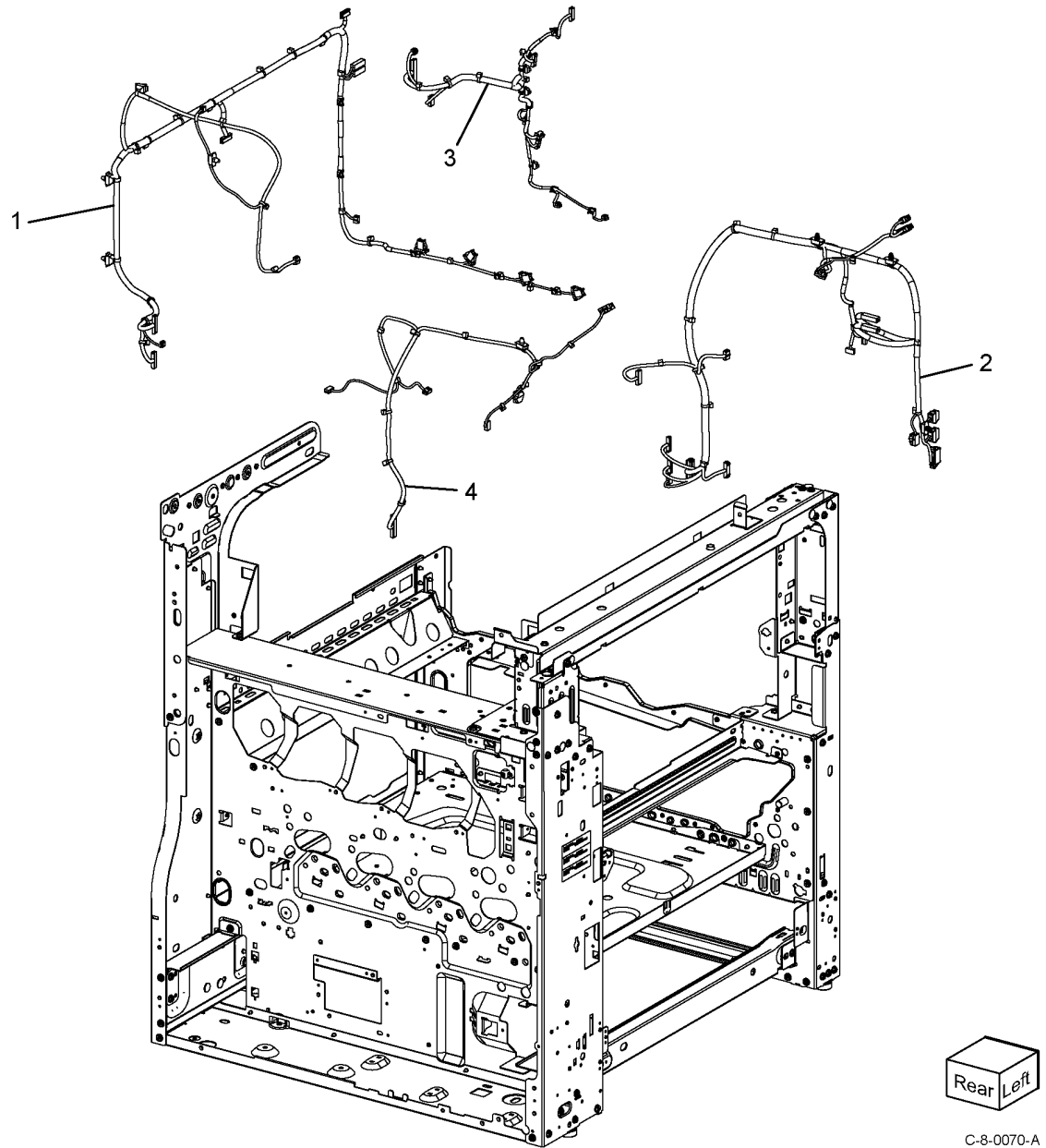
Item	Part	Description
1	–	Support bracket (P/O PL 1.15 Item 10)
2	–	AC main harness assembly (P/O PL 1.15 Item 10)
3	913W03100	Finisher outlet
4	–	AC bracket assembly (Not Spared)
5	–	AC stopper bracket (P/O PL 1.15 Item 4)
6	–	Screw (P/O PL 1.15 Item 4)
7	908W01201	Inlet GFI breaker
8	–	Connect bracket (P/O PL 1.15 Item 10)
9	–	Inlet bracket (P/O PL 1.15 Item 10)
10	101K73240	AC chassis assembly (C7030F)
–	101K73250	AC chassis assembly (C7000)
11	917W03005	Power cord (110V)
–	917W03102	Power cord (220V)



C-8-0069-A

PL 1.20 Wire Harness (1 of 2)

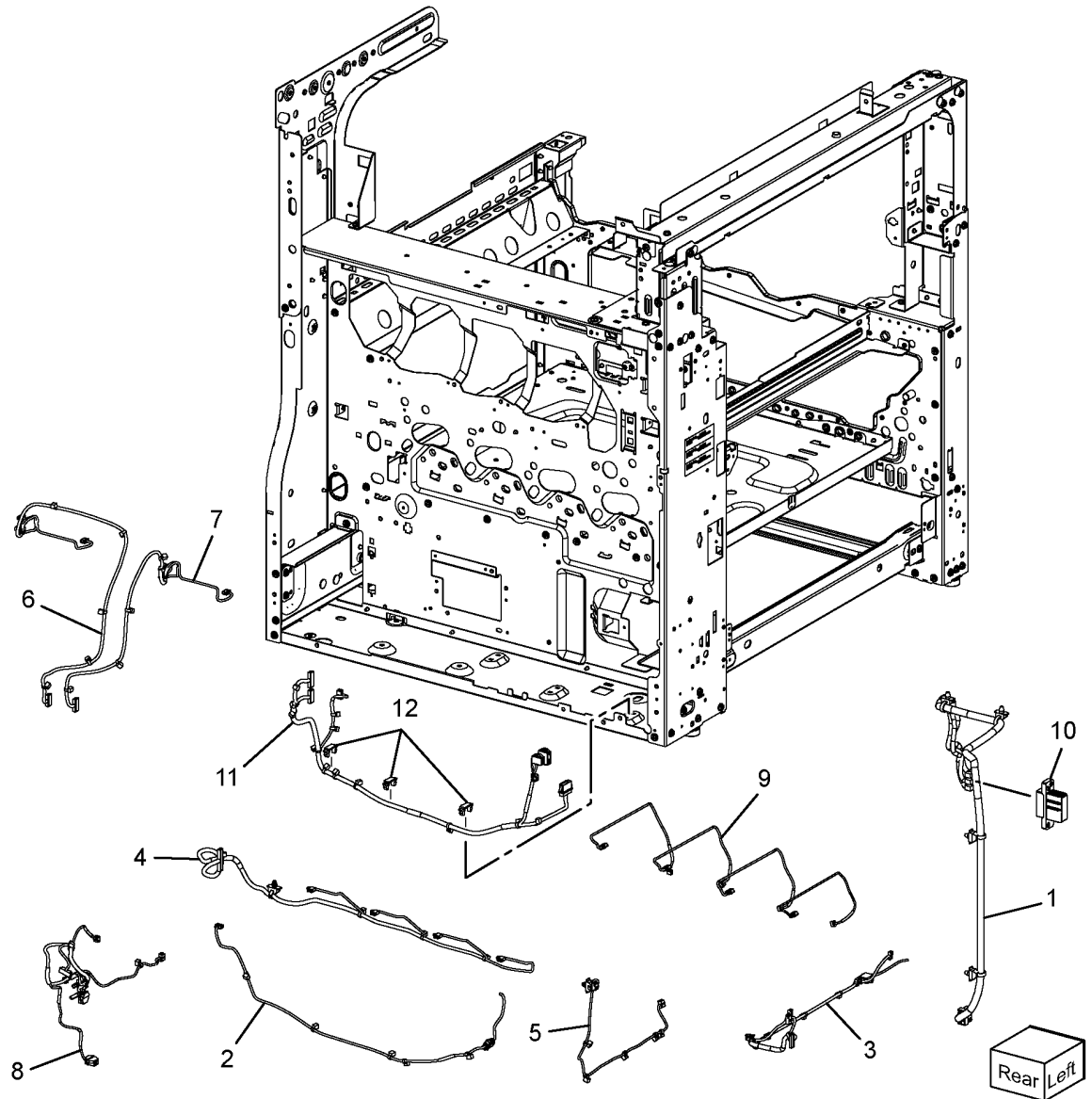
Item	Part	Description
1	952K34491	HVPS harness assembly
2	—	LH Main harness assembly (Not Spared)
3	952K36351	Drive harness assembly
4	—	Motor harness assembly (Not Spared)



C-8-0070-A

PL 1.25 Wire Harness (2 of 2)

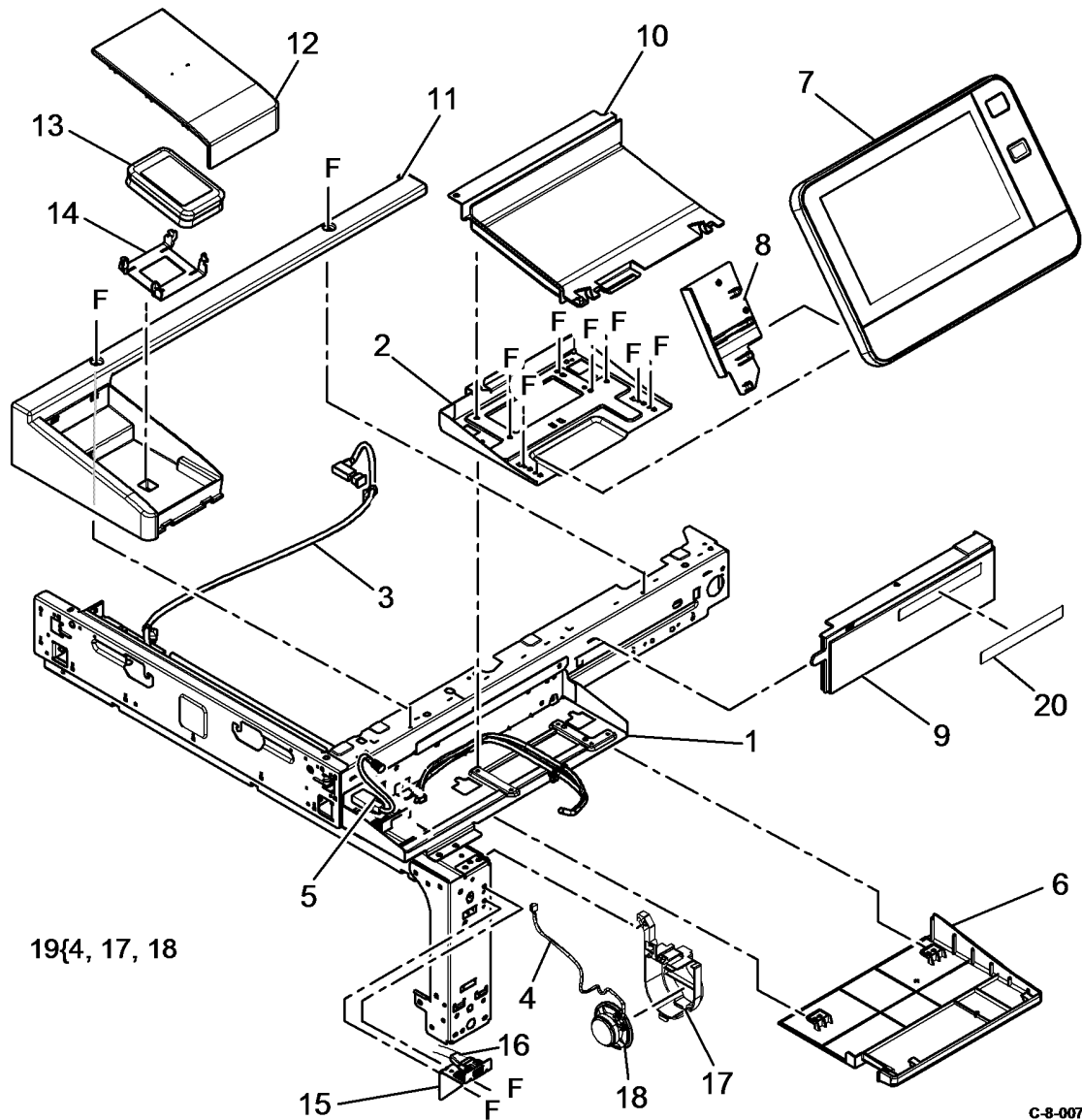
Item	Part	Description
1	952K19221	Fusing unit MM harness assembly
2	—	Feed M MM harness assembly (Not Spared)
3	—	MOB harness assembly (Not Spared)
4	—	Xerographic CRM harness assembly (REF: PL 90.25 Item 5)
5	—	Registration sensor harness assembly (Not Spared)
6	—	Toner CRM Y, M harness assembly (Not Spared)
7	—	Toner CRM C, K harness assembly (Not Spared)
8	952K21200	Exit 2 MM harness assembly
9	—	ATC harness assembly (Not Spared)
10	—	04R-XCM-KGB-S3 connector panel (Not Spared)
11	—	LH Low MM harness assembly (Not Spared)
12	—	Press clamp (Not Spared)



C-8-0071-A

PL 2.05 User Interface (C7030F)

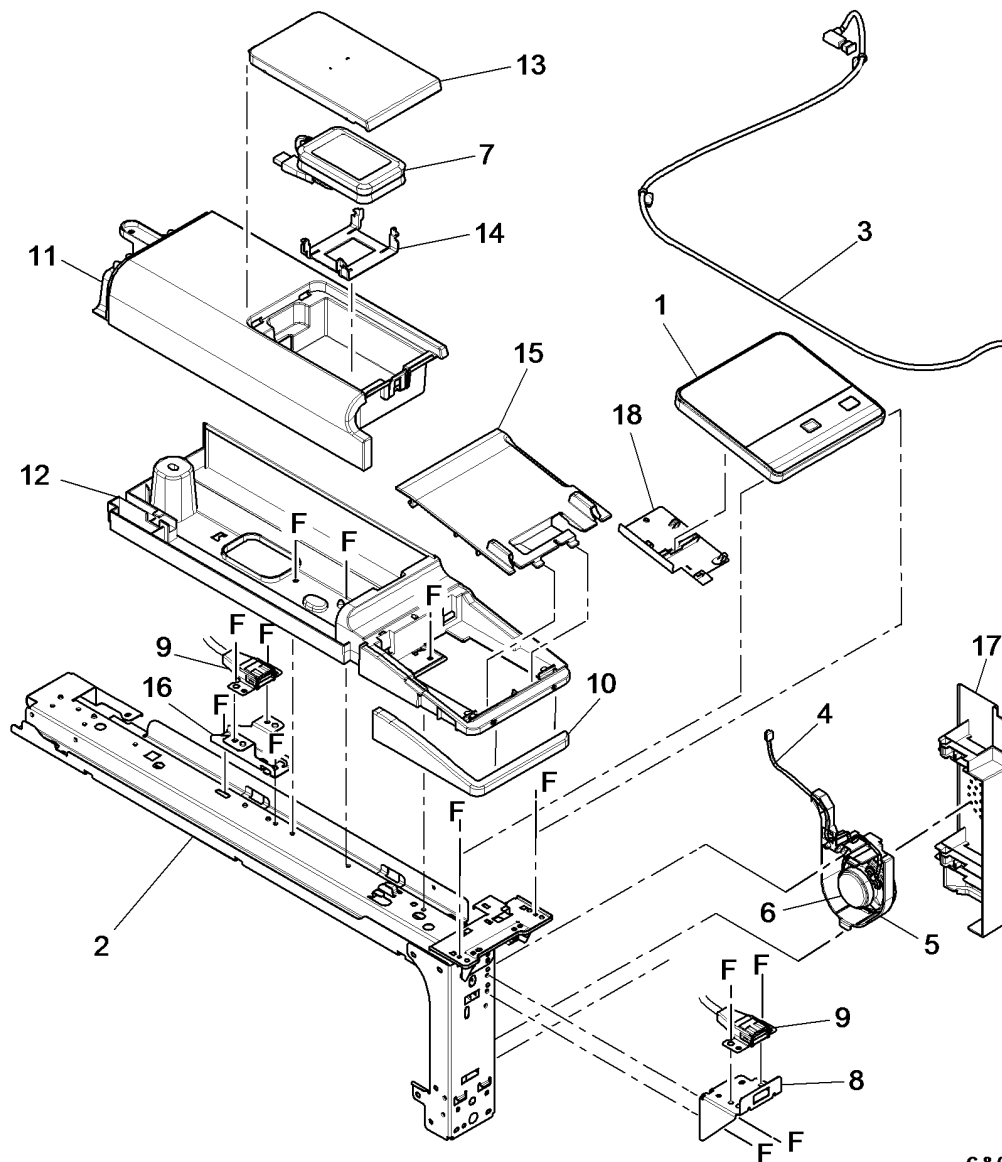
Item	Part	Description
1	—	UI bracket (Not Spared)
2	—	UI frame (Not Spared)
3	952K33680	UI harness
4	—	UI speaker harness (P/O PL 2.05 Item 19)
5	952K33380	USB ICCR harness
6	—	Bottom cover (Not Spared)
7	948K02983	UI assembly (REP 2.1)
8	—	Cable cover (Not Spared)
9	—	Lower cover (Not Spared)
10	822E25851	Inner cover
11	—	Upper cover (Not Spared)
12	—	ICCR cover (Not Spared)
13	144K00660	RFID card reader
14	—	ICCR bottom cover (Not Spared)
15	—	Front USB bracket (Not Spared)
16	952K33390	USB cable assembly
17	—	Speaker holder (P/O PL 2.05 Item 19)
18	—	Speaker assembly (P/O PL 2.05 Item 19)
19	—	Speaker bracket assembly (Not Spared)
20	—	Name label (Not Spared)



C-8-0075-A

PL 2.10 User Interface (C7000)

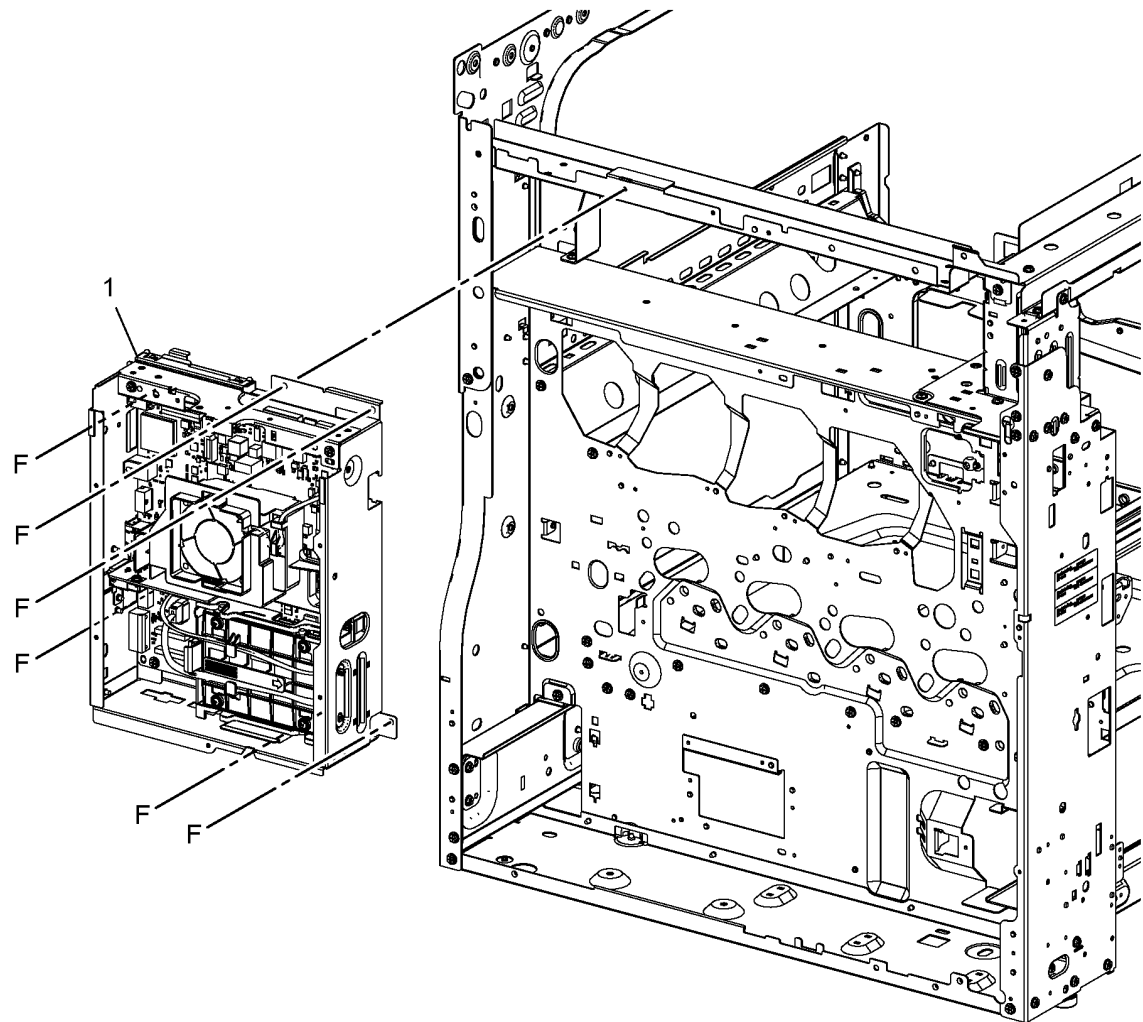
Item	Part	Description
1	948K21070	UI assembly
2	—	UI frame (Not Spared)
3	952K33680	UI harness
4	—	Speaker harness (Not Spared)
5	—	Speaker holder (Not Spared)
6	—	Speaker (Not Spared)
7	144K00660	RFID card reader
8	—	Front USB bracket (Not Spared)
9	952K33380	USB cable assembly
10	822E35090	Side cover
11	—	Top cover (Not Spared)
12	—	Lower cover (Not Spared)
13	—	ICCR upper cover (Not Spared)
14	—	ICCR lower cover (Not Spared)
15	822E37141	Inner cover
16	—	Rear USB bracket (Not Spared)
17	—	Front exit cover (Not Spared)
18	822E32001	Cable cover



C-8-0135-A

PL 3.05 Control Unit

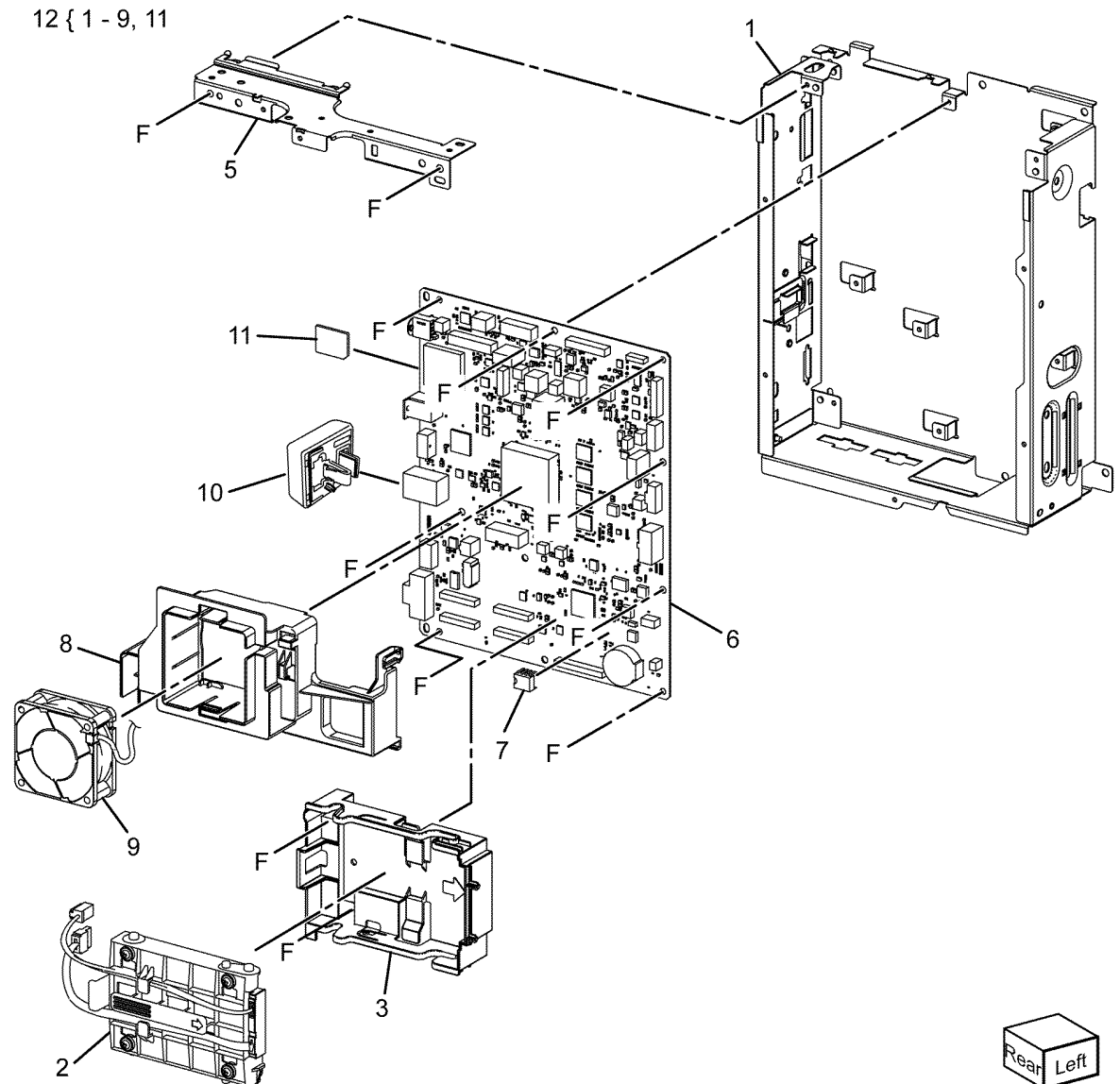
Item	Part	Description
1	—	ESS PWB chassis assembly (REF: PL 3.10)



C-8-0074-A

PL 3.10 ESS PWB Chassis Components

Item	Part	Description
1	—	ESS PWB chassis (P/O PL 3.10 Item 12)
2	101K73881	HDD chassis assembly
3	101K68970	HDD bracket
4	—	Not used
5	—	ESS upper panel (P/O PL 3.10 Item 12)
6	960K89373	ESS PWB (C7030F) (REP 3.1)
—	960K89393	ESS PWB (C7000) (REP 3.1)
7	607K07320	EPROM assembly (C7030F)
—	607K07330	EPROM assembly (C7000)
8	—	ESS fan bracket (P/O PL 3.10 Item 12)
9	127E87190	ESS fan
10	101K72680	WiFi dongle
11	—	SD card
12	—	ESS PWB chassis assembly (Not Spared) (REP 3.2)

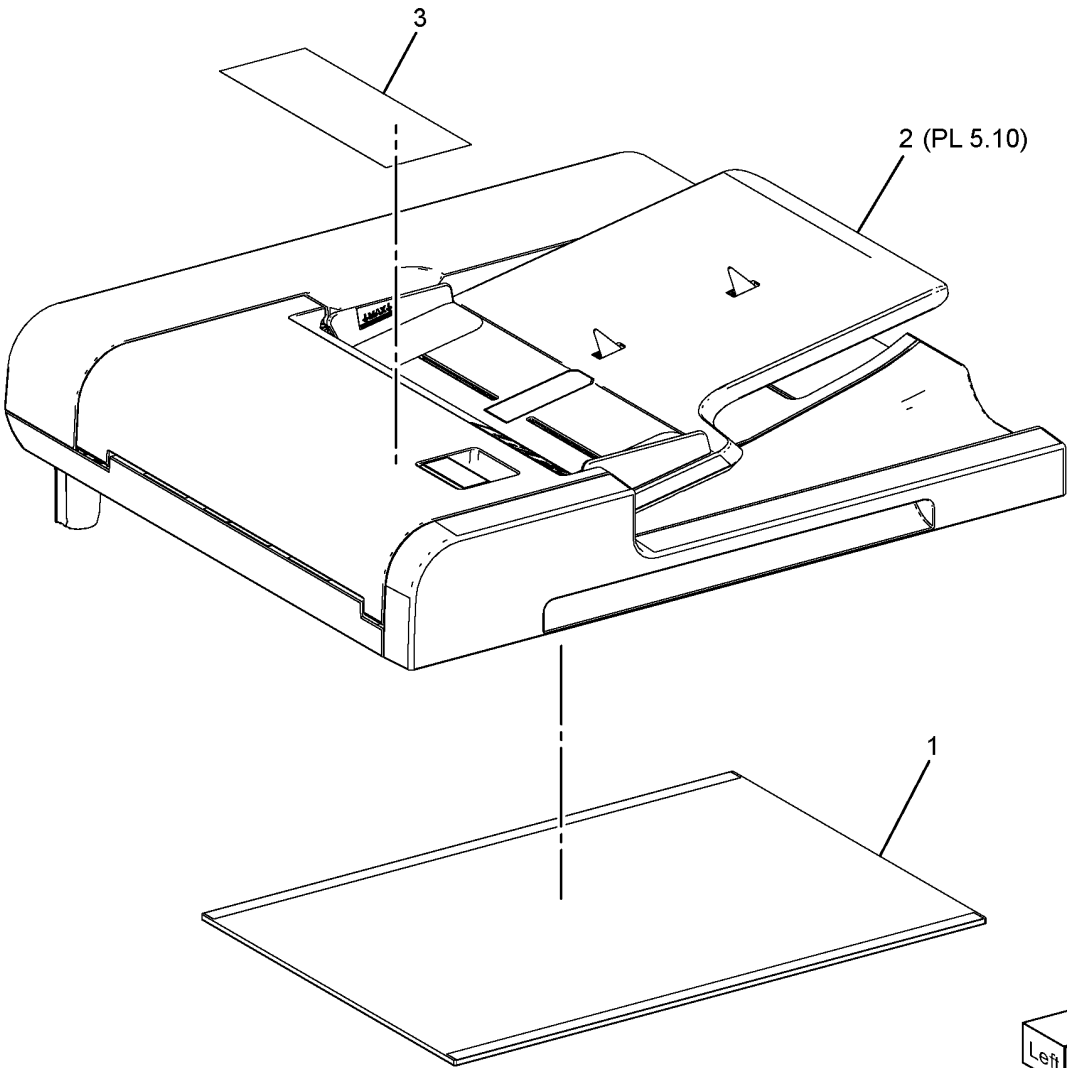


C-8-0076-A

PL 5.05 DADF Accessory

Item	Part	Description
1	004K03410	Document cushion (REP 5.2)
2	–	DADF (REF: PL 5.10) (REP 5.1)
3	–	Mix label (P/O PL 5.05 Item 4)
4	607K02952	DADF kit
5	859K01912	DADF LH cover

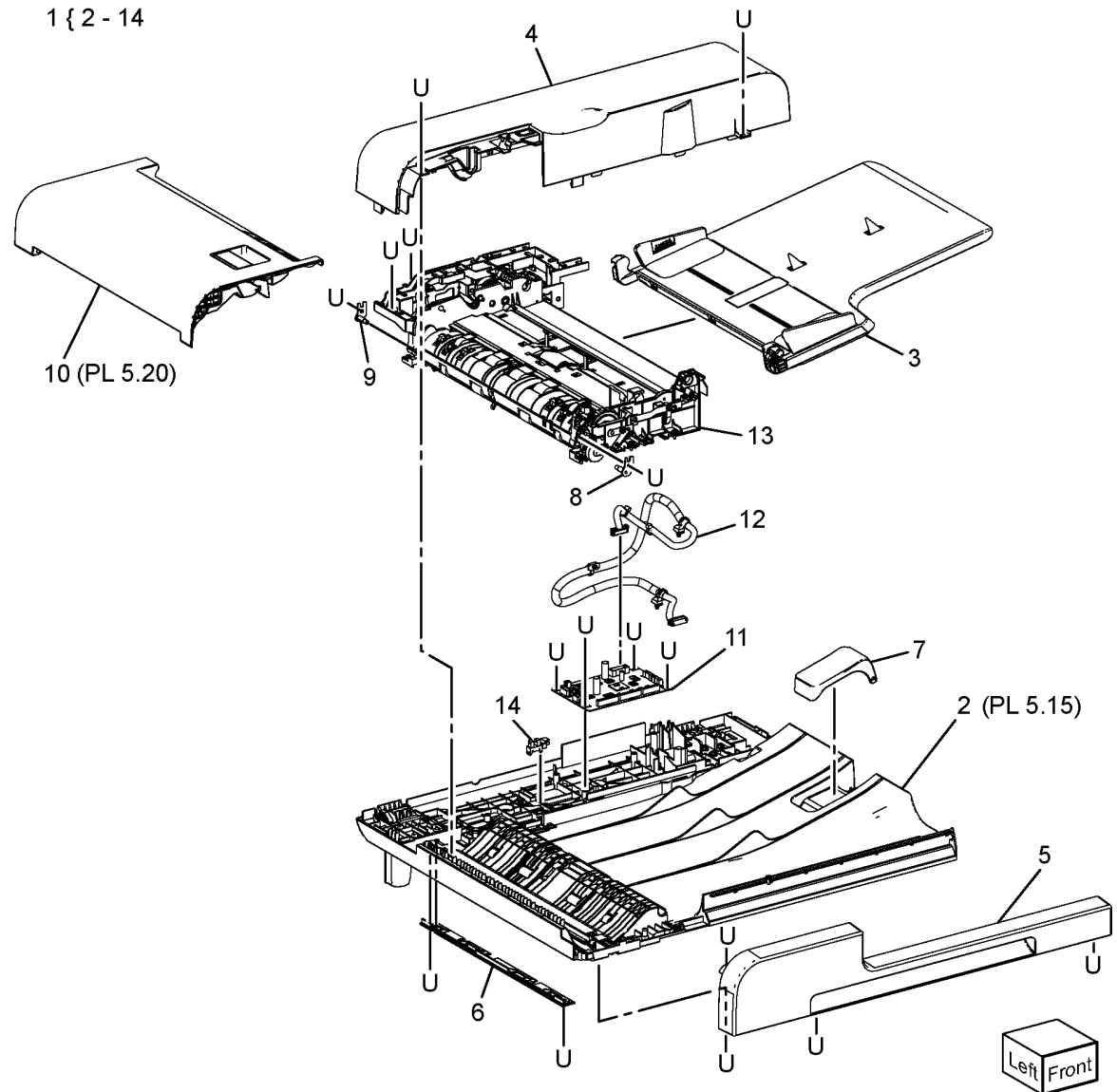
4 { 1, 2
5 { 3, PL 5.10 Item 10



C-8-0001-A

PL 5.10 DADF Components

Item	Part	Description
1	—	Base frame and feeder assembly (Not Spared)
2	—	Base frame (P/O PL 5.10 Item 1)
3	050K73352	Document tray
4	—	Rear cover (P/O PL 5.10 Item 1) (REP 5.4)
5	—	Front cover (P/O PL 5.10 Item 1) (REP 5.3)
6	—	Registration pinch cover (P/O PL 5.10 Item 1)
7	—	Tray stopper (P/O PL 5.10 Item 1)
8	—	Front hinge bracket (P/O PL 5.10 Item 1)
9	—	Rear hinge bracket (P/O PL 5.10 Item 1)
10	—	Upper feeder assembly (P/O PL 5.10 Item 1) (REP 5.6)
11	960K78322	DADF PWB (REP 5.5)
12	—	I/F wire harness (P/O PL 5.10 Item 1)
13	—	Feeder assembly (P/O PL 5.10 Item 1) (REP 5.7)
14	930W00121	CVT feeder cover sensor (Q05- 212)

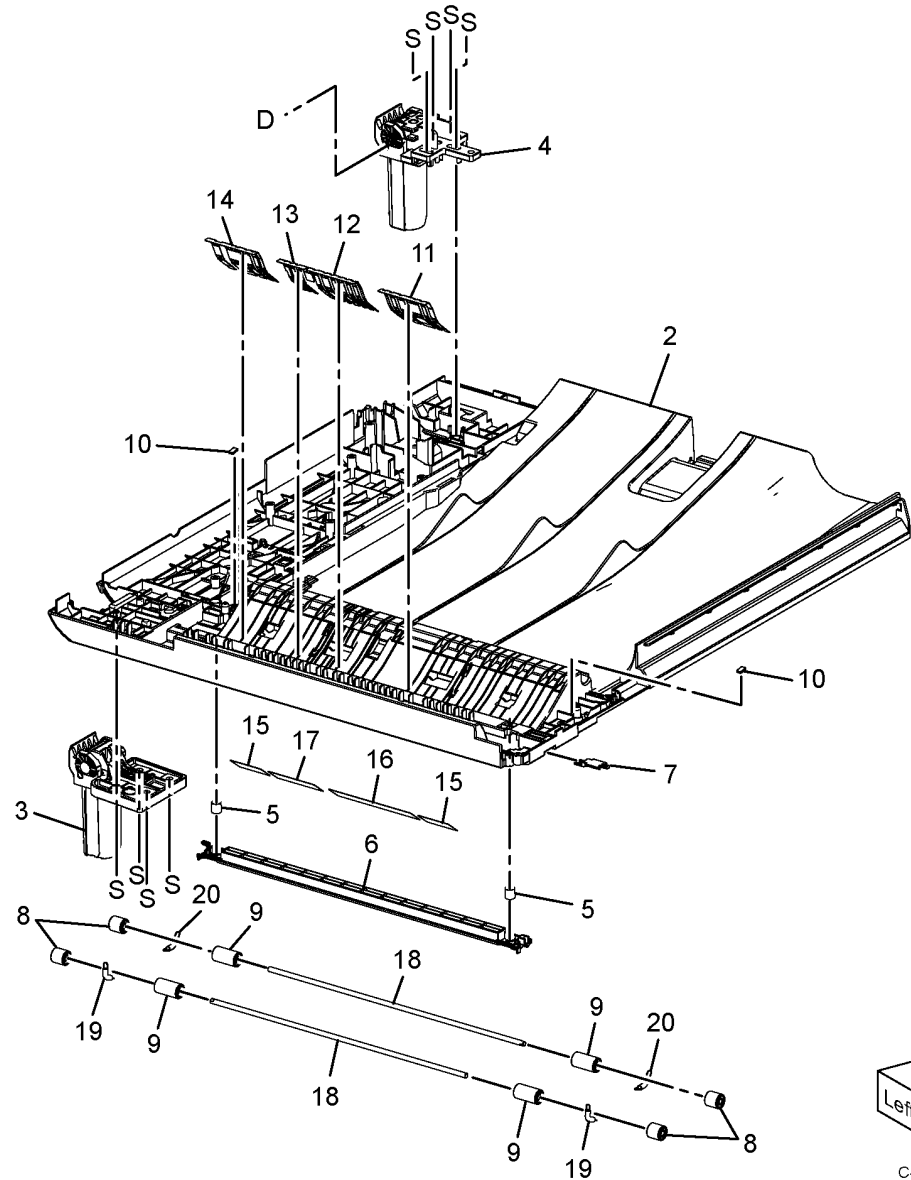


C-8-0002-A

PL 5.15 DADF Base Frame

Item	Part	Description
1	—	Base frame assembly (Not Spared)
2	—	Base frame (P/O PL 5.15 Item 1)
3	—	Left counterbalance (P/O PL 5.15 Item 21) (REP 5.8)
4	—	Right counterbalance (P/O PL 5.15 Item 21) (REP 5.9)
5	—	Spring CVT (P/O PL 5.15 Item 1)
6	—	Chute CVT (P/O PL 5.15 Item 1)
7	—	Stopper CVT (P/O PL 5.15 Item 1)
8	—	Registration pinch roller (short) (P/O PL 5.15 Item 1)
9	—	Registration pinch roller (long) (P/O PL 5.15 Item 1)
10	—	Gate pad assembly (P/O PL 5.15 Item 1)
11	—	Seal chute 2 (P/O PL 5.15 Item 1)
12	—	Seal chute 3 (P/O PL 5.15 Item 1)
13	—	Seal chute 4 (P/O PL 5.15 Item 1)
14	—	Seal chute 5 (P/O PL 5.15 Item 1)
15	—	Seal B1 (P/O PL 5.15 Item 1)
16	—	Seal B2 (P/O PL 5.15 Item 1)
17	—	Seal B3 (P/O PL 5.15 Item 1)
18	—	Shaft (P/O PL 5.15 Item 1)
19	—	Spring (P/O PL 5.15 Item 1)
20	—	Spring (P/O PL 5.15 Item 1)
21	—	DADF counter balance kit (Not Spared)

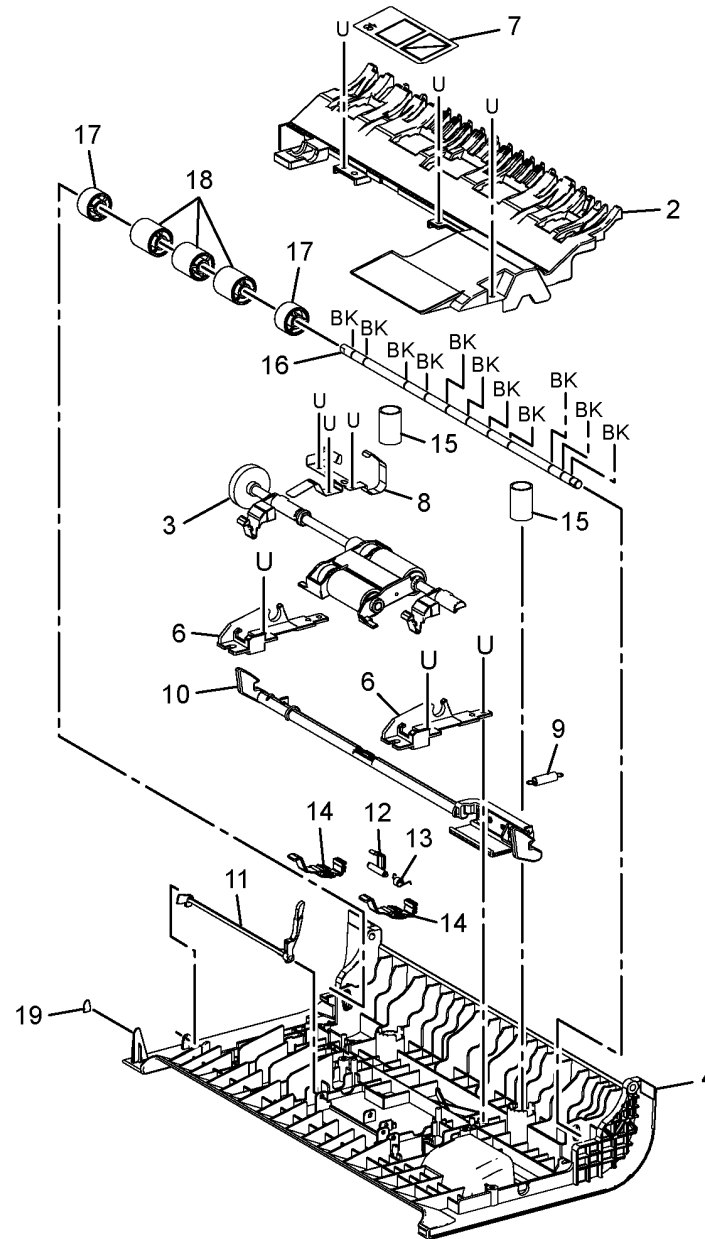
1 { 2 - 20
21 { 3, 4



C-8-0003-A

PL 5.20 Upper Feeder

Item	Part	Description
1	—	Upper feeder assembly (Not Spared)
2	—	DADF feeder assembly (P/O PL 5.20 Item 1)
3	—	Feed roll nudger roll assembly (REF: PL 5.25)
4	—	Upper feeder cover (P/O PL 5.20 Item 1)
5	—	Pinch roller takeaway (P/O PL 5.20 Item 1)
6	—	Bracket (P/O PL 5.20 Item 1)
7	—	Jam label (P/O PL 5.20 Item 1)
8	—	Ground plate (P/O PL 5.20 Item 1)
9	—	Exit spring (P/O PL 5.20 Item 1)
10	011K04261	Handle lever
11	120E34245	Document sensor actuator
12	—	Actuator stopper (P/O PL 5.20 Item 1)
13	—	Spring (P/O PL 5.20 Item 1)
14	—	Link set (P/O PL 5.20 Item 1)
15	—	TA spring (P/O PL 5.20 Item 1)
16	—	Shaft (P/O PL 5.20 Item 5)
17	—	Nip roll (P/O PL 5.20 Item 5)
18	—	Nip roll (P/O PL 5.20 Item 5)
19	—	Interlock seal assembly (P/O PL 5.20 Item 1)



1 { 2 - 19

5 { 16 - 18



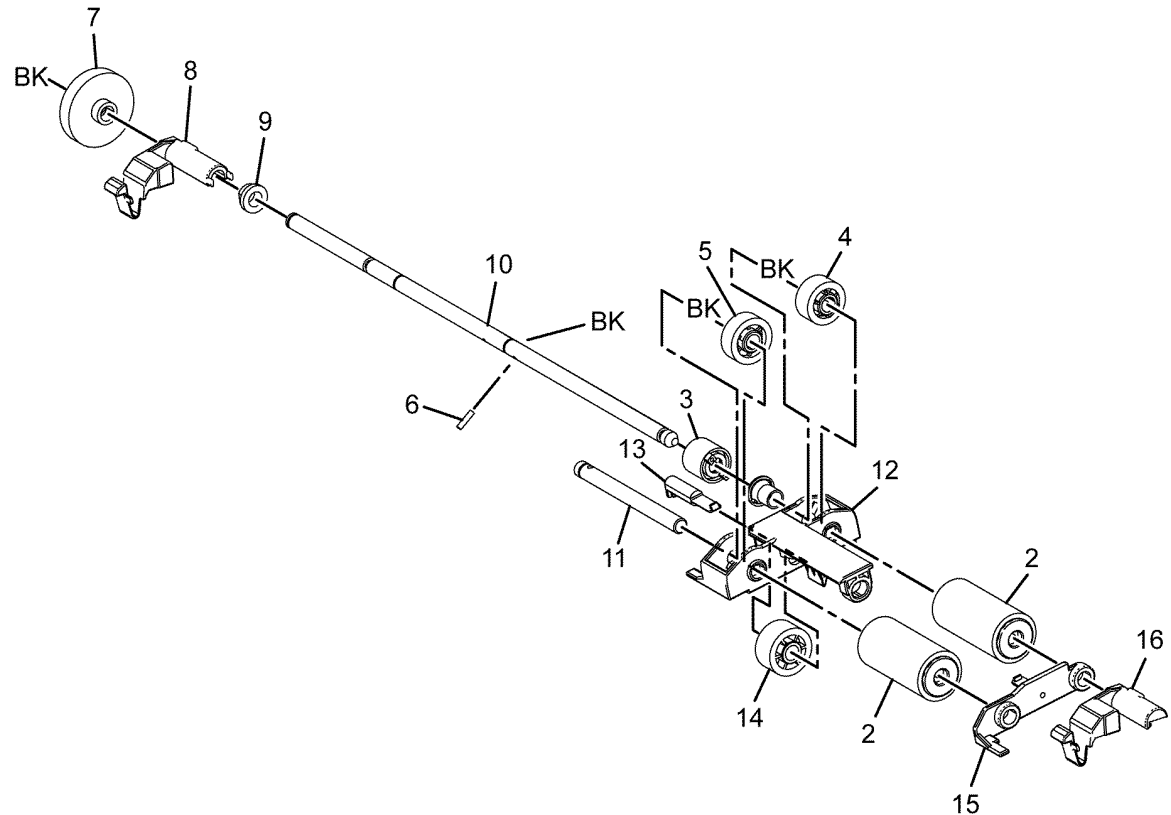
C-8-0004-A

PL 5.25 Feed Roll Nudger Roll Assembly

Item	Part	Description
1	—	Feed roll nudger roll assembly (Not Spared)
2	—	Feeder roll assembly (P/O PL 5.65 Item 22) (see NOTE) (REP 5.10)
3	—	Brake assembly (P/O PL 5.25 Item 1)
4	—	Feed gear (P/O PL 5.25 Item 1)
5	—	Feed idler gear (P/O PL 5.25 Item 1)
6	—	TL pin (P/O PL 5.25 Item 1)
7	—	Feed gear (P/O PL 5.25 Item 1)
8	—	Feed rear handle (P/O PL 5.25 Item 1)
9	—	Bearing (P/O PL 5.25 Item 1)
10	—	Feed shaft assembly (P/O PL 5.25 Item 1)
11	—	Nudger shaft assembly (P/O PL 5.25 Item 1)
12	—	Nudger housing (P/O PL 5.25 Item 1)
13	—	Idler pin (P/O PL 5.25 Item 1)
14	—	Nudger gear (P/O PL 5.25 Item 1)
15	—	Nudger CRU housing (P/O PL 5.25 Item 1)
16	—	Feed front handle (P/O PL 5.25 Item 1)
17	—	DADF feeder kit (Not Spared)

NOTE: HFSI. To reset the HFSI counter, refer to dC135.

1 { 2 - 16
17 { 2 & PL 5.65 ITEMS 4,5

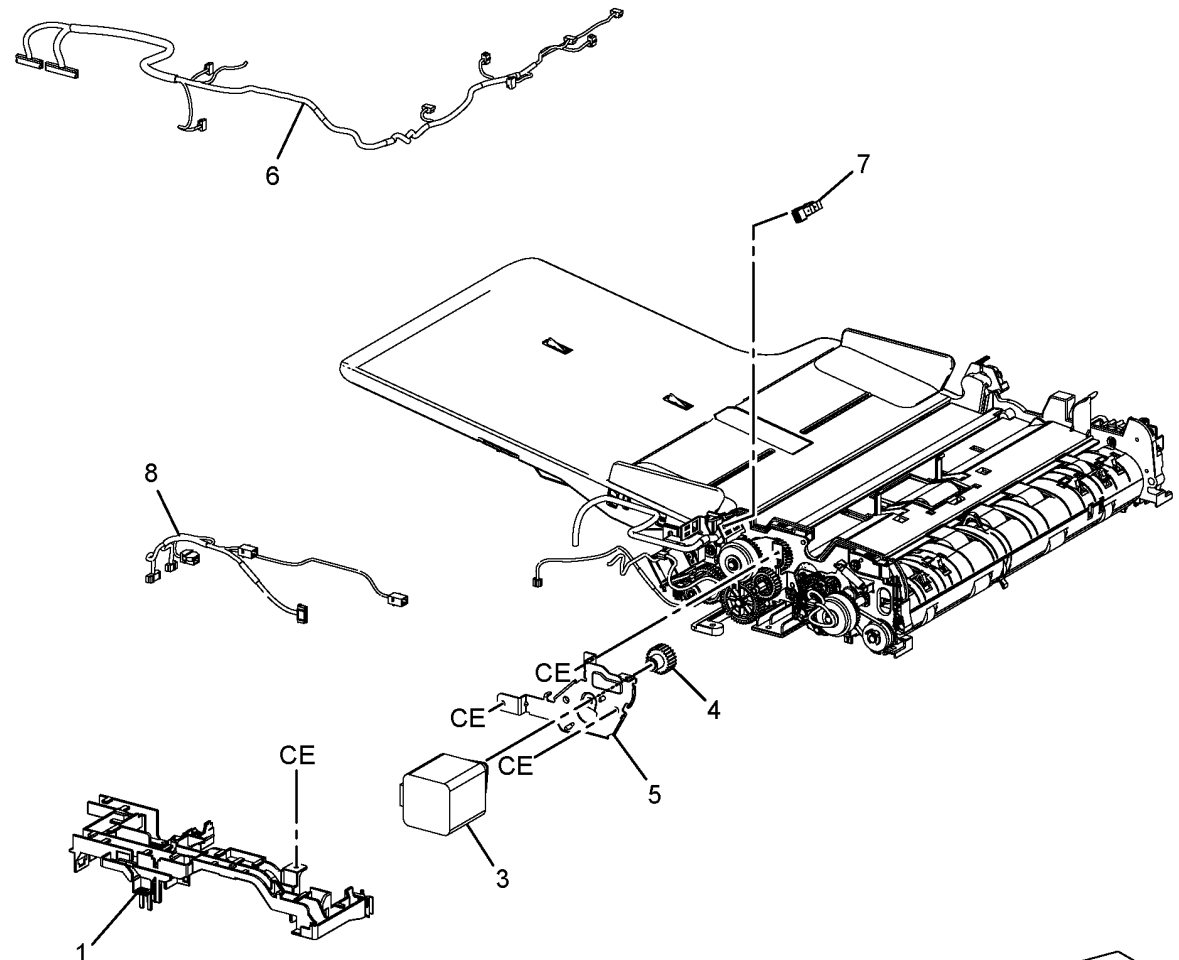


C-8-0005-A

PL 5.30 DADF Feed Motor and Harness Guide

Item	Part	Description
1	—	Harness guide (Not Spared) (REP 5.11)
2	—	DADF feed motor assembly (Not Spared) (REP 5.12)
3	127K76840	DADF feed motor (MOT05-004)
4	—	Idler motor gear (P/O PL 5.30 Item 2)
5	—	Motor bracket assembly (P/O PL 5.30 Item 2)
6	—	DADF harness assembly (Not Spared)
7	930W00121	Document sensor (S05-102)
8	—	Wire harness (motor/clutch) (Not Spared) (REP 5.11)

2 { 3 - 5

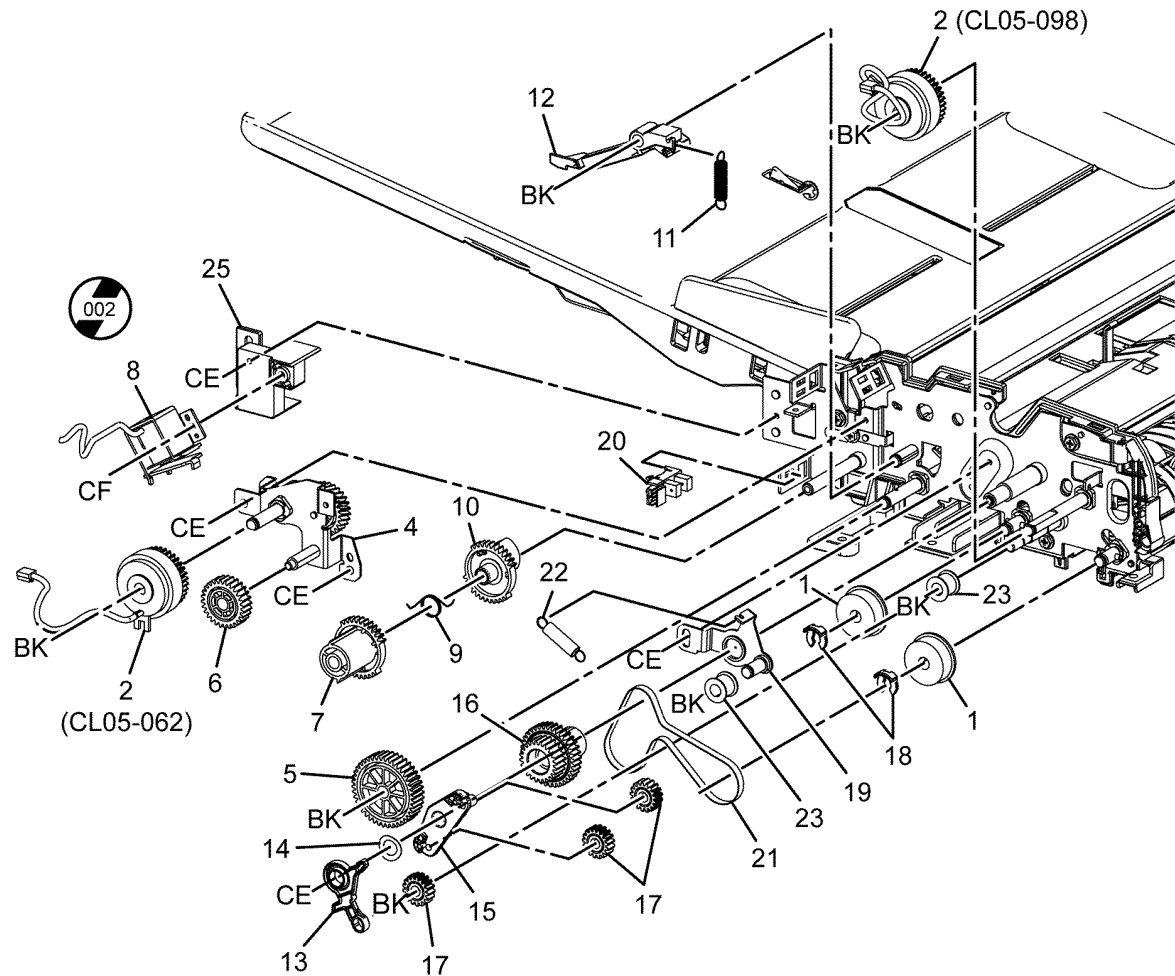


C-8-0006-A

PL 5.35 DADF Feeder Rear Frame (W/ O TAG 002)

24 { 8, 25

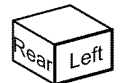
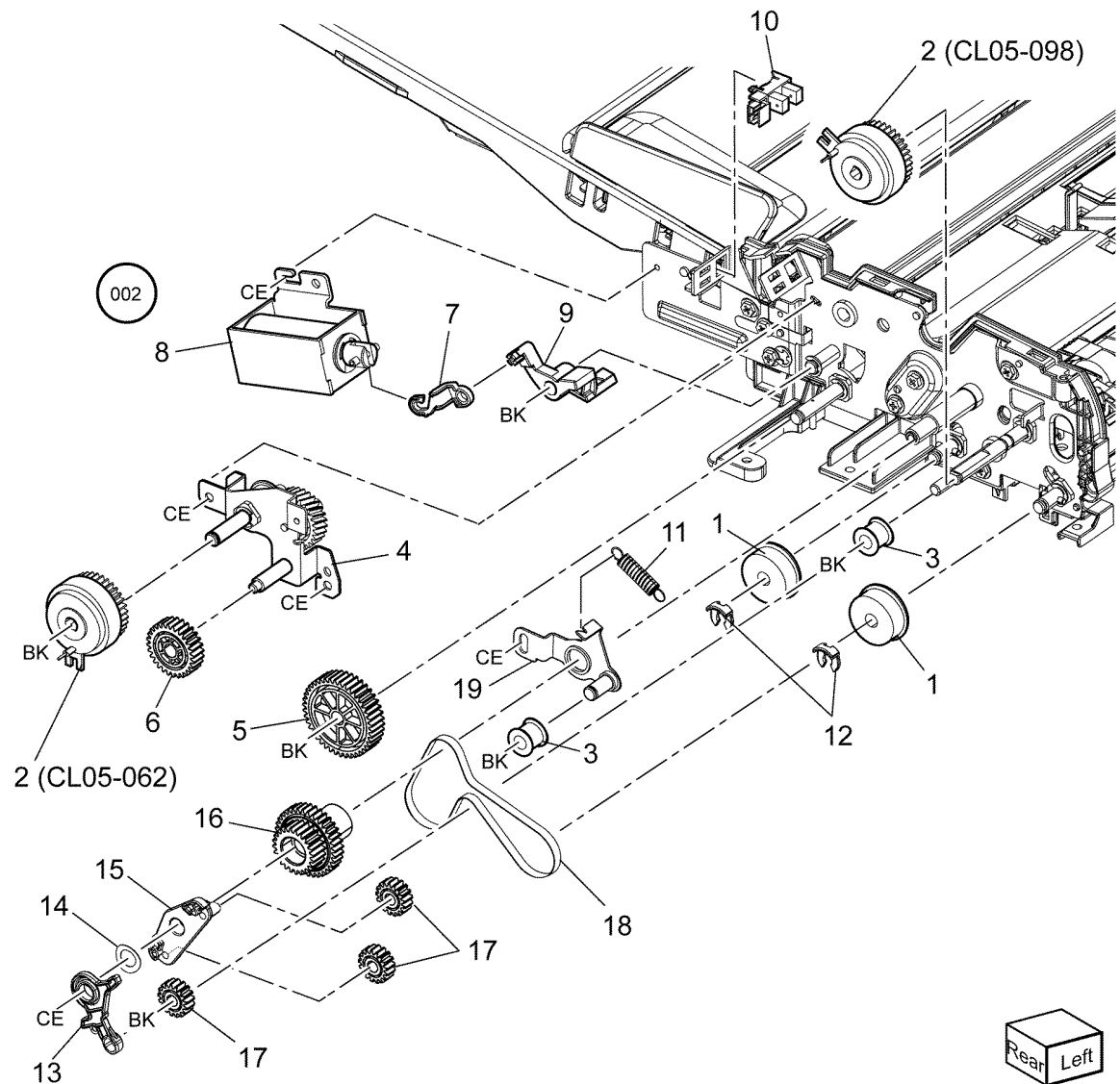
Item	Part	Description
1	—	Registration pulley (Not Spared)
2	121K52310	DADF feed clutch (CL05-062)/ Takeaway clutch (CL05-098)
3	—	Not used
4	—	Clutch gear bracket assembly (Not Spared)
5	—	Exit gear (Not Spared)
6	—	Exit gear idler (Not Spared)
7	—	Lock gear (Not Spared)
8	—	Exit nip release solenoid (SOL05- 072) (P/O PL 5.35 Item 24)
9	—	Gear cam spring (Not Spared)
10	—	Cam gear (Not Spared)
11	—	Link invert spring (Not Spared)
12	—	Set link (Not Spared)
13	—	Stopper link (Not Spared)
14	—	Idler spring (Not Spared)
15	—	Idler gear bracket (Not Spared)
16	—	Gear pulley (Not Spared)
17	—	Gear idler T17 (Not Spared)
18	—	KL ring (Not Spared)
19	—	Tension bracket assembly (Not Spared)
20	930W00121	DADF home position sensor (S05- 234)
21	—	DADF drive belt (Not Spared)
22	—	Tension spring (Not Spared)
23	—	Roller (Not Spared)
24	121K57710	Nip release solenoid assembly
25	—	Solenoid bracket (P/O PL 5.35 Item 24)



C-8-0007-B

PL 5.36 DADF Feeder Rear Frame (W/ TAG 002)

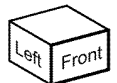
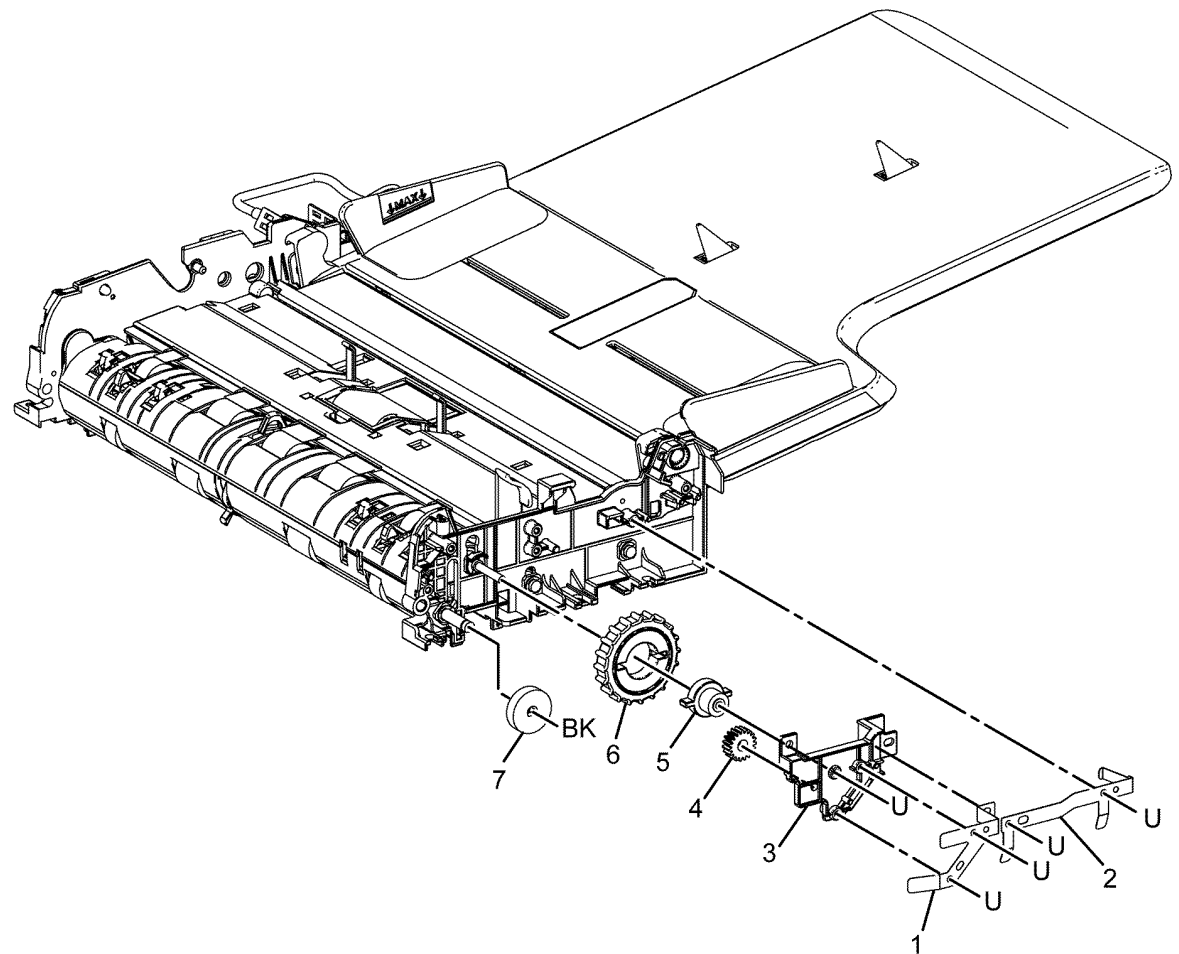
Item	Part	Description
1	—	Registration pulley (Not Spared)
2	121K52310	DADF feed clutch (CL05-062)/ Takeaway clutch (CL05-098)
3	—	Roller (Not Spared)
4	—	Clutch gear bracket assembly (Not Spared)
5	—	Exit gear (Not Spared)
6	—	Exit gear idler (Not Spared)
7	—	Exit release link (Not Spared)
8	121K55430	Exit nip release solenoid (SOL05-072)
9	—	Exit cam open link (Not Spared)
10	930W00121	DADF home position sensor (S05-234)
11	—	Tension spring (Not Spared)
12	—	KL ring (Not Spared)
13	—	Stopper link (Not Spared)
14	—	Idler spring (Not Spared)
15	—	Idler gear bracket (Not Spared)
16	—	Gear pulley (Not Spared)
17	—	Gear idler T17 (Not Spared)
18	—	DADF drive belt (Not Spared) (REP 5.13)
19	—	Tension bracket assembly (Not Spared)



C-8-0137-A

PL 5.40 DADF Feeder Front Frame

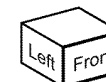
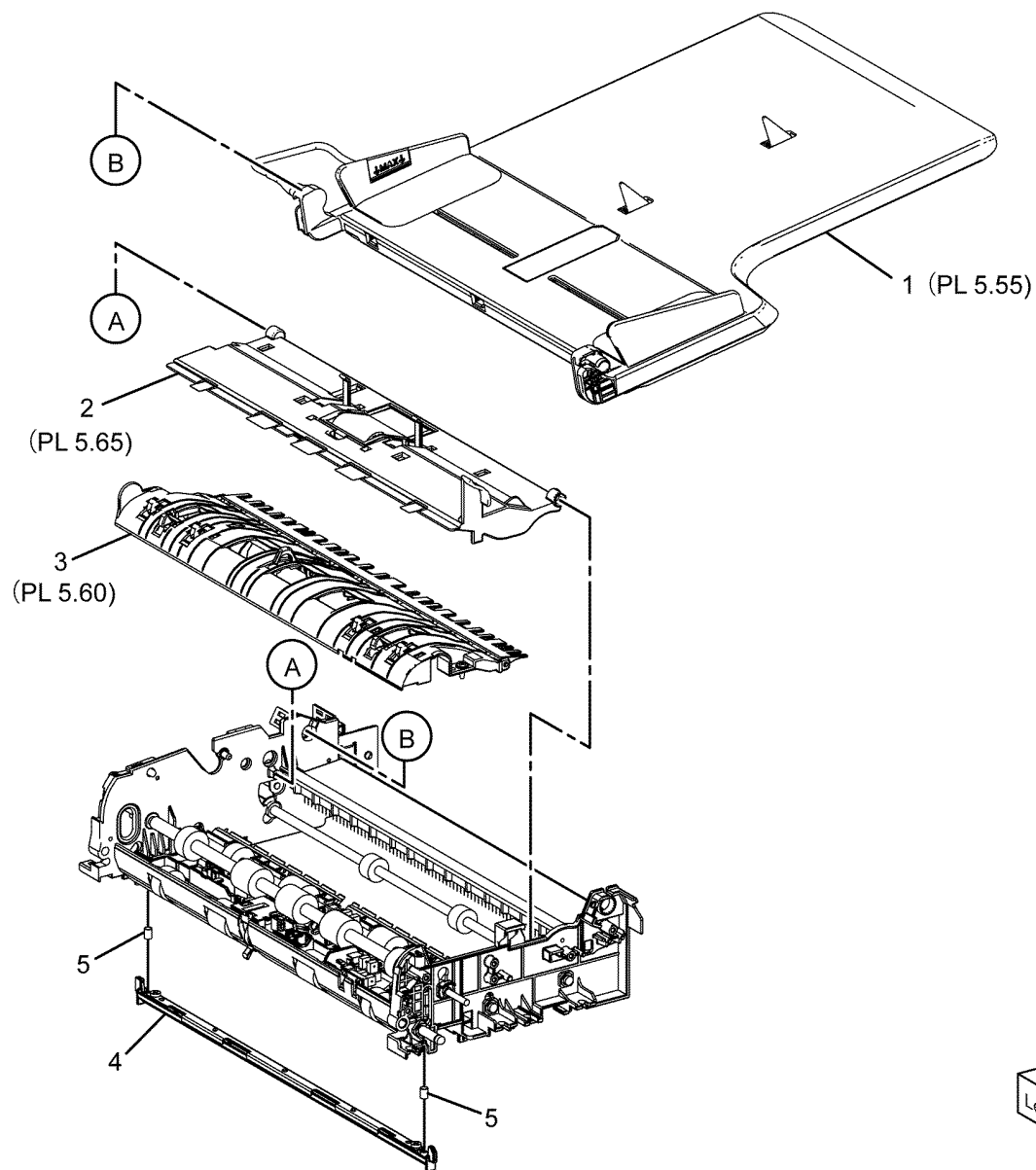
Item	Part	Description
1	—	Earth roller plate (Not Spared)
2	—	Earth roller 2 plate (Not Spared)
3	—	Handle knob bracket (Not Spared)
4	—	Gear idler (Not Spared)
5	—	Gear handle (Not Spared)
6	—	Handle knob (Not Spared)
7	—	Registration knob gear (Not Spared)



C-8-0008-A

PL 5.45 DADF Tray and Chute

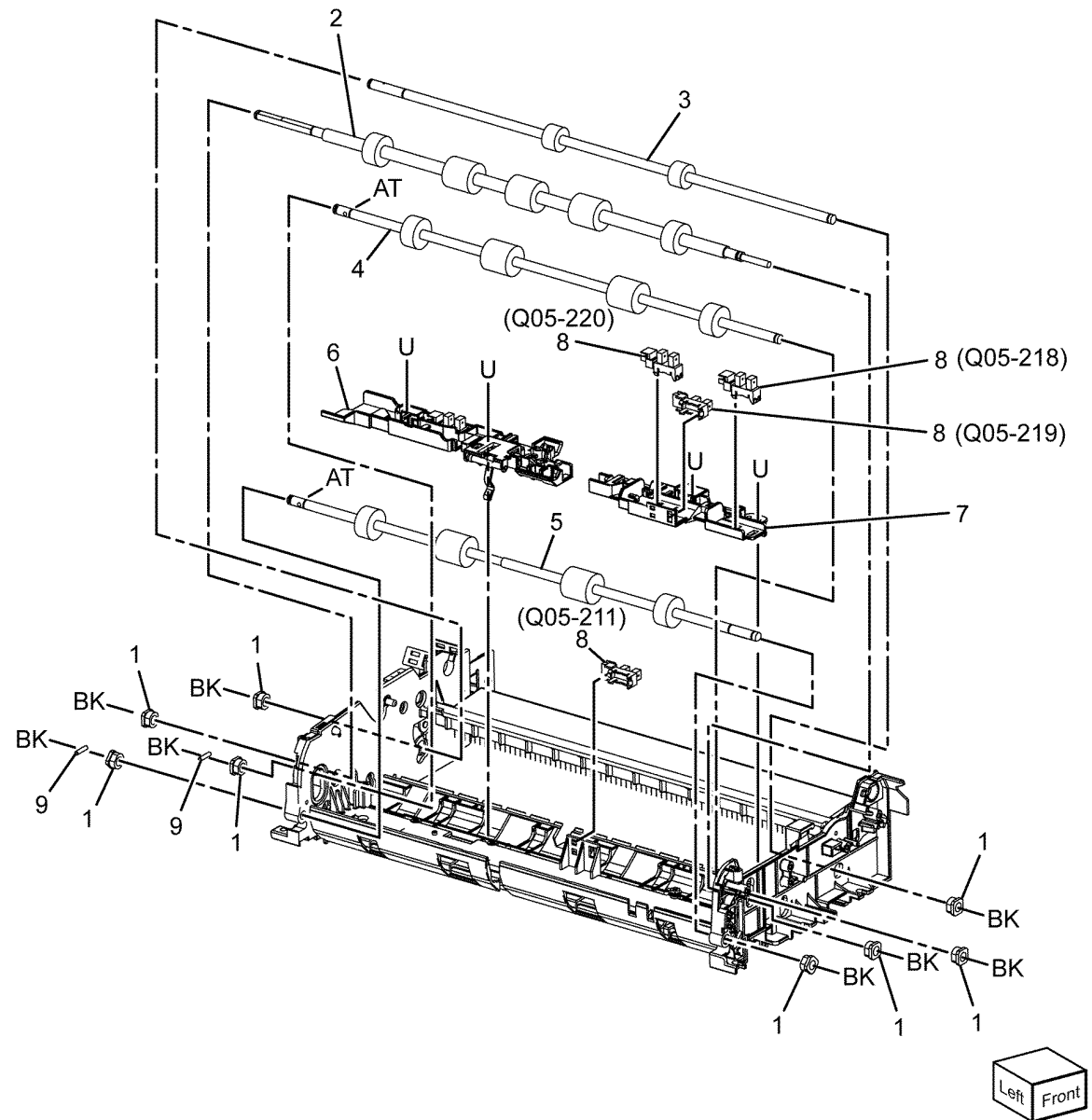
Item	Part	Description
1	–	Document tray (REF: PL 5.55) (REP 5.14)
2	054K54871	Retard chute assembly (REF: PL 5.65) (REP 5.15)
3	054K54860	Invert chute assembly (REF: PL 5.60) (REP 5.16)
4	–	FLT chute assembly (Not Spared)
5	–	Floating spring (Not Spared)



C-8-0009-A

PL 5.50 DADF Roller and Sensor Bracket

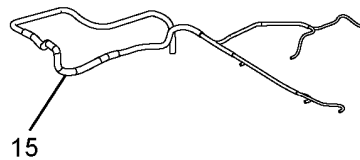
Item	Part	Description
1	—	Plastic bearing sleeve (Not Spared)
2	—	DADF takeaway roll (Not Spared)
3	—	Exit roll (Not Spared)
4	—	Out roll (Not Spared)
5	—	Registration roll (Not Spared)
6	—	Registration sensor bracket (P/O PL 5.70 Item 1) (REP 5.18)
7	—	APS sensor bracket (Not Spared) (REP 5.18)
8	930W00121	APS sensor 1 (Q05-218)/APS sensor 2 (Q05-219)/APS sensor 3 (Q05-220)/Invert sensor (Q05-211)
9	—	Ring KL (Not Spared)



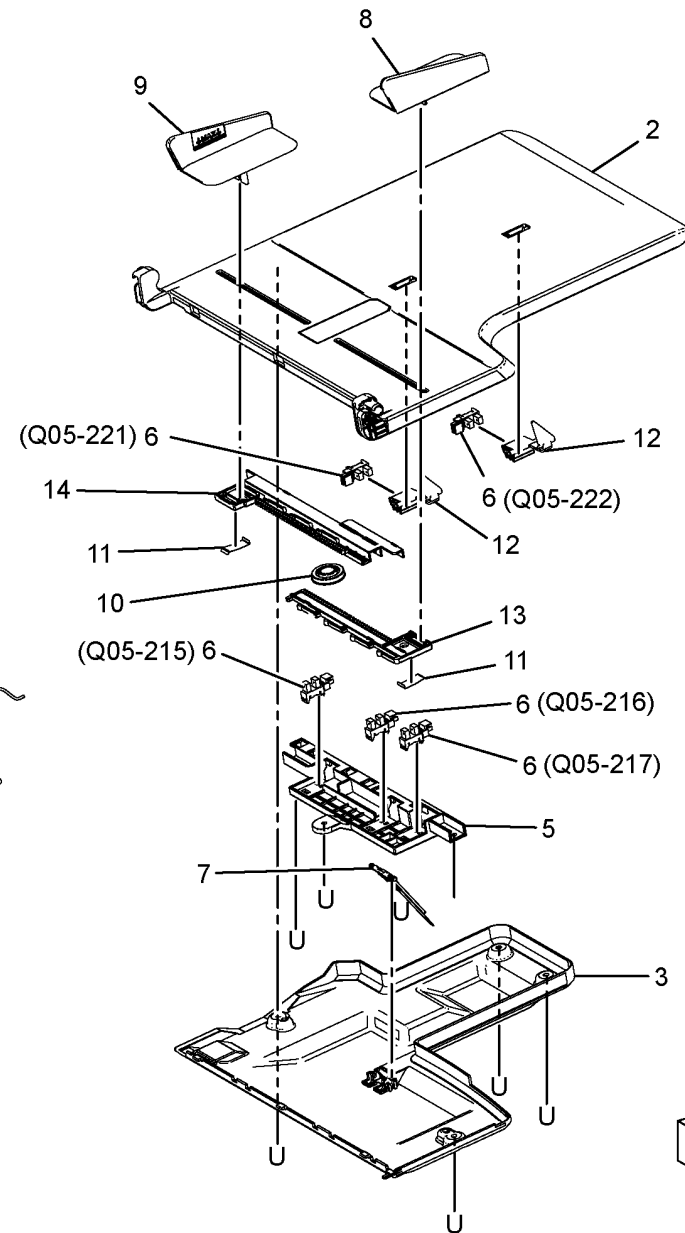
C-8-0010-A

PL 5.55 Document Tray

Item	Part	Description
1	—	Tray assembly (Not Spared)
2	—	Upper tray (P/O PL 5.55 Item 1)
3	—	Lower tray (P/O PL 5.55 Item 1)
4	—	Sensor bracket assembly (P/O PL 5.55 Item 1)
5	—	Sensor bracket (P/O PL 5.55 Item 4)
6	930W00121	Tray APS sensor 1 (Q05-215)/Tray APS sensor 2 (Q05-216)/Tray APS sensor 3 (Q05-217)/Tray size sensor 1 (Q05-221)/Tray size sensor 2 (Q05-222)
7	—	Scatter guide assembly (P/O PL 5.55 Item 1)
8	—	Front document guide (P/O PL 5.55 Item 1)
9	—	Rear document guide (P/O PL 5.55 Item 1)
10	—	Gear pinion (P/O PL 5.55 Item 1)
11	—	Rack spring (P/O PL 5.55 Item 1)
12	—	Actuator (P/O PL 5.55 Item 1)
13	—	Front gear guide (P/O PL 5.55 Item 1)
14	—	Rear gear guide (P/O PL 5.55 Item 1)
15	—	Document tray harness (P/O PL 5.55 Item 1)



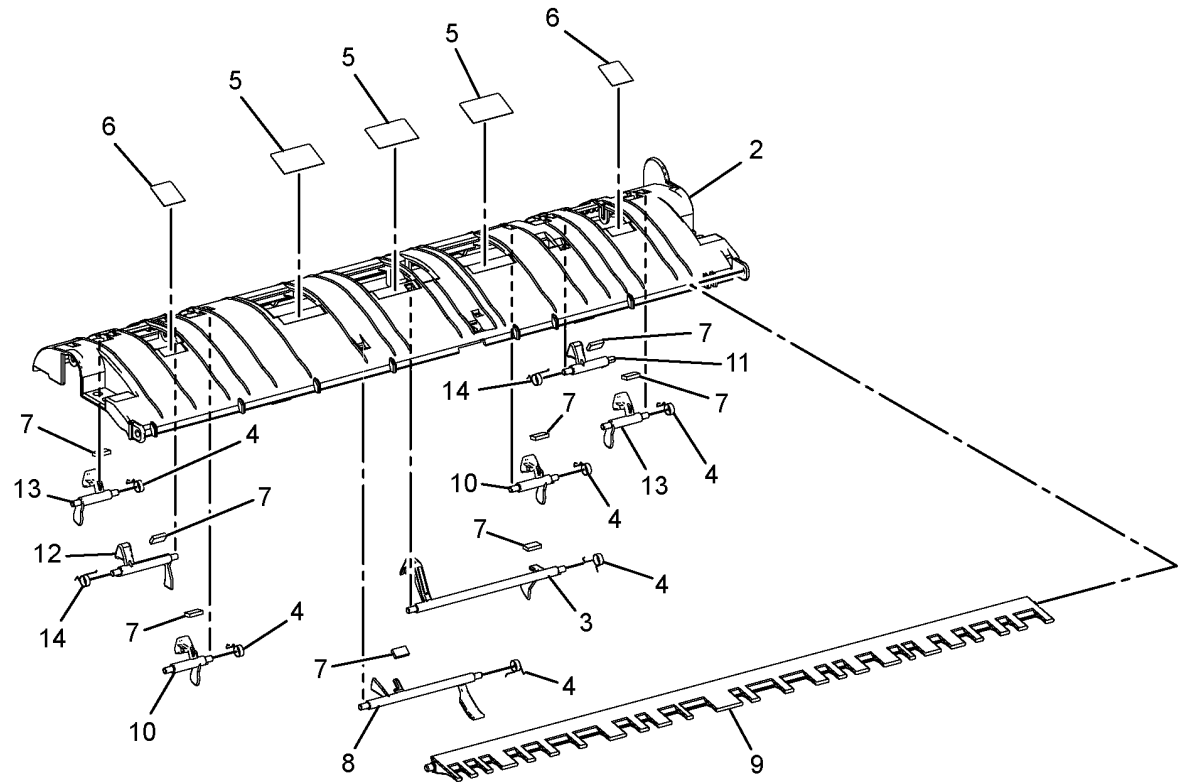
1 { 2 - 15
4 { 5, 6



C-8-0011-A

PL 5.60 Invert Chute

Item	Part	Description
1	—	Invert chute assembly (REF: PL 5.45 Item 3)
2	—	Invert chute (P/O PL 5.60 Item 1)
3	—	Pre-registration actuator (P/O PL 5.60 Item 1)
4	—	Spring (P/O PL 5.60 Item 1)
5	—	W seal (P/O PL 5.60 Item 1)
6	—	S seal (P/O PL 5.60 Item 1)
7	—	Pad (P/O PL 5.60 Item 1)
8	—	Invert actuator (P/O PL 5.60 Item 1)
9	—	Invert gate (P/O PL 5.60 Item 1)
10	—	APS 1 actuator (P/O PL 5.60 Item 1)
11	—	APS 2 actuator (P/O PL 5.60 Item 1)
12	—	APS 2 dummy actuator (P/O PL 5.60 Item 1)
13	—	APS 3 actuator (P/O PL 5.60 Item 1)
14	—	Spring (P/O PL 5.60 Item 1)

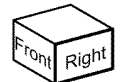
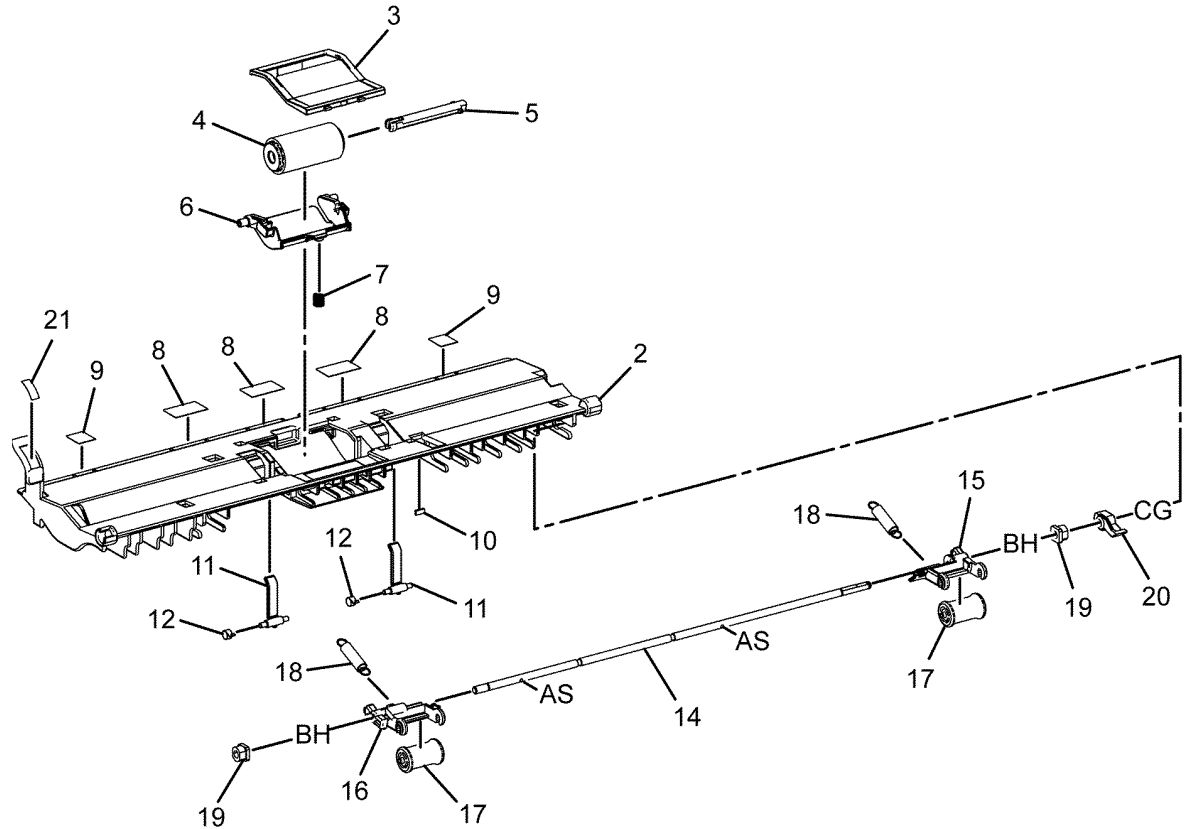


C-8-0012-A

PL 5.65 Retard Chute

Item	Part	Description
1	—	Retard chute assembly (P/O PL 5.45 Item 3)
2	—	Retard chute (P/O PL 5.65 Item 1)
3	848K99190	Retard CRU cover assembly
4	—	Retard roll assembly (P/O PL 5.65 Item 1) (See NOTE) (REP 5.19)
5	—	Retard shaft (P/O PL 5.65 Item 1)
6	—	Retard housing (P/O PL 5.65 Item 1)
7	—	Retard spring (P/O PL 5.65 Item 1)
8	—	W seal (P/O PL 5.65 Item 1)
9	—	S seal (P/O PL 5.65 Item 1)
10	—	Pad (P/O PL 5.65 Item 1)
11	—	Set gate (P/O PL 5.65 Item 1)
12	—	Torsion set spring (P/O PL 5.65 Item 1)
13	—	Exit nip roll (P/O PL 5.65 Item 1)
14	—	Exit roll shaft (P/O PL 5.65 Item 13)
15	—	Exit R holder (P/O PL 5.65 Item 13)
16	—	Exit F holder (P/O PL 5.65 Item 13)
17	—	Exit nip roll (P/O PL 5.65 Item 13)
18	—	Exit spring (P/O PL 5.65 Item 1)
19	—	Bearing (P/O PL 5.65 Item 1)
20	—	Exit cam 2 link (P/O PL 5.65 Item 1)
21	—	Retard label (P/O PL 5.65 Item 1)
22	604K97930	DADF feeder kit

NOTE: HFSI. To reset the HFSI counter, refer to dC135.

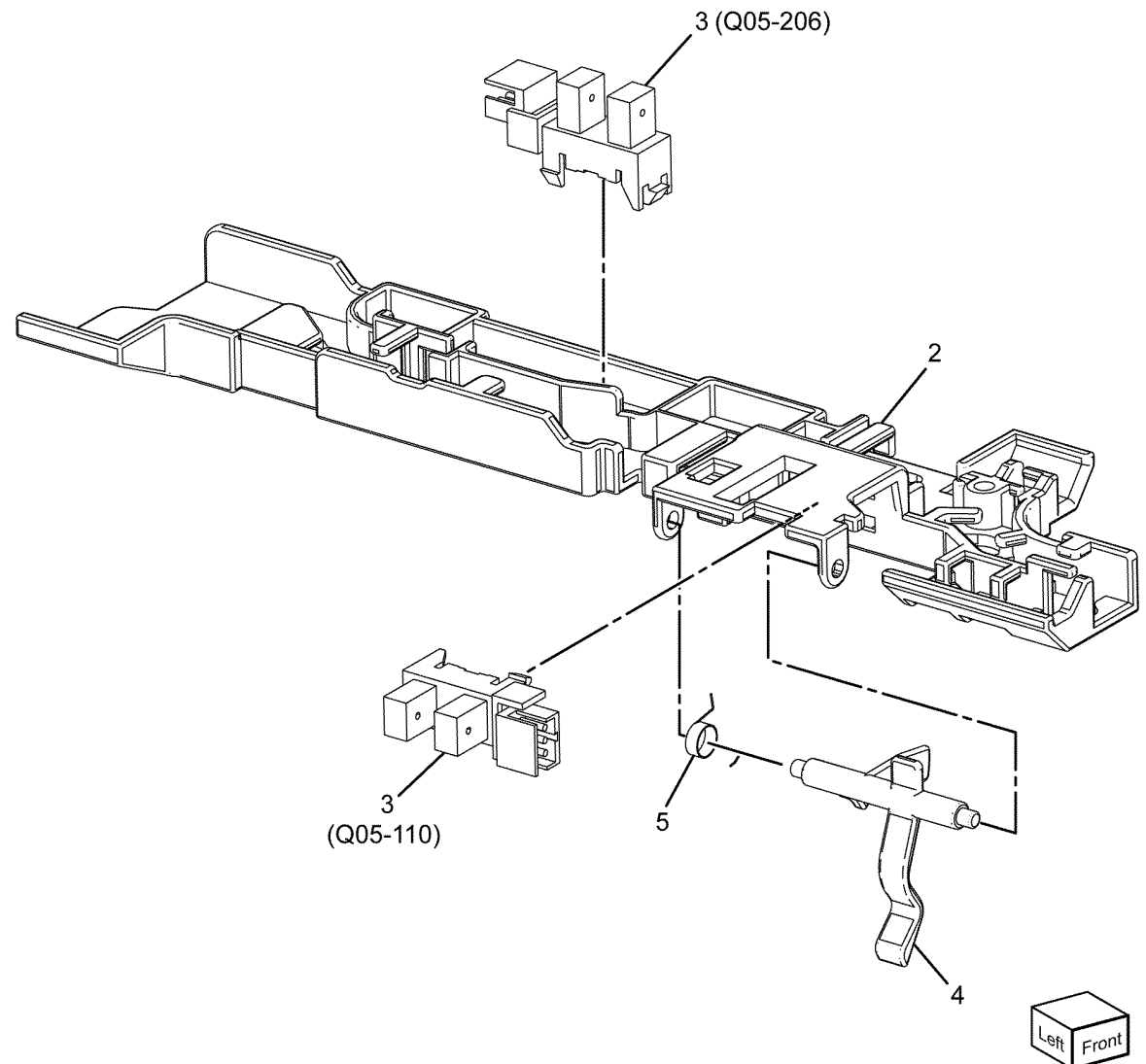


C-8-0013-A

PL 5.70 Registration Sensor Bracket

Item	Part	Description
1	—	Registration sensor bracket assembly (Not Spared)
2	—	Bracket (P/O PL 5.70 Item 1)
3	930W00121	Registration sensor (Q05-110)/pre-registration sensor (Q05-206)
4	—	Actuator (P/O PL 5.70 Item 1)
5	—	Torsion spring (P/O PL 5.70 Item 1)

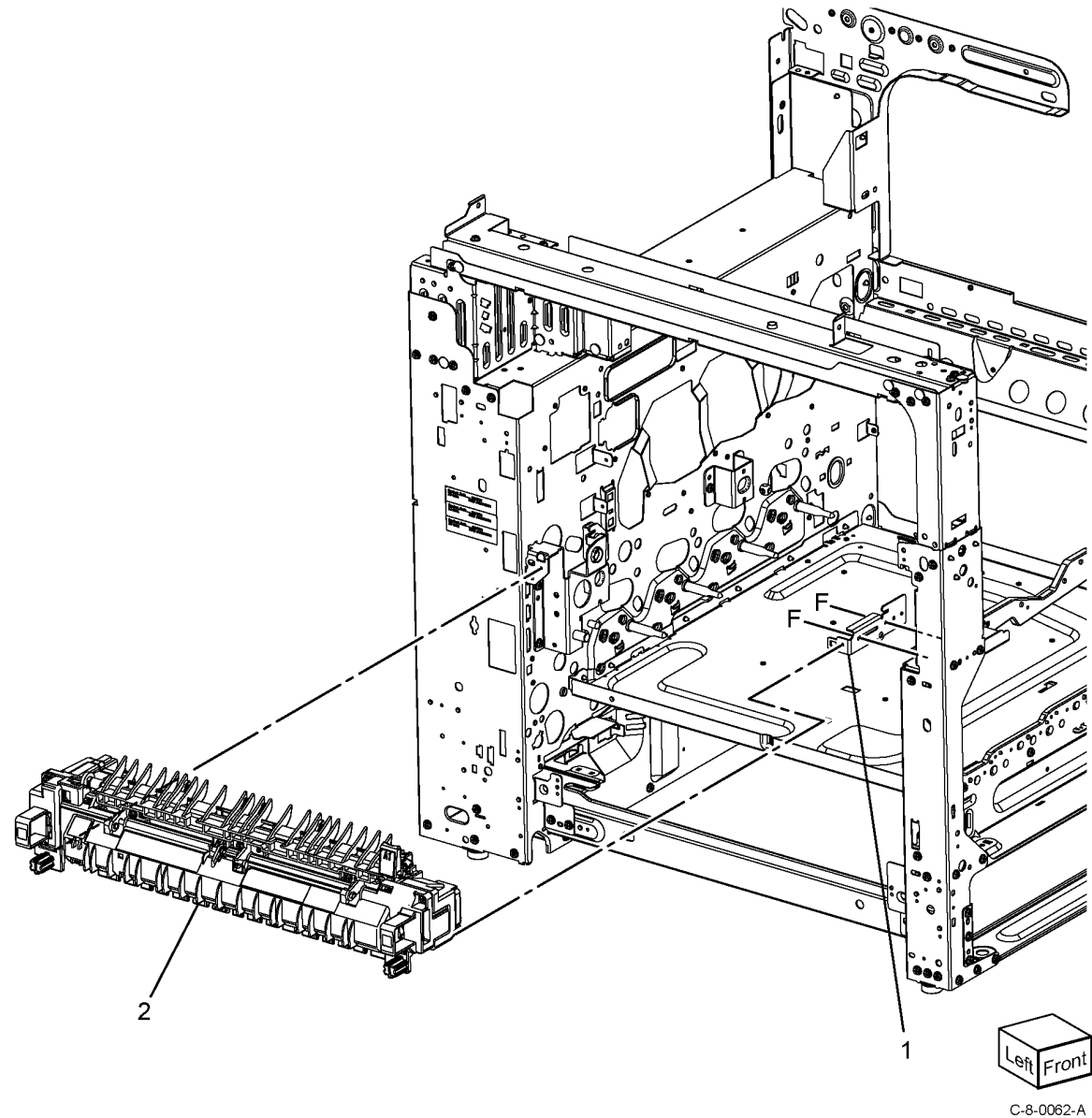
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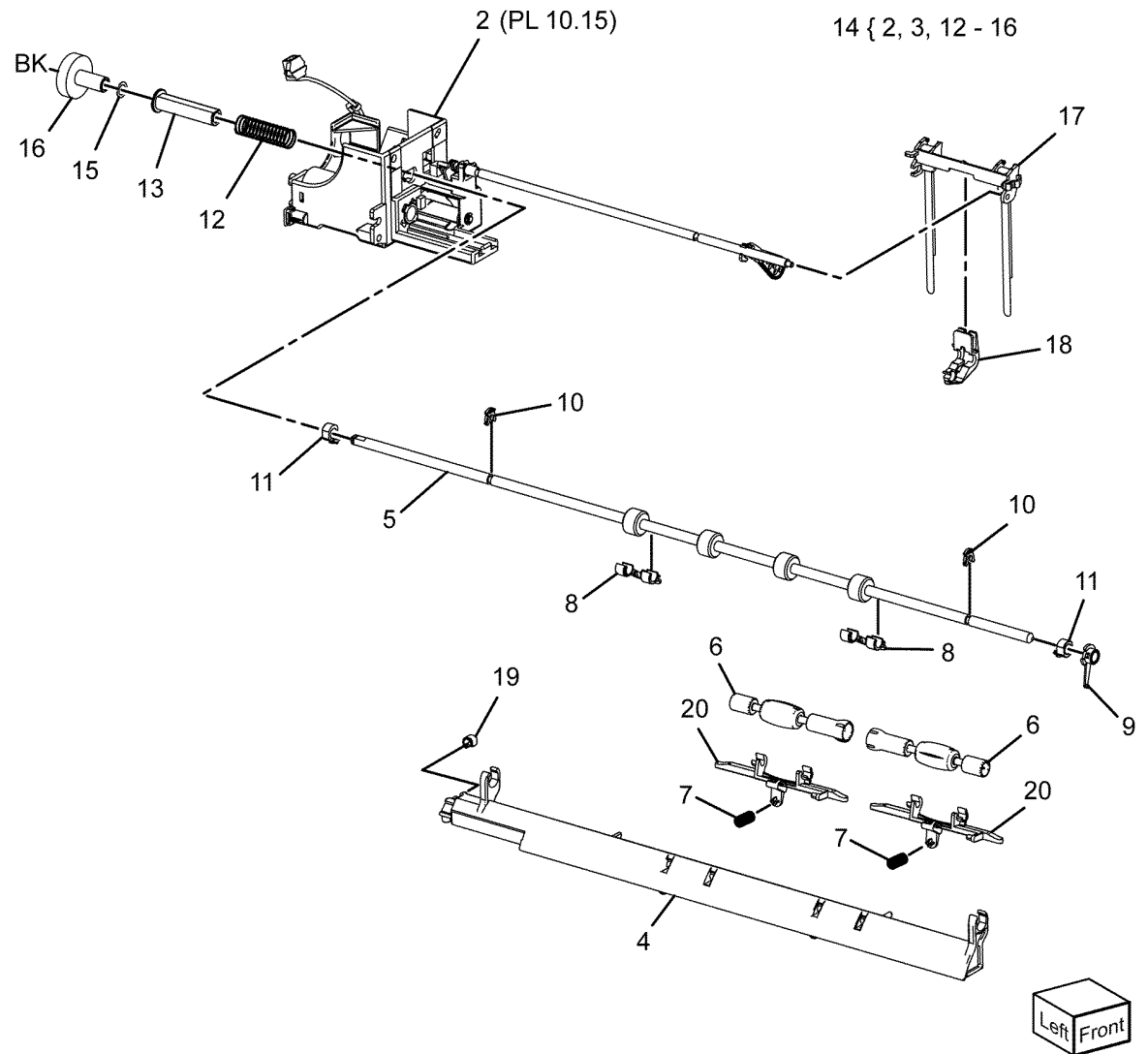
PL 10.05 Fuser

Item	Part	Description
1	—	Adjust plate (Not Spared)
2	115R00114	Fuser 120V (C7030F) (REP 10.3)
—	115R00115	Fuser 220V (C7030F) (REP 10.3)
—	115R00137	Fuser 120V (C7000) (REP 10.3)
—	115R00138	Fuser 220V (C7000) (REP 10.3)



PL 10.10 Exit 1

Item	Part	Description
1	859K00504	Exit 1 OCT assembly (REP 10.1)
2	—	Exit 1 base assembly (P/O PL 10.10 Item 1)
3	—	OCT chute assembly (P/O PL 10.10 Item 1)
4	—	OCT chute (P/O PL 10.10 Item 3)
5	—	Exit 1 roller assembly (P/O PL 10.10 Item 3)
6	—	Nip roll (P/O PL 10.10 Item 3)
7	—	Spring (P/O PL 10.10 Item 3)
8	—	Exit guard (P/O PL 10.10 Item 3)
9	—	Bearing (Not Spared)
10	—	Clip shaft (P/O PL 10.10 Item 3)
11	—	Bearing (P/O PL 10.10 Item 3)
12	—	OCT back spring (P/O PL 10.10 Item 1)
13	—	Bearing OCT (P/O PL 10.10 Item 1)
14	—	Full stack chute assembly (Not Spared)
15	—	Plain washer (P/O PL 10.10 Item 1)
16	—	OCT gear (P/O PL 10.10 Item 1)
17	036K92030	Paper exit 1 weight assembly
18	—	Exit 1 CTR guard (Not Spared)
19	—	OCT collar (P/O PL 10.10 Item 3)
20	—	Nip roll holder (P/O PL 10.10 Item 1)



1 { 2, 3, 12, 13, 15, 16, 20

3 { 4 - 8, 10, 11, 19

14 { 2, 3, 12 - 16

Left Front

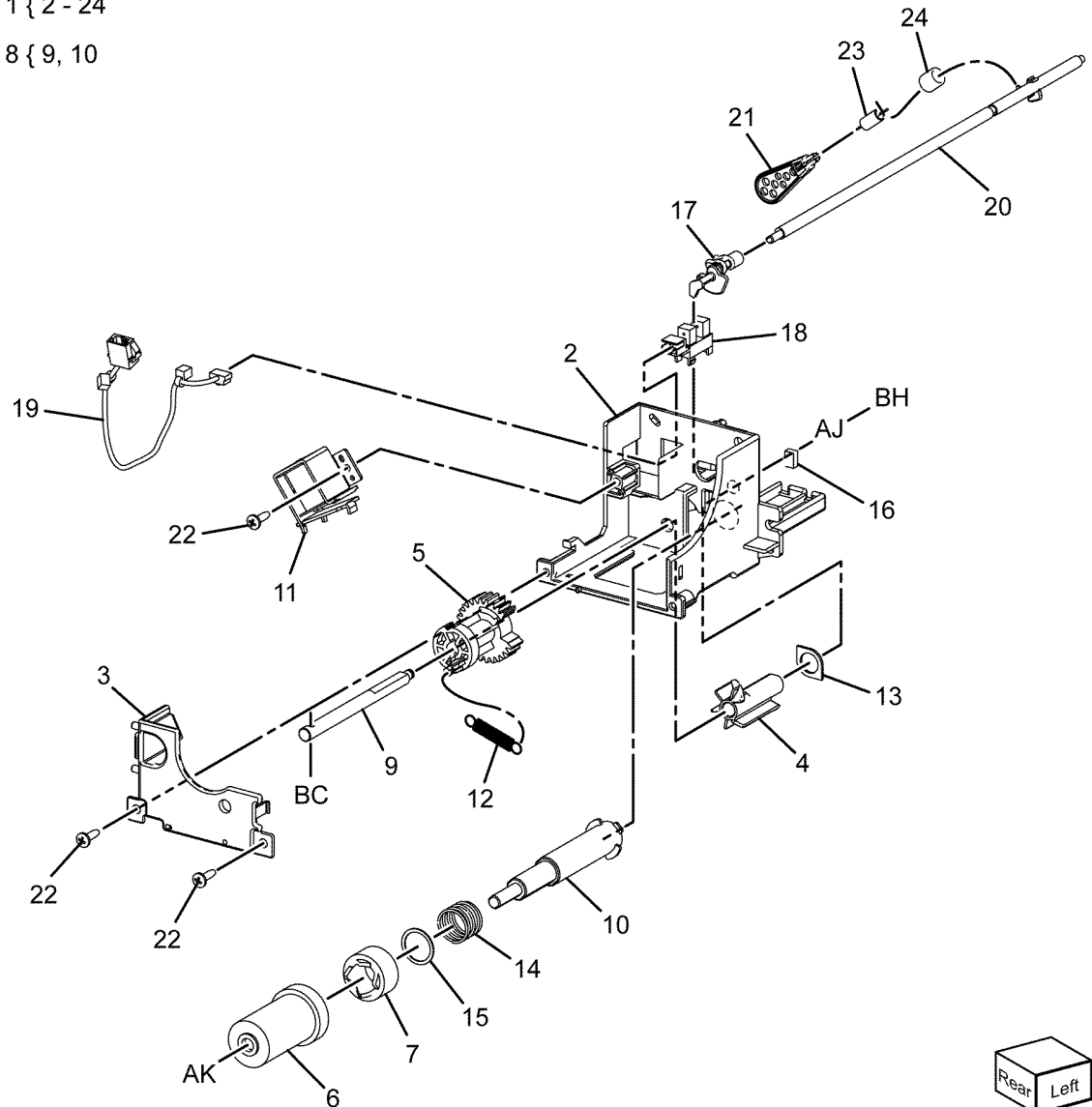
C-8-0077-A

PL 10.15 Exit 1 Base Assembly

Item	Part	Description
1	—	Exit 1 base assembly (Not Spared)
2	—	Base exit 1 (P/O PL 10.15 Item 1)
3	—	Base exit 1 cover (P/O PL 10.15 Item 1)
4	—	Cam screw (P/O PL 10.15 Item 1)
5	—	OCT segment gear (P/O PL 10.15 Item 1)
6	—	Exit 1 idler gear (P/O PL 10.15 Item 1)
7	—	Coupling gear (P/O PL 10.15 Item 1)
8	—	Exit 1 shaft assembly (P/O PL 10.15 Item 1)
9	—	Cam shaft (P/O PL 10.15 Item 8)
10	—	Idler gear shaft (P/O PL 10.15 Item 8)
11	121E25150	Exit 1 offset solenoid (SOL77-010)
12	—	Cam spring (P/O PL 10.15 Item 1)
13	—	Cam screw pad (P/O PL 10.15 Item 1)
14	—	OCT safety spring (P/O PL 10.15 Item 1)
15	—	Exit 1 washer (P/O PL 10.15 Item 1)
16	—	OCT back pad (P/O PL 10.15 Item 1)
17	—	Full sensor actuator (P/O PL 10.15 Item 1)
18	930W00113	Exit 1 OCT full stack sensor (Q77-124)
19	—	Exit harness assembly (P/O PL 10.15 Item 1)
20	—	Full stack B shaft (P/O PL 10.15 Item 1)
21	—	Full actuator (P/O PL 10.15 Item 1)
22	—	Screw (P/O PL 10.15 Item 1)
23	—	Spring pipe (P/O PL 10.15 Item 1)
24	—	Spring (P/O PL 10.15 Item 1)

1 { 2 - 24

8 { 9, 10

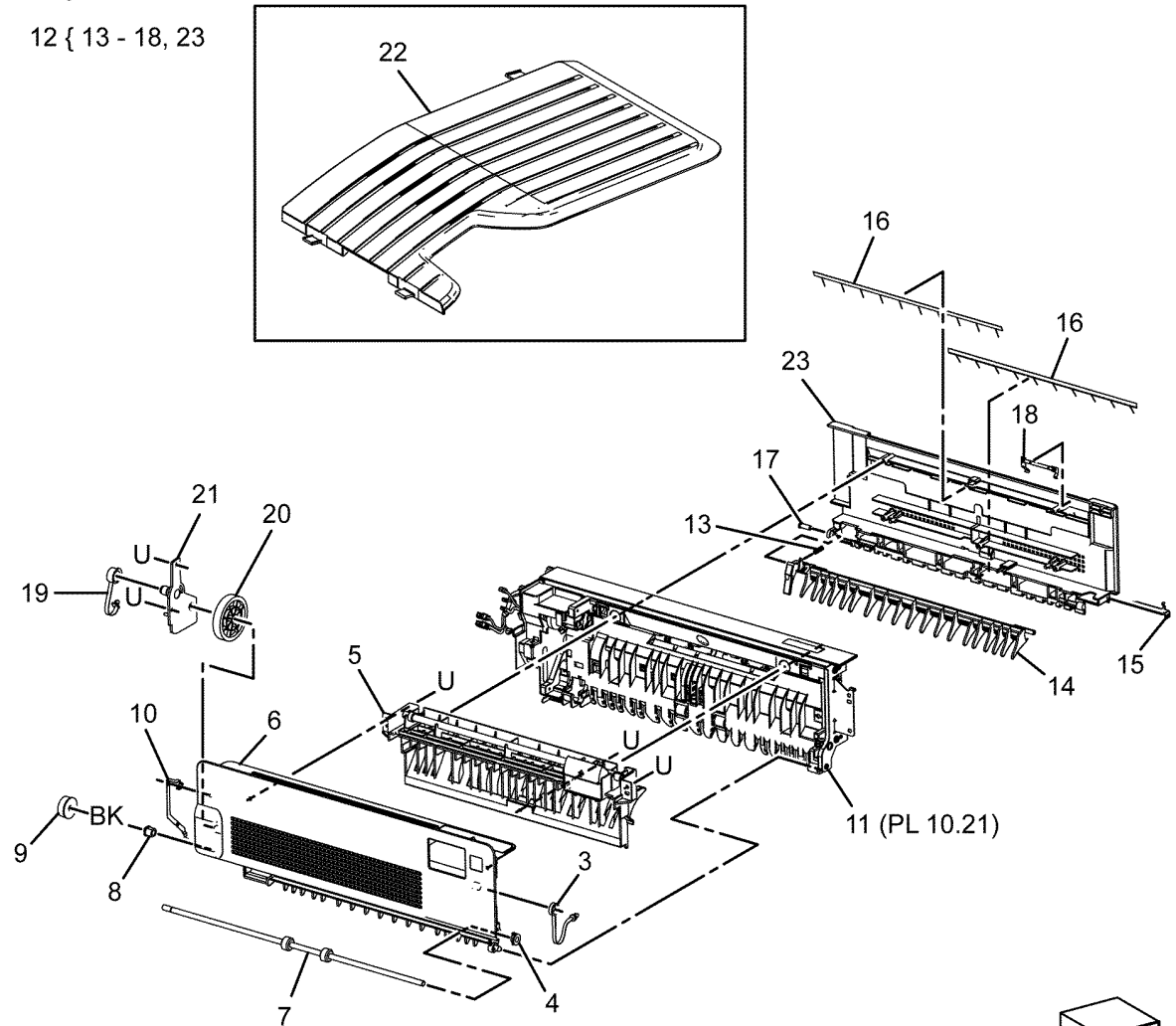


C-8-0078-A

PL 10.20 Exit 2 (1 of 3)

Item	Part	Description
1	859K04963	Exit 2 transport assembly
2	—	Chute LH transport assembly (P/O PL 10.20 Item 1)
3	—	Exit 2 stopper (P/O PL 10.20 Item 1)
4	—	Bearing (P/O PL 10.20 Item 1)
5	—	Exit 2 chute (P/O PL 10.20 Item 1)
6	—	LH high chute (P/O PL 10.20 Item 1)
7	—	Inverter roller assembly (P/O PL 10.20 Item 1)
8	—	Bearing sleeve (P/O PL 10.20 Item 1)
9	—	Inverter gear (P/O PL 10.20 Item 1)
10	—	Earth plate (P/O PL 10.20 Item 1)
11	—	Exit 2 drive assembly (REF: PL 10.21)
12	—	Exit 2 guide assembly (P/O PL 10.20 Item 1)
13	—	Gate 1 spring (P/O PL 10.20 Item 12)
14	050E94761	Exit 1 diverter gate
15	—	Exit 1 conductor (P/O PL 10.20 Item 12)
16	—	Static eliminator (P/O PL 10.20 Item 12)
17	—	Gate stopper (P/O PL 10.20 Item 12)
18	—	Exit 2 conductor (P/O PL 10.20 Item 12)
19	—	Exit 2 stopper (P/O PL 10.20 Item 1)
20	—	Gear (P/O PL 10.20 Item 1)
21	—	Gear cover (P/O PL 10.20 Item 1)
22	050E32541	Center tray / dual catch tray
23	—	Exit 2 guide (P/O PL 10.20 Item 12)

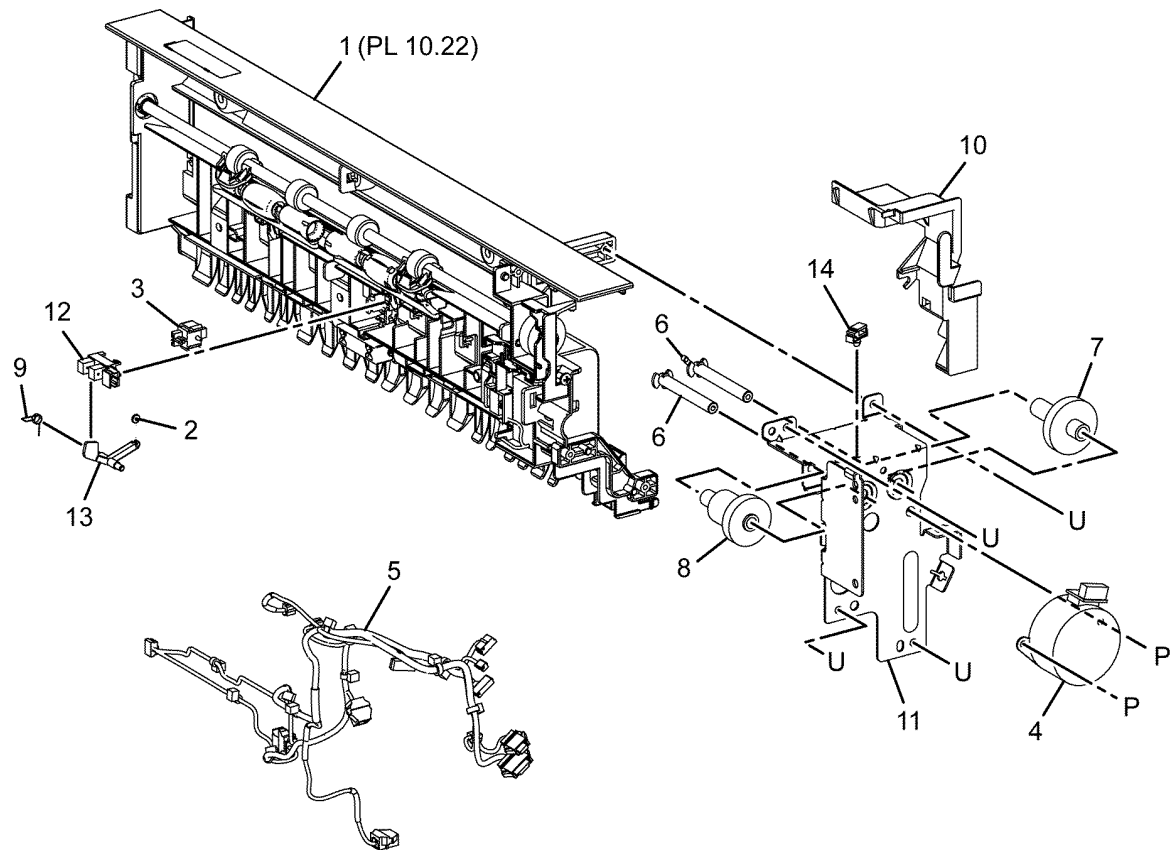
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2 { 3 - 10, 20, 21
12 { 13 - 18, 23



C-8-0079-A

PL 10.21 Exit 2 (2 of 3)

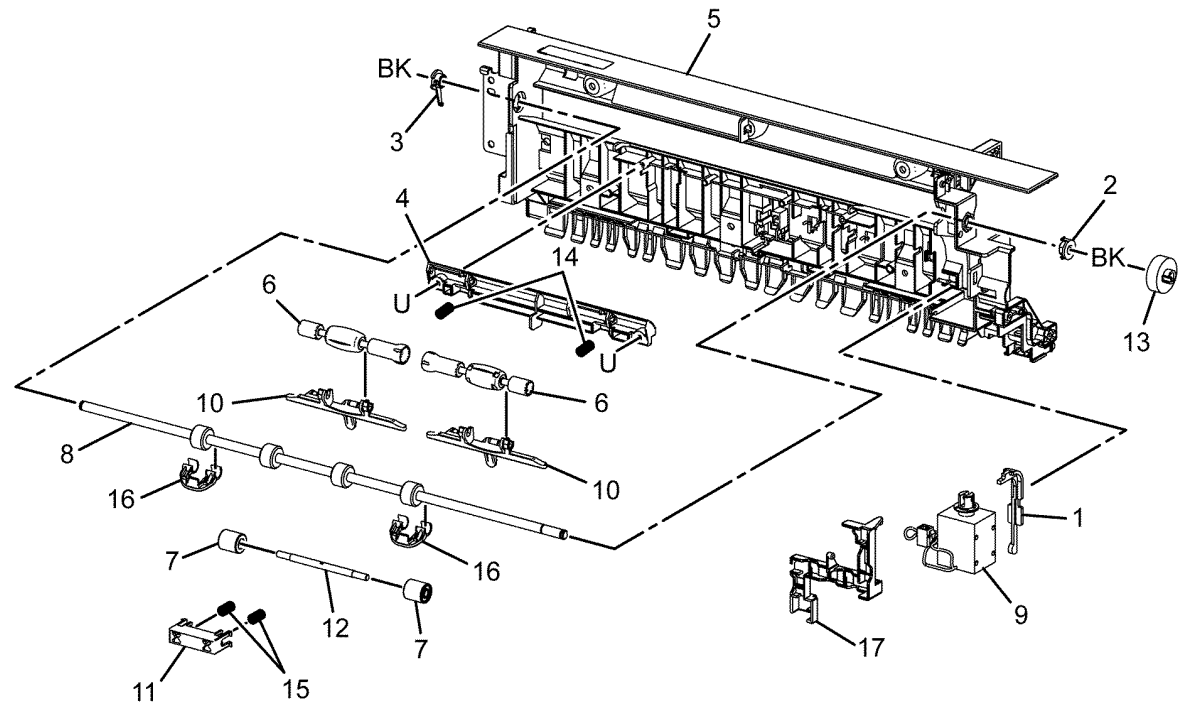
Item	Part	Description
1	—	Exit 2 OCT assembly (REF: PL 10.22)
2	—	Roller actuator (Not Spared)
3	110E11580	LH high cover switch (S77-302)
4	127K58400	Exit 2 motor (MOT77-014)
5	952K21202	Exit 2 harness assembly
6	—	Gear shaft (Not Spared)
7	—	Gear 28T (Not Spared)
8	—	Gear 16/48T (Not Spared)
9	—	Actuator spring (Not Spared)
10	—	Rear cover (Not Spared)
11	—	Rear bracket (Not Spared)
12	930W00123	Exit 2 sensor (Q77-100)
13	—	Actuator (Not Spared)
14	—	Locking clamp (Not Spared)



C-8-0080-A

PL 10.22 Exit 2 (3 of 3)

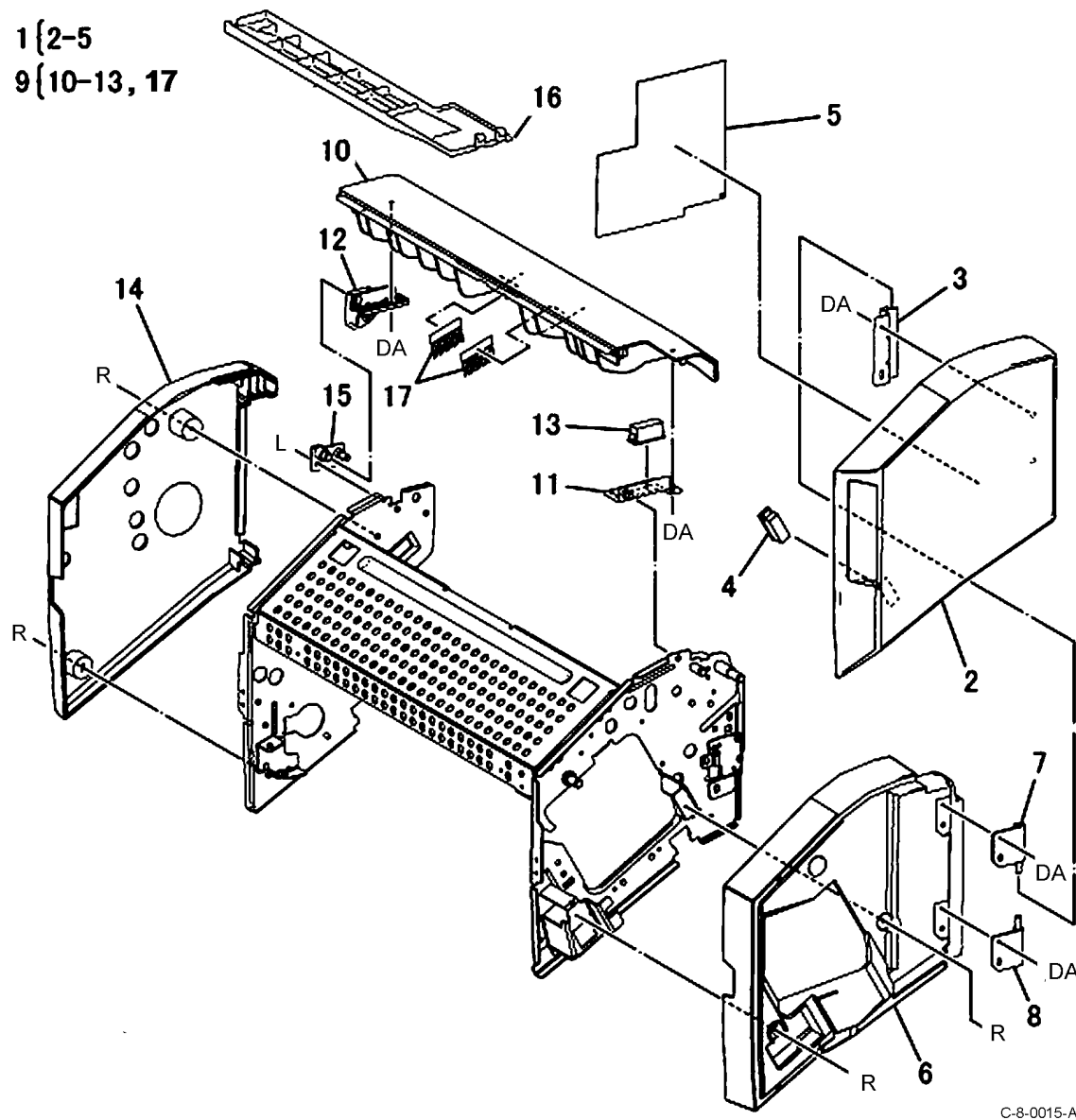
Item	Part	Description
1	—	Gate exit link (Not Spared)
2	—	Bearing (Not Spared)
3	—	Bearing (Not Spared)
4	—	Exit chute (Not Spared)
5	—	Low exit 2 chute (Not Spared)
6	059E10261	Pinch roller
7	—	Inverter nip roll (Not Spared)
8	—	Exit 2 roll (Not Spared) (REP 10.2)
9	921W11601	Exit gate solenoid (SOL77-004)
10	—	Nip roll holder (Not Spared)
11	—	Spring holder (Not Spared)
12	—	Shaft (Not Spared)
13	—	Gear 22T (Not Spared)
14	—	Exit nip spring (Not Spared)
15	—	Inverter nip spring (Not Spared)
16	—	Exit guard (Not Spared)
17	—	Exit 2 guide harness (Not Spared)



C-8-0081-A

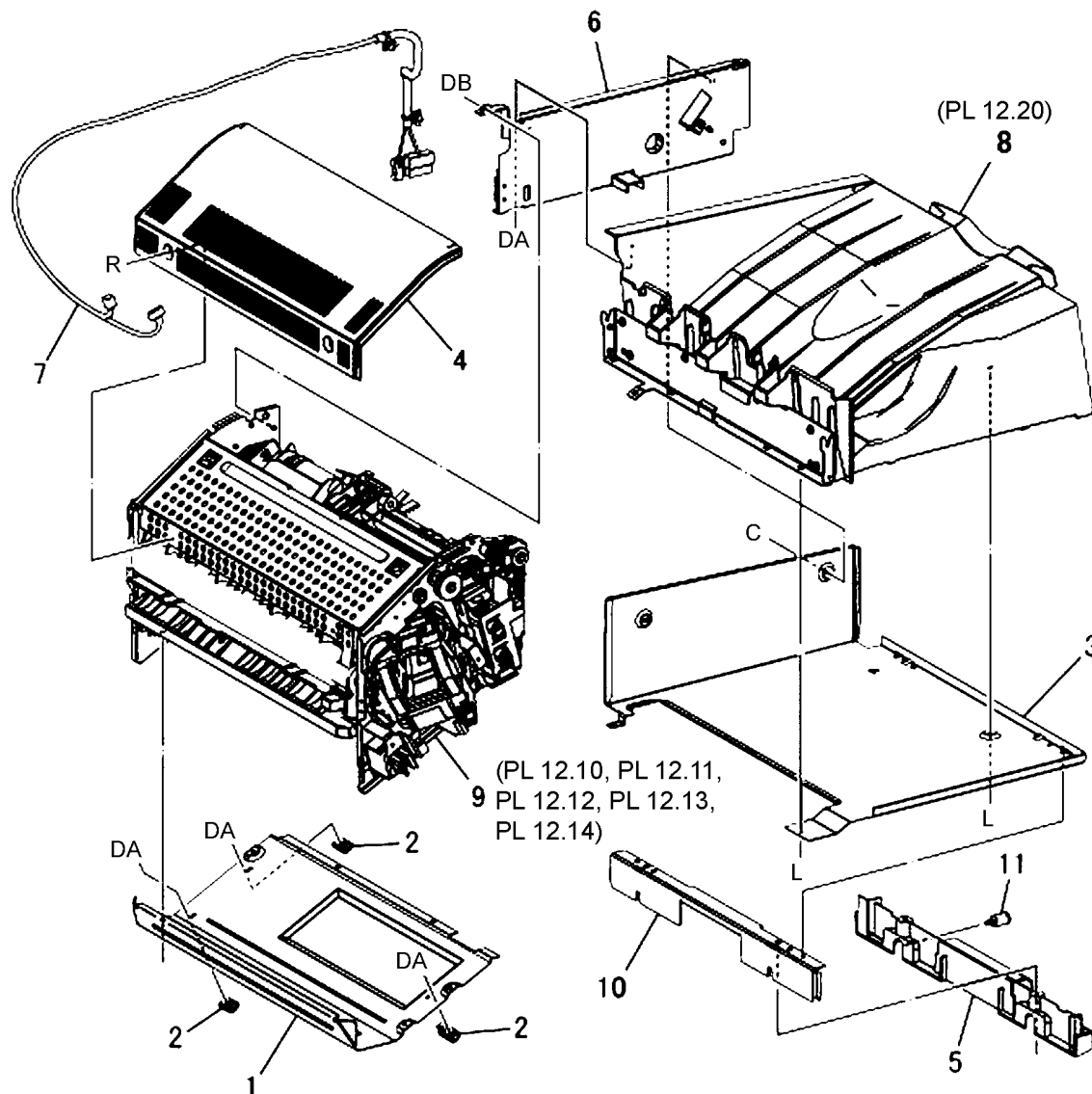
PL 12.05 Integrated Office Finisher (1 of 2)

Item	Part	Description
1	948K05200	Front cover assembly
2	—	Front cover (P/O PL 12.05 Item 1)
3	—	Bracket (P/O PL 12.05 Item 1)
4	—	Magnet (P/O PL 12.05 Item 1)
5	—	Label (P/O PL 12.05 Item 1)
6	—	Front inner cover (Not Spared)
7	—	Hinge (Not Spared)
8	—	Hinge (Not Spared)
9	948K05210	Top cover assembly
10	—	Top cover (P/O PL 12.05 Item 9)
11	—	Bracket (P/O PL 12.05 Item 9)
12	—	Stopper (P/O PL 12.05 Item 9)
13	—	Magnet (P/O PL 12.05 Item 9)
14	—	Rear cover (Not Spared)
15	—	Hinge (Not Spared)
16	—	IIT cover (Not Spared)
17	—	Static eliminator (P/O PL 12.05 Item 9)



PL 12.06 Integrated Office Finisher (2 of 2)

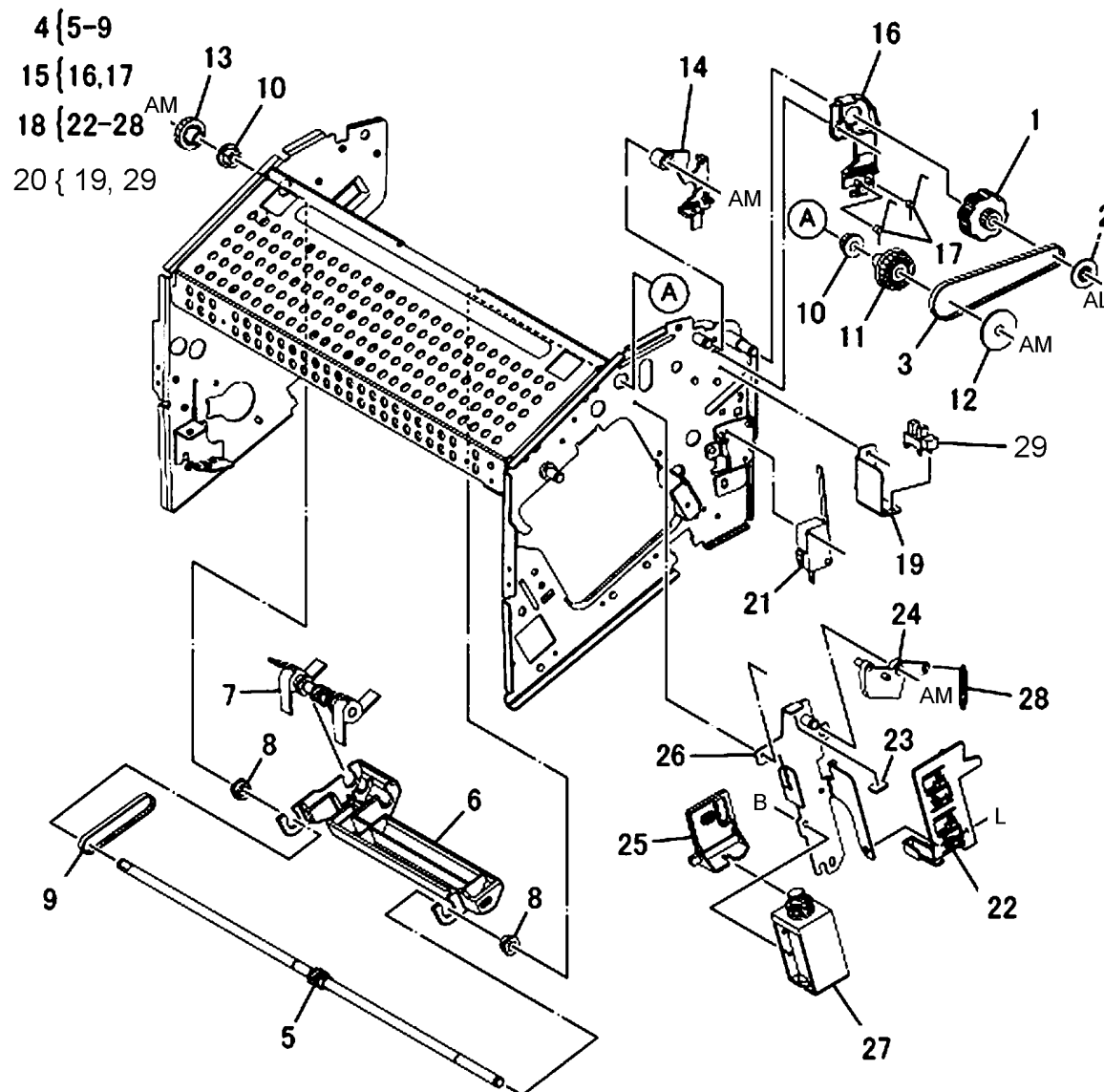
Item	Part	Description
1	—	Bottom cover (Not Spared)
2	—	Spacer (Not Spared)
3	—	Tray cover (Not Spared)
4	—	Left cover (Not Spared)
5	—	Tray support (Not Spared)
6	—	Rear bracket (Not Spared)
7	962K42291	Wire harness
8	050K75640	Stacker tray assembly (REP 12.15)
9	—	Stacker base assembly (Not Spared)
10	—	Extended tray assembly (Not Spared)
11	826E24180	Thumb screw



C-8-0016-A

PL 12.10 Integrated Office Finisher Base Assembly (1 of 5)

Item	Part	Description
1	—	Pulley knob (Not Spared)
2	005E89470	Collar
3	423W10455	Front paddle belt (REP 12.2)
4	012K96371	Link shaft assembly
5	—	Link shaft (P/O PL 12.10 Item 4)
6	—	Support (P/O PL 12.10 Item 4)
7	—	Sub paddle shaft assembly (P/O PL 12.10 Item 4)
8	—	Bearing (P/O PL 12.10 Item 4)
9	423W06055	Front paddle belt (REP 12.2)
10	413W75959	Bearing
11	—	Pulley (Not Spared)
12	—	Collar (Not Spared)
13	—	Gear (21T) (Not Spared)
14	—	Actuator (Not Spared)
15	—	Knob cover assembly (Not Spared)
16	—	Knob Cover (P/O PL 12.10 Item 15)
17	—	Spring (P/O PL 12.10 Item 15)
18	—	Sub paddle solenoid assembly (Not Spared)
19	—	Bracket (P/O PL 12.10 Item 20)
20	068K30000	Finisher top cover interlock sensor assembly
21	110K12980	Finisher top cover interlock (Q12-300) (+24V)
22	—	Support (P/O PL 12.10 Item 18)
23	—	Cushion (P/O PL 12.10 Item 18)
24	—	Link (P/O PL 12.10 Item 18)
25	—	Arm (P/O PL 12.10 Item 18)
26	—	Bracket (P/O PL 12.10 Item 18)
27	121K34620	Sub paddle solenoid (SOL12-013) (REP 12.3)
28	—	Spring (P/O PL 12.10 Item 18)
29	130K70160	Finisher top cover interlock sensor (P/O PL 12.10 Item 20)

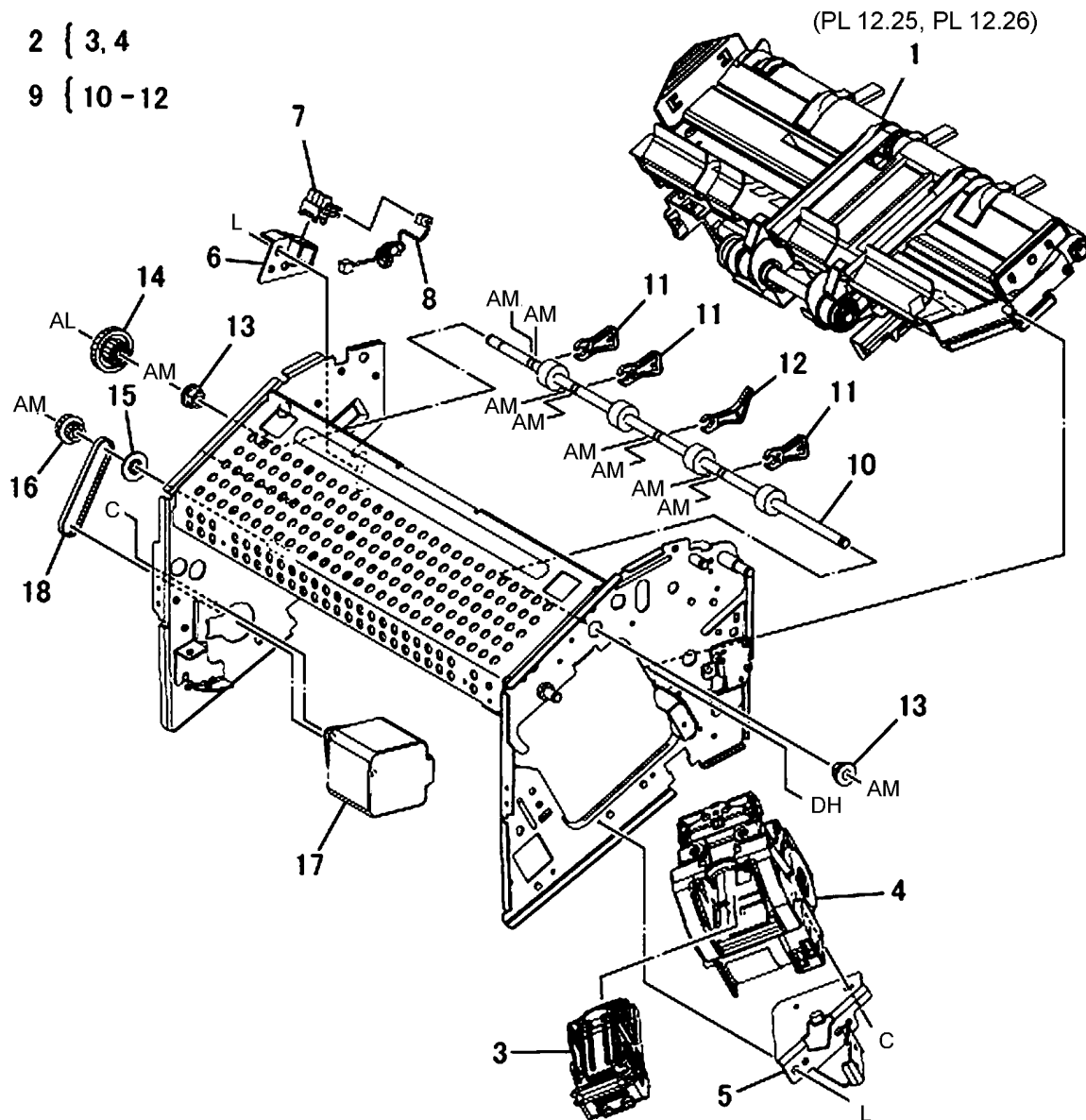


C-8-0017-A

PL 12.11 Integrated Office Finisher Base Assembly (2 of 5)

Item	Part	Description
1	050K75630	Compiler assembly (REP 12.19)
2	029K93260	Stapler assembly (alternative) (REP 12.4)
—	029K92350	Stapler assembly (REP 12.4)
3	—	Cartridge (P/O PL 12.11 Item 2) (See NOTE)
4	—	Stapler (P/O PL 12.11 Item 2)
5	—	Bracket (Not Spared)
6	—	Support (Not Spared)
7	930W00111	Set clamp home sensor (Q12-251) (REP 12.5)
8	962K44981	Wire harness
9	022K72790	Exit roll assembly (REP 12.6)
10	—	Exit roll (P/O PL 12.11 Item 9)
11	—	Damper (P/O PL 12.11 Item 9)
12	—	Center damper (P/O PL 12.11 Item 9)
13	—	Bearing (Not Spared)
14	007K94220	One way gear
15	005E89470	Collar
16	—	Gear pulley (16T/18T) (Not Spared)
17	127K49800	Transport motor (MOT12-095)
18	423W06954	Belt

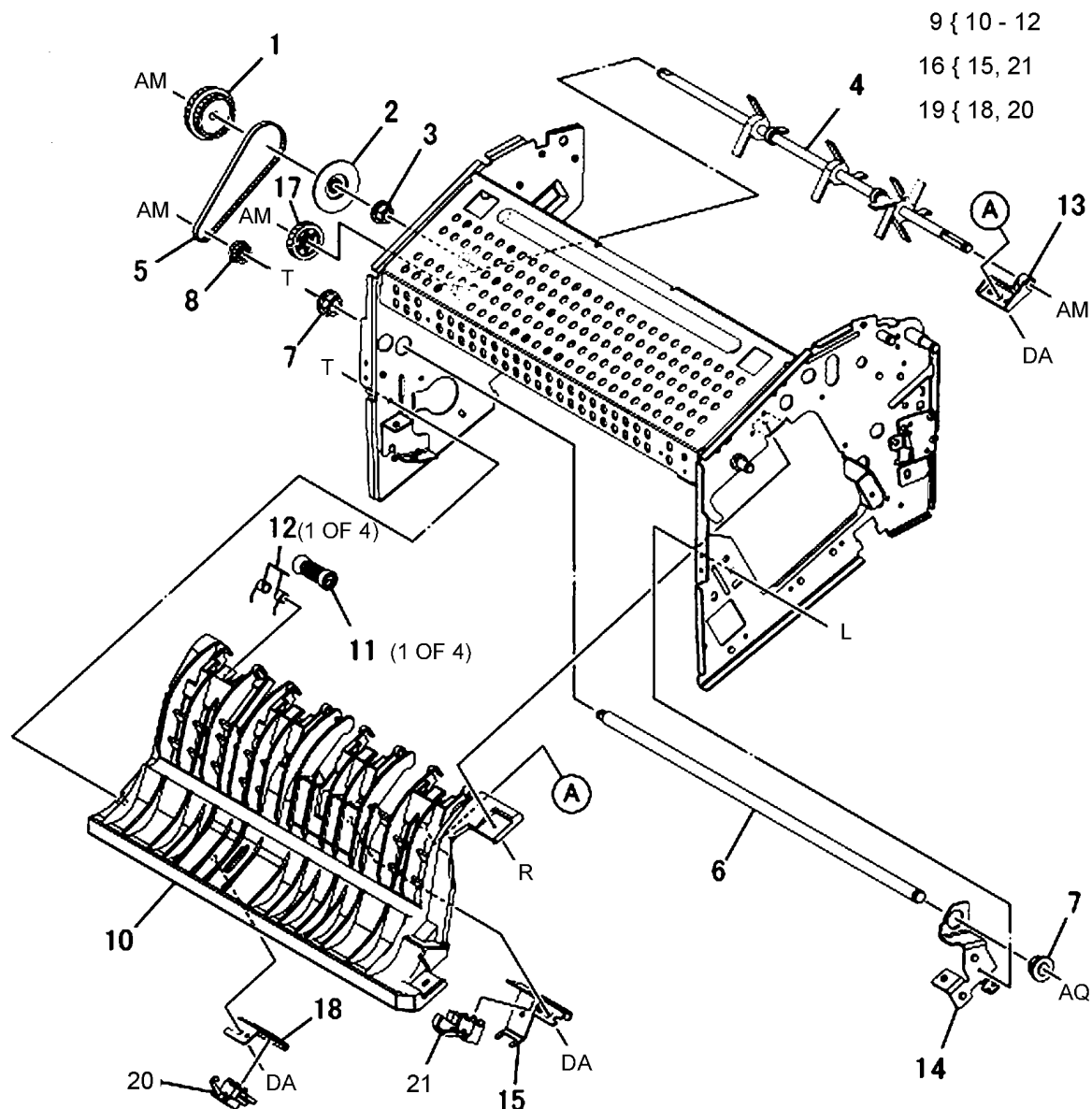
NOTE: Refer to PL 26.05 for the staple refills and cartridge.



C-8-0018-A

PL 12.12 Integrated Office Finisher Base Assembly (3 of 5)

Item	Part	Description
1	—	Gear pulley (37T/45T) (Not Spared)
2	—	Collar (Not Spared)
3	—	Bearing (Not Spared)
4	006K25001	Main paddle shaft assembly (REP 12.10)
5	—	Belt (Not Spared)
6	—	Shaft (Not Spared)
7	413W11860	Bearing
8	—	Pulley (19T) (Not Spared)
9	054K30361	Lower chute assembly (REP 12.11)
10	—	Lower chute (P/O PL 12.12 Item 9)
11	022K73190	Nip roll (REP 12.7)
12	809E65931	Spring (REP 12.7)
13	—	Support (Not Spared)
14	—	Bracket (Not Spared)
15	—	Bracket (P/O PL 12.12 Item 16)
16	130K93251	Compiler exit sensor assembly (Q12-150) (REP 12.9)
17	—	Gear (27T) (Not Spared)
18	—	Bracket (P/O PL 12.12 Item 19)
19	068K30520	Entry sensor assembly (Q12-140) (REP 12.8)
20	—	Entry sensor (Q12-140) (P/O PL 12.12 Item 19)
21	—	Compiler exit sensor (Q12-150) (P/O PL 12.12 Item 16)

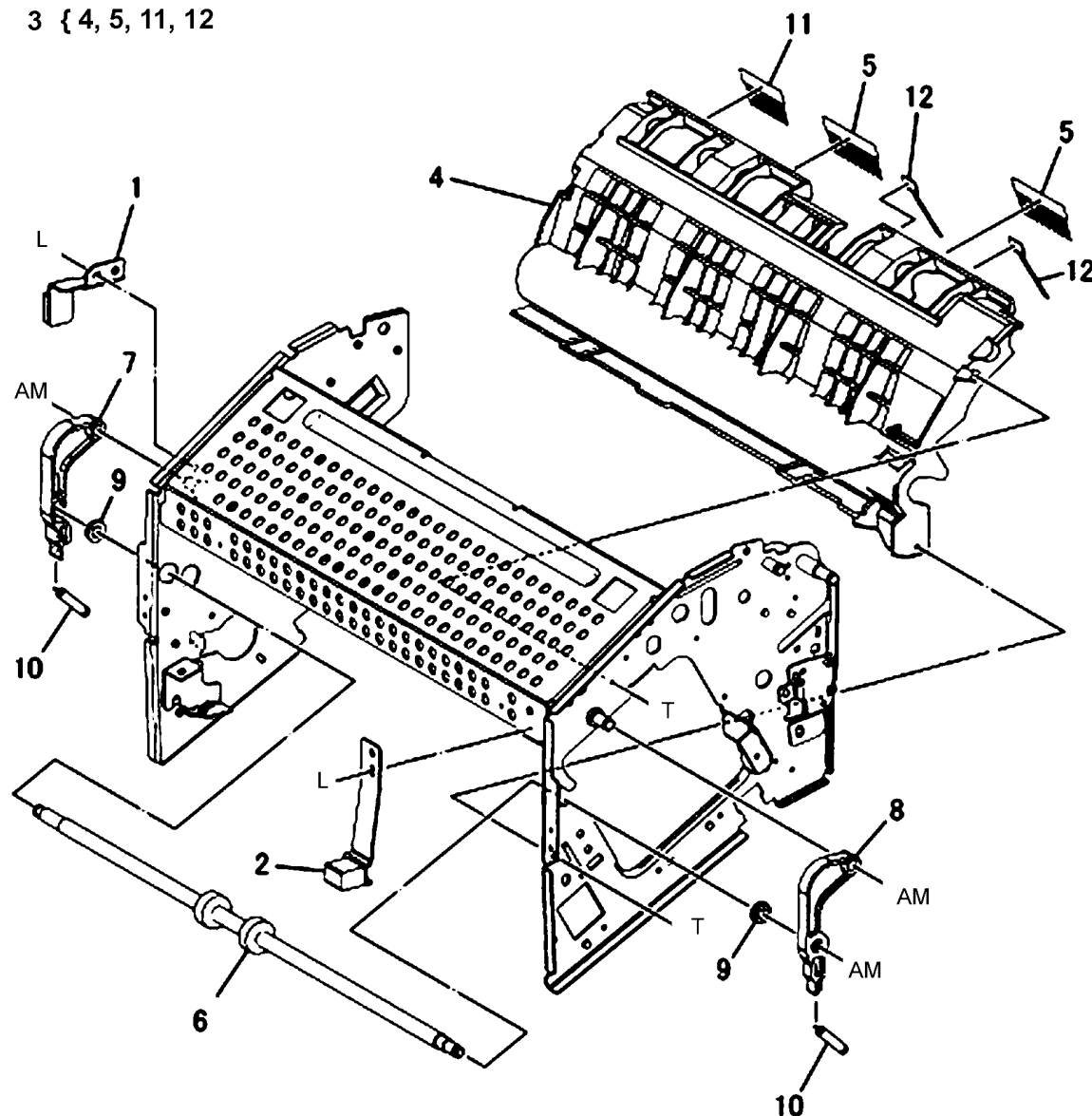


C-8-0019-A

PL 12.13 Integrated Office Finisher Base Assembly (4 of 5)

Item	Part	Description
1	—	Bracket (Not Spared)
2	—	Bracket (Not Spared)
3	054K42690	Upper chute assembly (REP 12.13)
4	—	Upper chute (P/O PL 12.13 Item 3)
5	—	Static eliminator (P/O PL 12.13 Item 3)
6	022K72782	Entry roll (REP 12.12)
7	—	Rear arm (Not Spared)
8	—	Front arm (Not Spared)
9	413W66250	Ball bearing
10	—	Spring (Not Spared)
11	042E92330	Static eliminator
12	—	Paper guide (P/O PL 12.13 Item 3)

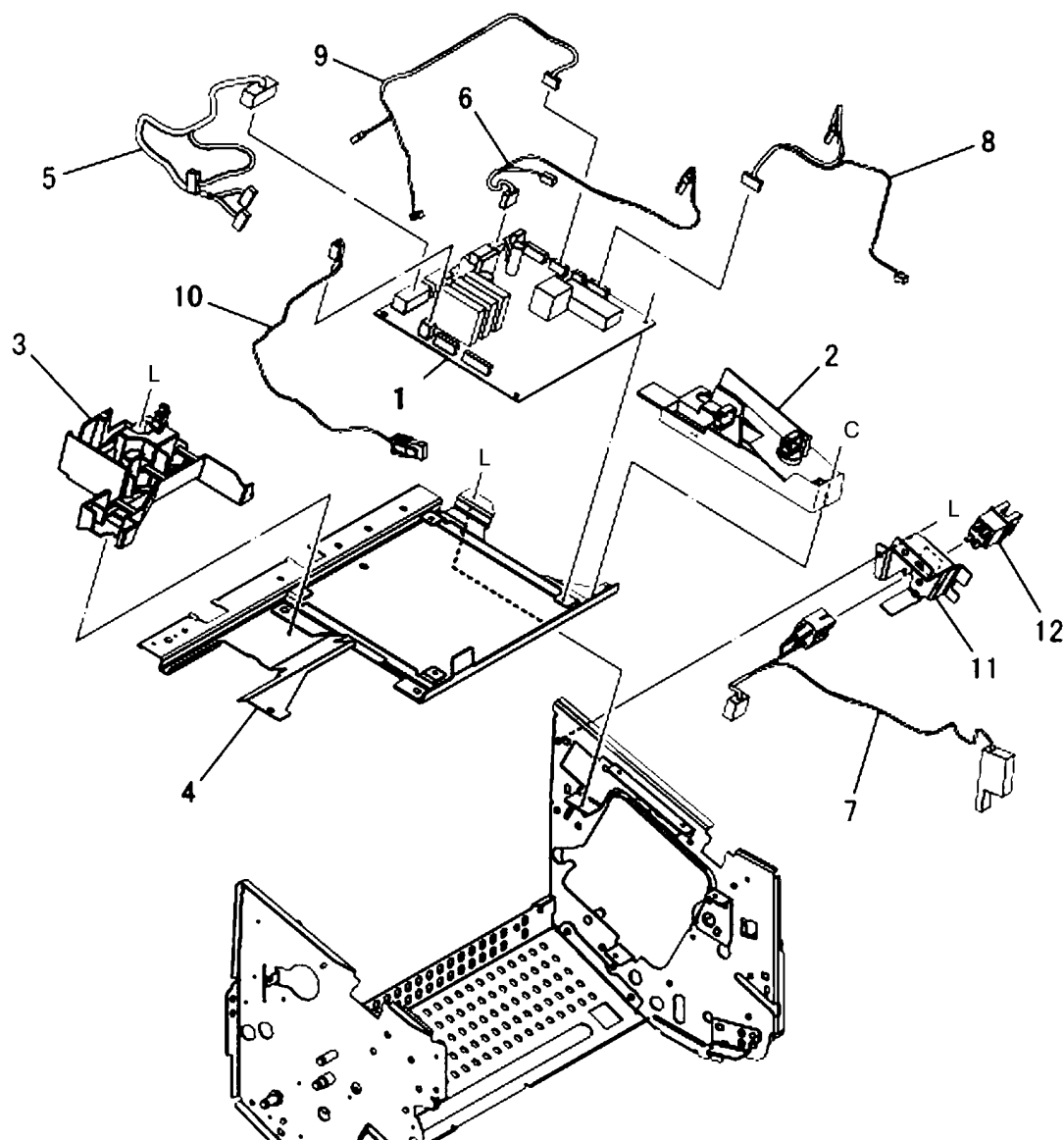
3 { 4, 5, 11, 12



C-8-0020-A

PL 12.14 Integrated Office Finisher Base Assembly (5 of 5)

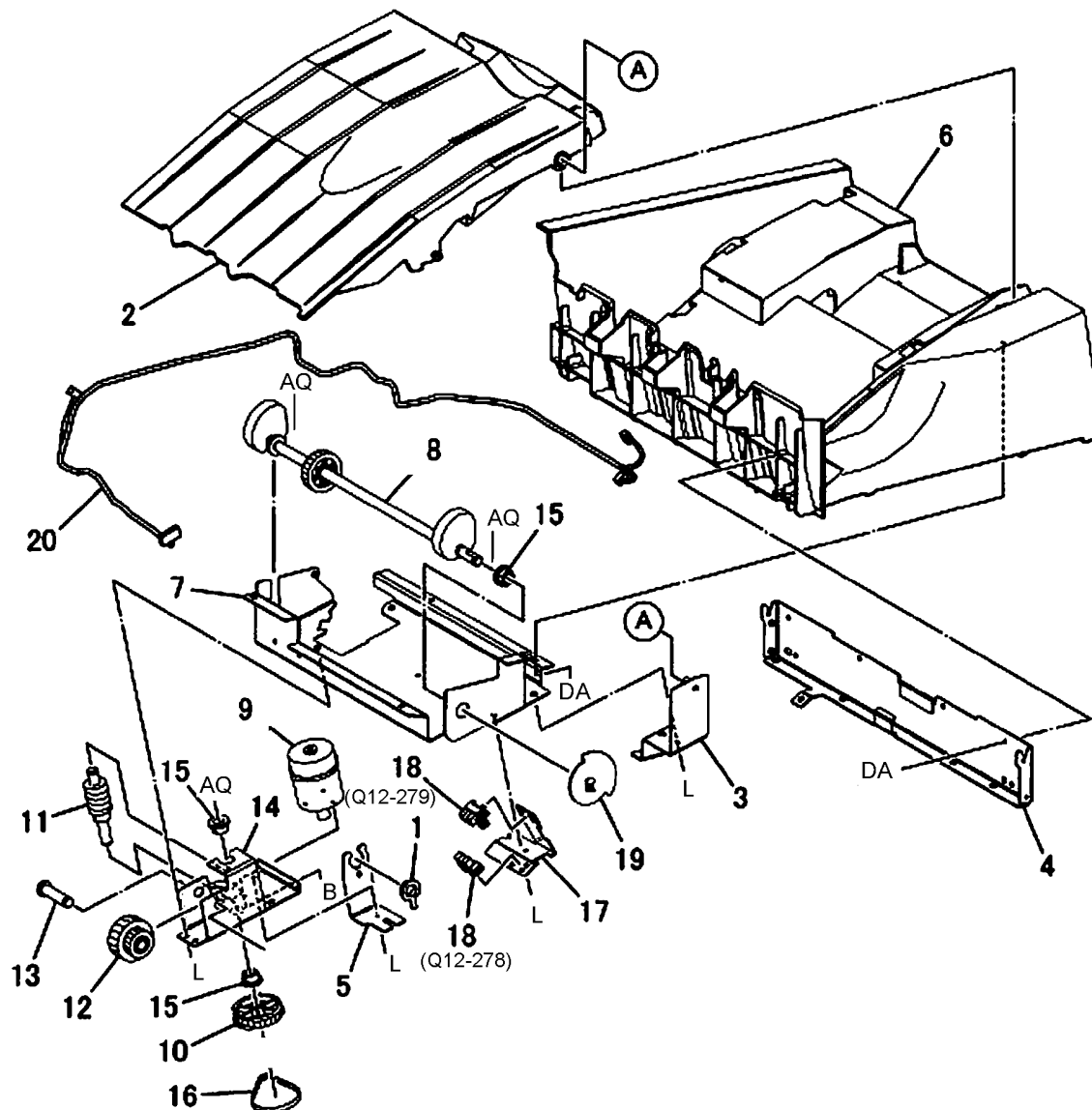
Item	Part	Description
1	960K85703	Finisher PWB (REP 12.14)
2	—	Connector bracket (Not Spared)
3	—	Harness guide (Not Spared)
4	—	PWB bracket (Not Spared)
5	—	Wire harness (drive) (Not Spared)
6	—	Wire harness (stapler) (Not Spared)
7	—	Wire harness (interlock) (Not Spared)
8	—	Wire harness (front sensor) (Not Spared)
9	—	Wire harness (compile) (Not Spared)
10	—	Wire harness (stacker) (Not Spared)
11	—	Bracket (Not Spared)
12	110E97990	Front door interlock switch (S12-302)



C-8-0021-A

PL 12.20 Integrated Office Finisher Stacker Tray Assembly

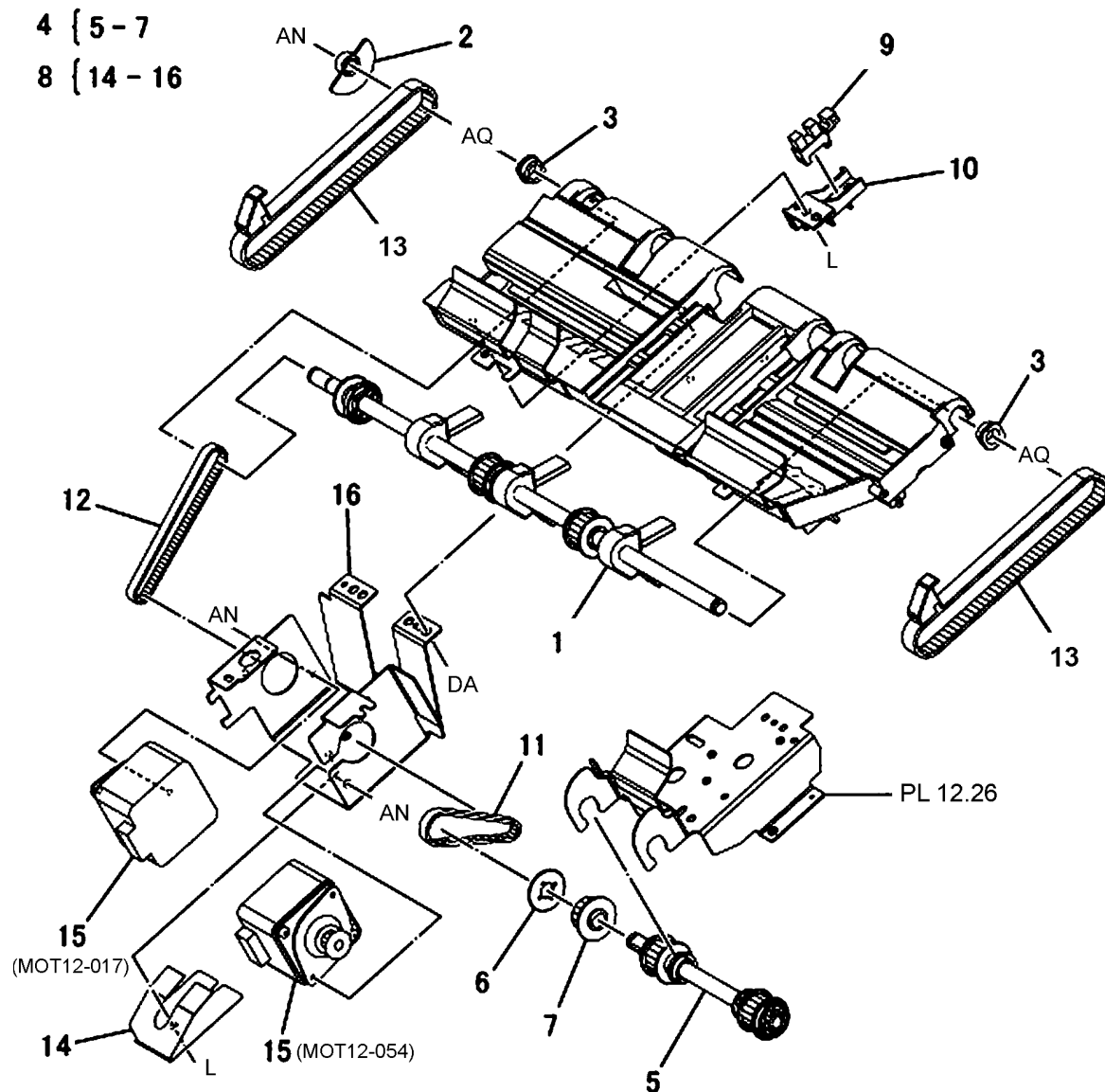
Item	Part	Description
1	—	Bearing (Not Spared)
2	—	Top tray (Not Spared)
3	—	Bracket (Not Spared)
4	—	Plate (Not Spared)
5	—	Bracket (Not Spared)
6	—	Base tray (Not Spared)
7	—	Base bracket (Not Spared)
8	—	Stacker shaft assembly (Not Spared) (REP 12.16)
9	—	Stacker motor (MOT12-060) (Not Spared) (REP 12.17)
10	—	Pulley (60T) (Not Spared)
11	—	Worm gear (Not Spared)
12	—	Gear (16T/32T) (Not Spared)
13	—	Stud (Not Spared)
14	—	Bracket (Not Spared)
15	—	Bearing (Not Spared)
16	—	Belt (Not Spared)
17	—	Bracket (Not Spared)
18	930W00111	Stack sensor 1 (Q12-278)/Stack sensor 2 (Q12-279) (REP 12.18)
19	—	Actuator (Not Spared)
20	—	Wire harness (Not Spared)



C-8-0022-A

PL 12.25 Integrated Office Finisher Compile Assembly (1 of 2)

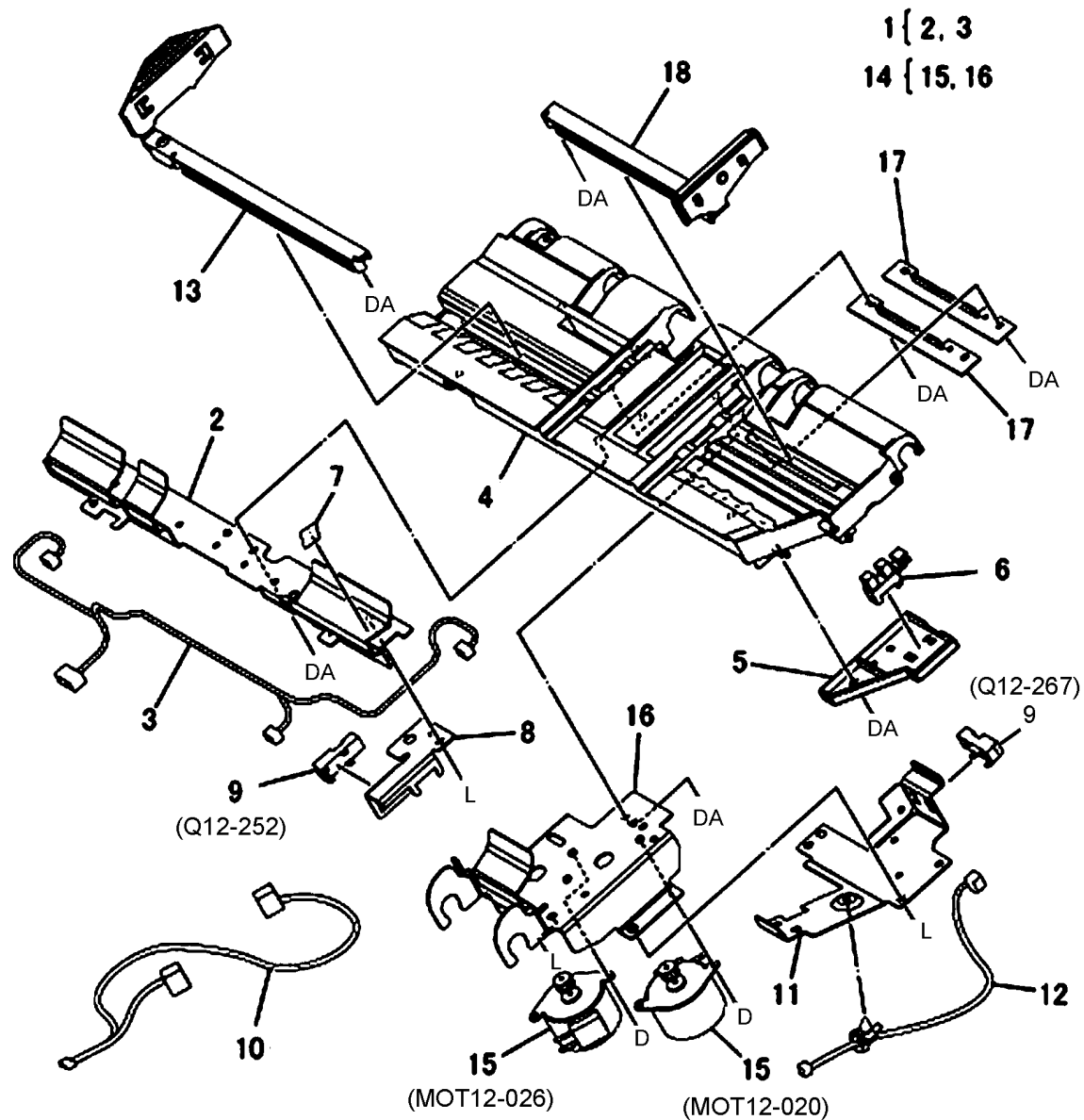
Item	Part	Description
1	006K25012	Set clamp shaft (REP 12.20)
2	120E27221	Actuator
3	413W11860	Bearing
4	006K25020	Eject shaft assembly (REP 12.24)
5	—	Eject shaft (P/O PL 12.25 Item 4)
6	—	Spacer (P/O PL 12.25 Item 4)
7	—	Pulley (P/O PL 12.25 Item 4)
8	068K29830	Eject/set clamp motor assembly (REP 12.22)
9	930W00111	Rear tamper home sensor (Q12-221) (REP 12.23)
10	—	Support (Not Spared)
11	423W26755	Belt
12	423W29455	Belt
13	023K91530	Eject belt (REP 12.21)
14	—	Spring (P/O PL 12.25 Item 8)
15	—	Eject motor (MOT12-054)/Set clamp motor (MOT12-017) (P/O PL 12.25 Item 8)
16	—	Bracket (P/O PL 12.25 Item 8)



C-8-0023-A

PL 12.26 Integrated Office Finisher Compile Assembly (2 of 2)

Item	Part	Description
1	068K30511	Bracket assembly
2	—	Bracket (P/O PL 12.26 Item 1)
3	—	Wire harness (P/O PL 12.26 Item 1)
4	050E32490	Compile tray
5	—	Support (Not Spared)
6	930W00111	Front tamper home sensor (Q12-220) (REP 12.26)
7	—	Paper guide (Not Spared)
8	—	Bracket (Not Spared)
9	930W00212	Eject home sensor (Q12-252) (REP 12.27)/Stack height sensor (Q12-267) (REP 12.28)
10	—	Wire harness (Not Spared)
11	—	Bracket (Not Spared)
12	—	Wire harness (Not Spared)
13	—	Rear tamper guide (Not Spared)
14	068K30740	Front/Rear tamper motor assembly (REP 12.25)
15	—	Front tamper motor (MOT12-020)/ Rear tamper motor (MOT12-026)
16	—	Bracket (P/O PL 12.26 Item 14)
17	—	Rail (Not Spared)
18	—	Front tamper guide (Not Spared)

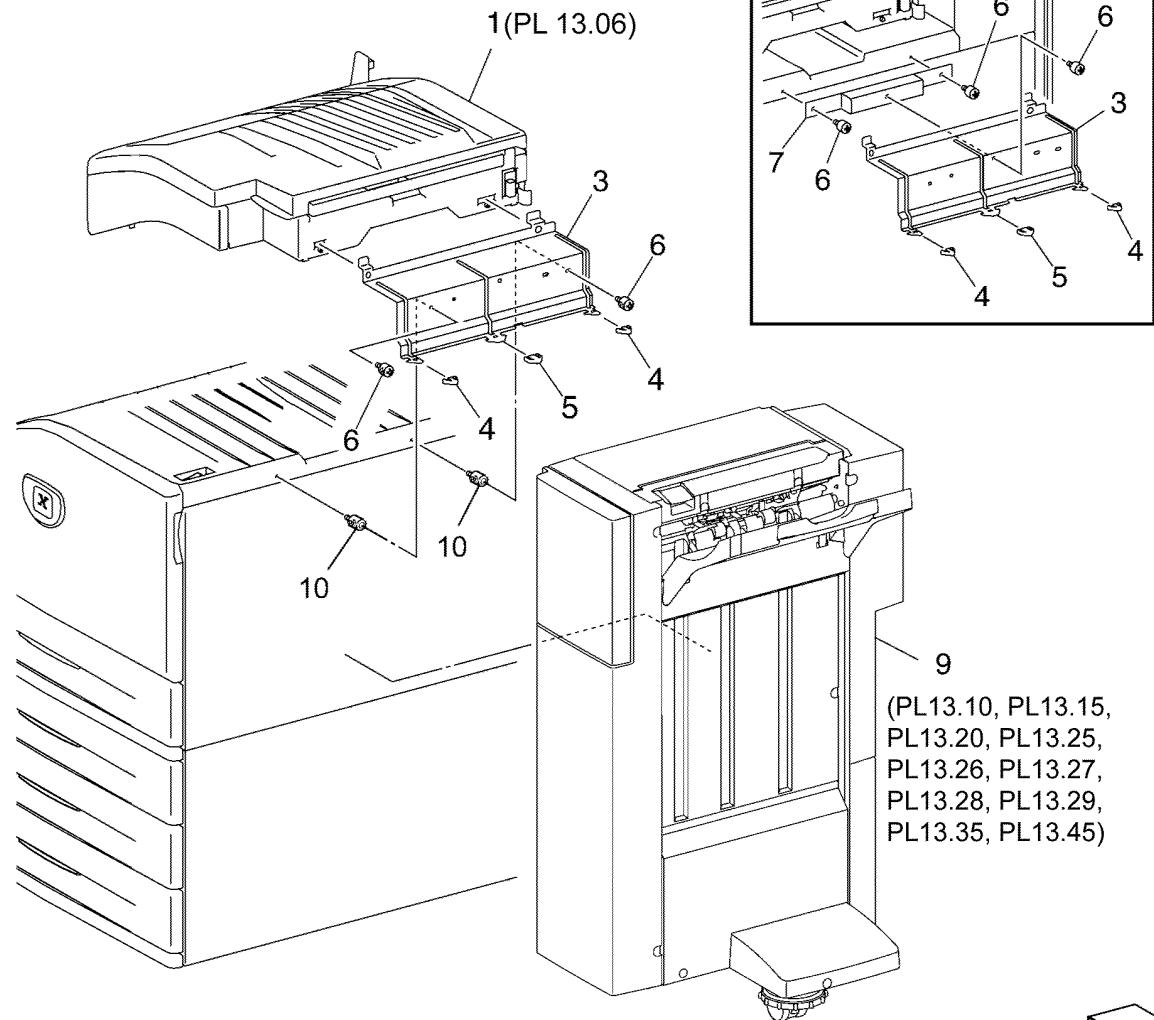


C-8-0024-A

PL 13.05 H-Transport Assembly (1 of 5)

Item	Part	Description
1	859K04770	H-Transport assembly (REP 13.1)
2	068K59494	Docking plate assembly
3	—	Docking plate (P/O PL 13.05 Item 2)
4	—	Side guide (P/O PL 13.05 Item 2)
5	—	Center guide (P/O PL 13.05 Item 2)
6	026K81200	Thumb screw
7	868E51550	Docking bracket
8	—	Not used
9	—	Finisher LX assembly (Not Spared) (REP 13.5)
10	—	HTU spacer (Not Spared)
11	—	Gap kit (Not Spared)

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11{6,7, PL 13.10 ITEMS 18, 19

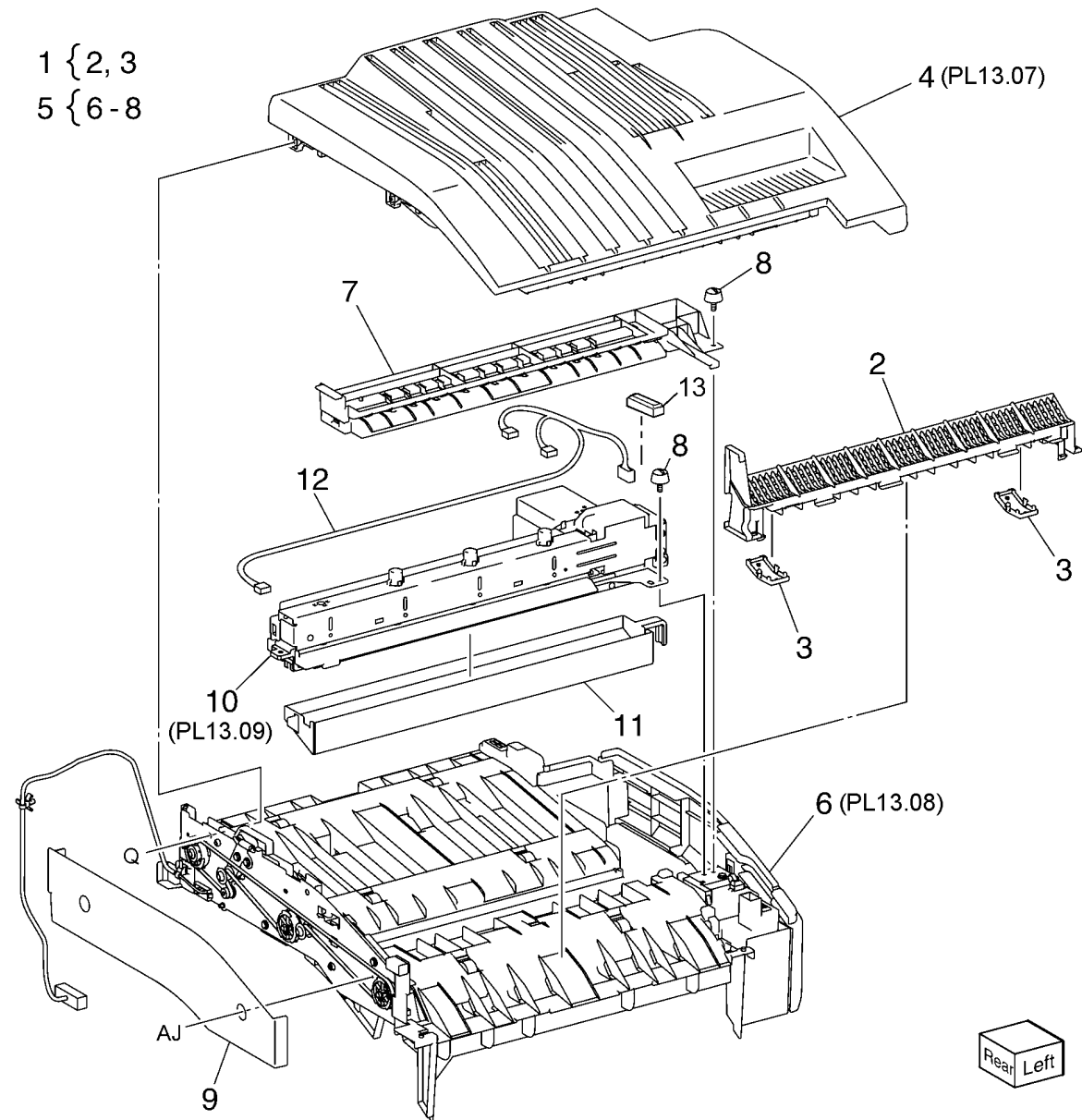


C-8-0025-A

PL 13.06 H-Transport Assembly (2 of 5)

Item	Part	Description
1	—	Left cover assembly (Not Spared)
2	—	Left cover (P/O PL 13.06 Item 1)
3	—	Paper guide (P/O PL 13.06 Item 1)
4	—	Top cover assembly (Not Spared)
5	—	Lower chute assembly (Not Spared)
6	—	Lower chute assembly (P/O PL 13.06 Item 5)
7	—	Chute assembly (P/O PL 13.06 Item 5)
8	—	Thumb screw (P/O PL 13.06 Item 5)
9	—	Rear cover (Not Spared)
10	180K00393	Punch assembly (2/3 Hole) (REP 13.2)
—	180K00403	Punch assembly (2/4 Hole) (REP 13.2)
11	695K19403	Punch box
12	—	Wire harness (Not Spared)
13	—	Connector cover (Not Spared)

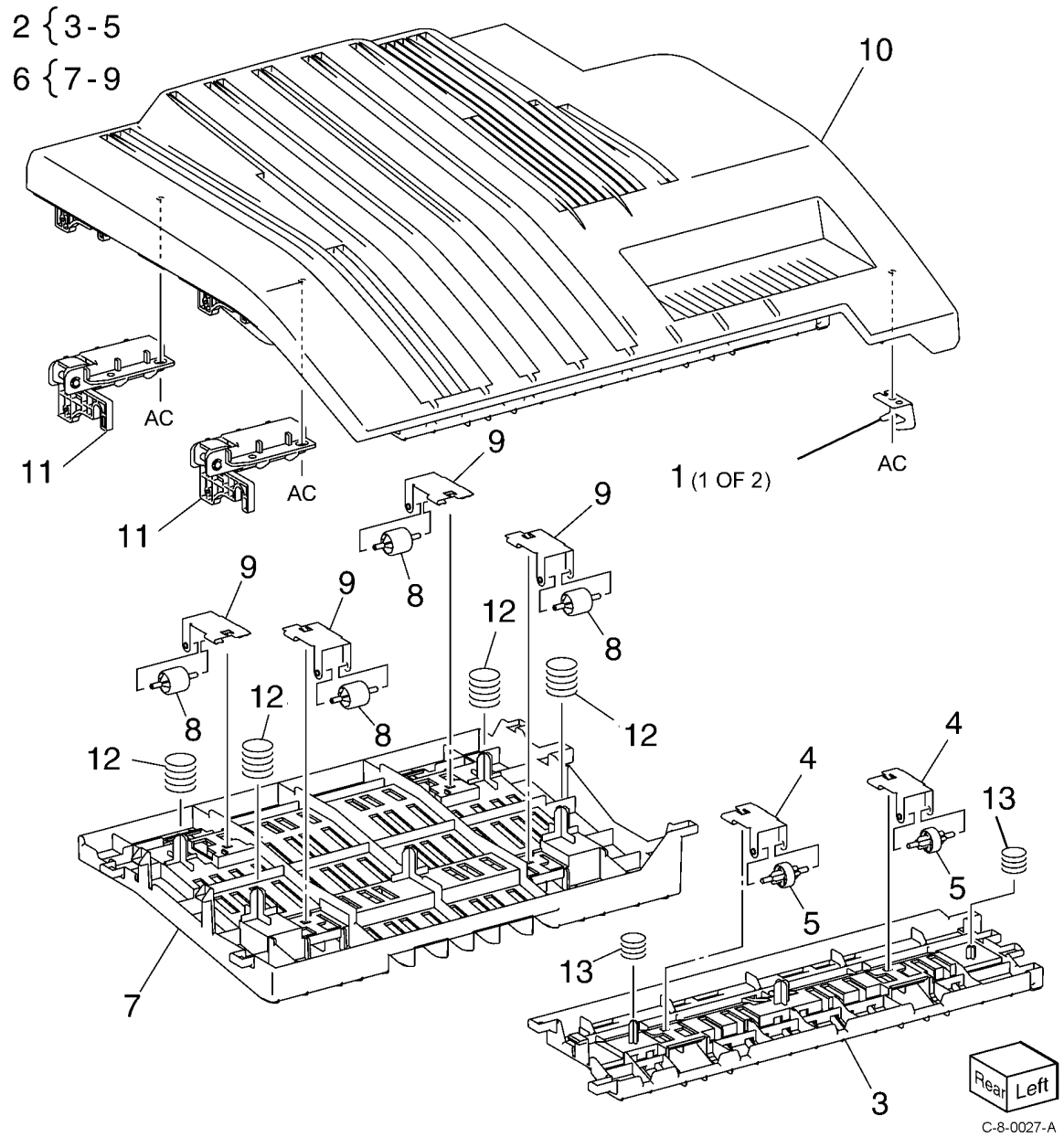
NOTE: Refer to PL 31.05 for the punch assembly kits.



C-8-0026-A

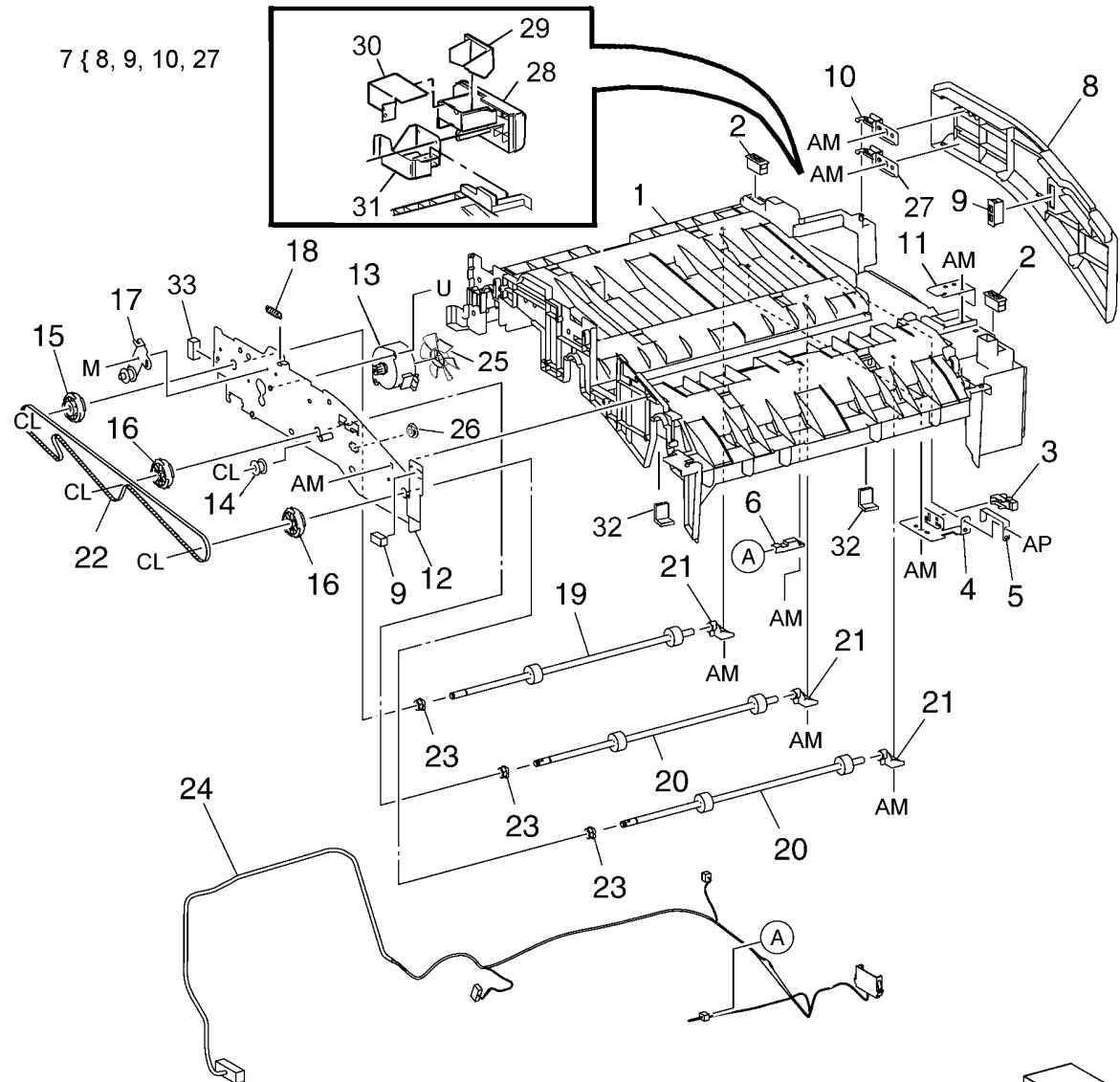
PL 13.07 H-Transport Assembly (3 of 5)

Item	Part	Description
1	—	Bracket (P/O PL 13.06 Item 4)
2	054K50020	Left chute assembly
3	—	Left chute (P/O PL 13.07 Item 2)
4	—	Pinch spring (P/O PL 13.07 Item 2)
5	—	Pinch roller (P/O PL 13.07 Item 2)
6	054K35246	Right chute assembly
7	—	Right chute (P/O PL 13.07 Item 6)
8	—	Nip roll (P/O PL 13.07 Item 6)
9	—	Nip spring (P/O PL 13.07 Item 6)
10	—	Top cover (Not Spared)
11	—	H-Transport counter balance (Not Spared)
12	—	Spring (Not Spared)
13	—	Spring (Not Spared)



PL 13.08 H-Transport Assembly (4 of 5)

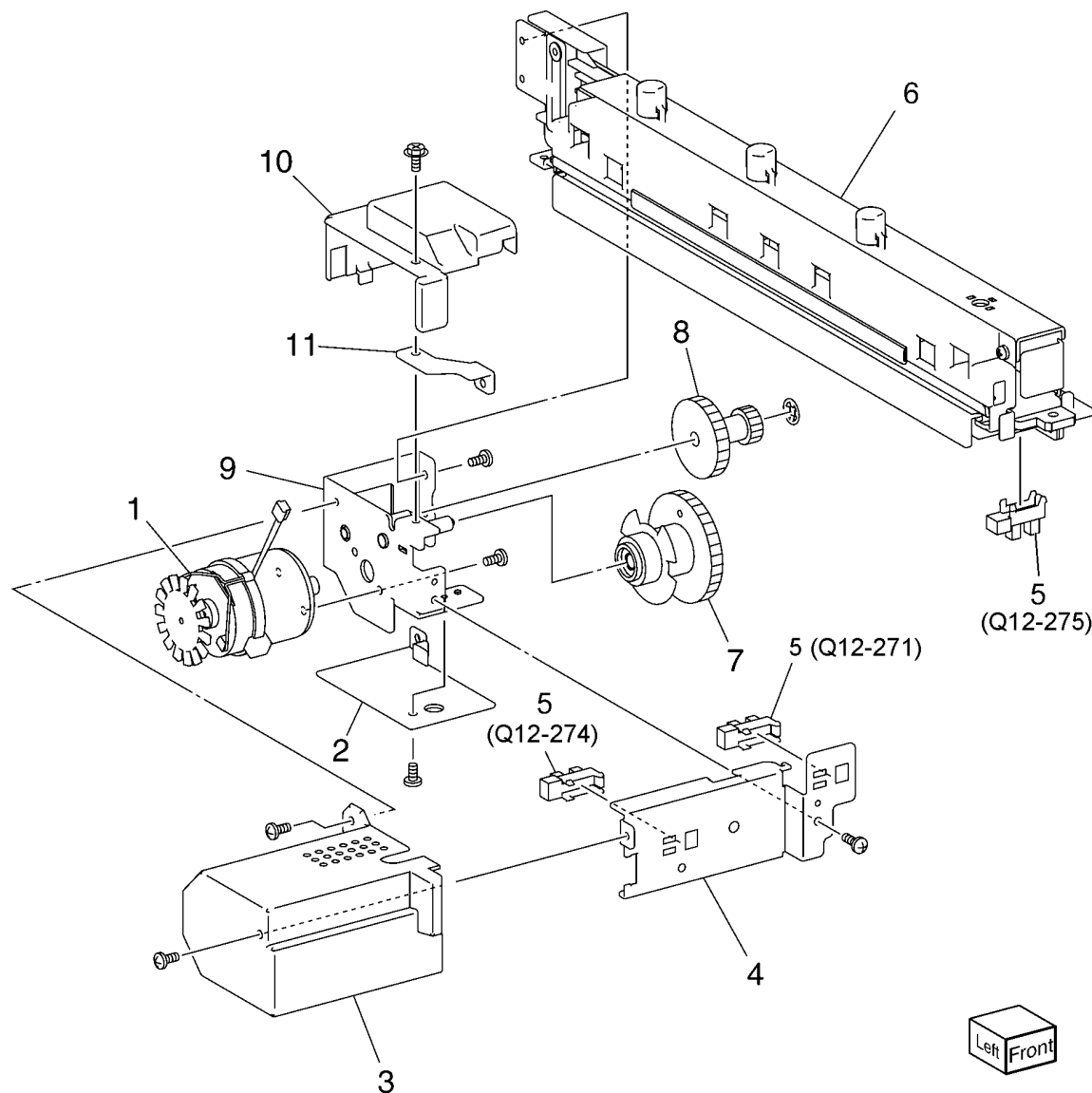
Item	Part	Description
1	—	Lower chute (P/O PL 13.06 Item 6)
2	—	Magnet (P/O PL 13.06 Item 6)
3	930W00125	H-Transport open sensor (Q12-303)
4	—	Sensor bracket (Not Spared)
5	—	Actuator (Not Spared)
6	930W00211	H-Transport entrance sensor (Q12-100)
7	948K05100	H-Transport front cover assembly
8	—	H-Transport front cover (P/O PL 13.08 Item 7)
9	835E43650	Gasket
10	—	Hinge (P/O PL 13.08 Item 7)
11	—	Bracket (P/O PL 13.06 Item 6)
12	—	Rear frame assembly (P/O PL 13.06 Item 6)
13	127K57622	H-Transport motor (MOT12-032) (REP 13.4)
14	—	Tension pulley (Not Spared)
15	—	Pulley (43T) (Not Spared)
16	—	Pulley (43T) (Not Spared)
17	—	Tension bracket (P/O PL 13.06 Item 6)
18	—	Spring tension (Not Spared)
19	—	Drive roll (Not Spared)
20	—	Drive roll (Not Spared)
21	—	Bearing (Not Spared)
22	423W01154	H-Transport belt (REP 13.3)
23	—	Sleeve bearing (Not Spared)
24	—	Wire harness (Not Spared)
25	—	Fan blade (Not Spared)
26	—	Pinch bushing (Not Spared)
27	—	Lower hinge (P/O PL 13.08 Item 7)
28	—	Front cover (Not Spared)
29	—	Switch cover (Not Spared)
30	—	Cover (Not Spared)
31	—	Bracket (Not Spared)
32	—	Pinch cushion (Not Spared)
33	—	Gasket (Not Spared)



C-8-0028-A

PL 13.09 H-Transport Assembly (5 of 5)

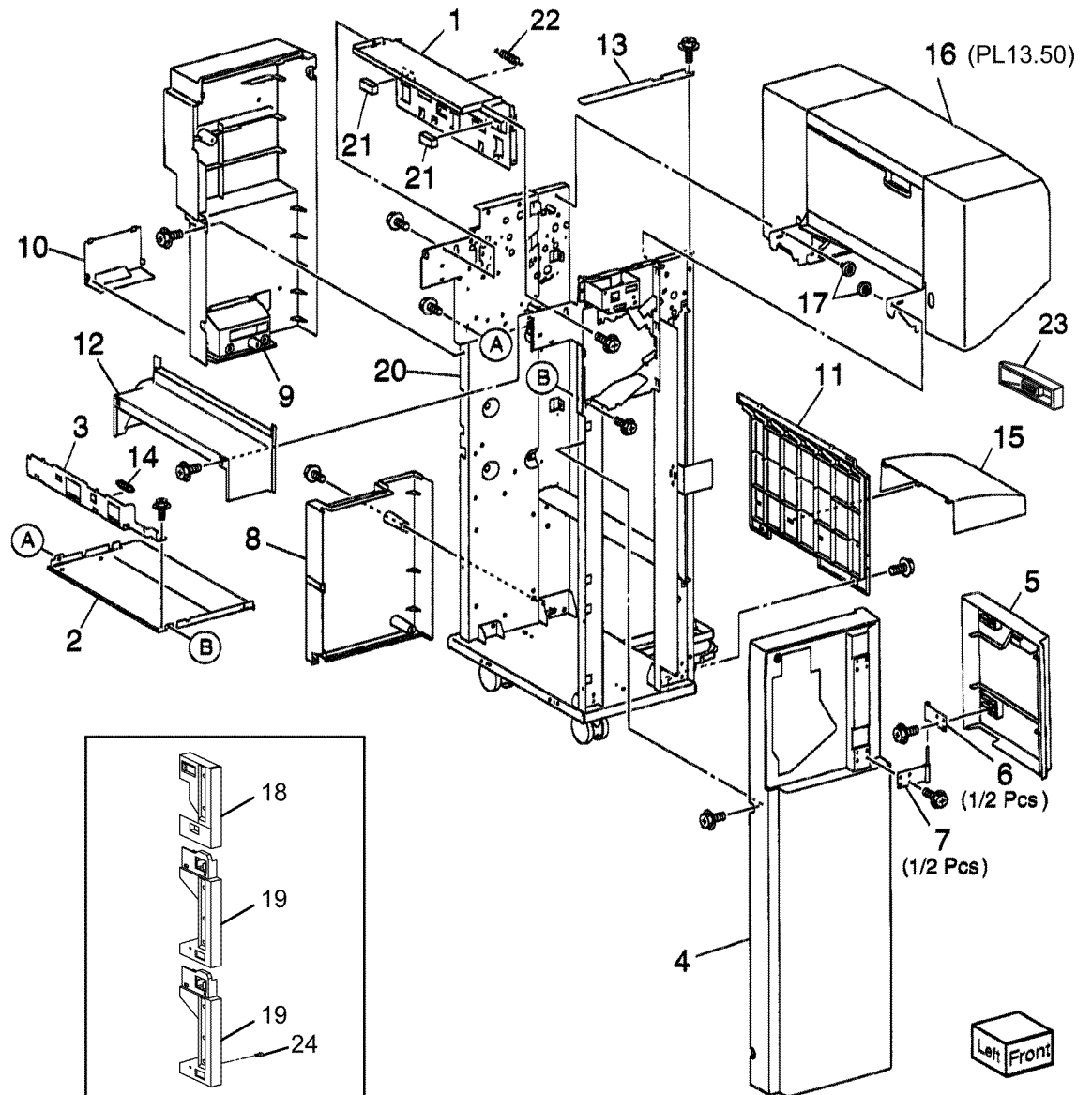
Item	Part	Description
1	—	Punch motor (MOT12-074) (P/O PL 13.06 Item 10)
2	—	Punch lower cover (P/O PL 13.06 Item 10)
3	—	Punch motor cover (P/O PL 13.06 Item 10)
4	—	Sensor bracket (P/O PL 13.06 Item 10)
5	930W00111	Punch encoder sensor (Q12-274)/ Punch home sensor (Q12-271)/ Punch box set sensor (Q12-275)
6	—	Punch frame assembly (P/O PL 13.06 Item 10)
7	—	Encoder/gear assembly (P/O PL 13.06 Item 10)
8	—	Gear (P/O PL 13.06 Item 10)
9	—	Motor bracket (P/O PL 13.06 Item 10)
10	—	Punch top cover (P/O PL 13.06 Item 10)
11	—	Bracket (P/O PL 13.06 Item 10)



C-8-0029-A

PL 13.10 Office Finisher LX Covers

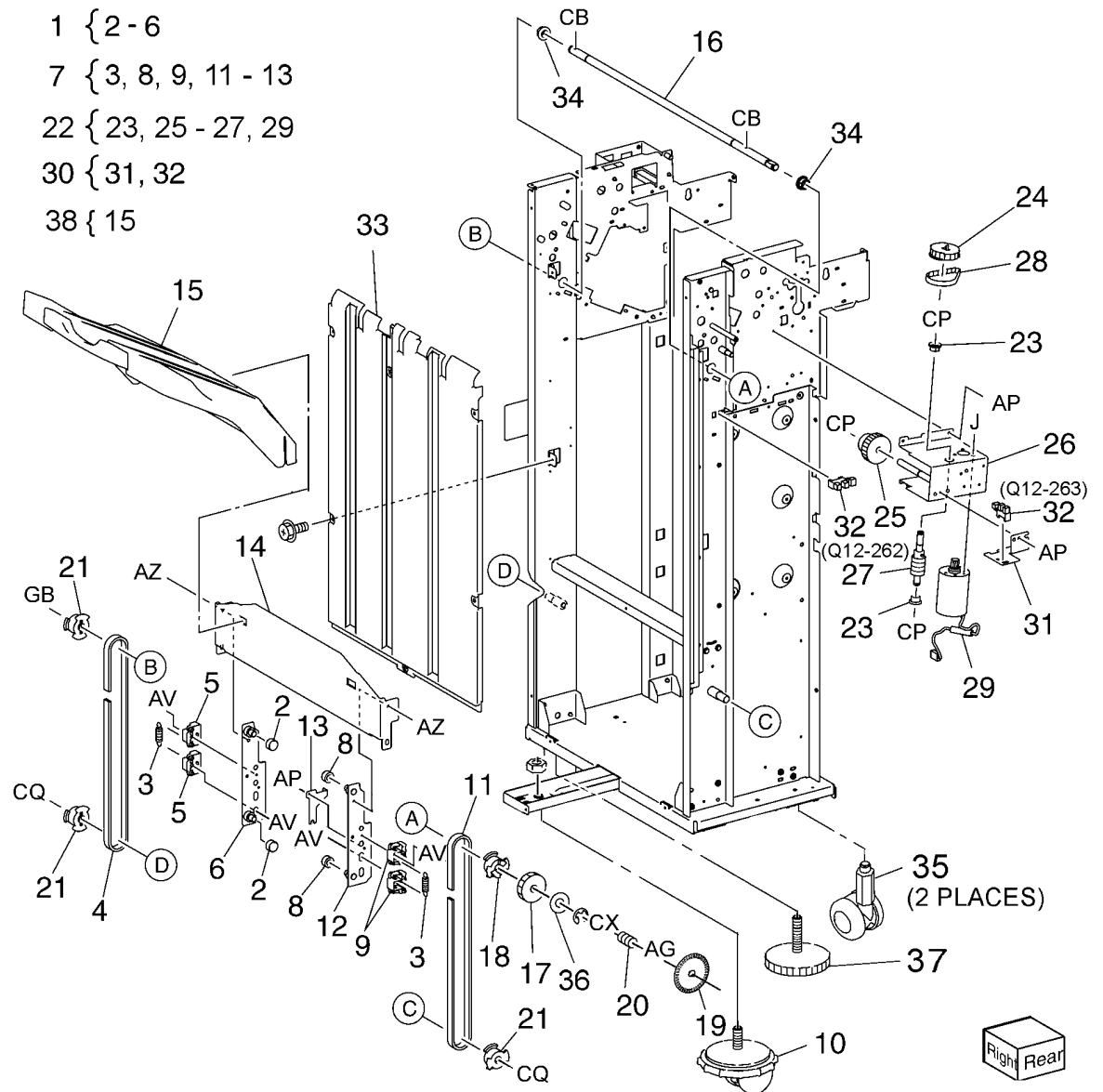
Item	Part	Description
1	848E22730	Plate
2	—	Lower plate (Not Spared)
3	—	Docking lever (Not Spared)
4	848E75671	Front cover (REP 13.6)
5	848K57230	Front door
6	—	Bracket (Not Spared)
7	—	Hinge (Not Spared)
8	—	Rear lower cover (Not Spared) (REP 13.8)
9	—	Rear upper cover (Not Spared) (REP 13.7)
10	—	Connector cover (Not Spared)
11	848E75711	Stacker lower cover (REP 13.11)
12	—	LH cover (Not Spared)
13	—	Cover (Not Spared)
14	—	Spring (Not Spared)
15	—	Foot cover (Not Spared) (REP 13.10)
16	801K30704	Booklet assembly (REP 13.31)
17	—	Thumb screw (Not Spared)
18	—	Upper adjust cover (Not Spared)
19	—	Lower adjust cover (Not Spared)
20	—	Base frame assembly (Not Spared)
21	835E43650	Gasket
22	—	Extension spring (Not Spared)
23	—	Paper guide (Not Spared)
24	—	Thumb screw (Not Spared)



C-8-0030-A

PL 13.15 Office Finisher LX Stacker

Item	Part	Description
1	—	Front carriage assembly (Not Spared) (REP 13.29)
2	—	Bearing (P/O PL 13.15 Item 1)
3	—	Spring (P/O PL 13.15 Item 1)
4	—	Front stacker belt (P/O PL 13.15 Item 1)
5	—	Clamp (P/O PL 13.15 Item 1)
6	—	Front carriage assembly (P/O PL 13.15 Item 1)
7	—	Rear carriage assembly (REP 13.29)
8	—	Bearing (P/O PL 13.15 Item 7)
9	—	Clamp (Not Spared)
10	—	Knob caster assembly (Not Spared)
11	—	Rear stacker belt (P/O PL 13.15 Item 7)
12	—	Rear carriage (P/O PL 13.15 Item 7)
13	—	Actuator (P/O PL 13.15 Item 7)
14	—	Carriage tray (Not Spared)
15	—	Stacker tray (REP 13.20)
16	—	Shaft (Not Spared)
17	—	Gear (Not Spared)
18	—	Pulley (Not Spared)
19	146E90651	Encoder
20	—	Spring (Not Spared)
21	—	Pulley (18T) (Not Spared)
22	068K58304	Stacker elevator motor assembly
23	—	Bearing (P/O PL 13.15 Item 22)
24	—	Pulley (60T) (Not Spared)
25	—	Gear (15T/37T) (P/O PL 13.15 Item 22)
26	—	Motor bracket (P/O PL 13.15 Item 22)
27	—	Worm shaft (P/O PL 13.15 Item 22)
28	—	Belt (Not Spared)
29	—	Stacker elevator motor (MOT12-060) (P/O PL 13.15 Item 22) (REP 13.19)
30	—	Stacker encoder sensor assembly (Not Spared)
31	—	Bracket (P/O PL 13.15 Item 30)
32	930W00111	Stacker encoder sensor (Q12-263)/stacker paper sensor (Q12-262)
33	—	Stacker upper cover (Not Spared) (REP 13.12)
34	—	Bearing (Not Spared)
35	017K96450	Caster assembly
36	—	Washer (Not Spared)
37	017K94901	Adjustable foot assembly
38	607K04580	Stacker tray kit

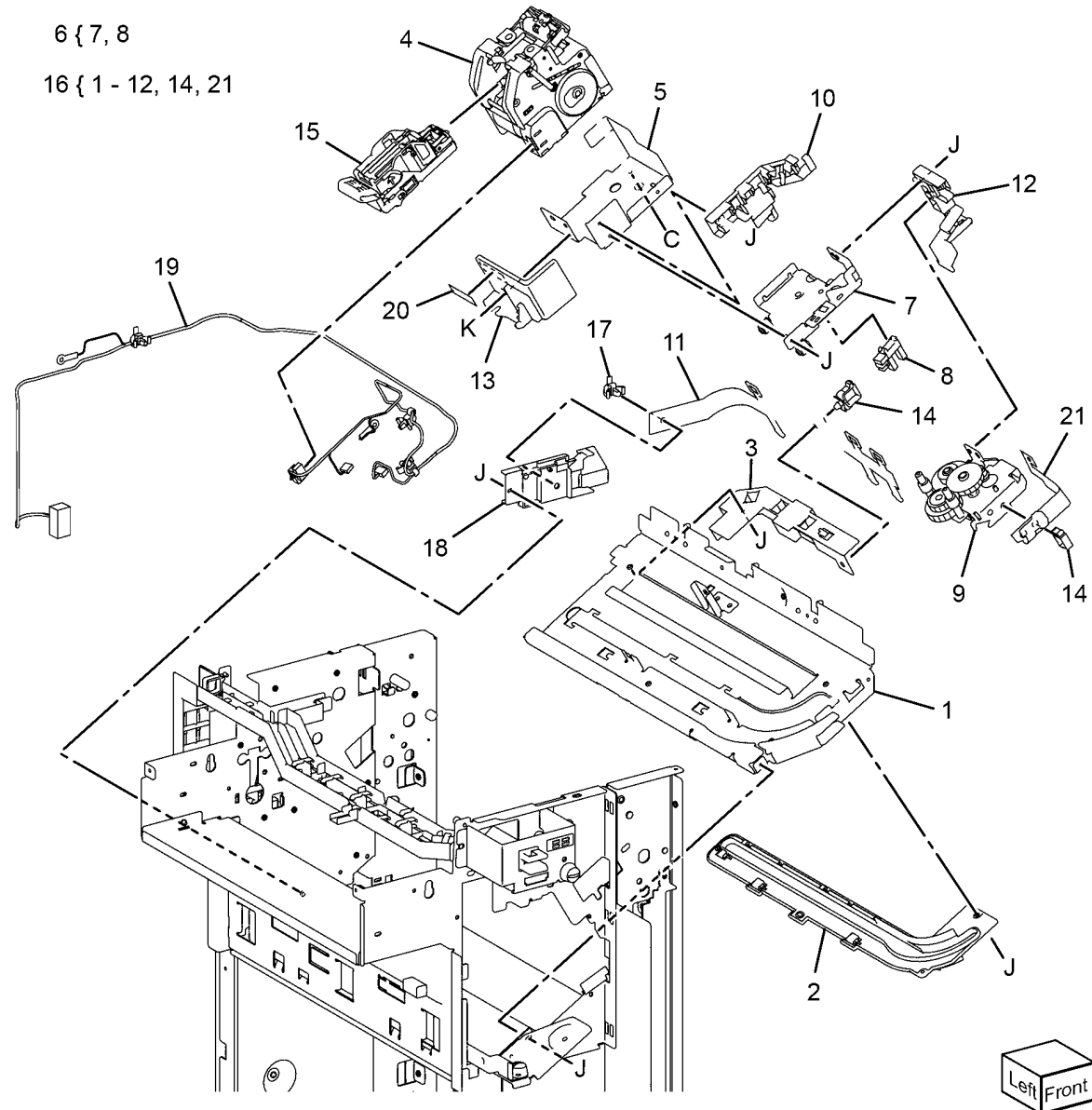


C-8-0031-A

PL 13.20 Office Finisher LX Stapler

Item	Part	Description
1	—	Base frame (P/O PL 13.20 Item 16)
2	—	Rail (P/O PL 13.20 Item 16)
3	—	Harness guide (P/O PL 13.20 Item 16)
4	029K92350	Stapler assembly (REP 13.16)
5	—	Holder (P/O PL 13.20 Item 16)
6	—	Stapler move position sensor assembly (Not Spared)
7	—	Bracket (P/O PL 13.20 Item 6)
8	130E94940	Stapler move position sensor (Q12-241)
9	068K58811	Stapler move motor assembly (MOT12-046) (REP 13.15)
10	—	Harness guide (P/O PL 13.20 Item 16)
11	—	Harness support guide (P/O PL 13.20 Item 16)
12	—	Harness guide (P/O PL 13.20 Item 16)
13	—	Stapler cover (Not Spared)
14	—	Clamp (P/O PL 13.20 Item 16)
15	—	Stapler cartridge (See NOTE)
16	801K64900	Stapler unit
17	—	Cable band (Not Spared)
18	—	Harness guide (Not Spared)
19	952K35890	Wire harness
20	—	Label (Not Spared)
21	—	Stapler move motor bracket (P/O PL 13.20 Item 9)

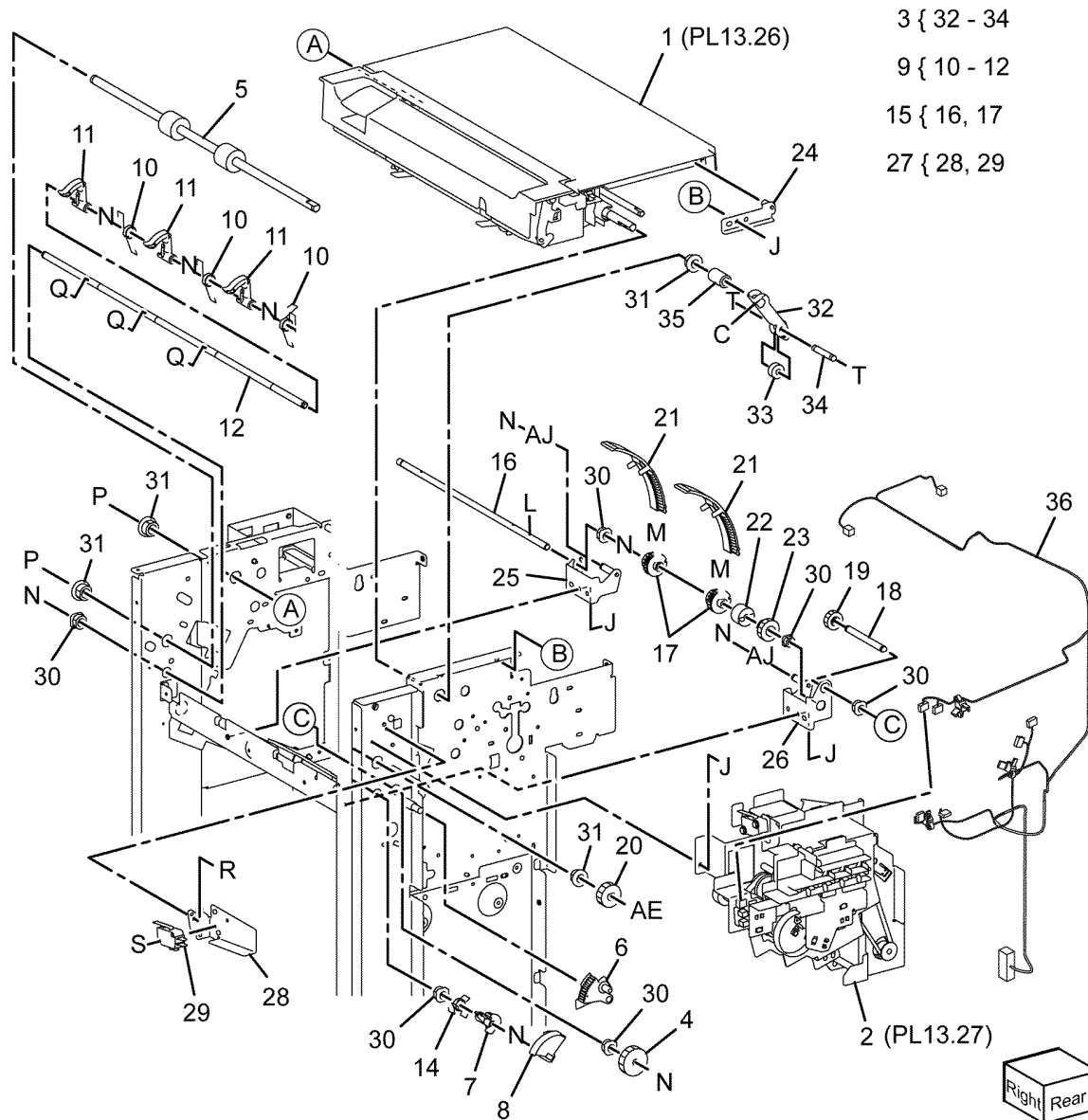
NOTE: Refer to PL 26.05 for the staple refills and cartridge.



