

# You should be using Electronic Documentation (EDOC) to support this product.

This pdf version of the Service Manual was made available at product launch until the EDOC was ready to be delivered but will not be updated/supported in the future.

We strongly recommend you transition to EDOC at your earliest opportunity.

- You must first have Portable Work Station (PWS) software loaded, which enables the use of Searchlite/Eureka and EDOC. The Windows 7 and Windows 10 versions of PWS are available in GSN library [16162](#).
- Once PWS software has been installed, you can request EDOC for products that you are trained on by accessing this [link](#) (login required). The form will look like the example below. Scroll down to find and select your product, or type the product into the **Other training** field, which is farther down on the page.

The screenshot shows the Xerox Training Order Form interface. At the top, there is a navigation bar with the Xerox logo, the title 'Training Order Form', and links for 'Help', 'Contact Us', 'Resources', and 'Hi'. Below this is a blue header with 'ASP Product Training' and 'E-learning/LivePlay'. The main content area is titled 'Select Training' and contains several sections of text: 'IMPORTANT:', 'The Annual Training and Documentation Fee includes one legacy product training kit per company per model. Any additional training kits will be charged at \$75.00 per kit.', 'NARS Authorized Service Providers can use CompTIA Printing and Documentation Imaging (PDI+) certification as a substitute for Printing, Laser Basics and Multifunction Basics. If you are PDI+ certified and haven't done so already, send a copy of your PDI+ certificate along with your name and TCN to [Partner Escalations](#).', 'Xerox will calculate any applicable sales tax and shipping charges.', and 'Can't find your what you're looking for? Some product training is offered as E-learning/LivePlay, available 24/7 via [Learning@Xerox](#). Choose the E-learning/LivePlay link on the menu above to see a full list of current online training offerings.'

The 'Training kits' section is a table with columns for 'Title' and 'Qty'. It lists several products with their respective quantities set to 0:

Title	Qty
Phaser 3100 MFP	0
Phaser 3150	0
Phaser 3200 MFP & PE220 & Differences	0
Phaser 3300 MFP	0
Phaser 3450	0
Phaser 3500	0
~+ 3600	

Below the training kits, there is a 'Fax kits' section with one item: 'Fax 101 Basic Kit - Cost: \$50 each' with a quantity of 0.

The 'Other training' section is a text input field, highlighted with a red box. Below it, a note states: 'This text box is for entering customized training, legacy products, or training NOT listed above.'

At the bottom, there are sections for 'Prerequisite CD-ROMs' and 'Onsite training available to selected Resellers only'. The CD-ROM section includes the text: 'Please visit [Learning@Xerox](#) to complete training and assessment on the new Xerox Office Prerequisites.' The onsite training section includes the text: 'Please note: As of September 30th, 2010, EIV 401 is a prerequisite for all products with fax capabilities. You may order an instructor facilitated course without completing this specific course.'



# VersaLink® B600/B610 Printer and B605/B615 Multifunction Printer Service Manual

Xerox® VersaLink® B600 Family MFP

Service Documentation

Xerox® VersaLink® B600 Family MFP Service Manual

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Revised BUS Update: 9 July 2018

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About This Manual .....	iii
How To Use This Manual .....	iii
Change History .....	iv
Service Safety Summary.....	v
Symbols Used on the Product.....	viii
Voltage Measurement and Specifications.....	ix
Health and Safety Incident Reporting .....	ix
Regulatory Specifications.....	x
Translation of Warnings .....	xi
Technical Support Information .....	xiv



## About This Manual

The Xerox® VersaLink® B600/605/610/615 MFP\_MFP-Tall and SFP Printer Service Manual is part of a multinational service documentation system delivered in the standard Xerox EDOC service manual format. This manual is the primary document used for diagnosing, repairing, maintaining, and troubleshooting these systems. The Service Manual is the controlling publication for a service call. To ensure product understanding, complete the Xerox Service Training Program for this printer.

### Organization

Section titles and the information contained in each is presented in the following paragraphs:

#### 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/Adjustments

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

#### Section 5 Parts List

This section contains the 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 / Information

This section contains all other procedures, product specifications and general information.

#### Section 7 Wiring Data

This section contains the wiring diagrams.

#### Section 8 Principles of Operation

This section contains details of printer operation and component locations.

### Component Names

Names of parts that appear in the disassembly procedures may not be exactly the same as the names that appear on the part or listed in the Parts List. For example; a part called the Registration Chute Assembly may appear on the Parts List as Assembly, Chute REG1.

## 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

The machines will be identified in this manual by the model identifier: VersaLink® B600/605/610/615 MFP\_Tall.

- VersaLink B600 Printer (SFP) (Low Speed)
- VersaLink B605 Multifunction Printer (MFP) (Low Speed)
- VersaLink B610 Printer (SPF) (High Speed)
- VersaLink B615 Multifunction Printer (MFP) (High Speed)
- VersaLink B615 Multifunction Printer (MFP) - Tall (High Speed with acc. opening)

When a procedure, parts list description or other reference is unique amongst different models of machine, the appropriate model designator is indicated. Any artwork is also specific. The VersaLink® B600/B605/B610/B615/B615\_Tall printer models may also be referred to as SFP, MFP Std. and MFP\_Tall respectively.

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

### Warnings, Cautions and Notes

#### WARNING

**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](#).

#### CAUTION

**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 appears to highlight a procedure, practice, condition or statement.

### Service Acronyms

While using this service documentation, you may encounter acronyms that are unfamiliar.

To find definitions for Xerox acronyms, go to the following page in your web browser, then enter the acronym and click Search:

<https://open.xerox.com/Services/acronym>

## Change History

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

- [BUS Update July 2018](#)

### BUS Update July 2018

The following procedures are updated:

- SCP 7 Configurations and Options
- Troubleshooting Overview
- 025-596, 025-597 HDD Diagnostics RAP
- 026-710 S/MIME Unsupported Cipher RAP
- 026-711 Multi-Page File Size RAP
- 027-741 Template Server Connect Fail RAP
- 027-742 HDD File System Full RAP
- 033-523 and 033-546 Line Not Connected RAP
- 033-530 DTMF Illegal Procedure RAP
- 042-348 Over Temperature Detect Fail RAP
- 045-311 Controller Communication Fail RAP
- 045-371 LPH DL Fail MULT RAP
- 047-216 Finisher Comm Fail RAP
- 071-101 Paper Jam in Tray1 RAP
- 075-100 JAM in Bypass Tray RAP
- 077-101 Paper Jam RAP
- 077-104 Exit Sensor Off Jam RAP
- 077-123 Registration Sensor Jam (Duplex) RAP
- 077-322 Option Comm Fail RAP
- 077-909 Paper Jam RAP
- 089-623 to 089-679 LED Offset Correction Error RAP
- 091-313, 091-402, 091-480 to 482, 091-913 to 929 Drum/CRUM RAP
- 093-912 Toner Cartridge Empty (K) RAP
- 093-913 to 093-939 and 096-918 CRUM Error RAP
- 099-396 to 099-399 Fuser Temperature Fault RAP
- 116-382 ABL Initialize Fail RAP
- 116-383 PIT Lib Failure RAP
- 116-396 RAPS140 Self Test Fail RA
- 124-315, 317, 355 DC132 Error 02, 04 and 14 RAP
- 124-319 DC132 Error 08 RAP
- 124-323 DC132 06 RAP
- 124-341, 351, 361, 381, 391 CRUM Market Fail MCU RAP
- 124-344, 346, 348 Billing Meter Mismatch RAP
- 124-347 Billing CountType Restoration Fail RAP
- 124-349 Modal Break Points Restoration Fail RAP
- 124-372 to 124-374 IOT Soft Fail RAP
- 133-710 Tray Select Fail RAP
- OF 1 Unusual Noises RAP
- OF 2 Blank UI RAP
- OF 3 POST Fault Codes (LED) Complete RAP
- IQ1 Image Quality Entry
- IQ2 Light or Undertoned Print
- IQ3 Blank Print RAP
- IQ4 Smeared/Unfused Image
- IQ5 Random Spots
- IQ6 Bead Carry-Out
- IQ7 Cross Process Banding
- IQ8 In-Process Lines Streaks
- IQ9 Cyclic Dots / Line
- IQ10 Vertical Deletions
- IQ11 Horizontal Banding
- IQ12 Banding (Blurred in horizontal direction)
- IQ13 Diagonal Banding
- IQ14 Uneven Density
- IQ15 Residual Image (Ghosting)
- IQ16 High Background on Prints
- IQ17 Jagged/ Blurry Text and Image
- IQ18 Wrinkled or Creased
- IQ19 Leading Edge Paper Damage
- IQ20 Incorrect Image Position or Margins
- IQ21 Images are Skewed
- IQ22 Registration is out of Alignment
- IQ23 Skew Check
- IQ24 Registration Check
- REP 1.1 UI Console Assembly (Control Panel) (MFP)
- REP 1.2 UI Inner Cover (MFP)
- REP 1.3 UI Frame Cover (MFP)
- REP 1.4 UI Harness
- REP 1.5 UI Access Door (MFP)
- REP 1.6 UI Console Assembly (SFP)
- REP 1.7 UI Inner Cover (SFP)
- REP 1.8 UI Harness (SFP)
- REP 1.9 UI Access Door (SFP)
- REP 2.1 LPH Mono Head Assembly
- REP 2.2 LPH MONO Guide
- REP 2.3 Right LPH Holder
- REP 2.4 Toner Guide
- REP 2.5 LPH MONO FFC Guide
- REP 11.10 Rear Interlock Switch



- REP 11.11 Feed and Separator Rollers
- REP 13.4 Bypass Tray Turn around 1 Roller Assembly Kit
- REP 14.1 Duplex Relay Cover
- REP 15.1 Option Registration Chute
- REP 15.2 Duplex Registration Roller Assembly Kit
- REP 15.3 Registration Chute Feeder Assembly
- REP 15.4 No Paper Actuator (Registration)
- REP 15.5 Registration Actuator
- REP 15.6 Registration Sensor
- REP 15.7 Feed Roll Assembly
- REP 18.8 HVPS PWB (MFP)
- REP 19.1 Front Cover Assembly (MFP and MFP\_Tall)
- REP 19.2 Right Front Cover (MFP and MFP\_Tall )
- REP 19.7 Left Side Cover (MFP and MFP\_Tall)
- REP 19.8 Left Side IIT Cover (MFP)
- REP 19.9 Second Bias Transfer Roller Assembly (MFP and MFP\_Tall)
- REP 19.10 Left Front Cover (MFP and MFP\_Tall)
- REP 19.12 Right Side Cover Assembly (MFP and MFP\_Tall)
- REP 19.13 Top Cover (MFP)
- REP 19.14 Left Side Cover (MFP and MFP\_Tall)
- REP 19.16 WIFI Cap (MFP and MFP\_Tall)
- REP 19.17 ESS Window Assembly Kit (MFP and MFP\_Tall)
- REP 19.18 Rear Cover Assembly (MFP and MFP\_Tall)
- REP 19.19 Front Inner Cover (MFP-Tall)
- REP 19.21 Right Side Front Cover (MFP-Tall)
- REP 19.36 Left Side Cover (MFP-Tall)
- REP 19.40 WIFI Cap (MFP Tall)
- REP 19.41 ESS Window Assembly Kit (MFP Tall)
- REP 19.42 Rear Cover Assembly (MFP-Tall)
- REP 19.56 Rear Cover Assembly (MFP)
- 5 Parts Lists
- GP 7 Machine Specifications
- GP 15 Special Boot Modes
- GP 39 Reset Administrator Password
- GP 41 Hardware Information
- dC612 Print Test Pattern
- dC945 IIT Calibration
- Reference Library

## Service Safety Summary

### General Guidelines

For qualified service personnel only. Refer also to the section on Electrical Safety.

Avoid servicing alone. Do not perform internal service or adjustment of this product unless another person capable of rendering first aid or resuscitation is present.

### WARNING

**Use extreme care when working near electrically energized components and high voltage cables that are exposed during troubleshooting or repair. Contact with electrical components or high voltage cables represents a shock potential that could result in serious personal injury.**

**NOTE:** Power is supplied to the AC inlet, LVPS PWB; (PL 18.1 Item 16, PL 18.5 Item 16/PL 18.9 Item 16), and the ESS MFP/ESS SFP PWBs (PL 18.1 Item 5/PL 18.5 Item 5/PL 18.9 Item 5), even while the printer is off. Never touch these live components. Disconnect power before removing the power supply shield or replacing components.

**NOTE:** Remove jewelry prior to servicing. Rings, necklaces and other metallic objects could come into contact with dangerous voltages and currents.

### Electrical Safety

- Use the power cord supplied with the printer.
- Plug the power cord directly into a properly grounded electrical outlet.
- Do not use a ground adapter plug to connect the printer to an electrical outlet that does not have a ground connection terminal.
- Do not use an extension cord or power strip.
- Do not place the system in an area where people might step on the power cord.
- Do not place objects on the power cord.
- Do not block ventilation openings. These openings prevent printer overheating.
- Do not drop paper clips or staples into the printer.

### Operational Safety

The printer and supplies were designed and tested to meet strict safety requirements. These include safety agency examination, approval, and compliance with established environmental standards.

Pay attention to these safety guidelines to ensure the continued, safe operation of the printer.

- Use the supplies specifically designed for your system. The use of unsuitable materials may cause poor performance and a possible safety hazard.
- Follow all warnings and instructions marked on, or supplied with, the system, options and supplies.

**NOTE:** The Total Satisfaction Guarantee is available in the United States and Canada. Coverage may vary outside these areas; please contact your local representative for details.

### Maintenance Safety

- Do not attempt maintenance not specifically described in the printer documentation.
- Do not use aerosol cleaners. The use of supplies that are not approved may cause poor performance and could create a hazardous condition.

- Do not burn any consumables or routine maintenance items. For information on Xerox supplies recycling programs, go to [www.xerox.com/gwa](http://www.xerox.com/gwa).

### Safety Labels

Read and obey all posted caution, warning, and danger labels. Throughout the printer, these safety labels are displayed on potentially dangerous components. As you service the printer, check to make certain that all safety labels remain in place.

- **Caution:** An unapparent hazard exists that may cause personal injury or damage to the equipment. For example, a panel may cover the hazardous area.
- **Warning:** An unapparent hazard exists that may cause serious personal injury.
- **Danger:** An unapparent hazard exists that may cause serious personal injury or death.

### Safety Interlocks

Use caution so that the safety devices for preventing accidents (interlocks switches, fuses, thermostats, etc.) and the protective parts for users (covers, control panel, etc.) can function as intended. Make sure all covers are in place and all interlock switches are functioning correctly after you have completed a service call. If you bypass an interlock switch, use extreme caution when working on or around the printer. [Figure 1](#) and [Figure 2](#) show the interlock switch locations and circuitry.

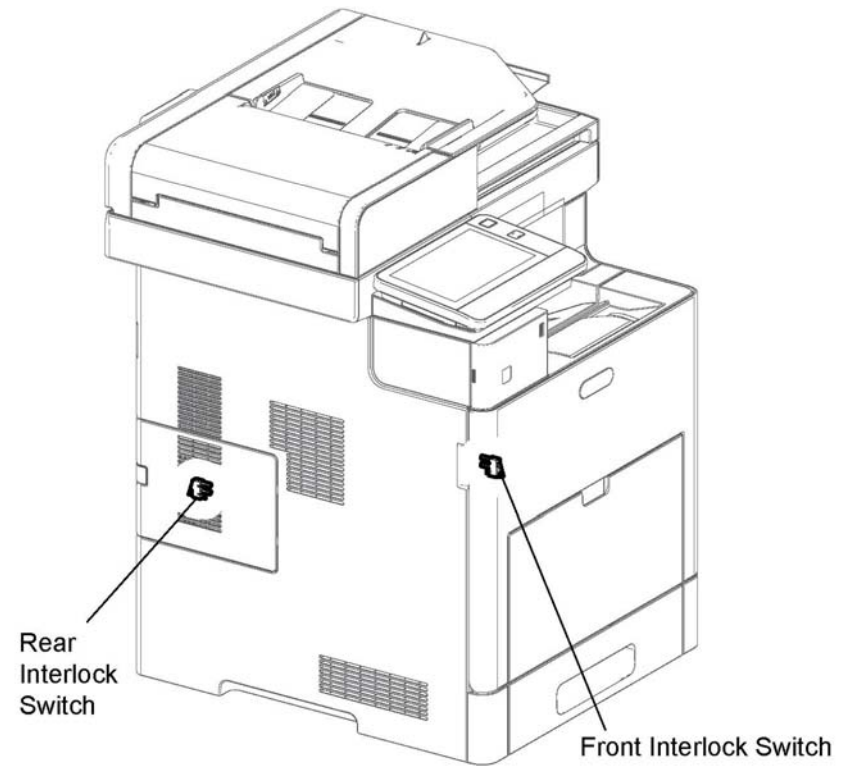


Figure 1 Safety interlock switch locations (MFP shown)

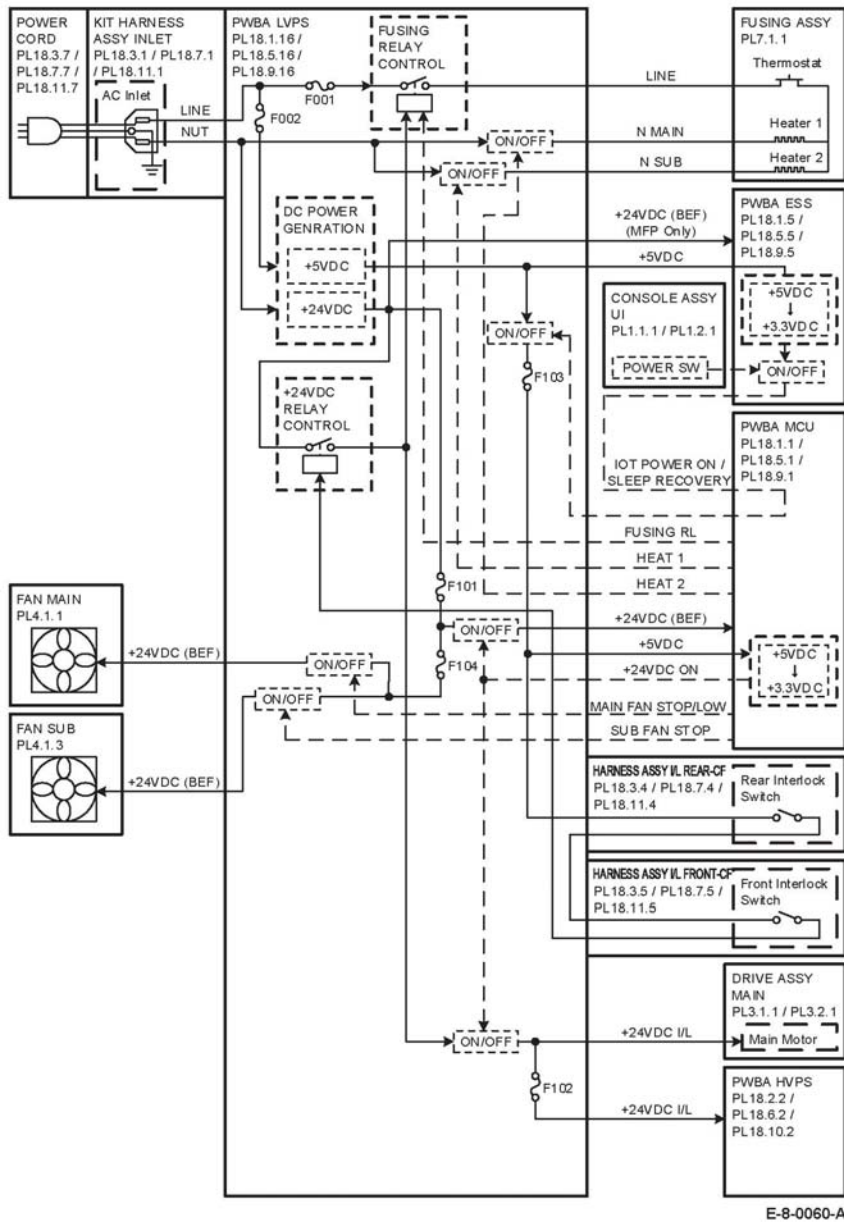


Figure 2 Safety system schematic

## Drive Units

When servicing gears or other driving units, be sure to turn off the power switch and unplug the power cord. Drive them manually when required.

## High-Temperature Units

When servicing high-temperature units (securing unit, etc.), be sure to turn them off to prevent burns, injuries and other troubles. Remove the power plug and wait 30 minutes before starting service processes so they have cooled down sufficiently.

## Routing Wire Harnesses

Before starting the service operation, carefully check how the harness wires are routed. When routing them, check that they are routed in the same way as they were before the servicing, and that they are not pinched or do not interfere with the corners or edges of any operating components.

## Battery

A lithium battery is used on the ESS PWB.

## WARNING

To avoid the possibility of fire or explosion, always replace the battery with the same type, and dispose of old batteries as required by local regulations.

## Symbols Used on the Product

The following precautionary symbols may appear on the machine.

Figure 1 indicates Danger High Voltage.



Figure 1 High voltage symbol

Figure 2 is the Protective Ground (Earth) symbol.



Figure 2 Protective ground (earth) symbol

Figure 3 is the symbol indicating a hot surface. Use caution to avoid personal injury.



Figure 3 Hot surface symbol

Figure 4 is the symbol indicating that the surface is hot while the printer is running. After turning off the power, wait 30 minutes.



Figure 4 Wait 30 minutes symbol

Figure 5 is the symbol indicating where to avoid pinching fingers in the printer. Use caution to avoid personal injury.



Figure 5 Pinch injury symbol

Figure 6 is the symbol to use caution (or draws attention to a particular component). Refer to the manual(s) for information.



Figure 6 Use caution symbol

Figure 7 is the symbol indicating that the item is sensitive and should not be touched.



Figure 7 Do not touch symbol

Figure 8 is the symbol indicating the item is sensitive to sunlight, and exposure to it will reduce its life span.



Figure 8 No sunlight symbol

Figure 9 is the symbol indicating the item is sensitive to any light, and exposure to it will reduce its life span.



Figure 9 No light symbol

## Voltage Measurement and Specifications

Table 1 shows the voltages present in the Xerox® VersaLink® B600/605/610/615 MFP\_MFP-Tall and SFP Printers. Measurements of DC voltage must be made with reference to the specified DC common, unless some other point is referenced in a diagnostic procedure. All measurements of AC voltage should be made with respect to the adjacent return or ACN wire.

Table 1 Voltage measurement and specifications

Voltage	Specification
Input Power 220VAC	198VAC TO 254VAC
Input Power 100VAC	90VAC TO 135VAC
Input Power 120VAC	90VAC TO 135VAC
+5VDC	+4.75VDC TO +5.25VDC
+24VDC	+23.37VDC TO +27.06VDC

### Logic Voltage Levels

Table 2 shows the logic levels present in the Xerox® VersaLink® B600/605/610/615 MFP\_MFP-Tall and SFP Printers. Measurements of logic levels must be made with reference to the specified DC common, unless some other point is referenced in a diagnostic procedure.

Table 2 Logic levels

Voltage	H/L Specification
+5VDC	H = +3.00VDC or greater L = below 0.8VDC
+3.3VDC	H = +2VDC or greater L =below 0.8VDC

### DC Voltage Measurement in RAPs

The RAPs have been designed so that when it is required to use the DMM to measure a DC voltage, the first test point listed is the location for the red (+) meter lead and the second test point is the location for the black meter lead. For example, the following statement may be found in a RAP.

**There is +5VDC from P/J7 to P/J68.**

In this example, the red meter lead would be placed on P/J7 and the black lead on P/J68.

If a second test point is not given, it is assumed that the black meter lead may be attached to chassis ground.

## 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 & 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 any of the following methods:
  - For incidents in North America and Developing Markets West (Brazil, Mexico, Latin American North and Latin American South):
    - Phone\* Xerox EH&S at: 1-800-828-6571.
    - Electronic mail to Xerox EH&S
    - FAX Xerox EH&S at: 1-585-422-6449 (intelnet 8\*222 6449).
  - For incidents in Europe and Developing Markets East (Middle East, Africa, India, China and Hong Kong):
    - Phone\* Xerox EH&S at: +44 (0) 1707 353434.
    - Electronic mail Xerox EH&S at: Elaine.Grange@xerox.com.
    - FAX Xerox EH&S at: +44 (0) 1707 353914 (intelnet 8\*668 3914).

\*Initial notification made by phone must be followed within 24 hours by a completed incident report and sent to the indicated electronic mail address or FAX number.

**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.

## Regulatory Specifications

Xerox has tested this product to electromagnetic emission and immunity standards. These standards are designed to mitigate interference caused or received by this product in a typical office environment.

### United States (FCC Regulations)

The Xerox® VersaLink® B600/605/610/615 MFP\_MFP-Tall and SFP Printers have been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with these instructions, it may cause harmful interference to radio communications. Operation of Class A equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense. There is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment Off and On, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiver.
- Increase the separation between the equipment and receiver.
- Connect the equipment to a different electrical circuit.
- Consult the dealer or an experienced radio/television technician for help.

Any modifications not expressly approved by Xerox could void the user's authority to operate the equipment. To ensure compliance with Part 15 of the FCC rules, use shielded interface cables.

### Canada (Regulations)

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

### European Union

CE Mark



Figure 1 CE symbol

The CE mark (Figure 1) applied to this product symbolizes Xerox's declaration of conformity with the following applicable Directives of the European Union as of the dates indicated:

February 26, 2014, Low Voltage Directive 2014/35/EU

April 20, 2014, Electromagnetic Compatibility Directive 2014/30/EU

This product, if used properly in accordance with the user's instructions, is neither dangerous for the consumer nor for the environment.

To ensure compliance with European Union regulations, use shielded interface cables.

A signed copy of the Declaration of Conformity for this product can be obtained from Xerox.

## Translation of Warnings

### WARNING

Switch off the electricity to the machine, **GP 4**. 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. 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:** Spegnere la macchina. 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. 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. 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

Perform the steps in the following procedure carefully. Failure to follow this procedure carefully could result in electrical shock and personal injury.

**DANGER:** Faire très attention en effectuant les étapes de la procédure suivante. Si cette procédure n'est pas strictement respectée, il y a des risques d'électrocution et d'autres blessures.

**AVVERTENZA:** Si prega eseguire attentamente la seguente procedura. Omettere di eseguire attentamente la procedura indicata può provocare forti scosse e gravi ferite.

**VORSICHT:** Befolgen Sie die Schritte der folgenden Anleitung genau. Die Nichtbefolgung dieser Anweisungen kann elektrischen Schlag oder andere Körperverletzungen zur Folge haben.

**AVISO:** Lleve a cabo los pasos del procedimiento siguiente con mucho cuidado. No seguir este procedimiento cuidadosamente puede ocasionar una descarga eléctrica y lesiones personales

## WARNING

Use extreme care when working in the following area. Some of the components are electrically energized and could cause electrical shock and personal injury if touched.

**DANGER:** Faire très attention en travaillant dans la zone suivante. Certains éléments portent une charge électrique et présentent un risque d'électrocution et de graves blessures s'ils sont touchés.

**AVVERTENZA:** Maneggiare la seguente area con la massima precauzione. Alcuni componenti sono carichi di corrente elettrica e se toccati possono provocare scosse elettriche e lesioni.

**VORSICHT:** Bei Arbeiten in folgenden Bereichen besondere Vorsicht walten lassen. Einige der Komponenten sind elektrisch aufgeladen und können bei Berührung einen Stromschlag und körperliche Verletzung verursachen

**AVISO:** Tenga mucho cuidado al trabajar en el área siguiente. Algunos de los componentes están cargados eléctricamente y podrían producir descargas y lesiones, si se tocan

## 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

Use safe handling procedures when removing the module. Refer to **GP 4**. The module is heavy.

**DANGER:** Conformez-vous aux procédures de manipulation de sécurité pour le retrait du module. Reportez-vous à **GP 4**. Le module est lourd.

**AVVERTENZA:** Utilizzare procedure di gestione sicure durante la rimozione del modulo. Vedere **GP 4**. Il modulo è pesante.

**VORSICHT:** Verwenden Sie sichere Vorgehensweisen zum Entfernen des Moduls. Siehe auch **GP 4**. Das Modul ist sehr schwer.

**AVISO:** Utilice los procedimientos de seguridad cuando elimine el módulo. Consulte el **GP 4**. El módulo es pesado.

## WARNING

Follow the service procedure exactly as written. Use of controls or adjustments other than those specified in this manual, may result in an exposure to invisible laser radiation. During servicing, the invisible laser radiation can cause eye damage if looked at directly.

**DANGER:** Les procédures de dépannage doivent être suivies à la lettre. Si les réglages ou vérifications ne sont pas effectués suivant les instructions de ce manuel, il peut y avoir un risque d'exposition dangereuse au faisceau laser. Celui-ci peut provoquer des lésions oculaires s'il est observé directement.

**AVVERTENZA:** Eseguire le procedure di servizio esattamente come descritto. L'utilizzo di dispositivi di controllo o di registrazione diversi da quelli riportati in questo manuale potrebbe comportare un'esposizione a radiazioni laser invisibili. Tali radiazioni possono danneggiare gli occhi se si guarda direttamente il fascio laser durante gli interventi di servizio.

**VORSICHT:** Die Wartungsarbeiten genau den Anweisungen entsprechend durchführen. Der Umgang mit Steuer- oder Bedienelementen, deren Verwendung nicht ausdrücklich in diesem Handbuch angewiesen wurde, kann dazu führen, dass unsichtbare Laserstrahlung frei gesetzt wird. Direkter Blickkontakt mit dem Laserstrahl kann bleibende Augenschäden verursachen.

**AVISO:** Siga los procedimientos de mantenimiento tal como están descritos. El uso de controles o ajustes no especificados en este manual puede tener como resultado la exposición a radiación láser invisible. Durante las operaciones de mantenimiento, la radiación de láser invisible puede causar daños en los ojos si se mira directamente a ella.

## 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.

**DANGER:** États-Unis et Canada. Si cette machine est installée dans un couloir ou une voie de sortie, 1,12 m (44 pouces) d'espace supplémentaire à l'espace normal doit être disponible devant la machine conformément aux normes de sécurité d'incendie.

**AVVERTENZA:** N/A

**VORSICHT:** N/A

**AVISO:** Estados Unidos y Canadá. No instale esta máquina en un corredor o ruta de salida que no tenga 1.12 m (44 pulgadas) de ancho delante de la máquina, sin incluir el espacio que ocupe la máquina. Este espacio adicional de 1.12 m (44 pulgadas) delante de la máquina en corredores y rutas de salida es necesario para cumplir los requisitos de las normas sobre incendios.



## WARNING

Use only Xerox materials and components. This product is safety certified using Xerox materials and components. The use of non Xerox materials and components may invalidate the safety certificate.

**DANGER:** N'utilisez que des matières premières et des composants Xerox. La sécurité du produit est assurée dans le cadre de son utilisation avec des matières premières et des composants Xerox. L'utilisation de matières premières et de composants autres que ceux de Xerox risque d'invalider le certificat de sécurité.

**AVVERTENZA:** Utilizzare solo materiali e componenti Xerox per avvalersi della certificazione di protezione. L'utilizzo di materiali e componenti non Xerox può rendere nulla la certificazione di protezione.

**VORSICHT:** Verwenden Sie nur Materialien und Komponenten von Xerox. Dieses Produkt besitzt die Sicherheitszertifizierung bei Verwendung von Xerox-Materialien und -Komponenten. Die Verwendung von Materialien und Komponenten anderer Hersteller setzt möglicherweise das Sicherheitszertifikat außer Kraft.

**AVISO:** Utilice solo los materiales y componentes Xerox. Este producto dispone de un certificado de seguridad si se utilizan los materiales y componentes Xerox. Este certificado de seguridad no será válido si se utilizan materiales y componentes que no sean de Xerox.

## 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

Do not handle the Fuser components until they have cooled. Some Fuser components operate at hot temperatures and can produce serious personal injury if touched.

**DANGER:** Ne pas manipuler les éléments du four avant de les laisser refroidir. Certains éléments du four fonctionnent à des températures très élevées et peuvent causer de graves blessures s'ils sont touchés.

**AVVERTENZA:** Non maneggiare i componenti del fusore finché non sono raffreddati. Alcuni di questi componenti funzionano ad alte temperature e possono provocare gravi ferite se vengono toccati.

**VORSICHT:** Die Fixieranlage sollte erst gehandhabt werden, wenn diese genügend abgekühlt ist. Einige Teile der Fixieranlage erzeugen übermäßige Hitze und führen bei der Berührung zu schweren Verbrennungen.

**AVISO:** No manipule los componentes del fusor antes de que se enfríen. Algunos de los componentes del fusor funcionan a altas temperaturas y pueden ocasionar daños personales graves si se los toca.

## WARNING

Do not attempt to remove or lift the following component with less than 2 people. The component is very heavy and requires at least 2 people to lift or remove it. Any attempt to remove or lift the component with less than 2 people could result in serious personal injury.

**DANGER:** Ne pas tenter d'enlever ou soulever l'élément suivant tout seul. Cet élément est très lourd; au moins 2 personnes doivent être présentes pour le soulèvement ou la dépose. Toute tentative d'enlever ou soulever cet élément sans la collaboration d'au moins 2 personnes peut causer de graves blessures.

**AVVERTENZA:** Non tentare di togliere o sollevare il componente seguente con meno di 2 persone. Il componente è molto pesante e richiede almeno 2 persone per sollevarlo o rimuoverlo. Tentare di rimuovere o sollevare questo componente con meno di 2 persone può provocare gravi ferite.

**VORSICHT:** Versuchen Sie keinesfalls, die folgende Komponente mit weniger als 2 Personen zu entfernen oder zu heben. Die Komponente ist sehr schwer, daher werden mindestens 2 Personen benötigt, um sie zu heben oder zu entfernen. Der Versuch, die Komponente mit weniger als 2 Personen zu entfernen oder zu heben, kann schwere Körperverletzung zur Folge haben.

**AVISO:** No intente levantar o retirar el componente siguiente usando menos de 2 personas. El componente es muy pesado, y se necesitan por lo menos 2 personas para levantarlo o retirarlo. Intentar retirar o levantar el componente usando menos de 2 personas puede resultar en lesiones personales serias.

## Technical Support Information

The Xerox Service Manual is the primary document used for repairing, maintaining, and troubleshooting the Xerox® VersaLink® B600/605/610/615 MFP\_MFP-Tall and SFP Printers. To ensure complete understanding of these products, participation in Xerox Service Training is strongly recommended. To service these products, certification for these products is required.

For updates to the service manual, service bulletins, knowledge base, etc., go to:

- Xerox Global Service Net: <https://www.xrxgsn.com/secure/main>.

For further technical support, contact your assigned Xerox Technical Support representative.

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# 1 Service Call Procedures

SCP 1 Initial Actions..... 1-3  
SCP 2 First Call Actions..... 1-4  
SCP 3 Normal Call Actions ..... 1-4  
SCP 4 Fault Analysis ..... 1-5  
SCP 5 Subsystem Maintenance ..... 1-6  
SCP 6 Final Actions ..... 1-9



## SCP 1 Initial Actions

Initial actions are used to gather information on printer performance.

Start a service call with [SCP 1](#) Initial Actions and end with [SCP 6](#) Final Actions.

Also refer to [GP 7](#) Machine Specifications.

### Procedure

#### WARNING

**Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.**

#### WARNING

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

*NOTE: Ignore references to options not installed on the printer.*

1. Identify the problem.
  - Verify the reported problem does exist.
  - Ask the operator to describe or demonstrate the problem.
  - Print normal customer prints and service test prints.
  - Make note of any print-quality problems in the test prints.
  - Print a usage profile, if the printer is able to print.
2. Make note of any mechanical or electrical abnormalities present.
3. Make note of any unusual noise or smell coming from the printer.
4. View the engine error and jam histories under the Tools menu.
5. Take note of symptoms or error messages.
6. Make sure:
  - a. The power cord is connected to the wall outlet and to the machine.
  - b. The AC input from the wall outlet is within specifications.
  - c. Paper is loaded correctly and all paper trays and covers are closed
  - d. If installed, the USB cable or network connection is installed correctly.
7. If available, check the service log book for any previous actions that may be relevant to the call.
8. If this is the first service call to this printer, perform [SCP 2](#) First Call Actions, otherwise go to [SCP 3](#) Normal Call Actions.

### Accessing Engine Fault History

Listed below are three ways in which you can access fault history. Additional fault history information appears in [GP 2](#).

*NOTE: Error and fault code definitions appear in Section 2.*

1. Read (if possible) fault history from the Machine Status menu on the control panel. The error history is listed on screen.
2. Accessing fault history in Service Diagnostics

3. If the printer is connected to a network and has a TCP/IP address, view the printer's web page using a web browser.
  - a. Open a web browser.
  - b. Enter the printer's IP address as the URL.
  - c. Select > > and the fault history displays.

## SCP 2 First Call Actions

First call actions are used for the first service call.

### Procedure

1. Check the machine configuration with the customer, refer to [GP 7](#) Machine Specifications. Check that all required hardware and software is installed and/or enabled.
2. Check that all the relevant machine settings are correctly entered, refer to [GP 4](#) System Administration Tools.
3. If a fault is present, go to [SCP 3](#) Normal Call Actions. If there is no fault present, go to [SCP 6](#) Final Actions.
4. Enter the printer and customer details in the service log.

## SCP 3 Normal Call Actions

Normal call actions are used to determine the reason for the service call.

### Procedure

**NOTE:** *If a fault message appears at any time. Refer directly to the RAP for the fault message and perform the procedure.*

If possible, perform the following:

1. Review any defective print samples.
2. Determine that the user accessible settings are correct. If necessary refer to the user documentation.
3. Check all job queues and verify with the customer any requirement to print the documents in memory, before switching off the power or clearing memory.
4. Print the customer assistance report (call for assistance), then record the total print count.
5. Go to [SCP 4](#) Fault Analysis.

## SCP 4 Fault Analysis

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

### Procedure

When diagnosing or repairing a fault in a particular subsystem, exercise the machine in all modes until the fault is determined. In the instance of finding more than one fault or failure, correct one fault before going to the next fault. If no fault is found, go to [SCP 5 Subsystem Maintenance](#).

### Fault Codes

If a fault code is displayed, perform the Status Indicator RAP for that code.

### Control Panel Faults

If the power is on but the control panel is blank, perform [dC305 Panel Diagnostics](#).

### Image Quality Defects

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

### Unresolved Faults

If a fault cannot be resolved using the appropriate RAP, and also only if instructed by 2nd level support, obtain a log files. Refer to [GP 37 How to obtain Log Files](#). Escalate the problem to 2nd level support.

### Additional Information

If necessary, refer to the following general procedures and information:

- [GP 1 Using the Service Diagnostics](#)
- [GP 2 Fault Codes and History Logs](#)
- [GP 3 Device Information](#)
- [GP 4 How to Switch Off or Switch On the Printer](#)
- [GP 6 Electrostatic Discharge Prevention](#)
- [GP 7 Machine Specifications](#)
- [GP 8 General Disassembly Precautions](#)
- [GP 9 Firmware Version Upgrade](#)
- [GP 10 How to Check a Motor](#)
- [GP 11 How to Check a Sensor](#)
- [GP 12 How to Check a Solenoid or Clutch](#)
- [GP 13 How to Check a Switch](#)
- [GP 14 How to Clone Device Settings](#)
- [GP 15 Special Boot Modes](#)
- [GP 16 Separate System Modules](#)
- [GP 17 External FAX Line Test](#)
- [GP 18 Printing Reports](#)
- [GP 19 Intermittent or Noise Problem](#)
- [GP 20 How to Safely Lift or Move the Printer](#)

- [GP 21 Machine Lubrication](#)
- [GP 22 Installation Space Requirements](#)
- [GP 23 First Print Output Time](#)
- [GP 24 Restriction of Hazardous Substances \(RoHS\)](#)
- [GP 26 Media Specifications](#)
- [GP 27 Environmental Data](#)
- [GP 28 Supplies Plan Conversion](#)
- [GP 29 How to Check a Dispenser Motor](#)
- [GP 30 IP \(ESS\) Specifications](#)
- [GP 31 IIT Specifications](#)
- [GP 32 FAX Specifications](#)
- [GP 35 Setting Up an Ethernet Connection](#)
- [GP 36 How to Manually Configure an IP Address](#)
- [GP 37 How to Obtain Log Files](#)
- [GP 38 Electrical Specifications](#)
- [GP 39 Reset Administrator Password](#)
- [GP 40 Xerox Supplies and Accessories](#)
- [GP 41 Hardware Information](#)

## SCP 5 Subsystem Maintenance

The Subsystem Maintenance section contains information regarding the component life of the machine.

### Procedure

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.

1. Clean the pick rollers on every call.
2. Use the Control panel to check maintenance item counters.
3. Compare the counter values to those listed in Table 1.
4. Advise the customer of any routine maintenance items that are approaching or over the service limit.

### Lubrication

#### CAUTION

Plastic parts deteriorate when unspecified lubricants or chemicals are used. To avoid damage, use only approved lubricant.

The printer is lubricated during assembly at the factory and does not require periodic lubrication. Some parts require lubrication following replacement. These parts are identified in the replacement procedures. When lubricating during replacement, use approved grease.

### Component Life

The design life of the major components are shown in Table 1. Environmental conditions and actual use will vary these factors. The component life shown in Table 1 is for reference only.

Table 1 Design life of major components

	Component	Design Life
1.	Pick Up and Nudger Rollers	100,000 pages
2.	Separator Roller	100,000 pages
3.	Transfer Roll Unit	200,000 images
4.	Fuser	200,000 images
5.	Feed Roller Kit	100,000 pages
6.	DADF Roller Assembly	200,000 pages
7.	Drum Cartridge	60,000 pages

### Consumables and Maintenance

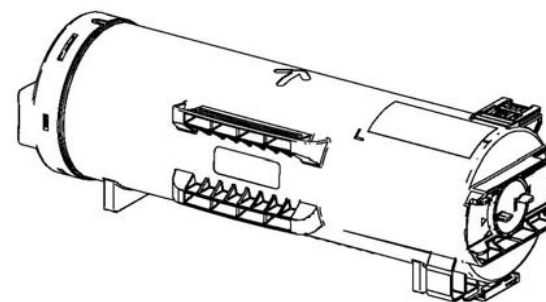
Consumables consist of the toner cartridge, drum cartridge, and the staple cartridge.

### Dimensions and Mass of Consumables

The MFP and SFP contain the consumables shown in Table 2:

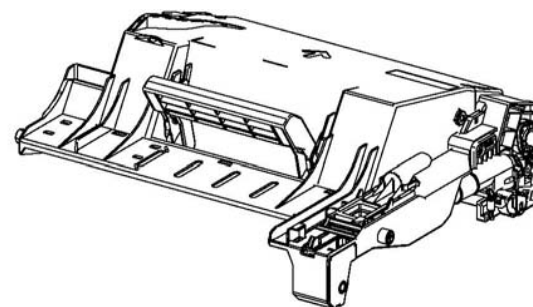
Table 2 Dimensions and mass of consumable

Consumable	Width (mm)	Depth (mm)	Height (mm)	Mass (g)
Toner Cartridge (Figure 1.)	61.3	180	57.3	100/120/140
Drum Cartridge (Figure 2.)	77.3	335.4	78.5	720



E-8-0579-A

Figure 1 Toner cartridge



E-8-0580-A

Figure 2 Drum cartridge

### Consumables Life Expectancies

The toner cartridge has a CRUM (Customer Replaceable Unit Monitor) to record regional and toner usage information. The CRUM maintains a count of the amount of toner consumed. When the count reaches set values, warning and error messages appear to notify the user when near and end of life status is reached.

Like the toner cartridge, the drum cartridge has a CRUM to maintain a page count. When the count reaches a set value, warning and error messages appear to notify the user that the drum cartridge has reached near or end of life status.



**NOTE:** The specifications showing life ratings are correct at the time of product release. For the most current values, go to [www.xerox.com](http://www.xerox.com).

Life ratings are shown in [Table 3](#) and [Table 4](#) and [Table 5](#).

**Table 3 Life expectancies for toner (pages)**

Consumable	Config	Capacity				
		Bundled	Standard	High Capacity	Extra High Capacity	Extra High Cap. Metered
Black Toner Cartridge	SFP/MFP	10,000	10,000	25,000	45,000	45,000

**Table 4 Life expectancies for drum cartridge (pages)**

Consumable	Config.	Capacity	
		Bundled	CRU
Drum Cartridge	C600/C605	57,000	57,000
	C610/C615	60,000	60,000

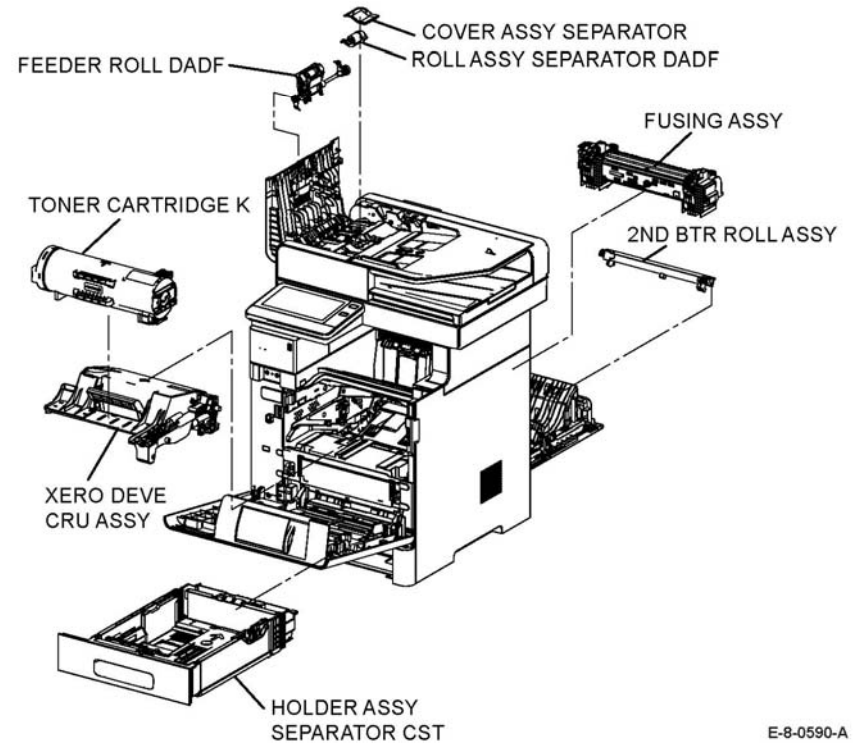
**Table 5 Life expectancies for stapler cartridge**

Consumable	Config.	Capacity	
		Cartridge	Refill
Stapler Cartridge	Finisher	5,000 staples (per 1 cartridge)	5,000 (set of 3)

**Routine Maintenance Items**

For routine maintenance items, refer to [Figure 3](#) and [Figure 4](#) for the MFP, and to [Figure 5](#) for the SFP.

- Fuser (110V / 220V): 200 kPV
- Transfer belt unit and transfer roller unit: 200 kPV
- DADF feed rollers: 200 kPV (VersaLink C505/C605 MFP only)



**Figure 3 MFP routine maintenance items**

E-8-0590-A

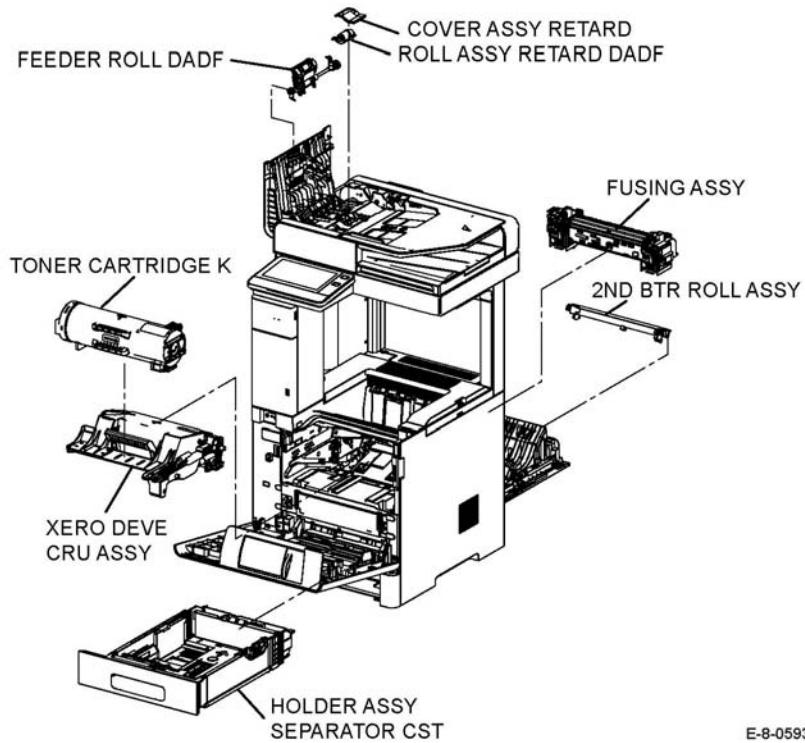


Figure 4 MFP\_Tall routine maintenance items

E-8-0593-A

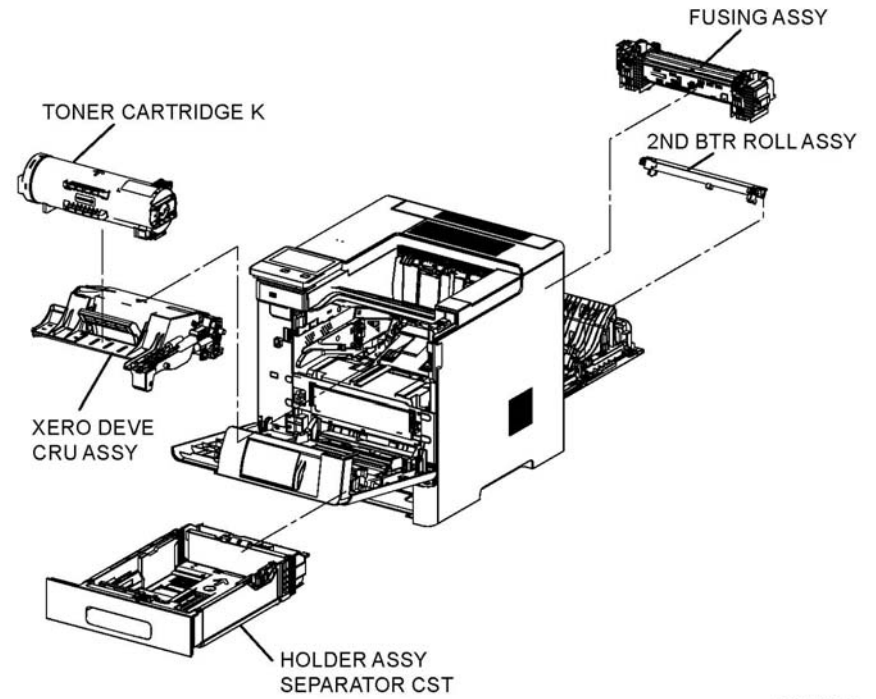


Figure 5 SFP routine maintenance items

E-8-0594-A

**Hardware Information**

Information about spared hardware for repairs and maintenance is detailed in [GP 41](#). This hardware includes miscellaneous screws and e-clips that can be used to replace hardware that is lost or damaged.

## SCP 6 Final Actions

Final actions are used to evaluate the total operation of the system and to identify the actions required to complete the service call.

### Procedure

Complete the following, if a fault is identified, return to [SCP 4 Fault Analysis](#):

1. Perform the end of call subsystem maintenance actions, [SCP 5 Subsystem Maintenance](#).
2. Exercise the machine in all modes, printing from all trays. If a fault message is displayed or some other problem is evident, go to [SCP 4 Fault Analysis](#).
3. Make a print of a customer document.
4. If any of the customers selections were changed, return them to the customers preferred settings. Refer to [GP 4 System Administration Tools](#).
5. At the first service and at any subsequent service where changes are made or options are added, print the configuration report and store it with machine log book. Discard any previous versions of the configuration report.
6. Remove and destroy any copies of test patterns.
7. Ensure the machine and service area are clean before leaving the customer premises.
8. Provide customer training if required.



## 2 Status Indicator RAPs

Troubleshooting Overview .....	2-11	010-105, 010-106 Fusing Assembly Exit Sensor RAP .....	2-37
<b>Chain 01-09 Raps</b>		010-321 Fusing Unit Nip Fail RAP .....	2-38
002-500 UI Error RAP .....	2-15	010-329 to 010-346 Fusing Assembly HR RAP .....	2-38
003-311 IIT CDI I/F Mismatch RAP .....	2-15	010-420 and 010-421 Fusing Assembly Life RAP .....	2-39
003-318 to 003-319 IIT Software Fail RAP .....	2-16	011-101 and 011-102 MBX Vertical Sensor RAP .....	2-39
003-320 to 003-343 IISS-ESS Communication Fail RAP .....	2-16	011-210 and 011-334 MBX NVM and Downloader Fail RAP .....	2-40
003-344 Hotline Fail RAP .....	2-17	011-310 MBX Rear Cover Open RAP .....	2-40
003-345, 003-346 X PIO Mismatch RAP .....	2-18	011-912 MBX Static Jam RAP .....	2-41
003-700 Returned Documents Error RAP .....	2-18	011-941 to 011-944 MBX Static Jam RAP .....	2-41
003-701 Duplication Prevention Code RAP .....	2-19	012-122 Compile Tray Exit Sensor OFF Jam RAP .....	2-42
003-702 Different Magnification RAP .....	2-19	012-152 Compile Tray Exit Sensor ON Jam RAP .....	2-42
003-703, 003-704 Color Correction RAP .....	2-20	012-161 Finisher Set Eject Jam RAP .....	2-43
003-705 Energy Saving Paper Size Mismatch RAP .....	2-20	012-210 and 012-334 Finisher NVM and Downloader Fail RAP .....	2-43
003-750 Insufficient Documents Duplex Book RAP .....	2-21	012-211 to 012-213 Stacker Tray Fail RAP .....	2-44
003-751 Capacity RAP .....	2-21	012-239 to 012-240 Finisher Sub-Paddle Home Sensor ON/OFF Fail RAP .....	2-44
003-752, 932, 935 600dpi Cannot be Scanned RAP .....	2-22	012-259 to 012-280 Finisher Eject Home Sensor ON/OFF Fail RAP .....	2-45
003-753, 930, 933 300dpi Cannot be Scanned RAP .....	2-22	012-283 to 012-284 Finisher Set Clamp Home Sensor ON/OFF Fail RAP .....	2-45
003-754, 003-755 S2X Error RAP .....	2-23	012-290 Staple Cover Interlock 24V Disconnect Fail RAP .....	2-46
003-756 All Originals Blank RAP .....	2-23	012-291 Stapler Fail RAP .....	2-46
003-757, 931, 934 400dpi Cannot be Scanned RAP .....	2-24	012-354 Finisher Maker Mismatch Fail RAP .....	2-47
003-760, 003-761 Scan Settings Error RAP .....	2-24	012-405 Stapler Near Empty RAP .....	2-47
003-764 Insufficient Documents RAP .....	2-25	012-912 Finisher Static Jam RAP .....	2-48
003-780 Scan Image Compression Error RAP .....	2-25	013-286 and 013-287 Right Tamper Home SNR ON/OFF Fail RAP .....	2-48
003-795 AMS Limit Error RAP .....	2-26	013-288 and 013-289 Left Tamper Home SNR ON/OFF Fail RAP .....	2-49
003-913 Document Size Error RAP .....	2-26	014-302 Finisher Rear Cover Interlock Open RAP .....	2-49
003-940 Insufficient Memory RAP .....	2-27	014-303 Staple Cover Interlock Open RAP .....	2-50
003-941 Insufficient Page Memory RAP .....	2-27	016-210, 016-506, 016-777, 016-780, 016-798 HDD Error RAP .....	2-50
003-944 Repeat Image Count Fail RAP .....	2-28	016-211, 016-212 SW Option Fail Memory Low RAP .....	2-51
003-946 Image Rotation (Copy APS) RAP .....	2-28	016-214 SW Option Fail (FAX Card) RAP .....	2-51
003-947, 948 Document Error RAP .....	2-29	016-234, 016-235 XCP Error RAP .....	2-52
003-952 Document Color Mismatch RAP .....	2-29	016-242 System GMT Clock Fail RAP .....	2-52
003-956 Document Size Auto Detect RAP .....	2-30	016-244 Self-Signed Certificate Auto Update Fail RAP .....	2-53
003-963, 965 APS RAP .....	2-30	016-310 SSMM Job Log Full RAP .....	2-53
003-970, 003-976 Fax Line Memory RAP .....	2-31	016-311, 315, 319, 354 Scanner/IIT Errors RAP .....	2-54
003-972 Maximum Stored Page RAP .....	2-31	016-314 SW Option Fail (Hybrid WaterMark) RAP .....	2-54
003-973 Image Rotation RAP .....	2-32	016-320 Document Formatter Fatal Error RAP .....	2-55
003-974 Next Original Specification RAP .....	2-32	016-321 FAX Module Error RAP .....	2-55
003-977 Document Mismatch (Multi Scan) RAP .....	2-33	016-323 B-Formatter Fatal Error RAP .....	2-56
003-978 Color Document Mismatch (Multi Scan) RAP .....	2-33	016-324 Scheduled Image Overwrite RAP .....	2-56
005-121 DADF Jam .....	2-34	016-325 Using Personal Certificate RAP .....	2-57
005-211 DADF Motor Fail .....	2-34	016-326, 362, 607 UI Cable Connection Fail RAP .....	2-57
005-305 DADF Feeder Cover Interlock Open RAP .....	2-35	016-328 Connection Fail RAP .....	2-58
005-900 DADF Static Jam RAP .....	2-35	016-330 to 016-332 Cont System Memory Fail RAP .....	2-58
005-940 DADF No Original RAP .....	2-36	016-342 to 016-345 Controller Fail RAP .....	2-59
005-941 Not Enough Documents RAP .....	2-36	016-346 Cont A4FAX Modem Diagnosis Fail RAP .....	2-59
		016-349 to 016-351 eMMC Card Errors RAP .....	2-60
		016-352, 609, 610 Internal Network Init/PCI/PCIEX Fail RAP .....	2-60
		016-353, 356, 606 IOT-Controller Communication Fail RAP .....	2-61
<b>Chain 10-19 Raps</b>			

016-354 IOT-Controller Communication Fail RAP .....	2-61	016-554 Attestation Agent Error 554 RAP .....	2-87
016-355, 016-356 Controller ASIC Fail RAP .....	2-62	016-555 Attestation Agent Error 555 RAP .....	2-88
016-359, 360, 361 Controller USB Fail RAP .....	2-62	016-556 Attestation Agent Error 556 RAP .....	2-88
016-360, 016-362 Controller UI Fail RAP .....	2-63	016-557 Attestation Agent Error 557 RAP .....	2-89
016-366, 016-367 Controller HDD Fail RAP .....	2-63	016-558 Attestation Agent Error 558 RAP .....	2-89
016-371 Controller USB 1.1 Host Fail RAP .....	2-64	016-559 Remote Download Parameter Error RAP .....	2-90
016-383 Controller OS Communication Fail RAP .....	2-64	016-560 Attestation Agent Error 560 RAP .....	2-90
016-400, 401, 402, 403, 406 802.1x Authentication Failure - Network1 RAP .....	2-65	016-562 Detected User Duplication RAP .....	2-91
016-404 802.1x Inside Failure RAP .....	2-65	016-563 ImageLog Memory Full (Exp. Kit) RAP .....	2-91
016-405 Certificate DB File Error RAP .....	2-66	016-564 Remote Download Server Authentication Failed RAP .....	2-92
016-407 to 016-412 XCP Plugin Error RAP .....	2-66	016-565 Backup Restore Error RAP .....	2-92
016-421 Input Tray is Removed RAP .....	2-67	016-566 Backup Restore Condition Error RAP .....	2-93
016-422, 016-423 Offline RAP .....	2-67	016-567 Backup Capacity Full RAP .....	2-93
016-424, 016-425 Power Mode RAP .....	2-68	016-568 Backup Restore Failed RAP .....	2-94
016-426 DHCP Error RAP .....	2-68	016-570 Job Ticket Out of Memory RAP .....	2-94
016-427, 428, 429, 430, 431, 432 802.1x Failures (Network 2) RAP .....	2-69	016-571 Job Ticket Wrong Parameters RAP .....	2-95
016-450 SMB Host Name Duplicated RAP .....	2-69	016-572 Job Ticket Media Error RAP .....	2-95
016-453, 016-454 IPv6/Dynamic DNS Failure RAP .....	2-70	016-573 Job Ticket Parse Error RAP .....	2-96
016-455, 016-456 SNTP Time Out RAP .....	2-70	016-574 FTP Host Name Solution Error RAP .....	2-96
016-461 Under Non-transmitted Image Log Stagnation RAP .....	2-71	016-575 FTP DNS Server Error RAP .....	2-97
016-500 ROM Write Error (During DLD Method) RAP .....	2-71	016-576 FTP Server Connection Error RAP .....	2-97
016-503 to 016-505 SMTP Server Fail for Redirector RAP .....	2-72	016-577 FTP Service RAP .....	2-98
016-506 ImageLog HDD Full RAP .....	2-72	016-578 FTP Login Name or Password Error RAP .....	2-98
016-507, 016-508 Image Log Send Fail RAP .....	2-73	016-579 FTP Scanning Picture Preservation Place Error RAP .....	2-99
016-509, 016-510 Image Log No Send Rule RAP .....	2-73	016-580 FTP File Name Acquisition Failure RAP .....	2-99
016-511, 016-512 Image Log Invalid Send Rule RAP .....	2-74	016-581 FTP File Name Suffix Limit RAP .....	2-100
016-513 SMTP Server Reception Error RAP .....	2-74	016-582, 016-588 FTP File Creation Failure RAP .....	2-100
016-514 XPS Error RAP .....	2-75	016-583, 016-584 FTP Folder Creation Failure RAP .....	2-101
016-515 XPS Short of Memory .....	2-75	016-585, 587, 589 FTP File Delete/Read Failure RAP .....	2-101
016-516 XPS Print Ticket Description Error RAP .....	2-76	016-586 FTP Lock Folder Delete Failure RAP .....	2-102
016-518 PS Booklet Conflict WM RAP .....	2-76	016-590 FTP Data Reading Failure RAP .....	2-102
016-519 Device DV Limit Reached RAP .....	2-77	016-591 FTP Scan Filing Policy RAP .....	2-103
016-521 SmartCard Not Found RAP .....	2-77	016-592 FTP DAT File Access Error RAP .....	2-103
016-522 LDAP SSL Error 112 RAP .....	2-78	016-593 to 016-596 FTP Error RAP .....	2-104
016-523 LDAP SSL Error 113 RAP .....	2-78	016-597 Same File on FTP Server RAP .....	2-104
016-524, 016-525 LDAP SSL Error 114 and 115 RAP .....	2-79	016-598, 016-599 Email Message Size RAP .....	2-105
016-526 LDAP SSL Error 116 RAP .....	2-79	016-600, 016-601 KO Authentication Locked RAP .....	2-105
016-527 LDAP SSL Error 117 RAP .....	2-80	016-604 Debug Log Created RAP .....	2-106
016-528 SmartCard Not Authorized RAP .....	2-80	016-606, 016-608 Controller Connection Fail RAP .....	2-106
016-529 Remote Download Server Timeout RAP .....	2-81	016-609, 016-610 PCI Option Fail RAP .....	2-107
016-533 Kerberos Attestation Protocol Error 37 RAP .....	2-81	016-611 EMMC Card Connection Fail RAP .....	2-107
016-534 Kerberos Attestation Protocol Error 41 and 42 RAP .....	2-82	016-700 Password Below Minimum RAP .....	2-108
016-535 Remote Download File Access Error RAP .....	2-82	016-701 Out of ART EX Memory RAP .....	2-108
016-536 Host Name Solution Error in Remote Download RAP .....	2-83	016-702 Out of Page Buffer RAP .....	2-109
016-537 Remote Download Server Connection Error RAP .....	2-83	016-703 Email To Invalid Box RAP .....	2-109
016-538 Remote Download File Write Error RAP .....	2-84	016-704 Mailbox Full RAP .....	2-110
016-539 Kerberos Attestation Other Protocol Error RAP .....	2-84	016-705 Secure Print Fail RAP .....	2-110
016-543 Attestation Agent Error 543 RAP .....	2-85	016-706 Maximum User Number Exceeded RAP .....	2-111
016-545 Attestation Agent Error 545 RAP .....	2-85	016-707 Sample Print Fail RAP .....	2-111
016-546 Attestation Agent Errors RAP .....	2-86	016-708 Annotation/Watermark HDD Full RAP .....	2-112
016-548 Attestation Agent Error 548 RAP .....	2-86	016-709 ART EX Command Error RAP .....	2-112
016-553 Attestation Agent Error 553 RAP .....	2-87	016-710 Delayed Print Fail RAP .....	2-113

016-711 Email Transmission Size Limit RAP.....	2-113	016-795 Media Reader Format Error RAP.....	2-139
016-712 Panther Capacity RAP.....	2-114	016-796 Document Insert Operation Error RAP.....	2-140
016-713, 016-714 Security Box Error RAP.....	2-114	016-797 Image File Read Error RAP.....	2-140
016-715 ESCP Form Invalid Password RAP.....	2-115	016-799 PLW Print Instruction Fail RAP.....	2-141
016-716 TIFF Data Overflow RAP.....	2-115	016-910, 016-911 Required Resource Not Ready RAP.....	2-141
016-717 Fax Send Result Not Found RAP.....	2-116	016-917 to 016-919 Toner Y/M/C Life End RAP.....	2-142
016-718 Out of PCL6 Memory RAP.....	2-116	016-940 to 016-949 Incorrect Job Settings RAP.....	2-142
016-719 Out of PCL Memory RAP.....	2-117	016-982 HDD Access Error 2 RAP.....	2-143
016-720 PCL Command Error RAP.....	2-117	016-983 Image Log HDD Full RAP.....	2-143
016-721 and 016-722 Settings Error RAP.....	2-118	016-985 Scan to Email Data Size RAP.....	2-144
016-725 B-Formatter Library Image Conversion Error RAP.....	2-118	017-500 Job Limit Illegal Response RAP.....	2-144
016-726 PDL Auto Switch Fail RAP.....	2-119	017-501 Multiple Permission Restrictions RAP.....	2-145
016-727 Unstorable Document RAP.....	2-119	017-503 Password Over Maximum RAP.....	2-145
016-728 Unsupported TIFF Data RAP.....	2-120	017-504, 017-505, 017-506 JobLimit Server Connection Fail RAP.....	2-146
016-729 TIFF Data Size RAP.....	2-120	017-507 Disabled Direct Print RAP.....	2-146
016-731, 016-732 Invalid Data RAP.....	2-121	017-713 Start TLS Unsupported Fail RAP.....	2-147
016-733 Destination Address Resolution Error RAP.....	2-121	017-714 SMTP Over SSL Fail RAP.....	2-147
016-735 Updating Job Template RAP.....	2-122	017-715 SSL Certificate Fail RAP.....	2-148
016-741 Download Mode Fail RAP.....	2-122	017-716 to 017-718 SSL Certificate (SMTP) Fail RAP.....	2-148
016-742 Download Data Product ID Mismatch RAP.....	2-123	017-719 SMTP Over SSL Internal Fail RAP.....	2-149
016-743 Device Model/Panel Type Error RAP.....	2-123	017-720, 017-721 PDL Command Fail RAP.....	2-149
016-744 Download Data CheckSum Error RAP.....	2-124	017-722 Total Impressions Over Fail RAP.....	2-150
016-745 Download Data XPJL Fatal Error RAP.....	2-124	017-723 DocuWorks Unsupported Character Fail RAP.....	2-150
016-746, 016-751 Unsupported PDF File RAP.....	2-125	017-725 Forced Annotation Syntax Fail RAP.....	2-151
016-747 Drawing Annotation Memory RAP.....	2-125	017-728 Scan Job-Flow Document Fail RAP.....	2-151
016-748, 016-774, 016-775, 016-778, 016-981 HDD Full RAP.....	2-126	017-729 Temporary Error in PDL Transfer RAP.....	2-152
016-749 JCL Syntax Error RAP.....	2-126	017-730 Network Error in PDL Transfer RAP.....	2-152
016-750 Print Job Ticket Description Error RAP.....	2-127	017-731 POP Server Not Connected RAP.....	2-153
016-752 PDF Short of Memory RAP.....	2-127	017-732 Offline Error in PDL Transfer RAP.....	2-153
016-753 PDF Password Mismatched RAP.....	2-128	017-733 Internal Error in PDL Transfer RAP.....	2-154
016-755 PDF Print Prohibited RAP.....	2-128	017-734 IPP Data Error RAP.....	2-154
016-756 Auditron-Prohibit Service RAP.....	2-129	017-735 Unauthorized Auditron User RAP.....	2-155
016-757 Auditron Invalid User RAP.....	2-129	017-737, 017-738, 017-746 Out of Memory Fail RAP.....	2-155
016-758 Auditron Disabled Function RAP.....	2-130	017-739, 017-740 Transfer Service Not Available RAP.....	2-156
016-759 Auditron Limit Reached RAP.....	2-130	017-741 Custom Transfer Invalid Plug-In RAP.....	2-156
016-760 PS Decompose Failure RAP.....	2-131	017-742 to 017-744 Custom Transfer Plug-In Connection RAP.....	2-157
016-761 FIFO Empty RAP.....	2-131	017-747 Custom Transfer Plug-In Connection Timeout RAP.....	2-157
016-762 Print Language Not Installed RAP.....	2-132	017-748 Custom Transfer Plug-In Invalid Device RAP.....	2-158
016-764 SMTP Server Connect RAP.....	2-132	017-749 Custom Transfer Plug-In XML Fail RAP.....	2-158
016-765, 016-766 SMTP Server Error RAP.....	2-133	017-750 Custom Transfer Plug-In Internal Fail RAP.....	2-159
016-767 Invalid Email Address RAP.....	2-133	017-751 Custom Transfer Plug-In Other Fail RAP.....	2-159
016-768 Invalid Sender Address RAP.....	2-134	017-755 Software Download Via Network Fail RAP.....	2-160
016-769 SMTP Server Unsupported DSN RAP.....	2-134	017-759 Download Data Inspection Error RAP.....	2-160
016-770 Direct FAX Function Canceled RAP.....	2-135	017-760, 017-766 POP Over SSL Fail RAP.....	2-161
016-772 Scan Data Repository Error RAP.....	2-135	017-761, 017-767 SSL Server Cert Untrusted (POP) RAP.....	2-161
016-776 Image Conversion Error RAP.....	2-136	017-762, 763, 764, 768, 769, 770 SSL Certificate (POP) Fail RAP.....	2-162
016-779 Scan Image Conversion Error RAP.....	2-136	017-765, 017-771 POP Over SSL Internal Fail RAP.....	2-162
016-781 Server Connect Error RAP.....	2-137	017-772 Scan All Blank Page Fail RAP.....	2-163
016-786 HDD Full Scan Write Error RAP.....	2-137	017-773 Netlog Task Error RAP.....	2-163
016-790 Email Fragment Over RAP.....	2-138	017-774 Message Lost Error RAP.....	2-164
016-792 Specified Job Not Found RAP.....	2-138	017-775 Network API Error RAP.....	2-164
016-794 Media Not Inserted RAP.....	2-139	017-776, 017-777 Syslog Server Error RAP.....	2-165

017-778 Queue Error RAP .....	2-165	018-587 File Duplication Fail RAP .....	2-191
017-779 Link Error RAP .....	2-166	018-588 Scan Filing Policy Invalid RAP .....	2-192
017-780 Held Job Timeout RAP .....	2-166	018-589 NEXNAME File Error RAP .....	2-192
017-782, 784, 85, 786 Custom Image Processing Plug-In RAP .....	2-167	018-590 Same Name Exists RAP .....	2-193
017-783 Custom Image Processing Memory RAP .....	2-167	018-591 File Name Suffix Over Limit RAP .....	2-193
017-787 Google Cloud Print Data Error RAP .....	2-168	018-592, 018-593 Lock Folder Fail RAP .....	2-194
017-789 Job Limit Estimation Logic Fail RAP .....	2-168	018-595 Detected User Duplication RAP .....	2-194
017-790 to 017-799 Print Permission RAP .....	2-169	018-596, 018-700 Network Error RAP .....	2-195
018-400 IPSEC Configuration Mismatch RAP .....	2-169	018-701 to 018-705 LDAP Protocol Errors 01 to 05 RAP .....	2-195
018-405 User Account Disabled RAP .....	2-170	018-709 Active Communication is Unavailable Now Fail RAP .....	2-196
018-406 Setting Status of IP Address (IPv4) RAP .....	2-170	018-710 to 018-714 LDAP Protocol Errors 10 to 14 RAP .....	2-196
018-407 Setting Status of IP Address (IPv6) RAP .....	2-171	018-715 Kerberos Attestation Protocol Error 73 RAP .....	2-197
018-408, 018-429, 018-430 Duplicate IP address IPv4 (wifi) RAP .....	2-171	018-716 to 018-721 LDAP Protocol Errors 16 to 21 RAP .....	2-197
018-409, 412, 413 Duplicate IPv6 Address 1 RAP .....	2-172	018-722 GCP Network Fail RAP .....	2-198
018-410, 018-411 Dynamic DNS Update Failure RAP .....	2-172	018-723, 018-740 GCP Certification Fail RAP .....	2-198
018-414 Duplicate IPv6 Address 2 RAP .....	2-173	018-724 GCP SSL Connection Fail RAP .....	2-199
018-415 Duplicate IPv6 Address 3 RAP .....	2-173	018-725 Kerberos Attestation Protocol Error 22 RAP .....	2-199
018-416 Duplicate IPv6 Address 4 RAP .....	2-174	018-726 Kerberos Attestation Protocol Error 70 RAP .....	2-200
018-424 WLAN WPA-Enterprise Certificate Empty Failure RAP .....	2-174	018-727 Kerberos Attestation Protocol Error 71 RAP .....	2-200
018-425 WLAN WPA-Enterprise Certificate Unavailability Failure RAP .....	2-175	018-728 Kerberos Attestation Protocol Error 72 RAP .....	2-201
018-426 WLAN WPA-Enterprise server certificate failure .....	2-175	018-729, 730, 731, 740, 738, 739, 743, 744, 745, 746 GCP Network Fail RAP .....	2-201
018-427 Duplicate IP address range Wi-Fi and Wi-Fi Direct .....	2-176	018-732 to 018-736 LDAP Protocol Errors 32 to 36 RAP .....	2-202
018-428 WLAN Module Connection Failure RAP .....	2-176	018-737, 018-741 GCP Other Fail RAP .....	2-202
018-431 Duplicate IPv6 address (wifi) RAP .....	2-177	018-747 Server Not Found in SMB RAP .....	2-203
018-432 Duplicate IPv6 address (wifi) RAP .....	2-177	018-748, 750, 751, 752, 753, 754 LDAP Protocol Errors 48, 50 to 36 RAP .....	2-203
018-433 Duplicate IPv6 address (wifi) RAP .....	2-178	018-749 LDAP Protocol Error 49 RAP .....	2-204
018-434 Duplicate IPv6 address (wifi) RAP .....	2-178	018-755 Server Connection Error in SMB RAP .....	2-204
018-435 Duplicate IPv6 address (wifi) RAP .....	2-179	018-756 Server Login Response Timeout in SMB RAP .....	2-205
018-436 Duplicate IPv6 Address (wifi) RAP .....	2-179	018-757 Host Name Solution Error in SMB RAP .....	2-205
018-439, 018-440, 018-441 Wi-Fi Direct Stops RAP .....	2-180	018-758, 018-759 Picture Preservation or File Name Error RAP .....	2-206
018-500, 501, 503, 504, 506, 507, 508 CA Server Error RAP .....	2-180	018-760 DFS Link Error in SMB RAP .....	2-206
018-502 SMB Login Failure RAP .....	2-181	018-761 Out of Server Memory in SMB RAP .....	2-207
018-505 SMB-DOS Protocol Error RAP .....	2-181	018-762 Server Response Timeout in SMB RAP .....	2-207
018-509 Template Parameter Conflict RAP .....	2-182	018-763 Character Convert Error in SMB RAP .....	2-208
018-524 Invalid Device Network Setting RAP .....	2-182	018-764 to 018-769, 018-771 LDAP Protocol Errors RAP .....	2-208
018-525 HDD full or Access Error RAP .....	2-183	018-770 LDAP Protocol Error 70 RAP .....	2-209
018-526 to 529, 531, 532 CUI Scan Error RAP .....	2-183	018-772 Shared Name Not Found in Server RAP .....	2-209
018-530 Authentication Error RAP .....	2-184	018-773 Shared Name Error in Server RAP .....	2-210
018-543 Shared Name Error in SMB Server RAP .....	2-184	018-780 to 018-784 LDAP Protocol Errors 80 and 82 to 84 RAP .....	2-210
018-547 SMB Scan Users Restriction RAP .....	2-185	018-781 LDAP Protocol Error 81 RAP .....	2-211
018-556 HTTP Server Script Error RAP .....	2-185	018-785 LDAP Protocol Error 85 RAP .....	2-211
018-557 HTTP Invalid Character in Filename RAP .....	2-186	018-786 to 797 LDAP Protocol Errors 86 to 97 RAP .....	2-212
018-558 HTTP File Not Found RAP .....	2-186		
018-559 HTTP File Duplication Fail RAP .....	2-187		
018-560 to 018-563 HTTP Server Login Fail RAP .....	2-187		
018-564 Host Name Solution Error in HTTP RAP .....	2-188		
018-565 Proxy Name Solution Error in HTTP RAP .....	2-188		
018-566, 018-567 Server Connect Error in HTTP RAP .....	2-189		
018-568 HTTP Server SSL Access Fail RAP .....	2-189		
018-569 HTTP Server Certificate Fail RAP .....	2-190		
018-570 HTTP Certificate Fail RAP .....	2-190		
018-571 Internal Error in Scan RAP .....	2-191		
		<b>Chain 20-29 RAPs</b>	
		021-210 to 021-212 USB IC Card Reader Error RAP .....	2-213
		021-214 USB IC Card Reader Encryption Setting RAP .....	2-213
		021-401 USB IC Card Reader Connection Error RAP .....	2-214
		021-505, 021-506 SSL Error RAP .....	2-214
		021-509, 515, 516, 522 Invalid Message Detected RAP .....	2-215
		021-523 Internal Error RAP .....	2-215
		021-524 to 012-528 Communications Error RAP .....	2-216
		021-533, 021-534 Unsupported ROM Set RAP .....	2-216



023-500 UI ROM Download Fail RAP .....	2-217	026-700 LDAP Protocol Error RAP .....	2-244
023-600, 023-601 UI Key Error RAP .....	2-217	026-701 Address Book Request Overflow RAP .....	2-244
024-312, 313, 314, 315 IOT NVM Backup Restore RAP .....	2-218	026-702 Address Book Directory Service Overflow RAP .....	2-245
024-322 and 024-223 SEEPROM Refurbish Fail RAP .....	2-218	026-703 Abort With Logout RAP .....	2-245
024-340 to 024-360 IOT-ESS Communication Fail 1 RAP .....	2-219	026-708 URL Data Over Size RAP .....	2-246
024-361 Invalid IOT Paper Size RAP .....	2-220	026-709 URL HDD Full RAP .....	2-246
024-362, 024-363 Page Sync Illegal Start or Stop RAP .....	2-220	026-710 S/MIME Unsupported Cipher RAP .....	2-247
024-364 DMA Transfer Fail RAP .....	2-221	026-711 Multi-Page File Size RAP .....	2-247
024-365 Overflow on Loop Back Write RAP .....	2-221	026-712 HTTP Out Job Overlap Error RAP .....	2-248
024-366 JBIG Library Other Fail RAP .....	2-222	026-718 PS Print Instruction Fail RAP .....	2-248
024-367 Decompress Other Fail RAP .....	2-222	026-719 Internal Error in Scan RAP .....	2-249
024-368 PCI Error RAP .....	2-223	026-720 to 026-723 Media Error RAP .....	2-249
024-370 Marker Code Detection Fail RAP .....	2-223	026-726 Inconsistent Options RAP .....	2-250
024-371, 372, 373, 375 IOT-ESS Communication Fail 2 RAP .....	2-224	026-727 Media Filepath Fail RAP .....	2-250
024-376 IOT-ESS Communication Fail 25 RAP .....	2-224	026-728, 026-729 WSD Scan Error RAP .....	2-251
024-600 to 024-614 Counter Repair RAP .....	2-225	026-730 Tray Paper Size Not Detected RAP .....	2-251
024-615 IOT Unsupported Drum Shut Off RAP .....	2-225	026-731 to 026-733 PJJ Fail RAP .....	2-252
024-616 to 024-618 Serial Number RAP .....	2-226	026-734 PJJ Diag Mode RAP .....	2-252
024-619 to 024-621 Product Number RAP .....	2-226	026-739 Waiting Scan Job Deleted RAP .....	2-253
024-701 Invalid Instruction of Face Inversion RAP .....	2-227	027-442, to 027-444 Duplicate IP Address 1 RAP .....	2-253
024-702 Paper Jam RAP .....	2-227	027-445 Illegal IP Address RAP .....	2-254
024-705 Forced Annotation Template Fail RAP .....	2-228	027-446 Duplicate IP Address 2 RAP .....	2-254
024-707 Duplex Inversion Prohibited (Duplex) RAP .....	2-228	027-447 Duplicate IP Address 3 RAP .....	2-255
024-708 Duplex Inversion Prohibited (Face Down) RAP .....	2-229	027-452 Duplicate IP Address 4 RAP .....	2-255
024-746, 024-747 Print Request Failure RAP .....	2-229	027-500 SMTP Server Fail for Mail IO RAP .....	2-256
024-748 Bates Numbering Digit Exceeded RAP .....	2-230	027-501 POP Server Fail for Mail IO RAP .....	2-256
024-910 and 024-959 Tray 1 Size Mismatch RAP .....	2-230	027-502 POP Authentication Fail for Mail IO RAP .....	2-257
024-911 and 024-960 Tray 2 Size Mismatch RAP .....	2-231	027-503, 504, 533, 773, 785, 786 Server Communication Timeout RAP .....	2-257
024-912 and 024-961 Tray 3 Size Mismatch RAP .....	2-231	027-513 SMB Scan Client Access RAP .....	2-258
024-913, 962 Tray 4 Size Mismatch RAP .....	2-232	027-514 Host Name Solution Error in SMB RAP .....	2-258
024-916 Finisher Stacker Mix Full Stack RAP .....	2-232	027-515 DNS Server Setup in SMB RAP .....	2-259
024-917 Stacker Tray Staple Set Over Count RAP .....	2-233	027-516 Server Connection Error in SMB RAP .....	2-259
024-920 FaceDown Tray 1 Paper FULL RAP .....	2-233	027-518 Login Name or Password Error in SMB RAP .....	2-260
024-933 024-940 024-941 DRUM CARTRIDGE Life End RAP .....	2-234	027-519 Scanning Picture Preservation Place Error RAP .....	2-260
024-934 Paper Type Mismatch RAP .....	2-234	027-520 File Name Acquisition Failure RAP .....	2-261
024-946 Tray 1 Out of Place RAP .....	2-235	027-521 File Name Suffix Limit Over in SMB RAP .....	2-261
024-947 to 024-949 and 028-989 Tray 2, 3, 4, 5 Out of Place RAP .....	2-235	027-522 File Creation Failure in SMB RAP .....	2-262
024-950 Tray 1 Empty RAP .....	2-236	027-523 Lock Folder Creation Failure in SMB RAP .....	2-262
024-951 to 024-953 Tray 2, 3, 4 Out of Paper RAP .....	2-237	027-524 Folder Creation Failure in SMB RAP .....	2-263
024-954 MSI Tray Out Of Paper RAP .....	2-237	027-525, 027-527 File Delete Failure in SMB RAP .....	2-263
024-958 Bypass Tray Size Mismatch RAP .....	2-238	027-526 Lock Folder Delete Failure in SMB RAP .....	2-264
024-965, 024-966 ATS/APS RAP .....	2-238	027-528 Data Write Failure to SMB Server RAP .....	2-264
024-967 and 024-968 Stapler Paper Mixed Width and Batting Error RAP .....	2-239	027-529 Data Read Failure From SMB Server RAP .....	2-265
024-976 Finisher Staple Status NG RAP .....	2-239	027-530 File Name Duplicate Failure in SMB RAP .....	2-265
024-977 Stapler Feed Ready Fail RAP .....	2-240	027-531 SMB Scan Filing Policy Injustice RAP .....	2-266
024-979 Finisher Stapler Near Empty RAP .....	2-240	027-532 NEXTNAME File Access Error in SMB RAP .....	2-266
024-980 Finisher Stacker Tray Full RAP .....	2-241	027-543 SMB Server Name Specification Error RAP .....	2-267
024-982 Stacker Lower Safety Warning RAP .....	2-241	027-547, 027-548 SMB Protocol Errors 1 RAP .....	2-267
025-596, 025-597 HDD Diagnostics RAP .....	2-242	027-549, 572, 573, 574, 576 SMB Protocol Error 4-009 RAP .....	2-268
026-400 USB Host Connection Number Exceeded RAP .....	2-242	027-564 SMB Protocol Error 4-024 RAP .....	2-268
026-402 Changed IOT Speed RAP .....	2-243	027-565, 027-578 SMB Protocol Errors 2 RAP .....	2-269
026-403 Stop printing and wait for toner cooling RAP .....	2-243	027-566 SMB Protocol Error 4-026 RAP .....	2-269

027-569 SMB (TCP/IP) Not Started RAP .....	2-270	027-772, 773, 774, 776 SMTP Server Error RAP .....	2-296
027-584 SMB Protocol Error 4-044 RAP .....	2-270	027-775 Too Many SMTP Addresses RAP .....	2-296
027-585 SMB Protocol Error 4-045 RAP .....	2-271	027-777 SMTP Server Non Support RAP .....	2-297
027-586 SMB Protocol Error 4-046 RAP .....	2-271	027-778 No Mode Specified by SMTP-AUTH RAP .....	2-297
027-587 SMB Protocol Error 4-047 RAP .....	2-272	027-779 Attestation-Fails by SMTP-AUTH RAP .....	2-298
027-588, 027-589 SMB Protocol Errors 3 RAP .....	2-272	027-780 WebDAV Network Interface Fail RAP .....	2-298
027-590 SMB Protocol Error 4-050 RAP .....	2-273	027-781 WebDAV Spool Size Over RAP .....	2-299
027-591 SMB Protocol Error 4-051 RAP .....	2-273	027-782 WebDAV Server Redirector Limit RAP .....	2-299
027-700 Mail Address Domain Error RAP .....	2-274	027-783 WebDAV User Authentication RAP .....	2-300
027-701 Disconnected Network Cable RAP .....	2-274	027-784 WebDAV Proxy Server Authentication RAP .....	2-300
027-702 to 027-706, 027-709 Certificate for Addresses Error RAP .....	2-275	027-785, 027-786 WebDAV Server Time-Out RAP .....	2-301
027-710 to 027-716 S/MIME Mail Error RAP .....	2-275	027-787 WebDAV File Name Duplication Fail RAP .....	2-301
027-717 No MX Record at DNS RAP .....	2-276	027-788, 027-793 WebDAV Request Fail RAP .....	2-302
027-720, 027-721 Extension Server Error RAP .....	2-276	027-789, 791, 795 Access Forbidden RAP .....	2-302
027-722 Extension Server Timeout RAP .....	2-277	027-790 WebDAV File Not Found RAP .....	2-303
027-723 Extension Server Authentication Fail RAP .....	2-277	027-792 WebDAV Server Conflict RAP .....	2-303
027-724 to 027-726 Extension Server Access Fail RAP .....	2-278	027-794 WebDAV Server Internal Fail RAP .....	2-304
027-727 Extension Server Parameters RAP .....	2-278	027-796 Email Not Printed RAP .....	2-304
027-728 Extension Server File Exceeded RAP .....	2-279	027-797 Invalid Output Destination RAP .....	2-305
027-730 SMTP Mail Division Error RAP .....	2-279	027-798 JFS Target Document Not Found RAP .....	2-305
027-732 Server Access Error RAP .....	2-280	027-799 WebDAV Server Insufficient Storage RAP .....	2-306
027-733 Server SSL Error RAP .....	2-280	028-910 Wrong fuser Type RAP .....	2-306
027-734 Server Certificate Error RAP .....	2-281	028-912 Fusing Unit Lever Envelope Fail RAP .....	2-307
027-735 Device SSL Configuration Error RAP .....	2-281	028-986 and 028-987 Paper Size/No Paper Detected Error RAP .....	2-307
027-736 Device Certificate Error RAP .....	2-282	028-988 and 028-990 Tray 5 Size Mismatch RAP .....	2-308
027-737 Template Server Read Error RAP .....	2-282	029-700, 029-701 WebDAV Server Response RAP .....	2-308
027-739 Invalid Template Server Path RAP .....	2-283	029-702 WebDAV Client RAP .....	2-309
027-740 Template Server Login Error RAP .....	2-283	029-703 AirPrint Scan Client RAP .....	2-309
027-741 Template Server Connect Fail RAP .....	2-284	029-704, 029-711 Invalid PACFile RAP .....	2-310
027-742 HDD File System Full RAP .....	2-284	029-705, 706, 709, 712, 713, 716 PACFile Communications RAP .....	2-310
027-743 Template Server Install Error RAP .....	2-285	029-707, 708, 714, 715 PACFile Not Found RAP .....	2-311
027-744 Template Server Error 1 RAP .....	2-285	029-710, 029-717 PACFile URL Not Found RAP .....	2-311
027-745 Template Server Error 2 RAP .....	2-286		
027-746 Job Template Pool Server Not Ready RAP .....	2-286	<b>Chain 30-39 RAPs</b>	
027-750 Fax Document Incongruent RAP .....	2-287	033-310 FAX Charge Function Fail RAP .....	2-313
027-751 Job Template Analysis Error RAP .....	2-287	033-311 Invalid Address Book Data RAP .....	2-313
027-752 Required User Entry Not Entered RAP .....	2-288	033-312, 318, 324 FAX Fault RAP .....	2-314
027-753 Job Flow Service Request Disabled RAP .....	2-288	033-328 to 033-340 Failed to Initialize FAX Log RAP .....	2-314
027-754 Job Flow Service File Signature Mismatch RAP .....	2-289	033-330 to 033-336 Non-mounted Channel RAP .....	2-315
027-757 Extension Server SSL Fail RAP .....	2-289	033-339 FAX 2 Not Responding RAP .....	2-315
027-758 System Credential Setting Error RAP .....	2-290	033-363 FAX Card Reset (Reboot) RAP .....	2-316
027-759 Reference Server Connection Error RAP .....	2-290	033-500 to 033-507 Remote Machine Error RAP .....	2-316
027-760 XJT Command Fail RAP .....	2-291	033-508, 033-511 Destination Polling Error RAP .....	2-317
027-761 Web Print Timeout RAP .....	2-291	033-509 DCS/NSS Resend Exceeded RAP .....	2-317
027-762 Illegal Web Print Job Ticket RAP .....	2-292	033-510 Fallback Error RAP .....	2-318
027-763 Auditron Cannot Check User RAP .....	2-292	033-514, 516, 517, 521, 522, 033-526 to 033-529 Remote Machine Error 1 RAP .....	2-318
027-764 AirPrint Scan Data Transfer Fail RAP .....	2-293	033-523 and 033-546 Line Not Connected RAP .....	2-319
027-765 Host Name Solution Error in WebDAV RAP .....	2-293	033-530 DTMF Illegal Procedure RAP .....	2-319
027-766 Proxy Name Solution Error in WebDAV RAP .....	2-294	033-531, 532, 533, 544, 552, 578 Remote Machine Error 2 RAP .....	2-320
027-767 WebDAV Server SSL Access Fail RAP .....	2-294	033-535 DCN Receive at Phase B Send RAP .....	2-320
027-768 WebDAV Server Certificate Fail RAP .....	2-295	033-536, 537, 540, 568, 575, 577 Send/Receive Error RAP .....	2-321
027-769 WebDAV Server Access Fail RAP .....	2-295	033-541, 033-566 No Destination Specified RAP .....	2-321

033-543, 567, 576, 702, 703 Dial Error RAP .....	2-322	061-354 to 061-357 and 061-362 to 061-393 LPH Fault RAP .....	2-349
033-545 T0 Timeout RAP .....	2-322	061-358 to 061-361 LPH Config Fail RAP .....	2-350
033-547 Abort During Transmission RAP .....	2-323	062-277, 316, 399 DADF Fail RAP .....	2-351
033-548 No Manual Send Line RAP .....	2-323	062-300 Platen Interlock Open RAP .....	2-351
033-549, 551, 583 FAX Service Disabled RAP .....	2-324	062-311, 313, 321, 360, 371, 380, 386, 389, 393, 396-398 IIT Fail RAP .....	2-352
033-550 Cannot Disable FAX Service RAP .....	2-324	062-345 IIT EEPROM Fail RAP .....	2-352
033-553 No Folder/Relay RAP .....	2-325	062-362 X Hard Fail RAP .....	2-353
033-554 Wrong Password/Receive Banned RAP .....	2-325	062-395 Trans Power Failure Detected RAP .....	2-353
033-555, 033-556 Incorrect Password RAP .....	2-326	062-790 Recognition Fail RAP .....	2-354
033-557, 033-565 Destinations or Services Exceeded RAP .....	2-326	065-221 to 065-225 CIS Fail RAP .....	2-354
033-558, 033-559 Remote ID Rejection RAP .....	2-327		
033-560, 561, 562 TRESS/RCC RAP .....	2-327	<b>Chain 70-79 RAPs</b>	
033-563, 033-569 No Printable Paper Size RAP .....	2-328	071-101 Paper Jam in Tray1 RAP .....	2-355
033-564, 033-570 Power Off During Transmission RAP .....	2-328	072-101 and 077-117 Jam in Tray2 Error RAP .....	2-356
033-571, 033-588 Manual Send Job Canceled RAP .....	2-329	072-103 Path2 SNR ON Jam RAP .....	2-357
033-572 FAX Report Print Job Canceled RAP .....	2-329	072-310, 073-310, 074-310, 077-360 Tray2-5, Motor Fail RAP .....	2-358
033-573 Domain Regulation Check Error RAP .....	2-330	072-311 Tray2 Mode Fail RAP .....	2-359
033-580 Missing VoIP Gateway RAP .....	2-330	072-312 Feeder2 Maker Mismatch Fail RAP .....	2-360
033-586 T38 Protocol Not Ready RAP .....	2-331	072-401 Tray2 Feed Roll Near Life RAP .....	2-360
033-593 Canceled By Remote Peer RAP .....	2-331	072-402 Tray2 Feed Roll Life Over RAP .....	2-361
033-700 T1 Timeout Fail RAP .....	2-332	073-101 Tray3 Miss Feed RAP .....	2-361
033-701 Retry Timeout RAP .....	2-332	075-100 JAM in Bypass Tray RAP .....	2-362
033-710, 712, 713, 717, 718, 719, 721 Document Not Found RAP .....	2-333	077-101 Paper Jam RAP .....	2-362
033-716 No Specified Folder RAP .....	2-333	077-104 Exit Sensor Off Jam RAP .....	2-364
033-724 FAX Receive Memory Over Flow RAP .....	2-334	077-123 Registration Sensor Jam (Duplex) RAP .....	2-365
033-726, 728, 734, 737, 738, 751 FAX Printing Error RAP .....	2-334	077-302 Device Right Side Door is Open RAP .....	2-366
033-733, 735, 741, 743, 744, 745, 746, 750 FAX Document Number Error RAP .....	2-335	077-314 P/H Module Logic Fail RAP .....	2-366
		077-322 Option Comm Fail RAP .....	2-367
		077-323 PH Motor Fail RAP .....	2-367
		077-327 Feeder Composition Fail RAP .....	2-368
		077-909 Paper Jam RAP .....	2-368
		<b>Chain 80-89 RAPs</b>	
<b>Chain 40-49 RAPs</b>		089-600 to 089-617 RC Fail RAP .....	2-369
041-310 IM Logic Fail RAP .....	2-337	089-623 to 089-679 LED Offset Correction Error RAP .....	2-370
041-340 to 041-363 MCU NVM (EEPROM) Fail RAP .....	2-337		
041-388 MK Logic Fail RAP .....	2-338	<b>Chain 90-99 RAPs</b>	
041-603, 041-604 Temp/Humidity Sensor Fail RAP .....	2-338	091-312 HVPS CC Fail RAP .....	2-371
042-313 Rear Cooling Fan1 Fail RAP .....	2-339	091-313, 091-402, 091-480 to 482, 091-913 to 929 Drum/CRUM RAP .....	2-371
042-325 Device Fault RAP .....	2-339	091-316 Xero Drum Motor Fail RAP .....	2-372
042-335 Device Fault (Main Fan Fail) RAP .....	2-340	091-400, 401, 405-436 DRUM/CRUM and Waste DRUM RAP .....	2-373
042-336 Device Fault (SUB Fan Fail) RAP .....	2-340	091-911 Waste Toner Bottle Full RAP .....	2-373
042-348 Over Temperature Detect Fail RAP .....	2-341	092-312 to 092-315 ATC Sensor Fault RAP .....	2-374
044-329 Shutdown Fail RAP .....	2-341	092-318 to 092-321 ADC Patch System Fail RAP .....	2-374
045-310 Image Ready NG RAP .....	2-342	092-606, 094-310, 094-325, 094-326 ADC/CTD Fail RAP .....	2-375
045-311 Controller Communication Fail RAP .....	2-342	092-675 to 092-678 ADC Tone Patch Fail RAP .....	2-375
045-370 LPH DL Fail Power RAP .....	2-343	092-911 to 092-914 Toner Cartridge Uncertain Empty [X] RAP .....	2-376
045-371 LPH DL Fail MULT RAP .....	2-344	092-916 Environment SNR Sensor Fail RAP .....	2-376
047-216 Finisher Comm Fail RAP .....	2-345	093-324 DEVE YMC Motor Fail RAP .....	2-377
		093-339 Toner Drum CRUM Authentication Fail RAP .....	2-377
		093-400 to 093-425 DRUM Cartridge Near Empty RAP .....	2-378
		093-912 Toner Cartridge Empty (K) RAP .....	2-378
<b>Chain 50-59 RAPs</b>			
058-310, 311, 315, 316, 317 Fusing Error RAP .....	2-347		
059-314, 315, 326 Fusing Error RAP .....	2-347		
059-321, 059-324 Fusing Error RAP .....	2-348		
<b>Chain 60-69 RAPs</b>			
060-341 to 060-352 LPH Fault RAP .....	2-349		

093-913 to 093-939 and 096-918 CRUM Error RAP .....	2-379	116-738 Size/Orientation Mismatch RAP .....	2-408
094-318 1st BTR Position Fail RAP .....	2-380	116-739, 741, 742, 743 Out of Memory RAP .....	2-409
094-417 IBT Near Life End RAP .....	2-380	116-740 Arithmetic Error RAP .....	2-409
094-420 IBT Life Over RAP .....	2-381	116-746 Selected Form Not Registered RAP .....	2-410
094-911 Transfer Belt Position Fail RAP .....	2-381	116-747, 116-748 Invalid Page Data RAP .....	2-410
099-396 to 099-399 Fuser Temperature Fault RAP .....	2-382	116-749 PostScript Font Error RAP .....	2-411
<b>Chain 100-109 RAPs</b>			
102-311 to 102-319 USB Dongle Errors RAP .....	2-383	116-752 Print Job Ticket RAP .....	2-411
102-356 EWS Soft Fail RAP .....	2-384	116-749 PostScript Font Error RAP .....	2-412
103-314 Prohibited Originals RAP .....	2-385	116-790 Stapling Canceled RAP .....	2-412
<b>Chain 110-119 RAPs</b>			
116-210 and 116-211 Media Reader Error RAP .....	2-387	117-310 WSD Scan S/W Fail RAP .....	2-413
116-212 and 116-220 ESS Error RAP .....	2-387	117-312 Device Self Test Error RAP .....	2-413
116-312 and 116-313 HDD Encrypt Fail RAP .....	2-388	117-313 Geographic Region Change Fail RAP .....	2-414
116-314 Ethernet Address Fail RAP .....	2-388	117-314 and 117-315 Contract Type/Geographic Region Changed RAP .....	2-414
116-321, 322, 328, 329, 338 Software Error RAP .....	2-389	117-316 Contract Manager Software Fail RAP .....	2-415
116-323 ESS NVRAM W/R Check Fail RAP .....	2-390	117-317, 117-318 Contract Manager PPP RAP .....	2-415
116-324, 116-328 Exception Fail RAP .....	2-390	117-319 and 117-320 eMMC Fail RAP .....	2-416
116-325 ESS Fan Fail RAP .....	2-391	117-321, 117-324 eMMC Card Invalid Type Fail RAP .....	2-416
116-330, 336, 337, 339, 353, 354, 356, 361, 388 HDD Fail RAP .....	2-391	117-322 eMMC Card Encrypt Fail RAP .....	2-417
116-331 Invalid Log Info RAP .....	2-392	117-323 eMMC File Access Fail RAP .....	2-417
116-334 ESS NVRAM Data Compare Fail .....	2-393	117-325 Contract Manager RTC Hardware Fail RAP .....	2-418
116-342, 393, 394 ROM Version Incorrect RAP .....	2-393	117-326 ESS NVRAM SW Access Fail RAP .....	2-418
116-343, 346, 357, 359 Main PWB Error RAP .....	2-394	117-327 ESS NVRAM eMMC Card HW Access Fail RAP .....	2-419
116-348, 349 Redirector Fail RAP .....	2-394	117-330, 118-311 Soft Fail RAP .....	2-419
116-355, 358, 360, 363, 370, 374, 379, 395, 362, 117-330, 118-311 Soft Fail RAP .....	2-395	117-332, 117-335 Uninitialized or Invalid NVM RAP .....	2-420
116-363, 370, 373, 376 Fatal Error RAP .....	2-396	117-333, 348, 364 Uninitialized or Used eMMC RAP .....	2-420
116-364 Timer Fail RAP .....	2-396	117-343 Log Sending Parameter Fail RAP .....	2-421
116-365, 366, 368, 371, 372, 373, 375, 377 SW Fail RAP .....	2-397	117-344 Invalid User Job Type Fail RAP .....	2-422
116-378, 379, 395 MCR/MCC Soft Fail RAP .....	2-398	117-345 SSMM Batch Setting Duration Fail RAP .....	2-422
116-380 ESS Font ROM DIMM #1Check Fail RAP .....	2-398	117-354, 356, 358 Job Limit System Fail RAP .....	2-423
116-381 ABL Version Fail RAP .....	2-399	117-357 TPM Fail RAP .....	2-423
116-382 ABL Initialize Fail RAP .....	2-399	117-360 Date Limit Exceeding Fail RAP .....	2-424
116-383 PIT Lib Failure RAP .....	2-400	117-362, 117-363 USB Dongle Fail RAP .....	2-424
116-384, 116-385 DCS/IDC Software Fail RAP .....	2-400	117-365 WiFi Long Diag Fail RAP .....	2-425
116-386 Incorrect USB port used for FAX RAP .....	2-401	118-310 IPSEC Internal Fail RAP .....	2-425
116-391 Illegal Code RAP .....	2-401	<b>Chain 120-129 RAPs</b>	
116-396 RAPS140 Self Test Fail RAP .....	2-402	121-316 Accessory Conflict RAP .....	2-427
116-397 Illegal Setting Area Coverage Threshold RAP .....	2-402	121-318 Auth/Account Settings Not Supported RAP .....	2-427
116-399 Under initialization for 10 minutes RAP .....	2-403	123-310 to 123-399 UI Error RAP .....	2-428
116-701 Out of Memory Duplex Fail RAP .....	2-403	124-310-314, 316, 318, 322, 324, 340, 356, 357, 360 ID/Billing/Data Mismatch RAP ...	2-429
116-702 Print with Substitute Font RAP .....	2-404	124-315, 317, 355 DC132 Error 02, 04 and 14 RAP .....	2-430
116-703 PostScript LANG Interpreter ERR RAP .....	2-404	124-319 DC132 Error 08 RAP .....	2-430
116-704 to 116-709, 716, 717 Media Reader Format RAP .....	2-405	124-320 SEEPROM Fail RAP .....	2-431
116-710 HP-GL/2 Overflow RAP .....	2-405	124-321 Backup SRAM Fail RAP .....	2-431
116-714 HP-GL/2 Command Error RAP .....	2-406	124-323 DC132 06 RAP .....	2-432
116-719 XPIF Parameter Cancelled RAP .....	2-406	124-325 Billing Restoration Fail RAP .....	2-432
116-720 PCL Memory Low Page Simplified RAP .....	2-407	124-326 IOT Speed Not Registered RAP .....	2-433
116-721 to 116-728 Color Print Permissions RAP .....	2-407	124-327 IOT Speed Change Fail RAP .....	2-433
116-725 HDD full for Image Log RAP .....	2-408	124-334 to 124-335 ESS ROM DIMM RAP .....	2-434
		124-337 ESS Standard RAM Error RAP .....	2-434
		124-341, 351, 361, 381, 391 CRUM Market Fail MCU RAP .....	2-435
		124-342, 343, 352, 362, 363, 382, 383, 392, 393 CRUM Fail SYS RAP .....	2-435

124-344, 346, 348 Billing Meter Mismatch RAP .....	2-436
124-345 Billing Meter Type Restoration Fail RAP .....	2-436
124-347 Billing CountType Restoration Fail RAP .....	2-437
124-349 Modal Break Points Restoration Fail RAP .....	2-437
124-350, 354, 380, 390 CRUM OEM Fail All RAP .....	2-438
124-359 IOT NVM Backup Restor Fail 1 RAP .....	2-438
124-372 to 124-374 IOT Soft Fail RAP .....	2-439
127-310 ESS Task Fatal Error RAP .....	2-439
125-311, 314, 315, 342 PSW Controller Unexpected Fail RAP .....	2-440
127-353, 354, 396, 398, 399 Fatal Error RAP .....	2-440
<b>Chain 130-139 RAPs</b>	
133-210 to 133-224, 133-226, 133-701 FAX Parameter Incorrect RAP .....	2-441
133-701 Replacement Character Detected RAP .....	2-442
133-710 Tray Select Fail RAP .....	2-442
<b>Chain 500 RAPs</b>	
500-030 dC612 Print NG IOT Wait State RAP .....	2-443
500-033, 500-035 Diag Documents RAP .....	2-443
500-990 dC612 Print NG By Any Reason RAP .....	2-444
<b>OF - Other Faults</b>	
OF 1 Unusual Noises RAP .....	2-445
OF 2 UI has no Display .....	2-445
OF 3 Special Boot Modes RAP .....	2-446
OF 4 POST Error RAP .....	2-446



## Troubleshooting Overview

To increase the efficiency of troubleshooting, ensure that preliminary checks should be made to confirm the trouble status before proceeding to the Repair Adjustment Procedure (RAP) (Chapter 2), Diagnostic Procedures (Chapter 6), Wiring Diagrams (Chapter 7), and Principles of Operation (Chapter 8).

### Flow of Troubleshooting

Flow of the troubleshooting is as follows:

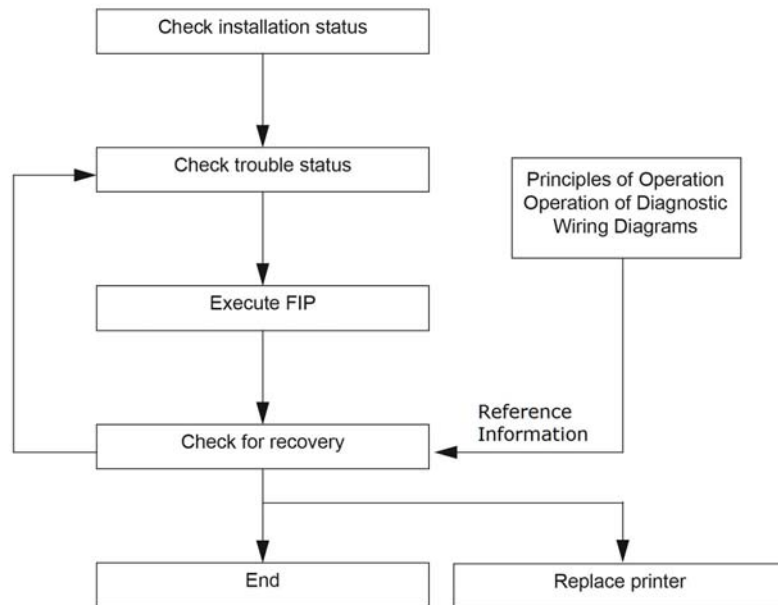


Figure 1 Troubleshooting Flow Diagram

### Check Installation Status

Be sure to check the following items before starting the troubleshooting procedures.

1. The power supply voltage is within the specifications (measure the voltage at the wall outlet).
2. Power cord is free from breakage, short-circuit, disconnected wire, or incorrect connection in the power cord.
3. The printer is properly grounded.

4. The printer is not installed at a place subjected to high/low temperature, humidity, and sudden temperature changes.
5. The printer is not installed at or near water facilities, humidifier, heating appliance, fire, dust, or in airflow from air conditioner.
6. The printer is not installed in a place subjected to volatile or inflammable gas.
7. The printer is not installed under direct sunlight.
8. The printer is installed in a well-ventilated place.
9. The printer is installed on a firm and stable surface.
10. The paper meets the specifications (standard paper is recommended).
11. The printer is handled properly.

### Cautions on Service Operations

#### WARNING

While the printer is on, never touch live parts if not required. Power is supplied to the inlet and LVPS even while the printer is off. Never touch its live components. Do not touch live parts unless otherwise specified.

1. Be sure to remove the power cord unless otherwise required.

#### WARNING

When outputting a high voltage using the Diag Tool, etc., ensure that: - The high voltage carrying parts must never be touched. - The instructions in this manual must be followed.

1. When outputting a high voltage using the Diag Tool, etc., keep all the covers on unless otherwise required.
2. When operating the motor using the Diag Tool, etc., keep all the covers on unless otherwise required.

#### WARNING

When operating the drive unit using the Diag Tool, etc., ensure that: - The drive unit must never be touched. - The instructions in this manual must be followed.

1. When touching hot parts, be careful not to get burnt.
2. While working, be sure to wear a wrist band or the like to dissipate static charges from your body.

#### WARNING

Check the provided parts individually. Do not remove, replace, or check any parts other than the provided parts. Never break down the provided parts or replace the parts therein. Mounting of any parts other than the provided parts is not guaranteed in quality or safety, and is strictly forbidden.

### Cautions on Using RAPs

1. Check the provided parts individually. Do not remove, replace, or check any parts other than the provided parts. Never break down the provided parts or replace the parts therein. Mounting of any parts other than the provided parts is not guaranteed in quality or safety, and is strictly forbidden.
2. In the initial check according to the RAP, check only items which can be simply checked.
3. In the initial check according to the RAP, check the constitutive parts of the major check parts and related parts, as well as major check parts.

4. When working with the printer, be sure to remove the power cord unless otherwise required. Never touch live parts if not required, while the power cord is connected.
5. Connector condition is denoted as follows: Connector (P12) is connected Plug side with the connector (P/J12) removed (except when attached directly to the board). (J12) Jack side with the connector (P/J12) removed (except when attached directly to the board).
6. (P/J1-2PIN between P/J3-4PIN) in the RAP means measurement with the positive side of the measuring instrument connected to (P/J1-2PIN) and the negative side of (P/J3-4PIN).
7. (P/J1 between J2) in the RAP means measurement for all terminals corresponding between (1 and P/J2) based on "Wiring Diagrams".
8. In (P/J1-2PIN between P/J3-4PIN) in the RAP where voltage is measured, (P/J3-4PIN) on the rear negative side is always at the AG (analog ground), SG (signal ground), or RTN (return). Therefore, after checking of proper conductivity between AGs, SGs, or RTNs respectively, the rear negative side can be connected to the PIN of AG, SG or RTN instead of (P/J3-4PIN). However, care should be taken not to confuse (AG), (SG), and (RTN) because they are not on the same level.
9. When measuring the voltage at small connectors, use the dedicated tool. Handle the tool with care because its business end is pointed.
10. When measuring the voltage, install the toner cartridge and sheet feeder, close the Covers and power ON unless otherwise required.
11. Numerical values in the RAP are only for guideline. Approximate values are acceptable.
12. In each step of the RAP, parts removal and other procedures implicitly required for the step are omitted.
13. In the RAP, "Replacement" means the replacement of the parts that are considered to be the cause of the trouble. Replacement of those parts means the replacement of the assembly part (HIGH Assy) that contain them.
14. Some of the instructions in the RAP are branched off depending on the specifications. Follow the applicable instruction.

## Items To Be Confirmed Before Going To RAP Troubleshooting

### Basic Printer Problems

Some printer problems can be easy to resolve. If a problem occurs with your printer, check each the following:

1. If a message is displayed on the UI of operator panel, see "2.2 Error Code List".
2. The printer power cable is plugged into the printer and a properly grounded electrical outlet.
3. The printer power is powered ON.
4. The electrical outlet is not turned off by any switch or breaker.
5. Other electrical equipment plugged into the outlet is working.
6. All options are properly installed.
7. If you have checked all of the above and still have a problem, turn off the printer, wait for 10 seconds, and then turn on the printer again. This often solves the problem.

### Display Problems

1. If the operator panel displays only diamonds or is blank, check and try the action below.
  - a) Turn off the printer, wait for 10 seconds, and turn on the printer.
  - b) Self Test Message appears on the operator panel. When the test is completed, "Ready to Print" is displayed.

2. If menu settings changed from the operator panel have no effect, check and try the actions below. Settings in the software program, the printer driver, or the printer utilities are overriding the settings made on the operator panel.
  - a) Change the menu settings from the printer driver, the printer utilities, or the software program instead of the operator panel.
  - b) Disable the settings in the printer driver, the printer utilities, or the software program so you can change settings on the operator panel.

### Printing Problems

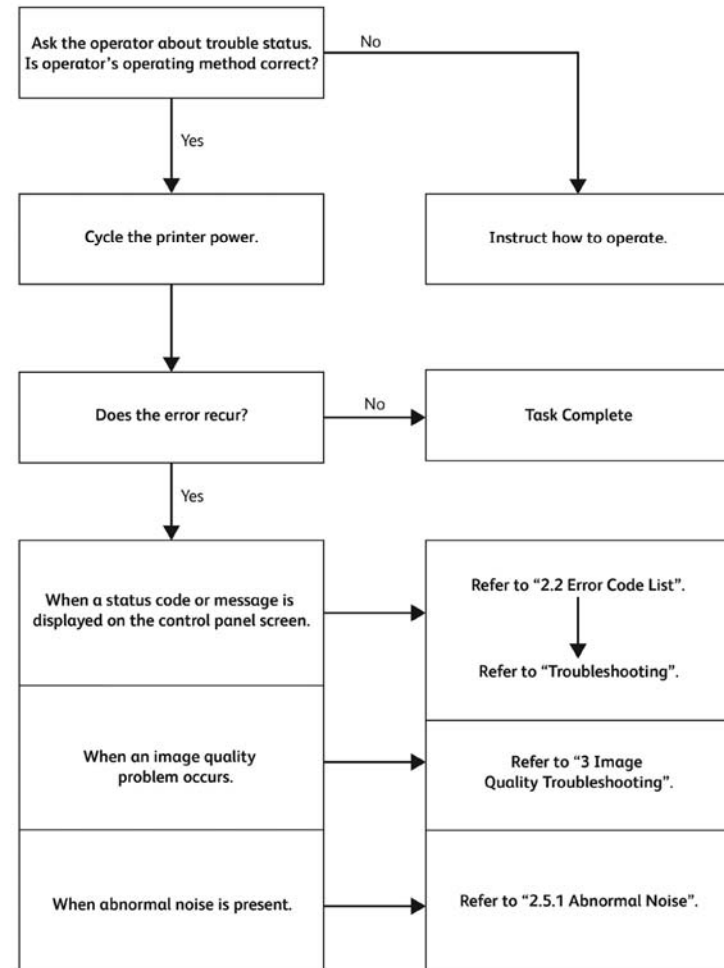
1. If a job did not print correct or incorrect characters were printed, check and try the actions below.
  - a) Make sure "Ready to Print" appears on the operator panel before sending a job to print. Press Menu to return to "Ready to Print".
  - b) Make sure print media is loaded in the printer. Press Menu to return to "Ready to Print".
  - c) Verify that you are using the correct printer driver.
  - d) Make sure you are using the correct Ethernet or USB cables and it securely connected at the back of the printer.
  - e) Verify that the correct print media size is selected.
  - f) If using a print spooler, verify that the spooler has not stalled.
  - g) Check the printer interface from the "Configure" menu. Determine the host interface you are using. Print a Panel Setting page to verify that the current interfaces settings are correct.
  - h) Output fonts will not print correctly using the PCL driver in its default mode. To correct this problem, use PS driver when using the PCL driver.
2. If print media misfeeds or multiple feeds occur, check and try the actions below.
  - a) Make sure the print media you are using meets the specifications for your printer.
  - b) Flex print media before loading it in any of the sources.
  - c) Make sure the print media is loaded correctly.
  - d) Make sure the width and length guides on the print media sources are adjusted correctly.
  - e) If the print media are overfilled in sources, reduce the amount of media.
  - f) Load the recommended print side correctly for the type of print media you are using.
  - g) Turn the print media over or around and try printing again to see if feeding improves.
  - h) Check the print media type loaded in the source, and refill only one type of print media, if print media types are mixed.
    - i) Refill a new ream of print media, if some reams are mixed.
    - j) Remove the top and bottom sheets of a ream before loading the print media.
    - k) Do not reload print media until the print media source is empty.
3. If envelope misfeeds or multiple feeds occur, check and try the action below.
  - a) Remove the stack of envelopes from the bypass tray.
4. If page breaks in unexpected places, check and try the action below.
  - a) Check the "Job Time-out" in the Basic Settings menu and increase the value.
5. When a job is executed with a wrong paper tray or a wrong print media, check and try the action below.
  - a) Check the "Paper Size" and "Paper Type" in the Tray Settings menu on the printer operator panel and in the printer driver.



6. If print media does not stack neatly in the output tray, check and try the action below.  
 a) Turn the print media stack over in the tray or multipurpose feeder.

## RAP

The RAP is the first step for trouble diagnosis. The RAP isolates the presence of various troubles including error codes, and guides the troubleshooting procedure.



**Figure 2 Repair Analysis Process**

**NOTE:** Wait at least 3 seconds after turning the power off before turning the power on again. Turning the power on again soon after turning the power off will not turn the power off.



## 002-500 UI Error RAP

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 4. 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 4.
2. Check the wiring between the ESS PWB and the UI assembly.
3. Upgrade the software, GP 9.
4. Perform GP 15 Special Boot Modes, Function 03. NVRAM INIT MODE.

#### CAUTION

*Do not install the ESS PWB and the MCU PWB at the same time. Always install the ESS PWB, then verify the fault is cleared before installing the MCU PWB.*

5. If the fault persists, install the new components as necessary:
  - UI assembly: PL 1.1 Item 1 (MFP) or PL 1.2 Item 1 (SFP).
  - ESS PWB: PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP\_Tall), PL 18.9 Item 5 (SFP).
  - MCU PWB: PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP\_Tall), PL 18.9 Item 1 (SFP).

**NOTE:** If the fault persists after startup, perform dC132 to verify all numbers match. Go to Serial Number Re-Synchronization in GSN (Library 1503).

## 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

Upgrade the software, GP 9.

## 003-318 to 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 4. 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 4](#).
2. Perform [OF 3](#) Special Boot Modes RAP.
3. Ensure that all connectors on the IIT assembly, [PL 50.1 Item 2](#) and the ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP\_Tall), are connected securely. Ensure that all surface-mounted modules on the ESS PWB are connected securely.
4. Upgrade the software, [GP 9](#).
5. Perform [GP 15](#), Function 03. NVRAM INIT MODE.

#### CAUTION

**Do not install the ESS PWB and the MCU PWB at the same time. Always install the ESS PWB, then verify the fault is cleared before installing the MCU PWB.**

6. If the fault persists, install a new:
  - ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP\_Tall).
  - MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP\_Tall).

**NOTE:** If the fault persists after startup, perform [dC132](#) to verify all numbers match. Go to *Serial Number Re-Synchronization in GSN (Library 1503)*.

## 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

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Perform [OF 3](#) Special Boot Modes RAP.
3. Ensure that all connectors on the IIT assembly, [PL 50.1 Item 2](#) and the ESS PWB, [PL 18.1 Item 5 \(MFP\)](#) or [PL 18.5 Item 5 \(MFP\\_Tall\)](#), are connected securely. Ensure that all surface-mounted modules on the ESS PWB are connected securely.
4. Upgrade the software, [GP 9](#).
5. Perform [GP 15](#), Function 03. NVRAM INIT MODE.

### CAUTION

*Do not install the ESS PWB and the MCU PWB at the same time. Always install the ESS PWB, then verify the fault is cleared before installing the MCU PWB.*

6. If the fault persists, install a new:
  - ESS PWB, [PL 18.1 Item 5 \(MFP\)](#) or [PL 18.5 Item 5 \(MFP\\_Tall\)](#).
  - MCU PWB, [PL 18.1 Item 1 \(MFP\)](#) or [PL 18.5 Item 1 \(MFP\\_Tall\)](#).

**NOTE:** *If the fault persists after startup, perform [dC132](#) to verify all numbers match. Go to [Serial Number Re-Synchronization in GSN \(Library 1503\)](#).*

## 003-344 Hotline Fail RAP

**003-344** Hotline failure during power on.

## Procedure

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Perform [OF 3](#) Special Boot Modes RAP.
3. Ensure that all connectors on the IIT assembly, [PL 50.1 Item 2](#) and the ESS PWB, [PL 18.1 Item 5 \(MFP\)](#) or [PL 18.5 Item 5 \(MFP\\_Tall\)](#), are connected securely. Ensure that all surface-mounted modules on the ESS PWB are connected securely.
4. Upgrade the software, [GP 9](#).
5. Perform [GP 15](#), Function 03. NVRAM INIT MODE.

### CAUTION

*Do not install the ESS PWB and the MCU PWB at the same time. Always install the ESS PWB, then verify the fault is cleared before installing the MCU PWB.*

6. If the fault persists, install a new:
  - ESS PWB, [PL 18.1 Item 5 \(MFP\)](#) or [PL 18.5 Item 5 \(MFP\\_Tall\)](#).
  - MCU PWB, [PL 18.1 Item 1 \(MFP\)](#) or [PL 18.5 Item 1 \(MFP\\_Tall\)](#).

**NOTE:** *If the fault persists after startup, perform [dC132](#) to verify all numbers match. Go to [Serial Number Re-Synchronization in GSN \(Library 1503\)](#).*

## 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

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Perform [OF 3](#) Special Boot Modes RAP.
3. Ensure that all connectors on the IIT assembly, [PL 50.1 Item 2](#) and the ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP\_Tall), are connected securely. Ensure that all surface-mounted modules on the ESS PWB are connected securely.
4. Upgrade the software, [GP 9](#).
5. Perform [GP 15](#), Function 03. NVRAM INIT MODE.

#### CAUTION

*Do not install the ESS PWB and the MCU PWB at the same time. Always install the ESS PWB, then verify the fault is cleared before installing the MCU PWB.*

6. If the fault persists, install a new:
  - ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP\_Tall).
  - MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP\_Tall).

**NOTE:** *If the fault persists after startup, perform [dC132](#) to verify all numbers match. Go to [Serial Number Re-Synchronization in GSN \(Library 1503\)](#).*

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).



## 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, upgrade the software, [GP 9](#).

## 003-751 Capacity RAP

**003-751** An attempt to process image data of a size smaller than the one that can be processed according to the document area settings and the scan area 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 003-754, 003-755 S2X Error RAP

**003-754** A recoverable error was detected.

**003-755** Command error returned from the PWB.

### Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job, then retry the job.
2. If the fault persists, upgrade the software, [GP 9](#).

## 003-756 All Originals Blank RAP

**003-756** All scanned documents were detected as blank.

### Procedure

Perform the steps that follow:

1. Advise the customer to ensure all documents are not blank and are inserted in the correct orientation, then retry the job.
2. If the fault persists, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

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

**003-760** The job properties are incorrect.

**003-761** Tray selection error.

### Procedure

Perform the steps that follow:

1. Advise the customer to correct the job properties.
2. If the fault persists, upgrade the software, [GP 9](#).

## 003-764 Insufficient Documents RAP

**003-764** Insufficient documents for image overlay.

### Procedure

Perform the steps that follow:

1. Advise the customer to correct the job properties.
2. If the fault persists, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 003-913 Document Size Error RAP

003-913 Insufficient memory to store the selected document size and resolution detected.

### Procedure

Perform the steps that follow:

1. Advise the customer to cancel the job, then to change the scan resolution or document size parameters and retry the job.
2. If the fault persists, upgrade the software, [GP 9](#).

## 003-940 Insufficient Memory RAP

**003-940** Insufficient DAM 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, upgrade the software, [GP 9](#).

## 003-941 Insufficient Page Memory RAP

**003-941** Insufficient page memory to store the image detected.

### Procedure

Perform the steps that follow:

1. Advise the customer to change the job parameters, then retry the job.
2. Ensure the HDD, [PL 18.1 Item 27](#) (MFP) or [PL 18.5 Item 27](#) (MFP\_Tall) or [PL 18.9 Item 27](#) (SFP), is installed correctly.
3. If the fault persists, upgrade the software, [GP 9](#).

## 003-944 Repeat Image Count Fail RAP

**003-944** Incorrect image repeat count (not even one image can 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).



## 003-947, 948 Document Error RAP

**003-947** An additional number of documents are required.

**003-948** Returned document size mismatch.

### 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, upgrade the software, [GP 9](#).

## 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 reload the correct color documents and to correctly program the job. Retry the job.
2. If the fault persists, upgrade the software, [GP 9](#).

## 003-956 Document Size Auto Detect RAP

**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.

## 003-963, 965 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.

### 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, upgrade the software, [GP 9](#).

## 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 touch continue to store as much data as the memory capacity will allow, then continue scanning the next document. Otherwise, cancel the job.
2. Switch off, then switch on the machine, [GP 4](#).
3. Ensure the HDD, [PL 18.1 Item 27](#) (MFP) or [PL 18.5 Item 27](#) (MFP\_Tall) or [PL 18.9 Item 27](#) (SFP), is installed correctly.
4. If the fault persists, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 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, upgrade the software, [GP 9](#).

## 005-121 DADF Jam

005-121 A jam in the DADF is detected.

### Procedure

Open the DADF upper feeder cover, [PL 50.1 Item 8](#). Remove any jammed paper.

## 005-211 DADF Motor Fail

005-211 An DADF motor error was detected.

### Procedure

Switch the machine off, then on, [GP 4](#).

## 005-305 DADF Feeder Cover Interlock Open RAP

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

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 4**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Open the DADF upper feeder cover, **PL 50.1 Item 8**. Remove any jammed paper.
2. Check the DADF upper feeder cover for mismatch.
3. Perform **GP 15**, Function 03. NVRAM INIT MODE.

#### CAUTION

*Do not install the ESS PWB and the MCU PWB at the same time. Always install the ESS PWB, then verify the fault is cleared before installing the MCU PWB.*

4. If the fault persists, install new components as necessary:
  - DADF upper feeder cover, **PL 50.1 Item 8**.
  - ESS PWB, **PL 18.1 Item 5 (MFP)** or **PL 18.5 Item 5 (MFP\_Tall)**.
  - MCU PWB, **PL 18.1 Item 1 (MFP)**, **PL 18.5 Item 1 (MFP\_Tall)**.

**NOTE:** If the fault persists after startup, perform **dC132** to verify all numbers match. Go to *Serial Number Re-Synchronization in GSN (Library 1503)*.

- DADF tray assembly, **PL 50.1 Item 11**.

## 005-900 DADF Static Jam RAP

**005-900** DADF pre-registration sensor detected paper when powering on, closing the feeder cover or closing the DADF.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 4**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Open the DADF upper feeder cover, **PL 50.1 Item 8**. Remove any jammed paper.
2. Check the DADF upper feeder cover for mismatch.
3. Perform **GP 15**, Function 03. NVRAM INIT MODE.

#### CAUTION

*Do not install the ESS PWB and the MCU PWB at the same time. Always install the ESS PWB, then verify the fault is cleared before installing the MCU PWB.*

4. If the fault persists, install new components as necessary:
  - DADF upper feeder cover, **PL 50.1 Item 8**.
  - ESS PWB, **PL 18.1 Item 5 (MFP)** or **PL 18.5 Item 5 (MFP\_Tall)**.
  - MCU PWB, **PL 18.1 Item 1 (MFP)**, **PL 18.5 Item 1 (MFP\_Tall)**.

**NOTE:** If the fault persists after startup, perform **dC132** to verify all numbers match. Go to *Serial Number Re-Synchronization in GSN (Library 1503)*.

- DADF tray assembly, **PL 50.1 Item 11**.

## **005-940 DADF No Original RAP**

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

### **Procedure**

Reload the document.

## **005-941 Not Enough Documents RAP**

**005-941** Some originals were missing after all originals were returned.

### **Procedure**

Follow the instructions on the UI to reload the documents.



## 010-105, 010-106 Fusing Assembly Exit Sensor RAP

BSD-ON: [BSD 07: Registration and no paper sensors](#)

BSD-ON: [BSD 20: Exit Clutch](#)

BSD-ON: [BSD 42: PH Motor, LVPS, MCU](#)

BSD-ON: [BSD 16: Exit Sensor](#)

BSD-ON: [BSD 04: Main Motor](#)

BSD-ON: [BSD 28: Invert Clutch](#)

**010-105** After registration clutch on, exit sensor is not turned on by paper within specified time.

**010-106** After registration clutch off, exit sensor is not turned off by paper within 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 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.
- [GP 12](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Open the rear door, [PL 19.2](#) and clear obstructions in the paper path.
2. Check the rear cover for damage. If the rear cover is damaged, install a new rear cover assembly kit, [PL 19.2 Item 99](#).
3. Check the feed and separator rolls for damage or excessive wear. If the feed and separator rolls are damaged or show excessive wear, install a new feed and separator roll kit, [PL 19.2 Item 98](#).
4. Check the exit chute assembly, for damage or excessive wear. If the exit chute is damaged, install a new exit chute assembly, [PL 17.1 Item 1](#).
5. Reseat the fusing assembly, [PL 7.1 Item 1](#).
6. Enter [dC330](#). Check the sensors that follow:
  - Code 071-103, registration sensor, [PL 15.2 Item 13](#).
  - Code 071-104, exit sensor, [PL 17.1 Item 11](#).
7. Enter [dC330](#). Check the clutches that follow:
  - Code 071-105, exit clutch, [PL 17.1 Item 4](#).
  - Code 071-106, invert clutch, [PL 17.1 Item 4](#).
8. Enter [dC330](#). Check the motors that follow:
  - Code 071-073, main drive assembly 2, [PL 3.1 Item 2](#).
  - Code 071-061, motor drive assembly, [PL 3.1 Item 7](#).
9. If the fault persists, install new components as necessary:

- Registration sensor, [PL 15.2 Item 13](#).
- Exit sensor, [PL 17.1 Item 11](#).
- Main exit drive assembly, [PL 17.1 Item 4](#).
- Main drive assembly 2, [PL 3.1 Item 1](#).
- MSI drive assembly, [PL 3.1 Item 5](#).
- MCU PWB, [PL 18.1 Item 1](#) (B605/B615) Std.), [PL 18.5 Item 1](#) (B615\_Tall), [PL 18.9 Item 1](#) (B600/B610).

## 010-321 Fusing Unit Nip Fail RAP

**BSD-ON:** [BSD 33: MCU, Envelope Mode Sensor](#)

**BSD-ON:** [BSD 34: MCU, Fusing Envelope Motor](#)

**010-321** Nip CAM Sensor does not turn ON/OFF after the Nip CAM has been driven for 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 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

#### **WARNING**

**Do not touch the Fuser while it is hot.**

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Check for and remove any obstruction in the NIP retract drive assembly, [PL 7.1 Item 99](#).
3. Check the following components for damage or excessive wear. Install new components as necessary:
  - Bracket nip retract, [PL 7.1 Item 2](#).
  - NIP retract drive assembly, [PL 7.1 Item 99](#).
  - NIP retract shaft assembly, [PL 7.1 Item 99](#).
4. Enter [dC330](#), code 010-202. Check the envelope mode sensor, [PL 7.1 Item 5](#).
  - a. Install new components as necessary:
    - i. Envelope mode sensor [PL 7.1 Item 5](#).
    - ii. MCU PWB, [PL 18.1 Item 1](#) (B605/B615) Std.), [PL 18.5 Item 1](#) (B615\_Tall), [PL 18.9 Item 1](#) (B600/B610).
5. Enter [dC330](#), code 010-003. Check the fusing envelope motor, [PL 7.1 Item 4](#).
  - a. Install new components as necessary:
    - i. Fusing envelope motor, [PL 7.1 Item 4](#).

## 010-329 to 010-346 Fusing Assembly HR RAP

**BSD-ON:** [BSD 5: Fusing, MCU. LVPS](#)

**010-329** Fusing Assembly Fuse Cut Fail.

**010-331** Fusing Assembly HR STS Over Temperature Fail.

**010-332** Fusing Assembly HR NCS Disconnection Fail.

**010-333** Fusing Assembly HR NCS Over Temperature Fail.

**010-334** Fusing Assembly HR NCS Broken Fail.

**010-335** Fusing Assembly HR NCS Range Fail.

**010-338** Fusing Assembly HR On Time Fail (Wait).

**010-339** Fusing Assembly HR NCS Low Temperature Fail.

**010-340** Fusing Assembly Detached Fail.

**010-344** Fusing Assembly HR STS Low Temperature Fail.

**010-345** Fusing Assembly Hard Relay OFF Fail.

**010-346** Fusing Assembly Main Lamp Data Renewal Fail.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

#### **WARNING**

**Do not touch the Fuser while it is hot.**

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the fusing assembly and the drawer connector of the printer are installed properly (without a bent pin, or any foreign or burnt objects, etc.).
3. Check the connection between the fusing assembly, MCU PWB, and LVPS PWB are fully seated.
4. Install new components as necessary,
  - a. Fusing assembly, [PL 7.1 Item 1](#).
  - b. LVPS PWB [PL 18.1 Item 16](#) (B605/B615), [PL 18.5 Item 16](#) (B615\_Tall), [PL 18.9 Item 16](#) (B600/B610).
  - c. MCU PWB, [PL 18.1 Item 1](#) (B605/B615) or [PL 18.5 Item 1](#) (B615\_Tall) or [PL 18.9 Item 1](#) (B600/B610).

## 010-420 and 010-421 Fusing Assembly Life RAP

010-420 Fusing assembly near life end.

010-421 Fusing assembly life over.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the Fuser while it is hot.

Perform the steps that follow:

1. Install a new fusing assembly [PL 7.1 Item 1](#).

## 011-101 and 011-102 MBX Vertical Sensor RAP

BSD-ON: [MBX diagram 1](#)

BSD-ON: [MBX diagram 2](#)

011-101 MBX vertical sensor on jam.

011-102 MBX vertical sensor off jam.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the mailbox trays and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Enter [dC330](#) (012-402) to activate the MBX vertical sensor.
3. Enter [dC330](#) (012-080) to run the motor assembly.
4. Install new components as necessary:
  - MBX vertical sensor, [PL 20.2 Item 6](#).
  - Motor assembly, [PL 20.2 Item 8](#).
  - GPF A4MBX PWB, [PL 20.1 Item 11](#).
5. If the fault persists, contact Support for further instruction.

## 011-210 and 011-334 MBX NVM and Downloader Fail RAP

BSD-ON: [MBX diagram 1](#)

BSD-ON: [MBX diagram 2](#)

011-210 NVM Fail

011-334 MBX downloader fail (subsystem).

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Upgrade the software, [GP 9](#).
3. Check the wiring between the MBX IF harness assembly P/J8866, [PL 20.1 Item 17](#) and P/J621. Verify all connectors are fully seated and no damage to the harness. Repair the harness if needed.
4. Check the wiring between the MBX AC harness assembly P/J590, [PL 20.1 Item 15](#) and CN3. Verify all connectors are fully seated and no damage to the harness. Repair the harness if needed.
5. If the fault persists, contact Support for further instruction.

## 011-310 MBX Rear Cover Open RAP

BSD-ON: [MBX diagram 1](#)

BSD-ON: [MBX diagram 2](#)

011-310 MBX rear cover open.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Close the MBX rear cover, [PL 20.2 Item 4](#).
2. Check the rear cover for any damage to the rear cover, hinge and interlock.
3. Enter [dC330](#), code 012-400. Check the rear cover interlock sensor, [PL 20.2 Item 10](#).
4. If the fault persists, install a new GPF A4MBX PWB, [PL 20.1 Item 11](#).
5. If the fault persists, contact Support for further instruction.

## 011-912 MBX Static Jam RAP

BSD-ON: [MBX diagram 1](#)

BSD-ON: [MBX diagram 2](#)

011-912 MBX static jam.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the mailbox trays and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Enter [dC330](#), code 012-402. Check the MBX vertical sensor, [PL 20.2 Item 6](#).
3. If the fault persists, install a new, GPF A4MBX PWB, [PL 20.1 Item 11](#)

## 011-941 to 011-944 MBX Static Jam RAP

BSD-ON: [MBX diagram 1](#)

BSD-ON: [MBX diagram 2](#)

011-941 MBX bin 01 full stack.

011-942 MBX bin 02 full stack.

011-943 MBX bin 03 full stack.

011-944 MBX bin 04 full stack.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the mailbox trays and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Enter [dC330](#) and enter the following codes to activate the 1/2/3/4-bin full paper sensors, [PL 20.1 Item 5](#).
  - 012-410 bin 1
  - 012-411 bin 2
  - 012-412 bin 3
  - 012-413 bin 4
3. If the fault persists, install a new, GPF A4MBX PWB, [PL 20.1 Item 11](#).

## 012-122 Compile Tray Exit Sensor OFF Jam RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 3](#)

012-122: Compile Tray Exit Sensor OFF Jam

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the finisher and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Enter [dC330](#) (012-101) to activate the compile exit sensor, [PL 21.2 Item 9](#).
3. Enter [dC330](#) (012-011) to run the transport motor [PL 21.2 Item 8](#).
4. If the fault persists, install a new, PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 012-152 Compile Tray Exit Sensor ON Jam RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 3](#)

012-161: Compile Tray Exit Sensor ON Jam

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#) How to Check a Sensor.
- [GP 12](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Remove all paper from the finisher and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Check the takeaway pinch roll and takeaway chute, [PL 21.2 Item 4](#), for incorrect installation or damage.
3. Enter [dC330](#) (012-101) to activate the compile exit sensor, [PL 21.2 Item 9](#).
4. Enter [dC330](#) (012-013) to energize the transport gate solenoid, [PL 21.2 Item 11](#).
5. If the fault persists, install a new, PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 012-161 Finisher Set Eject Jam RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 3](#)

012-161: Finisher Set Eject Jam RAP

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the finisher and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Check the eject belt, [PL 21.1 Item 13](#), for incorrect installation or damage.
3. Enter [dC330](#) (012-200) to activate the eject home sensor, [PL 21.1 Item 3](#).
4. Enter [dC330](#) (012-013) to run the eject belt motor, [PL 21.1 Item 5](#).
5. If the fault persists, install a new, PWB GPF A4FIN, [PL 21.1 Item 12](#).
6. contact Support for further instruction.

## 012-210 and 012-334 Finisher NVM and Downloader Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 3](#)

012-210: NVM Fail

012-334: Finisher Downloader Fail (SubSystem)

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Upgrade the software, [GP 9](#).
3. Check the wiring between the FIN IF harness assembly P/J8866, [PL 21.2 Item 11](#) and P/J621. Verify all connectors are fully seated and no damage to the harness. Repair the harness if needed.
4. Check the wiring between the FIN AC harness assembly P/J590, [PL 20.1 Item 15](#) and CN3. Verify all connectors are fully seated and no damage to the harness. Repair the harness if needed.
5. If the fault persists, contact Support for further instruction.

## 012-211 to 012-213 Stacker Tray Fail RAP

BSD-ON:[Finisher diagram 1](#)

BSD-ON:[Finisher diagram 3](#)

012-211: Stacker Tray Fail

012-212: Stacker Tray Upper Limit Fail

012-213: Stacker Tray Upper Limit Fail

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the finisher and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the stacker tray, [PL 21.1 Item 6](#), for incorrect installation or damage. If the tray is damaged install a new tray assembly base, [PL 21.1 Item 6](#).
4. Enter [dC330](#) (012-200) to activate the stacker tray no paper & full sensor, [PL 21.1 Item 11](#).
5. Enter [dC330](#) (012-060) to run the stacker motor, [PL 21.1 Item 5](#).
6. If the fault persists, install a new, PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 012-239 to 012-240 Finisher Sub-Paddle Home Sensor ON/OFF Fail RAP

BSD-ON:[Finisher diagram 1](#)

BSD-ON:[Finisher diagram 3](#)

012-239: Finisher Sub-Paddle Home Sensor ON Fail

012-240: Finisher Sub-Paddle Home Sensor OFF Fail

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the finisher and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the compile tray assembly, [PL 21.1 Item 3](#) for incorrect installation or damage. Correct the installation of the compile tray and the compile tray belt if necessary.
4. Enter [dC330](#) (012-201) to activate the SUB paddle home sensor, [PL 21.1 Item 4](#).
5. Enter [dC330](#) (012-020/) to run the eject belt motor, [PL 21.1 Item 5](#).
6. If the fault persists, install a new, PWB GPF A4FIN, [PL 21.1 Item 12](#).



## 012-259 to 012-280 Finisher Eject Home Sensor ON/OFF Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 3](#)

012-259: Finisher Eject Home Sensor ON Fail

012-280: Finisher Eject Home Sensor OFF Fail

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the finisher and cancel all jobs. Clear any jams and verify the correct paper is being used and per specifications in [GP 26](#), Media Specifications.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the compile tray assembly, [PL 21.1 Item 3](#) for incorrect installation or damage. Correct the installation of the compile tray and the compile tray belt if necessary.
4. Enter [dC330](#) (012-200) to activate the eject home sensor, [PL 21.1 Item 3](#).
5. Enter [dC330](#) (012-020/021) to run the eject belt motor, [PL 21.1 Item 5](#).
6. If the fault persists, install a new, PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 012-283 to 012-284 Finisher Set Clamp Home Sensor ON/OFF Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 3](#)

012-283: Finisher Set Clamp Home Sensor ON Fail

012-284: Finisher Set Clamp Home Sensor OFF Fail

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Check the compile tray assembly, [PL 21.1 Item 3](#) for incorrect installation or damage. Correct the installation of the compile tray and the compile tray belt if necessary.
3. Enter [dC330](#) (012-020) to activate the set clamp home sensor, [PL 21.1 Item 3](#).

**NOTE:** If the eject belt motor rotates continuously, this indicates that the set clamp home sensor does not function normally.

4. Enter [dC330](#) (012-020/) to run the eject belt motor, [PL 21.1 Item 5](#).
5. If the fault persists, install a new, PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 012-290 Staple Cover Interlock 24V Disconnect Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

012-290: Staple Cover Interlock 24V Disconnect Fail

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 13](#) How to Check a Switch

Perform the steps that follow:

1. Verify the staple cover, [PL 21.2 Item 3](#) is fully closed and the staple cover interlock switch, [PL 21.2 Item 5](#) is engaged.
2. Enter [dC330](#) (012-301) to actuate the staple cover interlock switch, [PL 21.2 Item 3](#).
3. If the fault persists, install a new PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 012-291 Stapler Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

012-291: Stapler Fail

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor
- [GP 11](#) How to Check a Sensor

Perform the steps that follow:

1. Check the stapler assembly, [PL 21.2 Item 7](#) is clear of all paper, stuck staples, or any other foreign materials.
2. Enter [dC330](#). Check the sensors that follow:
  - Code 021-220, low staple sensor, [PL 21.2 Item 7](#).
  - Code 012-222, staple home sensor, [PL 21.2 Item 7](#).
  - Code 012-211, self priming sensor, [PL 21.2 Item 7](#).
3. Enter [dC330](#) (012-301) to run the staple motor.
4. If the fault persists, install new components as necessary:
  - a. Stapler assembly, [PL 21.2 Item 7](#).
  - b. PWB GPF A4FIN, [PL 21.1 Item 12](#).
5. If the fault persists, contact Support for further instruction.

## 012-354 Finisher Maker Mismatch Fail RAP

012-354 The system detected that the finisher or mailbox for another model was installed.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. If the fault persists check the correct finisher, PL 21.1 or mailbox, PL 20.1 is installed.

## 012-405 Stapler Near Empty RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

012-405: Staple near empty is detected.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 13](#) How to Check a Switch.

Perform the steps that follow:

1. Check the stapler assembly, [PL 21.2 Item 7](#) is clear of all paper, stuck staples, or any other foreign materials.
2. Enter [dC330](#) 012-301 to actuate the staple cover interlock switch, [PL 21.2 Item 5](#).
3. Enter [dC330](#) 012-301 to run the staple motor.

## 012-912 Finisher Static Jam RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

012-912: Detected paper on finisher compile exit sensor.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Check the stapler assembly, [PL 21.2 Item 7](#) and paper path is clear of all paper, stuck staples, or any other foreign materials.
2. Enter [dC330 012-101](#) to activate the compile exit sensor, [PL 21.2 Item 9](#).
3. Check the customer outlet voltage meets the specifications for the machine in, [GP 38](#) Electrical Specifications.
4. If the fault persists, install a new PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 013-286 and 013-287 Right Tamper Home SNR ON/OFF Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 4](#)

013-286: Right Tamper Home SNR ON Fail.

013-287: Right Tamper Home SNR OFF Fail.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor
- [GP 11](#) How to Check a Sensor

Perform the steps that follow:

1. Switch off, then switch off the machine, [GP 4](#).
2. Check the compile tray assembly. [PL 21.1 Item 3](#) and verify the paper path is clear of all paper and foreign materials.
3. Enter [dC330 012-210](#) to activate the right tamper home sensor, [PL 21.1 Item 3](#).
4. Enter [dC330 012-030](#) to run the right tamper motor, [PL 21.1 Item 3](#).
5. If the fault persists, install a new PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 013-288 and 013-289 Left Tamper Home SNR ON/OFF Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 4](#)

013-288: Left Tamper Home SNR ON Fail.

013-289: Left Tamper Home SNR OFF Fail.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#) How to Check a Motor
- [GP 11](#) How to Check a Sensor

Perform the steps that follow:

1. Switch off, then switch off the machine, [GP 4](#).
2. Check the compile tray assembly. [PL 21.1 Item 3](#) and verify the paper path is clear of all paper and foreign materials.
3. Enter [dC330 012-211](#) to activate the left tamper home sensor, [PL 21.1 Item 3](#).
4. Enter [dC330 012-040](#) to run the left tamper motor, [PL 21.1 Item 3](#).
5. If the fault persists, install a new PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 014-302 Finisher Rear Cover Interlock Open RAP

BSD-ON: [Finisher diagram 1](#)

014-302: Finisher rear cover open sensor detected.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#) How to Check a Switch

Perform the steps that follow:

1. Switch off, then switch off the machine, [GP 4](#).
2. Check the rear cover assembly. [PL 21.2 Item 4](#) and verify there is no damage to the cover, hinge, or interlock mechanism.
3. Enter [dC330 012-300](#) to activate the rear cover interlock switch, [PL 21.2 Item 5](#).
4. If the fault persists, install a new PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 014-303 Staple Cover Interlock Open RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

014-302: Staple cover open sensor detected.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 13](#) How to Check a Switch

Perform the steps that follow:

1. Close the staple cover.
2. Check the staple cover assembly. [PL 21.2 Item 3](#) and verify there is no damage to the cover, hinge, or interlock mechanism. If the staple cover assembly is damaged, install a new staple cover assembly, [PL 21.2 Item 3](#).
3. Check the stapler assembly. [PL 21.2 Item 7](#) and verify there is no damage to the stapler assembly. If the staple assembly is damaged, install a new stapler assembly, [PL 21.2 Item 7](#).
4. Enter [dC330](#) 012-301 to activate the staple cover interlock switch, [PL 21.2 Item 5](#).
5. If the fault persists, install a new PWB GPF A4FIN, [PL 21.1 Item 12](#).

## 016-210, 016-506, 016-777, 016-780, 016-798 HDD Error RAP

016-210 One of the SW option functions cannot be executed due to an 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

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Ensure that all connectors on the ESS PWB and the HDD and all surface mounted modules are fully seated.
3. Enter [GP 15](#) Special Boot Mode, perform the HDD Initialize Mode routine.
4. If the fault persists, install a new HDD, [PL 18.1 Item 27](#) (B605/B615) or [PL 18.5 Item 27](#) (B615\_Tall) or [PL 18.9 Item 27](#) (B600/B610).

## 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 4](#).
2. Refer the customer to the User Guide to check memory usage.

## 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 4](#). 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 4](#).
2. Verify FAX PWB [PL 18.1 Item 9](#) is correctly installed.
3. If the fault persists, install a new FAX PWB, [PL 18.1 Item 9](#) (B605/B615), [PL 18.5 Item 9](#) (B615\_Tall).

## 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

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter GP 15 Special Boot Mode, perform the HDD Initialize Mode routine.

**NOTE:** After HHD Initialize, it may be necessary to verify the Device ID performing dC132.

## 016-242 System GMT Clock Fail RAP

016-242 System GMT clock fail.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Set the current date and time.
3. If the fault persists, install a new ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).



## 016-244 Self-Signed Certificate Auto Update Fail RAP

016-244 Self-signed certificate auto update failure.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 37 How to Obtain Log Files, and contact Support with the appropriate log files for further assistance.

## 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 4.

## 016-311, 315, 319, 354 Scanner/IIT Errors RAP

016-311:No Scanner that Should Be

016-315:IIT Interface Fail

016-319:Long Boot Diag IIT Interface Fail

016-354:Cont IIT-Controller Communication Fail

### Initial Action

Switch off, then switch on the machine to check if the error recurs GP 4.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the connection at the ESS PWB and the IIT Assembly, verify P/J1370, P/J1374 and P/J1372 are fully seated.
2. Check the connection at the ESS PWB and the DADF Assembly, verify P/J1371 and P/J1377 are fully seated.
3. If the fault persists, install new components as necessary:
  - a. IIT Assembly, PL 50.1 Item 2
  - b. DADF Assembly, PL 50.1 Item 1.
  - c. ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).

## 016-314 SW Option Fail (Hybrid WaterMark) RAP

016-314 The board for detecting the back (side 2) of a document is not installed. Therefore (paper security) is unavailable.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter special boot mode, GP 15, and perform the LONGDIAG MODE routine.
3. Ensure that all connectors and all surface mounted modules on the ESS PWB are fully seated.
4. Upgrade the software, GP 9.
5. If the fault persists, install a new ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).

## 016-320 Document Formatter Fatal Error RAP

016-320 A software error was detected when documents were converted.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 15, then perform LONGDIAG MODE.
2. Upgrade the software, GP 9.
3. Switch off, then switch on the machine, GP 4.
4. Switch off the machine, GP 4.
5. Disconnect the power cord for a minimum 2 minutes, then connect the power cord.
6. Switch on the machine, GP 4.
7. Verify the wire harness connections on each board are installed properly, then perform the same operation creating the error.
  - Install a new ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610) and perform the same operation where the error occurred.
8. If the fault persists, reinstall the original ESS PWB and contact the Support.

## 016-321 FAX Module Error RAP

016-321 FAX related error at booting.

### Initial Actions

Get the procedures for reproducing an error according to the operation that was performed when the error occurred.

1. Check the job type: Send Mail, Receive Mail, Broadcast Send, Polling, or Folder Receipt.
2. Check the job settings from the Panel.
3. Check whether it is Speed Dial or Keypad Dial.
4. Check which function was used: G3 or G4. Refer to GP 42 for a list of acronyms.
5. Collect all other information necessary to reproduce the fault.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Verify the FAX PWB PL 18.1 Item 9 and fax harness assembly PL 18.1 Item 10 connections are seated fully.
2. Upgrade the software, GP 9.
3. Perform the same operation where the error occurred.
  - If the fault persists, install a new front usb harness assembly PL 18.1 Item 14.
4. Immediately after the error occurs, Obtain the log file using the log tool GP 37.
5. Install a new FAX PWB, PL 18.1 Item 9 (B605/B615) or PL 18.5 Item 9 (B615\_Tall), PL 18.9 Item 9 (B600/B610) and perform the operation again.
6. If the fault persists, reinstall the original FAX PWB and contact Support for instructions.

## 016-323 B-Formatter Fatal Error RAP

016-323 Fatal error has occurred in the B-formatter task.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 15, and perform the LONGDIAG MODE routine.
2. Verify the wire harness connections on each board are installed properly, then perform the same operation creating the error.
3. Upgrade the Software, GP 9.
4. Switch off, then switch on the machine, GP 4.
5. If the fault persists, switch off the machine, GP 4. Unplug the power cord for 2 minutes, then switch on the machine, GP 4. Perform the same operation where the error occurred.
6. If the fault persists, install a new ESS PWB, PL 18.1 Item 5 (B605/B615), PL 18.5 Item 5 (B615\_Tall), or PL 18.9 Item 5 (B600/B610) and perform the same operation where the error occurred.
7. If the fault persists, reinstall the original ESS PWB and contact the Support Department for instructions.

## 016-324 Scheduled Image Overwrite RAP

016-324 Scheduled image overwrite.

### Procedure

Switch off, then switch on the machine, GP 4.

## 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. Switch off, then switch on the machine, GP 4.
2. Enter dC131. Set NVM value 790-389 to 0.

## 016-326, 362, 607 UI Cable Connection Fail RAP

016-326: Cont-UI Cable Connection Fail

016-362: Cont UI Fail-2

016-607: Cont-UI Cable Connection Fail

### Initial Action

1. Switch off, then switch on the machine to check if the error recurs GP 4.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Check the connection at the console assembly UI AIO and the ESS PWB, verify P/J1352 is fully seated.
2. Upgrade the Software GP 9.
3. If the fault persists, install a new components as necessary:
  - a. Console assembly UI AIO, PL 1.1 Item 1 (B605/B615) and B605/B615 Tall), PL 1.2 Item 1 (B600/B610).
  - b. Harness Assembly Front USB, PL 18.1 Item 14.
  - c. ESS PWB, PL 18.1 Item 5 (B605/B615), PL 18.5 Item 5 (B615\_Tall), or PL 18.9 Item 5 (B600/B610).

## 016-328 Connection Fail RAP

**016-328** The controller has detected a failure at its cable connection with the MCU.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Verify all connectors between the ESS PWB and the MCU PWB, and all surface mounted modules such as the eMMC Card, are fully seated.

## 016-330 to 016-332 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

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Verify all connectors between the ESS PWB and the MCU PWB, and all surface mounted modules such as the eMMC Card, are fully seated.
3. If the fault persists, install a new ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 016-342 to 016-345 Controller Fail RAP

016-342 Cont RTC diagnostic fail.

016-343 Long boot diag timer fail.

016-345 Cont NVM diagnostic fail.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Verify the time and date are set correctly for the customer location.
3. Upgrade the software, GP 9.
4. If the fault persists, install a new ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).

**NOTE:** RTC is set as GMT;

'Local Time' setting will be separately done by customer.

Case1: If 'Local Time' is not set by customers, they need to set as initial setting for 'Local Time'.

Case2: If 'Local Time' has been set by customers already, they don't need to set it again.

## 016-346 Cont A4FAX Modem Diagnosis Fail RAP

016-346 An A4 Fax Modem diagnosis error was detected by the Boot Diag.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Upgrade the software, GP 9.
3. Install a new FAX PWB, PL 18.1 Item 9 (B605/B615), PL 18.5 Item 9 (B615\_Tall).
4. If the fault persists, install a new ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).

## 016-349 to 016-351 eMMC Card Errors RAP

016-349 Cont MAC address data fail.

016-350 Cont SEEP-ROM diagnostic fail 1.

016-351 Cont SEEP-ROM diagnostic fail 2.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Remove and reseal the eMMC Card.
3. Install a new ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).
4. If the fault persists, contact Support for further instruction.

## 016-352, 609, 610 Internal Network Init/PCI/PCIEX Fail RAP

016-352: Internal Network Initialize Fail Internal network initialization error.

016-609: PCI Option No Support Device Fail PCI Option No Support Device Fail.

016-610: PCIEX Option No Support Device Fail PCIEX Option No Support Device Fail.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 4.
2. Update the Software using the Download Mode procedure in GP 15 Special Boot Menu.
3. If the fault persists, install a new ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).



## 016-353, 356, 606 IOT-Controller Communication Fail RAP

**016-353: Cont IOT-Controller Communication Fail** Communication cannot be established between the IOT and the ESS.

**016-356: Cont Video ASIC Fail** Communication cannot be established between the IIT and the controller.

**016-606: Cont-BP Cable Connection Fail** Fault in the connection with the back plane is detected by the controller.

**016-608** Cont-MCU 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 4. 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 4](#).
2. Check the wiring and all surface mounted modules between the ESS PWB and the MCU PWB, verify [P/J300](#) and [P/J335](#) are fully seated.
3. If the fault persists, install new components as necessary:
  - Install a new ESS MCU FFC, [PL 18.1 Item 2](#) (B605/B615), [PL 18.5 Item 2](#) (B615\_Tall), [18.9/2](#) (B600/B610).
  - ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610)
  - MCU PWB, [PL 18.1 Item 1](#) (B605/B615) or [PL 18.5 Item 1](#) (B615\_Tall) or [PL 18.9 Item 1](#) (B600/B610)

## 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

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Ensure that all connectors on the MCU PWB and the ESS PWB and all surface mounted modules are fully seated.
3. Upgrade the software, [GP 9](#).
4. If the fault persists, install a new components as necessary:
  - ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).
  - MCU PWB, [PL 18.1 Item 1](#) (B605/B615) or [PL 18.5 Item 1](#) (B615\_Tall) or [PL 18.9 Item 1](#) (B600/B610).

## 016-355, 016-356 Controller ASIC Fail RAP

**016-355:**Cont IO ASIC diagnostic fail At Scanner diagnostic, an error has occurred at (Copy path, Scan path).

**016-356:**Cont video ASIC diagnostic fail. At IOT diagnostic, an error has occurred (Print path).

### Initial Action

1. Switch off, then switch on the machine to check if the error recurs [GP 4](#).
2. Clean the document glass and the white stripe before proceeding.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Check the connection at the ESS PWB and the IIT Assembly, verify [P/J1370](#), [P/J1374](#) and [P/J1372](#) are fully seated.
2. Check the connection at the ESS PWB and the IIT Assembly, verify [P/J1371](#), and [P/J1377](#) are fully seated.
3. If the fault persists, install a new components as necessary:
  - DADF Assembly, [PL 50.1 Item 1](#).
  - IIT Assembly, [PL 50.1 Item 2](#).
  - ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B605/B615) Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 016-359, 360, 361 Controller USB Fail RAP

**016-359:** Cont USB HUB fail. The USB HUB connection is invalid.

**016-360:** Cont UI fail-1. An error occurred during W/R/V test of PCI Config interval.

**016-361:** Cont USB 3.0 device fail. When error has occurred at W/R/V test on the internal register of the USB 3.0 Device.

**016-362:** Cont UI Fail-2. An error occurred during W/R/V test of VRAM. The Command/Status line is normal if entering the Long Boot Mode.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 to check if the error recurs [GP 4](#).
2. If the fault persists, install a new ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 016-360, 016-362 Controller UI Fail RAP

016-360 Cont UI diagnostic fail 1.

016-362 Cont UI diagnostic fail 2.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter Special Boot Modes, GP 15, then 03. NVRAM INIT MODE.

#### CAUTION

*Never install a new ESS PWB and a new MCU PWB at the same time. First install the new ESS PWB. If the fault persists, then install a new MCU PWB.*

3. Install new components as necessary:
  - ESS PWB, PL 18.1 Item 5 (B605/B615), PL 18.5 Item 5 (B615\_Tall), or PL 18.9 Item 5 (B600/B610).
  - MCU PWB, PL 18.1 Item 1 (B605/B615), PL 18.5 Item 1 (B615\_Tall), or PL 18.9 Item 1 (B600/B610).

**NOTE:** If the fault persists after startup, perform dC132 to verify all numbers match. Go to Serial Number Re-Synchronization in GSN (Library 1503).

## 016-366, 016-367 Controller HDD Fail RAP

016-366 Cont HDD diagnostic fail 1.

016-367 Cont HDD diagnostic fail 2.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the wiring between the ESS PWB and the HDD PL 18.1 Item 27.
3. Upgrade the software, GP 9.

#### CAUTION

*Never install a new ESS PWB and a new MCU PWB at the same time. First install the new ESS PWB. If the fault persists, then install a new MCU PWB.*

4. Install new components as necessary:
  - ESS PWB, PL 18.1 Item 5 (B605/B615), PL 18.5 Item 5 (B615\_Tall), or PL 18.9 Item 5 (B600/B610).
  - MCU PWB, PL 18.1 Item 1 (B605/B615), PL 18.5 Item 1 (B615\_Tall), or PL 18.9 Item 1 (B600/B610).

**NOTE:** If the fault persists after startup, perform dC132 to verify all numbers match. Go to Serial Number Re-Synchronization in GSN (Library 1503).

## 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

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Upgrade the software, [GP 9](#).
3. Verify the USB Harness [PL 18.1 Item 14](#), is fully seated in the ESS PWB.
4. If the fault persists, install new components and necessary:
  - USB Harness, [PL 18.1 Item 14](#) (B605/B615), [PL 18.5 Item 14](#) (B615\_Tall), [PL 18.9 Item 14](#) (B600/B610).
  - ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 016-383 Controller OS Communication Fail RAP

**016-383** Communication failure between Linux and VX works

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Upgrade the software, [GP 9](#).
3. If the fault persists, install a new ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610)

## 016-400, 401, 402, 403, 406 802.1x Authentication Failure - Network1 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.

**016-401** 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.

**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.

**016-403** 802.1x Authentication certificate mismatch. The root server certificate for the authentication server is not stored in the machine or it is mismatched.

**016-406** (EAP-TLS) is selected as the authentication method for 802.1x authentication for Network 1, but the SSL client certificate is not set or has been deleted.

### Procedure

Advise the customer:

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.
4. **016-403** - Store the Route Certificate for the server certificate (for Network 1) of the authentication server in the machine.
5. **016-403** - If unable to Obtain the route certificate of the server certificate, disable the (Server Authentication Inspection) (for Network 1) in the 802.1x setting item of the device.
6. **016-406** - Store the client certificate to this machine SSL and set as SSL client certificate.
7. **016-406** - If the setting of SSL client certificate cannot be made, select other than (EAP-TLS) as the authentication method.

## 016-404 802.1x 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.

### Procedure

Advise the customer:

1. Repeat the operation. The problem persists, Switch off, then switch on the machine [GP 4](#).
2. Obtain the log file using the log tool [GP 37](#).

## **016-405 Certificate DB File Error RAP**

**016-405** When the certificate database file is loaded, header and size errors are detected.

### **Procedure**

Advise the customer to start 'Initialize certificate' under Maintenance.

## **016-407 to 016-412 XCP Plugin 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.

## 016-421 Input Tray is Removed RAP

016-421 The paper tray is removed.

### Procedure

Perform the steps that follow:

1. Install the paper tray.

## 016-422, 016-423 Offline RAP

016-422 Diag Offline - When the Diag operation is in

progress, it turns Offline.

016-423 Offline

### Procedure

Perform the steps that follow:

1. If a remote access session is in progress, wait for it to end.
2. If the fault persists, switch off, then switch on the machine, GP 4.
3. Obtain the log file using the log tool GP 37 and contact Support for further instruction.

## 016-424, 016-425 Power Mode RAP

**016-424** Low power mode.

**016-425** Sleep mode.

### Procedure

Perform the steps that follow:

1. Press the power button on the UI to cancel the low power or sleep mode.
2. If the fault persists, switch off, then switch on the machine, [GP 4](#).
3. Obtain the log file using the log tool [GP 37](#) and contact Support for further Instruction.

## 016-426 DHCP Error RAP

**016-426** Low power mode.

- B605/B615): Remote Services Error
- B600/B610: Remote Services Error

### Procedure

Perform the steps that follow:

1. Log into the Embedded Web Server.
  - a. Navigate to Connectivity > Ethernet (Or WiFi, if applicable).
  - b. Under DNS click Edit to confirm the customer's DNS Settings.
  - c. If invalid or 0.0.0.0, toggle Use DHCP to Assign Address to Off.
  - d. Manually populate Primary Server, Alternate Server 1, and Alternate Server 2 with appropriate the DNS server settings. Contact the network administrator for appropriate DNS server settings.
2. Check the system time to ensure it is accurate. Configure the system time manually if it is not.
3. Contact the network administrator to determine if the customer is using an HTTP proxy.  
If the customer is using an HTTP proxy:
  - a. In the Embedded Web Server navigate to Connectivity > HTTP and Enable HTTP Proxy.
  - b. Under Proxy Server, click Setup to use an automatic proxy configuration, or manual to specify an HTTP proxy server manually.
  - c. Populate the HTTP proxy server information manually if necessary. Contact the network administrator to obtain proxy information as needed.



## 016-427, 428, 429, 430, 431, 432 802.1x Failures (Network 2) RAP

**016-427** 802.1x Authentication failure (network 2).

**016-428** 802.1x Authentication method mismatch (authentication server does not support the authentication method of this device: network 2)

**016-429** 802.1x Authentication failure by timing out (network 2).

**016-430** The route certificate of the server certificate (for network 2) of the authentication server is not stored in the machine or it does not match.

**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.

**016-432** 802.1x setting error of the client certificate of the authentication (network 2).

### Procedure

Advise the customer:

1. Repeat the operation.
2. Set the authentication method of network 2 of this device to the same authentication method as the one set in the authentication server.
3. Check the switch setting or network connection of the (Authentication Device) which is physically network connected to Network 2 of this machine and connect it correctly.
4. **016-430** Store the Route Certificate for the server certificate (for Network 2) of the authentication server in the machine.
5. **016-430** If unable to Obtain the route certificate of the server certificate, disable the (Server Authentication Inspection) for the 802.1x setting item (Network 2) of the device.
6. **016-432** Store the client certificate to this machine SSL and set as SSL client certificate.
7. **016-432** 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:

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 IPv6/Dynamic DNS Failure 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:
  - 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, Obtain the log file using the log tool [GP 37](#).

## 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:
  - a. Check that the SNTP server address is set correctly in the device.
  - b. Check the time on the machine, if the time on the machine is incorrect, manually set the time.

## 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:
  - 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. Obtain the device log. Refer to How to Obtain Log Files, [GP 37](#).
3. Upgrade the software, [GP 9](#).
4. Attempt to reproduce an error according to the operation that was performed when the error occurred.
5. If the fault persists, contact Support for further instructions.

## 016-500 ROM Write Error (During DLD Method) RAP

**016-500** An error has occurred during the process of writing data to the cont-ROM.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Upgrade the software, [GP 9](#).
2. If the fault persists, install a new ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 016-503 to 016-505 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).

**016-504** The POP server name could not be resolved (though the machine tried to connect to the server).

**016-505** Incorrect POP Server authentication information was detected.

### Procedure

1. Request the customer specify the correct SMTP server name or specify the IP address.
2. If the fault persists, obtain device logs. Refer to How to Obtain Device Logs, [GP 37](#), then contact support.

## 016-506 ImageLog HDD Full RAP

**016-506** When the system data Level of Ensuring Log image Creation is set to High the log image storage area on the disk becomes full (during processing any job other than copy/scan jobs).

### Procedure

Perform the steps that follow:

1. Try to rerun the job.
2. If the situation is the same despite some re-attempts, delete unnecessary documents saved in the device or change the “level of ensuring creation” at “Low”.

**NOTE:** If the level is set at “Low”, log image creation cannot be ensured.

## **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 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.

## **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**

Perform the steps that follow:

1. Advise the customer register rules for transfer from the destination image log control server to the device.

## 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

Perform the steps that follow:

1. Advise the customer overwrite rules for transfer from the destination image log control server to the device.

## 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 wait 5 minutes before resubmitting the job.
2. Check the SSL/TLS settings and Port number:  
On the Web UI, under Connectivity > SMTP > Connection Security. Ensure that the customer is using the appropriate encryption type for their mail server.
3. 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

Perform the steps that follow:

1. Print from XPS Viewer, using a printer driver (ART-EX, PCL, etc.).
2. Upgrade the software, [GP 9](#).
3. If the fault persists, perform the following steps to Obtain the log files for Support contact:
  - a. Obtain the log file using the log tool [GP 37](#).
    - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
  - b. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
  - c. Upgrade the software, [GP 9](#).
  - d. Switch off, then switch on the machine, [GP 4](#). Attempt to reproduce the error according to the operation that was performed when the error occurred.
    - i. Check the exact occurrence timing during job execution.
    - ii. Check the job settings from the Panel.
    - iii. Collect other information as much as possible to reproduce the error.
  - e. Obtain the log file using the log tool [GP 37](#).
  - f. Contact Service for further instructions.

## 016-515 XPS Short of Memory

**016-515** During XPS Bridge processing, a lack of memory 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 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer 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. If memory is still insufficient print from XPS Viewer, using a driver (ART-EX, PCL, etc.).
3. Upgrade the software, [GP 9](#).
4. Perform the following steps to Obtain the log files for Support contact:
  - a. Obtain the log file using the log tool [GP 37](#).
    - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
  - b. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
  - c. Upgrade the software, [GP 9](#).
  - d. Switch off, then switch on the machine, [GP 4](#). Attempt to reproduce the error according to the operation that was performed when the error occurred.
    - i. Check the exact occurrence timing during job execution.
    - ii. Check the job settings from the Panel.
    - iii. Collect other information as much as possible to reproduce the error.
  - e. Obtain the log file using the log tool [GP 37](#).
  - f. Contact Service for further instructions.

## 016-516 XPS Print Ticket Description Error RAP

016-516 XPS Print Ticket description error.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer check whether the application that sends a print job and the print instructions has a problem.
  - a. If they have no problems, request the customer consult the software vendor producing the application sending the print job for assistance printing from the application.
2. If the fault persists, obtain a list of printer settings, a job history report, and the print data with PrintTicket to send to Support and go to the following to resolve the problem,
3. Upgrade the software, [GP 9](#).
4. If the fault persists, perform the following steps to Obtain the log files for Support contact:
  - a. Obtain the log file using the log tool [GP 37](#).
    - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
  - b. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
  - c. Upgrade the software, [GP 9](#).
  - d. Switch off, then switch on the machine, [GP 4](#). Attempt to reproducing an error according to the operation that was performed when the error occurred.
    - i. Check the exact occurrence timing during job execution.
    - ii. Check the job settings from the Panel.
    - iii. Collect other information as much as possible to reproduce the error.
  - e. Obtain the log file using the log tool [GP 37](#).
  - f. Contact Service for further instructions.

## 016-518 PS Booklet Conflict WM RAP

016-518 PS booklet and watermarks were specified at the same time.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 cancel either one.
2. Ensure that all connectors between the ESS PWB and the HDD and all surface mounted modules on the ESS PWB are fully seated.
3. Upgrade the software, [GP 9](#).



## 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.

## 016-521 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

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer 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 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 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 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 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 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 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. (37)

### Procedure

**NOTE:** The clock difference between the device and the Kerberos server has exceeded the clock skew limit of the Kerberos server.

Advise the customer:

1. 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.
3. Go to [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-534 Kerberos Attestation Protocol Error 41 and 42 RAP

**016-534** A Kerberos Server Attestation protocol error has occurred. (41, 42)

### Procedure

1. Advise the customer check that the realm name and server address in the Kerberos settings of the device are set correctly.
2. Check that the domain name and server address in the Kerberos settings of the device are set correctly.
  - When connected to a Microsoft Windows 2000/2003 Server, use all upper case for the domain name.
3. If the fault persists, manually upgrade the software using the Firmware Upgrade Utility. Refer to How to Upgrade the Software, [GP 9](#).

## 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 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 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 check the network connection setting (port) of the remote download server.

## 016-538 Remote Download File Write Error RAP

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 4. 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 4.
2. Ensure that all connectors between the ESS PWB and the HDD and all surface mounted modules on the ESS PWB are fully seated.
3. Enter GP 15 Special Boot Mode, perform the HDD Initialize Mode routine.
4. If the fault persists, install a new HDD, PL 18.1 Item 27 (B605/B615) or PL 18.5 Item 27 (B605/B615)
5. Tall) or PL 18.9 Item 27 (B600/B610).

## 016-539 Kerberos Attestation Other Protocol Error RAP

016-539 A Kerberos Server Attestation protocol error has occurred.

### Procedure

1. Go to GP 37 to obtain the logs required for contacting Support for further instruction.



## 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

Have the customer:

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

Have the customer 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 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 4](#).

## 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

Have the customer 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. Have the customer 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**

Have the customer 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**

Have the customer 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**

Have the customer 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**

Have the customer check the ApeosWare Authentication Agent.

## **016-558 Attestation Agent Error 558 RAP**

**016-558** An internal error has occurred in the ApeosWare Authentication Agent.

### **Procedure**

Have the customer 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

1. Advise the customer 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

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

1. Advise the customer make corrections so that the temporary user entries of the Active Directory or Authentication Agent do not have the same IC card information.
2. Go to [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-563 ImageLog Memory Full (Exp. Kit) RAP

**016-563** When the system data 'Log/Image Creation Guarantee Level' is set to 'High, the Image Extension Kit has insufficient memory.

### Procedure

1. Advise the customer set the image quality to Normal.
2. Go to [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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

1. Advise the customer check that the correct user name and password was specified when accessing the remote download server.
2. Go to [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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:

1. During backup, save the FW download file into the dwld 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. Enter **GP 15** Special Boot Mode, perform the HDD Initialize Mode routine.
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

1. Increase memory size for job ticket on UI Panel.
2. Switch off, then switch on the machine, **GP 4**.
3. Run the job again.
4. Go to **GP 37** to obtain the logs required for contacting Support for further instruction.

## 016-571 Job Ticket Wrong Parameters RAP

016-571 XPIF parameter mismatch.

### Procedure

Advise the customer 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 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. Advise the customer to verify the FTP server hostname is correct.
3. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-575 FTP DNS Server Error RAP

**016-575** The DNS server was not set during FTP scan.

### Procedure

1. Advise the customer to set the DNS address or set the destination server address using IP address.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-576 FTP Server Connection Error RAP

**016-576** Problem with connection to server during FTP scan.

### Procedure

1. Advise the customer to check that the network communication between the transfer destination FTP server and the machine is available. For example:
2. Check that the server IP address is correct.
3. Check the connection of network cables.
4. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-577 FTP Service RAP

016-577 Failed to connect to the FTP service of the destination server.

### Procedure

1. Check that the FTP service of the Server is operating.
2. Check that the FTP port number of the Server matches the FTP port number that is set on the machine.
3. Perform [GP 37](#), to obtain the logs required for contacting Support for further instruction.

## 016-578 FTP Login Name or Password Error RAP

016-578 FTP scan login name or password error.

### Procedure

1. Check that the login name (user name) and password are correct.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-579 FTP Scanning Picture Preservation Place Error RAP

**016-579** Problem with scanned image storage destination of FTP scan.

### Procedure

Advise the customer 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. Ask the customer to check the access rights to the FTP scan server.
2. Ask the customer to check the image storage destination folder name.
3. Perform [GP 37](#) to obtain the machine logs and contact support for further information

## 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 change the file name/destination folder or move or delete the files in the destination folder.

If the fault persists Perform [GP 37](#) to obtain the machine logs and contact support for further information.

## 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:

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:

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.
6. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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

1. Advise the customer check whether there is access right to the FTP server and grant the proper rights.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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:

1. Check the FTP user has appropriate permissions for the scanned image destination.
2. If a lock directory (\*.LCK) remains in the transfer destination, delete it then retry the job.
3. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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

1. Advise the customer set 'File Name Conflict' to other than 'Cancel Job'
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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

1. When Add is selected for File Name Conflict, check that the file format is not set to Multi-page.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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, have the customer check that the NEXTNAME.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

1. Repeat the operation.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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

1. Perform the same operation again without multiple machines accessing the same folder in the same server.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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

#### Procedure

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).
4. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-600, 016-601 KO Authentication Locked RAP

**016-600: KO Authentication Locked** - The number of incorrect Key Operator log in attempts reached the limit.

**016-601: Illegal Access Detection** - The number of incorrect authentication log in attempts reached the limit.

### Procedure

1. 016-600 - Authentication Continuous Error Maximum Count (NVM:700-563)
2. 016-601 - Authentication Error Maximum Count (NVM:700-564)
3. If required, refer to [GP 3](#) Customer Administration Tools, to reset password to 1111 (default) if the System Administrator ID is unavailable.

**NOTE:** Default is 5 events. NVM Read/Write 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.*

## 016-604 Debug Log Created RAP

016-604 Debug log auto creation by system.

### Primary Causes

1. When the power is turned off and a debug log is automatically created during job execution.
2. When the power is turned on and a debug log is automatically created while the power is turned off and the Power OFF Sequence is not executed.

### Procedure

Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-606, 016-608 Controller Connection Fail RAP

016-606 Cont-BP cable connection fail.

016-608 Cont-MCU 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 4](#). 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 4](#).
2. Ensure that all connectors between the ESS PWB and the HDD and all surface mounted modules on the ESS PWB are fully seated.
3. Upgrade the software, [GP 4](#).
4. If the fault persists, install a new components as necessary:
  - ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).
  - MCU PWB, [PL 18.1 Item 1](#) (B605/B615) or [PL 18.5 Item 1](#) (B615\_Tall) or [PL 18.9 Item 1](#) (B600/B610).

## 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

Advise the customer deselect the unknown PCI or PCIEX option.

## 016-611 EMMC Card Connection Fail RAP

016-611 EMMC card connection fail.

### Procedure

Ensure the EMMC card, [PL 18.1 Item 30](#) (B605/B615) or [PL 18.5 Item 30](#) (B615\_Tall) or [PL 18.9 Item 30](#) (B600/B610) is fully seated into the connector of the ESS PWB.

## 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

1. Advise the customer increase the number of password digits for the print job.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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:
  - 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. Upgrade the software, [GP 9](#).



## 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 Set (Print Mode) to (High Speed) and reduce the print resolution before retrying the operation.
2. If the fault persists, Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
7. Contact Service for further instructions.

## 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

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer:
  - a. Check whether the selected mailbox is set up correctly.
  - b. Have Email, fax or internet fax sent to a valid mailbox.
2. Ensure the fax PWB is correctly installed, [PL 18.1 Item 9](#) (B605/B615) or [PL 18.5 Item 9](#) (B615\_Tall) or [PL 18.9 Item 9](#) (B600/B610).
3. Upgrade the software, [GP 9](#).
4. Ensure that all connectors between the ESS PWB and the HDD and all surface mounted modules on the ESS PWB are fully seated.
5. Enter [GP 15](#) Special Boot Mode, perform the HDD Initialize Mode routine.
6. If the fault persists, install a new HDD, [PL 18.1 Item 27](#) (B605/B615) or [PL 18.5 Item 27](#) (B615\_Tall) or [PL 18.9 Item 27](#) (B600/B610).

## 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 delete unnecessary documents, then repeat the operation.
2. Upgrade 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

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer 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. Upgrade the software, [GP 9](#).
  - b. Ensure that all connectors between the ESS PWB and the HDD and all surface mounted modules on the ESS PWB are fully seated.
  - c. Enter [GP 15](#) Special Boot Mode, perform the HDD Initialize Mode routine.
  - d. If the fault persists, install new components as necessary:
    - i. HDD, [PL 18.1 Item 27](#) (B605/B615), [PL 18.5 Item 27](#) (B615\_Tall), [PL 18.9 Item 27](#) (B600/B610).
    - ii. ESS PWB, [PL 18.1 Item 5](#) (B605/B615), [PL 18.5 Item 5](#) (B615\_Tall), [PL 18.9 Item 5](#) (B600/B610).

## 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 delete unnecessary documents or users, then repeat the operation.
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
7. Contact Service for further instructions.

## 016-707 Sample Print Fail RAP

**016-707** When receiving Email, fax or internet fax, an invalid (not setup) mailbox number is selected.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer:
  - 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 and all surface mounted modules on the ESS PWB are fully seated.
3. Upgrade the software, [GP 9](#).
4. Check the wiring between the ESS PWB and the HDD.
5. If the fault persists, install new components as necessary:
  - HDD, [PL 18.1 Item 27](#) (B605/B615) [PL 18.5 Item 27](#) (B615\_Tall) or [PL 18.9 Item 27](#) (B600/B610).
  - ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 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

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 4**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer:
  - 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 and all surface mounted modules on the ESS PWB are fully seated.
3. Upgrade the software, **GP 9**.
4. Check the wiring between the ESS PWB and the HDD.
5. If the fault persists, install new components as necessary:
  - HDD, **PL 18.1 Item 27** (B605/B615) **PL 18.5 Item 27** (B615\_Tall) or **PL 18.9 Item 27** (B600/B610).
  - ESS PWB, **PL 18.1 Item 5** (B605/B615) or **PL 18.5 Item 5** (B615\_Tall) or **PL 18.9 Item 5** (B600/B610).

## 016-709 ART EX Command Error RAP

**016-709** An ART EX command error occurred during  
W processing.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 4**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer:
  - 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 and all surface mounted modules on the ESS PWB are fully seated.
3. Upgrade the software, **GP 9**.
4. Check the wiring between the ESS PWB and the HDD.
5. If the fault persists, install new components as necessary:
  - HDD, **PL 18.1 Item 27** (B605/B615) **PL 18.5 Item 27** (B615\_Tall) or **PL 18.9 Item 27** (B600/B610).
  - ESS PWB, **PL 18.1 Item 5** (B605/B615) or **PL 18.5 Item 5** (B615\_Tall) or **PL 18.9 Item 5** (B600/B610).

## 016-710 Delayed Print Fail RAP

016-710 Process conditions for delay print were not met.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer:
  - 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 and all surface mounted modules on the ESS PWB are fully seated.
3. Upgrade the software, GP 9.
4. Check the wiring between the ESS PWB and the HDD.
5. If the fault persists, install new components as necessary:
  - HDD, PL 18.1 Item 27 (B605/B615) PL 18.5 Item 27 (B615\_Tall) or PL 18.9 Item 27 (B600/B610).
  - ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).

## 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:

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).
4. Obtain the log file using the log tool GP 37.
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
5. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
6. Upgrade the software, GP 9.
7. Switch off, then switch on the machine, GP 4. Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
8. Switch off, then switch on the machine, GP 4, obtain logs immediately, GP 37, after the error has occurred.
9. Contact Service for further instructions.

## 016-712 Panther Capacity RAP

016-712 Capability of Panther deteriorated.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Advise the customer increase the resolution or enlarge the scan area.
2. Check that all connectors and all surface mounted modules on the ESS PWB are fully seated.
3. Check the wiring between the ESS PWB and the HDD for broken or damaged wire.
4. Upgrade the software, [GP 9](#).
5. If the fault persists, install new components as necessary:
  - HDD, [PL 18.1 Item 27](#) (B605/B615) [PL 18.5 Item 27](#) (B615\_Tall) or [PL 18.9 Item 27](#) (B600/B610).
  - ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).
6. Attempt to reproduce the error as performed when the error occurred.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-713, 016-714 Security Box Error RAP

016-712: Security Box Password Error - the password set in the specified Mailbox and the password specified for the job do not match.

016-714: Security Box Is Not Enabled - The mailbox specified for the job does not exist.

### Procedure

Perform the steps that follow:

1. Advise the customer set a correct password and try again.
2. Open the appropriate mailbox and try again.
3. Upgrade the software, [GP 9](#).
4. If the fault persists, Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
5. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
6. Upgrade the software, [GP 9](#).
7. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
8. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
9. Contact Service for further instructions.

## 016-715 ESCP Form Invalid Password RAP

**016-715** Unable to access the ESCP form because ESCP form password did not match

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer input the correct password to use ESCP form.
2. Ensure that all and all surface mounted modules on the ESS PWB are fully seated.
3. Upgrade the software, GP 9.
4. If the fault persists, Obtain the log file using the log tool GP 37.
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
5. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
6. Upgrade the software, GP 9.
7. Switch off, then switch on the machine, GP 4. Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
8. Switch off, then switch on the machine, GP 4, obtain logs immediately, GP 37, after the error has occurred.
9. Contact Service for further instructions.

## 016-716 TIFF Data Overflow RAP

**016-716** The system detected that the files to be spooled in TIFF exceeded the disk capacity.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 and all surface mounted modules on the ESS PWB are fully seated.
2. If the fault persists, perform the steps that follow:
  - a. Upgrade the software, GP 9.
  - b. Ensure that all connectors on the ESS PWB and the HDD and all surface mounted modules are fully seated.
  - c. Enter GP 15 Special Boot Mode, perform the HDD Initialize Mode routine.
  - d. If the fault persists, install new components as necessary:
    - i. HDD, PL 18.1 Item 27 (B605/B615) PL 18.5 Item 27 (B615\_Tall) or PL 18.9 Item 27 (B600/B610).
    - ii. ESS PWBB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).

## 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

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer:
  - 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. If the fault persists, perform the steps that follow:
  - a. Upgrade the software, GP 9.
  - b. Ensure that all connectors on the ESS PWB and the HDD and all surface mounted modules are fully seated.
  - c. Enter GP 15 Special Boot Mode, perform the HDD Initialize Mode routine.
  - d. If the fault persists, install new components as necessary:
    - i. HDD, PL 18.1 Item 27 (B605/B615) PL 18.5 Item 27 (B615\_Tall) or PL 18.9 Item 27 (B600/B610).
    - ii. ESS PWB, PL 18.1 Item 5 (B605/B615) or PL 18.5 Item 5 (B615\_Tall) or PL 18.9 Item 5 (B600/B610).

## 016-718 Out of PCL6 Memory RAP

**016-718** Insufficient PCL6 decomposer memory.

### Procedure

Perform the steps that follow:

1. Advise the customer decrease the resolution to reduce the PLW memory.
2. Upgrade the software, GP 9.
3. Obtain the log file using the log tool GP 37.
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, GP 9.
6. Switch off, then switch on the machine, GP 4. Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, GP 4, obtain logs immediately, GP 37, after the error has occurred.
8. Contact Service for further instructions.



## 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 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. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 cancel the job then execute the command again.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-721 and 016-722 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.

### Procedure

Perform the steps that follow:

1. Advise the customer correct the settings, then execute the command again.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 directly scan the document and send it to the FAX recipient.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-726 PDL Auto Switch Fail RAP

**016-726** Print language auto judgment fail.

### Procedure

Perform the steps that follow:

1. Advise the customer fix, then select the decomposer from the UI or with a command.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 switch off paper saving, then print the job again.
2. Upgrade the software, [GP 9](#).

## 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

016-729 The files to be spooled in the TIFF exceeded the disk capacity.

### Procedure

Perform the steps that follow:

1. Advise the customer refer to the User Guide to correct the valid range.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 resend the data or form data.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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:
  - a. Check if the destination address has been entered correctly.
  - b. Set a correct DNS server address.
2. Upgrade the software, [GP 9](#). If the fault persists, perform [GP 4](#).
3. If the fault persists, Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.

## 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. Upgrade the software, [GP 9](#). If the fault persists, perform [GP 4](#).
3. If the fault persists, Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.

## 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. Check that the 'Communicating' LED is off.
3. After completing a panel operation, wait for 1 minute or longer before starting the download operation.
4. Enter [dC131](#). Set NVM value 700-420 to 0, then retry the operation.
5. Perform [GP 37](#) to Obtain the logs required for contacting Support for further instruction.

## 016-742 Download Data Product ID Mismatch RAP

**016-742** A mismatch in the product ID of download data was detected.

### Procedure

Perform the steps that follow:

1. Advise the customer to obtain the download data again, then retry the job.
2. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 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

### Procedure

Perform the steps that follow:

1. Advise the customer to obtain the download data again, then retry the job.
2. Switch off, then switch on the machine, [GP 4](#).
3. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.



## 016-746, 016-751 Unsupported PDF File RAP

**016-746** There was transparency or JBIG2 in a PDF 1.3 file.

**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 print via the driver from Acrobat Reader.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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:
  - a. Increase the annotation image size.
  - b. Reduce the number of repeat images for the repeat function.
2. Upgrade the software, [GP 9](#).
3. Perform [GP 37](#) to obtain the logs required for contacting Support for further instruction.

## 016-748, 016-774, 016-775, 016-778, 016-981 HDD 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 HDD is detected being full.

### Procedure

Perform the steps that follow:

1. Advise the customer:
  - 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.
2. Enter [GP 15](#) Special Boot Mode, perform the HDD Initialize Mode routine.
3. Perform an on demand image overwrite on the HDD.
4. If the fault persists install a new HDD, [PL 18.1 Item 27](#) (B605/B615) or [PL 18.5 Item 27](#) (B615\_Tall) or [PL 18.9 Item 27](#) (B600/B610).
5. Upgrade the software, [GP 9](#).

## 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:
  - 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. Upgrade the software, [GP 9](#).

## 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 refer to the user Guide.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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:
  - 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. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 specify the correct password using the UI or the contents bridge.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 use Acrobat to clear the print prohibition setting then print the PDF file.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-756 Auditron-Prohibit Service RAP

016-756 Auditron - Prohibit Service

016-757 Auditron - Invalid User

016-758 Auditron - Disabled Function

016-759 Auditron - Reached Limit

### Procedure

#### 1st Action - Individual Error

1. **016-756** - Request the Account Administrator for access to use the service.
2. 016-757 - Set the correct account and redo the last operation creating the error.
3. 016-758
  - a. Set the new function that is allowed for that account and try again.
  - b. Request the Account Administrator to add the rights.
4. 016-759 - Request the Account Administrator to set the number of copies, etc.

#### 2nd Action - All

1. Upgrade the software, [GP 9](#).
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
7. Contact Service for further instructions.

## 016-757 Auditron Invalid User RAP

016-756 The account has not been registered.

**NOTE:** When Xerox Standard Accounting has been enabled, the user account has not been properly specified in the print job data. Enter user account info correctly, then re-send the print job.

### Procedure

Perform the steps that follow:

1. Advise the customer set the correct account, then resubmit the job.
2. Upgrade the software, [GP 9](#).

## 016-758 Auditron Disabled Function RAP

**016-758** An illegal account was detected.

### Procedure

**NOTE:** When Xerox Standard Accounting has been enabled, a user account has been submitted without permission to access this service.

Perform the steps that follow:

1. Advise the customer:
  - a. Set the new function that is allowed for that account then try again.

Perform one of the following:

    - Try a different user account.
    - Configure the printer to permit user access to this feature.
    - Request that the Accounting Administrator add access rights to the account.
2. If the fault persists Upgrade the software, [GP 9](#).

## 016-759 Auditron Limit Reached RAP

**016-759** The number of registered users reached the limit.

### Procedure

**NOTE:** When Xerox Standard accounting has been enabled, the limit on the maximum number of registered users has been reached.

Perform the steps that follow:

1. 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 delete unnecessary users or combine user accounts.
3. If the fault persists Upgrade the software, [GP 9](#).

## 016-760 PS Decompose Failure RAP

**016-760** An error occurred in decompose processing.

### Procedure

Perform the steps that follow:

1. Advise the customer resend the job.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-761 FIFO Empty RAP

**016-761** Image enlargement error (FIFO empty).

### Procedure

Perform the steps that follow:

1. Advise the customer print in the high speed mode. If the fault persists, use print guaranteed mode.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 correct then select the decomposer from the UI or with a command.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-764 SMTP Server Connect RAP

**016-764** The machine failed to connect to the SMTP server.

### Procedure

Advise the customer:

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:

1. Request the customer contact the SMTP Server Administrator.
2. Retrieve E-mails in the SMTP Server HD.
3. Check the server capacity.

## 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 Upgrade the software, [GP 9](#).

## **016-768 Invalid Sender Address RAP**

**016-768** The SMTP server refused to accept the sender address.

### **Procedure**

Advise the customer check that the sender address is correct.

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.

## **016-769 SMTP Server Unsupported DSN RAP**

**016-769** The SMTP server refused to accept the sender address.

### **Procedure**

Advise the customer contact the network administrator for Advise 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

1. Advise the customer release the direct FAX job prohibition (set the target system to 0).
2. Obtain the job logs (UI, Report, EWS, SSMI applications).

## 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 set the DNS address. Or, set the scan data repository address using IP address.
2. Upgrade the software, [GP 9](#).

## 016-776 Image Conversion Error RAP

**016-776** Error due during image conversion processing by S-formatter.

### Procedure

Perform the steps that follow:

1. Advise the customer:
  - 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 device.
  - 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. Upgrade the software, [GP 9](#).

## 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:
  - a. Repeat the operation.
  - b. Reduce the scan resolution to 400dpi or less then repeat the operation.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-781 Server Connect Error RAP

016-781 SMTP server not found.

### Procedure

Perform the steps that follow:

1. Advise the customer:
  - a. Correctly set the device TCP/IP, IP address, subnet mask and gateway.
  - b. Check that the SMTP server, IP address or hostname and port number are correct.
  - c. Check network connectivity to the printer from the server, and from the printer to the server.
  - d. 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 Upgrade the software, [GP 9](#).

## 016-786 HDD Full Scan Write Error RAP

016-786 When performing the scan function, files cannot be written in the HDD.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Ensure all paper trays are loaded.
3. If this occurs when sending email, Advise the customer:
  - 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. If the fault persists, perform the steps that follow:
  - a. Upgrade the software, [GP 9](#).
  - b. Ensure that all connectors on the ESS PWB and the HDD and all surface mounted modules are fully seated.
  - c. Enter [GP 15](#) Special Boot Mode, perform the HDD Initialize Mode routine.
  - d. If the fault persists, install new components as necessary:
    - i. HDD, [PL 18.1 Item 27](#) (B605/B615) or [PL 18.5 Item 27](#) (B615\_Tall) or [PL 18.9 Item 27](#) (B600/B610).
    - ii. ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 016-790 Email Fragment Over RAP

**016-790** Email fragment quantity is over spec.

### Procedure

Perform the steps that follow:

1. Advise the customer:
  - 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. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
3. Contact Service for further instructions.

## 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 repeat the operation.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-794 Media Not Inserted RAP

**016-794** Media not inserted.

### Procedure

Perform the steps that follow:

1. Advise the customer check that the media is inserted.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 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. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 check the me dis content from the PC. Check whether the print file attribute data is displayed on the PC, then reset the settings.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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 check the me dis content from the PC. Check whether the print file images are displayed on the PC, then reset the settings.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.



## 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 repeat the operation.
2. Upgrade the software, [GP 9](#).
3. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
4. Contact Service for further instructions.

## 016-910, 016-911 Required Resource Not Ready RAP

**016-910** The paper requested by the selected print parameters are not installed.

**016-911** The paper requested by the print specification is 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 correctly load paper.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-917 to 016-919 Toner Y/M/C Life End RAP

**016-917** Job Held by Toner Y Life End (Operation).

**016-918** Job Held by Toner M Life End (Operation)

**016-919** Job Held by Toner C Life End (Operation)

### Procedure

Perform the steps that follow:

1. Install a new TONER CARTRIDGE(Y/M/C) as the error requires.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 016-940 to 016-949 Incorrect Job Settings RAP

**016-920** The paper specified for printing cannot be detected.

**016-940** Different size settings for side 1 and side 2 were detected after the job had started with 2-Sided Print specified.

**016-941** Mixed size/direction set for the page with images was detected after the job had started with Booklet specified.

**016-942** Different size settings for side 1 and side 2 were detected after the pages with 2-Sided Print specified had been deleted.

**016-943** Different size settings for side 1 and side 2 were detected after the document and separators had been inserted for the pages with 2-Sided Print specified.

**016-944** The document collate setting for the pages including the cover with images or the document with separators with Document Attachment specified was detected.

**016-945** The documents that do not support 2-Sided Print has been inserted for the pages for 2-Sided Print.

**016-946** A document or separator has been inserted between Cover pages or Separator pages.

**016-947** The system detected that no tray is loaded with paper for Auto Paper Selection after the job for which the paper for APS (Auto Paper Selection) was selected or APS was set has started.

**016-948** The covers with images, separators, or blank pages were detected after the job had started with Booklet specified.

**016-949** The document with a different size/orientation from the operated page was tried to be inserted for the job with Attachment specified.

### Procedure

Perform the steps that follow:

1. Advise the customer re-submit the job with the correct settings.

## 016-982 HDD Access Error 2 RAP

**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:
  - 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. If the fault persists, perform the steps that follow:
  - a. Upgrade the software, [GP 9](#).
  - b. Ensure that all connectors on the ESS PWB and the HDD and all surface mounted modules are fully seated.
  - c. If the error persists, perform [GP 15](#), Special Boot Modes and the procedure Initialize HDD Mode.
  - d. If the fault persists, install new components as necessary:
    - i. HDD, [PL 18.1 Item 27](#) (B605/B615) or [PL 18.5 Item 27](#) (B615\_Tall) or [PL 18.9 Item 27](#) (B600/B610).
    - ii. ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 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:

1. Cancel the job.
2. Re-run the job.
3. Delete unnecessary documents saved in the device 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. Have the customer 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, upgrade the software, [GP 9](#).

## 017-500 Job Limit Illegal Response RAP

017-500 Invalid response from job limit server.

### Procedure

Advise the customer:

1. Check the job parameter settings, then re-run the job.
2. Check the response packet from the job limit server.
3. Upgrade the software, [GP 9](#).
4. Switch off, then switch on the machine, [GP 4](#), obtain logs immediately, [GP 37](#), after the error has occurred.
5. Contact Service for further instructions.

## 017-501 Multiple Permission Restrictions RAP

017-501 A print rights violation has occurred.

### Procedure

Advise the customer change the user privileges.

## 017-503 Password Over Maximum RAP

017-503 Password has exceeded maximum number of digits.

### Procedure

1. Advise the customer lower the number of password digits.
2. Upgrade the software, GP 9.
3. Switch off, then switch on the machine, GP 4, obtain logs, GP 37, immediately after the error has occurred.
4. Contact Service for further instructions.

## **017-504, 017-505, 017-506 JobLimit Server Connection Fail RAP**

**017-504** JobLimit Server Connection Fail (LUI)

**017-505** JobLimit Server Connection Fail

**017-506** JobLimit Rejected by Remote Server

### **Procedure**

Advise the customer verify the network status and the operating status of JobLimit Server.

## **017-507 Disabled Direct Print RAP**

**017-507** Job History

### **Procedure**

Change the system data that disables the printing without load to Not disable (0).

## 017-713 Start TLS Unsupported Fail RAP

017-713 Start TLS unsupported fail.

### Procedure

1. Advise the customer change the SSL operation mode setting to other than STARTTLS mode.
2. Upgrade the software, [GP 9](#).
3. Switch off, then switch on the machine, [GP 4](#), obtain logs, [GP 37](#), immediately after the error has occurred.
4. Contact Service for further instructions.

## 017-714 SMTP Over SSL Fail RAP

017-714 SSL communication failure with SMTP server.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#), obtain logs, [GP 37](#), immediately after the error has occurred.
2. Check the following:
  - If the fault occurred in TLS Mode it may be due to an incorrect port number. Check the Port Number settings of the SMTP Server.
  - Confirm that the SSL or TLS encryption type matches the appropriate port the customer selected.
3. Upgrade the software, [GP 9](#).
4. Contact Service for further instructions.

## 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

1. Advise the customer register the root certificate of the SMTP server SSL certificate in the machine.
2. Upgrade the software, [GP 9](#).
3. Switch off, then switch on the machine, [GP 4](#), obtain logs, [GP 37](#), immediately after the error has occurred.
4. Contact Service for further instructions.

## 017-716 to 017-718 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:

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.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#), obtain logs, [GP 37](#), immediately after the error has occurred.
7. Contact Service for further instructions.

**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 repeat the operation.
2. Upgrade the software, GP 9.
3. Switch off, then switch on the machine, GP 4, obtain logs, GP 37, immediately after the error has occurred.
4. Contact Service for further instructions.

## 017-720, 017-721 PJI Command Fail RAP

017-720 Contract type value is incorrect.

017-721 Geographic region value is incorrect.

### Procedure

Advise the customer correct the contract type or geographic region value specified by PJI 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 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 print from the DocuWorks viewer using the print driver (ART-EX, PCL, etc.).
2. If the fault persists, reload the software, [GP 9](#).

## 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 check the driver settings.
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Switch off, then switch on the machine, [GP 4](#), obtain logs, [GP 37](#), immediately after the error has occurred.
7. Contact Service for further instructions.

## 017-728 Scan Job-Flow Document Fail RAP

017-728 Syntax error in Forced Annotation instructions is detected.

### Primary Causes

1. 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.
2. Extension Scanner Kit not installed (Scan To Office Selection Service not enabled).

### Procedure

Perform the steps that follow:

1. Advise the customer Change output format to other than MS Word or MS Excel.
  - 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 50mmx50mm or more, 297mmx432mm 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. Verify the Extension Scanner Kit Position.
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. If possible, Switch off, then switch on the machine, [GP 4](#), obtain logs, [GP 37](#), immediately after the error has occurred.
5. Contact Service for further instructions.

## 017-729 Temporary Error in PDL Transfer RAP

**017-729** Temporary inability to send due to maximum jobs exceeded at the destination device, or spool area of print data full, etc.

### Procedure

Advise the customer:

1. Set the spooling of the print data at the destination device 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:

1. Check the connection of the network cable.
2. Check the destination device is powered on.
3. Check that the IPP port of the destination device is enabled.
4. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
5. Contact Service for further instructions.

## 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 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 device is correct.
  - b. Check the connection of network cables.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 017-732 Offline Error in PDL Transfer RAP

017-732 Unable to send because destination printer is offline.

### Procedure

1. Advise the customer disable the offline status of the destination device.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 017-733 Internal Error in PDL Transfer RAP

**017-733** Unable to send because destination printer is offline.

### Procedure

1. Advise the customer repeat the operation.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37,i mediately after the error has occurred.
3. Contact Service for further instructions.

## 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 print by using a different print method (printer driver or utility other than print from IPP) that is supported by the device.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37,i mediately after the error has occurred.
3. Contact Service for further instructions.

## 017-735 Unauthorized Auditron User RAP

017-735 Unauthorized user is detected.

### Procedure

Perform the steps that follow:

1. Advise the customer get permission to use the device from the account administrator.
2. If the fault persists, reload the software, [GP 9](#).

## 017-737, 017-738, 017-746 Out of Memory Fail RAP

017-737 Custom Transfer Out Of Memory Fail.

017-738 Custom Transfer JVM Internal Fail.

017-746 Custom transfer plug-in local disk malfunction.

### Procedure

Advise the customer:

1. Deactivate or delete all unnecessary plug-ins.
2. Switch off and switch on the machine. [GP 4](#)
3. From special boot menu, perform [dC330](#), HDD initialize.

## 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:

1. Enable the embedded plug-in feature. **017-739**
  - a. **For UI Panel:**
  - b. Login as System Administrator
  - c. Select the (System Settings) tab -> (Common Service Settings) -> (Plugin Settings), set (Embedded Plugins) to (Enabled) and Switch off and switch on the machine GP 4.
  - d. **For EWS:**
  - e. Login as System Administrator
  - f. Select (Properties) tab, (Security) -> (Plug-in Settings) -> (Plug-in Settings), enable (Plug-in Settings) and Switch off and switch on the machine GP 4.
2. Input the software key for the customization kit.
3. Enable the embedded plug-in feature. **017-740**
  - a. **For UI Panel:** N/A
  - b. **For EWS:**
  - c. Login as System Administrator.
  - d. Select (Properties) tab, (Security) -> (Plugin Settings) -> (List of Embedded Plug-ins), register the custom transfer plug-in and switch off and switch on the machine. GP 4.

## 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:

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 to 017-744 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:

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.

## **017-747 Custom Transfer Plug-In Connection Timeout RAP**

**017-747** Custom transfer plug-in communication timed out error.

### **Procedure**

Advise the customer:

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 Device RAP**

**017-748** Custom transfer plug-in invalid device settings data error.

### **Procedure**

Advise the customer check the device 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 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. Switch off, then switch on the machine, [GP 4](#).
2. Advise the customer revise the custom transfer plug-in and then reinstall it.

## 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 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. Obtain the log file using the log tool **GP 37**.
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, **GP 9**.
5. Switch off, then switch on the machine, **GP 4**. Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
7. Contact Service for further instructions.

## 017-759 Download Data Inspection Error RAP

**017-759** Electronic signature verification error of download data.

### Procedure

1. Advise the customer re-Obtain the download data then perform the operation again.
2. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
3. Contact Service for further instructions.

## 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 check the port number settings of the POP server.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 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

1. The machine is unable to trust the SSL certificate of the POP server. Advise the customer register the root certificate of the POP server SSL certificate in the machine.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 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:

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.
4. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
5. Contact Service for further instructions.

**NOTE:** This fault 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

1. Advise the customer to repeat the operation.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 017-772 Scan All Blank Page Fail RAP

017-772 It was detected that all the pages are blank.

### Procedure

Advise the customer:

1. Darken the density during scan.
2. Turn off the blank suppression instruction.
3. Adjust the following settings.
  - a. **840-223**: Blank Page Detection Formatter Control Parameter:
    - Lower the File Size Based Blank Paper Detection Level.
  - b. **840-224**: Blank Page Detection Formatter Control Parameter:
    - Lower the Black Dot Count Based Blank Paper Detection Level.

## 017-773 Netlog Task Error RAP

017-773 Detected fatal error during Netlog operation.

### Procedure

Advise the customer 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 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 check the status of the Syslog server, address value of the Syslog that is set to the device, whether there is an issue in the network route between the device 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 check if the IP address of the machine is set.

## 017-779 Link Error RAP

017-779 Detected unplugged network cable on the device 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 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 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 017-782, 784, 85, 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 reinstall after correcting the custom image processing plug-in.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 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 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 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 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. Try the following:
  - Advise the customer try to send the print job again.
  - Advise the customer confirm try sending a different file/print job.
  - Advise the customer use a different print method supported by the machine (print driver, utility other than Google Cloud Print).
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to Obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Switch off, then switch on the machine, [GP 4](#), obtain logs [GP 37](#), immediately after the error has occurred.
7. Contact Service for further instructions.

## 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

1. Advise the customer check the job settings, then re-run the job.
2. Switch off, then switch on the machine, [GP 4](#), obtain logs [GP 37](#), immediately after the error has occurred.
3. Contact Service for further instructions.

## 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 set the permissions as required.

## 018-400 IPSEC Configuration Mismatch RAP

**018-400** IPSEC error (setting mismatch).

### Procedure

Advise the customer 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. Request 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 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 try the following:
  - Change the setting to a different IP address
  - Change the IP address to DHCP
2. Verify, in the client environment:
  - a. The client service will not aggregate information from the remote environment, or,
  - b. Even if information is aggregated, there is no possibility of multiple billing, allowing setting of the same IP address by the following C/L.
    - 701-644:TCP/IP information: Setting state of the same IP address(IPv4).

## 018-407 Setting Status of IP Address (IPv6) RAP

018-407 Setting state of the same IP address (IPv6).

### Procedure

Perform the following:

1. Advise the customer 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, 018-429, 018-430 Duplicate IP address IPv4 (wifi) RAP

**018-408** The same IP address device as the IPv4 address of this machine exists on the network in the network environment where the Ether 2 side is connected.

**018-429 Duplicate IP address IPv4 (wifi)** - There is a device on the network with the same IP address as the machine's IPv4 address in the network environment that wifi is connected to.

**018-430 Duplicate IP address IPv4 (wifi Direct)** - There is a device on the network with the same IP address as the machine's IPv4 address in the network environment that wifi Direct is connected to.

### Procedure

Perform the steps that follow:

1. Change the machine's IPv4 address or the IPv4 address of the device on the network.
2. If the fault persists,
  - a. For a manual address setting, check if the IP address set by the customer is being used somewhere else.
  - b. For BOOTP and DHCP settings, check with the customer regarding the configuration of the servers.

## 018-409, 412, 413 Duplicate IPv6 Address 1 RAP

**018-409** The same IP address device 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 device 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 device 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:
  - 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. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Service for further instructions.

## 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:
  - a. Check if the DNS server address is correctly set to the device.
  - b. Check if the DNS server is set so that the dynamic DNS can be operated.
2. Contact Service for further instructions.



## 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:
  - 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. Contact Service for further instructions.

## 018-415 Duplicate IPv6 Address 3 RAP

**018-415** The same IP address device as the IPv6 manual setting address 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:
  - a. Change the IPv6 manual setting address of this machine or the IPv6 address of the network upper apparatus.
  - b. Check if the IPv6 address that was automatically set as manual address is a valid address.
2. Contact Service for further instructions.

## 018-416 Duplicate IPv6 Address 4 RAP

**018-416** The same IP address device 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:
  - 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. Contact Service for further instructions.

## 018-424 WLAN WPA-Enterprise Certificate Empty Failure RAP

**018-424** A wireless WPA-Enterprise authentication root certificate or client certificate is not stored in the machine.

### Procedure

Perform the steps that follow:

1. Store a root certificate or client certificate in the machine that will be used in wireless WPA-Enterprise authentication.
2. If a WPA-Enterprise authentication root certificate or client certificate cannot be obtained, use a type of wireless security other than WPA-Enterprise.

## **018-425 WLAN WPA-Enterprise Certificate Unavailability Failure RAP**

**018-425** The WPA-Enterprise authentication root certificate or client certificate cannot be used.

### **Procedure**

Perform the steps that follow:

1. Reconfigure the root certificate or client certificate in the machine that will be used in wireless WPA-Enterprise authentication.
2. If a WPA-Enterprise authentication root certificate or client certificate cannot be Obtained, use a type of wireless security other than WPA-Enterprise.

## **018-426 WLAN WPA-Enterprise server certificate failure**

**018-426** An irregularity was detected in the server certificate that was received during wireless WPA-Enterprise authentication execution. This includes when the server certificate cannot be referenced.

### **Procedure**

Perform the steps that follow:

1. Check if the server certificate is within the expiration date and that the certificate type and signature algorithm are supported. Use an appropriate certificate.
2. If a server certificate that satisfies the request cannot be used, use a type of wire-less security other than WPA-Enterprise.

## 018-427 Duplicate IP address range Wi-Fi and Wi-Fi Direct

**018-427** An 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** The WLAN module has not been correctly connected to the machine.

### Procedure

Perform the steps that follow:

1. Turn off the machine's power and check the installation of the WLAN module.
2. Install new components as necessary:
  - a. Wifi module, [PL 18.1 Item 11](#) (B605/B615), [PL 18.5 Item 11](#) (B615\_Tall) [PL 18.9 Item 11](#) (B600/B610).
  - b. ESS PWB, [PL 18.1 Item 5](#) (B605/B615) or [PL 18.5 Item 5](#) (B615\_Tall) or [PL 18.9 Item 5](#) (B600/B610).

## 018-431 Duplicate IPv6 address (wifi) RAP

**018-431** There is a device on the network with the same IP address as the machine's IPv6 'Auto Stateless Address 1' or 'IPv6 Auto Address' in the network environment that wifi is connected to.

### Procedure

Perform the steps that follow:

1. Change the IPv6 address of the device on the network with the duplicate address to resolve the problem.
2. If the fault persists,
  - a. Check if the IP address automatically set as the stateless address is being used somewhere else.
  - b. Check if the IP address set with auto IPv6 is being used somewhere else.

## 018-432 Duplicate IPv6 address (wifi) RAP

**018-432** There is a device on the network with the same IP address as the machine's 'Auto Stateless Address 2' in the network environment that wifi is connected to.

### Procedure

Perform the steps that follow:

1. Change the IPv6 address of the device on the network with the duplicate address to resolve the problem.
2. If the fault persists, check if the IP address automatically set as the stateless address is being used somewhere else.

## 018-433 Duplicate IPv6 address (wifi) RAP

**018-433** There is a device on the network with the same IP address as the machine's IPv6 'Auto Stateless Address 3' or 'IPv6 Auto Address' in the network environment that wifi is connected to.

### Procedure

Perform the steps that follow:

1. Change the IPv6 address of the device on the network with the duplicate address to resolve the problem.
2. If the fault persists,
  - a. Check if the IP address automatically set as the stateless address is being used somewhere else.
  - b. Check if the IP address set with auto IPv6 is being used somewhere else.

## 018-434 Duplicate IPv6 address (wifi) RAP

**018-434** IPv6 'Manual Address' set on the machine is invalid in the network environment that wifi is connected to.

### Procedure

Perform the steps that follow:

1. Change the machine's 'IPv6 (Manual Address)' to an IPv6 address that can be used for the machine's address.
2. If the fault persists, check if an invalid address is being used for the IPv6 address automatically set as the manual address.

## 018-435 Duplicate IPv6 address (wifi) RAP

**018-435** There is a device on the network with the same IP address as the machine's IPv6 'Manual Address' in the network environment that wifi is connected to.

### Procedure

Perform the steps that follow:

1. Change the machine's IPv6 'Manual Address' or the IPv6 address of the device on the network.
2. If the fault persists, check if the IP address automatically set as the manual address is being used somewhere else.

## 018-436 Duplicate IPv6 Address (wifi) RAP

**018-436** There is a device on the network with the same IP address as the machine's IPv6 'Link-local Address' in the network environment that wifi is connected to.

### Procedure

Perform the steps that follow:

1. Advise the customer change the IPv6 address of the device on the network with the duplicate address to resolve the problem.
2. If the fault persists, Check if the IPv6 address automatically set as the 'Link-local Address' is being used somewhere else.

## 018-439, 018-440, 018-441 Wi-Fi Direct Stops RAP

**018-439** When activating the Wi-Fi Direct of this machine, the conflict setting for Wi-Fi Network Type Ad-hoc is detected.

**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.

**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

Perform the steps that follow:

1. Advise the customer change the setting for the Wi-Fi Network Type of this machine to Infrastructure.
2. Advise the customer change the setting for the configuration information related to the IP protocol stack of this machine to Dual or the IPv4 mode.
3. Advise the customer 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 device.

**018-501** The device could not connect to the CA server when trying to do CA authentication. The device has failed in communication.

**018-503** The device 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 device and the CA server for authentication, a mismatch in Session ID between both has occurred.

**018-506** During communication between the device 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 device has received a server exception message from the CA authentication server.

### Procedure

Advise the customer:

1. Make the IOT and the controller the same in agreement info.
2. Set up the server certificate, or set the CA function to off.
3. Check the address of the CA server, or recheck the connection to the network.
4. Retry the authentication operation.
5. Enter the correct user name and password.
6. Check the status of the CA server.
7. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
8. Contact Support with the required logs for further assistance.



## 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

1. Advise the customer:
  - Check that the SMB login name and password are correct.
  - Check the printer firmware (software) version, and make sure that it's up to date (GP 9).
  - Verify that the server SMB share is configured properly.
  - Verify that the server firewall is configured properly.
  - Check that they have not reached the maximum number of available connections to the share.
2. Switch off, then switch on the machine, GP 4, obtain logs immediately, GP 37, after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 018-505 SMB-DOS Protocol Error RAP

**018-505** SMB user authentication failed/unable to log into SMB scanner.

### Procedure

1. Advise the customer contact the network administrator to confirm the following:
  - a. Server user name and password
  - b. Server hostname 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 check whether the settings in the job template are correct. For example:

1. A setting that cannot be used in the device is set.
2. The transfer repository is not set correctly.
3. A nonexistent template name is specified.
4. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**,i mediately after the error has occurred.
5. Contact Support with the required logs for further assistance.

## 018-524 Invalid Device Network Setting RAP

**018-524** CUI scan: an invalid job template is specified.

### Procedure

Advise the customer:

1. Check whether the port and network related settings that are required to execute the scan job are set properly in the device.
2. Check whether the DNS server setting is correct.
3. Check whether the port for the specified protocol is activate.
4. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**,i mediately after the error has occurred.
5. Contact Support with the required logs for further assistance.

## 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](#), [016-506](#), [016-777](#), [016-780](#), [016-798](#) HDD Error RAP.

## 018-526 to 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

1. Advise the customer to wait for a while, then perform the same operation again.
2. Switch off, then switch on the machine, [GP 4](#), obtain logs [GP 37](#), immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 018-530 Authentication Error RAP

**018-530** Authentication/DV-related error during start-up of a CUI scan job.

### Procedure

1. Advise the customer to either perform the correct authentication operation or check the limitations (color mode, no. of sheets, services) that was set by the administrator.
2. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 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:

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.
3. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
4. Contact Support with the required logs for further assistance.
5. Update printer firmware (software).

## 018-547 SMB Scan Users Restriction RAP

**018-547** The number of SMB scan users has exceeded the limit.

### Procedure

Advise the customer:

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.
3. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
4. Contact Support with the required logs for further assistance.
5. Update printer firmware (software).

## 018-556 HTTP Server Script Error RAP

**018-556** HTTP error - invalid script.

### Procedure

Advise the customer:

1. Check that the drive and directory that are specified in the HTTP server that sends scanned documents are accessible.
2. Repeat the operation.
3. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
4. Contact Support with the required logs for further assistance.

## 018-557 HTTP Invalid Character in Filename RAP

018-557 HTTP file - invalid characters.

### Procedure

1. Advise the customer ensure that the file name that is specified in the scanned document destination does not contain any invalid characters.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 018-558 HTTP File Not Found RAP

018-558 The HTTP directory/file name does not exist.

### Procedure

Advise the customer:

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.
3. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
4. Contact Support with the required logs for further assistance.

## 018-559 HTTP File Duplication Fail RAP

018-559 File name conflict stop.

### Procedure

1. Request the customer that when performing scan Jobs, set File Name Conflict to other than Cancel Job.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 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:

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.
6. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
7. Contact Support with the required logs for further assistance.

## 018-564 Host Name Solution Error in HTTP RAP

**018-564** Failed to resolve host name in HTTP.

### Procedure

Advise the customer:

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.
4. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
5. Contact Support with the required logs for further assistance.

## 018-565 Proxy Name Solution Error in HTTP RAP

**018-565** Failed to resolve proxy name error in HTTP.

### Procedure

Advise the customer:

1. Check whether the proxy server name that is set in the device 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.
4. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
5. Contact Support with the required logs for further assistance.



## 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:

1. Check the network cable of the device.
2. Check whether the scanned document destination HTTP server is accessible from the PC.
3. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
4. Contact Support with the required logs for further assistance.

## 018-568 HTTP Server SSL Access Fail RAP

**018-568** HTTP error - abnormal SSL connection.

### Procedure

Advise the customer:

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.
5. Switch off, then switch on the machine, **GP 4**, obtain logs **GP 37**, immediately after the error has occurred.
6. Contact Support with the required logs for further assistance.

## 018-569 HTTP Server Certificate Fail RAP

018-569 HTTP error - invalid certificate.

### Procedure

Advise the customer:

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 device.
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 device 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 device certificate validation.
5. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
6. Contact Support with the required logs for further assistance.

## 018-570 HTTP Certificate Fail RAP

018-570 HTTP error - invalid client certificate.

### Procedure

Advise the customer:

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 device.
3. Check whether a valid device certificate is registered in the scanned document destination HTTP server.
4. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
5. Contact Support with the required logs for further assistance.

## 018-571 Internal Error in Scan RAP

018-571 Scan network sending software internal error.

### Procedure

1. Advise the customer repeat the operation.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 018-587 File Duplication Fail RAP

018-587 File name conflict stop.

### Procedure

1. Advise the customer set File Name Conflict to other than Cancel Job.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 018-588 Scan Filing Policy Invalid RAP

018-588 Invalid filing policy.

### Procedure

1. Request the customer that when Add is selected for File Name Conflict, check that the file format is not set to Multi-page.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 018-589 NEXTNAME File Error RAP

018-589 NEXTNAMEDAT file access error.

### Procedure

1. Request the customer that when Add is selected for File Name Conflict, check that the NEXTNAME.DAT file is correct.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 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 perform the same operation again without multiple machines accessing the same folder in the same server.

**NOTE:** Change file name of scan, or move or delete files from the file server using file name.

2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 018-591 File Name Suffix Over Limit RAP

**018-591** The scan file name has exceeded the suffix limit value.

### Procedure

1. Advise the customer change the file name/destination folder on the scan server. Else, move or delete the files in the destination folder.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 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:

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.
3. Check user permissions to the share or file folder.
4. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
5. Contact Support with the required logs for further assistance.

## 018-595 Detected User Duplication RAP

**018-595** Duplicate IDs were detected at ICCG external authentication (LDAP protocol).

### Procedure

1. Advise the customer make corrections so that the user entries in the database of the LDAP server do not have the same IC card information.
2. Switch off, then switch on the machine, GP 4, obtain logs GP 37, immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 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

1. Advise the customer to wait for a while, then perform the same operation again.
2. Switch off, then switch on the machine, [GP 4](#), obtain logs [GP 37](#), immediately after the error has occurred.
3. Contact Support with the required logs for further assistance.

## 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)

**018-706** LDAP protocol error 06 at address book operation (comparison request result is true).

**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

1. 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.
2. 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.
3. There is a problem with the LDAP setups on the machine or with the remote LDAP server. Advise the customer verify the machine LDAP setups. If the check is good, there may be a problem with the remote LDAP server.
4. See [GP 36](#) How to Manually Setup a Network Connection, for further help or advise the customer to contact their network administrator.

## 018-709 Active Communication is Unavailable Now Fail RAP

**018-709** Active communication is unavailable now fail.

### Procedure

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify with the customer if machine was connected to the network.
  - a. Advise the customer verify the IPv4 settings are static or DHCP.
  - b. Refer to [GP 36](#) How to Manually Configure an IP Address to verify customer network settings and set the machine IP address to a static address.
3. If the fault persists, Advise the customer to contact their network administrator.

## 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

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.



## 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 device is specified by KDC.
2. In the case of password authentication, KDC does not support any of the device's algorithms.
3. KDC settings should be reviewed. Also, in the case of devices supporting FIPS, disabling FIPS mode may correct the problem.
4. Before switching the power off and then on, [GP 4](#), obtain logs [GP 37](#), immediately after the error has occurred.
5. Contact Support with the required logs for further assistance.

## 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

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 018-722 GCP Network Fail RAP

018-722 GCP network connection error.

### Procedure

Perform the steps that follow:

1. Advise the customer confirm the network connection status, network settings status with the system administrator.
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Obtain logs immediately, [GP 37](#), after the error has occurred.
7. Contact Service for further instructions.

## 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 confirm with the network administrator the correct root CA certificate is present, certificate authentication settings are correct.
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Obtain logs immediately, [GP 37](#), after the error has occurred.
7. Contact Service for further instructions.

## 018-724 GCP SSL Connection Fail RAP

018-724 GCP SSL connection error.

### Procedure

Perform the steps that follow:

1. Advise the customer confirm with the network administrator the network (SSL Communication) connection status, SSL settings status.
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Obtain logs immediately, [GP 37](#), after the error has occurred.
7. Contact Service for further instructions.

## 018-725 Kerberos Attestation Protocol Error 22 RAP

018-725 Duplicate IDs were detected at ICCG external authentication (LDAP protocol).

### Procedure

Request 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 check if a higher CA certificate in the user SmartCard is registered with the device. If not, register it with the device.

## 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 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 device; the KDC certificate has expired; or the KDC certificate address is different from that written on the certificate.)

### Procedure

Advise the customer:

1. Check if the root CA certificate of KDC certificate is registered with the device. 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 device is the same as that written on the Kerbeors server KDC certificate. If they are different, change the Kerbeors server address set on the device, 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, 731, 740, 738, 739, 743, 744, 745, 746 GCP Network Fail RAP

**018-729** GCP connection timeout error.

**018-730** GCP other network error.

**018-731** GCP HDD limit fail.

**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.

**018-740** GCP XMPP Certification Fail.

**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 check the network connection status, settings status as the network might be congested.
2. Upgrade the software, [GP 9](#).
3. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
4. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
5. Upgrade the software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Obtain logs immediately, [GP 37](#), after the error has occurred.
8. Contact Service for further instructions.

## 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

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 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 check the settings.
2. Obtain the log file using the log tool [GP 37](#).
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Upgrade the software, [GP 9](#).
5. Switch off, then switch on the machine, [GP 4](#). Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Obtain logs immediately, [GP 37](#), after the error has occurred.
7. Contact Service for further instructions.

## 018-747 Server Not Found in SMB RAP

018-747 Unable to find the SMB server during SMB scan.

### Procedure

Advise the customer:

#### 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.

5. Switch off, then switch on the machine, GP 4, obtain logs immediately, GP 37, after the error has occurred.

6. Contact Service for further instructions.

## 018-748, 750, 751, 752, 753, 754 LDAP Protocol Errors 48, 50 to 36 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

1. Switch off, then switch on the machine, GP 4.
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 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

1. Switch off, then switch on the machine, GP 4.
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 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:

1. Check the transfer destination server, the router that exists between the multifunction device 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.*

3. Switch off, then switch on the machine, GP 4, obtain logs immediately, GP 37, after the error has occurred.
4. Contact Service for further instructions.



## 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:

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.*

3. Obtain logs immediately, [GP 37](#), after the error has occurred.
4. Contact Service for further instructions.

## 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:

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.
3. Obtain logs immediately, [GP 37](#), after the error has occurred.
4. Contact Service for further instructions.

## 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:

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.
4. Obtain logs immediately, [GP 37](#), after the error has occurred.
5. Contact Service for further instructions.

## 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

1. Advise the customer check the settings of the distributed file system (DFS) with the system administrator
2. Obtain logs immediately, [GP 37](#), after the error has occurred.
3. Contact Service for further instructions.

## 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:

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.
5. Obtain logs immediately, [GP 37](#), after the error has occurred.
6. Contact Service for further instructions.

## 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:

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.
3. Obtain logs immediately, [GP 37](#), after the error has occurred.
4. Contact Service for further instructions.

## 018-763 Character Convert Error in SMB RAP

**018-763** The character code conversion process in the multifunction device has failed during the scanner (scan to PC) SMB transfer.

### Procedure

Advise the customer:

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.
3. Obtain logs immediately, [GP 37](#), after the error has occurred.
4. Contact Service for further instructions.

## 018-764 to 018-769, 018-771 LDAP Protocol Errors 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

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 018-770 LDAP Protocol Error 70 RAP

**018-770** LDAP protocol error 70 at Address Book operation (search target is too large).

### Procedure

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 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 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:

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.
5. Obtain logs immediately, [GP 37](#), after the error has occurred.
6. Contact Support with the required logs for further assistance.

## 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

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 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:

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.
5. Contact Service for further instructions.

## 018-785 LDAP Protocol Error 85 RAP

**018-785** LDAP protocol error 85 at address book operation (search timeout).

### Procedure

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.

## 018-786 to 797 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

1. Switch off, then switch on the machine, [GP 4](#).
2. Verify the machine is communicating on the network.
3. If the fault persists, print a network configuration report and verify the LDAP setup on the machine to the remote LDAP server is correct.
4. If the network settings are correct and connectivity is still lost, Advise the customer to contact their network administrator.



## 021-210 to 021-212 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

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the connection between the card reader and the machine.
3. Enter dC131. Make sure NVM value 700-885 is set correctly:
  - Internal IC card reader: 0
  - IC card reader (HID support): 1
4. If the error persists, Request the customer that the card reader is faulty.

## 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 4.
2. Request 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.
3. Switch off. then switch on the machine., GP 4 to reset the encryption settings for the card reader.

## 021-401 USB IC Card Reader Connection Error RAP

021-401 USB IC card reader connection status is incorrect.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Advise the customer to disconnect the USB IC card reader that caused this error to occur from the USB connector.

## 021-505, 021-506 SSL Error RAP

021-505 Couldn't establish SSL session - An error has occurred during SSL/TLS handshake. libcurl returned 'CURLE\_SSL\_CONNECT\_ERROR'

021-506 The SSL certificate of the server is invalid.

### Procedure

1. Switch off, then switch on the machine, [GP 4](#).
2. Perform [GP 37](#), How to Obtain Log Files and contact Support for further assistance.

## 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

1. Switch off. then switch on the machine. [GP 4](#).
2. Perform [GP 37](#), How to Obtain Log Files and contact Support for further assistance.

## 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. Switch off. then switch on the machine. [GP 4](#).
3. Perform [GP 37](#), How to Obtain Log Files and contact Support for further assistance.

## 021-524 to 012-528 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).

**021-528** Communication setting error.

### Procedure

1. Use Chain-Link (920-001) to change "Installation Status" to "Not Installed" and retry the operation.
2. Switch off, then switch on the machine. [GP 4](#).
3. Perform [GP 37](#), How to Obtain Log Files and contact Support for further assistance.

## 021-533, 021-534 Unsupported ROM Set RAP

**021-533** The user cannot do an update.

**021-534** An unsupported submodule is detected.

### Procedure

Update the Software, [GP 9](#).

## 023-500 UI ROM Download Fail RAP

023-500 Panel ROM data write processing error detection.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Update the Software, GP 9.
2. Install a new UI assembly, PL 18.1 Item 1 (MFP/MFP Tall), PL 18.2 Item 1 (SFP).

## 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.

## 024-312, 313, 314, 315 IOT NVM Backup Restore RAP

**024-312** IOT NVM Backup Restore Fail 2. It was detected that the identifiers (Product No., Serial No.) of the backed up IOT NVM Data were different from those instructed by the restore request.

**024-313** IOT NVM Backup Restore Fail 3. It was detected that the data size of the backed up IOT NVM Data was different from the size instructed by the restore request.

**024-314** IOT NVM Backup Restore Fail 4. A backup data read error was detected.

**024-315** IOT NVM Backup Restore Fail 5. When restore was requested, it was detected that the backup data did not exist.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Install a new MCU PWB PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP)

## 024-322 and 024-223 SEEPROM Refurbish Fail RAP

**024-322** Refurbish is impossible because the counting value exceeds its maximum.

**024-323** An abnormal parameter is set as the argument for the Send function.

### Procedure

1. Switch off. then switch on the machine. GP 4.

## 024-340 to 024-360 IOT-ESS Communication Fail 1 RAP

**024-340** MCU sending error detected by controller (invalid parameter was used).

**024-341** MCU sending error detected by controller (sequence number error).

**024-342** MCU sending error detected by controller (packet number error).

**024-343** MCU sending error detected by controller (message length error).

**024-345** MCU sending error detected by controller (check code error).

**024-346** MCU sending error detected by controller (parity error detected by the IOT).

**024-347** MCU sending error detected by controller (framing error detected by the IOT).

**024-348** MCU sending error detected by controller (overflow error detected by the IOT).

**024-349** MCU sending error detected by controller (receive abort detected by the IOT after the header had been recognized).

**024-350** MCU receiving error detected by controller (sequence number of the received message packet is incorrect).

**024-351** MCU receiving error detected by controller (packet number error).

**024-352** MCU receiving error detected by controller (message length error).

**024-353** MCU receiving error detected by controller (check code error).

**024-354** MCU receiving error detected by controller (parity error detected by the UART).

**024-355** MCU receiving error detected by controller (framing error detected by the UART).

**024-356** MCU receiving overflow error detected by controller (overflow error detected by the UART).

**024-357** MCU 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** MCU transmission receiving error detected by controller (invalid parameter used).

**024-360** Initialization error between IOT and ESS.

## Procedure

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu [GP 15](#).
3. Check the wire harness connections on the ESS PWB and MCU PWB are installed properly and fully seated.
4. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Update the Software, [GP 9](#).
6. Switch off, then switch on the machine, [GP 4](#).
7. If the error persists, obtain the log file again, [GP 37](#).
8. Switch off the machine [GP 4](#).
9. Disconnect the power cord for 2 minutes.
10. Switch on the machine, [GP 4](#).
11. Perform the same operation where the error occurred.
12. If the error persists, install a new MCU PWB [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP) and perform the same operation where the error occurred.

## 024-361 Invalid IOT Paper Size RAP

024-361 Invalid IOT paper size group information.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the paper size group setting in the Controller and set a correct value.
2. Initialize the user NVM, enter to dC301 NVM Initialization.
3. Enter GP 37, How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
5. Update the Software, GP 9.
6. Repeat the operation which failed.
7. Enter GP 37, How to Obtain Log Files to gather machine logs.
8. Contact Support for further instructions.

## 024-362, 024-363 Page Sync Illegal Start or Stop RAP

024-362 Page-sync occurred before video output preparation completes.

024-363 Page-sync completion error during video output.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Ensure that all connectors and surface mounted modules on the ESS PWB and the MCU PWB are fully seated.
3. Enter GP 15, Special Booting Menu to perform Hardware Diagnostic using the LONG-DIAG MODE.
4. Enter GP 37, How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Update the Software, GP 9.
6. Switch off, then switch on the machine, GP 4.
7. If the error persists, obtain the log file again, GP 37.
8. Switch off the machine, GP 4.
9. Disconnect the power cord for 2 minutes.
10. Switch on the machine, GP 4.
11. If the error persists, install a new MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP) and perform the same operation where the error occurred.
12. If the error persists, install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
13. If the error persists, reinstall the original ESS PWB and contact Support for instructions.



## 024-364 DMA Transfer Fail RAP

**024-364** During Reduce/Enlarge, reduction/enlargement was not completed even though the specified data was entered. This is probably caused by the SW failure or garbage data Loop-back write over- flow.

### Procedure

1. Switch off. then switch on the machine. GP 4.
2. Update the Software, GP 9.
3. Install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

## 024-365 Overflow on Loop Back Write RAP

**024-365** Loopback write overflow.

### Procedure

This fault is currently not dispenser displayed. No service action necessary.

## 024-366 JBIG Library Other Fail RAP

024-366 Other errors in JBIG Lib.

### Procedure

1. Switch off. then switch on the machine. [GP 4](#).
2. Update the Software, [GP 9](#).
3. Install a new ESS PWB, [PL 18.1 Item 5 \(MFP\)](#), [PL 18.5 Item 5 \(MFP Tall\)](#), [PL 18.9 Item 5 \(SFP\)](#).

## 024-367 Decompress Other Fail RAP

024-367 Incorrect line synchronization was detected.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Update the Software, [GP 9](#).
3. Refer [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Refer [GP 15](#), Special Booting Menu to perform Hardware Diagnostic using the LONG-DIAG MODE.
5. Switch off, then switch on the machine, [GP 4](#).
6. If the error persists, obtain the log file again, [GP 37](#).
7. Switch off the machine, [GP 4](#).
8. Disconnect the power cord for 2 minutes.
9. Switch on the machine, [GP 4](#).
10. Install a new ESS PWB, [PL 18.1 Item 5 \(MFP\)](#), [PL 18.5 Item 5 \(MFP Tall\)](#), [PL 18.9 Item 5 \(SFP\)](#). and perform the same operation where the error occurred.
11. Reinstall the original ESS PWB and contact the Support Department for instructions.

## 024-368 PCI Error RAP

**024-368** PCI access error occurred due to a faulty PCI bus.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Update the Software, GP 9.
3. Enter GP 37, How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu, GP 15.
5. Switch off, then switch on the machine, GP 4.
6. If the error persists, obtain the log file again, GP 37.
7. Switch off the machine, GP 4.
8. Disconnect the power cord for 2 minutes.
9. Switch on the machine, GP 4.
10. Install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
11. Reinstall the original ESS PWB and contact the Support for instructions.

## 024-370 Marker Code Detection Fail RAP

**024-370** During Enlarge, when the file was enlarged only by the specified size, the end code (FF02) cannot be found in the compressed data.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
  - a. Change the Print mode (Normal/High Quality/High Resolution).
  - b. Change the RAM size. (Change the port settings or the receive buffer size, etc.)
2. Switch off, then switch on the machine. GP 4.
3. Update the Software, GP 9.
4. Enter GP 37, How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu, GP 15.
6. Switch off, then switch on the machine, GP 4.
7. If the error persists, obtain the log file again, GP 37.
8. Switch off the machine, GP 4.
9. Disconnect the power cord for 2 minutes.
10. Switch on the machine, GP 4.
11. Check the wiring on the MCU PWB and the ESS PWB are fully seated.
12. If the error persists, install a new MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP) and perform the same operation where the error occurred.
13. If the error persists, install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
14. Reinstall the original ESS PWB and contact Support for instructions.

## 024-371, 372, 373, 375 IOT-ESS Communication Fail 2 RAP

**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

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Update the Software, [GP 9](#).
3. Check the wiring on the MCU PWB and the ESS PWB are fully seated.
4. If the error persists, install new components as necessary:
  - MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
  - ESS PWB, [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (MFP Tall), [PL 18.9 Item 5](#) (SFP).

## 024-376 IOT-ESS Communication Fail 25 RAP

**024-376** Occurs when a break in connection is detected at the loop back terminal of the image signal line.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Update the Software, [GP 9](#).
3. Check the wiring on the MCU PWB and the ESS PWB are fully seated.
4. Check the LPH unit image signal disconnection (cable) is fully seated at the, LPH [PL 2.1 Item 1](#), and the ESS PWB.
5. Switch off, then switch on the machine [GP 4](#).
6. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu, [GP 15](#).
7. Switch off, then switch on the machine, [GP 4](#).
8. If the error persists, obtain the log file again, [GP 37](#).
9. Switch off the machine, [GP 4](#).
10. Disconnect the power cord for 2 minutes.
11. Switch on the machine, [GP 4](#).
12. If the error persists, install a new MCU PWB [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP) and perform the same operation where the error occurred.
13. If the error persists, install a new ESS PWB [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (MFP Tall), [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred.
14. Reinstall the original ESS PWB and contact Support for instructions.

## 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 024-618 Serial Number RAP**

**024-616** Serial No. Master was restored automatically.

**024-617** Serial No. Backup1 was restored automatically.

**024-618** Serial No. Backup2 was restored automatically.

### **Procedure**

For information only, no service action necessary.

## **024-619 to 024-621 Product Number RAP**

**024-619** Product No. Master was restored automatically.

**024-620** Product No. Backup1 was restored automatically.

**024-621** Product No. Backup2 was restored automatically.

### **Procedure**

For information only, no service action necessary.

## **024-701 Invalid Instruction of Face Inversion RAP**

**024-701** Job cancellation due to invalid invert instruction.

### **Procedure**

Refer the customer the User Guide to use paper or media that is within specification.

## **024-702 Paper Jam RAP**

**024-702** Job cancellation due to paper jam.

### **Procedure**

Clear the paper jam.

## 024-705 Forced Annotation Template Fail RAP

**024-705** The specified Force Annotation template cannot be found in the device

### Procedure

1. Delete document and attempt to restore the template from the driver.
2. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to “0” to perform log collection and return the NVM (700-530) to “1” after completing the procedure.
3. Repeat the operation which failed.
4. Update the Software, [GP 9](#).
5. Switch off, then switch on the machine [GP 4](#).
6. Ask the customer for the procedures to reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
8. Contact Support for further instructions.

## 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 within specification or to print simplex. Refer to [GP 26](#), Paper and Media Size Specifications.
2. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to “0” to perform log collection and return the NVM (700-530) to “1” after completing the procedure.
3. Repeat the operation which failed.
4. Update the Software, [GP 9](#).
5. Switch off, then switch on the machine [GP 4](#).
6. Ask the customer for the procedures to reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
8. Contact Support for further instructions.



## 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 within specification or to print face up. Refer to [GP 26](#), Paper and Media Size Specifications.
2. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Repeat the operation which failed.
4. Update the Software, [GP 9](#).
5. Switch off, then switch on the machine [GP 4](#).
6. Ask the customer for the procedures to reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
8. Contact Support for further instructions.

## 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. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Repeat the operation which failed.
4. Update the Software, [GP 9](#).
5. Switch off, then switch on the machine [GP 4](#).
6. Ask the customer for the procedures to reproducing an error according to the operation that was performed when the error occurred.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
7. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
8. Contact Support for further instructions.

## 024-910 and 024-959 Tray 1 Size Mismatch RAP

**BSD-ON:** [BSD 45: MCU, Size Switch Assembly \(Tray 1\)](#)

**BSD-ON:** [BSD 07: Registration and no paper sensor](#)

**024-910** Size mismatch tray 1, measured length mismatch.

**024-959** Tray 1 size mismatch.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Advise the customer:
  - a. Use paper that is within specification. Refer to [GP 26](#), Media Specifications.
  - b. Ensure the paper in tray 1, [PL 9.1 Item 1](#), is the correct size for the job.
  - c. Ensure tray 1 is fully inserted.
2. Check for slipping or sticky registration clutch, [PL 15.1 Item 8](#).
3. Enter [dC330](#). Enter the following codes to check the sensors:
  - 071-106 tray 1 paper size sensor 0
  - 071-107 tray 1 paper size sensor 1
  - 071-108 tray 1 paper size sensor 2
  - 071-103 registration sensor
4. Install new components as necessary:
  - a. Registration sensor, [PL 15.2 Item 13](#).
  - b. Size switch assembly (tray 1), [PL 18.3 Item 21\(MFP\)](#), [PL 18.7 Item 21\(MFP Tall\)](#), [PL 18.11 Item 21\(SFP\)](#).
  - c. MCU PWB, [PL 18.1 Item 1 \(MFP\)](#) or [PL 18.5 Item 1 \(MFP Tall\)](#) or [PL 18.9 Item 1 \(SFP\)](#).

## 024-911 and 024-960 Tray 2 Size Mismatch RAP

BSD-ON: [BSD 45: MCU, Size Switch Assembly \(Tray 1\)](#)

BSD-ON: [BSD 07: Registration and no paper sensor](#)

024-911 Size mismatch tray 2, measured length mismatch.

024-960 Tray 2 size mismatch.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Advise the customer:
  - a. Use paper that is within specification. Refer to [GP 26](#), Media Specifications.
  - b. Ensure the paper in tray 2, [PL 9.1 Item 1](#), is the correct size for the job.
  - c. Ensure tray 2 is closed.
2. Enter [dC330](#). Enter the following codes to check the sensors:
  - 071-109 option feeder 2 size sensor 0
  - 071-110 option feeder 2 size sensor 1
  - 071-111 option feeder 2 size sensor 2
  - 071-103 registration sensor
3. Install new components as necessary:
  - a. Registration sensor, [PL 15.2 Item 13](#).
  - b. Switch assembly size OPF 550, [PL 10.1 Item 12](#).
  - c. MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-912 and 024-961 Tray 3 Size Mismatch RAP

BSD-ON: [BSD 45: MCU, Size Switch Assembly \(Tray 1\)](#)

BSD-ON: [BSD 07: Registration and no paper sensor](#)

024-912 Size mismatch tray 3, measured length mismatch.

024-961 Tray 3 size mismatch.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Advise the customer:
  - a. Use paper that is within specification. Refer to [GP 26](#), Media Specifications.
  - b. Ensure the paper in tray 3, [PL 9.1 Item 1](#), is the correct size for the job.
  - c. Ensure tray 3 is closed.
2. Enter [dC330](#). Enter the following codes to check the sensors:
  - 071-114 option feeder 3 size sensor 0
  - 071-115 option feeder 3 size sensor 1
  - 071-116 option feeder 3 size sensor 2
  - 071-103 registration sensor
3. Install new components as necessary:
  - a. Registration sensor, [PL 15.2 Item 13](#).
  - b. Switch assembly size OPF 550, [PL 10.1 Item 12](#).
  - c. MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-913, 962 Tray 4 Size Mismatch RAP

BSD-ON: [BSD 45: MCU, Size Switch Assembly \(Tray 1\)](#)

BSD-ON: [BSD 07: Registration and no paper sensor](#)

024-913 Size mismatch tray 4, measured length mismatch.

024-960 Tray 4 size mismatch.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Advise the customer to:
  - a. Use paper that is within specification. Refer to [GP 26](#), Media Specifications.
  - b. Ensure the paper in tray 4, [PL 9.1 Item 1](#), is the correct size for the job.
  - c. Ensure tray 4 is closed.
2. Enter [dC330](#). Enter the following codes to check the sensors:
  - 071-119 option feeder 4 size sensor 0
  - 071-120 option feeder 4 size sensor 1
  - 071-121 option feeder 4 size sensor 2
  - 071-103 registration sensor
3. Install new components as necessary:
  - a. Registration sensor, [PL 15.2 Item 13](#).
  - b. Switch assembly size OPF 550, [PL 10.1 Item 12](#).
  - c. MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-916 Finisher Stacker Mix Full Stack RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 3](#)

BSD-ON: [Finisher diagram 4](#)

024-916 One of the following conditions was met during Mix Full position detection:

- When 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 when the uppermost paper size loaded for the previous job is less than 279.4mm.
- When uppermost paper size loaded for the previous job is unknown'.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor.

Perform the steps that follow:

1. Advise the customer to remove the paper from the stacker.
2. Enter [dC330](#), code 012-230. Check the stacker tray no-paper & full sensor [PL 21.1 Item 11](#).
3. Install a new, PWBA GPF A4FIN, [PL 21.1 Item 12](#).

## 024-917 Stacker Tray Staple Set Over Count RAP

**024-917** The Staple Set Count exceeded 50 sets on the Stacker Tray during the Staple Set Eject operation.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 no paper sensor, [PL 21.1 Item 11](#).

## 024-920 FaceDown Tray 1 Paper FULL RAP

**024-920** The paper output to the FaceDown Tray 1 is full.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Clear the paper from the output tray.
2. Enter [dC330](#), code 071-105 to check the full stack sensor.

## 024-933 024-940 024-941 DRUM CARTRIDGE Life End RAP

BSD-ON: [IOT diagram 13](#)

BSD-ON: [IOT diagram 14](#)

024-933 Drum cartridge Y life end.

024-940 Drum cartridge M life end.

024-941 Drum cartridge C life end.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Verify the customer has installed a new DRUM cartridge for the color reporting in fault.
2. Check the connection terminal of the dispense assembly for damage. If the dispense assembly at fault is damaged, install a new dispense assembly:
  - XERO DEVE CRU Assembly [PL 8.1 Item 1](#).
3. Check the wiring between the XERO DEVE CRU assembly [PL 8.1 Item 1](#) and the toner CRUM connector assembly [PL 5.1 Item 6](#).
4. Check the XERO DEVE CRU assembly is installed properly.
5. Check the wiring of the CRUM inside the XERO DEVE CRU assembly. If the harness is damaged, install a new, XERO DEVE CRU assembly [PL 8.1 Item 1](#).
6. Check the wiring of the DEVE/ XERO C. If the harness is damaged, install a new, XERO CRUM LPH FFC kit.
7. If the error persists, install a new MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-934 Paper Type Mismatch RAP

024-934 The media requested in the print file is not available in any media tray.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Load the requested media, and set tray media type correctly.
2. Update the Software, [GP 9](#).

## 024-946 Tray 1 Out of Place RAP

BSD-ON: [BSD 45: MCU, Size Switch Assembly \(Tray 1\)](#)

024-946 The system detected that tray 1 was not installed.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the following procedures as required:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Check that tray 1 is fully inserted.
2. Check that paper is loaded in the tray and is lifting properly when tray is inserted.
3. Enter [dC330](#), code 071-101 to check the tray 1 size switch [PL 18.3 Item 21](#).
4. Enter [dC330](#). Enter the following codes to check the tray 1 size sensors:
  - 071-106 tray 1 size sensor 0
  - 071-107 tray 1 size sensor 1
  - 071-108 tray 1 size sensor 2
5. Install new components as necessary:
  - Size switch assembly (Tray 1), [PL 18.3 Item 21](#)(MFP), [PL 18.7 Item 21](#)(MFP Tall), [PL 18.11 Item 21](#).
  - MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-947 to 024-949 and 028-989 Tray 2, 3, 4, 5 Out of Place RAP

BSD-ON: [BSD 47: OPF PWB, Tray Open Sensor](#)

BSD-ON: [BSD 45: MCU, Size Switch Assembly \(Tray 1\)](#)

024-947 The system detected that tray 2 was not installed. (OPF 550 or HCF)

024-948 The system detected that tray 3 was not installed. (OPF 550 or HCF)

024-949 The system detected that tray 4 was not installed.

028-989 The system detected that tray 5 was not installed.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Advise the customer to:
  - d. Ensure the relevant tray is installed and closed in the machine.
2. Check the HCF for damage. If the HCF is damaged, install a new HCF.
3. Enter [dC330](#). Enter code 071-129 to check the tray 2 sensor HCF(HTM).
4. Enter [dC330](#). Enter code 071-131 to check the tray 3 sensor HCF(HTM).
5. Check the OPF 550 feeder assembly, [PL 10.1 Item 1](#), for damage. If the OPF 550 feeder assembly is damaged, install a new OPF 550 feeder assembly kit, [PL 10.1 Item 1](#).
6. Enter [dC330](#). Enter the following codes to check the tray 2 sensors: (OPF 550)
  - 071-109 option feeder 2 size sensor 0
  - 071-110 option feeder 2 size sensor 1
  - 071-111 option feeder 2 size sensor 2
7. Enter [dC330](#). Enter the following codes to check the tray 3 sensors: (OPF 550)
  - 071-114 option feeder 3 size sensor 0
  - 071-115 option feeder 3 size sensor 1
  - 071-116 option feeder 3 size sensor 2
8. Enter [dC330](#). Enter the following codes to check the tray 4 sensors: (OPF 550)
  - 071-119 option feeder 4 size sensor 0
  - 071-120 option feeder 4 size sensor 1
  - 071-121 option feeder 4 size sensor 2
9. Check the Tray 5 settings in the UI console and verify settings are correct for the appropriate optional feeder installed.
10. Install new components as necessary:

- a. Switch assembly size OPF 550, [PL 10.1 Item 12](#).
- b. MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-950 Tray 1 Empty RAP

**BSD-ON:** [BSD 07: Registration and no paper sensors](#)

024-950 Tray 1 is Out of Paper

### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

### **Procedure**

1. Advise the customer to add paper to tray 1 if the tray is empty.
2. Check the registration feeder chute assembly for damage. If the registration feeder chute assembly is damaged, install a new registration feeder chute assembly, [PL 15.2 Item 1](#).
3. Enter [dC330](#), code 071-101 to check the tray 1 no paper sensor [PL 15.2 Item 22](#).
4. Check the wiring between the no paper sensor and the MCU PWB for damage. Repair the harness is necessary. If the fault persists, install a new no paper sensor, [PL 15.2 Item 22](#).
5. If the fault persists, install a new MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).



## 024-951 to 024-953 Tray 2, 3, 4 Out of Paper RAP

BSD-ON: [BSD 41: OPF PWB, HCF No Paper Sensor](#)

BSD-ON: [BSD 31: OPF 550 PWB, OPT Feeder No Paper Sensor](#)

024-951 Tray 2 is out of paper.

024-952 Tray 3 is out of paper.

024-953 Tray 4 is out of paper.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Advise the customer to add paper to the tray at fault if empty.
2. Check the HCF feeder assembly, [PL 11.1 Item 5](#) for damage. If the HCF feeder assembly is damaged, install a new HCF feeder assembly, [PL 11.1 Item 5](#).
3. Enter [dC330](#). Enter code 071-112 to check the tray 2 no paper sensor.
4. Enter [dC330](#). Enter code 071-117 to check the tray 3 no paper sensor.
5. Enter [dC330](#). Enter code 071-122 to check the tray 4 no paper sensor (OPF 550).
6. Check the wiring between the OPT feeder no paper sensor and the OPF 550 PWB. Repair the harness as necessary.
7. If the fault persists, install a new MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-954 MSI Tray Out Of Paper RAP

BSD-ON: [BSD 48: MCU, MSI No Paper Sensor](#)

024-954 The MSI tray is empty.

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

### Procedure

1. Add paper to the MSI tray.
2. Check the MSI frame assembly for damage. If the MSI frame assembly is damaged, install a new MSI frame assembly, [PL 13.1 Item 1](#).
3. Enter [dC330](#), code 071-100 to activate the MSI no paper sensor, [PL 13.1 Item 8](#). If the MSI no paper sensor fails to activate, install a new MSI no paper sensor, [PL 13.1 Item 8](#).
4. If the fault persists, install a new MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 024-958 Bypass Tray Size Mismatch RAP

BSD-ON: [BSD 48: MCU, MSI No Paper Sensor](#)

BSD-ON: [BSD 07: Registration and no paper sensor](#)

024-958 Check Paper Selection - Check Bypass Tray Settings.

### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

### Procedure

1. Add paper to the MSI tray.
2. Check the MSI frame assembly for damage. If the MSI frame assembly is damaged, install a new MSI frame assembly, [PL 13.1 Item 1](#).
3. Enter [dC330](#), code 071-100 to activate the MSI no paper sensor, [PL 13.1 Item 8](#). If the MSI no paper sensor fails to activate, install a new MSI no paper sensor, [PL 13.1 Item 8](#).
4. Enter [dC330](#), code 071-103 to activate the registration sensor, [PL 15.2 Item 13](#). If the registration sensor fails to activate, install a new registration sensor, [PL 15.2 Item 13](#).
5. If the fault persists, install a new MCU PWB, [PL 18.1 Item 1 \(MFP\)](#) or [PL 18.5 Item 1 \(MFP Tall\)](#) or [PL 18.9 Item 1 \(SFP\)](#).

## 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.

### Initial Actions

- Check the correct setting for paper size and type are selected in the UI.
- Add the correct paper to the appropriate Tray.

### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. If the error persists, perform the steps that follow:
  - a. Ensure that all connectors and surface mounted modules on the ESS PWB and the MCU PWB are fully seated.
  - b. Update the Software, [GP 9](#).

## 024-967 and 024-968 Stapler Paper Mixed Width and Batting Error RAP

**024-967** Mixed Width was detected with the settings only available for stapling the same widths.

**024-968** The Staple position was batting.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Cancel the staple job in progress.
2. If the error persists, perform the steps that follow:
  - a. Switch off, then switch on the machine, [GP 4](#).
  - b. Ensure that all connectors and surface mounted modules on the ESS PWB and the MCU PWB are fully seated.
  - c. Update the Software, [GP 9](#).

## 024-976 Finisher Staple Status NG RAP

**BSD-ON:** [Finisher diagram 1](#)

**BSD-ON:** [Finisher diagram 2](#)

**024-976** Finisher Staple Status NG:

1. In staple operation, staple home sensor does not detect off-on within the specified time.
2. After reverse operation, staple home sensor detects 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 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#), How to Check a Motor.
- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Clear any paper jam in the paper path and in the stapler.
2. Check the stapler assembly, [PL 21.2 Item 7](#) for damage. If the stapler assembly is damaged, install a new stapler assembly, [PL 21.2 Item 7](#).
3. Enter [dC330](#), code 012-222 to activate the stapler home sensor, [PL 21.2 Item 7](#). If the self stapler home sensor activates, go to step 4. If the stapler home sensor does not activate, install a new stapler assembly, [PL 21.2 Item 7](#).
4. Enter [dC330](#), code 012-250 to run the stapler home motor, [PL 21.2 Item 13](#). If the stapler home motor runs, go to step 5. If the stapler home motor does not run, install a new stapler assembly, [PL 21.2 Item 7](#).
5. If the error persists, install a new PWBA GPF A4FIN, [PL 21.1 Item 12](#).

## 024-977 Stapler Feed Ready Fail RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

024-977 At the start of stapling, self priming sensor is OFF.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 10](#), How to Check a Motor.
- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Verify the staple cartridge is installed correctly, reinstall if necessary.
2. Enter [dC330](#), code 012-221 to activate the self priming sensor, [PL 21.2 Item 7](#). If the self priming sensor activates, go to step 3. If the self priming sensor does not activate, install a new stapler assembly, [PL 21.2 Item 7](#).
3. Enter [dC330](#), code 012-250 to run the stapler home motor, [PL 21.2 Item 7](#). If the stapler home motor runs, go to step 3. If the stapler home motor does not run, install a new stapler assembly, [PL 21.2 Item 7](#).
4. Install a new PWBA GPF A4FIN, [PL 21.1 Item 12](#).

## 024-979 Finisher Stapler Near Empty RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

024-979 Detect Low Staple Sensor ON just before Stapler Motor ON.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Verify the staple cartridge is installed correctly, reinstall if necessary.
2. Enter [dC330](#), code 012-220 to activate the low staple sensor, [PL 21.2 Item 7](#). If the low staple sensor does not activate, install a new stapler assembly, [PL 21.2 Item 7](#).
3. If the error persists, install a new PWBA GPF A4FIN, [PL 21.1 Item 12](#).

## 024-980 Finisher Stacker Tray Full RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 5](#)

**024-980** Stack Encoder Sensor counted the specified number of sheets for Full Stack (large size/Small size).

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Remove the all paper in the tray.
2. Enter [dC330](#), code 012-230 to activate the stacker tray no-paper & full sensor, [PL 21.1 Item 11](#). If the stacker tray no-paper & full sensor, does not activate, install a new PWBA GPF A4FIN, [PL 21.1 Item 12](#).

## 024-982 Stacker Lower Safety Warning RAP

BSD-ON: [Finisher diagram 1](#)

BSD-ON: [Finisher diagram 2](#)

**024-982** The stacker height sensor 1 did not detect OFF within the specified time in three consecutive times.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Remove the all paper in the tray and vary there are no obstructions of the stacker tray.
2. Enter [dC330](#), code 012-230 to activate the stacker tray no-paper & full sensor, [PL 21.1 Item 11](#).
3. Enter [dC330](#), code 012-250 to activate the stacker height sensor 1, [PL 21.1 Item 3](#).
4. Install a new PWBA GPF A4FIN, [PL 21.1 Item 12](#).
5. If the fault persists, install a new finisher.

## 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](#), [016-506](#), [016-777](#), [016-780](#), [016-798](#) 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 4](#).
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.
3. Contact Support for further instructions.

## **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. Request 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 error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 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 devices. The processing capacity of the JRM directory service has been exceeded.

### Procedure

Perform the steps that follow:

1. Request the customer that when performing simultaneous queries on the address book in the machine from multiple machine panel and Web UI input devices, lower the query interval.
2. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.



## 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

Perform the steps that follow:

1. Check whether the Controller ROM is the latest version. If not, upgrade it to the latest.
2. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 026-703 Abort With Logout RAP

**026-703** At installation of additional document, authentication is already canceled.

### Procedure

Advise the customer to make it impossible for authentication to be canceled at additional document loading.

## 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.
4. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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 device 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:
  - 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 RAPS140 Authentication Mode of the device to off.
2. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 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:

1. Reduce the resolution level (scanned-image quality), then re-run the job.
2. Reduce the number of documents, then re-run the job.
3. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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. Request 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 device 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 error persists, Update the Software, [GP 9](#).

## 026-719 Internal Error in Scan RAP

**026-719** An internal error has occurred.

### Procedure

Perform the steps that follow:

1. Update to the latest version of the software, [GP 9](#).
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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:

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.
5. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.

## 026-726 Inconsistent Options RAP

**026-726** The device configuration info included in XPJL does not match the actual configuration.

### Procedure

1. Advise the customer to set up the device 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

1. Advise the customer to shorten the specified storage location or the filename.
2. If the error persists, perform [GP 37](#) How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 026-728, 026-729 WSD Scan Error RAP

**026-728** An error occurred during communication with the WSD scan client. WSD scan client canceled the job.

**026-729** An error occurred during communication with the WSD scan client. WSD scan client canceled the job or a scan from the DADF was performed from an application other than Windows FAX and scan.

### Procedure

Advise the customer:

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.
3. **026-729 Only** - If the error persists, perform [GP 37 How to Obtain Log Files](#), immediately after the error has occurred.
4. **026-729 Only** - Contact Support for further instructions.

## 026-730 Tray Paper Size Not Detected RAP

**026-730** The paper size of the paper tray selected is unknown.

### Procedure

Make sure the paper guides in the selected tray are set correctly.

## 026-731 to 026-733 PJJ Fail RAP

**026-731** The PIN number that is specified by PJJ command is different from the number that is calculated from the machine's serial number.

**026-732** The print count that is specified by PJJ command has exceeded the machine's total impression meter value by +100.

**026-733** The password that is specified by PJJ 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 PJJ Command, then try again.

## 026-734 PJJ Diag Mode RAP

**026-734** Unable to transition to the PJJ Diag Mode.

### Procedure

Advise the customer:

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

Perform the steps that follow:

1. For one occurrence, take no action. If the error persists, do the following,
2. Enter **GP 37**, How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Update the Software, **GP 9**.
4. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
5. If the error persists, perform **GP 37**, How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.

## 027-442, to 027-444 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 device or the IPv6 address of the other device on the network.
2. If the error persists, have the cu

## **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 error persists, Advise the customer to contact their network administrator.

## **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 error persists, Advise the customer to contact their network administrator.

## 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 device or the IPv6 address of the other device on the network.
2. If the error persists, Advise the customer to contact their network administrator.

## 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 error persists, Advise the customer to contact their network administrator.

## 027-500 SMTP Server Fail for Mail IO RAP

027-500 SMTP server address resolution fail for mail IO.

### Procedure

Advise the customer:

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 device 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 device, and set a correct IP address.
3. If the error persists, Advise the customer to contact their network administrator.

## 027-501 POP Server Fail for Mail IO RAP

027-501 Incorrect POP server name was detected.

### Procedure

Advise the customer:

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 device 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 device, and set a correct IP address.
3. If the error persists, Advise the customer to contact their network administrator.

## 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 error persists, Advise the customer to contact their network administrator.

## 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

Perform the steps that follow:

1. Advise the customer to wait for a while, then perform the operation again.
2. Investigate the SMTP Server information (name and version of the server that is in use) or the provider name (in case of outsourcing).(\*1)
3. Refer to the SMTP Communication Protocol Report and check whether any 4xx or 5xx error response were notified from the server. If any 4xx or 5xx response was notified, this mean that the problem could be at the server side. Use the information obtained from 1.2 to search the Web for troubleshooting information (\*2) and perform the corrective actions.(\*1) It is also possible
  - a. \*1 It is also possible to trace the provider and which server is being used by using the Host Name that is listed in the 220 response (the very first packet) from the Mail Server.
  - b. \*2 (Reference sample for troubleshooting information search result) Obtained information: Exchange 2007 Server, 550 5.7.1 Client does not have permissions to send as this sender (error information from the server). Search keywords: 550 5.7.1 Client does not have permissions to send as this sender.
  - c. Microsoft Search engine: Google Search result: Exchange 2007 transport access permission model Reason: The Sender that is specified in the MAIL FROM field of the SMTP protocol does not have the access permission to send to this server.
  - d. The ms-Exch-SMTP-Submit access permission must be granted to the Sender.
4. Ask the customer To Contact Their Network Administrator.

## 027-513 SMB Scan Client Access RAP

**027-513** In scan to SMB, the user has no right to access the SMB server.

### Procedure

1. Advise the customer to check if the specified user has read/write access in a file or folder in the specified place.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-514 Host Name Solution Error in SMB RAP

**027-514** Unable to resolve hostname during SMB scan.

### Procedure

1. 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.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-515 DNS Server Setup in SMB RAP

**027-515** The DNS server was not set during SMB scan.

### Procedure

1. Advise the customer to set the DNS server address. Or, set the SMB server address of the transfer destination using IP address.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-516 Server Connection Error in SMB RAP

**027-516** Problem with connection to server during SMB scan.

### Procedure

Advise the customer:

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 device at the transfer destination SMB server has started.
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 027-518 Login Name or Password Error in SMB RAP

**027-518** Login name or a password error in SMB.

### Procedure

1. Advise the customer to check the password that was set for the shared folder.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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:

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).
4. Advise the customer to perform the same operation.
5. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.



## 027-520 File Name Acquisition Failure RAP

**027-520** Unable to obtain the file/folder name on the SMB scan server.

### Procedure

1. Advise the customer to perform the same operation.
2. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 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

1. 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.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-522 File Creation Failure in SMB RAP

**027-522** Failed to create an SMB scan file.

### Procedure

Advise the customer:

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.
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 027-523 Lock Folder Creation Failure in SMB RAP

**027-523** Failed to create an SMB scan lock folder.

### Procedure

Advise the customer:

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.
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 027-524 Folder Creation Failure in SMB RAP

**027-524** Failed to create an SMB scan folder.

### Procedure

1. Advise the customer to check if a file or folder with the same name as the specified name exists on the SMB server.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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

1. Advise the customer to check whether the file in the specified storage destination is being used by another user.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-526 Lock Folder Delete Failure in SMB RAP

**027-526** Failed to delete an SMB scan lock folder.

### Procedure

1. Advise the customer to manually delete the lock directory (\*.LCK) from the transfer destination, then retry the job.
2. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 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

1. Advise the customer to check that the storage destination has enough free space.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-529 Data Read Failure From SMB Server RAP

**027-529** Unexpected error of the SMB scan data server.

### Procedure

1. 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.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-530 File Name Duplicate Failure in SMB RAP

**027-530** Cancel Job is selected for SMB scan File Name Conflict.

### Procedure

1. Advise the customer to set File Name Conflict to other than Cancel Job.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-531 SMB Scan Filing Policy Injustice RAP

**027-531** Incorrect SMB scan filing policy (when additional items are selected).

### Procedure

1. Advise the customer to check that the file format is not set to Multi-page When Add is selected for File Name Conflict.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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

1. Advise the customer to check that the NEXTNAME.DAT file is correct when Add is selected for File Name Conflict.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-543 SMB Server Name Specification Error RAP

**027-543** The SMB server (NetBIOS) name specification is incorrect.

### Procedure

1. Advise the customer to check that the server name of the SMB server is correct.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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

1. Advise the customer to have the system administrator set the domain name and user name correctly.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-549, 572, 573, 574, 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

1. Advise the customer to perform the operation again.
2. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 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 device 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 device are connected to different subnets, check that the device 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 device can resolve the addresses from the WINS server.
  - b. Check if the authentication server and the device 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.
6. Advise the customer to perform the same operation.
7. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
8. Contact Support for further instructions.



## 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

1. Advise the customer to check that the authentication server and the device 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. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-566 SMB Protocol Error 4-026 RAP

**027-566** SMB protocol error (4-026), the library has not been initialized.

### Procedure

1. Advise the customer to check if the SMB client has been started.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-569 SMB (TCP/IP) Not Started RAP

027-569 SMB (TCP/IP) is not started

### Procedure

1. Advise the customer to check that SMB (TCP/IP) is enabled.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-584 SMB Protocol Error 4-044 RAP

027-584 SMB protocol error (4-044), authentication server common security mode is operating.

### Procedure

1. Advise the customer to set the authentication server to Windows other than Win95/Win98/Me.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-585 SMB Protocol Error 4-045 RAP

**027-585** SMB protocol error (4-045), scan login not available time period.

### Procedure

1. Advise the customer to check with the system administrator for the time period when logging in is allowed.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-586 SMB Protocol Error 4-046 RAP

**027-586** SMB protocol error (4-046), the password has expired.

### Procedure

1. Advise the customer to obtain a valid password from the system administrator.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-587 SMB Protocol Error 4-047 RAP

027-587 SMB protocol error (4-047), the password must be changed.

### Procedure

1. Advise the customer to request the system administrator to disable the change password at next login setting.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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

1. Advise the customer to request the system administrator to enable or unlock the user account. as necessary.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-590 SMB Protocol Error 4-050 RAP

**027-590** SMB protocol error (4-050), the user account has expired.

### Procedure

1. 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.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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

1. Advise the customer to request the system administrator set a user password.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-700 Mail Address Domain Error RAP

**027-700** The domain of the destination mail address is designated as a prohibited domain.

### Procedure

1. Advise the customer to check that the domain of the destination mail address is not designated as a prohibited domain.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-701 Disconnected Network Cable RAP

**027-701** In external authentication, the disconnected cable is detected.

### Procedure

1. Make sure the network cable is connected correctly.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-702 to 027-706, 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 device certificate exists (before connection to the server).

**027-707** The device certificate expired (before connection to the server).

**027-708** The device 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 machines 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 device certificate is the same as that set up on the device.
  - e. Advise the customer to perform the same operation.
2. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 027-710 to 027-716 S/MIME Mail Error RAP

**027-710** The mail I/O received S/MIME mail even though S/MIME was disabled.

**027-711** SMIME 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.

**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. 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 device.
  - d. Check that the mail address written on the device certificate is the same as that set up on the device.
  - e. Request the customer that the sender needs to send a mail that is signed with a valid certificate because the sender certificate has expired.
2. Request the customer that the device may be blocking the attacks.
3. Update the Software, [GP 9](#).
4. Advise the customer to perform the same operation.
5. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.

## 027-717 No MX Record at DNS RAP

**027-717** An inquiry 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 device is set properly.
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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 properly. Check that the PC running the application interface is registered in DNS.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.



## 027-722 Extension Server Timeout RAP

027-722 Application interface during web service interface - timeout.

### Procedure

Perform the steps that follow:

1. Request 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. Update the Software, [GP 9](#).
3. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 027-724 to 027-726 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. Update the Software, [GP 9](#).
3. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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

1. Advise the customer to check that the server disk is normal and has free space, and then retry the operation.
2. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
3. Contact Support for further instructions.

## 027-733 Server SSL Error RAP

027-733 The SSL setting for the job template server did not become enabled.

### Procedure

1. Advise the customer to check that the SSL setting for the job template server is enabled.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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 device.
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 device 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 device certificate validation.
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 027-735 Device SSL Configuration Error RAP

**027-735** When SSL transfer was instructed, the SSL setting of the device is disabled.

### Procedure

1. Advise the customer to enable the SSL settings of the machine or specify HTTP as the transfer protocol.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-736 Device Certificate Error RAP

**027-736** When server certificate validation is instructed, the server certificate validation of the device is disabled.

### Procedure

1. Advise the customer to enable the server certificate validation settings of the machine or disable the server certificate validation setting during transfer.
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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 that 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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 error persists, perform the [016-210](#), [016-506](#), [016-777](#), [016-780](#), [016-798](#) 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 027-750 Fax Document Incongruent RAP

027-750 Fax Document Incongruent

(1) With Internet FAX Document E-mail and Internet FAX Transfer prohibited, Internet FAX Document E-mail and Internet FAX Transfer instructions were received.

(2) Printing Scan and Printer documents was instructed during interruption.

### Procedure

Perform the steps that follow:

1. For Internet FAX received document, enable the transfer setting.
2. Clear interruption and print when printing Scan and Printer documents during interruption.
3. Update the Software, [GP 9](#).
4. Advise the customer to perform the same operation.
5. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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.
  - b. Check the communication route that can be reached.
  - c. Ping the DNS server.
  - d. Check if the CA certificate of the destination server is imported to the device by using the browser.
  - e. Check if the device does not go through the proxy that SSL has the function to check the communication details SSL.
  - f. Specify the device as out of the SSL proxy target.
  - g. Check if the server supports the relevant encryption method.
  - h. Set the client certificate to the device.
  - i. Import the client certificate to the device and set to use as the client certificate.
  - j. Check the daylight saving time difference to see if the date/time of the device is correct.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## **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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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.
3. Update the Software, [GP 9](#).
4. Advise the customer to perform the same operation.
5. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.

## 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

1. Update the Software, [GP 9](#).
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 027-763 Auditron Cannot Check User RAP

**027-763** The device 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 device so that it can correctly communicate with the external accounting server.



## 027-764 AirPrint Scan Data Transfer Fail RAP

**027-764** The device 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.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 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.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 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.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 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. Make sure the device is registered.
3. Make sure the scan SSL server certificate of the document destination WebDAV server is correct. For example:
  - a. Check the expiration date.
  - b. Check that the device time is correct.
  - c. Check that they are not on the dispenser 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 device.
5. Update the Software, [GP 9](#).
6. Advise the customer to perform the same operation.
7. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
8. Contact Support for further instructions.

## 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. Make sure the correct network interface is selected.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 027-772, 773, 774, 776 SMTP Server Error RAP

**027-772 SMB Protocol error 4-032:** Incorrect parameter.

**027-773 SMB Protocol error 4-033:** Incorrect parameter.

**027-774 SMB Protocol error 4-034:** Incorrect parameter.

**027-776 SMB Protocol error 4-036:** Incorrect parameter.

### Procedure

1. Perform the operation again.
2. If the error persists, perform [GP 37](#), How to Obtain Log Files then contact Service for further instruction.

## 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 Attestation-Fails by SMTP-AUTH RAP

**027-779** Authentication fail (after connecting to the server).

### Procedure

1. Advise the customer to check if the authentication information (user name/password) has been set correctly.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 027-780 WebDAV Network Interface Fail RAP

**027-780** The specified network interface can not be used.

### Procedure

1. Advise the customer to select the network interface that can be used.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 027-781 WebDAV Spool Size Over RAP

**027-781** Writing of scan data spool file failed because the disk is full.

### Procedure

1. Advise the customer to split the scan data.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. Obtain logs immediately after the error has occurred without turning the power off and on. Perform [GP 37](#), and contact Support with the logs as required.

## 027-782 WebDAV Server Redirector Limit RAP

**027-782** Maximum number of WebDAV server redirections has occurred.

### Procedure

1. Advise the customer to check the redirection settings of the WebDAV server.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 027-784 WebDAV Proxy Server Authentication RAP

027-784 WebDAV proxy server authentication failure.

### Procedure

1. Advise the customer to check that the user name and password for the proxy server that was configured on the device are correct.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.



## 027-785, 027-786 WebDAV Server Time-Out RAP

**027-785** WebDAV server response timeout.

**027-786** WebDAV server network timeout.

### Procedure

1. Advise the customer to try again later. If the situation does not improve, consult with the Network Administrator.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 027-787 WebDAV File Name Duplication Fail RAP

**027-787** Override is selected in the scan file name duplication when processing.

### Procedure

1. 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).
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 027-790 WebDAV File Not Found RAP

027-790 WebDAV server not found.

### Procedure

1. Advise the customer to make sure WebDAV storage path and directory specified in the server exist.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 027-792 WebDAV Server Conflict RAP

027-792 WebDAV server conflict.

### Procedure

1. Advise the customer to make sure WebDAV storage path and directory specified in the server exist.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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.
3. Update the Software, [GP 9](#).
4. Advise the customer to perform the same operation.
5. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.

## 027-796 Email Not Printed RAP

027-796 Email print control through user settings.

### Procedure

Perform the steps that follow:

1. Update the Software, [GP 9](#).
2. Advise the customer to perform the same operation.
3. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
5. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.

## 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 device, then repeat the operation.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 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. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. Enter [GP 37](#), How to Obtain Log Files to gather machine logs.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Ask the customer for the procedures to duplicate the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 027-799 WebDAV Server Insufficient Storage RAP

**027-799** There is no free space in the storage location on the WebDAV server.

### Procedure

1. Advise the customer to check whether or not there is free space in the storage location.
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 028-910 Wrong fuser Type RAP

**028-910** The fuser needs to be replaced.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Install a new fuser, [PL 7.1 Item 1](#).

## 028-912 Fusing Unit Lever Envelope Fail RAP

**028-912** The Fusing Unit is set to envelope mode and is unable to process the specified paper (other than envelope).

### Headed Block

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 4**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Change the fusing unit to standard mode.
2. If the fault persists:
  - a. Check the cable between the fuser, **PL 7.1 Item 1** and the MCU PWB **PL 18.1 Item 1**, **PL 18.5 Item 1** or **PL 18.9 Item 1**.
  - b. Install a new fuser, **PL 7.1 Item 1**.

## 028-986 and 028-987 Paper Size/No Paper Detected Error RAP

**028-986** Tray size mismatch, tray cannot detect the paper size.

**028-987** ATS/APS No Destination Error, the paper instructed to print 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 4**. 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. Use paper that is within specification. Refer to **GP 26**, Media Specifications.
  - b. Ensure the paper is the correct size for the job.
  - c. Restart the print job during user intervention.

## 028-988 and 028-990 Tray 5 Size Mismatch RAP

BSD-ON: [BSD 46: OPF 550 PWB, OPF 550 Size Switch Assembly](#)

BSD-ON: [BSD 07: Registration and no paper sensor](#)

**028-988** Size mismatch tray 5, measured length mismatch.

**028-990** Tray 5 size mismatch.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

- [GP 11](#), How to Check a Sensor

Perform the steps that follow:

1. Advise the customer to verify the paper used is within specification. Refer to [GP 26](#), Media Specifications.
2. Verify the UI is set to the correct media size as shown in [GP 26](#), Media Specifications.
3. If tray 5 is an OPF 550 feeder assembly, check the OPF 550 size switch assembly for damage. If the OPF 550 size switch assembly is damaged, install a new OPF 550 size switch assembly, [PL 10.1 Item 12](#).
4. If tray 5 is the HCF, check the HCF feeder assembly for damage. If the feeder assembly is damaged install a new HCF feeder assembly, [PL 11.1 Item 5](#).
5. Enter [dC330](#) code 071-103 to activate the registration sensor, [PL 15.2 Item 13](#). If the registration sense fails to activate, install a new registration sensor, [PL 15.2 Item 13](#).
6. If the fault persists, install a new MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 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. Check the configuration of the server.
3. Check the access from the PC to the scan document destination WebDAV server.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.



## 029-702 WebDAV Client RAP

**029-702** An unexpected error has occurred in the internal library.

### Procedure

1. Update the Software, [GP 9](#).
2. Advise the customer to perform the same operation.
3. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
4. Contact Support for further instructions.

## 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, 029-711 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

1. 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).
2. Update the Software, [GP 9](#).
3. Advise the customer to perform the same operation.
4. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
5. Contact Support for further instructions.

## 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 (PAC-File) 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. Check the subnet mask setting.
4. Check the DNS server address setting.
5. Update the Software, [GP 9](#).
6. Advise the customer to perform the same operation.
7. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
8. Contact Support for further instructions.

## 029-707, 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.
4. Update the Software, [GP 9](#).
5. Advise the customer to perform the same operation.
6. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
7. Contact Support for further instructions.

## 029-710, 029-717 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

1. Request the customer network administrator Check the Internet connection proxy settings “automatically detect” is not checked.
2. The correct proxy settings for the customer network must be manually entered for the PACFile to be found. Advise the customer to network administrator correct the proxy issues.
3. Update the Software, [GP 9](#).
4. Advise the customer to perform the same operation.
5. If the error persists, perform [GP 37](#), How to Obtain Log Files, immediately after the error has occurred.
6. Contact Support for further instructions.



## 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 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, 318, 324 FAX Fault RAP

**033-312: Controller Not Respond When System Is Changing Mode**

**033-318: Image Processing Error**

**033-324: USB State Change Error**

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the FAX PWB, PL 18.1 Item 9 for correct installation and all harnesses are connected and fully seated.
3. Update the Software, GP 9.
4. Check for a dial tone in the UI.
5. Check the LVPS PWB, PL 18.1 Item 16 for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
6. Install a new FAX PWB, PL 18.1 Item 9.
7. If the error persists, enter GP 37, How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-328 to 033-340 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. Switch off, then switch on the machine, GP 4.
2. Enter GP 15, Special Boot Modes, and initialize the HDD and NVM.
3. If the error persists, enter GP 37, How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-330 to 033-336 Non-mounted Channel RAP

**033-330** Foip unrecoverable error.

**033-331** Foip controller init fail.

**033-332** Foip cont not respond when system is booting.

**033-333** Foip cont not respond when system is sleeping.

**033-334** Can not send a message to foip cont.

**033-335** Illegal fault code notice.

**033-336** Access to a nonmounted channel.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the FAX PWB, PL 18.1 Item 9 for correct installation and all harnesses are connected and fully seated.
3. Update the Software, GP 9.
4. Check for a dial tone in the UI.
5. Check the LVPS PWB, PL 18.1 Item 16 for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
6. Install a new FAX PWB, PL 18.1 Item 9.
7. If the error persists, enter GP 37, How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-339 FAX 2 Not Responding RAP

**033-339** Fax 2 not respond when system is sleeping.

When transitioning to sleep, there is no response from FAX controller 2.

### Procedure

Switch off, then switch on the machine, GP 4.

## 033-363 FAX Card Reset (Reboot) RAP

**033-363** The controller reset the FAX card because the FAX card did not respond.

### Procedure

1. Switch off, then switch on the machine, [GP 4](#).
2. Obtain the log file using the Web UI, [GP 37](#), How to Obtain Log Files.
  - If there was a restart after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to '0' to perform log collection and return the NVM (700-530) to '1' after completing the procedure.
3. Request the following from the customer to duplicate the error:
  - a. The exact procedures for reproducing the error.
  - b. Check the job type: Send Mail, Receive Mail, Broadcast Send, Polling, or Folder Receipt.
  - c. Check the job settings from the Panel.
4. Switch off, then switch on the machine, [GP 4](#).
5. Perform [GP 37](#), How to Obtain Log Files.
6. If the error persists, contact Support for further instruction.

## 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

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Check the remote machine and then request for the sender to send again.
3. Check the line status and that a dial tone is heard from the UI.
4. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
5. Update the Software, [GP 9](#).
6. Check for a dial tone in the UI.
7. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
8. Install a new FAX PWB, [PL 18.1 Item 9](#).
9. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.



## 033-508, 033-511 Destination Polling Error RAP

**033-508** No polling document in the remote machine.

**033-511** DTS/NSC resending exceeded the limit.

### Procedure

Perform the steps that follow:

1. Advise the customer check the destination device for a problem, then repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-509 DCS/NSS Resend Exceeded RAP

**033-509** DCS/NSS re-send over.

### Procedure

Perform the steps that follow:

1. Advise the customer repeat the operation. If the problem persists after repeating the operation, check the status of the receiver at the destination side.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-510 Fallback Error RAP

033-510 FTT was received at 2400 bps.

### Procedure

Perform the steps that follow:

1. Advise the customer repeat the operation. If the problem persists after repeating the operation, check the status of the receiver at the destination side.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 request for the sender to check the remote machine for an error, then re-send.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-523 and 033-546 Line Not Connected RAP

**033-523** Channel 1 not connected.

**033-546** The dial tone could not be detected.

### Procedure

Perform the steps that follow:

1. Make sure the relevant telephone cable is connected correctly.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-530 DTMF Illegal Procedure RAP

**033-530** An invalid procedure signal was received.

### Procedure

Perform the steps that follow:

1. Request the customer that there may be a mistake in how the operator is performing the DTMF procedure.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 request for the sender to check the remote machine for an error, then re-send.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 check the recipient's address, folder information, etc. then repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-536, 537, 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 canceled.

**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 repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 specify the appropriate address by using the speed dial number that is registered with the correct FAX address number, etc.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 check the dial data, then repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 check the address number and whether the remote party is a FAX machine.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-547 Abort During Transmission RAP

033-547 Aborted during transmission (operation was canceled).

### 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 repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 wait for a while, then repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-550 Cannot Disable FAX Service RAP

**033-550** The system is attempting to transition to the diag mode, etc., but was unable to do so because FAX communication is in progress.

### Procedure

Perform the steps that follow:

1. Advise the customer wait for the job to complete its transmission, then repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.



## 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 consult with the operator of the remote machine on whether the wrong F Code was input.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 consult with the operator of the remote machine on whether the wrong machine password was input.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 wait for the jobs that are waiting to be sent to decrease or reduce the number of addresses, then try again.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 change the FAX machine setting to be able to receive FAX messages even if destination does not send remote ID.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 specify the correct paper size and check that the paper trays are correctly loaded with the paper guides correctly adjusted.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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:
  - a. Wait for a while then check the FAX function settings and dial numbers, then resend data if needed.
  - b. Check the self-terminal status and line status, then perform the operation again.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-571, 033-588 Manual Send Job Canceled RAP

**033-571** At the start of the Job, the report area for FAX was detected to be full and the job was canceled.

**033-588** T38 packet loss causing unrecoverable error was detected.

### Procedure

Perform the steps that follow:

1. Advise the customer wait for some of the jobs that are queued to be completed or canceled, then retry the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-572 FAX Report Print Job Canceled 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 canceled.

### Procedure

Perform the steps that follow:

1. For a single occurrence, take no action.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 check the address and input the correct one.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 set the correct device VoIP gateway address to correspond with the phone number that was input.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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:
  - 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. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-593 Canceled 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 request for the sender to re-send.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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:
  - 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. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-701 Retry Timeout RAP

**033-701** The communication did not end normally within the retry timeout time.

### Procedure

1. Switch off, then switch on the machine, [GP 4](#).
2. Check the remote machine and then request for the sender to send again.
3. Check the line status and that a dial tone is heard from the UI.
4. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
5. Update the Software, [GP 9](#).
6. Check for a dial tone in the UI.
7. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
8. Install a new FAX PWB, [PL 18.1 Item 9](#).
9. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.



## 033-710, 712, 713, 717, 718, 719, 721 Document Not Found RAP

**033-710** The specified document cannot be found

**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 repeat the operation.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-724 FAX Receive Memory Over Flow RAP

**033-724** The receive operation was aborted, the maximum limit of receivable image data for one FAX communication was exceeded.

### Procedure

Perform the steps that follow:

1. Ask the sender to divide the document into two or more parts or reduce the resolution of the data.
2. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 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 canceled 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. Switch off, then switch on the machine, [GP 4](#).
3. Check the remote machine and then request for the sender to send again.
4. Check the line status and that a dial tone is heard from the UI.
5. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
6. Update the Software, [GP 9](#).
7. Check for a dial tone in the UI.
8. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
9. Install a new FAX PWB, [PL 18.1 Item 9](#).
10. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.

## 033-733, 735, 741, 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.

**033-743** 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 repeat the operation.
2. Advise the customer break up the number pages or reduce the number of images in the send operation.
3. Switch off, then switch on the machine, [GP 4](#).
4. Check the remote machine and then request for the sender to send again.
5. Check the line status and that a dial tone is heard from the UI.
6. Check the FAX PWB, [PL 18.1 Item 9](#) for correct installation and all harnesses are connected and fully seated.
7. Update the Software, [GP 9](#).
8. Check for a dial tone in the UI.
9. Check the LVPS PWB, [PL 18.1 Item 16](#) for loose connections between the FAX PWB and LVPS PWB and that all connectors are fully seated.
10. Install a new FAX PWB, [PL 18.1 Item 9](#).
11. If the error persists, enter [GP 37](#), How to Obtain Log Files, to acquire logs and contact Support for further instruction.



## 041-310 IM Logic Fail RAP

041-310 IM software control error detected.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Update the Software, [GP 9](#).
3. If the error persists, install new components as necessary:
  - MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
  - ESS PWB, [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (MFP Tall), [PL 18.9 Item 5](#) (SFP).

## 041-340 to 041-363 MCU NVM (EEPROM) Fail RAP

041-340 MCU NVM (EEPROM) Data Abnormality.

041-341 MCU NVM (EEPROM) Access Error.

041-342 MCU NVM (EEPROM) Read Verify Error.

041-343 MCU NVM (EEPROM) Write Verify Error.

041-363 MCU NVM (EEPROM) Data Broken Error.

### Initial Actions

Enter [dC131](#). Check that the NVM values that follow are set to default:

- 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

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Update the Software, [GP 9](#).
3. Enter [GP 15](#), Special Boot Modes and initialize the NVM.
4. If the error persists, install a new MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 041-388 MK Logic Fail RAP

**041-388** When fatal abnormality was detected in marking control.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Update the Software, [GP 9](#).
3. Enter [GP 15](#), Special Boot Modes and initialize the NVM.
4. If the error persists, install a new MCU PWB, [PL 18.1 Item 1 \(MFP\)](#), [PL 18.5 Item 1 \(MFP Tall\)](#), [PL 18.9 Item 1 \(SFP\)](#).

## 041-603, 041-604 Temp/Humidity Sensor Fail RAP

**041-603** Temperature Sensor value is outside the upper and lower limit range.

**041-604** Humidity Sensor value is outside the upper and lower limit range.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Install a new CTD sensor assembly, [REP 6.1](#).

## 042-313 Rear Cooling Fan1 Fail RAP

042-313 Rear Fan does not rotate correctly.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

[GP 10](#), How to Check a Motor.

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#).
2. Enter diagnostics [GP 1](#).
3. Enter [dC330](#) (042-003), and check the rotation of the rear fan [PL 4.1 Item 5](#).
4. Exit diagnostics, [GP 1](#).
5. If the error persists, install a new MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
6. Rotate the rear fan manually looking for any signs of wear or resistance to rotation.
7. Check the wiring at the rear fan and the LVPS PWB, verify [P/J289](#), Is fully seated.
8. Check wiring between the LVPS PWB and the MCU PWB verify each cable of [P/J284](#) and [P/J280](#) is continuous.
9. Install a new rear fan [PL 4.1 Item 5](#).
10. Install a new LVPS PWB, [PL 18.1 Item 16](#) (MFP), [PL 18.5 Item 16](#) (MFP Tall), [PL 18.9 Item 16](#) (SFP).

## 042-325 Device Fault RAP

042-325 Abnormal rotation of the drive motor assembly, [PL 3.1 Item 7](#).

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

[GP 10](#), How to Check a Motor.

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#).
2. Enter diagnostics [GP 1](#).
3. Enter [dC330](#) (071-061), and check the rotation of the drive motor assembly.
4. Exit diagnostics, [GP 1](#).
5. Check the wiring between the drive motor assembly and the MCU PWB, verify [P/J571](#) and [P/J570](#) are fully seated and no open circuits.
6. Check the drive gear for wear, damage or bearing blockage.
7. Check the load towards the drive motor assembly, install new components as necessary:
  - Drive motor assembly, [PL 3.1 Item 7](#).
8. Install new components as necessary:
9. If the error persists, install new components as necessary:
  - MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
  - ESS PWB, [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (MFP Tall), [PL 18.9 Item 5](#) (SFP).

## 042-335 Device Fault (Main Fan Fail) RAP

042-335 Abnormal rotation of the Main Fan.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

[GP 10](#), How to Check a Motor.

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#).
2. Enter diagnostics [GP 1](#).
3. Enter [dC330](#) (042-001), and check the rotation of the main fan [PL 4.1 Item 1](#), the error persists,
4. Install a new MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
5. Exit diagnostics, [GP 1](#).
6. Rotate the main fan manually looking for any signs of wear or resistance to rotation.
7. Check the connections at the main fan and the LVPS PWB, verify [P/J289](#) is fully seated.
8. Check the connections at the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated.
9. Check continuity between the LVPS PWB and the MCU PWB verify each cable of [P/J284](#) and [P/J280](#) is continuous.
10. Install a new fusing assembly, [PL 7.1 Item 1](#).
11. Install a new LVPS PWB, [PL 18.1 Item 16](#) (MFP), [PL 18.5 Item 16](#) (MFP Tall), [PL 18.9 Item 16](#) (SFP).

## 042-336 Device Fault (SUB Fan Fail) RAP

042-336 Abnormal rotation of the SUB Fan, [PL 4.1 Item 3](#).

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedure that follows as necessary:

[GP 10](#), How to Check a Motor.

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#).
2. Enter diagnostics [GP 1](#).
3. Enter [dC330](#) (042-003), and check the rotation of the sub fan [PL 4.1 Item 3](#), the error persists,
4. Install a new MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
5. Exit diagnostics, [GP 1](#).
6. Rotate the sub fan manually looking for any signs of wear or resistance to rotation.
7. Check the wiring at the sub fan and the LVPS PWB, verify [P/J294](#) and [P/J293](#) are fully seated.
8. Check the wiring at the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated.
9. Install a new sub fan, [PL 4.1 Item 3](#).
10. Install a new LVPS PWB, [PL 18.1 Item 16](#) (MFP), [PL 18.5 Item 16](#) (MFP Tall), [PL 18.9 Item 16](#) (SFP).



## 042-348 Over Temperature Detect Fail RAP

**042-348** Temperature inside of the machine increases more than specified value and unable to continue printing.

**BSD-Reference:** [BSD 01: Main Fan](#)

### Procedure

#### WARNING

**Do not handle the fuser components until they have cooled. Some fuser components operate at hot temperatures and can produce serious personal injury if touched.**

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the following procedures:

1. Check [GP 27](#), Environmental Data and [GP 22](#), Installation Space Requirements for proper clearance space around printer for ventilation, ambient room temperature.
2. Enter [dC330](#) code 042-001 to check the rotation of the main fan, [PL 4.1 Item 1](#).
3. Refer to BSD MCU LVPS fan above to check the wiring between the main fan, MCU PWB, and LVPS PWB and that all connectors are fully seated and undamaged.
4. If the error persists, install new components as necessary:
  - a. Main fan, [PL 4.1 Item 1](#).
  - b. Fusing assembly, [PL 7.1 Item 1](#).
  - c. MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
  - d. ESS PWB, [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (MFP Tall), [PL 18.9 Item 5](#) (SFP).

## 044-329 Shutdown Fail RAP

**044-329** Shutdown has not been completed during the NVM time after the reference trigger.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).

## 045-310 Image Ready NG RAP

Image preparation error in the ESS PWB.

### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

### Procedure

1. Switch off, then switch on the machine, GP 4.
2. Check the wiring between the MCU PWB and the ESS PWB and verify the connectors are fully seated.
3. Update the Software, GP 9.
4. If the error persists, install a new, ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

## 045-311 Controller Communication Fail RAP

045-311 Communication failure between ESS PWB and MCU PWB 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 4. 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 4.
2. Update the Software, GP 9.
3. Check the harness between the MCU PWB and the ESS PWB and verify the connectors are fully seated.
4. Install new components in order as necessary:
  - ESS MCU FCC, PL 18.1 Item 2 (MFP), PL 18.5 Item 2 (MFP Tall), PL 18.9 Item 2 (SFP).
  - MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
  - ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

**NOTE:** To ensure integrity of the FFC connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

### CAUTION

Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

**NOTE:** When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 1, **Proper FFC Cable Removal**.

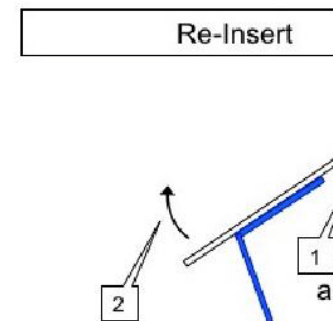
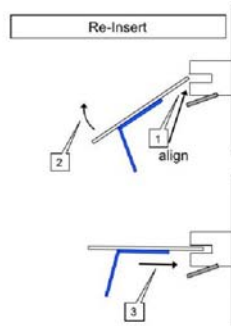


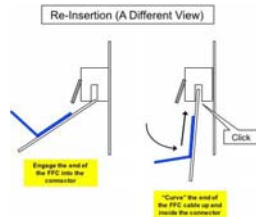
Figure 1 Proper FFC Cable Removal

1. Slip the core down the FFC cable.
2. To ease installation and ensure proper alignment of the FFC cable, bend the blue “grip tab” 90 degrees perpendicular to the FFC.
3. Refer to [Figure 2](#) and [Figure 3](#), **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive side, of the FFC cable against the edge of the connector and centered to the connector.

**NOTE:** Remember; there is no need to actuate the lever when inserting the FFC into the connector. The connector will automatically lock when the FFC is fully seated in the connector.



**Figure 2 Cable Perpendicular Insertion**



**Figure 3 Cable Parallel Connector Insertion**

4. Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.

## 045-370 LPH DL Fail Power RAP

045-370 ASIC register error during IBY initial DL check.

**NOTE:** Failure occurs on LPH of all colors simultaneously. Common parts (such as power connectors on MD board) could be defective. LPH color actually failing can be checked by NVM.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Check the cable between the ESS PWB and the LPH.
3. Install new components in order as necessary:
  - ESS PWB, [PL 18.1 Item 5 \(MFP\)](#), [PL 18.5 Item 5 \(MFP Tall\)](#), [PL 18.9 Item 5 \(SFP\)](#).
  - XERO CRUM LPH FFC Kit.
  - LPH, [PL 2.1 Item 1](#).

## 045-371 LPH DL Fail MULT RAP

045-371 ASIC register error during IBY initial DL check.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the harness between the ESS PWB and the MCU PWB and verify the connector are fully seated.
3. Install new components in order as necessary:
  - ESS MCU FFC, PL 18.1 Item 2 (MFP), PL 18.5 Item 2 (MFP Tall), PL 18.9 Item 2 (SFP).
  - MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
  - ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

**NOTE:** To ensure integrity of the FFC connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

#### CAUTION

Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

**NOTE:** When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 1, **Proper FFC Cable Removal**.

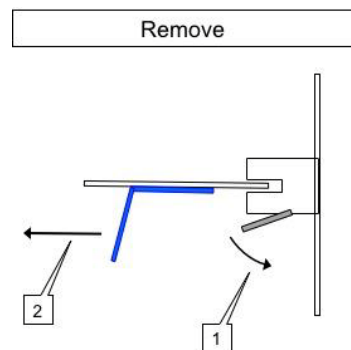


Figure 1 Proper FFC Cable Removal

1. Slip the core down the FFC cable.
2. To ease installation and ensure proper alignment of the FFC cable, bend the blue “grip tab” 90 degrees perpendicular to the FFC.
3. Refer to Figure 2 and Figure 3, **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive side, of the FFC cable against the edge of the connector and centered to the connector.

**NOTE:** Remember; there is no need to actuate the lever when inserting the FFC into the connector. The connector will automatically lock when the FCC is fully seated in the connector.

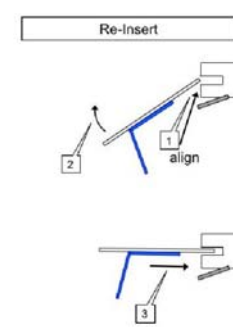


Figure 2 Cable Perpendicular Insertion

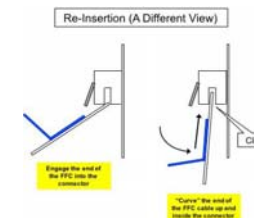


Figure 3 Cable Parallel Connector Insertion

4. Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.

## 047-216 Finisher Comm Fail RAP

047-216 Reply from the communication with the finisher is judged to be an error.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the harness between the IOT and Finisher and verify the connector are fully seated.



## 058-310, 311, 315, 316, 317 Fusing Error RAP

058-310 Over Temperature on Fusing Assembly Detected

058-311 Over Temperature on Fusing Assembly Detected

058-315 STS Sensor Fail Detected

058-316 Fusing Unit HB STS Center Low Temperature Fail - Center temperature below abnormal temperature detection limit, continuously detected more than specified abnormality detection count.

058-317 Fusing Ep U4 ShortHeater Slowheat Center Fail - Center temperature not rising as normally expected within the specified time to heat the Center.

### WARNING

Do not handle the fuser components until they have cooled. Some fuser components operate at hot temperatures and can produce serious personal injury if touched.

### CAUTION

*Printing has been suspended because inside of the Printer is extraordinarily hot. Wait until the error message turns off with the power to the Printer remained on.*

### Procedure

### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the following procedures:

Perform the 010-329 to 010-346 fusing assembly HR RAP.

## 059-314, 315, 326 Fusing Error RAP

059-314 Fault or Error - Fusing Assembly HR STS Center Disconnection Fail.

059-315 Fusing Assembly HR STS Center Over Temperature Fail - Center temperature beyond abnormal temperature detection limit, continuously detected more than specified abnormality detection count.

### WARNING

Do not handle the fuser components until they have cooled. Some fuser components operate at hot temperatures and can produce serious personal injury if touched.

### CAUTION

*Printing has been suspended because inside of the Printer is extraordinarily hot. Wait until the error message turns off with the power to the Printer remained on.*

### Procedure

### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the following procedures:

Perform the 010-329 to 010-346 fusing assembly HR RAP.

## 059-321, 059-324 Fusing Error RAP

059-321 Fusing Assembly Life End

059-324 Abnormal temperature variation on Heat Roll is detected.

### WARNING

**Do not handle the fuser components until they have cooled. Some fuser components operate at hot temperatures and can produce serious personal injury if touched.**

### CAUTION

*Printing has been suspended because inside of the Printer is extraordinarily hot. Wait until the error message turns off with the power to the Printer remained on.*

### Procedure

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Remove any remaining paper from the fusing assembly.
2. If the error persists, install a new fusing assembly, [PL 7.1 Item 1](#).



## 060-341 to 060-352 LPH Fault RAP

**060-341 LPH DATA Fail Y** Large pixel count error between the video output and LPH. Image abnormality may occur.

**060-342 LPH DATA Fail M** Large pixel count error between the video output and LPH. Image abnormality may occur.

**060-343 LPH DATA Fail C** Large pixel count error between the video output and LPH. Image abnormality may occur.

**060-344 LPH DATA Fail K** Large pixel count error between the video output and LPH. Image abnormality may occur.

**060-349 LPH Reset Fail Y** LPH reset due to a noise was detected. Possibly caused by an external noise.

**060-350 LPH Reset Fail C** LPH reset due to a noise was detected. Possibly caused by an external noise.

**060-351 LPH Reset Fail M** LPH reset due to a noise was detected. Possibly caused by an external noise.

**060-352 LPH Reset Fail K** LPH reset due to a noise was detected. Possibly caused by an external noise.

### Procedure

#### WARNING

**Switch off the electricity to the machine, GP 4. 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, then switch on the machine, [GP 4](#).
2. Verify the connections between LPH where failure is occurring and the ESS PWB at [P/J1363](#). the error persists,
  - Install a new LPH color head assembly, [PL 2.1 Item 1](#).
3. Check the LPH Xerographic CRUM FFC, for excessive wear or breakage.
  - Install a new, LPH Xerographic CRUM FFC.
4. If the error persists, install a new ESS PWB, [PL 18.1 Item 5 \(MFP\)](#), [PL 18.5 Item 5 \(MFP Tall\)](#), [PL 18.9 Item 5 \(SFP\)](#).
  - After installing a new ESS PWB and the problem continues call Support for further instruction

## 061-354 to 061-357 and 061-362 to 061-393 LPH Fault RAP

**061-354 LPH DL Fail Y** ASIC register error during IBY initial DL check.

**061-355 LPH DL Fail C** ASIC register error during IBY initial DL check.

**061-356 LPH DL Fail M** ASIC register error during IBY initial DL check.

**061-357 LPH DL Fail K** ASIC register error during IBY initial DL check.

**061-362** Communication error between ESS and 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 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 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 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 LPH (data read 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 LPH (data read 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 LPH (data read 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 LPH (data read 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 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 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 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 LPH (error in the communication IC or cable). It may occur due to an external noise, poor connection of FFC, poor power supply, etc.

**061-390** Large pixel count error between the video output and LPH. Image abnormality may occur.

**061-391** Large pixel count error between the video output and LPH. Image abnormality may occur.

**061-392** Large pixel count error between the video output and LPH. Image abnormality may occur.

**061-393** Large pixel count error between the video output and LPH. Image abnormality may occur.

### Procedure

1. Switch off, then switch on the machine **GP 4**, the error persists,
2. Perform the **060-341 to 060-352** LPH Fault RAP.

## 061-358 to 061-361 LPH Config Fail RAP

**061-358 LPH Config Fail Y** Model number of installed LPH could be incorrect. Memory inside of LPH could be defective.

**061-359 LPH Config Fail M** Model number of installed LPH could be incorrect. Memory inside of LPH could be defective.

**061-360 LPH Config Fail C** Model number of installed LPH could be incorrect. Memory inside of LPH could be defective.

**061-361 LPH Config Fail K** Model number of installed LPH could be incorrect. Memory inside of LPH could be defective.

### Procedure

1. Switch off, then switch on the machine, **GP 4**
2. Verify the correct LPH **PL 2.1**, is installed for the pertinent Y,M,C,K error.

## 062-277, 316, 399 DADF Fail RAP

**062-277** Communications cannot be established between the ESS PWB and the DADF Assembly.

**062-316** Error detected from the motor driver of the DADF motor.

**062-399** DADF-Cont I/O Cable Connection Fail Connection problem of DADF cable was detected.

### Procedure

#### WARNING

Switch off the electricity to the machine, **GP 4**. 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, then switch on the machine, **GP 4**.
2. Clean the document glass and the white stripe.
3. Check the wiring between the ESS PWB **P/J1371** and the DADF assembly. **P/J1377** for an open circuit, short circuit or poor contact.
4. Install new components as necessary:
  - DADF assembly, **PL 50.1 Item 1**.
  - ESS PWB, **PL 18.1 Item 5 (MFP)**, **PL 18.5 Item 5 (MFP Tall)**, **PL 18.9 Item 5 (SFP)**.

## 062-300 Platen Interlock Open RAP

**062-300** The Document Feeder is Open.

- 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

#### WARNING

Switch off the electricity to the machine, **GP 4**. 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.

Refer to the procedure that follows as necessary:

- **GP 11** How to Check a Sensor.

Perform the steps that follow:

1. Switch off, then switch on the machine, **GP 4**. fusing assembly
2. Check the wiring between the IIT assembly and the ESS PWB at **P/J1370**, **P/J1372**, **P/J1373** and **P/J1374** for an open circuit, short circuit or poor contact.
3. Install new components as necessary:
  - IIT assembly, **PL 50.1 Item 2**.
  - ESS PWB, **PL 18.1 Item 5 (MFP)**, **PL 18.5 Item 5 (MFP Tall)**, **PL 18.9 Item 5 (SFP)**.

## 062-311, 313, 321, 360, 371, 380, 386, 389, 393, 396-398 IIT Fail RAP

062-311 Error detected in IISS software.

062-313 Unexecutable Scan command error.

062-321 Unexecutable Scan command error.

062-360 Carriage home position error is detected.

062-371 IIT failure Lamp error is detected.

062-380 Insufficient lamp brightness was detected when performing AGC.

062-386 During AOC (darkness adjustment), detected CCD output error.

062-389 Overrunning of CRG was detected.

062-393 CISASIC communication error is detected.

062-396 Connection problem of CIS flat cable was detected.

062-397 Connection problem of ESS Video cable was detected.

062-398 Connection problem of ESS I/O cable was detected.

### Procedure

#### WARNING

Switch off the electricity to the machine, GP 4. 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, then switch on the machine, GP 4.
2. Clean the scanner platen and the white stripe.
3. Install a new IIT Assembly, PL 50.1 Item 2.
4. Install a new DADF Assembly, PL 50.1 Item 1.
5. Install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

## 062-345 IIT EEPROM Fail RAP

062-345 Write failure to IEEPROM, or communication failure with EEPROM.

### Procedure

#### WARNING

Switch off the electricity to the machine, GP 4. 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, then switch on the machine, GP 4.
2. Verify the EMMC Card is seated in the socket on the ESS PWB correctly.
3. Install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

## 062-362 X Hard Fail RAP

062-362 Hard modification of authentication device was detected.

### Procedure

#### WARNING

Switch off the electricity to the machine, GP 4. 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, then switch on the machine, GP 4
2. Install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

## 062-395 Trans Power Failure Detected RAP

062-395 Power failure on the Trans board was detected.

### Procedure

#### WARNING

Switch off the electricity to the machine, GP 4. 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, then switch on the machine, GP 4
2. Install a new ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

## 062-790 Recognition Fail RAP

**062-790** The document being scanned is prohibited by law.

### Procedure

Request the customer to refer to the Legal Notices in the User Guide to check the types of document available for copying.

## 065-221 to 065-225 CIS Fail RAP

**065-221** AGC process of CIS is not completed or settled.

**065-222** AGC process of CIS is not completed or settled.

**065-223** There is a possibility that connection problem of the CIS cable occurs.

**065-224** Information on the CIS device cannot be read correctly.

**065-225** CIS failure was detected.

### Procedure

#### **WARNING**

**Switch off the electricity to the machine, GP 4. 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, then switch on the machine, GP 4.
2. Clean the document glass and the white stripe.
3. Check the wiring between the ESS PWB P/J1371 and the DADF assembly P/J1377 for an open circuit, short circuit or poor contact.
4. Install new components as necessary:
  - DADF assembly, PL 50.1 Item 1.
  - ESS PWB, PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (MFP Tall), PL 18.9 Item 5 (SFP).

## 071-101 Paper Jam in Tray1 RAP

071-101 Paper does not actuate the Tray1 Regi Sensor within the specified time after Tray1 feed start.

### Initial Actions

- Check the condition of the paper in all trays. Refer to [GP 26](#), Media Specifications.
- Ensure that the fusing assembly, [PL 7.1 Item 1](#), is installed correctly.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the Fuser while it is hot.

Refer to the procedures that follow as necessary:

- [GP 10](#), How to Check a Motor.
- [GP 11](#), How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path and flip over the paper in the tray.
  2. Adjust the paper guides (length guide and width guide) of the tray to the paper.
  3. Check the feed and separator roll, [PL 9.1 Item 98](#), are installed correctly, not damaged or worn, and clean with a lint-free cloth slightly dampened with water if needed.
    - Install a new feed and separator roll kit [PL 9.1 Item 98](#).
  4. Verify no damage, wear, or deformation of the registration actuator [PL 15.2 Item 11](#).
  5. Enter Diagnostics, [GP 1](#).
  6. Enter [dC330](#), code 071-103. Check the registration sensor operation [PL 15.2 Item 1](#).
    - Check the wiring and continuity between the registration sensor and the MCU PWB and verify [P/J540](#), [P/J545](#), and [P/J546](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
    - Check if the voltage between the MCU PWB ground and the [P/J540](#) pin-7 is about (+5VDC).
      - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
      - b. Check the voltage from the LVPS PWB (+5VDC). Voltage between the LVPS PWB ground and the [P/J284](#) pin-5 should be about (+5VDC).
      - c. If the error persists, install new components as necessary:
        - Registration sensor (registration feeder chute assembly), [PL 15.2 Item 1](#).
        - MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
  7. Enter [dC330](#), code 071-002. Check the feed clutch operation, [PL 15.2 Item 15](#).
    - Check the wiring and continuity between the feed clutch and the MCU PWB and verify [P/J540](#), [P/J544](#), and [P/J548](#) are fully seated and no opens in the harness exist.
  - Turn off the power, remove the feed clutch, and check the wire wound resistance between both terminals. The resistance value should be approximately 240 ohms (20 degrees C).
    - a. Install a new feed clutch [PL 15.2 Item 15](#).
  - Close all interlock switches. The voltage between the MCU PWB ground and [P/J540-5](#) pin should read approximately (+24VDC).
    - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
  - Close all interlock switches and check the voltage from the LVPS PWB (+24VDC). Voltage between the LVPS PWB ground and the [P/J284-20](#) pin should be about (+24VDC).
  - If the error persists, install new components as necessary:
    - Registration feeder chute assembly, [PL 15.2 Item 1](#).
8. Enter [dC330](#), code 071-061. Check the main motor rotation, [PL 3.1 Item 1](#).
    - Abnormal motor rotation is observed.
    - Check the wiring and continuity between the main motor and the MCU PWB and verify [P/J571](#) and [P/J570](#) are fully seated and no opens in the harness exist.
    - Check the wiring and continuity between the main motor and the LVPS PWB and verify [P/J570](#) and [P/J288](#) are fully seated and no opens in the harness exist.
    - Close all interlock switches. The voltage between the LVPS PWB ground and the [P/J288-1](#)pin should read approximately (+24VDC).
      - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
    - Close all interlock switches and check the voltage from the LVPS PWB (+24VDC). Voltage between the LVPS PWB ground and the [P/J284-2](#)pin should be about (+24VDC).
    - If the error persists, install new components as necessary:
      - MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
      - LVPS PWB, [PL 18.1 Item 16](#) (MFP), [PL 18.5 Item 16](#) (MFP Tall), [PL 18.9 Item 16](#) (SFP).
  9. Exit Diagnostics, [GP 1](#).

## 072-101 and 077-117 Jam in Tray2 Error RAP

**072-101** Paper does not actuate the Tray2 registration sensor within the specified time after Tray2 feed start.

**077-117** During feeding from Tray2, registration sensor is not turned on within specified time from Tray2 path sensor ON.

### Initial Actions

- Check the condition of the paper in all trays. Refer to [GP 26](#), Paper and Media Size Specifications.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the Fuser while it is hot.

Refer to the procedures that follow as necessary:

- [GP 10](#), How to Check a Motor.
- [GP 11](#), How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path and flip over the paper in the tray.
2. Adjust the paper guides (length guide and width guide) of the tray to the paper.
3. Check the feed and separator roll, [PL 10.3 Item 98](#) are installed correctly, not damaged or worn, and clean with a lint-free cloth slightly dampened with water, as needed.
  - Install a new feed and separator roll kit [PL 10.3 Item 98](#).
4. Check for excessive wear or deformation of the registration actuator, [PL 15.2 Item 11](#).
  - Install a new registration actuator, [PL 15.2 Item 11](#).
5. Check for proper installation of the registration sensor, [PL 15.2 Item 13](#), correct if needed.
  - Install a new registration sensor, [PL 15.2 Item 13](#).
6. Enter Diagnostics, [GP 1](#).

Follow the procedure for the correct malfunctioning part:

#### 072-101 - Tray2 error is 550 OPF related.

1. Enter [dC330](#), code 071-113. Check the OPT path paper sensor operation. The OPT path paper sensor operates properly, go to step 2. If the error persists,
  - Check the wiring and continuity between the OPT path paper sensor and the 550 OPF PWB. and verify [P/J808](#) and [P/J810](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. 550 OPF feeder assembly kit, [PL 10.1 Item 1](#).

2. Enter [dC330](#), code 071-014. Check the OPT feed clutch operation. The OPT feed clutch operates properly, go to step 3. If the error persists,
  - Check the wiring and continuity between the OPT feed clutch and the 550 OPF PWB, verify [P/J805](#) and [P/J806](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. 550 OPF feeder assembly kit, [PL 10.1 Item 1](#).
3. Enter [dC330](#), code 071-015, Check the OPT takeaway clutch operation. The OPT takeaway clutch operates properly, go to step 4. If the error persists,
  - Check the wiring and continuity between the OPT takeaway clutch and the 550 OPF PWB, verify [P/J808](#) and [P/J809](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. 550 OPF feeder assembly kit, [PL 10.1 Item 1](#).
4. Enter [dC330](#), code 071-010. Check the OPF feed motor rotation. The OPF feed motor rotates properly, go to step 5. If the error persists,
  - Check the wiring and continuity between the OPF feed motor and the 550 OPF PWB, verify [P/J804](#) and [P/J803](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. 550 OPF feeder assembly kit, [PL 10.1 Item 1](#).
5. Check the wiring and continuity between the OPF PWB and the MCU PWB, [P/J800](#), [P/J801](#), and [P/J802](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
6. Check continuity between the OPF PWB and the drawer connector, verify [P/J802](#) and [P/J801](#) are fully seated and no opens in the harness exist.
  - Install new components as necessary:
    - a. MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

#### 072-101 - Tray2 error is HCF related.

1. Enter [dC330](#), code 071-113. Check the HCF paper path sensor operation [PL 11.3 Item 6](#). The HCF paper path sensor operates properly, go to step 6. If the error persists,
  - Check the wiring and continuity between the HCF paper path sensor and the OPF PWB. and verify [P/J808](#) and [P/J810](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. HCF feeder assembly, [PL 11.1 Item 5](#).
2. Enter [dC330](#), code 071-014. Check the HCF feed clutch operation. The HCF feed clutch operates properly, go to step 7. If the error persists,
  - Check the wiring and continuity between the HCF feed clutch and the OPF PWB, verify [P/J805](#) and [P/J806](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. HCF feeder assembly, [PL 11.1 Item 5](#).
    - b. 550 OPF feeder assembly kit, [PL 10.1 Item 1](#).



3. Enter **dC330**, code 071-015, Check the HCF takeaway clutch operation. The HCF takeaway clutch operates properly, go to step 8. If the error persists,
  - Check the wiring and continuity between the HCF takeaway clutch and the OPF PWB, verify **P/J808** and **P/J809** are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. HCF feeder assembly, **PL 11.1 Item 5**.
    - b. 550 OPF feeder assembly kit, **PL 10.1 Item 1**.
4. Enter **dC330**, code 071-010. Check the HCF feed motor rotation. The HCF feed motor rotates properly, go to step 9. If the error persists,
  - Check the wiring and continuity between the HCF feed motor and the OPF PWB, verify **P/J804** and **P/J803** are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. HCF feed motor, **PL 11.2 Item 4**.
    - b. 550 OPF feeder assembly kit, **PL 10.1 Item 1**.
5. Check the wiring and continuity between OPF PWB and the MCU PWB, **P/J800**, **P/J801**, and **P/J802** are fully seated and no opens in the harness exist and no opens in the harness exist. If the error persists,
  - Install new components as necessary:
    - a. MCU PWB, **PL 18.1 Item 1 (MFP)**, **PL 18.5 Item 1 (MFP Tall)**, **PL 18.9 Item 1 (SFP)**.

#### 077-117 - Tray2 error is Registration Sensor related.

1. Enter **dC330**, code 071-103. Check the registration sensor operation. The registration sensor operates properly, go to step 2. If the error persists,
  - Check the wiring and continuity between the registration sensor and the MCU PWB. and verify **P/J540**, **P/J545**, and **P/J546** are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. Registration sensor, **PL 15.2 Item 13**.
2. Enter **dC330**, code 071-061. Check the main motor operation. The main motor operates properly, go to step 7. If the error persists,
  - Check the wiring and continuity between the main motor and the MCU PWB, verify **P/J571** and **P/J572** are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Check the wiring and continuity between the main motor and the LVPS PWB, verify **P/J572** and **P/J288** are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. Main motor, **PL 3.1 Item 1 (C505/C605) (C500/C600)**.
    - b. MCU PWB, **PL 18.1 Item 1 (MFP)**, **PL 18.5 Item 1 (MFP Tall)**, **PL 18.9 Item 1 (SFP)**.

## 072-103 Path2 SNR ON Jam RAP

**072-103** After Tray 3 Path Sensor is turned on, Tray 2 Path Sensor is not turned on by paper within specified time.

### Initial Actions

- Remove paper jam.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

#### WARNING

**Do not touch the Fuser while it is hot.**

Refer to the procedures that follow as necessary:

- **GP 10**, How to Check a Motor.
- **GP 11**, How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path and flip over the paper in the tray.
2. Adjust the paper guides (length guide and width guide) of the tray to the paper.
3. Check the feed and separator roll, **PL 10.3 Item 98** are installed correctly, not damaged or worn, and clean with a lint-free cloth slightly dampened with water, as needed.
  - Install a new feed and separator roll kit **PL 10.3 Item 98**.
4. Enter Diagnostics, **GP 1**.

#### Follow the procedure to correct the error:

1. Enter **dC330**, code 071-113. Check the OPT path paper sensor operation. The OPT path paper sensor operates properly, go to step 2. If the error persists,
  - Check the wiring and continuity between the OPT path paper sensor and the 550 OPF PWB. and verify **P/J808** and **P/J810** are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. HCF feeder assembly, **PL 11.1 Item 5**.
2. Enter **dC330**, code 071-014. Check the OPT feed clutch operation. The OPT feed clutch operates properly, go to step 3. If the error persists,
  - Check the wiring and continuity between the OPT feed clutch and the 550 OPF PWB, verify **P/J805** and **P/J806** are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. HCF feeder assembly, **PL 11.1 Item 5**.
3. Enter **dC330**, code 071-015. Check the OPT takeaway clutch operation. The OPT takeaway clutch operates properly, go to step 4. If the error persists,
  - Check the wiring and continuity between the OPT takeaway clutch and the 550 OPF PWB, verify **P/J808** and **P/J809** are fully seated and no opens in the harness exist and no opens in the harness exist.

- Install new components as necessary:
    - a. HCF feeder assembly, [PL 11.1 Item 5](#).
4. Enter **dC330**, code 071-010. Check the OPF feed motor rotation. The OPF feed motor rotates properly, go to step 5. If the error persists,
    - Check the wiring and continuity between the OPF feed motor and the 550 OPF PWB, verify [P/J804](#) and [P/J803](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
    - Install new components as necessary:
      - a. HCF feeder assembly, [PL 11.1 Item 5](#).
  5. Check the wiring and continuity between the OPF PWB and the MCU PWB, [P/J800](#), [P/J801](#), and [P/J802](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
  6. Check continuity between the OPF PWB and the drawer connector, verify [P/J802](#) and [P/J801](#) are fully seated and no opens in the harness exist.
    - Install new components as necessary:
      - a. MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 072-310, 073-310, 074-310, 077-360 Tray2-5, Motor Fail RAP

Feeder Motor Alarm on Tray is detected.

### Initial Actions

- Switch off, then switch on the machine, [GP 4](#).
- Reseat the 550 OPF

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

#### WARNING

**Do not touch the Fuser while it is hot.**

Refer to the procedures that follow as necessary:

- [GP 10](#), How to Check a Motor.
- [GP 11](#), How to Check a Sensor.

Perform the steps that follow:

1. Check for obstructions in the paper path and flip over the paper in the tray.
2. Enter Diagnostics, [GP 1](#).

**Follow the procedure to correct the error:**

#### When the Tray error is 550 OPF Feeder

1. Enter **dC330**
  - code 071-010 for Tray2
  - code 071-020 for Tray3
  - code 071-030 for Tray4
  - code 071-040 for Tray5
2. Check the OPF feeder motor operation, [PL 10.1 Item 18](#). The OPF feeder motor operates properly;
  - a. Install a new MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

#### If the error persists,

- Rotate the OPF feeder motor manually checking for resistance or overload in rotation.
- Check the wiring and continuity between the OPT path paper sensor and the 550 OPF PWB. and verify [P/J804](#) and [P/J803](#) are fully seated and no opens in the harness exist and no opens in the harness exist.
- Install new components as necessary:
  - a. HCF feeder assembly, [PL 11.1 Item 5](#).

## When Tray is HCF

1. Enter **dC330**
  - code 071-010 for Tray2
  - code 071-020 for Tray3
2. Check the HCF feeder motor operation, **PL 10.2 Item 4**. The HCF feeder motor operates properly;
  - a. Install a new MCU PWB, **PL 18.1 Item 1 (MFP)**, **PL 18.5 Item 1 (MFP Tall)**, **PL 18.9 Item 1 (SFP)**.

## 072-311 Tray2 Mode Fail RAP

072-311 Operation mode of Tray2 (Download mode) is detected.

### Procedure

#### **WARNING**

**Switch off the electricity to the machine, GP 4. 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 steps that follow:

1. Check for obstructions in the paper path and remove.
2. Switch off, then switch on the machine, **GP 4**.
3. Reseat the 550 OPF kit assembly or the HCF.
4. Update the Software, **GP 9**.
5. Install a new components as necessary:
  - a. 550 OPF kit assembly, **PL 10.1 Item 1**.
  - b. HCF, **PL 11.1 Item 1**.

## 072-312 Feeder2 Maker Mismatch Fail RAP

072-312 The system detected that the OPF 550 or HCF for another model was installed.

### Procedure

#### WARNING

Switch off the electricity to the machine, **GP 4**. 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 steps that follow:

1. Check for obstructions in the paper path and remove.
2. Switch off, then switch on the machine, **GP 4**.
3. Check the 550 OPF kit assembly or the HCF and verify correct installation.

## 072-401 Tray2 Feed Roll Near Life RAP

072-401 Tray2 Feed Roll Near Life End.

### Procedure

#### WARNING

Switch off the electricity to the machine, **GP 4**. 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 steps that follow:

1. Prepare a new feed and separator roll kit, **PL 10.3 Item 98** for end of life replacement soon.

## 072-402 Tray2 Feed Roll Life Over RAP

072-402 Tray2 Feed Roll Life Over.

### Procedure

#### **WARNING**

Switch off the electricity to the machine, **GP 4**. 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 steps that follow:

1. Install a new feed and separator roll kit, **PL 10.3 Item 98**.

## 073-101 Tray3 Miss Feed RAP

073-101 After Tray3 Feed Start, Tray3 Path Sensor is not turned on by paper within specified time.

### Procedure

#### **WARNING**

Switch off the electricity to the machine, **GP 4**. 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 steps that follow:

1. Install a new feed and separator roll kit, **PL 10.3 Item 98**.

## 075-100 JAM in Bypass Tray RAP

**075-100** After MSI Feed Start, registration sensor is not turned on by paper within specified time.

### Initial Actions

Verify and remove any paper jam.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Verify no obstructions in the paper path.
2. Verify the condition of the separator rolls [PL 13.2 Item 5](#) looking for any unusual wear or damage.
3. If the error persists. clean the separator rolls with a slightly dampened with water lint-free cloth.
4. If the error persists, install a new bypass tray separator holder assembly [PL 13.2 Item 5](#) following.
5. If the error persists, verify the MSI feed solenoid [PL 13.1 Item 7](#).
  - Enter [dC330](#), code 072-001. Test the MSI feed solenoid operation.
  - Check the wiring and continuity between the MSI feed solenoid and the MCU PWB at [P/J480](#) and [P/J482](#) and verify they are fully seated and no opens in the harness exist.
  - Close all interlock switches. Voltage between the MCU PWB ground and the [P/J480-3](#) pin should read approximately +24VDC.
  - Check the wiring and continuity between the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
  - Close all interlock switches and check the voltage from the LVPS PWB (+24VDC). Voltage between the LVPS PWB ground and the [P/J284-20](#) pin should be about +24VDC.
  - Install a new MSI feed solenoid [PL 13.1 Item 7](#).
    - c. If the error persists, install new components as necessary:
      - a. MCU PWB, [PL 18.1 Item 1](#)(MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 077-101 Paper Jam RAP

**077-101 registration sensor Off Jam** After Regi Clutch ON, registration sensor is not turned on by paper within 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 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Refer to the procedures that follow as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Verify there are no obstructions in the paper path and the paper guides are set correct to the paper size in the paper tray.
2. Verify the paper guides are set correct to the paper size.
3. Check the feed and separator roll [PL 9.1 Item 98](#), for foreign substances or wear.
  - a. Install a new feed and separator roll kit [PL 9.1 Item 98](#).
4. Enter [dC330](#), code 071-103. Check the registration sensor operation [PL 15.2 Item 1](#).
  - Check the wiring and continuity between the registration sensor and the MCU PWB and verify [P/J540](#), [P/J545](#), and [P/J546](#) fully seated and no opens in the harness exist.
  - Check the wiring and continuity between the LVPS PWB and the MCU PWB [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
  - Check the voltage between the MCU PWB ground and the [P/J540](#) pin-7 for +5VDC.
  - Check the voltage from the LVPS PWB (+5VDC). Voltage between the LVPS PWB ground and the [P/J540-5pin](#) should be about (+5VDC).
  - If the error persists, install new components as necessary:
    - a. registration sensor (registration feeder chute assembly,) [PL 15.2 Item 1](#).
    - b. MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
5. Enter [dC330](#), code 071-004. Check the Registration Clutch, [PL 15.1 Item 8](#)
  - Check the wiring and continuity between the REGI Clutch and the MCU PWB and verify [P/J540](#), [P/J541](#), and [P/J542](#) are fully seated and no opens in the harness exist.
  - Check the wiring and continuity between the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
  - Close all interlock switches and verify the voltage from the LVPS PWB ground and the [P/J284](#) pin-18 and the voltage from the LVPS PWB ground and the [P/J284](#) pin-20 is about +24VDC.
  - Close all interlock switches. Voltage between the LVPS PWB ground and the [P/J288](#) pin-1 should read approximately +24VDC.
    - a. If the error persists, install new components as necessary:
      - i. Registration Clutch, [PL 15.1 Item 8](#).

- ii. MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
- 6. Enter dC330, code 071-065. Check the sub motor, PL 3.1 Item 1, rotation for any abnormal, frozen, or resistive rotation.
  - Check the wiring and continuity between the sub motor and the MCU PWB and verify sub motor connector and P/J570 are fully seated and no opens in the harness exist.
  - Check the wiring and continuity between the sub motor and the LVPS PWB and verify sub motor connector and P/J288 are fully seated and no opens in the harness exist.
  - Close all interlock switches. Voltage between the LVPS PWB ground and the P/J288-1 pin should read approximately +24VDC.
    - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB, verify P/J284 and P/J280 are fully seated and no opens in the harness exist.
    - b. Close all interlock switches and verify the voltage from the LVPS PWB ground and the P/J284-18 pin and the voltage from the LVPS PWB ground and the P/J284-20 pin is about +24VDC.
    - c. If the error persists, install new components as necessary:
      - i. main drive assembly, PL 3.1 Item 1.
      - ii. MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
- 7. Enter dC330, code 071-104. Check the exit sensor operation, PL 7.1 Item 1
  - Check the wiring and continuity between the exit sensor and the MCU PWB and verify P/J270 and P/J272 are fully seated and no opens in the harness exist.
  - Check the wiring and continuity between LVPS PWB and the MCU PWB, P/J284 and P/J280 are fully seated and no opens in the harness exist.
  - Check the voltage from the LVPS PWB (+5VDC). Voltage between the LVPS PWB ground and the P/J284 pin-5 should be about +5VDC.
  - Check the voltage from the LVPS PWB ground and the P/J284 pin-5 is about +5VDC.
  - If the error persists, install new components as necessary:
    - a. exit sensor (fusing assembly), PL 7.1 Item 1
    - b. MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
- 8. Enter dC330, code 071-061. Check the main motor rotation, PL 3.1 Item 1.
  - Abnormal motor rotation is observed.
  - Check the wiring and continuity between the main motor and the MCU PWB and verify P/J571 and P/J570 are fully seated and no opens in the harness exist.
  - Check the wiring and continuity between the main motor and the LVPS PWB and verify P/J570 and P/J288 are fully seated and no opens in the harness exist.
  - Close all interlock switches. Voltage between the LVPS PWB ground and the P/J288-1 pin should read approximately +24VDC.
  - Check the wiring and continuity between the LVPS PWB and the MCU PWB, verify P/J284 and P/J280 are fully seated and no opens in the harness exist.
  - Close all interlock switches and check the voltage from the LVPS PWB (+24VDC) ground and the P/J284 pin-2 should be about +24VDC.
  - If the error persists, install new components as necessary:
    - a. MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
    - b. Install a new LVPS PWB PL 18.1 Item 16 (MFP), PL 18.5 Item 16 (MFP Tall), PL 18.9 Item 16 (SFP).

## 077-104 Exit Sensor Off Jam RAP

**077-104** After exit sensor ON, exit sensor is not turned back off by the trail edge of the paper within the specified time.

### Initial Actions

- Check the condition of the paper in all trays. Refer to [GP 26](#) Paper and Media Size Specifications

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

### WARNING

**Do not touch the Fuser while it is hot.**

### Procedure

Refer to the procedures that follow as necessary:

- [GP 10](#) How to Check a Motor.
  - [GP 11](#) How to Check a Sensor.
1. Check for obstructions in the paper path and clear all obstruction.
  2. Check the exit roll for proper installation, foreign objects, or wear. Any excessive wear present,
    - Install a new exit chute assembly [PL 17.1 Item 1](#).
  3. Enter [dC330](#), code 071-104 to check exit sensor operation.
    - Update to the latest Software version.
    - Reseat the Console assembly UI AIO [PL 1.1 Item 1](#)
    - Check the wiring and continuity between the Console assembly UI AIO [PL 1.1/1](#) and the ESS PWB [PL 18.1 Item 5](#).
      - Verify [P/J1352](#) fully seated.
    - Install a new UI Console assembly (MFP) [PL 1.1 Item 1](#), UI Console assembly (SFP) [PL 1.2 Item 1](#)
    - Install a new Front USB Harness assembly [PL 18.1 Item 14](#)
      - Install a new ESS PWB [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (SFP) [REP 18.1](#).
  4. Enter [dC330](#), code 071-005. Check the main motor, [PL 3.1 Item 1](#).
    - Check the wiring and continuity between the Exit Clutch and the MCU PWB verify [P/J460](#), [P/J462](#) is fully seated.
    - Close the interlock switch and check if the voltage between the MCU PWB ground and the [P/J460-4](#) pin is about +24VDC.
  5. Enter [dC330](#), code 071-006. Check the Invert Clutch operation, [PL 17.1 Item 4](#).
    - Check the wiring and continuity between the Invert Clutch and the MCU PWB and verify [P/J460](#), is fully seated.
      - Close interlock switch and check if the voltage between the MCU PWB ground and the [P/J460-2](#) pin is about +24VDC.
        - a. Install a new Main Drive assembly, [PL 3.1 Item 1](#)
  6. Enter [dC330](#), code 071-061. Check the main motor rotation, [PL 3.1 Item 1](#).

- Abnormal motor rotation is observed.
  - Check the wiring and continuity between the main motor and the MCU PWB and verify [P/J571](#) and [P/J570](#) are fully seated and no opens in the harness exist.
  - Check the wiring and continuity between the main motor and the LVPS PWB and verify [P/J570](#) and [P/J288](#) are fully seated and no opens in the harness exist.
  - Close all interlock switches. Voltage between the LVPS PWB ground and the [P/J288](#) pin-1 should read approximately +24VDC.
    - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
    - b. Check continuity between the LVPS PWB and the MCU PWB verify each cable of [P/J284](#) between [P/J280](#) is continuous.
  - Close all interlock switches and check the voltage from the LVPS PWB (+24VDC). Voltage between the LVPS PWB ground and the [P/J284](#) pin-2 should be about +24VDC.
  - If the error persists, install new components as necessary:
    - Install a new LVPS PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
7. If the error persists, install new components as necessary:
    - MCU PWB, [REP 18.16](#) (MFP), [REP 18.1](#) (SFP).
    - ESS PWB [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (SFP).



## 077-123 Registration Sensor Jam (Duplex) RAP

Paper does not actuate the Registration Sensor in the specified time after the registration clutch in energized in duplex mode.

### Initial Actions

Check the condition of the paper in all trays. Refer to [GP 26](#) Paper and Media Size Specifications.

### Procedure

#### WARNING

**Switch off the electricity to the machine, [GP 4](#). 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.**

Refer to the procedures that follow as necessary:

- [GP 10](#) How to Check a Motor.
- [GP 11](#) How to Check a Sensor.
- [GP 12](#) How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Check for obstructions in the paper path.
2. Check the Exit Roll, [PL 17.1 Item 1](#) for foreign substances or wear. Clean or install new components as necessary.
3. Check the duplex rolls, [PL 15.1 Item 14](#) and pinch rolls, [PL 17.1 Item 2](#) for foreign substances or wear. Clean or install new components as necessary.
4. Enter [dC330](#), code 071-104. Check the exit sensor operation, [PL 17.1 Item 1](#)
  - Check the wiring and continuity between the exit sensor and the MCU PWB and verify [P/J270](#) is fully seated and no opens in the harness exist.
  - Check the voltage from the LVPS PWB (+5VDC). Voltage between the LVPS PWB ground and the [P/J284](#) pin-5 should be about +5VDC.
    - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB, [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.
    - b. Check the voltage from the LVPS PWB ground and the [P/J284](#) pin-5 is about +5VDC.
  - If the error persists, install new components as necessary:
    - a. exit sensor (fusing assembly), [PL 7.1 Item 1](#).
5. Enter [dC330](#), code 071-005. Check the duplex clutch, [PL 14.1 Item 1](#).
6. Enter [dC330](#), code 042-001. Check the main motor, [PL 3.1 Item 1](#).
7. Enter [dC330](#), code 071-061. Check the main motor rotation, [PL 3.1 Item 1](#).
  - Abnormal motor rotation is observed.
  - Check the wiring and continuity between the main motor and the MCU PWB and verify [P/J571](#) and [P/J570](#) are fully seated and no opens in the harness exist.
  - Check the wiring and continuity between the main motor and the LVPS PWB and verify [P/J570](#) and [P/J288](#) are fully seated and no opens in the harness exist.
  - Check the wiring and continuity at the LVPS PWB and the MCU PWB, verify [P/J284](#) and [P/J280](#) are fully seated and no opens in the harness exist.

- Close all interlock switches. Voltage between the LVPS PWB ground and the [P/J288-1](#) pin should read approximately +24VDC.
- Close all interlock switches and check the voltage from the LVPS PWB (+24VDC). Voltage between the LVPS PWB ground and the [P/J284](#) pin-2 should be about +24VDC.
- If the error persists, install new components as necessary:
  - a. MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).
  - b. Install a new LVPS PWB [PL 18.1 Item 16](#) (MFP), [PL 18.5 Item 16](#) (MFP Tall), [PL 18.9 Item 16](#) (SFP).7

## 077-302 Device Right Side Door is Open RAP

### Procedure

Device Right-Side Door is Open.

Close the right-side door.

## 077-314 P/H Module Logic Fail RAP

Fatal error of paper feed module is detected.

### Procedure

#### **WARNING**

**Switch off the electricity to the machine, GP 4. 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 steps that follow:

1. Switch off, then switch on the machine, GP 4.
2. Install a new MCU PWB REP 18.16 (MFP), REP 18.1 (SFP).

## 077-322 Option Comm Fail RAP

Communication failure between IOT and Option Tray is detected.

### Procedure

#### WARNING

Switch off the electricity to the machine, **GP 4**. 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 steps that follow:

1. Reseat the Optional 550- Sheet Feeder.
2. Switch off, then switch on the machine, **GP 4**
3. If the error persists, install new components as necessary:
  - Install a new Optional 550-Sheet Feeder, **PL 10.2 Item 1**.
  - Install a new Harness assembly OPF, **PL 18.3 Item 6**.
  - Install a new Harness assembly OPF 2C, **PL 10.1 Item 17**.
  - MCU PWB **REP 18.16 (MFP)**, **REP 18.1 (SFP)**.

## 077-323 PH Motor Fail RAP

Abnormal rotation in the PH Motor.

### Procedure

#### WARNING

Switch off the electricity to the machine, **GP 4**. 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 steps that follow:

1. Switch off, then switch on the machine, **GP 4**.
2. If the error persists, install a new Main Drive assembly **REP 3.1**.

## 077-327 Feeder Composition Fail RAP

Option Unit structuring error (Invalid tray is installed)

### Procedure

#### WARNING

Switch off the electricity to the machine, GP 4. 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 steps that follow:

1. Switch off, then switch on the machine, GP 4.
2. Remove the Optional Feeder 550 Tray.
3. If the error persists, Check operation of the Exit, Regi, Tray2 path sensor.

## 077-909 Paper Jam RAP

Paper remains on registration sensor, exit sensor, Tray2 path sensor when power ON, machine stop (CycleDown/ShutDown), and Option Tray Cassette or Rear Cover or Side Cover is closed.

### Procedure

The following are for reference to the steps below:

- GP 11, How to Check a Sensor.

Perform the steps that follow:

1. Remove all paper from the paper path.
2. Enter Diagnostics, GP 1.
3. Enter dC330, code 071-113. Check the OPT path paper sensor operation. The OPT path paper sensor operates properly, go to step 2. If the error persists,
  - Check the wiring and continuity between the OPT path paper sensor and the 550 OPF PWB. and verify P/J808 and P/J810 are fully seated and no opens in the harness exist and no opens in the harness exist.
  - Install new components as necessary:
    - a. 550 OPF feeder assembly kit, PL 10.1 Item 1.
4. Enter dC330, code 071-104. Check the exit sensor operation, PL 7.1 Item 1.
  - Check the wiring and continuity between the exit sensor and the MCU PWB and verify P/J270 is fully seated and no opens in the harness exist.
  - Check the voltage from the LVPS PWB (+5VDC). Voltage between the LVPS PWB ground and the P/J284 pin-5 should be about +5VDC.
    - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB, P/J284 and P/J280 are fully seated and no opens in the harness exist.
  - If the error persists, install new components as necessary:
    - a. exit sensor (fusing assembly), PL 7.1 Item 1.
5. Enter dC330, code 071-103. Check the registration sensor operation PL 15.2 Item 1.
  - Check the wiring and continuity between the registration sensor and the MCU PWB and verify P/J540, P/J545, and P/J546 are fully seated and no opens in the harness exist.
  - Check if the voltage between the MCU PWB ground and the P/J540 pin-7 is about (+5VDC).
    - a. Check the wiring and continuity between the LVPS PWB and the MCU PWB P/J284 and P/J280 are fully seated and no opens in the harness exist.
    - b. Check the voltage from the LVPS PWB (+5VDC). Voltage between the LVPS PWB ground and the P/J284 pin-5 should be about (+5VDC).
    - c. If the error persists, install new components as necessary:
      - i. Registration sensor (registration feeder chute assembly), PL 15.2 Item 1.
      - ii. MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).

## 089-600 to 089-617 RC Fail RAP

**089-600** Main scanning correction failure: Main scanning position of #4(Black) color which is a standard is abnormal during A1/C Patch detection.

(Only to register on History)

**089-601** RAD sensor detection failure or A1/C Patch forming failure: Valid sample block count is less than specified count when RAD Sensor IN during A1/C Patch detection.

(Only to register on History)

**089-603** RAD sensor detection failure or A1/C Patch forming failure: Valid sample block count is less than specified count when RAD Sensor OUT during A1/C Patch detection.

(Only to register on History)

**089-604** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor IN during B Patch detection of #1(Yellow) color.

(Only to register on History)

**089-606** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor OUT during B Patch detection of #1(Yellow) color.

(Only to register on History)

**089-607** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor IN during B Patch detection of #2(Magenta) color.

(Only to register on History)

**089-609** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor OUT during B Patch detection of #2(Magenta) color.

(Only to register on History)

**089-610** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor IN during B Patch detection of #3(Cyan) color.

(Only to register on History)

**089-612** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor OUT during B Patch detection of #3(Cyan) color.

(Only to register on History)

**089-613** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor IN during B Patch detection of #4(Black) color.

(Only to register on History)

**089-615** RAD sensor detection failure or B Patch forming failure: Valid sample block count is less than specified count when RAD Sensor OUT during B Patch detection of #4(Black) color.

(Only to register on History)

**089-616** Correction setting value of calculation result exceeded valid setting range (To be introduced in V2? (Only to register on History)

**089-617** After adding offset value to correction value, the value exceeded valid setting range (To be introduced in V2? (Only to register on History)

### Procedure

#### WARNING

When cleaning this product, use the designated cleaning materials exclusive to it. Other cleaning materials may result in poor performance of the product. Never use aerosol cleaners to avoid catching fire and explosion.

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury

#### Clean the CTD (RAD) Sensor:

1. Turn the printer off, GP 4
2. Pull up the handle lever of the rear cover, and open the rear cover.
3. Clean the CTD sensor with a clean and dry cotton swab.

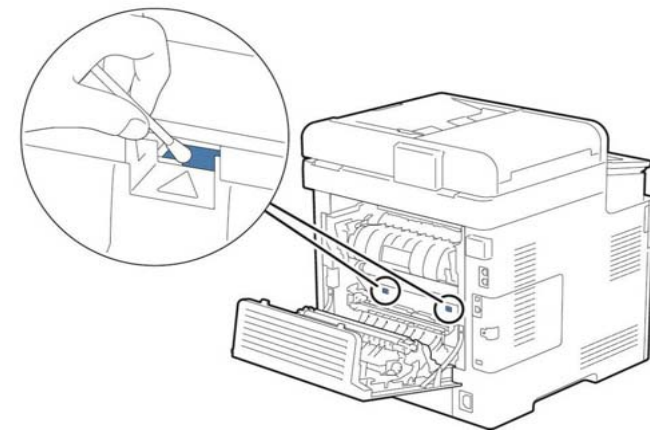


Figure 1 Cleaning the CTD sensor

4. Close the rear cover.

## 089-623 to 089-679 LED Offset Correction Error RAP

**089-623** During LED light amount correction of gain correction, sensor output voltage value on the IBT belt is abnormal (IN side) (Only to register on History)

**089-629** During LED light amount correction of gain correction, sensor output voltage value on the IBT belt is abnormal (OUT side) (Only to register on History)

**089-674** During LED light amount correction of gain correction, LED light amount is not converged (IN side) (Only to register on History)

**089-676** During LED light amount correction of gain correction, LED light amount is not converged (OUT side) (Only to register on History)

**089-677** During LED light amount correction of gain correction, sensor output voltage value on the IBT belt is abnormal (IN side) (Only to register on History)

**089-679** During LED light amount correction of gain correction, sensor output voltage value on the IBT belt is abnormal (OUT side) (Only to register on History)

### Procedure

#### WARNING

**When cleaning this product, use the designated cleaning materials exclusive to it. Other cleaning materials may result in poor performance of the product. Never use aerosol cleaners to avoid catching fire and explosion.**

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury**

#### Clean the CTD (RAD) Sensor:

1. Turn the printer off, GP 4
2. Pull up the handle lever of the rear cover, and open the rear cover.
3. Clean the CTD sensor with a clean and dry cotton swab.

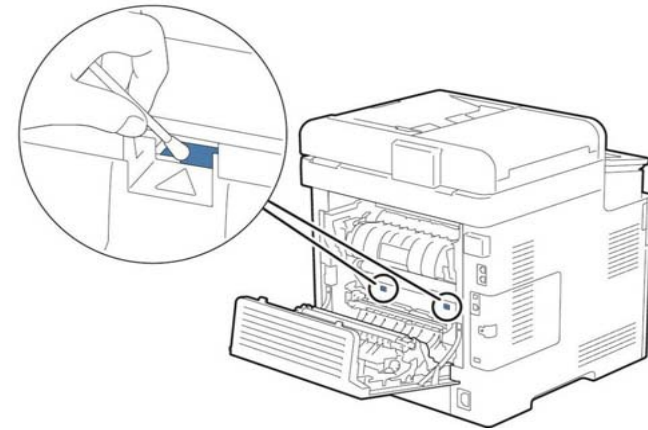


Figure 1 Cleaning the CTD sensor

4. Close the rear cover.
5. Enter dC131, check the NVM values that follow:
  - a. 759-009 (Lead Registration Offset).
  - b. 759-011 (Side 1 Registration Offset).
  - c. 759-012 (Side 2 Registration Offset).
6. Check connection of the Color Toner Density (CTD) Sensor Assembly.
7. Install a new Color Toner Density (CTD) Sensor Assembly.
8. Install a new Transfer Belt Unit.

## 091-312 HVPS CC Fail RAP

091-312: HVPS CC Fail

### Initial Actions

Switch off, then switch on the machine, GP 4.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the wiring and continuity between the HVPS PWB and the MCU PWB, verify P/J100 and P/J1001 are fully seated and no opens in the harness exist. If the error persists,
  - a. Install new components as necessary:
    - i. HVPS PWB, PL 18.2 Item 2 (MFP), PL 18.6 Item 2 (MFP Tall), PL 18.10 Item 2 (SFP).
    - ii. MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).

## 091-313, 091-402, 091-480 to 482, 091-913 to 929 Drum/CRUM RAP

091-313: CRUM ASIC Comm Fail  
091-402: DRUM CARTRIDGE K Life Over  
091-480: DRUM CARTRIDGE Y Life Over  
091-481: DRUM CARTRIDGE M Life Over  
091-482: DRUM CARTRIDGE C Life Over  
091-913: DRUM CARTRIDGE K Life End  
091-914: DRUM K CRUM Communication Fail  
091-915: DRUM CRUM K Data Broken  
091-916: DRUM CRUM K Data Mismatch  
091-917: DRUM Y CRUM Communication Fail  
091-918: DRUM M CRUM Communication Fail  
091-919: DRUM C CRUM Communication Fail  
091-920: DRUM CRUM Y Data Broken  
091-921: DRUM CRUM K Not Position  
091-922: DRUM CRUM M Data Broken  
091-923: DRUM CRUM C Data Broken  
091-924: DRUM CRUM Y Data Mismatch  
091-925: DRUM CRUM M Data Mismatch  
091-926: DRUM CRUM C Data Mismatch  
091-927: DRUM CRUM Y Not Position  
091-928: DRUM CRUM M Not Position  
091-929: DRUM CRUM C Not Position

### Initial Actions

1. Check if the customer tried another drum cartridge, the error may be the drum cartridge is bad and needs replaced.

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

### Procedure

Perform the steps that follow:

1. Switch off then switch on the machine, GP 4.
2. Remove, then reinstall the DRUM cartridge.
3. Verify the connection terminal of the CRUM inside the XERO/DEVE CRU assembly (YMCK) is not broken or damaged.
  - a. Install a new Xerographic Developer CRU assembly PL 8.1 Item 1.
4. Check the DRUM cartridge CRUM harness and verify all connections are fully seated and no opens in the harness exist.

5. Verify connection and continuity between the XERO/DEVE CF harness assembly and the MCU PWB and verify that all P/J are fully seated and no opens in the harness exist. If the error persists, install new components as necessary.
  - a. MCU PWB, [PL 18.1 Item 1 \(MFP\)](#), [PL 18.5 Item 1 \(MFP Tall\)](#), [PL 18.9 Item 1 \(SFP\)](#).

## 091-316 Xero Drum Motor Fail RAP

**091-316:** Xero Drum Motor does not rotate correctly.

### Initial Actions

Switch off, then switch on the machine, [GP 4](#).

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Refer to the procedures that follow as necessary:

- [GP 10](#) How to Check a Motor.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Enter [dC330](#), code 071-065. Check the sub motor rotation, [PL 3.1](#) or [PL 3.2](#). Abnormal motor rotation is observed,
3. Check the sub motor wiring:
  - Check the wiring and continuity between the sub motor and the MCU PWB. Verify that connectors are fully seated and no opens in the harness exist.
  - Check the wiring and continuity between the sub motor and the LVPS PWB. Verify that the connectors are fully seated and no opens in the harness exist.
  - If the error persists, install new components as necessary:
    - a. Main drive assembly H, [PL 3.1 Item 1](#).
    - b. MCU PWB, [PL 18.1 Item 1 \(MFP\)](#), [PL 18.5 Item 1 \(MFP Tall\)](#), [PL 18.9 Item 1 \(SFP\)](#).



## 091-400, 401, 405-436 DRUM/CRUM and Waste DRUM RAP

**091-400** To inform users to install a new Waster Toner Box.

**091-401** Detected that replacement of the DRUM CARTRIDGE(K) is required.

**091-405** To inform users to install a new Waster Toner Box.

**091-406** Detected that replacement period of the DRUM CARTRIDGE(K) is close.

**091-411** Detected that replacement period of the DRUM CARTRIDGE(Y) is close.

**091-416** Detected that replacement period of the DRUM CARTRIDGE(Y) is close.

**091-421** Detected that replacement period of the DRUM CARTRIDGE(M) is close.

**091-426** Detected that replacement period of the DRUM CARTRIDGE(M) is close.

**091-431** Detected that replacement period of the DRUM CARTRIDGE(C) is close.

**091-436** Detected that replacement period of the DRUM CARTRIDGE(C) is close.

### Procedure

091-400 and 091-405 Advice the customer prepare a new Waste Toner Box for replacement.

Advice the customer prepare a new DRUM Cartridge (Y,M,C,K) for the same type DRUM cartridge notification.

## 091-911 Waste Toner Bottle Full RAP

**091-911** PV or Pixel Count exceeded the specified value after Waste Toner Full Sensor is turned on.

### Initial Actions

Install a new Waste Toner Box.

Refer to the procedures that follow as necessary:

- [GP 11](#) How to Check a Sensor.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Enter [dC330](#), code 094-202. Check the toner full sensor operation, [PL 5.1 Item 9](#). The toner full sensor operates normally, go to step 3. If the error persists,
2. Check the wiring and continuity between the toner full sensor and the MCU PWB. Verify that the connectors are fully seated and no opens in the harness exist.
3. If the fault persists, install new components as necessary:
  - Toner full sensor, [PL 5.1 Item 9](#).
  - MCU PWB, [PL 18.1 Item 1](#)(MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 092-312 to 092-315 ATC Sensor Fault RAP

**092-312 ATC Y System Fail** DRUM density in the developer unit as detected by the 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 ATC M System Fail** DRUM density in the developer unit as detected by the 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 ATC C System Fail** DRUM density in the developer unit as detected by the 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 ATC K System Fail** DRUM density in the developer unit as detected by the 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.

### Procedure

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#).
2. Contact 2nd Level Support.

**NOTE:** This fault is caused by a machine setting failure prior to shipping. Contact 2nd Level Support.

## 092-318 to 092-321 ADC Patch System Fail RAP

**092-318:** ADC Y Patch System Fail

1. Detected (TC/SAD patch abnormal - pale color) Measurement result of potential/density patch shows abnormally pale color. DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.
2. DRUM Cartridge Shane mode DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.

**092-319** ADC M Patch System Fail

1. Detected (TC/SAD patch abnormal - pale color) Measurement result of potential/density patch shows abnormally pale color. DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.
2. DRUM Cartridge Shane mode DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.

**092-320** ADC C Patch System Fail

1. Detected (TC/SAD patch abnormal - pale color) Measurement result of potential/density patch shows abnormally pale color. DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.
2. DRUM Cartridge Shane mode DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.

**092-321** ADC K Patch System Fail

1. Detected (TC/SAD patch abnormal - pale color) Measurement result of potential/density patch shows abnormally pale color. DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.
2. DRUM Cartridge Shane mode DRUM cartridge became empty (DRUM recovery does not work), although DRUM cartridge is not supposed to be empty.

### Procedure

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#),
2. Shake the toner cartridge well and install to the IOT again.
3. Reseat the DRUM cartridge.
4. Install a new toner cartridge (YMCK), [PL 5.1 Item 11 \(Y\)](#), [PL 5.1 Item 12 \(M\)](#), [PL 5.1 Item 13 \(C\)](#), [PL 5.1 Item 14 \(K\)](#).
5. Install a new Xerographic Developer CRU assembly [PL 8.1 Item 1](#).

## 092-606, 094-310, 094-325, 094-326 ADC/CTD Fail RAP

**092-606:** ADC Sensor Dirty

**094-310:** Measurement result under CTD Sensor LED OFF condition exceeds upper limit.

**094-325:** Measurement result under CTD Sensor LED OFF condition exceeds upper limit.

**094-326:** Measurement result under CTD Sensor LED OFF condition exceeds upper limit.

### Procedure

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#).
2. Clean the CTD sensor with a clean and dry cotton swab.
  - a. Refer to RAP 089-600 to 089-617 RC Fail RAP
3. Check connection of the CTD sensor assembly (RAD Sensor):
  - Check the wiring and continuity between the CTD sensor assembly and the MCU PWB. Verify that the connectors are fully seated and no opens in the harness exist.
  - Check the MCU PWB wiring. Verify connectors are fully seated and no opens in the harness exist.
  - If the error persists, install new components as necessary:
    - a. CTD sensor assembly.
    - b. MCU PWB, [PL 18.1 Item 1](#)(MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 092-675 to 092-678 ADC Tone Patch Fail RAP

**092-675: ADC Tone Patch Fail Y** - Y-color ADC gradation patch is abnormally pale/dark.

**092-676: ADC Tone Patch Fail M** - M-color ADC gradation patch is abnormally pale/dark.

**092-677: ADC Tone Patch Fail C** - C-color ADC gradation patch is abnormally pale/dark.

**092-678: ADC Tone Patch Fail K** - K-color ADC gradation patch is abnormally pale/dark.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Refer to the procedures that follow as necessary:

- [GP 11](#) How to Check a Sensor.

Perform the steps that follow:

1. Switch off then switch on the machine, [GP 4](#).
2. Clean the CTD sensor with a clean and dry cotton swab.
  - a. Refer to RAP 089-600 to 089-617 RC Fail RAP.
3. Check connection of the CTD sensor assembly (RAD Sensor):
  - Check the wiring and continuity between the CTD sensor assembly and the MCU PWB. Verify connectors are fully seated and no opens in the harness exist.
  - Check the MCU PWB wiring. Verify connectors are fully seated and no opens in the harness exist.
  - If the error persists, install new components as necessary:
    - a. CTD sensor assembly.
    - b. Xerographic Developer CRU assembly, [PL 8.1 Item 1](#).
    - c. IBT unit, [PL 6.1 Item 1](#).
    - d. Color LPH head assembly, [PL 2.1 Item 1](#).
    - e. MCU PWB, [PL 18.1 Item 1](#)(MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 092-911 to 092-914 Toner Cartridge Uncertain Empty [X] RAP

092-911 Y - Color Toner Cartridge has become empty during the new cartridge period.

092-912 M - Color Toner Cartridge has become empty during the new cartridge period.

092-913 C - Color Toner Cartridge has become empty during the new cartridge period.

092-914 K - Color Toner Cartridge has become empty during the new cartridge period.

### Initial Actions

1. Cancel the error upon successful toner recovery by opening and closing the front interlock. (Error can also be canceled upon successful toner recovery by turning the power off and on.)
2. Shake the toner cartridge well and install to the IOT again.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the area between the dispenser assembly and the CRUM inside the toner cartridge is clean (without any foreign objects).
2. Check the toner cartridge (CYMK) is installed properly.
3. Check the connection terminal of the CRUM inside the Toner Cartridge (YMCK) is not broken or damaged. The terminal is broken or damaged,
  - Install a new toner cartridge (YMCK), PL 5.1 Item 11 (Y), PL 5.1 Item 12 (M), PL 5.1 Item 13 (C), PL 5.1 Item 14 (K).
4. Check the connection terminal of the dispenser assembly (YMCK) is not broken or damaged. The terminal is broken or damaged,
  - Install a new DISP assembly (YMCK), PL 5.1 Item 2 (Y), PL 5.1 Item 3 (M), PL 5.1 Item 4 (C), PL 5.1 Item 5 (K).
5. Check the wiring and continuity between the dispenser assembly (YMCK) and the MCU PWB and Check the connections are fully seated and no opens in the harness exist. If the error persists,
  - a. Install a new MCU PWB, PL 18.1 Item 1 (MFP) or PL 18.5 Item 1 (MFP Tall) or PL 18.9 Item 1 (SFP).

## 092-916 Environment SNR Sensor Fail RAP

092-916: The Environment Sensor detects the temperature abnormally.

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

### Procedure

Perform the steps that follow:

1. Switch off then switch on the machine, GP 4.
2. Install a new Color Toner Density (CTD) Sensor Assembly.

## 093-324 DEVE YMC Motor Fail RAP

**091-316:** Abnormal motor rotation of developer YMC motor is detected.

### Initial Actions

Switch off, then switch on the machine, [GP 4](#).

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Refer to the procedures that follow as necessary:

- [GP 10](#) How to Check a Motor.

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Enter [dC330](#), code 071-077. Check the developer motor rotation, [PL 3.1 Item 1](#).
3. Check the wiring and continuity between the developer motor and the MCU PWB. Verify that the connectors are fully seated and no opens in the harness exist.
4. Check the wiring and continuity between the developer motor and the LVPS PWB. Verify that the connectors are fully seated and no opens in the harness exist. If the error persists,
5. Install new components as necessary:
  - a. Main drive assembly H, [PL 3.1 Item 1](#)
  - b. MCU PWB, [PL 18.1 Item 1](#)(MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 093-339 Toner Drum CRUM Authentication Fail RAP

**093-339** Communication with CRUM authentication IC is abnormal. NAK is detected during communication with CRUM authentication IC.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

1. Switch off then switch on the machine, [GP 4](#),
2. Install a new MCU PWB, [PL 18.1 Item 1](#)(MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 093-400 to 093-425 DRUM Cartridge Near Empty RAP

093-400 DRUM CARTRIDGE Near Empty (K).

093-406 DRUM CARTRIDGE Pre Near Empty (K)

093-407 DRUM CARTRIDGE Pre Near Empty (Y)

093-408 DRUM CARTRIDGE Pre Near Empty (M)

093-409 DRUM CARTRIDGE Pre Near Empty (C)

093-423 DRUM CARTRIDGE Near Empty (Y).

093-424 DRUM CARTRIDGE Near Empty (M).

093-425 DRUM CARTRIDGE Near Empty (C).

### Procedure

Prepare a new DRUM Cartridge of the same color for installation.

## 093-912 Toner Cartridge Empty (K) RAP

093-912 TONER CARTRIDGE(K) empty.

1. ADC Empty Detection TC patch density decrease is detected by ADC sensor. Toner is filled up but density is not regained.
2. Counter Empty Detection Toner empty is judged by Dispense time/Pixel counter.

### Initial Actions

1. Install a new toner cartridge (K), [PL 5.1 Item 14](#).

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Check the connector at the dispenser assembly and the CRUM inside the toner cartridge is clean and no any foreign objects obstructing the connection.
2. Check toner cartridge (K) is installed properly.
3. Check the connector of the CRUM inside the toner cartridge (K). Verify the connector is not damaged or broken. The connector is damaged or broken,
  - Install a new toner cartridge (K), [PL 5.1 Item 14](#).
4. Check the connection terminal of the dispenser assembly (K). Verify the terminal is not damaged or broken. The terminal is damaged or broken,
  - Install a new dispenser assembly (K), [PL 5.1 Item 5](#).
5. Check the wiring and continuity between the dispenser assembly (K) and the MCU PWB. Verify and CRUM harness are fully seated and no opens in the harness exist. If the error persists,
  - a. Install a new MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

## 093-913 to 093-939 and 096-918 CRUM Error RAP

**093-913:** Check the Yellow Toner Cartridge (Y) Position (MFP)/ Insert Yellow Toner Cartridge. (SFP)

**093-914:** Check the Magenta Toner Cartridge (M) Position (MFP)/ Insert Magenta Toner Cartridge. (SFP)

**093-915:** Check the Cyan Toner Cartridge (C) Position (MFP) / Insert Cyan Toner Cartridge (SFP)

**093-916:** Check the Black Toner Cartridge (K) Position (MFP) / Insert Black Toner Cartridge (SFP)

**093-924:** TONER K CRUM Comm Fail

**093-925:** TONER K CRUM Data Broken Fail

**093-926:** TONER K CRUM Data Mismatch Fail

**093-927:** TONER Y CRUM Comm Fail

**093-928:** TONER M CRUM Comm Fail

**093-929:** TONER C CRUM Comm Fail

**093-933:** TONER Y CRUM Data Broken Fail

**093-934:** TONER M CRUM Data Broken Fail

**093-935:** TONER C CRUM Data Broken Fail

**093-937:** TONER Y CRUM Data Mismatch Fail

**093-938:** TONER M CRUM Data Mismatch Fail

**093-939:** TONER C CRUM Data Mismatch Fail

**096-918:** XC 3rd Party CRUM Detect Fail

- a. Install a new MCU PWB, [PL 18.1 Item 1](#) (MFP) or [PL 18.5 Item 1](#) (MFP Tall) or [PL 18.9 Item 1](#) (SFP).

### Initial Actions

1. Reseat the Toner Cartridge (YMC).
2. Perform the following steps:

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

1. Check the wiring and continuity between the DISP assembly and the CRUM. Verify that the toner cartridge is free of dirt and foreign objects, clean as needed.
2. Check the connection terminal of the CRUM inside the toner cartridge for damage. The terminal is damaged,
  - a. Install a new toner cartridge [PL 5.1 Item 11](#).
3. Check the connection terminal of the DISP assembly (YMCK) for damage.
  - a. Install a new DISP assembly [PL 5.1 Item 2](#).
4. Check the wiring and continuity between the DISP assembly (YMCK) and the MCU PWB and verify all are fully seated and no opens in the harness exist.
5. Check the wiring and continuity at the DISP assembly [P/J114](#) at the MCU PWB are fully seated and no opens in the harness exist.
6. Check the wiring and continuity between the DISP assembly and the MCU PWB, [P/J114](#) are fully seated and no opens in the harness exist. If the error persists,

## 094-318 1st BTR Position Fail RAP

094-318 1st BTR contact/retract did not complete within the start of operation through NVM:1st BTR Position Fail occurrence time.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Refer to the procedures that follow as necessary:

- GP 10, How to Check a Motor.
- GP 11, How to Check a Sensor.
- GP 12, How to Check a Solenoid or Clutch.