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PL 13.25 Office Finisher LX Ejector (1 of 5)

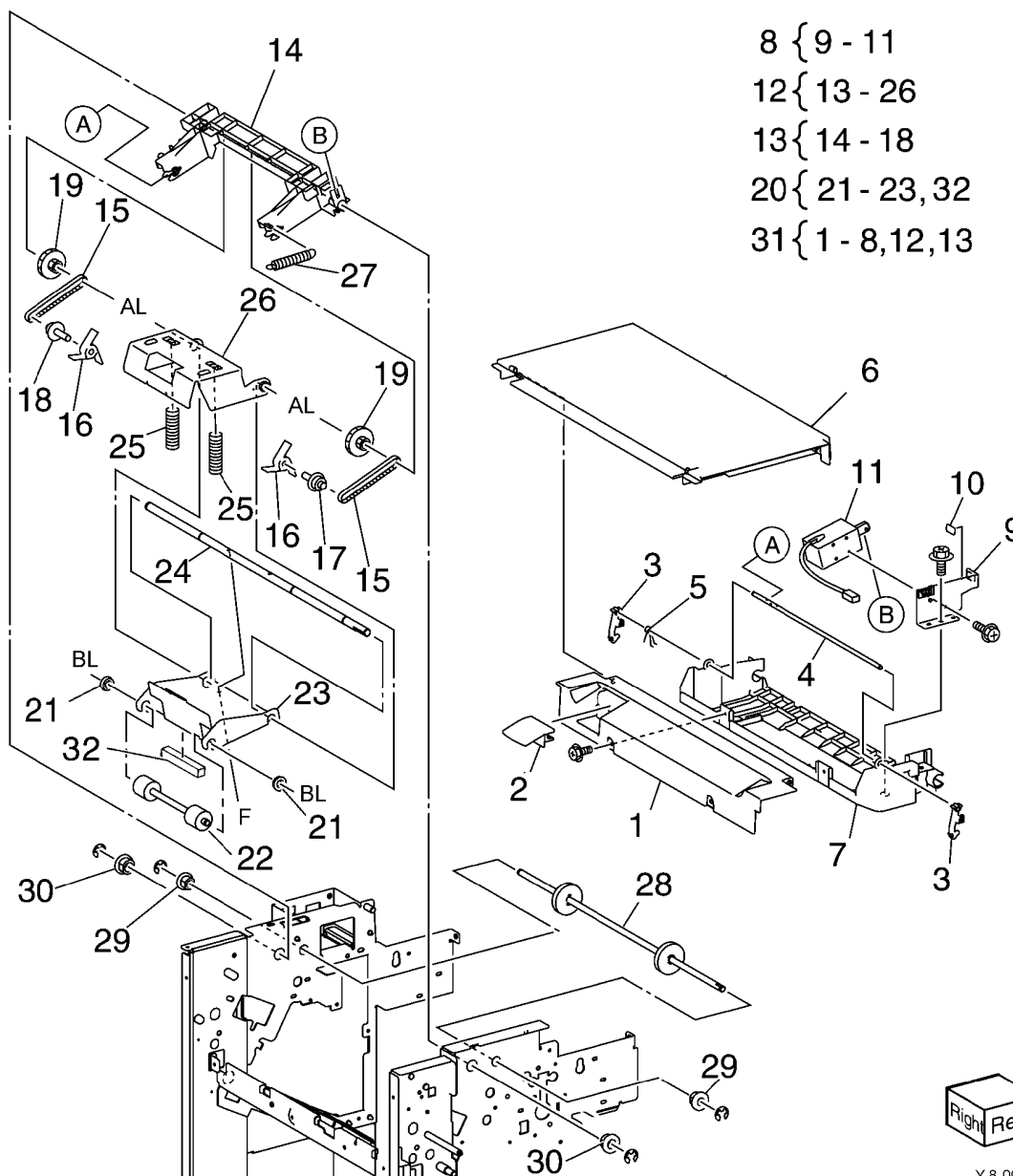
Item	Part	Description
1	—	Eject cover assembly (Not Spared)
2	—	Eject assembly (Not Spared)
3	031K93790	Clamp arm assembly
4	807E21400	Gear (31T)
5	059K55111	Eject roller
6	807E21380	Sector gear (72T)
7	807E21391	Gear (18T)
8	120E29773	Actuator
9	006K86731	Set clamp shaft assembly
10	809E79060	Spring
11	—	Set clamp holder (P/O PL 13.25 Item 9)
12	—	Shaft (P/O PL 13.25 Item 9)
13	—	Not used
14	809E79080	Spring
15	006K86741	Guide paper shaft assembly
16	—	Guide paper shaft (P/O PL 13.25 Item 15)
17	—	Gear (20T) (P/O PL 13.25 Item 15)
18	—	Shaft (Not Spared)
19	807E21420	Gear (19T)
20	807E21370	Gear (25T)
21	038E36490	Guide paper (left/right)
22	005K83720	Clutch
23	807E45590	Gear (23T)
24	—	Stopper (Not Spared)
25	—	Bracket (front) (Not Spared)
26	—	Bracket (rear) (Not Spared)
27	—	Option switch assembly (Not Spared)
28	—	Bracket (P/O PL 13.25 Item 27)
29	—	Option switch (P/O PL 13.25 Item 27)
30	413W11660	Sleeve bearing
31	—	Bearing (Not Spared)
32	—	Clamp arm (P/O PL 13.25 Item 3)
33	—	Roll (P/O PL 13.25 Item 3)
34	—	Shaft (P/O PL 13.25 Item 3)
35	—	Spacer (Not Spared)
36	962K60433	Wire harness



C-8-0033-A

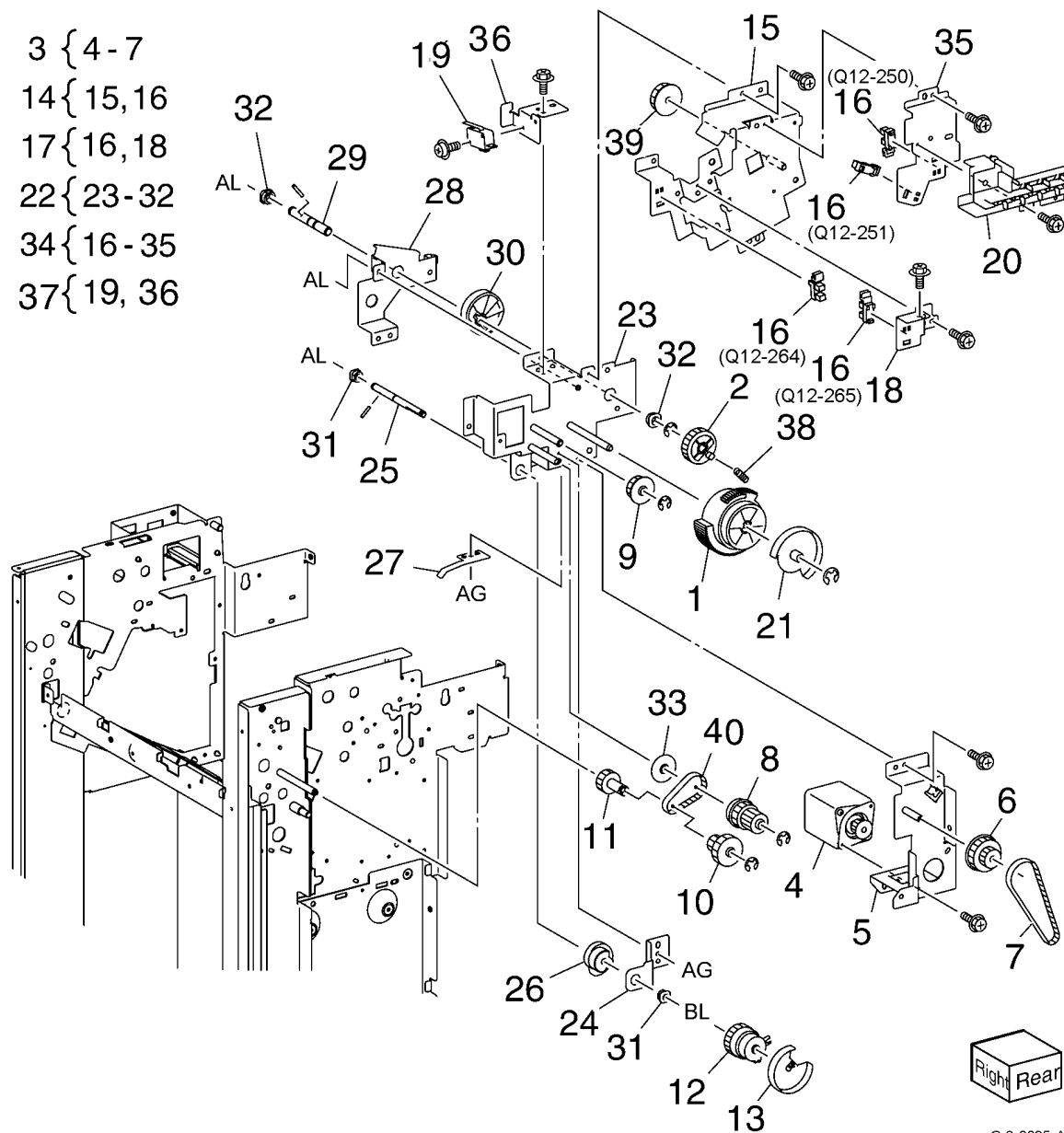
PL 13.26 Office Finisher LX Ejector (2 of 5)

Item	Part	Description
1	—	Top right hand cover (P/O PL 13.26 Item 31)
2	—	Top cover lever (P/O PL 13.26 Item 31)
3	—	Top cover latch (P/O PL 13.26 Item 31)
4	—	Shaft (P/O PL 13.26 Item 31)
5	—	Spring (P/O PL 13.26 Item 31)
6	—	Eject cover (P/O PL 13.26 Item 31) (REP 13.9)
7	—	Eject chute (P/O PL 13.26 Item 31)
8	121K41632	Sub paddle solenoid assembly (REP 13.14)
9	—	Bracket (P/O PL 13.26 Item 8)
10	—	Damper (P/O PL 13.26 Item 8)
11	—	Sub paddle solenoid (SOL12-013) (P/O PL 13.26 Item 8)
12	—	Eject roller assembly (P/O PL 13.26 Item 31)
13	031K94470	Paddle arm assembly
14	—	Sub paddle arm (P/O PL 13.26 Item 13)
15	—	Belt (P/O PL 13.26 Item 14)
16	—	Sub paddle (P/O PL 13.26 Item 13)
17	—	Pulley (P/O PL 13.26 Item 13)
18	—	Pulley (P/O PL 13.26 Item 13)
19	—	Gear/Pulley (31T/20T) (Not Spared)
20	059K55715	Eject nip roll assembly
21	—	Bearing (P/O PL 13.26 Item 20)
22	—	Eject nip roll (P/O PL 13.26 Item 20)
23	—	Bracket (P/O PL 13.26 Item 20)
24	—	Shaft (P/O PL 13.26 Item 12)
25	—	Spring (P/O PL 13.26 Item 12)
26	—	Bracket (P/O PL 13.26 Item 12)
27	—	Spring (Not Spared)
28	006K86690	Eject drive shaft
29	—	Bearing (Not Spared)
30	—	Bearing (Not Spared)
31	—	Eject chute assembly (Not Spared)
32	—	Static eliminator (P/O PL 13.26 Item 20)



PL 13.27 Office Finisher LX Ejector (3 of 5)

Item	Part	Description
1	007K15451	Gear (82T/77T/51T)
2	—	Gear (38T) (Not Spared)
3	127K57196	Eject motor assembly (REP 13.22)
4	—	Eject motor (MOT12-054) (P/O PL 13.27 Item 3) (REP 13.25)
5	—	Bracket (P/O PL 13.27 Item 3)
6	—	Gear/Pulley (20T/49T) (P/O PL 13.27 Item 3)
7	—	Belt (P/O PL 13.27 Item 7)
8	—	Gear (28T/22T/38T) (Not Spared)
9	—	Gear (25T) (Not Spared)
10	—	Gear/Pulley (32T/25T) (Not Spared)
11	—	Gear (23T) (Not Spared)
12	121K34631	Set clamp clutch (34T) (CL12-050)
13	120E29593	Set clamp cam actuator
14	130K72171	Stacker height sensor 1 assembly
15	—	Bracket (P/O PL 13.27 Item 14)
16	930W00111	Stack height sensor 1 (Q12-264) (REP 13.13)/Stack height sensor 2 (Q12-265) (REP 13.13)/Eject clamp home sensor (Q12-250)/Set clamp home sensor (Q12-251) ()
17	—	Stacker height sensor 2 assembly (P/O PL 13.27 Item 34)
18	—	Bracket (P/O PL 13.27 Item 17)
19	—	Eject cover switch (S12-300) (P/O PL 13.27 Item 37)
20	—	Harness guide (P/O PL 13.27 Item 34)
21	120E29852	Gear select actuator
22	068K58732	Eject drive bracket assembly
23	—	Bracket (P/O PL 13.27 Item 22)
24	—	Bracket (P/O PL 13.27 Item 22)
25	—	Shaft (P/O PL 13.27 Item 22)
26	—	Clamp set cam (P/O PL 13.27 Item 22)
27	809E79070	Spring
28	—	Bracket (P/O PL 13.27 Item 22)
29	—	Shaft (P/O PL 13.27 Item 22)
30	—	Eject clamp cam (P/O PL 13.27 Item 22)
31	—	Sleeve bearing (P/O PL 13.27 Item 22)
32	—	Sleeve bearing (P/O PL 13.27 Item 22)
33	—	Drive eject flange (Not Spared)
34	—	Eject clamp home sensor assembly (Not Spared)
35	—	Bracket (P/O PL 13.27 Item 34)
36	—	Bracket (P/O PL 13.27 Item 37)
37	068K58742	Eject cover switch assembly
38	809E79820	Spring
39	807E22040	Gear (30T)
40	—	Belt (Not Spared)

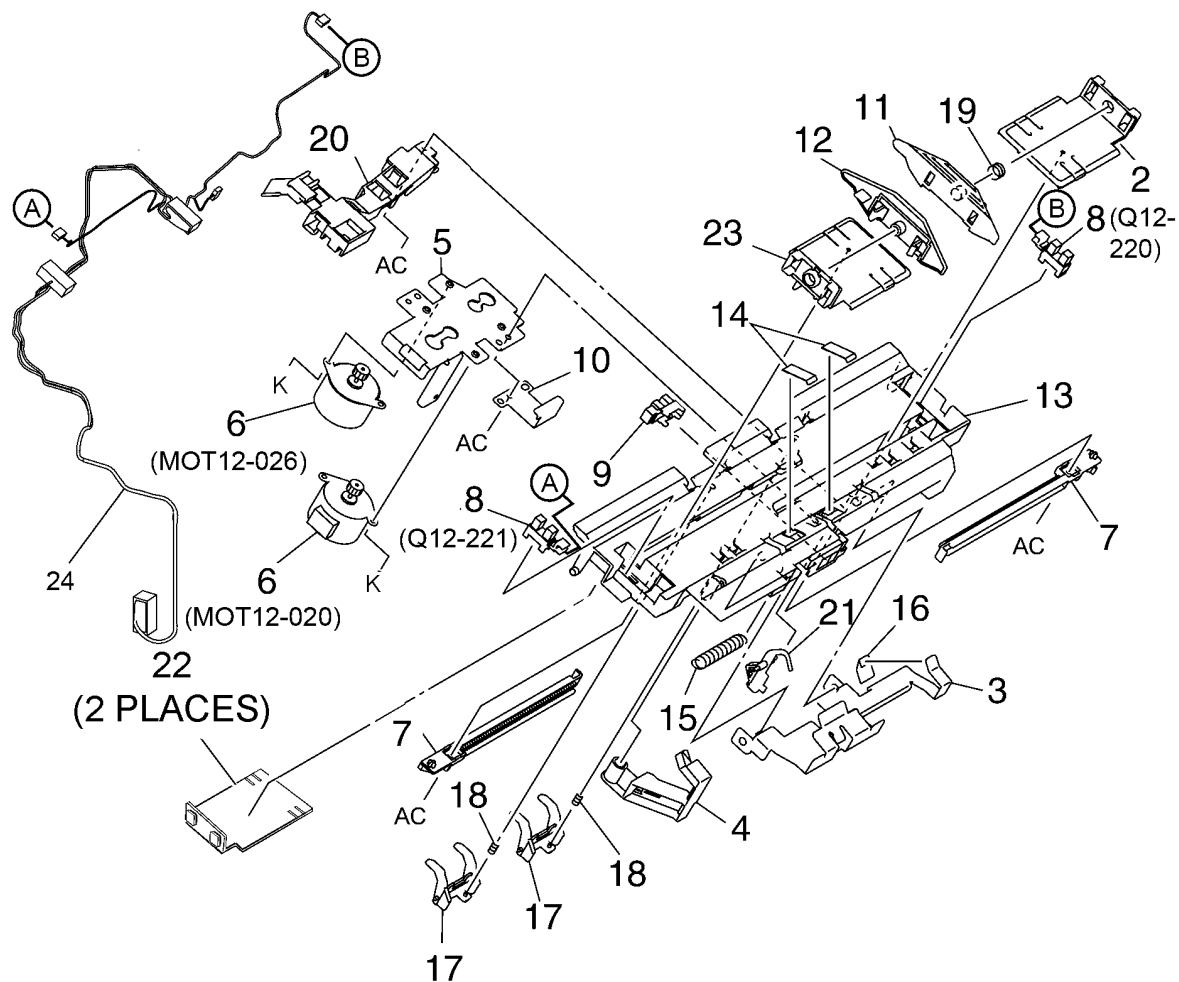


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PL 13.28 Office Finisher LX Ejector (4 of 5)

Item	Part	Description
1	050K61092	Compiler tray assembly (REP 13.17)
2	—	Rear tamper guide (P/O PL 13.28 Item 1)
3	—	Compiler center paper guide (P/O PL 13.28 Item 1)
4	—	Compiler rear paper guide (P/O PL 13.28 Item 1)
5	—	Bracket (P/O PL 13.28 Item 1)
6	127K58040	Front tamper motor (MOT12-020)/Rear tamper motor (MOT12-026) (REP 13.26)
7	—	Rack (front) (P/O PL 13.28 Item 1)
8	930W00111	Front tamper home sensor (Q12-220)/Rear tamper home sensor (Q12-221) (REP 13.27)
9	930W00211	Compiler tray no paper sensor (Q12-151) (REP 13.28)
10	—	Spring (P/O PL 13.28 Item 1)
11	—	Tamper front guide (P/O PL 13.28 Item 1)
12	—	Tamper rear guide (P/O PL 13.28 Item 1)
13	—	Compiler tray (P/O PL 13.28 Item 1)
14	—	Paper paddle guide (P/O PL 13.28 Item 1)
15	—	Spring (P/O PL 13.28 Item 1)
16	—	Paper end guide (P/O PL 13.28 Item 1)
17	—	Paper tray guide (P/O PL 13.28 Item 1)
18	—	Spring (P/O PL 13.28 Item 1)
19	—	Spring (P/O PL 13.28 Item 1)
20	—	Harness guide (P/O PL 13.28 Item 1)
21	—	Actuator (P/O PL 13.28 Item 1)
22	—	Tamper base (P/O PL 13.28 Item 1)
23	—	Front tamper guide (P/O PL 13.28 Item 1)
24	962K60453	Wire harness

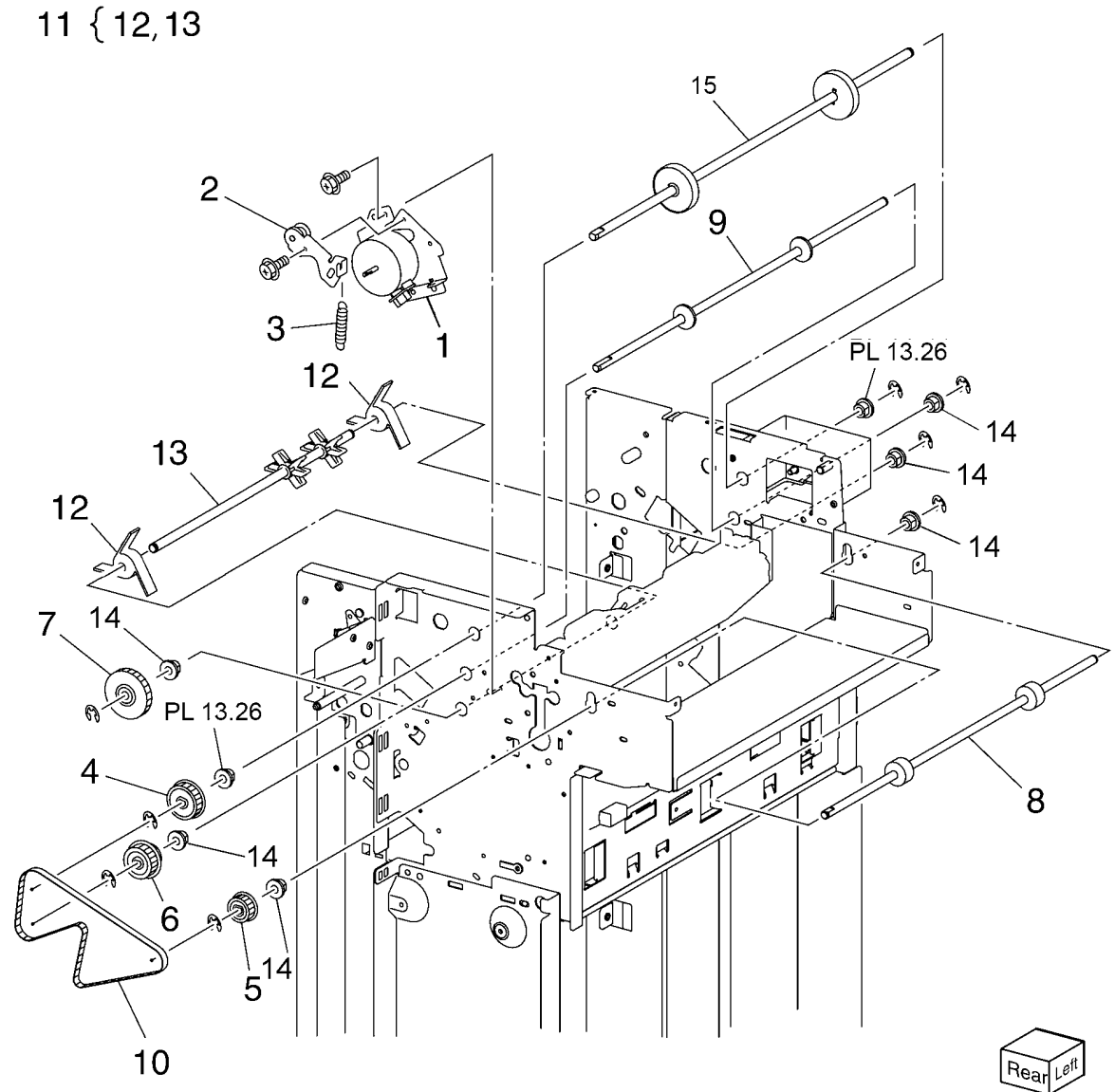
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PL 13.29 Office Finisher LX Ejector (5 of 5)

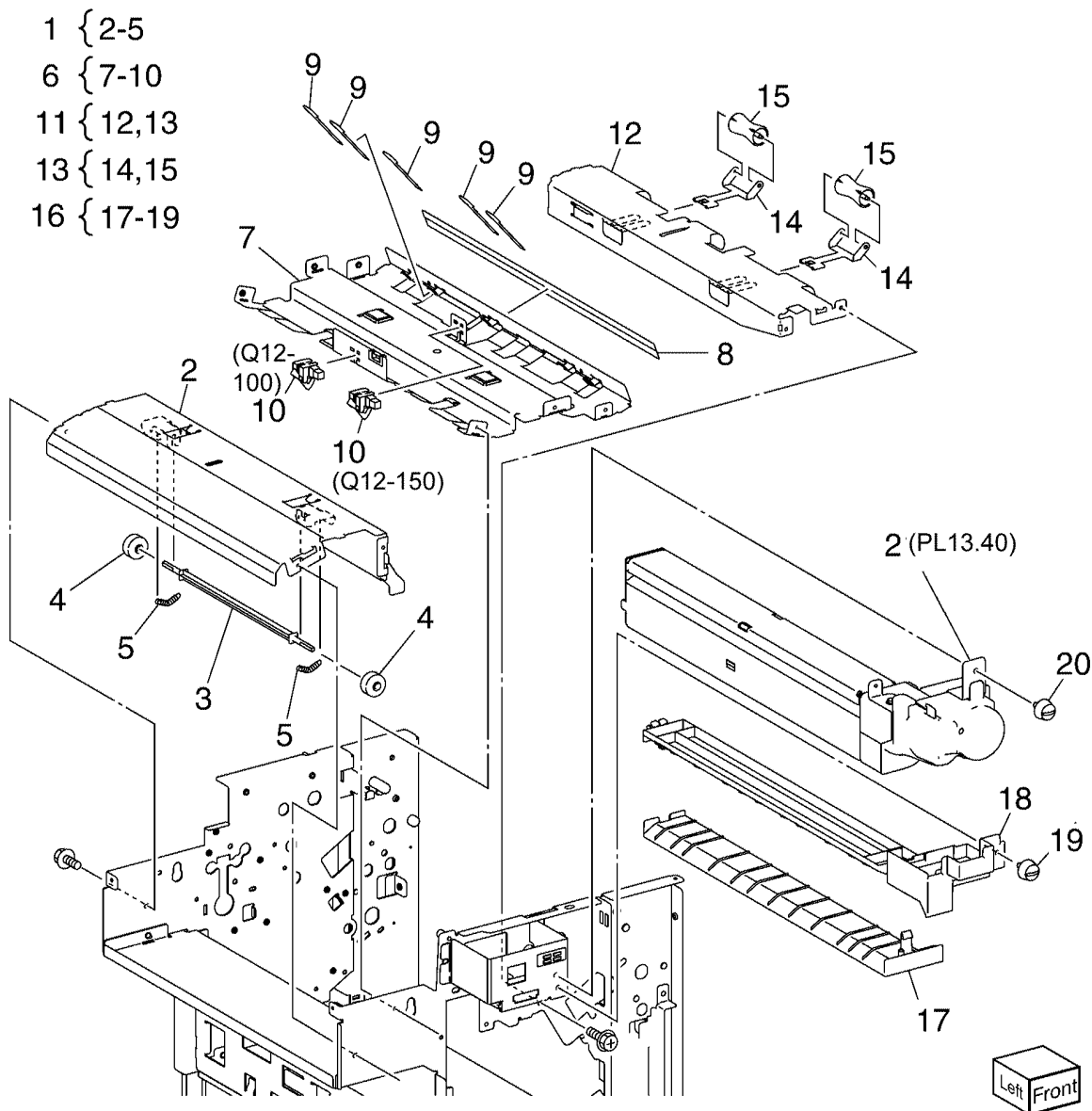
Item	Part	Description
1	068K58823	Transport motor (MOT12-013)
2	—	Tension roller assembly (Not Spared)
3	—	Spring (Not Spared)
4	—	Pulley (30T) (Not Spared)
5	—	Pulley (41T) (Not Spared)
6	—	Gear/Pulley (27T/30T) (Not Spared)
7	—	Gear (Not Spared)
8	059K55081	Entrance roller
9	059K55091	Exit roller
10	—	Eject belt (Not Spared) (REP 13.21)
11	006K98010	Paddle shaft assembly
12	—	Cyclone paddle (P/O PL 13.29 Item 11)
13	—	Paddle shaft (P/O PL 13.29 Item 11)
14	413W75959	Bearing
15	—	Eject drive shaft (REF: PL 13.26 Item 28)



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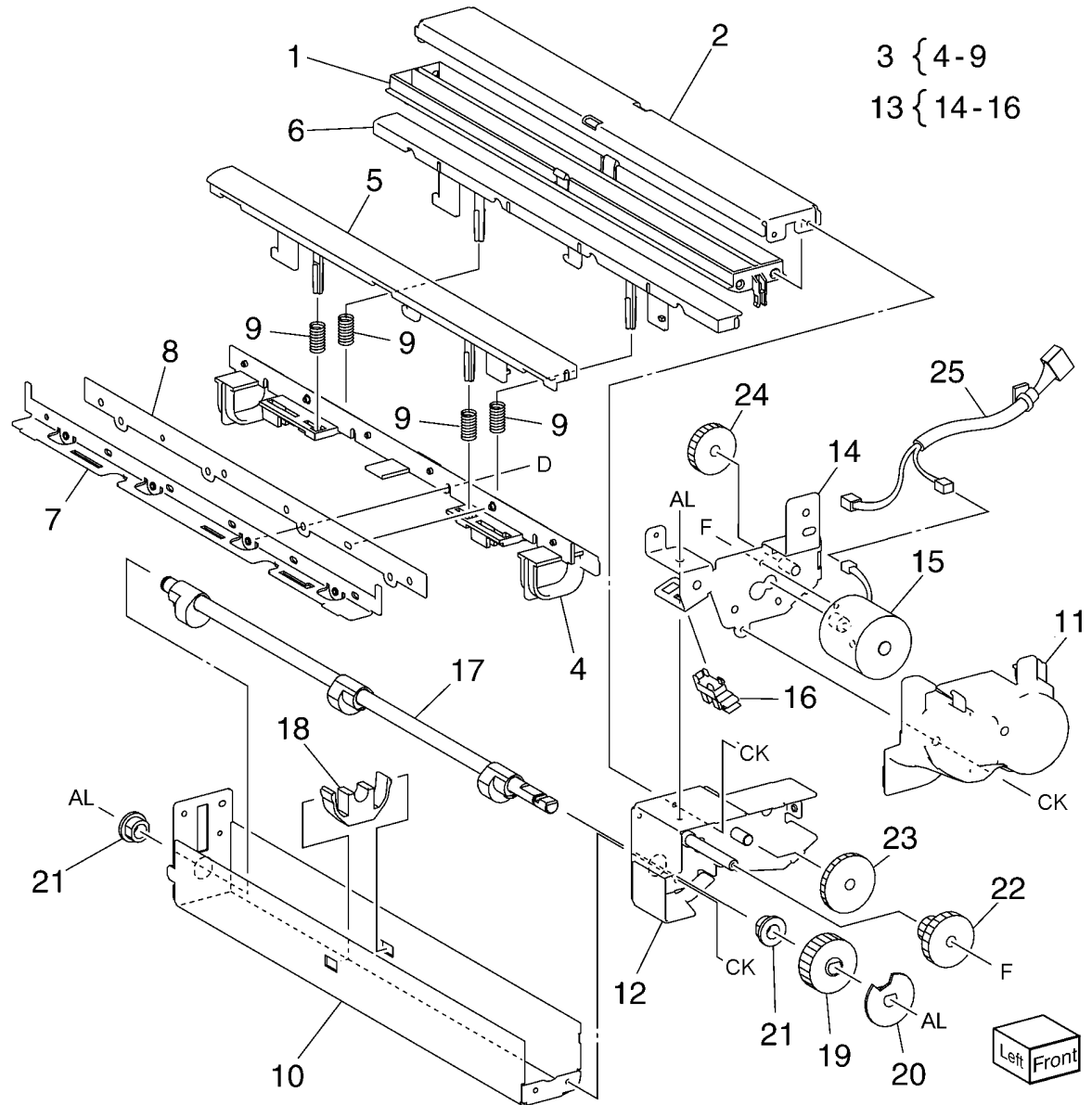
PL 13.35 Office Finisher LX Exit and Folder Assembly

Item	Part	Description
1	054K35532	Lower chute assembly
2	—	Lower chute (P/O PL 13.35 Item 1)
3	—	Shaft (P/O PL 13.35 Item 1)
4	—	Nip roll (P/O PL 13.35 Item 1)
5	—	Spring (P/O PL 13.35 Item 1)
6	054K35540	Exit upper chute assembly
7	—	Exit upper chute (P/O PL 13.35 Item 6)
8	—	Static eliminator (P/O PL 13.35 Item 6)
9	—	Paper guide (P/O PL 13.35 Item 6)
10	130K88311	Compiler exit sensor (Q12-150)/ Transport entry sensor (Q12-100)
11	054K48531	Exit lower chute assembly
12	—	Exit lower chute (P/O PL 13.35 Item 11)
13	—	Nip roll assembly (P/O PL 13.35 Item 11)
14	—	Spring (P/O PL 13.35 Item 13)
15	—	Nip roll (P/O PL 13.35 Item 13)
16	607K03960	Chute assembly
17	—	Lower chute (P/O PL 13.35 Item 16)
18	—	Upper chute (P/O PL 13.35 Item 16)
19	—	Thumb screw (P/O PL 13.35 Item 16)
20	—	Thumb screw (Not Spared)
21	695K18692	Crease assembly (Option) (REP 13.18)



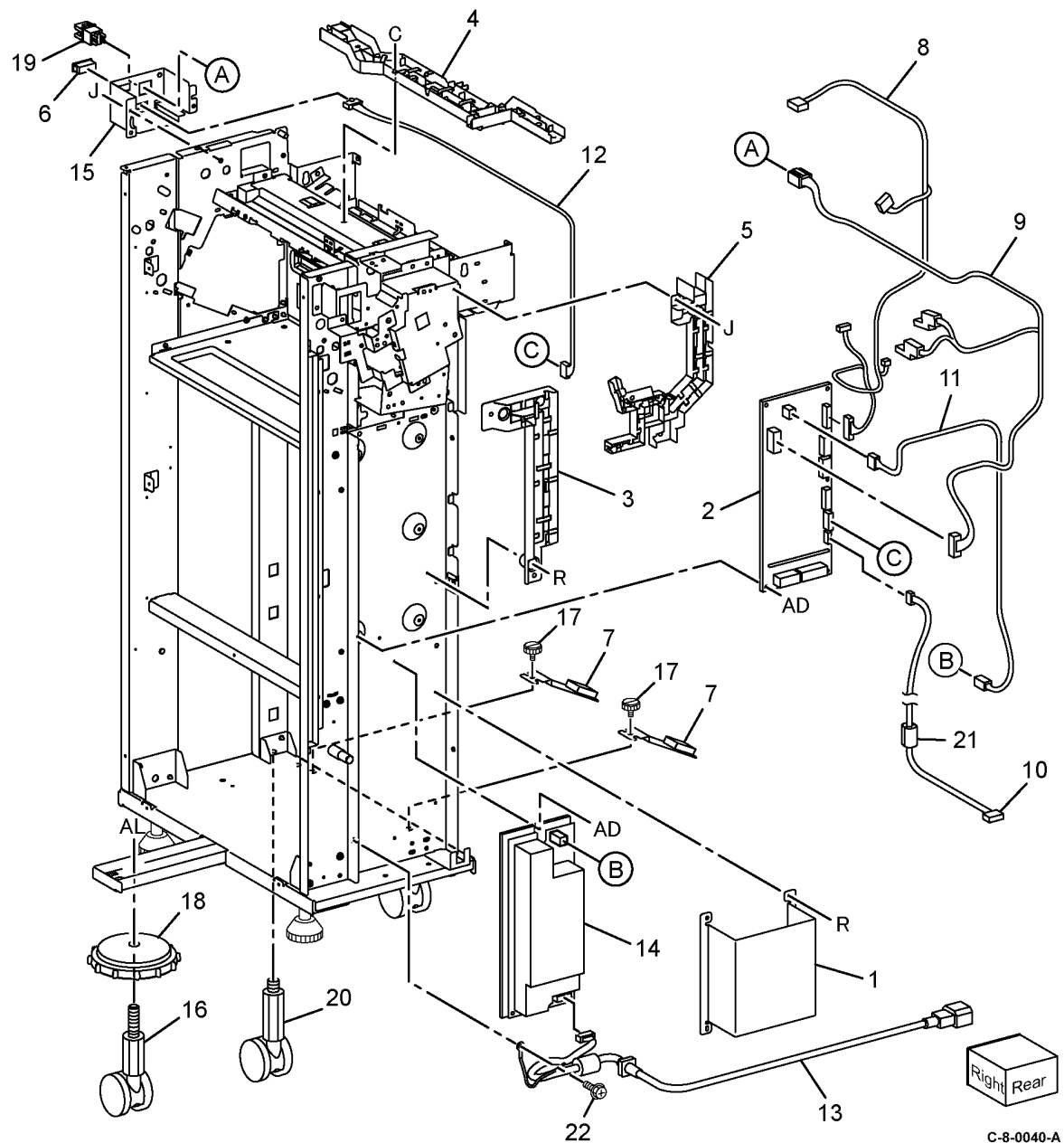
PL 13.40 Office Finisher LX Folder Assembly

Item	Part	Description
1	—	Upper chute (P/O PL 13.35 Item 21)
2	—	Upper plate (P/O PL 13.35 Item 21)
3	—	Knife assembly (P/O PL 13.35 Item 21)
4	—	Blade holder (P/O PL 13.40 Item 3)
5	—	Lower holder 1 (P/O PL 13.40 Item 3)
6	—	Lower holder 2 (P/O PL 13.40 Item 3)
7	—	Bracket (P/O PL 13.40 Item 3)
8	—	Blade (P/O PL 13.40 Item 3)
9	—	Spring (P/O PL 13.35 Item 2)
10	—	Frame (P/O PL 13.35 Item 21)
11	—	Front cover (Not Spared)
12	—	Bracket (P/O PL 13.35 Item 21)
13	—	Knife motor assembly (P/O PL 13.35 Item 21)
14	—	Motor bracket (P/O PL 13.40 Item 13)
15	—	Knife motor (MOT13-022) (P/O PL 13.40 Item 13)
16	930W00111	Folder home sensor (Q12-101)
17	—	Cam shaft assembly (P/O PL 13.35 Item 21)
18	—	Guide (P/O PL 13.35 Item 21)
19	—	Gear (28T/8T) (P/O PL 13.35 Item 21)
20	—	Encoder (P/O PL 13.35 Item 21)
21	—	Bearing (P/O PL 13.35 Item 21)
22	—	Gear (12T/27T) (P/O PL 13.35 Item 21)
23	—	Gear (12T/30T) (P/O PL 13.35 Item 21)
24	—	Gear (12T/51T) (P/O PL 13.35 Item 21)
25	—	Wire harness (P/O PL 13.35 Item 21)



PL 13.45 Office Finisher LX Folder Electrical

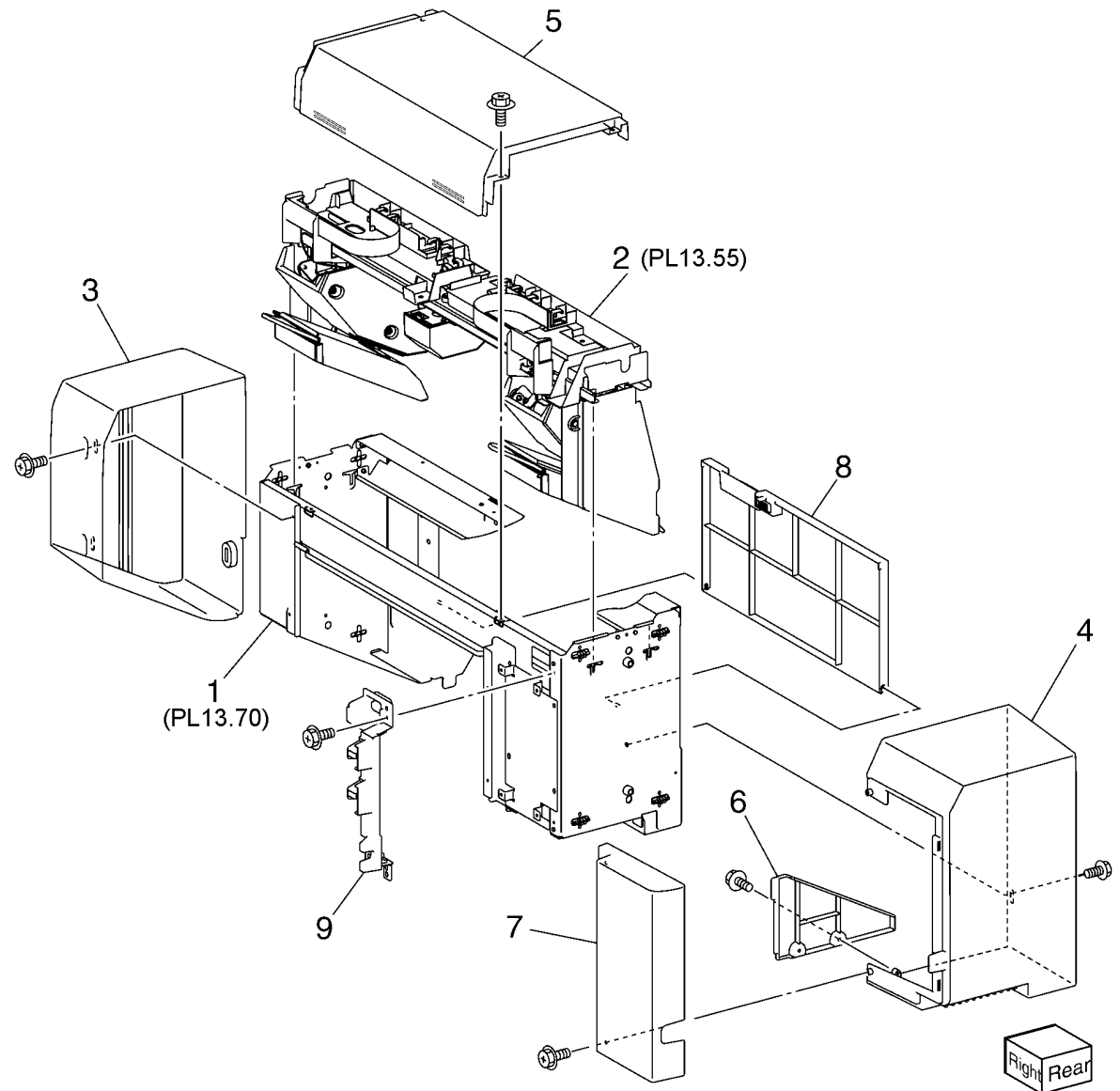
Item	Part	Description
1	—	LVPS cover (Not Spared)
2	960K89740	Finisher PWB (REP 13.23)
3	—	Harness guide (Not Spared)
4	—	Harness guide (Not Spared)
5	—	Harness guide (Not Spared)
6	—	Magnet (Not Spared)
7	—	Gasket plate assembly (Not Spared)
8	—	Wire harness (Not Spared)
9	—	Wire harness (Not Spared)
10	962K60482	Wire harness (IF)
11	962K60493	Wire harness (LVPS)
12	962K60593	Wire harness (IF)
13	962K60511	Power cable
14	105E22590	Finisher LVPS (REP 13.24)
15	—	Bracket (Not Spared)
16	—	Caster (Not Spared)
17	—	Thumb Screw (Not Spared)
18	—	Knob (Not Spared)
19	110E97990	Finisher front door interlock switch (S12-302)
20	017K96450	Caster
21	—	Core (Not Spared)
22	—	Screw (Not Spared)



C-8-0040-A

PL 13.50 Office Finisher LX Booklet Cover

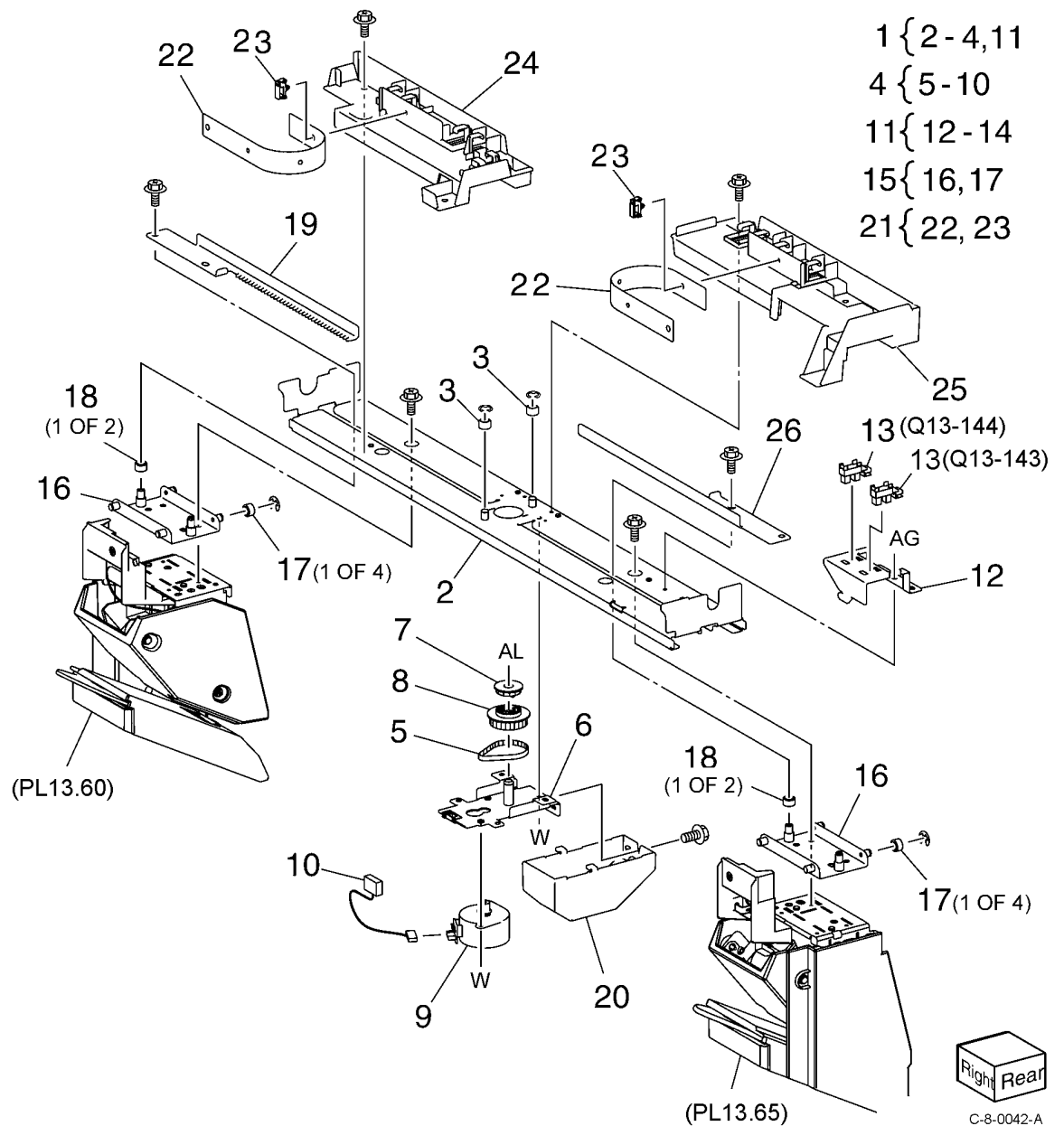
Item	Part	Description
1	—	Frame assembly (Not Spared)
2	—	Booklet stapler assembly (Not Spared) (ADJ 13.2)
3	—	Rear cover (REP 13.33)
4	—	Front cover (Not Spared) (REP 13.32)
5	—	Top cover (Not Spared) (REP 13.34)
6	—	Side cover (Not Spared)
7	—	PWB cover (Not Spared) (REP 13.35)
8	—	Left cover (Not Spared) (REP 13.36)
9	—	Harness guide (Not Spared)



C-8-0041-A

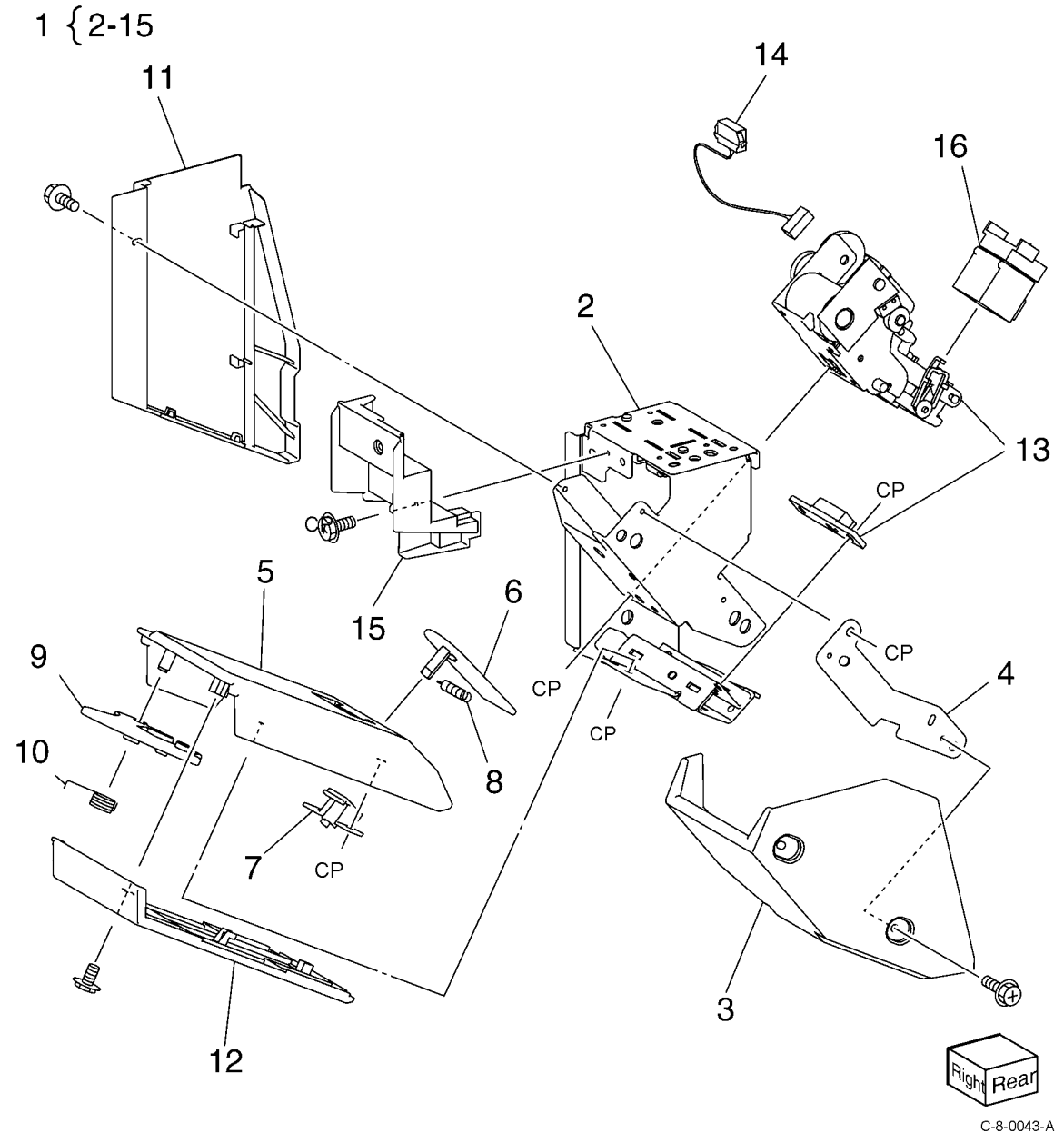
PL 13.55 Office Finisher LX Booklet Stapler Assembly

Item	Part	Description
1	—	Front carriage rail (Not Spared)
2	—	Frame (P/O PL 13.55 Item 1)
3	—	Core (P/O PL 13.55 Item 1)
4	127K57052	Booklet stapler move motor assembly
5	—	Belt (P/O PL 13.55 Item 4)
6	—	Bracket (P/O PL 13.55 Item 4)
7	—	Gear (12T) (P/O PL 13.55 Item 4)
8	—	Pulley (50T) (P/O PL 13.55 Item 4)
9	—	Booklet stapler move motor (MOT13-028) (P/O PL 13.55 Item 4) (REP 13.38)
10	—	Wire harness (P/O PL 13.55 Item 4)
11	—	Sensor bracket assembly (P/O PL 13.55 Item 1)
12	—	Sensor bracket (P/O PL 13.55 Item 11)
13	930W00111	Booklet stapler move position sensor (Q13-143)/Booklet stapler move home sensor (Q13-144)
14	—	Rear rack gear (Not Spared)
15	—	Carriage assembly (Not Spared)
16	—	Carriage (P/O PL 13.55 Item 15)
17	—	Core (P/O PL 13.55 Item 15)
18	—	Core (Not Spared)
19	—	Front rack gear (Not Spared)
20	—	Motor cover (Not Spared)
21	—	Harness guide assembly (Not Spared)
22	—	Harness strap (P/O PL 13.55 Item 21)
23	—	Locking clamp (P/O PL 13.55 Item 21)
24	—	Harness guide (front) (Not Spared)
25	—	Harness guide (rear) (Not Spared)
26	—	Rear rack guide (Not Spared)



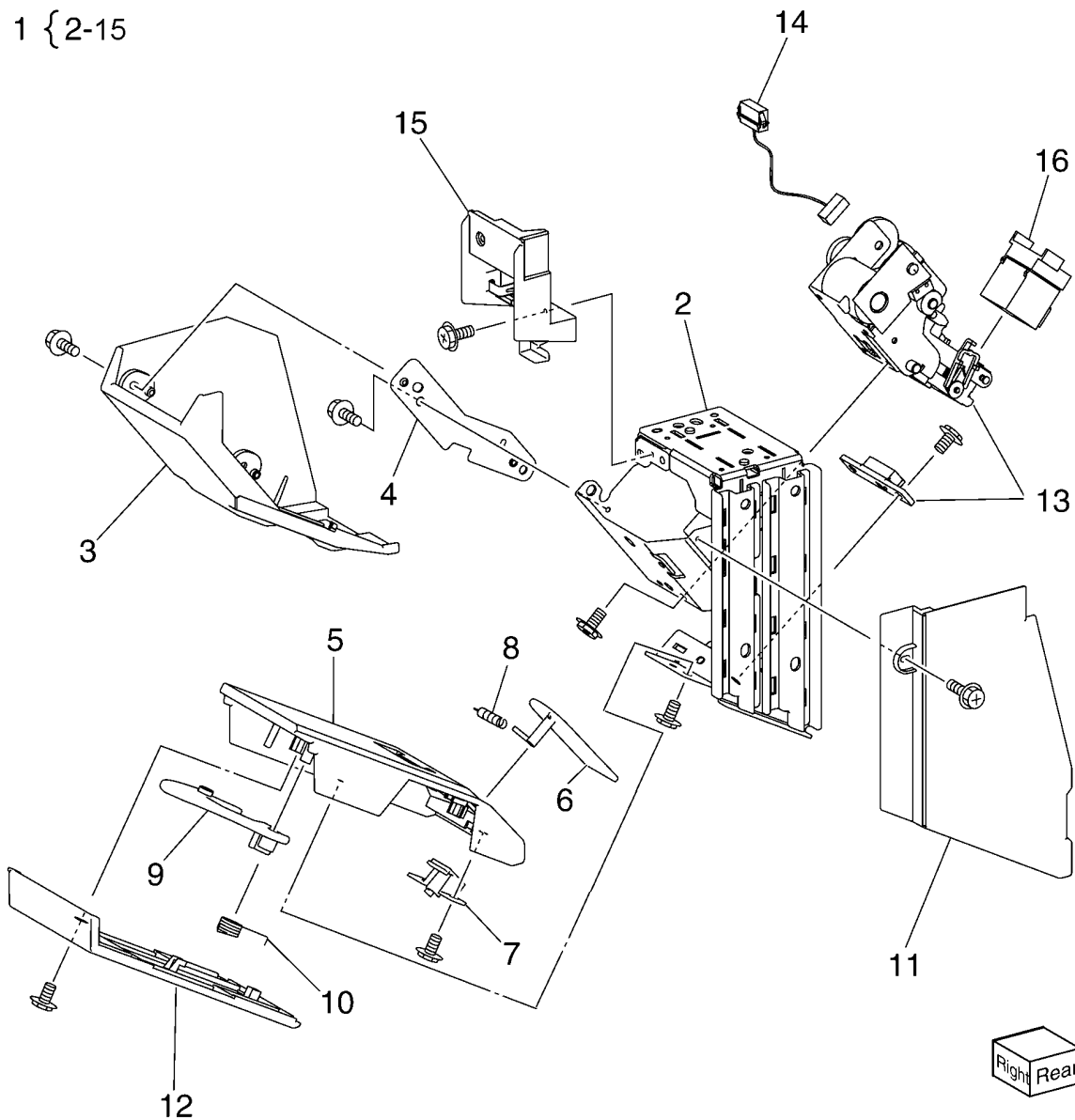
PL 13.60 Office Finisher LX Booklet Front Stapler Assembly

Item	Part	Description
1	029K92491	Booklet front stapler assembly
2	—	Bracket (P/O PL 13.60 Item 1)
3	—	Rear cover (P/O PL 13.60 Item 1)
4	—	Bracket (P/O PL 13.60 Item 1)
5	—	Chute (P/O PL 13.60 Item 1)
6	—	Sub chute (P/O PL 13.60 Item 1)
7	—	Support (P/O PL 13.60 Item 1)
8	—	Spring (P/O PL 13.60 Item 1)
9	—	Exit sub chute (P/O PL 13.60 Item 1)
10	—	Spring (P/O PL 13.60 Item 1)
11	—	Front cover (P/O PL 13.60 Item 1)
12	—	Lower cover (P/O PL 13.60 Item 1)
13	—	Booklet stapler assembly (P/O PL 13.60 Item 1) (REP 13.37)
14	—	Wire harness (P/O PL 13.60 Item 1)
15	—	Guide (P/O PL 13.60 Item 1)
16	—	Booklet staple cassette assembly (REF: PL 26.05 Item 6)



PL 13.65 Office Finisher LX Booklet Rear Stapler Assembly

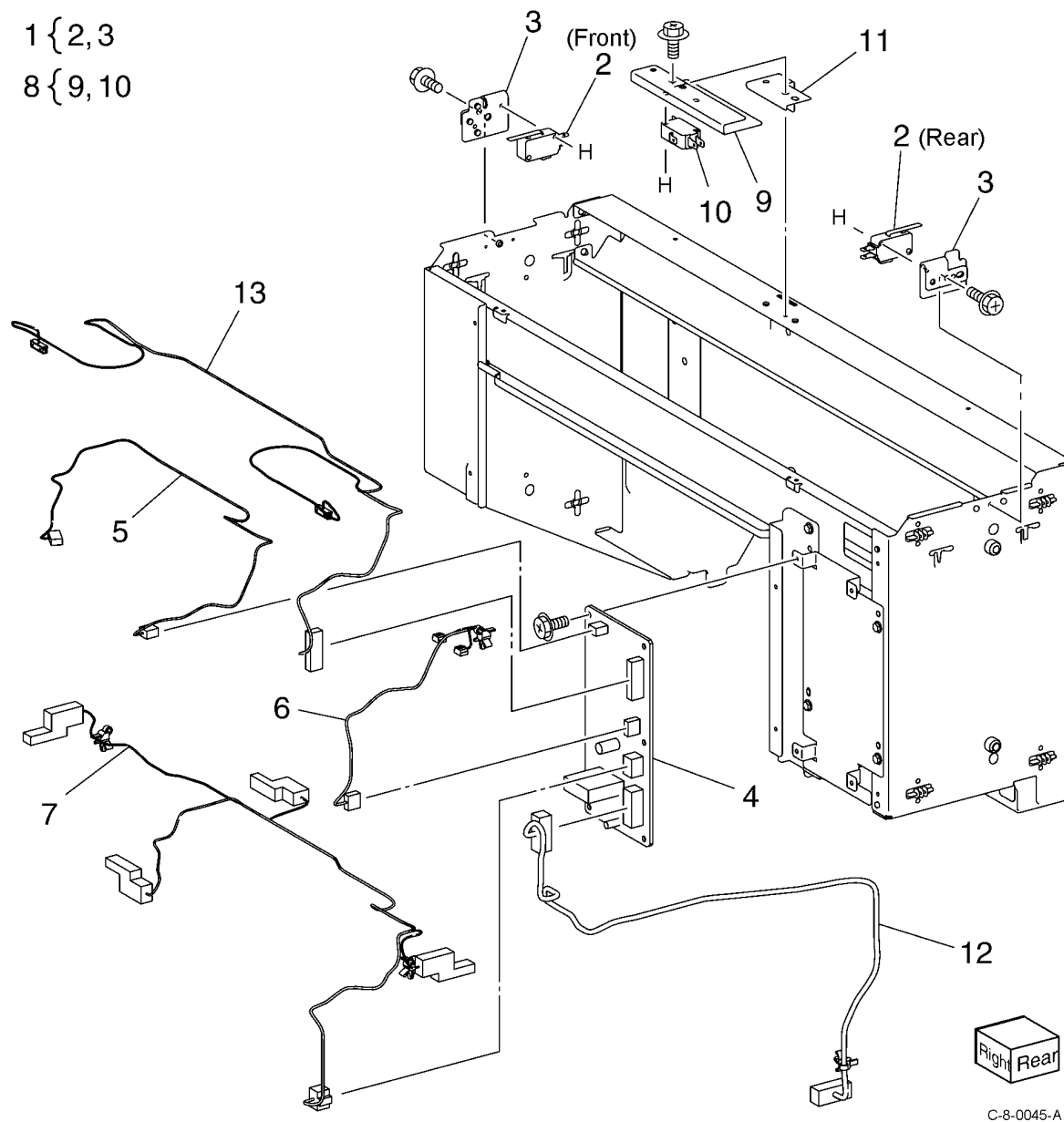
Item	Part	Description
1	029K92501	Booklet rear stapler assembly
2	—	Bracket (P/O PL 13.65 Item 1)
3	—	Rear cover (P/O PL 13.65 Item 1)
4	—	Bracket (P/O PL 13.65 Item 1)
5	—	Chute (P/O PL 13.65 Item 1)
6	—	Sub chute (P/O PL 13.65 Item 1)
7	—	Support (P/O PL 13.65 Item 1)
8	—	Spring (P/O PL 13.65 Item 1)
9	—	Sub chute (P/O PL 13.65 Item 1)
10	—	Spring (P/O PL 13.65 Item 1)
11	—	Front cover (P/O PL 13.65 Item 1)
12	—	Lower cover (P/O PL 13.65 Item 1)
13	—	Booklet stapler assembly (P/O PL 13.65 Item 1) (REP 13.37)
14	—	Wire harness (P/O PL 13.65 Item 1)
15	—	Guide (P/O PL 13.65 Item 1)
16	—	Booklet staple cassette assembly (REF: PL 26.05 Item 6)



C-8-0044-A

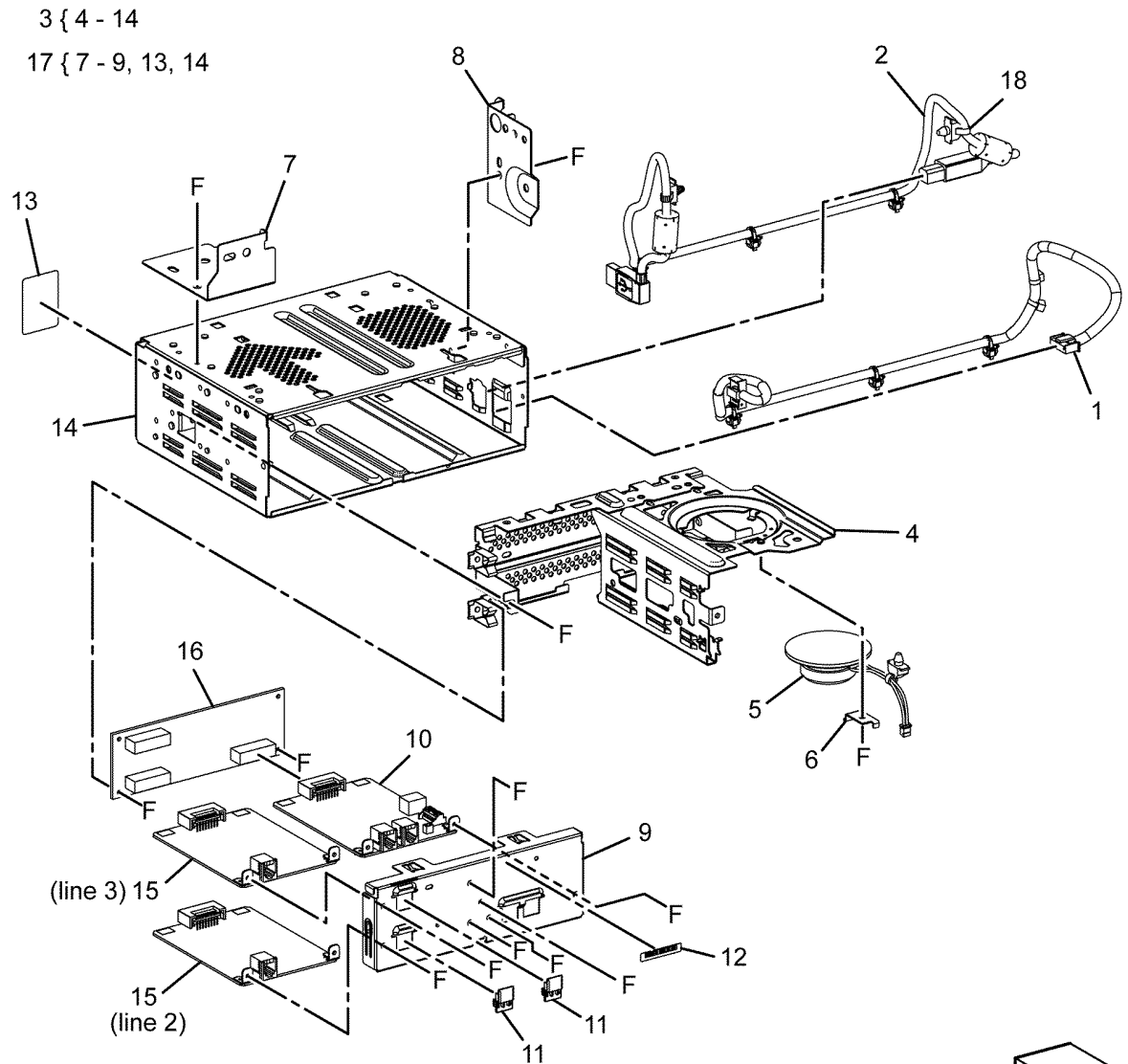
PL 13.70 Office Finisher LX Booklet Electrical

Item	Part	Description
1	068K58351	Stapler rear safety switch/stapler front safety switch
2	—	Booklet stapler safety switch assembly (P/O PL 13.70 Item 1)
3	—	Bracket (P/O PL 13.70 Item 1)
4	960K32545	Booklet PWB (REP 13.30)
5	—	Wire harness (Not Spared)
6	—	Wire harness (Not Spared)
7	—	Wire harness (Not Spared)
8	068K58361	Booklet stapler cover switch assembly
9	—	Bracket (P/O PL 13.70 Item 8)
10	—	Booklet cover open switch (S13-300) (P/O PL 13.70 Item 8)
11	—	Plate (Not Spared)
12	—	Wire harness (Not Spared)
13	—	Wire harness (Not Spared)



PL 20.05 Fax

Item	Part	Description
1	952K19382	Fax harness
2	117K48410	USB harness
3	—	Fax chassis assembly (Not Spared)
4	—	Riser bracket assembly (P/O PL 20.05 Item 3)
5	—	Fax speaker (P/O PL 20.05 Item 3)
6	—	Speaker bracket (P/O PL 20.05 Item 3)
7	—	Fax L1 bracket (P/O PL 20.05 Item 3)
8	—	Fax R1 bracket (P/O PL 20.05 Item 3)
9	—	Fax panel (P/O PL 20.05 Item 3)
10	960K79262	Line 1 Fax PWB (XC)
—	960K81232	Line 1 Fax PWB (XE)
11	—	Snap fax cover (P/O PL 20.05 Item 3)
12	—	Traceability label (P/O PL 20.05 Item 3)
13	—	FX2A label (P/O PL 20.05 Item 3)
14	—	Fax chassis (P/O PL 20.05 Item 3)
15	960K77542	Line 2/3 fax PWB
16	960K77550	Riser PWB
17	—	Fax kit (Not Spared)
18	—	Locking clamp (Not Spared)



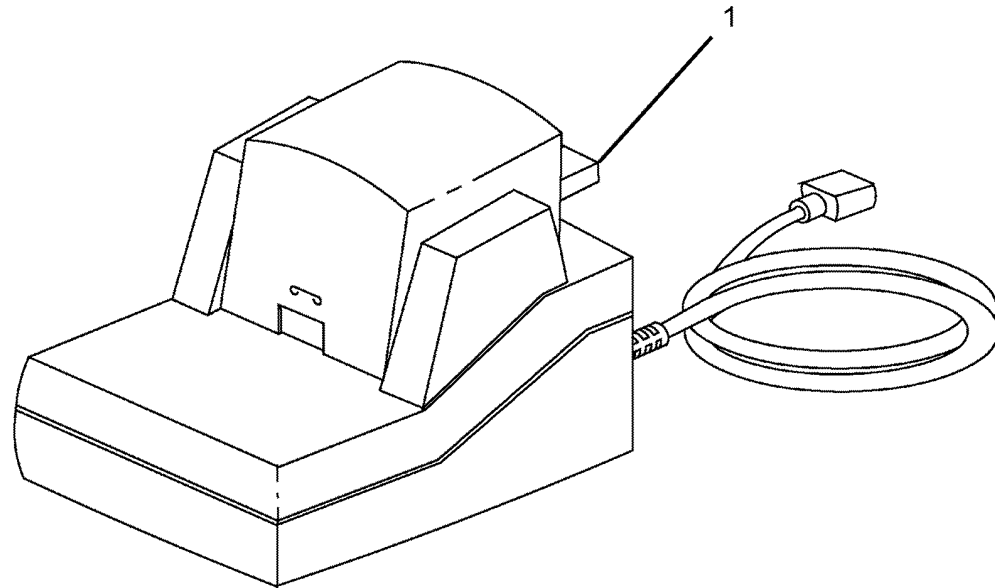
C-8-0082-A

PL 25.05 Convenience Stapler

Item	Part	Description
1	604K35710	KConvenience stapler (110V) (See NOTE 1 & 2)
–	604K35700	Convenience stapler (220V) (See NOTE 1 & 2)

NOTE: 1. Refer to PL 31.05 for the convenience stapler kits.

NOTE: 2. Refer to PL 26.05 for the staple refills and cartridge.



C-8-0083-A

PL 26.05 Consumables and Tools (1 of 2)

Item	Part	Description
1	–	Toner (K) - see below for variants
–	106R03761	Standard -5K (NAS/XE-SOLD) (C7000)
–	106R03769	Standard -5K (DMO-SOLD) (C7000)
–	106R03753	Metered -12K (Worldwide) (C7000)
–	106R03757	High capacity -12K (NA/XE-SOLD) (C7000)
–	106R03765	High capacity - 12K (DMO-SOLD) (C7000)
–	106R03733	Metered -22K (Worldwide) (C7030F)
–	106R03741	High capacity - 15.5K (NA/XE-SOLD) (C7030F)
–	106R03749	High capacity -15.5K (DMO-SOLD) (C7030F)
–	106R03737	Extra high capacity -22K (NA/XE-SOLD) (C7030F)
–	106R03745	High capacity -22K (DMO-SOLD) (C7030F)
2	–	Toner cartridge (Y) - see variants below
–	106R03762	Standard - 3K (NA/XE-SOLD) (C7000)
–	106R03770	Standard - 3K (DMO-SOLD) (C7000)
–	106R03766	Standard - 8K (DMO-SOLD) (C7000)
–	106R03754	Metered - 8K (Worldwide) (C7000)
–	106R03734	Metered -15.5K (Worldwide) (C7030F)
–	106R03758	High capacity - 8K (NA/XE-SOLD) (C7000)
–	106R03742	High capacity - 9K (NA/XE-SOLD) (C7030F)
–	106R03750	High capacity - 9K (DMO-SOLD) (C7030F)
–	106R03738	Extra High capacity - 15.5K (NA/XE-SOLD) (C7030F)
–	106R03746	Extra high capacity -15.5K (DMO-SOLD) (C7030F)
3	–	Toner cartridge (M) (REF: PL 26.10)
4	–	Toner cartridge (C) (REF: PL 26.10)
5	–	Staple cartridge (convenience stapler)
6	–	Office finisher LX booklet maker staple cartridge
7	–	Staple refills (convenience stapler)

**NO EXPLODED
VIEW PROVIDED**

C-8-0084-A

PL 26.10 Consumables and Tools (2 of 2)

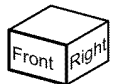
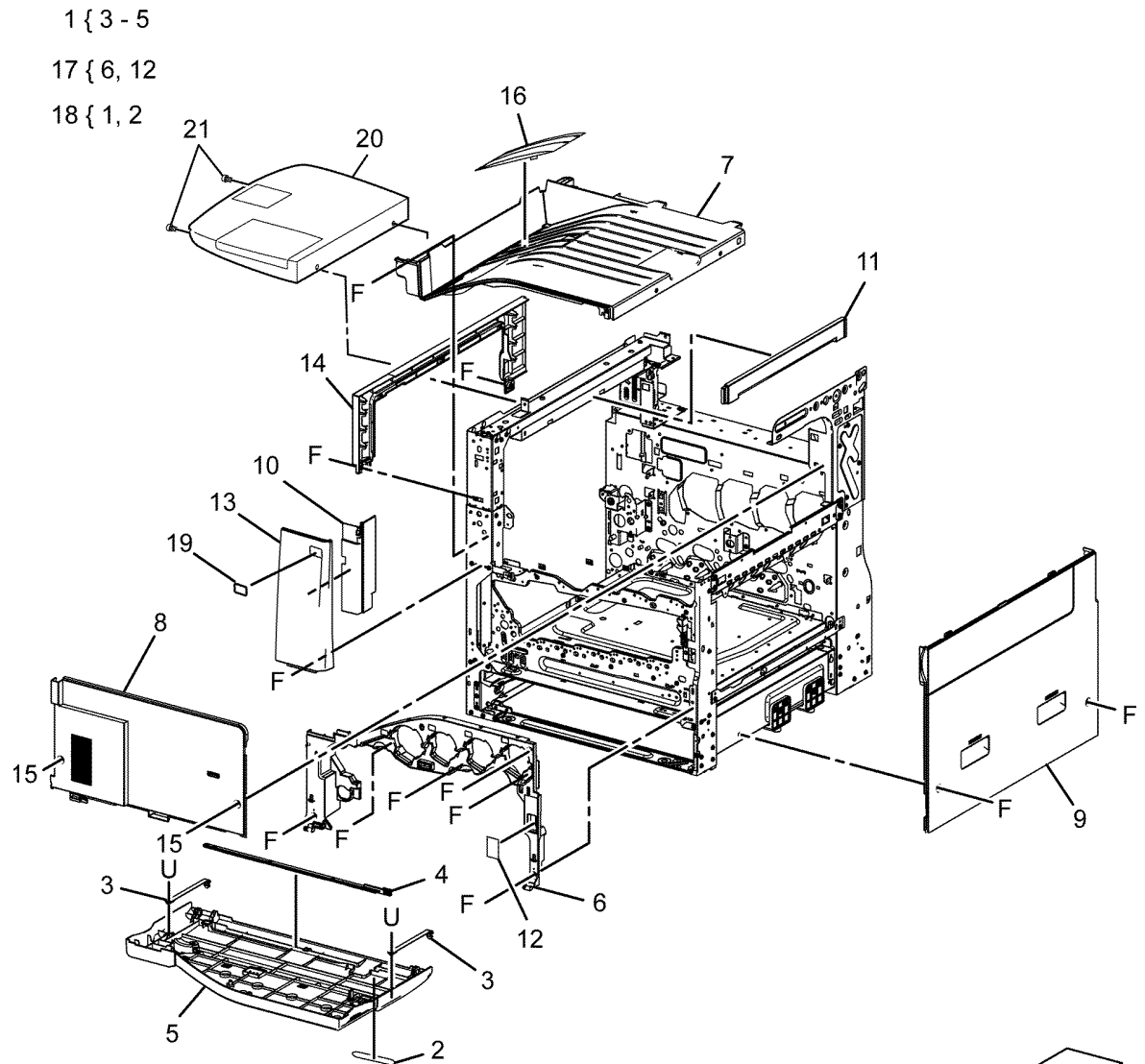
Item	Part	Description
1	–	Toner cartridge (M) - see variants below
–	106R03763	Standard -3K (NA/XE-SOLD) (C7000)
–	106R03771	Standard - 3K (DMO-SOLD) (C7000)
–	106R03755	Metered - 8K (Worldwide) (C7000)
–	106R03759	High capacity -8K (NA/XE-SOLD) (C7000)
–	106R03767	High capacity -8K (DMO-SOLD) (C7000)
–	106R03735	Metered - 15.5K (Worldwide) (C7030F)
–	106R03743	High capacity -9K (NA/XE-SOLD) (C7030F)
–	106R03751	High capacity - 9K (DMO-SOLD) (C7030F)
–	106R03739	Extra High capacity -15K (NA/XE-SOLD) (C7030F)
–	106R03747	Extra high capacity -15.5K (DMO-SOLD) (C7030F)
2	–	Toner cartridge (C) - see variants below
–	106R03764	Standard - 3K (NA/XE-SOLD) (C7000)
–	106R03772	Standard - 3K (DMO-SOLD) (C7000)
–	106R03756	Metered - 8K (Worldwide) (C7000)
–	106R03760	High capacity -8K (NA/XE-SOLD) (C7000)
–	106R03768	High capacity - 8K (DM)-SOLD) (C7000)
–	106R03736	Metered - 15.5K (Worldwide) (C7030F)
–	106R03744	High capacity -9K (NA/XE-SOLD) (C7030F)
–	106R03752	High capacity - 9K (DMO-SOLD) (C7030F)
–	106R03740	Extra High capacity -15.5K (NA/XE-SOLD) (C7030F)
–	106R03748	Extra High capacity -15.5K (DMO-SOLD) (C7030F)

**NO EXPLODED
VIEW PROVIDED**

C-8-0136-A

PL 28.05 Covers (1 of 2)

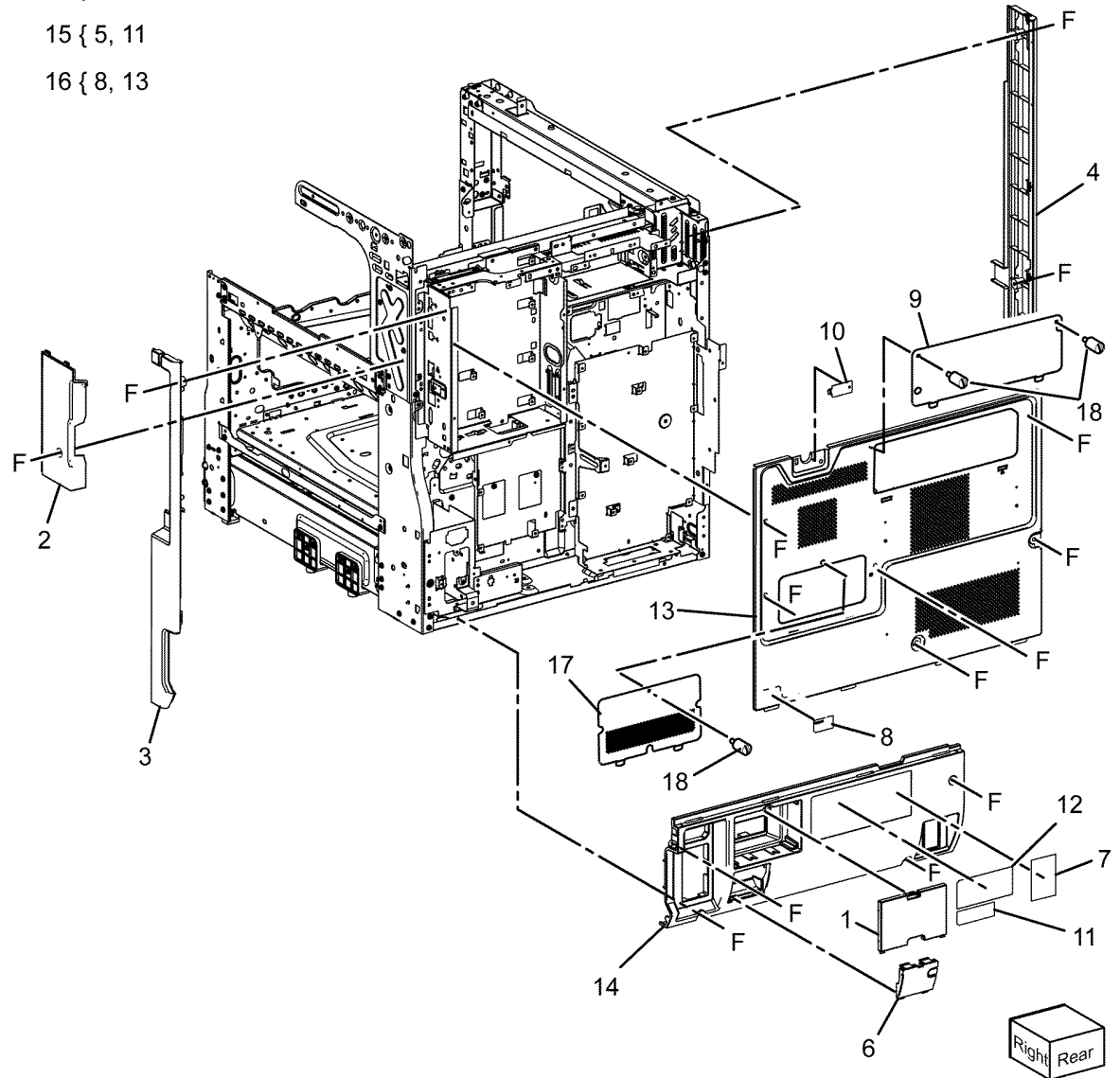
Item	Part	Description
1	—	Front cover assembly (P/O PL 28.05 Item 18) (REP 28.1)
2	—	Logo plate assembly (P/O PL 28.05 Item 18)
3	—	BS Strap (P/O PL 28.05 Item 1)
4	—	Cleaner assembly (P/O PL 28.05 Item 1)
5	—	Front cover (P/O PL 28.05 Item 1)
6	—	Inner cover (P/O PL 28.05 Item 17) (REP 28.2)
7	—	Top cover (Not Spared) (REP 28.4)
8	—	Top rear cover (Not Spared)
9	—	Right cover (Not Spared) (REP 28.3)
10	—	Exit front cover (Not Spared)
11	—	Exit upper cover (Not Spared)
12	—	SW label (P/O PL 28.05 Item 17)
13	—	Pillar left cover (Not Spared)
14	—	LH top cover (Not Spared)
15	—	Screw TP black (Not Spared)
16	050E32530	Tray insert
17	607K07130	Inner cover kit (ACO)
18	607K07121	Front cover kit
19	822E35790	USB cover
20	—	Work surface (C7030F) (P/O PL 31.05 Item 7)
21	003E63230	Thumbscrew (C7030F)



C-8-0072-A

PL 28.06 Covers (2 of 2)

Item	Part	Description	
1	—	STM Cover (Not Spared)	5 { 6, 14
2	—	RH top cover (Not Spared)	
3	—	RH rear cover (Not Spared)	15 { 5, 11
4	—	LH rear cover (Not Spared)	
5	—	Rear lower cover assembly (P/O PL 28.06 Item 15) (REP 28.6)	16 { 8, 13
6	—	EPSV cover	
7	—	Label-PTT (APO) (Not Spared)	
8	—	Outlet label (P/O PL 28.06 Item 16)	
9	—	Blind FAX cover (Not Spared)	
10	—	Blind cover (C7030F)	
11	—	Earth label (P/O PL 28.06 Item 15)	
12	—	Data FX plate (Not Spared)	
13	—	Upper rear cover (P/O PL 28.06 Item 13) (REP 28.5)	
14	—	Lower rear cover (P/O PL 28.06 Item 5)	
15	—	Rear lower cover kit (Not Spared) (REP 28.6)	
16	—	Rear upper cover kit (Not Spared)	
17	822E17170	HDD cover	
18	826E14330	Thumbscrew	



C-8-0073-A

PL 31.05 Maintenance / Installation / Removal Kits

Item	Part	Description
1	497K03860	Punch assembly kit (2/3 hole)
2	497K03870	Punch assembly kit (2/4 hole)
3	498K08250	Convenience stapler kit (110V)
4	498K08260	Convenience stapler kit (220V)
5	498K14141	Foreign device interface kit
6	497K17720	Envelope tray kit
7	498K04730	Work surface kit (C7030F)
8	497K18120	RFID install kit (WH)
—	497K18140	RFID install kit (EH)
9	497K19070	Smart card mount kit
10	497K19550	CAC reader kit

**NO EXPLODED
VIEW PROVIDED**

C-8-0085-A

PL 31.10 Line 1 Fax Kits

Item	Part	Description
1	497K17790	Line 1 fax kit (India/Brazil/ Argentina)
2	497K17750	Line 1 fax kit (XC/DMO)
3	497K17770	Line 1 fax kit (XE/South Africa)

**NO EXPLODED
VIEW PROVIDED**

C-8-0086-A

PL 31.15 3 Line Fax Kits

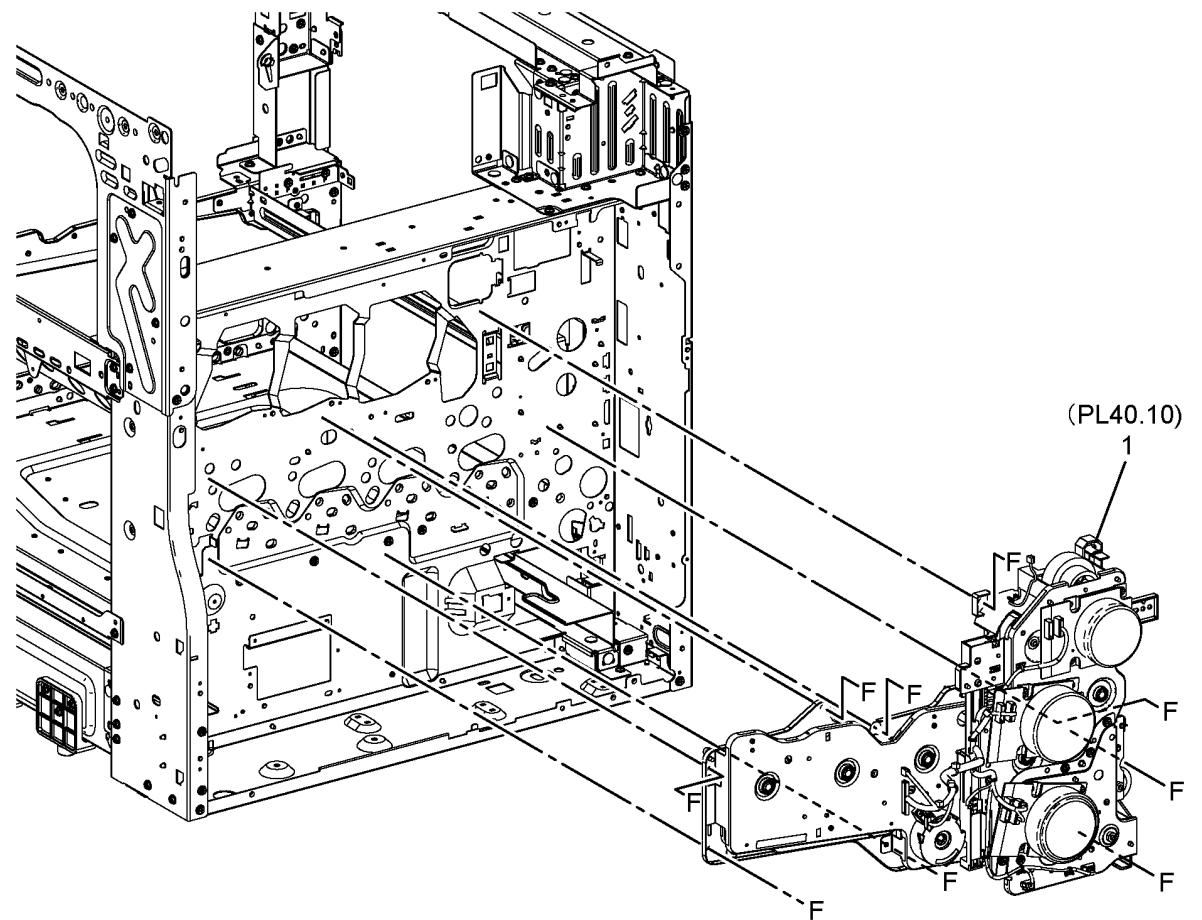
Item	Part	Description
1	497K17760	3 Line fax kit (XC/DMO)
2	497K17780	3 Line fax kit (XE/South Africa)

**NO EXPLODED
VIEW PROVIDED**

C-8-0087-A

PL 40.05 Drive Assembly

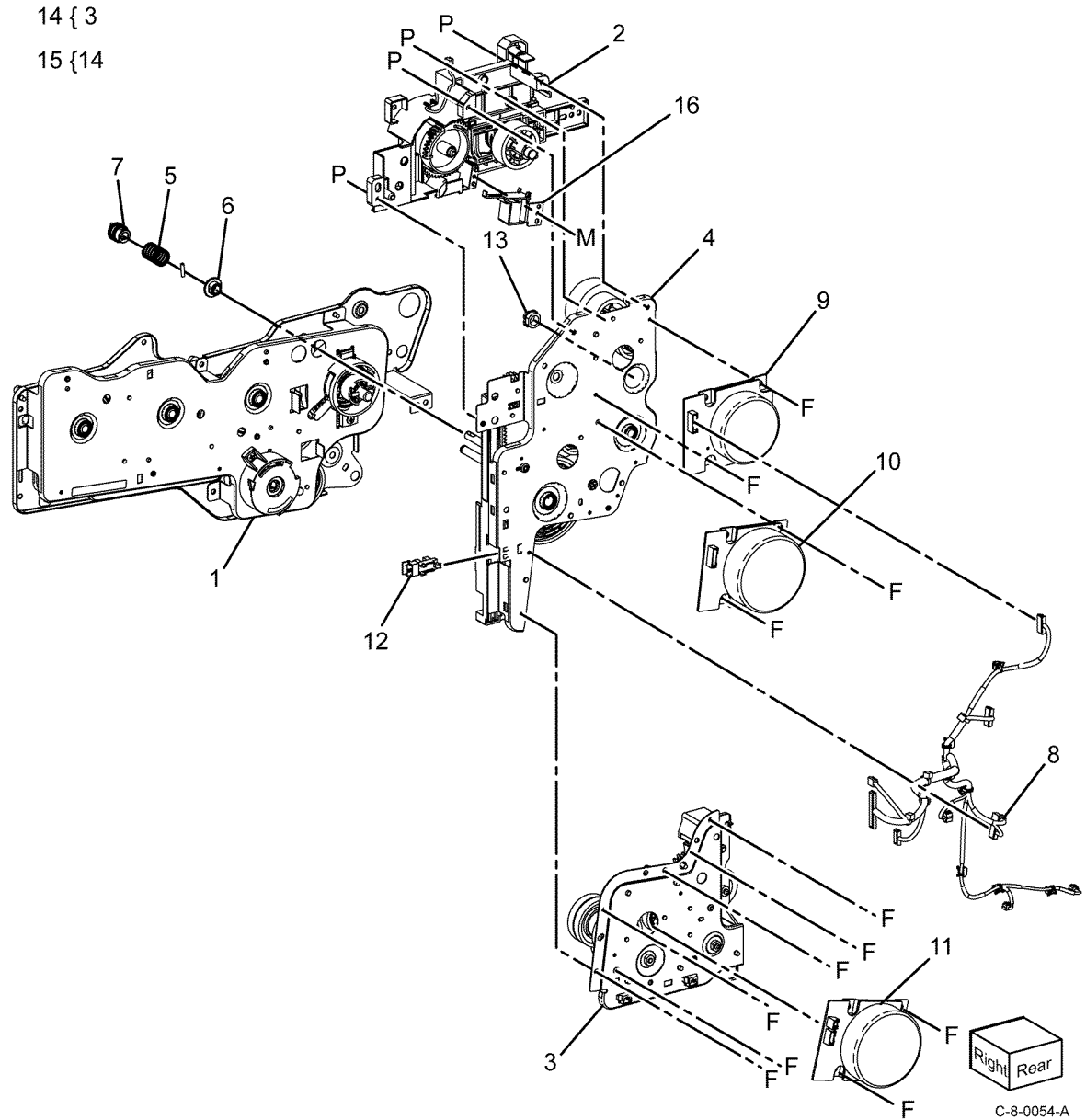
Item	Part	Description
1	007K21163	Drive assembly (REP 40.1)



C-8-0053-A

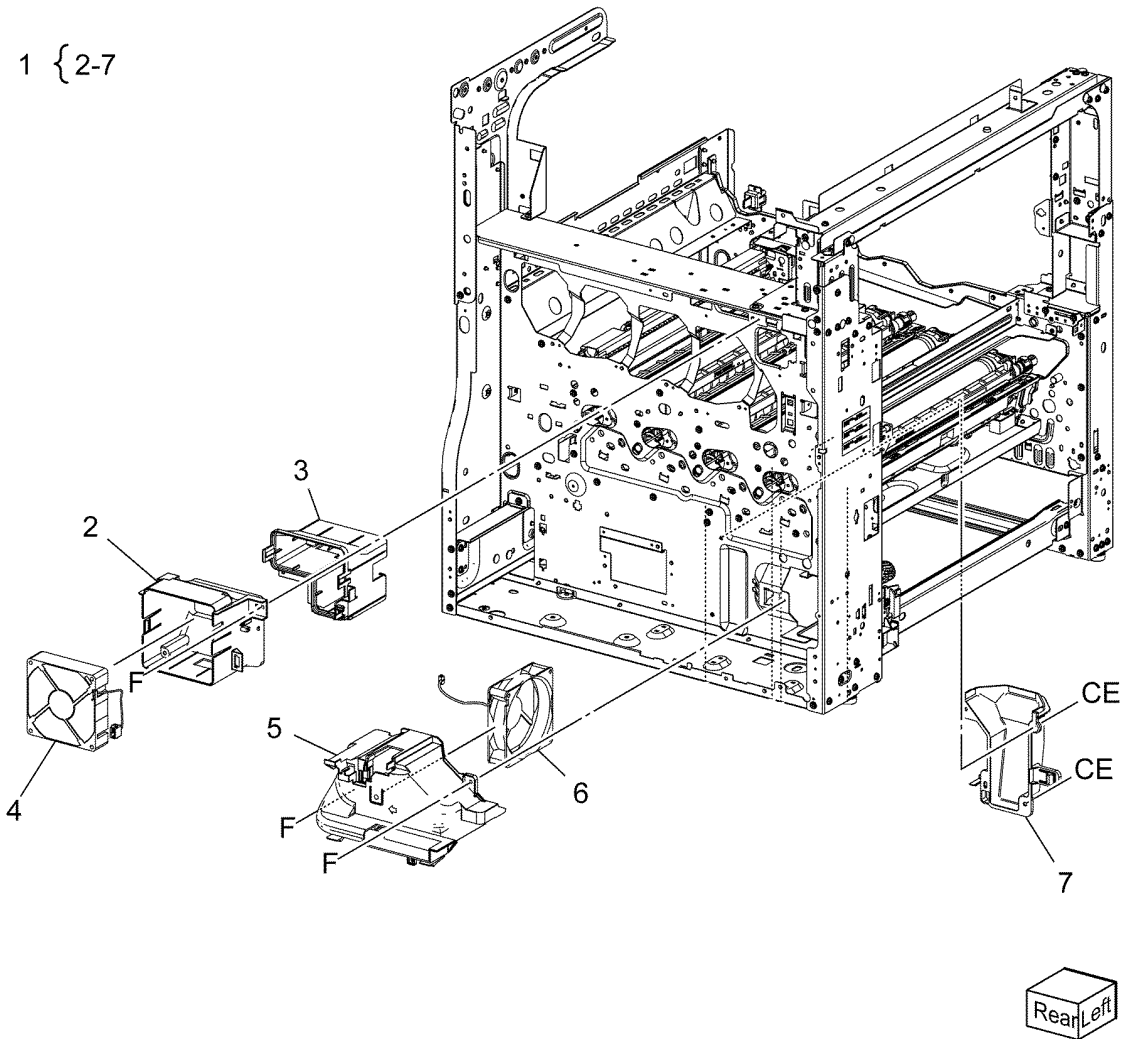
PL 40.10 Drive Components

Item	Part	Description
1	—	Main drive assembly (Not Spared)
2	—	Fusing COH drive assembly (Not Spared)
3	—	PH drive assembly (P/O PL 40.10 Item 14)
4	—	Motor drive assembly (Not Spared)
5	—	Spring (Not Spared)
6	—	Bearing (Not Spared)
7	—	Coupling (Not Spared)
8	—	Harness assembly drive (Not Spared)
9	127K72520	Fusing unit drive motor (MOT42-009)
10	127K72500	Main motor (MOT42-001) (REP 40.3)
11	—	Sub motor (MOT42-004) (Not Spared) (REP 40.4)
12	930W00123	YMC link sensor (Q12-200)
13	413W11860	Sleeve plastic bearing
14	—	Drive assembly spare (P/O PL 40.10 Item 15)
15	604K97081	SP drive assembly kit
16	—	YMC link solenoid (SOL42-010) (Not Spared)



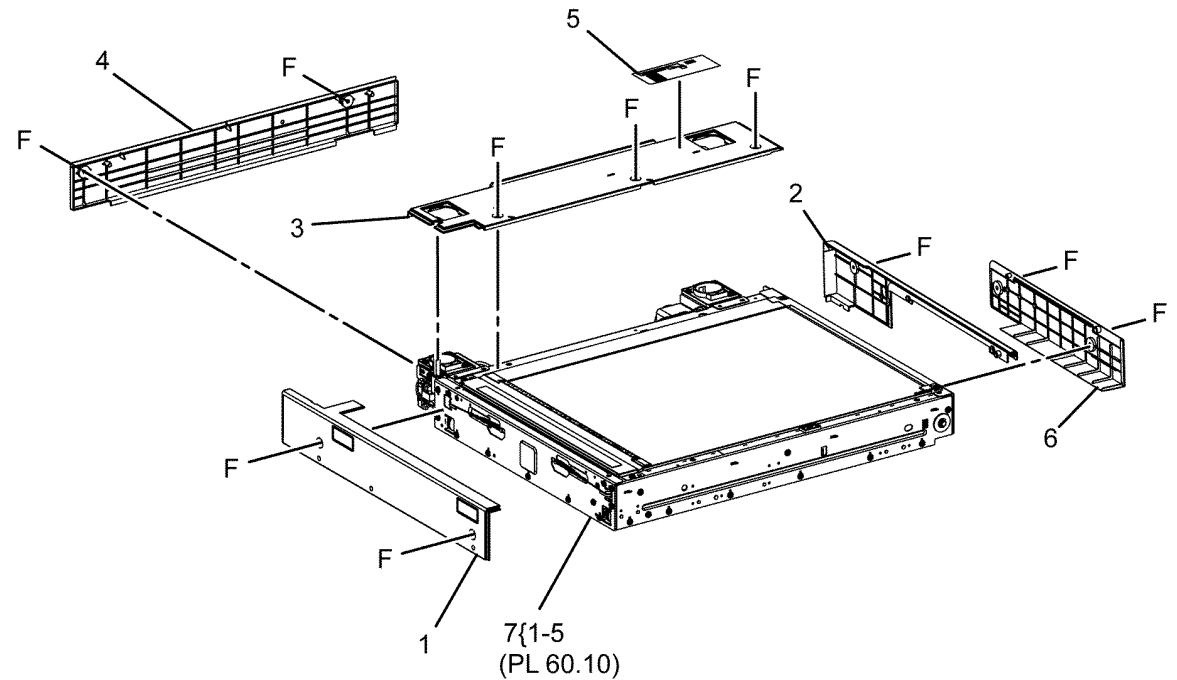
PL 40.15 NOHAD

Item	Part	Description
1	—	Fuser fan duct assembly (Not Spared)
2	—	Rear duct fuser A (P/O PL 40.15 Item 1) (REP 10.4)
3	—	Rear duct fusing B (P/O PL 40.15 Item 1) (REP 10.6)
4	127K74080	Fuser unit exhaust fan (MOT42-050) (REP 10.5)
5	—	Rear duct marking (P/O PL 40.15 Item 1)
6	127K53050	Marking fan (MOT42-052)
7	—	Front duct marking (P/O PL 40.15 Item 1)



PL 60.05 IIT Covers

Item	Part	Description
1	—	Left cover (P/O PL 60.05 Item 7)
2	—	Right cover (white) (P/O PL 60.05 Item 7)
3	—	Top cover (P/O PL 60.05 Item 7)
4	—	Rear cover (P/O PL 60.05 Item 7)
5	—	Caution N label (P/O PL 60.05 Item 7)
6	—	Right cover (blue)
7	062K27502	Scanner (IIT) assembly



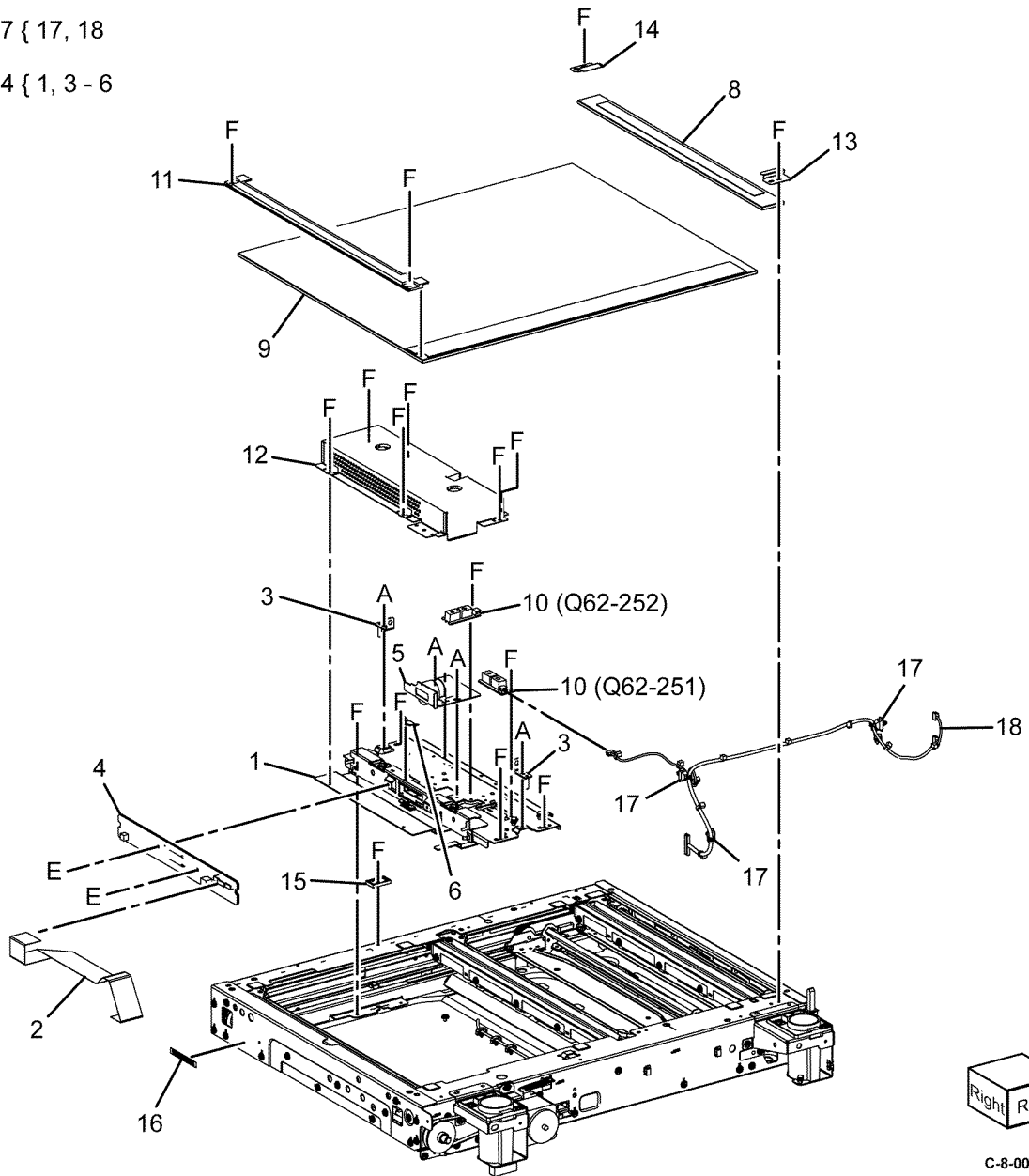
C-8-0046-A

PL 60.10 CCD Lens Assembly/ Document Glass (C7030F)

Item	Part	Description
1	—	Base plate assembly (P/O PL 60.10 Item 24)
2	952K20511	CCD FFC contact cable assembly
3	—	Pin assembly (P/O PL 60.10 Item 24)
4	—	CCD assembly (P/O PL 60.10 Item 24)
5	—	CCD lens assembly (P/O PL 60.10 Item 24) (REP 60.2, ADJ 60.6)
6	—	Conductor (P/O PL 60.10 Item 24)
7	952K33890	Sensor harness assembly
8	090K93320	CVT glass
9	090K93580	Document glass (REP 60.1)
10	130K64150	APS sensor 1 (Q62-251)/ APS sensor 3 (Q62-252)
11	815E58943	Right plate
12	—	Lens cover assembly (P/O PL 60.05 Item 7)
13	—	Rear glass support (P/O PL 60.05 Item 7)
14	—	Front glass support (P/O PL 60.05 Item 7)
15	—	Glass support (P/O PL 60.05 Item 7)
16	—	Data plate (P/O PL 60.05 Item 7)
17	—	Cable tie (P/O PL 60.10 Item 7)
18	—	Wire harness assembly (P/O PL 60.10 Item 7)
19	—	Not used
20	—	Not used
21	—	Not used
22	—	Not used
23	—	Not used
24	604K97090	Lens kit

7 { 17, 18

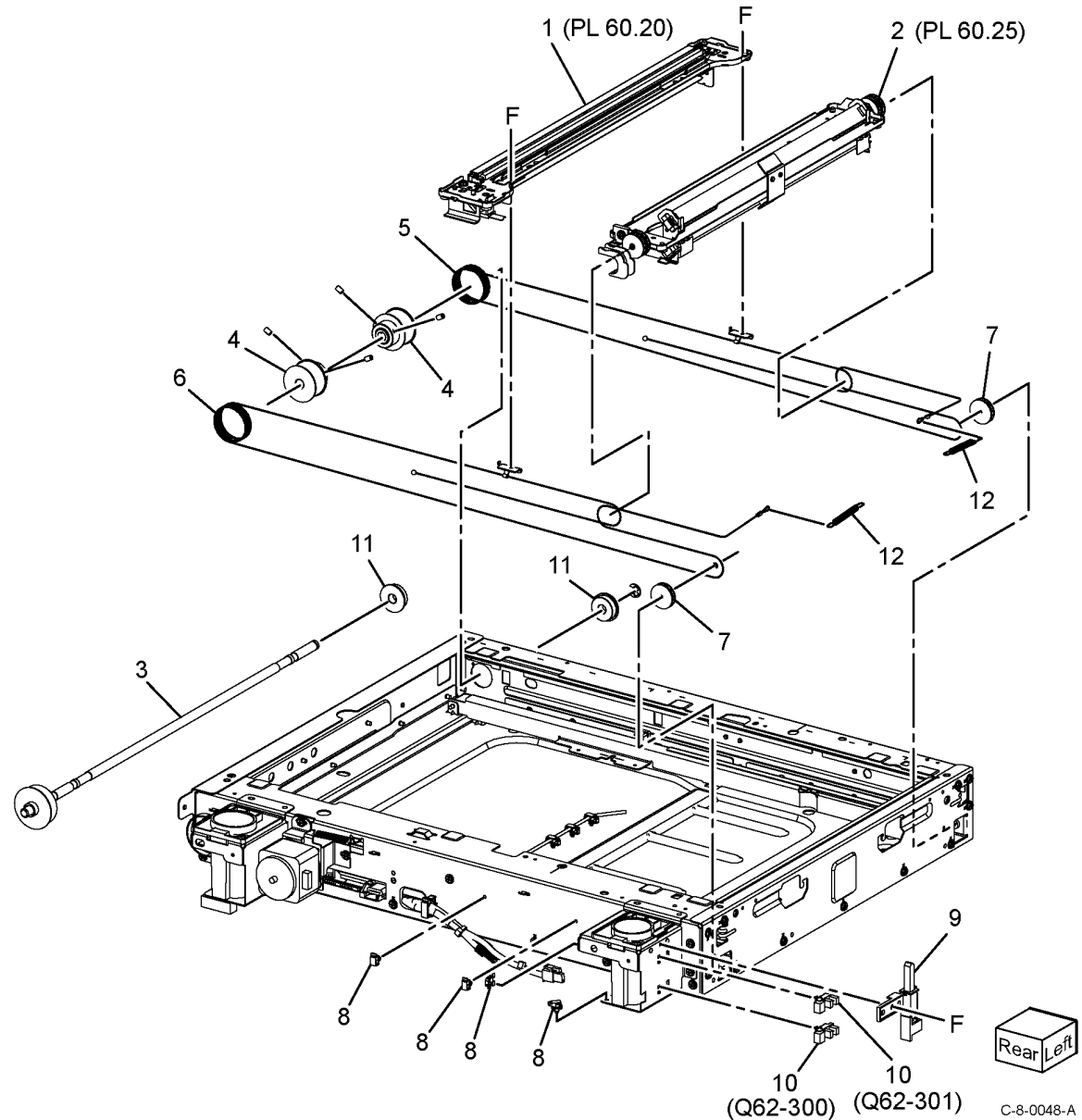
24 { 1, 3 - 6



PL 60.15 Full/Half Rate Carriage/ Carriage Cable (C7030F)

Item	Part	Description
1	041K96680	Full rate carriage (REF: PL 60.20) (See NOTE) (ADJ 60.1)
2	041K96431	Half rate carriage (REF: PL 60.25) (ADJ 60.1)
3	—	Capstan shaft (P/O PL 60.05 Item 7)
4	—	Capstan pulley (P/O PL 60.05 Item 7)
5	—	Front carriage cable (P/O PL 60.05 Item 7) (REP 60.3)
6	—	Rear carriage cable (P/O PL 60.05 Item 7) (REP 60.3)
7	—	Pulley (P/O PL 60.05 Item 7)
8	—	Locking clamp (P/O PL 60.05 Item 7)
9	120K92581	Actuator assembly
10	930W00123	Platen angle sensor (Q62-301)/ Platen I/L sensor (Q62-300)
11	—	Bearing (P/O PL 60.05 Item 7)
12	—	Extension spring (P/O PL 60.05 Item 7)

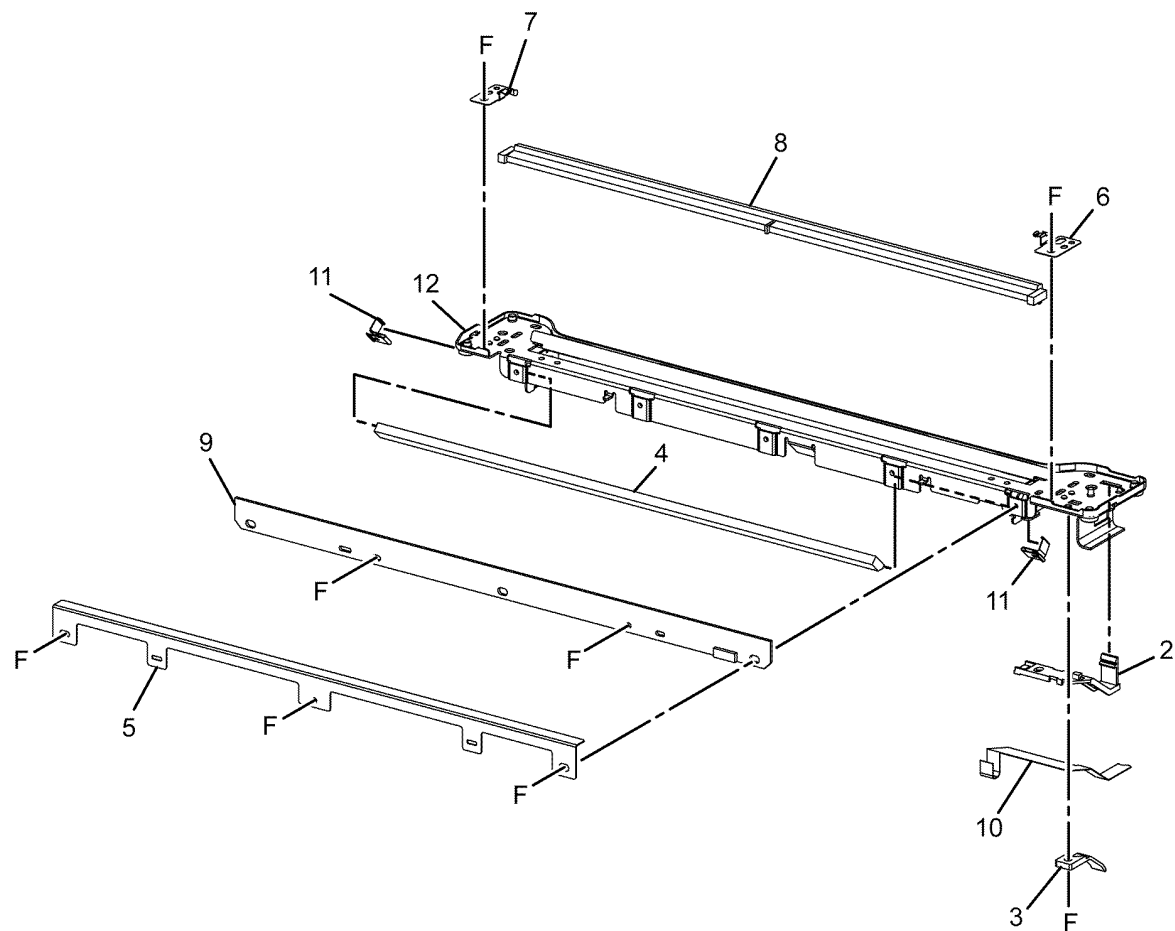
NOTE: HFSI. To reset the HFSI count, refer to dC135.



PL 60.20 Full Rate Carriage (C7030F)

Item	Part	Description
1	—	Full rate carriage assembly (REF: PL 60.15 Item 1) (See NOTE)
2	—	Cable guide A (P/O PL 60.20 Item 1)
3	—	Cable guide FR (P/O PL 60.20 Item 1)
4	—	Mirror 1 (P/O PL 60.20 Item 1)
5	—	LED bracket (P/O PL 60.20 Item 1)
6	—	Front spring guide (P/O PL 60.20 Item 1)
7	—	Rear spring guide (P/O PL 60.20 Item 1)
8	—	Light guide (P/O PL 60.20 Item 1) (REP 60.6)
9	960K61571	Lamp assembly (P/O PL 60.20 Item 1) (REP 60.4)
10	952K20520	FFC LED cable assembly (REP 60.5)
11	—	Mirror SL clip (P/O PL 60.20 Item 1)
12	—	Full rate carriage (P/O PL 60.20 Item 1)

NOTE: HFSI. To reset the HFSI counter, refer to dC135.

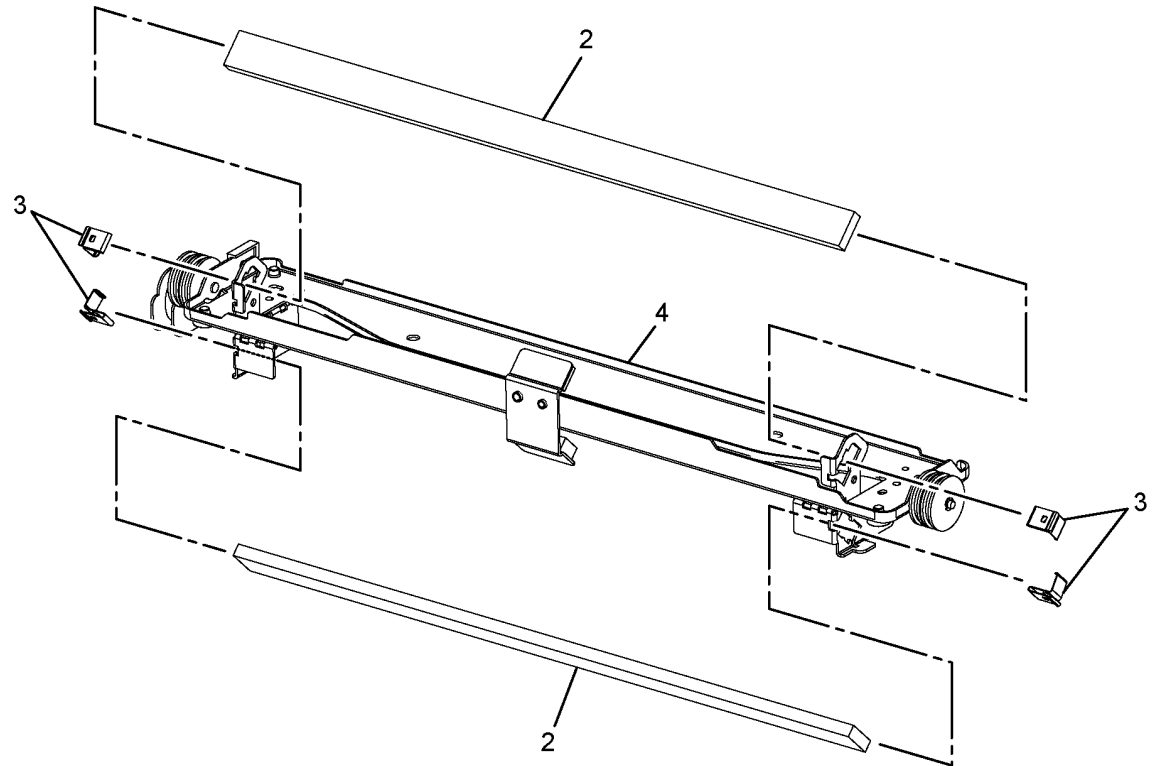


C-8-0049-A

PL 60.25 Half Rate Carriage (C7030F)

Item	Part	Description
1	—	Half rate carriage assembly (REF: PL 60.15 Item 2)
2	—	Mirror 2 (P/O PL 60.25 Item 1)
3	—	Mirror SI clip (P/O PL 60.25 Item 1)
4	—	Half rate carriage (P/O PL 60.25 Item 1)

1 { 2 - 4

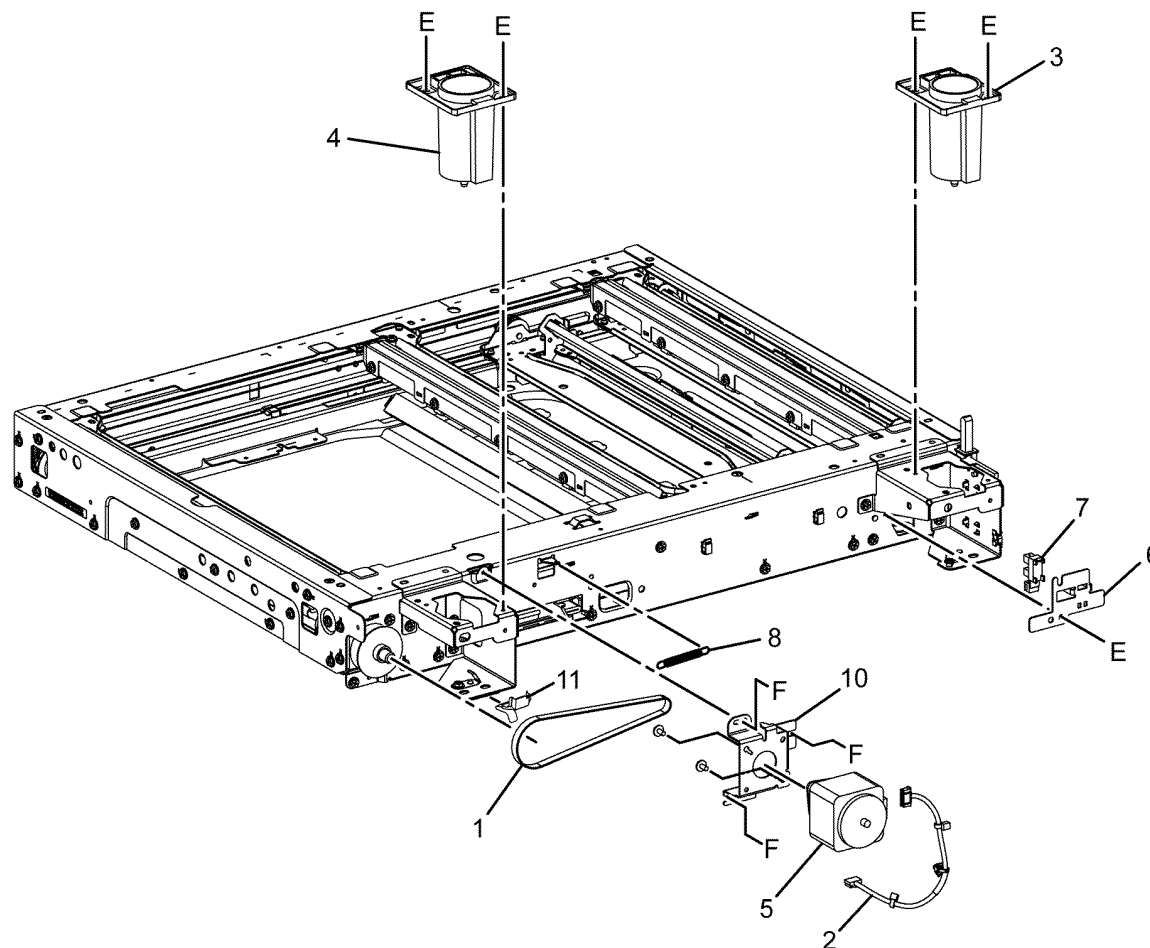


C-8-0050-A

PL 60.30 Motor/Transport PWB (C7030F)

9 { 5, 10

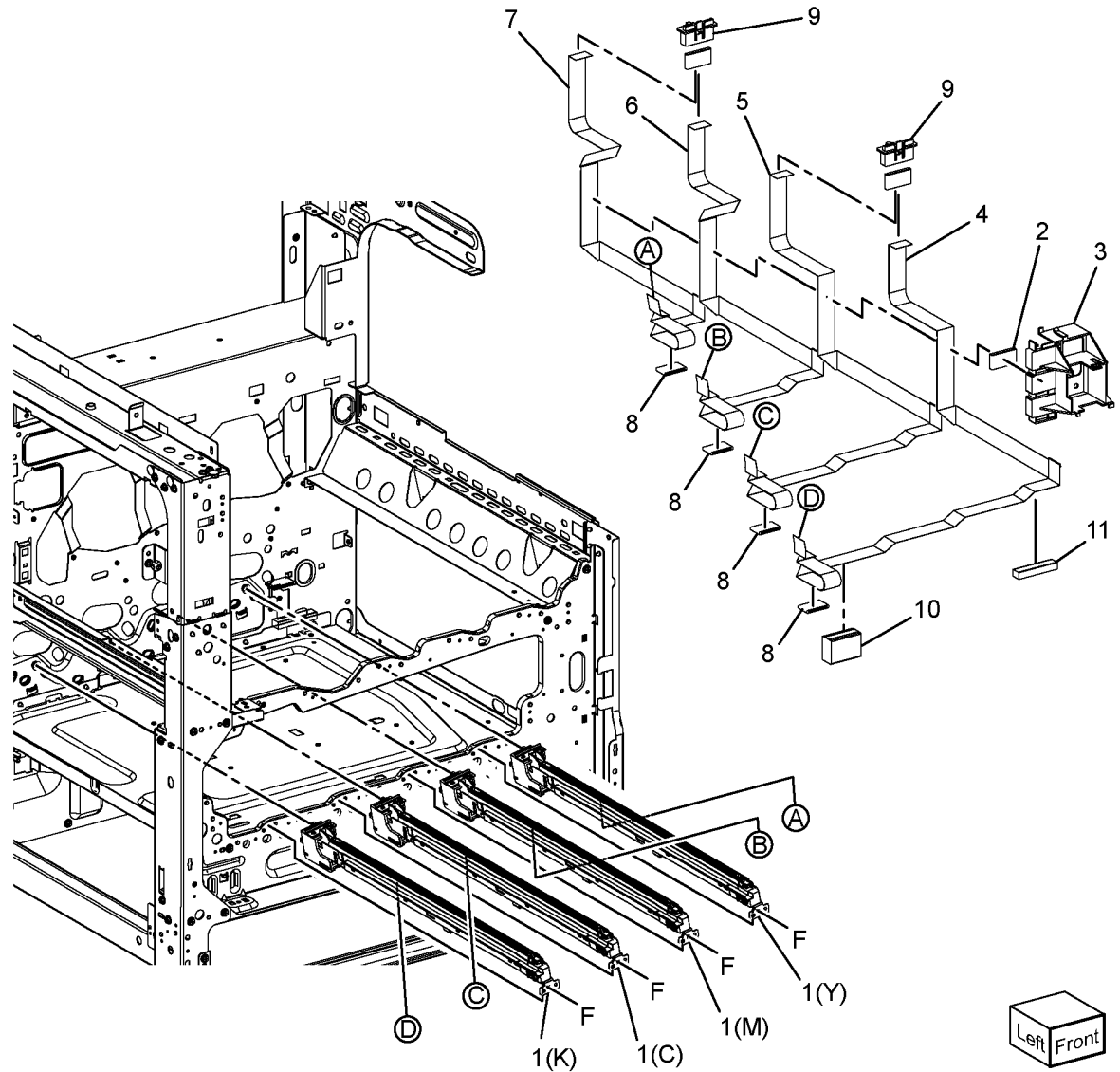
Item	Part	Description
1	—	Drive belt (Not Spared)
2	—	Scan motor harness (Not Spared)
3	—	Left counterbalance support (Not Spared)
4	—	Right counterbalance support (Not Spared)
5	—	IIT scan motor (MOT62-005) (P/O PL 60.30 Item 9)
6	—	Bracket (Not Spared)
7	930W00123	IIT registration sensor (Q62-212)
8	—	Extension spring (Not Spared)
9	127K76592	IIT scan motor assembly (REP 60.7)
10	—	Motor bracket (P/O PL 60.30 Item 9)
11	—	Rear cover ground clip (Not Spared)



C-8-0051-A

PL 60.35 LPH

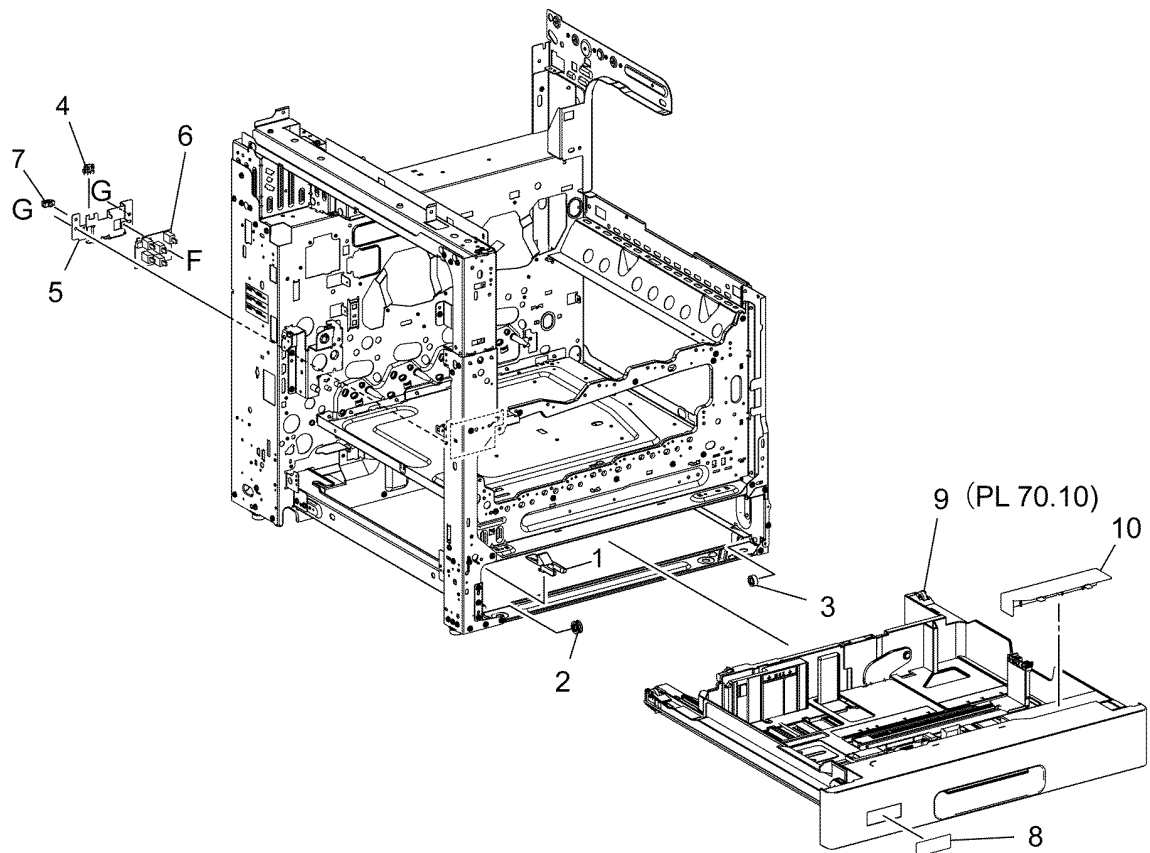
Item	Part	Description
1	930K03052	Print head assembly (REP 60.8)
2	—	Core ferrite (Not Spared)
3	—	FFC guide (Not Spared)
4	117E39650	FFC cable (K) (REP 60.9)
5	117E39660	FFC cable (C) (REP 60.9)
6	117E39670	FFC cable (M) (REP 60.9)
7	117E39680	FFC cable (Y) (REP 60.9)
8	—	Core ferrite (Not Spared)
9	—	FFC guard (Not Spared)
10	—	Gasket (Not Spared)
11	—	Gasket (Not Spared)



C-8-0052-A

PL 70.05 Tray 1

Item	Part	Description
1	003E75432	Stopper
2	059E10660	Left roller
3	059E08410	Right roller
4	—	Locking clamp (Not Spared)
5	—	Switch bracket (Not Spared)
6	110K12100	Tray 1 size sensor (REP 70.1)
7	—	Locking clamp (Not Spared)
8	—	Tray label (P/O PL 70.05 Item 9)
9	—	Tray 1 assembly (REF: PL 70.10 Item 1) (REP 70.11)
10	—	RAI cover (P/O PL 70.05 Item 9)

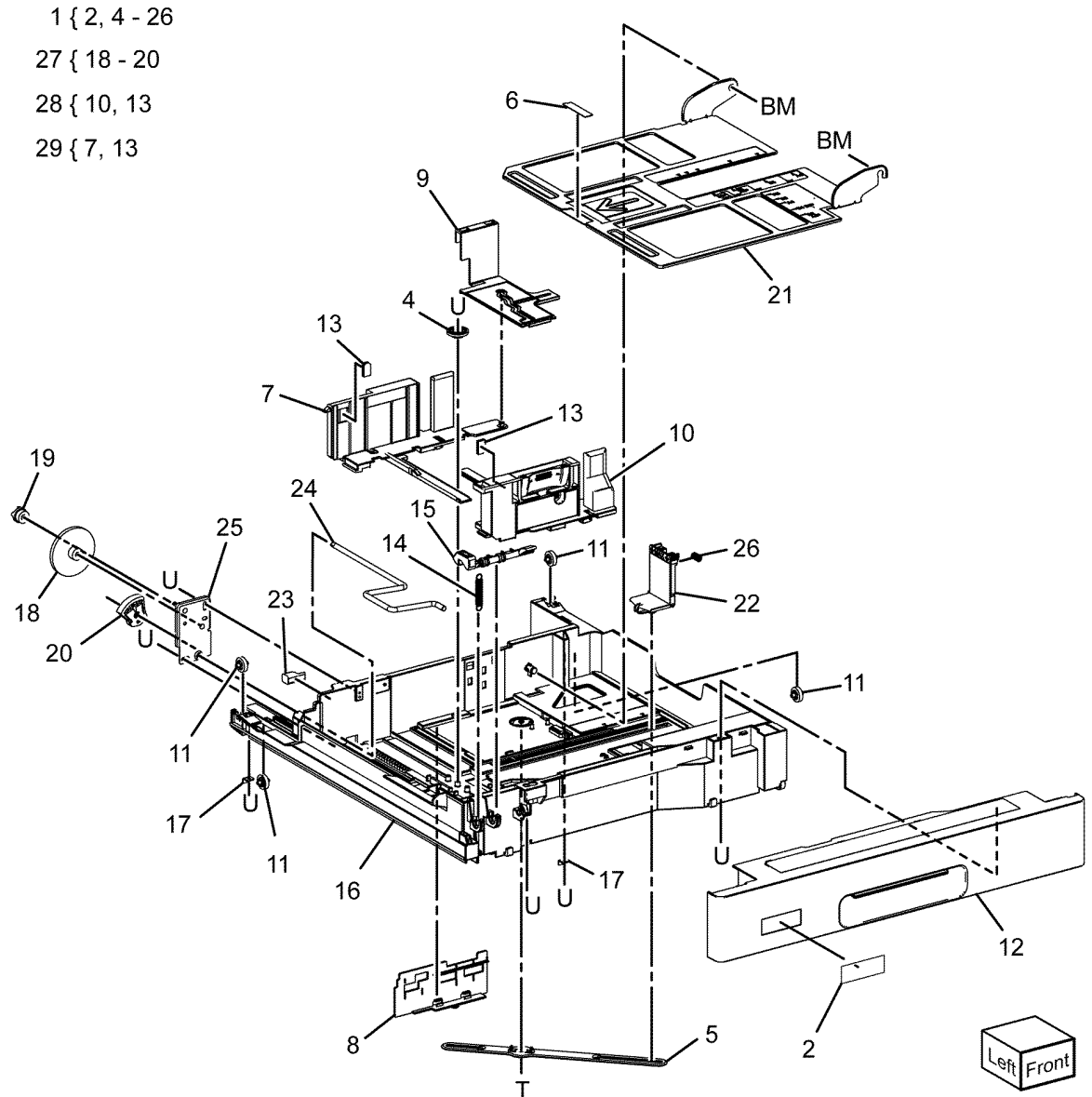


C-8-0089-A

PL 70.10 Tray Components

Item	Part	Description
1	607K01932	A3 tray kit (See NOTE)
2	—	Label (P/O PL 70.10 Item 1)
3	—	Not used
4	807E13521	Pinion
5	—	End link guide (P/O PL 70.10 Item 1)
6	—	Bottom pad assembly (P/O PL 70.10 Item 1)
7	—	Rear side guide (P/O PL 70.10 Item 1)
8	—	End A3 actuator (P/O PL 70.10 Item 1)
9	—	Side A3 actuator (P/O PL 70.10 Item 1)
10	—	Front side guide assembly (P/O PL 70.10 Item 1)
11	059E03523	Rear roller
12	—	Front cover assembly (P/O PL 70.10 Item 1)
13	819E04110	Pad
14	—	Spring (P/O PL 70.10 Item 1)
15	—	Latch (P/O PL 70.10 Item 1)
16	—	A3 cassette housing (P/O PL 70.10 Item 1)
17	—	Tray RH stopper (P/O PL 70.10 Item 1)
18	—	Gear 13/60 (P/O PL 70.10 Item 27)
19	—	Gear 13 (P/O PL 70.10 Item 27)
20	—	Gear Z60 assembly (P/O PL 70.10 Item 27)
21	—	Bottom A3 plate (P/O PL 70.10 Item 1)
22	038E44700	End guide
23	—	Gasket (P/O PL 70.10 Item 1)
24	—	Lift shaft (P/O PL 70.10 Item 1)
25	—	Rear plate assembly (P/O PL 70.10 Item 1)
26	—	Spring (P/O PL 70.10 Item 1)
27	604K20543	Gear kit
28	607K01941	Front side guide and pad
29	607K01951	Rear side guide and pad

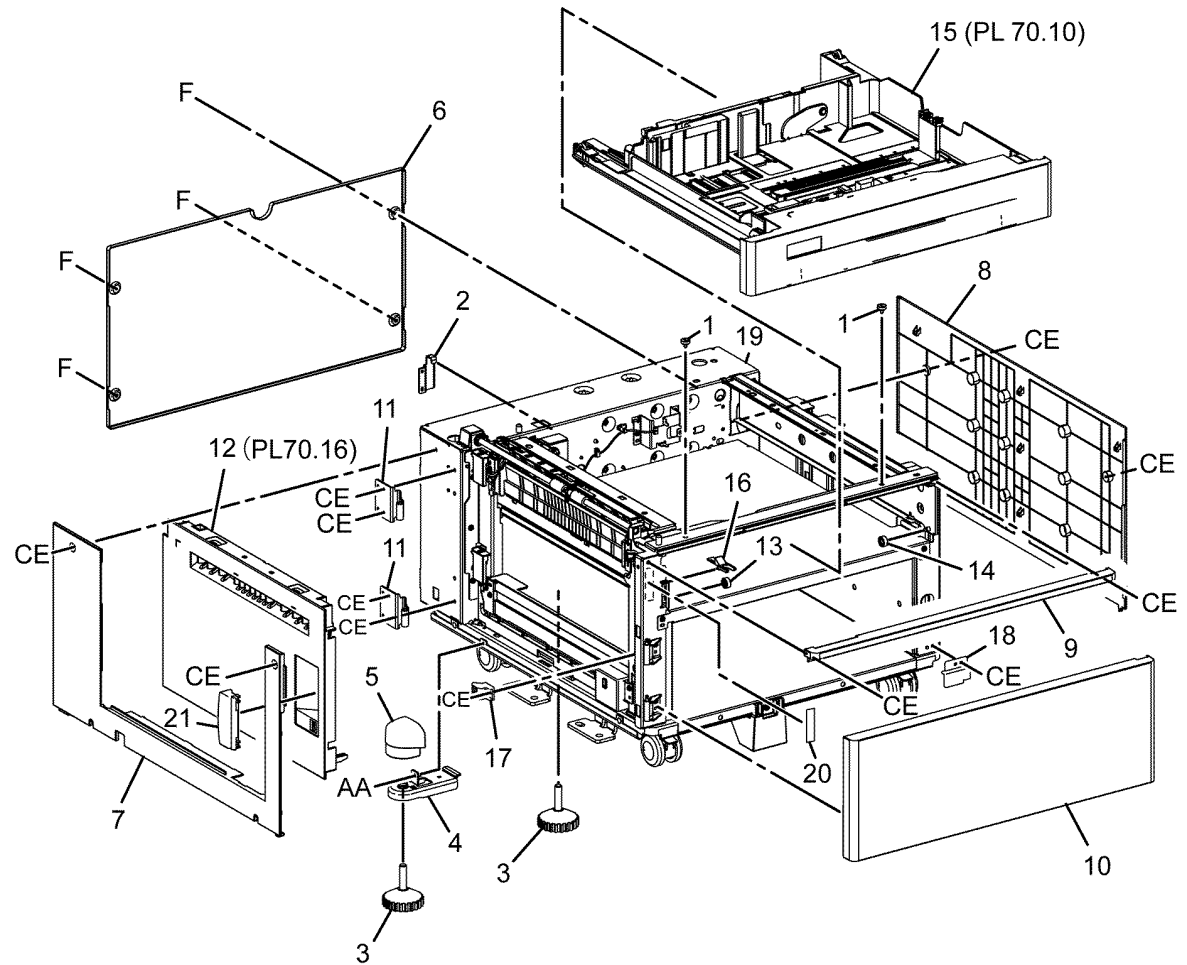
NOTE: Includes labels for trays 1, 2, 3 and 4.



C-8-0090-A

PL 70.15 1TM (1 of 3)

Item	Part	Description
1	—	Docking screw (Not Spared)
2	—	Joint bracket (Not Spared)
3	—	Foot adjuster assembly (Not Spared)
4	—	Left bracket (Not Spared)
5	—	Left cover (Not Spared)
6	—	Bracket cover (Not Spared)
7	—	Left cover (Not Spared)
8	—	Right cover (Not Spared)
9	—	MA Top cover (Not Spared)
10	848K94153	Front cover assembly
11	—	Hinge frame bracket (Not Spared)
12	—	Left cover assembly (P/O PL 70.16)
13	059E03500	Front left roller
14	059E08410	Front right roller
15	—	A3 tray assembly (P/O PL 70.10)
16	003E75431	Front TM stopper
17	—	LTH holder (Not Spared)
18	—	Foot right cover (Not Spared)
19	—	Frame assembly (Not Spared)
20	—	Label (Not Spared)
21	—	Handle (Not Spared)

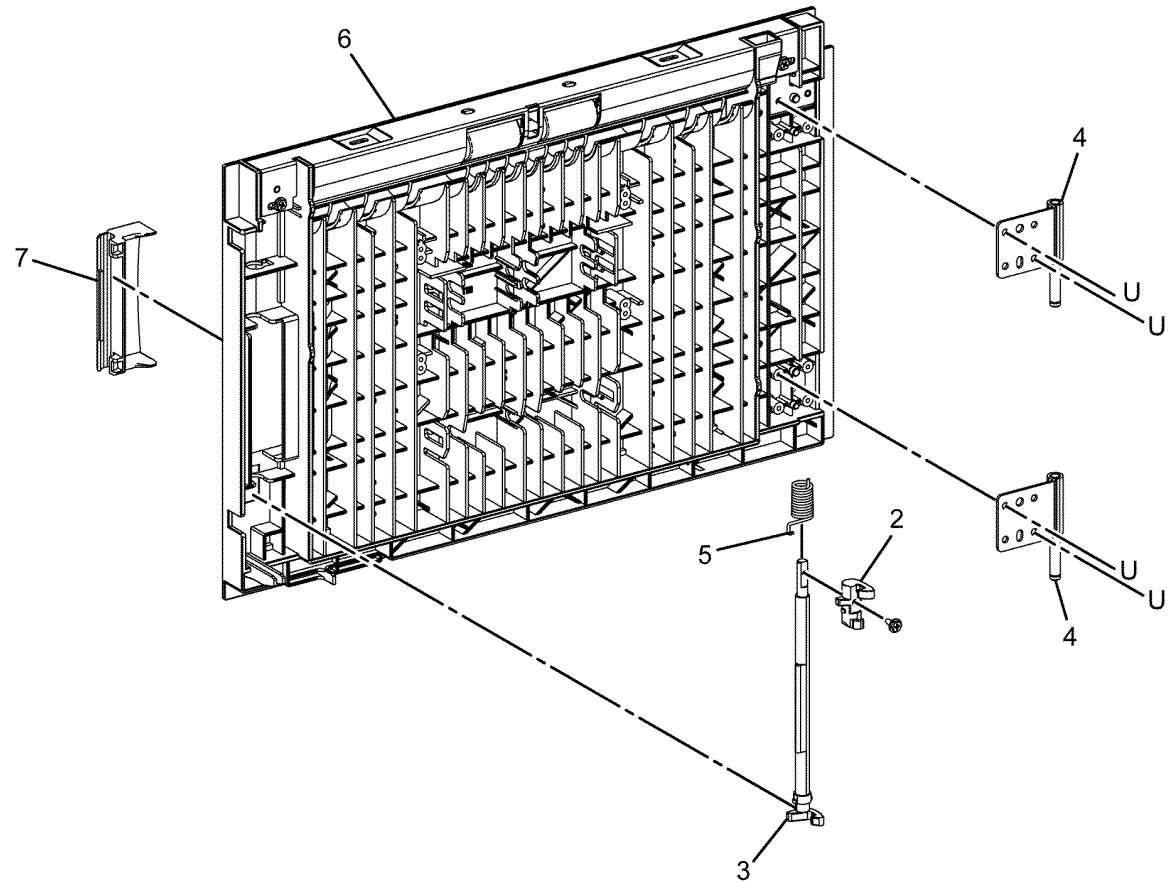


C-8-0091-A

PL 70.16 1TM (2 of 3)

Item	Part	Description
1	948K03930	Left cover assembly
2	—	Hook (P/O PL 70.16 Item 1)
3	—	Latch (P/O PL 70.16 Item 1)
4	—	Hinge bracket assembly (P/O PL 70.16 Item 1)
5	—	Spring (P/O PL 70.16 Item 1)
6	—	Cover (P/O PL 70.16 Item 1)
7	—	Handle (P/O PL 70.16 Item 1)

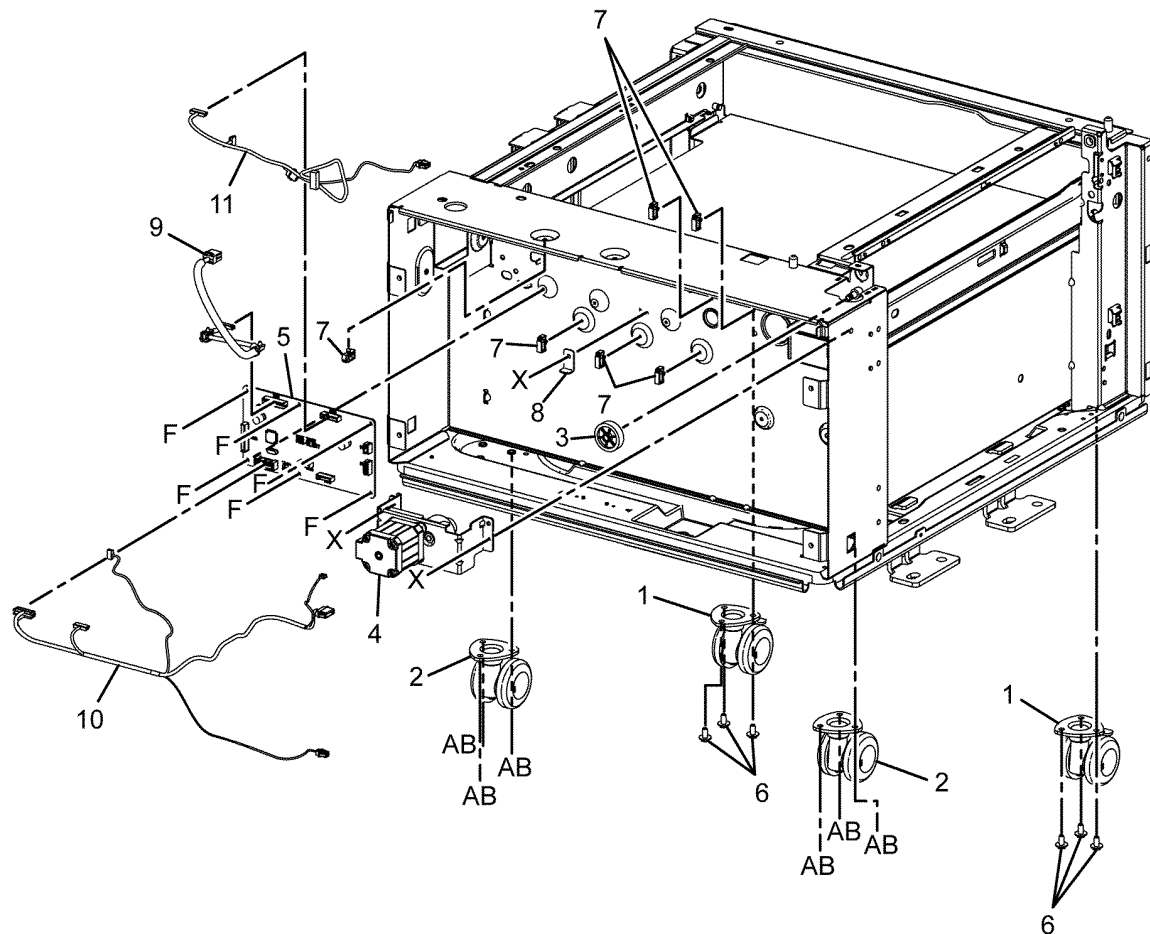
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C-8-0092-A

PL 70.17 1TM (3 of 3)

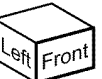
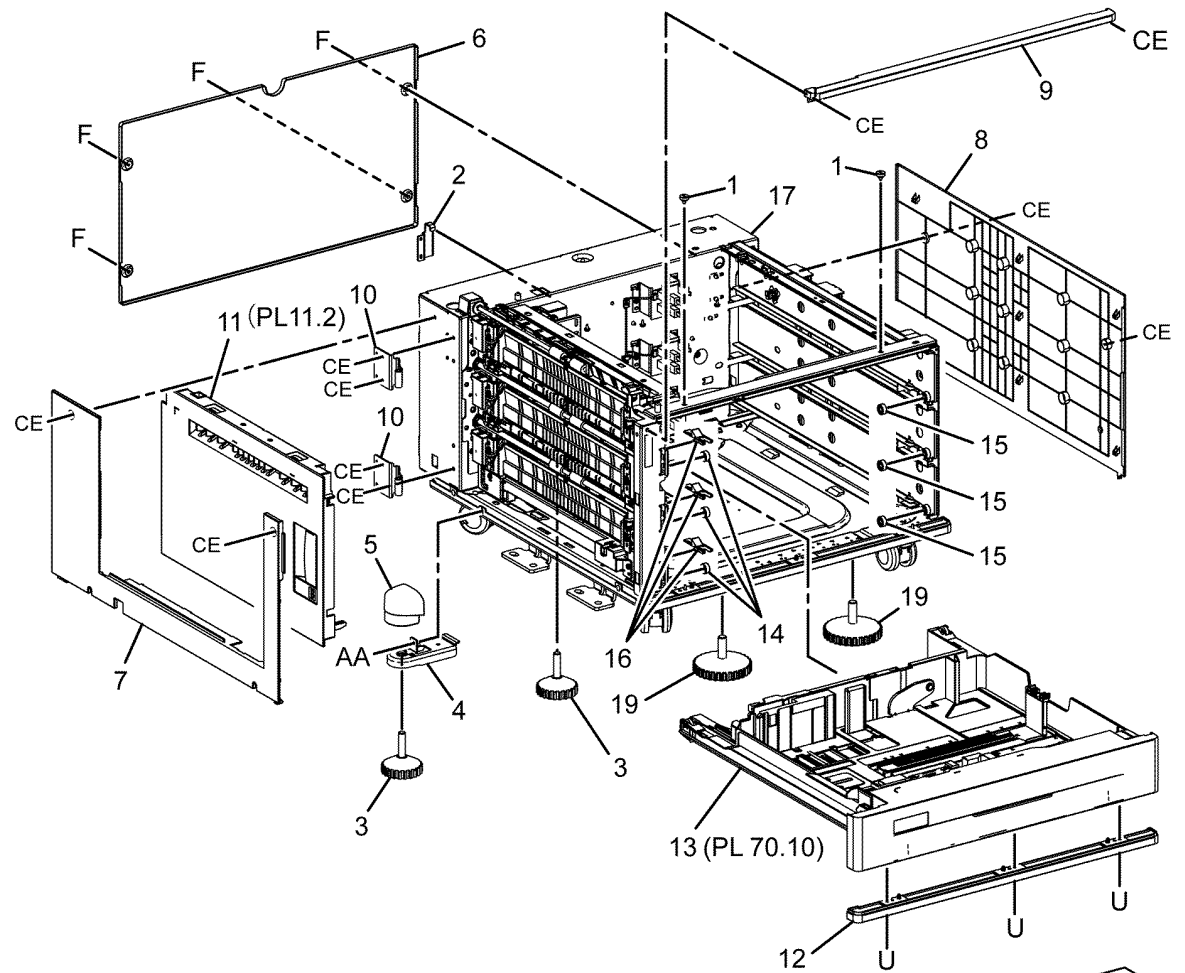
Item	Part	Description
1	417W41349	Front caster
2	417W41449	Rear caster
3	—	Gear 34T (Not Spared)
4	127K75990	Takeaway motor (MOT77-033) (REP 80.5)
5	960K85453	1TM PWB (REP 80.4)
6	—	Screw (Not Spared)
7	920W01211	Locking clamp
8	—	Bracket (Not Spared)
9	952K20151	Harness
10	952K20182	Harness
11	952K20192	Harness



C-8-0093-A

PL 70.20 3TM (1 of 4)

Item	Part	Description
1	—	Docking screw (Not Spared)
2	—	Joint bracket (Not Spared)
3	—	Rear adjustable foot (Not Spared)
4	—	Left bracket (Not Spared)
5	—	Bracket cover (Not Spared)
6	—	Rear cover (Not Spared)
7	—	Left cover (Not Spared)
8	—	Right cover (Not Spared)
9	—	MA top cover (Not Spared)
10	—	Hinge frame bracket (Not Spared)
11	—	Left cover assembly (Not Spared)
12	—	Foot MA cover (Not Spared)
13	—	A3 tray assembly (REF: PL 70.10)
14	059E03500	Front left roller
15	059E08410	Front right roller
16	003E75431	Front right TM stopper
17	—	Frame assembly (Not Spared)
18	—	Not used
19	—	Front adjustable foot (Not Spared)

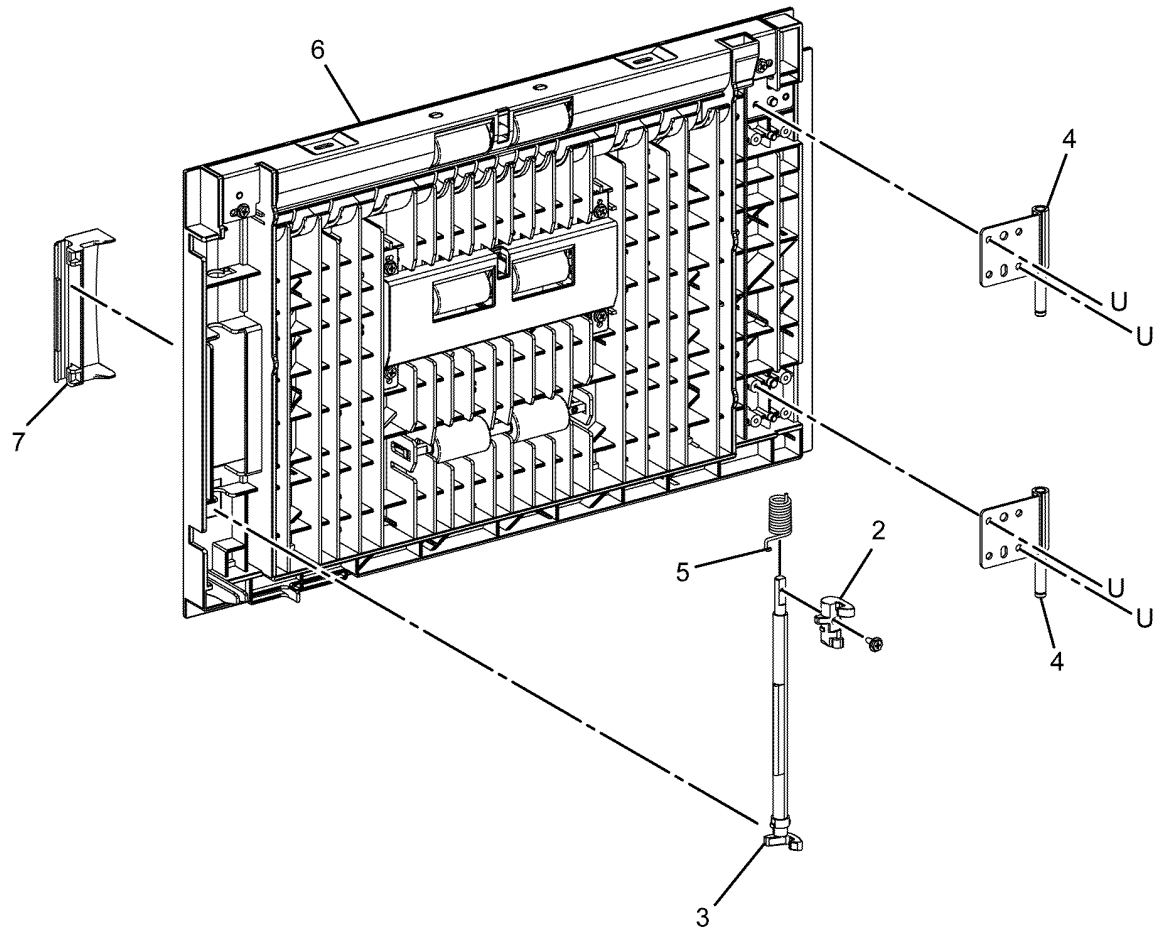


Y-8-0018-A

PL 70.21 3TM (2 of 4)

Item	Part	Description
1	948K03140	Left cover assembly
2	—	Hook (P/O PL 70.21 Item 1)
3	—	Latch (P/O PL 70.21 Item 1)
4	—	Hinge bracket assembly (P/O PL 70.21 Item 1)
5	—	Spring (P/O PL 70.21 Item 1)
6	—	LH cover (P/O PL 70.21 Item 1)
7	—	Handle (P/O PL 70.21 Item 1)

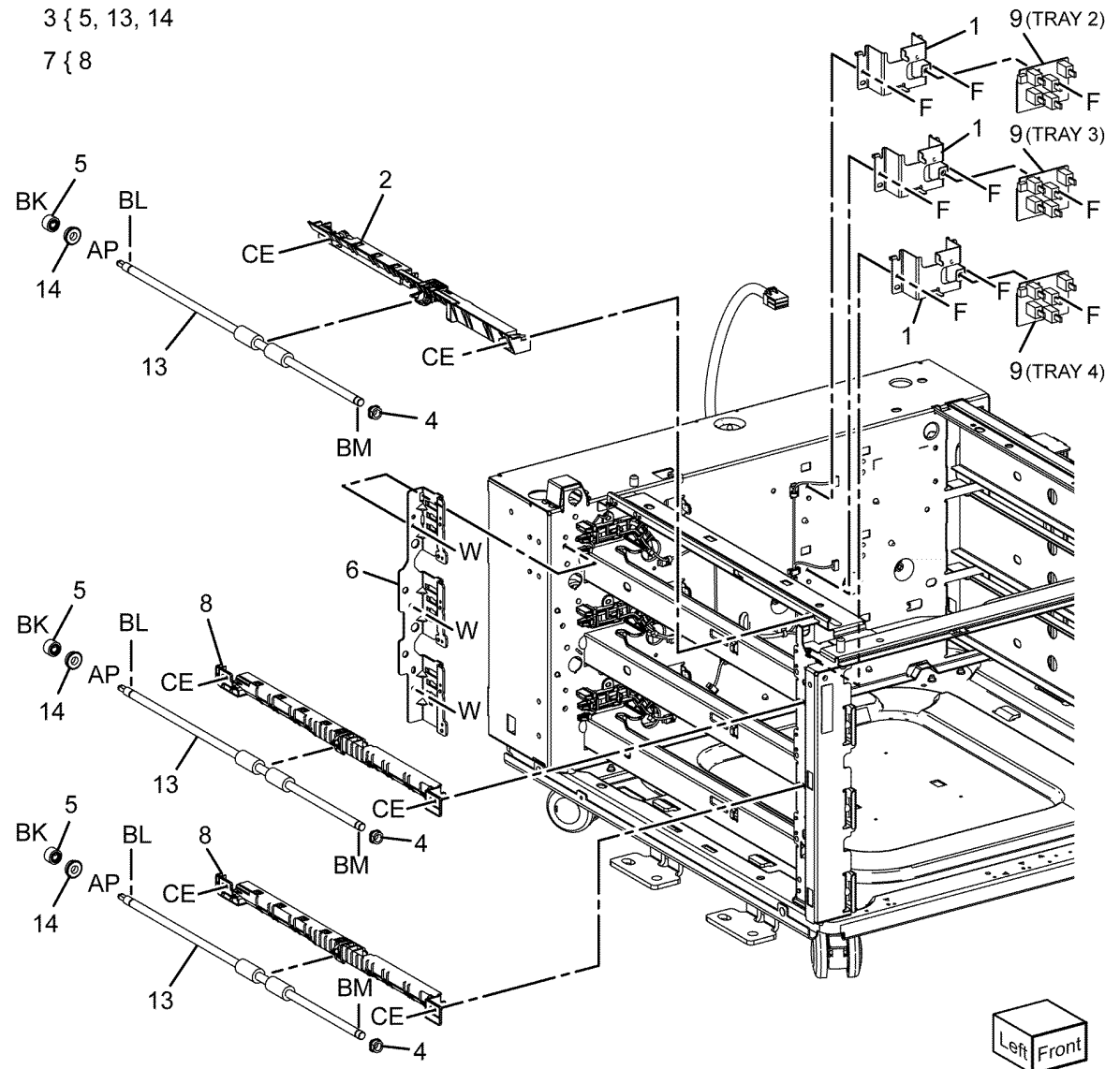
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C-8-0095-A

PL 70.22 3TM (3 of 4)

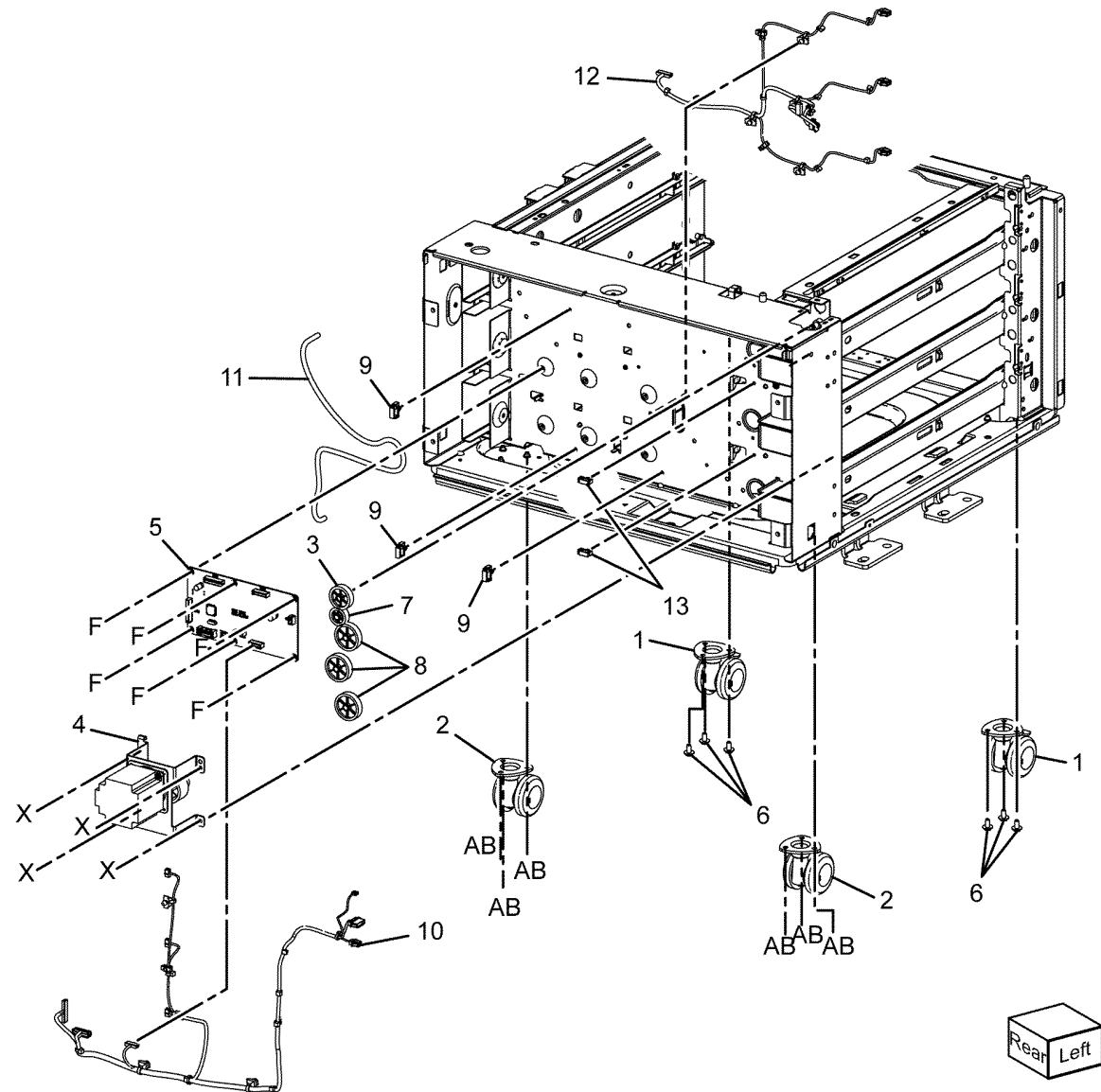
Item	Part	Description
1	—	Sensor bracket (Not Spared)
2	054K55730	Takeaway chute
3	859K03850	Takeaway roll assembly
4	013E46870	Bearing
5	—	Gear 16T (P/O PL 70.22 Item 3)
6	—	Bracket (Not Spared)
7	—	Feed chute assembly (Not Spared)
8	054E58810	Exit chute
9	110K17950	Tray 2 paper size sensor (Q72-104)/Tray 3 paper size sensor (Q73-104)/Tray 4 paper size sensor (Q74-104)
10	—	Not used
11	—	Not used
12	—	Not used
13	—	Takeaway roll (P/O PL 70.22 Item 3)
14	—	Bearing (P/O PL 70.22 Item 3)



C-8-0096-A

PL 70.23 3TM (4 of 4)

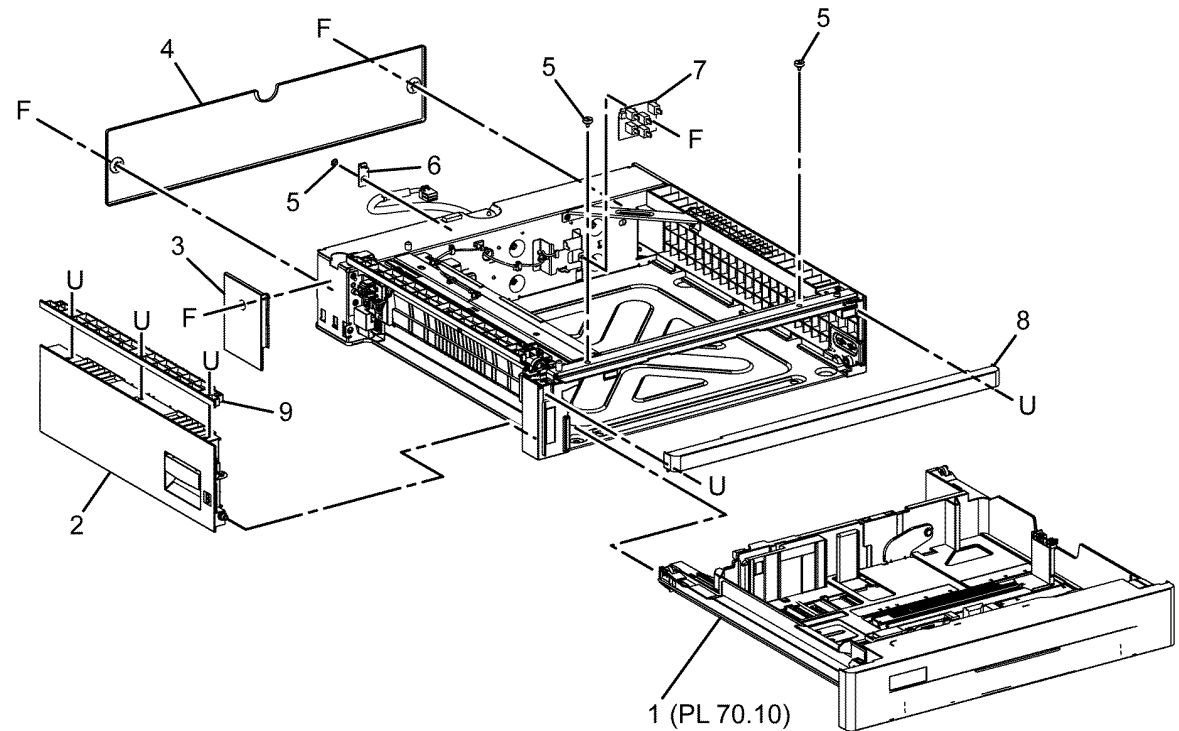
Item	Part	Description
1	417W41349	Front caster
2	417W41449	Rear caster
3	807E20700	Gear 34T
4	127K72691	Takeaway motor (MOT77-033) (REP 80.11)
5	960K85443	3TM PWB (REP 80.10)
6	—	Screw (Not Spared)
7	807E20710	Gear 26T
8	807E20720	Gear 39T
9	920W01211	Locking clamp
10	952K20130	Harness
11	—	Harness (Not Spared)
12	—	Harness (Not Spared)
13	920W01210	Locking clamp



C-8-0097-A

PL 70.25 STM (1 of 4)

Item	Part	Description
1	—	A3 tray assembly (REF: PL 70.10)
2	—	Left cover assembly (Not Spared)
3	—	Left cover (Not Spared)
4	—	Rear cover (Not Spared)
5	—	Docking screw (Not Spared)
6	—	Docking bracket (Not Spared)
7	110K17950	Paper size sensor
8	—	MA top cover (Not Spared)
9	—	Chute (Not Spared)

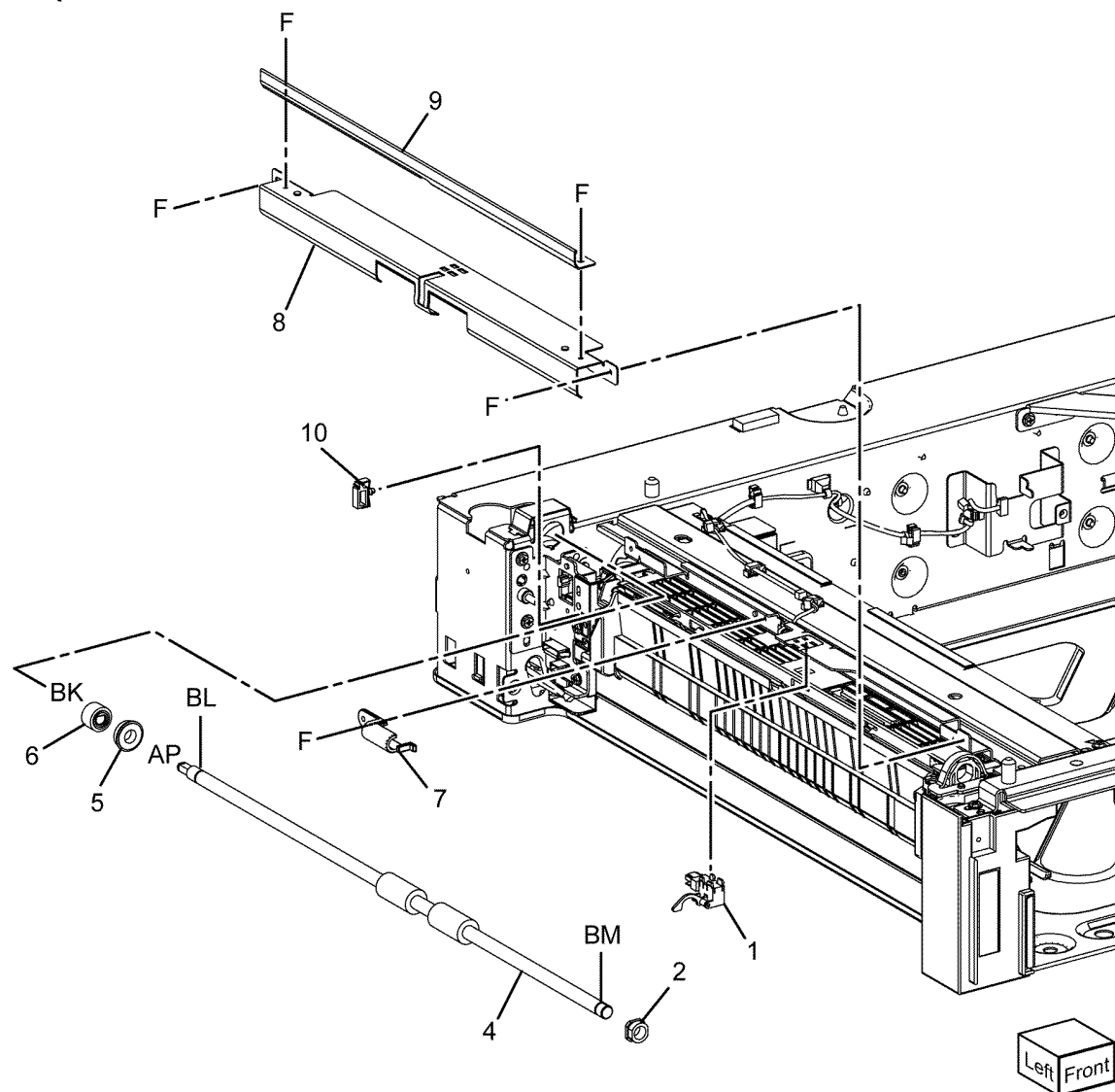


C-8-0098-A

PL 70.26 STM (2 of 4)

Item	Part	Description
1	130K64121	Tray 2 feed out sensor (Q72-103)
2	413W11860	Bearing
3	059K86600	Takeaway roll assembly
4	—	Roller assembly (P/O PL 70.26 Item 3)
5	—	Bearing (P/O PL 70.26 Item 3)
6	—	Gear 16T (P/O PL 70.26 Item 3)
7	—	LH harness guide (Not Spared)
8	—	Takeaway chute (Not Spared)
9	—	Exit chute (Not Spared)
10	920W01209	Locking clamp

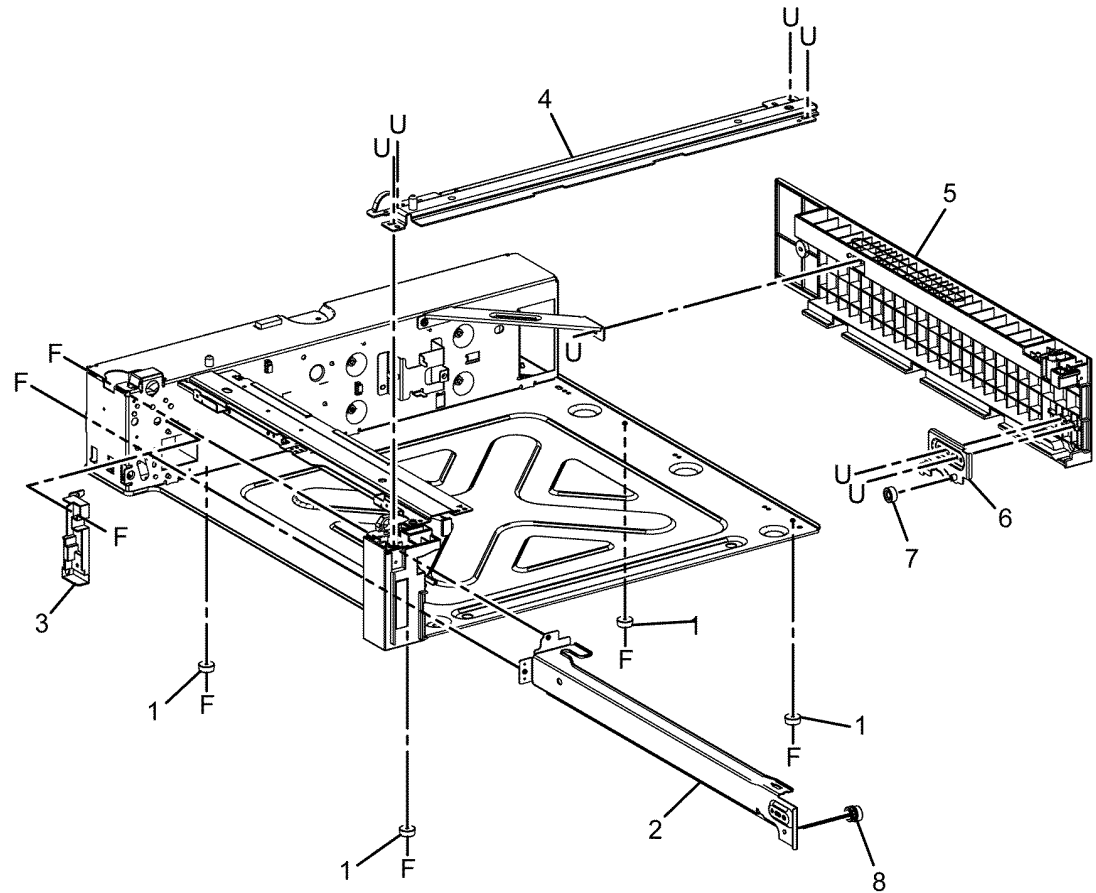
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C-8-0099-A

PL 70.27 STM (3 of 4)

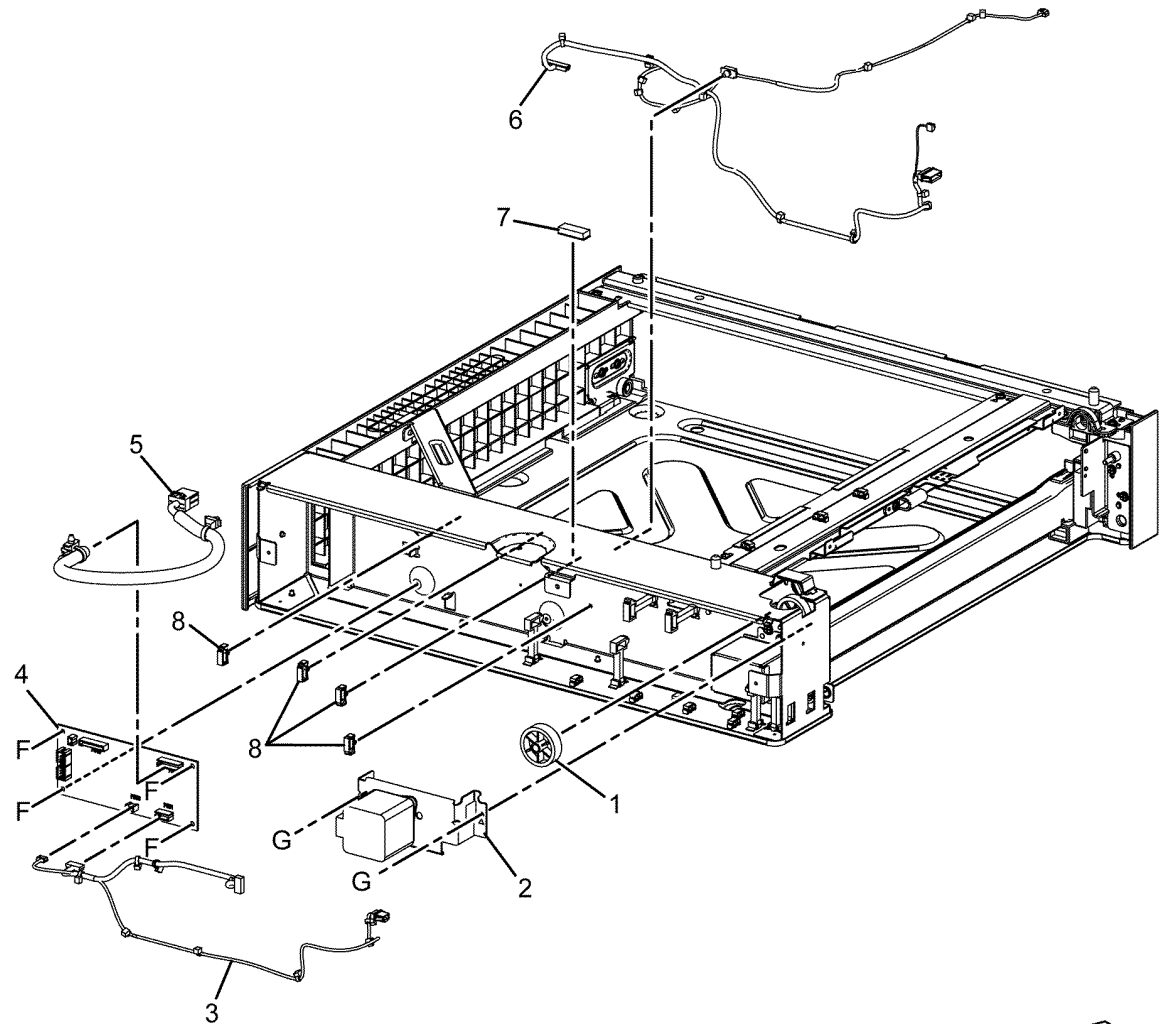
Item	Part	Description
1	—	Foot (Not Spared)
2	—	Left rail assembly (Not Spared)
3	—	Harness guide (Not Spared)
4	—	Top front frame assembly (Not Spared)
5	—	RH guide (Not Spared)
6	—	Right rail assembly (Not Spared)
7	059E08410	Front right roller
8	059E03500	Front left roller



C-8-0100-A

PL 70.28 STM (4 of 4)

Item	Part	Description
1	807E45050	Gear 65/20
2	049K28360	Takeaway motor (MOT77-033) (REP 80.14)
3	952K15720	Harness
4	607K04440	STM PWB (REP 80.13)
5	952K15700	Harness
6	952K15710	Harness
7	—	Gasket shield (Not Spared)
8	920W01210	Locking clamp

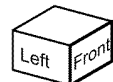
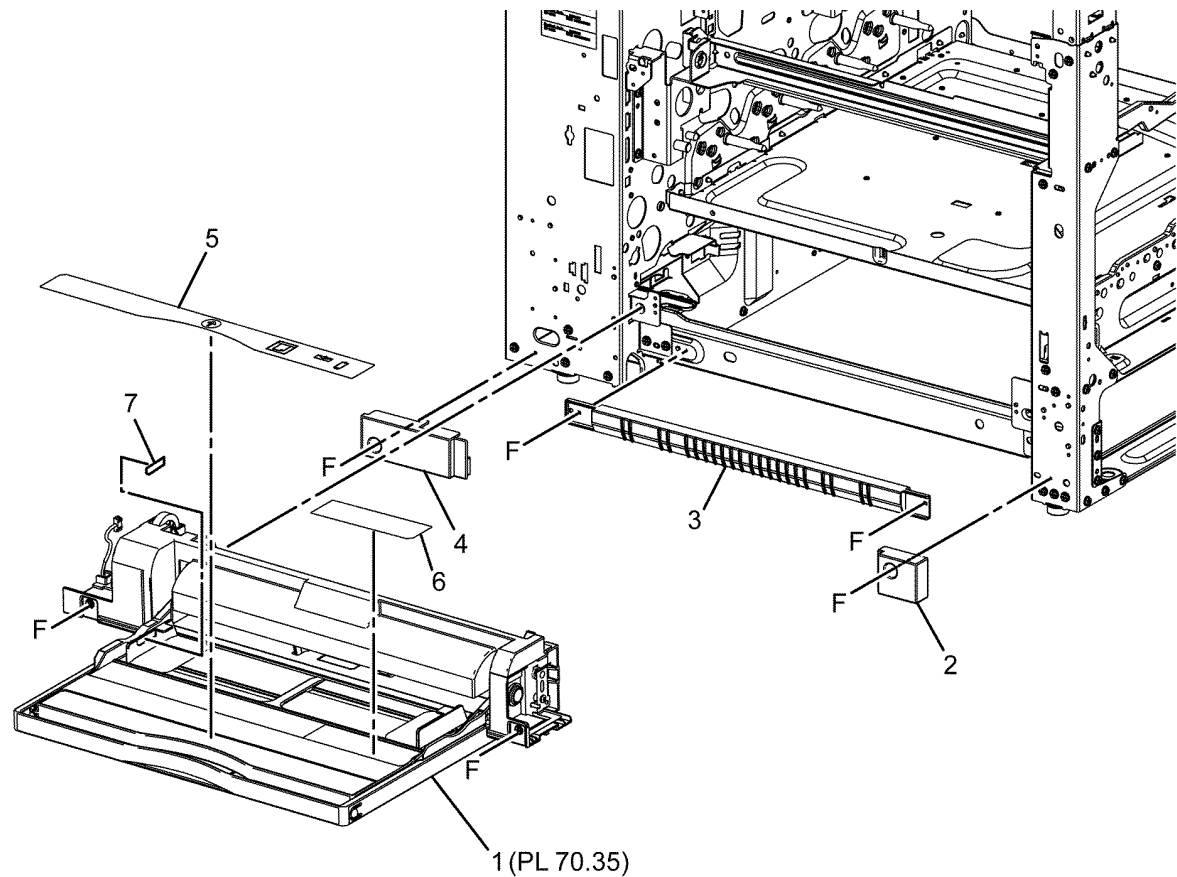


C-8-0101-A

PL 70.30 Bypass Tray

Item	Part	Description
1	—	Bypass tray (REF: PL 70.35) (REP 70.2)
2	—	Bypass tray front cover (Not Spared)
3	—	TM out chute (Not Spared)
4	—	Bypass tray right cover (Not Spared)
5	—	Bypass tray instruction label (P/O PL 70.30 Item 8)
6	—	Bypass tray size label (P/O PL 70.30 Item 8)
7	—	Max label (P/O PL 70.30 Item 8)
8	607K01965	Bypass tray assembly kit (Option)

8 { 1, 5 - 7

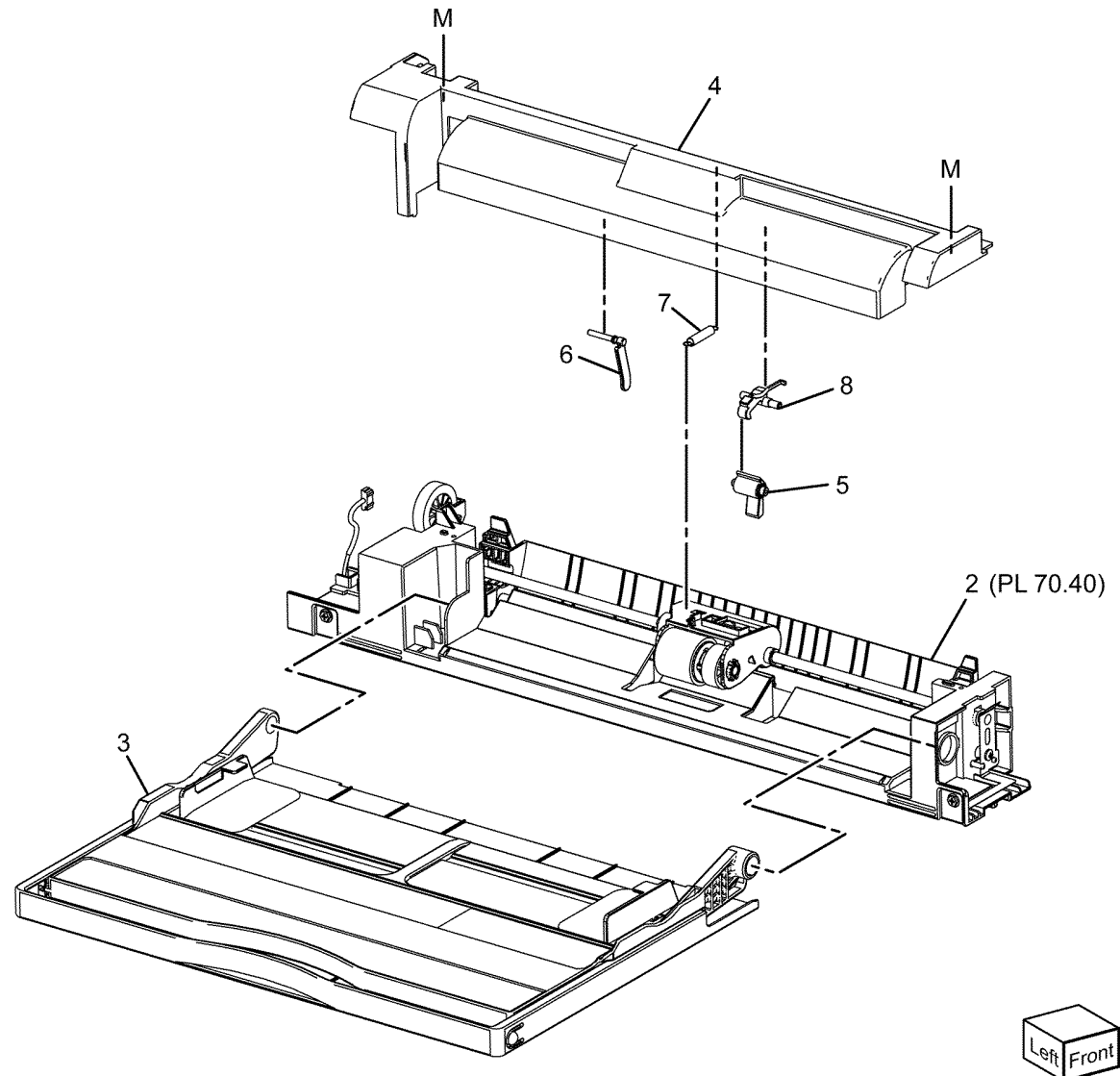


C-8-0065-A

PL 70.35 Bypass Tray Components

Item	Part	Description
1	—	Bypass tray feeder assembly (P/O PL 70.30 Item 8)
2	—	Bypass tray lower feeder assembly (REF: PL 70.40)
3	—	Bypass tray assembly (P/O PL 70.35 Item 1)
4	—	Upper frame (P/O PL 70.35 Item 1)
5	—	Paper stopper (P/O PL 70.35 Item 1)
6	—	No paper sensor actuator (P/O PL 70.35 Item 1)
7	—	Spring (P/O PL 70.35 Item 1)
8	—	Paper lock stopper (P/O PL 70.35 Item 1)

1 { 2 - 8

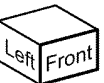
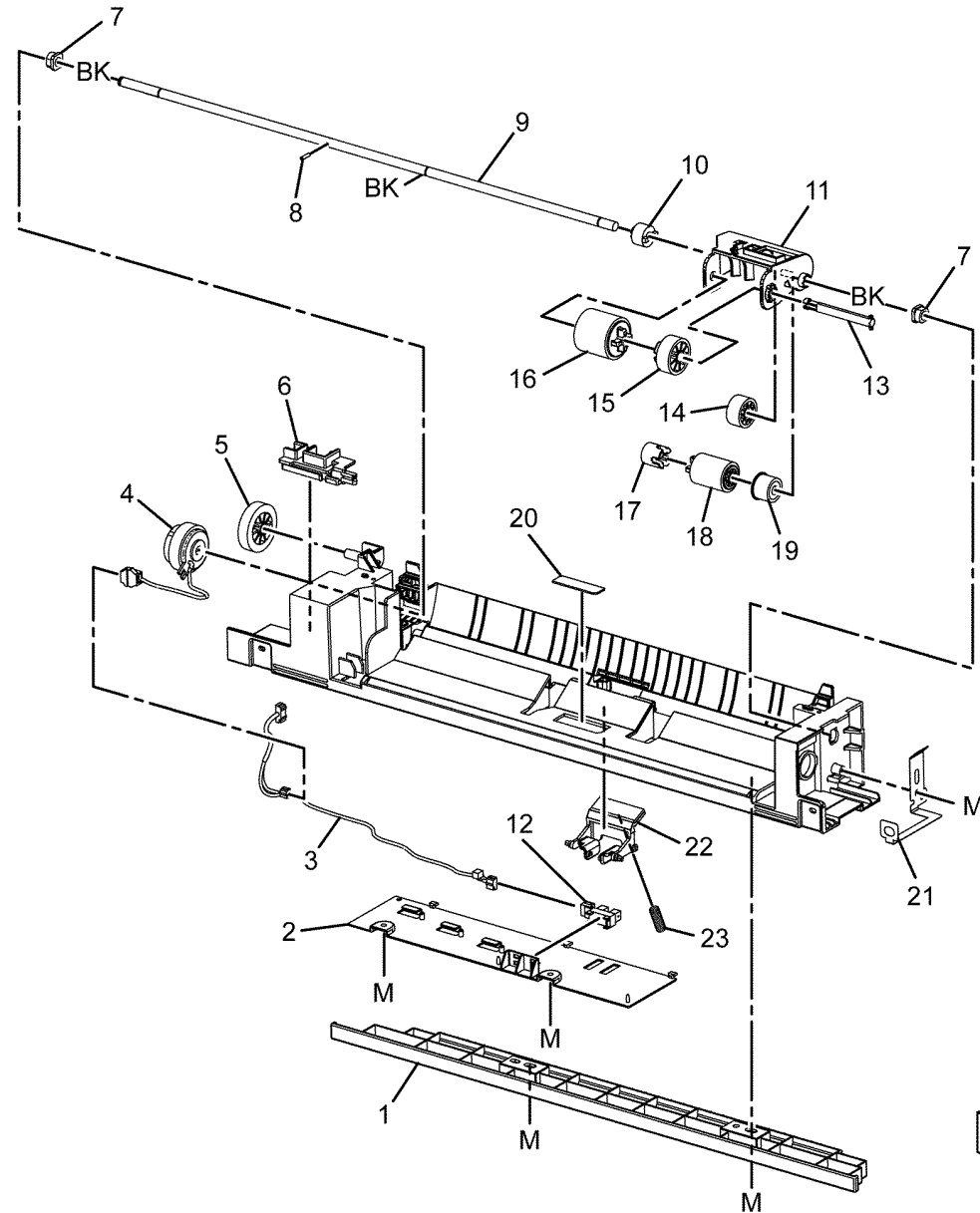


C-8-0102-A

PL 70.40 Bypass Tray Lower Feeder

Item	Part	Description
1	—	Bypass tray low chute (Not Spared)
2	—	Lower cover (Not Spared)
3	—	Bypass tray harness assembly (Not Spared)
4	121K56480	Bypass tray feed clutch (CL75-001)
5	—	Drive gear 22T (Not Spared)
6	—	Connector cover (Not Spared)
7	—	Bearing (Not Spared)
8	—	Pin (Not Spared)
9	—	Shaft (Not Spared)
10	—	Friction clutch assembly (Not Spared)
11	—	Nudger holder (Not Spared)
12	930W00123	Bypass tray no paper sensor (Q75-100)
13	—	Shaft (Not Spared)
14	—	Idler gear 37T (Not Spared)
15	—	Nudger gear 46T (Not Spared)
16	022K78481	Bypass tray nudger roll (See NOTE) (REP 80.16)
17	—	One way clutch (Not Spared)
18	022K77450	Feed roll (REP 80.16)
19	—	Feed gear 30T (Not Spared)
20	—	Pad (Not Spared)
21	—	Earth plate (Not Spared)
22	019K12820	Retard pad (See NOTE) (REP 80.17)
23	—	Spring (Not Spared)

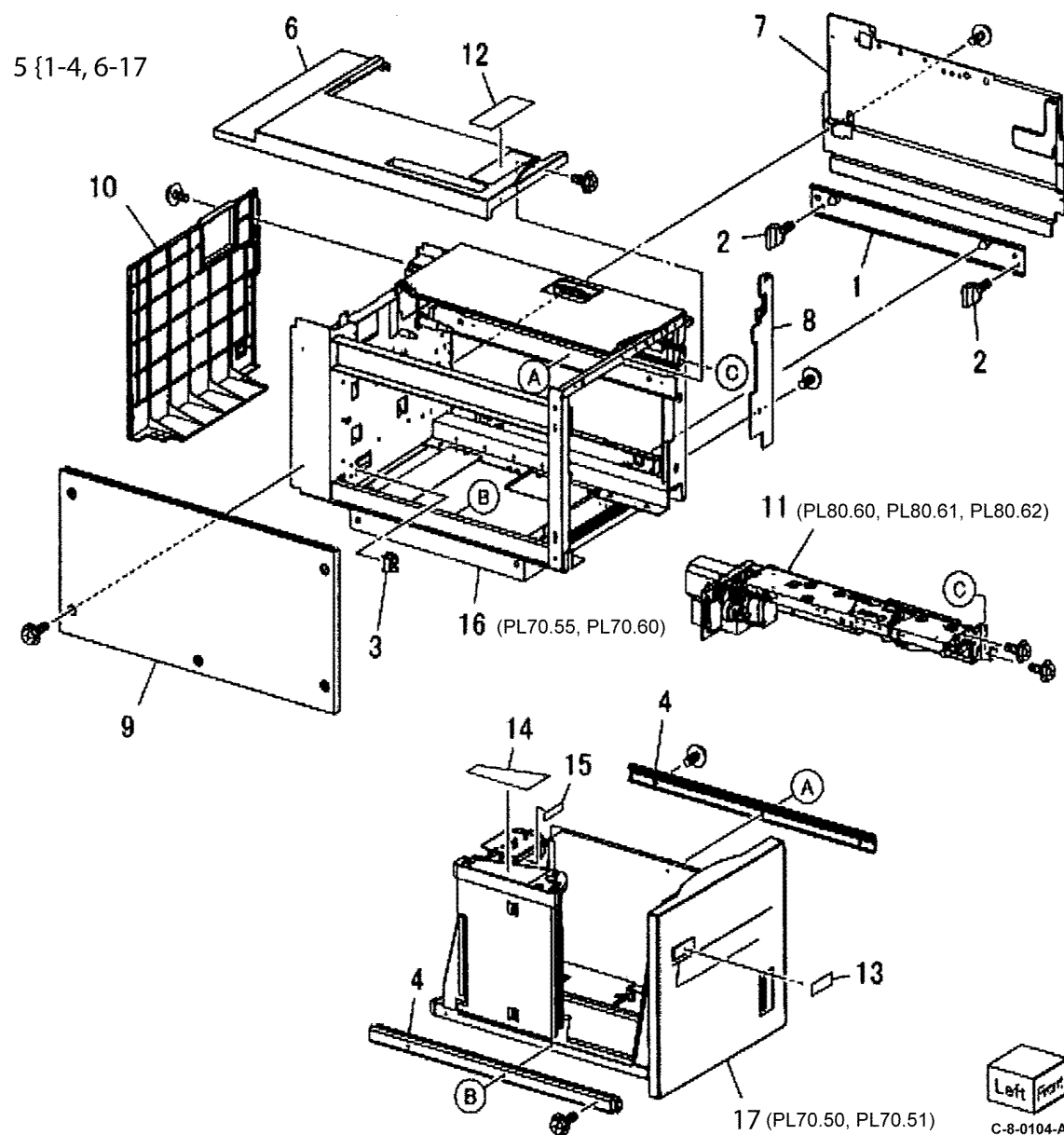
NOTE: HFSI. To reset the HFSI counter, refer to dC135.



C-8-0103-A

PL 70.45 HCF Assembly

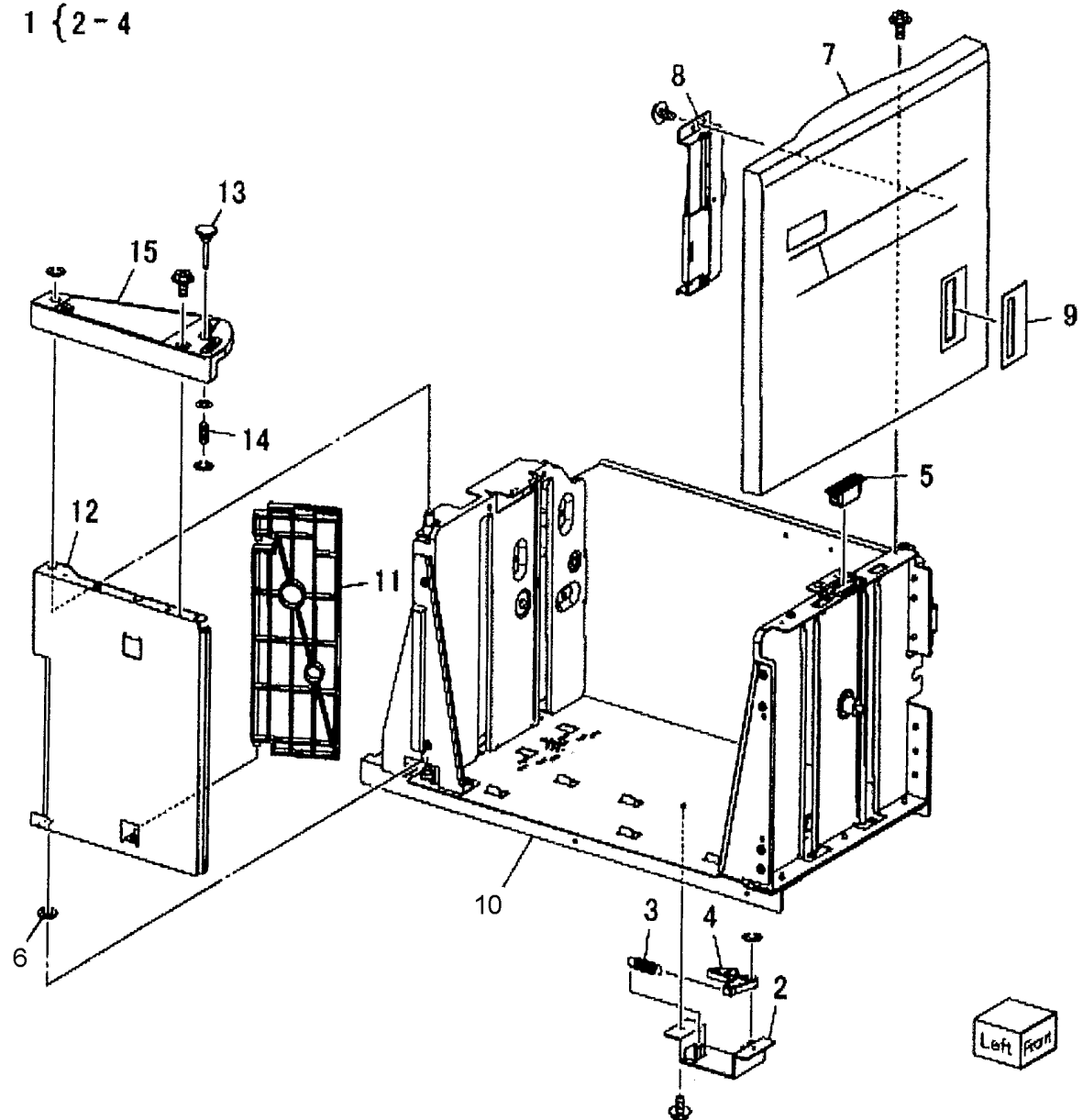
Item	Part	Description
1	604K23830	Docking plate
2	003K91881	Knob
3	130K55590	HCF tray in sensor (Q78-204)
4	801K15701	Tray rail
5	050K51976	HCF Tray 6 (REP 70.3, REP 70.4)
6	—	Left top cover (Not Spared)
7	—	Right cover (Not Spared)
8	—	Front right cover (Not Spared)
9	—	Left cover (Not Spared)
10	—	Rear cover (Not Spared)
11	—	HCF feeder (Not Spared) (REP 80.21)
12	—	Label (top) (Not Spared)
13	—	Label (tray number) (Not Spared)
14	—	Label (size) (Not Spared)
15	—	Label (end) (Not Spared)
16	—	Frame assembly (Not Spared)
17	—	HCF tray (P/O PL 70.45 Item 5)



PL 70.50 HCF (1 of 2)

Item	Part	Description
1	003K13592	Tray latch assembly
2	—	Bracket
3	—	Spring (P/O PL 70.50 Item 1)
4	—	Latch lever (P/O PL 70.50 Item 1)
5	—	Magnet (P/O PL 70.45 Item 5)
6	—	Wave washer (P/O PL 70.45 Item 5)
7	—	Front cover (P/O PL 70.45 Item 5)
8	—	Gear bracket (P/O PL 70.45 Item 5)
9	—	Label (Gauge) (P/O PL 70.45 Item 5)
10	—	Frame (P/O PL 70.45 Item 5)
11	—	Plate (P/O PL 70.45 Item 5)
12	—	Bracket (P/O PL 70.45 Item 5)
13	—	Pin (P/O PL 70.45 Item 5)
14	—	Spring (P/O PL 70.45 Item 5)
15	—	Top plate (P/O PL 70.45 Item 5)

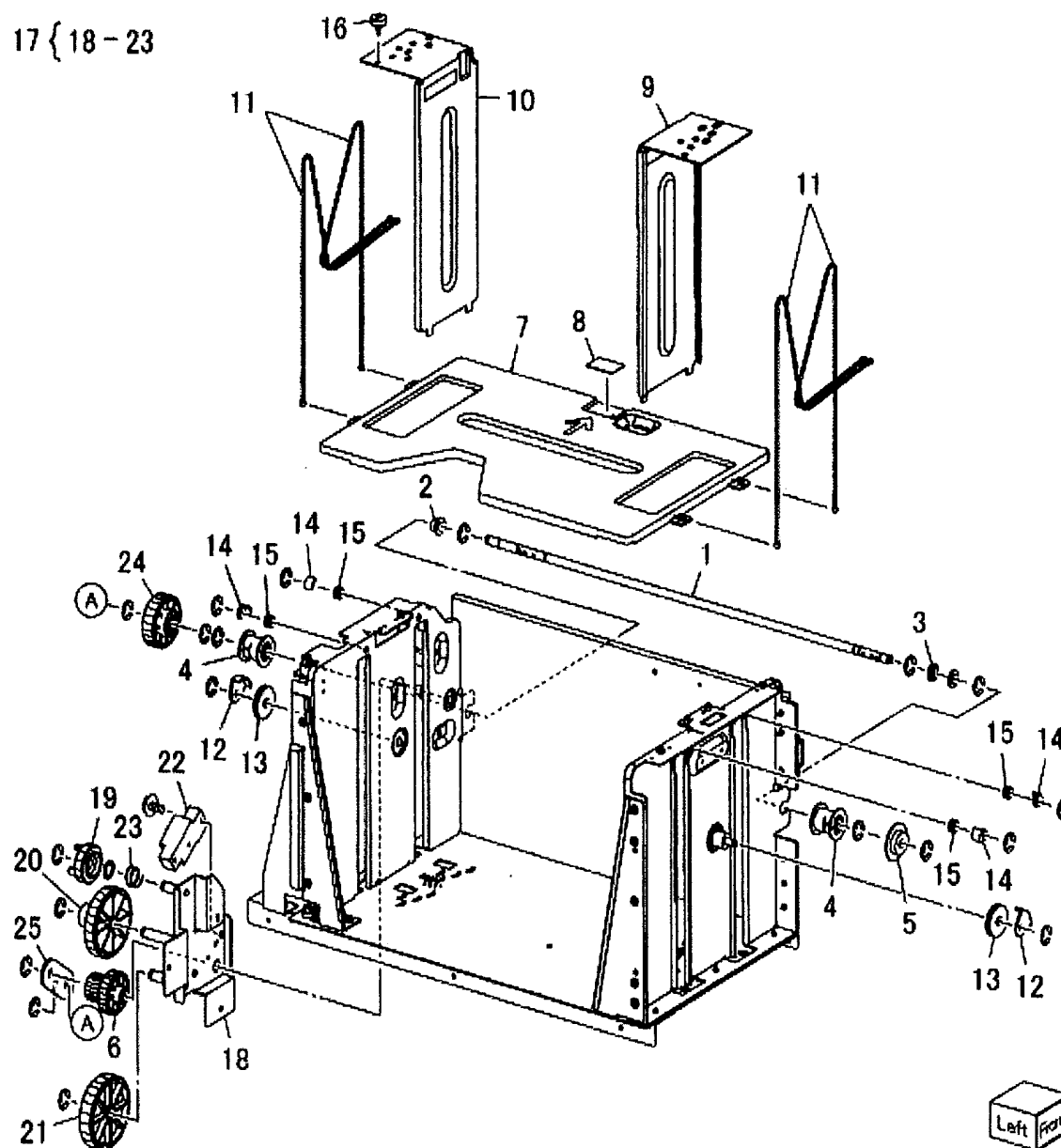
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C-8-0105-A

PL 70.51 HCF (2 of 2)

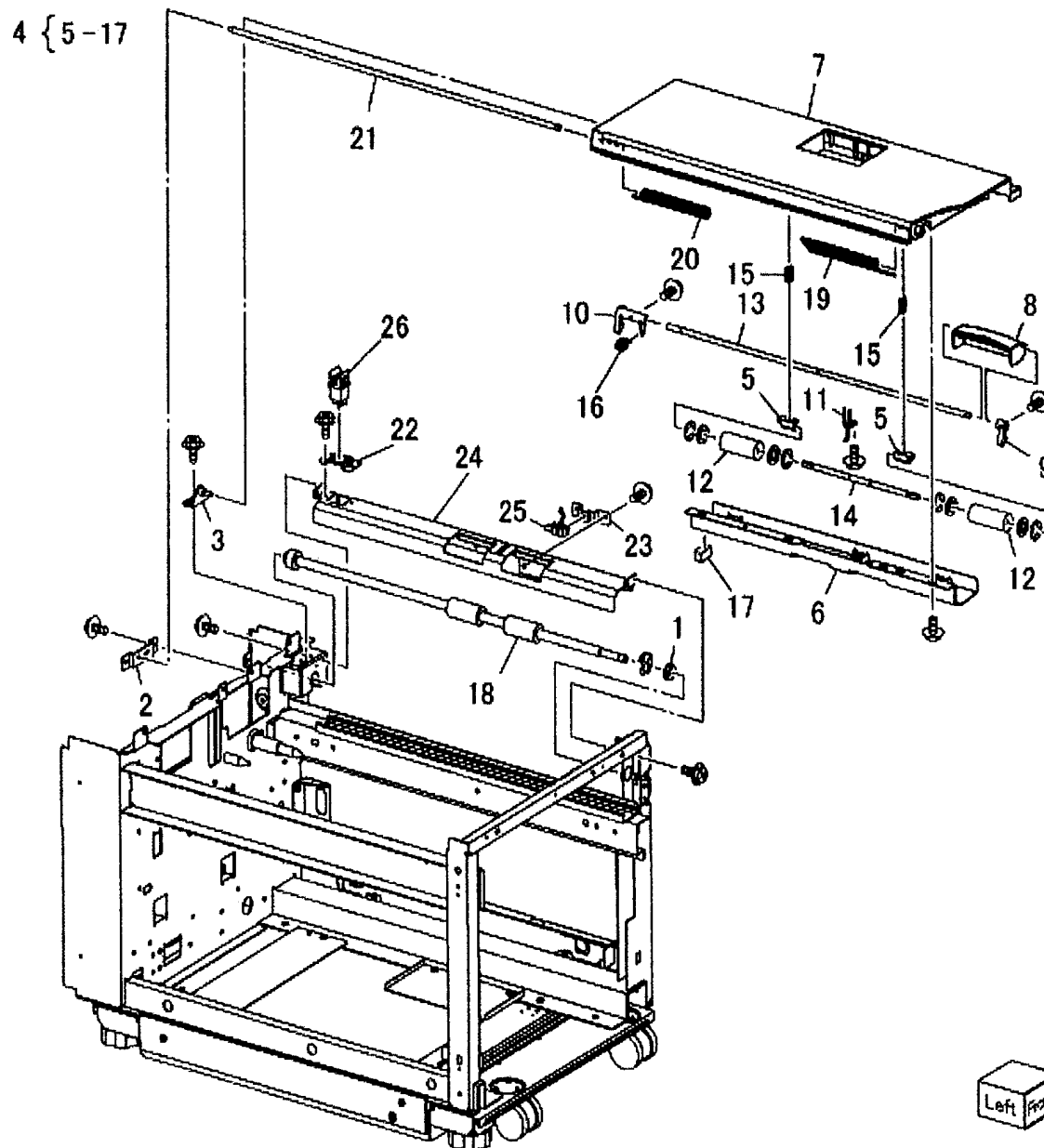
Item	Part	Description
1	—	Lift shaft (P/O PL 70.45 Item 5)
2	—	Bearing (P/O PL 70.45 Item 5)
3	—	Bearing (P/O PL 70.45 Item 5)
4	020E37620	Tray cable pulley
5	—	Gear (P/O PL 70.45 Item 5)
6	—	Gear (P/O PL 70.45 Item 5)
7	—	Bottom plate (P/O PL 70.45 Item 5)
8	019E58620	Pad
9	—	Front side guide (P/O PL 70.45 Item 5)
10	—	Rear side guide (P/O PL 70.45 Item 5)
11	604K19981	Rear cables (REP 70.5)/front cables (REP 70.6)
12	032E22410	Wire guide (L)
13	—	Pulley (P/O PL 70.45 Item 5)
14	—	Wire guide (S) (P/O PL 70.45 Item 5)
15	—	Pulley (P/O PL 70.45 Item 5)
16	—	Screw (P/O PL 70.45 Item 5)
17	015K65532	Gear bracket assembly
18	—	Gear bracket (P/O PL 70.51 Item 17)
19	—	Contact gear (P/O PL 70.51 Item 17)
20	—	Gear (P/O PL 70.51 Item 17)
21	—	Gear (P/O PL 70.51 Item 17)
22	—	Brake (P/O PL 70.51 Item 17)
23	—	Spring (P/O PL 70.51 Item 17)
24	807E04500	Lift gear
25	—	Plate (P/O PL 70.45 Item 5)



C-8-0106-A

PL 70.55 HCF Top Cover Assembly

Item	Part	Description
1	013E17100	Bearing
2	—	Bracket (Not Spared)
3	—	Pivot bracket (Not Spared)
4	—	Top cover assembly (Not Spared)
5	—	Bearing (P/O PL 70.55 Item 4)
6	—	Upper chute (P/O PL 70.55 Item 4)
7	—	Top cover (P/O PL 70.55 Item 4)
8	—	Knob (P/O PL 70.55 Item 4)
9	—	Latch (P/O PL 70.55 Item 4)
10	—	Latch (P/O PL 70.55 Item 4)
11	—	Spring (P/O PL 70.55 Item 4)
12	059E01430	Nip roll
13	—	Shaft (P/O PL 70.55 Item 4)
14	—	Shaft (P/O PL 70.55 Item 4)
15	—	Spring (P/O PL 70.55 Item 4)
16	—	Spring (P/O PL 70.55 Item 4)
17	—	Gasket (P/O PL 70.55 Item 4)
18	059K36260	Takeaway roll (REP 80.26)
19	—	Spring (left) (P/O PL 70.45 Item 16)
20	—	Spring (right) (P/O PL 70.45 Item 16)
21	—	Pivot shaft (P/O PL 70.45 Item 16)
22	—	Bracket (P/O PL 70.45 Item 5)
23	—	Bracket (P/O PL 70.45 Item 16)
24	—	Lower chute (P/O PL 70.45 Item 16)
25	130K88150	HCF feed out sensor (Q78-101)
26	110E94770	Top cover interlock switch

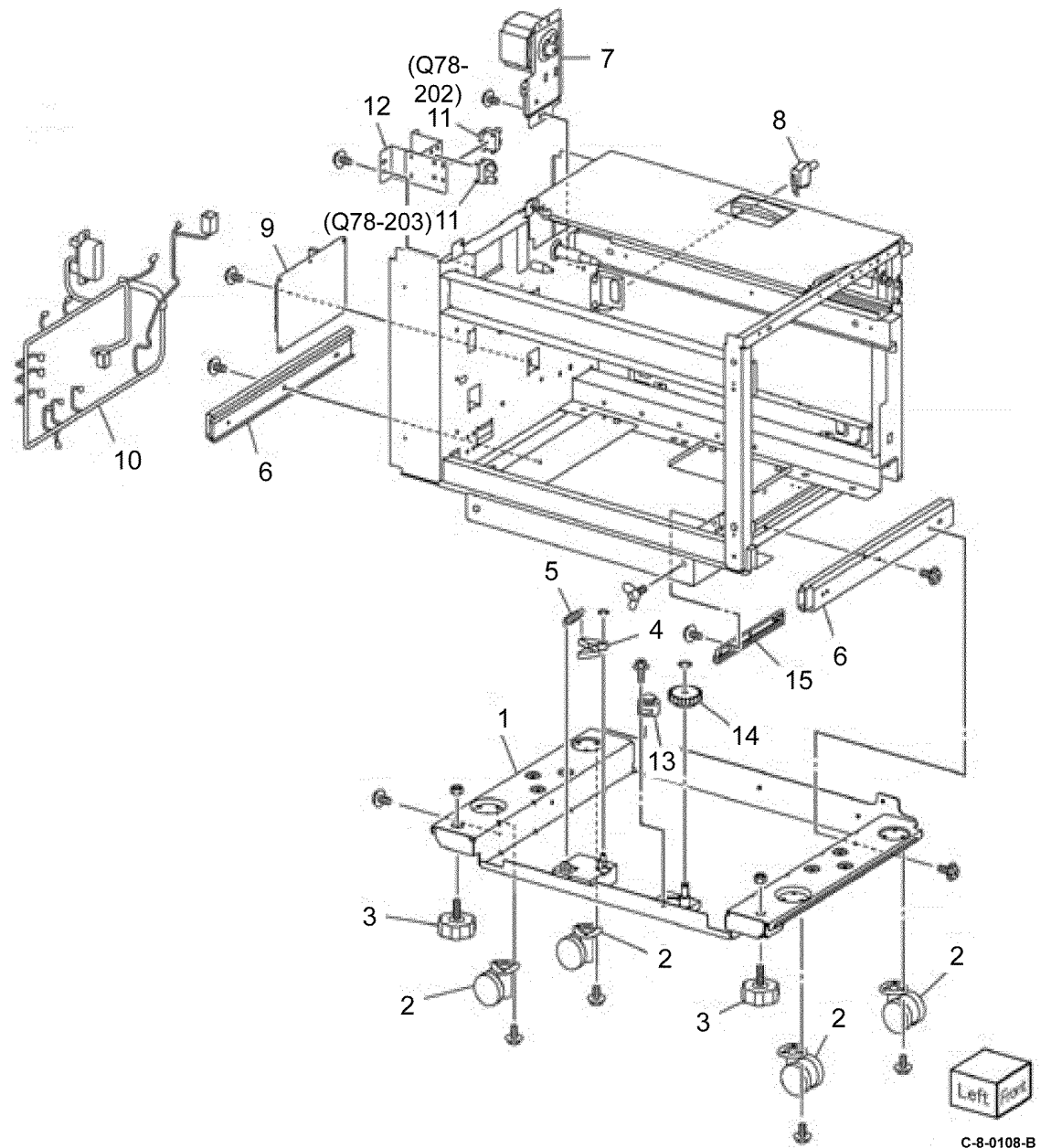


Left Front

C-8-0107-A

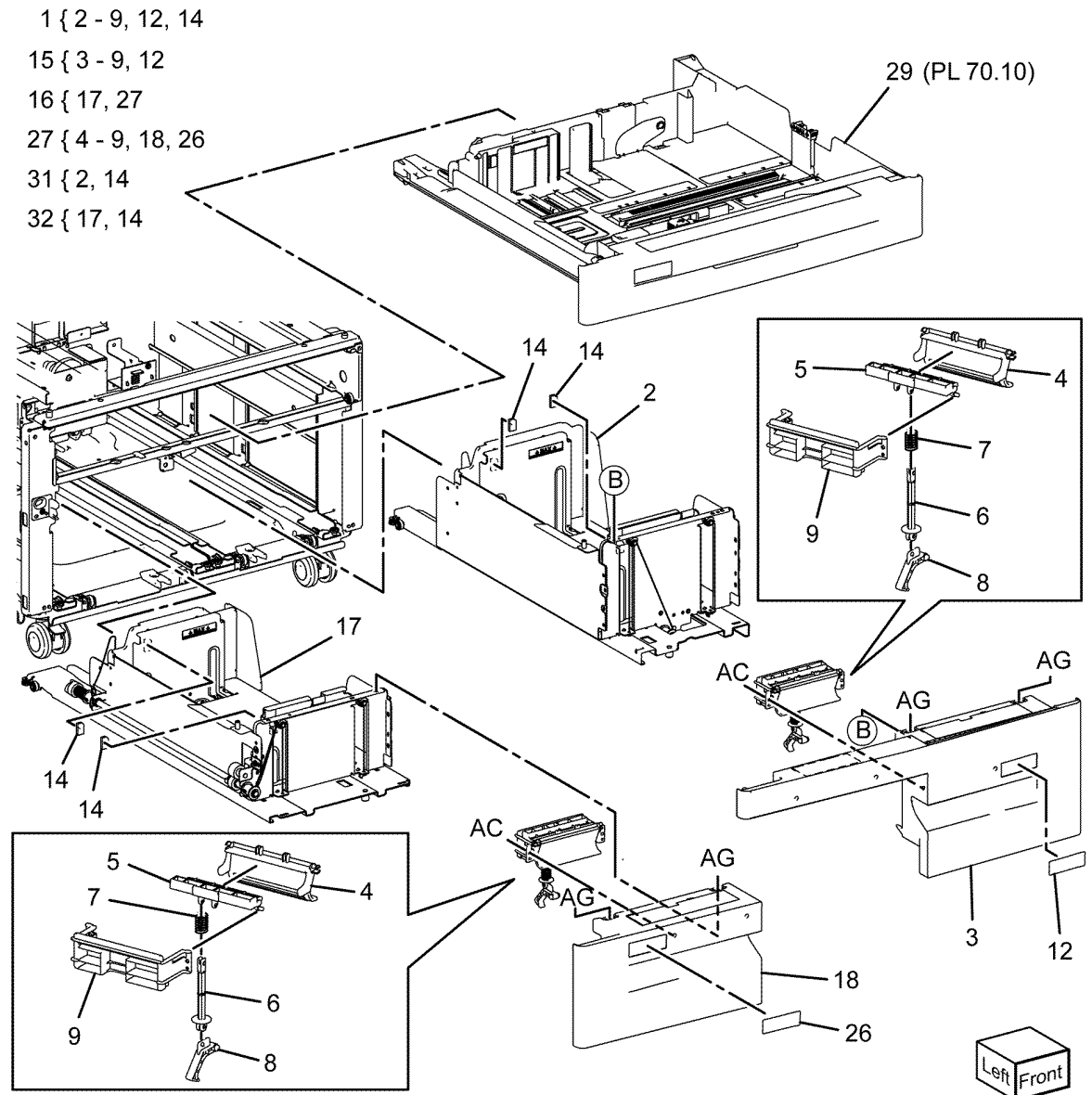
PL 70.60 HCF Electrical and Rails

Item	Part	Description
1	—	Plate (Not Spared)
2	017E92820	Caster (REP 70.7)
3	017E97191	Foot
4	—	Latch lever (Not Spared)
5	—	Spring (Not Spared)
6	801K15690	Rail
7	127K47152	Takeaway motor (MOT78-093)
8	110E10381	HCF side out switch (S78-301)
9	960K74412	HCF PWB (REP 70.8)
10	—	Wire Harness (P/O PL 70.45 Item 16)
11	130K55590	HCF size sensor A (Q78-202)/HCF size sensor B (Q78-203)
12	—	Bracket (P/O PL 70.45 Item 5)
13	004K03000	Damper
14	807E32730	Pinion
15	—	Rack



PL 70.65 TTM (1 of 3)

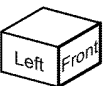
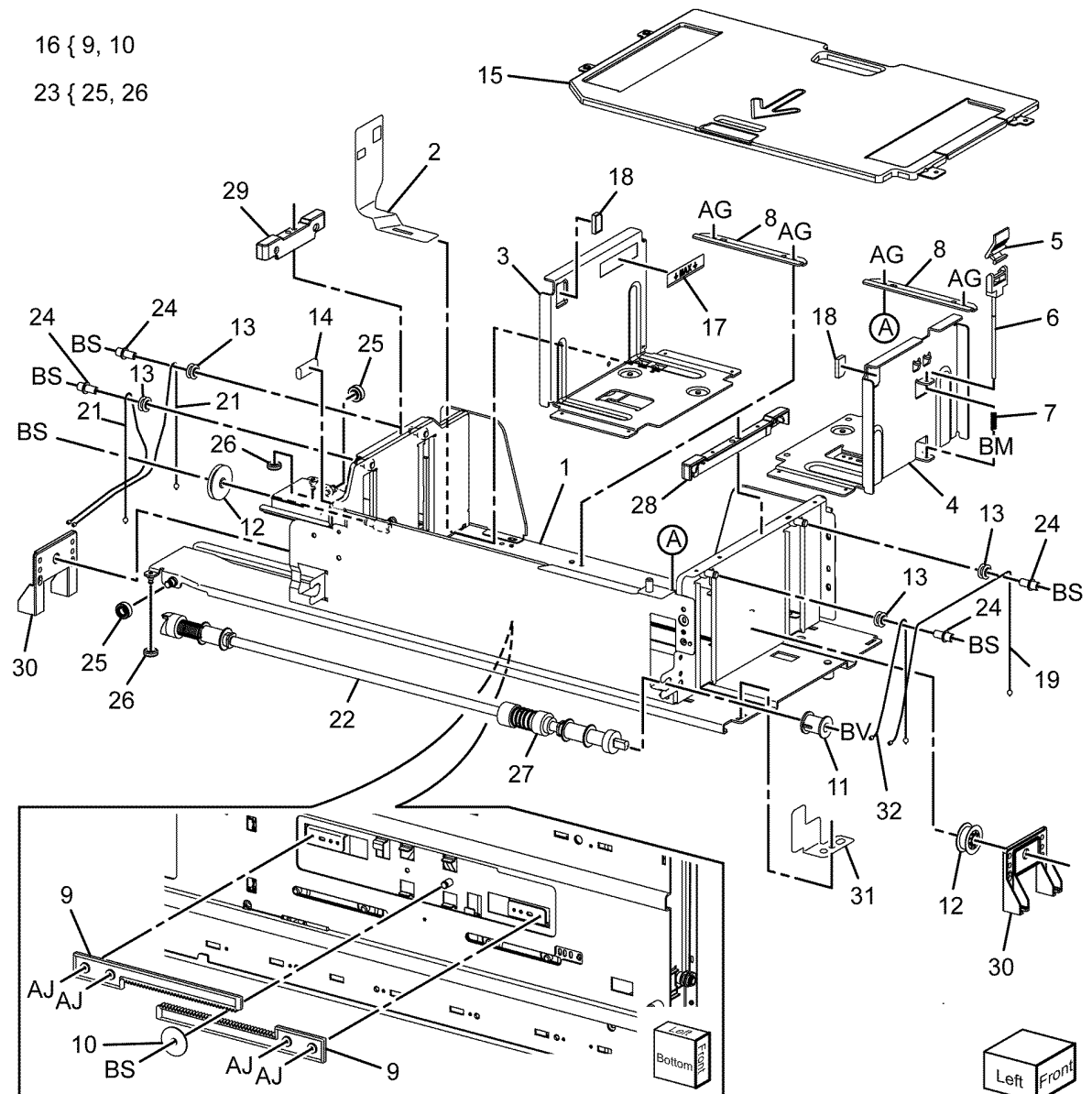
Item	Part	Description
1	—	Tray 4 assembly (P/O PL 70.65 Item 31)
2	—	Tray 4 (P/O PL 70.65 Item 31)
3	—	Tray 4 cover (P/O PL 70.65 Item 15)
4	—	Lever (P/O PL 70.65 Item 15)
5	—	Link (P/O PL 70.65 Item 15)
6	—	Link (P/O PL 70.65 Item 15)
7	—	Spring (P/O PL 70.65 Item 15)
8	—	Latch (P/O PL 70.65 Item 15)
9	—	Cover (P/O PL 70.65 Item 15)
10	—	Not used
11	—	Not used
12	—	Label (P/O PL 70.65 Item 15)
13	—	Not used
14	819E04150	Pad
15	607K08830	Tray 4 cover assembly
16	050K73153	Tray 3 assembly
17	—	Tray 3 (P/O PL 70.65 Item 32)
18	—	Tray 3 cover (P/O PL 70.65 Item 27)
19	—	Not used
20	—	Not used
21	—	Not used
22	—	Not used
23	—	Not used
24	—	Not used
25	—	Not used
26	—	Label (P/O PL 70.65 Item 27)
27	607K08820	Tray 3 cover assembly
28	—	Not used
29	—	Tray 2 assembly (REF: PL 70.10)
30	—	Not used
31	050K73143	Tray 4 kit
32	050K73163	Tray 3 kit



C-8-0109-A

PL 70.66 TTM (2 of 3)

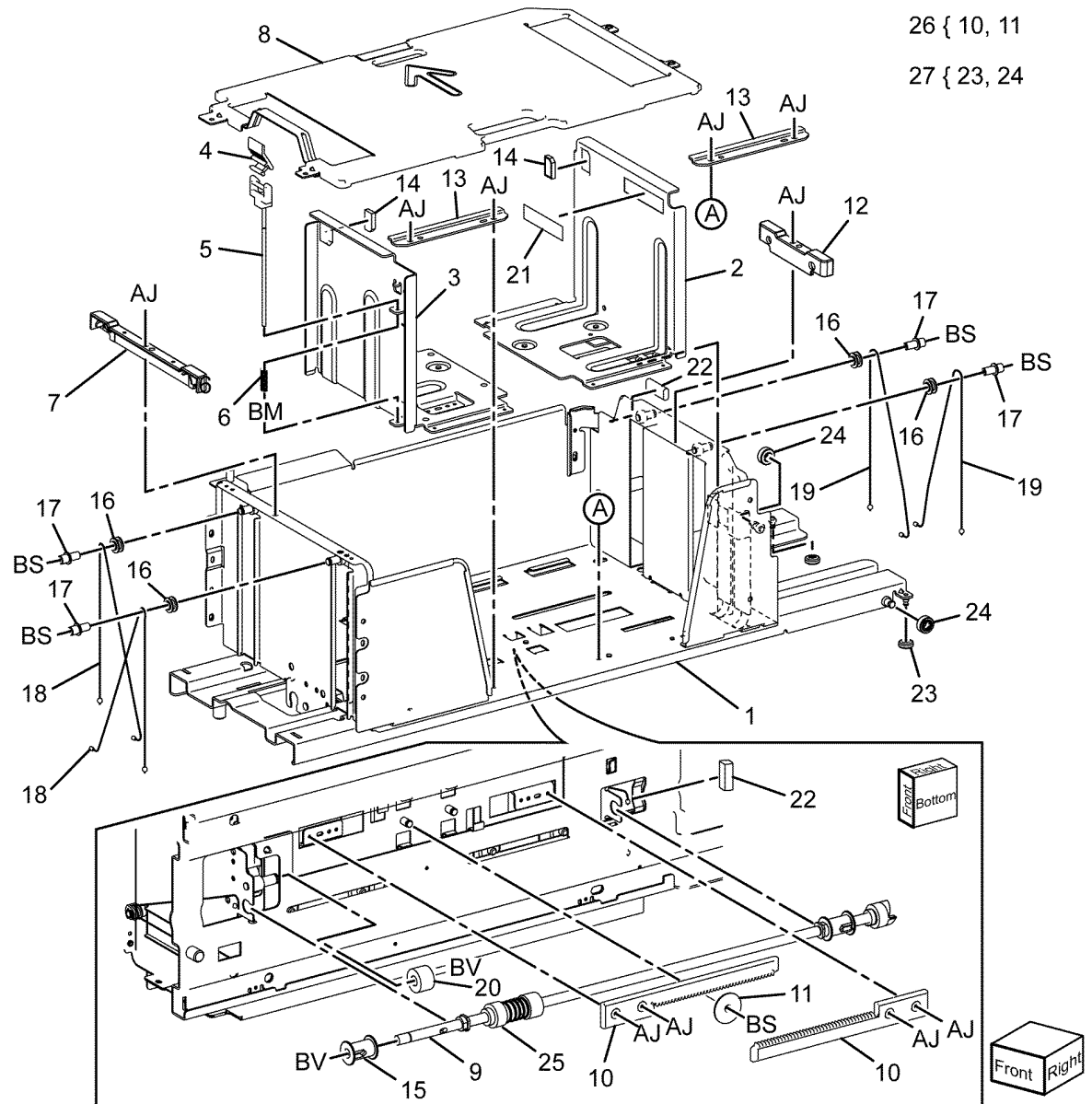
Item	Part	Description
1	—	Tray 3 cassette assembly (Not Spared)
2	—	Size actuator (Not Spared)
3	—	Side rear guide (Not Spared)
4	—	Side front guide (Not Spared)
5	—	Knob (Not Spared)
6	—	Knob assembly (Not Spared)
7	—	Spring (Not Spared)
8	—	Bracket (Not Spared)
9	—	Rack gear (P/O PL 70.66 Item 16)
10	—	Pinion (P/O PL 70.66 Item 16)
11	—	Pulley (Not Spared)
12	—	Pulley (Not Spared)
13	—	Pulley (Not Spared)
14	—	Gasket (Not Spared)
15	—	Bottom plate (Not Spared)
16	604K68260	Rack gear and pinion kit
17	—	Label (Max) (Not Spared)
18	819E04150	Pad
19	—	Front lift cable (long) (Not Spared)
20	—	Not used
21	—	Rear lift cable (Not Spared)
22	006K35290	Lift shaft (REP 70.9)
23	604K68160	Roller kit
24	—	PL shaft (Not Spared)
25	—	Side roller (P/O PL 70.66 Item 23)
26	—	Lower roller (P/O PL 70.66 Item 23)
27	019K17181	Brake assembly (REP 70.9)
28	—	Guide - WF (Not Spared)
29	—	Guide - W (Not Spared)
30	—	Guide - WL (Not Spared)
31	—	Spring (Not Spared)
32	—	Front lift cable (short) (Not Spared)



C-8-0110-A

PL 70.67 TTM (3 of 3)

Item	Part	Description
1	—	Tray 4 cassette assembly (Not Spared)
2	—	Side rear guide (Not Spared)
3	—	Side front guide (Not Spared)
4	—	Knob (Not Spared)
5	—	Knob assembly (Not Spared)
6	—	Spring (Not Spared)
7	—	Guide - WF (Not Spared)
8	—	Bottom plate (Not Spared)
9	006K35290	Lift shaft (REP 70.10)
10	—	Rack gear (P/O PL 70.67 Item 26)
11	—	Pinion (P/O PL 70.67 Item 26)
12	—	Guide - W (Not Spared)
13	—	Bracket (Not Spared)
14	819E04150	Pad (REP 70.10)
15	—	Pulley (Not Spared)
16	—	Pulley (Not Spared)
17	—	Shaft - PL (Not Spared)
18	—	Front lift cable (Not Spared)
19	—	Rear lift cable (Not Spared)
20	—	Size actuator (Not Spared)
21	—	Label (Not Spared)
22	—	Gasket (Not Spared)
23	—	Lower roller (P/O PL 70.67 Item 27)
24	—	Side roller (P/O PL 70.67 Item 27)
25	019K17181	Brake assembly (REP 70.10)
26	604K68260	Rack gear and pinion kit
27	604K68160	Roller kit

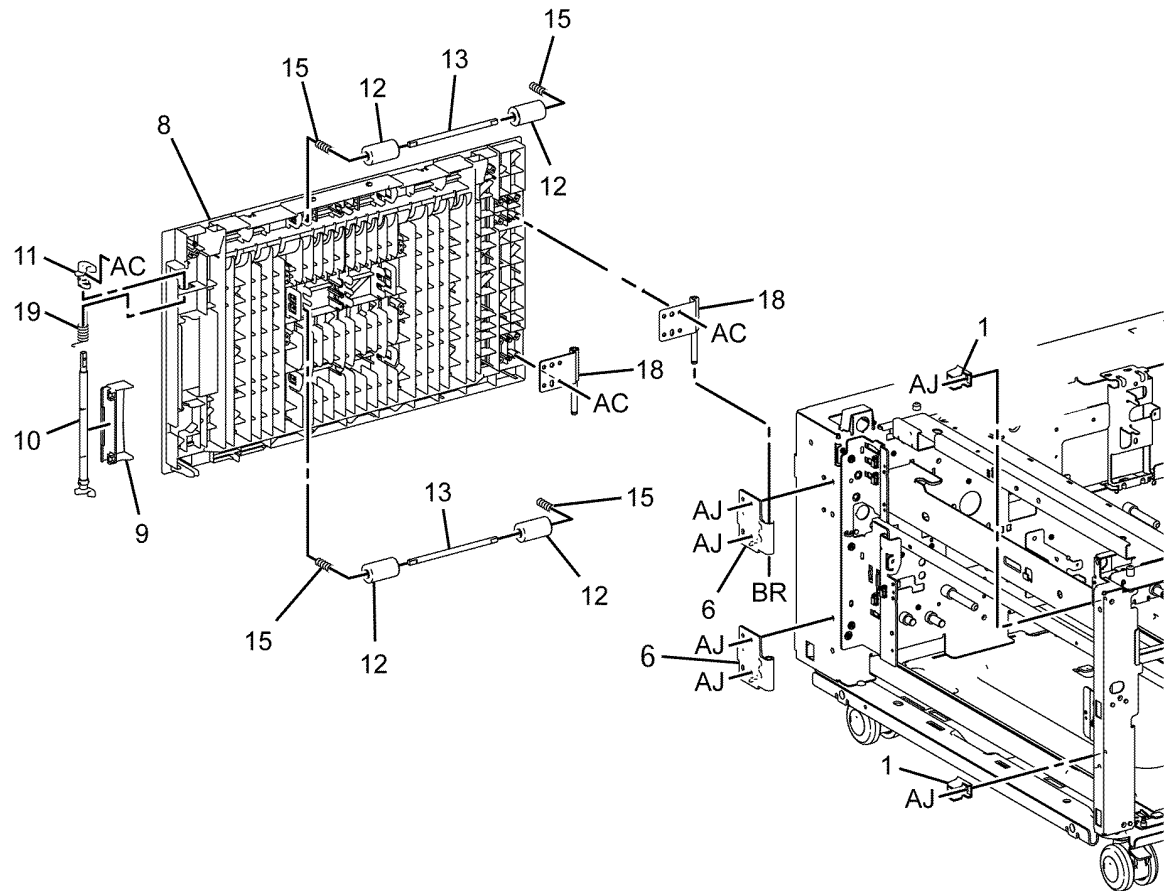


C-8-0111-A

PL 70.70 TTM Left Cover Assembly

Item	Part	Description
1	—	Door catch (Not Spared)
2	—	Not used
3	—	Not used
4	—	Not used
5	—	Not used
6	—	Hinge frame bracket (Not Spared)
7	948K03890	Left cover assembly
8	—	Left cover (P/O PL 70.70 Item 7)
9	—	Handle (P/O PL 70.70 Item 7)
10	—	Latch (P/O PL 70.70 Item 7)
11	—	Hook (P/O PL 70.70 Item 7)
12	059E99241	Nip roll
13	—	Nip spring (P/O PL 70.70 Item 7)
14	—	Not used
15	—	Pinch spring (P/O PL 70.70 Item 7)
16	—	Not used
17	—	Not used
18	—	Hinge bracket assembly (P/O PL 70.70 Item 7)
19	—	Spring (P/O PL 70.70 Item 7)

7 { 8 - 13, 15, 18, 19

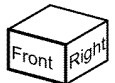
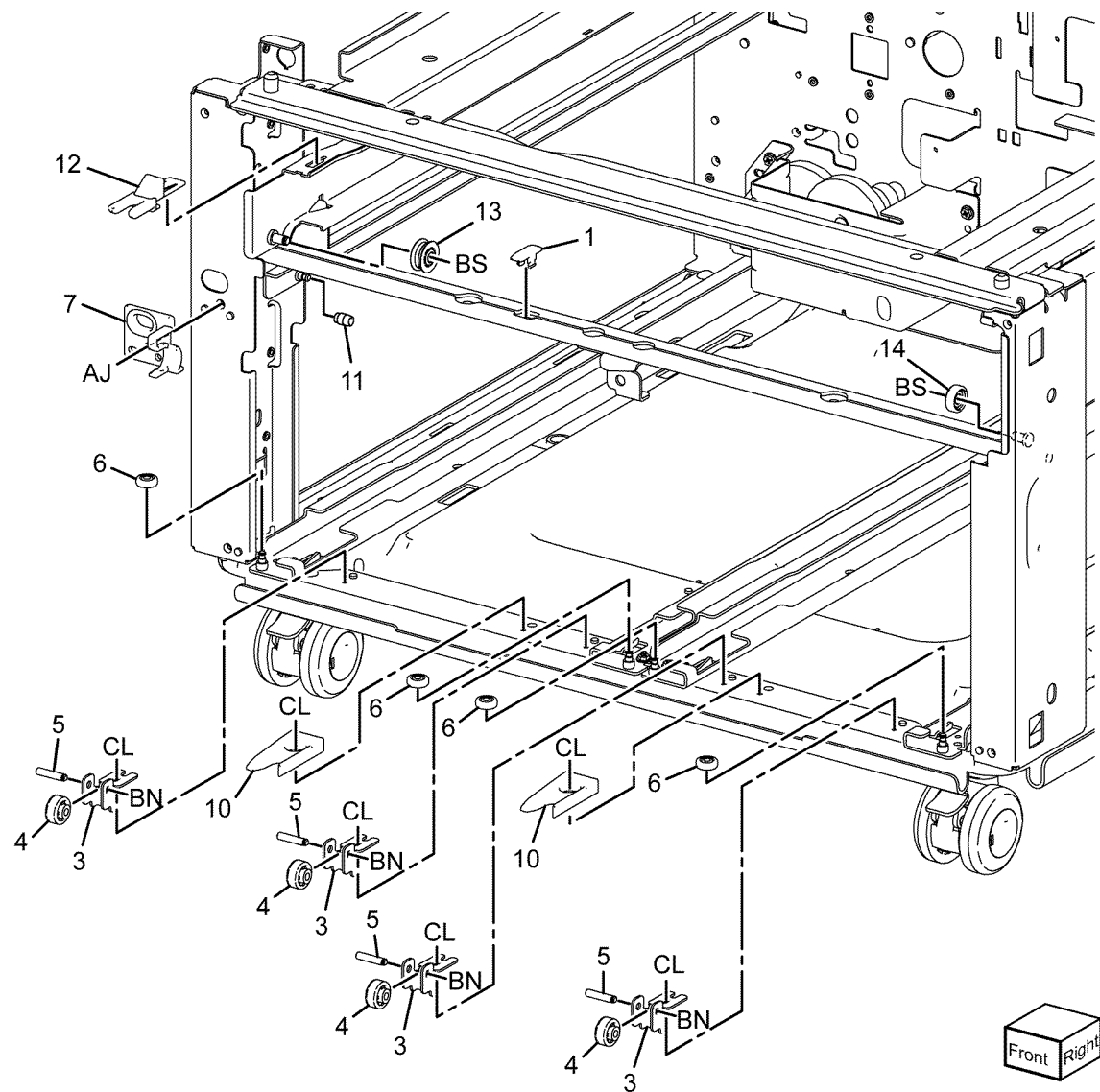


C-8-0112-A

PL 70.75 TTM Front Support

Item	Part	Description
1	—	Spacer (Not Spared)
2	—	Roller assembly (Not Spared)
3	—	Stopper bracket (P/O PL 70.75 Item 2)
4	—	Roller (P/O PL 70.75 Item 2)
5	—	Shaft (P/O PL 70.75 Item 2)
6	059E05060	Upper roller
7	—	Tray stop (Not Spared)
8	—	Not used
9	—	Not used
10	803E09020	Stopper
11	059E05131	Roller
12	003E75432	Tray stop
13	059E03500	Front left roller
14	059E08410	Front right roller

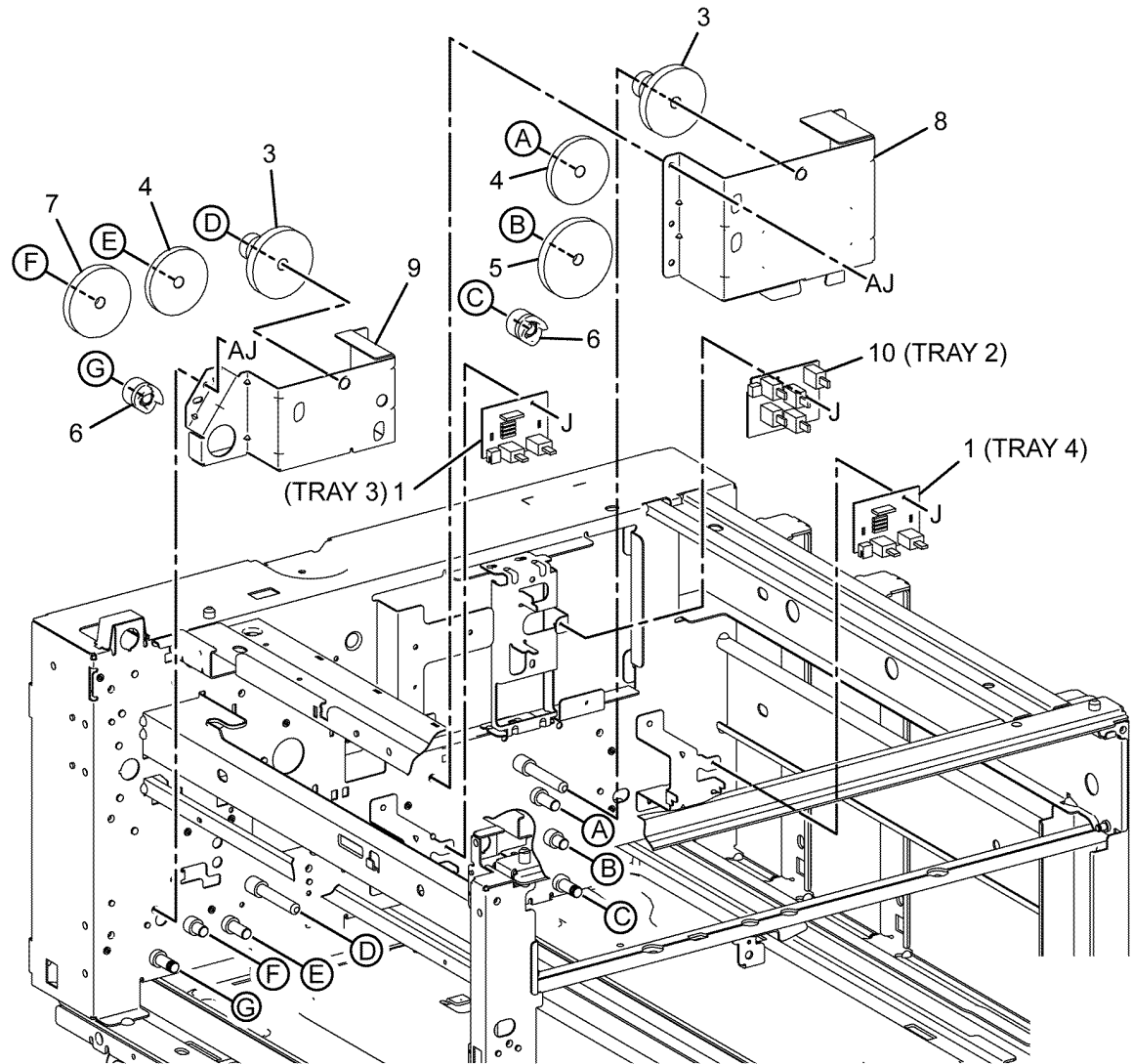
2 { 3 - 5



C-8-0113-A

PL 70.80 TTM Size Sensing

Item	Part	Description
1	110K15040	Paper size sensor
2	—	Not used
3	—	Gear 17/50T (Not Spared)
4	—	Gear 16/48T (Not Spared)
5	—	Gear 57T (Not Spared)
6	—	Gear 18T (Not Spared)
7	—	Gear 51T (Not Spared)
8	—	Bracket (Not Spared)
9	—	Bracket (Not Spared)
10	110K11680	Tray 2 paper size sensor



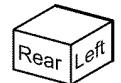
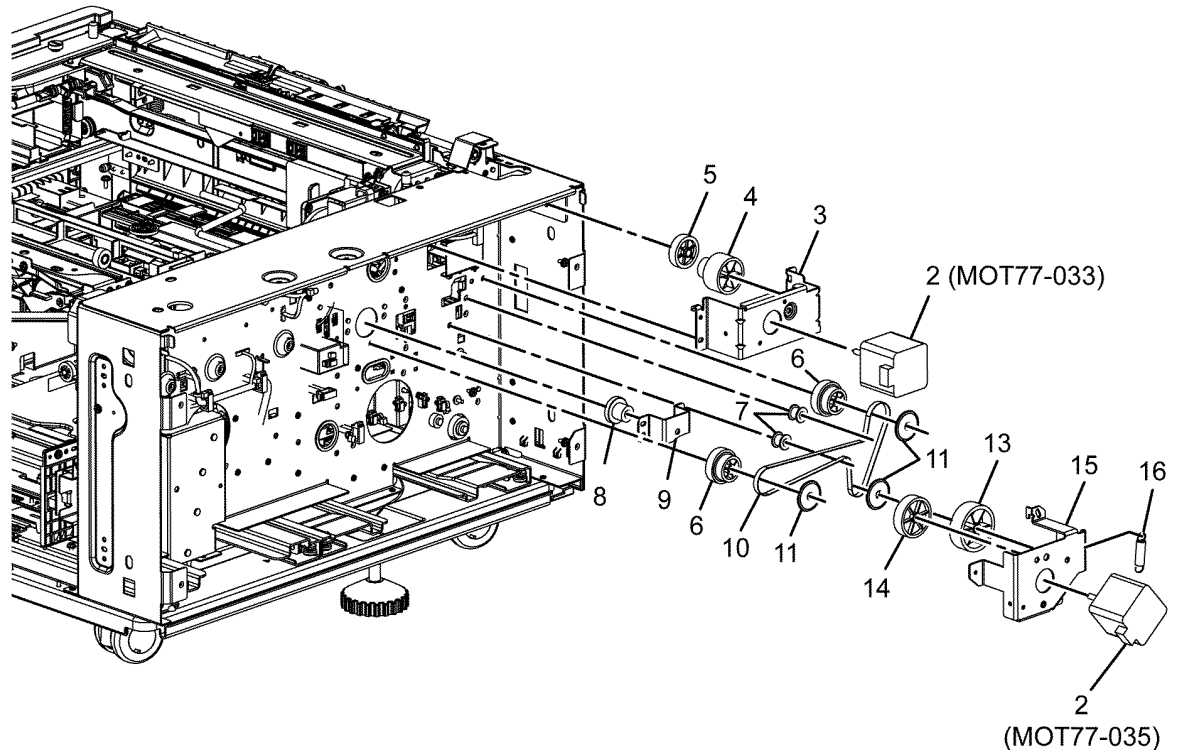
C-8-0114-A

PL 70.85 TTM Drive Components

Item	Part	Description
1	127K75990	Takeaway motor 1 assembly
2	—	Takeaway motor 1 (MOT77-033) (P/O PL 70.85 Item 1)/Takeaway motor 2 (MOT77-035) (P/O PL 70.85 Item 12)
3	—	Motor bracket (P/O PL 70.85 Item 1)
4	—	Gear M2 (P/O PL 70.85 Item 1)
5	—	Gear 34T (Not Spared)
6	—	Gear 26T (Not Spared)
7	—	Roller (Not Spared)
8	807E35860	Transfer gear (REP 80.40)
9	—	Trans bracket assembly (Not Spared)
10	023E28900	Drive belt (REP 80.28)
11	—	Collar - 2 (P/O PL 70.85 Item 12)
12	127K76000	Takeaway motor 2 assembly (REP 80.37)
13	—	Gear 81T (P/O PL 70.85 Item 12)
14	—	Gear 70T (P/O PL 70.85 Item 12)
15	—	Motor bracket (P/O PL 70.85 Item 12)
16	—	Spring (Not Spared)

1 { 2 - 4

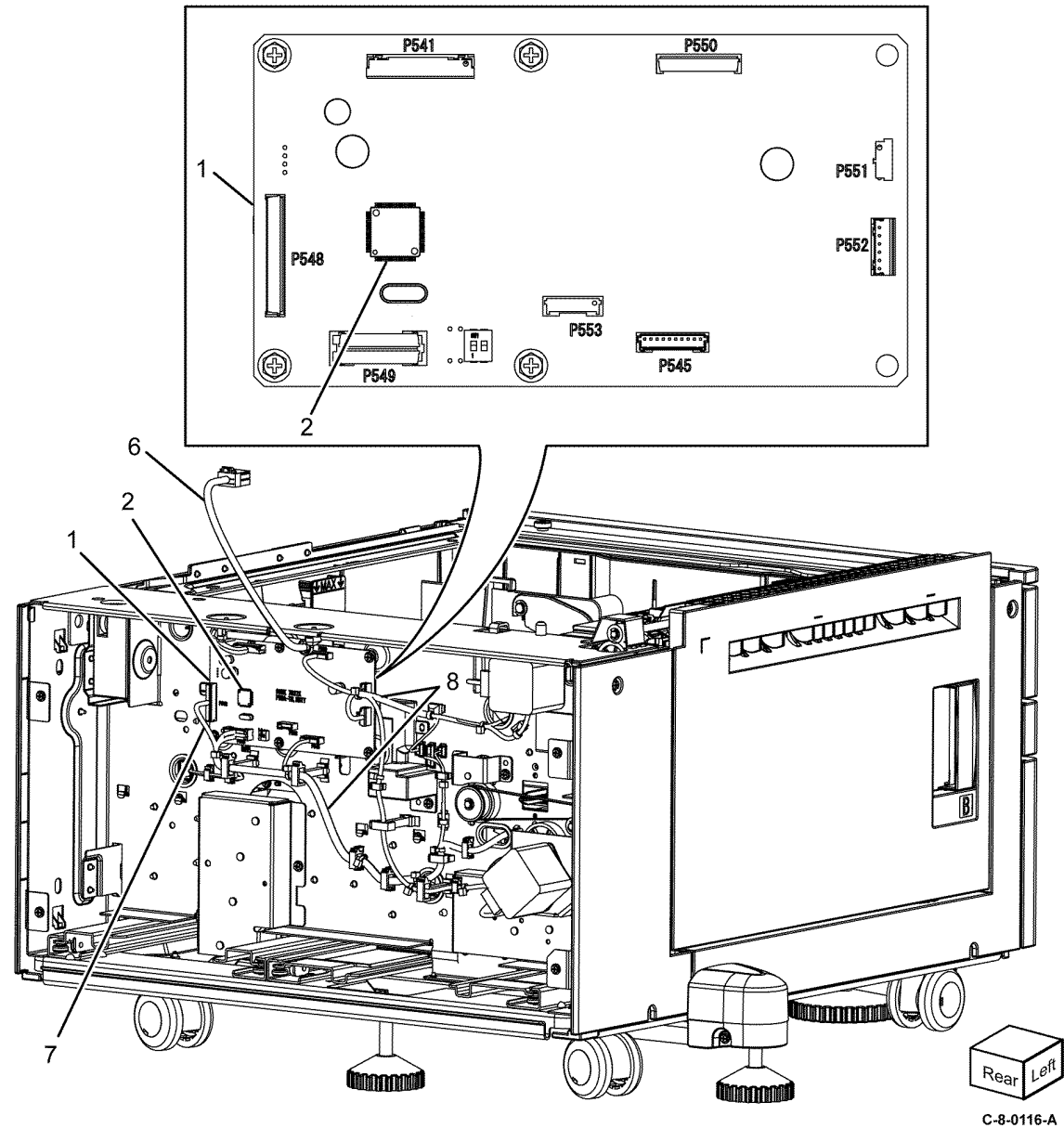
12 { 2, 11, 13 - 15



C-8-0115-A

PL 70.90 TTM Electrical

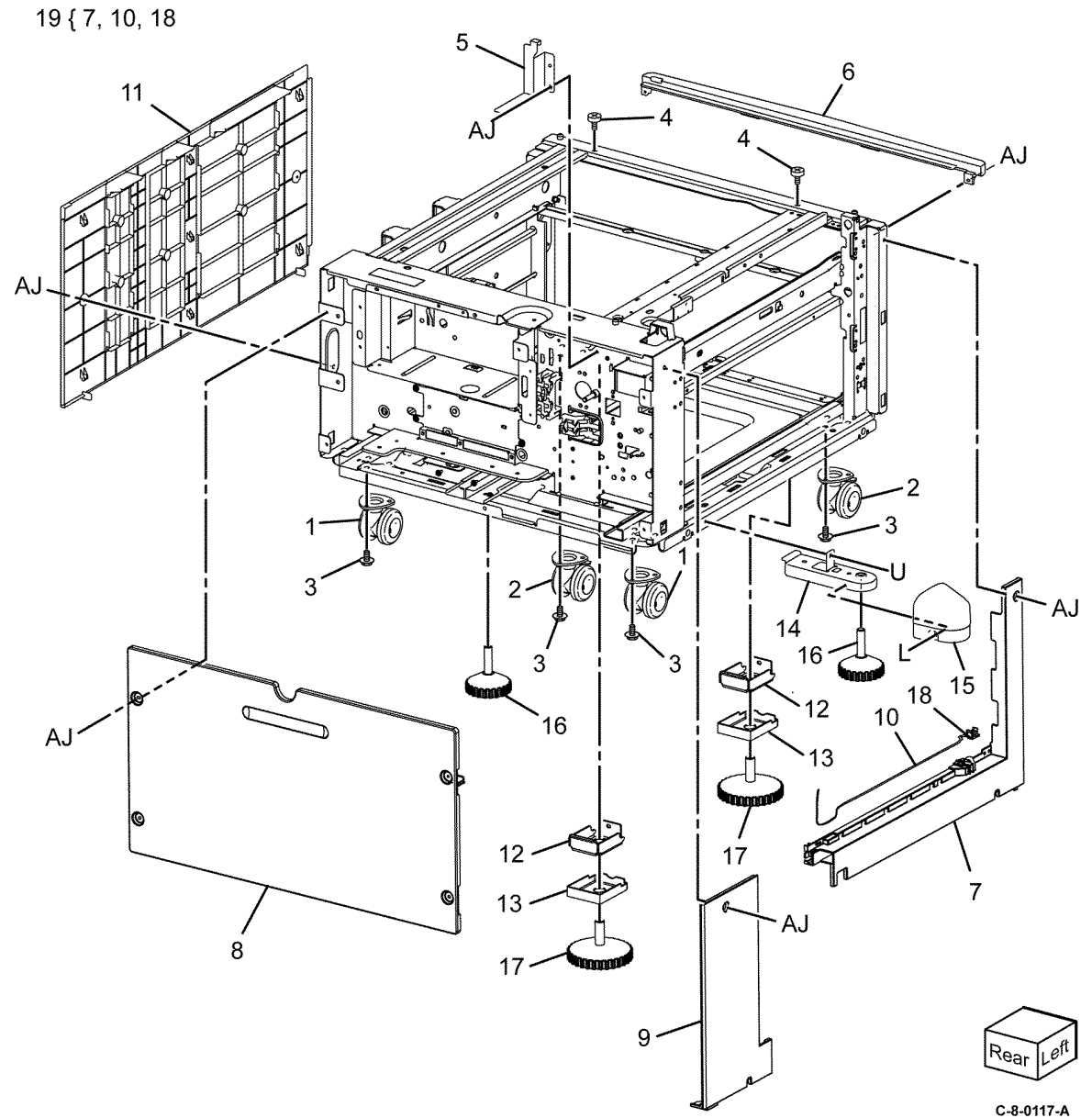
Item	Part	Description
1	—	TTM PWB (REP 80.42)
2	—	Flash CPU (Not Spared)
3	—	Not used
4	—	Not used
5	—	Not used
6	952K20151	IOT harness
7	952K20161	Sensor harness assembly
8	952K20171	Motor harness assembly



C-8-0116-A

PL 70.95 TTM Casters

Item	Part	Description
1	417W41449	Caster
2	417W41349	Locking caster
3	—	Screw (Not Spared)
4	—	Docking screw (Not Spared)
5	—	Docking bracket (Not Spared)
6	—	Top cover (Not Spared)
7	—	Left front cover (Not Spared)
8	—	Rear cover (Not Spared)
9	—	Left rear cover (Not Spared)
10	—	Harness (Not Spared)
11	—	Right cover (Not Spared)
12	—	Front foot bracket (Not Spared)
13	—	Front foot cover (Not Spared)
14	—	Left foot bracket (Not Spared)
15	—	Foot cover (Not Spared)
16	017K94910	Foot assembly adjuster
17	017K96680	Front foot assembly adjuster
18	110E11580	TM left hand interlock switch (77-306)
19	—	Left front cover assembly (Not Spared)

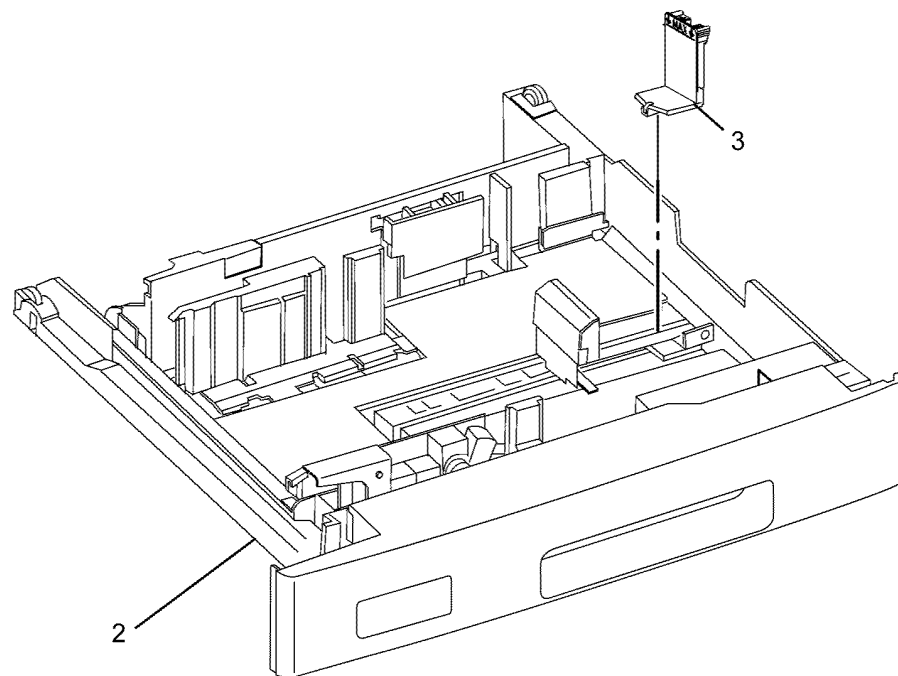


PL 70.100 Envelope Tray

Item	Part	Description
1	–	Envelope tray assembly (See NOTE)
2	–	Envelope tray (P/O PL 70.100 Item 1)
3	038E44700	End guide

1 { 2 , 3

NOTE: Refer to PL 31.05 for the Envelope tray kit.

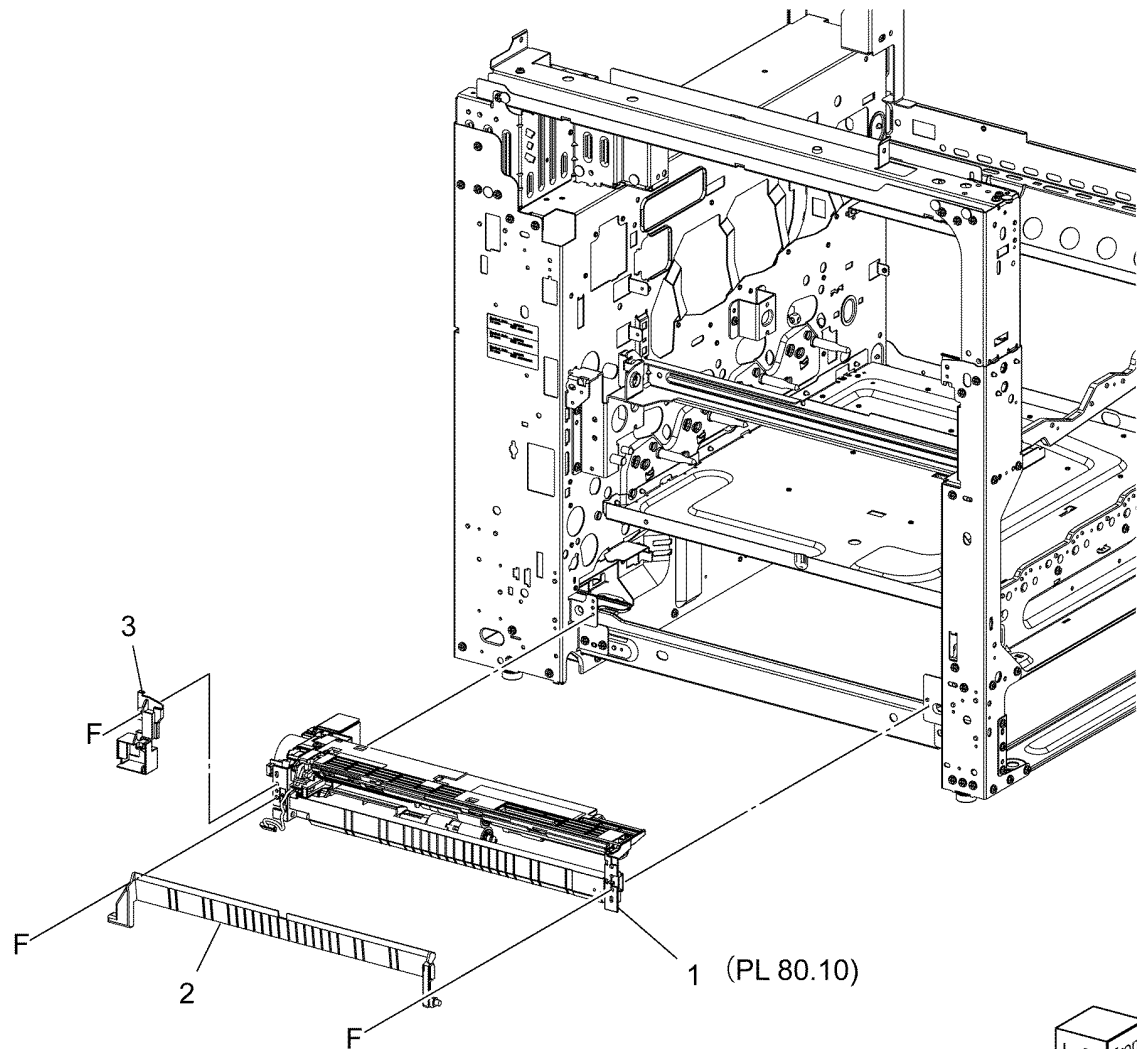


C-8-0118-A

PL 80.05 Tray 1 Feeder

Item	Part	Description
1	859K08542	Tray 1 feeder assembly (REF: PL 80.10, PL 80.11) (See NOTE) (REP 80.1)
2	054E33803	Feed out chute
3	—	Harness holder (Not Spared)

NOTE: HFSI. To reset the HFSI count, refer to dC135.

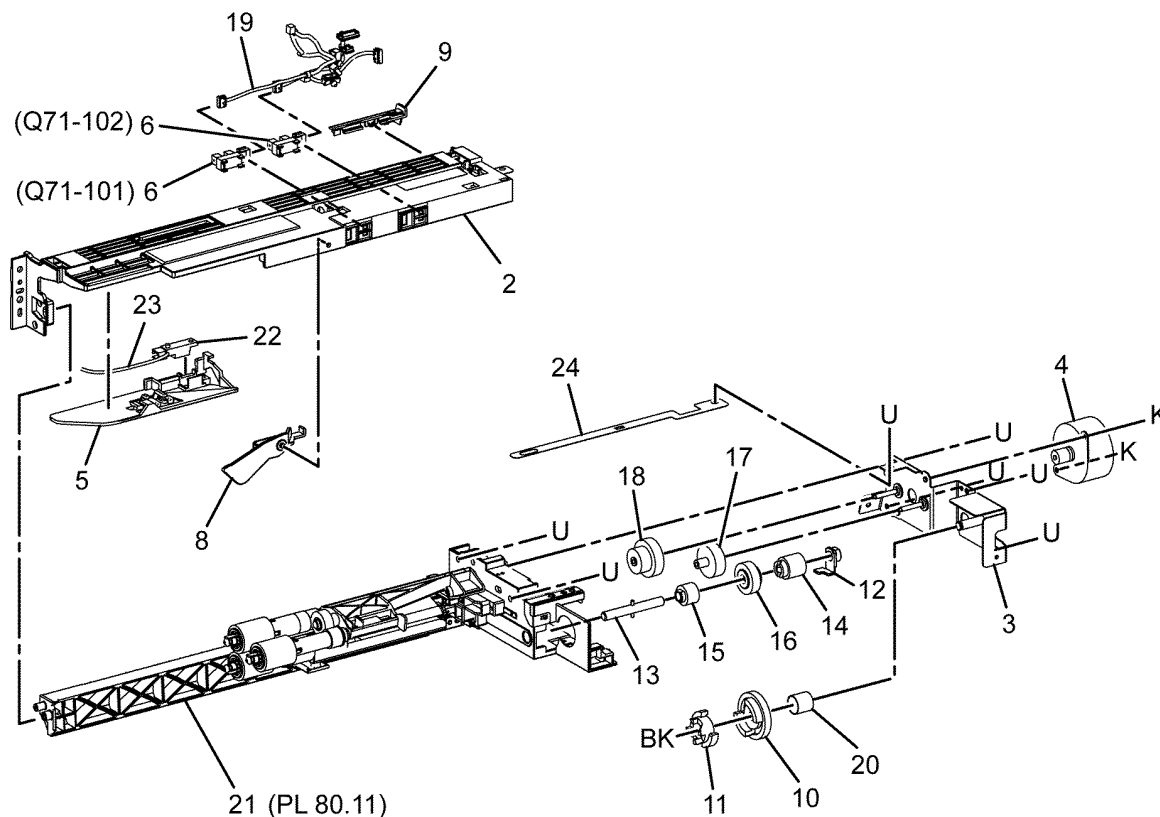


C-8-0119-A

PL 80.10 Tray 1 Feeder Assembly (1 of 2)

Item	Part	Description
1	—	Tray 1 feeder assembly (REF: PL 80.05 Item 1)
2	—	Upper frame (P/O PL 80.10 Item 1)
3	—	Drive bracket assembly (P/O PL 80.10 Item 1)
4	127K52790	Tray 1 feed/lift motor (MOT71-001)
5	—	Chute (P/O PL 80.10 Item 1)
6	930W00123	Tray 1 level sensor (Q71-102)/Tray 1 no paper sensor (Q71-101)
7	—	Not used
8	120E22481	Sensor actuator
9	—	Harness rear holder (P/O PL 80.10 Item 1)
10	—	Gear 31T (P/O PL 80.10 Item 1)
11	—	Spacer (P/O PL 80.10 Item 1)
12	—	Bearing shaft (P/O PL 80.10 Item 1)
13	—	Drive shaft assembly (P/O PL 80.10 Item 1)
14	—	Gear 13 (P/O PL 80.10 Item 1)
15	005K83081	One way clutch assembly (P/O PL 80.10 Item 1)
16	—	One way gear assembly (P/O PL 80.10 Item 1)
17	—	Helical gear 25T (P/O PL 80.10 Item 1)
18	—	Helical gear 29/19T (P/O PL 80.10 Item 1)
19	—	Sensor harness assembly (P/O PL 80.10 Item 1)
20	—	Spring (P/O PL 80.10 Item 1)
21	—	Roll assembly (P/O PL 80.10 Item 1)
22	930W00211	Tray 1 pre feed sensor (Q71-105)
23	—	Pre feed sensor harness (P/O PL 80.10 Item 1)
24	—	Plate earth nudger (P/O PL 80.10 Item 1)

1 { 2 - 24, PL 80.11 items 1 - 23



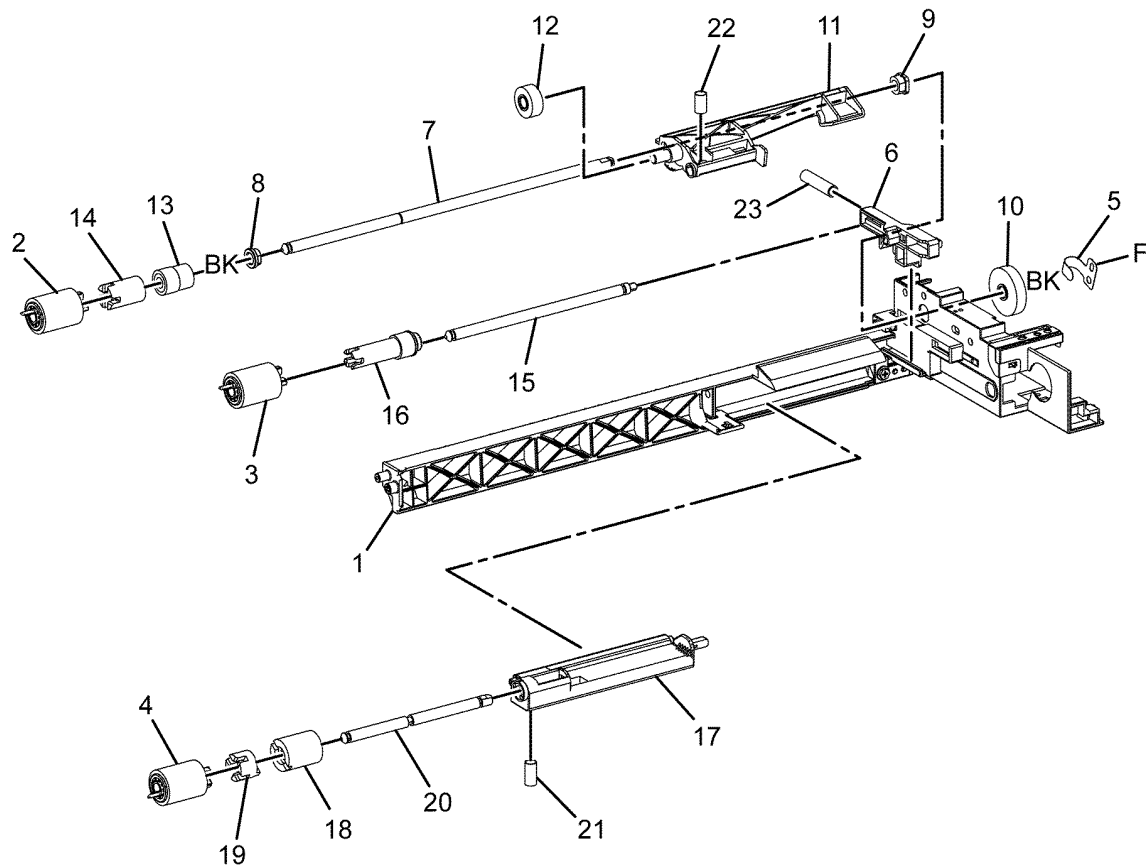
C-8-0120-A

PL 80.11 Tray 1 Feeder Assembly (2 of 2)

Item	Part	Description
1	—	Lower frame (P/O PL 80.10 Item 1)
2	—	Feed roll (P/O PL 80.11 Item 24) (REP 80.2)
3	—	Nudger roll (P/O PL 80.11 Item 24) (REP 80.2)
4	—	Retard roll (P/O PL 80.11 Item 24) (REP 80.2)
5	—	Earth feed plate (P/O PL 80.10 Item 1)
6	—	Lever (P/O PL 80.10 Item 1)
7	—	Feed shaft (P/O PL 80.10 Item 1)
8	—	Bearing (P/O PL 80.10 Item 1)
9	—	Bearing (P/O PL 80.10 Item 1)
10	—	Helical gear 30T (P/O PL 80.10 Item 1)
11	—	Nudger support (P/O PL 80.10 Item 1)
12	—	Spur gear 33T (P/O PL 80.10 Item 1)
13	005K06760	Clutch assembly 22T
14	005K05890	Clutch assembly
15	—	Nudger shaft (P/O PL 80.10 Item 1)
16	—	Gear 25T (P/O PL 80.10 Item 1)
17	—	Retard support (P/O PL 80.10 Item 1)
18	005K83300	Friction clutch assembly
19	—	Spacer (P/O PL 80.10 Item 1)
20	—	Retard shaft (P/O PL 80.10 Item 1)
21	—	Retard spring compression (P/O PL 80.10 Item 1)
22	—	Nudger spring compression (P/O PL 80.10 Item 1)
23	—	Lever spring compression (P/O PL 80.10 Item 1)
24	604K56080	Feed roller kit (See NOTE) (REP 80.2)

NOTE: HFSI. To reset the HFSI counter, refer to dC135.

24 { 2 - 4

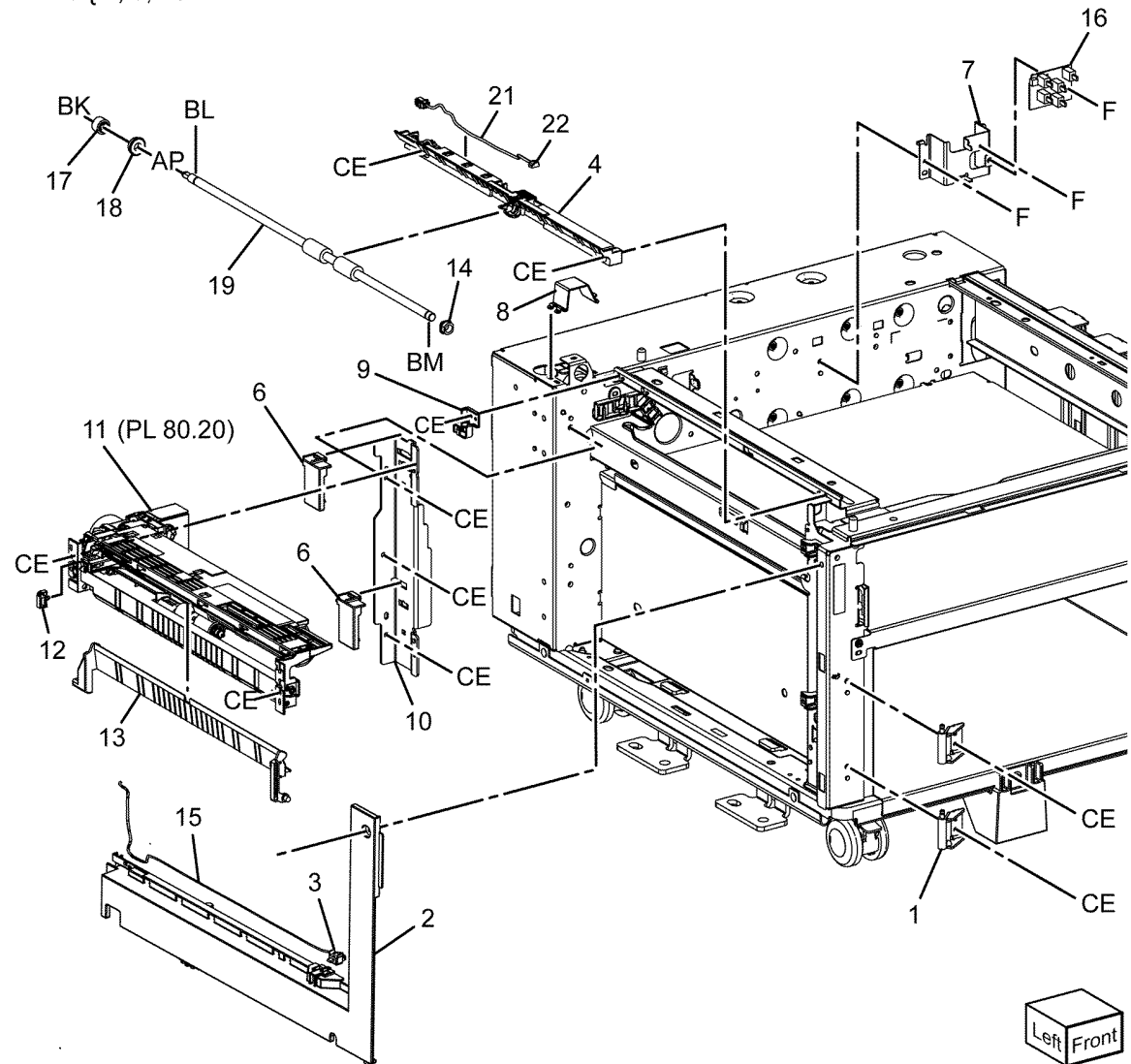


C-8-0121-A

PL 80.15 1TM Feeder

Item	Part	Description
1	—	Hinge bracket (Not Spared)
2	—	Left front cover (P/O PL 80.15 Item 20)
3	110E11580	TM left hand interlock switch (S77-306)
4	—	Exit chute (Not Spared)
5	859K03850	Takeaway roll assembly
6	—	ESD cover (Not Spared)
7	—	Sensor bracket (Not Spared)
8	—	Cover bracket (Not Spared)
9	—	Left guide (Not Spared)
10	—	Bracket (Not Spared)
11	859K09730	Feeder assembly (REF: PL 80.20, PL 80.25) (See NOTE) (REP 80.3)
12	920W01210	Locking clamp
13	054E33803	Feed chute
14	013E46870	Bearing
15	—	Harness assembly (P/O PL 80.15 Item 20)
16	110K17950	Tray 2 paper size sensor
17	—	Gear 16T (P/O PL 80.15 Item 5)
18	—	Ball bearing (P/O PL 80.15 Item 5)
19	—	Takeaway roll (P/O PL 80.15 Item 5)
20	—	Left front cover assembly (Not Spared)
21	—	Feed out sensor harness (P/O PL 80.15 Item 4)
22	930W00123	Tray 2 feed out sensor (Q72-103)

NOTE: HFSI. To reset the HFSI counter, refer to dC135.

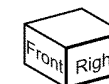
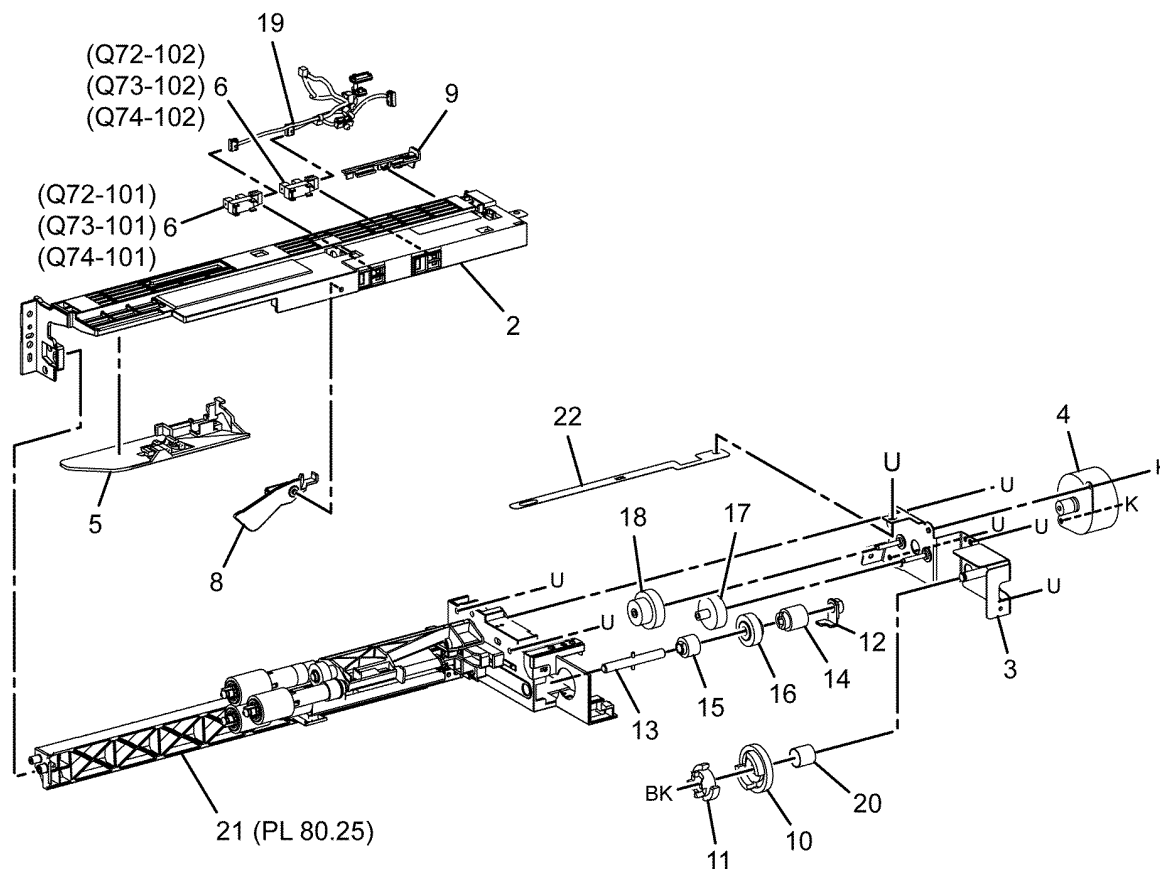


C-8-0122-A

PL 80.20 Tray 2, 3 and 4 Feeder Assembly (1 of 2)

Item	Part	Description
1	—	Tray 2/3/4 feeder assembly (REF: PL 80.15, PL 80.30, PL 80.35, PL 80.65, PL 80.70)
2	—	Upper frame (P/O PL 80.20 Item 1)
3	—	Drive bracket assembly (P/O PL 80.20 Item 1)
4	127K52790	Tray 2 feed/lift motor (MOT72-001)/ Tray 3 feed/lift motor (MOT73-001)/Tray 4 feed/lift motor (MOT74-001) (P/O PL 80.20 Item 1)
5	—	Chute (P/O PL 80.20 Item 1)
6	930W00123	Tray 2 level sensor (Q72-102)/Tray 3 level sensor (Q73-102)/Tray 4 level sensor (Q74-102)/Tray 2 no paper sensor (Q72-101)/Tray 3 no paper sensor (Q73-101)/Tray 4 no paper sensor (Q74-101)
7	—	Not used
8	120E22481	Tray 2 no paper sensor actuator
9	—	Harness rear holder (P/O PL 80.20 Item 1)
10	—	Gear 31 (P/O PL 80.20 Item 1)
11	—	Spacer (P/O PL 80.20 Item 1)
12	—	Bearing shaft (P/O PL 80.20 Item 1)
13	—	Drive shaft assembly (P/O PL 80.20 Item 1)
14	—	Gear 13T (P/O PL 80.20 Item 1)
15	005K83081	One way clutch assembly (P/O PL 80.20 Item 1)
16	—	One way gear assembly (P/O PL 80.20 Item 1)
17	—	Helical gear 25T (P/O PL 80.20 Item 1)
18	—	Helical gear 29/19T (P/O PL 80.20 Item 1)
19	—	Sensor harness assembly (P/O PL 80.20 Item 1)
20	—	Spring (P/O PL 80.20 Item 1)
21	—	Roll assembly (P/O PL 80.20 Item 1)
22	—	Plate earth nudger (P/O PL 80.20 Item 1)

1 { 2 - 22, PL 80.25 items 1 - 23



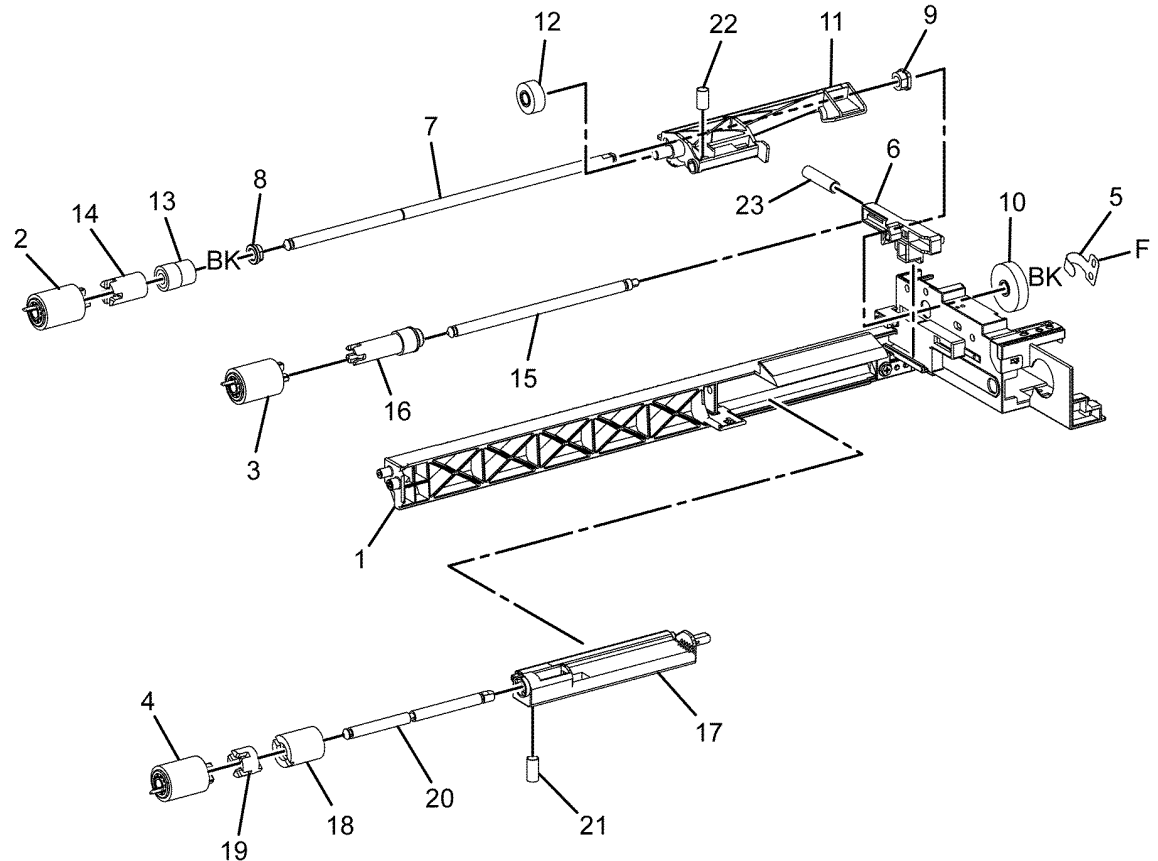
C-8-0123-A

PL 80.25 Tray 2, 3 and 4 Feeder Assembly (2 of 2)

Item	Part	Description
1	—	Lower frame (P/O PL 80.20 Item 1)
2	—	Feed roll (P/O PL 80.25 Item 24) (REP 80.6)
3	—	Nudger roll (P/O PL 80.25 Item 24) (REP 80.6)
4	—	Retard roll (P/O PL 80.25 Item 24) (REP 80.6)
5	—	Earth feed plate (P/O PL 80.20 Item 1)
6	—	Lever (P/O PL 80.20 Item 1)
7	—	Feed shaft (P/O PL 80.20 Item 1)
8	—	Bearing (P/O PL 80.20 Item 1)
9	—	Bearing (P/O PL 80.20 Item 1)
10	—	Helical gear 30T (P/O PL 80.20 Item 1)
11	—	Nudger support (P/O PL 80.20 Item 1)
12	—	Spur gear 33T (P/O PL 80.20 Item 1)
13	005K06760	Clutch assembly 22T
14	005K05890	Clutch assembly
15	—	Nudger shaft (P/O PL 80.20 Item 1)
16	—	Gear 25T (P/O PL 80.20 Item 1)
17	—	Retard support (P/O PL 80.20 Item 1)
18	005K83300	Friction clutch assembly
19	—	Spacer (P/O PL 80.20 Item 1)
20	—	Retard shaft (P/O PL 80.20 Item 1)
21	—	Retard spring compression (P/O PL 80.20 Item 1)
22	—	Nudger spring compression (P/O PL 80.20 Item 1)
23	—	Lever spring compression (P/O PL 80.20 Item 1)
24	604K56080	Feed roller kit (See NOTE) (REP 80.6, REP 80.12, REP 80.15)

NOTE: HFSI. To reset the HFSI counter, refer to dC135.

24 { 2 - 4

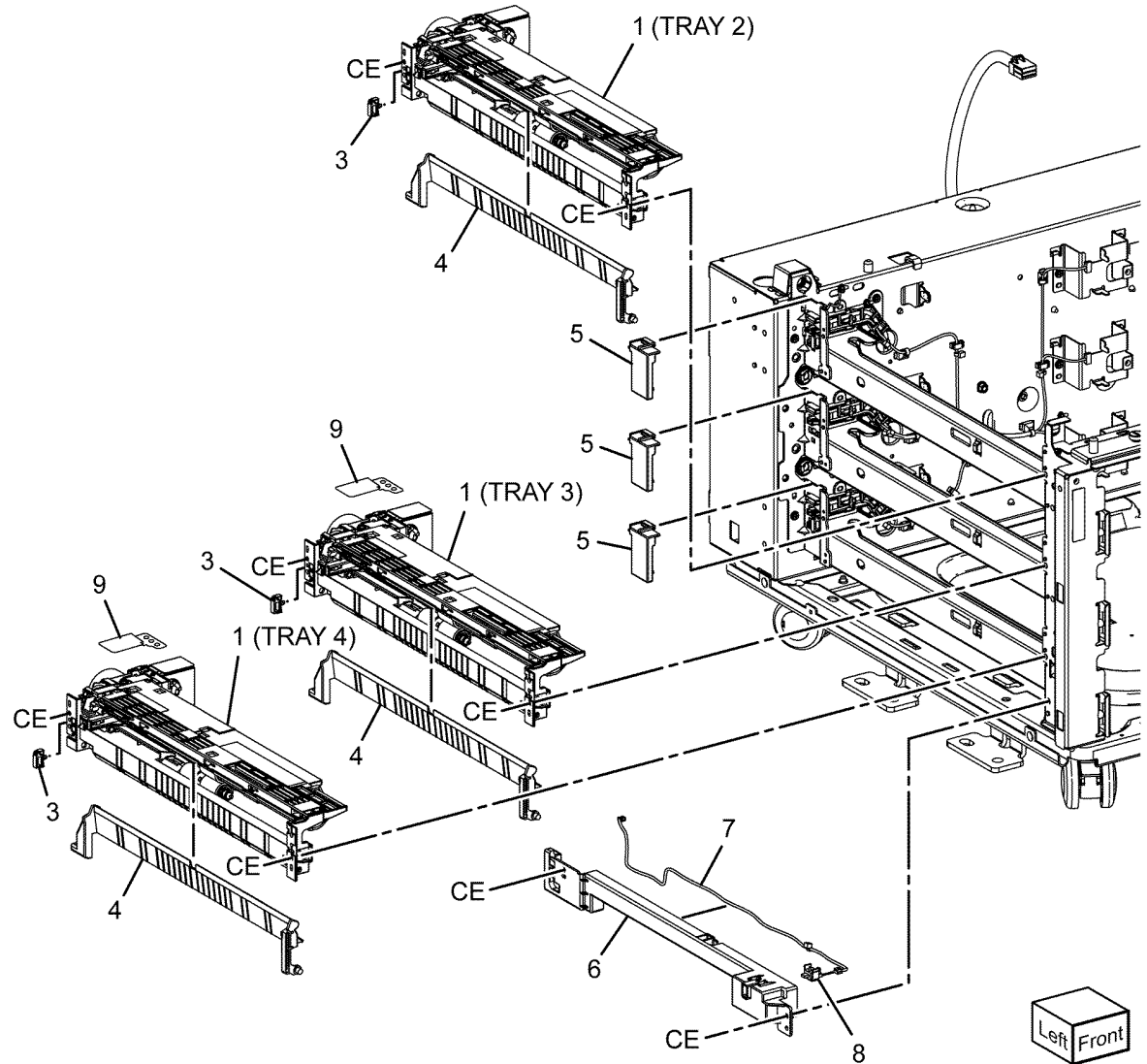


C-8-0124-A

PL 80.30 3TM Feeders

Item	Part	Description
1	859K09730	Tray 2/3/4 feeder assembly (REF: PL 80.20, PL 80.25) (See NOTE) (tray 2 - REP 80.7, tray 3 - REP 80.8, tray 4 - REP 80.9)
2	—	Not used
3	920W01209	Locking clamp
4	054E33803	Feed chute
5	—	ESD cover (Not Spared)
6	—	IL cover assembly (Not Spared)
7	—	IL harness assembly (Not Spared)
8	110E11580	TM left hand interlock switch (S77-306)
9	—	FDR 2T cover (Not Spared)

NOTE: HFSI. To reset the HFSI counter, refer to dC135.

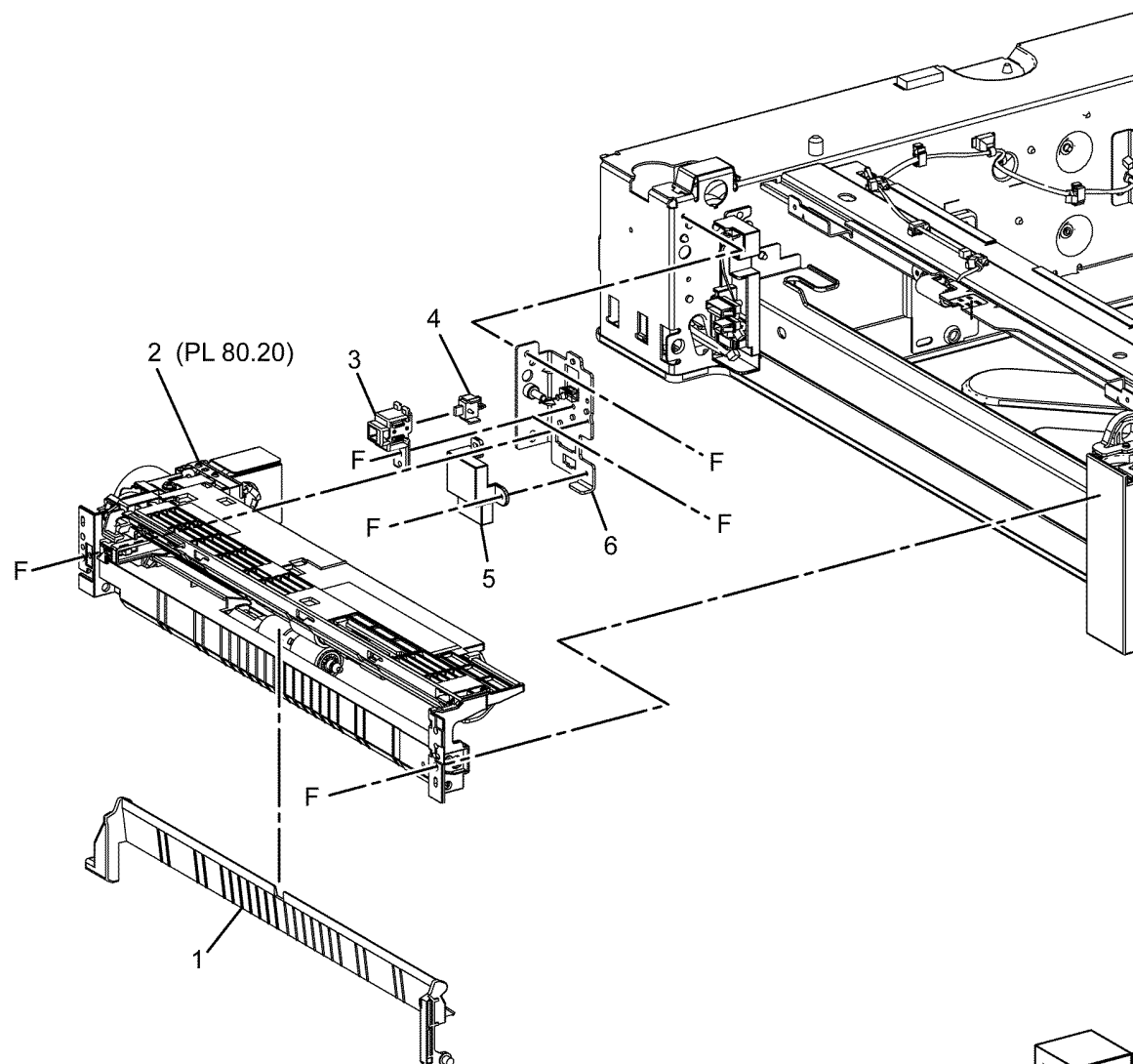


C-8-0125-A

PL 80.35 STM Feeder

Item	Part	Description
1	054E33803	Feed chute
2	859K09730	Tray 2 feeder assembly (See NOTE)
3	—	IL cover (Not Spared)
4	110E12220	TM left hand interlock switch (S77-306)
5	—	ESD STM cover (Not Spared)
6	—	Latch bracket assembly (Not Spared)

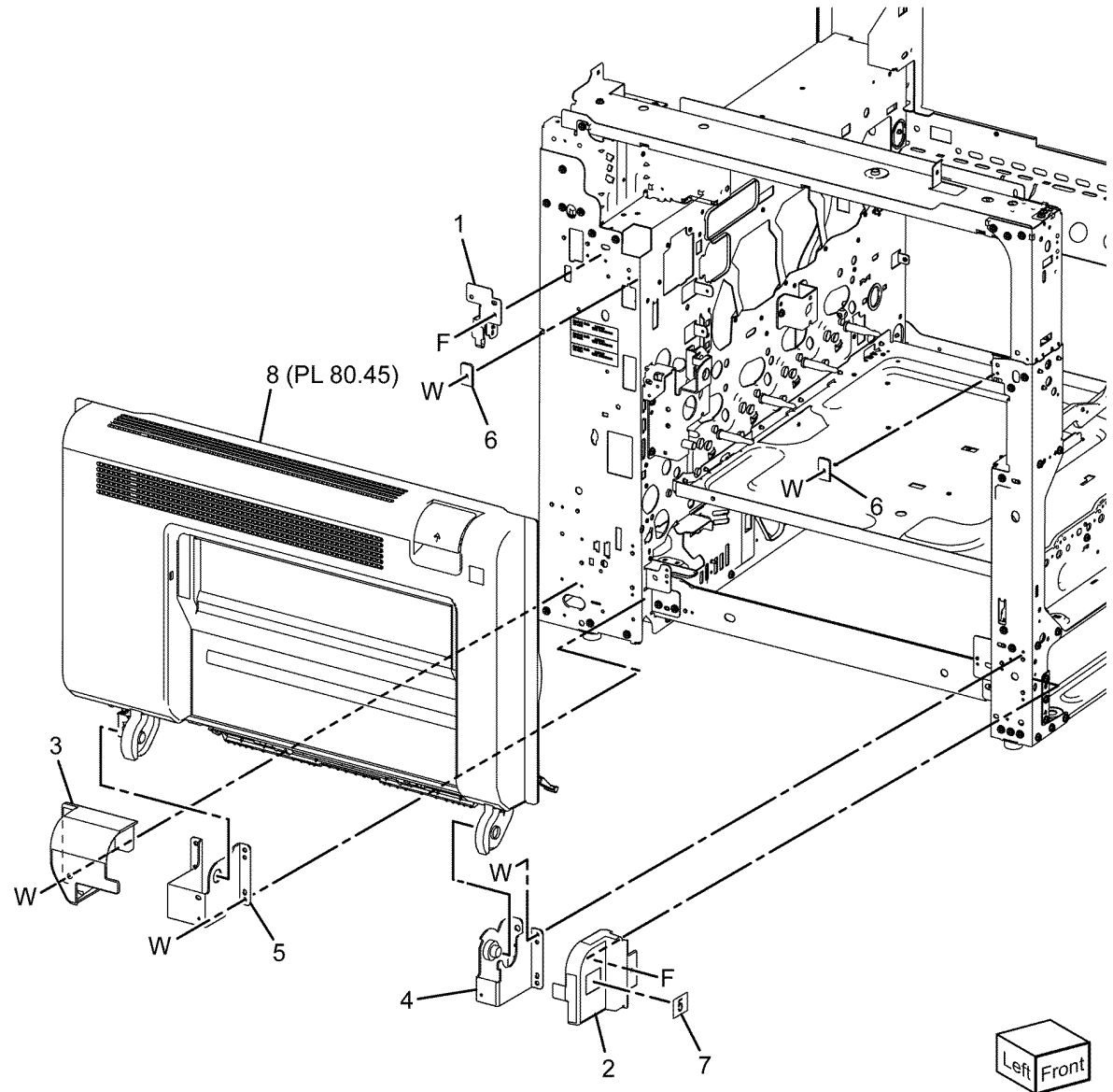
NOTE: HFSI. To reset the HFSI count, refer to dC135.



C-8-0126-A

PL 80.40 LH Transport Components

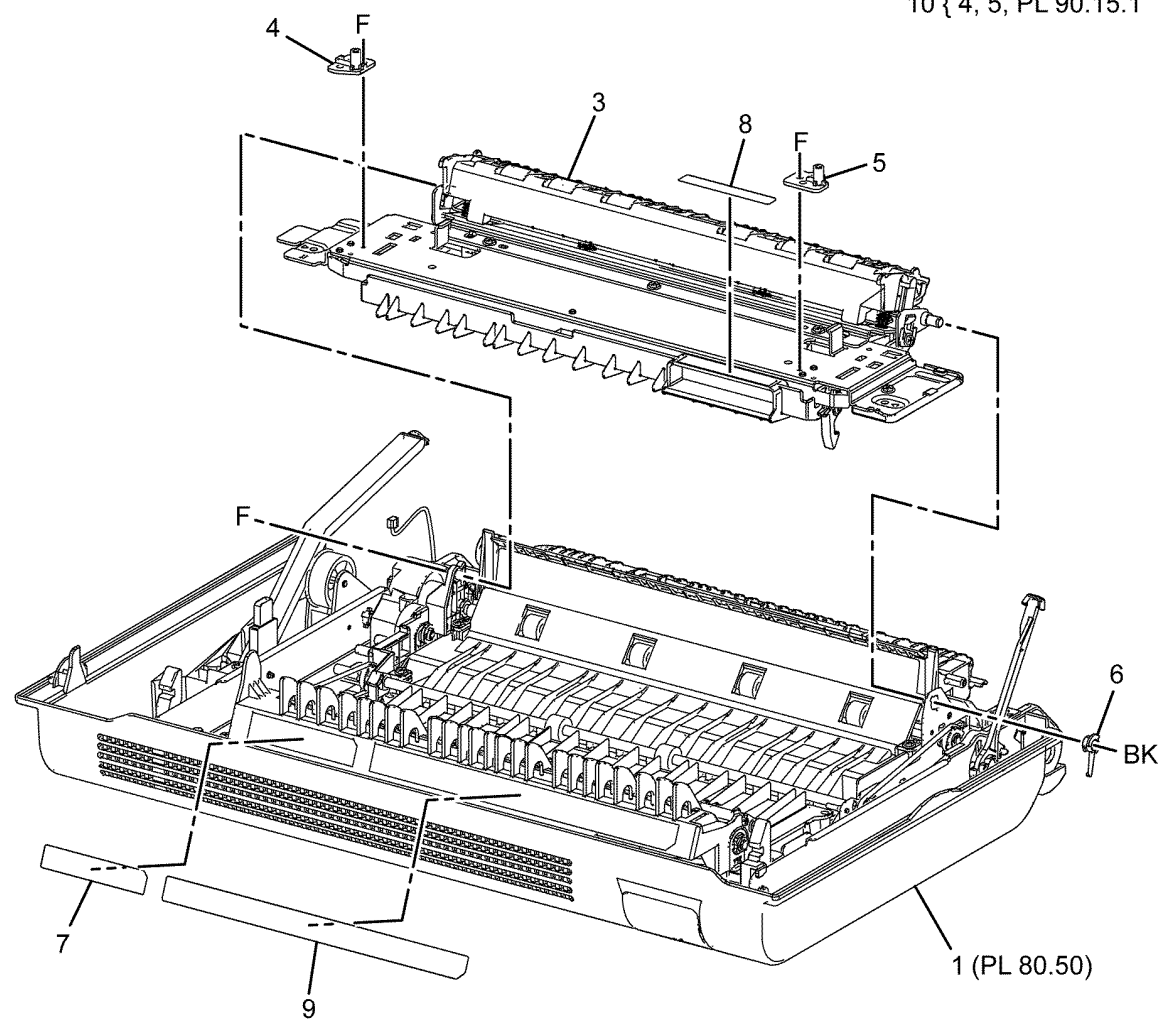
Item	Part	Description
1	110K18072	Left hand high cover switch (S77-302)
2	—	Front hinge cover (Not Spared)
3	—	Rear hinge cover (Not Spared)
4	—	Bypass tray front frame assembly (Not Spared)
5	—	Bypass tray rear frame assembly (Not Spared)
6	—	Latch guide (Not Spared)
7	—	Number label (5) (Not Spared)
8	859K09610	L/H cover (REP 80.18)



C-8-0127-A

PL 80.45 LH Transport Assembly

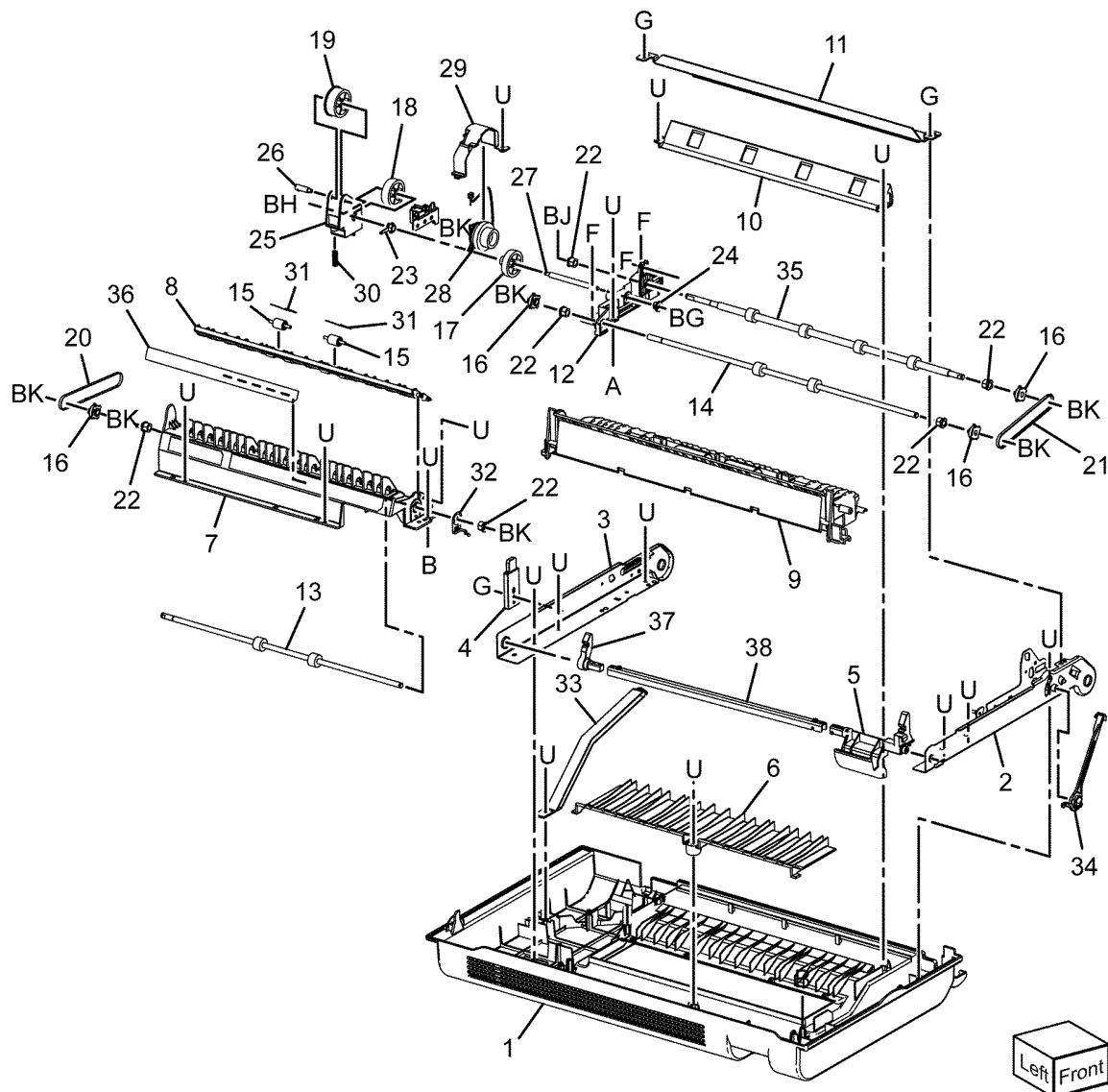
Item	Part	Description
1	—	LH cover assembly (REF: PL 80.50)
2	—	Inner duplex chute assembly
3	—	Inner duplex chute (P/O PL 80.45 Item 2)
4	—	Holder-in (P/O PL 80.45 Item 2)
5	—	Holder-out (P/O PL 80.45 Item 1)
6	—	Bearing (Not Spared)
7	—	Caution label (Not Spared)
8	—	Inner label (Not Spared)
9	—	Label (Not Spared)
10	—	Transfer chute assembly (Not Spared)



C-8-0128-A

PL 80.50 Duplex LH Cover Components

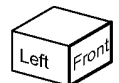
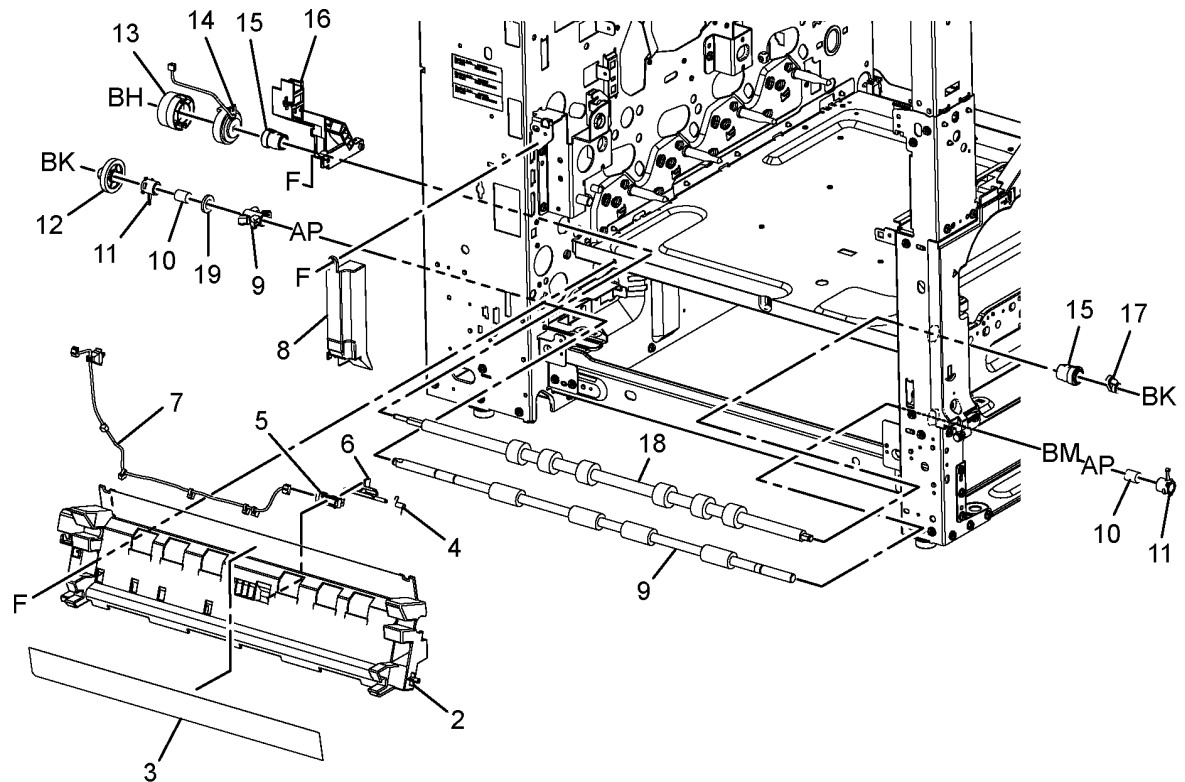
Item	Part	Description
1	—	Left cover (Not Spared)
2	—	Front frame (Not Spared)
3	—	Rear frame (Not Spared)
4	—	Fusing plate (Not Spared)
5	011E28352	Lever latch front mat
6	—	Duplex cover chute (Not Spared)
7	—	LH cover duplex chute (Not Spared)
8	—	LH low chute (Not Spared)
9	—	TA pinch chute assembly (Not Spared)
10	—	Duplex out chute (Not Spared)
11	—	Plate tie TA (Not Spared)
12	—	Gear bracket (Not Spared)
13	—	Duplex 1 roll (Not Spared)
14	—	Duplex 2 roll (Not Spared)
15	—	Duplex nip roll (Not Spared)
16	—	Pulley (Not Spared)
17	—	Gear (Not Spared)
18	—	Gear (Not Spared)
19	—	Swing gear (Not Spared)
20	—	Belt (Not Spared)
21	—	Belt (Not Spared)
22	—	Bearing (Not Spared)
23	—	Bearing (Not Spared)
24	—	Bearing (Not Spared)
25	—	Swing bracket (Not Spared)
26	—	Swing shaft (Not Spared)
27	—	Clutch shaft (Not Spared)
28	121K56560	Duplex clutch (CL77-003)
29	—	Clutch cover (Not Spared)
30	—	Spring (Not Spared)
31	—	Pinch spring (Not Spared)
32	—	Ground plate (Not Spared)
33	869E14461	LH rear support
34	868E48840	LH front support
35	—	Duplex 3 roll (Not Spared)
36	—	Label (Not Spared)
37	011E29140	Rear latch lever
38	—	Plate latch (Not Spared)



C-8-0129-A

PL 80.55 Registration

Item	Part	Description	
1	859K01531	Registration transport assembly (REP 80.19)	1 { 2 - 18
2	—	Registration MA chute (P/O PL 80.55 Item 1)	20 { 13, 14
3	—	Inlet film chute (P/O PL 80.55 Item 1)	
4	—	Registration spring actuator (P/O PL 80.55 Item 1)	
5	930W00123	Registration sensor (Q77-104)	
6	120E35300	Registration actuator	
7	—	Registration sensor IBK harness assembly (P/O PL 80.55 Item 1)	
8	—	Connect cover (P/O PL 80.55 Item 1)	
9	859K01520	Takeaway roll 1	
10	899E10940	TA spring	
11	013E45340	TA bearing	
12	807E48210	Gear 36T	
13	807E45610	Registration clutch gear	
14	121K55550	Registration clutch (CL77-002)	
15	013E45090	Registration bearing	
16	—	Guide harness (P/O PL 80.55 Item 1)	
17	005E94861	Registration coupling	
18	059K87340	Registration roll (REP 80.20)	
19	—	Washer NY 8-1 (Not Spared)	
20	—	Registration clutch assembly (Not Spared)	

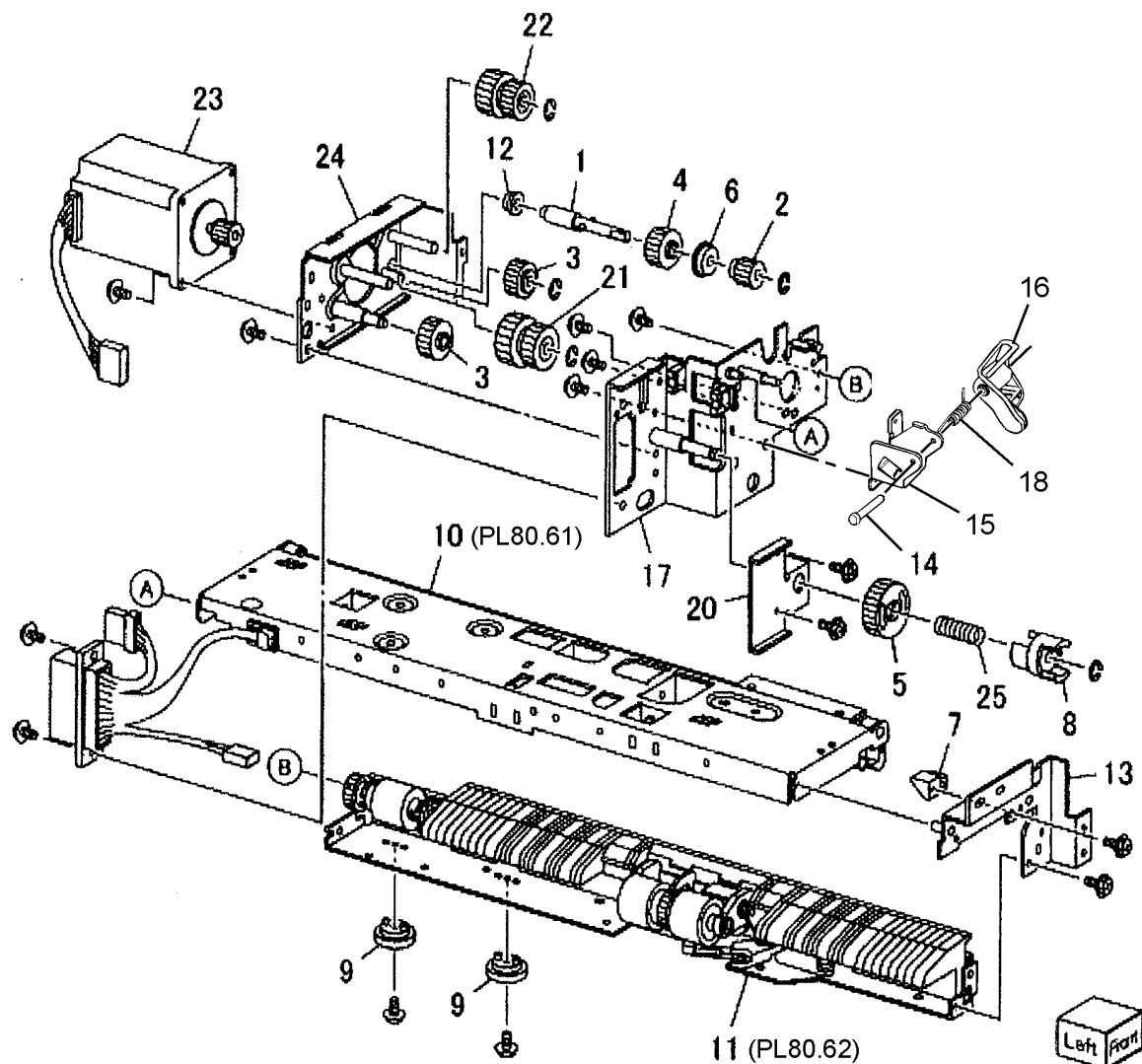


C-8-0066-A

PL 80.60 HCF Feeder (1 of 3)

Item	Part	Description
1	—	Shaft (P/O PL 70.45 Item 11)
2	007E78760	Gear 19T
3	007E78770	Gear 25T
4	007E78780	Gear 25T
5	007E78790	Gear 40T
6	013E25530	Bearing
7	—	Block (P/O PL 70.45 Item 11)
8	—	Spacer (P/O PL 70.45 Item 11)
9	019E56470	Holder
10	—	Upper feeder assembly (P/O PL 70.45 Item 11)
11	—	Lower feeder assembly (P/O PL 70.45 Item 11)
12	413W66250	Ball bearing
13	—	Front frame (P/O PL 70.45 Item 11)
14	—	Pin (P/O PL 70.45 Item 11)
15	—	Down bracket (P/O PL 70.45 Item 11)
16	—	Link bracket (P/O PL 70.45 Item 11)
17	—	Rear frame (P/O PL 70.45 Item 11)
18	—	Tension spring (P/O PL 70.45 Item 11)
19	—	Lift/Motor frame (P/O PL 70.45 Item 11)
20	—	Bracket (P/O PL 80.60 Item 19)
21	007K88520	Gear 23T/27T
22	007K88530	Gear 31T/36T
23	127K37901	HCF feed/lift motor (MOT78-003) (REP 80.27)
24	—	Plate (P/O PL 80.60 Item 19)
25	—	Spring (P/O PL 70.45 Item 11)

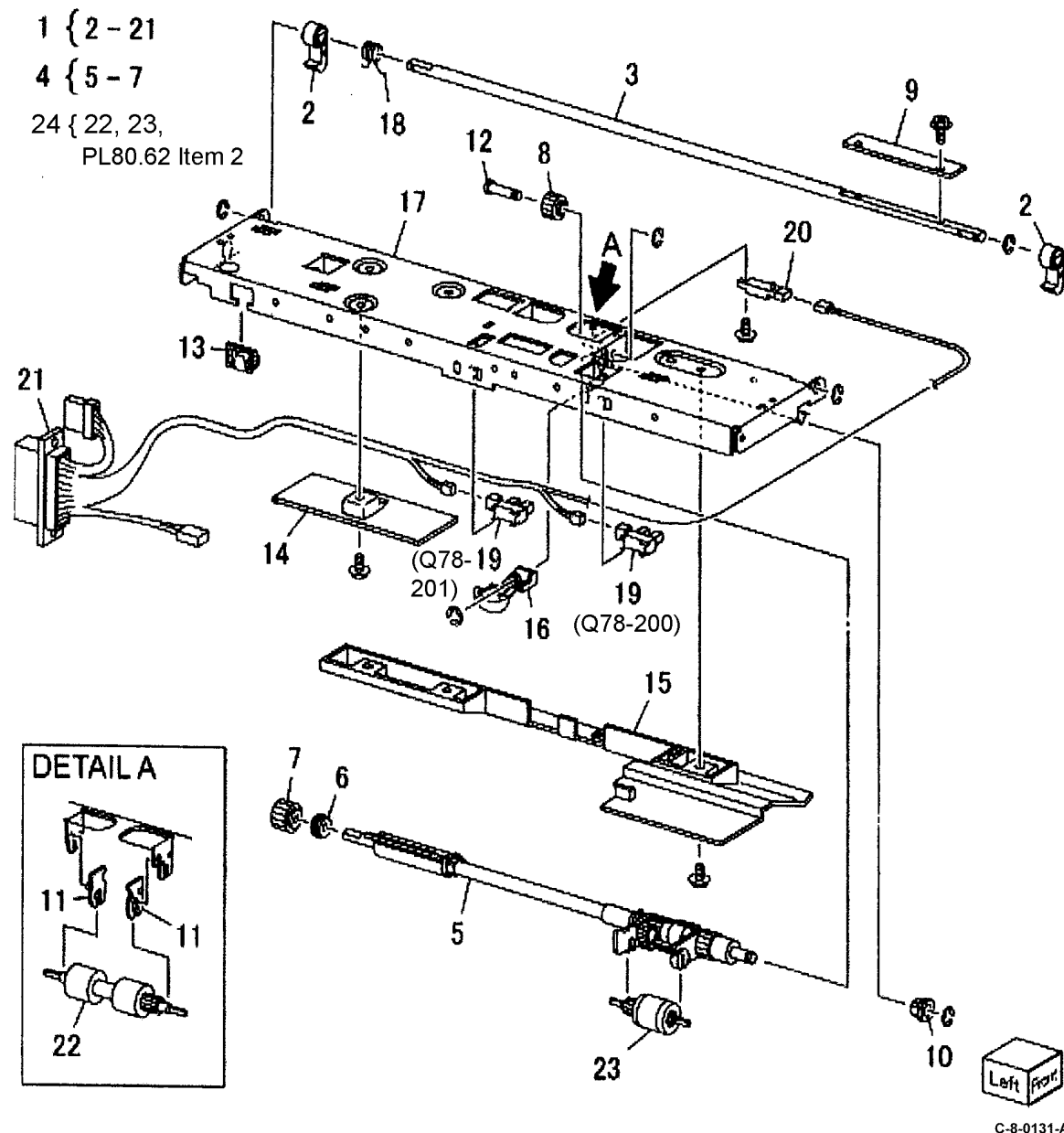
19 { 20 - 24



C-8-0130-A

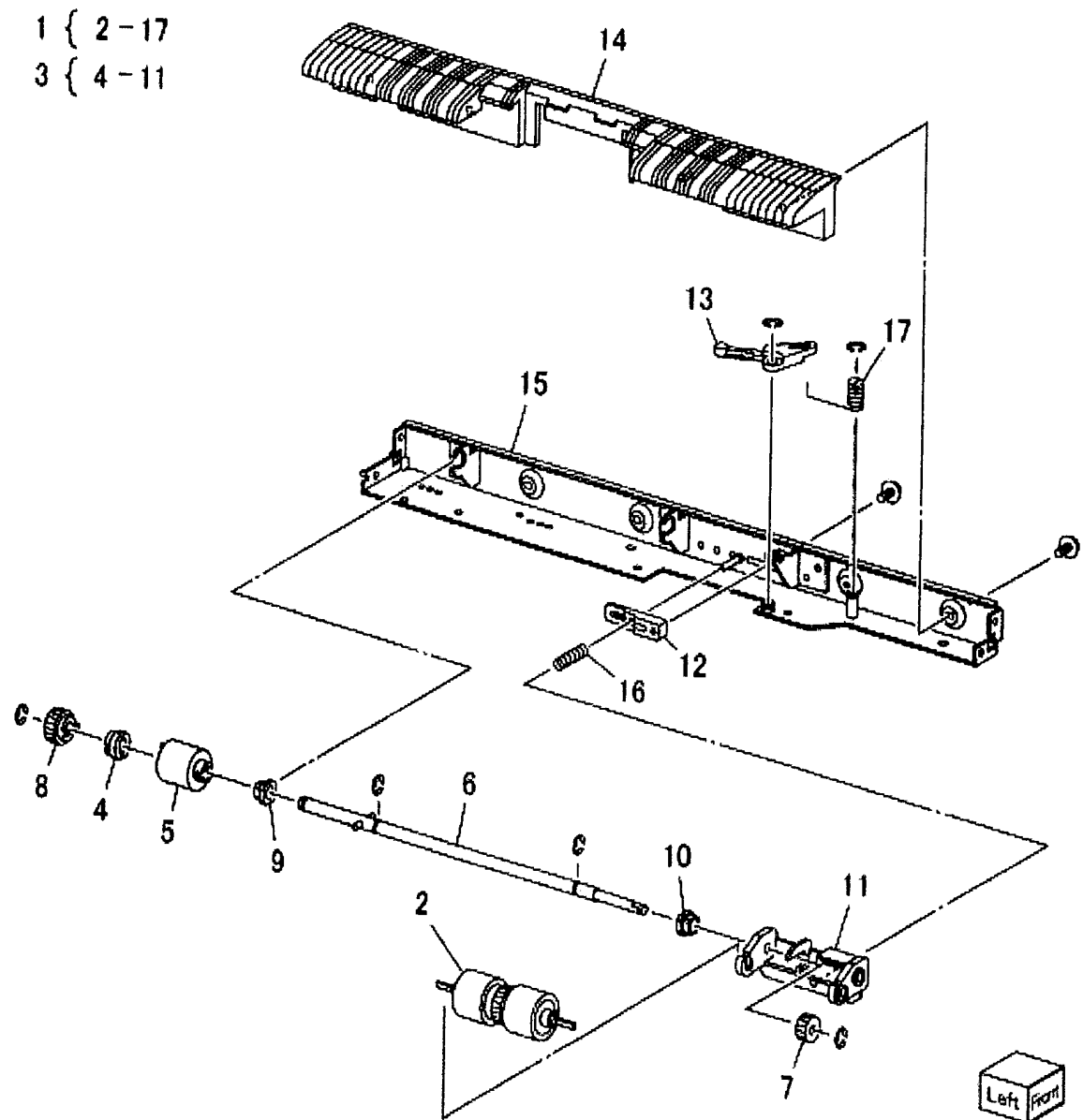
PL 80.61 HCF Feeder (2 of 3)

Item	Part	Description
1	—	Upper feeder assembly (P/O PL 70.45 Item 11)
2	003E59570	Latch
3	—	Shaft latch (P/O PL 80.61 Item 1)
4	006K23124	Feed shaft assembly (REP 80.23, REP 80.25)
5	—	Feed shaft (P/O PL 80.61 Item 4)
6	413W66250	Ball bearing
7	—	Gear 20T (P/O PL 80.61 Item 4)
8	007E78180	Feed gear 25T
9	—	Lever (P/O PL 80.61 Item 1)
10	—	Bearing (P/O PL 80.61 Item 1)
11	—	Spacer (P/O PL 80.61 Item 1)
12	—	Pin drive (P/O PL 80.61 Item 1)
13	—	Guide (P/O PL 80.61 Item 1)
14	—	Rear upper chute (P/O PL 80.61 Item 1)
15	—	Upper chute (P/O PL 80.61 Item 1)
16	120E21900	Actuator
17	—	Upper frame (P/O PL 80.61 Item 1)
18	—	Spring (P/O PL 80.61 Item 1)
19	930W00112	HCF no paper sensor (Q78-200)/ HCF level sensor (78-201)
20	—	HCF Pre feed sensor (Q78-100) (P/O PL 80.61 Item 1)
21	—	Wire harness (P/O PL 80.61 Item 1)
22	—	Feed roll (P/O PL 80.61 Item 24)
23	—	Nudger roll (P/O PL 80.61 Item 24)
24	604K23660	Feed roller kit (REP 80.22)



PL 80.62 HCF Feeder (3 of 3)

Item	Part	Description
1	—	Lower feed assembly (Not Spared)
2	—	Retard roll (P/O PL 80.61 Item 24)
3	—	Retard shaft assembly (P/O PL 80.62 Item 1)
4	—	Collar (P/O PL 80.62 Item 3)
5	005K06701	Friction clutch
6	—	Shaft (P/O PL 80.62 Item 3)
7	007E78170	Gear 15T
8	007E89760	Gear 22T
9	013E23600	Bearing
10	013E23610	Bearing
11	—	Retard bracket (P/O PL 80.62 Item 3)
12	—	Slide (P/O PL 80.62 Item 1)
13	—	Lever (P/O PL 80.62 Item 1)
14	—	Lower chute (P/O PL 80.62 Item 1)
15	—	Lower frame (P/O PL 80.62 Item 1)
16	—	Spring (P/O PL 80.62 Item 1) (REP 80.25)
17	—	Spring (P/O PL 80.62 Item 1) (REP 80.24)

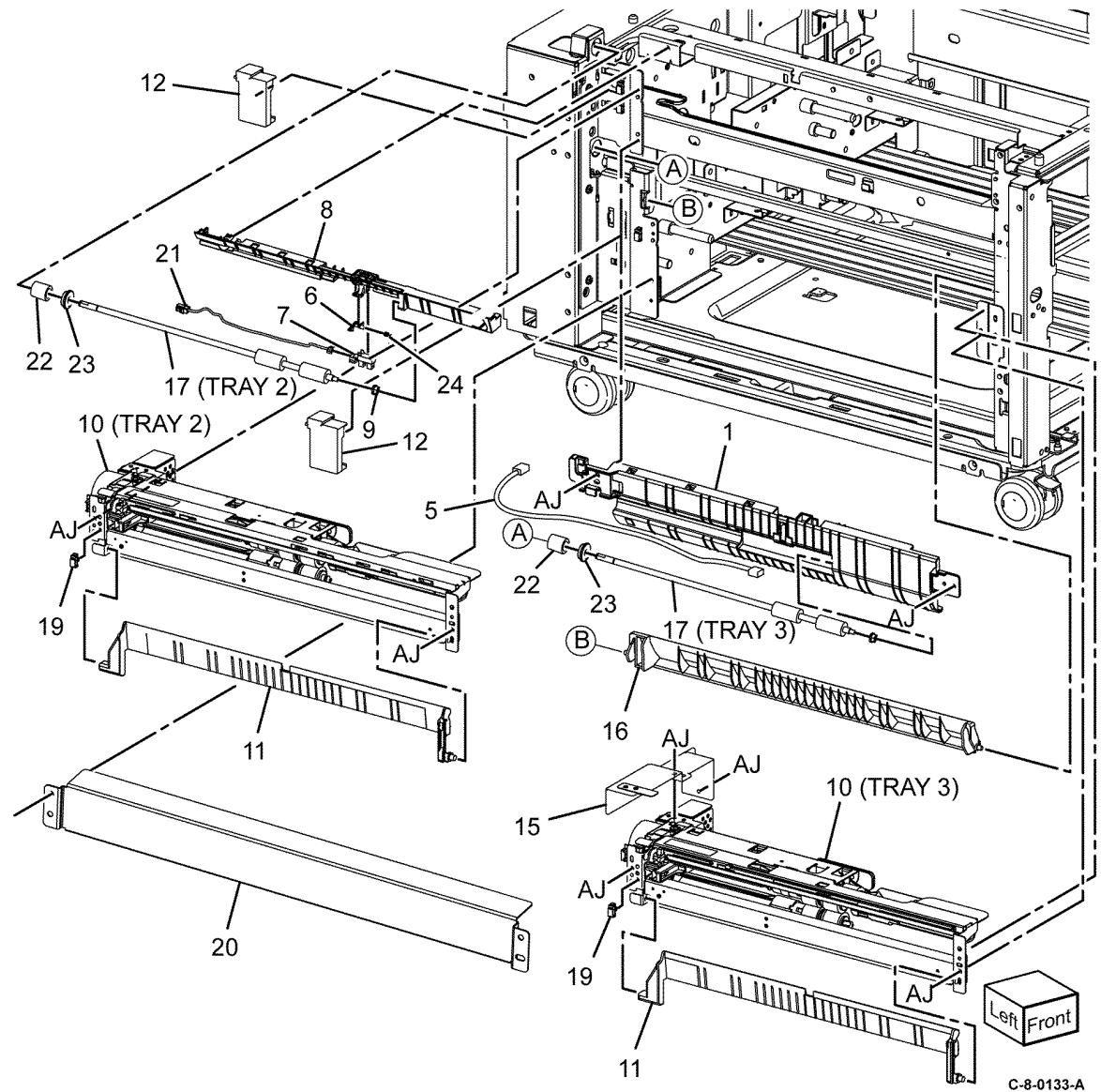


C-8-0132-A

PL 80.65 TTM Tray 2 and 3 Feeders

Item	Part	Description
1	054E59220	TTM chute (REP 80.30)
2	—	Not used
3	—	Not used
4	—	Not used
5	—	Harness assembly (Not Spared)
6	120E37920	Sensor actuator
7	930W00123	Tray 2 feed out sensor (Q72-103) (REP 80.36)
8	—	TA chute (Not Spared)
9	013E46870	Plastic bearing
10	859K09730	Tray 2/3 feeder assembly (REF: PL 80.20, PL 80.25) (See NOTE) (tray 2 - REP 80.33, tray 3 - REP 80.34)
11	054E33803	Feed chute
12	—	ESD cover (Not Spared)
13	—	Not used
14	—	Not used
15	—	Feeder cover (Not Spared)
16	—	Feed trans - chute (Not Spared)
17	859K04560	Takeaway roll (See NOTE) (REP 80.41)
18	—	Not used
19	—	Clamp (Not Spared)
20	—	Inner cover (Not Spared)
21	—	Harness assembly (Not Spared)
22	—	Gear 16T (Not Spared)
23	—	Sleeve bearing (Not Spared)
24	—	Spring (Not Spared)

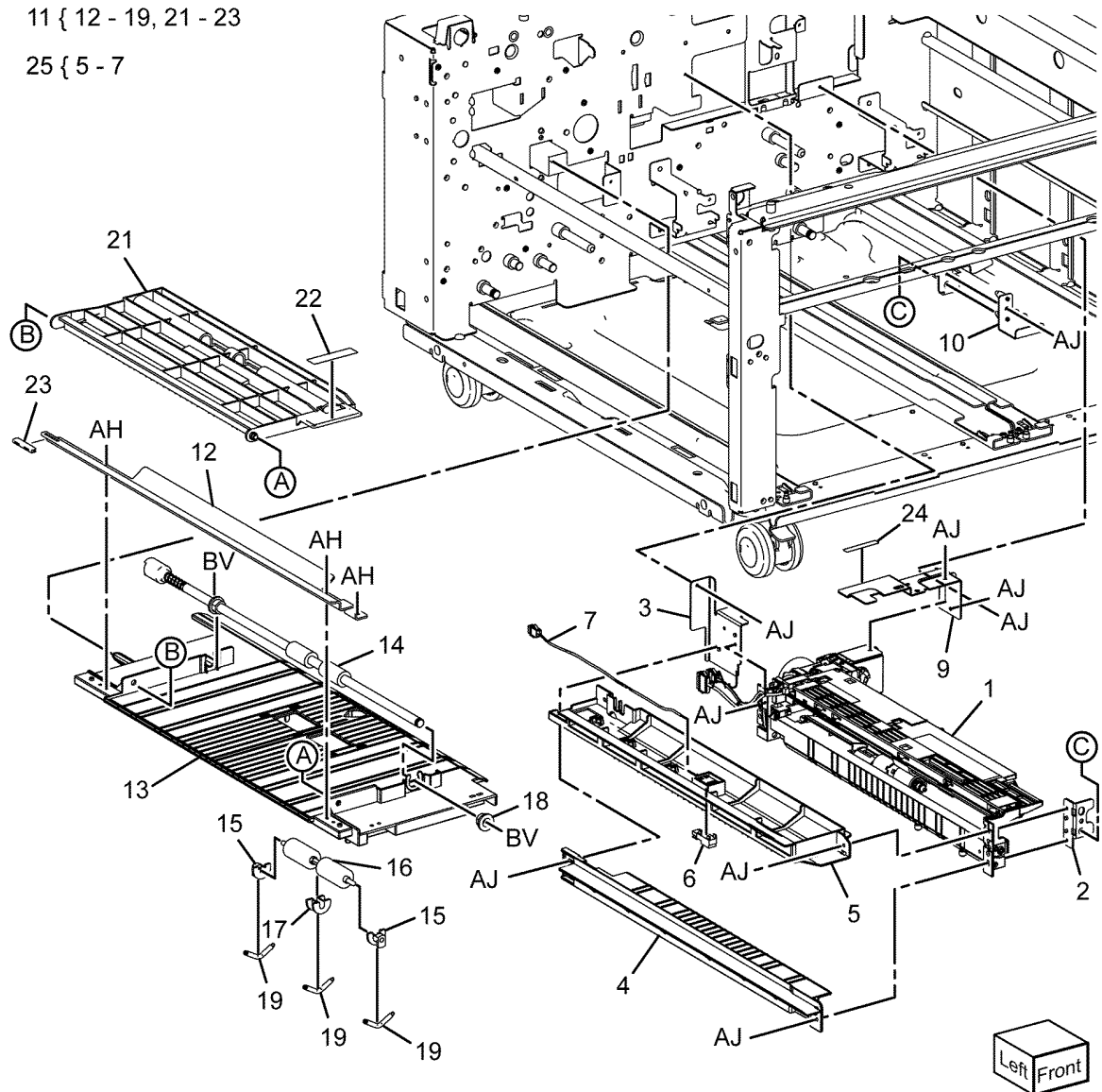
NOTE: HFSI. To reset the HFSI count, refer to dC135.



PL 80.70 TTM Tray 4 Feeder

Item	Part	Description
1	859K00482	Tray 4 feeder assembly (REF: PL 80.20, PL 80.25) (See NOTE) (REP 80.35)
2	—	Bracket (Not Spared)
3	—	Bracket (Not Spared)
4	054E57341	Lower feed chute (REP 80.29)
5	—	Upper feed chute (P/O PL 80.70 Item 25) (REP 80.31)
6	930W00212	Tray 4 feed out sensor
7	—	Wire harness (P/O PL 80.70 Item 25)
8	—	Not used
9	—	Feeder cover (Not Spared)
10	—	Support bracket (Not Spared)
11	—	Tray 4 transport assembly (Not Spared)
12	—	Transport rail (P/O PL 80.70 Item 11)
13	—	Lower chute (P/O PL 80.70 Item 11)
14	—	Transport roll assembly (P/O PL 80.70 Item 11)
15	—	Bearing (P/O PL 80.70 Item 11)
16	059E98860	Nip roll (REP 80.32)
17	—	Bearing (P/O PL 80.70 Item 11)
18	—	Bearing (P/O PL 80.70 Item 11)
19	—	Spring (P/O PL 80.70 Item 11)
20	—	Not used
21	—	Upper chute (P/O PL 80.70 Item 11)
22	—	Label (P/O PL 80.70 Item 11)
23	—	Spacer (P/O PL 80.70 Item 11)
24	—	Label (Not Spared)
25	054K54480	Upper chute assembly

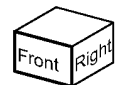
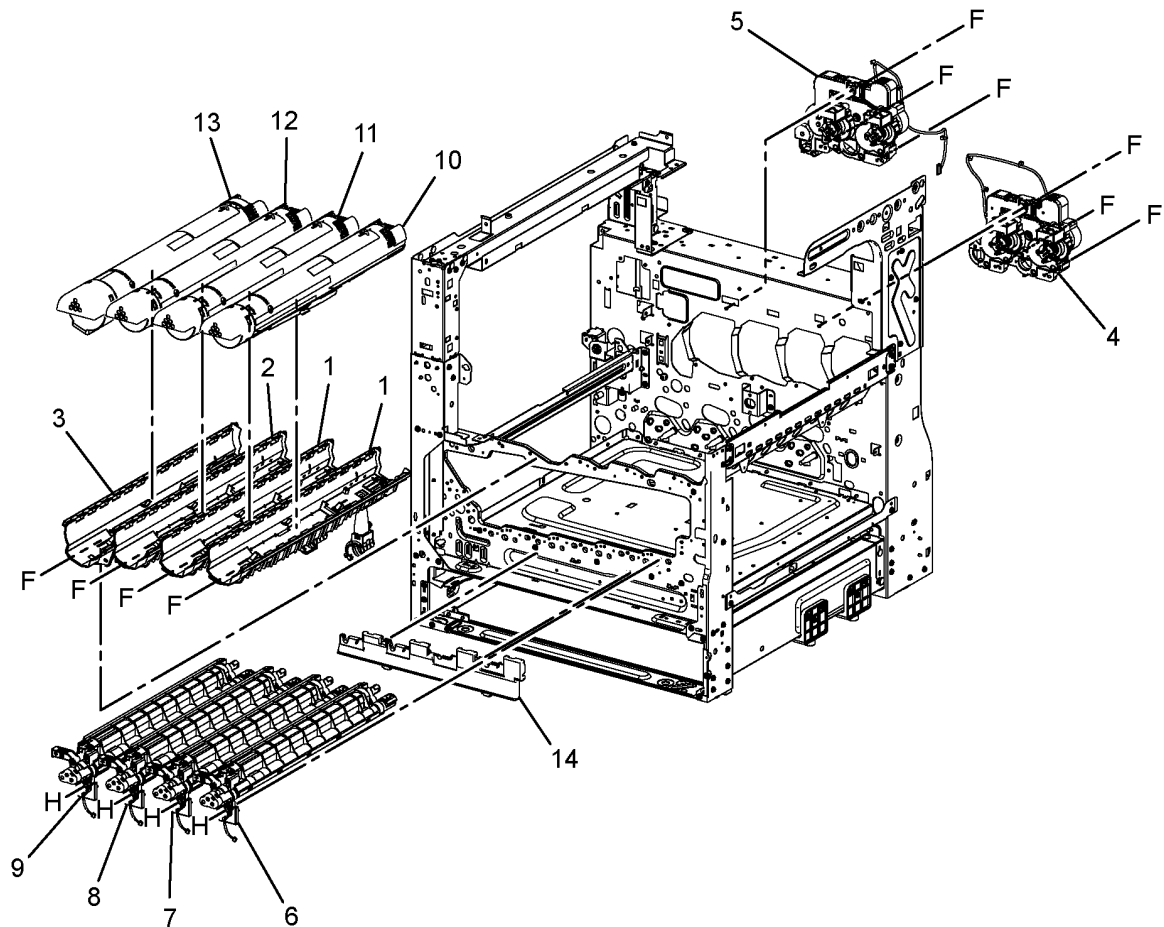
NOTE: HFSI. To reset the HFSI count, refer to dC135.



PL 90.05 Dispenser, Developer Unit

Item	Part	Description
1	—	Dispenser YM (REF: PL 90.10)
2	—	Dispenser C (REF: PL 90.10)
3	—	Dispenser K (REF: PL 90.10)
4	—	Dispenser Drive YM (REF: PL 90.15)
5	—	Dispenser Drive CK (REF: PL 90.15)
6	—	Developer Unit Y (REF: PL 90.30) (REP 90.1)
7	—	Developer Unit M (REF: PL 90.30) (REP 90.1)
8	—	Developer Unit C (REF: PL 90.30) (REP 90.1)
9	—	Developer Unit K (REF: PL 90.30) (REP 90.1)
10	—	Toner cartridge Y (REF: PL 26.05) (See NOTE)
11	—	Toner cartridge M (REF: PL 26.10) (See NOTE)
12	—	Toner cartridge C (REF: PL 26.10) (See NOTE)
13	—	Toner cartridge K (REF: PL 26.05) (See NOTE)
14	—	Harness cover

NOTE: For Toner cartridge variants look in Consumables at PL 26.05 and PL 26.10.

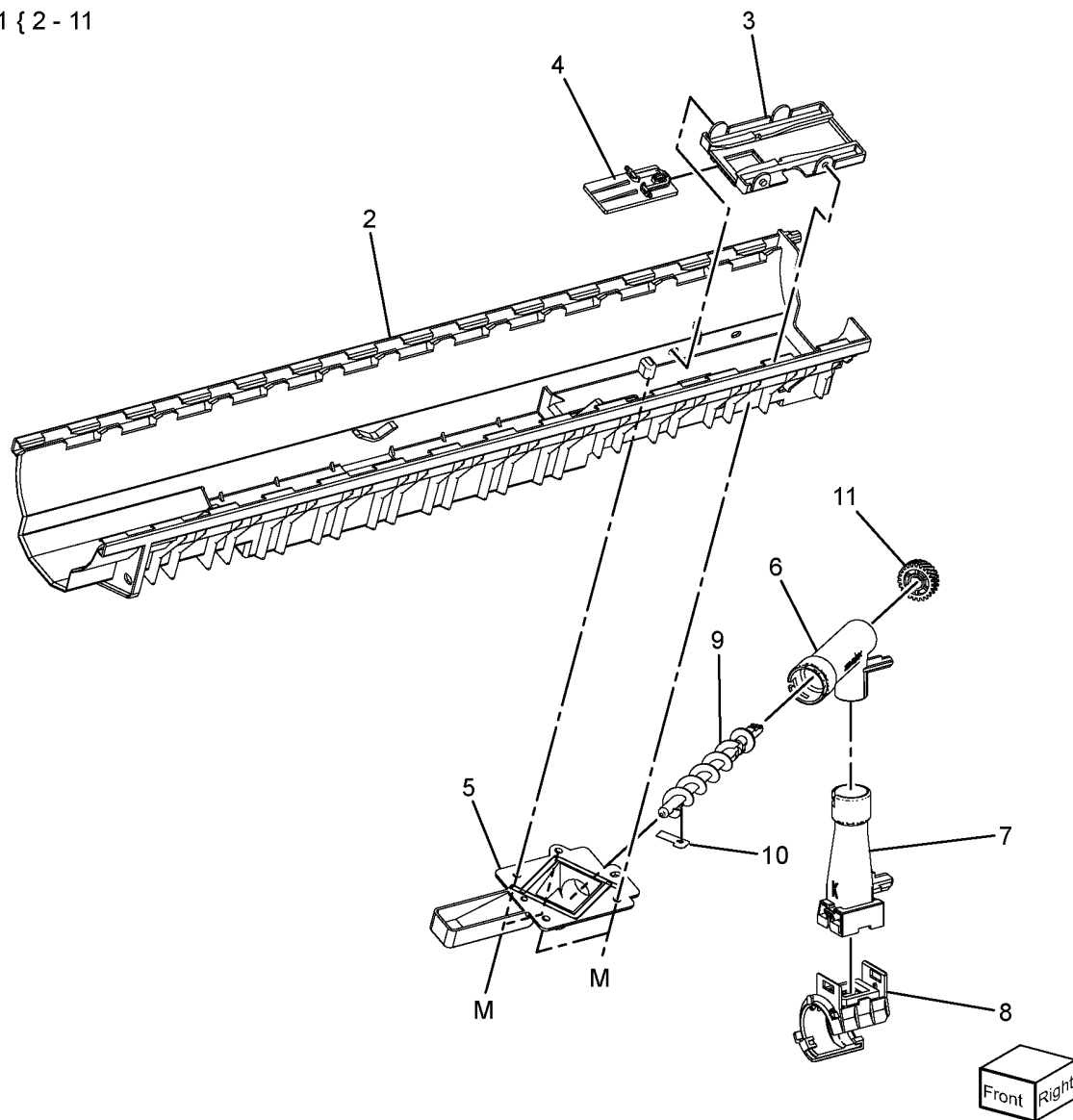


C-8-0055-A

PL 90.10 Dispenser Components

Item	Part	Description
1	094K93870	Dispenser Y,M (REP 90.4)
–	094K94061	Dispenser C (REP 90.4)
–	094K94071	Dispenser K (REP 90.4)
2	–	Holder cartridge STD Y,M,C (P/O PL 90.10 Item 1)
3	–	Shutter guide assembly (P/O PL 90.10 Item 1)
4	–	Shutter dispenser (P/O PL 90.10 Item 1)
5	–	Pipe dispenser main (P/O PL 90.10 Item 1)
6	–	Pipe dispenser assembly middle (P/O PL 90.10 Item 1)
7	–	Pipe dispenser assembly Lower Y,M,C (P/O PL 90.10 Item 1)
8	–	Pipe dispenser joint assembly (P/O PL 90.10 Item 1)
9	–	Auger (P/O PL 90.10 Item 1)
10	–	Paddle (P/O PL 90.10 Item 1)
11	–	Gear Y,M,K (P/O PL 90.10 Item 1)

1 { 2 - 11



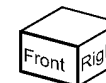
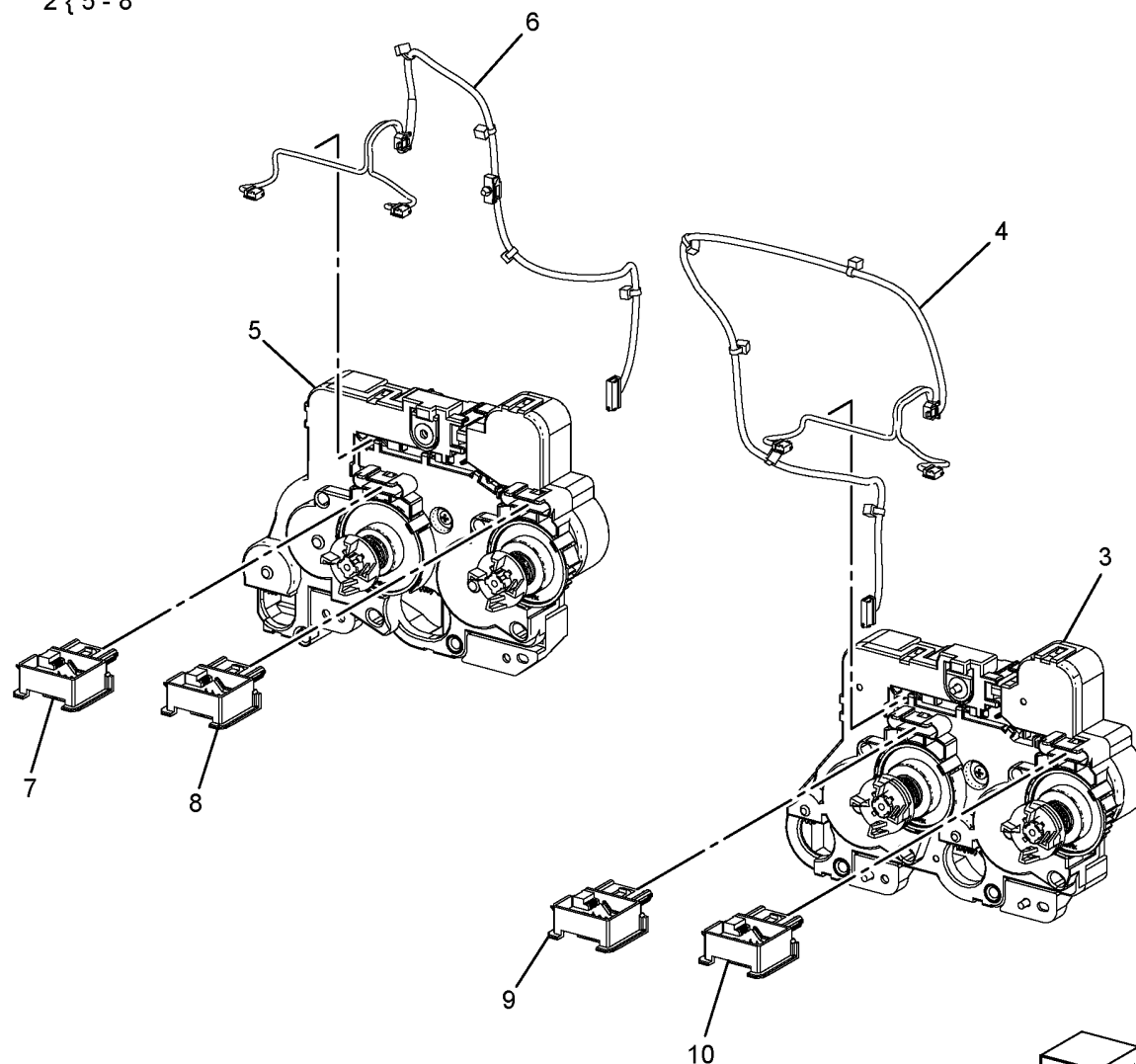
C-8-0056-A

PL 90.15 Dispenser Drive Components

Item	Part	Description
1	007K21081	Dispenser drive (Y, M) (REP 90.2)
2	007K21090	Dispenser drive (C, K) (REP 90.3)
3	—	Toner dispense motor (Y, M) (MOT93-001) (P/O PL 90.15 Item 1)
4	—	Toner CRUM YM harness assembly (P/O PL 90.15 Item 1)
5	—	Toner dispense motor (C, K) (MOT93-001) (P/O PL 90.15 Item 2)
6	—	Toner CRUM CK harness assembly (P/O PL 90.15 Item 2)
7	—	Toner CRUM connector assembly (K) (P/O PL 90.15 Item 2)
8	—	Toner CRUM connector assembly (C) (P/O PL 90.15 Item 2)
9	—	Toner CRUM connector assembly (M) (P/O PL 90.15 Item 1)
10	—	Toner CRUM connector assembly (Y) (P/O PL 90.15 Item 1)

1 { 3, 4, 9, 10

2 { 5 - 8



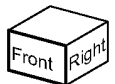
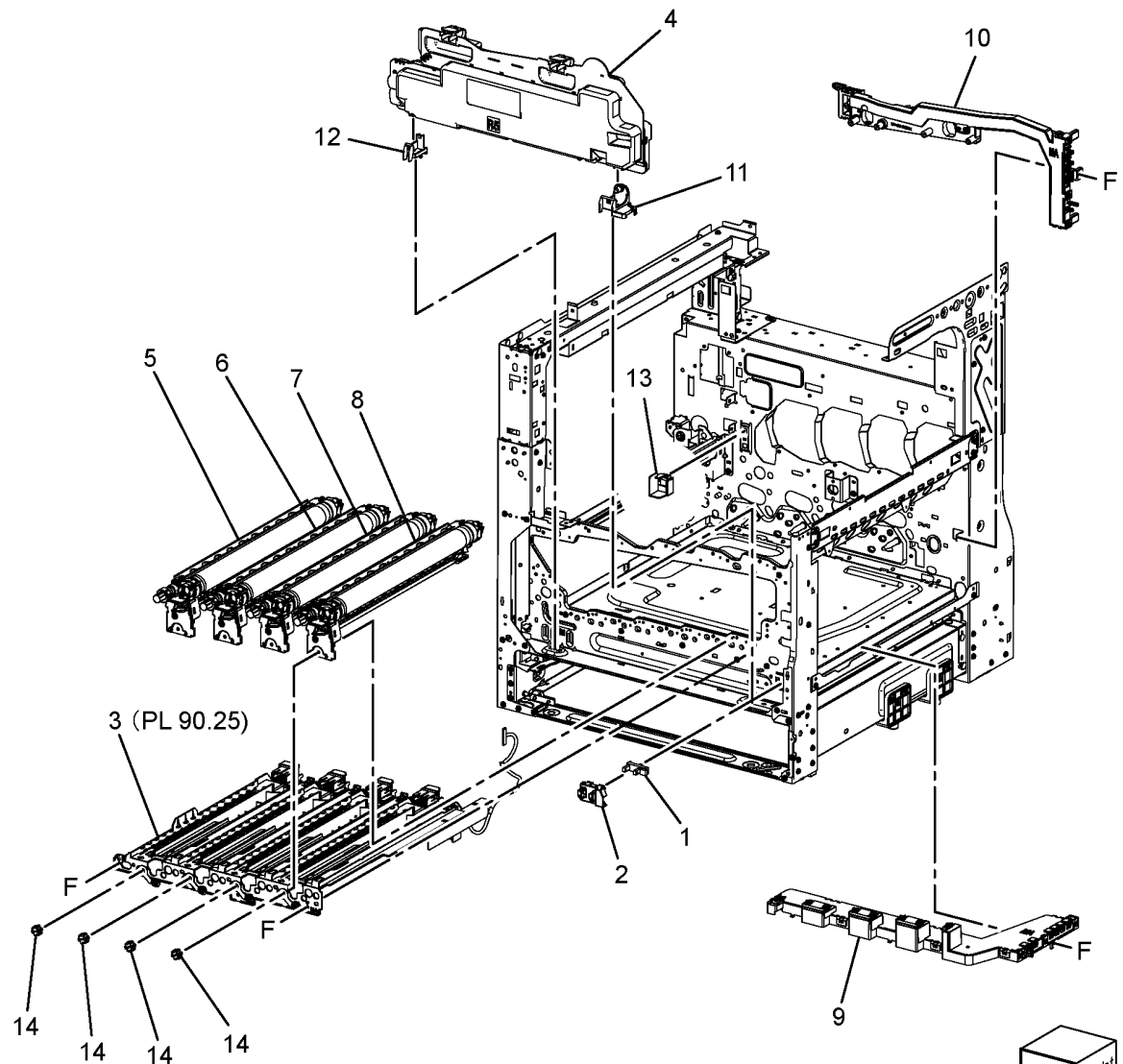
C-8-0057-A

PL 90.20 Xerographic Components

Item	Part	Description
1	930W00511	Waste toner bottle full sensor (Q91-200)
2	—	Sensor waste cover (Not Spared)
3	—	Marking guide assembly (REF: PL 90.25)
4	115R00129	Waste bottle assembly (C7000) (REP 90.6)
—	115R00128	Waste bottle assembly (C7030F) (REP 90.6)
5	113R00780	Drum cartridge (K) (C7030F) (See NOTE 1 & 2) (REP 90.12)
—	113R00782	Drum cartridge (K) (C7000)
6	—	Drum cartridge (C) (See NOTES 1 & 2) (REP 90.12)
7	—	Drum cartridge (M) (See NOTES 1 & 2) (REP 90.12)
8	—	Drum cartridge (Y) (See NOTES 1 & 2) (REP 90.12)
9	848K93810	HVPS housing assembly
10	848K93830	Conductor housing assembly
11	869E04962	Bottle right support
12	869E04972	Bottle left support
13	930K00290	Environment sensor
14	801K70720	Knob strap assembly

NOTE: 1.HFSI. To reset the HFSI count, refer to dC135.

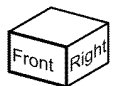
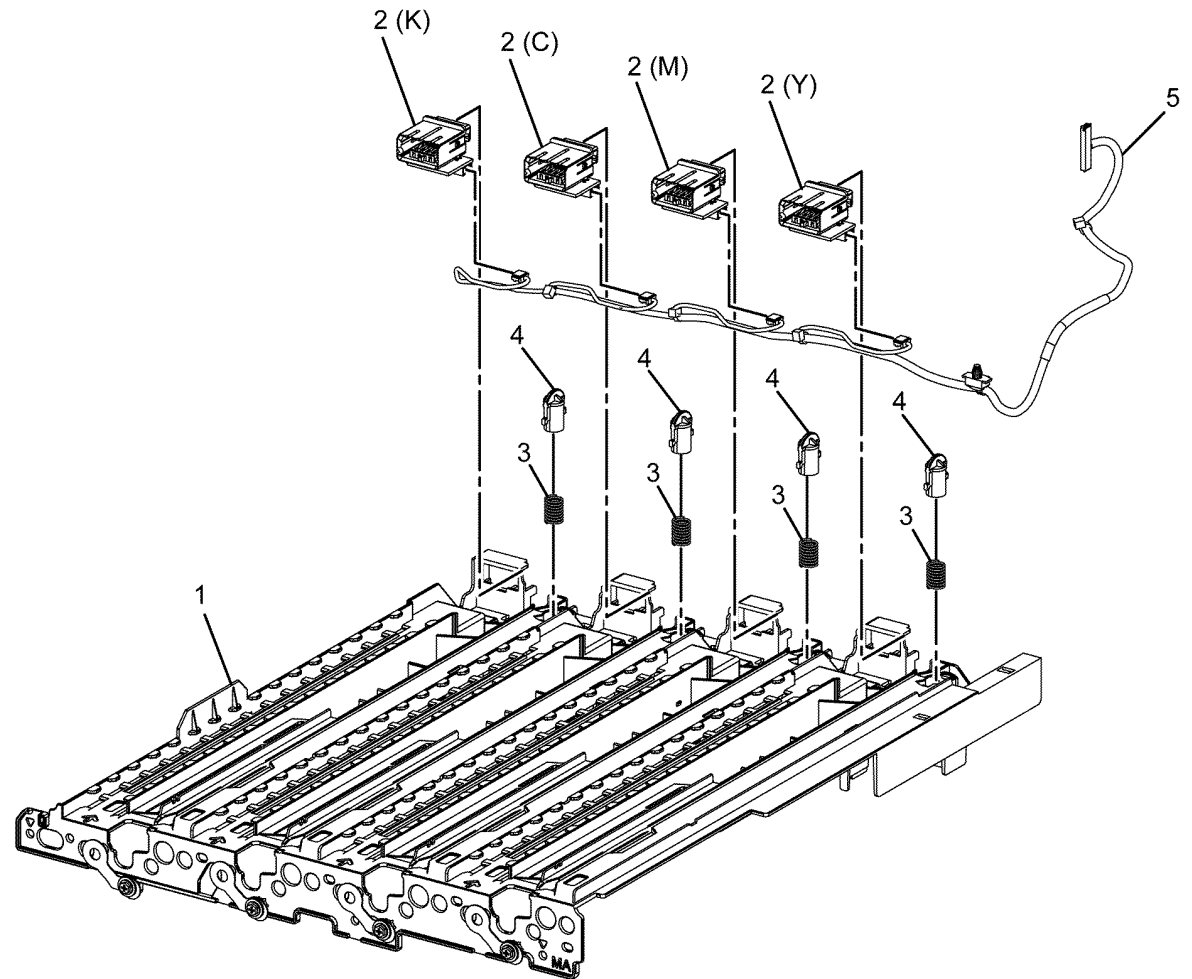
NOTE: 2.For all C/M/Y Drum cartridges order 113R00780 (C7030F) or 113R00782 (C7000) as per item 5.



C-8-0063-A

PL 90.25 Marking Guide Components

Item	Part	Description
1	032K09600	Guide marking
2	019K17630	Xero CRUM connector assembly (C, M, Y, K)
3	—	Tracking rear spring (Not Spared)
4	—	Developer rear plunger (Not Spared)
5	952K21420	Xero CRUM harness assembly

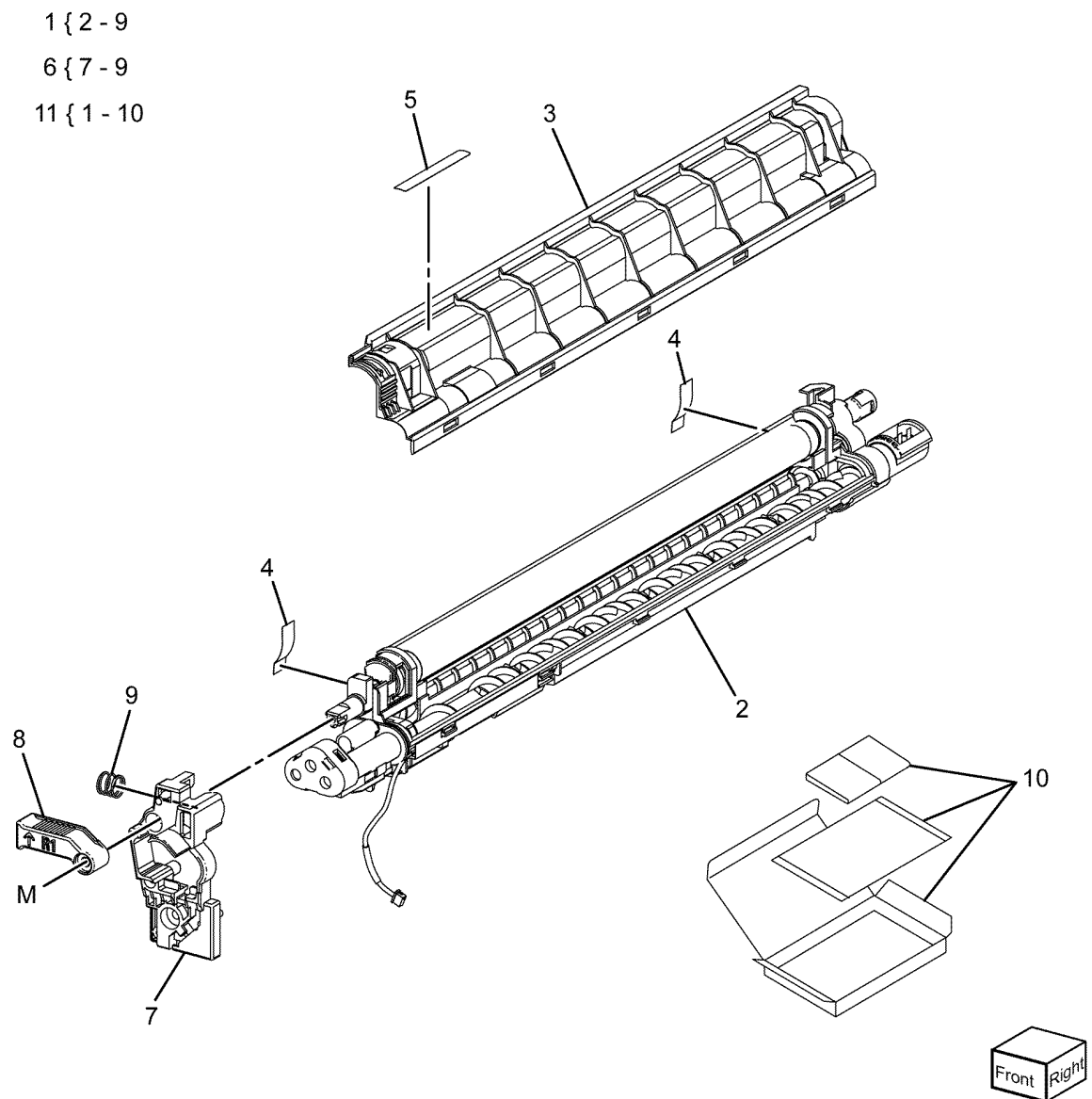


C-8-0064-A

PL 90.30 Developer Unit Components

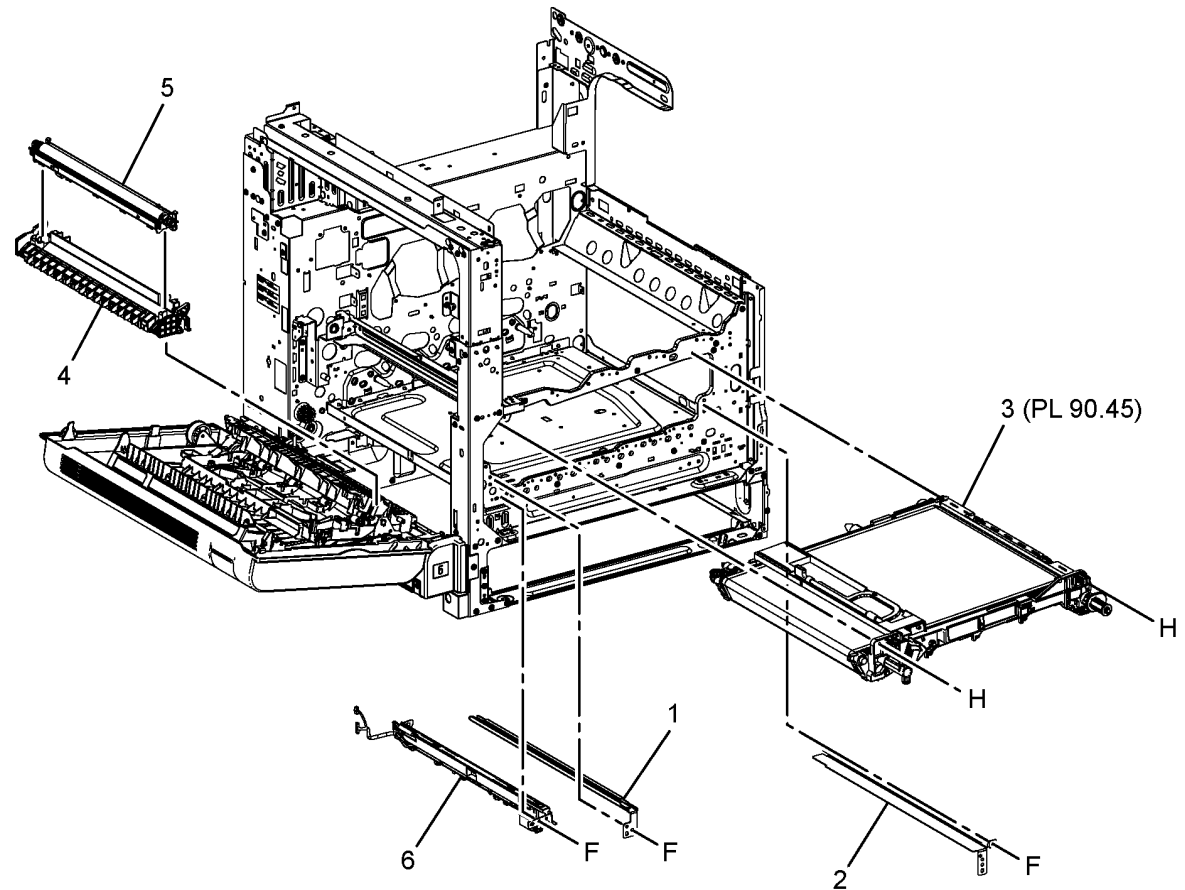
Item	Part	Description
1	—	Developer unit Y (P/O PL 90.30 Item 11) (See NOTE) (REP 90.1)
—	—	Developer unit M (P/O PL 90.30 Item 11) (See NOTE) (REP 90.1)
—	—	Developer unit C (P/O PL 90.30 Item 11) (See NOTE) (REP 90.1)
—	—	Developer unit K (P/O PL 90.30 Item 11) (See NOTE) (REP 90.1)
2	—	Lower sub COH housing assembly (P/O PL 90.30 Item 1)
3	—	Upper sub cover assembly (P/O PL 90.30 Item 1)
4	—	Seal (P/O PL 90.30 Item 1)
5	—	Traceability label (P/O PL 90.30 Item 1)
6	—	Developer front cover assembly (P/O PL 90.30 Item 1)
7	—	Developer front cover (P/O PL 90.30 Item 6)
8	—	Lever (P/O PL 90.30 Item 6)
9	—	Track out spring (P/O PL 90.30 Item 6)
10	—	Developer kit - Y (P/O PL 90.30 Item 11)
—	—	Developer kit - M (P/O PL 90.30 Item 11)
—	—	Developer kit - C (P/O PL 90.30 Item 11)
—	—	Developer kit - K (P/O PL 90.30 Item 11)
11	607K07260	Developer assembly kit Y (REP 90.5)
—	607K07270	Developer assembly kit M (REP 90.5)
—	607K07280	Developer assembly kit C (REP 90.5)
—	607K07290	Developer assembly kit K (REP 90.5)

NOTE: HFSI. To reset the HFSI count, refer to dC135.



PL 90.40 IBT Belt Unit, 2nd BTR Roll, MOB ADC

Item	Part	Description
1	—	IBT lower left guide (Not Spared)
2	—	IBT lower right uide (Not Spared)
3	—	IBT belt unit (REF: PL 90.45)
4	—	2nd housing assembly (Not Spared)
5	115R00126	2nd BTR roll assembly (REP 90.8)
6	930K03260	MOB ADC assembly (REP 90.9)

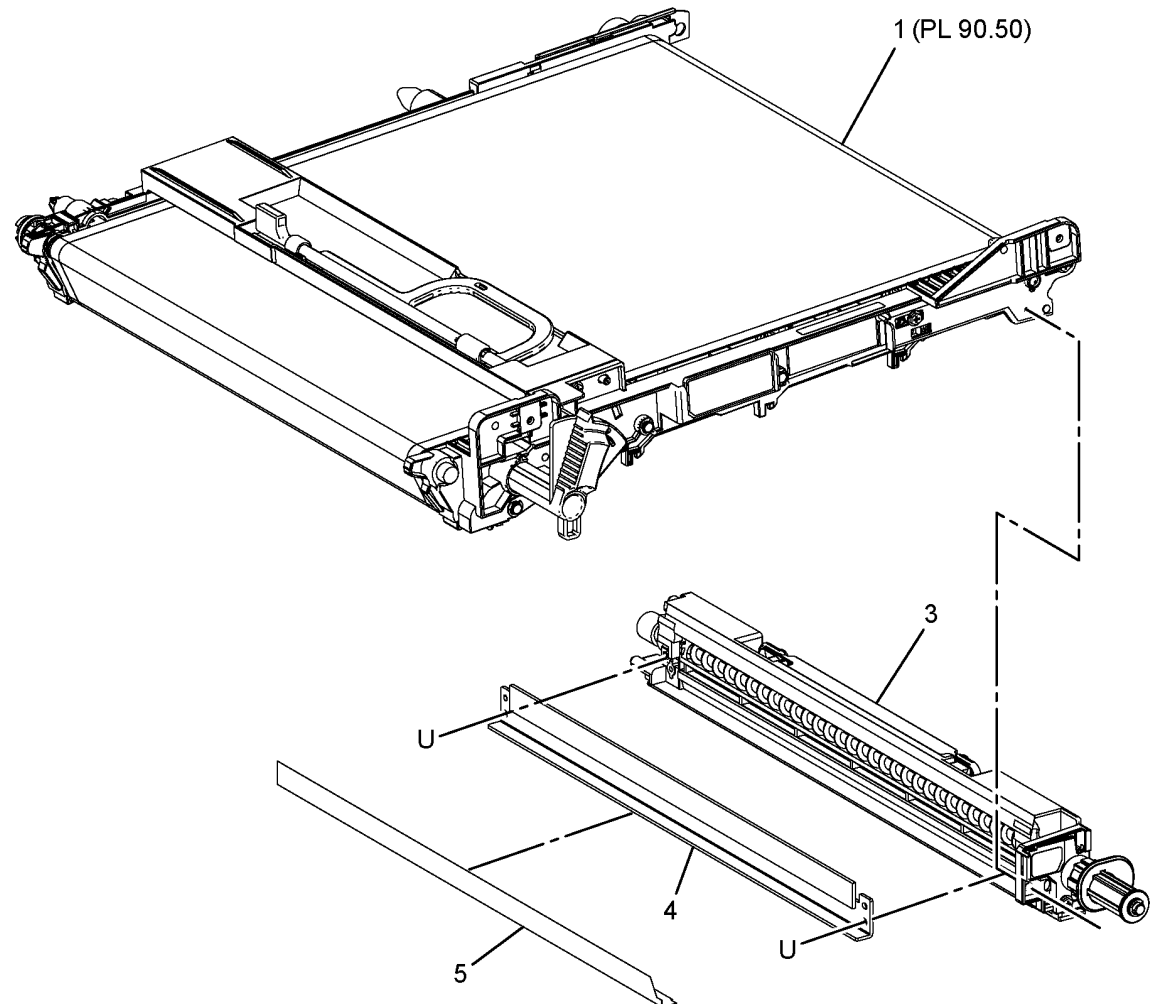


C-8-0059-A

PL 90.45 IBT Belt Unit Components

Item	Part	Description
1	—	IBT unit belt assembly (REF: PL 90.50) (REP 90.7)
2	042K95950	IBT FX cleaner assembly
3	—	Housing cleaner (P/O PL 90.45 Item 2)
4	—	Belt cleaner blade (P/O PL 90.45 Item 2) (REP 90.10)
5	—	Seal film (P/O PL 90.45 Item 2)
6	497K03852	

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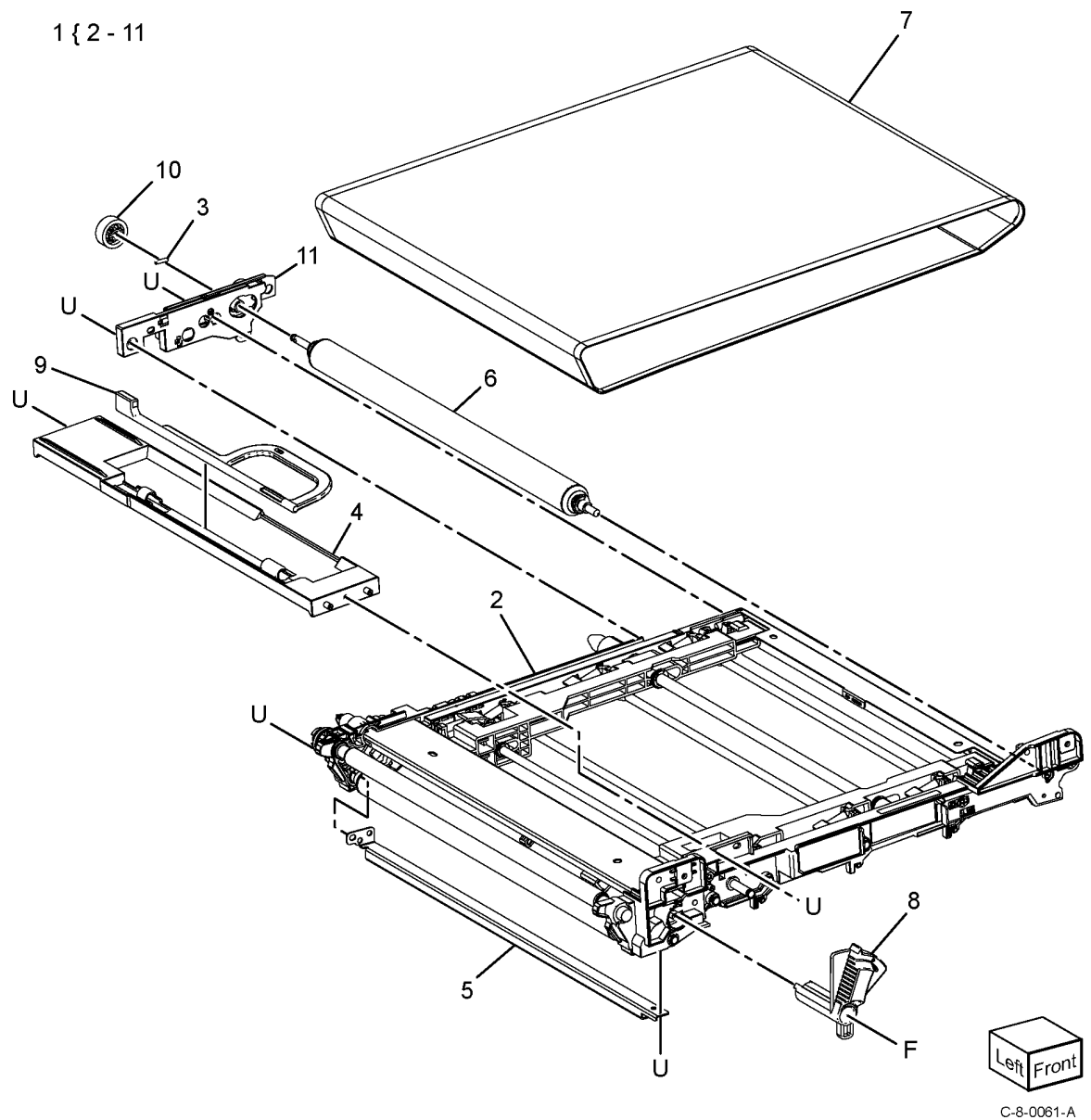


C-8-0060-A

PL 90.50 IBT Belt Assembly Component

Item	Part	Description
1	064K94731	IBT unit belt assembly (See NOTE) (REP 90.7)
–	115R00127	IBT unit belt assembly (alternative)
2	–	IBT belt housing (P/O PL 90.50 Item 1)
3	–	Pin (P/O PL 90.50 Item 1)
4	–	Handle holder (P/O PL 90.50 Item 1)
5	–	Guide (P/O PL 90.50 Item 1)
6	–	Tension roller (P/O PL 90.50 Item 1)
7	064K93512	IBT belt (See NOTES 1 & 2) (REP 90.11)
8	803E18691	Retract handle
9	–	IBT unit handle (P/O PL 90.50 Item 1)
10	–	Tension gear (P/O PL 90.50 Item 1)
11	–	Rear holder (P/O PL 90.50 Item 1)

NOTE: HFSI. To reset the HFSI count, refer to dC135.



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GP 1 Diagnostics Entry

Purpose

This procedure describes how to enter and exit diagnostics and the available service routines.

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.

How to Enter Diagnostics

1. If necessary, switch on the machine, [GP 10](#).

NOTE: Log out of system administration tools and delete all print jobs in the queue before entering diagnostics.

2. When the machine is ready, press and hold the Home button for 5 seconds. Release the home button.
3. When the passcode screen opens, enter the passcode, 6789. Touch **OK**. If the UI displays a message requesting a maintenance password, touch **Next**.

NOTE: The system administrator can set an extra level of diagnostics password protection 'a maintenance password'. Security sensitive customers may have this feature enabled. If this feature is enabled, obtain the maintenance password from the customer.

4. If required, enter the maintenance password, touch **OK**. If the maintenance password is unavailable, refer to [Maintenance Password Not Available](#).
5. Touch Diagnostics.
6. Select the relevant diagnostics routine:
 - [dC118](#) Jam Counter
 - [dC120](#) Failure Counter
 - [dC122](#) Shutdown History
 - [dC125](#) Faults
 - [dC126](#) System Registration Adjustment
 - [dC131](#) NVM Read/Write
 - [dC132](#) Device ID and Billing Data
 - [dC135](#) HFSI Counter
 - [dC140](#) Analog Component Monitoring
 - [dC301](#) Initialize NVM
 - [dC305](#) Panel Diagnostics
 - [dC330](#) Component Control
 - [dC355](#) Hard Disk Diagnostics
 - [dC363](#) Backup and Restore NVM Values
 - [dC500](#) Blank Page Threshold Value
 - [dC527](#) DADF Independent Operation
 - [dC612](#) Print Test Pattern
 - [dC671](#) Registration Measurement Cycle
 - [dC673](#) Registration Control Sensor Check Cycle
 - [dC675](#) Registration Control Setup Cycle
 - [dC919](#) Color Balance Set

- [dC924](#) TRC Manual Adjustment
- [dC940](#) Procon On/Off Print
- [dC945](#) IIT Calibration
- [dC949](#) Default Developer ATC Setup
- [dC950](#) ATC Sensor Setup
- [dC980](#) Altitude Adjustment
- [dC981](#) Marking Data Print
- [dC991](#) Toner Density Adjustment
- [dC1215](#) Transfer Voltage Adjustment

How to Exit Diagnostics

1. Touch Exit. Select either Clear Error Log History or Keep Error Log History.
2. Touch Service.
3. Touch Log Out.

Maintenance Password Not Available

If the maintenance passcode is unavailable, perform the steps that follow:

1. From the Embedded Web Server Home screen, select **Log In**, then **Admin**.
2. Enter the password '1111' (default setting). Select **Log In**. If the administrator password is unknown, perform [GP 29](#) System Administrator Password Reset.
3. Select **System, Security**.
4. Select **Customer Service Engineer Access Restriction**. If this option is not displayed, select **SSL/TLS Settings**, then enable **HTTP-SSL/TLS Communication**. Then select **OK**, then **Restart Now**. After the restart, select **System**, then **Security**, then **Customer Service Engineer Access Restriction**.
5. Disable the feature, select **OK**, then **Restart Now**.
6. Enter diagnostics normally.

GP 2 Fault Codes and History Files

Purpose

To describe access to fault history information and explain the fault code structure.

Fault Data Available from Diagnostics

Diagnostics (GP 1) gives access to the fault history options that follow:

- For information on paper jam codes, refer to dC118 Jam Counter.
- For information on failures, refer to dC120 Fault Counter.
- For information on current machine faults, refer to dC125 Faults.

Function, Fault, Component Codes

Refer to Table 1 for a description of some of the function and fault code prefixes.

Table 1 Function and fault code prefixes

Chain Code	Function
001	Standby power
002	User interface
003	Machine run control
005	Document transportation
010	Fusing and copy/print transportation
012	Finishers
016	Network controller
04X	Main drives
06X	LED print head, scanner
07X (X = tray No.)	Paper supply (paper trays and bypass)
08X	Paper feed and transport
09X	Xerographics

GP 3 Device Information

Purpose

To provide machine hardware and software information.

Service Information Available

From the Home screen, touch Device. This gives the options that follow:

- Language
- About:
 - Device Name
 - Model
 - Serial Number
 - Xerox Asset Tag
 - Customer Asset Tag
 - Software Version
 - Contact information
 - Network information
 - Wi-Fi information
 - Job Overwrite
 - Information Pages
- Software Update
- Notifications
- Paper Trays
- Supplies
- Billing Usage
- General:
 - Measurements
 - Reading Order
 - Date & Time
 - System Timeout
 - Display Brightness
 - Sounds
 - Power Save
 - Feature Installation
- Apps:
 - Address Book
 - Email
 - Fax
 - Scan To
- Connectivity
- Support
- Resets:
 - Reset NVRAM

- Reset Fonts, Forms and Macros
- Reset to Factory Defaults

GP 4 Machine Software

Purpose

To provide machine software information and explain the software loading procedures.

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.

Obtaining Machine Software

The firmware download manager tool (FWDLMgr.exe) and the device firmware file (.bin) can be downloaded from the Xerox.com, Product Support & Drivers page.

Procedure

Four methods are available to download the machine software:

1. [Software Loading via the Special Boot Menu](#)
2. [Software Loading via the Embedded Web Server](#)
3. [Software Download via the USB Port](#)
4. [Software Download via the Network Port \(Port 9100\)](#)

Software Loading via the Special Boot Menu

NOTE: A video of this procedure is available on the EDOC. The video is accessible from the Library menu on the Service Interface.

1. Download the firmware (.bin) file, refer to [Obtaining Machine Software](#).
2. Create a folder named 'DWLD' on the USB memory device.
3. Store the software download file (.bin) in the 'DWLD' folder
4. Switch off the machine, [GP 10](#). Insert the USB memory device.
5. Enter special boot mode, [GP 22](#). Select Download Mode on SPECIAL BOOT MENU 1/3, then touch **YES**. The UI will display SW update progress. The machine will eventually reboot.



CAUTION

Do not switch off the printer until the reboot is complete. The printer will reboot after the download is complete.

6. After the reboot, a Software Upgrade Report will print. Remove the USB memory device.

Software Loading via the Embedded Web Server

There are three options available for updating the software via the Embedded Web Page:

- [Check Now](#)
- [Periodic Updates](#)
- [Updates with File Specified](#)

Check Now

Use this feature to check for software updates.

Perform the steps that follow:

1. Log in as an administrator via the Embedded Web Server. Ensure that software Update is set to **Enable** (Home/System/Software Update/Enable).

2. Touch **Check Now**.

Periodic Updates

Use this feature setup the device to check periodically (daily, weekly, monthly) for software updates.

Perform the steps that follow:

1. Log in as an administrator via the Embedded Web Server. Ensure that software Update is set to **Enable** (Home/System/Software Update/Enable).
2. Under the Check Automatically banner, use to pull down menu to set "When should the Device check for updates?" to Never, Daily, Weekly or Monthly.

Updates with File Specified

Perform the steps that follow:

1. Download the firmware (.bin) file, refer to [Obtaining Machine Software](#).
2. Log in as an administrator via the Embedded Web Server. Ensure that software Update is set to **Enable** (Home/System/Software Update/Enable).
3. Under the Update with File Specified banner, touch **Select**.
4. Browse to where the firmware file (.bin) is located. Select the (.bin) file, then touch **Install Now**.

Software Download via the USB Port

Perform the steps that follow:

1. Download the appropriate firmware download manager tool (FWDLMgr.exe) and firmware (.bin) to an appropriate file location on the PWS. Refer to [Obtaining Machine Software](#).
2. Connect a USB cable (type A/B) from the PWS to the machine.
3. Double click on FWDLMgr.exe to run the firmware download manager tool.
4. Touch **Agree** on the Firmware Update Tool (License).
5. The Printer Model And File Selection window will open. From the pull down menu, select the printer model, then browse to where the firmware file (.bin) is located. Double-click the (.bin) file then select **Add**, then select **Next**.
6. The Communication Interface Selection window will open. Select **USB Port**, then select **Next**.
7. The software update status appears on the Update in Progress screen.



CAUTION

Do not switch off the machine until the reboot is complete. The machine will reboot after the download is complete.

8. When the update is complete, the Result window will open. Touch **complete**. The machine will reboot, and a Software Upgrade Report will be printed.

Software Download via the Network Port (Port 9100)

Perform the steps that follow:

1. Download the appropriate firmware download manager tool (FWDLMgr.exe) and firmware (.bin) to an appropriate file location on the PWS. Refer to [Obtaining Machine Software](#).
2. Switch off the machine, [GP 10](#).

3. Disconnect the ethernet cable from the machine. Connect an ethernet crossover cable from the PWS network port to the machine network port. Refer to [GP 25 Ethernet Crossover Cable Setup](#).
4. Switch on the machine, [GP 10](#). When the machine reaches the Ready state, print a configuration report, [GP 14](#).
5. Ensure the IP address (refer to the configuration report) of the machine can be pinged from the PWS:
 - a. Open a command window (CMD):
 - Select **Start** and in the Search box above the Start button, type **CMD**, then press **Enter**.
 - b. In the Command window (where the blinking cursor is) type ping. Press the space bar once, then enter the IP address of the device. Press **Enter**.
 - c. If the ping command is successful, the device will reply four times. This should not take more than two or three seconds.
 - d. If the ping command times out, or responds with 'host unreachable', check the IP address that was entered. If the IP address is correct, contact 2nd level support.
6. Log in as an administrator via the Embedded Web Server. Ensure that software Update is set to **Enable** (Home/System/Software Update/Enable).
7. Double click on FWDLMgr.exe to run the firmware download manager tool.
8. Touch **Agree** on the Firmware Update Tool (License).
9. The Printer Model And File Selection window will open. From the pull down menu, select the printer model, then browse to where the firmware file (.bin) is located. Double-click the (.bin) file then touch **Add** and then touch **Next**.
10. The Communication Interface Selection window will open. Select **Network (Port9100)**, then touch **Next**.
11. The Printer Specification window will open. Specify the printer to be updated (entering the IP address is the best method). Touch **Next** to start the software download.
12. The software update status appears on the Update in Progress screen.



CAUTION

Do not switch off the machine until the reboot is complete. The machine will reboot after the download is complete.

13. When the update is complete, the Result window will open. Touch **complete**. The machine will reboot, and a Software Upgrade Report will be printed.

GP 5 Miscellaneous Checks

Purpose

To indicate which types of problems to look for when checking or inspecting parts of the machine.

Procedure

1. Assess the fault. Check if the part is broken, too loose or too tight. Check if it needs cleaning or lubricating.
2. Check the components that follow as appropriate:
 - Actuators
 - Bearings
 - Drive Belts
 - Gears
 - Gravity Fingers and Stripper Fingers
 - Harnesses and Wiring
 - Rollers
 - Shafts

Actuators

- Free movement.
- Damage
- Contamination.

Bearings

- Wear.
- Damage.
- Contamination.

Drive Belts

- Wear.
- Damaged teeth.
- Correct tension.
- Contamination of tension rollers and support shafts.

Gears

- Contamination.
- Chips or cracks.
- Wear.
- Misalignment.

Gravity Fingers and Stripper Fingers

- Free movement.
- Missing fingers.
- Damage.
- Contamination on the fingers, rollers or on the pivot shaft.

Harnesses and Wiring

- Continuity.

- Short circuits caused by physical damage or contamination of conductors, terminals or connectors.
- Overheated insulation.
- Damaged insulation near moving parts and sharp edges.
- Pin and receptacle damage on connectors.

Rollers

- Flats.
- Tears.
- Contamination.
- Secure E-clips and other retainers.

Shafts

- Contamination.
- Misalignment.
- Rotates without binding.

GP 6 How to Check a Motor

This procedure describes how to check the motors that follow:

- Two Wire DC Motors.
- Four Wire Stepper Motor.
- Six Wire Stepper Motor.

Initial Actions



Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

1. Check that the motor is free to rotate.
2. Check that all the motor's mechanisms are clean, free to move and lubricated correctly.
3. Enter the component control code for the motor. Refer to dC330. Run the motor for 30 seconds. If the motor shows signs of, or can be heard to slow down, then the motor is defective. Replace the motor.
4. Perform the appropriate procedure:
 - Two Wire DC Motors.
 - Four Wire Stepper Motor.
 - Six Wire Stepper Motor.

NOTE: The voltages, PJ numbers, pin numbers and PWB names shown are an example only.

Two Wire DC Motors

NOTE: In cases where the motor may be driven forward or backward, the same 2 feed wires are used, but the voltages on them are reversed, to reverse the motor direction. Such motors may have 2 component control codes, for forward and reverse. A typical application is a tray lift motor with a tray-up and a tray-down direction.

- Disconnect PJB (Flag 2). Check that +24V is measured when the component control code for the motor is entered.
- Disconnect PJA (Flag 1). Check for +24V on the LVPS.
- Disconnect PJC (Flag 3). Check that the signal changes on the ESS PWB when the component control code for the motor is entered.
- Check the wiring and the connectors for the motor circuit.

Four Wire Stepper Motor

NOTE: A stepper motor with an internal open circuit may appear to be fully functional under dC330 component control. However, under normal operation it will run with intermittent failure. Use the standard digital meter to check that the resistance of the stepper motor coils are similar.

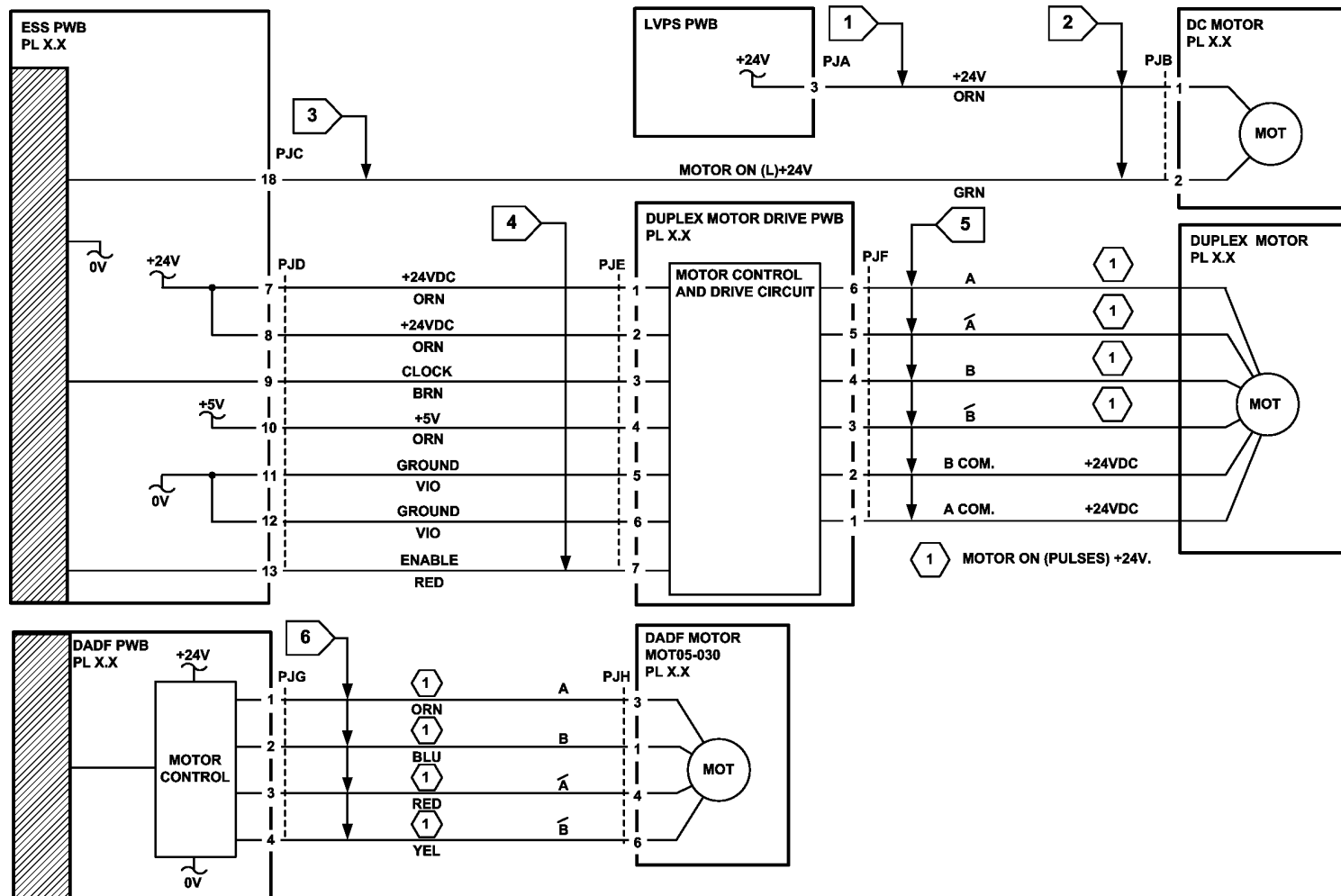
- Disconnect PJH (Flag 6). Check the motor on pulses on the harness when the component control code for the motor is entered.
- Disconnect PJJ (Flag 6). Check the motor on pulses on the harness when the component control code for the motor is entered.

- Check the wiring and the connectors for the motor circuit.

Six Wire Stepper Motor

NOTE: A stepper motor with an internal open circuit may appear to be fully functional under dC330 component control. However, under normal operation it will run with intermittent failure. Use the standard digital meter to check that the resistance of the stepper motor coils are similar.

- Disconnect PJF (Flag 5). Check the +24V supply and the motor on pulses when the component control code for the motor is entered.
- Disconnect PJD (Flag 4). Check the +24V, +5V and 0V supplies.
- Check the clock pulses (Flag 4).
- Check that the signal on PJD pin 13 (Flag 4) changes when the component control code for the motor is entered.
- Check the wiring and the connectors for the motor circuit.



TC-1-0159-A

Figure 1 Wiring diagram

GP 7 How to Check a Sensor

Purpose

Use this procedure to check the operation of a sensor.

NOTE: The upper circuit diagram in [Figure 1](#) shows a flag sensor. Some sensors have a resistor within the sensor. Other sensors require a resistor on the PWB, such as R1 in [Figure 1](#). The resistor limits the current through the LED. This decreases the voltage on the sensor LED to 1.2V, typically.

NOTE: The voltages, PJ numbers, pin numbers and PWB names shown are an example only.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Ensure that the sensor is installed correctly.
2. Clean the sensor and the area around the sensor.
3. If a flag actuator is installed, check that it has free movement.
4. Check that the paper path is clear.
5. If the sensor actuates by a surface that reflects, check that the surface is clean. Also ensure that there is not an obstruction between the sensor and the surface.
6. If the sensor actuates by an encoder disc, ensure the holes or gaps in the disc are aligned correctly with the sensor.

Sensor Action

In the upper sensor in [Figure 1](#), when light from the LED is allowed to fall on the photo-sensitive transistor, the sensing line, PJA, pin 2, is low. When light from the LED is blocked by the flag, the sensing line is high.

In the lower sensor in [Figure 1](#), when light from the LED is reflected by the paper onto the photo-sensitive transistor, the sensing line, PJE, pin 2 is low. When no paper is present, no light falls on the transistor and the sensing line is high.

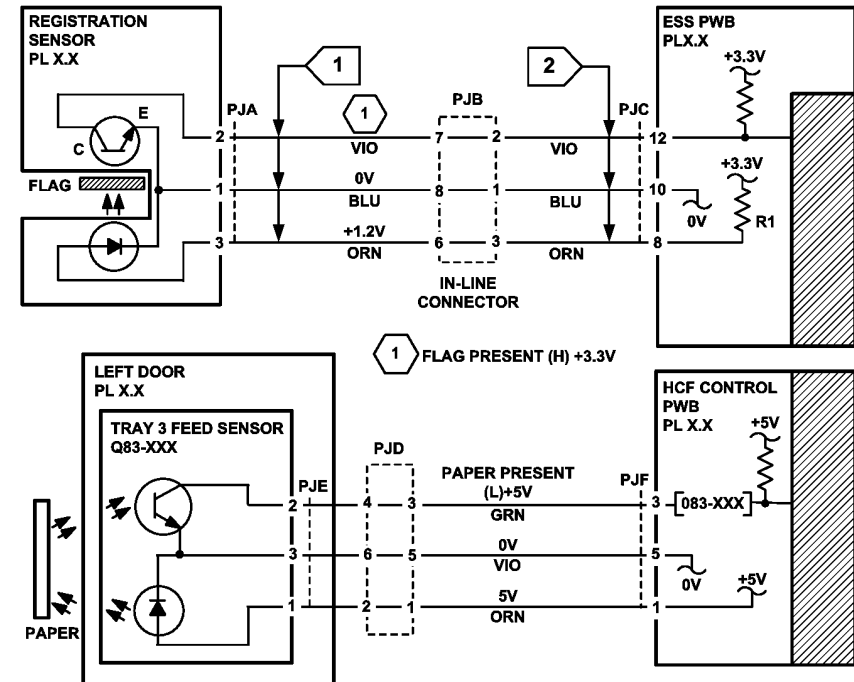
Quick Sensor Check

Enter the component control code for the sensor. Refer to [dC330](#). Actuate the sensor. If the display changes, the sensor operates correctly. If the display does not change, perform the procedure.

Procedure

For the upper sensor in [Figure 1](#):

- Disconnect PJA ([Flag 1](#)). Check for +3.3V and 0V at PJA on the harness.
- Disconnect PJC ([Flag 2](#)). Check the wiring and the connectors for the sensor circuit.
- Check for +3.3V and 0V at PJC ([Flag 2](#)) on the ESS PWB.
- If necessary, install new components or repair the wiring.



TC-1-0160-A

Figure 1 Wiring diagram

GP 8 How to Check a Solenoid or Clutch

Purpose

Use this procedure to check a clutch or solenoid.

Initial Actions



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

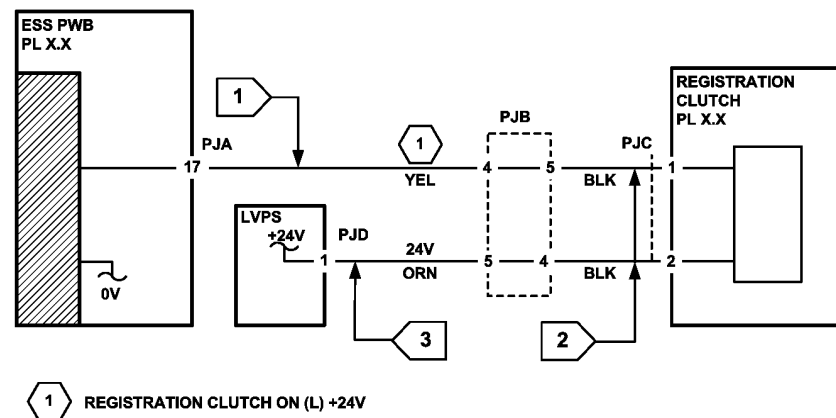
1. For a clutch, check that the mechanical components are clean, free to move and are lubricated correctly
2. For a solenoid, check that the armature and associated mechanical components are free to move.

Procedure

NOTE: The voltages, PJ numbers, pin numbers and PWB names shown are an example only.

NOTE: When a solenoid is energized in diagnostics, armature movement is seen. When a clutch is energized in diagnostics, the sound of the clutch action is heard. If possible, energize the motor connected to the clutch to confirm when the clutch is energized.

- Check that the signal changes on the ESS PWB (Flag 1) when the component control code for the clutch or solenoid is entered.
- Disconnect PJC (Flag 2). Check that +24V is measured when the component control code for the clutch or solenoid is entered.
- Disconnect PJD (Flag 3). Check for +24V on the LVPS.
- Check the wiring and the connectors for the clutch or solenoid circuit.



TC-1-0161-A

Figure 1 Wiring diagram

GP 9 How to Check a Switch

Purpose

Use this procedure to check the operation of a switch.

NOTE: The circuit in [Figure 1](#) shows an interlock switch actuated by the closing of a door.

Initial Actions



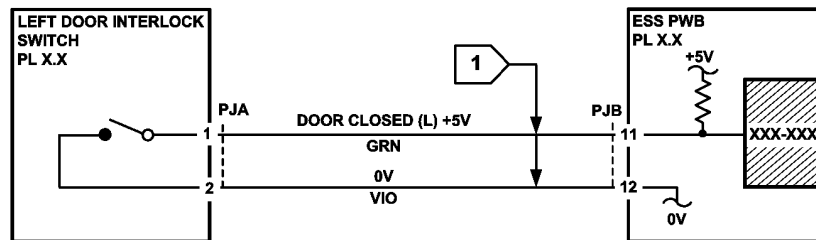
Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 10](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Manually check that the switch operates. Ensure that the magnet or other actuator has enough mechanical movement to operate the switch.

NOTE: The voltages, PJ numbers, pin numbers and PWB names shown are an example only.

Procedure

- Disconnect PJA ([Flag 1](#)). Check the electrical operation of the switch.
- Disconnect PJB ([Flag 1](#)). Check for +5V and 0V on the IOT PWB.
- Check the wiring and the connectors for the switch circuit.



TC-1-0162-A

Figure 1 Wiring diagram

GP 10 How to Switch Off the Machine or Switch On the Machine

Purpose

To show how to switch off or switch on the machine, without the loss of customer data or damage to the system hardware.



Do not use the power button as a safety disconnect device. The power button is not a disconnect device. Disconnect the power cord from the supply to isolate the equipment.

Refer to:

- [Switch Off Procedure](#)
- [Quick Restart](#)
- [Switch On Procedure](#)
- [Sleep Mode](#)

Switch Off Procedure



Do not disconnect the power cord or interrupt the electricity supply before the power down is complete unless advised. The data and software can become damaged.

1. Press the Power button on the UI. The Power Down Options window will display.
2. Touch Power Off.
3. Open the front cover, [PL 28.05 Item 5](#). Switch off the main power switch, [PL 1.05 Item 3](#).
4. When the machine has switched off, remove the power cord [PL 1.15 Item 11](#), from the customer's power supply outlet.

Quick Restart

The quick restart causes the system to reset the software of the ESS PWB, the drive PWB and the UI.

1. Press the Power button on the UI. The Power Down Options window will display.
2. Select the Quick Restart button on the UI touch screen.

Switch On Procedure

1. After the machine has been switched off, wait a minimum of 2 minutes before the machine is switched on.
2. After a service call, ensure that all service tools are removed from the machine.
3. Connect the power cord from the customer's power supply outlet to the machine. Ensure the AC bracket assembly is installed, [PL 1.15 Item 4](#).
4. Switch on the main power switch, [PL 1.05 Item 3](#).
5. Press the Power button on the UI.
6. The machine will perform a power on self test (POST). The POST checks that the hardware resources are available to run the operating system. If a POST fault is detected, the machine is prevented from booting. The fault is communicated via LEDs on the ESS PWB. Refer to the [OF1 POST Error RAP](#).

Restart

Restart is selected from the Power Down window. When pressed, the machine should restart within 2 minutes.

Sleep Mode

Sleep is selected from the Power Down window. When pressed, the machine should immediately enter sleep mode.

GP 11 How to Safely Lift or Move Heavy Modules

Purpose

Use this procedure when lifting or moving heavy modules.

Procedure

When removing heavy modules from the machine, the instructions that follow must be observed:

1. Ensure that a suitable stable surface to support the module after removal is located in close proximity to the machine.

NOTE: Other parts of the machine are not a suitable stable surface.

2. Ensure that the height of the support surface is between 750mm and 1000mm (30 inches and 39 inches).
3. Ensure that there are no hazards or obstacles between the machine and the support surface.
4. If instructed to remove the module toward the rear of the machine and only 1 person is available, the module must be removed while standing at the rear of the machine. If 2 people are available, the module may be removed while standing at the front of the machine.
5. Two people are required if the module is to be lifted on to the floor or lifted from the floor.

GP 12 Machine Lubrication

Purpose

To give information on the use of lubricants.

Procedure



WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 10. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.



CAUTION

Only use lubricants as directed. Incorrect use of lubricants could seriously affect the performance of the machine.

Take the precautions that follow when performing machine lubrication:

- Wear disposable gloves.
- Only use lubricants that are specified in the Parts List.
- Only lubricate parts of the machine as directed in the relevant RAPs, Repairs, Adjustments and General Procedures.
- Apply only the smallest amount of lubricant, sufficient to lubricate the parts. To prevent contamination, remove any surplus lubricant before the machine is run.
- Take great care not to contaminate other parts of the machine with the lubricant.

GP 13 Network Clone Procedure

Purpose

Use this procedure to establish a network connection between the PWS and printer, create a copy of network configuration settings and then distribute these settings to multiple devices on the network. This cloning process can also be used to backup and restore network settings lost during a software reload.

NOTE: To establish a direct Ethernet connection between the PWS and printer requires the printer's driver installation CD-ROM, a crossover cable, and the PWS.

Depending on the printer, a Windows 7 (W7) driver might not be available on the printer's driver installation CD-ROM. If not, download the driver from Xerox.com under the Support and Drivers page. W7 has two kernel types, 32 and 64-bit. If installation the wrong driver is attempted, Windows displays an error to indicate the driver is incorrect. To check the kernel type, click on Start, in the right column, right click on Computer and select Properties, the kernel type will be listed as System Type.

Procedure

Refer to the relevant procedure:

- [Establishing a LAN Connection](#)
- [Creating the Clone File](#)
- [Using the Clone File](#)
- [Set a Static IP Address on the PWS](#)
- [PWS Browser Proxy Server Setting](#)

Establishing a LAN Connection

Use these steps to establish a Local Area Network (LAN) connection between the PWS and printer using a crossover cable.

NOTE: Record the original data for every change. It may be necessary to reset the IP address, depending on PWS usage and local network practice.

1. Print a Configuration Report, [GP 14](#). Note the printer's IP address.
2. Connect the crossover cable between the PWS and printer.
3. Open a Command window (CMD) on the PWS:
 - Select **Start** and in the Search box above the Start button, type **CMD**, then press **Enter**.
4. Type **ipconfig** at the prompt, record the current network settings displayed. Restore these settings when the LAN connection is no longer needed.

NOTE: Use the IPv4 address for the Local Area Connection, not the address listed under Wireless Ethernet Connection (if enabled in the laptop).

5. Check the IP addresses of the PWS and printer. If the PWS has been connected to the same subnet, the PWS and printer address should share the same values for the first three and have a different value for the fourth number. Refer to [Table 1](#) for an example.

Table 1 Example LAN settings

	Printer	PWS / Laptop
IP Address	192.168.0.2	192.168.0.5

Table 1 Example LAN settings

	Printer	PWS / Laptop
Subnet Mask	255.255.255.0	255.255.255.0
Gateway/Router	192.168.0.1	192.168.0.1

If the PWS and printer share similar, but unique IP address, continue. If not, use the Set a Static IP Address on the PWS to set the PWS IP address.

6. After verifying the IP addresses are correctly configured, PING the printer:
 - a. In the Command window (where the blinking cursor is) type the word **PING**. Press the space bar once and enter the printer's IP address and press **Enter**. As an example: ping 192.168.0.2.
 - b. If the printer responds to the PING command, it replies four times. This should not take more than two or three seconds.
 - c. If the PING command times out, or responds with "host unreachable", check the IP addresses that were entered. If the IP address is correct, contact 2nd level support.
7. If the PING command replies, exit the Command window (type "exit" at the prompt and press **Enter**). This test verifies the Ethernet connection is good.
8. Install the printer driver and setup the printer as a local printer. Select connect to the printer using "other" port type. From the dialog drop down select Standard TCP/IP port.
9. For the printer name or IP address, enter the printer's IP address (192.168.0.2 in this example).
10. When the driver installation finishes, Select **Yes** at the Print Test Print dialog box.

NOTE: If the test page does not print, the customer could have Accounting enabled (if the device supports it) requiring that a special code is submitted with the print job before the printer prints.

11. After the test print is completed, open a web browser on the PWS.
12. In the Address Bar (in place of a web site address or URL), enter the printer's IP address (192.168.0.2 in this example).
13. If the connection is working correctly, the web page of the printer will be displayed.

NOTE: If the printer's webpage cannot be opened, verify that Web Services are enabled on the configuration page. If the the web browser is set to use a Proxy address for the internet connection, it will not be possible to open the printer's webpage as there will be no connection to that proxy server while directly connected to the printer via the crossover Ethernet cable. Refer to PWS Browser Proxy Server Setting for instructions on Internet Explorer proxy configuration.

Creating the Clone File

NOTE: This procedure can be performed from any PC connected to the network or the PWS connected to the machine using an Ethernet crossover cable. The only requirement on the PC is an Internet Browser.

1. Open Internet Explorer
2. Enter the machine's IP address in the **Address** line and select **Go**.
3. When the **Internet Services** window opens, login to **Admin** mode, [GP 23](#). Click on the **Home** tab, then the **Cloning** link.
4. Select individual parameters to clone from the device or Select/Clear All.

5. Click on **Create**.
6. If prompted, save the clone file to an easily remembered location that for later installation. If not prompted to save the file, look for it in the Downloads folder.
7. Click **Close**.
8. Log out of **Admin** mode, [GP 19](#).

Using the Clone File

NOTE: This procedure can be performed from any PC connected to the network or the PWS connected to the machine using an Ethernet crossover cable. The only requirement on the PC is an Internet Browser.

1. Open Internet Explorer
2. Enter the machine's IP address in the **Address** line and select **Go**.
3. When the **Internet Services** window opens, login to **Admin**, [GP 23](#). Click on the **Home** tab, then the **Cloning** link.
4. Click on the **Select** button.
5. Use the **Browse** button to navigate to the clone file, or type the full path to the file, then click **Open**.
6. Click **Install**.
7. Verify the cloned settings with a new Configuration Report.

Set a Static IP Address on the PWS

Use this procedure to manually set the PWS IP address. Instructions are given for W7 and W10.

NOTE: If the PWS has a wireless Ethernet card/adaptor installed, Windows will not use the wired Ethernet port by default until either the PWS is rebooted or the wireless Ethernet card is temporarily disabled. If unsure how to disable/enable the wireless Ethernet card, restart the PWS after setting the IP address.

For W7:

1. Open the **Control Panel**.
2. Select **Network Sharing Center**.
3. Select **Change Adaptor Settings** in the upper left corner of the Control Panel.
4. Right-click on **Local Area Connection**, then select **Properties**.
5. On the Networking tab (for local area connection), click on **Internet Protocol Version 4 (TCP/IPv4)**, then select **Properties**.
6. Select **Use the following IP address**, then enter the IP address and subnet mask.
Refer to the configuration report then:
 - Set the IP address of the laptop one number higher than the device. For example, if the IP address of the device is 192.168.196.112, set the IP address of the laptop to 192.168.196.113.
 - Set the Subnet mask of the laptop to the same as the Subnet mask of the device.
7. Click **OK** twice and exit Network Connections and return to [Creating the Clone File](#).

For W10:

1. Click **Start** and select **Settings**.
2. Select **Network and Internet**.

3. Under Related settings select **Network and Sharing Center**, then from the task list on the left of the screen select **Change adapter settings**.
4. Right-click on **Local Area Connection** and then select **Properties**.
5. Select **Internet Protocol Version 4 (TCP/IPv4)**, then select **Properties**. The Internet Protocol Version 4 (TCP/IPv4) Properties window will open.
6. Select **Use the following IP address**, then enter the IP address and subnet mask.
Refer to the configuration report then:
 - Set the IP address of the laptop one number higher than the device. For example, if the IP address of the device is 192.168.196.112, set the IP address of the laptop to 192.168.196.113.
 - Set the Subnet mask of the laptop to the same as the Subnet mask of the device.
7. Select **OK** to close the properties dialog box, then **OK** to close the second properties dialog box.
8. Close the Local Area Connection Status dialog box and return to [Creating the Clone File](#).

PWS Browser Proxy Server Setting

The following steps ensure the proxy server settings are correct.

1. Open **Windows Internet Explorer**.
2. Select **Tools - Internet Options**.
3. Select the **Advanced** tab.
4. Scroll down to **HTTP 1.1 Settings**.
5. Ensure that the "Use HTTP 1.1 through proxy connections" box is **un-checked**.
6. Select **OK** to close the **Internet Options** window.
7. Close **Windows Internet Explorer**.

GP 14 Printing Reports

Purpose

To list reports available from the UI:

- [Configuration Report](#)
- [Billing Summary Report](#)
- [Supplies Usage](#)
- [PostScript Font List](#)
- [PCL Font List](#)
- [Demonstration Print](#)
- [Startup Page](#)

NOTE: To print the fax protocol report or fax activity report, refer to [GP 30](#).

Procedure

Perform the steps that follow:

1. From the Home Screen, touch Device.
2. Touch About.
3. Scroll to the bottom of the list, then touch Information Pages.
4. Select the desired report, then touch Print.

Configuration Report

The Configuration Report lists the current state of system configuration parameters including installed options and network settings.

Billing Summary Report

The Billing Summary Report lists Device Information, Billing Meter impression counters (for customers on billing meter supplies plans only) and Sheet Count by Paper Type.

Supplies Usage

The Supplies Usage report includes the current status of printer consumables and routine maintenance items. Installation dates and replacement part numbers are listed.

PostScript Font List

This report provides a list of the installed PostScript fonts.

PCL Font List

This report provides a list of the installed PCL fonts.

Demonstration Print

This report shows a brief synopsis of the device.

Startup Page

This report lists device type, software versions, enabled protocols and mobile connectivity.

GP 15 Paper and Media Size Specifications

Purpose

To list the paper and media size specifications.

Specifications

NOTE: Check that the paper tray settings match the paper size in the tray.

Refer to the tables that follow:

- [Table 1](#). Supported paper size and weight for trays 1, 2, 3, 4 and 5.

- [Table 2](#). Recommended paper types - Europe.
- [Table 3](#). Recommended paper types - North America.
- [Table 4](#). Integrated office finisher supported paper types The table defines the paper sizes that can be delivered to the output trays of the integrated office finisher.
- [Table 5](#). Office finisher LX supported paper types. The table defines the paper sizes that can be delivered to the output bins of the Office finisher LX.

Table 1 Supported paper size and weight

Tray	Supported Paper (Standard Size)	Supported Paper (Non-Standard Size) (W x L)	Supported Paper Weight	Capacity	Remarks
1, 2, 3 and 4	Min: A5S Max: A3 SEF, 11x17 SEF	Min: 139.7x182mm (5.5x7.2 inches) Max: 297.0 x 431.8	60 to 256gsm (40 to 173lbs)	500 (80gsm/54lbs)	Stack height 54mm (2.1 inches)
Bypass tray	Min: Postcard, Envelope Max: A3 SEF, 11x17 SEF	Min: 88.9x98.4mm (3.5x2.7 inches) Max: 297x431.8mm (11.7x17 inches)	60 to 216gsm (40 to 146lbs)	96 (80gsm/54lbs)	Stack height 10mm (0.4 inch) Feed performance for paper less than 140mm (5.5 inches) in length may result in fuser jams.
TTM - Tray 2	Min: A5S Max: A3 SEF, 11x17 SEF	Min: 139.7x182mm (5.5x7.2 inches) Max: 297.0 x 431.8	60 to 256gsm (40 to 173lbs)	500 (80gsm/54lbs)	Stack height 54mm (2.1 inches)
TTM - Tray 3	A4, 8.5 x 11 or B5	-	60 to 256gsm (40 to 173lbs)	870 (80gsm/54lbs)	-
TTM - Tray 4	A4, 8.5 x 11 or B5	-	60 to 256gsm (40 to 173lbs)	1130 (80gsm/54lbs)	-
HCF	A4, 8.5 x 11 or B5	-	60 to 216gsm (40 to 146lbs)	2000 (80gsm/54lbs)	-

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R91720	Xerox Premier	80gsm	Plain	Plain D	A4		
3R91721	Xerox Premier	80gsm	Plain	Plain D	A3		
3R98837	Xerox Digital Colour Colotech+ GOLD	90gsm	Bond	Plain F	A4		
3R98839	Xerox Digital Colour Colotech+ GOLD	90gsm	Bond	Plain F	A3		
3R91854	Xerox Premier	90gsm	Bond	Plain F	A4		
3R91853	Xerox Premier	90gsm	Bond	Plain F	A3		
3R90208	Xerox Exclusive	80gsm	Plain	Plain D	A4		
3R91712	Xerox Exclusive	80gsm	Plain	Plain D	A4	4-hole	
3R90209	Xerox Exclusive	80gsm	Plain	Plain D	A3		
3R94641	Xerox Digital Colour Colotech+	90gsm	Bond	Plain F	A4		

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R94642	Xerox Digital Colour Colotech+	90gsm	Bond	Plain F	A3		
3R94646	Xerox Digital Colour Colotech+	100gsm	Bond	Plain F	A4		
3R94647	Xerox Digital Colour Colotech+	100gsm	Bond	Plain F	A3		
3R98842	Xerox Digital Colour Colotech+ GOLD	100gsm	Bond	Plain F	A4		
3R98844	Xerox Digital Colour Colotech+ GOLD	100gsm	Bond	Plain F	A3		
3R91820	Xerox Business	80gsm	Plain	Plain D	A4		
3R91821	Xerox Business	80gsm	Plain	Plain D	A3		
3R91165	Xerox Recycled	80gsm	Recycled	Plain D	A4		
3R91166	Xerox Recycled	80gsm	Recycled	Plain D	A3		
3R95860	Xerox® Recycled Supreme 100%	80gsm	Recycled	Plain D	A4		
3R95861	Xerox® Recycled Supreme 100%	80gsm	Recycled	Plain D	A3		
3R90600	Xerox Exclusive	90gsm	Bond	Plain F	A4		
3R90618	Xerox Exclusive	90gsm	Bond	Plain F	A3		
3R97661	Xerox Digital Colour Impressions	80gsm	Plain	Plain D	A4		
3R97662	Xerox Digital Colour Impressions	80gsm	Plain	Plain D	A3		
3R97663	Xerox Digital Colour Impressions	80gsm	Bond	Plain F	A4		
3R97664	Xerox Digital Colour Impressions	90gsm	Bond	Plain F	A3		
3R97666	Xerox Digital Colour Impressions	100gsm	Bond	Plain F	A4		
3R97667	Xerox Digital Colour Impressions	100gsm	Bond	Plain F	A3		
3R98685	Xerox Digital Colour Impressions	120gsm	Lightweight cardstock	Heavy 1A	A4		
3R97669	Xerox Digital Colour Impressions	120gsm	Lightweight cardstock	Heavy 1A	A3		
3R98007	Xerox Digital Colour Impressions	160gsm	Lightweight cardstock	Heavy 1A	A4		
3R98008	Xerox Digital Colour Impressions	160gsm	Lightweight cardstock	Heavy 1A	A3		
3R98687	Xerox Digital Colour Impressions	250gsm	Heavyweight cardstock	Heavy 2A	A4		
3R97671	Xerox Digital Colour Impressions	250gsm	Heavyweight cardstock	Heavy 2A	A3		

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R94651	Xerox Digital Colour Colotech+	120gsm	Lightweight cardstock	Heavy 1A	A4		
3R94652	Xerox Digital Colour Colotech+	120gsm	Lightweight cardstock	Heavy 1A	A3		
3R94656	Xerox Digital Colour Colotech+	160gsm	Lightweight cardstock	Heavy 1A	A4		
3R94657	Xerox Digital Colour Colotech+	160gsm	Lightweight cardstock	Heavy 1A	A3		
3R94661	Xerox Digital Colour Colotech+	200gsm	Cardstock	Heavy 2A	A4		
3R94662	Xerox Digital Colour Colotech+	200gsm	Cardstock	Heavy 2A	A3		
3R94668	Xerox Digital Colour Colotech+	220gsm	Heavyweight cardstock	Heavy 2A	A4		
3R94669	Xerox Digital Colour Colotech+	220gsm	Heavyweight cardstock	Heavy 2A	A3		
3R94671	Xerox Digital Colour Colotech+	250gsm	Heavyweight cardstock	Heavy 2A	A4		
3R94672	Xerox Digital Colour Colotech+	250gsm	Heavyweight cardstock	Heavy 2A	A3		
3R98847	Xerox Digital Colour Colotech+ GOLD	120gsm	Lightweight cardstock	Heavy 1A	A4		
3R98848	Xerox Digital Colour Colotech+ GOLD	120gsm	Lightweight cardstock	Heavy 1A	A3		
3R98852	Xerox Digital Colour Colotech+ GOLD	160gsm	Lightweight cardstock	Heavy 1A	A4		
3R98854	Xerox Digital Colour Colotech+ GOLD	160gsm	Lightweight cardstock	Heavy 1A	A3		
3R97967	Xerox Digital Colour Colotech+ GOLD	200gsm	Cardstock	Heavy 2A	A4		
3R97968	Xerox Digital Colour Colotech+ GOLD	200gsm	Cardstock	Heavy 2A	A3		
3R97971	Xerox Digital Colour Colotech+ GOLD	220gsm	Heavyweight cardstock	Heavy 2A	A4		
3R97972	Xerox Digital Colour Colotech+ GOLD	220gsm	Heavyweight cardstock	Heavy 2A	A3		

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R98975	Xerox Digital Colour Colotech+ GOLD	250gsm	Heavyweight cardstock	Heavy 2A	A4		
3R98976	Xerox Digital Colour Colotech+ GOLD	250gsm	Heavyweight cardstock	Heavy 2A	A3		
3R97102	Xerox Colotech+ Natural White	100gsm	Bond	Plain F	A4		
3R97103	Xerox Colotech+ Natural White	100gsm	Bond	Plain F	A3		
3R95956	Xerox Colotech+ Natural White	160gsm	Lightweight cardstock	Heavy 1A	A4		
3R95957	Xerox Colotech+ Natural White	160gsm	Lightweight cardstock	Heavy 1A	A3		
3R95958	Xerox Colotech+ Natural White	200gsm	Cardstock	Heavy 2A	A4		
3R95959	Xerox Colotech+ Natural White	200gsm	Cardstock	Heavy 2A	A3		
3R97514	Xerox Colour Laser Matt CD labels		Lightweight cardstock	Heavy 1A	A4	2-up	Environmental conditions may require that this product be fed one sheet at a time. If misfeed still occurs when feeding one sheet at a time, load paper curled upward.
7R96721	Xerox Digital C5 Envelope		Envelope	Heavy 2A	9x6.4		Misfeed jam may occur under high temperature/humidity condition or with envelopes with low stiffness.
7R96718	Xerox Digital DL Envelope		Envelope	Heavy 2A	8.7x4.3		Misfeed jam may occur under high temperature/humidity condition or with envelopes with low stiffness.
1144	Riverseries DL Severn Self-seal Envelope	80 GSM	Envelope	Extra-Heavy-weight			
1029	Riverseries DL Severn Gummed Envelope	80 GSM	Envelope	Extra-Heavy-weight			
2234	Riverseries C5 Congo Gummed Envelope	80 GSM	Envelope	Extra-Heavy-weight			

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R90336	Xerox Digital Colour Colotech+ Gloss Coated	120gsm	Lightweight glossy card-stock	Coated 1	A4		Tray 5 (bypass) inhibited due to excessive jams. Loading from trays 1-4 recommended. Environmental conditions may require that this product be fed one sheet at a time. (If misfeed still occurs when feeding one sheet at a time, load paper curled upward).
3R90337	Xerox Digital Colour Colotech+ Gloss Coated	120gsm	Lightweight glossy card-stock	Coated 1	A3		
3R90339	Xerox Digital Colour Colotech+ Gloss Coated	140gsm	Lightweight glossy card-stock	Coated 1	A4		
3R90340	Xerox Digital Colour Colotech+ Gloss Coated	140gsm	Lightweight glossy card-stock	Coated 1	A3		
3R90342	Xerox Digital Colour Colotech+ Gloss Coated	170gsm	Glossy card-stock	Coated 2	A4		
3R90343	Xerox Digital Colour Colotech+ Gloss Coated	170gsm	Glossy card-stock	Coated 2	A3		
3R90345	Xerox Digital Colour Colotech+ Gloss Coated	210gsm	Glossy card-stock	Coated 2	A4		
3R90346	Xerox Digital Colour Colotech+ Gloss Coated	210gsm	Glossy card-stock	Coated 2	A3		Environmental conditions may require that this product be fed one sheet at a time from trays 1-4. Tray 5 (bypass) cannot be used for media heavier than 216gsm). When job is printed in low temperature and low humidity environment, poor transfer of toner may be observed. If poor transfer is observed, change 2nd transfer voltage offset.
3R90348	Xerox Digital Colour Colotech+ Gloss Coated	250gsm	Heavyweight glossy card-stock	Coated 2	A4		
3R90349	Xerox Digital Colour Colotech+ Gloss Coated	250gsm	Heavyweight glossy card-stock	Coated 2	A3		

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R90355	Xerox Digital Colour Colotech+ Silk Coated	120gsm	Lightweight glossy card-stock	Coated 1	A4		Environmental conditions may require that this product be fed one sheet at a time from trays 1-4 or tray 5 (bypass).
3R90356	Xerox Digital Colour Colotech+ Silk Coated	120gsm	Lightweight glossy card-stock	Coated 1	A3		
3R90358	Xerox Digital Colour Colotech+ Silk Coated	140gsm	Lightweight glossy card-stock	Coated 1	A4		
3R90359	Xerox Digital Colour Colotech+ Silk Coated	140gsm	Lightweight glossy card-stock	Coated 1	A3		
3R90361	Xerox Digital Colour Colotech+ Silk Coated	170gsm	Glossy card-stock	Coated 2	A4		
3R90362	Xerox Digital Colour Colotech+ Silk Coated	170gsm	Glossy card-stock	Coated 2	A3		
3R90364	Xerox Digital Colour Colotech+ Silk Coated	210gsm	Glossy card-stock	Coated 2	A4		
3R90365	Xerox Digital Colour Colotech+ Silk Coated	210gsm	Glossy card-stock	Coated 2	A3		
3R90367	Xerox Digital Colour Colotech+ Silk Coated	250gsm	Heavyweight glossy card-stock	Coated 2	A4		Environmental conditions may require that this product be fed one sheet at a time from trays 1-4. Tray 5 (bypass) cannot be used for media heavier than 216gsm.)
3R90368	Xerox Digital Colour Colotech+ Silk Coated	250gsm	Heavyweight glossy card-stock	Coated 2	A3		When job is printed in low temperature and low humidity environment, poor transfer of toner may be observed. If poor transfer is observed, change 2nd transfer voltage offset

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R97680	Xerox Colotech+ Supergloss (Coated 1 side)	160gsm	Lightweight glossy card-stock (*)	Coated 1	A4		
3R97681	Xerox Colotech+ Supergloss (Coated 1 side)	160gsm	Lightweight glossy card-stock (*)	Coated 1	A3		
3R97682	Xerox Colotech+ Supergloss (Coated 1 side)	210gsm	Glossy card-stock	Coated 2	A4		
3R97683	Xerox Colotech+ Supergloss (Coated 1 side)	210gsm	Glossy card-stock	Coated 2	A3		
3R97686	Xerox Colotech+ Supergloss (Coated 1 side)	250gsm	Heavyweight glossy card-stock	Coated 2	A4		Environmental conditions may require that this product be fed one sheet at a time from trays 1-4. If misfeed still occurs when feeding one sheet at a time, load paper curled upward. Tray 5 (bypass) cannot be used for media heavier than 216gsm.)
3R97687	Xerox Colotech+ Supergloss (Coated 1 side)	250gsm	Heavyweight glossy card-stock	Coated 2	A3		
3R93872	Xerox Colour Copier Laser Labels		Heavyweight labels	Label 2	A4	1-up	Labels once fed cannot be used. Tray 5 (bypass) only. Excessive jams due to curl when fed from trays 1-4. Low humidity environment (J/C zones) inhibited due to excessive media curl. Poor stacking at continuous running in A/C/J-zone. Removing the output one by one is recommended.
3R95813	Xerox Colour Copier Laser Labels		Heavyweight labels	Label 2	A4	4-up	
3R93874	Xerox Colour Copier Laser Labels		Heavyweight labels	Label 2	A4	8-up	
3R93875	Xerox Colour Copier Laser Labels		Heavyweight labels	Label 2	A4	14-up	
3R95815	Xerox Colour Copier Laser Labels		Heavyweight labels	Label 2	A4	21-up	
3R97524	Xerox Colour Copier Laser Labels		Heavyweight labels	Label 2	A4	24-up	

Table 2 Recommended paper types - Europe

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R97288	Xerox Supergloss Labels		Glossy card-stock	Coated 2	A4	1-up	Tray 5 (bypass) is inhibited due to excessive jams. Environmental conditions may require that this product be fed one sheet at a time. If misfeed still occurs when feeding one sheet at a time, load paper curled upward. A-zone is inhibited.
3R97344	Xerox Color Laser Dura Paper Label		Labels	Label 1	A4	1-up	Labels once fed cannot be used. Smears may be observed in BW mode.
3R96177	Xerox High Speed Removable Labels		Heavyweight labels	Label 2	A4	16-up	Labels once fed cannot be used. Jams due to excessive curl may occur in A/C/J zones. Environmental conditions may require that this product be fed one sheet at a time from Tray 5 (bypass).
3R96178	Xerox High Speed Removable Labels(A4.)		Heavyweight labels	Label 2	A4	24-up	
3R97516	Xerox Colour Laser Gloss CD labels		Glossy card-stock	Coated 2	A4	2-up	Tray 5 (bypass) inhibited due to excessive jams. Loading from trays 1-4 recommended. Environmental conditions may require that this product be fed one sheet at a time. (If misfeed still occurs when feeding one sheet at a time, load paper curled upward.)
3R96281	Xerox High Speed Laser Labels		Heavyweight labels	Label 2	A4	16-up	Labels once fed cannot be used. Smears may be observed in BW mode.

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R02047	Xerox Vitality Multipurpose Printer Paper	20lb	Plain	Plain A	8.5x11		Previous Name - Xerox Business 4200
3R03761	Xerox Vitality Multipurpose Printer Paper	20lb	Plain	Plain A	11x17		Previous Name - Xerox Business 4200
3R11540	Xerox Bold Digital Printing Paper	90gsm/24lb	Bond	Plain F	8.5x11		Previous Name - Xerox Color Xpressions Select
3R11543	Xerox Bold Digital Printing Paper	90gsm/24lb	Bond	Plain F	11x17		Previous Name - Xerox Color Xpressions Select
3R02051	Xerox Vitality Multipurpose Printer Paper	20lb	Plain		8.5x14		Previous Name - Xerox Business 4200
3R2641	Xerox Vitality Multipurpose Printer Paper	20lb	Plain		8.5x11	3 hole	Previous Name - Xerox Business 4200
3R11541	Xerox Bold Digital Printing Paper	90gsm/24lb	Bond	Plain F	8.5x11	3-hole	Previous Name - Xerox Color Xpressions Select
3R11542	Xerox Bold Digital Printing Paper	90gsm/24lb	Bond	Plain F	8.5x14		Previous Name - Xerox Color Xpressions Select
3R02531	Xerox Vitality Multipurpose Printer Paper	90gsm/24lb	Bond	Plain F	8.5x11		Previous Name - Xerox Business 4200
3R03317	Xerox Vitality Multipurpose Printer Paper	90gsm/24lb	Bond	Plain F	8.5x11	3 hole	Previous Name - Xerox Business 4200
3R03871	Xerox Vitality Multipurpose Printer Paper	90gsm/24lb	Bond	Plain F	11x17		Previous Name - Xerox Business 4200
3R6296	Xerox® Vitality™ Multipurpose Printer Paper, 30% Recycled	75gsm/20lb	Recycled	Plain A	8.5x11		Previous Name - Xerox Business Recycled Paper
3R6297	Xerox® Vitality™ Multipurpose Printer Paper, 30% Recycled	75gsm/20lb	Recycled	Plain A	8.5x11	3-hole	Previous Name - Xerox Business Recycled Paper
3R6298	Xerox® Vitality™ Multipurpose Printer Paper, 30% Recycled	75gsm/20lb	Recycled	Plain A	8.5x14		Previous Name - Xerox Business Recycled Paper
3R6299	Xerox® Vitality™ Multipurpose Printer Paper, 30% Recycled	75gsm/20lb	Recycled	Plain A	11x17		Previous Name - Xerox Business Recycled Paper
3R11376	Xerox® Vitality™ Multipurpose Printer Paper, 100% Recycled	75gsm/20lb	Recycled	Plain A	8.5x11		

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R11760	Xerox Bold Digital Printing Paper	105gsm/28lb	Bond	Plain F	8.5x11		Misfeed jams may occur depending on media's condition. If the jam occur, fanning paper before loading is recommended. If the misfeed jams still occur, feeding one sheet at a time is required.
3R11761	Xerox Bold Digital Printing Paper	105gsm/28lb	Bond	Plain F	8.5x11	3-hole	
3R11762	Xerox Bold Digital Printing Paper	105gsm/28lb	Bond	Plain F	17x11		
3R11764	Xerox Bold Digital Printing Paper	120gsm/32lb	Lightweight cardstock	Heavy 1A	8.5x11		
3R11765	Xerox Bold Digital Printing Paper	120gsm/32lb	Lightweight cardstock	Heavy 1A	17x11		
3R11767	Xerox Bold Digital Printing Paper	163gsm/60lb	Lightweight cardstock	Heavy 1A	8.5x11		
3R11768	Xerox Bold Digital Printing Paper	163gsm/60lb	Lightweight cardstock	Heavy 1A	17x11		
3R11770	Xerox Bold Digital Printing Paper	215gsm/80lb	Cardstock	Heavy 2A	8.5x11		
3R11771	Xerox Bold Digital Printing Paper	215gsm/80lb	Cardstock	Heavy 2A	17x11		
3R11800	Xerox® Bold™ Digital Printing Paper, 20% Recycled	105gsm/28lb	Bond	Plain F	8.5x11		Previous Name - Xerox Color Xpressions Planet 20
3R11801	Xerox® Bold™ Digital Printing Paper, 20% Recycled	105gsm/28lb	Bond	Plain F	17x11		Previous Name - Xerox Color Xpressions Planet 20
3R11803	Xerox® Bold™ Digital Printing Paper, 20% Recycled	175gsm/65lb	Cardstock	Heavy 2A	8.5x11		Previous Name - Xerox Color Xpressions Planet 20
3R11804	Xerox® Bold™ Digital Printing Paper, 20% Recycled	175gsm/65lb	Cardstock	Heavy 2A	17x11		Previous Name - Xerox Color Xpressions Planet 20
3R11806	Xerox® Bold™ Digital Printing Paper, 20% Recycled	215gsm/80lb	Cardstock	Heavy 2A	8.5x11		Previous Name - Xerox Color Xpressions Planet 20
3R11807	Xerox® Bold™ Digital Printing Paper, 20% Recycled	215gsm/80lb	Cardstock	Heavy 2A	17x11		Previous Name - Xerox Color Xpressions Planet 20
3R11815	Xerox® Bold™ Digital Printing Paper, 100% Recycled	105gsm /28lb	Recycled	Plain A	8.5x11		Previous Name - Xerox Planet 100
3R11747	Xerox Vitality Index Paper	163gsm/90lb Index	Lightweight cardstock	Heavy 1A	8.5x11		Previous Name - Xerox 90# Index Stock
3R11748	Xerox Vitality Index Paper	163gsm/90lb Index	Lightweight cardstock	Heavy 1A	11x17		Previous Name - Xerox 90# Index Stock

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R11749	Xerox Vitality Index Paper	199gsm/110# Index	Cardstock	Heavy 2A	8.5x11		Previous Name - Xerox 110# Index Stock
3R13038	Xerox® Bold™ Professional Quality Paper	90gsm/24lb	Bond	Plain F	8.5x11		
	Monarch	75 ?90gsm	Envelopes	Heavy 2A	3.9x7.5		Misfeed jam may occur under high temperature/humidity condition or with envelopes with low stiffness.
	Com10	76 ?90gsm	Envelopes	Heavy 2A	4.1x9.5		Misfeed jam may occur under high temperature/humidity condition or with envelopes with low stiffness.
C0125-ELR	Columbian No. 10 4 1/8x9 1/2	24lb	Envelope	Extra-Heavy-weight	Com-10		
1636	Strathmore Writing Bright White Move Monarch Envelope	24lb	Envelope	Extra-Heavy-weight			
3R11470	Xerox® Bold™ Coated Satin Digital Printing Paper	120gsm/80lb	Lightweight glossy card-stock(*)	Coated 1	8.5x11	Silk Text	Environmental conditions may require that this product be fed one sheet at a time from trays 1-4 or tray 5 (bypass). 120gsm/140gsm only When job is printed in low temperature and low humidity environment, poor transfer of toner may be observed. If poor transfer is observed, change 2nd transfer voltage offset.
3R11471	Xerox® Bold™ Coated Satin Digital Printing Paper	120gsm/80lb	Lightweight glossy card-stock(*)	Coated 1	17x11	Silk Text	
3R11474	Xerox® Bold™ Coated Satin Digital Printing Paper	140gsm/100lb	Lightweight glossy card-stock(*)	Coated 1	8.5x11	Silk Text	
3R11475	Xerox® Bold™ Coated Satin Digital Printing Paper	140gsm/100lb	Lightweight glossy card-stock(*)	Coated 1	17x11	Silk Text	
3R11478	Xerox® Bold™ Coated Satin Digital Printing Paper	210gsm/80lb	Glossy card-stock	Coated 2	8.5x11	Silk Cover	
3R11479	Xerox® Bold™ Coated Satin Digital Printing Paper	210gsm/80lb	Glossy card-stock	Coated 2	17x11	Silk Cover	

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R11450	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Lightweight glossy card-stock(*)	Coated 1	8.5x11	Gloss Text	Environmental conditions may require that this product be fed one sheet at a time from trays 1-4 or tray 5 (bypass).
3R11451	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Lightweight glossy card-stock(*)	Coated 1	17x11	Gloss Text	
3R11454	Xerox® Bold™ Coated Gloss Digital Printing Paper	140gsm/100lb	Lightweight glossy card-stock(*)	Coated 1	8.5x11	Gloss Text	
3R11455	Xerox® Bold™ Coated Gloss Digital Printing Paper	140gsm/100lb	Lightweight glossy card-stock(*)	Coated 1	17x11	Gloss Text	
3R11458	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Glossy card-stock	Coated 2	8.5x11	Gloss Cover	
3R11459	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Glossy card-stock	Coated 2	17x11	Gloss Cover	
3R11503	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Lightweight glossy card-stock	Coated 1	17x11	Gloss Text	Environmental conditions may require that this product be fed one sheet at a time from trays 1-4 or tray 5 (bypass).
3R11506	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Glossy card-stock	Coated 2	17x11	Gloss Cover	
3R11680	Xerox® Bold™ Super Gloss Cover	8PT / 170gsm	Lightweight glossy card-stock (*)	Coated 1	8.5x11		Tray 5 (bypass) inhibited due to excessive jams. Environmental conditions may require that this product be fed one sheet at a time from trays 1-4.
3R11681	Xerox® Bold™ Super Gloss Cover	8PT / 170gsm	Lightweight glossy card-stock (*)	Coated 1	17x11		
3R11683	Xerox® Bold™ Super Gloss Cover	10pt / 219 gsm	Heavyweight glossy card-stock	Coated 1	8.5x11		
3R11684	Xerox® Bold™ Super Gloss Cover	10pt / 219 gsm	Heavyweight glossy card-stock	Coated 1	17x11		

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R11686	Xerox® Bold™ Super Gloss Cover	12PT/ 247gsm	Heavyweight glossy card- stock	Coated 2	8.5x11		Environmental conditions may require that this product be fed one sheet at a time from trays 1-4. Tray 5 (bypass) cannot be used for media heavier than 216gsm.)
3R11687	Xerox® Bold™ Super Gloss Cover	12PT/ 247gsm	Heavyweight glossy card- stock	Coated 2	17x11		
3R11875	Xerox® Vitality™ Coated Printing Paper Gloss	120gsm/80lb Text	Lightweight glossy card- stock	Coated 1	17x11		
3R11880	Xerox® Vitality™ Coated Printing Paper Gloss	140gsm/ 100lb Text	Lightweight glossy card- stock	Coated 1	17x11		
3R11885	Xerox® Vitality™ Coated Printing Paper Gloss	210gsm/80lb Cover	Glossy card- stock	Coated 2	17x11		
3R11690	Xerox® Vitality™ Coated Printing Paper Satin	120gsm/80lb Text	Lightweight glossy card- stock	Coated 1	17x11		
3R11695	Xerox® Vitality™ Coated Printing Paper Satin	140gsm/ 100lb Text	Lightweight glossy card- stock	Coated 1	17x11		
3R11855	Xerox® Vitality™ Coated Printing Paper Satin	210gsm/80lb Cover	Glossy card- stock	Coated 2	17x11		
3R12057	Revolution Label - Multipurpose Labels		Label		8.5x11	1- up	
3R12050	Revolution Label - Multipurpose Labels		Label		8.5x11	33- up	
3R04476	Revolution Label - High Speed Labels		Label		8.5x11	1- up	Previous Name - Xerox Monochrome High Speed Label
3R03139	Revolution Label - High Speed Labels		Label		8.5x11	33- up	Previous Name - Xerox Monochrome High Speed Label

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R12736	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	1- up	Labels once fed cannot be used. Tray 5 (bypass) inhibited due to excessive jams. Environmental conditions may require that this product be fed one sheet at a time from rays 1-4.
3R12737	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	4-up	
3R12740	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	10-up	
3R12741	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	30-up	
3R12738	Xerox Digital Color Glossy Labels		Heavyweight labels	Label 2	8.5x11	CD Rom	
3R5771	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	1- up	Labels once fed cannot be used. Loading from trays 1-4 recommended. Environmental conditions may require that this product be fed one sheet at a time. Image defect may be observed around the edge of the label pieces. If image defects are observed in low temperature/ humidity condition, the voltage should be adjusted by 2nd transfer user offset.
3R5773	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	4-up	
3R6332	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	10-up	
3R6333	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	30-up	
3R6330	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	CD Rom 2-up	
3R12373	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	17x11	CD Rom 6-up	
3R12739	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	17x11	CD Rom 6-up	Tray 5 (bypass) inhibited due to excessive jams. Loading from trays 1-4 recommended. Environmental conditions may require that this product be fed one sheet at a time. (If misfeed still occurs when feeding one sheet at a time, load paper curled upward.)
3R11503	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Lightweight glossy card-stock	Coated 1	17x11	Gloss Text	Environmental conditions may require that this product be fed one sheet at a time from trays 1-4 or tray 5 (bypass).
3R11506	Xerox® Bold™ Coated Gloss Digital Printing Paper	210gsm/80lb	Glossy card-stock	Coated 2	17x11	Gloss Cover	

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R11680	Xerox® Bold™ Super Gloss Cover	8PT / 170gsm	Lightweight glossy card-stock (*)	Coated 1	8.5x11		Tray 5 (bypass) inhibited due to excessive jams. Environmental conditions may require that this product be fed one sheet at a time from trays 1-4.
3R11681	Xerox® Bold™ Super Gloss Cover	8PT / 170gsm	Lightweight glossy card-stock (*)	Coated 1	17x11		
3R11683	Xerox® Bold™ Super Gloss Cover	10pt / 219gsm	Heavyweight glossy card-stock	Coated 1	8.5x11		
3R11684	Xerox® Bold™ Super Gloss Cover	10pt / 219gsm	Heavyweight glossy card-stock	Coated 1	17x11		
3R11686	Xerox® Bold™ Super Gloss Cover	12PT/ 247gsm	Heavyweight glossy card-stock	Coated 2	8.5x11		Environmental conditions may require that this product be fed one sheet at a time from trays 1-4. Tray 5 (bypass) cannot be used for media heavier than 216gsm.)
3R11687	Xerox® Bold™ Super Gloss Cover	12PT/ 247gsm	Heavyweight glossy card-stock	Coated 2	17x11		
3R11875	Xerox® Vitality™ Coated Printing Paper Gloss	120gsm/80lb Text	Lightweight glossy card-stock	Coated 1	17x11		
3R11880	Xerox® Vitality™ Coated Printing Paper Gloss	140gsm/ 100lb Text	Lightweight glossy card-stock	Coated 1	17x11		
3R11885	Xerox® Vitality™ Coated Printing Paper Gloss	210gsm/80lb Cover	Glossy card-stock	Coated 2	17x11		
3R11690	Xerox® Vitality™ Coated Printing Paper Satin	120gsm/80lb Text	Lightweight glossy card-stock	Coated 1	17x11		

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R11695	Xerox® Vitality™ Coated Printing Paper Satin	140gsm/ 100lb Text	Lightweight glossy card-stock	Coated 1	17x11		
3R11855	Xerox® Vitality™ Coated Printing Paper Satin	210gsm/80lb Cover	Glossy card-stock	Coated 2	17x11		
3R12057	Revolution Label - Multipurpose Labels		Label		8.5x11	1- up	
3R12050	Revolution Label - Multipurpose Labels		Label		8.5x11	33- up	
3R04476	Revolution Label - High Speed Labels		Label		8.5x11	1- up	Previous Name - Xerox Monochrome High Speed Label
3R03139	Revolution Label - High Speed Labels		Label		8.5x11	33- up	Previous Name - Xerox Monochrome High Speed Label
3R12736	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	1- up	Labels once fed cannot be used. Tray 5 (bypass) inhibited due to excessive jams. Environmental conditions may require that this product be fed one sheet at a time from trays 1-4.
3R12737	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	4-up	
3R12740	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	10-up	
3R12741	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	8.5x11	30-up	
3R12738	Xerox Digital Color Glossy Labels		Heavyweight labels	Label 2	8.5x11	CD Rom	
3R5771	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	1- up	Labels once fed cannot be used. Loading from trays 1-4 recommended. Environmental conditions may require that this product be fed one sheet at a time. Image defect may be observed around the edge of the label pieces. If image defects are observed in low temperature/ humidity condition, the voltage should be adjusted by 2nd transfer user offset.
3R5773	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	4-up	

Table 3 Recommended paper types - North America

Part Number	Paper	Weight	Category	Paper type	Size	Type	Remarks
3R6332	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	10-up	
3R6333	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	30-up	
3R6330	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	8.5x11	CD Rom 2-up	
3R12373	Xerox® Revolution™ Label – Matte Coated Labels		Heavyweight labels	Label 2	17x11	CD Rom 6-up	
3R12739	Xerox® Revolution™ Label – Gloss Coated Labels		Heavyweight labels	Label 2	17x11	CD Rom 6-up	Tray 5 (bypass) inhibited due to excessive jams. Loading from trays 1-4 recommended. Environmental conditions may require that this product be fed one sheet at a time. (If misfeed still occurs when feeding one sheet at a time, load paper curled upward.)

Table 4 Integrated office finisher supported paper types

Paper Type on UI		Top Tray			Notes
Name	Weight	Stack	Offset	Staple	
Bond		Y	Y	Y	
Plain		Y	Y	Y	
Recycled		Y	Y	Y	
Custom 1 to 5	60 to 105gsm (40 to 71lbs)	Y	Y	Y	
Punched		Y	Y	Y	
Letterhead		Y	Y	Y	
Pre-printed		Y	Y	Y	
Plain reload	60 to 105gsm (40 to 71lbs)	Y	Y	Y	
Heavyweight 1	106 to 169gsm (72 to 114lbs)	Y	Y	Y	
Heavyweight 2	170 to 216gsm (115 to 146lbs)	Y	Y	Y	
Heavyweight 3	217 to 256gsm (147 to 173lbs)	Y	Y	Y	Media weight up to 220gsm (149lbs) is supported.
Gloss 1	106 to 169gsm (72 to 114lbs)	N	N	N	
Gloss 2	170 to 216gsm (115 to 146lbs)	N	N	N	
Gloss 3	217 to 256gsm (147 to 173lbs)	N	N	N	
Labels 1	106 to 169gsm (72 to 114lbs)	Y	Y	Y	
Labels 2	170 to 216gsm (115 to 146lbs)	Y	Y	Y	

Table 4 Integrated office finisher supported paper types

Paper Type on UI		Top Tray			Notes
Name	Weight	Stack	Offset	Staple	
Labels 3	217 to 256gsm (147 to 173lbs)	Y	Y	Y	Media weight up to 220gsm (149lbs) is supported.
Heavyweight 1 side 2	106 to 169gsm (72 to 114lbs)	Y	Y	Y	
Heavyweight 2 side 2	170 to 216gsm (115 to 146lbs)	Y	Y	Y	Media weight up to 220gsm (149lbs) is supported.
Heavyweight 3 side 2	217 to 256gsm (147 to 173lbs)	Y	Y	Y	
Gloss 1 side 2	106 to 169gsm (72 to 114lbs)	N	N	N	
Gloss 2 side 2	170 to 216gsm (115 to 146lbs)	N	N	N	
Gloss 3 side 2	217 to 256gsm (147 to 173lbs)	N	N	N	
Envelopes		Y	N	N	

Table 5 Office finisher LX supported paper types

Paper Type on UI		Top Tray						Notes
Name	Weight	Stack	Offset	Punch	Staple	Booklet (see NOTE)	Folding only	
Bond		Y	Y	Y	Y (1)	Y (2)	Y	1. Up to 50 sheets of 64 to 90gsm (43 to 60lbs) centre line paper of can be stapled. 2. Paper exceeding 80gsm (54lbs) can be stapled as cover paper.
Plain		Y	Y	Y	Y (1)	Y (2)	Y	
Recycled		Y	Y	Y	Y (1)	Y (2)	Y	
Custom 1 to 5	60 to 105gsm (40 to 71lbs)	Y	Y	Y	Y (1)	Y (2)	Y	
Punched		Y	Y	Y	Y (1)	Y (2)	Y	
Letterhead		Y	Y	Y	Y (1)	Y (2)	Y	
Pre-printed		Y	Y	Y	Y (1)	Y (2)	Y	
Plain reload	60 to 105gsm (40 to 71lbs)	Y	Y	Y	Y (1)	N	Y	1. Up to 50 sheets of 64 to 90gsm (43 to 60lbs) centre line paper of can be stapled.
Heavyweight 1	106 to 169gsm (72 to 114lbs)	Y	Y	Y	Y (1)	Y (2)	N	1. Up to 50 sheets of 64 to 90gsm (43 to 60lbs) centre line paper of can be stapled. 2. Paper exceeding 80gsm (54lbs) can be stapled as cover paper.
Heavyweight 2	170 to 216gsm (115 to 146lbs)	Y	Y	Y (3)	Y (1)	Y (2)	N	1. Up to 50 sheets of 64 to 90gsm (43 to 60lbs) centre line paper of can be stapled. 2. Paper exceeding 80gsm (54lbs) can be stapled as cover paper. 3. Up to 200gsm (136lbs).
Heavyweight 3	217 to 256gsm (147 to 173lbs)	Y (3)	Y (3)	N	Y(1) (3)	Y (2) (3)	N	
Gloss 1	106 to 169gsm (72 to 114lbs)	N	N	N	N	N	N	
Gloss 2	170 to 216gsm (115 to 146lbs)	N	N	N	N	N	N	
Gloss 3	217 to 256gsm (147 to 173lbs)	N	N	N	N	N	N	
Labels 1	106 to 169gsm (72 to 114lbs)	N	N	N	N	N	N	
Labels 2	170 to 216gsm (115 to 146lbs)	N	N	N	N	N	N	
Labels 3	217 to 256gsm (147 to 173lbs)	N	N	N	N	N	N	

Table 5 Office finisher LX supported paper types

Paper Type on UI		Top Tray						Notes
Name	Weight	Stack	Offset	Punch	Staple	Booklet (see NOTE)	Folding only	
Heavyweight 1 side 2	106 to 169gsm (72 to 114lbs)	Y	Y	Y	Y (1)	N	N	1. Up to 50 sheets of 64 to 90gsm (43 to 60lbs) centre line paper of can be stapled.
Heavyweight 2 side 2	170 to 216gsm (115 to 146lbs)	Y	Y	Y (2)	Y (1)	N	N	1. Up to 50 sheets of 64 to 90gsm (43 to 60lbs) centre line paper of can be stapled.
Heavyweight 3 side 2	217 to 256gsm (147 to 173lbs)	Y (2)	Y (2)	N	Y (1) (2)	N	N	2. 3. Up to 200gsm (136lbs).
Gloss 1 side 2	106 to 169gsm (72 to 114lbs)	N	N	N	N	N	N	
Gloss 2 side 2	170 to 216gsm (115 to 146lbs)	N	N	N	N	N	N	
Gloss 3 side 2	217 to 256gsm (147 to 173lbs)	N	N	N	N	N	N	
Envelopes		Y	N	N	N	N	N	

NOTE: Booklet includes folding and saddle stapling.

GP 16 Installation Space Requirements

Purpose

To outline the general space requirements to enable safe use and adequate access for service.



WARNING

Do not work in a confined space. 1 m (39 inches) space is needed for safe working.



WARNING

USA and Canada. Do not install this machine in a hallway or exit route that does not have 1.12 m (44 inches) of space additional to the normal space requirements in front of the machine. To conform with fire regulations this additional 1.12 m (44 inches) of space is needed in front of the machine in hallway and exit routes.

Machine Height

C7030F

- Single tray machine with the DADF lowered = 768mm (30.2 inches).
- Single tray machine with the DADF raised = 1133mm (44.6 inches).
- Two tray machine with the DADF lowered = 882mm (34.7 inches).
- Two tray machine with the DADF raised = 1247mm (49 inches).
- Stacked machine (1TM, TTM or 3TM) with the DADF lowered = 1119mm (44 inches).
- Stacked machine (1TM, TTM or 3TM) with the DADF raised = 1484mm (58.4 inches).

C7000

- Single tray machine = 637mm (25 inches).

Machine Weight

C7030F

- Single tray machine = 67kg (147.7lb).
- Fully configured machine (3TM) = 160.7kg (354.2lb).

C7000

- Single tray machine = 50.7kg (111.7lb).

- Fully configured machine (3TM) = 81.7kg (207.6lb).

Finishers

- Integrated office finisher = 12kg (26.4lb)
- Office finisher LX = 28kg (61.7lb).
- Booklet = 9.2kg (20.2lb).
- Punch = 0.7kg (1.5lb).

Paper Trays

- HCF = 29kg (63.9lb).
- 3TM = 28kg (61.6lb).
- STM = 10.5kg (23.1lb).
- 1TM = 23.8kg (52.4lb).
- TTM = 37.5kg (82.5lb).

Machine Dimensions and Installation Space Requirements

Table 1 shows the dimensions of the C7030F machines and the installation space required for safe operation.

Table 2 shows the dimension of C7000 machines and the installation space required for safe operation.

NOTE: The installation dimensions in Table 1 and Table 2 allow for a 1 metre (39.4 inches) minimum safety work space around the machine. To acquire this minimum safety work space, it may be necessary to move the machine within the area specified.

A gap of 100mm (4 inches) is required at the rear for airflow to fans. This is also sufficient for the DADF when raised.

For machines with an HCF, the required install width (dimension C) includes the extra space required to slide the HCF away from the machine.

The installation dimensions in Table 1 and Table 2 show the machine footprint with the bypass tray and output trays fully extended.

Figure 1 represents a plan view of a machine installation and is to be read in conjunction with Table 1 and Table 2. The dimensions A and B outline a footprint of the machine within the boundary of safe operation, dimensions C and D. The dimension E indicates the area required for airflow/work space at the rear of the machine.

Table 1 Dimensions and space requirements for C7030F

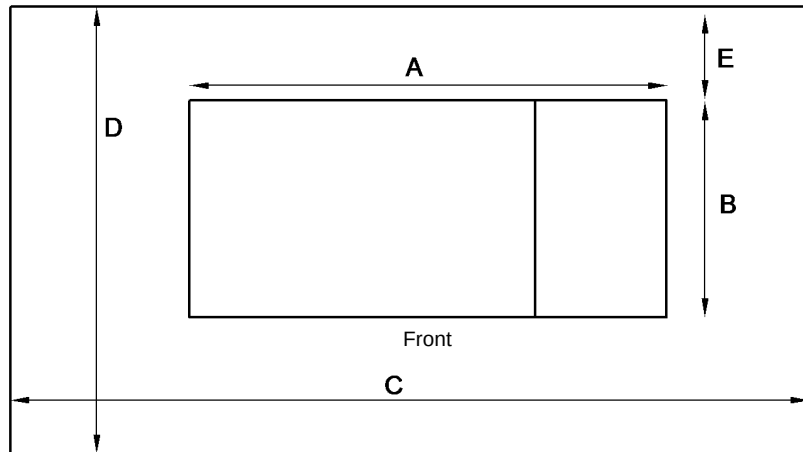
Configuration	Machine Width (bypass tray closed) (A) mm/inches	Machine Depth (B) mm/inches	Install Width Required (C) mm/inches		Install Depth Required (D) mm/inches		Install Airflow/Service Work Space (E) mm/inches	
			Moveable	Fixed	Moveable	Fixed	Moveable	Fixed
Single tray machine	590 / 23.2	670 / 26.3	1590 / 62.5	2590 / 101.9	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM)	616 / 24.2	670 / 26.3	1616 / 63.6	2616 / 102.9	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM) with HCF	932 / 36.6	670 / 26.3	1932 / 76	2932 / 115.4	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM) with Integrated office finisher	675 / 26.5	670 / 26.3	1675 / 65.9	2675 / 105.3	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM) with Office finisher LX	1194 / 47	670 / 26.3	2194 / 86.3	3194 / 125.7	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4

Table 1 Dimensions and space requirements for C7030F

Configuration	Machine Width (bypass tray closed) (A) mm/inches	Machine Depth (B) mm/inches	Install Width Required (C) mm/inches		Install Depth Required (D) mm/inches		Install Airflow/Service Work Space (E) mm/inches	
			Moveable	Fixed	Moveable	Fixed	Moveable	Fixed
Stacked machine (1TM, TTM or 3TM) with Office finisher LX	1510 / 59.4	670 / 26.3	2510 / 98.8	3510 / 138.1	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM) with Office finisher LX and booklet maker	1194 / 47	681 / 26.8	2194 / 86.3	3194 / 125.7	1681 / 66.1	2681 / 105.5	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM) with office finisher, booklet maker and HCF	1510 / 59.4	681 / 26.8	2510 / 98.8	3510 / 138.1	1681 / 66.1	2681 / 105.5	100 / 4	1000 / 39.4

Table 2 Dimensions and space requirements for C7000

Configuration	Machine Width (bypass tray closed) (A) mm/inches	Machine Depth (B) mm/inches	Install Width Required (C) mm/inches		Install Depth Required (D) mm/inches		Install Airflow/Service Work Space (E) mm/inches	
			Moveable	Fixed	Moveable	Fixed	Moveable	Fixed
Single tray machine	590 / 23.2	670 / 26.3	1590 / 62.5	2590 / 101.9	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM)	616 / 24.2	670 / 26.3	1616 / 63.6	2616 / 102.9	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Stacked machine (1TM, TTM or 3TM) with integrated office finisher	675 / 26.5	670 / 26.3	1675 / 65.9	2675 / 105.3	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4
Single tray machine (1TM, TTM or 3TM) with integrated office finisher	649 / 25.5	670 / 26.3	1649 / 64.9	2649 / 104.2	1670 / 65.7	2670 / 105.1	100 / 4	1000 / 39.4



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Figure 1 Installation plan

GP 17 Electrical Power Requirements

Power Requirements

Refer to [Table 1](#).

Table 1 Electrical power requirements

Nominal Voltage	Average Current	Comments
110-120VAC (60Hz) Plus 6% minus 10%	Less than or equal to 12A RMS.	50/60Hz plus 3% minus 3%
220-240VAC (50Hz) Plus 10% minus 10%	Less than or equal to 8A RMS.	50Hz plus 3% minus 3%

Power Consumption

Refer to [Table 2](#).

Table 2 Power consumption

Region	Voltage	Power Consumption Value (kW)
XC	110-127VAC	110VAC - 1.45 or less 127VAC - 1.67 or less
XE	220-240VAC	220VAC - 1.76 or less 240VAC - 1.92 or less

Operation Modes

Refer to [Table 3](#) and [Table 4](#).

Table 3 Operation modes

Mode	State
Run	Normal operation mode
Ready	The state prior to entering run mode.
Low power	A lower power consumption mode than ready mode
Sleep	A lower power consumption mode than low power mode.
Sub power off	The controller is maintained with the programs running.

Table 4 IOT states

Sub-System	Run Mode	Ready Mode	Low Power Mode	Sleep Mode	Sub Power Off Mode
Fuser	Maintaining operating temperature	Maintaining standby temperature	Maintaining low temperature	Off	Off
Xerographcs	Operating state	Off	Off	Off	Off
Print Head Assembly	Operating state	Off	Off	Off	Off

Table 4 IOT states

Sub-System	Run Mode	Ready Mode	Low Power Mode	Sleep Mode	Sub Power Off Mode
Fusing Fan	Temperature controlled slow or fast rotation	Temperature control in stop or rotate (slow)	Temperature control in stop or rotate (slow)	Off	Off
Marking Fan	Temperature controlled, either stopped or slow or fast rotation	Temperature control led either stop or slow rotation	Temperature control led either stop or slow rotation	Off	Off
ESS (Reference only)	Operating state	Standby	Standby	Ready to receive	Inactive
HDD	Accessible	Accessible	Accessible	Not accessible	Not accessible

GP 18 Environmental Data

Operating

- Temperature range: 10 to 32 degrees C (50 to 90 degrees F).
- Relative humidity: 15 to 85%.
- Altitude: 0 to 2500 metres (0 to 8200 feet).
- Noise:

NOTE: Blue Angel Europe criteria measured in accordance with RAL-UZ 122.

- **Table 1** contains the maximum value in decibels of noise that can be generated by the C7030F.
- **Table 2** contains the maximum value in decibels of noise that can be generated by the C7000.

Table 1 Maximum noise limits for C7030F

Item	PPM	Black and White Mode		Full Color Mode	
		IOT	Full System	IOT	Full System
Standby (dBA)	20	19.4	Int Fin: 18.8 Fin LX: 20.6	19.4	Int Fin: 18.8 Fin LX: 20.6
Run continuous (dBA)		46.2	Int Fin: 52.8 Fin LX: 52.8	19.5	Int Fin: 53.0 Fin LX: 52.9
Standby (dBA)	25	19.9	Int Fin: 18.7 Fin LX: 19.3	19.9	Int Fin: 18.7 Fin LX: 19.3
Run continuous (dBA)		47.6	Int Fin: 53.3 Fin LX: 52.9	19.9	Int Fin: 53.3 Fin LX: 52.9
Standby (dBA)	30	24.7	Int Fin: 22.1 Fin LX: 20.6	24.7	Int Fin: 22.1 Fin LX: 20.6
Run continuous (dBA)		48.4	Int Fin: 54.8 Fin LX: 54.6	49.4	Int Fin: 54.9 Fin LX: 54.6

Table 2 Maximum noise limits for C7000

Item	PPM	Black and White Mode		Full Color Mode	
		IOT	Full System	IOT	Full System
Standby (dBA)	35	16.4	Int Fin: 16.2	16.4	Int Fin: 16.2
Run continuous (dBA)		49.7	Int Fin: 55.6	50.1	Int Fin: 55.8

Storage

- Altitude: 0 to 3100 metres (0 to 10170 feet).
- Maximum temperature 48 degrees C (118 degrees F).