Perform the steps that follow:

1. Switch off, then switch on the machine, GP 4.
2. Enter dC330 094-201, and check the K mode sensor operation. The K mode sensor operates normally, go to step 4. If the error persists,
  - a. Check the wiring and continuity between the K mode sensor and the MCU PWB P/J470, P/J468. and P/J460 are fully seated and no opens in the harness exist.
  - b. Check the wiring and continuity between the K mode sensor and P/J468. Verify the connectors are fully seated and no opens in the harness exist.
  - c. Install new components as necessary:
    - K Mode Sensor
    - MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
3. Enter dC330 094-003/094-004, and check the switching clutch assembly (k clutch), part of main drive assembly, PL 3.1 Item 1(C505/C605) (C500/C600) operation. The switching clutch assembly operates normally, go to step 4. If the error persists,
  - a. Check the wiring and continuity between the switching clutch assembly (k clutch) and the MCU PWB and P/J460 are fully seated and no opens in the harness exist.
  - b. Install new components as necessary:
    - Main drive assembly H, PL 3.1 Item 1
    - MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP).
4. Inspect the IBT Unit for deformities or damaged.
  - Install a new IBT assembly, PL 6.1 Item 1

## 094-417 IBT Near Life End RAP

094-417 IBT Unit HFSI Counter reached IBT Unit Near End Warning (NVM).

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Prepare a new IBT (BTR) as necessary.



## 094-420 IBT Life Over RAP

094-420 IBT Unit HFSI Counter reached IBT Unit End Warning (NVM).

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 4**. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Replace the IBT and reset the counter. **PL 6.1**

## 094-911 Transfer Belt Position Fail RAP

094-911 Belt Unit is not installed.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to **GP 4**. 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 4**.
2. Reseat the belt unit.
3. Install a new belt unit, **PL 6.1 Item 1**.

## 099-396 to 099-399 Fuser Temperature Fault RAP

**099-396 Fusing Ep U4 Noheat Center Fail** - Temperature is not reached specified degrees within specified time.

**099-397 Fusing Ep U4 Slowheat Center Fail** - Temperature is not reached specified degrees within specified time.

**099-398 Fusing Ep U4 Fastheat Center Fail** - Over Temperature on Fusing assembly detected.

**099-399 Fusing Ep U4 Under Side Fail** - Abnormal temperature of the Fusing assembly is detected.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Check the fusing assembly and the drawer connector of the printer. Verify the fusing assembly and the drawer connector are installed properly (no bent pin, or any foreign or burnt objects).
2. Check the wiring and continuity between the Fusing assembly and the MCU PWB and between the fusing assembly and the LVPS PWB are fully seated and no opens in the harness exist.
3. Check the wiring and continuity at [P/J283](#). Verify all are fully seated and no opens in the harness exist.
4. Check the wiring and continuity at [P/J270](#). Verify all are fully seated and no opens in the harness exist.
5. Check the wiring and continuity between [P/J284](#) and [P/J280](#). Verify all are fully seated and no opens in the harness exist.
6. Install a new fusing assembly CRU, [PL 7.1 Item 1](#).
7. Install a new LVPS PWB, [PL 18.1 Item 16](#) (MFP), [PL 18.5 Item 16](#) (MFP Tall), [PL 18.9 Item 16](#) (SFP).
8. Install a new MCU PWB, [PL 18.1 Item 1](#) (MFP), [PL 18.5 Item 1](#) (MFP Tall), [PL 18.9 Item 1](#) (SFP).

## 102-311 to 102-319 USB Dongle Errors RAP

**102-311** USB dongle access failed during the initial installation by the USB dongle.

**003-312** 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.

**003-314** 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.

**003-316** Setting the supply setting failed during the initial installation by the USB dongle.

**003-317** 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.

**003-319** The NVM rewriting list process failed during the initial installation by the USB dongle.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15, Special Boot Mode
3. Perform GP 9, Software Version Upgrade.
4. Switch off, then switch on the machine, GP 4.
5. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
6. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.

7. Switch on the machine, GP 4, perform the same operation where the error occurred.
8. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
9. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
10. Reinstall the original ESS PWB and contact Support for instructions.

# 102-356 EWS Soft Fail RAP

102-356 Fatal error related to EWS.

## Initial Actions

Request the customer to ensure that the machine's network port settings are correct.

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

## Procedure

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
3. Check the version of Controller ROM. If it is not the latest, download and update to the latest software revision. (Refer to Software Version Upgrade GP 9.)
4. Switch off, then switch on the machine, GP 4.
5. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
6. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
7. Switch on the machine, GP 4, perform the same operation causing the error.
8. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
9. Switch off then switch on the machine, GP 4.
10. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
11. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
12. Check the connection between the ESS PWB and the customer network or USB-connected workstation, then turn on the power.
13. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.

14. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
15. Reinstall the original ESS PWB and contact Support for instructions.

## 103-314 Prohibited Originals RAP

103-314 Possible prohibited originals (system fail).

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Verify that customer is not attempting to make photo copies of documents protected by law such as currency, government bonds, postage stamps, etc.
2. Switch off then switch on the machine, GP 4.
3. Perform GP 9, Software Version Upgrade.
4. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP)



## 116-210 and 116-211 Media Reader Error RAP

116-210 Fatal error of reader.

116-211 Connection cable disconnected.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the wiring and continuity of the front USB harness assembly PL 18.1 Item 14 and verify no damage or opens in the harness exist.
3. If the error persists, install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP).

## 116-212 and 116-220 ESS Error RAP

116-212 MediaLib internal logic error has occurred.

116-220 The downloader that processes software downloads within the ESS failed to initialize during transition into download mode.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15, Special Boot Mode
3. Perform GP 9, Software Version Upgrade.
4. Switch off, then switch on the machine, GP 4.
5. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
6. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
7. Switch on the machine, GP 4, perform the same operation where the error occurred.
8. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
9. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
10. Reinstall the original ESS PWB and contact Support for instructions.

## 116-312 and 116-313 HDD Encrypt Fail RAP

**116-312** An error in the HDD encryption key was detected on booting.

**116-313** The encryption key was set up but the HDD itself was not encrypted.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Disconnect and reconnect the hard disk harness.
2. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#), Special Boot Mode
4. Perform [GP 9](#), Software Version Upgrade.
5. Switch off, then switch on the machine, [GP 4](#).
6. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
7. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
8. Switch on the machine, [GP 4](#), perform the same operation where the error occurred.
9. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
10. Perform [GP 15](#), STORAGE DEVICE INITIALIZE MODE in the Special Boot Mode procedure. If the error persists,
  - a. Install a known good hard disk to see if the error persists.
  - b. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
11. Perform the same operation where the error occurred. If the error persists, reinstall the original ESS PWB and contact Support for instructions.

## 116-314 Ethernet Address Fail RAP

**116-314** An Ethernet error was detected.

### Initial Actions

Request the customer to check network connection and settings. This error can be displayed if the printer is set to obtain a TCP/IP address from a router with DHCP, but it is not connected to a DHCP router

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Verify the eMMC PWB is fully seated in the socket of the ESS PWB, [PL 18.1 Item 5](#) (MFP), [PL 18.5 Item 5](#) (SFP).
3. Switch off, then switch on the machine, [GP 4](#).
4. Perform [GP 9](#), Software Version Upgrade.
  - a. Verify the machine software version is the latest revision, download and install the latest software if it is not. (Refer to Software Version Upgrade.)
5. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
6. Check the connection between the ESS PWB and the customer network or USB-connected workstation, then turn on the power.
7. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
8. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred.
9. Reinstall the original ESS PWB and contact Support for instructions.



## 116-321, 322, 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.

**116-328** 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.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to “0” to perform log collection and return the NVM (700-530) to “1” after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
3. Check the version of Controller ROM. If it is not the latest, download and update to the latest software revision. (Refer to Software Version Upgrade GP 9.)
4. Switch off, then switch on the machine, GP 4.
5. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
6. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
7. Switch on the machine, GP 4, perform the same operation causing the error.
8. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
9. Switch off, then switch on the machine, GP 4.
10. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
11. Perform GP 37, How to Obtain Log Files.

- If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to “0” to perform log collection and return the NVM (700-530) to “1” after completing the procedure.
12. Check the connection between the ESS PWB and the customer network or USB-connected workstation, then turn on the power.
  13. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
  14. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
  15. Reinstall the original ESS PWB and contact Support for instructions.

## 116-323 ESS NVRAM W/R Check Fail RAP

**116-323** During a Read/Write check at power on, OS/DD detects an HW error with the NVRAM PWB.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Disconnect and reconnect the ESS PWB and turn on the power.
  - a. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP)
3. After installation of the ESS PWB, serial number mismatch will occur. Perform [dC132](#) to correct the serial number mismatch issue.
4. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#) Special Boot Mode.
6. Check the version of Controller ROM. If it is not the latest, download and update to the latest software revision. (Refer to Software Version Upgrade [GP 9](#).)
7. Switch off, then switch on the machine, [GP 4](#).
8. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
9. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
10. Switch on the machine, [GP 4](#), perform the same operation causing the error.
11. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
12. Switch off, then switch on the machine, [GP 4](#).
13. Check the version of Controller ROM.
  - a. Perform [GP 9](#), Software Version Upgrade.
14. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
15. Check the connection between the ESS PWB and the customer network or USB-connected workstation, then turn on the power.
16. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
17. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
18. Reinstall the original ESS PWB and contact Support for instructions.

## 116-324, 116-328 Exception Fail RAP

**116-324 Exception Fail** - A fatal software exception error has occurred in the controller PWB CPU.

**116-328 L2 Cache Fail** - A failure was detected in the Level 2 Cache built in the CPU.

### Initial Actions

The error occurs in most printers caused by a corrupt print file, wrong printer driver or a corrupt printer driver. Disconnect the printer from the network or USB and switch off, then switch on the machine, [GP 4](#). The error desists, reconnect network and test. If the error persists, purge all print files from the print server and/or individual workstations and retest.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP).
3. Perform [GP 9](#), Software Version Upgrade.

## 116-325 ESS Fan Fail RAP

116-325 An error occurred in the rotation of the ESS fan.

### Procedure

For information only. No service action necessary.

## 116-330, 336, 337, 339, 353, 354, 356, 361, 388 HDD Fail RAP

116-330 HDD File System Fail - HDD Check at power ON detected that an error has occurred or the HDD was not formatted.

116-336 Redirector HD Fail - An error was detected when HD was accessed.

116-337 SNTP S/W Fail - Overall SNTP fatal error. Due to an error in software processing, subsequent processes cannot be performed.

116-339 JBA No HD - When the JBA is started up, the HDD is not installed.

116-353 HDD Physical Fail - The HDD was not booted due to a physical HDD failure detected on booting.

116-354 HDD Product Fail - The HDD was not started up due to a Product Code error detected in the HDD on booting. It is possible that the HDD had been formatted by the M/C of a different product.

116-356 HDD Format Fail - HDD was formatted but an incorrect HDD was connected or a HDD error occurred.

116-361 Spool Fatal HDD - Fatal error of SPL HDD.

116-388 No HD that Should Be - No HDD detected.

116-713 Job divided by HDD Full - Collate operation was split when HDD Full occurred in Print Service.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Check the HDD installation and verify the HDD and both harness connectors are fully seated.
2. Switch off, then switch on the machine, GP 4.
3. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15, Special Boot Mode
5. Perform GP 9, Software Version Upgrade.
6. Switch off, then switch on the machine, GP 4.
7. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
8. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.

9. Switch on the machine, [GP 4](#), perform the same operation where the error occurred.
10. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
11. Perform [GP 15](#), STORAGE DEVICE INITIALIZE MODE in the Special Boot Mode procedure. If the error persists,
  - a. Install a known good hard disk to see if the error persists.
  - b. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
12. Perform the same operation where the error occurred. If the error persists, reinstall the original ESS PWB and contact Support for instructions.

## 116-331 Invalid Log Info RAP

**116-331** A log related error 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 4](#). 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 4](#).
2. Disconnect and reconnect the hard disk harness.
3. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Perform [GP 15](#), JOB LOG CLEAR in the Special Booting Menu.
5. Perform [GP 9](#), Software Version Upgrade.
6. Switch off, then switch on the machine, [GP 4](#).
7. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
8. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
9. Switch on the machine, [GP 4](#), perform the same operation where the error occurred.
10. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
11. Perform [GP 15](#), STORAGE DEVICE INITIALIZE MODE in the Special Boot Mode procedure. If the error persists,
  - a. Install a known good hard disk to see if the error persists.
  - b. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
12. Perform the same operation where the error occurred. If the error persists, reinstall the original ESS PWB and contact Support for instructions.

## 116-334 ESS NVRAM Data Compare Fail

### 116-334 ESS NVRAM Data Compare Fail

During a check of Read/Write at power on, System Cont detects (ESS-NVRAM with factory settings is installed) or (Illegal ESS-NVRAM data is occurring).

Because data for initialization in ESS-ROM is written on ESS-NVRAM data when 116-334 is detected, powering off and on after that causes System Fails (124-3xx) that indicate mismatches in various data between the three locations.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Disconnect and reconnect the ESS PWB and turn on the power.
  - a. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP).
3. Switch off, then switch off the machine, GP 4, if error 116-334 occurs.
4. Enter diagnostics, GP 1.
5. Execute dC132, following the corrective actions for the relevant Fault Code(s).
  - a. Switch off the machine, GP 4. Disconnect and reconnect the NVRAM Board, then switch on the machine. If the error persists,
  - b. Switch off the machine, GP 4. Install new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP), then switch on the machine.
  - c. If the 116-334 problem still persists, perform the following steps to resolve it.
6. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
7. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
8. Check the version of Controller ROM, if the version is not current,
  - a. Perform GP 9, Software Version Upgrade.
9. Switch off, then switch on the machine, GP 4.
10. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
11. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
12. Switch on the machine, GP 4, perform the same operation causing the error.
13. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
14. Switch off, then switch on the machine, GP 4.
15. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
16. Reinstall the original ESS PWB and contact Support for instructions.

## 116-342, 393, 394 ROM Version Incorrect RAP

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

1. Reload the software, GP 4.
2. Perform GP 15, How to Obtain the Log Files.
3. Call Support for further instruction.

## 116-343, 346, 357, 359 Main 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.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
3. Switch off, then switch on the machine, GP 4.
4. Install a new;
  - a. ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP).

## 116-348, 349 Redirector Fail RAP

**116-348** A response such as system function recall error was detected.

**116-349** An error occurred when calling the Pflite function using the SIF.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
4. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
5. Switch off, then switch on the machine, GP 4.
6. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
7. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
8. Switch on the machine, GP 4, perform the same operation causing the error.
9. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
10. Switch off, then switch on the machine, GP 4.
11. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
12. Perform GP 36, How to Manually Configure an IP Address, and verify the network settings for the machine are correct for the customer network.
13. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
14. Reinstall the original ESS PWB and contact Support for instructions.

## 116-355, 358, 360, 363, 370, 374, 379, 395, 362, 117-330, 118-311 Soft Fail RAP

116-355 Agent Soft Fail - Fatal error related to the SNMP Agent.

116-358 Salutation Soft Fail - Fatal error related to the SNMP Agent.

116-360 SMB Soft Fail - Fatal error related to the SNMP.

116-363 BMLinkS/ Print Service Soft Fail - BMLinkS/ Print Service Software Failure.

116-370 XJCL Fail - Fatal error in XJCL.

116-374 Auto Switch Fail - Fatal error of auto SW.

116-379 MCC Soft Fail - Fatal error related to MCC.

116-395 USB Soft Fail - Fatal error related to USB.

116-362 SSDP Soft Fail - Fatal error related to USB.

117-330 XBSD Soft Fail - Fatal error related to XBSD.

118-311 GCP Soft Fatal Error - Fatal error related to GCP.

### Initial Actions

1. Request the customer to ensure that the machine's network port settings are correct.
2. Switch off, then switch on the machine, [GP 4](#).

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#) Special Boot Mode.
3. Check the version of Controller ROM.
  - a. Perform [GP 9](#), Software Version Upgrade.
4. Switch off, then switch on the machine, [GP 4](#).
5. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
6. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
7. Verify the wire harness connections on each PWB are fully seated.
8. Switch on the machine, [GP 4](#), perform the same operation causing the error.

9. Use the ping command to verify no faulty ports in the list below, and no Network connectivity issues.
  - SNMP, Port 9100, Salutation I/O, USB, lpd, FTP Serv, MailO, IPP.
10. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
11. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
12. Reinstall the original ESS PWB and contact Support for instructions.

## 116-363, 370, 373, 376 Fatal Error RAP

**116-370** Fatal error of XJCL.

**116-373** Fatal error related to dynamic DNS.

**116-376** Port 9100 software fail.

### Initial Actions

Request the customer to ensure that the machine's network port settings are correct.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#) Special Boot Mode.
3. Check the version of Controller ROM.
  - a. Perform [GP 9](#), Software Version Upgrade.
4. Switch off, then switch on the machine, [GP 4](#).
5. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
6. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
7. Switch on the machine, [GP 4](#), perform the same operation causing the error.
8. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
9. Switch off, then switch on the machine, [GP 4](#).
10. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
11. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
12. Reinstall the original ESS PWB and contact Support for instructions.

## 116-364 Timer Fail RAP

**116-364** An error in the timer was detected.

### Initial Actions

Check the state of the battery on the ESS PWB before further action.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Set the current time and date in the UI.
3. Perform [GP 4](#), Software Version Upgrade.
4. Ensure that all connectors on the MCU PWB, and the ESS PWB are securely connected. Make sure all surface mounted modules on both PWBs are securely connected.
5. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP).



## 116-365, 366, 368, 371, 372, 373, 375, 377 SW Fail RAP

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.

116-373 Fatal error related to dynamic DNS.

116-375 A response such as system function recall error was detected.

116-377 Video DMA failure was detected.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Switch off the machine, GP 4.
2. Disconnect and reconnect the ESS PWB and turn on the power.
  - a. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP).
3. Switch on the machine, GP 4.
4. After installation of the ESS PWB, SN mismatch will occur. perform dC132 to correct the SN mismatch issue.
5. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
6. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
7. Check the version of Controller ROM.

- a. Perform GP 9, Software Version Upgrade.
8. Switch off, then switch on the machine, GP 4.
9. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
10. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
11. Switch on the machine, GP 4, perform the same operation causing the error.
12. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
13. Switch off, then switch on the machine, GP 4.
14. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
15. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
16. Reinstall the original ESS PWB and contact Support for instructions.

## 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.

### Initial Actions

Request the customer to ensure that the machine's network port settings are correct.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
4. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
5. Switch off, then switch on the machine, GP 4.
6. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
7. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
8. Switch on the machine, GP 4, perform the same operation causing the error.
9. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
10. Switch off, then switch on the machine, GP 4.
11. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
12. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
13. Reinstall the original ESS PWB and contact Support for instructions.

## 116-380 ESS Font ROM DIMM #1Check Fail RAP

**116-380** An error was detected when the ESS Font ROM DIMM #1 was checked.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 4, Software Version Upgrade.
3. Ensure that all connectors on the MCU PWB, and the ESS PWB are securely connected. Make sure all surface mounted modules on both PWBs are securely connected.
4. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP).

## 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

1. Switch off, then switch on the machine [GP 4](#).
2. Perform Clear Controller NVM on the system. As this will clear all address information, Request permission from the user before performing this.

## 116-382 ABL Initialize Fail RAP

**116-382** ABL has failed to access the NVM.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Enter Diagnostics, [GP 1](#).
3. Enter [dC131](#). Set NVM value 790-664 to 0.
4. Exit Diagnostics, [GP 1](#).
5. Perform [GP 4](#), Software Version Upgrade.
6. Ensure that all connectors on the MCU PWB, and the ESS PWB are securely connected. Make sure all surface mounted modules on both PWBs are securely connected.
7. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP). If the error persists,
8. Perform the [116-330](#), [336](#), [337](#), [339](#), [353](#), [354](#), [356](#), [361](#), [388](#) HDD Fail RAP

## 116-383 PIT Lib Failure RAP

**116-338** HDD File System Fail - HDD Check at power ON detected that an error has occurred or the HDD was not formatted.

1. An HDD access error was detected during job execution.
2. Insufficient memory is detected during image log creation.

**NOTE:** Note the difference in timing, that although 016-231 is detected during power ON, it is 'detected during job execution'.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 power, GP 4.
2. Check dC125 Active Faults. If a new fault is listed, perform the relevant RAP.
3. Perform 116-330, 336, 337, 339, 353, 354, 356, 361, 388 HDD Fail RAP.

## 116-384, 116-385 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.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:.
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
3. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
4. Switch off, then switch on the machine, GP 4.
5. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
6. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
7. Switch on the machine, GP 4, perform the same operation causing the error.
8. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
9. Switch off, then switch on the machine, GP 4.
10. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
11. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
12. Reinstall the original ESS PWB and contact Support for instructions.

## 116-386 Incorrect USB port used for FAX RAP

**116-386** At startup, the Fax USB Cable was connected to an incorrect port.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Switch off the machine, GP 4.
2. If the error persists, verify the fax USB Cable is connected to the correct USB port, then turn the power on.
3. Switch on the machine, GP 4.

## 116-391 Illegal Code RAP

**116-391** Country code/territory code/paper size group setting error detected.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 9, Software Version Upgrade. If the error persists,
3. Enter Diagnostic, GP 1.
4. Enter dC131. Make sure NVM values 700-165, 700-338 and 700-402 are correct. Change the values as necessary.
5. Exit Diagnostic, GP 1.

## 116-396 RAPS140 Self Test Fail RAP

**116-396** At start, the RAPS140 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 4. 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 4**.
2. Reload the software, **GP 9**.

## 116-397 Illegal Setting Area Coverage Threshold RAP

**116-397** The plain total color judge threshold setting is incorrect.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4**.
2. Perform **GP 9**, Software Version Upgrade. If the error persists,
3. Enter Diagnostic, **GP 1**.
4. Enter **dC131**. Make sure the value of 720-061 is higher than 720-060. Adjust the values as necessary.
5. Exit Diagnostic, **GP 1**.

## 116-399 Under initialization for 10 minutes RAP

**116-399** The machine remains in initializing state even after 10 minutes has passed since start up (not including the startup after power save).

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. If the error persists, perform [GP 37](#), How to Obtain the Log Files.
3. Contact Support for further instruction.

## 116-701 Out of Memory Duplex Fail RAP

**116-701** The title with two or more lines was printed on 2 pages because 2-Sided Print is not available due to insufficient memory.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Expand the memory or install the HDD if it is not installed.

## 116-702 Print with Substitute Font RAP

116-702 Printing performed with a substitute font.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Install an appropriate Font ROM.

## 116-703 PostScript LANG Interpreter ERR RAP

116-703 There is a problem in the PostScript data and an error occurred in PostScript grammar interpretation or language interpretation.

### Initial Actions

1. Re-install client PS driver or application.
2. When another PostScript printer exists at the customer site, print data on that printer and check if the same problem occurs.

### Procedure

Perform the steps that follow:

1. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
3. Check the version of Controller ROM. Perform GP 37, How to Obtain Log Files.
4. Switch off, then switch on the machine, GP 4.
5. Ask the customer for the procedures to reproduce the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Perform GP 37, How to Obtain the Log Files immediately after the error has occurred without powering down and powering the machine back up.
7. Contact Technical Support for further instructions.



## 116-704 to 116-709, 716, 717 Media Reader Format RAP

**116-704** The MediaLib detected this error while performing the operation that requires access to media.

**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 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 error persists, inform the customer that the media may be defective.
2. If the error persists, inform the customer that the media may be defective.

## 116-710 HP-GL/2 Overflow RAP

**116-710** HP-GL/2 overflow.

### Procedure

Increase the HP-GL spool size or install the HDD.

## 116-714 HP-GL/2 Command Error RAP

116-714 HP-GL/2 command error occurred.

### Procedure

Perform the steps that follow:

1. Perform [GP 9](#), Software Version Upgrade.

## 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 device cannot execute them. Advise the customer cancel the disabled parameter(s).

## 116-720 PCL Memory Low Page Simplified RAP

116-720 PCL Memory Low, Page Simplified

### Procedure

- Deactivate the unnecessary ports.
- Adjust various buffer memory sizes.

## 116-721 to 116-728 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 full for Image Log RAP**

**017-725** With the system data 'Level of Ensuring Log Image Creation' set to 'Low,' the log image storage area on the disk is full.

### **Procedure**

Rerun the job. If the error persists, delete unnecessary documents saved in the device and run the job again.

## **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 select paper that has the same size and orientation as the registered form.

## **116-739, 741, 742, 743 Out of Memory RAP**

**017-739** The form/logo data cannot be registered due to insufficient ram.

**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**

After checking the registered forms/logos using the Operation Panel utility, Advise the customer delete any unnecessary forms or logos.

## **116-740 Arithmetic Error RAP**

**017-740** The value calculated in the interpreter exceeded the limit.

### **Procedure**

Advise the customer upgrade the driver.

## **116-746 Selected Form Not Registered RAP**

**017-746** The specified form is not registered.

### **Procedure**

Advise the customer 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 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 add the necessary font, or specify a substitute font.

## 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.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Advise the customer:
  - a. Re-run the job.
  - b. Print to a machine that supports the printing instructions.
2. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
4. Check the version of Controller ROM. Perform GP 9, Software Version Upgrade.
5. Ask the customer for the procedures to reproduce the error.
  - a. Check the exact occurrence timing during job execution.
  - b. Check the job settings from the Panel.
  - c. Collect other information as much as possible to reproduce the error.
6. Perform GP 37, How to Obtain the Log Files immediately after the error has occurred without powering down and powering the machine back up.
7. Contact Technical Support for further instructions.

## **116-749 PostScript Font Error RAP**

**017-749** Job was aborted because the specified font is not found.

### **Procedure**

Advise the customer add the necessary font, or specify a substitute font.

## **116-790 Stapling Canceled RAP**

**116-790** Either all or one of the lead Stapler is canceled during print.

### **Procedure**

Perform the steps that follow:

1. Cancel the first print and staple job in the list.
2. Cancel all print and staple jobs and rerun the first print and staple job.
3. Proceed with all remaining print and staple jobs once the first completes successfully.



## 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.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
4. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
5. Switch off, then switch on the machine, GP 4.
6. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
7. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
8. Switch on the machine, GP 4, perform the same operation causing the error.
9. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
10. Switch off, then switch on the machine, GP 4.
11. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
12. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
13. Reinstall the original ESS PWB and contact Support for instructions.

## 117-312 Device 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

#### **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. Perform GP 9, Software Version Upgrade. If the error persists,
2. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP).

## 117-313 Geographic Region Change Fail RAP

117-313 The geographic region change command from the PJJ can not be implemented.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Request the customer update the geographic region again.
3. Request the customer download and install the latest Xerox PC software.
4. Perform [GP 9](#), Software Version Upgrade.
5. If the error persists, install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP).

## 117-314 and 117-315 Contract Type/Geographic Region Changed RAP

117-314 The contract type change command from the PJJ can not be implemented.

117-315 The geographic region and contract type change command from the PJJ was implemented.

### Procedure

Perform the steps that follow:

1. Switch off, then switch on the machine, [GP 4](#).
2. Request the customer update the contract type again.
3. Request the customer update the contract type again.
4. Switch off the machine, [GP 4](#).
5. Install the new contract type and geographic region CRUs.
6. Switch on the machine, [GP 4](#).
7. Request the customer download and install the latest Xerox PC software.
8. Perform [GP 9](#), Software Version Upgrade.
9. If the error persists, install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP).

## 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 the machine, make sure the UI is fully off, then switch on the machine, [GP 4](#).
2. If the error persists, reload the software, [GP 9](#).

## 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

Request the customer to wait for the machine to reboot.

## 117-319 and 117-320 eMMC Fail RAP

**117-319** When attempting to extract programs and font data from the eMMC PWB into the memory immediately after Power ON, an access error occurs and retrying still results in access failure.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Perform [GP 9](#), Software Version Upgrade.
3. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#), Special Boot Mode.
5. Switch off, then switch on the machine, [GP 4](#).
6. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
7. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
8. Switch on the machine, [GP 4](#), perform the same operation causing the error.
9. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
10. Switch off, then switch on the machine, [GP 4](#).
11. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
12. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
13. Reinstall the original ESS PWB and contact Support for instructions.

## 117-321, 117-324 eMMC Card Invalid Type Fail RAP

**117-321** When starting up, the installed EMMC CARD was detected to be unsupported by Sys-CheckMemory.

**117-324** When the OS is starting up, the system detected that the EMMC CARD is meant for another product and an error is issued.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Verify the eMMC card is the correct type for the machine, install the correct type eMMC card if the one causing the error is not correct.
3. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#) Special Boot Mode.
5. Check the version of Controller ROM.
  - a. Perform [GP 9](#), Software Version Upgrade.
6. Switch off, then switch on the machine, [GP 4](#).
7. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
8. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
9. Switch on the machine, [GP 4](#), perform the same operation causing the error.
10. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
11. Switch off, then switch on the machine, [GP 4](#).
12. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
13. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
14. Reinstall the original ESS PWB and contact Support for instructions.

## 117-322 eMMC Card Encrypt Fail RAP

117-322 When starting up, memory encryption error was detected by SysCheckMemory.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Verify the encryption key/memory encryption settings are correct.
3. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
5. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
6. Switch off, then switch on the machine, GP 4.
7. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
8. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
9. Switch on the machine, GP 4, perform the same operation causing the error.
10. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
11. Switch off, then switch on the machine, GP 4.
12. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
13. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
14. Reinstall the original ESS PWB and contact Support for instructions.

## 117-323 eMMC File Access Fail RAP

117-323 When starting up, eMMC CARD File System Access error was detected by SysCheckMemory.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Perform Hardware Diagnostic using the following steps, in order, in the Special Booting Menu. Refer to GP 15 Special Boot Mode.

**NOTE:** Switch off, then switch on the machine, GP 4. Check after each step to see if the error persists. Stop at the step correcting the error.

  - a. JOB LOG CLEAR
  - b. HDD INITIALIZE
  - c. HDD FORMAT
  - d. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,
4. Reinstall the original ESS PWB and contact Support for instructions.

## 117-325 Contract Manager RTC Hardware Fail RAP

117-325 Failed to obtain RTC timer value due to hardware problem in the contract function.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Switch off the machine, wait until the UI is fully off, then switch on the machine, GP 4.

## 117-326 ESS NVRAM SW Access Fail RAP

117-326 Software fault processing of NVRAM area/access.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 37, How to Obtain Log Files.
3. Contact Support for further instruction.

## 117-327 ESS NVRAM eMMC Card HW Access Fail RAP

**117-326** When accessing using `nv_memmove ()`, an Error on the EMMC CARD is detected or when 3 retry attempts using the EMMC CARD Driver is still unable to end in recovery, the `nv_memmove ()` will be in Assertion Fail (= state, Fail Code cannot be identified) and the access to the corresponding task is stopped. (Same as the existing NV Fail Detection).

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform the following steps in order:
  - a. Perform eMMC CARD Hardware Diagnostic in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
    - If the diagnostics return an error, install a new, ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
  - b. Perform eMMC CARD Hardware Diagnostic using LONG BOOT in the Special Booting Menu.
    - Refer to GP 15 Special Boot Mode. If no error is detected, perform the NVRAM Area Initialization process.
3. If the error persists, contact Support for further instruction.

## 117-330, 118-311 Soft Fail RAP

**117-330 XBDS Soft Fail** Problem occurs at software processing, and processing is unable to proceed.

**118-311 GCP Soft Fatal Error** Problem occurs at software processing, and processing is unable to proceed.

### Initial Actions

Request the customer to ensure that the machine's network port settings are correct.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform the same operation and check whether the problem is reoccurring.
3. Check whether HTTP and HTTPS have started up normally and are operable. As data is obtained via SNMP for the Alert section, it depends on whether the SNMP Agent has started up normally.
4. Switch off, then switch on the machine, GP 4.
5. Check the version of Controller ROM.
  - a. Verify the machine software version is the latest revision, download and install the latest software if it is not. (Refer to Software Version Upgrade GP 9.)
6. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
7. Check the connection between the ESS PWB and the customer network or USB-connected workstation, then turn on the power.
8. If the error persists, perform the same operation that created the error originally and Perform GP 37, How to Obtain Log Files.
9. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
10. Reinstall the original ESS PWB and contact Support for instructions.

## 117-332, 117-335 Uninitialized or Invalid NVM RAP

**117-332 Uninitialize used NVM** An uninitialized NVM that was used for another device was recognized.

**117-335 Invalid NVM of Convert Fail** detected at startup after the power is cut off during the NVM Map convert.

### Procedure

Initialize the NVM, perform [dC301](#) NVM Initialization.

## 117-333, 348, 364 Uninitialized or Used eMMC RAP

**117-333 Uninitialize used eMMC** An uninitialized eMMC PWB that was used for another device was recognized.

**117-348 Uninitialize used eMMC** An uninitialized eMMC PWB that was used for another device was recognized.

### 117-348 Key Fail

- The encryption key file was corrupted.
- The TPM key information file was corrupted.
- When automatically restoring the encryption key file, there was no TPM backup file or it was corrupted.
- Either of the access key information, MAC address, or serial number held in the SEEP area was changed.
- Failed to decrypt the encryption key in TPM.

### Procedure

Perform procedure [GP 15](#) Special Boot Modes “HDD Initialize Mode” to initialize the eMMC PWB in the machine.

**NOTE:** After performing [GP 15](#) Special Boot Modes it may be necessary to perform [dC132](#) Device ID / Billing Data to verify all Device IDs are same.



## 117-343 Log Sending Parameter Fail RAP

**117-343 Log Sending Parameter Fail** an incorrect setting of the log transfer function was detected.

### Initial Actions

Obtain the following information from the customer.

- When the Image Log function is disabled and the Auto Transfer function is enabled, Transfer in Job Units is set.
- When the Job Log Auto Transfer function is disabled and the Auto Transfer function of the log is set to enabled.
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Change the setting of Log Transfer function.

1. Switch off, then switch on the machine, GP 4.
2. For detection condition 1, change the operation method for Log Auto Transfer to anything other than (Transfer in Job Units).
3. For detection condition 2, change the Auto Transfer function of the log to disable it.
4. Perform GP 37, How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to GP 15 Special Boot Mode.
6. Check the version of Controller ROM.
  - a. Perform GP 9, Software Version Upgrade.
7. Switch off, then switch on the machine, GP 4.
8. If the error persists after performing, GP 4, perform GP 37, How to Obtain Log Files.
9. Switch off the machine, GP 4, disconnect the power cord for 2 minutes.
10. Switch on the machine, GP 4, perform the same operation causing the error.
11. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
12. Switch off, then switch on the machine, GP 4.
13. If the error persists, perform the same operation that created the error originally and perform GP 37, How to Obtain Log Files.
14. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred. If the error persists,

15. Reinstall the original ESS PWB and contact Support for instructions.

## 117-344 Invalid User Job Type Fail RAP

**117-344** The applicable user job cannot be executed at the system level.

### Procedure

1. Switch off, then switch on the machine, [GP 4](#).
2. For Public Print, check whether it is set to be stored as Charge Print.
3. Perform the 2.6 Log procedure

## 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

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

1. For a single occurrence, take no action.
2. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
3. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#) Special Boot Mode.
4. Check the version of Controller ROM.
  - a. Perform [GP 9](#), Software Version Upgrade.
5. Switch off, then switch on the machine, [GP 4](#).
6. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
7. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
8. Switch on the machine, [GP 4](#), perform the same operation causing the error.
9. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
10. Switch off, then switch on the machine, [GP 4](#).
11. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
12. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
13. Reinstall the original ESS PWB and contact Support for instructions.

## 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

1. Switch off, then switch on the machine, [GP 4](#).
2. Perform [GP 37](#), How to Obtain Log Files.

## 117-357 TPM Fail RAP

**117-357** One of the following conditions was satisfied.

- TPM device could not be recognized.
- TPM self-diagnostic failed.
- Communications failure with TPM.
- TPM initialization failure.
- The key generated by the TPM was used, but the TPM can no longer be used.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 error persists, perform the steps that follow:
  - a. Switch off, then switch on the machine, [GP 4](#).
  - b. Unplug the Power cord from the machine for 2 mins. to ensure the UI Panel is off.
  - c. Ensure that all connectors on the MCU PWB and the ESS PWB are securely connected. Make sure all surface mounted modules on both PWBs are securely connected.
  - d. Perform [GP 9](#), Software Version Upgrade.
  - e. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP).

## 117-360 Date Limit Exceeding Fail RAP

**117-360** When the unit starts up in year 3036 or later, reset the time to year 2034 in order to avoid the year 2038 problem.

### Procedure

#### **WARNING**

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
  - When the power is turned on again, the time will be set to 2034 or later. Set the correct time again.
2. Perform GP 9, Software Version Upgrade.
3. Install a new ESS PWB, PL 18.1 Item 5 (MFP) or PL 18.5 Item 5 (MFP Tall) or PL 18.9 Item 5 (SFP).

## 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 4.
2. Make sure the correct USB dongle is installed.

## 117-365 WiFi Long Diag Fail RAP

**117-365** An error occurred in the WiFi diagnostics test.

### Procedure

Perform the steps that follow:

1. Switch off the machine, [GP 4](#), check that the operation panel is not illuminated, and then switch on the machine, [GP 4](#).
2. Check the WiFi adapter connection or install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP).

## 118-310 IPSEC Internal Fail RAP

**118-310** An internal error was detected during initialization of the IPSEC.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Change the setting of Log Transfer function.

1. Switch off, then switch on the machine, [GP 4](#).
2. For detection condition 1, change the operation method for Log Auto Transfer to anything other than (Transfer in Job Units).
3. For detection condition 2, change the Auto Transfer function of the log to disable it.
4. Perform [GP 37](#), How to Obtain Log Files.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
5. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. Refer to [GP 15](#) Special Boot Mode.
6. Check the version of Controller ROM.
  - a. Perform [GP 9](#), Software Version Upgrade.
7. Switch off, then switch on the machine, [GP 4](#).
8. If the error persists after performing, [GP 4](#), perform [GP 37](#), How to Obtain Log Files.
9. Switch off the machine, [GP 4](#), disconnect the power cord for 2 minutes.
10. Switch on the machine, [GP 4](#), perform the same operation causing the error.
11. Verify the wire harness connections on each PWB are fully seated properly, then perform the same operation creating the error.
12. Switch off, then switch on the machine, [GP 4](#).
13. If the error persists, perform the same operation that created the error originally and perform [GP 37](#), How to Obtain Log Files.
14. Install a new ESS PWB, [PL 18.1 Item 5](#) (MFP) or [PL 18.5 Item 5](#) (MFP Tall) or [PL 18.9 Item 5](#) (SFP) and perform the same operation where the error occurred. If the error persists,
15. Reinstall the original ESS PWB and contact Support for instructions.



## 121-316 Accessory Conflict RAP

**117-316** Prohibited combination of EP accessory connection and secure access authentication.

### Procedure

#### **WARNING**

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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.

## 121-318 Auth/Account Settings Not Supported RAP

**117-318** Auth/account settings not supported.

### Procedure

For information only. No service actions necessary.

## 123-310 to 123-399 UI Error 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.

**123-353** The control panel has detected that the UI cable is disconnected.

**123-354** The control panel has detected a drop in +24VDC power voltage.

**123-355** The control panel has detected a drop in +5VDC power voltage.

**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.

**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.

### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

### Procedure

Perform the steps that follow:

1. Make sure that the UI Cable connection section of the UI are installed properly and perform the same operation where the error occurred.
    - perform the following procedures:
  2. Obtain the log file using the log tool GP 37.
    - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
  3. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. GP 15 Special Boot Modes.
  4. Check the version of Controller ROM. If it is not the latest, download and update to the latest software revision. Refer to Software Version Upgrade GP 9.
  5. Switch the power Off and On, GP 4.
6. If the error persists after turning the power off and on on GP 4, Obtain the log file using the log tool GP 37.



7. Turn off the Power GP 4, unplug the power cord for 2 minutes, then turn on the Power again GP 4 to perform the same operation where the error occurred.
8. Verify the wire harness connections on each board are installed properly, then perform the same operation creating the error.
9. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
10. Reinstall the original ESS PWB and contact the Support Department for instructions with the logs as required

## 124-310-314, 316, 318, 322, 324, 340, 356, 357, 360 ID/ Billing/Data Mismatch RAP

124-310 DC132 11 Product Number Not Specified.

124-311 DC132 09 Serial Number Not Specified.

124-312 Stored Data Mismatch. The Product Number Did Not Match.

124-313 DC132 10 Serial Number Not Mismatch.

124-314 DC132 01 Stored Data Mismatch.

124-316 DC132 03 Stored Data Mismatch.

124-318 DC132 07 Stored Data Mismatch.

124-322 DC132 05 Product Number Not Specified.

124-324 All Billings Mismatch.

124-340 CRUM Market Fail ALL.

124-356 SN Restoration Fail.

124-357 Product Number 1 Point Mismatch.

124-360 CRUM Validation Fail ALL.

### Possible Parts Affected:

- MCU PWB PL 18.1 Item 1 (MFP), PL 18.9 Item 1 (SFP)
- ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP)

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter dC132 Device ID/Billing Data, compare the following 3 NVM values. and verify the 3 numbers match.
3. Install a new MCU PWB PL 18.1 Item 1 (MFP) PL 18.9 Item 1 (SFP) and Enter dC132 Device ID/Billing Data and verify the 3 numbers match.
4. If the fault persists, install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and Enter dC132 Device ID/Billing Data and verify the 3 numbers match.

## 124-315, 317, 355 DC132 Error 02, 04 and 14 RAP

**124-315: DC132 02** At least one IOT Speed value held in three locations was different.

**124-317: DC132 04** At least one Product a/f Model identification information value held in three locations was different.

**124-355: DC132 14** At least one set of territory information at the 3 locations is different.

### Possible Parts Affected:

- MCU PWB [PL 18.1 Item 1 \(MFP\)](#), [PL 18.9 Item 1 \(SFP\)](#)
- ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#)

### Procedure

#### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Enter [dC131](#) NVM Read/Write, compare and verify the following 3 NVM values.
  - 700-600
  - 700-601
  - 700-602
3. Install a new MCU PWB [PL 18.1 Item 1 \(MFP\)](#) [PL 18.9 Item 1 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.
4. Install a new ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.

## 124-319 DC132 Error 08 RAP

**124-319: DC132 08** Stored data mismatch. Internal control error was detected.

### Possible Parts Affected:

- MCU PWB [PL 18.1 Item 1 \(MFP\)](#), [PL 18.9 Item 1 \(SFP\)](#)
- ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#)

### Procedure

#### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Enter [dC131](#) NVM Read/Write, compare the following 3 NVM values. and verify the 3 numbers match.
  - 700-606
  - 700-607
  - 700-608
3. Install a new MCU PWB [PL 18.1 Item 1 \(MFP\)](#) [PL 18.9 Item 1 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.
4. Install a new ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.

## 124-320 SEEPROM Fail RAP

124-320 Write error occurred in the SEEPROM on the ESS PWB.

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Ensure that all connectors on the ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) are securely connected. Make sure all surface mounted modules are securely connected.
3. Refer to Software Version Upgrade GP 9.
4. If the fault persists, Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP).

## 124-321 Backup SRAM Fail RAP

124-321 Write error occurred in the NVM on the ESS PWB.

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Ensure that all connectors on the ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) are securely connected. Make sure all surface mounted modules are securely connected.
3. Refer to Software Version Upgrade GP 9.
4. If the fault persists, Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP)

## 124-323 DC132 06 RAP

**124-323 DC132 06** The billing counters in multiple locations are all different.

### Possible Parts Affected:

- MCU PWB [PL 18.1 Item 1 \(MFP\)](#), [PL 18.9 Item 1 \(SFP\)](#)
- ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#)

### Procedure

#### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#) the error persists,
2. Enter [dC131](#) NVM Read/Write, compare the following 3 NVM values. and verify the 3 numbers match.
  - 700-603
  - 700-604
  - 700-605
3. Install a new MCU PWB [PL 18.1 Item 1 \(MFP\)](#), [PL 18.9 Item 1 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.
4. Install a new ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.
5. Install a new PWB whose values do not match.

## 124-325 Billing Restoration Fail RAP

**124-325** It was detected that at boot, IOT Speed registration procedure status was 1 or 2.

### Possible Parts Affected:

- MCU PWB [PL 18.1 Item 1 \(MFP\)](#), [PL 18.9 Item 1 \(SFP\)](#)
- ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#)

### Procedure

#### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4](#).
2. Enter [dC131](#) NVM Read/Write, compare the 3 serial numbers. and verify the 3 serial numbers match.
3. Install a new MCU PWB [PL 18.1 Item 1 \(MFP\)](#) [PL 18.9 Item 1 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.
4. Install a new ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#) and Enter [dC132](#) Device ID/Billing Data, and verify the 3 numbers match.
5. Install a new PWB whose values do not match.

## 124-326 IOT Speed Not Registered RAP

124-326 IOT Speed not registered.

### Procedure

1. Switch off then switch on the machine, GP 4.
2. Request 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.

1. A failure to shift to Diag Mode.
2. A failure in dC132.
3. A failure to read from/write in SEEP ROM.
4. A failure to reboot.

### Procedure

#### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.

## 124-334 to 124-335 ESS ROM DIMM RAP

**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.

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#).
2. Install the latest software version, [GP 9](#).

## 124-337 ESS Standard RAM Error RAP

**124-337** An error was detected in the ESS Built-In Standard RAM.

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). 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 4](#),
2. If the fault persists, Install a new ESS PWB [PL 18.1 Item 5 \(MFP\)](#), [PL 18.9 Item 5 \(SFP\)](#).

## 124-341, 351, 361, 381, 391 CRUM Market Fail MCU RAP

**124-341: CRUM Market Fail MCU** One of the CRUM destinations stored in three positions does not match (Data stored in the MCU PWB does not match).

**124-351: CRUM OEM Fail MCU** One of the CRUM destinations stored in three positions does not match (Data stored in the MCU PWB does not match).

**124-361: CRUM Validation Fail MCU** One of the CRUM destinations stored in three positions does not match (Data stored in the MCU PWB does not match).

**124-381: CRUM MarketFail MCU (2)** destinations stored in three positions does not match (Data stored in the MCU PWB does not match).

**124-391: CRUM OEM Fail MCU (2)** destinations stored in three positions does not match (Data stored in the MCU PWB does not match).

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter dC132 Device ID/Billing Data.
3. Install a new MCU PWB PL 18.1 Item 1 (MFP) PL 18.9 Item 1 (SFP) and enter dC132 Device ID/Billing Data.

## 124-342, 343, 352, 362, 363, 382, 383, 392, 393 CRUM Fail SYS RAP

**124-342 CRUM Market Fail SYS 1**

**124-343 CRUM Market Fail SYS 2**

**124-352 CRUM OEM Fail SYS 1**

**124-353 CRUM OEM Fail SYS 2**

**124-362 CRUM Validation Fail SYS 1**

**124-363 CRUM Validation Fail SYS 2**

**124-382 CRUM Market Fail SYS 1 (2)**

**124-383 CRUM Market Fail SYS 2 (2)**

**124-392 CRUM OEM Fail SYS 1 (2)**

**124-393 CRUM OEM Fail SYS 2 (2)**

### Possible Parts Affected:

- eMMC PWB PL 18.1 Item 30
- ESS PWB PL 18.1 Item 5 (MFP), PL 18.5 Item 5 (SFP)

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter dC132 Device ID/Billing Data.
3. Power down the machine, remove the eMMC card, then power the machine up.
4. If the fault persists, install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and enter dC132 Device ID/Billing Data and verify the 3 ID numbers match.

## 124-344, 346, 348 Billing Meter Mismatch RAP

**124-344: All Billings Metertypes Mismatch** All the billing count types kept at multiple locations are different.

**124-346: All Billing CountTypes Mismatch** All the billing count types kept at multiple locations are different.

**124-348: All Modal Break Points Mismatch** All the Modal Break Points kept at multiple locations are different.

### Possible Parts Affected:

- MCU PWB PL 18.1 Item 1 (MFP), PL 18.9 Item 1 (SFP)
- ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP)

### Procedure

#### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter diagnostic dC132 Device ID/Billing Data.
3. Install a new MCU PWB PL 18.1 Item 1 (MFP) PL 18.9 Item 1 (SFP) enter dC132 Device ID/Billing Data.
4. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) enter dC132 Device ID/Billing Data.

## 124-345 Billing Meter Type Restoration Fail RAP

**124-345** When one billing meter types did not match, this machine tried to automatically correct it but failed.

### Possible Parts Affected:

- MCU PWB PL 18.1 Item 1 (MFP), PL 18.9 Item 1 (SFP)
- ESS PWB PL 18.1 Item 1 (MFP), PL 18.9 Item 1 (SFP)

### Procedure

#### WARNING

**Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.
  - 720-002
  - 720-062
3. Install a new MCU PWB PL 18.1 Item 1 (MFP) PL 18.9 Item 1 (SFP) execute diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.
4. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and execute diagnostic dC131 NVM Read/Write, and verify the 2 numbers match



## 124-347 Billing CountType Restoration Fail RAP

### 124-347 Billing Count Type Fail

#### Possible Parts Affected:

- MCU PWB PL 18.1 Item 1 (MFP), PL 18.9 Item 1 (SFP)
- ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP)

#### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.
  - 720-052
  - 720-063
3. Install a new MCU PWB PL 18.1 Item 1 (MFP) PL 18.9 Item 1 (SFP) execute diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.
4. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and execute diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.

## 124-349 Modal Break Points Restoration Fail RAP

124-349 When one Modal Break Point did not match, this machine tried to automatically correct it but failed.

#### Possible Parts Affected:

- MCU PWB PL 18.1 Item 1 (MFP), PL 18.9 Item 1 (SFP)
- ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP)

#### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.
  - 720-057
  - 720-064
3. Install a new MCU PWB PL 18.1 Item 1 (MFP) PL 18.9 Item 1 (SFP) execute diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.
4. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and execute diagnostic dC131 NVM Read/Write, and verify the 2 numbers match.

## 124-350, 354, 380, 390 CRUM OEM Fail All RAP

124-350 OEM fail ALL

124-354: DC132 13

124-380: CRUM Market fail ALL (2)

124-390: CRUM OEM fail ALL (2)

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Enter diagnostic dC131 NVM Read/Write.
3. Install a new MCU PWB PL 18.1 (MFP) PL 18.9 (SFP).

## 124-359 IOT NVM Backup Restor Fail 1 RAP

124-359: It was detected that the Restore function of the IOT NVM, which checks three points for automatic correction, was executed and had finished successfully.

### No Corrective Action Required

## 124-372 to 124-374 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

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. GP 15 Special Boot Modes.
2. Verify the wire harness connections on the ESS PWB and MCU PWB are installed properly and fully seated.
3. Obtain the log file using the log tool GP 37.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Check the version of Controller ROM. If it is not the latest, download and update to the latest software revision. Refer to Software Version Upgrade GP 9.
5. Switch the power Off and On, GP 4, the error persists after turning the power off and on GP 4, Obtain the log file using the log tool GP 37.
6. Turn off the Power GP 4, unplug the power cord for 2 minutes, then turn on the Power again GP 4 to perform the same operation where the error occurred.
7. If the problem is related to the Net such as Scanner/Printer, proceed to the following for collecting data.
8. Install a new MCU PWB PL 18.1 Item 1 (MFP) PL 18.9 Item 1 (SFP) and perform the same operation where the error occurred.
9. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
10. Reinstall the original ESS PWB and contact Support for instructions.

## 127-310 ESS Task Fatal Error RAP

127-310 ESR Task Fatal error - A fatal error occurred in ESR Task.

### Procedure

#### WARNING

Ensure electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Perform GP 37.

## 125-311, 314, 315, 342 PSW Controller Unexpected Fail RAP

125-311 - PSW controller software failure.

127-314 ESR Task Fatal error - ESS detected a video link error.

127-315 ThinPrint S/W Fail - A problem has occurred with software processing, causing the processing to stop.

127-342 JobTemplate Monitor Fail - A problem has occurred with software processing, causing the processing to stop.

### Initial Actions

Obtain the following information from the customer.

- Job mode (Copy/Scan/Print/Fax)
- Type of job
- Job settings on the UI.
- To reproduce the error for troubleshooting purposes, the following will be required:
  - For network jobs: a copy of the output report and the network configuration.
  - For print jobs: the PRN file.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

1. Obtain the log file using the log tool GP 37.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
2. Perform Hardware Diagnostic using the LONGDIAG MODE in the Special Booting Menu. GP 15 Special Boot Modes.
3. Check the version of Controller ROM. If it is not the latest, download and update to the latest software revision. Refer to Software Version Upgrade GP 9.
4. Switch the power Off and On, GP 4, if the error persists after turning the power off and on GP 4, Obtain the log file using the log tool GP 37.
5. Turn off the Power GP 4, unplug the power cord for 2 minutes, then turn on the Power again GP 4 to perform the same operation where the error occurred.
6. Verify the wire harness connections on each board are installed properly, then perform the same operation creating the error.
7. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred, **the error persists**.
8. Reinstall the original ESS PWB and contact the Support Department for instructions.

## 127-353, 354, 396, 398, 399 Fatal Error RAP

127-353 LPD Soft Fatal Error - Fatal error related to LPD.

127-354 FTP Server Software Fail - Fatal error of FTP server was detected.

127-396 MailIO Soft Fatal Error - Fatal error related to mail IO.

127-398 IPP Soft Fatal Error - Fatal error related to IPP.

127-399 JME Soft Fatal Error - Fatal error related to JME.

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 4.
2. Check the version of Controller ROM.
  - a. Verify the machine software version is the latest revision, download and install the latest software if it is not. Refer to GP 9 Software Version Upgrade.
3. Obtain the log file using the log tool GP 37.
  - If there was a reboot after the error had occurred and hence was unable to obtain the log, set NVM (700-530) to "0" to perform log collection and return the NVM (700-530) to "1" after completing the procedure.
4. Check the connection between the ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and the customer network or USB-connected workstation, then turn on the power.
5. Check use the ping command to check for faulty ports listed in Table 1 that may be in error:

Table 1 Ports and Ping Commands

SNTP	SMB	lpd	USB	Salutation IO
NetWare	Port 9100	FTP Serv	IPP	MailIO

6. If the error persists, perform the same operation that created the error originally and Obtain the log file using the log tool GP 37.
  - a. Proceed with the following to collect the data recorded in each item.
    - 2.4.2 (Not connected to network) or (Unable to find the device from the PC)
    - 2.4.3 No output is available, no data is printed
7. Install a new ESS PWB PL 18.1 Item 5 (MFP), PL 18.9 Item 5 (SFP) and perform the same operation where the error occurred.
8. Reinstall the original ESS PWB and contact the Support Department for instructions.

## 133-210 to 133-224, 133-226, 133-701 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.

**133-218** Insufficient FAX card message library memory.

**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.

**133-224** Version mismatch between the controller ROM and the FAX card ROM.

**133-226** The code that does not provide FAX service is set in the system data country code.

**133-701** Character replacement has occurred in destination name, sender name, comment, station name.

### Initial Actions

Get the procedures for reproducing an error according to the operation that was performed when the error occurred.

1. Check the job type: Send Mail, Receive Mail, Broadcast Send, Polling, or Folder Receipt.
2. Check the job settings from the Panel.
3. Check whether it is Speed Dial or Keypad Dial.
4. Check which function was used: G3 or G4.
  - Collect other procedures as much as possible to reproduce the error.

## Procedure

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Verify the FAX PWB [PL 18.1 Item 9](#) and Fax Harness Assy [PL 18.1 Item 10](#) connections are seated fully.
2. Obtain the Fax-related reports (Protocol Monitor, Activity Report, Configuration Report, Scan / Fax Configuration, and Job History Report).
  - Depending on the situation, such as in the cases of Broadcast Send or Folder Receipt, obtain the Speed Dial list or Stored Document list.
3. Check the version of Controller ROM. If it is not the latest, download and update to the latest software revision. (Refer to Software Version Upgrade [GP 9](#))
4. Perform the same operation where the error occurred.
  - Install a new Front USB Harness Assy [PL 18.1 Item 14](#).
5. Immediately after the error occurs, go to [GP 37](#) to obtain the log files for Support.
6. Install a new FAX PWB [REP 18.4](#) and perform the operation again.
7. Reinstall the original FAX PWB and contact the Support for instructions.

## 133-701 Replacement Character Detected RAP

### Initial Actions

Get the procedures for reproducing an error according to the operation that was performed when the error occurred.

1. Check the job type: Send Mail, Receive Mail, Broadcast Send, Polling, or Folder Receipt.
2. Check the job settings from the Panel.
3. Check whether it is Speed Dial or Keypad Dial.
4. Check which function was used: G3 or G4.
  - Collect other procedures as much as possible to reproduce the error.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

Perform the steps that follow:

1. Request the customer to set the characters used Refer 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. Check the sound of the telephone line by ear and verify whether the sound level is high enough to generate noise.

**NOTE:** Turn on Line Monitor, and provide the path to do it.

3. Check the line (telephone line, TA, etc.) for possible cause of noise.
4. Check the ground connection.
5. The Fax Job Fail occurs due to the remote machine's environment and the line status.

**NOTE:** If the Fail is occurring with a specific recipient, it is largely caused by the recipient's environment, and hence any adjustment at the device could result in it affecting the other communications,

6. Verify the FAX PWB **PL 18.1 Item 9** and Fax Harness Assy **PL 18.1 Item 10** connections are seated fully.
7. Obtain the Fax-related reports (Protocol Monitor, Activity Report, Configuration Report, Scan / Fax Configuration, and Job History Report).
  - Depending on the situation, such as in the cases of Broadcast Send or Folder Receipt, obtain the Speed Dial list or Stored Document list.
8. The Fax JobFail occurs due to the remote machines and line status.
  - a. Check the remote machine, line status, and then repeat the operation.
9. If the error occurs frequently, take notes on the exact occurrence timings during job execution.
10. Before turning the power off and on **GP 4**, obtain logs immediately, **GP 37**, after the error has occurred.
11. Install a new FAX PWB **REP 18.4** and perform the operation again.
12. Reinstall the original FAX PWB and contact the Support for instructions.

## 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. Advise 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 4**.
  - b. Reload the software, **GP 9**.

## 500-030 dC612 Print NG IOT Wait State RAP

**500-030** The machine changed state during dC612 Print Test Pattern.

### Primary Causes

The following occurs (However, this includes the cases that may not occur when dC612 Print Test Pattern starts):

1. DC900G:
  - a. Fusing Unit: Shifted to Warming Up and Sagging occurred. The CC Cleaner Position was moved from the Home Position
  - b. Fusing Unit Relay State: Shifted to Not Ready.
  - c. Drum Cycle State: Shifted to Cleaning Request.
  - d. CC Wire Warning: Occurred.
  - e. Reserve Tank State: Filling.
  - f. Drum CRUM State: Unknown.
2. DCC5540G/DC540G:
  - a. Fusing Unit: Shifted to Warming Up and Sagging occurred.
  - b. Reserve Tank State: Filling.

### Procedure

Allow the machine to return from the wait state, then re-run the routine.

## 500-033, 500-035 Diag Documents RAP

**500-033:Diag Document Not Detected/ Enough** - The document is not loaded or the number of documents are less than expected when a diagnostics routine is performed.

**500-035:Diag Document Invalid Size** - The document size is different than expected when a Diagnostic routine is performed.

### Procedure

Load the required number and/or size of documents, then re-run the routine.

## 500-990 dC612 Print NG By Any Reason RAP

500-990 Printing could not start due to unknown reason in dC612 Print Test Pattern print, or it was aborted.

### Procedure

Re-run the routine.



## OF 1 Unusual Noises RAP

Use this procedure to isolate unusual noises.

**NOTE:** Due to the intermittent nature of unusual noises, this RAP can only give guidance on how to isolate noises. This RAP will not find all possible causes. When machines become old and worn, unusual noises may arise that are not covered in this RAP.

### Procedure

#### WARNING

**Switch off the electricity to the machine GP 4. 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. Request the customer to demonstrate the function that generates the unusual noise.
2. Cycle system power. Wait while the printer performs a normal initialization and warm-up.
3. Run the machine in all modes, GP 15, Special Boot Modes.

### Noise when Switching on the Machine

#### CAUTION

*Do not run the dispenser motor, PL 5.1 Item 1 for more than 3 seconds at any speed as damage may occur.*

Perform the steps that follow:

1. Check the operation of the dispenser motor. Enter dC330 code 093-004 (Y), 093-005 (M), 093-006 (C), 093-007 (K) and run the dispenser motor. If the noise persists, install a new toner cartridge, PL 5.1.
2. Check the operation of the main drive assembly. Enter dC330 code 071-061 and run the main drive assembly. If the noise persists, install a new main drive assembly, PL 3.1 Item 1 (High), PL 3.1 Item 2 (Low).
3. If the noise persists, contact Support for further instruction.

### During Standby

Perform the steps that follow:

1. Check the operation of the main fan, PL 4.1 Item 1. Enter dC330 code 042-001 and run the main fan. If the noise persists, install a new main fan, PL 4.1 Item 1.

### During Printing

Perform the steps that follow:

1. Install a new MSI feed solenoid, PL 13.1 Item 7.
2. If the noise persists, install a new registration clutch, PL 15.1 Item 8.
3. If the noise persists, refer to the procedure above, Noise when Switching on the Machine.

### During DADF Feeding

Perform the steps that follow:

1. Clean the separation pad, PL 50.1 Item 7. If the noise persists, install a new separation pad, PL 50.1 Item 7.
2. If the noise persists, install a new DADF assembly, PL 50.1 Item 1.

## OF 2 UI has no Display

Use this procedure when the machine will not switch on or the UI has no display.

### Procedure

Perform the steps that follow:

1. Check that the power cord is plugged into the proper power source and there is no damage to the power cord. If the power cord is damaged or no power to the machine, install a new power cord PL 18.3 (MFP), PL 18.11 (SFP). If the UI console has no display proceed to step 2.
2. Install a new LVPS PWB, PL 18.1 Item 16 (MFP), PL 18.5 Item 16 (MFP Tall), PL 18.9 Item 16 (SFP). If the UI console has no display proceed to step 3.
3. Install a new UI console assembly, PL 1.1 Item 1 (MFP and MFP Tall), PL 1.2 Item 1 (SFP). If the UI console has no display proceed to step 4.
4. Install a new MCU PWB, PL 18.1 Item 1 (MFP), PL 18.5 Item 1 (MFP Tall), PL 18.9 Item 1 (SFP). If the UI console has no display proceed to step 5.
5. Install a new ESS PWB, PL 18.1 Item 3 (MFP), PL 18.5 Item 3 (MFP Tall), PL 18.9 Item 3 (SFP). If the UI console has no display proceed to step 6.
6. Contact Support for further instruction.

## OF 3 Special Boot Modes RAP

Use this RAP to solve boot up errors. If directed here from another procedure, always return to that procedure.

### Procedure

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. 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 15.
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.

## OF 4 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.
- The ESS PWB runs the POST.
- The fault is communicated using an LED display on the ESS PWB. This is to help diagnose common faults that prevent the machine from powering on correctly to the point where faults are displayed and service mode begins.

Use the following table to determine POST LED status, [Table 1](#):

Table 1 ESS Status LEDs

Number	LED Pattern								Fault Condition	Normal Diagnosis	LongBoot Diagnosis	Related Fail Code
	LED7	LED6	LED5	LED4	LED3	LED2	LED1	LED0				
1	Off	Off	Off	Off	Off	Off	Off	Off	Initial status at power-on	Yes	Yes	-
2	Off	Off	Off	Off	Off	Off	Off	On	After CA7 L1 Boot has completed, SPI initialization	Yes	Yes	-
3	Off	Off	Off	Off	Off	Off	On	Off	Before jumping to CA7 L2 Boot Stage 2	Yes	Yes	-
4	Off	Off	Off	Off	Off	Off	On	On	After jumping to CA7 L2 Boot Stage 2, after initialization during SPI	Yes	Yes	-
5	Off	Off	Off	Off	Off	On	Off	Off	After DDR initialization has completed	Yes	Yes	-
6	Off	Off	Off	Off	Off	On	Off	On	obs	Yes	Yes	-
7	Off	Off	Off	Off	Off	On	On	Off	obs	Yes	Yes	-
8	Off	Off	Off	Off	Off	On	On	On	obs	Yes	Yes	-
9	Off	Off	Off	Off	On	Off	Off	Off	Before loading CA7 Boot Loader	Yes	Yes	-
10	Off	Off	Off	Off	On	Off	Off	On	Failed to load/jump to CA7 Boot Loader	Yes	Yes	-
11	Off	Off	Off	Off	On	Off	On	Off	Reserved (OFF)	-	-	-
12	Off	Off	Off	On	Off	Off	Off	Off	Reserved (OFF)	-	-	-
13	Off	Off	Off	On	Off	Off	Off	On	SPI module initialization has completed	Yes	Yes	-
14	Off	Off	Off	On	Off	Off	On	Off	I2C module initialization has completed	Yes	Yes	-
15	Off	Off	Off	On	Off	Off	On	On	Interrupt controller initialization has completed	Yes	Yes	-
16	Off	Off	Off	On	Off	On	Off	Off	Debug serial initialization has completed	Yes	Yes	-
17	Off	Off	Off	On	Off	On	Off	On	RTC Device initialization has completed	Yes	Yes	-
18	Off	Off	Off	On	Off	On	On	Off	FCSPI module initialization has completed	Yes	Yes	-
19	Off	Off	Off	On	Off	On	On	On	SD Card Power ON has completed	Yes	Yes	-
20	Off	Off	Off	On	On	Off	Off	Off	Hard Disk Power ON has completed	-	-	-
21	Off	Off	Off	On	On	Off	Off	On	CIP UI module initialization has completed	Yes	Yes	-
22	Off	Off	Off	On	On	Off	On	Off	Reserved (OFF)	-	-	-
23	Off	Off	Off	On	On	Off	On	On	Reserved (OFF)	-	-	-
24	Off	Off	Off	On	On	On	Off	Off	Reserved (OFF)	-	-	-
25	Off	Off	Off	On	On	On	Off	On	Reserved (OFF)	-	-	-
26	Off	Off	Off	On	On	On	On	Off	Reserved (OFF)	-	-	-
27	Off	Off	Off	On	On	On	On	On	Reserved (OFF)	-	-	-
28	Off	Off	On	Off	Off	Off	Off	Off	Software initialization process has started	Yes	Yes	-
29	Off	Off	On	Off	Off	Off	Off	On	Interrupt registration table initialization has completed	Yes	Yes	-
30	Off	Off	On	Off	Off	Off	On	Off	Interrupt vector copying and enabling has completed	Yes	Yes	-
31	Off	Off	On	Off	Off	Off	On	On	Mac Address has been obtained and stored	Yes	Yes	-
32	Off	Off	On	Off	Off	On	Off	Off	Diag table initialization has completed	Yes	Yes	-
33	Off	Off	On	Off	Off	On	Off	On	Memory area variable setting has completed	Yes	Yes	-
34	Off	Off	On	Off	Off	On	On	Off	Memory area variable notification process has completed	Yes	Yes	-
35	Off	Off	On	Off	Off	On	On	On	Command table initialization has completed	Yes	Yes	-
36	Off	Off	On	Off	On	Off	Off	Off	Global variable initialization has completed	Yes	Yes	-
37	Off	Off	On	Off	On	Off	Off	On	Connection Error: Check PWBA-AIRI (eMMC daughter board)	Yes	Yes	-
38	Off	Off	On	Off	On	Off	On	Off	Reserved (OFF)	-	-	-

Table 1 ESS Status LEDs

Number	LED Pattern								Fault Condition	Normal Diagnosis	LongBoot Diagnosis	Related Fail Code
	LED7	LED6	LED5	LED4	LED3	LED2	LED1	LED0				
39	Off	Off	On	Off	On	Off	On	On	Reserved (OFF)	-	-	-
40	Off	Off	On	Off	On	On	Off	Off	Reserved (OFF)	-	-	-
41	Off	Off	On	Off	On	On	Off	On	Reserved (OFF)	-	-	-
42	Off	Off	On	Off	On	On	On	Off	Reserved (OFF)	-	-	-
43	Off	Off	On	Off	On	On	On	On	Reserved (OFF)	-	-	-
44	Off	Off	On	On	Off	Off	Off	Off	JUMP to Mini OS section	Yes	Yes	-
45	Off	Off	On	On	Off	Off	Off	On	JUMP to Panbug Main section	-	-	-
46	On	On	On	On	On	On	On	On	Flashes 0xFF ->0x00 repeatedly and alternately. DDR initialization process has failed	Yes	Yes	-
47	On	On	On	On	Off	Off	Off	Off	Flashes 0xF0 and 0x0F repeatedly and alternately. Error: Checksum Error of the bootloader image loaded to the memory from FCSPi ROM.	Yes	Yes	-
48	On	Off	On	Off	Off	Off	Off	Off	CA15-0: (0xA0 -> 0x05) is repeating alternately. CPLD is showing an invalid boot mode.	Yes	Yes	-
49	Flashing								Flashes right to left, left to right repeatedly. Indicates PWBA Hardware Configuration is incorrect or not set.	Yes	Yes	-
50	Off	Off	On	On	Off	On	Off	Off	CA15-0:After the recovery from Switch OFF mode is detected by CPLD flag, before proceeding to read the NVM recovery data.	-	-	-
51	Off	Off	On	On	Off	On	Off	On	CA15-0: After reading the NVM recovery data, before calculating the checksum on the DDR.	-	-	-
52	Off	Off	On	On	Off	On	On	On	CA15-0: Immediately before jumping to the Switch OFF recovery point.	-	-	-
53	On	On	Off	Off	Off	Off	Off	Off	CA15-0: (0xC0 -> 0x03) is repeating alternately. Checksum Error during recovery from Switch OFF mode.	Yes	Yes	-
54	Off	Off	On	On	Off	Off	On	On	CA15-0: After the recovery from CPU OFF mode is detected by CPLD flag, before proceeding to read the NVM recovery data.	-	-	-
55	Off	Off	On	On	Off	On	On	Off	CA15-0: After reading the NVM recovery data, before calculating the checksum on the DDR.	-	-	-
56	Off	Off	On	On	On	Off	Off	Off	obs	-	-	-
57	Off	Off	On	On	On	Off	Off	On	obs	-	-	-
58	Off	Off	On	On	On	Off	On	Off	obs	-	-	-
59	Off	Off	On	On	On	Off	On	On	CA15-0: Immediately before jumping to the CPU OFF recovery point.	-	-	-
60	On	Off	Off	Off	Off	Off	Off	Off	0x80 -> 0x01 is repeating alternately. Stored data checksum Error during recovery from CPU OFF mode.	-	-	-
61	On	On	On	Off	Off	Off	Off	Off	0xE0 -> 0x07 is repeating alternately. Other Error has occurred at CA15, L2 Boot.	-	-	-
62	On	On	Off	On	Off	Off	Off	Off	SD module initialization has started	Yes	Yes	117-319
63	On	On	Off	On	Off	Off	Off	On	SD Card Power ON has completed	Yes	Yes	117-319
64	On	On	Off	On	Off	Off	On	Off	SD module initialization has completed	Yes	Yes	117-319
65	On	On	Off	On	Off	Off	On	On	SD Card driver error	Yes	Yes	117-319
66	On	On	Off	On	Off	On	Off	Off	An unsupported SD Card is inserted	Yes	Yes	117-321

Table 1 ESS Status LEDs

Number	LED Pattern								Fault Condition	Normal Diagnosis	LongBoot Diagnosis	Related Fail Code
	LED7	LED6	LED5	LED4	LED3	LED2	LED1	LED0				
67	On	On	Off	On	Off	On	Off	On	SD Card is not inserted (not detected)	Yes	Yes	117-329
68	On	On	Off	On	Off	On	On	Off	Reserved (OFF)	-	-	-
69	On	On	Off	On	Off	On	On	On	Reserved (OFF)	-	-	-
70	On	On	Off	On	On	Off	Off	Off	Reserved (OFF)	-	-	-
71	On	On	Off	On	On	Off	Off	On	Reserved (OFF)	-	-	-
72	On	On	Off	On	On	Off	On	Off	SD module initialization has completed	Yes	Yes	117-319
73	On	On	Off	On	On	Off	On	On	Read process from SD Card has started	Yes	Yes	117-319
74	On	On	Off	On	On	Off	Off	Off	SD module initialization check has completed	Yes	Yes	117-319
75	On	On	Off	On	On	Off	On	On	A15 Program memory expansion has completed	Yes	Yes	117-319
76	On	On	Off	On	On	On	On	Off	A7 Program memory expansion has completed	Yes	Yes	-
77	On	On	Off	On	On	On	On	On	Reserved (OFF)	-	-	-
78	On	On	Off	Off	Off	Off	Off	On	BackPlane Disconnect Detection	Yes	Yes	16-327
79	On	On	Off	Off	Off	Off	On	Off	UI cable Disconnect Detection	Yes	Yes	16-326
80	On	On	Off	Off	Off	Off	On	On	MCU Harness Disconnect Detection	Yes	Yes	16-328
81	On	On	Off	Off	Off	On	Off	Off	Detects the connection of a unknown PCI Option device.	Yes	Yes	117-336
82	On	On	Off	Off	Off	On	Off	On	Detects the connection of a unknown PCI EX Option device.	Yes	Yes	117-337
83	On	On	Off	Off	Off	On	On	Off	SD Card Insertion Detection	Yes	Yes	117-338
84	Off	On	Off	Off	Off	Off	Off	Off	IO ASIC diagnostic has started	Yes	Yes	016-355
85	Off	On	Off	Off	Off	Off	Off	On	IO ASIC diagnostic has completed	-	-	-
86	Off	On	Off	Off	Off	Off	On	Off	Codec ASIC diagnostic has started	Yes	Yes	016-356
87	Off	On	Off	Off	Off	Off	On	On	Codec ASIC diagnostic has completed	-	-	-
88	Off	On	Off	Off	Off	On	Off	Off	Standard FontROM diagnostic has started	-	-	116-380
89	Off	On	Off	Off	Off	On	Off	On	Standard FontROM diagnostic has completed	-	-	-
90	Off	On	Off	Off	Off	On	On	Off	Extension FontROM diagnostic has started	-	-	116-380 116-310 116-317
91	Off	On	Off	Off	Off	On	On	On	Extension FontROM diagnostic has completed	-	-	-
92	Off	On	Off	Off	On	Off	Off	Off	SEEP diagnostic has started	Yes	Yes	16-351 16-350
93	Off	On	Off	Off	On	Off	Off	On	SEEP diagnostic has completed	-	-	-
94	Off	On	Off	Off	On	Off	On	Off	Timer diagnostic has started	Yes	Yes	16-343
95	Off	On	Off	Off	On	Off	On	On	Timer diagnostic has completed	-	-	-
96	Off	On	Off	Off	On	On	Off	Off	PageMemory diagnostic has started	-	Yes	16-317
97	Off	On	Off	Off	On	On	Off	On	PageMemory diagnostic has completed	-	-	-
98	Off	On	Off	Off	On	On	On	Off	IITIF diagnostic has started	-	-	16-319 16-329 16-333 16-334 16-348
99	Off	On	Off	Off	On	On	On	On	IITIF diagnostic has completed	-	-	-

Table 1 ESS Status LEDs

Number	LED Pattern								Fault Condition	Normal Diagnosis	LongBoot Diagnosis	Related Fail Code
	LED7	LED6	LED5	LED4	LED3	LED2	LED1	LED0				
100	Off	On	Off	On	Off	Off	Off	Off	OS communication diagnostic has started	-	Yes	16-383
101	Off	On	Off	Off	Off	Off	Off	On	OS communication diagnostic has completed	-	-	-
102	Off	On	Off	On	Off	Off	On	Off	RTC diagnostic has started	-	Yes	16-342
103	Off	On	Off	On	Off	Off	On	On	RTC diagnostic has completed	-	-	-
104	Off	On	Off	On	Off	On	Off	Off	UI Check diagnostic has started	-	Yes	16-362
105	Off	On	Off	On	Off	On	Off	On	UI Check diagnostic has completed	-	-	-
106	Off	On	Off	On	Off	On	On	Off	Lyra diagnostic has started	-	-	-
107	Off	On	Off	On	Off	On	On	On	Lyra diagnostic has completed	-	-	-
108	Off	On	Off	On	On	Off	Off	Off	USB 1.0 Host diagnostic has started	-	-	16-371
109	Off	On	Off	On	On	Off	Off	On	USB 1.0 Host diagnostic has completed	-	-	-
110	Off	On	Off	On	On	Off	On	Off	USB 2.0 Host diagnostic has started	-	Yes	16-364
111	Off	On	Off	On	On	Off	On	On	USB 2.0 Host diagnostic has completed	-	-	-
112	Off	On	Off	On	On	On	Off	Off	USB 2.0 Device diagnostic has started	-	Yes	16-365
113	Off	On	Off	On	On	On	Off	On	USB 2.0 Device diagnostic has completed	-	-	-
114	Off	On	Off	On	On	On	On	Off	HDD diagnostic has started	-	Yes	16-366 16-367
115	Off	On	Off	On	On	On	On	On	HDD diagnostic has completed	-	-	-
116	Off	On	On	Off	Off	Off	Off	Off	HDD (UFS) diagnostic has started	-	Yes	16-372
117	Off	On	On	Off	Off	Off	Off	On	HDD (UFS) diagnostic has completed	-	-	-
118	Off	On	On	Off	Off	Off	On	Off	Torino diagnostic has started	-	-	16-368
119	Off	On	On	Off	Off	Off	On	On	Torino diagnostic has completed	-	-	-
120	Off	On	On	Off	Off	On	Off	Off	Selene diagnostic has started	-	Yes	16-369
121	Off	On	On	Off	Off	On	Off	On	Selene diagnostic has completed	-	-	-
122	Off	On	On	Off	Off	On	On	Off	Ethernet diagnostic has started	-	Yes	16-349
123	Off	On	On	Off	Off	On	On	On	Ethernet diagnostic has completed	-	-	-
124	Off	On	On	Off	On	Off	Off	Off	SdCard diagnostic has started	-	Yes	117-324 117-320 117-321 117-323
125	Off	On	On	Off	On	Off	Off	On	SdCard diagnostic has completed	-	-	-
126	Off	On	On	Off	On	Off	On	Off	IOT communication diagnostic has started	-	Yes	016-353
127	Off	On	On	Off	On	Off	On	On	IOT communication diagnostic has completed	-	-	-
128	Off	On	On	Off	On	On	Off	Off	IIT communication diagnostic has started	-	Yes	016-354
129	Off	On	On	Off	On	On	Off	On	IIT communication diagnostic has completed	-	-	-
130	Off	On	On	Off	On	On	On	Off	Standard ROM diagnostic has started	-	Yes	116-317 16-336
131	Off	On	On	Off	On	On	On	On	Standard ROM diagnostic has completed	-	-	-
132	Off	On	On	On	Off	Off	Off	Off	EP accessory diagnostic has started	-	Yes	016-357
133	Off	On	On	On	Off	Off	Off	On	EP accessory diagnostic has completed	-	-	-

Table 1 ESS Status LEDs

Number	LED Pattern								Fault Condition	Normal Diagnosis	LongBoot Diagnosis	Related Fail Code
	LED7	LED6	LED5	LED4	LED3	LED2	LED1	LED0				
134	Off	On	On	On	Off	Off	On	Off	Parallel diagnostic has started	-	Yes	016-358
135	Off	On	On	On	Off	Off	On	On	Parallel diagnostic has completed	-	-	-
136	Off	On	On	On	Off	On	Off	Off	USBHUB diagnostic has started	-	Yes	016-359
137	Off	On	On	On	Off	On	Off	On	USBHUB diagnostic has completed	-	-	-
138	Off	On	On	On	Off	On	On	Off	USB 3.0 Drv diagnostic has started	-	Yes	016-361
139	Off	On	On	On	Off	On	On	On	USB 3.0 Drv diagnostic has completed	-	-	-
140	Off	On	On	On	On	Off	Off	Off	WIFI diagnostic has started	-	Yes	016-384
141	Off	On	On	On	On	Off	Off	On	WIFI diagnostic has completed	-	-	-
142	Off	On	On	On	On	Off	On	Off	A4Fax diagnostic has started	-	Yes	016-346
143	Off	On	On	On	On	Off	On	On	A4Fax diagnostic has completed	-	-	-
144	On	Off	Off	Off	Off	Off	Off	Off	Power Savor transition (Standby -> LowPower)	Yes	-	-
145	On	Off	Off	Off	Off	Off	Off	On	Power Saving (LowPower)	Yes	-	-
146	On	Off	Off	Off	Off	Off	On	Off	Power Saving (Sleep)	Yes	-	-
147	On	Off	Off	Off	Off	Off	On	On	Power Savor transition (LowPower->Sleep)	Yes	-	-
148	Off	Off	Off	Off	Off	Off	Off	Off	Power Saving (CpuOFF)	Yes	-	-
149	On	Off	Off	Off	Off	On	Off	Off	Reserved (OFF)	-	-	-
150	On	Off	Off	Off	Off	On	On	On	Reserved (OFF)	-	-	-
151	On	Off	Off	Off	On	Off	Off	On	Power Savor transition (LowPower -> Standby)	Yes	-	-
152	On	Off	Off	Off	On	Off	On	Off	Power Savor transition (Sleep -> Standby)	Yes	-	-
153	On	Off	Off	On	Off	Off	Off	Off	Reserved (OFF)	-	-	-
154	On	Off	Off	On	Off	Off	Off	On	Reserved (OFF)	-	-	-
155	On	Off	Off	On	Off	Off	On	Off	Reserved (OFF)	-	-	-
156	On	Off	Off	On	Off	Off	On	On	Reserved (OFF)	-	-	-
157	On	Off	Off	On	Off	On	Off	Off	Reserved (OFF)	-	-	-
158	On	Off	Off	On	Off	On	Off	On	Power Savor transition (CpuOff -> Sleep)	Yes	-	-
159	On	On	On	On	On	On	On	On	VxWORKS boot complete Recovering from Power Savor	Yes	Yes	-



## 3 Image Quality

IQ1 Image Quality Entry.....	3-3
IQ2 Light or Undertoned Print.....	3-4
IQ3 Blank Print RAP.....	3-5
IQ4 Smeared/Unfused Image.....	3-6
IQ5 Random Spots.....	3-7
IQ6 Bead Carry-Out.....	3-8
IQ7 Cross Process Banding.....	3-9
IQ8 In-Process Lines Streaks.....	3-10
IQ9 Cyclic Dot/ Line.....	3-11
IQ10 Vertical Deletions.....	3-12
IQ11 Horizontal Banding.....	3-13
IQ12 Banding (Blurred in horizontal direction).....	3-13
IQ13 Diagonal Banding.....	3-14
IQ14 Uneven Density.....	3-15
IQ15 Residual Image (Ghosting).....	3-15
IQ16 High Background on Prints.....	3-16
IQ17 Jagged/ Blurry Text and Image.....	3-17
IQ18 Wrinkled or Creased.....	3-18
IQ19 Leading Edge Paper Damage.....	3-19
IQ20 Incorrect Image Position or Margins.....	3-19
IQ21 Images are Skewed.....	3-20
IQ22 Registration is out of Alignment.....	3-21
IQ23 Skew Check.....	3-21
IQ24 Registration Check.....	3-22



## IQ1 Image Quality Entry

The purpose of this procedure is to establish the source and type of imaging defect. Print-quality defects can be attributed to printer components, consumables, media, internal software, external software applications, and environmental conditions. Recreate the perceived defect using the customer's job or use diagnostic function **dC612**, which prints test patterns stored in the printer for checking image quality and isolating problems. Use approved media from a fresh ream acclimated to room temperature and humidity.

If the print-quality defect is still present after printing on approved media from an unopened ream of paper, investigate software applications being used and environmental conditions. Check the temperature and humidity under which the printer is operating. Compare this to the Environmental Specifications listed in **GP 27**. Extreme temperature and humidity can adversely affect the printer's xerographic and fusing characteristics.

When analyzing an imaging defect, determine if the defect is repeating or random. If a cursory inspection does not reveal any obvious defects, continue troubleshooting the defect, starting with Initial Actions.

### Initial Actions

#### WARNING

**Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.**

Use the following steps to determine which part of the system is at fault.

1. If possible, discuss the defect with the customer to determine if the perceived defect is outside the printer's image specifications.
2. Ensure all connections to the printer are secure.
3. Check the CRU life counts. Replace components at end of life.
4. Switch on the switch off the system power **GP 4**.
5. Make sure the printer is positioned to allow adequate airflow at all vents. Refer to **GP 22**, Installation Space Requirements.
6. Make sure the printer's interior is clean.
7. Check the tray guides.
8. Use the customer's print job to check defect reoccurrence. If the defect persists, begin to isolate the defect by attempting to identify the component responsible using the Repeating Patterns test print.
9. Check stored tray settings for media size and type.
10. Check image adjustment and print mode settings being used.
11. Check if defect occurs when printing or copying. Printing refers to using an electronic file as input; copying refers to using a hardcopy original as input. If defect occurs when copying, check if defect occurs from the platen or the DADF.

### Defects Associated with Specific Components

To aid with defect diagnosis, listed below are defects associated with specific components. Refer to **dC612** for detailed information about test patterns.

Drum cartridge image defects:

- Uneven density
- Background contamination
- Spots, smudges, or smears
- Ghosting
- Vertical white lines
- Vertical lines or bands
- Stains on the page front
- Blank prints
- Horizontal lines or bands

Fuser image defects:

- Poor image adhesion
- Ghosting
- Stains on the page back or front
- Vertical line or spots
- Blurred image horizontally
- Wrinkled media
- Skewed image

Transfer roller (BTR) image defects:

- Uneven Density
- Background contamination
- Ghosting
- Vertical white lines
- Vertical lines or bands
- Stains on the page back

LED Print Head (LPH) unit image defects:

- Vertical white lines
- Scanner image defects:
- Skewed image
  - Vertical line

After determining the defect type and possible source, match the defect with those listed in **Table 1**.

Go to the RAP listed to correct the defect.

### Image Defect Definitions

**Table 1** lists image defect definitions and the RAP(s) used to correct the defects.

**Table 1 Image defect definitions**

Defect	Definition	Go To
Banding	The image appears blurred in the horizontal direction	<b>IQ12</b>
Bead Carry-Out	Media has gritty texture.	<b>IQ6</b>
Blank Prints	Prints are completely blank.	<b>IQ3</b>

Table 1 Image defect definitions

Defect	Definition	Go To
Cross-Process Dots/ Lines	Recurring dots, spots, or lines in vertical direction.	IQ7
Cyclic Banding	Cyclic black line or dot in the vertical direction.	IQ9
Diagonal Banding	Low density or blurred images diagonally across output.	IQ13
High Background	Toner contamination on all or part of the page appears as a very light gray dusting or fog.	IQ16
Horizontal Banding	Horizontal black bands across the output.	IQ11
Images are Skewed	Images in the output are not parallel to the edge of the printed sheet.	IQ21
Incorrect Image Position or Margins	Image prints in wrong position or outside the page margins.	IQ20
Jagged/Blurry Text/ Image	Text or image is jagged or blurry along the edges.	IQ17
Leading Paper Edge Damage	The page exits with the leading edge damaged.	IQ19
Light or Undertoned Prints	The overall image density is too light.	IQ2
Random Spots	Random spots of toner scattered on the page.	IQ5
Registration is out of Alignment	Image is not aligned.	IQ22
Residual Image (Ghosting)	The image from a previous print appears on the current print.	IQ15
Uneven Density	Uneven density, mottled image or text.	IQ14
Unfused Image	Part or all of the image is unfused or smeared. Refer to the specification.	IQ4
Vertical Deletions	Areas of image appear as vertical blanks or deletions.	IQ10
In-Process Lines/ Streaks	Extraneous dark lines/bands in the process direction.	IQ8
Wrinkled/ Creased Prints	The prints are wrinkled, creased, stained, or torn.	IQ18

## IQ2 Light or Undertoned Print

The overall image density is too light. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check toner adhesion on the media output. If toner smears, see [IQ4](#), Unfused Image.
- Check the life counter of the imaging unit. Install a new Imaging units that are at end of life.
- Check that the imaging units' electrical contact points are clean.
- Clean the LED print head (LPH) using the LPH cleaning wand ([ADJ 1](#)).
- Ensure that draft mode is turned Off.
- Ensure the printer is located in a humidity-controlled environment.



E-8-0174-A

Figure 1 Light or undertoned print example

### Procedure

Check media condition. Load new, dry recommended paper, and print a test print. For a listing of test prints and how to print them, refer to [dC612](#). **The image is too light.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Verify that the printer's media type is set appropriately for the media being used, and print a test print. **The image is too light.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Install a new BTR roll assembly; [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11](#) (SFP).

Y N  
Perform SCP 6 Final Actions

Check the PWBA HVPS connector and secure the connection if necessary. **The defect persists.**

Y N  
Perform SCP 6 Final Actions

Install a new HVPS PWBA, PL 18.2 Item 2 (MFP Std.), PL 18.6 Item 2(MFP\_Tall), PL 18.10 Item 2, (SFP).

## IQ3 Blank Print RAP

No visible image anywhere on the output.

### Initial Actions

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

- Ensure that the drum cartridge is properly installed.
- Check for multi-sheet feeds
- Clean the LED print head using ADJ 1.
- Check CRU life counters and replace any CRUs that are at end of life.

### Procedure

Remove the 2nd bias transfer roll (BTR) assembly. Check for surface contamination or excessive wear, ensure the transfer roller is correctly seated. **The transfer roller is good.**

Y N  
Install a new BTR roll assembly; PL 19.2 Item 11 (MFP), PL 19.4 Item 11 (MFP\_Tall), PL 19.6 Item 11 (SFP).

Check the 2nd BTR plate spring on the HVPS, PL 18.2 Item 5. **The plate spring is clean and undamaged.**

Y N  
As necessary, clean the plate spring or install a new HVPS.

Remove the drum cartridge PL 8.1. Check the spring connectors on the HVPS, **The spring connectors are clean and undamaged.**

Y N  
As necessary, clean the spring connectors or install a new HVPS.

Enter dC330, code 093-001 to run the toner dispenser motor. **The toner dispenser motor runs.**

Y N  

- Check the toner dispenser motor PL 5.1 Item 1. Refer to GP 10; How to Check a Motor.
- If necessary, install a new toner dispenser motor PL 5.1 Item 1.

Check the ATC sensor contact point on the drum cartridge, and the xerographic connector assembly. **The contact point is good.**

Y N  
Install new components as necessary:

- Xero deve CRU assembly (drum cartridge) (PL 18.1)
- Xerographic connector assembly

A

Ensure that all connectors on the ESS PWB, [PL 18.9](#) (SFP), [PL 18.1](#) (MFP std.), [PL 18.6](#) (MFP\_Tall) and the MCU PWB, are securely connected. Ensure all surface mounted modules on the ESS PWB and MCU PWB are securely connected. **The image quality defect persists.**

**Y** **N**  
Perform [SCP 6](#) Final Actions.

Install new components as necessary:

- Drum cartridge, [PL 8.1](#)
- HVPS PWBA: [PL 18.2 Item 2](#) (MFP Std.), [PL 18.6 Item 2](#) (MFP\_Tall), [PL 18.10 Item 2](#) (SFP).
- LPH Head assembly mono, [PL 2.1 Item 1](#).

## IQ4 Smearred/Unfused Image

The printed image is not fully fused to the paper. The image rubs off easily. A cold environment affects the warm-up time, while high humidity has an adverse effect on fusing. Also, media weight and composition affect fusing performance. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

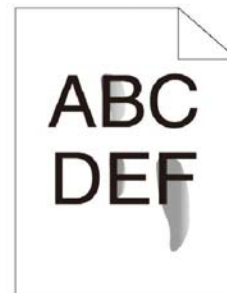
**Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.**

#### WARNING

**Do not touch the fuser while it is hot.**

After each action, print a test page to check if image quality improves.

- Check the environment. A location that's too cold or humid reduces fusing performance (refer to [GP 27](#) Environmental Data.)
- Verify that the media type is set correctly. Refer to [GP 26](#) for Media Specifications.
- Verify that the toner cartridge is genuine Xerox toner.



E-8-0182-A

Figure 1 Smearred/unfused image example

### Procedure

Check the tray settings and install new, dry media from an unopened ream. Run a test print.

**The defect persists.**

**Y** **N**  
Perform [SCP 6](#) Final Actions.

Increase fuser temperature, and re-run test print on good media. **The defect persists.**

**Y** **N**  
Perform [SCP 6](#) Final Actions

Remove and inspect the fuser assembly and fuser electrical connections. Install a new fuser if necessary. **The defect persists.**

**Y** **N**  
Perform [SCP 6](#) Final Actions.

## IQ5 Random Spots

There are spots of toner randomly scattered on the page. Refer to [Figure 1](#).

### Initial Actions

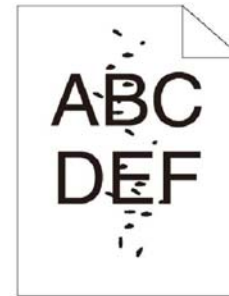
#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

- Check that the paper is clean, dry, and meets specifications.
- Clear the media path of items such as staples, paper clips or paper scraps.
- Check the drum cartridge surface for spots or contamination.
- Check that the drum cartridge contacts are clean.  
Clean the LED Print Head [ADJ 1](#).



E-8-0183-A

Figure 1 Random spots example

### Procedure

Print a test print. **The image quality defect persists.**

Y N

Perform [SCP 6](#) Final Actions.

Remove the BTR roll assembly and check for surface contamination and wear. **The roll is worn or damaged.**

Y N

Perform [SCP 6](#) Final Actions.

Install a new BTR roll assembly; [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11 REP 19.22](#) (SFP). **The defect persists.**

Y N

Perform [SCP 6](#) Final Actions.

Check the drum cartridge for spots or contamination and re-run the test print. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Replace the drum cartridge [PL 8.1](#). **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Check the fuser for damage or debris. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Install a new fuser, [PL 7.1](#)

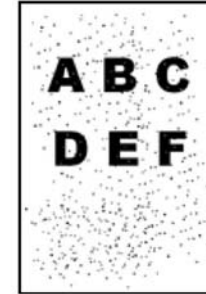
## IQ6 Bead Carry-Out

Media has gritty texture. Refer to [Figure 1](#).

### Initial Actions

After each action, print a test page to check if image quality improves.

- Ensure that the printer contains a genuine Xerox toner cartridge.
- Check that the paper is clean, dry, and meets specifications.
- Check CRU life count. Replace components at end of life ([dC135](#).)



E-8-0167-A

Figure 1 Bead carry-out example

### Procedure

Check the altitude setting if the printer is installed in a high altitude location. **The altitude is set for the appropriate value.**

Y N  
Go Service Tools on the Printer Maintenance tab to adjust the altitude value.

Replace the drum cartridge, [PL 8.1](#). **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Reseat HVPS bias connections. If necessary, install a new HVPS [PL 18.2 Item 2](#). **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Call Xerox Technical Support.



## IQ7 Cross Process Banding

Low density or blurred image horizontally, voids, or streaks. See [Figure 1](#).

### Initial Actions

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

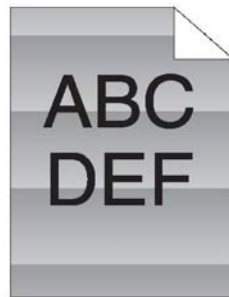
#### WARNING

Do not touch the fuser while it is hot.

**NOTE:** If the drum cartridge was removed and placed in the light, reinstall it in the printer and wait approximately 1 hour before printing a test sheet to see if this resolves the problem.

After each action, print a test page to check if image quality improves. Refer to the Repeating Defects test print [dC612](#).

- Check that the paper is clean, dry, and meets specifications.
- Ensure that the toner cartridge is a genuine Xerox cartridge.
- Check CRU life counts. Replace components at end of life.



E-8-0170-A

Figure 1 Horizontal bands, voids, or streaks example

### Procedure

Install a new drum cartridge [PL 8.1](#), and re-run the test print. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Remove the BTR roll assembly and check for surface contamination and wear. If necessary, install a new BTR roll assembly; [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11](#) (SFP). **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Check the fuser assembly for damage or debris and install a new one if necessary. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions  
Install a new fuser assembly, [PL 7.1](#).

## IQ8 In-Process Lines Streaks

Extraneous dark lines or bands in the process direction, [Figure 1](#) and [Figure 2](#).

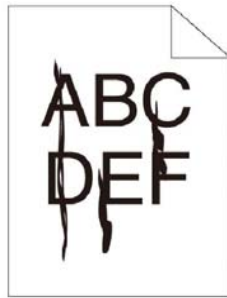


Figure 1 Streaks

E-8-0186-A

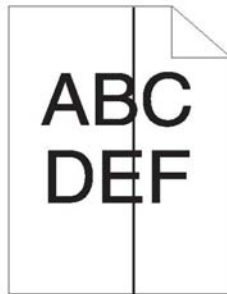


Figure 2 Vertical Lines

E-8-0187-A

### Procedure

#### WARNING

Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

Print a test pattern. The image quality defect persists.

Y N

Clean the scanner (MFP) using the procedure described in [ADJ 2](#). If the fault persists, install a new IIT assembly, [PL 50.1 Item 2](#).

Remove the BTR roll assembly, Check for surface contamination or excessive wear, ensure the transfer roller is correctly seated. **The transfer roller is good.**

Y N

Install a new BTR roll assembly; [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11 REP 19.22](#) (SFP).

Check the BTR plate spring, [PL 18.2 Item 5](#). **The plate spring is clean and undamaged.**

Y N

As necessary, clean the plate spring or install a new HVPS, [PL 18.2 Item 2](#) (MFP), [PL 18.6 Item 2](#) (MFP\_Tall), [PL 18.10 Item 2](#), (SFP).

Remove the Drum Cartridge, [PL 8.1](#). Check the BCR and DB spring connectors on the HVPS, **The spring connectors are clean and undamaged.**

Y N

As necessary, clean the spring connectors or install a new HVPS, [PL 18.2 Item 2](#) (MFP), [PL 18.6 Item 2](#) (MFP\_Tall), [PL 18.10 Item 2](#), (SFP)

Install new components as necessary:

- Drum Cartridge: [PL 8.1](#).
- HVPS: [PL 18.2 Item 2](#) (MFP), [PL 18.6 Item 2](#) (MFP\_Tall), [PL 18.10 Item 2](#), (SFP)
- BTR roll assembly; [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11 REP 19.22](#) (SFP).

## IQ9 Cyclic Dot/ Line

A cyclic black dot or line in the vertical direction. Refer to [Figure 1](#) and [Figure 2](#).

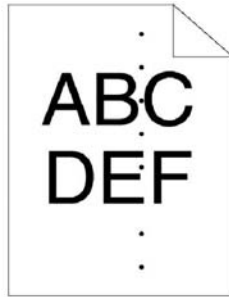


Figure 1 Cyclic dots

E-8-0172-A

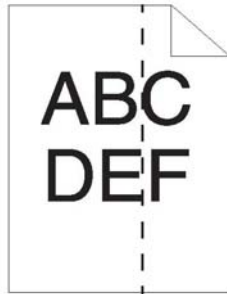


Figure 2 Cyclic lines

E-8-0173-A

## Procedure

### CAUTION

*Do not touch the surface of the drum while cleaning the Drum Cartridge.*

Remove the Drum Cartridge. Use a dry, lint free cloth to clean the rear side of the drum cartridge. Reinstall the Drum Cartridge. Make a copy from the document glass. **The image quality defect persists.**

Y N

Perform [SCP 6](#) Final Actions.

Install a new drum cartridge [PL 8.1](#). Make a copy from the document glass. **The image quality defect persists.**

Y N

Perform [SCP 6](#) Final Actions.

Install a new scanner assembly (MFP) [PL 50.1 Item 2](#). Make a copy from the document glass. **The defect persists.**

Y N

Perform [SCP 6](#) Final Actions.

Remove the fuser unit, [PL 7.1 Item 1](#). Check the fuser roll for contamination. **The fuser roll is clean.**

Y N

Clean the fuser roll. If necessary, install a new fuser assembly, [PL 7.1 Item 1](#).

Contact Technical Support.

## Initial Actions

### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

### WARNING

**Do not touch the fuser while it is hot.**

- Check that rollers and other media path components are clean and unobstructed.
- Check CRU life counts. Replace components at end of life
- Ensure that a genuine Xerox toner cartridge is being used.

## IQ10 Vertical Deletions

Areas of image (lines or bands) appear as vertical blanks or deletion. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

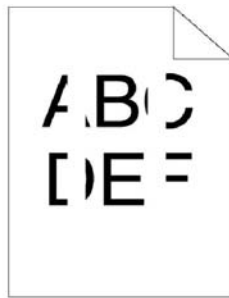
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the paper supply is dry and meets specifications.
- Inspect the paper path for items, such as staples, paper clips, and paper scraps.
- Check that rollers and other media path components are clean and unobstructed.
- Clean the LED print head (LPH) using the LPH cleaning wand, ([ADJ 1](#)).



E-8-0185-A

Figure 1 Vertical blank deletions (line or band) example

### Procedure

Print the repeating defects test print [dC612](#). Look only at the solid areas, not at the map area.

#### The defect persists

Y N  
Perform [SCP 6](#) Final Actions.

Install a new drum cartridge, [REP 8.1](#) and re-run the test print. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Inspect the LED array on the LPH for debris or contamination. If necessary, install a new LPH [ADJ 1](#), [REP 2.1](#). **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

A  
Remove the BTR assembly; [PL 19.2 Item 11 REP 19.9](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11 REP 19.22](#) (SFP). Check for surface contamination and wear and replace if necessary. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Contact Xerox Technical Support.

## IQ11 Horizontal Banding

The image has horizontal black bands across the output. See [Figure 1](#).

### Initial Actions

#### WARNING

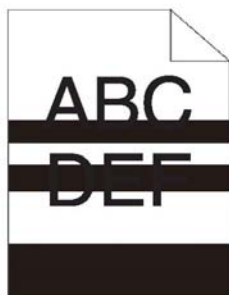
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the paper is clean, dry, and meets specifications.
- Ensure that a genuine Xerox toner cartridge is being used.
- Clean the LED print head using the procedure outlined in [ADJ 1](#).



E-8-0177-A

Figure 1 Horizontal banding example

## IQ12 Banding (Blurred in horizontal direction)

The image appears blurred in the horizontal direction. See [Figure 1](#).

### Initial Actions

#### WARNING

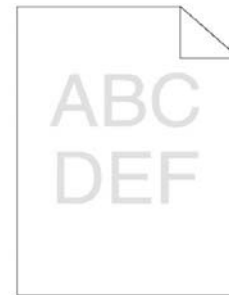
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the paper is clean, dry, and meets specifications.
- Ensure that a genuine Xerox toner cartridge is being used.
- Clean the LED print head using the procedure outlined in [ADJ 1](#).



E-8-0174-A

Figure 1 Banding example

### Procedure

Ensure that the drum cartridge is properly installed. Reinstall the drum cartridge if necessary.

**The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Install a new drum cartridge, [PL 8.1](#), [REP 8.1](#). **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions

Check that the connections on the HVPS PWBA are properly seated. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Replace the HVPS PWBA; [PL 18.2 Item 2 \(MFP\)](#), [PL 18.6 Item 2 \(MFP\\_Tall\)](#), [PL 18.10 Item 2](#)

## Procedure

Ensure that the drum cartridge is properly installed. Reinstall the drum cartridge if necessary.

### The defect persists.

Y N  
Perform SCP 6 Final Actions.

Install a new drum cartridge, PL 8.1, REP 8.1. **The defect persists.**

Y N  
Perform SCP 6 Final Actions

Remove the BTR assembly; PL 19.2 Item 11 REP 19.9 (MFP), PL 19.4 Item 11 (MFP\_Tall), PL 19.6 Item 11 REP 19.22 (SFP). Check for surface contamination and wear and replace if necessary. **The defect persists.**

Y N  
Perform SCP 6 Final Actions.

Remove the fuser assembly. Turn the gear by hand and examine the heat roll section. If damaged, install a new fuser PL 7.1. **The defect persists.**

Y N  
Perform SCP 6 Final Actions.

Contact Xerox Technical Support.

## IQ13 Diagonal Banding

Low density or blurred images appear diagonally across output. See Figure 1.

### Initial Actions

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the paper is clean, dry, and meets specifications.
- Check CRU life counts. Replace components at end of life.
- Check if the printer contains genuine Xerox Toner cartridges and parts.



E-8-0171-A

Figure 1 Diagonal banding (auger marks) example

### Procedure

Discuss printing behavior with the customer. **The customer is printing a lot of continuous high-area coverage prints.**

Y N  
Install a new drum cartridge, PL 8.1, REP 8.1

Discuss printer limitations with the customer. Print the number of low coverage pages necessary to recover the print job.

## IQ14 Uneven Density

Uneven density, mottled image or text. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

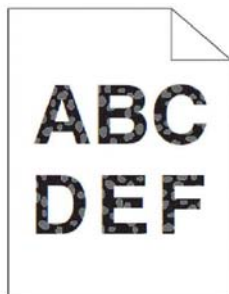
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check if the toner cartridges are genuine Xerox. If they are not, install new Xerox cartridges.
- Check the paper is the correct type and that it's not damaged or damp.
- Verify the paper is within specifications.
- Confirm that the printer is set to the correct media type (plain, heavyweight, etc.) [GP 26](#).
- Clean the LED print head (LPH) [ADJ 1](#).



E-8-0184-A

Figure 1 Uneven density example

### Procedure

Repeat customer job with fresh ream of media. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Refer to the appropriate repair procedure to adjust the bias transfer voltage up or down. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Call Xerox Technical Support.

## IQ15 Residual Image (Ghosting)

The image from a previous print appears on the current print. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

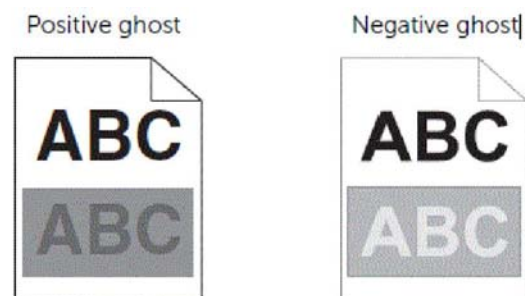
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Confirm that the printer is set to the correct media type (plain, heavyweight, etc.).
- Inspect the paper path for items, such as staples, paper clips, and paper scraps.
- Check that the fuser is seated properly.
- Verify the paper is within specifications ([GP 26](#)).



E-8-0191-A

Figure 1 Ghosting example

### Procedure

Print the Repeating Defects test print and review the prints. **The printed image contains repeating defects.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Install a new drum cartridge [PL 8.1 Item 1](#). **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Remove the BTR roll assembly; [PL 19.2 Item 11 REP 19.9](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11 REP 19.22](#) (SFP), and check for surface contamination and wear. Replace if necessary. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

A

Remove the fuser and check for damage, debris, and contamination. Install a new fuser assembly if necessary [PL 7.1](#), [REP 7.1](#). **The defect persists.**

Y N

Perform [SCP 6](#) Final Actions.

Contact Xerox Technical Support.

## IQ16 High Background on Prints

There is toner contamination on all or part of the page; refer to [Figure 1](#). The contamination appears as a very light dusting or fog on prints and copies.

**NOTE:** If the defect occurs when making copies or scanning documents, and not when printing files, refer to the white reference calibration in [dC945](#).

### Initial Actions

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the media type settings are correct.
- Some glossy media or photo paper will exhibit high background. If the issue only occurs on a particular media, try a different brand.
- Check that the paper is clean, dry, and meets specifications.
- Verify the toner cartridge is a Xerox manufactured part with adequate life remaining.
- Ensure covers are in place and no outside light enters the printer.
- Clean the LPH [ADJ 1](#).



E-8-0176-A

Figure 1 High background contamination example

### Procedure

Check the paper condition. Load new, dry recommended paper, and print a test print. **The image includes background defects.**

Y N

Perform [SCP 6](#) Final Actions.

Remove the drum cartridge, [REP 8.1](#), clean the electrical contacts, then print a test print. **The image includes background defects.**

Y N

Perform [SCP 6](#) Final Actions.



A  
Install a new drum cartridge, [PL 8.1](#), [REP 8.1](#) and reprint the test print. **The image includes background defects.**

Y N  
Perform [SCP 6](#) Final Actions.

Check that the connections on the HVPS PWBA are properly seated. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Replace the HVPS PWBA; [PL 18.2 Item 2 \(MFP\)](#), [PL 18.6 Item 2 \(MFP\\_Tall\)](#), [PL 18.10 Item 2 \(SFP\)](#).

## IQ17 Jagged/ Blurry Text and Image

Text in image is blurry or jagged along the edges. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

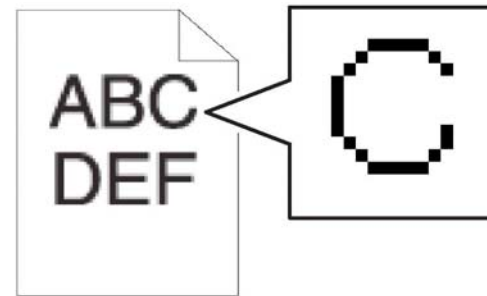
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the paper is clean, dry, and meets specifications.
- Check that the media type settings are correct.
- Check CRU life counts. Replace components at end of life.
- Clean the LED Print Head (LPH).



E-8-0179-A

Figure 1 Jagged/ blurry text and image example

### Procedure

On the Printer Options tab, set Print Quality to Enhanced. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

If the customer is using a downloaded font, ensure that the font is recommended for the printer, operating system, and the application being used. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Inform customer of printer limitations. Perform [SCP 6](#) Final Actions.

## IQ18 Wrinkled or Creased

The prints are wrinkled, creased, stained, or torn. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

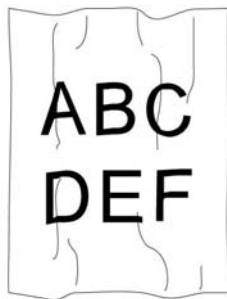
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the media is clean, dry, and meets specifications.
- Check that the media type settings are correct.
- Inspect the paper path for items, such as staples, paper clips, and paper scraps.
- Check CRU life counts. Replace components at end of life.
- Check the paper tray guides so they are positioned against the paper correctly.



E-8-0188-A

Figure 1 Wrinkled or creased example

### Procedure

Check the location of wrinkles on the media. **Wrinkles are about 30mm or more from the four edges of an envelope.**

**Y N**  
This type of wrinkle is considered normal. The printer is not at fault. Perform [SCP 6](#) Final Actions.

Reload the envelopes in the bypass tray properly. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Replace the 2nd bias transfer roller (BTR roll assembly); [PL 19.2 Item 11 REP 19.9](#) (MFP), [PL 19.4 Item 11\(MFP\\_Tall\)](#), [PL 19.6 Item 11 REP 19.22](#) (SFP). Repeat the Repeating Defects test print. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

**A**  
Install a new fuser, [PL 7.1](#). **The defect persists.**  
**Y N**  
Perform [SCP 6](#) Final Actions  
Call Xerox Technical support

## IQ19 Leading Edge Paper Damage

The page exits with the leading edge damaged. Refer to [Figure 1](#).

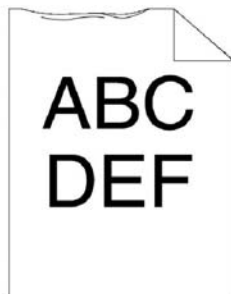
### Initial Actions

#### WARNING

**Do not touch the fuser while it is hot.**

After each action, print a test page to check if image quality improves.

- Check that the paper is clean, dry, and meets specifications.
- Inspect the paper path for items, such as staples, paper clips, and paper scraps.
- Make certain that settings are correct for; trays, paper guides and paper types.
- Check CRU life counts. Replace components at end of life.
- Clean the LPH. Refer to [ADJ 1](#).



E-8-0180-A

Figure 1 Leading edge paper damage example

### Procedure

Check the paper feed path roller. **The roller on the paper feed path is not dirty, damaged, or worn; it works correctly; and it is installed correctly.**

Y N  
Clean or install a new corresponding roller, and reinstall it.

Check the installation status of the transfer roller. **The transfer roller is installed correctly.**

Y N  
Reinstall the 2nd bias transfer roller (BTR roll assembly); [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11](#) (SFP). Repeat.

Check the fuser assembly installation. **The fuser assembly is installed correctly.**

Y N  
Reinstall the fuser.

Remove the fuser assembly, turn the gear by hand, and examine the heat roll section **The heat roll section is good.**

Y N  
Install a new fuser, [PL 7.1](#).

Contact Xerox Technical Support.

## IQ20 Incorrect Image Position or Margins

Image prints outside of the paper margins. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

**Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to [GP 4](#). Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.**

- Make certain that settings are correct for; trays, paper guides and paper types.
- Ensure that the toner cartridge is a genuine Xerox toner cartridge.
- Clean the LPH. ([ADJ 1](#))



E-8-0178-A

Figure 1 Incorrect position or margins

### Procedure

The fault only occurs during printing.

Y N  
The fault only occurs when feeding an original through the DADF.  
Y N  
Install a new scanner assembly (MFP only), [PL 50.1 Item 2](#).

Check the DADF feed roller assembly, [PL 50.1 Item 1](#). **The feed roller assembly is damaged or contaminated.**

Y N  
Install a new scanner assembly, [PL 50.1 Item 2](#).

Clean or install a new DADF feed roller assembly as necessary, [PL 50.1 Item 1](#).

Install a new drum cartridge, [PL 8.1](#). **The image quality defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

Install a new transfer roller (BTR roll assembly); [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11](#) (SFP). **The image quality defect persists.**

Y N  
Perform [SCP 6](#) Final Actions.

## IQ21 Images are Skewed

Images in the output are not parallel to the edge of the printed sheet. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

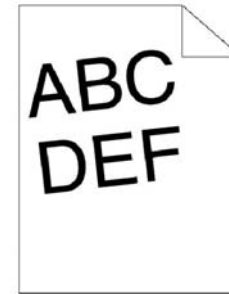
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Check that the paper is clean, dry, and meets specifications.
- Make certain that settings are correct for; trays, paper guides and paper types.
- Inspect the paper path for items, such as staples, paper clips, and paper scraps.
- Ensure that the toner cartridge is a genuine Xerox toner cartridge.
- Check CRU life counts. Replace components at end of life.



E-8-0181-A

Figure 1 Skewed image example

### Procedure

Adjust the paper guides to the proper position. **The defect persists.**

Y N  
Perform [SCP 6](#) Final Actions

Check the paper feed path roller [PL 13.1](#). **The the paper feed path roller is good.**

Y N  
Clean or install a new transfer roller (BTR roll assembly); [PL 19.2 Item 11](#) (MFP), [PL 19.4 Item 11](#) (MFP\_Tall), [PL 19.6 Item 11](#) (SFP).

Check the installation status of the fuser assembly [PL 7.1](#). **The fuser assembly is installed correctly.**

Y N  
Install the fuser correctly, [PL 7.1](#).

Contact Xerox Technical Support.

## IQ22 Registration is out of Alignment

Images are not aligned with each other. Refer to [Figure 1](#).

### Initial Actions

#### WARNING

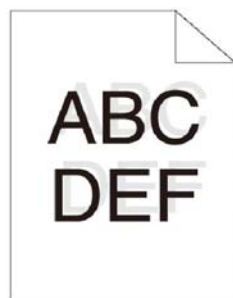
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to [GP 4](#). Electricity can cause death or injury. Moving parts can cause injury.

#### WARNING

Do not touch the fuser while it is hot.

After each action, print a test page to check if image quality improves.

- Clean the LED Print Head (LPH) [ADJ 1](#).
- Check that the paper is clean, dry, and meets specifications.
- Remove items from the paper path, such as staples, paper clips or paper scraps.
- Check CRU life counts. Replace components at end of life.



E-8-0194-A

Figure 1 Registration misalignment example

### Procedure

Refer to the machine's service log. New LED print head or FCC cables have recently been installed. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Check that the LPH array is installed correctly. **The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Check that the FCC cables connecting the LPH array to the ESS PWB are installed correctly.

**The defect persists.**

**Y N**  
Perform [SCP 6](#) Final Actions.

Contact Xerox Technical Support.

## IQ23 Skew Check

Use this RAP to check the skew for prints and copies.

**NOTE:** The test patterns are printable from the [Reference Library](#) for correct letter and A4 sizes.

### Procedure

IOT Print Skew

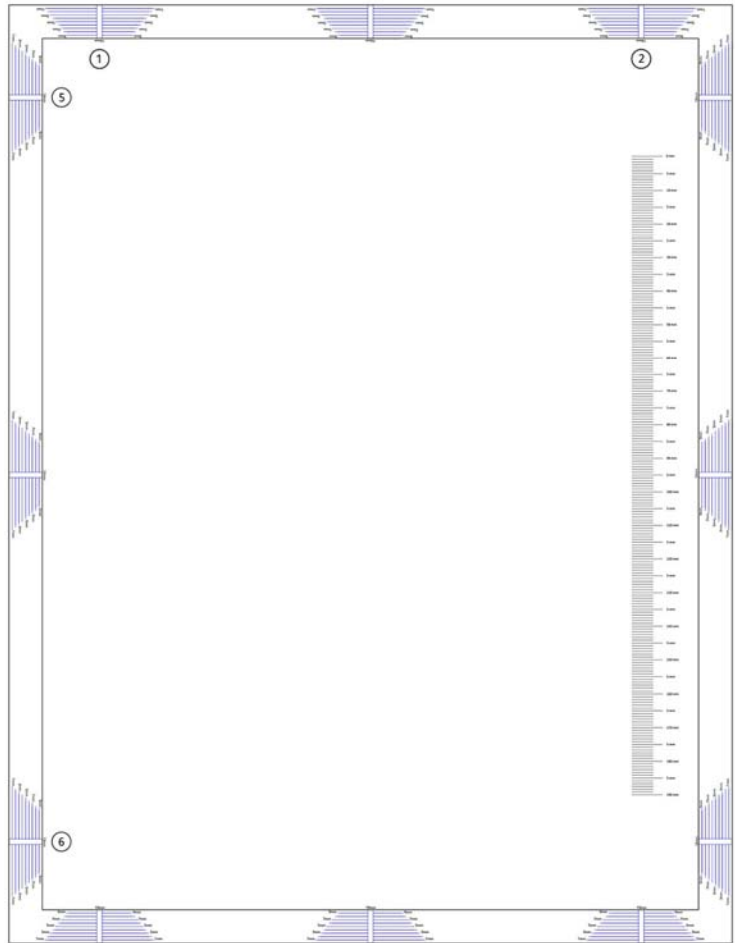
1. Print the test page, [Figure 1](#).
2. Measure from the edge of the paper to the 10mm line at points 1 and 2, then 5 and 6.
3. The skew is the difference between the two measurements for that side.
4. Verify the difference is within the tolerance value as given in [Table 1](#) for IOT (Internal Print).

Copy Skew

1. Print one test page, [Figure 1](#), mark the page **side 1**.
2. Measure from the edge of the paper to the 10mm line at points 1 and 2, then 5 and 6.
3. Copy the page, then mark the copy **side 2**.
4. Measure from the edge of the paper to the 10mm line at points 1 and 2, then 5 and 6.
5. Compare the side 1 and side 2 skew difference. Verify the difference is within the tolerance in [Table 1](#).

Table 1 Copy skew tolerance value

	Flatbed Copy (From Platen)	DADF Copy	IIT Scan from platen to file	IIT + DADF (Scan) Scan to file	IOT (Internal Print)
Lead Edge (180mm edge)	±1.3mm	±2.7mm	±0.6mm	±2.4mm	±1.1mm
Side Edge (280mm edge)	±2.2mm	±3.5mm	±0.9mm	±2.8mm	±2.0mm



B-1-0360-A

**Figure 1 Skew Check**

The printable version of the letter and A4 size skew test pattern above is located here:

- [Skew Test Pattern A4](#)
- [Skew Test Pattern Letter](#)

## IQ24 Registration Check

Use this RAP to check the registration for prints and copies.

**NOTE:** The test patterns are printable from the [Reference Library](#) for correct letter and A4 sizes.

### Procedure

#### IOT Print Registration

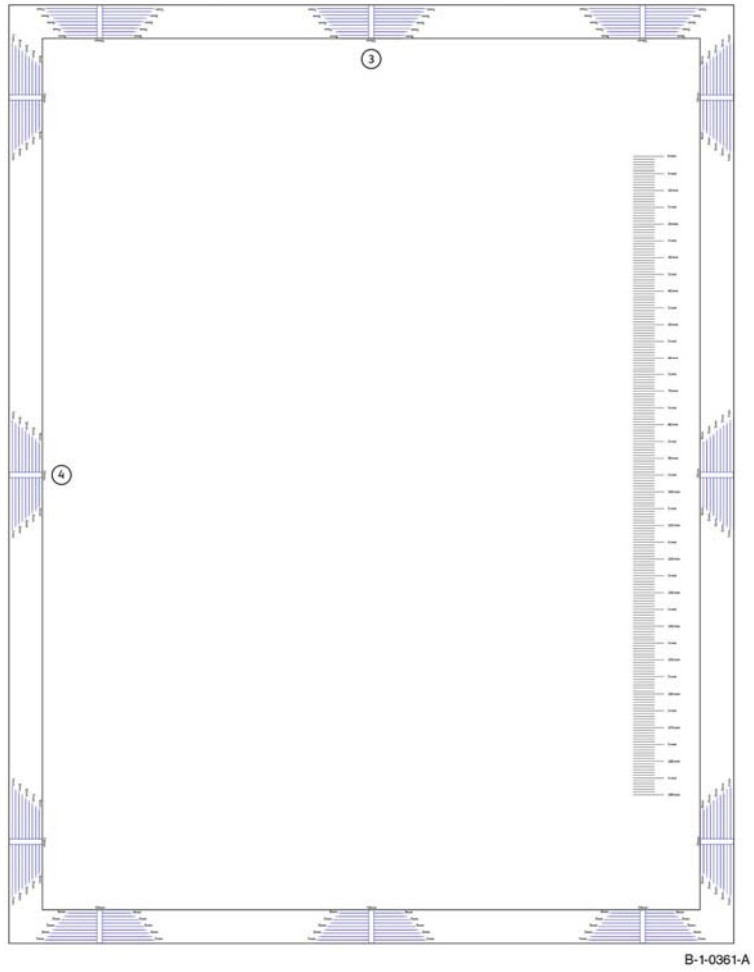
1. Print one test page, [Figure 1](#).
2. Measure the print from the edge of the paper to the 10mm line at points 3 and 4.
3. The registration is the difference between the points 3 and 4.
4. Make sure that the difference is within the tolerance value as given in [Table 1](#) for IOT (Internal Print).

#### Copy Registration

1. Print one test page, [Figure 1](#), mark the page **side 1**.
2. Measure the print from the edge of the paper to the 10mm line at points 3 and 4.
3. Copy the page, then mark the copy **side 2**.
4. Measure the print from the edge of the paper to the 10mm line at points 3 and 4.
5. Compare the side 1 and side 2 registration difference. Verify the difference is within the tolerance in [Table 1](#).

**Table 1 Copy registration tolerance value**

	Flatbed Copy (From Platen)	DADF Copy	IIT Scan from platen to file	IIT + DADF (Scan) Scan to file	IOT (Internal Print)
Lead Edge (180mm edge) Registration	+3.3/-1.3mm	±3.9/-1.9mm	±1.0mm	±2.0mm	+3.0/-1.0mm
Side Edge (280mm edge) Registration	±2.7mm	±3.0mm	±1.0mm	±1.5mm	±2.5mm



**Figure 1 Registration Check**

The printable version of the letter and A4 size registration test pattern above is located here:

- [Registration Test Pattern A4](#)
- [Registration Test Pattern Letter](#)





# 4 Repairs - Adjustments

## REP 1 UI Console Assembly

REP 1.1 UI Console Assembly (Control Panel) (MFP) .....	4-5
REP 1.2 UI Inner Cover (MFP) .....	4-6
REP 1.3 UI Frame Cover (MFP) .....	4-6
REP 1.4 UI Harness .....	4-7
REP 1.5 UI Access Door (MFP) .....	4-8
REP 1.6 UI Console Assembly (SFP) .....	4-9
REP 1.7 UI Inner Cover (SFP) .....	4-10
REP 1.8 UI Harness (SFP) .....	4-11
REP 1.9 UI Access Door (SFP) .....	4-12

## REP 2 LPH

REP 2.1 LPH Mono Head Assembly .....	4-13
REP 2.2 LPH MONO Guide .....	4-14
REP 2.3 Right LPH Holder .....	4-16
REP 2.4 Toner Guide .....	4-17
REP 2.5 LPH MONO FFC Guide .....	4-18

## REP 3 Drive

REP 3.1 Main Drive Assembly .....	4-21
REP 3.2 MSI Drive assembly .....	4-24

## REP 4 NOHAD

REP 4.1 Main Fan .....	4-25
REP 4.2 Sub Fan .....	4-26
REP 4.3 Foot and Foot Assembly Kit .....	4-27

## 5 REP Dispenser

REP 5.1 Dispenser/Environmental-MV Drive Assemblies .....	4-29
REP 5.2 Toner CRUM Connector Assembly .....	4-30
REP 5.3 Dispenser/Environmental Motor Assembly .....	4-31

## REP 6 Transfer

REP 6.1 Humidity and Temperature Sensor .....	4-33
---	------

## REP 7 Fuser

REP 7.1 Fusing Assembly .....	4-35
REP 7.2 Nip Retract Shaft Assembly .....	4-36

## REP 8 Xerographics

REP 8.1 CRU Xerographic Developer Assembly .....	4-39
--	------

## REP 9 Tray

REP 9.1 IOT 550 Feed Tray Assembly .....	4-41
REP 9.2 CST Separator Holder Assembly .....	4-42
REP 9.3 Tray Dust Cover .....	4-43

## REP 10 Optional 550-Sheet Feeder

REP 10.1 550 Option Feeder Separation .....	4-45
REP 10.2 550 Optional Feeder Foot .....	4-46

REP 10.3 Option Feeder Size Switch Assembly .....	4-47
REP 10.4 LED harness Assembly Kit .....	4-49
REP 10.6 Feed Roller Assembly Kit (Optional Feeder) .....	4-51
REP 10.7 No Paper Actuator (Optional Feeder) .....	4-52
REP 10.8 550 Option Cassette Assembly .....	4-53
REP 10.9 Cassette Separator Holder Assembly (Option Feeder) .....	4-54
REP 10.10 Tray Dust Cover .....	4-54
REP 10.11 Cassette Separator Roll Kit .....	4-55

## REP11 High Capacity Feeder (HCF)

REP 11.1 Right Side Cover .....	4-57
REP 11.2 Left Front Corner, Shade Tray LED and PWB LED Cover .....	4-58
REP 11.3 Left Side Cover .....	4-59
REP 11.4 Rear Cover .....	4-60
REP 11.5 Feeder Assembly .....	4-61
REP 11.6 harness Assembly LED .....	4-62
REP 11.7 Optional Paper Feeder (OPF) PWB .....	4-63
REP 11.8 Main Motor Assembly .....	4-64
REP 11.9 Main Motor Assembly P1 .....	4-65
REP 11.10 Rear Interlock Switch .....	4-66
REP 11.11 Feed and Separator Rollers .....	4-68

## REP 13 Bypass (MSI) Tray

REP 13.1 Bypass Tray Frame Assembly .....	4-71
REP 13.2 Bypass Tray Feed Roller .....	4-72
REP 13.3 Bypass Tray No Paper Sensor .....	4-73
REP 13.4 Bypass Tray Turn around 1 Roller Assembly Kit .....	4-74
REP 13.5 Bypass Tray Turn Around 2 Roller Assembly Kit .....	4-75
REP 13.6 Main Bypass Tray (MSI) Assembly .....	4-77
REP 13.7 Bypass Tray Separator Holder Assembly .....	4-78
REP 13.8 Bypass Cover Assembly .....	4-78

## REP 14 Duplex

REP 14.1 Duplex Relay Cover .....	4-81
-----------------------------------	------

## REP 15 Registration

REP 15.1 Option Registration Chute .....	4-83
REP 15.2 Duplex Registration Roller Assembly Kit .....	4-86
REP 15.3 Registration Chute Feeder Assembly .....	4-87
REP 15.4 No Paper Actuator (Registration) .....	4-89
REP 15.5 Registration Actuator .....	4-90
REP 15.6 Registration Sensor .....	4-91
REP 15.7 Feed Roll Assembly .....	4-91

## REP 17 Exit

REP 17.1 Exit Chute Assembly .....	4-93
REP 17.2 Main Exit Drive Assembly (High Model) .....	4-94
REP 17.3 Full Stack Sensor (High Model) .....	4-95
REP 17.4 Full Stack Actuator .....	4-96

## REP 18 Electrical

REP 18.1 MCU PWB .....	4-97
REP 18.2 ESS MCU FCC .....	4-99
REP 18.3 ESS PWB .....	4-101
REP 18.4 FAX PWB.....	4-105
REP 18.5 ICCR USB Harness Assembly.....	4-105
REP 18.6 Front USB Harness Assembly .....	4-106
REP 18.7 LVPS PWB .....	4-107
REP 18.8 HVPS PWB.....	4-108
REP 18.9 HVPS Toner Cover .....	4-110
REP 18.10 Second Bias Transfer Roll Housing Kit.....	4-111
REP 18.11 AC Fusing Harness.....	4-111
REP 18.12 Rear Interlock Harness Assembly .....	4-113
REP 18.13 Side Interlock Harness Assembly .....	4-114
REP 18.14 OPF-CF Harness Assembly .....	4-115
REP 18.15 Size Switch Assembly.....	4-116
REP 18.16 MCU PWB (MFP Tall).....	4-117
REP 18.17 FCC MCU ESS (MFP Tall) .....	4-119
REP 18.18 ESS PWB (MFP Tall).....	4-121
REP 18.19 FAX PWB (MFP Tall) .....	4-125
REP 18.20 ICCR USB Harness Assembly (MFP Tall).....	4-126
REP 18.21 Front USB Harness Assembly (MFP Tall) .....	4-127
REP 18.22 LVPS PWB (MFP Tall).....	4-128
REP 18.23 HVPS Guide Assembly (MFP Tall) .....	4-129
REP 18.24 HVPS Toner Cover (MFP Tall) .....	4-130
REP 18.25 Second Bias Transfer Roller Kit (MFP Tall).....	4-131
REP 18.26 AC Fusing Harness (MFP Tall).....	4-131
REP 18.27 Rear Interlock Harness Assembly (MFP Tall).....	4-133
REP 18.28 Side Interlock Harness Assembly (MFP Tall) .....	4-134
REP 18.29 OPF Harness Assembly (MFP Tall).....	4-135
REP 18.30 Size Switch Assembly (MFP Tall).....	4-136
REP 18.31 MCU PWB (SFP) .....	4-137
REP 18.32 ESS MCU FCC (SFP) .....	4-139
REP 18.33 ESS PWB (SFP) .....	4-141
REP 18.34 Front USB Harness Assembly (SFP).....	4-144
REP 18.35 LVPS PWB (SFP).....	4-145
REP 18.36 HVPS Guide Assembly (SFP) .....	4-147
REP 18.37 HVPS Toner Cover (SFP).....	4-148
REP 18.38 Second Bias Transfer Roll Housing Kit (SFP) .....	4-149
REP 18.39 AC Fusing Harness Assembly (SFP).....	4-149
REP 18.40 Rear-CF Interlock Harness Assembly (SFP) .....	4-151
REP 18.41 Side-CF Interlock Harness Assembly (SFP).....	4-152
REP 18.42 OPF-CF Harness Assembly (SFP) .....	4-153
REP 18.43 Size Switch Assembly (SFP) .....	4-154

## REP 19 Covers

REP 19.1 Front Cover Assembly (MFP and MFP_Tall).....	4-157
REP 19.2 Right Front Cover (MFP and MFP_Tall) .....	4-158
REP 19.3 Not used .....	4-158
REP 19.4 Not used .....	4-159
REP 19.5 Not used .....	4-159
REP 19.6 Not used .....	4-160

REP 19.7 Left Side Cover (MFP and MFP_Tall).....	4-160
REP 19.8 Left Side IIT Cover (MFP).....	4-161
REP 19.9 Second Bias Transfer Roller Assembly (MFP and MFP_Tall) .....	4-162
REP 19.10 Left Front Cover (MFP and MFP_Tall).....	4-163
REP 19.11 Not used.....	4-164
REP 19.12 Right Side Cover Assembly (MFP and MFP_Tall).....	4-164
REP 19.13 Top Cover (MFP) .....	4-165
REP 19.14 Left Side Cover (MFP and MFP_Tall).....	4-166
REP 19.15 Right Side Front Cover (SFP) .....	4-168
REP 19.16 WIFI Cap (MFP and MFP_Tall) .....	4-169
REP 19.17 ESS Window Assembly Kit (MFP and MFP_Tall).....	4-169
REP 19.18 Rear Cover Assembly (MFP and MFP_Tall).....	4-170
REP 19.19 Front Inner Cover (MFP-Tall).....	4-171
REP 19.20 Top Cover Assembly (SFP) .....	4-172
REP 19.22 Second Bias Transfer Roller Assembly (SFP) .....	4-173
REP 19.24 WiFi Cap (SFP).....	4-173
REP 19.25 Rear Cover Assembly Kit (SFP) .....	4-174
REP 19.32 Left Side Front Cover (MFP-Tall).....	4-174
REP 19.33 Not Used.....	4-175
REP 19.35 Top Cover (MFP-Tall) .....	4-176
REP 19.43 Not Used.....	4-177
REP 19.45 Right Side Front Cover (SFP).....	4-177
REP 19.47 Left Side Front Cover (SFP) .....	4-178
REP 19.48 Toner Cover Assembly (SFP).....	4-179
REP 19.49 Right Side Cover Assembly (SFP).....	4-180
REP 19.50 Top Cover (SFP).....	4-181
REP 19.51 Left Side Cover (SFP).....	4-182
REP 19.54 WIFI Cap (SFP) .....	4-183
REP 19.55 ESS Window Assembly Kit (SFP).....	4-184
REP 19.56 Rear Cover Assembly (MFP).....	4-184

## REP 20 Mailbox (MBX)

REP 20.1 Cover LH C .....	4-187
REP 20.2 Cover RH C and Cover Assembly Staple .....	4-188
REP 20.3 Cover Top C.....	4-189
REP 20.4 MBX PWB.....	4-189
REP 20.5 LVPS PWB.....	4-190
REP 20.6 Motor Assembly .....	4-191
REP 20.7 Solenoid Assembly Gate.....	4-192
REP 20.8 Tray Assembly .....	4-193
REP 20.9 Tray assembly Bottom .....	4-196
REP 20.10 Bin Assembly Gate Solenoid .....	4-197

## REP 21 Finisher

REP 21.1 Cover LH C .....	4-199
REP 21.2 Cover RH C.....	4-200
REP 21.3 Cover Top C.....	4-201
REP 21.4 PWB GPF A4 Finisher .....	4-202
REP 21.5 LVPS.....	4-203
REP 21.6 Motor Assembly .....	4-204
REP 21.7 Solenoid Assembly Gate.....	4-205
REP 21.8 Cover Lower C.....	4-206

REP 21.9 Motor Assembly Stepping .....	4-206
REP 21.10 Stapler Assembly .....	4-208
REP 21.11 Base Tray Assembly .....	4-209
<b>REP 50 DADF / IIT / Scanner</b>	
REP 50.1 DADF Assembly (MFP Std. and MFP Tall).....	4-211
REP 50.2 IIT Assembly .....	4-214
REP 50.3 Left and Right Counterbalance Assemblies (Hinges) (MFP Std. and MFP Tall)	4-218
REP 50.4 Platen Cushion Assembly (MFP Std. and MFP Tall) .....	4-218
REP 50.5 Left IIT Cover (MFP Std. and MFP Tall) .....	4-219
REP 50.6 Left IIT Cap (MFP Std. and MFP Tall) .....	4-220
REP 50.7 DADF Actuator (MFP Std. and MFP Tall).....	4-221
REP 50.8 IIT Front Cover (MFP Std. and MFP Tall).....	4-221
REP 50.9 DADF Feed Roll Kit .....	4-222
<b>Adjustments</b>	
ADJ 1 Cleaning the LPH .....	4-223
ADJ 2 Cleaning the Scanner .....	4-226



## REP 1.1 UI Console Assembly (Control Panel) (MFP)

Parts List on [PL 1.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Verify the software version, if possible, before and after replacement of the UI and update the software, [GP 9](#), if needed.
2. Remove the UI console assembly, [Figure 1](#):
  - a. Remove the UI access door (2) from the console, [REP 1.5](#).
  - b. Release the UI and the speaker harness (3) from the UI console assembly.
  - c. Remove four screws (4) attaching the UI console assembly (5) to the UI frame assembly.
  - d. Remove the UI console assembly (5) from the UI frame assembly.

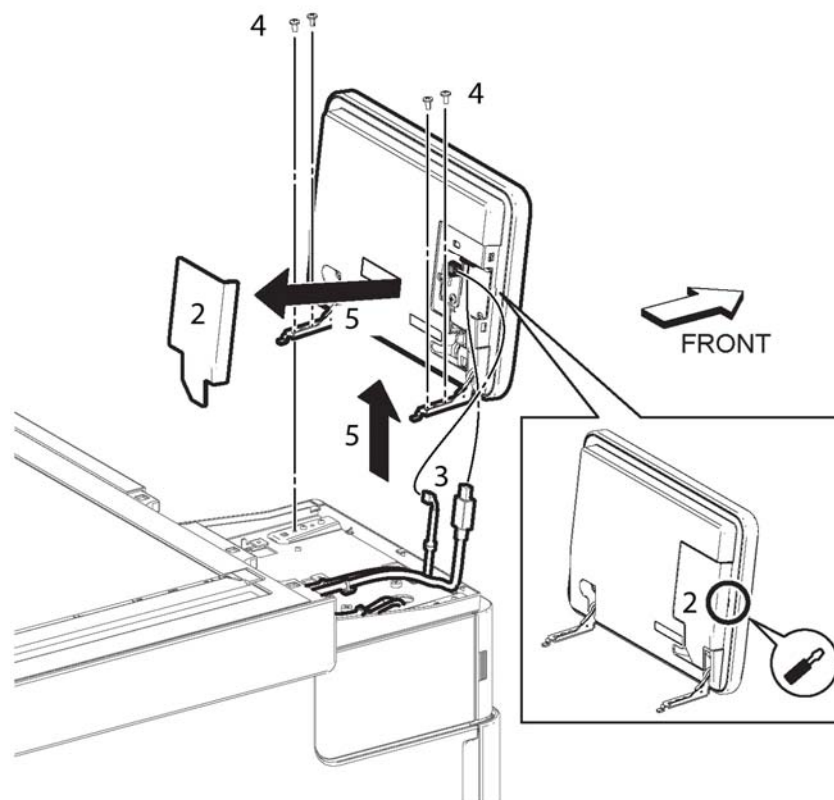


Figure 1 UI console assembly

D-8-0012-A

### Replacement

The replacement is the reverse of the removal procedure.

## REP 1.2 UI Inner Cover (MFP)

Parts List on [PL 1.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove the left side IIT cover, [REP 50.5](#).
2. Release two hooks, and remove the UI inner cover, [Figure 1](#).

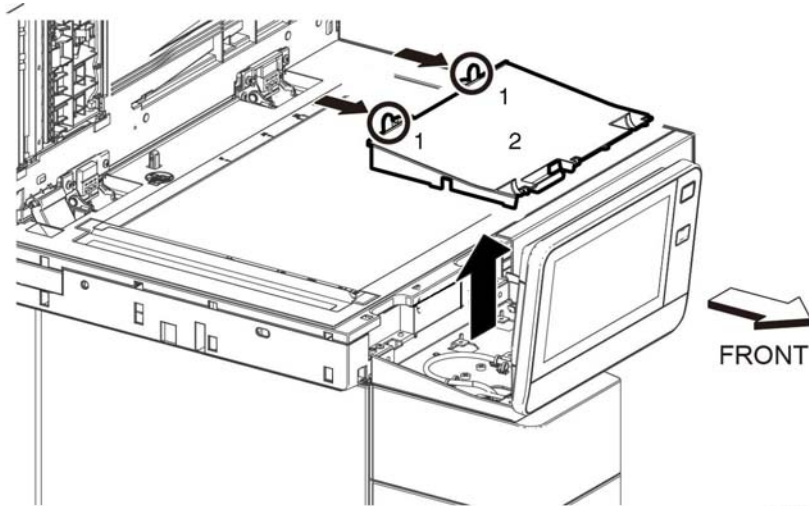


Figure 1 UI Inner cover

D-8-0017-A

### Replacement

The replacement is the reverse of the removal procedure.

## REP 1.3 UI Frame Cover (MFP)

Parts List on [PL 1.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove the IU inner cover, [REP 1.2](#).
2. Release four push ties (1) attaching the harnesses, [Figure 1](#).

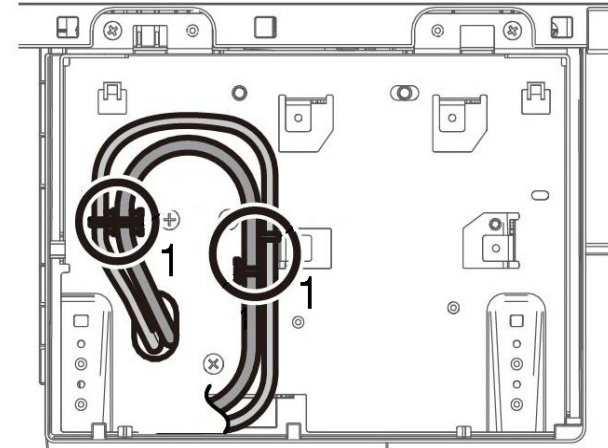


Figure 1 Release push ties

3. Remove three screws (2), then remove the UI frame inner cover (3), [PL 1.1 Item 3](#).

### Top View

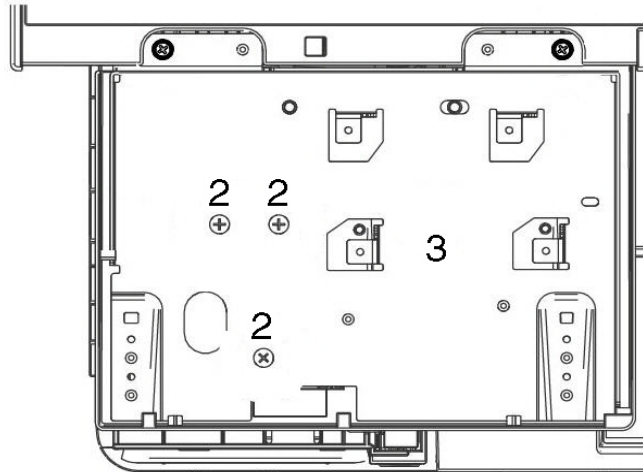


Figure 2 UI frame cover screws

### Replacement

#### CAUTION

*Avoid damaging harnesses during replacement. When attaching the UI console assembly to the UI frame assembly, be sure to feed the harnesses completely back through the frame before attaching the console to the frame.*

*Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.*

The replacement is the reverse of the removal procedure.

## REP 1.4 UI Harness

Parts List on [PL 1.1](#)

### Removal

#### WARNING

**Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove the UI frame cover, [REP 1.3](#).
2. Remove the UI harness, [Figure 1](#):
  - a. Disconnect the UI connector (1).
  - b. Release four push ties (2) attaching the UI and speaker harnesses to the top cover.
  - c. Release three push ties (3) attaching the UI and speaker harnesses, then remove the UI harness.

## REP 1.5 UI Access Door (MFP)

Parts List on [PL 1.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Insert a flat blade screwdriver (1) at the side of the UI access door (2) to slightly open the UI access door, then remove the UI access door (3).

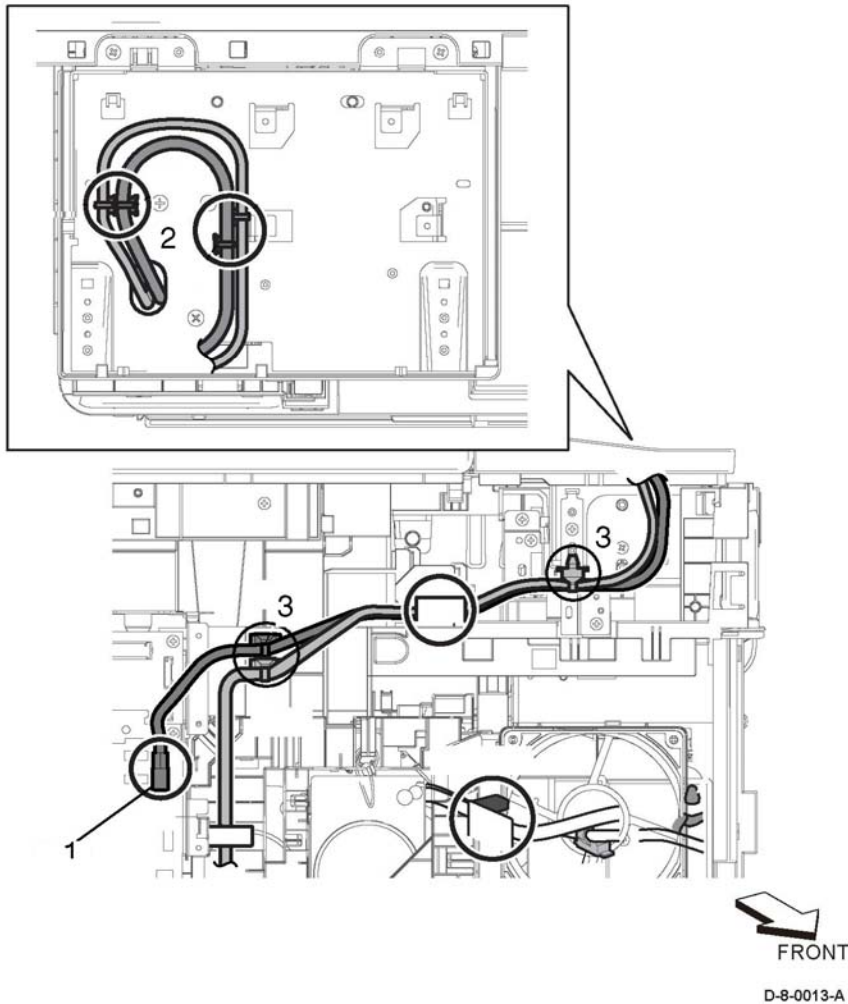


Figure 1 UI harness

D-8-0013-A

### Replacement

#### CAUTION

Avoid damaging harnesses during replacement. When attaching the UI console assembly to the UI frame assembly, be sure to feed the harnesses completely back through the frame before attaching the console to the frame.

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

The replacement is the reverse of the removal procedure.

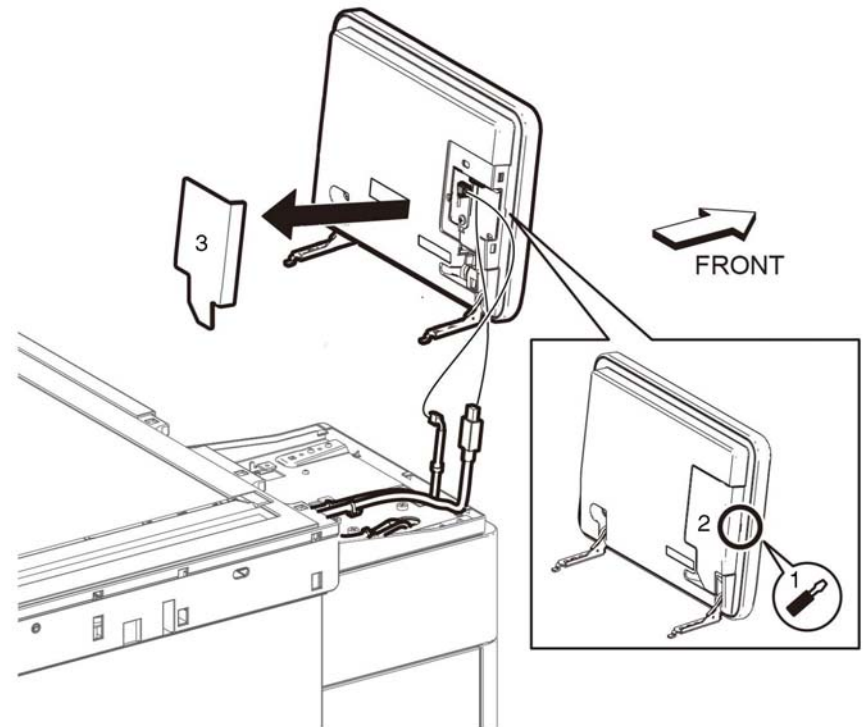


Figure 1 UI access door

D-8-0018-B



## Replacement

The replacement is the reverse of the removal procedure.

## REP 1.6 UI Console Assembly (SFP)

Parts List on PL 1.2

### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 additional information about screws and fasteners, refer GP 41.

1. Remove the UI inner cover, REP 1.7.
2. Remove the UI access door, REP 1.9.
3. Disconnect the UI and speaker harnesses (1).
4. Remove two screws (2), then lift the UI console in the direction of the arrow (3) to remove.

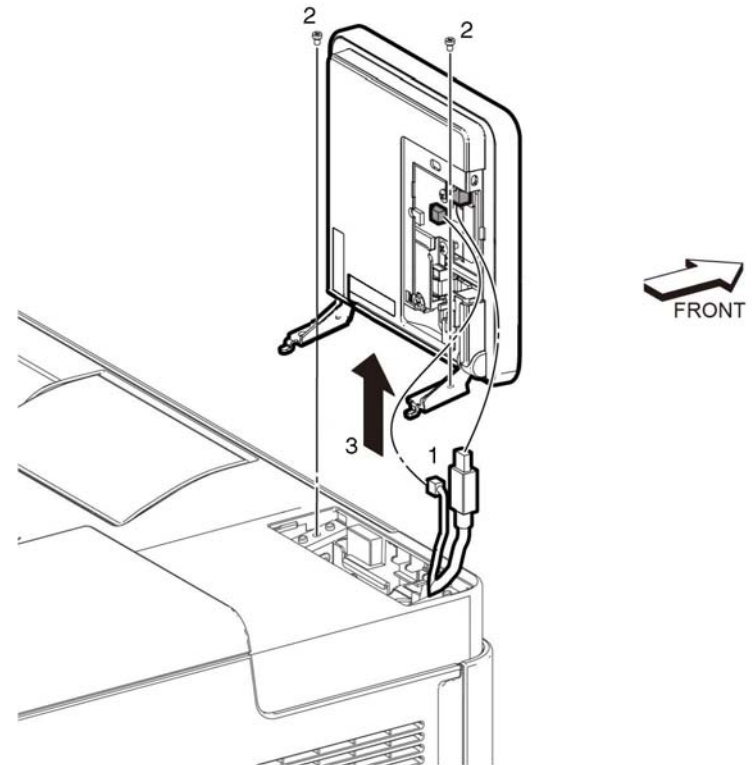


Figure 1 Remove the UI Console Assembly (SFP)

D-8-0022-B

## Replacement

The replacement is the reverse of the removal procedure.

## REP 1.7 UI Inner Cover (SFP)

Parts List on [PL 1.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove the left IIT cover, [REP 50.6](#).
2. Release two hooks (1) then remove the UI inner cover (2).

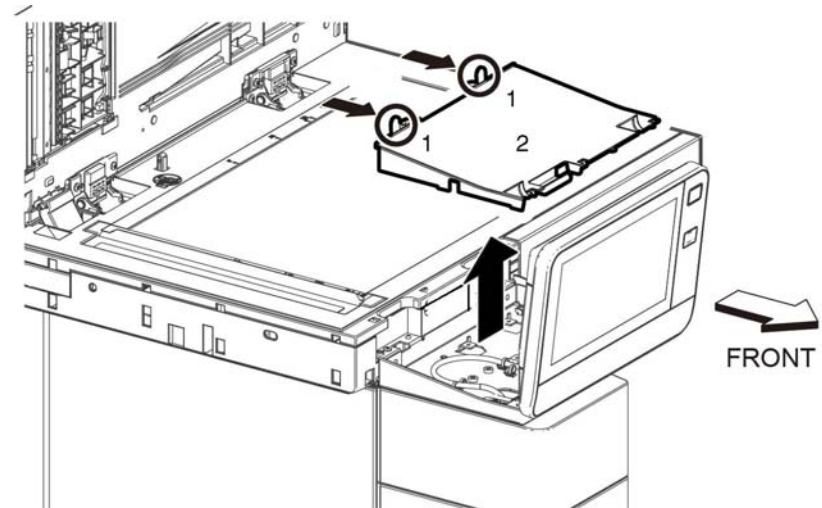


Figure 1 Remove the UI inner cover

D-8-0017-A

### Replacement

The replacement is the reverse of the removal procedure.

## REP 1.8 UI Harness (SFP)

Parts List on [PL 1.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove the left side cover, [REP 19.51](#).
2. Disconnect the UI harness (1) from the ESS PWB [P/J1352](#), release the harness tab (2), then remove the UI harness.

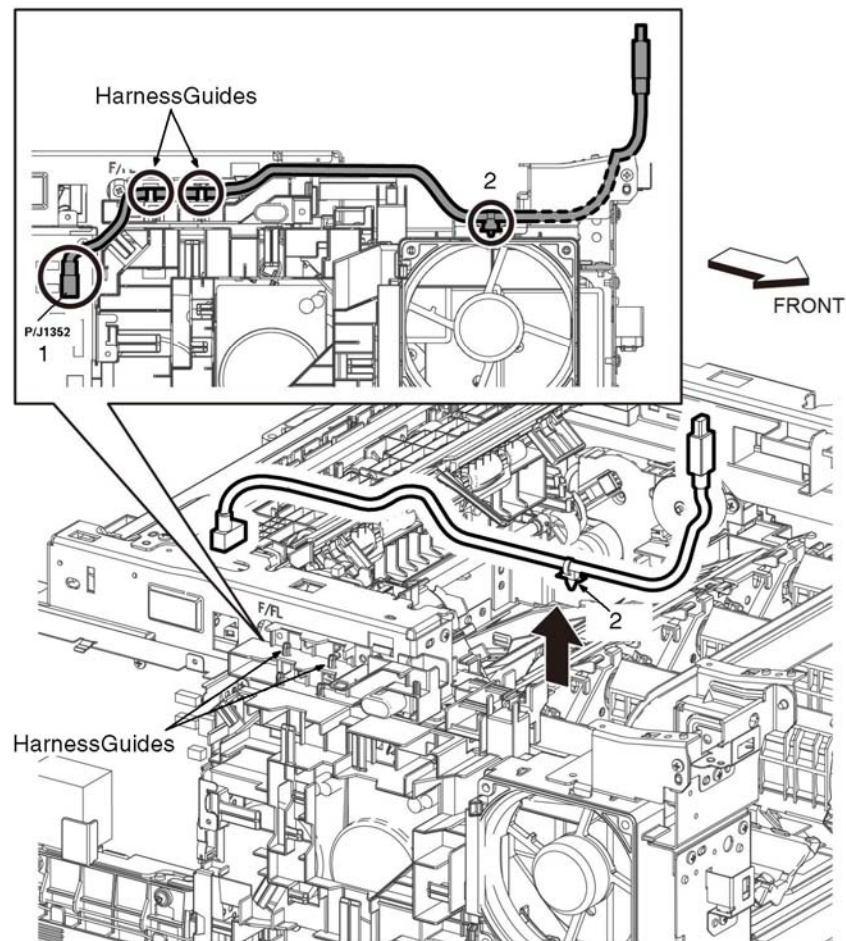


Figure 1 Remove the UI harness assembly (SFP)

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

The replacement is the reverse of the removal procedure.

## REP 1.9 UI Access Door (SFP)

Parts List on [PL 1.2](#)

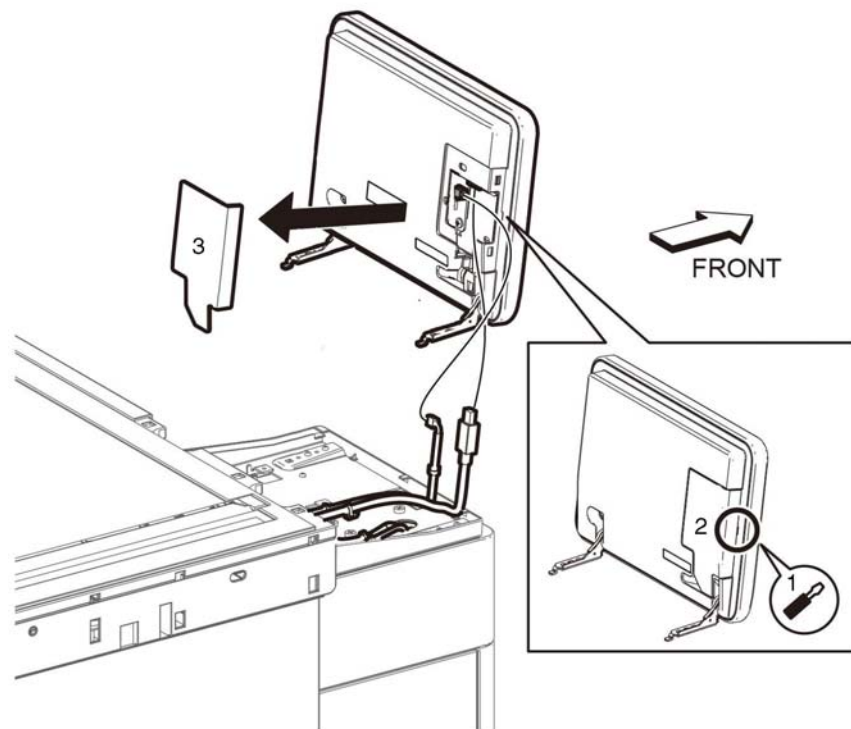
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Insert a flat blade screwdriver (1) at the side of the UI access door (2), then remove the UI access door (3).



D-8-0018-B

Figure 1 Remove the UI access door

### Replacement

1. Align the access door with the opening and press the access door to lock closed.

## REP 2.1 LPH Mono Head Assembly

Parts List on [PL 2.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 front cover assembly, [REP 19.1](#).
2. Remove the CRU Xerographic Developer Assembly, [REP 8.1](#).

#### CAUTION

Protect the drum from deterioration. When performing the following step, cover the drum with paper or similar material to prevent exposure to direct sunlight or room light.

Avoid damaging the LED strip on the LPH head assembly. Handle the LPH head assembly carefully.

3. Remove the LPH cover, [Figure 1](#):
  - a. Remove the XERO CRU Developer Assembly, [REP 8.1](#)
  - b. Release the three hooks (1).
  - c. Remove the LPH cover (2).

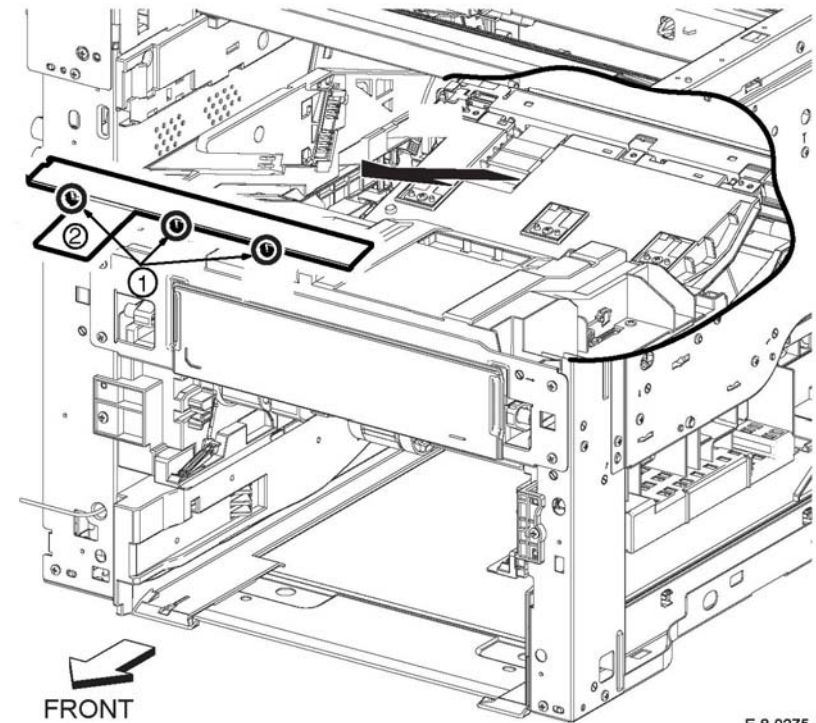


Figure 1 LPH cover removal

4. Remove the LPH MONO print head, [Figure 2](#):
  - a. Remove three screws (2).

#### CAUTION

Raise the FFC lock lever as shown in the inset of [Figure 2](#). Do not force to high or the lever will be damaged.

- b. Release the LPH FFC cable from the FFC lock (3).
- c. Remove the LPH MONO print head (4).

## REP 2.2 LPH MONO Guide

Parts List on [PL 2.1 Item 2](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 Right LPH Holder, [REP 2.3](#).
2. Remove the LPH FFC cable, [Figure 1](#):
  - a. Release the two hooks (1), then remove the LPH ESD cover (2).
  - b. Release the LPH FCC cable (3) from the harness guide of the HVPS cover (4).

#### CAUTION

*In the next step, check that the reinforcing plate does not get caught in hole A or it could damage the FFC cable during the removal.*

- c. Pull the LPH FFC (3) cable through hole (A), then remove the LPH FFC cable (3).

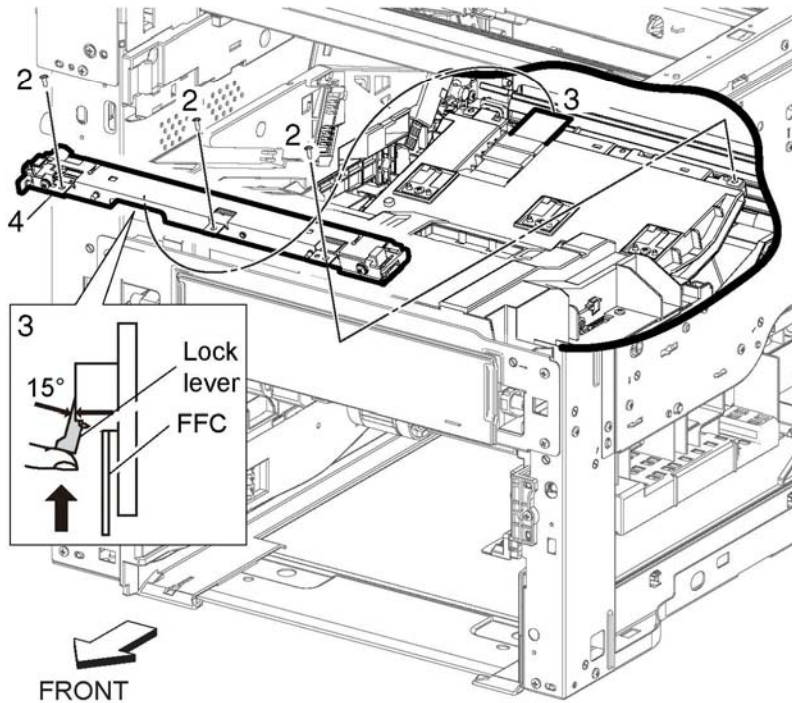


Figure 2 LPH MONO print head removal

E-8-0277-A

### Replacement

The replacement is the reverse of the removal procedure.

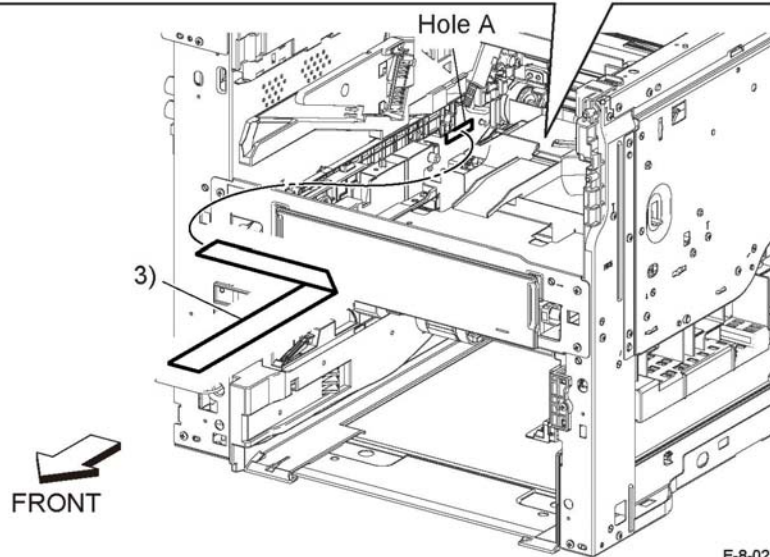
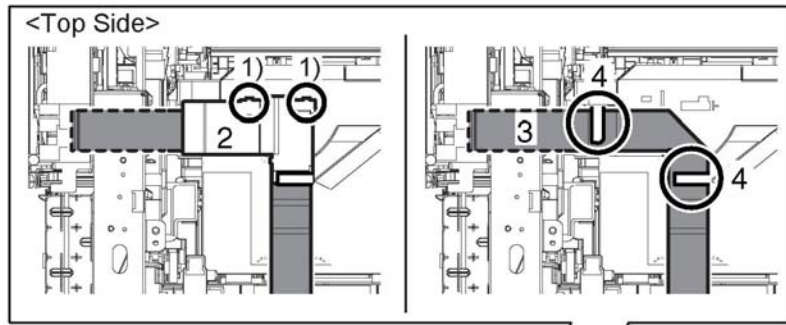


Figure 1 LPH FFC cable removal

E-8-0278-A

## Replacement

Form the FFC cable, along the fold line as shown in Figure 2.

The replacement is the reverse of the removal procedure.

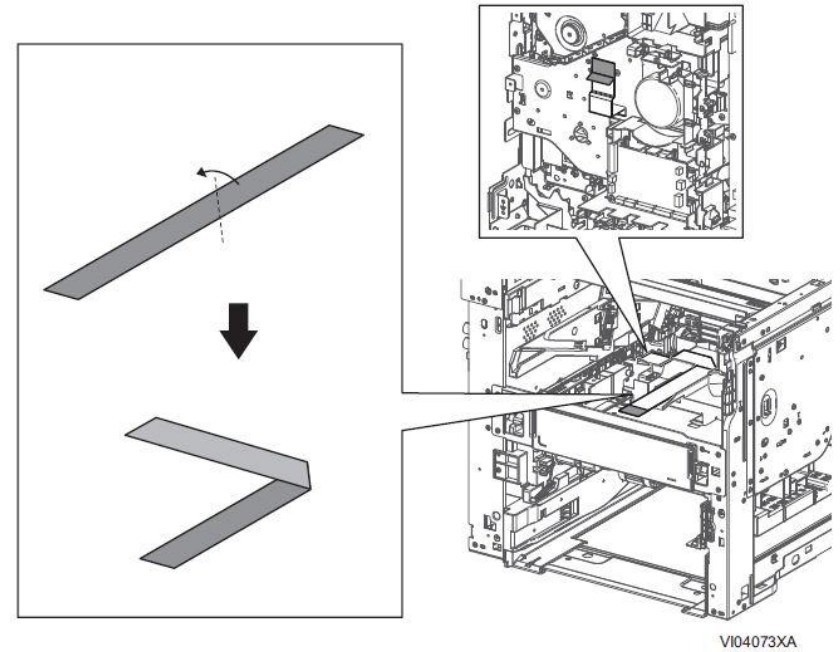


Figure 2 FFC cable installation

VI04073XA

## REP 2.3 Right LPH Holder

Parts List on [PL 2.1](#)

### Initial Actions

Remove the Toner Guide, [REP 2.4](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 two LPH ferrite cores, [Figure 1](#).

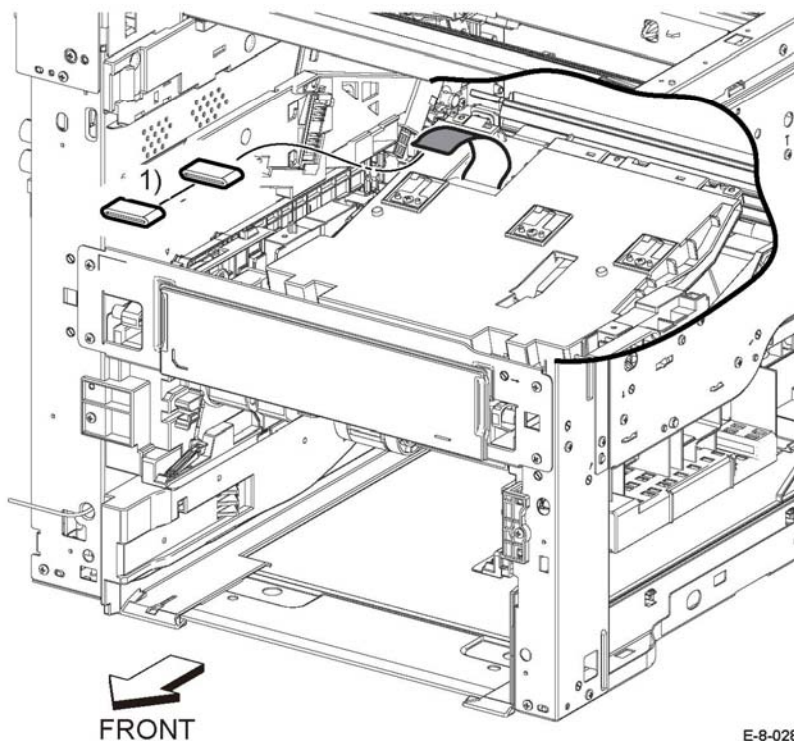


Figure 1 Right LPH holder removal

E-8-0281-A

2. While working the LPH FFC cable through hole A, remove the right LPH holder, [Figure 2](#).

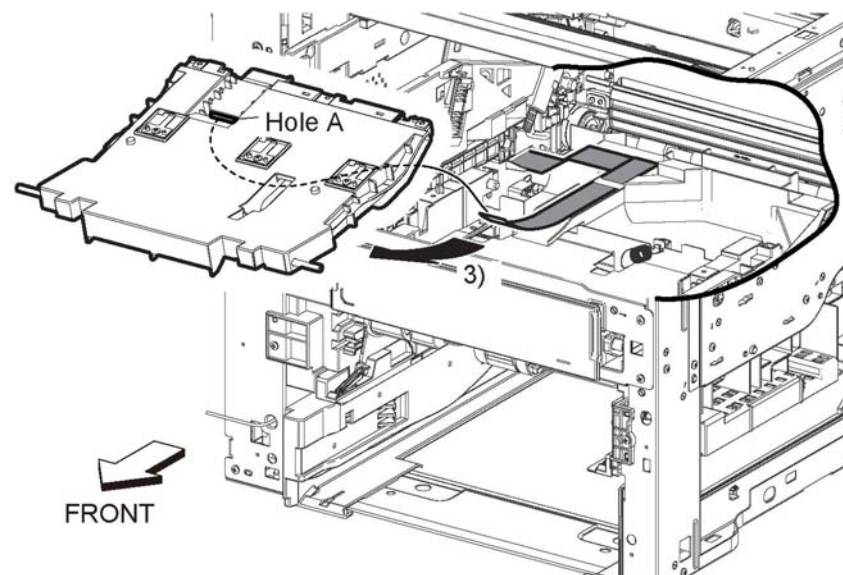


Figure 2 LPH FCC holder removal

### Replacement

The replacement is the reverse of the removal procedure.



## REP 2.4 Toner Guide

Parts List on [PL 2.1](#)

### Initial Actions

Remove the XERO CRU Developer assembly, [REP 8.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 toner guide, [Figure 1](#):
  - a. Remove four screws (1).
  - b. Remove the toner guide (2).

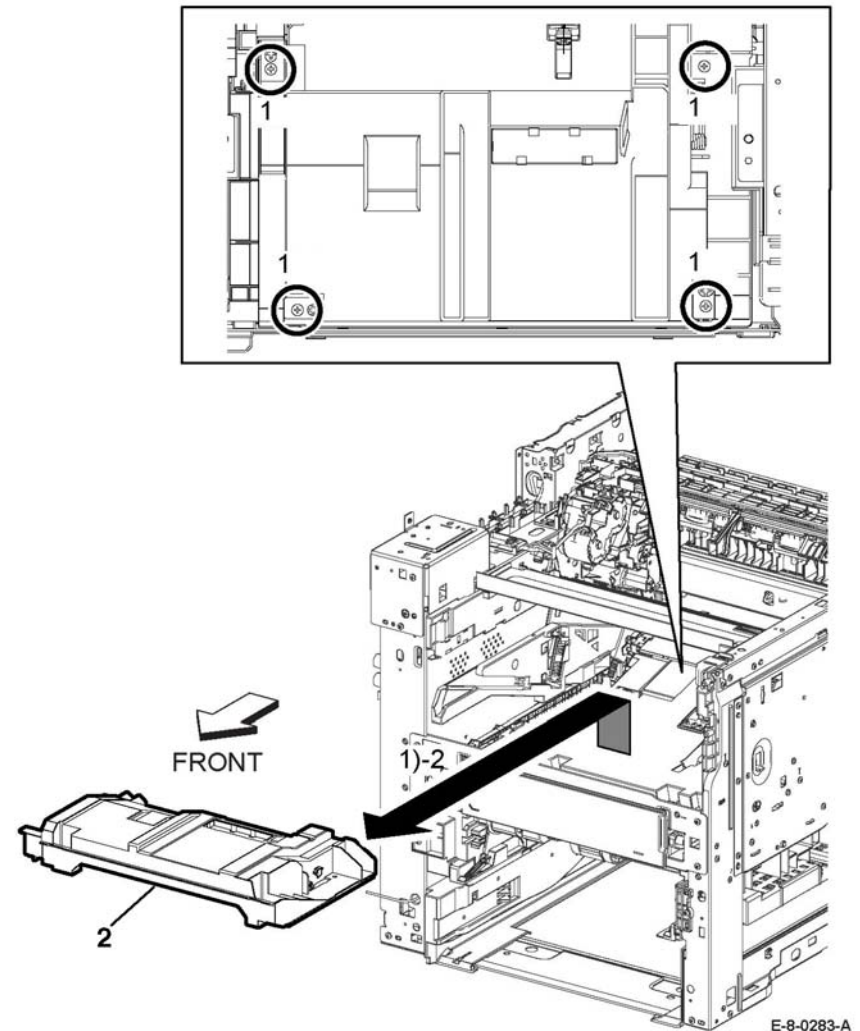


Figure 1 Toner guide removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 2.5 LPH MONO FFC Guide

### Parts List on [PL 2.1](#)

#### Initial Actions

Remove the Left Side Cover, REP TBD

#### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 ESS plate and HDD bracket, [Figure 1](#):
  - a. Remove two screws (1), then the lower ESS plate (2).
  - b. Remove two screws (3), then the HDD bracket (4).

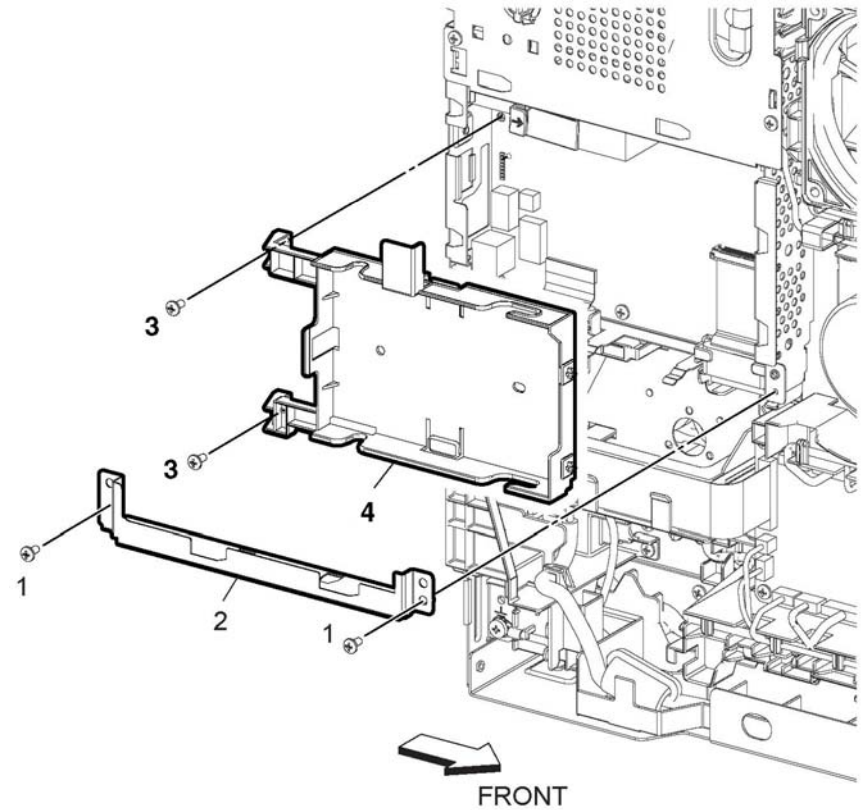


Figure 1 ESS plate and HDD bracket removal

E-8-0284-A

2. Remove the LPH MONO FFC guide, [Figure 2](#):

**CAUTION**

*Raise the lock lever only as shown. Do not force to high or the lever will be damaged.*

- a. Disconnect the connector, P/J1363 (1) of the LPH FFC cable (2).
- b. Remove two LPH ferrite cores (2) from the LPH FCC cable (2).
- c. Release the lock lever (3) as shown.
- d. Remove the LPH MONO FFC guide (4).

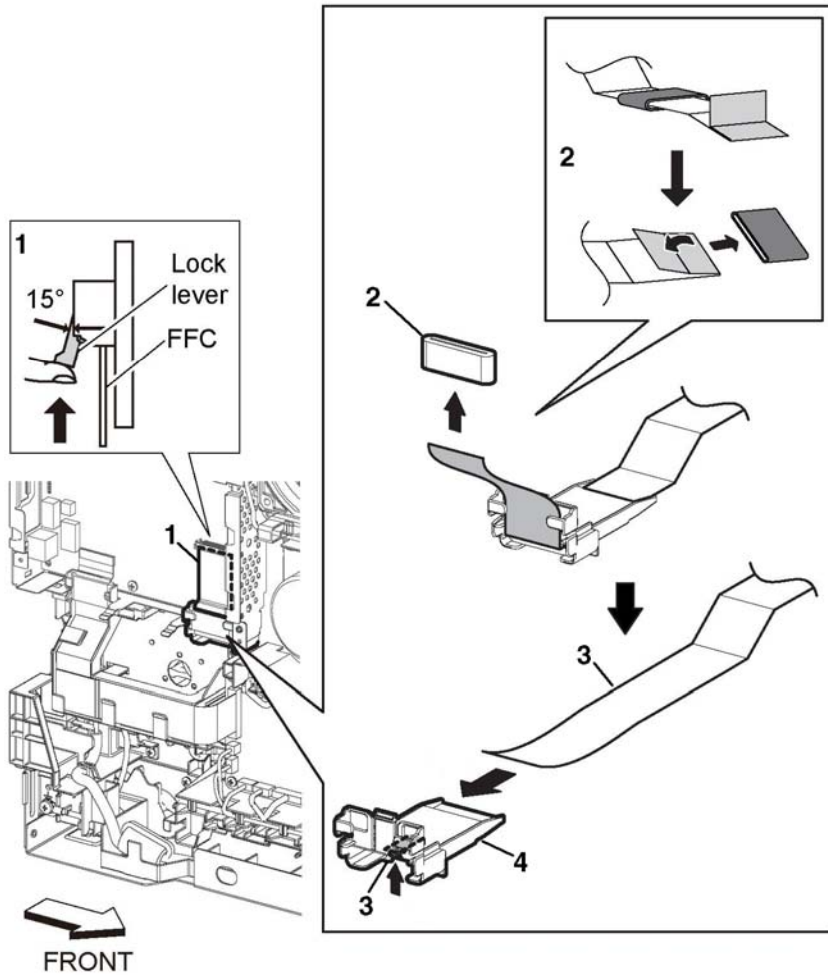


Figure 2 LPH FCC MONO guide removal

E-8-0286-A

**Replacement**

1. Insert the FFC cable through the core and then bend the knob portion about 90 degrees, [Figure 3](#).

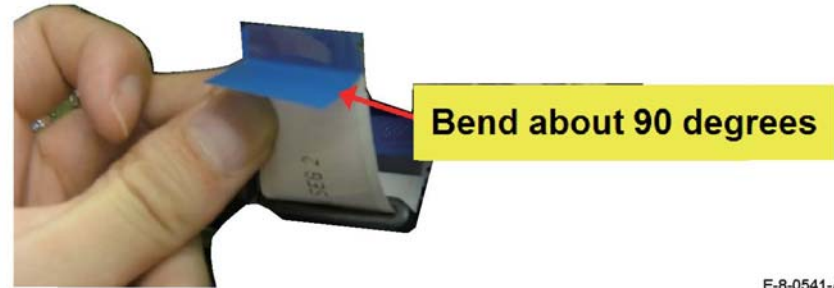


Figure 3 FFC cable installation

E-8-0541-A

2. Place the reinforcing sheet, blue, at the insertion opening of the connector and insert it into the connector, [Figure 4](#).