GP 19 Obtaining Audit and Device Logs

Purpose

To obtain then download device data for analysis by 2nd level support.

NOTE: It may not be possible to obtain a device log if the device executed a reboot after an error occurred. To enable the device log collection enter **dC131** then set the NVM chain-link code 700-530 value to 0. Repeat the device log procedure then reset the NVM chain-link code 700-530 value back to 1.

Procedure

Audit Log

To obtain the Audit Log:

1. Obtain the machine's IP address by printing a configuration report. Refer to **GP 14** Printing Reports.
2. Access the web UI by entering the IP address into a web browser on a PC on the same network as the machine.
3. Log in to the web UI as an administrator. Refer to **GP 23** Customer Administration Tools.
4. **Ensure HTTP - SSL/TLS is enabled:**
 - a. Click **Connectivity**.
 - b. Click **HTTP**.
 - c. Enable HTTP (SSL).
 - d. Click **OK**. You will be prompted to restart the machine, click **Restart Now**.
5. When the machine restarts, log back in as an administrator, then click **System**.
6. Click **Logs**.
7. Click **Audit Log**.
8. Click **Enable**.
9. Click **Export**. The auditlog.txt file is downloaded via the web browser.

Device Log

To obtain the Device Log:

1. Obtain the machine's IP address by printing a configuration report. Refer to **GP 14** Printing Reports.
2. Access the web UI by entering the IP address into a web browser on a PC on the same network as the machine.
3. Log in to the web UI as an administrator. Refer to **GP 23** Customer Administration Tools.
4. Click **System**.
5. Click **Logs**.
6. Click **Device Log**.
7. Click **Accept**. The devicelog.dat file is downloaded via the web browser.

GP 20 First Copy/Print Out Time and Power On Time

Refer to [Table 1](#). The first copy out time (FCOT) is the duration from the start copy request to the delivery of the first copy to the output destination. Values are based on a standard job where the original is copied at 100% from the document glass or DADF onto A4 LEF paper fed from tray 1.

The first print out time (FPOT) is the duration from the print job request to the delivery of the print in the centre catch tray. Values are based on paper fed from tray 1.

Table 1 Machine timing

Description	Response Time (B/W)	Response Time (color)	Notes
FCOT from the document glass to centre tray (B/W priority)	20ppm - 6.9 seconds 25ppm - 6.9 seconds 30ppm - 5.8 seconds 35ppm - 5.8 seconds	20ppm - 13.3 seconds 25ppm - 13.3 seconds 30ppm - 10.3 seconds 35ppm - 10.3 seconds	A4 or 8.5x11 LEF
FCOT from the document glass to centre tray (color priority)	20ppm - 9.3 seconds 25ppm - 9.3 seconds 30ppm - 7.8 seconds 35ppm - 7.8 seconds	20ppm - 9.0 seconds 25ppm - 9.0 seconds 30ppm - 7.2 seconds 35ppm - 7.2 seconds	A4 or 8.5x11 LEF
FCOT from the DADF to centre tray (B/W priority)	20ppm - 9.3 seconds 25ppm - 9.3 seconds 30ppm - 7.8 seconds 35ppm - 7.8 seconds	20ppm - 15.7 seconds 25ppm - 15.7 seconds 30ppm - 13.7 seconds 35ppm - 13.7 seconds	A4 or 8.5x11 LEF
FCOT from the DADF to centre tray (color priority)	20ppm - 11.8 seconds 25ppm - 11.8 seconds 30ppm - 10.3 seconds 35ppm - 10.3 seconds	20ppm - 12.2 seconds 25ppm - 12.2 seconds 30ppm - 10.2 seconds 35ppm - 10.2 seconds	A4 or 8.5x11 LEF
FPOT (B/W priority)	20ppm - 5.6 seconds 25ppm - 5.6 seconds 30ppm - 4.2 seconds 35ppm - 4.2 seconds	20ppm - 11.2 seconds 25ppm - 11.2 seconds 30ppm - 9.2 seconds 35ppm - 9.2 seconds	A4 or 8.5x11 LEF
FPOT (color priority)	20ppm - 8.2 seconds 25ppm - 8.2 seconds 30ppm - 6.7 seconds 35ppm - 6.7 seconds	20ppm - 7.8 seconds 25ppm - 7.8 seconds 30ppm - 5.7 seconds 35ppm - 5.7 seconds	A4 or 8.5x11 LEF
Recovery from low power mode	12 seconds	12 seconds	From low power mode to ready to copy, print or fax
Recovery from sleep mode	12 seconds	12 seconds	From sleep mode to ready to print or copy
Main power on time to ready to print	98 seconds or less	98 seconds or less	
Sub power on time to ready to print	88 seconds or less	88 seconds or less	

GP 21 Restriction of Hazardous Substances (RoHS)

Purpose

To provide information on the RoHS Directive.

The RoHS Directive restricts the use of certain hazardous substances in electrical and electronic equipment. It applies to equipment placed in the European Union (EU) market. The directive takes effect from 1st July 2006.

NOTE: Currently these restrictions are only for the European Union (EU) market and some associated countries. For more information go to www.Xerox.com. However, Xerox has mandated that all Xerox® VersaLink® C7000/C7020/C7025/C7030 machines must be maintained as RoHS compliant.

The hazardous substances are:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent Chromium (Cr 6+, Cr [VI])
- Polybrominated Diphenyl Ethers (PBDEs)
- Polybrominated Biphenyls (PBBs)

Identification of a RoHS Compliant Machine

Xerox will maintain a central list of RoHS compliant machines.

All Xerox® VersaLink® C7000/C7020/C7025/C7030 machines are RoHS compliant at time of manufacture.

Procedure



Failure to comply with RoHS guidelines can result in product recalls, imprisonment, fines or penalties.

Use only spares that are listed in the Xerox® VersaLink® C7000/C7020/C7025/C7030 Spare Parts List. Do not use spare parts from other similar machines, even if the parts look identical. All Xerox® VersaLink® C7000/C7020/C7025/C7030 machines are RoHS compliant at time of manufacture and must be maintained as RoHS compliant.

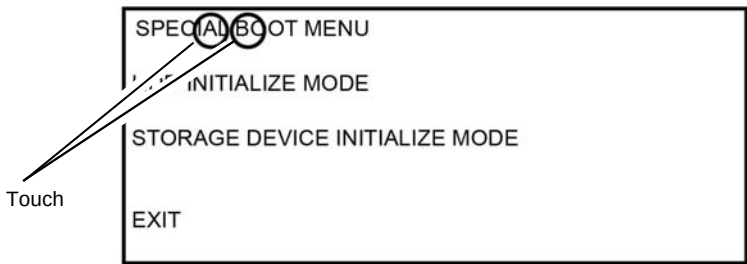
GP 22 Special Boot Modes

Purpose

To start the device in various modes to enable special functions.

Procedure

1. Switch off the machine, [GP 10](#).
2. Simultaneously press then hold down the **Home** and **Power** buttons until the device powers on and SPECIAL BOOT MENU appears, [Figure 1](#).
3. Simultaneously touch the letters **A** in **SPECIAL**, **B** in **BOOT** and the **Home** button. Do not hold any of the three locations, just touch/press then release simultaneously, [Figure 1](#).



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Figure 1 Accessing special boot mode

4. At the keypad screen enter code number, 6789#. The first SPECIAL BOOT MENU screen will display.



CAUTION

Do not switch off the device until the reboot is complete. The device will reboot after the download is complete.

5. Scroll through the SPECIAL BOOT MENU screens to select the appropriate function, refer to [Table 1](#). Follow the on screen instructions. The device may reboot, then print a report.

Table 1 Next level of menu

Function	Display	Notes
DOWNLOAD MODE	--BOOT MODE-- DOWNLOAD MODE ARE YOU SURE? YES NO	Machine starts in Firmware Download Mode. Refer to GP 4 .
LONGDIAG MODE	--BOOT MODE-- LONGDIAG MODE ARE YOU SURE? YES NO	Performs a more detailed check than the usual device diagnostic items at machine start. If a fault code is displayed, perform the relevant procedure.

Table 1 Next level of menu

Function	Display	Notes
01. JOB LOG CLEAR MODE	--BOOT MODE-- 01. JOB LOG CLEAR MODE ARE YOU SURE? YES NO	Used to clear corrupted jobs.
02. FACTORY INIT MODE	--BOOT MODE-- 02. FACTORY INIT MODE ARE YOU SURE? YES NO	CAUTION <i>Do not perform this mode unless directed.</i> Machine will be reset and the message NVMEM IS CLEARED will be displayed. Switch the machine off, then on, GP 10. Fault code 116-334 will be displayed, again switch the machine off, then on, GP 10. Fault code 124-315 will be displayed, perform dC132. The machine will restart at the install wizard. CAUTION <i>All customer configured settings will be deleted. To restore the customer configured settings, a clone file is required. Refer to GP 13.</i> NOTE: The install dongle will not be required.
03. NVRAM INIT MODE	--BOOT MODE-- 03. NVRAM INIT MODE ARE YOU SURE? YES NO	Forcibly initializes the controller NVM back to default. This is the same as initializing the Sys - System NVM and Sys - User NVM in dC301 .
04. HDD FORMAT MODE	--BOOT MODE-- 04. HDD FORMAT MODE ARE YOU SURE? YES NO	All pending jobs will be deleted. The HDD will be forcibly reformatted. CAUTION <i>All customer data on the HDD (mailboxes, scanned documents, user IDs and account IDs) will be deleted.</i>
06. HDD INITIALIZE MODE	--BOOT MODE-- 06. HDD INITIALIZE MODE ARE YOU SURE? YES NO	All pending jobs will be deleted. The spool area of the HDD will be initialized. CAUTION <i>All customer data on the HDD (mailboxes, scanned documents, user IDs and account IDs) will be deleted.</i>

Table 1 Next level of menu

Function	Display	Notes
SKIP INSTALL WIZARD	--BOOT MODE-- SKIP INSTALL WIZARD ARE YOU SURE? YES NO	Starts the machine without displaying the install wizard.

GP 23 Customer Administration Tools

Purpose

To gain access to Customer Administration Tools on the UI or to login as an administrator via the Embedded Web Server (EWS).

Refer to the relevant procedure:

- [How to Enter Customer Administration Tools.](#)
- [How to Enter Admin Mode via the EWS.](#)

How to Enter Customer Administration Tools

Perform the steps that follow:

1. Switch on the machine, [GP 10](#).
2. When the machine is ready, touch Log In in the top left corner of the UI.
3. Touch Admin.
4. The User Accounts screen displays. Enter user name 'admin' (case sensitive) or touch admin if the account already exists.
5. Enter the password '1111' (default setting). Touch OK.

NOTE: If the administrator password is not 1111, ask the customer for the current password. If the administrator password is unknown, perform [GP 29 System Administrator Password Reset](#).

Call Closeout

Perform the steps that follow:

1. Touch Admin in the top left corner of the UI.
2. Touch Logout.

How to Enter Admin Mode via the EWS

Perform the steps that follow:

1. Type the device IP address into a web browser.
2. Select Log in, top left corner.
3. The User Accounts screen is displayed. Select admin.
4. The admin screen is displayed. Enter the password '1111' (default setting).

NOTE: If the admin password is not 1111, ask the customer for the current password. If the admin password is unknown, perform [GP 29 System Administrator Password Reset](#).

5. Select Log In.

Call Closeout

Perform the steps that follow:

1. Select Admin, in the top left corner.
2. The pull down menu is displayed. Select Log Out .

GP 24 How to Set the Date and Time

Purpose

To set the machine's date and time.

Procedure

Perform the steps that follow:

1. Enter Customer Administration Tools, [GP 23](#).
2. Touch Device.
3. Touch General.
4. Touch Date & Time.
5. Again, touch Date & Time.
6. Correctly set the date and time. Touch OK.
7. Log out of Customer Administration Tools.

GP 25 Ethernet Crossover Cable Setup

Purpose

To connect and then configure the PWS to communicate with a device via a ethernet crossover cable (600T02252).

Procedure



WARNING

Switch off the electricity to the machine **GP 10**. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Print a configuration report, **GP 14**.
2. Ensure that Windows firewall and wireless network connectivity on the PWS are turned off.
3. Record the IP address and Subnet Mask of the PWS.



CAUTION

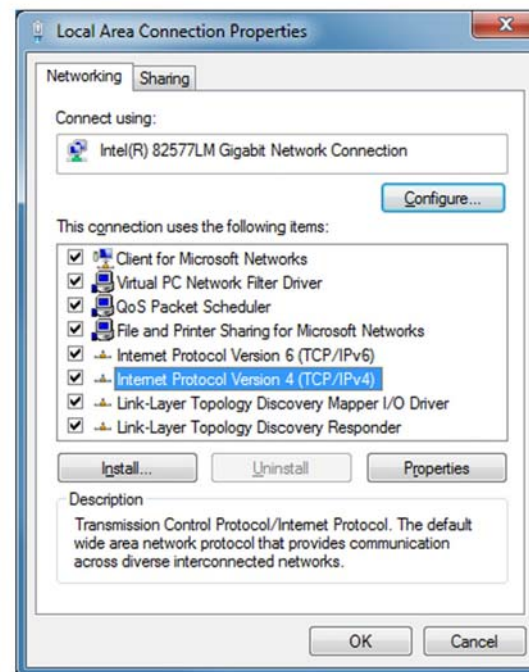
Before changing the value of a setting ensure the original value is recorded. All the original values will need to be restored to the PWS at the end of the procedure.

- a. Open a command window on the PWS:
 - Select **Start** and in the Search box above the Start button, type **CMD**, then press **Enter**.
- NOTE:** If the Windows key is enabled (the key located in the lower left corner with the Microsoft logo), hold the Windows key down, press R and release both keys to open the Command window.
- b. Type **ipconfig** at the command prompt, then record the Local Area Connection: IPv4 Address and Subnet Mask.
4. Configure the LAN connection of the PWS to enable communication with the device. Go to the relevant procedure:
 - **Windows 7**.
 - **Windows 10**.

Windows 7

Perform the steps that follow:

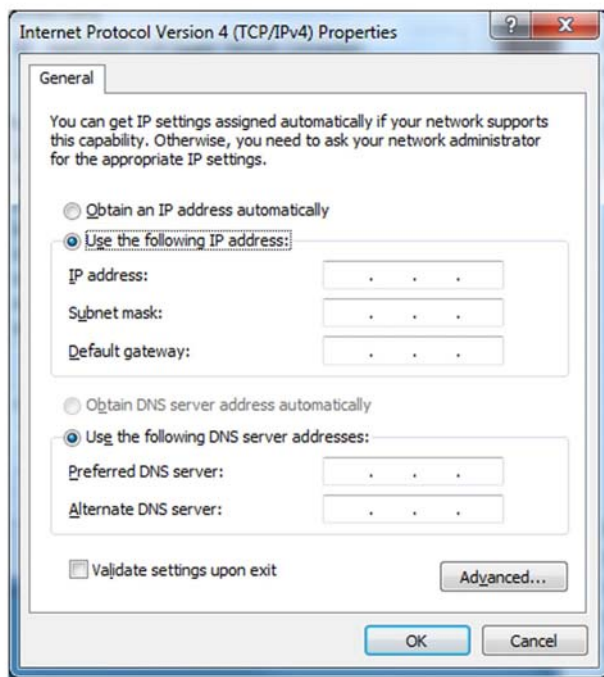
1. Select the Windows **Start** button, then **Control Panel**, then **Network and Sharing Centre**.
2. From the left pane, select **Change adapter settings**.
3. Right-click on the **Local Area Connection** icon. Select **Properties**. The Local Area Connection Properties window will open.
4. Select **Internet Protocol Version 4 (TCP/IPv4)**. Select **Properties**, **Figure 1**. The Internet Protocol Version 4 (TCP/IPv4) Properties window will open.



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Figure 1 Properties window

5. Double-click the entry **Internet Protocol Version 4 (TCP/IPv4)**.
6. Select **Use the following IP address**, then enter the IP address and subnet mask. Refer to the configuration report then:
 - Set the IP address of the laptop one number higher than the device. For example, if the IP address of the device is 192.168.196.112, set the IP address of the laptop to 192.168.196.113.
 - Set the Subnet mask of the laptop to the same as the Subnet mask of the device, **Figure 2**.



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Figure 2 Properties window

Windows 10

Perform the steps that follow:

1. Select the Windows **Start** button, then select **Settings**.
2. Select **Network & Internet**.
3. Under Related settings select **Network and Sharing Center**, then from the task list on the left of the screen select **Change adapter settings**.
4. Right click on **Local Area Connection** (Ethernet), then select **Properties**.
5. Select **Internet Protocol Version 4(TCP/IPv4)**, then select **Properties**. The Internet Protocol Version 4 (TCP/IPv4) Properties window will open.
6. Select **Use the following IP address**, then enter the IP address and subnet mask.
Refer to the configuration report then:
 - Set the IP address of the laptop one number higher than the device. For example, if the IP address of the device is 192.168.196.112, set the IP address of the laptop to 192.168.196.113.
 - Set the Subnet mask of the laptop to the same as the Subnet mask of the device.
7. Select **OK** to close the properties dialog box, then **OK** to close the second properties dialog box.
8. Close the Local Area Connection Status dialog box.
9. Connect the ethernet crossover cable to the device, then continue with your procedure.

7. Click on **OK** to close the properties dialog box, then **OK** to close the second properties dialog box.
8. Close the Local Area Connection Status dialog box.
9. Connect the ethernet crossover cable to the device, then continue with your procedure.

GP 26 Replacement Dongle Process

Purpose

To provide information about the process to follow when a customer requires a replacement configuration dongle.

NOTE: The dongle is supplied as part of the initialization kit. The dongle sets the machine speed, billing plan and billing impression mode (BIM).

NOTE: The dongle should be stored in tray 1, beneath the RAI cover, *PL 70.05 Item 10*.

Procedure

Refer to [Table 1](#) (C7030F) and [Table 2](#) (C7000) for the initialization kit part numbers. Refer to the directions for the relevant OPCO:

- DMOE
- DMOW
- GIS
- USCU
- USEU
- XCL
- XE

DMOE

Log a request for a new initialization kit in the PNP system. The Integrated Supply Chain Service Team East (ISC STE) will arrange shipment of a new initialization kit.

DMOW

Log a request for a new initialization kit in the PNP system. The Integrated Supply Chain Service Team West (ISC STW) will arrange shipment of a new initialization kit.

GIS

Order the relevant initialization kit via the standard Returned Goods Equipment Spares Consumables GIS Process Guide (Version 2011.05.16).

USCU

For US authorised service providers, go to <https://www.office.xerox.com/partners/productreplacementform/index.cfm>. Be aware of the following:

- In the box 'Description of technical problem and any steps taken to resolve', enter 'Initialization kit request'.
- In the box 'Options', enter 'Initialization kit'.
- Beneath Reason for Return, select 'Other', then enter 'Initialization kit' in the comments section.

USEU

The initialization kit and must be ordered using the Dead on Arrival (DOA) or Identical Replacement (IDR) process:

- If a replacement dongle is required at the time of install and the machine has not yet been recorded as installed, use the DOA process to order the initialization kit. Request the initialization kit be shipped via air to ensure timely delivery.

- If a replacement dongle is required after the machine has been recorded as installed, use the IDR process to obtain a new initialization kit. Request the initialization kit be shipped via air to ensure timely delivery.

XCL

Contact the local OTI Delivery Analyst.

XE

Follow the standard product replacement process (DOA/TEX) for the relevant initialization kit number.

Table 1 Initialization kit numbers (C7030F)

Speed	PagePack	Billing Plan	BIM (See NOTE)	Product Code	Initialization Kit Number
20ppm	No	Metered	Off	9UB	097S04921
25ppm	No	Metered	Off	2UX	097S04922
30ppm	No	Metered	Off	3UX	097S04923
20ppm	Yes	Metered	On	7VA	097S04935
25ppm	Yes	Metered	On	4UX	097S04924
30ppm	Yes	Metered	On	4NA	097S04895
25ppm	No	Sold	On	5UX	097S04925
20ppm	No	Sold	On	6UX	097S04926
25ppm	No	Sold	On	7UX	097S04927
30ppm	No	Sold	On	8UX	097S04928
20ppm	No	Sold	Off	4VA	097S04932
25ppm	No	Sold	Off	5VA	097S04933
30ppm	No	Sold	Off	6VA	097S04934
20ppm	No	Metered	On	8VA	097S04936
25ppm	No	Metered	On	9VA	097S04937
30ppm	No	Metered	On	2VB	097S04938

Table 2 Initialization kit numbers (C7000)

Speed	PagePack	Billing Plan	BIM (See NOTE)	Product Code	Initialization Kit Number
35ppm	No	Sold	Off	5UA	100S14290
35ppm	No	Sold	Off	6UA	100S14291
35ppm	No	Metered	On	7UA	100S14292
35ppm	No	Sold	Off	8UA	100S14293
35ppm	No	Sold	Off	9UA	100S14297
35ppm	Yes	Metered	On	8UB	100S14298

NOTE: Billing impression mode (BIM) On equates to A4 impression mode. Billing impression mode (BIM) Off equates to A3 impression mode.

GP 27 Billing Plan/Region Conversion Process

Purpose

To provide information about the process to follow when a customer requires a billing plan change.

General Information

Xerox® VersaLink® C7000/C7020/C7025/C7030 machines are shipped from manufacturing in a neutral state. All billing plans are enabled with a configuration dongle, included in the initialization kit delivered with the machine. This dongle will set the billing plan (Sold/Metered/Page-Pack), machine speed (20/25/30/35ppm) and billing impression mode.

The billing plan governs what consumables are compatible with the product:

- The metered billing plan allows metered consumables to be used on a machine that is included as part of the metered contract.
- The sold billing plan only allows sold consumables (purchased by the customer), to be used.

NOTE: Sold supplies can also be used in metered machines. However, metered supplies cannot be used in sold machines (a fault code will be generated and a message displayed on the UI indicating toner incompatibility).

There are four billing plans supported:

- NA/XE Sold.
- DMO Sold.
- Worldwide Metered.
- PagePack (XE only).

Should a customer wish to convert their billing plan, this can be done from either the user interface or Embedded Web Server and involves obtaining the following:

- For Sold to Metered or Metered to Sold; a plan conversion code.
- For Sold to XE PagePack or XE PagePack to Sold; a supplies plan activation code.

To confirm the customer's current billing plan, either:

- Print a configuration report, [GP 14](#). The supplies plan will be listed as either Activated (Metered/PagePack) or Not Activated (Sold).
- Enter [dC131](#). Check the NVM location values listed in [Table 1](#).

Table 1 Initialization kit numbers

Chain	Link	Parameter	Value
700	400	Total Service Contract Mode	1 = Metered 2 = Sold 15 = Neutral (starter cartridge, region not yet set)
700	774	PagePack Contract Setting	0 = Unlimited (Metered/Sold) 1 = Non-PagePack Contract (NA PagePack) 2 = Pack Contract (XE PagePack)
700	775	Supplies Plan Number	0 to 268435455
700	776	PagePack Contract Length	0 to 127 (Months) (1-126 = XE PagePack) (127 = NA PagePack)

Table 1 Initialization kit numbers

Chain	Link	Parameter	Value
700	777	PagePack Region Code	0 = Worldwide/Neutral 1 = DMO/Sold 2 = NA/XE Sold 3 to 7 = Invalid

Refer to [PL 26.05](#) for the toner cartridge part numbers.

NOTE: The first toner cartridges installed after the neutral starter toner cartridges sets the region only.

Procedure

Refer to the relevant procedure:

- [Conversion Process from the User Interface](#)
- [Conversion Process from the Embedded Web Server](#)

Conversion Process from the User Interface

Perform the steps that follow:

1. From the Home screen, touch the **Device** button. Scroll down, then touch **Supplies**, then **Supplies Plan**. For plan conversion, record the device serial number and total impressions. For supplies plan activation, record the serial number and sequence number.
2. Contact the relevant OPCO:
 - **DMO** - Follow the local process.
 - **GIS** - Conversion requests must be approved by the GIS Headquarter VP of Service. Request that your field service manager contact their GIS Company VP of Service for directions. The GIS Core Company VP of Service will require authorization to convert the machine from sold to metered and provide a status of your request. Do not call field engineering to obtain a service plan conversion pin code.
 - **USCU** - Call PageConnect at 1-888-892-6483 or send an email to pageconnectprogram@xerox.com requesting a pin code. Provide the machine serial number and the number of total impressions.
 - **USEU** - Call Xerox Corporate Licensing System (XDSS) on 1-800-890-3260 or 1-800-635-8054, prompt eight for toner conversions. Provide the machine serial number and the number of total impressions.
 - **XCL** - Call the Customer Delivery Organization (CDO) Field support number 1-800-647-1331, prompt 8 (license strings) for a toner conversion PIN. Provide the machine serial number and the total number of impressions.
 - **XE** - Email OFFICE.Europe.Page.Pack.PIN@xerox.com.
3. A six character pin code will be provided.

NOTE: The plan conversion pin code is valid for approximately 500 additional impressions after being generated.

4. From the Home screen, touch the **Device** button. Scroll down, then touch **Supplies**, then **Supplies Plan**. Select either **Supplies Plan Activation** or **Plan Conversion** as necessary.
5. Select the **Enter and Apply Supplies Plan Activation Code** or **Enter and Apply Plan Conversion Code** entry field on the UI. Enter the six digit pin code that was provided.

6. Select **OK**.

NOTE: If converting from Metered to Sold or PagePack to Sold, appropriate Sold toner cartridges must be installed immediately after the conversion process or the device will display an incompatible toner error message.

7. Confirm the service plan is correct by printing a configuration report, [GP 14](#) or checking the NVM values, refer to [Table 1](#).

Conversion Process from the Embedded Web Server

Perform the steps that follow:

1. From the Home screen, scroll down to Supplies, then select **Details**.
2. Scroll down, beneath Options, select **Supplies Plan**.
3. The Supplies Plan window opens. Select either **Supplies Plan Activation** or **Plan Conversion** as necessary.

NOTE: The device serial number and sequence number are listed on the Supplies Activation screen. The device serial number and total impressions are listed on the Plan Conversion screen.

4. Contact the relevant OPCO:
 - **DMO** - Follow the the local process.
 - **GIS** - Conversion requests must be approved by the GIS Headquarter VP of Service. Request that your field service manager contact their GIS Company VP of Service for directions. The GIS Core Company VP of Service will require authorization to convert the machine from sold to metered and provide a status of your request. Do not call field engineering to obtain a service plan conversion pin code.
 - **USCU** - Call PageConnect at 1-888-892-6483 or send an email to pageconnectprogram@xerox.com requesting a pin code. Provide the machine serial number and the number of total impressions.
 - **USEU** - Call Xerox Corporate Licensing System (XDSS) on 1-800-890-3260 or 1-800-635-8054, prompt eight for toner conversions. Provide the machine serial number and the number of total impressions.
 - **XCL** - Call the Customer Delivery Organization (CDO) Field support number 1-800-647-1331, prompt 8 (license strings) for a toner conversion PIN. Provide the machine serial number and the total number of impressions.
 - **XE** - Email OFFICE.Europe.Page.Pack.PIN@xerox.com.
5. A six character pin code will be provided.

NOTE: The plan conversion pin code is valid for approximately 500 additional impressions after being generated.

6. From the Home screen, scroll down to Supplies, then select **Details**. Scroll down, beneath Options, select **Supplies Plan**.
7. The Supplies Plan window opens. Select either **Supplies Plan Activation** or **Plan Conversion** as necessary. Enter the six digit pin code that was provided.
8. Select **Apply**.

NOTE: If converting from Metered to Sold or PagePack to Sold, an appropriate Sold toner cartridge must be installed immediately after the conversion process or the device will display an incompatible toner error message.

9. Confirm the service plan is correct by printing a configuration report, [GP 14](#) or checking the NVM values, refer to [Table 1](#).

GP 28 Billing Impression Mode Change Process

Purpose

To provide information about the process to follow when a customer requires a billing impression mode (BIM) change.

General Information

Xerox® VersaLink® C7000/C7020/C7025/C7030 machines can be ordered with the option to bill customers two meter clicks for oversized media using Billing Impression Mode 'A4 Impressions'. Sales will order the equipment using a market code to determine if Billing Impression Mode is 'A3 Impressions' or 'A4 Impressions'.

If Billing Impression Mode is set for 'A4 Impressions', any media over 145 inches square (935cm square) will be billed as 2 meter clicks. For example, an 8.5x14 page is 119 inches square, so it will be billed as 1 click. A 11x17 page is 187 inches square (greater than 145 inches square), so if the machine is setup for BIM 'A4 Impressions', a 11x17 page will be billed as 2 meter clicks.

The BIM can only be changed if the current BIM does not match the customers contract. If the customer disagrees, advise them to contact their sales representative to discuss their contract.

Procedure

Perform the relevant procedure:

- [How to Check the Customers Current BIM](#)
- [How to Verify the Contract and Change the BIM](#)

How to Check the Customers Current BIM

Refer to the relevant procedure:

- [From the User Interface](#)
- [From the Embedded Web Server](#)

From the User Interface

Perform the steps that follow:

1. From the Home screen, touch the **Device** button. Scroll down, then touch **Billing/Usage**, then **Impression Mode**.
2. On the Impression Mode screen, the current BIM will be displayed alongside Current Mode.

NOTE: Record the serial number and sequence number to obtain a BIM pin code.

From the Embedded Web Server

Perform the steps that follow:

1. From the Home screen, select **Log In**, then **Admin**.
2. Enter the password '1111' (default setting). Select **Log In**.
3. Scroll down, beneath Billing / Usage, select **Details**.
4. The Billing Details & Usage Counters window opens. Select **Impression Mode**.
5. On the Impression Mode screen, the current BIM will be displayed alongside Current Mode.

NOTE: Record the serial number and sequence number to obtain a BIM pin code.

How to Verify the Contract and Change the BIM

If the machines BIM is thought to be incorrect, contact the relevant OPCO:

- **GIS** - Contact the service manager.
- **USEU/XCL/USCU** - Call Xerox Corporate Licensing System (XDSS) on 1-800-890-3260.
- **XE/DMO** - Advise the customer to contact their sales representative.

The OPCO will require the machines serial number and sequence number. If the machines BIM does not match the customers contract, the OPCO can generate a six digit PIN code to correct the BIM.

Once the OPCO has generated the PIN code, it will be provided via telephone, email or the Xerox Software Activation Portal at <https://www.xeroxlicensing.xerox.com/fik>. The PIN code can be entered:

- [From the User Interface](#)
- [From the Embedded Web Server](#)

From the User Interface

Perform the steps that follow:

1. From the Home screen, touch the **Device** button. Scroll down, then touch **Billing/Usage**, then **Impression Mode**.
2. On the Impression Mode screen, touch **Enter PIN**.
3. Use the displayed keyboard to enter the six digit PIN code, then touch **Enter**.
4. Verify that the BIM has been changed. Refer to [How to Check the Customers Current BIM](#).

From the Embedded Web Server

Perform the steps that follow:

1. From the Home screen, select **Log In**, then **Admin**.
2. Enter the password '1111' (default setting). Select **Log In**.
3. Scroll down, beneath Billing / Usage, select **Details**.
4. The Billing Details & Usage Counters window opens. Select **Impression Mode**.
5. On the Impression Mode screen, enter the six digit PIN code on the Enter and Apply PIN line. Select **Apply**.
6. Verify that the BIM has been changed. Refer to [How to Check the Customers Current BIM](#).

GP 29 System Administrator Password Reset

Purpose

To reset the system administrator password.

Procedure

Perform the steps that follow:

1. Click on the attached BUS Link.
2. Follow the instructions on EUREKA Tip ETI 1394055.

GP 30 How to Print the Fax Reports

Purpose

To print the machine's fax protocol report.

Procedure

Perform the steps that follow:

1. Enter Diagnostics, [GP 1](#).
2. Touch **Device**.
3. Touch **Apps**, then **Fax**.
4. Touch **Fax Protocol Report** or **Fax Activity Report**.
5. Touch Close to return to the Diagnostics screen.
6. Exit diagnostics, [GP 1](#).

GP 31 Print/Copy Orientation Definitions

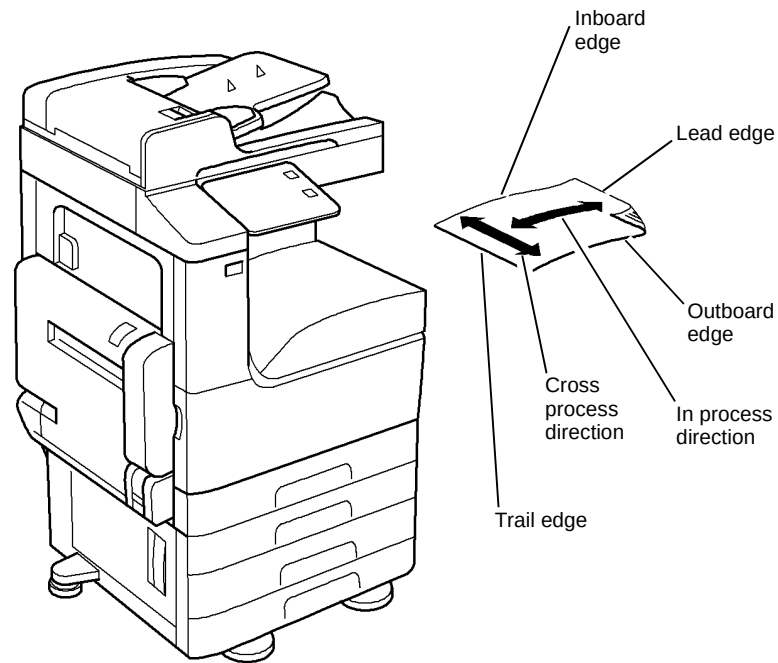
Purpose

To describe the print/copy orientation definitions.

Definitions

Refer to [Figure 1](#). Be aware of the points that follow:

- **Inboard edge** - can also be described as the top edge or side edge.
- **In process direction** - can also be described as the slow scan direction.
- **Cross process direction** - can also be described as the fast scan direction.



C-1-0683-A

Figure 1 Print/copy orientation definitions

GP 40 Glossary of Terms, Acronyms and Abbreviations

Where possible unit designations as appear in ISO 1000 (International Organization for Standardization) and Xerox Standard MN2-905 have been used. All measurements appear in ISO units followed by any conversion in brackets e.g.; 22.5mm (0.885 inches)

Refer to [Table 1](#).

Table 1 Abbreviations

Term	Description
1TM	One Tray Module
3TM	Three Tray Module
AAA	Authentication, Authorisation and Accounting
ABS	Automatic Background Suppression.
AC	Alternating Current
ACAST	Anti Counterfeiting Activities Support/Strategy Team
ACL	Alternating Current Live
ACN	Alternating Current Neutral
AGC	Automatic Gain Control
AHA	Advanced Hardware Architecture
AMPV	Average Monthly Print Volume
ANSAM	Answer Tone, Amplitude Modulated
APS	Auto Paper Selection
ARP	Address Resolution Protocol. Converts an IP address to a MAC address. See RARP.
ASIC	Application Specific Integrated Circuit
B	Bels (applies to sound power level units)
Binding	Part of the communication between modules.
BM	Booklet Maker
BootP	Boot Protocol. AN IP protocol for automatically assigning IP addresses.
BPS	Bits Per Second
BS	Behavior Specification
BT	Busy Tone
BCR	Bias Charge Roll
BTR	Bias Transfer Roll
C	Celsius
CAT	Customer Admin Tool
CBC	Customer Business Center
CCD	Charged Coupled Device
CCM	Copy Controller Module
CCS	Copy Controller Service
CentreWare	CentreWare internet services is the embedded HTTP server application that is available on network enabled machines. It enables access to printing, faxing and scanning over the internet.
CIPS	Common Image Path Software

Table 1 Abbreviations

Term	Description
CIS	Contact Image Sensor
CL	Copy Lighter. A copy density setting
CQ	Copy Quality
CRC	Cyclic Redundancy Check
CRU	Customer Replaceable Unit
CRUM	Customer Replaceable Unit Monitor
CSE	Customer Service Engineer
CVT	Constant Velocity Transport
CWIS	CentreWare Internet Services (also known as Web UI)
DADF	Dual Auto Document Feeder
dB	Decibel (applies to sound pressure level units)
dC	Diagnostic code
DC	Device Controller, generic term for any module that acts as a image handling device e.g., SIP. Digital Copier
DC	Direct Current
DCN	Disconnect
DCS	Digital Command Signal
DDNS	Dynamic Domain Name System
DH	Document Handler
DHCP	Dynamic Host Config Protocol (similar to BootP)
DIMM	Dual In-line Memory Module
DIP	Dual In-line Package (switch)
DIS	Digital Identification Signal
DLM	Dynamically Loadable Module
DM	Document Manager
DMA	Direct Memory Access
DMO	Developing Markets Operations
DMO-E	Developing Markets Operations East
DMO-W	Developing Markets Operations West
DPI	Dots per inch
DRAM	Dynamic Random Access Memory
DST	Daylight Saving Time
DT	Dial Tone
DTMF	Dual Tone Multiple Frequency
DTS	Detack Saw
Dust Off	Routine to return machine to pre-install state
DVMA	Direct Virtual Memory Access
EH&S	Environmental Health and Safety
EJS	Easy Java Simulation
ELT	Extract, Load, Transform
Embedded Fax	A fax system included in a system device

Table 1 Abbreviations

Term	Description
EMC	Electromagnetic Compatibility
EME	Electromagnetic Emission
ENS	Event Notification Service. Used by a software module to alert another module of an event.
EOM	End Of Message
EOP	End Of Procedure
EOR	End Of Retransmission
EPA	Environmental Protection Agency
EPC	Electronic Page Collation (memory dedicated to temporary retention of images captured from the scanner and network controller)
EPROM	Erasable / Programmable Read Only Memory
ERR	End Retransmission Response
ERU	Engineer Replaceable Unit
ESD	Electrostatic Discharge
ESS	Electronic Sub-System (equivalent to NC)
EU	European Union
EUR	Europe
FAR	Fully Active Retard feeder
Fax	Facsimile
FCOT	First Copy Out Time
FDI	Foreign Device Interface
FIFO	First In First Out
Firmware	Software in a ROM
FLASH	On board erasable and re-programmable non volatile memory
FOIP	Fax Over Internet Protocol
FPGA	Field Programmable Gate Array
FPOT	First Print Out Time
FRU	Field Replaceable Unit
FRU	Fuser Replacement Unit
FTP	File Transfer Protocol
FX	Fuji Xerox
G3	Group 3
GMT	Greenwich Mean Time
GND	Ground
GSM	Grams per square metre
GUI	Graphical User Interface
HCF	High Capacity Feeder
HDD	Hard Disk Drive
HFSI	High Frequency Service Intervals
HTTP	Hyper Text Transfer Protocol
HVPS	High Voltage Power Supply

Table 1 Abbreviations

Term	Description
Hz	Hertz
I/O	Input/Output
I2C-bus	Inter Integrated Circuit bus. This provides a simple bidirectional 2-wire bus for efficient inter-IC control. All I2C-bus compatible devices incorporate an interface which allows them to communicate directly with each other via the I2C-bus.
ID	Identification
IDG	Inter document gap
IFax	Internet Fax
IIT	Image Input Terminal
Intlk	Interlock
ioctl	input/output control
IOT	Image Output Terminal
IP	Internet Protocol
IPA	Image Processing Accelerator. Used by the machine scanning services to convert scanned images to a standard format e.g. for scan to file / scan to E-mail for network transmission.
IPS	Image Processing Service
IPSec	Internet Protocol Security
IPX	Internetwork Protocol eXchange
IQ	Image Quality
IQS	Image Quality Specification
IR	Intelligent Ready
ISDN	Integrated Services Digital Network / International Standard Data Network
ISO	International Standards Organization
ITP	Internal Test Pattern
JBA	Job Based Accounting (Network Accounting)
JIS	Japanese Industrial Standards
kg	kilogram
kHz	kilohertz
Kill All	Routine to return all NVM, including protected NVM, to a virgin state. Factory use only
KO	Key Operator
LAN	Local Area Network
LCD	Liquid Crystal Display
LCSS	Low Capacity Stapler Stacker
LDAP	Lightweight Directory Access Protocol (allows sharing of corporate phone book information)
LE	Lead edge
LED	Light Emitting Diode
LEF	Long Edge Feed

Table 1 Abbreviations

Term	Description
LOA	Load Object Attributes
LPD	Line Printer Daemon
LPH	LED Print Head. An LED array in close proximity to and the same width as the photoreceptor. Individual LEDs are switched on/off to develop the image on the xerographic drum.
lpi	Lines per inch
LVF BM	Low Volume Finisher Booklet maker
LVDS	Low Voltage Differential Signal
LVPS	Low Voltage Power Supply
LUI	Local user Interface
m	metre
MAC Address	Media Access Code. This is the basic, unique identifier of a networked device. An incoming message is analysed and an address in another form, such as an IP address, is resolved by a lookup table to a MAC address. The message is then directed to, and accepted by the equipment thus identified. It is the burnt-in, hardware address of a NIC.
Mark Service	Mark Service is the software module that tells the hardware to put toner on paper.
MB	Megabyte (one MB = 1,048,576 bytes = 1024 kilobytes). Mail Box
Mb	Mega bit (one million bits)
MCF	Message Confirmation
MF	Multifunction
mm	millimeter
Modem	MOdulator/DEModulator. Hardware unit that converts the 'one' and 'zero' binary values from the computer to 2 frequencies for transmission over the public telephone network (modulation). It also converts the 2 frequencies received from the telephone network to the binary values for the computer (demodulation).
Moire	Image quality defect caused by interference between patterned originals and the digital imaging process. Moire patterns are repetitive and visible as bands, plaids or other texture.
MSG	Management Steering Group
ms	millisecond
N	Newton
NA	North America
NC	Network Controller (equivalent to ESS)
NC	Normal Contrast. Copy contrast setting
NCR	No Copying Required
NetBIOS	Network Basic Input / Output System. Software developed by IBM that provides the interface between the PC operating system, the I/O bus, and the network. Since its design, NetBIOS has become a de facto standard.
Nm	Newton metre

Table 1 Abbreviations

Term	Description
NOHAD	Noise, Ozone, Heat, Airflow and Dust
NTP	Network Time Protocol
NVM	Non-Volatile Memory
OA	Open Architecture
ODIO	On Demand Image Overwrite
OEM	Original Equipment Manufacturer
OpCo	Operating Company
OS	Operating System
P/R	Photoreceptor
PABX	Private Automatic Branch Exchange
PC	Personal Computer
PC Fax	Personal Computer Fax
PCI	Peripheral Component Interface
PCL	Printer Control Language
PDF	Adobe Acrobat Portable Document Format
PFM	Paper Feed Module
PIN	Procedural Interrupt Negative
PIN	Personal Identification Number
ping	Packet InterNet Groper. Tool to test connections between nodes by sending and returning test data.
PME	Power Management Event
POPO	Power Off Power On
POO or P of O	Principles of Operation
POST	Power On Self Test
POTS	Plain Old Telephone System
PPM	Prints per minute / Parts Per Million
PR	Photo-Receptor
Procon	Process control
Process Death	A process has stopped working.
PS	Post Script
PS	Power Supply
PSTN	Private Switched Telephone Network
PSW	Portable Service Workstation
Pthread	Process Thread. A very low level operating system concept for code execution.
PWB	Printed Wiring Board
PWBA	Printed Wiring Board Assembly
PWM	Pulse-Width Modulation
PWS	Portable Work Station
RAM	Random Access Memory

Table 1 Abbreviations

Term	Description
RARP	Reverse Address Resolution. Reverse of ARP. Converts a MAC address to an IP address. The document centre resolves its address using RARP. See also MAC, NIC and ARP.
RDT	Remote Data Transfer
Reg	Registration
Registration Service	Monitors when RPC services go on and offline.
RF	Radio Frequency
RFID	Radio Frequency Identification
RPC	Remote Procedure Call. How the device communicates internally between software modules.
RH	Relative humidity
RMS	Root Mean Square (AC effective voltage)
RNR	Receive Not Ready
RoHS	Restriction of Hazardous Substances
ROM	Read Only Memory
RR	Receive Ready
RS-232, RS-423, RS-422, RS-485	Series of standards for serial communication of data by wire. RS-232 operates at 20kbits/s, RS-423 operates at 100kbits/s, RS-422 and RS-485 operate at 10Mbits/s. See FireWire and USB.
RTC	Real Time Clock
Rx	Receive
S2F	Scan-to-File
SA	Systems Administration
SAKO	Systems Administration Key Operator
SAR	Semi-Active Retard feeder
SBC	Single board controller. Copy, print and UI controllers all on one PWB within the image processing module.
SCD	Software Compatibility Database
SD	Secure Digital, memory card format
Server Fax	A fax system that uses a remote Fax server. Faxes transmit as a Scan to File job sent to the server. Fax receive as print jobs submitted to the Connection Device.
SEF	Short Edge Feed
Semaphore	A variable or abstract data type.
SESS	Strategic Electronic Sub-System
SH	Staple Head
SIM	Subscriber Identity Module (also known as a SOK-Software Option Key)
SIM	Scanner Input Module
SIP	Scanning and Image Processing
SIR	Standard Image Reference
SLP	Service Location Protocol (finds servers)

Table 1 Abbreviations

Term	Description
SM	Scheduled Maintenance
SMART	Systematic Material Acquisition Release Technique
SMB	Server Message Block. Microsoft Server / Client Communications protocol
SMP	Service Maintenance Pack (contains a software package)
SNMP	Simple Network Management Protocol
Snr	Sensor
SOK	Software Option Key (also known as a SOIM-Subscriber Identity Module)
SPAR	Software Problem Action Request
spi	Spots per inch
SPI	Service Provider Interface. Steps to process a job.
SR	Service Representative
SRS	Service Registry Service
SS or S/S	Sub System
SSDP	Simple Service Discovery Protocol
SSID	Service Set Identifier (wireless network name)
STM	Single Tray Module
SU	Staple Unit
SW	Switch
SW or S/W	Software
sync	synchronize
TAR	Take Away Roll
TAR or tar	An archive file format, derived from Tape ARchive
TBC	To Be Confirmed
TBD	To Be Defined
TC	Toner Concentration
TCF	Training Check Field
TCO	Thermal Cutout
TCP/IP	Transmission Control Protocol/Internet Protocol
TE	Trail Edge
Template	A collection of Scan to File attributes that can be conveniently re-used.
TIFF	Tagged Image File Format
TP	Test Point
TRC	Toner Reproduction Curve
TTM	Tandem Tray Module
TTY	Teletype Terminal
Tx	Transmit
UART	Universal Asynchronous Receiver Transmitter
U-boot	Universal Boot Loader
UI	User Interface (display screen)
UK	United Kingdom

Table 1 Abbreviations

Term	Description
UM	Unscheduled Maintenance
USB	Universal Serial Bus. High speed successor to parallel port for local device communications. Operates at 12Mbps/s. See FireWire and RS-232.
USCO	United States Customer Operations
USSG	United States Solutions Group
V.17 / V.29 / V.34	Modem standards
VOIP	Voice Over Internet Protocol
WC	WorkCentre
WEB UI	CentreWare Internet Services
XCL	Xerox Canada Limited
XE	Xerox Europe
XEIP	Xerox Extensible Interface Platform
XLA	Xerox Latin America
XML	eXtensible Markup Language
XPS	XML Paper Specification (printing format)
XRU	Xerographic Replacement Unit
XSA	Xerox Standard Accounting

GP 41 Foreign Device Interface Setup

Purpose

This procedure explains the process for configuration and installation of a Foreign Device Interface (FDI).

FDI Installation Procedure



CAUTION

Do not connect a Foreign Device Interface (FDI) to a Power Over Ethernet (PoE) network. To do so may damage the FDI and components within the Xerox® device.

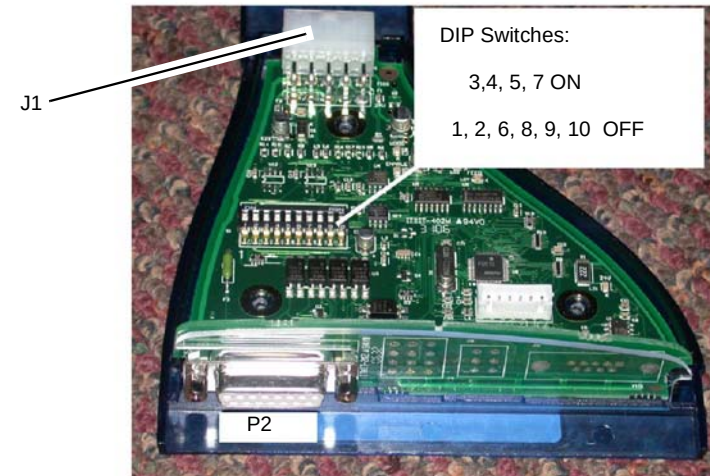


CAUTION

Do not install a Foreign Device Interface (FDI) until the Xerox® device is configured for FDI use. To do so may damage the FDI and components within the Xerox® device.

NOTE: If the procedural steps of the FDI Installation Procedure are performed out of sequence the "Convenience" selection tab on the "Login/ Logout Settings" page of the EWS may not display. To correct this malfunction, perform the [FDI Removal Procedure](#), then continue from step 1 of the [FDI Installation Procedure](#).

1. Ensure the Xerox® device is configured to use a FDI. Go to [Configuring the Foreign Device Interface](#).
2. Set the FDI dip switches.
 - a. Remove the 3 Phillips screws on under side of the FDI.
 - b. Remove the FDI top cover to gain access to the internal DIP switches.
 - c. Set DIP switches as shown in, [Figure 1](#).



C-1-0696-A

Figure 1 FDI DIP Switches

- d. Replace the FDI top cover, then secure with the 3 Phillips screws.
3. Use the harness supplied with the FDI kit to connect the FDI at J1 [Figure 1](#), to P/J351 on the [ESS PWB](#).
4. Use the 3 round Velcro® stickers, supplied with FDI kit, to secure FDI adaptor onto the Xerox® device.

NOTE: The CRD TO FDI harness is typically provided from the CRD supplier. Confirm the cable is for the specific Xerox® equipment. If not, it may cause damage to FDI unit or may cause improper functionality. Advise the customer to consult with the CRD provider for further instruction.

NOTE: Only permit the connection of a **CRD Additive** type device to a Xerox® device with a speed capability of >70 ppm/cpm. The connection of a **CRD Subtractive** type device to a Xerox® >70 ppm/cpm device can cause issues with the customer's ability to collect funds properly.

5. Connect the Cost Recovery Device (CRD) to P2 on the FDI adaptor, [Figure 1](#).
6. Switch on the machine, [GP 10](#).

7. Observe the UI screen. Confirm the UI displays one of the following messages "Insert Coin", "Insert Card" or "Insert Car or Coin" as appropriate, depending on the type of CRD installed.

If the appropriate message does not display, enter [dC131](#) NVM location 850-007, then set the value in accordance with [Table 1](#).

8. Enter [dC131](#) NVM location 850-001. Ensure that the NVM value is set to 1. Refer to [Table 1](#).
9. Enter [dC131](#). Set the NVM location values in [Table 1](#) depending on the type of device and the customer's preferences.

NOTE: For further FDI service information on:

- NVM Settings.
- Harnesses.
- Trouble Shooting.
- Fault Codes.
- Test Tools.

Refer to the document "Bear FDI Setting per Product V1.22.00.pdf " in GSN library #14131.

Table 1 FDI NVM Settings

NVM loc.	Name	Function	Values	Configuration
850-001	FDI Connection	FDI is present. Automatically recognized only when FDI is connected upon M/C power on. Disabling FDI-CRD function, must enter [0], turn off MC and remove the FDI connection.	0 = disabled (default) 1 = enabled	
850-007	Accessory Type	Type of Cost Recovery Device connected. This function is for UI Message. Disabling FDI-CRD function, must enter [0], turn off MC and remove the FDI connection.	0 = None or Foot Switch (default) 1 = Additive Mode (UI msg = Use a Valid Card) 2 = Subtractive Mode (UI msg = Use a Valid Card) 3 = Dispenser - Subtractive Mode (UI msg = Use a Valid Card) 4 = Coin-Op Kit - Subtractive Mode (UI msg = Insert Coins) 5 = Multiple connection of CopyLyzer & Dispenser - Subtractive Mode (UI msg = Use a Valid Card) 6 = Multiple connection of CopyLyzer & Coin-Op Kit - Subtractive Mode (UI msg = Insert Coins or Use a Valid Card) 7 = Multiple connection of Dispenser & Coin-Op Kit - Subtractive Mode (UI msg = Insert Coins or Use a Valid Card) 8 = Not Applicable 9 = Not Applicable 10 = D-Card Reader DCS-5005 (UI msg = Use a Valid Card) 11 = Not Applicable 12 = Not Applicable	XC, XE, DMO, FX XC, XE, DMO, FX FX XC, XE, DMO, FX XC, XE, DMO, FX FX FX XC, XE, DMO, FX XC, XE, DMO, FX
850-009	Print Job Control	Disable / Enable controlling charge print jobs by FDI-CRD	0 = disabled (default) 1 = enabled	
850-010	Interrupt Function	Disable / Enable the function of Interrupt at Subtractive CRD configuration.	0 = disabled (default) 1 = enabled NOTE: When NVM 850-016 is set to 2, this setting is prohibited to be set to enable Interrupt.	

Table 1 FDI NVM Settings

NVM loc.	Name	Function	Values	Configuration
850-013	Scan-Ahead Function	Enable/Disable Scan-Ahead Feature with FDI-CRD. This function is not effective if [850-030] = 0.	0 = Disable Scan-Ahead (default) 1:Enable Scan-Ahead <i>NOTE: Setting of 1 is recommended on any Subtractive Device to avoid free side-2 copy/print with CRD.</i>	
850-014	FDI Connect Wait Time	Amount of time for MC to wait for FDI-CRD to boot-up after MC is power ON. If MC did not detect FDI-CRD within time, the system declares a fault (121-333).	0 = Wait for 10 seconds (default) 1 - 9 = Number of minutes to wait before fault is declared.	
850-015	Scan/Fax/Internet Fax Job Control	Disable / Enable controlling charge on Scan/Fax/Internet Fax jobs at storing and sending in Fax/Internet Fax jobs. Valid only when charge type is Xerox Card, JIS II Card or IC Card. (Multiple connection of CRD devices with the above the charge types)	0 = disabled (default) 1 = enabled	
850-016	Operational when Job-in-Process is disabled and Subtractive Mode CRD is connected	<i>NOTE: This function is only available in FX/FX-IBG Market.</i> Change system behavior based on Subtractive CRD or CRD set to Subtractive Mode, and Job-in-Process is disabled.	0 = All Xerox Europe 1 = Cancel 2 = Pause automatically clear remaining jobs	
850-017	Use of card number upon Print Job Control	Disable / Enable charging Print Jobs to Card Number when the card were inserted. <i>NOTE: Valid only when Print Job Control [850-009] is enabled.</i>	0 = disabled (default) 1 = enabled	
850-018	Paper Transfer in Duplex Mode	Disable/Enable single-sheet feed mode during Duplex Printing, when Subtractive CRD is connected.	0 = Regular Speed 1 = Single-Sheet Feed Mode (default) <i>NOTE: Setting of 1 is recommended on any Subtractive Device to avoid free side-2 copy/print with CRD.</i>	
850-030	Copy Job Control	Disable / Enable controlling charge copy jobs by FDI-CRD	0 = disabled (default) 1 = enabled	
700-125	Job Cancel Timer	Amount of time (unit = seconds) until Paused Job is cancelled	Variable	

Configuring the Foreign Device Interface

1. Enter Admin Mode via the Embedded Web Server (EWS), [GP 23](#).
2. Ensure HTTPS (SSL) is enabled:
 - a. From the left side menu select **Connectivity**.
 - b. In the list under the heading "Protocols" select the **HTTP** tab, then if necessary position the on screen slide switch to enable HTTPS (SSL).
 - c. Select **OK**.
3. From the left side menu select **Permissions**.
4. In the top on screen menu select **Login/Logout Settings**.
5. In the list under the heading "Login Method" within the Convenience tab touch **Select**.

NOTE: If the procedural steps of the FDI Installation Procedure are performed out of sequence the "Convenience" selection tab on the "Login/ Logout Settings" page of the EWS may not display. To correct this malfunction, perform the [FDI Removal Procedure](#), then continue from step 1 of the [FDI Installation Procedure](#).

6. On the "Convenience Login" screen enter the IP Address 11.1.1.1 (NOTE: the IP address does not need to function), then select **OK**.
7. Accept the Restart prompt.
8. Login as an administrator, [GP 23](#).
9. From the left side menu select **Permissions**.
10. In the top on screen menu select **Accounting Methods**.
11. In the list under the heading "Accounting Methods" within the Auxiliary Device tab touch **Select**.
12. Select the appropriate Device Type and What to Track, then select **OK**.
13. Accept the Restart prompt.
14. After the device reboots, switch off the machine, [GP 10](#).
15. Install the FDI adapter, go to the [FDI Installation Procedure](#).

FDI Removal Procedure

1. Enter [dC131](#). Ensure the NVM locations that follow are set to "0".
 - 850-001.
 - 850-007.
2. Switch off the machine, [GP 10](#).
3. Disconnect the FDI adaptor from the Xerox® device.
4. Switch on the Machine, [GP 10](#).
5. Check [dC125](#) Active Faults. If FDI faults are listed, perform the appropriate RAP.

dC118 Jam Counter

Purpose

To view the number of jams that have occurred. dC118 Jam Counters records the number of occurrences of a jam and allows the counters to be sorted by occurrences.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC118 Jam Counter.

NOTE: *There will be a delay while the machine retrieves the jam counter data.*

3. A list of jams that have occurred is displayed.
4. Touch Close to return to the Diagnostics screen.
5. Exit diagnostics, [GP 1](#).

dC120 Failure Counter

Purpose

To view the faults raised by the machine. dC120 Fault Counters records the number of occurrences of a fault.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC120 Failure Counter.

NOTE: *There will be a delay while the machine retrieves the fault counter data.*

3. A list of faults that have occurred on the machine is displayed.
4. Touch Close to return to the Diagnostics screen.
5. Exit diagnostics, [GP 1](#).

dC122 Shutdown History

Purpose

To view the shutdown history in chronological order and in more detail than shown in dC120 Failure Counter.

Procedure

1. Enter Diagnostics, GP 1.
2. Touch dC122 Shutdown History.
3. The dC122 Shutdown History screen is displayed.
4. Touch Failures to choose between:
 - Paper Jams
 - Document Feeder Jams
 - Failures
 - Last 40 Faults
5. Touch Close to return to the Diagnostics screen.
6. Exit diagnostics, GP 1.

dC125 Active Faults

Purpose

To view the current faults.

Procedure

1. Enter Diagnostics, GP 1.
2. Touch dC125 Active Faults.

NOTE: *There will be a delay while the machine retrieves the fault data.*

3. A list of current faults is displayed.
4. Touch Close to return to the Diagnostics screen.
5. Exit diagnostics, GP 1.

dC126 System Registration Adjustment

Description

To measure and adjust the image to paper registration for the IOT.

NOTE: This routine only works correctly for A3 and 11x17 inch paper. If setting system registration for A4 and 8.5x11 inch paper, perform [ADJ 60.7 Image Position](#). Ensure there is A3 or 11x17 inch paper available in one of the paper trays.

Purpose

NOTE: For a description of the print/copy orientation definitions, refer to [GP 31 Print/Copy Orientation Definitions](#).

NOTE: Refer to [IQS 7 Registration](#) for specifications.

To measure and adjust the lead edge and side edge image to paper registration of the image output terminal by performing the routines that follow:

1. Slow Scan% (in the process direction) (measuring position: Lss - side 1 and 2. this is between the Sa line and the Sb line).
2. Side 1 / Side 2 Registration (measuring position: A, B, C and D - side 1 and 2). This adjustment is to align the side 2 image with the side 1 image, only the side 2 image is affected.
3. Lead Registration (measuring position: B - side 1 and 2).
4. Side Registration (measuring position: A - side 1 and 2).

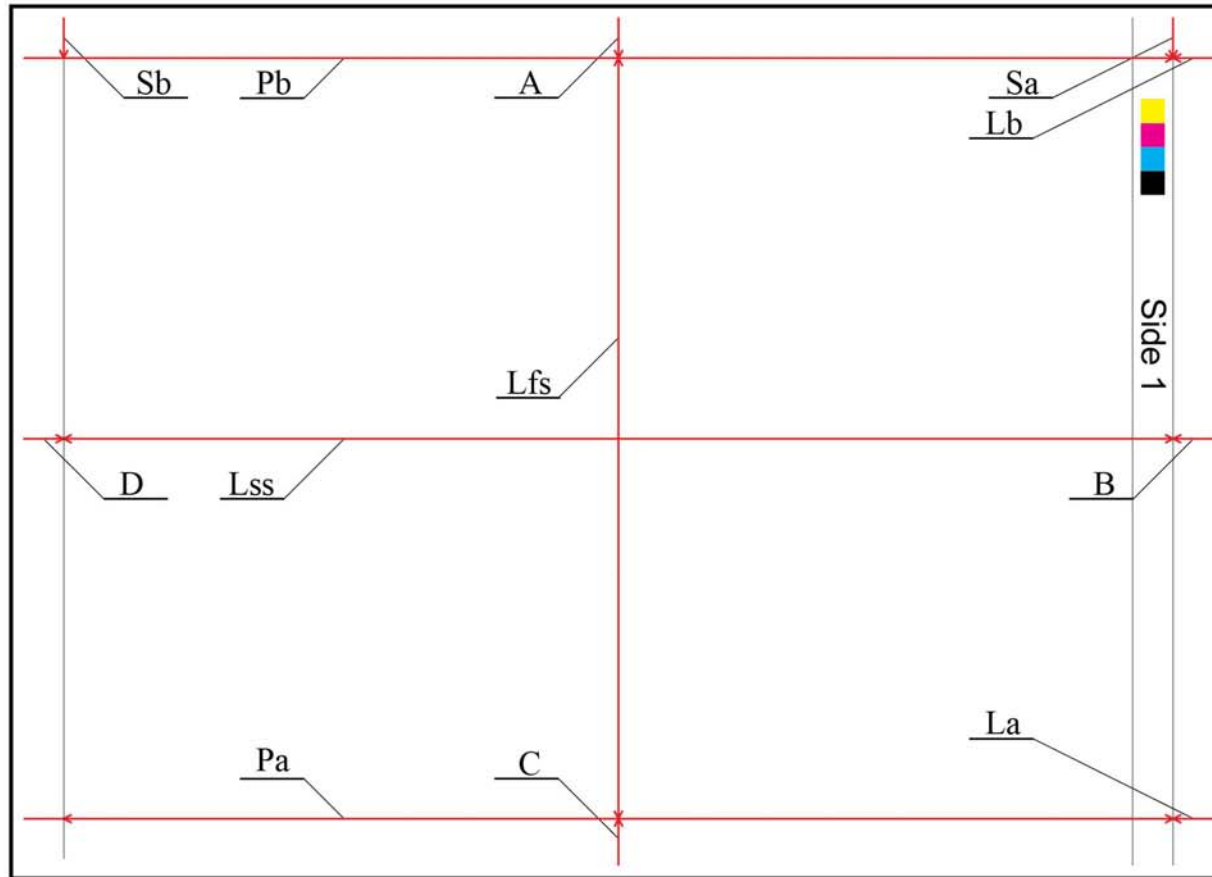
Perform the adjustments in the order that follows:

1. Lead Registration on side 1 - this will adjust measurement B. Refer to [IQS 7 Registration](#) and [Figure 1](#).
2. Slow Scan% - this will adjust side 1 measurement Lss. Refer to [IQS 2 Magnification](#) and [Figure 1](#).
3. Lead Registration on side 2 - this will adjust measurement B. Refer to [IQS 7 Registration](#) and [Figure 2](#).
4. Side Registration on side 1 - this will adjust measurement A. Refer to [IQS 7 Registration](#) and [Figure 1](#).
5. Side Registration on side 2 - this will adjust measurement A. Refer to [IQS 7 Registration](#) and [Figure 2](#).
6. Side 1 / Side 2 Registration - this will adjust the position of the side 2 image in relation to the side 1 image. Holding the test pattern up to a bright light, the side 1 and side 2 images should align.

Procedure

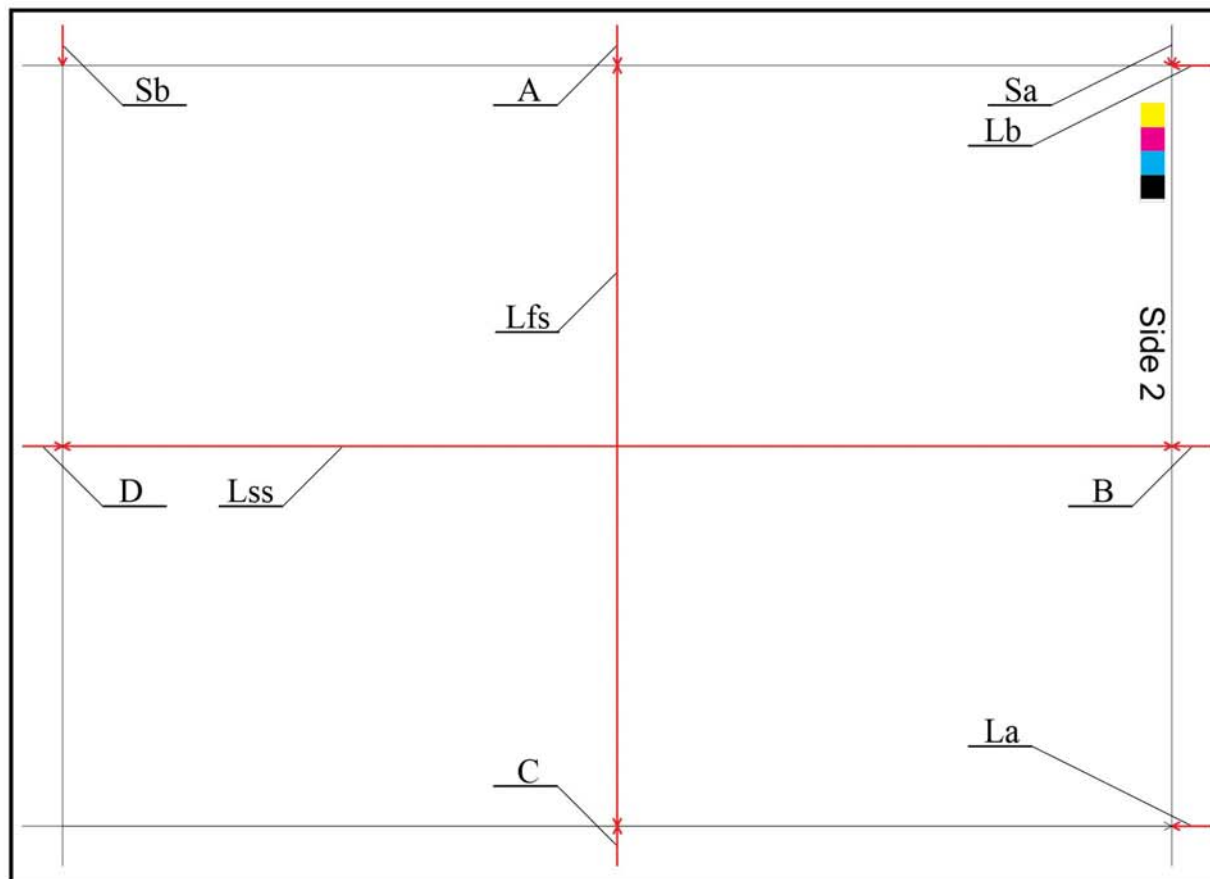
NOTE: This procedure uses side registration as an example. When performing other adjustments, use the appropriate location on the test pattern. Refer to [Purpose](#).

1. Enter Diagnostics, [GP 1](#).
2. Touch dC126 System Registration.
3. Touch Paper Supply. Select the tray to adjust.
4. Touch Print. The test pattern will be printed, [Figure 1](#) and [Figure 2](#).



C-1-0681-A

Figure 1 Registration test pattern side 1



C-1-0682-A

Figure 2 Registration test pattern side 2

5. Compare the registration of the image on side 1 and side two of the print with the specification in [IQS 7 Registration](#). Compare the magnification of the image on side 1 and side 2 of the print with the specification in [IQS 2 Magnification](#). If any measurement does not meet the specifications, go to [Registration Adjustment](#).

Registration Adjustment

1. This procedure uses side registration as an example. When performing other adjustments, use the appropriate location on the test pattern. Refer to [Purpose](#).

NOTE: The *Sa* and *Sb* locations marked on the test pattern indicate the distance from the test pattern image to the edge of the paper.

2. On the printed test pattern, measure the distance (in millimeters) at point *Sa* from the line to the edge of the paper on side 1 and side 2. Refer to [Figure 1](#) and [Figure 2](#).
3. Touch Side Registration, then Adjusted Side (Side 1).

4. Touch +/- to enter the measured value of position *A* for side 1.

NOTE: Touch *A* to open a keypad on which to enter the value.

5. Touch Side Registration, then Adjusted Side (Side 2).
6. Touch +/- to enter the measured value of position *A* for side 2.

NOTE: Touch *B* to open a keypad on which to enter the value.

7. After inputting the values for side 1 and side 2, touch Adjust to save the settings.
8. Exit diagnostics, [GP 1](#).

dC131 NVM Read/Write

Purpose

To review and modify values within the machine configuration and control parameters stored in NVM.

Description

Each NVM item is identified using an NVM chain link number in the form XXX-XXX.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC131 NVM Read/Write.
3. To read NVM, enter the required chain link number. The current value will be displayed.
4. To write NVM:
 - a. Enter the required chain link number.
 - b. Touch Change.
 - c. Enter a new value.
 - d. Touch OK.
 - e. The new value will be displayed in the Current Value box.
5. Touch Close to return to the Diagnostics screen.
6. Exit diagnostics, [GP 1](#).

NOTE: The Edoc CD must be in the CD drive to use the link below.

For the NVM tables, refer to the documents that follow:

- [dC131 NVM Tables \(1 of 2\)](#)
- [dC131 NVM Tables \(2 of 2\)](#)

dC132 Device ID and Billing Data

Purpose

To view and, if required, synchronize the serial and product numbers between the drive PWB and ESS PWB when a new drive PWB or ESS PWB has been installed.

The serial and product numbers are held at the following locations:

- EPROM on the drive PWB (IOT).
- EPROM on the ESS PWB (SYS1).
- ESS PWB (SYS2).

NOTE: This function must only be used when a failure has occurred. When the values at the three locations (IOT, SYS1, SYS2) are the same, there is no need to continue with the procedure.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC132 Device ID and Billing Data.
3. To change the values, touch IOT, SYS1 or SYS2.
4. Follow the on screen instructions to enter the required values, then touch OK.
5. Exit diagnostics, [GP 1](#).

dC135 HFSI Counter

Purpose

To view the counters for high frequency service items (HFSI).

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC135 HFSI Counter.
3. Enter the relevant Chain-Link number or select the component from the list.
4. Touch Details. The Details screen will open, displaying the part name, current value, replacement data and the specified life.
5. Refer to [Table 1](#) to observe the status of the items.
6. To reset an HFSI value:
 - a. Touch Reset.
 - b. The Reset Current Value screen will open.
 - c. Touch Yes to reset the NVM value.

NOTE: The three previous replacement values will be modified.

7. To edit the specified life of an HFSI:
 - a. Touch Spec Life.
 - b. The Spec Life screen will open.
 - c. Enter the new value.
 - d. Touch OK.
8. Touch Close to return to the HFSI Counter screen.
9. Touch Close to return to the Diagnostics screen.
10. Exit diagnostics, [GP 1](#).

Table 1 HFSI Details

Chain-Link	Name	Spec Life
954-800	Tray 1 Feed/Retard/Nudger Rolls	300K feeds
954-801	Tray 2 Feed/Retard/Nudger Rolls	300K feeds
954-802	Tray 3 Feed/Retard/Nudger Rolls	300K feeds
954-803	Tray 4 Feed/Retard/Nudger Rolls	300K feeds
954-804	HCF1 Feed/Retard/Nudger Rolls	300K feeds
954-805	MSI (Bypass Tray) Feed Roll/Retard	50K feeds
954-820	IBT Unit	20000K prints
954-821	2nd BTR Unit	20000K prints
954-830	Deve HSG PV Y	20/25ppm = 400K Prints 30/35ppm = 480K prints
954-831	Deve HSG PV M	20/25ppm = 400K prints 30/35ppm = 480K prints
954-832	Deve HSG PV C	20/25ppm = 400K prints 30/35ppm = 480K prints
954-833	Deve HSG PV K	20/25ppm = 400K prints 30/35ppm = 480K prints

Table 1 HFSI Details

Chain-Link	Name	Spec Life
954-840	Y Drum Cartridge PV	65800 prints
954-841	M Drum Cartridge PV	65800 prints
954-842	C Drum Cartridge PV	65800 prints
954-843	K Drum Cartridge PV	65800 prints
954-850	Fusing Unit Print Count	175K feeds
954-851	Fusing Unit Time Count	18000K seconds
955-806	Feed Count	200K feeds
955-807	Simplex Feed Count	360K feeds
955-808	Duplex Feed Count	360K feeds
955-810	I/L Open Count	180K
955-812	TA Clutch On-Count	1080K
955-826	Nip Sol On-Count	500K
955-828	Feed Clutch On-Count	360K
955-830	Stamp Sol On Count	100K
955-831	Stamp Action Count	3K
956-802	Scan Count	6000K
956-803	Light Lamp Time	7200K
956-804	Lamp Turn On Count	6000K

dC140 Analog Component Monitoring

Purpose

To provide tools to start (actuate) and stop (de-actuate) monitoring of specific analog components. The nominal range of the analog value and, when monitoring is active, the current value is displayed. The values are updated at least every second to allow the component state to be monitored.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC140 Analog Component Monitoring.
3. Touch Chain-Link.
4. Enter the relevant Chain-Link number, refer to [Table 1](#).
5. Touch OK.
6. Touch Start. The screen will display the information that follows:
 - Chain-Link number of the component.
 - Input or output code clarification.
 - The enabled or disabled state.
 - The output level.
7. To temporarily change the output level of a component:
 - a. Touch Level (wrench symbol).
 - b. Touch the +/- buttons to enter the new value (1 to 65535).
 - c. Touch OK.
8. Touch Stop All to stop component operation.
9. Touch Close to return to the Diagnostics screen.
10. Exit diagnostics, [GP 1](#).

Table 1 Component list

Chain-Link	Component Name	Description
010-200	Heat Roll NC Sensor: Inf	The detected value of the mid heat roll sensor. Range: 1019 (low) to 150 (high)
010-201	Heat Roll NC Sensor: Temp	The compensated value of the mid heat roll sensor. Range: 1019 (low) to 130 (high)
010-202	Heat Roll NC Sensor: Diff	The differential value of the mid heat roll sensor. Range: -32 (low) to 1024 (high)
010-203	Heat Roll STS	The STS temperature value of the rear heat roll sensor. Range: 1018 (low) to 120 (high)
071-200	Tray 1 Size Sensor Analog	Displays the value for tray 1 paper size. Range: 0 to 989
072-200	Tray 2 Size Sensor Analog	Displays the value for tray 2 paper size. Range: 0 to 247
073-200	Tray 3 Size Sensor Analog	Displays the value for tray 3 paper size. Range: 0 to 247

Table 1 Component list

Chain-Link	Component Name	Description
074-200	Tray 4 Size Sensor Analog	Displays the value for tray 4 paper size. Range: 0 to 247
089-200	R_RAD_VSP	MOB sensor reading (OUT).
089-202	R_RAD_LOW_VSP	MOB sensor reading (IN).
092-203	ATC_SNR_Y	TC detection in the Y developer housing assembly.
092-204	ATC_SNR_M	TC detection in the M developer housing assembly.
092-205	ATC_SNR_C	TC detection in the C developer housing assembly.
092-206	ATC_SNR_K	TC detection in the K developer housing assembly.

dC301 NVM Initialization

Purpose

To reset the values of all applicable NVM parameters to default.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC301 Initialize NVM.
3. Select the area to be initialized. Refer to [Table 1](#).

Table 1 NVM areas

Area	Comments
IOT 1	Drive PWB NVM. After initializing the IOT 1 NVM, ensure the tray module type is correctly set, refer to the 077-211 Tray Module Mismatch RAP.
IOT 2	Do not use.
Finisher	Integrated finisher or LX office finisher NVM.
IFM	Do not use.
IISS - IIT/IPS	Scanner NVM.
IISS - Extension	Do not use.
Input Device	DADF NVM.
Sys - System	ESS PWB NVM.
Sys - User	SD card customer settings. The installation wizard will have to be run after initializing the SD card NVM.
Fault Counter	Fault history.
HCS 1	Do not use.
HCS 2	Do not use.
PFIM	Do not use.

4. Touch Start.
5. Follow the UI messages to initialize the NVM.
6. Touch Close to return to the Diagnostics screen.
7. Enter [dC131](#). Ensure NVM value 790-900 is set to 1. If the NVM value was changed, switch off, then switch on the machine, [GP 10](#). Verify that the Embedded Web Server is working.
8. Exit diagnostics, [GP 1](#).

dC305 UI Panel Diagnostics

Purpose

To test the LED and audio functions of the user interface.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC305 UI Panel Diagnostics.
3. Touch [LED Test](#) or [Audio Test](#).
4. Exit diagnostics, [GP 1](#).

LED Test

1. Touch the 1 or more LEDs to be diagnosed:
 - Interactive
 - Error
 - NFC
 - Power
 - Data
2. Touch the display pattern to be diagnosed. The selected LEDs are switched on.
3. Touch All Off.
4. Touch the back button (top left) to return to the Diagnostics screen.

Audio Test

1. Touch Volume. Adjust the volume as necessary.
2. Touch the pattern to be diagnosed. The audio sounds with the specified volume and pattern:
 - Pattern 1
 - Pattern 2
 - Pattern 3
 - Pattern 4
 - Pattern 5
 - Pattern 6
3. Touch the back button (top left) to return to the Diagnostics screen.

dC330 Component Control

Purpose

To show the status of input components e.g. sensors, and to run or energize output components e.g. motors, solenoids.

Description

Output and input component codes are entered into the Component Control Table on the UI, and then checked individually or in permitted groups. The codes in the tables are grouped in function chain order. Refer to [GP 2](#) Fault Codes and History Files.

NOTE: To check the operation of the fuser temperature, tray size sensing, development housing ATC sensors and MOB sensor, refer to [dC140 Analog Monitor](#).

Go to the appropriate procedure:

- [Input Components](#)
- [Output Components](#)

Input Components

When the appropriate code is entered, the status of the component is shown on the UI.

NOTE: The logic level shown on the BSD with the signal name is the actual signal as measured with a service meter. This is not necessarily the same as the logic state shown on the UI, especially where the output is inverted. When testing components using these control codes, look for a change in state, not for a high or low.

The displayed status of the input component can be changed by causing the component status to change, e.g. operating a sensor with a sheet of paper.

Go to the appropriate table:

- [Table 1](#) Input codes 005.
- [Table 2](#) Input Codes 012 - Integrated Office Finisher.
- [Table 3](#) Input Codes 012 and 013 - Office Finisher LX.
- [Table 4](#) Input codes 042.
- [Table 5](#) Input Codes 062.
- [Table 6](#) Input Codes 071 to 078.
- [Table 7](#) Input Codes 091.

Output Components

When the appropriate code is entered, the component runs or energizes for a set time. The default timeout for most components is set at 90 seconds, but can be as short as 5 seconds. Some components require that other components are run or energized at the same time. It is possible to enter and run or energize up to 6 component control codes (not fax), but only in permitted groups. If illegal combinations of codes are entered, the components do not run or energize.

Go to the appropriate table:

- [Table 8](#) Output Codes 005.
- [Table 9](#) Output Codes 012 - Integrated Office Finisher.
- [Table 10](#) Output Codes 012 and 013 - Office Finisher LX.
- [Table 11](#) Output Codes 042.

- [Table 12](#) Output Codes 061 and 062.
- [Table 13](#) Output Codes 071 to 078.
- [Table 14](#) Output Codes 091 to 094.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC330 Component Control.



CAUTION

Check the component control tables for components that will damage the machine if run together.

3. Touch Chain-Link.
4. Enter the relevant Chain-Link number.
5. Touch OK.
6. Touch Start. The component will operate and the screen will display the information that follows:
 - Chain-Link number of the component.
 - Input or output code clarification.
 - The component status.
 - Operation counter.
7. Toggle Cyclic Motion to repeat the operation.
8. Touch Stop All to stop component operation.
9. Touch Close to return to the Diagnostics screen.
10. Exit diagnostics, [GP 1](#).

Input Codes

Table 1 Input codes 005

Code	Displayed Name	Description	General
005-102	Document Sensor	Document sensor (Q05-102)	High = document present
005-110	Regi Sensor	Registration sensor (Q05-110)	High = no document
005-206	CVT Pre Regi Sensor	Pre-registration sensor (Q05-206)	High = no document
005-211	CVT Invert Sensor	Invert sensor (Q05-211)	High = no document
005-212	CVT Feeder Cover Interlock Switch	CVT feeder cover sensor (Q05-212)	High = Cover closed
005-213	CVT DADF Interlock Switch	CVT DADF interlock switch (S05-213)	High = DADF lowered
005-215	CVT #1 Tray APS Sensor (CVT)	Tray APS sensor 1 (Q05-215)	High/Low
005-216	CVT #2 Tray APS Sensor (CVT)	Tray APS sensor 2 (Q05-216)	High/Low
005-217	CVT #3 Tray APS Sensor (CVT)	Tray APS sensor 3 (Q05-217)	High/Low
005-218	CVT APS No. 1 Sensor	APS sensor 1 (Q05-218)	Low = document present
005-219	CVT APS No. 2 Sensor	APS sensor 2 (Q05-219)	Low = document present
005-220	CVT APS No. 3 Sensor	APS sensor 3 (Q05-220)	Low = document present
005-221	CVT Tray Size SNR No. 1	Tray size sensor 1 (Q05-221)	Low = document present
005-222	CVT Tray Size SNR No. 2	Tray size sensor 2 (Q05-222)	Low = document present
005-224	Scan Start (CVT)	Scan count signal.	High = on
005-226	#2 Invert Sensor (PF1)	Invert sensor 2 (Q05-226)	Low = document present
005-234	Home Position SNR	Link home position sensor (Q05-234) for nip release	High = nip closed

Table 2 Input Codes 012 - Integrated Office Finisher

Code	Displayed Name	Description	General
012-111	IOT Exit Sensor	IOT exit sensor (Q12-111)	High/Low
012-140	Ent Sensor	Entry sensor (Q12-140)	High/Low
012-150	Compile Exit Sensor	Compiler exit sensor (Q12-150)	High/Low
012-220	Front Tamper Home Sensor	Front tamper home sensor (Q12-220)	High = home

Table 2 Input Codes 012 - Integrated Office Finisher

Code	Displayed Name	Description	General
012-221	Rear Tamper Home Sensor	Rear tamper home sensor (Q12-221)	High = home
012-242	Low Staple Sensor	Low staples sensor (Q12-242)	High = almost empty
012-243	Self Priming Sensor	Self priming sensor (Q12-243)	High = ready
012-244	Staple Home Sensor	Staple head home sensor (Q12-244)	High = staple head home
012-251	Set Clamp Home Sensor	Set clamp home sensor (Q12-251)	High = set clamp home
012-252	Eject Home Sensor	Ejector home sensor (Q12-252)	High = Ejector home
012-267	Stack Height Sensor	Stack height sensor (Q12-267)	High/Low
012-278	Stack Sensor1	Stack sensor 1 (Q12-278)	High/Low
012-279	Stack Sensor2	Stack sensor 2 (Q12-279)	High/Low
012-300	Top Cover Interlock	Top cover interlock switch (S12-302)	High/Low
012-302	Finisher Front Door SW	Font door interlock switch (S12-302)	High/Low

Table 3 Input Codes 012 and 013 - Office Finisher LX

Code	Displayed Name	Description	General
012-100	Transport Entrance Sensor	Transport entry sensor (Q12-100)	High/Low
012-110	Reg. Clutch on Detect	Registration clutch (CL12-110)	On/off
012-111	IOT Exit Sensor	IOT exit sensor (Q12-111)	High/Low
012-150	Compile Exit Sensor	Compiler exit sensor (Q12-150)	High/Low
012-151	Compiler Tray No Paper Sensor	Compiler tray no paper sensor (Q12-151)	High/Low
012-190	H-Transport Entrance Sensor	H-transport entrance sensor (Q12-190)	High/Low
012-220	Front Tamper Home Sensor	Front tamper home sensor (Q12-220)	High = home
012-221	Rear Tamper Home Sensor	Rear tamper home sensor (Q12-221)	High = home
012-241	Stapler Move Position Sensor	Stapler move position sensor (Q12-241)	High/Low
012-242	Low Staple Sensor	Low staples sensor (Q12-242)	High = almost empty
012-243	Self Priming Sensor	Self priming sensor (Q12-243)	High = ready
012-244	Staple Home Sensor	Staple head home sensor (Q12-244)	High = staple head home
012-250	Eject Clamp Home Sensor	Eject clamp home sensor (Q12-250)	High/Low
012-251	Set Clamp Home Sensor	Set clamp home sensor (Q12-251)	High = set clamp home

Table 3 Input Codes 012 and 013 - Office Finisher LX

Code	Displayed Name	Description	General
012-260	Upper Limit Sensor	Upper limit sensor (Q12-260)	High/Low
012-262	Stacker Paper Sensor	Stacker paper sensor (Q12-262)	High/Low
012-263	Stacker Encoder Sensor	Stacker encoder sensor (Q12-263)	High/Low
012-264	Stack Height Sensor 1	Stack height sensor 1 (Q12-264)	High/Low
012-265	Stack Height Sensor 2	Stack height sensor 2 (Q12-265)	High/Low
012-271	Punch Home Sensor	Punch home sensor (Q12-271)	High/Low
012-274	Punch Encoder Sensor	Punch encoder sensor (Q12-274)	High/Low
012-275	Punch Box Set Sensor	Punch box set sensor (Q12-275)	High/Low
012-277	Puncher Detect	Puncher detect (Q12-277)	High/Low
012-300	Eject Cover Switch	Eject cover switch (S12-300)	High/Low
012-302	Fin. Front Door Intlk Switch	Finisher front door interlock switch (S12-302)	High/Low
012-303	H-Transport Open Sensor	H-transport open sensor (Q12-303)	High/Low
013-101	Folder Home Sensor	Folder home sensor (Q13-101)	High/Low
013-107	Booklet Front Low Staple Switch	Booklet front low staple switch (S13-107)	High = Staple slow
013-108	Booklet Rear Low Staple Switch	Booklet rear low staple switch (S13-108)	High = Staple slow
013-141	Booklet Front Staple Home Switch	Booklet front staple home switch (S13-141)	High/Low
013-142	Booklet Rear Staple Home Switch	Booklet rear staple home switch (S12-142)	High/Low
013-143	Booklet Stapler Move Position Sensor	Booklet stapler move position sensor (S13-143)	High/Low
013-144	Booklet Stapler Move Home Sensor	Booklet stapler move home sensor (S13-144)	High/Low
013-160	Folder Detect	Folder detect	High/Low
013-161	Booklet Detect	Booklet detect	High/Low
013-300	Booklet Cover Open Switch	Booklet cover open switch (S13-300)	High/Low
013-301	Booklet Safety Switch	Booklet safety switches	High/Low

Table 4 Input codes 042

Code	Displayed Name	Description	General
042-200	YMC Link Sensor	YMC link sensor (Q42-200)	High/Low
042-250	Fusing Exhaust Fan Fail	Detects using exhaust fan fail.	-
042-251	Marking Fan FAIL	Detects marking fan fail.	-

Table 5 Input codes 062

Code	Displayed Name	Description	General
062-212	IIT Regi Sensor	Scanner registration sensor (Q62-212)	Low = Actuated
062-240	ADF Exist	DADF present sensor (Q62-240)	High = DADF present
062-251	APS Sensor1	APS sensor 1 (Q62-251)	High = document present
062-253	APS Sensor3	APS sensor 3 (Q62-253)	High = document present
062-300	Platen I/L Switch	Platen I/L sensor (Q62-300)	Low = DADF closed
062-301	Angle Sensor	Angle sensor (Q62-301)	Low = DADF closed

Table 6 Input codes 071 to 078

Code	Displayed Name	Description	General
071-101	#1 No Paper Sensor	Tray 1 no paper sensor (Q71-101)	High = Paper empty
071-102	#1 Level Sensor	Tray 1 level sensor (Q71-102)	High = top of stack sensed
071-104	#1 Tray Paper Size Switch	Tray 1 paper size switch (S71-104)	High = Tray out
071-105	#1 Pre Feed Sensor	Tray 1 pre feed sensor (Q71-105)	High = paper detected
072-101	#2 No Paper Sensor	Tray 2 no paper sensor (Q72-101)	High = Paper empty
072-102	#2 Level Sensor	Tray 2 level sensor (Q72-102)	High = top of stack sensed
072-103	#2 Feed Out Sensor	Tray 2 feed out sensor (Q72-103)	High = Paper Detected
072-104	#2 Tray Paper Size Sensor Digital	Tray 2 paper size sensor (Q72-104)	-
073-101	#3 No Paper Sensor	Tray 3 no paper sensor (Q73-101)	High = Paper empty
073-102	#3 Level Sensor	Tray 3 level sensor (Q73-102)	High = top of stack sensed
073-103	#3 Feed Out Sensor	Tray 3 feed out sensor (Q73-103)	High = Paper Detected
073-104	#3 Tray Paper Size Sensor Digital	Tray 3 paper size sensor (Q73-104)	-
074-101	#4 No Paper Sensor	Tray 4 no paper sensor (Q74-101)	High = Paper empty
074-102	#4 Level Sensor	Tray 4 level sensor (Q74-102)	High = top of stack sensed

Table 6 Input codes 071 to 078

Code	Displayed Name	Description	General
074-103	#4 Feed Out Sensor	Tray 4 feed out sensor (Q74-103)	High = Paper Detected
074-104	#4 Tray Paper Size Sensor Digital	Tray 4 paper size sensor (Q74-104)	High/Low
075-100	MSI No Paper Sensor	Bypass tray no paper sensor (Q75-100)	High = Paper detected
077-100	#2 Exit Sensor	Exit 2 sensor (Q77-100)	High = paper detected
077-101	#1 Exit Sensor	Exit 1 sensor (Q77-101)	High = paper detected
077-104	Regi Sensor	Registration sensor (Q77-104)	High = paper detected
077-105	#2 Feed Out Sensor	#2 Feed Out Sensor	High = paper detected
077-120	IOT Feed Ready Signal Input	Feed ready signal	On/off
077-121	Tray Module Regi Stop Signal Input	Registration stop signal.	On/off
077-123	Tray Module Feed ON Signal Input	Feed on signal.	On/off
077-124	#1 OCT Full Stack Sensor	Exit 1 OCT full stack sensor (Q77-124)	High/Low
077-300	Left Hand Interlock Switch	Left hand interlock switch (S77-300)	High/Low
077-302	Left Hand High Cover Switch	Left hand high cover switch (S77-302)	High/Low
077-303	Front Interlock Switch	Front interlock switch (S77-303)	High/Low
077-306	Tray Module Left Hand Interlock Switch	TM left hand interlock switch (S77-306)	High = cover closed
078-100	HCF1 Pre Feed Sensor	HCF pre feed sensor (Q78-100)	High/Low
078-101	HCF1 Feed Out Sensor	HCF feed out sensor (Q78-101)	High/Low
078-200	HCF1 No Paper Sensor	HCF no paper sensor (Q78-200)	High/Low
078-201	HCF1 Level Sensor	HCF level sensor (Q78-201)	High/Low
078-202	HCF1 Size Sensor A	HCF size sensor A (Q78-202)	High/Low
078-203	HCF1 Size Sensor B	HCF size sensor B (Q78-203)	High/Low
078-204	HCF1 Tray In Sensor	HCF tray in sensor (Q78-204)	High/Low
078-300	HCF1 Transport Interlock	HCF transport interlock(S78-300)	High/Low
078-301	HCF1 Side Out Switch	HCF side out switch (S78-301)	High/Low

Table 7 Input codes 091

Code	Displayed Name	Description	General
091-200	Waste Toner Full Sensor	Detects toner waste bottle near full.	-

Output Codes

Table 8 Output Codes 005

Code	Displayed Name	Description	General
005-004	Feed Motor (CCW) 82.5mm/s	Runs the DADF feed motor (MOT05-004) counter clockwise at 82.5mm/s. 50 seconds timeout.	On/off
005-005	Feed Motor (CCW) 110.0mm/s	Runs the DADF feed motor (MOT05-004) counter clockwise at 110mm/s. 50 seconds timeout.	On/off
005-008	Feed Motor (CCW) 165.0mm/s	Runs the DADF feed motor (MOT05-004) counter clockwise at 165mm/s. 50 seconds timeout.	On/off
005-009	Feed Motor (CW) 330.0mm/s	Runs the DADF feed motor (MOT05-004) clockwise at 330mm/s. 50 second timeout.	On/off
005-010	Feed Motor (CCW) 220.0mm/s	Runs the DADF feed motor (MOT05-004) counter clockwise at 220mm/s. 50 second timeout.	On/off
005-013	Feed Motor (CW) 440.0mm/s	Runs the DADF feed motor (MOT05-004) clockwise at 440mm/s. 50 second timeout.	On/off
005-015	Feed Motor (CCW) 330.0mm/s	Runs the DADF feed motor (MOT05-004) counter clockwise at 330mm/s. 50 second timeout.	On/off
005-047	Feed Motor (CW) 110.0mm/s	Runs the DADF feed motor (MOT05-004) clockwise at 110mm/s. 50 second timeout.	On/off
005-048	Feed Motor (CW) 165.0mm/s	Runs the DADF feed motor (MOT05-004) clockwise at 165mm/s. 50 second timeout.	On/off
005-049	Feed Motor (CW) 220.0mm/s	Runs the DADF feed motor (MOT05-004) clockwise at 220mm/s. 50 second timeout.	On/off
005-062	DADF Feed Clutch	Energises the DADF feed clutch (CL05-062). 50 second timeout.	On/off
005-072	Nip Release Solenoid	Nip release solenoid (SOL05-072). 3 second timeout.	On/off
005-083	Doc Ready	Switches on the document ready signal.	On/off
005-088	Image Area	Image area.	On/off

Table 8 Output Codes 005

Code	Displayed Name	Description	General
005-098	Takeaway Clutch	Energises the DADF takeaway clutch (CL05-098). 50 second time-out.	On/off

Table 9 Output Codes 012 - Integrated Office Finisher

Code	Displayed Name	Description	General
012-013	Sub Paddle Solenoid	Energizes the sub paddle solenoid (SOL12-013). CAUTION <i>Do not run with 012-014. Running these codes at the same time can cause damage to the machine.</i>	On/off. 660ms timeout.
012-014	Sub Paddle Rotation	Simultaneously runs the transport motor (MOT12-095) and energizes the paddle solenoid (SOL12-013) to rotate the sub paddle once. CAUTION <i>Do not run with 012-013, 012-095, 012-096 or 012-097. Running these codes at the same time can cause damage to the machine.</i>	On/off. 660ms timeout.
012-017	Set Clamp Motor	Runs the set clamp motor (MOT12-017). CAUTION <i>Do not run with 012-061. Running these codes at the same time can cause damage to the machine.</i>	On/off. 250 pulses.
012-020	Front Tamper Mot Low Front	Runs the front tamper motor (MOT12-020) at low speed to move the front tamper forward.	On/off. 100 pulses.
012-021	Front Tamper Mot Middle Front	Runs the front tamper motor (MOT12-020) at mid speed to move the front tamper forward.	On/off. 100 pulses
012-022	Front Tamper Mot High Front	Runs the front tamper motor (MOT12-020) at high speed to move the front tamper forward.	On/off. 100 pulses
012-023	Front Tamper Mot Low Rear	Runs the front tamper motor (MOT12-020) at low speed to move the front tamper backward.	On/off. 100 pulses.

Table 9 Output Codes 012 - Integrated Office Finisher

Code	Displayed Name	Description	General
012-024	Front Tamper Mot Middle Rear	Runs the front tamper motor (MOT12-020) at mid speed to move the front tamper backward.	On/off. 100 pulses
012-025	Front Tamper Mot High Rear	Runs the front tamper motor (MOT12-020) at high speed to move the front tamper backward.	On/off. 100 pulses
012-026	Rear Tamper Mot Low Front	Runs the rear tamper motor (MOT12-026) at low speed to move the rear tamper forward.	On/off. 100 pulses.
012-027	Rear Tamper Mot Middle Front	Runs the rear tamper motor (MOT12-026) at mid speed to move the rear tamper forward.	On/off. 100 pulses
012-028	Rear Tamper Mot High Front	Runs the rear tamper motor (MOT12-026) at high speed to move the rear tamper forward.	On/off. 100 pulses
012-029	Rear Tamper Mot Low Rear	Runs the rear tamper motor (MOT12-026) at low speed to move the rear tamper backward.	On/off. 100 pulses.
012-030	Rear Tamper Mot Middle Rear	Runs the rear tamper motor (MOT12-026) at mid speed to move the rear tamper backward.	On/off. 100 pulses
012-031	Rear Tamper Mot High Rear	Runs the rear tamper motor (MOT12-026) at high speed to move the rear tamper backward.	On/off. 100 pulses
012-046	Staple Motor FORWARD	Runs the staple motor (MOT12-046) forwards.	On/off.
012-047	Staple Motor REVERSE	Runs the staple motor (MOT12-046) in reverse.	On/off. 180ms timeout.
012-054	Eject Motor Low FORWARD	Runs the eject motor (MOT12-054) at low speed to move the ejector out.	On/off. 2000 pulses
012-055	Eject Motor High FORWARD	Runs the eject motor (MOT12-054) at high speed to move the ejector out.	On/off. 2000 pulses
012-056	Eject Motor Low REVERSE	Runs the eject motor (MOT12-054) at low speed to move the ejector home.	On/off. 2000 pulses
012-057	Eject Motor High REVERSE	Runs the eject motor (MOT12-054) at high speed to move the ejector home.	On/off. 2000 pulses
012-060	Stacker Motor UP	Runs the stacker motor (MOT12-060) to drive the stacker tray up.	On/Off. 80ms time-out.
012-061	Stacker Motor DOWN	Runs the stacker motor (MOT12-060) to drive the stacker tray down.	On/Off. 80ms time-out.

Table 9 Output Codes 012 - Integrated Office Finisher

Code	Displayed Name	Description	General
012-095	Transport Motor Low	Runs the transport motor (MOT12-095) forward at low speed (equal to full IOT speed).	
012-096	Transport Motor Hi	Runs the transport motor (MOT12-095) forward at high speed (transport speed in finisher).	
012-097	Transport Motor Half Speed	Runs the transport motor (MOT12-095) forward at half speed (equal to half IOT speed).	
012-110	Registration Clutch ON	Energizes the registration clutch (CL12-110).	

Table 10 Output Codes 012 and 013 - Office Finisher LX

Code	Displayed Name	Description	General
012-013	Sub Paddle Solenoid	Energizes the sub paddle solenoid (SOL12-013).	On/off. 250 ms
012-018	Transport Motor Reverse	Runs the transport motor (MOT12-018) in reverse.	On/off.
012-020	Front Tamper Mot Low Front	Runs the front tamper motor (MOT12-020) at low speed to move the front tamper forward.	On/off. 82 pulses
012-022	Front Tamper Mot High Front	Runs the front tamper motor (MOT12-020) at high speed to move the front tamper forward.	On/off. 82 pulses
012-023	Front Tamper Mot Low Rear	Runs the front tamper motor (MOT12-020) at low speed to move the front tamper backward.	On/off. 82 pulses
012-025	Front Tamper Mot High Rear	Runs the front tamper motor (MOT12-020) at high speed to move the front tamper backward.	On/off. 82 pulses
012-026	Rear Tamper Motor Low Front	Runs the rear tamper motor (MOT12-026) at low speed to move the rear tamper forward.	On/off. 82 pulses
012-028	Rear Tamper Motor High Front	Runs the rear tamper motor (MOT12-026) at high speed to move the rear tamper forward.	On/off. 82 pulses
012-029	Rear Tamper Motor Low Rear	Runs the rear tamper motor (MOT12-026) at low speed to move the rear tamper backward.	On/off. 82 pulses
012-031	Rear Tamper Motor High Rear	Runs the rear tamper motor (MOT12-026) at high speed to move the rear tamper backward.	On/off. 82 pulses
012-032	H-Transport Motor 1	Runs the horizontal transport motor (MOT12-032) forward at highest speed.	On/off.

Table 10 Output Codes 012 and 013 - Office Finisher LX

Code	Displayed Name	Description	General
012-033	H-Transport Motor 2	Runs the horizontal transport motor (MOT12-032) forward at high speed.	On/off.
012-034	H-Transport Motor 3	Runs the horizontal transport motor (MOT12-032) forward at mid speed.	On/off.
012-035	H-Transport Motor 4	Runs the horizontal transport motor (MOT12-032) forward at low speed.	On/off.
012-036	Transport Motor 1	Runs the transport motor (MOT12-036) forward at high speed.	On/off.
012-037	Transport Motor 2	Runs the transport motor (MOT12-036) forward at mid speed.	On/off.
012-038	Transport Motor 3	Runs the transport motor (MOT12-036) forward at low speed.	On/off.
012-039	H-Transport Motor Reverse	Runs the horizontal transport motor (MOT12-032) in reverse.	On/off.
012-040	Stapler Move Motor Front Low	Runs the stapler move motor (MOT12-040) to move the stapler assembly to the front at low speed.	On/off.
012-042	Stapler Move Motor Front High	Runs the stapler move motor (MOT12-040) to move the stapler assembly to the front at high speed.	On/off.
012-043	Stapler Move Motor Rear Low	Runs the stapler move motor (MOT12-040) to move the stapler assembly to the rear at low speed.	On/off.
012-045	Stapler Move Motor Rear High	Runs the stapler move motor (MOT12-040) to move the stapler assembly to the rear at high speed.	On/off.
012-046	Staple Motor Forward	Runs the stapler motor (MOT12-046) forwards.	On/off.
012-047	Staple Motor Reverse	Runs the stapler motor (MOT12-046) in reverse.	On/off. 200ms timeout.
012-050	Set Clamp Clutch	Energizes the set clamp clutch (CL12-050).	On/off. 583 pulses.
012-052	Eject Clamp Up	Runs the eject motor (MOT12-054) in reverse at high speed to raise the eject clamp roll.	On/off. 200ms timeout.
012-053	Eject Clamp Down	Runs the eject motor (MOT12-054) in reverse at high speed to lower the eject clamp roll.	On/off. 46 pulses after home.
012-054	Eject Motor Forward Low	Runs the eject motor (12-054) forward at low speed.	On/off. 1136 pulses.
012-055	Eject Motor Forward High	Runs the eject motor (12-054) forward at high speed.	On/off. 1136 pulses.
012-060	Stacker Motor Up	Runs the stacker motor (MOT12-060) to drive the stacker tray up.	On/Off. 500ms timeout.

Table 10 Output Codes 012 and 013 - Office Finisher LX

Code	Displayed Name	Description	General
012-061	Stacker Motor Down	Runs the stacker motor (MOT12-060) to drive the stacker tray down.	On/Off. 500ms timeout.
012-074	Punch Motor Move Home	Runs the punch motor (MOT12-074) to drive the punch home.	On/off.
012-077	Punch (2 hole)	Runs the punch motor (MOT12-074) to drive 2 hole punch movement.	On/off.
012-078	Punch (3 hole)	Runs the punch motor (MOT12-074) to drive 3 hole punch movement.	On/off.
012-079	Punch (4 hole)	Runs the punch motor (MOT12-074) to drive 4 hole punch movement.	On/off.
013-022	Knife Motor Forward	Runs the knife motor (MOT13-022) forward.	On/off.
013-023	Knife Motor Reverse	Runs the knife motor (MOT13-022) in reverse.	On/off.
013-024	Booklet Front Stapler Motor Forward	Runs the front booklet staple motor (MOT13-024) forward.	On/off.
013-025	Booklet Front Stapler Motor Reverse	Runs the front booklet staple motor (MOT13-024) in reverse.	On/off.
013-026	Booklet Rear Stapler Motor Forward	Runs the rear booklet staple motor (MOT13-026) forward.	On/off.
013-027	Booklet Front Stapler Motor Reverse	Runs the rear booklet staple motor (MOT13-026) in reverse.	On/off.
013-028	Booklet Staple Move Motor In	Runs the booklet staple move motor (MOT13-028) to move booklet stapler to the I/B side.	On/off. 350 pulses
013-029	Booklet Staple Move Motor Out	Runs the booklet staple move motor (MOT13-028) to move booklet stapler to the O/B side.	On/off. 350 pulses

Table 11 Output Codes 042

Code	Displayed Name	Description	General
041-001	AllSub integrated mode	Drum, dispense, waste toner box auger and fuser exit 1 noise detection processing.	-
041-002	Drum abnormal sound detection mode	Drum abnormal sound detection processing.	-
041-003	Dispense noise detection mode	Dispense abnormal sound detection processing.	-
041-004	Waste toner box auger and fuser exit 1 noise detection mode	Waste toner box auger and fuser exit 1 noise detection processing.	-
042-001	Main Motor (175mm/s)	Runs the main motor (MOT42-001) at 175mm/s.	On/off

Table 11 Output Codes 042

Code	Displayed Name	Description	General
042-002	Main Motor (126mm/s)	Runs the main motor (MOT42-001) at 126mm/s.	On/off
042-003	Main Motor (63mm/s)	Runs the main motor (MOT42-001) at 63mm/s.	On/off
042-004	Sub Motor (175mm/s)	Runs the sub motor (MOT42-004) at 175mm/s.	On/off
042-005	Sub Motor (126mm/s)	Runs the sub motor (MOT42-004) at 126mm/s.	On/off
042-006	Sub Motor (63mm/s)	Runs the sub motor (MOT42-004) at 63mm/s.	On/off
042-007	Fusing Motor 175mm/s)	Runs the fusing motor (MOT42-007) at 175mm/s.	On/off
042-008	Fusing Motor 126mm/s)	Runs the fusing motor (MOT42-007) at 126mm/s.	On/off
042-009	Fusing Motor 63mm/s)	Runs the fusing unit drive motor (MOT42-007) at 63mm/s.	On/off
042-010	YMC Link Solenoid	Energizes the YMC link solenoid (SOL42-010)	On/off
042-011	1st BTR Initialize	Initialize the 1st BTR.	On/off
042-050	Fusing Unit Exhaust Fan High Speed Rotation	Runs the fuser exhaust fan (MOT42-050) at high speed.	On/off
042-051	Fusing Unit Exhaust Fan Low Speed Rotation	Runs the fuser exhaust fan (MOT42-050) at low speed.	On/off
042-052	Marking Fan High Speed Rotation	Runs the marking fan (MOT42-052) at high speed.	On/off
042-053	Marking Fan Low Speed Rotation	Runs the marking fan (MOT42-052) at low speed.	On/off

Table 12 Output Codes 061 and 062

Code	Displayed Name	Description	General
061-001	LPH forced ON (all-solid)	Switches on the print head assembly (all beta pattern).	On/off
061-002	LPH forced ON (Cin 50%)	Switches on the print head assembly (Cin 50%).	On/off
061-003	LPH forced ON (thyristor transfer)	Switches on the print head assembly (performs thyristor transfer only).	On/off
062-002	IIT Exposure Lamp	Switches on the exposure Lamp. 3 minute timeout.	On/off
062-005	IIT Scan Motor (Scan direction)	Runs the scan motor (MOT62-005) to drive the scan carriage 50mm (2 inches) in the scan direction.	-

Table 12 Output Codes 061 and 062

Code	Displayed Name	Description	General
062-006	IIT Scan Motor (Return direction)	Runs the scan motor (MOT62-005) to drive the scan carriage 50mm (2 inches) in the return direction.	-

Table 13 Output Codes 071 to 078

Code	Displayed Name	Description	General
071-001	#1 Feed Motor 1-2-phase Feed Direction	Runs the tray 1 feed/lift motor (MOT71-001) at paper feed speed in the feed direction.	On/off
071-002	#1 Feed Motor 2-phase Lift Up Direction	Runs the tray 1 feed/lift motor (MOT71-001) at tray lift speed in the lift direction.	On/off
072-001	#2 Feed Motor 2-phase (CW 2) Feed Direction	Runs the tray 2 feed/lift motor (MOT72-001) at paper feed speed in the feed direction (2 phase control).	On/off
072-002	#2 Feed Motor 2-phase (CCW 2) Lift Up Direction	Runs the tray 2 feed/lift motor (MOT72-001) at tray lift speed in the lift direction.	On/off
072-003	#2 Feed Motor 1-2-phase (CW 1-2) Feed Direction	Runs the tray 2 feed/lift motor (MOT72-001) at paper feed speed in the feed direction (1-2 phase control)	On/off
073-001	#3 Feed Motor 2-phase (CW 2) Feed Direction	Runs the tray 3 feed/lift motor (MOT73-001) at paper feed speed in the feed direction (2 phase control).	On/off
073-002	#3 Feed Motor 2-phase (CCW 2) Lift Up Direction	Runs the tray 3 feed/lift motor (MOT73-001) at paper feed speed in the feed direction (1-2 phase control)	On/off
073-003	#3 Feed Motor 1-2-phase (CW 1-2) Feed Direction	Runs the tray 3 feed/lift motor (MOT73-001) (1-2 phase control)	On/off
074-001	#4 Feed Motor 2-phase (CW 2) Feed Direction	Runs the tray 4 feed/lift motor (MOT74-001) at paper feed speed in the feed direction (2 phase control).	On/off
074-002	#4 Feed Motor 2-phase (CCW 2) Lift Up Direction	Runs the tray 4 feed/lift motor (MOT74-001) at tray lift speed in the lift direction.	On/off
074-003	#4 Feed Motor 1-2-phase (CW 1-2) Feed Direction	Runs the tray 4 feed/lift motor (MOT74-001) at paper feed speed in the feed direction (1-2 phase control)	On/off
075-001	MSI Feed Clutch	Energizes the bypass tray feed clutch (CL75-001).	On/off

Table 13 Output Codes 071 to 078

Code	Displayed Name	Description	General
077-001	Takeaway Clutch	Energizes the takeaway clutch (CL077-001).	On/off
077-002	Regi Clutch	Energizes the registration clutch (CL77-002).	On/off
077-003	Duplex Clutch	Energizes the duplex clutch (CL77-003).	On/off
077-004	Exit Gate Solenoid	Energizes the exit gate solenoid (SOL77-004).	On/off
077-010	#1 Exit Offset Solenoid	Energizes the exit 1 offset solenoid (SOL77-010).	On/off
077-014	Exit 2 Drive Motor Forward Rotation	Runs the exit 2 drive motor (MOT77-014) forwards (output direction).	On/off
077-015	Exit 2 Drive Motor Reverse Rotation	Runs the exit 2 drive motor (MOT77-014) in reverse (intake direction).	On/off
077-030	TM Feed Ready Signal Output	Switches on the feed ready signal.	On/off
077-031	IOT Regi Stop Signal Output	Switches on the registration stop signal.	On/off
077-032	IOT Feed ON Signal Output	Switches on the feed on signal.	On/off
077-033	TM T/A Motor 1 Full Speed	Runs the TM T/A motor 1 (MOT77-033) at full speed.	On/off
077-034	TM T/A Motor 1 Half Speed	Runs the TM T/A motor 1 (MOT77-033) at half speed.	On/off
077-035	TM T/A Motor 2 Full Speed	Runs the TM T/A motor 2 (MOT77-035) at full speed.	On/off
077-036	TM T/A Motor 2 Half Speed	Runs the TM T/A motor 2 (MOT77-035) at half speed.	On/off
078-003	HCF1 Feed Motor - Feed Direction	Runs the HCF feed/lift motor (MOT78-003) in the feed direction.	On/off
078-004	HCF1 Feed Motor - Lift Up	Runs the HCF feed/lift motor (MOT78-003) in the lift direction.	On/off
078-093	HCF1 T/A Motor	Runs the HCF T/A motor (MOT78-093) at low speed.	On/off
078-094	HCF1 T/A Motor	Runs the HCF T/A motor (MOT78-093) at high speed.	On/off

Table 14 Output Codes 091 to 094

Code	Displayed Name	Description	General
091-001	BCR Y DC	Energizes the BCR DC Y bias voltage.	On/off
091-002	BCR M DC	Energizes the BCR DC M bias voltage.	On/off

Table 14 Output Codes 091 to 094

Code	Displayed Name	Description	General
091-003	BCR C DC	Energizes the BCR DC C bias voltage.	On/off
091-004	BCR K DC	Energizes the BCR DC K bias voltage.	On/off
092-001	R_RAD_COM_DA	Switches on or off the R-RAD LED.	On/off
092-002	ADC shutter open	Energizes the CTD shutter solenoid to open the ADC shutter.	150ms timeout.
092-003	ADC shutter Close	De-energizes the CTD shutter solenoid to close the ADC shutter.	150ms timeout.
093-001	DISPENSE MOTOR-Y	Runs the Y dispense motor (MOT93-001) at process speed.	On/off
093-002	DISPENSE MOTOR-M	Runs the M dispense motor (MOT93-002) at process speed.	On/off
093-003	DISPENSE MOTOR-C	Runs the C dispense motor (MOT93-003) at process speed.	On/off
093-004	DISPENSE MOTOR-K	Runs the K dispense motor (MOT93-004) at process speed.	On/off
093-005	DEVE BIAS-DC-YMC	Energizes the Dev. DC YMC bias voltage.	On/off
093-006	DEVE BIAS-DC-K	Energizes the Dev. DC K bias voltage.	On/off
093-007	DEVE BIAS-AC-YMC	Energizes the Dev. AC YMC bias voltage.	On/off
093-008	DEVE BIAS-AC-K	Energizes the Dev. AC K bias voltage.	On/off
093-009	DEVE CLUTCH-K	Energizes the developer clutch K.	On/Off. 2000ms timeout.
094-001	2nd BTR (-)	Energizes the 2nd BTR (-) bias.	On/off
094-002	2nd BTR (+)	Energizes the 2nd BTR (+) bias.	On/off
094-003	1st BTR YMC Contact	Brings the 1st BTR (YMC) into contact with the drum.	-
094-004	1st BTR YMC Retract	Retracts the 1st BTR (YMC) from the drum.	-

dC355 Hard Disk Diagnostics

Purpose

To initialize hard disk or perform the failure prediction test.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **dC355** Hard Disk Diagnostics.
3. Touch Failure Prediction Test or Initialize Hard Disk.
4. Follow the UI messages, then touch Start.
5. The result is displayed. Touch Close.
6. Touch Close to return to the Hard Disk Diagnostics screen.
7. Touch Back to return to the Diagnostics screen.

dC363 Backup and Restore NVM Values

Purpose

To backup or restore NVM values.



CAUTION

Do not perform this routine if installing a new ESS PWBA.



CAUTION

To avoid the loss of NVM data, perform this routine before performing dC301 NVM Backup Restore.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC363](#) Backup and Restore NVM Values.
3. Touch either Back Up Files or Restore Files, then touch Start.
4. Refer to the Backup / Restore NVM confirmation screen, then touch Yes to continue.
5. Wait for the process to complete, then touch Close.
6. Touch Close to return to the Diagnostics screen.
7. Exit diagnostics, [GP 1](#).

dC500 Blank Page Threshold Value

Purpose

To set the value that is used to determine what is a blank page when performing blank fax detection.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC500](#) Blank Page Threshold Value.
3. Follow the UI messages.
4. Touch Start.
5. A single side is then scanned and the threshold value coefficient is displayed and set.
6. Touch Close to return to the Diagnostics screen.
7. Exit diagnostics, [GP 1](#).

dC527 DADF Independent Operation

Purpose

To automatically correct the scanned document size to the target document size.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC527](#) DADF Independent Operation.
3. Follow the UI messages.
4. Touch Start.
5. Follow the UI messages, then touch Confirm.
6. Touch Close to return to the Diagnostics screen.
7. Exit diagnostics, [GP 1](#).

dC612 Print Test Pattern

Purpose

To print the internal test patterns.

NOTE: All test prints should be printed long edge feed.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch dC612 Print Test Pattern.
3. Select the test pattern required. Refer to [IQ1](#) Image Quality Entry RAP. Select from the available options for the required test pattern:
 - Pattern number
 - Quantity
 - Paper Supply
 - Cin%
 - Screen
 - Output destination
 - 1 sided or 2 Sided
4. Touch the Start button.
5. Touch the Close button to return to the diagnostics screen.
6. Exit diagnostics, [GP 1](#).

Pattern Numbers and Images

NOTE: If the settings for a test pattern are incorrect, an error message is displayed and the test pattern will not be printed. In this case, ensure the settings match the requirements listed in [IQ1 Internal Test Patterns](#), then repeat the test print.

dC671 Registration Measurement Cycle

Purpose

This procedure checks and adjusts color registration:

- Performs measurement to determine the condition of the registration control.
- Checks that the belt controls are operating normally.
- Measures/displays the amount of color shift relative to black.
- Displays the results as either OK or NG (OK=Good/Pass, NG=Not Good/Fail).

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC671](#) Registration Measurement Cycle.
3. Touch Start, the Registration Measurement Cycle Processing message displays.
4. Wait for the process to complete, then touch Close.
5. OK or NG is displayed in the Result column for each row.
6. Touch Close to return to the Diagnostics screen.
7. Exit diagnostics, [GP 1](#).

dC673 Registration Control Sensor Check Cycle

Purpose

This is a self-diagnostic cycle for checking that the registration detection system is operating normally. Color shift is detected using a cyan patch. Any misregistration detected in the MOB sensor is displayed on the screen.

This detection result is compared with the target value to determine the OK or NG status (OK=Good/Pass, NG=Not Good/Fail). Correction is not performed.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC673](#) Registration Control Sensor Check Cycle.
3. Touch Start, the Registration Control Sensor Check Cycle Processing message displays.
4. Wait for the process to complete, then touch Close.
5. OK or NG is displayed in the Result column for each row.
6. Touch Close to return to the diagnostics screen.
7. Exit diagnostics, [GP 1](#).

dC675 Registration Control Setup Cycle

Purpose

This is a setup procedure to be used after removal of key marking module components such as:

- LPH.
- 2nd BTR.
- IBT belt.
- IBT cleaning unit.
- Belt module.
- Developer.

Function 1: This is a registration control full cycle that can be performed after NVM initialization. Performing this function corrects the color registration into the predefined range. The corrected shift amount for each color is saved in the NVM and it is displayed at normal completion.

Function 2: On entering a setup cycle, the IOT does not start. The registration control shift correction amount is displayed automatically on the UI screen and is used as a tool for determining the cause when a failure occurs.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC675](#) Registration Control Setup Cycle. Readings for all four colors are displayed on the screen. Scroll down to view more readings
3. Touch Start, the Registration Control Setup Cycle Processing message displays.
4. Wait for the process to complete, then touch Close.
5. Touch Close to return to the Diagnostics screen.
6. Exit diagnostics, [GP 1](#).

dC919 Color Balance Set

Purpose

This procedure enables fine adjustment of the center value of the low density/medium density/high density output balance for each color for copy images.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC919](#) Color Balance Set.
3. Touch on the color to be adjusted:
4. Touch on the - or + for Highlight, Midtone and Shadow to decrease or increase any of the set values between -4 and +4.
5. Touch Close.
6. Touch Close to return to the Diagnostics screen.
7. Exit diagnostics, [GP 1](#).

dC924 TRC Manual Adjustment

Purpose

This procedure allows a manual density adjustment. It sets an offset amount of the ADC look-up table created by the ADC patch to finely adjust the gradation.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC924](#) TRC Manual Adjustment.
3. Touch on the color to be adjusted.
4. Touch on the - or + for Low, Medium or High to decrease or increase any of these values between -128 and +127.
5. Touch Close.
6. Touch Close to return to the Diagnostics screen.
7. Exit diagnostics, [GP 1](#).

dC940 Procon On/Off Print

Purpose

The procedure prints out the process control test pattern in two different modes. The comparison between the two prints can help isolate process control related image quality problems. Ensure that paper is loaded in tray 1 before starting this procedure as test patterns are printed.

The Procon On/Off Print consists of the following:

- [Procon On Print](#): This is a print mode that uses the current Procon Data with the Procon (Process Control) soft enabled and the TRC Adjustment turned on.
- [Procon Off Print](#): This is a print mode that uses IOT features with the Procon routine fully turned off.

Procedure

Procon On Print

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC940](#) Procon On/Off Print.
3. Touch Procon On Print.
4. Touch Start. The internal test pattern Pcon PG is printed.
5. Check the image quality of the internal test pattern Pcon PG print.
6. Touch Close to return to the Procon On / Off Print screen.

Procon Off Print

1. Touch Procon Off Print.
2. Touch Start. The internal test pattern Pcon PG is printed.
3. Compare the output of the ProCon On and ProCon Off prints. Evaluate according to one of the following problem statements:
 - The problem involves a single color, this is an indication that the imaging unit and/or power supplies or LPH may be at fault.
 - The problem involves all colors, this is an indication that the 2nd BTR and/or transfer belt assembly may be at fault.
 - The ProCon Off print is OK, but ProCon On print is unacceptable, this is an indication that process control items, rather than IOT items are at fault.
4. Touch Close to return to the Procon On / Off Print screen.
5. Touch Back to return to the Diagnostics screen.
6. Exit diagnostics, [GP 1](#).

dC945 IIT Calibration

Purpose

To perform white reference adjustment, CCD calibration, and optical axis deviation correction for the scanner.

Prerequisite

- Color test pattern 82E13120.

Preparation



CAUTION

Only use one of the specified Xerox papers listed in Table 1. The use of non-specified Xerox papers may cause the IIT to be calibrated incorrectly.

- Perform ADJ 60.5 Optics Cleaning Procedure.
- Enter dC131, then read NVM location 715-106.
- Refer to Table 1, then depending on the available paper position 10 sheets on the document glass, then set the NVM 715-106 value to 5, 6, 7 or 8.

NOTE: In order to adjust the white reference the NVM 715-106 value needs to be set according to Table 1.

If the NVM 715-106 value displayed is something other than 5, 6, 7, 8 or 0, the scanner NVM is corrupt and needs to be initialized. Enter dC301, select area IISS - IIT/IPS (Scanner NVM), then touch Start and follow the UI messages to initialize the scanner NVM.

Table 1 NVM Values for Paper

Paper Type	Weight/Size	Brightness	Value for NVM 715-106
Digital Color Xpression	24lb/11x17	98B	5
Colotech Plus Gold	90gsm/A3	98B	6
Xerox 4200	20lb/11x17	98B	7
Xerox Business	80gsm/A3	98B	8

- Exit dC131.

Procedure



CAUTION

Do not select Optical Axis Correction unless the CCD Assembly has been replaced or you are specifically instructed to perform Optical Axis Correction by some other procedure. If it is necessary to perform the Optical Axis Correction, go to (ADJ 60.6).

- Enter Diagnostics, GP 1.
- Touch dC945 IIT Calibration.
- Select White Reference Adjustment - Side 1, then follow the on screen instructions.
- After the White Reference Adjustment - Side 1 routine has completed, position test pattern 82E13120 on the platen glass, color pattern face down and lead edge on the left, with the 10 sheets of Xerox specified paper on top.
- Select CCD Calibration Side 1, then follow the on screen instructions.

- After the CCD Calibration Side 1 routine has completed, check the UI display shows the Procon and Scan Result as **OK**.
- Touch Close to return to the IIT Calibration screen.
- Touch Back to return to the Diagnostics screen.
- Exit diagnostics, GP 1.

dC949 Default Developer ATC Setup

Purpose

This procedure sets the ATC target value by having the ATC sensor measure the toner density of the developer housing assy. This procedure can also work as the check function of the ATC sensors, that measures the toner density of the developing powder and displays readings for ATC measure value ATC target value for all four colors. Below these readings, only fail states are displayed.

For each color, there is a setting switch option that can be set to either on or off. If performed in the on state, this procedure changes the value of the ATC target. Perform in the on state only directly after a developer replacement. For performance checks on the ATC sensors, set switches to off.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC949](#) Default Developer ATC Setup.
3. Touch Setting Switch.
4. To turn on any of the four colors, touch the left of the two boxes below each color.
5. To turn off any of the four colors, touch the right of the two boxes below each color.
6. Touch OK to return to the Default Developer ATC Setup screen.
7. Touch Start.
8. After the Successfully Completed message is displayed, touch Close.
9. Touch Close to return to the Diagnostics screen.
10. Exit diagnostics, [GP 1](#).

dC950 ATC Sensor Setup

Purpose



CAUTION

This procedure should only be performed after installation of a new ATC sensor or drum cartridge. Or when there is reason to believe that the calibration values in NVM are incorrect

To acquire the sensitivity correction values (correction coefficient and correction offset) for adjusting the ATC sensor output from the bar code numbers which display the sensitivity attribute in every ATC sensor. The bar code numbers are set in NVM (bar code number) manually from this adjustment screen.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC950](#) ATC Sensor Setup.
3. Touch Bar Code No.
4. Touch on the - or + for Yellow, Magenta, Cyan and Black to decrease or increase any of these values between 0 and +99. Default values are 55 for all colors.
5. Touch OK.
6. Touch Start.
7. After the Successfully Completed message is displayed, touch Close.
8. Touch Close to return to the Diagnostics screen.
9. Exit diagnostics, [GP 1](#).

dC980 Altitude Adjustment

Purpose

To set the correct altitude for the location of the machine.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC980](#) Altitude Adjustment.
3. Touch the relevant altitude for the machine location.
4. Touch OK.

dC981 Marking Data Print

Purpose

To print marking data.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch [dC981](#) Marking Data Print.
3. Touch Start, the Marking Data document is printed.
4. Touch Close.
5. Touch Close to return to the Diagnostics screen.
6. Exit diagnostics, [GP 1](#).

dC991 Toner Density Adjustment

Purpose

Adjusts toner density. Make this adjustment if the difference between the current TC target number and the TC value number is large (30 or higher).

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **dC991** Toner Density Adjustment.
3. Observe numbers for TC Target and TC Value for each color. Only make adjustments if difference is greater than 30. To exit at this point, touch Close to return to the Diagnostics screen.
4. To proceed with adjustment, touch Number of Sheets.
5. For one color only, touch - or + to choose a number of sheets to be printed.

NOTE: Negative numbers are permitted. For example entering -6 will result in 6 sheets being printed. The toner density will reduce for each sheet. If +6 is entered, toner density will increase for each sheet.

6. Touch Start to commence printing.

NOTE: If negative numbers were inputted, the first print will have a high density, with each subsequent print will have a slightly lower density. If positive numbers were inputted, the first print will have a low density, with each subsequent print will have a slightly higher density.

7. Observe numbers for TC Target and TC Value. Make further adjustments if necessary.
8. Touch Close to return to the Diagnostics screen.
9. Exit diagnostics, [GP 1](#).

dC1215 Transfer Voltage Adjustment

Purpose

To adjust the transfer voltage to minimise the transfer capability difference caused by different paper type.

Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **dC1215** Transfer Voltage Adjustment.
3. Follow the on screen instructions.
4. Touch Close.
5. Touch Close to return to the Diagnostics screen.
6. Exit diagnostics, [GP 1](#).

Change Tags

Change Tag Introduction

This section describes tags associated with the printer, as well as multinational applicability, classification codes, and permanent or temporary modification information. Important modifications to the copier are identified by a tag number which is recorded on a tag matrix inside the front door.

Classification Codes

A tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures.

A tag number may also be required to identify the presence of optional hardware, special non-volatile memory programming, or whether mandatory modifications have been installed. Each tag number is given a classification code to identify the type of change that the tag has made. The classification codes and their descriptions are listed in [Table 1](#).

Table 1 Classification codes

Classification Code	Description
M	Mandatory tag.
N	Tag not installed in the field.
O	Optional tag.
R	Repair tag.

Change Tags

TAG: 002

CLASS: N

NAME: Low Noise DADF

PURPOSE: Introduction of a new document handler with an improved exit roll nip release mechanism, designed to eliminate high noise levels during the duplex feeding of original documents. This new exit roll nip release design now features an open/close solenoid. The W/TAG 002 DADF is cut-in at manufacturing and is interchangeable with the previous DADF.

PARTS LIST ON: [PL 5.36](#)

Plug/Jack Location List	
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PJ Locations

PJ Location Tables

To locate a connector, go to the appropriate table.

- Connectors 1 to 67, [Table 1](#).
- Connectors 100 to 136, [Table 2](#).
- Connectors 200 to 384, [Table 3](#).
- Connectors 400 to 594, [Table 4](#).
- Connectors 600 to 7254, [Table 5](#).
- Connectors 8700 to 8799, [Table 6](#).
- Connectors 8800 to 8995, [Table 7](#).
- Connectors F10 to USB, [Table 8](#).

Location Figures for PWB Connectors and In-line Connectors

NOTE: Part list references are given with each figure.

1. Booklet maker (1 of 2), [Figure 33](#).
2. Booklet maker (2 of 2), [Figure 34](#).
3. Drum cartridge, [Figure 6](#).
4. DADF (1 of 2), [Figure 1](#).
5. DADF (2 of 2), [Figure 2](#).
6. Drive PWB, [Figure 11](#).
7. ESS PWB, [Figure 10](#).
8. Exit, [Figure 13](#).
9. Fax PWB, [Figure 25](#).
10. Front cover interlock switch, [Figure 15](#).
11. Fuser, [Figure 7](#).
12. HCF (1 of 2), [Figure 35](#).
13. HCF (2 of 2), [Figure 36](#).
14. Horizontal transport, [Figure 29](#).
15. Integrated office finisher (1 of 3), [Figure 26](#).
16. Integrated office finisher (2 of 3), [Figure 27](#).
17. Integrated office finisher (3 of 3), [Figure 28](#).
18. LVPS, [Figure 12](#).
19. Machine rear, [Figure 14](#).
20. Office finisher LX (1 of 3), [Figure 30](#).
21. Office finisher LX (2 of 3), [Figure 31](#).
22. Office finisher LX (3 of 3), [Figure 32](#).
23. Registration and Bypass Tray, [Figure 8](#).
24. Scanner assembly, [Figure 3](#).
25. Toner cartridge CRUM, [Figure 5](#).
26. Tray 1 feeder, [Figure 9](#).
27. Tray module (1TM) (1 of 2), [Figure 18](#).
28. Tray module (1TM) (2 of 2), [Figure 19](#).
29. Tray module (3TM) (1 of 2), [Figure 20](#).

30. Tray module (3TM) (2 of 2), [Figure 21](#).
31. Tray module (STM) (1 of 2), [Figure 16](#).
32. Tray module (STM) (2 of 2), [Figure 17](#).
33. Tray module (TTM) (1 of 3), [Figure 22](#).
34. Tray module (TTM) (2 of 3), [Figure 23](#).
35. Tray module (TTM) (3 of 3), [Figure 24](#).
36. UI assembly, [Figure 4](#).

Table 1 Connectors 1 to 67

P/J No	Figure No.	Item No.	PJ Location
FS001	Figure 35	3	HCF
FS002	Figure 35	3	HCF
P/J1	Figure 4	1	UI I/F PWB
P/J1	Figure 36	4	HCF
P1	Figure 12	6	LVPS
P/J2	Figure 36	5	HCF
P2	Figure 12	3	LVPS
P/J3	Figure 36	6	HCF
P3	Figure 12	5	LVPS
P/J4	Figure 4	2	UI I/F PWB
P/J4	Figure 36	7	HCF
P4	Figure 12	4	LVPS
P/J5	Figure 36	8	HCF
P/J6	Figure 36	9	HCF
J10	Figure 14	16	Inlet GFI breaker (BLK)
P/J12	Figure 15	5	Main power switch
P/J14	Figure 15	4	Main power switch
P/J14	Figure 4	3	UI I/F PWB
J16	Figure 14	11	Finisher outlet (BLK)
J17	Figure 14	18	Finisher outlet (WHT)
J18	Figure 14	13	Inlet GFI breaker (WHT)
J51	Figure 14	14	Inlet GFI breaker (GN/YL)
J52	Figure 14	12	Finisher Outlet (GN/YL)
P/J51	Figure 36	2	HCF
J52	Figure 14	11	Finisher outlet (GN/YL)
P/J52	Figure 36	1	HCF
P/J53	Figure 36	10	HCF
P/J54	Figure 35	2	HCF
P/J56	Figure 35	9	HCF
P/J57	Figure 36	11	HCF
P/J58	Figure 35	1	HCF
P/J60	Figure 35	7	HCF
P/J61	Figure 35	5	HCF

Table 1 Connectors 1 to 67

P/J No	Figure No.	Item No.	PJ Location
P/J62	Figure 35	6	HCF
P/J67	Figure 35	4	HCF

Table 2 Connectors 100 to 136

P/J No	Figure No.	Item No.	PJ Location
P/J100	Figure 13	2	Exit 2 sensor
P/J101	Figure 1	2	Document tray size sensor 1
P/J101	Figure 8	2	Registration sensor
P/J101	Figure 16	4	Tray 2 paper size sensor (STM)
P/J101	Figure 18	4	Tray 2 paper size sensor (1TM)
P/J101	Figure 20	4	Tray 2 paper size sensor (3TM)
P/J101	Figure 24	1	Tray 2 paper size sensor (TTM)
P/J103	Figure 1	3	Document tray size sensor 2
P/J102	Figure 13	9	Exit 1 OCT full stack sensor (option)
P/J102	Figure 20	5	Tray 3 paper size sensor (3TM)
P/J102	Figure 24	3	Tray 3 paper size sensor (TTM)
P/J103	Figure 1	5	DADF tray set guide sensor 3
P/J103	Figure 8	4	Bypass tray no paper sensor
P/J103	Figure 20	6	Tray 4 paper size sensor (3TM)
P/J103	Figure 24	2	Tray 4 paper size sensor (TTM)
P/J104	Figure 1	4	DADF tray set guide sensor 2
P/J104	Figure 9	3	Tray 1 level sensor
P/J104	Figure 16	8	STM left cover switch
P/J104	Figure 18	5	1TM left cover switch
P/J104	Figure 20	8	3TM left cover switch
P/J104	Figure 23	11	TTM left cover switch
P/J105	Figure 1	1	DADF tray set guide sensor 1
P/J105	Figure 9	5	Tray 1 no paper sensor
P/J106	Figure 2	17	DADF feeder cover sensor
P/J106	Figure 9	6	Tray 1 pre feed sensor
P/J106	Figure 16	3	Tray 2 no paper sensor (STM)
P/J106	Figure 18	3	Tray 2 no paper sensor (1TM)
P/J106	Figure 20	3	Tray 2 no paper sensor (3TM)
P/J106	Figure 23	3	Tray 2 no paper sensor (TTM)
P/J107	Figure 2	11	DADF home position sensor
P/J107	Figure 9	4	Tray 1 paper size sensor
P/J107	Figure 16	2	Tray 2 level sensor (STM)
P/J107	Figure 18	2	Tray 2 level sensor (1TM)
P/J107	Figure 20	2	Tray 2 level sensor (3TM)
P/J107	Figure 23	2	Tray 2 level sensor (TTM)

Table 2 Connectors 100 to 136

P/J No	Figure No.	Item No.	PJ Location
P/J108	Figure 14	19	YMC link sensor
P/J108	Figure 16	5	Tray 2 feed out sensor (STM)
P/J108	Figure 18	6	Tray 2 feed out sensor (1TM)
P/J108	Figure 20	7	Tray 2 feed out sensor (3TM)
P/J108	Figure 23	4	Tray 2 feed out sensor (TTM)
P/J109	Figure 2	18	DADF document set sensor
P/J109	Figure 6	2	Xero CRUM connector assembly (K)
P/J110	Figure 1	10	DADF invert sensor
P/J110	Figure 6	2	Xero CRUM connector assembly (C)
P/J110	Figure 20	3	Tray 3 no paper sensor (3TM)
P/J110	Figure 23	3	Tray 3 no paper sensor (TTM)
P/J111	Figure 1	12	DADF pre registration sensor
P/J111	Figure 6	2	Xero CRUM connector assembly (M)
P/J111	Figure 20	2	Tray 3 level sensor (3TM)
P/J111	Figure 23	2	Tray 3 level sensor (TTM)
P/J112	Figure 1	9	DADF registration sensor
P/J112	Figure 6	2	Xero CRUM connector assembly (Y)
P/J113	Figure 1	7	DADF APS sensor 3
P/J113	Figure 5	1	Toner CRUM connector assembly (K)
P/J114	Figure 1	8	DADF APS sensor 2
P/J114	Figure 5	2	Toner CRUM connector assembly (C)
P/J114	Figure 20	3	Tray 4 no paper sensor (3TM)
P/J114	Figure 23	3	Tray 4 no paper sensor (TTM)
P/J115	Figure 1	6	DADF APS sensor 1
P/J115	Figure 5	3	Toner CRUM connector assembly (M)
P/J115	Figure 20	2	Tray 4 level sensor (3TM)
P/J115	Figure 23	2	Tray 4 level sensor (TTM)
P/J116	Figure 5	4	Toner CRUM connector assembly (Y)
P/J116	Figure 24	4	Tray 4 feed out sensor (TTM)
P/J117	Figure 6	3	ATC sensor (K)
P/J118	Figure 6	3	ATC sensor (C)
P/J119	Figure 6	3	ATC sensor (M)
P/J120	Figure 6	3	ATC sensor (Y)
P/J121	Figure 5	6	Waste Toner Bottle Full Sensor
P/J122	Figure 8	3	MOB ADC sensor (R-rad)
P/J123	Figure 8	1	MOB sensor (R-rad low)
P/J124	Figure 7	2	Heat roll NC sensor
P/J125	Figure 7	6	Fuser exit sensor
P/J126	Figure 7	7	Environment sensor
P/J130	Figure 13	3	L/H high cover switch
P/J131	Figure 14	2	L/H cover interlock switch

Table 2 Connectors 100 to 136

P/J No	Figure No.	Item No.	PJ Location
P/J132	Figure 14	3	L/H cover interlock switch
P/J135	Figure 15	3	Front cover interlock switch
P/J136	Figure 15	2	Front cover interlock switch

Table 3 Connectors 200 to 384

P/J No	Figure No.	Item No.	PJ Location
P/J200	Figure 13	1	Exit gate solenoid
P/J201	Figure 2	10	DADF feed clutch
P/J201	Figure 13	6	Face up tray gate solenoid (option)
P/J202	Figure 2	8	DADF T/A clutch
P/J202	Figure 8	7	Registration clutch
P/J203	Figure 2	12	Exit nip release solenoid
P/J203	Figure 14	1	YMC link solenoid
P/J204	Figure 13	10	Exit 1 OCT solenoid
P/J205	Figure 8	6	Bypass tray feed clutch
P/J206	Figure 8	7	Duplex clutch
P/J207	Figure 14	8	Take away clutch
P/J208	Figure 14	9	Developer K clutch
P/J210	Figure 2	9	DADF feed motor
P/J210	Figure 14	1	Fuser exhaust fan
P/J211	Figure 9	9	Tray 1 feed/lift up motor
P/J212	Figure 14	4	Fusing unit drive motor
P/J213	Figure 14	5	Main motor
P/J214	Figure 14	7	Sub motor
P/J215	Figure 14	6	Sub motor
P/J216	Figure 14	21	Toner dispense motor (Y, M)
P/J217	Figure 14	22	Toner dispense motor (C, K)
P/J218	Figure 13	7	Exit 2 motor
P/J219	Figure 9	2	CTD shutter solenoid
P/J220	Figure 3	6	IIT scan motor
P/J214	Figure 14	6	Main motor
P/J221	Figure 16	1	Tray 2 feed/lift up motor (STM)
P/J221	Figure 18	1	Tray 2 feed/lift up motor (1TM)
P/J221	Figure 20	1	Tray 2 feed/lift up motor (3TM)
P/J221	Figure 23	1	Tray 2 feed/lift up motor (TTM)
P/J203	Figure 14	4	Drum motor
P/J222	Figure 20	1	Tray 3 feed/lift up motor (3TM)
P/J222	Figure 23	1	Tray 3 feed/lift up motor (TTM)
P/J223	Figure 20	1	Tray 4 feed/lift up motor (3TM)
P/J223	Figure 23	1	Tray 4 feed/lift up motor (TTM)

Table 3 Connectors 200 to 384

P/J No	Figure No.	Item No.	PJ Location
P/J224	Figure 17	2	STM takeaway motor
P/J224	Figure 19	2	1TM takeaway motor
P/J224	Figure 21	2	3TM takeaway motor
P/J224	Figure 22	13	TTM takeaway motor 1
P/J226	Figure 22	12	TTM takeaway motor 2
P/J300	Figure 10	14	ESS PWB
P/J302	Figure 10	20	ESS PWB
P/J310	Figure 10	19	ESS PWB
P/J311	Figure 10	10	ESS PWB
P/J340	Figure 10	21	ESS PWB
P/J343	Figure 10	12	ESS PWB
P/J345	Figure 10	3	ESS PWB
J346	Figure 10	1	ESS PWB
P/J351	Figure 10	17	ESS PWB
P/J352	Figure 25	4	Line 1 fax PWB
P/J353	Figure 25	3	Line 1 fax PWB
P/J355	Figure 25	2	Line 1 fax PWB/riser PWB (option)
P/J356	Figure 25	5	Fax speaker
P/J363	Figure 25	10	Line 2 fax PWB/riser PWB (option)
P/J364	Figure 25	1	Line 3 fax PWB/riser PWB (option)
P/J380	Figure 10	18	ESS PWB
P/J384	Figure 10	13	ESS PWB

Table 4 Connectors 400 to 594

P/J No	Figure No.	Item No.	PJ Location
P/J400	Figure 11	5	Drive PWB
P/J401	Figure 11	1	Drive PWB
P/J402	Figure 11	11	Drive PWB
P/J403	Figure 11	13	Drive PWB
P/J404	Figure 11	16	Drive PWB
P/J405	Figure 11	7	Drive PWB
P/J406	Figure 11	6	Drive PWB
P/J407	Figure 11	10	Drive PWB
P/J408	Figure 5	5	HVPS
P/J409	Figure 11	28	Drive PWB
P/J410	Figure 11	15	Drive PWB
P/J411	Figure 11	4	Drive PWB
P/J412	Figure 11	2	Drive PWB
P/J413	Figure 11	8	Drive PWB
P/J414	Figure 11	25	Drive PWB

Table 4 Connectors 400 to 594

P/J No	Figure No.	Item No.	PJ Location
P/J415	Figure 11	12	Drive PWB
P/J416	Figure 11	9	Drive PWB
P/J417	Figure 11	17	Drive PWB
P/J418	Figure 11	18	Drive PWB
P/J419	Figure 11	3	Drive PWB
P/J420	Figure 10	6	ESS PWB
P/J420	Figure 11	23	Drive PWB
P/J421	Figure 10	5	ESS PWB
P/J422	Figure 10	8	ESS PWB
P/J422	Figure 11	14	Drive PWB
P/J423	Figure 10	7	ESS PWB
P/J424	Figure 11	26	Drive PWB
P/J425	Figure 11	27	Drive PWB
P/J501	Figure 12	9	LVPS
P/J502	Figure 12	11	LVPS
P/J503	Figure 12	10	LVPS
P/J504	Figure 12	7	LVPS
P/J505	Figure 12	2	LVPS
P/J506	Figure 12	1	LVPS
P/J507	Figure 12	8	LVPS
P/J541	Figure 17	4	STM PWB
P/J541	Figure 19	3	1TM PWB
P/J541	Figure 21	3	3TM PWB
P/J541	Figure 22	1	TTM PWB
P/J545	Figure 19	6	1TM PWB
J545	Figure 21	6	3TM PWB
P/J545	Figure 22	5	TTM PWB
P548	Figure 19	9	1TM PWB
P/J548	Figure 17	3	STM PWB
P/J548	Figure 21	9	3TM PWB
P/J548	Figure 22	7	TTM PWB
P/J549	Figure 19	8	1TM PWB
P/J549	Figure 21	8	3TM PWB
P/J549	Figure 22	6	TTM PWB
P/J550	Figure 17	6	STM PWB
P/J550	Figure 19	4	1TM PWB
P/J550	Figure 21	4	3TM PWB
P/J550	Figure 22	2	TTM PWB
P/J551	Figure 17	5	STM PWB
P/J551	Figure 19	5	1TM PWB
P/J551	Figure 21	5	3TM PWB

Table 4 Connectors 400 to 594

P/J No	Figure No.	Item No.	PJ Location
P/J551	Figure 22	3	TTM PWB
P/J552	Figure 22	4	TTM PWB
P553	Figure 17	7	STM PWB (to CPU-ROM writer)
P553	Figure 19	7	1TM PWB (to CPU-ROM writer)
P/J553	Figure 21	7	3TM PWB (to CPU-ROM writer)
P/J567	Figure 7	5	Fuser fuse PWB
P/J590	Figure 11	20	Drive PWB
P/J590	Figure 31	15	Office finisher LX
P/J591	Figure 11	21	Drive PWB
P/J591	Figure 31	14	Office finisher LX
J592	Figure 19	1	Connector (1TM)
J592	Figure 21	1	Connector (3TM)
P/J592	Figure 11	19	Drive PWB
P/J593	Figure 11	22	Drive PWB
P/J594	Figure 11	24	Drive PWB

Table 5 Connectors 600 to 7254

P/J No	Figure No.	Item No.	PJ Location
P/J600	Figure 13	5	Connector (7 pin)
P/J601	Figure 13	4	Connector (2 pin)
P/J602	Figure 8	9	Connector (3 pin)
P/J603	Figure 8	5	Connector (5 pin)
P/J604	Figure 9	7	Connector (9 pin)
P/J605	Figure 9	8	Connector (4 pin)
P/J606	Figure 13	8	Connector (4 pin)
P/J607	Figure 6	4	Connector (3pin) (K)
P/J608	Figure 6	4	Connector (3pin) (C)
P/J609	Figure 6	4	Connector (3pin) (M)
P/J610	Figure 6	4	Connector (3pin) (Y)
P/J611	Figure 8	8	Connector (10pin)
DJ612	Figure 7	1	Fusing Unit (Connect to DP612)
DJ612S	Figure 7	1	Fusing Unit (Connect to DP612S)
DP612	Figure 7	8	Connector (Connect to DJ612)
DP612S	Figure 7	8	Connector (Connect to DJ612S)
P/J613	Figure 9	1	Connector (4pin)
P/J614	Figure 13	11	Connector (3 pin)
P/J661	Figure 16	6	Connector (4 pin) (STM)
P/J661	Figure 18	8	Connector (4 pin) (1TM)
P/J661	Figure 20	14	Connector (4 pin) (3TM)
P/J661	Figure 23	6	Connector (4 pin) (TTM)

Table 5 Connectors 600 to 7254

P/J No	Figure No.	Item No.	PJ Location
P/J662	Figure 20	12	Connector (4 pin) (3TM)
P/J662	Figure 23	9	Connector (4 pin) (TTM)
P/J663	Figure 20	10	Connector (4 pin) (3TM)
P/J663	Figure 22	8	Connector (4 pin) (TTM)
P/J668	Figure 18	7	Connector (2 pin) (1TM)
P/J668	Figure 20	9	Connector (2 pin) (3TM)
P/J668	Figure 23	10	Connector (2 pin) (TTM)
P/J669	Figure 16	7	Connector (9 pin) (STM)
P/J669	Figure 18	9	Connector (9 pin) (1TM)
P/J669	Figure 20	15	Connector (9 pin) (3TM)
P/J669	Figure 23	6	Connector (9 pin) (TTM)
P/J671	Figure 20	13	Connector (9 pin) (3TM)
P/J671	Figure 23	8	Connector (9 pin) (TTM)
P/J673	Figure 20	11	Connector (9 pin) (3TM)
P/J673	Figure 22	1	Connector (9 pin) (TTM)
P/J674	Figure 22	9	Connector (3 pin) (TTM)
P/J675	Figure 18	10	Connector (3 pin) (1TM)
P/J675	Figure 20	16	Connector (3 pin) (3TM)
P/J675	Figure 23	5	Connector (3 pin) (TTM)
J678	Figure 35	10	HCF
J690	Figure 17	1	Connector (STM)
P/J700	Figure 3	7	CCD assembly
P/J750	Figure 10	4	ESS PWB
P/J751	Figure 2	7	DADF PWB
P/J752	Figure 2	4	DADF PWB
P/J753	Figure 2	5	DADF PWB
P/J754	Figure 2	6	DADF PWB (option)
P/J755	Figure 2	3	DADF PWB
P/J756	Figure 2	2	DADF PWB
P/J757	Figure 2	1	DADF PWB
DP800	Figure 14	10	Connector
J800	Figure 35	11	HCF
P/J1315	Figure 10	26	ESS PWB
P/J1332	Figure 10	24	ESS PWB
P/J1334	Figure 10	15	ESS PWB
P/J1352	Figure 10	2	ESS PWB
P/J1360	Figure 10	19	ESS PWB
P/J1361	Figure 10	18	ESS PWB
P/J1362	Figure 10	15	ESS PWB
P/J1363	Figure 10	17	ESS PWB
P/J1365	Figure 10	9	ESS PWB

Table 5 Connectors 600 to 7254

P/J No	Figure No.	Item No.	PJ Location
P/J3480	Figure 10	24	ESS PWB
P/J7001	Figure 3	5	Lamp assembly
P/J7251	Figure 3	2	Platen close sensor
P/J7252	Figure 3	1	Platen angle sensor
P/J7253	Figure 3	4	IIT registration sensor
P/J7254	Figure 3	8	APS sensor 1
P/J7255	Figure 3	10	APS sensor 3

Table 6 Connectors 8700 to 8799

P/J No	Figure No.	Item No.	PJ Location
P/J8700	Figure 27	2	Integrated office finisher
P/J8701	Figure 27	1	Integrated office finisher
P/J8702	Figure 27	11	Integrated office finisher
P/J8703	Figure 27	10	Integrated office finisher
P/J8704	Figure 27	13	Integrated office finisher
P/J8705	Figure 27	12	Integrated office finisher
P/J8706	Figure 27	8	Integrated office finisher
P/J8707	Figure 27	3	Integrated office finisher
P/J8708	Figure 27	17	Integrated office finisher
P/J8709	Figure 27	16	Integrated office finisher
P/J8710	Figure 27	9	Integrated office finisher
P/J8711	Figure 27	4	Integrated office finisher
P/J8721	Figure 28	2	Integrated office finisher
P/J8722	Figure 28	1	Integrated office finisher
P/J8723	Figure 28	6	Integrated office finisher
P/J8724	Figure 26	1	Integrated office finisher
P/J8725	Figure 28	11	Integrated office finisher
P/J8726	Figure 26	7	Integrated office finisher
P/J8727	Figure 26	9	Integrated office finisher
P/J8728	Figure 26	8	Integrated office finisher
P/J8729	Figure 26	6	Integrated office finisher
P/J8730	Figure 26	2	Integrated office finisher
P/J8731	Figure 26	4	Integrated office finisher
P/J8732	Figure 26	3	Integrated office finisher
P/J8733	Figure 27	14	Integrated office finisher
P/J8734	Figure 27	15	Integrated office finisher
P/J8735	Figure 26	5	Integrated office finisher
P/J8736	Figure 28	5	Integrated office finisher
J8737	Figure 28	9	Integrated office finisher
J8738	Figure 28	10	Integrated office finisher

Table 6 Connectors 8700 to 8799

P/J No	Figure No.	Item No.	PJ Location
P/J8739	Figure 27	7	Integrated office finisher
P/J8740	Figure 27	5	Integrated office finisher
P/J8741	Figure 27	6	Integrated office finisher
J8742A	Figure 28	7	Integrated office finisher
J8742B	Figure 28	8	Integrated office finisher

Table 7 Connectors 8800 to 8995

P/J No	Figure No.	Item No.	PJ Location
J8860	Figure 29	1	Horizontal transport
J8861	Figure 29	4	Horizontal transport
P/J8862	Figure 29	2	Horizontal transport
J8863	Figure 29	7	Horizontal transport
P8863	Figure 29	5	Horizontal transport
J8864	Figure 29	8	Horizontal transport
J8865	Figure 29	10	Horizontal transport
J8866	Figure 29	6	Horizontal transport
P/J8867	Figure 29	9	Horizontal transport
J8868	Figure 32	4	Office finisher LX
J8869	Figure 32	3	Office finisher LX
J8870	Figure 31	24	Office finisher LX
J8871	Figure 31	23	Office finisher LX
J8872	Figure 31	21	Office finisher LX
J8873	Figure 31	2	Office finisher LX
J8874	Figure 31	1	Office finisher LX
J8875	Figure 31	22	Office finisher LX
P/J8876	Figure 32	5	Office finisher LX
P/J8877	Figure 31	20	Office finisher LX
P/J8878	Figure 31	7	Office finisher LX
P/J8879	Figure 31	5	Office finisher LX
J8880	Figure 32	7	Office finisher LX
J8881	Figure 32	11	Office finisher LX
J8882	Figure 32	6	Office finisher LX
P/J8883	Figure 32	8	Office finisher LX
P/J8884	Figure 32	10	Office finisher LX
J8885	Figure 30	7	Office Finisher LX
J8886	Figure 30	6	Office Finisher LX
J8887	Figure 30	5	Office Finisher LX
P/J8888	Figure 32	9	Office finisher LX
J8889	Figure 31	3	Office finisher LX
J8890	Figure 31	4	Office finisher LX

Table 7 Connectors 8800 to 8995

P/J No	Figure No.	Item No.	PJ Location
J8891	Figure 32	2	Office finisher LX
P/J8892	Figure 33	1	Booklet maker
P/J8893	Figure 33	2	Booklet maker
J8894	Figure 34	3	Booklet maker
J8895	Figure 34	3	Booklet maker
P/J8896	Figure 33	7	Booklet maker
J8897	Figure 33	4	Booklet maker
J8898	Figure 33	5	Booklet maker
J8899	Figure 33	6	Booklet maker
J8900	Figure 33	8	Booklet maker
J8901	Figure 33	3	Booklet maker
P8903	Figure 32	1	Office finisher LX
P/J8903	Figure 30	2	Office Finisher LX
J8904	Figure 30	3	Office Finisher LX
P/J8905	Figure 30	4	Office Finisher LX
P/J8906	Figure 34	2	Booklet maker
J8980	Figure 31	19	Office finisher LX
J8982	Figure 31	18	Office finisher LX
P/J8981	Figure 31	10	Office finisher LX
P/J8983	Figure 31	9	Office finisher LX
J8984	Figure 31	6	Office finisher LX
J8985	Figure 34	4	Booklet maker
P8985	Figure 31	17	Office finisher LX
P/J8986	Figure 31	8	Office finisher LX
J8987	Figure 29	3	Horizontal transport
P8987	Figure 31	16	Office finisher LX
P/J8988	Figure 31	11	Office finisher LX
J8989	Figure 31	13	Office finisher LX
P/J8990	Figure 31	12	Office finisher LX
P/J8991	Figure 34	9	Booklet maker
P/J8992	Figure 34	7	Booklet maker
P/J8993	Figure 34	6	Booklet maker
P/J8994	Figure 34	5	Booklet maker
P/J8995	Figure 34	8	Booklet maker

Table 8 Connectors F10 to USB

P/J No	Figure No.	Item No.	PJ Location
F10	Figure 7	3	Thermostat center
F10	Figure 7	4	Thermostat front
FS001	Figure 35	3	HCF

Table 8 Connectors F10 to USB

P/J No	Figure No.	Item No.	PJ Location
FS002	Figure 35	3	HCF
FS003	Figure 35	8	HCF
FS004	Figure 35	8	HCF
	Figure 6	1	Print head assembly
LINE2	Figure 25	8	Line 2 fax PWB (option)
LINE3	Figure 25	9	Line 3 fax PWB (option)
MJ1	Figure 25	7	Line 1 fax PWB (LINE)
MJ2	Figure 25	6	Line 1 fax PWB (TEL)
T1	Figure 2	16	Terminal
T1	Figure 14	15	Terminal
T2	Figure 2	15	Terminal
T2	Figure 14	16	Terminal
T3	Figure 2	13	Terminal
T4	Figure 2	14	Terminal
USB	Figure 4	4	USB

DADF (1 of 2)

Location: [PL 5.05](#)

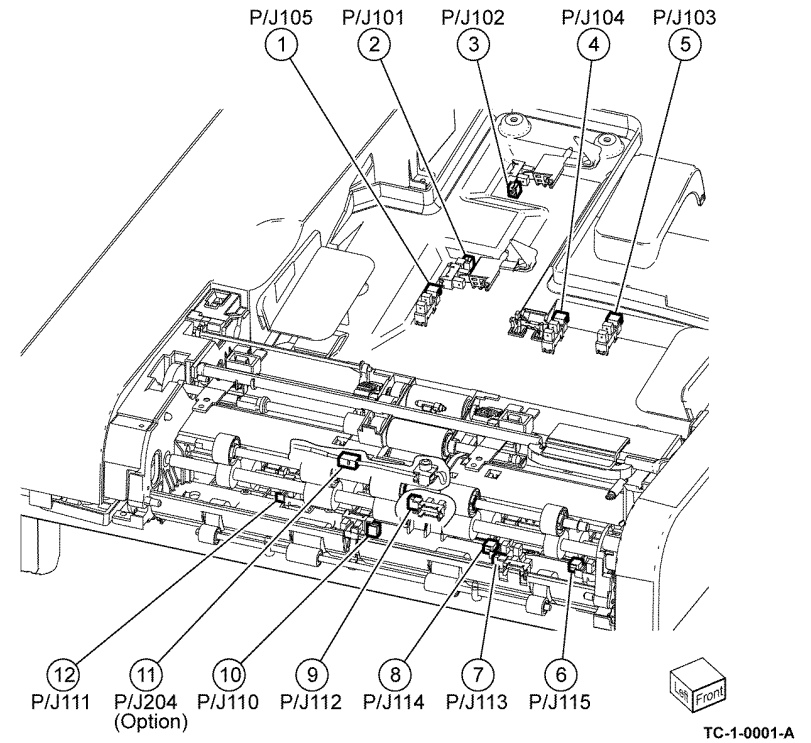


Figure 1 DADF 1 of 2

DADF (2 of 2)

Location: [PL 5.05](#)

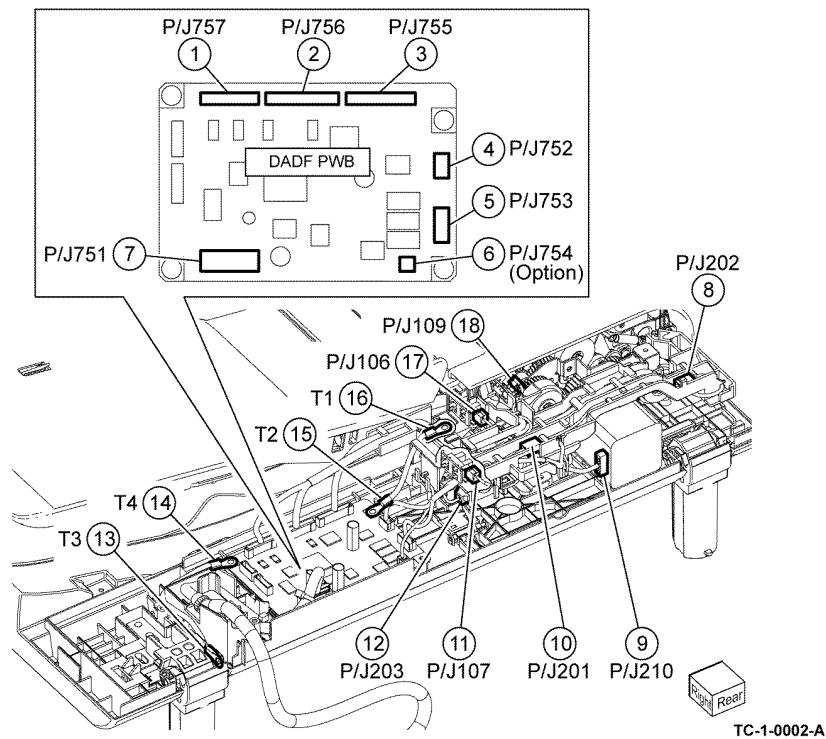


Figure 2 DADF 2 of 2

Scanner (IIT) Assembly

Location: [PL 60.05](#)

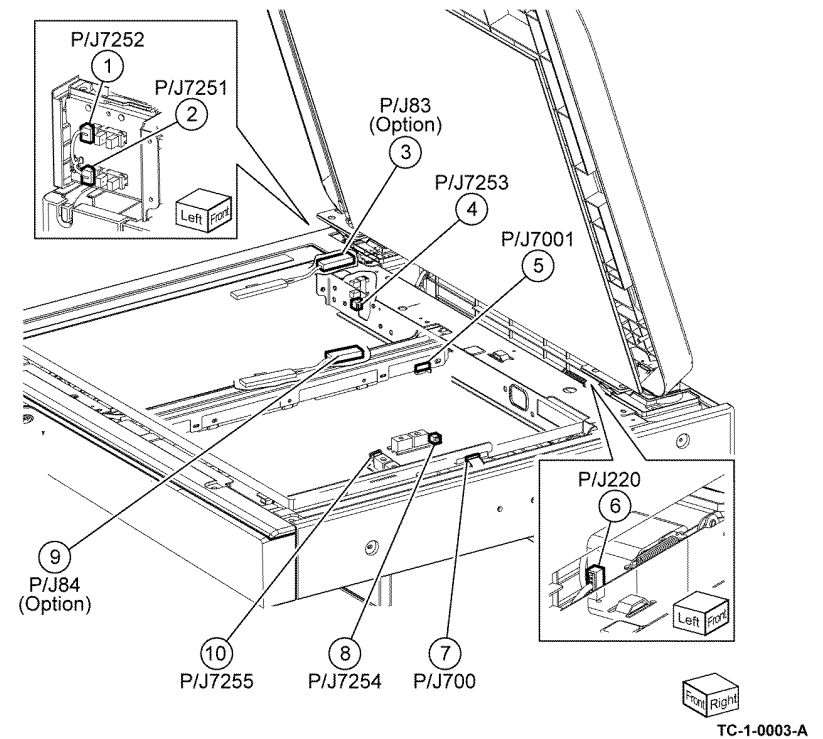


Figure 3 Scanner assembly

UI Assembly

Location: [PL 2.05](#)

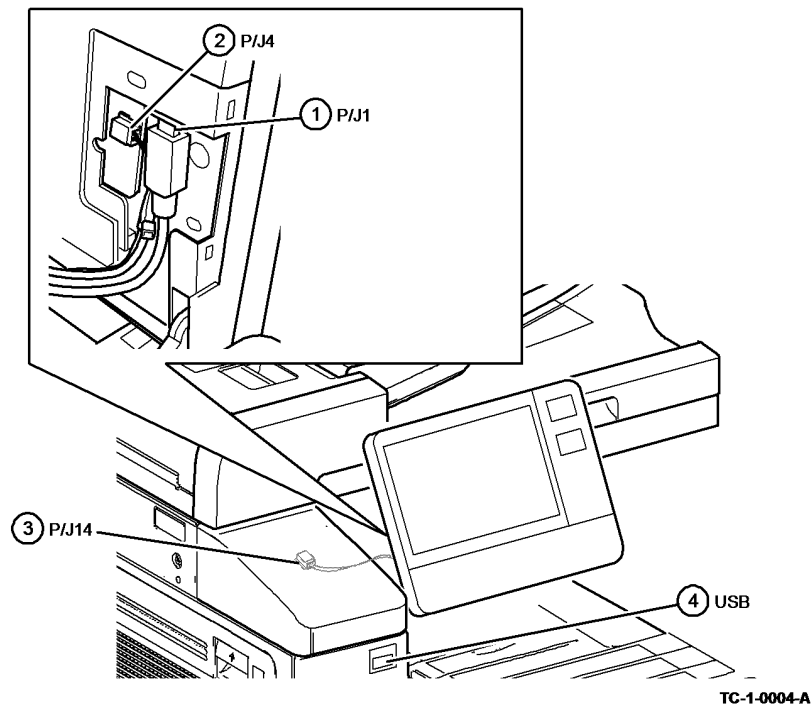


Figure 4 UI assembly

Toner Cartridge CRUM

Location: [PL 90.10](#)

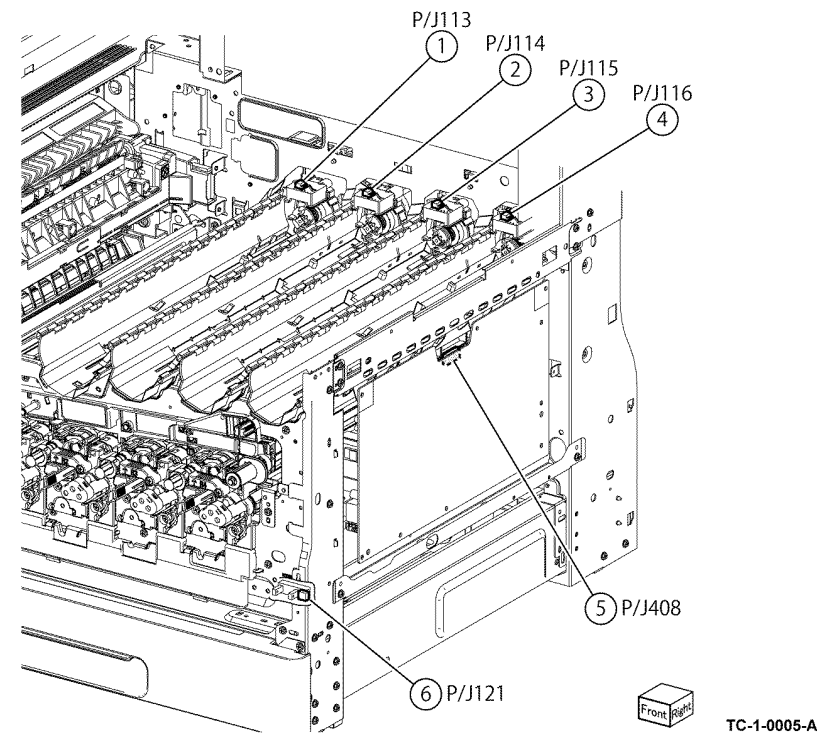


Figure 5 Toner cartridge CRUM interlock switch

Drum Cartridge

Location: PL 90.20

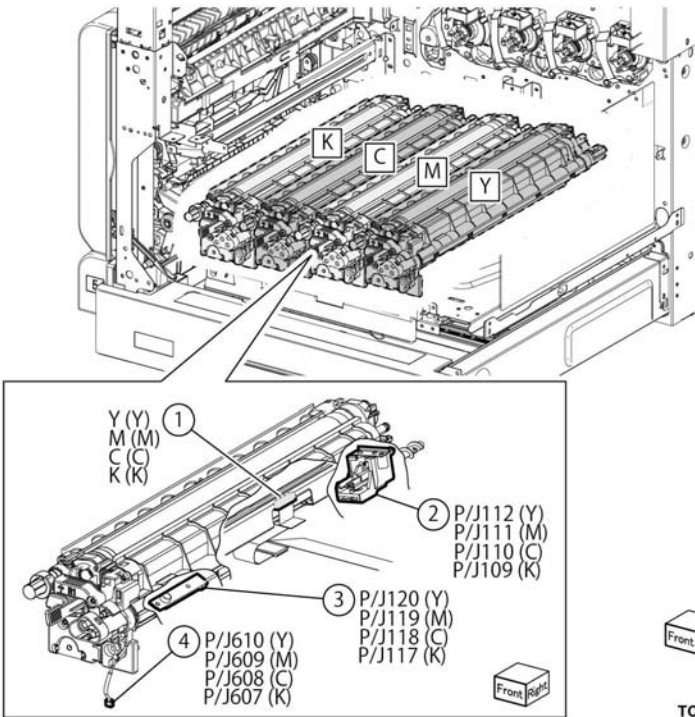


Figure 6 Xerographics CRUM/CIS sensor assembly



TC-1-0006-A

Fuser

Location: PL 10.05

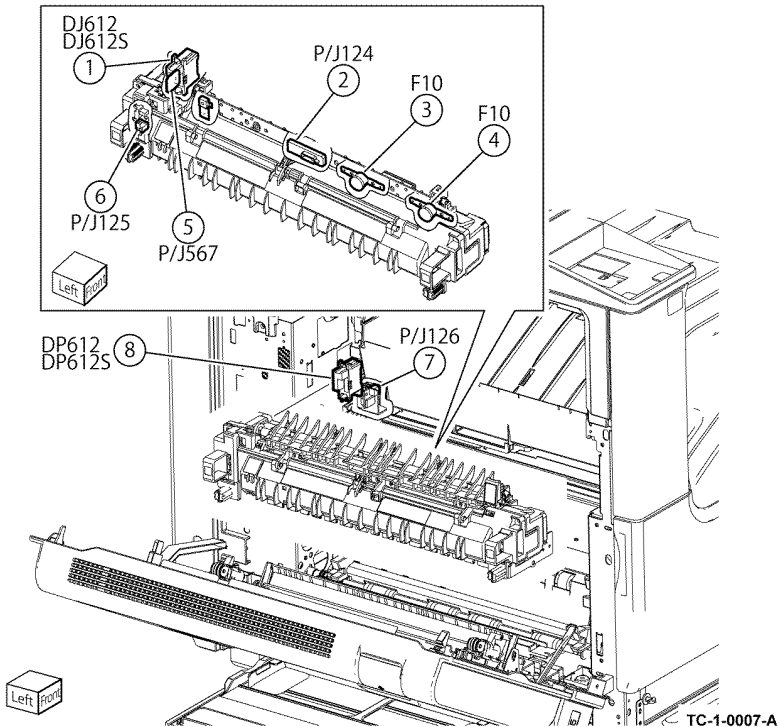


Figure 7 Fuser



TC-1-0007-A

Registration and Bypass Tray

Location: PL 70.30, PL 80.55

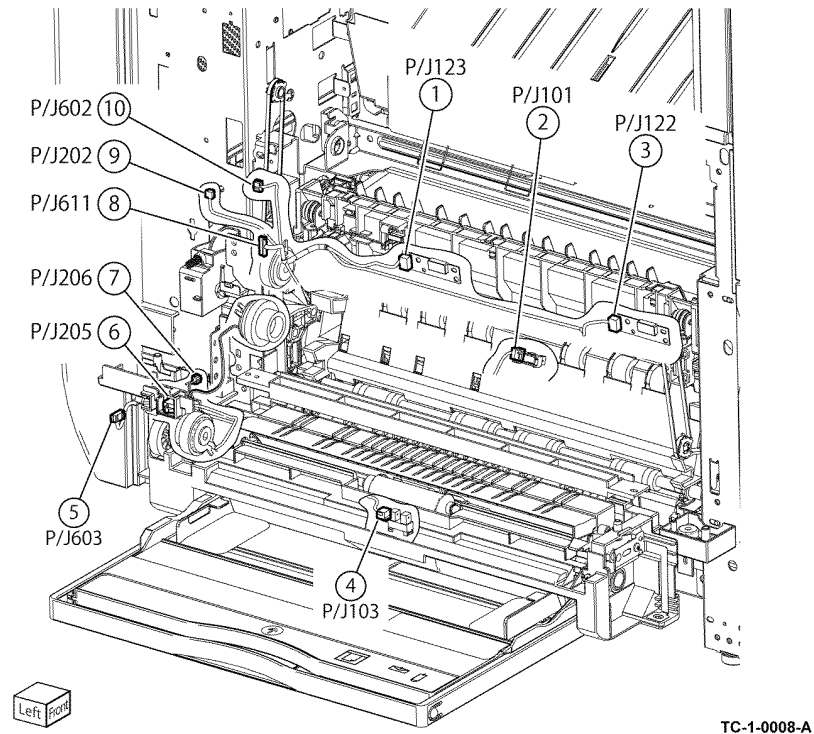


Figure 8 Registration and bypass tray

Tray 1 Feeder

Location: PL 80.05

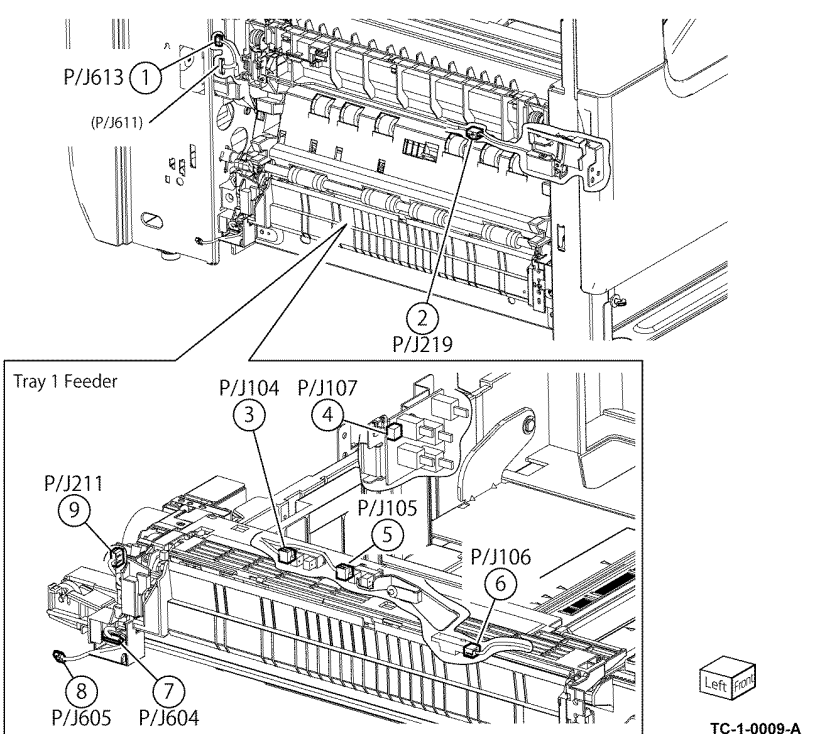


Figure 9 Tray 1 feeder

ESS PWB

Location: [PL 3.10](#)

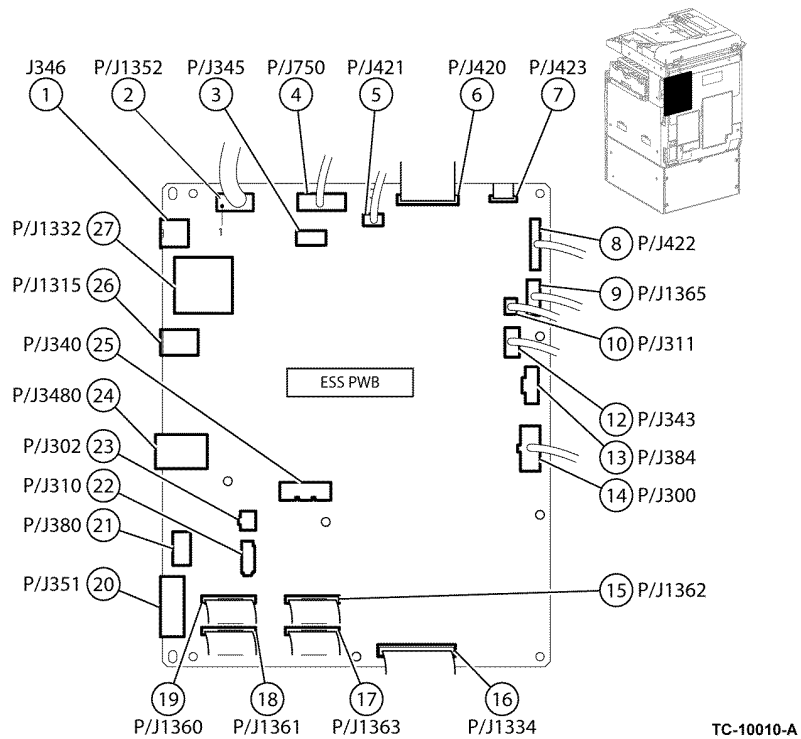


Figure 10 ESS PWB

Drive PWB

Location: [PL 1.10](#)

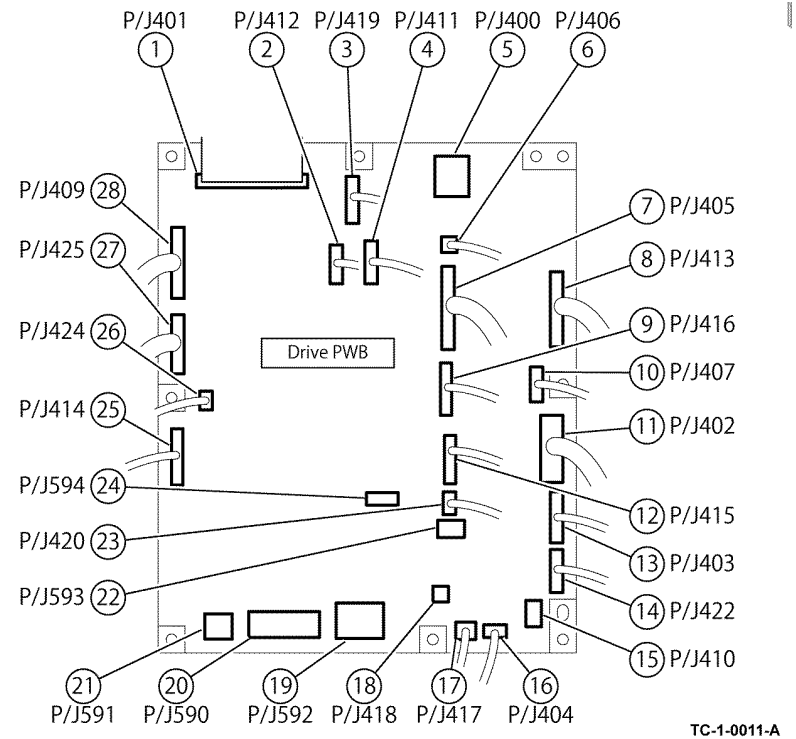


Figure 11 Drive PWB

LVPS

Location: [PL 1.10](#)

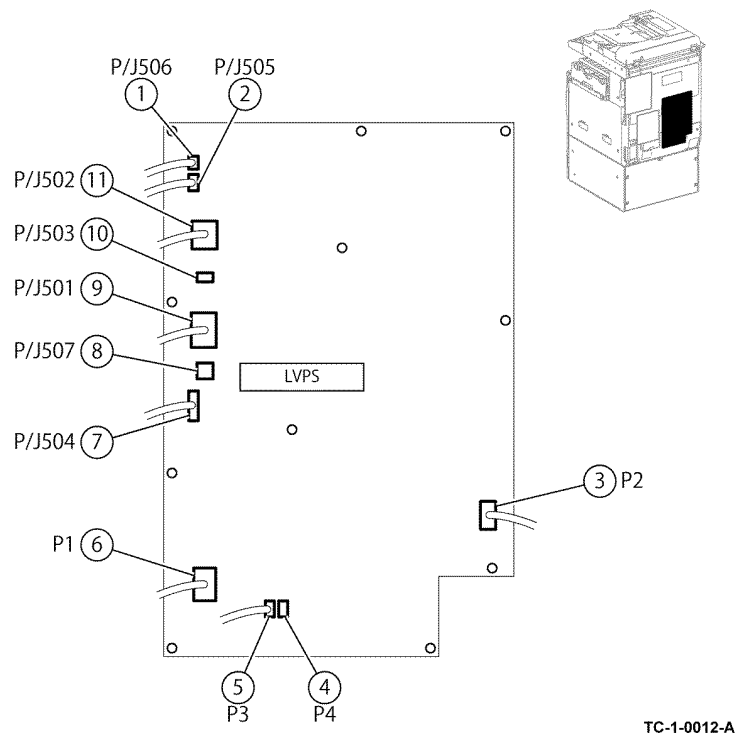


Figure 12 LVPS

Exit

Location: [PL 10.20](#)

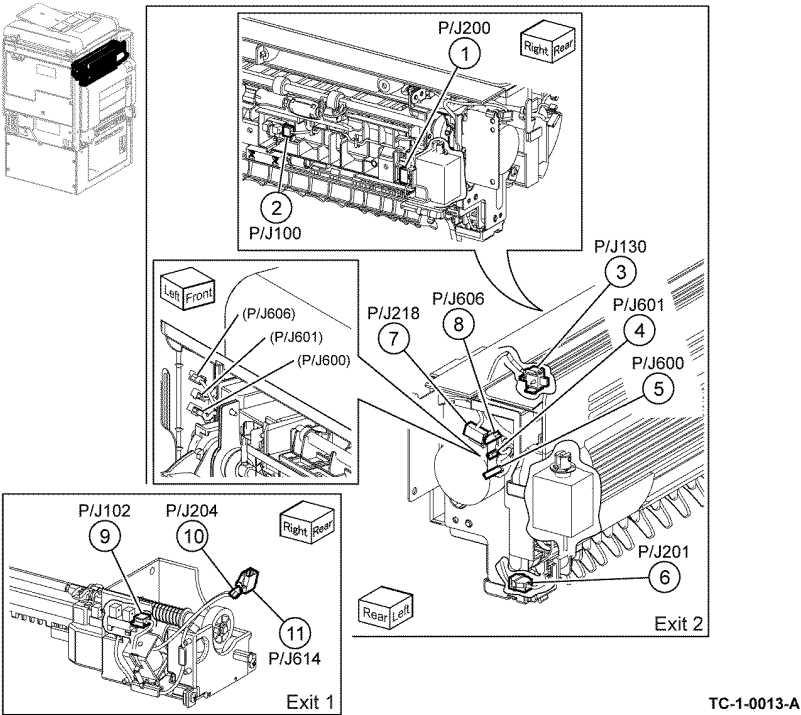


Figure 13 Exit

Machine Rear

Location: [PL 1.10](#)

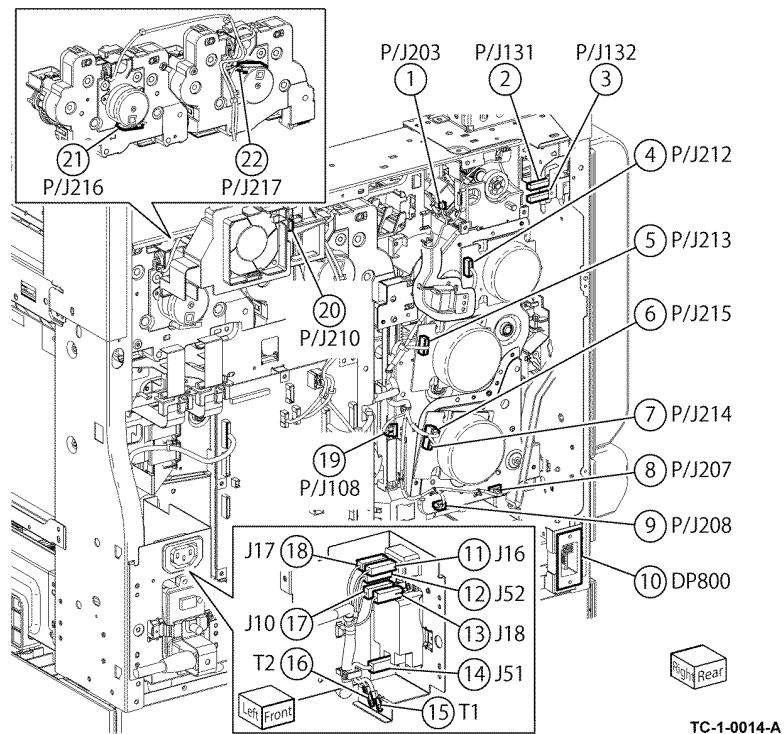


Figure 14 Machine rear

Front Cover Interlock Switch

Location: [PL 1.05](#)

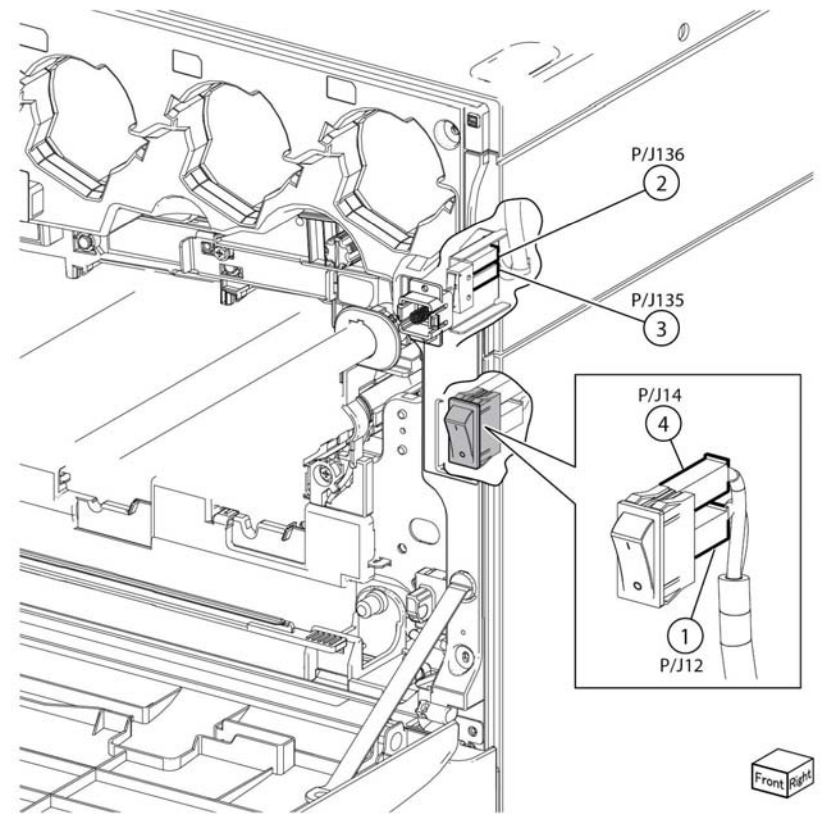


Figure 15 Front cover interlock switch

Tray Module (STM) (1 of 2)

Location: PL 70.25

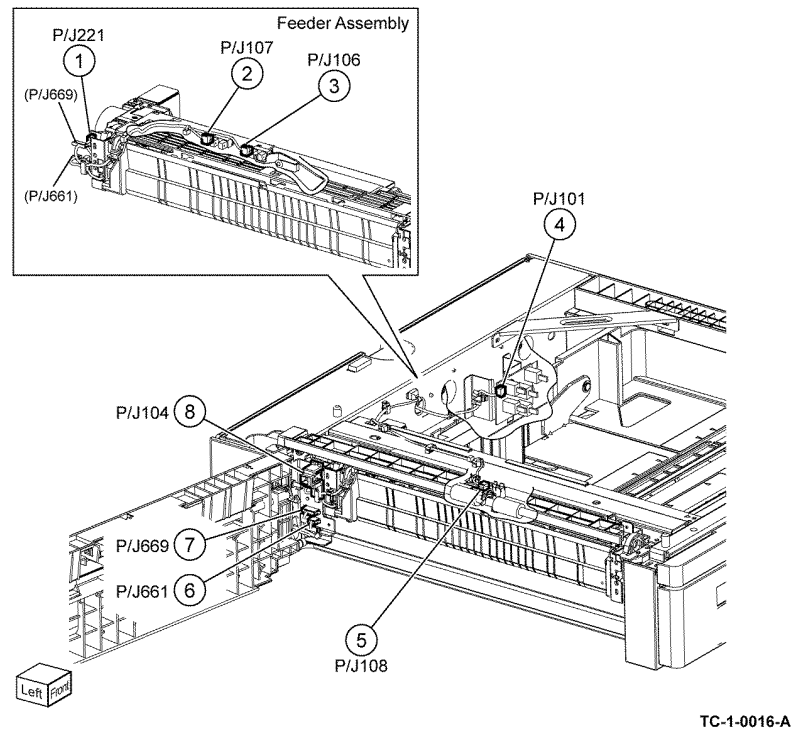


Figure 16 Tray module (STM) (1 of 2)

Tray Module (STM) (2 of 2)

Location: PL 70.25

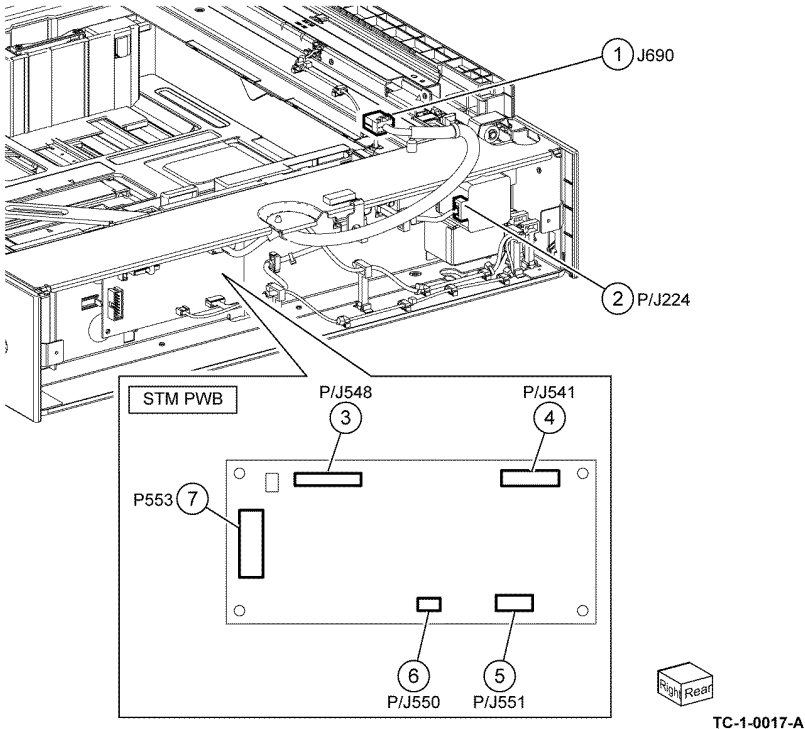


Figure 17 Tray module (STM) (2 of 2)

Tray Module (1TM) (1 of 2)

Location: [PL 70.15](#)

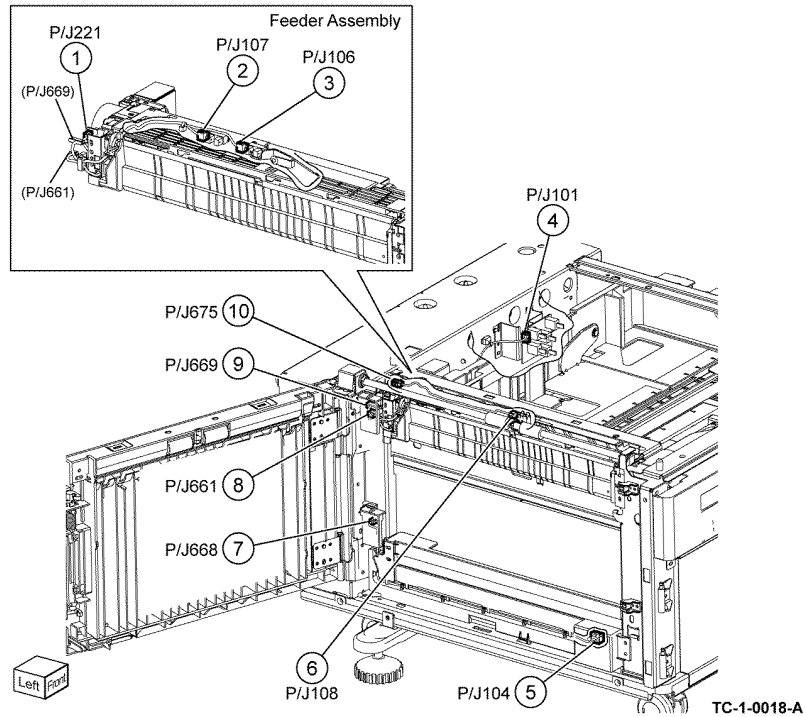


Figure 18 Tray module (1TM) (1 of 2)

Tray Module (1TM) (2 of 2)

Location: [PL 70.15](#)

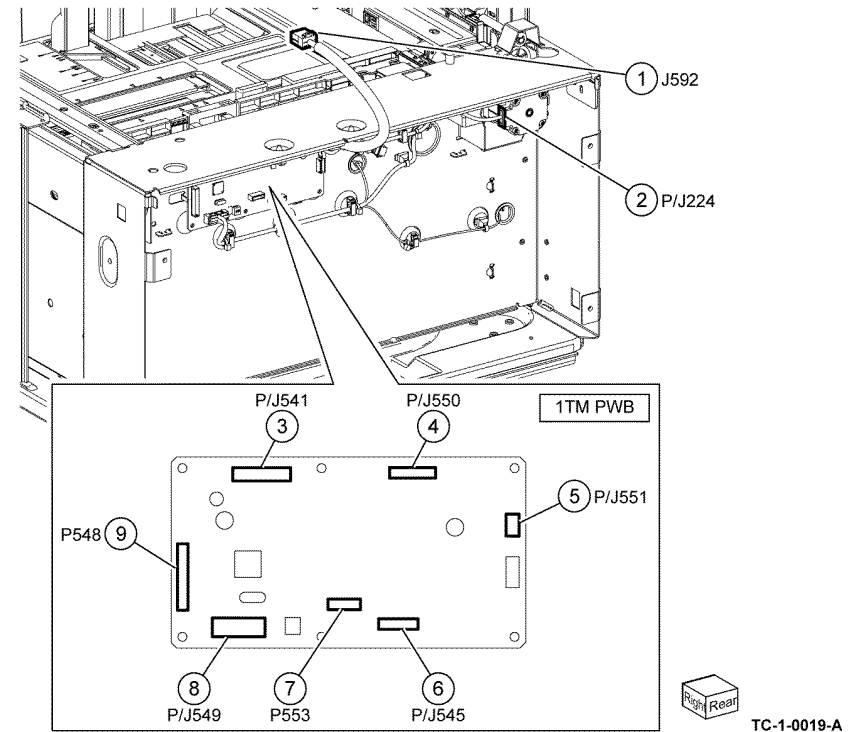


Figure 19 Tray Module (1TM) (2 of 2)

Tray Module (3TM) (1 of 2)

Location: [PL 70.20](#)

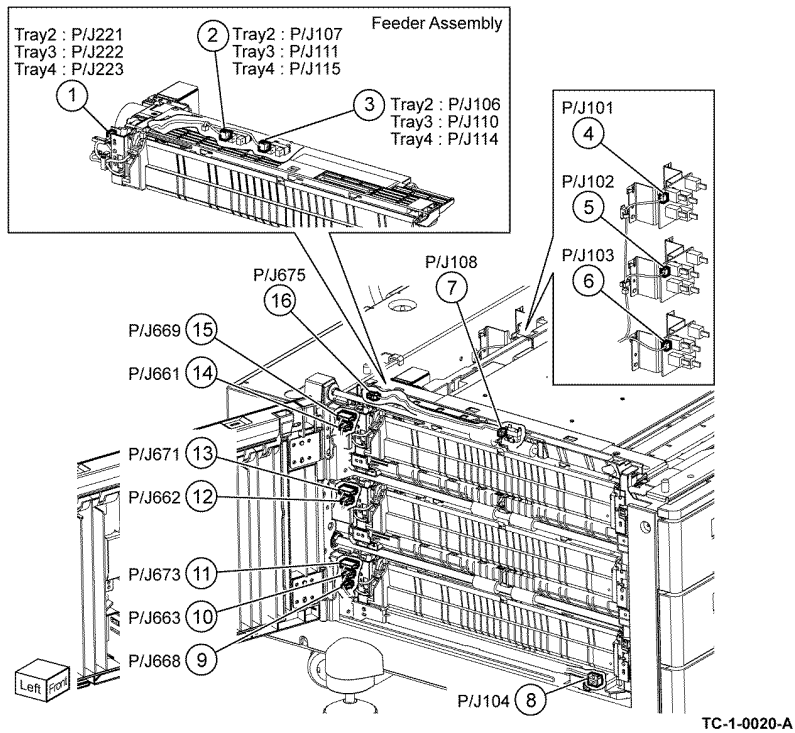


Figure 20 Tray Module (3TM) (1 of 2)

Tray Module (3TM) (2 of 2)

Location: [PL 70.20](#)

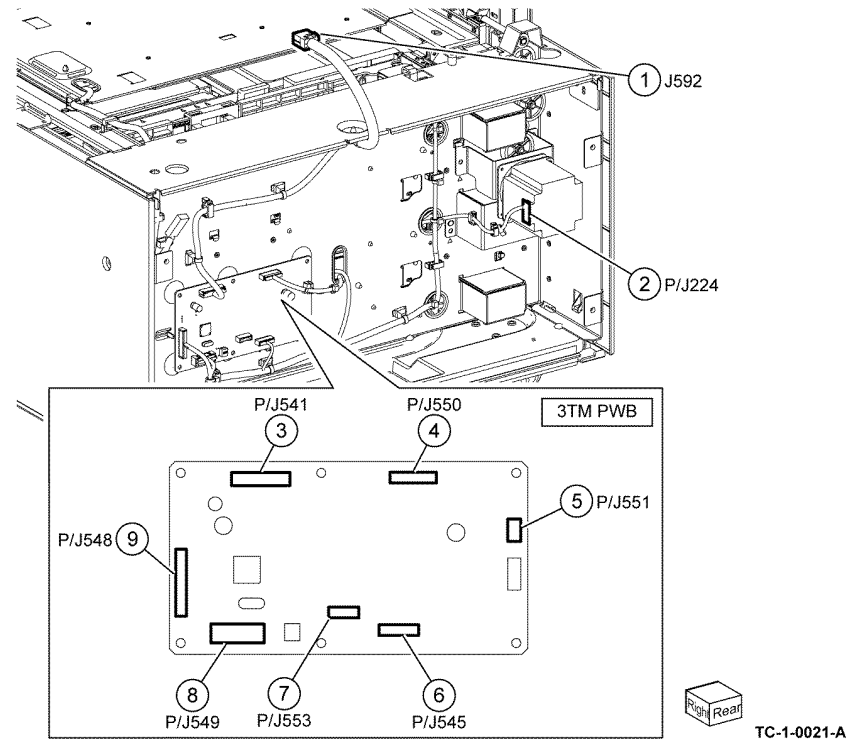


Figure 21 Tray module (3TM) (2 of 2)

Tray Module (TTM) (1 of 3)

Location: [PL 70.65](#)

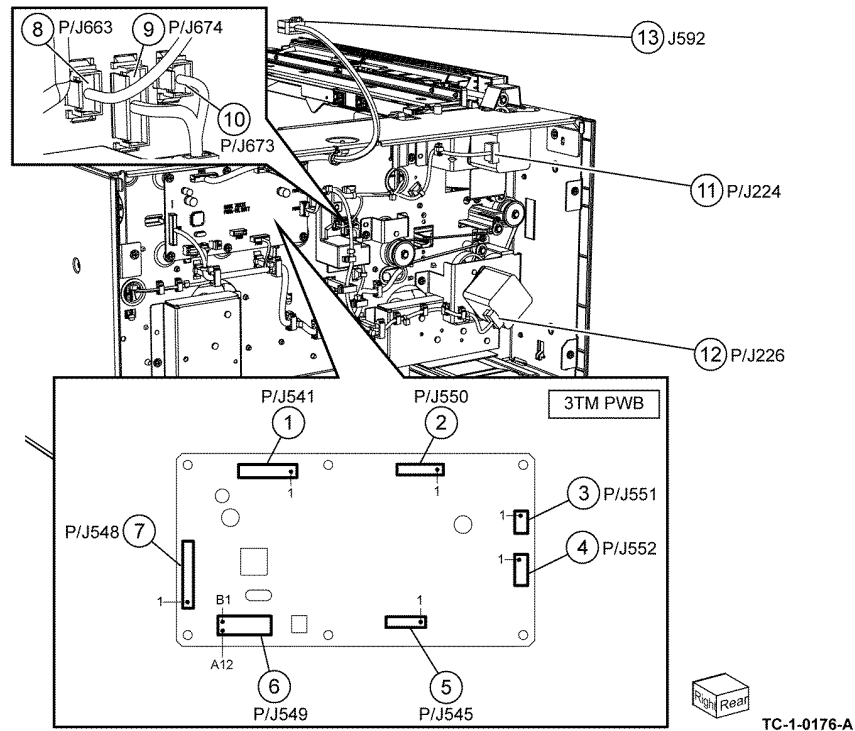


Figure 22 Tray Module (TTM) (1 of 3)

Tray Module (TTM) (2 of 3)

Location: [PL 70.65](#)

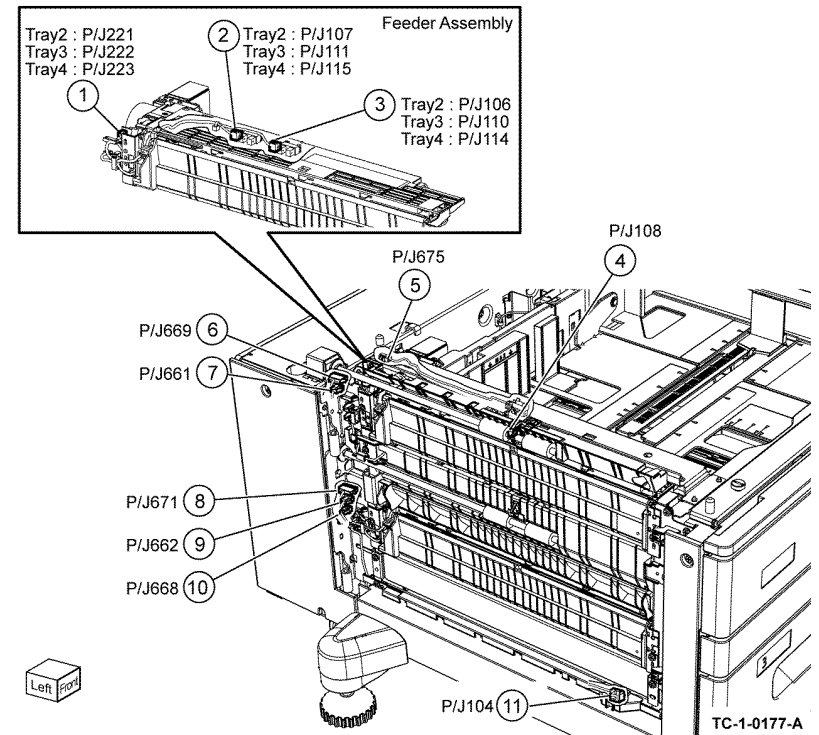


Figure 23 Tray module (TTM) (2 of 3)

Tray Module (TTM) (3 of 3)

Location: PL 70.65

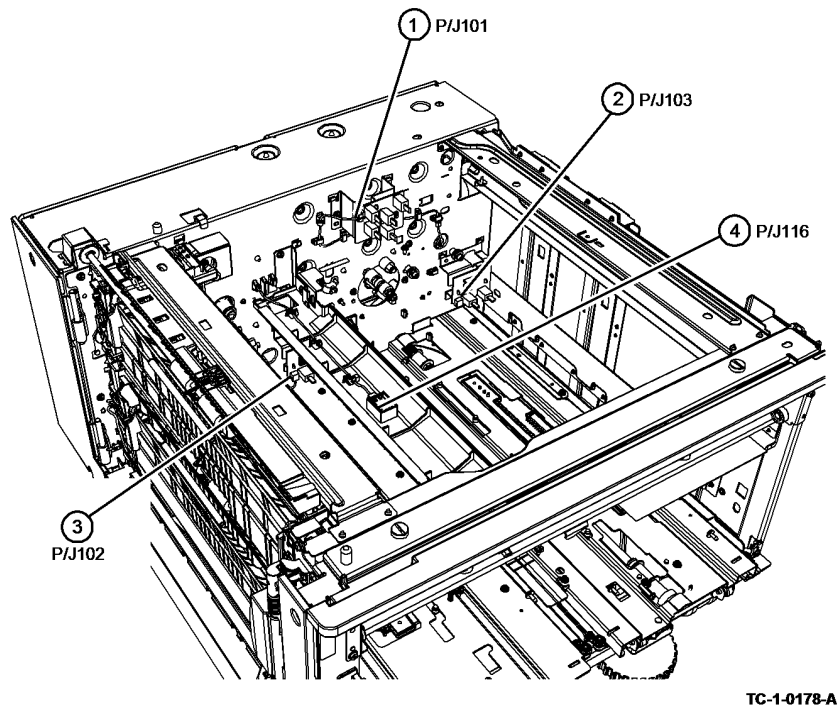


Figure 24 Tray module (TTM) (3 of 3)

Fax PWB

PL 20.05

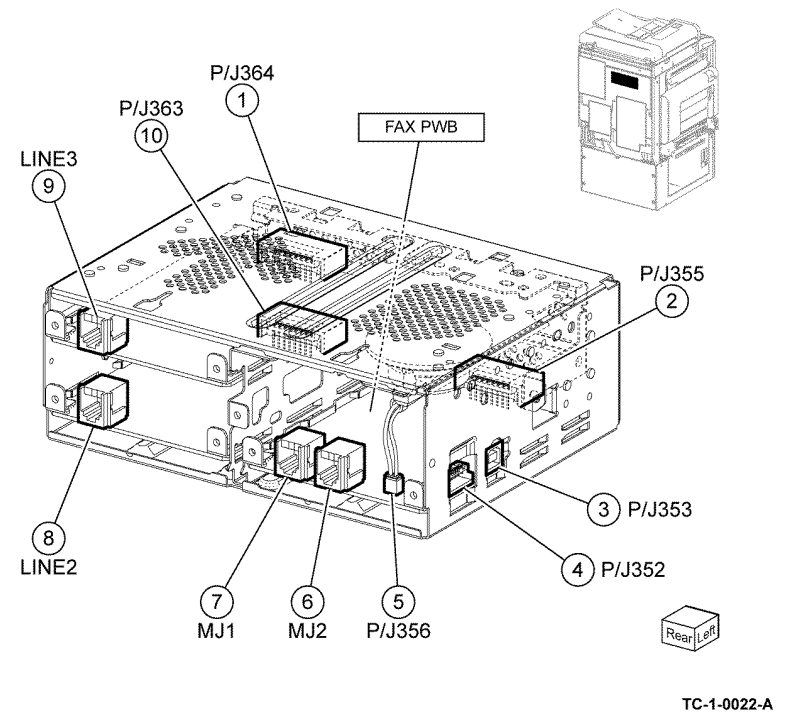


Figure 25 Fax PWB

Integrated Office Finisher (1 of 3)

Location: [PL 12.06](#)

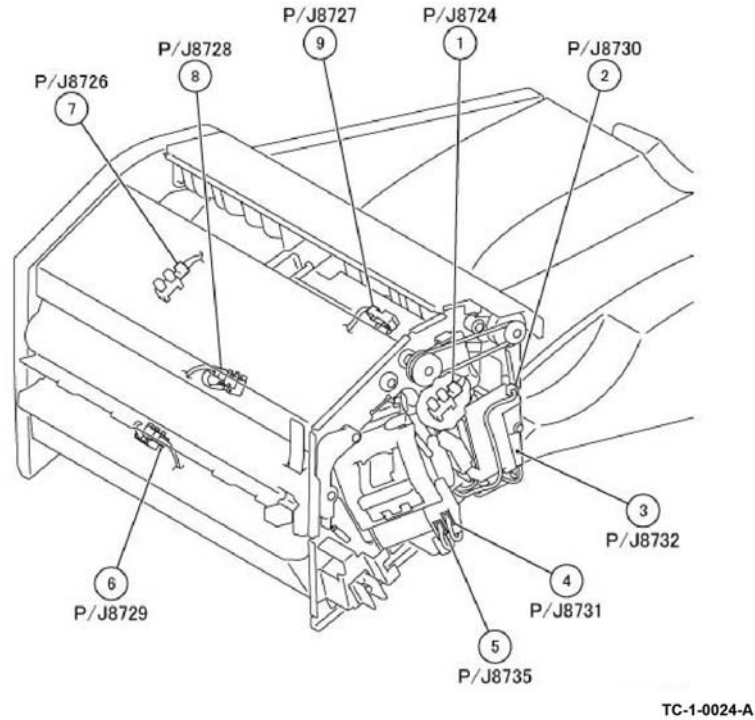


Figure 26 Integrated office finisher (1 of 3)

Integrated Office Finisher (2 of 3)

Location: [PL 12.06](#)

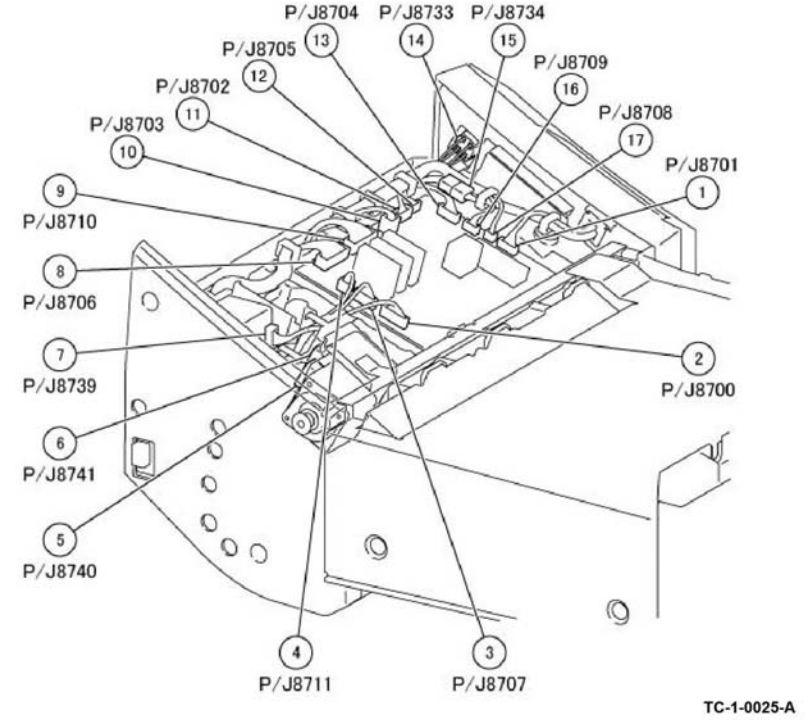


Figure 27 Integrated office finisher (2 of 3)

Integrated Office Finisher (3 of 3)

Location: [PL 12.06](#)

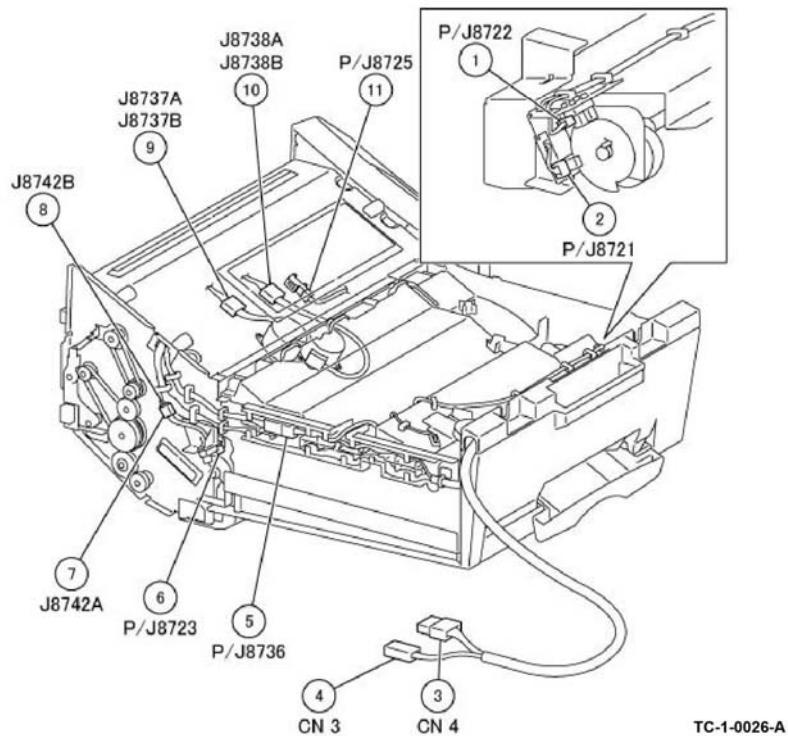


Figure 28 Integrated office finisher (3 of 3)

Horizontal Transport

Location: [PL 13.06](#)

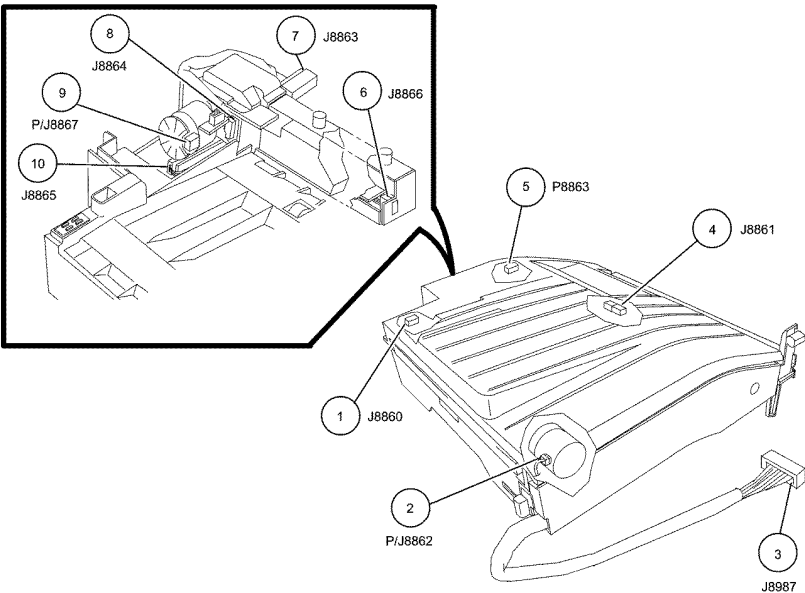
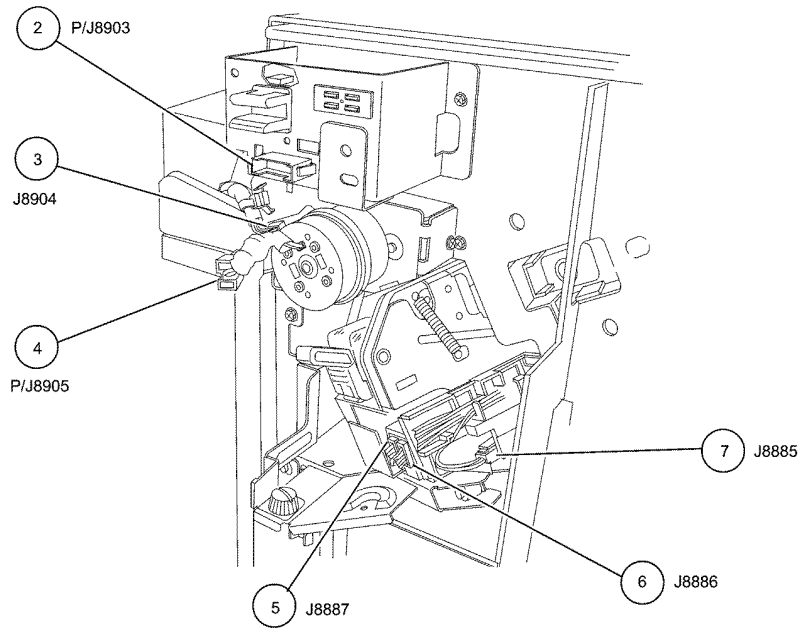


Figure 29 Horizontal transport

Office Finisher LX (1 of 3)

Location: PL 13.10

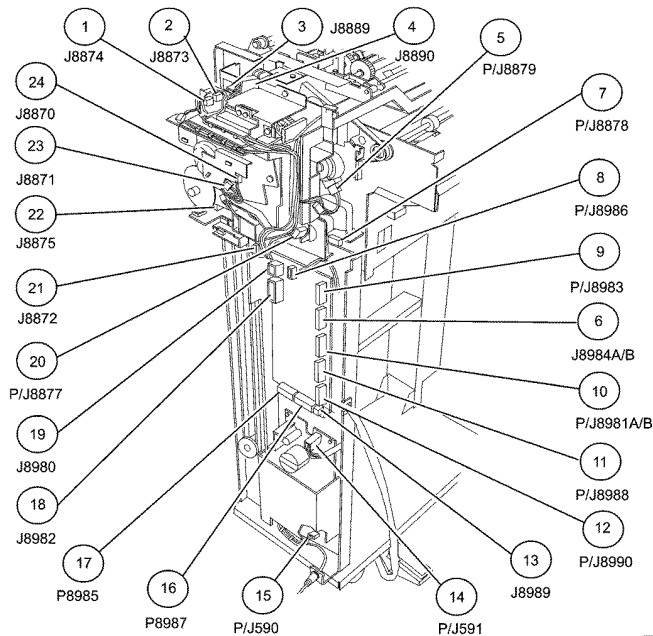


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Figure 30 Office finisher LX (1 of 3)

Office Finisher LX (2 of 3)

Location: PL 13.10



TC-1-0029-A

Figure 31 Office finisher LX (2 of 3)

Office Finisher LX (3 of 3)

Location: [PL 13.10](#)

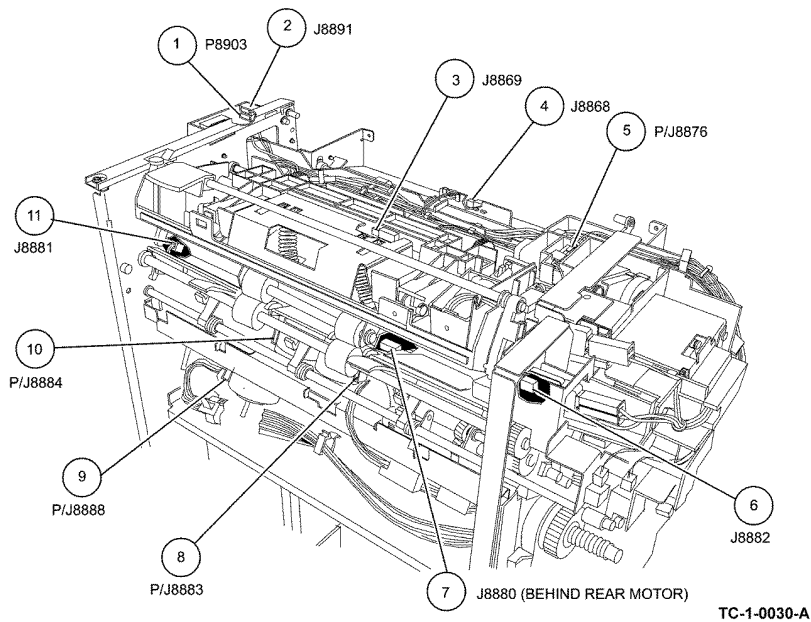


Figure 32 Office finisher LX (3 of 3)

Booklet Maker (1 of 2)

Location: [PL 13.50](#)

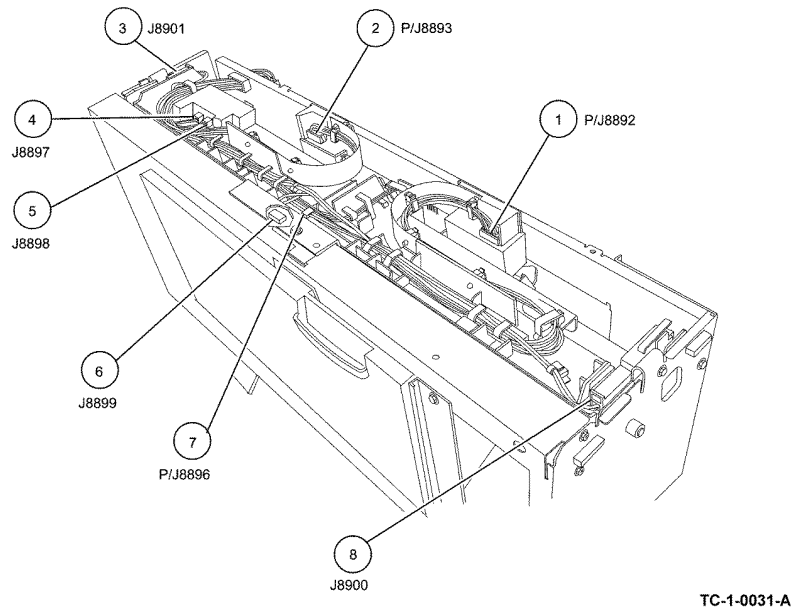
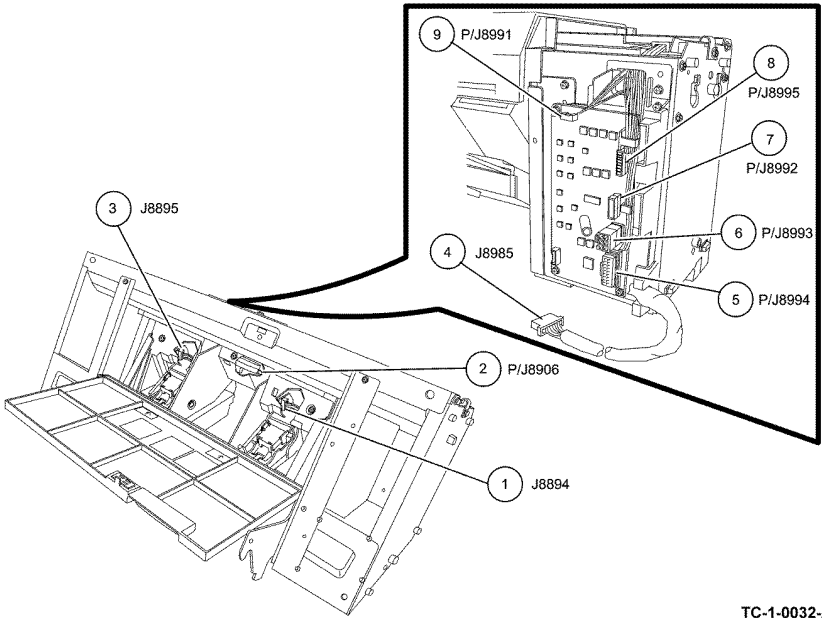


Figure 33 Booklet maker (1 of 2)

Booklet Maker (2 of 2)

Location: [PL 13.50](#)

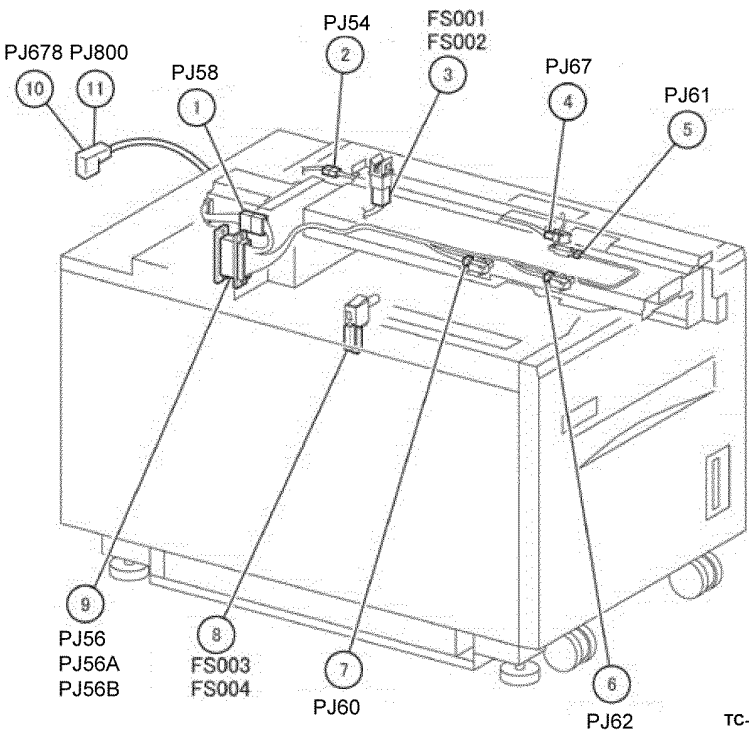


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Figure 34 Booklet maker (2 of 2)

HCF (1 of 2)

Location: [PL 70.50](#)

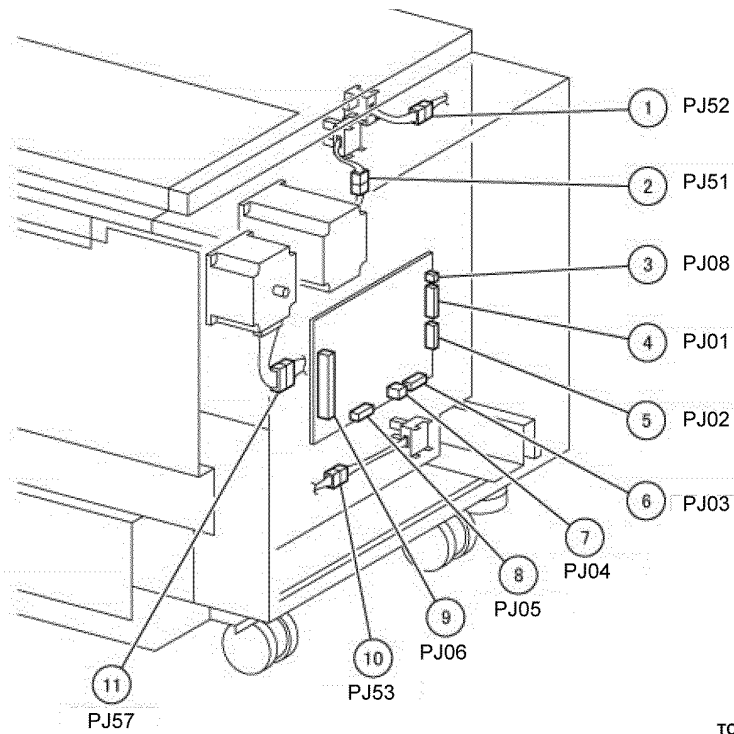


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Figure 35 HCF (1 of 2)

HCF (2 of 2)

Location: [PL 70.50](#)



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Figure 36 HCF (2 of 2)

Wiring Diagrams

Purpose

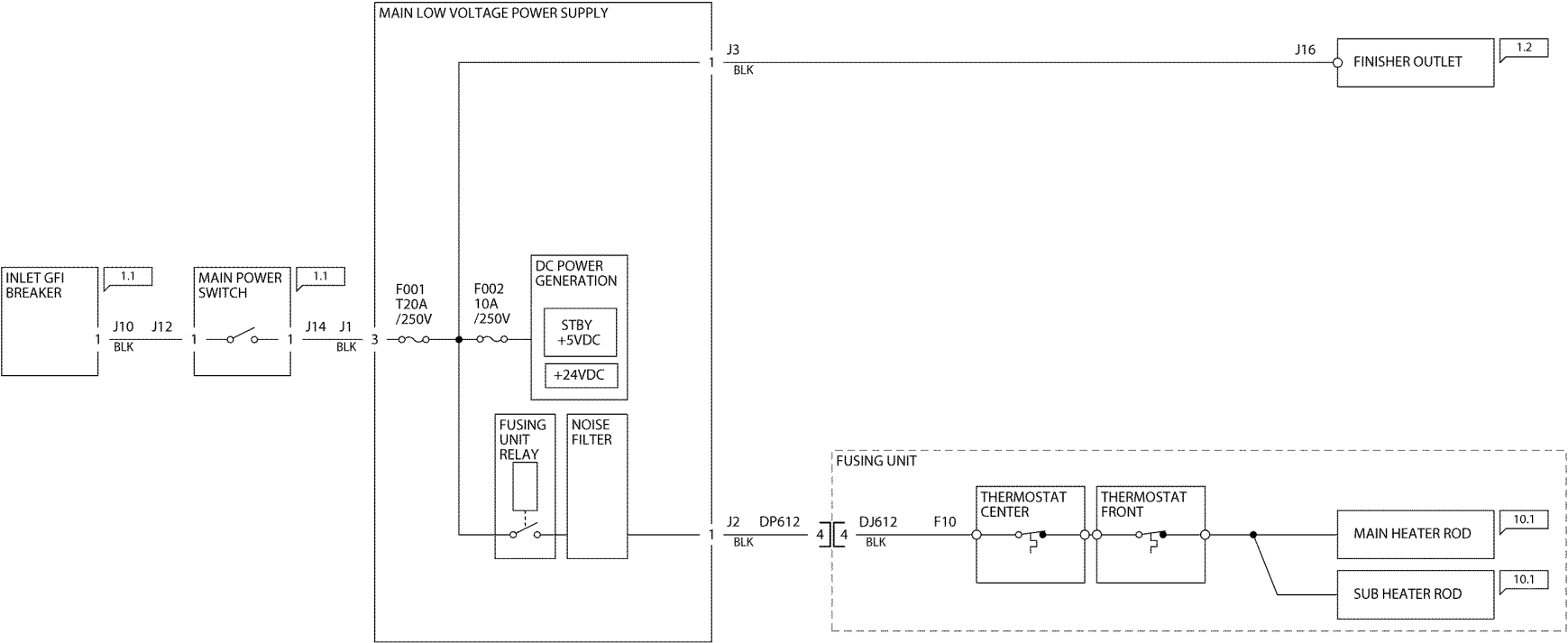
Wiring diagrams are an aid to trace wiring faults. Wiring diagrams are used to complement the block schematic diagrams (BSDs).