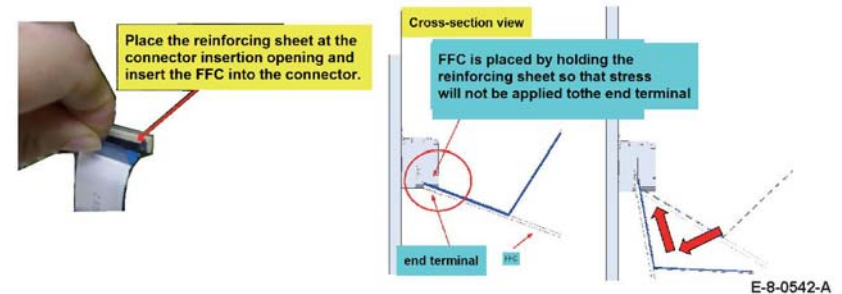
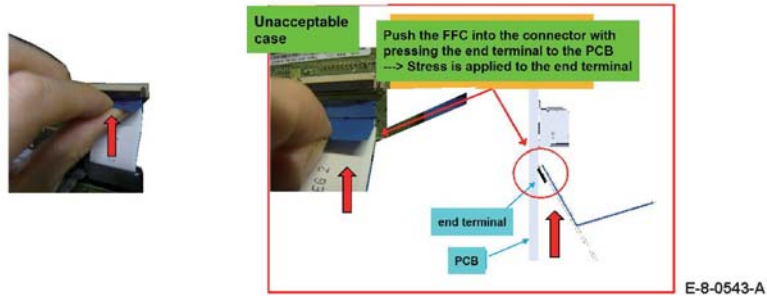


Figure 4 FFC cable installation

E-8-0542-A

3. Push the FFC cable into the connector until a clicking sound is heard, [Figure 5](#).



**Figure 5 FFC cable in home position**

4. Check the final FFC cable installation, [Figure 6](#).



**Figure 6 FFC cable installation**

E-8-0544-A

## REP 3.1 Main Drive Assembly

Parts List on [PL 3.1](#)

### Initial Actions

Remove the Fusing Assembly [REP 7.1](#).

### Removal

#### WARNING

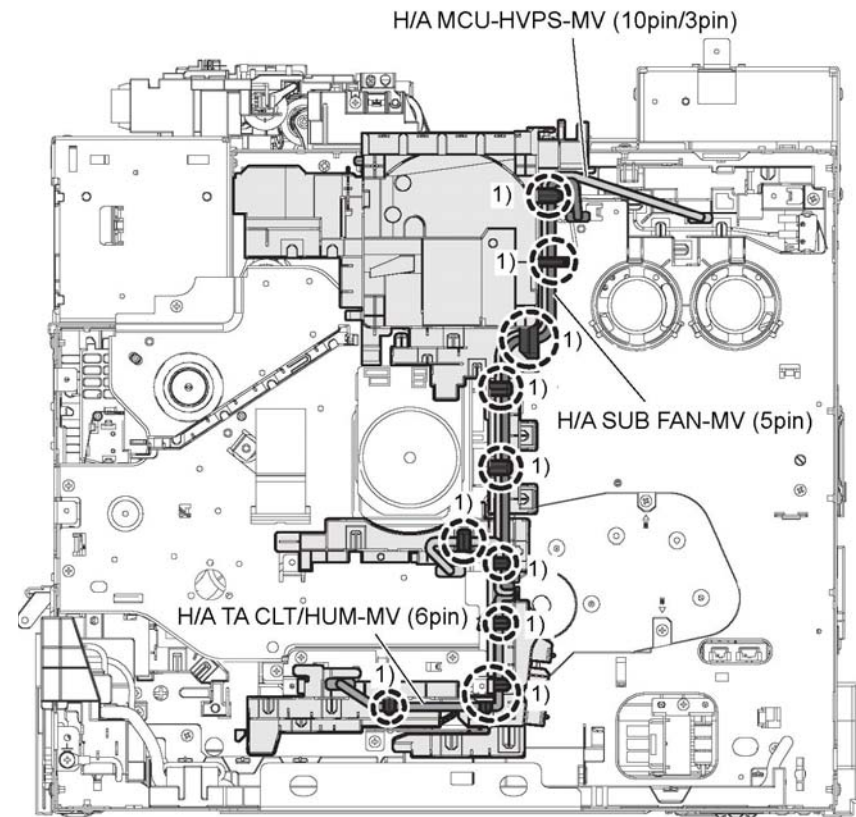
Switch off the electricity to the machine, [GP 4](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

#### CAUTION

To avoid potentially serious problems, follow the procedure shown below and use caution when removing and handling this part. Do not disassemble this part. If replacing, use genuine Xerox parts.

**NOTE:** The motors have tab releases only on them.

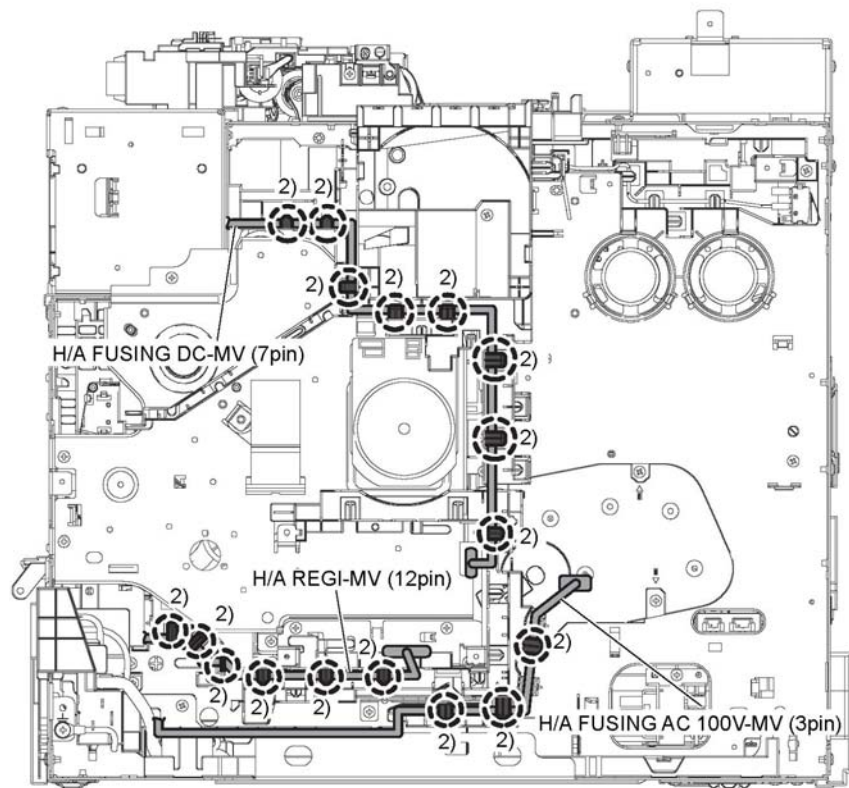
1. Remove the following harness assemblies from the main duct fan and MCU guide harness, [Figure 1](#):
  - MCU-HVPS-MV harness assembly.
  - Turn around clutch/humidity-MV harness assembly.
  - Sub fan-MV harness assembly.



E-8-0287-A

Figure 1 Harness assembly 1 removal

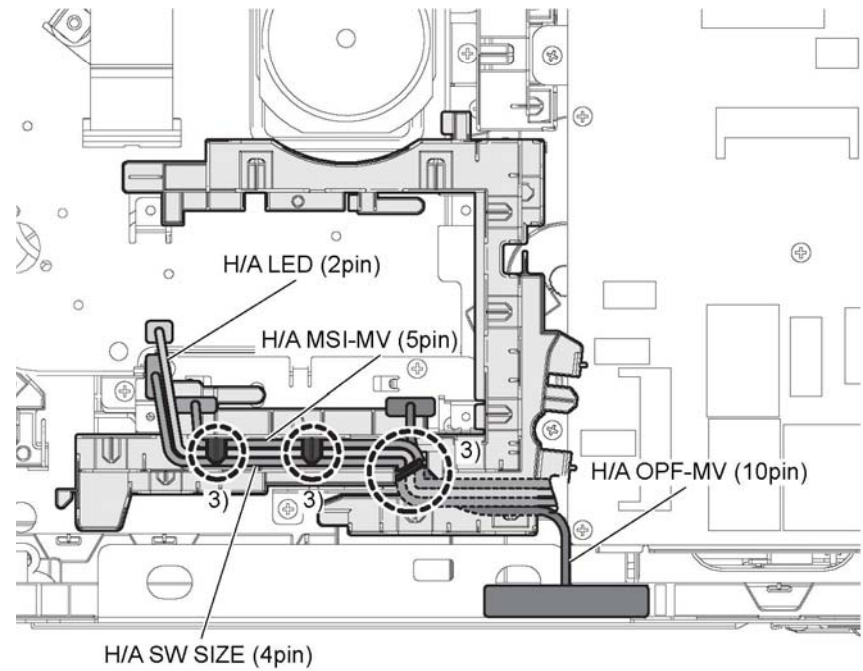
2. Release the following harness assemblies from the main fan duct and MCU guide harness, [Figure 2](#):
  - DC-MV fusing harness assembly.
  - 110V fusing harness assembly.
  - Registration-MV harness assembly.



E-8-0288-A

**Figure 2 Harness assembly 3 removal**

3. Remove the following harness assemblies from the main fan duct, [Figure 3](#):
  - Optional feeder-MV harness assembly.
  - Size switch harness assembly.
  - MSI-MV harness assembly.
  - LED harness assembly.



E-8-0289-A

**Figure 3 Main duct fan and MCU guide harness**

4. Disconnect connectors [P/J571](#), [P/J572](#), [Figure 4](#).
5. Perform the items that follow, [Figure 4](#):
  - Release the hooks.
  - Remove one screw (SM18).
  - Remove the main duct fan and MCU guide harness.
6. Remove in the direction shown, [Figure 4](#).

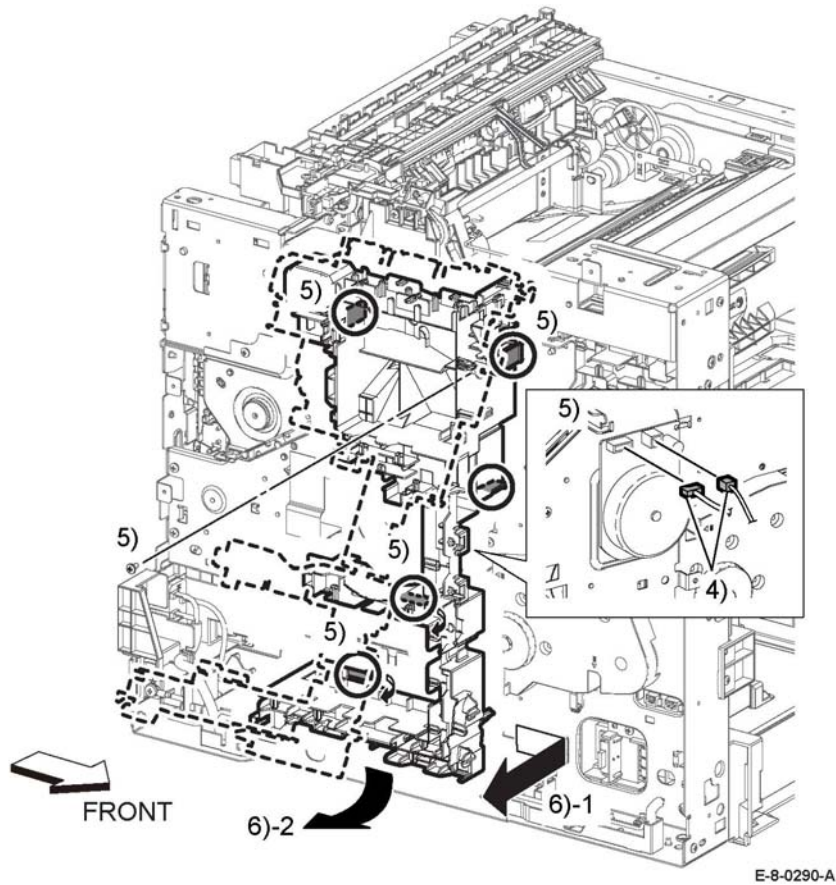


Figure 4 Harness assembly 2 removal

7. Remove the items that follow, Figure 5:

- Four screws (ST18).
- MCU plate.

**CAUTION**

*Do not damage the laser print head and cable.*

8. Remove the items that follow, Figure 5:

- 8-1 Seven screws (SM18).
- 8-2 Main drive assembly with the rear interlock guide harness assembly.

9. Perform the items that follow, Figure 5:

- 9-1 Release the hook.

9-2 Remove the rear interlock guide harness assembly from the main drive assembly.

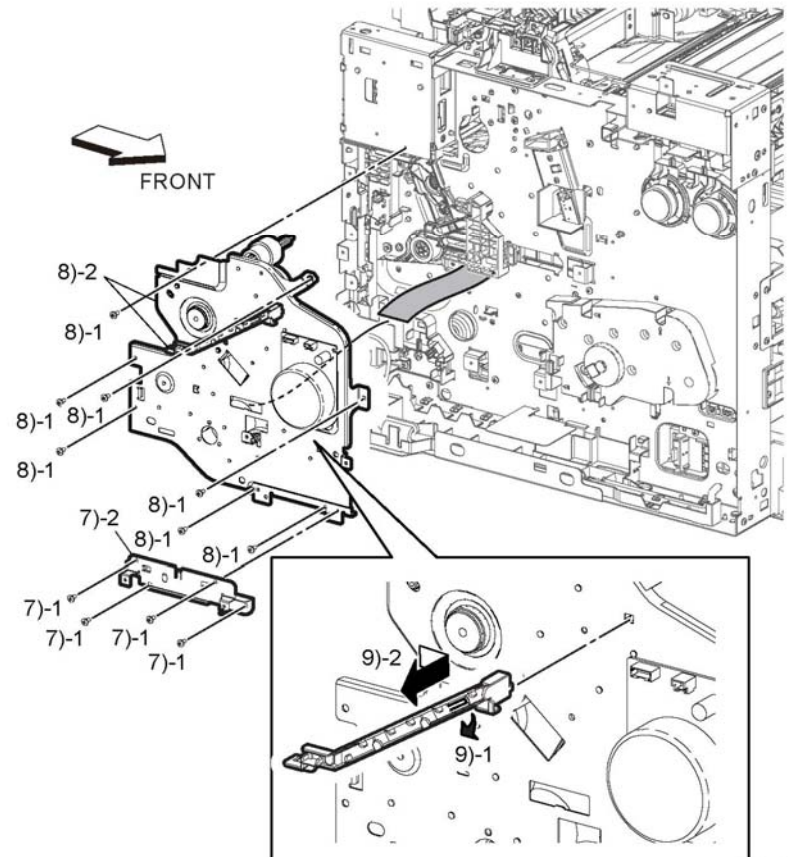


Figure 5 Rear interlock guide harness assembly removal

**Replacement**

**CAUTION**

*Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.*

The replacement is the reverse of the removal procedure.

## REP 3.2 MSI Drive assembly

Parts List on [PL 3.1](#)

### Initial Actions

Remove the Main Drive Assembly [REP 3.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 avoid potentially serious problems, follow the procedure shown below and use caution when removing and handling this part. Do not disassemble this part. If replacing, use genuine Xerox parts.

1. Disconnect connector [P/J146](#), [Figure 1](#).
2. Release the MSI drive assembly harness from the harness guide, [Figure 1](#).
3. Remove the items that follow, [Figure 1](#):
  - 3.1 Four screws.
  - 3.2 MSI drive assembly

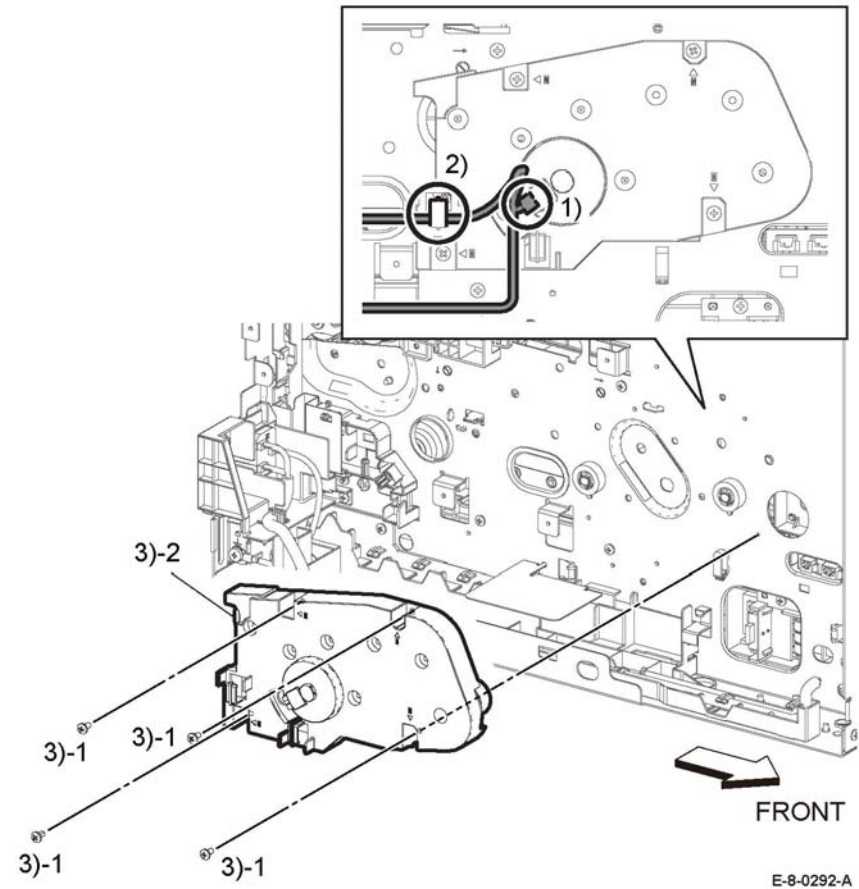


Figure 1 MSI drive assembly

### Replacement

The replacement is the reverse of the removal procedure.



## REP 4.1 Main Fan

### Parts List on PL 4.1

#### Initial Actions

Remove the left side cover; REP 19.14.

#### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 avoid potentially serious problems, follow the procedure shown below and use caution when removing and handling this part. Do not disassemble this part. If replacing, use genuine Xerox parts.

1. Disconnect connector, P/J289, Figure 1.
2. Release the two hooks attaching the main fan to the main fan duct and remove the main fan, Figure 1.

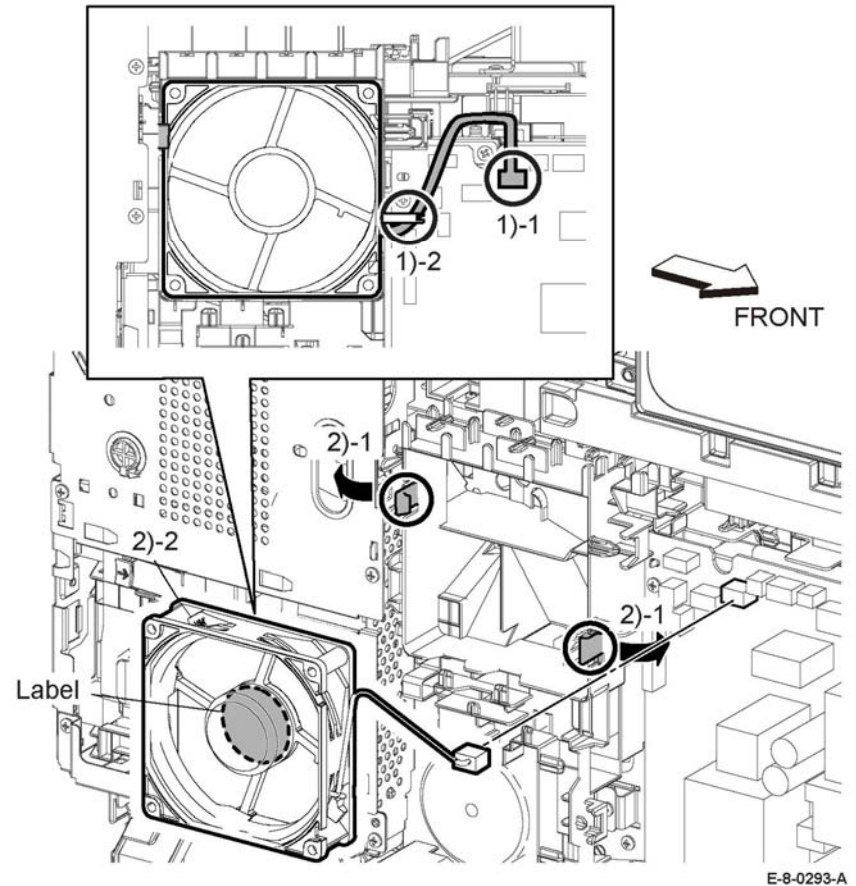


Figure 1 Remove the main fan

#### Replacement

**NOTE:** Note the orientation of the main fan, install it so that the label side faces inward.

## REP 4.2 Sub Fan

Parts List on [PL 4.1](#)

### Initial Actions

Remove the right side cover; [REP 19.2](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 avoid potentially serious problems, follow the procedure shown below and use caution when removing and handling this part. Do not disassemble this part. If replacing, use genuine Xerox parts.

1. Disconnect connector, [P/J294](#), [Figure 1](#).
2. Release the two hooks attaching the main fan to the main fan duct and remove the main fan, [Figure 1](#).

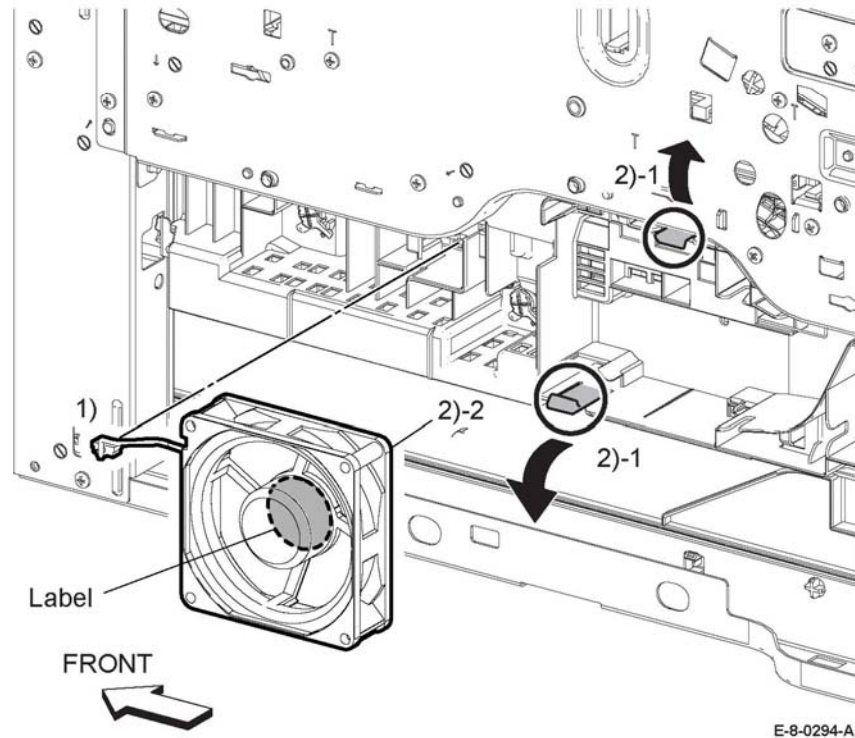


Figure 1 Remove the sub fan

### Replacement

**NOTE:** Note the orientation of the main fan, install it so that the label side faces inward.

## REP 4.3 Foot and Foot Assembly Kit

Parts List on [PL 4.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 the printer from falling off the workbench in the following steps, position the printer to overhang the edge of the workbench as little as possible.

1. Position the front of the printer to overhang the edge of the workbench.
2. Install the new front two feet, [Figure 1](#).

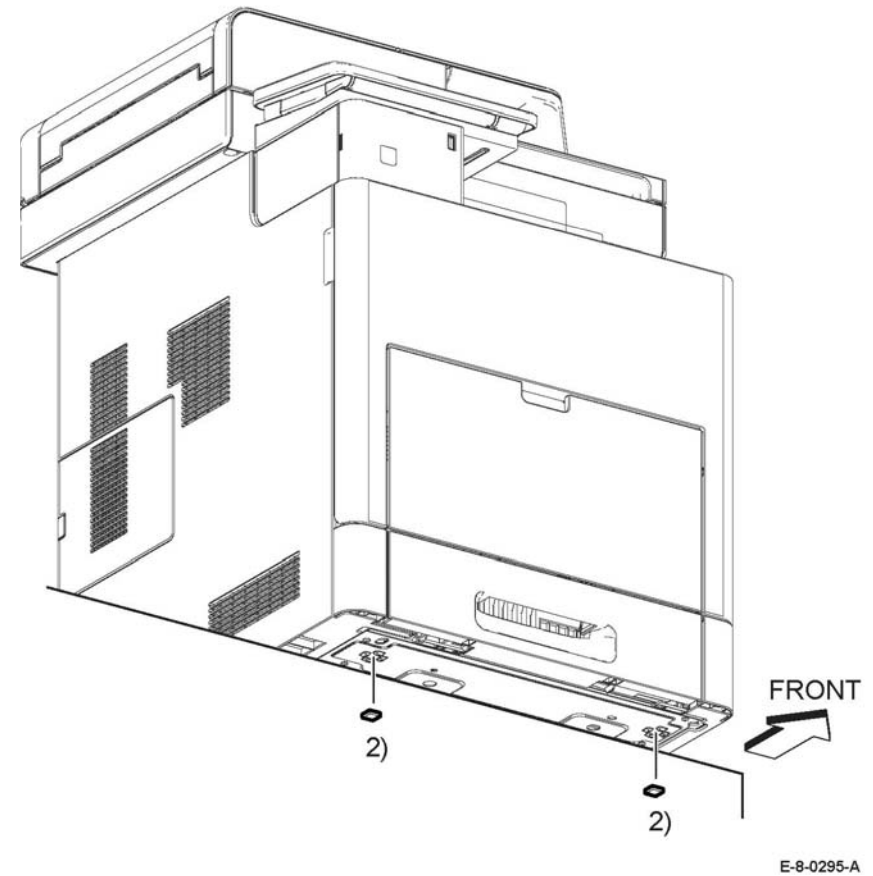


Figure 1 Install new front bottom feet

3. Position the back of the printer to overhang the edge of the workbench.
4. Install a new rear bottom foot, [Figure 2](#).

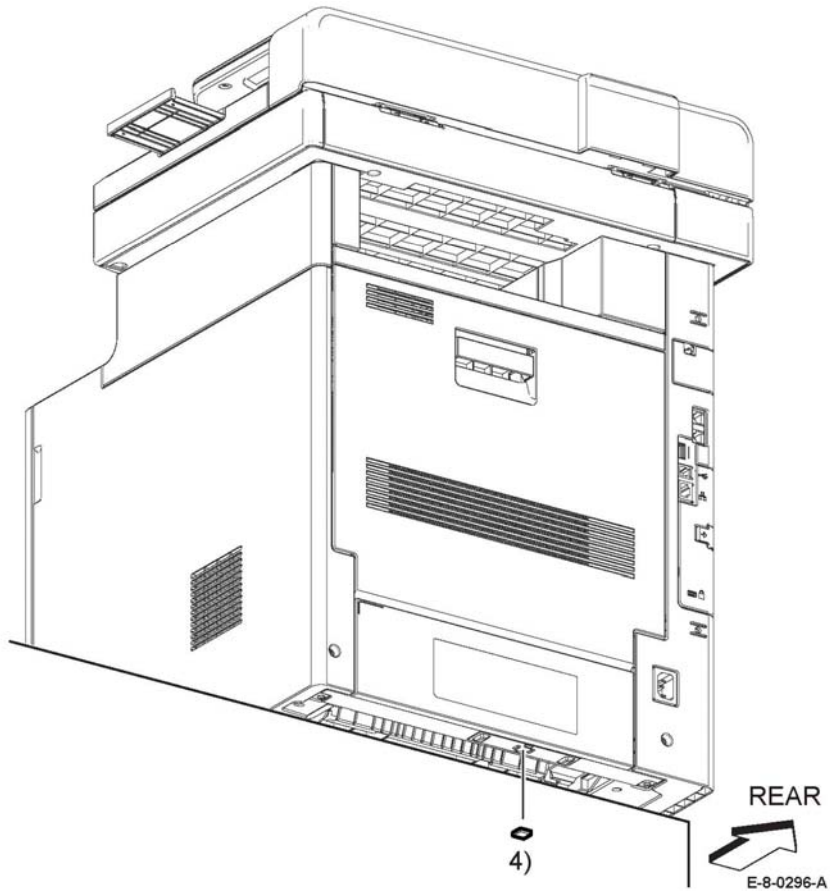


Figure 2 Install new rear bottom foot

## REP 5.1 Dispenser/Environmental-MV Drive Assemblies

Parts List on [PL 5.1](#)

### Initial Actions

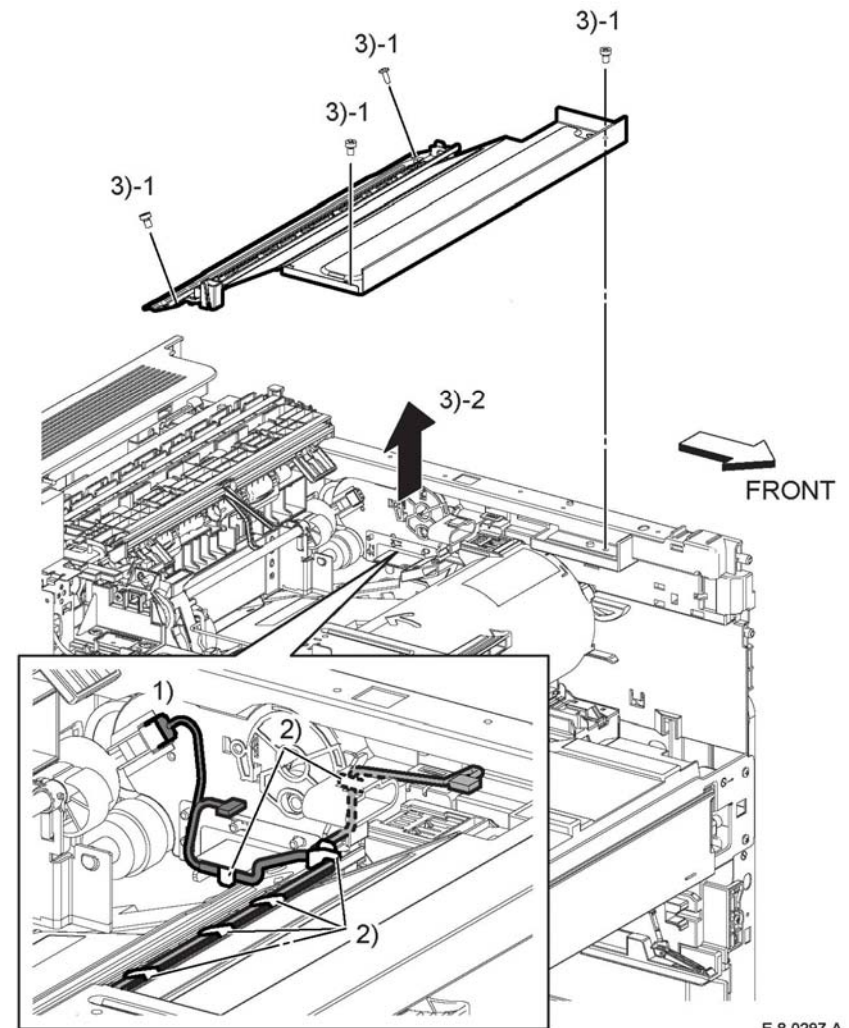
Remove the fusing assembly [REP 7.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 connector [P/J171](#), [Figure 1](#).
2. Release the dispenser/environmental-MV and CRUM-MV harness assemblies, [Figure 1](#).
3. Remove the items that follow, [Figure 1](#):
  - 3-1 One (ST20) and three (SM3) screws.
  - 3-2 Top MONO frame.



E-8-0297-A

Figure 1 Top MONO frame

4. Perform the items that follow, [Figure 2](#):
  - 4-1 Remove three screws (ST20).
  - 4-2 Release the hook.
  - 4-3 Remove the dispenser/environmental drive assembly.

## REP 5.2 Toner CRUM Connector Assembly

Parts List on [PL 5.1](#)

### Initial Actions

Remove one of the items that follow:

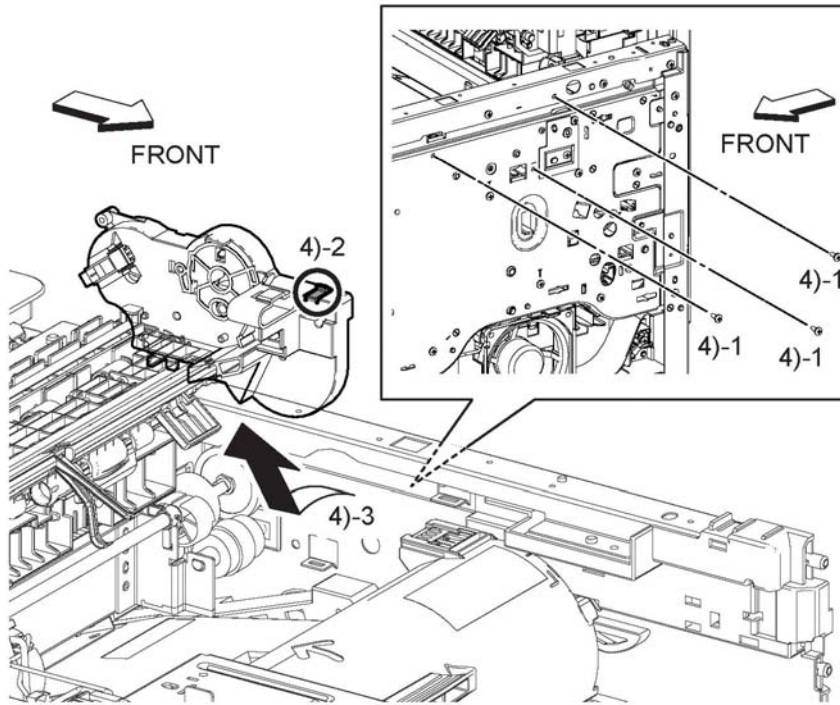
- Top cover assembly/right IIT inner cover/left IIT inner cover, [REP 19.13](#), [REP 19.8](#) (MFP)
- Top cover assembly, [REP 19.35](#) (MFP-tall) and [REP 19.50](#) (SFP)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Release the CRUM-MV harness assembly from the harness guide, [Figure 1](#).
2. Release the hook to release toner CRUM connector assembly, [Figure 1](#).
3. Perform the items that follow, [Figure 1](#):
  - 3-1 Release the CRUM-MV harness assembly from the CRUM toner connector assembly.
  - 3-2 Disconnect connector P/J116.

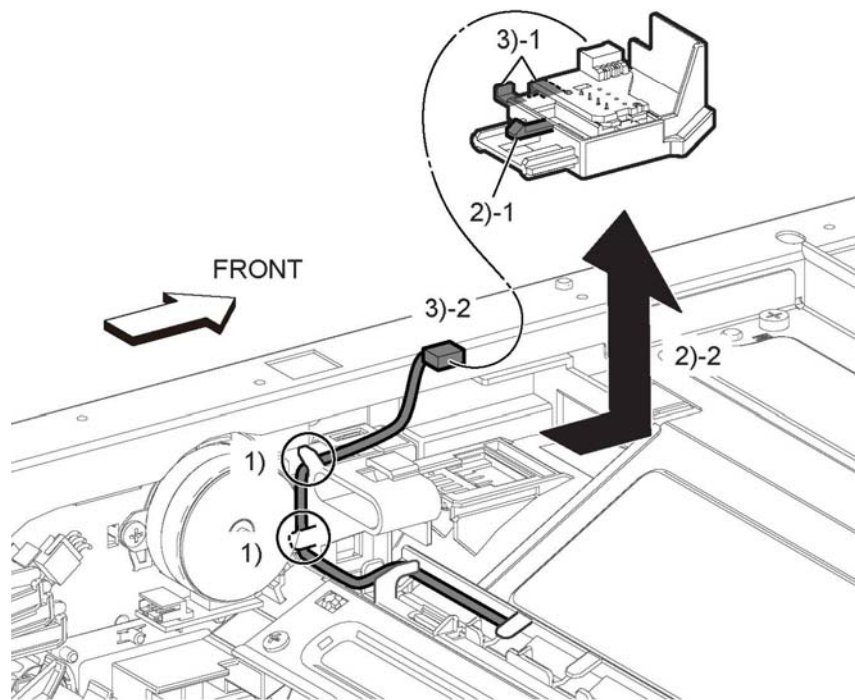


E-8-0298-A

Figure 2 Dispenser/environmental drive assembly

### Replacement

The replacement is the reverse of the removal procedure.



E-8-0299-A

Figure 1 Toner CRUM assembly

## Replacement

The replacement is the reverse of the removal procedure.

## REP 5.3 Dispenser/Environmental Motor Assembly

Parts List on [PL 5.1](#)

### Initial Actions

Remove one of the items that follow:

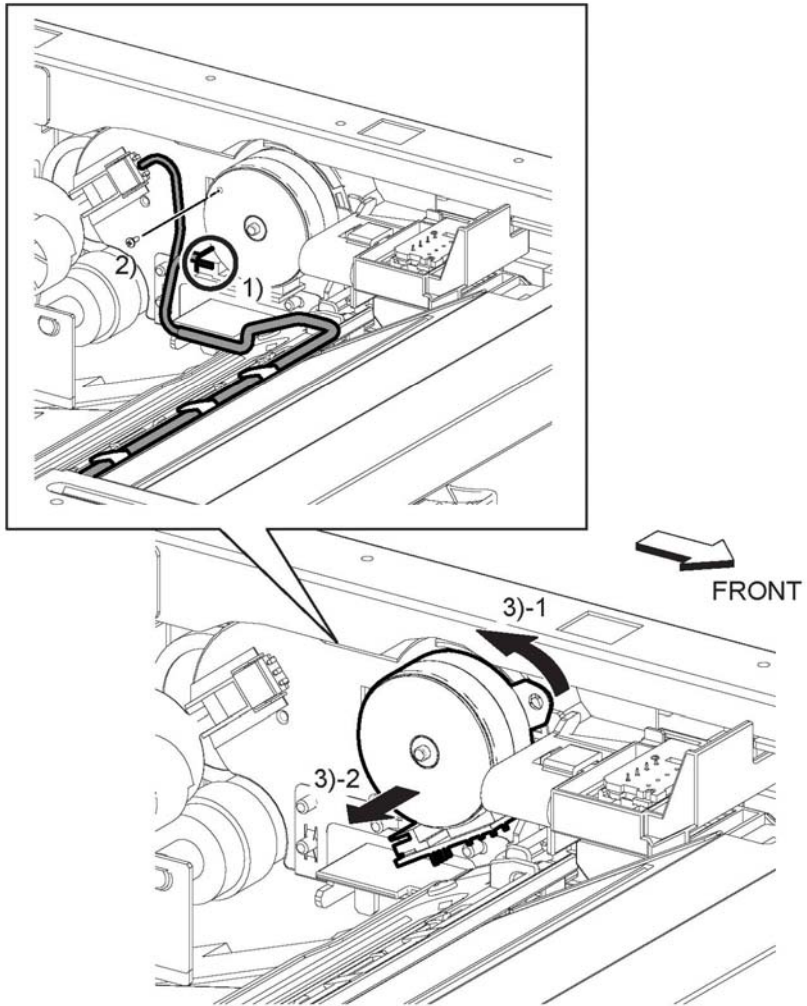
- Top cover assembly/right IIT inner cover/left IIT inner cover, [REP 19.13](#), [REP 19.8](#) (MFP)
- Top cover assembly, [REP 19.35](#) (MFP-tall) and [REP 19.50](#) (SFP)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 connector [P/J122](#), [Figure 1](#).
2. Remove one screw (ST20), [Figure 1](#).
3. Perform the items that follow, [Figure 1](#):
  - 3-1 Rotate the dispenser/environmental motor.
  - 3-2 Remove the environmental motor.



E-8-0300-A

Figure 1 Dispenser/environmental motor

## Replacement

The replacement is the reverse of the removal procedure.



## REP 6.1 Humidity and Temperature Sensor

Parts List on [PL 6.1](#)

### Initial Actions

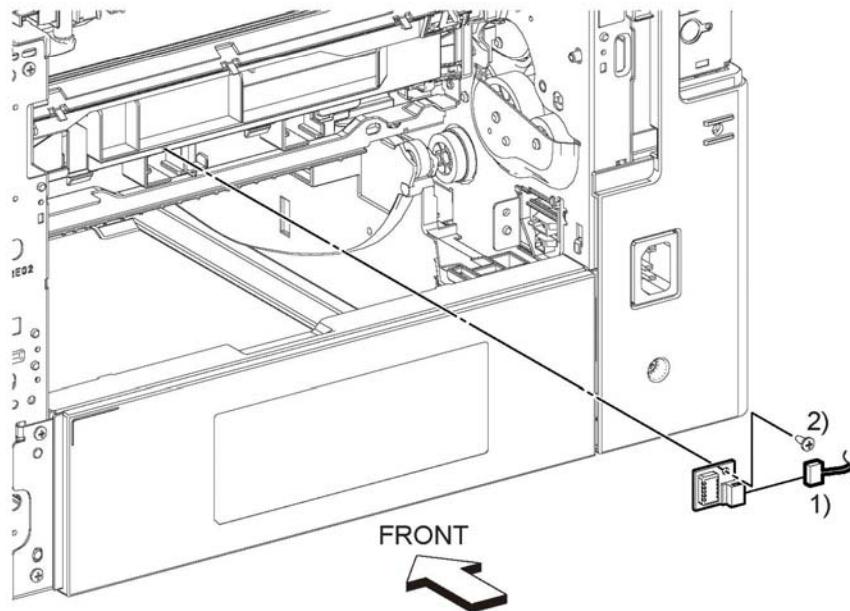
Remove the duplex registration roller kit [REP 15.2](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 connector [P/J145](#), [Figure 1](#).
2. Remove one screw (ST20) and the humidity and temperature sensor, [Figure 1](#).



E-8-0301-A

Figure 1 Humidity and temperature sensor

### Replacement

The replacement is the reverse of the removal procedure.



## REP 7.1 Fusing Assembly

### Parts List on PL 7.1

#### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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

Do not touch the fuser while it is hot.

1. Open the rear cover assembly, REP 19.18, MFP, MFP tall REP 19.25, SFP.
2. Remove the items that follow, Figure 1:
  - 2-1 Lift up the tabs.
  - 2-2 Left the fusing assembly out of the frame as shown.

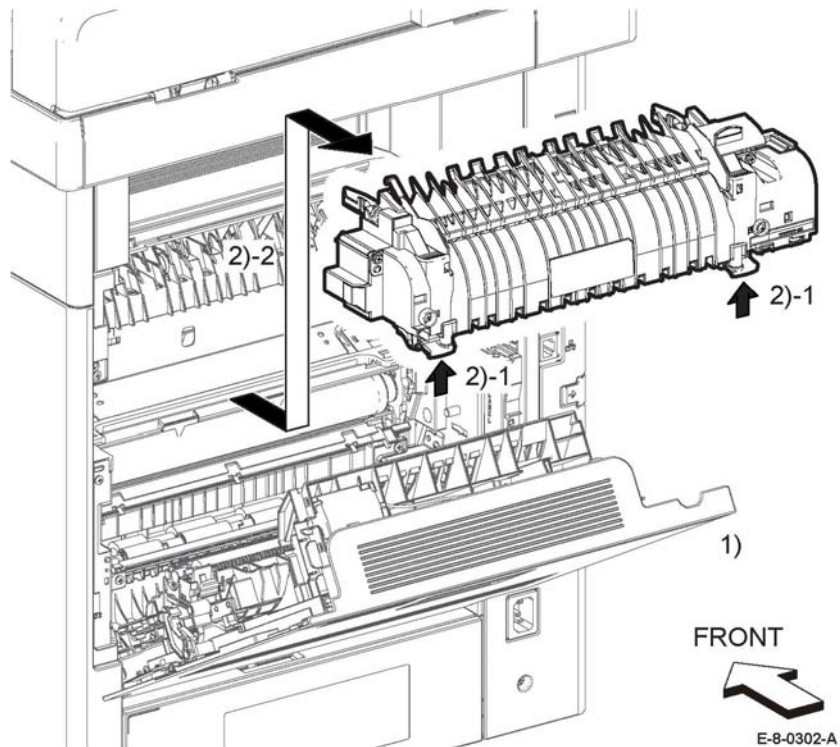


Figure 1 Fuser Assembly

#### Replacement

The replacement is the reverse of the removal procedure.

## REP 7.2 Nip Retract Shaft Assembly

### Parts List on PL 7.1

#### Initial Actions

Remove the exit chute assembly, REP 17.1.

#### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 items that follow, Figure 1.

1-1 One screw (ST18).

**NOTE:** In the next step, do not loose the bearing.

1-2 Retract nip bracket with the bearing.

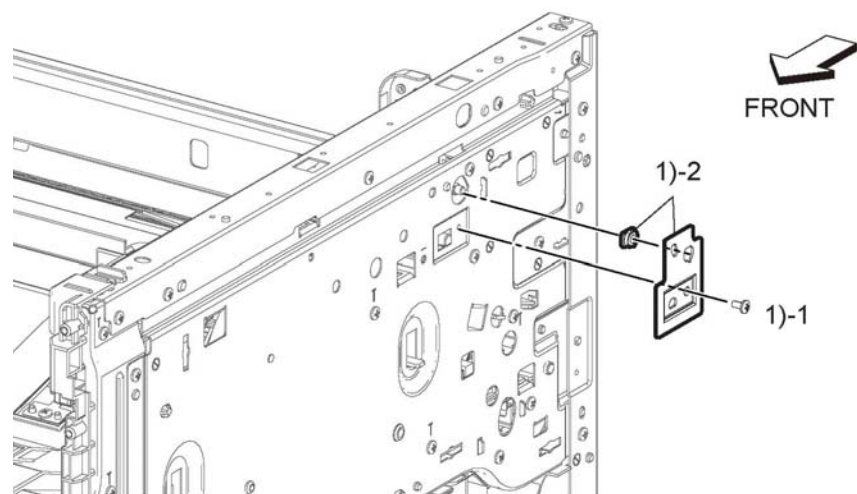


Figure 1 Retract nip bracket

2. Remove the retract damper shaft, Figure 2.
3. Perform the items that follow, Figure 2.
  - 3-1 Release the levers.
  - 3-2 Remove the retraction shaft.
4. Remove the shaft retraction gear, Figure 2.

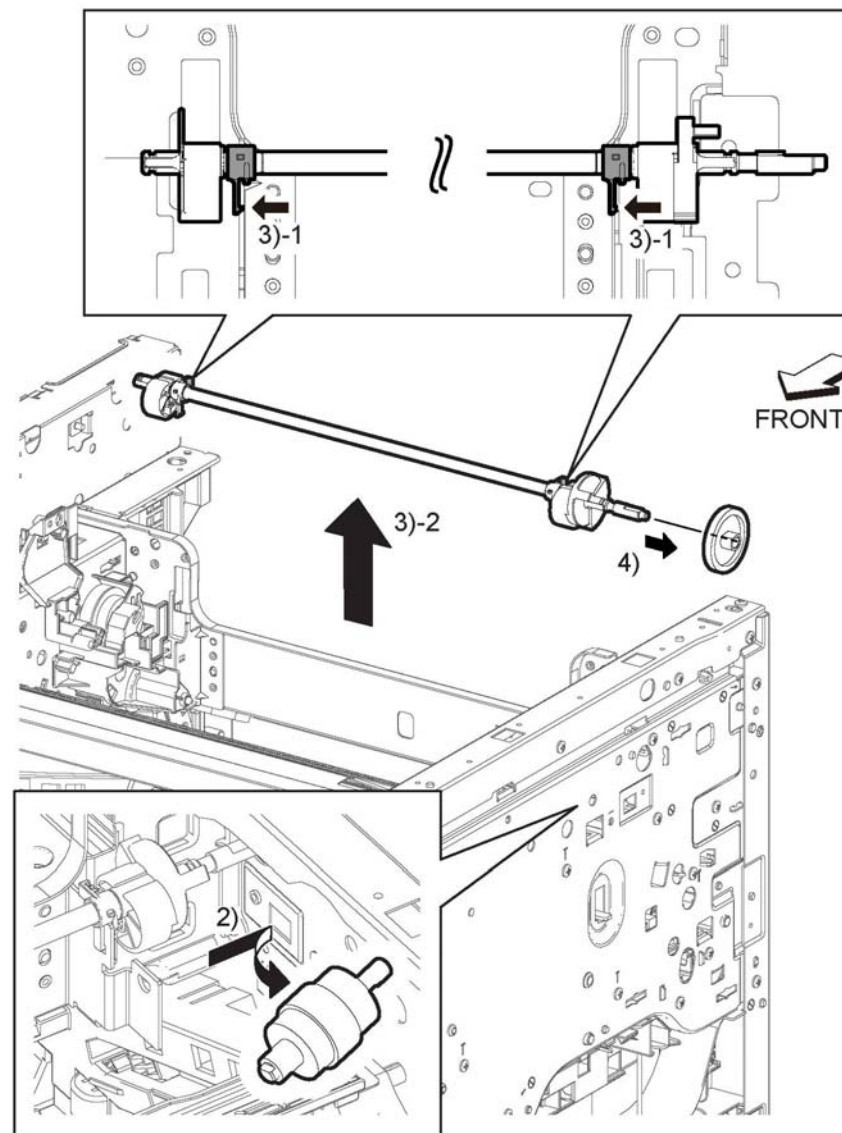


Figure 2 Retraction shaft and gear

## Replacement

The replacement is the reverse of the removal procedure.



## REP 8.1 CRU Xerographic Developer Assembly

Parts List on [PL 8.1](#)

### Initial Actions

Remove the MSI main tray assembly, [REP 13.6](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 assembly, [Figure 1](#).
2. Remove the toner cartridge, [Figure 1](#).

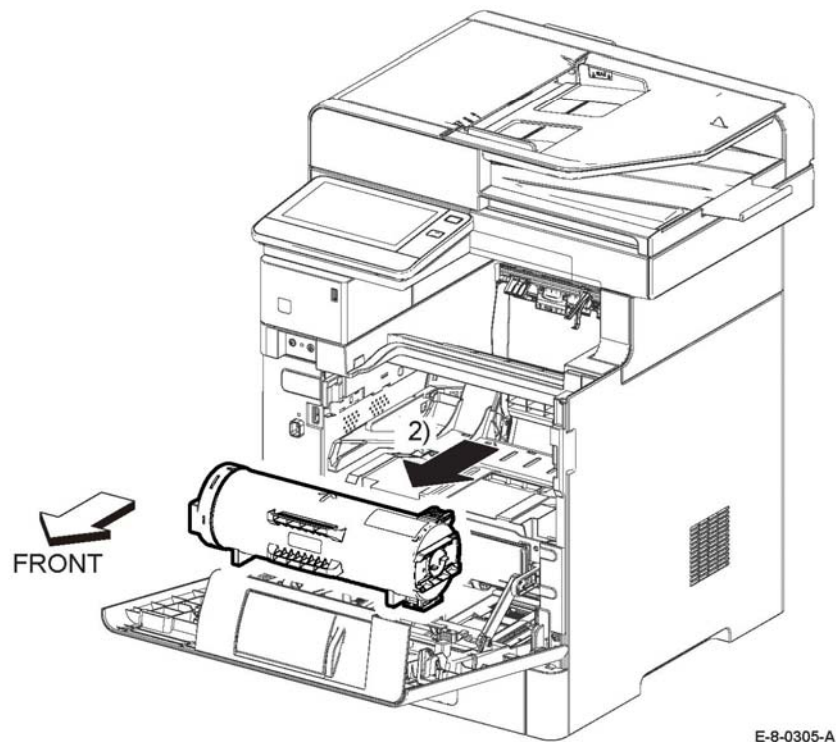


Figure 1 Remove toner cartridge

3. Perform the items that follow, [Figure 2](#).
  - 3-1 Grasp the handle of the CRU xerographic developer assembly.
  - 3-2 Pull the CRU xerographic developer assembly out of the printer.

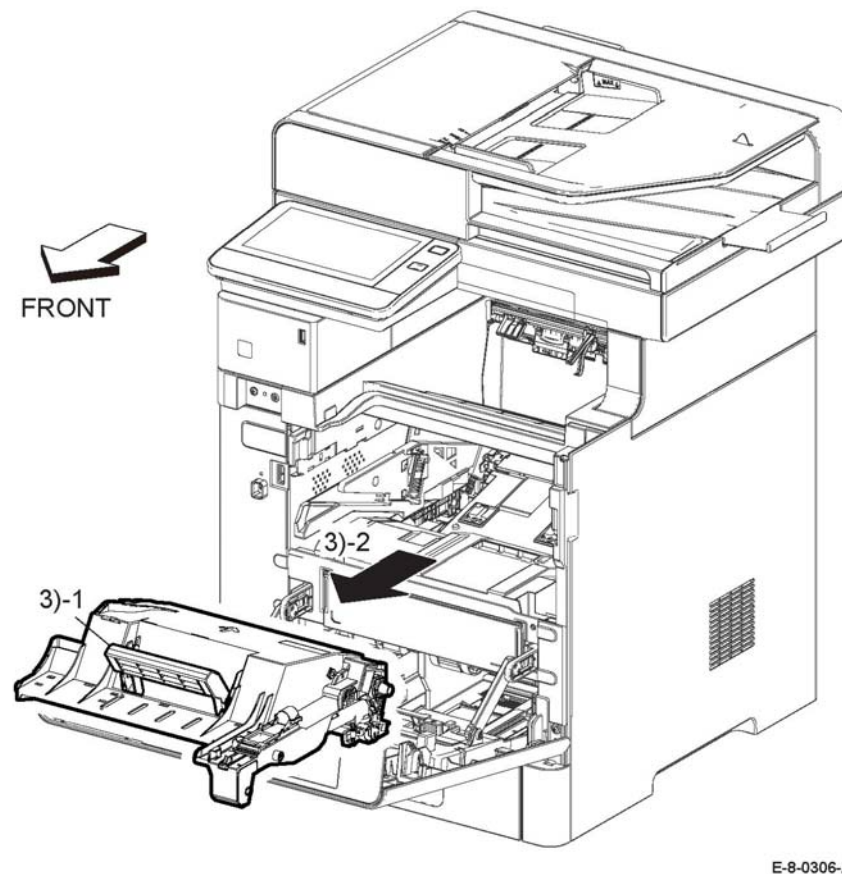


Figure 2 Remove the CRU xerographic developer assembly

### Replacement

The replacement is the reverse of the removal procedure.





## REP 9.1 IOT 550 Feed Tray Assembly

Parts List on [PL 9.1](#)

### Removal

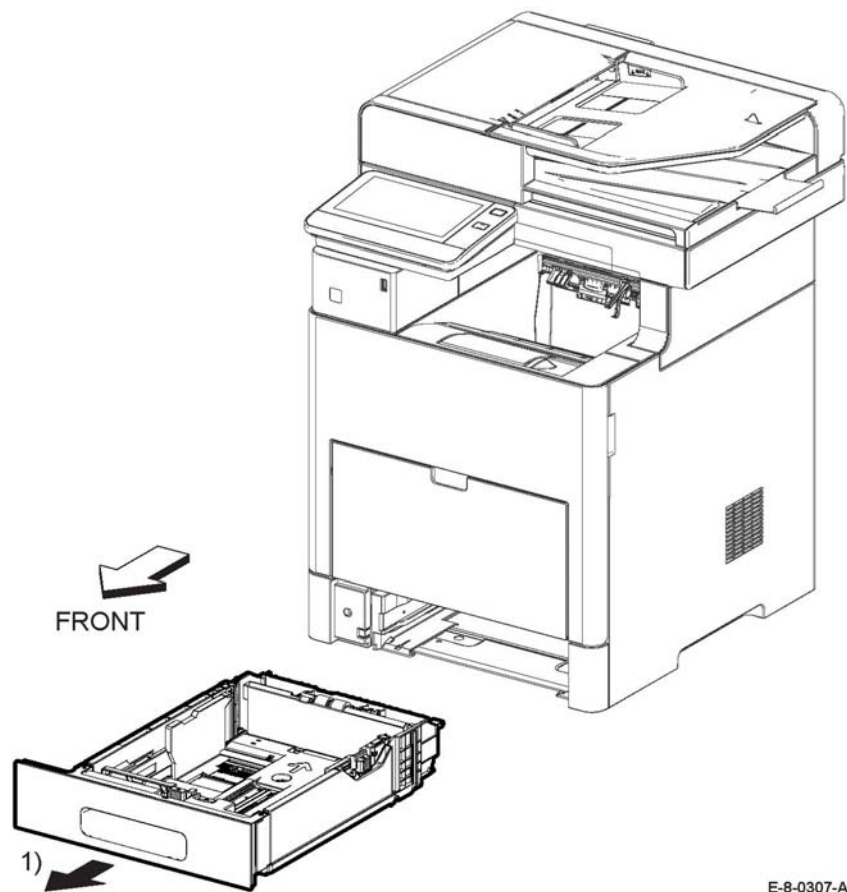
#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 avoid potentially serious problems, follow the procedure shown below and use caution when removing and handling this part. Do not disassemble this part. If replacing, use genuine Xerox parts.

1. Remove the feed tray assembly from the printer, [Figure 1](#).



E-8-0307-A

Figure 1 Feed tray assembly removal

### Replacement

**NOTE:** If this is a new feed tray, be sure the energy star label is installed on the tray.

The replacement is the reverse of the removal procedure.

## REP 9.2 CST Separator Holder Assembly

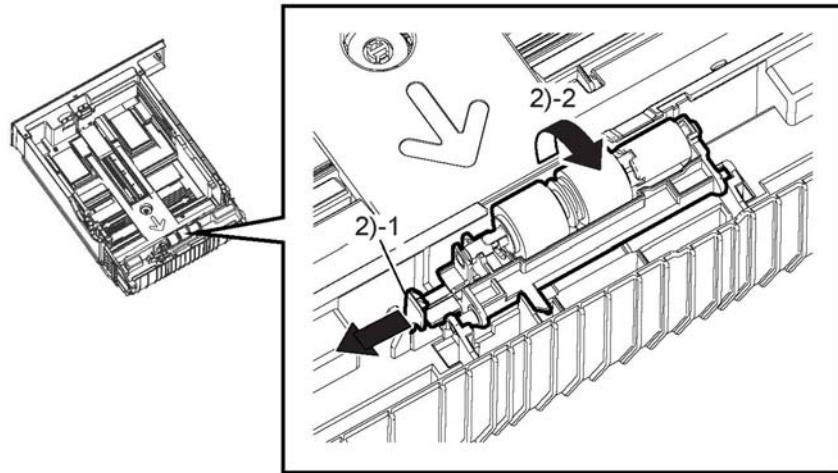
Parts List on [PL 9.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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.

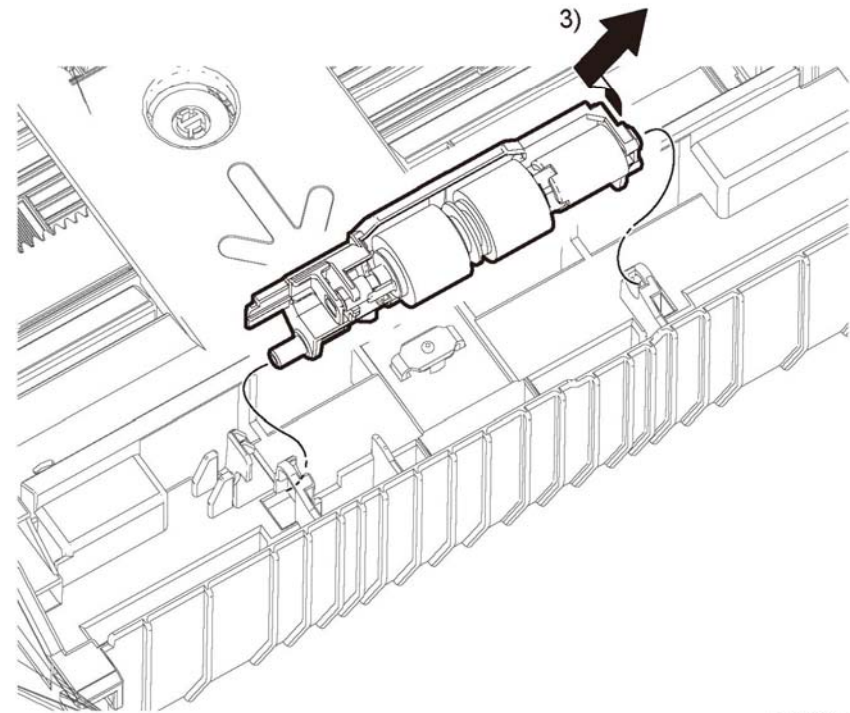
1. Remove the 550 feed tray assembly, [REP 9.1](#).
2. Perform the items that follow, [Figure 1](#):
  - 2-1 Release the hook.
  - 2-2 Turn up and remove the CST separator holder assembly.



E-8-0308-A

Figure 1 Remove the CST separator holder.

3. Remove the CST separator holder assembly, [Figure 2](#).



E-8-0309-A

Figure 2 Remove the CST separator holder

### Replacement

The replacement is the reverse of the removal procedure.

## REP 9.3 Tray Dust Cover

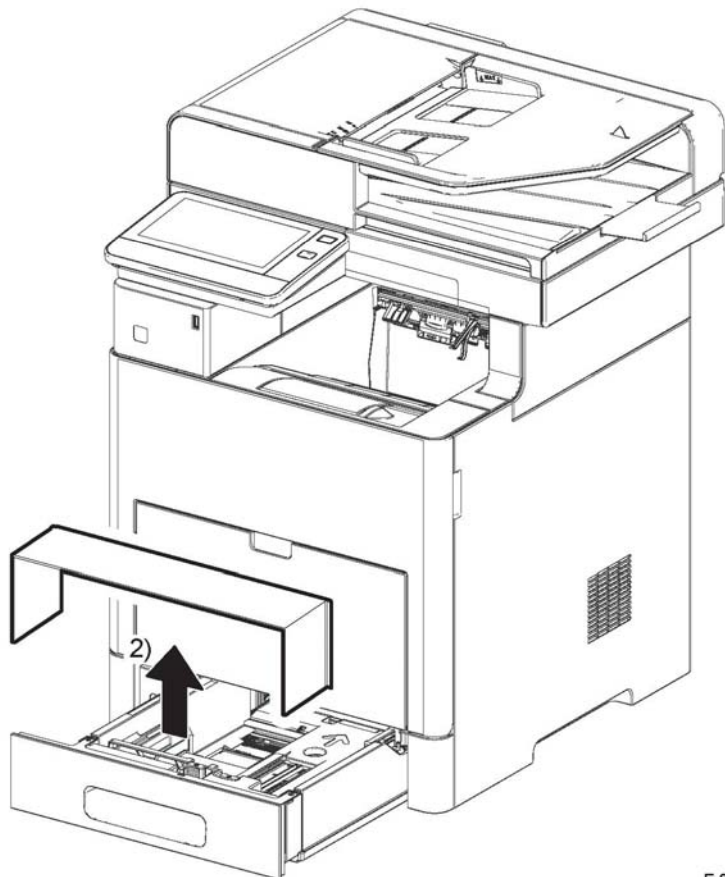
Parts List on [PL 9.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 the 550 cassette assembly, [Figure 1](#).
2. Release the latches that hold the legal paper tray dust cover to the cassette, and remove the cover, [Figure 1](#).



E-8-0310-A

Figure 1 Remove the legal paper tray dust cover



## REP 10.1 550 Option Feeder Separation

Parts List on [PL 10.1](#)

### Removal

#### WARNING

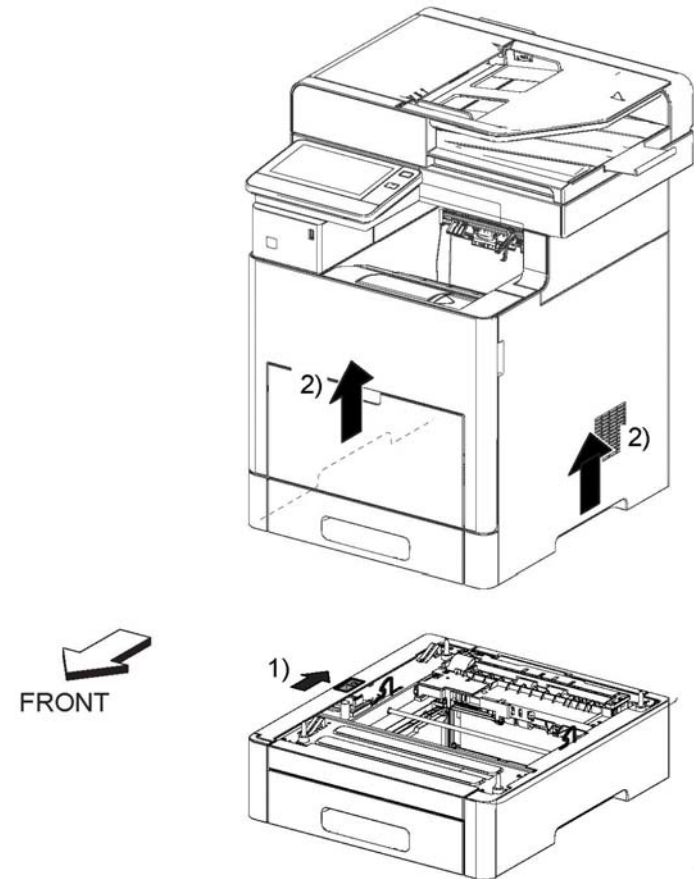
Switch off the electricity to the machine, [GP 4](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Slide the lever and release the two hooks attaching the 550 option feeder assembly, [Figure 1](#).

#### WARNING

Do not attempt to remove or lift the following component with less than 2 people. The component is very heavy and requires at least 2 people to lift or remove it. Any attempt to remove or lift the component with less than 2 people could result in serious personal injury.

2. Hold the recessed areas on both sides and raise the printer to separate it from the 550 option feeder assembly, [Figure 1](#). Refer to [GP 7](#) for machine configurations.



E-8-0311-A

Figure 1 Remove the 550 option feeder assembly

### Replacement

The replacement is the reverse of the removal procedure.

## REP 10.2 550 Optional Feeder Foot

### Parts List on [PL 10.1](#)

#### Initial Action

Do the removals that follow:

- Optional 550 feeder, [REP 10.1](#).
- Optional 550 cassette, [REP 10.8](#).

#### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Hold the 550 option feeder assembly in areas A and B, then turn over the feeder, [Figure 1](#).

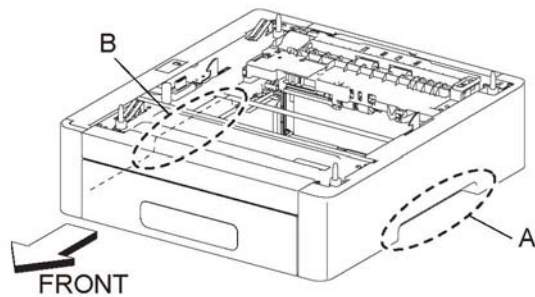


Figure 1 Locations to hold the 550 option feeder

2. Remove the items that follow, [Figure 2](#):
  - 2-1 Four screws (SM3).
  - 2-2 Four feet.

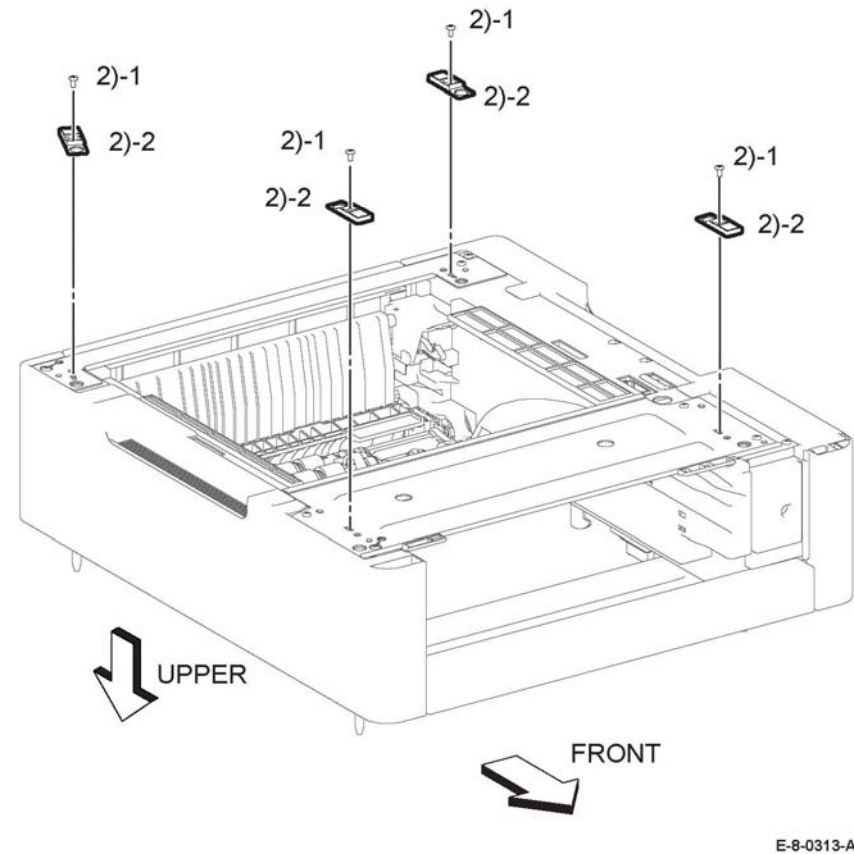


Figure 2 Remove the 550 option feeder feet

#### Replacement

The replacement is the reverse of the removal procedure.

## REP 10.3 Option Feeder Size Switch Assembly

### Parts List on PL 10.1

#### Initial Actions

Remove the 550 option feeder assembly from the printer, [REP 10.1](#)

#### Removal

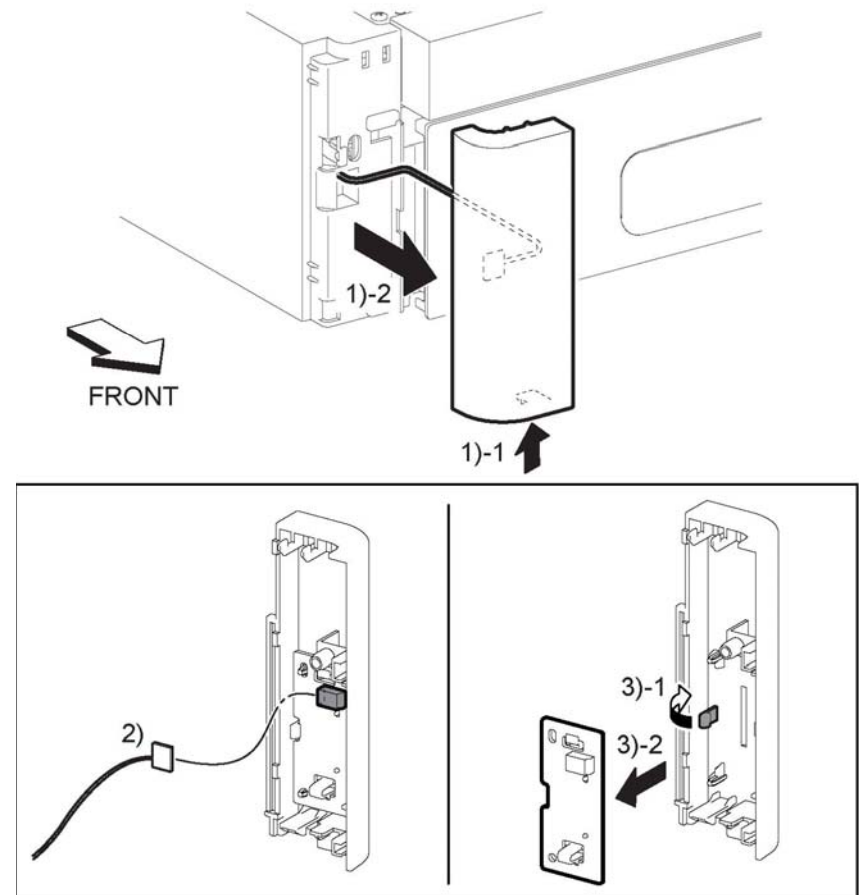
##### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

In the following step, avoid tearing off the LED harness assembly by gently pulling off the option feeder left front cover.

1. Perform the items that follow, [Figure 1](#):
  - 1-1 Press the hook to release the left front optional feed cover.
  - 1-2 Remove the left front optional feed cover.
2. Disconnect connector [P/J814](#) from the left front cover, [Figure 1](#).
3. Perform the items that follow, [Figure 1](#):
  - 3-1 Release the hook.
  - 3-2 Remove the LED shade tree PWB.



E-8-0319-A

Figure 1 Remove the 550 option feeder left front cover

4. Remove one screw (SM18) and the size switch assembly, [Figure 2](#).
5. Perform the items that follow, [Figure 2](#):
  - 5-1 Release two bosses.
  - 5-2 Release two hooks.
  - 5-3 Release two bosses.
  - 5-4 Remove the optional 550 feeder left side cover.

6. Disconnect connector P/J814, Figure 2.
7. Remove one screw and the size switch assembly, Figure 2.

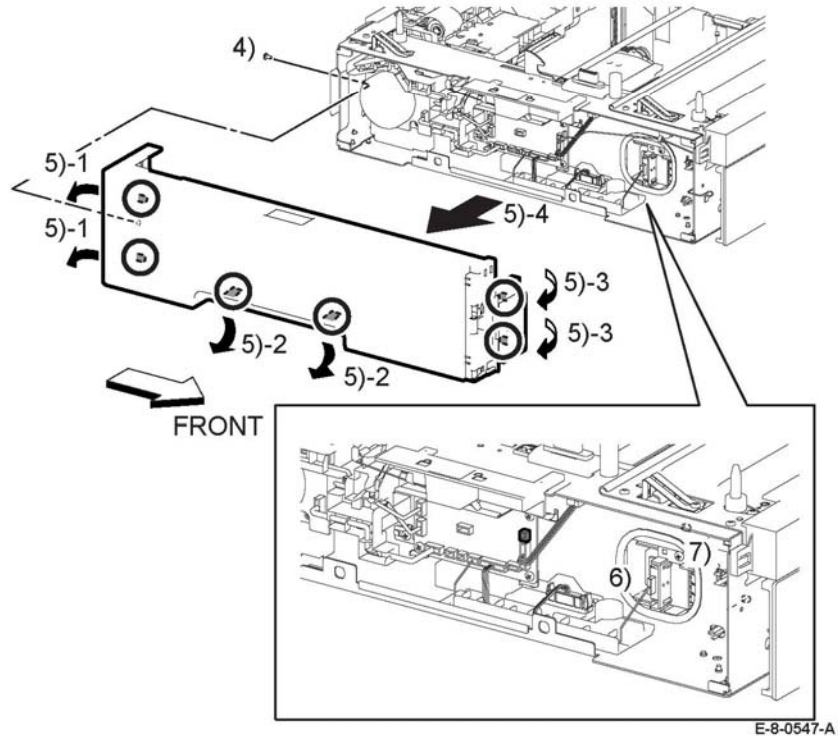


Figure 2 Remove left side cover and size switch assembly

## Replacement

**NOTE:** Before installing the option feeder left side cover, set the option feeder lock assembly to the lock position, Figure 3.

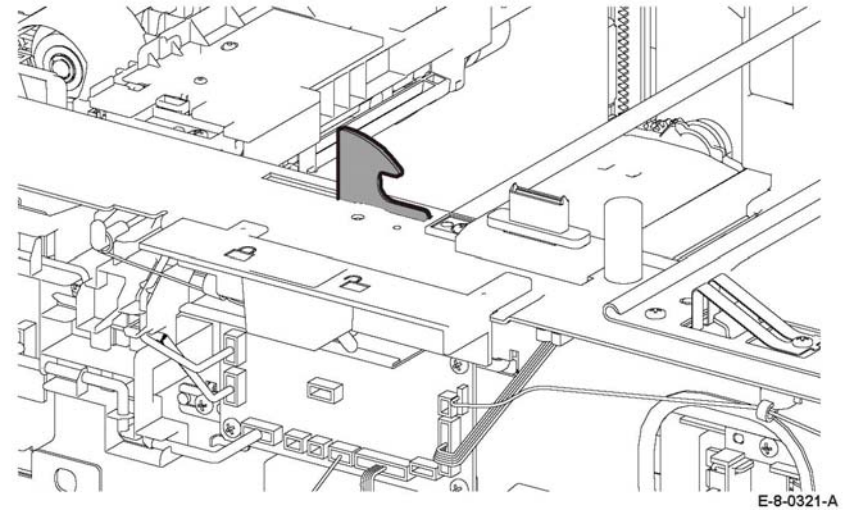


Figure 3 Place the option feeder lock into locked position



## REP 10.4 LED harness Assembly Kit

Parts List on [PL 3.1 Item 5](#).

### Initial Actions

1. Remove the MSI drive assembly, [REP 3.2](#).

### Removal

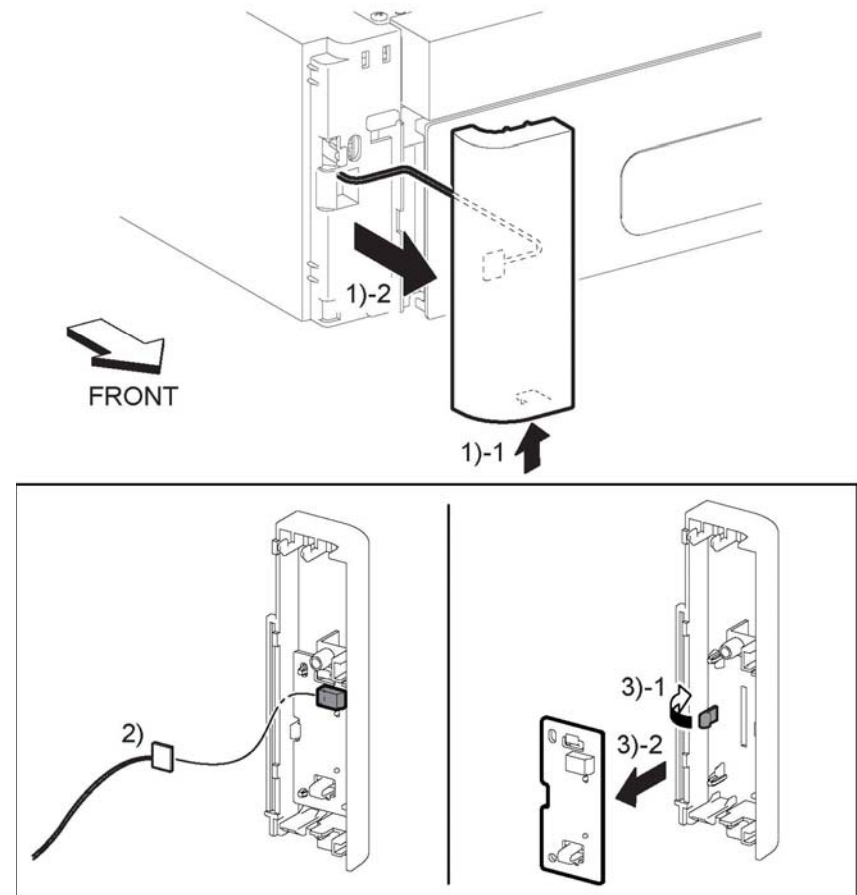
#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

In the following step, avoid tearing off the LED harness assembly by gently pulling off the option feeder left front cover.

1. Perform the items that follow, [Figure 1](#):
  - 1-1 Push the hook
  - 1-2 Remove the left optional front cover.
2. Disconnect connector [P/J814](#) from the left front cover.
3. Perform the items that follow, [Figure 1](#).
  - 3-1 Release the hook.
  - 3-2 Remove the shade tray cover and tray LED assembly.

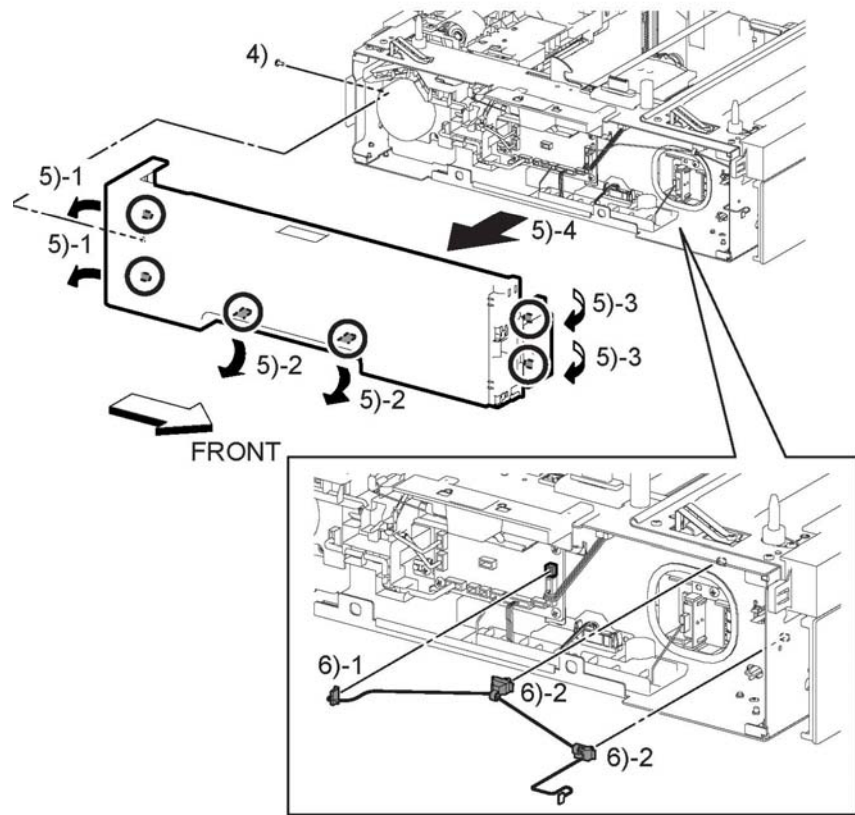


E-8-0319-A

Figure 1 Remove the 550 option feeder left front cover

4. Remove one screw (SM18) from the 550 option feeder left side cover.
5. Perform the items that follow, [Figure 2](#):
  - 5-1 Release two bosses at the rear side.
  - 5-2 Release two hooks at the bottom
  - 5-3 Release two bosses at the front side and the left side optional 550 feeder cover.
6. Perform the items that follow, [Figure 2](#):

- 6-1 Disconnect connector P/J813.
- 6-2 Remove two ties and the LED harness assembly.



E-8-0320-A

Figure 2 Remove the LED harness Assembly

## Replacement

### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

**NOTE:** Before installing the option feeder left side cover, set the option feeder lock assembly to the lock position as shown in Figure 3.

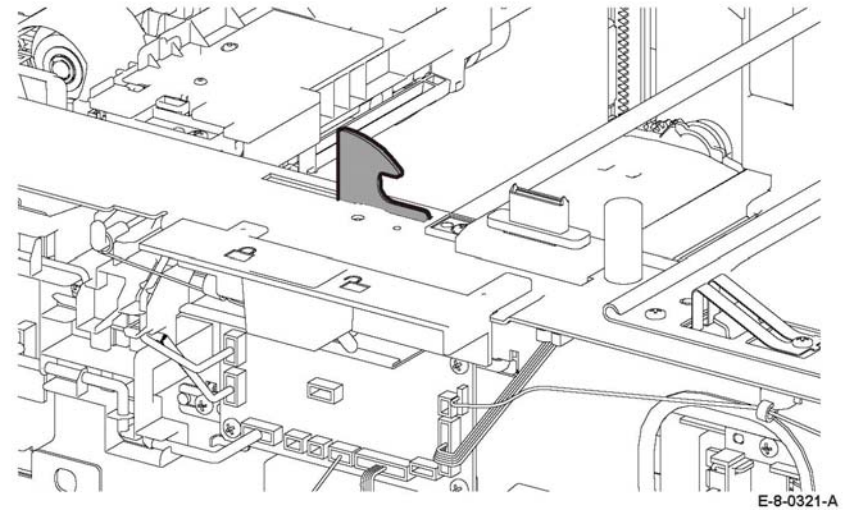


Figure 3 Place the option feeder lock into locked position

## REP 10.6 Feed Roller Assembly Kit (Optional Feeder)

Parts List on [PL 10.2](#)

### Prerequisites:

Remove the optional 550 feeder assembly from the printer, [REP 10.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Hold positions A and B and turn the optional 550 feeder upside down, [Figure 1](#).

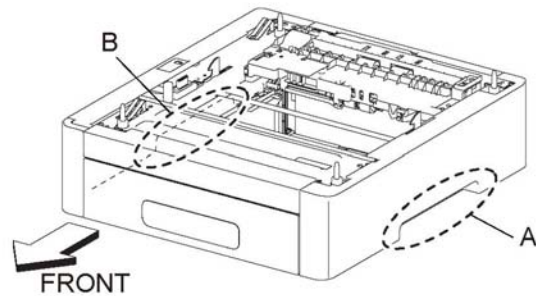


Figure 1 holding positions

E-8-0312-A

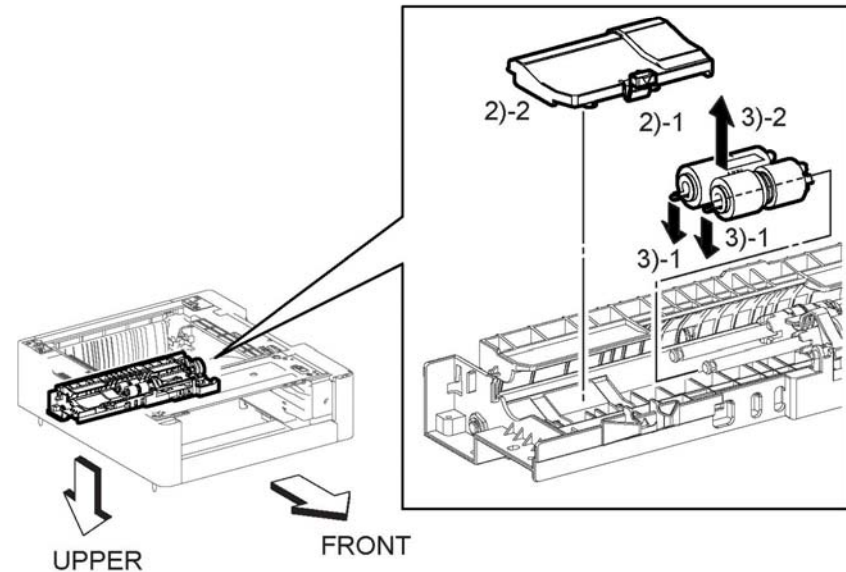


Figure 2 Remove the feed roll assembly

E-8-0314-A

2. Perform the items that follow, [Figure 2](#):
  - 2-1 Release the hook.
  - 2-2 Remove the upper feed chute.
3. Perform the items that follow, [Figure 2](#):
  - 3-1 Release the hooks.
  - 3-2 Remove the feed roll assembly.

### Replacement

The replacement is the reverse of the removal procedure.

## REP 10.7 No Paper Actuator (Optional Feeder)

Parts List on [PL 10.2](#)

### Initial Action

Remove the optional feeder assembly [REP 10.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Hold the 550 option feeder assembly using positions A and B, then turn the feeder up side down, [Figure 1](#).

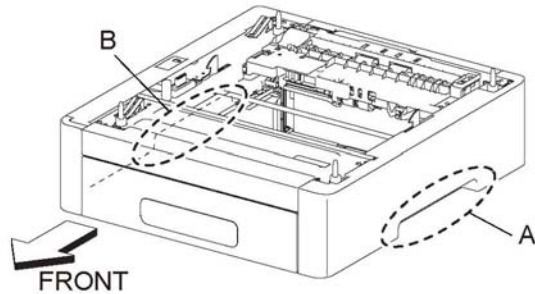
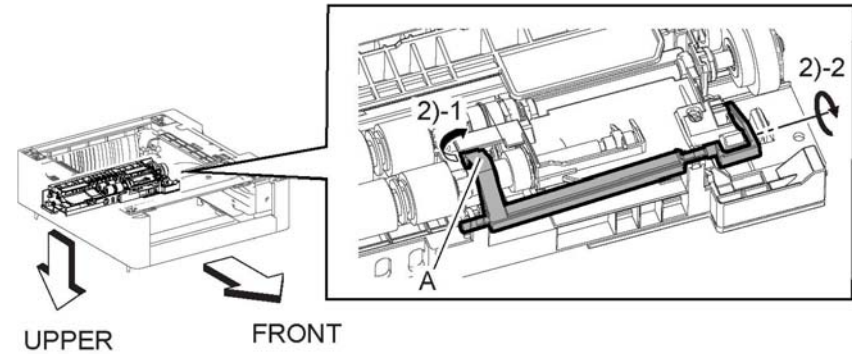


Figure 1 Locations to hold the 550 option feeder

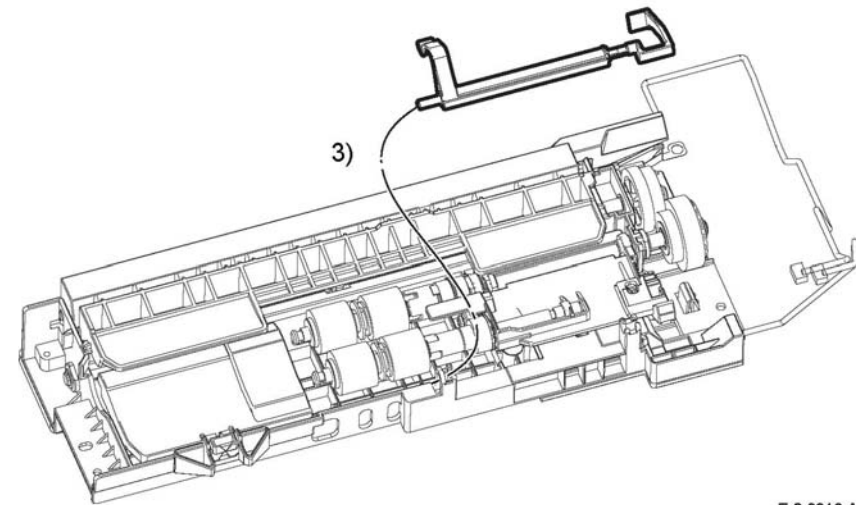
2. Perform the items that follow, [Figure 2](#):
  - 2.1 Release position A.
  - 2.2 Rotate in the direction of the arrow



E-8-0315-A

Figure 2 Release the no paper actuator

3. Remove the no paper actuator, [Figure 3](#).



E-8-0316-A

Figure 3 Remove the no paper actuator

## Replacement

When replacing the no paper actuator, make sure to snap portion A shown in [Figure 2](#) back into its original position.

## REP 10.8 550 Option Cassette Assembly

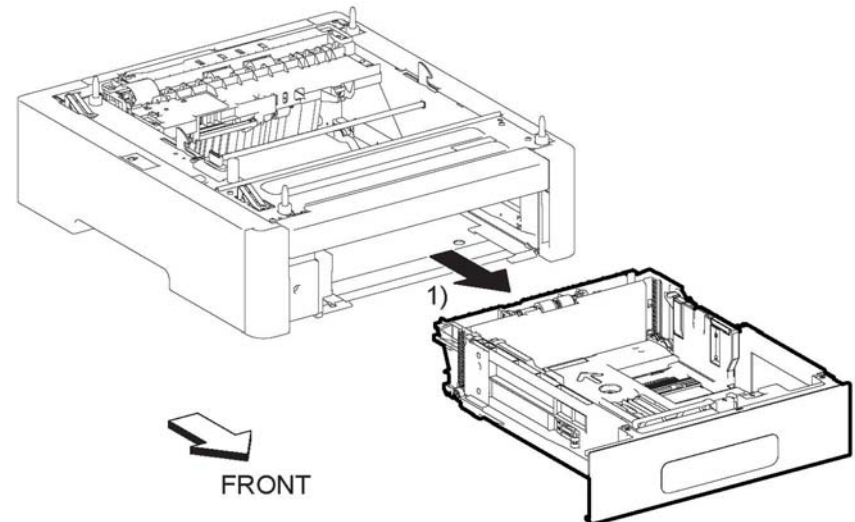
Parts List on [PL 10.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 550 option cassette assembly from the 550 option feeder assembly, [Figure 1](#).



E-8-0317-A

Figure 1 Remove the 550 option cassette assembly

### Replacement

The replacement is the reverse of the removal procedure.

## REP 10.9 Cassette Separator Holder Assembly (Option Feeder)

Parts List on [PL 10.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 550 option cassette assembly, [REP 10.8](#).
2. Release the hook on the holder, [Figure 1](#).
3. Perform the items that follow, [Figure 1](#):
  - 3-1 Rotate the cassette separator holder assembly.
  - 3-2 Remove the cassette separator holder assembly.

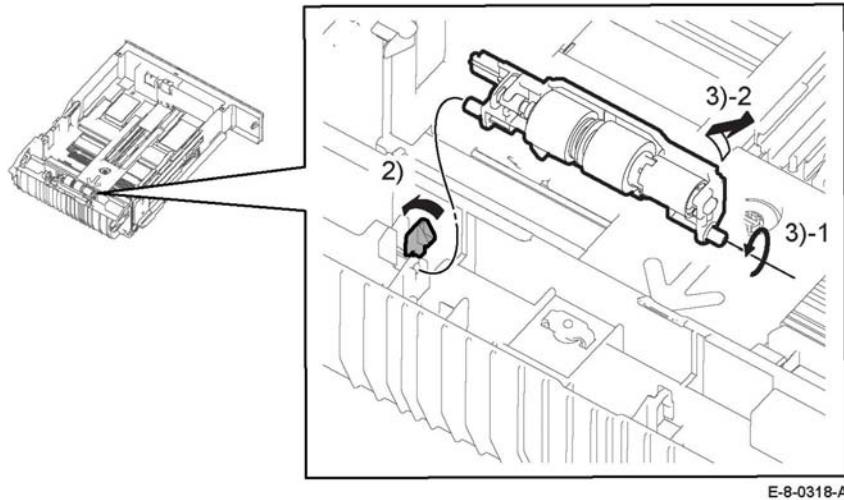


Figure 1 Remove the cassette separator holder assembly

### Replacement

The replacement is the reverse of the removal procedure.

## REP 10.10 Tray Dust Cover

Parts List on [PL 10.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 550 option cassette assembly, [REP 10.8](#).
2. Remove the legal paper tray cover, [Figure 1](#).

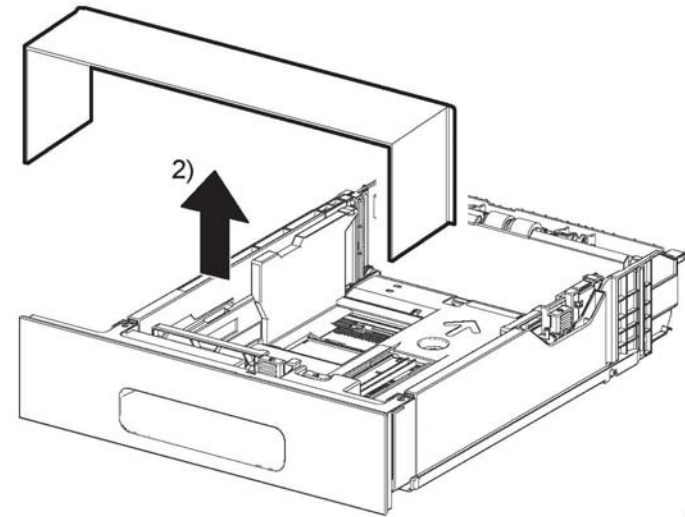


Figure 1 Remove the legal paper tray cover

### Replacement

The replacement is the reverse of the removal procedure.

## REP 10.11 Cassette Separator Roll Kit

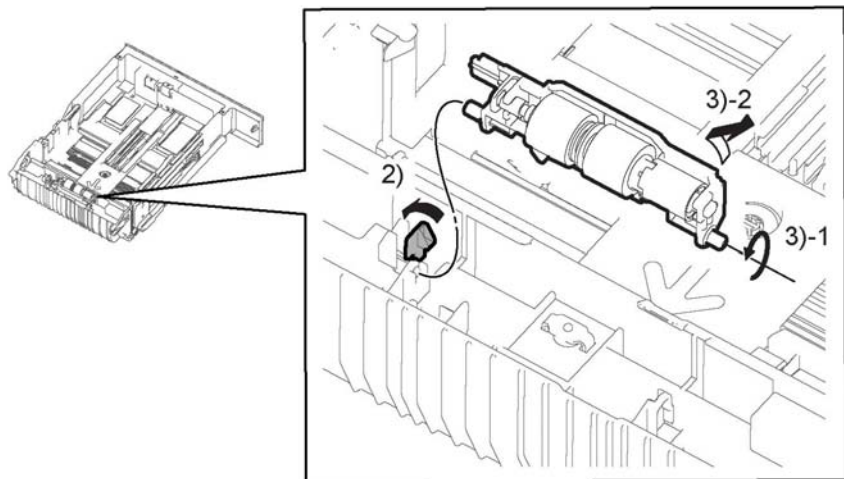
Parts List on [PL 10.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 550 option cassette assembly, [REP 10.8](#).
2. Release the hook on the holder, [Figure 1](#).
3. Perform the items that follow, [Figure 1](#):
  - 3-1 Rotate the cassette separator holder assembly.
  - 3-2 Remove the cassette separator holder assembly.



E-8-0318-A

Figure 1 Remove the cassette separator holder assembly

### Replacement

The replacement is the reverse of the removal procedure.





## REP 11.1 Right Side Cover

Parts List on [PL 11.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Open the HCF tray.
2. Remove two screws SM18, [Figure 1](#).
3. Perform the steps that follow, [Figure 1](#):
  - 3-1. Release two hooks.
  - 3-2. Remove the right side cover.

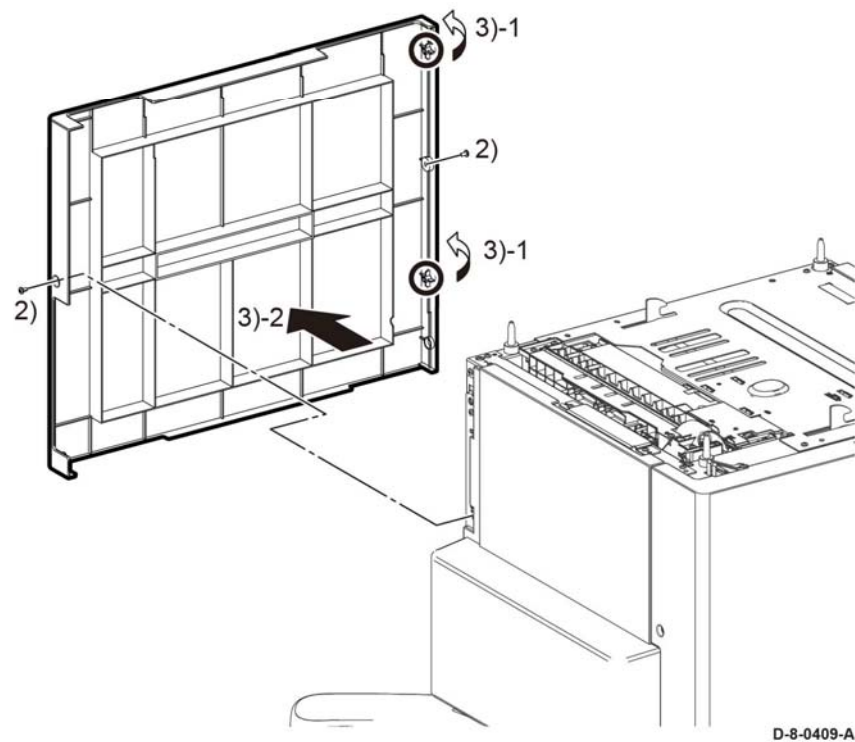


Figure 1 Right side cover

### Replacement

The replacement is the reverse of the removal procedure.

## REP 11.2 Left Front Corner, Shade Tray LED and PWB LED Cover

Parts List on [PL 11.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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.

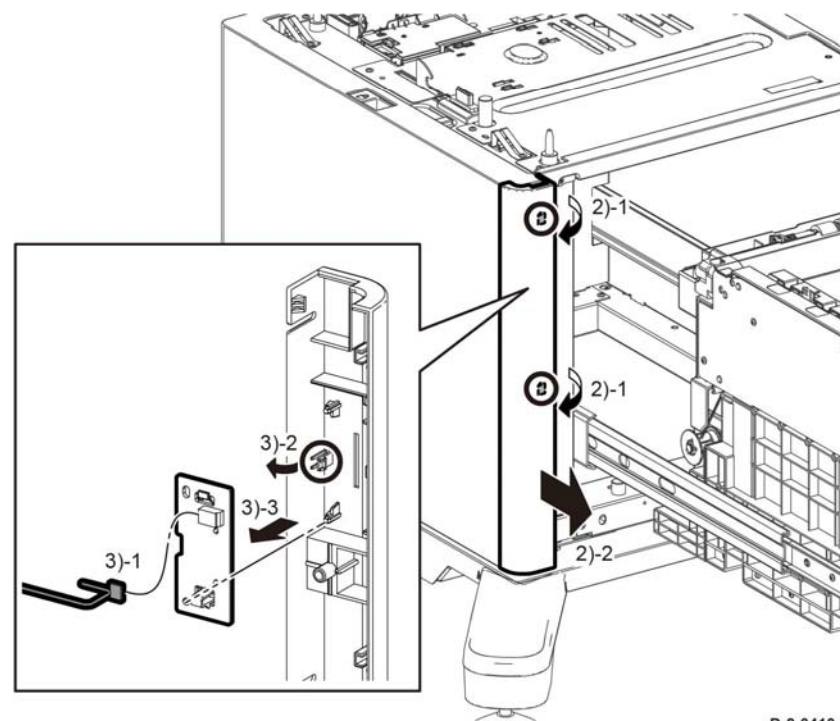
**NOTE:** For additional information about screws and fasteners, refer to [GP 41](#).

1. Open the HCF Tray.

#### CAUTION

In Step 2, do not damage the Shade Tray Cover LED and PWB as they are still attached to the left front corner.

2. Perform the steps that follow:
  - 2-1. Release two hooks, [Figure 1](#).
  - 2-2. Remove the cover front L.
3. Perform the steps that follow, [Figure 1](#):
  - 3-1. Disconnect connector [P/J814](#).
  - 3-2. Release the hook.
  - 3-3. Remove the shade tray LED and PWB.



D-8-0410-A

Figure 1 Left front cover, shade tray LED and PWB

### Replacement

The replacement is the reverse of the removal procedure.

## REP 11.3 Left Side Cover

Parts List on [PL 11.2](#)

### Prerequisites:

Remove the left front cover [REP 11.2](#).

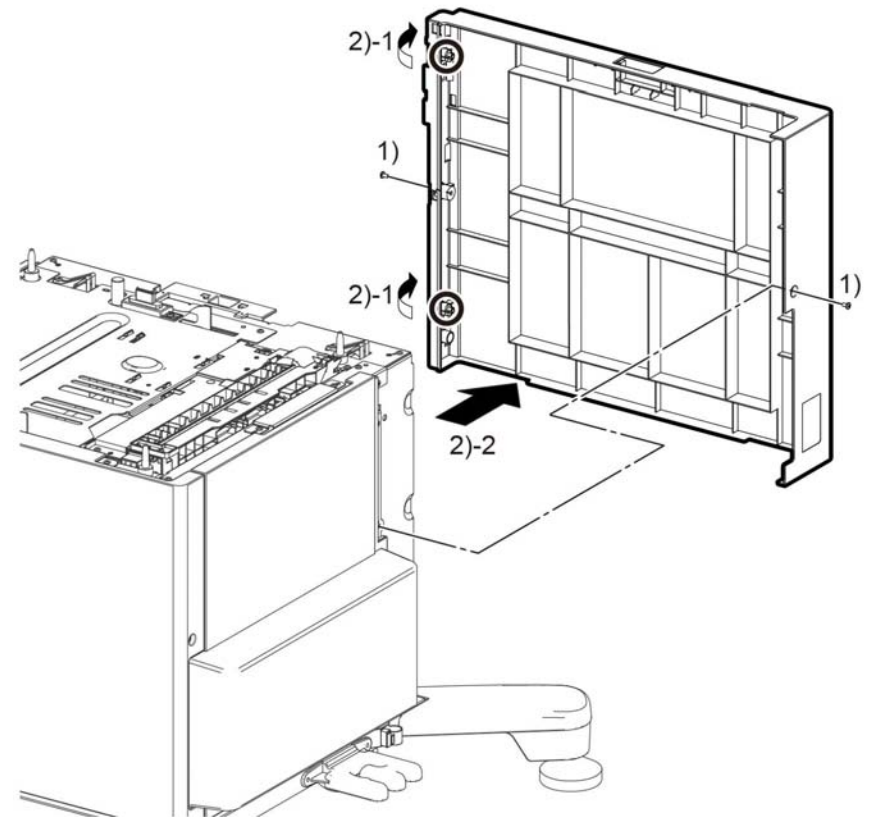
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

1. Remove two screw SM18. [Figure 1](#):
2. Perform the steps that follow:
  - 2-1. Release two hooks.
  - 2-2. Remove the left side cover.



D-8-0411-A

Figure 1 Left side cover

### Replacement

The replacement is the reverse of the removal procedure.

## REP 11.4 Rear Cover

Parts List on [PL 11.3](#)

### Removal

### Replacement

The replacement is the reverse of the removal procedure.

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

1. Remove the left front corner, shade tray LED, PWB LED cover, [REP 11.2](#).
2. Remove left side cover, [REP 11.3](#).
3. Remove the right side cover, [REP 11.1](#).
4. Remove the rear cover, [Figure 1](#).

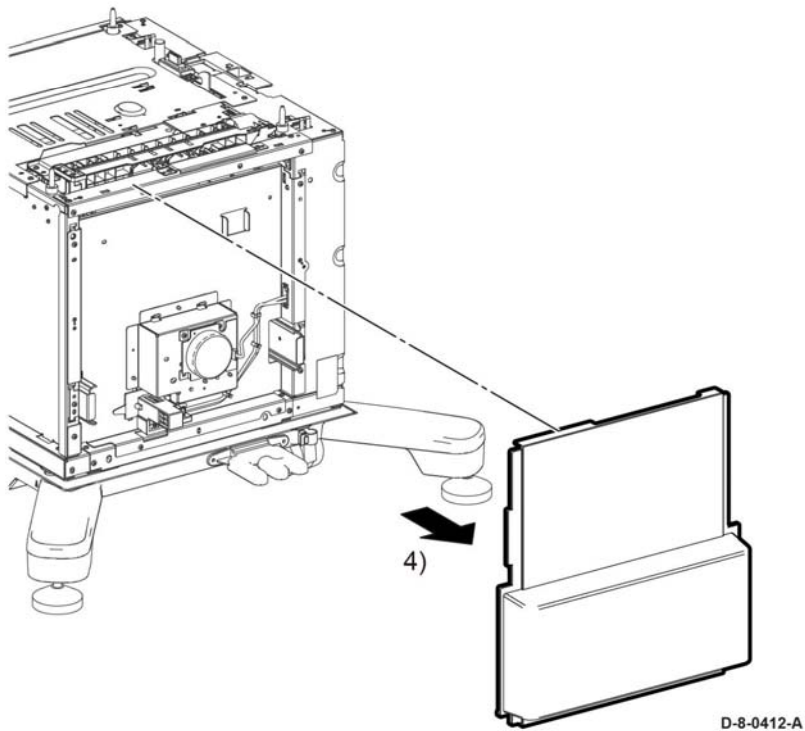


Figure 1 Rear cover

## REP 11.5 Feeder Assembly

### Parts List on PL 11.1

#### Removal

#### WARNING

Switch off the electricity to the machine. Refer to GP 4. 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 additional information about screws and fasteners, refer to GP 41.

1. Remove the left front corner, shade tray LED, PWB LED cover, REP 11.2.
2. Remove left side cover, REP 11.3.
3. Remove the right side cover, REP 11.1.
4. Remove the rear cover, REP 11.4.
5. Remove the spring from the guide harness, Figure 1.

**NOTE:** Be careful not to loose the spring.

6. Disconnect the following Connectors, Figure 1:

P/J805

P/J808

P/J822

7. Release the harness from the guide harness, Figure 1.

#### CAUTION

If the screw and ground plate in the next step is not removed, the ground plate could be damaged when the feeder is removed.

8. Remove one screw and the ground plate on the feeder, Figure 1.
9. Perform the steps that follow, Figure 1:
  - 9-1. Remove five screws, ST20.
  - 9-2. Remove the feeder and harness assembly.

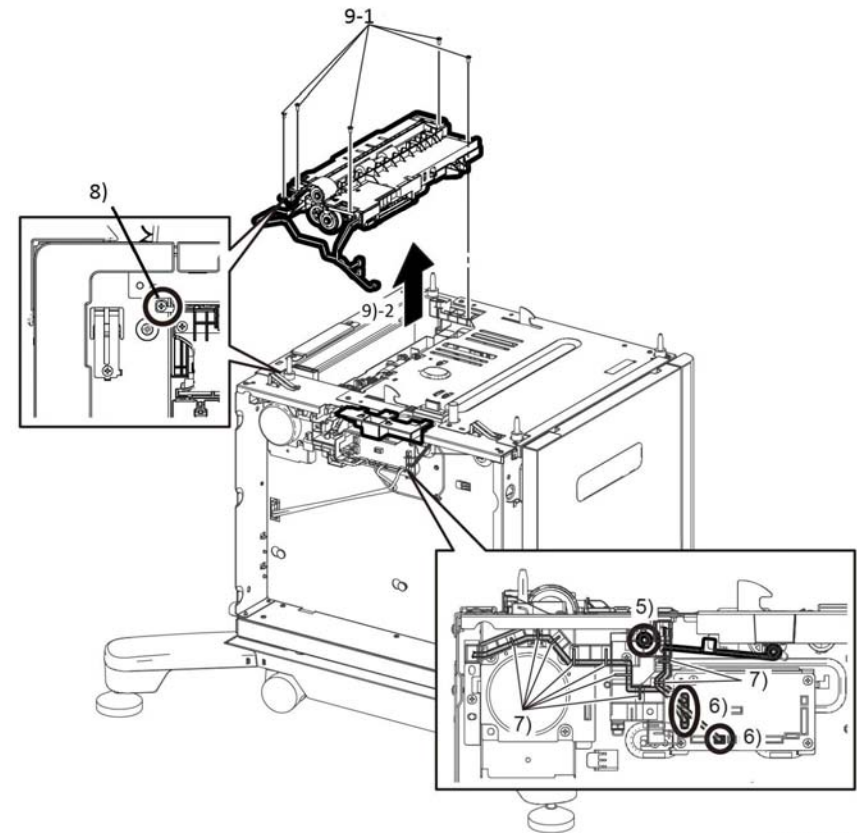


Figure 1 Feeder removal

D-8-0413-B

## Replacement

1. The replacement is the reverse of the removal procedure.
2. Be sure to insert the harness assembly through the holes in the frame, [Figure 2](#).

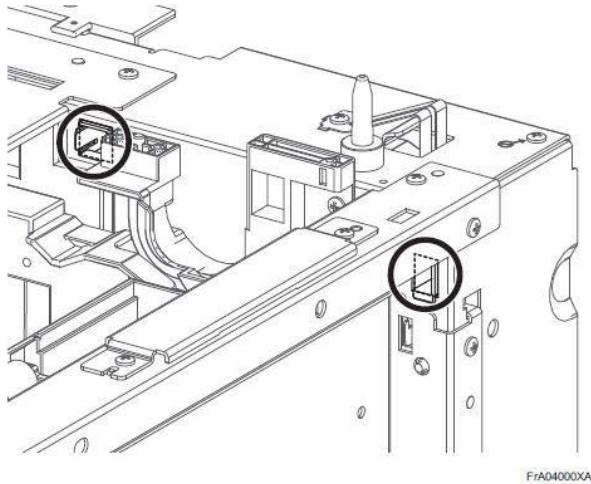


Figure 2 Holes in frame

## REP 11.6 harness Assembly LED

Parts List on [PL 11.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

1. Remove the left front corner, shade tray LED, PWB LED cover, [REP 11.2](#).
2. Remove left side cover, [REP 11.3](#).
3. Disconnect connector, [P/J813](#), [Figure 1](#).
4. Perform the steps that follow, [Figure 1](#):
  - 4-1. Release the harness from the two push-tie connectors.
  - 4-2. Remove the harness assembly.

## REP 11.7 Optional Paper Feeder (OPF) PWB

Parts List on [PL 11.2 Item 3](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

1. Remove the left front corner, shade tray LED cover, PWB LED, [REP 11.2](#).
2. Remove left side cover, [REP 11.3](#).
3. Disconnect all the connectors from the OPF PWB, [Figure 1](#).
4. Perform the steps that follow, [Figure 1](#):
  - 4-1. Remove four screws, SM 18.
  - 4-2. Remove the OPF PWB.

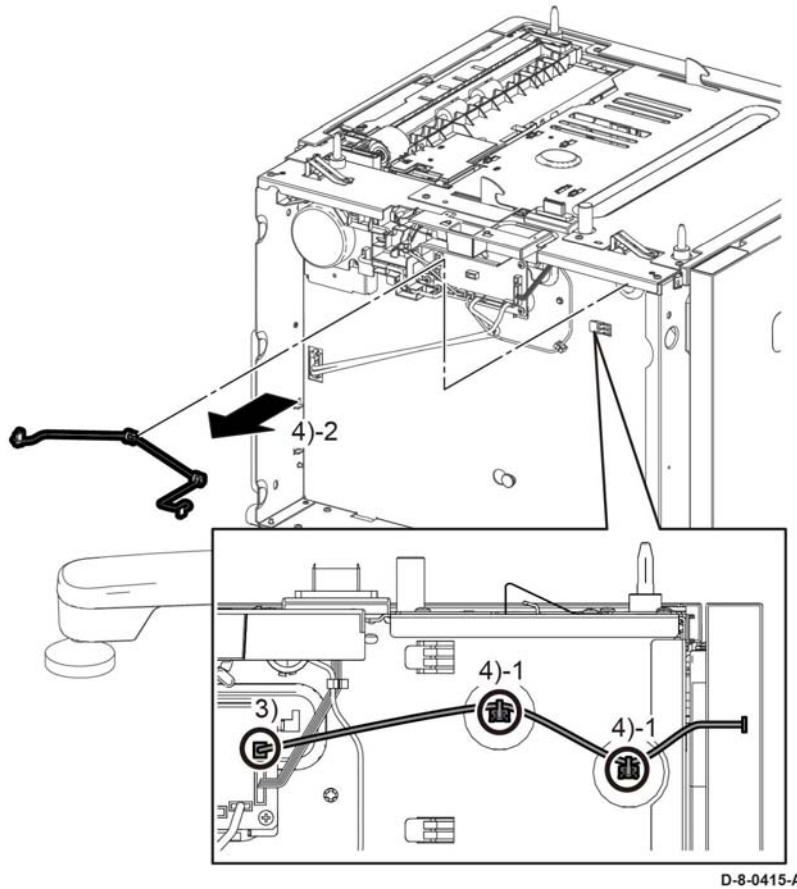


Figure 1 harness assembly

### Replacement

The replacement is the reverse of the removal procedure.

## REP 11.8 Main Motor Assembly

Parts List on [PL 11.2 Item 4](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

1. Remove the left front corner, shade tray LED, PWB LED cover, [REP 11.2](#).
2. Remove left side cover, [REP 11.3](#).
3. Remove the spring from the guide harness, [Figure 1](#).
4. Disconnect the following connectors, [Figure 1](#):
  - P/J803
  - P/J804
  - P/J805
  - P/J808
  - P/J822
5. Release the harness, [Figure 1](#):
6. Perform the steps that follow, [Figure 1](#):
  - 6-1. Remove one screw, SM18.
  - 6-2. Release two hooks to release the guide harness.
7. Perform the steps that follow, [Figure 1](#):
  - 7-1. Remove three screws.
  - 7-2. Remove the main motor assembly.

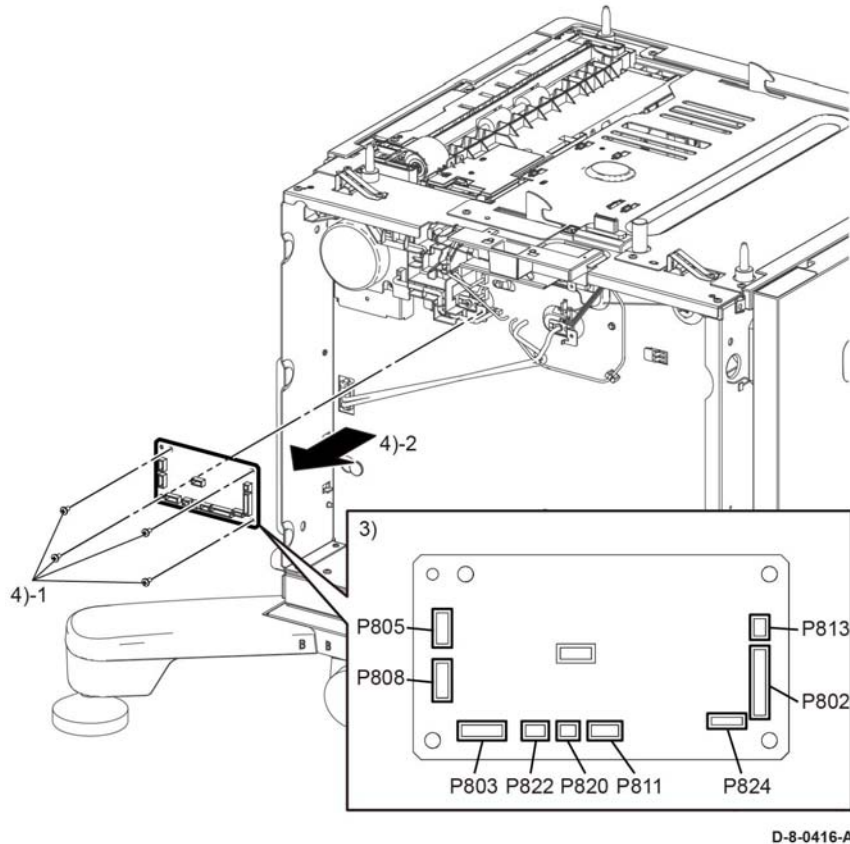


Figure 1 OPF PWB

### Replacement

The replacement is the reverse of the removal procedure.



## REP 11.9 Main Motor Assembly P1

Parts List on [PL 11.2 Item 4](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

1. Remove the left front corner, shade tray LED, PWB LED cover, [REP 11.2](#).
2. Remove left side cover, [REP 11.3](#).
3. Remove the right side cover, [REP 11.1](#).
4. Remove the rear cover, [REP 11.4](#).
5. Disconnect [P/J821](#), [Figure 1](#).
6. Perform the steps that follow, [Figure 1](#):
  - 6-1. Remove three screws, SM18.
  - 6-2. Remove the main motor assembly P1.

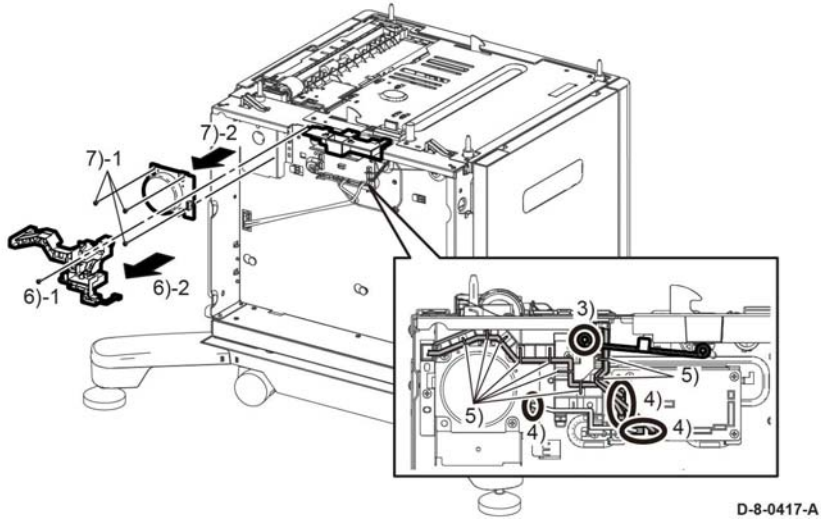


Figure 1 Main motor assembly

### Replacement

The replacement is the reverse of the removal procedure.

## REP 11.10 Rear Interlock Switch

Parts List on [PL 11.3 Item 4](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

1. Remove the left front corner, shade tray LED, PWB LED cover, [REP 11.2](#).
2. Remove left side cover, [REP 11.3](#).
3. Remove the right side cover, [REP 11.1](#).
4. Remove the rear cover, [REP 11.4](#).
5. Disconnect [P/J824](#), [Figure 1](#).
6. Perform the steps that follow, [Figure 1](#):
  - 6-1. Release one clamp.
  - 6-2. Release four clamps.
  - 6-3. Remove the harness.

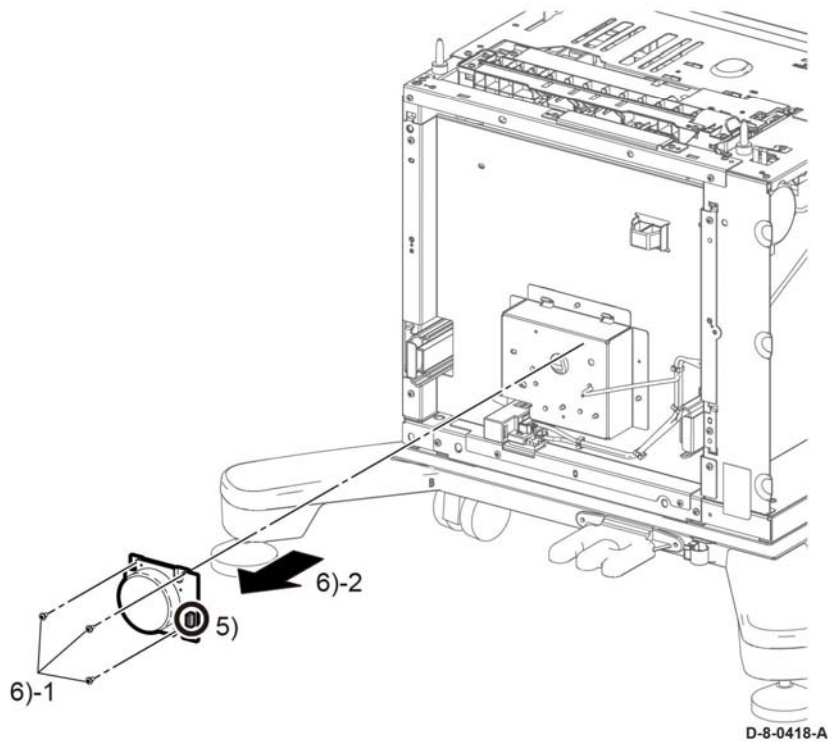


Figure 1 Main motor assembly P1

### Replacement

The replacement is the reverse of the removal procedure.

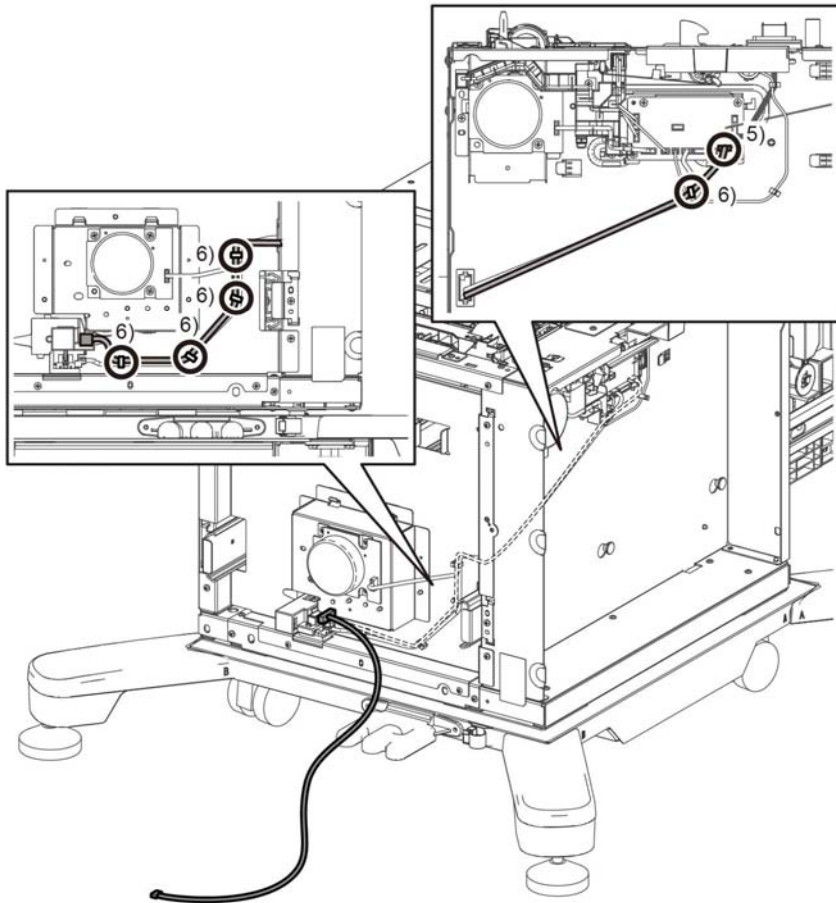
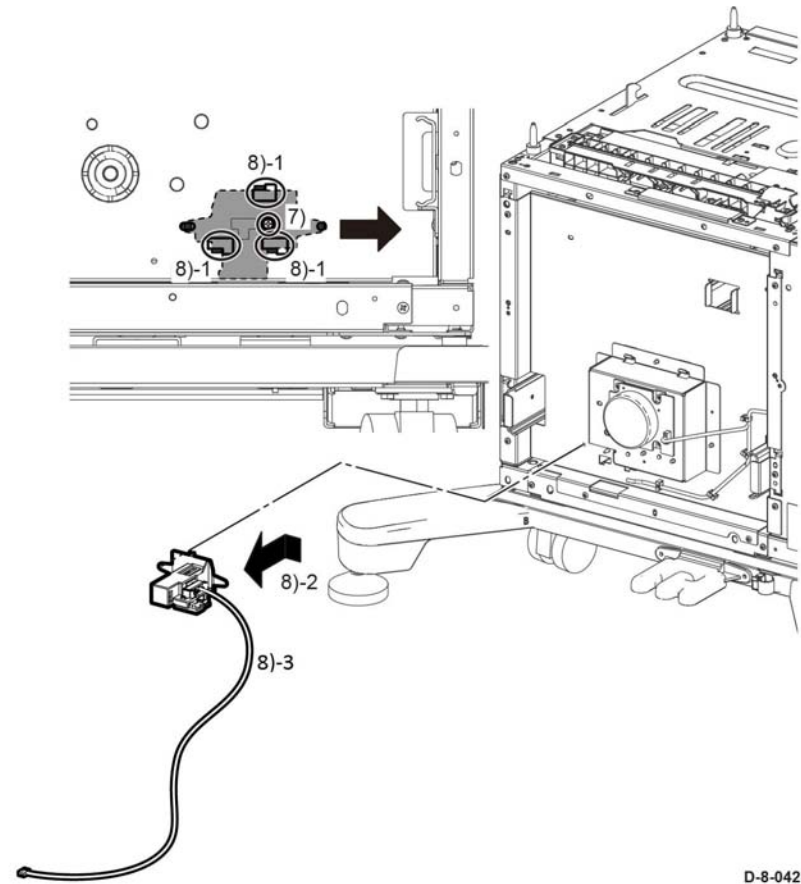


Figure 1 Rear interlock harness

D-8-0419-A

7. Remove one screw, ST20, [Figure 2](#).
8. Perform the steps that follow, [Figure 2](#):
  - 8-1. Move the rear interlock switch in the direction shown to release three hooks.
  - 8-2. Remove the rear interlock switch.
  - 8-3. Disconnect the harness from the rear interlock switch.



D-8-0420-B

Figure 2 Rear interlock switch removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 11.11 Feed and Separator Rollers

Parts List on [PL 11.4 Item 2](#)

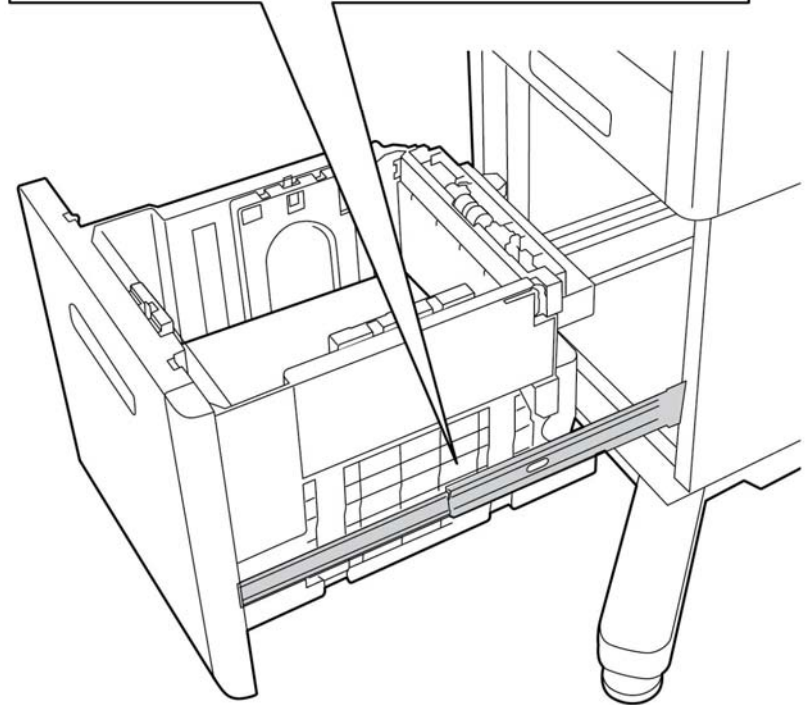
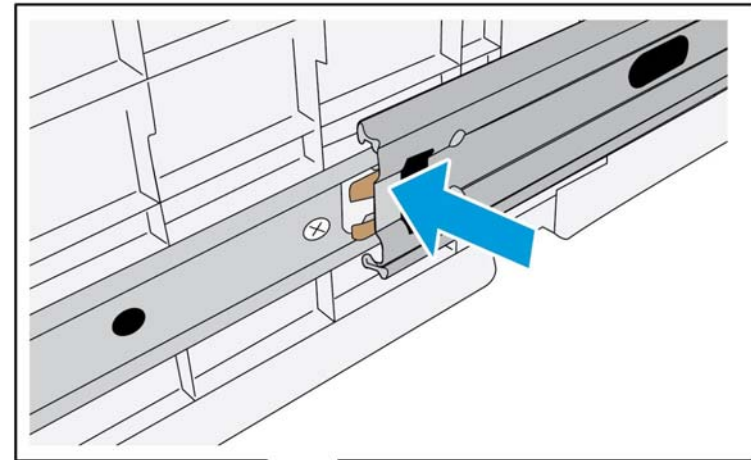
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to [GP 41](#).

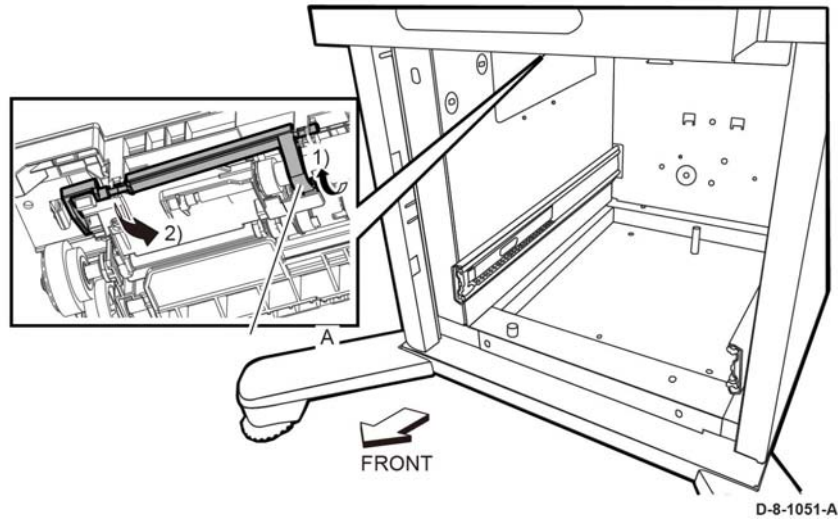
1. Pull the HCF feeder drawer out until it stops.
2. Push in the spring-loaded hatch one on each side, to remove the HCF feeder drawer, [Figure 1](#).



D-8-1053-A

Figure 1 Releasing the feeder drawer

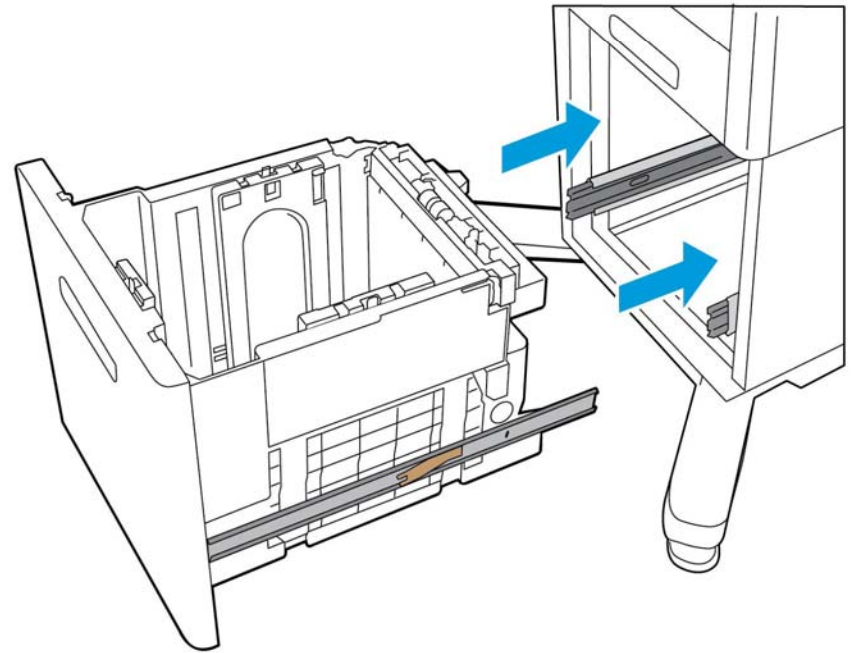
3. Pull and lift the HCF feeder drawer off the slide-rails to remove the HCF feeder drawer.
4. Perform the items that follow, [Figure 2](#):
  - 4-1 Rotate the lever.
  - 4-2 Remove the feed and separation lever.



**Figure 2 Remove feed and separation lever**

### Replacement

1. Push both slide rails all the way into the cabinet, [Figure 3](#).
2. Align the side rails, on the rear of the HCF feeder drawer, with the slide rails in the cabinet.
3. Push the HCF feeder drawer into place.



**Figure 3 Installing the HCF feeder drawer**



## REP 13.1 Bypass Tray Frame Assembly

Parts List on [PL 13.1](#)

### Initial Action:

Remove the front inner cover [REP 19.1](#).

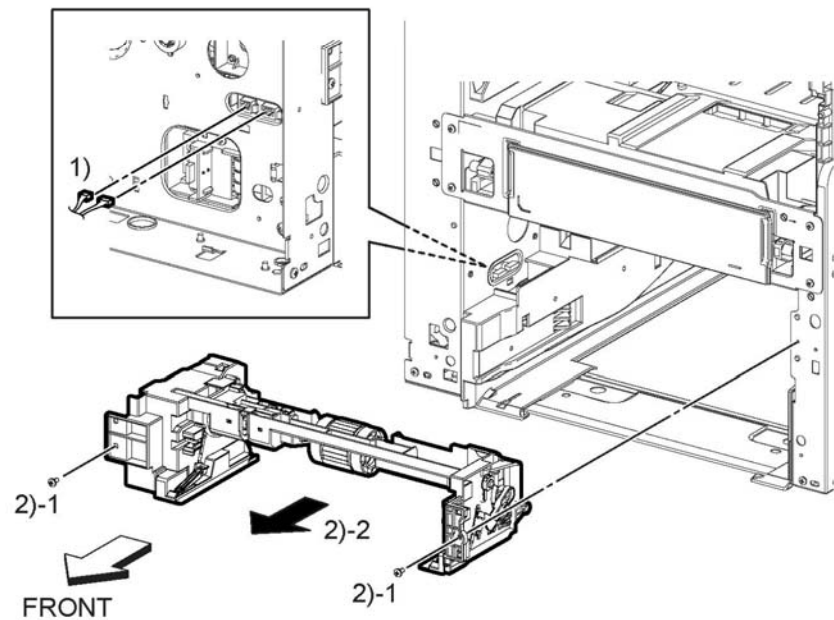
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Disconnect two connectors, [P/J482](#), [P/J483](#).
2. Remove the items that follow:
  - 2-1 Two screws, SM 18.
  - 2-2 Bypass tray frame assembly.



E-8-0323-A

Figure 1 Frame assembly removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 13.2 Bypass Tray Feed Roller

### Parts List on PL 13.1

#### Initial Action1-1

Remove the MSI bypass tray assembly, REP 13.6.

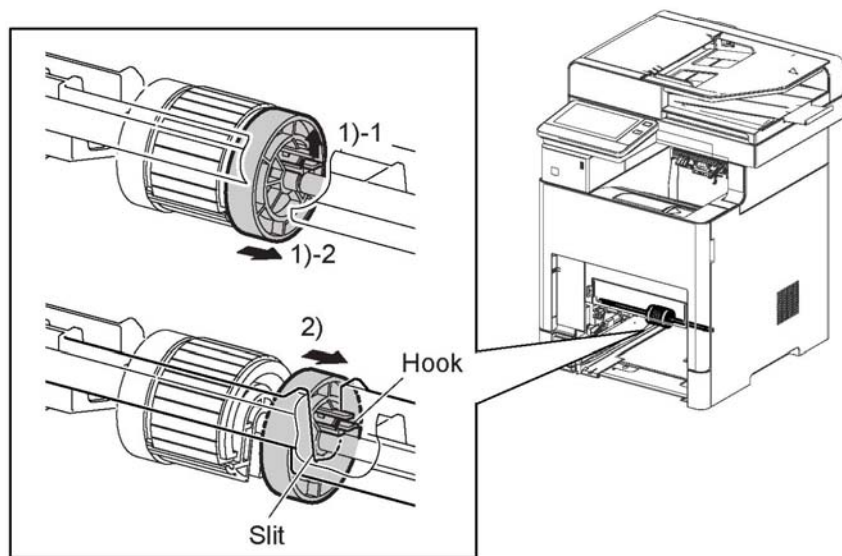
#### Removal

**NOTE:** For additional information about screws and fasteners, refer GP 41.

#### WARNING

Switch off the electricity to the machine, GP 4. 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.

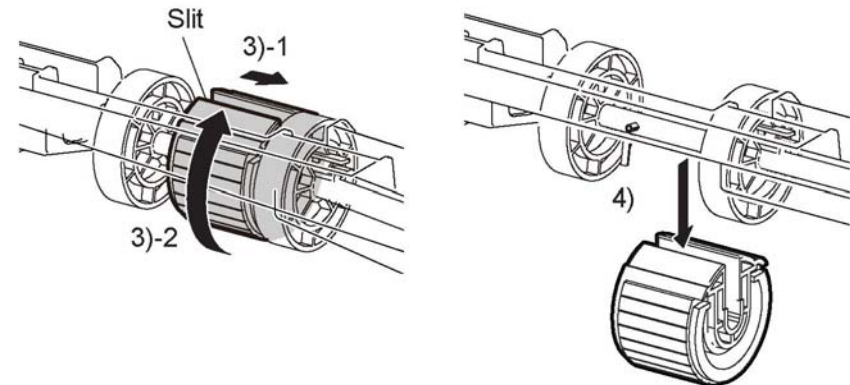
1. Perform the items that follow, Figure 1:
  - 1-1 Release the hook.
  - 1-2 Slide the feed roll
2. Align the hook with the slit and slide it down the shaft, Figure 1.



E-8-0324-A

Figure 1 Release the bypass tray feed roller hook

3. Perform the items that follow, Figure 2:
  - 3-1 Slide the bypass tray feed roll up the shaft.
  - 3-2 Rotate the bypass tray feed roll as shown.
4. Remove the bypass tray feed roll from the shaft, Figure 2.
5. Remove the bypass tray feed roller, Figure 2.



E-8-0325-A

Figure 2 Remove the bypass tray feed roller

#### Replacement

The replacement procedure is the reverse of the removal procedure.



## REP 13.3 Bypass Tray No Paper Sensor

### Parts List on PL 13.1

#### Initial Action

Remove the bypass tray frame assembly, REP 13.1.

#### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 additional information about screws and fasteners, refer GP 41.

1. Perform the items that follow, Figure 1:
  - 1-1 Release two hooks and the boss.
  - 1-2 Remove the bypass no paper sensor bracket from the bypass frame assembly.
2. Disconnect connector P/J484 and release the harness.

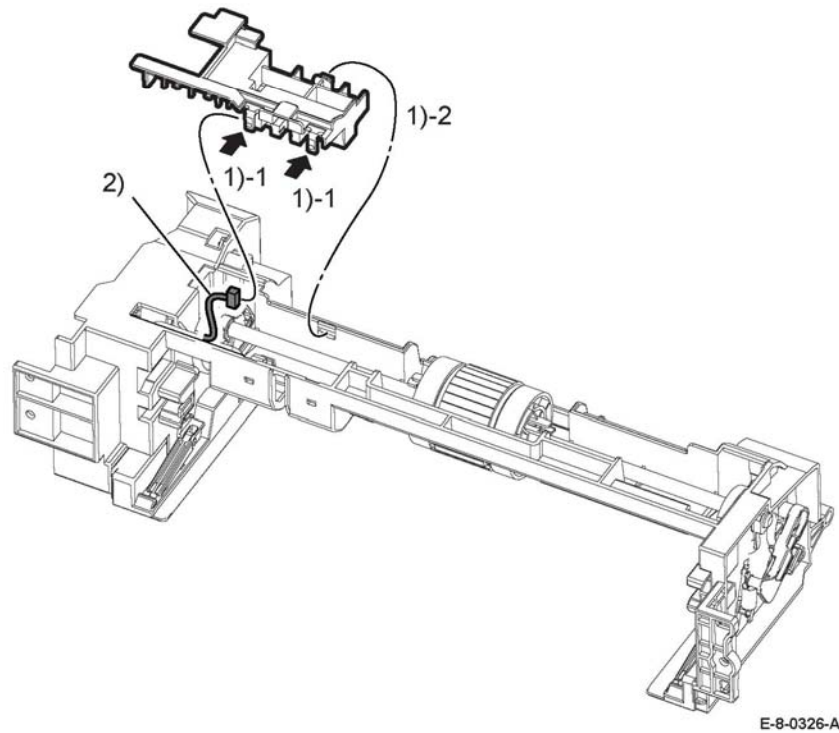


Figure 1 Remove the bypass tray no paper bracket

3. Perform the items that follow, Figure 2:
  - 3-1 Release the three hooks
  - 3-2 Remove the bypass no paper sensor.

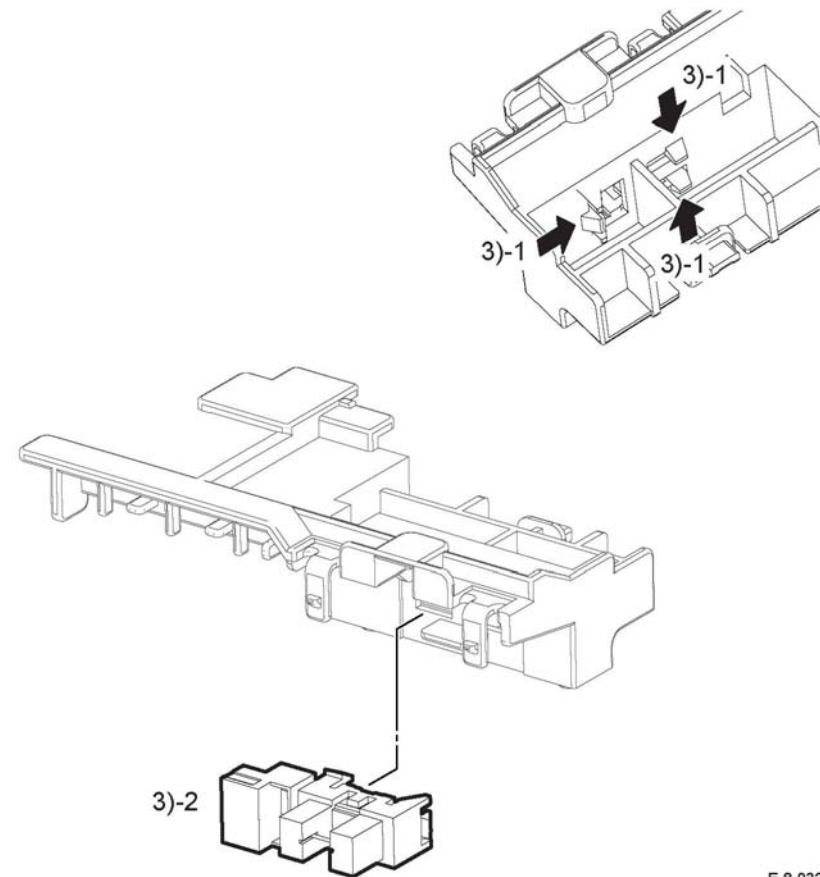


Figure 2 Remove the bypass tray no paper sensor

#### Replacement

The replacement is the reverse of the removal procedure.

## REP 13.4 Bypass Tray Turn around 1 Roller Assembly Kit

Parts List on [PL 13.1](#)

### Initial Action

Remove the bypass tray frame assembly [REP 13.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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.

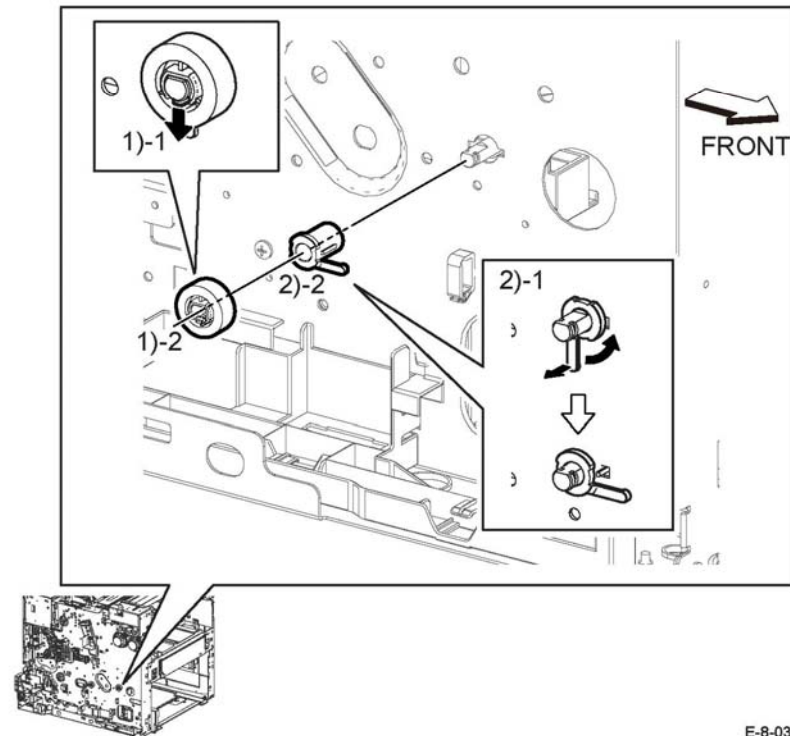
**NOTE:** For additional information about screws and fasteners, refer [GP 41](#).

1. Perform the items that follow, [Figure 1](#):
  - 1-1 Release the hook.
  - 1-2 Remove the turn gear.

#### CAUTION

In the following step, avoid breaking the bearing tab by lifting the hook gently during bearing removal.

2. Perform the items that follow, [Figure 1](#):
  - 2-1 Release the hook.
  - 2-2 Remove the left turn around bearing



E-8-0328-A

Figure 1 Remove the bypass tray TA1 roller assembly

3. Perform the items that follow, [Figure 2](#):
  - 3-1 Slide the turn around 1 assembly to the left.
  - 3-2 turn the turn around assembly 1 down.
4. Remove the turn around assembly 1 roller assembly in the direction of the arrow.

## REP 13.5 Bypass Tray Turn Around 2 Roller Assembly Kit

Parts List on [PL 13.1](#)

### Initial Action

Remove the bypass tray frame assembly [REP 13.1](#).

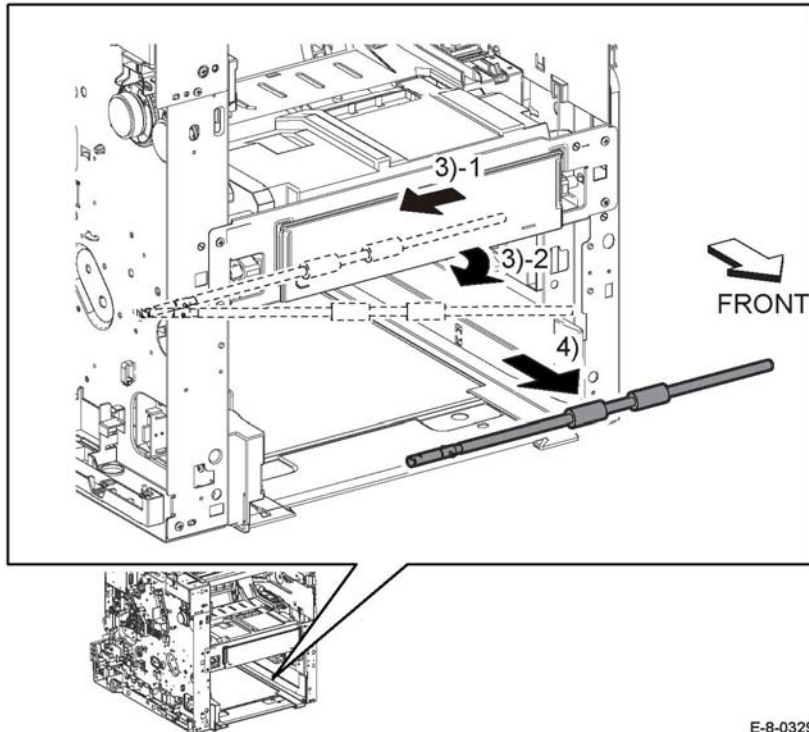
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove four screws (ST 20) holding the guide tray, [Figure 1](#).

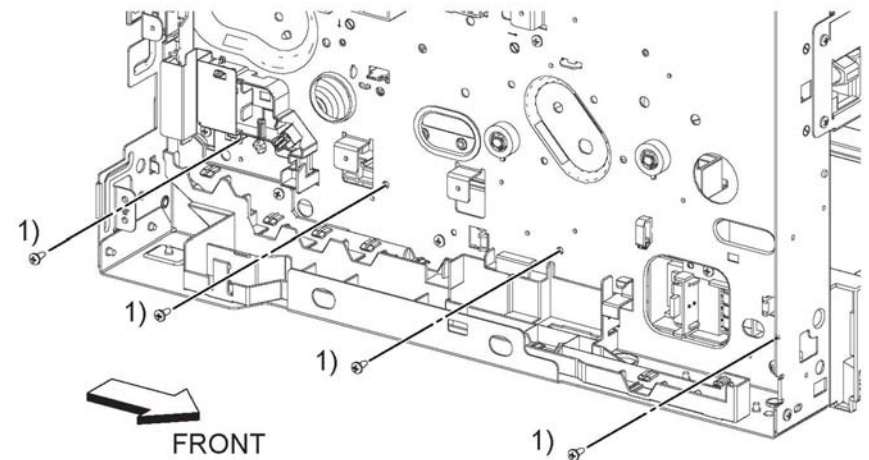


E-8-0329-A

Figure 2 Remove the turn around assembly 1 roller assembly

### Replacement

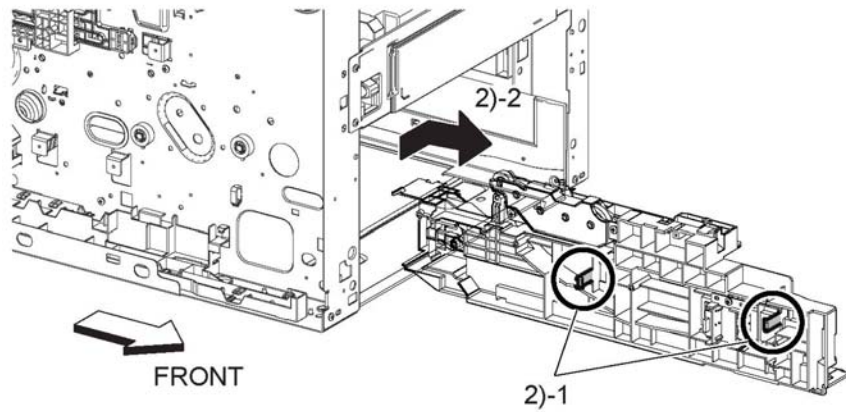
When replacing the roller, use only the parts in the spares kit that are required for this part.



E-8-0330-A

Figure 1 Remove the screws

2. Perform the items that follow, [Figure 2](#):
  - 1-1 Release two hooks.
  - 1-2 Remove the guide tray.



E-8-0527-A

**Figure 2 Remove the guide tray**

3. Perform the items that follow, **Figure 3**:

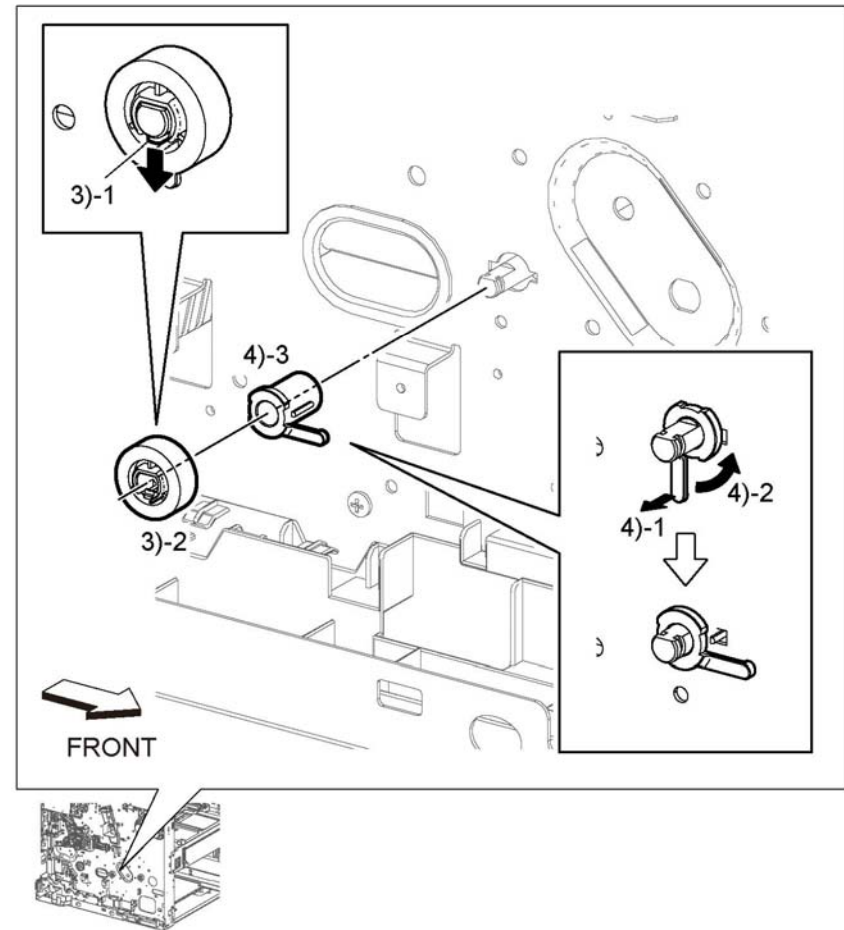
- 3-1 Release the hook.
- 3-2 Remove the turn gear.

**CAUTION**

*In the following step, avoid breaking the bearing tab by lifting the hook gently during bearing removal.*

4. Perform the items that follow, **Figure 3**:

- 4-1 Release the hook
- 4-2 Remove the left turn around bearing.



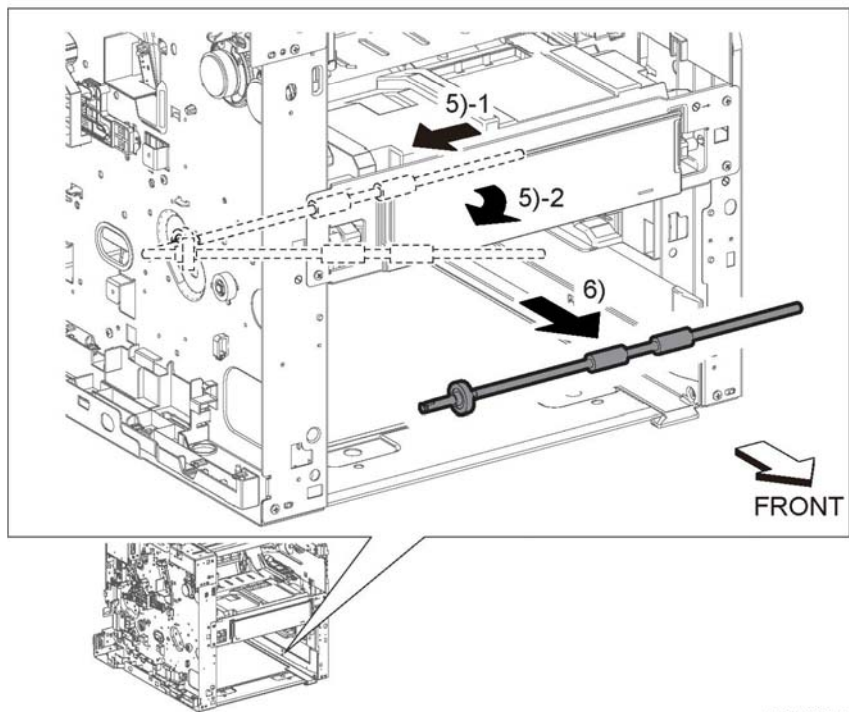
E-8-0331-A

**Figure 3 Remove the bypass tray TA 2 roller assembly**

5. Perform the items that follow, **Figure 4**:

- 5-1 Slide the turn around roller 2 to the left.
- 5-2 Rotate the turn around roller 2 downward.

6. Remove the turn around roller assembly 2 in the direction of the arrow.



E-8-0332-A

Figure 4 Remove the turn around roller 2

### Replacement

When replacing the roller, use only the parts in the spares kit that are required for this part.

## REP 13.6 Main Bypass Tray (MSI) Assembly

Parts List on [PL 13.2](#)

### Prerequisites:

Perform the IOT cassette assembly, [PL 9.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Open the MSI main tray assembly, [Figure 1](#).
2. Remove the MSI main tray assembly.

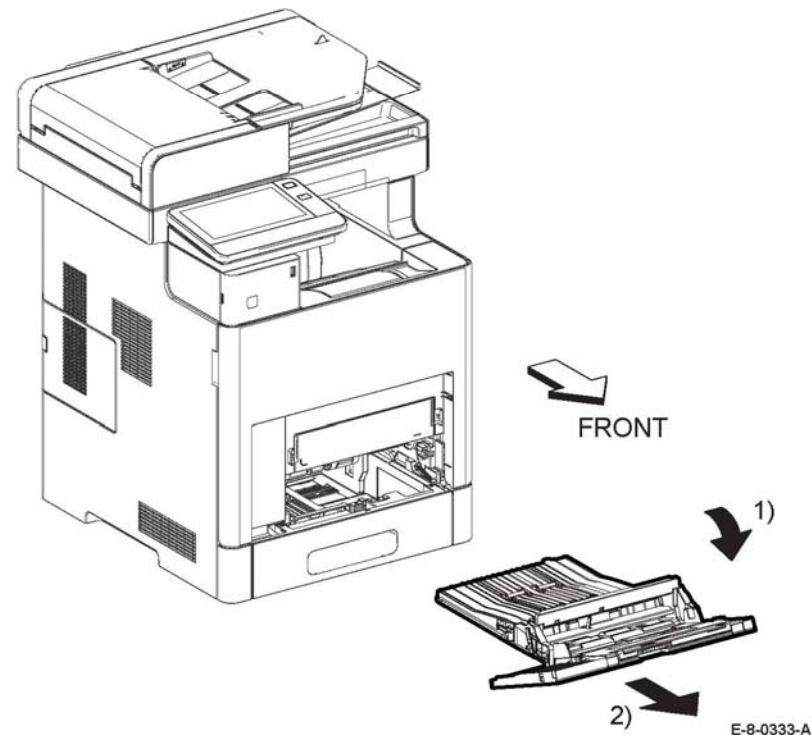


Figure 1 Remove the main bypass tray

### Replacement

The replacement is the reverse of the removal procedure.

## REP 13.7 Bypass Tray Separator Holder Assembly

Parts List on [PL 13.2](#)

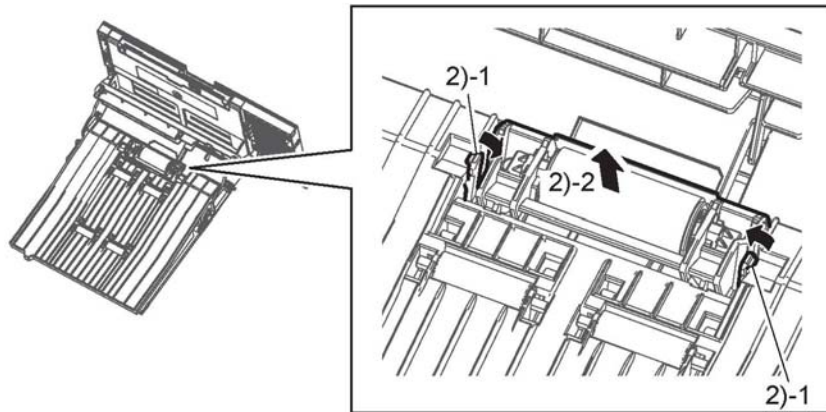
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove the main bypass tray assembly, [REP 13.6](#).
2. Perform the items that follow, [Figure 1](#):
  - 2-1 Release the two hooks
  - 2-2 Remove the bypass separator holder assembly from the main bypass tray assembly.



E-8-0334-A

Figure 1 Remove the bypass tray separator holder assembly

## REP 13.8 Bypass Cover Assembly

Parts List on [PL 13.2](#)

### Initial Action

Remove the main bypass tray assembly, [REP 13.6](#).

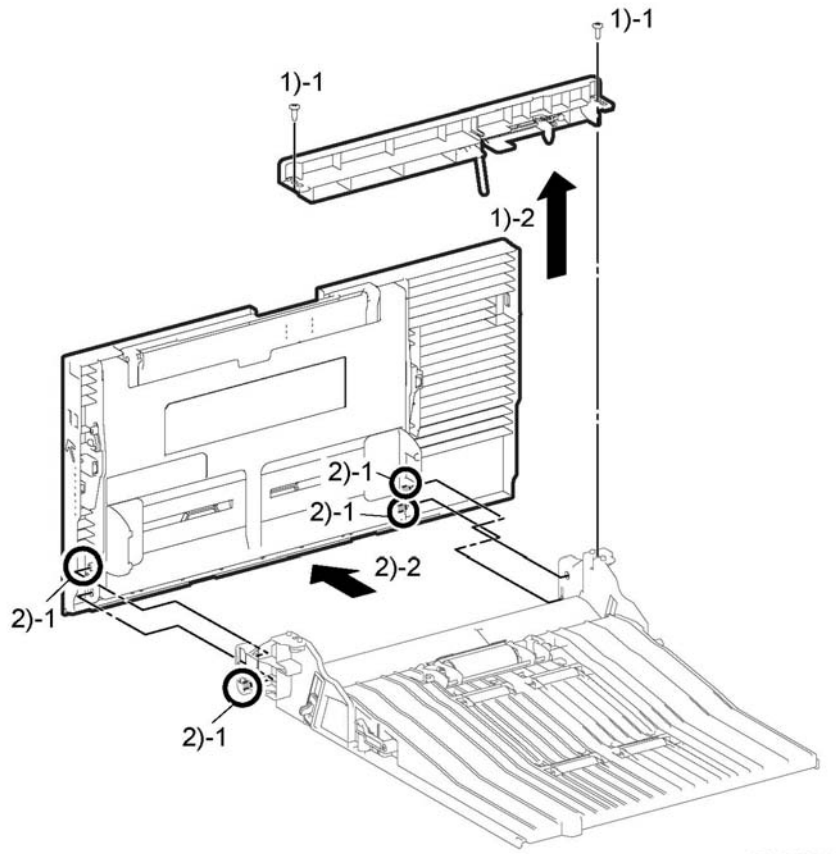
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Perform the items that follow, [Figure 1](#):
  - 1-1 Remove two screws (ST20).
  - 1-2 Remove the front bypass bar.
2. Perform the items that follow, [Figure 1](#):
  - 2-1 Flex the bypass chute to release the four bosses.
  - 2-2 Remove the bypass cover assembly.



E-8-0335-A

Figure 1 Remove the bypass cover assembly





## REP 14.1 Duplex Relay Cover

Parts List on [PL 14.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 rear cover assembly, [PL 19.2 Item 99](#).
2. Release two latches attaching the duplex relay cover, [PL 14.1 Item 5](#), to the rear cover assembly and remove.



## REP 15.1 Option Registration Chute

### Parts List on PL 15.1

#### Initial Action

Remove one of the following:

- Second bias roller transfer kit REP 18.10 (MFP)
- Second bias roller transfer kit REP 18.25 (MFP TALL)
- Second bias roller transfer kit REP 18.38 (SFP)

#### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 additional information about screws and fasteners, refer GP 41.

1. Remove the lower duplex chute, Figure 1:
  - 1 One screw.
  - 2 Duplex rear cover.
  - 3 Rotate the lower duplex chute 90° remove the lower duplex chute.

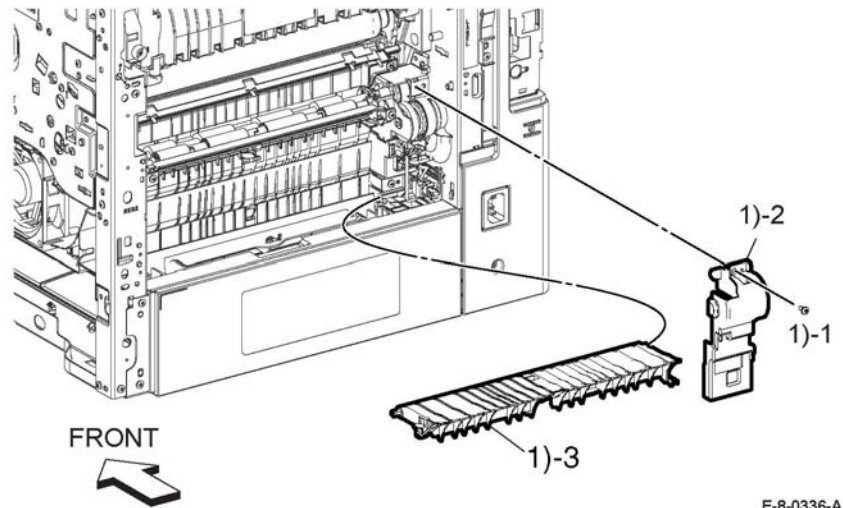


Figure 1 Lower duplex chute removal

2. Remove the optional 550 chute, Figure 2:

- 1 Release two hooks.
- 2 Remove the optional 550 chute.

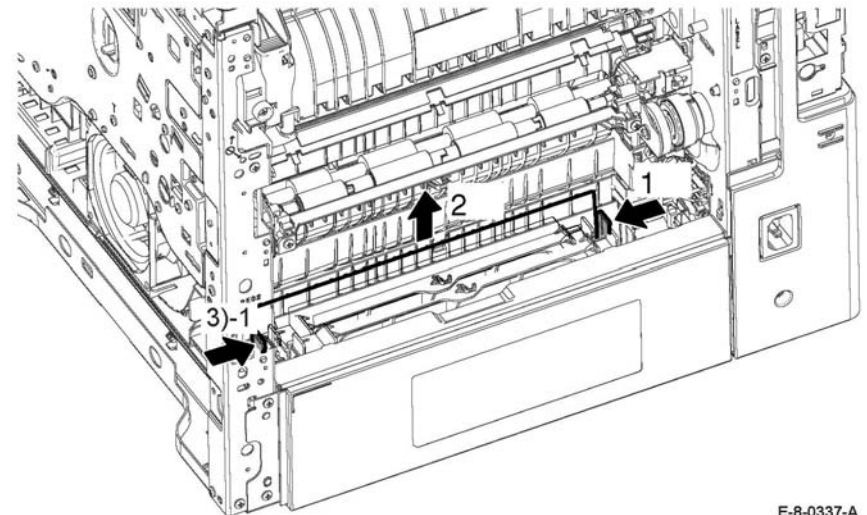
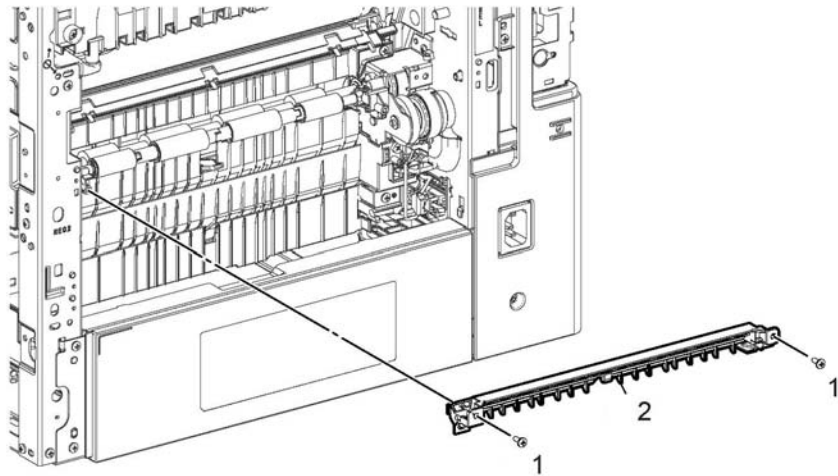


Figure 2 Optional 550 chute removal

3. Remove the upper duplex chute, **Figure 3**:

1 Two screws.

2 Upper duplex chute.



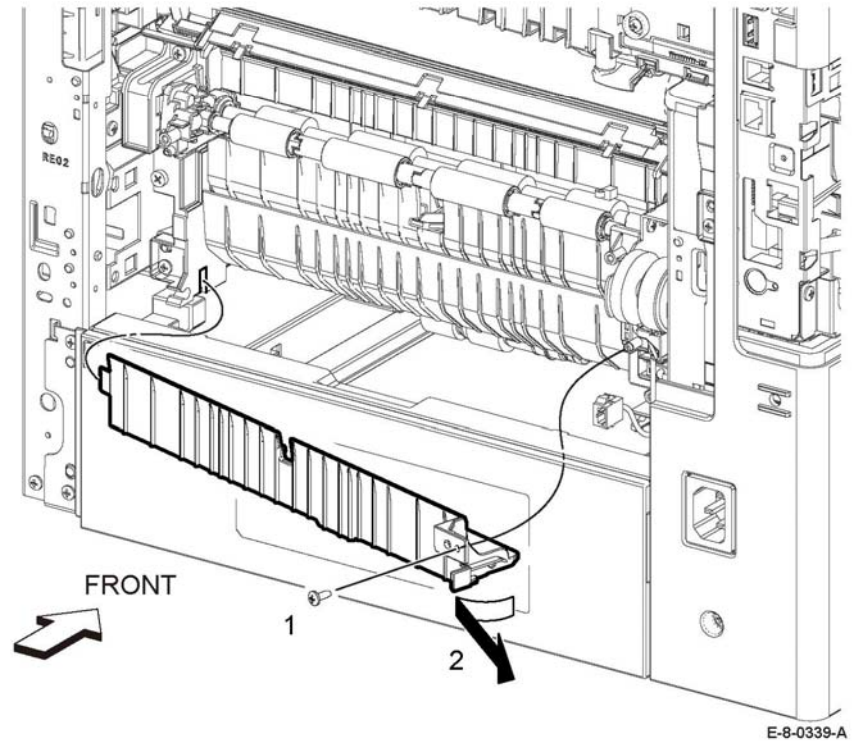
**Figure 3 Upper duplex chute removal**

E-8-0338-A

4. Perform the items that follow, **Figure 4**:

1 Remove one screw.

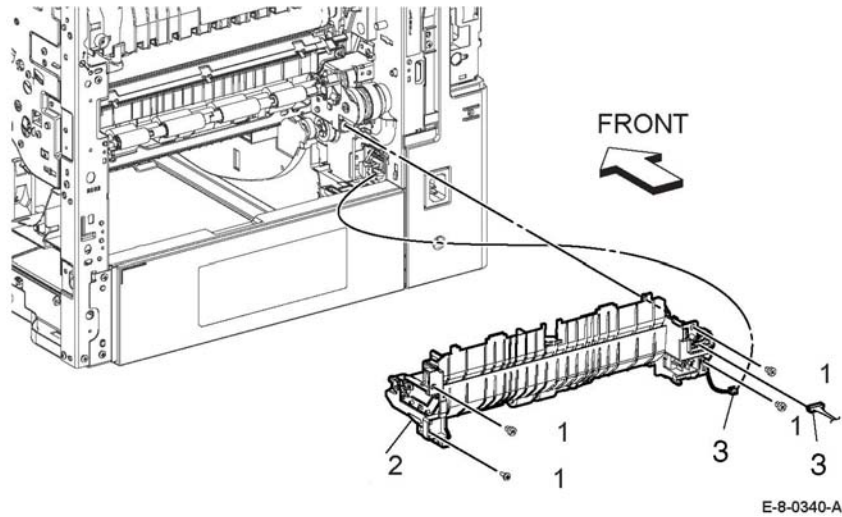
2 Pull the feeder chute out as shown.



**Figure 4 Feeder chute removal**

E-8-0339-A

5. Remove the feeder registration chute assembly, **Figure 5**:
  - 1 Four screws.
  - 2 Registration feeder chute assembly.
  - 3 Disconnect two connectors.



**Figure 5 Remove the feeder registration chute assembly**

E-8-0340-A

## Replacement

Replacement is the reverse of the repair procedure.

## REP 15.2 Duplex Registration Roller Assembly Kit

Parts List on [PL 15.1 Item 99](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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, [Figure 1](#).
  - a. Remove two screws (1).
  - b. Remove the upper chute assembly (2).

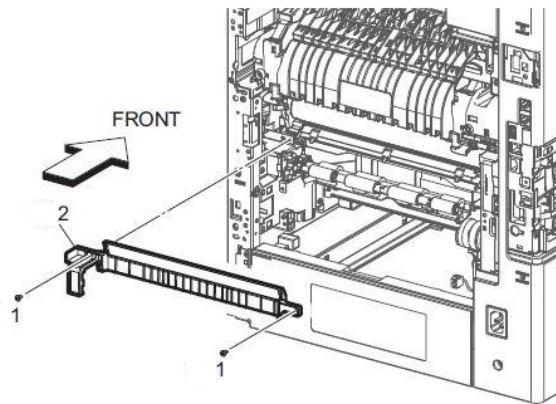


Figure 1 Remove the duplex registration roller assembly

VI04139XA

2. Remove the duplex registration roll assembly, [Figure 2](#):
  - a. Disconnect connector [P/J541](#) (1).
  - b. Remove two screws (2).

**NOTE:** When removing the Duplex Roller Registration Assembly, bearings and gears will move out of their seated positions. For easier replacement later, carefully observe the placement and orientation of bearings and gears at both ends of the roller assembly before removing it.

- c. Remove the two E-rings (3) from the duplex registration roller assembly.
- d. Remove three screws (4).
- e. Slide the duplex roll assembly in the direction of the arrow (5).
- f. Remove the duplex registration roll assembly in direction of the arrow (6).

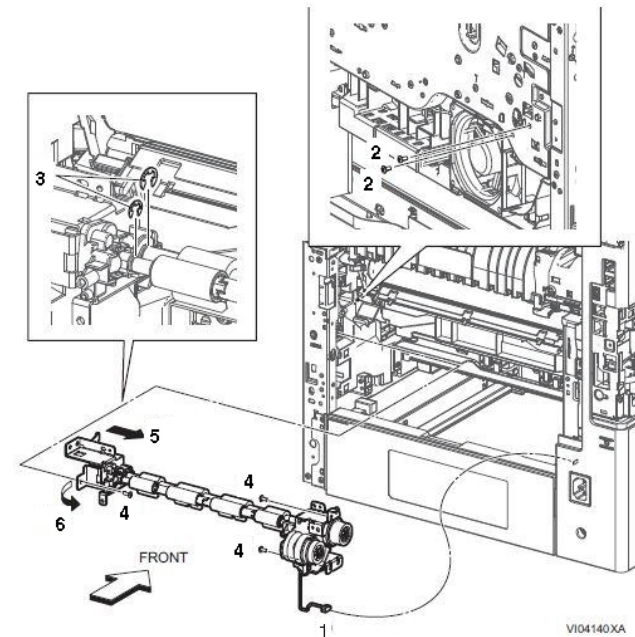


Figure 2 Remove the duplex registration roll assembly

VI04140XA

### Replacement

**NOTE:** Be sure to align bearings and gears at each end of the duplex registration roller assembly so they are fully seated in their positions.

For easier replacement, use the following order:

1. Align rollers, bearings, and gears into their final positions.
2. Snap the two E-rings into their positions.
3. Install the four screws (silver, M3x6mm).
4. Reattach the connector [P/J541](#).

## REP 15.3 Registration Chute Feeder Assembly

### Parts List on PL 15.1

#### Initial Actions

Remove one of the items that follow:

- Second BTR housing (MFP), REP 18.10.
- Second BTR housing (MFP-Tall), REP 18.25 .
- Second BTR housing (SFP), REP 18.38.

#### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 items that follow, Figure 1:

1-1 One screw.

1-2 Duplex rear cover.

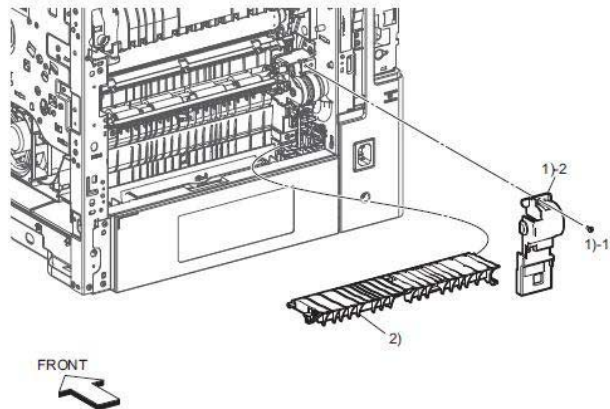


Figure 1 Remove lower duplex chute

VI04130XA

2. Remove the optional 550 chute, Figure 2:
  - a. Rotate the lower duplex chute 90° remove the lower duplex chute.
  - b. Release two hooks (1).
  - c. Remove the optional 550 chute (2) in the direction of the arrow.

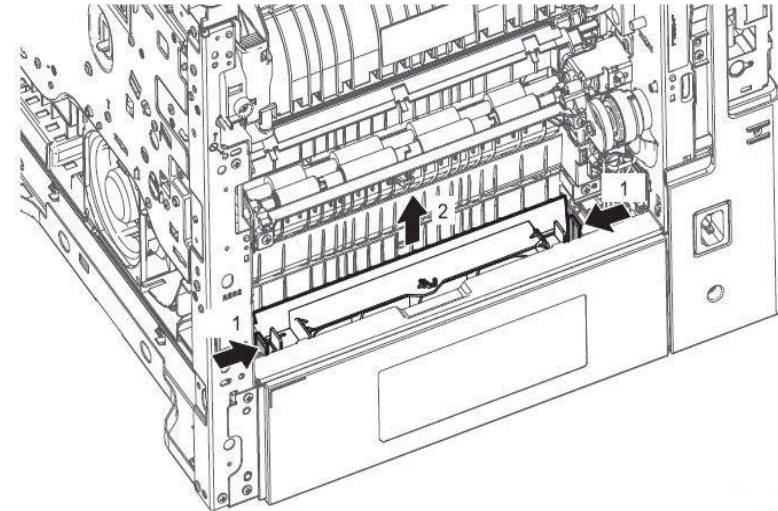
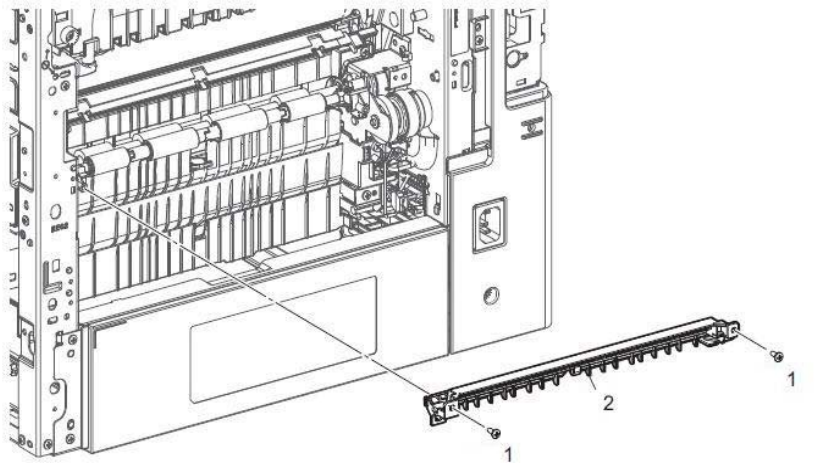


Figure 2 Remove the optional 550 chute

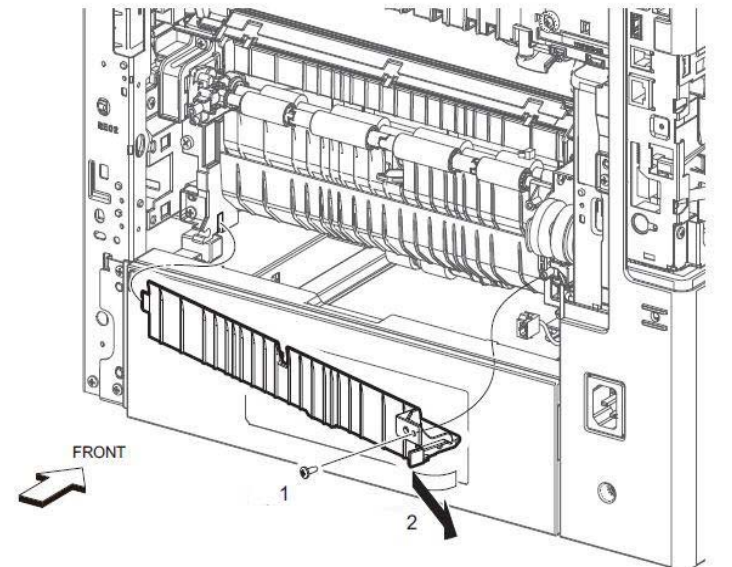
VI04131XA

3. Remove the upper duplex chute, **Figure 3**:
  - a. Remove two screws (1).
  - b. Remove the upper duplex chute (2).



**Figure 3 Remove upper duplex chute**

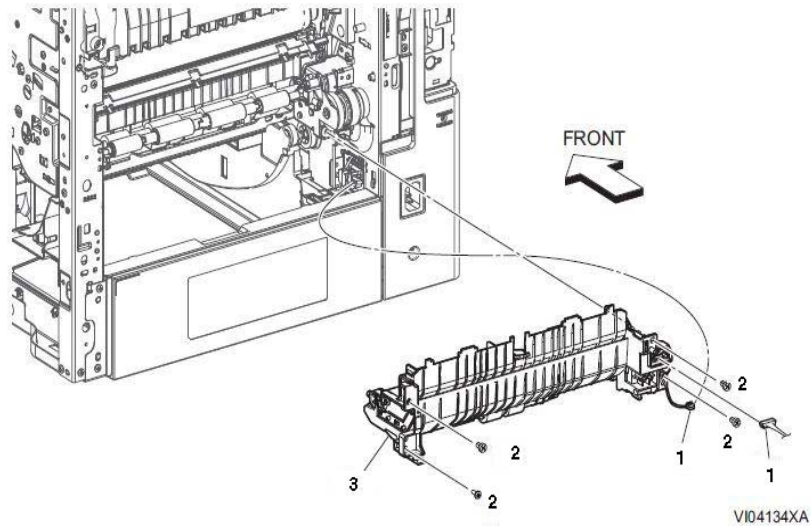
4. Remove the feeder chute, **Figure 4**:
  - Remove the screw (1).
  - Remove the feeder chute (2) in the direction of the arrow.