Introduction

Refer to the wiring diagrams that follow:

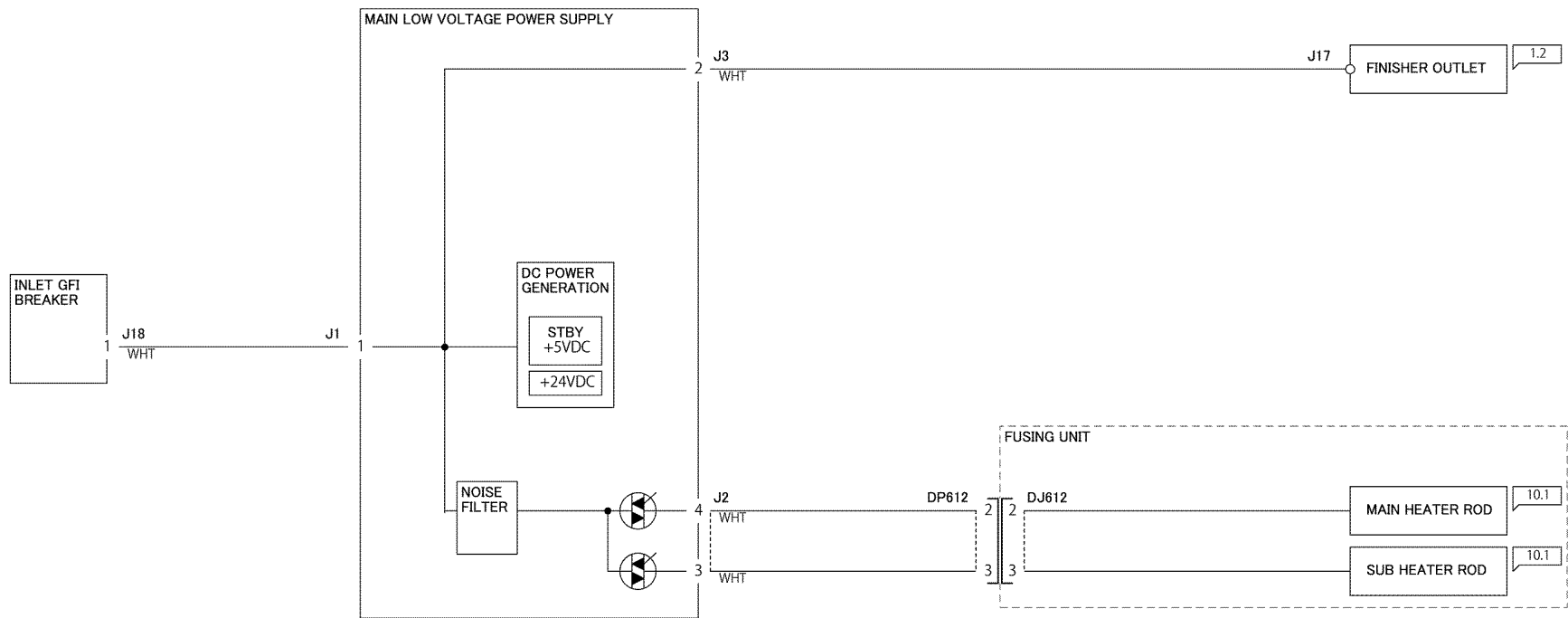
- IOT/IIT ACH, [Wiring Diagram 1](#).
- IOT/IIT ACN, [Wiring Diagram 2](#).
- IOT/IIT +3.3VDC (1 of 2), [Wiring Diagram 3](#).
- IOT/IIT +3.3VDC (2 of 2), [Wiring Diagram 4](#).
- IOT/IIT +3.3V RTN (1 of 2), [Wiring Diagram 5](#).
- IOT/IIT +3.3V RTN (2 of 2), [Wiring Diagram 6](#).
- IOT/IIT +5VDC (1 of 3), [Wiring Diagram 7](#).
- IOT/IIT +5VDC (2 of 3), [Wiring Diagram 8](#).
- IOT/IIT +5VDC (2 of 3), [Wiring Diagram 9](#).
- IOT/IIT +5V RTN (1 of 3), [Wiring Diagram 10](#).
- IOT/IIT +5V RTN (2 of 3), [Wiring Diagram 11](#).
- IOT/IIT +5V RTN (3 of 3), [Wiring Diagram 12](#).
- IOT/IIT +24VDC (1 of 2), [Wiring Diagram 13](#).
- IOT/IIT +24VDC (2 of 2), [Wiring Diagram 14](#).
- IOT/IIT +24V RTN, [Wiring Diagram 15](#).
- DADF +5VDC, [Wiring Diagram 16](#).
- DADF +24VDC, [Wiring Diagram 17](#).
- DADF DC COM, [Wiring Diagram 18](#).
- Integrated office finisher +5VDC, [Wiring Diagram 19](#).
- Integrated office finisher +24VDC, [Wiring Diagram 20](#).
- Integrated office finisher DC RTN, [Wiring Diagram 21](#).
- Office finisher LX +5VDC, [Wiring Diagram 22](#).
- Office finisher LX +24VDC, [Wiring Diagram 23](#).
- Office finisher LX DC RTN, [Wiring Diagram 24](#).
- HCF +24VDC, [Wiring Diagram 25](#).
- HCF +5VDC, [Wiring Diagram 26](#).
- HCF DC COM, [Wiring Diagram 27](#).

Wiring Diagram 1 IOT/IIT ACH



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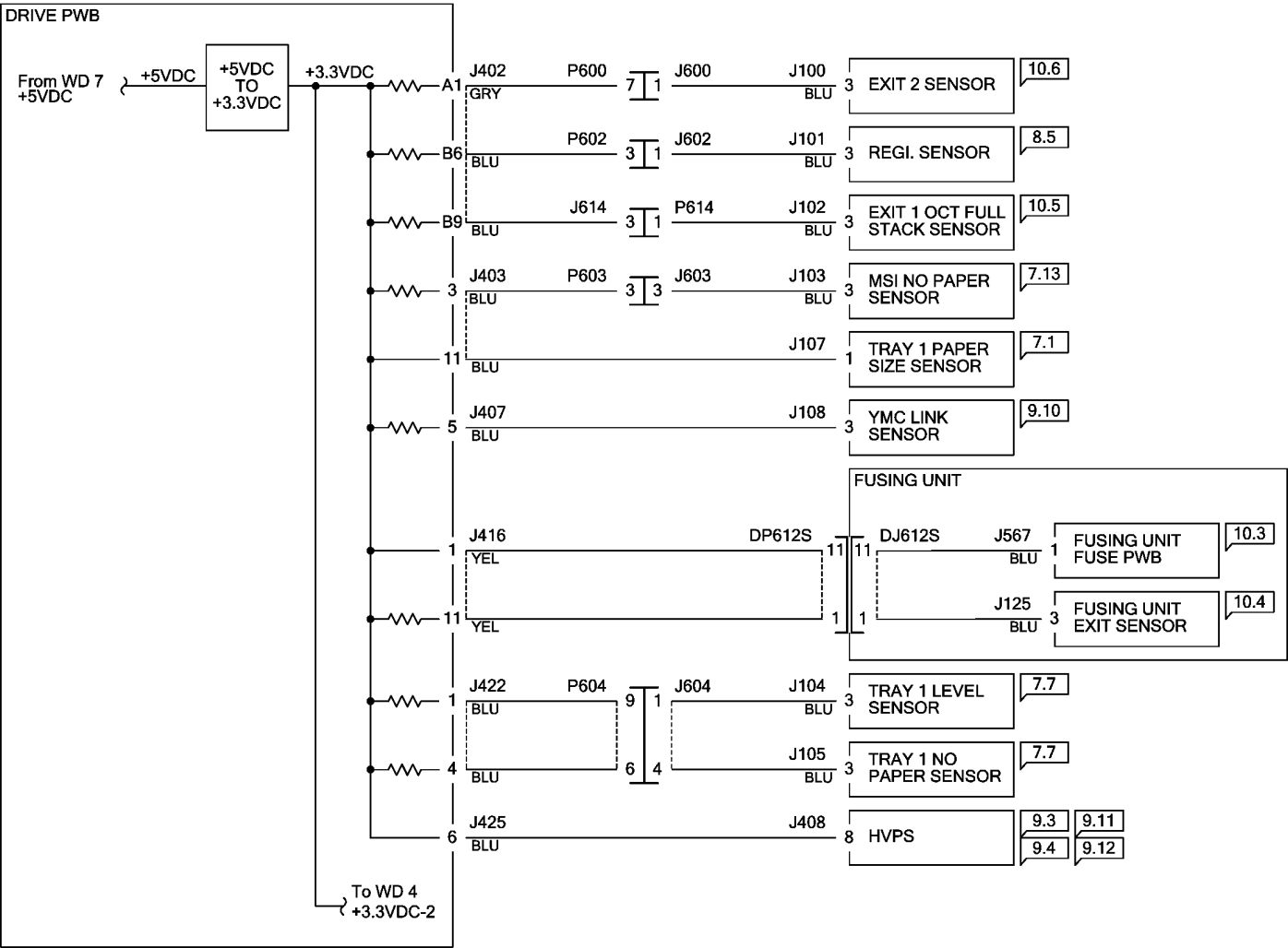
Figure 1 Wiring diagram 1



TC-1-0034-A

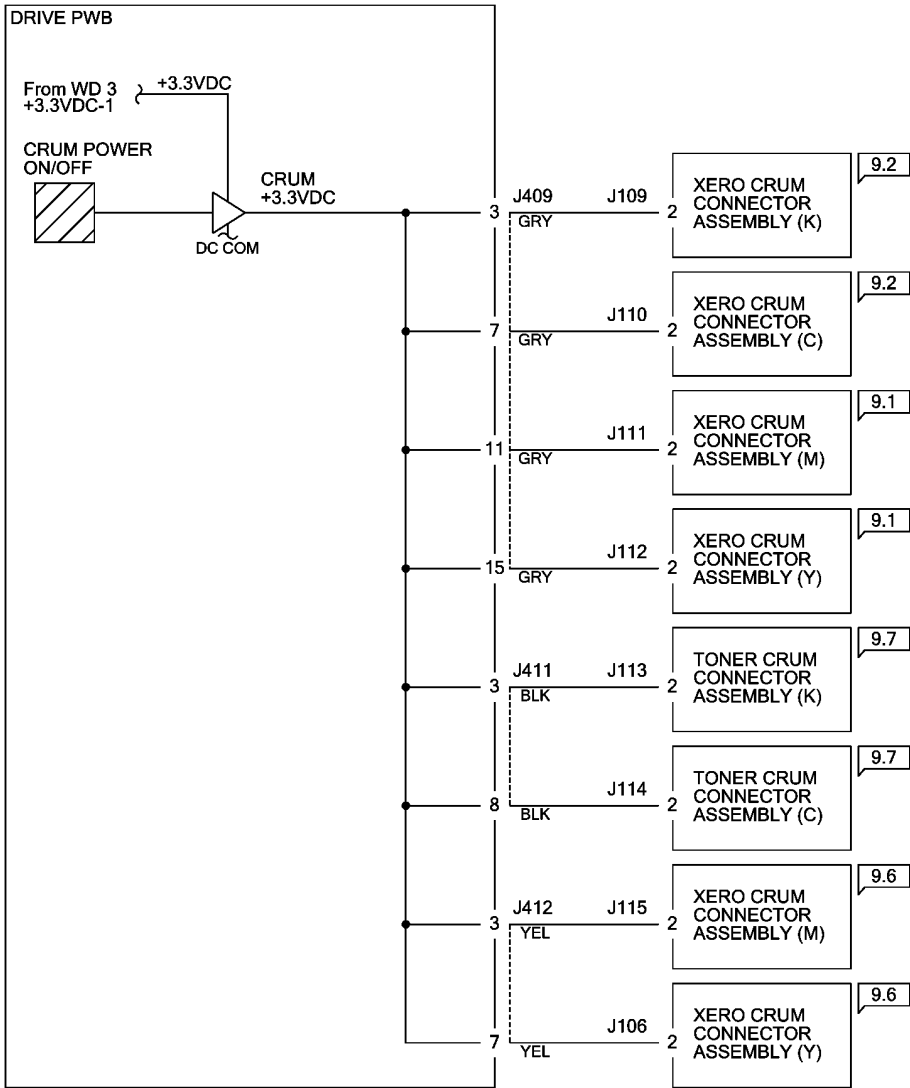
Figure 2 Wiring diagram 2

Wiring Diagram 3 IOT/IIT +3.3VDC (1 of 2)



TC-1-0035-A

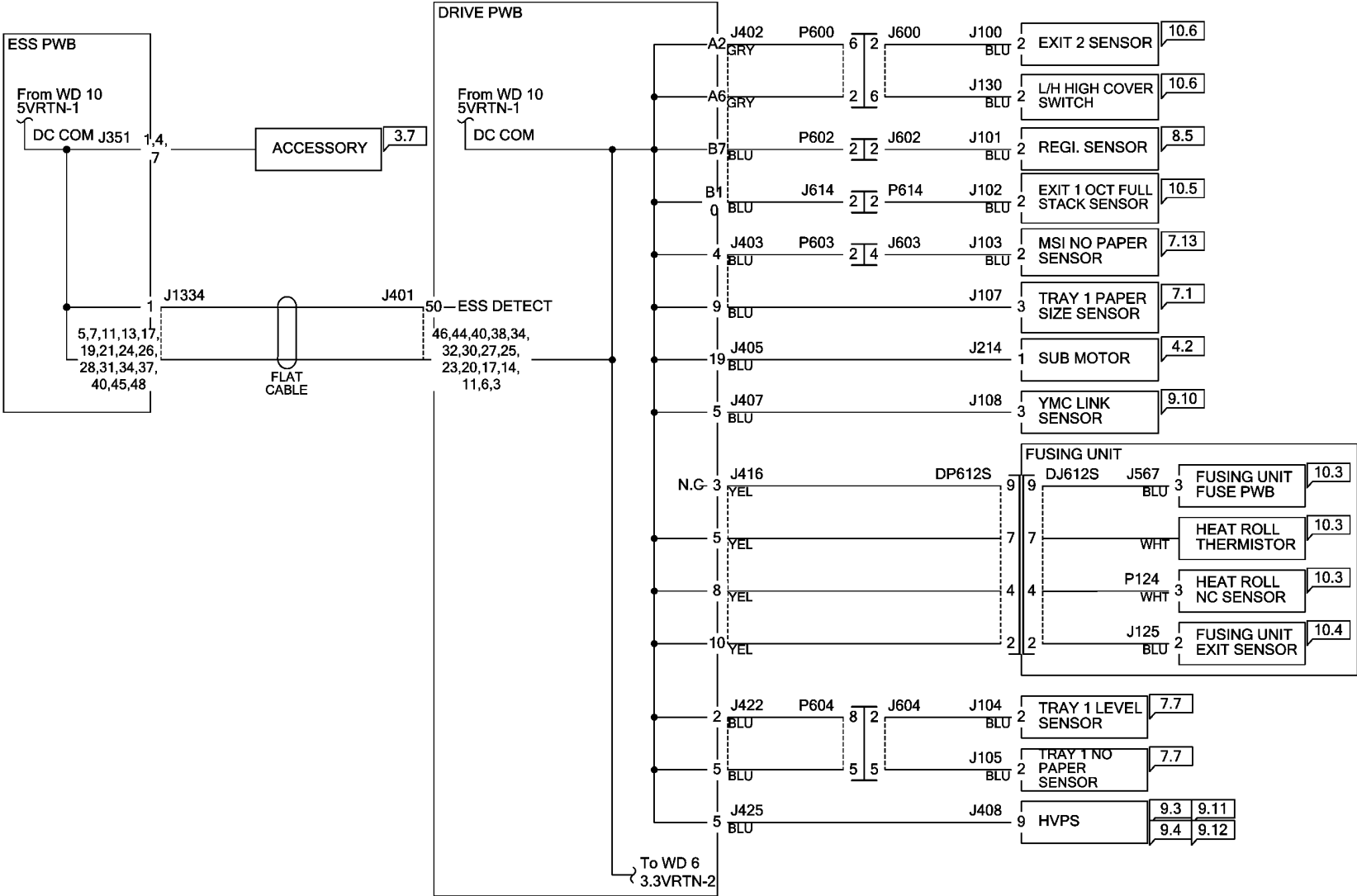
Figure 3 Wiring diagram 3



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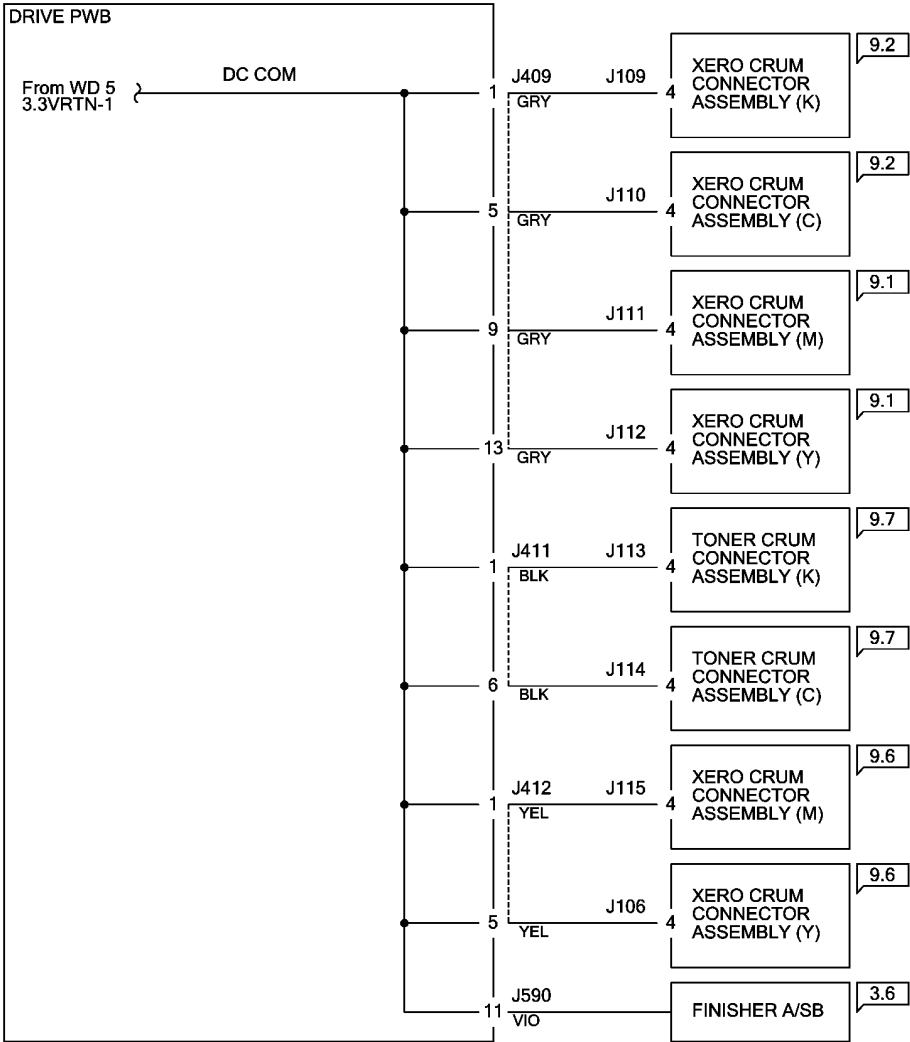
Figure 4 Wiring diagram 4

Wiring Diagram 5 IOT/IIT +3.3V RTN (1 of 2)



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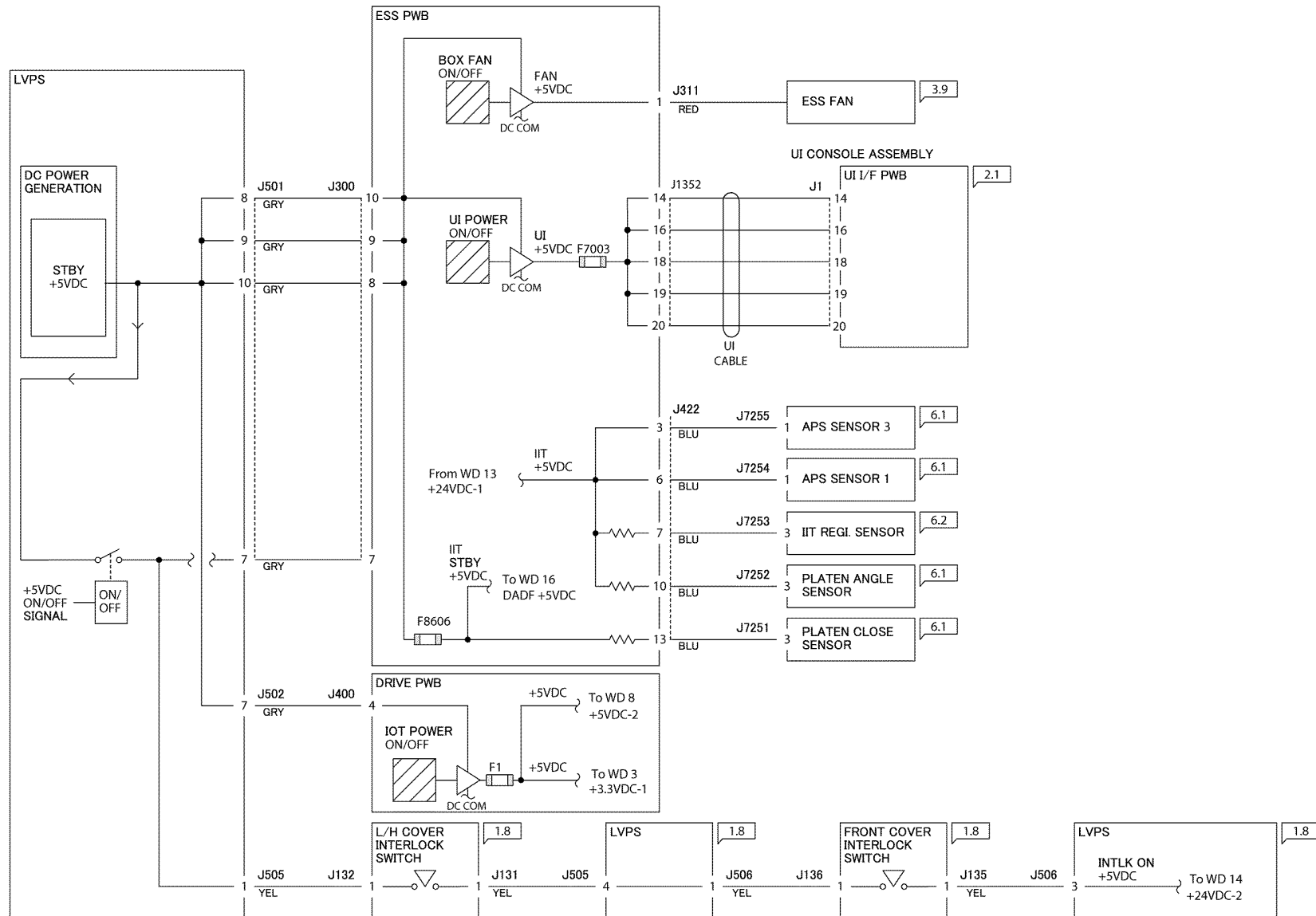
Figure 5 Wiring diagram 5



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Figure 6 Wiring diagram 6

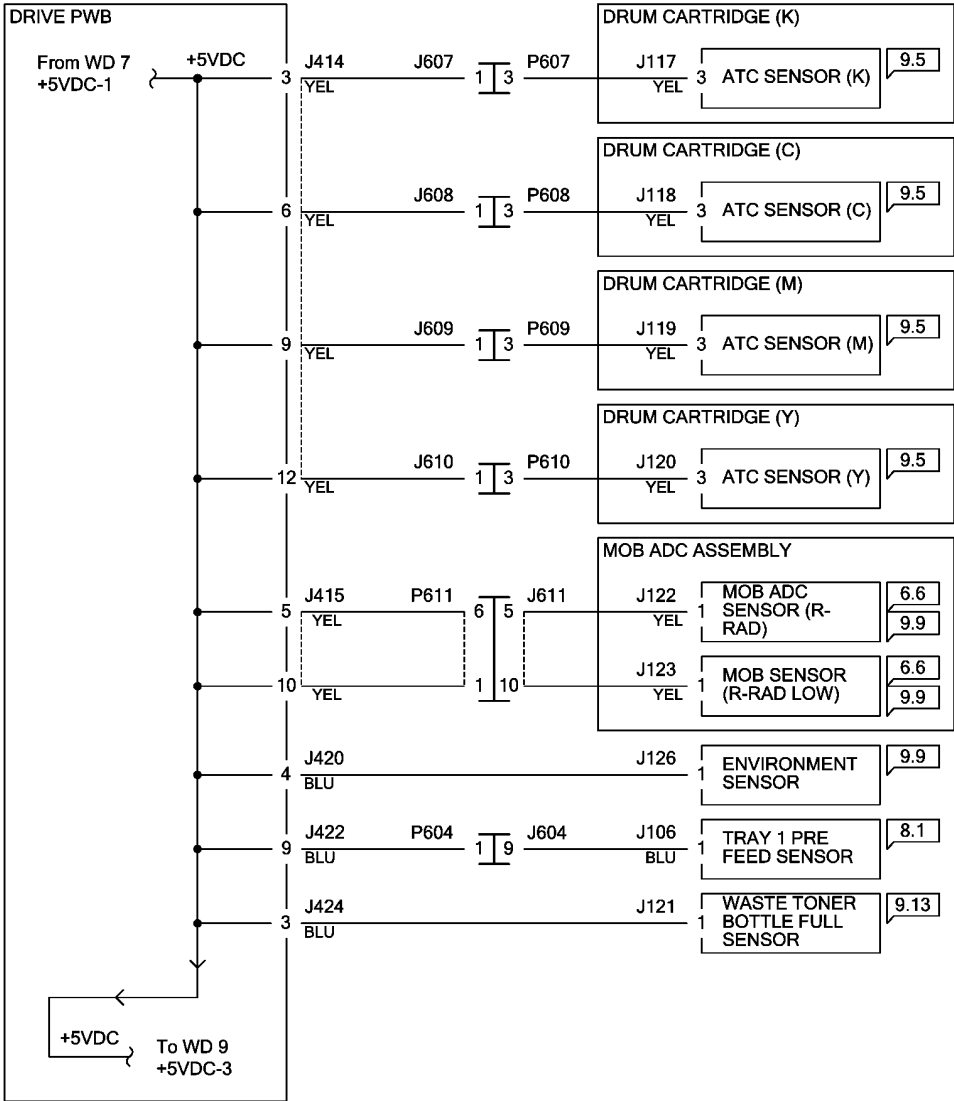
Wiring Diagram 7 IOT/IIT +5VDC (1 of 3)



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Figure 7 Wiring diagram 7

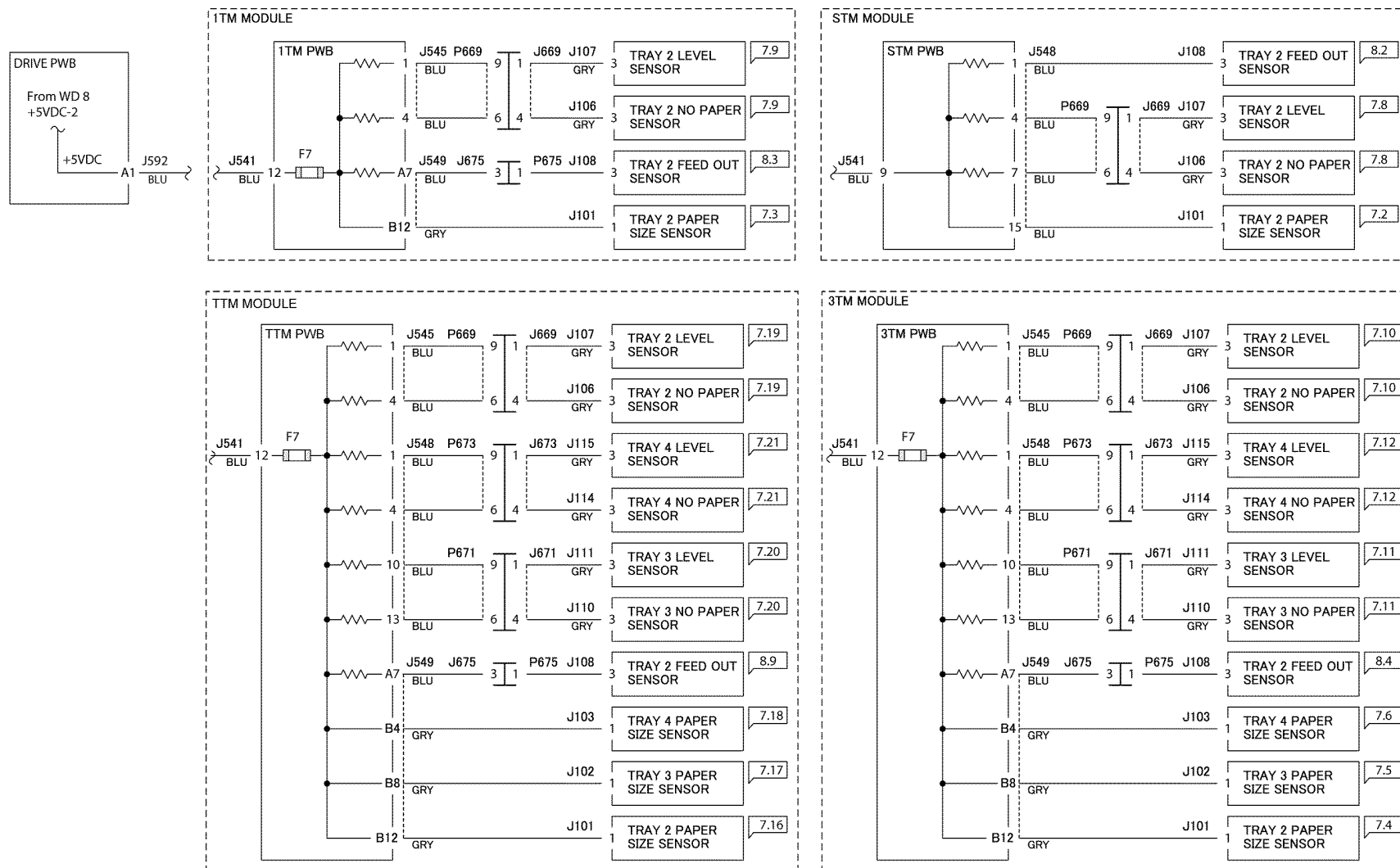
Wiring Diagram 8 IOT/IIT +5VDC (2 of 3)



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Figure 8 Wiring diagram 8

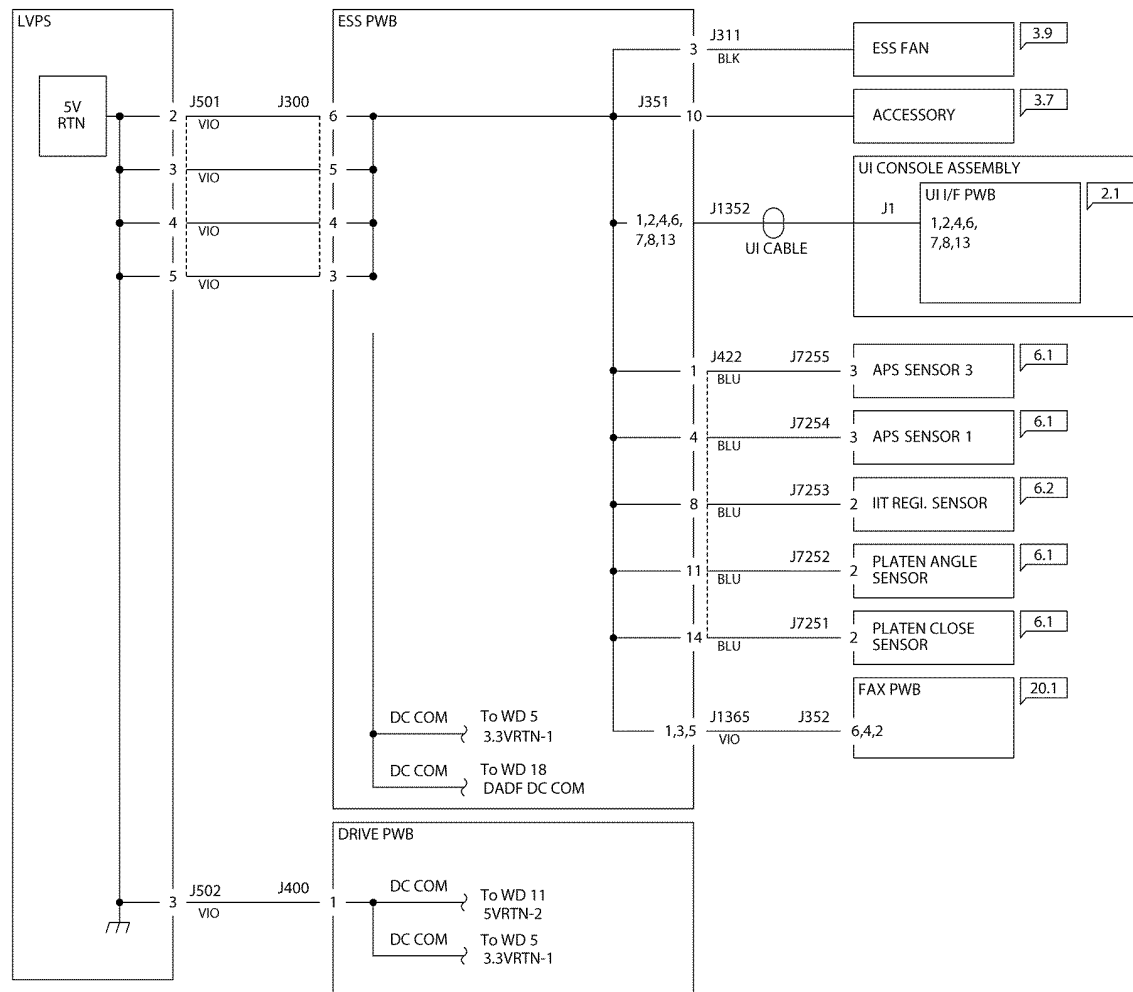
Wiring Diagram 9 IOT/IIT +5VDC (3 of 3)



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Figure 9 Wiring diagram 9

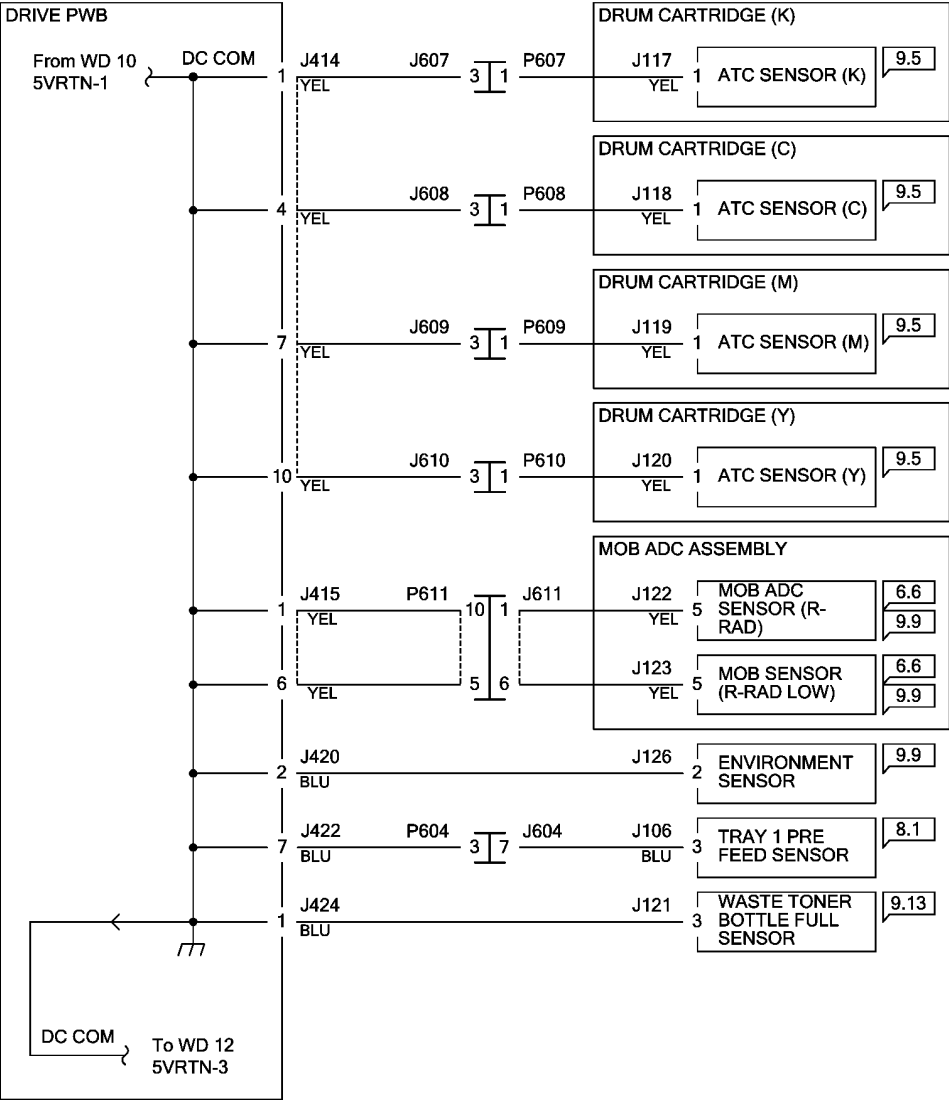
Wiring Diagram 10 IOT/IIT +5V RTN (1 of 3)



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Figure 10 Wiring diagram 10

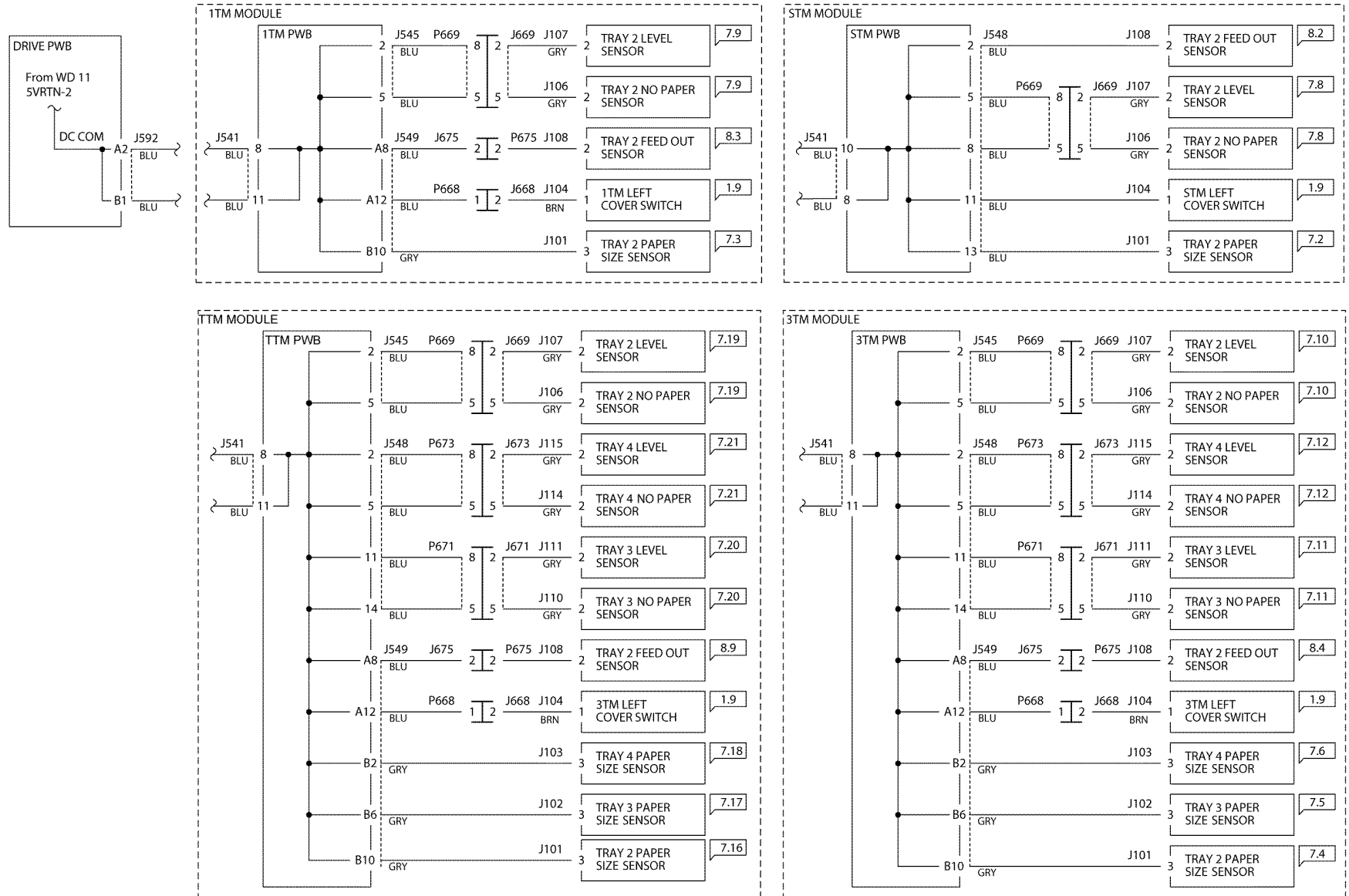
Wiring Diagram 11 IOT/IIT +5V RTN (2 of 3)



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Figure 11 Wiring diagram 11

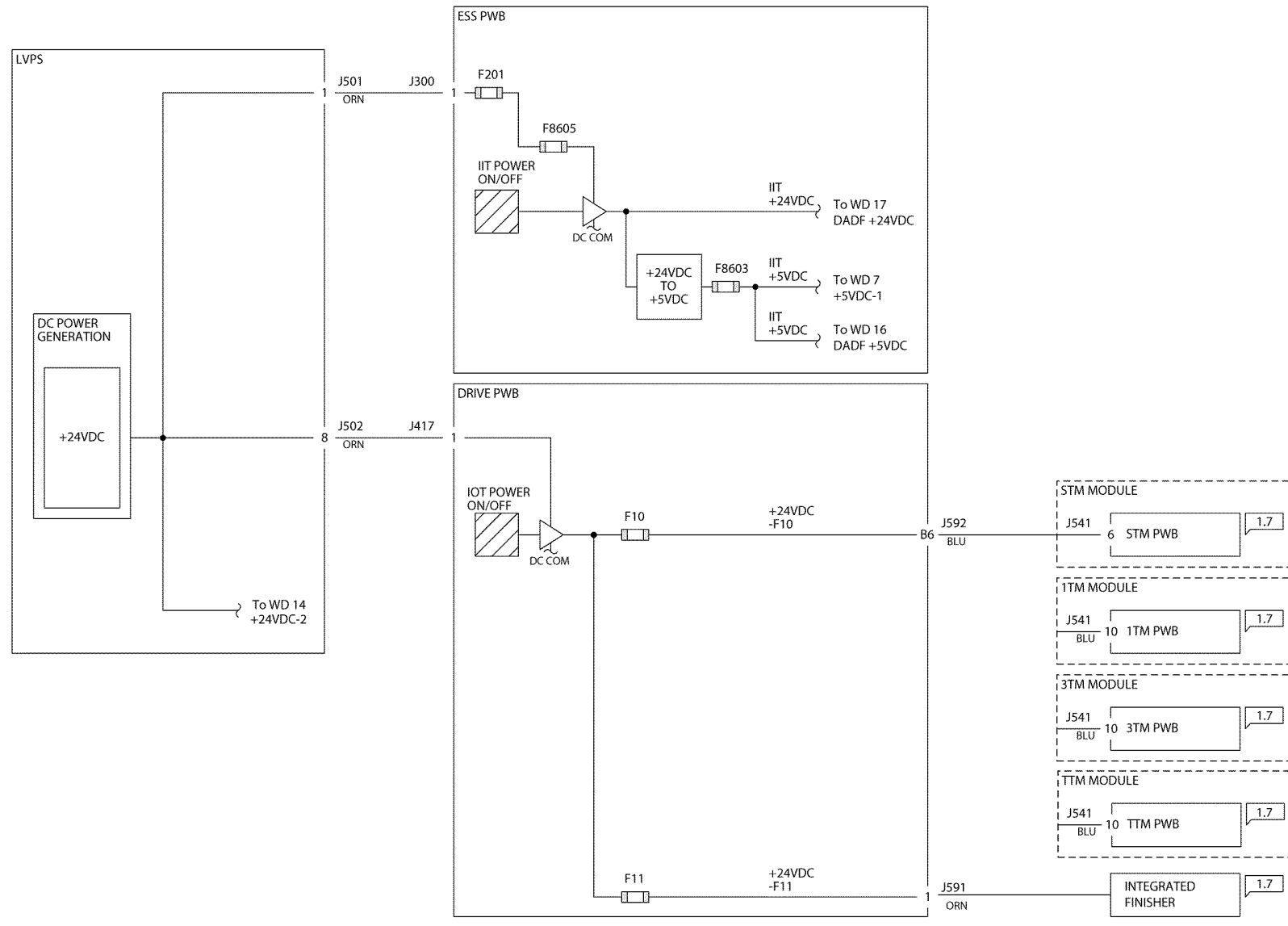
Wiring Diagram 12 IOT/IIT +5V RTN (3 of 3)



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Figure 12 Wiring diagram 12

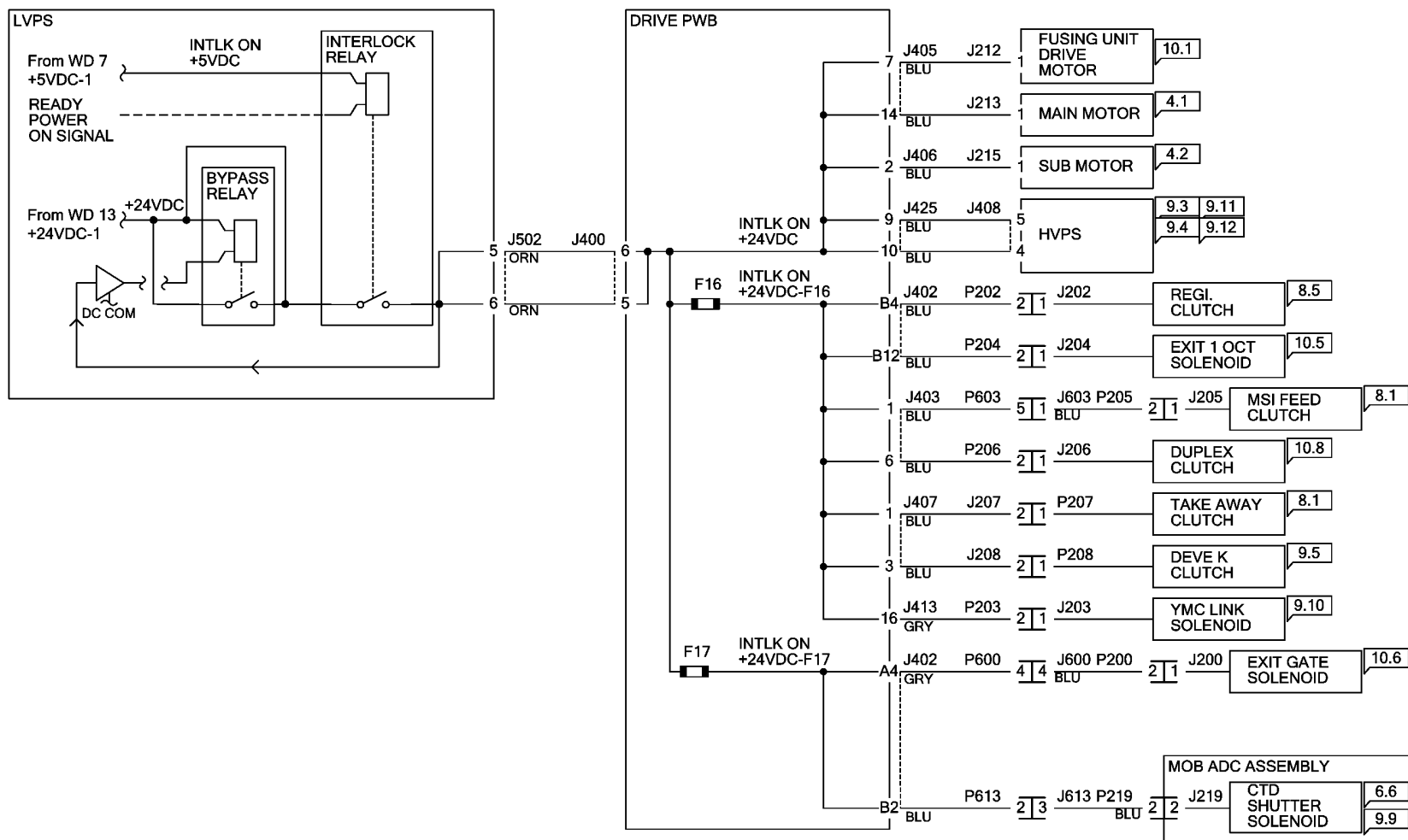
Wiring Diagram 13 IOT/IIT +24VDC (1 of 2)



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Figure 13 Wiring diagram 13

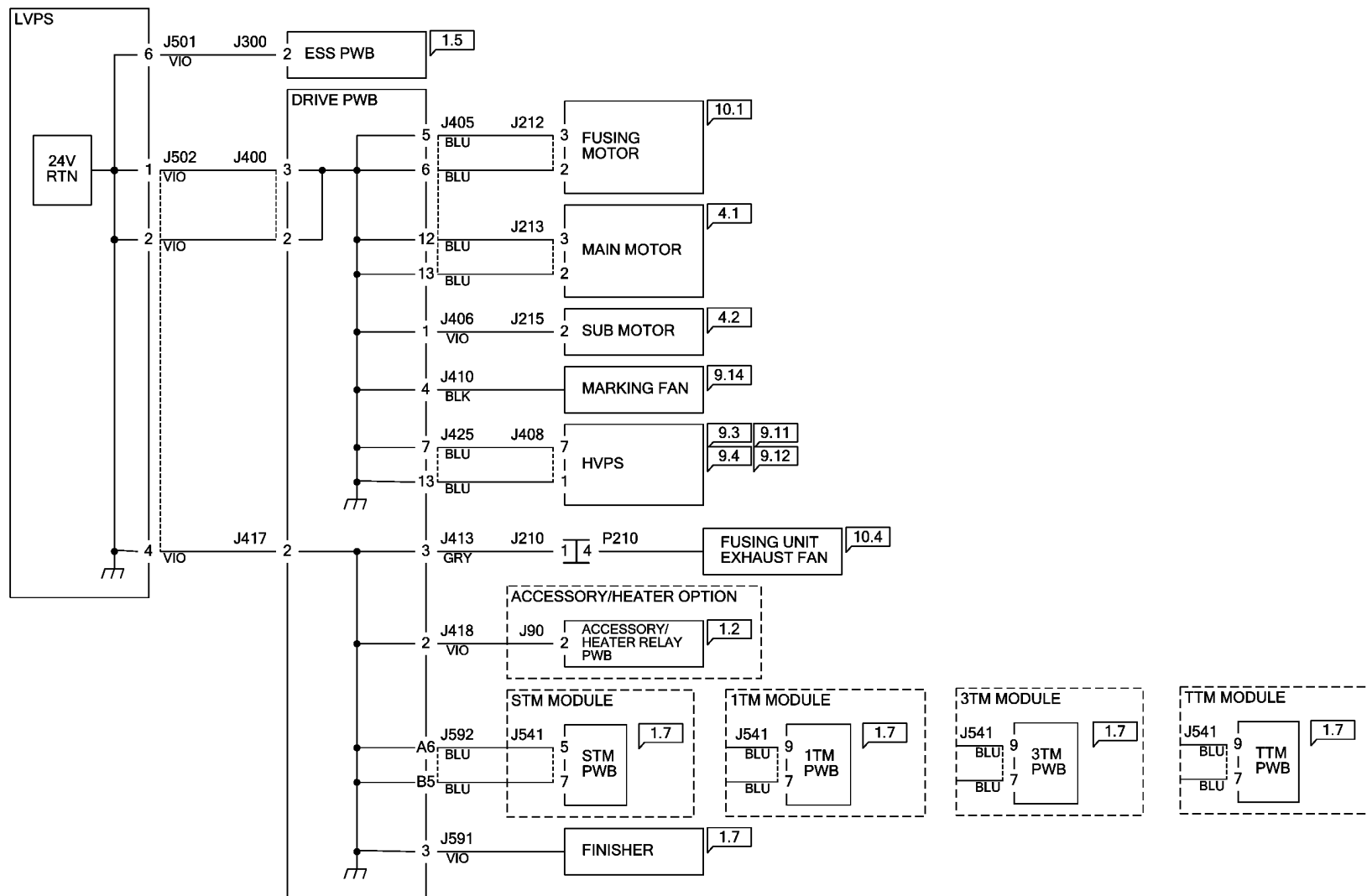
Wiring Diagram 14 IOT/IIT +24VDC (2 of 2)



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Figure 14 Wiring diagram 14

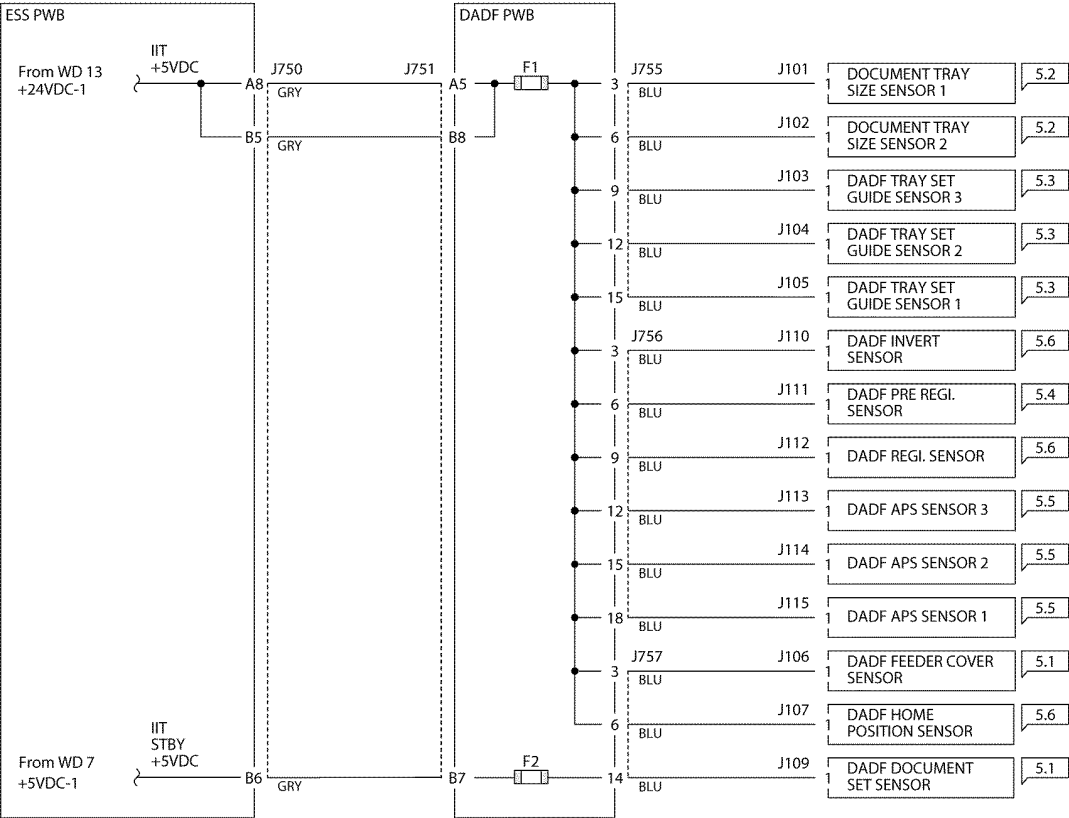
Wiring Diagram 15 IOT/IIT +24V RTN



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Figure 15 Wiring diagram 15

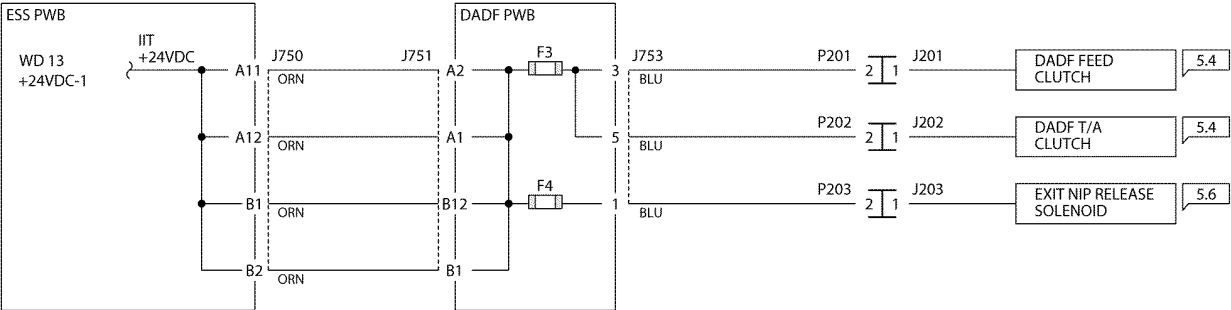
Wiring Diagram 16 DADF +5VDC



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Figure 16 Wiring diagram 16

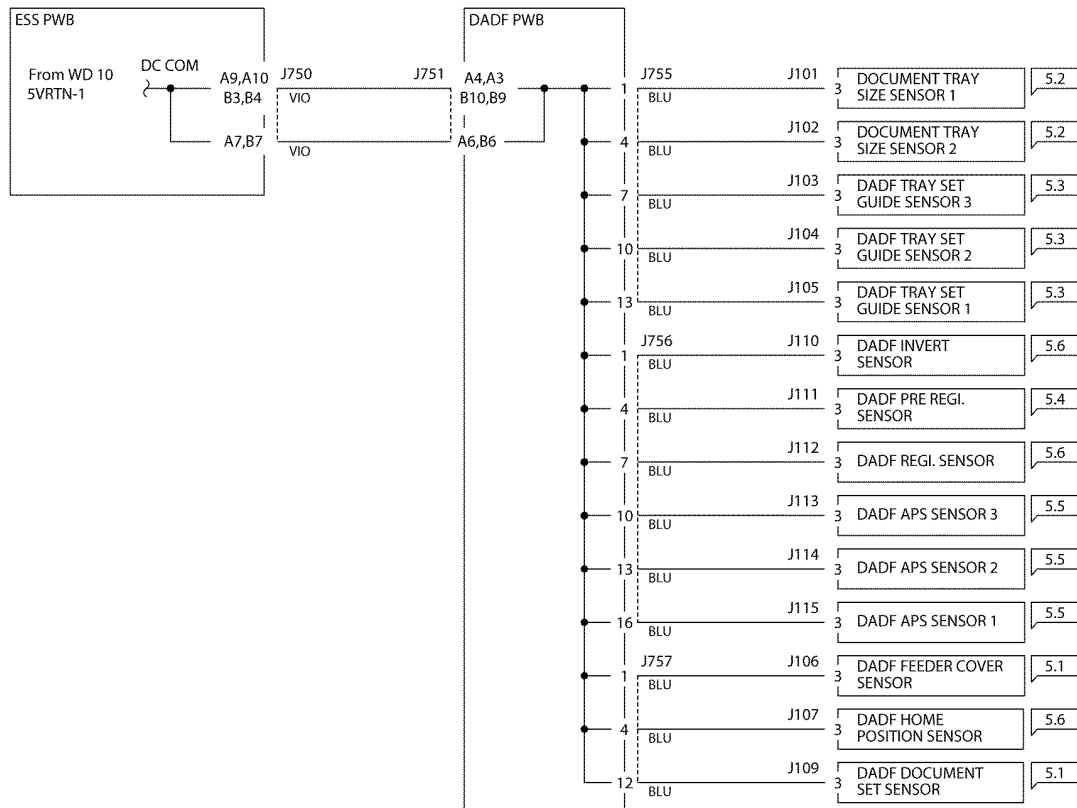
Wiring Diagram 17 DADF +24VDC



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Figure 17 Wiring diagram 17

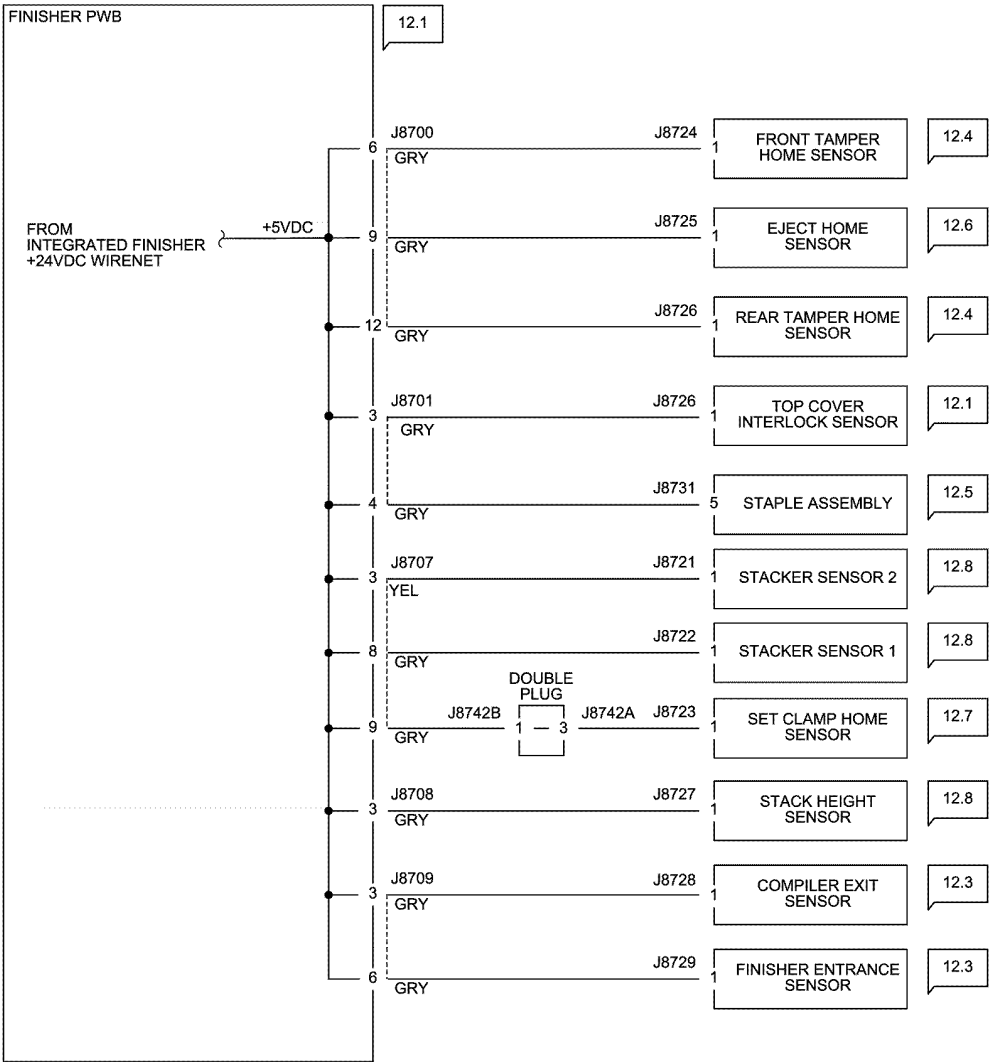
Wiring Diagram 18 DADF DC COM



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Figure 18 Wiring diagram 18

Wiring Diagram 19 Integrated Office Finisher +5VDC



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Figure 19 Wiring diagram 19

Wiring Diagram 20 Integrated Office Finisher +24VDC

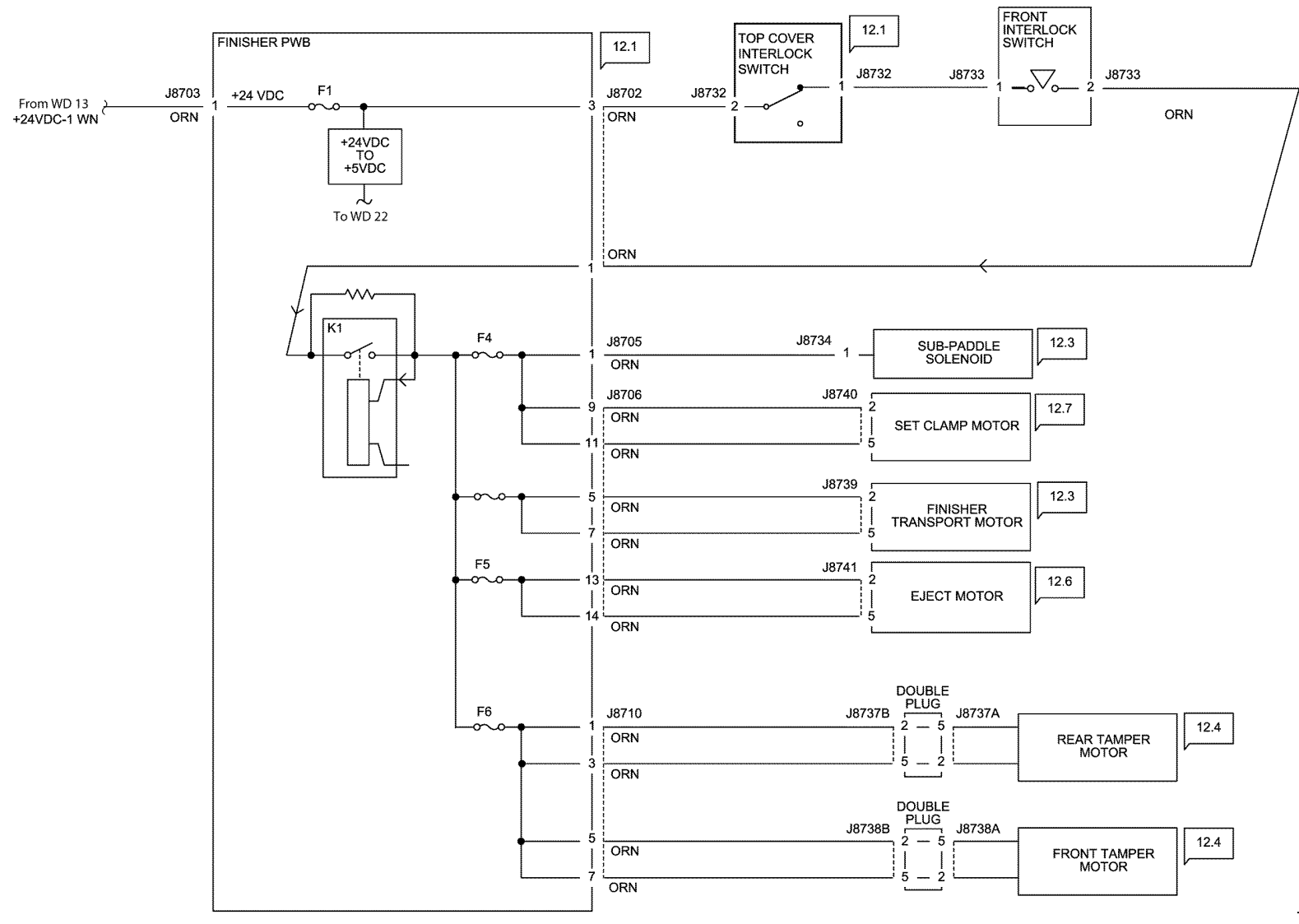
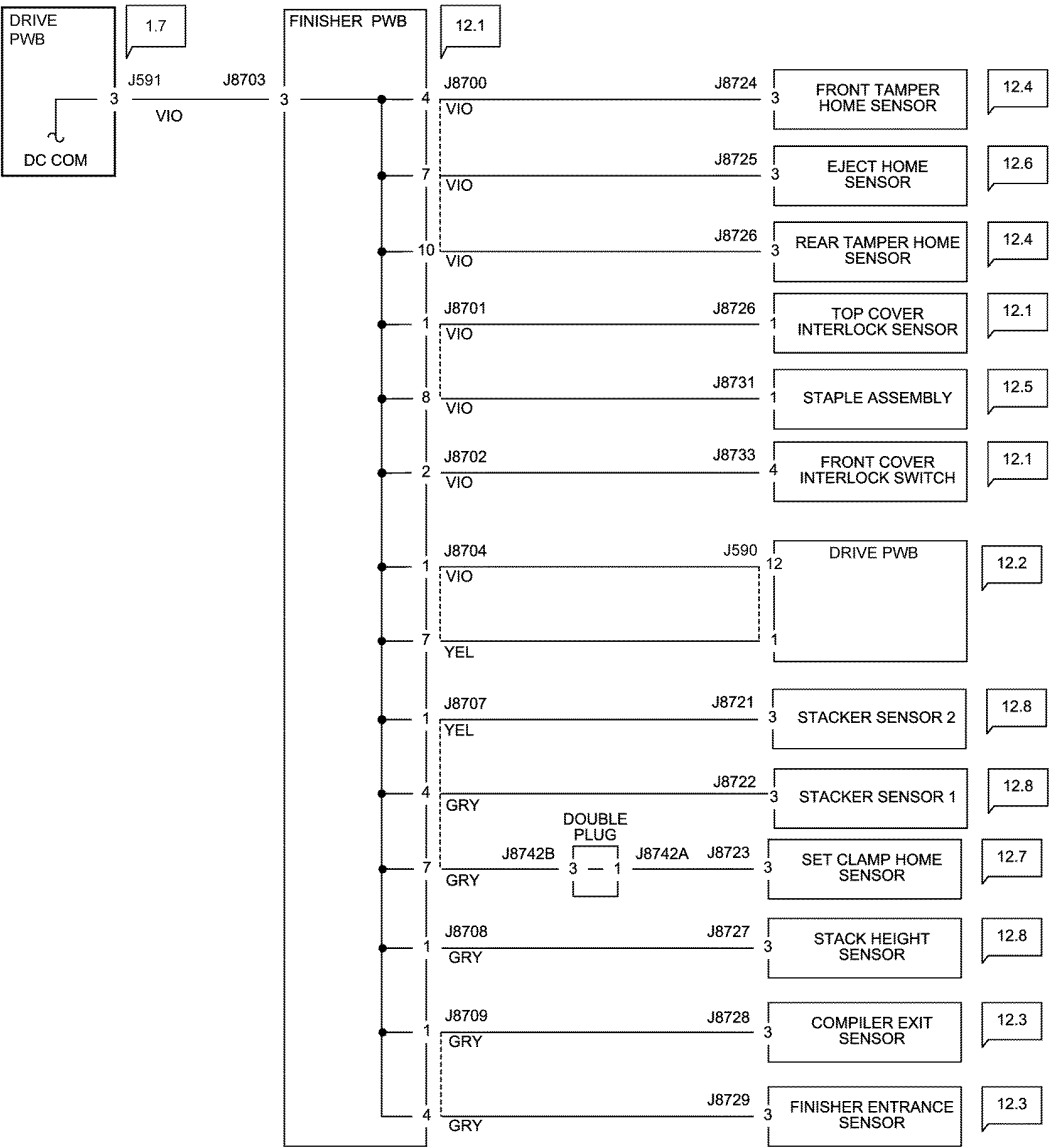


Figure 20 Wiring diagram 20

Wiring Diagram 21 Integrated Office Finisher DC RTN



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Figure 21 Wiring diagram 21

Wiring Diagram 22 Office Finisher LX +5VDC

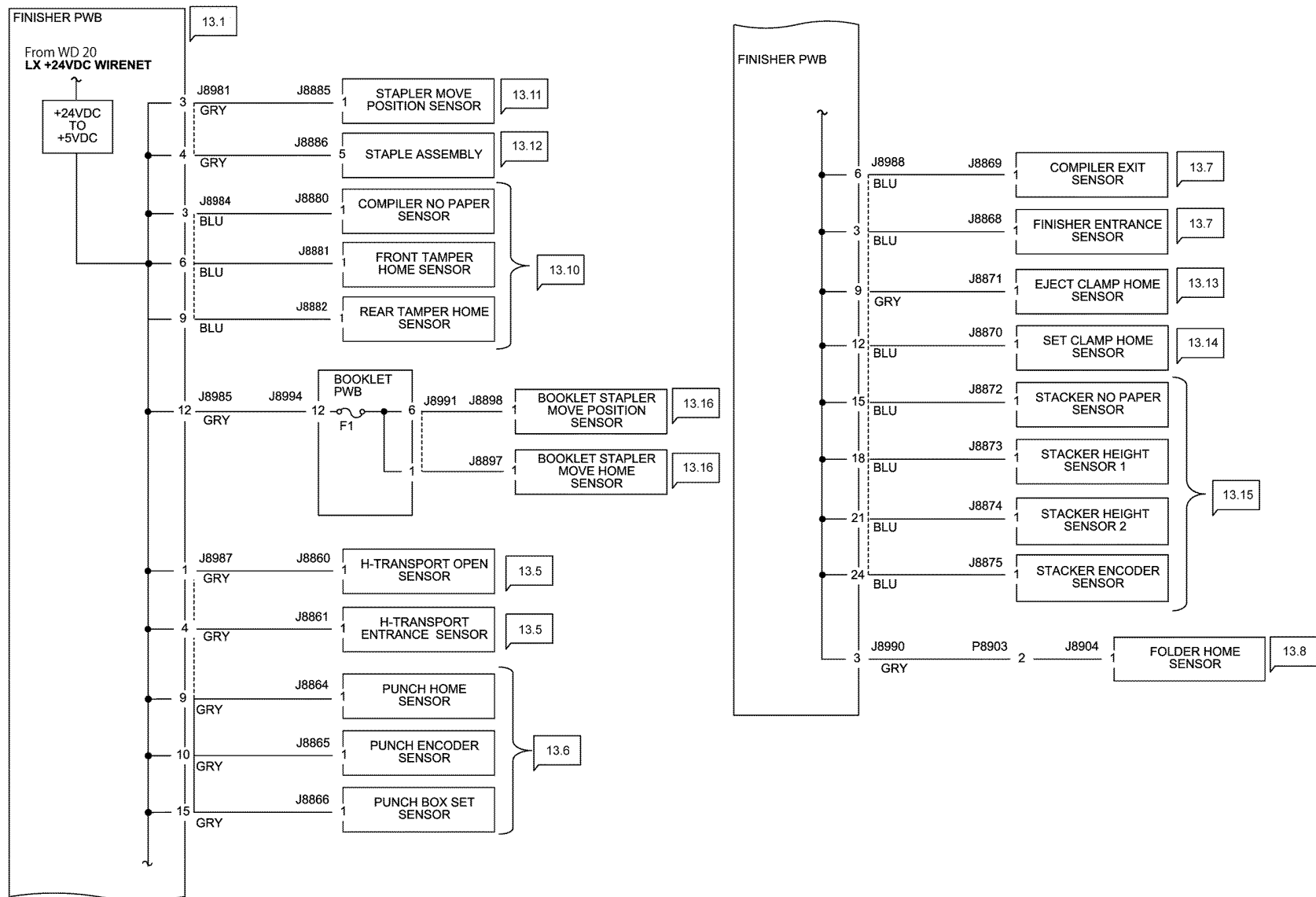
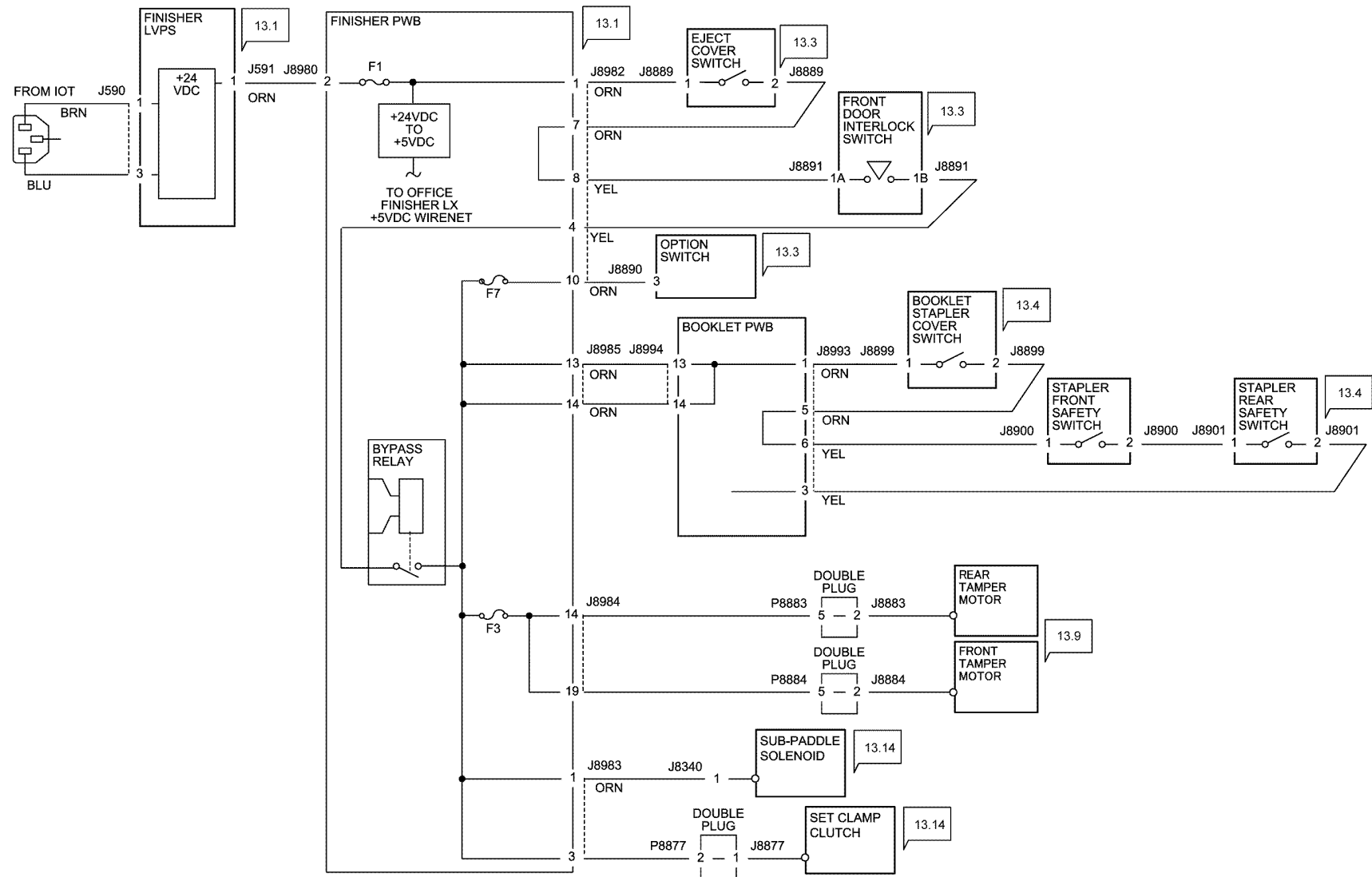


Figure 22 Wiring diagram 22

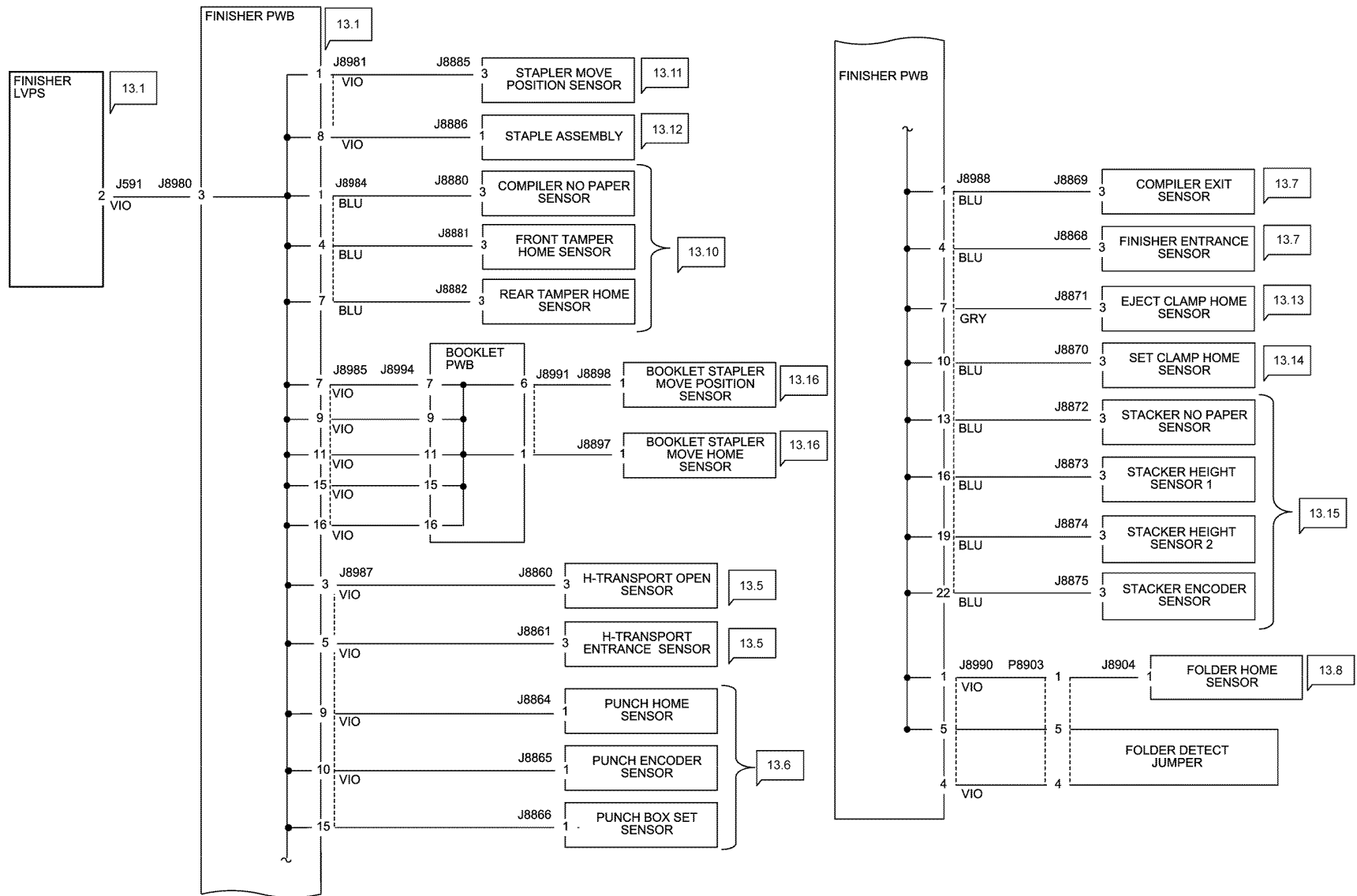
Wiring Diagram 23 Office Finisher LX +24VDC



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Figure 23 Wiring diagram 23

Wiring Diagram 24 Office Finisher LX DC RTN

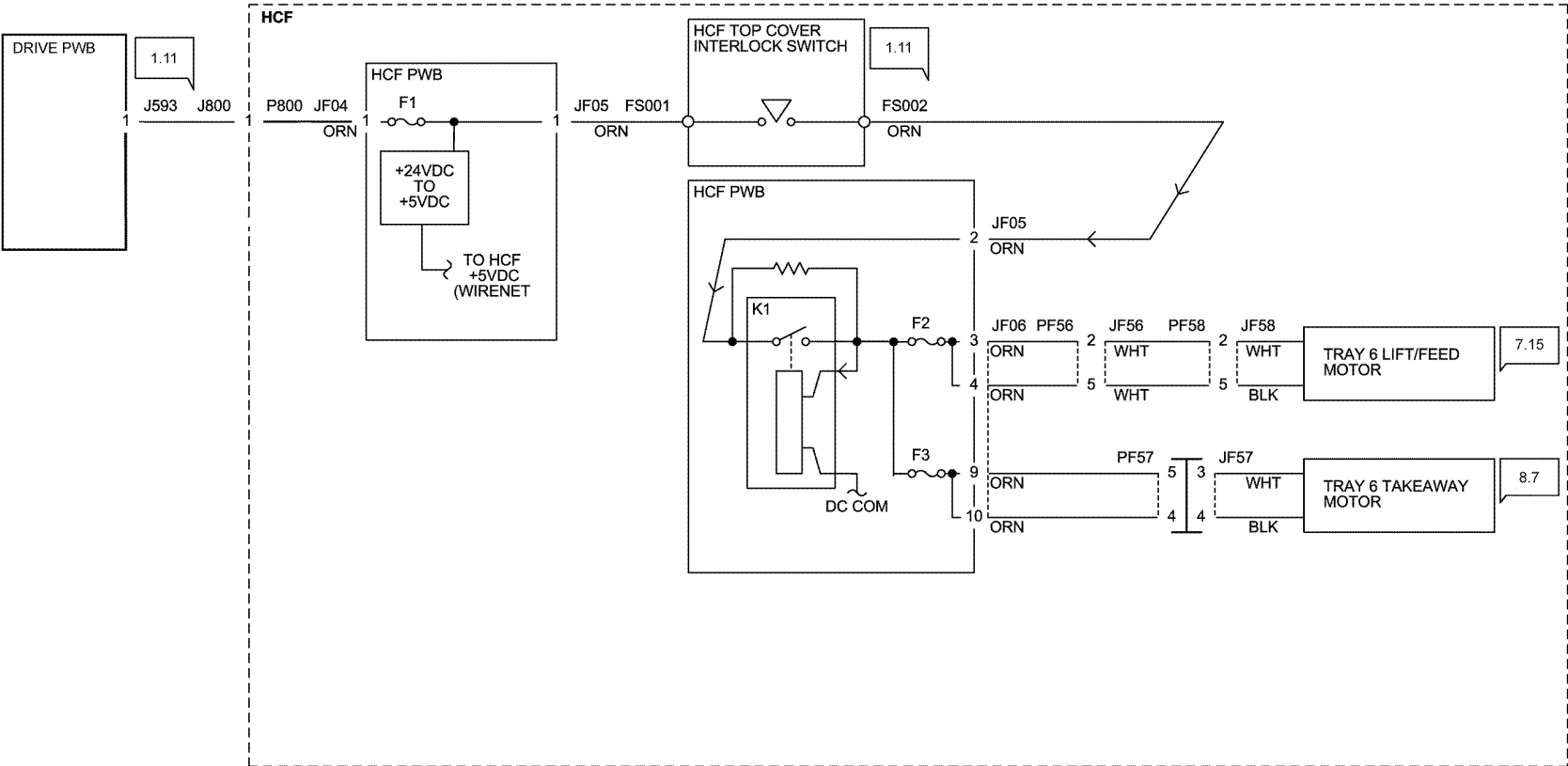


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Figure 24 Wiring diagram 24

Wiring Diagram 25 HCF +24VDC

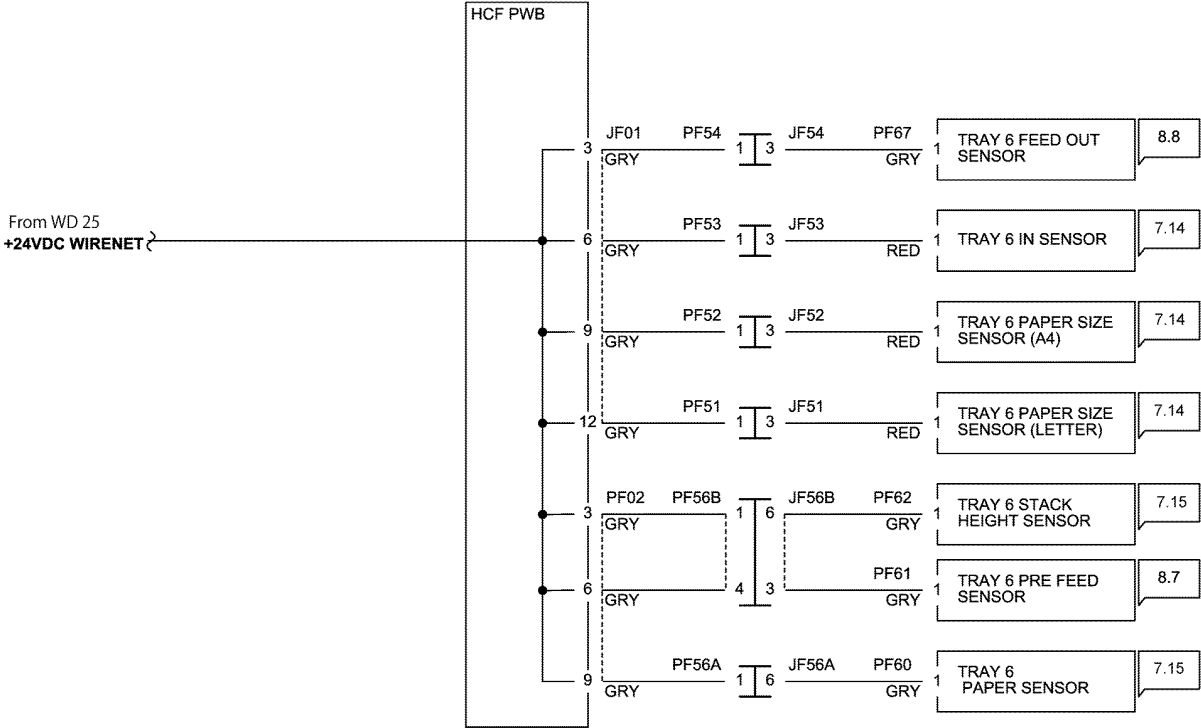
WD 25 HCF (1 OF 3)



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Figure 25 Wiring diagram 25

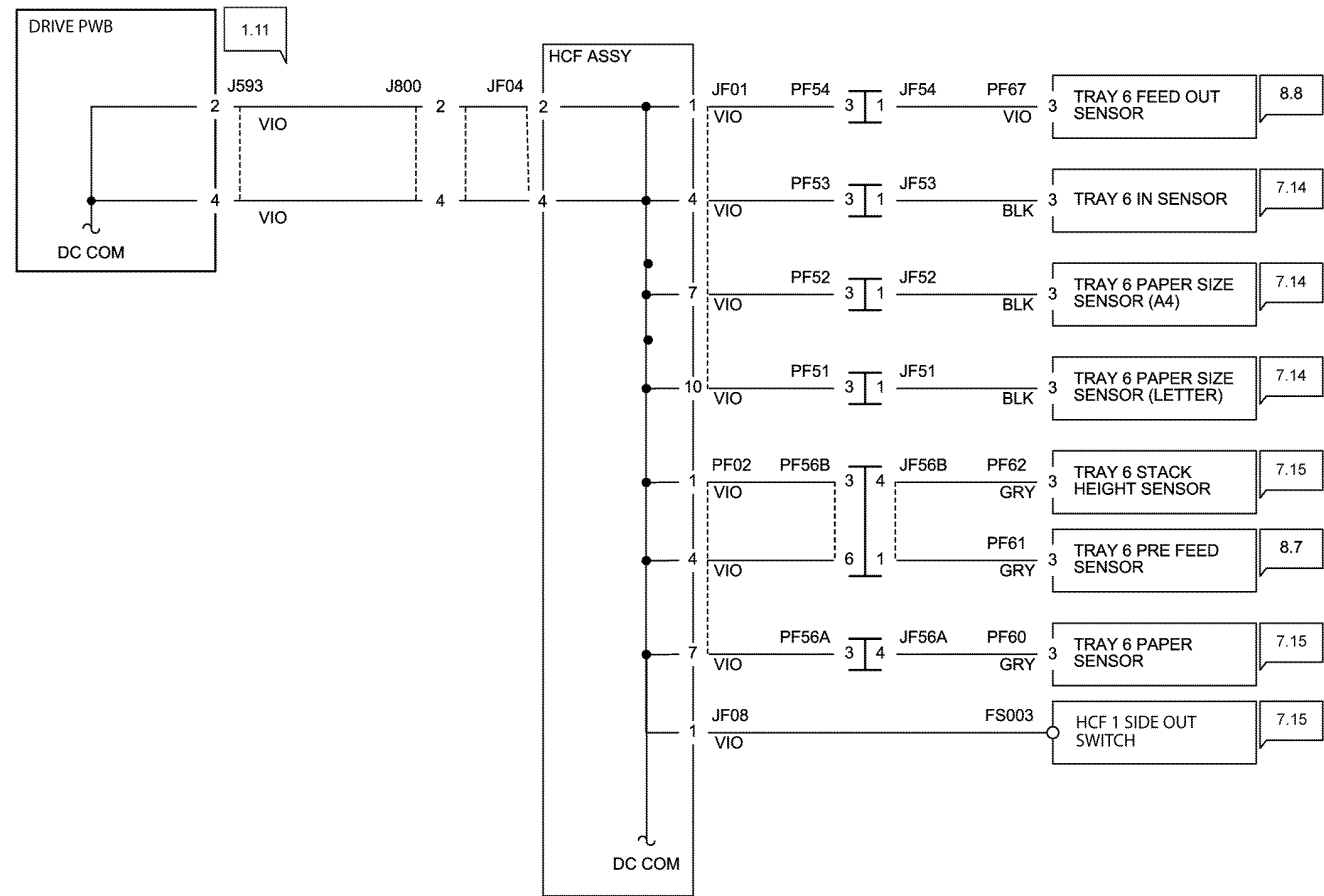
WD 26 HCF (2 OF 3)



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Figure 26 Wiring diagram 26

WD 27 HCF (3 OF 3)

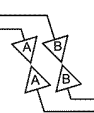


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Figure 27 Wiring diagram 27

Symbology

Refer to Figure 1.

Symbol	Description
	Refers to Notes that are usually on the same page.
	Refers to test data usually on the same page in case the voltage value shown on the BSD is different from the measured value.
PL 7.7	Refers to a component in the Parts List.
	Refers to an adjustment procedure.
	A variable resistor adjustable in the field.
	A signal test point.
	Identifies where the input comes from.
	Identifies where the output from the functions go.
	Signal lines are connected vertically.
	Signal lines connected horizontally.
	Signal line connected to a specific location in the same function.
	Signal line connected to a specific location in the same function.

Symbol	Description
	Signal line connected to a specific location in another sheet (shown at lower right of the BSD).
	Signal line connected to a specific location in another sheet (shown at lower right of the BSD).
	Power output in Chain 1.
	Frame ground.
	Twisted pair of wires.
	Signal runs from right to left.
	Feedback signal.
	Mechanical linkage to a part
	Mechanical drive signal showing signal direction.
	Paper feed direction.
	Heat, light or air signal showing signal direction.
	Control logic.

Symbol	Description
	Double plug connector.
	Drawer plug connector.
	Shorting plug connector.
	Fasten connector.
	Electrically conductive material such as a leaf spring or plate is used for connection.
	The part highlighted by the arrow has been modified.
	The part highlighted by the arrow has not been modified.
	The whole figure or framed illustration has been modified.
	The whole figure or framed illustration has not been modified.
	Direction of air flow.
	Switch that is also used as an interlock switch.
	Cheater type of interlock switch.
	Chip fuse.

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Figure 1 BSD symbology

Block Schematic Diagrams (BSDs)

Block Schematic Diagrams

Refer to the relevant BSD.

Chain 1

- [BSD 1.1.Main Power On \(1 of 2\)](#)
- [BSD 1.2 Main Power On \(2 of 2\)](#)
- [BSD 1.3 LVPS Control](#)
- [BSD 1.4 DC Power Generation \(1 of 2\)](#)
- [BSD 1.5 DC Power Generation \(2 of 2\)](#)
- [BSD 1.6 IIT DC Power Distribution](#)
- [BSD 1.7 Option DC Power Distribution](#)
- [BSD 1.8 Power Interlock Switching \(1 of 3\)](#)
- [BSD 1.9 Power Interlock Switching \(2 of 3\)](#)
- [BSD 1.10 Power Interlock Switching \(3 of 3\)](#)
- [BSD 1.11 DC Power Distribution - HCF](#)

Chain 2

- [BSD 2.1 Control Panel \(C7030F\)](#)
- [BSD 2.2 Control Panel \(C7000\)](#)

Chain 3

- [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)
- [BSD 3.2 PWB Communications \(ESS PWB/Drive PWB to STM\)](#)
- [BSD 3.3 PWB Communications \(ESS PWB/Drive PWB to 1TM/3TM/TTM\)](#)
- [BSD 3.4 PWB Communications \(ESS PWB to UI\)](#)
- [BSD 3.5 PWB Communications \(ESS PWB to DADF\)](#)
- [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)
- [BSD 3.7 Accessory](#)
- [BSD 3.8 Electric Billing](#)
- [BSD 3.9 ESS](#)
- [BSD 3.10 ESS Status LED \(1 of 5\)](#)
- [BSD 3.11 ESS Status LED \(2 of 5\)](#)
- [BSD 3.12 ESS Status LED \(3 of 5\)](#)
- [BSD 3.13 ESS Status LED \(4 of 5\)](#)
- [BSD 3.14 ESS Status LED \(5 of 5\)](#)
- [BSD 3.15 PWB Communications \(ESS to HCF\)](#)

Chain 4

- [BSD 4.1 Main Drive Control](#)
- [BSD 4.2 Sub Drive Control](#)

Chain 5

- [BSD 5.1 DADF Interlock and Document Setting](#)
- [BSD 5.2 DADF Document Size Sensing \(1 of 2\)](#)
- [BSD 5.3 DADF Document Size Sensing \(2 of 2\)](#)
- [BSD 5.4 Document Feeding \(1 of 2\)](#)

- [BSD 5.5 Document Feeding \(2 of 2\)](#)
- [BSD 5.6 Document Scan, Invert and Exit Transportation](#)
- [BSD 5.7 Document Path](#)
- [BSD 5.8 Document Transmission](#)

Chain 6

- [BSD 6.1 Platen Document Sensing](#)
- [BSD 6.2 Carriage Control](#)
- [BSD 6.3 Document Illumination and Image Input](#)
- [BSD 6.4 LED Control \(Y, M\)](#)
- [BSD 6.5 LED Control \(C, K\)](#)
- [BSD 6.6 Color Registration Control](#)

Chain 7

- [BSD 7.1 Tray 1 Paper Size Sensing](#)
- [BSD 7.2 Tray 2 Paper Size Sensing \(STM\)](#)
- [BSD 7.3 Tray 2 Paper Size Sensing \(1TM\)](#)
- [BSD 7.4 Tray 2 Paper Size Sensing \(3TM\)](#)
- [BSD 7.5 Tray 3 Paper Size Sensing \(3TM\)](#)
- [BSD 7.6 Tray 4 Paper Size Sensing \(3TM\)](#)
- [BSD 7.7 Tray 1 Paper Stacking](#)
- [BSD 7.8 Tray 2 Paper Stacking \(STM\)](#)
- [BSD 7.9 Tray 2 Paper Stacking \(1TM\)](#)
- [BSD 7.10 Tray 2 Paper Stacking \(3TM\)](#)
- [BSD 7.11 Tray 3 Paper Stacking \(3TM\)](#)
- [BSD 7.12 Tray 4 Paper Stacking \(3TM\)](#)
- [BSD 7.13 Bypass Tray Paper Sensing](#)
- [BSD 7.14 HCF Paper Size Sensing and Tray Set](#)
- [BSD 7.15 HCF Paper Stacking](#)
- [BSD 7.16 Tray 2 Paper Size Sensing \(TTM\)](#)
- [BSD 7.17 Tray 3 Paper Size Sensing \(TTM\)](#)
- [BSD 7.18 Tray 4 Paper Size Sensing \(TTM\)](#)
- [BSD 7.19 Tray 2 Paper Stacking \(TTM\)](#)
- [BSD 7.20 Tray 3 Paper Stacking \(TTM\)](#)
- [BSD 7.21 Tray 4 Paper Stacking \(TTM\)](#)

Chain 8

- [BSD 8.1 Tray 1 and Bypass Tray Paper Transportation](#)
- [BSD 8.2 Tray Module Paper Transportation \(STM\)](#)
- [BSD 8.3 Tray Module Paper Transportation \(1TM\)](#)
- [BSD 8.4 Tray Module Paper Transportation \(3TM\)](#)
- [BSD 8.5 Registration](#)
- [BSD 8.6 Paper Path](#)
- [BSD 8.7 HCF Paper Feeding](#)
- [BSD 8.8 HCF Paper Transportation](#)
- [BSD 8.9 Tray Module Paper Transportation \(TTM\) \(1 of 2\)](#)

- [BSD 8.10 Tray Module Paper Transportation \(TTM\) \(2 of 2\)](#)

Chain 9

- [BSD 9.1 Xero Life Control \(Y, M\)](#)
- [BSD 9.2 Xero Life Control \(C, K\)](#)
- [BSD 9.3 Charging and Exposure](#)
- [BSD 9.4 Development \(1 of 2\)](#)
- [BSD 9.5 Development \(2 of 2\)](#)
- [BSD 9.6 Toner Cartridge Life Control \(Y, M\)](#)
- [BSD 9.7 Toner Cartridge Life Control \(C, K\)](#)
- [BSD 9.8 Toner Dispense Control](#)
- [BSD 9.9 ADC and Environment Sensing](#)
- [BSD 9.10 1st BTR Contact Retract Control](#)
- [BSD 9.11 Image Transfer to IBT](#)
- [BSD 9.12 Image Transfer to Paper](#)
- [BSD 9.13 Waste Toner Disposal](#)
- [BSD 9.14 Marking Fan Control](#)

Chain 10

- [BSD 10.1 Fusing Unit Drive Control](#)
- [BSD 10.2 Fusing Heat Control \(1 of 2\)](#)
- [BSD 10.3 Fusing Heat Control \(2 of 2\)](#)
- [BSD 10.4 Fusing](#)
- [BSD 10.5 Fused Paper Exit 1 OCT Control](#)
- [BSD 10.6 Fused Paper Exit 2](#)
- [BSD 10.7 Duplex Transport](#)

Chain 12

- [BSD 12.1 Integrated Office Finisher DC Power and Interlock Switching](#)
- [BSD 12.2 IOT to Integrated Office Finisher Communication](#)
- [BSD 12.3 Integrated Office Finisher Transportation](#)
- [BSD 12.4 Integrated Office Finisher Tamping and Offset](#)
- [BSD 12.5 Integrated Office Finisher Staple Control](#)
- [BSD 12.6 Integrated Office Finisher Set Eject \(1 of 2\)](#)
- [BSD 12.7 Integrated Office Finisher Set Eject \(2 of 2\)](#)
- [BSD 12.8 Integrated Office Finisher Stacker Tray Control](#)

Chain 13

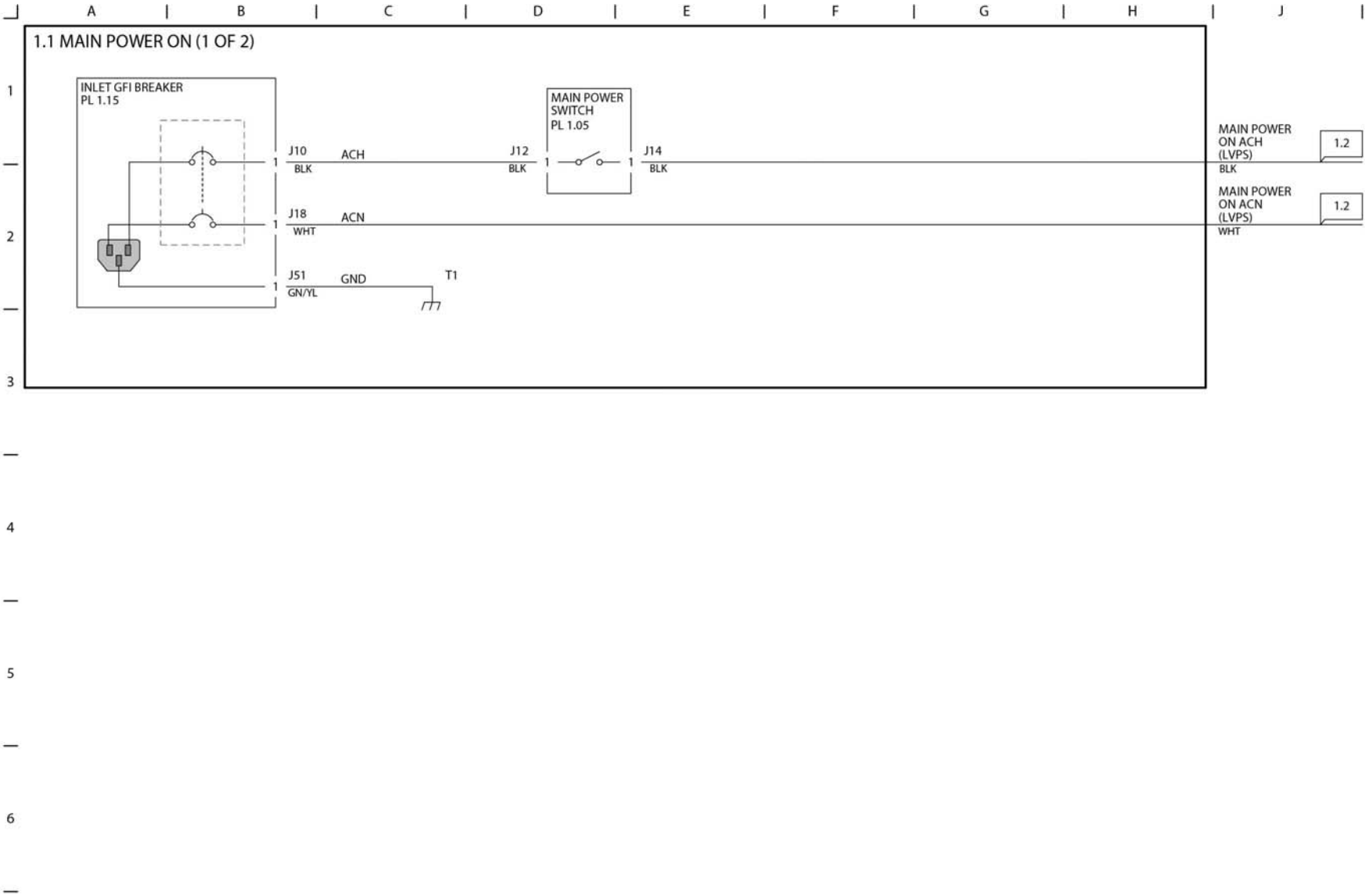
- [BSD 13.1 Office Finisher LX DC Power Generation](#)
- [BSD 13.2 Office Finisher LX DC Power Distribution](#)
- [BSD 13.3 Office Finisher LX Interlock Switching](#)
- [BSD 13.4 Office Finisher LX Booklet Interlock Switching](#)
- [BSD 13.5 Office Finisher LX Horizontal Transport](#)
- [BSD 13.6 Office Finisher LX Punch](#)
- [BSD 13.7 Office Finisher LX Transportation](#)
- [BSD 13.8 Office Finisher LX Folding](#)
- [BSD 13.9 Office Finisher LX Tamping and Offset \(1 of 2\)](#)

- [BSD 13.10 Office Finisher LX Tamping and Offset \(2 of 2\)](#)
- [BSD 13.11 Office Finisher LX Staple Positioning](#)
- [BSD 13.12 Office Finisher LX Staple Control](#)
- [BSD 13.13 Office Finisher LX Eject Control \(1 of 2\)](#)
- [BSD 13.14 Office Finisher LX Eject Control \(2 of 2\)](#)
- [BSD 13.15 Office Finisher LX Stacker Tray Control](#)
- [BSD 13.16 Office Finisher LX Booklet Staple Positioning](#)
- [BSD 13.17 Office Finisher LX Booklet Staple Control \(1 of 2 - Front\)](#)
- [BSD 13.18 Office Finisher LX Booklet Staple Control \(2 of 2 - Rear\)](#)

Chain 20

- [BSD 20.1 Fax](#)

BSD 1.1 Main Power On (1 of 2)



TC-1-0057-A

Figure 1 BSD 1.1

BSD 1.2 Main Power On (2 of 2)

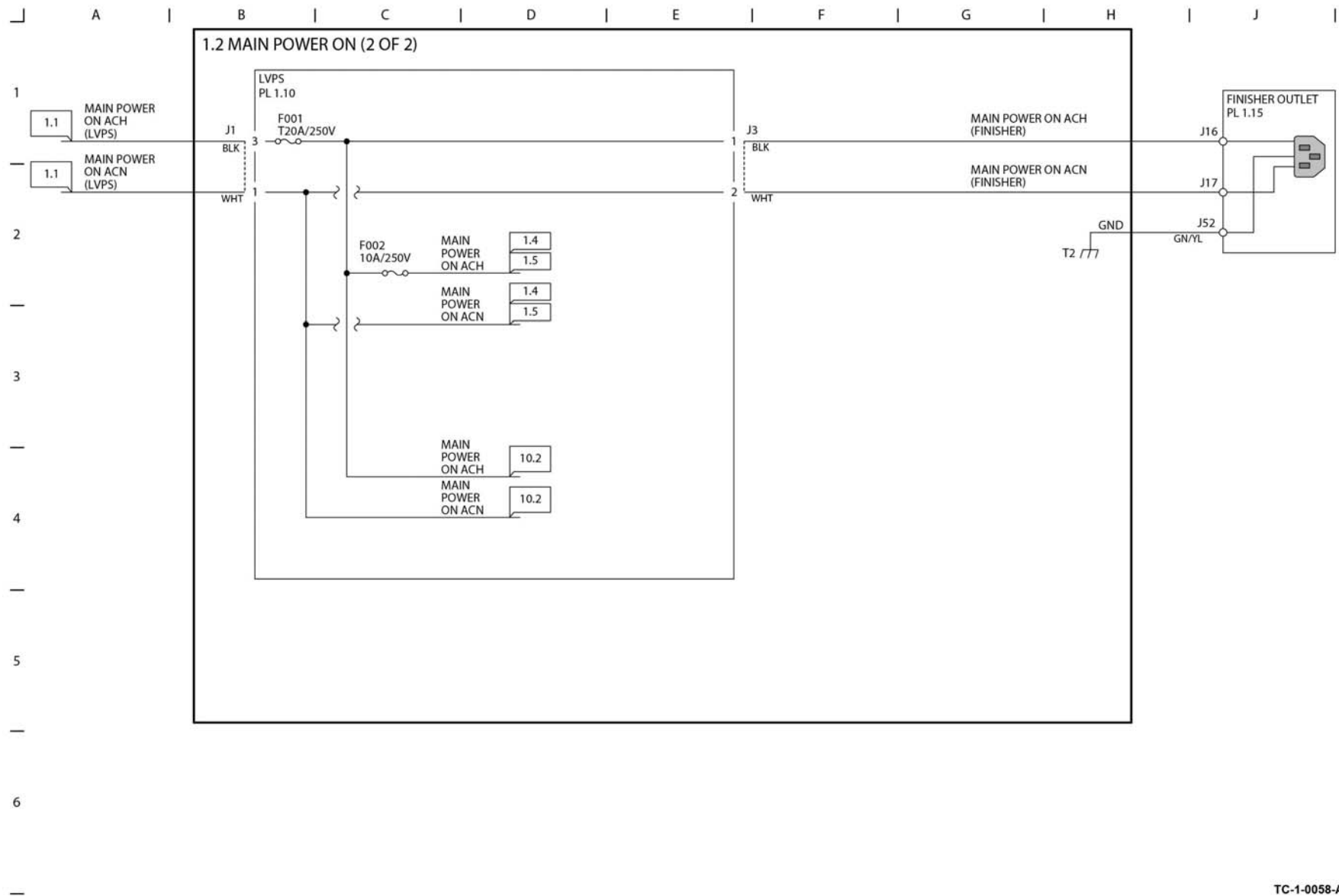
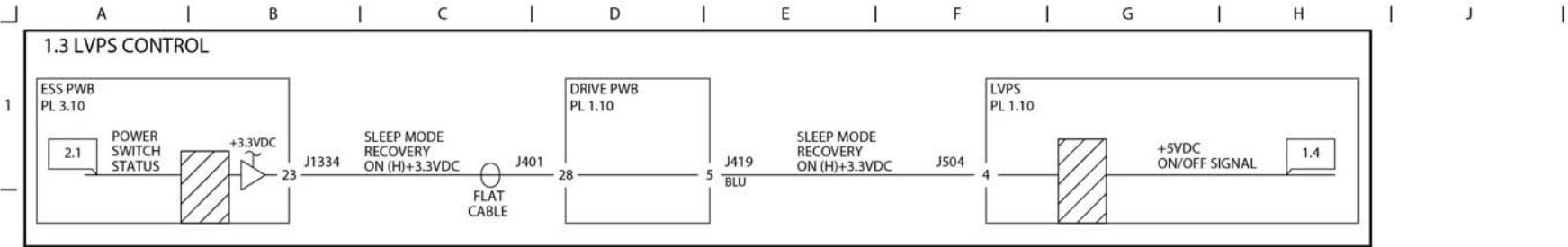
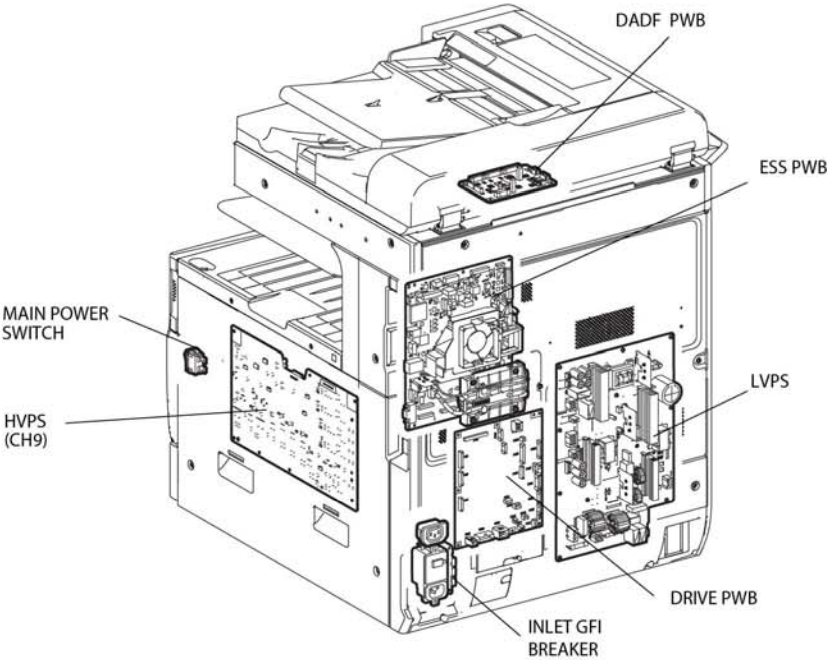


Figure 2 BSD 1.2

BSD 1.3 LVPS Control



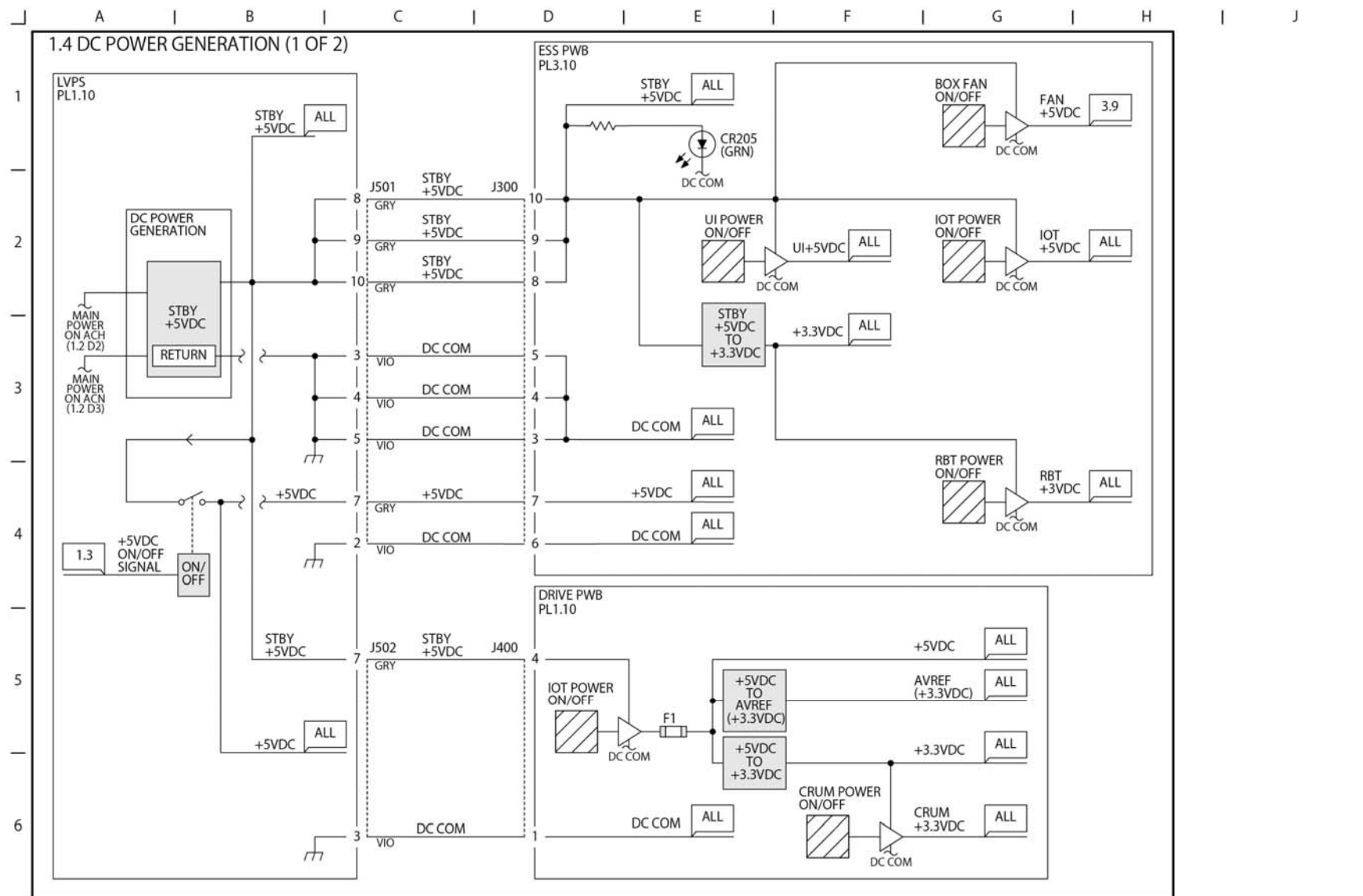
ELECTRICAL COMPONENTS



TC-1-0059-A

Figure 3 BSD 1.3

BSD 1.4 DC Power Generation (1 of 2)



TC-1-0060-A

Figure 4 BSD 1.4

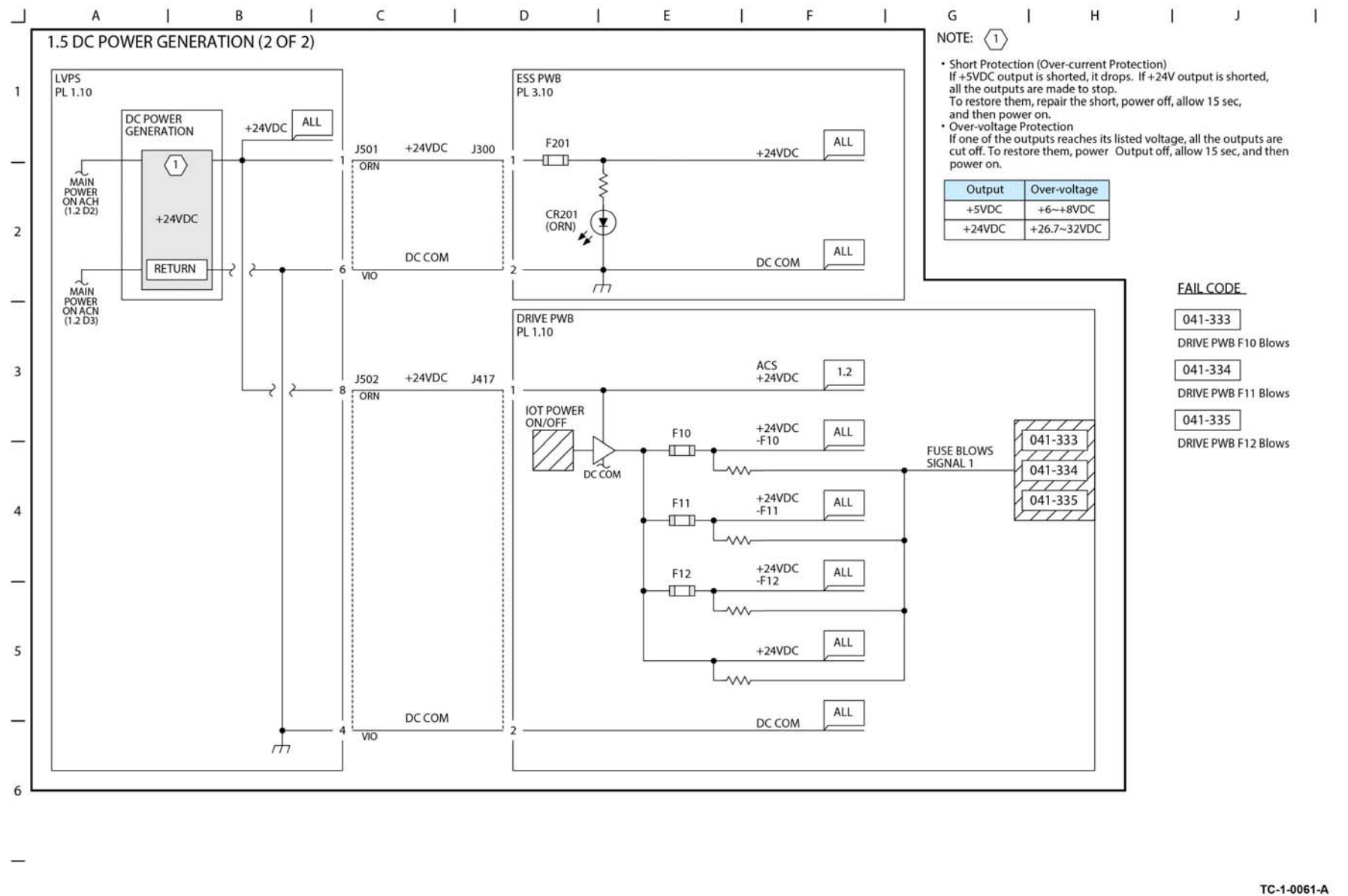
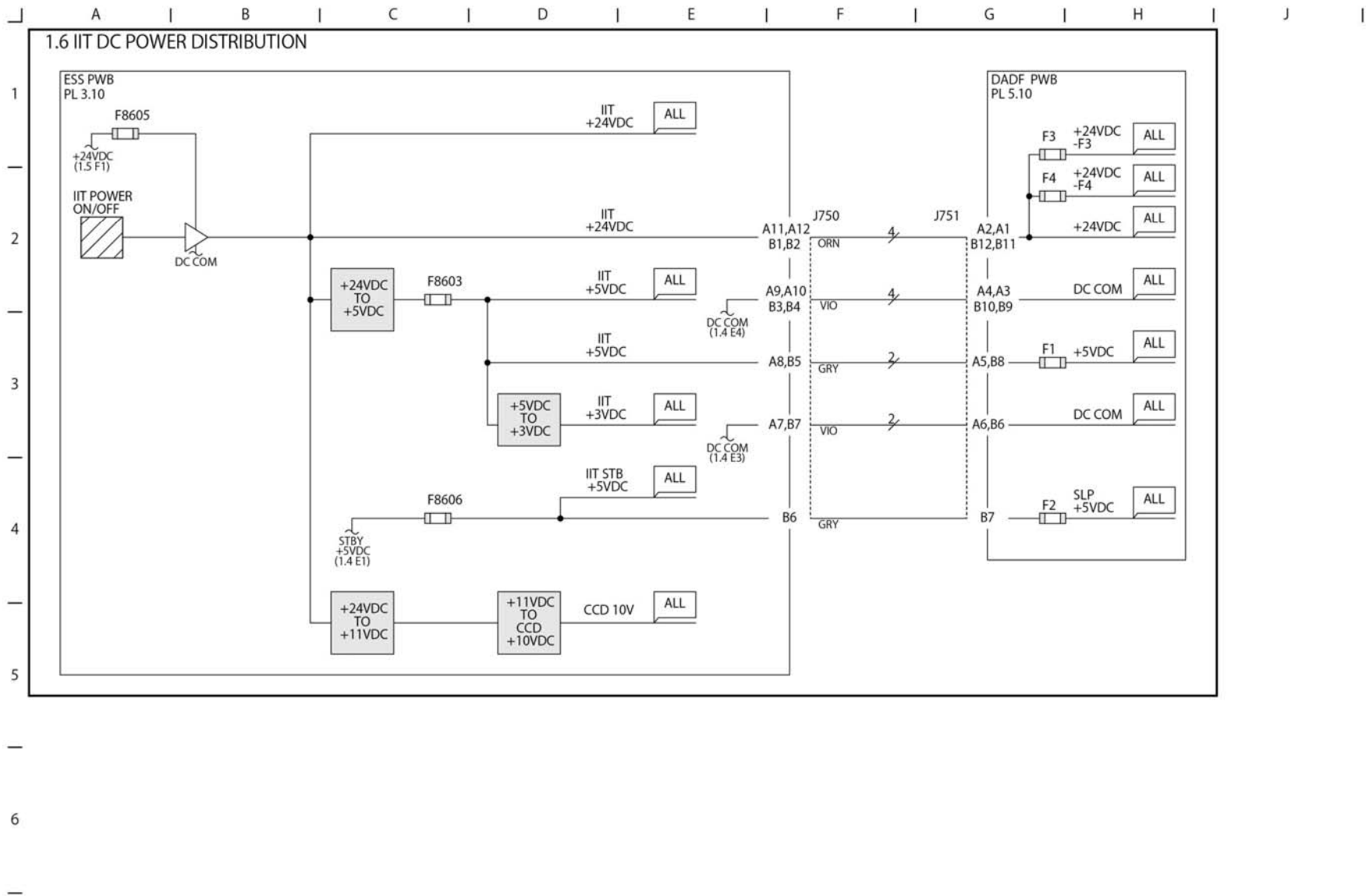


Figure 5 BSD 1.5

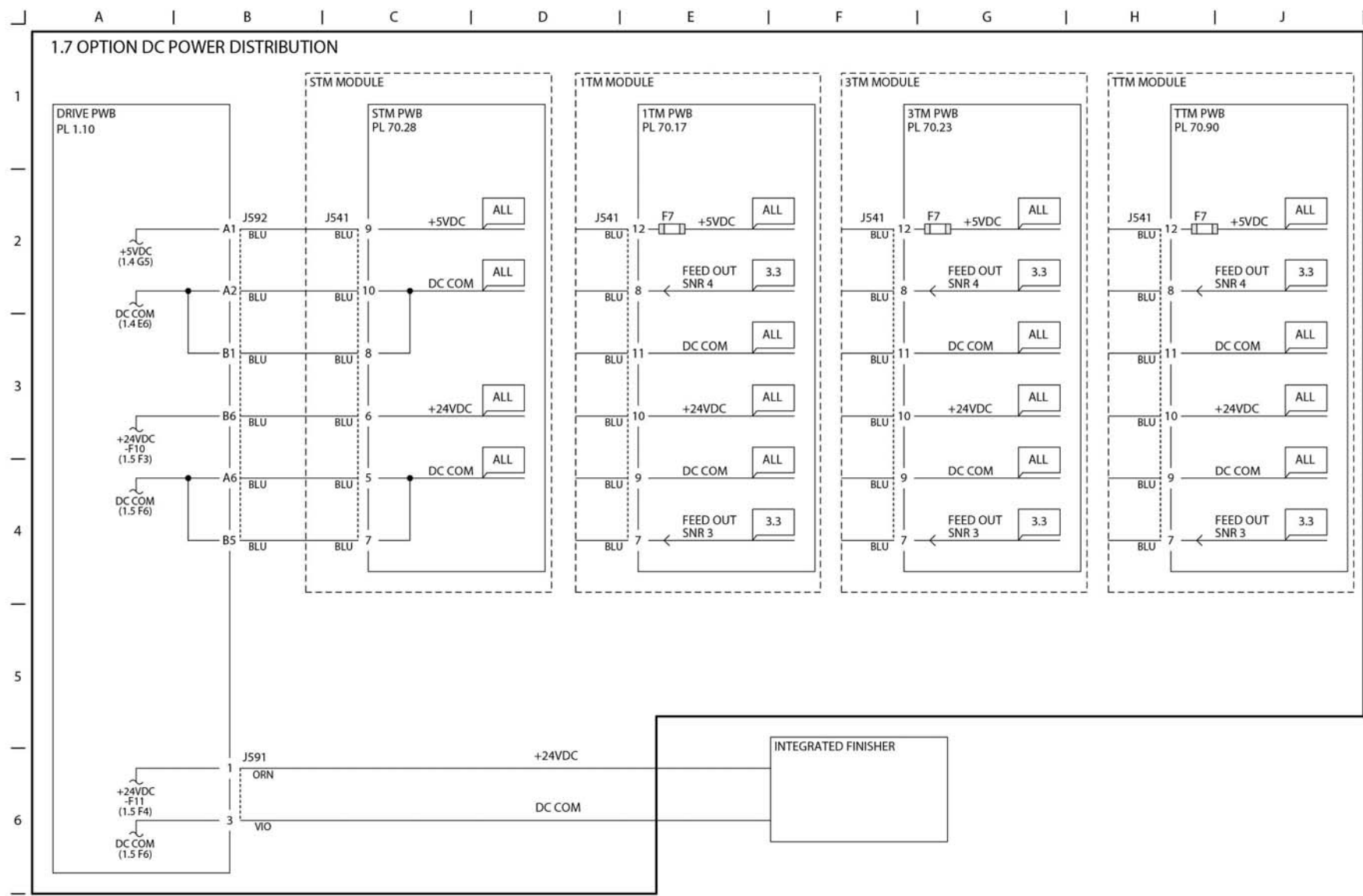
BSD 1.6 IIT DC Power Distribution



TC-1-0062-A

Figure 6 BSD 1.6

BSD 1.7 Option DC Power Distribution



TC-1-0063-A

Figure 7 BSD 1.7

BSD 1.8 Power Interlock Switching (1 of 3)

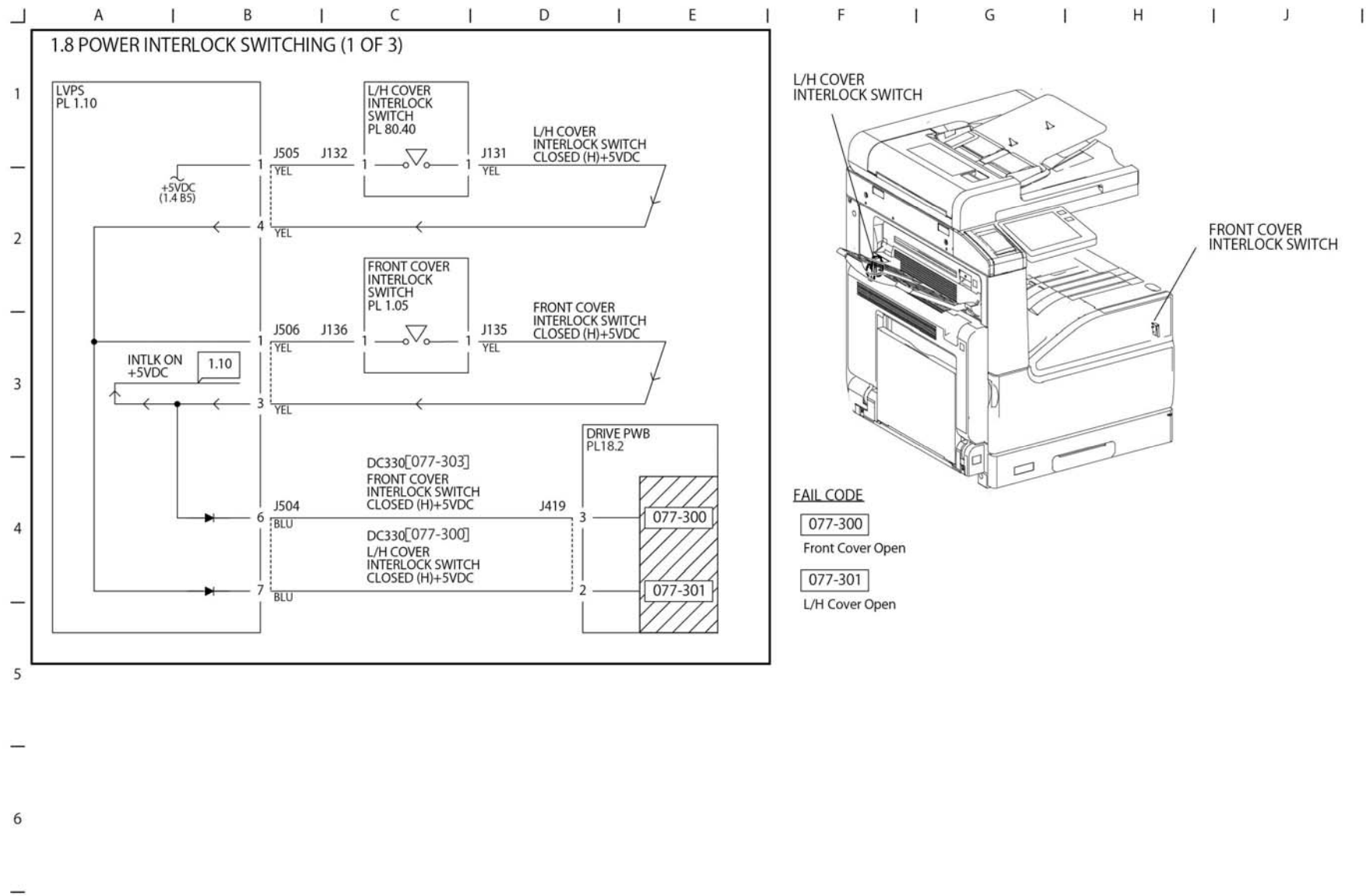
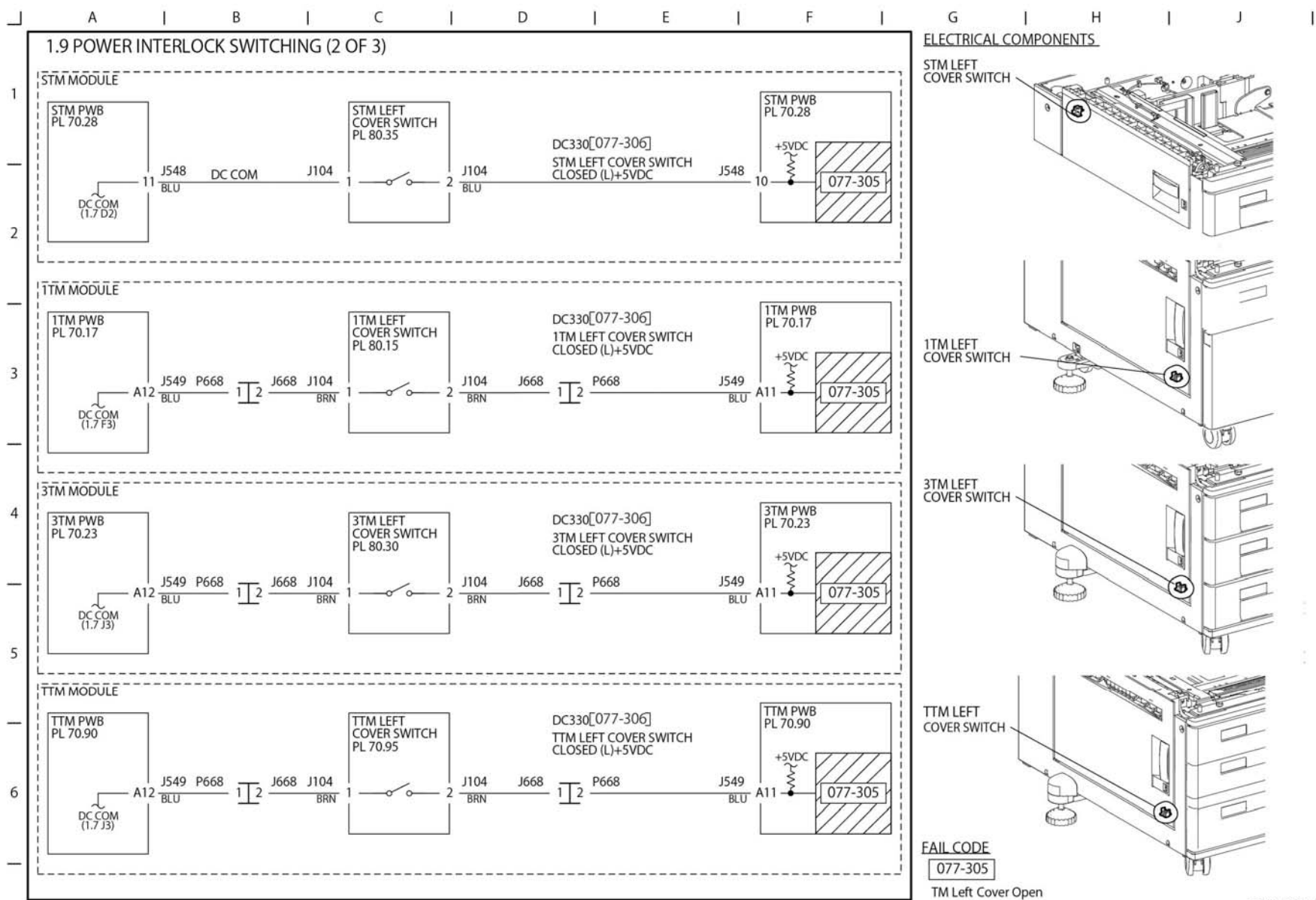


Figure 8 BSD 1.8

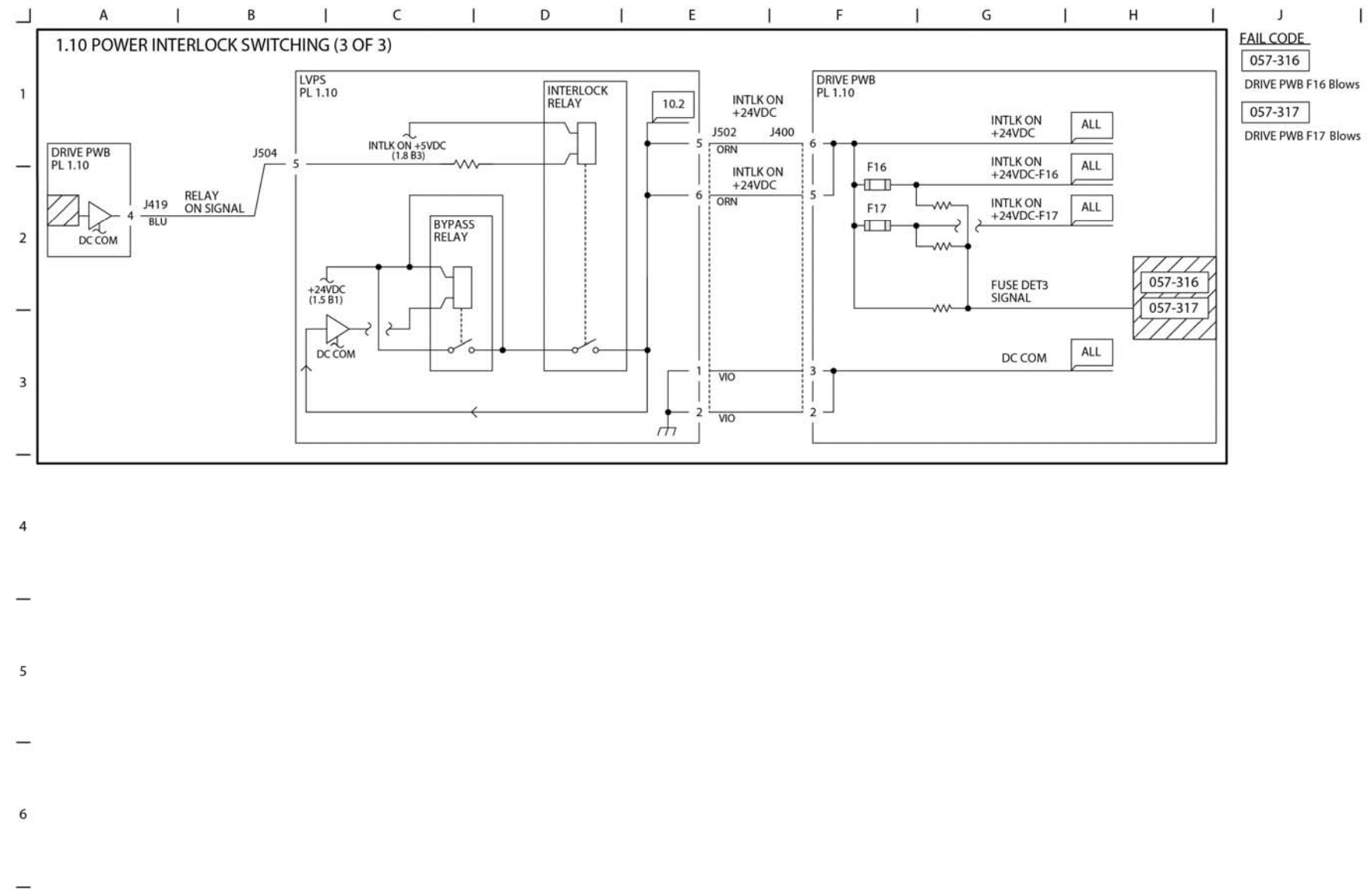
BSD 1.9 Power Interlock Switching (2 of 3)



TC-1-0065-A

Figure 9 BSD 1.9

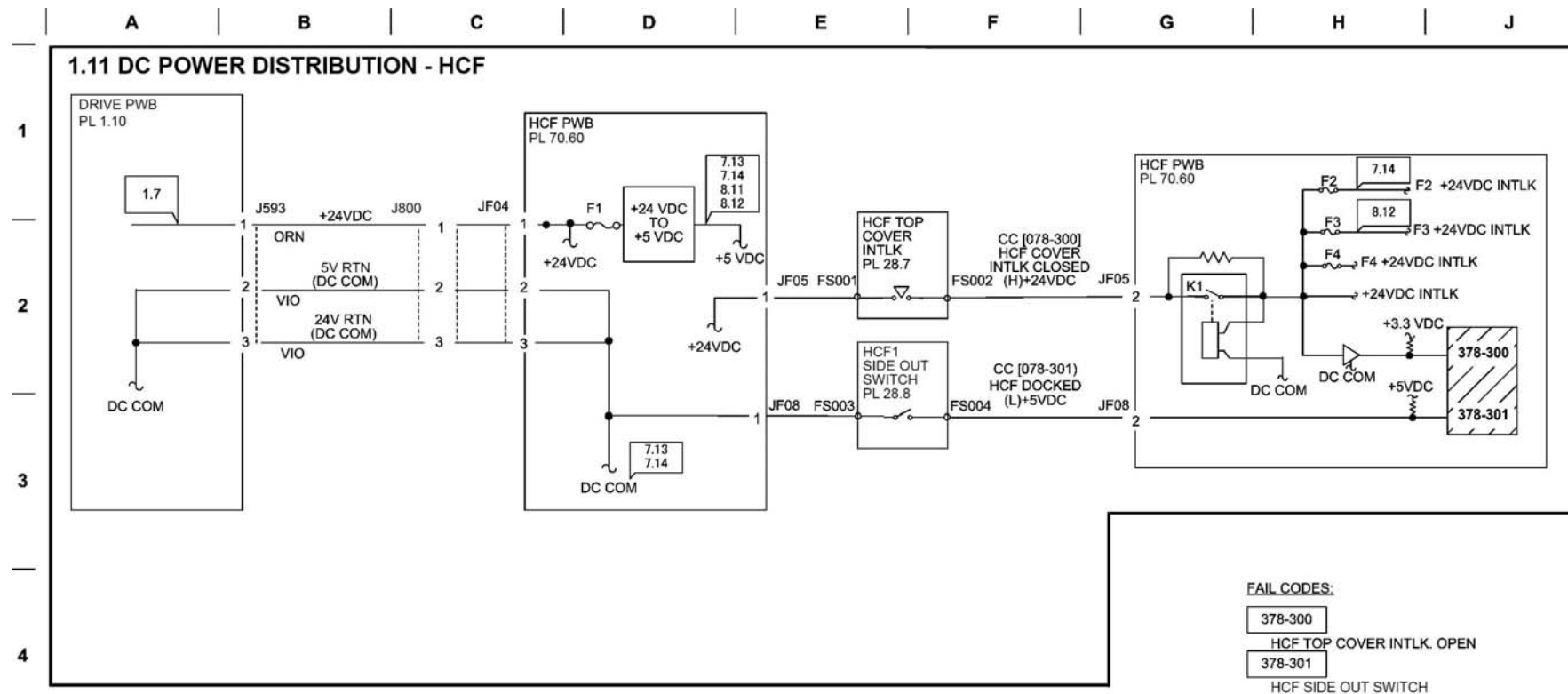
BSD 1.10 Power Interlock Switching (3 of 3)



TC-1-0066-A

Figure 10 BSD 1.10

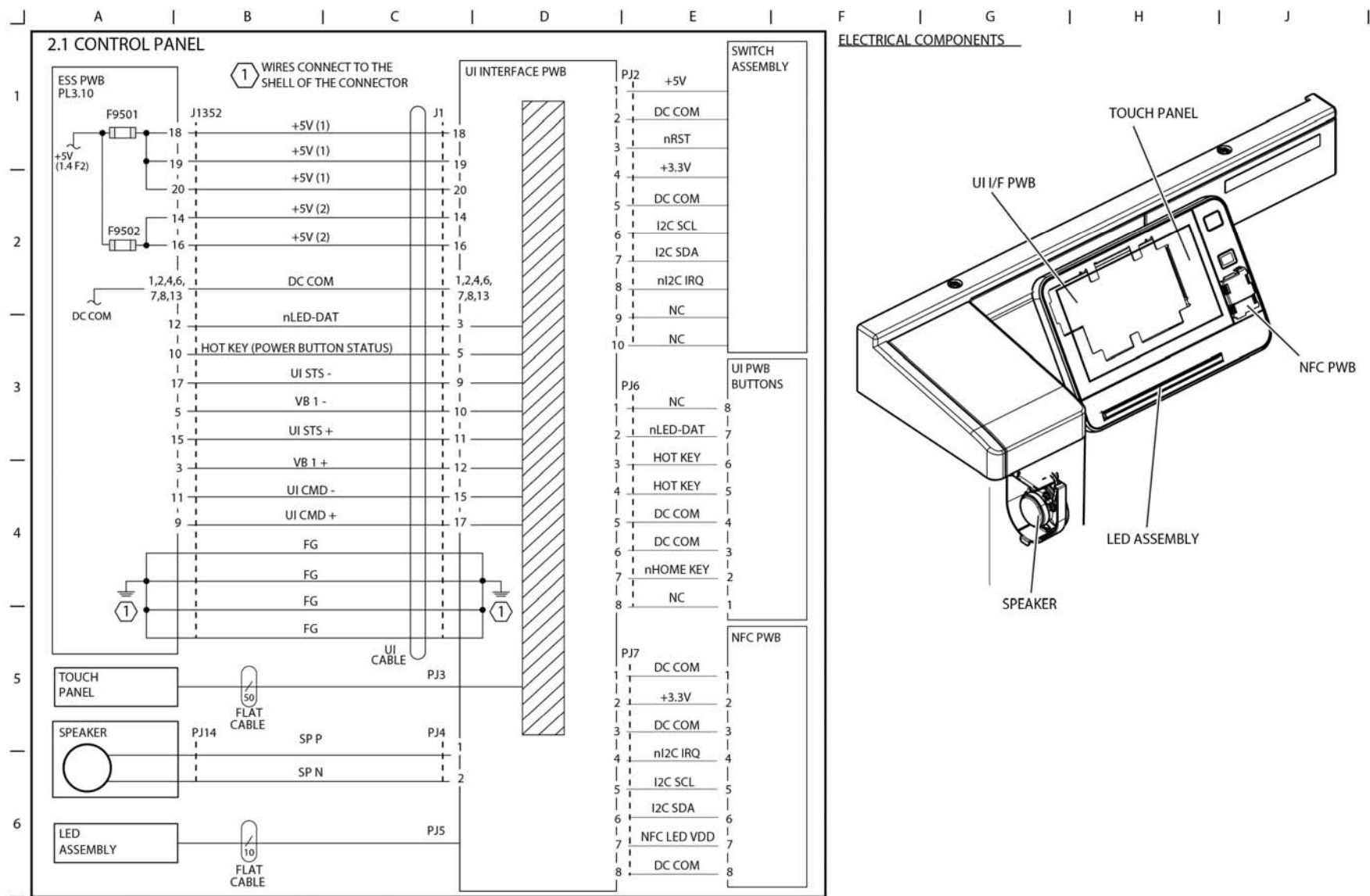
BSD 1.11 DC Power Distribution - HCF



TC-1-0168-A

Figure 11 BSD 1.11

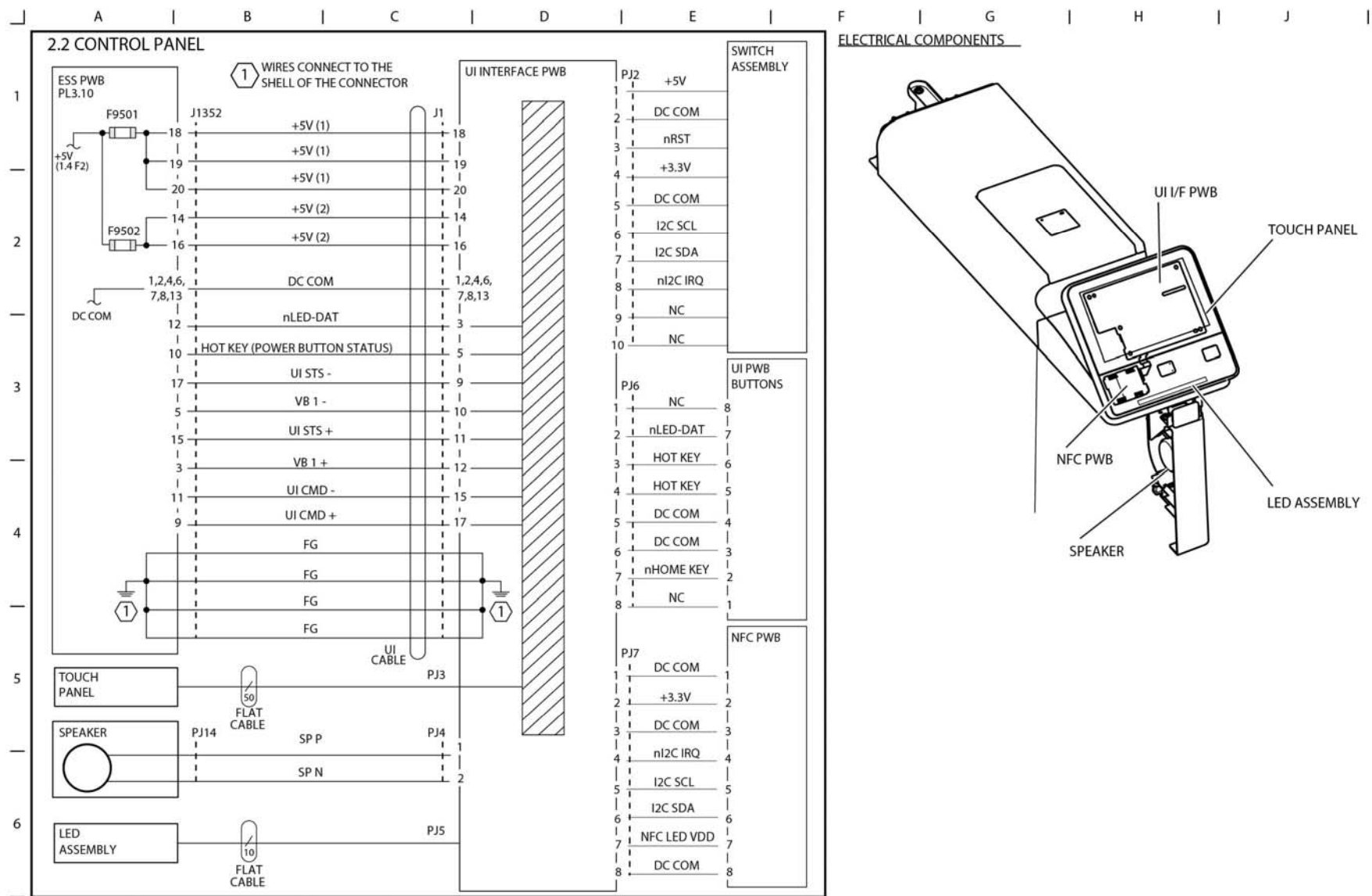
BSD 2.1 Control Panel (C7030F)



TC-1-0067-A

Figure 12 BSD 2.1

BSD 2.2 Control Panel (C7000)



TC-1-0198-A

Figure 13 BSD 2.2

BSD 3.1 PWB Communications (ESS PWB to Drive PWB)

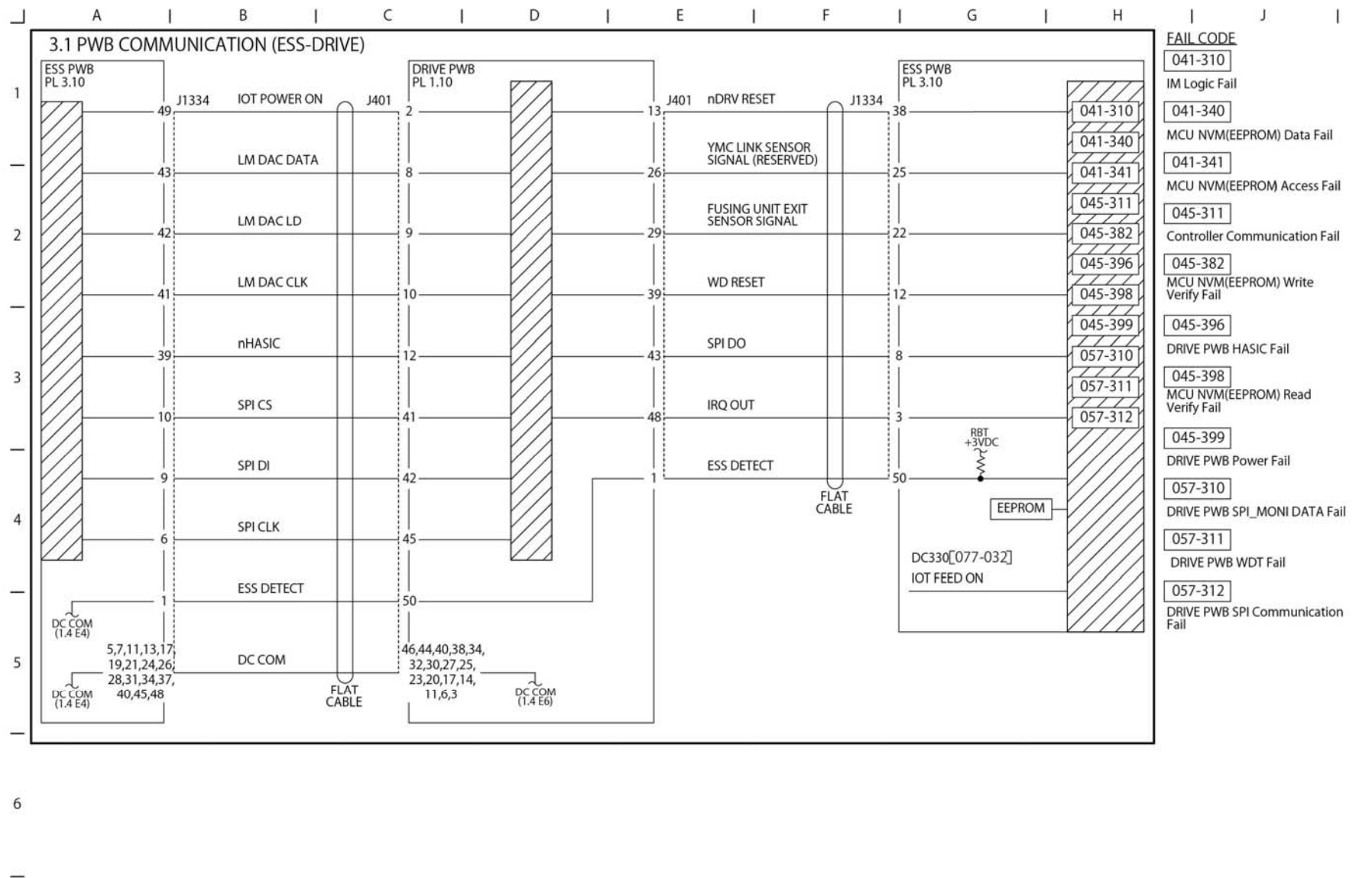


Figure 14 BSD 3.1

BSD 3.2 PWB Communications (ESS PWB/Drive PWB to STM)

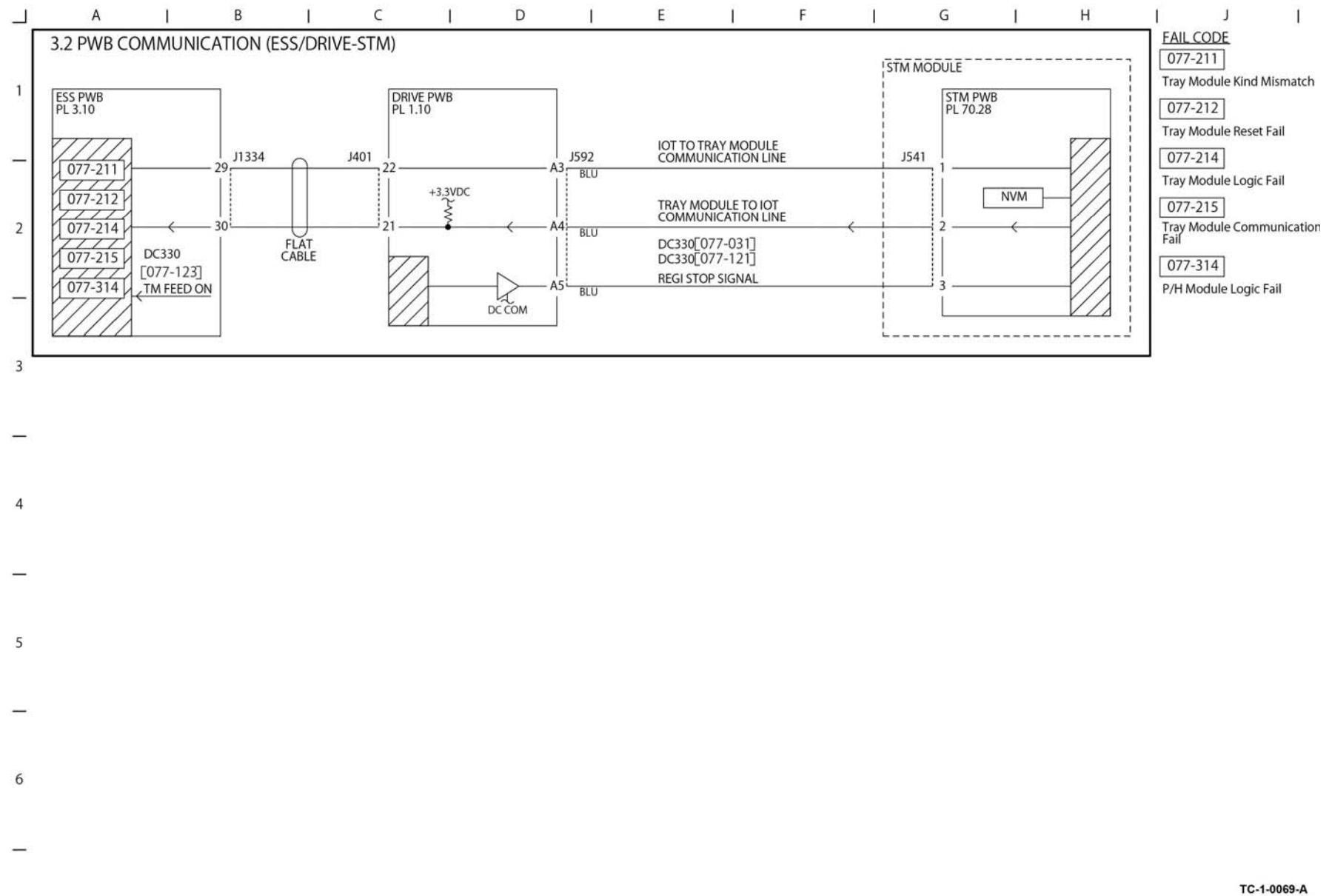
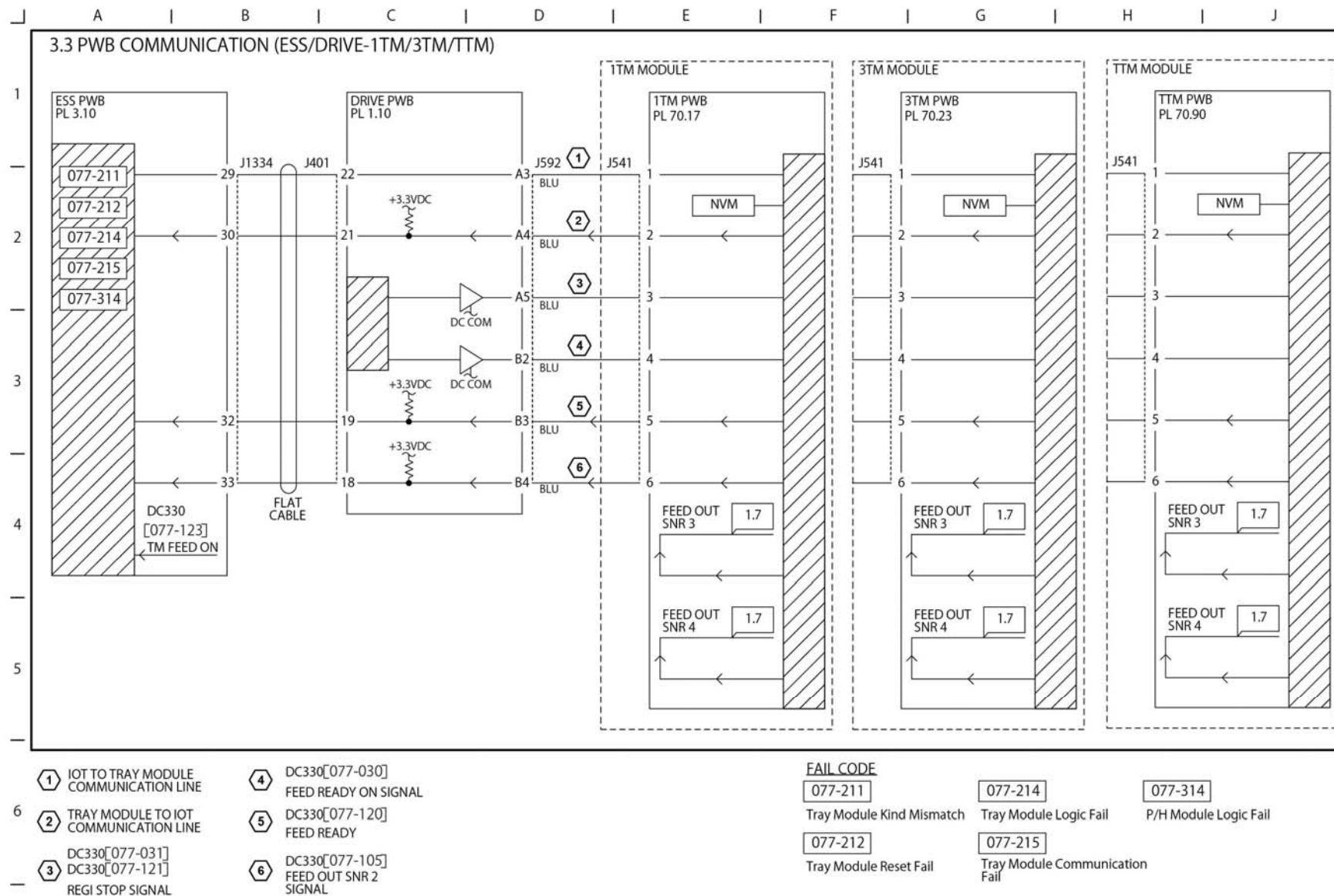


Figure 15 BSD 3.2

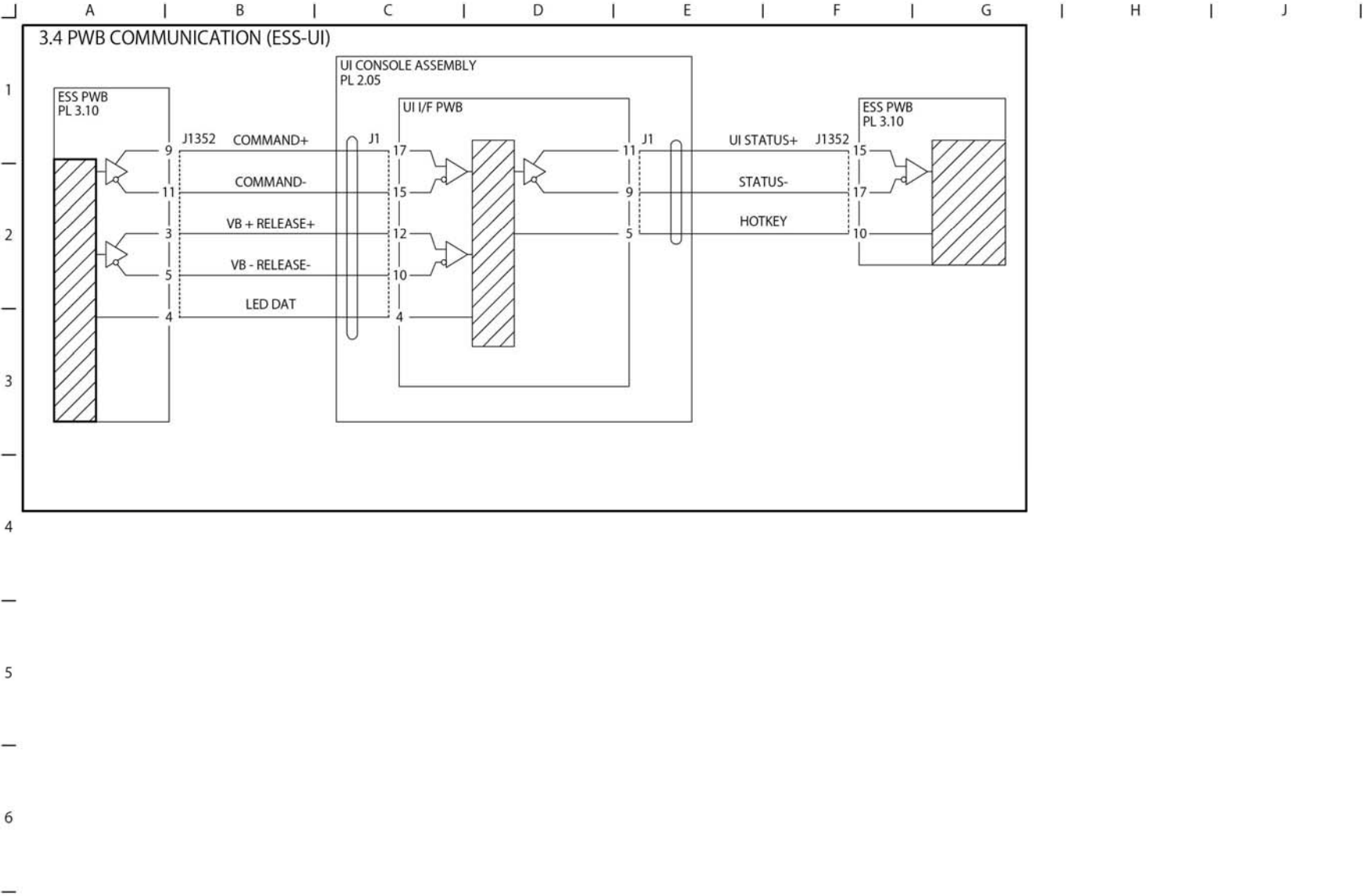
BSD 3.3 PWB Communications (ESS/Drive PWB to 1TM/3TM/TTM)



TC-1-0070-A

Figure 16 BSD 3.3

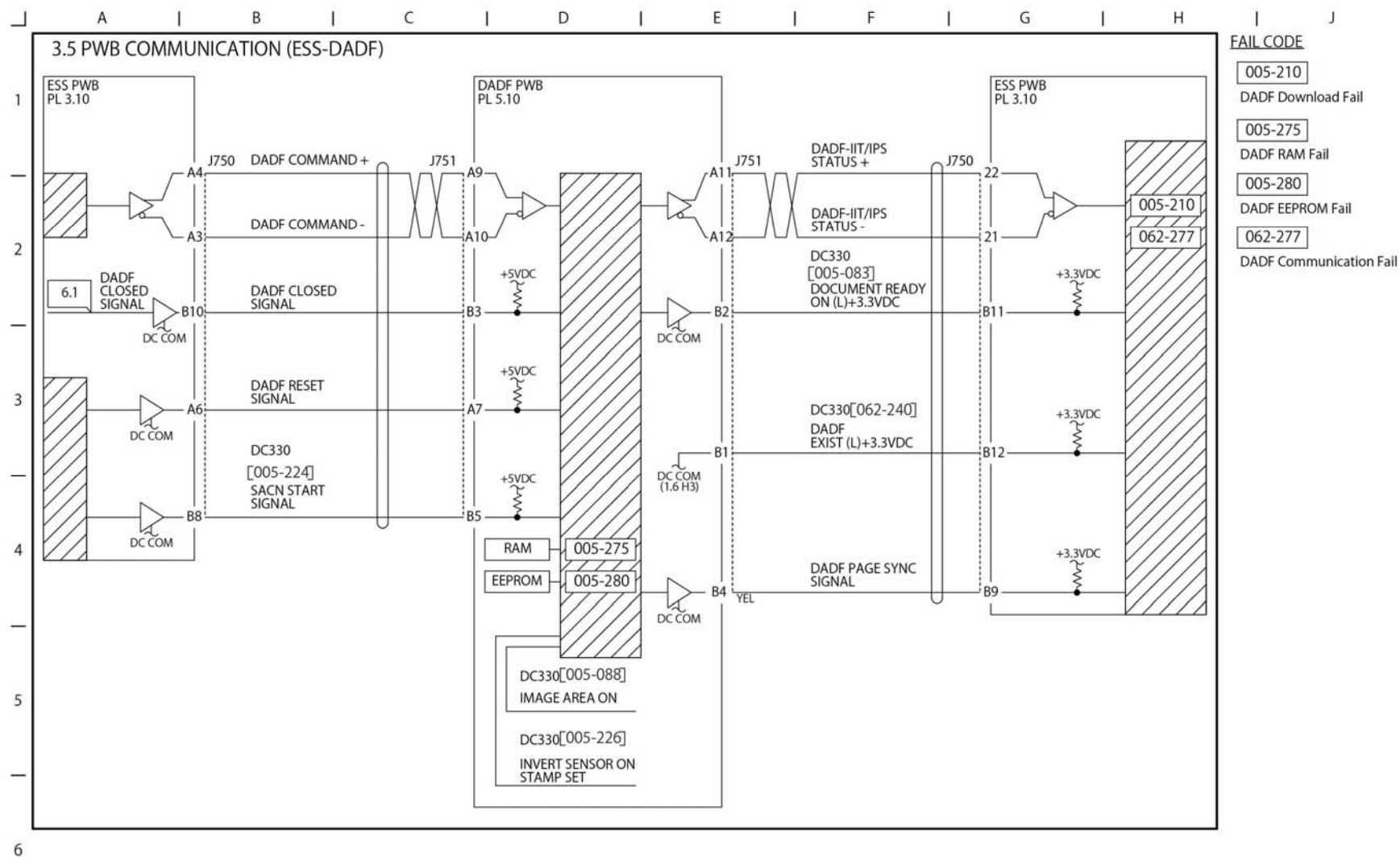
BSD 3.4 PWB Communications (ESS PWB to UI)



TC-1-0071-A

Figure 17 BSD 3.4

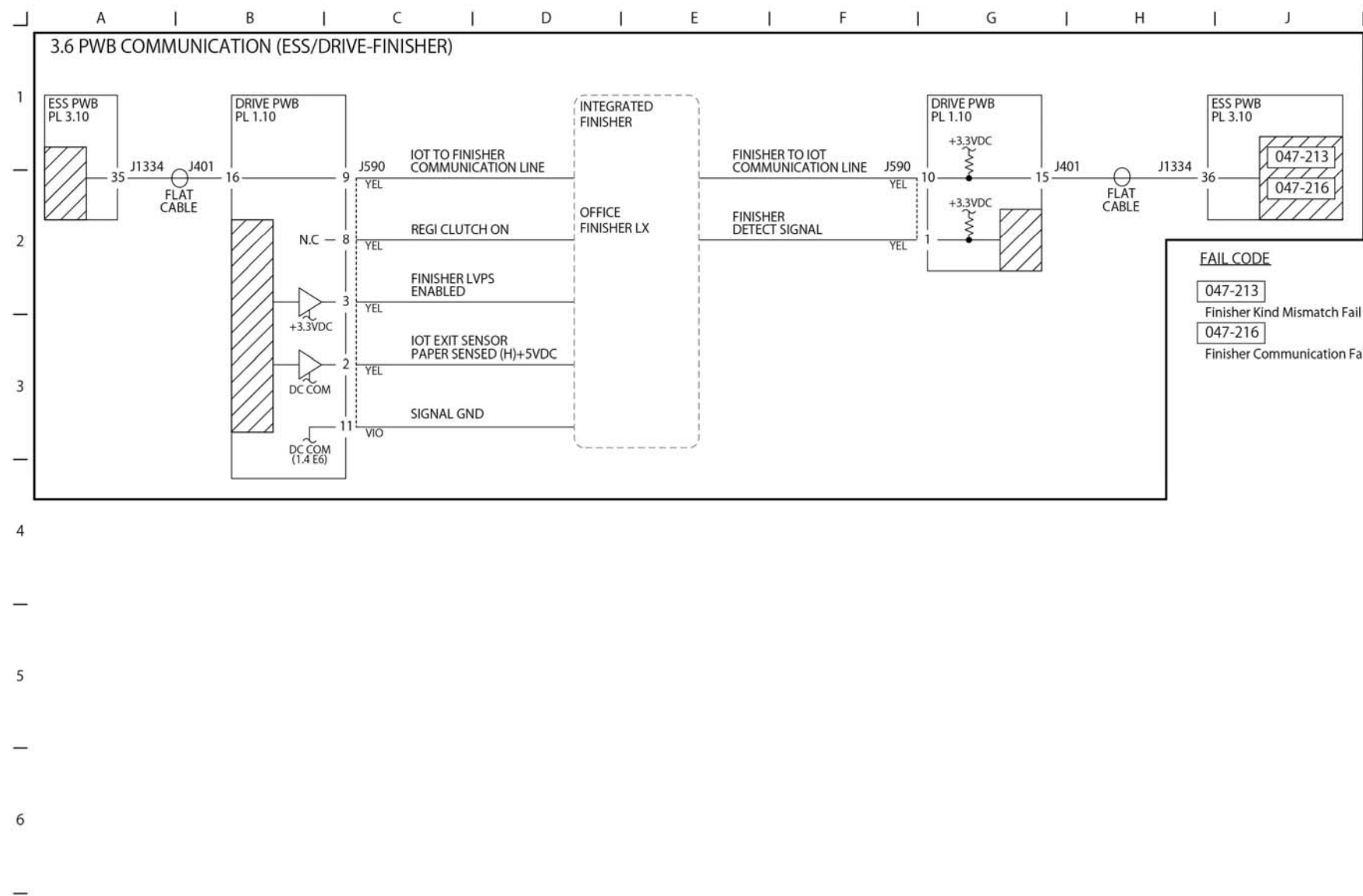
BSD 3.5 PWB Communications (ESS PWB to DADF)



TC-1-0072-A

Figure 18 BSD 3.5

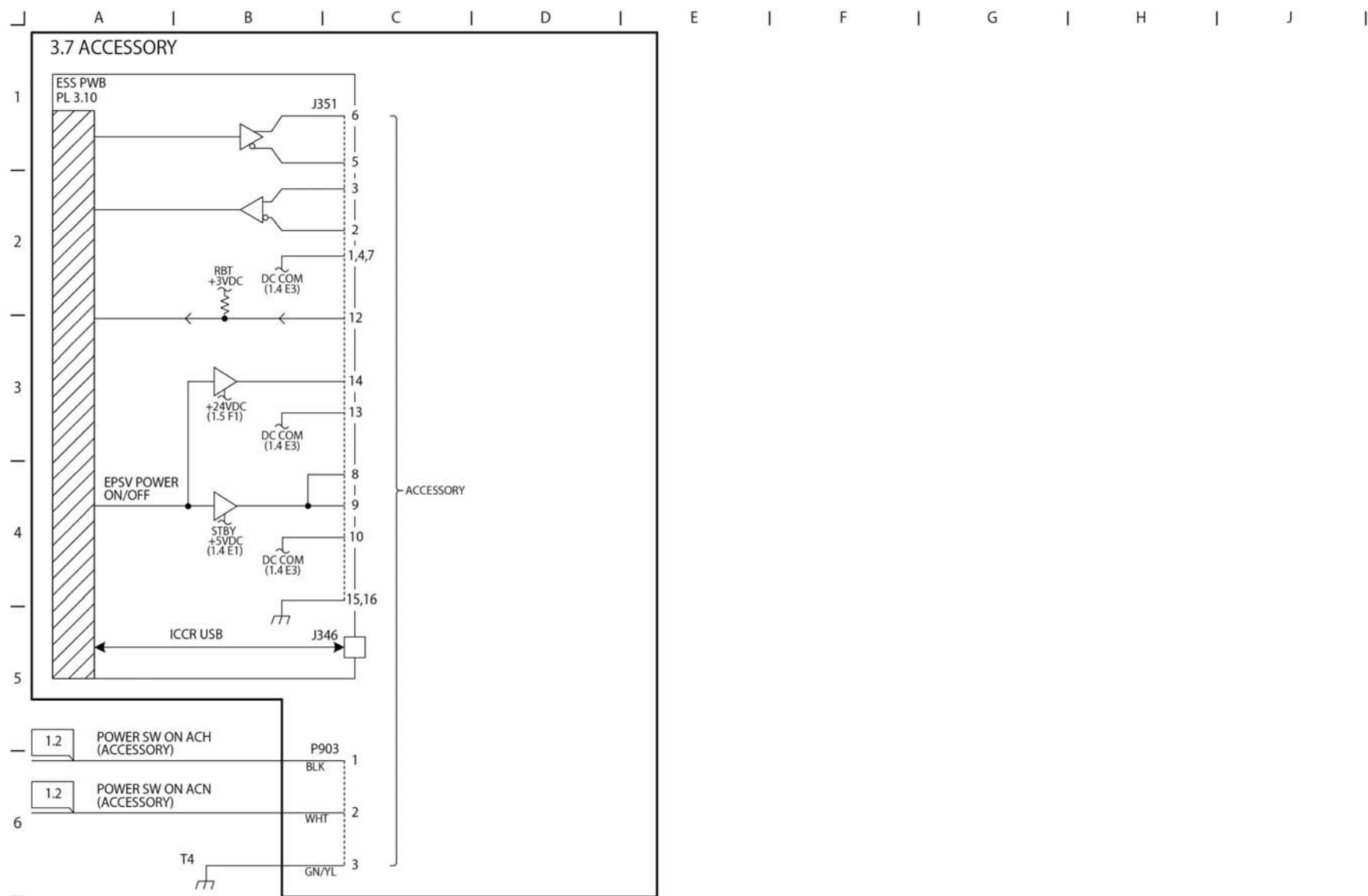
BSD 3.6 PWB Communications (ESS PWB/Drive PWB to Finisher)



TC-1-0073-A

Figure 19 BSD 3.6

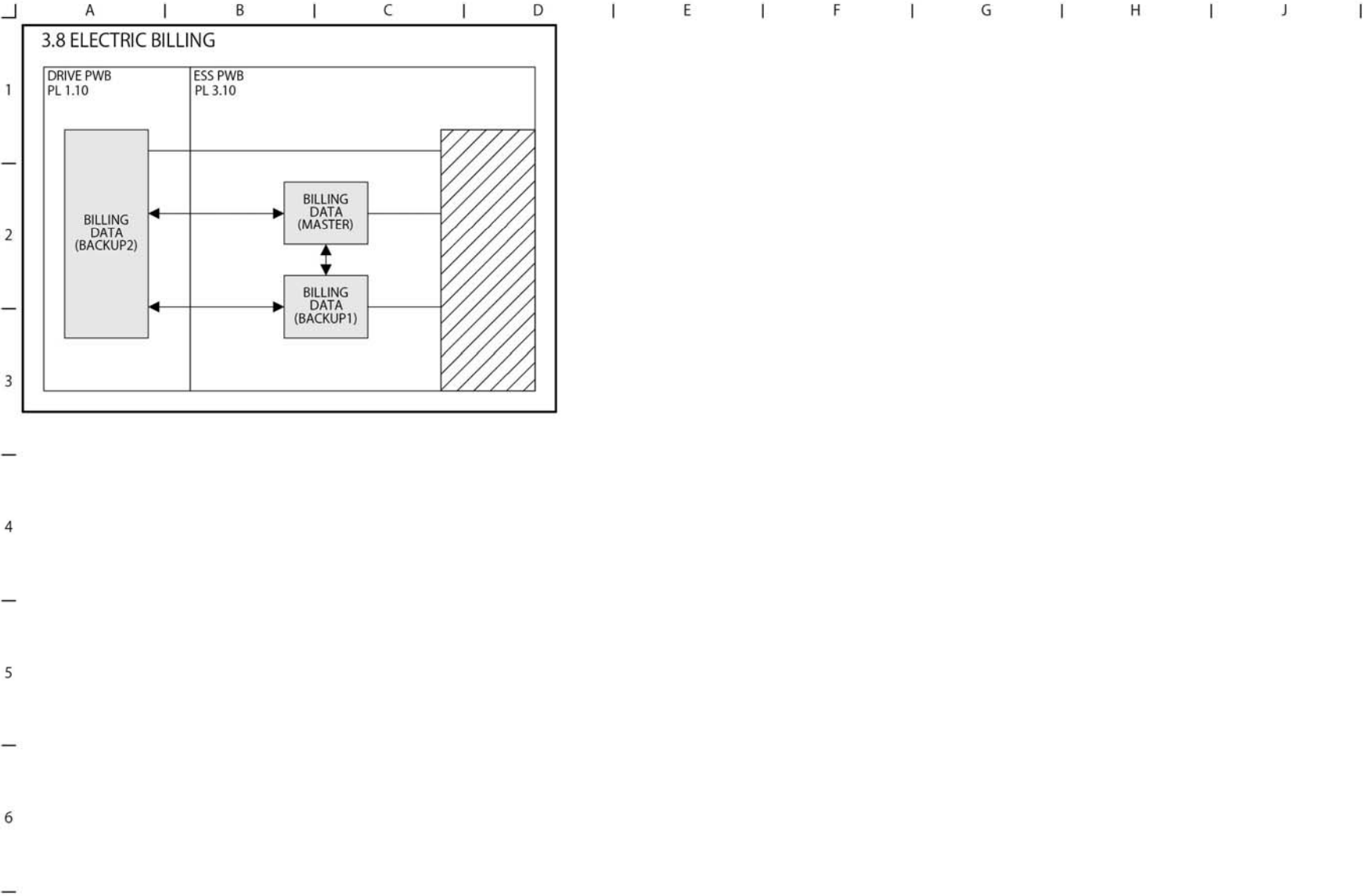
BSD 3.7 Accessory



TC-1-0074-A

Figure 20 BSD 3.7

BSD 3.8 Electric Billing



TC-1-0075-A

Figure 21 BSD 3.8

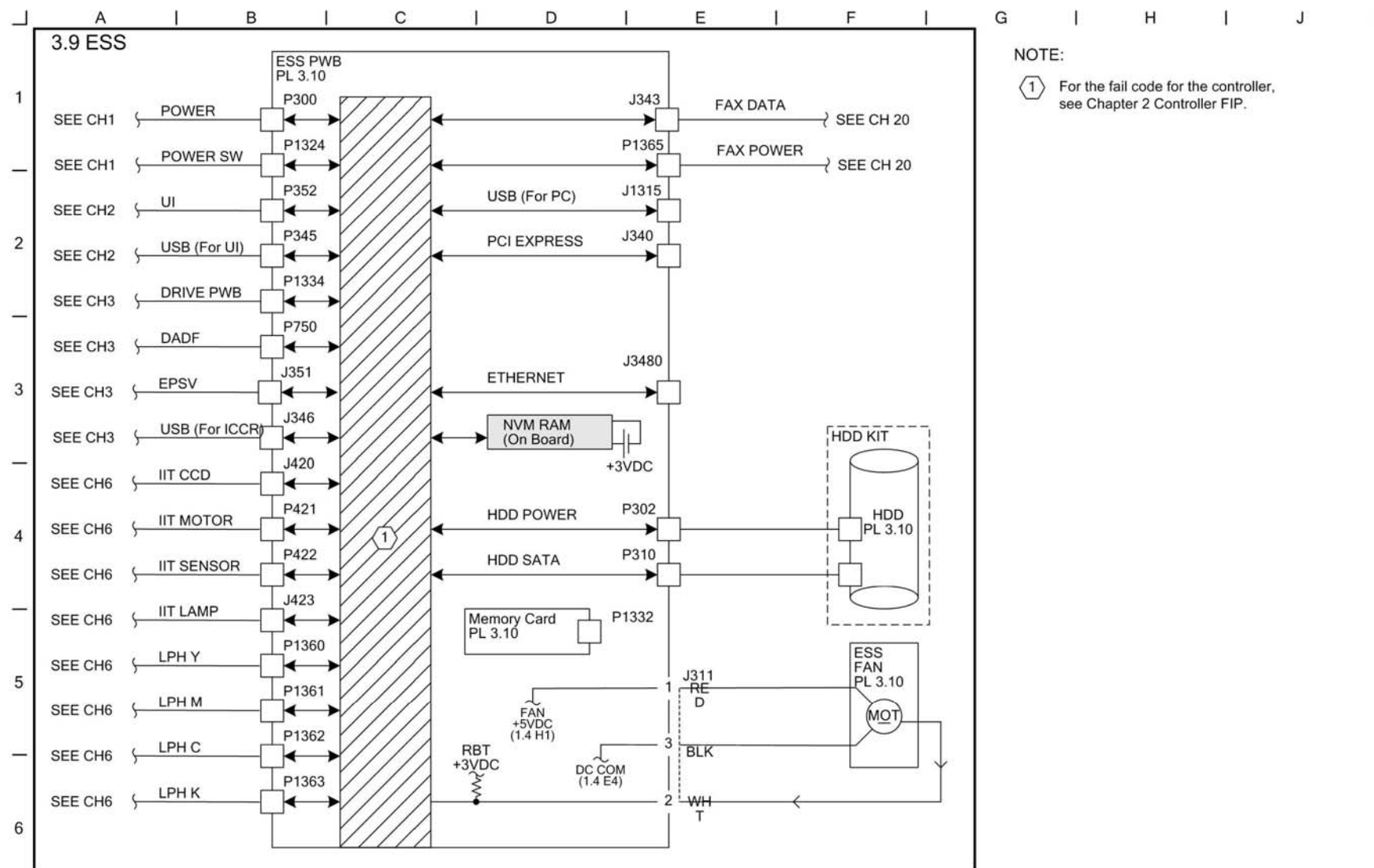
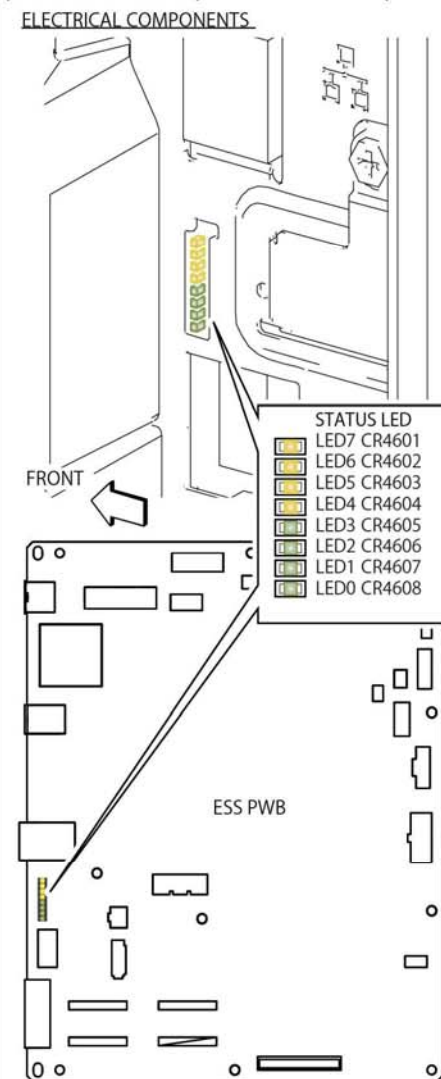


Figure 22 BSD 3.9

BSD 3.10 ESS Status LED (1 of 5)

3.10 ESS STATUS LED (1 OF 5)									
Illumination Status and Description of On Board Debug LEDs									
Number	LED Pattern								Situation
	LED7	LED6	LED5	LED4	LED3	LED2	LED1	LED0	
1	□	□	□	□	□	□	□	□	Initial status at power-on
2	□	□	□	□	□	□	□	■	After CA7 L1 Boot has completed, SPI initialization has completed
3	□	□	□	□	□	□	□	■	Before jumping to CA7 L2 Boot Stage 2
4	□	□	□	□	□	□	□	■	After jumping to CA7 L2 Boot Stage 2, after initialization during SPI
5	□	□	□	□	□	□	□	■	After DDR initialization has completed
6	□	□	□	□	□	□	□	■	obs
7	□	□	□	□	□	□	□	■	obs
8	□	□	□	□	□	□	□	■	obs
9	□	□	□	□	□	□	□	■	Before loading CA7 Boot Loader
10	□	□	□	□	□	□	□	■	Failed to load/jump to CA7 Boot Loader
11	□	□	□	□	□	□	□	■	Reserved (OFF)
12	□	□	□	□	□	□	□	■	Reserved (OFF)
13	□	□	□	□	□	□	□	■	SPI module initialization has completed
14	□	□	□	□	□	□	□	■	I2C module initialization has completed
15	□	□	□	□	□	□	□	■	Interrupt controller initialization has completed
16	□	□	□	□	□	□	□	■	Debug serial initialization has completed
17	□	□	□	□	□	□	□	■	RTC Device initialization has completed
18	□	□	□	□	□	□	□	■	FCSPI module initialization has completed
19	□	□	□	□	□	□	□	■	SD Card Power ON has completed
20	□	□	□	□	□	□	□	■	Hard Disk Power ON has completed
21	□	□	□	□	□	□	□	■	CIP UI module initialization has completed
22	□	□	□	□	□	□	□	■	Reserved (OFF)
23	□	□	□	□	□	□	□	■	Reserved (OFF)
24	□	□	□	□	□	□	□	■	Reserved (OFF)
25	□	□	□	□	□	□	□	■	Software initialization process has started
26	□	□	□	□	□	□	□	■	Interrupt registration table initialization has completed
27	□	□	□	□	□	□	□	■	Interrupt vector copying and enabling has completed
28	□	□	□	□	□	□	□	■	Mac Address has been obtained and stored
29	□	□	□	□	□	□	□	■	Diag table initialization has completed
30	□	□	□	□	□	□	□	■	Memory area variable setting has completed
31	□	□	□	□	□	□	□	■	Memory area variable notification process has completed
32	□	□	□	□	□	□	□	■	Command table initialization has completed
33	□	□	□	□	□	□	□	■	Global variable initialization has completed

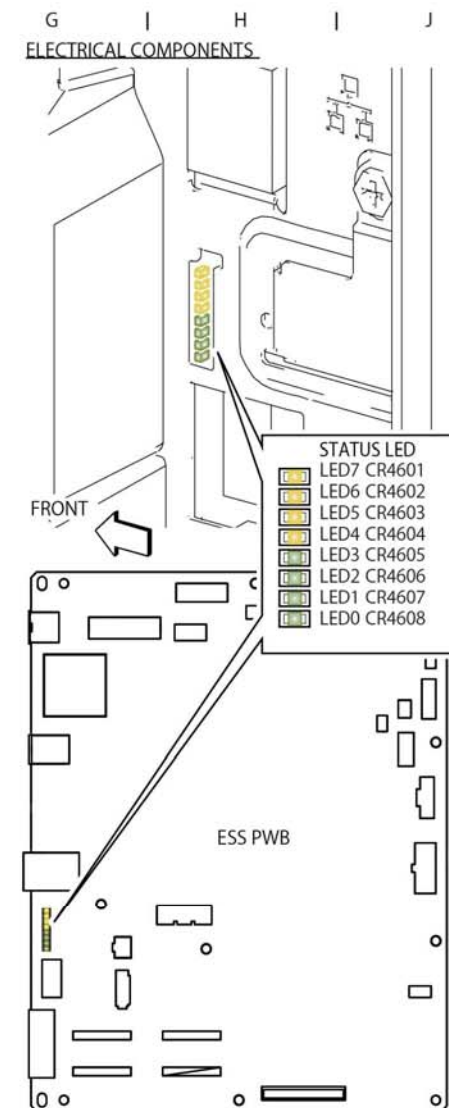


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Figure 23 BSD 3.10

BSD 3.11 ESS Status LED (2 of 5)

3.11 ESS STATUS LED (2 OF 5)									
Illumination Status and Description of On Board Debug LEDs									
Number	LED Pattern							Situation	Problem
	LED7	LED6	LED5	LED4	LED3	LED2	LED1		
34	On	On	On	On	On	On	On	Reserved (OFF)	-
35	On	On	On	On	On	On	On	Reserved (OFF)	-
36	On	On	On	On	On	On	On	JUMP to Mini OS section	ON: ESS Error
37	On	On	On	On	On	On	On	JUMP to Panbug Main section	ON: ESS Error
38	On	On	On	On	On	On	On	Reserved (OFF)	-
39	On	On	On	On	On	On	On	Reserved (OFF)	-
40	On	On	On	On	On	On	On	0xFF -> 0x00 is repeating alternately. DDR initialization process has failed	Flashing: ESS Error
41	On	On	On	On	On	On	On	0xF0 -> 0x0F is repeating alternately. Boot Loader checksum error - L2 Boot has read a Boot Loader checksum error from FCSPI	Flashing: ESS Error
42	On	On	On	On	On	On	On	CA15-0: (0xA0 -> 0x05 is repeating alternately. CPLD is showing an invalid boot mode.	Flashing: ESS Error
43	On	On	On	On	On	On	On	CA15-0: After the recovery from Switch OFF mode is detected by CPLD flag, before proceeding to read the NVM recovery data.	ON: ESS Error
44	On	On	On	On	On	On	On	CA15-0: After reading the NVM recovery data, before calculating the checksum on the DDR.	ON: ESS Error
45	On	On	On	On	On	On	On	CA15-0: Immediately before jumping to the Switch OFF recovery point.	ON: ESS Error
46	On	On	On	On	On	On	On	CA15-0: (0xC0 -> 0x03 is repeating alternately. Checksum error during recovery from Switch OFF mode.	Flashing: ESS Error
47	On	On	On	On	On	On	On	CA15-0: After the recovery from CPU OFF mode is detected by CPLD flag, before proceeding to read the NVM recovery data.	ON: ESS Error
48	On	On	On	On	On	On	On	CA15-0: After reading the NVM recovery data, before calculating the checksum on the DDR.	ON: ESS Error
49	On	On	On	On	On	On	On	obs	ON: ESS Error
50	On	On	On	On	On	On	On	obs	ON: ESS Error
51	On	On	On	On	On	On	On	obs	ON: ESS Error
52	On	On	On	On	On	On	On	CA15-0: Immediately before jumping to the CPU OFF recovery point.	ON: ESS Error
53	On	On	On	On	On	On	On	0x80 -> 0x01 is repeating alternately. Stored data checksum error during recovery from CPU OFF mode.	Flashing: ESS or RAM Error
54	On	On	On	On	On	On	On	0xE0 -> 0x07 is repeating alternately. Other error has occurred at CA15, L2 Boot.	Flashing: ESS or RAM Error
55	On	On	On	On	On	On	On	SD module initialization has started	Flashing: RAM or SD Card Error
56	On	On	On	On	On	On	On	SD Card Power ON has completed	Flashing: RAM or SD Card Error
57	On	On	On	On	On	On	On	SD module initialization has completed	Flashing: RAM or SD Card Error
58	On	On	On	On	On	On	On	SD Card driver error	Flashing: RAM or SD Card Error
59	On	On	On	On	On	On	On	An unsupported SD Card is inserted	Flashing: RAM or SD Card Error



7-73

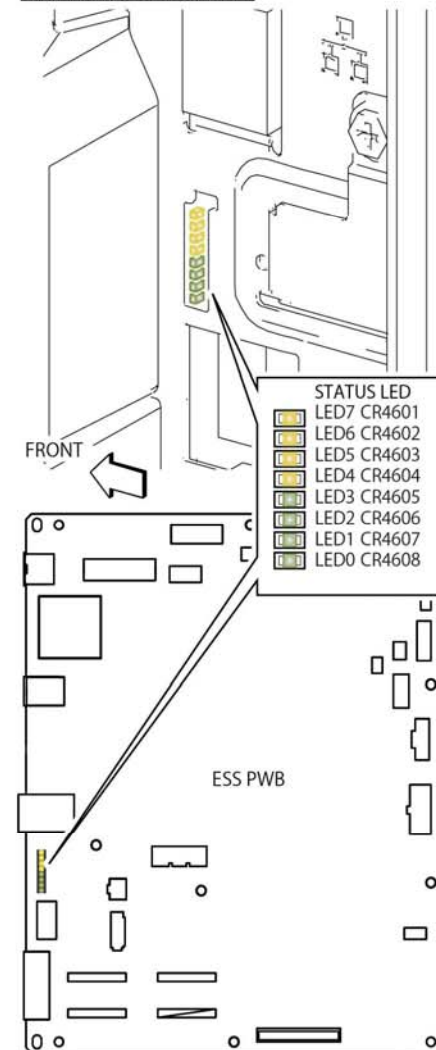
TC-1-0154-A

Figure 24 BSD 3.11

BSD 3.12 ESS Status LED (3 of 5)

	A	B	C	D	E	F	G	H	J
	3.12 ESS STATUS LED (3 OF 5)								
	Illumination Status and Description of On Board Debug LEDs								
	LED Pattern On Off								
	Number	LED7	LED6	LED5	LED4	LED3	LED2	LED1	LED0
1	60	On	On	On	Off	Off	Off	Off	Off
	61	On	On	On	Off	Off	Off	Off	Off
	62	On	On	On	Off	Off	Off	Off	Off
2	63	On	On	On	Off	Off	Off	Off	Off
	64	On	On	On	Off	Off	Off	Off	Off
	65	On	On	On	Off	Off	Off	Off	Off
	66	On	On	On	Off	Off	Off	Off	Off
	67	On	On	On	Off	Off	Off	Off	Off
	68	On	On	On	Off	Off	Off	Off	Off
	69	On	On	On	Off	Off	Off	Off	Off
3	70	On	On	On	Off	Off	Off	Off	Off
	71	On	On	On	Off	Off	Off	Off	Off
	72	On	On	On	Off	Off	Off	Off	Off
	73	On	On	On	Off	Off	Off	Off	Off
	74	On	On	On	Off	Off	Off	Off	Off
	75	On	On	On	Off	Off	Off	Off	Off
4	76	On	On	On	Off	Off	Off	Off	Off
	77	On	On	On	Off	Off	Off	Off	Off
	78	On	On	On	Off	Off	Off	Off	Off
	79	On	On	On	Off	Off	Off	Off	Off
	80	On	On	On	Off	Off	Off	Off	Off
	81	On	On	On	Off	Off	Off	Off	Off
	82	On	On	On	Off	Off	Off	Off	Off
5	83	On	On	On	Off	Off	Off	Off	Off
	84	On	On	On	Off	Off	Off	Off	Off
	85	On	On	On	Off	Off	Off	Off	Off
	86	On	On	On	Off	Off	Off	Off	Off
	87	On	On	On	Off	Off	Off	Off	Off
	88	On	On	On	Off	Off	Off	Off	Off
6	89	On	On	On	Off	Off	Off	Off	Off
	90	On	On	On	Off	Off	Off	Off	Off

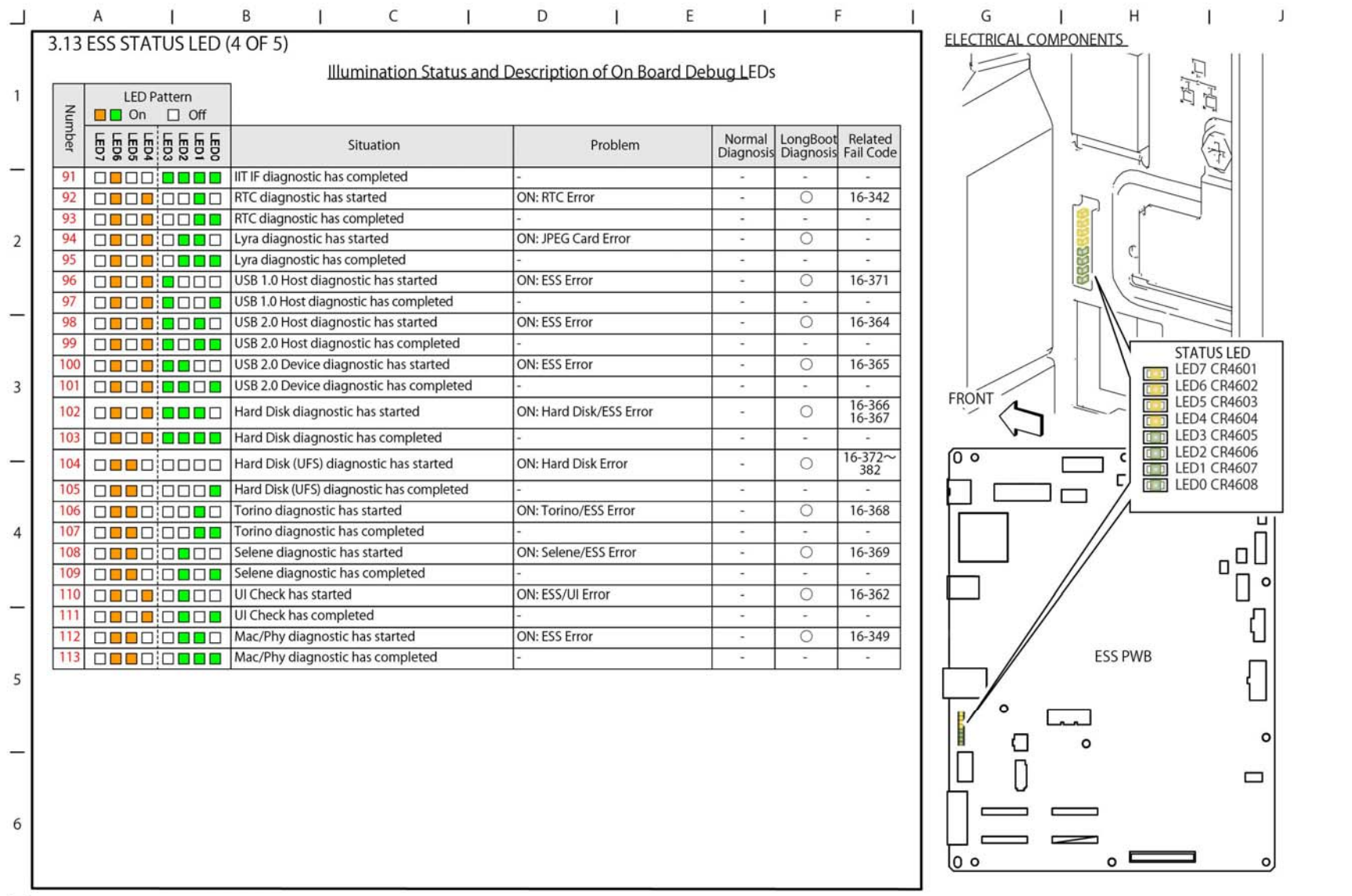
ELECTRICAL COMPONENTS



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Figure 25 BSD 3.12

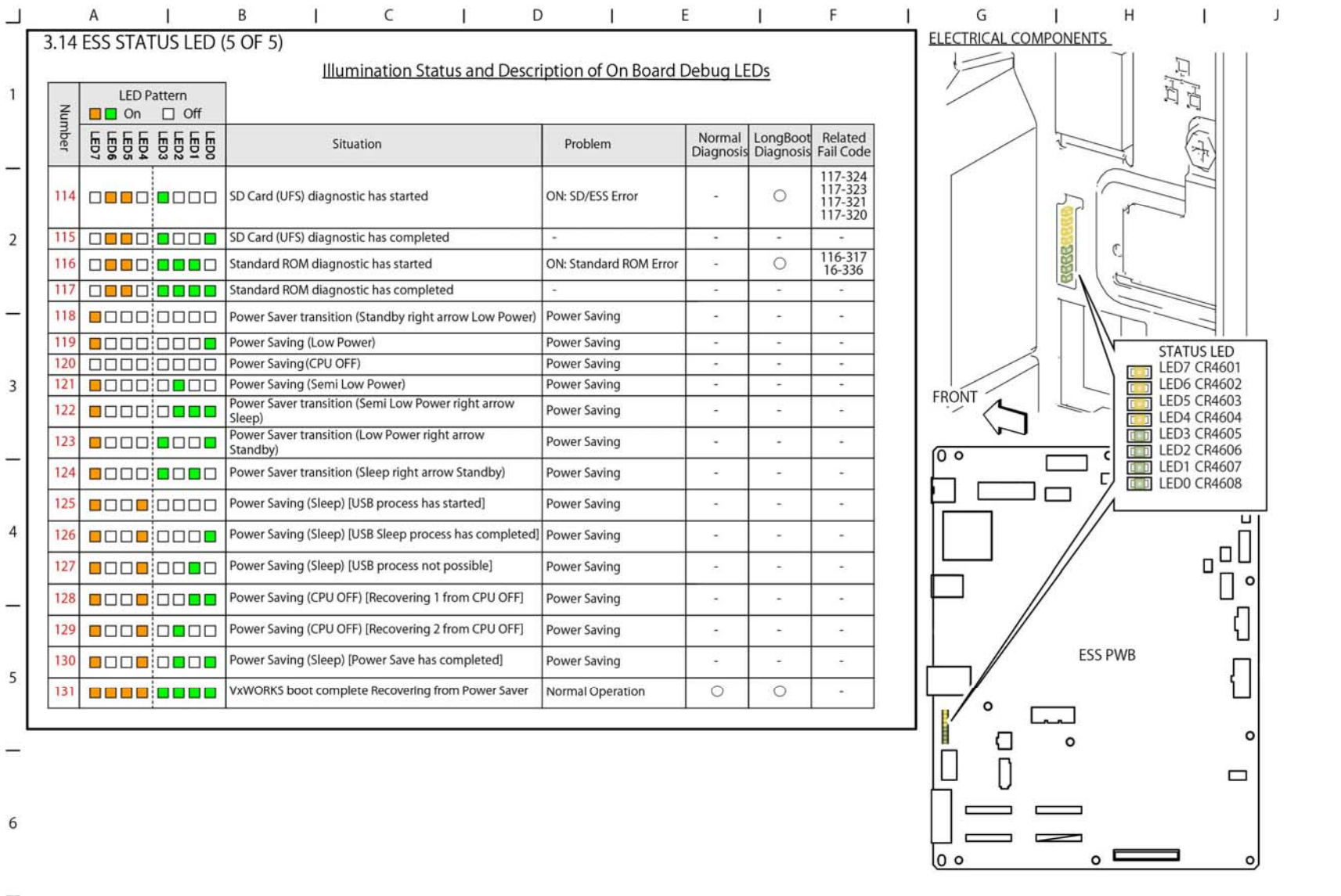
BSD 3.13 ESS Status LED (4 of 5)



TC-1-0156-A

Figure 26 BSD 3.13

BSD 3.14 ESS Status LED (5 of 5)



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Figure 27 BSD 3.14

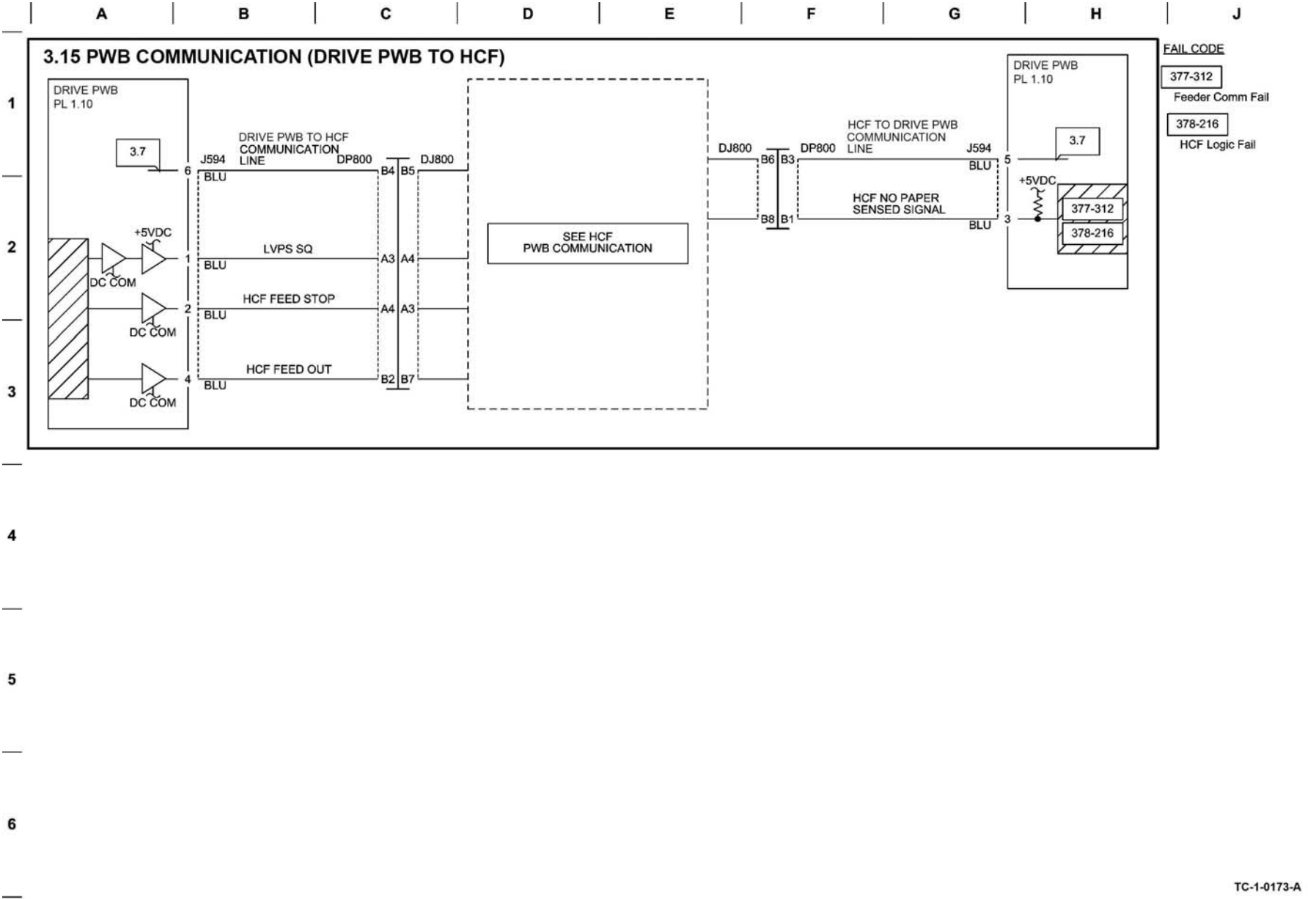


Figure 28 BSD 3.15

BSD 4.1 Main Drive Control

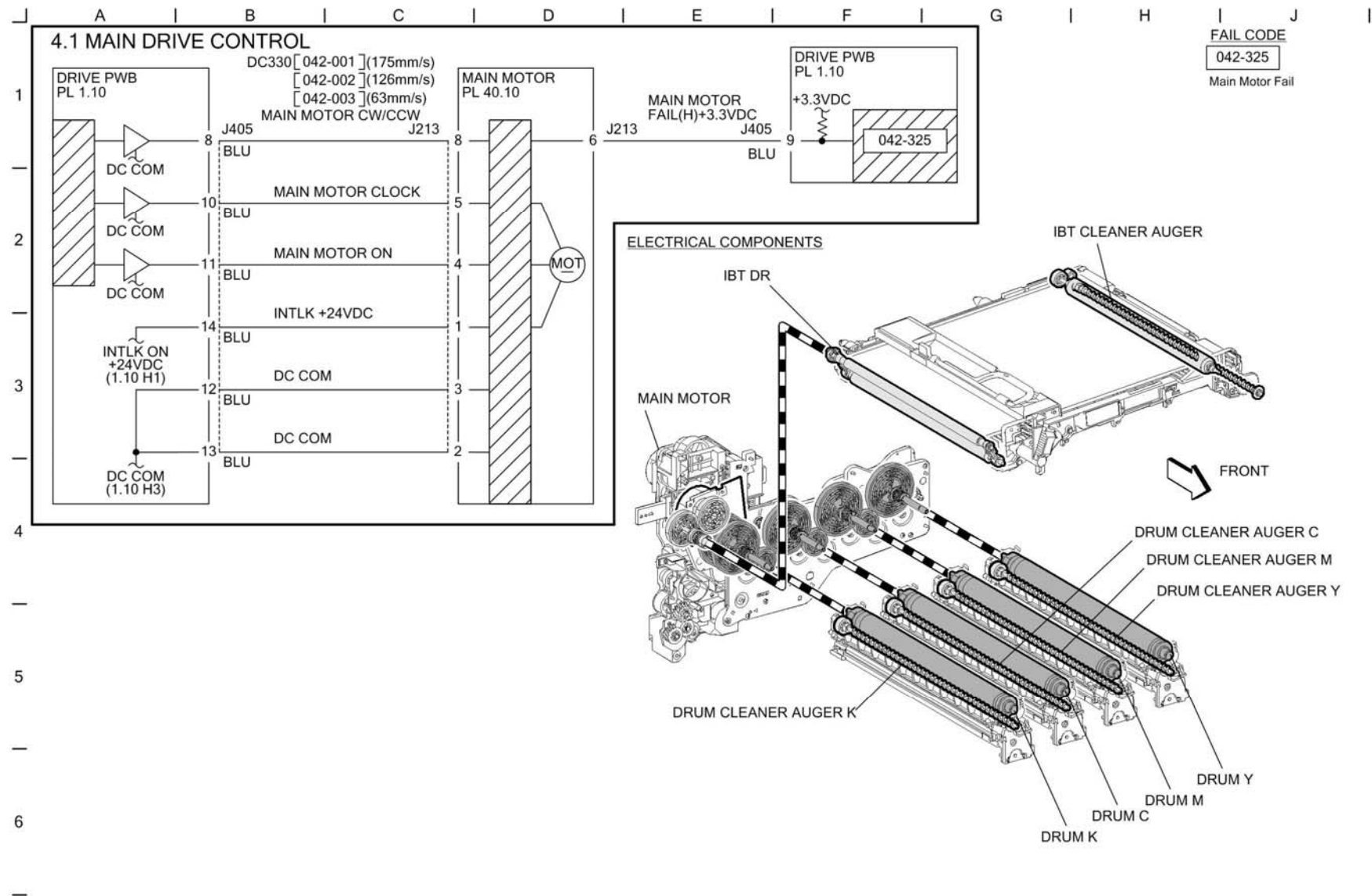


Figure 29 BSD 4.1

BSD 4.2 Sub Drive Control

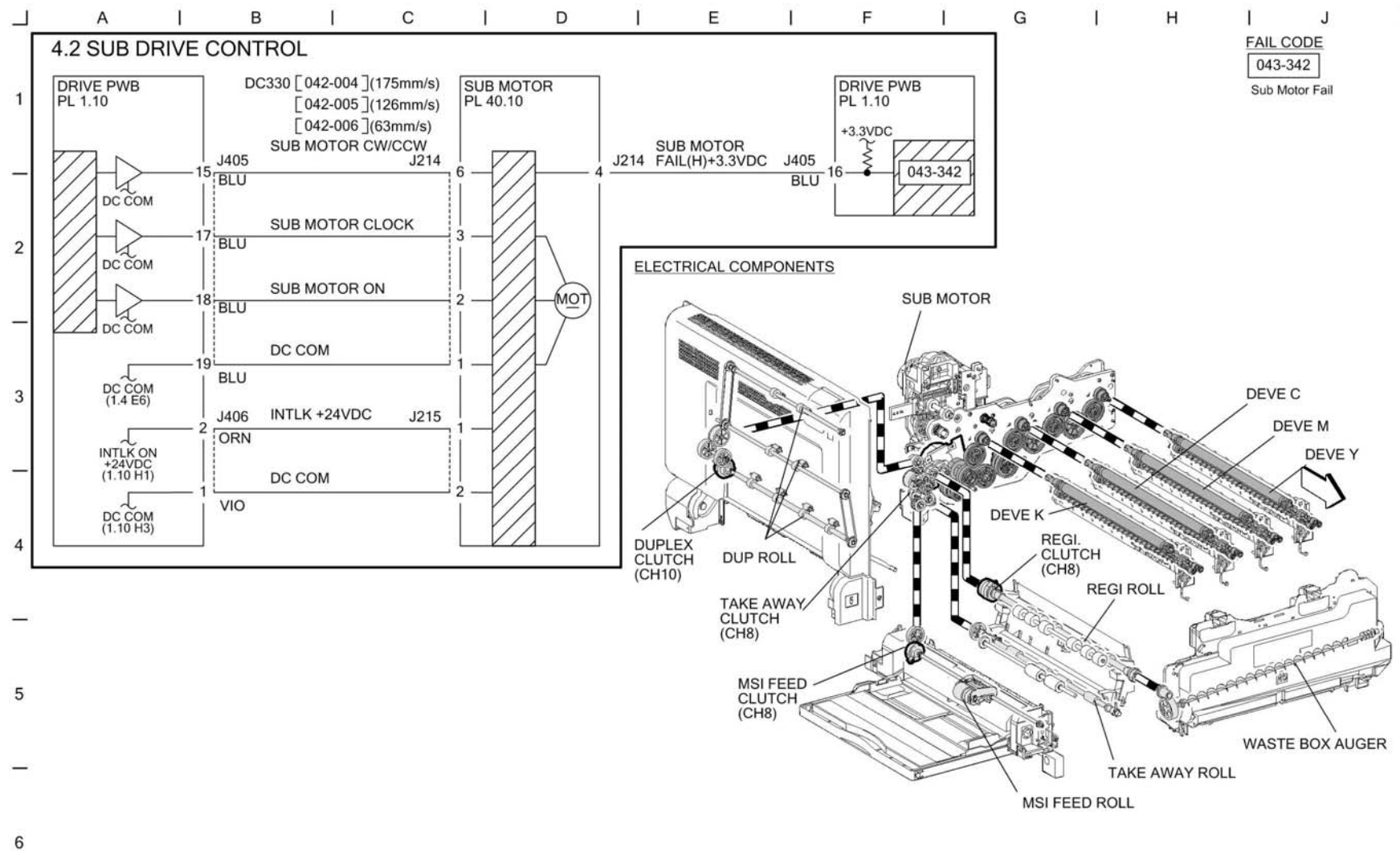
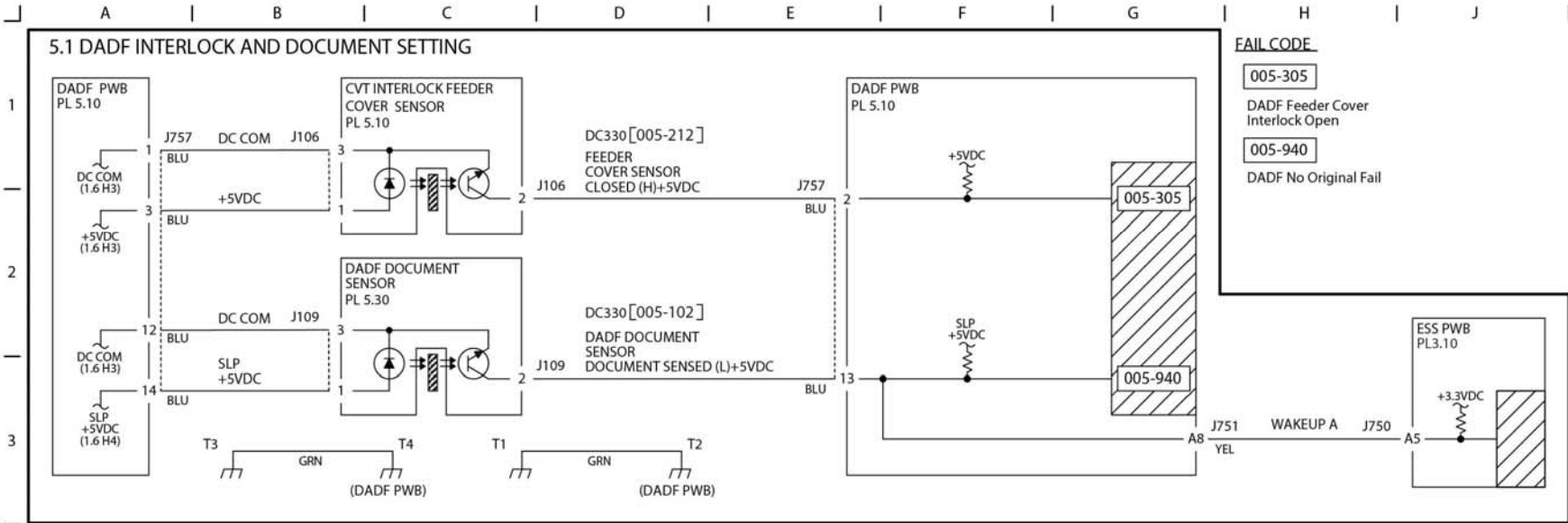


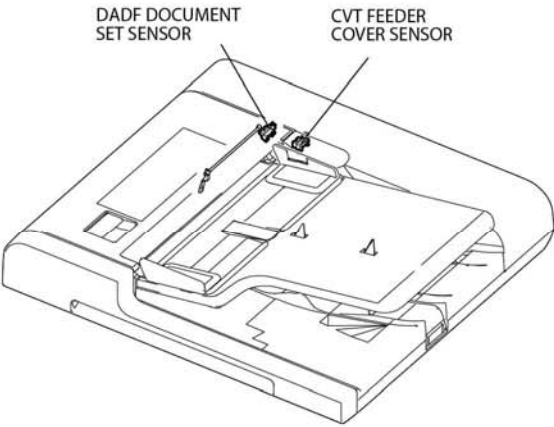
Figure 30 BSD 4.2

TC-1-0077-A

BSD 5.1 DADF Interlock and Document Setting

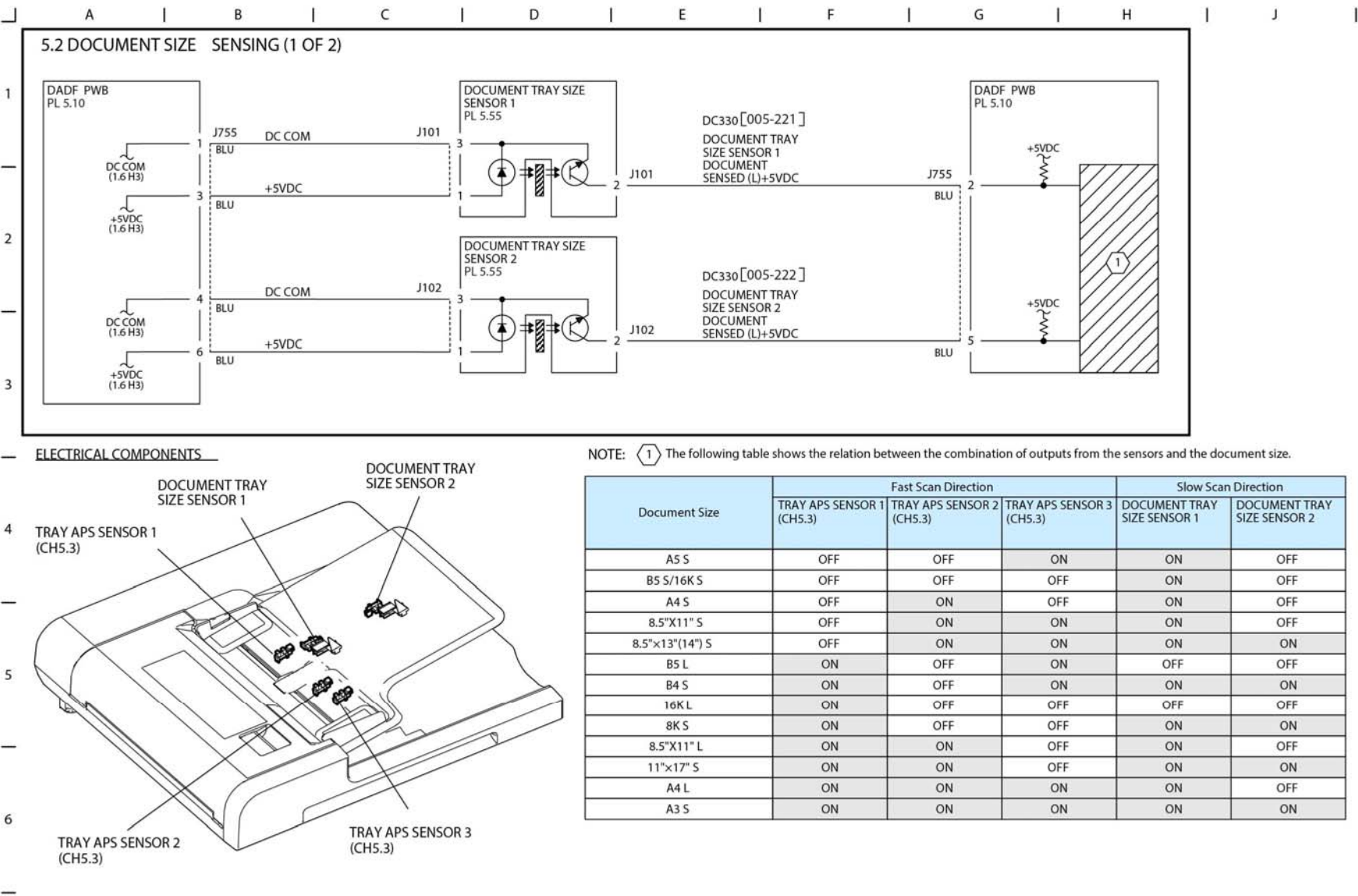


ELECTRICAL COMPONENTS



TC-1-0078-A

Figure 31 BSD 5.1



TC-1-0079-A

Figure 32 BSD 5.2



Figure 33 BSD 5.3

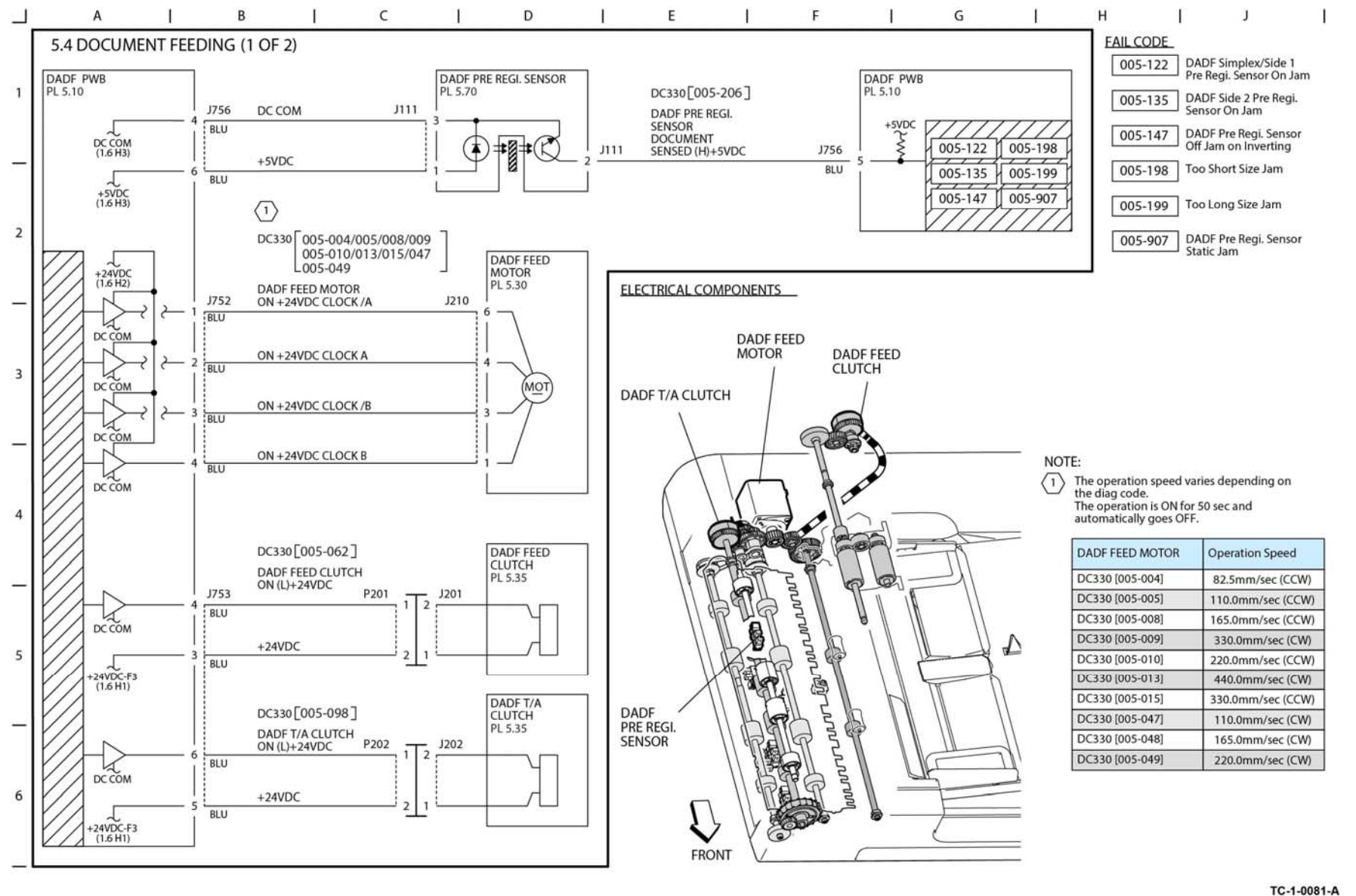
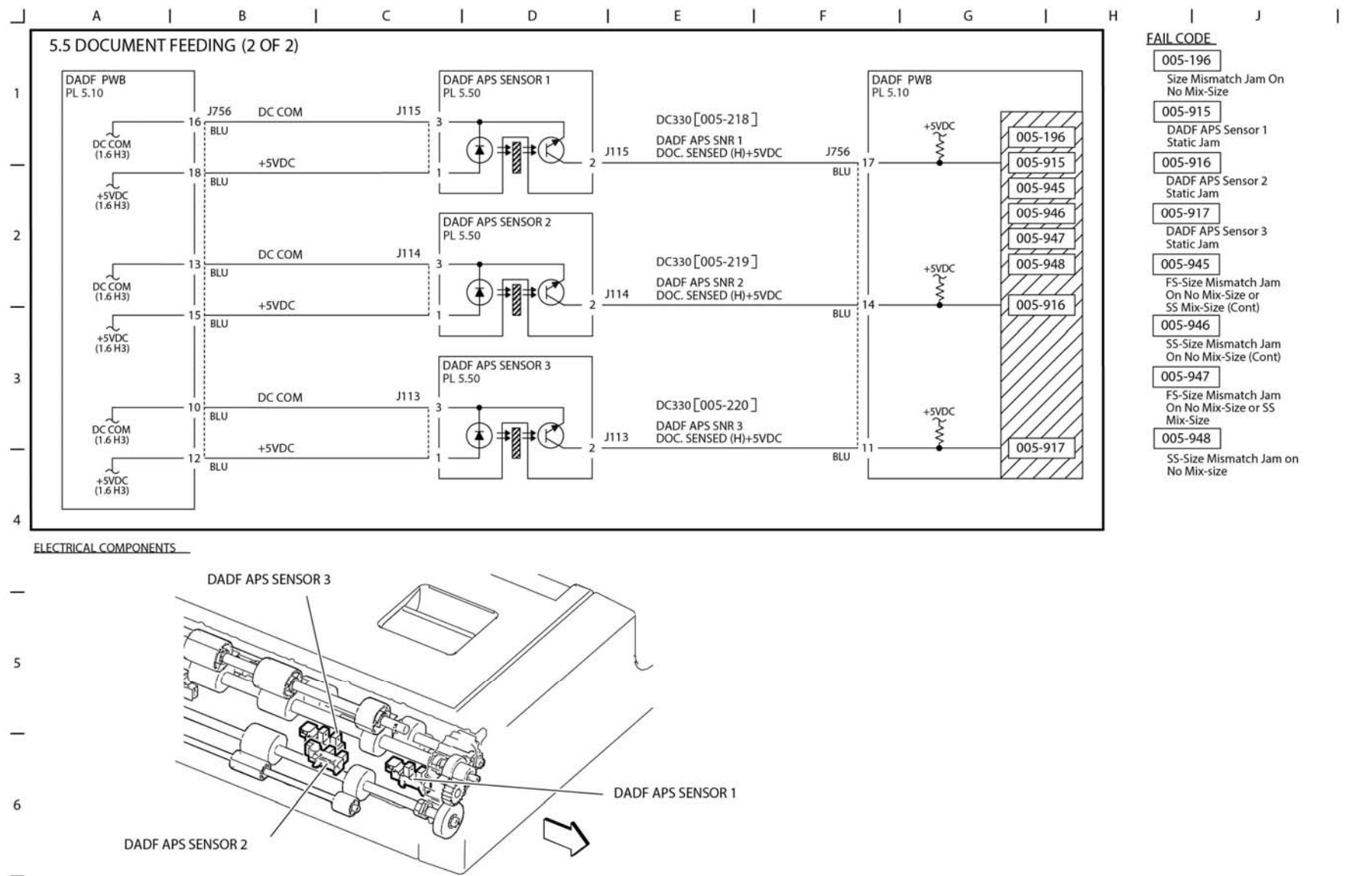


Figure 34 BSD 5.4

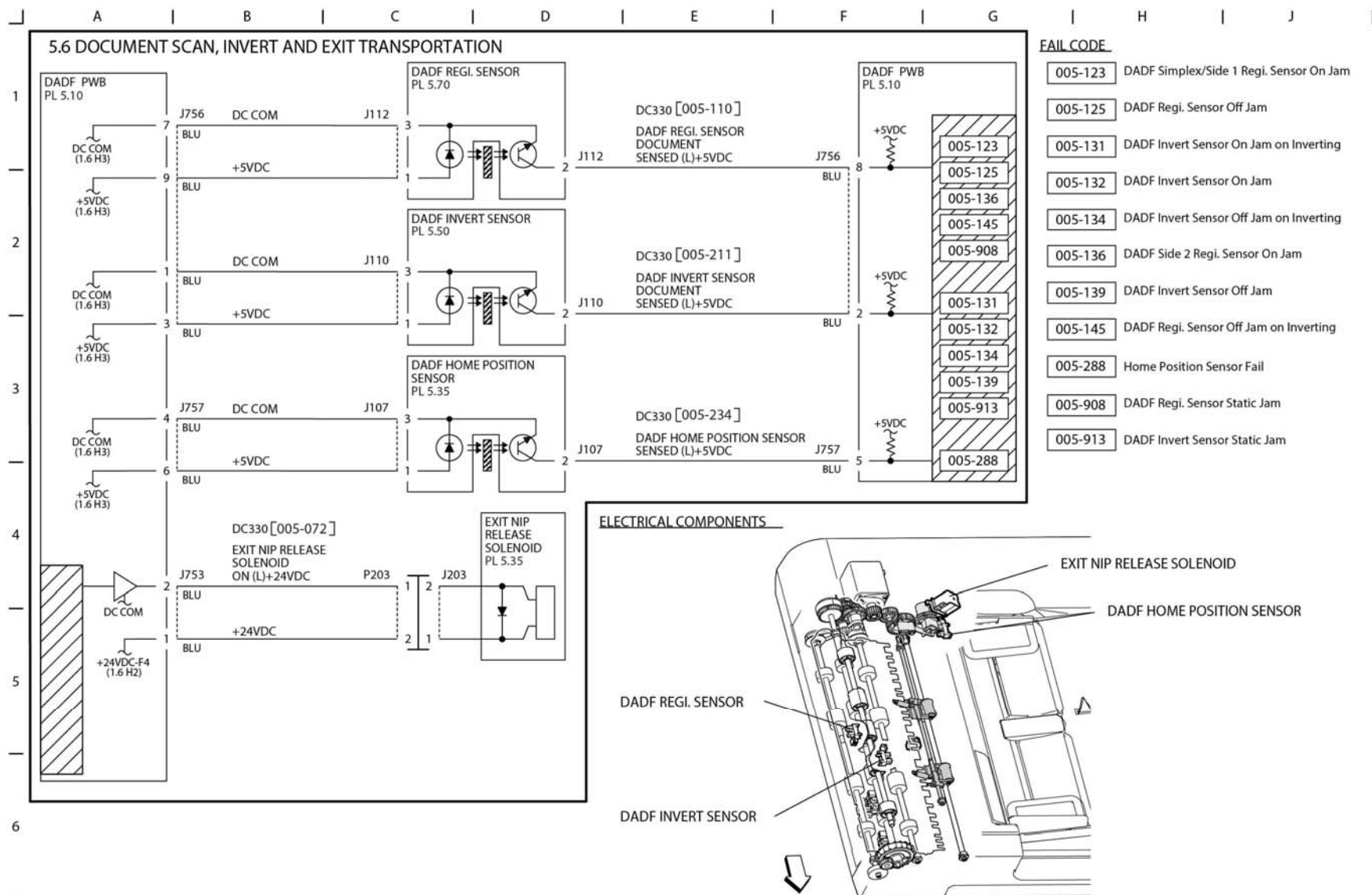


FAIL CODE

- 005-196
Size Mismatch Jam On
No Mix-Size
- 005-915
DADF APS Sensor 1
Static Jam
- 005-916
DADF APS Sensor 2
Static Jam
- 005-917
DADF APS Sensor 3
Static Jam
- 005-945
FS-Size Mismatch Jam
On No Mix-Size or
SS Mix-Size (Cont)
- 005-946
SS-Size Mismatch Jam
On No Mix-Size (Cont)
- 005-947
FS-Size Mismatch Jam
On No Mix-Size or SS
Mix-Size
- 005-948
SS-Size Mismatch Jam on
No Mix-size

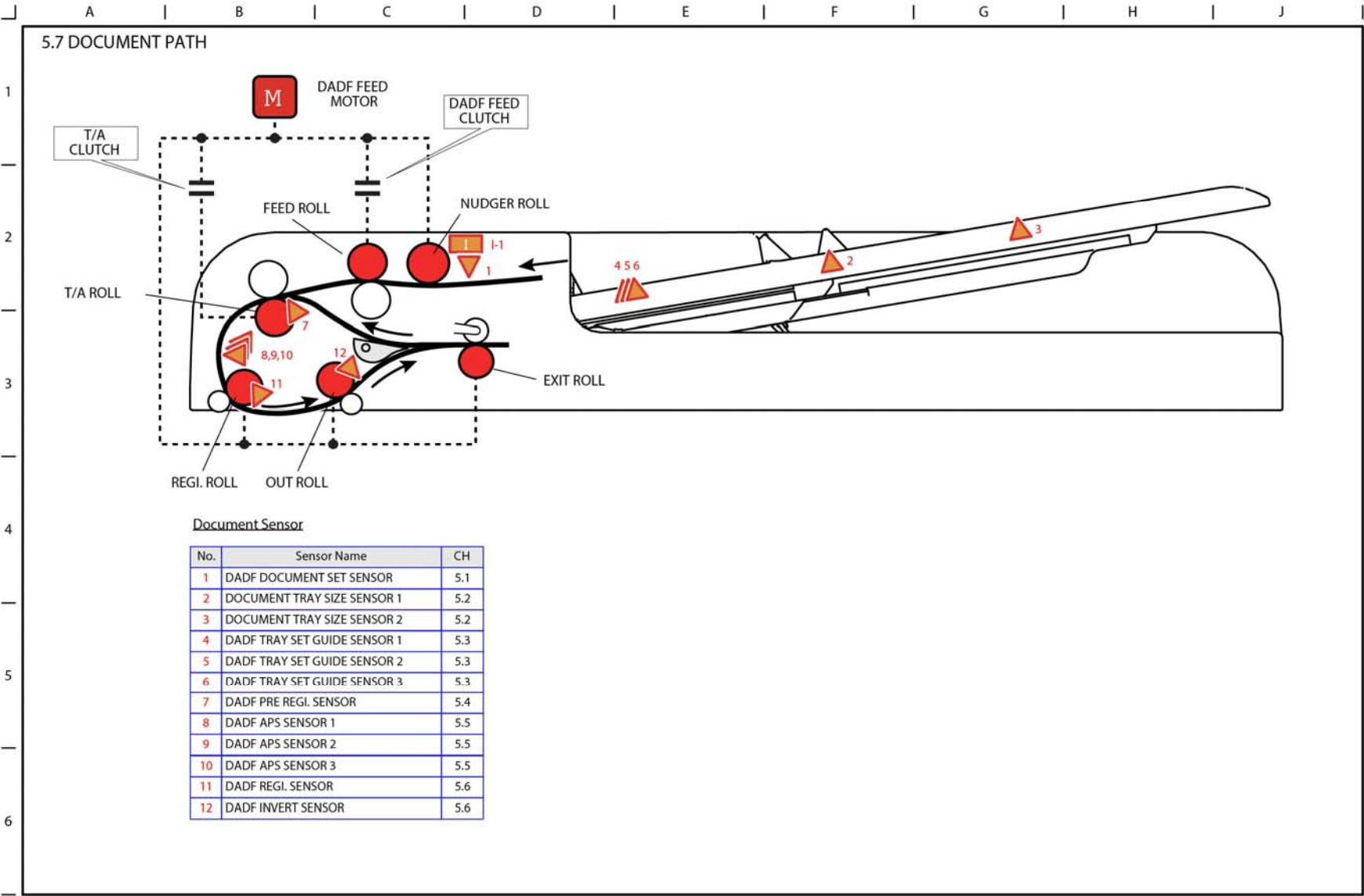
Figure 35 BSD 5.5

BSD 5.6 Document Scan, Invert and Exit Transportation



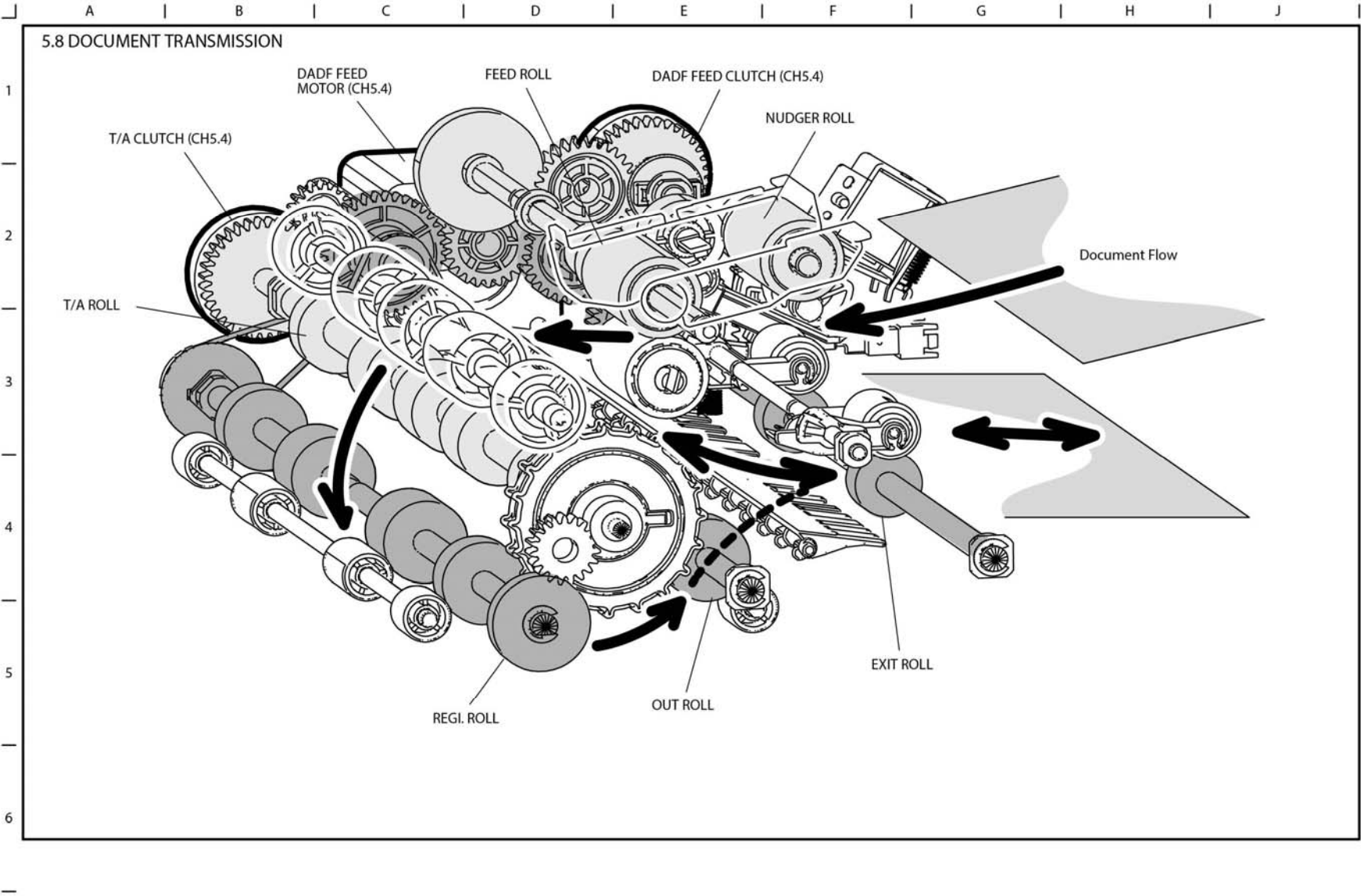
TC-1-0083-A

Figure 36 BSD 5.6



TC-1-0084-A

Figure 37 BSD 5.7



TC-1-0085-A

Figure 38 BSD 5.8

BSD 6.1 Platen Document Sensing

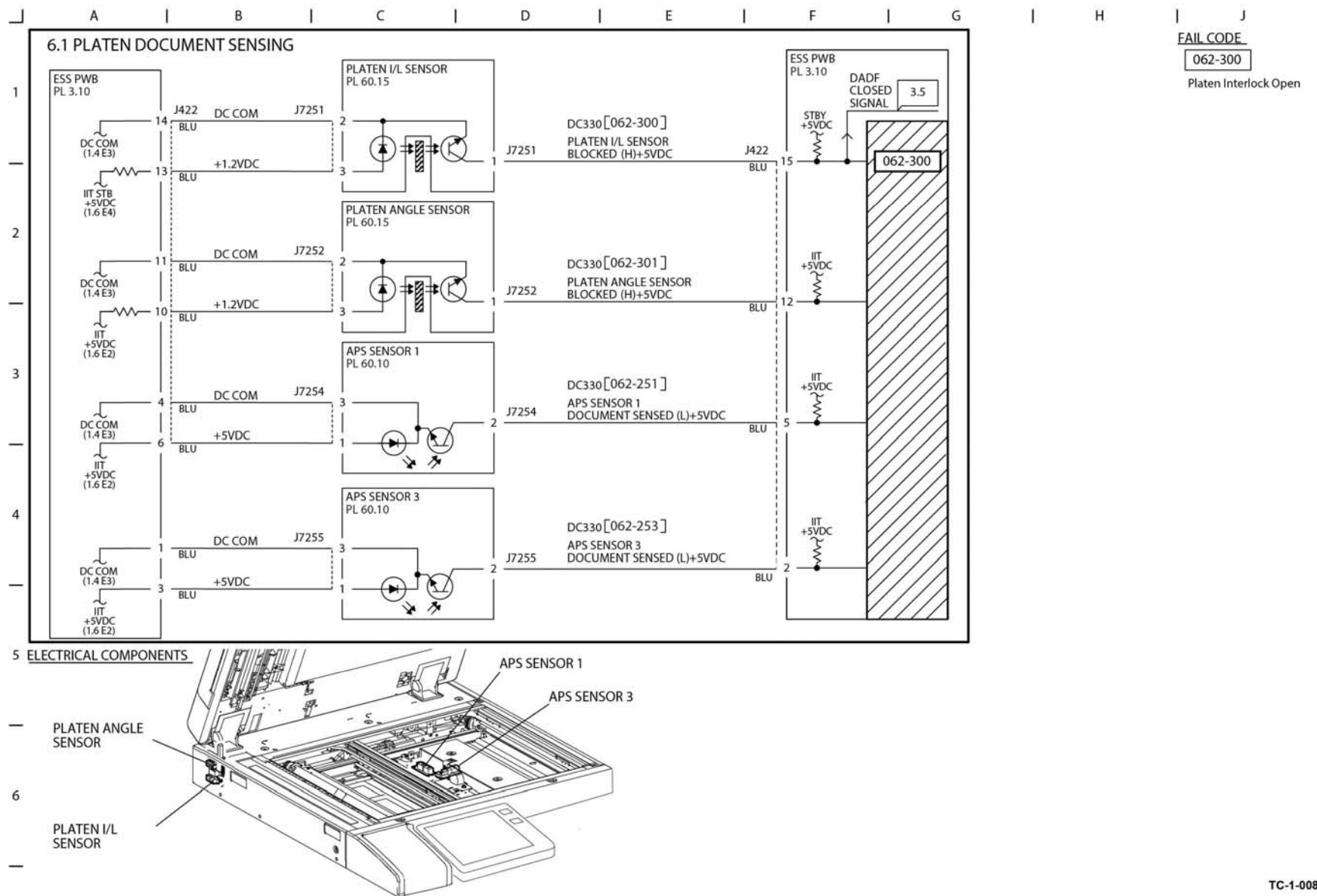
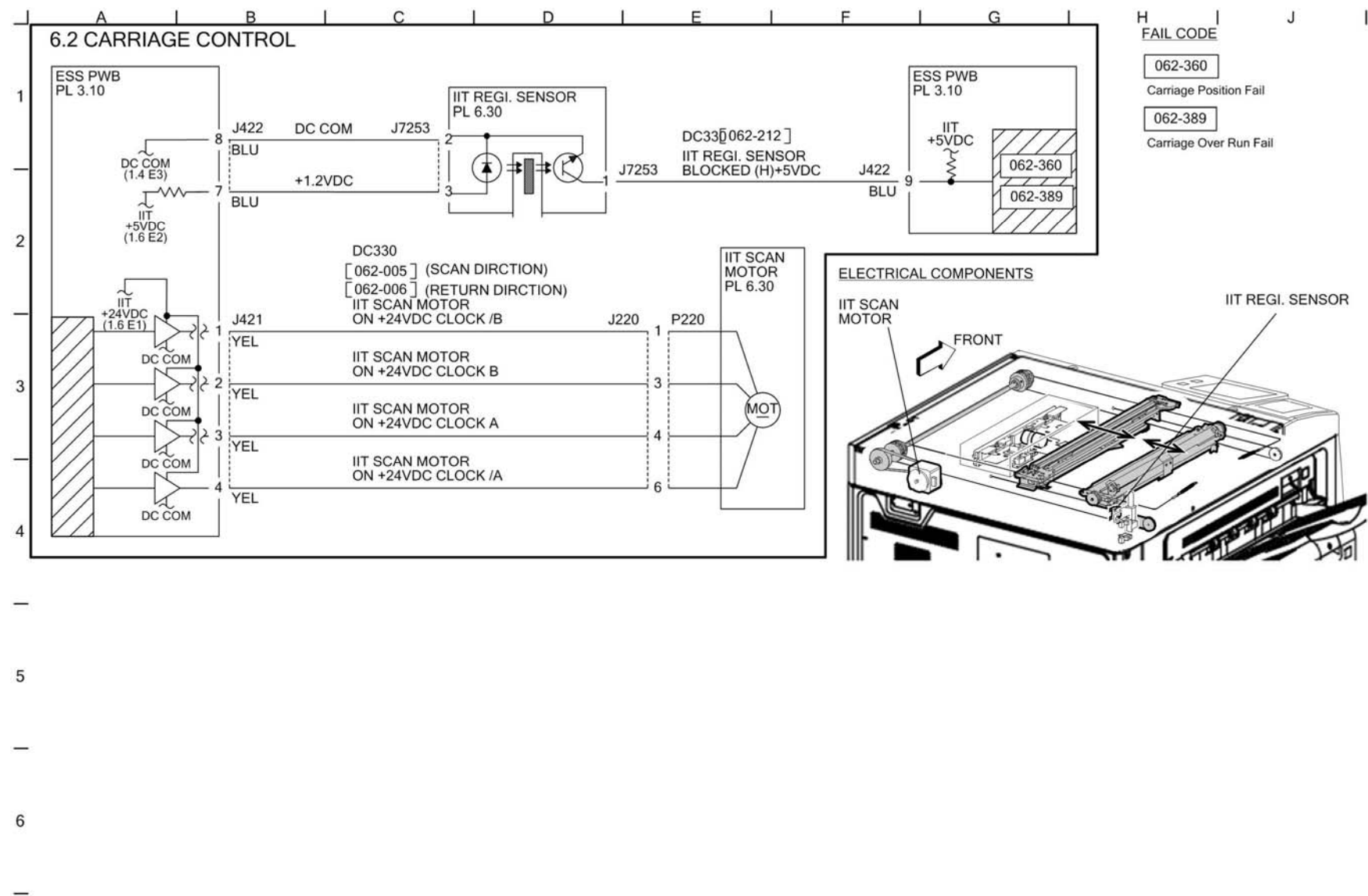


Figure 39 BSD 6.1

BSD 6.2 Carriage Control



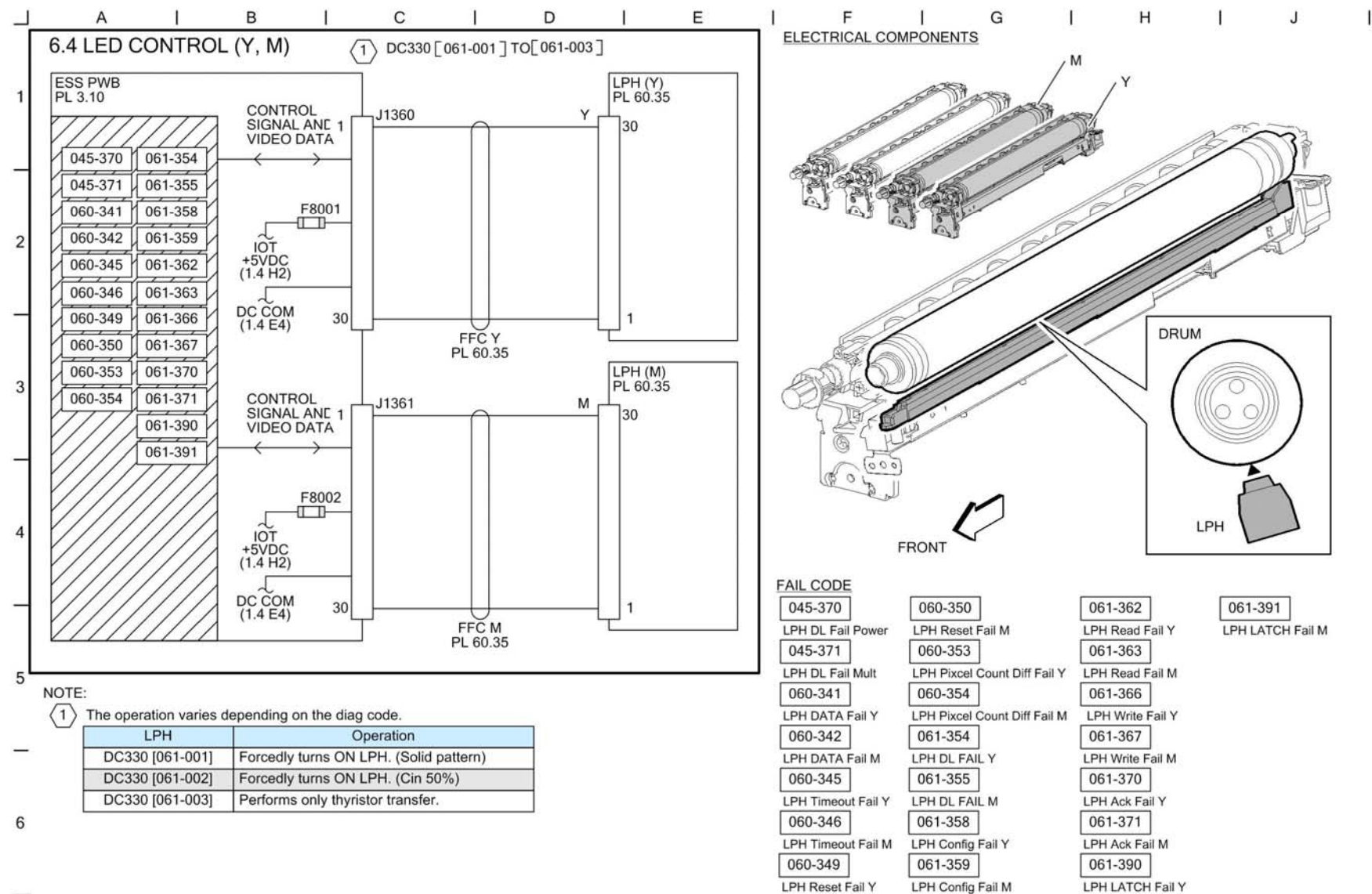
TC-1-0087-A

Figure 40 BSD 6.2



Figure 41 BSD 6.3

BSD 6.4 LED Control (Y, M)



BSD 6.5 LED Control (C, K)

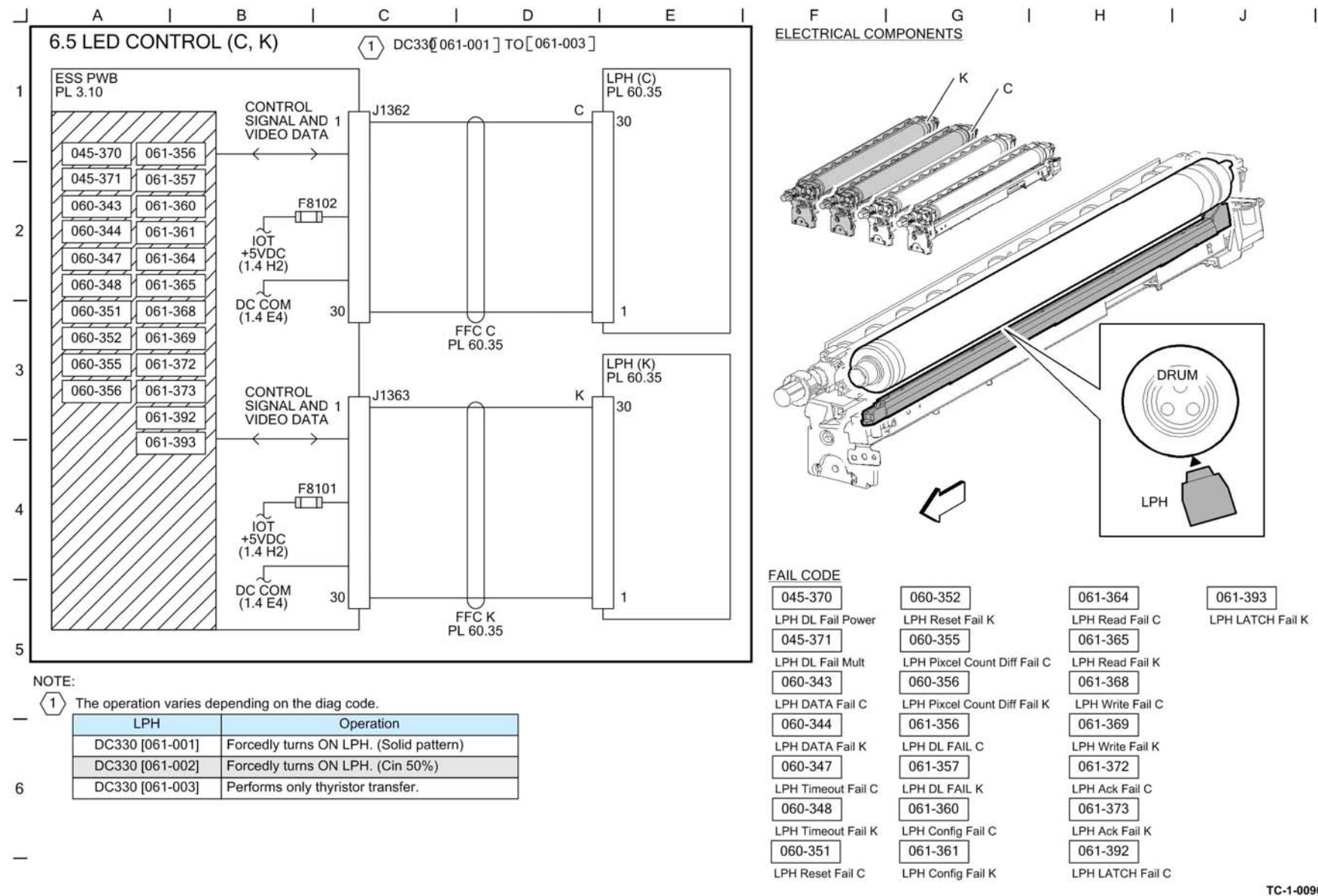


Figure 43 BSD 6.5

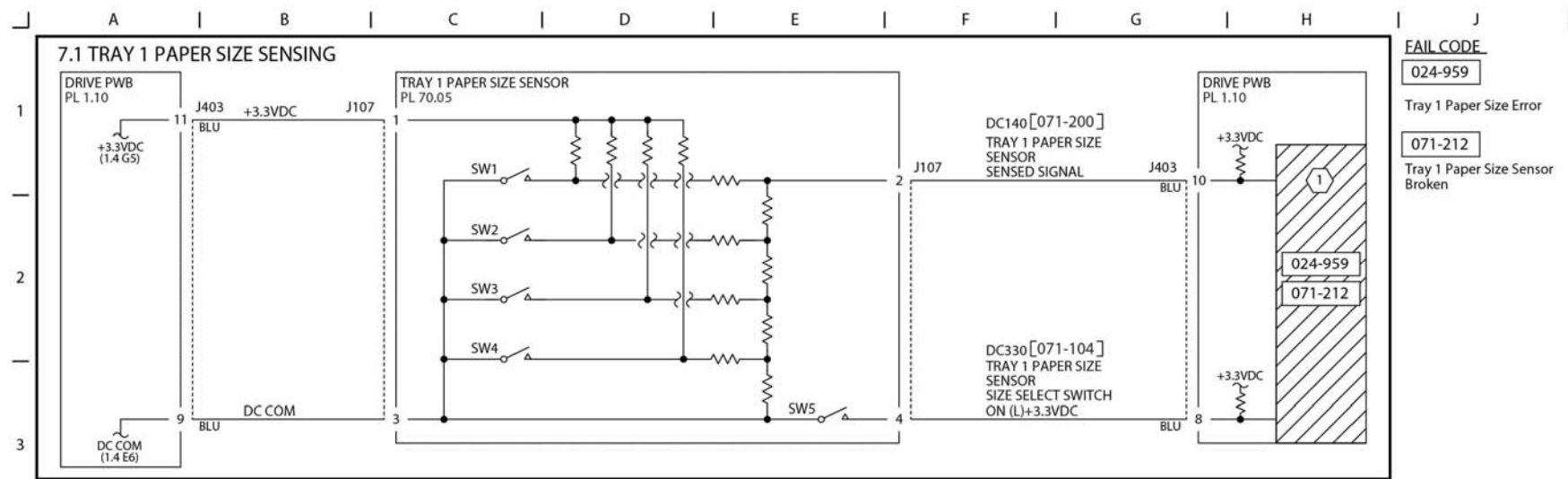
Xerox® VersaLink® C7000 Color Printer & C7030 Family Color Multifunction



December 2017
7-103

Block Schematic Diagrams (BSDs)

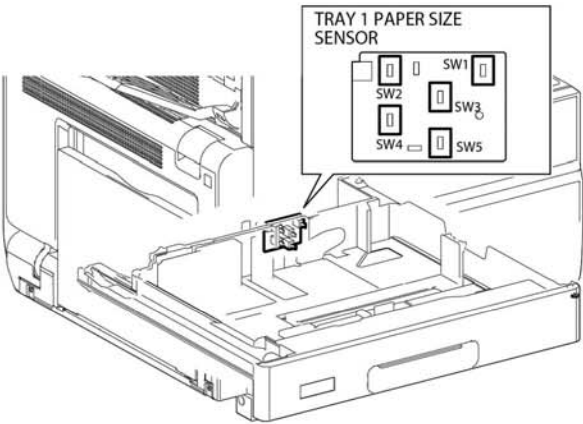
BSD 7.1 Tray 1 Paper Size Sensing



NOTE: 1 Paper size is sensed by voltage corresponding to combined resistance of Paper Size Switch and SW5 On/Off. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value. (Any combination other than the ones below results in an undetermined size.)

Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage (V) (J403-10)	AD Value DC140[071-200]
No Tray	OFF	OFF	OFF	OFF	OFF	3.085±0.066	922-989
A5S/5.5"X8.5"S	OFF	OFF	ON	OFF	OFF	2.671±0.066	797-857
B5S	OFF	OFF	ON	ON	ON	2.468±0.066	735-796
8.5"X13"S	OFF	ON	OFF	ON	OFF	2.064±0.066	610-671
8.5"X14"S	OFF	ON	OFF	ON	ON	1.864±0.066	548-609
A4S	OFF	ON	ON	OFF	OFF	1.079±0.066	304-365
8.5"X11"S	OFF	ON	ON	OFF	ON	0.881±0.066	244-303
A4L	ON	OFF	ON	OFF	OFF	0.691±0.066	184-243
A3S	ON	OFF	ON	ON	OFF	0.493±0.066	124-183
B5L/7.25"X10.5"L	ON	ON	OFF	OFF	ON	0.300±0.066	64-123
8KS(GCO)	ON	ON	OFF	ON	OFF	0.106±0.066	0-63
B4S	ON	ON	ON	OFF	ON		
8.5"X11"L	ON	ON	ON	OFF	OFF		
16KL(GCO)	ON	ON	ON	OFF	ON		
11"X17"S	ON	ON	ON	ON	ON		

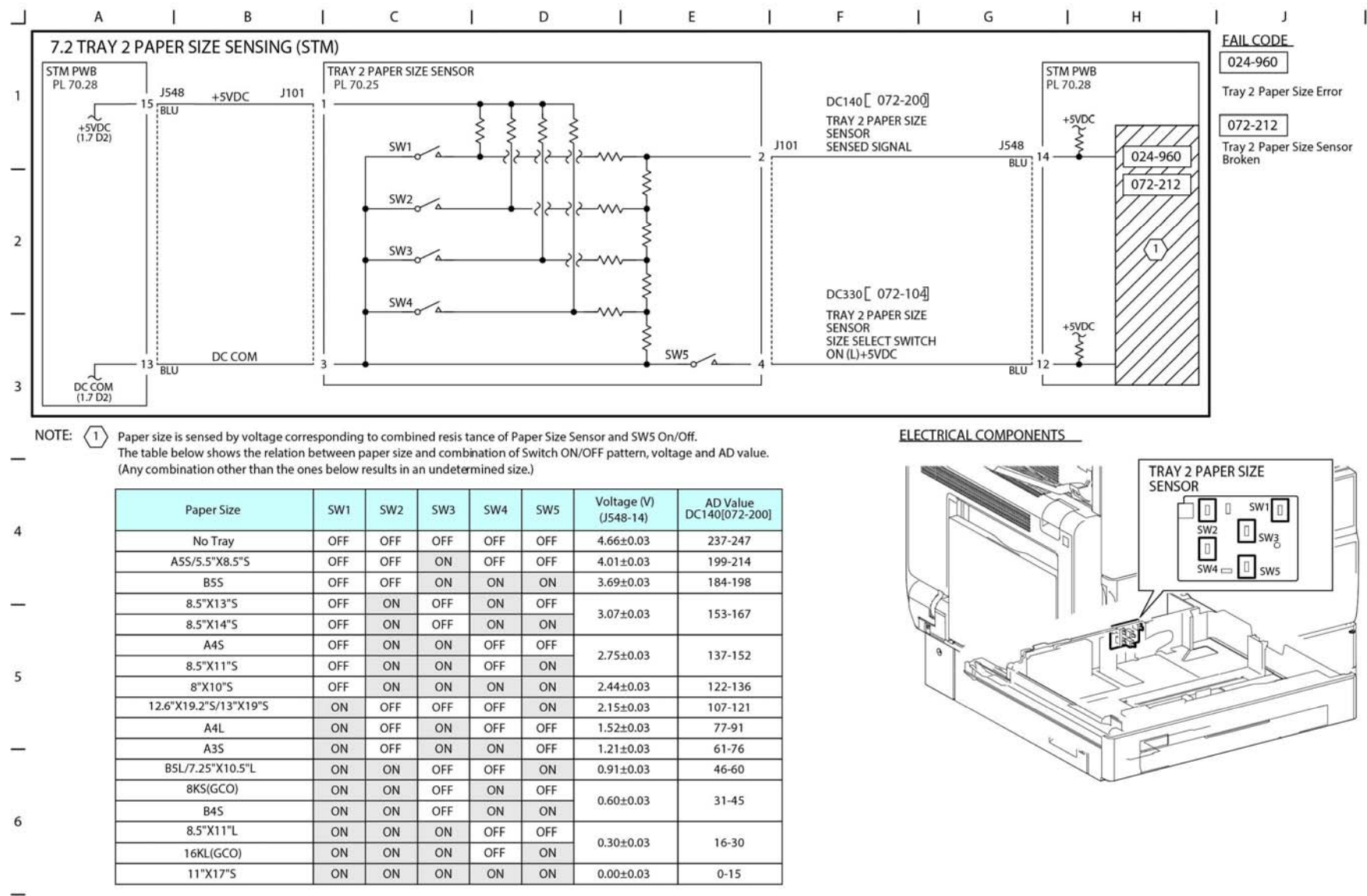
ELECTRICAL COMPONENTS



TC-1-0091-A

Figure 45 BSD 7.1

BSD 7.2 Tray 2 Paper Size Sensing (STM)



NOTE: 1

Paper size is sensed by voltage corresponding to combined resis tance of Paper Size Sensor and SW5 On/Off.
The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value.
(Any combination other than the ones below results in an undetermined size.)

Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage (V) (J548-14)	AD Value DC140[072-200]
No Tray	OFF	OFF	OFF	OFF	OFF	4.66±0.03	237-247
A5S/5.5"X8.5"S	OFF	OFF	ON	OFF	OFF	4.01±0.03	199-214
B5S	OFF	OFF	ON	ON	ON	3.69±0.03	184-198
8.5"X13"S	OFF	ON	OFF	ON	OFF	3.07±0.03	153-167
8.5"X14"S	OFF	ON	OFF	ON	ON		
A4S	OFF	ON	ON	OFF	OFF	2.75±0.03	137-152
8.5"X11"S	OFF	ON	ON	OFF	ON		
8"X10"S	OFF	ON	ON	ON	ON	2.44±0.03	122-136
12.6"X19.2"S/13"X19"S	ON	OFF	OFF	OFF	ON	2.15±0.03	107-121
A4L	ON	OFF	ON	OFF	OFF	1.52±0.03	77-91
A3S	ON	OFF	ON	ON	OFF	1.21±0.03	61-76
B5L/7.25"X10.5"L	ON	ON	OFF	OFF	ON	0.91±0.03	46-60
8KS(GCO)	ON	ON	OFF	ON	OFF	0.60±0.03	31-45
B4S	ON	ON	OFF	ON	ON		
8.5"X11"L	ON	ON	ON	ON	OFF	0.30±0.03	16-30
16KL(GCO)	ON	ON	ON	OFF	ON		
11"X17"S	ON	ON	ON	ON	ON	0.00±0.03	0-15

ELECTRICAL COMPONENTS

TRAY 2 PAPER SIZE
SENSOR

SW1

SW2

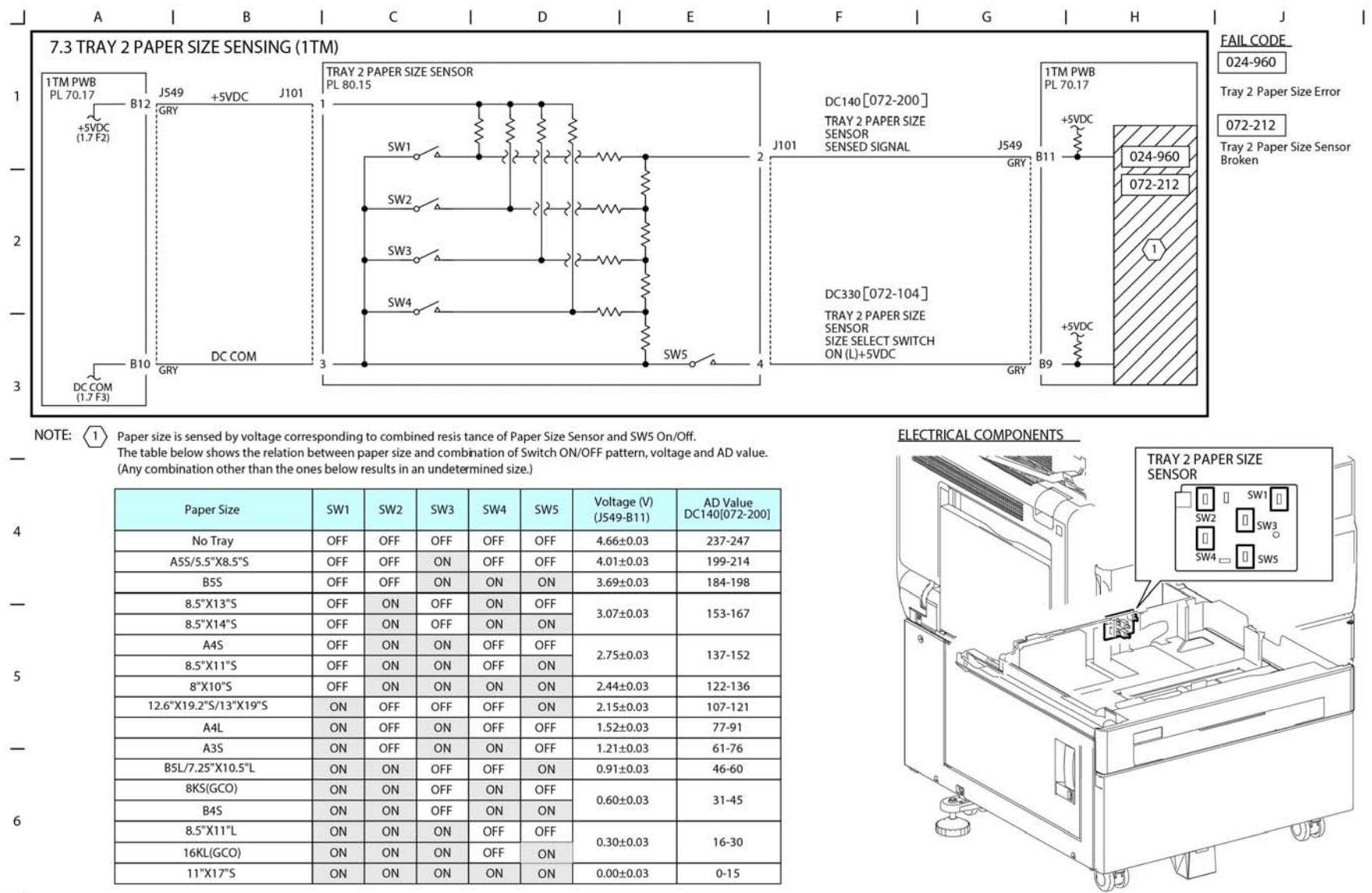
SW3

SW4

SW5

Figure 46 BSD 7.2

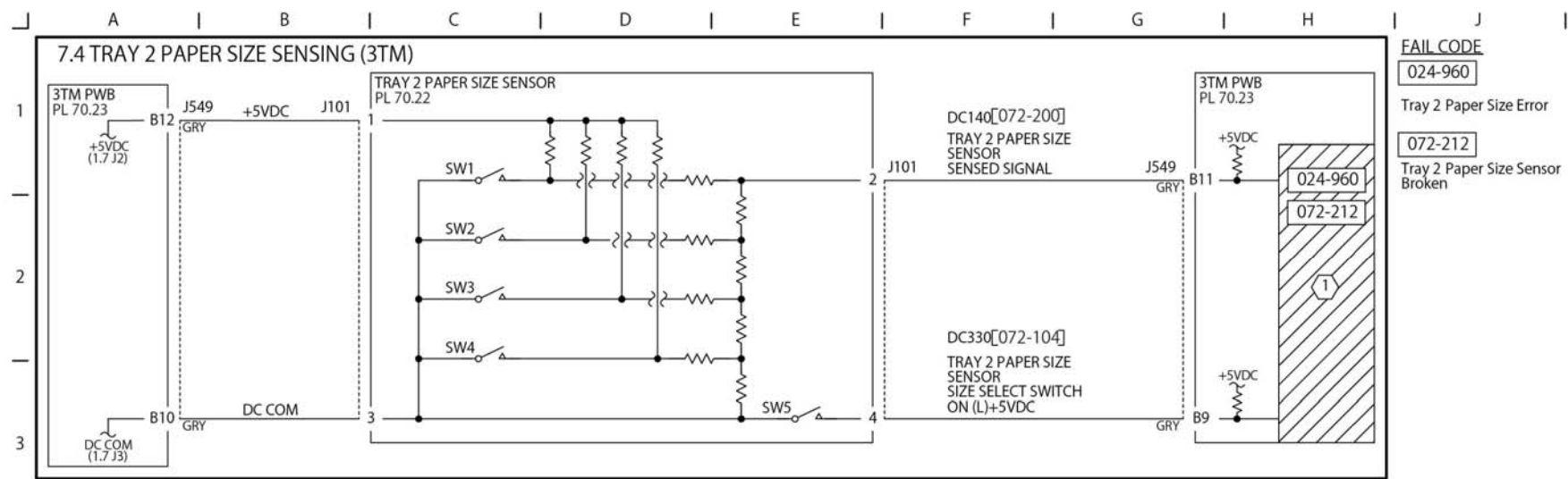
BSD 7.3 Tray 2 Paper Size Sensing (1TM)



TC-1-0093-A

Figure 47 BSD 7.3

BSD 7.4 Tray 2 Paper Size Sensing (3TM)

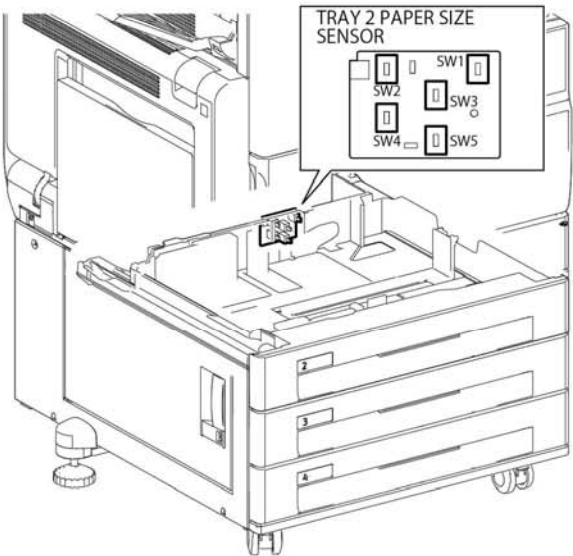


FAIL CODE
024-960
Tray 2 Paper Size Error
072-212
Tray 2 Paper Size Sensor Broken

NOTE: 1 Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor and SW5 On/Off. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value. (Any combination other than the ones below results in an undetermined size.)

Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage (V) (J549-B11)	AD Value DC140[072-200]
No Tray	OFF	OFF	OFF	OFF	OFF	4.66±0.03	237-247
A5S/5.5"X8.5"S	OFF	OFF	ON	OFF	OFF	4.01±0.03	199-214
B5S	OFF	OFF	ON	ON	ON	3.69±0.03	184-198
8.5"X13"S	OFF	ON	OFF	ON	OFF	3.07±0.03	153-167
8.5"X14"S	OFF	ON	OFF	ON	ON		
A4S	OFF	ON	ON	OFF	OFF	2.75±0.03	137-152
8.5"X11"S	OFF	ON	ON	OFF	ON		
8"X10"S	OFF	ON	ON	ON	ON	2.44±0.03	122-136
12.6"X19.2"S/13"X19"S	ON	OFF	OFF	OFF	ON	2.15±0.03	107-121
A4L	ON	OFF	ON	OFF	OFF	1.52±0.03	77-91
A3S	ON	OFF	ON	ON	OFF	1.21±0.03	61-76
B5L/7.25"X10.5"L	ON	ON	OFF	OFF	ON	0.91±0.03	46-60
8KS(GCO)	ON	ON	OFF	ON	OFF	0.60±0.03	31-45
B4S	ON	ON	OFF	ON	ON		
8.5"X11"L	ON	ON	ON	OFF	OFF	0.30±0.03	16-30
16KL(GCO)	ON	ON	ON	OFF	ON		
11"X17"S	ON	ON	ON	ON	ON	0.00±0.03	0-15

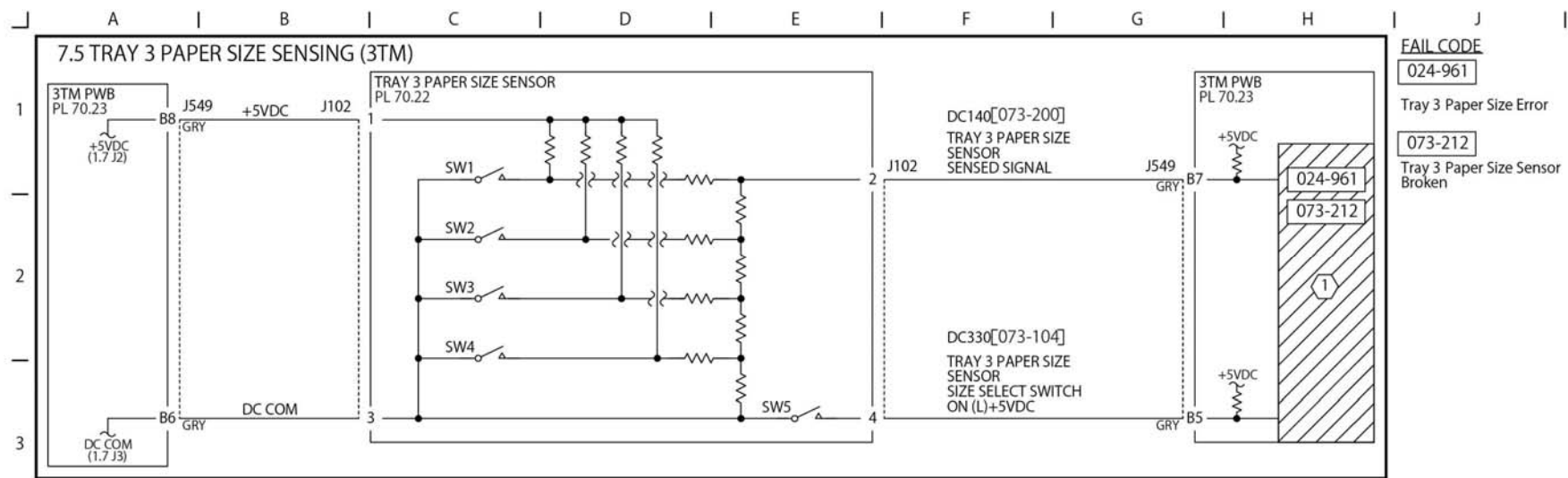
ELECTRICAL COMPONENTS



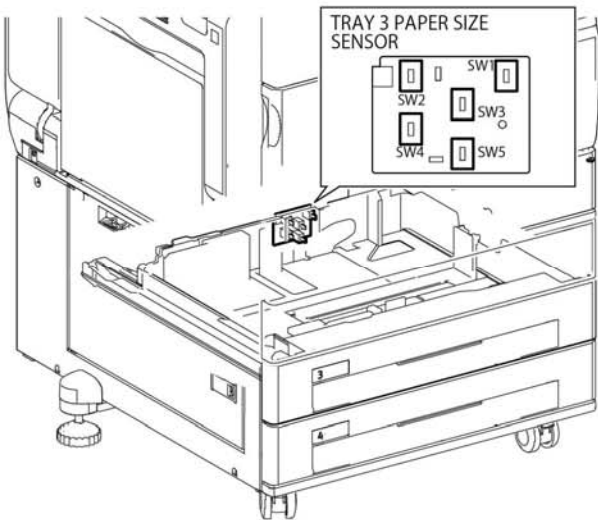
TC-1-0094-A

Figure 48 BSD 7.4

BSD 7.5 Tray 3 Paper Size Sensing (3TM)



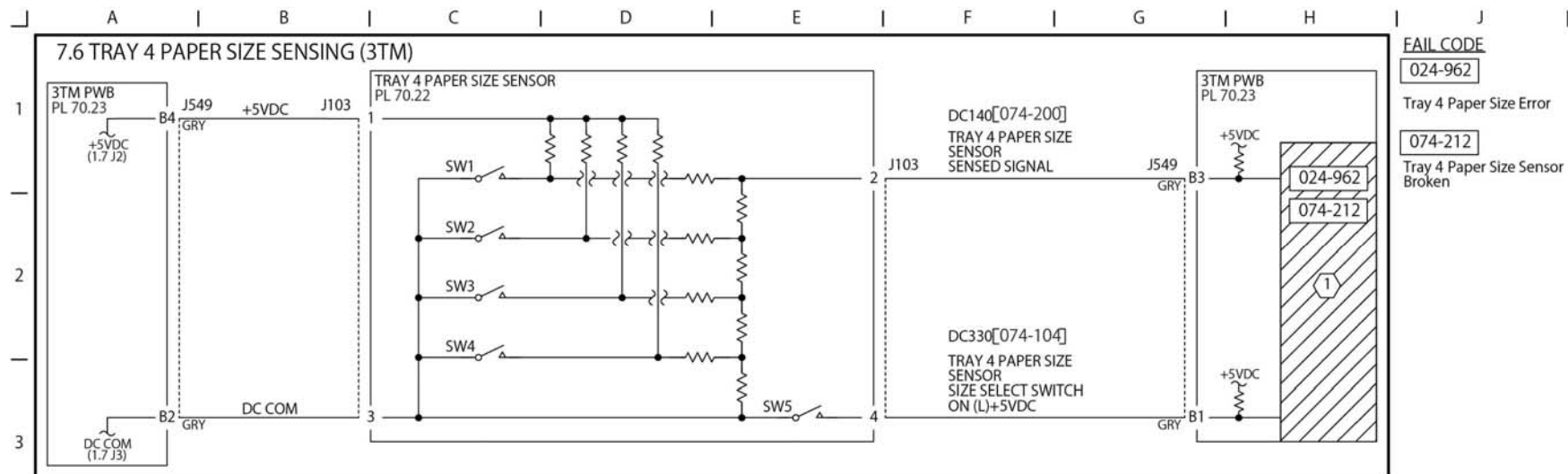
ELECTRICAL COMPONENTS



TC-1-0095-A

Figure 49 BSD 7.5

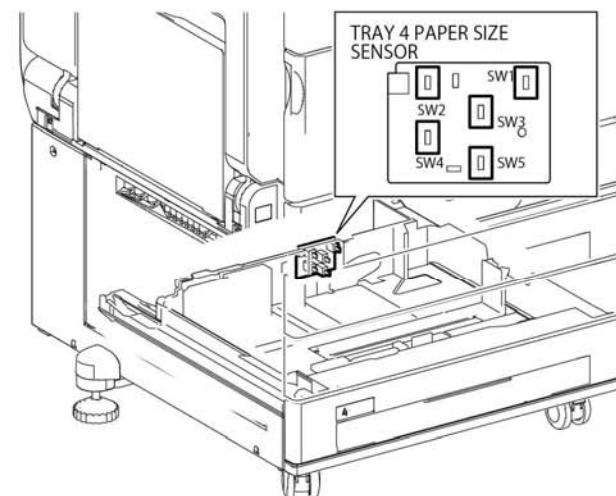
BSD 7.6 Tray 4 Paper Size Sensing (3TM)



NOTE: ① Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor and SW5 On/Off. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value. (Any combination other than the ones below results in an undetermined size.)

ELECTRICAL COMPONENTS

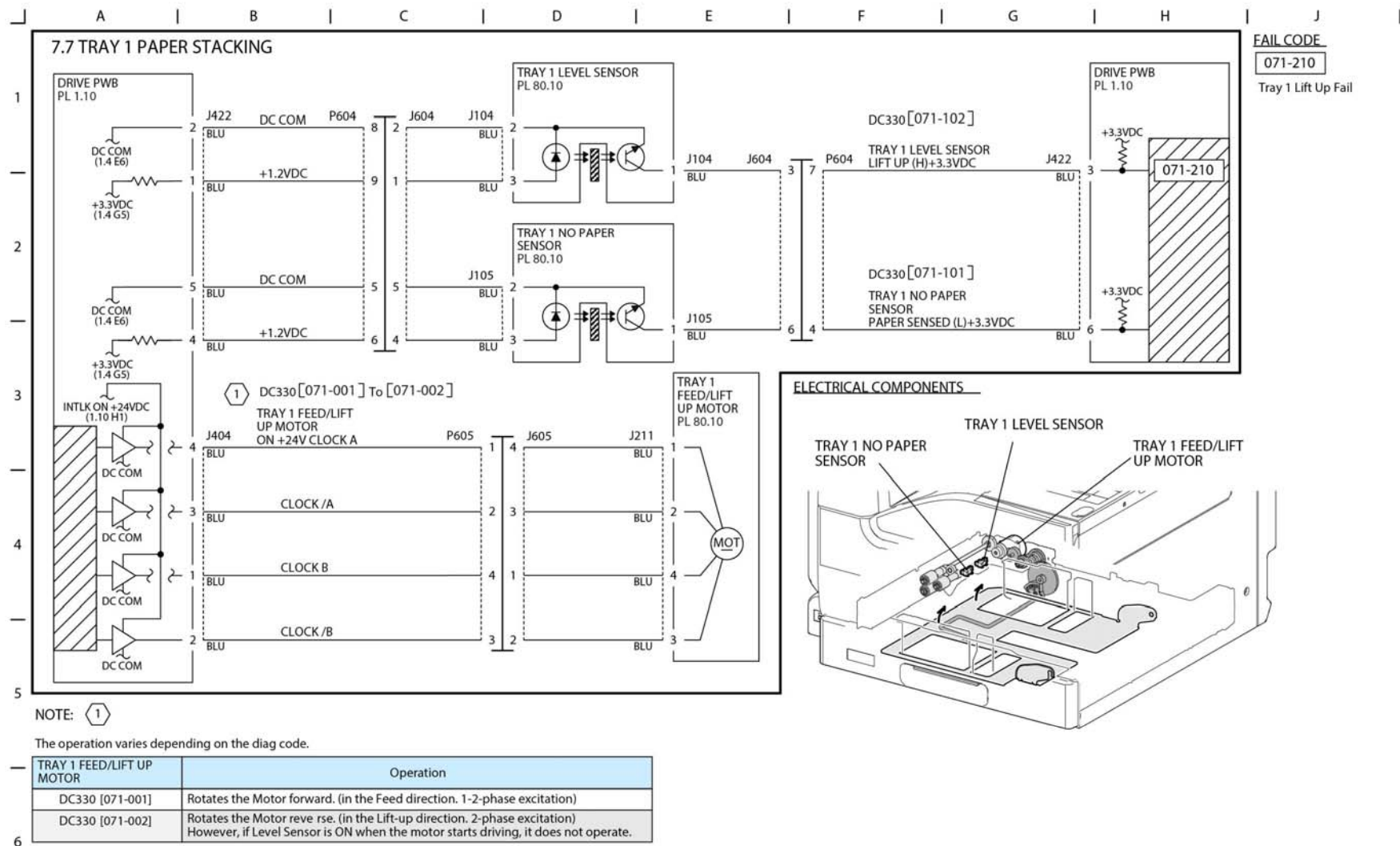
Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage (V) (J549-B3)	AD Value DC140[074-200]
No Tray	OFF	OFF	OFF	OFF	OFF	4.66±0.03	237-247
A5S/5.5"X8.5"S	OFF	OFF	ON	OFF	OFF	4.01±0.03	199-214
B5S	OFF	OFF	ON	ON	ON	3.69±0.03	184-198
8.5"X13"S	OFF	ON	OFF	ON	OFF	3.07±0.03	153-167
8.5"X14"S	OFF	ON	OFF	ON	ON		
A4S	OFF	ON	ON	OFF	OFF	2.75±0.03	137-152
8.5"X11"S	OFF	ON	ON	OFF	ON		
8"X10"S	OFF	ON	ON	ON	ON	2.44±0.03	122-136
12.6"X19.2"S/13"X19"S	ON	OFF	OFF	OFF	ON	2.15±0.03	107-121
A4L	ON	OFF	ON	OFF	OFF	1.52±0.03	77-91
A3S	ON	OFF	ON	ON	OFF	1.21±0.03	61-76
B5L/7.25"X10.5"L	ON	ON	OFF	OFF	ON	0.91±0.03	46-60
8KS(GCO)	ON	ON	OFF	ON	OFF	0.60±0.03	31-45
B4S	ON	ON	OFF	ON	ON		
8.5"X11"L	ON	ON	ON	OFF	OFF	0.30±0.03	16-30
16KL(GCO)	ON	ON	ON	OFF	ON		
11"X17"S	ON	ON	ON	ON	ON	0.00±0.03	0-15



TC-1-0096-A

Figure 50 BSD 7.6

BSD 7.7 Tray 1 Paper Stacking

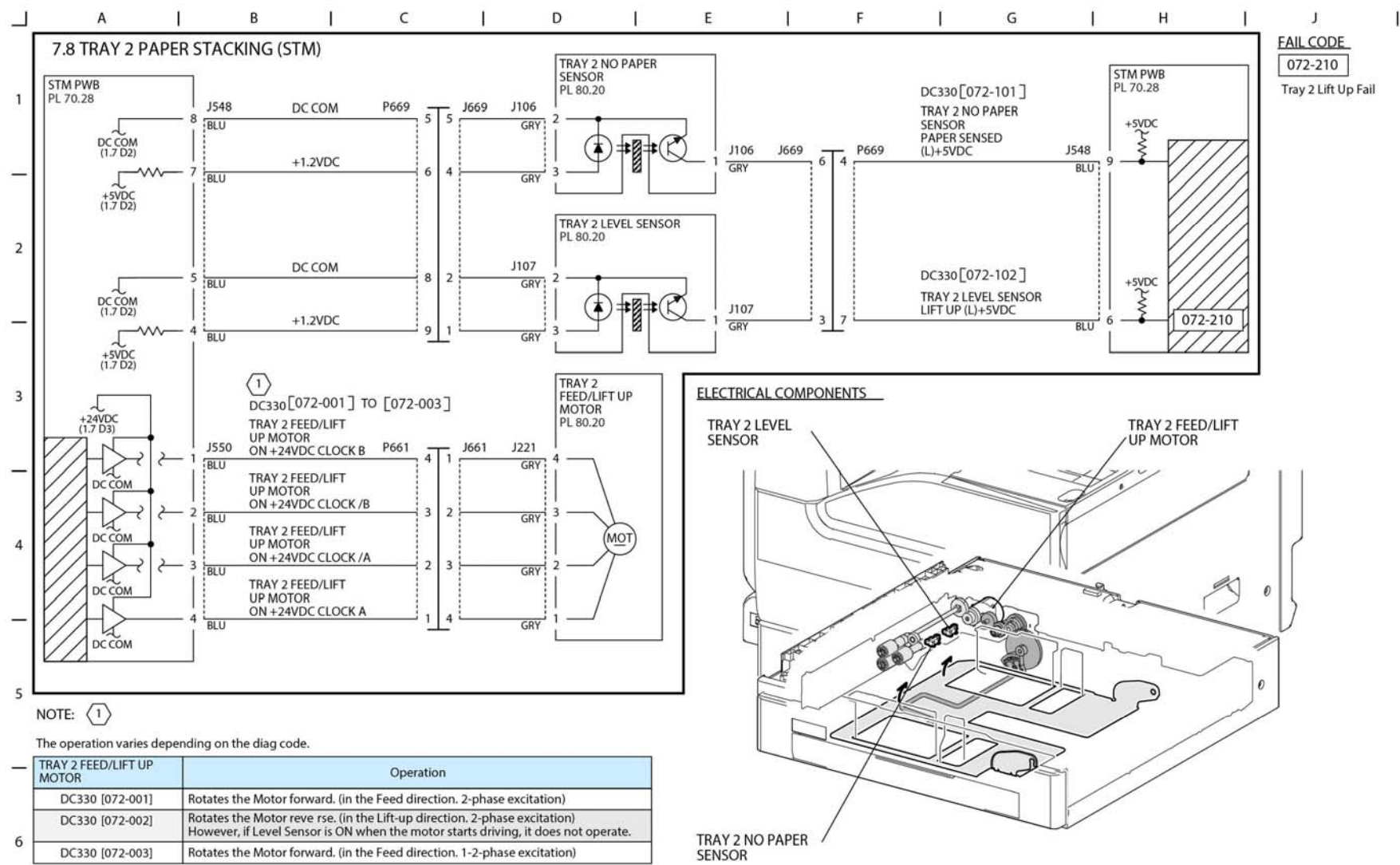


FAIL CODE
071-210
Tray 1 Lift Up Fail

TC-1-0097-A

Figure 51 BSD 7.7

BSD 7.8 Tray 2 Paper Stacking (STM)



TC-1-0098-A

Figure 52 BSD 7.8

BSD 7.9 Tray 2 Paper Stacking (1TM)

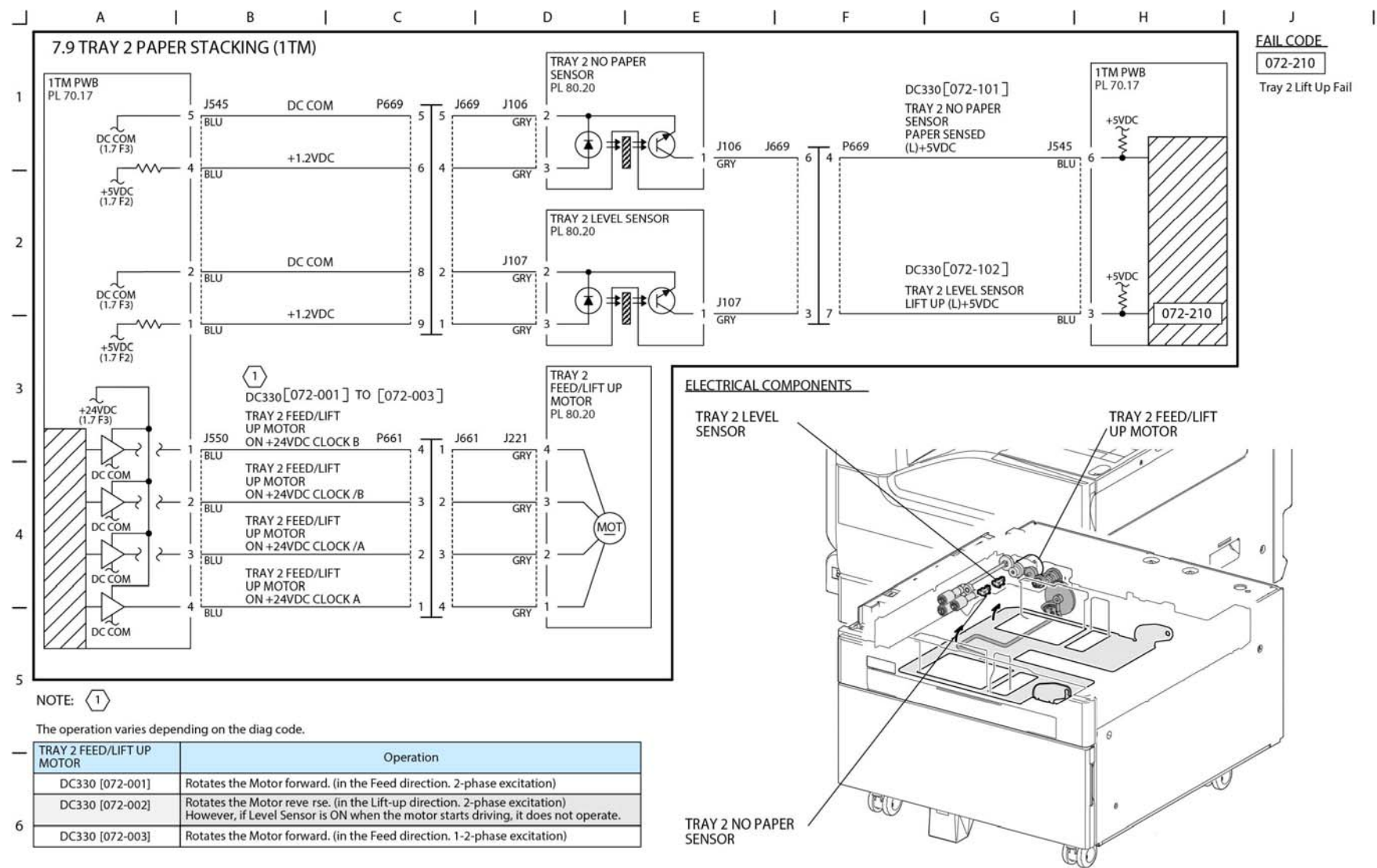
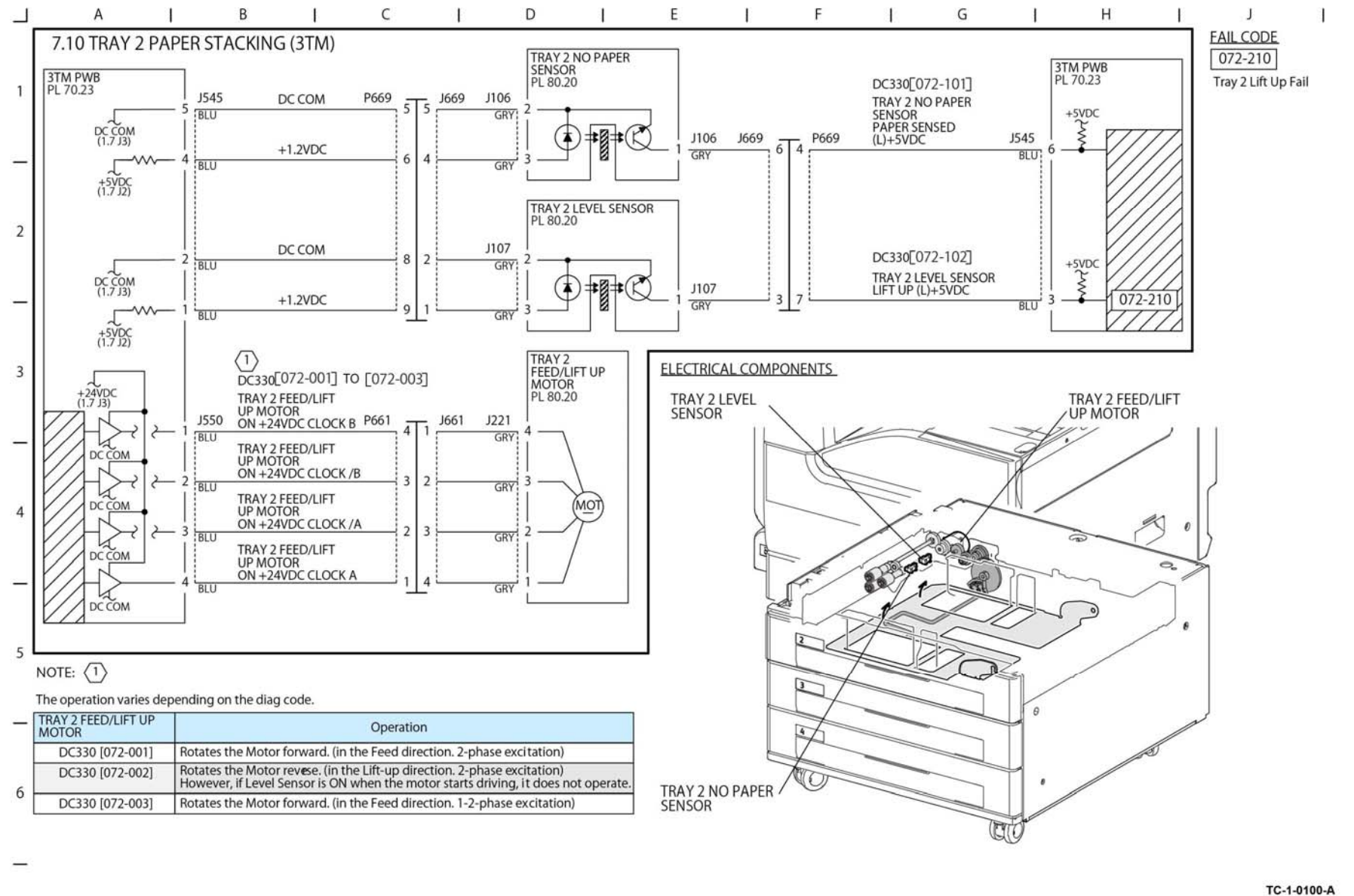
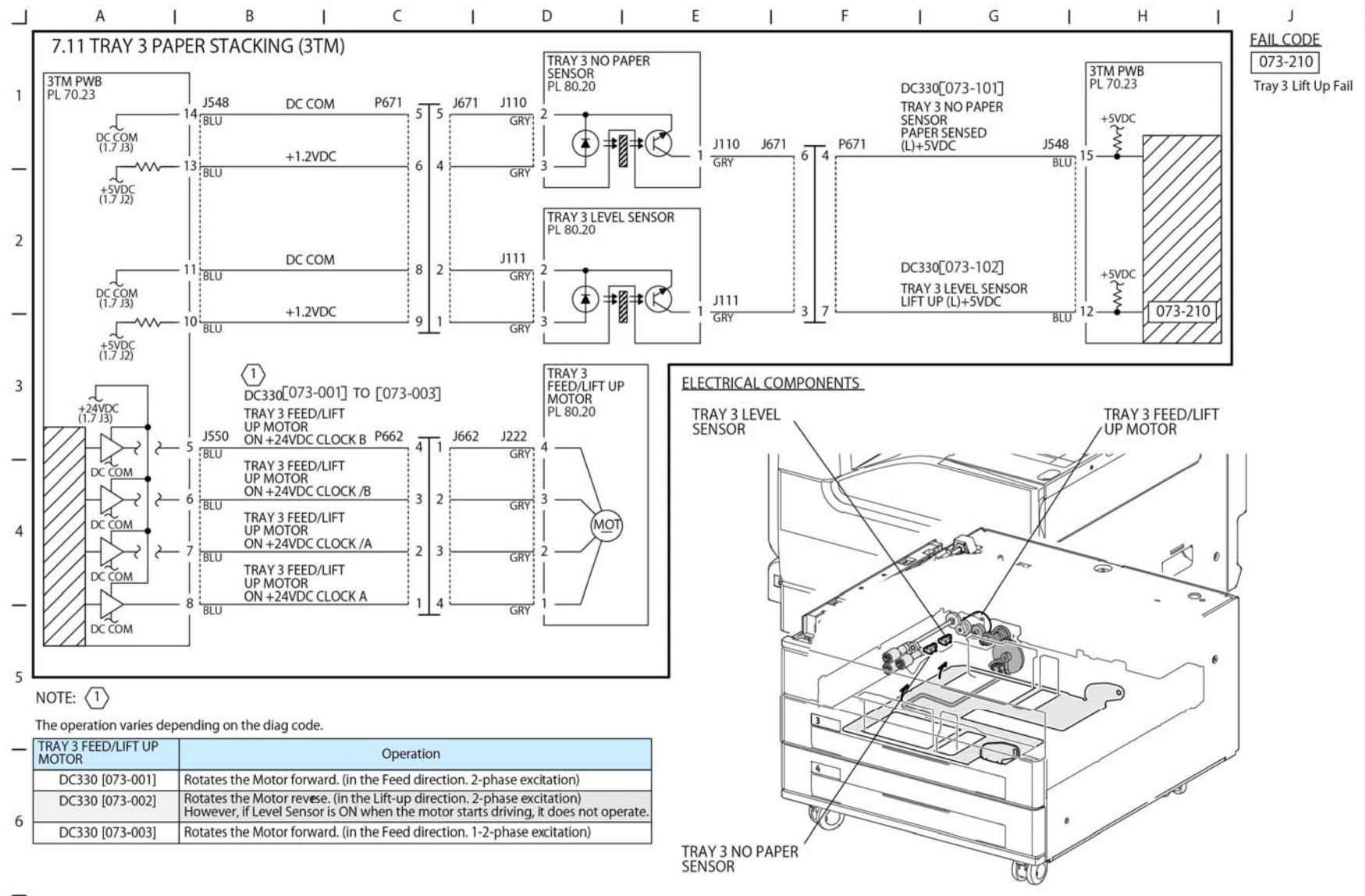


Figure 53 BSD 7.9

BSD 7.10 Tray 2 Paper Stacking (3TM)



BSD 7.11 Tray 3 Paper Stacking (3TM)

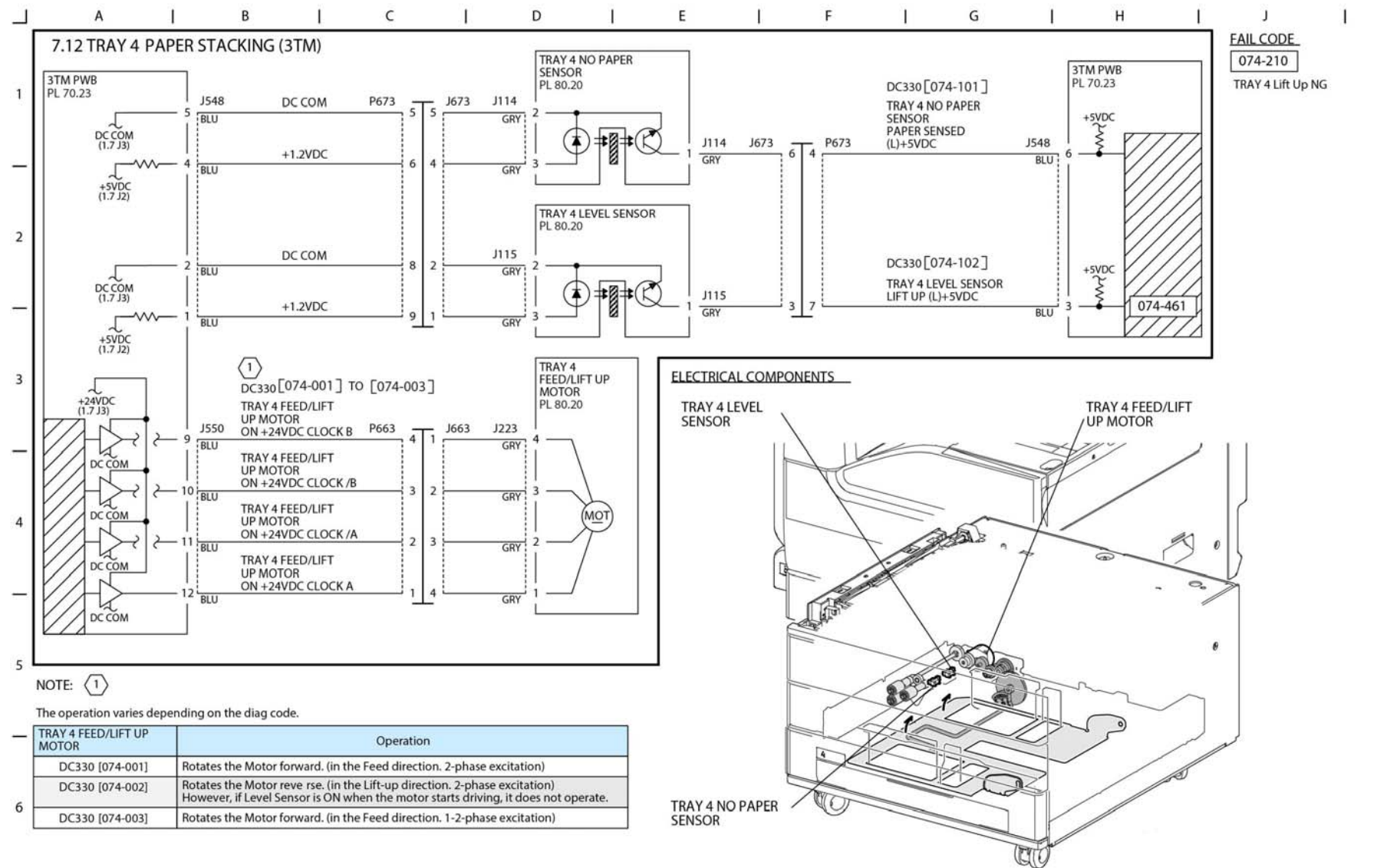


FAIL CODE
073-210
Tray 3 Lift Up Fail

TC-1-0101-A

Figure 55 BSD 7.11

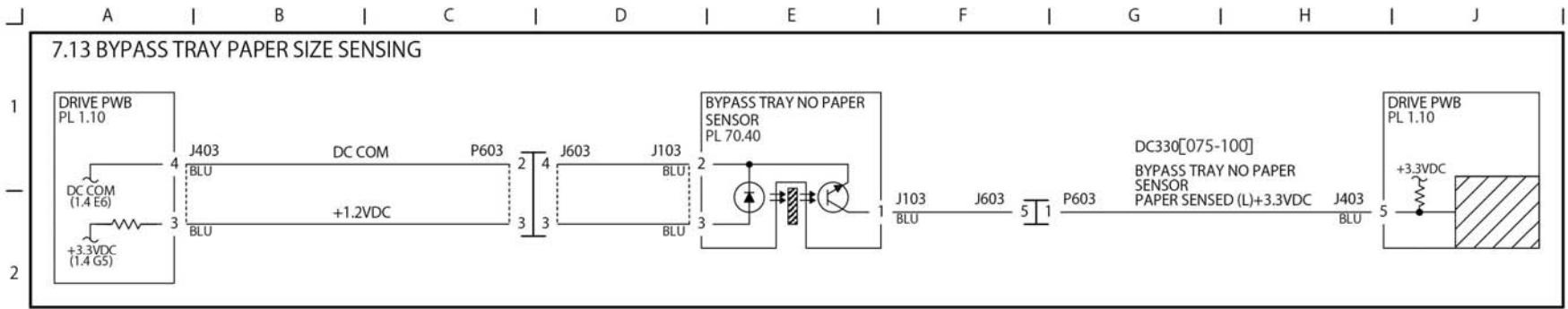
BSD 7.12 Tray 4 Paper Stacking (3TM)



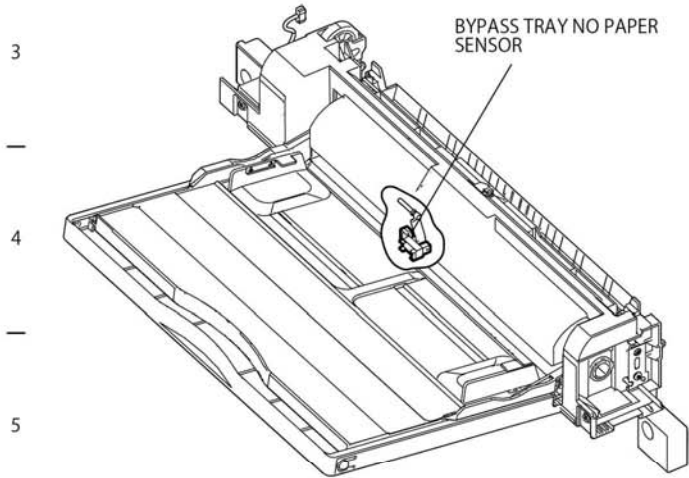
TC-1-0102-A

Figure 56 BSD 7.12

BSD 7.13 Bypass Tray Paper Sensing



ELECTRICAL COMPONENTS



TC-1-0103-A

Figure 57 BSD 7.13

BSD 7.14 HCF Paper Size Sensing and Tray Set

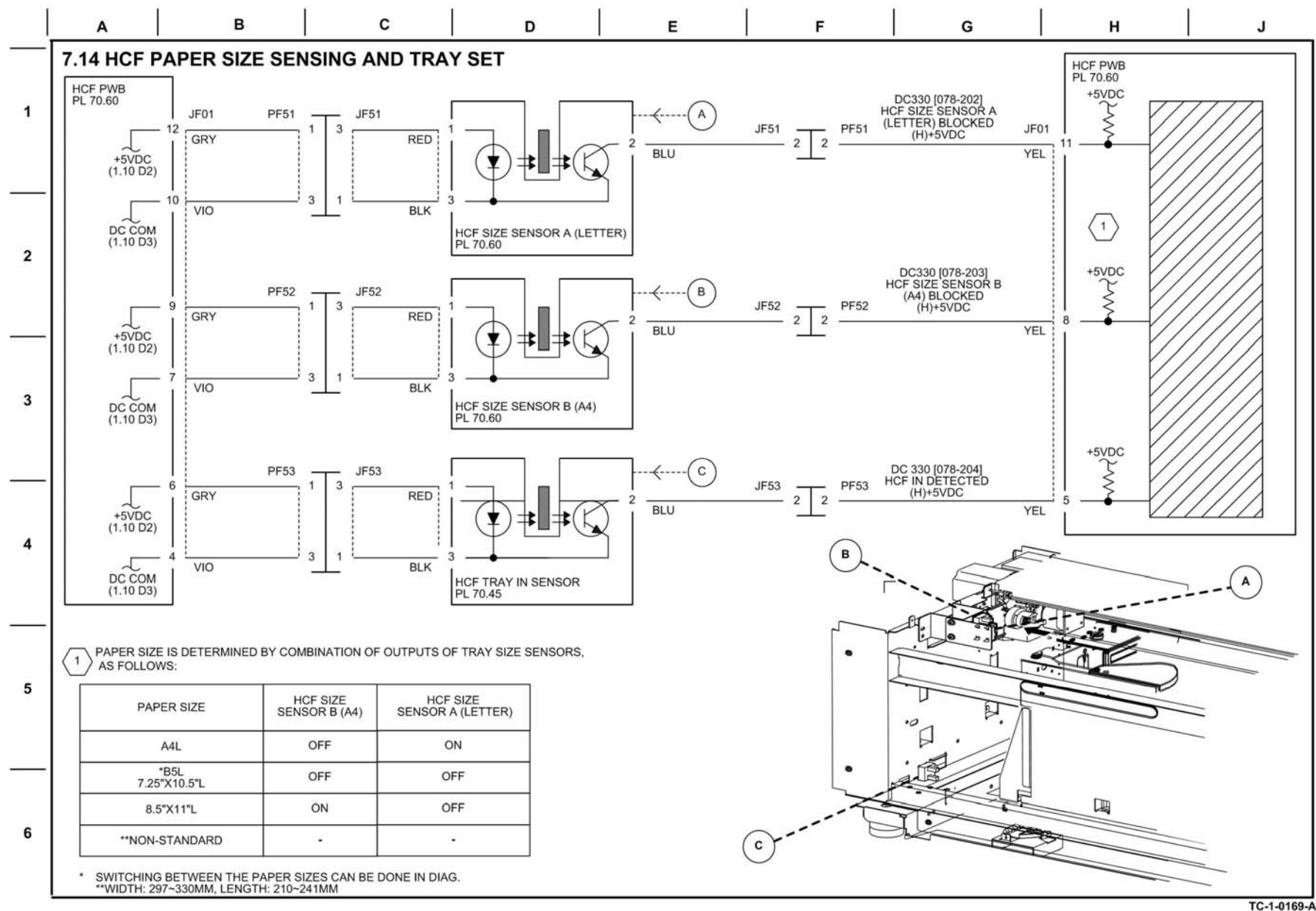
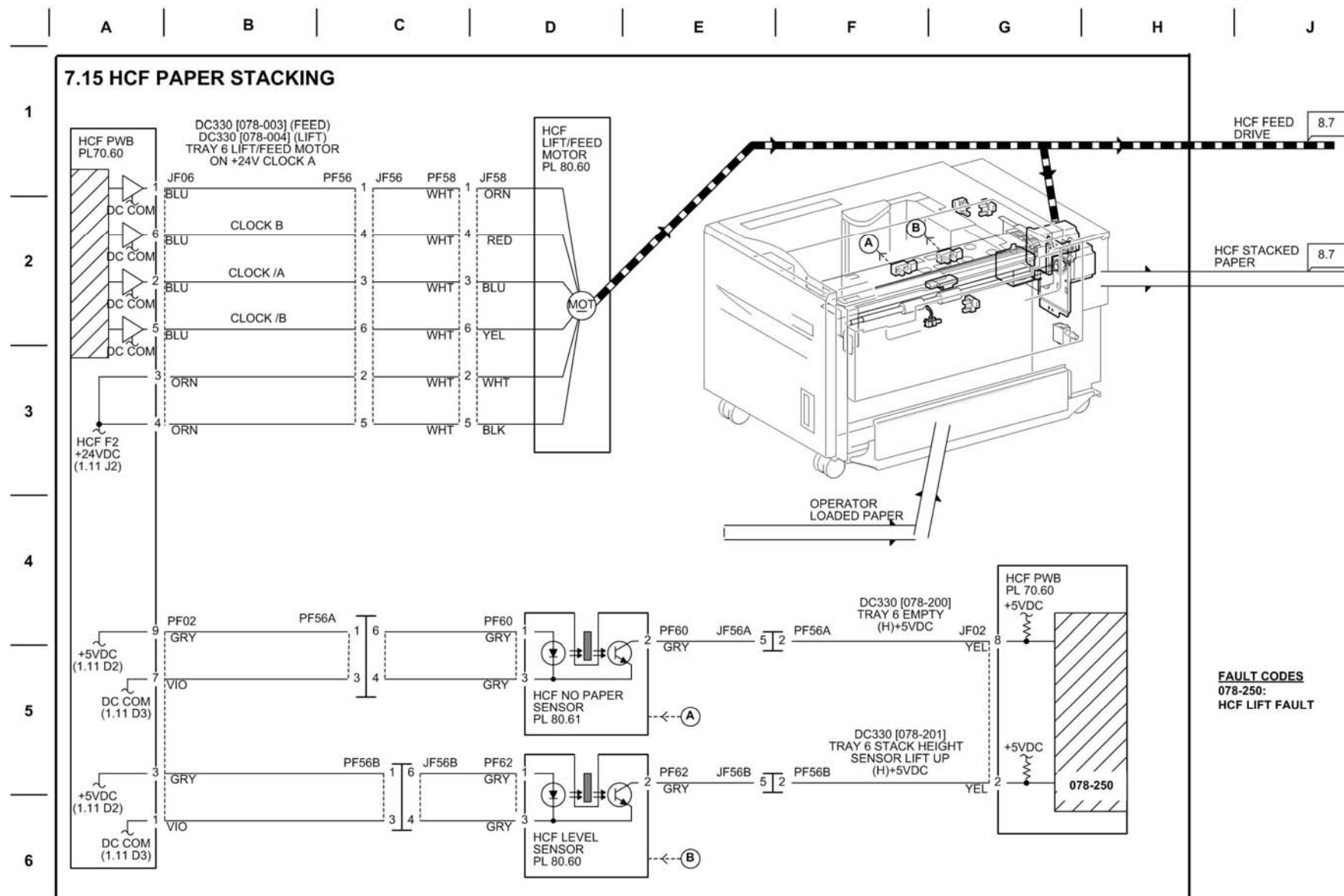


Figure 58 BSD 7.14

BSD 7.15 HCF Paper Stacking



TC-1-0170-A

Figure 59 BSD 7.15

BSD 7.16 Tray 2 Paper Size Sensing (TTM)

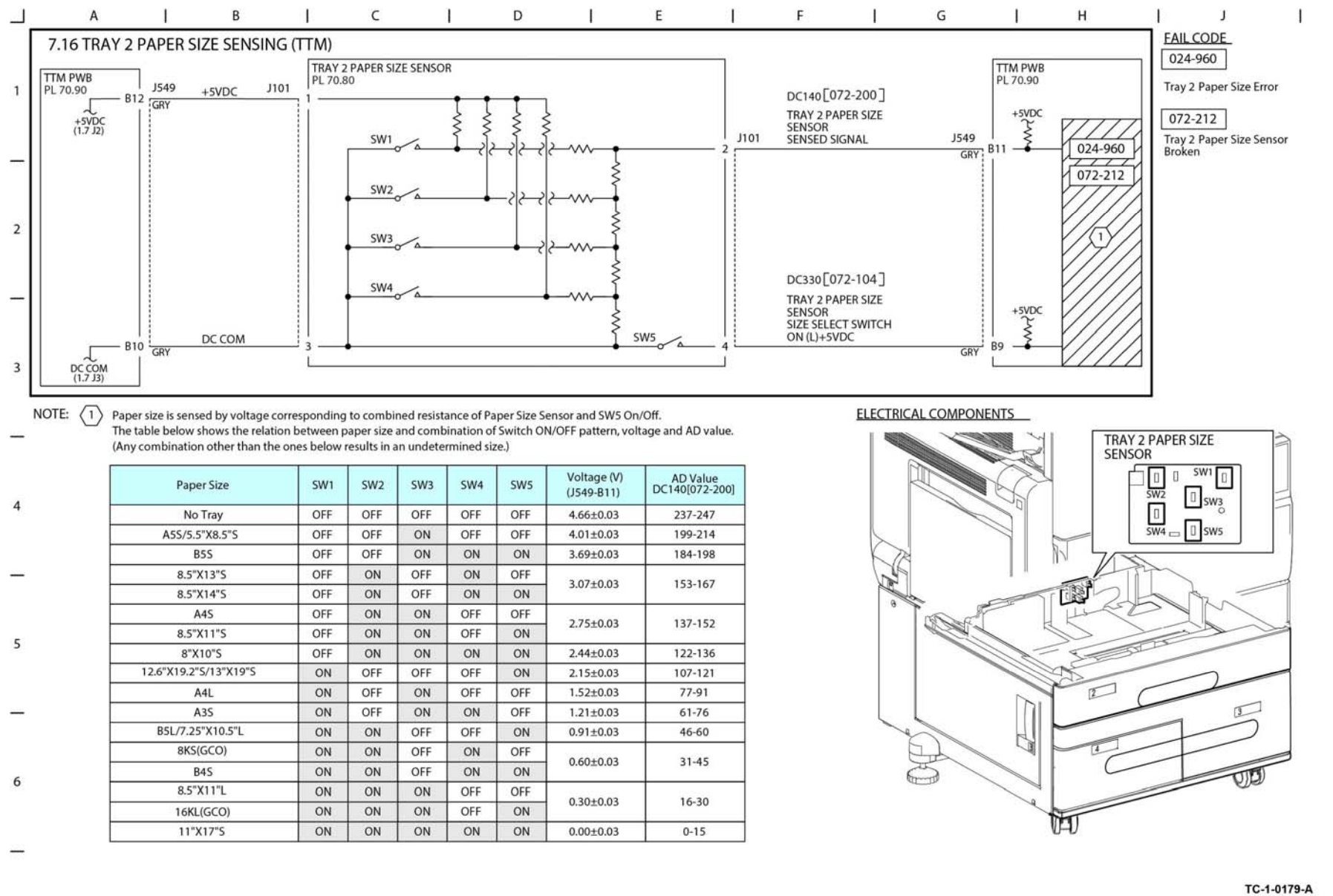
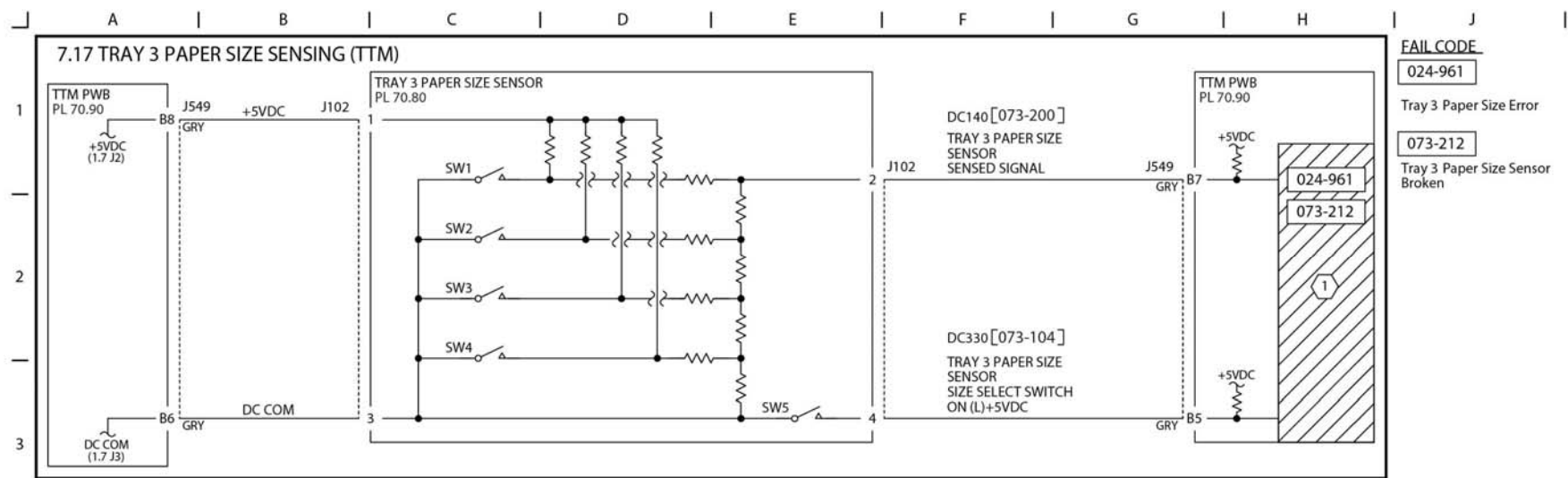
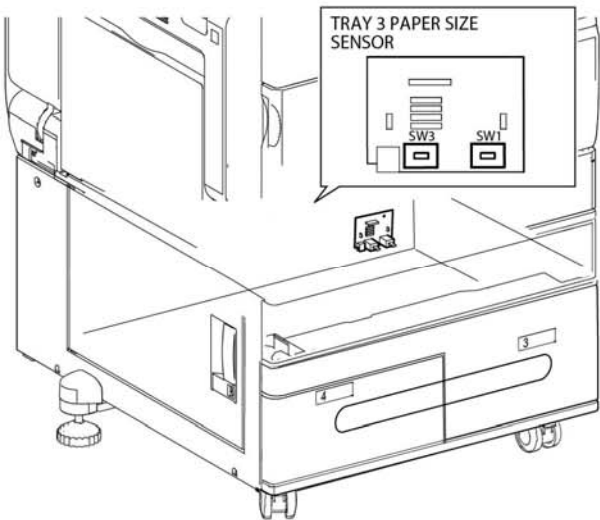


Figure 60 BSD 7.16

BSD 7.17 Tray 3 Paper Size Sensing (TTM)



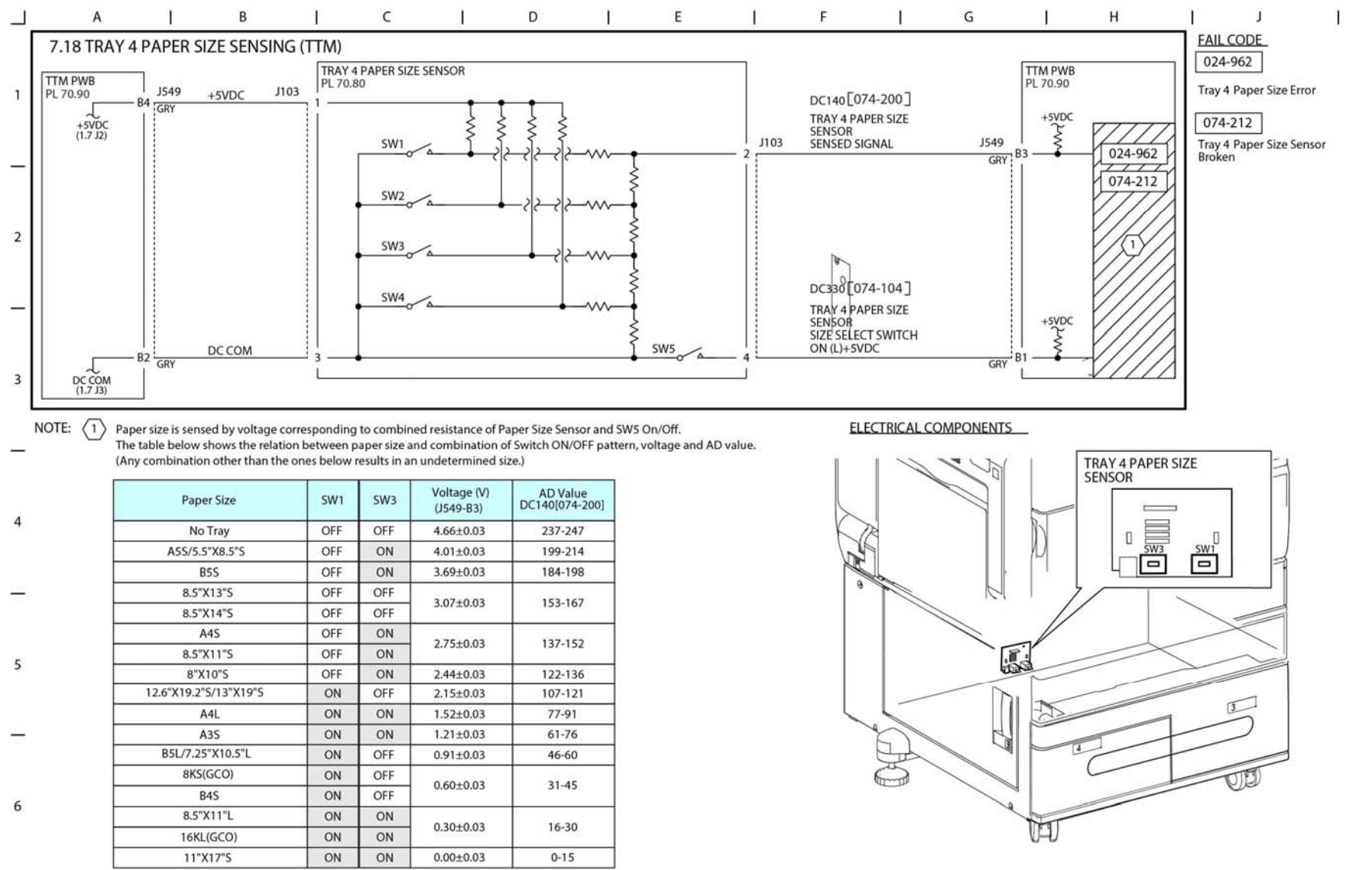
ELECTRICAL COMPONENTS



TC-1-0180-A

Figure 61 BSD 7.17

BSD 7.18 Tray 4 Paper Size Sensing (TTM)



TC-1-0181-A

Figure 62 BSD 7.18

BSD 7.19 Tray 2 Paper Stacking (TTM)

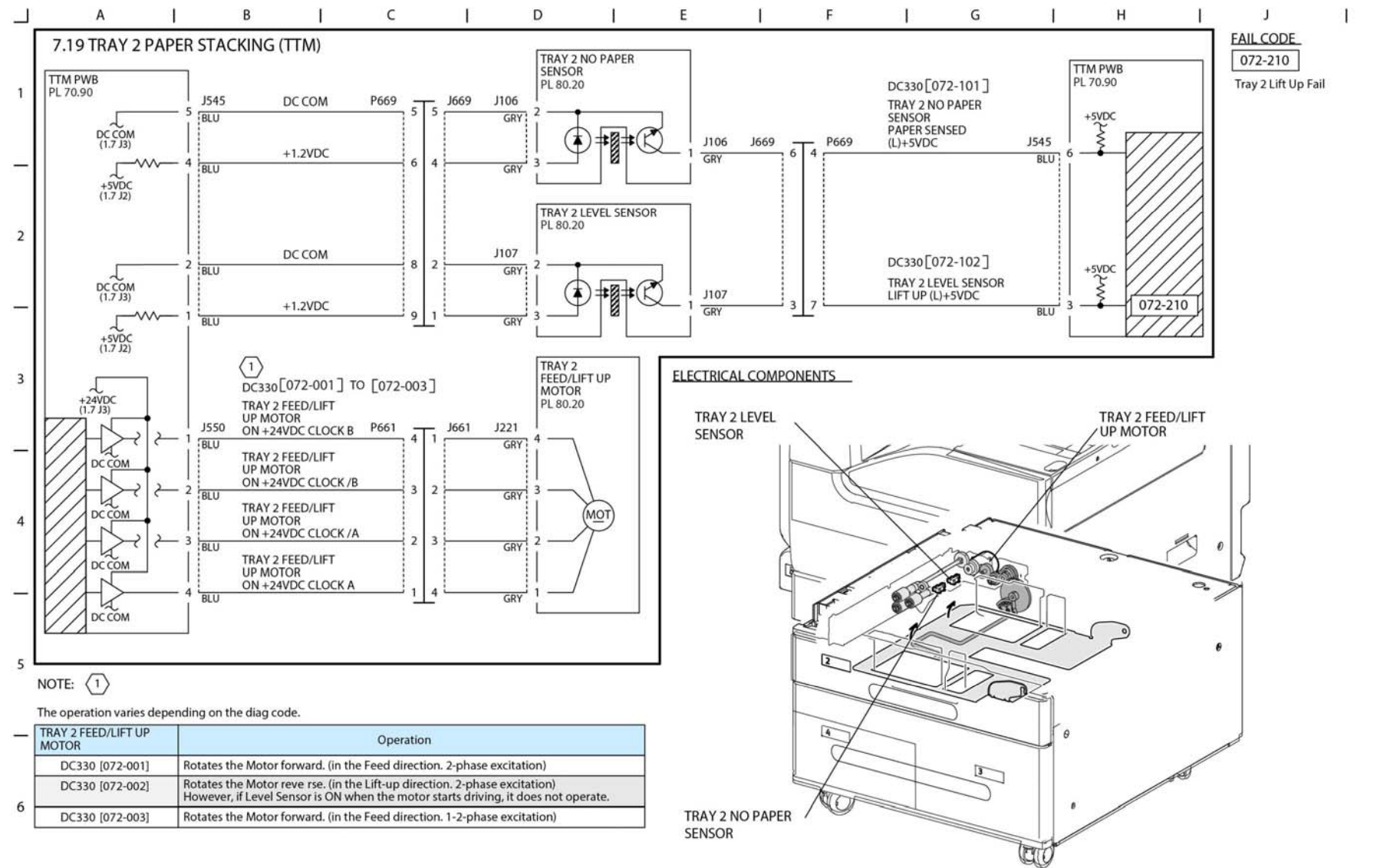
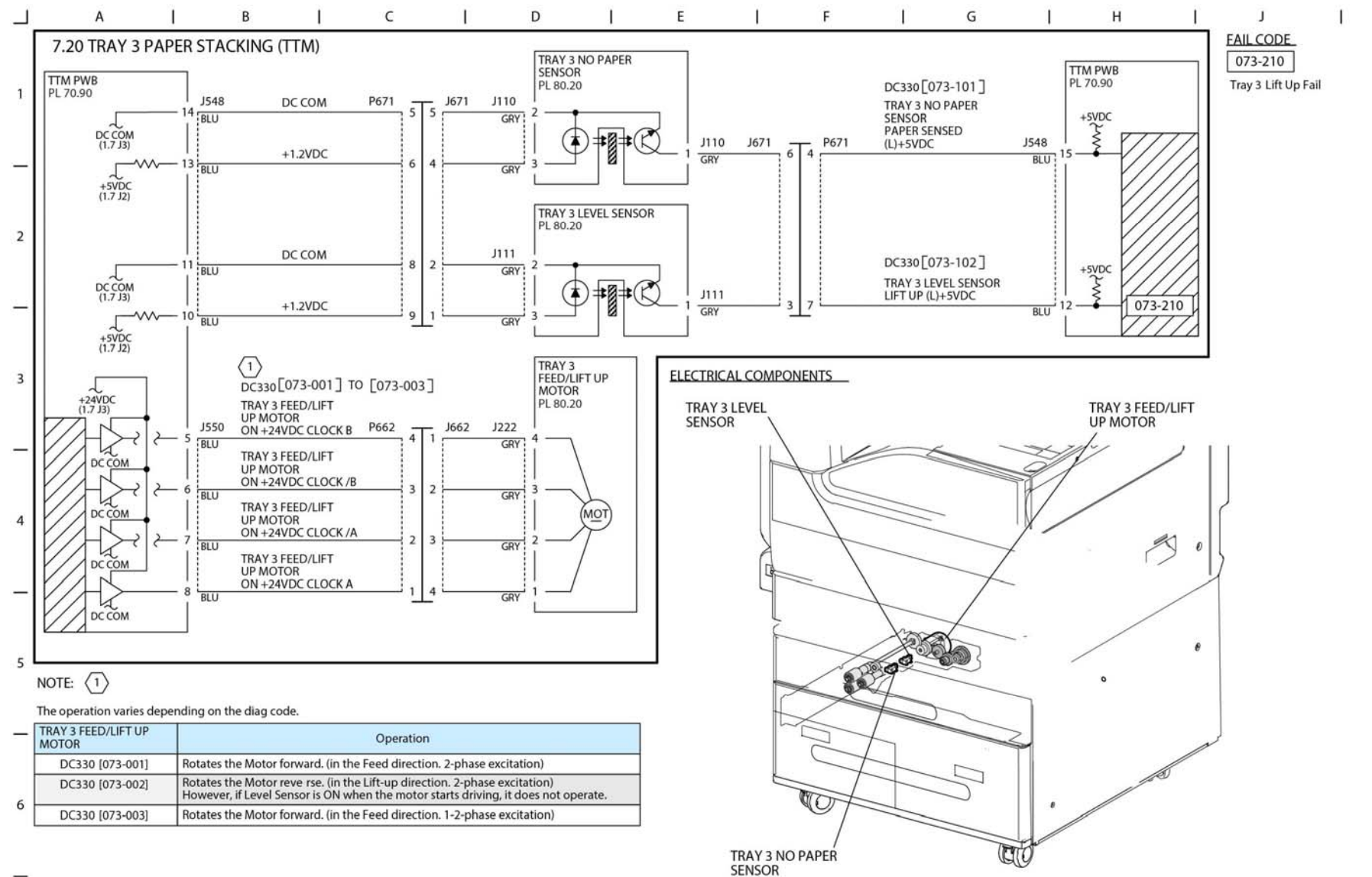


Figure 63 BSD 7.19

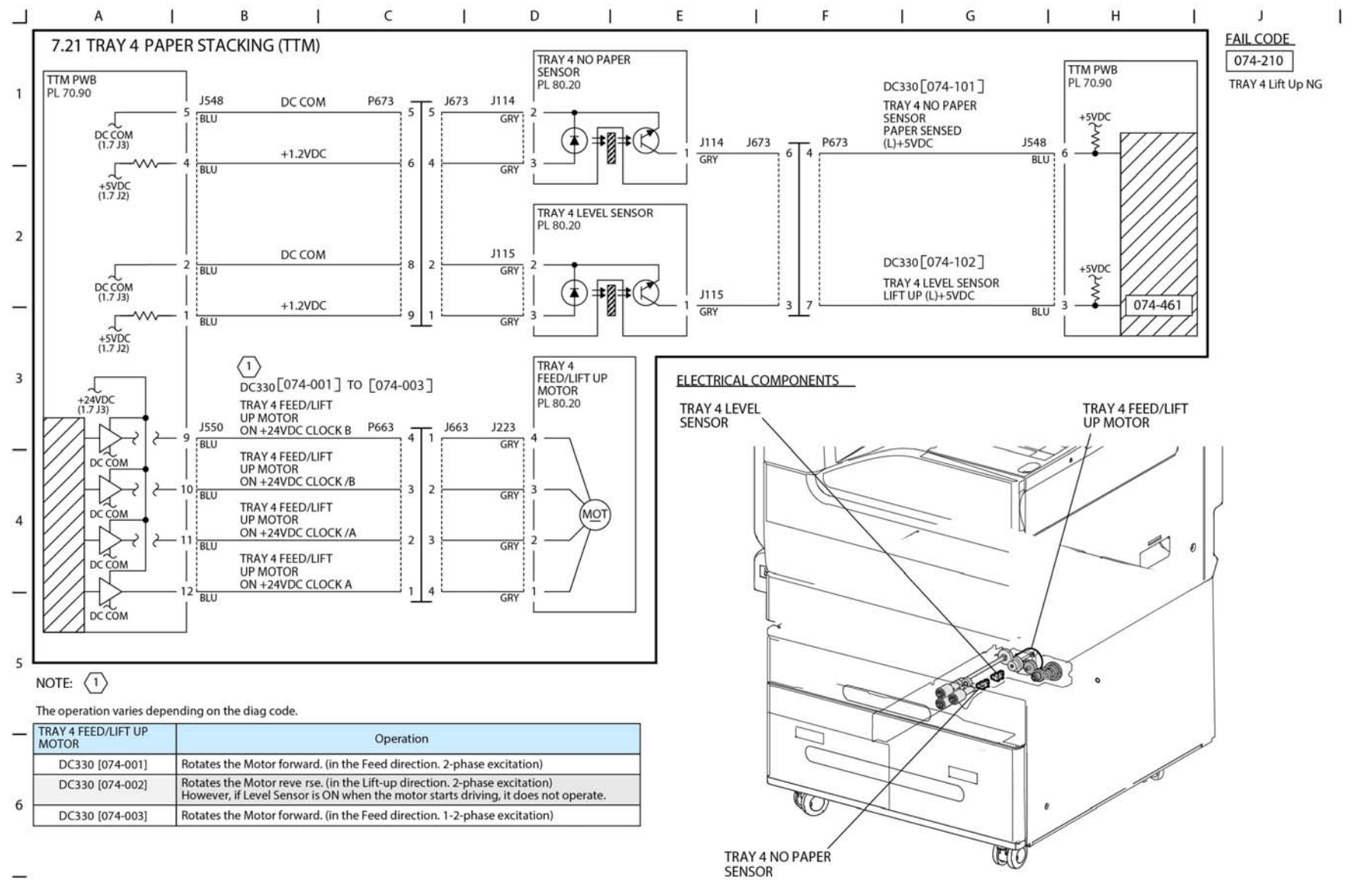
BSD 7.20 Tray 3 Paper Stacking (TTM)



TC-1-0183-A

Figure 64 BSD 7.20

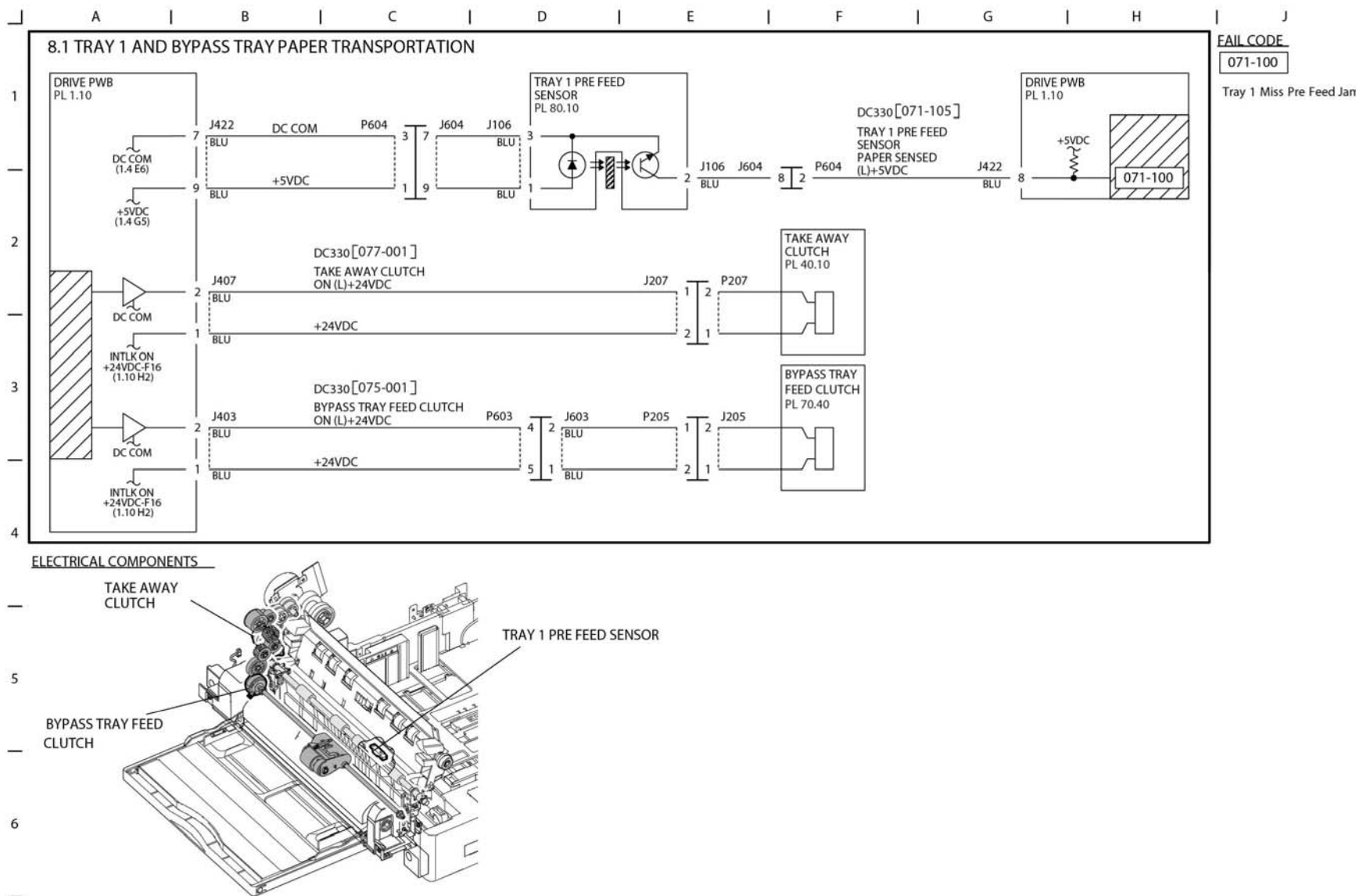
BSD 7.21 Tray 4 Paper Stacking (TTM)



TC-1-0184-A

Figure 65 BSD 7.21

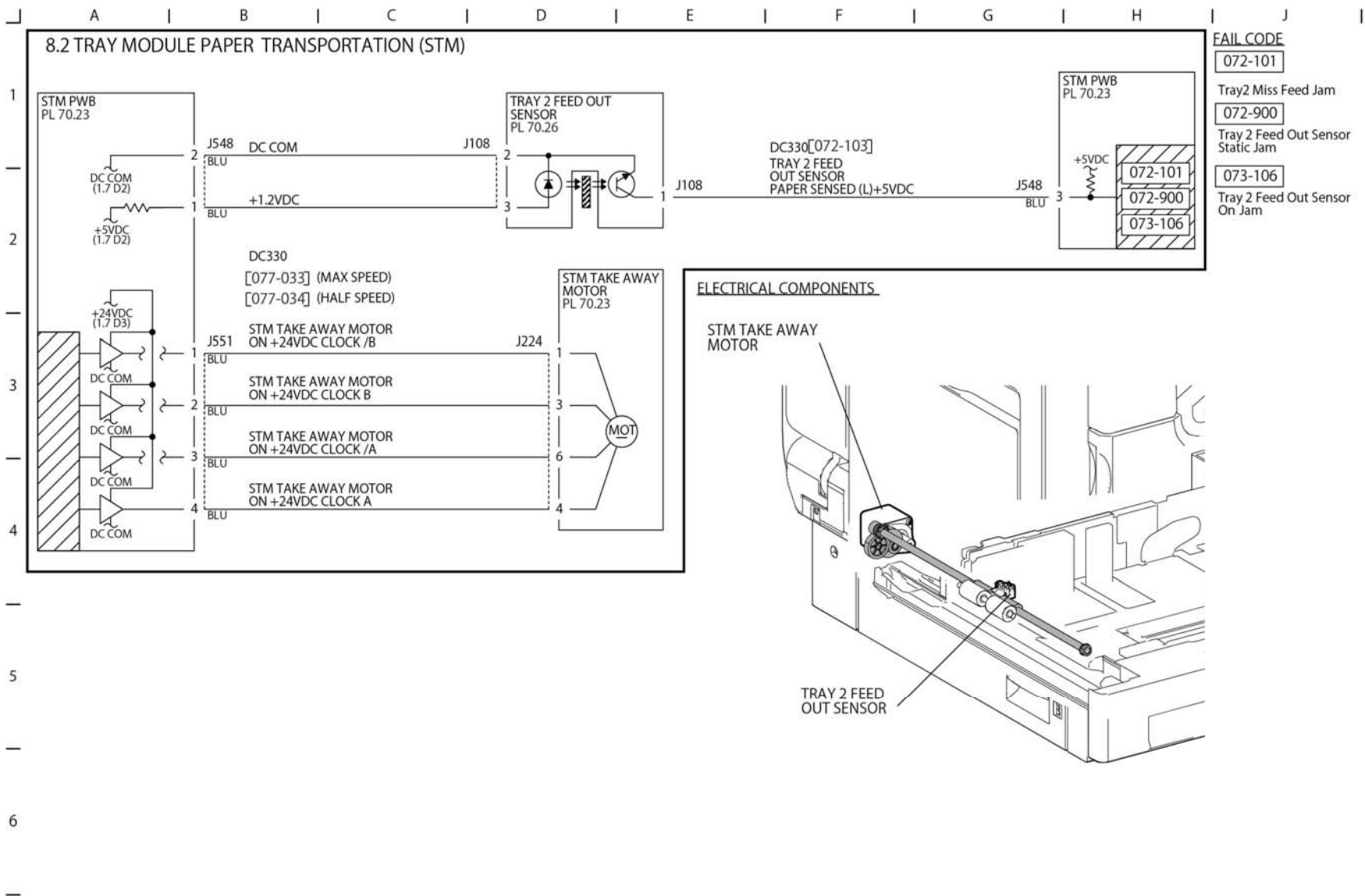
BSD 8.1 Tray 1 and Bypass Tray Paper Transportation



TC-1-0105-A

Figure 66 BSD 8.1

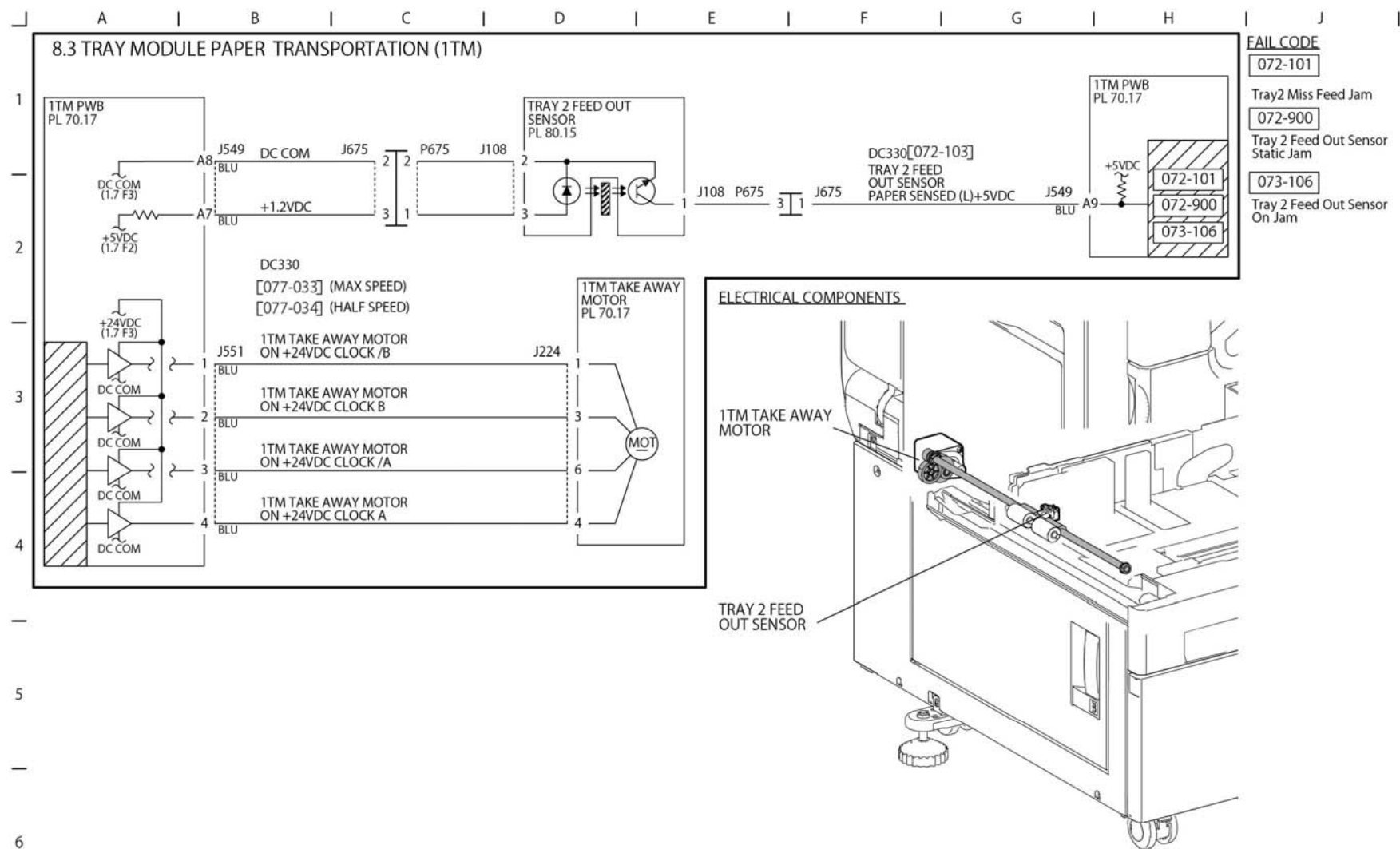
BSD 8.2 Tray Module Paper Transportation (STM)



TC-1-0106-A

Figure 67 BSD 8.2

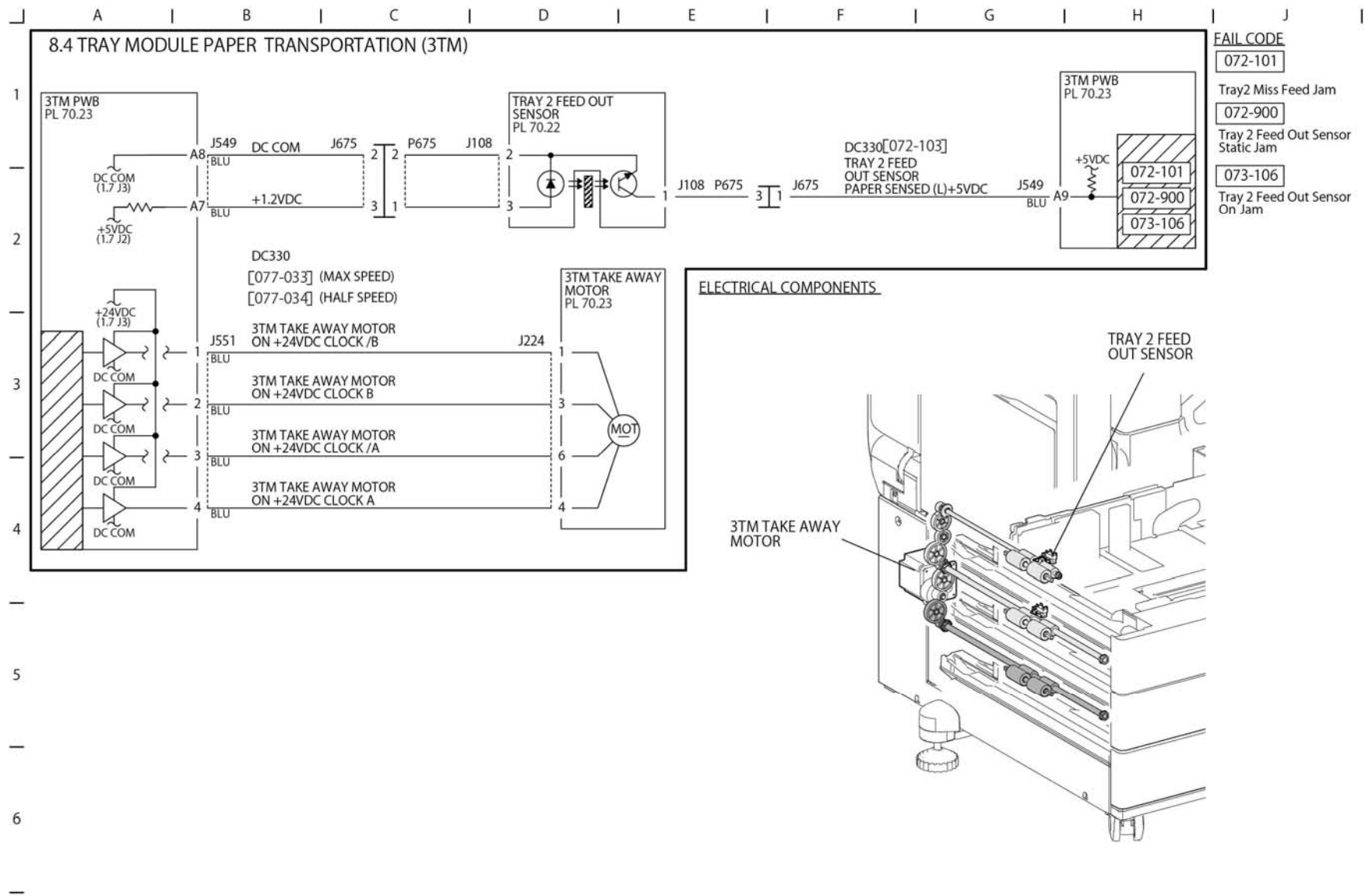
BSD 8.3 Tray Module Paper Transportation (1TM)



TC-1-0107-A

Figure 68 BSD 8.3

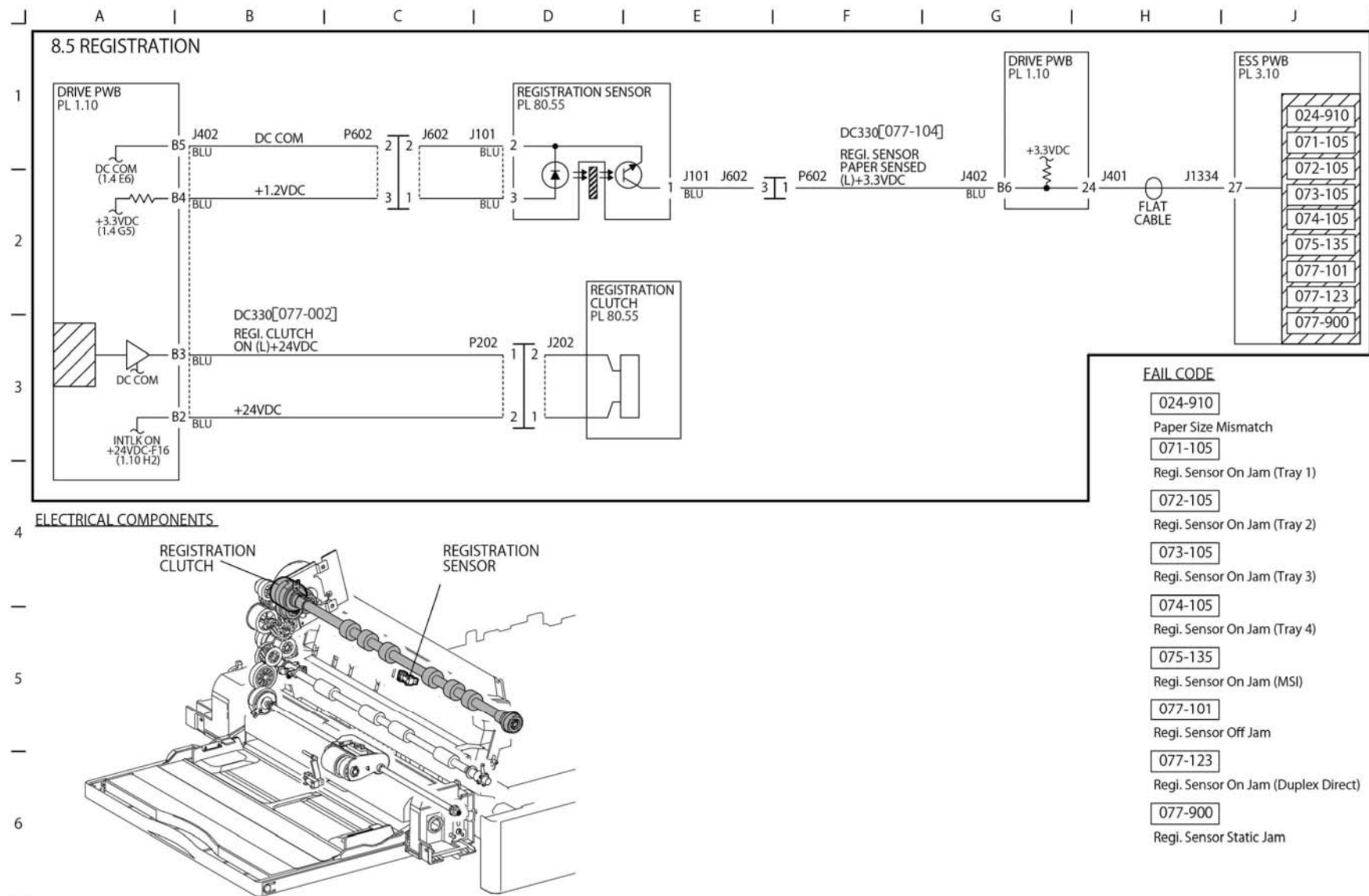
BSD 8.4 Tray Module Paper Transportation (3TM)



TC-1-0108-A

Figure 69 BSD 8.4

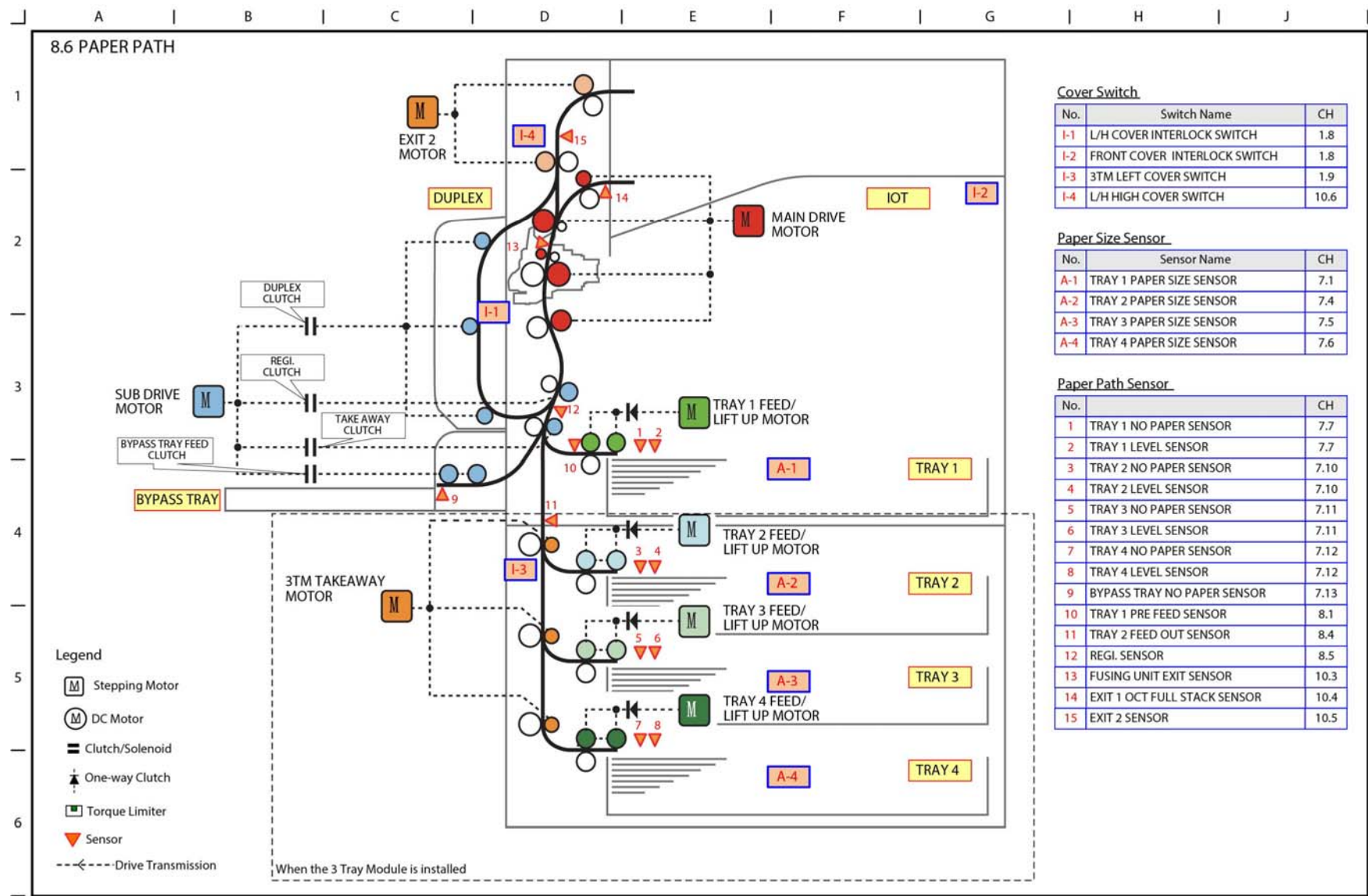
BSD 8.5 Registration



TC-1-0109-A

Figure 70 BSD 8.5

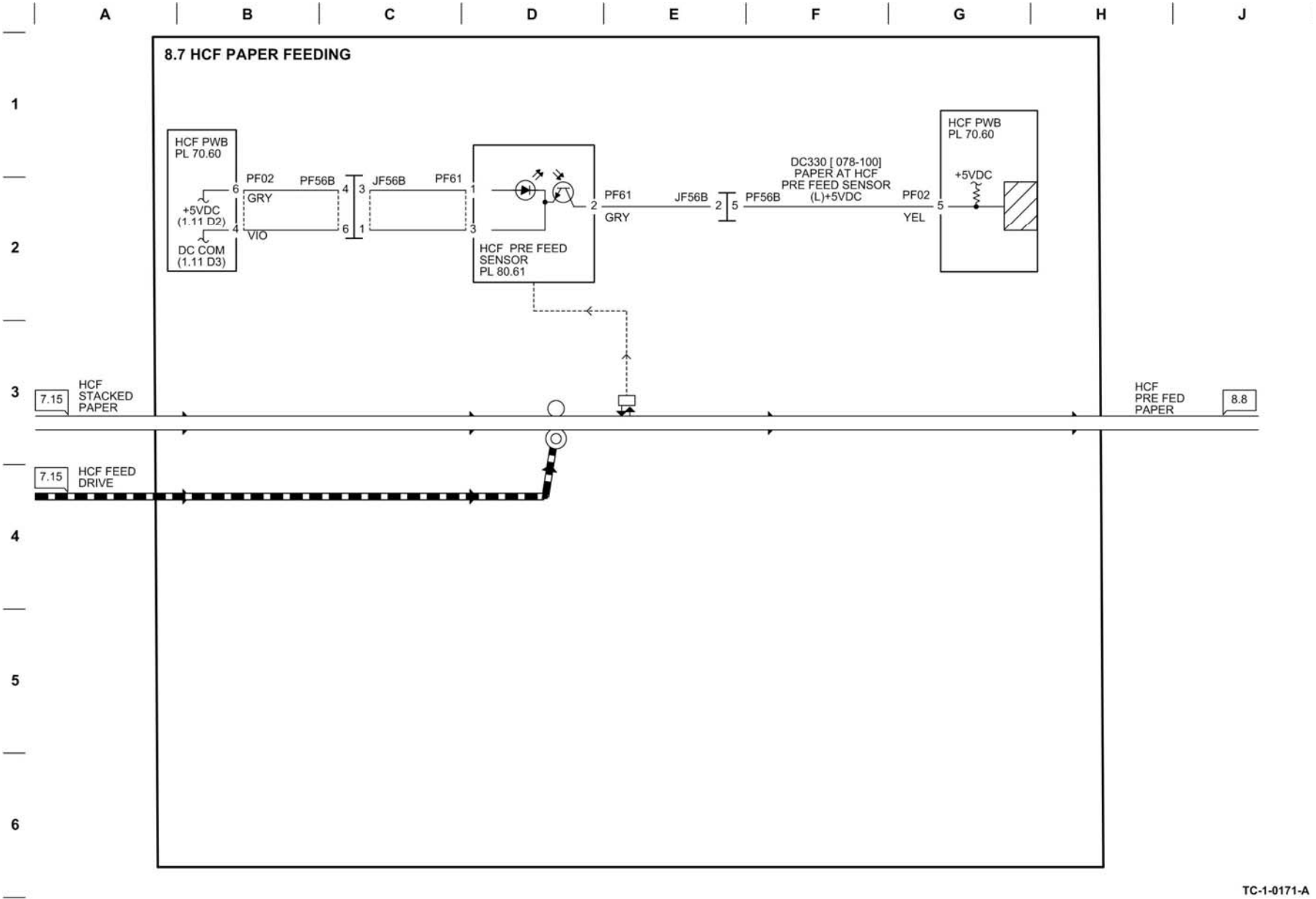
BSD 8.6 Paper Path



TC-1.0410.A

Figure 71 BSD 8.6

BSD 8.7 HCF Paper Feeding



TC-1-0171-A

Figure 72 BSD 8.7

BSD 8.8 Tray Module Paper Transportation (TTM) (1 of 2)

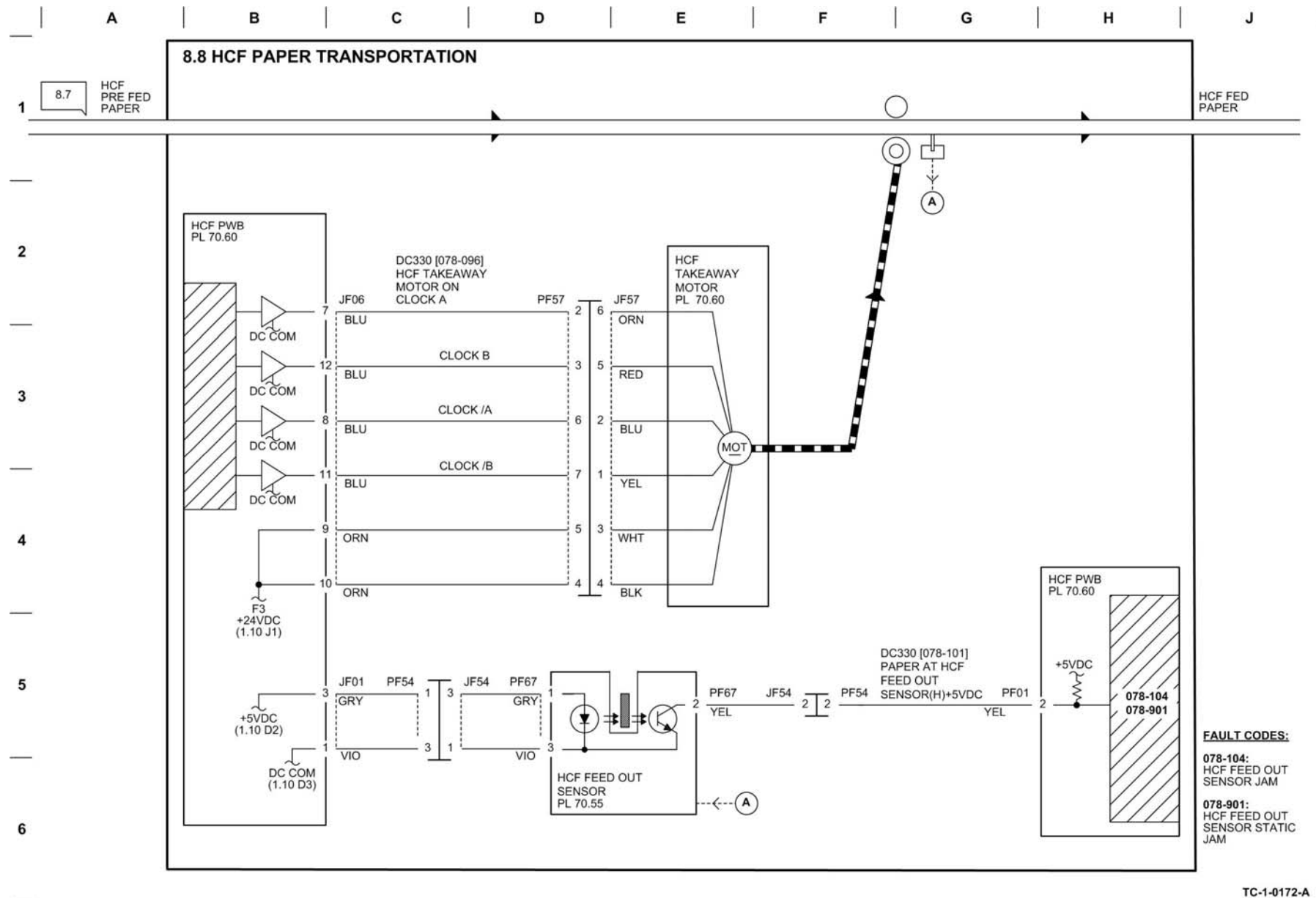
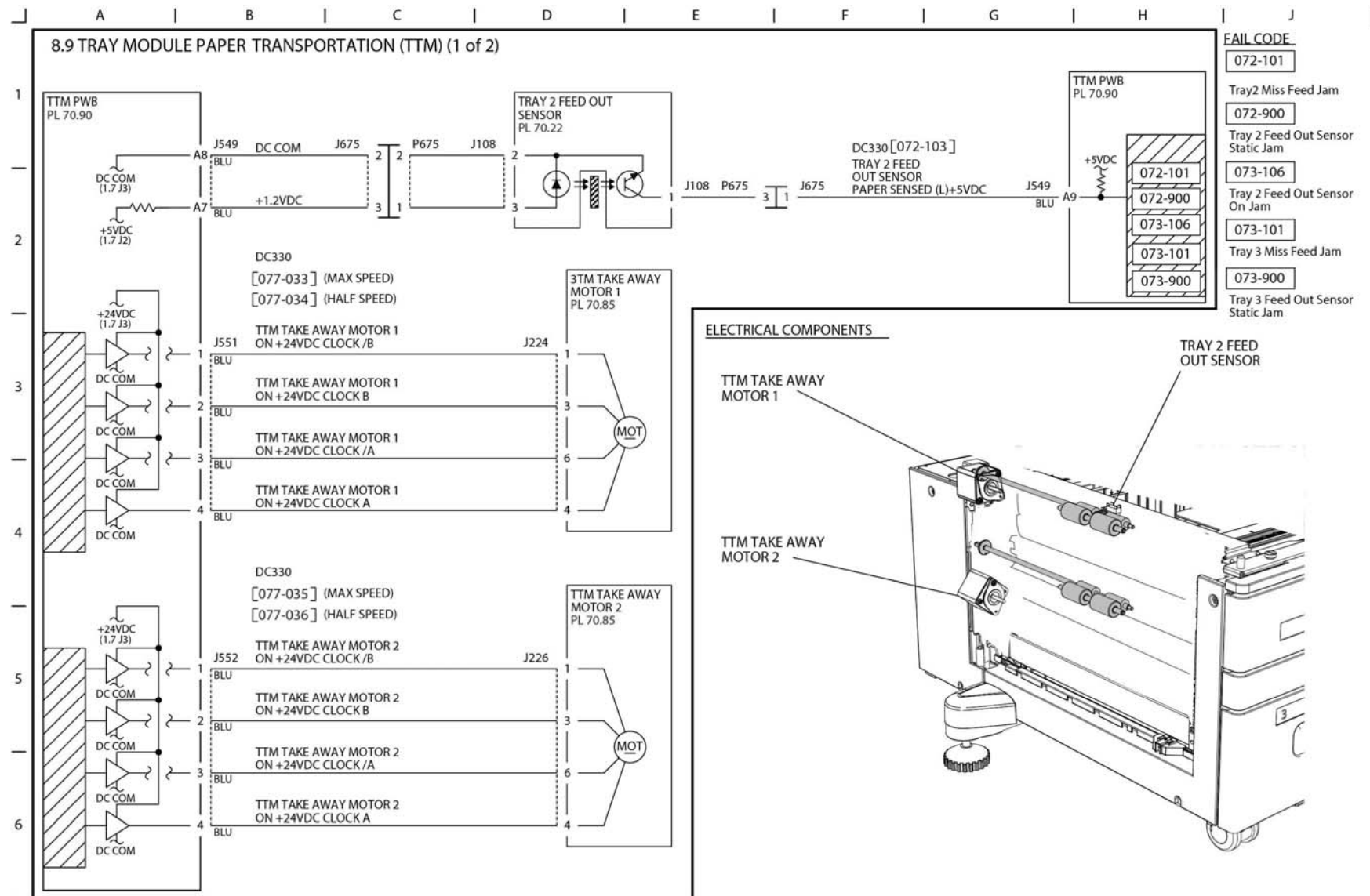


Figure 73 BSD 8.8

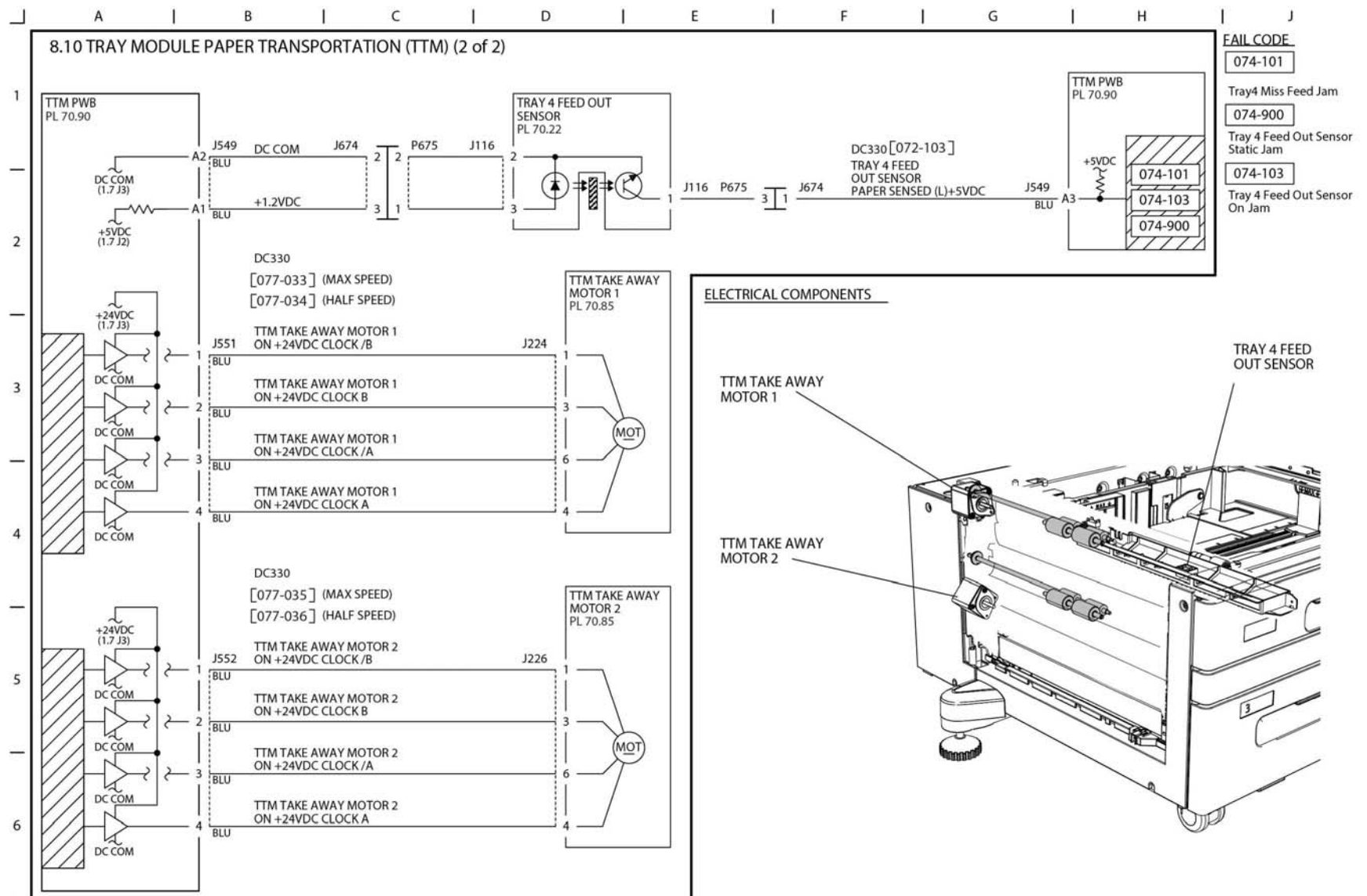
BSD 8.9 Tray Module Paper Transportation (TTM) (1 of 2)



TC-1-0197-A

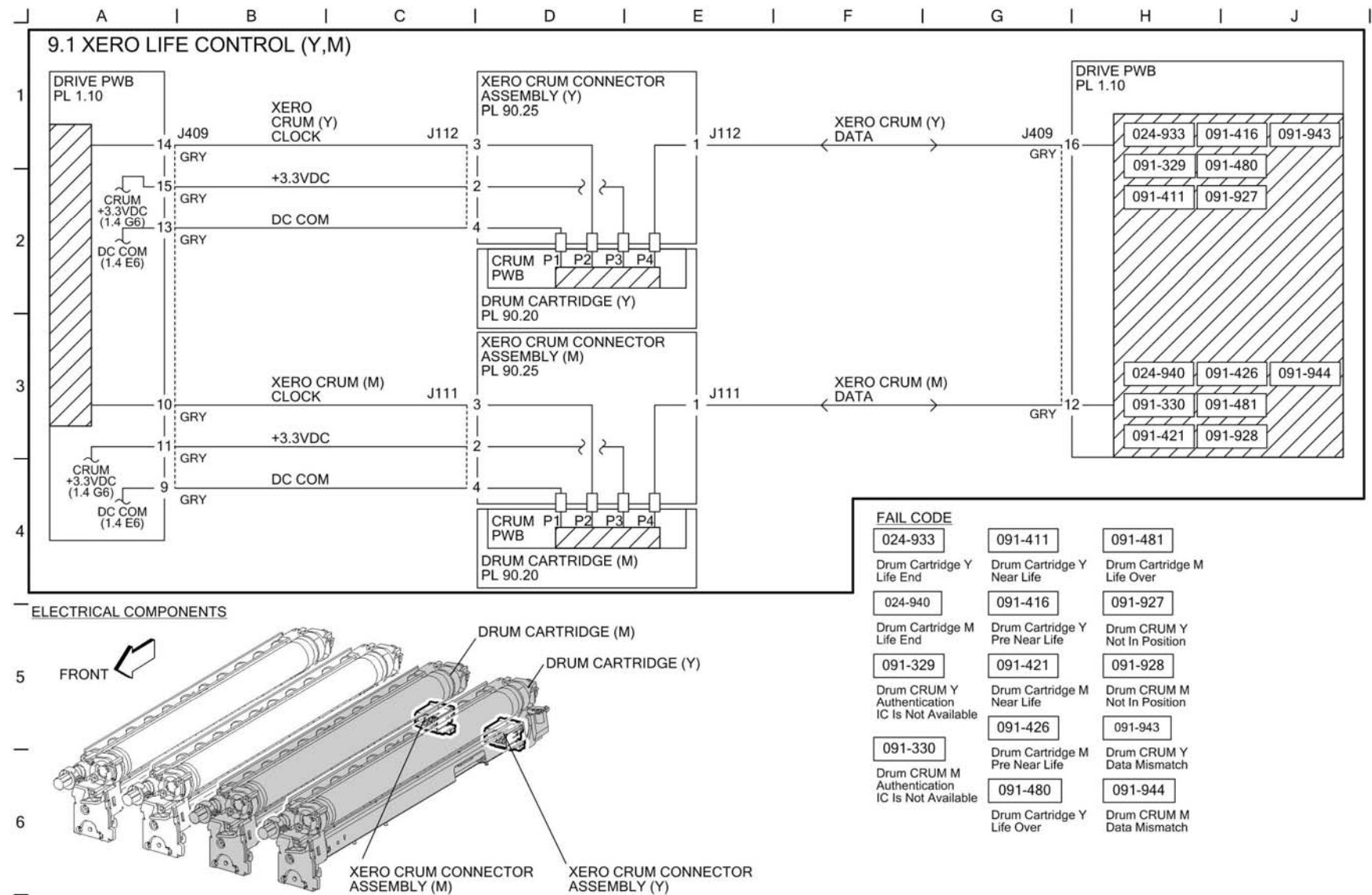
Figure 74 BSD 8.9

BSD 8.10 Tray Module Paper Transportation (TTM) (2 of 2)



TC-1-0196-A

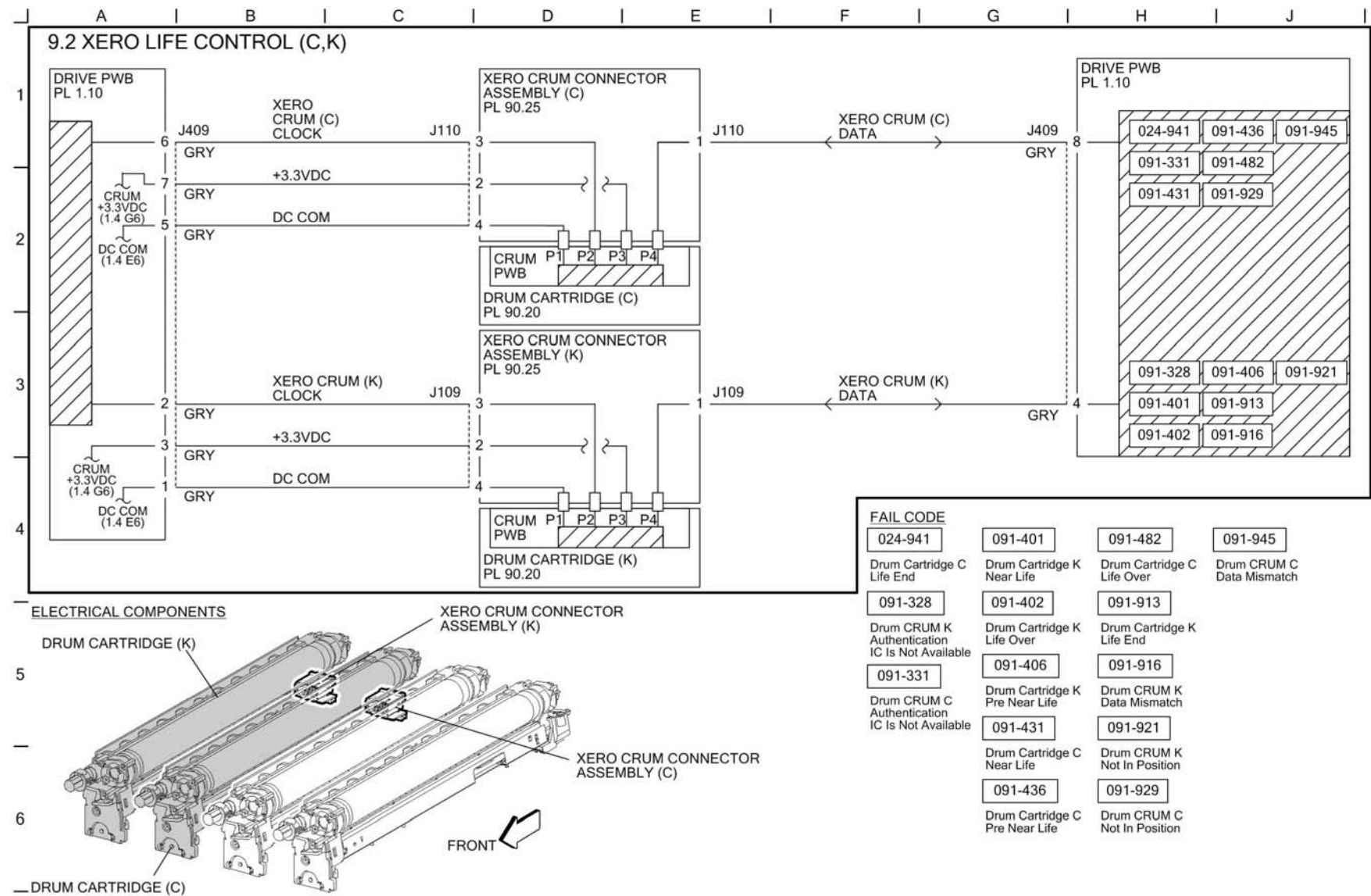
Figure 75 BSD 8.10



TC-1-0111-A

Figure 76 BSD 9.1

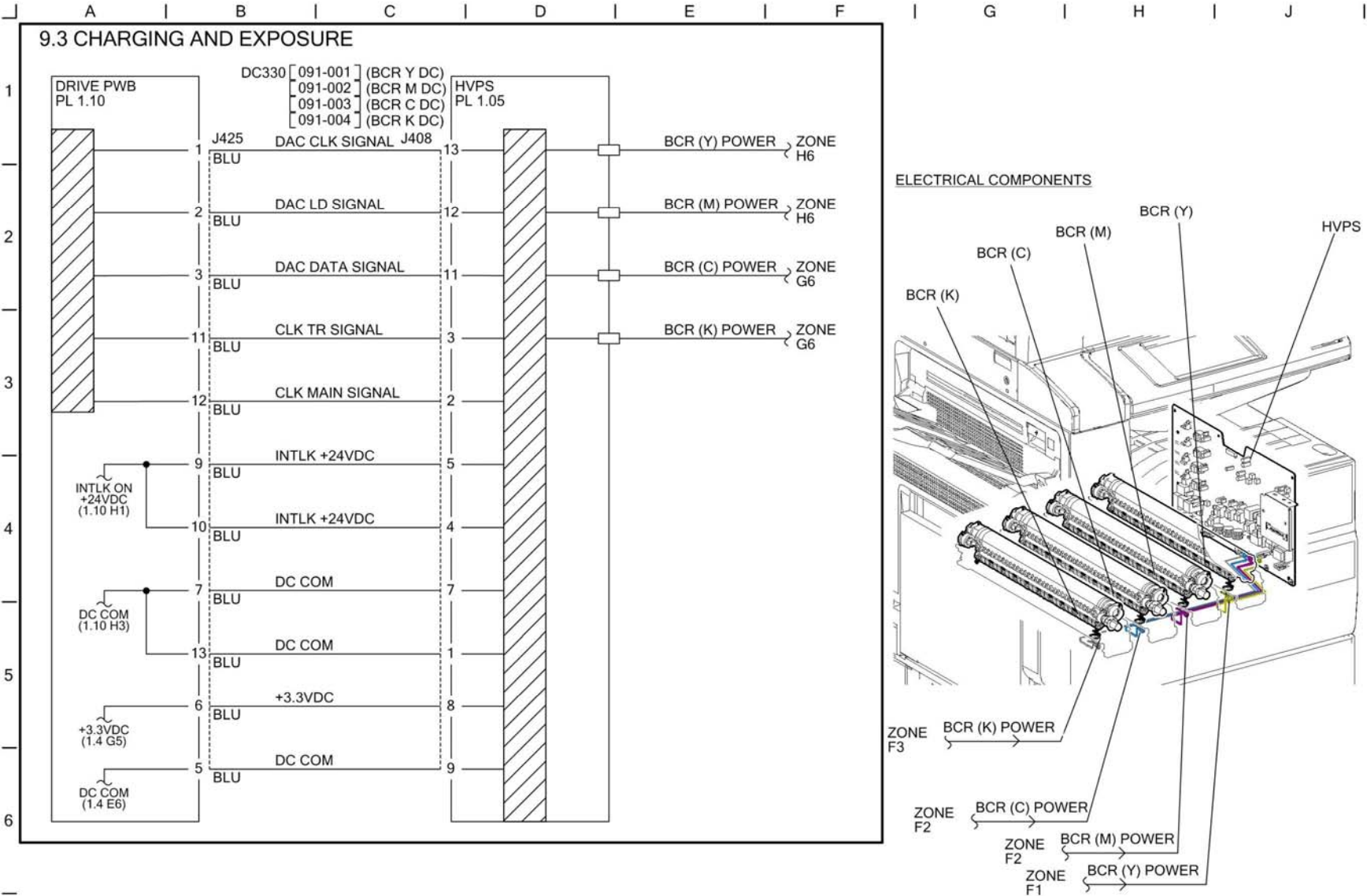
BSD 9.2 Xero Life Control (C, K)



TC-1-0112-A

Figure 77 BSD 9.2

BSD 9.3 Charging and Exposure



TC-1-0113-A

Figure 78 BSD 9.3

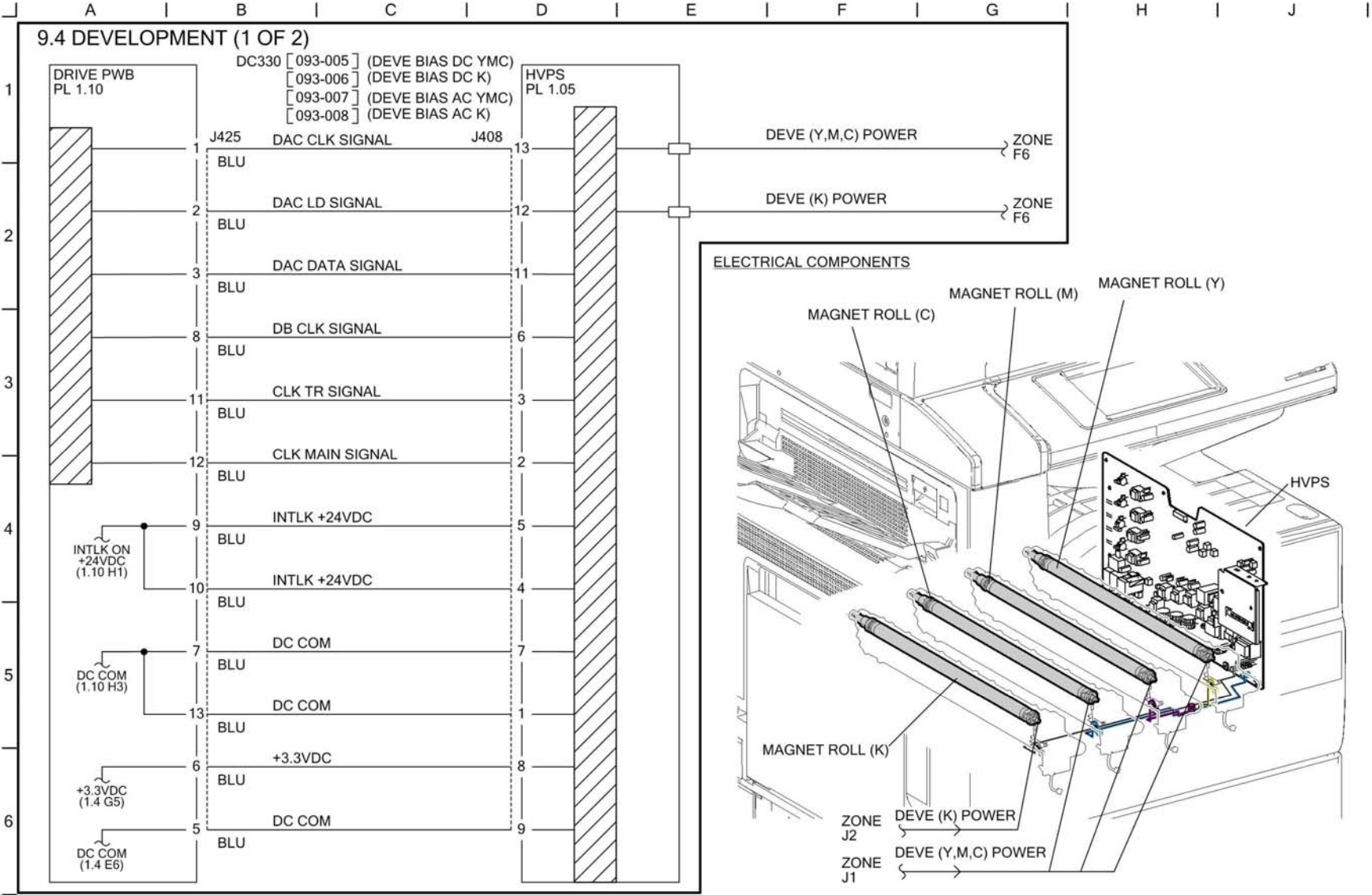
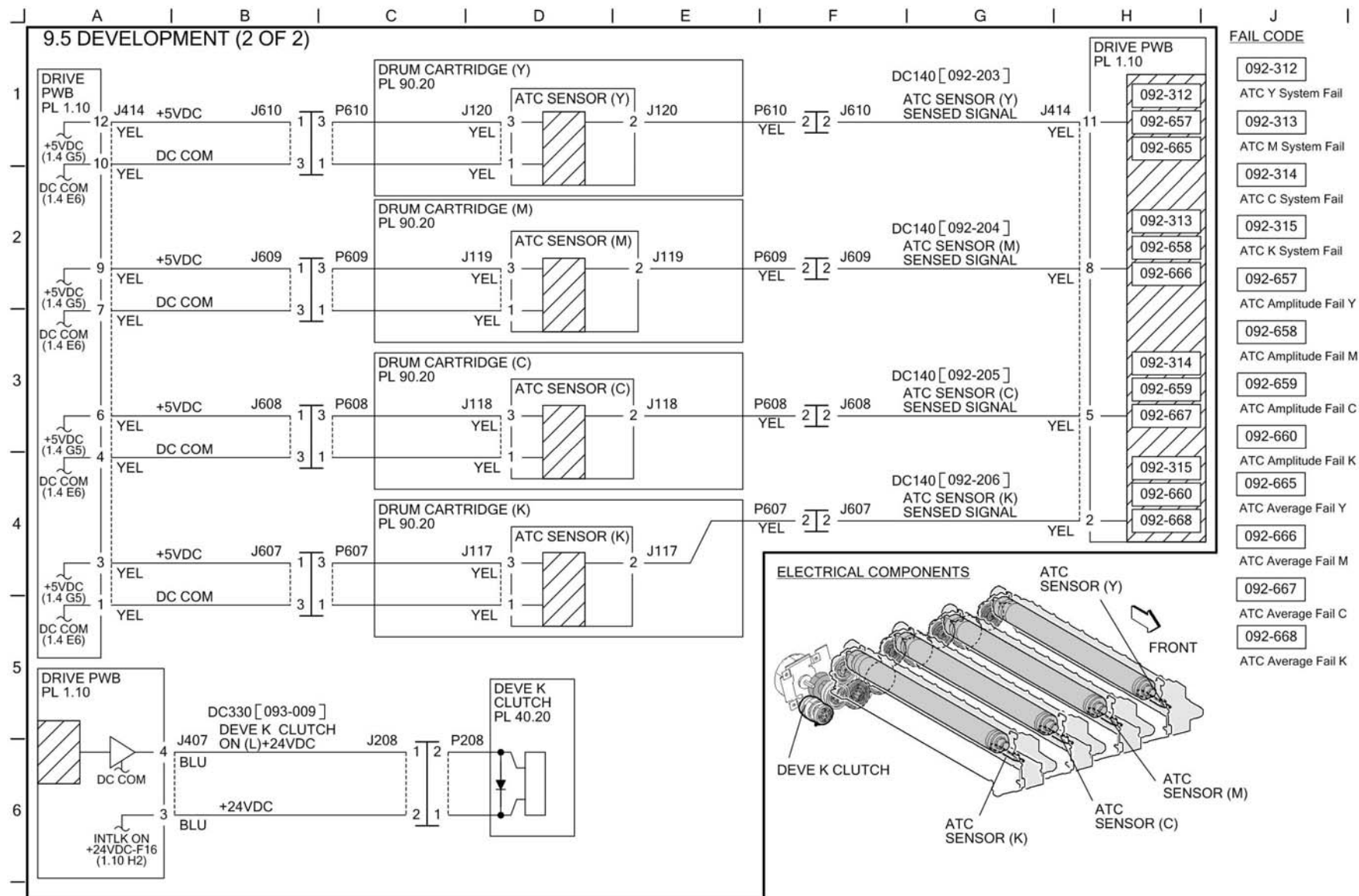


Figure 79 BSD 9.4



TC-1-0115-A

Figure 80 BSD 9.5

BSD 9.6 Toner Cartridge Life Control (Y, M)

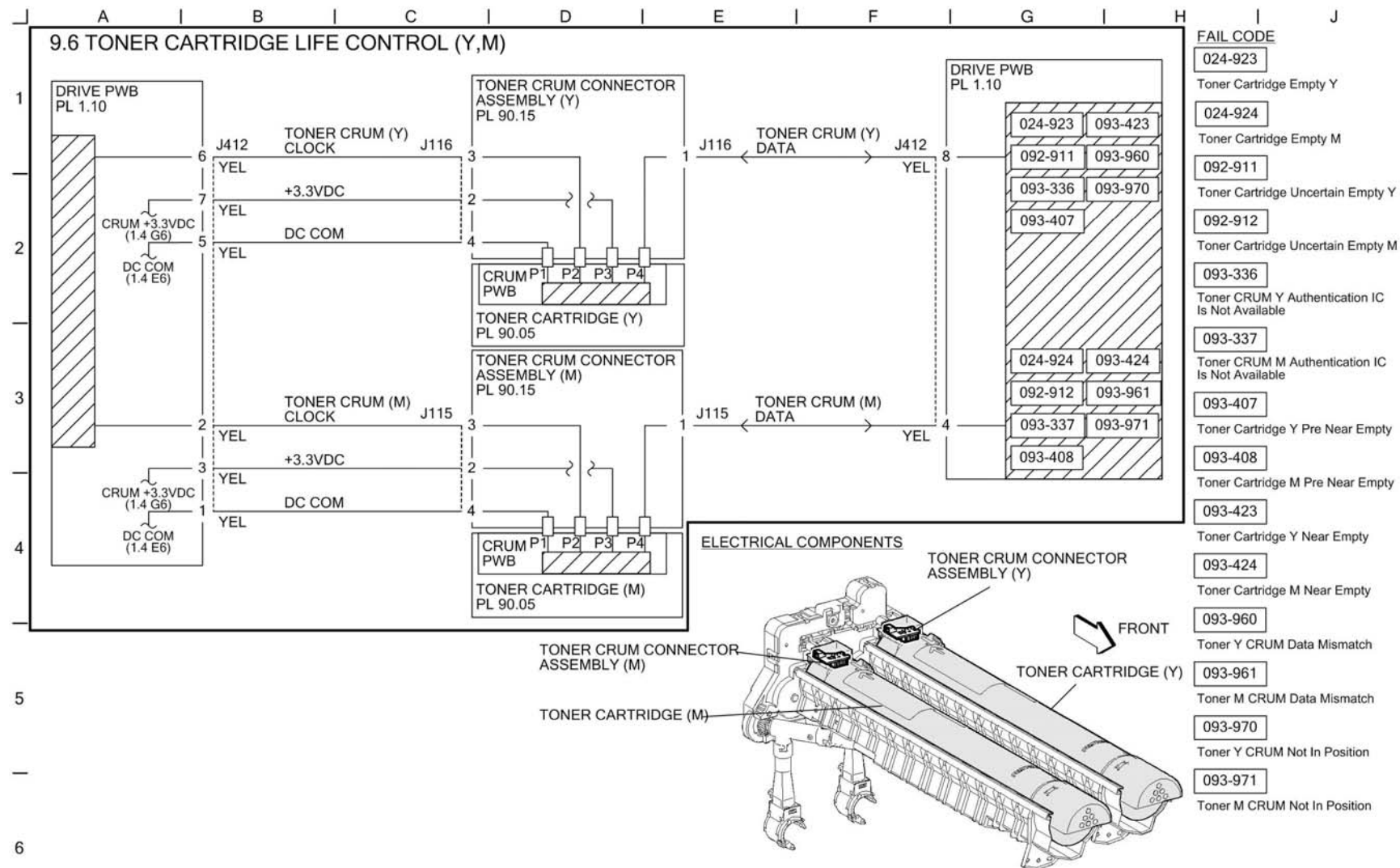
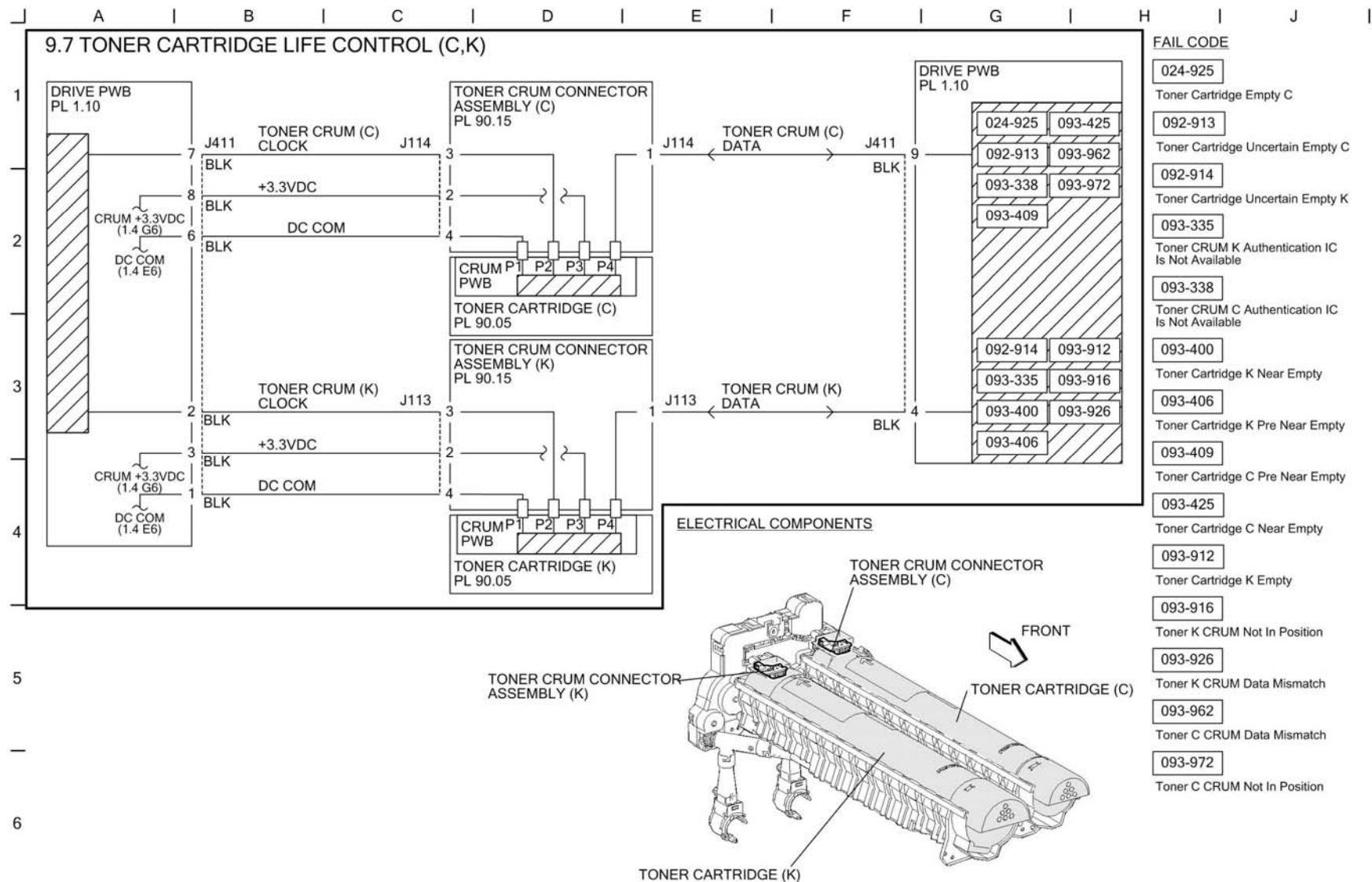


Figure 81 BSD 9.6

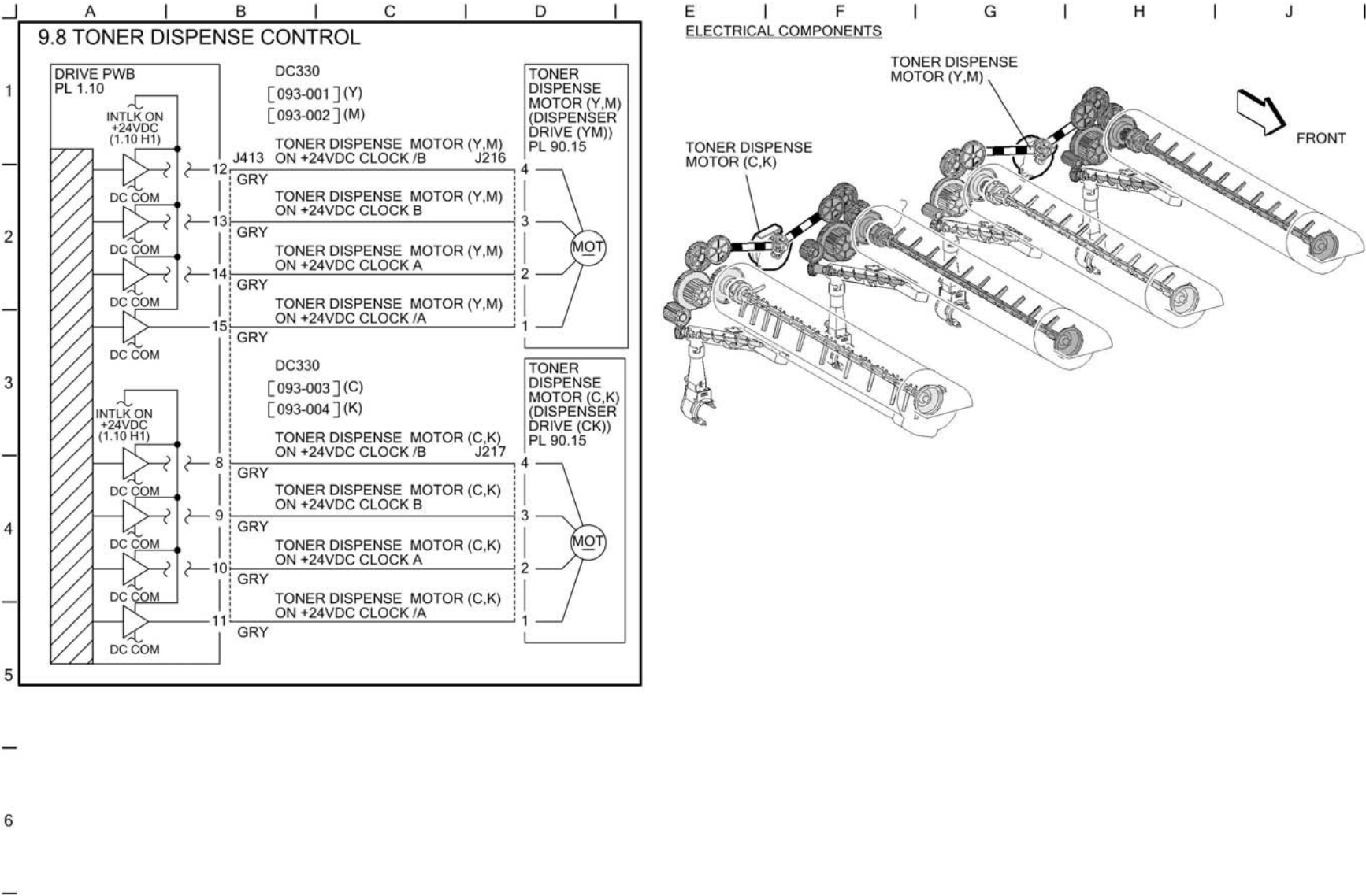
BSD 9.7 Toner Cartridge Life Control (C, K)



TC-1-0117-A

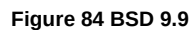
Figure 82 BSD 9.7

BSD 9.8 Toner Dispense Control

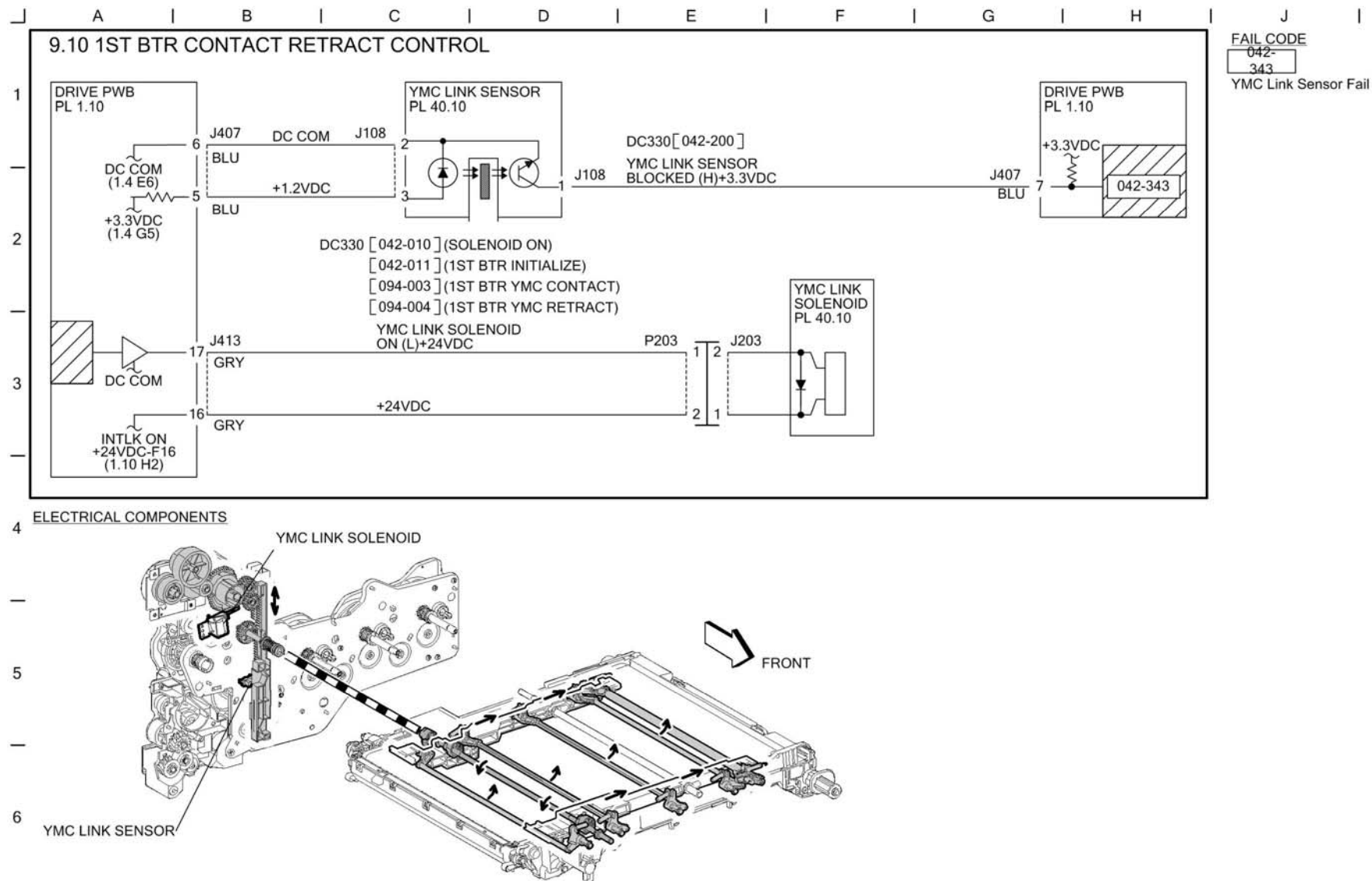


TC-1-0188-A

Figure 83 BSD 9.8



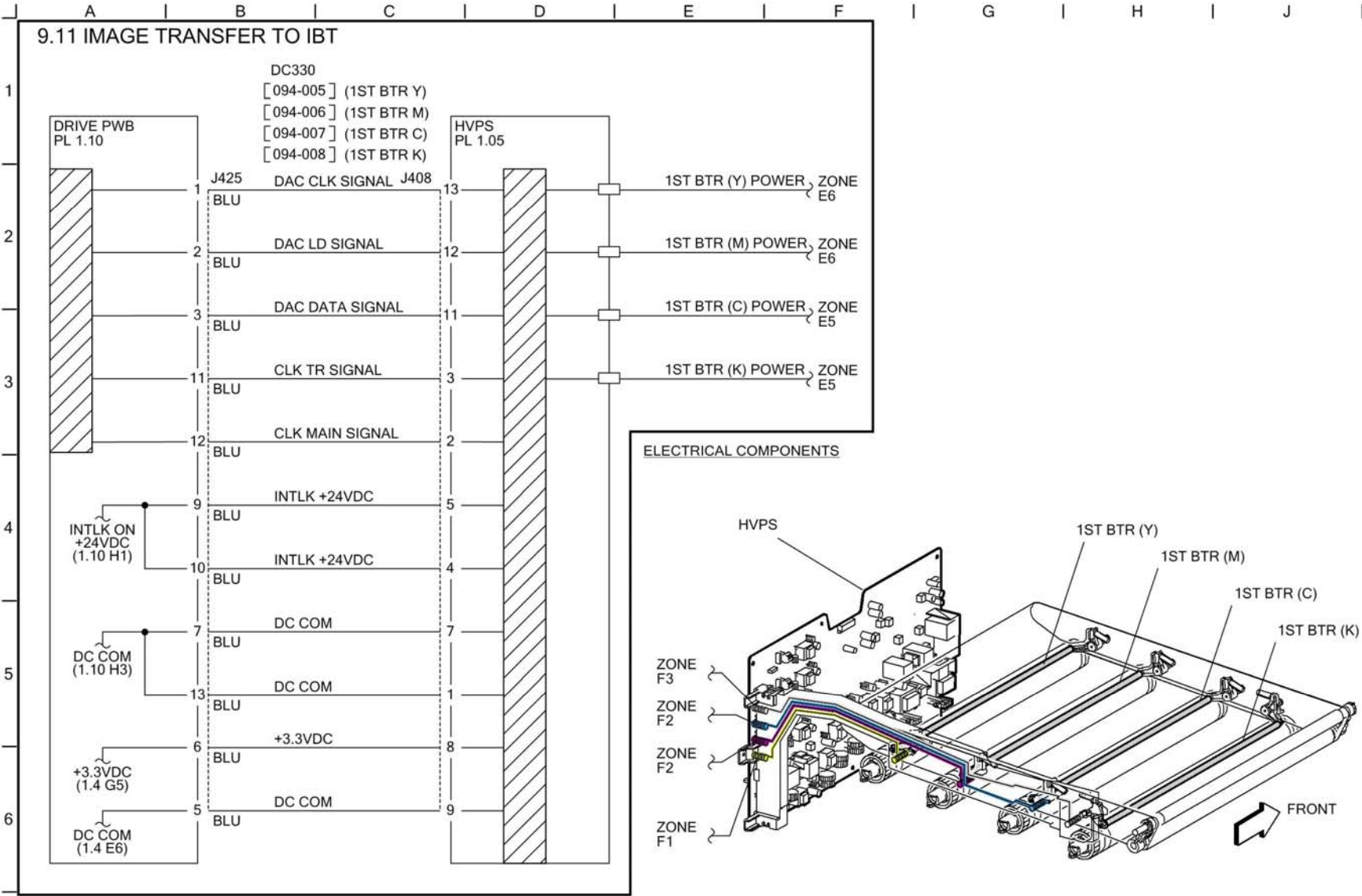
BSD 9.10 1st BTR Contact Retract Control



TC-1-0190-A

Figure 85 BSD 9.10

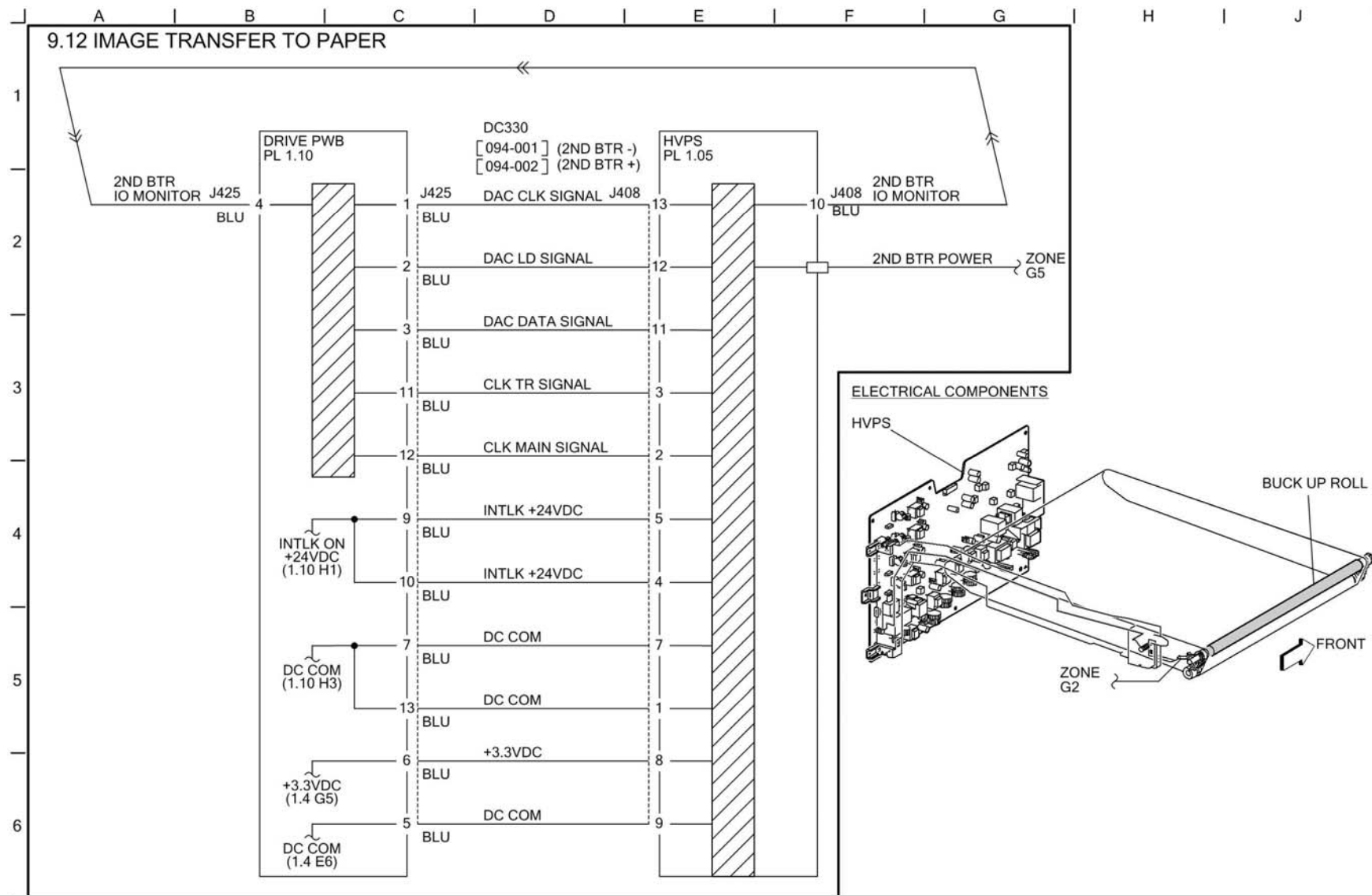
BSD 9.11 Image Transfer to IBT



TC-1-0191-A

Figure 86 BSD 9.11

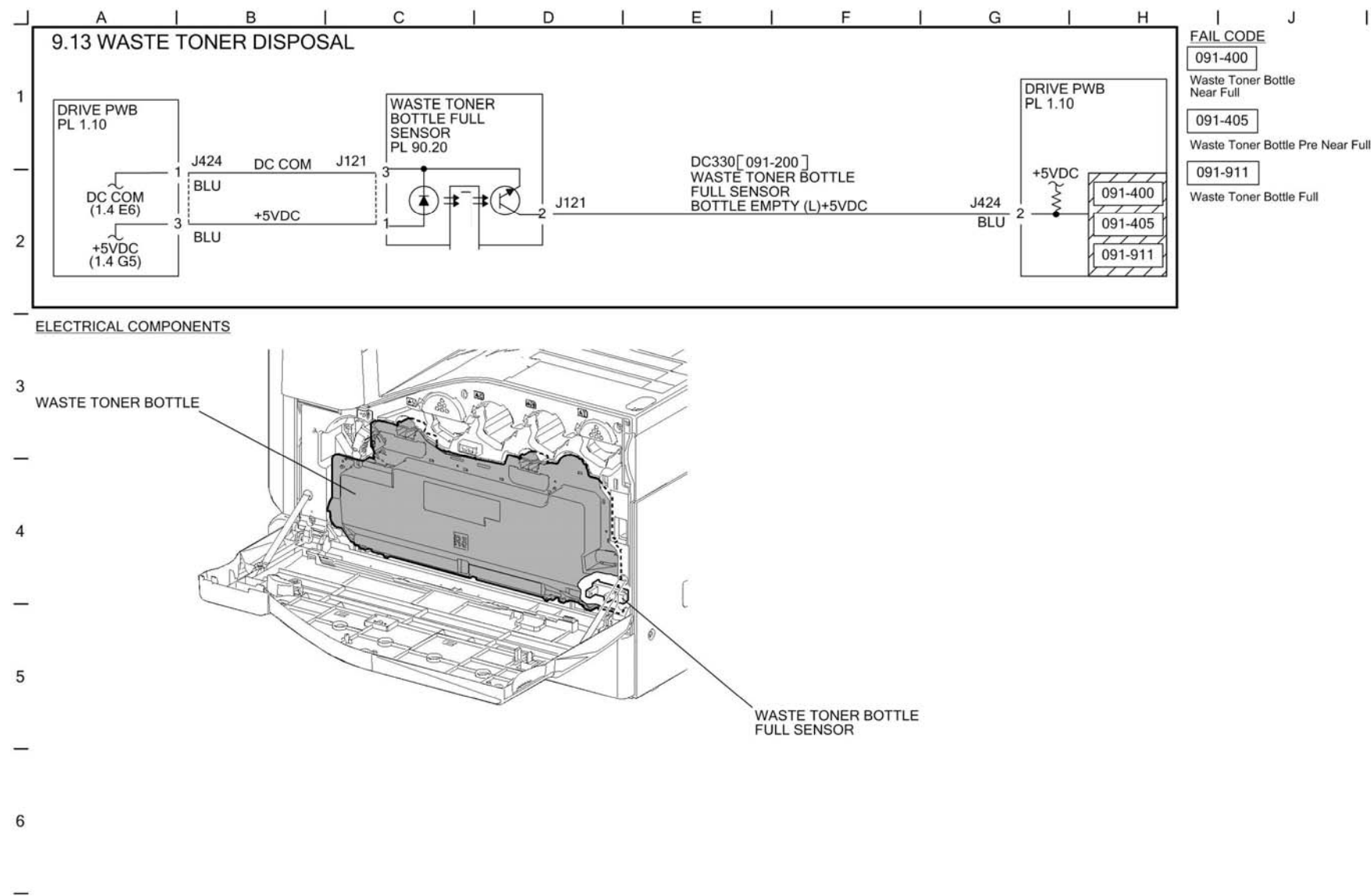
BSD 9.12 Image Transfer to Paper



TC-1-0192-A

Figure 87 BSD 9.12

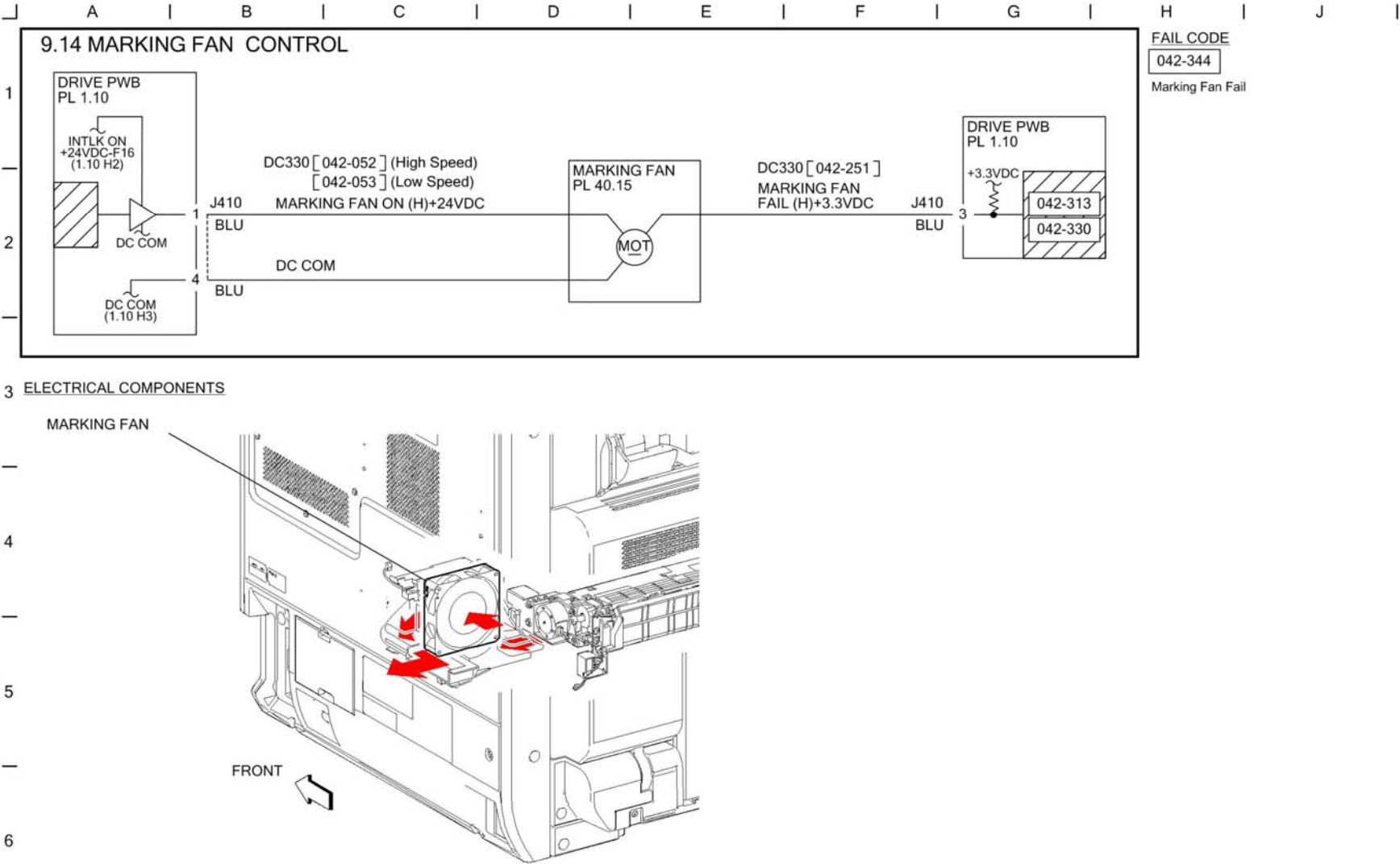
BSD 9.13 Waste Toner Disposal



TC-1-0193-A

Figure 88 BSD 9.13

BSD 9.14 Marking Fan Control



TC-1-0194-A

Figure 89 BSD 9.14

BSD 10.1 Fusing Unit Drive Control

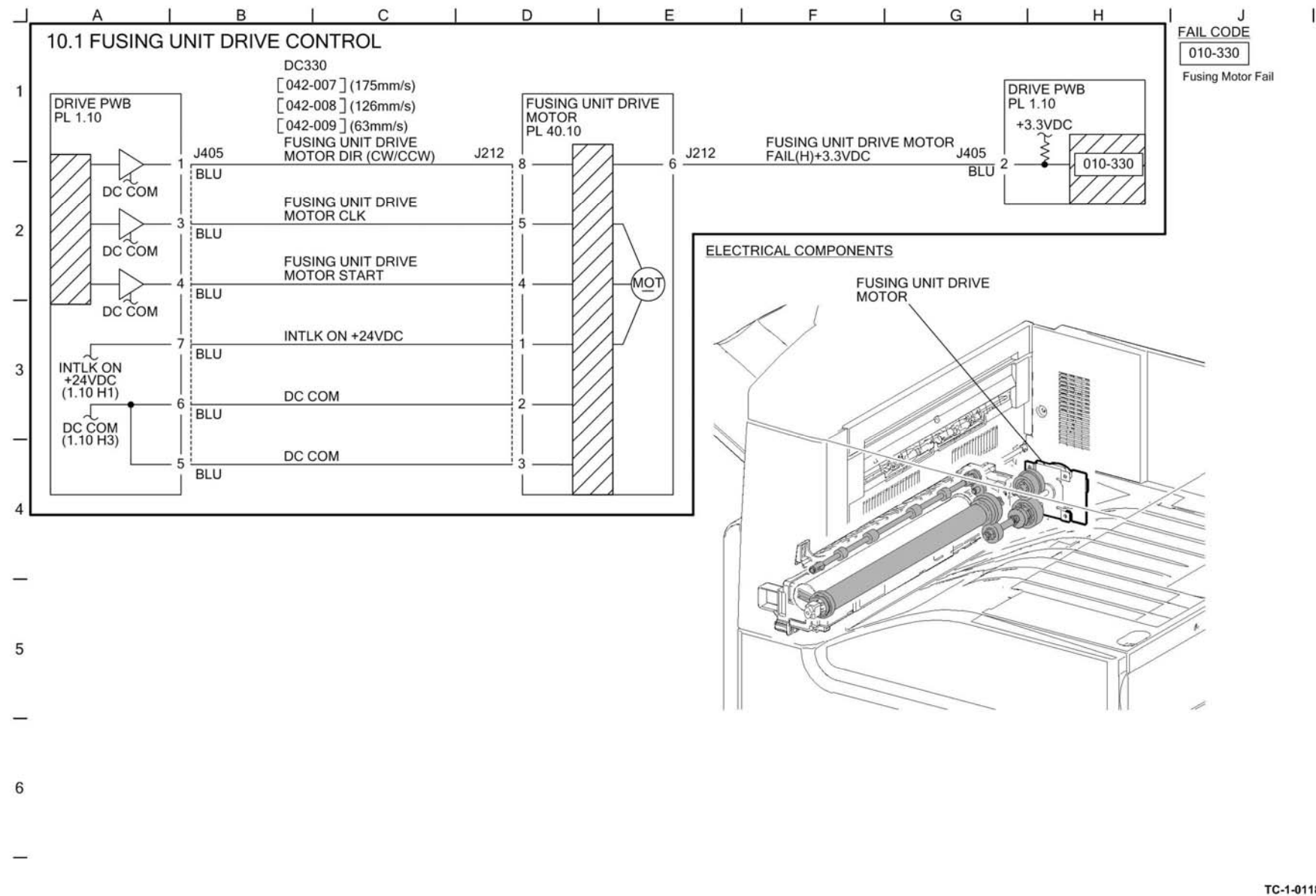
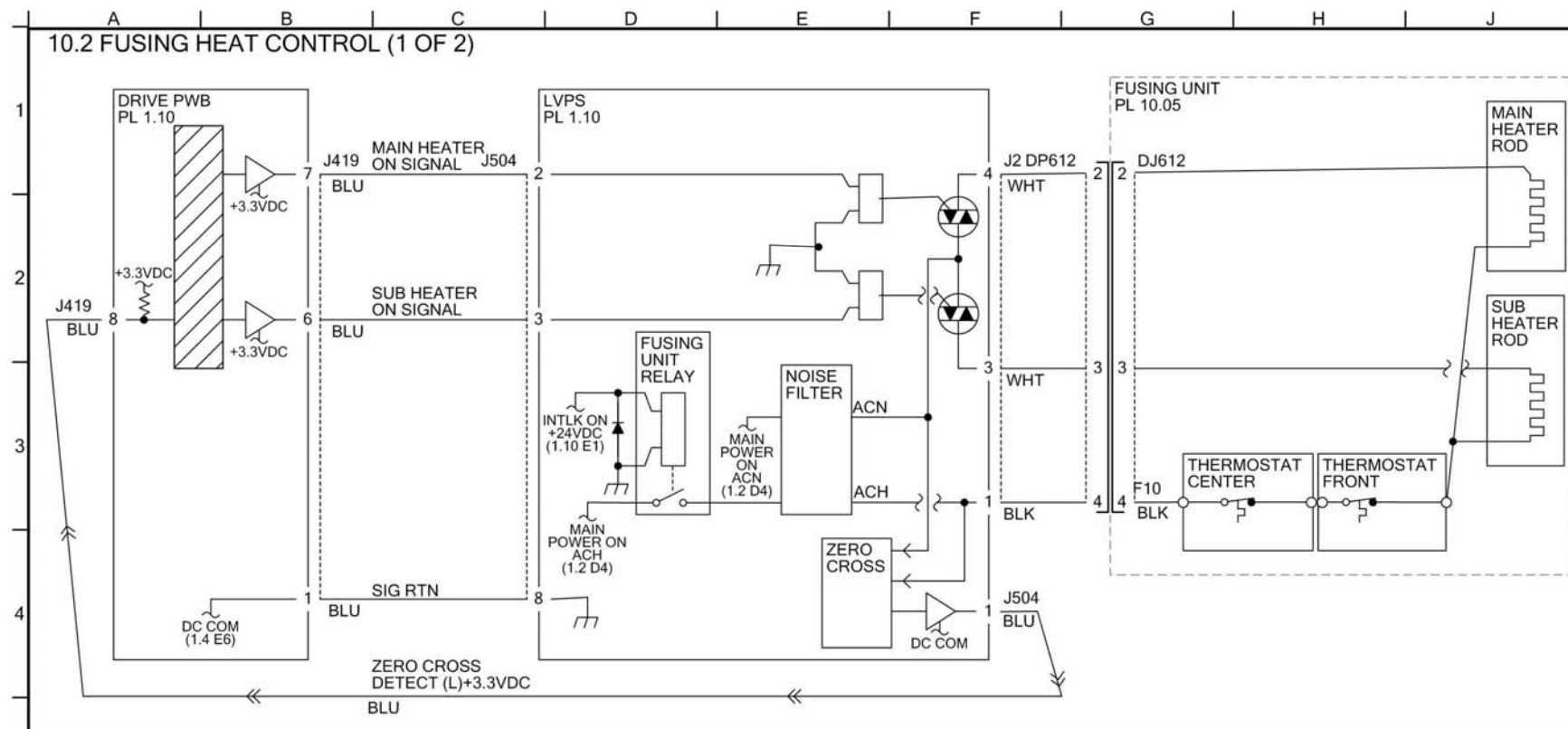


Figure 90 BSD 10.1

BSD 10.2 Fusing Heat Control (1 of 2)



ELECTRICAL COMPONENTS

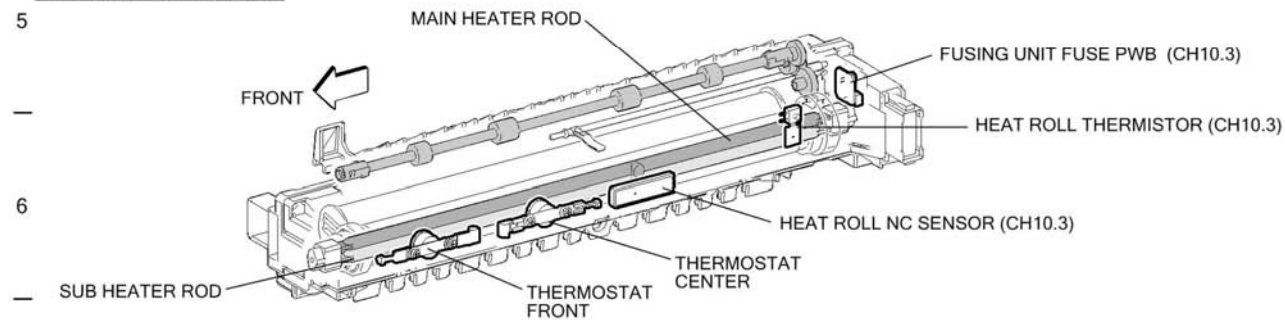


Figure 91 BSD 10.2

BSD 10.3 Fusing Heat Control (2 of 2)