**Figure 4 Remove feeder chute**



5. Remove the registration feeder chute assembly, [Figure 5](#):
  - a. Disconnect two connectors (1), [P/J544](#), [P/J545](#).
  - b. Remove four screws (2).
  - c. Remove the registration feeder chute assembly (3).



**Figure 5 Remove registration chute assembly**

### Replacement

The replacement is the reverse of the removal procedure.

## REP 15.4 No Paper Actuator (Registration)

Parts List on [PL 15.1](#)

### Initial Action

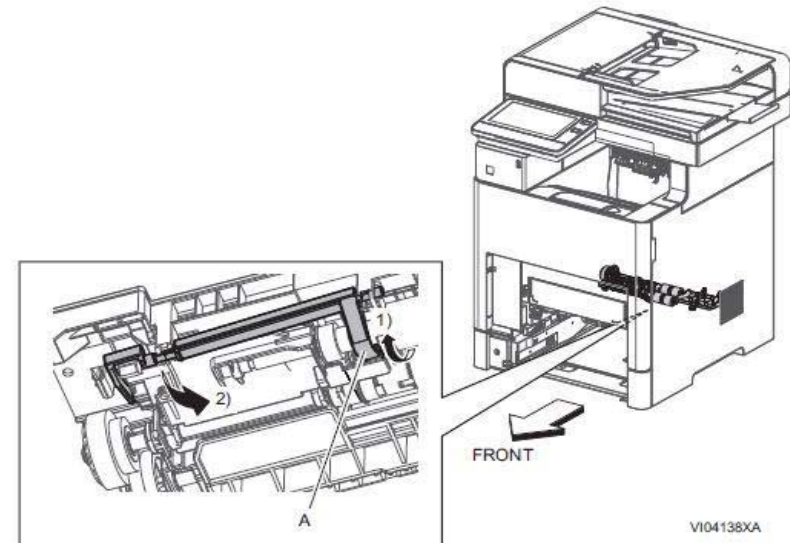
Remove the MSI bypass tray [REP 13.6](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 no paper actuator, [Figure 1](#):
  - a. Release the tab (A).
  - b. Remove the no paper actuator in the direction of the arrows.



**Figure 1 Remove the no paper actuator**

### Replacement

The replacement is the reverse of the removal procedure.

## REP 15.5 Registration Actuator

Parts List on [PL 15.2](#)

### Initial Action

Remove the registration chute feeder assembly [REP 15.3](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

*In the following step, avoid losing the spring from the end of the Registration Actuator when removing the actuator.*

1. Remove the registration actuator assembly, [Figure 1](#):
  - a. Rotate the registration actuator assembly in the direction of the arrow (1).
  - b. Remove the registration actuator assembly in the direction of the arrow (2).

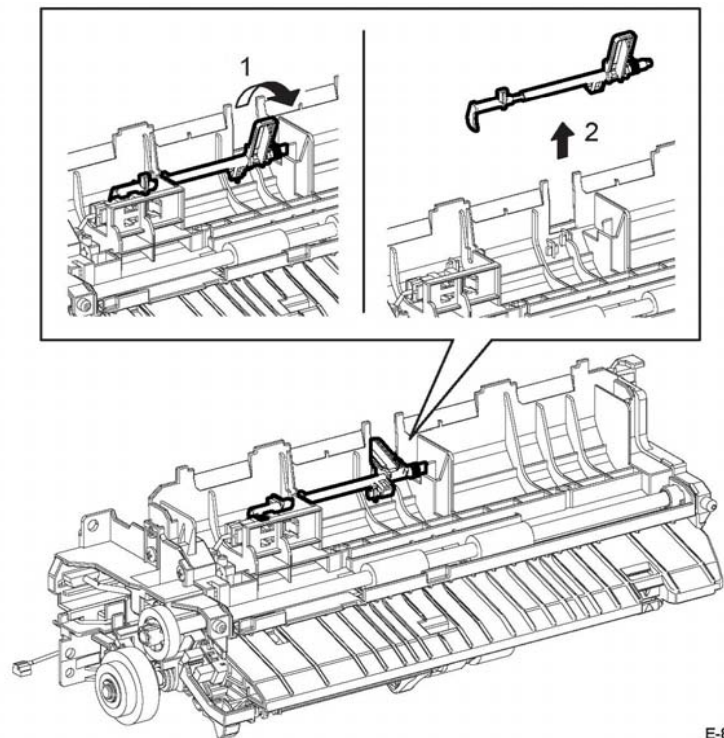


Figure 1 Remove the registration actuator assembly

### Replacement

The replacement is the reverse of the removal procedure.

## REP 15.6 Registration Sensor

Parts List on [PL 15.2 Item 13](#)

### Initial Action

Remove the registration chute feeder assembly, [REP 15.3](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 registration sensor, [Figure 1](#):
  - a. Release three hooks (1).
  - b. Lift up the registration sensor (2).
  - c. Disconnect connector [P/J546](#) (3), then remove the registration sensor (2).

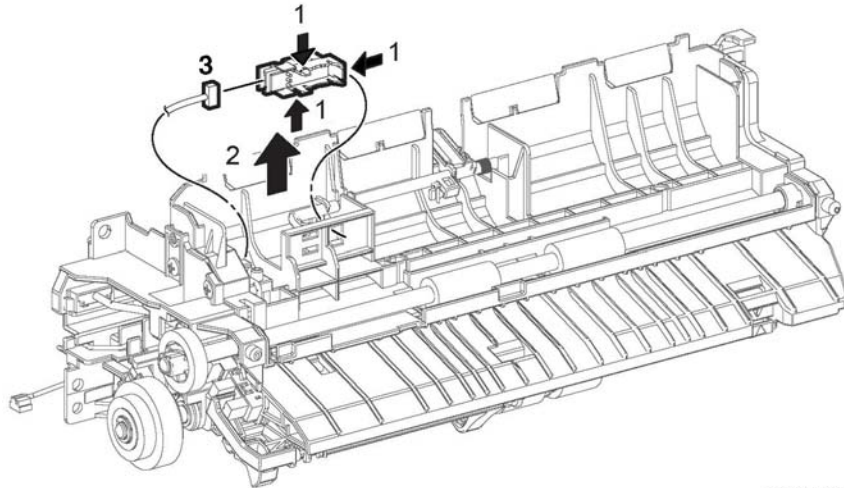


Figure 1 Remove the registration sensor

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## REP 15.7 Feed Roll Assembly

Parts List on [PL 15.2 Item 16](#)

### Initial Action

Remove the MSI bypass tray assembly, [REP 13.6](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Perform the items that follow, [Figure 1](#):
  - a. Remove the upper feed chute (1).
  - b. Remove the feed roll assembly in the direction of the arrows (2).

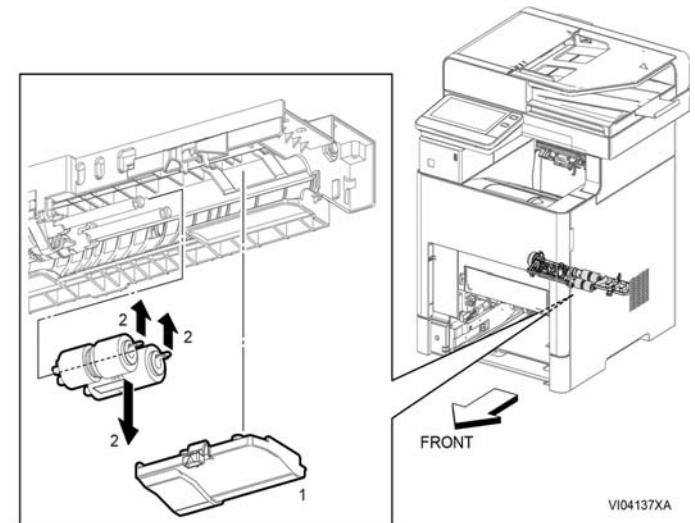


Figure 1 Remove upper feed chute

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### Replacement

The replacement is the reverse of the removal procedure.



## REP 17.1 Exit Chute Assembly

Parts List on [PL 17.1](#)

### Initial Action

#### WARNING

The Fuser is very hot. Take added care when handling the Fuser to avoid being burned.

Remove the fusing assembly, [REP 7.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. MFP-Tall and SFP models only, remove two screws (SM18) to remove plate A., [Figure 1](#).
2. MAP-Tall and SFP models only, remove four screws (SM18) to remove plate B, [Figure 1](#).

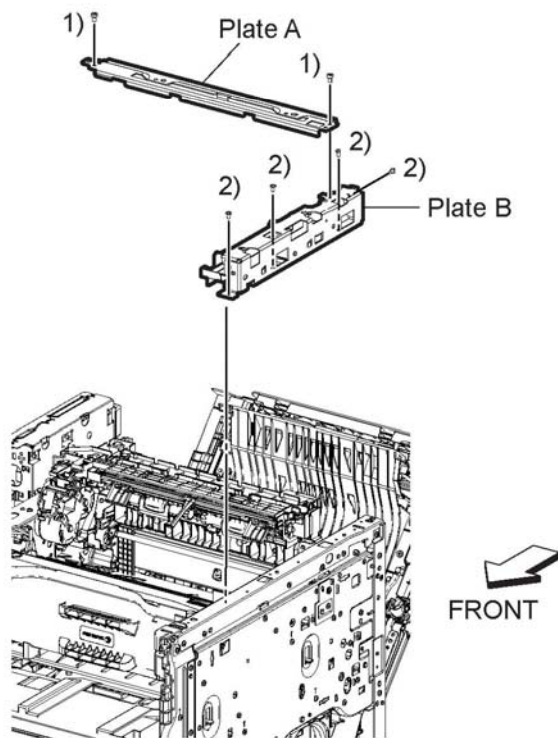


Figure 1 Remove plate A and B

#### CAUTION

When removing the exit chute assembly, do not turn the exit chute assembly over or part A may fall off, [Figure 3](#).

3. Remove the items that follow, [Figure 2](#):
  - 3-1 Two screws (SM18).
  - 3-2 Exit chute assembly.

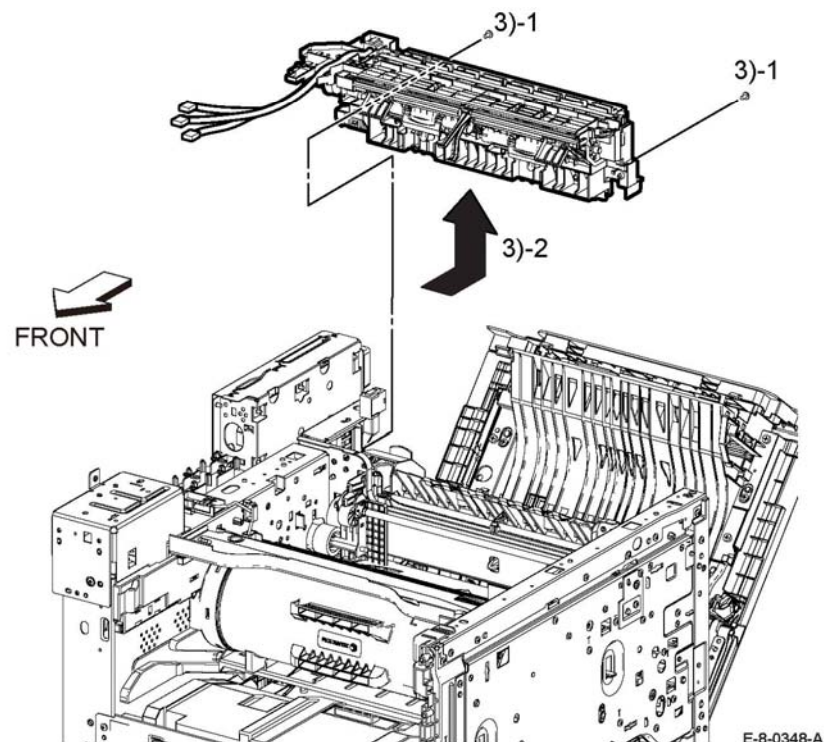


Figure 2 Remove exit chute assembly

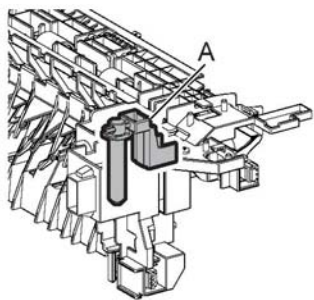


Figure 3 Chute exit assembly

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## REP 17.2 Main Exit Drive Assembly (High Model)

Parts List on [PL 17.1](#)

### Initial Action

Remove one of the items that follow:

- Top cover assembly, [REP 19.11](#), (MFP)
- Top cover assembly, [REP 19.20](#), (SFP)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

#### WARNING

The Fuser is very hot. Take added care when handling the Fuser to avoid being burned.

1. Disconnect connectors [P/J460](#), [P/J466](#), [P/J468](#), [Figure 1](#).
2. Release the harness from the harness guide.

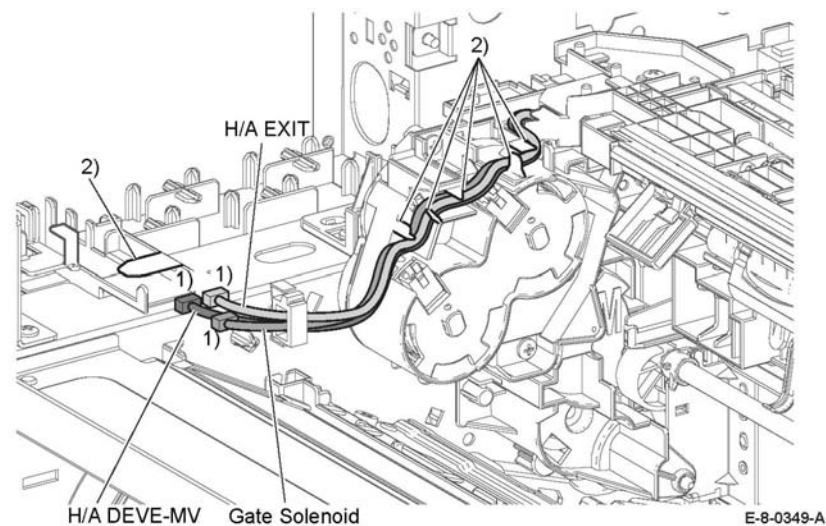


Figure 1 Removing the main exit harness

3. Perform the items that follow, [Figure 2](#):
  - 3-1 Disconnect connectors [P/J461](#), [P/J462](#).
  - 3-2 Release the harness from the harness guide.
4. Remove the items that follow, [Figure 2](#):
  - 4-1 Two screws (ST20).

4-2 Main exit drive assembly.

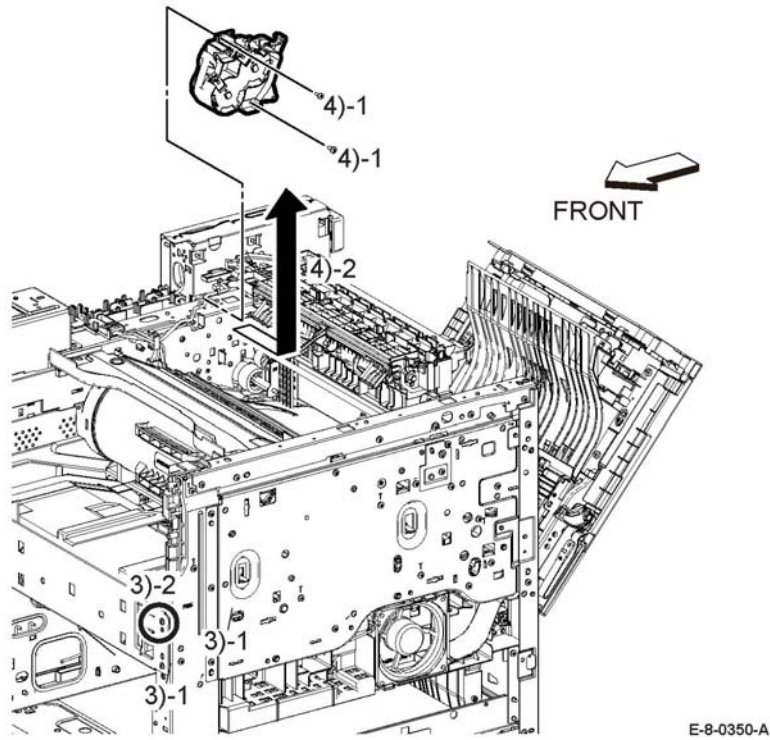


Figure 2 Remove the main exit drive assembly

### Replacement

When re-connecting the connectors P/J461, P/J462 onto the Exit Drive, refer to Figure 2 to ensure each harness is connected to the correct terminal.

## REP 17.3 Full Stack Sensor (High Model)

Parts List on [PL 17.1 Item 6](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

The Fuser is very hot. Take added care when handling the Fuser to avoid being burned.

**NOTE:** For additional information about screws and fasteners, refer [GP 41](#).

1. Perform the items that follow, [Figure 1](#):
  - 1-1 Rotate the full stack actuator.
  - 1-2 Remove the full stack sensor.

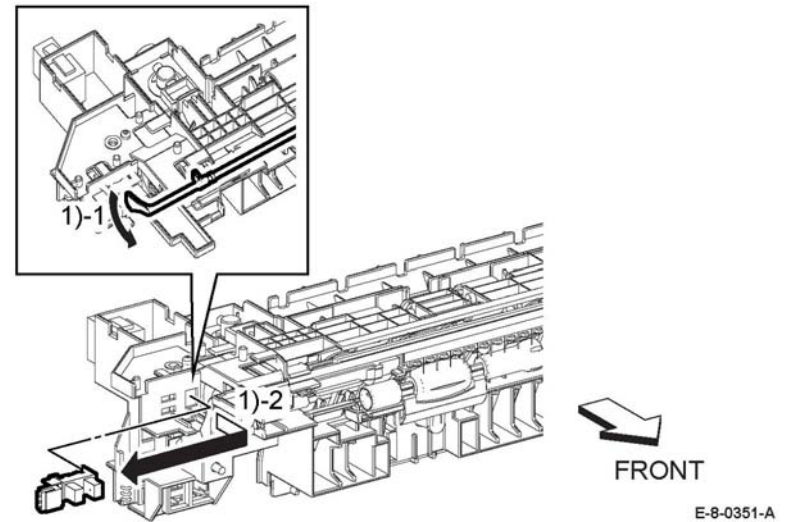


Figure 1 Remove the full stack sensor

### Replacement

The replacement is the reverse of the removal procedure.

## REP 17.4 Full Stack Actuator

Parts List on [PL 17.1 Item 7](#)

### Initial Action

Remove the exit chute assembly, [REP 17.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Perform the items that follow, [Figure 1](#):
  - 1-1 Remove two screws (ST20).
  - 1-2 Release the upper side of the exit chute assembly.
2. Release the hooks and remove the lower exit top cover with the exit flapper chute, [Figure 1](#).
3. Remove the stack full actuator.

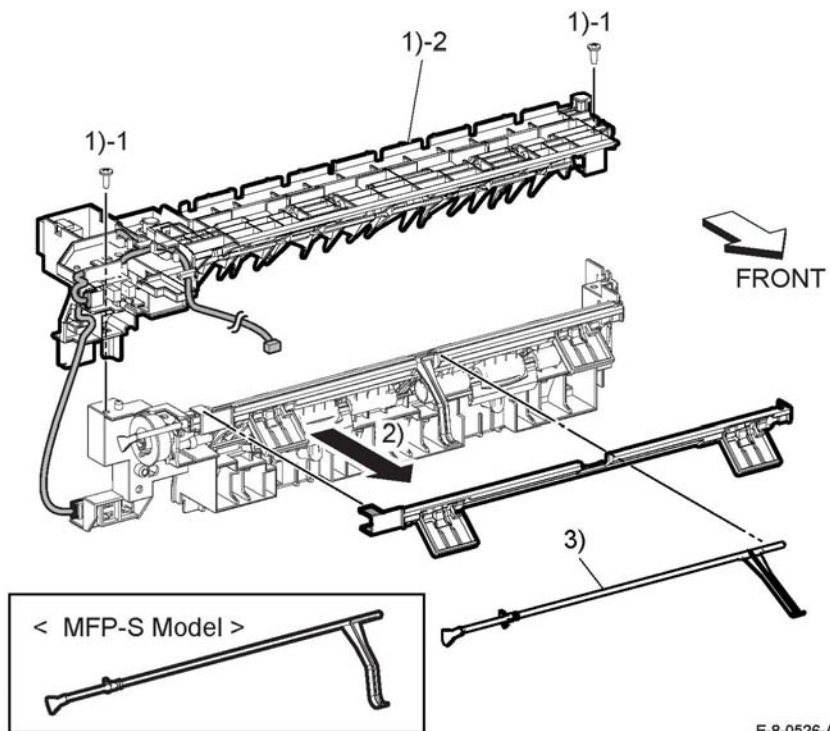


Figure 1 Remove the stack full actuator

### Replacement

The replacement is the reverse of the removal procedure.



## REP 18.1 MCU PWB

### Parts List on [PL 18.1 Item 1](#)

#### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

1. Before starting removal, print a configuration page and verify the software version.
2. Install a new MCU PWB, [PL 18.1 Item 1](#).
3. Print a configuration page again.
4. Verify the software version, update the software, [GP 9](#) if not the current version.

#### CAUTION

Never install a new MCU PWB and a new ESS PWB at the same time. The data is saved on the EMMC card chip of the ESS PWB.

**NOTE:** Observe the following when removing or replacing the MCU PWB:

- Do not install a new MCU PWB and a new ESS PWB at the same time. The data is saved on the EMMC Card on the ESS PWB. Install a new MCU PWB first, and then install a new ESS PWB. At the time of each replacement, turn on the printer to restore the data into the MCU PWB or ESS PWB.

Replace MCU PWB > Cycle pwr ON/OFF > Replace ESS PWB > Cycle pwr ON/OFF

- It is not necessary to back-up or restore data saved on the ESS PWB by Diagnostic, etc. The data is automatically backed-up when the printer is turned off or in the Deep Sleep mode. When the printer is turned on, mismatched information is detected on the MCU PWB, and then the information is corrected to be matched and restored into the MCU PWB

**NOTE:** For additional information about screws and fasteners, refer [GP 41](#).

1. Remove the 550 IOT feed tray assembly [REP 9.1](#).
2. Remove the main bypass tray, [REP 13.6](#)
3. Remove the ESS window kit assembly [REP 19.17](#).
4. Remove the WIFI cap [REP 19.16](#).
5. Remove the front cover assembly [REP 19.1](#).
6. Remove the left front cover, LED PWB and shade tray cover, [REP 19.10](#).
7. Remove the left side cover, [REP 19.7](#).

#### CAUTION

In the following step, engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

**NOTE:** When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in [Figure 1](#).

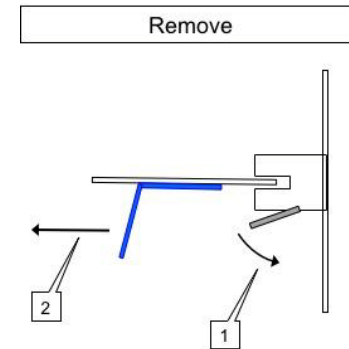


Figure 1 Proper Removal of the FFC Cable

8. Disconnect connectors [P/J100](#), [P/J110](#), [P/J130](#), [P/J140](#), [P/J190](#), [P/J200](#), [P/J270](#), [P/J280](#), [P/J290](#), [P/J460](#), [P/J480](#), [P/J540](#), [P/J550](#), [P/J570](#), [P/J800](#) and the FFC [P/J300](#), [Figure 2](#).
9. Remove the items that follow, [Figure 2](#):
  - 9-1 Four screws (SM18).
  - 9-2 MCU PWB.

## Replacement

### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

**NOTE:** To ensure integrity of the FFC connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the FFC cable.
2. To ease installation and ensure proper alignment of the FFC cable, bend the blue "grip tab" 90 degrees perpendicular to the FFC.
3. Grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector, [Figure 3](#) and [Figure 4](#).

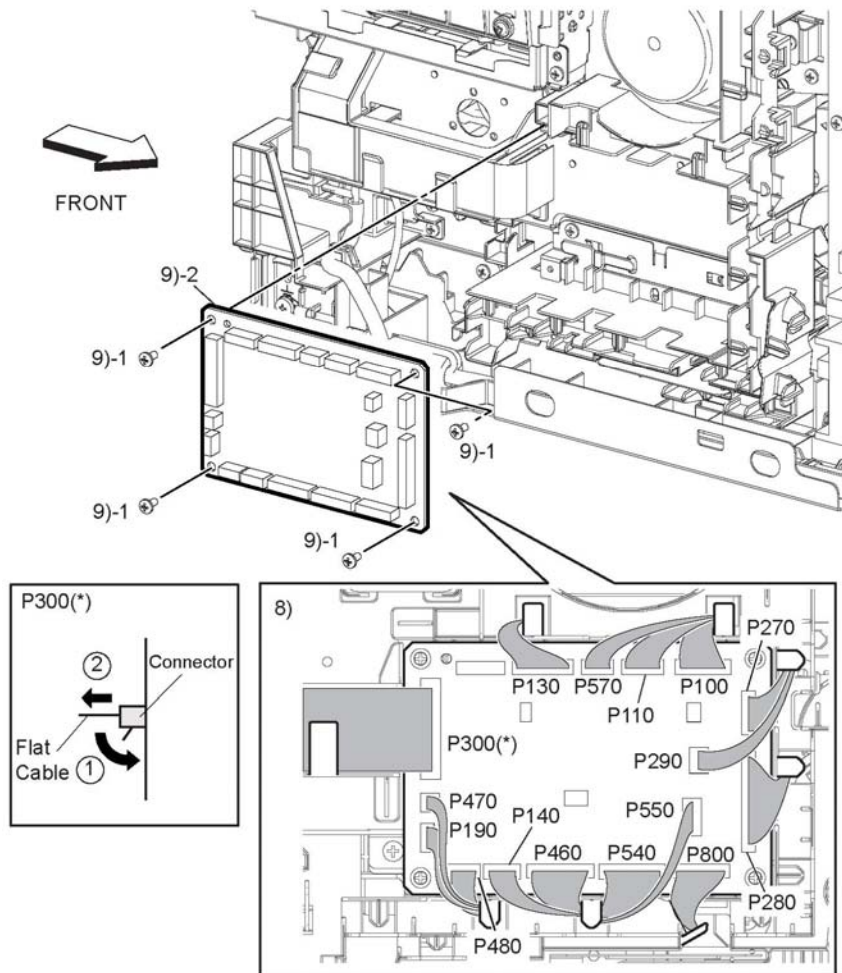


Figure 2 Remove the MCU PWB

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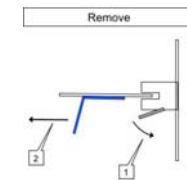


Figure 3 Cable Removal

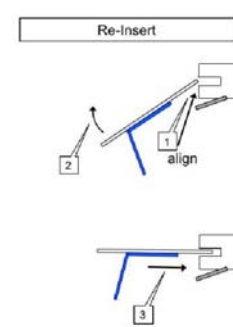


Figure 4 Cable perpendicular insertion

4. Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will "click" when fully seated, locking the FFC in-place.

## REP 18.2 ESS MCU FCC

Parts List on [PL 18.1 Item 2](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 additional information about screws and fasteners, refer [GP 41](#).

1. Remove the 550 IOT feed tray assembly [REP 9.1](#).
2. Remove the main bypass tray, [REP 13.6](#)
3. Remove the ESS window kit assembly [REP 19.17](#).
4. Remove the HDD assembly [PL 18.1 Item 27](#).
5. Remove the WIFI cap [REP 19.16](#).
6. Remove the front cover assembly [REP 19.1](#).
7. Remove the left front cover, LED PWB and shade tray cover, [REP 19.10](#).
8. Remove the left side cover, [REP 19.7](#).
9. Perform the items that follow, [Figure 1](#):
  - 9-1 Remove two screws (SM18).
  - 9-2 Remove the lower ESS plate.
10. Perform the items that follow, [Figure 1](#):
  - 10-1 Remove two screws (SM18).
  - 10-2 Remove the HDD bracket.

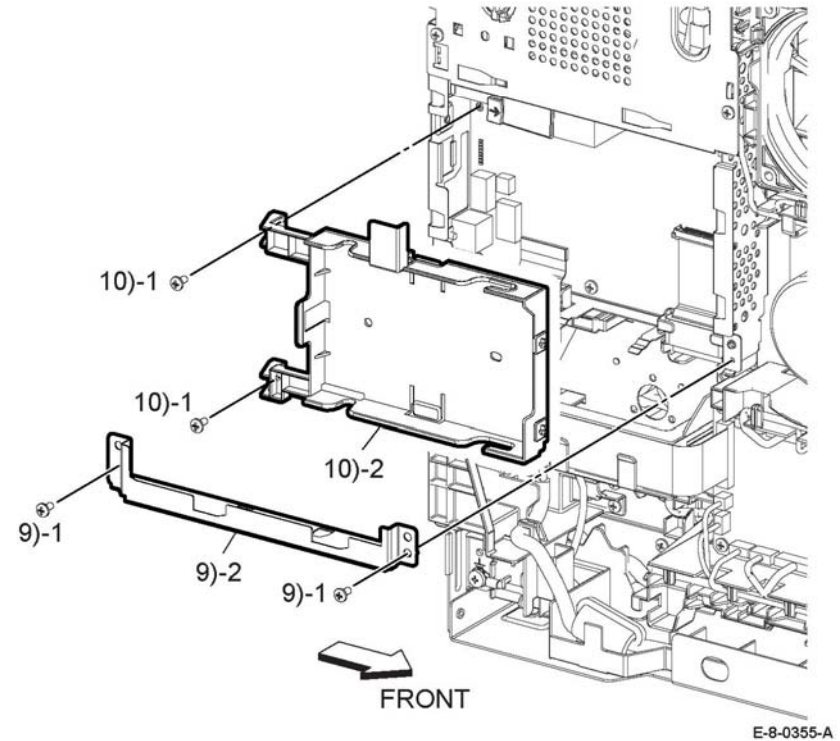


Figure 1 Remove the HDD bracket

### CAUTION

Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 2.

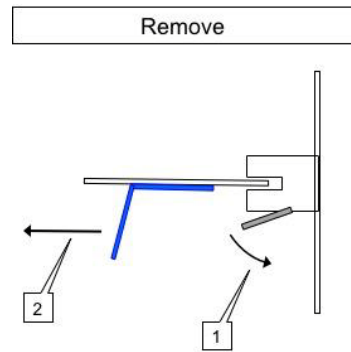


Figure 2 Removal

11. Perform the items that follow, Figure 3:
  - 11-1 Disconnect connectors P/J300, P/J335.
  - 11-2 Remove the ESS MCU FCC cable.
12. Perform the items that follow, Figure 3:
  - 12-1 Release three hooks.
  - 12-2 Remove the ESS MCU FCC.

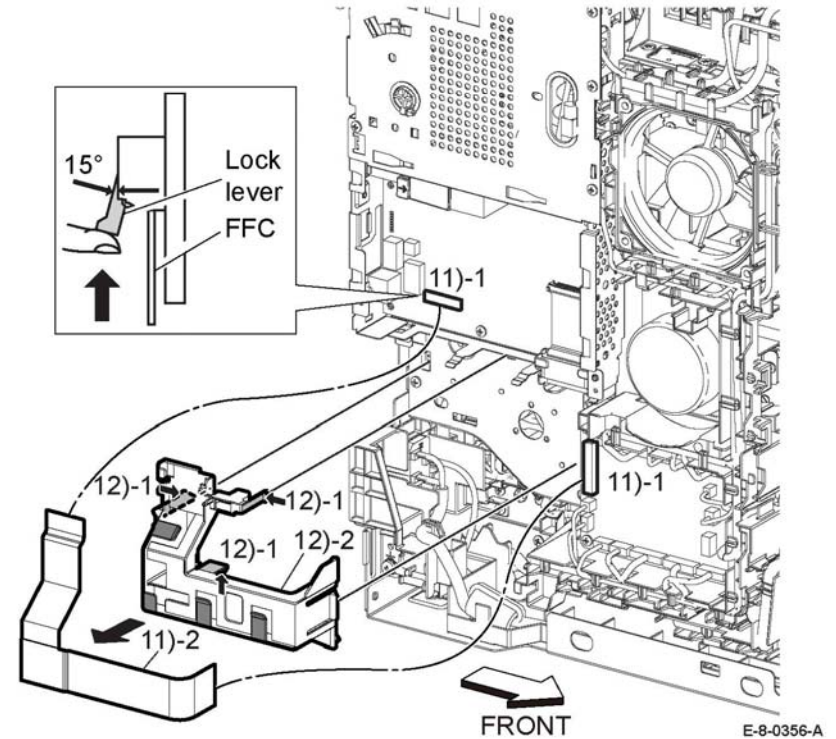


Figure 3 Remove the ESS MCU FCC.

### Replacement

NOTE: To ensure integrity of the ESS MCU FFC, PL 18.1 Item 2, cable, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the ESS FFC MCU cable.
2. To ease installation and ensure proper alignment of the ESS MCU FFC cable, bend the blue "grip tab" 90 degrees perpendicular to the ESS MCU FFC.
3. Grasp the grip tab of the ESS MCU FCC cable placing the back, or non-conductive side, of the ESS MCU FCC cable against the edge of the connector and centered to the connector, Figure 4 and Figure 5.

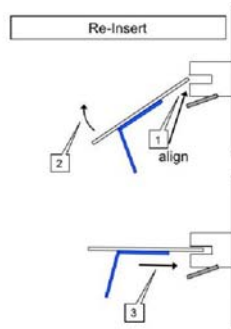


Figure 4 Cable Perpendicular Insertion

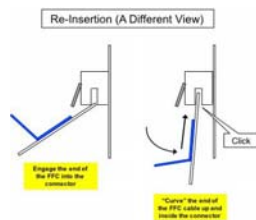


Figure 5 Cable Parallel Connector Insertion

4. Using the grip tab bent at 90 degrees, firmly push the ESS MCU FCC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FCC in-place.

## REP 18.3 ESS PWB

Parts List on [PL 18.1 Item 5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

1. Before starting removal, print a configuration page and verify the software version.
2. Install a new ESS PWB.
3. Print a configuration page again.
4. Verify the software version, update if not the current version, [GP 9](#).

#### CAUTION

Never install a new MCU PWB and a new ESS PWB at the same time.

**NOTE:** For additional information about screws and fasteners, refer [GP 41](#).

**NOTE:** Observe the following when removing or replacing the ESS PWB:

- Do not install a new MCU PWB and a new ESS PWB at the same time. The data is saved on the EMMC Card on the ESS PWB. Install a new MCU PWB first, and then install a new ESS PWB. At the time of each replacement, turn on the printer to restore the data into the MCU PWB or ESS PWB.

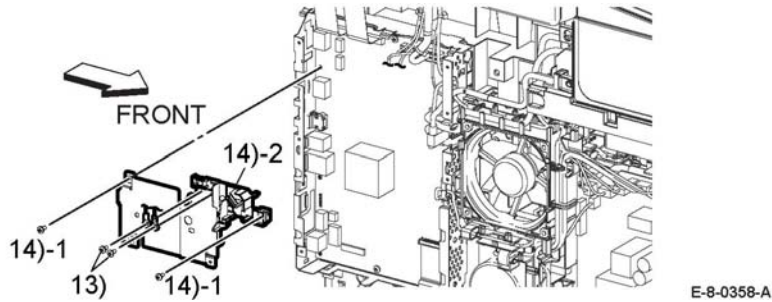
Replace MCU PWB > Switch the machine off then on [GP 4](#) > Replace ESS PWB > Switch the machine off then on [GP 4](#).

- It is not necessary to back-up or restore data saved on the ESS PWB by Diagnostic, etc. The data is automatically backed-up when the printer is switched off or in the Deep Sleep mode. When the printer is turned on, mismatched information is detected on the MCU PWB, and then the information is corrected to be matched and restored into the MCU PWB.
- **When replacing the ESS PWB, it is necessary to move the EMMC Card from the original ESS PWB to the replacement ESS PWB.**

Avoid using excessive pressure to remove or install the EMMC Card. Follow proper electrostatic discharge procedures to prevent damage to the ESS Card during replacement.

1. Remove the 550 IOT feed tray assembly [REP 9.1](#).
2. Remove the main bypass tray, [REP 13.6](#)
3. Remove the ESS window kit assembly [REP 19.17](#).
4. Remove the HDD assembly [PL 18.1 Item 27](#).
5. Remove the WIFI cap [REP 19.16](#).
6. Remove the front cover assembly [REP 19.1](#).
7. Remove the left front cover, LED PWB and shade tray cover, [REP 19.10](#).
8. Remove the left side cover, [REP 19.7](#).
9. Remove the top ESS plate, [PL 18.1 Item 18](#)
10. Remove the FAX PWB, [REP 18.4](#).
11. Remove the guide color FFC MCU, [PL 18.1 Item 7](#).

12. Remove the ESS FFC MCU, [REP 18.2](#).
13. Remove the two screws (silver, M3x6mm) attaching the earth cable to the FAX plate, [Figure 1](#).
14. Perform the items that follow, [Figure 1](#):
  - 14-1 Remove two screws (SM18).
  - 14-2 Remove the FAX plate assembly.

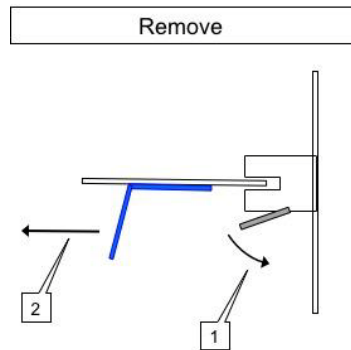


**Figure 1 Remove the FAX plate**

**CAUTION**

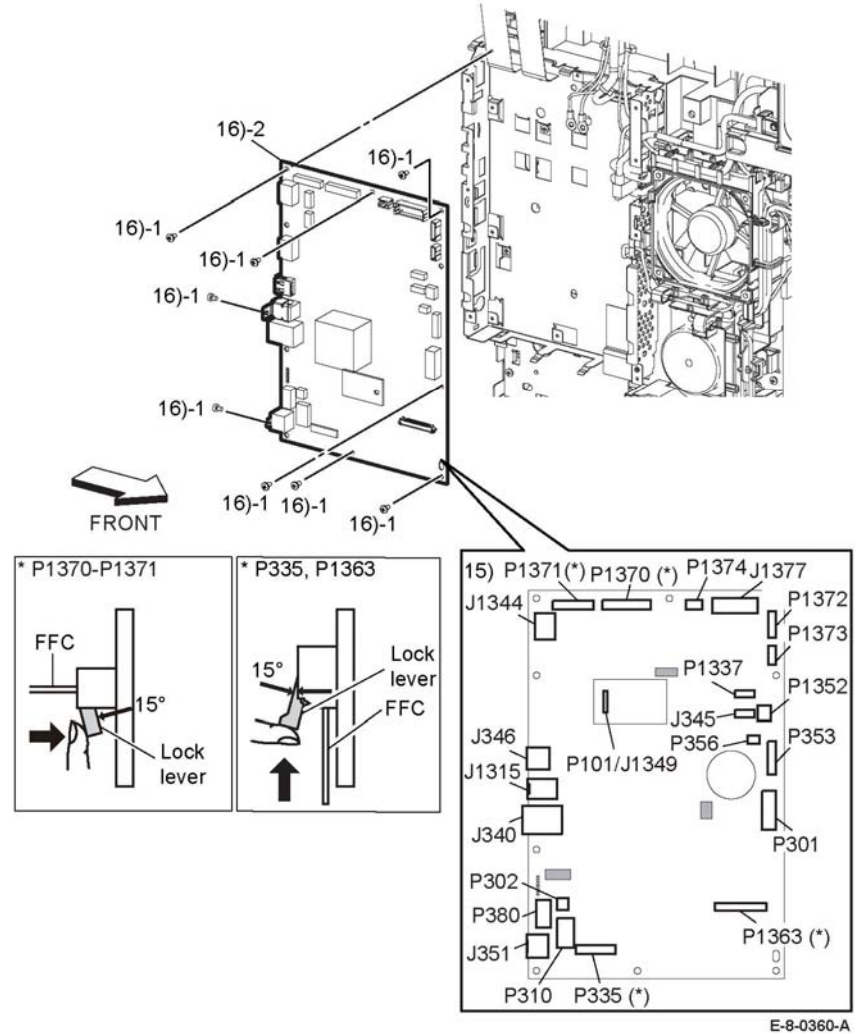
*Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.*

*NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in [Figure 2](#).*



**Figure 2 Removal**

- 16-1 Remove six screws (SM18) and two screws (SM1).
- 16-2 Remove the MFP ESS PWB.



**Figure 3 Remove the PWB ESS.**

15. Disengage the connectors, P/J301, P/J345, P/J1337, P/J1352, and the FFCs P/J335, P/J1363, [Figure 3](#).
16. Perform the items that follow, [Figure 3](#):
17. **Disconnect all Cables**, carefully move the harnesses out of the way and remove the ESS PWB from the frame leaving all harnesses and guides in-place, [Figure 4](#).



Figure 4 Disconnect all Cables

18. Lift the Bottom Right Corner from the ESS Frame, carefully ease the ESS PWB from the ESS Frame, Figure 5.



Figure 5 Lift the Bottom Right Corner from the ESS Frame

19. Slide the ESS PWB from the Right Side of the ESS Frame, carefully ease the ESS PWB out of the ESS Frame, Figure 6.



Figure 6 Slide the ESS PWB from the Right Side of the ESS Frame

20. Slide the ESS PWB Out of the ESS Frame, to remove the ESS PWB from the ESS Frame entirely, Figure 7.



Figure 7 Remove the ESS PWB from the ESS Frame

21. The ESS PWB removal is complete. **Removal Complete with FCC Guides Remaining In-place**, Figure 8



Figure 8 Removal Complete with FCC Guides Remaining In-place

## Replacement

### CAUTION

*Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.*

1. Be sure to move the EMMC Card from the original ESS PWB to the new one.

**NOTE:** To ensure integrity of the five FFC cables connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

2. Slip the core down the FFC cable.
3. To ease installation and ensure proper alignment of the FFC cable, bend the blue “grip tab” 90 degrees perpendicular to the FFC.
4. **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector, Figure 9 and Figure 10.

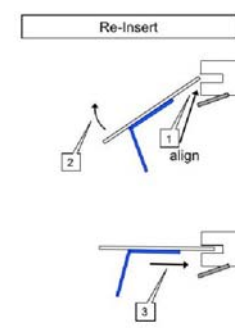


Figure 9 Cable Perpendicular Insertion

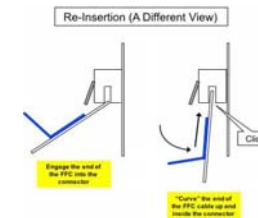


Figure 10 Cable Parallel Insertion

5. Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.



## REP 18.4 FAX PWB

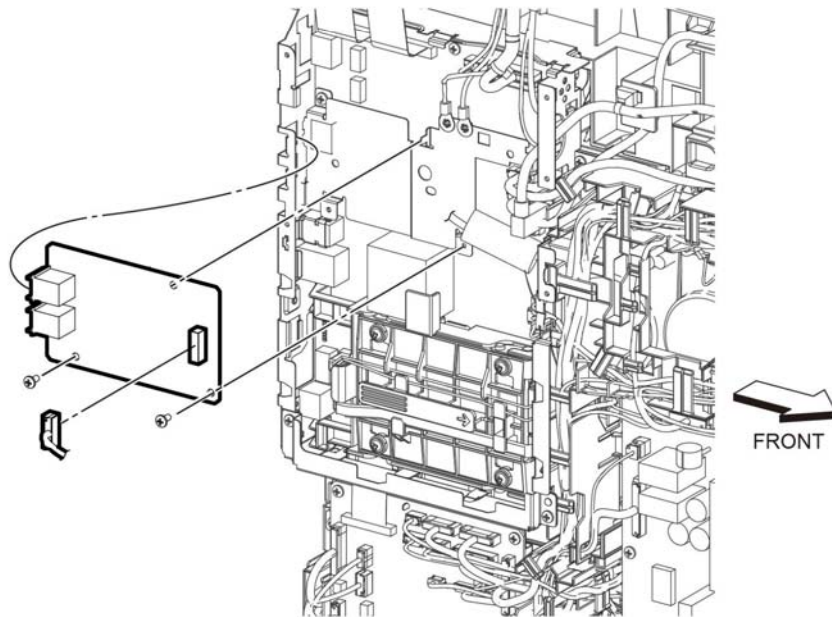
Parts List on [PL 18.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 side cover, [PL 19.2 Item 2](#).
2. Remove the ESS Top plate, [PL 18.1 Item 18](#).
3. Unplug the connector (P/J1350) from the FAX PWB.
4. Refer to [Figure 1](#), to remove the two screws (silver, M3x6mm) attaching the FAX PWB.



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Figure 1 Remove the FAX PWB

## REP 18.5 ICCR USB Harness Assembly

Parts List on [PL 18.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 UI harness, [PL 1.1 Item 5](#).
2. Unplug the connector (P/J345).
3. Release the USB ICCR harness assembly, [PL 18.1 Item 13](#), from the DC harness guide, [PL 18.3 Item 9](#), and the guides on the top cover, [PL 19.1 Item 15](#).
4. Refer to [Figure 1](#), remove one screw (SM3, silver, M4X6mm), one screw (ST20, screw for plastic silver, tapping, M3x8) and remove the USB ICCR harness assembly and the USB ICCR bracket, [PL 18.1 Item 31](#), from the top cover.
5. Refer to [Figure 1](#), remove two screws (SM18, silver, M3X6mm) to remove the USB ICCR harness assembly from the USB ICCR bracket.

## REP 18.6 Front USB Harness Assembly

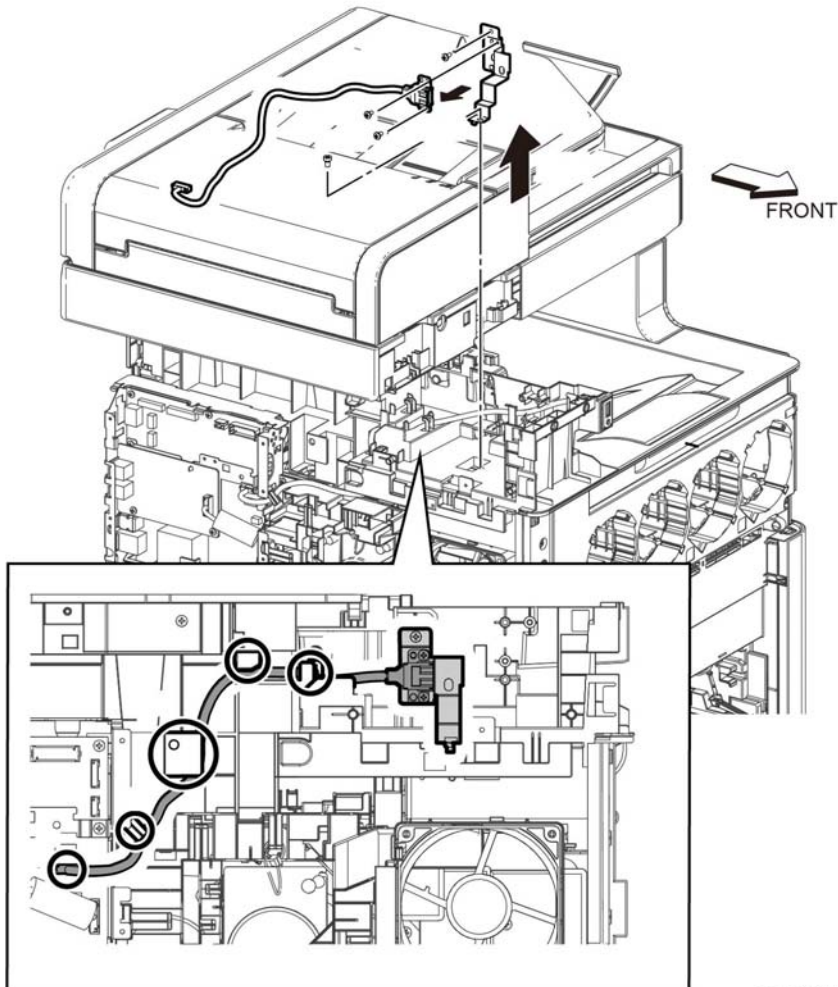
Parts List on [PL 18.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 UI harness, [PL 1.1 Item 5](#).
2. Unplug the connector (P/J1337).
3. Refer to [Figure 1](#), release the front USB harness assembly, [PL 18.1 Item 14](#), from the DC guide harness, [PL 18.3 Item 9](#), and the guides on the top cover, [PL 19.1 Item 15](#).
4. Refer to [Figure 1](#), remove one screw (SM3, silver, M4X6mm), and one screw (ST20, screw for plastic, silver, tapping, M3x8) to remove the front USB harness assembly and the USB bracket, [PL 18.1 Item 32](#), from the top cover.
5. Release the Front USB Harness from the harness guide.
6. Refer to [Figure 1](#), remove one screw (SM18, silver, M3X6mm) to remove the front USB harness assembly from the USB bracket.



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Figure 1 Remove the USB ICCR harness assembly

### Replacement

Replacement is the reverse of the removal procedure.

## REP 18.7 LVPS PWB

Parts List on [PL 18.1](#)

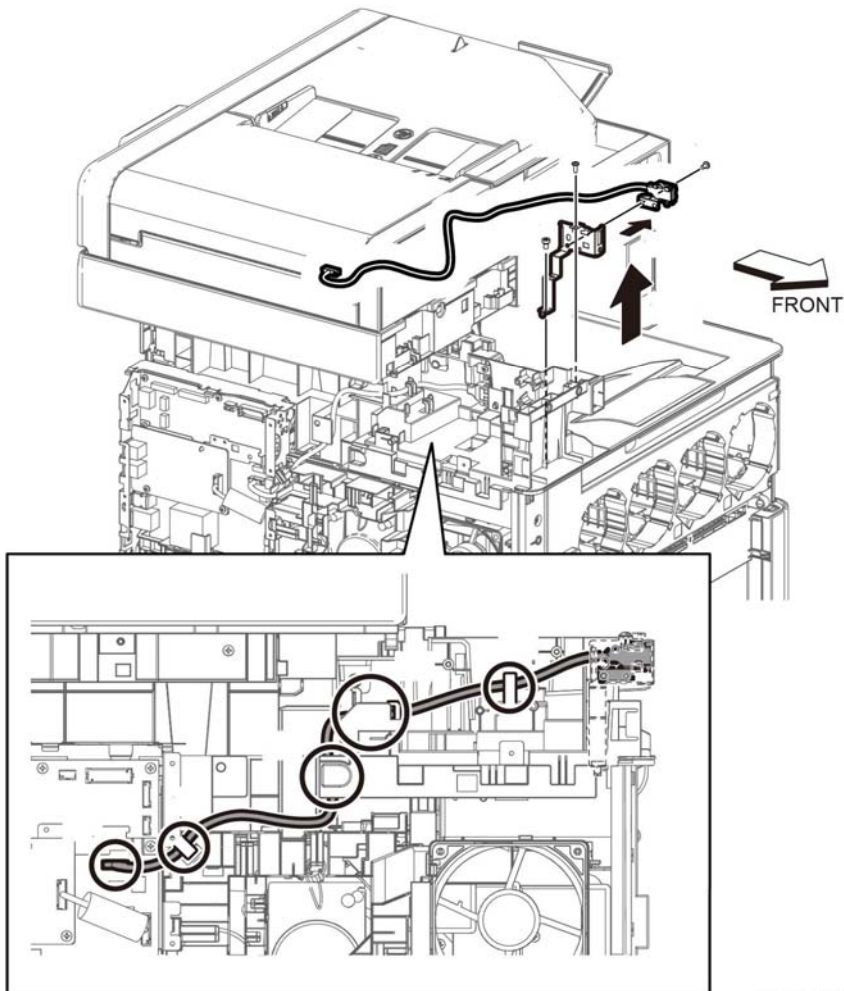
Parts List on [PL 18.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 side cover, [PL 19.2 Item 1](#).
2. Disconnect all connectors from the LVPS, [Figure 1](#).
3. Remove the seven screws (M18, silver, M3x6mm) attaching the LVPS PWB to the LVPS plate and remove the LVPS, [Figure 1](#).



D-8-0162-A

Figure 1 Remove the front USB harness assembly

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

## REP 18.8 HVPS PWB

Parts List on [PL 18.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LPH mono head assembly, [REP 2.1](#).
2. Remove the HVPS cover, [Figure 1](#):
  - a. Release three hooks (1), on the front side of the HVPS cover.
  - b. Release one hook (2), on the back side of the HVPS cover, then remove the HVPS cover (3).

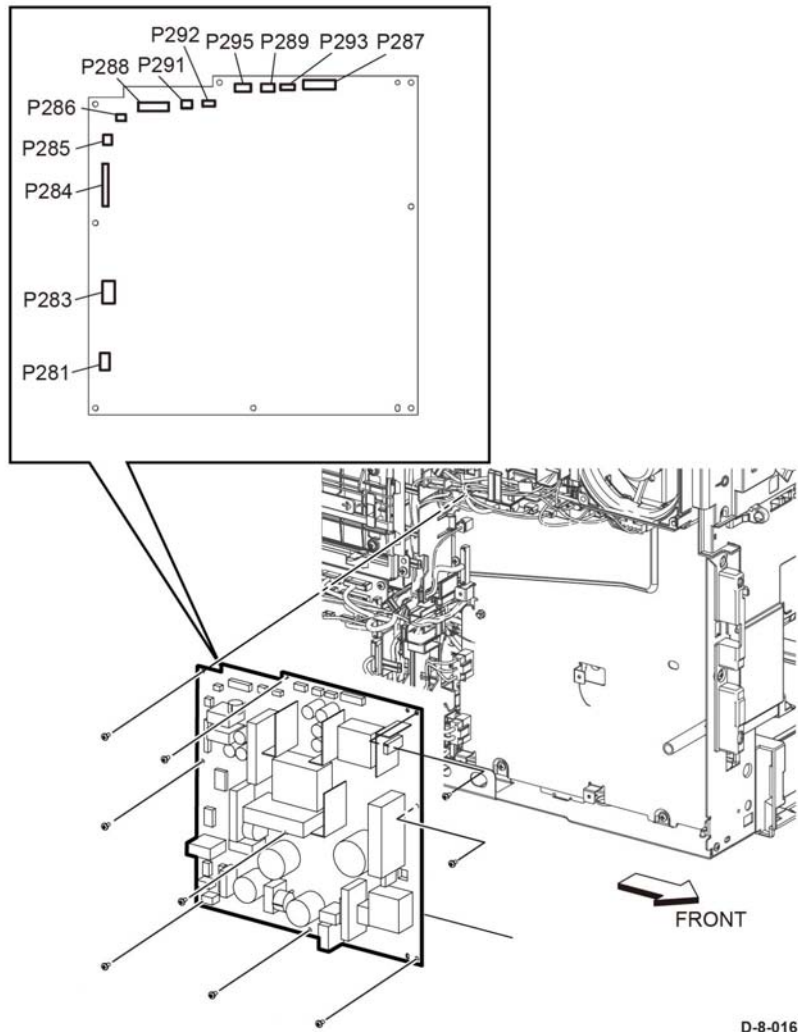
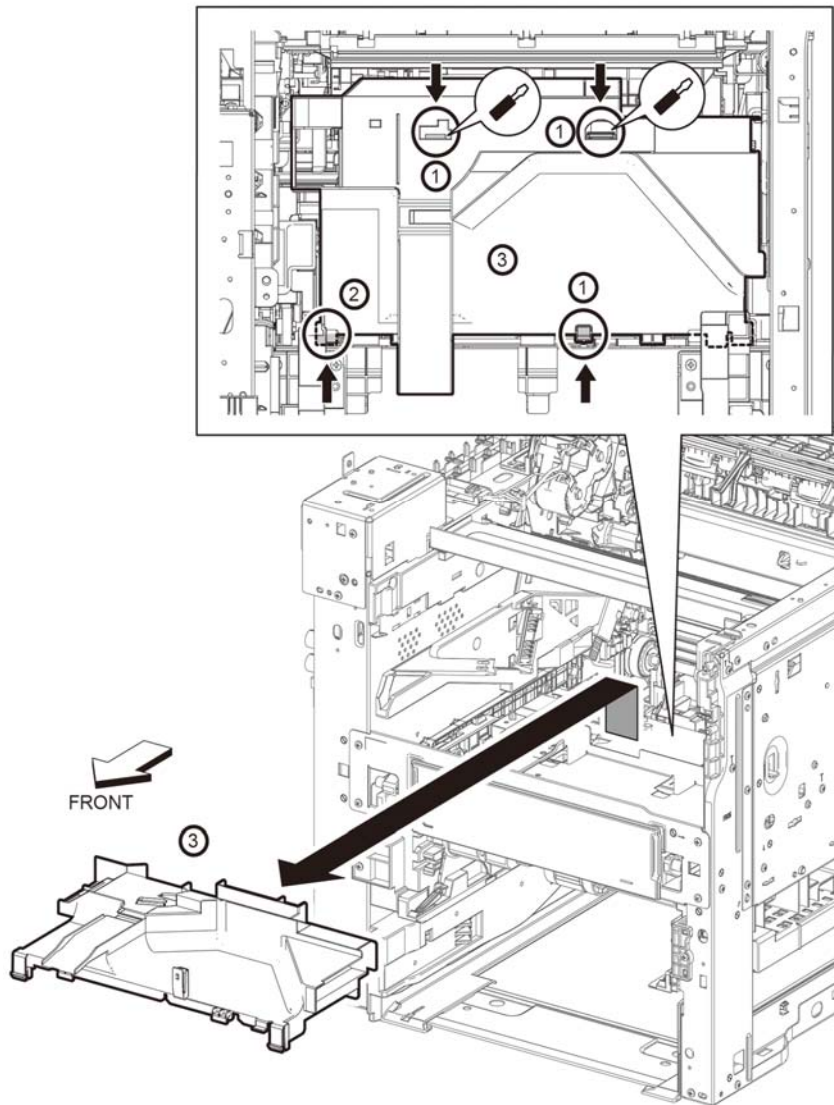


Figure 1 Remove the LVPS PWB

### Replacement

When replacing the LVPS PWB, be sure to place the holes in the board's upper and lower right corners onto the alignment tabs before inserting any screws.



D-8-0165-B

Figure 1 HVPS cover removal

3. Remove the HVPS PWB, **Figure 2**:
  - a. Remove two screws, (1).
  - b. Release two hooks (2), disengages two connectors (3) P/J1001 and T401, then remove the PWBA HVPS (4).

## REP 18.9 HVPS Toner Cover

Parts List on [PL 18.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 cartridge, [PL 8.1](#).
2. Remove the HVPS toner cover, [PL 18.2 Item 3](#), from the HVPS PWB, [Figure 1](#).

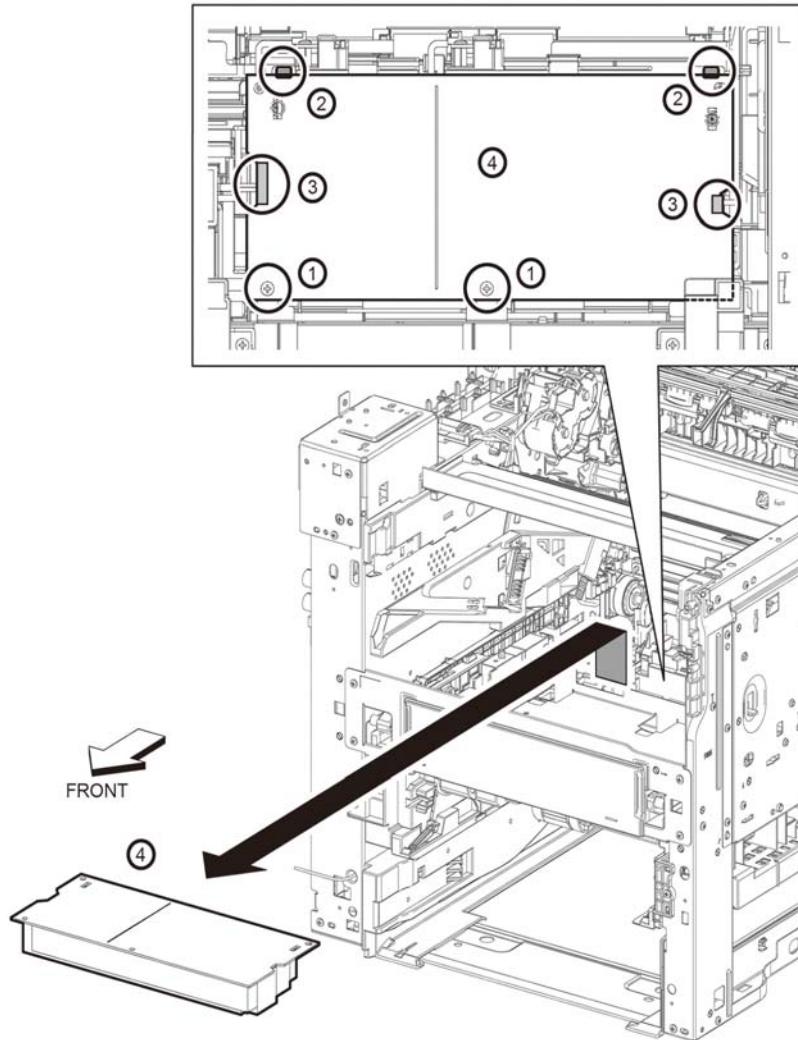


Figure 2 HVPS PWB removal

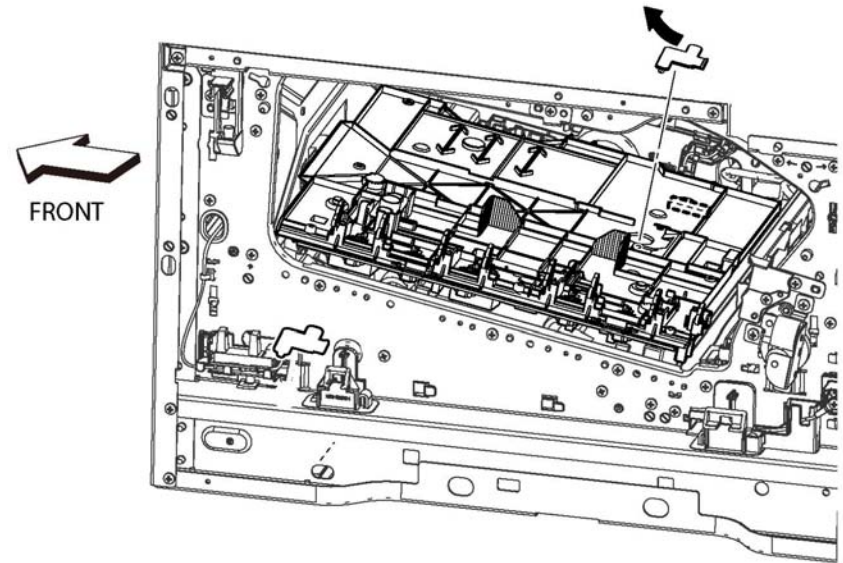


Figure 1 HVPS toner cover removal

## REP 18.10 Second Bias Transfer Roll Housing Kit

Parts List on [PL 18.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 right Side cover, [PL 19.1 Item 2](#).
2. Open the rear door, [PL 19.2 Item 99](#).
3. Refer to [Figure 1](#), to remove the one screw (silver, M3x6mm) attaching the high voltage harness.
4. Refer to [Figure 1](#), to release the two hooks and remove the second bias transfer housing the housing.

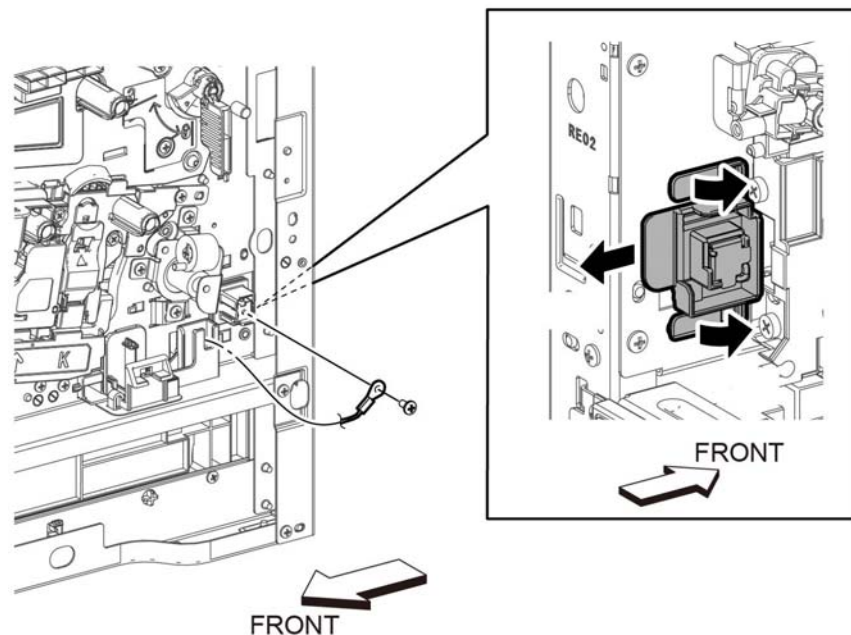


Figure 1 Remove the second bias transfer housing

D-8-0167-A

## REP 18.11 AC Fusing Harness

Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 chute assembly, [PL 17.1 Item 1](#) (C505/C605), (C500/C600).
2. Refer to [Figure 1](#), release one boss of the harness guide, and slightly release the harness guide with the harnesses in the direction of the arrow.
3. Refer to [Figure 1](#), remove one screw (SM18, silver, M3X6mm) to remove the plate.

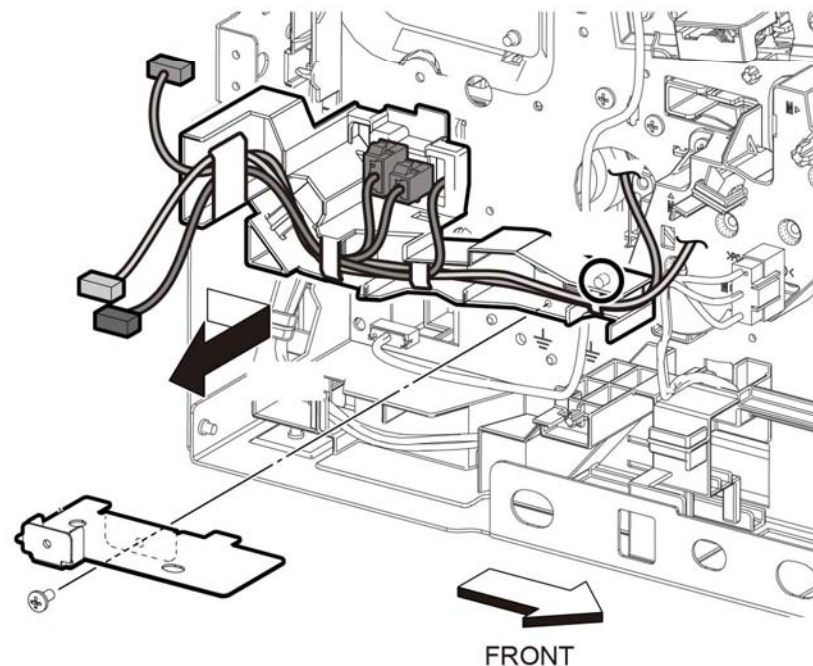
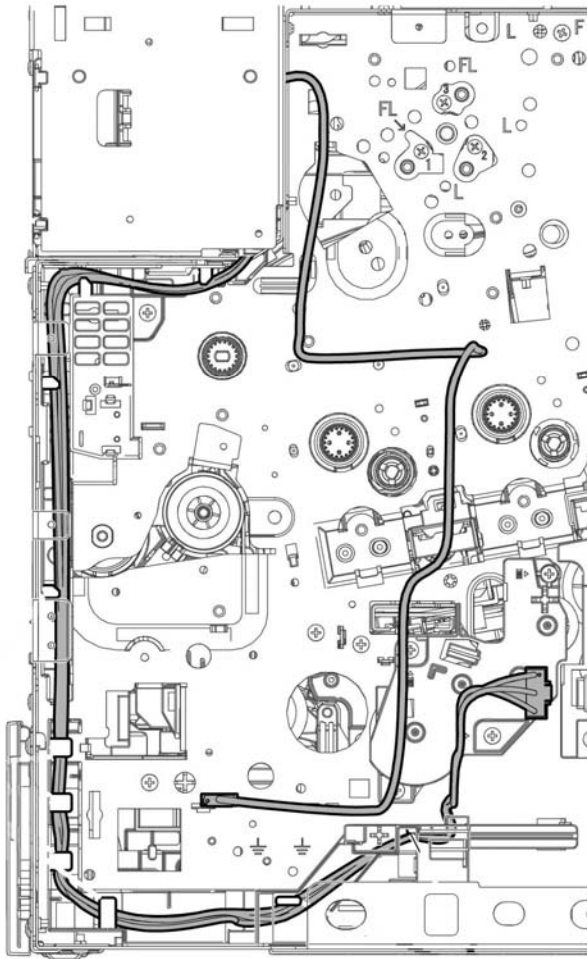


Figure 1 Remove the AC fusing harness guide.

D-8-0181-A

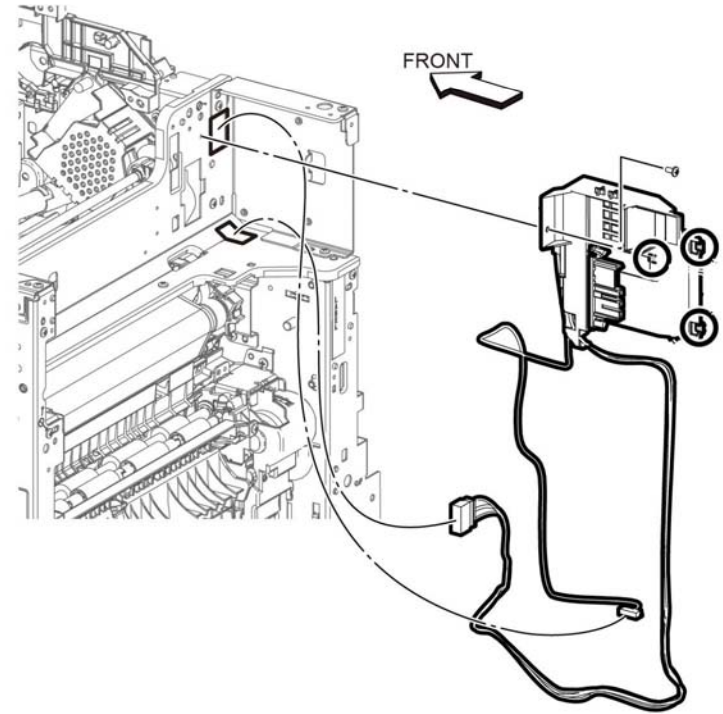
4. Refer to [Figure 2](#), release the AC fusing harness assembly, [PL 18.3 Item 3](#), from the harness guides.



D-8-0182-A

**Figure 2 Release the AC fusing harness assembly.**

5. Refer to [Figure 3](#), remove one screw (SM18, silver, M3X6mm), and release three hooks to remove the DC-CF fusing harness assembly, [PL 18.3 Item 2](#), and AC fusing harness assembly, [PL 18.3 Item 3](#), with the fusing harness guide, [PL 18.3 Item 4](#).



D-8-0183-A

**Figure 3 Remove AC fusing harness assembly with the fusing harness guide.**

6. Remove the DC-CF fusing harness assembly and AC fusing harness assembly from the fusing harness guide.
7. Remove the DC-CF fusing harness assembly from the AC fusing harness assembly, [Figure 4](#).



## REP 18.12 Rear Interlock Harness Assembly

Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 AIO ESS Box, [PL 18.1 Item 15](#).
2. Refer to [Figure 1](#), unplug the connector (P/J292) from the LVPS PWB and release the cable from the cable guide.
3. Release the Rear-CF I/L harness assembly, [PL 18.3 Item 4](#), from the DC harness guide, [PL 18.3 Item 9](#), and the Rear-CF I/L Harness guide, [PL 18.3 Item 11](#).
4. Refer to [Figure 1](#), release the two hooks and remove the rear interlock harness assembly.

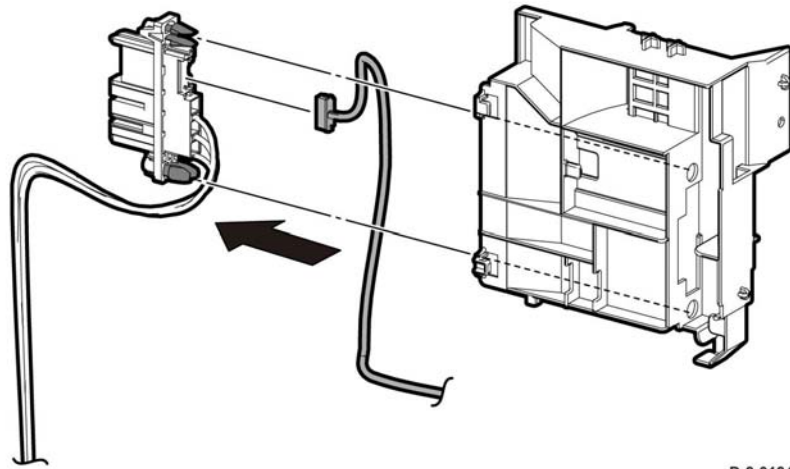


Figure 4 Remove the DC-CF fusing harness assembly

D-8-0184-A

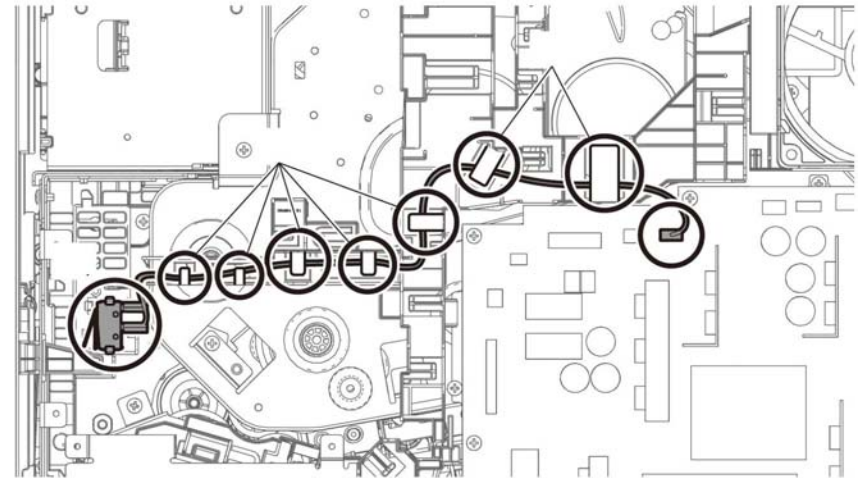


Figure 1 Remove the Rear Interlock harness assembly

D-8-0369-A

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

## REP 18.13 Side Interlock Harness Assembly

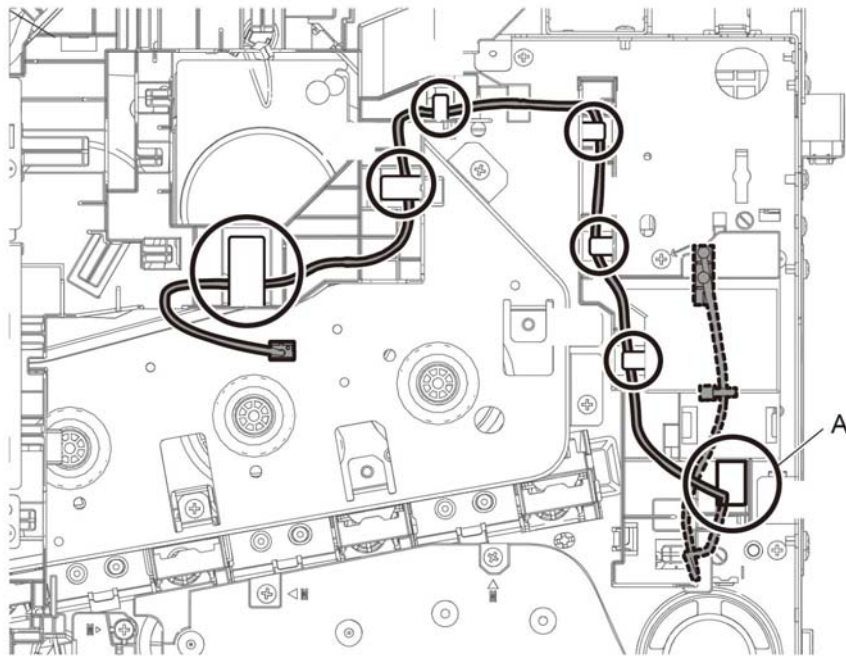
Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS plate, [PL 18.1 Item 13](#).
2. Refer to [Figure 1](#), release the Side-CF I/L harness assembly, [PL 18.3 Item 5](#), from the DC harness guide, [PL 18.3 Item 9](#), and the duct harness guide, [PL 18.3 Item 10](#).
3. Refer to [Figure 1](#), pull out the Side-CF I/L harness assembly from the hole A.

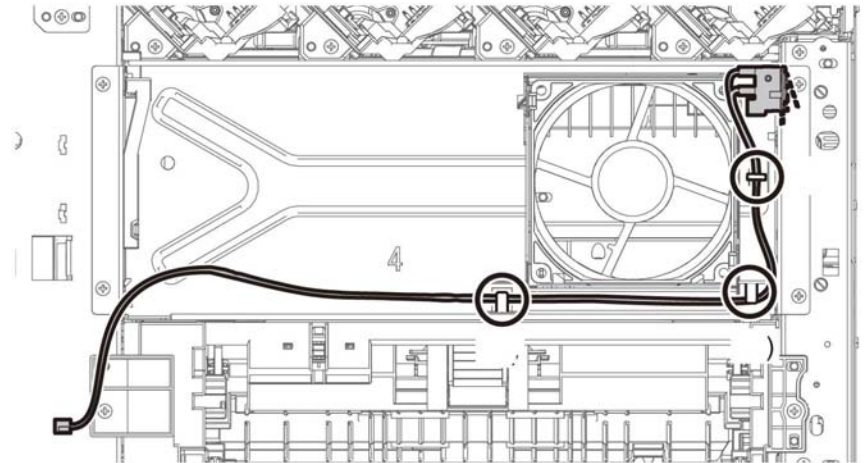


D-8-0169-A

Figure 1 Release the Side Interlock Harness from the Hooks

**NOTE:** In the following steps, be sure to note the harness routing to avoid damaging wires during replacement.

4. Refer to [Figure 2](#), release the Side-CF I/L harness assembly from the sub fan duct, [PL 4.1 Item 4](#).
5. Refer to [Figure 2](#), remove the Side-CF I/L harness assembly from one push-tie of the sub fan duct.



D-8-0170-A

Figure 2 Remove the Side interlock harness assembly

6. Refer to [Figure 3](#), remove the waste link, [PL 19.1 Item 13](#) and the waste link spring, [PL 19.1 Item 14](#).
7. Refer to [Figure 3](#), remove one screw (SM18, silver, M3X6mm) and pull out the Side-CF I/L harness assembly from the hole B.

## REP 18.14 OPF-CF Harness Assembly

Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS plate, [PL 18.1 Item 13](#).

**NOTE:** In the following steps, be sure to note the harness routing to avoid damaging wires during replacement.

2. Refer to [Figure 1](#), unplug the connector (P/J800) and release the harness portion of the OPF-CF harness assembly from the four hooks of the harness guide.
3. Refer to [Figure 1](#), push the two hooks on the OPF-CF harness assembly and remove the OPF-CF harness assembly.

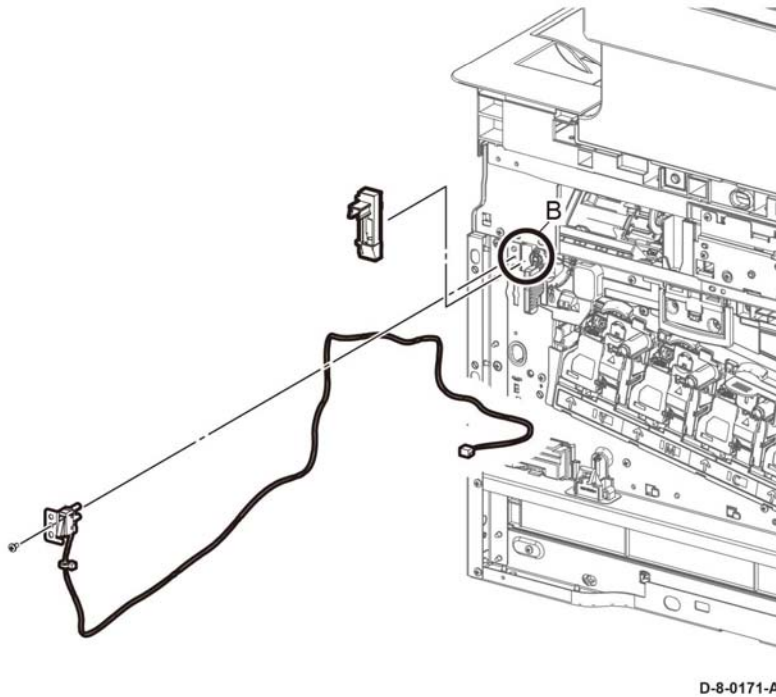


Figure 3 Pull out the Side-CF I/L harness assembly from the hole B.

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

## REP 18.15 Size Switch Assembly

Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS plate, [PL 18.1 Item 13](#).

**NOTE:** In the following steps, be sure to note the harness routing to avoid damaging wires during replacement.

2. Refer to [Figure 1](#), unplug the connector, P/J191.
3. Refer to [Figure 1](#), remove one screw, (ST20, silver, metal) and remove the size switch assembly.

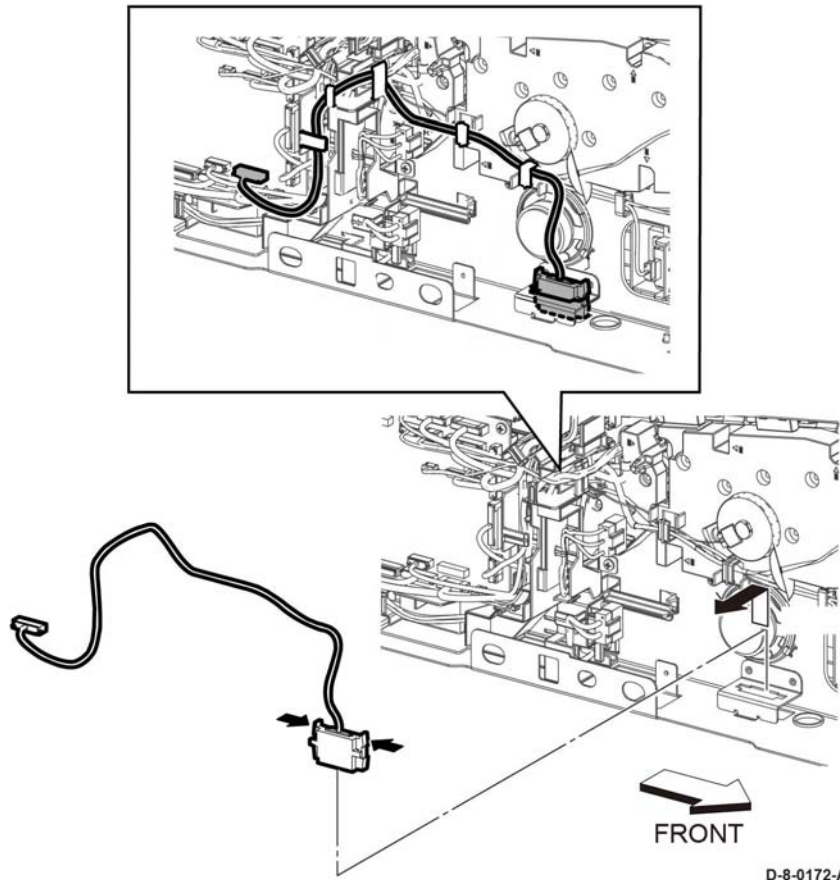
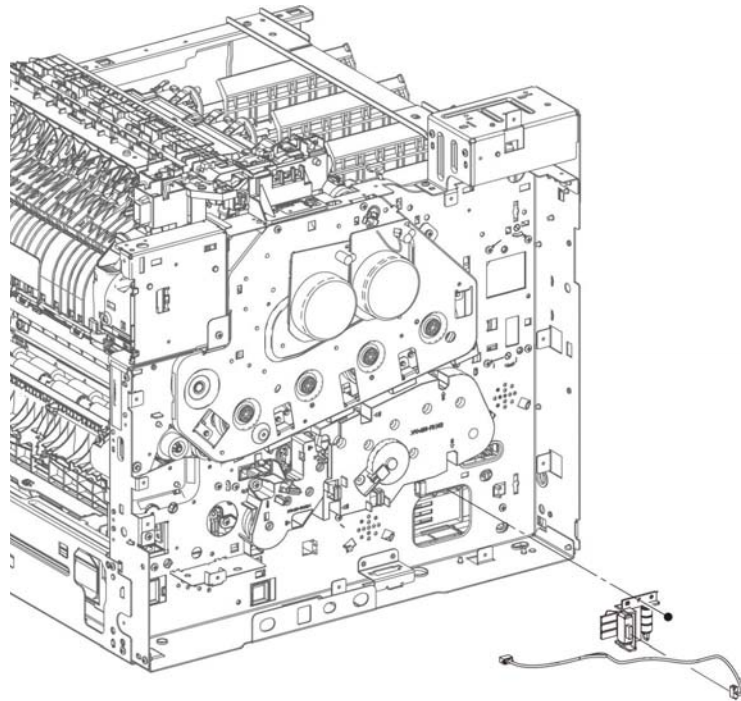


Figure 1 Remove the OPF harness assembly

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.



## REP 18.16 MCU PWB (MFP Tall)

Parts List on [PL 18.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

1. Before starting removal, print a configuration page and verify the software version.
2. Install a new MCU PWB, [PL 18.1 Item 1](#).
3. Print a configuration page again.
4. Verify the software version, update the software [GP 9](#) if not the current version.

#### CAUTION

Never install a new MCU PWB and a new ESS PWB at the same time.

**NOTE:** Observe the following when removing or replacing the MCU PWB:

- Do not install a new MCU PWB and a new ESS PWB at the same time. The data is saved on the EMMC Card on the ESS PWB. Install a new MCU PWB first, and then install a new ESS PWB. At the time of each replacement, turn on the printer to restore the data into the MCU PWB or ESS PWB.  
Replace MCU PWB > Cycle pwr ON/OFF > Replace ESS PWB > Cycle pwr ON/OFF
  - It is not necessary to back-up or restore data saved on the ESS PWB by Diagnostic, etc. The data is automatically backed-up when the printer is turned off or in the Deep Sleep mode. When the printer is turned on, mismatched information is detected on the MCU PWB, and then the information is corrected to be matched and restored into the MCU PWB
1. Remove the left side cover, [PL 19.2 Item 1](#).

D-8-1101-A

Figure 1 Remove the size switch assembly

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

### CAUTION

In the following step, engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 1, Proper Removal of the FFC Cable.

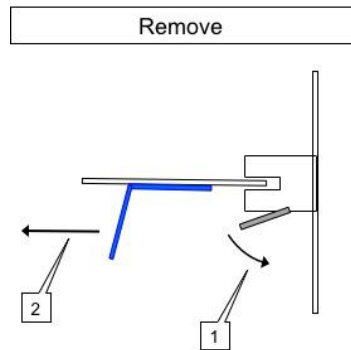


Figure 1 Proper Removal of the FFC Cable

2. Refer to Figure 2, unplug connectors (P/J100, P/J110, P/J120, P/J130, P/J140, P/J190, P/J200, P/J220, P/J270, P/J280, P/J290, P/J400, P/J460, P/J480, P/J500, P/J520, P/J540, P/J550, P/J560, P/J570, P/J800) and the FFC (P/J300).
3. Refer to Figure 2, remove four screws (silver, M3x6mm) securing MCU PWB, PL 18.5 Item 1, and remove the MCU PWB.

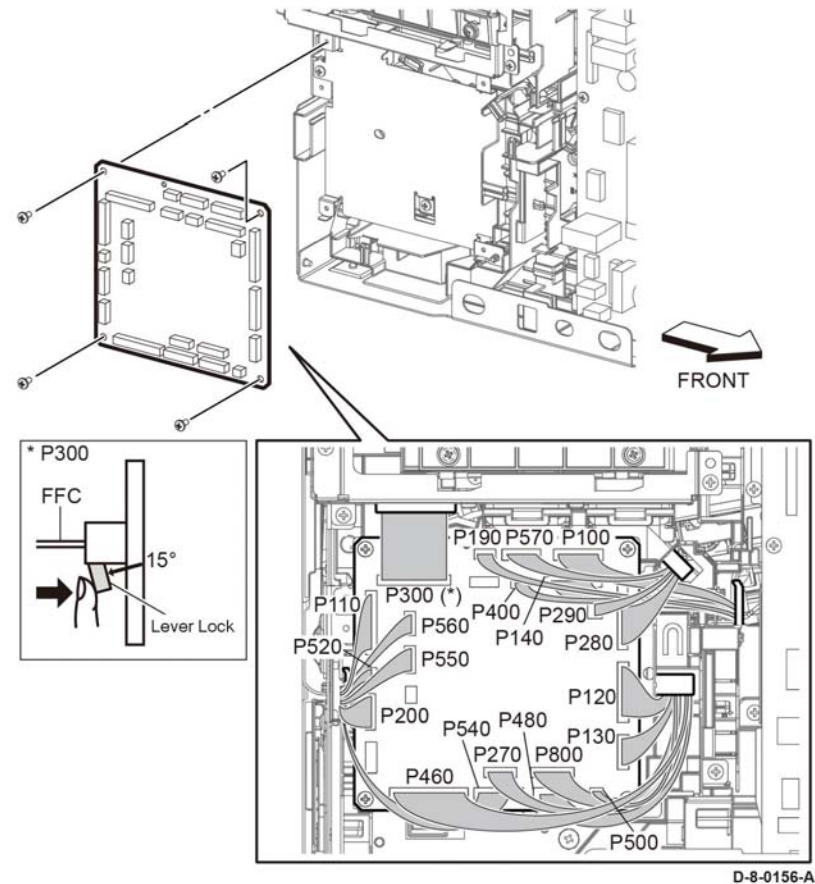


Figure 2 Remove the MCU PWB

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

NOTE: To ensure integrity of the FFC connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the FFC cable.
2. To ease installation and ensure proper alignment of the FFC cable, bend the blue "grip tab" 90 degrees perpendicular to the FFC.

- Referring to [Figure 3](#) and [Figure 4](#), **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector.

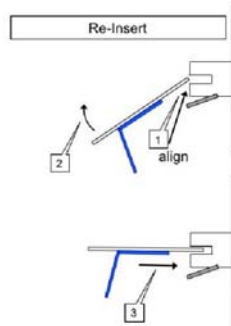


Figure 3 Cable Perpendicular Insertion

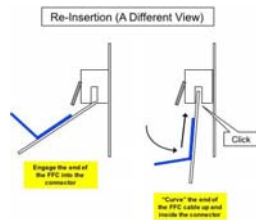


Figure 4 Cable Parallel Insertion

- Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.

## REP 18.17 FCC MCU ESS (MFP Tall)

Parts List on [PL 18.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 left side cover, [PL 19.2 Item 1](#).
- Refer to [Figure 1](#), remove two screws (silver, M3x6mm) attaching the ESS Lower plate and remove the plate.
- Refer to [Figure 1](#), remove two screws (SM18, silver, M3X6mm) and remove HDD bracket, [PL 18.1 Item 28](#).

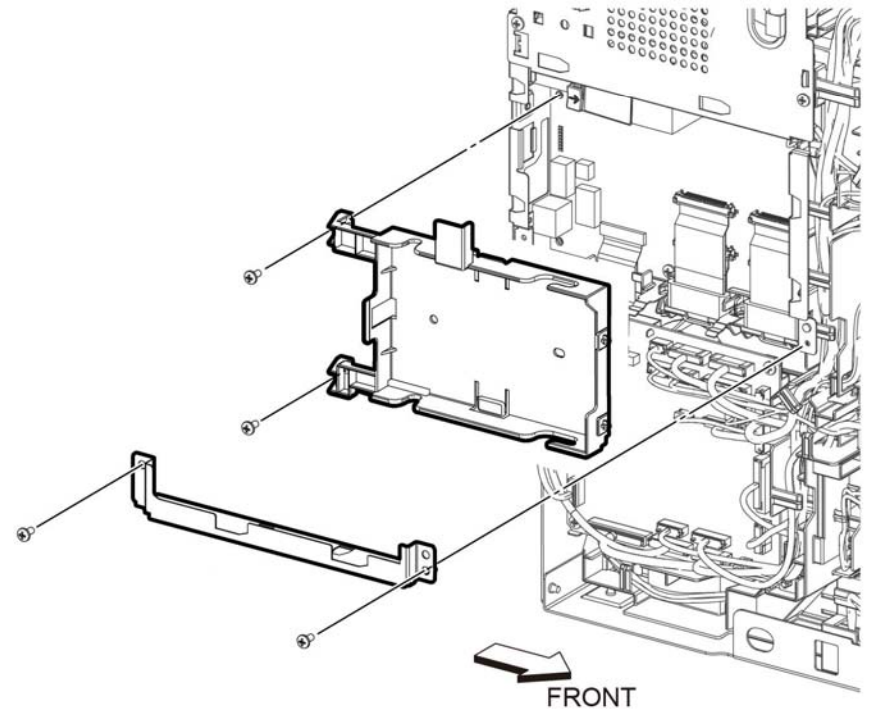


Figure 1 Remove the HDD bracket (MFP Tall)

### CAUTION

Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 2.

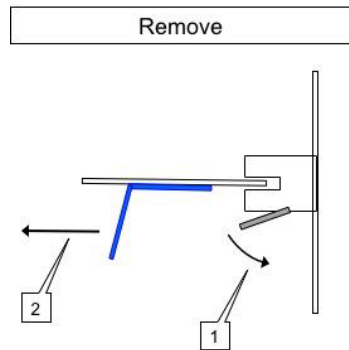


Figure 2 Removing the FFC from the connector.

4. Unplug connectors (P/J300, P/J335) and remove the ESS MCU FCC.

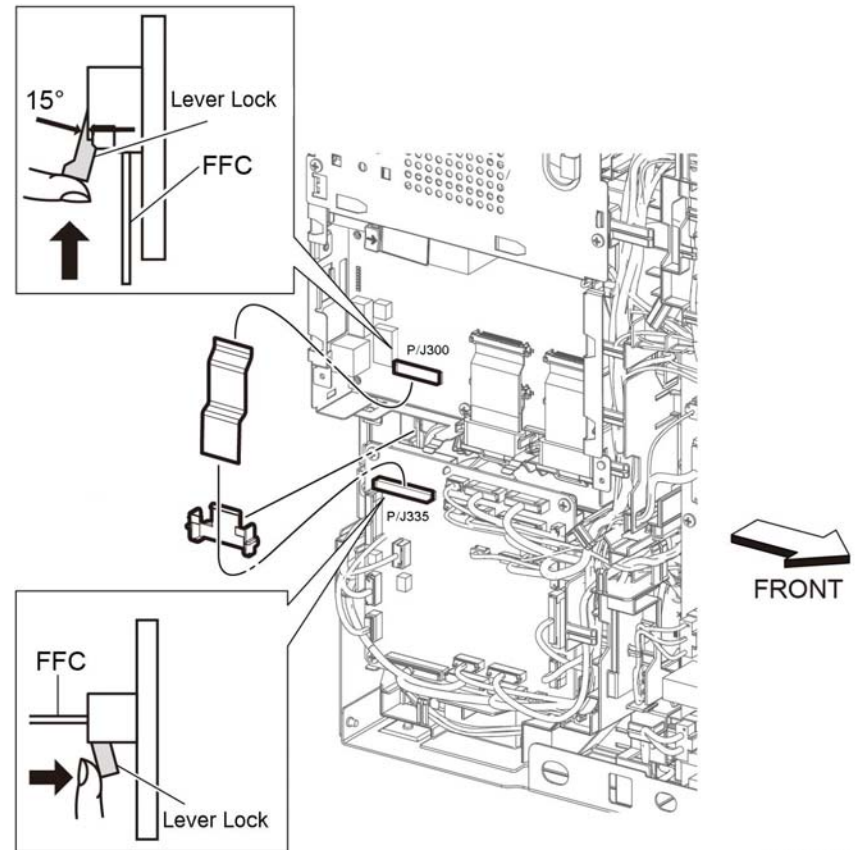


Figure 3 Remove the ESS MCU FCC

### Replacement

NOTE: To ensure integrity of the ESS MCU FFC, PL 18.1 Item 2, cable, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the ESS FFC MCU cable.
2. To ease installation and ensure proper alignment of the ESS MCU FFC cable, bend the blue "grip tab" 90 degrees perpendicular to the ESS MCU FFC.
3. Referring to Figure 4 and Figure 5, Proper ESS FFC MCU Cable Insertion, grasp the grip tab of the ESS MCU FCC cable placing the back, or non-conductive Side, of the ESS MCU FCC cable against the edge of the connector and centered to the connector.



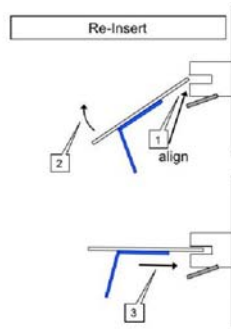


Figure 4 Cable Perpendicular Insertion

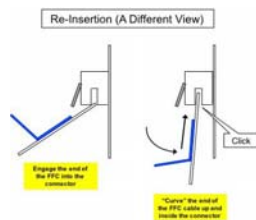


Figure 5 Cable Parallel Insertion

- Using the grip tab bent at 90 degrees, firmly push the ESS MCU FCC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FCC in-place.

## REP 18.18 ESS PWB (MFP Tall)

Parts List on [PL 18.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

- Before starting removal, print a configuration page and verify the software version.
- Install a new ESS PWB.
- Print a configuration page again.
- Verify the software version, update if not the current version [GP 9](#).

#### CAUTION

Never install a new MCU PWB and a new ESS PWB at the same time.

**NOTE:** Observe the following when removing or replacing the ESS PWB:

- Do not install a new MCU PWB and a new ESS PWB at the same time. The data is saved on the EMMC Card on the ESS PWB. Install a new MCU PWB first, and then install a new ESS PWB. At the time of each replacement, turn on the printer to restore the data into the MCU PWB or ESS PWB.  
Replace MCU PWB > Switch the machine off then on [GP 4](#) > Replace ESS PWB > Switch the machine off then on [GP 4](#).
  - It is not necessary to back-up or restore data saved on the ESS PWB by Diagnostic, etc. The data is automatically backed-up when the printer is switched off or in the Deep Sleep mode. When the printer is turned on, mismatched information is detected on the MCU PWB, and then the information is corrected to be matched and restored into the MCU PWB.
  - When replacing the ESS PWB, it is necessary to move the EMMC Card from the original ESS PWB to the replacement ESS PWB.**  
Avoid using excessive pressure to remove or install the EMMC Card. Follow proper electrostatic discharge procedures to prevent damage to the ESS Card during replacement.
- Remove the FAX PWB, [PL 18.1 Item 9](#).
  - Remove the Guide FFC Color MCU [PL 18.1 Item 7](#).
  - Refer to [Figure 1](#), to remove the two screws (silver, M3x6mm) attaching the earth cable to the FAX plate, [PL 18.1 Item 9](#).
  - Remove the three screws (silver, M3x6mm) attaching the FAX plate, [PL 18.1 Item 6](#) and remove the FAX plate.

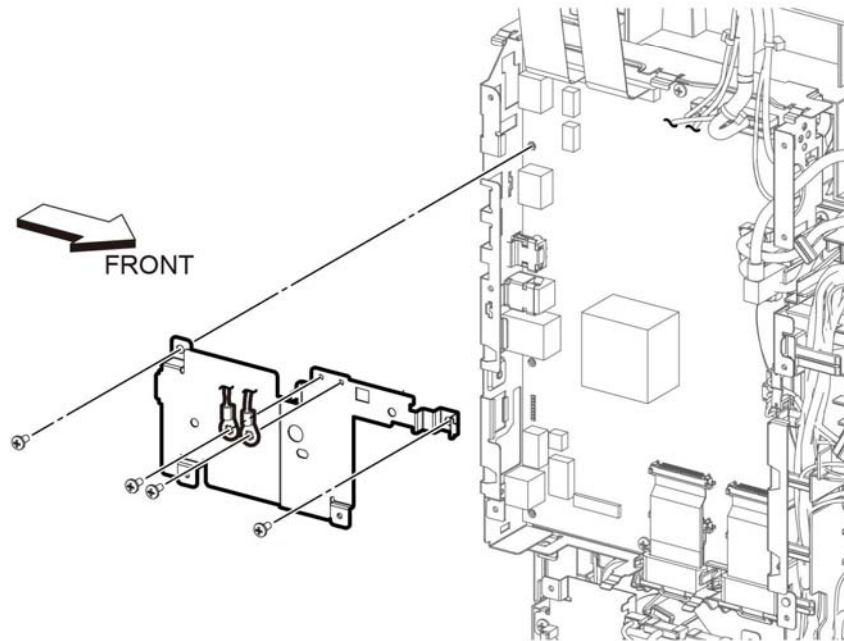


Figure 1 Remove the FAX plate (MFP Tail)

D-8-0159-A

**CAUTION**

Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 2.

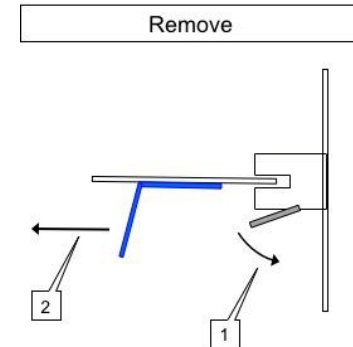


Figure 2 Removing the FFC from the connector

5. Refer to Figure 3, disengage the connectors (P/J301, P/J345, P/J356, P/J1337, P/J1352, P/J1372, P/J1373, P/J1374, P/J1377) and the FFCs (P/J1360, P/J1361, P/J1362, P/J1363, P/J1370, P/J1371, P/J335).
6. Refer to Figure 3, remove six screws (SM18, silver, M3X6mm) and two screws (SM1, silver, M3Xmm) and remove the ESS PWB, PL 18.1 Item 5.

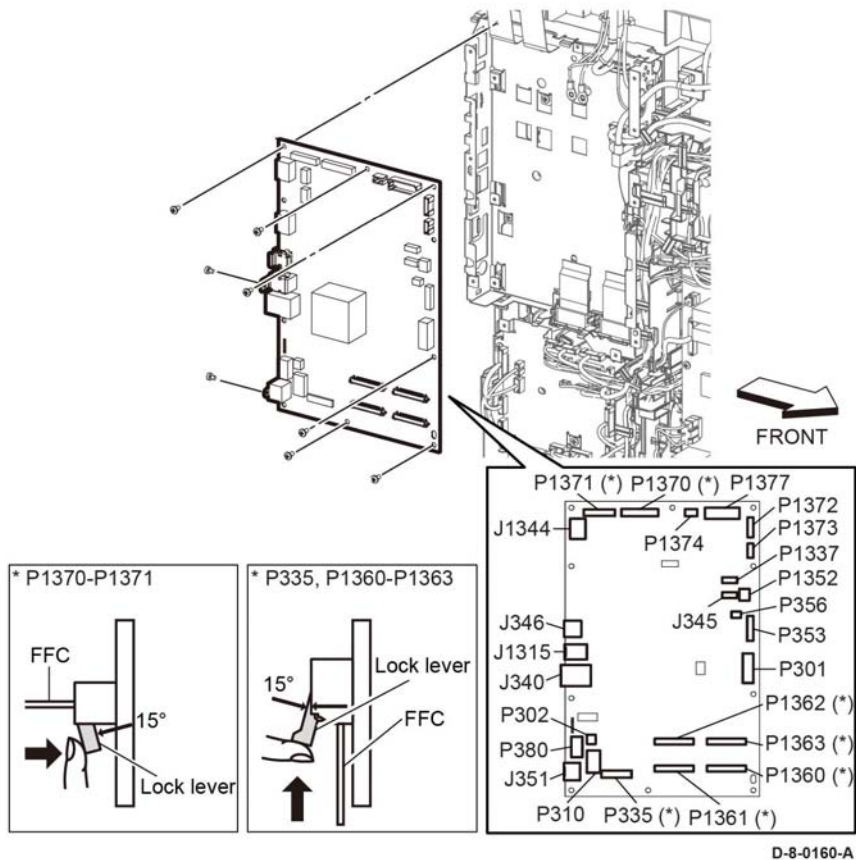


Figure 3 Remove the PWB ESS.

- Refer to [Figure 4](#), **Disconnect all Cables**, carefully move the harnesses out of the way and remove the ESS PWB from the frame leaving all harnesses and guides in-place.



Figure 4 Disconnect all Cables

- Refer to [Figure 5](#), **Lift the Bottom Right Corner from the ESS Frame**, carefully ease the ESS PWB from the ESS Frame.



Figure 5 Lift the Bottom Right Corner from the ESS Frame

9. Refer to [Figure 6](#), **Slide the ESS PWB from the Right Side of the ESS Frame**, carefully ease the ESS PWB out of the ESS Frame.



Figure 6 Slide the ESS PWB from the Right Side of the ESS Frame

10. Refer to [Figure 7](#), **Slide the ESS PWB Out of the ESS Frame**, to remove the ESS PWB from the ESS Frame entirely.



Figure 7 Remove the ESS PWB from the ESS Frame

11. The ESS PWB removal is complete, [Figure 8](#), **Removal Complete with FCC Guides Remaining In-place**

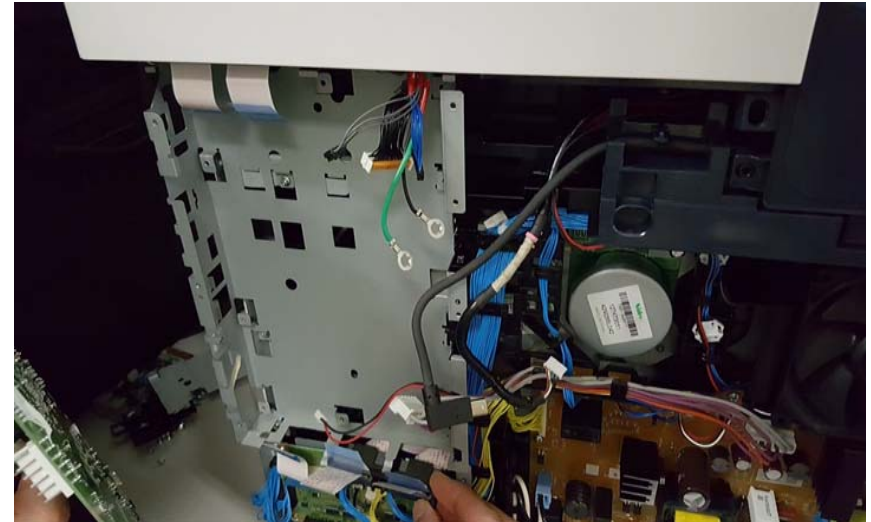


Figure 8 Removal Complete with FCC Guides Remaining In-place

## Replacement

### CAUTION

*Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.*

1. Be sure to move the EMMC Card from the original ESS PWB to the new one.

**NOTE:** To ensure integrity of the five FFC cables connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

2. Slip the core down the FFC cable.
3. To ease installation and ensure proper alignment of the FFC cable, bend the blue “grip tab” 90 degrees perpendicular to the FFC.
4. Refer to [Figure 9](#) and [Figure 10](#), **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector.

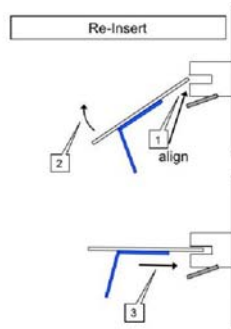


Figure 9 Cable Perpendicular Insertion

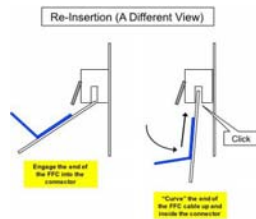


Figure 10 Cable Parallel Insertion

- Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.

## REP 18.19 FAX PWB (MFP Tail)

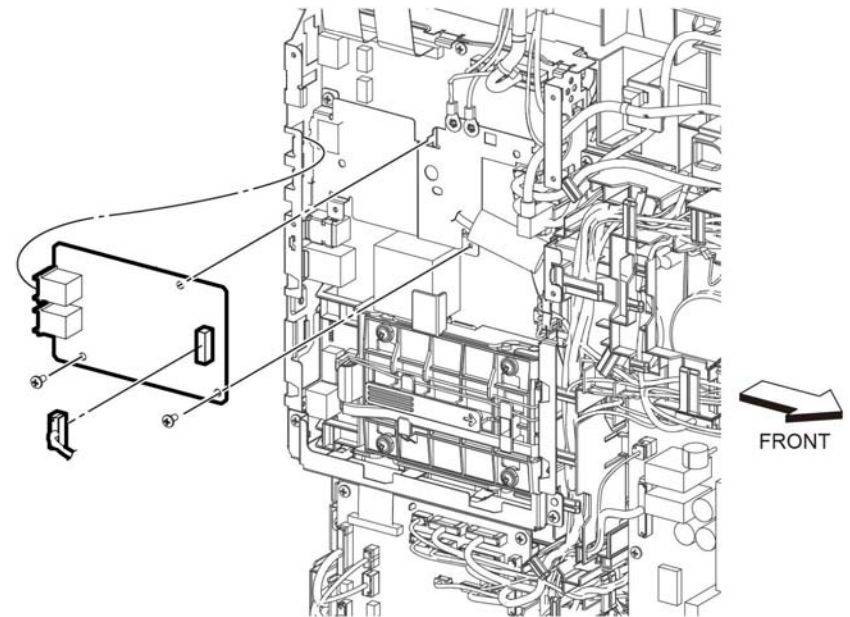
Parts List on [PL 18.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 left side cover, [PL 19.2 Item 2](#).
- Remove the ESS Top plate, [PL 18.1 Item 18](#).
- Disconnect the connector ( [P/J1350](#)) from the FAX PWB.
- Remove the two screws (silver, M3x6mm) attaching the FAX PWB, [Figure 1](#).



D-8-0001-A

Figure 1 Remove the FAX PWB (MFP Tail)

## REP 18.20 ICCR USB Harness Assembly (MFP Tall)

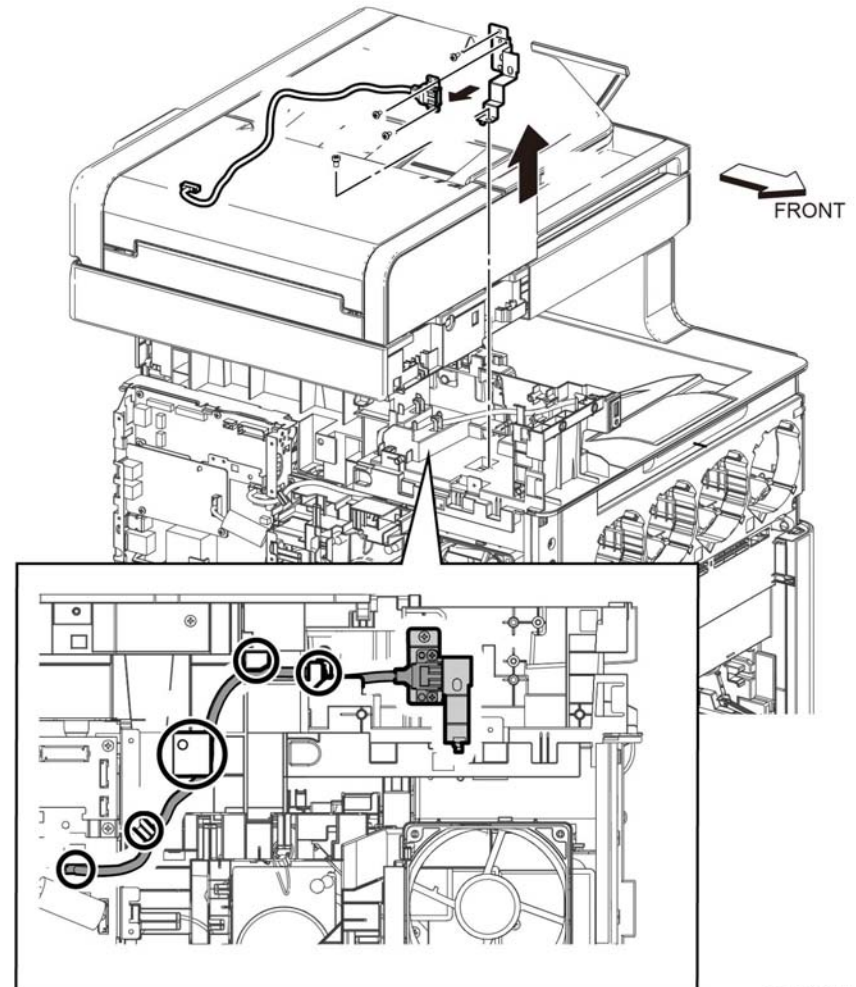
Parts List on [PL 18.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 UI harness, [PL 1.1 Item 5](#).
2. Disconnect the connector (P/J345).
3. Release the USB ICCR harness assembly, [PL 18.1 Item 13](#), from the DC harness guide, [PL 18.3 Item 9](#), and the guides on the top cover, [PL 19.1 Item 15](#).
4. Remove the two screws (SM3 silver M4X6mm and ST20 plastic silver M3x8) to remove the USB ICCR harness assembly and the USB ICCR bracket, [PL 18.1 Item 31](#), from the top cover, [Figure 1](#).
5. Remove two screws (SM18, silver, M3X6mm) to remove the USB ICCR harness assembly from the USB ICCR bracket, [Figure 1](#).



D-8-0180-A

Figure 1 Remove the USB ICCR harness assembly (MFP Tall)

## REP 18.21 Front USB Harness Assembly (MFP Tall)

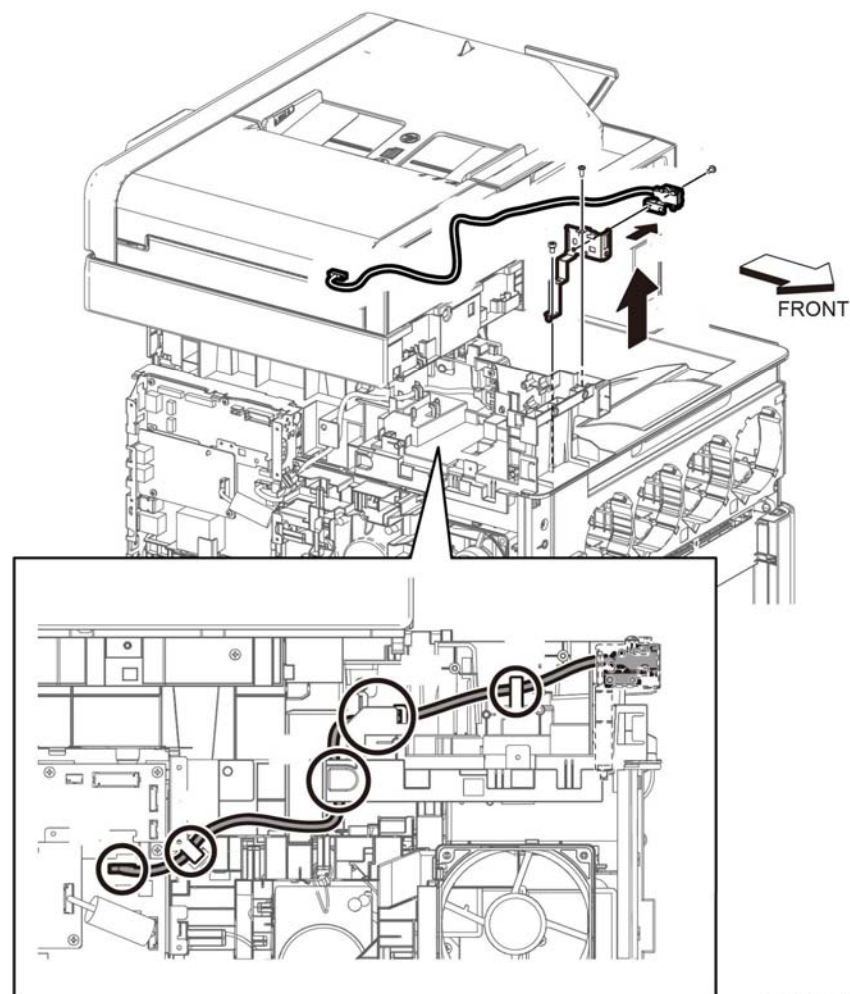
Parts List on [PL 18.5 Item 14](#) (C605 Tall)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 UI harness, [PL 1.1 Item 5](#).
2. Unplug the connector (P/J1337).
3. Refer to [Figure 1](#), release the front USB harness assembly, [PL 18.1 Item 14](#), from the DC guide harness, [PL 18.3 Item 9](#), and the guides on the top cover, [PL 19.1 Item 15](#).
4. Refer to [Figure 1](#), remove one screw (SM3, silver, M4X6mm), and one screw (ST20, screw for plastic, silver, tapping, M3x8) to remove the front USB harness assembly and the USB bracket, PL18.1.32, from the top cover.
5. Release the Front USB Harness from the harness guide.
6. Refer to [Figure 1](#), remove one screw (SM18, silver, M3X6mm) to remove the front USB harness assembly from the USB bracket.



D-8-0162-A

Figure 1 Remove the front USB harness assembly (MFP Tall)

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

## REP 18.22 LVPS PWB (MFP Tall)

Parts List on [PL 18.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 side cover, [PL 19.2 Item 1](#).
2. Refer to [Figure 1](#), unplug the connectors (P/J281, P/J283, P/J284, P/J285, P/J286, P/J287, P/J288, P/J289, P/J291, P/J292, P/J293, P/J295) from the LVPS PWB.
3. Refer to [Figure 1](#), remove the seven screws (M18, silver, M3x6mm) attaching the LVPS PWB to the LVPS plate and remove the LVPS PWB.

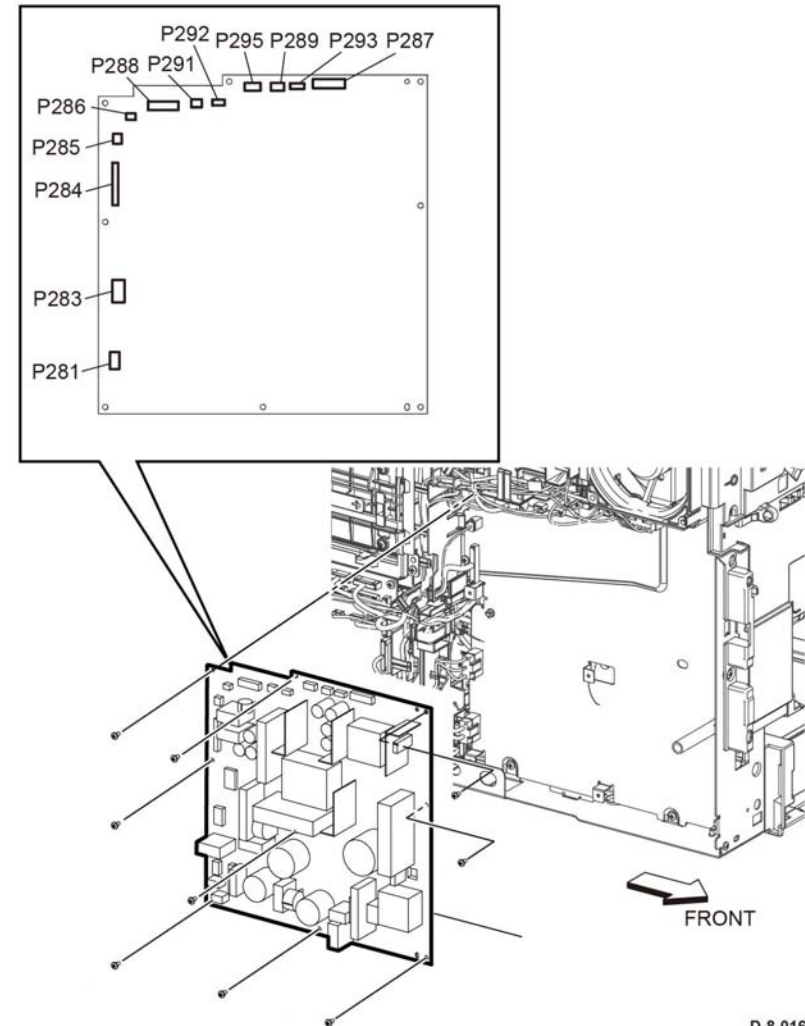


Figure 1 Remove the LVPS PWB.

### Replacement

When replacing the LVPS PWB, be sure to place the holes in the board's upper and lower right corners onto the alignment tabs before inserting any screws.



## REP 18.23 HVPS Guide Assembly (MFP Tall)

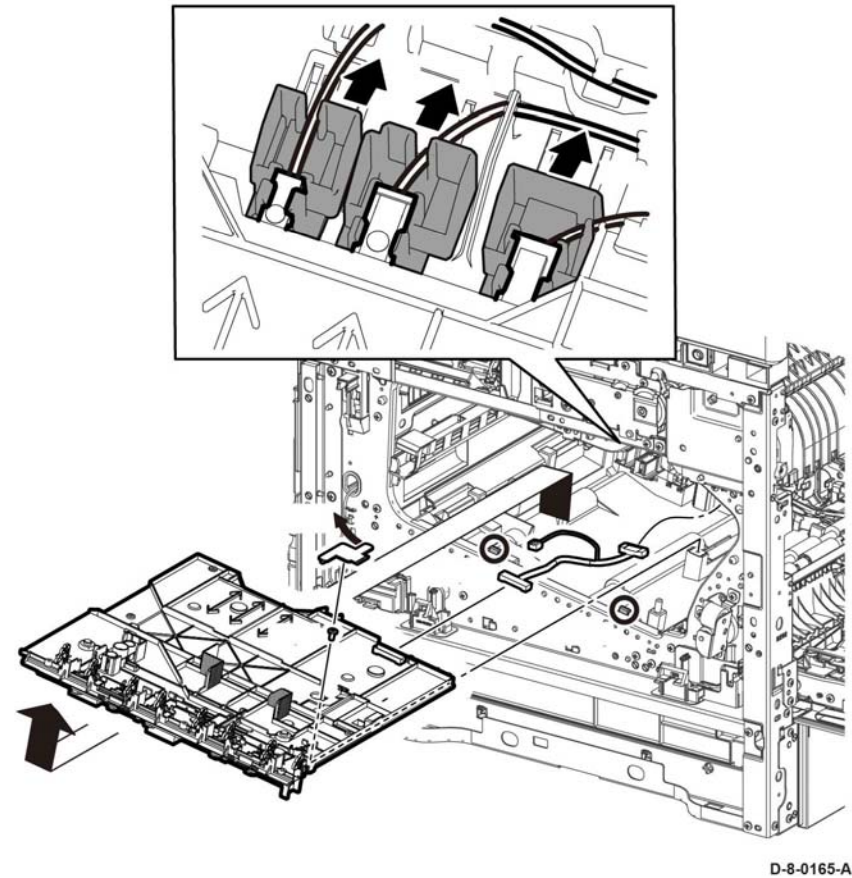
Parts List on [PL 18.6](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Refer to [Figure 1](#), remove the HVPS guide assembly (MFP Tall), to remove the HVPS toner cover, [PL 18.1 Item 3](#).
2. Refer to [Figure 1](#), remove the HVPS guide assembly (MFP Tall), to remove the screw (silver, M3x6mm) located under the HVPS toner cover.
3. Refer to [Figure 1](#), remove the HVPS guide assembly (MFP Tall), and push the faston holders in the direction of the arrows to remove the faston terminals (P/J501, P/J502, T601).
4. Refer to [Figure 1](#), disconnect the connector, ( P/J100).
5. Refer to [Figure 1](#), release the two hooks and remove the HVPS guide assembly in the direction of the arrow.



D-8-0165-A

Figure 1 Remove the HVPS guide assembly (MFP Tall)

### Replacement

To install a new HVPS guide assembly:

1. Connect the connector P/J101.
2. Place the HVPS guide assembly into its installed position making sure to insert the alignment tabs at the left edge of the board into their slots.
3. Slide the faston connector holders towards the board to reconnect the plugs.

**NOTE:** Make sure to attach the faston connectors (P/J501, P/J502, T601: K 1st supply harness assembly, PL 18.2 Item 7, YMC 1st supply harness assembly, PL 18.2 Item 6, and trans supply harness assembly, PL 18.2 Item 8, at the initial position as shown in Figure 2.

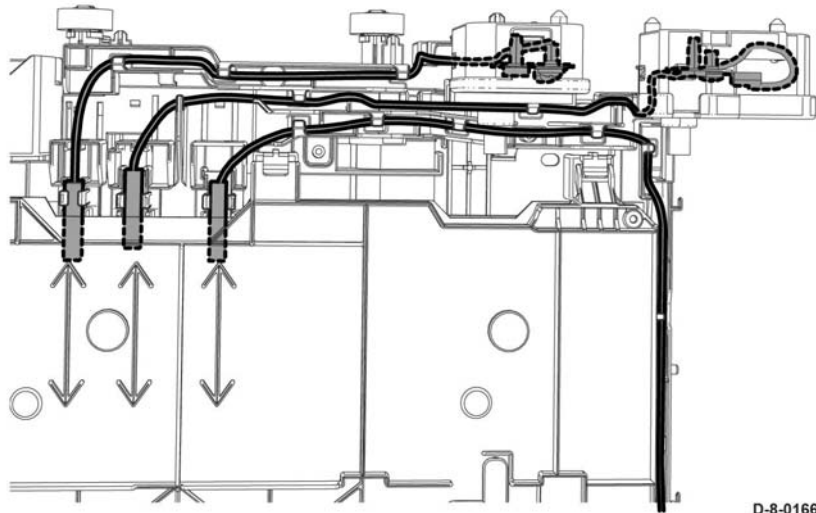


Figure 2 Re-attaching HVPS guide harnesses (MFP Tall)

## REP 18.24 HVPS Toner Cover (MFP Tall)

Parts List on PL 18.6

### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 Y, M, C, K, PL 8.1.
2. Refer to Figure 1, to remove the HVPS toner cover from the HVPS PWB.

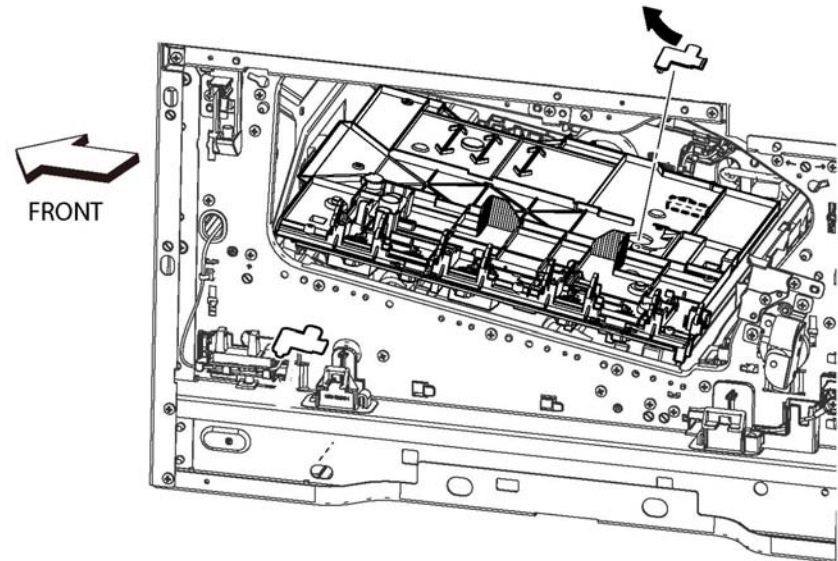


Figure 1 Remove the HVPS toner cover (MFP Tall)

## REP 18.25 Second Bias Transfer Roller Kit (MFP Tall)

Parts List on [PL 18.6](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 right Side cover, [PL 19.1 Item 2](#).
2. Open the rear door, [PL 19.2 Item 99](#)
3. Refer to [Figure 1](#), to remove the one screw (silver, M3x6mm) attaching the high voltage harness.
4. Refer to [Figure 1](#), to release the two hooks and remove the second bias transfer housing the housing.

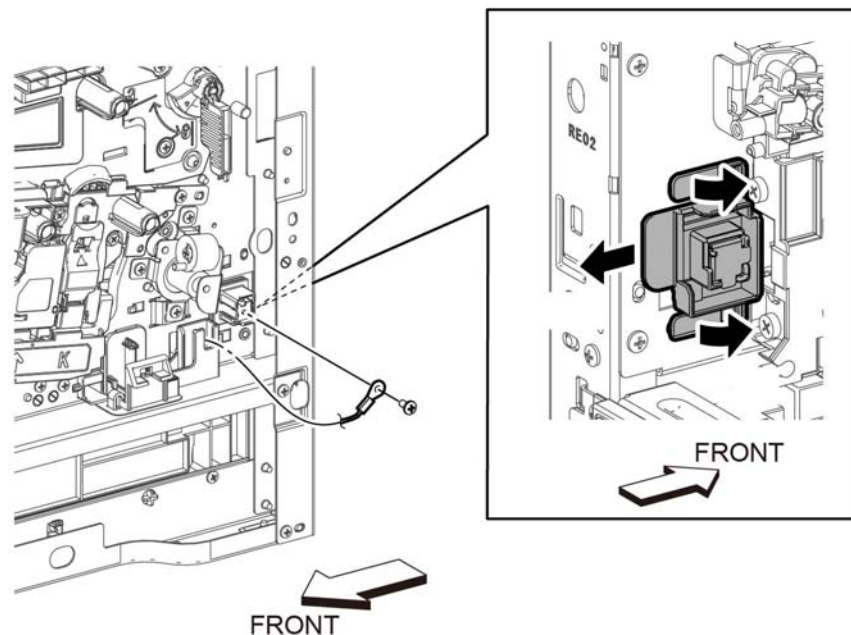


Figure 1 Remove the second bias transfer housing (MFP Tall)

## REP 18.26 AC Fusing Harness (MFP Tall)

Parts List on [PL 18.7](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 chute assembly, [PL 17.1 Item 1](#) (C505/C605), (C500/C600).
2. Refer to [Figure 1](#), release one boss of the harness guide, and slightly release the harness guide with the harnesses in the direction of the arrow.
3. Refer to [Figure 1](#), remove one screw (SM18, silver, M3X6mm) to remove the plate.

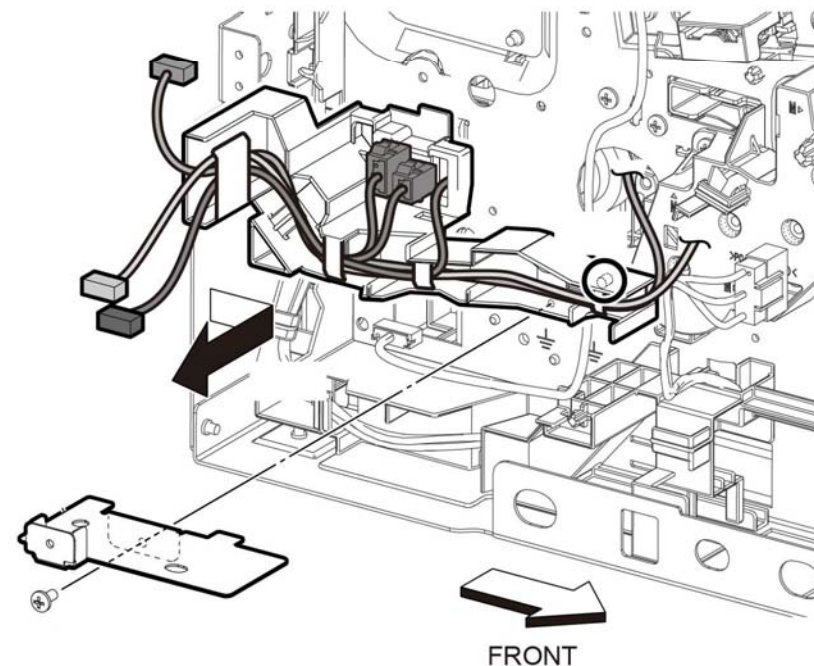
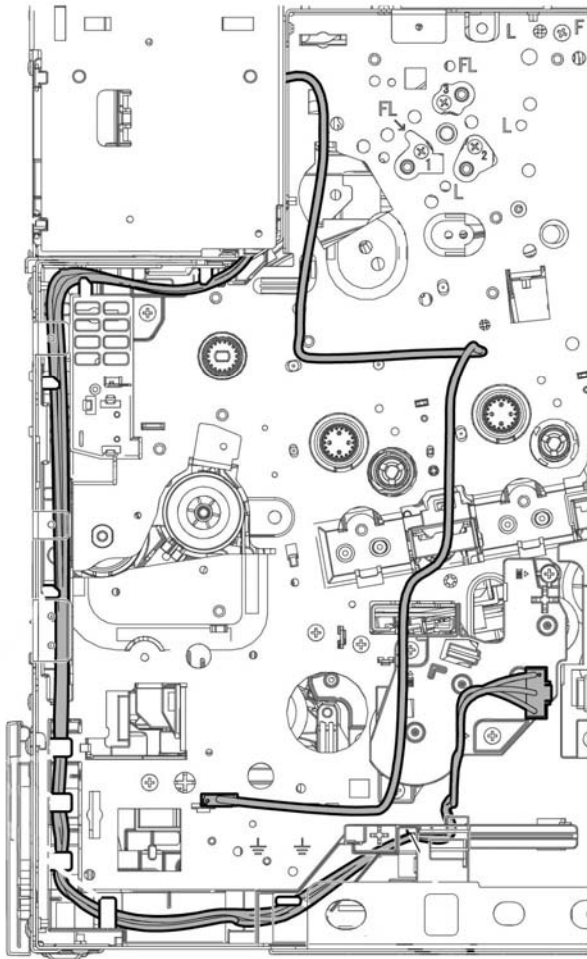


Figure 1 Remove the AC fusing harness guide.

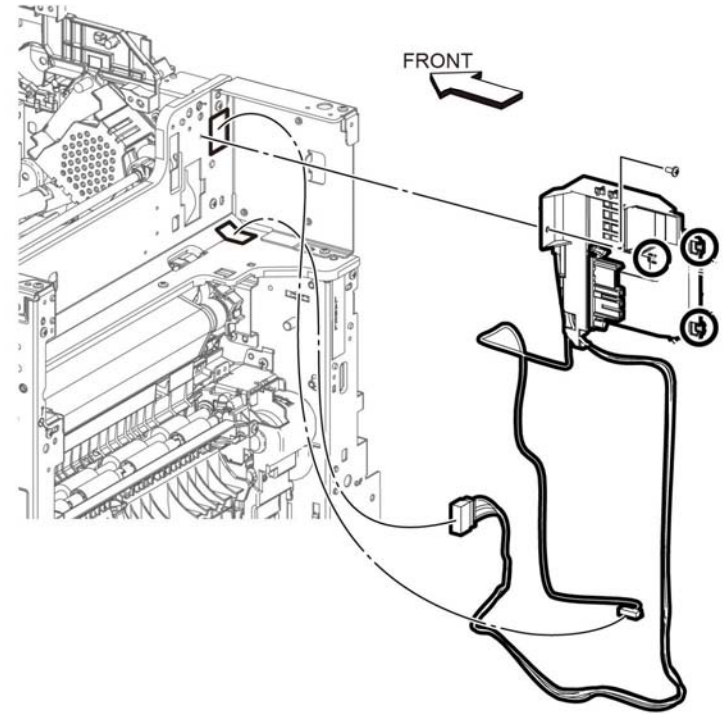
4. Refer to [Figure 2](#), release the AC fusing harness assembly, [PL 18.3 Item 3](#), from the harness guides.



D-8-0182-A

**Figure 2 Release the AC fusing harness assembly.**

5. Refer to [Figure 3](#), remove one screw (SM18, silver, M3X6mm), and release three hooks to remove the DC-CF fusing harness assembly [PL 18.3 Item 2](#), and AC fusing harness assembly with the fusing harness guide.



D-8-0183-A

**Figure 3 Remove AC fusing harness assembly with the fusing harness guide.**

6. Remove the DC-CF fusing harness assembly, [PL 18.3 Item 2](#), and AC fusing harness assembly from the fusing harness guide.
7. Remove the DC-CF fusing harness assembly, [PL 18.3 Item 2](#), from the AC fusing harness assembly.

## REP 18.27 Rear Interlock Harness Assembly (MFP Tail)

Parts List on [PL 18.7](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 AIO ESS Box, [PL 18.1 Item 15](#).
2. Refer to [Figure 1](#), unplug the connector (P/J292) from the LVPS PWB and release the cable from the cable guide.
3. Release the Rear-CF I/L harness assembly, [PL 18.3 Item 4](#), from the DC harness guide, [PL 18.3 Item 9](#), and the Rear-CF I/L Harness guide, [PL 18.3 Item 11](#).
4. Refer to [Figure 1](#), release the two hooks and remove the rear interlock harness assembly.

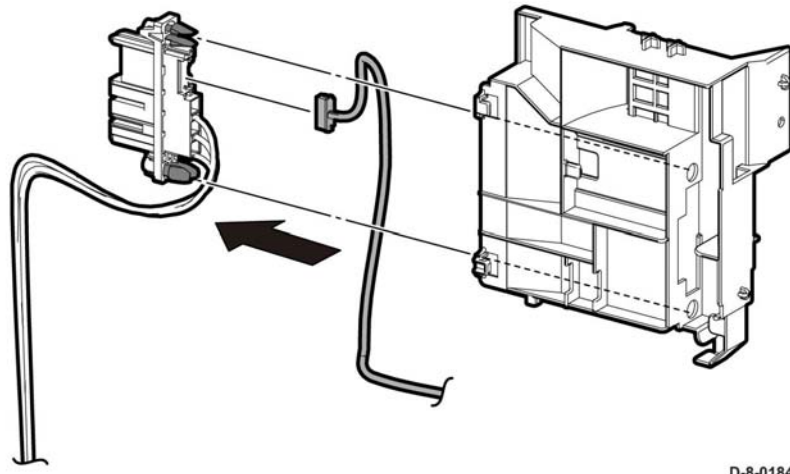


Figure 4 DC-CF fusing harness assembly removal

D-8-0184-A

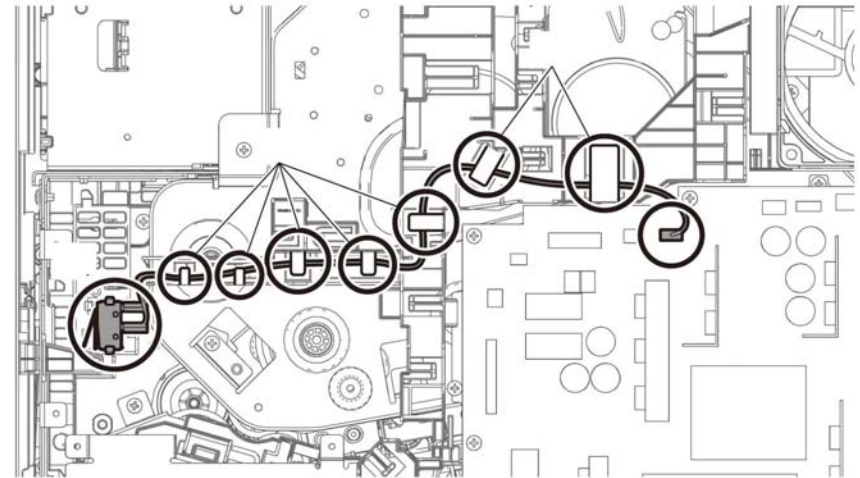


Figure 1 Rear Interlock harness assembly removal (MFP Tail)

D-8-0369-A

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

## REP 18.28 Side Interlock Harness Assembly (MFP Tall)

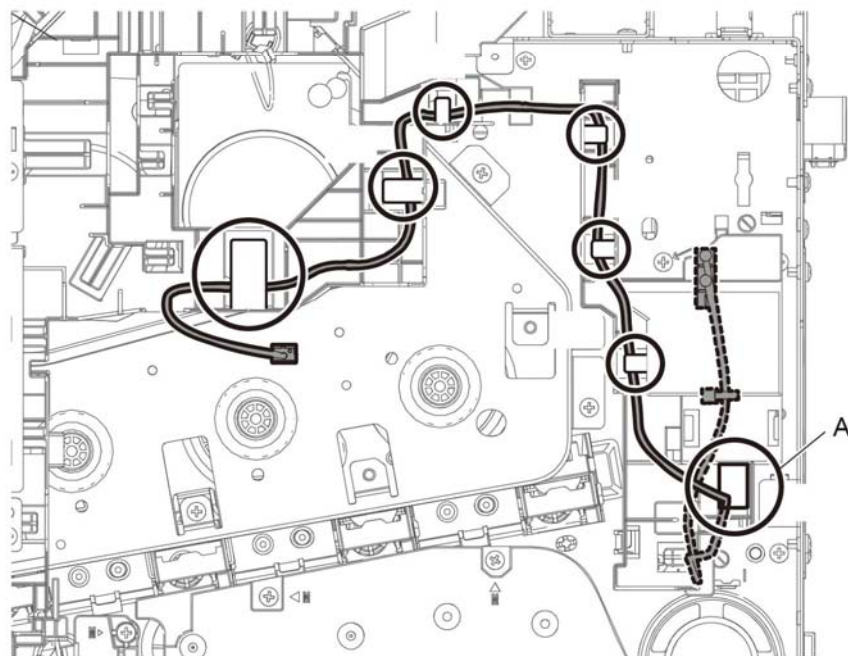
Parts List on [PL 18.7](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS plate, [PL 18.1 Item 13](#).
2. Refer to [Figure 1](#), release the Side-CF I/L harness assembly, [PL 18.3 Item 5](#), from the DC harness guide, [PL 18.3 Item 9](#), and the duct harness guide, [PL 18.3 Item 10](#).
3. Refer to [Figure 1](#), pull out the Side-CF I/L harness assembly from the hole A.

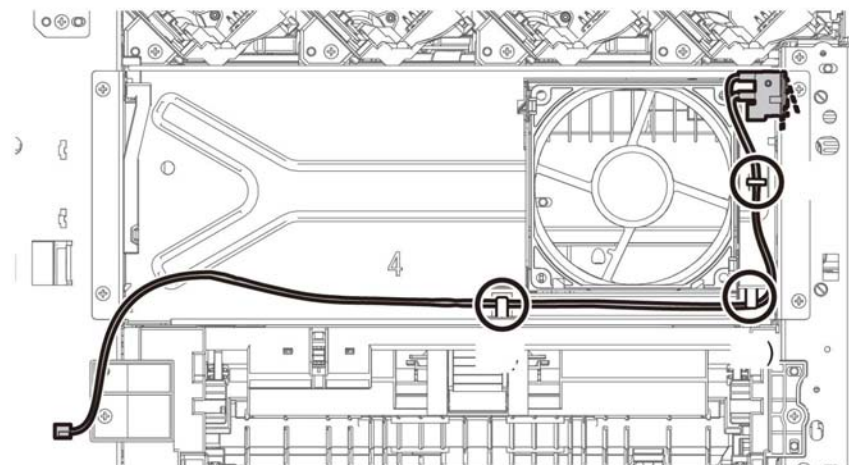


D-8-0169-A

Figure 1 Side interlock harness release

**NOTE:** In the following steps, be sure to note the harness routing to avoid damaging wires during replacement.

4. Refer to [Figure 2](#), release the Side-CF I/L harness assembly from the sub fan duct, [PL 4.1 Item 4](#).
5. Refer to [Figure 2](#), remove the Side-CF I/L harness assembly from one push-tie of the sub fan duct.



D-8-0170-A

Figure 2 Side interlock harness assembly removal (MFP Tall)

6. Refer to [Figure 3](#), remove the waste link, [PL 19.1 Item 13](#) and the waste link spring, [PL 19.1 Item 14](#).
7. Refer to [Figure 3](#), remove one screw (SM18, silver, M3X6mm) and pull out the Side-CF I/L harness assembly from the hole B.

## REP 18.29 OPF Harness Assembly (MFP Tall)

Parts List on [PL 18.7](#)

### Removal

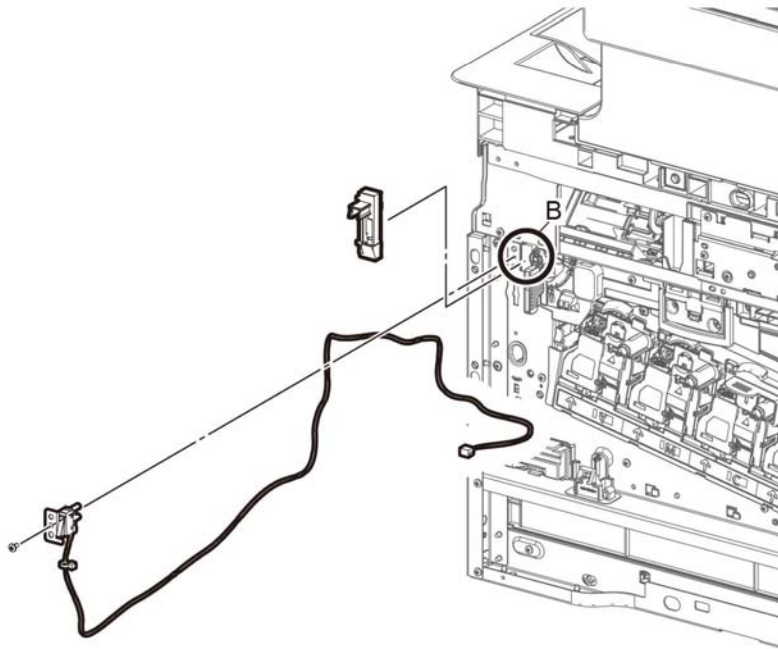
#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS plate, [PL 18.1 Item 13](#).

**NOTE:** In the following steps, be sure to note the harness routing to avoid damaging wires during replacement.

2. Refer to [Figure 1](#), unplug the connector (P/J800) and release the harness portion of the OPF harness assembly from the four hooks of the harness guide.
3. Refer to [Figure 1](#), push the two hooks on the OPF harness assembly and remove the OPF harness assembly



D-8-0171-A

Figure 3 Pull out the Side-CF I/L harness assembly from the hole B.

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

## REP 18.30 Size Switch Assembly (MFP Tall)

Parts List on [PL 18.7](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS plate, [PL 18.1 Item 13](#).

**NOTE:** In the following steps, be sure to note the harness routing to avoid damaging wires during replacement.

2. Refer to [Figure 1](#), unplug the connector, P/J191.
3. Refer to [Figure 1](#), remove one screw, (ST20, silver, metal) and remove the size switch assembly.

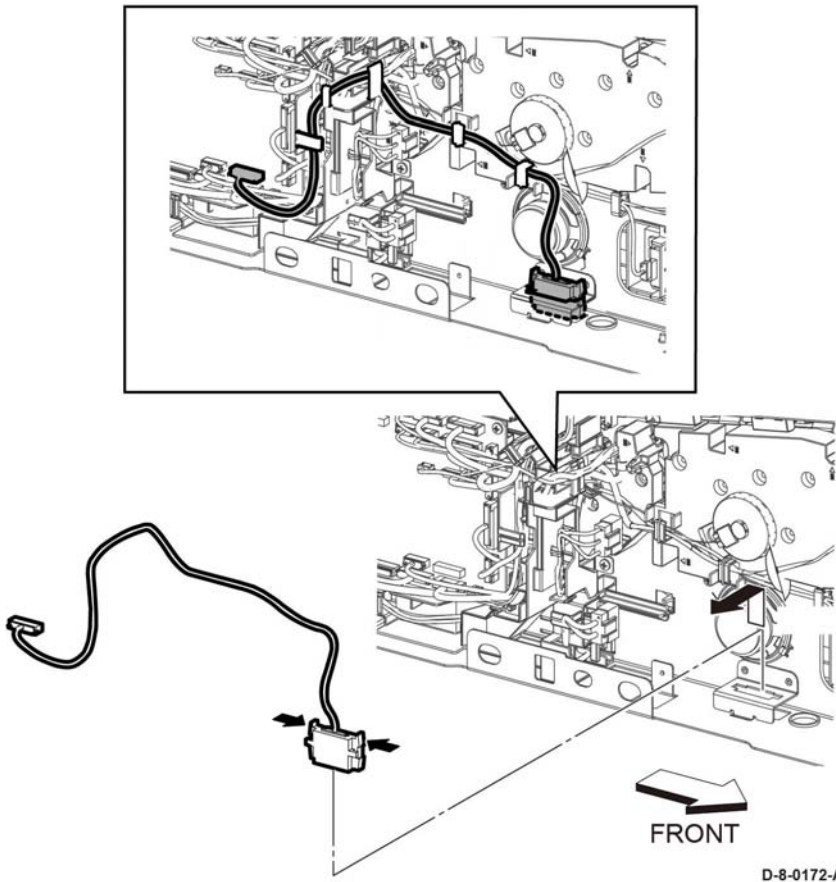


Figure 1 Remove the OPF harness assembly (MFP Tall)

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.



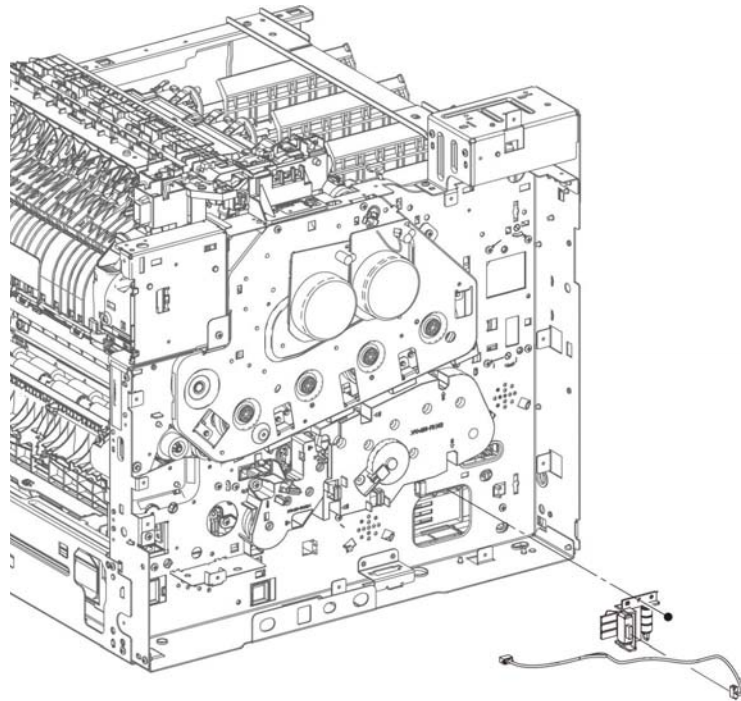


Figure 1 Remove the size switch assembly

D-8-1101-A

## REP 18.31 MCU PWB (SFP)

Parts List on [PL 18.1 \(C500/C505\)](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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

1. Before starting removal, print a configuration page and verify the software version.
2. Install a new MCU PWB, [PL 18.9 Item 1](#).
3. Print a configuration page again.
4. Verify the software version, update the software [GP 9](#) if not the current version.

#### CAUTION

Never install a new MCU PWB and a new ESS PWB at the same time.

**NOTE:** Observe the following when removing or replacing the MCU PWB:

- Do not install a new MCU PWB and a new ESS PWB at the same time. The data is saved on the EMMC Card on the ESS PWB. Install a new MCU PWB first, and then install a new ESS PWB. At the time of each replacement, turn on the printer to restore the data into the MCU PWB or ESS PWB.  
Replace MCU PWB > Cycle pwr ON/OFF > Replace ESS PWB > Cycle pwr ON/OFF
  - It is not necessary to back-up or restore data saved on the ESS PWB by Diagnostic, etc. The data is automatically backed-up when the printer is turned off or in the Deep Sleep mode. When the printer is turned on, mismatched information is detected on the MCU PWB, and then the information is corrected to be matched and restored into the MCU PWB
1. Remove the left side cover, [PL 19.6 Item 1](#).

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

### CAUTION

In the following step, engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 1, Proper Removal of the FFC Cable.

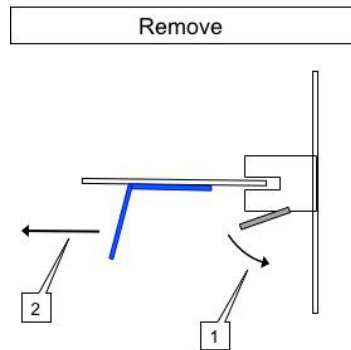


Figure 1 Proper Removal of the FFC Cable

2. Refer to Figure 2, unplug connectors (P/J100, P/J110, P/J120, P/J130, P/J140, P/J190, P/J200, P/J220, P/J270, P/J280, P/J290, P/J400, P/J460, P/J480, P/J500, P/J520, P/J540, P/J550, P/J560, P/J570, P/J800) and the FFC (P/J300).
3. Refer to Figure 2, remove four screws (silver, M3x6mm) securing MCU PWB, PL 18.9 Item 1, and remove the MCU PWB.

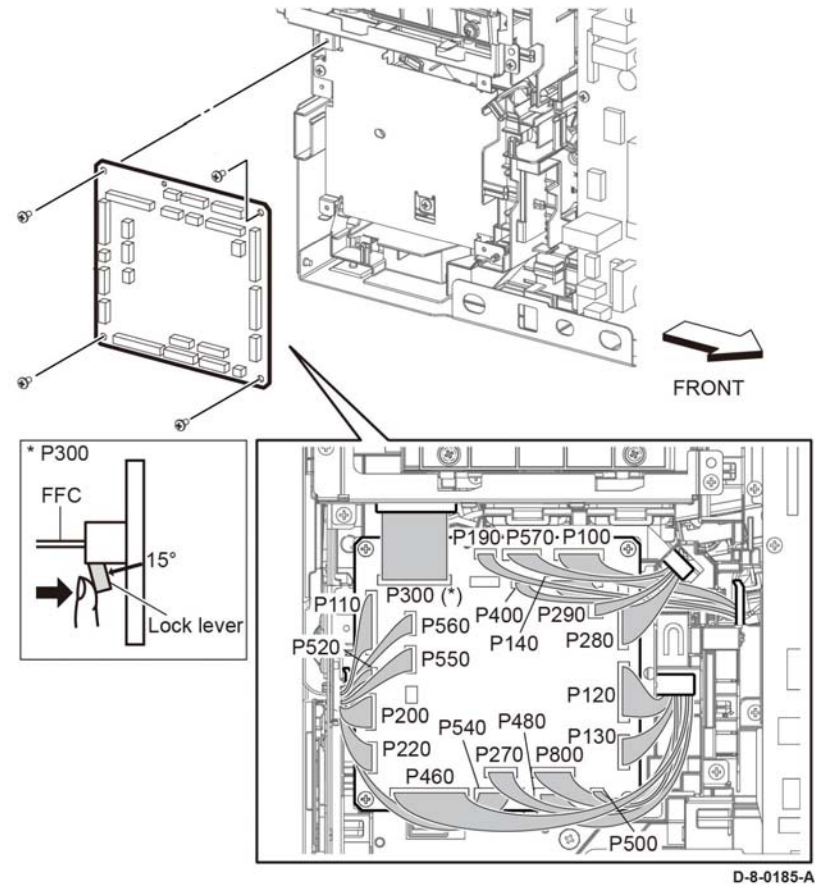


Figure 2 Remove the MCU PWB (SFP)

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

NOTE: To ensure integrity of the FFC connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the FFC cable.
2. To ease installation and ensure proper alignment of the FFC cable, bend the blue “grip tab” 90 degrees perpendicular to the FFC.

- Refer to [Figure 3](#) and [Figure 4](#), **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector.

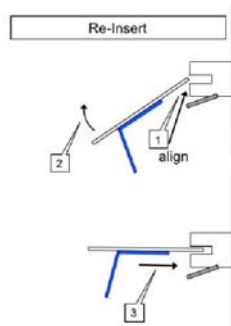


Figure 3 Cable Perpendicular Insertion

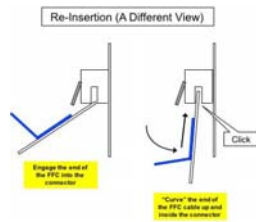


Figure 4 Cable Parallel Insertion

- Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.

## REP 18.32 ESS MCU FFC (SFP)

Parts List on [PL 18.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 left side cover, [PL 19.6 Item 1](#).
- Refer to [Figure 1](#), remove two screws (silver, M3x6mm) attaching the ESS lower plate and remove the plate.
- Refer to [Figure 1](#), remove two screws (SM18, silver, M3X6mm) and remove the HDD Bracket, [PL 18.9 Item 28](#).

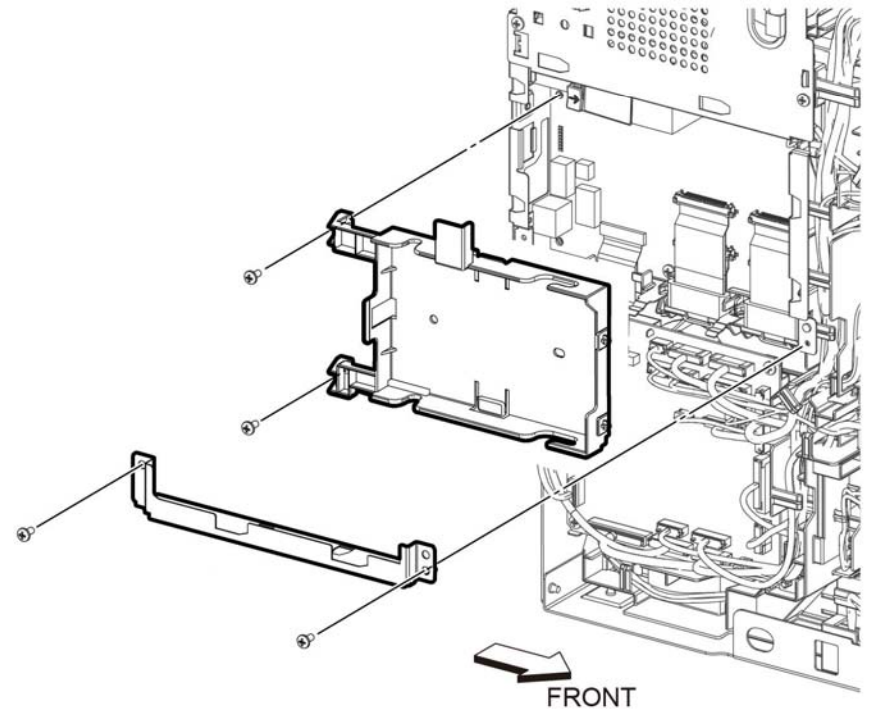


Figure 1 Remove the ESS MCU FFC (SFP)

### CAUTION

Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 2.

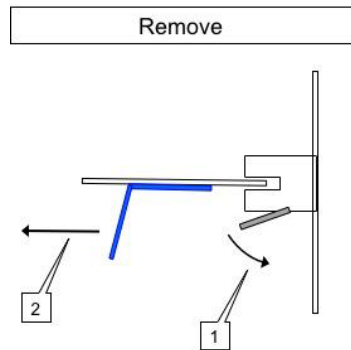


Figure 2 Removing the FFC from the connector

4. Unplug the connectors (P/J300, P/J335) and remove the ESS MCU FCC.

### Replacement

NOTE: To ensure integrity of the ESS MCU FFC, PL 18.9 Item 2, cable, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the ESS FFC MCU cable.
2. To ease installation and ensure proper alignment of the ESS MCU FFC cable, bend the blue "grip tab" 90 degrees perpendicular to the ESS MCU FFC.
3. Refer to Figure 3 and Figure 4, Proper ESS FFC MCU Cable Insertion, grasp the grip tab of the ESS MCU FCC cable placing the back, or non-conductive Side, of the ESS MCU FCC cable against the edge of the connector and centered to the connector.

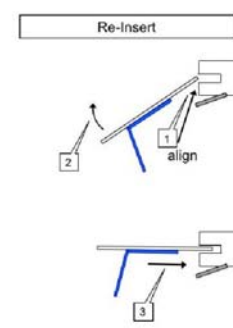


Figure 3 Cable Perpendicular Insertion

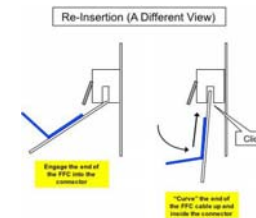


Figure 4 Cable Parallel Insertion

4. Using the grip tab bent at 90 degrees, firmly push the ESS MCU FCC cable into the connector until fully seated. The latch of the connector will "click" when fully seated, locking the FCC in-place.

## REP 18.33 ESS PWB (SFP)

### Parts List on PL 18.1

### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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

1. Before starting removal, print a configuration page and verify the software version.
2. Install a new ESS PWB, PL 18.9 Item 5.
3. Print a configuration page again.
4. Verify the software version, update the software GP 9 if not the current version.

#### CAUTION

Never install a new MCU PWB and a new ESS PWB at the same time.

**NOTE:** Observe the following when removing or replacing the ESS PWB:

- Do not install a new MCU PWB and a new ESS PWB at the same time. The data is saved on the EMMC Card on the ESS PWB. Install a new MCU PWB first, and then install a new ESS PWB. At the time of each replacement, turn on the printer to restore the data into the MCU PWB or ESS PWB.

Replace MCU PWB > Switch the machine off then on GP 4 > Replace ESS PWB > Switch the machine off then on GP 4.

- It is not necessary to back-up or restore data saved on the ESS PWB by Diagnostic, etc. The data is automatically backed-up when the printer is switched off or in the Deep Sleep mode. When the printer is turned on, mismatched information is detected on the MCU PWB, and then the information is corrected to be matched and restored into the MCU PWB.

- When replacing the ESS PWB, it is necessary to move the EMMC Card from the original ESS PWB to the replacement ESS PWB.

Avoid using excessive pressure to remove or install the EMMC Card. Follow proper electrostatic discharge procedures to prevent damage to the ESS Card during replacement.

1. Remove the left side cover, PL 19.6 Item 1.
2. Remove the ESS top plate, PL 18.9 Item 18.
3. Refer to Figure 1, disconnect the ESS MCU FCC cable from the ESS PWB, PL 18.9/.2.
4. Remove the MCU PWB, PL 18.9 Item 1.
5. Remove the Guide FFC Color MCU, PL 18.9 Item 7.
6. Refer to Figure 1, disengage the connectors (P/J301, P/J1337, P/J1352) and the FFCs (P/J1360, P/J1361, P/J1362, P/J1363, P/J335).

**NOTE:** Please refer to Figure 1, Proper Removal of the ESS MCU FFC Cable to ensure no damage to the cable or the connector release latch occurs. Damage to the FFC cable and/or release latch could result in replacement required or damage to other components.

7. Refer to Figure 1, remove six screws (SM18, silver, M3X6mm) and two screws (SM1, silver, M3Xmm) and Earth plate of the USB connector, and then remove the ESS PWB (SFP), PL 18.9 Item 5.

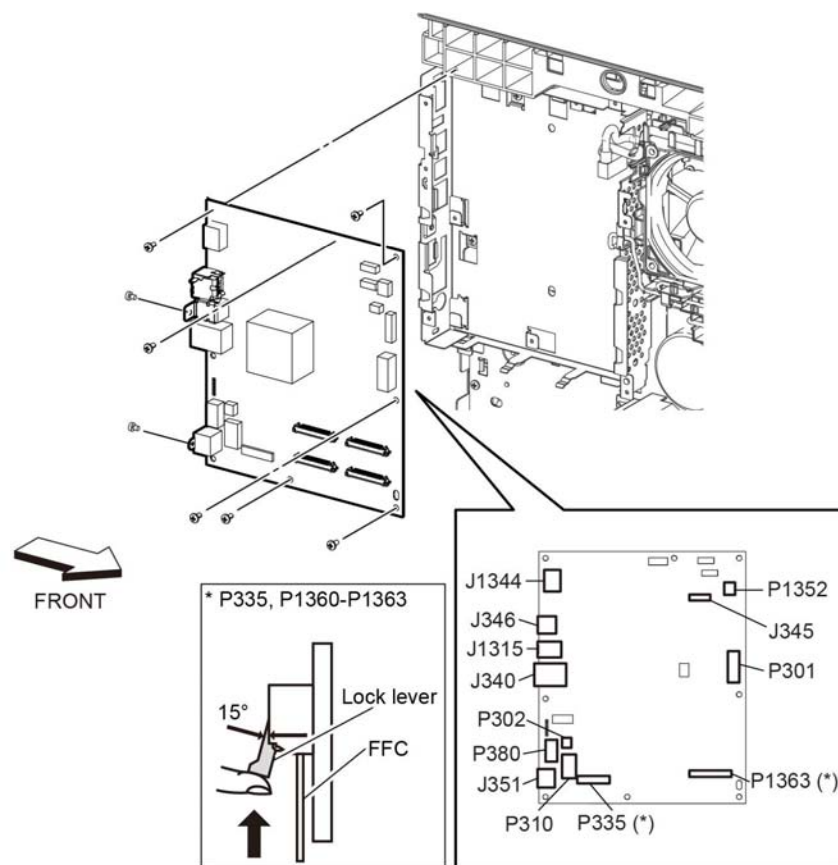


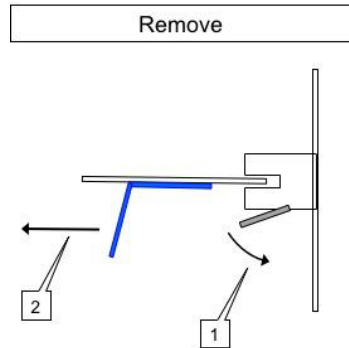
Figure 1 Remove the ESS PWB (SFP)

D-8-0371-A

**CAUTION**

*Engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.*

*NOTE: When engaging the release lever on the FFC connector, slightly open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in Figure 2.*



**Figure 2 Proper Removal of the ESS MCU FFC Cable**

8. Refer to [Figure 3](#), **Disconnect all Cables**, carefully move the harnesses out of the way and remove the ESS PWB from the frame leaving all harnesses and guides in-place.



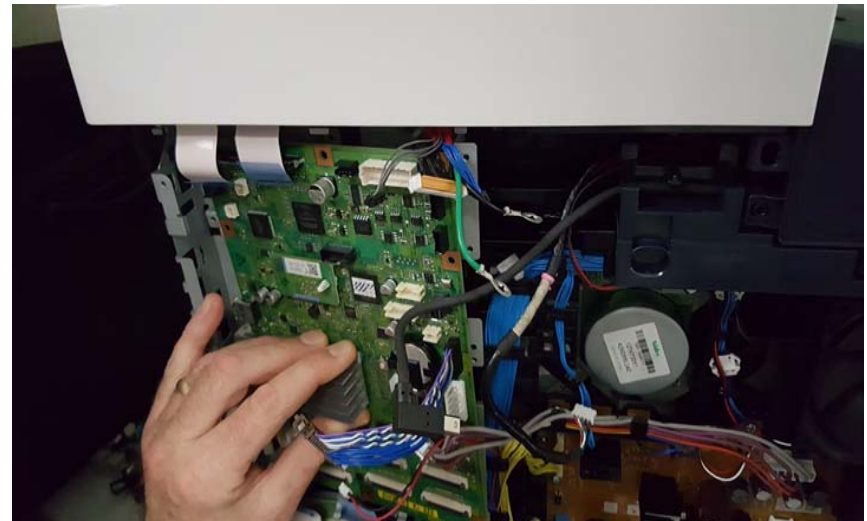
**Figure 3 Disconnect all Cables**

9. Refer to [Figure 4](#), **Lift the Bottom Right Corner from the ESS Frame**, carefully ease the ESS PWB from the ESS Frame.



**Figure 4 Lift the Bottom Right Corner from the ESS Frame**

10. Refer to [Figure 5](#), **Slide the ESS PWB from the Right Side of the ESS Frame**, carefully ease the ESS PWB out of the ESS Frame.



**Figure 5 Slide the ESS PWB from the Right Side of the ESS Frame**

11. Refer to [Figure 6](#), **Slide the ESS PWB Out of the ESS Frame**, to remove the ESS PWB from the ESS Frame entirely.



**Figure 6 Remove the ESS PWB from the ESS Frame**

12. The ESS PWB removal is complete, [Figure 7](#), **Removal Complete with FCC Guides Remaining In-place**



**Figure 7 Removal Complete with FCC Guides Remaining In-place**

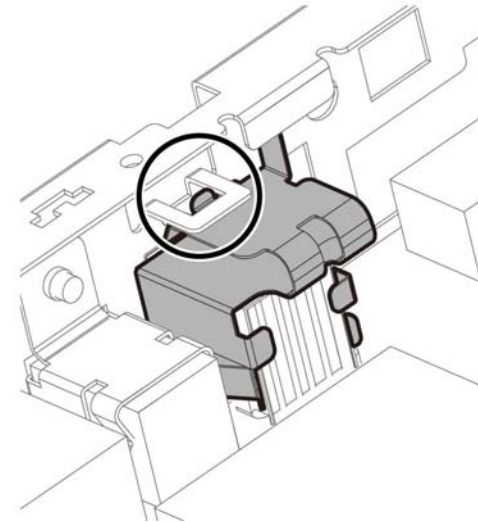
## Replacement

### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

### CAUTION

When installing the ESS PWB (SFP), check that the Earth plate of the USB connector catches in the ESS Box (SFP), PL18.9/19 as shown in the [Figure 8](#), **Earth plate of the USB Connector in the ESS Box** below.



D-8-0289-A

**Figure 8 Earth plate of the USB Connector in the ESS Box.**

1. Be sure to move the EMMC Card from the original ESS PWB to the new one.

**NOTE:** To ensure integrity of the FFC cables connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

2. Slip the core down the FFC cable.
3. To ease installation and ensure proper alignment of the FFC cable, bend the blue "grip tab" 90 degrees perpendicular to the FFC.
4. Refer to [Figure 9](#) and [Figure 10](#), **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector.

## REP 18.34 Front USB Harness Assembly (SFP)

Parts List on [PL 18.9 Item 14](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 SFP top cover assembly.
2. Refer to [Figure 1](#), unplug the connector. P/J1337.
3. Refer to [Figure 1](#), release the front USB harness assembly, [PL 18.9 Item 14](#), from the DC harness guide, [PL 18.11 Item 9](#), release one clamp, and the guides on the front USB harness assembly, [PL 18.11 Item 20](#).
4. Refer to [Figure 1](#), remove one screw (SM3, silver, M4X6mm) and one screw (ST20, screw for plastic silver, tapping, M3x8) to remove the front USB harness assembly.

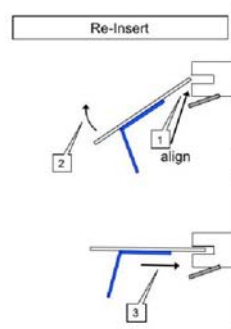


Figure 9 Cable Perpendicular Insertion

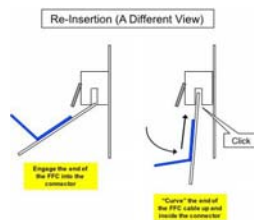


Figure 10 Cable Parallel Connector Insertion

5. Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.



## REP 18.35 LVPS PWB (SFP)

Parts List on [PL 18.9 Item 16](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 steps that follow:

High Speed Model (C600)

1. Remove the left side cover, [PL 19.3 Item 4](#).
2. Refer to [Figure 1](#), unplug the connectors (P/J281, P/J283, P/J284, P/J285, P/J286, P/J287, P/J288, P/J289, P/J291, P/J292, P/J293, P/J295) from the LVPS PWB.
3. Refer to [Figure 1](#), remove nine screws (silver, M3x6mm) attaching the LVPS PWB to the LVPS plate, and remove the LVPS PWB.

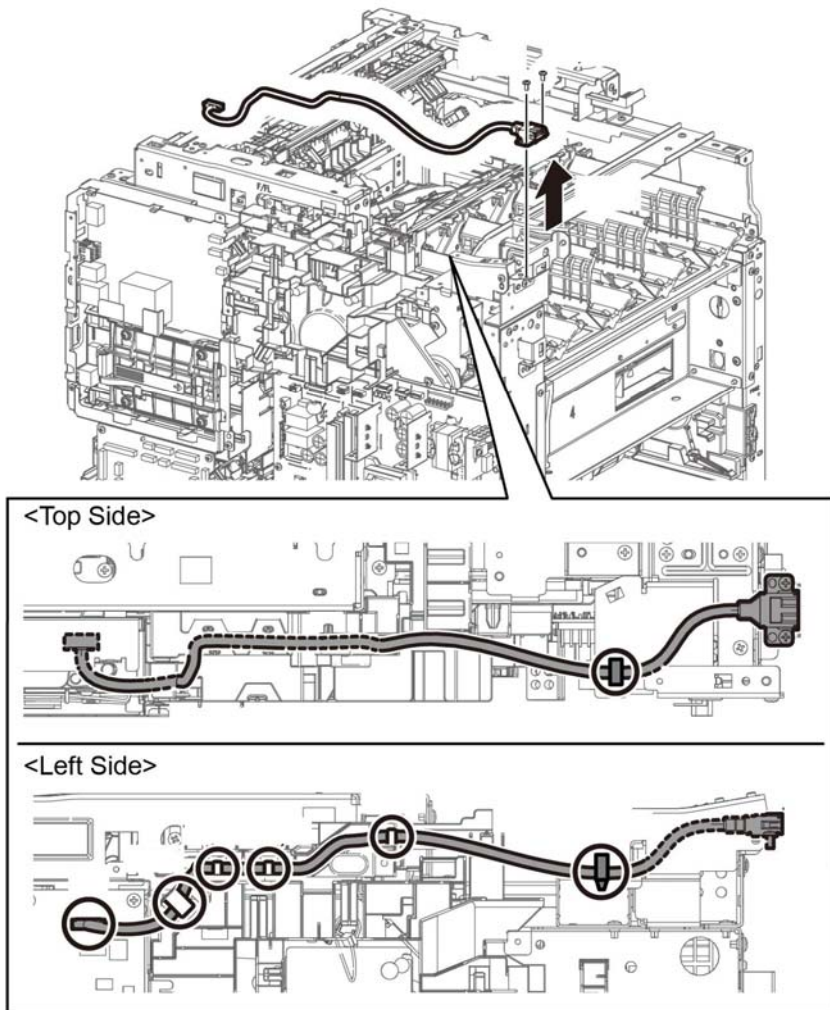


Figure 1 Remove the front USB harness assembly (SFP)

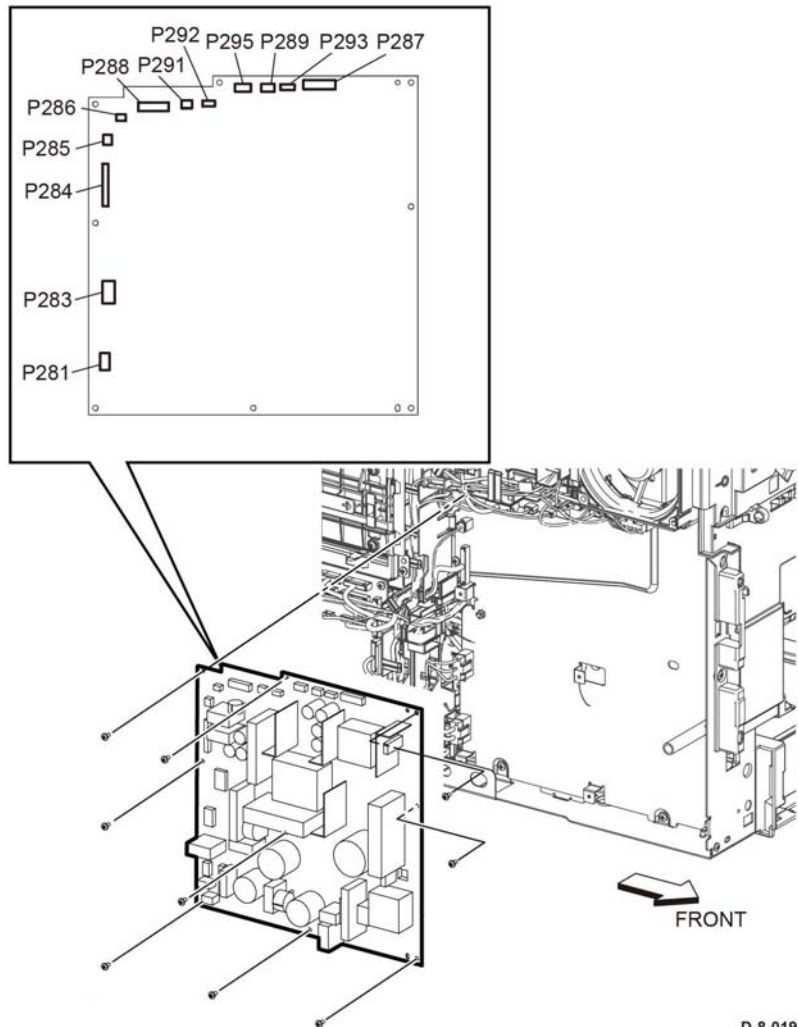


Figure 1 Remove the LVPS PWB (SFP High Model C600)

D-8-0191-A

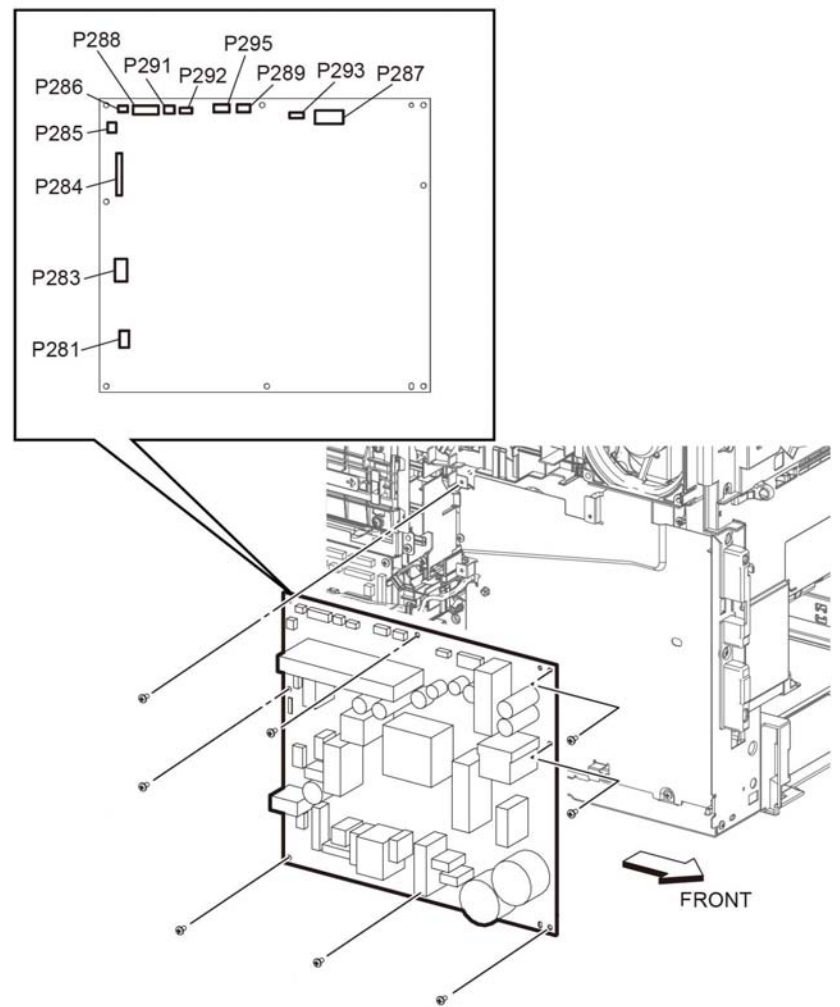


Figure 2 Remove the LVPS PWB (SFP Low Model C500)

D-8-0292-A

Low Speed Model (C500)

1. Refer to [Figure 2](#), remove eight screws (silver, M3x6mm) attaching the LVPS PWB to the LVPS plate, and remove the LVPS PWB.