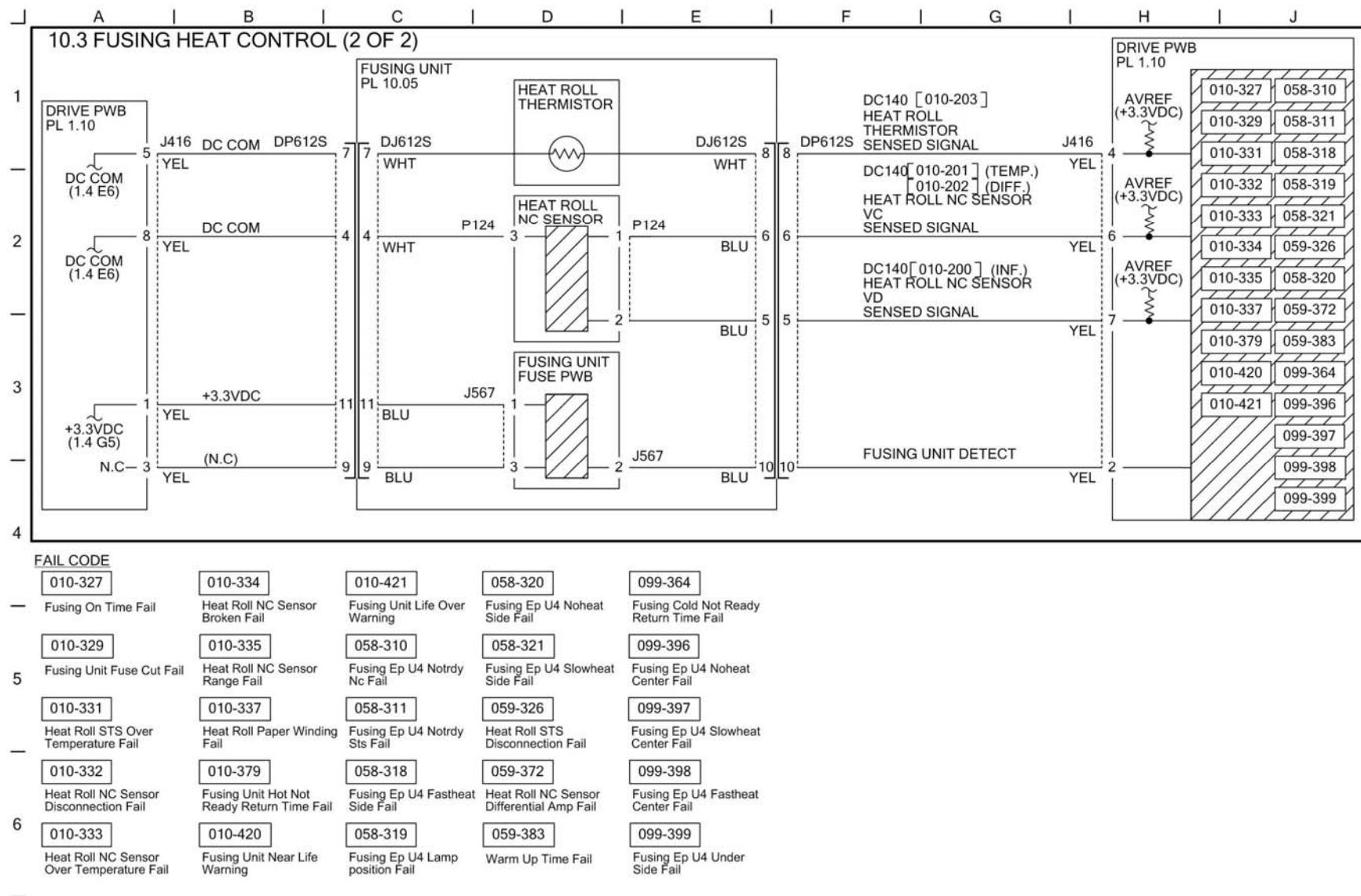


Figure 92 BSD 10.3

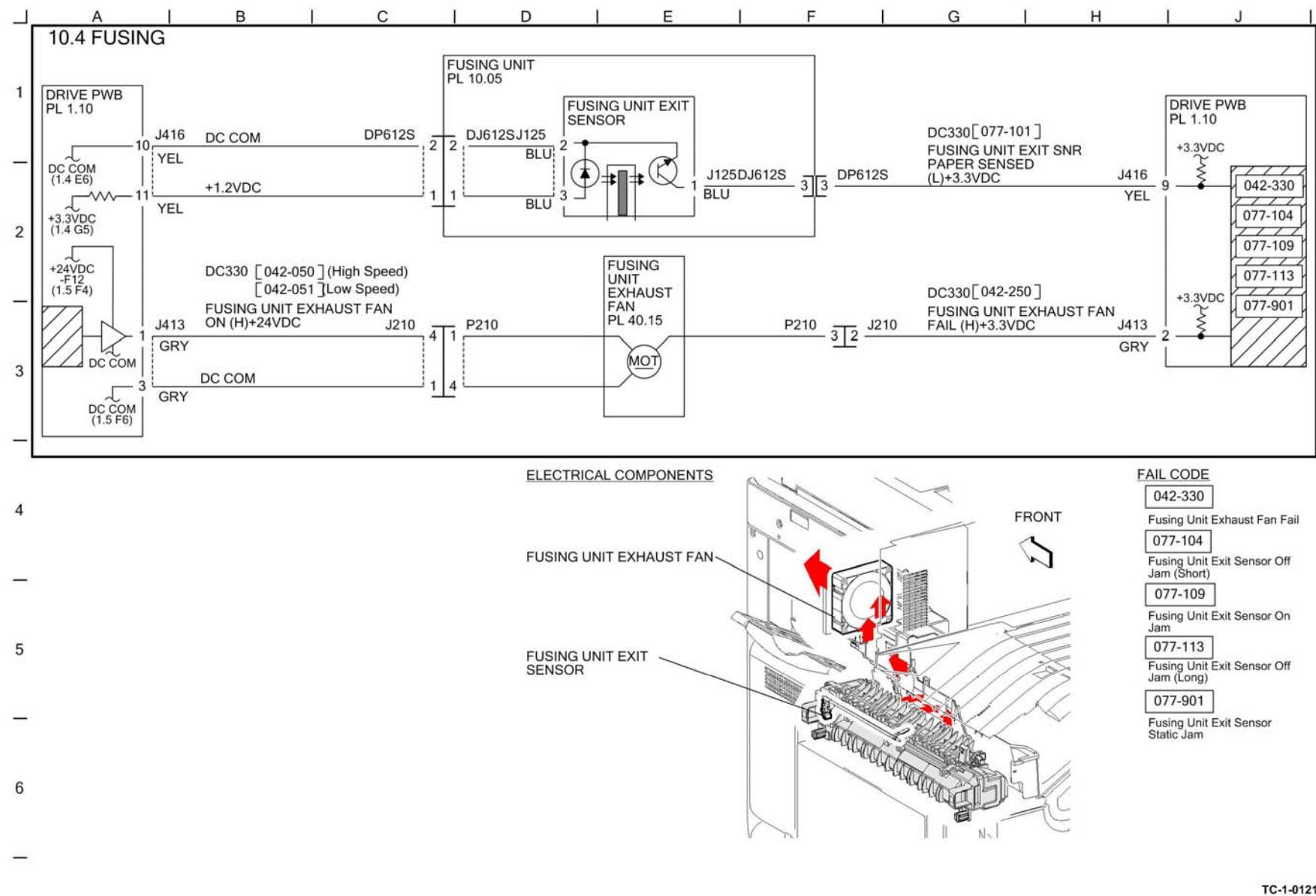


Figure 93 BSD 10.4

BSD 10.5 Fused Paper Exit 1 OCT Control

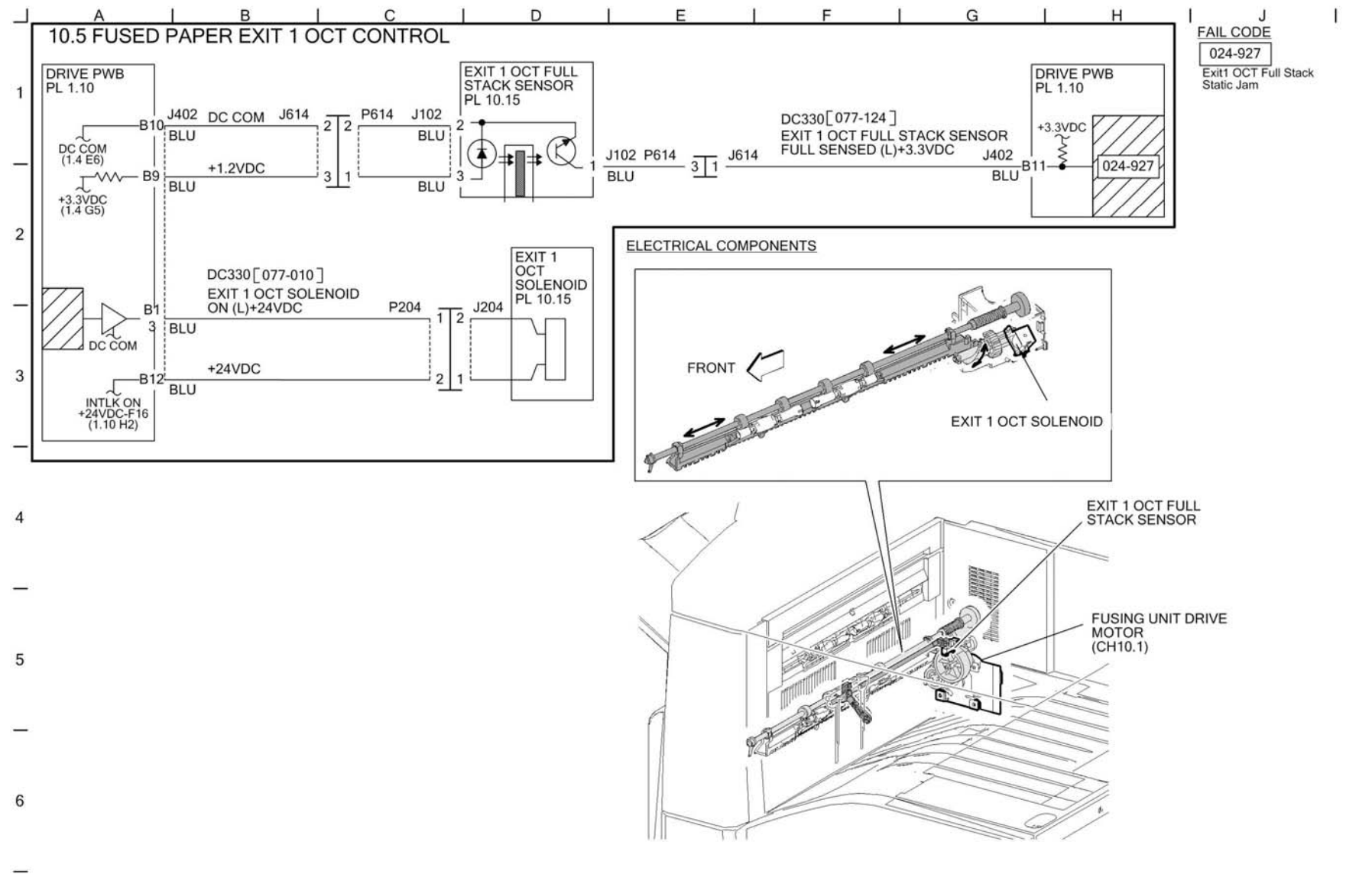


Figure 94 BSD 10.5

BSD 10.6 Fused Paper Exit 2

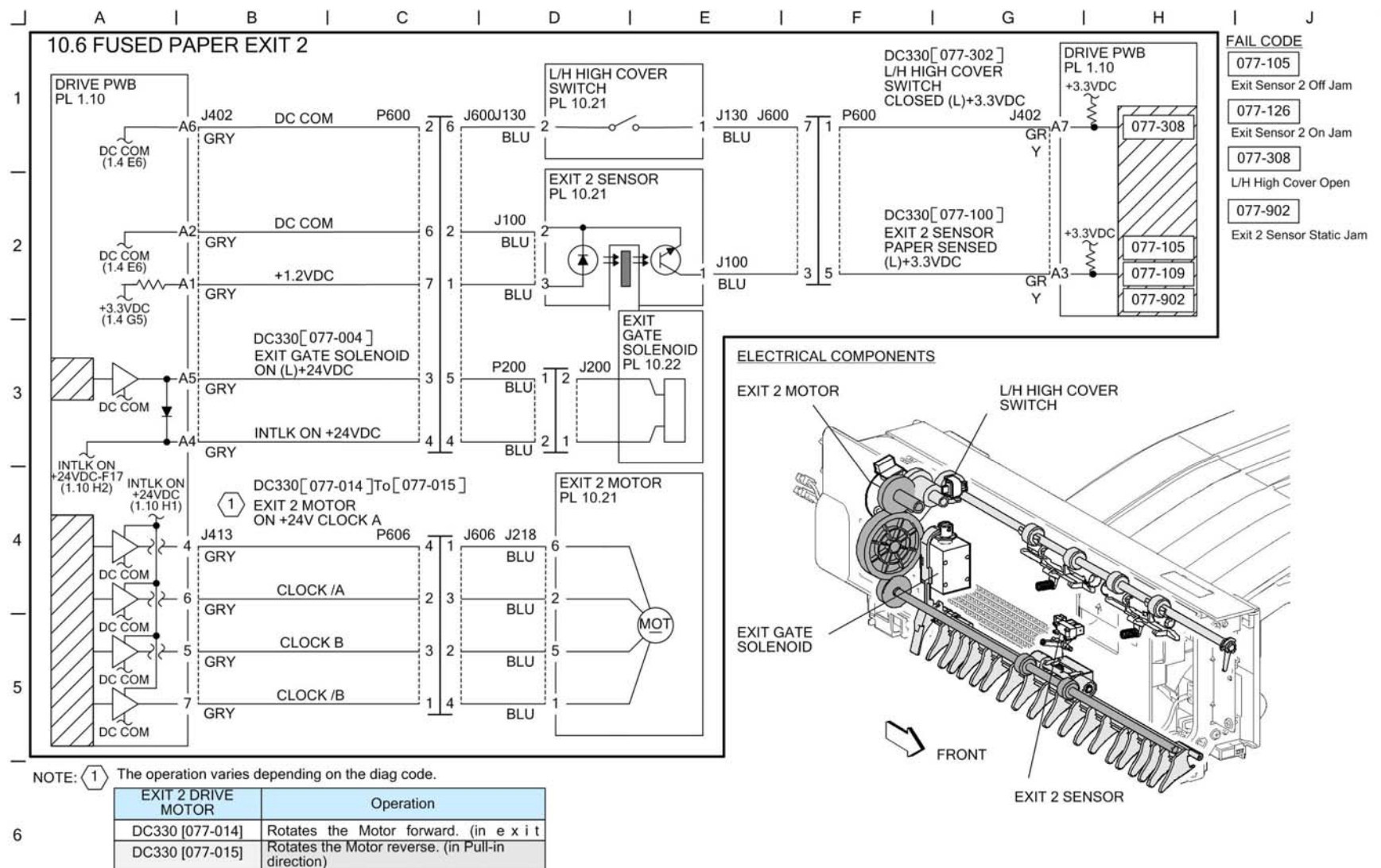
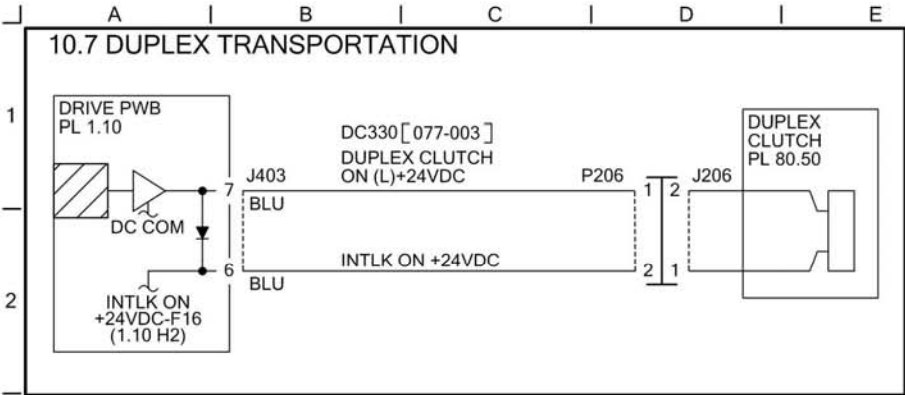
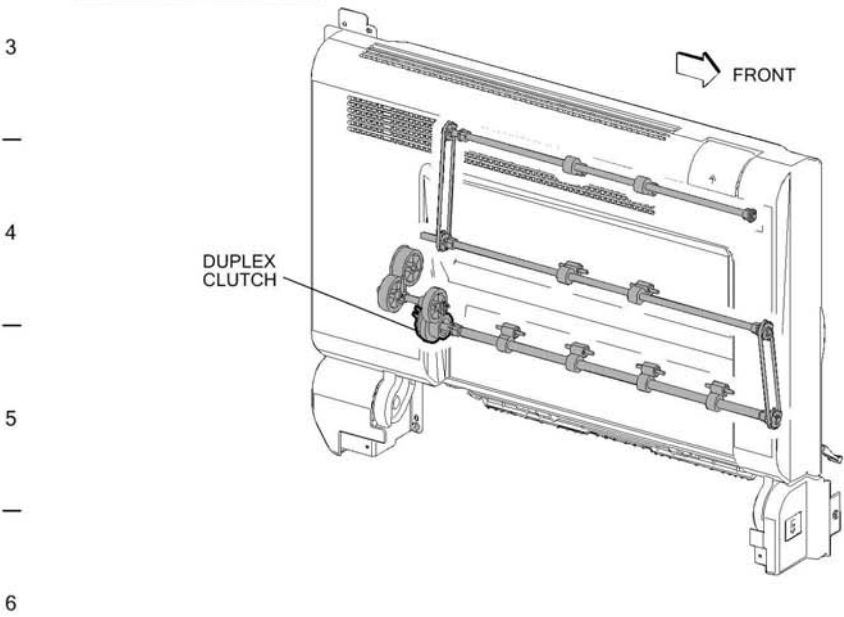


Figure 95 BSD 10.6



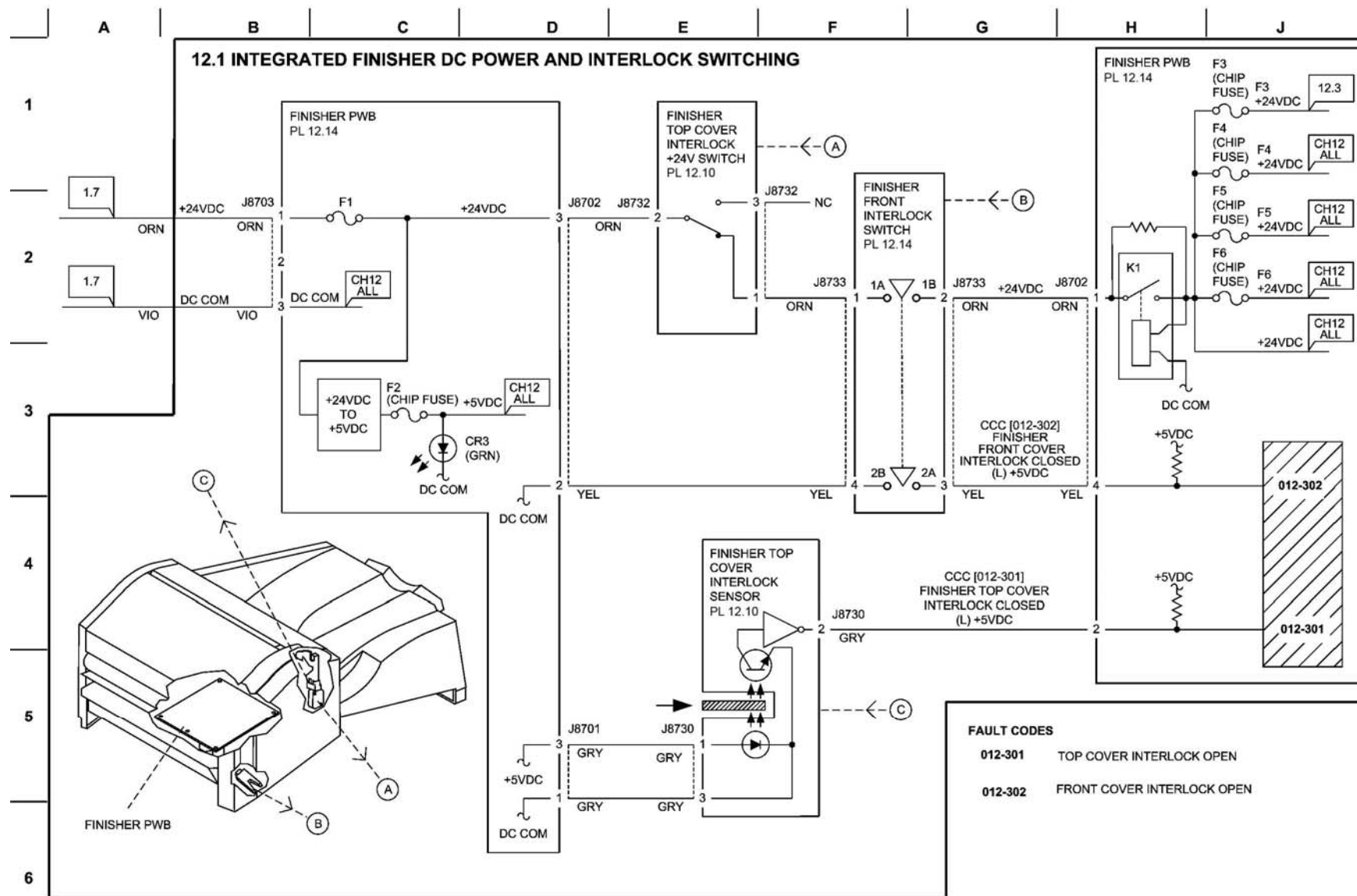
ELECTRICAL COMPONENTS



TC-1-0187-A

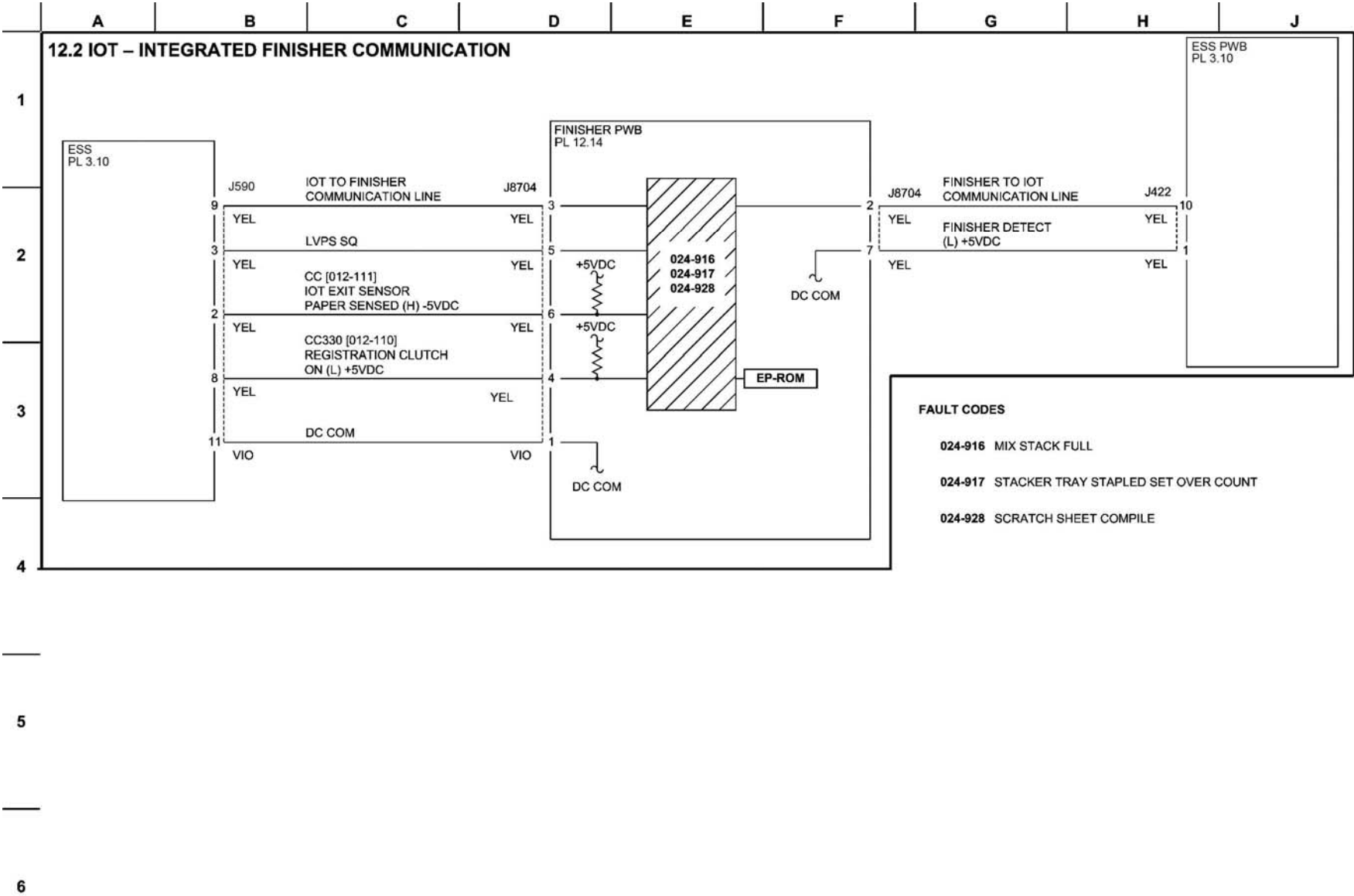
Figure 96 BSD 10.7

BSD 12.1 Integrated Office Finisher DC Power and Interlock Switching



TC-1-0125-A

Figure 97 BSD 12.1



TC-1-0126-A

Figure 98 BSD 12.2

BSD 12.3 Integrated Office Finisher Transportation

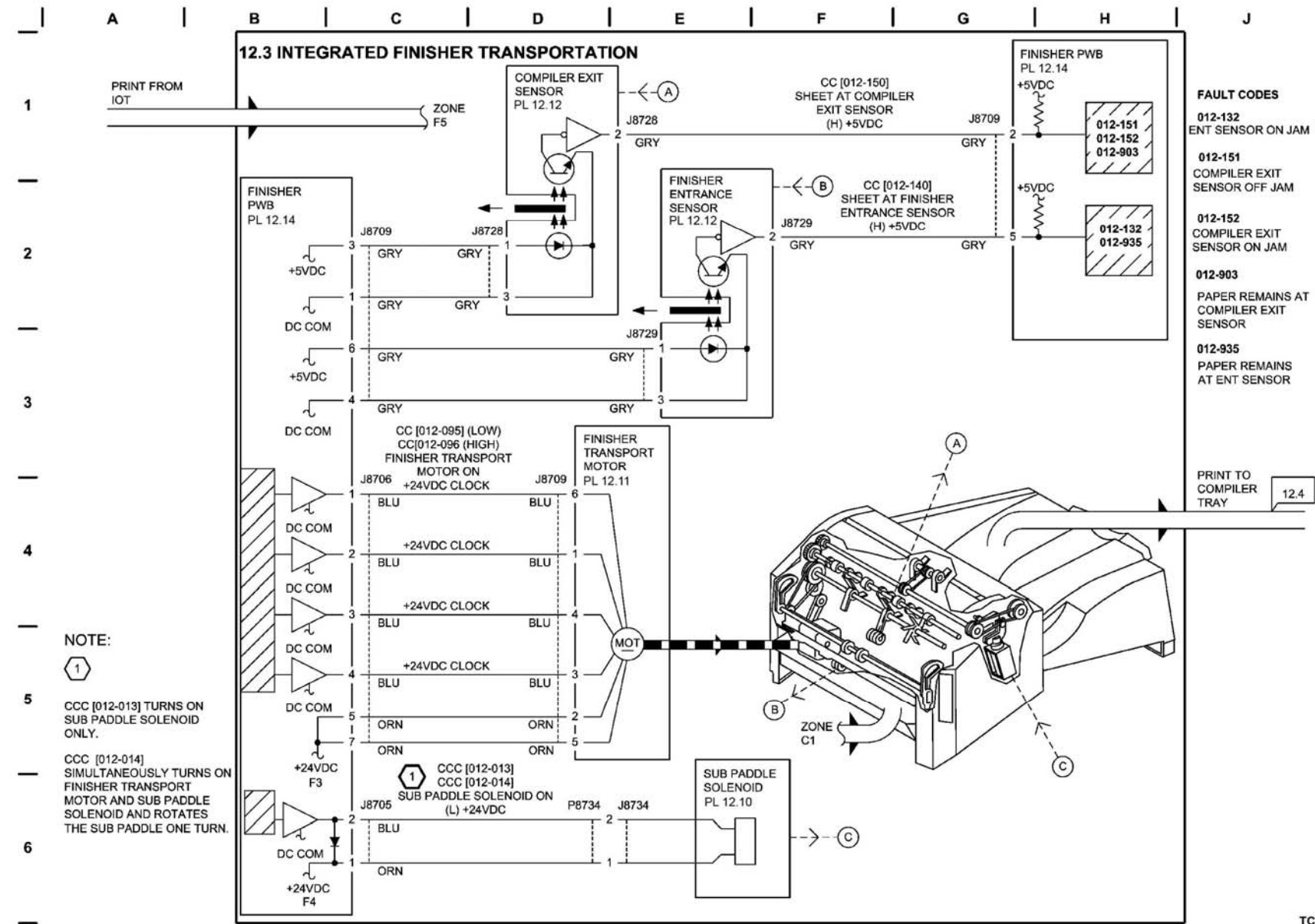


Figure 99 BSD 12.3

BSD 12.4 Integrated Office Finisher Tamping and Offset

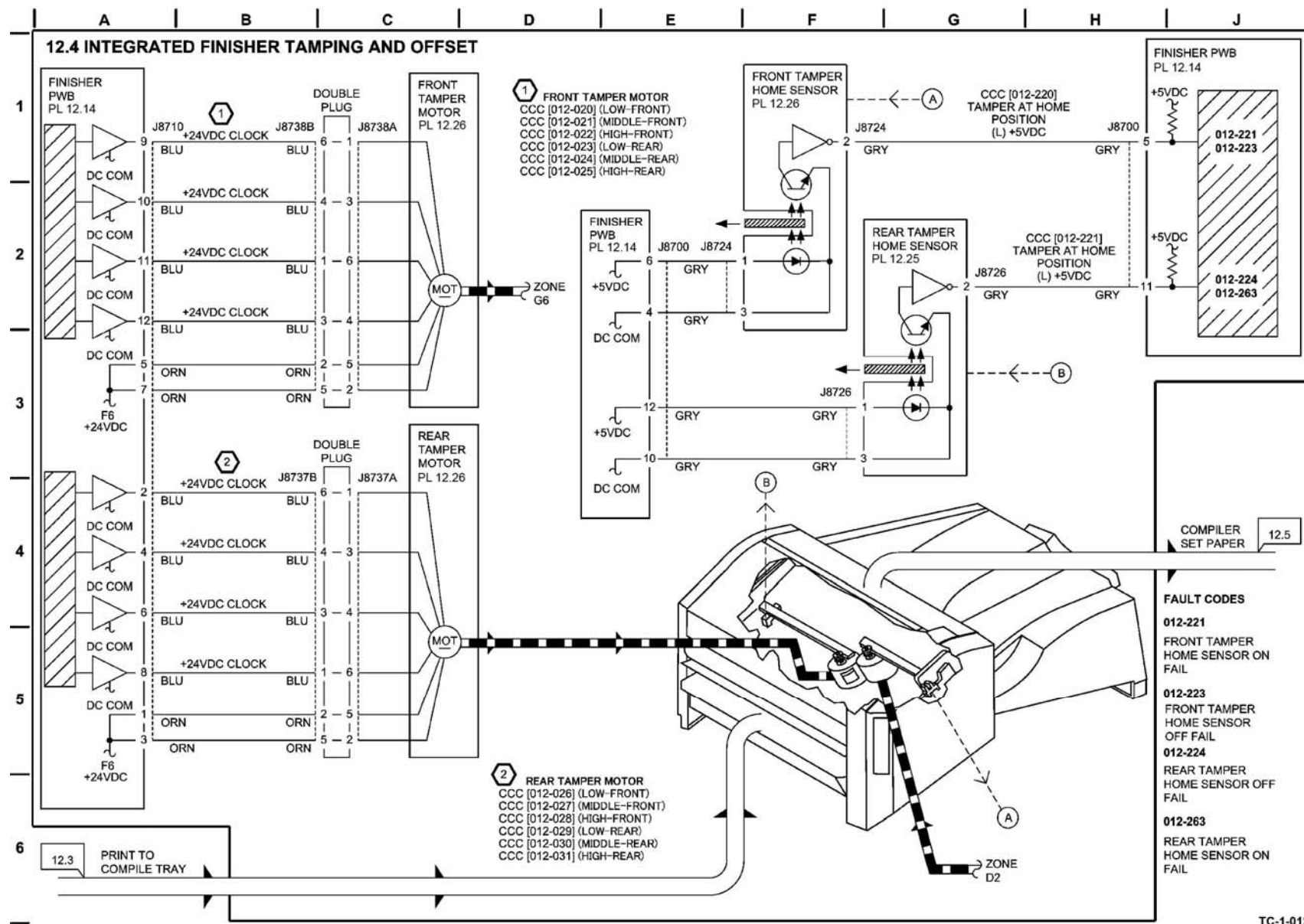


Figure 100 BSD 12.4

BSD 12.5 Integrated Office Finisher Staple Control

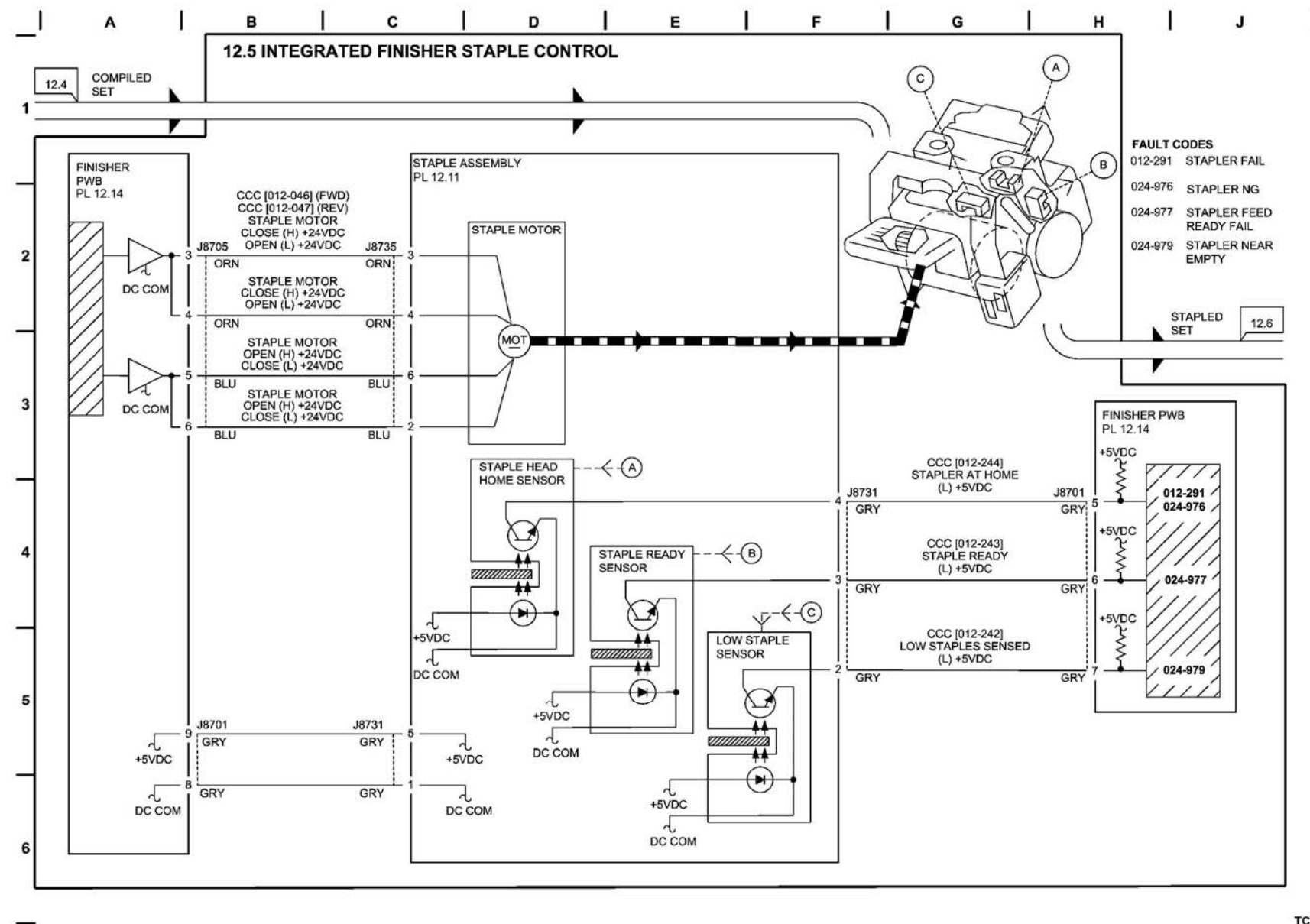
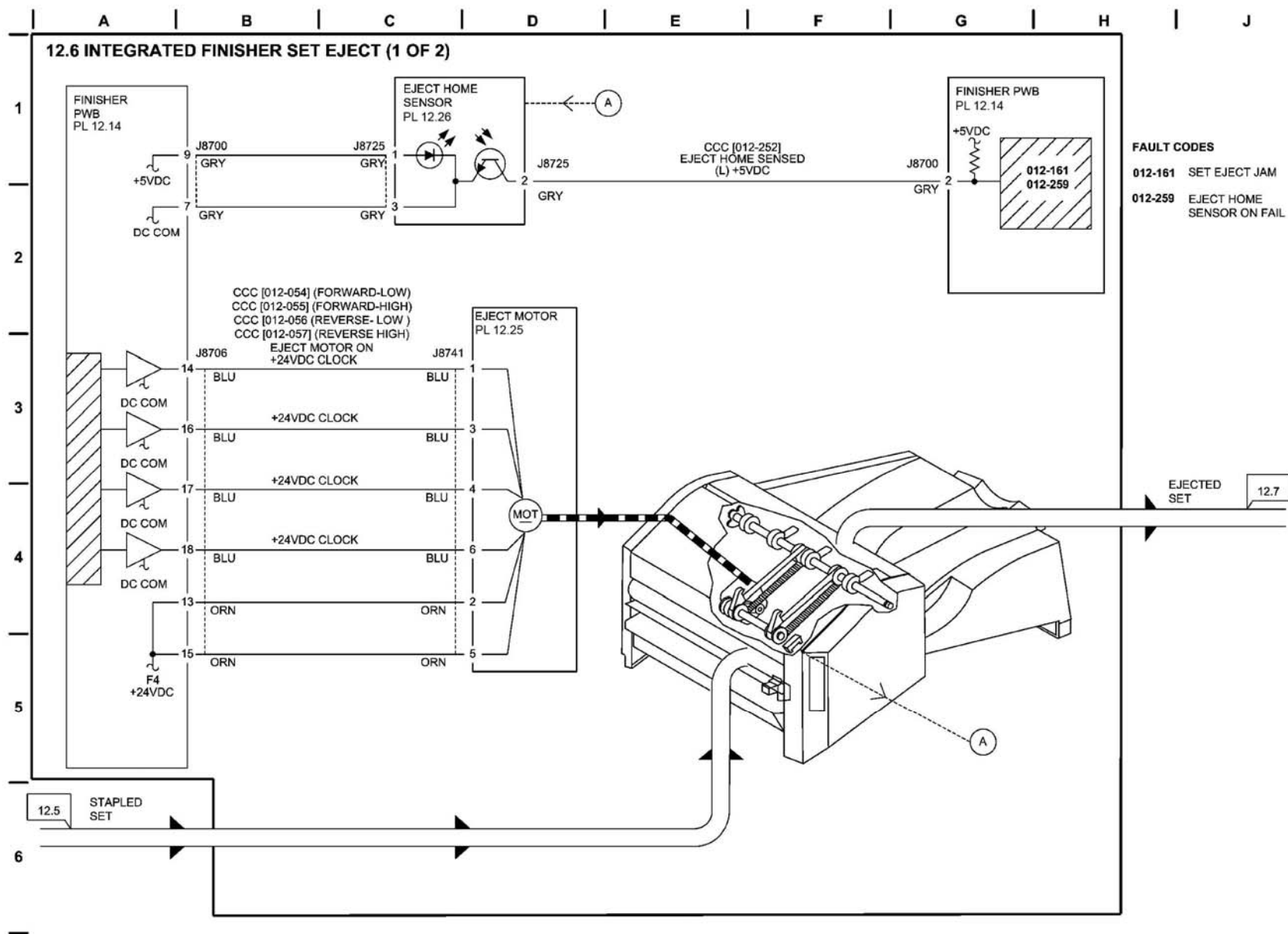


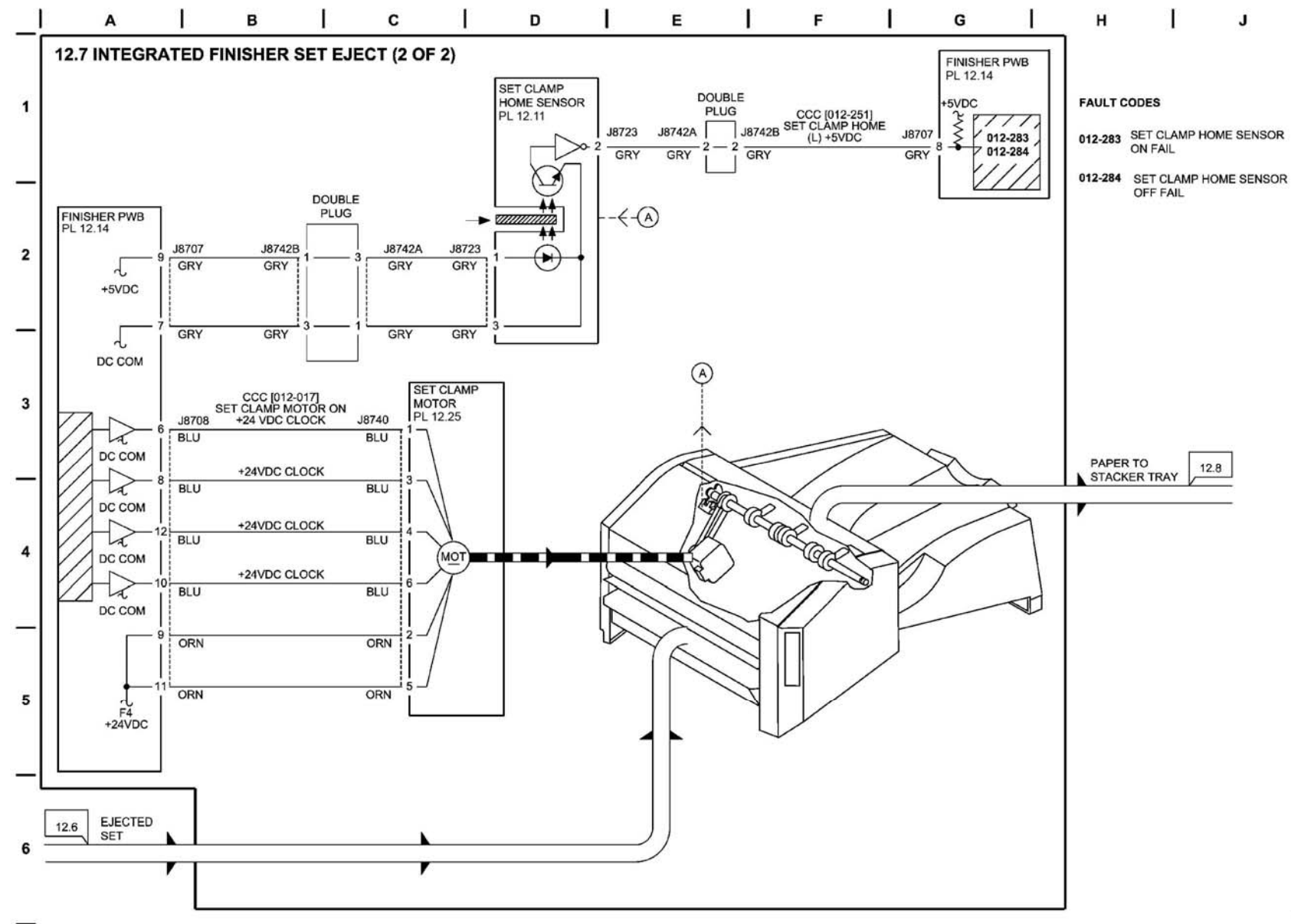
Figure 101 BSD 12.5

BSD 12.6 Integrated Office Finisher Set Eject (1 of 2)



TC-1-0130-A

Figure 102 BSD 12.6



TC-1-0131-A

Figure 103 BSD 12.7

BSD 12.8 Integrated Office Finisher Stacker Tray Control

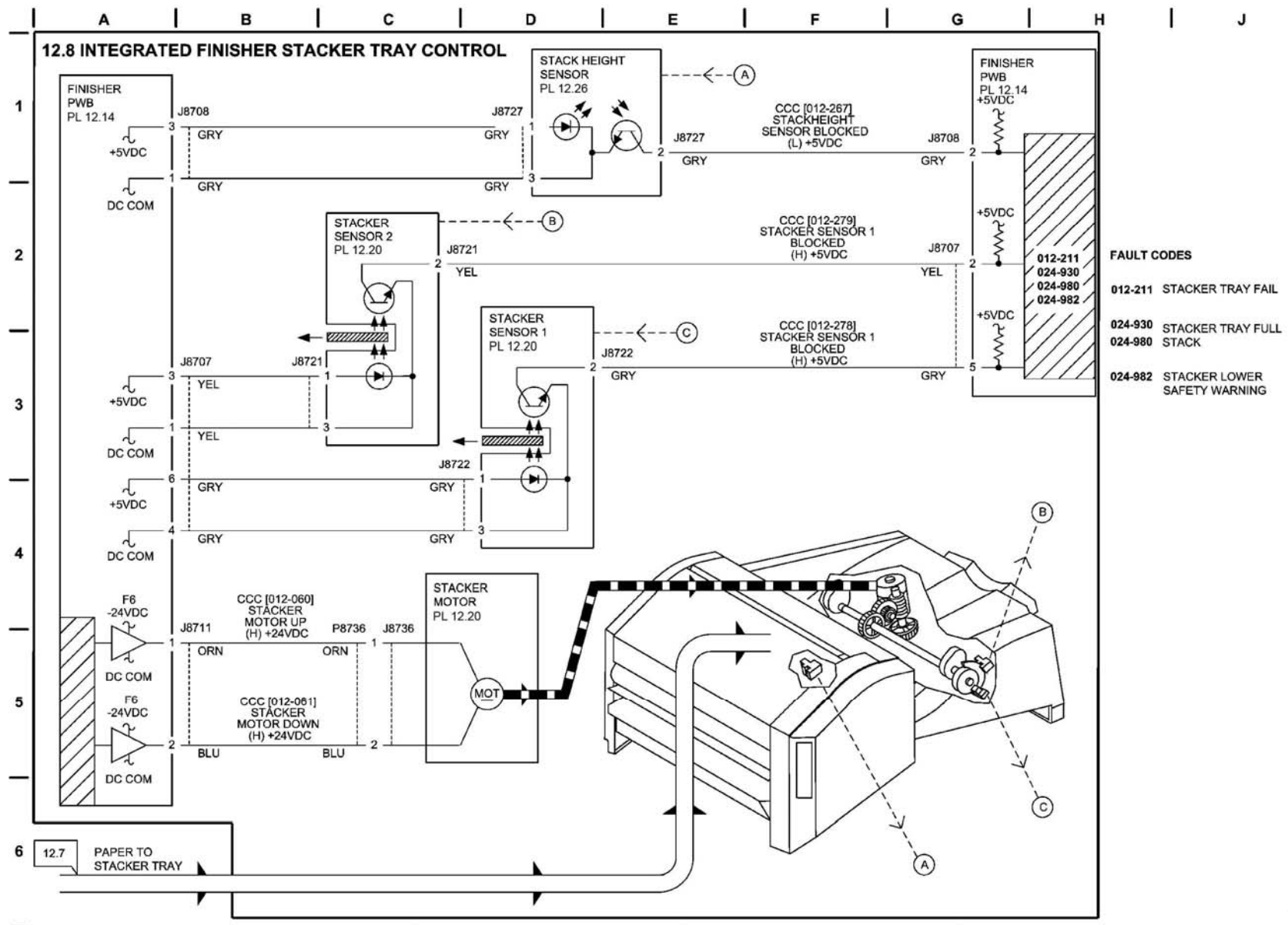


Figure 104 BSD 12.8

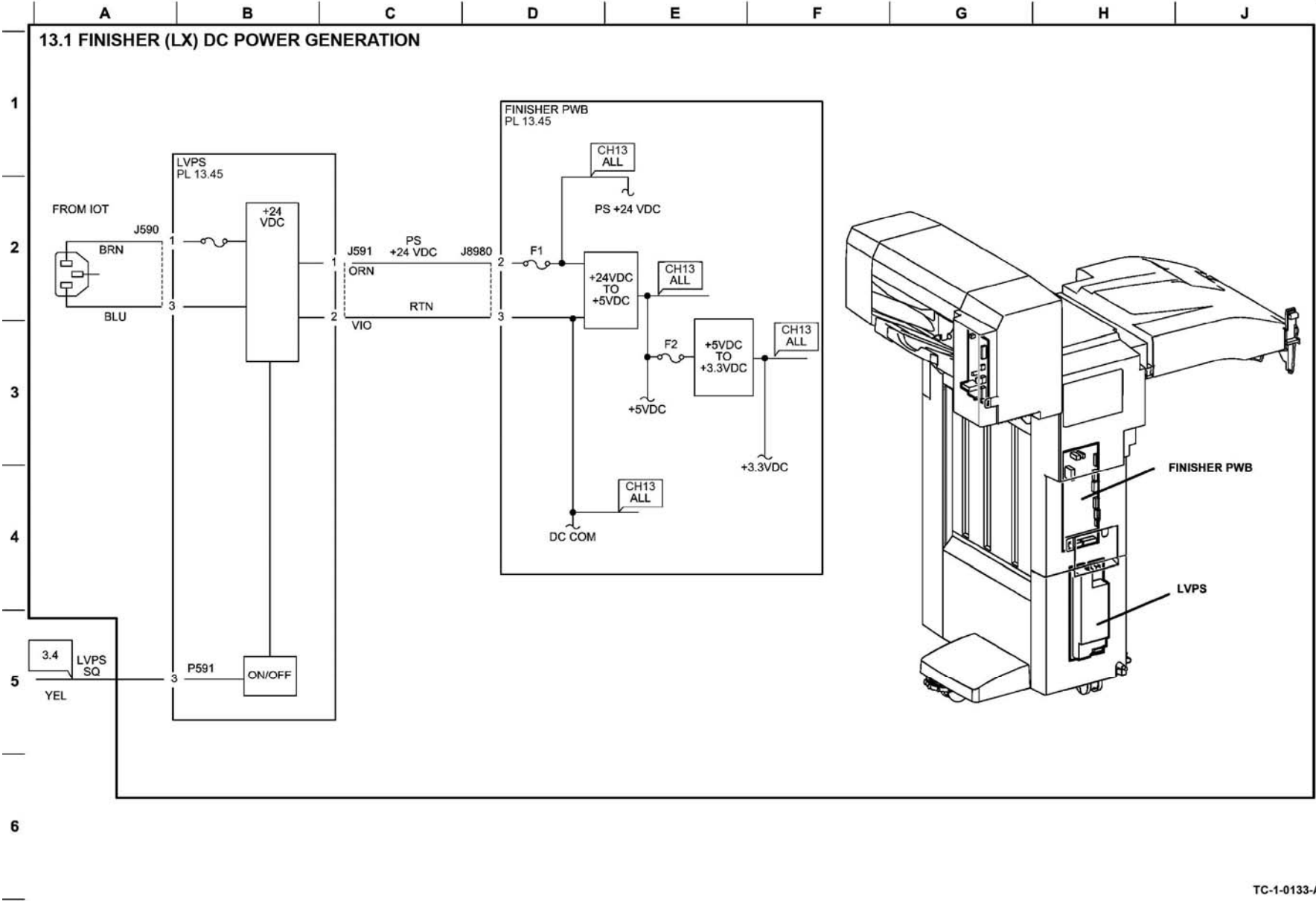
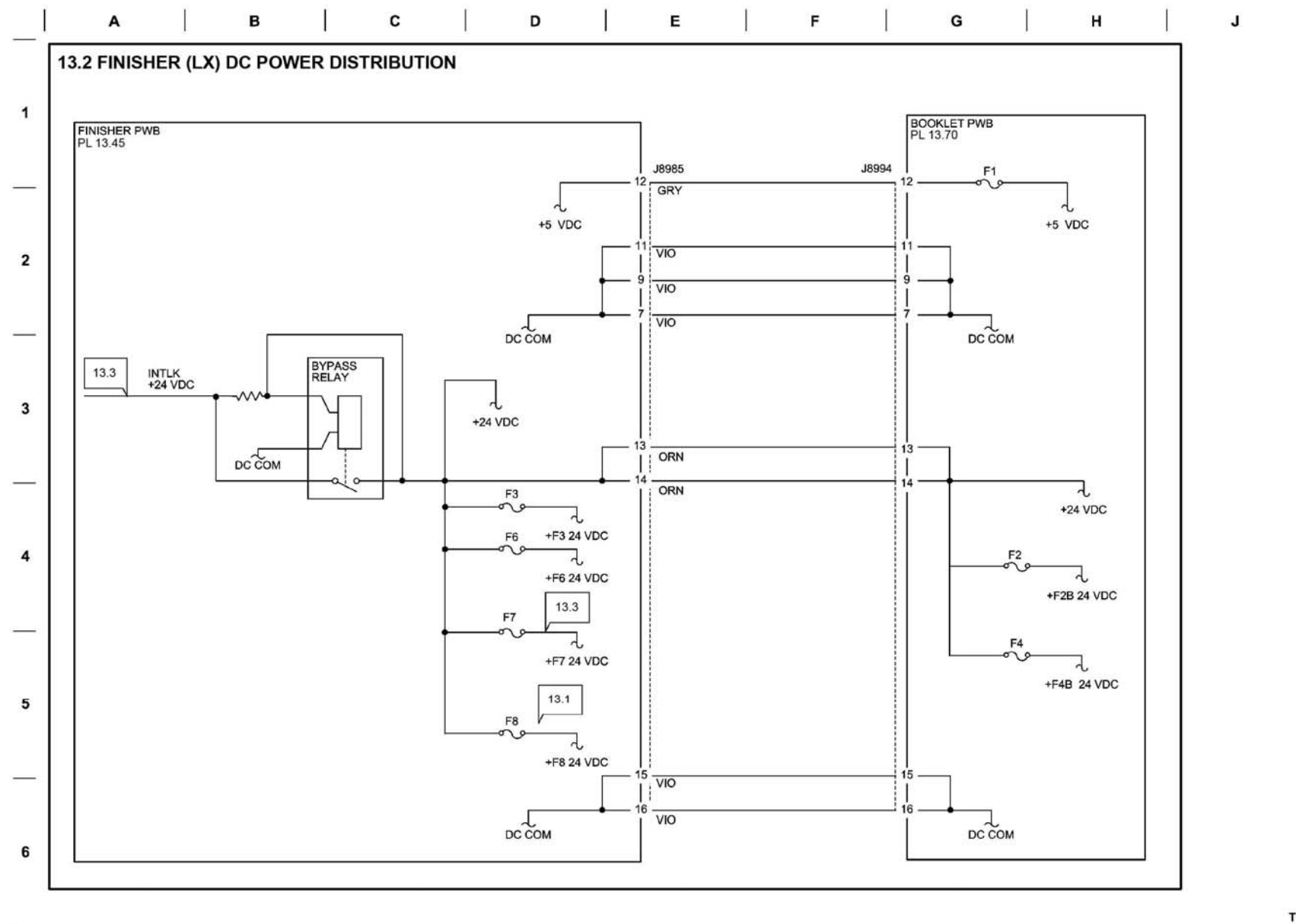


Figure 105 BSD 13.1

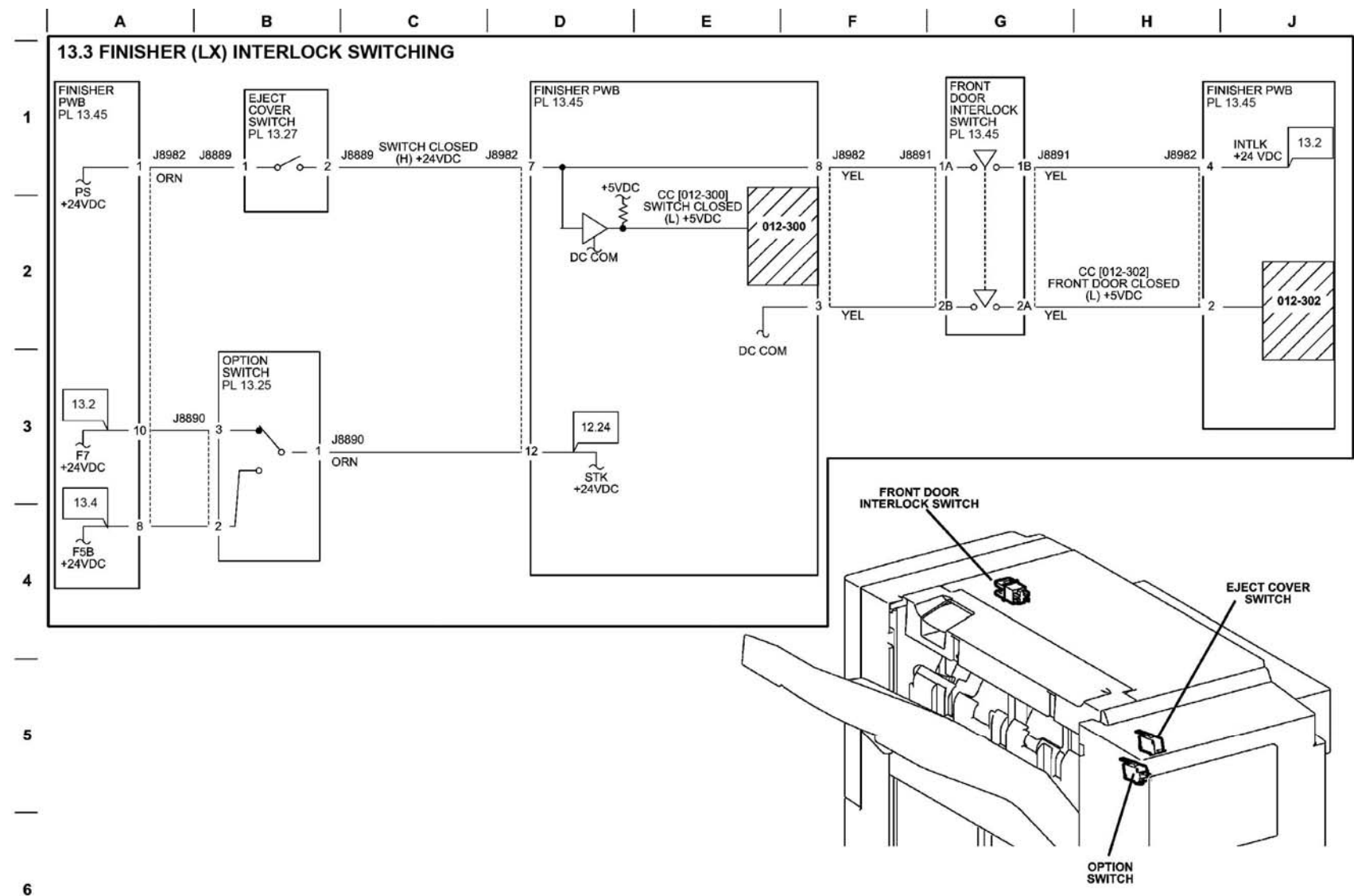
BSD 13.2 Office Finisher LX DC Power Distribution



TC-1-0134-A

Figure 106 BSD 13.2

BSD 13.3 Office Finisher LX Interlock Switching



TC-1-0135-A

Figure 107 BSD 13.3

BSD 13.4 Office Finisher LX Booklet Interlock Switching

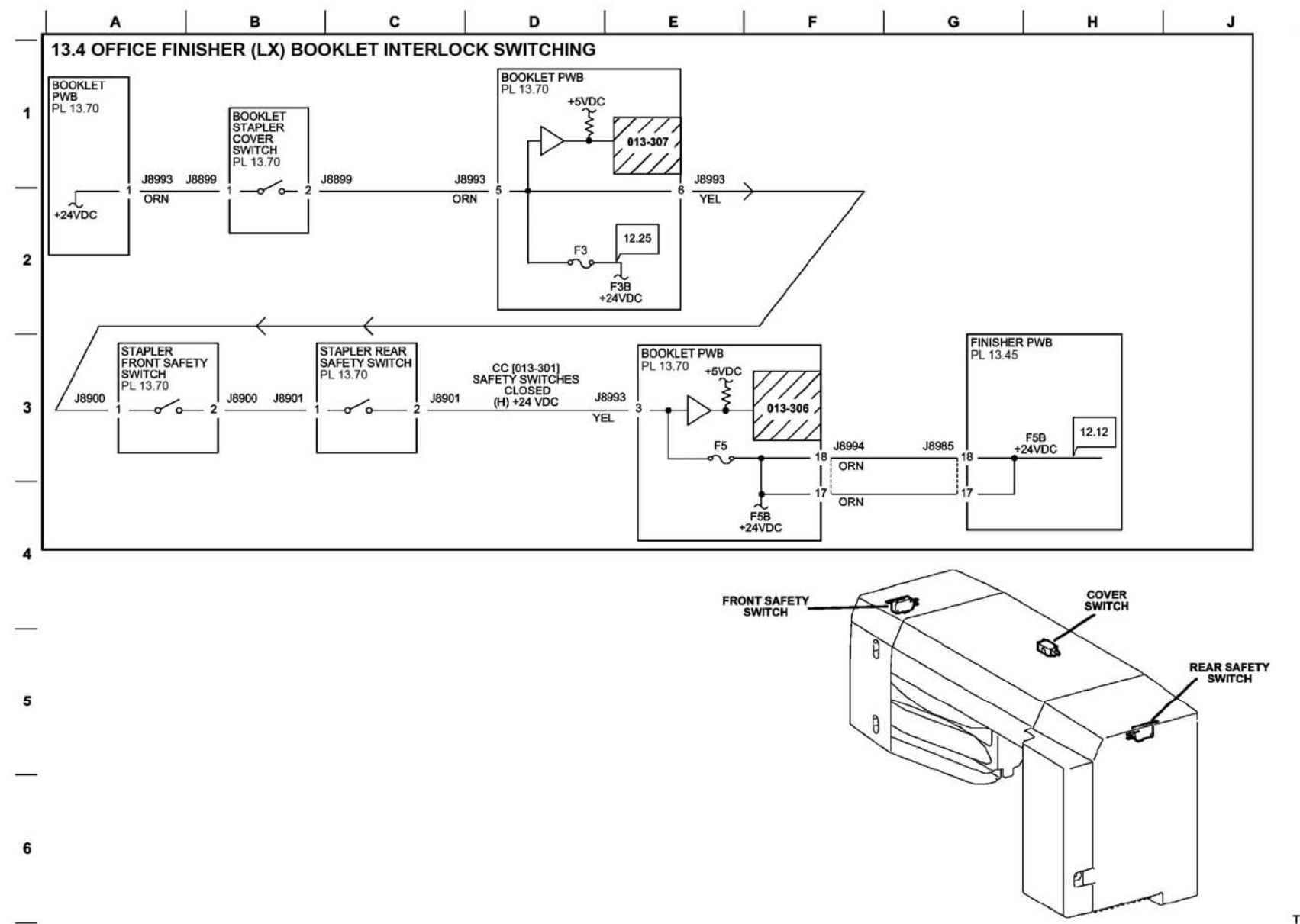
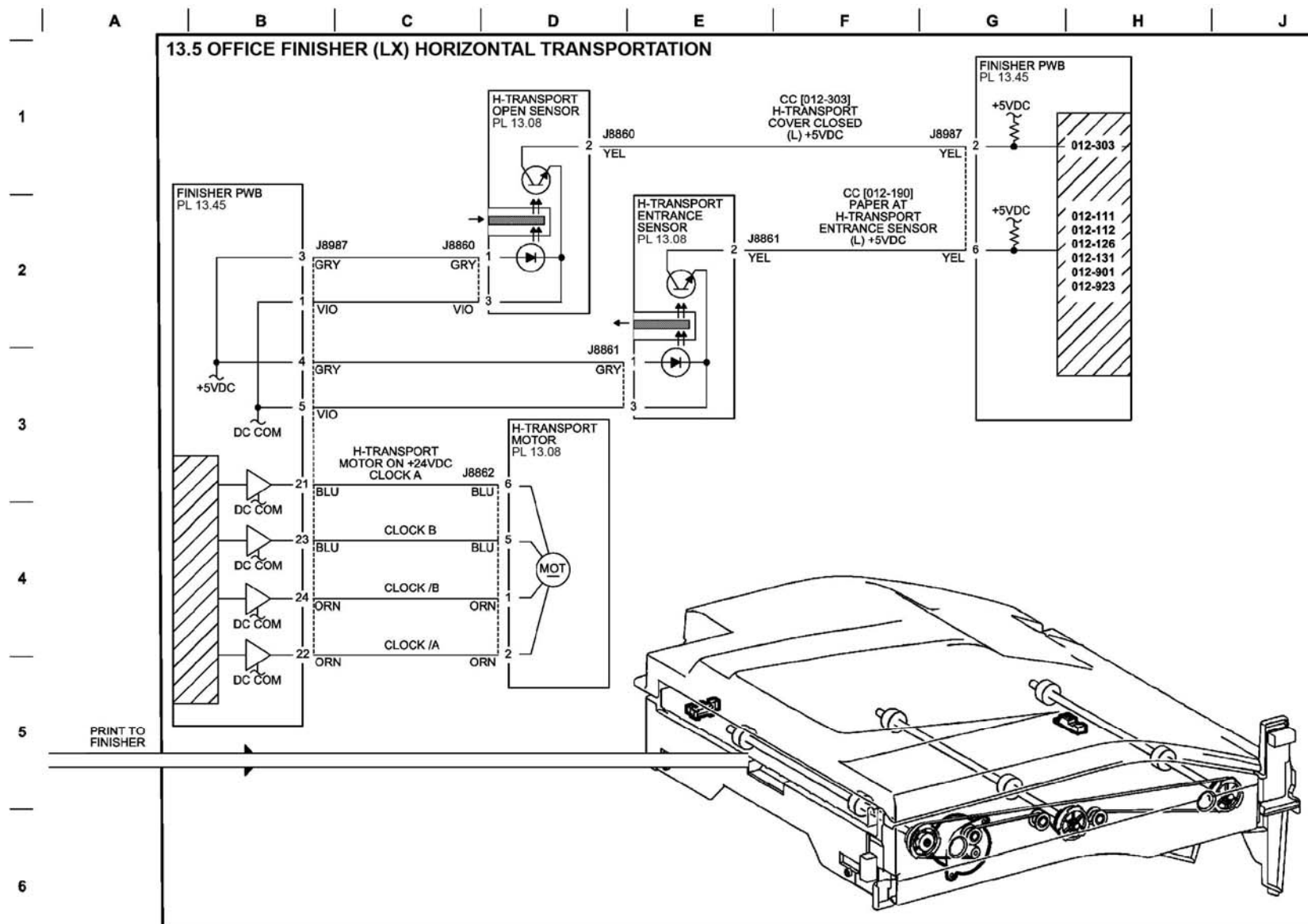


Figure 108 BSD 13.4

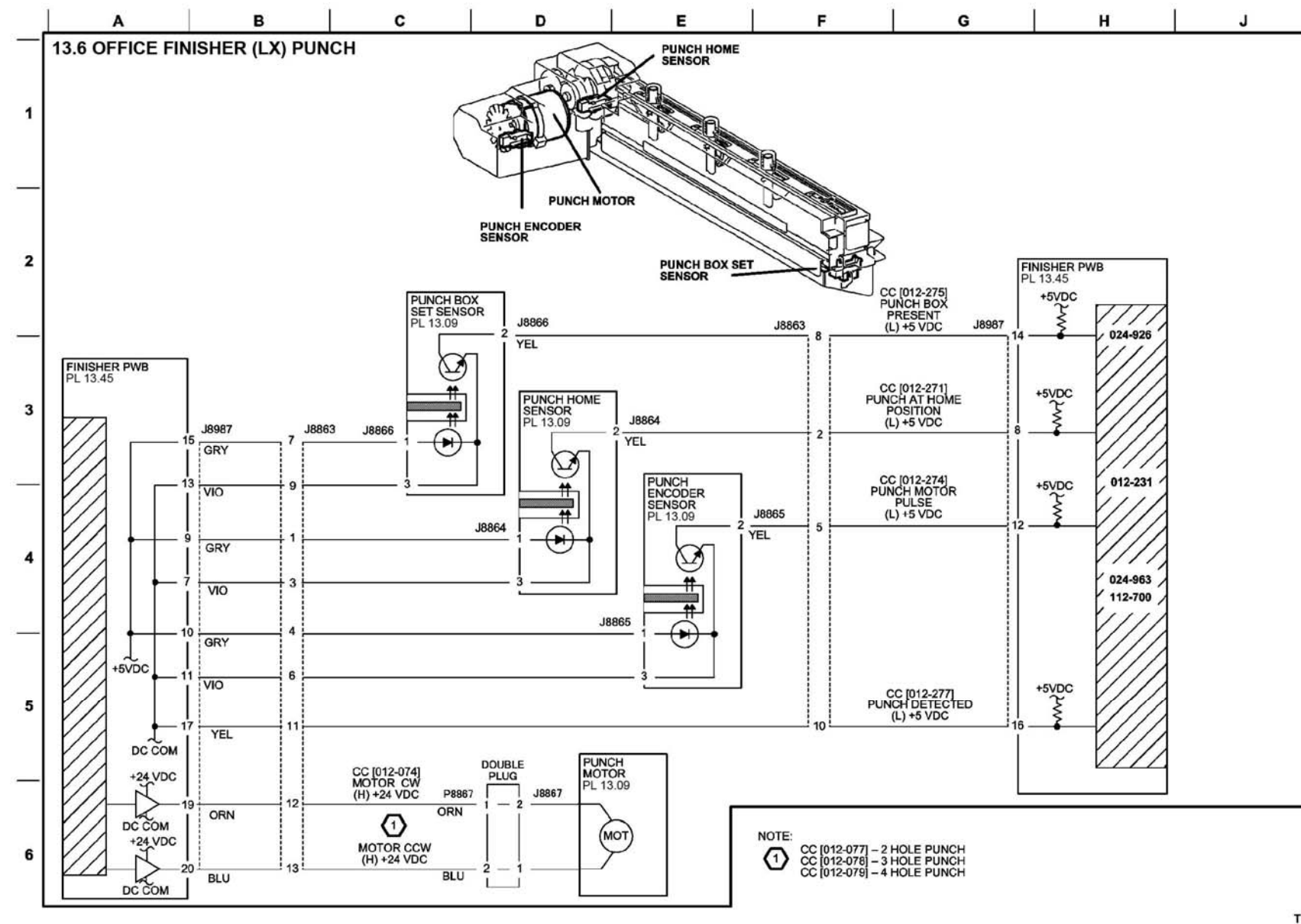
BSD 13.5 Office Finisher LX Horizontal Transport



TC-1-0137-A

Figure 109 BSD 13.5

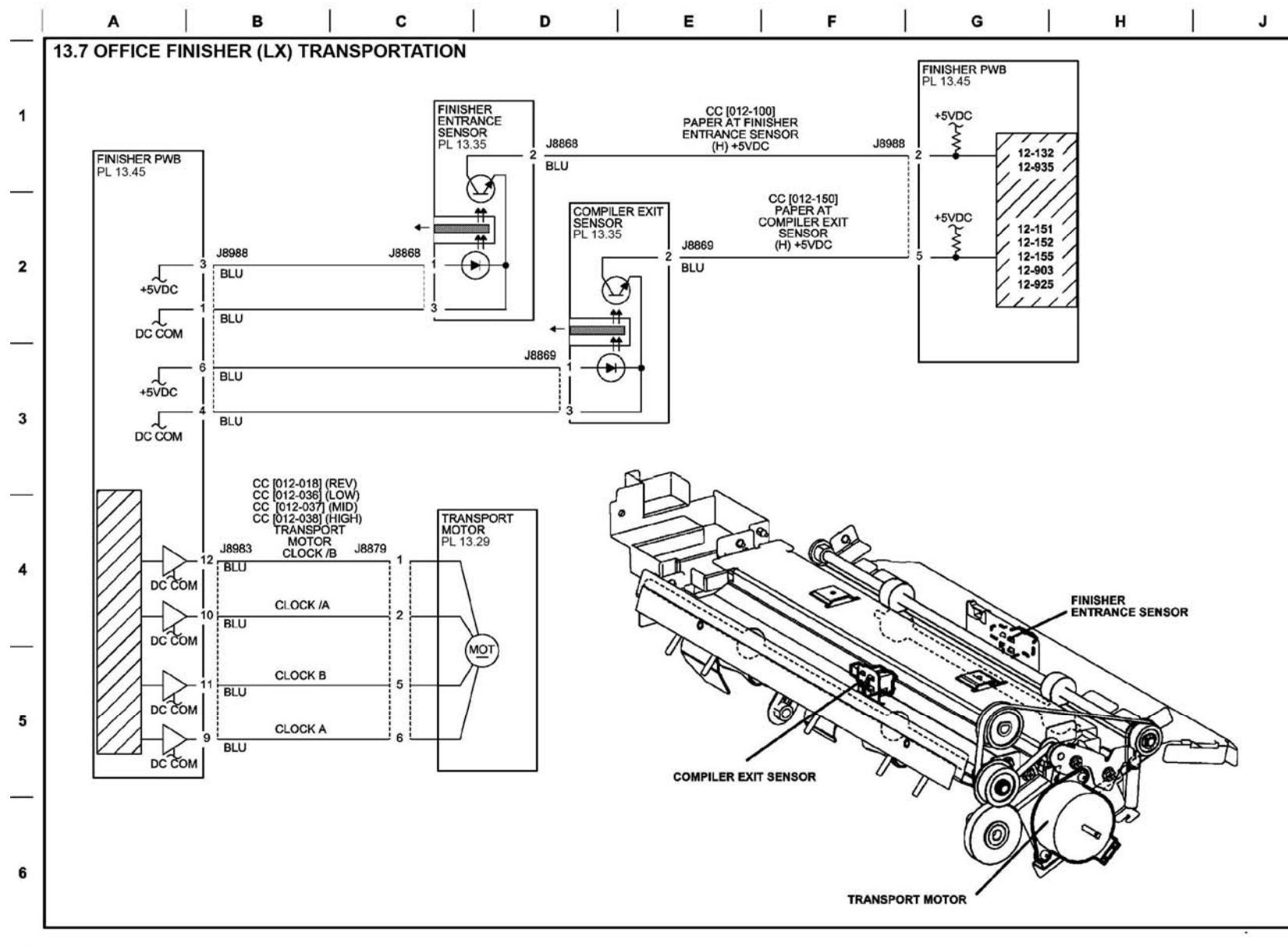
BSD 13.6 Office Finisher LX Punch



TC-1-0138-A

Figure 110 BSD 13.6

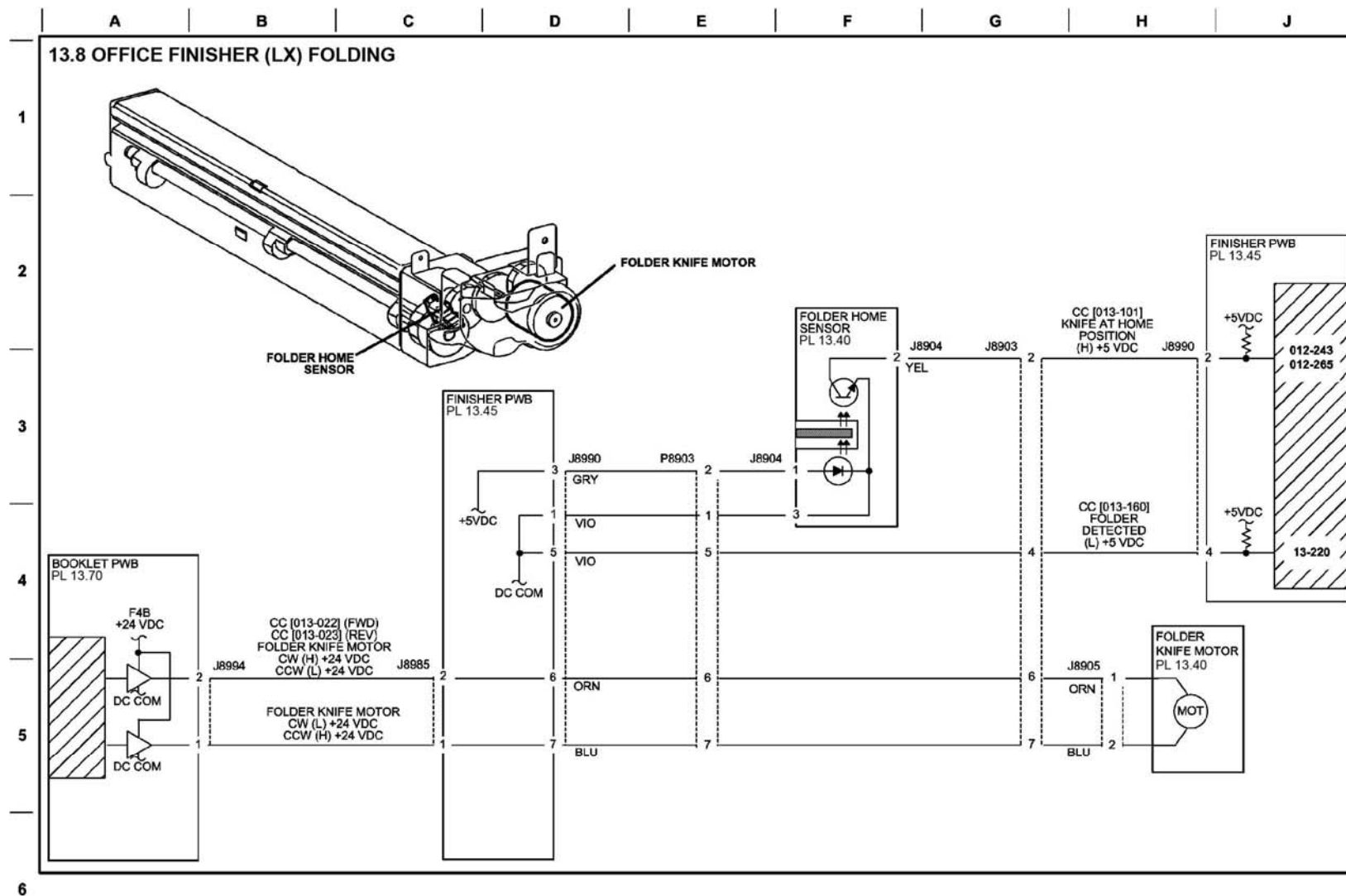
BSD 13.7 Office Finisher LX Transportation



TC-1-0139-A

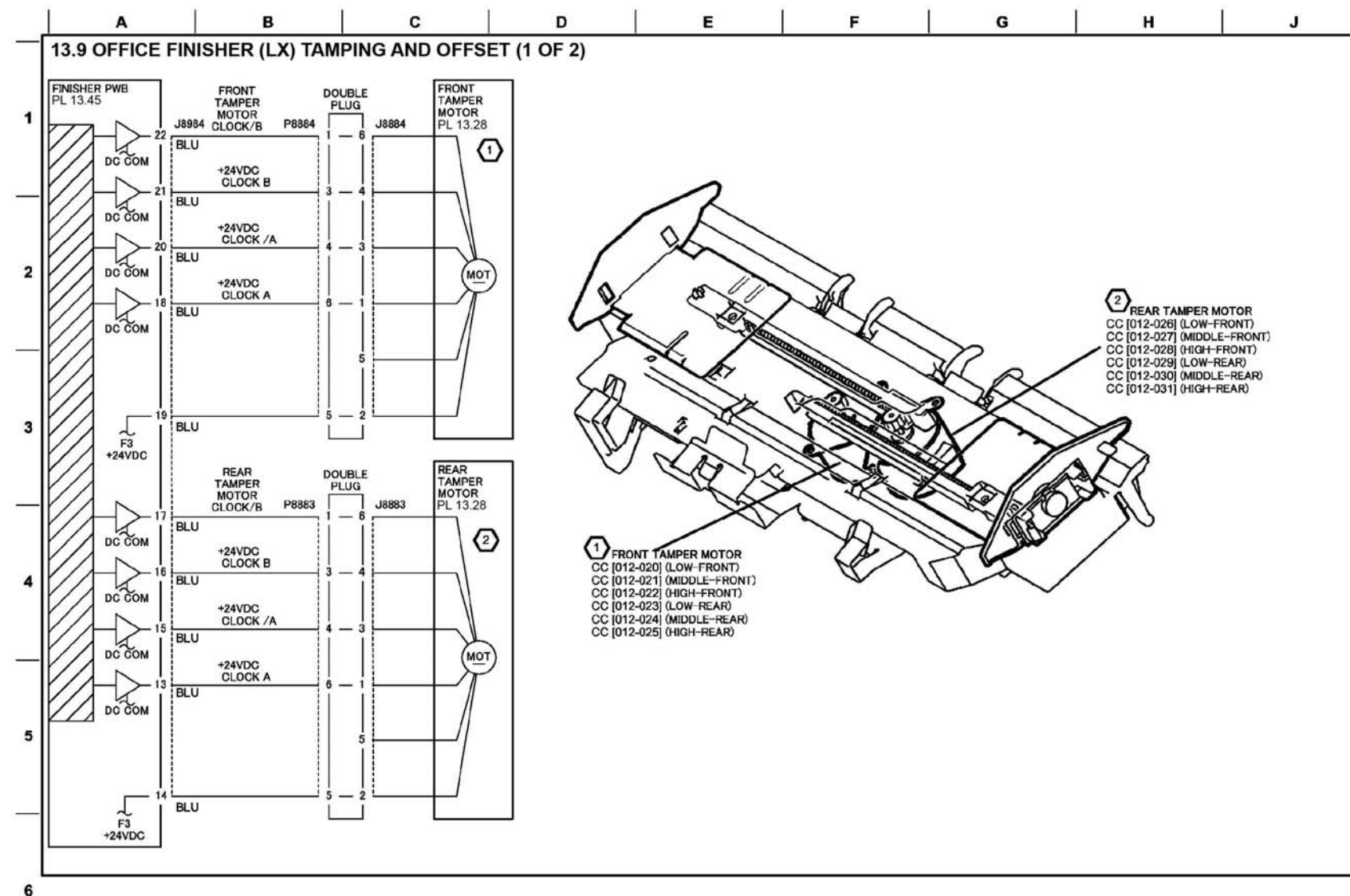
Figure 111 BSD 13.7

BSD 13.8 Office Finisher LX Folding



TC-1-0140-A

Figure 112 BSD 13.8



TC-1-0141-A

Figure 113 BSD 13.9

BSD 13.10 Office Finisher LX Tamping and Offset (2 of 2)

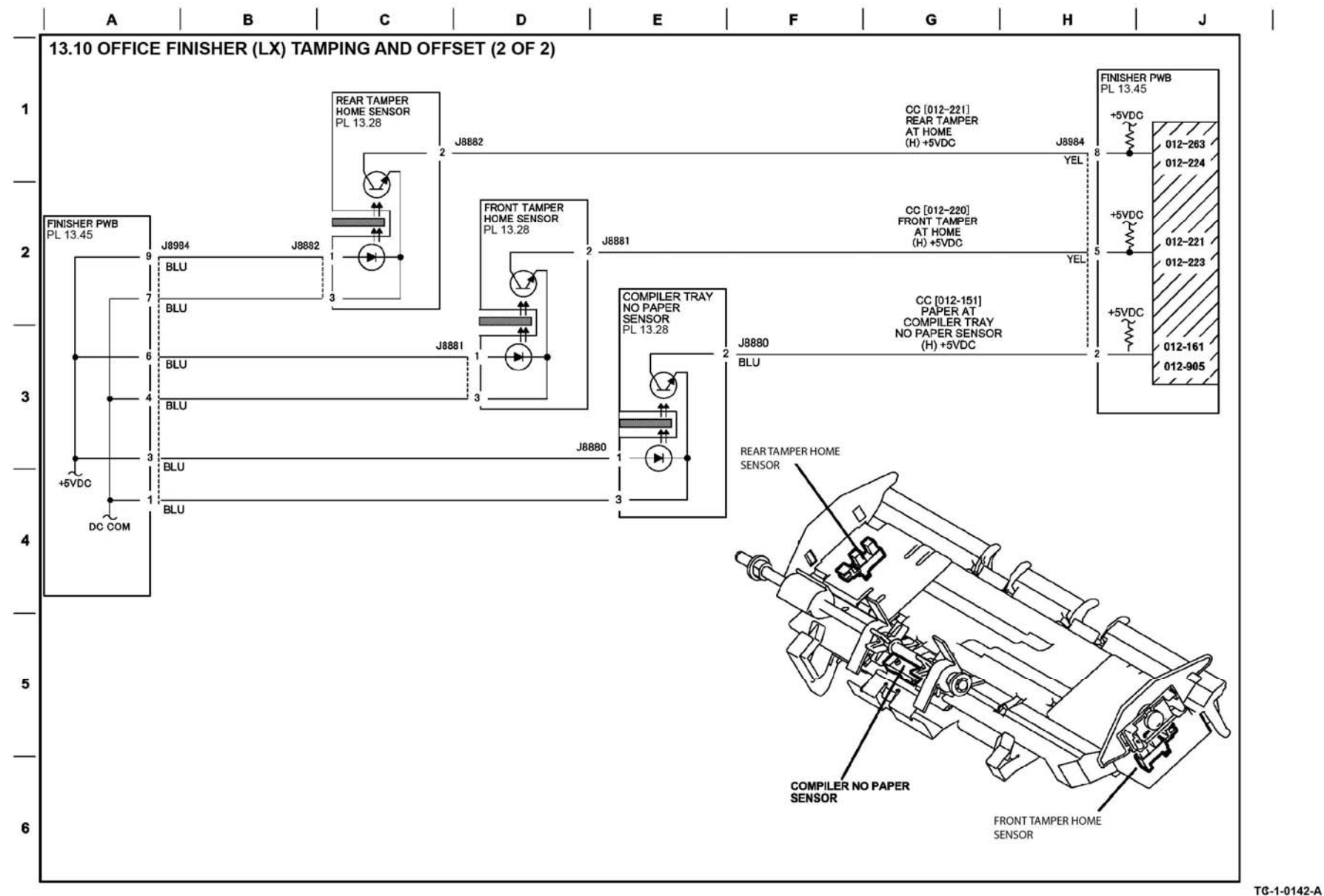
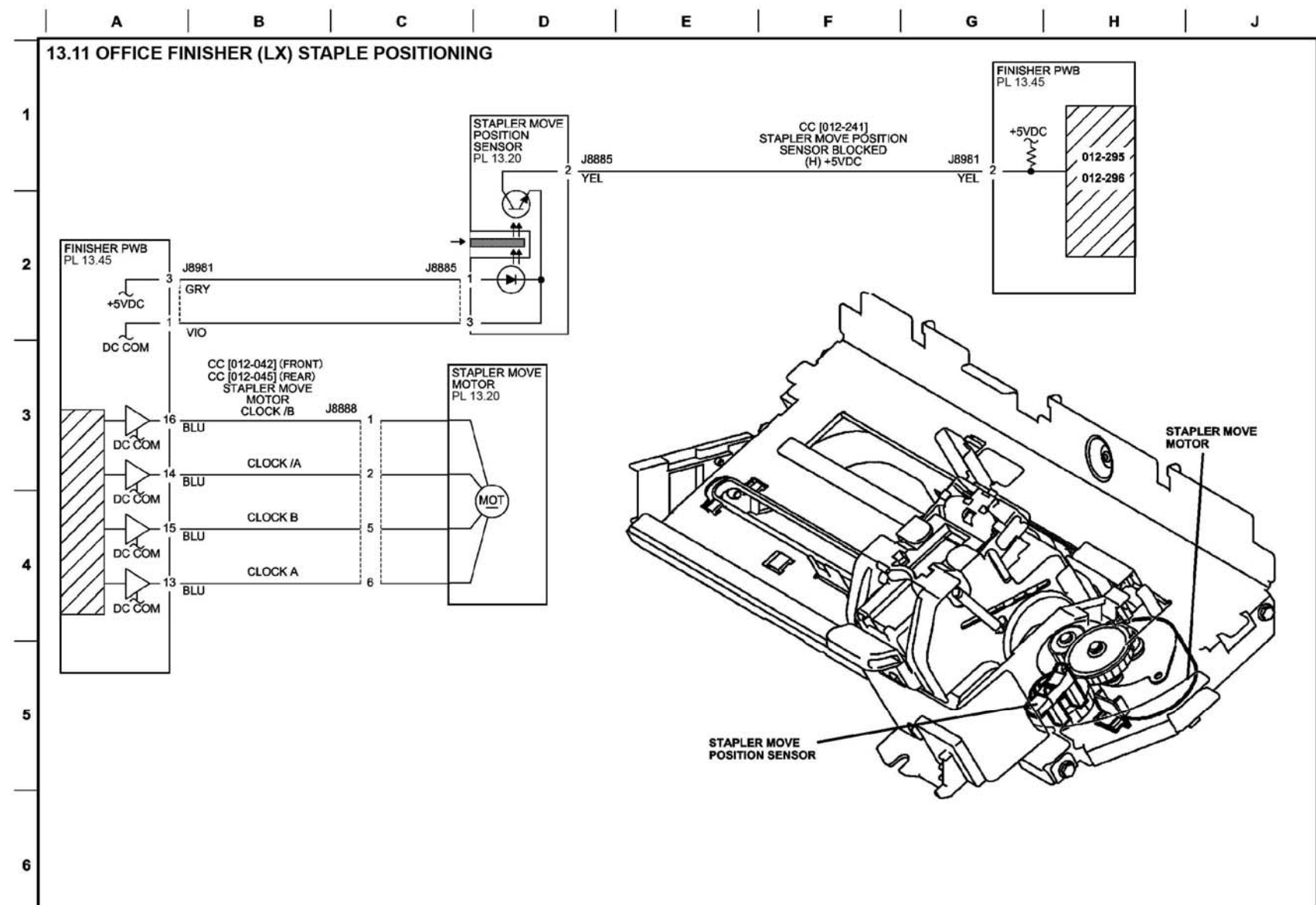


Figure 114 BSD 13.10

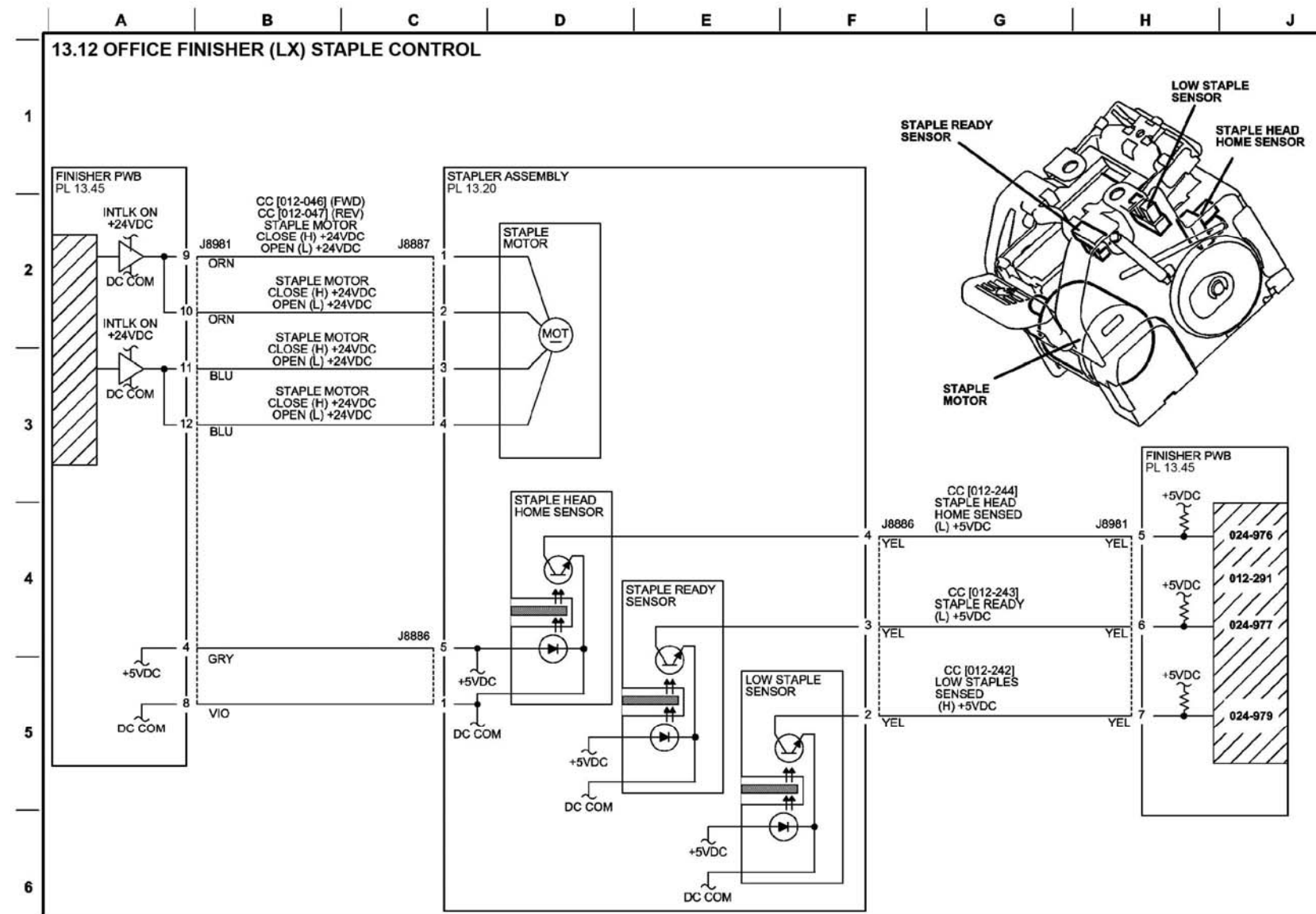
BSD 13.11 Office Finisher LX Staple Positioning



TC-1-0143-A

Figure 115 BSD 13.11

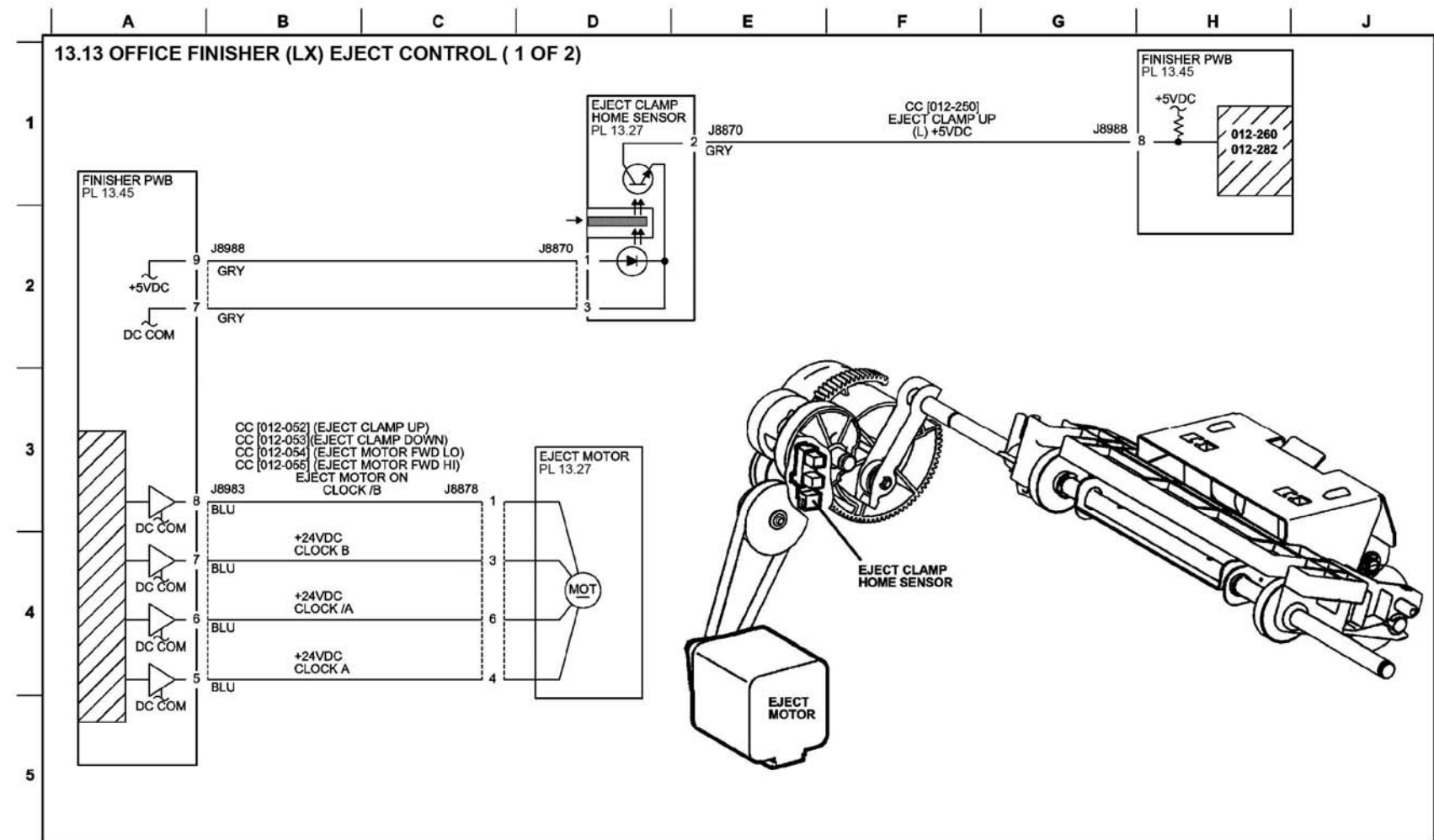
BSD 13.12 Office Finisher LX Staple Control



TC-1-0144-A

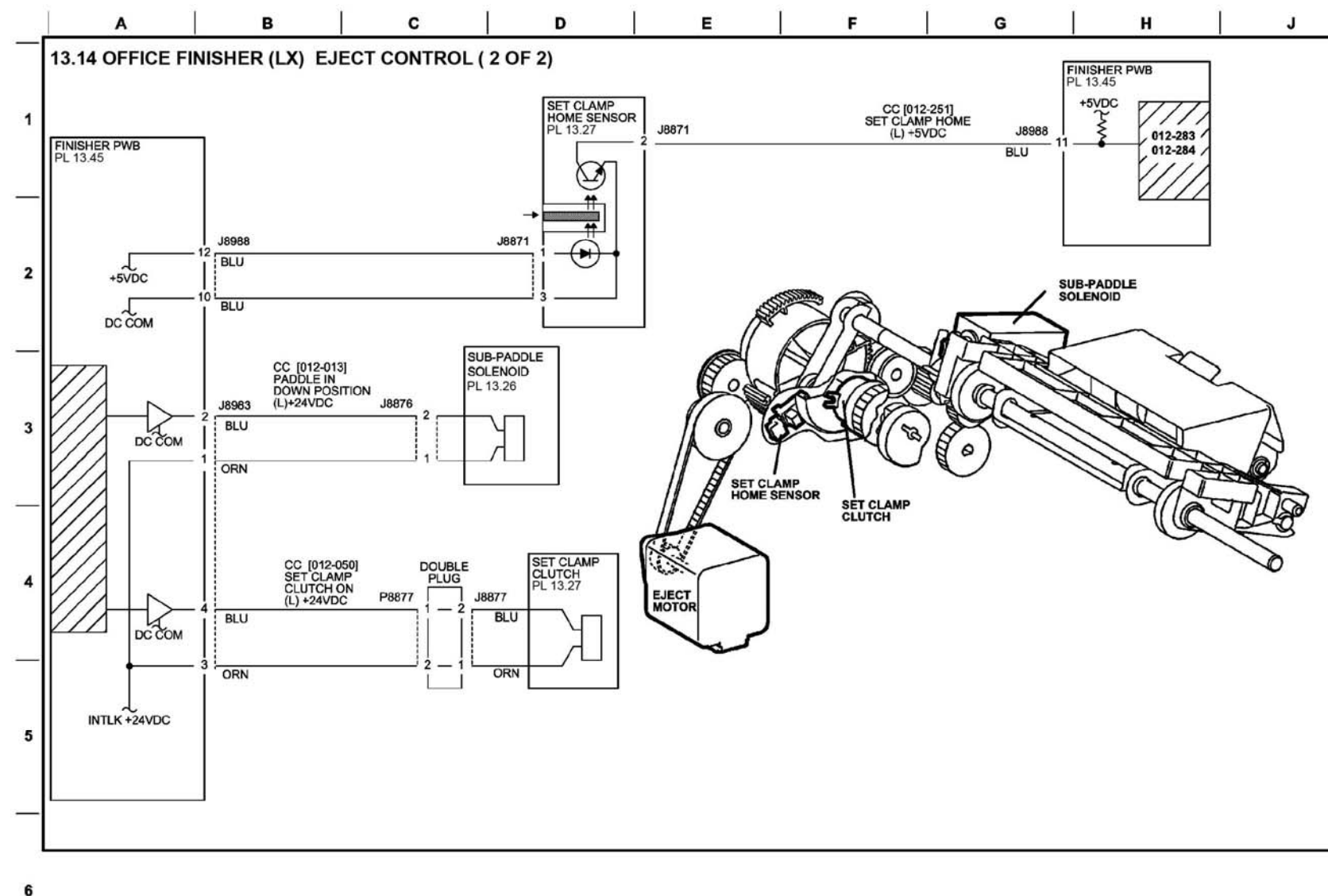
Figure 116 BSD 13.12

BSD 13.13 Office Finisher LX Eject Control (1 of 2)



TC-1-0145-A

Figure 117 BSD 13.13



TC-1-0146-A

Figure 118 BSD 13.14

BSD 13.15 Office Finisher LX Stacker Tray Control

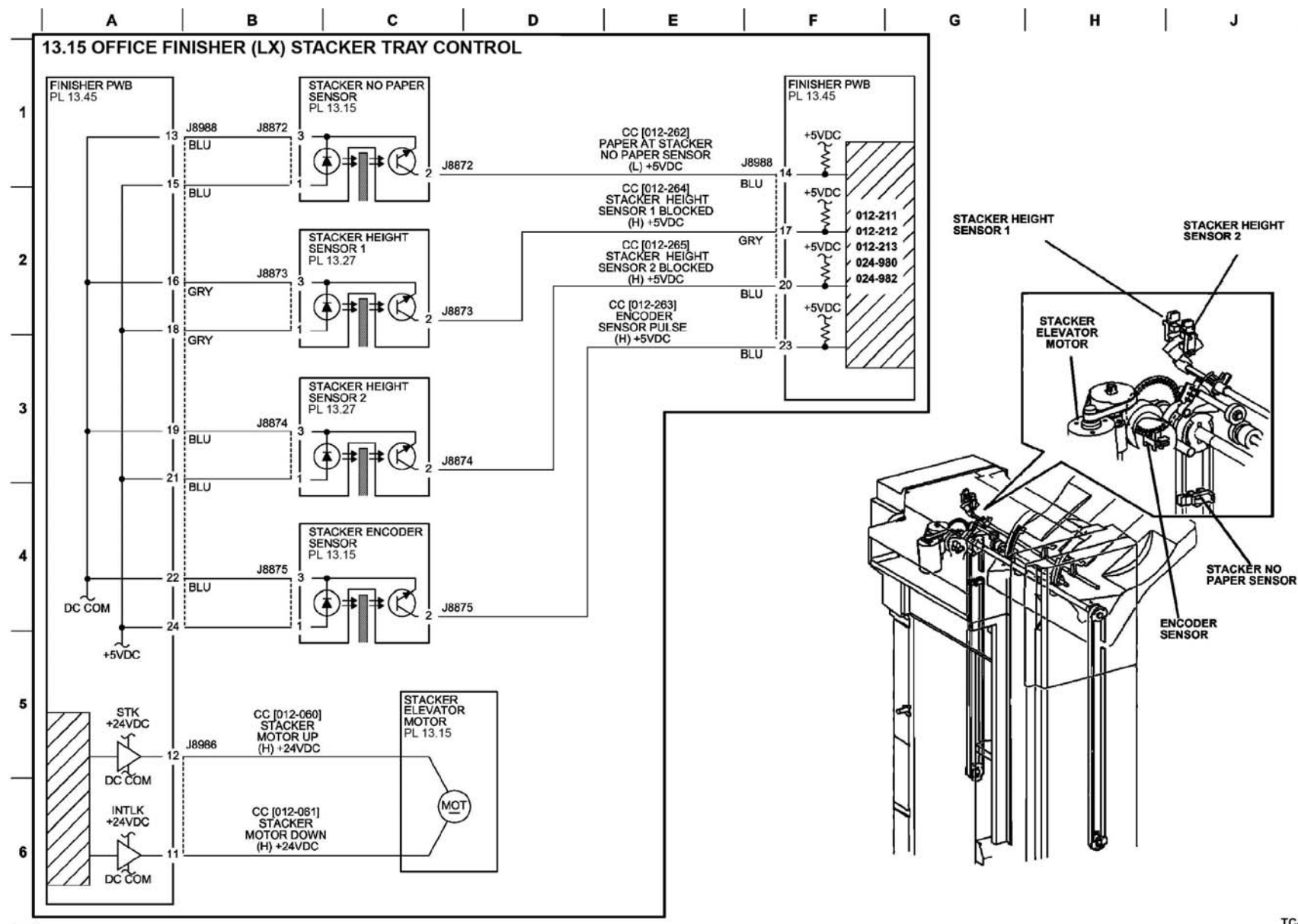
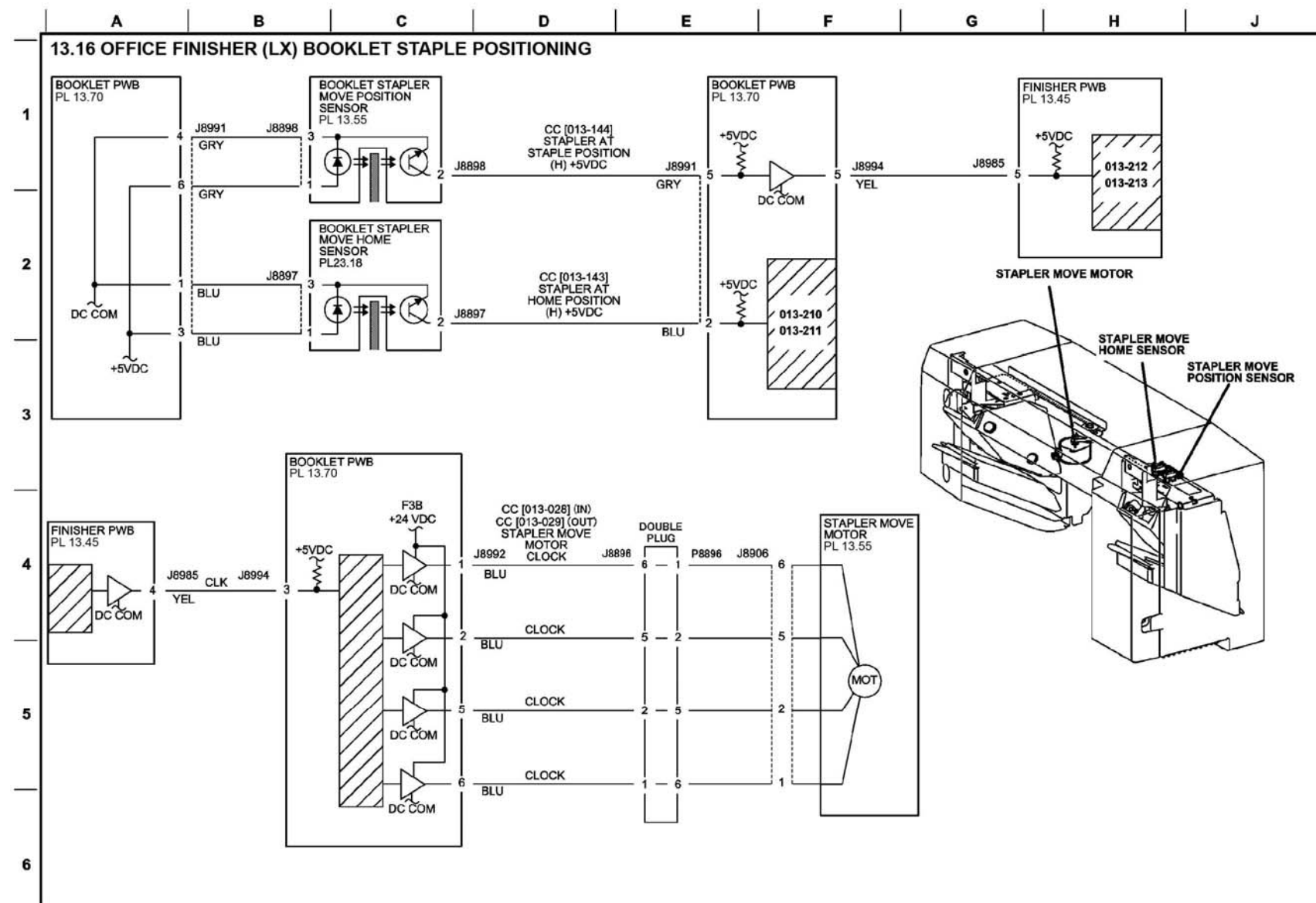


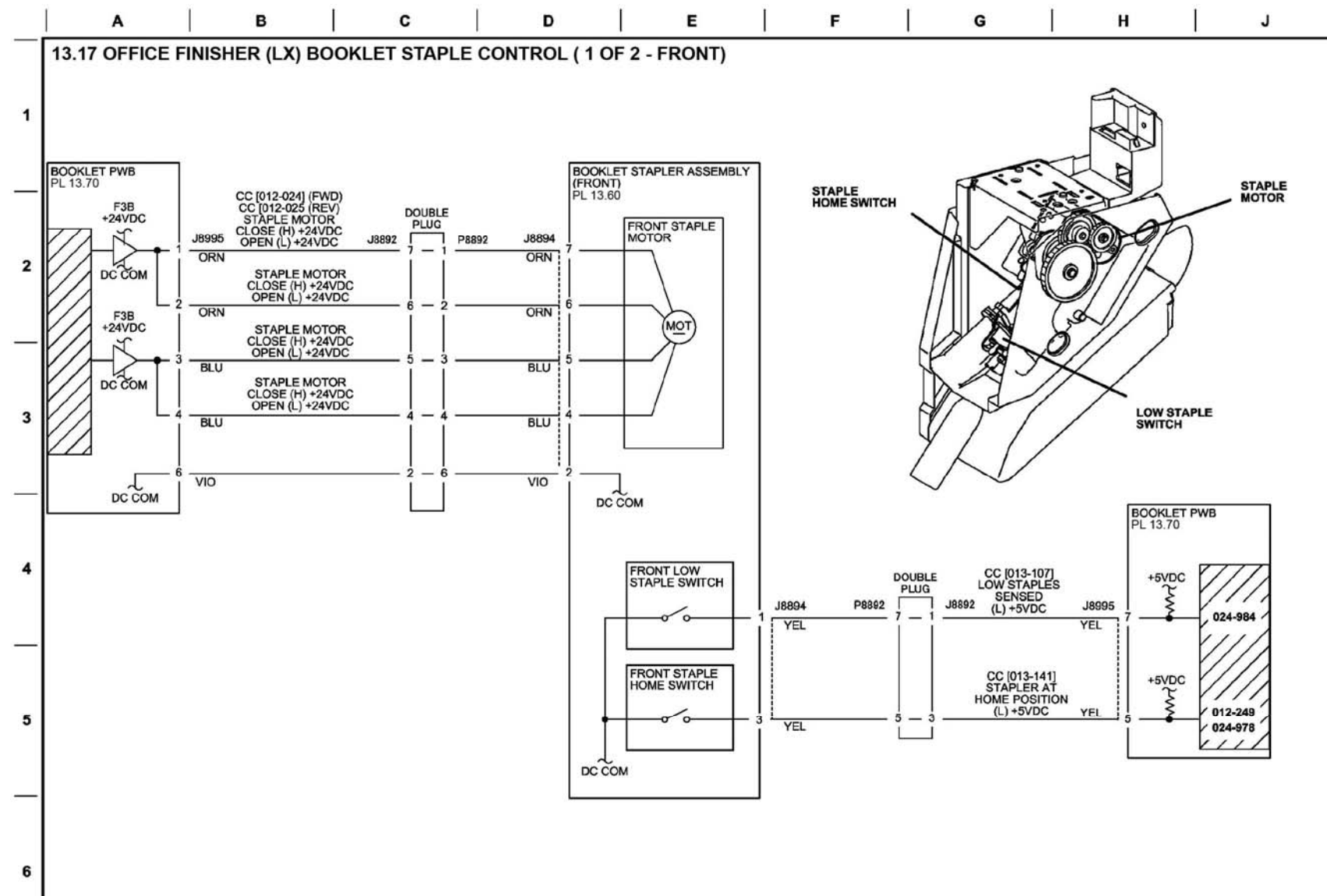
Figure 119 BSD 13.15



TC-1-0148-A

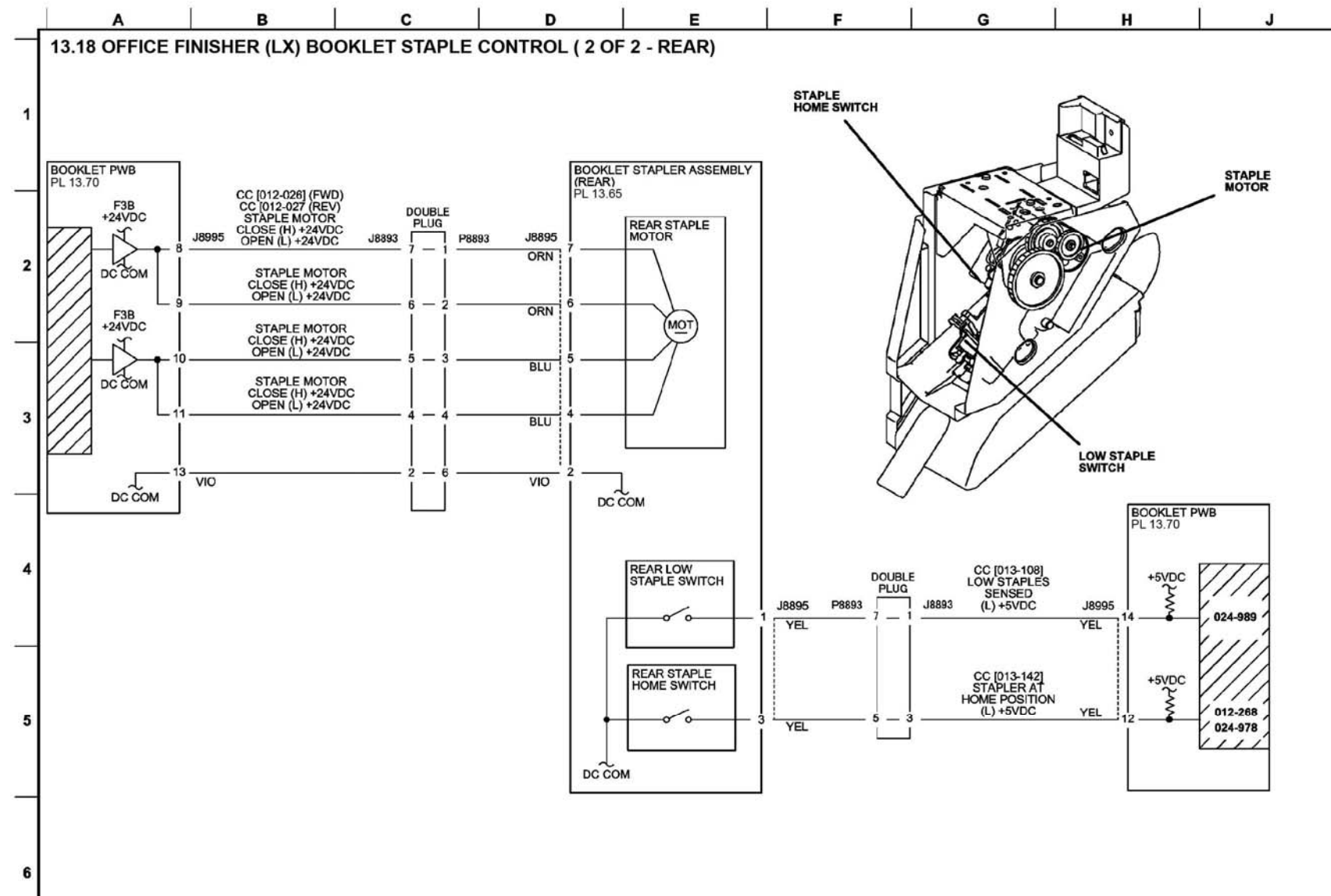
Figure 120 BSD 13.16

BSD 13.17 Office Finisher LX Booklet Staple Control (1 of 2 - Front)



TC-1-0149-A

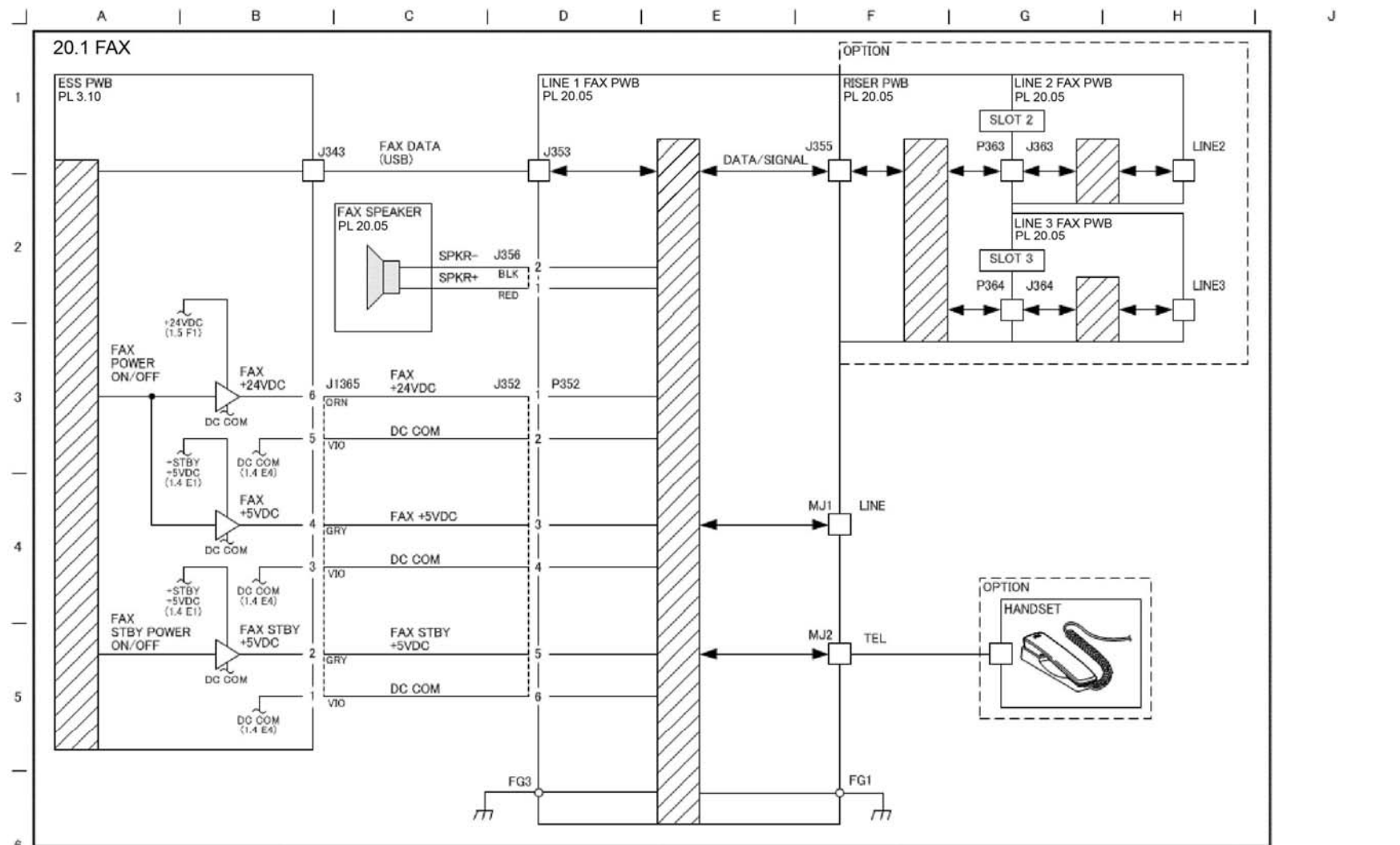
Figure 121 BSD 13.17



TC-1-0150-A

Figure 122 BSD 13.18

BSD 20.1 Fax



TC-1-0151-A

Figure 123 BSD 20.1

8 Product Technical Overview

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System Overview

Machine Configurations

The Xerox® VersaLink® C7030F multi function device and C7000 printer are available in the following configurations:

When a description or other reference is unique across different machine variants, the appropriate variant name will be quoted. For example, C7030F (multi-function printers) or C7000 (single-function printer). Any artwork will also be variant-specific.

C7030F includes the following model variants:

- Xerox® VersaLink® C7020 Color Multifunction Printer
- Xerox® VersaLink® C7025 Color Multifunction Printer
- Xerox® VersaLink® C7030 Color Multifunction Printer

C7000 refers to the following model only:

- Xerox® VersaLink® C7000 Color Printer

Multi Function Printer/Copier - VersaLink® C7030F

- Provides full digital copier features with the flexibility of network connections for printing and enhanced scanning capabilities
 - VersaLink® C7020 - 20ppm
 - VersaLink® C7025 - 25ppm
 - VersaLink® C7030 - 30ppm

The basic configurations of the multi function device include:

- Duplexing automatic document feeder (DADF); IOT with duplex path.
- Color image input terminal (IIT) for full color document scanning.
- Color scan to print from USB.
- Color scan to email/mailbox.
- Color print engine running at 20, 25, or 30ppm.
- One paper tray. (520 sheet A3/Ledger tray 1)
- Offsetting center catch tray, exit 1 only. (400 Capacity without exit tray 2, 200 sheet capacity with exit tray 2)
- Multi sheet inserter (MSI/bypass tray) 100 sheet.

Optional configurations of the multi function device include:

- 1TM (520 A3)
- 3TM (3x520 A3)
- STM (520 A3 tray 2)
- TTM (520 A3/2000 A4/Ltr)
- Envelope tray
- High capacity feeder (2000 A4/Ltr - requires 1TM, 3TM or TTM)
- Exit 2 tray. (200 sheet capacity)
- Integrated finisher
- Office finisher LX (requires 1TM, 3TM or TTM, optional booklet creaser and hole punch).

Hardware/software included as standard

- HDD
- Center tray
- Data security
- Secure access
- JBA
- Searchable PDF
- EIP v3.1
- XCA
- SmartSend

Other options

- WiFi
- CAC reader
- FDI
- Convenience stapler
- Scan to PC Desktop (Pro)
- VOIP fax
- Adobe PS
- 1 line or 3 line fax
- Work shelf

Printer Only - VersaLink® C7000

- Digital printer with no scanning facilities.
 - 35ppm

The basic configurations of the printer only device include:

- Color print engine running at 35ppm, simplex or duplex.
- One paper tray. (520 sheet A3/Ledger tray 1)
- Offsetting center catch tray, exit 1 only. (400 Capacity without exit tray 2, 200 sheet capacity with exit tray 2)
- Multi sheet inserter (MSI/bypass tray) 100 sheet.

Optional configurations of the printer only device include:

- 1TM (520 A3)
- 3TM (3x520 A3)
- STM (520 A3 tray 2)
- Envelope tray
- Exit 2 tray. (200 sheet capacity)
- Integrated finisher

Hardware/software included as standard

- Adobe PS
- Data security
- Secure access
- JBA
- Searchable PDF
- EIP v3.1

- XCA
- Other options
 - WiFi
 - CAC reader
 - HDD
 - Center tray

Refer to [Figure 1](#).



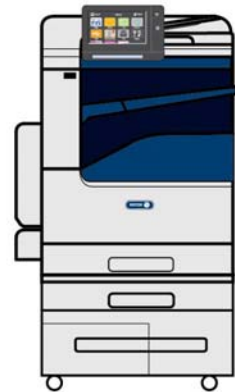
Desktop C7020 with tray 1.



Desktop C7000 with tray 1.



C7025 with tray 1 and 1TM



C7030 with tray 1 and TTM

C-5-0178-A

Figure 1 Machine examples

Main Power

AC Power

The Xerox® VersaLink® C7020/C7025/C7030 and C7000 machines are equipped a power button on the UI and a main power switch on the front of the IOT. To access the main power switch, open the front cover assembly.

Refer to [GP 10](#) for power off, quick restart and power on procedures.

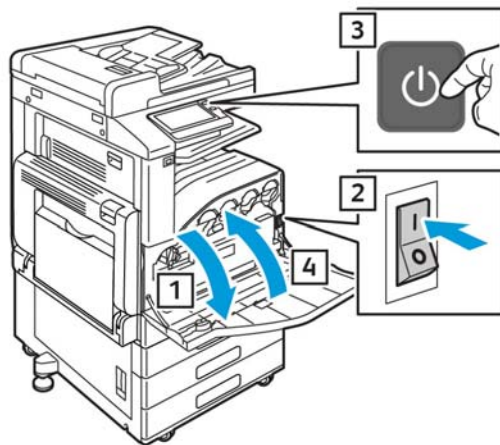
Closing the main power switch supplies AC power to the low voltage power supply, from which it is distributed throughout the machine, [Figure 1](#), item 1. The AC power is converted into +5VDC standby power which is supplied to the [ESS PWB](#) (and Fax if installed). The ESS PWB supplies 5VDC power to the UI power button, [Figure 1](#), item 2.

With only the main power switch on there is no generation of either +5V power or +24V power. This cannot occur until the power button on the UI is pressed.

The ESS PWB monitors the UI power button. When the UI power button is pressed the ESS PWB detects the change in status and enables the low voltage power supply to begin producing and distributing both the +5VDC and +24VDC power required for operation.

Refer to [Chain 1 BSDs](#).

NOTE: The illustration shows the multi function device variant. Power switch locations on the printer only variants are in the same location.



C-5-0130-A

Figure 1 Main power switch and UI power button

The main functions of the AC power are as follows:

- Provides ground fault interrupt and filtered power.

- Supplies AC power to the main power switch.
- Supplies AC power via the main power switch to the low voltage power supply for distribution to the finisher and PWS outlets.
- Supplies AC power to the low voltage power supply for conversion into standby +5VDC, +5VDC, and +24VDC power.

Low Voltage DC Power

With only the main power switch on, power on ACH is supplied to the +5VDC and +24VDC power generation circuits on the LVPS, [Figure 2](#). However, these circuits will not begin generating low voltage power until the power switch also is turned on and they receive the required on signals from the ESS PWB.

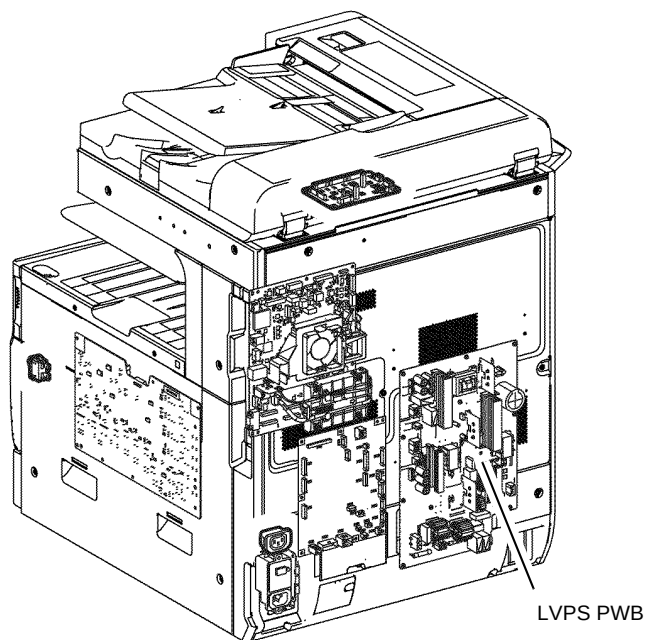
Also with only the main power switch on, STBY +5VDC power is routed to the ESS PWB so that it can produce the +3.3VDC and +3VDC power required to monitor system status.

After the power switch is turned on, the +5VDC on/off signal, the +24VDC on/off signal, and the +5VDC C-F On/off signal (fax) cause the low voltage power generation circuits to begin operation.

AC power is also routed via the LVPS to the finisher and accessory outlets.

Refer to:

- [BSD 1.3 LVPS Control](#)
- [BSD 1.4 DC Power Generation \(1 of 2\)](#)
- [BSD 1.5 DC Power Generation \(2 of 2\)](#)



C-5-0132-A

Figure 2 LVPS PWB

High Voltage DC Power

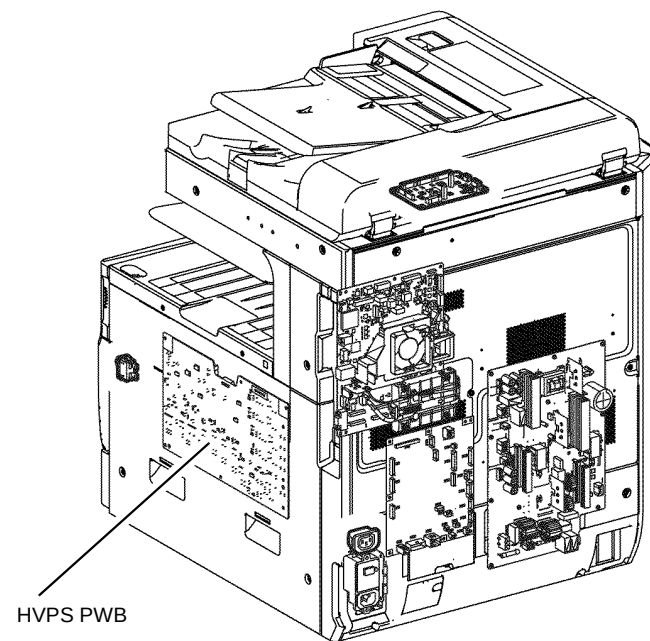
The high voltage power supply (HVPS) converts +24VDC power into the high voltages required by the xerographic subsystem.

The INTLK +24VDC power supplied via the drive PWB enters the HVPS, is routed to the transformers on the board, and is modified to the voltages required for charge, developer bias, detack, and transfer.

Refer to:

- [BSD 9.3 Charging and Exposure](#)
- [BSD 9.4 Development \(1 of 2\)](#)
- [BSD 9.11 Image Transfer to IBT](#)
- [BSD 9.12 Image Transfer to Paper](#)

Refer to [Figure 3](#).



C-5-0137-A

Figure 3 HVPS PWB

IOT Modes and System Status

Refer to [Table 1](#) for the operating modes are available.

Table 1 Operating modes

Mode	Remaining
Running Mode	The data receiving/image creation/recording (printing) operation mode
Ready Mode	When the system can enter the Running Mode immediately
Low Power Mode	The mode that reduces the power consumption more than the Ready Mode
Sleep Mode*	The mode that reduces the power consumption further more than the Low Power Mode.
Sub Power OFF Mode	The controller is maintained with the programs in running state. The rest are in the same state as when the power is OFF.

* Applies to the International Energy Star Program.

IOT States

Refer to [Table 2](#) for the IOT systems are in the following states in each mode.

Table 2 States

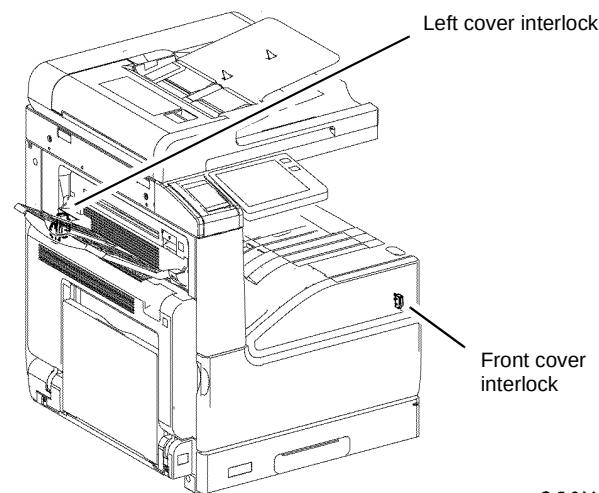
	Running Mode	Ready Mode	Low Power Mode	Sleep Mode
Fusing System (Fusing Unit)	Maintaining operating temperature	Maintaining standby temperature	Maintaining at low temperature	Stop state
Marking system (Transfer, Developer, etc.)	Operating state	Stop state	Stop state	Stop state
Exposure System (LPH)	Operating state	Stop state	Stop state	Stop state
Fusing Fan	Low Speed Rotation or High Speed Rotation by Temperature Control	Temperature control in Stop or Rotate (slow)	Temperature control in Stop or Rotate (slow)	Stop state
Marking Fan	Stop or Rotation by Temperature Control (Low Speed/High Speed)	Temperature control in Stop or Rotate (slow)	Temperature control in Stop or Rotate (slow)	Stop state
ESS (Reference)	Operating state	Standby	Standby	Ready to receive

Front Cover and Left Cover Interlocks

The front cover interlock switch is wired in series with the L/H cover interlock switch. These switches are supplied with +5VDC power from the LVPS. The drive PWB monitors their status.

When the front cover interlock switch opens, fault code 077-300 front cover open sets and the drive PWB de-energizes the interlock relay located on the LVPS. Simultaneously, the fault code and a message to close the front cover display on the UI. With the interlock relay de-energized, the supply of +24VDC power is removed from the drive PWB and the devices it supplies and/or controls (tray module PWB, motors, clutches, solenoids, fans and xerographics). Refer to [Figure 4](#).

NOTE: C7020/C7025/C7030 multi function device is shown. C7000 printer is the same.



C-5-0141-A

Figure 4 Front cover and left cover interlocks

The left cover interlock switch is wired in series with the front cover interlock switch. These switches are supplied with +5VDC power from the LVPS. The drive PWB monitors their status.

When the L/H cover interlock switch opens, fault code 077-301 left hand cover open sets and the drive PWB de-energizes the interlock relay located on the LVPS. Simultaneously, the fault code and a message to close the front cover display on the UI. With the interlock relay de-energized, the supply of +24VDC power is removed from the drive PWB and the devices it supplies and/or controls (tray module PWB, motors, clutches, solenoids, fans, xerographics). Refer to [BSD 1.8 Power Interlock Switching \(1 of 3\)](#) and [Figure 4](#).

NOTE: C7020/C7025/C7030 multi function device is shown. C7000 printer is the same.

Left Upper Cover Interlock

The left upper cover switch, [Figure 5](#), is supplied with +5VDC power from the drive PWB, which also monitors its status.

NOTE: C7020/C7025/C7030 multi function device is shown. C7000 printer is the same.

When the left upper cover switch opens, fault 077-308 left hand high cover open is declared and a message to close the cover displays on the UI. The machine inhibits printing until the user closes the cover, canceling the condition.

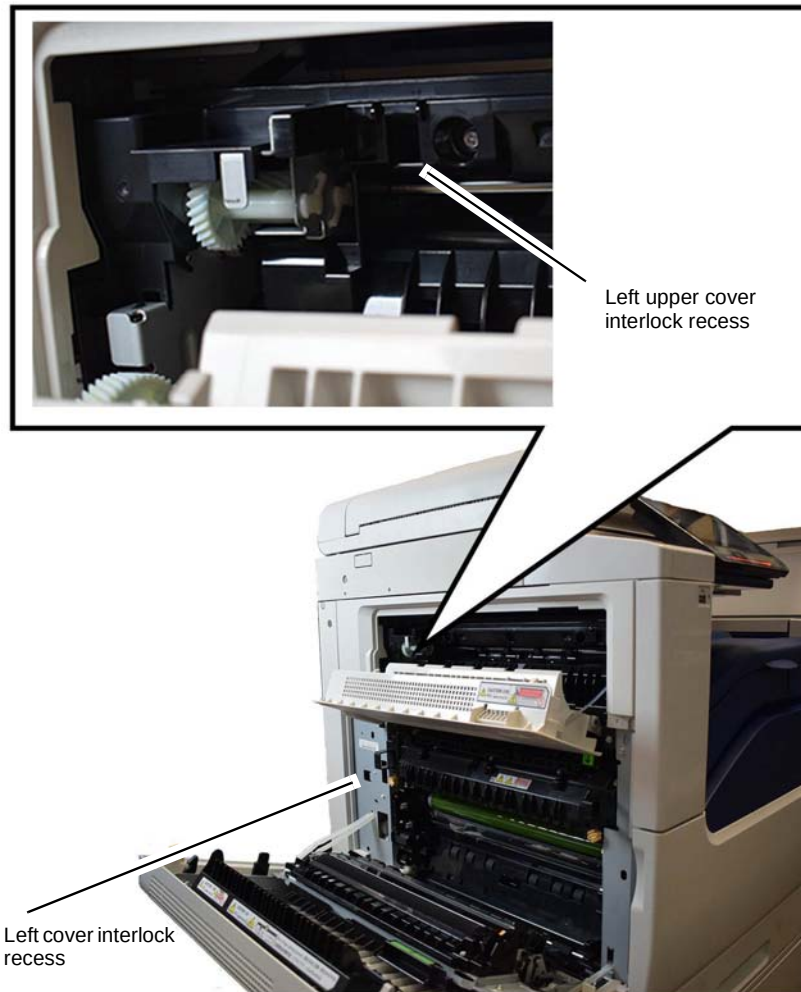


Figure 5 Interlocks on left covers

Left Lower Cover Interlock

The left lower cover switch is supplied with +5VDC power from the drive PWB via the tray module PWB, which also monitors its status.

When the left lower cover switch opens the machine declares a fault tray module cover open, inhibits printing, and displays a message to close the cover.

The interlock is in a similar position in the optional paper input modules listed here. [Figure 6](#), shows the TTM as an example. Refer to the parts list for more information.

NOTE: C7020/C7025/C7030 multi function device is shown. C7000 printer is the same.

- TTM [PL 70.95 Item 18](#).
- 1TM [PL 80.15 Item 3](#).
- 3TM [PL 80.30 Item 8](#).

Refer to [BSD 1.9 Power Interlock Switching \(2 of 3\)](#)

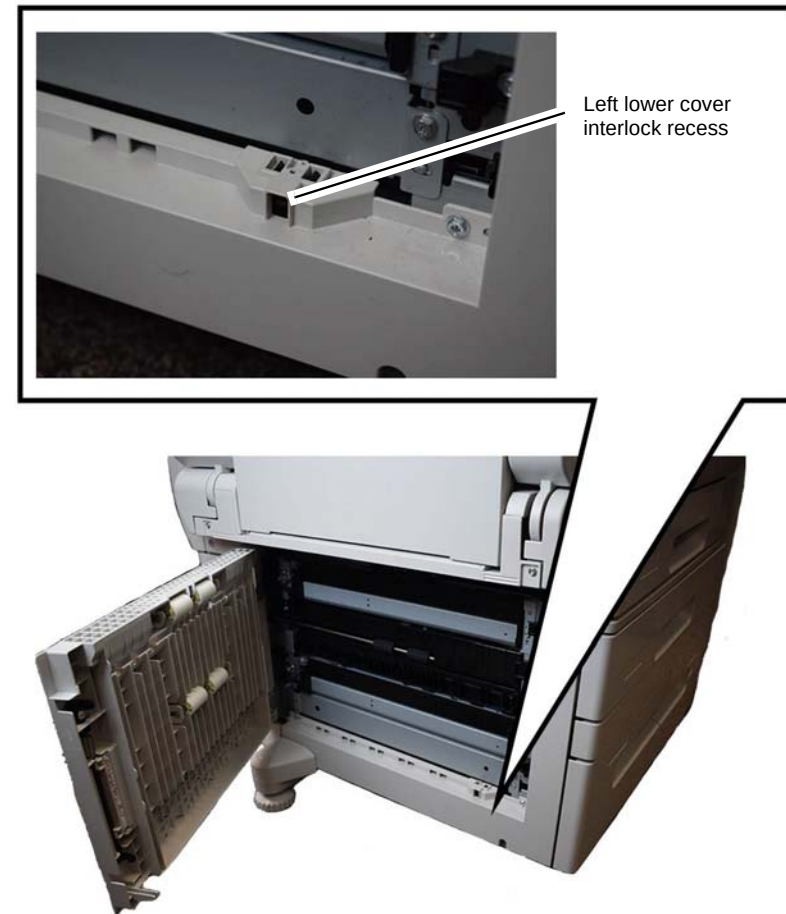


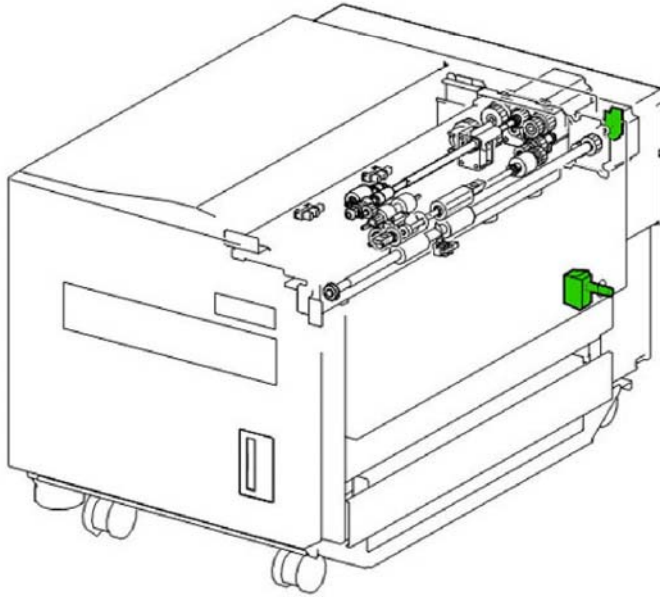
Figure 6 Left lower cover interlock

HCF Interlocks

The high capacity feeder is fitted with 2 interlocks:

- Top cover interlock, [PL 70.55 Item 26](#).
- HCF slide out switch, [PL 70.60 Item 8](#).

Refer to [BSD 1.11 DC Power Distribution - HCF](#) and [Figure 7](#).



C-5-0159-A

Figure 7 HCF interlocks

User Interface

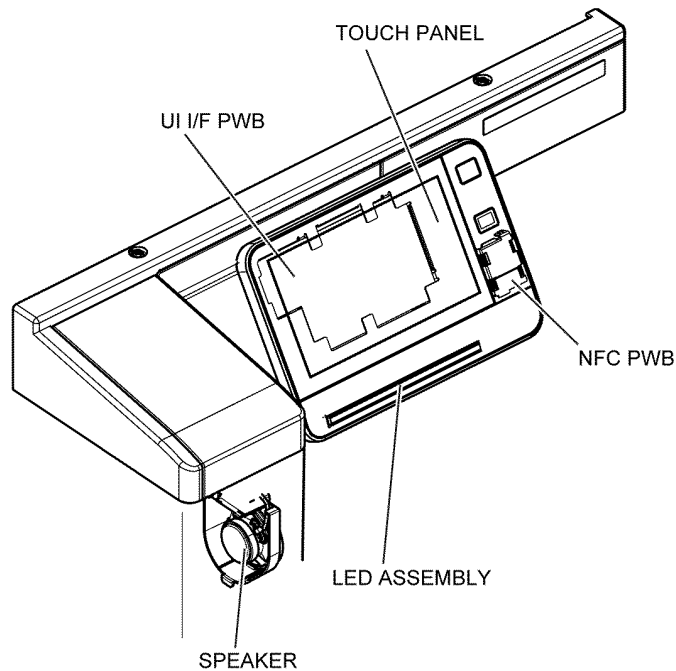
The user interface (UI) displays the state of the printer via the LCD touch screen and LED machine status display. The UI enables operation the device by means of the touch screen and buttons. Refer to [Figure 1 \(C7030F\)](#) and [Figure 2 \(C7000\)](#).

The UI speaker generates synchronised operational sounds for the UI. The UI speaker is attached to the side of the main device.

The user interface (UI) consists of the components that follow:

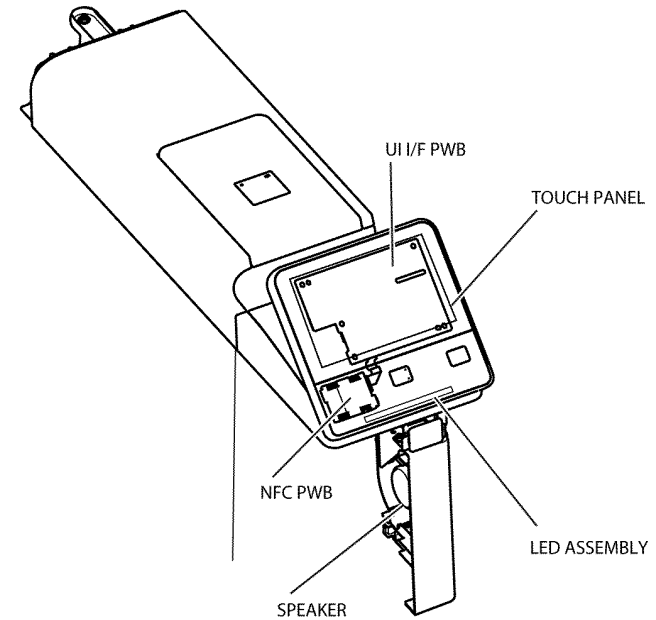
- LCD touch screen.
- Power button.
- Home button.
- LED machine status display.
- Near field communication receiver.

NOTE: The UI assembly, [PL 2.05 Item 7](#) is replaced as a single item. The components within the UI are not accessible.



TC-5-0070-A

Figure 1 User interface C7030F



TC-5-0189-A

Figure 2 User interface C7000

Machine Run Control

Overview

The main functions of run control are to:

- Perform self-testing at power on to verify the communication status between PWBs.
- Monitor and control the operation of the base machine and the installed options during all power states.
- Detect, log, and report faults.
- Communicate with the user through the user interface.

ESS PWB

The primary functions of the ESS PWB are as follows:

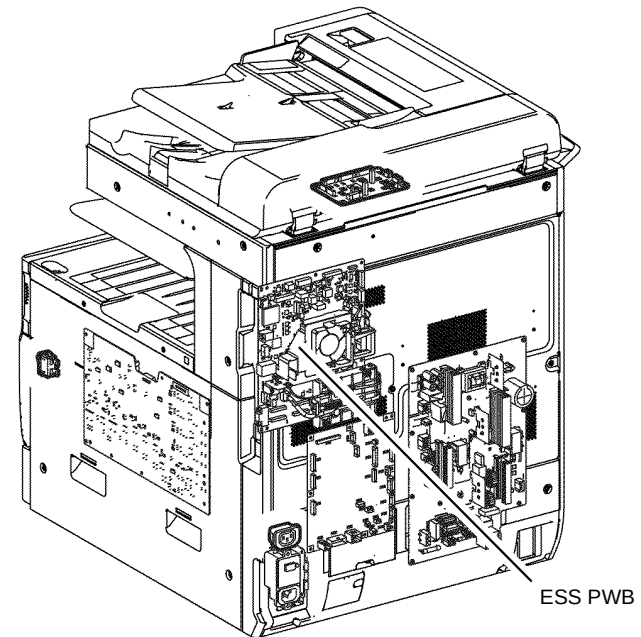
1. Receives image (video) data from the input module (IIT or DADF)
2. Processes this data based upon the user's requests (made at the user interface or a remote PC/server)
3. Sends the processed image data to the LPH to be written to the photoreceptor.
4. Sends printing, paper supply, and finishing requests to the drive PWB.

The ESS PWB, [PL 3.10 Item 6](#), connects to the UI, DADF PWB, drive PWB, HDD, fax and PWS.

The ESS PWB is contained in a chassis. The chassis contains the ESS PWB and HDD, along with mechanical parts and harnesses. Refer to [Figure 1](#).

Refer to:

- [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)
- [BSD 3.2 PWB Communications \(ESS PWB/Drive PWB to STM\)](#)
- [BSD 3.3 PWB Communications \(ESS PWB/Drive PWB to 1TM/3TM/TTM\)](#)
- [BSD 3.4 PWB Communications \(ESS PWB to UI\)](#)
- [BSD 3.5 PWB Communications \(ESS PWB to DADF\)](#)
- [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)
- [BSD 3.7 Accessory](#)
- [BSD 3.8 Electric Billing](#)
- [BSD 3.9 ESS](#)



C-5-0173-A

Figure 1 ESS PWB

Controller Interface

The functions of the connectors along the side of the ESS PWB are shown in [Figure 2](#).

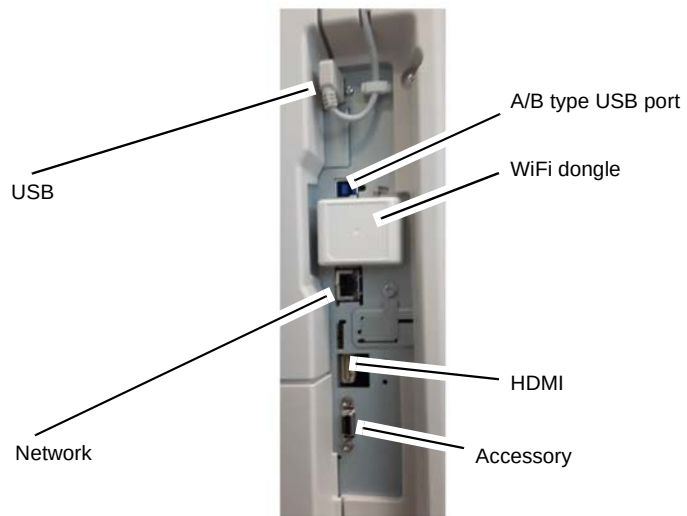


Figure 2 Controller interface

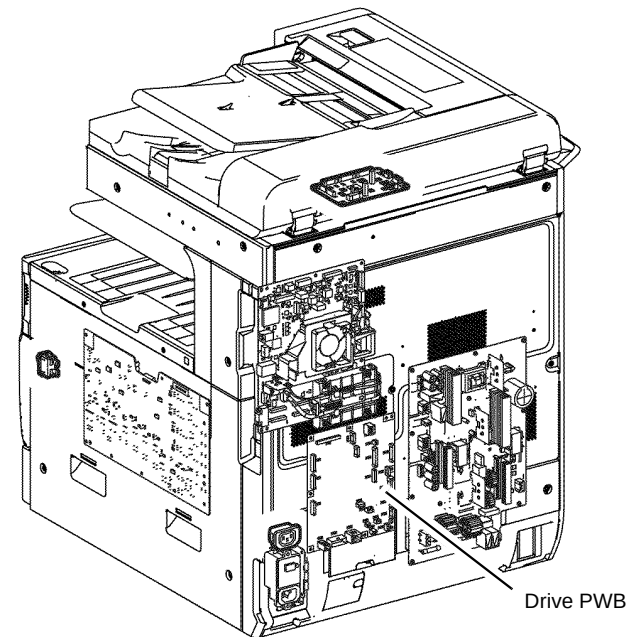
C-5-0181-A

Drive PWB

The drive PWB controls the print engine, providing power and drive signals to most of the motors, sensors, clutches and solenoids, plus assemblies including the HVPS, fuser, drum cartridge and toner CRUM. Refer to [Figure 3](#).

Refer to:

- [BSD 3.1 PWB Communications \(ESS PWB to Drive PWB\)](#)
- [BSD 3.2 PWB Communications \(ESS PWB/Drive PWB to STM\)](#)
- [BSD 3.3 PWB Communications \(ESS PWB/Drive PWB to 1TM/3TM/TTM\)](#)
- [BSD 3.6 PWB Communications \(ESS PWB/Drive PWB to Finisher\)](#)
- [BSD 4.1 Main Drive Control](#)
- [BSD 4.2 Sub Drive Control](#)



C-5-0174-A

Figure 3 Drive PWB

Main Drives and Cooling

Main Drives

The main drive assembly [PL 40.10 Item 1](#), is located to the rear of the machine behind the LVPS, [PL 1.10 Item 1](#). Refer to [Figure 1](#).

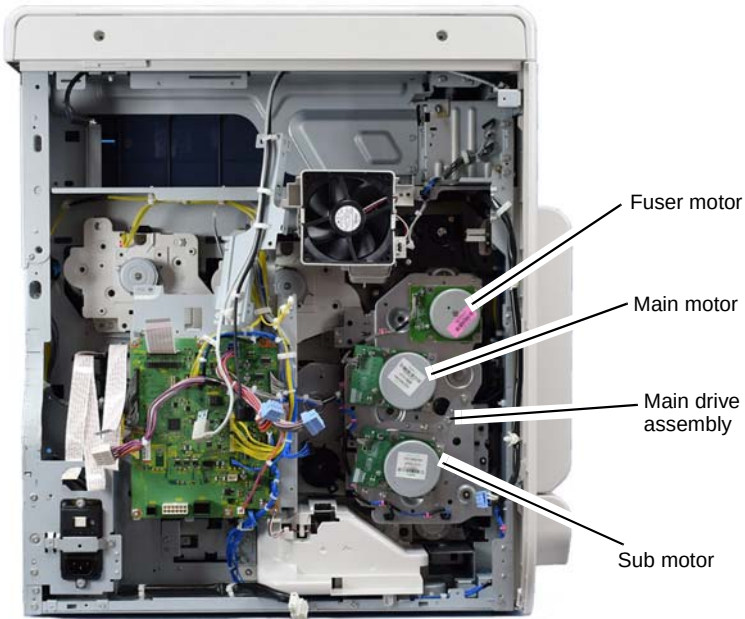
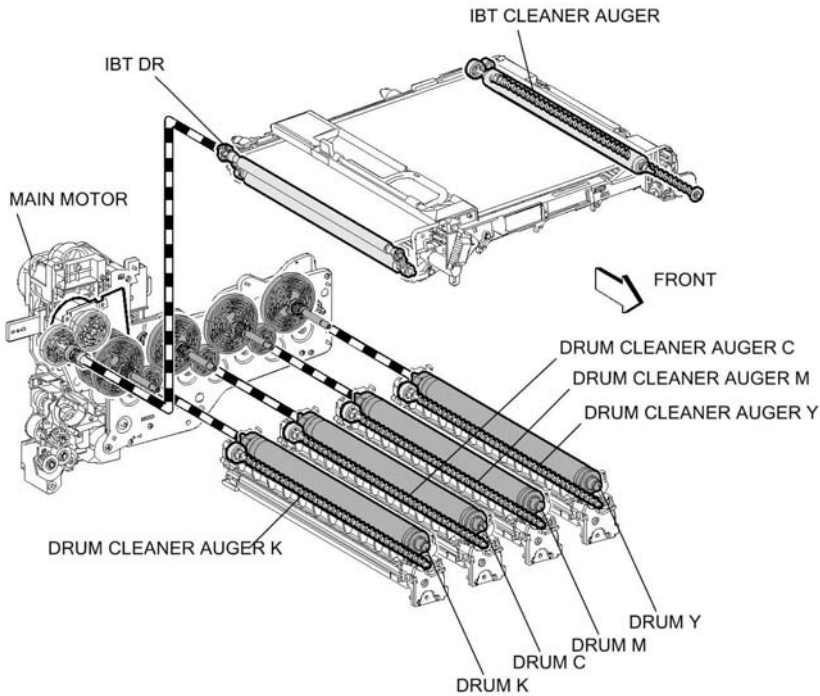


Figure 1 Main drive assembly

C-5-0210-A

The main motor drive paths are shown in [Figure 2](#).



TC-5-0215-A

Figure 2 Main motor drive paths

The drive trains for the main and sub motors are show in the schematic in [Figure 4](#).

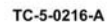


Figure 4 Drive schematic



Cooling

The Xerox® VersaLink® C7020/C7025/C7030 multi function device and C7000 printer employ 3 main cooling fans. No filters are used in any of the fan duct work.

- Fuser unit exhaust fan, PL 40.15 Item 4 inside the upper rear cover. Refer to Figure 5.
- Marking fan, PL 40.15 Item 6 at the front of the machine inside the inner cover. The fan position is not visible on the inner cover.
- The ESS PWB PL 3.05 Item 1 also features a dedicated fan to cool components on the board.

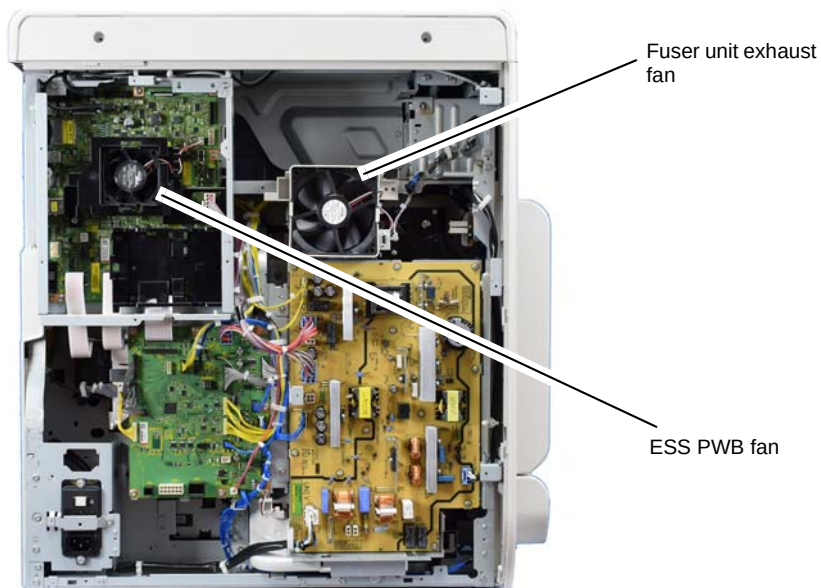


Figure 5 Cooling fans

DADF

Document Feeding Overview

The duplexing automatic document feeder (DADF) scans single or multi-page documents automatically. Single-sided and double-sided documents can be fed. Mixed sizes can be run after the appropriate selections are made on the UI

The DADF can invert a document to scan images on both sides, and it employs a constant velocity transport (CVT) system. With the CVT system, the lamp carriage of the IIT is fixed at a specified position (the scan position) where images are scanned as documents feed across the platen at a constant speed. Refer to Figure 1.



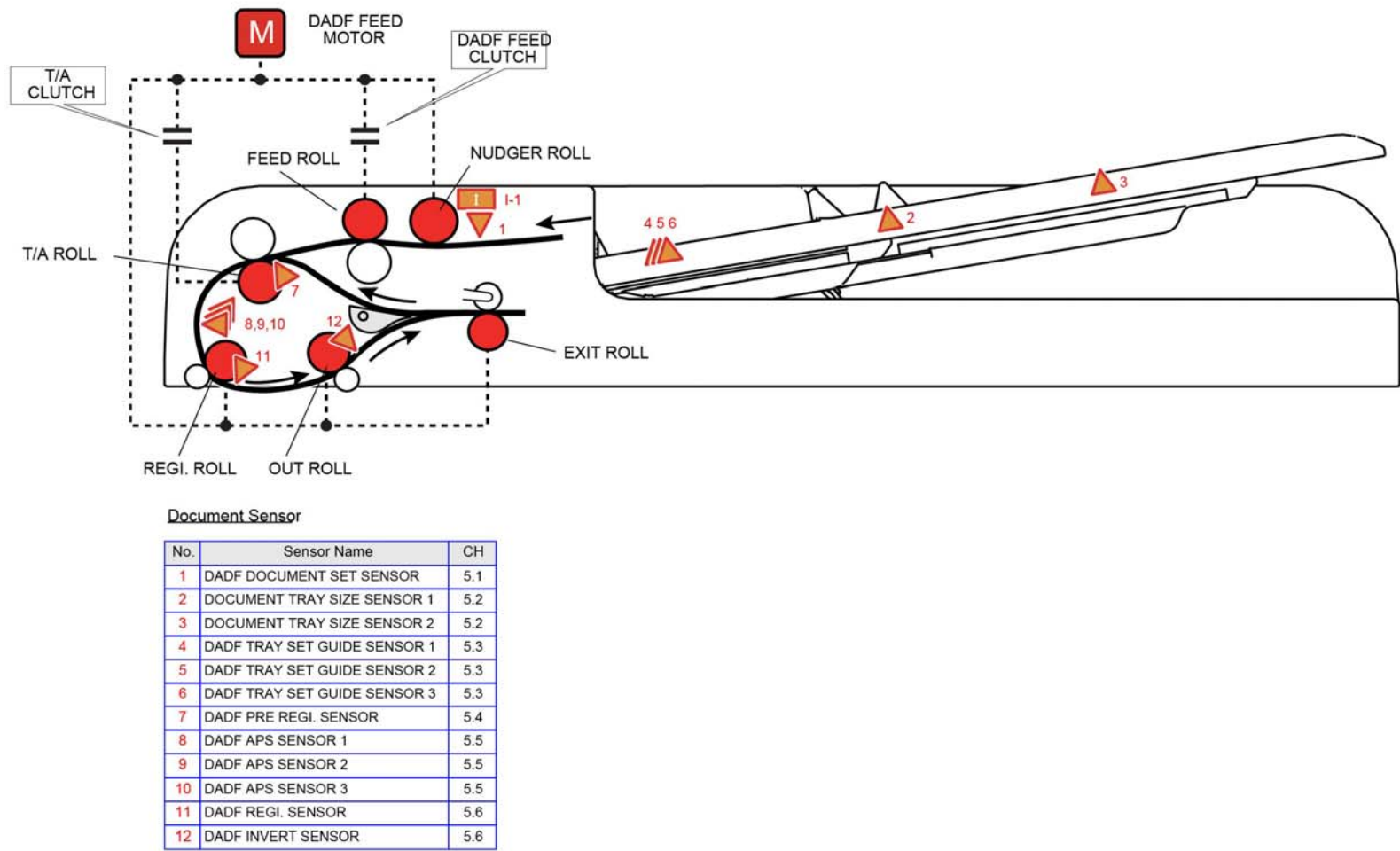
C-5-0100-A

Figure 1 DADF

The DADF performs the following functions:

- Automatically separates and feeds documents for copying.
- Automatically senses the document size.
- De-skews the documents before they are copied.
- Automatically inverts two-sided documents for duplex copying.
- Automatically stacks copied documents on the exit tray in the correct order and same orientation in which they were fed.

Figure 2 shows the relative locations of the DADF components.



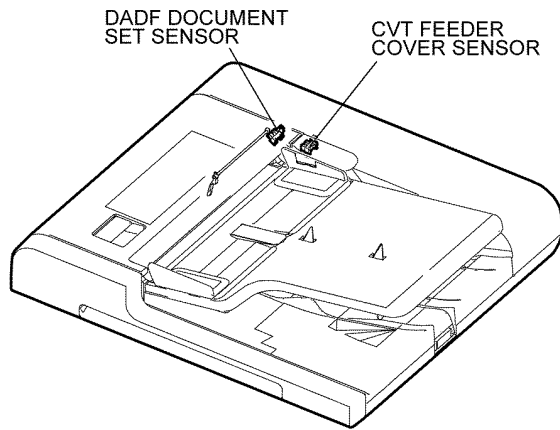
TC-5-0071-A

Figure 2 DADF components

Document Set Sensing

When a document is placed in the document tray, it activates the document sensor, [PL 5.30 Item 7](#).

The CVT feeder cover sensor detects that the upper feeder assembly, [PL 5.10 Item 10](#), is closed. Refer to [Figure 3](#).



TC-5-0072-A

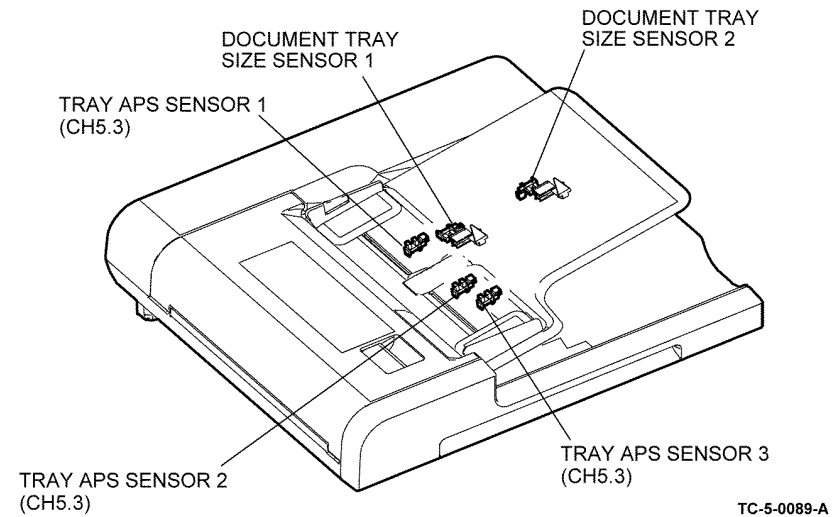
Figure 3 Document set sensor

Tray APS Sensors and Size Sensors

The document guides move a rack and gear that actuates 3 sensors (tray APS sensors 1, 2 and 3) within the DADF tray assembly, [Figure 4](#). Together these sensors detect the document width (in the cross process direction). The length of the document (in the process direction) is determined by the on or off states of DADF tray size sensor 1 and 2, [Figure 4](#). Refer to [PL 5.55](#).

NOTE: The tray APS sensors should not be confused with the APS sensors in the paper path. Refer to [APS Sensors](#).

When a document stack of different sizes is set, the document size is detected according to the combination of the maximum width and length of the documents. Refer to [Figure 4](#).



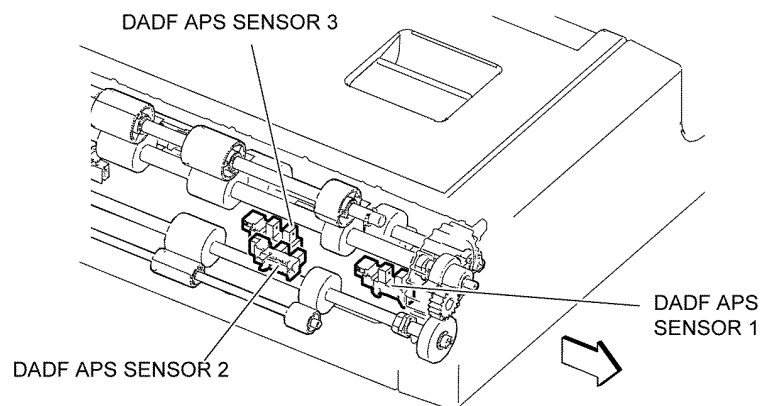
TC-5-0089-A

Figure 4 Tray APS sensors and size sensors

APS Sensors

DADF APS sensors 1, 2 and 3 detect the document width in the cross process direction, [Figure 4](#). Refer to [PL 5.50 Item 8](#). These sensors monitor the document width (cross process direction) as the documents passes along the document path. They allow multiple sized documents to be processed in a single job. Refer to [Figure 5](#).

NOTE: The APS sensors should not be confused with the tray APS sensors. Refer to [Tray APS Sensors and Size Sensors](#).

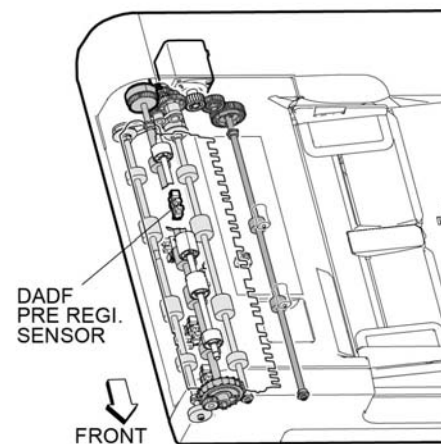


TC-5-0073-A

Figure 5 DADF APS sensors

Pre Registration Sensor

The DADF pre-registration sensor, [PL 5.70 Item 3](#), is installed immediately before the take-away roll. It detects that the preceding sheet has left the takeaway roll. Refer to [Figure 6](#).



TC-5-0074-A

Figure 6 Pre-registration sensor

Registration Sensor and Invert Sensor

The DADF registration sensor is installed before the registration roll. It detects that the preceding sheet has left the registration roll, triggering the pre-registration of the next.

The registration sensor and the pre-registration sensor provide jam detection as the document feeds through the document path.

The DADF invert sensor is installed immediately after the out roll. It detects the ejection of a sheet and provides timing data for two sided jobs. Refer to [Figure 7](#).

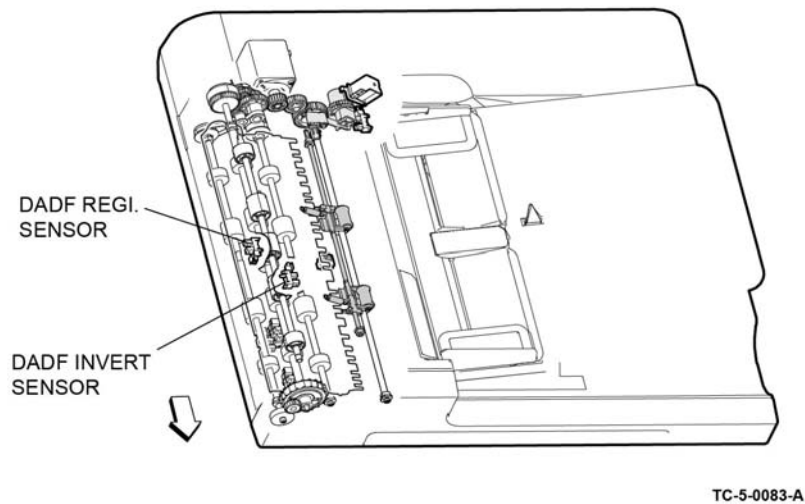


Figure 7 Registration sensor and invert sensor

Feed Motor, Nudger Roll, Feed Roll and Takeaway Roll

The DADF feed motor is a stepping motor that rotates the nudger roll and feed roll in the reverse (CCW) direction. It also rotates the takeaway roll in the normal (CW) direction. The takeaway roll stops when this motor rotates in the reverse direction.

The feed roll and the takeaway roll are driven through clutches that are controlled by the DADF PWB, [PL 5.10 Item 11](#). Refer to [Figure 8](#).

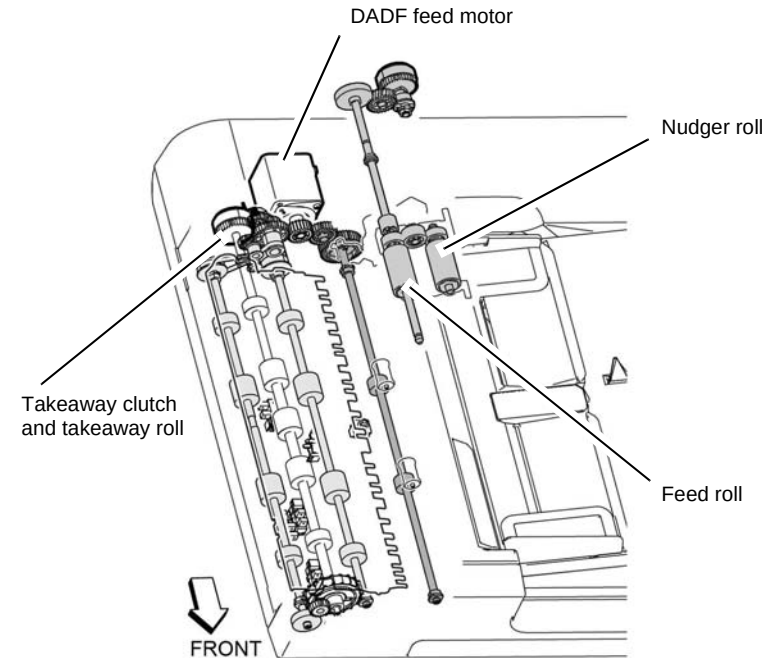
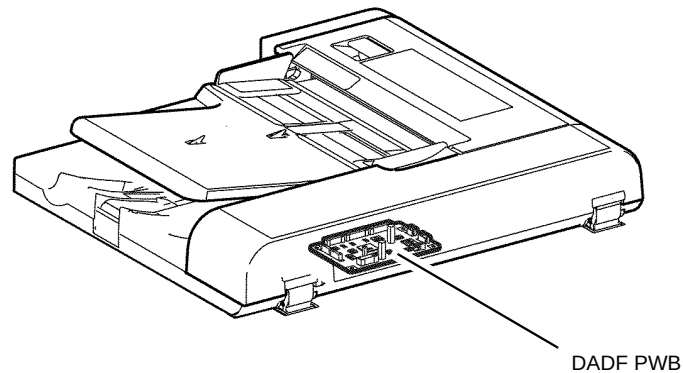


Figure 8 Document feed mechanism

DADF PWB

The DADF PWB, [Figure 9](#), controls the following:

- DADF feed motor, [PL 5.30 Item 3](#).
- DADF feed clutch, [PL 5.35 Item 2](#).
- Takeaway clutch, [PL 5.35 Item 2](#).
- Exit nip release solenoid, [PL 5.35 Item 8](#).

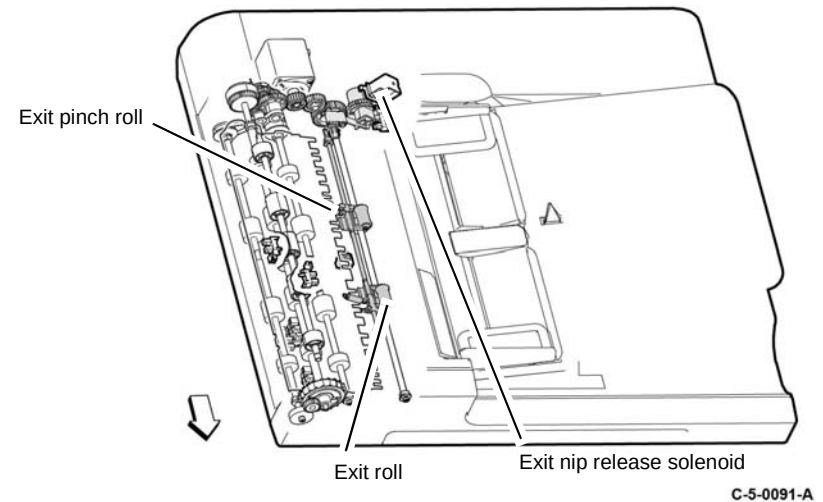


C-5-0136-A

Figure 9 DADF PWB

Exit Nip Release Solenoid

The exit nip release solenoid releases the nip on the exit roll, [PL 5.50 Item 3](#), and exit pinch roll, [PL 5.65 Item 13](#). The exit nip solenoid is normally off and the exit roll and pinch roll are nipped. Springs, [PL 5.65 Item 18](#), hold the pinch rolls against the exit roll when the 2 rolls are nipped. When the solenoid is activated the exit roll and exit pinch roll are released. The exit roll is driven directly by the feed motor. Refer to [Figure 10](#).



C-5-0091-A

Figure 10 Exit roll and nip release solenoid

Document Size Sensing - Same Size Set

Document Width - Cross Process Direction

The document set width (cross process direction) is detected by the DADF tray set guide sensors 1 - 3 (tray APS sensors, [Figure 4](#)) that are activated by the rack gear that moves with the document edge guides.

Document Length - Process Direction

The document length (in the process direction) is detected by the document tray size sensors 1 and 2, [Figure 4](#).

Refer to [Tray APS Sensors and Size Sensors](#).

Document Size Sensing - Mixed Set

Initial Document Sensing

When a stack of documents of different sizes is set the initial document set size is detected according to the combination of the maximum width and length of the set, refer to [Tray APS Sensors and Size Sensors](#).

Mixed Document Length - Process Direction

Individual document length (process direction) is determined by counting pulses from the feed motor. The counting begins when the lead edge of the document arrives at the registration sensor. The counting ends when the trail edge of the document leaves the DADF feed out sensor. A calculation is then made to determine the document length.

Mixed Document Width - Cross Process Direction

Individual page size checking (cross process direction) occurs as the documents feed using the APS sensors located in the paper path, refer to [APS Sensors](#). APS sensors 1, 2 and 3 monitor the document as it feeds to the pre-registration rolls. The control logic uses the input from the APS sensors to calculate document width.

Imaging

Image Input Terminal Overview

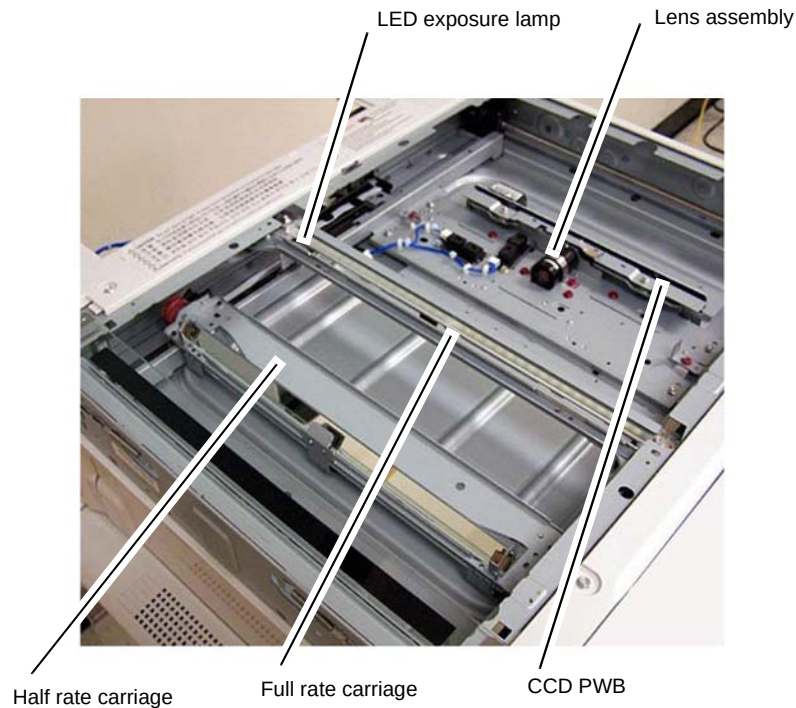
The scanner in the Image Input Terminal (IIT) uses an LED exposure lamp to illuminate and scan the document.

NOTE: The LED exposure lamp is referred to as the lamp assembly in the Parts List, refer to [PL 60.20 Item 9](#).

The LED exposure lamp is mounted on the full rate carriage and illuminates the document, in response to signals from the ESS PWB via the FFC LED cable.

The image of the document is reflected by the mirrors on the full and half rate carriages to the lens assembly. The image is focused by the lens onto the charge-coupled device (CCD). The CCD array converts the optical information to electrical analog levels that represent the red, green, and blue components of the original image. The CCD array uses a series of red, green and blue filters to separate the reflected image data into its R, G, and B components. Refer to [Figure 1](#).

NOTE: [Figure 1](#) shows the IIT after removal of the lens cover assembly, [PL 60.10 Item 12](#).



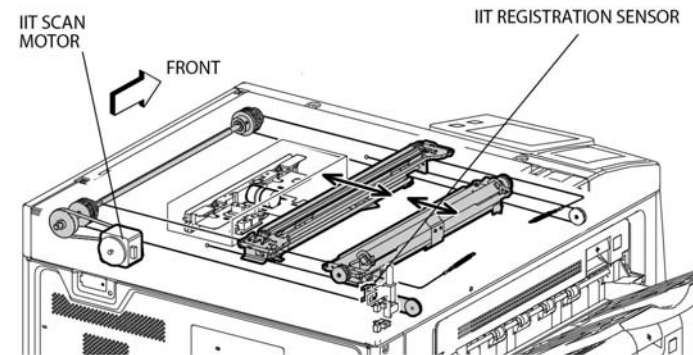
C-5-0108-A

Figure 1 IIT

The full rate carriage moves the LED exposure lamp to scan the complete document on the document glass.

The IIT scan motor, [PL 60.30 Item 5](#) drives the full and half rate carriages via cables and pulleys. The carriage motor is a stepper motor that precisely controls the movement of the scan carriages beneath the document glass.

The IIT registration sensor, [PL 60.30 Item 7](#) is used to establish the home position of the carriages so that the control logic knows their locations. Refer to [Figure 2](#).

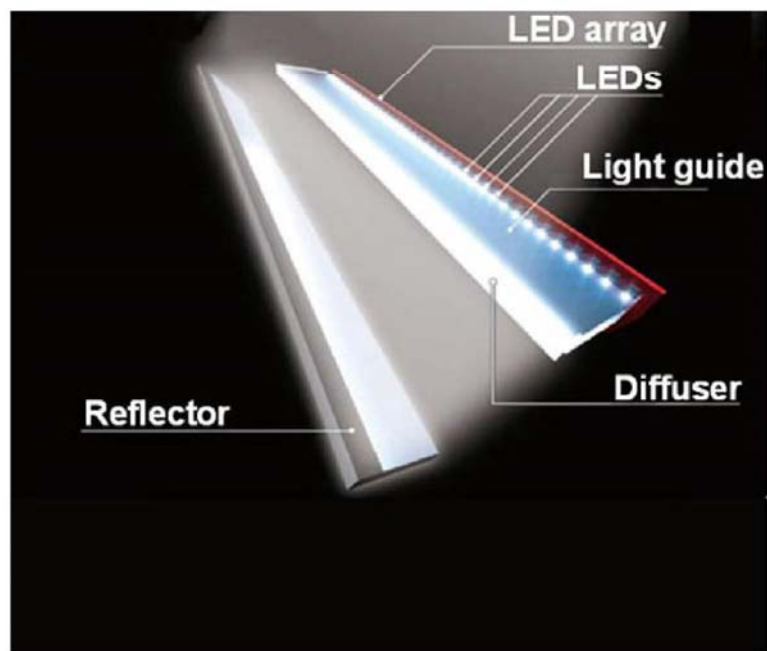


TC-5-0109-A

Figure 2 IIT scan motor and registration sensor

Light Guide Overview

The LED exposure lamp consists of a white LED array, a light guide, a diffuser, and a reflector. Refer to [Figure 3](#).

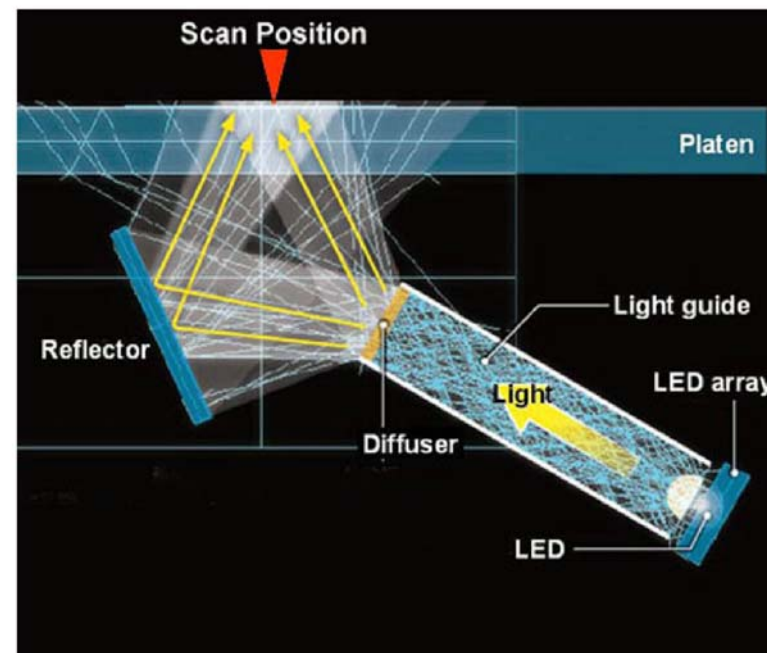


TC-5-0110-A

Figure 3 LED array

The light guide and diffuser convert the light from the LED array into a uniform pattern that closely parallels the output from a fluorescent lamp. Refer to [Figure 4](#).

The benefits of this design include uniform and stable light output at lower energy cost, reduced heat output, and faster start up.



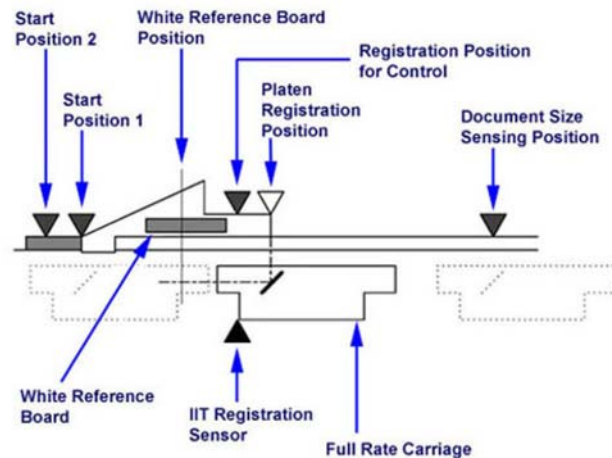
TC-5-0111-A

Figure 4 Light diffusion

Scanning Overview

When a document is scanned from the document glass, the scan cables that drive the full rate and half rate carriages maintain a fixed length optical path between the document and CCD. This is important for accurate size reproduction and focus.

The scan speed varies according to the reduction or enlargement ratio that has been selected. A slow scan produces an enlarged image and a fast scan produces a small image. Electronic processing is used to change the image size in the front- to-back (fast scan) direction when reduction or enlargement is selected. Refer to [Figure 5](#).



TC-5-0112-A

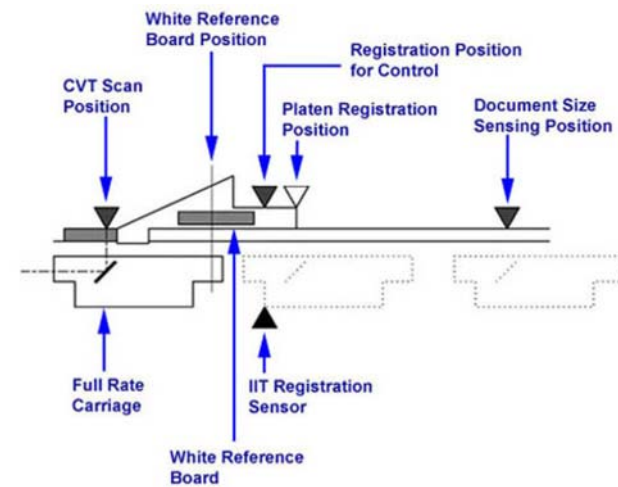
Figure 5 Scanning overview

DADF Scanning

In the DADF mode, the carriage is positioned under the constant velocity transport (CVT) glass. The carriage remains stationary while the document is moved across the CVT glass by the DADF.

The stationary half rate and full rate mirrors are used in the usual way to reflect the image through the lens to the CCD.

In all copy modes, the document is only scanned once regardless of the number of copies required. Refer to [Figure 6](#).



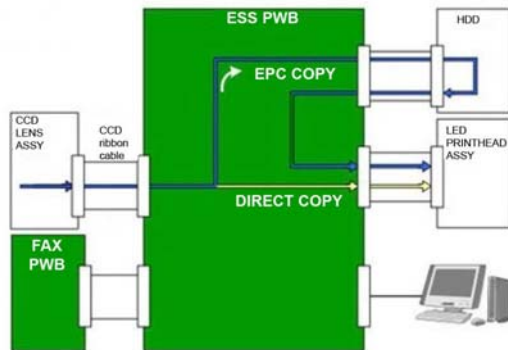
Full Rate Carriage position for DADF scanning

TC-5-0113-A

Figure 6 DADF scanning

Image Flow

The image data from the CCD image sensor are sent to the ESS PWB via the CCD ribbon cable. Shading compensation and white and black correction are then applied to the image data. Refer to [Figure 7](#).



TC-5-0114-A

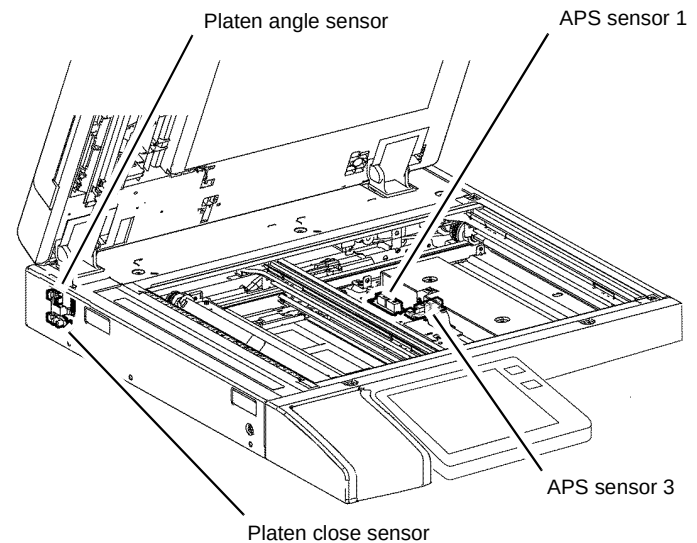
Figure 7 Image flow

IIT Document Size Sensing

The signal from the platen angle sensor indicates when the DADF opens and closes. The control logic responds to a "closed" signal by initiating size sensing. Size sensing also occurs when a user presses the Start button with the DADF open.

To determine a document's width, the exposure lamp is switched on momentarily, the document is illuminated, and the CCD image sensor detects the width (fast scan direction) to the nearest millimeter. A document's length (slow scan direction) is detected by the APS sensors 1 and 3. Refer to [Figure 8](#).

A look-up table is used to determine the size of the document. Refer to [Table 1](#).



C-5-0115-A

Figure 8 IIT sensors

IIT Document Size Sensing

If two documents are of the same size in the fast scan direction, their slow scan size is determined based on which, if either, of the APS sensors detects them.

Example: The scanner differentiates between an A4 LEF and an A3 SEF document because only the A3 SEF document is detected by the APS sensors.

The IIT has two APS sensors which enable it to distinguish between 8.5x11 inch SEF, 8.5x13 inch SEF, and 8.5x14 inch SEF. Refer to Figure 9.

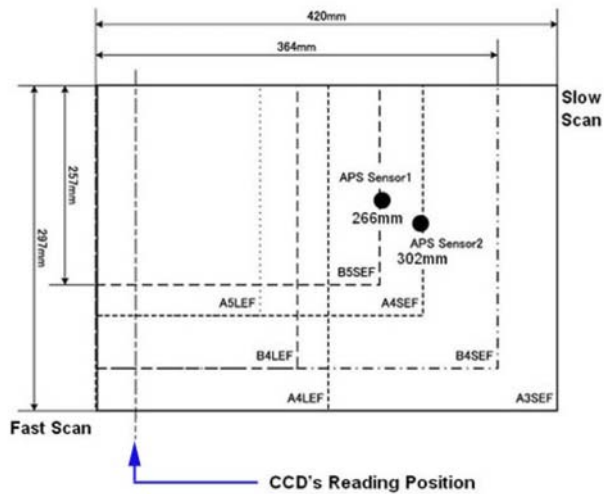


Figure 9 Document size sensing

TC-5-0116-A

Paper Sizes Detected by the IIT

Refer to Table 1. This table indicates the standard paper sizes which the IIT is capable of detecting

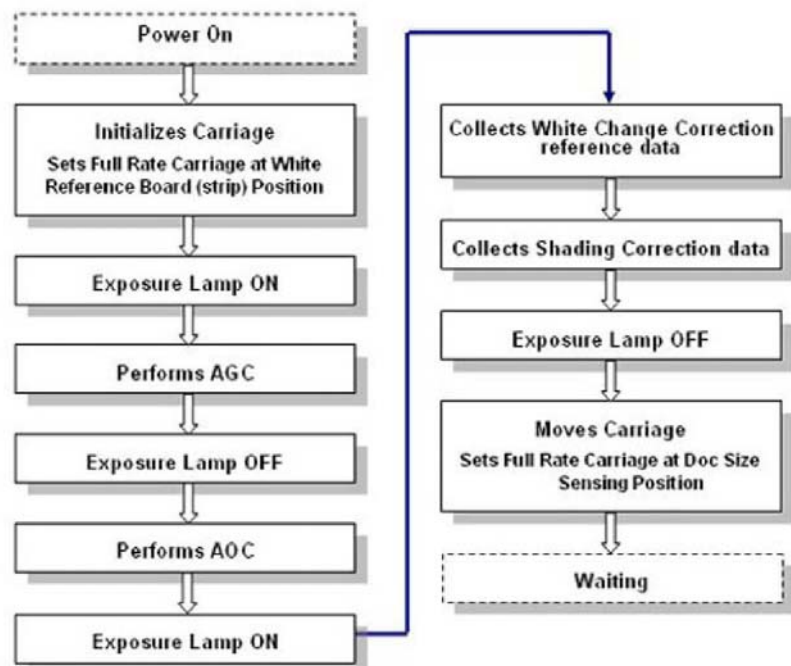
NOTE: The NVM setting for 715-305 determines whether the machine will detect 13" or 14" in the slow scan direction.

Table 1 Paper sizes

Document size	Width (mm)	Length (mm)	DMO-W	XE/DMO-E	XC
A5 SEF	148	210	Y	Y	N
A5 LEF	210	148	Y	Y	N
5.5" x 8.5" LEF	215.9	139.7	Y	N	Y
5.5" x 8.5" SEF	139.7	215.9	N	N	Y
B5 SEF	182	257	Y	N	N
B5 LEF	257	182	Y	N	N
A4 SEF	210	297	Y	Y	N
A4 LEF	297	210	Y	Y	Y
8.5" x 11" SEF	215.9	279.4	Y	N	Y
8.5" x 11" LEF	279.4	215.9	Y	Y	Y
8.5" x 13" SEF	215.9	330.2	Y	Y	N
8.5" x 14"	215.9	355.9	Y	N	Y
B4 SEF	257	364	Y	N	N
A3 SEF	297	420	Y	Y	Y
11" x 17" SEF	279.4	431.8	Y	Y	Y
Executive LEF	266.7	184.2	N	Y	Y
A6 SEF	105	148	Y	Y	N
Post card LEF	152.4	101.6	Y	Y	Y
B6 SEF	128.5	182	Y	Y	N

Scanner Initialization

The carriage position initializes after the machine is powered on or has recovered from power save mode. Refer to [Figure 10](#).



TC-5-0117-A

Figure 10 Scanner initialization

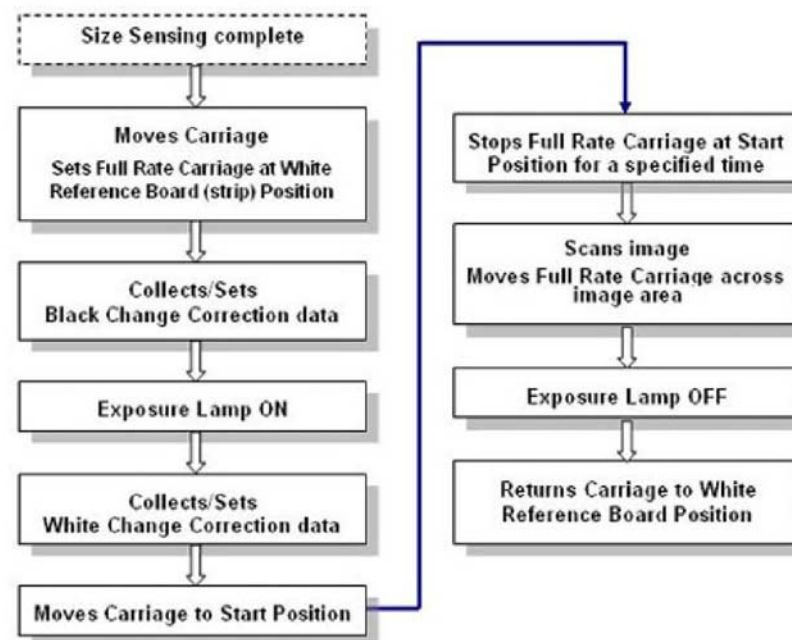
Platen Scanning Operation

The scan process begins once size sensing is complete. First, the full rate carriage moves to the white reference strip position. Here, with the exposure lamp off, it collects and applies black change correction data.

Next, the exposure lamp turns on and the IIT collects and applies white change correction data.

The full rate carriage now moves to the start position, where it waits a specified time. When the wait time elapses, the full rate carriage moves across the image area.

The exposure lamp turns off at the end of the scan, and the full rate carriage returns to the white reference strip position. Refer to [Figure 11](#).



TC-5-0118-A

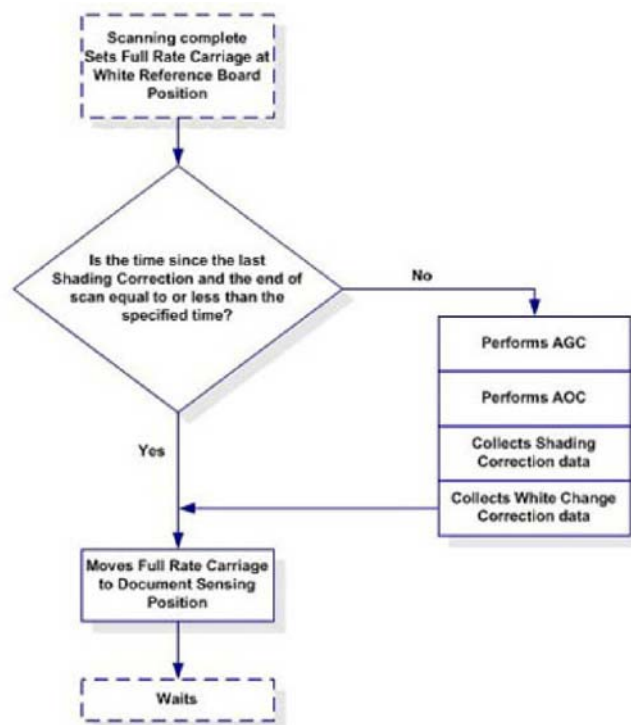
Figure 11 Platen scanning operation

End of Platen Scanning Operations

At the end of the scan, with the full rate carriage at the white reference strip position, the IIT determines how much time has elapsed since the last shading correction was performed.

If the elapsed time is greater than a specified value, the IIT performs auto gain control and auto offset control, and collects shading correction data and white change correction data.

It then moves the full rate carriage to the document sensing position, where it waits for the next customer job. Refer to [Figure 12](#).



TC-5-0119-A

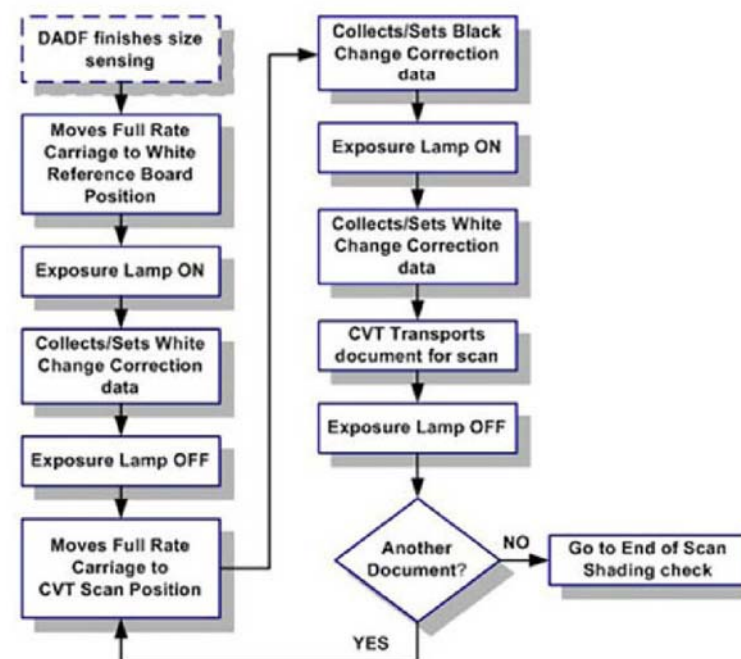
Figure 12 End of platen scanning

DADF Scanning Operations

After the DADF finishes size sensing, the full rate carriage moves to the white reference strip position. Here the exposure lamp is turned on and the IIT collects and applies white change correction data.

Next the exposure lamp turns off and the full rate carriage moves to the CVT scan position. First it collects and applies black change correction data, then it turns on the exposure lamp and collects white change correction data, setting the white and black levels.

The IIT scans the document as it is transported by the CVT. If there are multiple documents, the full rate carriage stays at the CVT scan position. Refer to [Figure 13](#).



TC-5-0120-A

Figure 13 DADF scanning operation

End of DADF Scan Operations

At the end of a CVT scan, with the full rate carriage at the registration position, the IIT determines how much time has elapsed since the last shading correction was performed.

If the elapsed time is greater than a specified value, the IIT moves the full rate carriage to the white reference strip position and performs AGC and AOC, and collects shading correction data and white change correction data.

It then moves the full rate carriage to the document sensing position, where it waits for the next customer job. Refer to [Figure 14](#).

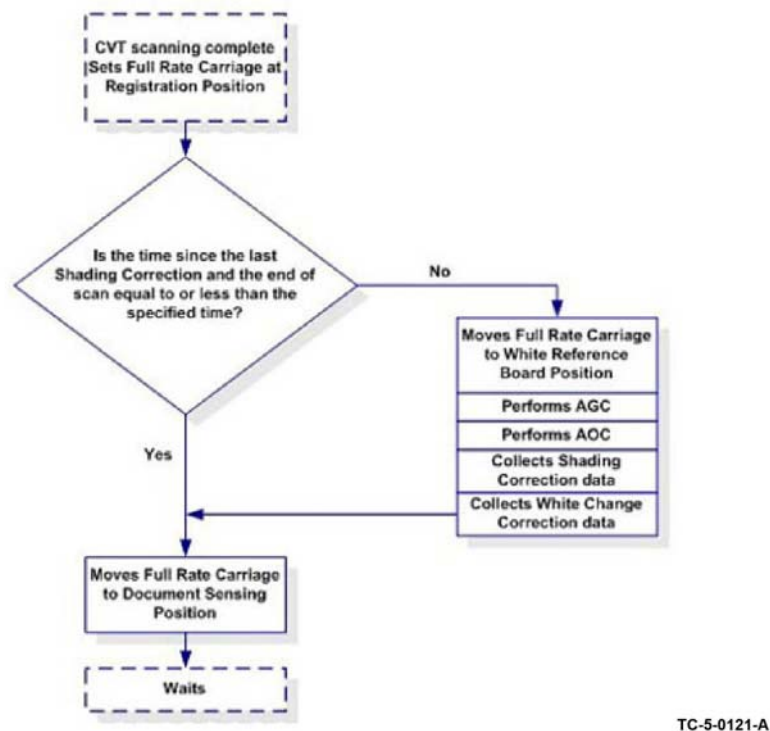


Figure 14 End of DADF scan

Document Scanning: CCD Calibration

To compensate electronically for variations in each pixel of the CCD and exposure lamp, five automatic calibrations are performed when the machine is switched on and at other specific times during operation. The values gathered during these calibrations are then applied to the data scanned by the IIT during processing by the IPS.

1. Automatic Gain Control (AGC)

AGC is a routine that adjusts gain so that the CCD image sensor output will be equal to a stored target value when the exposure lamp is switched on. This is also known as the white level coarse adjustment. AGC adjusts the level of the video signal prior to the A/D conversion in order to compensate for the natural decline in output of the exposure lamp as it ages and also for variations in the analog video circuits from one PWB to another. AGC is performed during initialization, at power on, and on recovery from Power Saver Mode.

The exposure lamp is switched on and several lines of image data from the white reference strip are scanned by the CCD image sensor in the fast scan direction.

The average value of the scanned lines of image data is compared with the AGC target value.

If the average scanned value is not within the specified range for AGC target value, gain will be increased and the routine will be repeated until the value falls within the specified range.

2. Automatic Offset Control (AOC)

AOC is a routine that adjusts offset voltage so that the CCD image sensor output will be closer to the target value when the exposure lamp is turned off. This is also known as the black level adjustment for image. AOC is performed during initialization, at power on, and on recovery from Power Saver Mode.

The exposure lamp is turned off and multiple lines of data under the white reference strip are scanned by the CCD image sensor in the fast scan direction.

The difference between the averaged scanned values and the AOC target value will be the offset voltage.

3. Shading Correction

The shading correction compensates for the variations in the sensitivity of the pixels in the CCD image sensor. It also corrects variations in pixel output values caused by uneven lighting in the optical system, in the fast scan direction. Shading correction is performed during initialization, at power on, and on recovery from Power Saver Mode. The value is applied to the image data when the image is scanned.

When the exposure lamp is switched on, the CCD image sensor reads several lines from the white reference strip, in the fast scan direction. The shading correction is then calculated and applied during scanning to achieve a more uniform output.

4. White Change Correction

The white change correction compensates for variation in the light intensity of the exposure lamp; it consists of two processes:

- Collecting the white change correction reference data during initialization
- Performing the white change correction during document scanning

To collect the white change correction data during initialization, the exposure lamp is illuminated. Image data reflected from the white reference strip (in the fast scan direction) are read by the CCD image sensor and averaged. The averaged readings are the white change correction reference value.

During scanning, the exposure lamp is illuminated and the above process is repeated. A comparison is then made of the white change correction reference value with the averaged scanned value. A calculation called the white level adjustment coefficient is then applied to the output data.

When scans are made from the DADF, white change correction is performed both at the white reference strip position under the platen glass and at the white reference strip at the CVT scan position.

5. **Black Change Correction**

The purpose of this adjustment is to ensure that the black level reference is accurate in the output data from the CCD. Just as each CCD pixel has variations in recognizing white, they also have variations recognizing black. Variations occur from pixel-to-pixel in the CCD and also from temperature drift in the analog circuit.

The black change correction consists of two processes: Collecting the black change correction reference data and calculating the black change correction coefficient.

During collection, the exposure lamp is switched off and multiple lines of the image data on the white reference strip are scanned by the CCD image sensor, in the fast scan direction.

The black change correction coefficient is then calculated from the average of the readings. This value is applied to the output data after the image is scanned.

6. **Image Data Flow**

The image data read by the CCD image sensor is converted into analog signals which are sent from the CCD PWB to the ESS PWB. The ESS performs image correction (if required), analog-to-digital conversion, image processing and then outputs to the LED print heads.

Paper Supply and Feed

Media Supply

- Configurations
- Supported Media
- Paper Tray Elevation and Feeding: Trays 1, 2, 3 and 4
- Paper Size Detection: Trays 1, 2, 3 and 4
- No Paper Detection: trays 1, 2, 3 and 4
- Remaining Paper Indication
- Paper Tray Specifications: Trays 1 and 2
- Paper Tray Specifications: Tandem Tray Module (TTM)
- Tandem Tray Module (TTM): Tray 3 components
- Tandem Tray Module (TTM): Tray 4 Components
- Bypass tray (Tray 5)
- High Capacity Feeder (HCF) (Tray 6)

NOTE: Refer to [Block Schematic Diagrams \(BSDs\)](#) chain 7 for paper supply component wiring and interconnection details.

Configurations

There are three basic Xerox® VersaLink® C7020/C7025/C7030 and the C7000 machine paper supply configurations, [Figure 1](#):

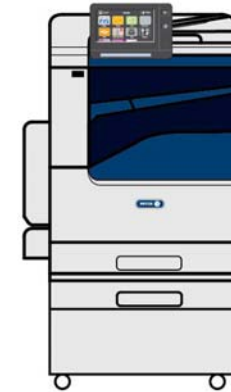
- Desktop machine with paper tray 1, [PL 70.05](#).
- Stacked machine with paper tray 1 and 1 tray module (1TM), [PL 70.15](#).
- Stacked machine with paper tray 1 and tandem tray module (TTM), [PL 70.65](#).



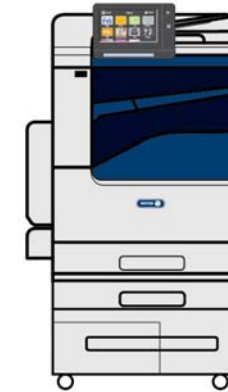
Desktop C7020/C7025/C7030 with tray 1.



Desktop C7000 with tray 1.



C7020/C7025/C7030 with tray 1 and 1TM



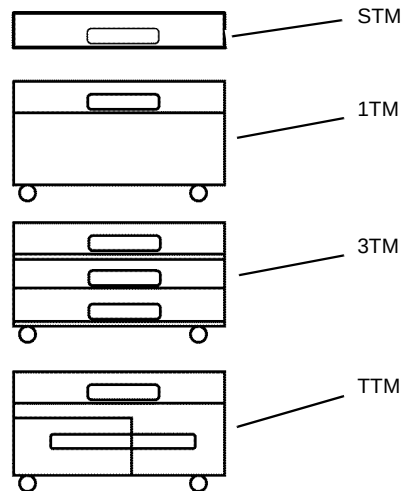
C7020/C7025/C7030 with tray 1 and TTM

C-5-0084-A

Figure 1 Basic configuration

There are four Xerox® VersaLink® C7020/C7025/C7030 and C7000 optional paper supply configurations for the desktop machine, [Figure 2](#):

- Desktop machine with single tray module (STM), [PL 70.25](#).
- Desktop machine with 1TM, [PL 70.15](#).
- Desktop machine with 3 tray module (3TM), [PL 70.20](#).
- Desktop machine with TTM, [PL 70.65](#).

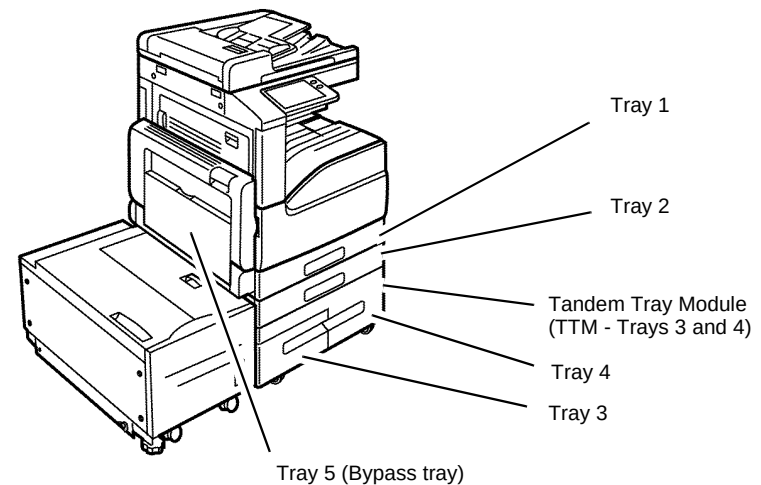


C-5-0085-A

Figure 2 Desktop machine options

All the Xerox® VersaLink® C7020/C7025/C7030 and the C7000 machine configurations feature a bypass tray (Tray 5), [PL 70.30](#). The VersaLink® C7020/C7025/C7030 can also be configured with an optional high capacity feeder (HCF), [PL 70.45](#) and [Figure 3](#).

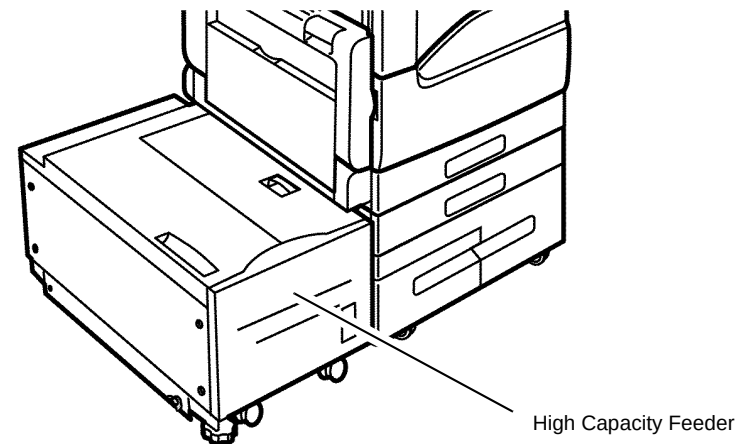
NOTE: The C7000 is not compatible with the HCF.



C-5-0088-A

Figure 3 Media supply trays (C7000 is the same)

The HCF can only be installed on machines configured with either a 1TM, 3TM or TTM, [Figure 4](#).



C-5-0101-A

Figure 4 High capacity feeder

An optional envelope tray is available, [PL 70.100 Item 1](#). The envelope tray is installed by the customer in the tray 1 position. Refer to [Figure 5](#).



Envelope tray

C-5-0128-A

Figure 5 Envelope tray

Supported Media

Refer to [GP 15](#) for the paper and media size specifications of the various paper trays.

Paper Tray Elevation and Feeding: Trays 1, 2, 3 and 4

NOTE: The elevation mechanism is similar trays 3 and 4 of the TTM but on different on the HCF.

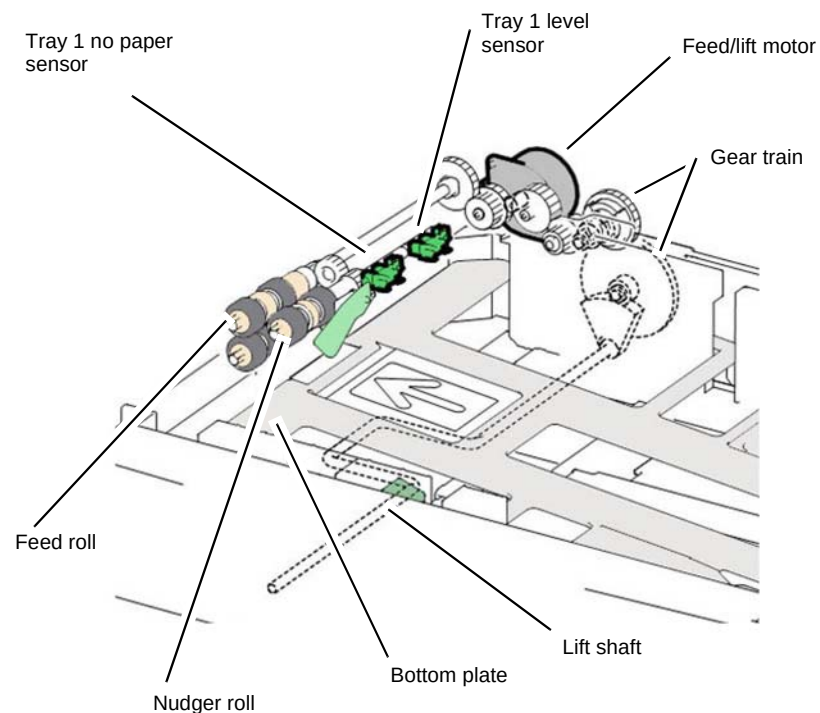
Refer to the relevant sections:

- [Tandem Tray Module \(TTM\): Tray 3 components.](#)
- [Tandem Tray Module \(TTM\): Tray 4 Components.](#)
- [High Capacity Feeder \(HCF\) \(Tray 6\).](#)

Paper trays 1, 2, 3 and 4 all have similar paper elevator systems that lift the paper stack into the paper feed position. The paper feed side of a hinged bottom plate is raised by a lift shaft until the paper stack is at the correct height to feed the top sheet of paper, [Figure 6](#). The tray drops mechanically when the tray is opened as the gears disengage.

When either of the paper trays 1, 2, 3 or 4 are fully inserted into a powered on machine the state of their tray level sensor is checked by a component control PWB. The STM, 1TM, 3TM and TTM all have an integral control PWB. However, the components of tray 1 are controlled by the drive PWB, [PL 1.10 Item 3](#). If the signal tray level sensor off is detected by the control logic, the feed/lift motor is activated to run in the counter clockwise direction (CCW). Thereby, elevating (via a gear train and lift shaft) the bottom plate and paper stack of that tray up to the paper feed position. In the feed position the elevated paper stack actuates the tray level sensor to signal on. When tray level sensor on signal is detected by the control logic, the feed/lift motor begins to rotate in a clockwise (CW) direction, driving the nudger and feed rolls and thereby feeding the top sheet towards the takeaway rolls, [Figure 6](#).

During paper feeding the tray level sensor is continuously monitored. When the signal tray level sensor signal off is detected, the control logic determines that it cannot feed the next sheet. The feed/lift motor, that is rotating CW during feed, then begins rotating CCW a pre-determined time after the end of the feed operation. Thereby, recommencing elevation of the paper stack to the paper feed position, then the feed cycle begins again, [Figure 6](#).



C-5-0094-A

Figure 6 Tray control components

The tray level sensor, no paper sensor and pre feed sensor are all integral to the feeder assembly, [Figure 7](#). The feed/lift motor is part of the feeder assembly, [Figure 8](#). Only paper tray 1 has a pre feed sensor. This sensor is use to detect paper mis feeds and paper jams.

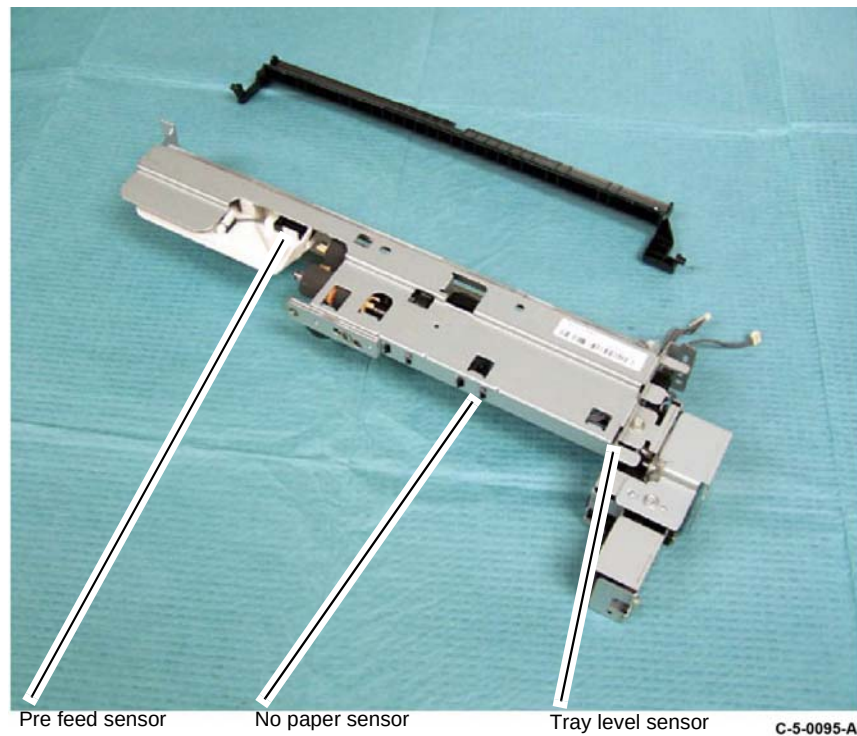


Figure 7 Feeder assembly

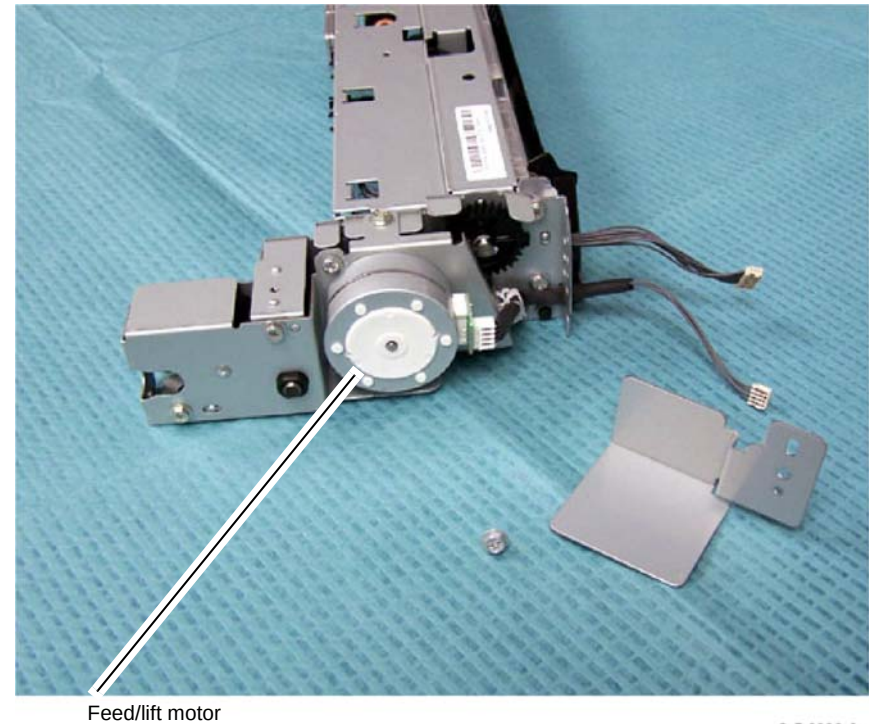


Figure 8 Feed/lift motor

Paper Size Detection: Trays 1, 2, 3 and 4

NOTE: The paper size detection system is different on HCF and trays 3 and 4 of the TTM.

Refer to the relevant sections:

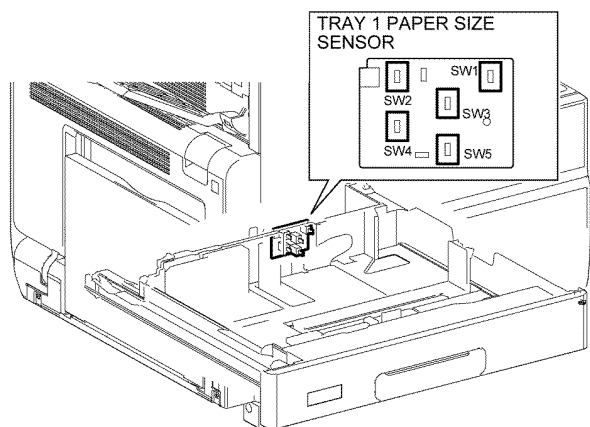
- **Tandem Tray Module (TTM): Tray 3 components.**
- **Tandem Tray Module (TTM): Tray 4 Components.**
- **High Capacity Feeder (HCF) (Tray 6).**

Paper size detection is similar for trays 1, 2, 3 and 4. Adjustment of the paper tray front and rear side and end guides into contact with the paper stack enables the size of the paper to be calculated. **Figure 9**. An actuator located at the rear of the tray, moves with the side guides, actuating one or more of the 5 switches which comprise the paper size switch, **Figure 10**. The combination of on and off signals from the paper size switches changes its output voltage. This output voltage is then converted from an analog to a digital value that is monitored by a PWB. The digital value indicates the size of the paper.

Paper size detection is performed at power on and every 0.1 second thereafter. However, the paper size sensor for a tray that has begun to feed paper is not monitored.

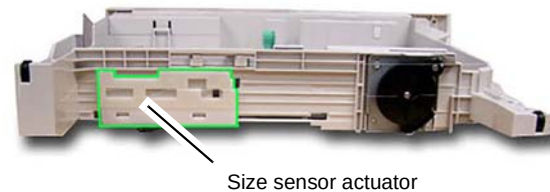
If a tray selected on the UI does not contain paper of the selected size, the machine will not print using that tray. If an analog to digital value that is not appropriate for the size of paper in a specific tray is detected the machine will not print using that tray.

NOTE: Although **Figure 9** depicts the tray 1 paper size sensor, the location of the sensor in relation to the paper tray is typical for paper trays 2, 3 and 4.



TC-5-0075-A

Figure 9 Paper size switch location



C-5-0097-A

Figure 10 Paper size sensor actuator

No Paper Detection: trays 1, 2, 3 and 4

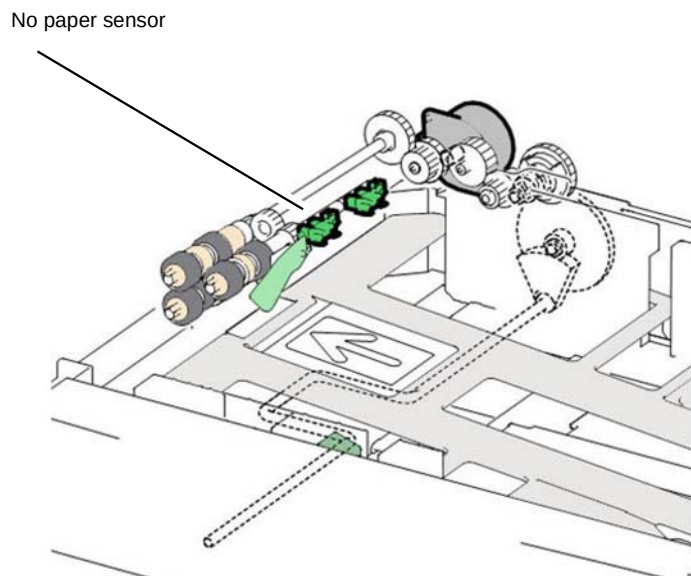
NOTE: The no paper detection system is different on HCF and trays 3 and 4 of the TTM.

Refer to the relevant sections:

- [Tandem Tray Module \(TTM\): Tray 3 components.](#)
- [Tandem Tray Module \(TTM\): Tray 4 Components.](#)
- [High Capacity Feeder \(HCF\) \(Tray 6\).](#)

Refer to [Figure 11](#). The no paper sensor detects if there is paper in the paper tray. The no paper sensors monitor every 0.01 second while the machine is in operation and at standby. When the last sheet feeds from the tray, the no paper sensor actuator drops into an opening in the paper tray bottom plate and unblocks the no paper sensor. This signals to the control logic that the tray is empty and to display a tray empty message on the UI.

If it is determined that a tray has no paper, the machine prohibits that tray from being used. If no paper is detected during feed, the machine will finish with the paper that is being fed and then stop. However, if the machine is in auto tray switch (ATS) mode and the same size of paper is found in another tray, the machine will start to feed paper from that tray.



C-5-0102-A

Figure 11 No paper sensor

Remaining Paper Indication

The machine informs the user of the amount of paper in each tray (trays 1 through 4 and 6) at five levels: 100%, 75%, 50%, 25%, and 0%.

The calculation of the amount of paper in a paper tray by the control logic is dependent on the time that elapses during elevation of the paper stack. Based on the time taken from when the tray feed/lift motor begins to drive the lift plate, until the paper stack triggers the tray level sensor on.

Paper Tray Specifications: Trays 1 and 2

The IOT is equipped with paper tray 1. The STM, 1TM, 3TM and TTM each provide for a paper tray 2 within their configurations.

Trays 1 and 2 each hold about 500 sheets of A4 or 8.5 x 11 inch paper.

The signals from the tray 1 and tray 2 paper size switches indicates the size of the paper loaded in each tray, refer to [Paper Size Detection: Trays 1, 2, 3 and 4](#).

For detailed media information refer to [GP 15 Paper and Media Size Specifications](#).

Paper Tray Specifications: Tandem Tray Module (TTM)

The TTM is equipped with trays 2, 3, and 4, [Figure 12](#). Trays 3 and tray 4 are high capacity trays and have the following capacities:

- Tray 3: 870 sheets of A4 or 8.5 x 11 inch paper.
- Tray 4: 1130 sheets of A4 or 8.5 x 11 inch paper

For detailed media information refer to [GP 15 Paper and Media Size Specifications](#).



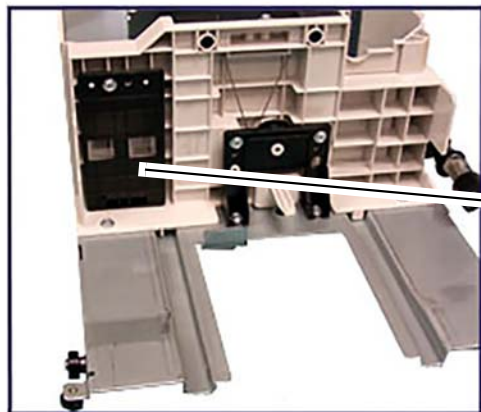
C-5-0103-A

Figure 12 TTM tray 3 and tray 4

Tandem Tray Module (TTM): Tray 3 components

Tray 3 paper size sensor - The tray 3 paper size sensor detects if tray is inserted and senses paper size. The tray 3 paper size sensor contains two switches, [Figure 15](#). The size actuator, [PL 70.66 Item 2](#), mounted on the tray, that works with the tray side rear, [PL 70.66 Item 3](#), and the side front, [PL 70.66 Item 4](#), guides, presses these switches, [Figure 13](#). The combination of the on and off states of these switches changes the output voltage, based on which paper size is sensed.

For tray 3 and tray 4, the tray size sensor senses A4 LEF, Letter (8.5 x 11 inch) LEF, and B5 LEF paper.



The tray 3 size actuator is a thin, clear film sheet with cutouts; tray 4 is similar.

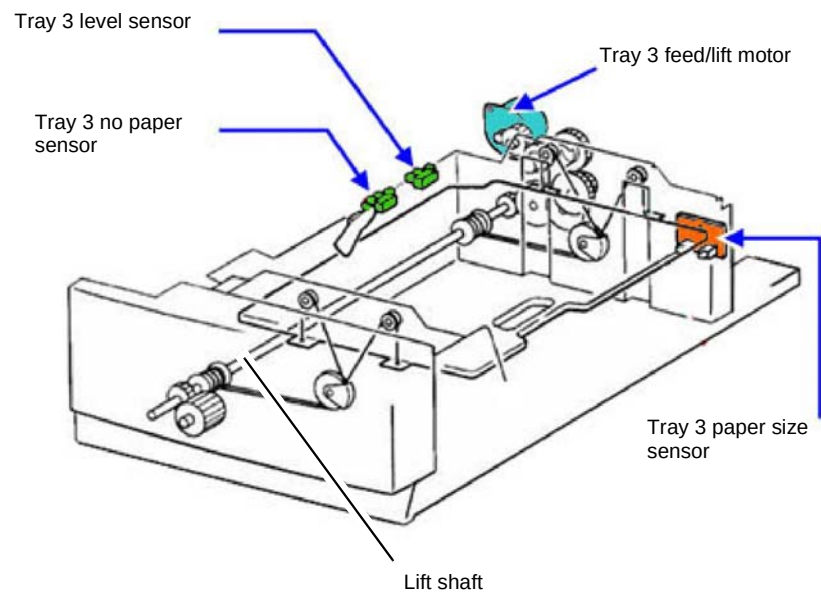
C-5-0098-A

Figure 13 Tray 3 paper size sensor actuator

Tray 3 level sensor. The tray 3 level sensor detects that the tray has lifted the paper and is ready to feed, [Figure 14](#).

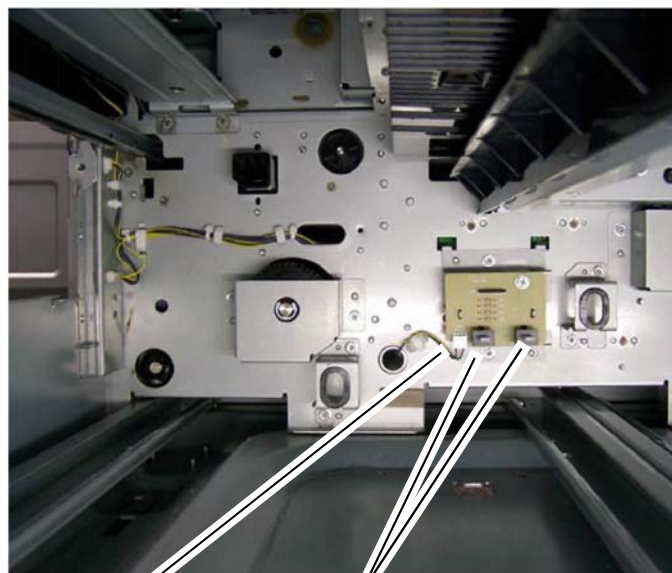
Tray 3 no paper sensor. The tray 3 no paper sensor detects that there is no paper in the tray. The sensor is monitored continually during run, at power on, and when the tray is inserted, [Figure 14](#).

Tray 3 Feed/lift motor. The feed/lift motor is a bidirectional stepping motor. When the motor rotates counter clockwise (CCW), it rotates the lift shaft through the gears and lifts the bottom plate. As it rotates clockwise (CW), it drives the nudger roll and the feed roll, [Figure 14](#).



C-5-0104-A

Figure 14 Tray 3 components



Tray 3 Paper Size Sensor
Switches

C-5-0105-A

Figure 15 Tray 3 paper sensor

Tandem Tray Module (TTM): Tray 4 Components

Paper tray 4 serves as a high capacity media tray and can only be loaded with 8.5" X 11" (A4) media. The capacity of the HCF is 2000 sheets of 24lb (90gsm) paper.

Paper Size Sensing

The tray 4 paper size sensor is identical to the tray 3 paper size sensor, [Figure 15](#). Moving the side rear, [PL 70.67 Item 2](#), and side front, [PL 70.67 Item 3](#), guides provides the control logic with the paper size information that it displays on the UI. Paper sizes are checked and sent from the TTM PWB, [PL 70.90 Item 1](#) to the drive PWB, [PL 1.10 Item 3](#).

Tray 4 Tray Lift

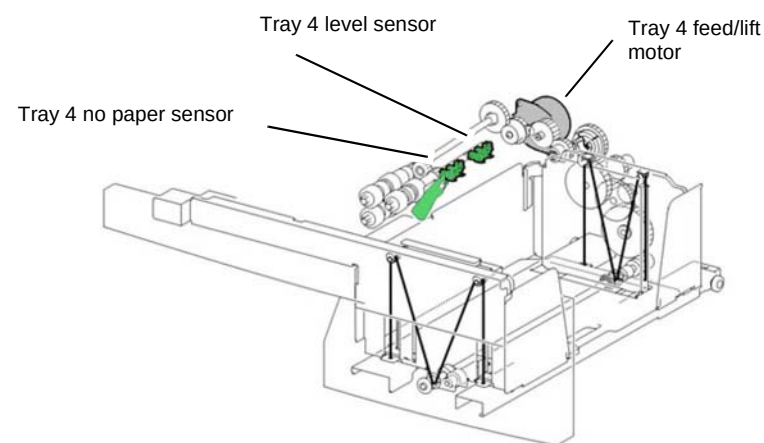
Lifting the paper stack is accomplished through a cable and pulley system. When the tray is loaded and pushed into the machine, thereby actuating the paper size sensor, the control logic commands the tray 4 feed/lift motor to rotate in a clockwise direction. The motor provides drive to the cable and pulley system, raising the stack. When the stack actuates the tray 4 level sensor, the motor stops, with the paper stack now in the feed position, [Figure 16](#).

Tray 4 Level Sensor

Stack height is maintained in the same way as trays 1, and 2, refer to [Paper Size Detection: Trays 1, 2, 3 and 4](#).

Tray 4 No Paper Detection

When the last sheet feeds from the tray, the tray 4 no paper sensor actuator drops into an opening in the paper tray elevator unblocking the tray 4 no paper sensor. This signals the control logic that the tray is empty and to display a (tray empty) message on the UI, [Figure 16](#).



C-5-0106-A

Figure 16 TTM tray 4 components

Bypass tray (Tray 5)

The bypass tray is located on the left-hand side of the IOT below the left cover assembly.

Tray 5 will feed special and standard paper from 60 to 216gsm weight but is not intended to feed transparencies.

For detailed media information refer to [GP 15 Paper and Media Size Specifications](#).