## REP 18.36 HVPS Guide Assembly (SFP)

Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LPH xerographic CRUM FFC, [PL 8.1](#).
2. Refer to [Figure 1](#), remove the HVPS toner cover, [PL 18.9 Item 3](#), and remove one screw, (SM18, silver, M3x6mm).
3. Refer to [Figure 1](#), push the faston plug holders in the direction of the arrows to disconnect the faston plugs from their terminals (P/J501, P/J502, T601).
4. Refer to [Figure 1](#), unplug the connector (P/J100) from the HVPS guide assembly.
5. Refer to [Figure 1](#), release the two hooks and remove the HVPS guide assembly in the direction of the arrow.

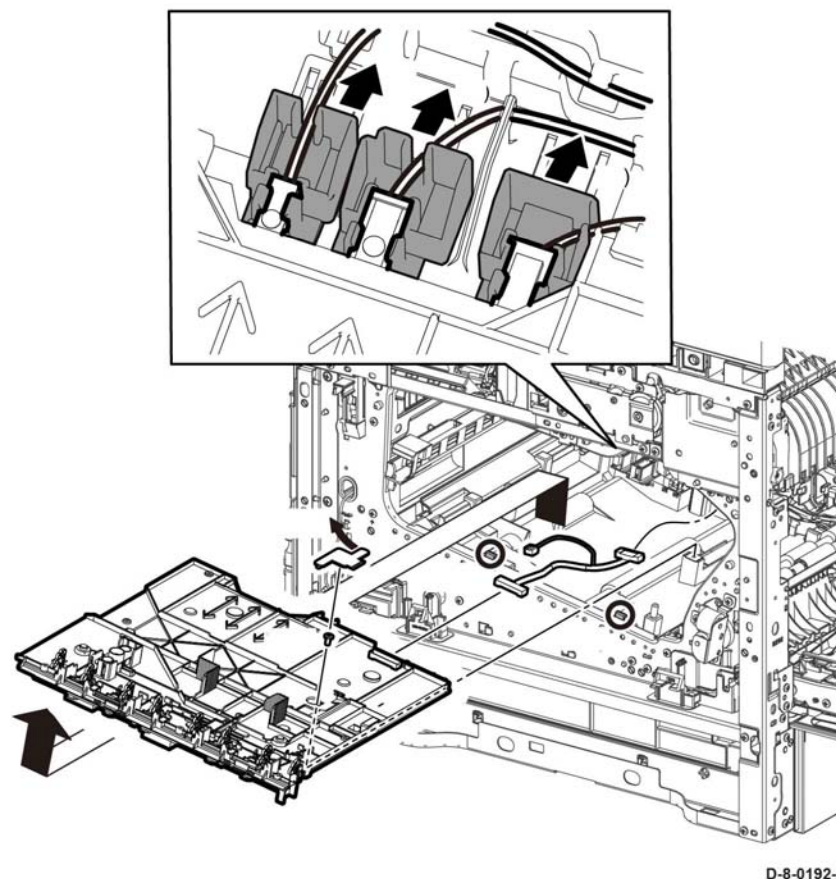


Figure 1 Remove the HVPS guide assembly (SFP)

### Replacement

To reinstall a new HVPS guide assembly:

1. Connect the connector P/J100.
2. Place the HVPS guide assembly into its installed position making sure to insert the alignment tabs at the left edge of the board into their slots.
3. Slide the faston connector holders towards the board to reconnect the plugs.

**NOTE:** Make sure to attach the faston connectors (P/J501, P/J502, T601: K 1st supply harness assembly, [PL 18.10 Item 7](#), YMC 1st supply harness assembly, [PL 18.10 Item 6](#), and trans supply harness assembly, [PL 18.10 Item 8](#), at the initial position as shown in [Figure 2](#).

## REP 18.37 HVPS Toner Cover (SFP)

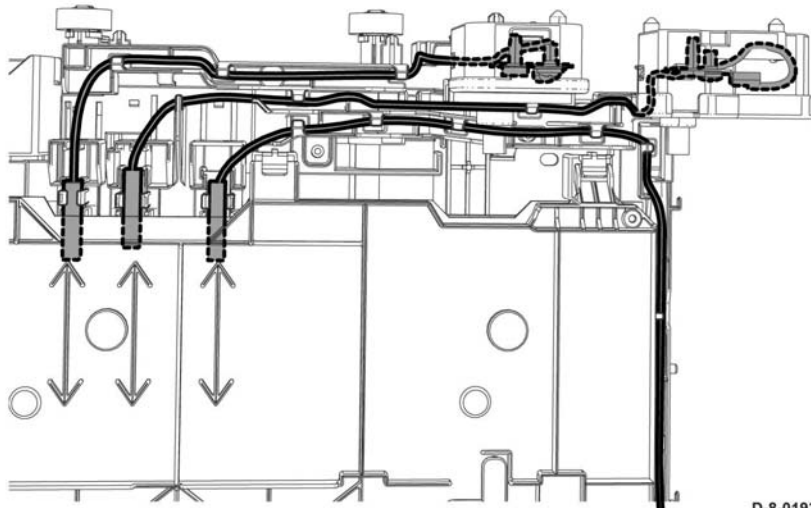
Parts List on [PL 18.10 Item 3](#)

### Removal

#### WARNING

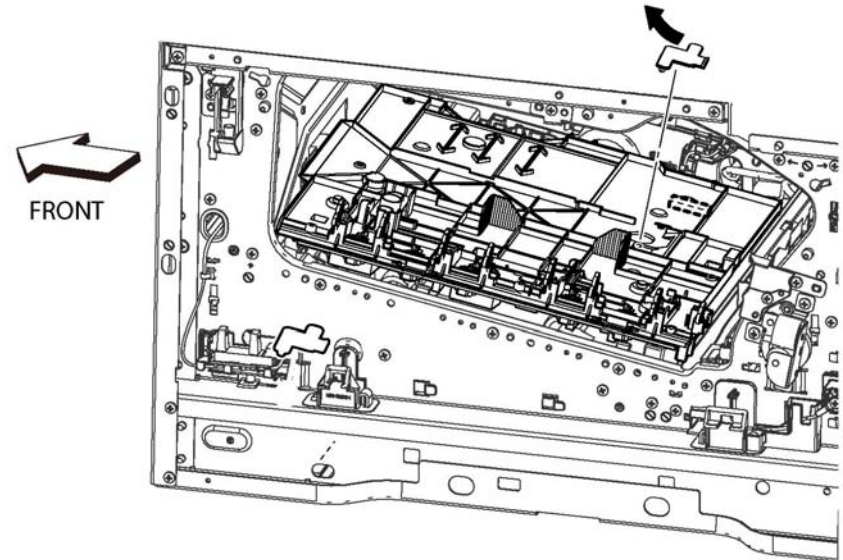
Switch off the electricity to the machine, [GP 4](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the drum cartridges Y, M, C, K, [PL 8.1](#).
2. Refer to [Figure 1](#), remove the HVPS toner cover, [PL 18.10 Item 3](#).



D-8-0193-A

Figure 2 Re-attaching HVPS guide harnesses (SFP)



D-8-1100-A

Figure 1 Remove the HVPS toner cover (SFP)

## REP 18.38 Second Bias Transfer Roll Housing Kit (SFP)

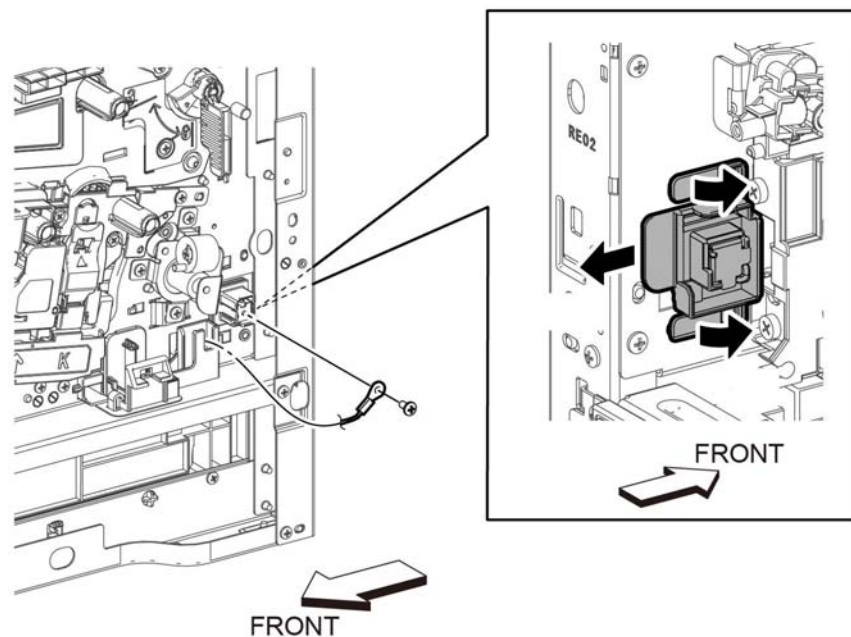
Parts List on [PL 18.10 Item 99](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 Rear Door, [PL 19.2 Item 99](#).
2. Refer to [Figure 1](#), remove the one screw (silver, M3x6mm) attaching the high voltage harness.
3. Refer to [Figure 1](#), release two hooks on the second bias transfer housing and remove the housing.



D-8-0167-A

Figure 1 Remove the second bias transfer housing kit (SFP)

## REP 18.39 AC Fusing Harness Assembly (SFP)

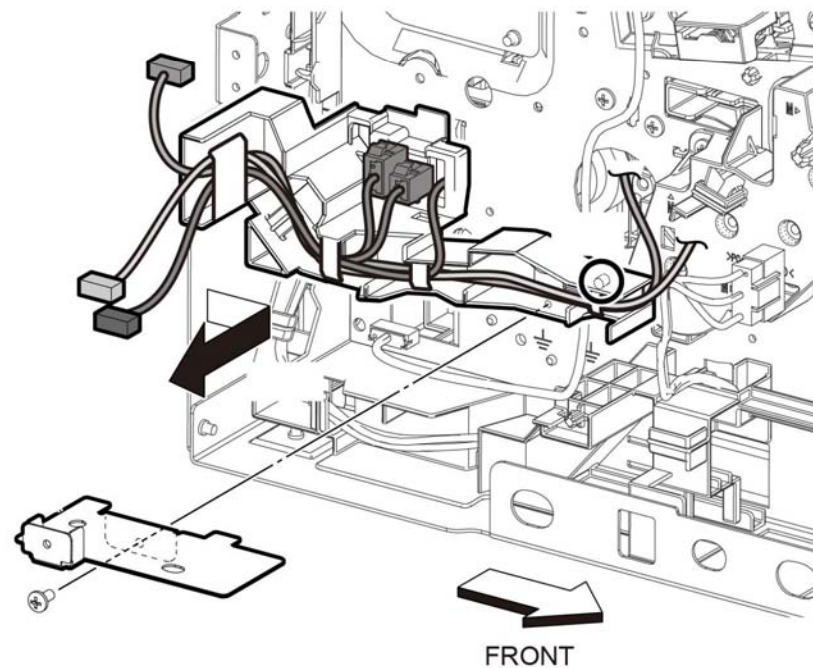
Parts List on [PL 18.11 Item 2](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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.

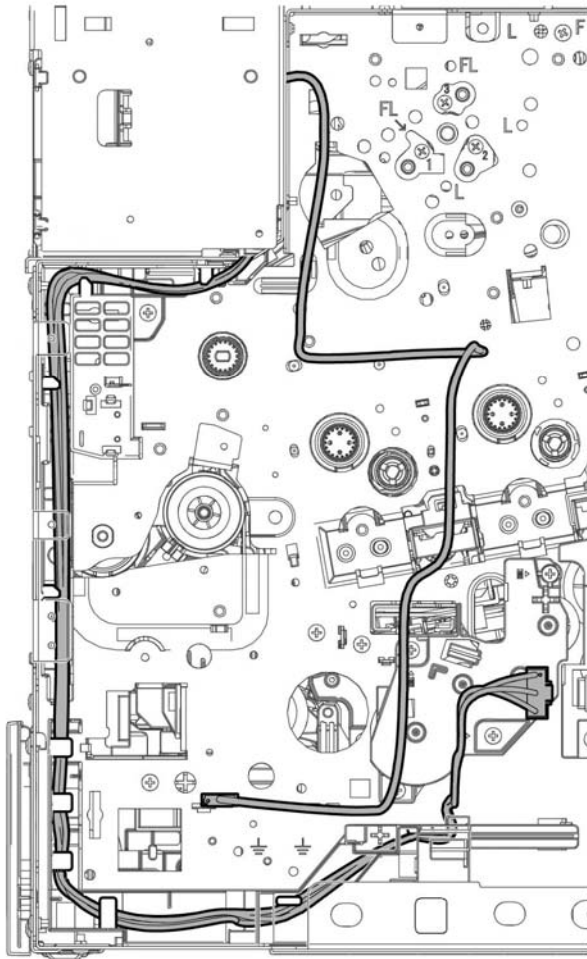
1. Remove the exit chute assembly, [PL 17.1 Item 1](#) (C600) (C500).
2. Release one boss of the harness guide, and slightly release the harness guide with the harnesses in the direction of the arrow.
3. Refer to [Figure 1](#), remove one screw (SM18, silver, M3X6mm) to remove the plate.



D-8-0299-A

Figure 1 Remove one screw to remove the plate (SFP)

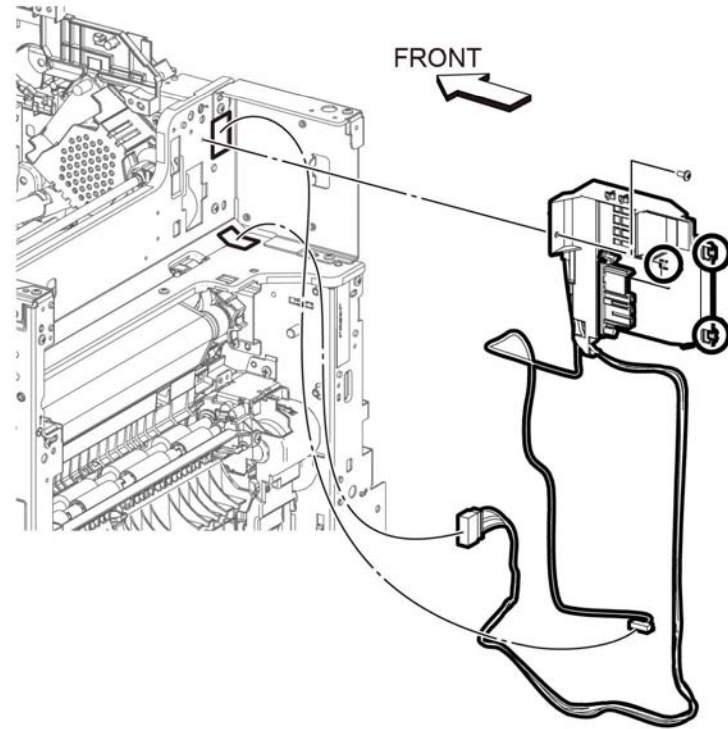
5. Release the AC fusing harness assembly, [PL 18.11 Item 3](#), from the harness guides.



D-8-0300-A

**Figure 2 Release the AC fusing harness assembly from the harness guides (SFP)**

6. Remove one screw (SM18, silver, M3X6mm), and release three hooks to remove the DC-CF fusing harness assembly, [PL 18.11 Item 2](#), and AC fusing harness assembly with the fusing harness guide.



D-8-0301-A

**Figure 3 Remove the DC-CF fusing harness assembly (SFP)**

7. Refer to [Figure 4](#), remove the DC-CF fusing harness assembly and AC fusing harness assembly from the fusing harness guide, then remove the DC-CF fusing harness assembly from the AC fusing harness assembly.

## REP 18.40 Rear-CF Interlock Harness Assembly (SFP)

Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 ESS PWB, [PL 18.3 Item 3](#).
2. Remove the ESS Box, [PL 18.3 Item 15](#).
3. Refer to [Figure 1](#), unplug the connector (P/J292) from the LVPS PWB and release the cable from the cable guide.
4. Refer to [Figure 1](#), release the two hooks and remove the Rear-CF interlock harness assembly.

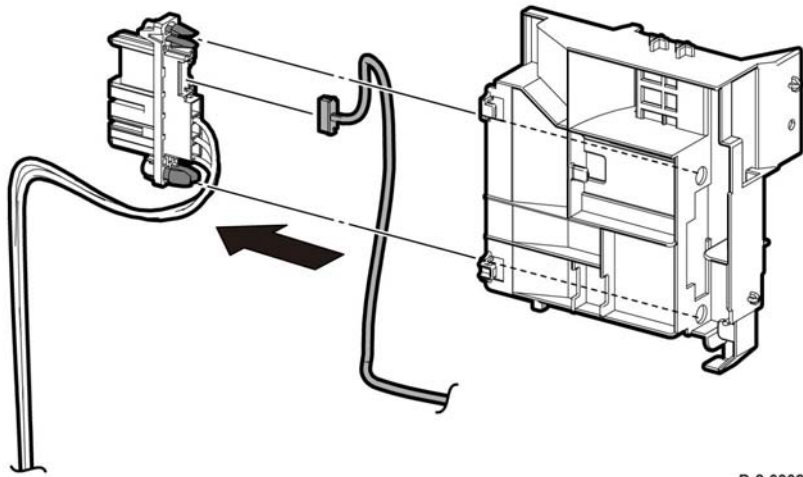


Figure 4 Remove the Inlet harness assembly (SFP)

D-8-0302-A

### Replacement

#### CAUTION

*Make sure the Inlet Harness wiring is replaced following the factory-installed route.*

The replacement is the reverse of the removal procedure.

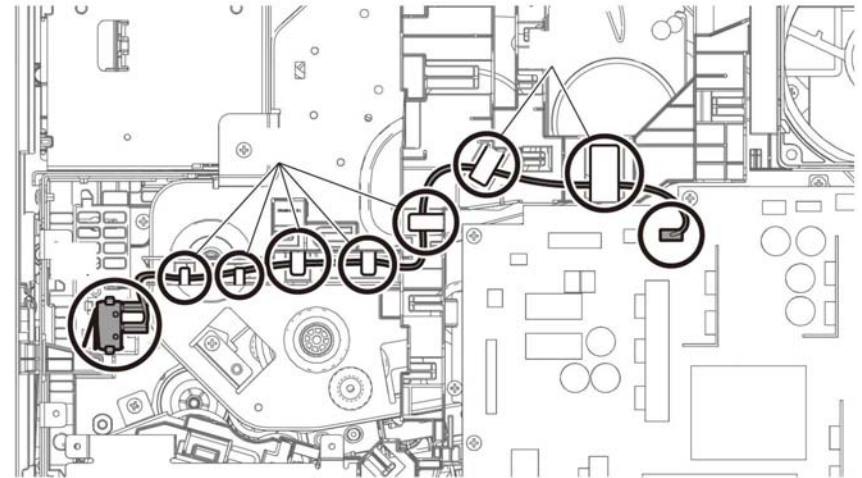


Figure 1 Remove the Rear-CF Interlock harness assembly (SFP)

D-8-0369-A

## REP 18.41 Side-CF Interlock Harness Assembly (SFP)

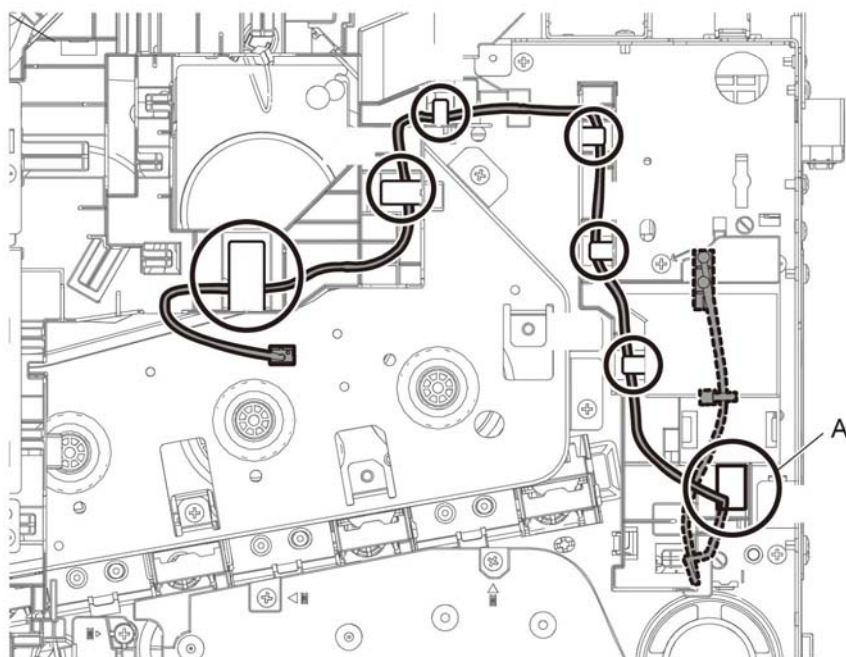
Parts List on [PL 18.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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.

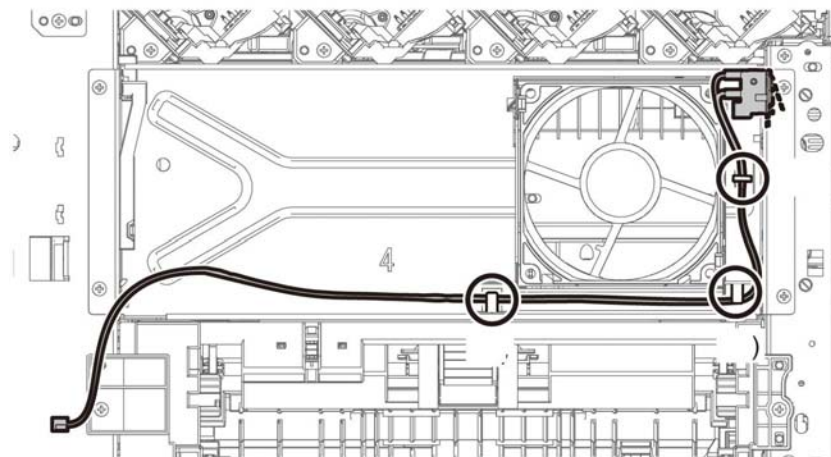
1. Remove the LVPS PWB, [PL 18.3 Item 6](#).
2. Remove the LVPS plate, [PL 18.3 Item 13](#).
3. Refer to [Figure 1](#), release the harness of the Side-CF IL harness assembly from the three hooks.
4. Pull out the Side-CF I/L harness assembly from hole A.



D-8-0169-A

Figure 1 Side interlock harness release

5. Refer to [Figure 2](#), release the Side-CF I/L harness assembly from the sub fan duct, [PL 4.1 Item 4](#).



D-8-0170-A

Figure 2 Side-CF I/L harness assembly release (SFP)

6. Remove the waste link, [PL 19.1 Item 13](#), and the waste link spring, [PL 19.1 Item 14](#).
7. Refer to [Figure 3](#), remove the screw (silver, M3x6mm) attaching the Side-CF interlock harness assembly and remove the harness.



## REP 18.42 OPF-CF Harness Assembly (SFP)

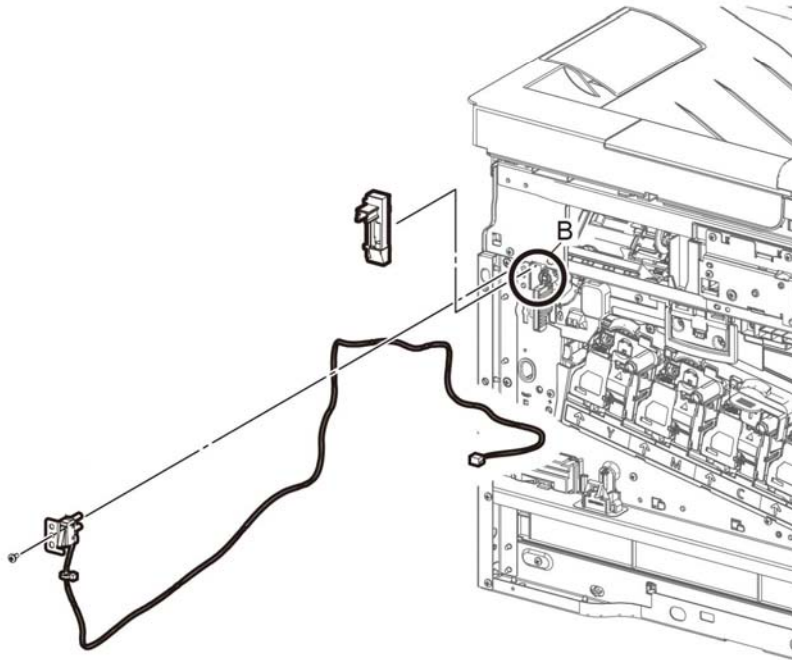
Parts List on [PL 18.7](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS PWB, [PL 18.3 Item 6](#).
2. Remove the LVPS plate, [PL 18.3 Item 13](#).
3. Refer to [Figure 1](#), unplug the connector (P/J800) and release the harness portion of the OPF harness assembly from the four hooks of the harness guide.
4. Release the levers to remove the OPF-CF harness assembly.
5. Refer to [Figure 1](#), squeeze the connector to release the connector from the socket and remove the OPF-CF harness assembly.



D-8-0294-A

Figure 3 Remove the Side Interlock harness assembly (SFP)

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.

## REP 18.43 Size Switch Assembly (SFP)

Parts List on [PL 18.11 Item 22](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 LVPS plate, [PL 18.1 Item 13](#).

**NOTE:** In the following steps, be sure to note the harness routing to avoid damaging wires during replacement.

2. Refer to [Figure 1](#), unplug the connector, P/J191.
3. Refer to [Figure 1](#), remove one screw, (ST20, silver, metal) and remove the size switch assembly.

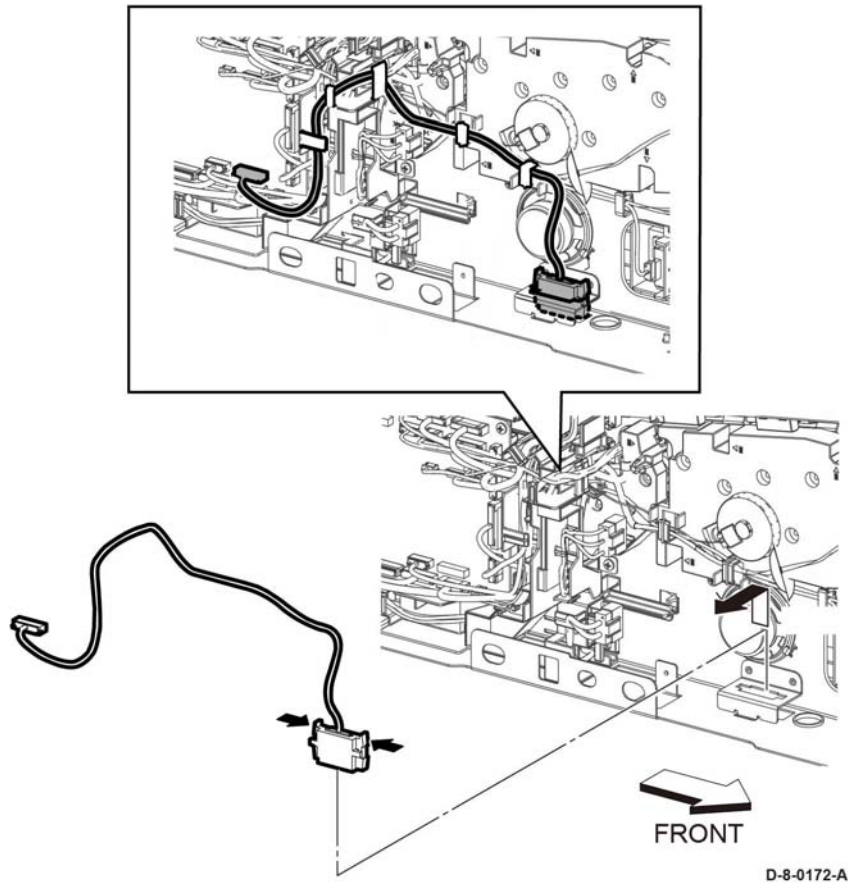
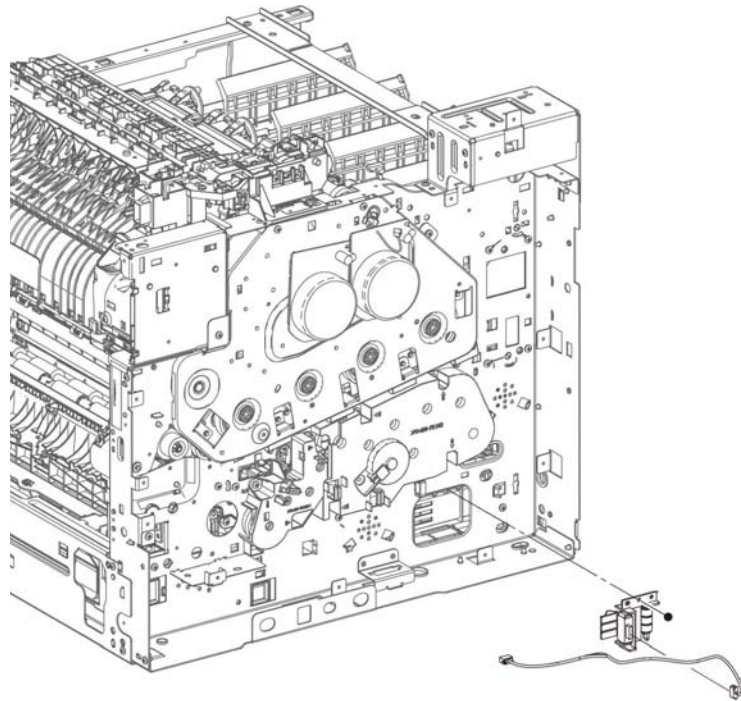


Figure 1 Remove the OPF harness assembly (SFP)

### Replacement

#### CAUTION

Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.



D-8-1101-A

Figure 1 Remove the size switch assembly (SFP)

## Replacement

### CAUTION

*Avoid damaging wires during replacement. When replacing wire harnesses, use factory-installed routes.*



## REP 19.1 Front Cover Assembly (MFP and MFP\_Tall)

Parts List on [PL 19.1](#) and [PL 19.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 IOT 550 Feed Tray Assembly, [REP 9.1](#).
2. Remove the finisher or mailbox if installed.
3. Release the front cover assembly, [Figure 1](#):
  - a. Open front cover assembly (1).
  - b. Release the boss of each link (L/R) from the front cover assembly (2).
  - c. Slide the links (L/R) into the printer (3).

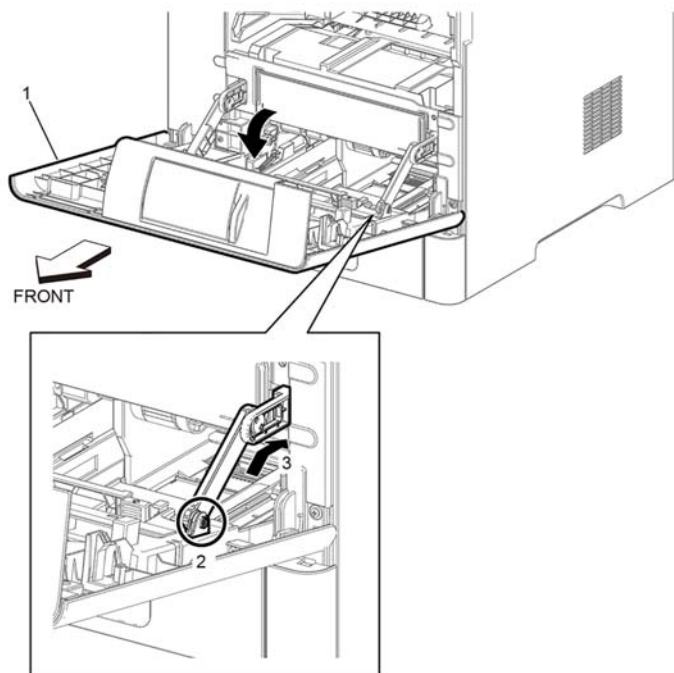


Figure 1 Front cover assembly release

D-8-0229-A

4. Remove the front cover assembly, [Figure 2](#):
  - a. Close the cover assy front to the position shown (1).
  - b. Remove the front cover assembly (2) while flexing the part (A) to release the bosses.

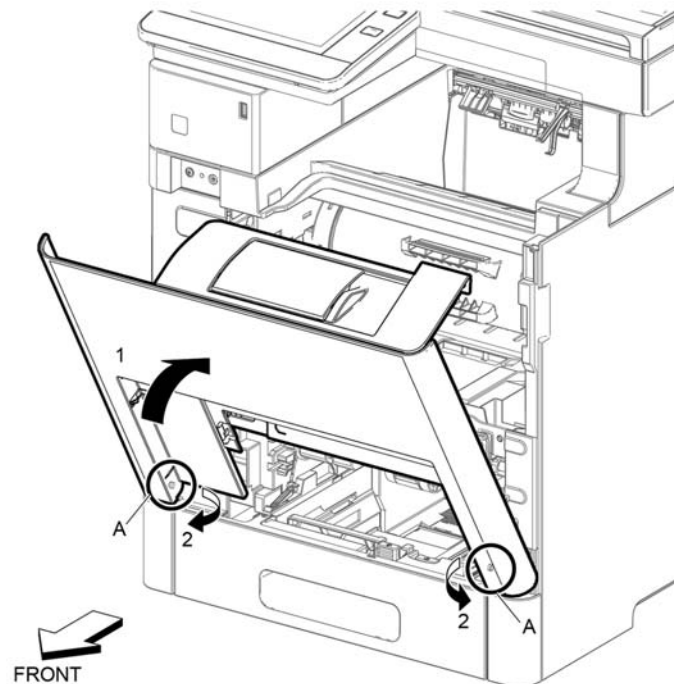


Figure 2 Front cover assembly removal

B-1-0229-B

### Replacement

The replacement is the reverse of the removal procedure.

## REP 19.2 Right Front Cover (MFP and MFP\_Tall)

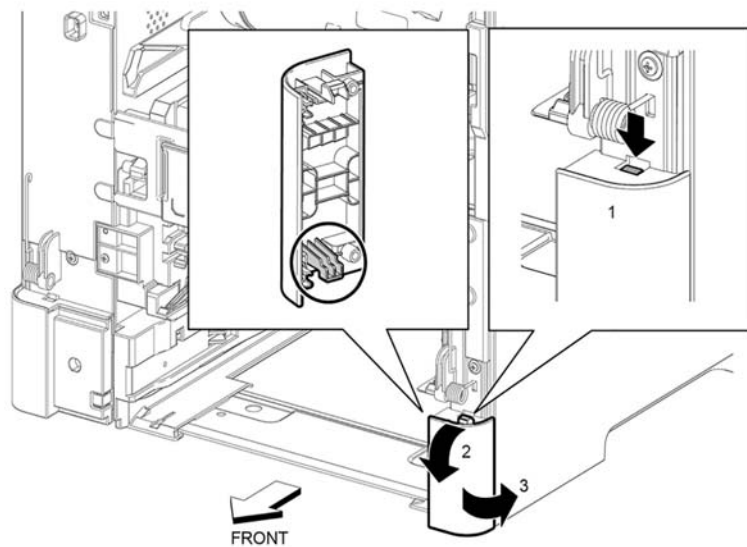
Parts List on [PL 19.1](#) and [PL 19.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 right side front cover, [Figure 1](#):
  - a. Press the hook release button (1).
  - b. Rotate the top of the right front cover in the direction of the arrow (2).
  - c. Remove the right front cover in the direction of the arrow (3).



B-8-0232-B

Figure 1 Right side front cover removal

### Replacement

The replacement is the reverse of the removal procedure.

**REP 19.4 Not used**  
This procedure is not used.

**REP 19.5 Not used**  
This procedure is not used.

## REP 19.6 Not used

This procedure is not used.

## REP 19.7 Left Side Cover (MFP and MFP\_Tall)

Parts List on [PL 19.2](#) and [PL 19.4](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 IOT 550 feed tray assembly, [REP 9.1](#).
2. Remove the main bypass tray (MSI) assembly, [REP 13.6](#).
3. Remove the front cover assembly, [PL 19.1](#).
4. Open the rear door, [PL 19.2 Item 12](#).
5. Remove the left cover assembly, [Figure 1](#):
  - a. Remove six screws (1).
  - b. Release two bosses (2) at the front of the left side cover.
  - c. Release one hook (3).
  - d. Release one hook (4) and one boss (4), then remove the left side cover.



## REP 19.8 Left Side IIT Cover (MFP)

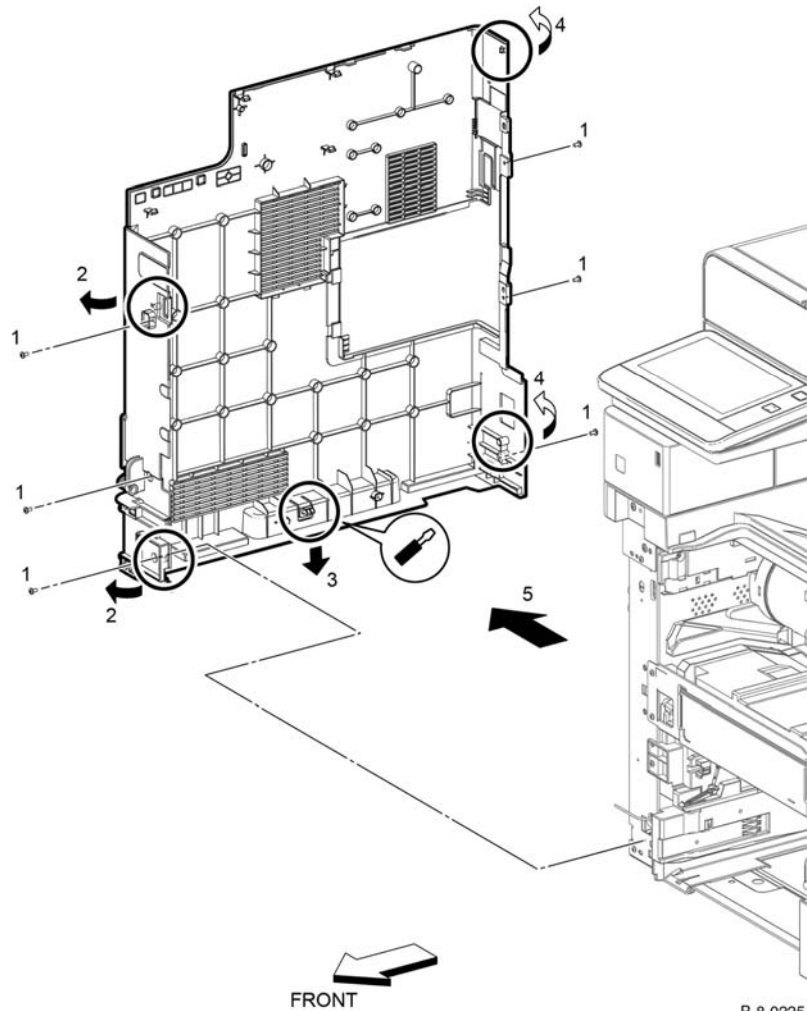
Parts List on [PL 19.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. While pushing the part A, remove the COVER ICCR (PL19.1.40).

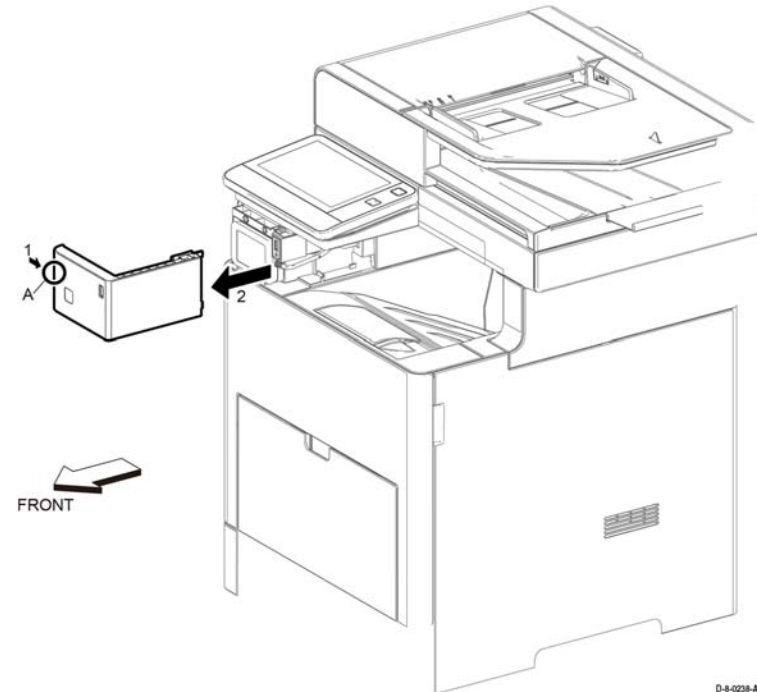


B-8-0225-A

Figure 1 Remove the left side cover (MFP)

### Replacement

The replacement is the reverse of the removal procedure.



D-8-0238-A

Figure 1 ICCR cover removal

- Refer to [Figure 2](#), remove the left side IIT cover in the direction of the arrow

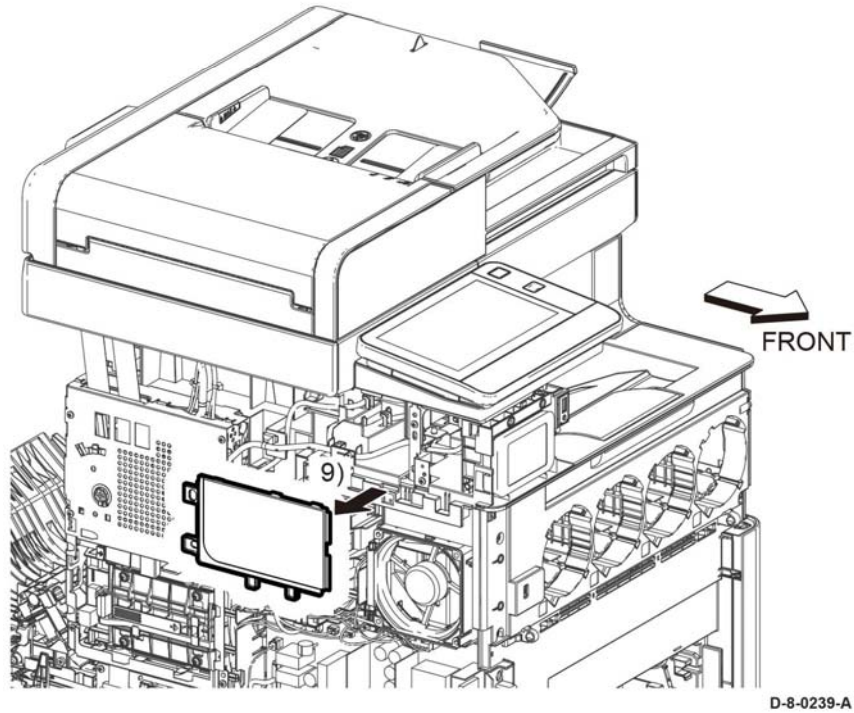


Figure 2 Remove the Left Side IIT Cover (MFP)

### Replacement

The replacement is the reverse of the removal procedure.

## REP 19.9 Second Bias Transfer Roller Assembly (MFP and MFP\_Tall)

Parts List on [PL 19.2](#) and [PL 19.4](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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.

- Open the rear door, [PL 19.1 Item 99](#).
- Squeeze the four latches and remove the 2nd BTR roll assembly.

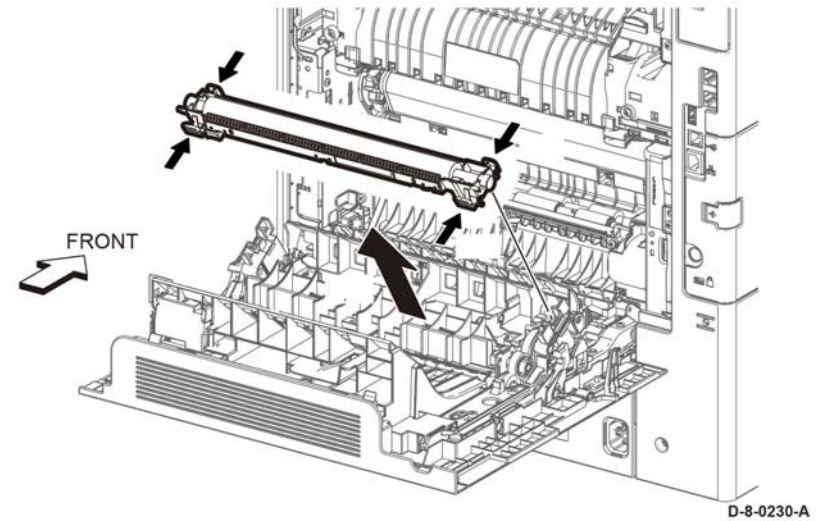


Figure 1 Remove the Second Bias Transfer Roller Assembly (MFP)

## REP 19.10 Left Front Cover (MFP and MFP\_Tall)

Parts List on [PL 19.1](#) and [PL 19.3](#)

### Prerequisite:

Remove the IOT 550 feed tray assembly, [REP 9.1](#).

Remove the main bypass tray (MSI) assembly, [REP 13.6](#).

Remove the front cover assembly, [REP 19.1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 front cover, [Figure 1](#):
  - a. Push the release button in the direction of the arrow (1) to release the front left cover (2).
  - b. Disconnect (P/J512) (3), then remove the left front cover (2) with the tray led PWB, [PL 19.1 Item 24](#) and the tray shade cover, [PL 19.1 Item 25](#).

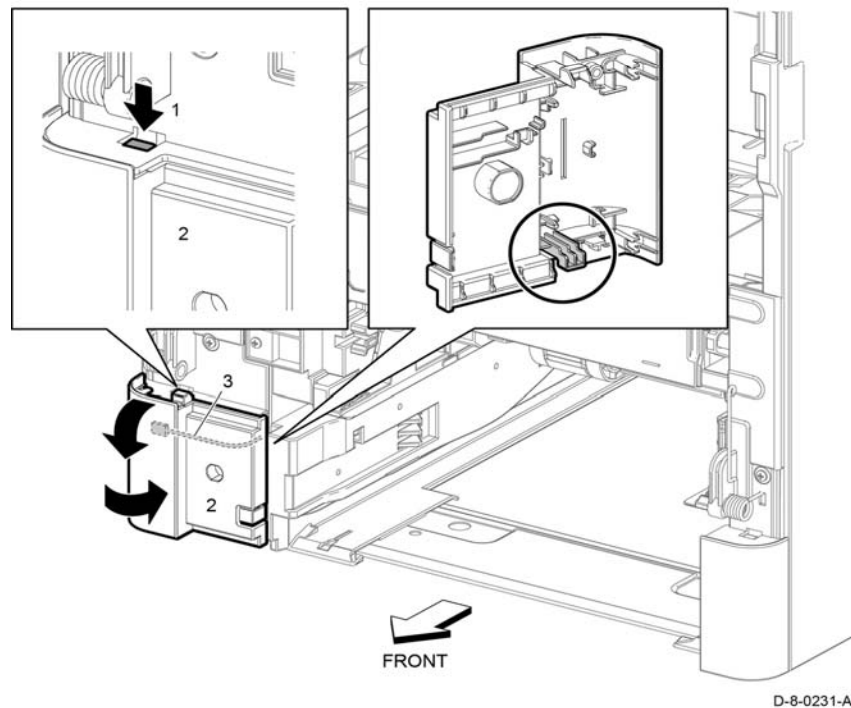


Figure 1 Remove the left front cover

### Replacement

The replacement is the reverse of the removal procedure.

**REP 19.11 Not used**  
This procedure is not used.

## REP 19.12 Right Side Cover Assembly (MFP and MFP\_Tall)

Parts List on [PL 19.1](#) and [PL 19.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. 550 IOT cassette assembly, [REP 9.1](#).
2. Main MSI tray assembly, [REP 13.6](#).
3. Right front cover, [REP 19.2](#).
4. Open the rear door, [PL 19.2 Item 99](#).
5. Remove the right side cover assembly, [Figure 1](#):
  - a. Remove four screws (1).
  - b. Release the bosses (2) on the front of the cover.
  - c. Release one hook (3) on the bottom of the cover.
  - d. Release two bosses (4) on the rear of the cover, then remove the cover.

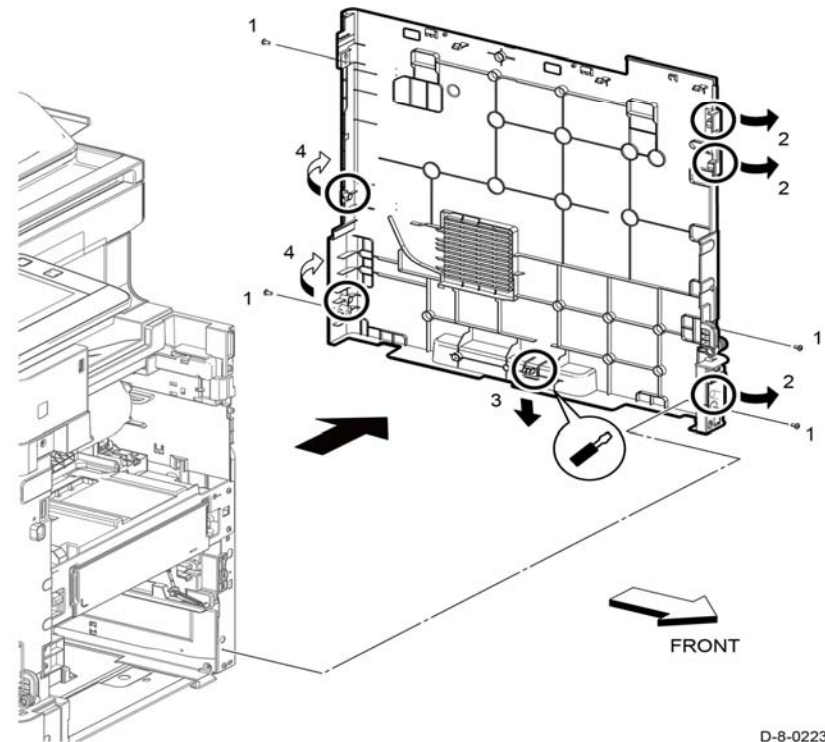


Figure 1 Right side cover removal

## Replacement

The replacement is the reverse of the removal procedure.

## REP 19.13 Top Cover (MFP)

Parts List on [PL 19.1](#)

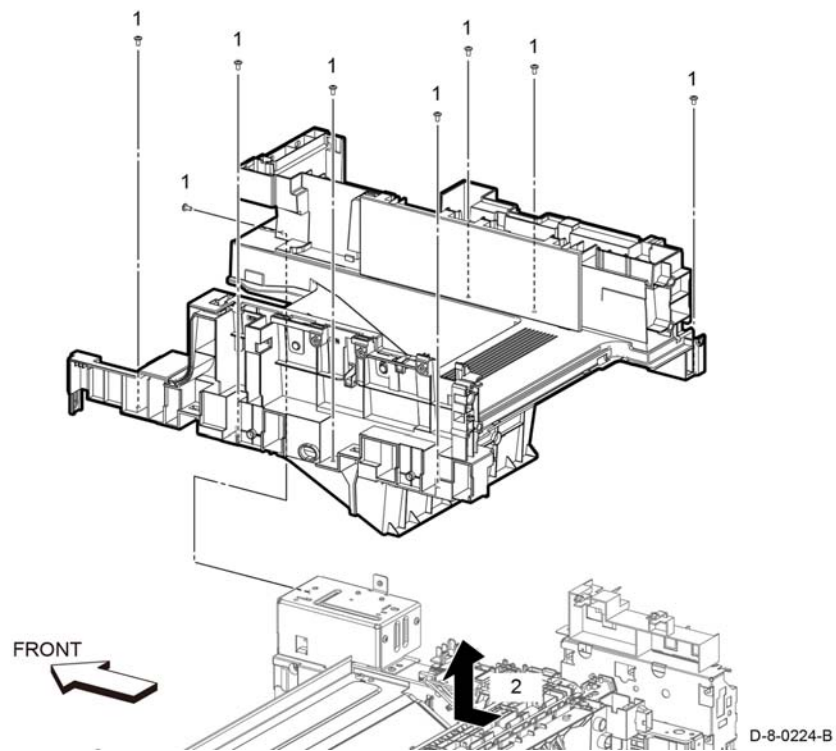
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 assembly, [REP 50.1](#).
2. Open the rear door, [PL 19.2 Item 99](#).
3. Remove the top cover, [Figure 1](#):
  - a. Remove eight screws (1).
  - b. Lift up and remove the top cover assembly (2).

**NOTE:** This includes the right IIT inner cover and left IIT inner cover.



### Replacement

Replacement is the reverse of the removal procedure.

**NOTE:** When installing the top cover, check that the actuator full stuck and exit flapper L/R come out of the paper exit on the top cover.

## REP 19.14 Left Side Cover (MFP and MFP\_Tall)

Parts List on [PL 19.2](#) and [PL 19.4](#)

### Removal

#### WARNING

Switch off the electricity to the machine [GP 4](#). 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 the printer from falling off the workbench in the following step, position the printer to overhang the edge of the workbench as little as possible.

1. Remove the 550 IOT cassette assembly, [REP 9.1](#).
2. Remove the main MSI tray assembly, [REP 13.6](#).
3. Remove the front cover assembly, [REP 19.1](#).
4. Remove the left front cover assembly, [REP 19.10](#).
5. Open the rear door, [PL 19.1 Item 99](#).

6. Remove the left side cover, **Figure 1**:
  - a. Remove six screws (1).
  - b. Release two bosses (2) on the front of the left side cover.
  - c. Release one hook (3) on the bottom of the left side cover.
  - d. Release one hook and one boss (4) at the rear of the left side cover, then remove the left side cover (5).

## Replacement

The replacement is the reverse of the removal procedure.

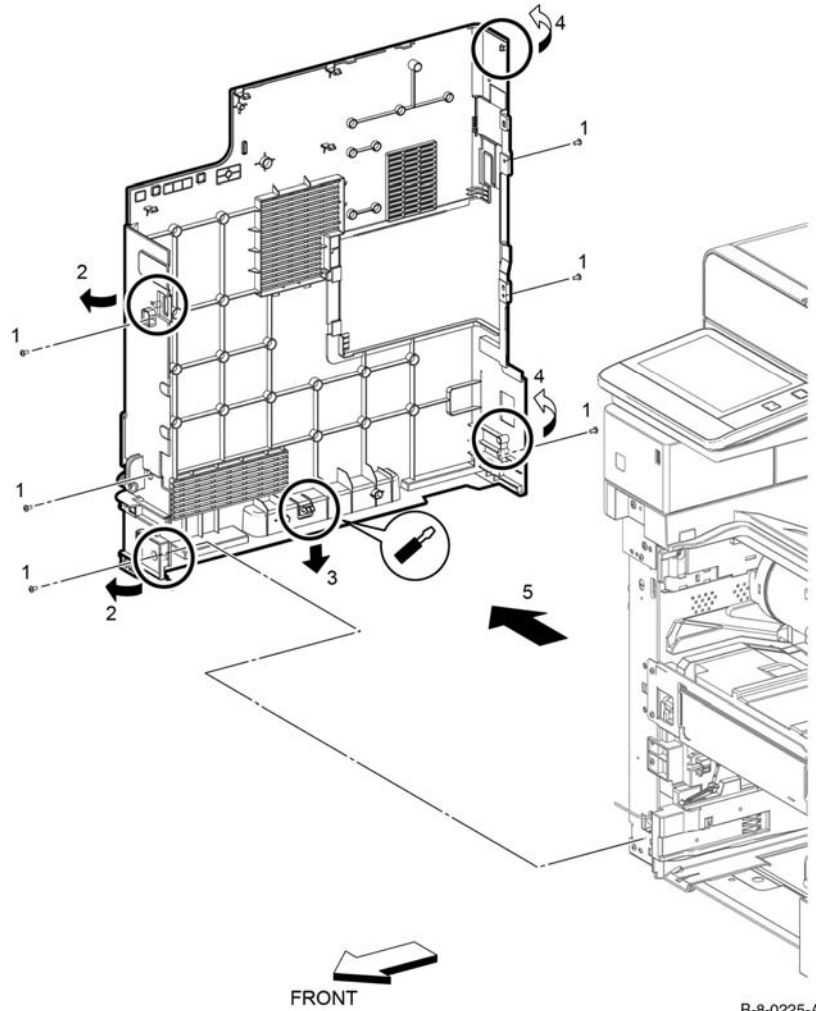


Figure 1 Left side cover removal

## REP 19.15 Right Side Front Cover (SFP)

Parts List on [PL 19.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 toner cover, [PL 19.1 Item 1](#).
2. Remove the MSI tray, [PL 13.2 Item 1](#).
3. Remove the IOT 550 cassette, [PL 9.1 Item 1](#).
4. Refer to [Figure 1](#), push and release button to release the hook at the top end of the right side front cover.
5. Press in at the two bosses and remove the right side front cover in the direction of the arrow.

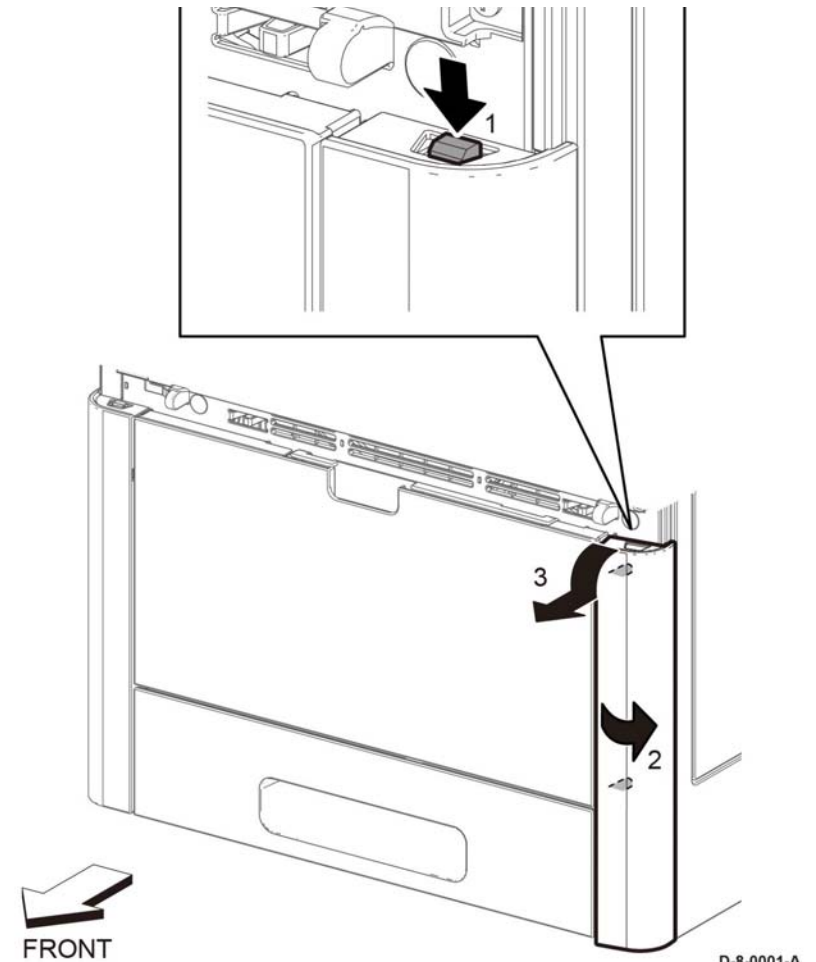


Figure 1 Remove the Right Side Front cover (SFP)

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## REP 19.16 WIFI Cap (MFP and MFP\_Tall)

Parts List on [PL 19.2](#) and [PL 19.4](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Release the hook, then remove the WIFI cap, [Figure 1](#).

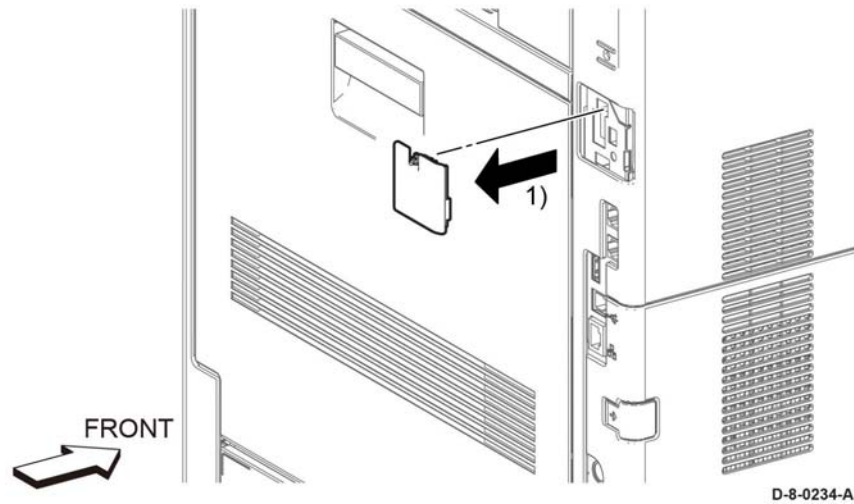


Figure 1 Remove the WIFI cap (MFP)

### Replacement

The replacement is the reverse of the removal procedure.

## REP 19.17 ESS Window Assembly Kit (MFP and MFP\_Tall)

Parts List on [PL 19.2](#) and [PL 19.4](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Perform the items that follow [Figure 1](#):
  - 1-1 Slide the lever as shown.
  - 1-2 rotate the lever as shown.
2. Remove the ESS window assembly.

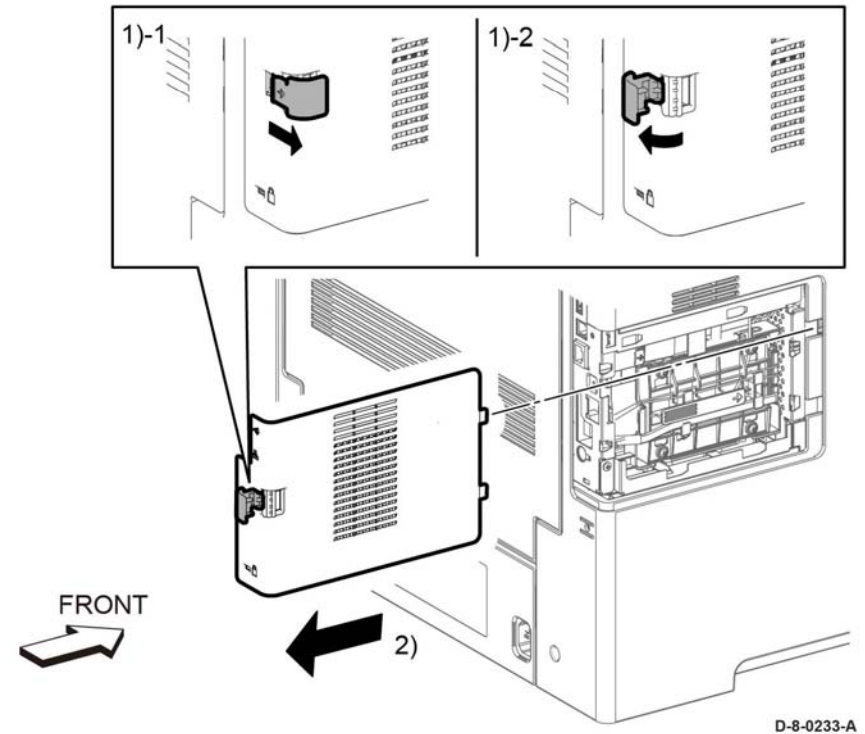


Figure 1 Remove the ESS window assembly (MFP)

### Replacement

The replacement procedure is the reverse of the removal procedure.

## REP 19.18 Rear Cover Assembly (MFP and MFP\_Tall)

Parts List on [PL 19.2](#) and [PL 19.4](#)

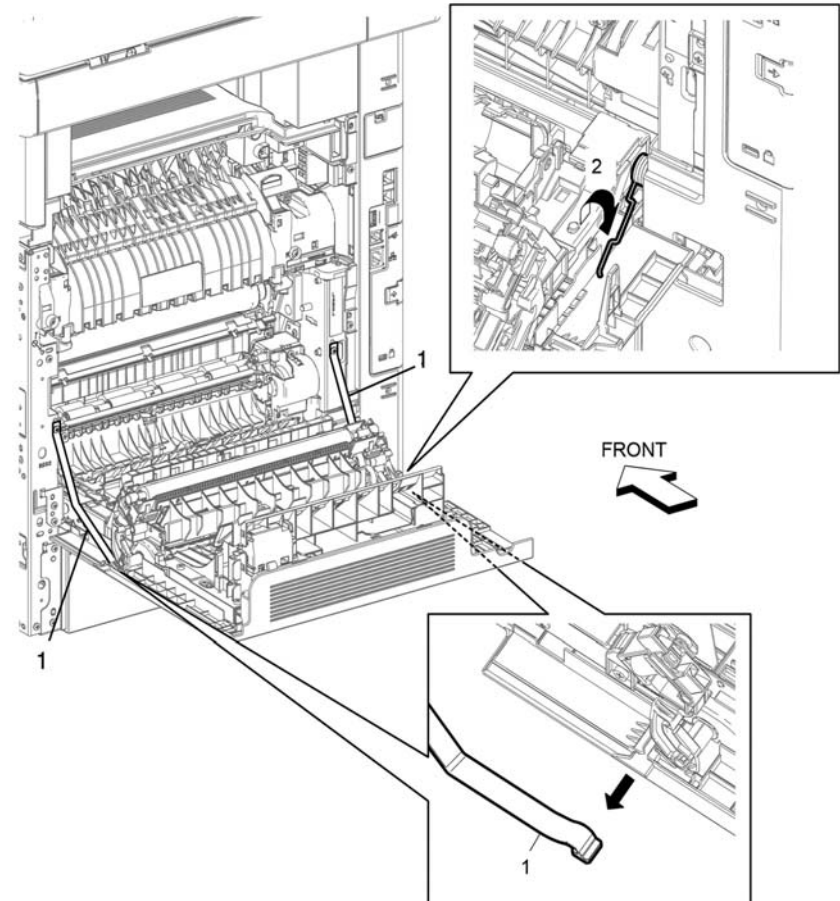
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 right side cover assembly, [REP 19.12](#).
2. Open the rear cover assembly, [PL 19.2 Item 99](#).

3. Release two straps (1) and one spring (2), [Figure 1](#):



D-8-0227-A

Figure 1 Remove the rear cover assembly (MFP)

4. Close the rear door.

5. Remove the rear cover assembly, [Figure 2](#).
  - a. Remove two screws (1) connecting the right rear hinge assembly (2).
  - b. Remove the right rear hinge assembly (2) and the rear cover assembly while opening the rear cover assembly.
  - c. Remove the rear cover spring (3).

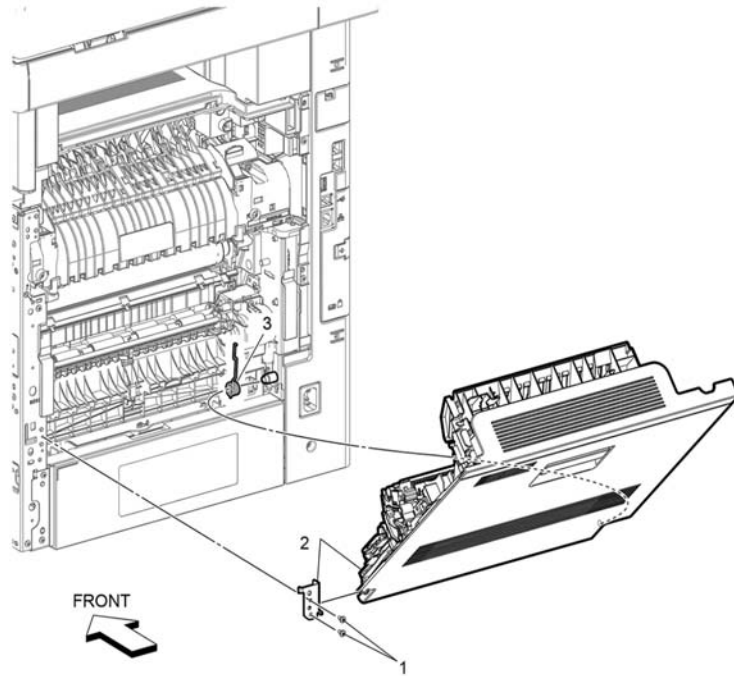


Figure 2 Remove the rear cover assembly

### Replacement

The replacement procedure is the reverse of the removal procedure.

## REP 19.19 Front Inner Cover (MFP-Tall)

Parts List on [PL 19.3](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 ICCR FIN Cover, [PL 19.3 Item 40](#).
2. Remove the front inner cover, [Figure 1](#):
  - a. Remove one screw (1).
  - b. Release tab (A), then pull at location (B) to remove the front inner cover (3).

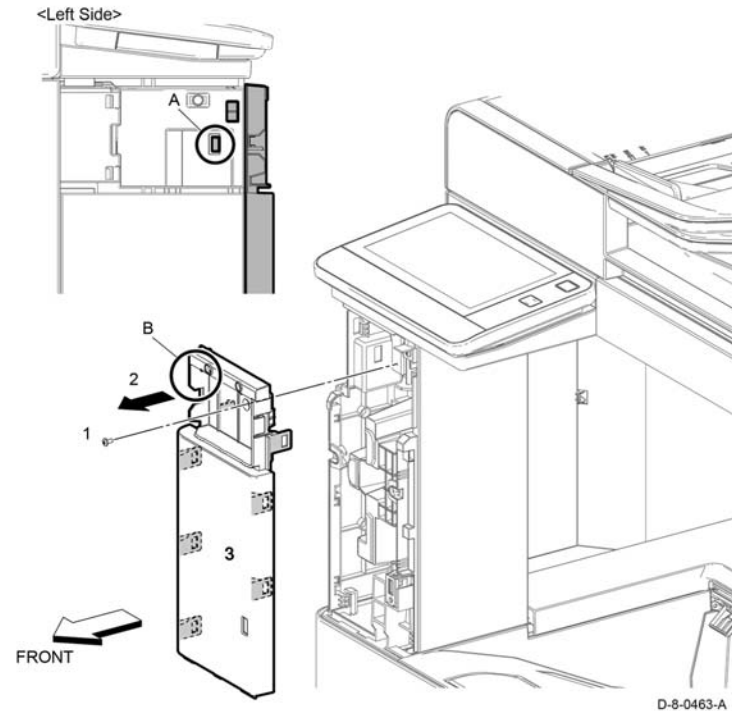


Figure 1 Remove the front inner cover

### Replacement

The replacement is the reverse of the removal procedure.

## REP 19.20 Top Cover Assembly (SFP)

Parts List on [PL 19.5](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 250 Sheet Cassette. [PL 9.1](#)
2. Remove the Main Bypass Tray Assembly. [PL 13.1](#)
3. Remove the Right Side Cover. [PL 19.5 Item 8](#)
4. Remove the Left Side Cover. [PL 19.6 Item 1](#)
5. Remove the Front Inner Cover. [PL 19.5 Item 96](#)
6. Remove the Left Rear Top Cover. [PL 19.5 Item 9](#)
7. Remove the Right Rear Top Cover. [PL 19.5 Item 10](#)
8. Open the Rear Cover.
9. Remove the UI Console. [PL 1.2](#)
10. Remove the three screws (silver, M3x6mm) attaching the Top Cover Assembly, then lift up the cover. [Figure 1](#).

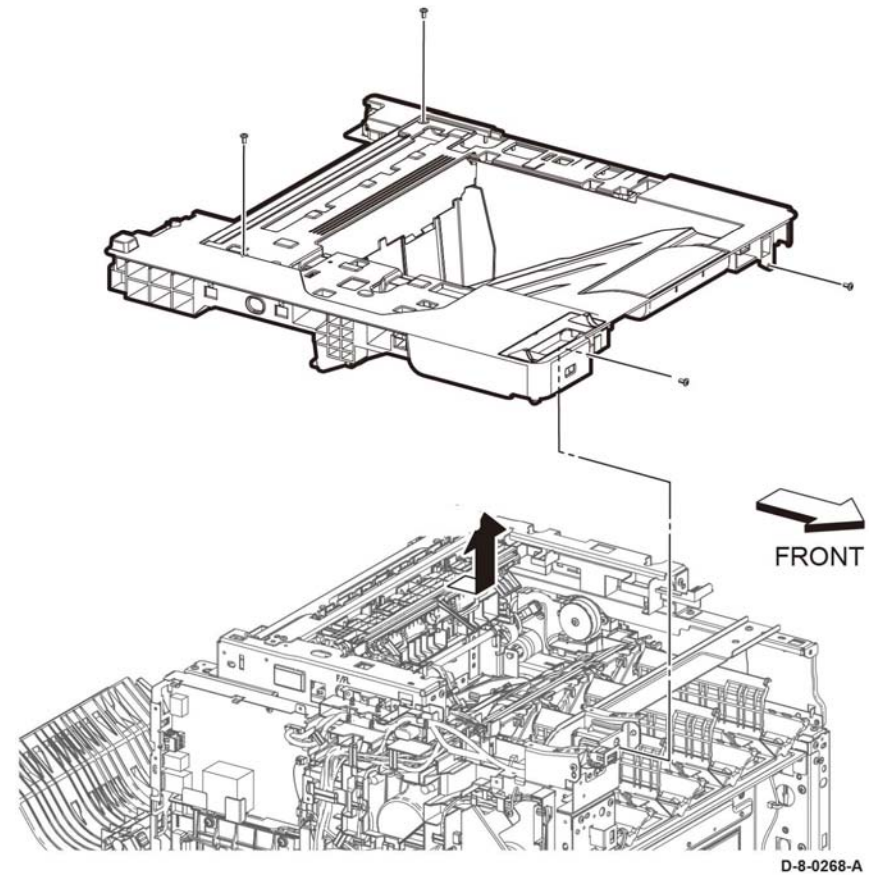


Figure 1 Remove the Top Cover Assembly (SFP)

### Replacement

#### CAUTION

Avoid pinching the UI harness between the Top Cover and the printer frame when installing the Top Cover.

**NOTE:** When installing the Top Cover Assembly, ensure that the Exit Flapper extends out from the Top Covers' paper exit slots.

## REP 19.22 Second Bias Transfer Roller Assembly (SFP)

Parts List on [PL 19.6](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 Rear Cover.
2. Refer to [Figure 1](#), to release the four latches attaching the Second Bias Transfer Roller and remove the roller assembly.

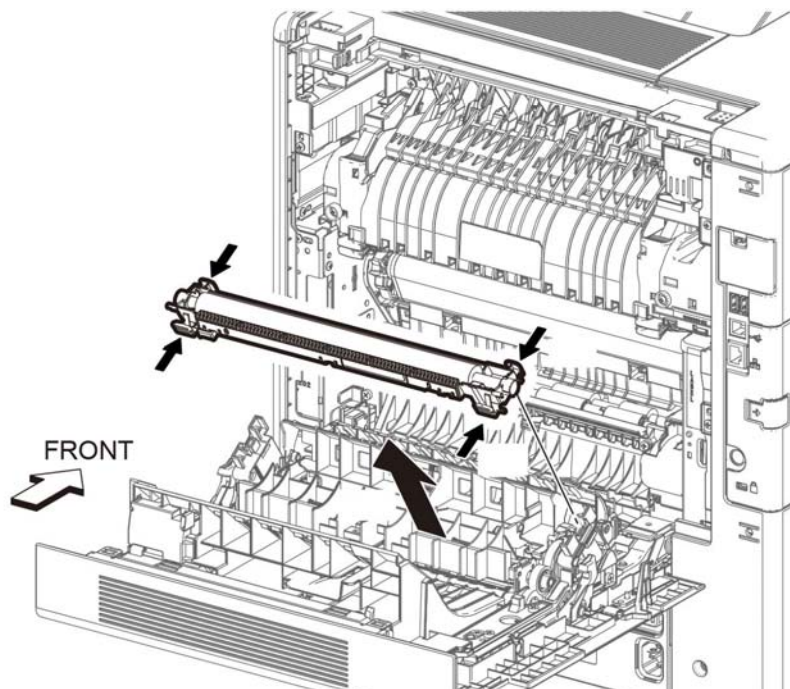


Figure 1 Remove the Second Bias Transfer Roller Assembly (SFP)

## REP 19.24 WiFi Cap (SFP)

Parts List on [PL 19.6](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Refer to [Figure 1](#), to release the lever in the direction of the arrow.

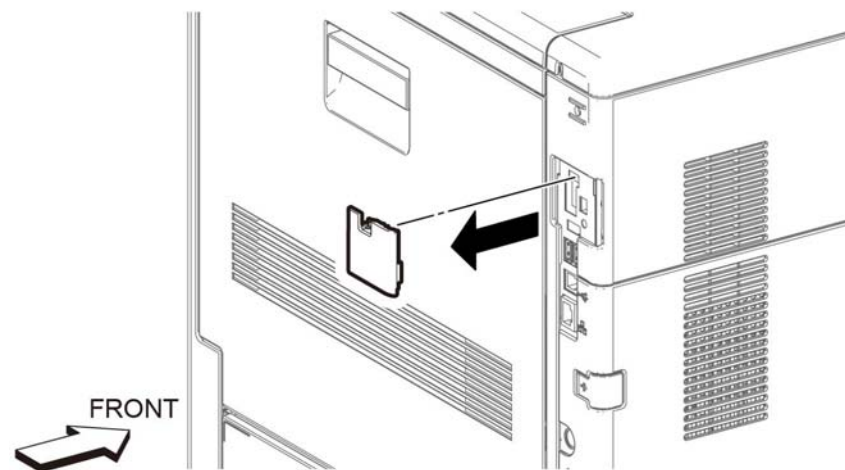


Figure 1 Remove the ESS Window Assembly (SFP)

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2. Remove the ESS window assembly.

## REP 19.25 Rear Cover Assembly Kit (SFP)

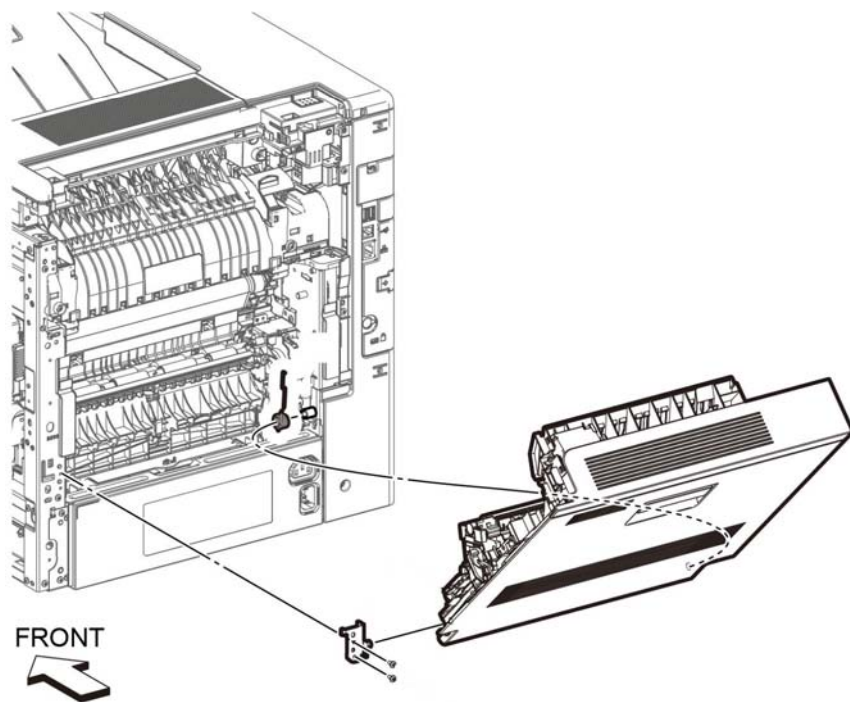
Parts List on [PL 19.6](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 right side cover.
2. Open the Rear Cover.
3. Refer to [Figure 1](#), to remove the ends of the two rear cover straps from the rear cover.
4. close the rear cover.
5. Refer to [Figure 1](#), to remove the two screws (silver, M3x6mm) attaching the right rear hinge.



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Figure 1 Remove the Rear Cover Assembly (SFP)

6. Remove the right rear hinge and the rear cover assembly from the printer while opening the cover.

## REP 19.32 Left Side Front Cover (MFP-Tall)

Parts List on [PL 19.3](#)

### Prerequisite:

Perform the toner cover assembly removal procedure [PL 19.3 Item 95](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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.

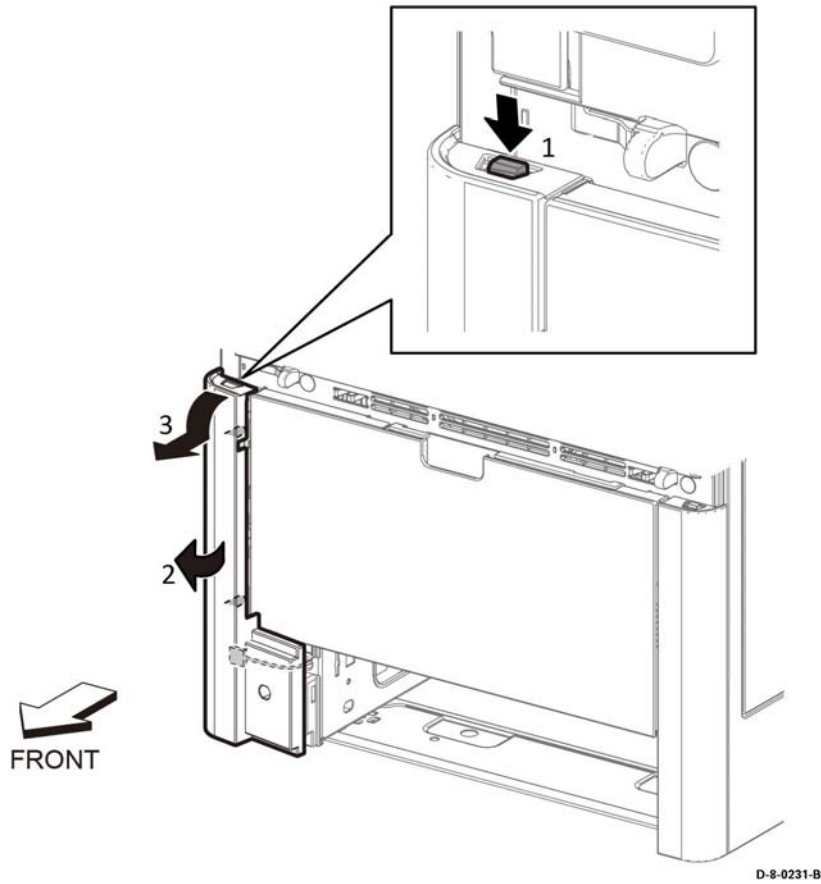
1. Perform the items that follow, [Figure 1](#):
  - 1-1 Push down the catch to release the left front cover.
  - 1-2 Rotate the left front cover as shown.

#### CAUTION

*Do not damage the LED harness assembly when performing the next step.*

- 1-3 Remove the left front cover.
2. Refer Disconnect the connector, P/J521.

**REP 19.33 Not Used**  
This procedure is not used.



**Figure 1 Remove the left side front cover**

### **Replacement**

The replacement is the reverse of the removal procedure.

## REP 19.35 Top Cover (MFP-Tall)

Parts List on [PL 19.3](#)

### Prerequisite:

Perform the USB front harness assembly.

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 rear cover assembly, [PL 19.2 Item 99](#).
2. Remove the OPT blind cover, [Figure 1](#):

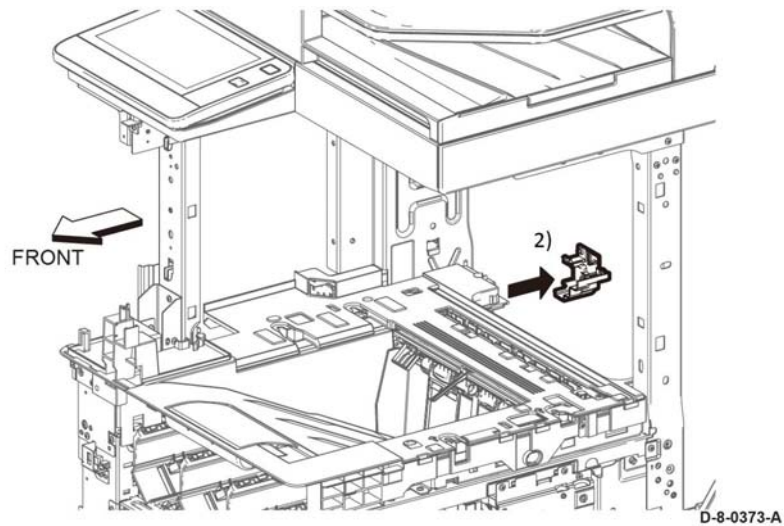


Figure 1 Remove the OPT blind cover

3. Perform the items that follow:
  - 3-1 Remove three screws SM18.
  - 3-2 Remove the top cover assembly.

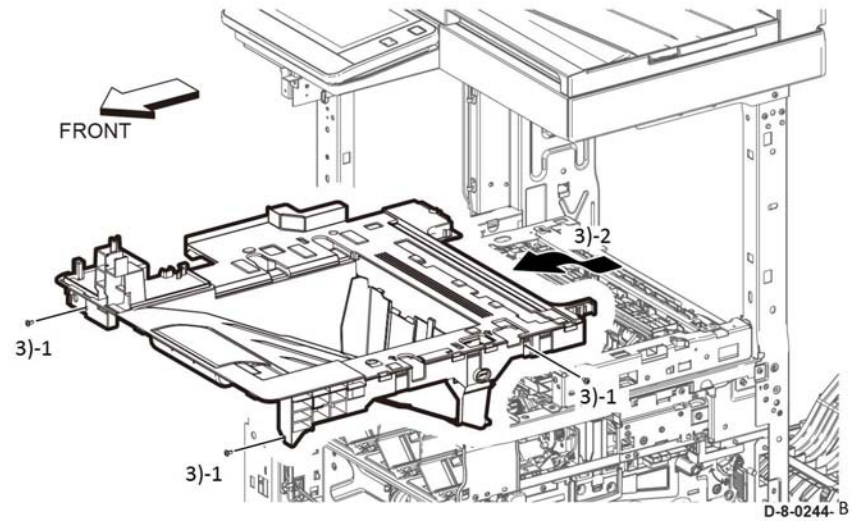


Figure 2 Remove top cover

### Replacement

When installing the top cover, check that the full stack actuator and left/right exit flapper come out of the paper exit on the top cover.



## REP 19.43 Not Used

This procedure is not used.

## REP 19.45 Right Side Front Cover (SFP)

Parts List on [PL 19.5](#)

### Removal

#### **WARNING**

**Switch off the electricity to the machine, GP 4. 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 toner cover assembly.
2. Perform the steps that follow, [Figure 1](#):
  - 2-1 Press the hook.
  - 2-2 Rotate the right front cover as shown.
  - 2-3 Remove the right front cover.

## REP 19.47 Left Side Front Cover (SFP)

Parts List on [PL 19.5](#)

### Prerequisite:

Perform the toner cover assembly removal procedure.

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Perform the items that follow, [Figure 1](#):
  - 1-1 Push down the catch to release the left front cover.
  - 1-2 Rotate the left front cover as shown.

#### CAUTION

*Do not damage the LED harness assembly when performing the next step.*

- 1-3 Remove the left front cover.
2. Refer Disconnect the connector, P/J521.

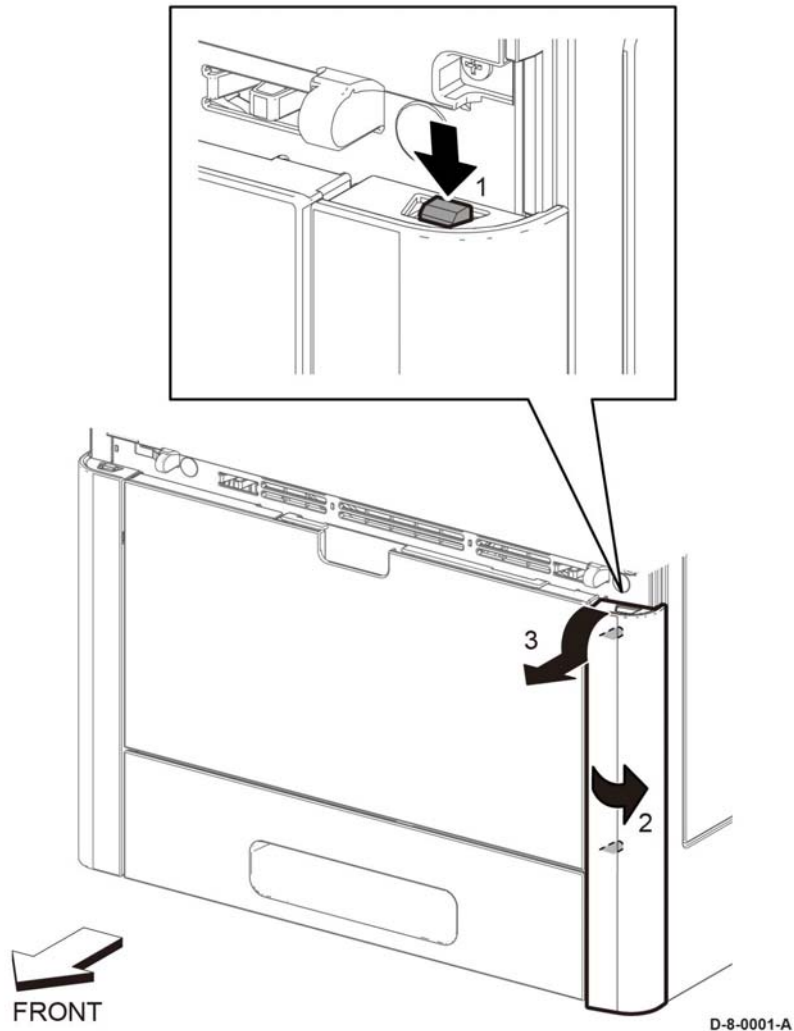


Figure 1 Remove the front right side cover (SFP)

## REP 19.48 Toner Cover Assembly (SFP)

Parts List on [PL 19.5](#)

### Prerequisite:

Perform the WiFi cap removal procedure, [PL 19.5 Item 95](#).

### Removal

#### WARNING

Switch off the electricity to the machine [GP 4](#). 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 Toner Cover Assembly, [Figure 1](#).
2. Perform the items that follow:
  - 2-1 Push the hook as shown.
  - 2-2 Remove the toner cover assembly.

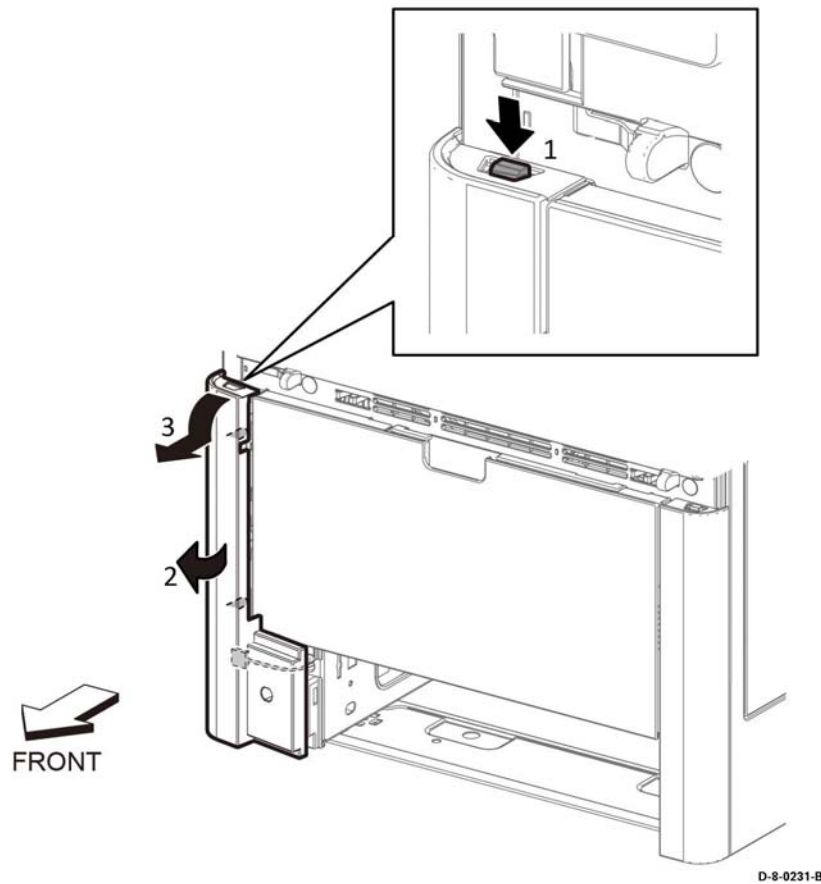


Figure 1 Remove the left side front cover

### Replacement

The replacement is the reverse of the removal procedure.

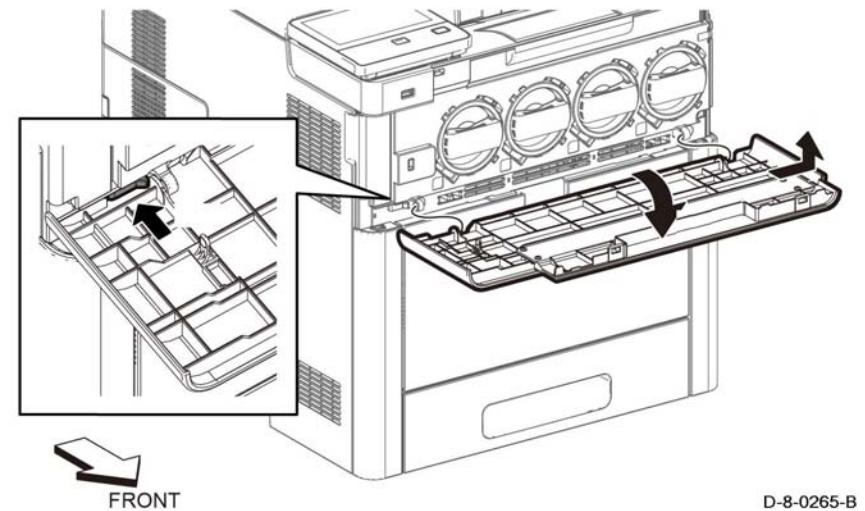


Figure 1 Toner cover assembly removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 19.49 Right Side Cover Assembly (SFP)

### Parts List on PL 19.5

#### Prerequisites:

Remove the right side front cover.

#### Removal

#### WARNING

Switch off the electricity to the machine, GP 4. 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 waste box cover on the right side, press the tab and remove the waste toner assembly, Figure 1.

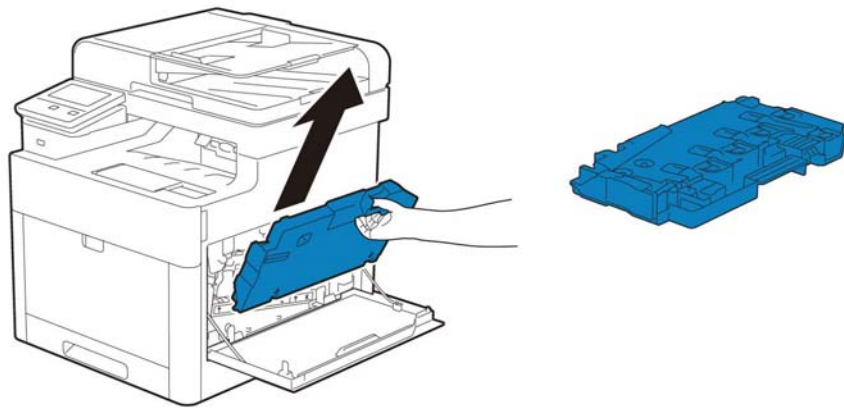


Figure 1 Remove the toner waste box assembly

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2. Open the rear door.

#### CAUTION

In the following step, to prevent the cover from dropping down as you remove the straps, support the cover from underneath.

3. Remove the items that follow, Figure 1:
  - One screw ST6.
  - Five screws ST18.
4. Perform the items that follow, Figure 1:
  - 4-1 Release one hook.
  - 4-2 Release one boss.
5. Release one hook at the bottom of the right side cover assembly, Figure 2.
6. Perform the items that follow, Figure 2:

- 6-1 Release one boss in the middle edge.
- 6-2 Release one boss on the bottom edge.
- 6-3 Remove the right side cover assembly.

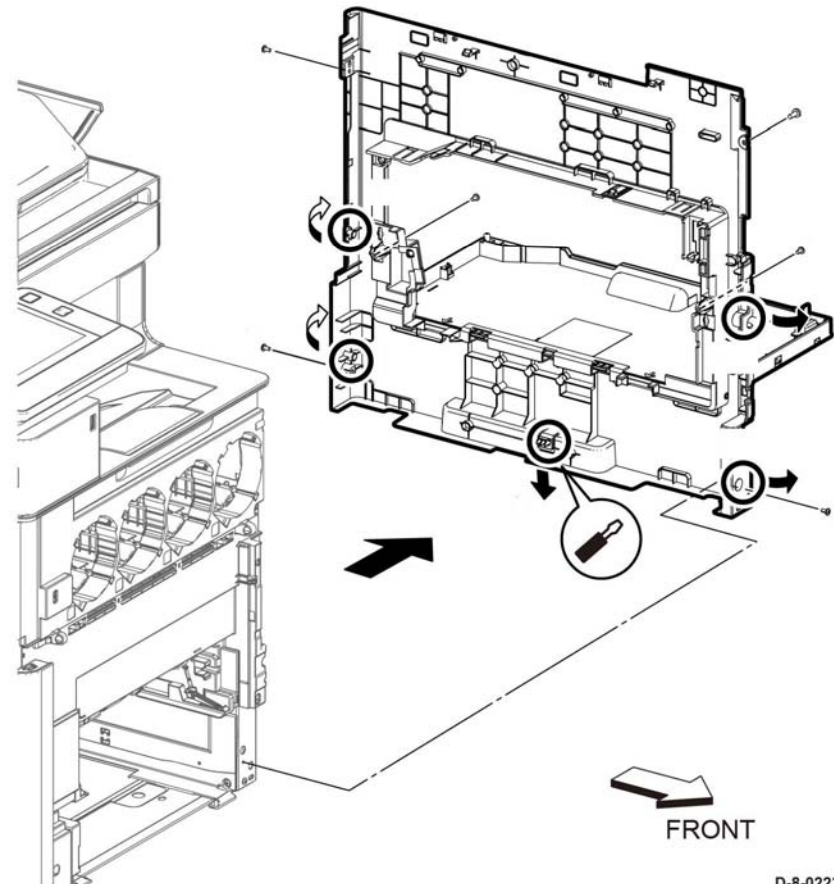


Figure 2 Remove the right side cover assembly (SFP)

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## REP 19.50 Top Cover (SFP)

Parts List on [PL 19.5](#)

### Prerequisite:

Perform the removals that follow:

- UI console assembly.
- UI access door.

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 rear cover assembly, [PL 19.2 Item 99](#).
2. Remove the OPT blind cover, [Figure 1](#):

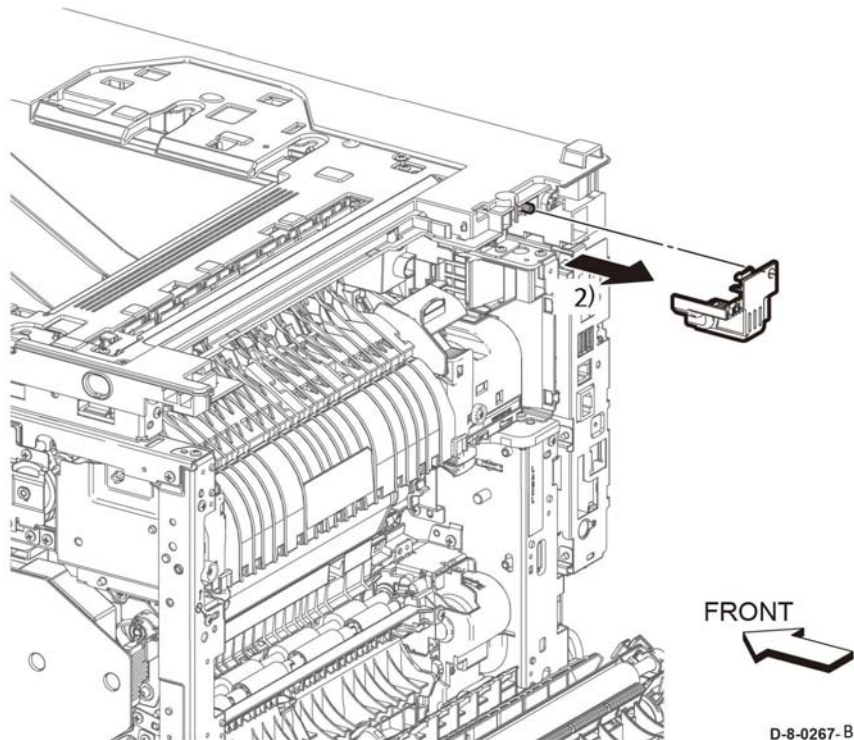


Figure 1 Remove the OPT blind cover

3. Perform the items that follow:
  - 3-1 Remove four screws SM18.

3-2 Remove the top cover assembly.

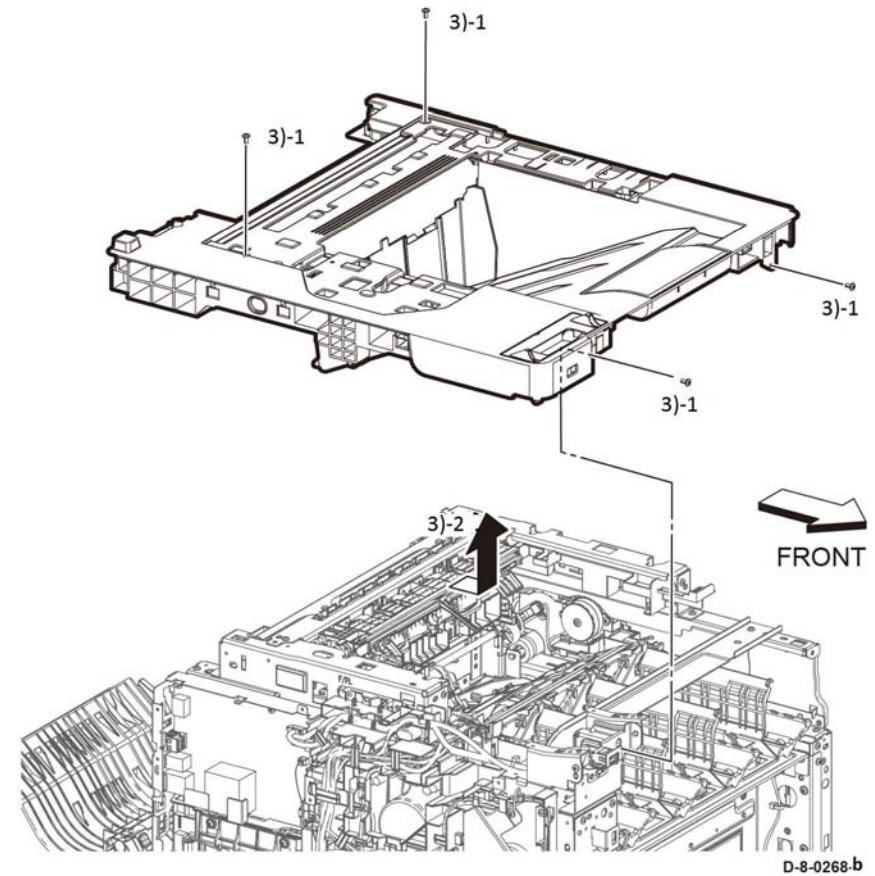


Figure 2 Remove top cover

### Replacement

When installing the top cover, check that the actuator full stuck and exit flapper L/R come out of the paper exit on the top cover.

## REP 19.51 Left Side Cover (SFP)

Parts List on PI 19.6

### Prerequisites:

Left front cover PL 19.5 Item 95.

### Removal

#### WARNING

Switch off the electricity to the machine GP 4. 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 the printer from falling off the workbench in the following step, position the printer to overhang the edge of the workbench as little as possible.

1. Open the rear cover assembly, PL 19.1 Item 99.
2. Remove four screws SM 18
3. Release the items that follow, Figure 1:
  - 3-1 One hook.
  - 3-2 One hook.
  - 3-3 One boss.
4. Release one hook.
5. Perform the items that follow:
  - 5-1 Release one hook.
  - 5-2 Release one boss.
  - 5-3 Remove the left side cover.

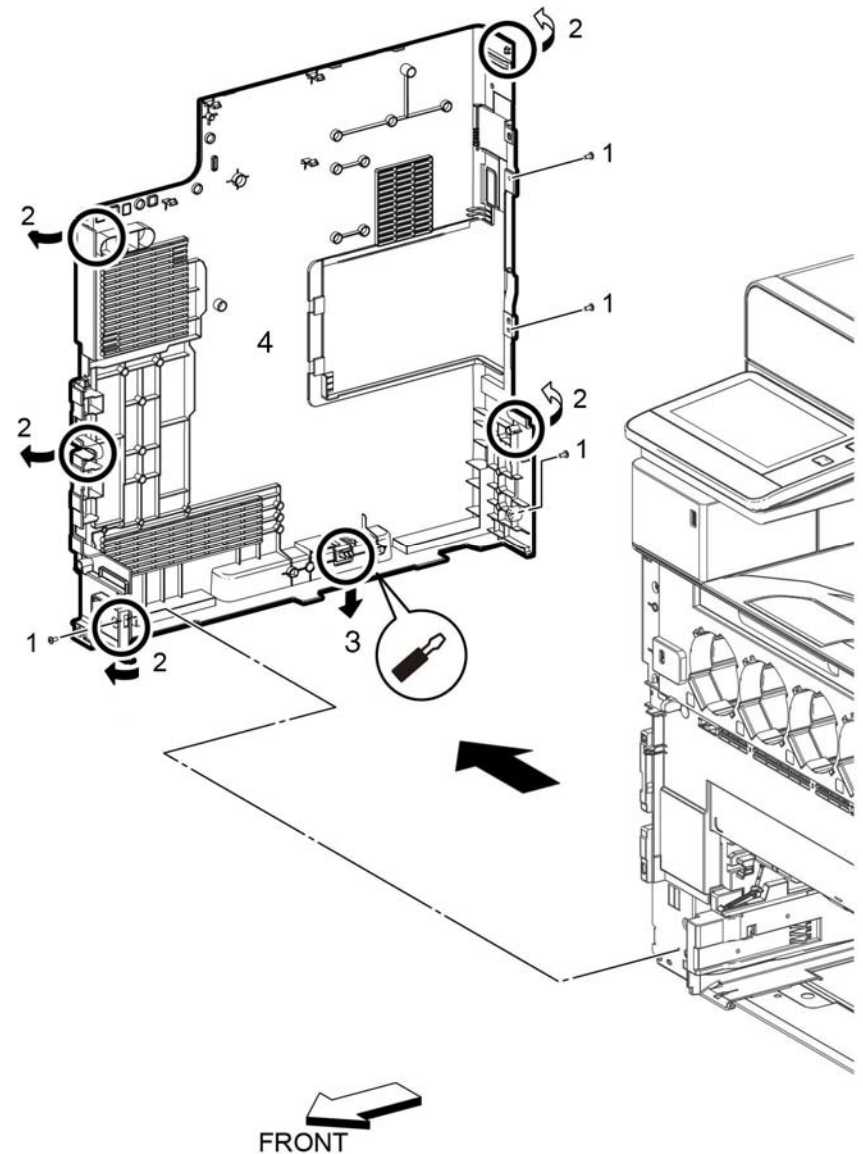


Figure 1 Left side cover (SFP) removal

D-8-0225-b

## Replacement

The replacement is the reverse of the removal procedure.

## REP 19.54 WIFI Cap (SFP)

Parts List on [PL 19.6](#)

### Prerequisite:

Perform the ESS window assembly, [PL 19.6 Item 16](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Release the hook and remove the WIFI cap, [Figure 1](#).

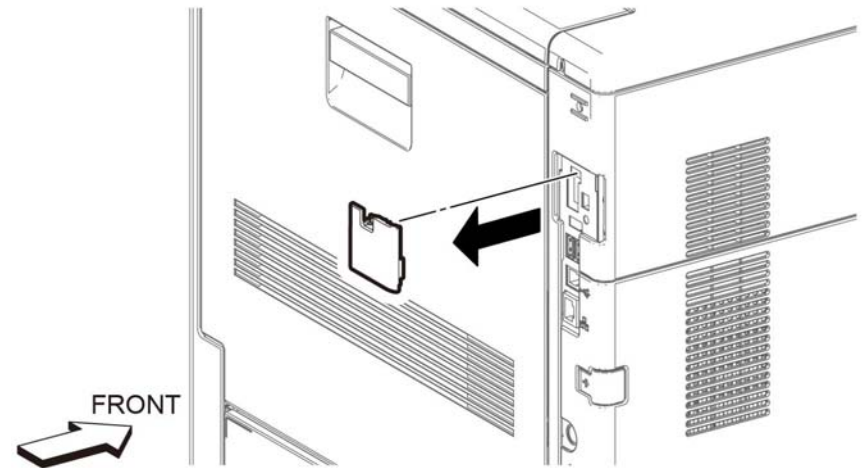


Figure 1 WIFI cap (SFP) removal

D-8-0278-A

### Replacement

The replacement is the reverse of the removal procedure.

## REP 19.55 ESS Window Assembly Kit (SFP)

Parts List on [PL 19.6](#)

### Prerequisite:

Perform the MSI main tray assembly, [PL 13.2 Item 1](#).

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Perform the items that follow, [Figure 1](#):
  - 1-1 Slide the lever as shown.
  - 1-2 rotate the lever as shown.
2. Remove the ESS window assembly.

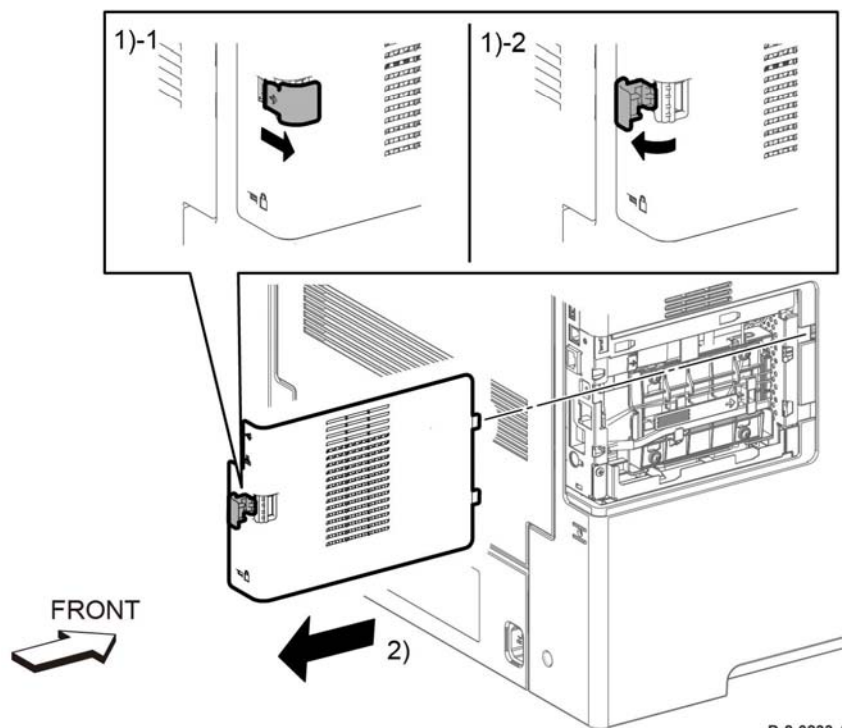


Figure 1 Remove the ESS window assembly (SFP)

### Replacement

The replacement procedure is the reverse of the removal procedure.

## REP 19.56 Rear Cover Assembly (MFP)

Parts List on [PL 19.6](#)

### Prerequisite:

Perform the right side cover assembly, [PL 19.5 Item 97](#).

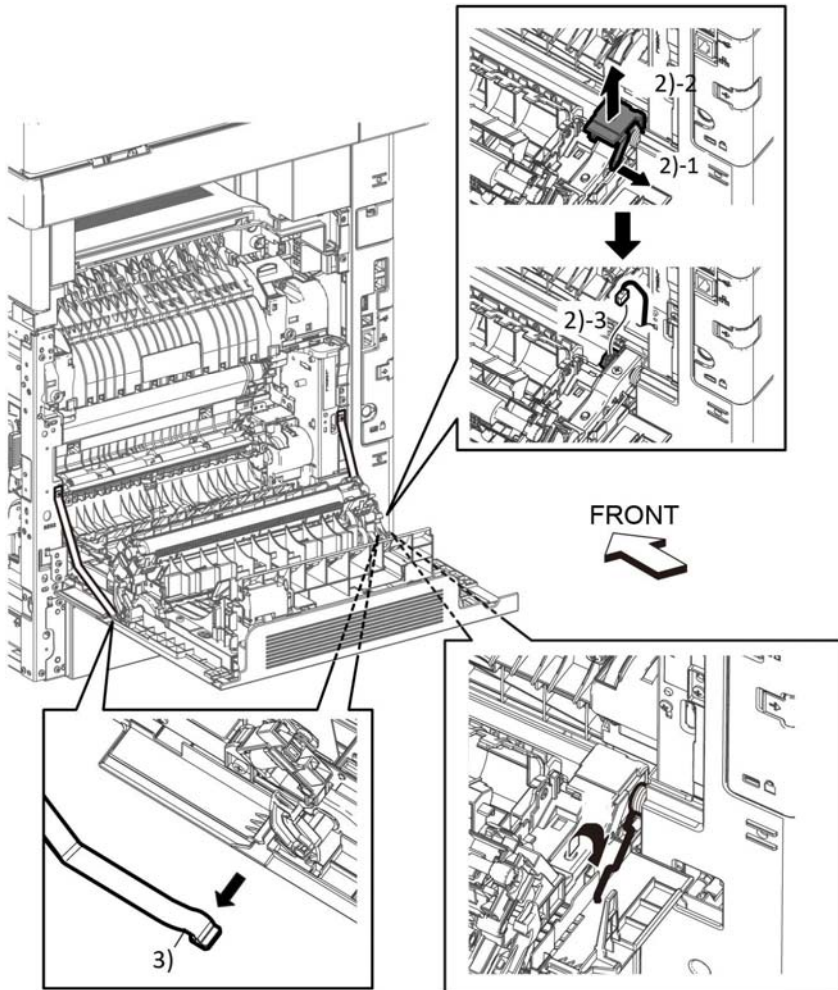
### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 rear cover assembly.
2. Perform the items that follow, [Figure 1](#):
  - 2-1 Raise the lever.
  - 2-2 Remove the relay cover.
  - 2-3 Disconnect the connector, P/J296.
3. Release two rear cover straps

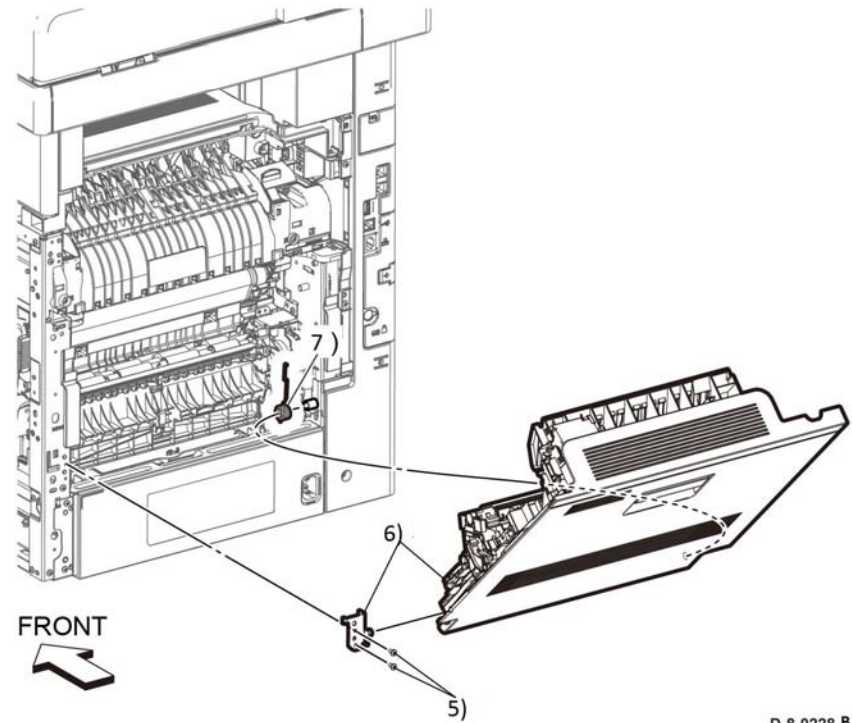




D-8-0227-B

**Figure 1 Remove the rear cover assembly (SFP)**

4. Close the rear cover assembly.
5. Remove two screws, SM18, holding the right rear hinge assembly, [Figure 1](#).
6. Remove the right rear hinge assembly and the rear cover assembly.
7. Remove the rear cover spring.



D-8-0228-B

**Figure 2 Remove the rear cover assembly (SFP)**

### Replacement

The replacement procedure is the reverse of the removal procedure.



## REP 20.1 Cover LH C

Parts List on [PL 20.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to the Hardware Kit.

1. Remove the mailbox from the IOT, then turn the mailbox upside down.
2. Remove two screws SM20, [Figure 1](#).

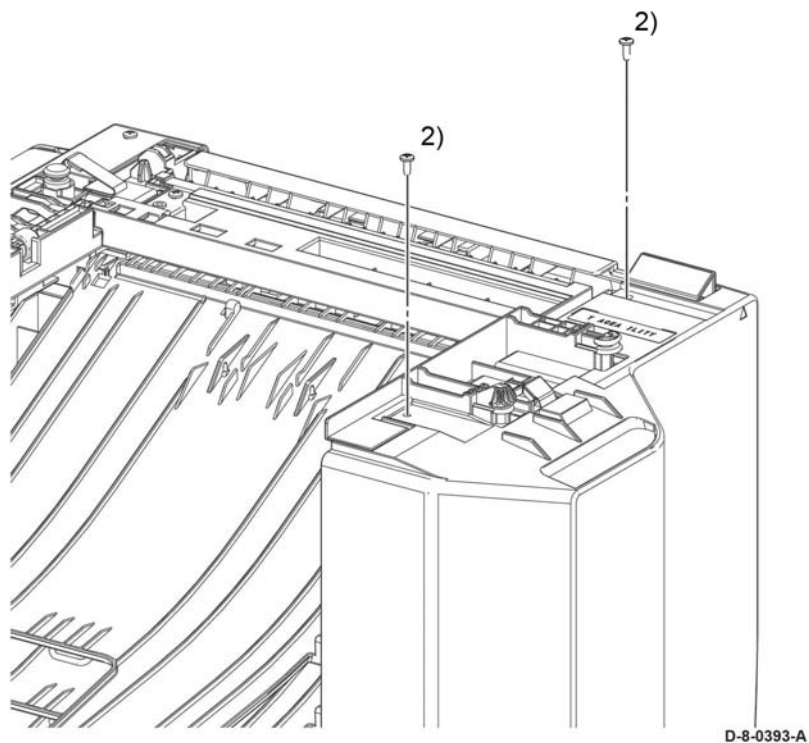


Figure 1 Removing bottom screws

#### CAUTION

Use care during the next Step as the covers are no longer firmly attached to the frame and may easily fall off and get damaged.

3. Turn the mailbox right side up as shown in [Figure 2](#).

4. Perform the items that follow, [Figure 2](#):

4-1 Release the two tabs.

4-2 Remove the cover LH C.

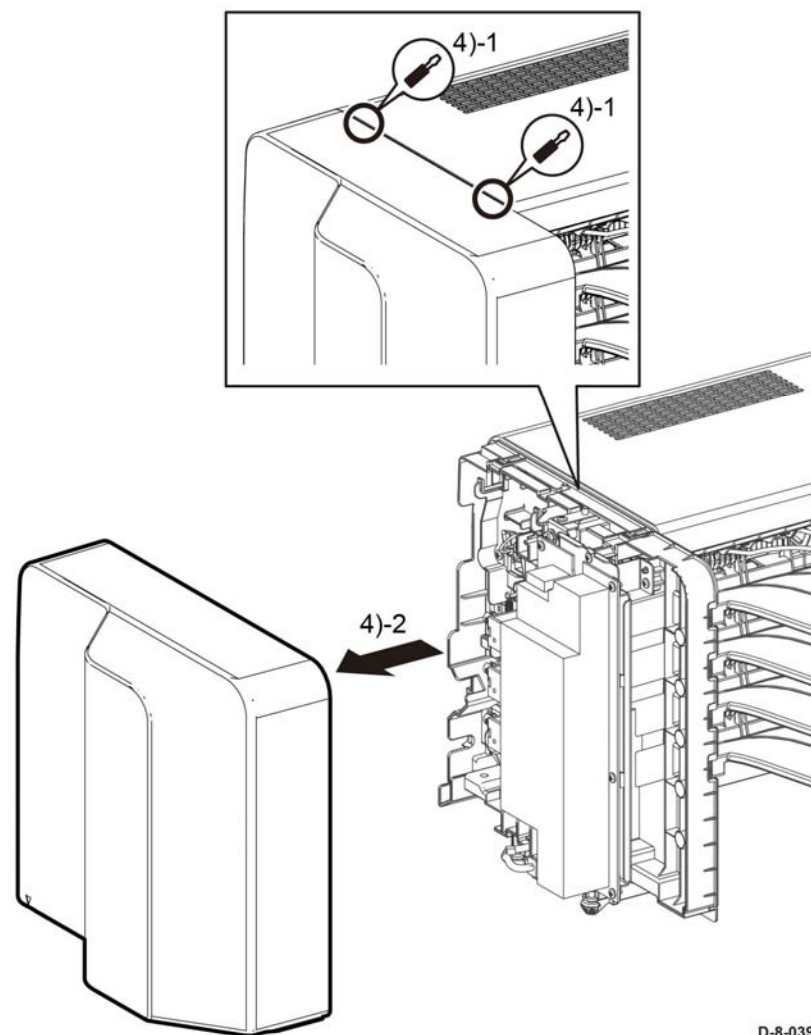


Figure 2 Removing cover LH C

### Replacement

The replacement is the reverse of the removal procedure.

## REP 20.2 Cover RH C and Cover Assembly Staple

Parts List on [PL 20.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the mailbox from the IOT, then turn the mailbox upside down.
2. Remove two screws SM20, [Figure 1](#).

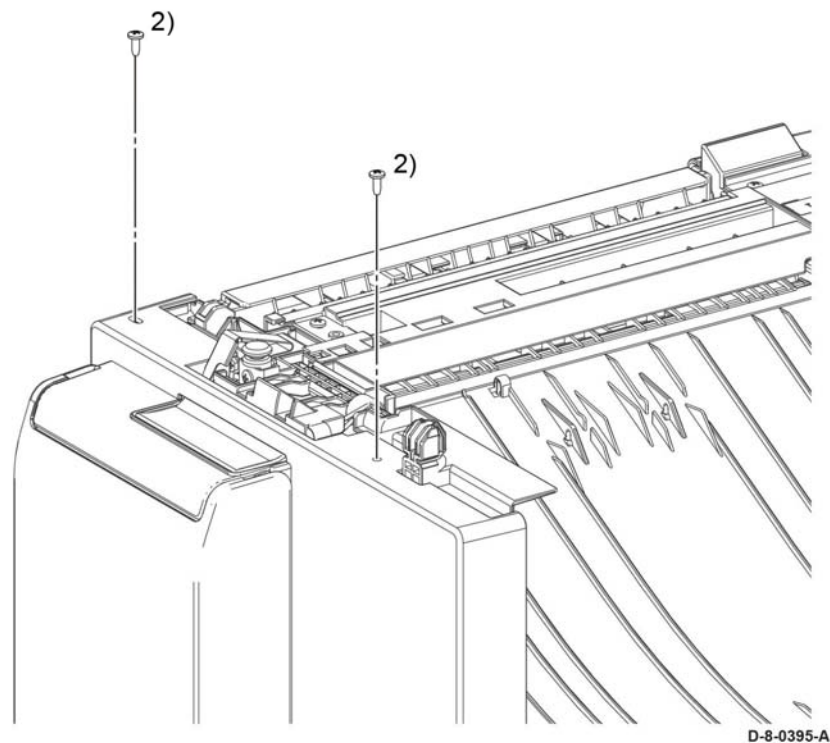


Figure 1 right hand cover bottom screws

4-1 Release the two tabs.

4-2 Remove the cover RH C.

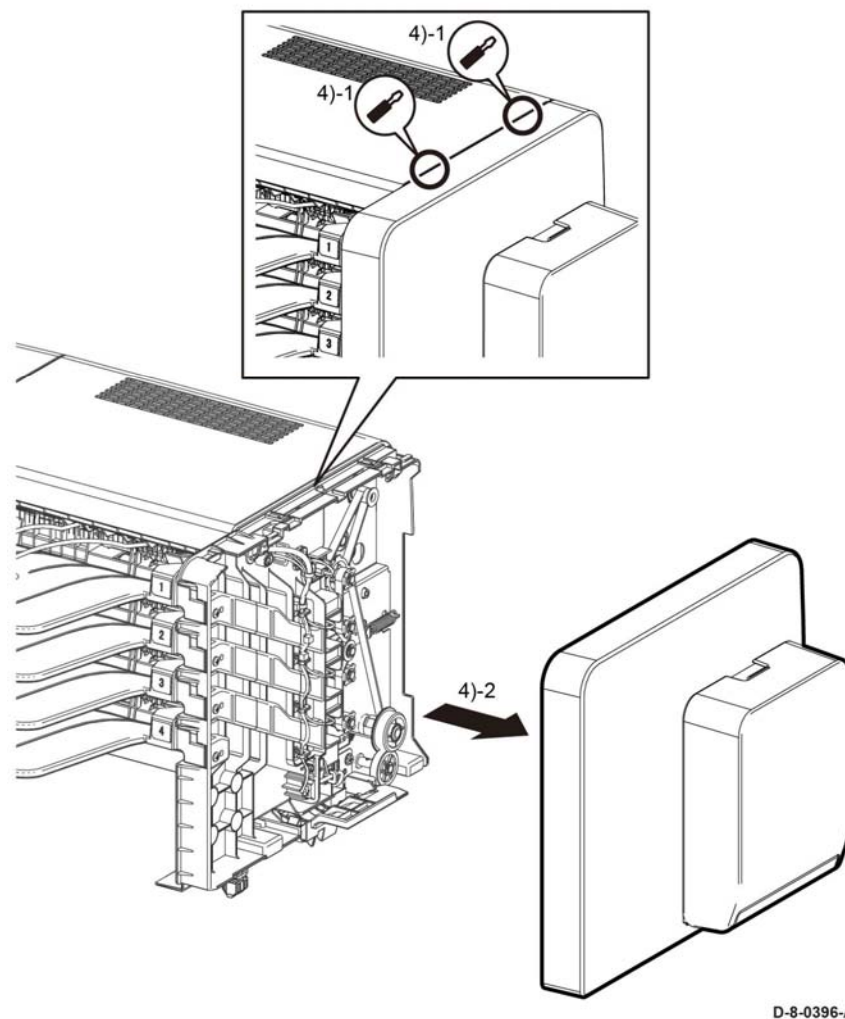


Figure 2 Cover removal

#### CAUTION

Use care during the next Step as the covers are no longer firmly attached to the frame and may easily fall off and get damaged.

3. Turn the mailbox right side up.
4. Perform the items that follow, [Figure 2](#):

### Replacement

The replacement is the reverse of the removal procedure.

## REP 20.3 Cover Top C

Parts List on [PL 20.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover LH C, [REP 20.1](#).
2. Remove the cover RH C/cover assembly staple, [REP 20.2](#).
3. Perform the items that follow, [Figure 1](#):
  - 3-1 Use a flat blade screwdriver and release the two tabs.
  - 3-2 Remove the cover top C.

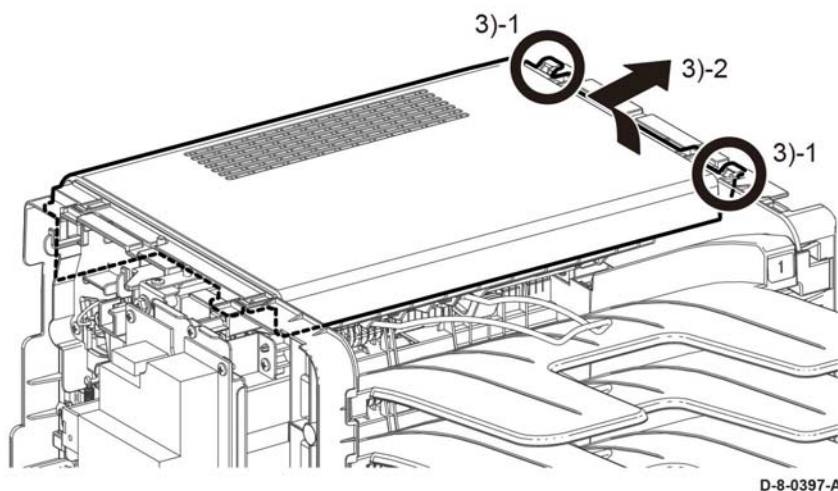


Figure 1 Cover top C removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 20.4 MBX PWB

Parts List on [PL 20.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer Hardware Kit.

1. Remove the cover LH C, [REP 20.1](#).
2. Remove the cover RH C/cover assembly staple, [REP 20.2](#).
3. Remove the cover top C, [REP 20.3](#).
4. Release the harness assembly vertical sensor from the clamp.
5. Remove the items that follow, [Figure 1](#):
  - 5-1 Two screws, one SM18 and one ST20.
  - 5-2 The bracket RH
6. Remove the items that follow, [Figure 1](#):
  - 6-1. One screw, SM18.
  - 6-2. One screw, ST20.
  - 6-3. The bracket LH
7. Disconnect all connectors from the PWB MBX, [Figure 1](#).
8. Remove the items that follow, [Figure 1](#):
  - 8-1 Four screws, ST20.
  - 8-2 MBX PWB.

## REP 20.5 LVPS PWB

Parts List on [PL 20.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover LH C, [REP 20.1](#).
2. Disconnect two connectors, P/J590, P/J591, [Figure 1](#).
3. Remove the components that follow, [Figure 1](#):
  - 3-1 Two screws, ST20.
  - 3-2 Remove the LVPS PWB.

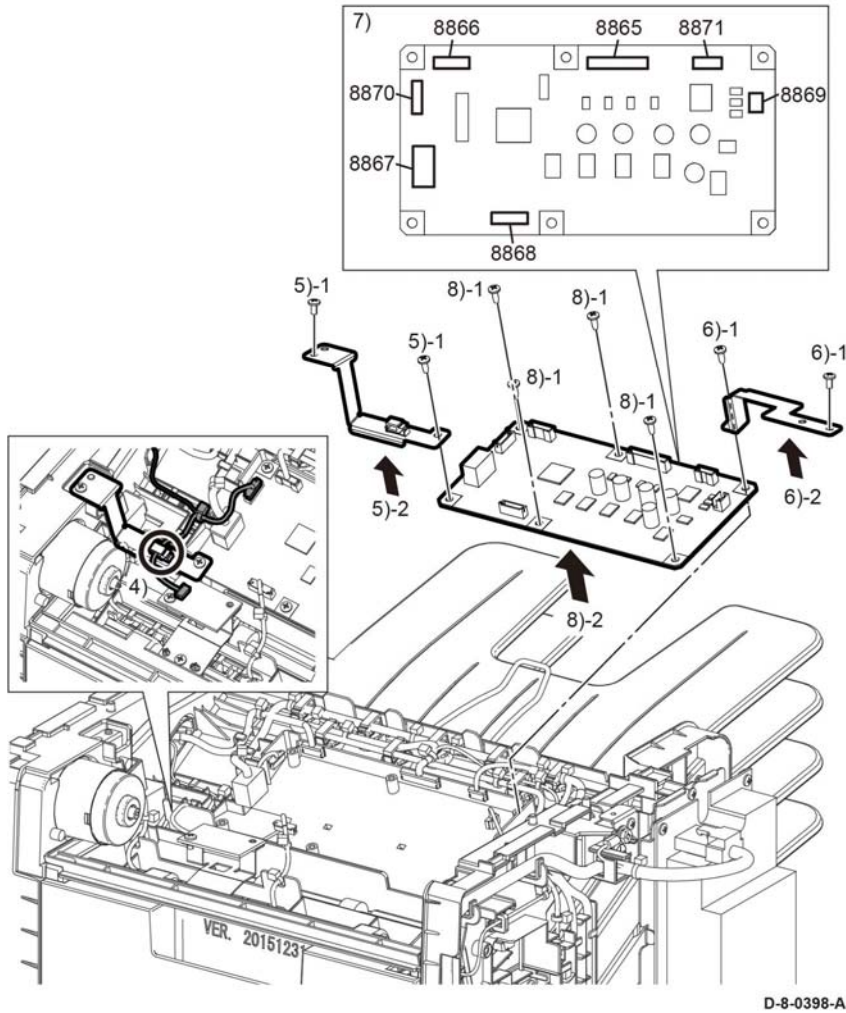


Figure 1 PWB PBX removal

### Replacement

The replacement is the reverse of the removal procedure.

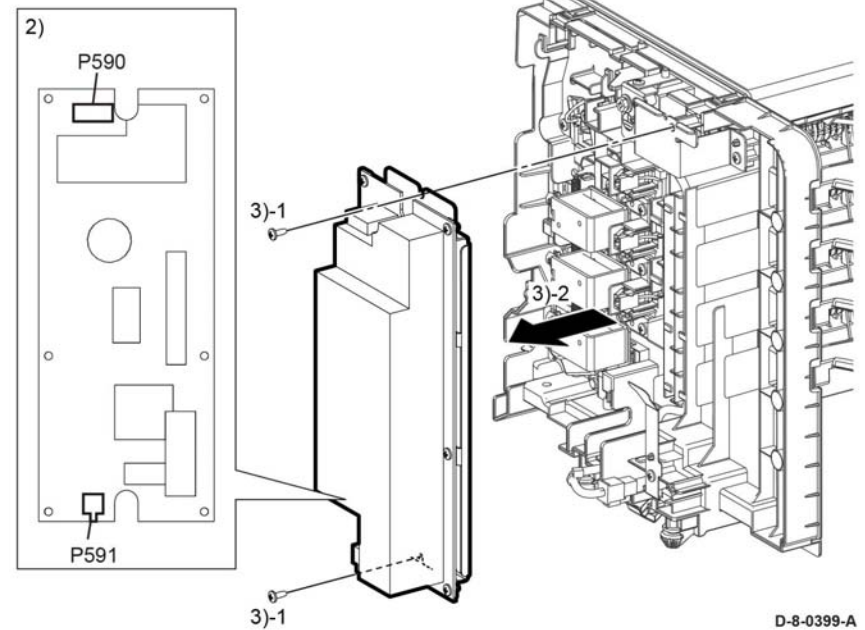


Figure 1 LVPS pwb

## Replacement

The replacement is the reverse of the removal procedure.

## REP 20.6 Motor Assembly

Parts List on [PL 20.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.*

1. Remove the cover LH C, [REP 20.1](#).
2. Remove the cover RH C/cover assembly staple, [REP 20.2](#).
3. Remove the cover top C, [REP 20.3](#).
4. Disconnect the connector, P/J8910, [Figure 1](#).
5. Remove two screws, SM25.
6. Remove the items that follow, [Figure 1](#):
  - 6-1 Belt.
  - 6-2 Motor

## REP 20.7 Solenoid Assembly Gate

Parts List on [PL 20.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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.

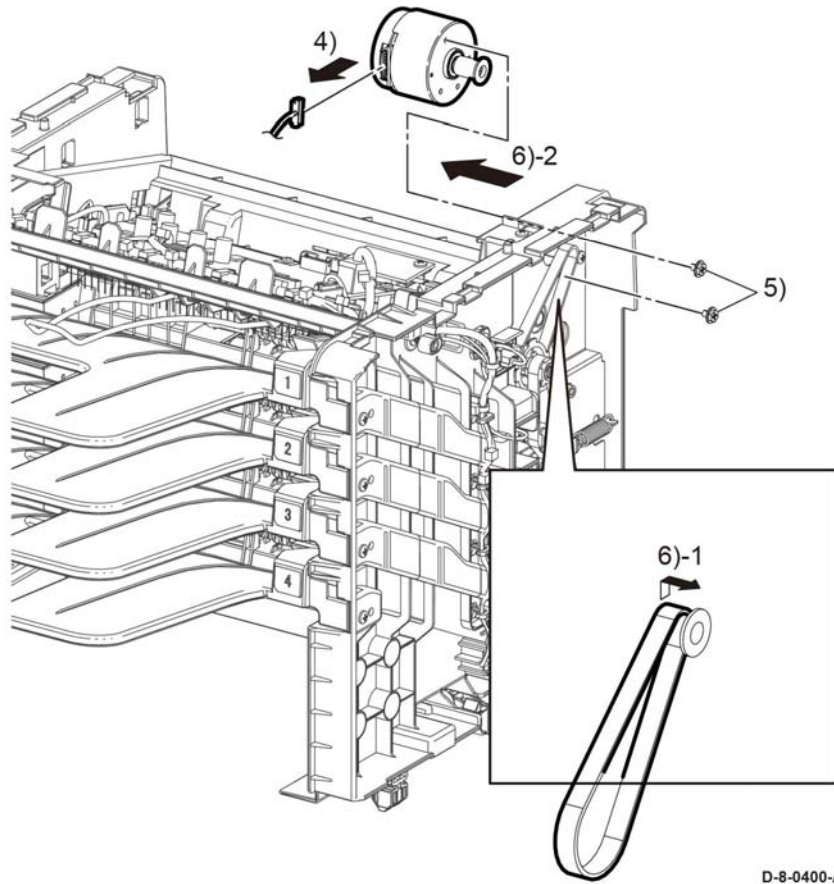
**NOTE:** For additional information about screws and fasteners, refer Hardware Kit.

1. Remove the cover RH C/cover assembly staple, [REP 20.2](#).
2. Turn the mailbox upside down as shown in [Figure 1](#).
3. Disconnect the connector, P/J8939.
4. Release the solenoid assembly gate harness, [PL 20.2 Item 11](#), from harness guide.

#### CAUTION

When releasing the chute low MBX in the next step, be careful not to damage the harness assembly vertical LED, [PL 20.2.9](#).

5. Remove the components that follow, [Figure 1](#):
  - 5-1 Two screws, ST20.
  - 5-2 Release the chute low mbx.
6. Remove the components that follow, [Figure 1](#):
  - 6-1 Two screws, SM25.
  - 6-2 Ground plate RH.
7. Remove the solenoid assembly gate while pulling out the harness through hole A.

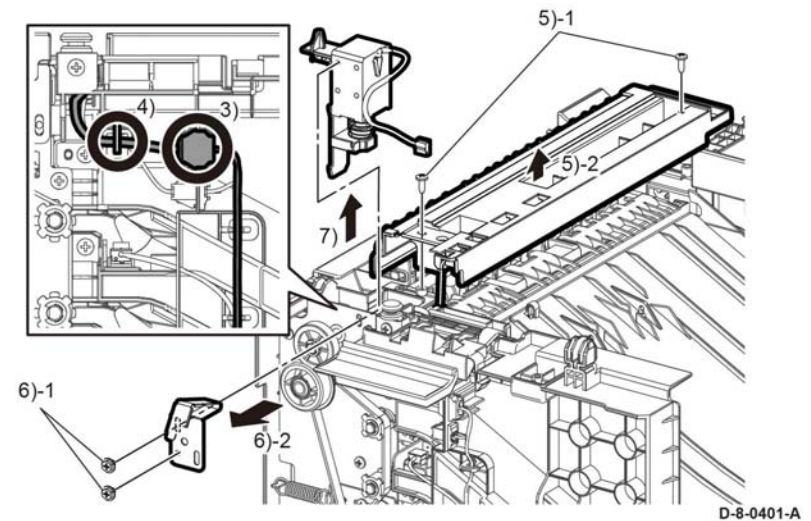


D-8-0400-A

Figure 1 Motor assembly

### Replacement

The replacement is the reverse of the removal procedure.



D-8-0401-A

Figure 1 Solenoid assembly gate



## Replacement

The replacement is the reverse of the removal procedure.

## REP 20.8 Tray Assembly

Parts List on [PL 20.1](#)

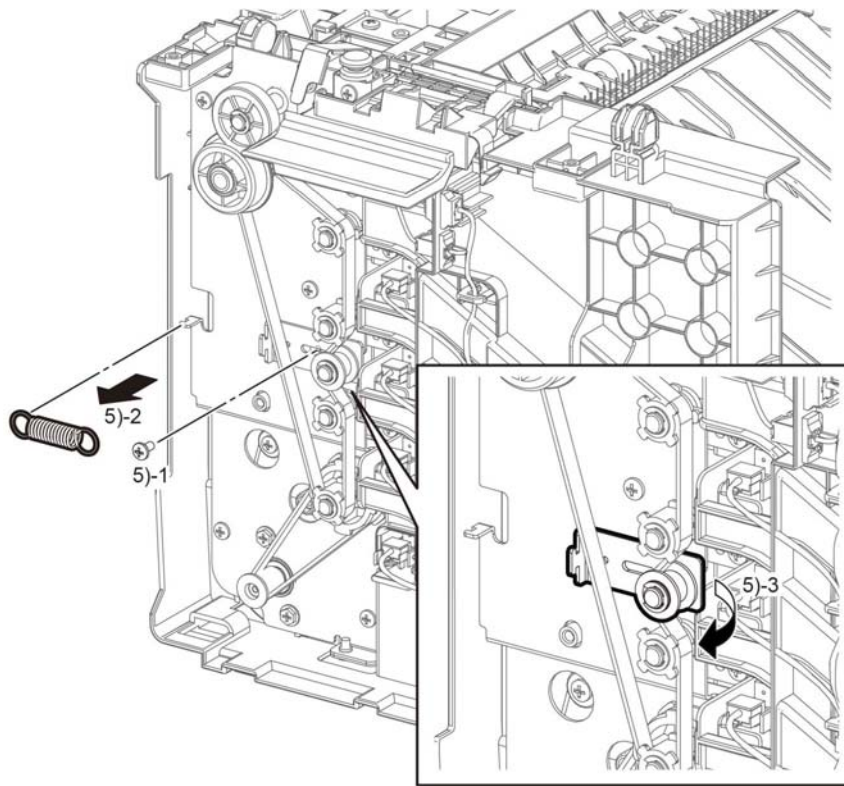
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.*

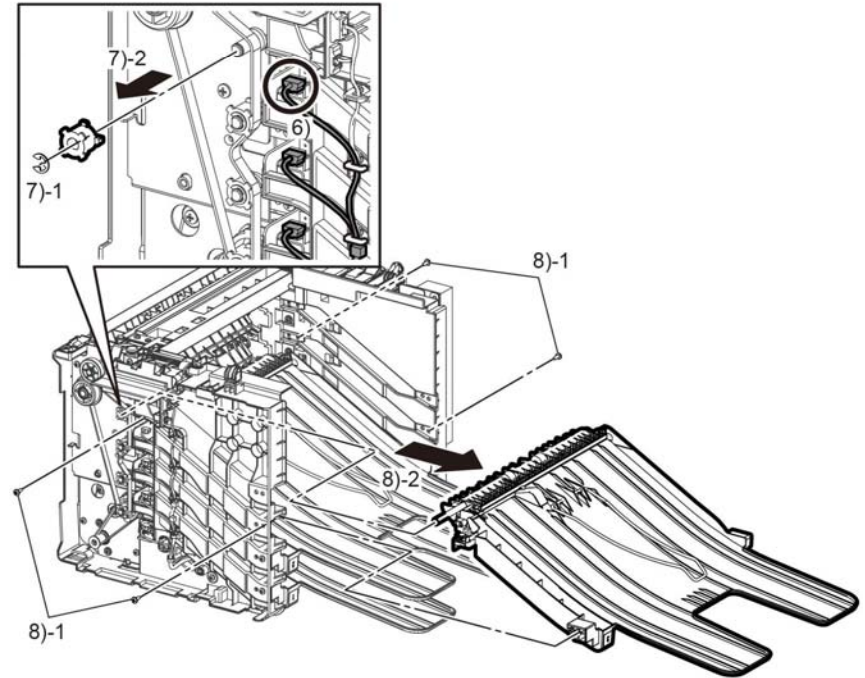
1. Remove the cover LH C, [REP 20.1](#).
2. Remove the cover RH C/cover assembly staple, [REP 20.2](#).
3. Remove the tray assembly bottom, [REP 20.9](#).
4. Turn the mailbox up side down as shown in [Figure 1](#).
5. Remove the components that follow, [Figure 1](#):
  - 5-1 One screw, SM18.
  - 5-2 Spring tension, [PL 20.2 Item 16](#).
  - 5-3 Bracket assembly tension, [PL 20.2 Item 17](#).
  - 5-4 Pulley tension spring, [PL 20.2 Item 16](#).



D-8-0402-A

**Figure 1 Tension pulley**

6. Disconnect the connector P/J8334, [Figure 2](#).
7. Remove the items that follow, [Figure 2](#):
  - 7-1 E-ring.
  - 7-2 Pulley, T20 MBX and Bushing while releasing the belt.
8. Remove the items that follow, [Figure 2](#):
  - 8-1 Four screws, ST20.
  - 8-2 3rd tray assembly, [PL 20.1 Item 2](#).



D-8-0403-A

**Figure 2 3rd tray assembly**

9. Disconnect connector P/J8933, [Figure 3](#).
10. Remove the items that follow, [Figure 3](#):
  - 10-1 E-ring.
  - 10-2 Pulley T20 MBX while avoiding the belt.
11. Remove the items that follow, [Figure 3](#):
  - 11-1 Four screws, ST20.
  - 11-2 2nd tray assembly, [PL 20.1 Item 2](#).

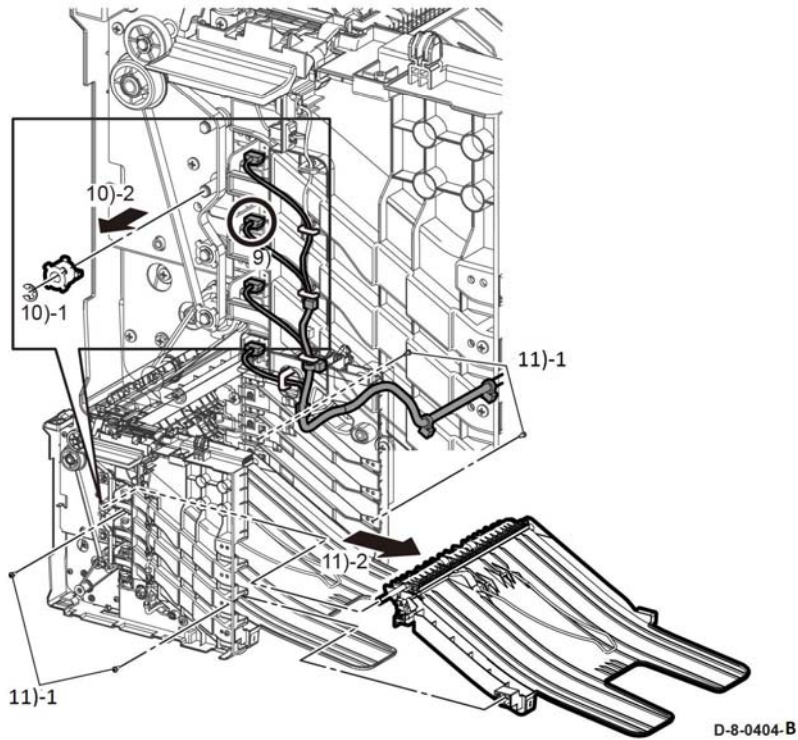


Figure 3 2nd tray assembly

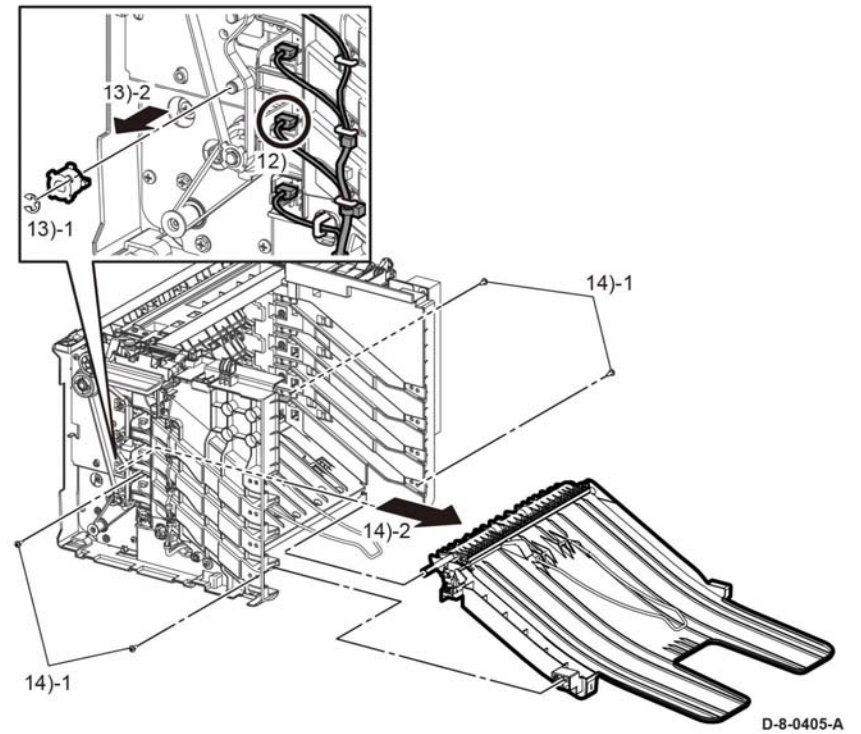


Figure 4 1st tray assembly

12. Disconnect connector P/J8932, [Figure 4](#).
13. Remove the components that follow, [Figure 4](#):
  - 13-1 E-ring.
  - 13-2 Pulley T20 MBX while releasing the belt.
14. Remove the components that follow, [Figure 4](#):
  - 14-1 Four screws, ST20.
  - 14-2 1st tray assembly, [PL 20.1 Item 2](#).

## Replacement

**NOTE:** Perform the steps the follow before installing the new spare tray assembly into the mailbox:

1. Compare the new spare tray to the old spare tray. It may be necessary to transfer one or two parts from the old assembly to the new assembly.
2. Check that the new spare tray has a label in it. It may be necessary to affix a label that is provided to the new tray assembly.
3. The replacement is the reverse of the removal procedure.

## REP 20.9 Tray assembly Bottom

Parts List on [PL 20.1](#)

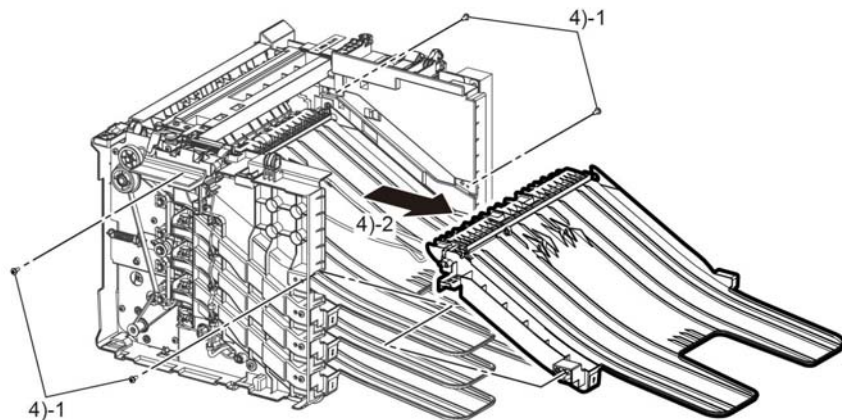
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover LH C, [REP 20.1](#).
2. Remove the cover RH c/cover assembly staple, [REP 20.2](#).
3. Turn the mailbox upside down as shown in [Figure 1](#).
4. Remove the items that follow, [Figure 1](#):
  - 4-1 Four screws, ST20.
  - 4-2 Tray assembly bottom, [PL 20.1 Item 3](#).



D-8-0406-A

Figure 1 Tray assembly bottom

### Replacement

**NOTE:** Perform the steps the follow before installing the new spare tray assembly into the mailbox:

1. Compare the new spare tray to the old spare tray. It may be necessary to transfer one or two parts from the old assembly to the new assembly.
2. Check that the new spare tray has a label in it. It may be necessary to affix a label that is provided to the new tray assembly.

## REP 20.10 Bin Assembly Gate Solenoid

Parts List on [PL 20.1](#)

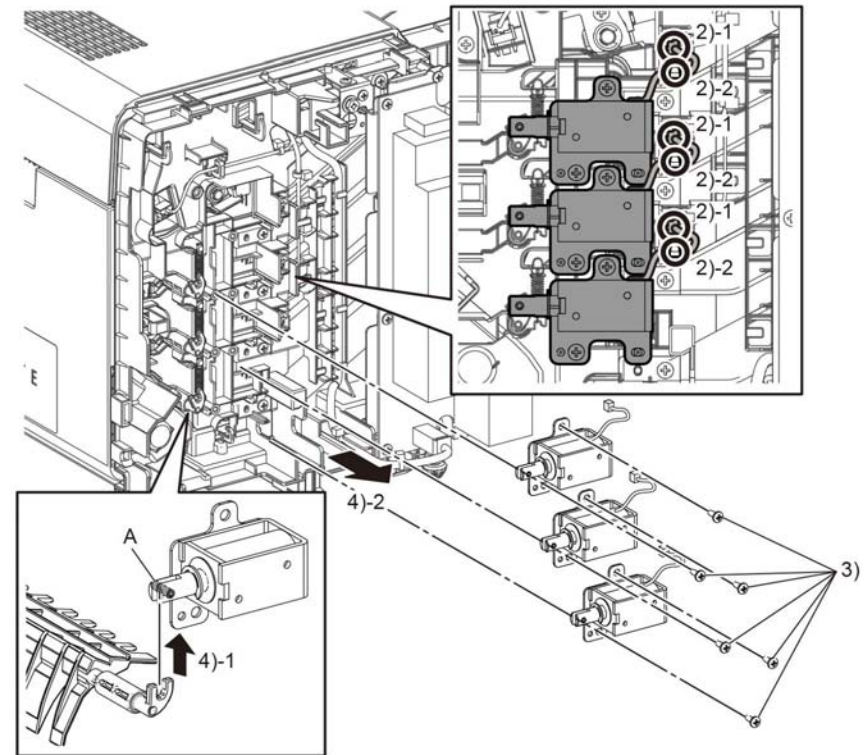
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, Hardware Kit.

1. Remove the cover LH C, [REP 20.1](#).
2. Perform the items that follow, [Figure 1](#):
  - 2-1 Remove the connector from defective bin gate solenoid P/J8940, or P/J8941, or P/J8942.
  - 2-2 Release the harness from the harness guides
3. Remove two screws, ST20, from the defective bin gate solenoid.
4. Perform the items that follow, [Figure 1](#):
  - 4-1 Disengage the link arm from the defective bin gate solenoid.
  - 4-2 Remove bin assembly gate solenoids.



D-8-0407-A

Figure 1 Bin assembly gate solenoids

### Replacement

The replacement is the reverse of the removal procedure.



## REP 21.1 Cover LH C

Parts List on [PL 21.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Perform the steps that follow:
  - Remove the finisher.
  - Turn the finisher upside down.

**NOTE:** For additional information about screws and fasteners, refer to Hardware Kit

2. Remove two screws, ST20, [Figure 1](#).

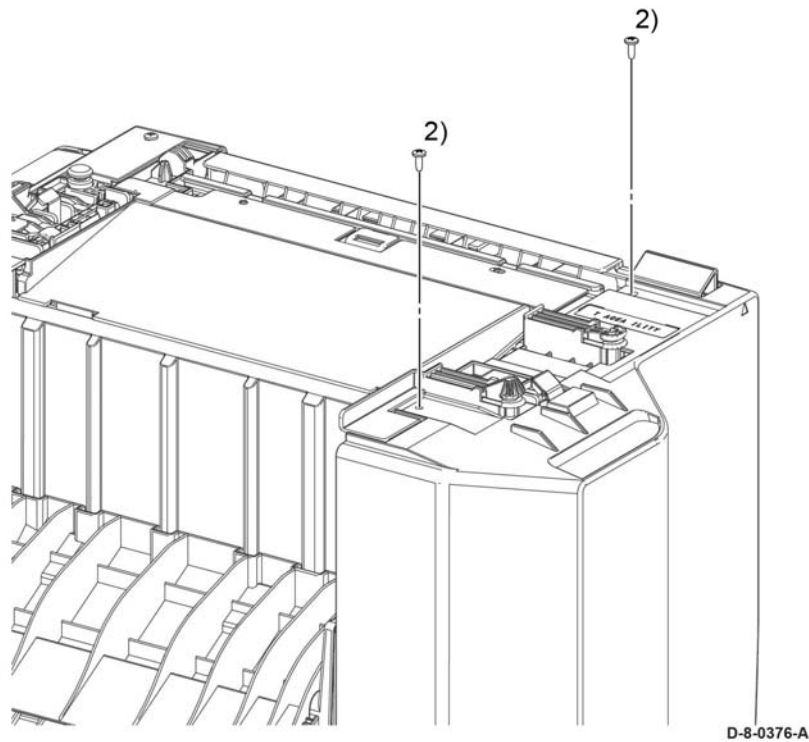


Figure 1 Removing bottom screws

#### CAUTION

Use care during the next step as the covers are no longer firmly attached to the frame and may easily fall off.

3. Turn the finisher right side up.
4. Perform the steps that follow, [Figure 2](#):
  - 4-1. Use a flat blade screwdriver to release the two tabs.
  - 4-2. Remove the cover LH C.

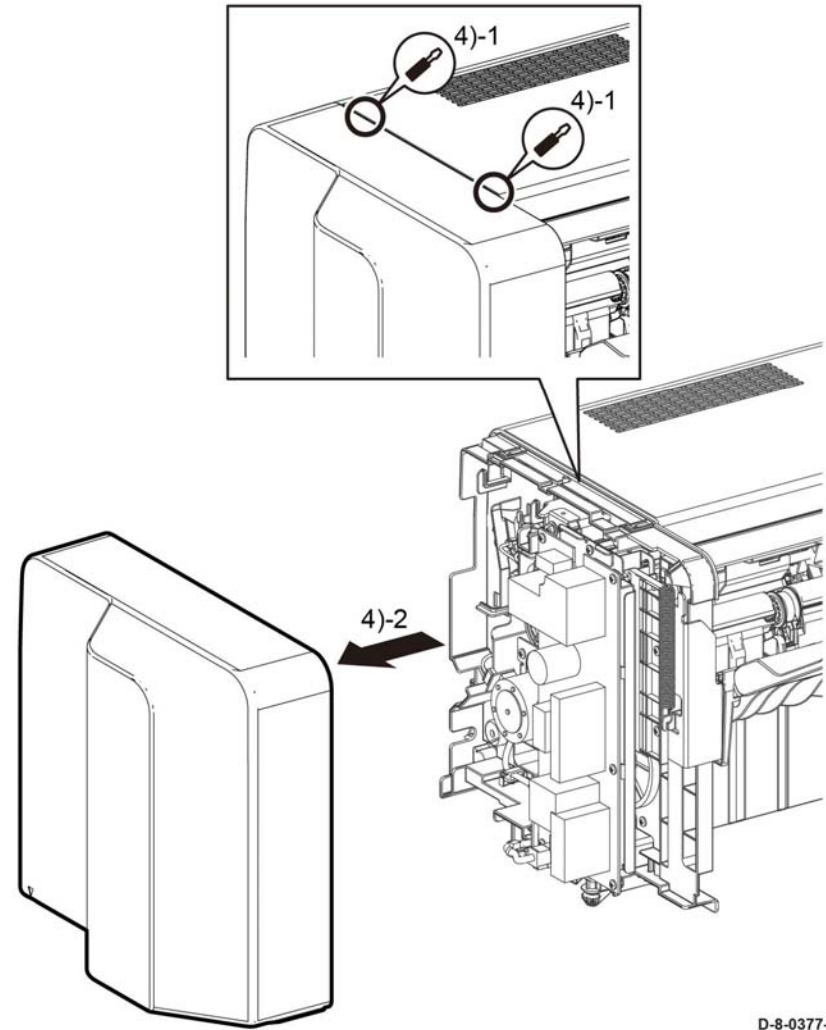


Figure 2 Cover LH C removal

## Replacement

The replacement is the reverse of the removal procedure.

## REP 21.2 Cover RH C

Parts List on [PL 21.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Perform the steps that follow:
  - Remove the finisher.
  - Turn the finisher upside down.
2. Remove two screws, ST20, [Figure 1](#).

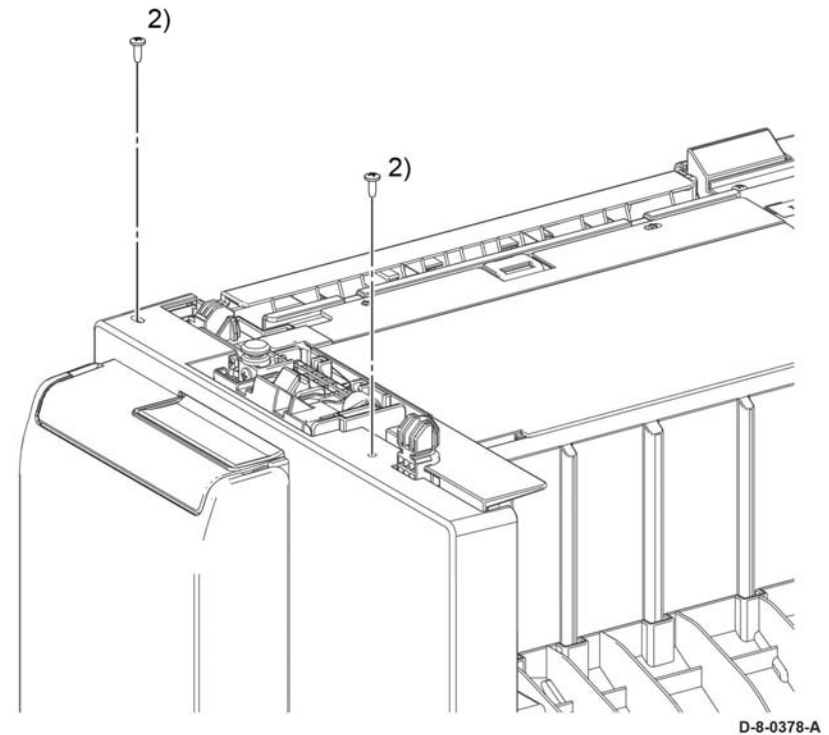


Figure 1 Right hand cover bottom screws



### CAUTION

Use care during the next step as the covers are no longer firmly attached to the frame and may easily fall off.

3. Turn the finisher right side up.
4. Perform the steps that follow, [Figure 2](#).
  - 4-1 Insert a flat blade screwdriver to release the two tabs.
  - 4.2 Remove the cover RH C.

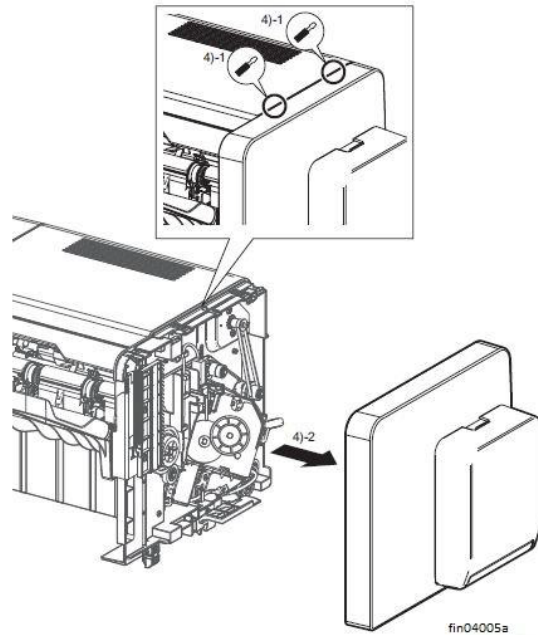


Figure 2 Cover removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.3 Cover Top C

Parts List on [PL 21.2](#)

### Removal

### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover LH C, [REP 21.1](#).
2. Remove the cover RH C, [REP 21.2](#).
3. Perform the items that follow, [Figure 1](#):
  - 3-1 Release two tabs.
  - 3-2 Remove the top cover C.

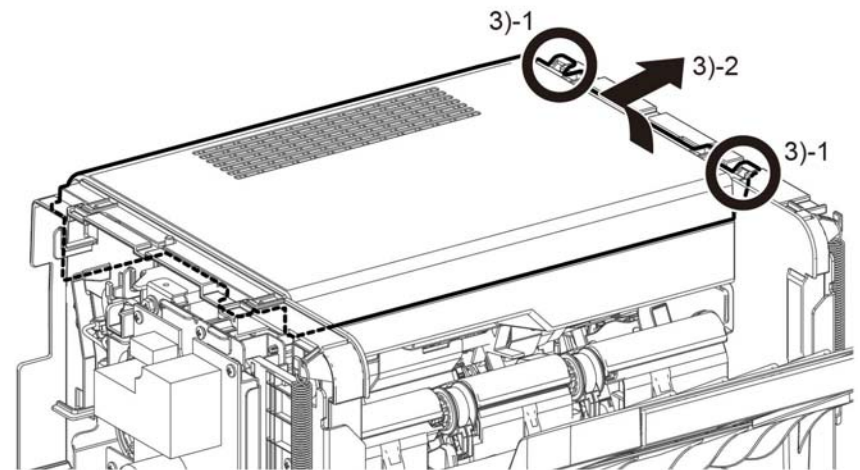


Figure 1 Cover top C removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.4 PWB GPF A4 Finisher

Parts List on [PL 21.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover lower C, [REP 21.8](#).
2. Turn the finisher upside down.
3. Disconnect all connectors, [Figure 1](#).
4. Remove the components that follow:
  - 4-1 Six screws, SM18.
  - 4-2 PWB GPF A4 finisher.

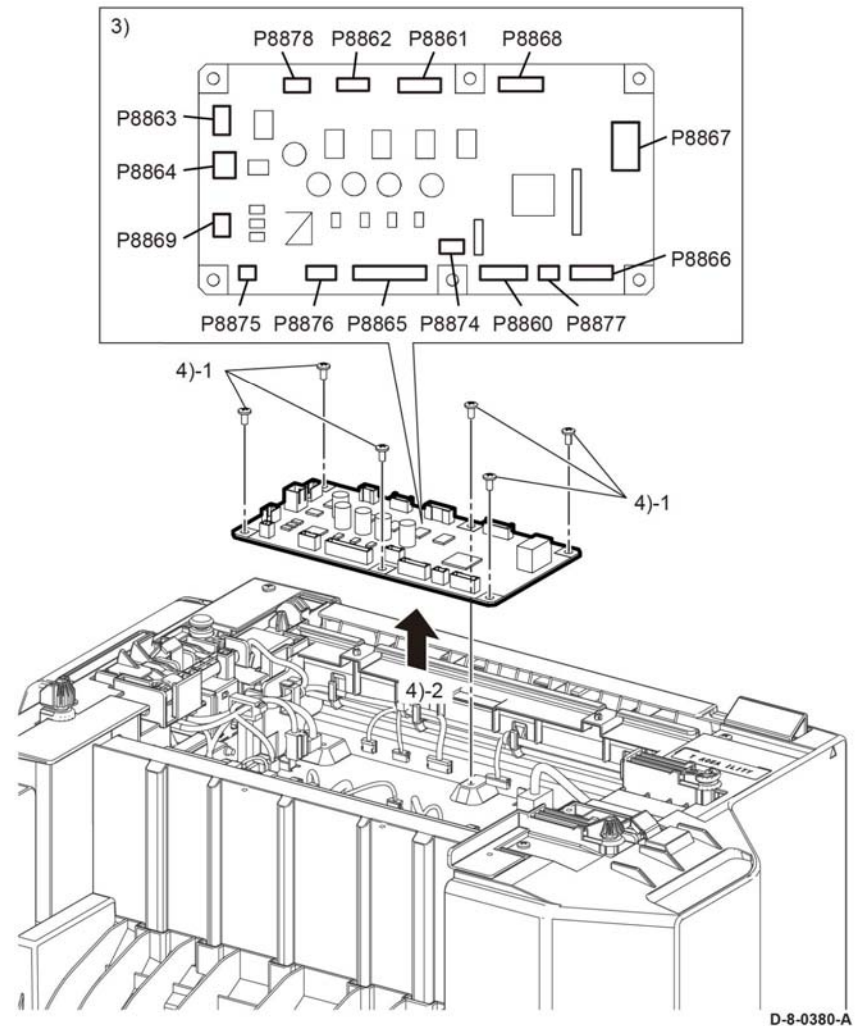


Figure 1 PWB removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.5 LVPS

Parts List on [PL 21.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover LH C, [REP 21.1](#).
2. Disconnect two connectors, P/J590, P/J591, [Figure 1](#).
3. Remove the components that follow:
  - 3-1 Two screws, ST20.
  - 3-2 LVPS.

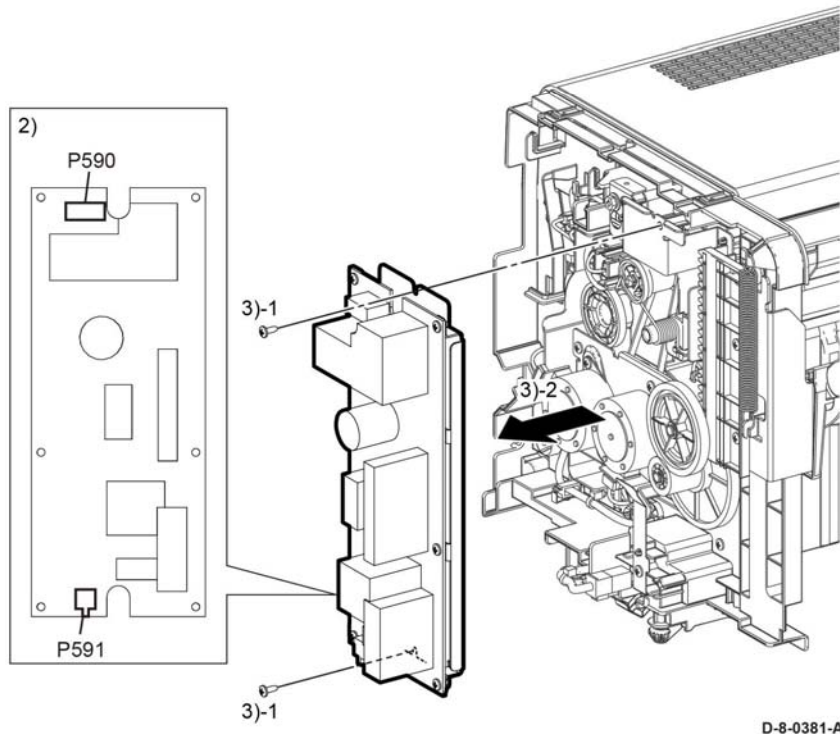


Figure 1 LVPS removal

D-8-0381-A

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.6 Motor Assembly

Parts List on [PL 21.2](#)

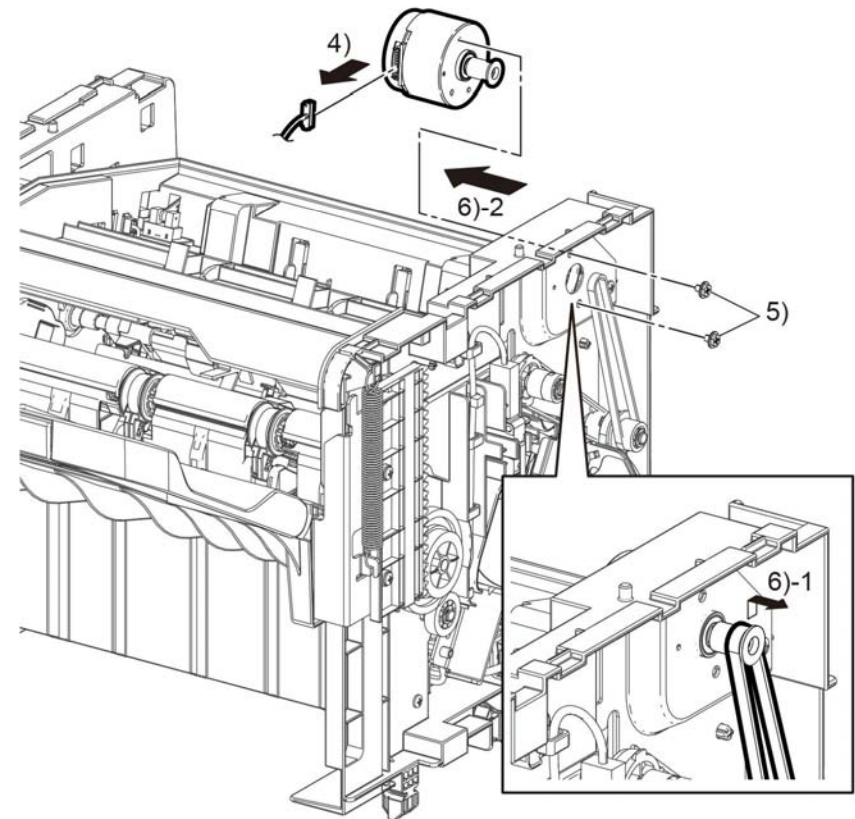
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover LH C, [REP 21.1](#).
2. Remove the cover RH C/cover assembly staple, [REP 21.2](#).
3. Remove the cover top C, [REP 21.3](#).
4. Disconnect the connector, P/J9810, [Figure 1](#).
5. Remove two screws, SM25, [Figure 1](#).
6. Remove the components that follow, [Figure 1](#):
  - 6-1 Belt.
  - 6-2 Motor.



D-8-0382-A

Figure 1 Motor assembly

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.7 Solenoid Assembly Gate

Parts List on [PL 21.2](#)

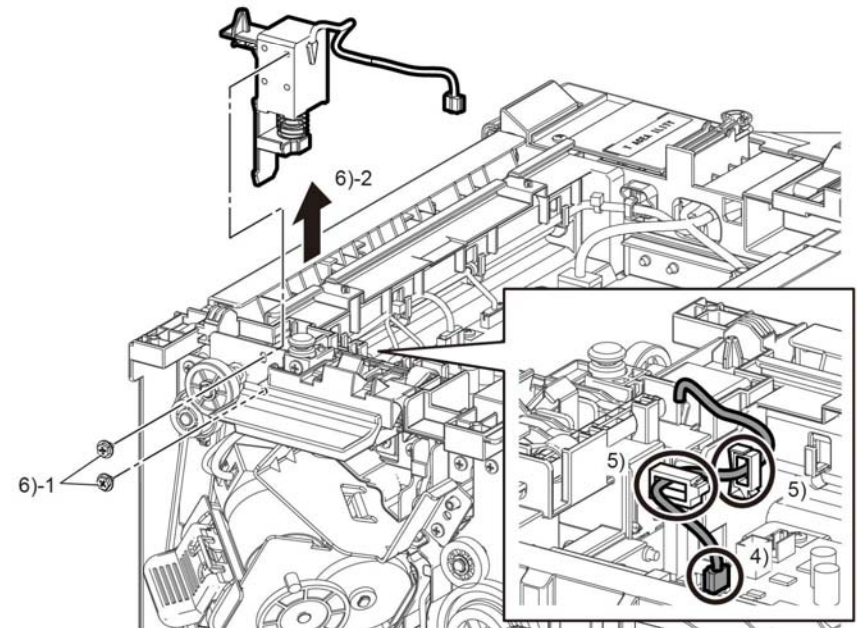
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the cover RH C, [REP 21.2](#).
2. Remove the Cover lower C, [REP 21.8](#).
3. Turn the finisher upside down as shown in [Figure 1](#).
4. Disconnect the connector P/J8869.
5. Release the solenoid assembly gate harness from the two clamps, [Figure 1](#).
6. Remove the components that follow, [Figure 1](#):
  - 6-1 Two screws, SM25.
  - 6-2 Solenoid assembly gate.



D-8-0383-A

Figure 1 Solenoid gate assembly removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.8 Cover Lower C

Parts List on [PL 21.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the finisher, REP TBD. Turn the finisher upside down.
2. Perform the items that follow, [Figure 1](#):
  - 2-1 Press the release lever.
  - 2-2 Remove the cover lower C.

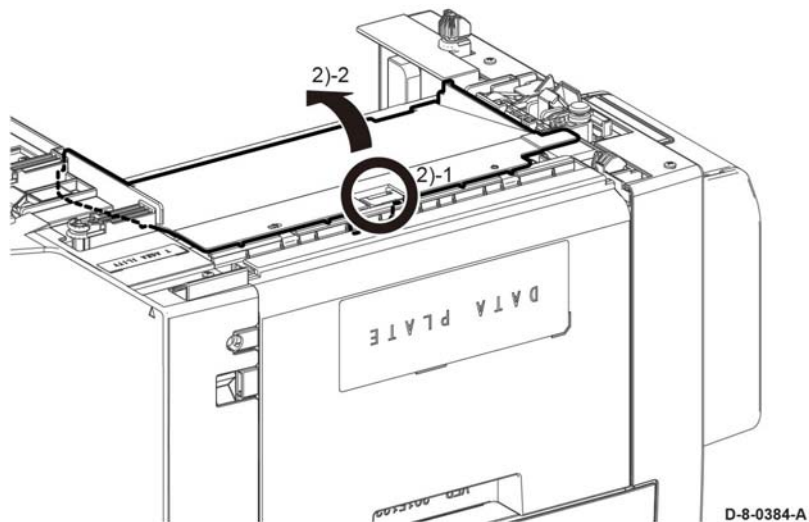


Figure 1 Cover lower C removal

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.9 Motor Assembly Stepping

Parts List on [PL 21.1](#)

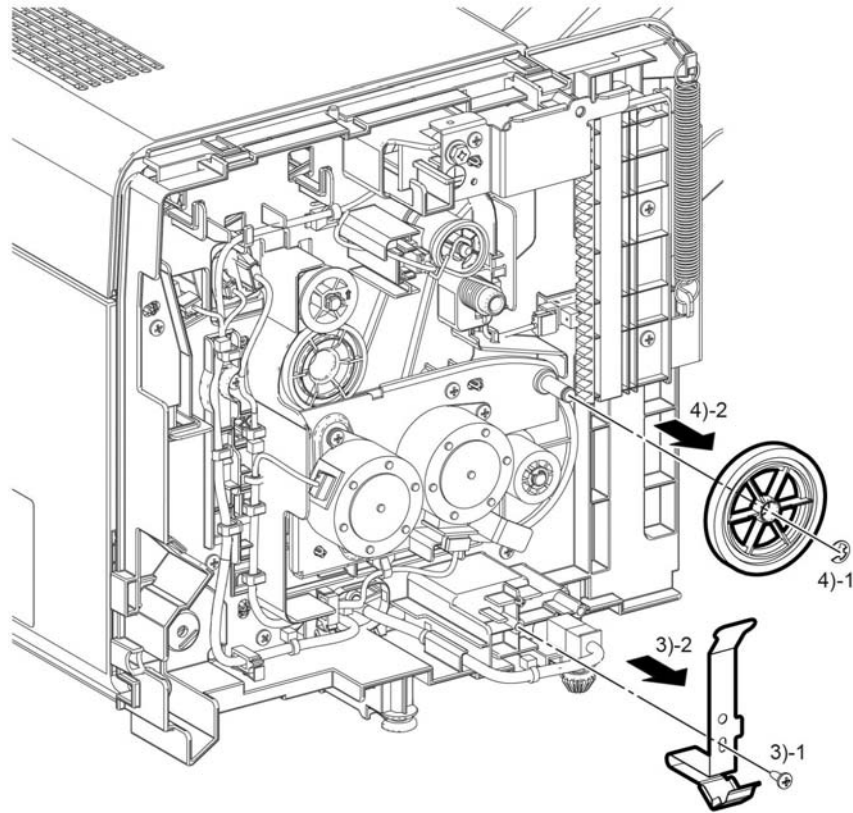
### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

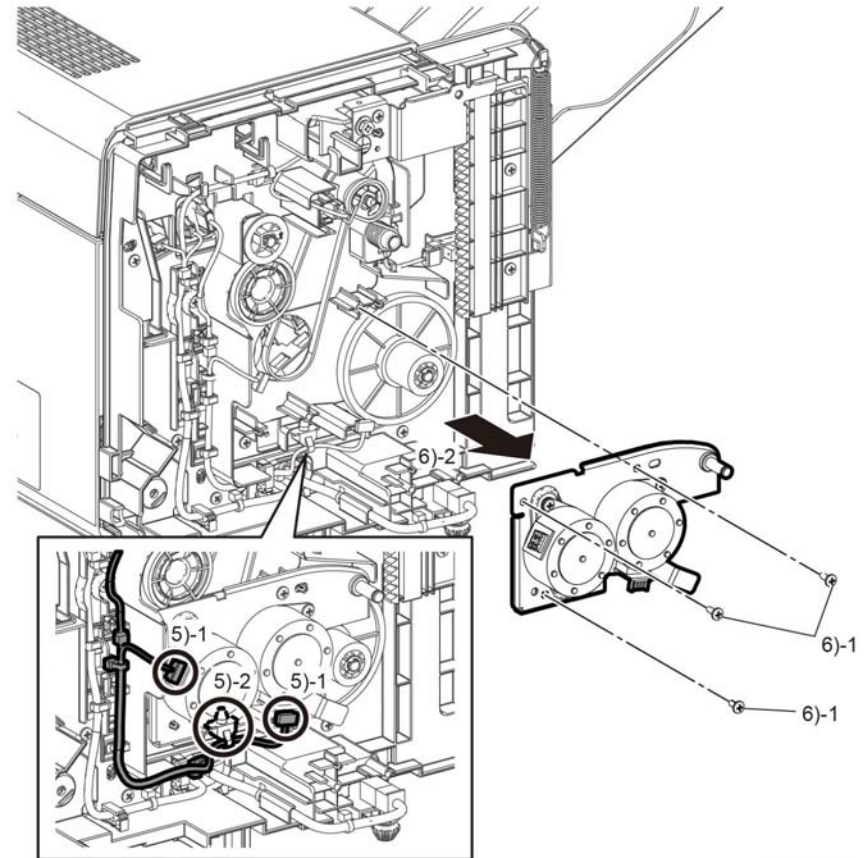
1. Remove the cover LH C, [REP 21.1](#).
2. Remove the LVPS, [REP 21.8](#).
3. Remove the components that follow, [Figure 1](#):
  - 3-1 One screw, ST20.
  - 3-2 Plate ground LH bracket.
4. Remove the components that follow, [Figure 1](#):
  - 4-1 One E-ring.
  - 4-2 Gear.