Tray 5 (Bypass tray): Components

Bypass tray no paper sensor - The bypass tray no paper sensor detects the presence of media. If the detected length of the media is greater than the size selected on the control panel or not within a range from 88.9 to 297mm, the machine stops, [Figure 17](#).

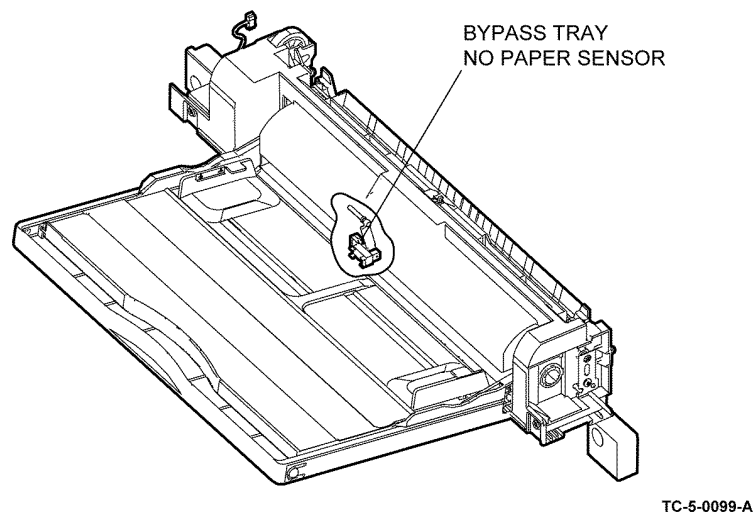


Figure 17 Bypass tray no paper sensor

An actuator attached to the upper frame, [PL 70.35 Item 4](#), blocks the bypass tray no paper sensor when there is no media in tray 5. As paper is loaded in tray 5, the lead edge of the stack moves the actuator, unblocking the sensor. The bypass tray no paper sensor signal is monitored by the drive PWB, [PL 1.10 Item 3](#).

Bypass tray paper feed

The bypass tray employs a friction retard pad, feed roll and nudger roll for media separation and feed. Drive for the bypass Tray is provided by the drum motor MOT42-002, [PL 40.10 Item 1](#), via a 3 gear train, [PL 40.05](#).

When media is placed in the bypass tray the paper stopper is locked in the down position preventing media entering the paper path and the nudger roll is in a none media contact raised position, [Figure 18](#).

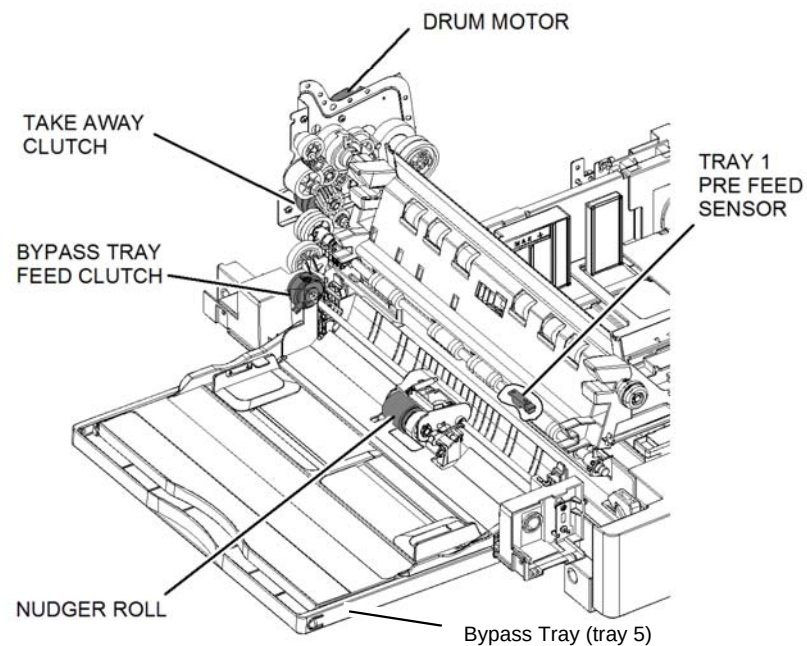
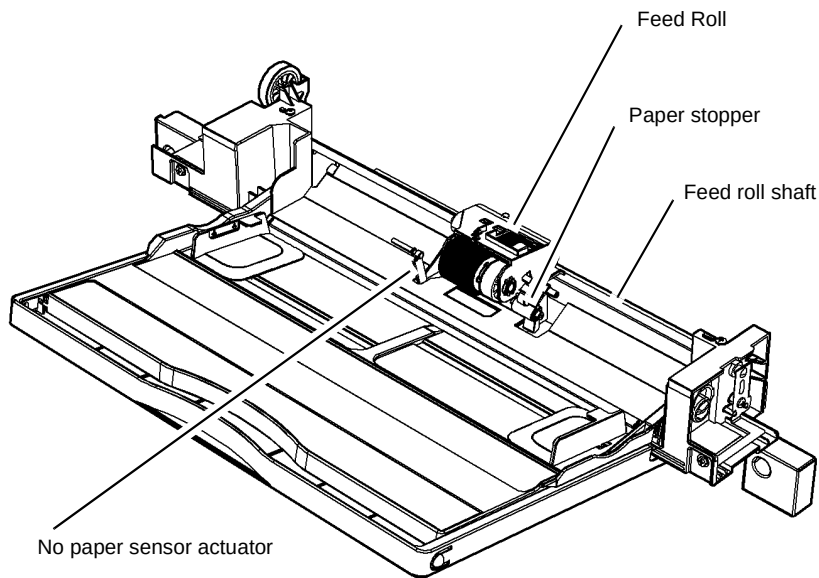


Figure 18 Bypass tray

When energized, the bypass tray feed clutch transfers drive from the drive gear 22T to the shaft of the feed roll. In turn the feed gear 30T, [PL 70.40 Item 19](#), transfers motion to the nudger roll, [PL 70.40 Item 16](#), via the idler gear, [PL 70.40 Item 14](#), and nudger rear 37T, [PL 70.40 Item 15](#).

As drive is provided to the nudger roll lowers just enough to contact and pick up the media. The paper stopper is unlocked and media feed enabled, [Figure 19](#).



C-5-0107-A

Figure 19 Bypass feed components

High Capacity Feeder (HCF) (Tray 6)

The HCF feature (optional) is used as a high capacity media supply and is primarily loaded with 8.5x11 or A4 paper. The capacity of the HCF is 2000 sheets of 80gsm (20lb) paper, [Figure 4](#).

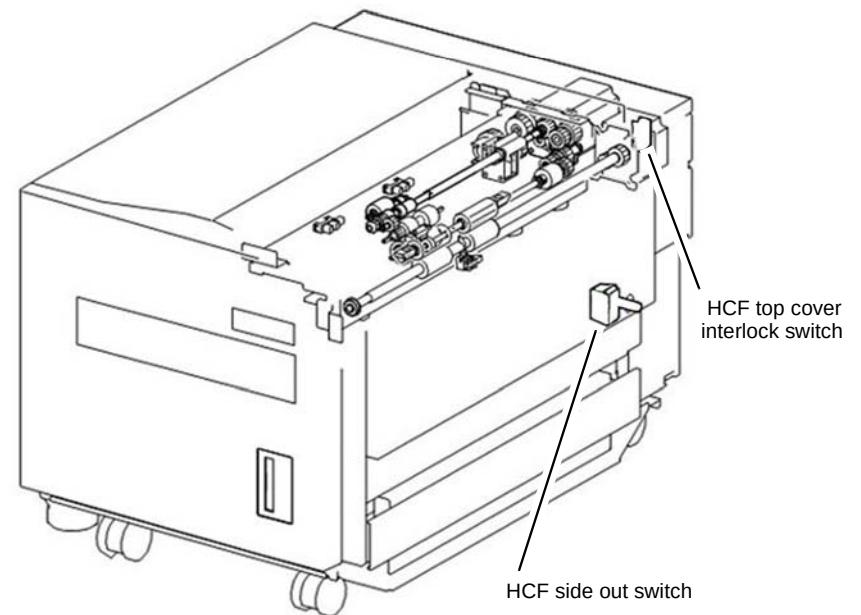
For detailed media information refer to [GP 15](#) Paper and Media Size Specifications.

High Capacity Feeder: Sensors and Interlocks

The HCF side out switch detects if the HCF is in the home position (against the left side of the device) following jam clearance. During jam clearance, the operator may need to slide the HCF to the left, away from the machine, [Figure 20](#).

Refer to [Figure 20](#). The HCF top cover interlock switch cuts +24VDC power to the K1 relay on the HCF PWB, [PL 70.60 Item 9](#), when opened, turning off the HCF feed/lift motor, [PL 80.60 Item 23](#), and the takeaway motor, [PL 70.60 Item 7](#).

Refer to [Figure 21](#). The HCF tray in sensor detects that the HCF drawer is in the operating position. This prevents the HCF feed/lift motor, [PL 80.60 Item 23](#), from operating with the drawer open.



C-5-0138-A

Figure 20 HCF Interlocks

High Capacity Feeder: Loading and Size Sensing

When the HCF tray is pulled out to load paper, the lift gear is separated from the drive gear and the tray is free to fall to the bottom position. A torque limiter on the lift shaft slows the fall of the paper tray to prevent damage to feeder components.

Size sensing is determined by the HCF size sensor (A) and the HCF size sensor (B). The paper tray guides actuate the size sensors, [Figure 21](#) and [Table 1](#).

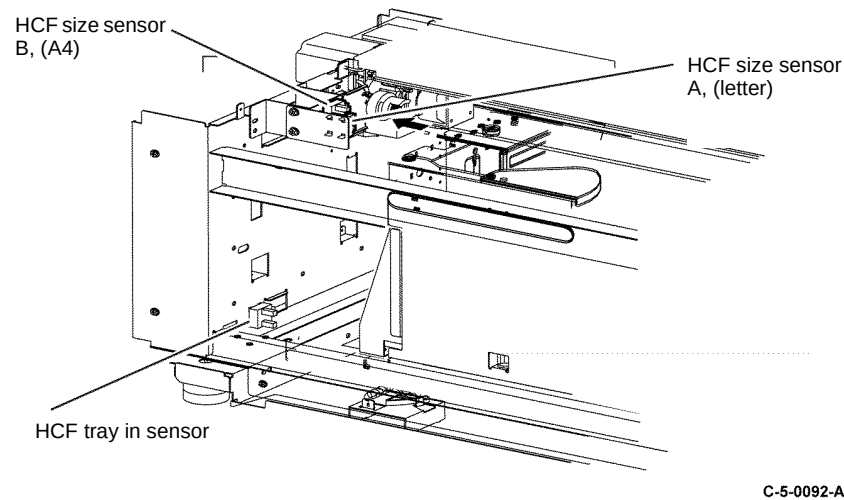


Figure 21 HCF tray in and paper size sensors

Table 1 Paper size by sensor state

Paper Size	Tray Paper Size Sensor	
	Sensor B	Sensor A
B5 LEF or 7.25x10.5 inch LEF	OFF	OFF
8.5x11 inch LEF	OFF	ON
A4 LEF	ON	OFF
Long A4 (Irregular Settings)	OFF	OFF

High Capacity Feeder: Tray Lift Operation

When the HCF tray is pushed in and actuates the HCF tray in sensor, [Figure 21](#), the following sequence of events occurs, refer to [Figure 22](#):

1. The nudger roll is lowered.
2. The HCF feed/lift motor switches on and rotates CCW to lift the tray through a pulley and cable arrangement.
3. Lift continues until the paper stack reaches and lifts the nudger roll, deactuating the HCF level sensor.
4. The HCF feed/lift motor switches off.

High Capacity Feeder: Remaining Paper Calculation

The control logic calculates the amount of paper that remains in the HCF tray by the time it takes for the paper stack to deactivate the HCF level sensor, [Figure 22](#). The value is then displayed on the UI for operator information. Refer to [Table 2](#) for the time/quantity relationship.

If the HCF is empty, the HCF no paper sensor will actuate, and a Tray Empty message will display, [Figure 22](#).

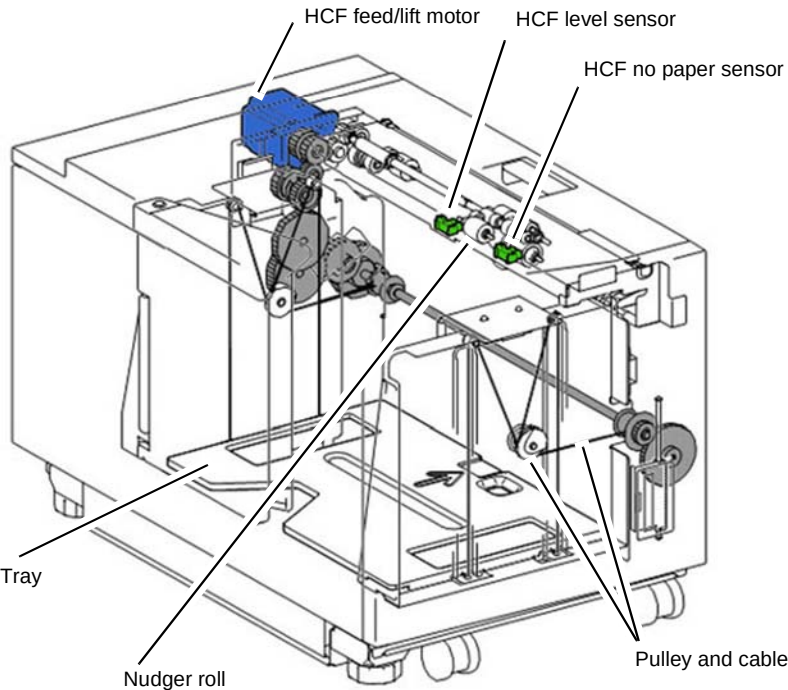


Figure 22 HCF level sensor

Table 2 Time/quantity relationship

Paper Remaining	Lift Time (msec)
25%	8798-11526
50%	6068-8797
75%	3338-6067
FULL	0-3337

Paper Transport

- [Overview: Drive Components and Sensors](#)
- [Overview: Paper Path Sensors](#)
- [Takeaway Rolls and Drive](#)
- [Paper Transport from Tray 1](#)
- [Paper Transport from Tray 2, Tray 3 and Tray 4 of the 3TM](#)
- [Paper Transport from the TTM](#)
- [Paper Transport from the Bypass Tray](#)
- [Drive from the Drum Motor](#)
- [Registration Roll and Sensor](#)
- [Duplex Transport](#)
- [High Capacity Feeder: Paper Feed](#)

Overview: Drive Components and Sensors

NOTE: Paper feed from trays 1, 2, 3, 4, 5 and the HCF is discussed in the [Media Supply](#) section of this product technical overview (PTO), as are the functions of the paper trays' paper size sensors, level sensors, no paper sensors, and feed/lift motors.

The purpose of the paper transport system is to take a sheet of media from any of the various paper trays and then deliver that media un-skewed to the point of xerographic transfer. Refer to Xerographics for details on the xerographic process and Fusing/Copy Transportation for details on fusing and post fuser copy transportation.

[Figure 1](#) shows the paper path, drive components and sensors of the Xerox® VersaLink® C7020/B7025/C7030 and C7000 machine, configured with a 3 tray module (3TM).

Refer to [Block Schematic Diagrams \(BSDs\)](#) chain 8 for paper transport component wiring and interconnection details.

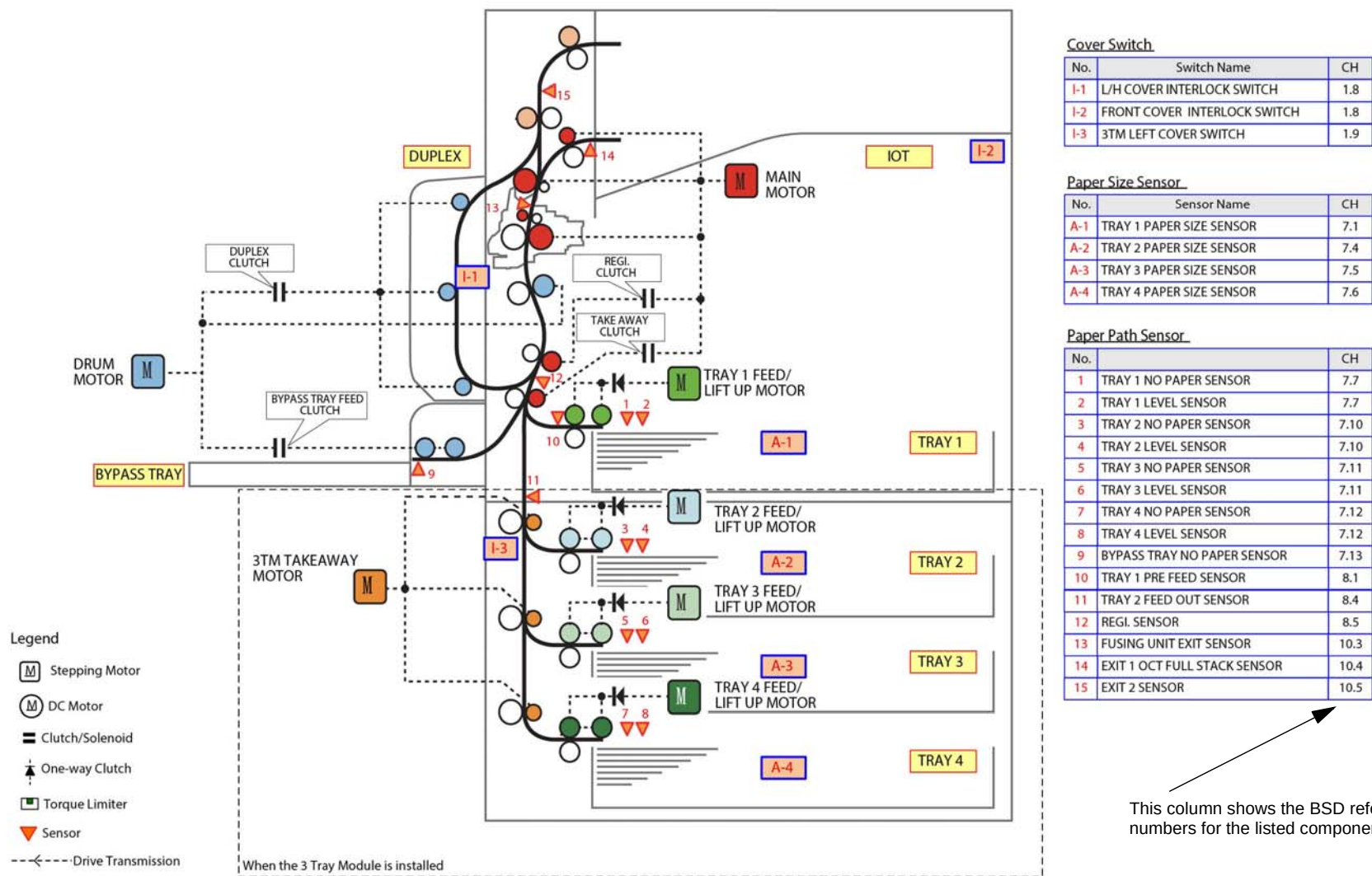


Figure 1 Paper path

TC-5-0082-A

Overview: Paper Path Sensors

The control logic uses the signals from the paper path sensors to control the on and off timing of the drive components and to detect jams and misfeeds.

Misfeeds typically indicate that a feed out sensor or a pre feed sensor fails to turn on within the specified time.

Misfeed Examples

- Fault 073-101 tray 3 miss-feed occurs when the tray 3 feed out sensor does not turn on a specified time after the tray 3 feed start signal.
- Fault 072-100 tray 2 pre miss-feed occurs when the tray 2 pre-feed sensor fails to turn ON within a specified time from tray 2 feed start.

Jams typically indicate that a sensor's signal remains on too long or fails to turn on at all.

Jam Examples

- Fault 072-105 registration sensor jam (tray 2) indicates that registration sensor failed to turn ON in a specified amount of time after the registration clutch initialized during paper feeding from tray 2.
- Fault 077-902 exit 2 sensor jam indicates that paper remains at exit 2 sensor while the machine is powered on and stopped and has its interlocks closed.

NOTE: The following describes typical functions performed by various paper path sensors; it is not an exhaustive list.

Refer to [Figure 1](#).

- Tray 1 pre feed sensor - provide misfeed and jam detection for trays 1.
- Tray 2 feed out sensor- this sensor detects the lead and trail edges of sheets fed from tray 2 as they pass the takeaway roll; also used for tray 2 misfeed and jam detection.
- Bypass no paper sensor - The bypass no paper sensor detects paper presence in the bypass tray.
- Registration sensor - monitors the registration unit for the presence of paper. Its signal, in conjunction with the registration clutch on signal, indicates media jams, i.e., if the registration clutch on signal has occurred and the sensor fails to stay on a specified time, a jam downstream from the sensor or in the duplex path is indicated. The control logic also uses the signal from the registration sensor (registration sensor off) in the control of duplex transport operations, bypass feed start timing, and tray 1 feed start timing.
- Duplex sensor - The duplex sensor monitors the duplex path. A duplex path sensor on jam occurs when the sensor fails to turn on a specified time after the exit 2 motor reverses rotation to feed the sheet into the duplex area. A jam in the duplex area may be indicated by the sensor remaining on.

Takeaway Rolls and Drive

Each individual paper tray with the exception of tray 4 on the TTM has an associated takeaway roll that takes over transportation of media fed via the paper feeder and then drives that media along the paper path towards the registration nip rolls. The transportation of paper feed from tray 4 on the TTM is continued via the tray 4 transport assembly, [PL 80.70 Item 11](#).

The drive for the takeaway rolls is provided by the take away motor of the associated paper tray, with the exception of paper tray 1. The drive for the tray 1 takeaway roll is provided by the main drive motor, [Figure 2](#).

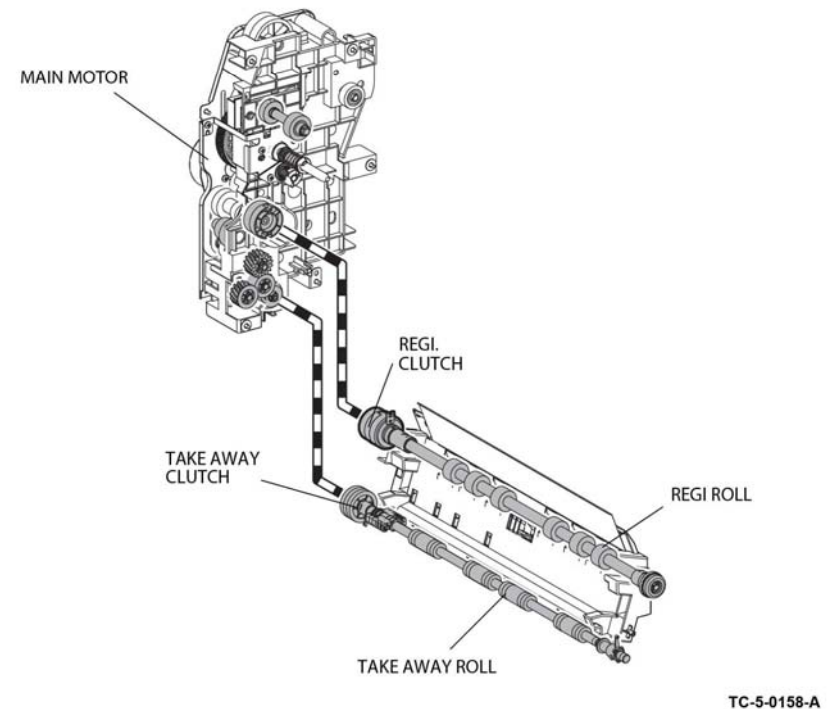


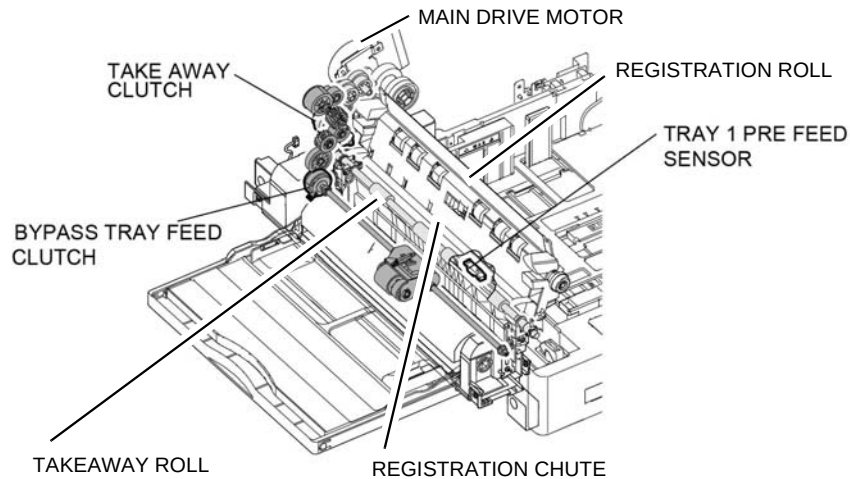
Figure 2 Tray 1 Takeaway and registration roll drive

The gear train linkage from each of the takeaway motors to the takeaway rolls varies for each paper supply modules. Refer to the following section for details on post feed paper transportation to registration nip rolls:

- [Paper Transport from Tray 1](#)
- [Paper Transport from Tray 2, Tray 3 and Tray 4 of the 3TM](#)
- [Paper Transport from the TTM](#)

Paper Transport from Tray 1

When tray 1 is selected the takeaway clutch, [PL 40.10 Item 5](#), is energized, thereby transferring drive via a gear from the main drive motor, [PL 40.10 Item 1](#), to takeaway roll 1, [PL 80.55 Item 15](#). At the same time the tray 1 feeder is activated and paper is fed from the feeder into the registration chute, [PL 80.55 Item 2](#), and onwards to the registration roll nip via the takeaway roll, [Figure 3](#).



TC-5-0078-A

Figure 3 Tray 1 transport

Refer to [Paper Tray Elevation and Feeding: Trays 1, 2, 3 and 4](#) in the Paper Supply and Feed section of this PTO for detailed paper feed information.

Paper Transport from Tray 2, Tray 3 and Tray 4 of the 3TM

When tray 2 is selected tray 1 takeaway roll is energized and the tray 2 associated takeaway motor turns on, driving takeaway roll 2. At the same time the tray 2 feeder is activated and paper is fed from the feeder onto takeaway roll 2. When the tray 2 feed out sensor detects the lead edge of the sheet, the takeaway motor reduces speed, [Figure 4](#).

Subsequent sheets in the same print job start feed after the trail edge of the previous sheet passes the registration sensor, the timing being based on the feed pitch.

The takeaway motor stops when the registration sensor, [PL 80.55 Item 4](#), detects the lead edge of the final sheet in a print job.

The takeaway roll paper transportation for all configuration of tray 2 is the same it is only their takeaway motors and gear trains that vary.

The figures that follow show the respective takeaway motor to takeaway roll 2 configurations:

- Tray 2 STM, [Figure 4](#).
- Tray 2 1TM, [Figure 5](#).
- Tray 2, 3 and 4, [Figure 6](#).

When feeding from tray 3 or tray 4 of a 3TM, the takeaway motors of all the above paper trays are energized and drive their associated takeaway rolls, [Figure 5](#). At the same time the tray 3 or 4 feeder is activated and paper is fed from the feeder onto the associated takeaway roll (3 or 4). Trays 3 and tray 4 have no feed out sensors. The takeaway motors for trays 1, 2, 3 and 4 will stop when the registration sensor detects the lead edge of the final sheet in a print job.

Refer to [Paper Tray Elevation and Feeding: Trays 1, 2, 3 and 4](#) in the Paper Supply and Feed section of this PTO for detailed paper feed information.

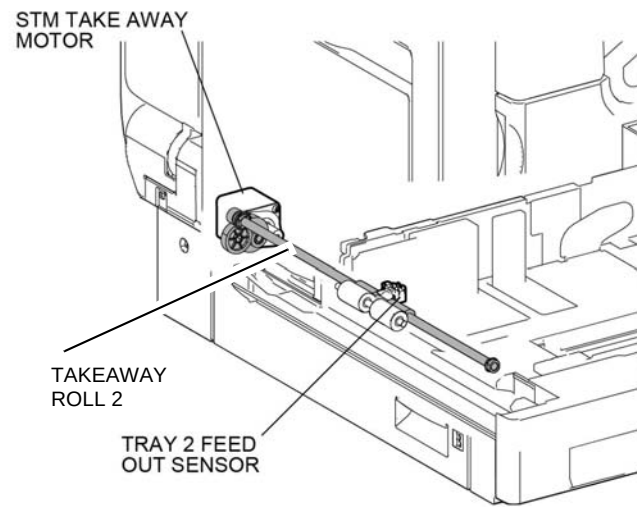


Figure 4 STM

TC-5-0079-A

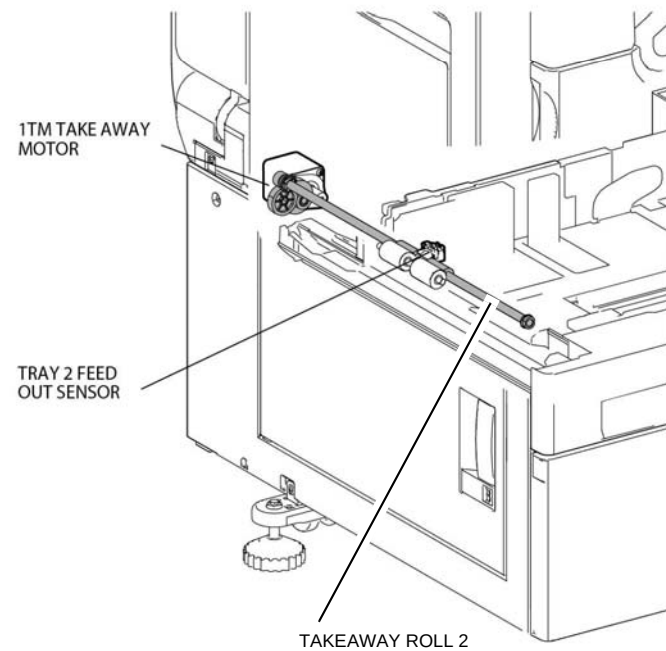


Figure 5 1TM takeaway

TC-5-0153-A

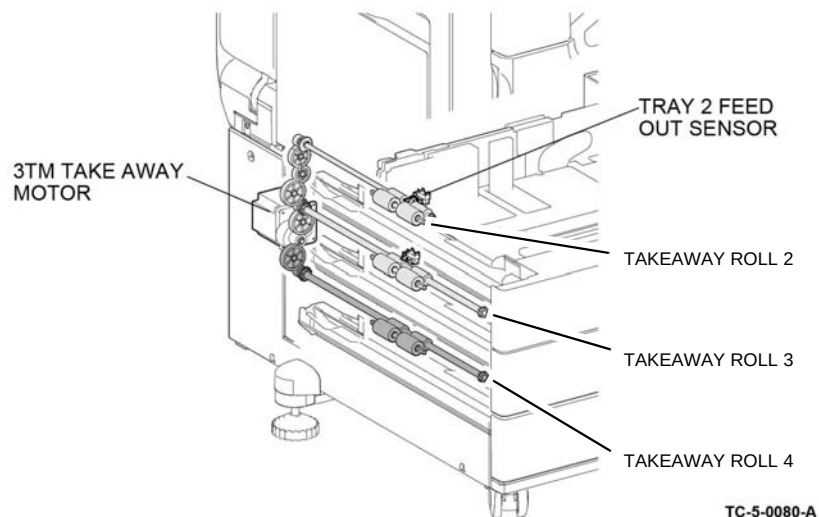


Figure 6 3TM takeaway

Paper Transport from the TTM

When tray 2 is selected the tray 1 takeaway roll is driven by the main drive motor and takeaway roll 2 of the TTM, [PL 80.65 Item 17](#), is driven via a gear train by the takeaway motor 1 (MOT77-033), [PL 70.85 Item 2](#). At the same time the tray 2 feeder is activated and paper is fed from the feeder onto takeaway roll 2.

Refer to [Paper Tray Elevation and Feeding: Trays 1, 2, 3 and 4](#) in the Paper Supply and Feed section of this PTO for detailed paper feed information.

When tray 3 or tray 4 is selected tray 1 takeaway roll is driven by the main drive motor, tray 2 takeaway roll is driven by the takeaway motor 1. Takeaway roll 3, [PL 80.65 Item 17](#), and the tray 4 transport roll, [PL 80.70 Item 14](#), of the TTM are driven via their respective gear trains and a drive belt, [PL 70.85 Item 10](#), linked to takeaway motor 2 (MOT77-035), [PL 70.85 Item 2](#) and [Figure 7](#). At the same time the tray 3 or 4 feeder is activated and paper is fed from the feeder onto takeaway roll 3. Paper feed from tray 4 is transported past the tray 4 feed out sensor to the tray 3 takeaway roll via the tray 4 transport assembly, [PL 80.70 Item 11](#).

The paper continue transportation to the registration nip rolls via takeaway rolls 1 and 2. The takeaway motors for trays 1, 2, 3 and 4 will stop when the registration sensor detects the lead edge of the final sheet in a print job.

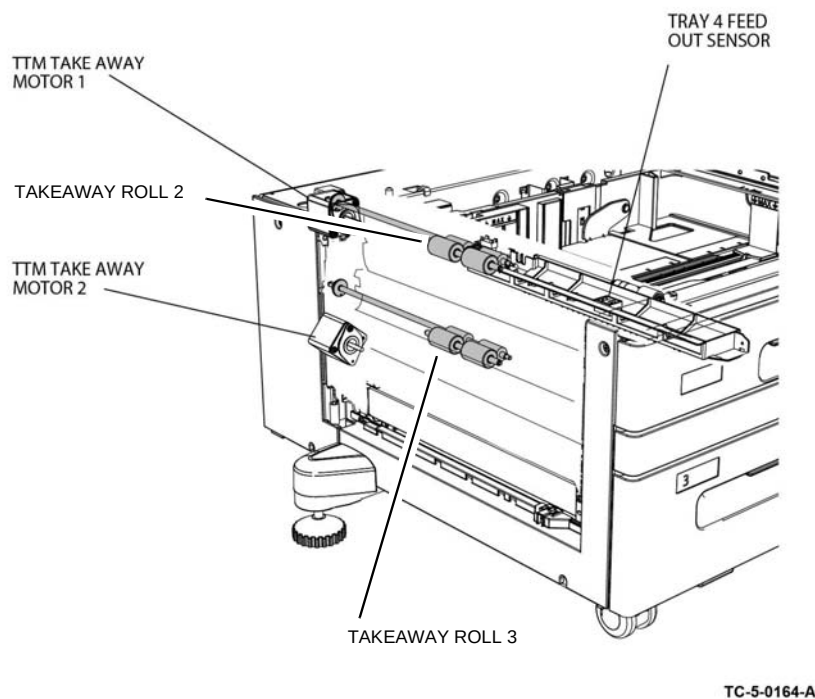


Figure 7 TTM

Paper Transport from the Bypass Tray

Media is transported from the bypass tray directly to the registration nip rolls via drive from the bypass tray feed roll, refer to, [Figure 8](#).

Refer to [Bypass tray \(Tray 5\)](#) in the Paper Supply and Feed section of this PTO for detailed information on paper feed from the bypass tray.

Drive from the Drum Motor

The drum motor (MOT42-002), [PL 40.10 Item 1](#), provides in direct drive to the bypass tray, drum cartridge and the duplex rolls, [Figure 8](#).

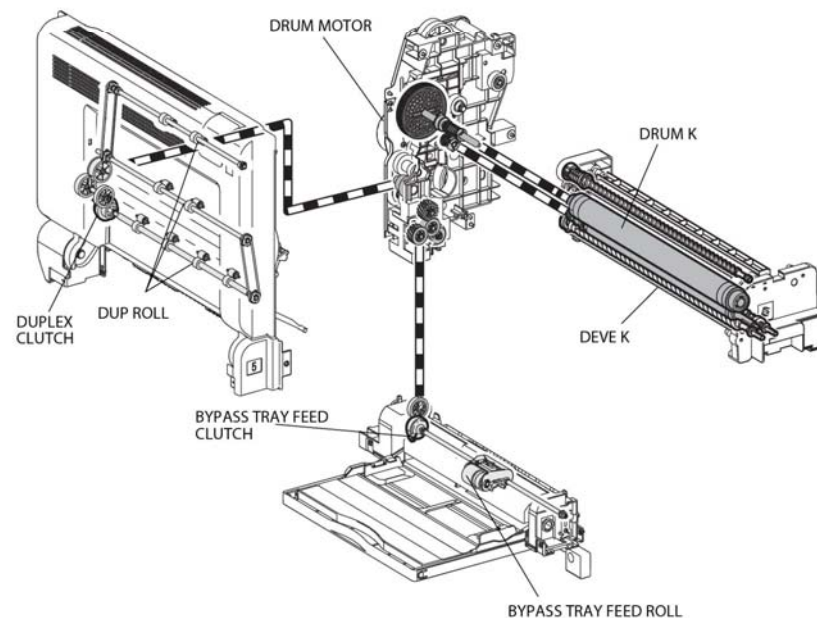


Figure 8 Drum motor

Registration Roll and Sensor

The registration sensor detects the paper just prior to the registration nip rolls. Its signal, in conjunction with the registration clutch on signal, indicates media jams, i.e., if the registration clutch on signal has occurred and the sensor fails to stay on a specified time, a jam downstream from the sensor or in the duplex path is indicated and the paper path transport system will shut down. The control logic also uses the signal from the registration sensor (registration sensor off) in the control of duplex transport operations, bypass feed start timing, and tray 1 feed start timing, [Figure 9](#).

The idlers for the registration roll, [PL 80.55 Item 8](#), are located in the LH cover assembly, [PL 80.45 Item 1](#), and with the registration roll form the registration nip. The registration roll is driven by the main motor via a gear train and registration clutch, [PL 80.55 Item 11](#). As the registration roll receives the paper that has been fed from the paper trays a buckle is formed in each sheet as it reaches the registration nip to remove any skew. At this point there is a small delay for sheet scheduling. After this time has expired, the registration clutch is energized and the main motor and registration roll are run to transport the sheet between the BTR roll and the photoreceptor in the xerographic transfer area. As the sheet passes the drum of the photo receptor the toner image is transferred to the paper, refer to [Figure 8](#) and [Figure 9](#).

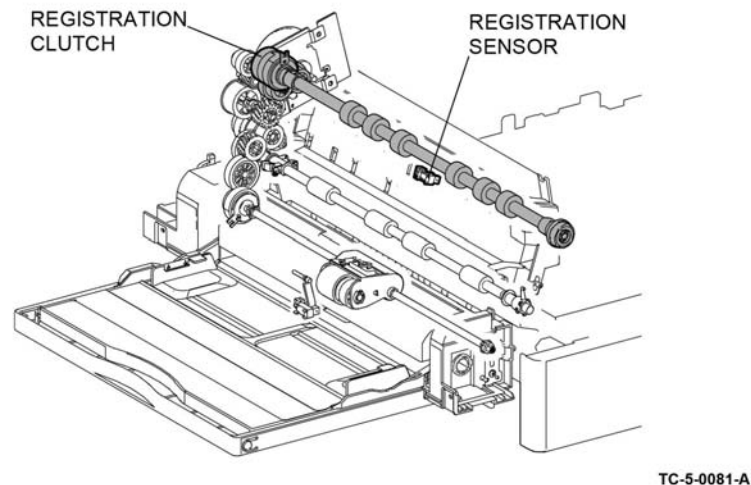


Figure 9 Paper registration

Duplex Transport

The duplex paper path reverses the direction of travel, enabling side 2 printing. The duplex rolls are driven by the drum motor via a gear train and clutch, [Figure 8](#) and Fusing/Copy Transportation.

High Capacity Feeder: Paper Feed

Refer to [Figure 10](#).

- The HCF feed/lift motor switches on in a clockwise direction, rotating the nudger roll and feed rolls.
- The top sheet feeds into the nip of the feed roll and retard roll, actuating the HCF pre feed sensor; this turns on the takeaway motor.
- Paper continues to advance, actuating the HCF feed out sensor.
- The takeaway motor rotates the takeaway rolls, transporting the sheet to the takeaway rolls in the IOT's takeaway (vertical) transport.
- When the trail edge of the paper clears the HCF feed out sensor, a timed interval begins after which the takeaway motor switches off.
- As paper continues to feed from the paper stack, the HCF level sensor will de actuate, causing a lift cycle. The HCF lift/feed motor will switch off to stop feeding, then begin rotating counter clockwise to lift the paper stack, then the feed cycle will then begin again.

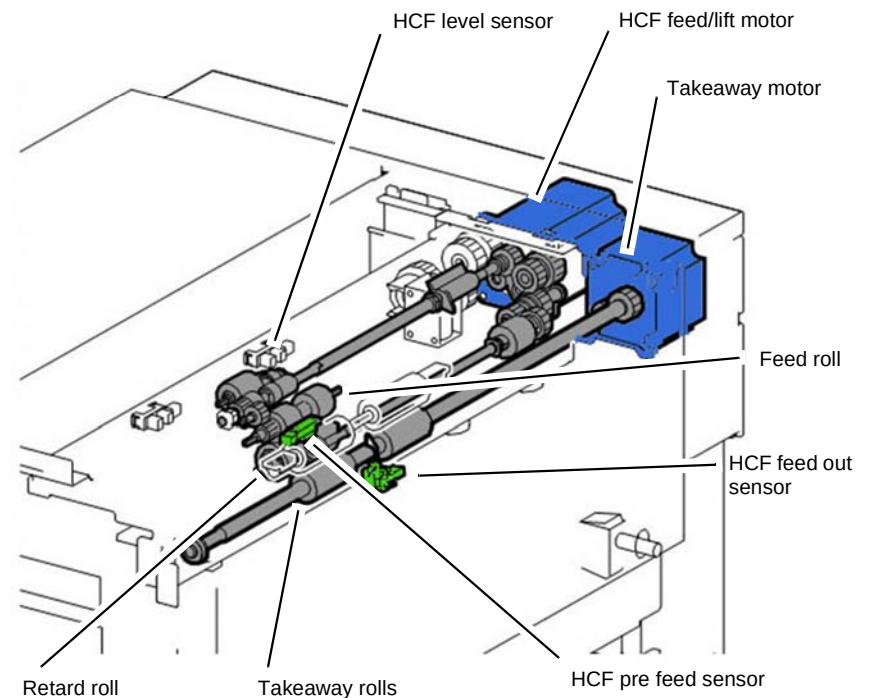


Figure 10 Paper feed

Xerographics

Overview

The Xerox® VersaLink® C7020/C7025/C7030 multi function device and C7000 printer employ an four-color, intermediate belt transfer print engine, which utilizes the xerographic process described below:

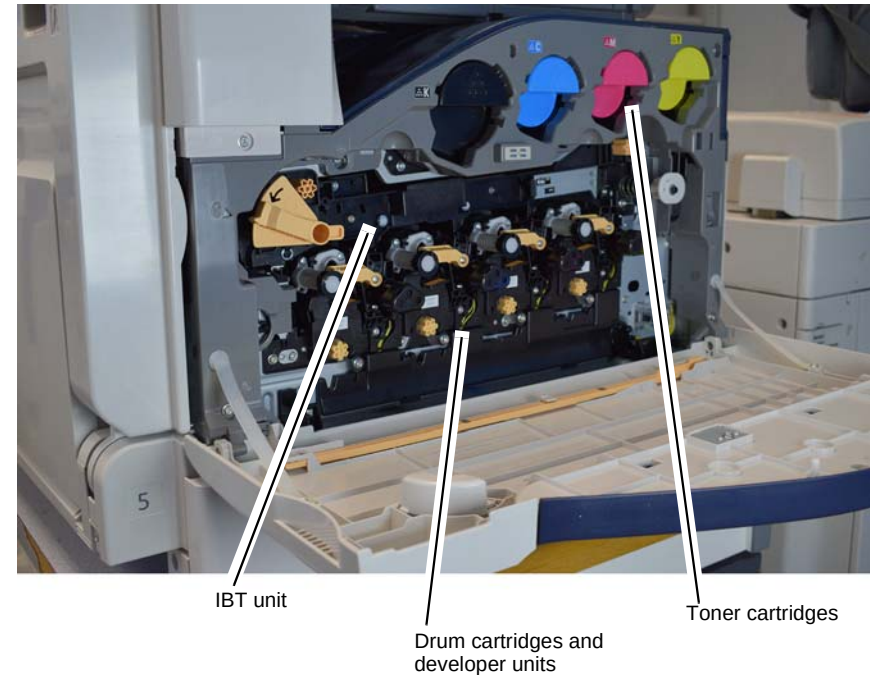
1. **Charge:** A negative charge is uniformly distributed over the surface of each of the four photoreceptor drums by a dedicated bias charge roll (BCR).
2. **Expose:** Each color-specific LED print head (LPH) creates a latent image on that color's photoreceptor drum by exposing it with a beam emitted from a semiconductor LED.
3. **Develop:** Toner is transported from the color-specific toner cartridge, via the dispenser, to the corresponding developer unit, then via a magnetic developer roll onto the photoreceptor drum. The toner particles are attracted to the latent image formed on the photoreceptor drum by the exposure process.
4. **Transfer:** The 1st bias transfer roll (1st BTR) for each color transfers the toner image from each photoreceptor drum to the transfer belt to build up the color image. The 2nd BTR then transfers the image from the transfer belt to the surface of the paper.
5. **Clean:** Waste toner is removed from the surface of each photoreceptor drum and the transfer belt by independent cleaning mechanisms, then transported to a waste toner bottle for periodic emptying.

NOTE: The print engine employs the "Write Black" xerography principle; when developing the image, the discharged areas of the photoreceptor drum attract toner.

The print engine uses the following components in the xerographic process.

- Toner cartridge (customer replaceable unit).
- Toner dispenser assembly.
- Developer unit.
- Drum cartridge (customer replaceable unit).
- IBT unit. (containing the transfer belt and 1st BTR)
- LED Print Head (LPH).
- 2nd BTR (customer replaceable unit).
- HVPS.

Figure 1 shows the main xerographic components as viewed from the front of the machine, with the waste toner bottle removed.



C-5-0196-A

Figure 1 Main xerographic components

Toner Cartridge

The toner cartridges, [PL 26.05](#) are customer replaceable units (CRU). The larger black toner cartridge carries a higher capacity of toner than the yellow, cyan and magenta cartridges due to the expected higher use of black toner. Refer to [Figure 2](#).

The toner cartridge does not include a toner empty sensor. Toner level is monitored by a combination of feedback from the automatic toner control (ATC) sensor and pixel counting. The machine monitors toner level and informs the user when it reaches these states:

- Pre-Near End-of-Life: the toner cartridge is approximately 25% full
- Near End-of-Life: the dispense motor is on but the ATC sensor detects no increase in toner in the drum cartridge.
- End-of-Life: the ATC sensor detects no toner in the drum cartridge. The machine hard stops at this point.

NOTE: The toner cartridge is a CRU and is not serviceable.



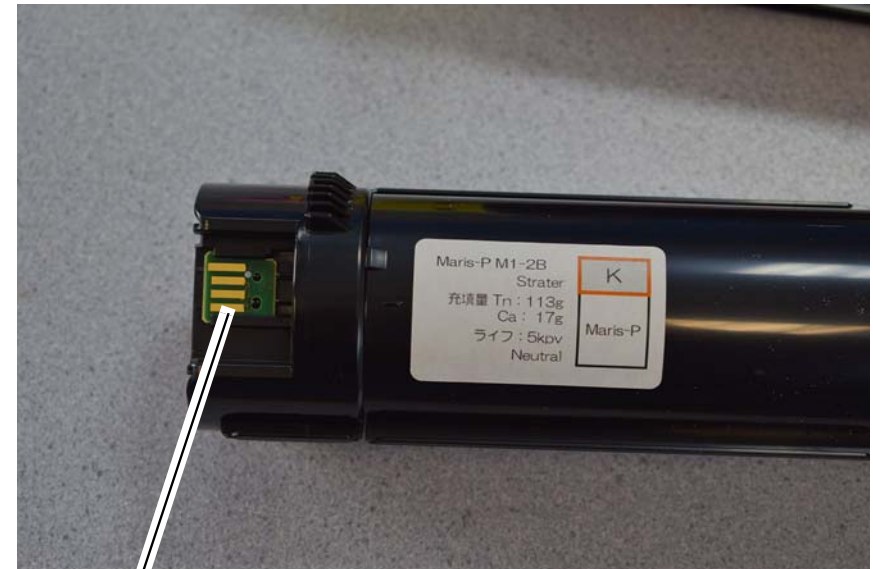
C-5-0197-A

Figure 2 Toner Cartridges

The toner cartridges are each equipped with customer replaceable unit monitor (CRUM). The CRUM monitors and stores information about the customer replaceable unit (CRU). The information stored in the CRUM is used to:

- Monitor CRU usage (total number of copies/prints)
- Indicate how near the CRU is to the end of its life.
- Prevent the installation and use of an unauthorized or incorrect CRU (CRUM checks for Xerox trademark on the CRU)
- Indicate that a new CRU has been installed

The CRUM consists of two components - a CRUM reader and a CRUM PWB. The CRUM PWB is mounted at the rear of the toner cartridge. Refer to [Figure 3](#).



Toner cartridge CRUM PWB

C-5-0198-A

Figure 3 Toner cartridge CRUM PWB

Toner Dispenser

Toner is transported from the toner cartridge to each drum cartridge by a dispenser which contains an auger. The four dispensers are driven by two dispenser motors via dispenser drive assemblies (one for the black and cyan dispenser, [PL 90.05 Item 5](#), one for the yellow and magenta dispenser, [PL 90.05 Item 4](#)), under the control of the automatic toner control (ATC) system.

Refer to [Figure 18](#).

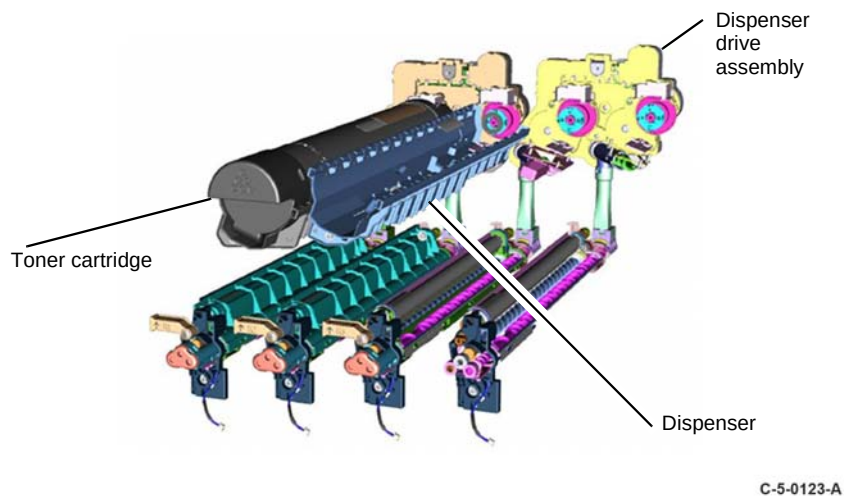


Figure 4 Dispenser assembly

Drum Cartridge (Overview)

The drum cartridge, [PL 90.20](#) is a customer replaceable unit (CRU) with an operational life expectancy of approximately 80 000 pages. The machine will stop operation when end of life is reached and generate a fault code. A message on the UI will inform the customer to replace the cartridge.

Each of the four drum cartridges contains the following components:

- Photoreceptor drum
- Bias charge roll (BCR)
- Drum cartridge CRUM
- BCR and drum cleaning augers

Refer to [Figure 22](#).

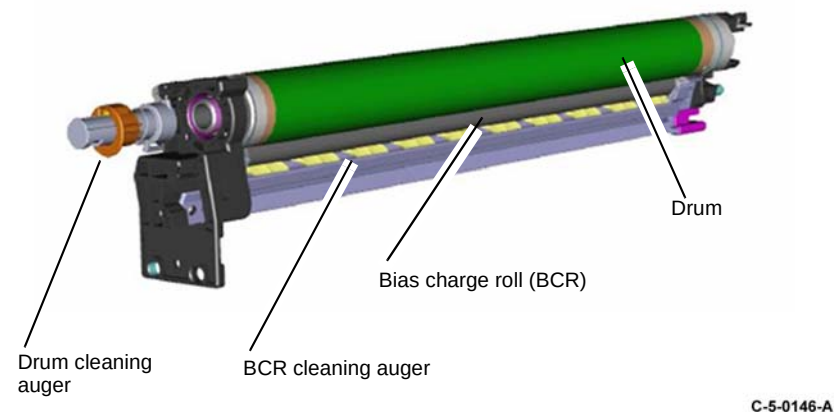


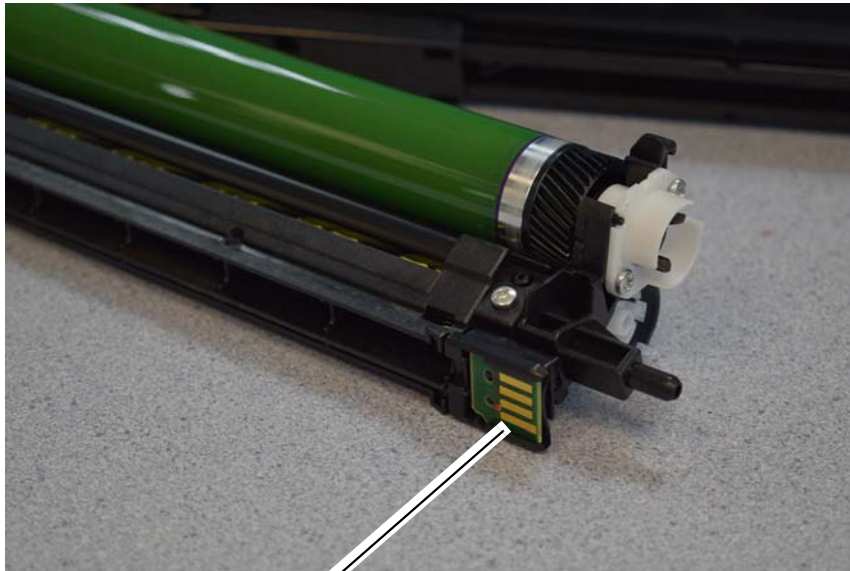
Figure 5 Drum cartridge CRU

NOTE: The drum cartridge is a CRU and is not serviceable.

The drum cartridge is equipped with customer replaceable unit monitor (CRUM). A CRUM monitors and stores information about the customer replaceable unit (CRU). The information stored in the CRUM is used to:

- Monitor CRU usage (total number of copies/prints)
- Indicate how near the CRU is to the end of its life.
- Prevent the installation and use of an unauthorized or incorrect CRU (CRUM checks for Xerox trademark on the CRU)
- Indicate that a new CRU has been installed

The CRUM consists of two components - a CRUM reader and a CRUM PWB. The CRUM PWB is mounted at the rear of the drum cartridge. Refer to [Figure 6](#).



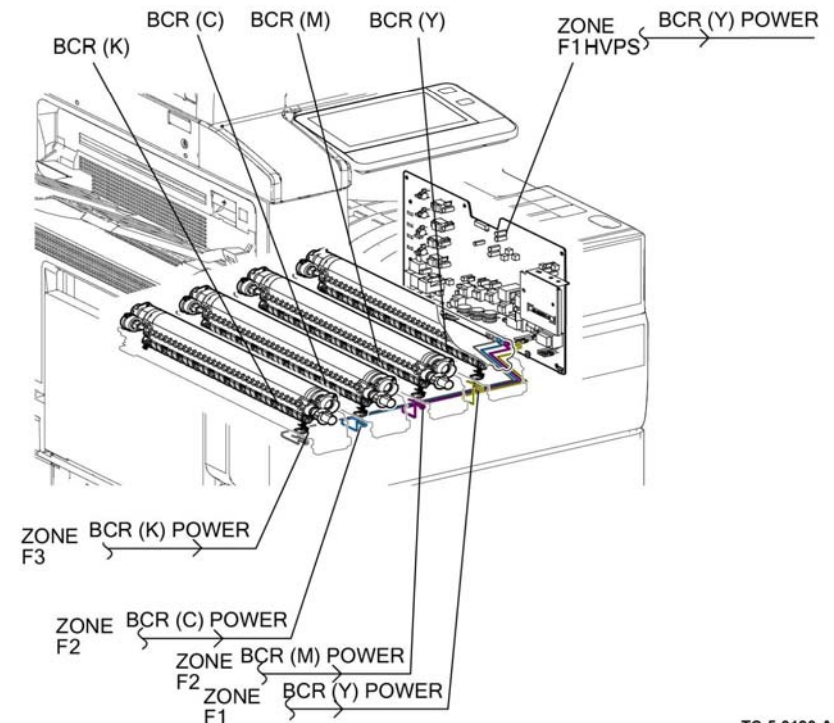
Drum cartridge CRUM PWB

C-5-0199-A

Figure 6 Drum cartridge CRUM

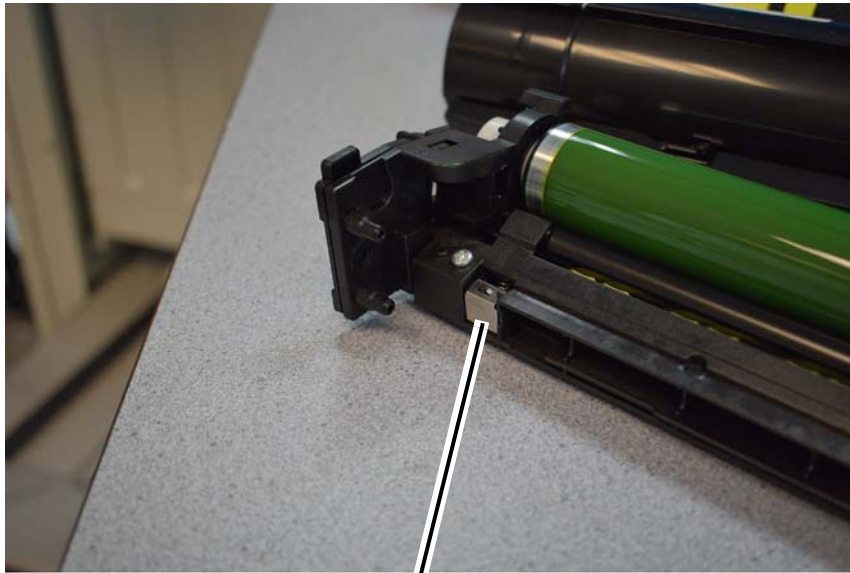
Drum Cartridge (Power)

The high voltages required by the drum cartridge for charging are provided by the high voltage power supply (HVPS), [PL 1.05 Item 7](#), via a high voltage contacts on the guide assembly that supports the cartridge. Refer to [Figure 7](#), [Figure 8](#) and [Figure 9](#).



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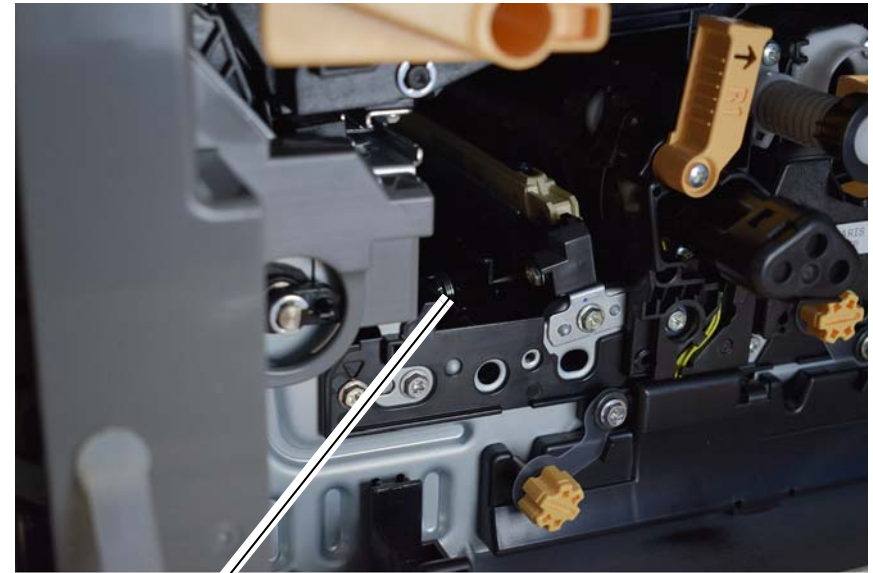
Figure 7 Drum cartridge guide contacts



BCR (charge) high voltage contact

C-5-0200-A

Figure 8 Drum cartridge electrical contact



BCR (charge) high voltage contact

C-5-0201-A

Figure 9 Drum cartridge guide contact

Drum Cartridge (Drive)

The mechanical drive for each of the four photoreceptor drums is provided by the main motor, [PL 40.10 Item 10](#), via the drive assembly [PL 40.10 Item 1](#).

The rotation of the photoreceptor drum drives the drum cleaner auger, which transports used toner to the waste bottle assembly [PL 90.20 Item 4](#). Refer to [Figure 10](#).

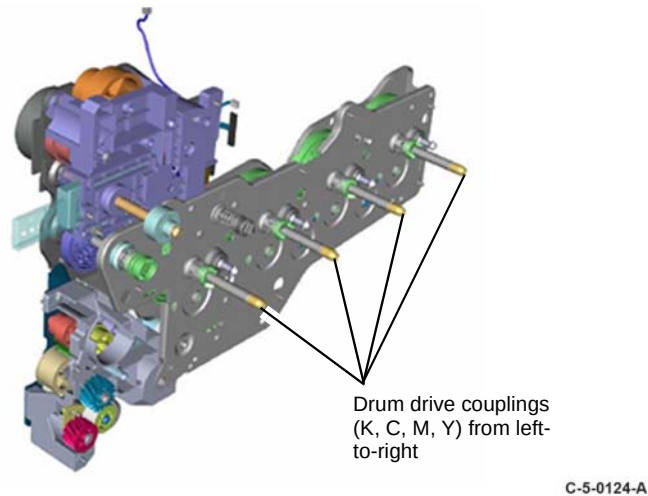
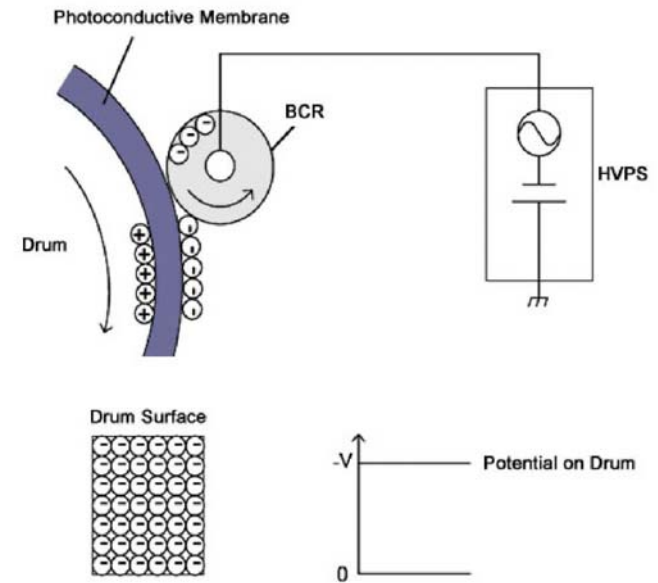


Figure 10 Drum cartridge drive components

Drum Cartridge (Charge)

Within each of the four drum cartridges, the bias charge roll (BCR) is in constant contact with and rotates with the photoreceptor drum. It applies a uniform negative DC voltage charge superimposed with AC voltage on the surface of the photoreceptor, preparing it to be exposed by the LED print head (LPH).

The surface of the drum is a light-sensitive, dispersion undercoat (DUC) membrane. After the photoreceptor's surface receives a uniform charge from the bias charge roller, the LPH exposes (discharges) the image areas. Refer to [Figure 11](#).



TC-5-0155-A

Figure 11 Photoreceptor drum charging

LED Print Head (LPH)

Exposure of the image on each drums is achieved using a dedicated LED print head (LPH), [PL 60.35](#).

The ESS PWB controls the LPH directly via the FFC cable. LPH operation begins when the ESS PWB sends the start instruction and image data to the LPH.

The LEDs are switched on and off based on the image density data from the ESS PWB and the LED light is directed onto the surface of the photoreceptor. The regions of the photoreceptor that are exposed by the LED become discharged, forming the electrostatic latent image that attracts the toner. Refer to [Figure 12](#).

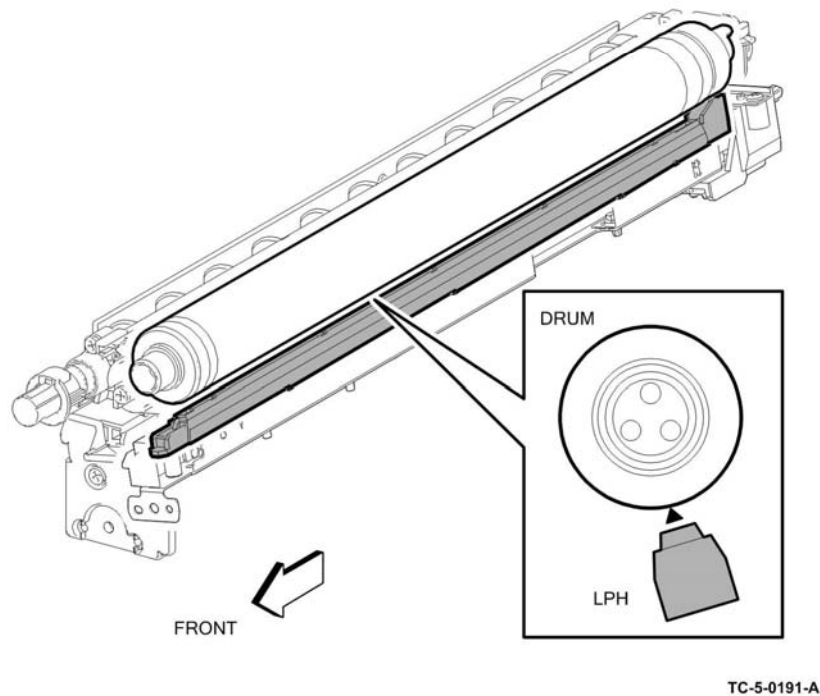


Figure 12 LED print head (LPH)

Developer Unit (Overview)

The four developer units, [PL 90.05](#), are engineer replaceable units (ERU) with an operational life expectancy of approximately 400 000 feeds for 20/25ppm speed machines or 480 000 feeds for 30/35ppm speed machines. The machine will stop operation when developer unit end of life is reached and will generate a fault code.

The drum cartridge contains the following components:

- Developer roll
- Augers (supply and toner reclamation/cleaning augers)
- Automatic toner control (ATC) sensor

Refer to [Figure 13](#).

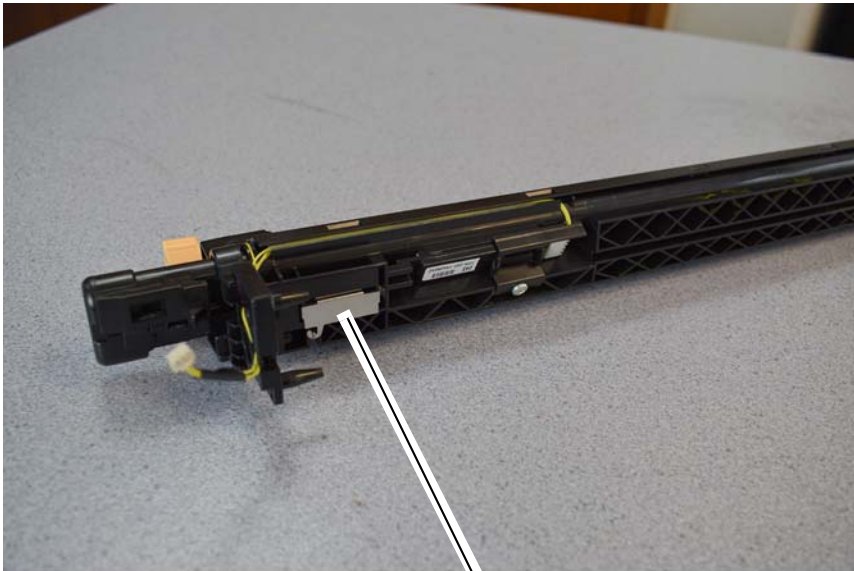


Figure 13 Developer unit

NOTE: The developer unit is an ERU and is not serviceable.

Developer Unit (Power)

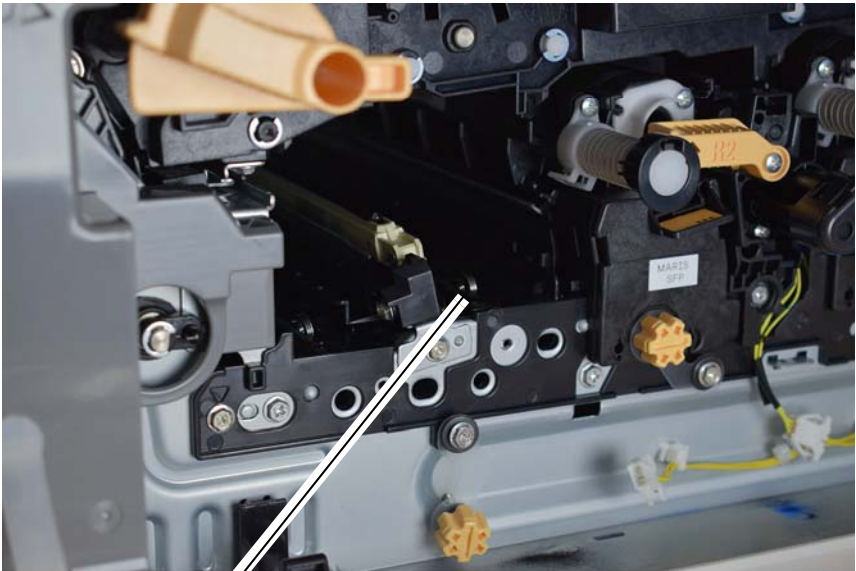
The high voltages required by each developer unit to energize the developer rolls are provided by the high voltage power supply (HVPS), [PL 1.05 Item 7](#), through two high voltage contacts on the guide assembly that supports the developer unit. Refer to [Figure 14](#) and [Figure 15](#).



BCR (charge) high voltage contact

C-5-0204-A

Figure 14 Developer unit electrical contact



BCR (charge) high voltage contact

C-5-0206-A

Figure 15 Developer unit guide contact

Developer Unit (Drive)

The mechanical drive for each of the four developer units is provided by the sub motor, PL 40.10 Item 11, via the drive assembly PL 40.10 Item 1.

The rotation of the developer roll drives the supply auger which transports toner to the developer roll and the developer roll cleaner auger, which transports used toner from the developer roll to the waste bottle assembly PL 90.20 Item 4. Refer to Figure 16.

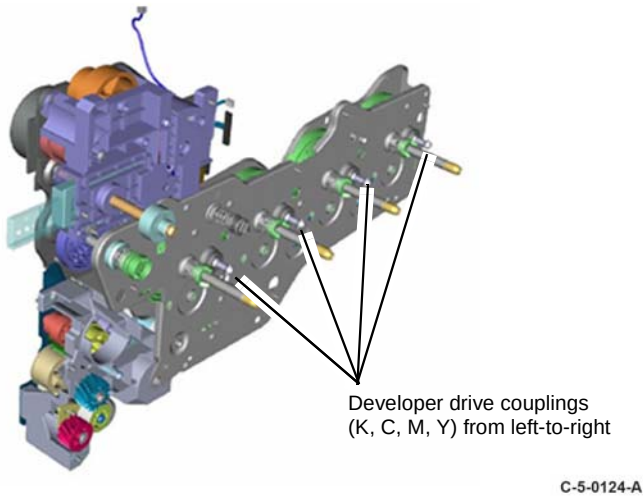


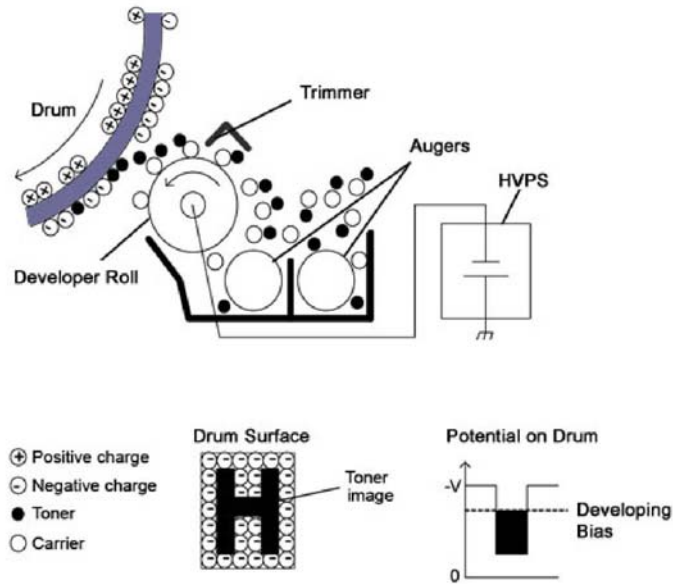
Figure 16 Developer unit drive

Image Development

Toner is supplied from each of the toner cartridges to the corresponding photoreceptor drum by the dispenser assemblies, supply augers and developer rolls. The rotation of the augers mixes the toner and carrier, producing a negative charge on the toner.

Each developer roll has a magnetic core which causes a brush to form at its surface. The height of the brush is controlled by the trimmer blade. The brush contacts the photoreceptor drum and the toner is attracted to the latent image formed by exposure to the LPH, that is, to the areas that have a reduced negative charge.

A developer bias voltage that is applied to the developer roll controls the development process and gives cleaner background areas. The developer bias voltage is modified based on the user's selections on the UI. Darker images require a greater amount of negative charge to be applied than lighter images. Refer to Figure 17 and Figure 18.



TC-5-0156-A

Figure 17 Drum cartridge development principle

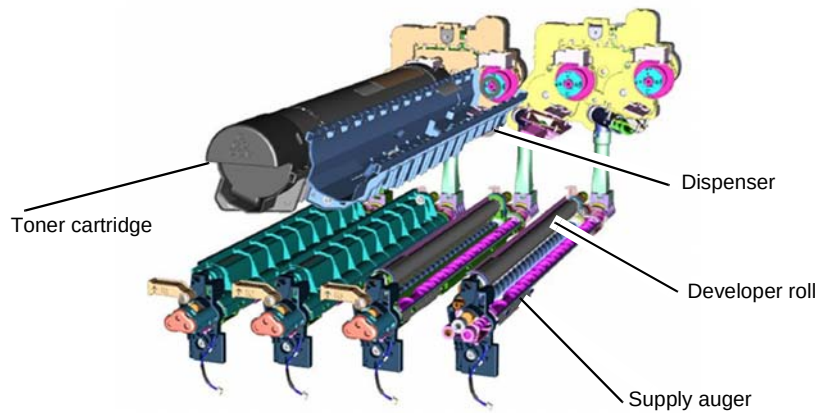


Figure 18 Image development

C-5-0123-A

IBT Unit

The Intermediate Belt Transfer (IBT) unit is an engineer replaceable unit (ERU) with an expected life of 20000K prints. The IBT unit contains the transfer belt and four 1st Bias Transfer Rolls (1st BTR) to facilitate the first image transfer from all four photoreceptor drums.

Mechanical drive for the IBT units is provided by the main motor, [PL 40.10 Item 10](#), via the drive assembly [PL 40.10 Item 1](#).

Refer to [Figure 19](#).

NOTE: [Figure 19](#) shows the IBT unit with the transfer belt removed for easier identification of the components.

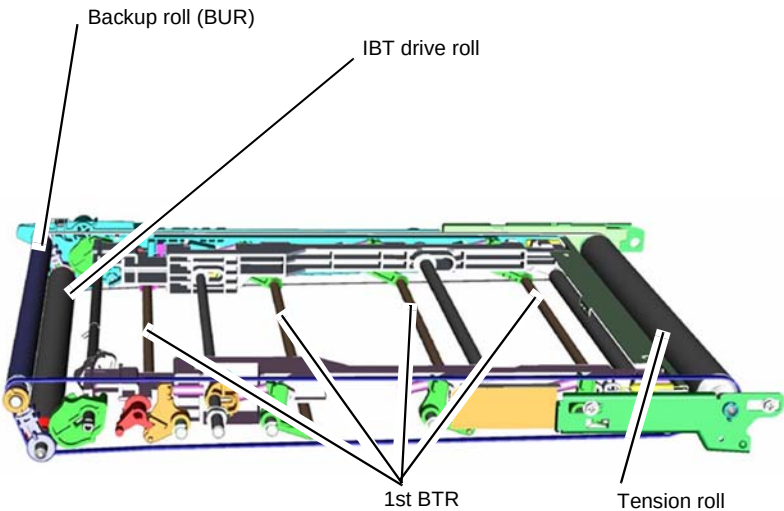


Figure 19 IBT Unit

Transfer

1st Transfer

The toner image is transferred first from the photoreceptor drum to the surface of the IBT belt by the 1st bias transfer roll (1st BTR). The 1st BTR is constructed of a metal shaft surrounded by a soft, conductive urethane roll which has a positive charge. As the photoreceptor and BTR rotate together, the positive charge of the BTR attracts the negative charge of the toner from the photoreceptor drum to the transfer belt. This process is repeated for all four colors to build up the image on the transfer belt.

IBT Unit greyscale and full-color mode switching

In order to reduce wear on the cyan, yellow and magenta photoreceptor drums when operating in greyscale modes, the drive PWB energizes the link solenoid allowing the fuser motor, via the YMC rack gear, to drive a set of cams that retract the yellow, cyan and magenta 1st BTRs, lifting the transfer belt away from the yellow, cyan and magenta photoreceptor drums. The YMC link sensor monitors the position of the YMC rack gear. Refer to [Figure 20](#).

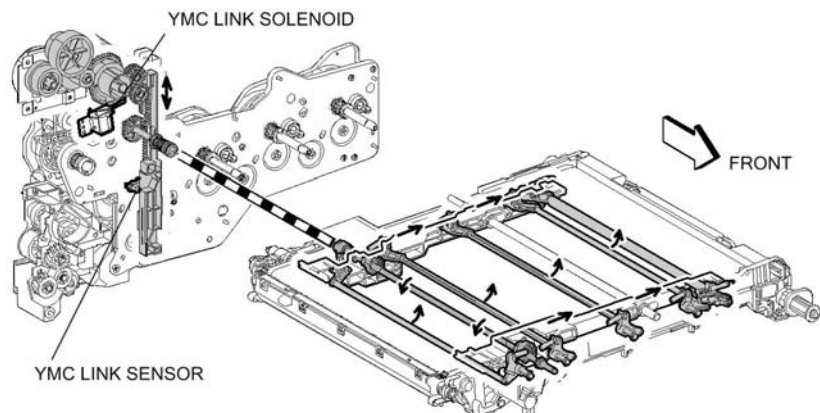


Figure 20 IBT Unit mode switching

2nd Transfer

The toner image is transferred from the IBT unit transfer belt to the surface of the paper using the 2nd bias transfer roll (2nd BTR). The 2nd BTR is constructed of a metal shaft surrounded by a soft, conductive urethane roll which has a positive charge. As the transfer belt and paper pass between the 2nd BTR and Back Up Roll (BUR), the positive charge of the 2nd BTR attracts the negatively charged toner to the paper.

The paper is released from the transfer belt by the detack saw. A voltage is applied to the detack saw to eliminate the charge on the paper. Refer to [Figure 21](#).

NOTE: The detack saw is part of the 2nd roll assembly, [PL 90.40 Item 5](#).



L/H cover

2nd Bias transfer
roll

Detack saw

C-5-0202-A

Figure 21 2nd BTR

Drum Cartridge and Transfer Belt Cleaning

As each of the four photoreceptor drums and BCRs rotate, their surfaces are cleaned by the cleaning augers contained within the drum cartridges. The IBT transfer belt is cleaned by the IBT cleaner assembly. The drum cartridge and IBT cleaning assembly augers are driven by the main motor.

After transfer, the drum cartridge augers strip the photoreceptor drum and BCR and transport the used toner directly to the waste toner bottle at the front of the print engine, Refer to [Figure 22](#).

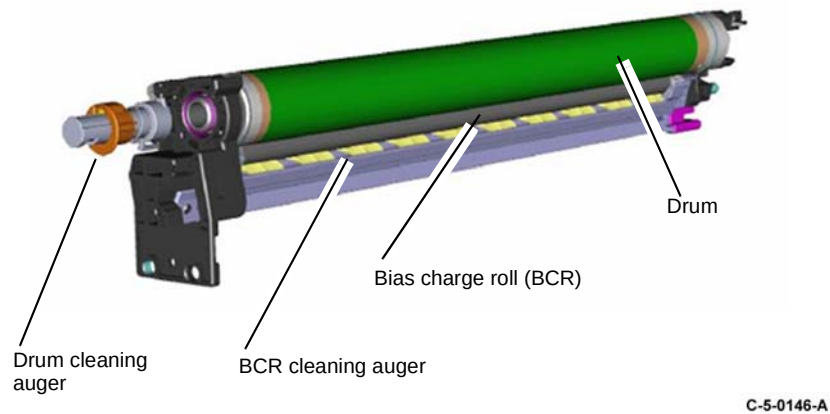


Figure 22 Drum and BCR cleaning

The IBT cleaner assembly, [PL 90.45 Item 2](#), employs a cleaning blade and an auger to strip the belt and transport the used toner to the waste toner bottle.

Waste toner assembly

The waste toner assembly, [PL 90.20 Item 4](#), includes the waste toner bottle and the internal waste toner auger. The waste toner bottle is fed by the augers in the drum cartridges and the IBT Cleaner Assembly via the trickle outlet shutters, [Figure 23](#). Drive to the internal waste auger is provided by the sub motor via the registration roll, [Figure 24](#). When the waste toner full sensor is activated the a fault is reported to alert the customer to empty the waste toner bottle.

The waste toner assembly full sensor, [PL 90.20 Item 1](#), detects the waste toner bottle fill level via the waste toner full sensor window, [Figure 23](#).

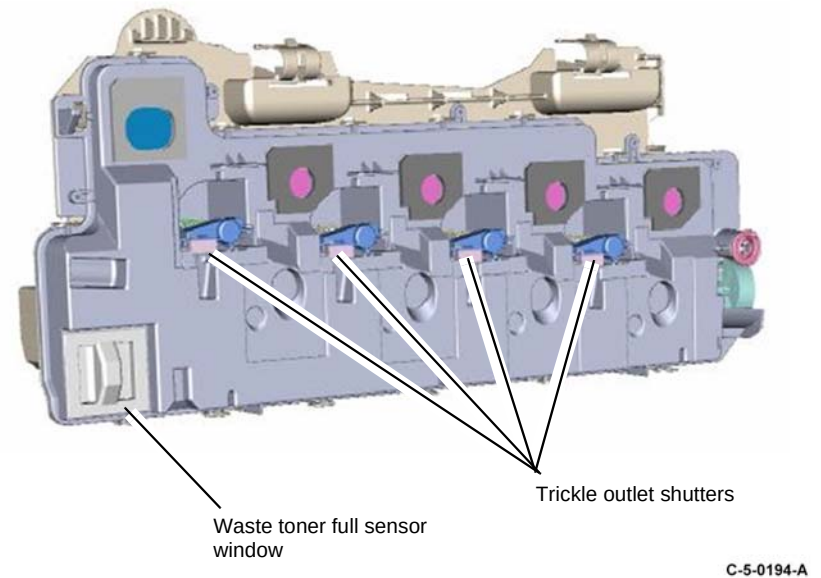
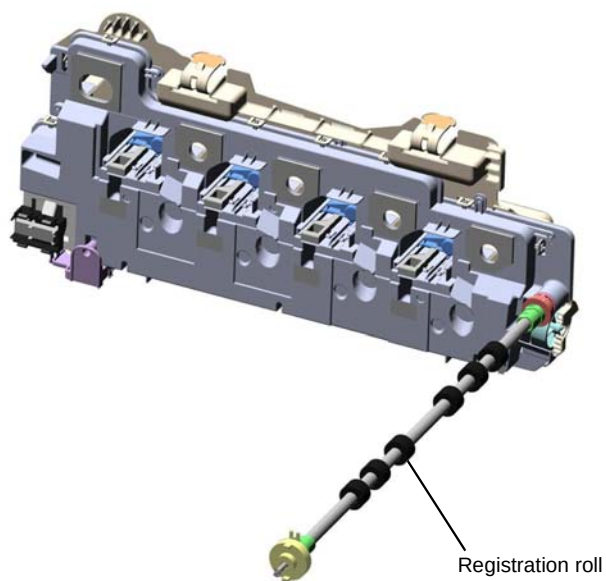


Figure 23 Waste toner bottle



C-5-0195-A

Figure 24 Waste toner bottle drive

Process Control

Overview

Process control maintains image quality by compensating for temperature and humidity changes and the aging of machine components. In part, this involves controlling the charge potential of the BCR and the light output from the LPH. Image quality deterioration also occurs as the photoconductive layer on the photoreceptor drum wears with increased use.

Process control uses inputs from the:

- CRUMs
- Environment sensor
- Automatic toner control (ATC) sensor
- Marks on belt (MOB) sensor
- MOB / Automatic density control (ADC) sensor

The environmental sensor mounted on the inside rear of the IOT, [PL 90.20 Item 13](#), monitors the environmental conditions inside the machine.

The ATC sensor (mounted to the drum cartridge, [PL 90.20 Item 1](#)) monitors the toner concentration inside the drum cartridge.

The MOB and ADC sensors (mounted in the MOB ADC assembly at the front left of the IOT, [PL 90.40 Item 6](#)), monitors the toner concentration on the transfer belt.

Process control uses the information from the above sources to:

- Alter the BCR voltage as required
- Alter the LPH light intensity
- Control the toner dispense rate

Process Control: Sensor Checks

Environmental Sensor Check

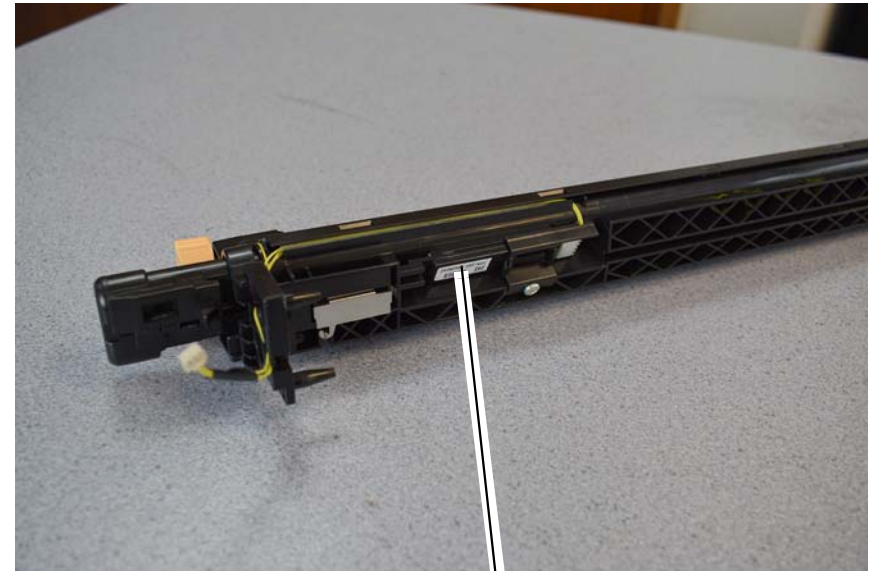
When the power is ON, the environmental sensor values are continuously monitored to measure the temperature and humidity in the machine. The environmental sensor is mounted on the inside rear of the IOT, [PL 90.20 Item 13](#).

ATC Sensor Check

Each of the four ATC sensors checks the toner concentration while the developer roll is being driven. The method is as follows:

- The ATC sensor output is read at predetermined intervals.
- The read values, excluding some of the highest and lowest, are averaged.
- The difference between maximum and minimum values is calculated.
- The average read value is corrected to determine the ATC output value (current toner concentration).

After an ATC sensor check, the ATC target value is calculated. To calculate the ATC target value, the temperature and humidity correction values calculated from the environment sensor value in the machine and the developing material deterioration correction value calculated from the cumulative drum rotation time are added to the standard ATC target value. Refer to [Figure 25](#).



ATC sensor

C-5-0204-A

Figure 25 ATC Sensor

Process Control: Charge Control and Exposure Control

Charge Control

Charge control corrects the charge voltage (the BCR output). Charge control correction factors include temperature and humidity and the cumulative number of drum rotations. These values are added to calculate the charge voltage correction value. Charge control occurs at the following times:

- At power on
- On return from power save mode
- At the start of a print job

Refer to [Figure 26](#).

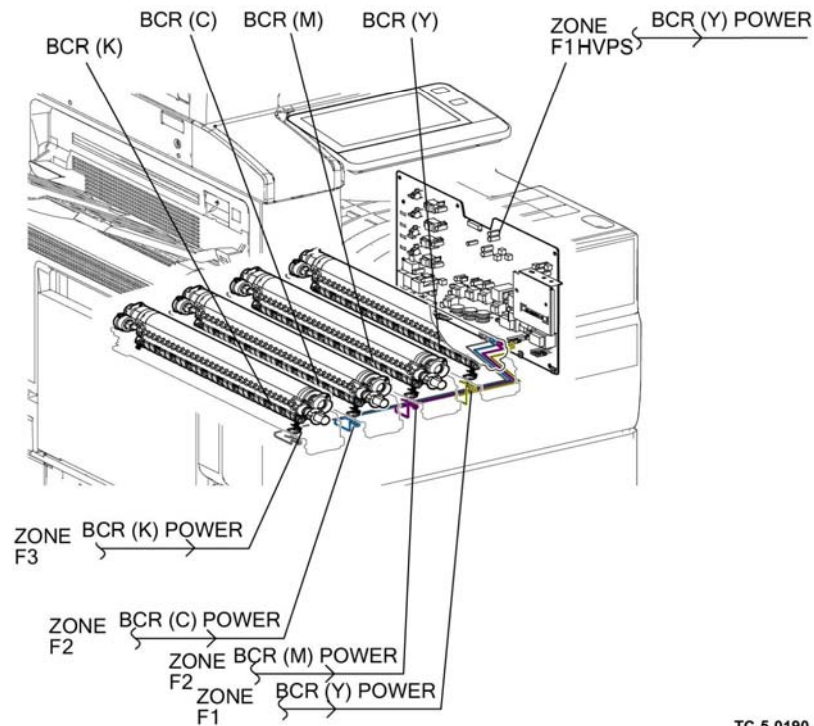


Figure 26 Charge control

Exposure Control

Exposure control corrects the quantity of LED light for image exposure on the photoreceptor drum. Correction factors for temperature and humidity, cumulative number of drum rotations, and no-toner state detection are added to calculate the exposure correction value. Exposure control occurs at the following times:

- At power on
- On return from Power Save Mode
- At the start of a print job
- When the print count reaches a predetermined level

Refer to [Figure 27](#).

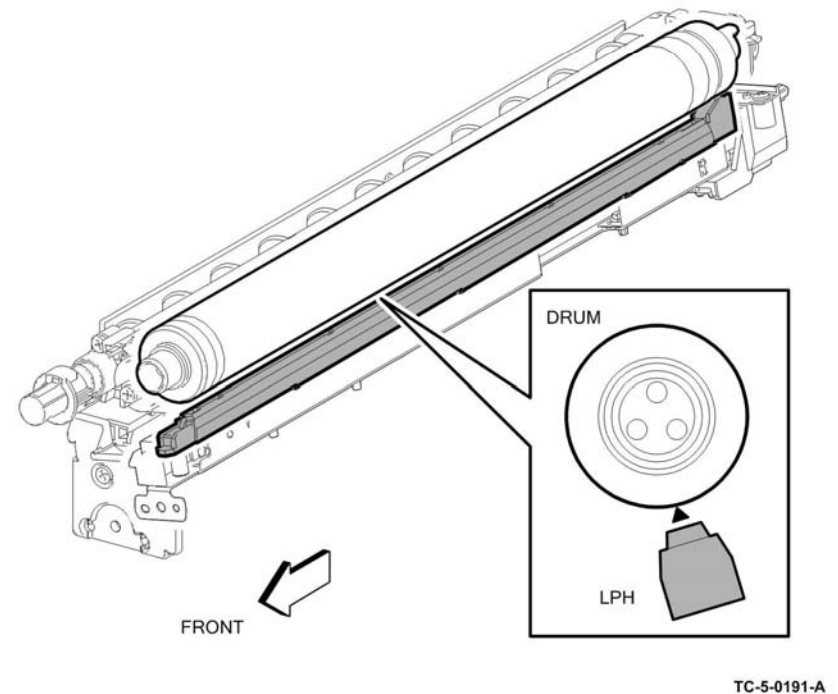


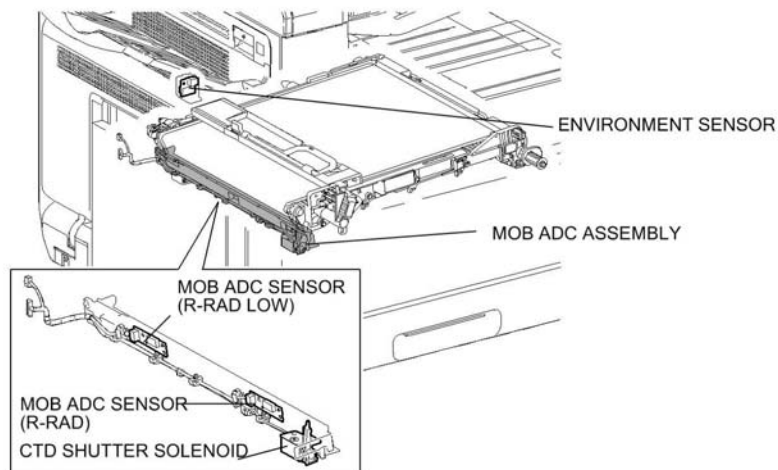
Figure 27 Exposure control

Process Control: Automatic Density Control

Image density control uses the Automatic Density Control (ADC) and Marks On Belt (MOB) sensors, [Figure 28](#), to read the density of ADC patches that are developed on the transfer belt. Process control then compensates for the difference between the reading and an ADC Target Value by controlling the electrical potentials, [Figure 29](#).

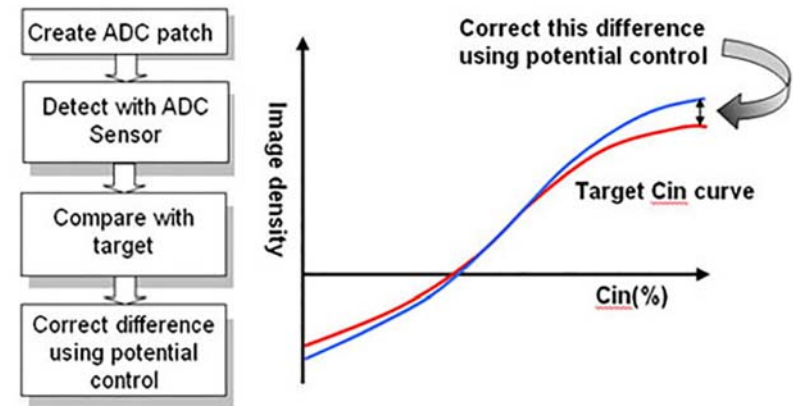
The ADC Patch is generated at specified times, such as at Power ON, at recovery from Sleep Mode, at the start, during, and at the end of a job. If the measured density of the ADC patch is lighter than the target, the machine controls the drum charging potential, developer bias, and LPH light quantity to bring the density closer to the ADC target.

Refer to [Figure 29](#).



TC-5-0208-A

Figure 28 ADC/MOB sensors



TC-5-0207-A

Figure 29 Automatic density control

Process Control: Toner Dispensing

This control function supplies toner from the toner cartridge to the drum cartridge to maintain optimum toner concentration. The control logic calculates the dispensing time using ICDC and ATC.

ATC Dispensing

The dispense time is calculated from the toner concentration in the developing unit. The difference between the ATC target value and the ATC output value is calculated. From this difference, the ATC dispense time is calculated.

ICDC Dispensing

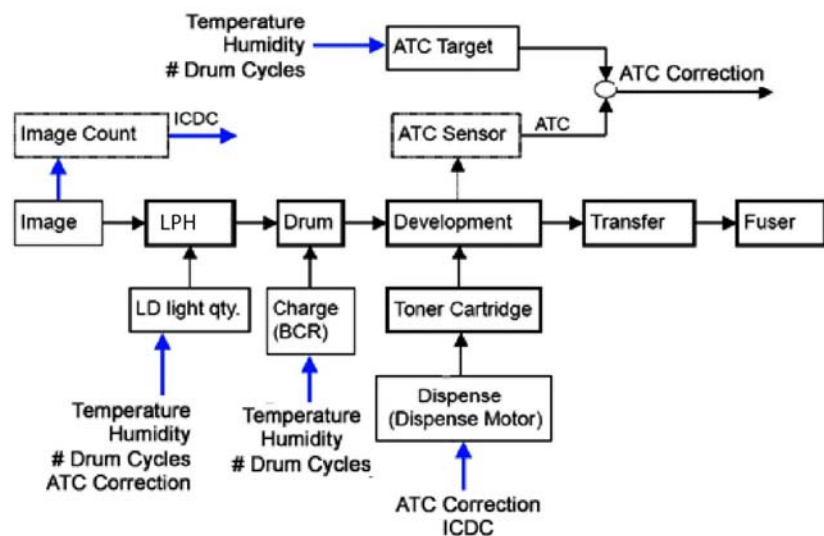
The dispense time is calculated from the number of pixels in image data. From each print, the pixels per page are counted. From the ICDC count, the dispense time per sheet is calculated.

Dispense Motor Drive

The dispense motor is driven for the dispense time calculated from ATC and ICDC.

NOTE: Toner dispense may be set in the NVMs to timed dispense, ICDC dispense, or dispense based on ATC control. When either timed or ICDC dispense is selected, ATC s will not be reported but TC will be out of control. The preferred (default) setting allows Toner Control to manage dispense.

Refer to Figure 30.



TC-5-0209-A

Figure 30 Toner dispensing control

Fusing/Copy Transportation

Fuser Overview

The fuser module bonds the toner to the paper by applying heat and pressure. This process melts the toner and fuses it to the paper.

The fuser module consists of a main heat roll, a fusing belt, thermostats, thermistors, and stripper blade.

NOTE: There are no spare parts in the fuser assembly. The fuser is replaced as an assembly.

Refer to [Figure 1](#).



Fuser

C-5-0167-A

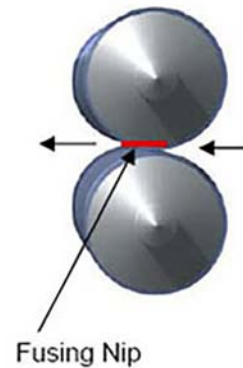
Figure 1 Fuser

Fusing works using a free belt nip fusing mechanism consisting of a heat roll, and with a fusing belt in place of a pressure roll. The heat roll consists of a thin steel tube coated with teflon to control the build-up of static and an anti-wear agent. The heat roll and fuser belt are in constant contact during fusing, [Figure 2](#). The stripper blade physically removes the paper from the heat roll during processing. The heat roll receives drive from the main motor through a system of gears. The fusing belt is driven by the friction applied from the heat roll.

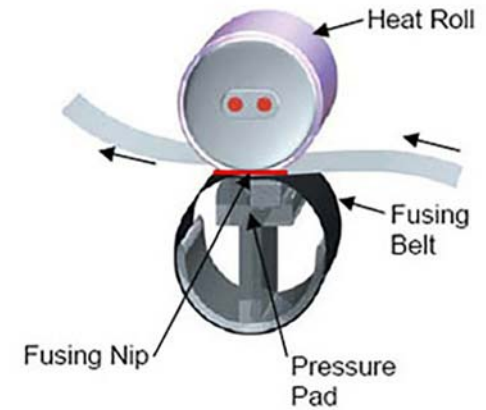
The heat roll is heated by main and sub heat rods. The two rods are used in various combinations depending on the operating conditions to achieve an even temperature along the entire length of the heat roll.

The fuser temperature control is managed by two thermostats, the fuser non-contact (NC) sensor and the fuser thermistor, [Figure 3](#).

Conventional Fusing

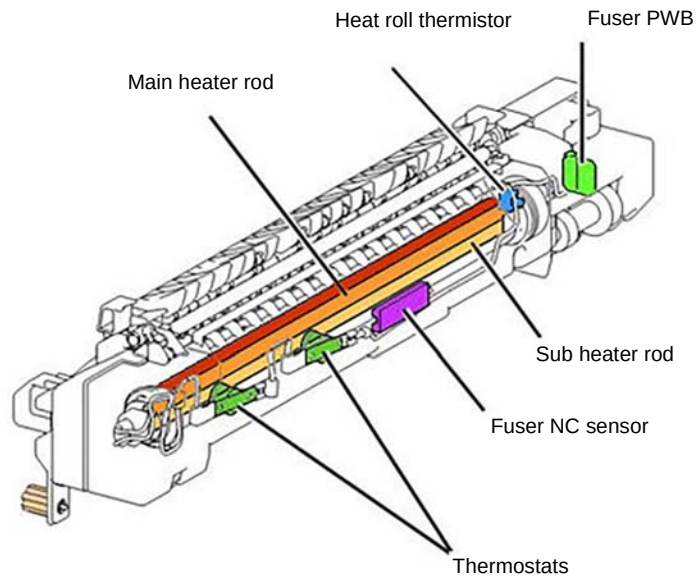


Free Belt Nip Fuser



TC-5-0168-A

Figure 2 Free belt nip fuser



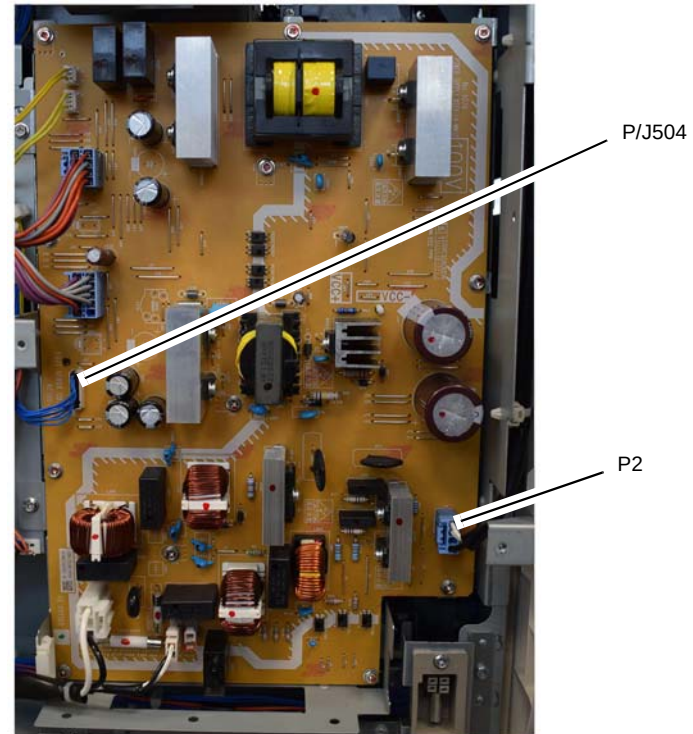
C-5-0169-A

Figure 3 Fuser main components

Fuser Power

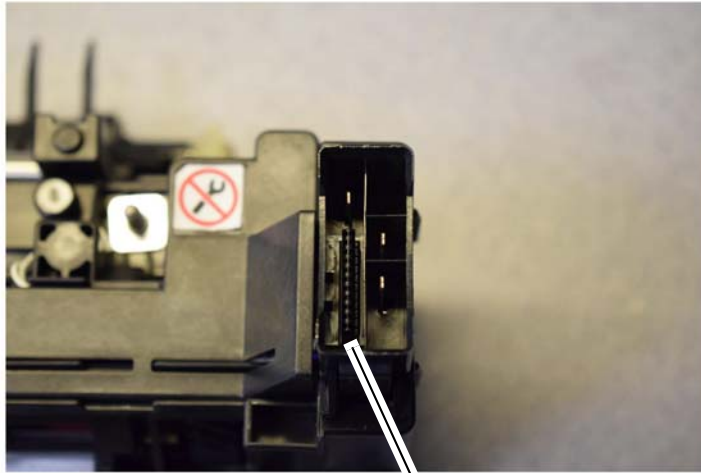
The main and sub heater on signal is supplied from P/J419 on the drive PWB, [PL 1.10 Item 3](#) to P/J 504 on the LVPS, [PL 1.10 Item 1](#). With the fuser relay energized, power is supplied from P2 on the LVPS, [Figure 4](#), to the fuser power connector, [Figure 5](#). Refer to [BSD 10.2 Fusing Heat Control \(1 of 2\)](#).

The drive PWB controls fusing temperature as required by the temperature control logic.



C-5-0175-A

Figure 4 Fuser power (LVPS)



Fuser connector

C-5-0171-A

Figure 5 Fuser connector

Fuser Life

The fuser assembly is an customer replaceable unit (CRU). The life of the fuser assembly is 100K feeds.

The fuser may require more frequent replacement if any of the following usage factors exist:

- Area coverage exceeds 5%
- Paper larger than letter size is commonly printed
- Printing short-edge feed
- Printing on specialty media

Print Quantity Counter (Counter 1):

Fuser counter 1 increments each time the fuser exit sensor turns OFF.

Each A4 LEF fed sheet is counted as 10 HFSI counts. When the HFSI counter (chain-link 954-850) reaches a value of 1,000,000 (100,000 x 10), the CSE will be notified on the HFSI counter UI diagnostics screen that the fuser should be replaced. Note that the machine and fuser will continue to run if the fuser is not replaced at this time.

Total Power On Time Counter (Counter 2):

Fuser counter 2 increments a count of 1 for each second of machine power on time.

The fuser assembly will also age/degrade due to extended usage time. The ON time HFSI counter (chain-link 954-851) keeps track of machine ON time in seconds. When this HFSI reaches a count of 18,000,000 seconds (approximately 208 days), the CSE will be notified on the HFSI counter UI diagnostics screen that the fuser should be replaced. Note that the machine and fuser will continue to run if the fuser is not replaced at this time.

After installing a new fuser, the HFSI counters are reset automatically. Refer to [Figure 6](#).



Fuser

Figure 6 Fuser replacement

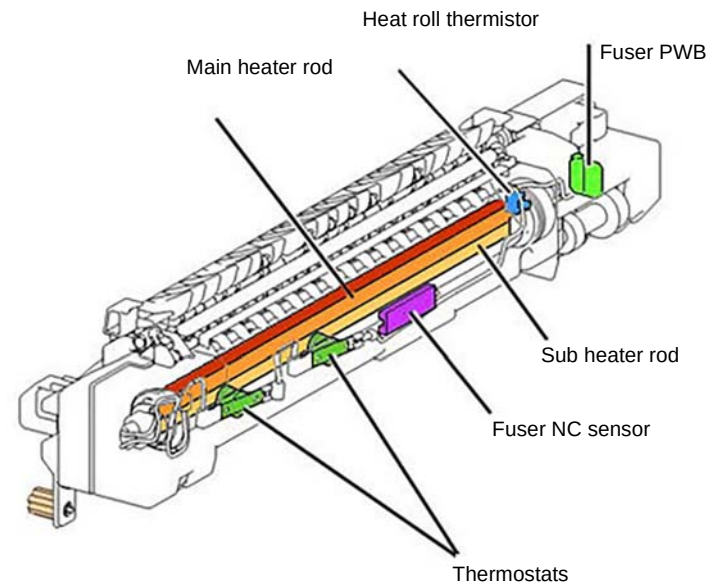
C-5-0176-A

Fuser Temperature Control

The heat roll temperature is monitored by the fuser non-contact sensor in the center of the heat roll and a soft-touch thermistor at the rear end of the heat roll. Each sensor measures the temperature in its region then provides temperature information to the drive PWB. [Figure 7](#).

The drive PWB logic uses the inputs from the sensors to control the fusing temperature by switching the heat rods on and off as required, refer to [BSD 10.2 Fusing Heat Control \(1 of 2\)](#).

The thermostats, located near the center and the front of the heat roll, provide over temperature protection. When the surface temperature of the heat roll exceeds a predetermined value, the thermostat opens, de-energizing the fuser relay and cutting off the current to the heat rods, refer to [BSD 10.2 Fusing Heat Control \(1 of 2\)](#), [Figure 7](#).

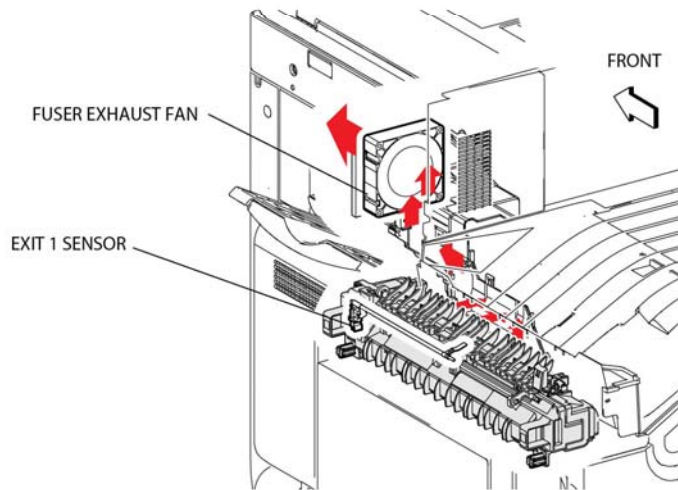


C-5-0169-A

Figure 7 Fusing temperature control

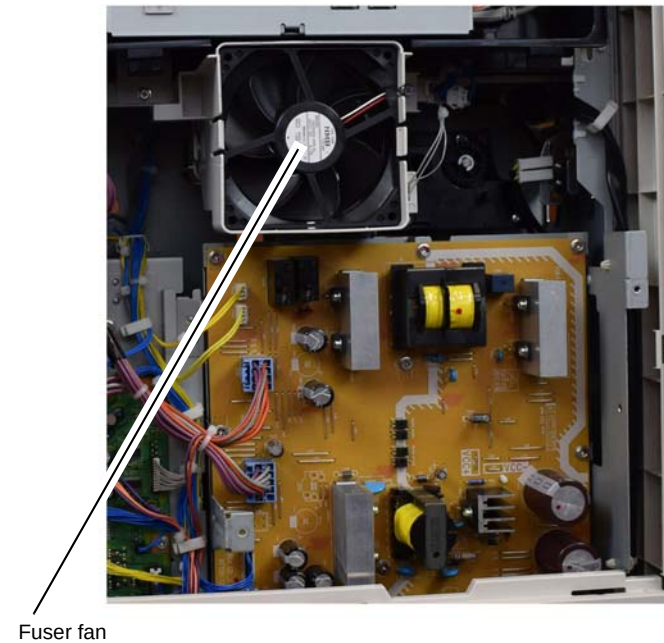
Fuser Cooling

The fuser fan, PL 40.15 Item 4, exhausts heated air from the fuser area via the ducting. Refer to Figure 8 and Figure 9.



TC-5-0172-A

Figure 8 Fuser cooling ducting



C-5-0170-A

Figure 9 Fuser cooling fan

Print Transportation Overview

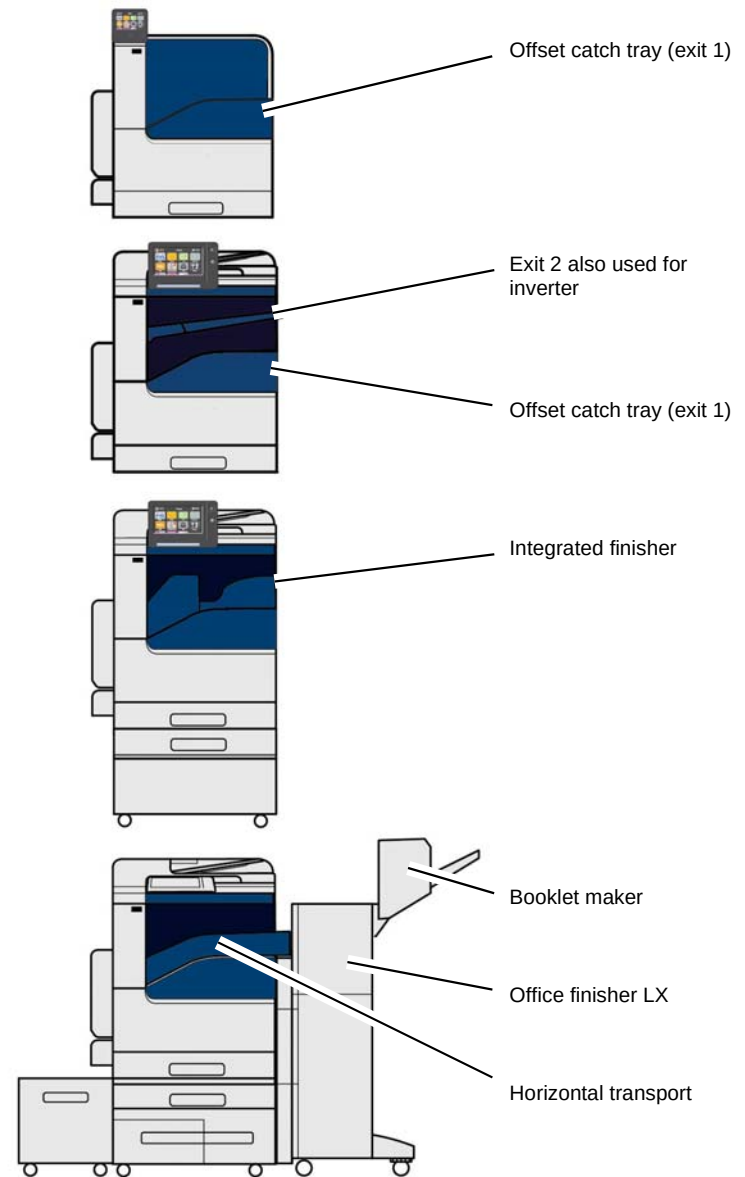
Overview

Prints exiting the fuser may go to any one of the following:

- To the output catch tray (exit 1) as single sheets or offset stacks.
- The integrated office finisher (exit 1).
- The horizontal transport (exit 1) to the office finisher LX.
- To the centre catch tray (exit 2) as single sheets. Exit 2 has no output sheet offset capability.
- To the inverter (exit 2) for side two registration and printing.

Refer to [Figure 10](#).

For full details of finisher compatibility refer to [Machine Configurations](#).



C-5-0183-A

Figure 10 Finisher configurations

Print Transportation

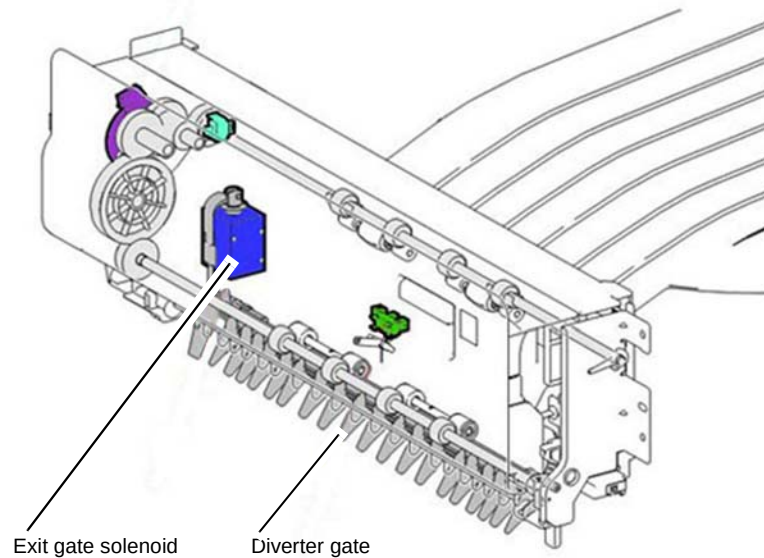
Exit 1

The exit gate solenoid is normally de-energized. With the solenoid in this state, the diverter gate directs prints to exit 1.

Based on the configuration of the system, exit 1 directs prints to either the:

- Output catch tray
- Horizontal transport when an office finisher LX is installed
- Integrated office finisher

Refer to [Figure 11](#).



C-5-0182-A

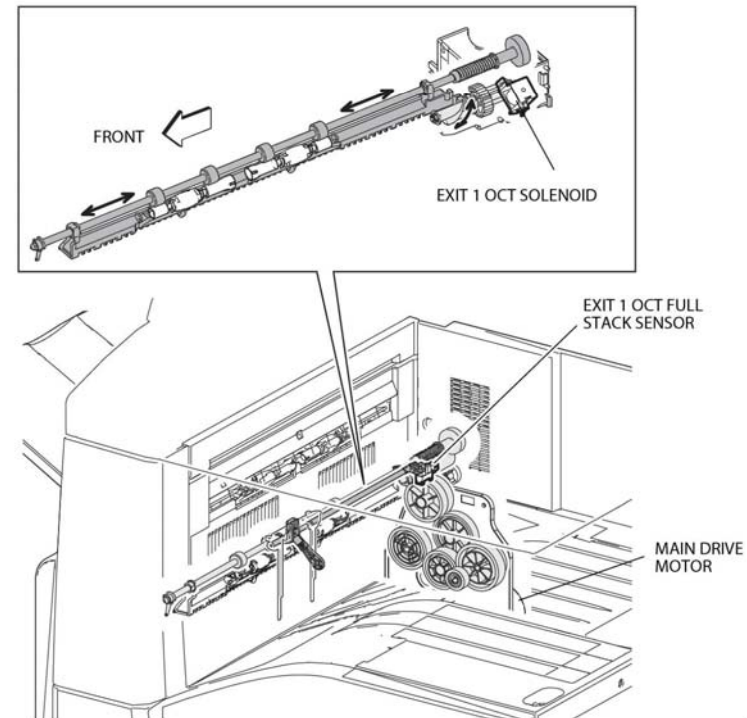
Figure 11 Diverter gate

Exit 1: Stacking

The exit 1 roller, exit 1 OCT full stack sensor and exit 1 OCT solenoid are used to offset print sets as they exit the machine. The output paper will be stacked in different positions by the movement of the exit 1 roller.

The exit 1 OCT solenoid moves the exit 1 roller toward the front or rear to offset the sheet or set. The exit 1 OCT full stack sensor monitors the position of the exit 1 roller.

Drive for the exit 1 roller is obtained from the main motor through a system of gears. Refer to [Figure 12](#).



TC-5-0184-A

Figure 12 Exit 1 stacking

Exit 2

A specified time after the paper is detected by the fuser exit sensor, the exit 2 motor is turned On, driving the inverter roll and the exit 2 roll. Prints are directed to exit 2 when the exit gate solenoid actuates the diverter gate, directing prints past exit 1

The signal from the fuser exit sensor, assists in controlling the operation of the exit 2 motor (stop and reverse timing) and actuation of the exit gate solenoid, both for duplex printing. Its signal also enables the control logic to count finished prints. The signal from the exit 2 sensor, [PL 10.22 Item 12](#), is used for jam detection in the exit area and to monitor completed prints as they exit to exit 2 Refer to [Figure 13](#).

NOTE: Because there is no face up tray option, there is neither a face up solenoid nor an exit 2 gate. Prints travel from the exit 1 area to exit 2 through baffles.

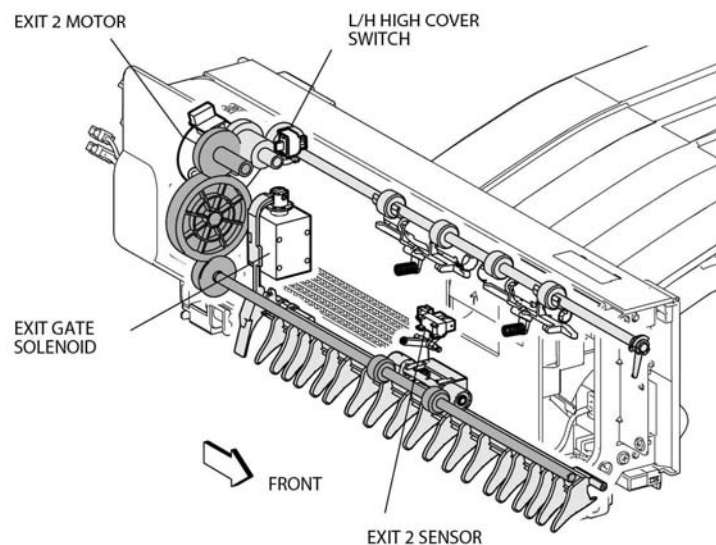


Figure 13 Exit 2

Duplex Printing

The duplex printing function first prints the front side of the sheet and then ejects the lead edge of that sheet into the exit 2 tray.

After the trail edge of the sheet passes the diverter gate, the paper is inverted, drawn into the duplex path, and returned to the registration unit for side 2 printing. Refer to [Figure 14](#).

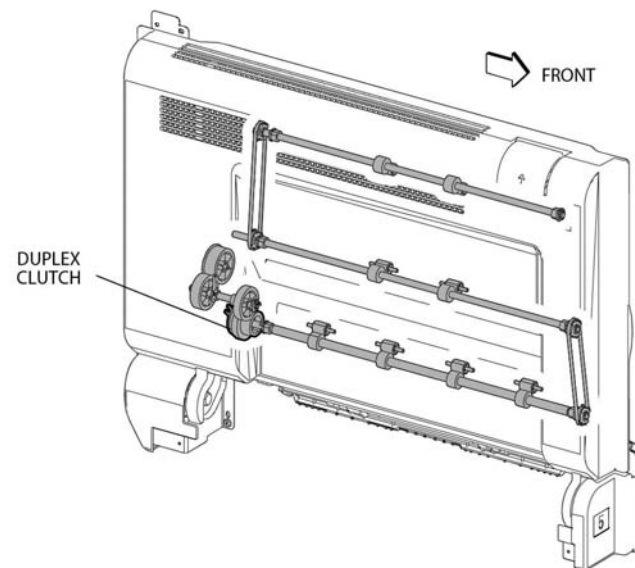


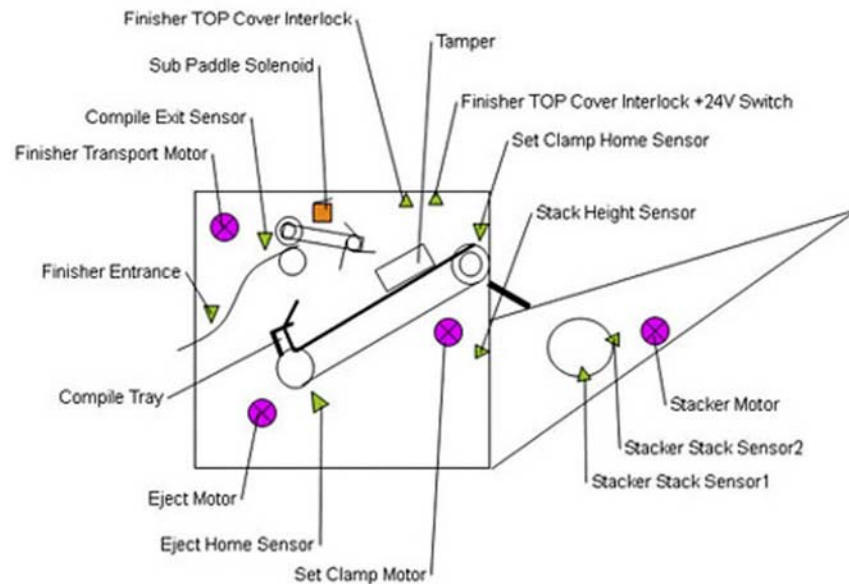
Figure 14 Duplex printing

Integrated Office Finisher

Overview

The Integrated Office Finisher transports prints from the IOT to the compile tray where they are compiled and tamped into sets. The sets then are stapled and or offset (as specified) and delivered to the stack tray.

As the paper is transported past multiple sensors, signals are sent to the finisher PWB control logic that regulate various motors and solenoids used in the Integrated Office Finisher. Refer to [Figure 1](#).



TC-5-0002-A

Figure 1 Components overview

Supported Paper Sizes

The Integrated Office Finisher is capable of handling a wide range of paper sizes, including post cards and envelopes. The sizes of paper for which the stack tray, stapling function, or off-set function is available are listed on the paper sizes for integrated finishers pdf.

Maximum Paper Quantity for Stapling

Small-sized paper: (paper with a lead edge length of 297mm or less such as A4 (LEF/SEF) or 8.5x11 (LEF/SEF)) - **50 sheets** (24lb/90gsm or less) or equivalent. Paper quantity for stapling can be changed in NVM from 10 to 70 sheets but stapling 51 or more sheets of paper is not guaranteed.

Large-sized paper: (paper with a lead edge length of more than 297mm such as 8.5x14 (SEF) or A3 (SEF)) - **30 sheets** (24lb/90 gsm or less) or equivalent. Paper quantity for stapling can be changed in NVM. (10 to 50 sheets)

Mixed sizes of paper: Sheets of paper of the same width can be stapled, however, if even one sheet of paper that is equivalent to a large size is included in a set, the value for large size paper is used as the limiting quantity. There is no stapling option available for mixed sizes of paper of different widths.

Refer to [Figure 2](#) for paper sizes for the integrated office finisher.

Paper Size	Direction	Fast Scan Width FS (MM)	Slow Scan Length SS (MM)	Stack Tray	Staple	Offset
A6	SEF	105.0	148.0	O	X	X
	LEF	148.0	105.0	X	X	X
A5	SEF	148.0	210.0	O	X	X
	LEF	210.0	148.0	O	X	O
A4	SEF	210.0	297.0	O	O	O
	LEF	297.0	210.0	O	O	O
A3	SEF	297.0	420.0	O	O	O
B6	SEF	128.0	182.0	O	X	X
	LEF	182.0	128.0	O	X	X
B5	SEF	182.0	257.0	O	X	X
	LEF	257.0	182.0	O	O	O
B4	SEF	257.0	364.0	O	O	O
	LEF	364.0	257.0	O	O	O
5.5X8.5 (Statement)	SEF	139.7	215.9	O	X	X
	LEF	215.9	139.7	O	X	O
7.25X10.5 (Executive)	SEF	184.2	266.7	O	X	X
	LEF	266.7	184.2	O	O	O
8X10	SEF	203.2	254.0	O	X	X
	LEF	254.0	203.2	O	X	O
8.5X11 (Letter)	SEF	215.9	279.4	O	O	O
	LEF	279.4	215.9	O	O	O
8.46X12.4	SEF	215.0	315.0	O	X	X
8.5X13	SEF	215.9	330.2	O	O	O
8.5X14 (Legal)	SEF	215.9	355.6	O	O	O
11X15	SEF	279.4	381.0	O	X	X
11X17 (Ledger)	SEF	279.4	431.8	O	O	O
12X18	SEF	304.8	457.2	X	X	X
SRA3 (12.6X17.7)	SEF	320.0	450.0	X	X	X
16 kai (Taiwan)	SEF	194.0	267.0	O	X	O
	LEF	267.0	194.0	O	O	O
8 kai (Taiwan)	SEF	267.0	388.0	O	O	O
16 kai (Mainland China)	SEF	195.0	270.0	O	X	O
	LEF	270.0	195.0	O	O	O
8 kai (Mainland China)	SEF	270.0	390.0	O	O	O
Official Postcard	SEF	100.0	148.0	O	X	X
	LEF	148.0	100.0	O	X	X
Prepaid postcard	SEF	148.0	200.0	O	X	X
	LEF	200.0	148.0	O	X	X
3.5X5 (photo L size)	SEF	88.9	127.0	X	X	X
	LEF	127.0	88.9	X	X	X
Postcard (3.5X5.5)	SEF	88.9	139.7	O	X	X
	LEF	139.7	88.9	X	X	X
Postcard (4X6)	SEF	101.6	152.4	O	X	X
	LEF	152.4	101.6	O	X	X
Postcard (5X7)	SEF	127.0	177.8	O	X	X
	LEF	177.8	127.0	O	X	X
Postcard (6X9)	SEF	152.4	228.6	O	X	X
	LEF	228.6	152.4	O	X	X
Envelope: Rectangular 3	SEF	120.0	235.0	X	X	X
Envelope: Side-opening, rectangular 3	LEF	235.0	120.0	O	X	X
Envelope: Commercial #10	LEF	241.3	104.8	O	X	X
Envelope: Monarch 7.3/4	LEF	190.5	98.4	O	X	X
Envelope: DL	LEF	220.0	110.0	O	X	X
Envelope: Square rectangular 20 (ISO-C4)	SEF	229.0	324.0	O	X	O
Envelope: Square rectangular 6 (ISO-C5)	SEF	162.0	229.0	X	X	X
	LEF	229.0	162.0	O	X	O
Non-standard size	Min.	89.0	98.4	O	X	X
	Max.	297.0	432.0	O	X	X

C-5-0001-A

Figure 2 Paper sizes for the integrated office finisher

Stack Tray Capacity

Quantity of sheets of paper to be held:

- Paper with a lead edge length of 216mm or less: 500
- Paper with a lead edge length of more than 216mm: 250
- Mix stack: 250

Mix stack refers to the following cases:

- A sheet of paper stacked is longer than its previous one both in lead edge length and in width.
- The size of stacked paper is unknown.
- A stack of paper whose minimum width is less than 279.4mm is different from its previous stack in staple mode.

NOTE: If 150 or more small-sized sheets of paper are stacked and then paper with a lead edge length of 360mm or more is output, it may be stacked with its lead edge curled.

Quantity of sets of stapled sheets:

- The maximum quantity of stapled sheets of paper to be stacked can be changed in NVM. (30 to 100 sets)

NOTE: In the case of a stack of ten or fewer sheets of paper, the stack tray may be judged as having no paper.

Power and Control

The finisher does not have its own power supply. It receives +24VDC from the IOT and controls power supply in the finisher as shown.

+24VDC output from the IOT is supplied to the finisher PWB. The finisher PWB generates +5VDC from +24VDC and it supplies +5VDC to various finisher components. In addition, +24VDC from the finisher PWB goes through the finisher top cover Interlock +24V switch and the finisher front Interlock switch, then returns to a relay on the finisher. When these interlock switches are both ON, the relay is energized and +24VDC is supplied to various finisher components. Refer to [Figure 3](#).

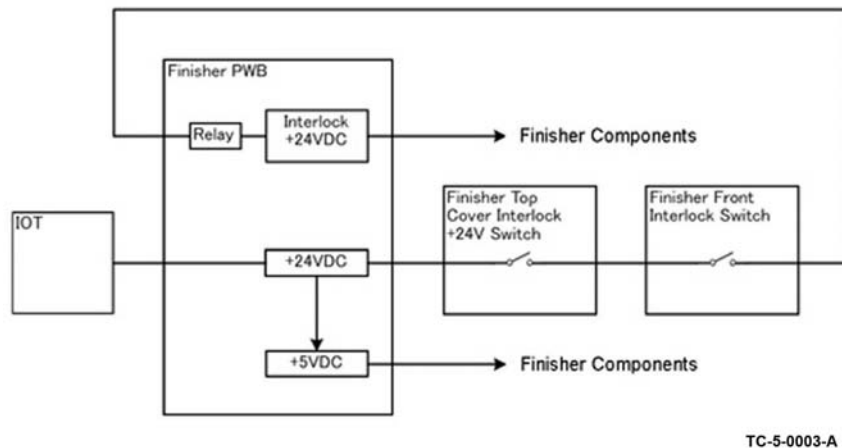


Figure 3 Power, control and interlocks

Interlocks and Power Save Mode

Supply of the +24 VDC to the relevant parts is shut off when either the top cover interlock switch or the front door interlock switch is turned off with the opening of the top cover or front door. The +24 VDC is turned on/off with a relay on the finisher PWB.

When the power saving function is used (refer to Standby Power) and the machine is in the Low Power mode or Sleep mode, the LVPS in the IOT is turned off to shut off the +24VDC power supplied to the finisher. Refer to [Figure 3](#).

Power and Control / Interlocks

The finisher PWB controls the basic operation of the finisher and converts +24VDC supplied from the IOT to +5VDC used in the finisher.

Integrated Office Finisher: Power and Control / Interlocks

The finisher front interlock switch is a dual pole switch that is wired in series with the top cover interlock +24VDC switch on pole A. Pole B uses +5VDC to detect whether the front cover is open or closed. When this switch opens it interrupts the supply of +24VDC.

The finisher top cover interlock switch +24VDC interrupts the supply of +24VDC when open.

The finisher top cover interlock sensor is a +5VDC photo sensor that detects whether the top cover is open or closed. Refer to [Figure 4](#).

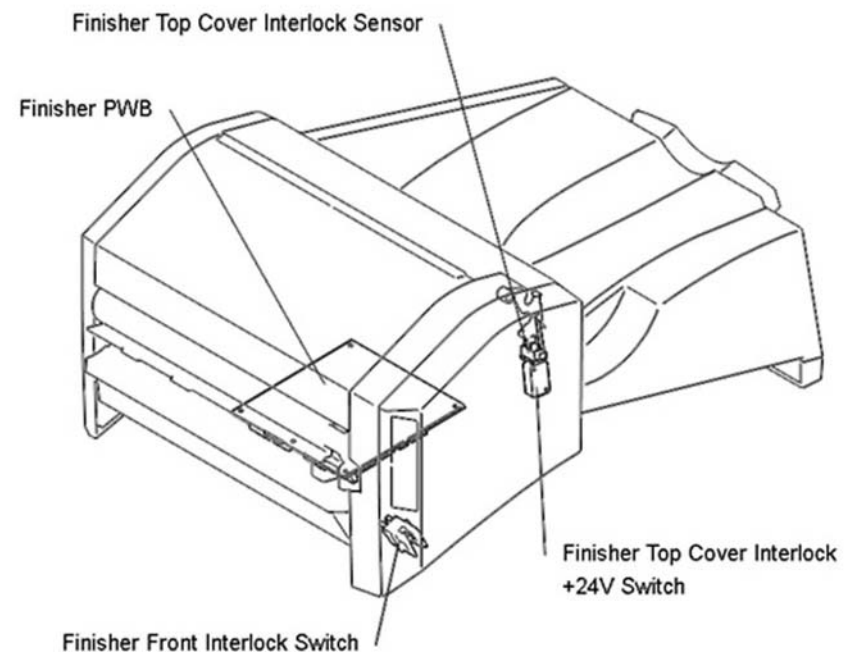


Figure 4 Power and control/interlocks

Tamper Major Components

Front tamper home sensor - This sensor detects the front tamper position. High (blocked) = at home

Rear tamper home sensor - This sensor detects the rear tamper position. High (blocked) = at home

Front tamper motor - This stepper motor moves the front tamper. When the motor rotates forward (CW), the front tamper moves toward the rear of the compile tray.

Rear tamper motor - This stepper motor moves the rear tamper. When the motor rotates forward (CW), the rear tamper moves toward the rear of the compile tray.

Refer to [Figure 5](#).

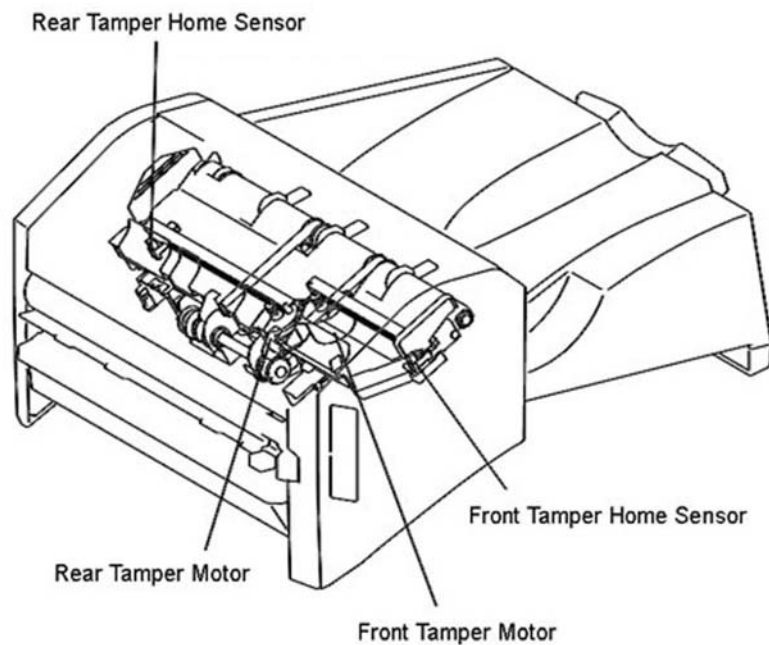


Figure 5 Tamper major components

Tamper Operation

The front tamper and the rear tamper perform the tamping operation, hold sets during stapling, and offset the output.

During the tamping operation the tampers are moved, thereby aligning sheets of paper transported into the compile tray into a registered set. During the offset operation the paper sets are shifted, front and rear. The tampers also hold the paper set during the stapling operation.

[Figure 6](#) shows the tamper positions when the width of the output paper is 182mm or more.

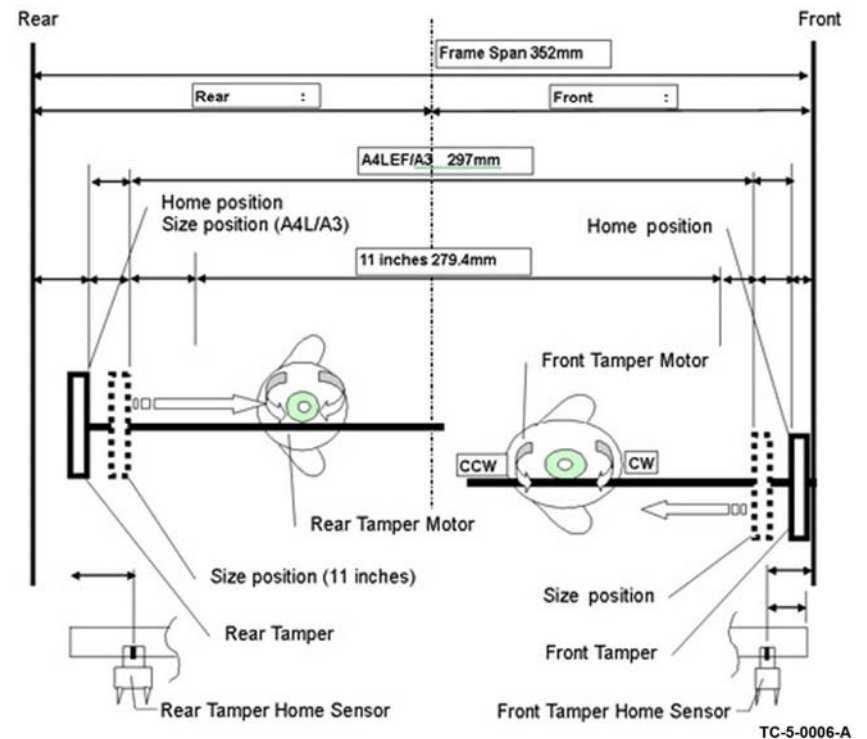


Figure 6 Tamper operation

Tamping Operation

The following describes the sequence of a tamping operation to offset two sets of sheets of paper (not stapled):

At power on, the tampers move to their home positions. At the start of job, the tampers move to size positions depending on the paper output size.

When the first set of paper reaches the compile tray, the tamping operation starts. The tamping operation varies according to paper size. In one case, with the front tamper fixed at a specific position, only the rear tamper moves to align sheets of paper.

In the other case, both the front tamper and the rear tamper move to align sheets of paper.

Once a specified number of sheets of paper accumulate in the compile tray, the set can be stapled and/or output to the stack tray. In the other case, both the front tamper and the rear tamper move to align sheets of paper.

After the output of the first set of paper, the front tamper moves to the rear offset position. When the second set of paper reaches the compile tray the tamping operation repeats. Refer to [Figure 7](#).

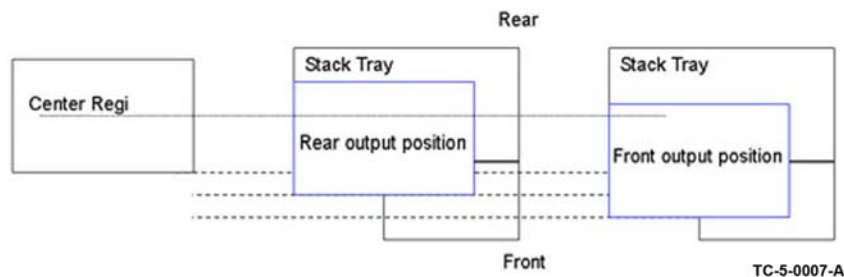


Figure 7 Tamping operation

Compiler

The major components of the compiler are as follows, Refer to [Figure 8](#):

- **Finisher entrance sensor** - This photo sensor detects when the lead edge of paper has been transported to the finisher.
- **Finisher transport motor** - This stepper motor drives the ENT roll, Exit roll, main paddle shaft assembly, and the sub paddle shaft assembly.
- **Finisher transport motor** - This stepper motor drives the ENT roll, exit roll, main paddle shaft assembly, and the sub paddle shaft assembly.
- **Compile Exit Sensor** - This photo sensor detects when the lead edge of paper reaches the compile tray.
- **Sub Paddle Solenoid** - When the sub paddle solenoid is energized, the sub paddle shaft assembly moves downward.

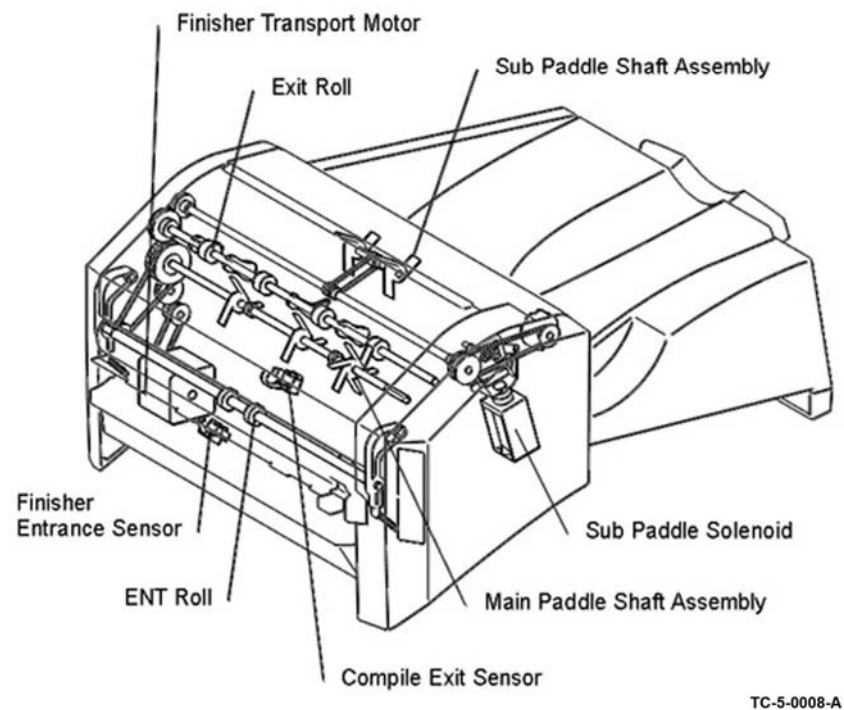


Figure 8 Compiler components

Compiler

Holding paper in compile tray:

The ENT roll and exit roll rotate to transport paper from the IOT to the compile tray. At the same time, the paddles of the main paddle shaft assembly and sub paddle shaft assembly rotate to position the paper in the compile tray.

The paddles of the sub paddle shaft do not normally contact paper. At a specified time after paper passes the compile exit sensor, the sub paddle solenoid is turned ON and the sub paddle shaft assembly is lowered to contact the paper. Once the paper has been held in the compile tray, the sub paddle solenoid is turned OFF and the sub paddle shaft assembly is raised. Refer to Figure 9.

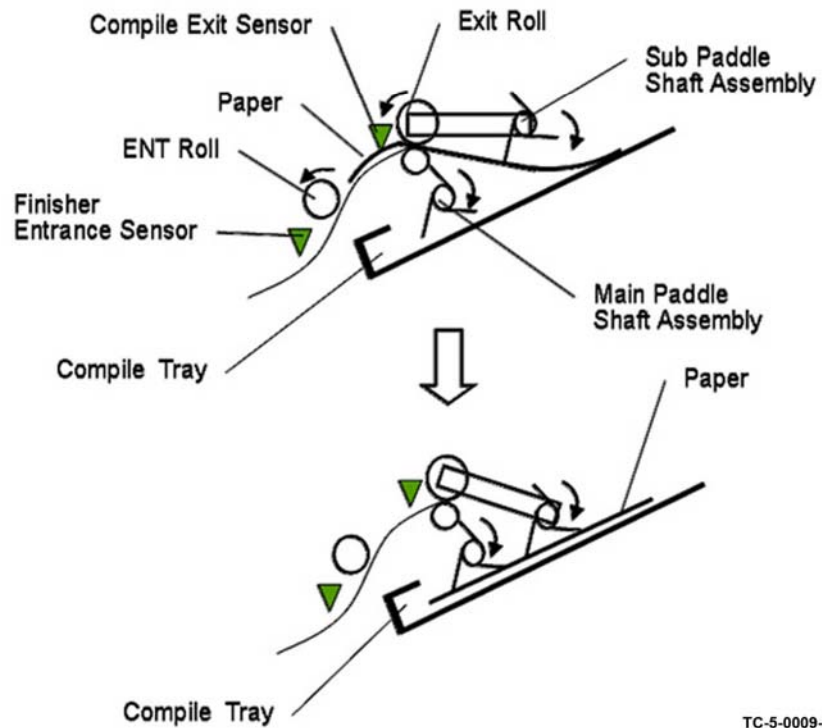


Figure 9 Compiler operation

Set Ejection

Refer to Figure 10. The major set ejection components are:

Set Clamp Home Sensor - This photo sensor detects that the set clamp shaft is in the home position. HIGH (blocked) = at home position

Set Clamp Motor - This stepper motor rotates in the reverse (CCW) direction only to drive the set clamp shaft in the forward direction.

Eject Home Sensor - This photo sensor detects that the eject belt is in the home position. In the home position the belt guide is moved back. LOW (not blocked) = at home

Eject Motor - This stepper motor drives the eject belt in the forward (CW) direction to transport paper to the stack tray and rotates in reverse to move the eject belt to home.

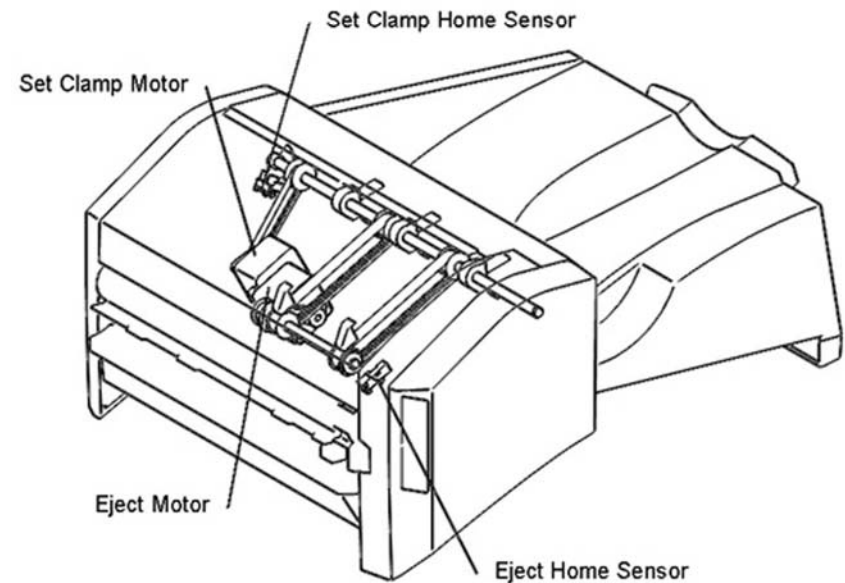


Figure 10 Set ejection

Set Ejection Operation

Once a specified number of sheets of paper have accumulated in the compile tray, the eject motor rotates forward (CW) for a specified time to drive the eject belts and output the set onto the stack tray.

Once the sets of paper have been output, the eject motor rotates in the reverse direction (CCW) to return the eject belts to the home position. Refer to [Figure 11](#).

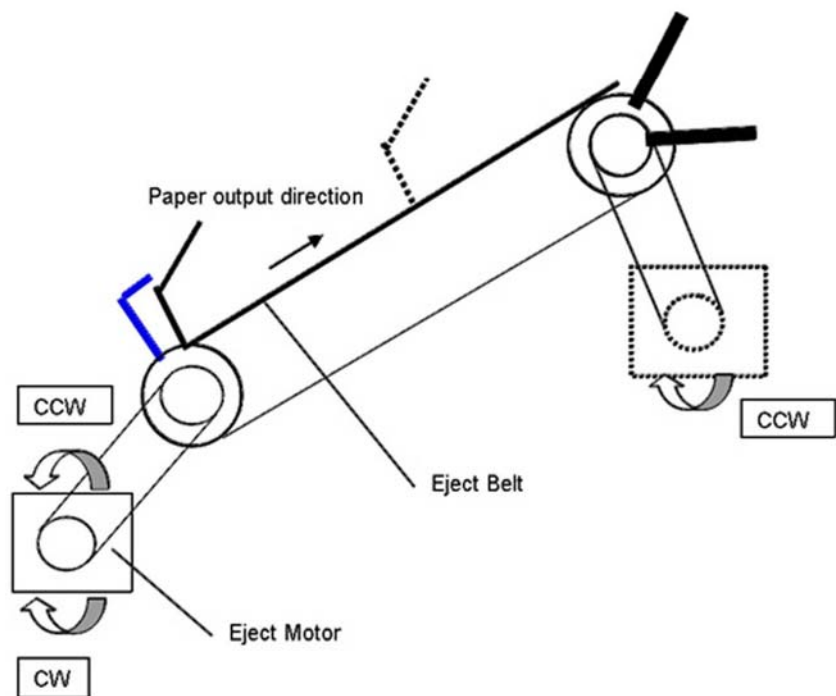


Figure 11 Set ejection operation

Set Ejection Operation Detail

When the belt eject operation has output a set, the set clamp motor rotates in the reverse direction (CCW), which drives the set clamp shaft forward (CW). The paddles of the set clamp shaft rotate to register and hold the sheets of paper on the stack tray.

The home position of the set clamp shaft is such that the paddles hold paper. In this position the set clamp home sensor is not blocked. When the set clamp shaft is driven from its home position, the set clamp home sensor is blocked and the shaft will rotate until it returns to the home position. Refer to [Figure 12](#).

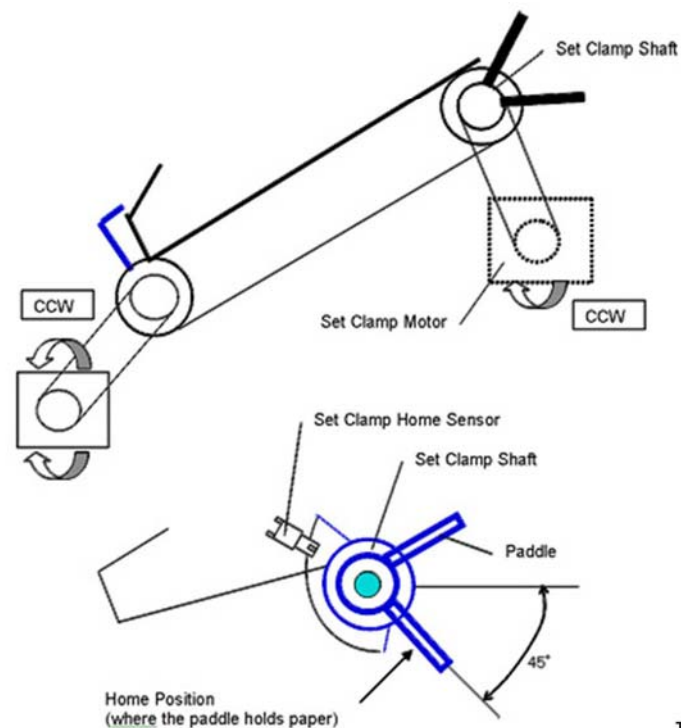
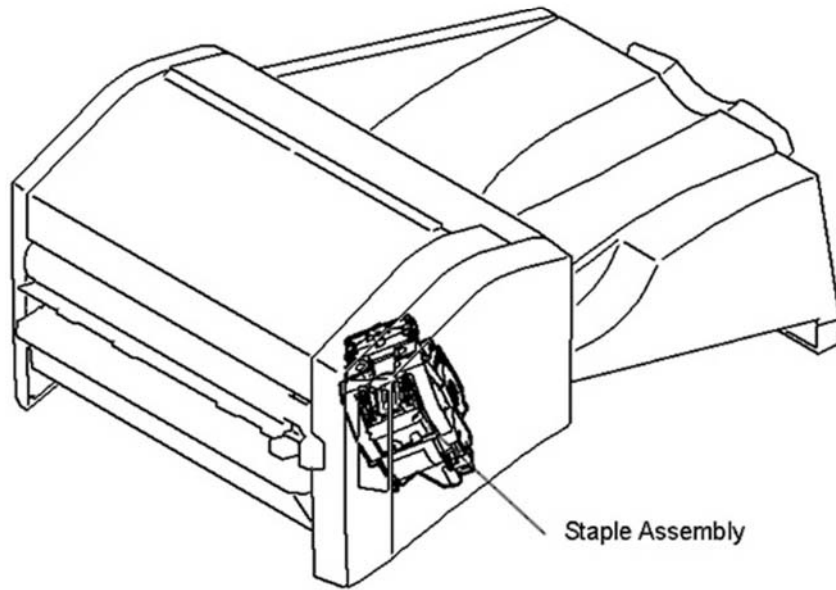


Figure 12 Set ejection operation detail

Stapler Operation

The staple assembly performs stapling. The staple motor in the staple assembly rotates in the forward direction (CW) to close the staple head, resulting in stapling, and then returns to the home position. If stapling fails, the staple motor reverses rotation (CCW) to near the home position. Refer to [Figure 13](#).

Staple assembly - The stapler unit consists of a staple head home sensor, staple motor, low staple sensor and staple ready sensor.



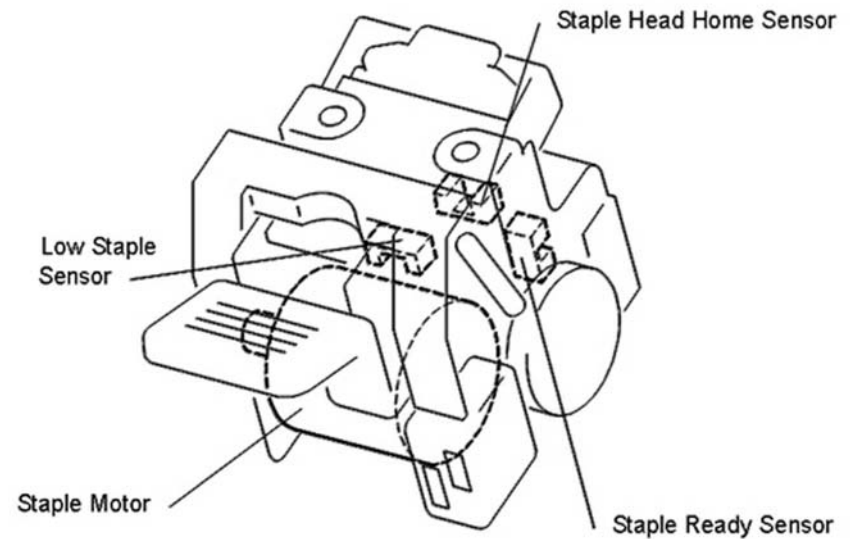
TC-5-0013-A

Figure 13 Stapler operation

Stapler Major Components

Refer to [Figure 14](#). The major Stapler components are:

- **Staple Head Home Sensor** – The home sensor detects that the staple head is at the home position.
- **Staple Motor** - This DC motor drives the staple head.
- **Low Staple Sensor** - This photo sensor detects the presence of the staple cartridge and the quantity of staples that remain.
- **Staple Ready Sensor** - This photo sensor detects that a staple has reached the staple head.



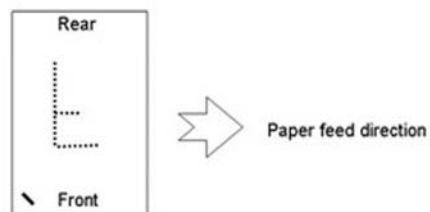
TC-5-0014-A

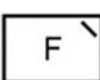
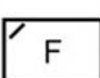
Figure 14 Stapler major components

Stapling Positions

Sheets of paper in the compile tray are stapled with only a single staple on the front corner.

Stapling positions relative to a page placed in the document handler or placed on the platen glass are different for LEF paper and SEF paper, as shown. Refer to [Figure 15](#).



	Paper supported	Portrait	Landscape
LEF	B5 A4 8.5 X 11 16 kai Executive		
SEF	A4 8.5 X 11 8.5 X 13 8.5 X 14 B4 A3 8 kai 11 X 17		

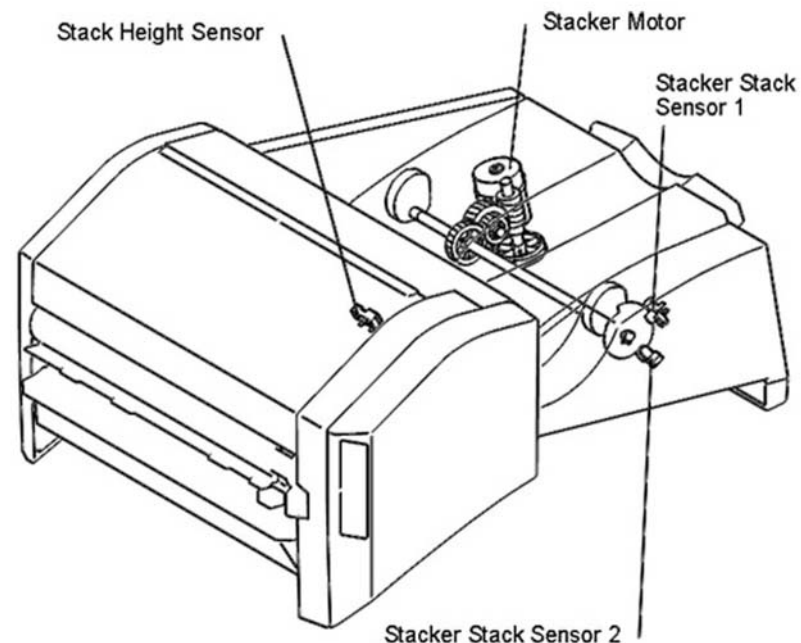
TC-5-0015-A

Figure 15 Stapling positions

Major Components

Refer to **Figure 16**. The major components of the stacker tray are:

- **Stack Height Sensor** - This photo sensor (reflection type) detects the presence of paper in the stack tray. LOW (sensor receives light) = The reflective sensor detects paper present.
- **Stacker Stack Sensor 1 and 2** - These photo sensors in combination detect the position of the stack tray.
- **Stacker Motor** - This DC motor moves the stack tray up and down. The stacker motor rotates in the forward (CW) direction to drive the stack tray down. In the reverse rotation (CCW), the stack tray is driven up.



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Figure 16 Stacker tray components

Stack Tray Height Adjustment

At the beginning of a job, when the tray is empty, the stack height sensor is not blocked and the stacker motor will raise the stacker tray to the uppermost position. The stack tray gradually goes down as more sheets of paper accumulate, up to a maximum number of sheets.

The stack height sensor detects paper at a specified time after they are output from the compile tray. When paper is detected, the stacker motor rotates forward (CW) to drive the stack tray down a specified distance. If the stack height sensor does not detect paper, the stack tray stays at the height it is at and waits for a next set to be output. Refer to [Figure 17](#).

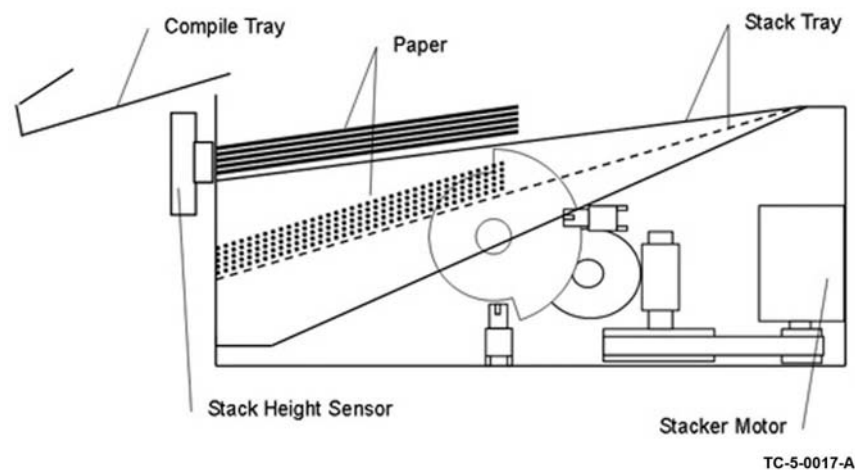


Figure 17 Stack tray height adjustment

Amount of Paper in Tray

A stack tray without paper in it is positioned at the top of its travel range. Stack sensor 1 is unblocked while stack sensor 2 is blocked by the actuator on the stacker motor drive shaft. When sheets of paper accumulate, the stack tray will go down and both sensors will become blocked by the actuator. As more sheets of paper accumulate in the stack tray and the tray is driven down, stack sensor 2 and then stack sensor 1 will both become unblocked by the actuator (stacker tray full). Refer to [Figure 18](#).

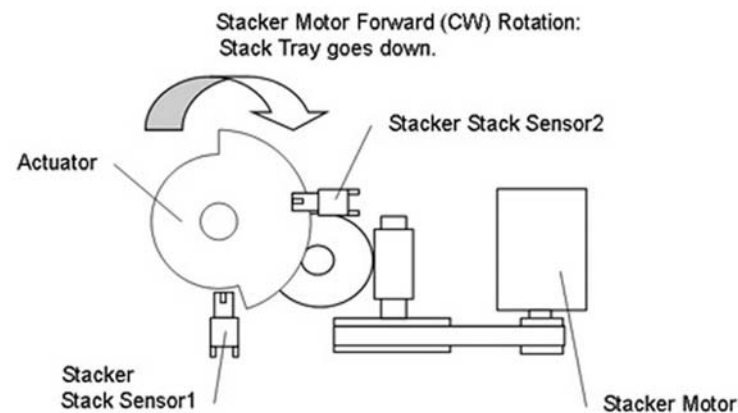


Figure 18 Amount of Paper Tray

Full Stack Detection

The height of the stack tray is detected based on a combination of states of the sensors.

Table 1 shows the relationship between the states of stacker stack sensor 1 and stacker stack sensor 2 and the amount of paper in the stack tray (stack tray height).

Table 1 Stacker sensors

	Stacker stack sensor 1	Stacker stack sensor 2	Number of sheets on stack tray
No Paper Stack tray at top	Low	High	
Paper present Stack tray at upper middle	High	High	Less than 250
Half full Stack tray at lower middle	High	Low	250 or more
Full Stack tray at bot- tom	Low	Low	500 or more

Office Finisher LX

Overview

The Office Finisher LX consists of a horizontal transport and finisher LX. It can collate, stack, staple, and hole punch sets of copies or prints.

When fitted with the optional booklet maker assembly, the finisher also can produce booklets.

The Finisher LX handles a variety of standard paper sizes, ranging from A4 SEF/8.5x11 inch up to A3 SEF/11x17 inch. The centre tray has a capacity of 200 sheets of A3/11x17 inch paper. The stacker tray has a capacity of 2000 sheets of A4/8.5x11 inch SEF or 1000 sheets of A3/11x17 inch paper.

The finisher LX can collate, stack, staple, and hole punch up to 2000 sheets or 200 sets of 90gsm or 20lb paper. For paper sizes greater than A4 SEF, the maximum number of sets is limited to 100. Refer to [Figure 1](#).

NOTE: The finisher cannot handle transparencies or envelopes.

The main components of the finisher are:

- [Horizontal Transport Assembly](#) - feeds the sheets exiting from the IOT to the finisher.
- **Finisher** - squares up the edges of sheets in the compiler tray to create sets and ejects/offsets the sets into the stacker tray.
- [Compiler Stapler](#) - Staples sets as specified.
- [Hole Punch Assembly](#) - Punches 2, 3 or 4 holes depending on the market. If ordered by the customer, the punch unit is in the horizontal transport.
- [Stacker Tray](#) - Collects the sets ejected from the finisher.
- [Booklet Maker](#) - (optional) saddle stitches and creases booklets

Refer to [Figure 2](#) and [Figure 3](#) for supported paper sizes.



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Figure 1 Overview

Name SEF/LEF	Inches		mm		Stacker Tray						IOT Inner Tray
	FS	SS	FS	SS	Stack	Offset	Punch	Staple	Booklet	Crease-Fold	
Postcard(Japan) S			100.0	148.0	N	N	N	N	N	N	"9
Postcard(Japan)L			148.0	100.0	N	N	N	N	N	N	"9
Reply Postcard S			148.0	200.0	N	N	N	N	N	N	"9
Reply Postcard L			200.0	148.0	N	N	N	N	N	N	"9
Postcard (US) S	4	6	101.6	152.4	N	N	N	N	N	N	"9
Postcard (US) L	6	4	152.4	101.6	N	N	N	N	N	N	"9
5x7(postcard) S	5	7	127.0	177.8	N	N	N	N	N	N	"9
5x7(postcard) L	7	5	177.8	127.0	N	N	N	N	N	N	"9
3.5x5 S	3.5	5	88.9	127.0	N	N	N	N	N	N	"9
3.5x5 L	5	3.5	127.0	88.9	N	N	N	N	N	N	"9
3.5x5.5 S	3.5	5.5	88.9	137.9	N	N	N	N	N	N	"9
3.5x5.5 L	5.5	3.5	137.9	88.9	N	N	N	N	N	N	"9
A6 S			105.0	148.0	N	N	N	N	N	N	"9
A6 L			148.0	105.0	N	N	N	N	N	N	"9
B6 S			128.0	182.0	N	N	N	N	N	N	"9
B6 L			182.0	128.0	N	N	N	N	N	N	"9
A5 S			148.0	210.0	N	N	N	N	N	N	"9
A5 L			210.0	148.0	N	N	N	N	N	N	"9
Statement S	5.5	8.5	139.7	215.9	N	N	N	N	N	N	"9
Statement L	8.5	5.5	215.9	139.7	N	N	N	N	N	N	"9
6x9(postcard) S	6	9	152.4	228.6	N	N	N	N	N	N	"9
6x9(postcard) L	9	6	228.6	152.4	N	N	N	N	N	N	"9
B5 S			182.0	257.0	N	N	N	N	N	N	"9
B5 L			257.0	182.0	Y	Y	Y(2,U2,3)	Y	N	N	"9
Executive S	7.2	10.5	184.2	266.7	N	N	N	N	N	N	"9
Executive L	10	7.25	266.7	184.2	Y	Y	Y(2,U2,3,4)	Y	N	N	"9
16K(TFX) S			194.0	267.0	N	N	N	N	N	N	"9
16K(TFX) L			267.0	194.0	Y	Y	Y(2,U2,3,4)	Y	N	N	"9
16K(GCO) S			195.0	270.0	N	N	N	N	N	N	"9
16K(GCO) L			270.0	195.0	Y	Y	Y(2,U2,3,4)	Y	N	N	"9
UK-Quatro S	8	10	203.2	254.0	N	N	N	N	N	N	"9
UK-Quatro L	10	8	254.0	203.2	Y	Y	Y(2,U2,3)	Y	N	N	"9
Letter S	8.5	11	215.9	279.4	Y	Y	Y(2,U2)	Y	Y	Y	"9
Letter L	11	8.5	279.4	215.9	Y	Y	Y(2,U2,3,4,S4)	Y	N	N	"9
Letter-Cover S	9	11	228.6	279.4	Y	Y	N	Y	Y	Y	"9
Letter-Cover L	11	9	279.4	228.6	Y	Y	Y(2,U2,3,4,S4)	Y	N	N	"9
A4 S			210.0	297.0	Y	Y	Y(2,U2)	Y	Y	Y	"9
A4 L			297.0	210.0	Y	Y	Y(2,U2,3,4,S4)	Y	N	N	"9
A4-Cover S			223.0	297.0	Y	Y	N	Y	Y	Y	"9
A4-Cover L			297.0	223.0	Y	Y	Y(2,U2,3,4,S4)	Y	N	N	"9
Special A4 S			226.0	310.0	Y	Y	N	Y	Y	Y	"9
Special A4 L			310.0	226.0	N	N	N	N	N	N	"9
Spanish S	8.4	12.4	215.0	315.0	Y	Y	Y(2,U2)	Y	Y	Y	"9
Foolscap S	8.5	13	215.9	330.2	Y	Y	Y(2,U2)	Y	Y	Y	"9
Mexican Folio	8.5	13.4	215.9	340	Y	Y	Y(2,U2)	Y	Y	Y	"9
Legal S	8.5	14	215.9	355.6	Y	Y	Y(2,U2)	Y	Y	Y	"9
11x15 S	11	15	279.4	381.0	Y	Y	Y(2,U2,3,4,S4)	Y	Y	Y	"9

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Figure 2 Supported paper sizes

Name SEF/LEF	Inches		mm		Stacker Tray						IOT Inner Tray
	FS	SS	FS	SS	Stack	Offset	Punch	Staple	Booklet	Crease-Fold	
B4S			257.0	364.0	Y	Y	Y(2,U2,3)	Y	Y	Y	"9
8K(TFX) S			267.0	388.0	Y	Y	Y(2,U2,3,4)	Y	Y	Y	"9
8K(GCO) S			270.0	390.0	Y	Y	Y(2,U2,3,4)	Y	Y	Y	"9
A3 S			297.0	420.0	Y	Y	Y(2,U2,3,4,S4)	Y	Y	Y	"9
Ledger S	11	17	279.4	431.8	Y	Y	Y(2,U2,3,4,S4)	Y	Y	Y	"9
12x18 S	12	18	304.8	457.2	N	N	N	N	N	N	"9
12x19 S	12	19	304.8	482.6	N	N	N	N	N	N	"9
DTSpecial A3 S			310.0	432.0	N	N	N	N	N	N	"9
SRA3 S	12	17.7	320.0	450.0	N	N	N	N	N	N	"9
12.6x19.2 S	12	19.2	320.0	487.7	N	N	N	N	N	N	"9
Special A3 S			328.0	453.0	N	N	N	N	N	N	"9
13x18 S	13	18	330.2	457.2	N	N	N	N	N	N	"9
13x19 S	13	19	330.2	482.6	N	N	N	N	N	N	"9
Choukei-3(Envelope)			120.0	235.0	N	N	N	N	N	N	"9
Kakukei-2(Envelope)			240.0	332.0	N	N	N	N	N	N	"9
C4(Envelope) S			229.0	324.0	N	N	N	N	N	N	"9
C5(Envelope) S			162.0	229.0	N	N	N	N	N	N	"9
C5(Envelope) L			229.0	162.0	N	N	N	N	N	N	"9
Com10 (Envelope)			241.3	104.8	N	N	N	N	N	N	"9
DL (Envelope) L			220	110	N	N	N	N	N	N	"9
Monarch			190.5	98.4	N	N	N	N	N	N	"9
Unfixed form			100.0 to 330.2	148.0 to 488.0	P *1 *4	P *1 *4	P *2 *4	P *1 *4	P *6 *4	P *6 *4	"9

C-5-0020-A

Figure 3 Supported paper sizes

Horizontal Transport Assembly

The horizontal transport assembly moves the sheets from the exit 1 assembly to the Finisher LX.

The horizontal transport assembly has its own drives, rollers, sensors, and interlocks and is powered and controlled by the finisher.

The top cover can be opened for jam clearance. Refer to [Figure 4](#).

NOTE: If a booklet maker also is installed, the hole punch is installed in the horizontal transport.



C-5-0022-A

Figure 4 Horizontal transport assembly

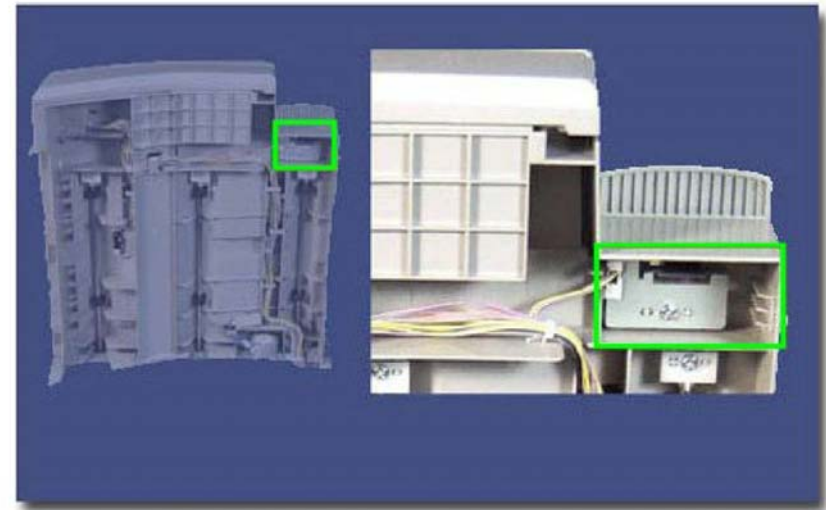
Top Cover Interlock

The horizontal transport assembly has one Interlock, the H-transport open sensor.

The H-transport open sensor senses when the top cover is raised and disconnects the 24V supply from the horizontal transport assembly.

The H-transport open sensor can be viewed from the underside of the horizontal transport. Refer to [Figure 5](#).

NOTE: The internal components and operation of the horizontal transport shown at the right are identical to the unit that installs on the Xerox® VersaLink® C7020/C7025/C7030 machines; only the cover color is different.



C-5-0023-A

Figure 5 Horizontal transport open sensor

Sensors

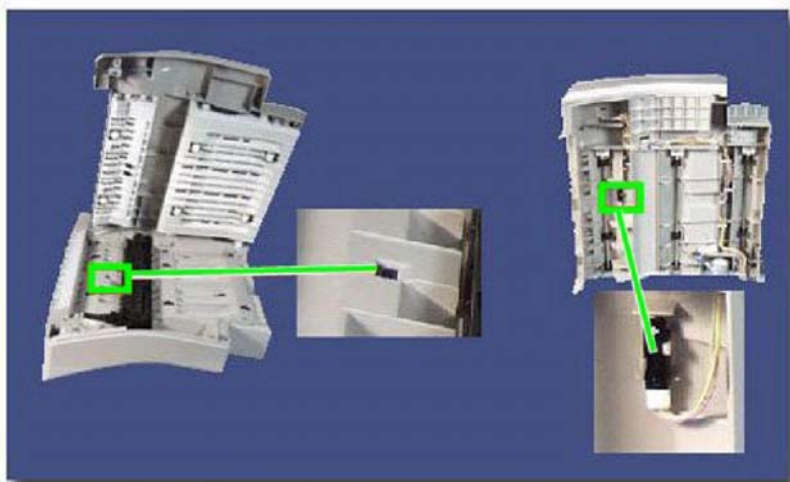
The movement of paper through the horizontal transport is monitored by the entrance sensor.

The entrance sensor is an optical sensor which is triggered when the light it emits is reflected by the sheet of paper.

As paper is fed from exit 1 into the horizontal transport, the entrance sensor detects this.

If, after a preset amount of time, the entrance sensor does not de-actuate, this indicates a paper jam and an error message is displayed on the UI. Refer to [Figure 6](#).

NOTE: The internal components and operation of the horizontal transport shown at the right are identical to the unit that installs on the Xerox® VersaLink® C7020/C7025/C7030 machines; only the cover color is different.



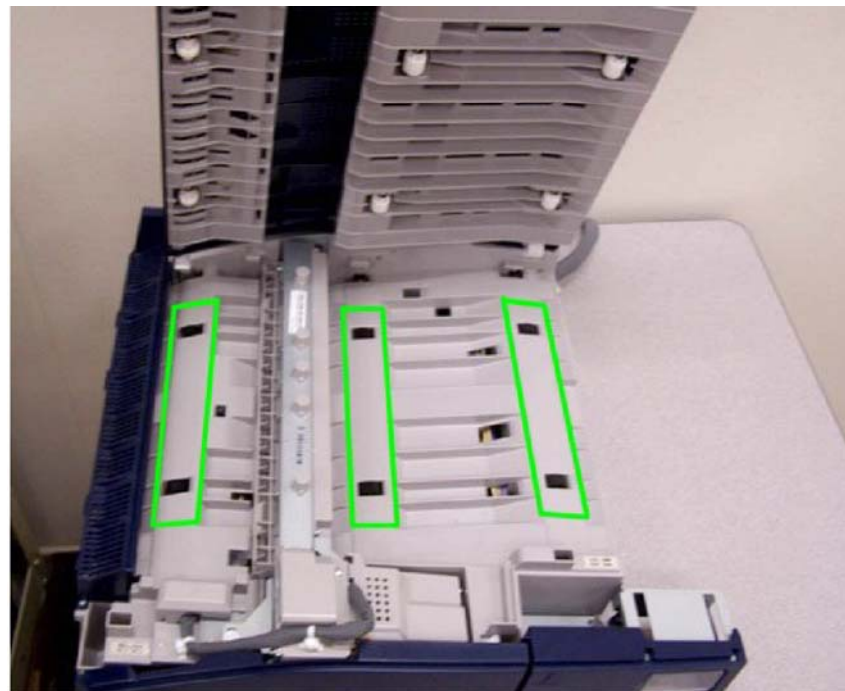
C-5-0024-A

Figure 6 Entrance sensor

Rolls and Drives

The paper is moved through the horizontal transport assembly by three sets of transport rolls.

Drive is provided to the transport rolls by the transport motor through a system of gears and belts. Refer to [Figure 7](#).



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Figure 7 Transport rolls

Power and Control

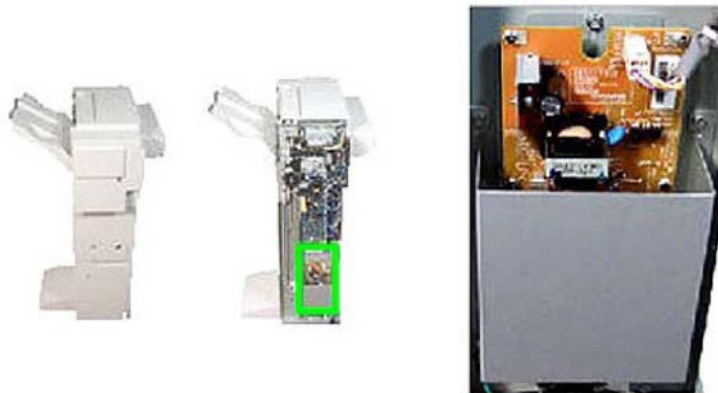
The Finisher LX contains all the electrical and mechanical components required to collate, stack, staple, and hole punch sets of copies or prints. Sets can be output to the center tray or to the stacker tray.

NOTE: When the Finisher LX is installed, the center tray is the top surface of the horizontal transport.

LVPS

Power is supplied to the finisher components by the low voltage power supply (LVPS).

The LVPS receives 110/240VAC supply from the GFI via the power cord and provides +24V to the finisher PWB. Refer to [Figure 8](#).



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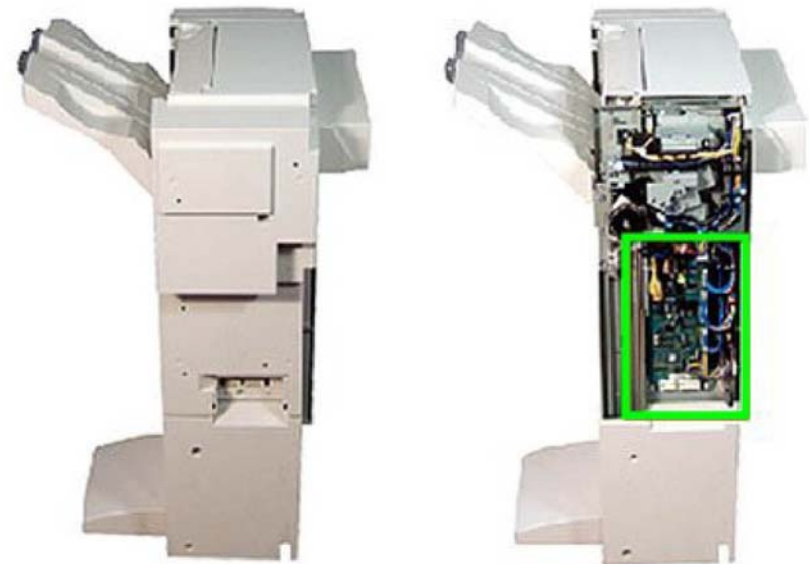
Figure 8 Low voltage power supply

Finisher PWB

All the sensors, switches, interlocks, motors, and clutches are controlled by the finisher PWB.

The finisher PWB receives +24V from the LVPS, which in turn it supplies to the motors and clutches.

In addition to the +24V supplies, the finisher PWB also provides +5V supply for all the sensors and switches. Refer to [Figure 9](#).



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Figure 9 Finisher PWB

Interlocks

Finisher LX has two Interlocks which disconnect the + 24V supply when deactuated. These are:

- **Eject Cover Switch** - triggered when the eject cover is raised. Refer to [Figure 10](#).
- **Front Door Interlock** - triggered when the front cover is opened. Refer to [Figure 11](#).

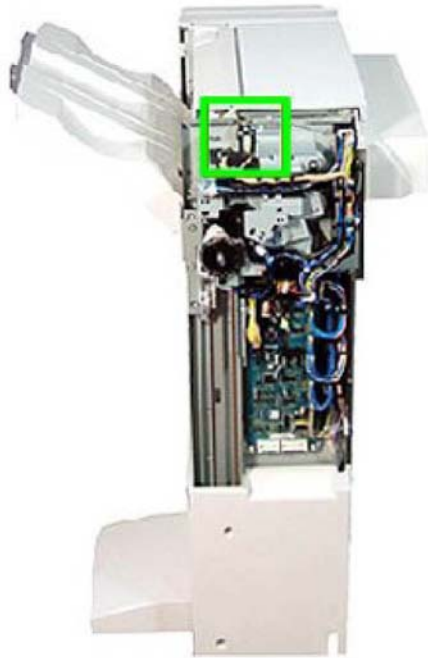


Figure 10 Eject cover switch



C-5-0028-A



C-5-0029-A

Figure 11 Front door interlock

Stacker Tray

The stacker tray is an output tray on the finisher LX that is used to store compiled sets in a stack. The stacker tray lowers in steps to accommodate up to 200 sets.

The stacker tray is raised and lowered by a system of gears and belts. The gears and belts are driven by the stacker elevator motor through a rack gear. Refer to [Figure 12](#).

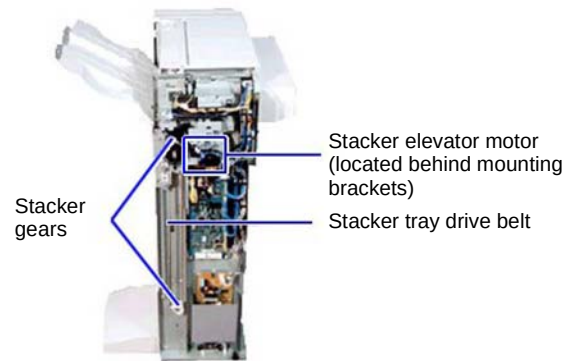


Figure 12 Stacker tray

C-5-0030-A

Elevation System

The position of the stacker tray is controlled by an encoder and sensor.

The encoder has a number of apertures cut into it and is connected directly to the main stacker tray drive gear via a shaft.

As the stacker tray drive gear rotates to lower or raise the stacker tray, the encoder also rotates. The rotation of the encoder is monitored by the encoder wheel sensor which is an optical sensor that reflects light onto the encoder. Refer to [Figure 13](#).

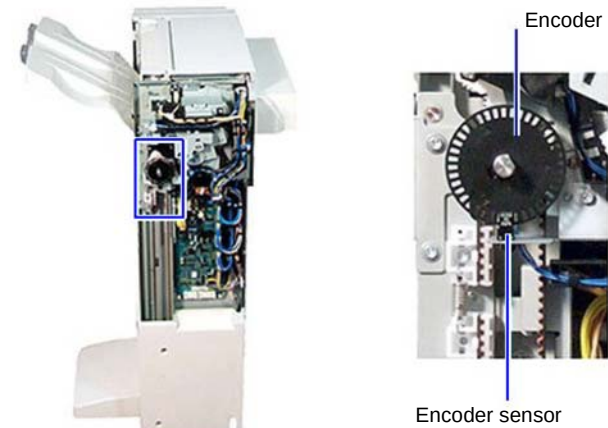


Figure 13 Encoder and sensor

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No Paper Sensor

The uppermost position of the stacker tray is monitored by the stacker no paper sensor. When actuated, this indicates that the stacker tray is in the uppermost feed position. Refer to [Figure 14](#).



Stacker no paper sensor

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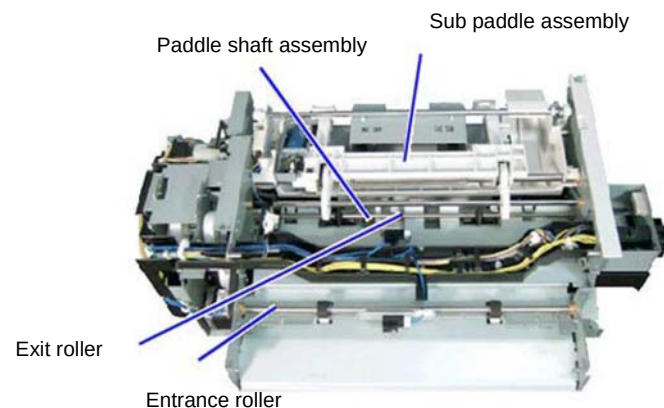
Figure 14 Stacker no paper sensor

Paper Feed

Drive

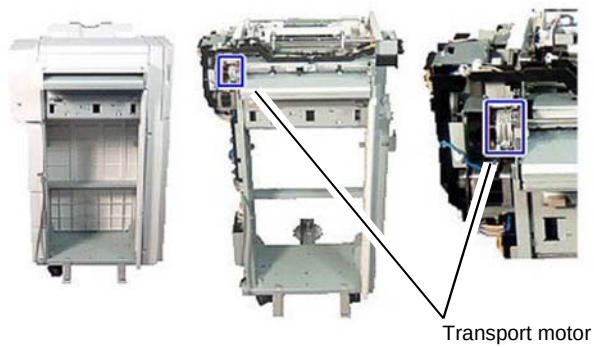
The sheets of paper are moved through the main section of the compiler by the entrance roll, exit roll, paddle shaft assembly and sub-paddle assembly.

Drive is provided to these components by the transport motor and a system of gears and pulleys. Refer to [Figure 15](#) and [Figure 16](#).



C-5-0033-A

Figure 15 Compiler components



C-5-0034-A

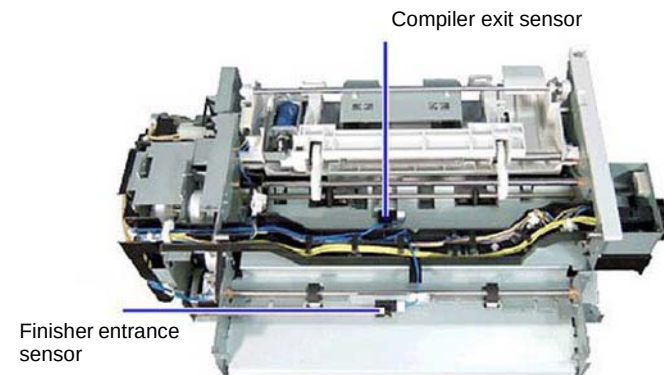
Figure 16 Transport motor

Compiler Entrance and Exit Sensors

The progress of paper through the main compiler is monitored by two sensors, (1) the entrance sensor and (2) the compiler exit sensor.

The entrance sensor is actuated by the lead edge of the paper entering the finisher from the horizontal transport. This signals the paper feed process to begin.

The compiler exit sensor is used to ensure that paper successfully moves through the paper path. If the compiler exit sensor is not actuated within a pre-set time of the entrance sensor being actuated, a paper jam condition is signalled and an error message appears. Refer to [Figure 17](#).



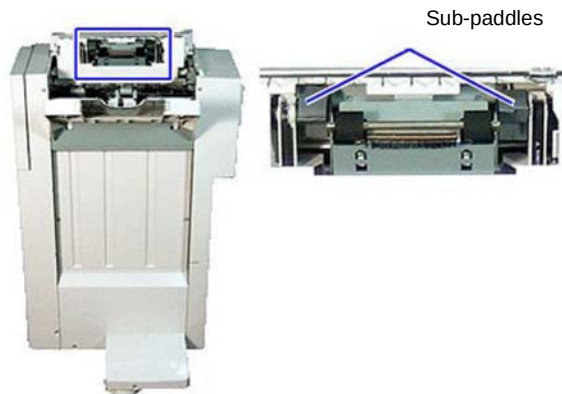
C-5-0035-A

Figure 17 Entrance sensor and compiler exit sensor

Sub Paddle Assembly

The sub-paddle assembly actively drives fed paper into the compiler tray when it exits the exit roll.

The sub-paddle assembly consists of a set of sub-paddles, an eject chute, and a solenoid. drive is provided by the transport motor. Refer to [Figure 18](#).



C-5-0036-A

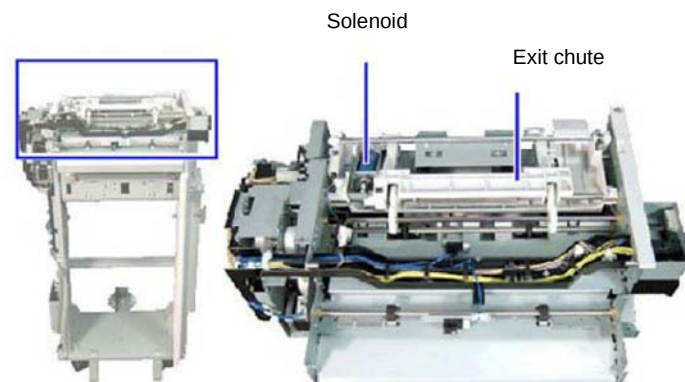
Figure 18 Sub paddle assembly

Exit Chute

When instructed, the solenoid is energized, which lowers the eject chute and the sub paddles onto the paper.

The rotation of the sub paddles actively drives the paper against the compiler backstops where the paper is tamped, stapled (if required), and ejected.

The sub paddles rotate constantly and only come into contact with the paper when the solenoid is actuated. Refer to [Figure 19](#), [Figure 20](#) and [Figure 21](#).



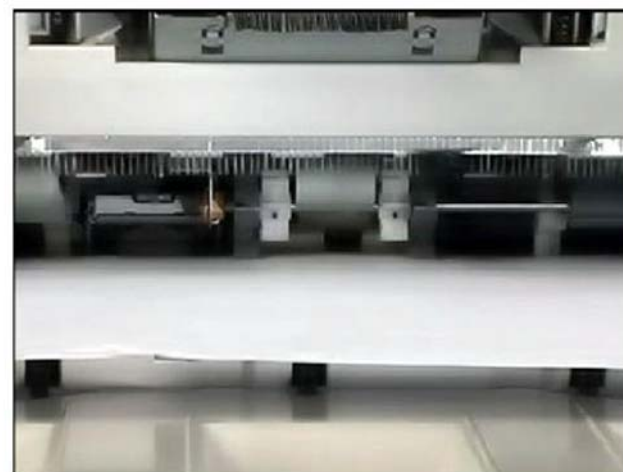
C-5-0037-A

Figure 19 Exit chute



C-5-0038-A

Figure 20 Sub paddle assembly



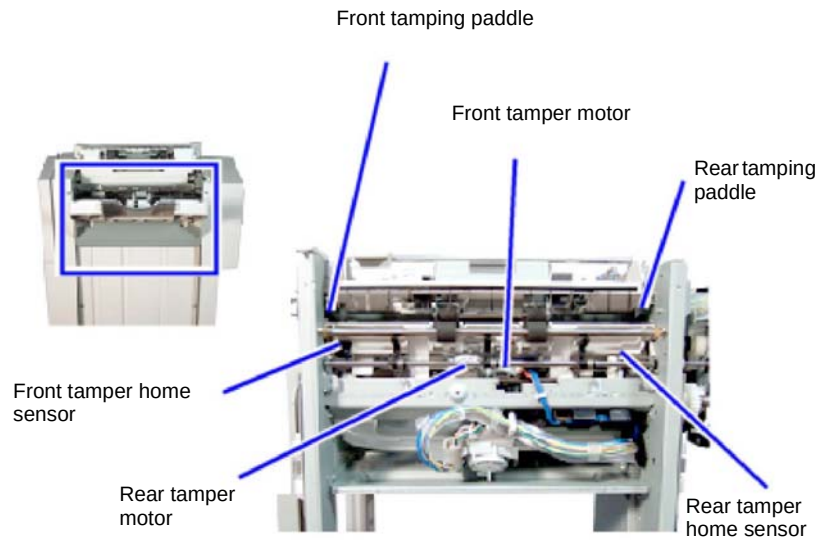
C-5-0039-A

Figure 21 Closer view

Tamper Assemblies

The tamper assemblies are used to compile sets of paper into registered stacks either for stapling or exit to the stacker tray. The tamper assemblies tamp the sets of paper to the front, center, or rear of the compiler, as required.

The Finisher LX has two separate tamper assemblies which operate as a single unit. These are the front and rear tamper assemblies. Each tamper assembly consists of a tamping paddle, tamper paddle motor, and a tamper home sensor. Refer to [Figure 22](#).



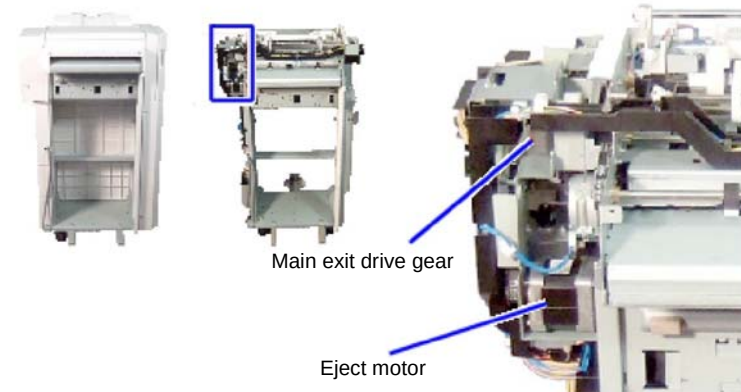
C-5-0040-A

Figure 22 Tamper assemblies

Exit and Stack

The exit roll, paper guides, and set clamp assembly all are driven by the eject motor through the main exit drive gear.

Each assembly has a discrete system of gears and quadrant gears which transfer drive from the main exit drive gear to the individual assembly. Refer to [Figure 23](#).



C-5-0041-A

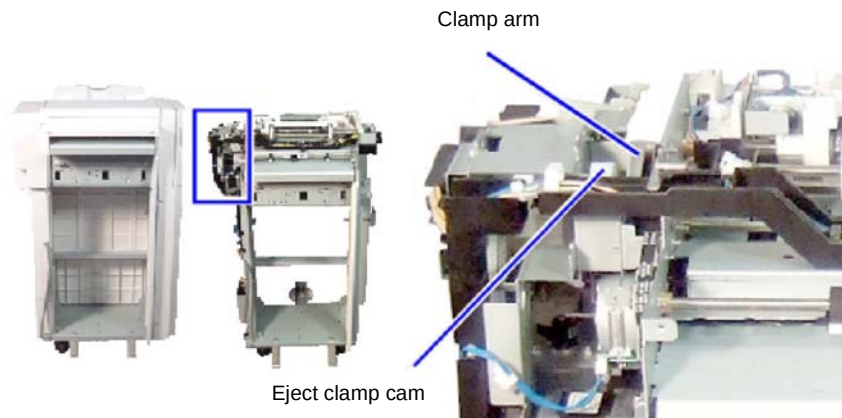
Figure 23 Main exit drive

Exit Roll Assembly

The exit roll assembly consists of exit roll gears, exit roll cam, upper exit roll, lower exit roll, retaining chassis, and retaining chassis lever. The upper exit roll is free rotating and is maintained in the raised or lowered position by the retaining chassis.

The exit cam roll, driven by the main exit drive gear, moves the retaining chassis into the raised or lowered position by actuating the retaining chassis lever.

The lower exit roll is driven by the exit roll gears through the main exit drive gear. Paper is moved from the compiler tray to the stacker tray when the upper exit roll is lowered onto the lower exit roll. Refer to [Figure 24](#).

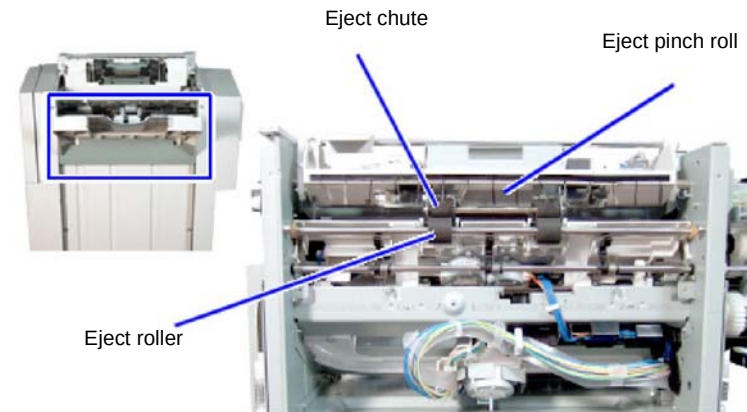


C-5-0042-A

Figure 24 Exit clamp

The eject roll is driven by the exit roll gears through the main exit drive gear.

Paper is moved from the compiler tray to the stacker tray when the eject pinch roll is lowered onto the eject roll. Refer to [Figure 25](#).



C-5-0043-A

Figure 25 Exit roll assembly

Paper Support Assembly

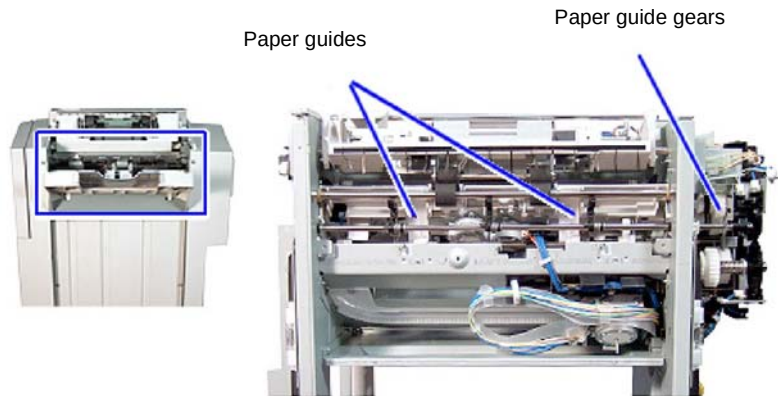
Paper Guide

The paper guide consists of two paper guides, the eject assembly, the gear select actuator, and an eject clamp home sensor.

Each paper guide features an integral rack which connects to the gears.

As the main exit drive gear rotates, the eject assembly also rotates, thereby extending or retracting the paper guide.

This action is reversed by a change in direction of the main exit drive gear. Refer to [Figure 26](#).



C-5-0044-A

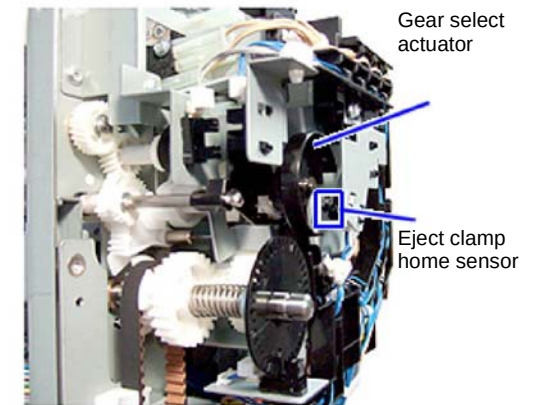
Figure 26 Paper guide

Eject Assembly

The position of the paper guide is monitored by the eject clamp home sensor.

The gear select actuator is fixed to the end of one of the drive shafts for the eject assembly and rotates to trigger the eject clamp home sensor.

The eject clamp home sensor and gear select actuator are only used to confirm that the support arms are fully extended or retracted. They do not control drive to the main exit drive gear. Refer to [Figure 27](#).



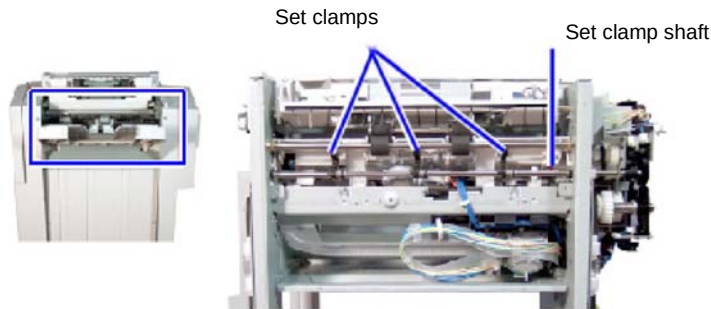
C-5-0045-A

Figure 27 Eject assembly

Paper Clamp Assembly

Set Clamps

The set clamp assembly uses set clamps to hold sets of paper in position on the stacker tray. The set clamps are fixed to the set clamp shaft which is rotated by the set clamp quadrant gear. Drive is provided by the main exit drive gear. Refer to [Figure 28](#).

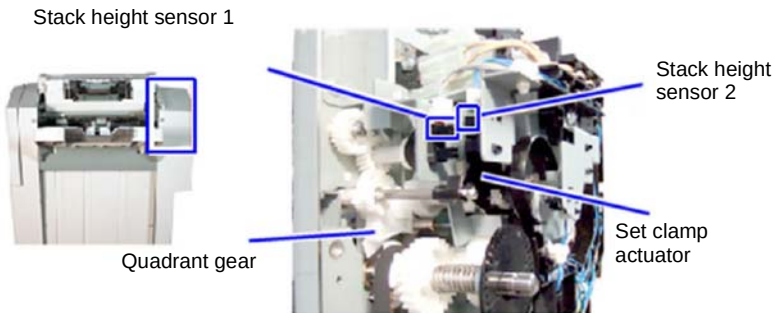


C-5-0046-A

Figure 28 Set clamps

Set Clamp Position

The position of the set clamps is monitored by two sensors. These are the upper and lower stack height sensors. The set clamp actuator is fixed to the end of the paper clamp shaft and triggers the sensors when the set clamps are in either the upper or lower position. The sensors and actuator are only used to confirm that the set clamps are fully raised or lowered. They do not control drive to the main exit drive gear. Refer to [Figure 29](#).



C-5-0047-A

Figure 29 Set clamp position

Booklet Maker

The optional booklet maker produces pre-creased booklets with either 1 or 2 staples. The booklet maker is supplied with a crease assembly which is installed into the Finisher LX. Refer to [Figure 30](#).

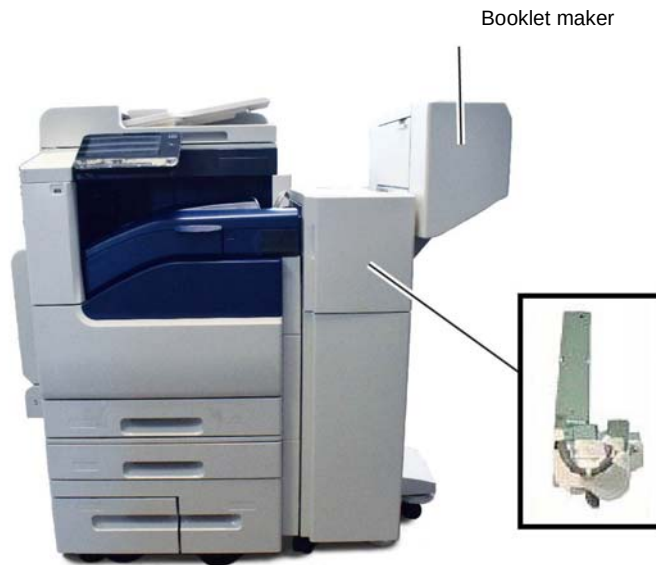


Figure 30 Booklet maker

C-5-0048-A

Power and Control

The Finisher LX supplies the booklet PWB with a +24V power supply through the interconnection harness.

The booklet PWB controls all the booklet maker components and distributes the + 24V supply to the motors and + 5V to the sensors and interlocks.

The crease assembly is powered and controlled by the finisher PWB. Refer to [Figure 31](#).

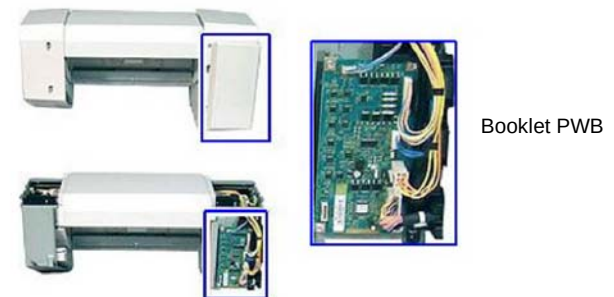


Figure 31 Booklet maker power and control

C-5-0049-A

Booklet Maker Interlocks

The booklet maker has three Interlocks: the booklet stapler cover switch, the front booklet stapler safety switch, and rear booklet stapler safety switch.

Interlock - Booklet Stapler Cover Switch

The booklet stapler cover switch is actuated when the side cover is opened. When actuated, all + 24V supplies are removed from the booklet maker. Refer to [Figure 32](#).



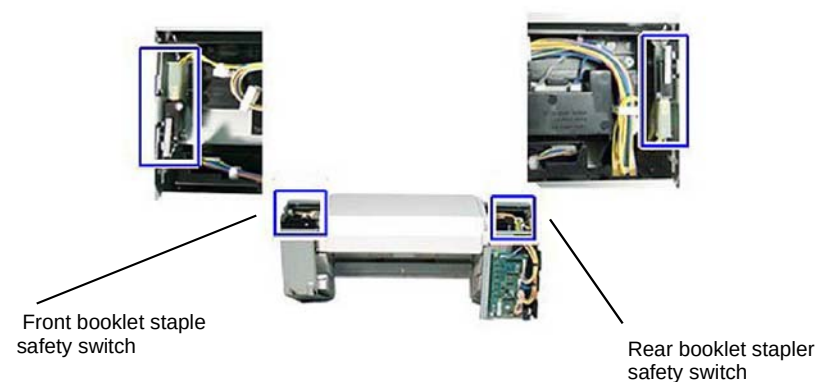
C-5-0050-A

Figure 32 Booklet stapler cover switch

Interlock - Front and Rear Booklet Stapler Safety Switches

The front and rear booklet stapler safety switches are actuated when either the front or rear covers are raised.

These Interlocks prevent the booklet maker from operating when either the front or rear covers are obstructed, i.e., raised, or when the booklet maker is incorrectly mounted. Refer to [Figure 33](#).



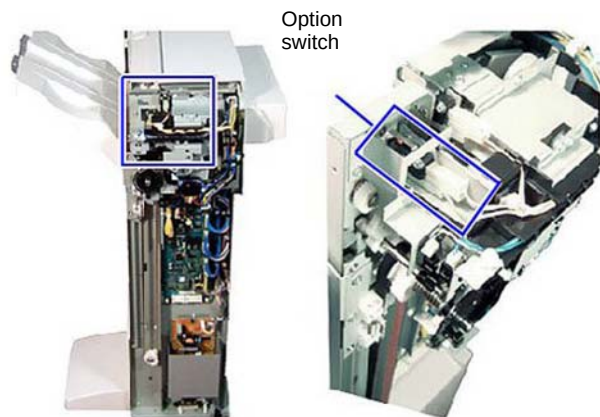
C-5-0051-A

Figure 33 Front and rear safety switches

Interlock - Finisher Side Interlock

An option switch is used to detect when the booklet maker is installed on the finisher. This Interlock is located on the Finisher LX, not the booklet maker.

When Interlocks are open, power is removed and an error message displays on the UI. Refer to [Figure 34](#).



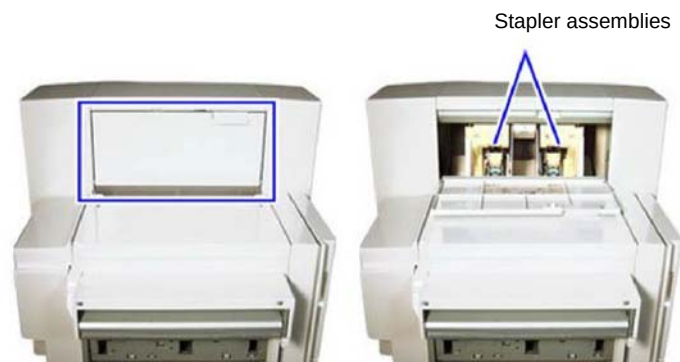
C-5-0052-A

Figure 34 Finisher side interlock

Stapler Assembly

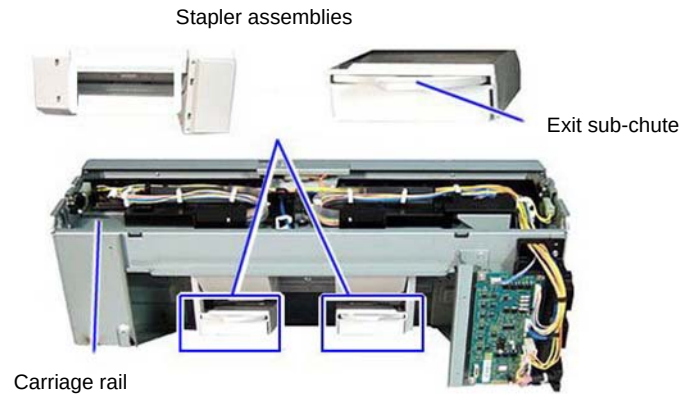
The booklet maker contains two stapler assemblies which support and staple compiled booklets prior to ejecting into the stacker tray.

Each stapler assembly contains a staple module and an exit sub chute. The staple units are mounted on a carriage rail. Refer to [Figure 35](#) and [Figure 36](#).



C-5-0053-A

Figure 35 Stapler assemblies



C-5-0054-A

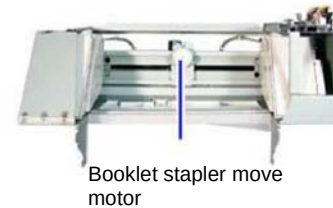
Figure 36 Components

Stapler Assembly Carriage Rail and Move Motor

The stapler assemblies are moved into position along the carriage rail by the booklet stapler move motor.

The booklet stapler move motor drives two rack gears, one connected to each stapler assembly.

The position of the stapler assemblies is controlled by the booklet stapler move home sensor and booklet stapler move position sensor which monitor the position of the rack gears. Refer to [Figure 37](#).



Booklet stapler move home sensor and booklet stapler move position sensor



C-5-0055-A

Figure 37 Stapler move motor

Crease Assembly

The crease assembly pre-creases sheets of paper prior to collating, stapling and stacking of booklets.

It is installed behind the compiler within the Finisher LX and is controlled by the finisher PWB.

Refer to [Figure 38](#).



Crease assembly



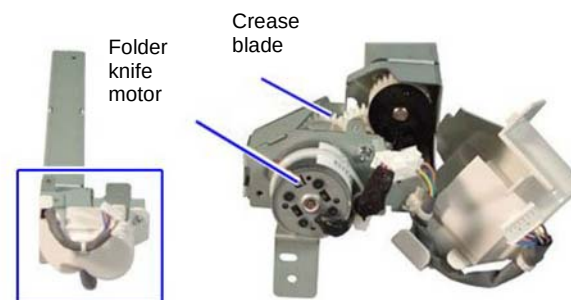
C-5-0056-A

Figure 38 Crease assembly

Crease Assembly Folder and Gears

The crease assembly consists of a folder knife motor, gears, crease blade and paper chute.

The folder knife motor raises and lowers the crease blade through one cycle of the gears. Refer to [Figure 39](#).



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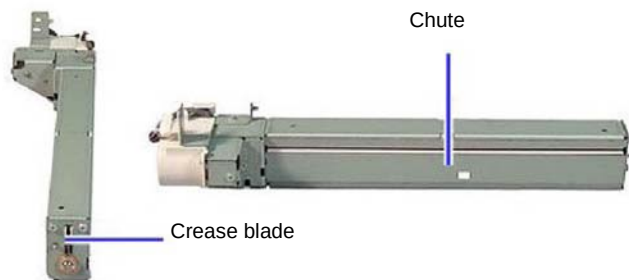
Figure 39 Crease assembly folder and gears

Crease Assembly Position

The action of the crease blade pressing the paper against the paper chute creates a pre-crease in the sheet of paper.

The position of the paper within the crease assembly is monitored by the entrance and compiler exit sensors (part of the finisher LX).

When the paper is in the correct position within the paper chute, the paper momentarily stops feeding and the crease blade is raised and lowered. Paper feed now resumes. Refer to [Figure 40](#).



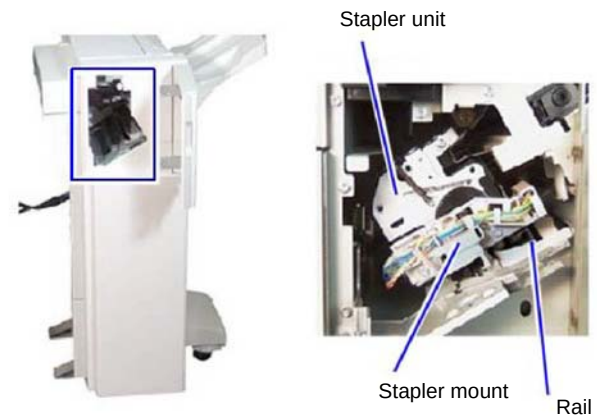
C-5-0058-A

Figure 40 Crease blade and chute

Compiler Stapler

Stapler Unit

The compiler stapler has a stapler unit which is installed on a stapler mount. The stapler mount moves the stapler unit to key stapling positions along the rail. Refer to [Figure 41](#).



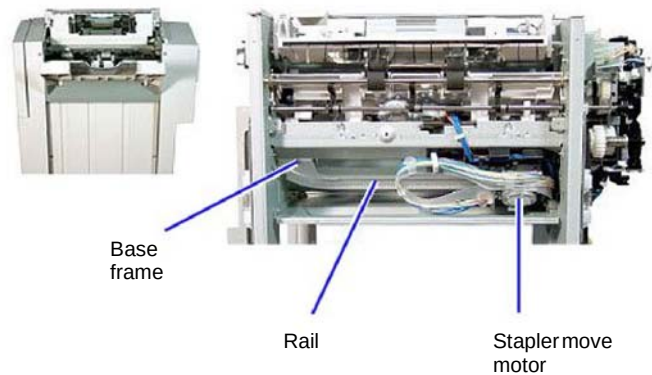
C-5-0059-A

Figure 41 Stapler unit

Stapler Mount

The stapler mount is driven by the stapler move motor which is secured to the bottom of the stapler mount.

A gear fixed to the end of the stapler move motor drives the stapler mount along the rail, which is an integral part of the base frame. Refer to [Figure 42](#).



C-5-0060-A

Figure 42 Stapler mount movement

Stapler Mount Position

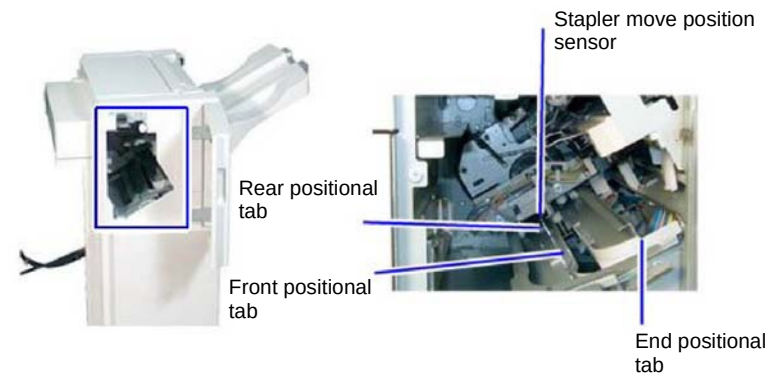
The position of the stapler mount is controlled by the stapler move position sensor.

As the stapler mount moves along the base frame, the light emitted between the two prongs of the stapler move position sensor is interrupted by one of three positional tabs.

These are the end, front, and rear positional tabs.

The end positional tab is used to indicate the correct position along the base frame for single stapling.

The front and rear positional tabs are used to indicate the correct position along the base frame for double stapling. Refer to [Figure 43](#).



C-5-0061-A

Figure 43 Stapler mount position

Stapler Cartridge

The staple units contain a staple cartridge CRU, staple clinch motor, cam and a staple drive mechanism.

When required, the staple clinch motor is energized to drive the cam.

One full rotation of the cam causes the staple drive mechanism to drive and clinch a staple, stored in the staple cartridge CRU, through the paper set. Refer to [PL 13.20](#).

Hole Punch Assembly

The hole punch assembly punches either 2 or 4 holes in Europe or 2 or 3 holes in North America. The hole punch assembly is installed within the horizontal transport. It is controlled by the finisher PWB. Refer to [Figure 44](#).



Figure 44 Hole punch assembly

Hole Punch Components

The hole punch assembly consists of a motor, gears, main cam, four (XE) or three (USSG, XCL) punch cams and a punch box.

The motor raises and lowers the punches through one cycle of the gears.

When the motor rotates in a clockwise direction it operates the two inner punch cams and in a counter-clockwise direction it operates all four (XE) or three (USSG, XCL) punch cams. Refer to [Figure 45](#).

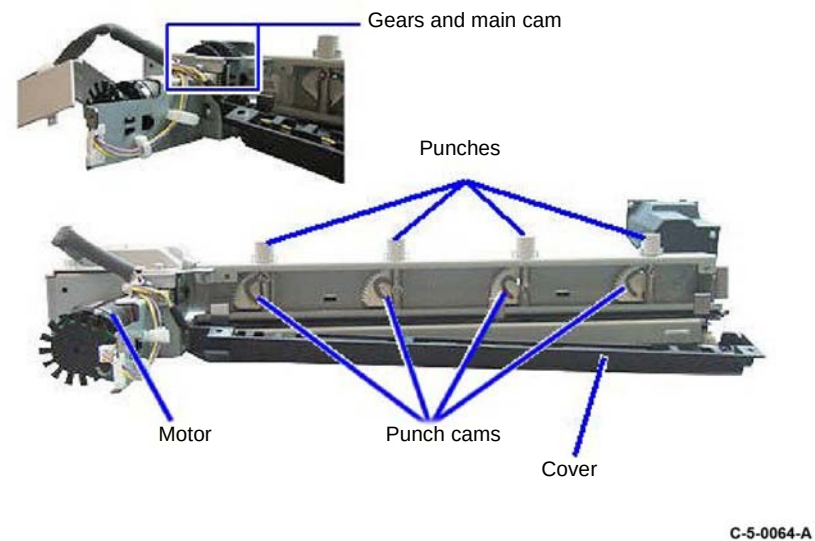
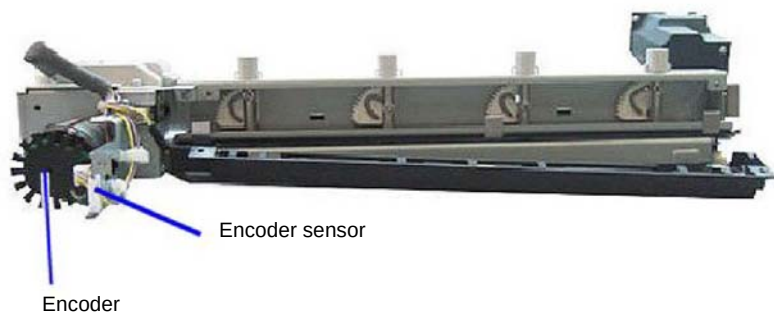


Figure 45 Hole punch components

Hole Punch Encoder

The operation of the hole punch is controlled by an encoder and sensor. The encoder has a number of apertures cut into it and is connected to the motor. As the motor rotates the gears to operate the hole punch, the encoder also rotates.

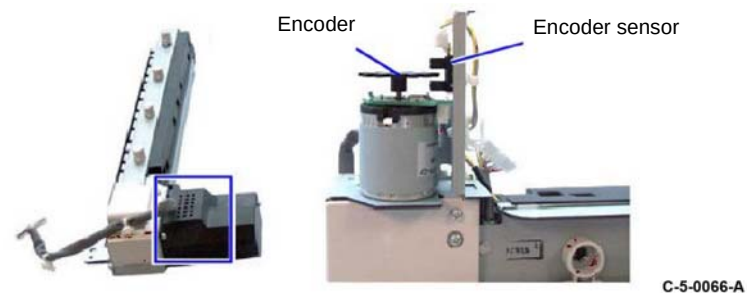
The rotation of the encoder is monitored by the encoder sensor which is an optical sensor that reflects light onto the encoder. Refer to [Figure 46](#).



C-5-0065-A

Figure 46 Hole punch encoder

The rotation of the encoder wheel causes the apertures to pass through the encoder sensor wheel, allowing light to pass. This triggers the sensor, which indicates that the hole punch has rotated one cycle. Refer to [Figure 47](#).

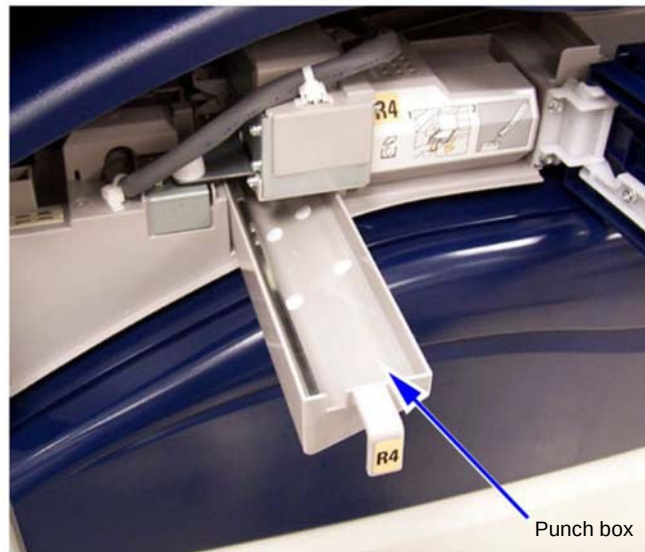


C-5-0066-A

Figure 47 Encoder wheel and sensor

Hole Punch Box

The punch box is located beneath the hole punch assembly and collects the discarded chads. This will need to be emptied periodically. Refer to [Figure 48](#).



Punch box

C-5-0067-A

Figure 48 Hole punch box

Customer Replaceable Units

Refer to [Figure 49](#). The only customer replaceable units (CRUs) for the LX finisher are:

- The 5,000 stitch staple cartridge and
- The two staple cassettes for the booklet maker. Each of the staple cassettes holds 2,000 staples.

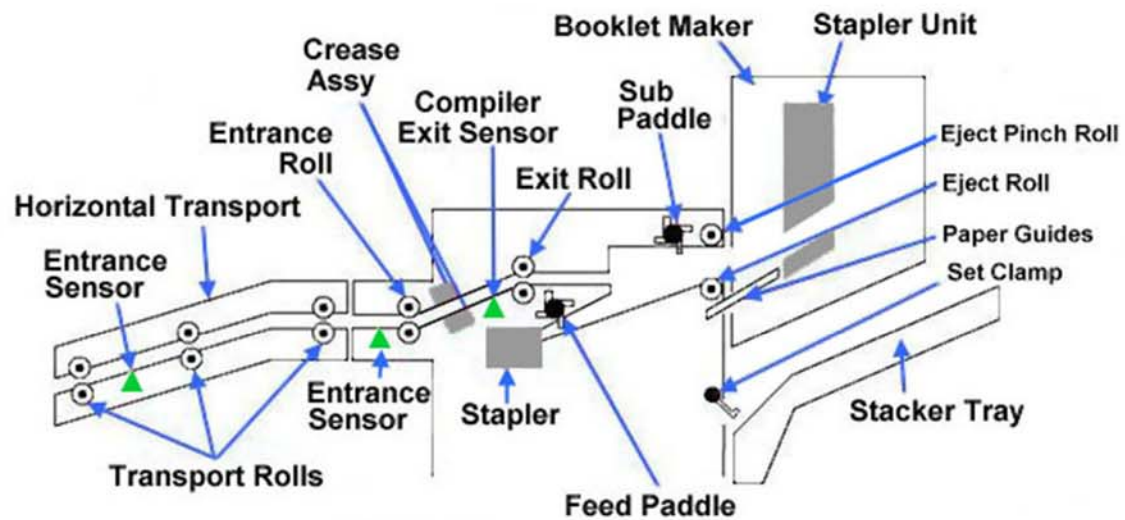


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Figure 49 Customer replaceable units

Paper Path Components

Refer to [Figure 50](#).



TC-5-0188-A

Figure 50 Paper path components

Fax

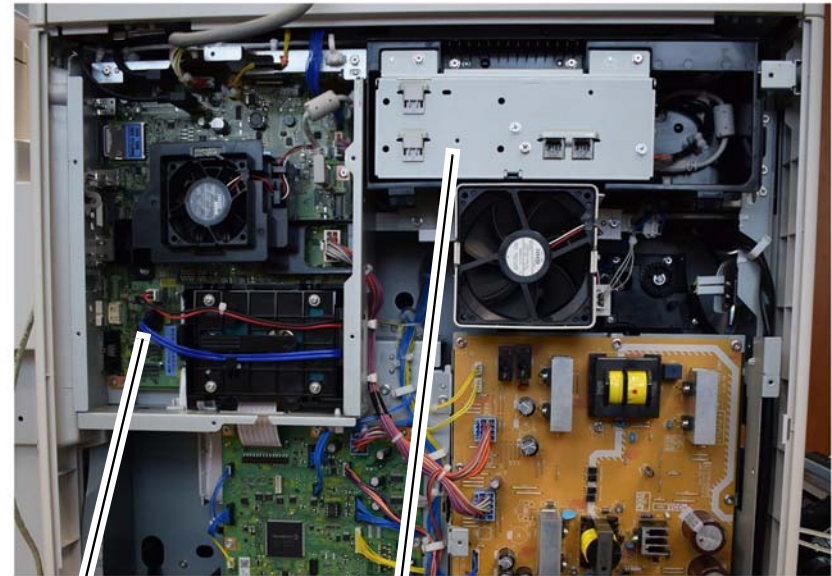
Overview

Super G3 analog fax capability is provided as an optional 1 or 3-line fax module or as a software-enabled Digital Fax over IP (VoIP Fax)

The 1 or 3-line fax module contains the fax modem(s) and fax speaker and is installed at the rear of the printer adjacent to the ESS PWB, [Figure 1](#). The line 1 fax PWB, [PL 20.05 Item 10](#), is fitted with a single fax modem. For the 3-line fax option, the line 2 and 3 fax PWBs, [PL 20.05 Item 15](#) are connected to the line 1 fax PWB via the riser PWB, [PL 20.05 Item 16](#). The line 1 fax PWB is connected directly to the ESS PWB and is controlled by software running on the ESS PWB. Refer to [BSD 20.1 Fax](#). The fax module also features a port to accommodate an optional telephone handset.

Fax over IP (VoIP Fax) is a purchasable option, installed via the USB port, which allows the printer to send and receive faxes over an IP based network using session Initiation Protocol (SIP) and Voice over IP (VoIP) protocols and services. The Fax over IP enabled printer can send and receive faxes from a variety of analog and digital devices.

Fax functionality is selected and controlled via the UI.



ESS PWB

Fax module (1-line module shown)

C-5-0187-A

Figure 1 Fax module