D-8-0385-A

**Figure 1 Motor gear and bracket removal**

5. Perform the steps that follow, [Figure 2](#):
  - 5-1 Disconnect two connectors, P/J8906, P/J8907.
  - 5-2 Release the wire holder.
6. Remove the components that follow, [Figure 2](#):
  - 6-1 Two screws, ST20.
  - 6-2 One screw, SM18.
  - 6-3 Motor assembly stepping, [Figure 2](#).



D-8-0386-A

**Figure 2 Motor assembly removal**

### Replacement

The replacement is the reverse of the removal procedure.

## REP 21.10 Stapler Assembly

Parts List on [PL 21.2](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.

1. Remove the Cover RH C, [REP 21.2](#).
2. Perform the steps that follow, [Figure 1](#):
  - 2-1 Disconnect connectors P/J8897,P/J9808.
  - 2-2 Release the harness from the clamps.
3. Remove the components that follow, [Figure 1](#):
  - 3-1 Two screws, ST20, harness Kit.
  - 3-2 Stapler assembly with the bracket assembly.
4. Remove the components that follow, [Figure 1](#):
  - 4-1 Two screws SM4.
  - 4-2 Bracket from the stapler assembly.

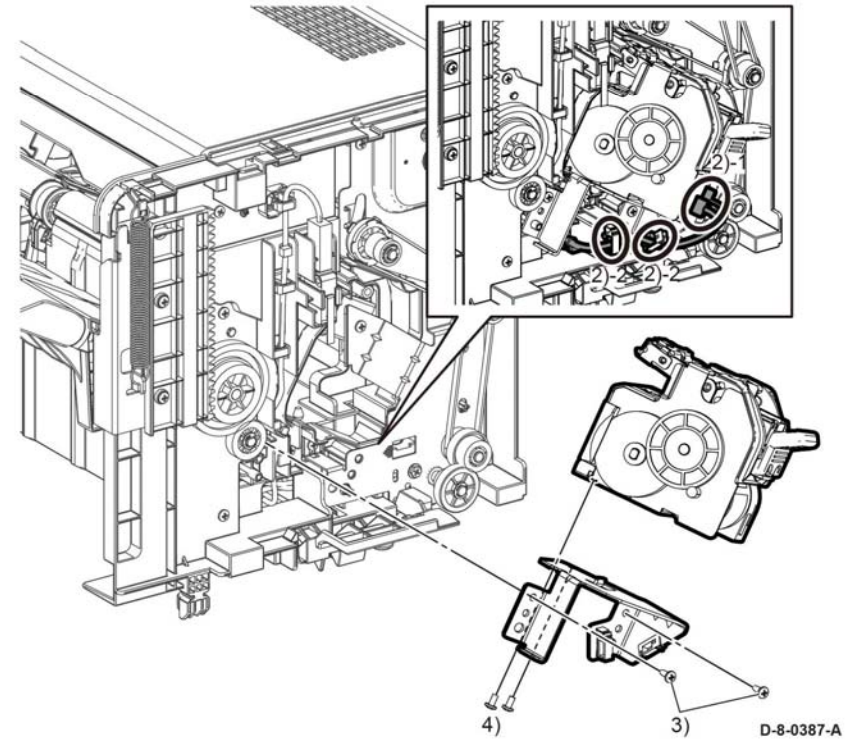


Figure 1 Stapler and bracket removal

### Replacement

The replacement is the reverse of the removal procedure.



## REP 21.11 Base Tray Assembly

Parts List on [PL 21.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine. Refer to [GP 4](#). 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 additional information about screws and fasteners, refer to Hardware Kit.*

1. Remove the cover LH C, [REP 21.1](#).
2. Remove the cover RH C, [REP 21.2](#).
3. Remove two springs.
4. Remove the E-ring, then the gear.
5. Remove two screws, then gear assembly rack right, and gear assembly rack left.
6. Fully lower the tray, then release the wheels from the guides.

### Replacement

1. Reinstall gear assembly rack right.
2. Set the tray half-way in gear rack.
3. Reinstall gear assembly rack left, then tighten two screws.
4. Reinstall the gear.

*NOTE: Do not install the E-ring at this time*

5. Using gear rack, level the tray lifting gear rack while turning gear, until the teeth of the two gears mesh and lock via the motor to stop the gear rack from lowering.
6. Reinstall the E-ring on gear.



## REP 50.1 DADF Assembly (MFP Std. and MFP Tall)

Parts List on [PL 50.1](#)

### Removal

MFP Std. C605

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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.

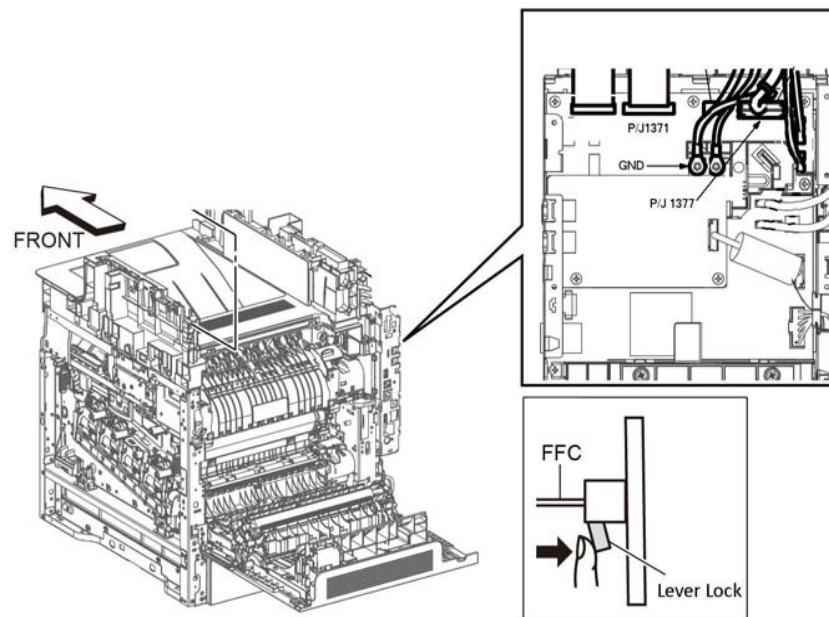
1. Remove the IOT 550 cassette assembly, [PL 19.1 Item 1](#).
2. Remove the main MSI tray assembly, [PL 13.2 Item 1](#).
3. Remove the ESS window assembly kit, [PL 19.2 Item 13](#).
4. Remove the WiFi cap, [PL 19.2 Item 16](#).
5. Remove the L front cover, [PL 19.1 Item 22](#).
6. Remove the L side cover, [PL 19.2 Item 1](#).
7. Remove the top ESS plate, [PL 18.1 Item 18](#).

#### CAUTION

In the following step, engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly press open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in the inset of [Figure 1](#), Disconnect the DADF harness and FFC.

1. Refer to [Figure 1](#), following the caution above, release the FFC (P/J1371) coming from the DADF, disconnect (P/J1377), and the ground wire from the ESS PWB, [PL 18.1 Item 3](#).



D-8-0198-B

Figure 1 Disconnect the DADF harness and FFC (MFP Std.)

2. Refer to [Figure 1](#), release the hook and remove the FFC Cover from the IIT Assembly.
3. Refer to [Figure 1](#), remove the DADF harness out of its harness guide and up through the IIT Assembly.
  - a. Fold the DADF harness connector up against the wires.
  - b. Orient the harness connector to face the front of the printer.
  - c. Pass the harness up through the IIT Assembly.
4. Refer to [Figure 2](#), lift the DADF assembly straight up from the IIT assembly in the direction of the arrow.

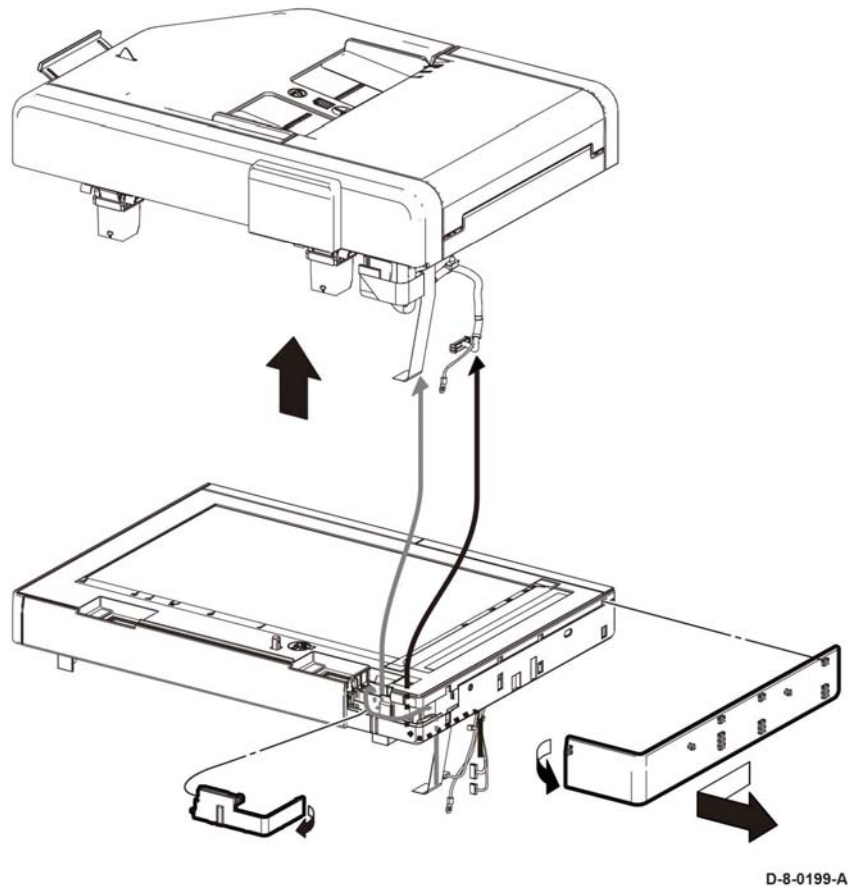


Figure 2 Separate the DADF Assembly from the IIT

## Removal

MFP Tall. C605\_Tall

## WARNING

Switch off the electricity to the machine, GP 4. 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 IOT 550 cassette assembly, PL 19.1 Item 1.
2. Remove the main MSI tray assembly, PL 13.2 Item 1.
3. Remove the ESS window assembly kit, PL 19.2 Item 13.
4. Remove the WiFi cap, PL 19.2 Item 16.
5. Remove the L front cover, PL 19.1 Item 22.

6. Remove the L side cover, PL 19.2 Item 1.
7. Remove the top ESS plate, PL 18.1 Item 18.

## CAUTION

In the following step, engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.

NOTE: When engaging the release lever on the FFC connector, slightly press open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in the inset of Figure 3, Disconnect the DADF harness and FFC.

1. Refer to Figure 3, following the caution above, release the FFC (P/J1371) coming from the DADF, disconnect (P/J1377), and the ground wire from the ESS PWB, PL 18.1 Item 3.

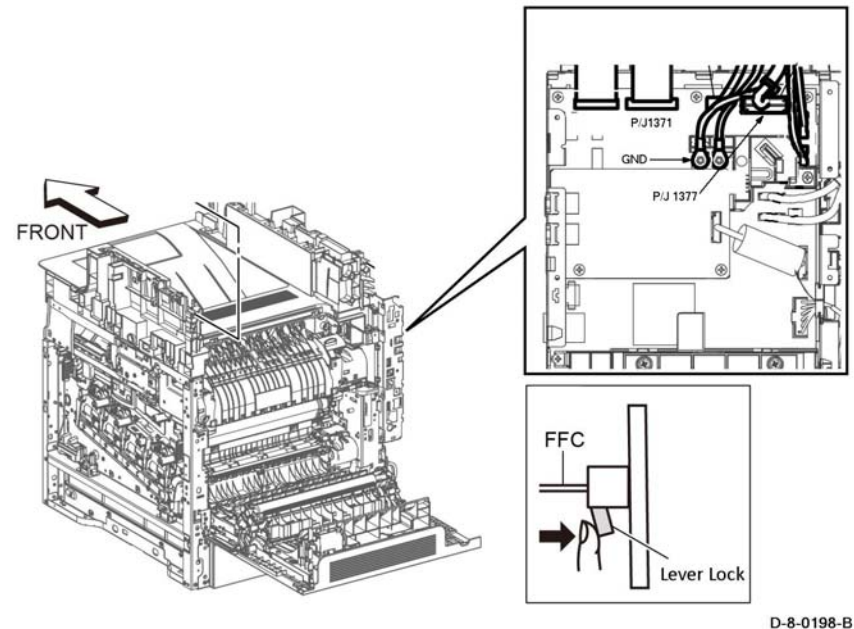


Figure 3 Disconnect the DADF harness and FFC (MFP Tall)

2. Refer to Figure 3, release the hook and remove the FFC Cover from the IIT Assembly.
3. Refer to Figure 4, remove the DADF harness out of its harness guide and up through the IIT Assembly.
  - a. Fold the DADF harness connector up against the wires.
  - b. Orient the harness connector to face the front of the printer.

- c. Pass the harness up through the IIT Assembly.
- 4. Refer to [Figure 4](#), lift the DADF assembly straight up from the IIT assembly in the direction of the arrow.

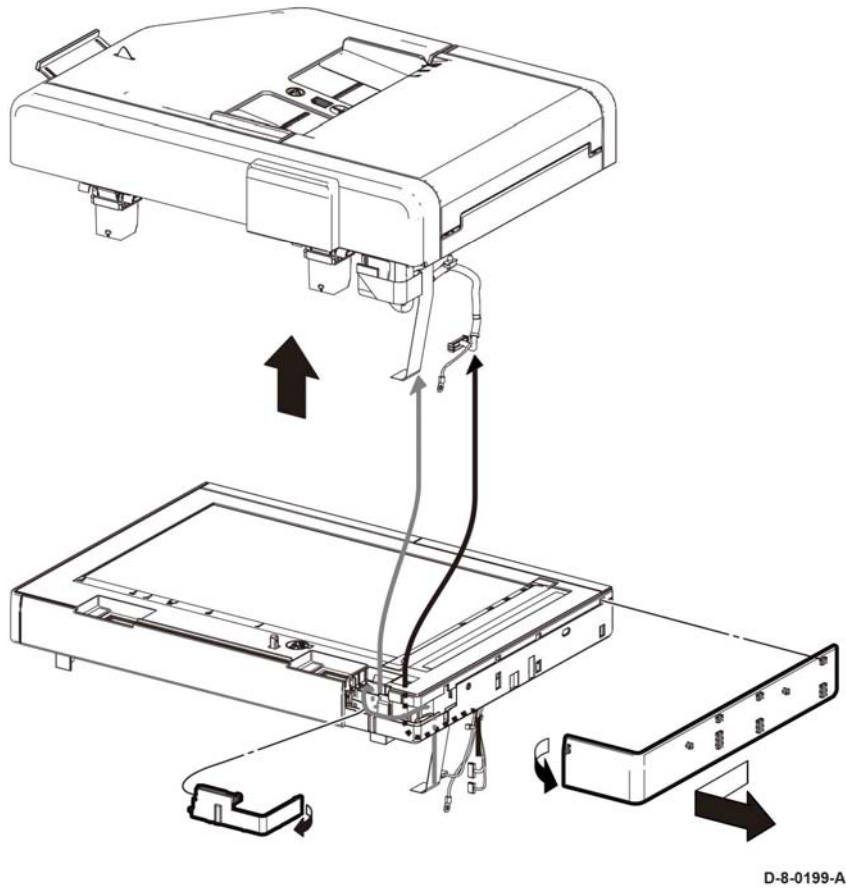
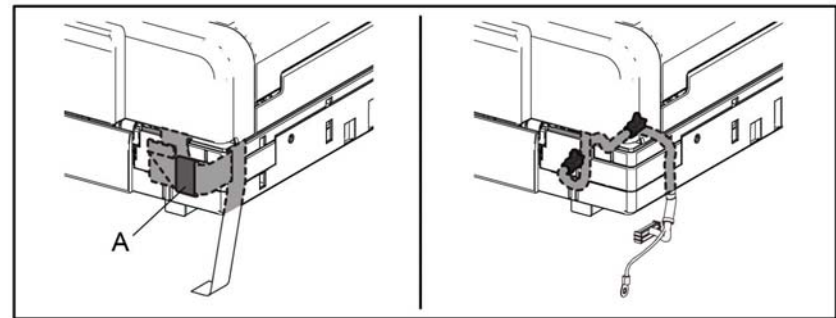
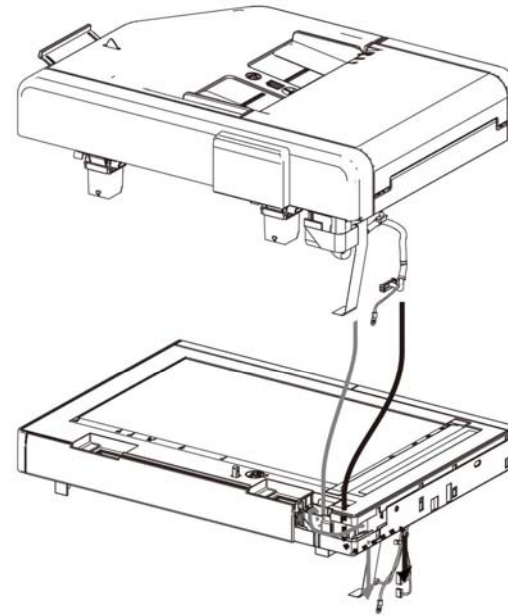


Figure 4 Separate the DADF Assembly from the IIT

## Replacement

### CAUTION

Avoid pinching wires when installing the DADF harness and FFC. Be sure to follow the harness routes as shown in [Figure 5](#).

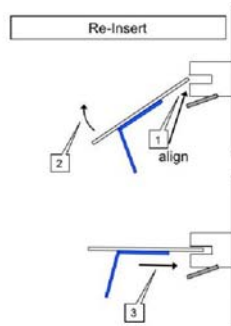


D-8-0201-A

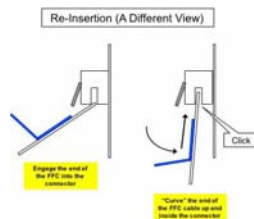
Figure 5 DADF Harness Routes

**NOTE:** To ensure integrity of the FFC connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the FFC cable.
2. To ease installation and ensure proper alignment of the FFC cable, bend the blue “grip tab” 90 degrees perpendicular to the FFC.
3. Referring to [Figure 6](#) and [Figure 7](#), **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector.



**Figure 6 Cable Perpendicular Insertion**



**Figure 7 Cable Parallel Connector Insertion**

4. Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will “click” when fully seated, locking the FFC in-place.

## REP 50.2 IIT Assembly

Parts List on [PL 50.1](#)

### Removal

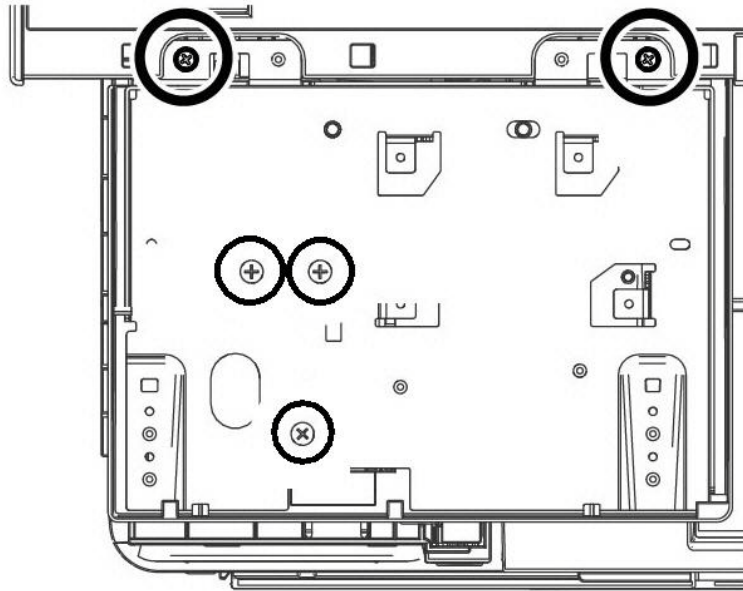
MFP Std. C605

### WARNING

**Switch off the electricity to the machine, GP 4. 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 IOT 550 cassette assembly, [PL 19.1 Item 1](#).
2. Remove the main MSI tray assembly, [PL 13.2 Item 1](#).
3. Open the rear door.
4. Remove the ESS window assembly kit, [PL 19.2 Item 13](#).
5. Remove the WiFi cap, [PL 19.2 Item 16](#).
6. Remove the L front cover, [PL 19.1 Item 22](#).
7. Remove the L side cover, [PL 19.2 Item 1](#).
8. Remove the Cover Front IIT, [PL 50.1.19](#).
9. Remove the UI inner cover, [PL 1.1 Item 2](#).
10. Remove the top ESS plate, [PL 18.1 Item 18](#).
11. Refer to [Figure 1](#), remove 2 screws connecting the UI plate to the scanner and three screws in the UI plate.

<Top Side>



D-8-0014-B

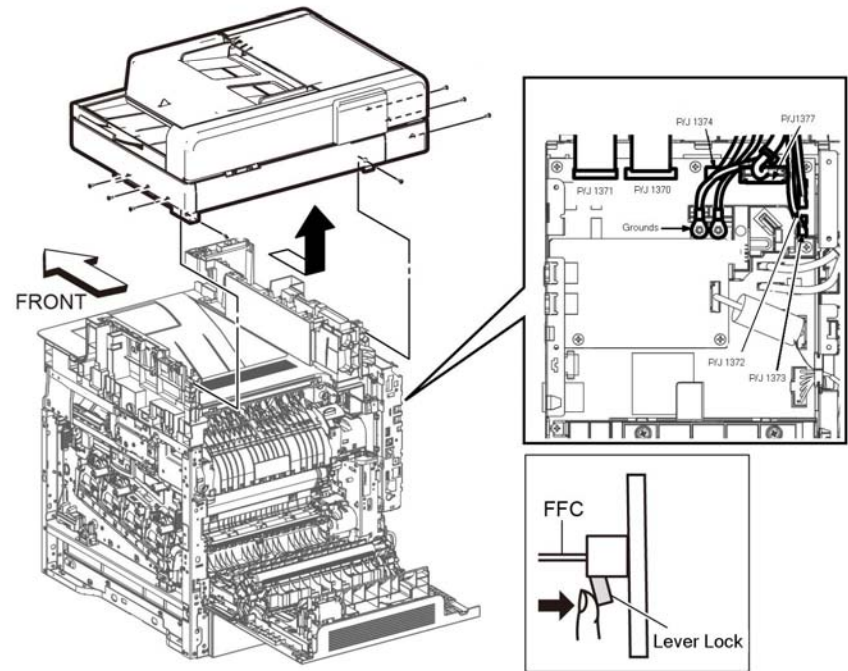
Figure 1 UI plate screw locations

**CAUTION**

*In the following step, engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.*

*NOTE: When engaging the release lever on the FFC connector, slightly press open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in the inset of Figure 2, Disconnect the harnesses and two FFCs.*

12. Refer to Figure 2, following the caution above, release the 2 FFC cables (P/J1370 and P/J1371) and disconnect (P/J1372, P/J1373, P/J1374, P/J1377) from the ESS PWB.
13. Refer to Figure 2, remove two screws (SM18, silver, M3X6mm) to release the ground harnesses from the ESS PWB, PL 18.1 Item 3.
14. Release three clamps and five push-ties.
15. Refer to Figure 2, remove eight screws (SM18, silver, M3X6mm) to remove the scanner assembly PL 50.1 Item 13 in the direction of the arrow.



D-8-0198-C

Figure 2 Disconnect the harnesses and two FFCs (MFP Std.)

**Removal**

MFP Tall C605\_Tall

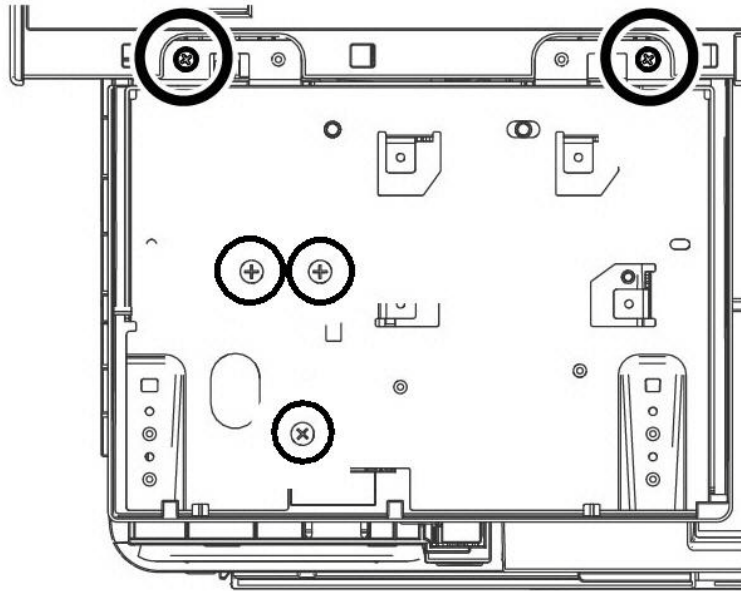
**WARNING**

**Switch off the electricity to the machine, GP 4. 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 or mailbox, if installed.
2. Remove the IOT 550 cassette assembly, PL 19.1 Item 1.
3. Remove the main MSI tray assembly, PL 13.2 Item 1.
4. Open the rear door.
5. Remove the ESS window assembly kit, PL 19.2 Item 13.
6. Remove the WiFi cap, PL 19.2 Item 16.
7. Remove the L front cover, PL 19.1 Item 22.
8. Remove the L side cover, PL 19.2 Item 1.
9. Remove the exit top finisher cover, if installed, PL 19.3 Item 50.
10. Remove the R side finisher cover, PL 19.3 Item 32.

11. Remove the L side finisher cover, PL 19.4 Item 2.
12. Remove the SUB L side finisher cover, PL 19.3 Item 43.
13. Remove the rear finisher cover, PL 19.4 Item 3.
14. Remove the inner rear finisher cover, PL 19.3 Item 31.
15. Remove the IIT front cover, PL 50.1 Item 19.
16. Remove the UI inner cover, PL 1.1 Item 2.
17. Remove the top ESS plate, PL 18.1 Item 18.
18. Refer to Figure 3, remove the 2 screws that connect the UI plate to the scanner, and the three screws in the bottom of the UI plate.

<Top Side>



D-8-0014-B

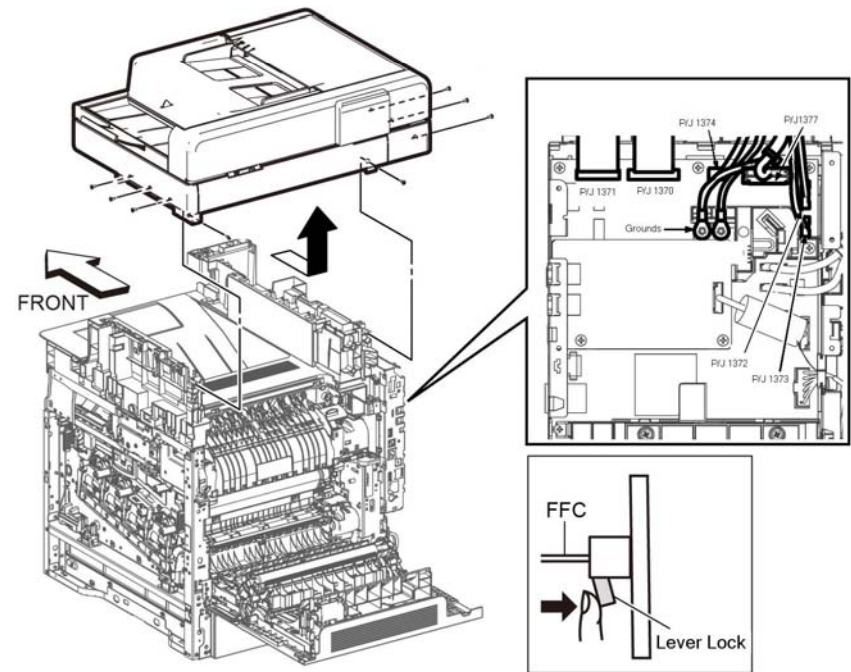
Figure 3 UI plate screw locations

**CAUTION**

*In the following step, engage the lever enough to release the FFC only. Over-engagement of the release lever will break the lever destroying the lock mechanism forcing replacement of the PWB.*

*NOTE: When engaging the release lever on the FFC connector, slightly press open the release lever no more than 15 degrees. Hold the lever while gently removing the FFC from the connector as shown in the inset of Figure 4, Disconnect the harnesses and two FFCs.*

19. Refer to Figure 4, following the caution above, release the 2 FFC cables (P/J1370 and P/J1371) and disconnect (P/J1372, P/J1373, P/J1374, P/J1377) from the ESS PWB.
20. Refer to Figure 4, remove two screws (SM18, silver, M3X6mm) to release the ground harnesses from the ESS PWB, PL 18.1 Item 3.
21. Release three clamps and five push-ties.
22. Refer to Figure 4, remove eight screws (SM18, silver, M3X6mm) to remove the scanner assembly PL 50.1 Item 13 in the direction of the arrow.



D-8-0198-C

Figure 4 Disconnect the harnesses and two FFCs (MFP Std.)



## Replacement

### CAUTION

Avoid pinching wires when installing the DADF harness and FFC. Be sure to follow the harness routes as shown in Figure 7.

**NOTE:** To ensure integrity of the FFC connected at the ESS PWB, the following steps are to be observed. Do not attempt to engage the release lever to insert the FFC cable, the FFC connector will allow insertion and lock on its own.

1. Slip the core down the FFC cable.
2. To ease installation and ensure proper alignment of the FFC cable, bend the blue "grip tab" 90 degrees perpendicular to the FFC.
3. Referring to Figure 5 and Figure 6, **Proper FFC Cable Insertion**, grasp the grip tab of the FFC cable placing the back, or non-conductive Side, of the FFC cable against the edge of the connector and centered to the connector.
4. Using the grip tab bent at 90 degrees, firmly push the FFC cable into the connector until fully seated. The latch of the connector will "click" when fully seated, locking the FFC in-place.

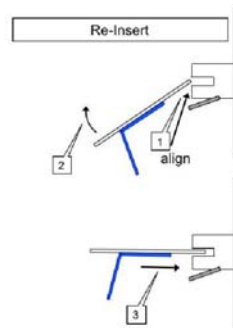


Figure 5 Cable Perpendicular Insertion

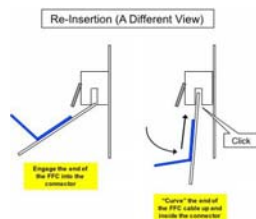
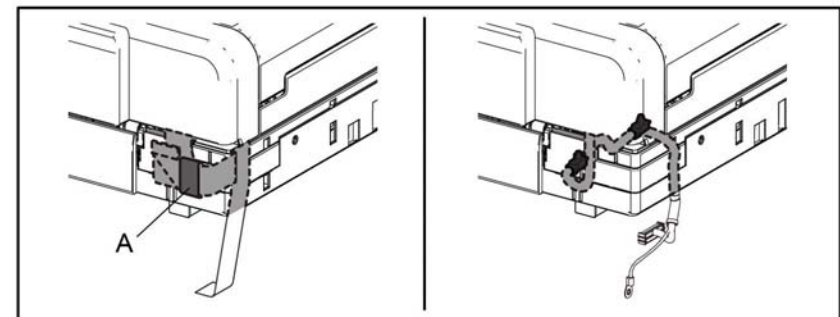
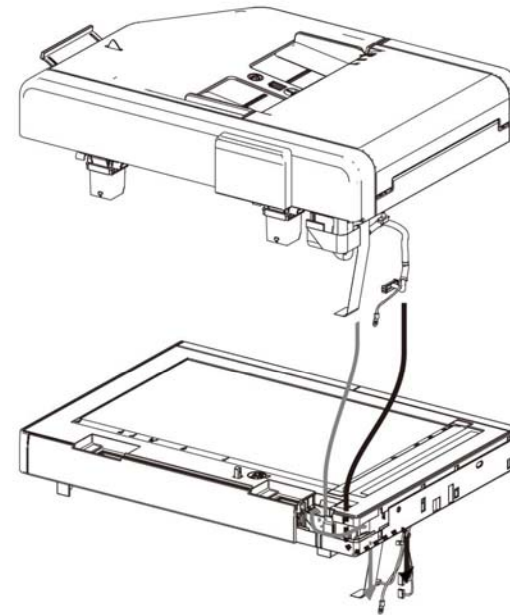


Figure 6 Cable Parallel Insertion



D-8-0201-A

Figure 7 DADF Harness Routes

## REP 50.3 Left and Right Counterbalance Assemblies (Hinges) (MFP Std. and MFP Tall)

Parts List on [PL 50.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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, [PL 50.1 Item 1](#), from the scanner.
2. Refer to [Figure 1](#), rest the DADF on the work surface as shown.
3. Refer to [Figure 1](#), remove eight screws (silver, tapping, m3x8), remove the left and right hinges.

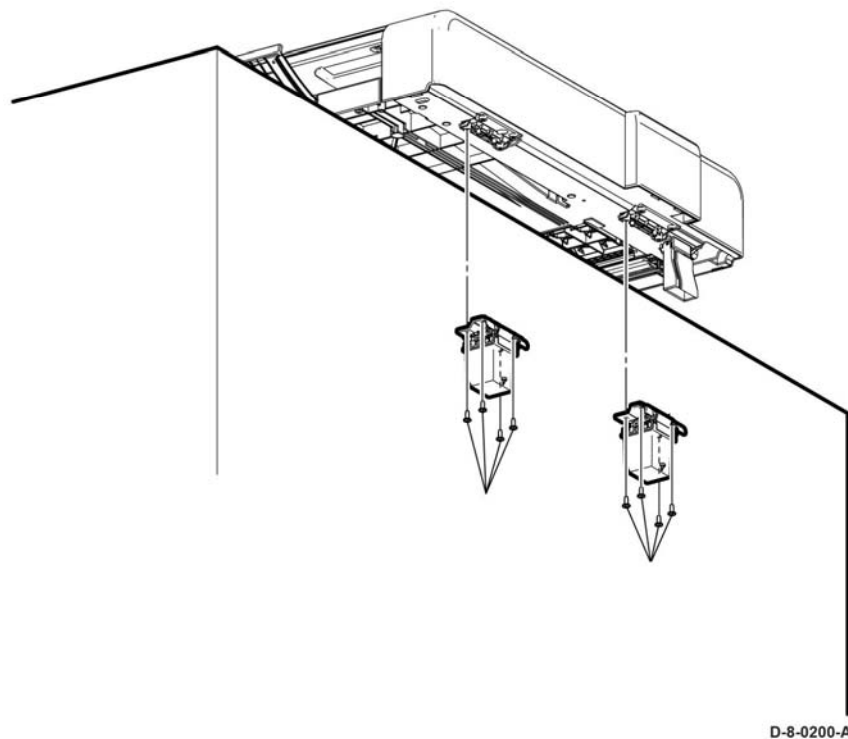


Figure 1 Remove the Hinges

### Replacement

#### CAUTION

The Hinges are keyed and must be installed in their specified locations.

## REP 50.4 Platen Cushion Assembly (MFP Std. and MFP Tall)

Parts List on [PL 50.1 Item 12](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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 document cover.
2. Remove the platen cushion assembly, [PL 50.1 Item 12](#).
3. Clean any residue adhesive from the DADF lid left behind.
4. A mild cleaning solution such as soap and water or glass cleaner may assist cleaning by softening up the adhesive residue.

### Replacement

**NOTE:** When installing the platen cushion assembly, arrange the platen cushion assembly as shown in [Figure 1](#).

1. Align the platen cushion assembly to the platen glass so that the DADF chute door is aligned to the DADF chute of the DADF lid, (left side).
2. Carefully lower the DADF lid onto the platen cushion assembly.
3. Gently but firmly, press the DADF lid to the scanner to adhere the platen cushion assembly to the DADF lid.
4. Lift the DADF lid and inspect the platen cushion assembly checking for any gaps between the adhesive and the lid area. Close any gaps between the platen cushion assembly and the DADF lid by pressing the platen cushion assembly to the lid.

## REP 50.5 Left IIT Cover (MFP Std. and MFP Tall)

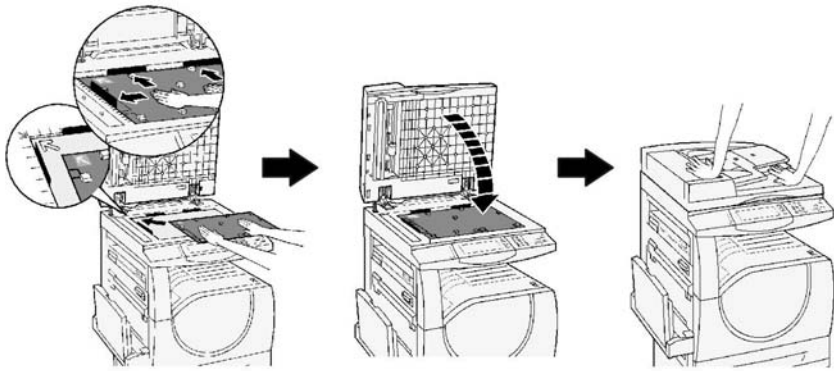
Parts List on [PL 50.1 Item 14](#)

### Removal

#### WARNING

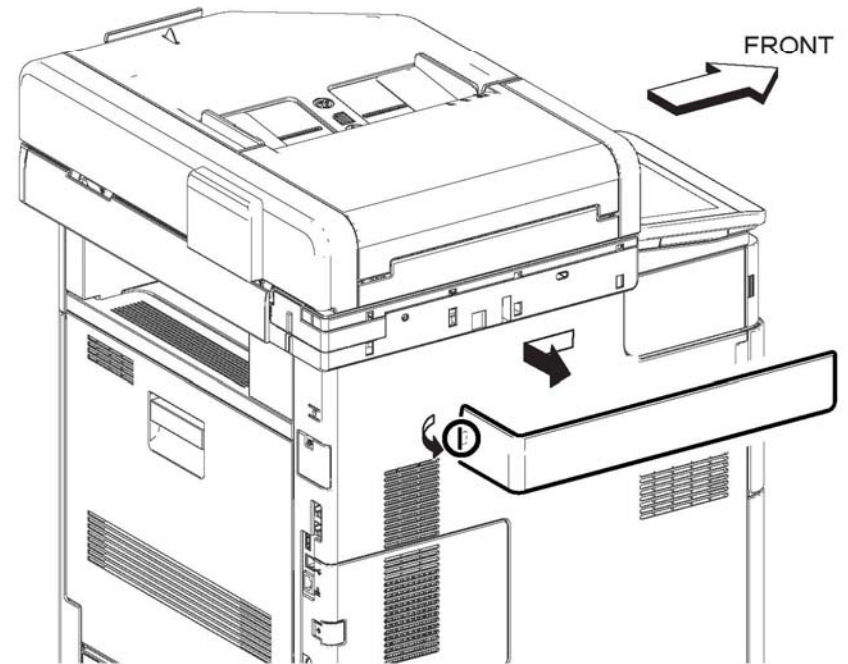
Switch off the electricity to the machine, [GP 4](#). Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Refer to [Figure 1](#) (MFP Std.), [Figure 2](#) (MFP Tall), release the hook on the rear side of the left IIT cover, and remove the left IIT cover.



D-8-0374-A

Figure 1 Platen cushion assembly installation method



D-8-0009-A

Figure 1 Left IIT cover removal MFP Std.

## REP 50.6 Left IIT Cap (MFP Std. and MFP Tall)

Parts List on [PL 50.1 Item 15](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Refer to [Figure 1](#), release the hook on the rear side of the left IIT cover, and remove the left IIT cover, [PL 50.1 Item 14](#).
2. Refer to [Figure 1](#), release the hook on the right of the left IIT cap and remove the left IIT cap.

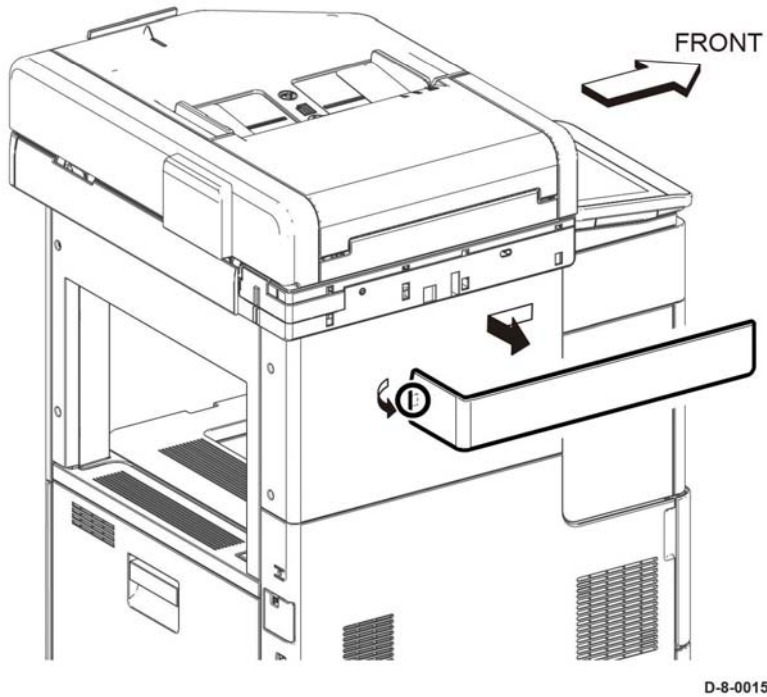


Figure 2 Left IIT cover removal MFP Tall

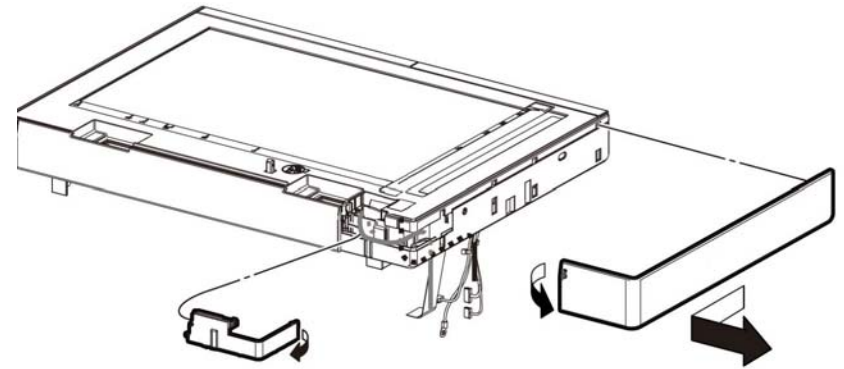


Figure 1 Left IIT cap removal

## REP 50.7 DADF Actuator (MFP Std. and MFP Tall)

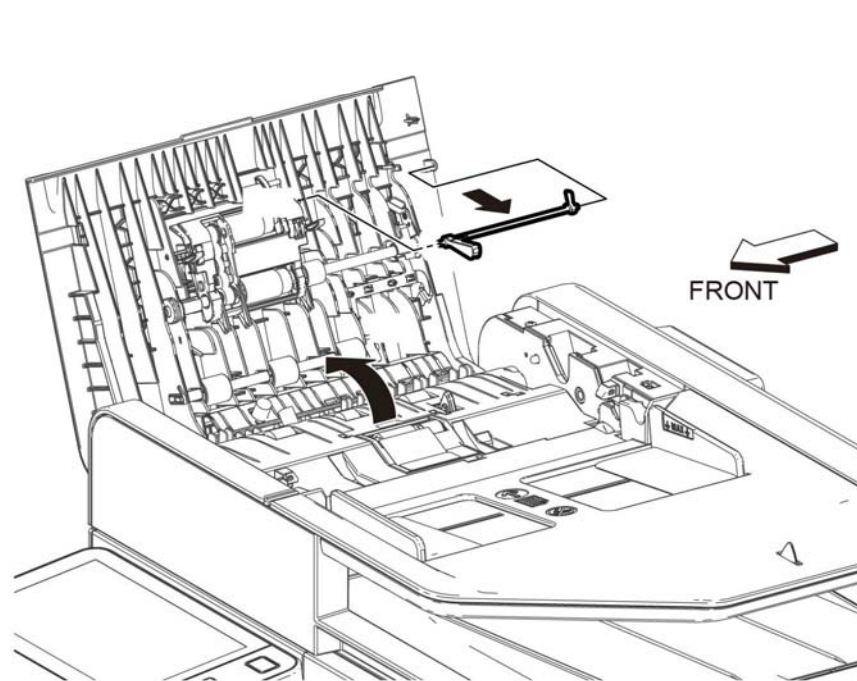
Parts List on [PL 50.1 Item 14](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Refer to [Figure 1](#), open the DADF Upper Feeder Assembly.
2. Release the two bosses at the ends of the DADF Actuator by slightly bending the Actuator, and remove it.



D-8-0211-A

Figure 1 Remove the DADF Actuator

## REP 50.8 IIT Front Cover (MFP Std. and MFP Tall)

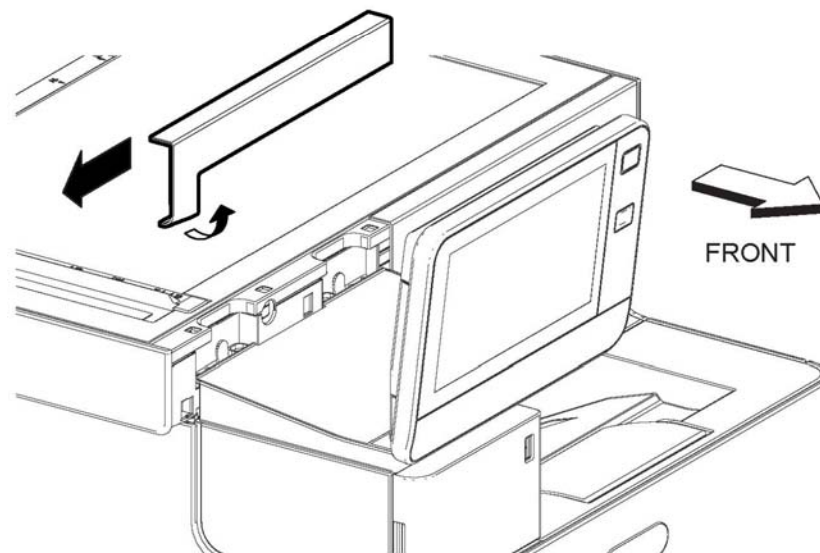
Parts List on [PL 50.1 Item 19](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Refer to [Figure 1](#), release the hook and remove the front IIT cover.



D-8-0010-A

Figure 1 Remove the Front IIT Cover

## REP 50.9 DADF Feed Roll Kit

Parts List on [PL 50.1](#)

### Removal

#### WARNING

Switch off the electricity to the machine, [GP 4](#). 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. Refer to [Figure 1](#), open the DADF Upper Feeder Assembly.

#### CAUTION

*In the following steps, avoid breaking the DADF Feed Roller and related hooks. Do not bend the hooks excessively. Carefully align the DADF Feed Roller with its mating features.*

2. Refer to [Figure 1](#), rotate the hook of the DADF Feed Roller and release the boss.
3. Remove the DADF Feed Roller.

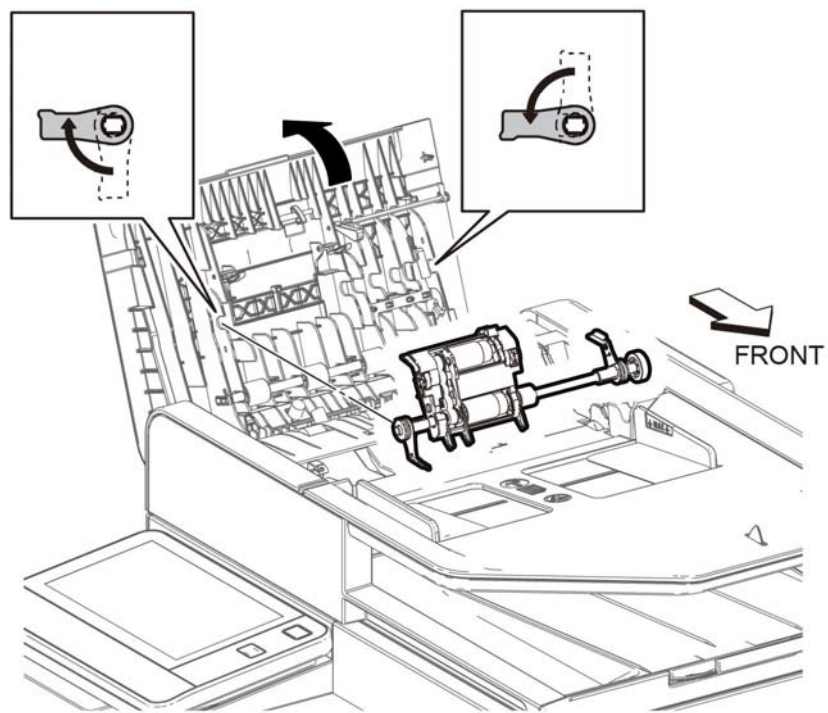


Figure 1 Remove the DADF Feed Roller

D-8-0202-A

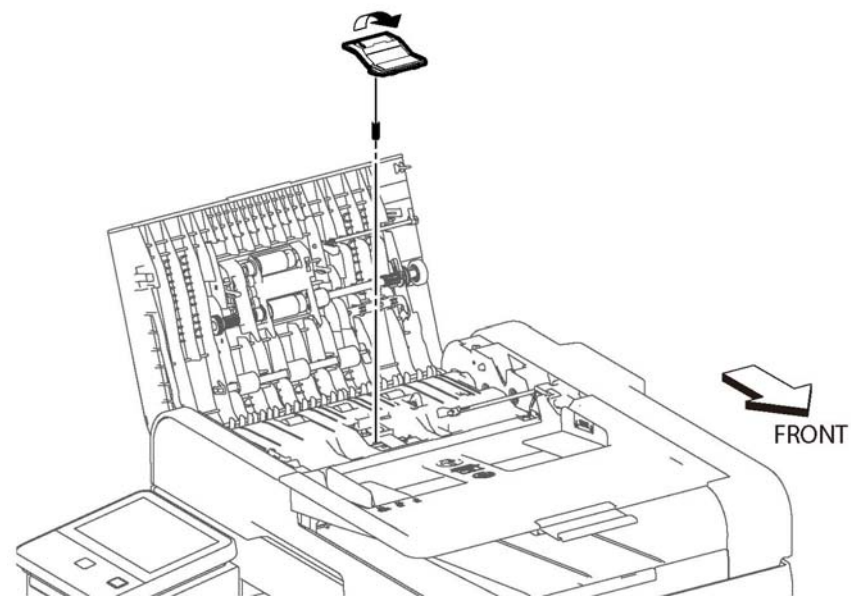


Figure 2 Remove the DADF Separator Cover and Spring

D-8-0211-B

4. Refer to [Figure 2](#), remove the Separator Cover Assembly in the direction of the arrow.
5. Remove the DADF Separator Spring.

## ADJ 1 Cleaning the LPH

### Purpose

Clean the LPH as a standard part of service. Cleaning the LPH provides consistent image quality.

### Clean

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.

1. Switch off the machine, unplug the cord from the power, GP 4.
2. Open the front door.
3. Remove the cleaning wand from inside the front door, Figure 1.

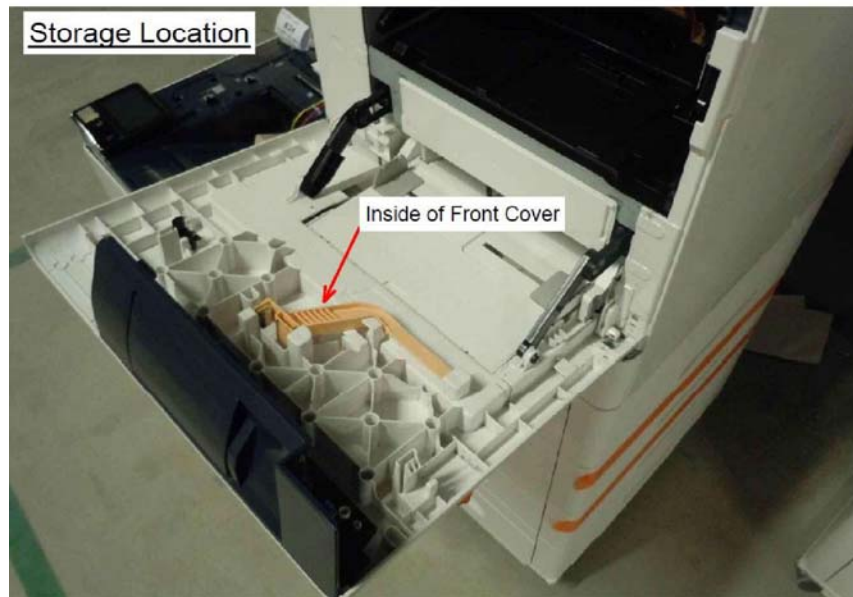


Figure 1 Cleaning wand location

E-8-0762-A

4. Check that the cleaning pad is correctly installed on the cleaning wand. If necessary obtain a clean pad. Figure 2.

**NOTE:** Squeeze the tabs together to if it is necessary to release the cleaning pad from the wand.

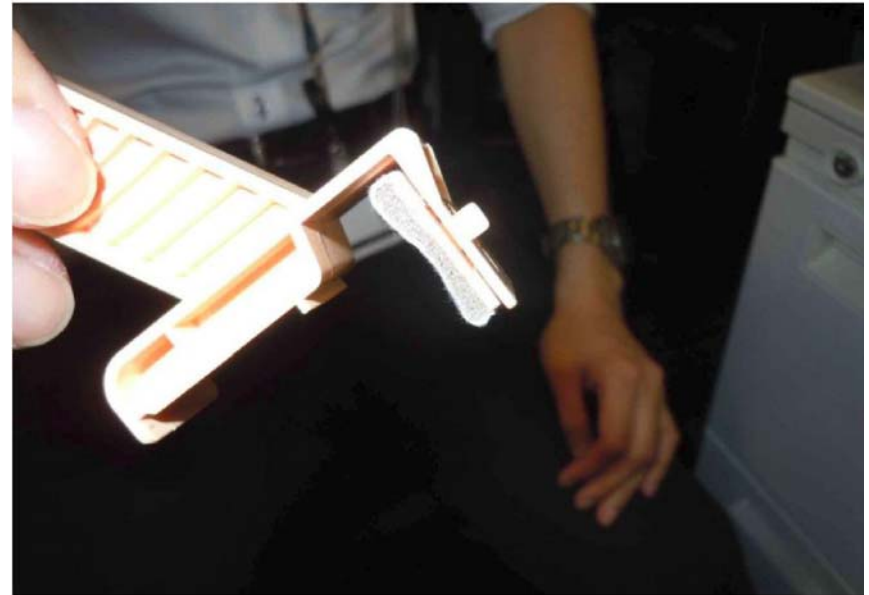


Figure 2 Cleaning pad location

E-8-0763-A

5. Identify the position of the guide rail. [Figure 3](#).

6. Put the cleaning wand over the guide rail so that the flat face of the wand sits on the guide rail as shown in [Figure 4](#).

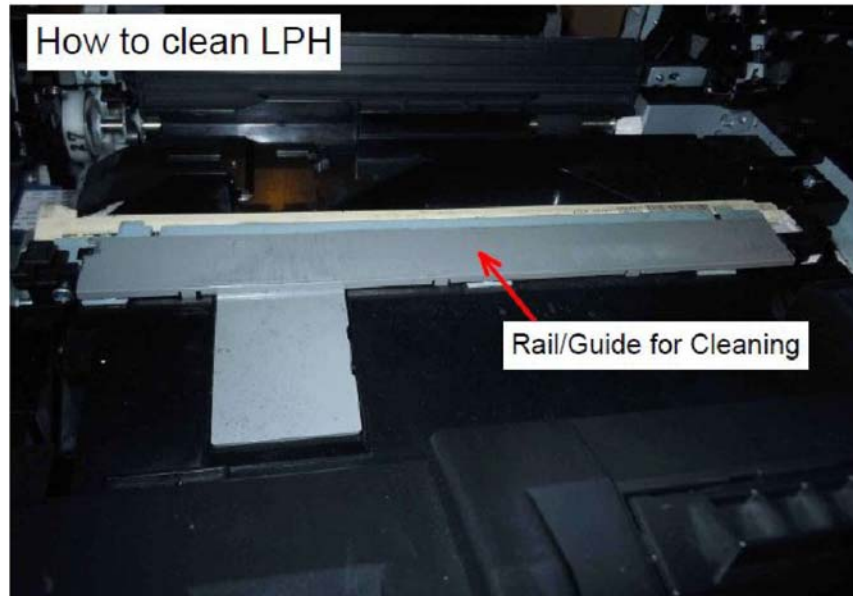


Figure 3 Guide rail location

E-8-0764-A

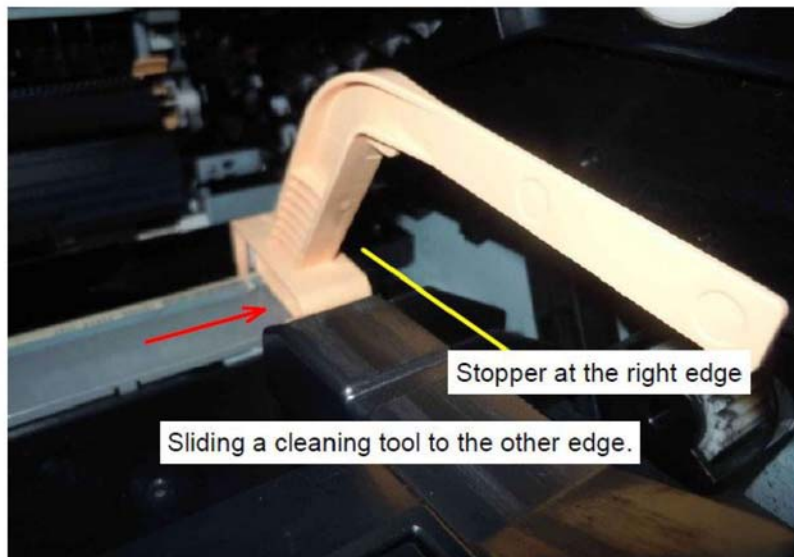
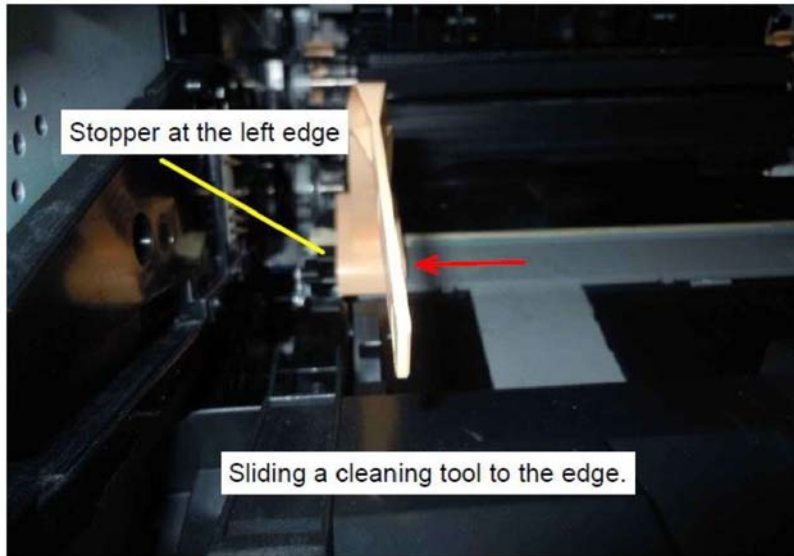


Figure 4 Cleaning wand positioning

E-8-0765-A



7. Slide the wand along the guide rail until it reaches the stopper on the left edge and the right edge, [Figure 5](#).
8. If the error persists, go to RAP [089-623 to 089-679](#) LED Offset Correction Error RAP.



E-8-0766-A

Figure 5 Cleaning wand movement to clean LPH

## ADJ 2 Cleaning the Scanner

### Purpose

To clean the optics components of the scanner, ensuring optimum image quality.

Refer to:

- Cleaning the Scanner
- Cleaning the feed rollers on the DADF

### Procedure

#### Cleaning the Scanner

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove any paper from the document feeder tray, and the document output tray.
2. Open the document cover.
3. Slightly dampen a soft, lint-free cloth with water.

**NOTE:** For best results in the following step, use Xerox® Glass Cleaner to remove marks and streaks.

4. Clean the document glass, the side-1 scanning area (to the left of the of the document glass) and the white strip, Figure 1.



Figure 1 Clean the document glass

E-8-0075-A

5. Wipe the white underside of the document cover until it is clean and dry.

6. To access the second-side scanning lens assembly, lower the second-side scanning access cover Figure 2.

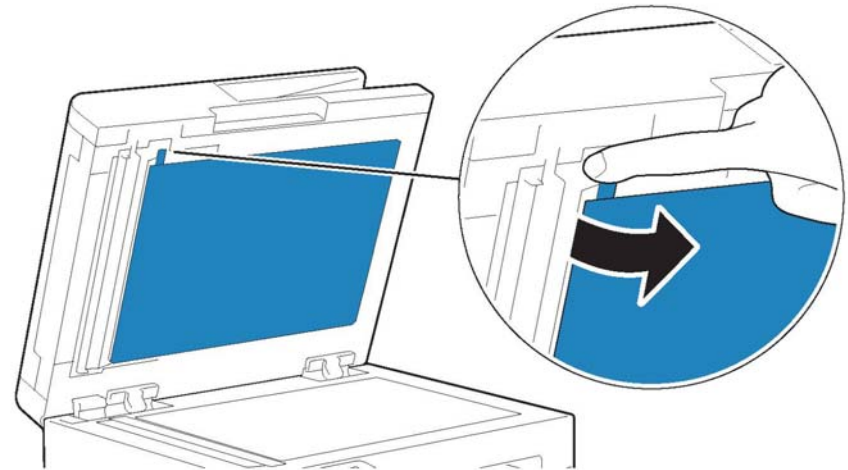


Figure 2 Opening the second-side scanning access cover

E-8-0076-A

#### CAUTION

In the following step, to prevent damage to the film around the glass, do not press heavily on the mirrored glass.

7. Using a soft cloth moistened with water, wipe the mirrored glass, the white-plastic strip, and the rollers, Figure 3. If dirt is difficult to remove, moisten a soft cloth with a small amount of neutral detergent. Then wipe the printer parts dry with a soft cloth.

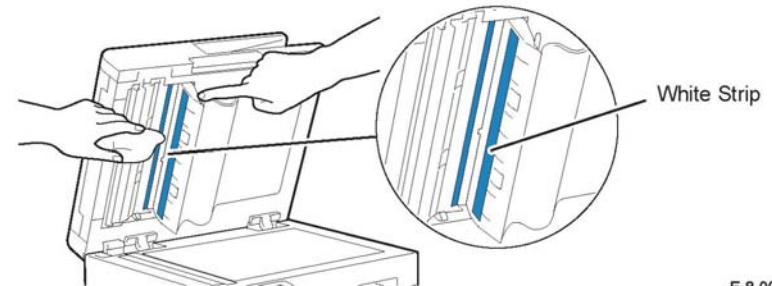


Figure 3 Clean the second-side scanning lens assembly

E-8-0077-A

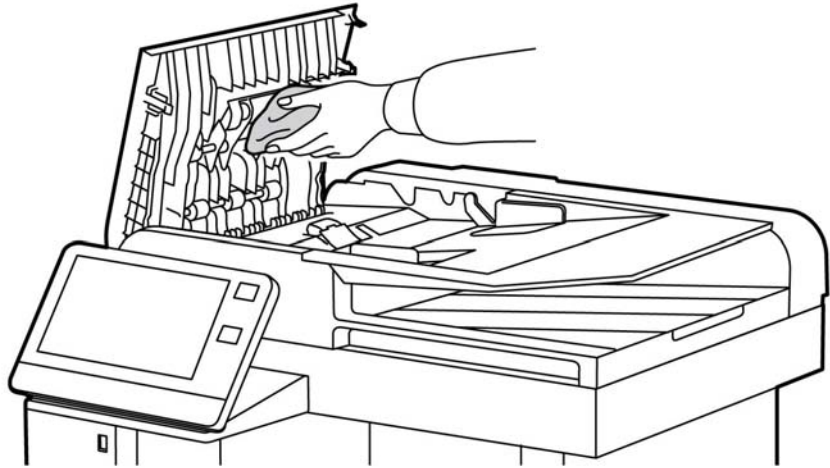
8. Close the second-side scanning access cover.
9. Close the document cover.

## Cleaning the feed rollers on the DADF

1. Open the DADF Top Cover.

**NOTE:** If the feed rollers get stained with toner or debris, they can cause stains on the documents. To remove the stains, use a soft lint-free cloth dampened with a neutral detergent or water.

2. Wipe the feed rollers with a dry, soft, lint-free cloth or paper towel until the rollers are clean, [Figure 4](#).



E-8-0767-A

Figure 4 Cleaning the DADF feed rollers

3. Close the top cover.



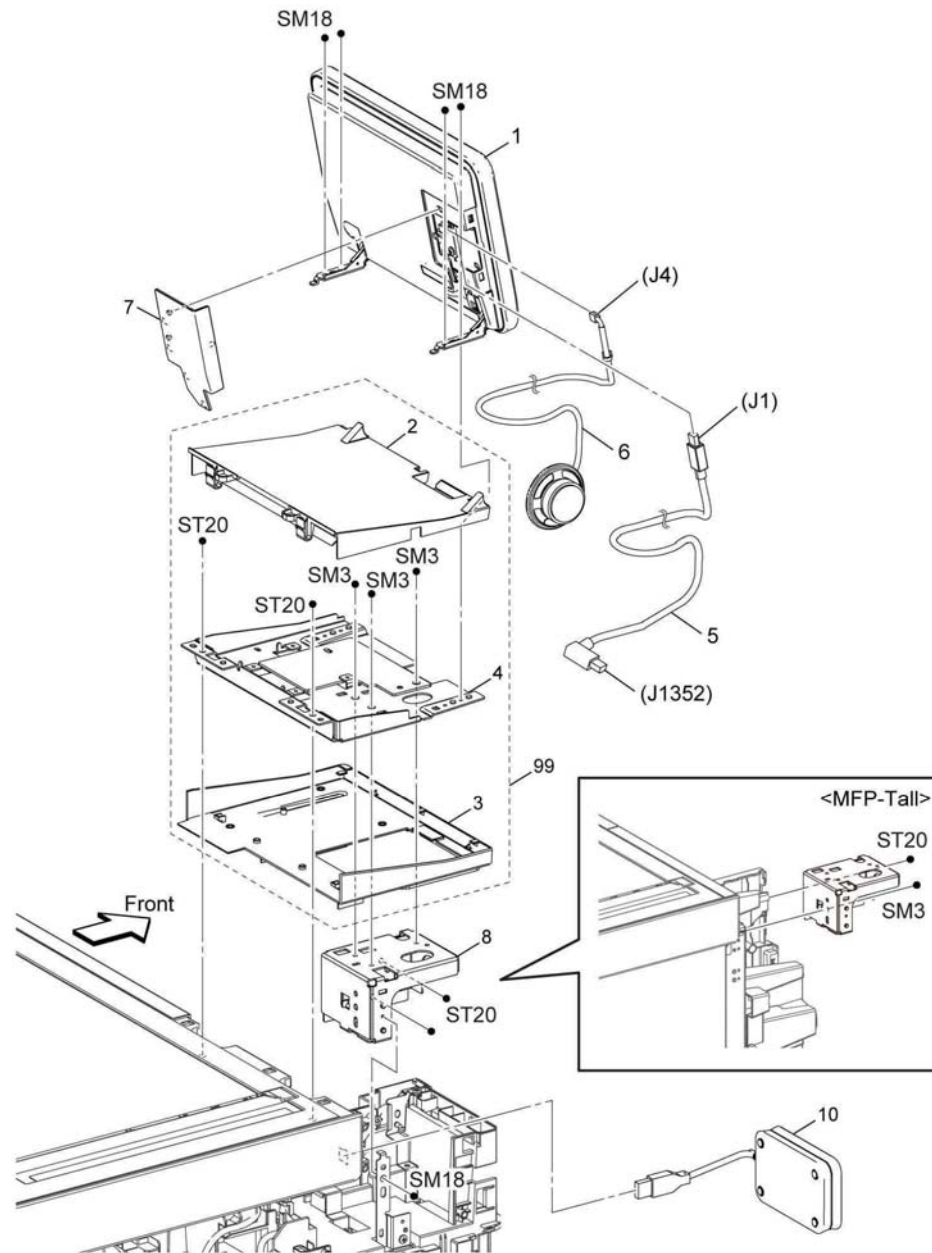
# 5 Parts Lists

<b>1 - UI</b>			
PL 1.1 UI MFP-Std, B615_Tall.....	5-3	PL 17.1 Exit.....	5-25
PL 1.2 UI (B600/B610).....	5-4		
<b>2.0 - LPH</b>		<b>18 - Electrical</b>	
PL 2.1 LPH.....	5-5	PL 18.1 Electrical (B605/B615) (1/4).....	5-26
<b>3 - Drive</b>		PL 18.2 Electrical (B605/B615) (2/4).....	5-27
PL 3.1 Drive.....	5-6	PL 18.3 Electrical (B605/B615) (3/4).....	5-28
<b>4 - NOHAD</b>		PL 18.4 Electrical (B605/B615) (4/4).....	5-29
PL 4.1 NOHAD.....	5-7	PL 18.5 Electrical (B615_Tall) (1/4).....	5-30
<b>5 - Dispenser</b>		PL 18.6 Electrical (B615_Tall) (2/4).....	5-31
PL 5.1 Dispenser.....	5-8	PL 18.7 Electrical (B615_Tall) (3/4).....	5-32
<b>6 - Transfer</b>		PL 18.8 Electrical (B615_Tall) (4/4).....	5-33
PL 6.1 Transfer.....	5-9	PL 18.9 Electrical (B600/B610) (1/4).....	5-34
<b>7 - Fusing</b>		PL 18.10 Electrical (B600/B610) (2/4).....	5-35
PL 7.1 Fusing.....	5-10	PL 18.11 Electrical (B600/B610) (3/4).....	5-36
<b>8 - Xerographic</b>		PL 18.12 Electrical (B600/B610) (4/4).....	5-37
PL 8.1 Xerographic.....	5-11	<b>19 - Cover</b>	
<b>9 - Tray</b>		PL 19.1 Cover (B605/B615) (1/2).....	5-38
PL 9.1 Tray.....	5-12	PL 19.2 Cover (B605/B615) (2/2).....	5-39
<b>10 - Option Feeder</b>		PL 19.3 Cover (B615_Tall) (1/2).....	5-40
PL 10.1 Option Feeder (1/3).....	5-13	PL 19.4 Cover (B615_Tall) (2/2).....	5-41
PL 10.2 Option Feeder (2/3).....	5-14	PL 19.5 Cover (B600/B610) (1/2).....	5-42
PL 10.3 Option Feeder (3/3).....	5-15	PL 19.6 Cover (B600/B610) (2/2).....	5-43
<b>11 - HCF</b>		<b>20 - Mailbox</b>	
PL 11.1 HCF Front-Right.....	5-16	PL 20.1 Mailbox.....	5-44
PL 11.2 HCF Left.....	5-17	PL 20.2 Mailbox.....	5-45
PL 11.3 HCF (3/4 Tray).....	5-18	<b>21 - Finisher</b>	
PL 11.4 HCF (4/4 Tray).....	5-19	PL 21.1 Finisher.....	5-46
<b>13 - MSI</b>		PL 21.2 Finisher.....	5-47
PL 13.1 MSI.....	5-20	<b>30 - Cabinet</b>	
PL 13.2 MSI (2/2).....	5-21	PL 30.1 Cabinet.....	5-48
<b>14 - Duplex</b>		PL 30.2 Caster.....	5-49
PL 14.1 Duplex.....	5-22	<b>50 - Scanner</b>	
<b>15 - Registration</b>		PL 50.1 Scanner (MFP only).....	5-50
PL 15.1 Registration (1/2).....	5-23		
PL 15.2 Registration (2/2).....	5-24		
<b>17 - Exit</b>			



## PL 1.1 UI MFP-Std, B615\_Tall

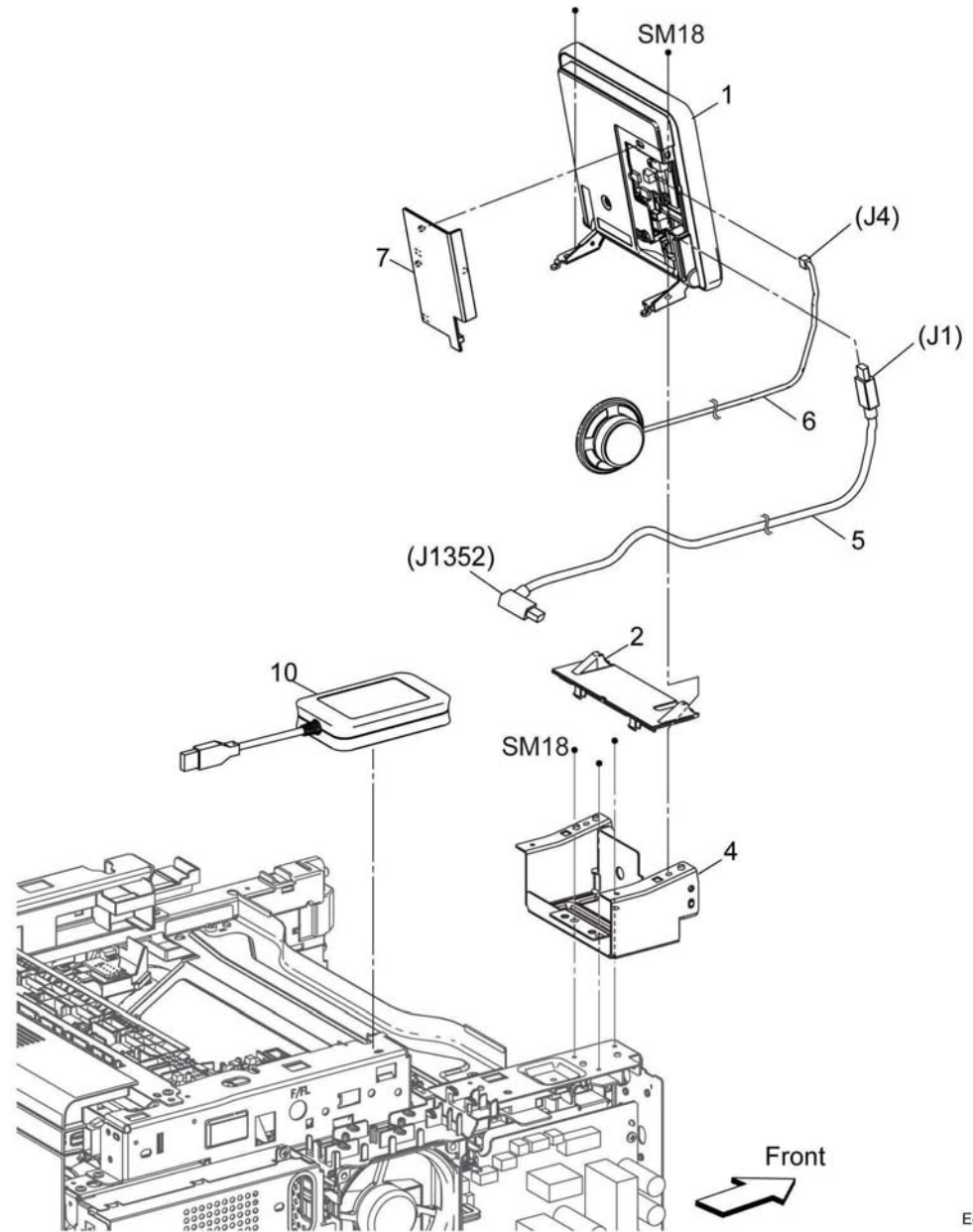
Item	Part	Description
1	948K02982	Console assembly UI AIO REP 1.1
2	822E18611	UI inner cover REP 1.2
3	822E18601	UI frame cover REP 1.3
4	-	UI frame plate (Not spared)
5	952K35720	UI harness (tall) REP 1.4
-	952K35710	UI harness REP 1.4
6	-	Speaker main
7	822E30280	UI access door (hatch) REP 1.5
8	-	UI frame bracket (Not spared)
9	-	Not used
10	-	ICCR card (Not spared)



E-8-2001-A

## PL 1.2 UI (B600/B610)

Item	Part	Description
1	848K95746	Console assembly UI SFP <a href="#">REP 1.6</a>
2	822E32330	UI inner cover <a href="#">REP 1.7</a>
3	–	Not used
4	–	UI frame (Not spared)
5	952K37020	UI harness <a href="#">REP 1.8</a>
6	–	Speaker main
7	822E32001	UI access door <a href="#">REP 1.9</a>
8	–	Not used
9	–	Not used
10	–	ICCR card (Not spared)

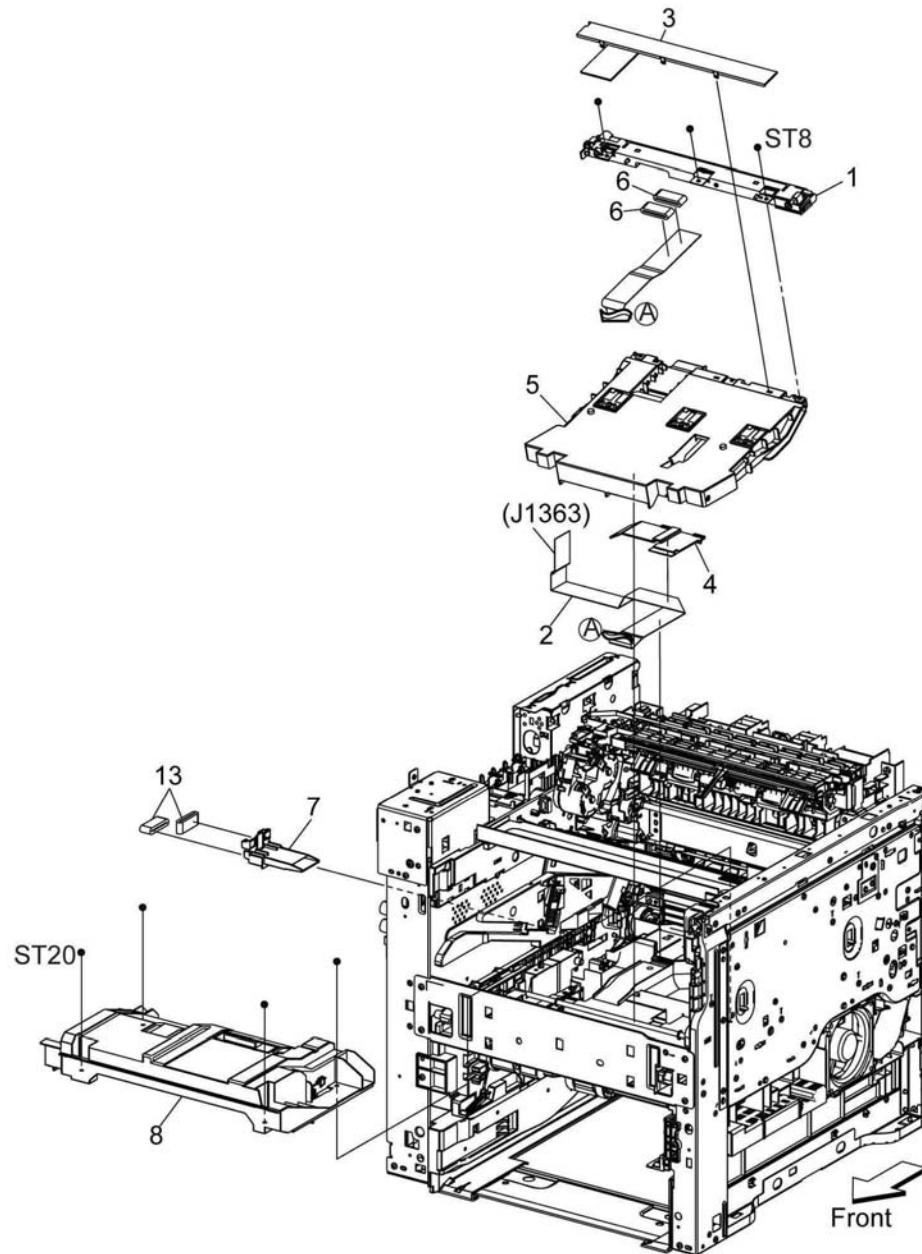


E-8-2002-A



## PL 2.1 LPH

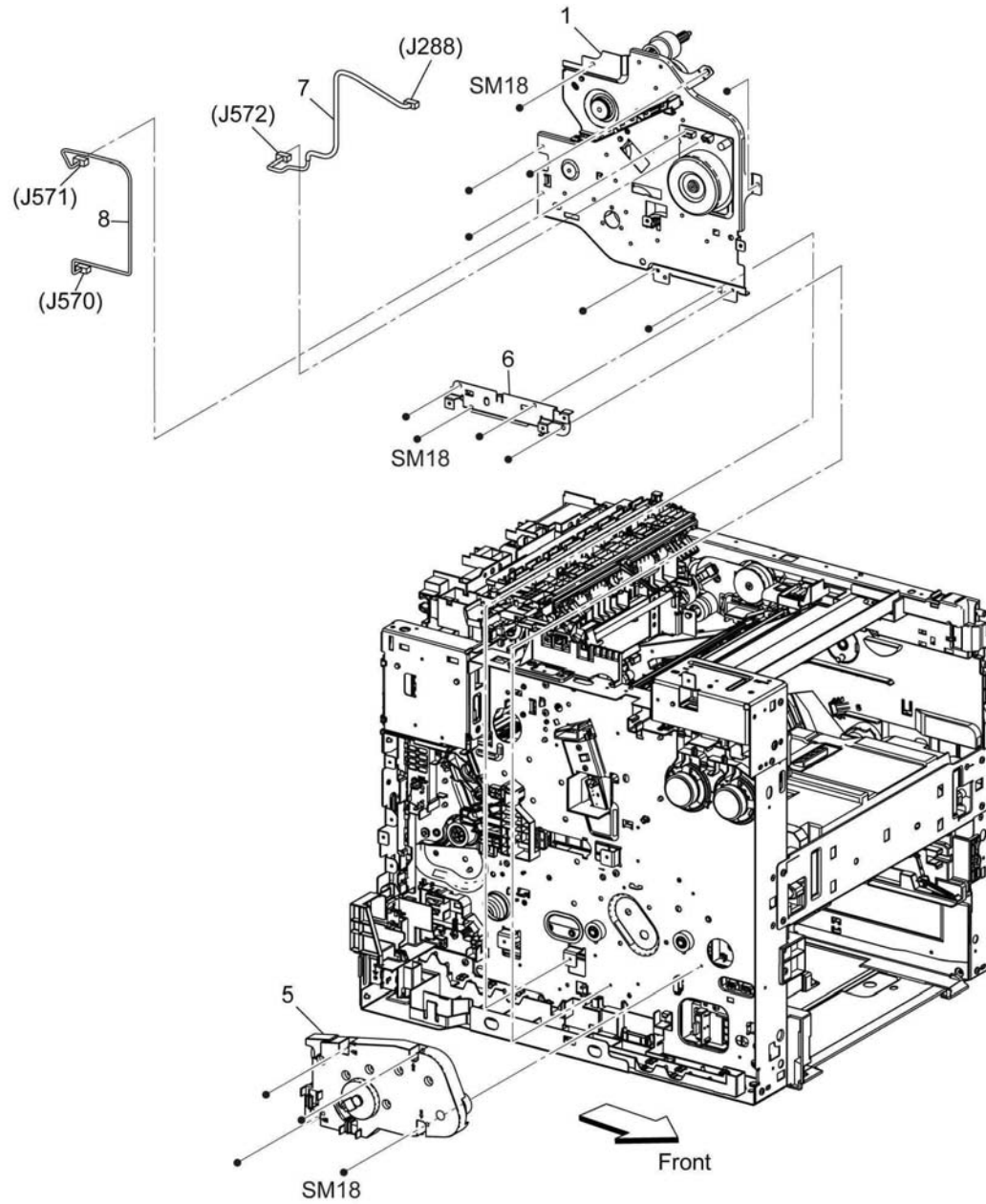
Item	Part	Description
1	930K00760	Head assembly LPH mono <a href="#">REP 2.1</a>
2	117E41970	FFC LPH <a href="#">REP 2.2</a>
3	–	Cover LPH (guide cleaner) (Not spared)
4	–	Cover LPH ESD (Not spared)
5	–	Holder LPH RT (Not spared) <a href="#">REP 2.3</a>
6	–	Core ferrite LPH (Not spared)
7	–	Guide FFC mono LPH (Not spared) <a href="#">REP 2.5</a>
8	–	Guide toner (Not spared) <a href="#">REP 2.4</a>
9	–	Not used
10	–	Not used
11	–	Not used
12	–	Not used
13	–	Core ferrite LPH (Not spared)



E-8-2003-A

## PL 3.1 Drive

Item	Part	Description
1	007K22820	Drive assembly main <a href="#">REP 3.1</a>
2	-	Not used
3	-	Not used
4	-	Not used
5	007K21981	Drive assembly MSI <a href="#">REP 3.2</a>
6	-	Plate MCU (Not spared)
7	-	Harness assembly motor PWR-MV (Not spared)
8	-	Harness assembly motor - MV (Not spared)

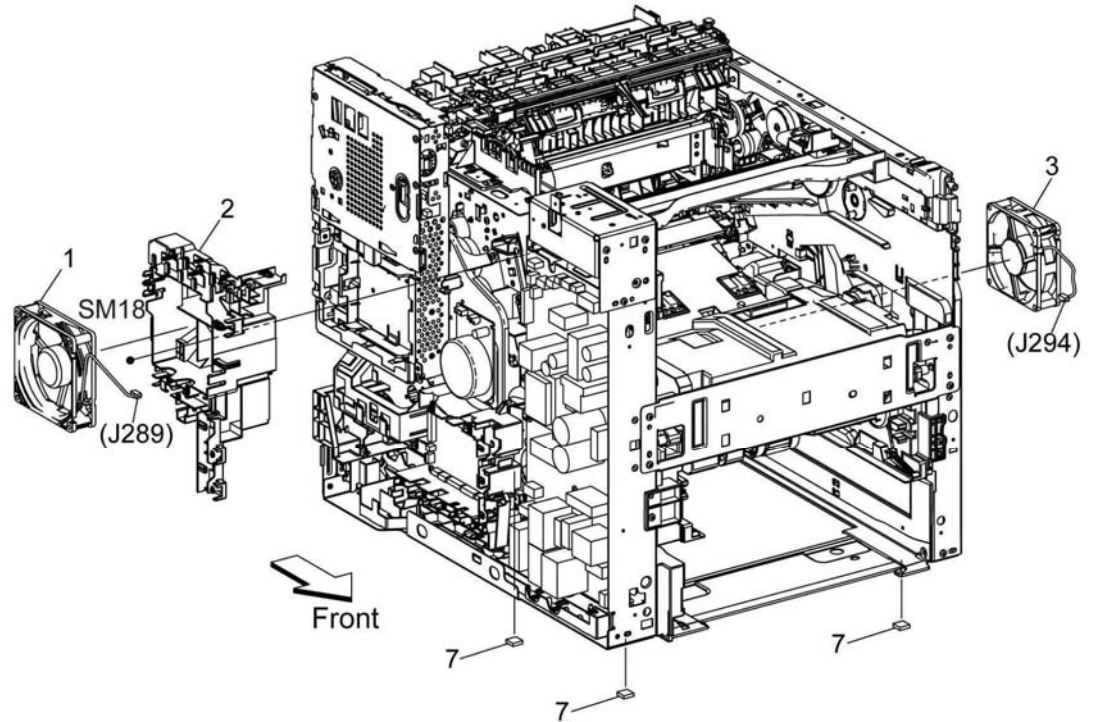


E-8-2004-A

# PL 4.1 NOHAD

Item	Part	Description
1	127K74220	Fan main <a href="#">REP 4.1</a>
2	-	Duct fan main (Not spared)
3	127K74200	Fan sub <a href="#">REP 4.2</a>
4	-	Not used
5	-	Not used
6	-	Not used
7	017K94350	Rubber foot
99	604K77650	Kit foot assembly <a href="#">REP 4.3</a>

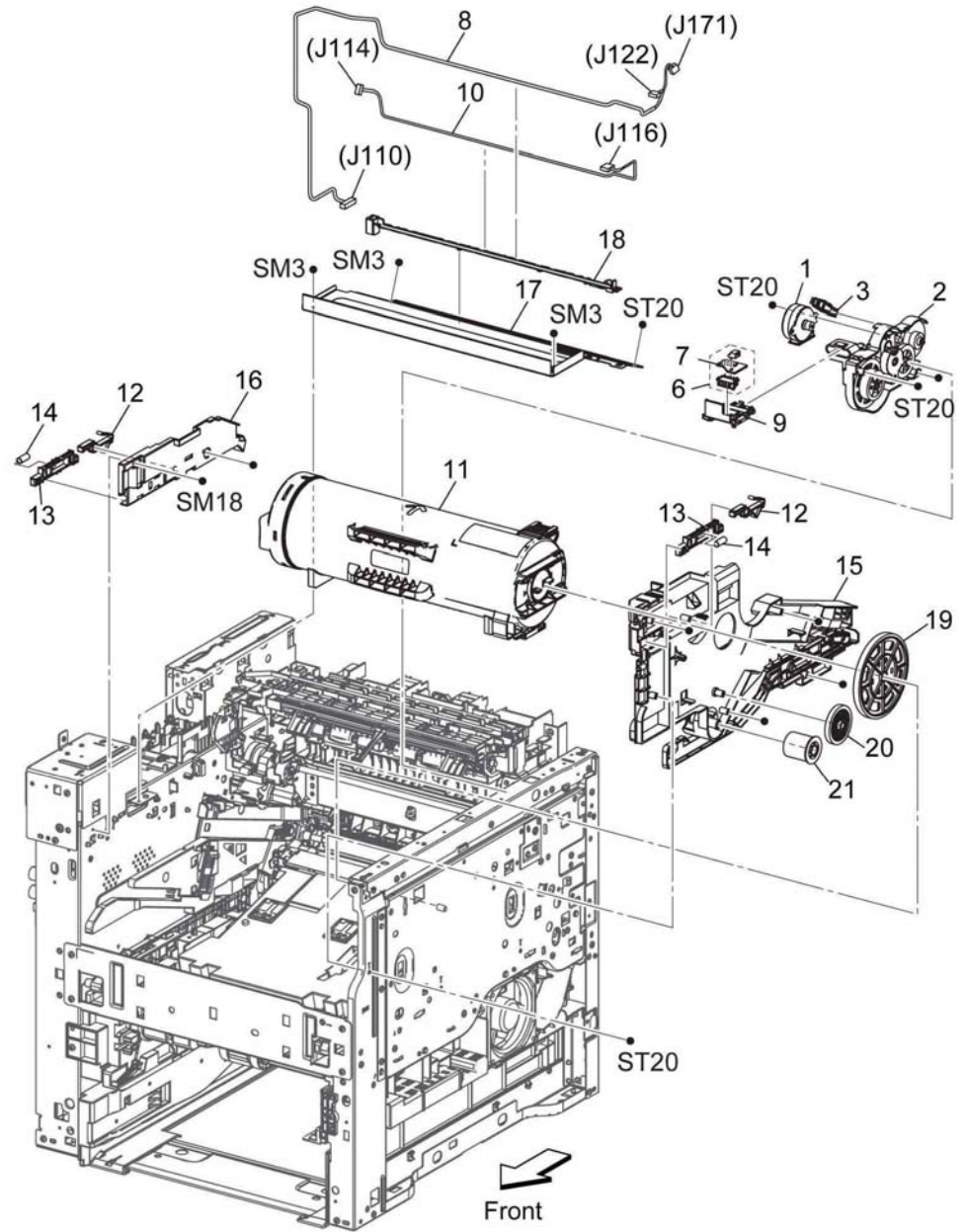
99 {Item 7×3 pcs}



E-8-2005-A

## PL 5.1 Dispenser

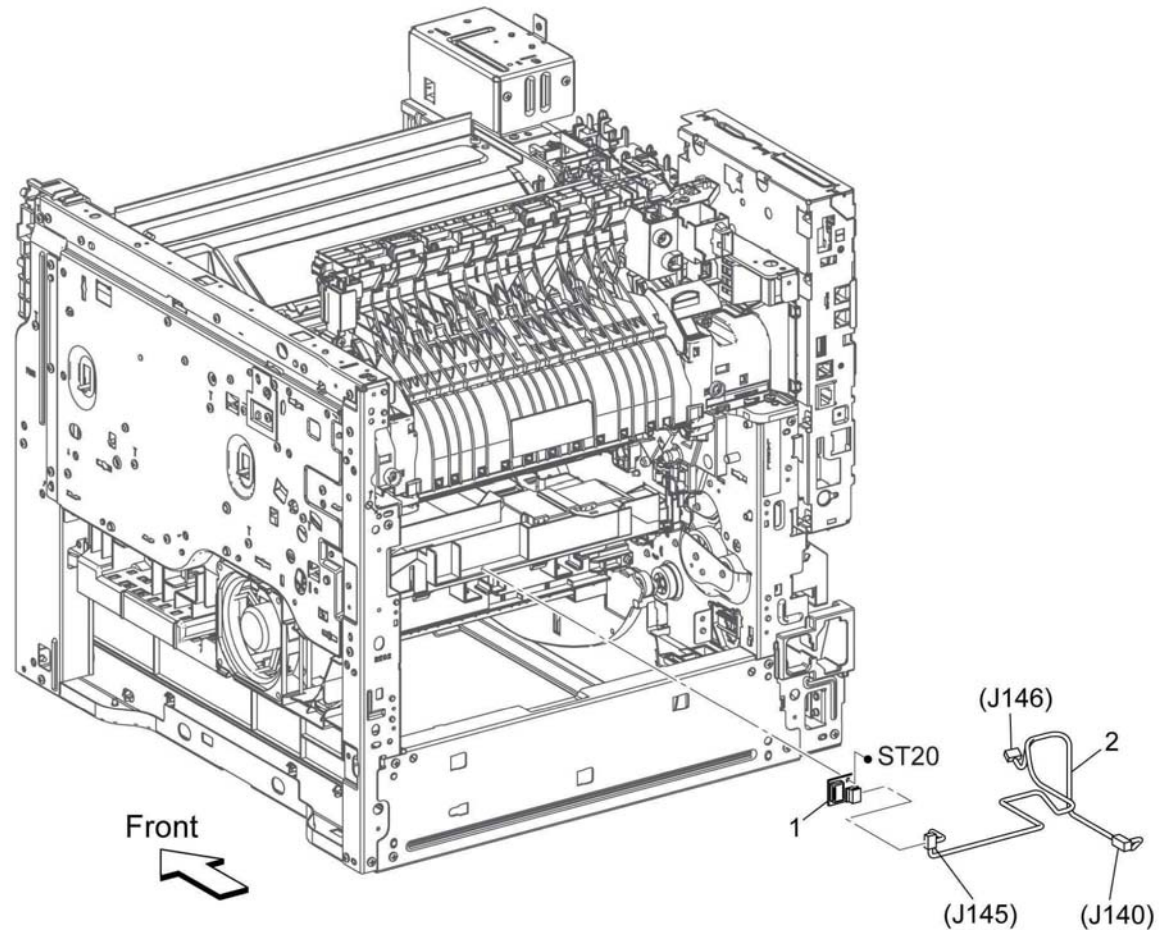
Item	Part	Description
1	127K64260	Motor assembly DISP/ENV (MOT93-010) <a href="#">REP 5.2</a>
2	007K23091	Drive assembly DISP/ENV (with 3) (MOT71-069) <a href="#">REP 5.1</a>
3	-	Photo sensor (Q94-200) (nip position sensor) (Not spared)
4	-	Not used
5	-	Not used
6	-	Connector assembly CRUM toner (with 7) (Not spared)
7	-	Toner CRUM PWB (Not spared) <a href="#">REP 5.3</a>
8	-	Harness assembly DISP/ENV-MV (Not spared)
9	-	Housing CRUM dispenser (Not spared)
10	-	Harness assembly toner CRUM-MV (Not spared)
11	-	Toner cartridge (Not spared)
12	-	Latch CTRG (Not spared)
13	-	Link latch CTRG (Not spared)
14	-	Spring latch CTRG (Not spared)
15	-	Guide CRU R (Not spared)
16	-	Guide CRU L2 (Not spared)
17	-	Frame top mono (Not spared)
18	-	Guide harness top (Not spared)
19	-	Assembly coupling (Not spared)
20	-	Gear idler dispenser (Not spared)
21	-	Gear out CRU (Not spared)



E-8-2006-A

## PL 6.1 Transfer

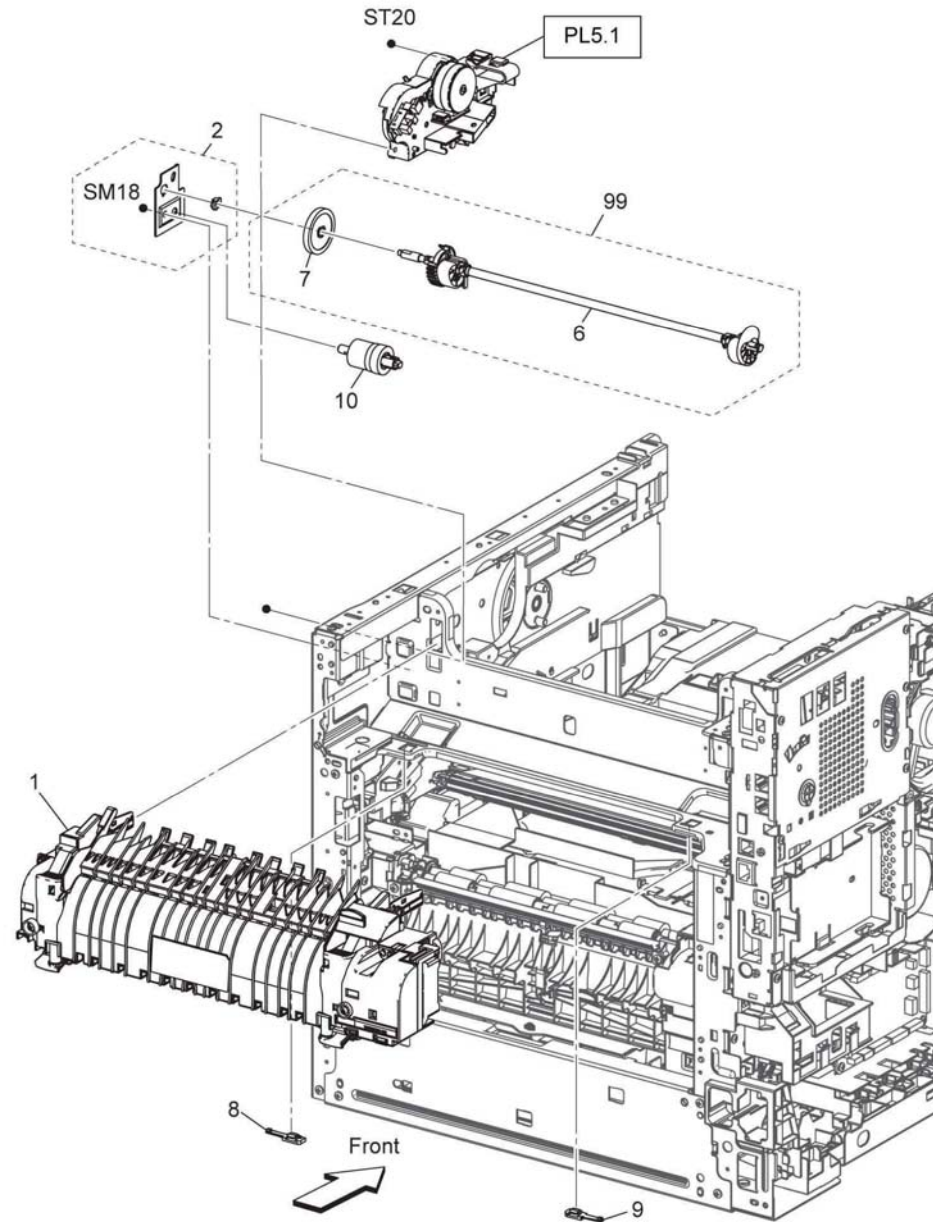
Item	Part	Description
1	130E17310	Humidity and temperature sensor REP 6.1
2	—	Harness assembly TA CLT/HUM-MV (Not spared)



E-8-2007-A

## PL 7.1 Fusing

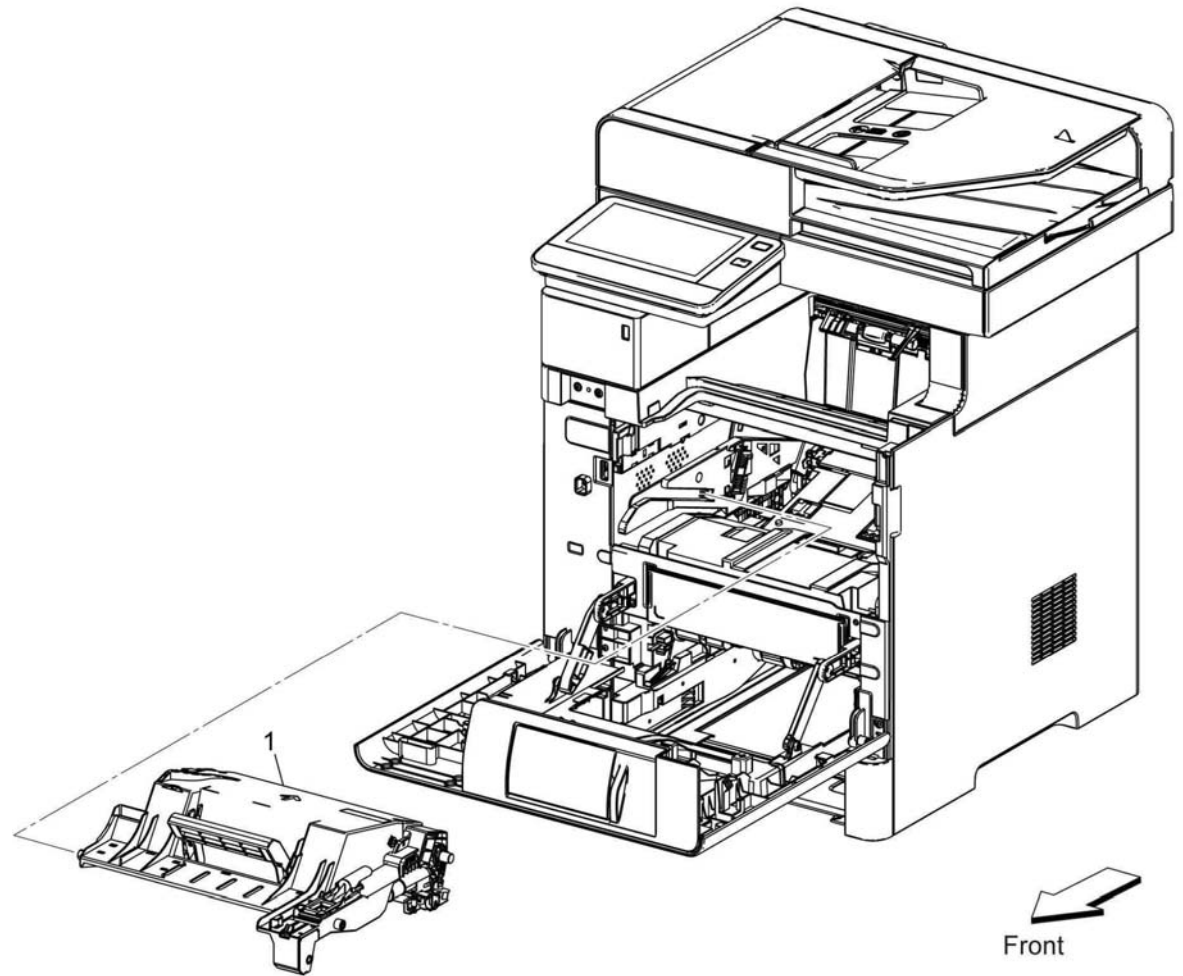
Item	Part	Description
1	115R00139	110V fuser <a href="#">REP 7.1 GP 40</a>
-	115R00140	220V fuser <a href="#">GP 40</a>
2	-	Bracket nip retract (not spared)
3	-	Not used
4	-	Not used
5	-	Not used
6	-	Shaft retract (P/O <a href="#">PL 7.1 Item 99</a> )
7	-	Gear shaft retraction (P/O <a href="#">PL 7.1 Item 99</a> )
8	-	Block CRU (not spared)
9	-	Block CRU D (not spared)
10	-	Nip retraction shaft damper (not spared)
99	607K05110	Nip retraction shaft assembly (with 6-7) <a href="#">REP 7.2</a>



E-8-2008-A

## PL 8.1 Xerographic

Item	Part	Description
1	-	Xerographic developer CRU assembly (not spared) <b>REP 8.1</b>

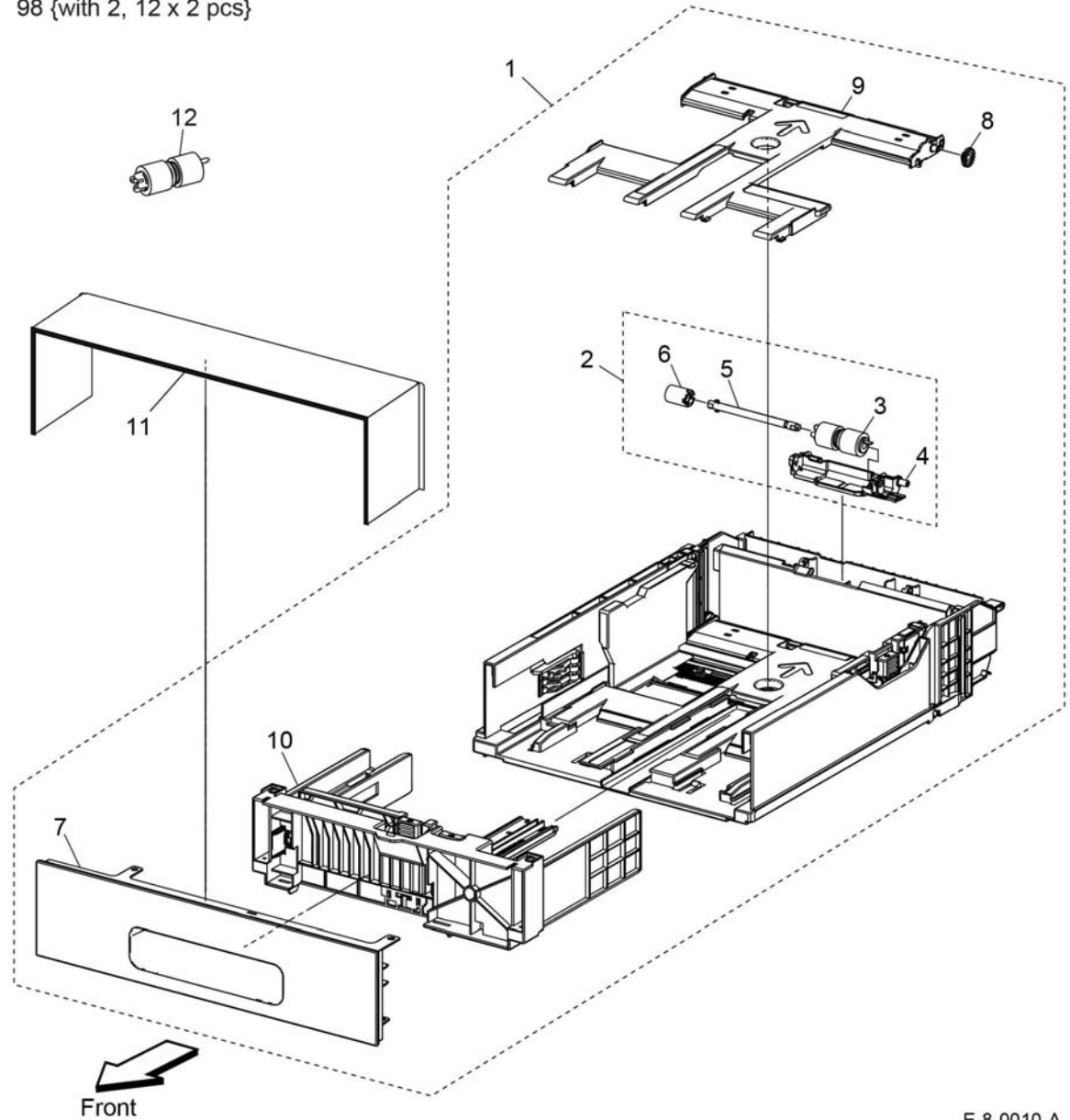


E-8-2009-A

# PL 9.1 Tray

Item	Part	Description
1	050K75820	Cassette assembly 550 IOT (with 2-10, label) <b>REP 9.1</b>
2	019K17070	Holder assembly separator CST (with 3-6) <b>REP 9.2</b>
3	-	Roll assembly (not spared)
4	-	Holder separator (not spared)
5	-	Shaft separator CST (not spared)
6	-	Clutch assembly friction (not spared)
7	-	Handle CST 550 (not spared)
8	-	Gear assembly (not spared)
9	-	Plate assembly bottom (not spared)
10	-	Housing assembly end 550 (not spared)
11	948K11521	Dust cover 550
12	859K00100	Roll assembly
98	607K00050	Feed and separator roll kit (with 2, 12 x 2 pcs) <b>REP 9.3</b>

98 {with 2, 12 x 2 pcs}

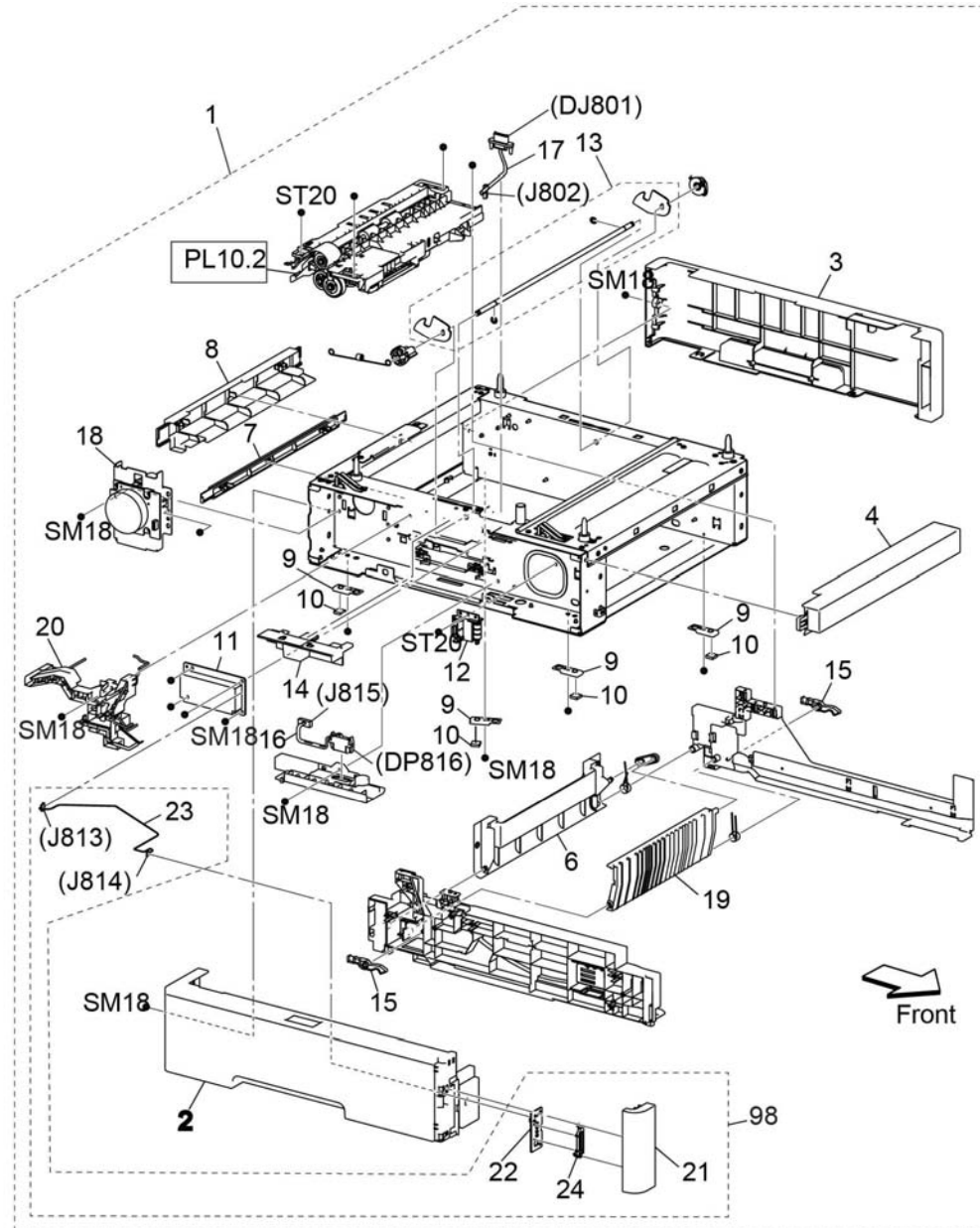


E-8-0010-A



## PL 10.1 Option Feeder (1/3)

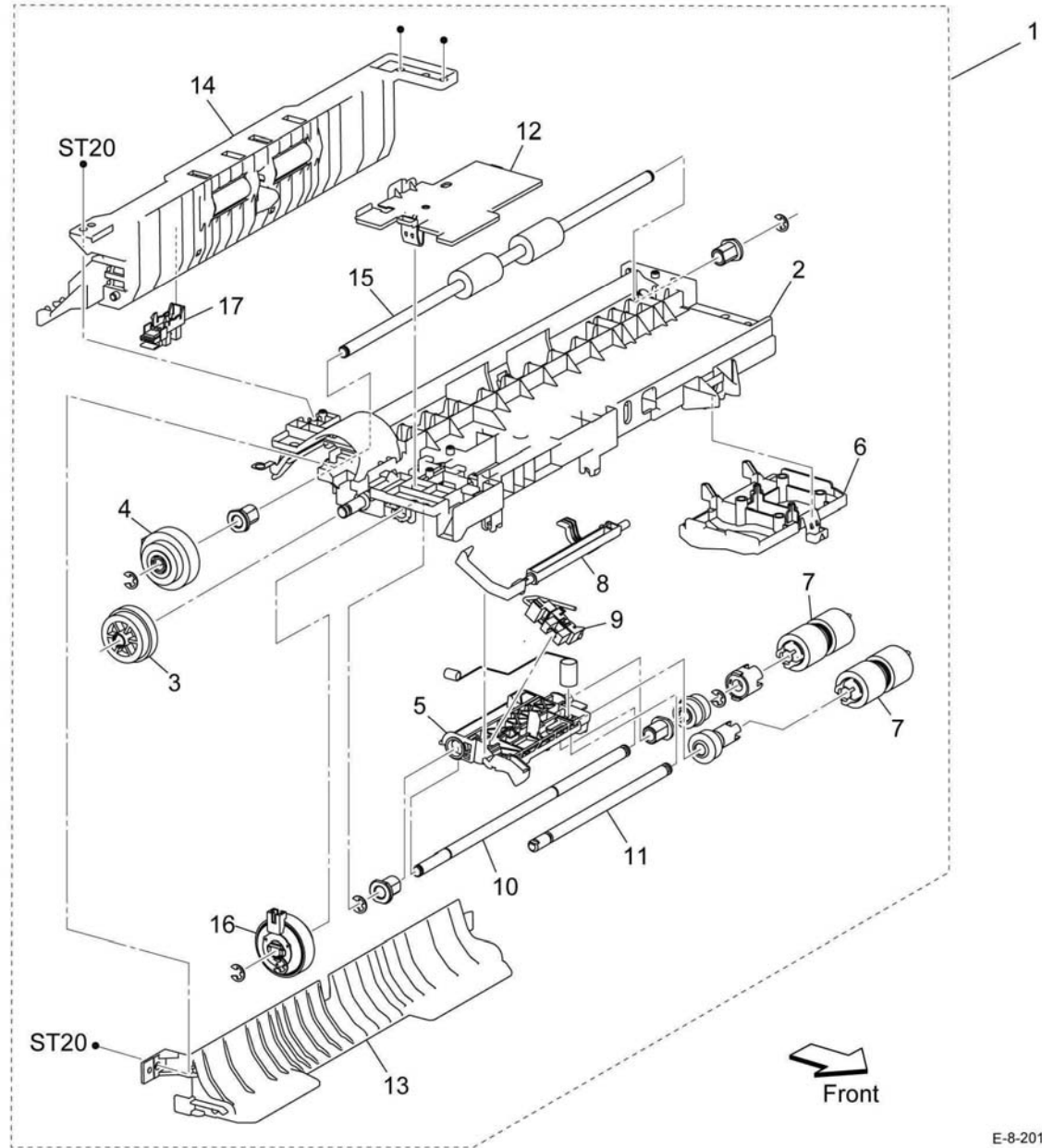
Item	Part	Description
1	859K09980	Kit feeder assembly OPF 550 (with 2-23, PL10.2) <b>REP 10.1</b>
2	-	Cover side l OPF 550 (not spared)
3	-	Cover side r OPF 550 (not spared)
4	-	Cover lip top OPF 550 (not spared)
5	-	Not used
6	-	Cover rear OPF 550 (not spared)
7	-	Cover rear under OPF 550 (not spared)
8	-	Cover rear top OPF 550 (not spared)
9	-	Foot base OPF 550 (not spared)
10	017K94350	Foot OPF 550 <b>REP 10.2</b>
11	-	PWB assembly OPF 550 (not spared)
12	110K16610	Switch assembly size OPF 550 <b>REP 10.3</b>
13	-	Lock assembly OPF 550 (not spared)
14	-	Gear rack lock OPF 550 (not spared)
15	-	Latch tray OPF 550 (not spared)
16	-	Harness assembly FDR drawer (not spared)
17	-	Harness assembly OPF 2C (not spared)
18	-	Motor assembly drive OPF 550 (not spared)
19	-	Chute rear OPF 550 (not spared)
20	-	Guide harness OPF 550 (not spared)
21	-	CVR front l OPF (not spared)
22	-	Tray LED assembly (not spared)
23	-	Harness assembly LED (J813-J814) (not spared)
24	-	Cover shade tray (not spared)
98	607K00450	Kit OPF FDR LED (with 21, 22, 23, 24) <b>REP 10.4</b>



E-8-0011-A

## PL 10.2 Option Feeder (2/3)

Item	Part	Description
1	–	Feeder assembly OPF 550 (with 2-15) (not spared)
2	–	Frame feeder top (not spared)
3	–	Gear P24-P27 (not spared)
4	–	Clutch assembly PH OPF 550 (not spared)
5	–	Support nudger (not spared)
6	054E60150	Chute upper feed
7	859K00100	Roll assembly <a href="#">REP 10.6</a>
8	120E35551	Actuator no paper <a href="#">REP 10.7</a>
9	–	Sensor photo (opt. feeder no paper sensor) (not spared)
10	–	Shaft feed OPF 550 (not spared)
11	–	Shaft nudger OPF 550 (not spared)
12	–	Cover harness OPF 550 (not spared)
13	–	Chute feeder (not spared)
14	–	Roll assembly TA pinch OPF 550 (not spared)
15	–	Roller assembly TA OPF 550 (not spared)
16	–	Clutch assembly PH OPF 550 (OPT feed clutch) (not spared)
17	–	Sensor photo (OPT path paper sensor) (not spared)

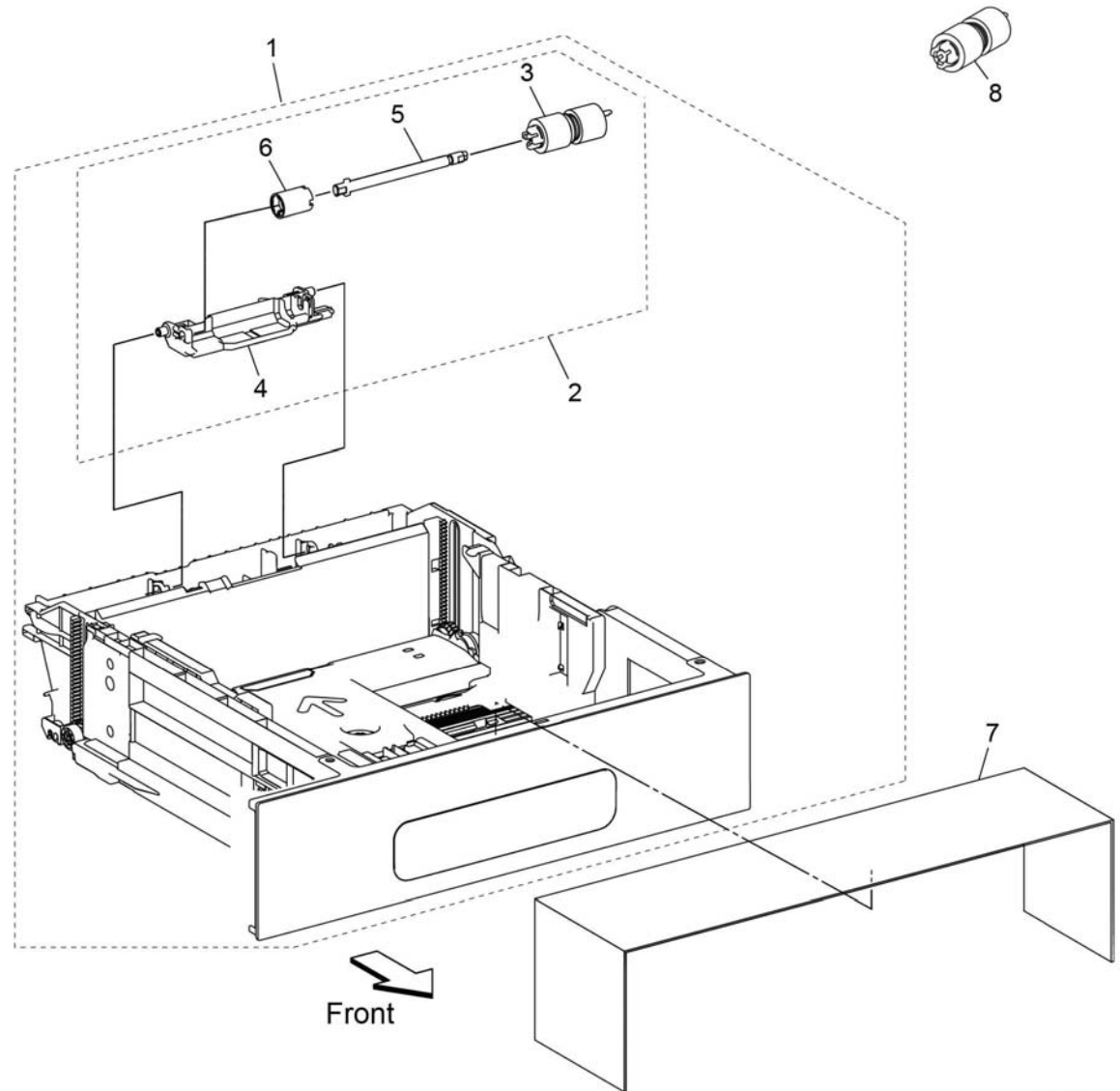


E-8-2012-A

## PL 10.3 Option Feeder (3/3)

Item	Part	Description
1	050K75820	Cassette assembly OPF 550 (with 2-6) <a href="#">REP 10.8</a>
2	019K17070	Holder assembly separator CST (with 3-6) <a href="#">REP 10.9</a>
3	-	Roll assembly (not spared)
4	-	Holder separator (not spared)
5	-	Shaft separator (not spared)
6	-	Clutch assembly friction (not spared)
7	948K11521	Dust cover 550 <a href="#">REP 10.10</a>
8	859K00100	Roll assembly
98	607K00050	Feed and separator roll kit (with 2, PL10.2.7 x2 pcs) <a href="#">REP 10.11</a>

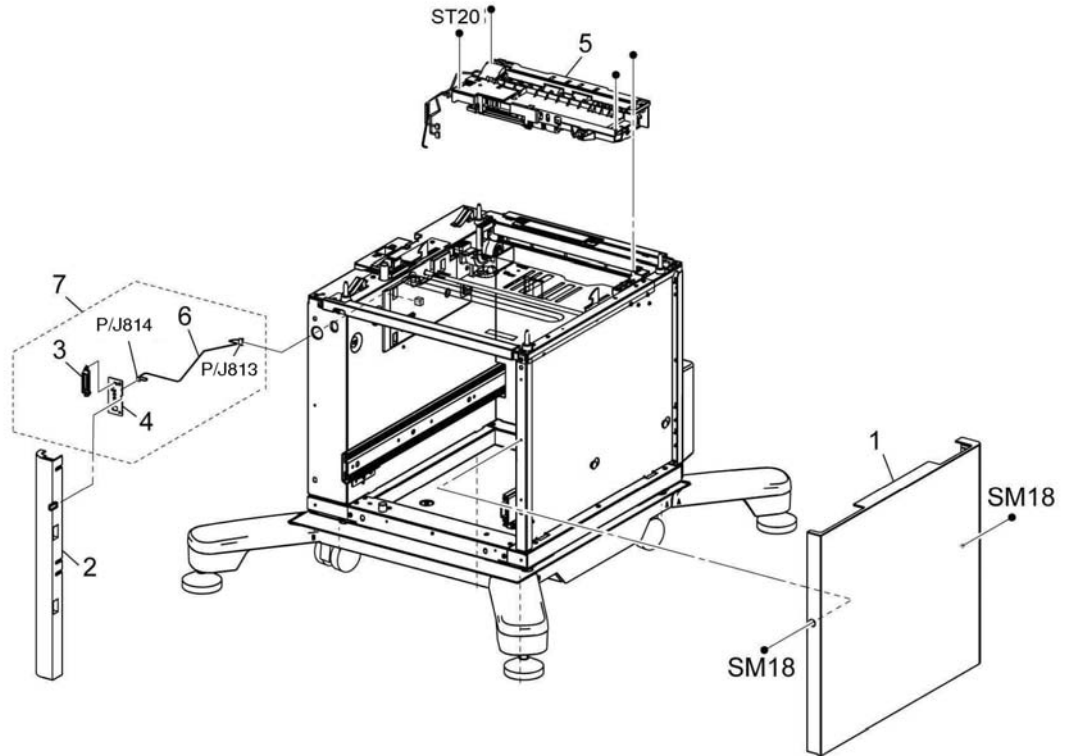
98 {with Item 2, 8 x 2 pcs}



E-8-0013-A

## PL 11.1 HCF Front-Right

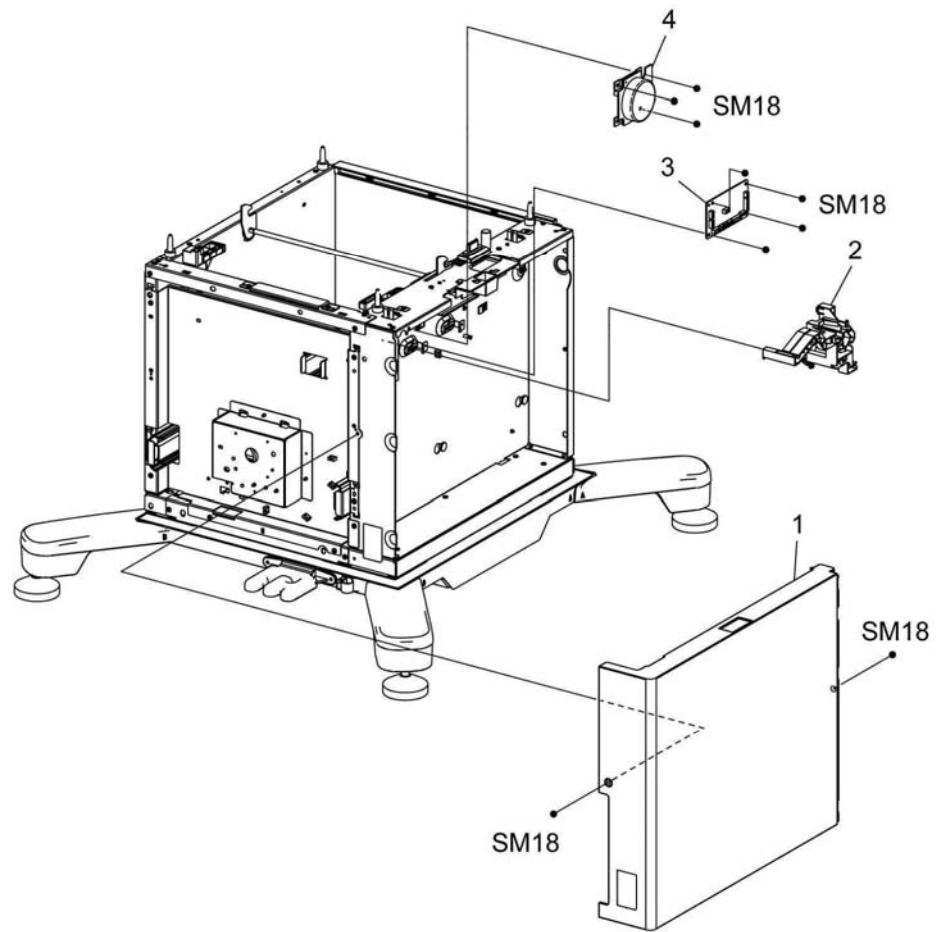
Item	Part	Description
1	-	Cover right (not spared) <a href="#">REP 11.1</a>
2	-	Cover front L (not spared) <a href="#">REP 11.2</a>
3	-	Cover shade tray LED (not spared) <a href="#">REP 11.2</a>
4	-	LED PWB (not spared) <a href="#">REP 11.2</a>
5	859K09990	Feeder assembly (HCF) <a href="#">REP 11.5</a>
6	-	Harness assembly LED (not spared)
7	607K05000	LED assembly W/I wire (with 3, 4, 6) <a href="#">REP 11.6</a>



E-8-2014-A

## PL 11.2 HCF Left

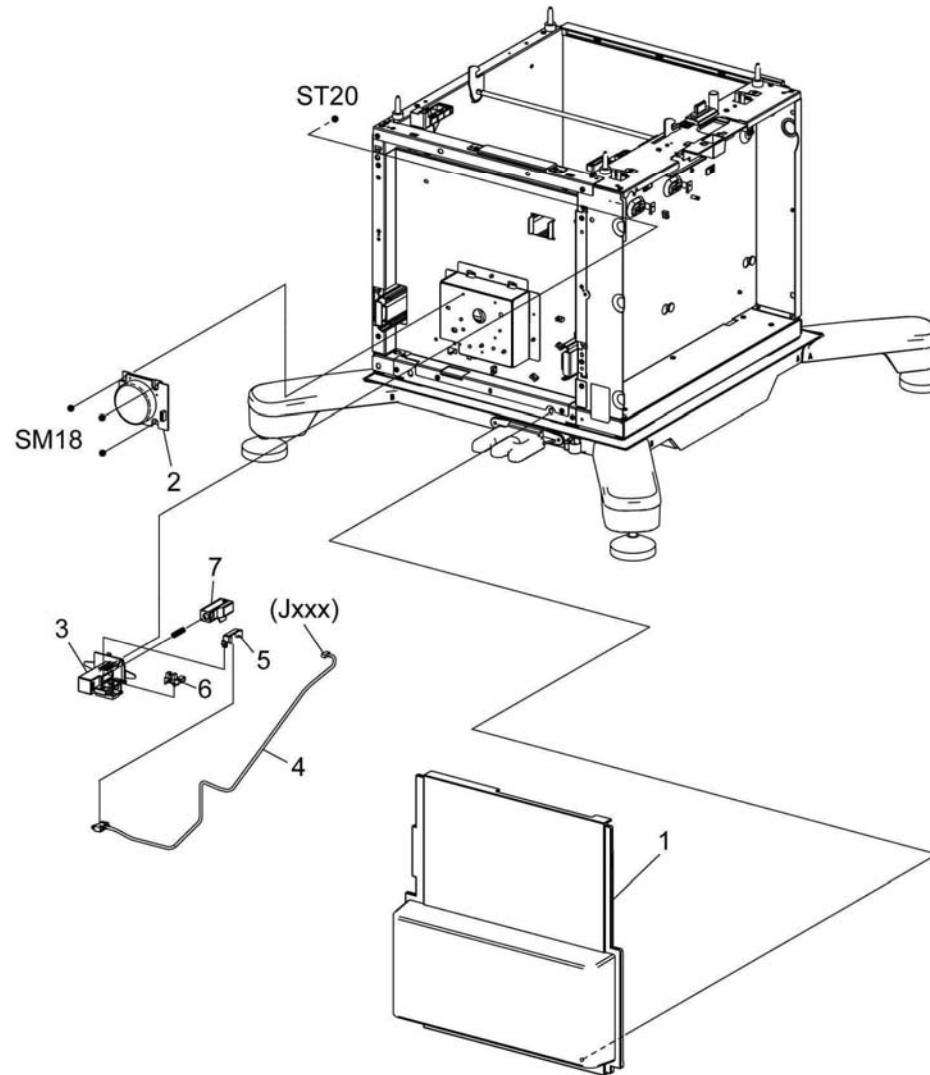
Item	Part	Description
1	—	Cover left (not spared)
2	—	Guide harness (not spared)
3	960K89873	OPF PWB <a href="#">REP 11.7</a>
4	127K73200	Motor assembly main <a href="#">REP 11.8</a>



E-8-2015-A

## PL 11.3 HCF (3/4 Tray)

Item	Part	Description
1	–	Cover rear (not spared) <a href="#">REP 11.4</a>
2	127K73200	Motor assembly main P1 <a href="#">REP 11.9</a>
3	–	Bracket actuator sensor (not spared)
4	952K24820	SW interlock <a href="#">REP 11.10</a>
5	–	Guide SW SUB (not spared)
6	–	Open tray sensor
7	012E18960	Actuator link sensor end

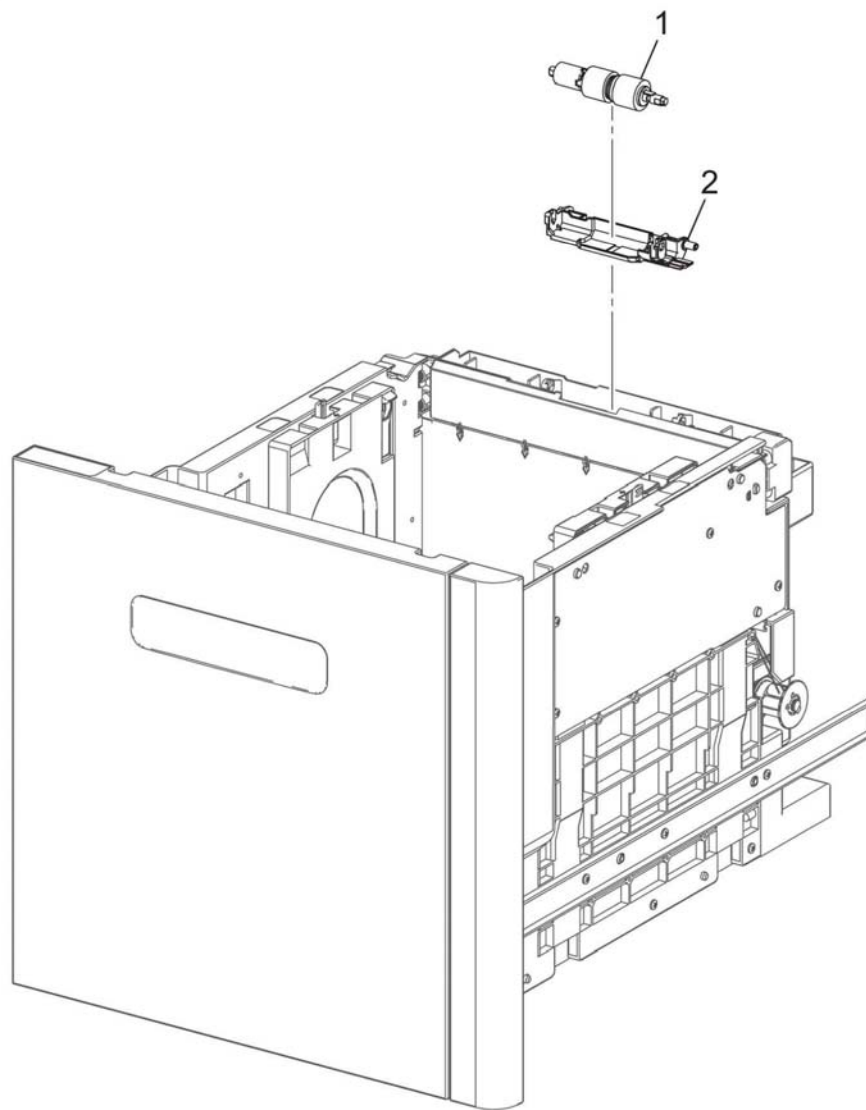


E-8-2016-A

## PL 11.4 HCF (4/4 Tray)

Item	Part	Description
1	859K00100	Shaft assembly feed
2	019K17070	Holder separator
98	607K00050	Feed and separator roll kit (with 1, 2 X2 pcs) <a href="#">REP 11.11</a>

98 { 1, 2

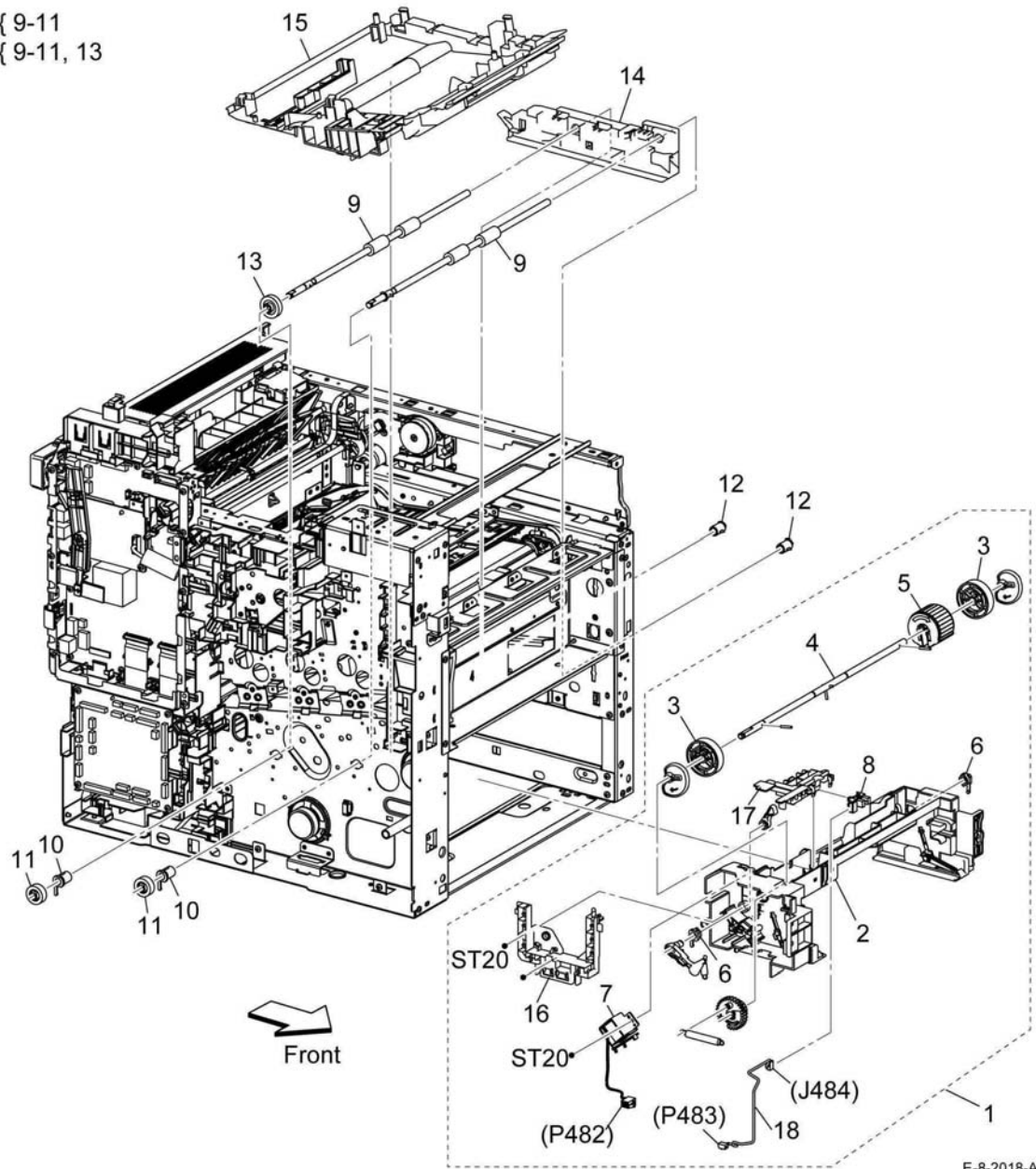


E-8-2017-A

# PL 13.1 MSI

Item	Part	Description
1	801K71230	Frame assembly MSI (with 2-8, 16-18) <a href="#">REP 13.1</a>
2	-	Frame MSI (not spared)
3	-	Roll core MSI (not spared)
4	-	Shaft assembly feed MSI (not spared)
5	059K89701	Feed roll MSI <a href="#">REP 13.2</a>
6	-	Bearing dup MSI (not spared)
7	-	Solenoid feed MSI (not spared)
8	930W00123	Sensor-photo int (MSI No Paper Sensor) <a href="#">REP 13.3</a>
9	-	Roll assembly TA 1 (not spared)
10	-	Bearing TA L (not spared)
11	-	Gear turn (not spared)
12	-	Bearing TA3 AD (not spared)
13	-	Gear TA 2 (not spared)
14	-	Guide MSI R (not spared)
15	-	Upper chute MSI (not spared)
16	-	Guide harness MSI (not spared)
17	-	Bracket no paper MSI (not spared)
18	-	Harness assembly no paper MSI (not spared)
98	-	Kit MSI roll assembly TA 1 (with 9-11) (not spared)
99	604K97990	Kit MSI roll assembly TA 1 / 2 (with 9-11, 13) <a href="#">REP 13.4</a>

98 { 9-11  
99 { 9-11, 13

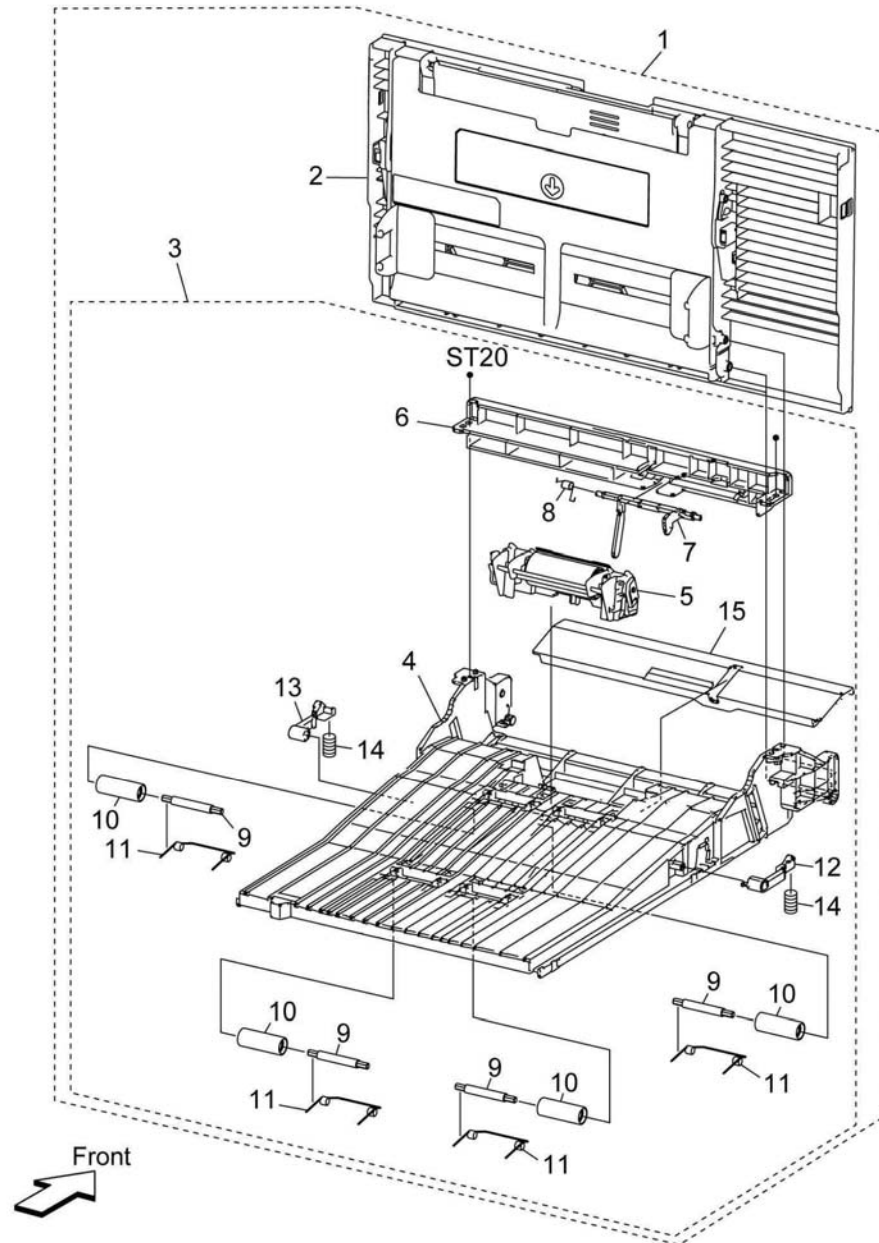


E-8-2018-A



## PL 13.2 MSI (2/2)

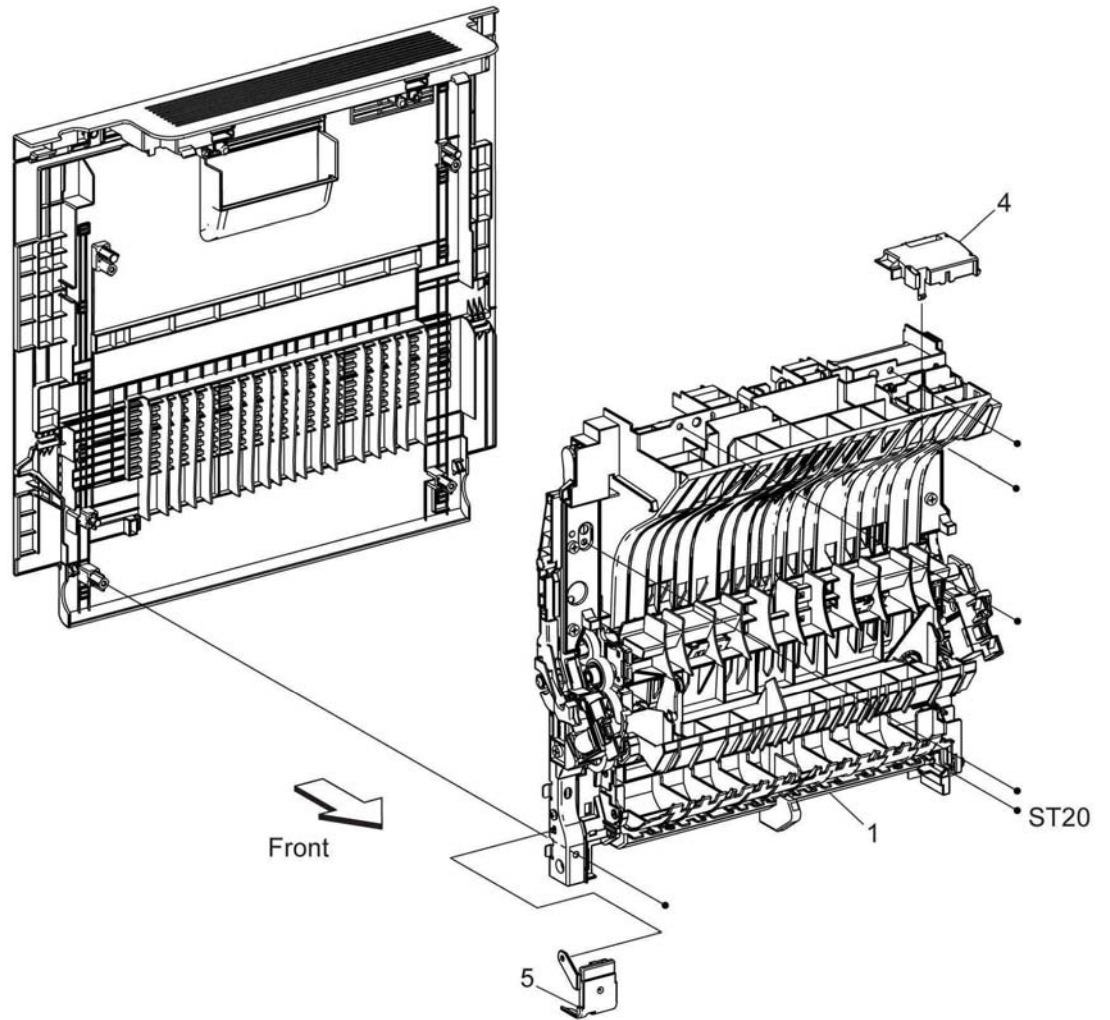
Item	Part	Description
1	050K73491	Tray assembly MSI main (with 2-3) REP 13.5
2	-	Cover assembly MSI (not spared)
3	-	Chute assembly MSI (with 4-15) (not spared)
4	-	Chute MSI (not spared)
5	105K33341	Holder assembly separator MSI REP 13.6
6	-	Bar MSI Front (not spared)
7	-	Actuator no paper MSI (not spared)
8	-	Spring no paper MSI (not spared)
9	-	Shaft pinch TA (not spared)
10	-	Roll pinch MSI (not spared)
11	-	Spring pinch MSI (not spared)
12	-	Latch MSI L (not spared)
13	-	Latch MSI R
14	-	Spring latch MSI (not spared)
15	-	Plate assembly bottom MSI (not spared)



E-8-2019-A

## PL 14.1 Duplex

Item	Part	Description
1	–	Duplex assembly (not spared)
2	–	Not used
3	–	Not used
4	–	Cover rear fan harness (not spared)
5	822E37420	Cover relay <a href="#">REP 14.1</a>

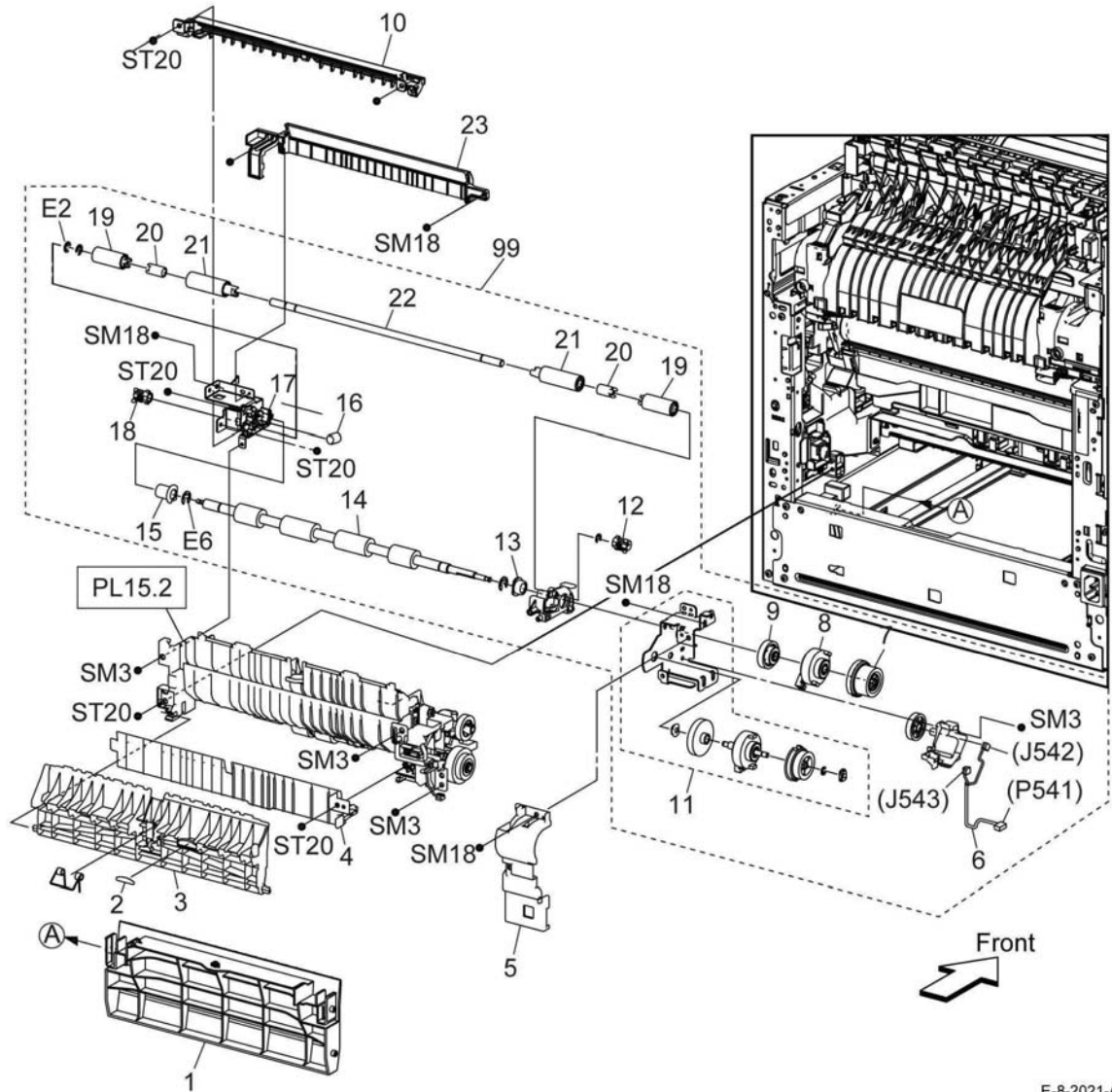


E-8-2020-A

## PL 15.1 Registration (1/2)

Item	Part	Description
1	054E56471	Chute OPT 550 REP 15.1
2	-	Label jam chute (not spared)
3	-	Chute dup lower (not spared)
4	-	Chute feeder (not spared)
5	-	Cover dup gear (not spared)
6	-	Harness assembly CLT REGI/DUP-C (not spared)
7	-	Gear CLT registration (not spared)
8	-	Clutch assembly registration (not spared)
9	-	Gear assembly one way (not spared)
10	-	Chute DUP upper (not spared)
11	-	Bracket assembly registration D (not spared)
12	-	Bearing registration pinch AD (not spared)
13	-	Bearing registration AD (not spared)
14	-	Roll assembly registration (not spared)
15	-	Bearing registration D (not spared)
16	-	Spring registration
17	-	Bracket assembly registration AD (not spared)
18	-	Bearing registration pinch D (not spared)
19	-	Roll registration pinch out (not spared)
20	-	Spacer registration pinch (not spared)
21	-	Roll registration pinch in (not spared)
22	-	Shaft registration pinch (not spared)
23	-	Chute assembly upper (not spared)
99	607K04980	Kit roll assembly DUP registration (with 6-9, 11-22 + 2 E-Rings) REP 15.2

99 {with 6-9, 11-12, 2-Erings}

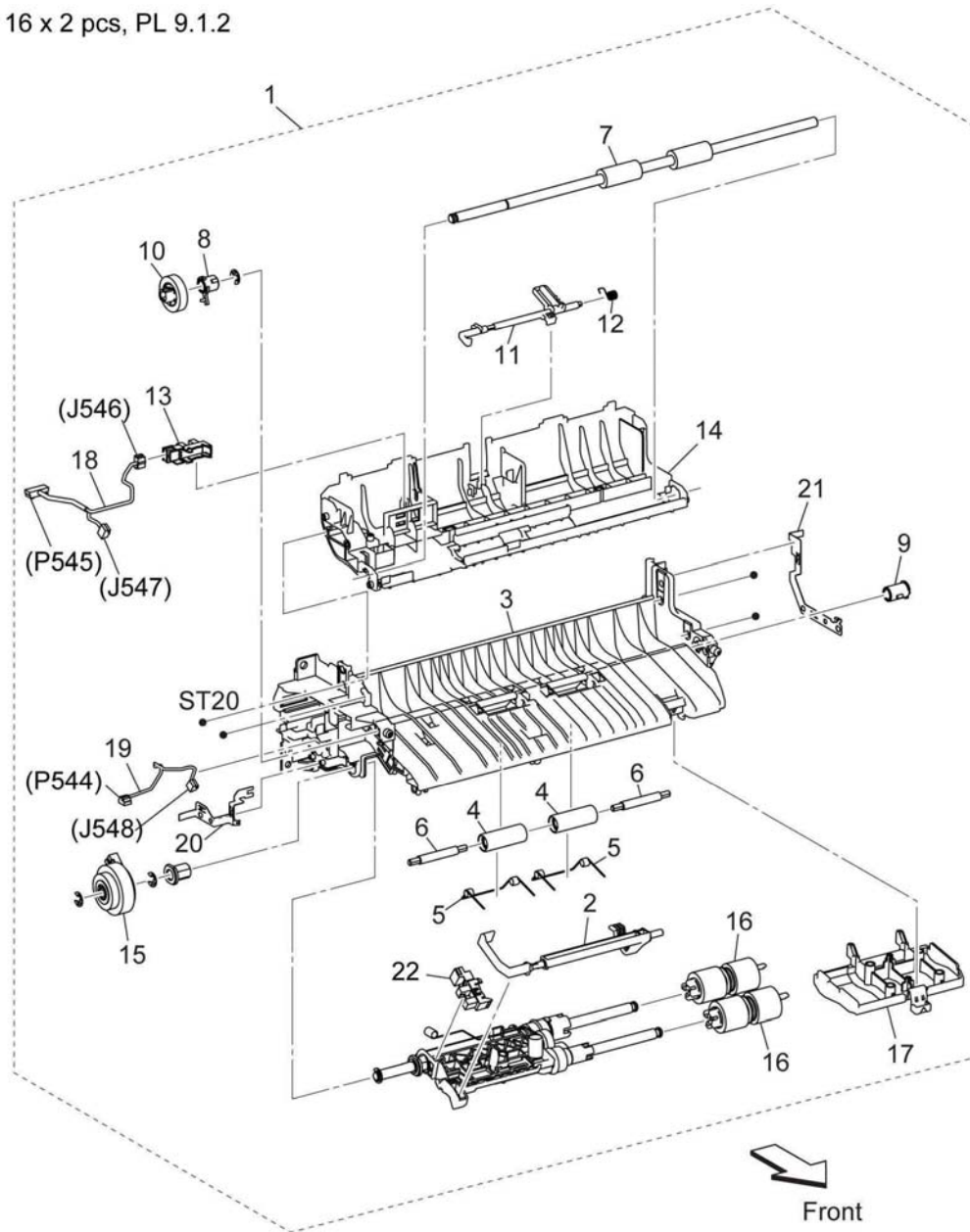


E-8-2021-A

## PL 15.2 Registration (2/2)

Item	Part	Description
1	054K58700	Chute assembly registration feeder (with 2-21) <a href="#">REP 15.3</a>
2	120E35551	Actuator no paper <a href="#">REP 15.4</a>
3	-	Chute registration (not spared)
4	-	Roll pinch TA (not spared)
5	-	Spring pinch TA (not spared)
6	-	Shaft pinch TA (not spared)
7	-	Roll assembly TA3 (not spared)
8	-	Bearing TA3 D (not spared)
9	-	Bearing TA3 AD (not spared)
10	-	Gear TA3 (not spared)
11	-	Actuator registration (with 12) (not spared) <a href="#">REP 15.5</a>
12	-	Spring actuator registration (not spared)
13	930W00123	Sensor photo int (registration sensor) <a href="#">REP 15.6</a>
14	-	Chute registration upper (not spared)
15	-	Clutch assembly PH
16	859K00100	Feed roll assembly <a href="#">REP 15.7</a>
17	054E60150	Chute upper feed
18	-	Harness assembly SNR registration/NO (not spared)
19	-	Harness assembly clutch feed (not spared)
20	-	Plate earth feed (not spared)
21	-	Plate earth TA3
22	-	Sensor photo int (no paper sensor) (not spared)
98	607K00050	Feed and separator roll kit (with 16 x 2 pcs, <a href="#">PL 9.1.15.72</a> ) <a href="#">REP 15.7</a>

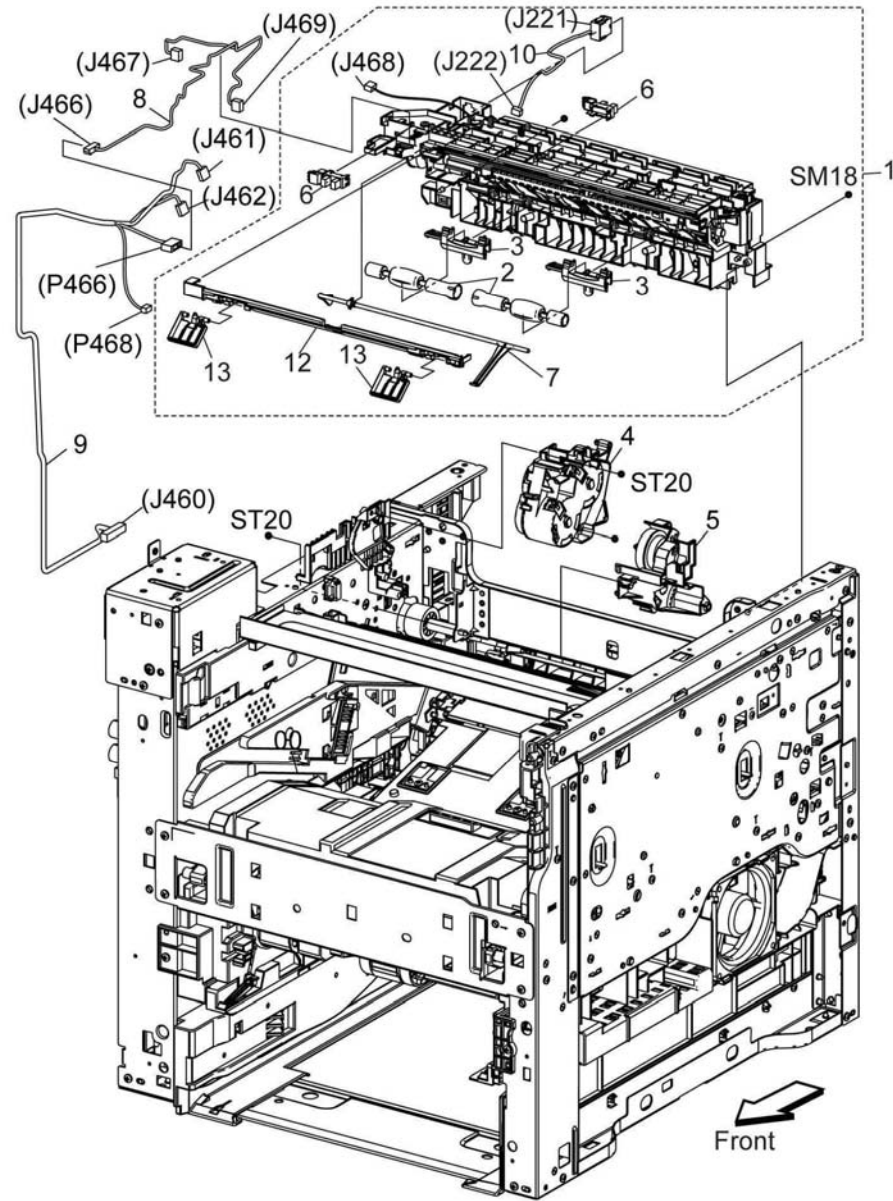
98 { 16 x 2 pcs, PL 9.1.2



E-8-2022-A

## PL 17.1 Exit

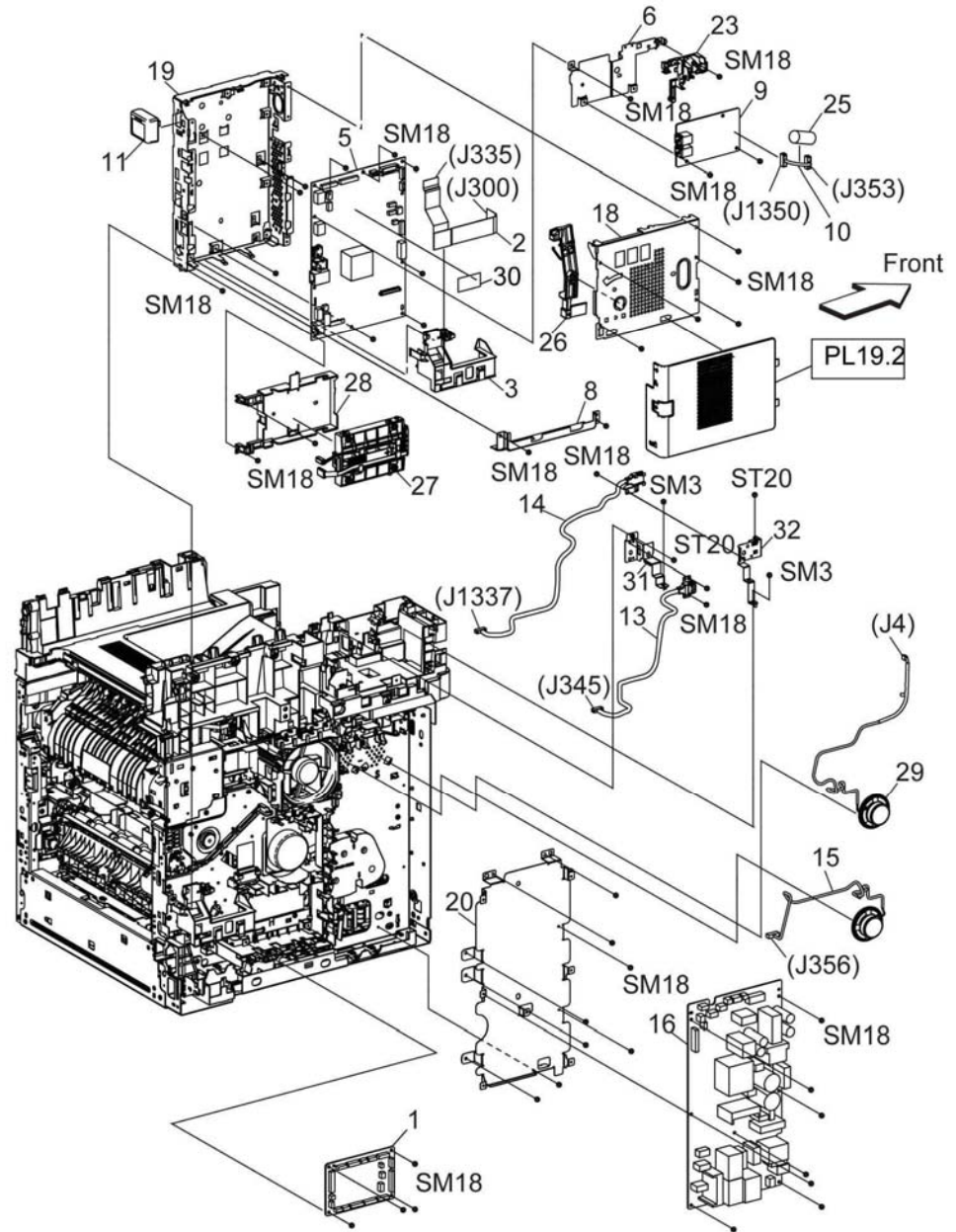
Item	Part	Description
1	054K58740	Chute assembly exit (with 2-3, 6-7, 10-11) <a href="#">REP 17.1</a>
-	054K58710	Chute assembly exit (with 2-3, 6-7, 10-11)
2	-	Roll pinch (Not spared)
3	-	Cover pinch (Not spared)
4	007K22150	Drive assembly exit main <a href="#">REP 17.2</a>
5	007K21430	Gear assembly idle exit <a href="#">REP 17.3</a>
6	930W00123	Full stack sensor, C sensor
7	120E38230	Actuator full stack <a href="#">REP 17.4</a> (B605/B615/B6015_Tall)
-	120E35590	Actuator full stack (B600/B610) <a href="#">REP 17.4</a>
8	-	Harness assembly full stack - MV (Not spared)
9	-	Harness assembly developer - MV (Not spared)
10	-	Harness assembly finisher - MV (Not spared)
11	-	Not used
12	-	Cover top exit lower (Not spared)
13	-	Chute flapper exit (Not spared)



E 8 2017 A

# PL 18.1 Electrical (B605/B615) (1/4)

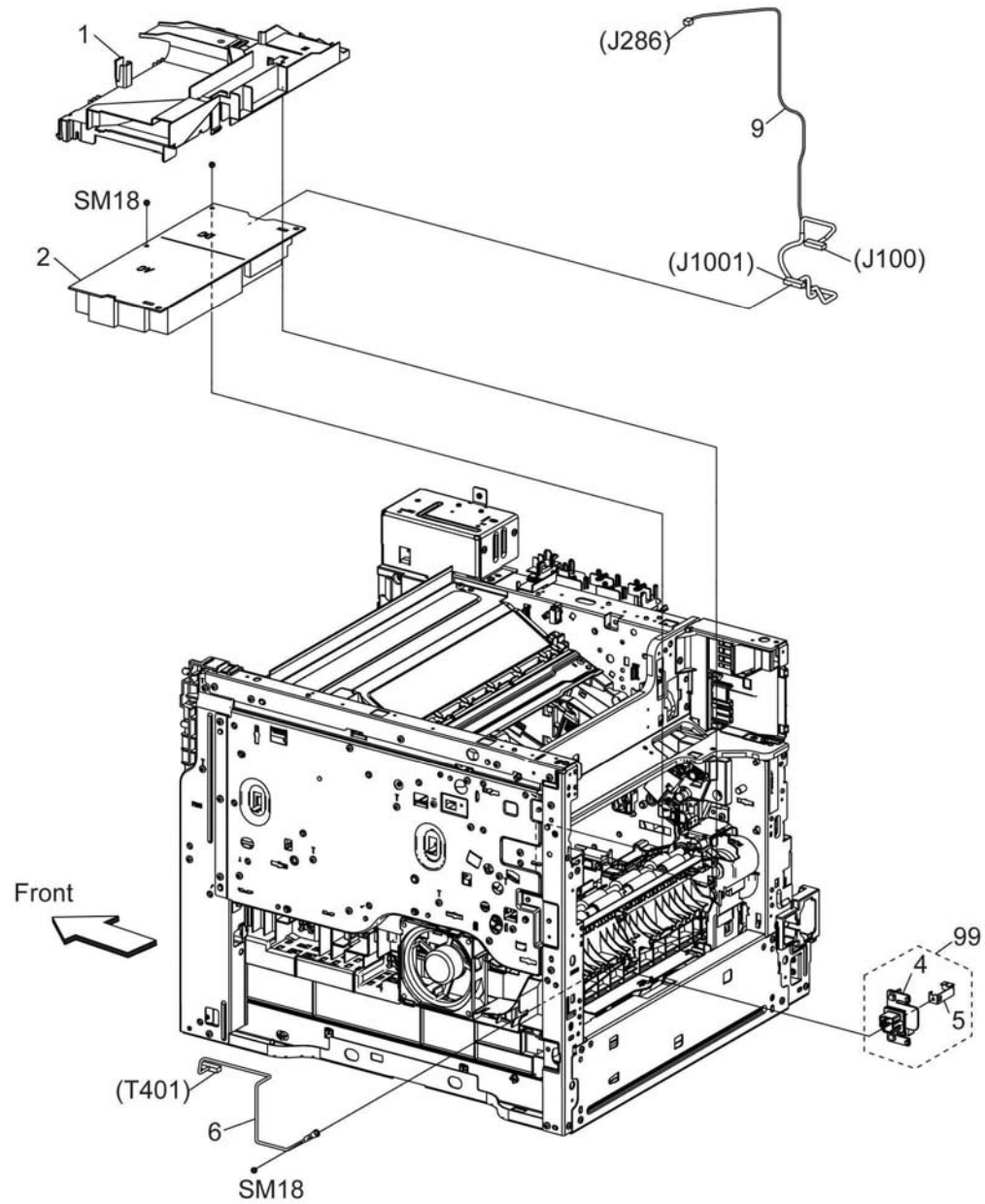
Item	Part	Description
1	960K81100	MCU PWB REP 18.1
2	952K25540	FFC MCU ESS REP 18.2
3	-	Guide FFC MCU
4	-	Not used
5	960K90833	ESS PWB MFP REP 18.3
6	-	PLATE FAX (Not spared)
7	-	Not used
8	-	Plate ESS low (Not spared)
9	960K80761	FAX PWB REP 18.4
10	-	Harness assembly fax (Not spared)
11	-	Wireless module (Not spared)
12	-	Not used
13	952K40000	Harness assembly ICCR USB REP 18.5
14	952K39990	Harness assembly front USB REP 18.6
15	-	Speaker assembly A4 fax (not spared)
16	105K33370	LVPS PWB 220V REP 18.7
-	105K33360	LVPS PWB 110V REP 18.8
17	-	Not used
18	-	Plate ESS top (not spared)
19	-	Box ESS AIO (not spared)
20	-	Plate LVPS (not spared)
21	-	Not used
22	-	Not used
23	-	Guide harness ESS (not spared)
24	-	Not used
25	-	Core fax (not spared)
26	-	Link WIFI (not spared)
27	101K73410	HDD assembly
28	-	Bracket HDD (not spared)
29	-	Speaker main (not spared)
30	-	EMMC card (not spared)
31	-	Bracket USB ICCR (not spared)
32	-	Bracket USB (not spared)



E-8-2024-A

## PL 18.2 Electrical (B605/B615) (2/4)

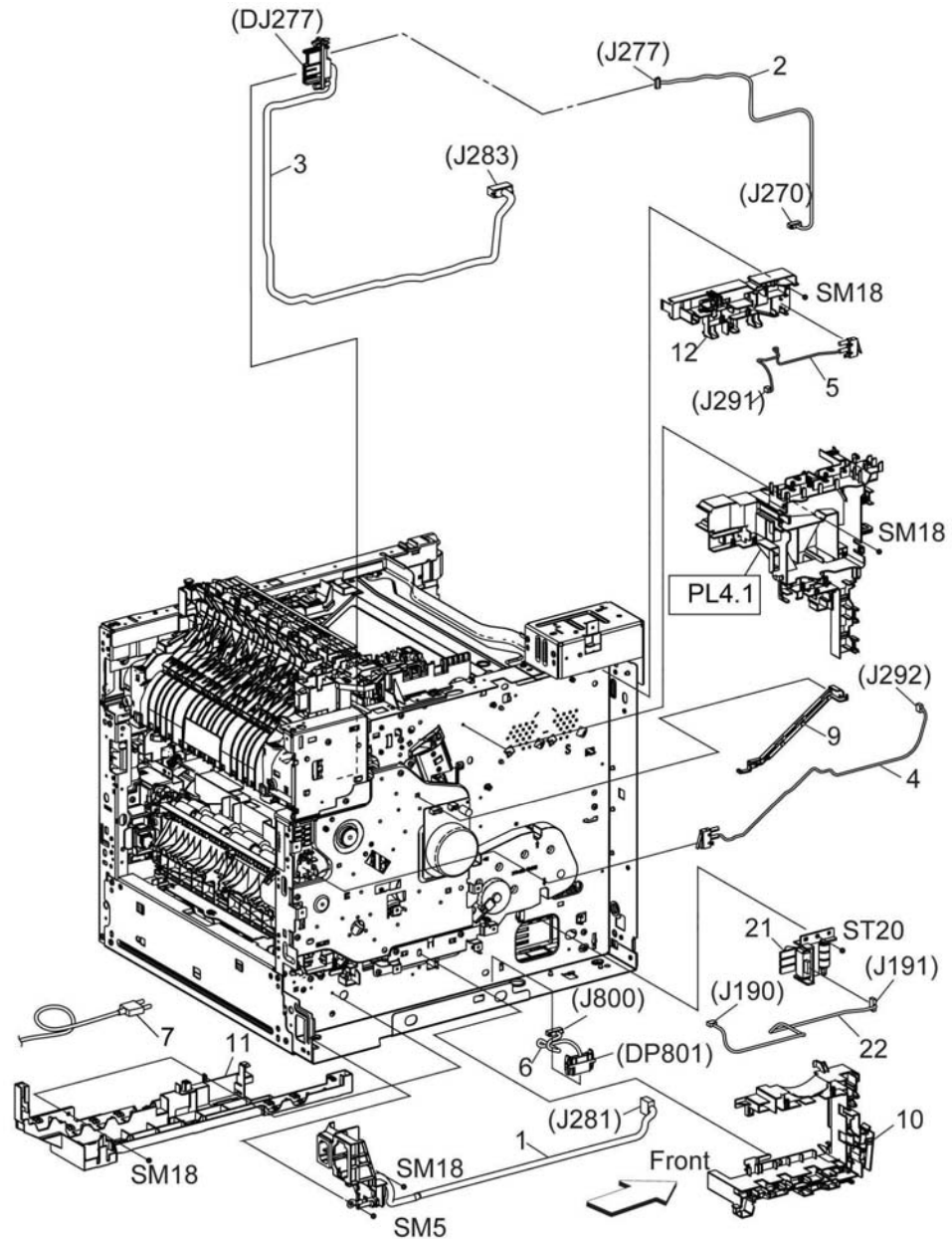
Item	Part	Description
1	–	Cover HVPS (not spared) <a href="#">REP 18.9</a>
2	105K33120	HVPS PWB <a href="#">REP 18.8</a>
3	–	Not used
4	–	Housing 2ND BTR (not spared) <a href="#">REP 18.10</a>
5	–	Plate BIAS 2nd BTR (not spared)
6	–	Harness 2nd BTR (T401) (not spared)
7	–	Not used
8	–	Not used
9	–	Harness assembly MCU-HVPS-MV (not spared)
99	–	Kit housing 2nd BTR (with 4-5) (not spared)



E-8-2025-A

## PL 18.3 Electrical (B605/B615) (3/4)

Item	Part	Description
1	–	Kit harness assembly inlet (not spared)
2	–	Harness assembly fusing DC-MV (not spared)
3	952K25320	Harness fusing AC 220V <b>REP 18.11</b>
–	952K25310	Harness assembly fusing AC 100V-MV <b>REP 18.11</b>
4	952K25390	Harness assembly I/L rear-MV <b>REP 18.12</b>
5	952K25380	Harness assembly I/L FRONT-MV <b>REP 18.13</b>
6	952K25490	Harness assembly OPF-MV <b>REP 18.14</b>
7	–	Power cord 110V (not spared)
8	–	Not used
9	–	Guide harness rear IL (not spared)
10	–	Guide harness MCU (not spared)
11	–	Guide harness AC (not spared)
12	–	Guide harness F USB (not spared)
13	–	Not used
14	–	Not used
15	–	Not used
16	–	Not used
17	–	Not used
18	–	Not used
19	–	Not used
20	–	Not used
21	110K16610	Switch assembly size <b>REP 18.15</b>
22	–	Harness assembly switch size (not spared)

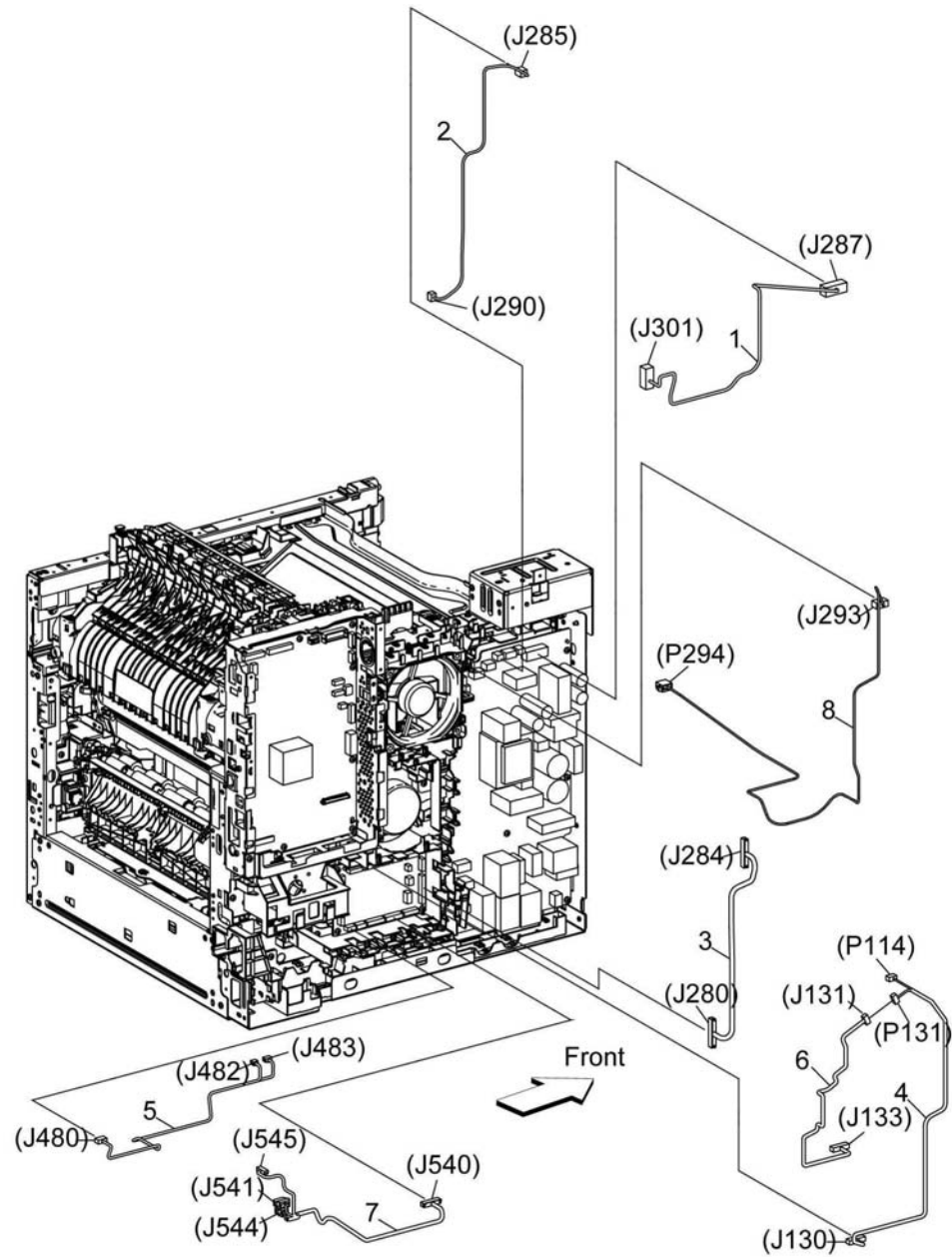


D-8-2026-A



## PL 18.4 Electrical (B605/B615) (4/4)

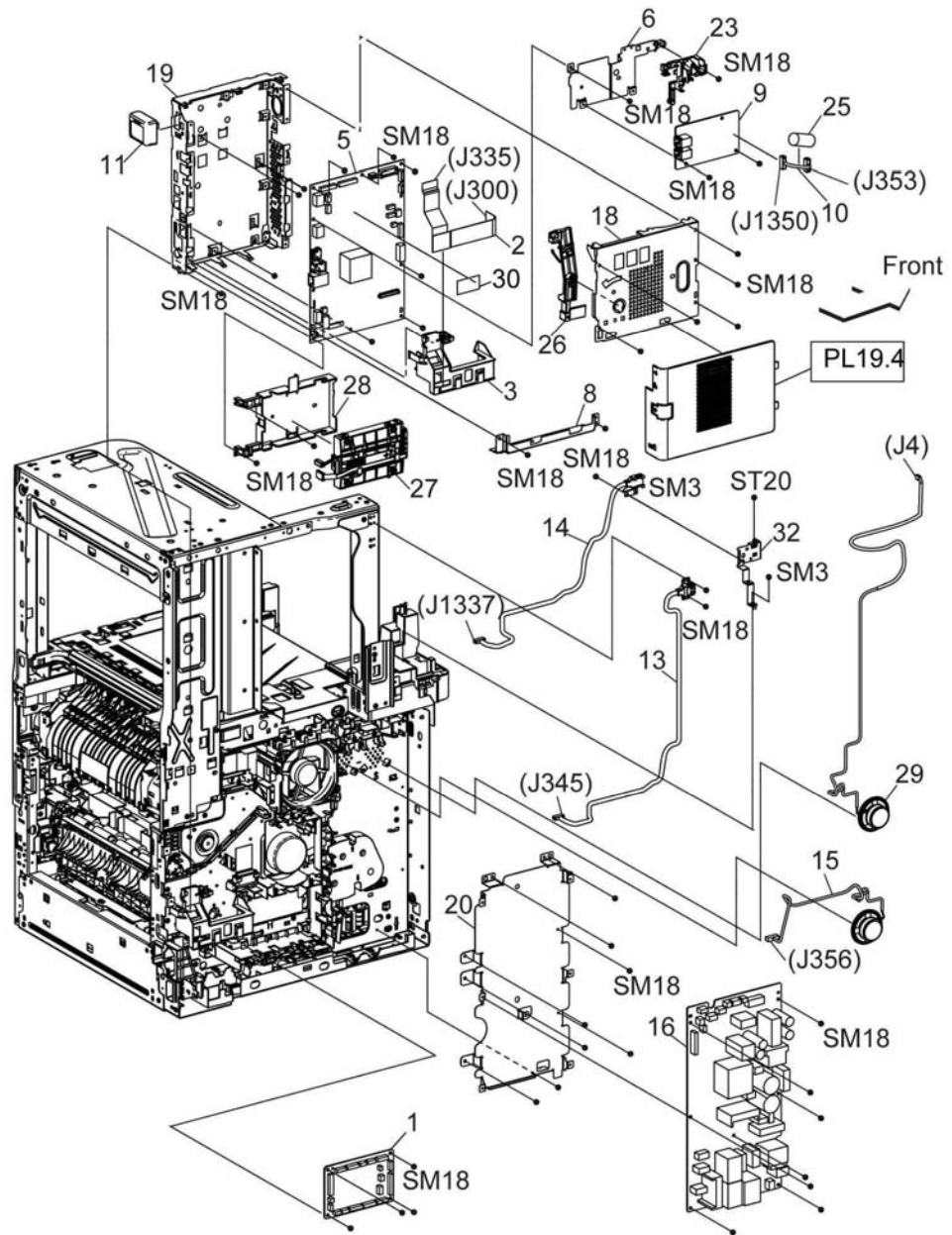
Item	Part	Description
1	-	Harness assembly ESS-PWR-MV (not spared)
2	-	Harness assembly 24V-MCU-MV (not spared)
3	-	Harness assembly LV-MCU-MV (not spared)
4	-	Harness assembly CRUM-MV (not spared)
5	-	Harness assembly MSI-MV (not spared)
6	-	Harness assembly XERO CRUM-MV (not spared)
7	-	Harness assembly REGI-MV (not spared)
8	-	Harness assembly SUB FAN-MV (not spared)



E-8-2027-A

## PL 18.5 Electrical (B615\_Tall) (1/4)

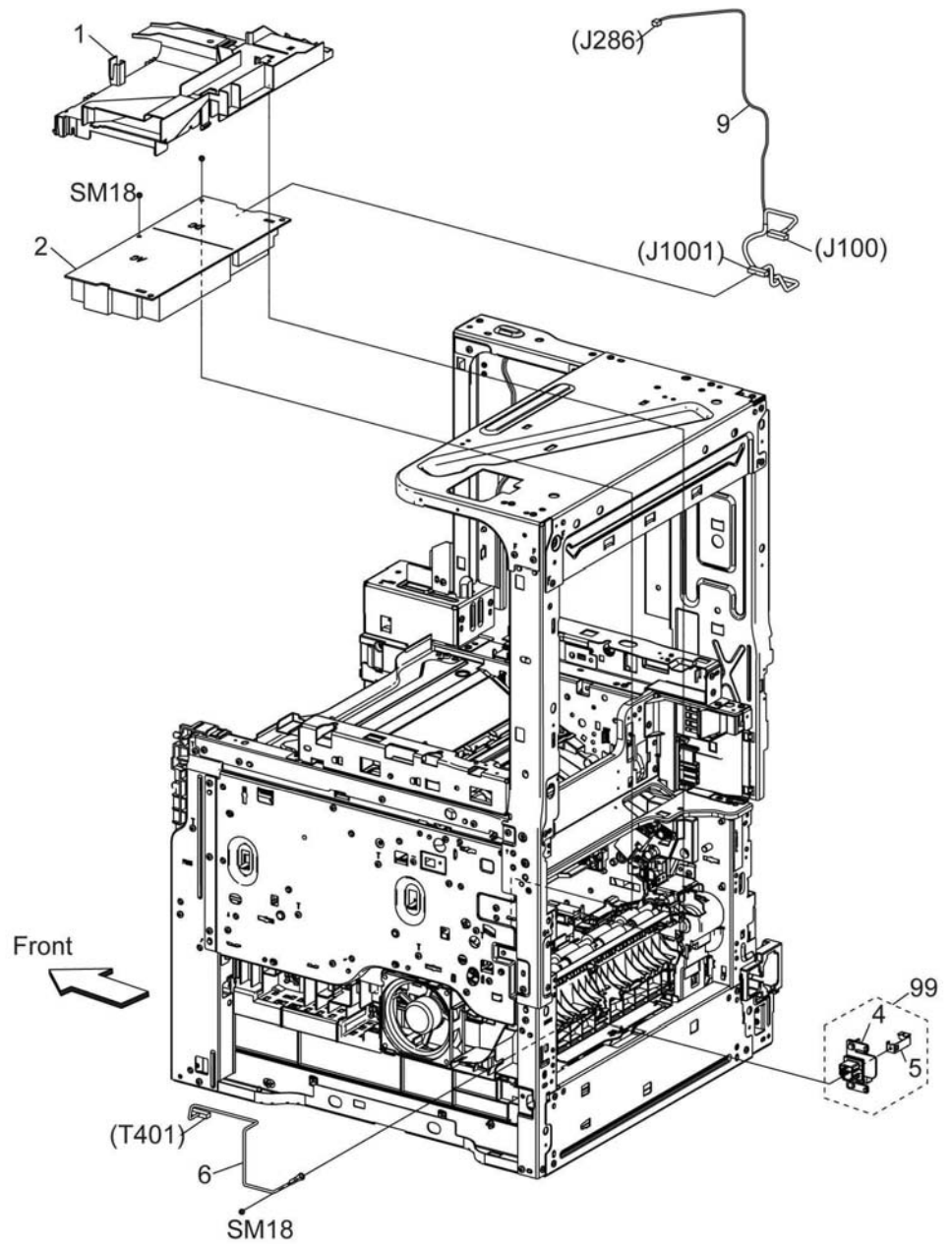
Item	Part	Description
1	960K81100	MCU PWB
2	952K25540	FFC MCU ESS
3	-	Guide FFC MCU (not spared)
4	-	Not used
5	960K90833	ESS PWB tall
6	-	Plate FAX (not spared)
7	-	Not used
8	-	Plate ESS low (not spared)
9	960K80761	FAX PWB
10	-	Harness assembly FAX (not spared)
11	-	Wireless module (not spared)
12	-	Not used
13	952K40000	Harness assembly ICCR USB
14	952K40010	Harness assembly front USB
15	-	Speaker assembly A4 FAX (not spared)
16	105K33360	LVPS PWB 110V
-	105K33370	LVPS PWB 220V
17	-	Not used
18	-	Plate ESS top (not spared)
19	-	Box ESS AIO (not spared)
20	-	Plate LVPS (not spared)
21	-	Not used
22	-	Not used
23	-	Guide harness ESS (not spared)
24	-	Not used
25	-	Core FAX (not spared)
26	-	Link WIFI
27	101K73410	HDD assembly
28	-	Bracket HDD (not spared)
29	-	Speaker main (not spared)
30	-	EMMC card (not spared)
31	-	Not used
32	-	Bracket USB (not spared)



E-8-2028-A

## PL 18.6 Electrical (B615\_Tall) (2/4)

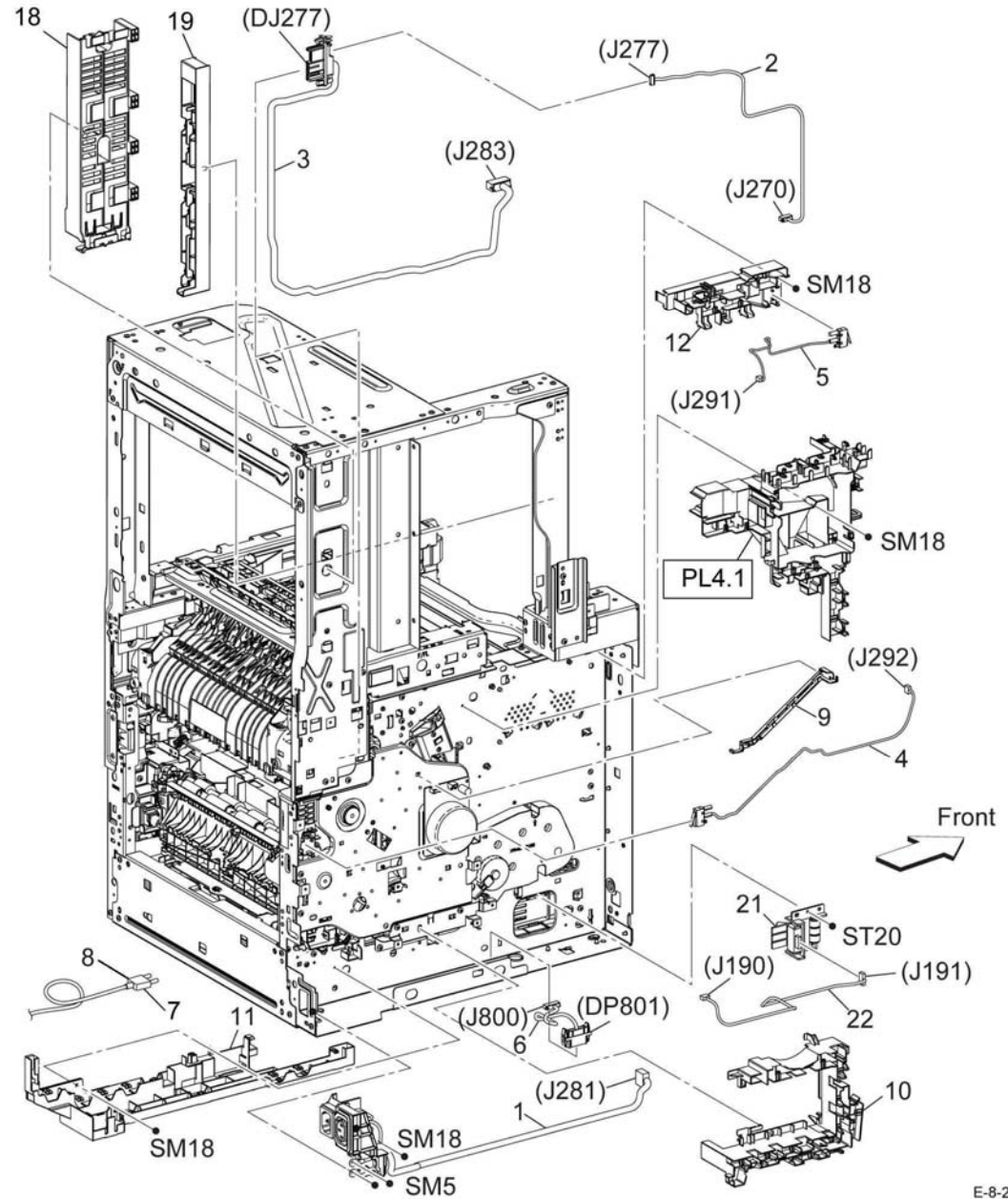
Item	Part	Description
1	-	COVER HVPS
2	105K33121	HVPS PWB <a href="#">REP 18.8</a>
3	-	Not used
4	-	Housing 2nd BTR (not spared)
5	-	Plate BIAS 2nd BTR (not spared)
6	-	Harness 2nd BTR
7	-	Not used
8	-	Not used
9	-	Harness assembly MCU-HVPS-MV (not spared)
99	-	Kit housing 2nd BTR (with 4-5) (not spared)



E-8-2029-A

### PL 18.7 Electrical (B615\_Tall) (3/4)

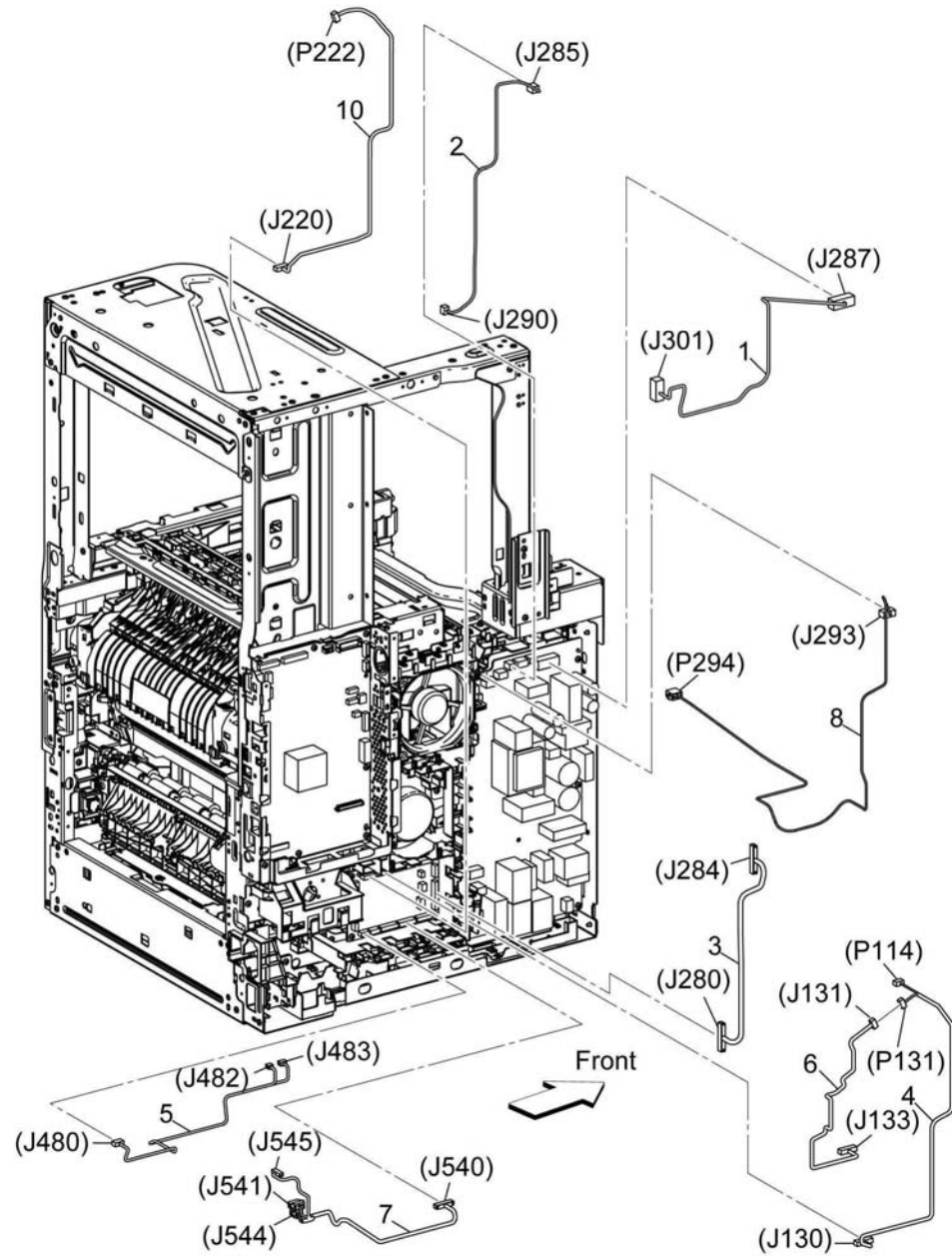
Item	Part	Description
1	–	Kit harness assembly inlet (not spared)
2	–	Harness assembly fusing DC-MV (not spared)
3	952K25320	Harness fusing AC 220V
–	952K25310	Harness assembly fusing AC 100V-MV
4	952K25390	Harness assembly I/L rear-MV
5	952K25380	Harness assembly I/L front-MV
6	952K25490	Harness assembly OPF-MV
7	–	Power cord 110V (not spared)
8	–	Power cord 220V (not spared)
9	–	Guide harness rear IL (not spared)
10	–	Guide harness MCU (not spared)
11	–	Guide harness AC (not spared)
12	–	Guide harness F USB (not spared)
13	–	Not used
14	–	Not used
15	–	Not used
16	–	Not used
17	–	Not used
18	–	Guide harness IIT (not spared)
19	–	Guide harness UI FIN (not spared)
20	–	Not used
21	110K16610	Switch assembly size
22	–	Harness assembly SW size (not spared)



E-8-2039-A

## PL 18.8 Electrical (B615\_Tall) (4/4)

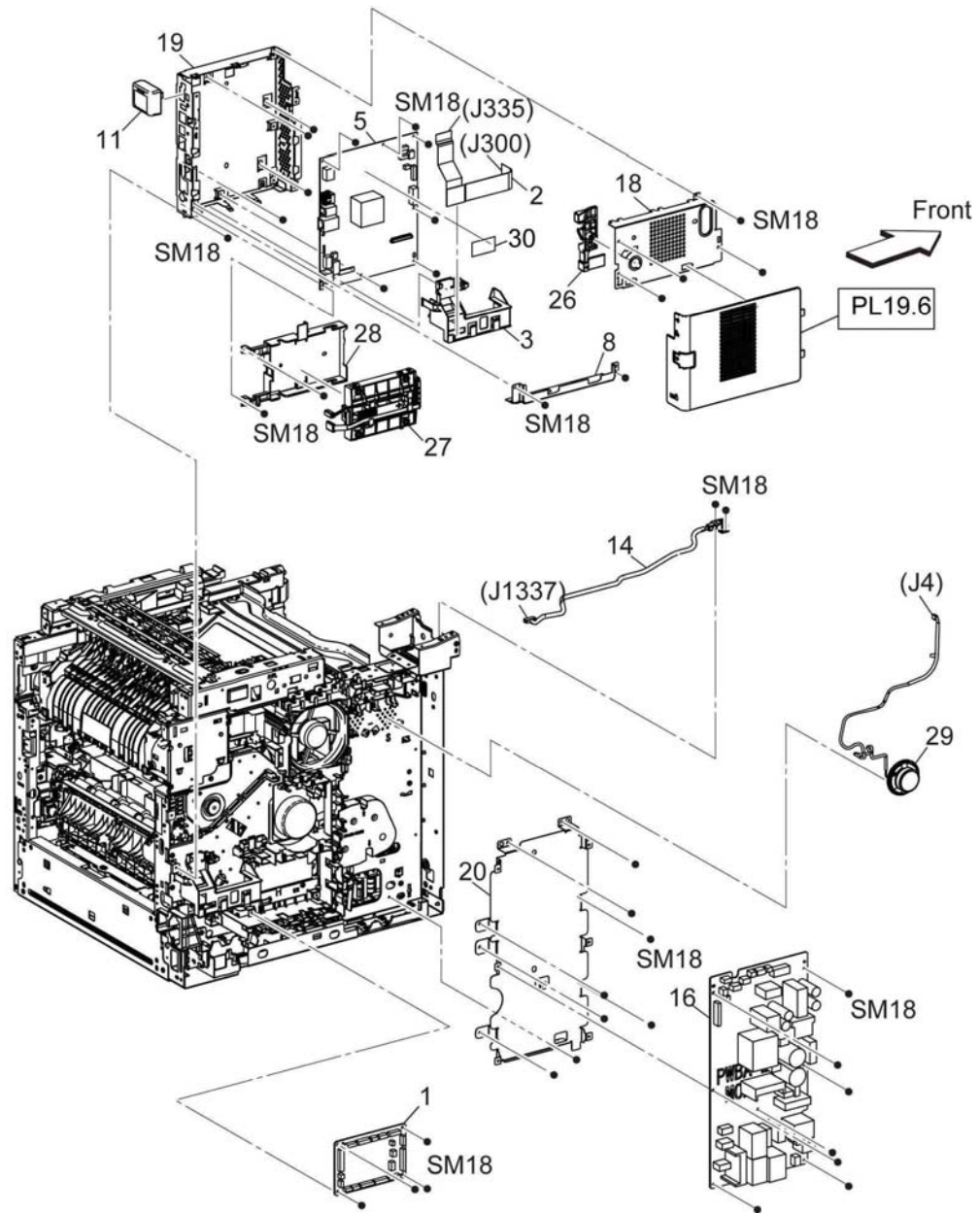
Item	Part	Description
1	-	Harness assembly ESS-PWR-MV (not spared)
2	-	Harness assembly 24V-MCU-MV (not spared)
3	-	Harness assembly LV-MCU-MV (not spared)
4	-	Harness assembly CRUM-MV (not spared)
5	-	Harness assembly MSI-MV (not spared)
6	-	Harness assembly XERO CRUM-MV (not spared)
7	-	Harness assembly REGI-MV (not spared)
8	-	Harness assembly SUB fan-MV (not spared)
9	-	Not used
10	-	Harness assembly FIN-MCU-MV (not spared)



E-8-2031-A

## PL 18.9 Electrical (B600/B610) (1/4)

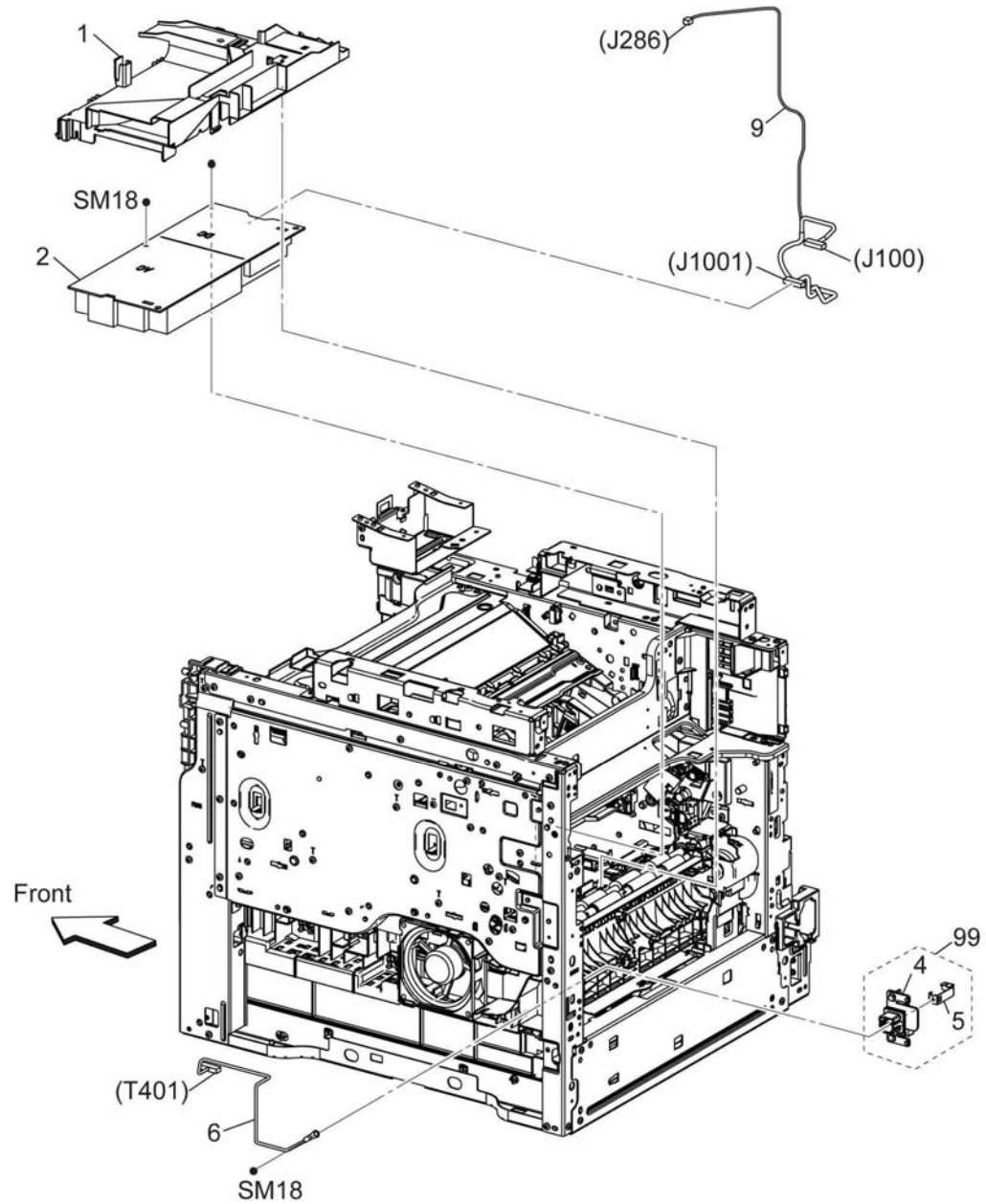
Item	Part	Description
1	960K81100	MCU PWB REP 18.31
2	952K25540	FFC MCU ESS REP 18.32
3	-	Guide FFC MCU (not spared)
4	-	Not used
5	960K90843	ESS PWB SFP REP 18.33
6	-	Not used
7	-	Not used
8	-	Plate ESS low (not spared)
9	-	Not used
10	-	Not used
11	-	Wireless module (not spared)
12	-	Not used
13	-	Not used
14	952K39980	Harness assembly front USB REP 18.34
15	-	Not used
16	105K33360	LVPS PWB 110V REP 18.35
-	105K33370	LVPS PWB 220V REP 18.35
17	-	Not used
18	-	Plate ESS top (not spared)
19	-	Box ESS SFP (not spared)
20	-	Plate LVPS (not spared)
21	-	Not used
22	-	Not used
23	-	Not used
24	-	Not used
25	-	Not used
26	-	Link WIFI (not spared)
27	101K73410	HDD assembly
28	-	Bracket HDD (not spared)
29	-	Speaker main (not spared)
30	-	EMMC card (not spared)
31	-	Not used
32	-	Not used



E-8-2032-A

## PL 18.10 Electrical (B600/B610) (2/4)

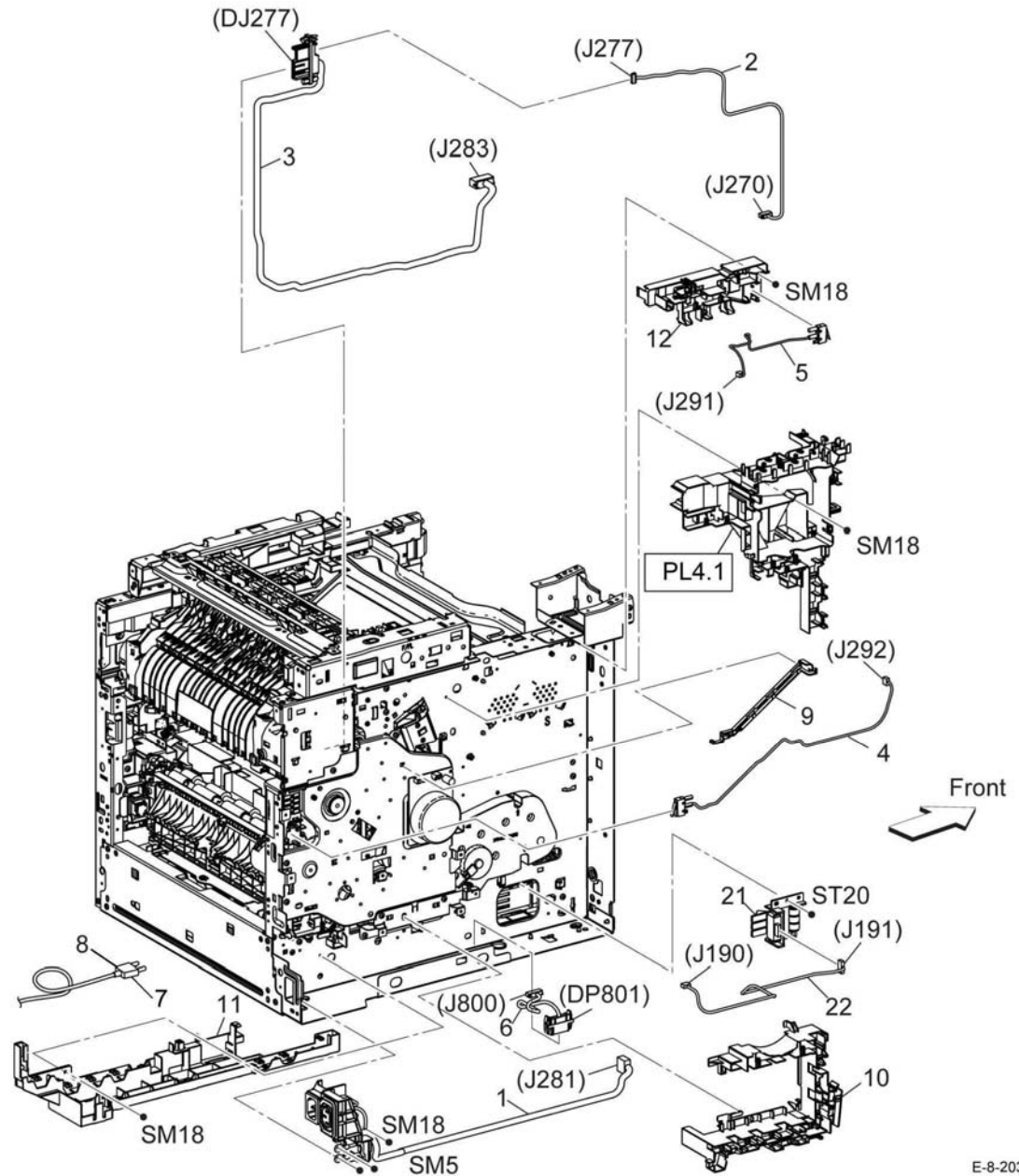
Item	Part	Description
1	—	Cover HVPS (not spared)
2	105K33121	HVPS PWB <a href="#">REP 18.8</a>
3	—	Not used
4	—	Housing 2nd BTR (not spared)
5	—	Plate bias 2nd BTR (not spared)
6	—	Harness 2nd BTR (not spared)
7	—	Not used
8	—	Not used
9	—	Harness assembly MCU-HVPS-MV (not spared)
99	—	Kit housing 2nd BTR (with 4-5) (not spared)



E-8-2033-A

## PL 18.11 Electrical (B600/B610) (3/4)

Item	Part	Description
1	–	Kit harness assembly inlet (not spared)
2	–	Harness assembly fusing DC-MV (not spared)
3	952K25320	Harness fusing AC 220V
–	952K25310	Harness assembly fusing AC 100V-MV
4	952K25390	Harness assembly I/L rear-MV (SW-J292)
5	952K25380	Harness assembly I/L front-MV (SW-J291)
6	952K25490	Harness assembly OPF-MV
7	–	Power cord 110V (not spared)
8	–	Power cord 220V (not spared)
9	–	Guide harness rear IL (not spared)
10	–	Guide harness MCU (not spared)
11	–	Guide harness AC (not spared)
12	–	Guide harness F USB (not spared)
13	–	Not used
14	–	Not used
15	–	Not used
16	–	Not used
17	–	Not used
18	–	Not used
19	–	Not used
20	–	Not used
21	110K16610	Switch assembly size
22	–	Harness assembly SW size (not spared)

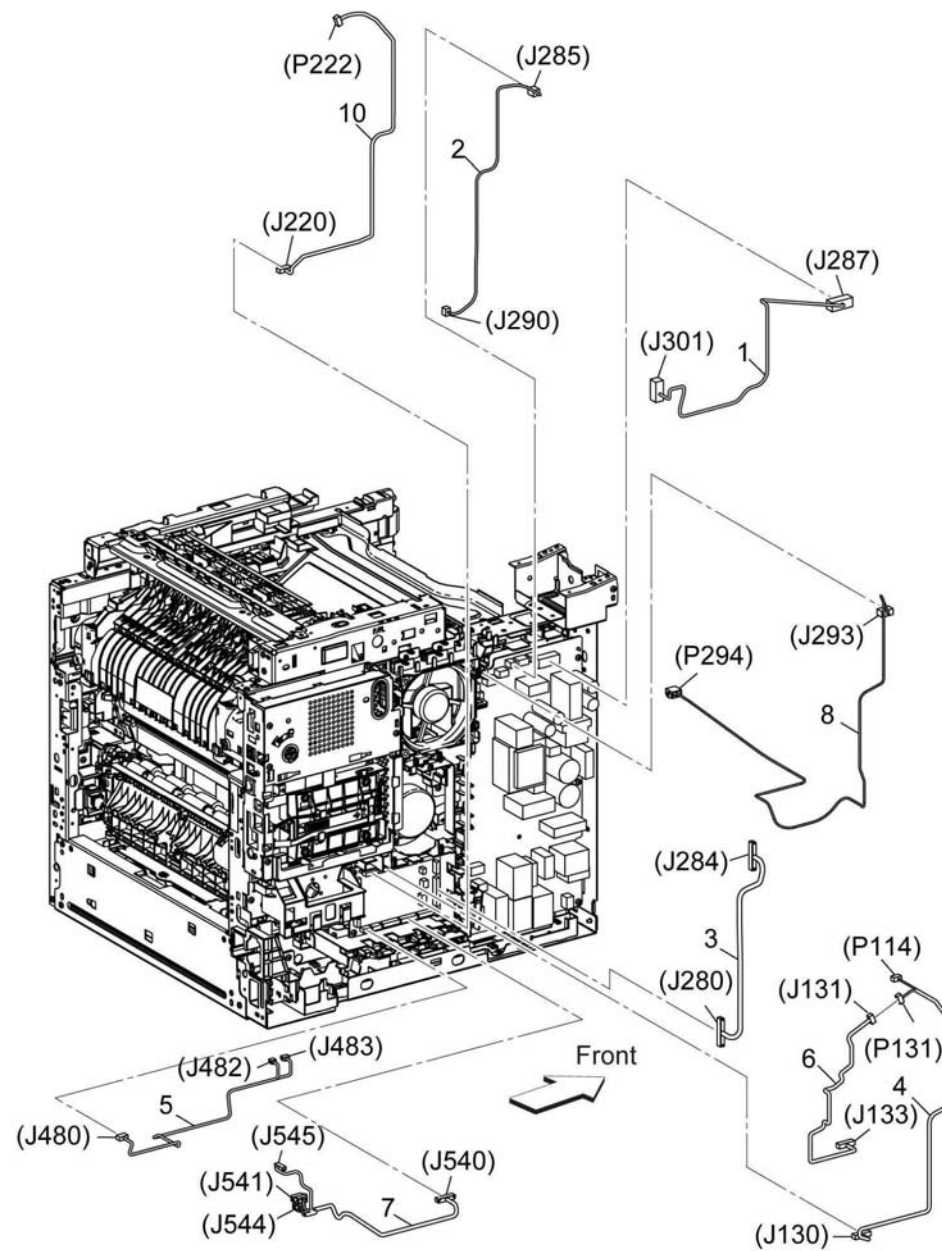


E-8-2034-A



## PL 18.12 Electrical (B600/B610) (4/4)

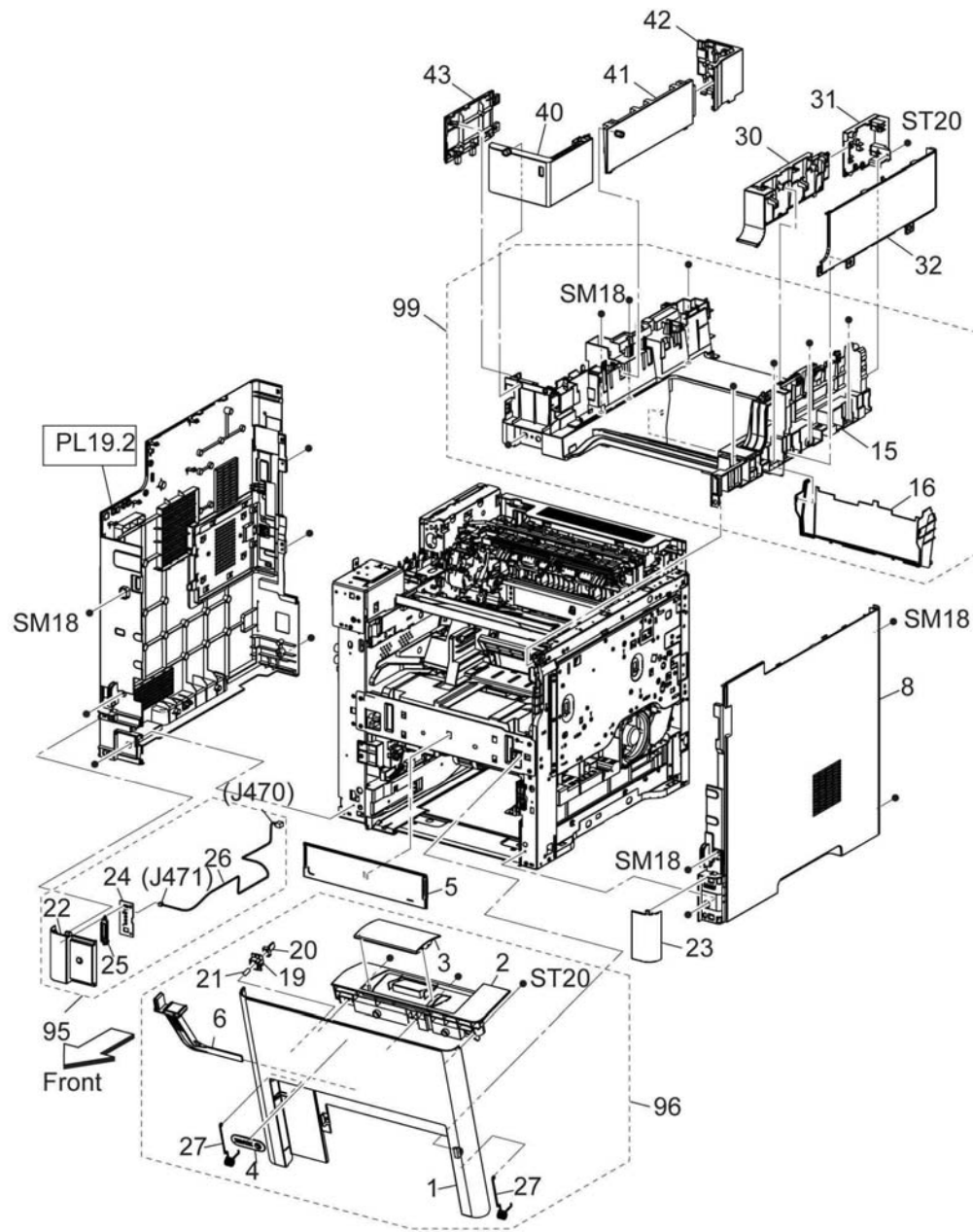
Item	Part	Description
1	-	Harness assembly ESS-PWR-MV (not spared)
2	-	Harness assembly 24V-MCU-MV (not spared)
3	-	Harness assembly LV-MCU-MV (not spared)
4	-	Harness assembly CRUM-MV (not spared)
5	-	Harness assembly MSI-MV (not spared)
6	-	Harness assembly XERO CRUM-MV (not spared)
7	-	Harness assembly REGI-MV (not spared)
8	-	Harness assembly SUB fan-MV (not spared)
9	-	Not used
10	-	Harness assembly FIN-MCU-MV (not spared)



E-8-2035-A

## PL 19.1 Cover (B605/B615) (1/2)

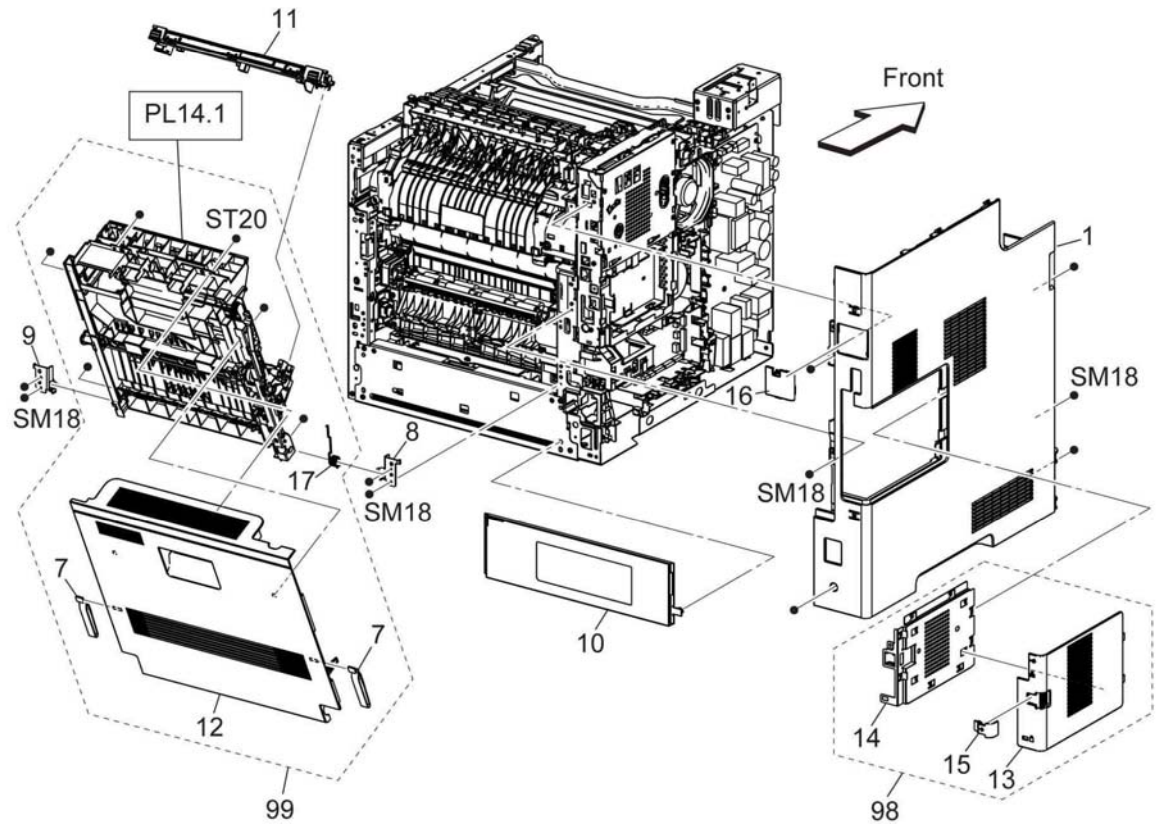
Item	Part	Description
1	—	Cover front (not spared)
2	—	Cover top front (not spared)
3	—	Tray extension (not spared)
4	—	Logo (not spared)
5	—	Cover front IN (not spared)
6	042K95900	LPH cleaner assembly
7	—	Not used
8	822E32721	Cover side R <a href="#">REP 19.12</a>
9	—	Not used
10	—	Not used
11	—	Not used
12	—	Not used
13	—	Not used
14	—	Not used
15	—	Cover top (not spared)
16	—	Cover exit (not spared)
17	—	Not used
18	—	Not used
19	—	Holder IL (not spared)
20	—	Actuator IL (not spared)
21	—	Spring IL (not spared)
22	—	Cover front L (not spared)
23	822E32421	Cover front R <a href="#">REP 19.2</a>
24	—	Tray LED HVPS PWB (not spared)
25	—	Cover shade tray (not spared)
26	—	Harness assembly LED (not spared)
27	—	Spring cover front (not spared)
28	—	Not used
30	822E32660	Cover IIT inner R
31	822E32700	Cover IIT inner R rear
32	822E32740	Cover IIT side R
33	—	Not used
40	822E32622	Cover ICCR
41	822E32640	Cover IIT inner L
42	822E32681	Cover IIT inner L rear
43	822E32782	Cover IIT side L <a href="#">REP 19.8</a>
95	948K16200	Cover assembly front L (with 22, 24-26) <a href="#">REP 19.10</a>
96	948K16230	Cover assembly front (with 1-4, 6, 19-21, 27) <a href="#">REP 19.1</a>
97	—	Not used
98	—	Not used
99	948K16220	Cover assembly top (with 15, 16) <a href="#">REP 19.13</a>



E-8-2036-A

## PL 19.2 Cover (B605/B615) (2/2)

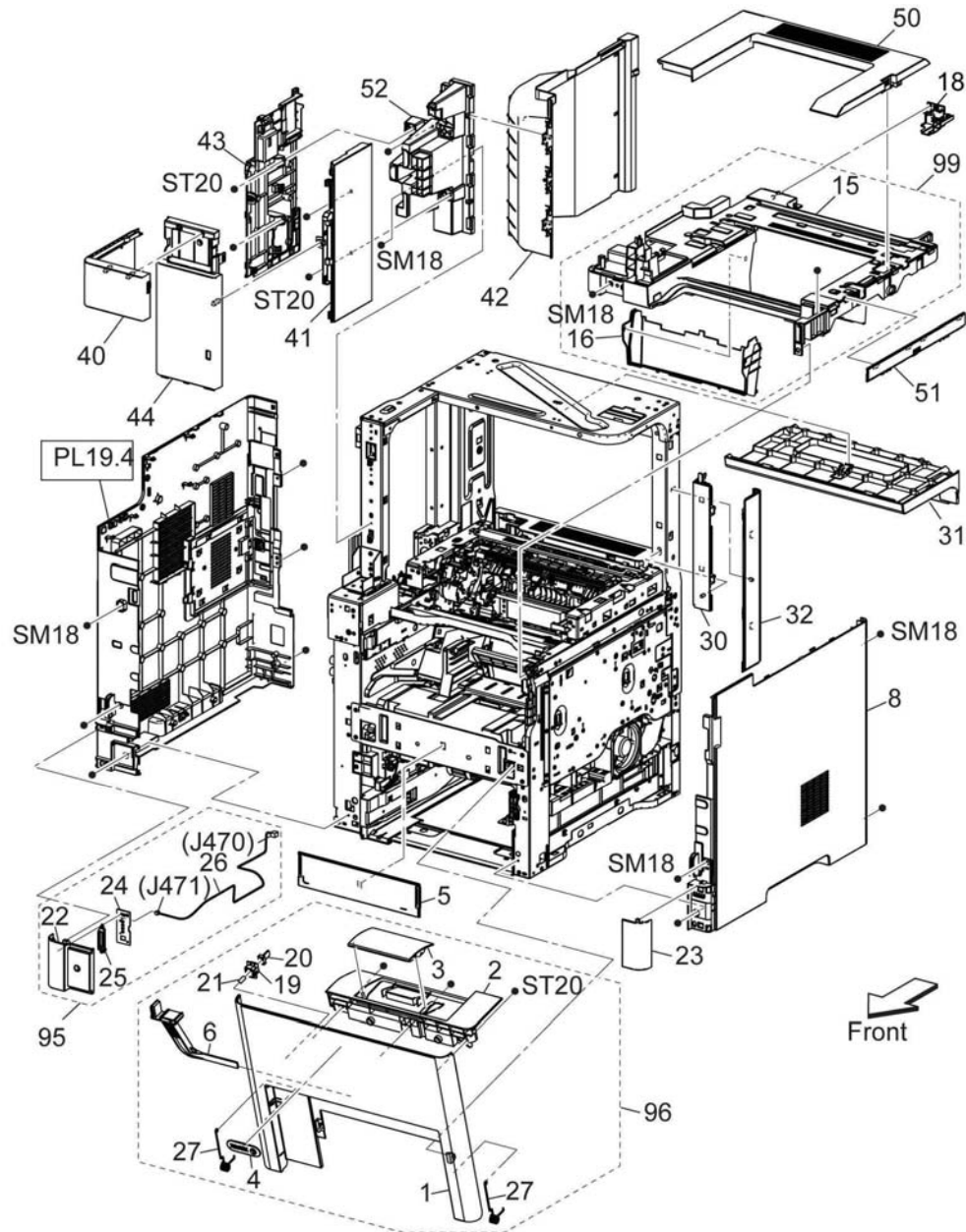
Item	Part	Description
1	822E46590	Cover side L (non-FAX) <a href="#">REP 19.7</a>
-	822E33022	Cover side L <a href="#">REP 19.7</a>
2	-	Not used
3	-	Not used
4	-	Not used
5	-	Not used
6	-	Not used
7	-	Strap cover rear (not spared)
8	-	Hinge assembly rear L (not spared)
9	-	Hinge assembly rear R (not spared)
10	-	Cover rear bottom (not spared)
11	-	2nd BTR roll assembly (not spared) <a href="#">REP 19.9</a>
12	-	Cover assembly rear AIO (not spared)
13	-	ESS window (not spared)
14	-	Plate ESS window (not spared)
15	-	Lever ESS window (not spared)
16	822E27572	WIFI cap <a href="#">REP 19.16</a>
17	-	Spring cover rear (not spared)
98	815K21540	Kit ESS window assembly (with 13-15) <a href="#">REP 19.17</a>
99	-	Kit cover assembly rear AIO (with 7x2, 12, PL14.1) (not spared) <a href="#">REP 19.18</a>



E-8-2037-A

## PL 19.3 Cover (B615\_Tall) (1/2)

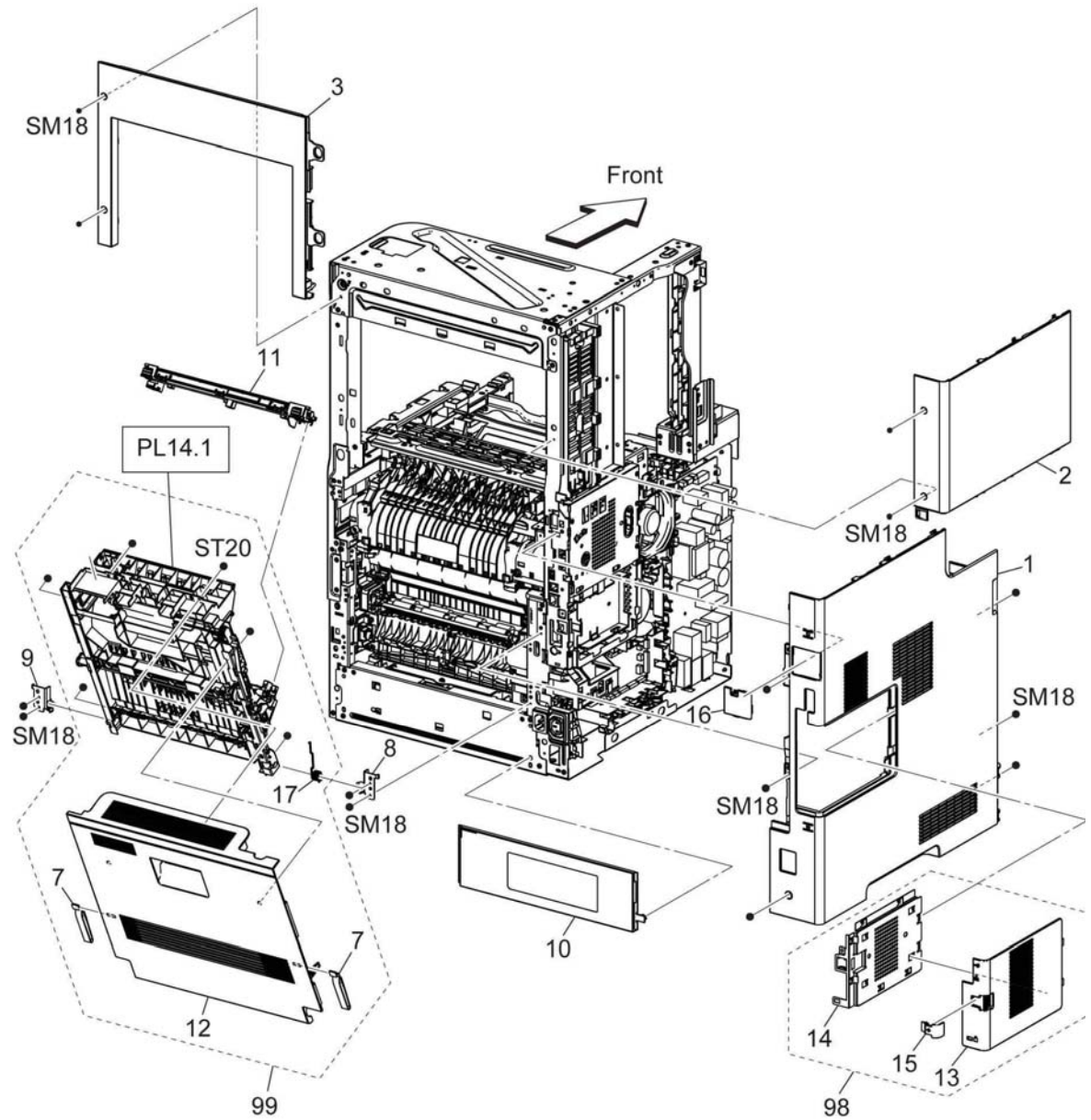
Item	Part	Description
1	-	Cover front (not spared)
2	-	Cover front top (not spared)
3	-	Tray extension (not spared)
4	-	Logo (not spared)
5	-	Cover front IN (not spared)
6	042K95900	LPH cleaner assembly
7	-	Not used
8	822E32721	Cover side R <a href="#">REP 19.12</a>
9	-	not used
10	-	Not used
11	-	Cover waste (not spared)
12	-	Not used
13	-	Not used
14	-	Not used
15	-	Cover top (not spared)
16	-	Cover exit (not spared)
18	822E32391	OPT blind cover
19	-	Holder IL (not spared)
20	-	Actuator IL (not spared)
21	-	Spring IL (not spared)
22	-	Cover front L (not spared) <a href="#">REP 19.10</a>
23	822E32421	Cover front R <a href="#">REP 19.2</a>
24	-	Tray LED HVPS PWB (not spared)
25	-	Cover shade tray (not spared)
26	-	Harness assembly LED (J470-J471) (not spared)
27	-	Spring cover front (not spared)
30	822E32960	Cover FIN inner R
31	-	Cover FIN inner right
32	822E32940	Cover FIN side R
40	822E32842	Cover ICCR FIN
41	822E32921	Cover FIN inner L
42	822E34800	Cover FIN inner side L
43	822E32901	Cover FIN side L SUB
44	822E32860	Cover FIN front <a href="#">REP 19.19</a>
50	822E34782	Cover FIN top exit
51	822E37761	Cover FIN side R cap
52	801E35940	Frame FIN
53	-	Not used
95	948K16200	Cover assembly front L (with 22, 24-26) <a href="#">REP 19.10</a>
96	948K16230	Cover assembly front (with 1-4, 6, 19-21, 27) <a href="#">REP 19.1</a>
97	-	Not used
98	-	Not used
99	948K04190	Cover assembly top (with 15, 16)



E-8-2038-A

## PL 19.4 Cover (B615\_Tall) (2/2)

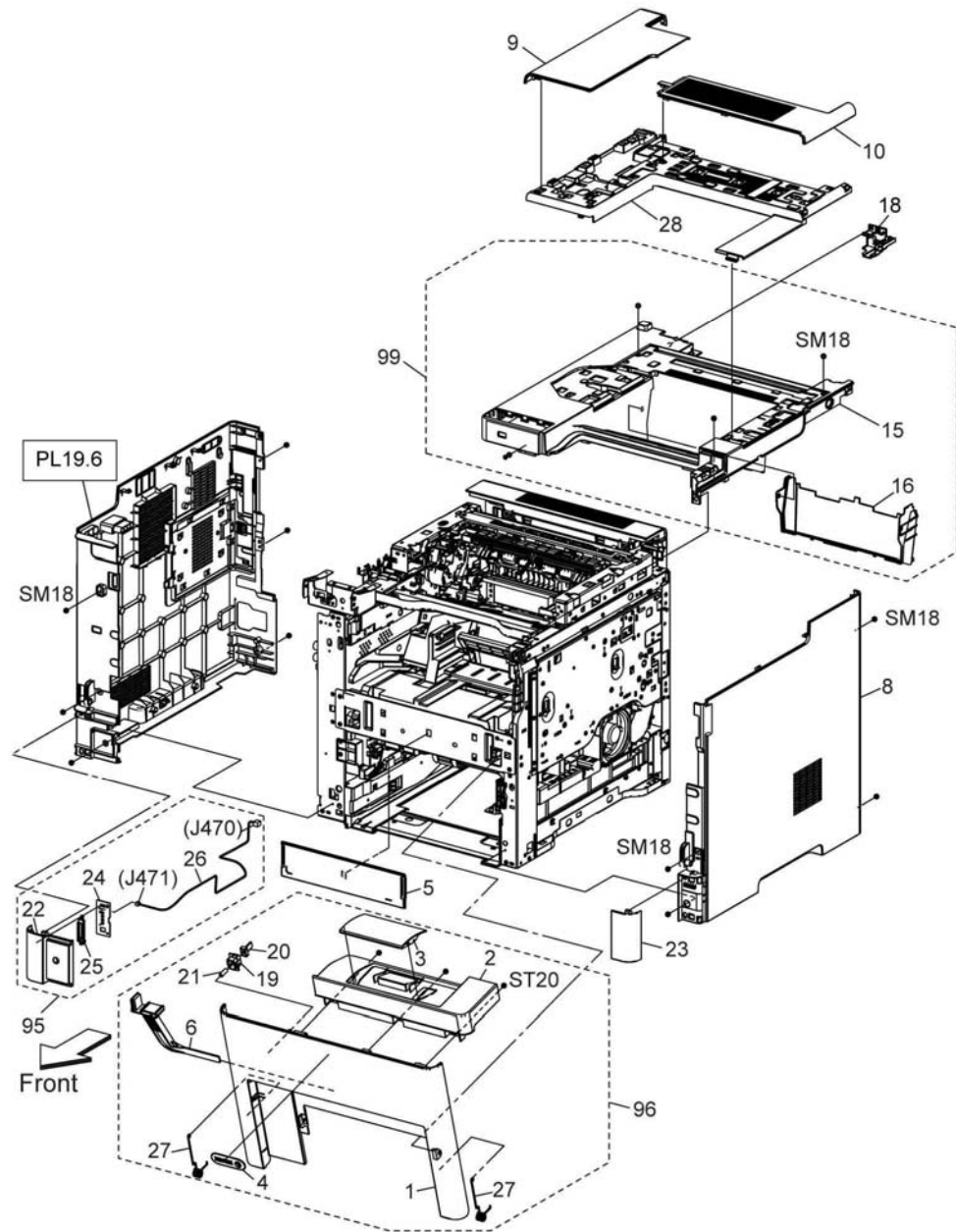
Item	Part	Description
1	822E46600	Cover side L (non-FAX) REP 19.14
-	822E33022	Cover side L REP 19.14
2	822E32882	Cover FIN side L
3	822E33001	Cover FIN rear
4	-	Not used
5	-	Not used
6	-	Not used
7	-	Strap cover rear (not spared)
8	-	Hinge assembly rear L (not spared)
9	-	Hinge assembly rear R (not spared)
10	-	Cover rear bottom (not spared)
11	-	2nd BTR roll assembly (not spared) REP 19.9
12	-	Cover assembly rear AIO (not spared)
13	-	ESS window (not spared)
14	-	Plate ESS window (not spared)
15	-	Lever ESS window (not spared)
16	822E27572	WIFI cap REP 19.16
17	-	Spring cover rear (not spared)
98	815K21540	Kit ESS window assembly (with 13-15) REP 19.17
99	-	Kit cover assembly rear AIO (with 7x2, 12, PL14.1) (not spared) REP 19.18



E-8-2039-A

## PL 19.5 Cover (B600/B610) (1/2)

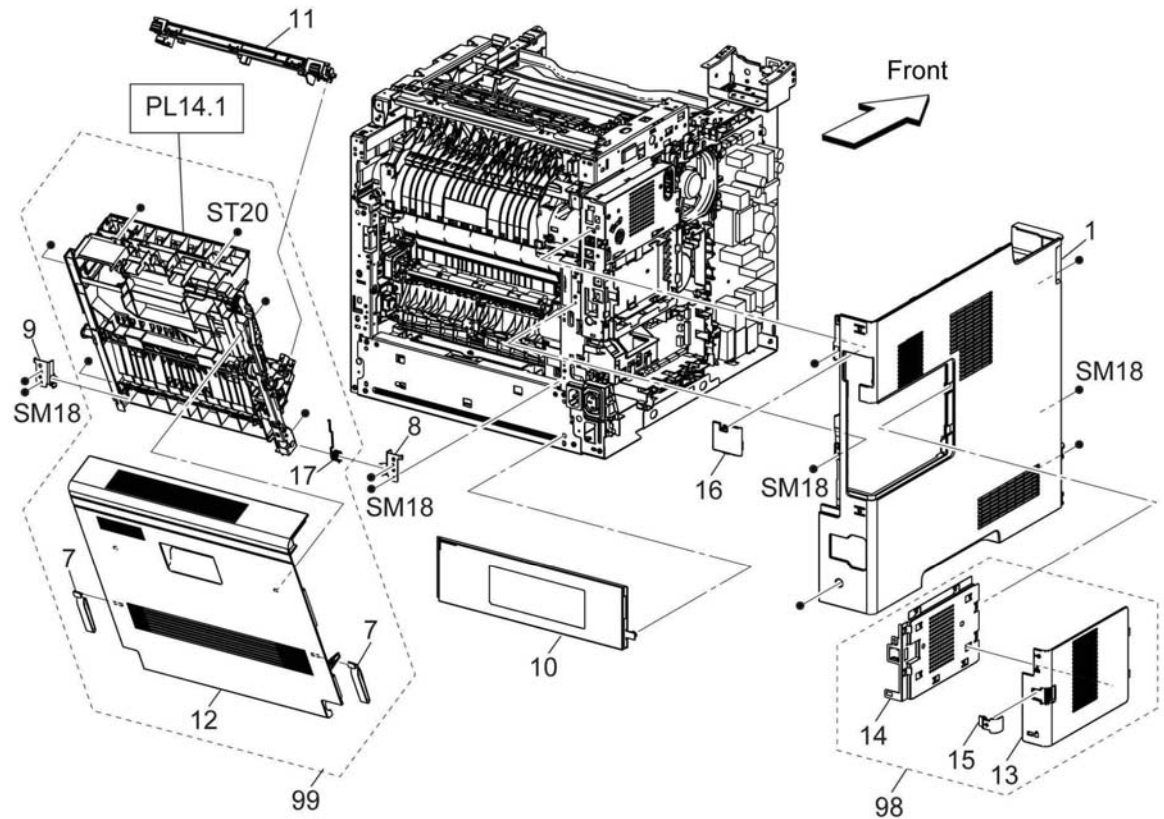
Item	Part	Description
1	-	Cover front (not spared)
2	-	Cover front top (not spared)
3	-	Tray extension (not spared)
4	-	Logo (not spared)
5	-	Cover front IN
6	-	Not used
7	-	Not used
8	822E32401	Cover side R <a href="#">REP 19.15</a>
9	-	Cover top rear L (not spared)
10	822E32383	Cover top rear R
11	-	Not used
12	-	Not used
13	-	Not used
14	-	Not used
15	-	Cover top (not spared)
16	-	Cover exit (not spared)
17	-	Not used
18	-	OPT blind cover (not spared)
19	-	Holder IL (not spared)
20	-	Actuator IL (not spared)
21	-	Spring IL (not spared)
22	-	Cover front L (not spared)
23	822E32421	Cover front R
24	-	Tray LED HVPS PWB (not spared)
25	-	Cover shade tray (not spared)
26	-	Harness assembly LED (not spared)
27	-	Spring cover front
28	-	Cover top exit
95	948K16200	Cover assembly front L (with 22, 24-26)
96	948K16180	Cover assembly front (with 1-4, 6, 19-21, 27)
97	-	Not used
98	-	Not used
99	948K04170	Cover assembly top SFP (with 15, 16) <a href="#">REP 19.20</a>



E-8-2040-A

## PL 19.6 Cover (B600/B610) (2/2)

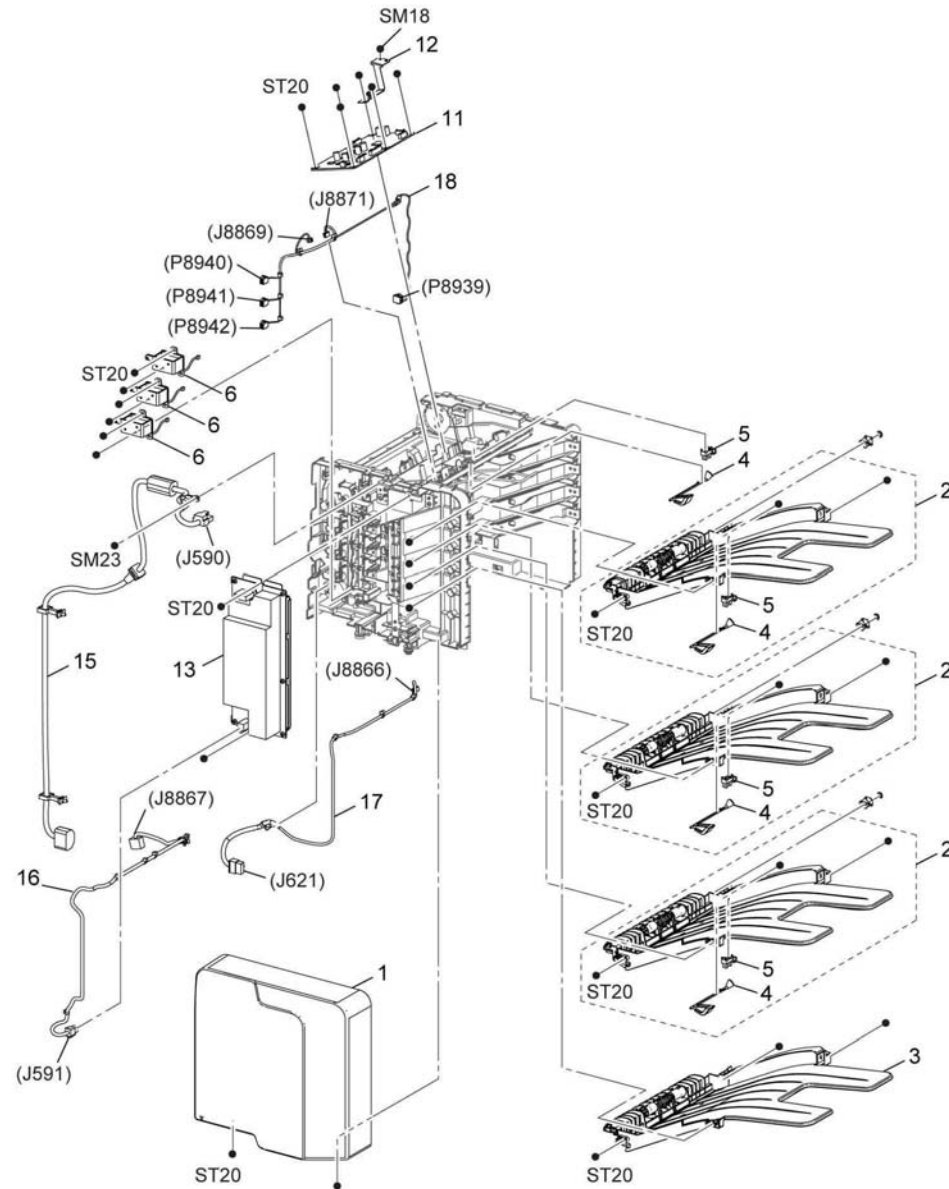
Item	Part	Description
1	-	Cover side L (not spared)
2	-	Not used
3	-	Not used
4	-	Not used
5	-	Not used
6	-	Not used
7	-	Strap cover rear (not spared)
8	-	Hinge assembly rear L (not spared)
9	-	Hinge assembly right R (not spared)
10	-	Cover rear bottom (not spared)
11	-	2nd BTR roll assembly <a href="#">REP 19.22</a>
12	-	Cover assembly rear SFP (not spared)
13	-	ESS window (not spared)
14	-	Plate ESS window (not spared)
15	-	Lever ESS window (not spared)
16	822E27572	WiFi cap <a href="#">REP 19.24</a>
17	-	Spring cover rear (not spared)
98	815K21540	Kit ESS window assembly (with 13-15)
99	-	Kit cover assembly rear SFP (with 7x2, 12, PL14.1) (not spared) <a href="#">REP 19.25</a>



E-8-2041-A

# PL 20.1 Mailbox

Item	Part	Description
1	-	Cover LH C
2	607K05020	Tray assembly (with label) (with 4, 5)
3	607K05030	Tray assembly bottom (with label)
4	-	Actuator tray full
5	-	Sensor photo int (1/2/3/4-bin full paper sensor)
6	049K34930	Bracket assembly gate solenoid
7	-	Not used
8	-	Not used
9	-	Not used
10	-	Not used
11	960K90041	GPF A4MBX PWB
12	960K90043	Bracket earth RH
13	105E22590	LVPS W/I bracket
14	-	Not used
15	-	Harness assembly MBX AC
16	-	Harness assembly MBX DC
17	-	Harness assembly MBX IF
18	-	Harness assembly trans S

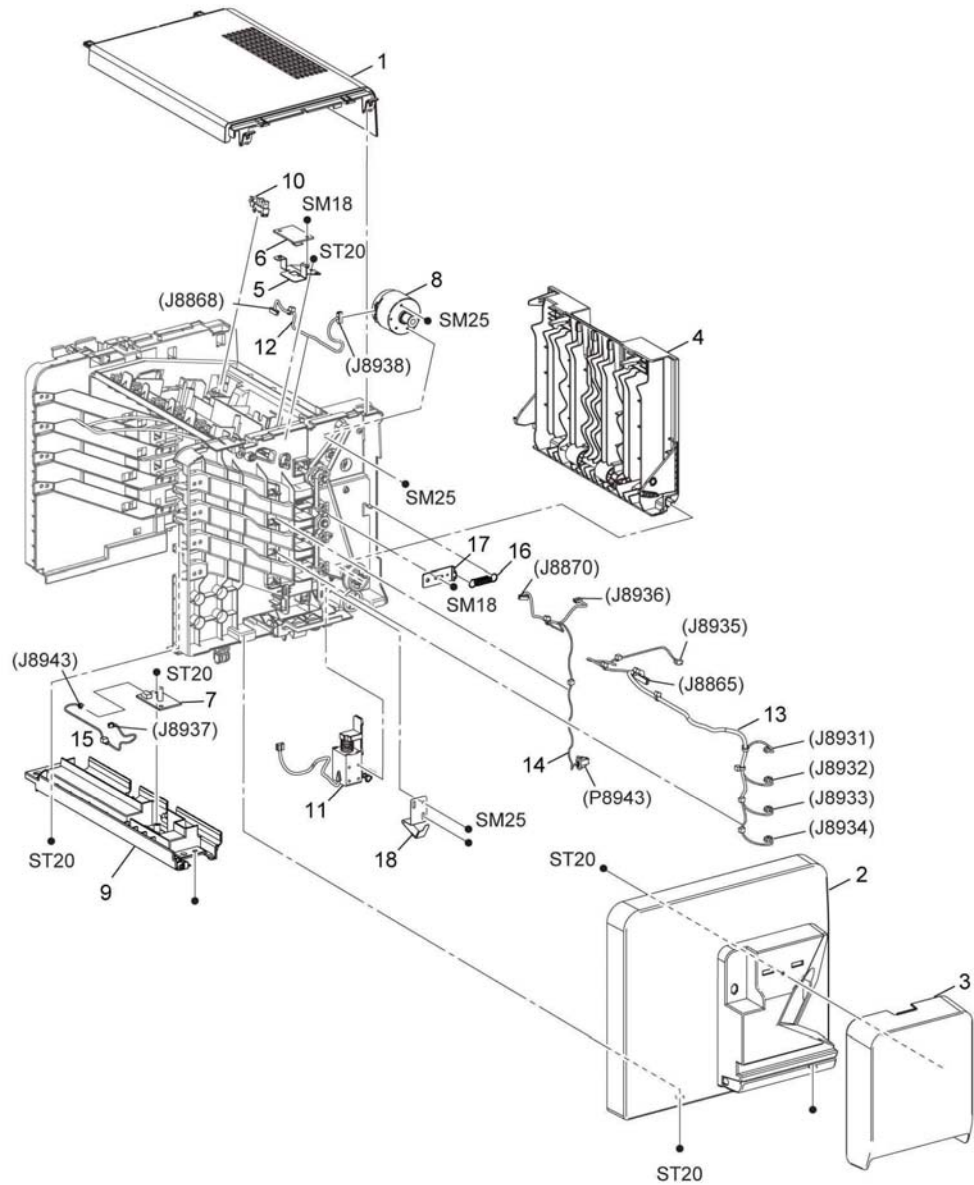


E-8-2047-A



# PL 20.2 Mailbox

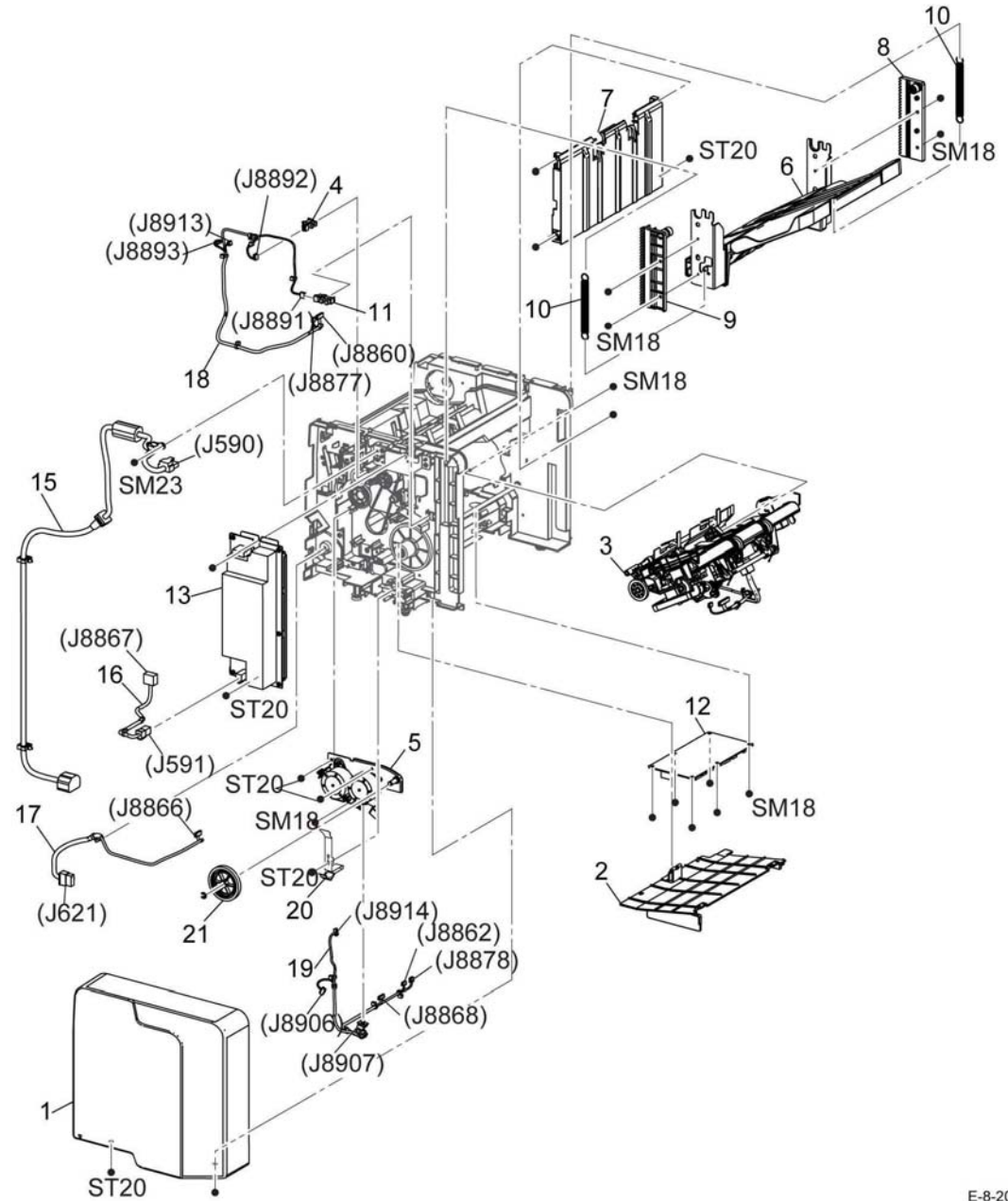
Item	Part	Description
1	-	Cover Top C (Not Spared) (REP 20.3)
2	-	Cover RH C (Not Spared) (REP 20.2)
3	-	Cover assembly staple (Not Spared)
4	-	Cover assembly rear (Not Spared)
5	-	Bracket vertical sensor MBX (Not Spared)
6	-	Vertical sensor rev PWB (Not Spared)
7	-	Vertical sensor LED PWB (Not Spared)
8	127K72241	Motor assembly (REP 20.6)
9	-	Chute low MBX (Not Spared)
10	-	Rear cover interlock sensor (Not Spared)
11	121K58300	Solenoid assembly gate (REP 20.7)
12	-	Harness assembly MBX trans M (Not Spared)
13	-	Harness assembly MBX sensor (Not Spared)
14	-	Harness assembly vertical sensor (Not Spared)
15	-	Harness assembly vertical LED (Not Spared)
16	-	Spring tension (Not Spared)
17	-	Bracket tension (Not Spared)
18	-	Plate ground RH (Not Spared)



E-8-2048-A

# PL 21.1 Finisher

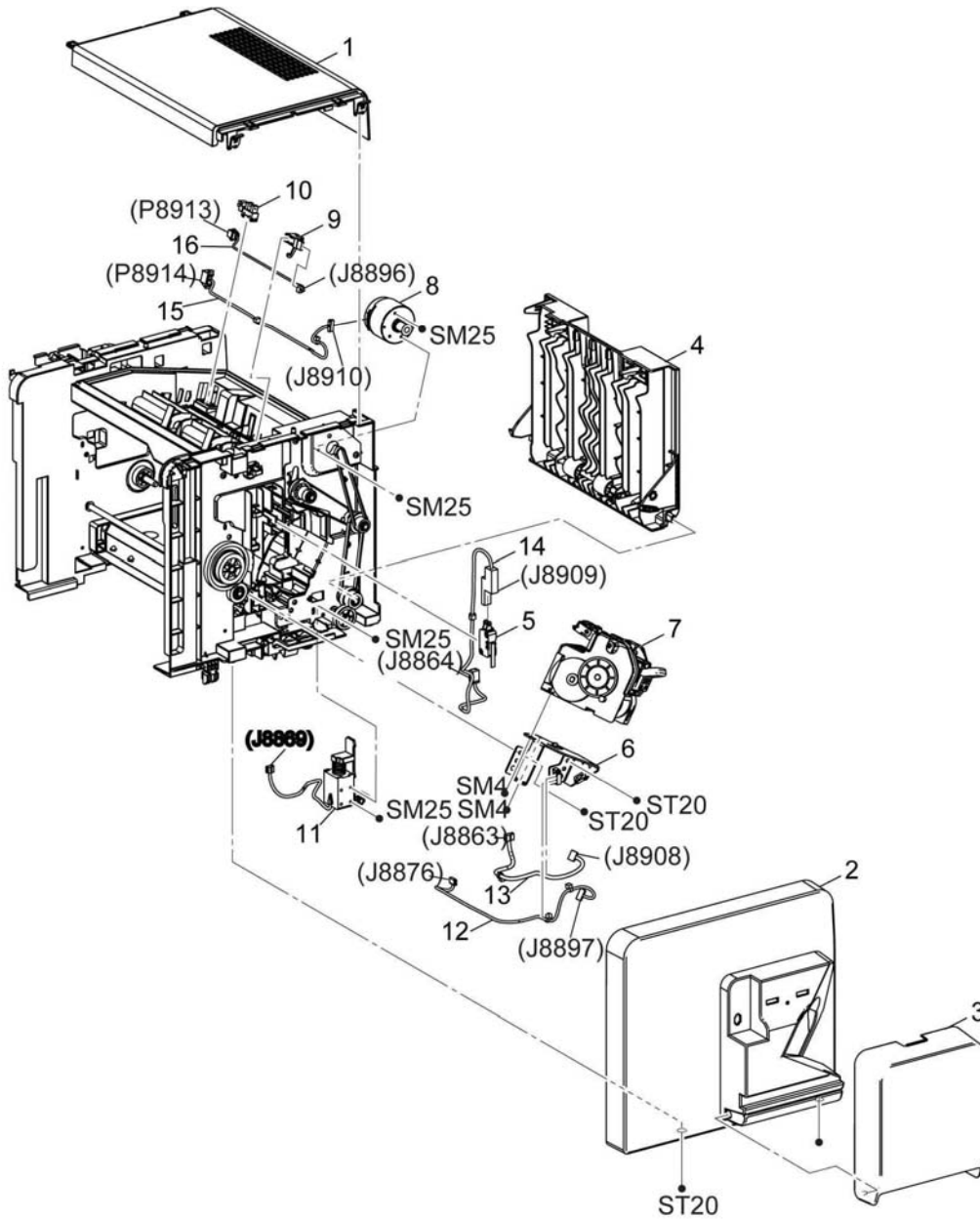
Item	Part	Description
1	-	Cover LH C
2	-	Cover Lower C
3	-	Tray assembly compile
4	-	Sensor photo int (sub paddle home sensor)
5	049K34570	Motor assembly stepping
6	050K75450	Tray assembly base
7	-	Tray guide C
8	-	Gear assembly Rack R
9	-	Gear assembly rack L
10	-	Spring-lift
11	-	Sensor photo int (stacker tray no-paper & full sensor)
12	960K90034	GPF A4fin PWB
13	105E22590	LVPS
14	-	Not Used
15	-	Harness assembly AC
16	-	Harness assembly fin DC
17	-	Harness assembly fin IF
18	-	Harness assembly fin SNR1
19	-	Harness assembly fin mot
20	-	Plate ground LH
21	-	Gear-Z50 Z20



E-8-2049-A

## PL 21.2 Finisher

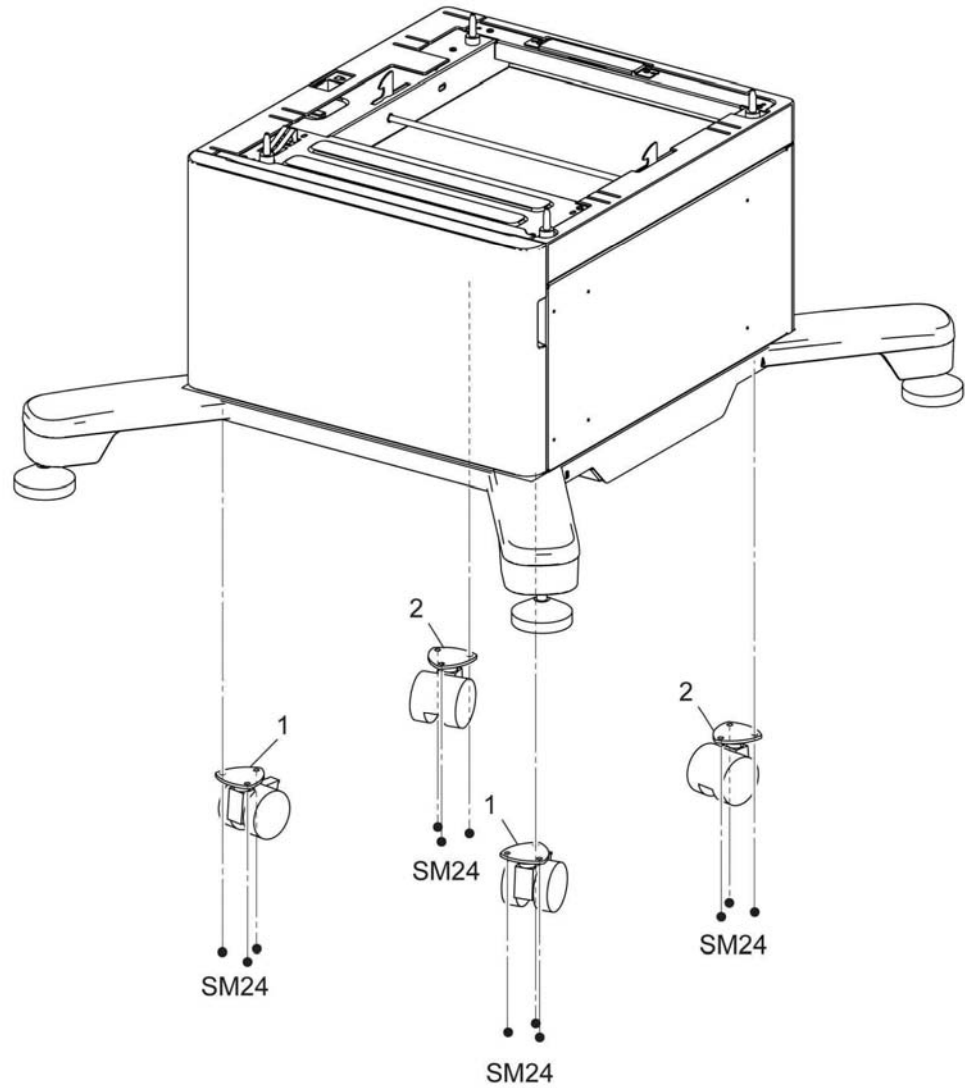
Item	Part	Description
1	-	Cover top C (Not Spared) (REP 21.3)
2	-	Cover RH C (Not Spared)
3	948K04650	Cover assembly staple
4	-	Cover assembly rear (Not Spared)
5	-	Switch safety IL (Not Spared)
6	-	Bracket stapler (Not Spared)
7	029K93260	Stapler assembly (REP 21.10)
8	127K72241	Motor assembly (REP 21.6)
9	-	Compile exit sensor (Not Spared)
10	-	Rear cover interlock sensor (Not Spared)
11	121K58300	Solenoid assembly gate (REP 21.7)
12	-	Harness assembly staple unit (Not Spared)
13	-	Harness assembly stapler M (Not Spared)
14	-	Harness assembly fin IL (Not Spared)
15	-	Harness assembly fin trans M1 (Not Spared)
16	-	Harness assembly fin compile sensor (Not Spared)
99	006K35670	Shaft assembly - paddle sub



E-8-2050-A

## PL 30.1 Cabinet

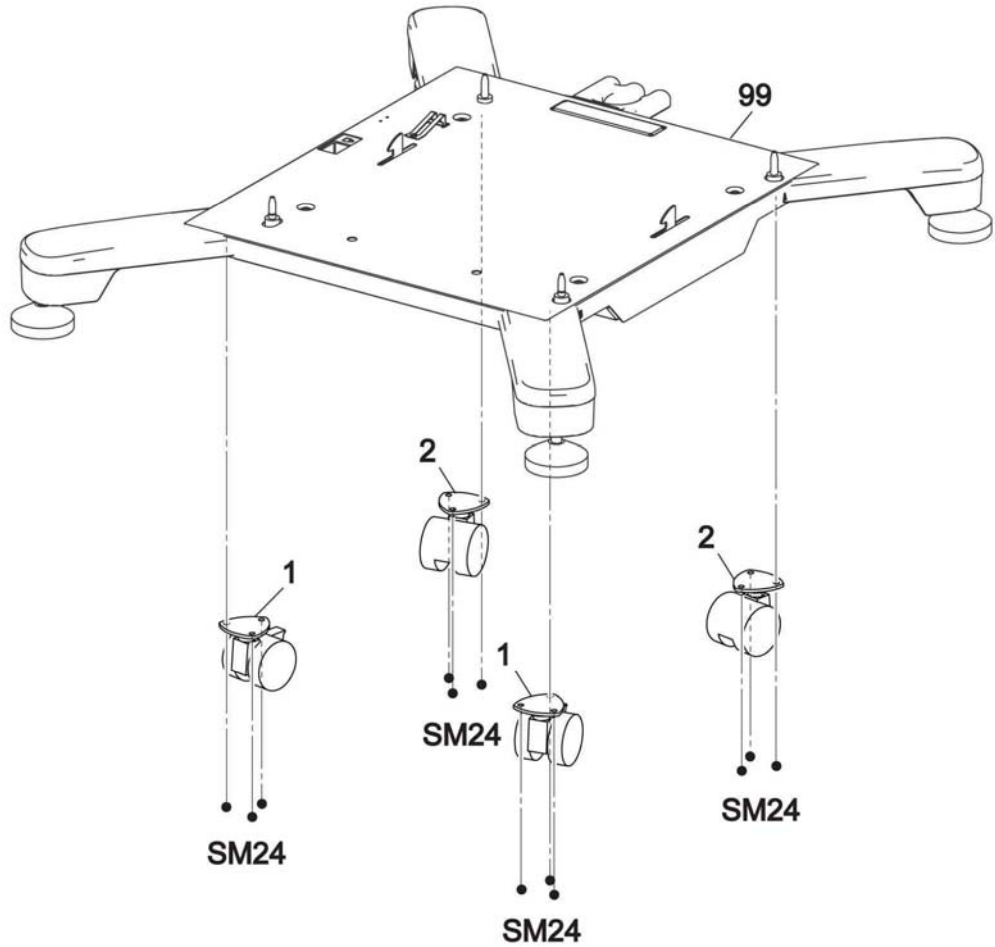
Item	Part	Description
1	-	Caster (with lock)
2	-	Caster (without lock)



E-8-2051-A

## PL 30.2 Caster

Item	Part	Description
1	-	Caster (with lock)
2	-	Caster (without lock)

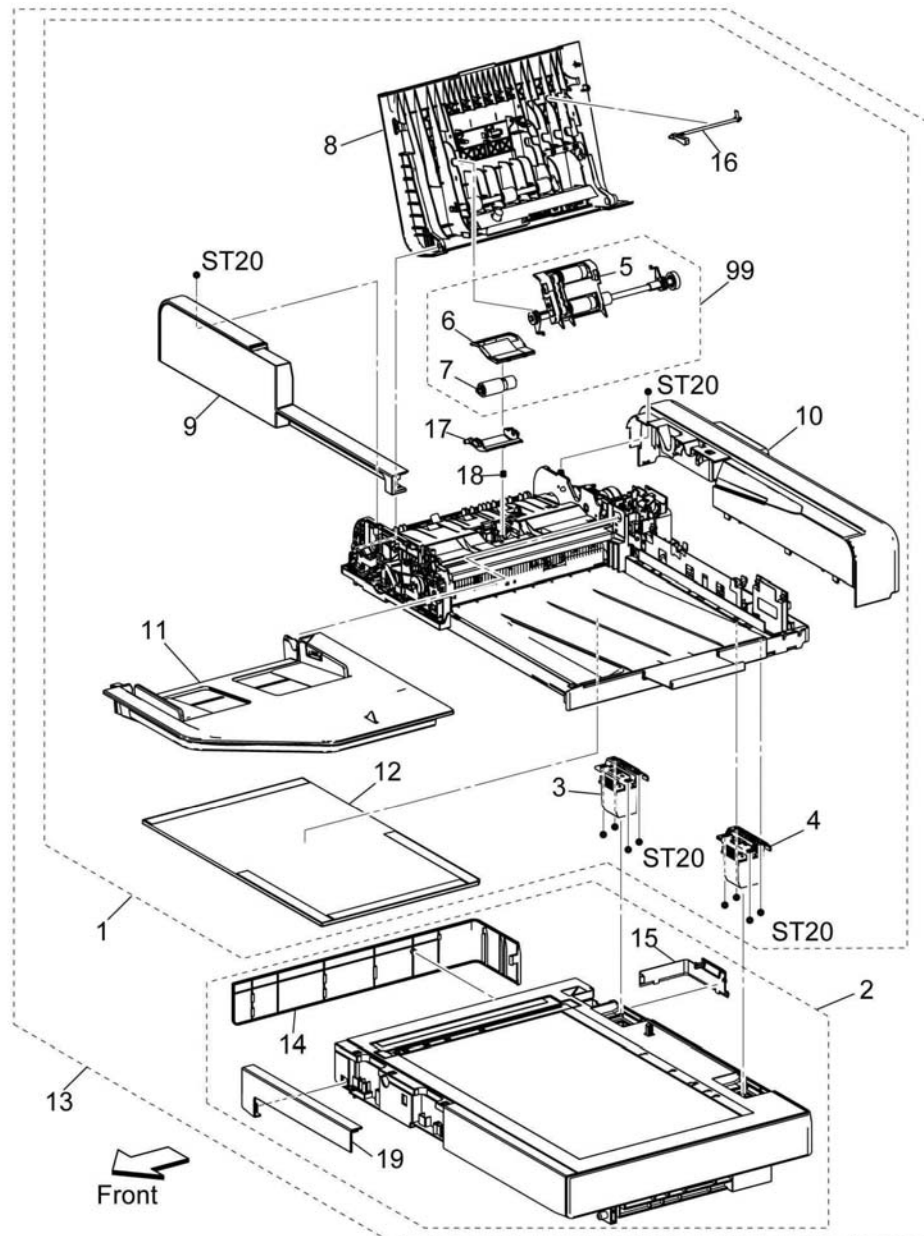


E-8-2052-A

## PL 50.1 Scanner (MFP only)

Item	Part	Description
1	607K04880	DADF assembly (with 3-12, 16, 17) <a href="#">REP 50.1</a>
-	607K04890	DADF assembly tall (with 3-12, 16, 17) <a href="#">REP 50.1</a>
2	607K05161	IIT assembly MFP low (with 14-15, 19) <a href="#">REP 50.2</a>
-	607K04861	IIT assembly MFP high std (with 14-15, 19) <a href="#">REP 50.2</a>
-	607K04871	IIT assembly MPF high tall (with 14-15, 19) <a href="#">REP 50.2</a>
3	036K92351	Counterbalance assembly L <a href="#">REP 50.3</a>
4	036K92331	Counterbalance assembly R <a href="#">REP 50.3</a>
5	-	Feeder roll DADF (see NOTE) (P/O <a href="#">PL 50.1 Item 99</a> )
6	-	Cover assembly separator (P/O <a href="#">PL 50.1 Item 99</a> )
7	-	Roll assembly separator DADF (P/O <a href="#">PL 50.1 Item 99</a> )
8	-	Feeder assembly upper (P/O <a href="#">PL 50.1 Item 1</a> )
9	-	Cover DADF front (P/O <a href="#">PL 50.1 Item 1</a> )
10	-	Cover DADF rear (P/O <a href="#">PL 50.1 Item 1</a> )
11	-	Tray assembly DADF (P/O <a href="#">PL 50.1 Item 1</a> )
12	004K03660	Cushion assembly platen <a href="#">REP 50.4</a>
13	-	Scanner assembly (with 1-2)
14	822E35271	Cover IIT left <a href="#">REP 50.5</a>
15	822E35341	Cover IIT left cap <a href="#">REP 50.6</a>
16	120E35681	DADF actuator <a href="#">REP 50.7</a>
17	-	Holder separator DADF (P/O <a href="#">PL 50.1 Item 1</a> )
18	-	Spring separator DADF (Not Spared)
19	822E35311	Cover front IIT <a href="#">REP 50.8</a>
99	-	Kit DADF feed roll (with 5-7) (P/O <a href="#">PL 50.1 Item 1</a> )

**NOTE:** HFSI. To reset the HFSI counter, refer to dC135.



E-8-2053-A

# 6 General Procedures-Information

## General Procedures

GP 1 Using the Service Diagnostics .....	6-3
GP 2 Fault Codes and History Files .....	6-4
GP 3 Device Information .....	6-5
GP 4 How to Switch Off or Switch On the Printer .....	6-6
GP 6 Electrostatic Discharge Prevention .....	6-6
GP 7 Machine Specifications .....	6-7
GP 8 General Disassembly Precautions .....	6-14
GP 9 Software Version Upgrade .....	6-15
GP 10 How to Check a Motor .....	6-16
GP 11 How to Check a Sensor .....	6-17
GP 12 How to Check a Solenoid or Clutch .....	6-18
GP 13 How to Check a Switch .....	6-18
GP 14 How to Clone Device Settings .....	6-19
GP 15 Special Boot Modes .....	6-21
GP 16 Separate System Modules .....	6-22
GP 17 External Fax Line Test .....	6-24
GP 18 Printing Reports .....	6-24
GP 19 Intermittent or Noise Problem .....	6-25
GP 20 How to Safely Lift or Move the Printer .....	6-26
GP 21 Machine Lubrication .....	6-28
GP 22 Installation Space Requirements .....	6-29
GP 23 First Copy Output Time/ First Print Out Time .....	6-33
GP 24 Restriction of Hazardous Substances (RoHS) .....	6-34
GP 26 M6edia Specifications .....	6-34
GP 27 Environmental Data .....	6-37
GP 28 Supplies Plan Conversion .....	6-38
GP 29 How to Check a Dispenser Motor .....	6-38
GP 30 IP (ESS) Specifications .....	6-39
GP 31 IIT Specifications .....	6-41
GP 32 Fax Specifications .....	6-41
GP 35 Setting Up an Ethernet Connection .....	6-42
GP 36 How to Manually Configure an IP Address .....	6-43
GP 37 How to Obtain Log Files .....	6-44
GP 38 Electrical Specifications .....	6-45
GP 39 Reset Administrator Password .....	6-46
GP 40 Xerox Supplies and Accessories .....	6-47
GP 41 Hardware Information .....	6-49
GP 42 Glossary of Terms, Acronyms and Abbreviations .....	6-49

## Diagnostics

dC118 Jam Counter .....	6-55
dC120 Failure Counter .....	6-55
dC122 Fault History .....	6-56
dC125 Active Faults .....	6-56
dC126 System Registration Adjustment .....	6-57
dC131 NVM Read / Write .....	6-58
dC132 Device ID / Billing Data .....	6-59

dC135 HFSI Counter (High Frequency Service Item) .....	6-59
dC140 Analog Component Monitoring .....	6-60
dC301 NVM Initialization .....	6-61
dC305 Panel Diagnostics .....	6-62
dC330 Component Control .....	6-62
dC362 Restore NVM Values .....	6-67
dC363 NVM Backup/Restore .....	6-68
dC500 Blank Page Threshold Value .....	6-68
dC612 Print Test Pattern .....	6-69
dC945 IIT Calibration .....	6-74
dC1010 Signals Sending Test .....	6-74
dC1011 Relay On / Off Test .....	6-75

## Change Tags

Tags/MODs .....	6-77
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## GP 1 Using the Service Diagnostics

This procedure describes how to enter and exit diagnostics and the available service routines.

### Diagnostics Functions Overview

**Table 1 Diagnostic routines** lists the diagnostic routines available to test or execute.

**Table 1 Diagnostic routines**

dC118	Jam Counter	Displays the count for jams that have occurred up to now.
dC120	Failure Counter	Displays the count for failures that have occurred up to now.
dC122	Fault History	Displays the history in four categories: document feeder jam, paper jam, failure, and last 40 Faults.
dC125	Active Faults	Displays the current faults.
dC126	System Registration Adjustment	Measures and adjusts registration to set correct positions.
dC131	NVM Read / Write	To refer to the NVM data and set/modify it.
dC132	Device ID / Billing Data	In cases where a serial number mismatch occurs, this function allows these errors to be corrected.
dC135	HFSI Counter	Displays the spec life (threshold value) and the current value (usage status) of the periodic replacement parts. You can change the spec life and reset the current value. Job history can be used to record/check the previous 3 replacements.
dC140	Analog Component Monitoring	Monitors the analog value of the A/D converter sensor, by operating the various components.
dC301	Initialize NVM	To perform initialization for any NVM area. When initializing IOT area, back up/restore is necessary in dC363.
dC305	Panel Diagnostics	To perform diagnosis of the LED / Audio which is implemented in the UI panel.
dC330	Component Control	Displays the logic state of input component input signals and operates the output components.
dC362	Restore NVM Values	Do not use. This function does not operate.
dC363	Backup/ Restore NVM	To backup / restore the NVM values (IOT areas). Use this command when exchanging the MCU. Do not use when exchanging the ESS. Also, use when initializing the IOT in dC301.

**Table 1 Diagnostic routines**

dC500	Blank Page Threshold Value (MFP only)	To set the value that is used to determine what is a blank document when performing blank page detection for fax machines.
dC612	Print Test Pattern	To print the test pattern that is stored in the printer for checking image quality and isolating problems.
dC945	IIT Calibration	For information only. Do not use this routine.
dC1010	Signals Sending Test	For information only. Do not use this routine.
dC1011	Relay On/ Off Test	For information only. Do not use this routine.

### Using the Diagnostics

This section explains how to enter and exit the diagnostics on the device.

#### Entering the Diagnostics

**NOTE:** Log out of system administration tools and delete all print jobs in the queue before entering diagnostics

1. Press and hold the **Home** button more than five seconds, then release.
2. Enter the passcode (6789), and touch **OK**.
3. Touch **Diagnostics**.
4. Select the required diagnostics routine.

#### Exiting the Diagnostics

1. Touch **Exit** and select **Clear Error Log History** or **Keep Error Log History**.
2. Touch **Service**.
3. Select **Log Out** and exit the diagnostics.

#### Entering Diagnostics Using an Administrator Password.

**NOTE:** Admin users have the ability to create an extra layer of password protection before entering diagnostics. Security sensitive customer may have this feature invoked. In this case, you need to obtain the additional password from the customer. The process for entering diagnostics will be as follows:

1. Press and hold the **Home** button for more than five seconds, then release.
2. Enter the diagnostics password (6789) and press **Next** (do not press OK).
3. Enter the maintenance password (set by the customer) and press **OK** (either location).
4. Touch **Diagnostics**.
5. Select the required diagnostics routine.

### Administrator 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 39](#), Reset Administrator Password.
3. Select **System** and then **Security**.
4. Click on **Customer Service Engineer Access Restriction**.

**NOTE:** if this option is not displayed, click on *SSL/TSL Settings and enable HTTP – SSL/TLS Communication*, then click *OK (then, Restart Now)*. After the restart, log in again as *admin and return to System>Security,>Customer Service Engineer Access Restriction*.

5. Disable the feature, then click **OK**, then **Restart Now**.
6. Enter diagnostics from the UI using the normal password (6789).

### Exiting Diagnostics

1. Touch **Exit** and select **Clear Error Log History** or **Keep Error Log History**.
2. Touch **Service**.
3. Select **Log Out**.

## 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

- For information on paper jam codes, refer to [dC118](#) Jam Counter.
- For information on failures, refer to [dC120](#) Fault Counter.
- To display fault history by category, refer to [dC122](#) Fault History.
- For information on current machine faults, refer to [dC125](#) Active Faults.

### Function, Fault, Component Codes

Refer to [Table 1](#) for a description of some of the function and fault code prefixes.

**Table 1** Fault code prefix and functional area

Fault Code Prefix	Functional Area
001	Standby power
002	User interface
003	Machine run control
005	Document transportation
010	Fusing and copy/print transportation
012	Finishing
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 the device button. The following options display:

- Language
- About:
  - Device Name
  - Model
  - Serial Number
  - Xerox Asset Tag
  - Customer Asset Tag
  - Software Version
  - Contact Information
    - Customer Support
    - Fax Number Line 1
    - Location
  - Network Information
    - Host name
    - IP address
  - Wi-Fi Information
    - Link Quality
    - Link Channel
  - Job Overwrite (on devices with an HDD)
  - Information Pages
- 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 802.1X and IPSec
  - Reset fonts, forms and macros
  - Reset to factory defaults

## GP 4 How to Switch Off or Switch On the Printer

### Purpose

#### 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.**

The printer has two multifunction buttons on the control panel, the Home button and the Power button. The Power/Wake button restarts, powers up, or powers down the printer. This button also enters and exits low-power mode, and flashes when the printer is in power-saver mode.

To power on the printer, or to exit Low-Power mode or Sleep mode, press the Power/Wake button.

#### NOTE:

- The Power/Wake button is the only power switch on the printer.
- The printer exits Low-Power mode or Sleep mode automatically when it receives data from a connected device.
- When in Low-Power mode, or Sleep mode, the touch screen is turned off and unresponsive. To wake the printer manually, press the Power/Wake button.

#### CAUTION

**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.**

To restart, place the printer in Sleep Mode, or power off the printer:

1. At the printer control panel, press the Power/Wake button.
2. Select an option.
  - To restart the printer, touch **Restart**. At the prompt, touch **Restart**.
  - To place the printer in Sleep Mode, touch **Sleep**.

**NOTE:** In Sleep mode, the touch screen is powered off and the Power/Wake button flashes.

- To power off the printer, touch **Power Off**.
3. If the printer does not respond to a single press of the Power/Wake button, press and hold the button for 5 seconds. A message appears that requests you to wait for the printer to power off.

## GP 6 Electrostatic Discharge Prevention

Some semiconductor components, and the sub-assemblies that contain them, are vulnerable to damage by electrostatic discharge (ESD). These techniques reduce the occurrence of component damage caused by static electricity.

Be sure the power is Off and observe all other safety precautions.

- Immediately before handling any semiconductor components, drain the electrostatic charge from your body. This can be accomplished by touching an earth ground source or by wearing a wrist strap device connected to an earth ground source. Wearing a wrist strap will also prevent accumulation of additional bodily static charges. Be sure to remove the wrist strap before applying power to the unit under test to avoid potential shock.
- After removing a static sensitive assembly from its anti-static bag, place it on a grounded conductive surface. If the anti-static bag is conductive, you may ground the bag and use it as a conductive surface.
- Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage some devices.
- Do not remove a replacement component or electrical sub-assembly from its protective package until you are ready to install it.
- Immediately before removing the protective material from the leads of a replacement device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
- Minimize body motions when handling unpacked replacement devices. Motion such as your clothes brushing together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an electrostatically sensitive device.
- Handle IC's carefully to avoid bending pins.
- Pay attention to the direction of parts when mounting or inserting them on circuit boards.

## GP 7 Machine Specifications

### Specifications by Product Type

Go to one of the following:

- [VersaLink B600/B610 SFP Printer Configurations and Options](#)
- [VersaLink B605/B615/B615\\_Tall MFP Configurations and Options](#)
- [Optional Equipment](#) (weights and dimensions)

**NOTE:** For additional information about device specifications, see the following:

- [Installation Space Requirements GP 22](#)
- [Media Specifications GP 26](#)
- [Environmental Specifications GP 27](#)
- [Electrical Specifications GP 28](#)

### VersaLink B600/B610 SFP Printer Configurations and Options

The Xerox® VersaLink B600/B610 single-function printer is available in the configurations listed in [Table 1](#).

**Table 1 SFP configurations**

Configuration	Feature
600DN	58ppm Print Automatic 2-sided printing Ethernet network connectivity USB2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF, Finisher or Mailbox
610DN	65ppm Print Ethernet network connectivity USB2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF (can be used with either a Finisher or Mailbox)

\* Also available in 220V.

### Standard Features (B600/B610 SFP)

See [Table 2](#) for a list of standard features for SFP configurations.

**Table 2 SFP standard features**

Feature	Description
Processor speed	1.05Ghz Qualcomm
RAM DDR3	667Mhz 2GB
Program ROM (eMMC)	3.6 GB
NVM (MRAM)	128KB

**Table 2 SFP standard features**

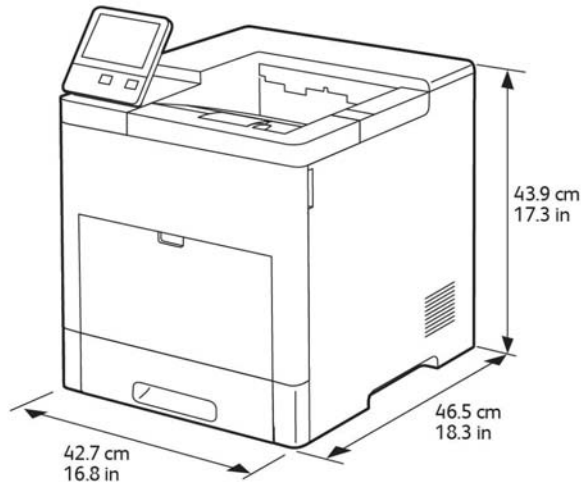
Feature	Description
Print speed (standard mode-simplex)	HS: 55ppm LS: 45ppm
Printer resolution	600 x 600 dpi (std.) 1200 x 2400 dpi (enhanced)
USB 2.0 front / back (host)	Standard
USB 3.0 rear (target)	Standard
Near Field Comm (NFC)	Standard
Single-pass Duplex Automatic Document Feeder (DADF)	N/A
Bypass tray (150 sheet)	Standard
Tray 1 (550 sheet)	Standard
550 OPT tray (550 sheet)	Optional
Duplex printing	Standard
FAX	N/A
Wireless LAN	Optional
HDD	Serial ATA Interface 2.5 inch HDD 250GB
IC Card Reader	USB connection type IC card reader (cable length:120mm) <i>The extension cable used only in SFP is 2 feet.</i>
FDI Cable	Optional
High Capacity Feeder (2000 sheet)	Optional
Finisher	Optional with B600/B610
Mailbox	Optional with B600/B610
<b>Paper Capacity:</b>	
Bypass Tray	150 sheets
MainTray	550 sheets
Maximum Print Size	Legal (216 x 356mm, 8.5 x14 in.)
2-Sided Printing	N configuration: manual DN configuration: up to 176 g/m <sup>2</sup> from any tray
Control Panel	5-inch LCD touch screen and keypad navigation
Connectivity	USB 2.0 USB 3.0 10/100/1000 Base-T Ethernet ICCR (Support) NFC WiFi FDI
Memory (std.)	2GB
HDD	Serial ATA interface 2.5in. HDD 250GB
Remote Access	Embedded web server

### Options and Upgrades

- Wireless connectivity
- Optional 550 sheet feeder: all configurations, up to 4 allowed
- Optional 2000 sheet high capacity feeder: used with either a finisher or mailbox
- High Capacity Feeder: 2000 sheet capacity
- Finisher or mailbox
- Stand and caster base

### Weights and Dimensions

Refer to [Figure 1](#) and [Table 3](#) for the weight and dimensions for standard B600 and B610 printers.



E-8-0900-A

**Figure 1 Standard configuration**

**Table 3 Weights and dimensions: Standard SFP**

Standard configuration (without the optional 550-Sheet feeder)	
Width	427mm (16.9 in.)
Depth	465mm (18.4 in.)
Height	439mm (17.3 in.)
Weight (B600)	27.6kg (60.8 lb.)
Weight (B610)	29.4kg (64.8 lb.)

## VersaLink B605/B615/B615\_Tall MFP Configurations and Options

### Basic Configurations and Options VLB605/B615\_Tall

The Xerox® VersaLink® B605/B615 Multi-function Printer is available in the configurations listed in [Table 4](#):

**Table 4 MFP configurations**

Configuration	Feature
605S (3in1)	58ppm Print Auto 2-sided printing Ethernet network connectivity US2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF
605X (4in1)	58ppm Auto 2-sided printing Copy Scan Fax Ethernet network connectivity US2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF

### Standard Features (MFP)

**Table 5 MFP Standard features**

Feature	Description
Processor speed	1.05Ghz Qualcomm
RAM DDR3	667Mhz 4GB
Program ROM (eMMC)	3.6 GB
NVM (MRAM)	128KB
Print speed (standard mode-simplex)	HS: 55ppm LS: 45ppm
Simplex print speed (605)	Standard and enhanced modes - up to 58 ppm
Print speed (615)	Standard and enhanced modes - up to 65 ppm
2-sided print speed (605)	Standard and enhanced modes - up to 58 images per minute
2-sided print speed (615)	Standard and enhanced modes - up to 65 images per minute
Printer resolution	600 x 600 dpi (std.) 1200 x 2400 dpi (enhanced)

**Table 5 MFP Standard features**

Feature	Description
<b>Paper Capacities:</b> Bypass tray Main tray Optional 550-Sheet Feeder HCF	150 sheets 550 sheets 550 sheets 2000 sheets
2-sided printing	All configurations
<b>Copy Speed</b> 1-sided copy  2-sided copy	21 copies for black and white 9 copies for black and white
Copy resolution	600x600 dpi
<b>Document Feeder:</b> 605 615 615 Tall	Single-pass Duplex Automatic Document Feeder Optional Feeder and High Capacity Feeder Optional Feeder and High Capacity Feeder Optional Feeder and High Capacity Feeder
<b>Fax Capability</b> Scan Speed (simplex) Scan Speed (single pass duplex) Resolution (standard) Resolution (super fine)	55dpm 110ipm 200dpi 400dpi
<b>Scan Speed:</b> Default scan input speed (DADH) -simplex Default scan input speed (DADH) -duplex	30ipm 30ipm
Document feeder capacity	50 sheets
Optical scan resolution	600x600dpi
<b>Maximum Scan Size:</b> Document Glass Single-pass DADF	215.9x297mm (8.5 x11.7 in.) 215.9x355.6mm (8.5 x14 in.)
Maximum Print able area	210.9x351mm
File Formats	JPEG JBIG2 LWZ/MH/MMR/MRC Compression TIFF XPS PDF/PDF/A/Searchable PDF/Linearized PDF
Scan Driver Compatibility	WIA TWAIN
Supported Scan Destinations	Scan to Home Scan to USB Scan to Email Scan to Network (FTP or Browse SBM)
Control Panel	7-inch LCD touch screen and keypad navigation

**Table 5 MFP Standard features**

Feature	Description
Connectivity	USB 2.0 USB 3.0 10/100/1000 Base-T Ethernet ICCR (Support) NFC FDI
Memory (std.)	4GB
Remote Access	Embedded Web Server

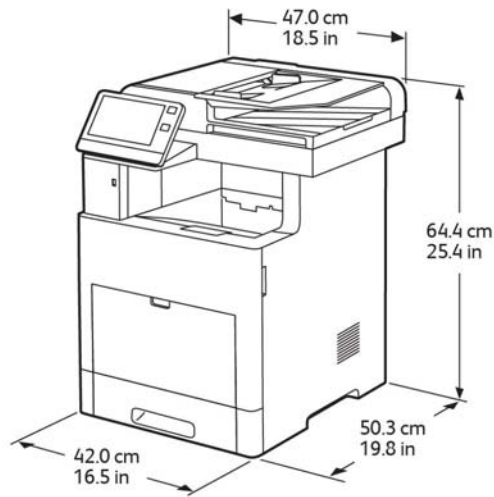
**Options and Upgrades**

- Wireless connectivity: available with all configurations
- 550 sheet feeder: all configurations (up to 4 allowed or 1 allowed with HCF)
- 2000 sheet high capacity feeder (HCF): available on all configs.
- Finisher or mailbox: available on 605\_Tall
- Stand and caster base: available with all configurations

**Weights and Dimensions**

Refer to the following figures and tables for the weight and dimensions for standard B605 and B615 printers.

- B605/B615 MFP: [Figure 2](#) and [Table 6](#)
- B615\_Tall: [Figure 3](#) and [Table 9](#)



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Figure 2 MFP Standard

Table 6 Weights and dimensions (B605/B615)

Width	470mm (18.5 in.)
Depth	505mm (19.9 in.)
Height	644mm (25.4 in.)
Weight (B505)	36.1kg (79.6 lb.)
Weight (B605)	36.1kg (79.6 lb.)

Basic Configurations and Options VLB605/B615\_Tall

Table 7 MFP configurations

Configuration	Feature
605SL_Tall (3in1)	58ppm Auto 2-sided printing Copy Scan Ethernet network connectivity US2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF (can be used with either a Finisher or Mailbox)

Table 7 MFP configurations

Configuration	Feature
605XL-Tall (4in1)	58ppm Auto 2-sided printing Copy Scan Fax Ethernet network connectivity US2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF (can be used with either a Finisher or Mailbox)
615SL_Tall (3in1)	65ppm Auto 2-sided printing Copy Scan Ethernet network connectivity US2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF (can be used with either a Finisher or Mailbox)
615XL_Tall (4in1)	65ppm Auto 2-sided printing Copy Scan Fax Ethernet network connectivity US2 and USB3 connectivity FDI Optional 550 Sheet Feeder and optional HCF (can be used with either a Finisher or Mailbox)

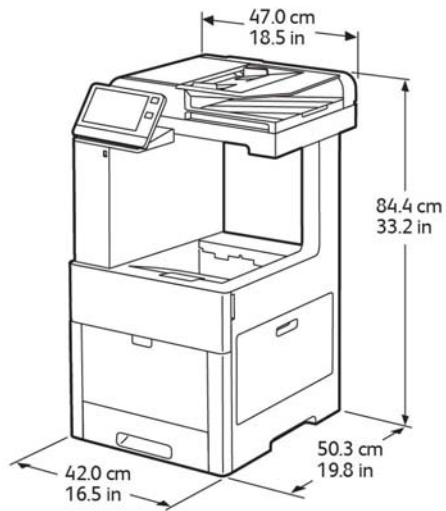
Table 8 Configurations and options (MFP\_Tall)

Model	VL B605/B615_Tall MFP
Processor speed	1.05Ghz Qualcomm
RAM DDR3	667Mhz 4GB
Program ROM (eMMC)	3.6 GB
NVM (MRAM)	128KB
Print speed (standard mode-simplex)	55ppm
Printer resolution	600 x 600 dpi 1200 x 2400 dpi
USB 2.0 front / back (host)	Standard
USB 3.0 rear (target)	Standard
Near Field Comm (NFC)	Standard
Single-pass Duplex Automatic Document Feeder (DADF)	Standard
Bypass tray (150 sheet)	Standard



**Table 8 Configurations and options (MFP\_Tall)**

Model	VL B605/B615_Tall MFP
Tray 1 (550 sheet)	Standard
550 OPT tray (550 sheet)	Optional
Duplex printing	Standard
FAX	Standard
Wireless LAN	Optional
HDD	Serial ATA interface 2.5 inch HDD 250GB
IC Card Reader	USB connection type IC card reader
FDI Cable	Optional
High Capacity Feeder (2000 sheet)	Optional
Finisher or Mailbox	Optional (choice)



**Figure 3 MFP (B615\_Tall)**

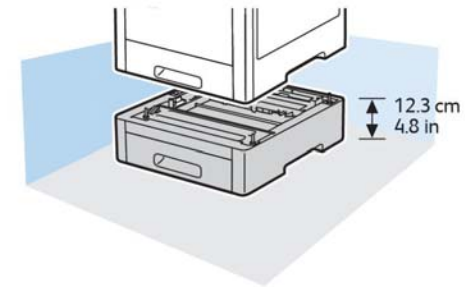
**Table 9 Weights and dimensions (B615\_Tall)**

Width	470mm (18.5 in.)
Depth	503mm (19.8 in.)
Height	844mm (33.2 in.)
Weight (B605_Tall)	38.8 (85.6 lb.)

## Optional Equipment

The following figures and tables display the weight and dimensions of available optional equipment.

- [Figure 4, Table 10](#): Optional 550 sheet feeder
- [Figure 5, Table 11](#): Caster base with cabinet
- [Figure 6, Table 12](#): Caster stand with HCF
- [Figure 7, Table 13](#), Finisher (B600/ B610)
- [Figure 8, Table 13](#), Finisher (B605/ B615\_Tall)
- [Figure 9, Table 14](#), Mailbox (B600/ B610)
- [Figure 10, Table 14](#), Mailbox (B605/B615)



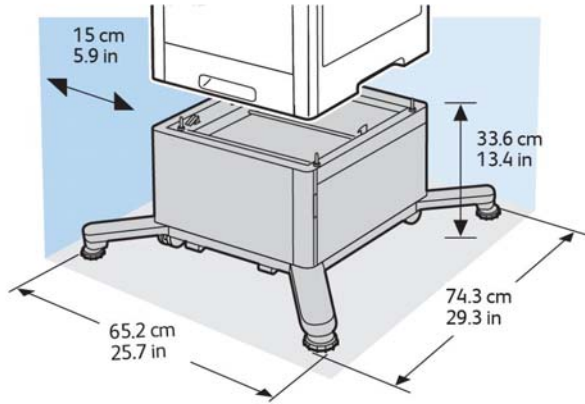
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**Figure 4 Optional 550 sheet feeder**

**Table 10 Weight and dimensions: optional 550 sheet feeder**

Width	420mm (16.5 in.)
Depth	464.5mm (18.3 in.)
Height	123.5mm (4.8 in.)
Weight	6.6kg (14.6 lb.)

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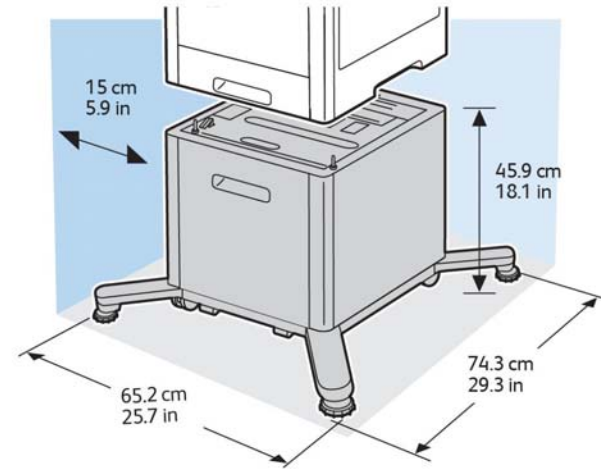


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Figure 5 Caster base with cabinet

Table 11 Weight and dimensions: Optional caster with cabinet

Width (min)	652mm (25.7 in.)
Width (max)	802mm (31.6 in.)
Depth	743mm (29.3 in.)
Height	336mm (13.4 in.)
Weight (cabinet)	16.6kg (36.6 lb.)
Weight (caster base)	8.5kg (18.8 lb.)

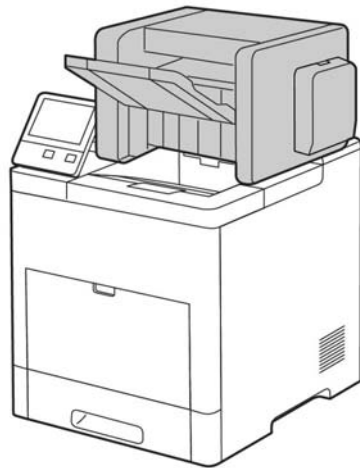


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Figure 6 Caster base with HCF

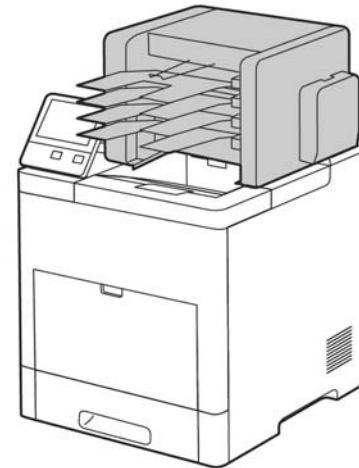
Table 12 Weight and dimensions: caster stand (with HCF)

Width (min)	652mm (25.7 in.)
Width (max.)	802mm (31.6 in.)
Depth	743mm (29.3 in.)
Height	459mm (18.1 in.)
Weight (HCF)	19.7kg (43.4 lb.)
Weight (caster base)	8.5kg (18.8 lb.)



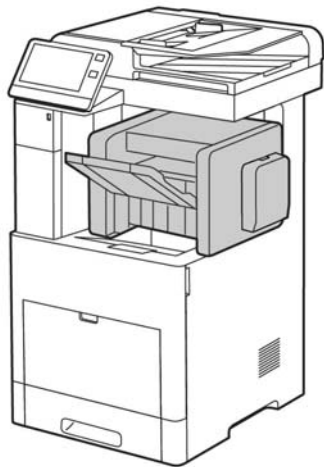
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**Figure 7 Finisher (B600/B610 SFP)**



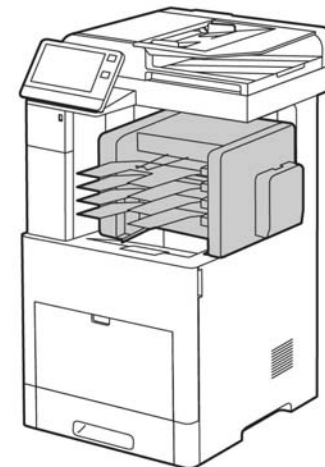
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**Figure 9 Mailbox (B600/B610 SFP)**



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**Figure 8 Finisher (B605/B615\_Tall MFP)**



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**Figure 10 Mailbox (B605/ B615 MFP Tall)**

**Table 13 Weight and dimensions: finisher**

Width	477mm (18.8 in.)
Depth	450mm (17.7 in.)
Height	248mm (9.8 in.)
Weight	6.8kg (15 lb.)

**Table 14 Weights and dimensions: mailbox**

Width	411mm (16.2 in.)
Depth	450mm (17.7 in.)
Height	248mm (9.8 in.)
Weight	5.2kg (11.5 lb.)

Refer to [GP 22](#) for detailed space requirements and dimensions of the finisher.

## GP 8 General Disassembly Precautions

### Purpose

Use these precautions when disassembling and reassembling components.

### Procedure

**NOTE:** *The close proximity of cables to moving parts makes proper routing essential. If components are removed, any cables disturbed by the procedure must be restored as close as possible to their original positions. Before removing any component from the machine, note the cable routing that will be affected.*

Whenever servicing the machine, perform the following:

1. Check the replacement part number.
2. Check to verify that jobs are not stored in memory.
3. Switch Off the machine, [GP 4](#).
4. Use a flat and clean surface.
5. Only install authorized components.
6. Do not forcibly remove plastic components.
7. Ensure all components are in their correct position.
8. When replacing screws into plastic components, turn the screw counterclockwise to engage the original thread, then turn the screw clockwise. Do not overtighten. If a new thread is cut, the plastic component will lose the ability to hold the screw. This also applies to metal components.

## GP 9 Software Version Upgrade

### Purpose

Use this procedure to update the printer software, or when a repair requires the software to be reinstalled.

### Obtaining the Software

The software download manager tool (FWDLMgr.exe) and the device software file (.bin) can be downloaded from the Xerox.com>Support>Support & Drivers page.

### Procedure

**NOTE:** . Prior to updating software, ensure that **software upgrade** is enabled.

There are different methods for downloading the machine software:

- [Software Loading via the Special Boot Menu](#)
- [Software Loading via the Embedded Web Server](#)
- [Software Download via the USB Port](#)
- [Software Download Manager Tool using Port 9100](#)

#### Software Loading via the Special Boot Menu

**NOTE:** . A USB memory device is needed for this method. The USB device must be formatted using the FAT32 file system.

1. Download the software (.bin) file. Refer to [Obtaining the 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 4](#). Insert the USB memory device.
5. Enter special boot mode, [GP 15](#). Select **Download Mode** on Special Boot Menu 1/3, then touch **YES**. The UI will display SW update progress. The machine reboots.

#### 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, the machine prints a software upgrade report. 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](#)

#### Software Download via the USB Port

Perform the steps that follow:

1. Download the appropriate software download manager tool (FWDLMgr.exe) and software (.bin) to an appropriate file location on the PWS. Refer to [Obtaining the Software](#).
2. Switch off the machine, [GP 4](#).
3. Connect a Type A to Type B USB cable (male on both ends), from the PWS to the machine.

4. Switch on the machine, [GP 4](#).
5. Enter special boot mode, [GP 15](#). Select download mode on SPECIAL BOOT MENU 1/3.
6. As the UI displays 0% completed, double click on FWDLMgr.exe to run the software download manager tool.
7. Touch **Agree** on the software update tool (license).
8. The printer model and file selection window will open. From the pull down menu, select the printer model, then browse to where the software file (.bin) is located. Double-click the (.bin) file then touch **Add** and then touch **Next**.
9. The Communication Interface Selection window will open. Select **USB Port**, then touch **Next**.
10. 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.*

11. When the update is complete, the result window opens; touch **Complete**. The machine reboots, and prints a Software upgrade report.

#### Software Download Manager Tool using Port 9100

1. Download the appropriate software download manager tool (FWDLMgr.exe) and software (.bin) to an appropriate file location on the PWS. Refer to [Obtaining the Software](#).
  2. Switch off the machine, [GP 4](#).
  3. Disconnect the ethernet cable from the machine. Connect an ethernet crossover cable from the PWS network port to the machine network port, [GP 35](#).
  4. Switch on the machine, [GP 4](#). When the machine reaches the Ready state, print a configuration report, [GP 18](#).
  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):
      - Windows 7: 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. 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 software download manager tool.
  8. Touch **Agree** on the software 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 software 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.

#### Check Now

Use the Check Now feature to check for software updates.

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**.
3. If new software is available, continue to follow the on-screen instructions.

**NOTE:** . If the device software is current, no action is taken.

#### Periodic Updates

Use this feature setup the device to check periodically (daily, weekly, monthly) for software updates.

1. Log in as an administrator via the embedded web server (refer to the appropriate User Guide for details.) Ensure that Software Update is set to **Enable**; (Home/System/Software Update/Enable).
2. Under the **Check Automatically** banner, use the pull down menu to set when the device should check for updates; never, daily, weekly or monthly.

#### Updates with File Specified

1. Download the software (.bin) file, refer to [Obtaining the 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 software file (.bin) is located. Select the (.bin) file, then touch **Install Now**.

## GP 10 How to Check a Motor

This procedure describes how to check a motor:

### Initial Actions

#### WARNING

**Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. 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 motors mechanisms are clean, free to move and lubricated correctly.
3. Enable 24V with chain-link 041-001 and test motor operability using **dC330**. Run the motor for 30 seconds, if the motor shows signs of or can be heard to slow down, the motor is defective. Install a new motor.
4. Perform the appropriate procedure:
  - Two Wire DC Motor
  - DC Motor with Integral Encoder
  - Four Wire Stepper Motor

**NOTE:** The voltages, PJ numbers, pin numbers and PWB names shown are an example only. Go to the wiring diagram associated with the RAP for the correct information.

**NOTE:** In cases where the motor may be driven forward or backward, the same two feed wires are used, but the voltages on them are reversed, to reverse the motor direction. Such motors may have two component control codes, for forward and reverse. A typical application is a tray lift motor with a tray-up and a tray-down direction

1. Check the drive voltage when the component control code for the motor is entered. If the drive voltage is present at the motor, but the motor does not turn, install a new motor. If the drive voltage is not present, go to step 2.
2. Check that the drive voltage is correct at the driver output pins of the PWB when the component control code for the motor is entered. If the drive voltage is present, check the wiring and connectors to the motor. If the drive voltage is not present, check the power to the driver PWB. If the power to the PWB is good, install a new driver PWB.

**NOTE:** This type of motor has the normal drive voltages for a DC motor, plus the +3.3VDC and 0V lines for the encoder. The encoder has two outputs, A and B, producing pulses when the motor is on. When the motor is running in one direction, the encoder A pulses lead the encoder B pulses. In the other direction, encoder B pulses lead encoder A pulses. In this way the controller can detect that the motor is running in the correct direction.

Check the operation of the motor as follows:

1. Check the drive voltage when the component control code for the motor is entered. If the drive voltage is present at the motor, but the motor does not turn, install a new motor. If the drive voltage is not present, go to step 2.
2. Check that the drive voltage is correct at the output pins of the driver PWB when the component control code for the motor is entered. If the drive voltage is present, check the wiring and connectors to the motor. If the drive voltage is not present, check the power to the driver PWB. If the power to the PWB is good, install a new driver PWB.

**NOTE:** When checking for pulses, use a standard digital multimeter. Using the DC volts range, or the AC volts range, expect to obtain a reading greater than 1V and less than 4 volts, while the motor is running. The actual value depends on the meter's reaction to square waves and to the particular frequency of the pulses. It is common to obtain a reading of 2 to 3 volts. If the meter has a minimum and maximum recording facility, expect a maximum value of around +4.9 volts DC, and a minimum value of around +0.2 volts DC

Check the operation of the encoder as follows:

Check for pulses when the motor is running. If pulses are present at the motor, but not present at the PWB, check the wiring to the motor and repair or install new wiring. If pulses are present at the PWB, but there is still an error indicating that the motor is failing, install a new driver PWB.

**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 multimeter to check stepper motor coil resistance.

1. Refer to [Figure 1](#) as an example. Disconnect PJ111. Check the +24VDC supply and the phase pulses to GND when the component control code for the motor is entered. If the supply and pulses are present, install a new motor.
2. Check the connectors and wiring to the motor. Repair or install new wiring, as necessary.
3. Disconnect PJ11. Check the +24VDC. If +24VDC is not present, check the power to the PWB. If the power is good, install a new PWB. Check the phase pulses at the PWB. If the phase pulses are not present at the PWB, install a new PWB.

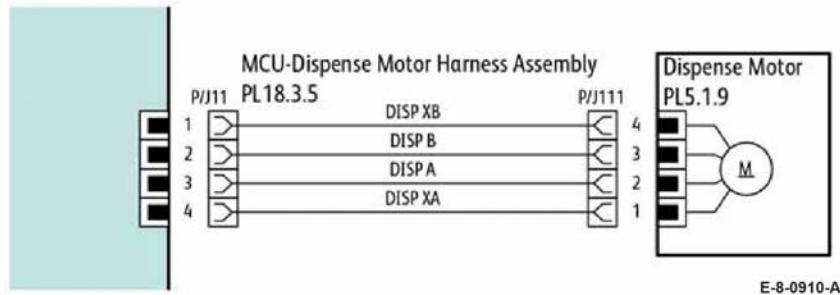


Figure 1 Motor wiring diagram

## GP 11 How to Check a Sensor

Use this procedure to check the operation of all types of sensor.

**NOTE:** Some sensors have a resistor within the sensor and other sensors require a resistor on the PWB. The resistor limits the current through the LED. The voltage to the sensor LED with an external resistor, is typically 1.2V.

**NOTE:** The voltages, PJ numbers, pin numbers and PWB names shown are examples only. Go to the wiring diagram associated with the RAP for the correct information.

**NOTE:** In some cases, two sensors are used to form an interruptible beam of light. In these cases, the LED of one sensor and the sensing element of the other sensor are used. Treat the two sensors as if they were housed in the same body for diagnostic purposes, ignoring the unused part of each sensor. If the combined sensors do not operate correctly and the beam path is clear of obstruction, it may be necessary to install both new sensors.

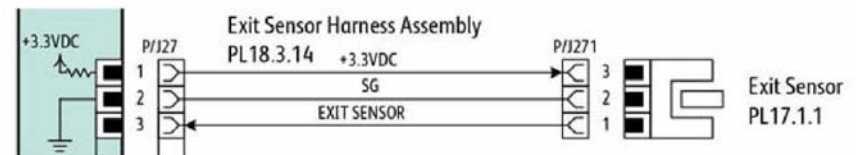
### Quick Sensor Check

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 sensor in the example wiring diagram shown in [Figure 1](#):

1. Actuate the sensor and check for a change in voltage at PJ27, pin 3. If the voltage changes, install a new PWB. If the voltage does not change, continue to the next step.
2. Disconnect PJ271 at the sensor. Check for +3.3VDC and 0V (GND) on the harness (between pins 2 and 3). If the voltage is correct, install a new sensor. If voltage is not present, go to the next step.
3. Disconnect PJ27 and PJ271. Check the harness and the connectors for continuity. Repair or install a new harness if continuity test indicates an open wire. If harness is good, go to the next step.
4. Check for +3.3VDC and 0V (GND) between pins 2 and 3. If voltage is not correct, install a new PWB.



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Figure 1 Sensor wiring diagram

## GP 12 How to Check a Solenoid or Clutch

Use this procedure to check a clutch or solenoid.

### Initial Actions

#### WARNING

Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.

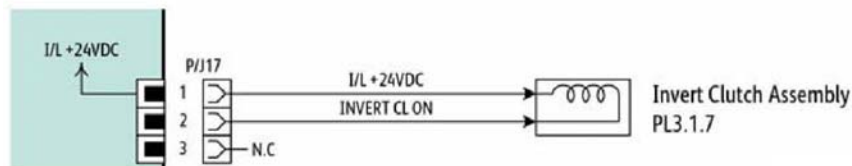
1. For a clutch, check that the shafts, gears, rolls etc., associated with the clutch are free to rotate, clean and lubricated where applicable.
2. For a solenoid, check that the solenoid is free to actuate and that the mechanisms associated with the solenoid are free to move.

### Procedure

**NOTE:** The voltages, PJ numbers, pin numbers and PWB names shown are an example only. Go to the wiring diagram associated with the RAP for the correct information.

**NOTE:** When a solenoid is energized in diagnostics, movement is seen. When a clutch is energized in diagnostics, the sound of the clutch action is heard. If possible, run the motor connected to the clutch to confirm when the clutch is energized

1. Enter the dC330 output code for the clutch or solenoid. If the clutch or solenoid does not energize, continue with step 2.
2. Refer to Figure 1 as an example. Disconnect PJ17, check for +24VDC at pin 1 on the wiring side of the connector. If the voltage is correct, install a new solenoid or clutch.
3. Reconnect PJ17, enter the dC330 output code for the clutch or solenoid, while measuring the voltage between pin 1 and ground. If the voltage does not change when the code is entered, install a new PWB.
4. If the fault is intermittent, perform the actions that follow:
  - a. Check the wiring. Repair or replace as necessary.
  - b. Operate the clutch or solenoid under normal running conditions. If the clutch or solenoid operates intermittently or with hesitation, install new parts.
  - c. Check that the clutch or solenoid has enough drive to operate the mechanism to which it is attached; if necessary, install a new clutch or solenoid.



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Figure 1 Clutch wiring diagram

## GP 13 How to Check a Switch

Use this procedure to check the operation of a switch.

**NOTE:** Figure 1 shows an interlock switch actuated by the closing of a door.

### Initial Actions

#### WARNING

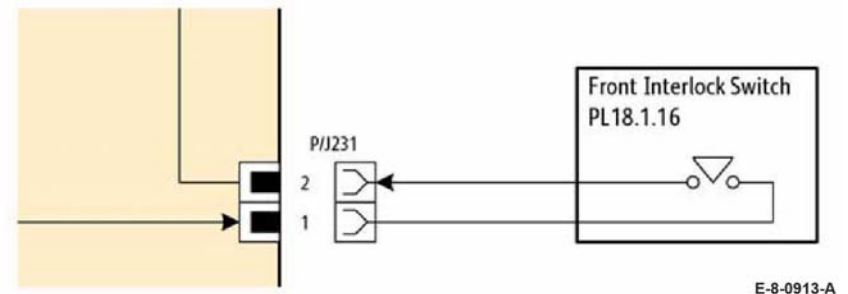
Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.

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. Go to the wiring diagram associated with the RAP for the correct information.

### Procedure

1. Enter dc330 diagnostics and enable the component control code for the switch to test. Actuate the switch. If the display changes, the switch operates correctly. If the display does not change, perform the following steps.
2. Inspect the mechanism intended to actuate the switch. Adjust, repair or install a new part as needed if it is not actuating the switch.
3. Disconnect the switch and measure the resistance between the two connector pins. If it does not change from infinite to 0 ohms as the switch is actuated, install a new switch. If the resistance changes correctly, go to the next step.
4. Check the continuity of the wire harness between the switch and its control PWB. If open, repair or install a new harness.
5. If the switch and wire harness have tested good, install a new PWB that the switch is connected to.



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Figure 1 Switch wiring diagram



## GP 14 How to Clone Device Settings

### 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](http://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 18](#). 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.
  - If running XP, click on **Start**, then select **Run**. Type **CMD** in the Run dialog box and press **Enter**.
  - If running W7, select **Start** and in the Search box above the Start button, type **CMD** and 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 Run dialog box.

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
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 web page cannot be opened, verify that Web Services are enabled on the configuration page. If the web browser is set to use a Proxy address for the internet connection, it will not be possible to open the printer's web page 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. Select individual parameters to clone from the device or Select/Clear All.
4. Click on Create.
5. 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.
6. Click Close.
7. Log out of **Admin** mode, [GP 1](#).

## 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 1](#). 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 XP.

**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** and enter an IP address similar to the printer to manually set the PWS IP address and subnet mask to match the printer's IP configuration settings.
7. Click **OK** twice and exit Network Connections and return to [Creating the Clone File](#).

### For XP:

1. Click **Start** and select **Control Panel**.
2. Click **Network and Internet Connections** and then select **Network Connections**.
3. Right-click on **Local Area Connection** and then select **Properties**.
4. On the General tab (for local area connection), click **Internet Protocol (TCP/IP)**, and then click on **Properties**.
5. Click **Use the following IP address** to manually set the computer's IP address and subnet mask to match the printer's IP configuration.
6. Click **OK** twice to exit Network Connections 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 15 Special Boot Modes

### Purpose

To start the device in various modes to enable special functions. The special boot modes are accessible by turning On the power while pressing and holding down specific buttons on the control panel.

### Procedure

1. Switch Off the machine [GP 4](#).
2. Simultaneously press then hold down the **Home** and **Power** buttons until the device powers On and SPECIAL BOOT MENU appears. Refer to, [Figure 1](#) Special boot menu.

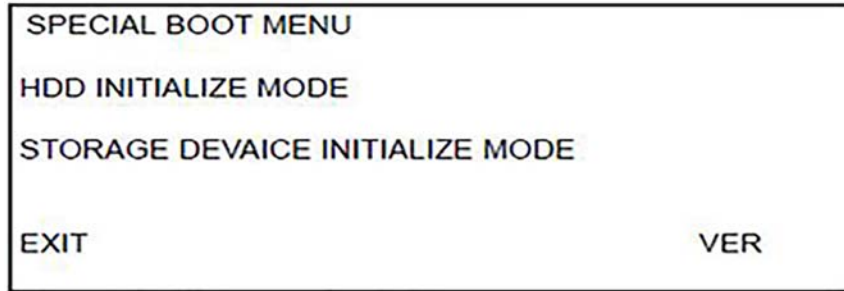


Figure 1 Special boot menu

3. Simultaneously touch the letters **A** in **SPECIAL** and **B** in **BOOT**, and the **Home** button. Do not hold any of the three locations, just touch/press then release simultaneously. Refer to, [Figure 2](#), Touch A and B.

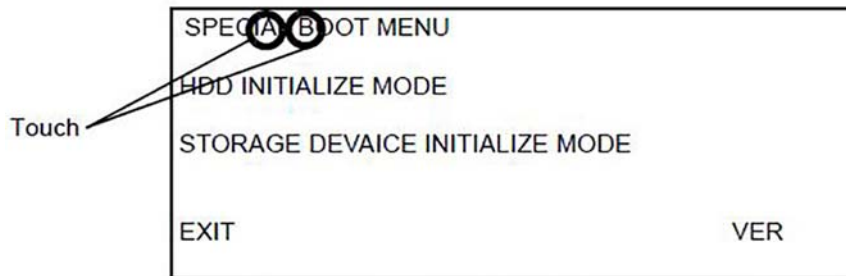


Figure 2 Touch A and B

4. At the keypad screen, enter code number 6789#. The first special boot menu displays.

### CAUTION

*Do not turn 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

DOWNLOAD MODE	--BOOT MODE-- DOWNLOAD MODE ARE YOU SURE? YES NO	Device starts in software download mode. See <a href="#">GP 9</a> , Software Version Upgrade.
LONGDIAG MODE	--BOOT MODE-- LONGDIAG MODE ARE YOU SURE? YES NO	Performs a more detailed check than the usual device diagnostic items at the start up of the machine.
01. JOB LOG CLEAR MODE	--BOOT MODE-- 01. JOB LOG CLEAR MODE ARE YOU SURE? YES NO	Used to clear corrupted files.
02. FACTORY INIT MODE	--BOOT MODE-- 02. FACTORY INIT MODE ARE YOU SURE? YES NO	<p><b>CAUTION</b></p> <p><i>Do not perform this mode unless directed.</i></p> <p>Machine will be reset and the message "NVMEM is cleared" will be displayed. Switch the machine off, then on, <a href="#">GP 4</a>. Fault code 116-334 will be displayed, again switch the machine off, then on, <a href="#">GP 4</a>. Fault code 124-315 will be displayed, perform <a href="#">dC301</a>. The machine will restart at the install wizard.</p> <p><b>CAUTION</b></p> <p><i>All customer configured settings will be deleted. To restore the customer configured settings, a clone file is required. Refer to <a href="#">GP 14</a>.</i></p>
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

Table 1 Next level of menu

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. <b>CAUTION</b> <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-- HDD INITIALIZE MODE ARE YOU SURE? YES NO	All pending jobs will be deleted. The spool area will be forcibly reformatted. <b>CAUTION</b> <i>All customer data on the HDD (mailboxes, scanned documents, user IDs and account IDs) will be deleted.</i>
SKIP INSTALL WIZARD	--BOOT MODE-- SKIP INSTALL WIZARD ARE YOU SURE? YES NO	Starts the machine without displaying install wizard.

## GP 16 Separate System Modules

Use this procedure to remove the optional feeder from the printer.

### Description

Many service procedures require separation of the optional feeder from the printer. Refer to GP 20 for information about how to safely move or lift the printer.

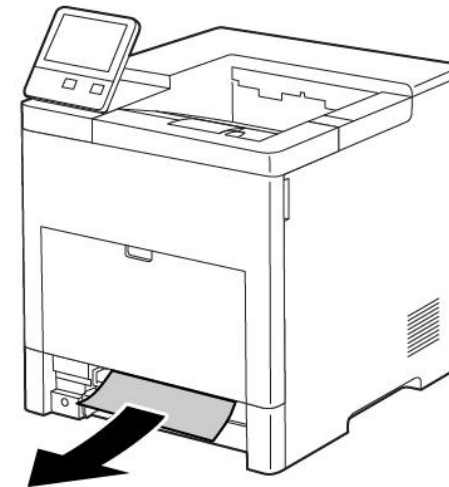
### WARNING

**Switch off the electricity to the machine GP 4. 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

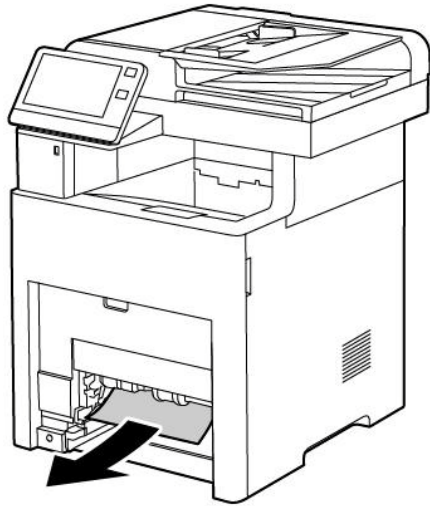
*Always move the printer separately from the optional tray.*

1. Refer to the following figures to clear the media path and output trays.
  - Figure 1 SFP
  - Figure 2 MFP
  - Figure 3 MFP with optional 550 sheet feeder
  - Figure 4 Remove the optional feeder from the printer



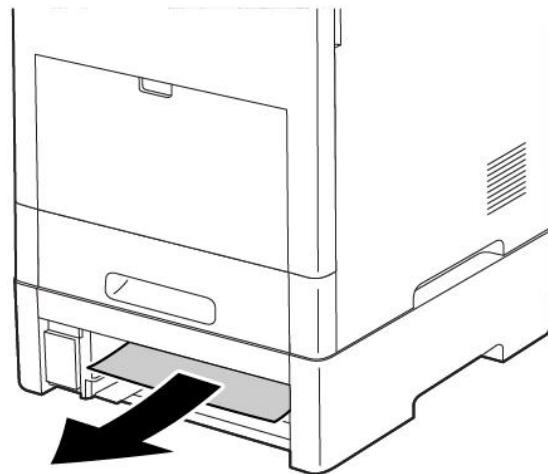
E-8-0931-A

Figure 1 Clear the media path and output tray (SFP shown)



**Figure 2 Clear the media path and output tray (MFP)**

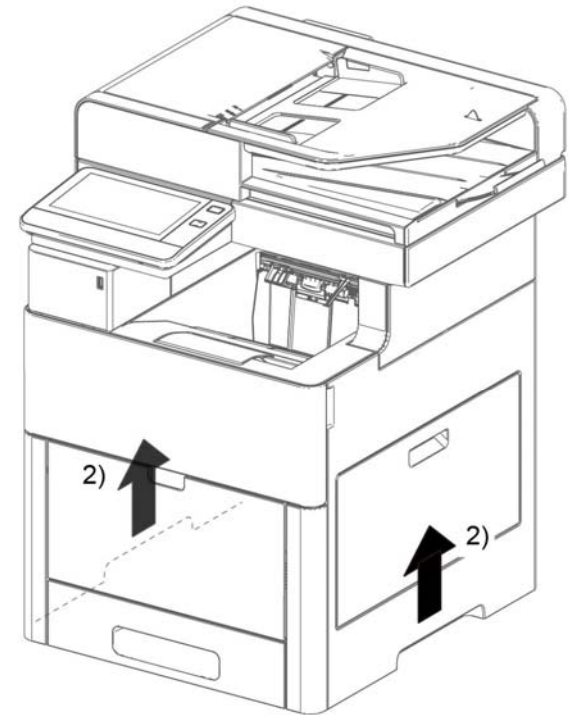
E-8-0932-A



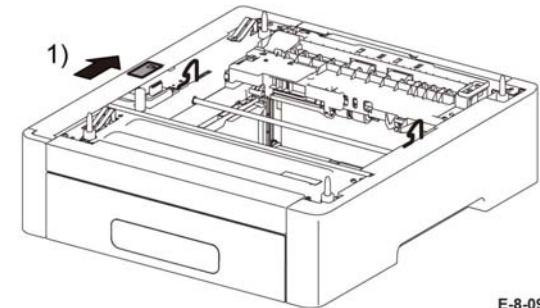
**Figure 3 Clear the media path and output tray (printer with optional feeder)**

E-8-0933-A

2. Refer to [Figure 4](#) to locate and toggle the slider switch to the unlocked position before separating the printer and optional trays.



FRONT



E-8-0914-A

**Figure 4 Separate optional feeder assembly from the printer**

3. Lift the module to clear the support brackets.
4. Place the module on a suitable work surface to avoid damage.
5. Check the position of the option connector before reassembly.

## GP 17 External Fax Line Test

### Purpose

To determine if a fax problem is with the customer's phone line or the Xerox device.

The preferred method of verifying the phone line functionality is to use the modem saver device part number 600T2133 to ensure the fax line is wired correctly and to use the Analog hand set part number 600T1937 or customer's analog phone to place calls on the line. Be sure that both local and long distance calls can be placed and the line quality is clear and without static.

Using the fax handset, determine the following:

- Can it dial externally on the line?
- Can it receive a call on the line?
- Evaluate line quality. Check the line for unwanted beeps, or noise.

Use a breakout box to measure voltages (use the machine chassis as ground). Refer to the Fax 101 training kit 701P50355 (GSN Library #77387) for instructions. Check the following conditions:

- Ground continuity
- Line voltage: -20 to -50VDC
- Loop current: 15 to 95 mA DC
- Ring signal: 50 to 90VAC
- Ring-ground and tip-ground: <1VAC

**NOTE:** If a line quality or incorrect voltage is found, it is the customers responsibility to resolve the problem.

## GP 18 Printing Reports

### Purpose

To provide the menu selections needed to access the following reports. For a detailed instructions on printing reports, refer to the device User Guide.

### Procedure

From the device UI, in the **About>Information Pages** menu, choose from the following:

- [Configuration Report](#)
- [Billing Summary Report](#)
- [Supplies Usage](#)
- [PostScript Font List](#)
- [PCL Font List](#)
- [Demonstration Print](#)
- [Startup Page](#)

#### 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.

From the device UI, in the **Support>Support Pages** menu, choose from the following:

- Error History Report
- Repeating Defects
- System Status
- LDAP Communication Report
- SMB Communication Report
- SMTP Communication Report

## GP 19 Intermittent or Noise Problem

### Purpose

To provide guidance for resolving intermittent or noise problems, and recommend actions to locate the cause of the problem.

### Procedure

1. Check the service log. Recent service actions may provide information about the problem. For example, a component that was recently replaced to correct another problem may be the cause of the new intermittent problem.
2. Noise problems may be due to improper installation. Check for packing materials that have not been removed and for loose or missing hardware.
3. Run the printer in a mode that vigorously exercises the function that is suspected. The printer may fail more frequently or fail completely under these conditions. Look for signs of failure or abnormal operation.  
An intermittent problem is usually associated with a RAP, resulting in a fault code, jam code, or other symptom.
4. Using the RAP associated with the problem, examine all of the referenced components. Look for:
  - contamination, such as a feed roller that has a build up of dirt or toner
  - wear, such as gear teeth that are rounded or have excessive backlash
  - wires chafing against components of the machine, especially against moving components
  - misaligned, mis-adjusted, or incorrectly installed components
  - slow or slipping clutches; slow or binding solenoids
  - damaged components
  - excessive heat, or symptoms of excessive heat, such as the discoloration of a component
  - loose cables or wires
5. Using the RAP, perform all adjustments for the components or functions. Check that the adjustment can be made, there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may indicate of the cause of the problem.
6. Operate the components using component control; **dC330**. Observe for symptoms of abnormal operation, such as a hesitation, or unusual sounds.
7. Check that the AC and DC power are within specification.
8. Examine any components that are not in the RAP, but associated with the function that is failing. Refer to the BSDs. Look for:
  - contamination, such as a feed roller that has a build up of dirt or toner
  - wear, such as gear teeth that are rounded or have excessive backlash
  - wires chafing against components of the machine, especially against moving components
  - misaligned, mis-adjusted, or incorrectly installed components
  - slow or slipping clutches; slow or binding solenoids
  - damaged components

- excessive heat, or symptoms of excessive heat, such as the discoloration of a component
  - loose cables or wires
9. Perform adjustments for any other failing components. Refer to the BSDs. Check to ensure that the adjustment can be made, there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem.
  10. Replace any components or consumables that are known to be a frequent cause of the problem, taking into consideration, repair cost and time required. If the suspected item is inexpensive, can be installed quickly, and has a high probability of resolving the problem, then it is reasonable to replace it.
  11. Leave a detailed record of actions taken in the service log, and recommended next steps.

## GP 20 How to Safely Lift or Move the Printer

Use this procedure when lifting or moving heavy modules.

### Description

Most service procedures for the optional feeder module requires separation of the printer and feeder. Feeder removal requires two people.

#### WARNING

**Do not attempt to remove or lift the following component with less than 2 people. The component is very heavy and requires at least 2 people to lift or remove it. Any attempt to remove or lift the component with less than 2 people could result in serious personal injury.**

#### CAUTION

*Always move the printer separately from the optional tray unless the optional stand is installed. Lift the printer firmly by gripping the recessed areas on both sides of the printer. Never lift the printer by gripping any other areas.*

When moving the printer or removing heavy modules, observe the following:

1. Locate a suitable stable surface to support the module after removal.
2. The support surface height is between 750mm and 1000mm (30" and 39").
3. Check there are no hazards or obstacles between the printer and support surface.

#### CAUTION

*If the optional Productivity Kit (HD) is not installed, ensure that the Ready LED is off before you turn off the printer. The data in the memory is cleared when the printer is turned off.*

4. Switch off the machine GP 4 and disconnect the power cord and other cables from the back of the printer.
5. If the output tray extension is extended, close it Figure 1. Remove any paper or other media from the output tray Figure 2.



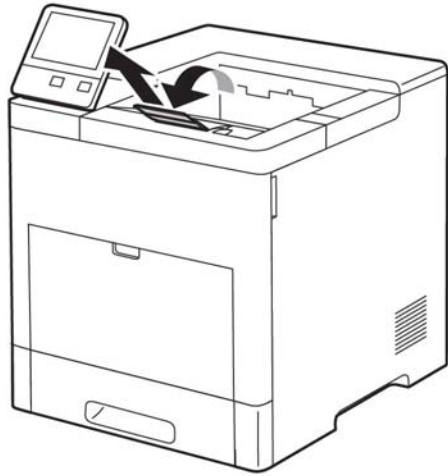


Figure 1 Close the output tray extension

E-8-0915-A

6. Remove the paper from the paper tray, Figure 1. Keep the paper wrapped and away from humidity and dirt.

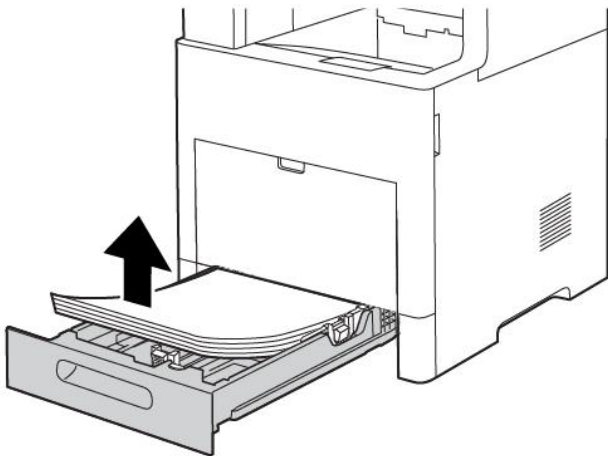


Figure 2 Remove paper from the paper tray

E-8-0934-A

7. Lift and carry the printer as shown in Figure 3 and Figure 4.



Figure 3 Printer Lifting Technique (SFP)

E-8-0916-A



Figure 4 Printer Lifting Technique (MFP)

E-8-0917-A

**NOTE:**

- When moving the printer, do not tilt it more than 10 degrees to the front, back, left, or right. Tilting the printer more than 10 degrees can cause toner spillage.

8. After moving the printer:
  - a. Reinstall any parts that were removed
  - b. Reconnect the printer to the cables and power cord
  - c. Plug in and turn on the printer

## GP 21 Machine Lubrication

### Purpose

To provide information on the use of lubricants.

### Procedure

#### CAUTION

*Only use lubricants as directed. Incorrect use of lubricants could seriously affect the performance of the device.*

Take the following precautions when performing machine lubrication:

- Wear disposable gloves.
- Only use lubricants that are specified in the procedure.
- Lubricate parts only as directed.
- Apply the smallest amount of lubricant, sufficient to lubricate the parts. To prevent contamination, remove any excess lubricant.
- Take great care not to contaminate other parts with the lubricant.

## GP 22 Installation Space Requirements

### 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 route.

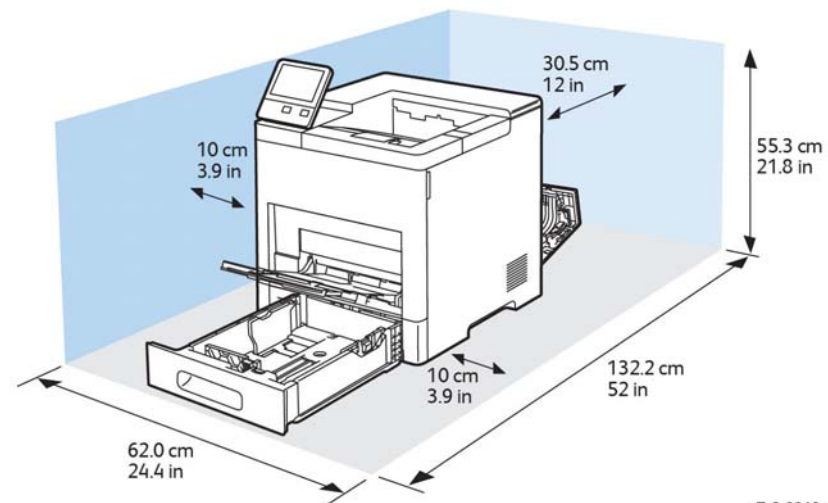
See the following illustrations and tables for the installation space requirements for the VersaLink printers.

- [SFP Installation Space Requirements](#)
- [MFP Installation Space Requirements](#)

## SFP Installation Space Requirements

Refer to [Figure 1](#) and [Table 1](#) for total clearance space requirements for the B600 and B610 SFPs. Refer to [Figure 2](#) and [Table 2](#) for space requirements for the optional 550 sheet feeder. Refer to [Figure 3](#) and [Table 3](#) for the optional finisher.

### SFP

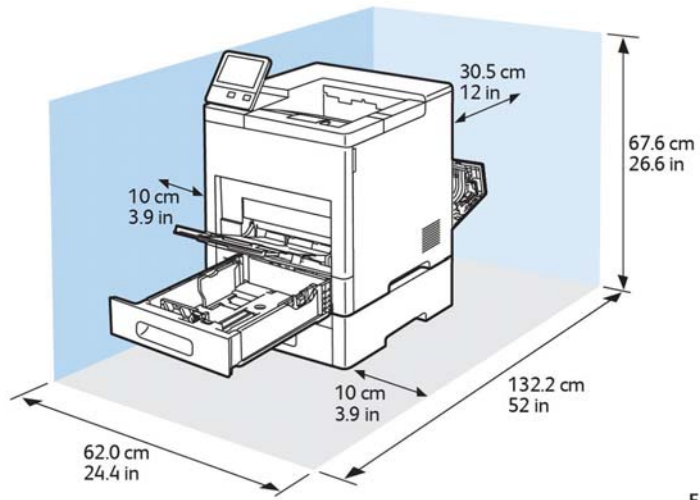


E-8-0919-A

Figure 1 SFP standard

Table 1 Total installation space requirements (SFP)

	SFP Standard
Width	870mm (34.3 in.)
Depth	1322mm (52 in.)
Height	553mm (21.8 in.)

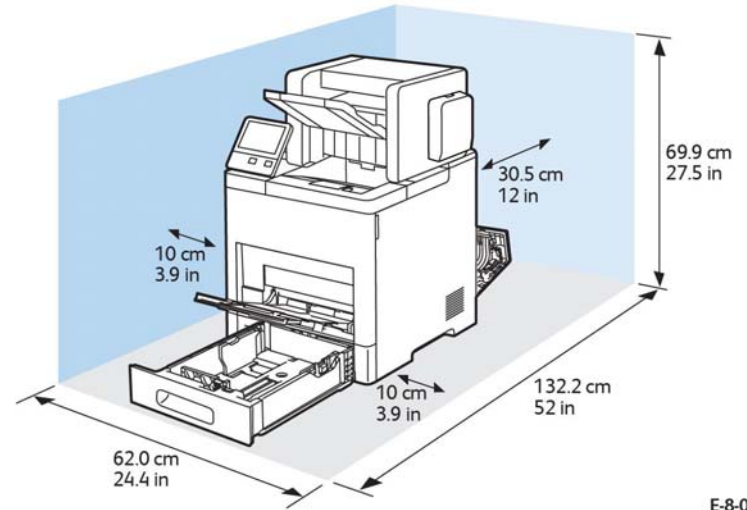


E-8-0920-A

Figure 2 SFP with optional 550 sheet feeder

Table 2 Total installation space requirements (SFP)

Width	870mm (34.3 in.)
Depth	1322mm (49.8 in.)
Height	676mm (26.6 in.)



E-8-0921-A

Figure 3 SFP with optional finisher

Table 3 SFP with optional finisher

Width	870mm (34.3 in.)
Depth	1322mm (52 in.)
Height	699mm (21.8 in.)

## MFP Installation Space Requirements

The following illustrations and tables show the weight, dimensions and installation space requirements for the VersaLink multi-function printers:

- MFP Standard: [Figure 4](#) and [Table 4](#)
- MFP Tall: [Figure 5](#) and [Table 5](#)
- MFP\_Tall (space requirements) with and without the optional 550-sheet feeder: [Table 6](#)
- Optional 550-sheet feeder: [Figure 6](#) and [Table 7](#)
- Optional caster stand with HCF: [Figure 7](#) and [Table 8](#)

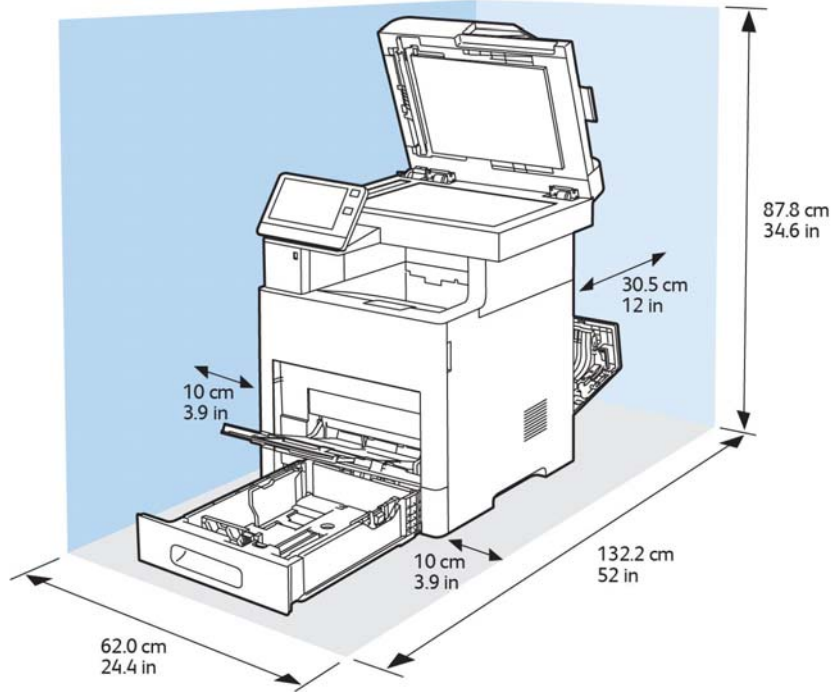


Figure 4 MFP Standard

Table 4 Weights and dimensions (B605)

	B605 MFP	Optional 550-Sheet Feeder Dimensions	Optional HCF Dimensions
Width	470mm (18.5 in.)	420mm (16.5 in.)	742mm (28.5 in.)
Depth	506mm (19.9 in.)	465mm (18.3 in.)	772mm (30.4 in.)
Height	643mm (25.3 in.)	148mm (5.8 in.)	459mm (18.1 in.)
Weight	35mm (77.2 lb.)	6.6kg (14.6 lb.)	19.7kg (43.4 lb.)

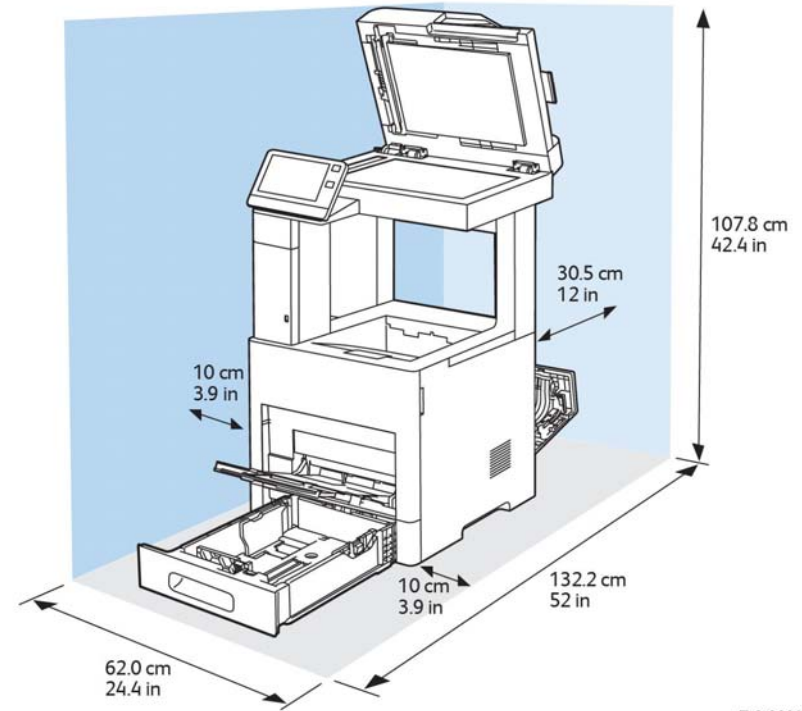


Figure 5 MFP B615\_tall

Table 5 Weights and dimensions (B605/C615)

	B605 MFP	B605 MFP_Tall	Optional 550-Sheet Feeder Dimensions	Optional HCF Dimensions
Width	470mm (18.5 in.)	470mm (18.5 in.)	420mm (16.5 in.)	742mm (28.5 in.)
Depth	506mm (19.9 in.)	506mm (19.9 in.)	465mm (18.3 in.)	772mm (30.4 in.)
Height	643mm (25.3 in.)	844mm (33.3 in.)	148mm (5.8 in.)	459mm (18.1 in.)
Weight	36.1kg (79.6 lb.)	38.8kg (85.6lb.)	6.6kg (14.6 lb.)	19.7kg (43.4 lb.)

Table 6 Space requirements (B615\_Tall)

	Configurations without the Optional 550-Sheet Feeder	Optional 550-Sheet Feeder Dimensions
Width	870mm (34.3 in.)	420mm (16.5 in.)
Depth	1322mm (52 in.)	465mm (18.3 in.)
Height	1078mm (34.3 in.)	148mm (5.8 in.)

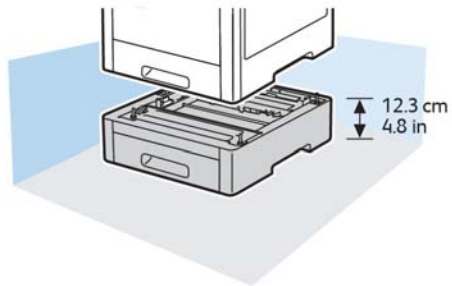


Figure 6 Optional 550 sheet feeder

Table 7 Weights and dimensions: Optional 550 sheet feeder

Width	420mm (16.5 in.)
Depth	464.5mm (18.3 in.)
Height	123mm (4.8 in.)
Weight	6.6kg (14.6 lb.)

E-8-0903-A

Table 8 Weights and dimensions: Caster stand (with HCF)

Height	459mm (18.1 in.)
Weight (HCF)	19.7kg (43.4 lb.)
Weight (caster base)	8.5kg (18.8 lb.)

### Elevation

For optimum performance, use the printer at elevations below 3100 m (10,170 ft.).

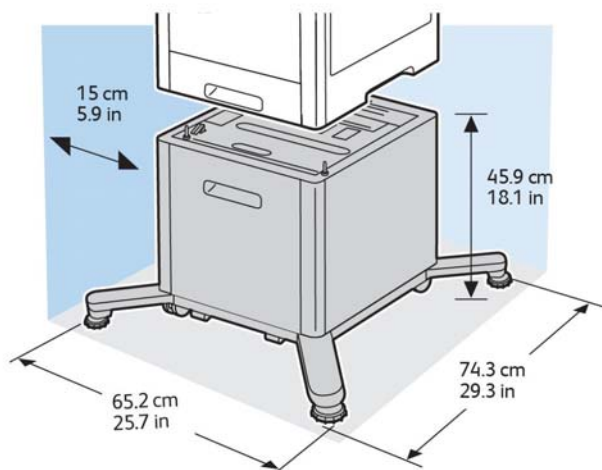


Figure 7 Optional caster stand with HCF

Table 8 Weights and dimensions: Caster stand (with HCF)

Width (min.)	652mm (25.7 in.)
Width (max.)	802mm (31.6 in.)
Depth	743mm (29.3 in.)

E-8-0905-A

## GP 23 First Copy Output Time/ First Print Out Time

### Description

#### Printer Warm-Up Time

Warm-up time assumes an ambient temperature of 23°C (73°F) at 65% relative humidity, after 3 or more hours of the power turned off. Printer warm-up times (time from standby to first sheet output) are listed in [Table 1](#).

#### FCOT

First copy time out measures the amount of time required for the trail edge of the first copy to be output to the specified destination from standby mode.

#### FPOT From Ready State

First Print Output Time (FPOT) is defined as the time from when the engine receives a start signal in ready state, until a single (simplex) page is printed and delivered to the output tray.

#### FPOT From Sleep State

First Print Out Time includes the time required to print any maintenance pages (such as the configuration page) and a single customer page on A size media from Tray 2.

### Warm Up Time

**Table 1 Printer warm-up time**

Configuration	After Power ON	From Power ON to UI Ready
B600	7.9 seconds or less	52.1 seconds
B610	7.9 seconds or less	64.5 seconds
B605	7.9 seconds or less	54.1 seconds
B605/B615_Tall	7.9 seconds or less	64.9 seconds

### FCOT (First Copy Output Time)

[Table 2](#) and [Table 3](#) display the time required for a printed copy to reach the exit tray after pressing Start for copy from standby mode.

**Table 2 First copy out time (B605/B605/B615\_Tall)**

Config	Priority Mode	B/W
Platen	B/W	5.2 sec.
DADF	B/W	6.3 sec.

**Table 3 First copy out time (B600/B610)**

Config	Priority Mode	B/W
Platen	B/W	5.4 sec.
DADF	B/W	6.9 sec.

### FPOT (First Print Output Time)

FPOT is the time required for the first (simplex) sheet of paper to exit the printer after clicking OK in the driver. See the following tables:

- [Table 4](#) FPOT B615 MFP with HDD
- [Table 5](#) FPOT B610 SFP without HDD
- [Table 6](#) FPOT B605 MFP with HDD
- [Table 7](#) FPOT B600 SFP without HDD

**Table 4 First print output time (B615 MFP with HDD)**

PCL6	
Priority Mode	B/W
B/W	8.2 sec.

**Table 5 First print output time (B610 SFP without HDD)**

PCL6	
Priority Mode	B/W
B/W	8.2 sec.

**Table 6 First print output time (B615 MFP with HDD)**

PCL6	
Priority Mode	B/W
B/W	8.9 sec.

**Table 7 First print output time (B600 SFP without HDD)**

PCL6	
Priority Mode	B/W
B/W	8.9 sec.

## GP 24 Restriction of Hazardous Substances (RoHS)

### Purpose

To give 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](http://www.Xerox.com).

The hazardous substances are:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent Chromium (Cr 6+, Cr (VI))
- Polybrominated Diphenyl Ethers (PBDE's)
- Polybrominated Biphenyls (PBB's)

### Identification of a RoHS Compliant Machine

Xerox maintains a central list of RoHS compliant printers. This general procedure is for information only. All current-model VersaLink printers are RoHS compliant.

## GP 26 Media Specifications

The media trays accommodate most sizes and types of paper or other specialty media.

### Media that May Damage the Printer

The printer can use a variety of media for print jobs. However, some media can cause poor output quality, increased jams, or damage. Unacceptable media includes:

- Rough, plastic, or porous media
- Transparency
- Paper that has been stapled, folded, photocopied, or wrinkled
- Envelopes with windows, metal clasps, padding, or adhesives with release strips
- CD labels
- Media that is less than 60 g/m<sup>2</sup> or more than 220 g/m<sup>2</sup>

### Media Storage Guidelines

If media handling problems are common, review these storage guidelines with the customer.

- Store media in dark, cool, relatively dry locations. Most media is susceptible to damage from ultraviolet (UV) and visible light. UV radiation, emitted by the sun and fluorescent bulbs, is particularly damaging to media. The intensity and length of exposure to visible light should be reduced as much as possible.
- Maintain constant temperatures and relative humidity
- Avoid attics, kitchens, garages, and basements. Inside walls are drier than outside walls where moisture can collect.
- Store flat. Media should be stored on pallets, cartons, shelves, or in cabinets.
- Do not open sealed packages until needed. Leave media in the original packaging. For most commercial grades, the wrapper's inner lining protects the media.

### Tray Capacity

Table 1 lists tray capacities.

Table 1 Tray capacity

Media/Weight	Bypass Tray	Main Tray	Optional Tray - up to 4 allowed	HCF- 1 allowed
Standard Paper	150 Sheets	550 Sheets	550 Sheets	2000 sheets
Weight	60-220 g/m <sup>2</sup>	60-220 g/m <sup>2</sup>	60-220 g/m <sup>2</sup>	60-176 g/m <sup>2</sup>

### Print Image Quality

#### Image Quality Guarantee Conditions

The image quality is specified and guaranteed under the conditions shown in Table 2.

Table 2 Print image quality specifications

Item	Specification
Environmental conditions	Environment condition for evaluating image quality Temperature: 15-28 degC Humidity: 20-70% RH



**Table 2 Print image quality specifications**

<b>Item</b>	<b>Specification</b>
Guaranteed paper	The print quality defined in this chapter is guaranteed when standard paper is used in the tray.
Paper condition	The paper used is fresh paper immediately after unpacked, which has been left in the operating environment for 12 hours before unpacking.
Printer condition	The print image quality specified in this section is guaranteed with the printer in normal condition.
Image quality guaranteed area	The print image quality specified in this section is guaranteed in the guaranteed image quality area specified in this manual.
Criterion	The print image quality is guaranteed with the spec. in rate = 90% (g = 90%).

## Paper

See the following tables for supported paper types, weights, and sizes:

- Supported paper types and weights [Table 3](#).
- Supported standard paper sizes [Table 4](#).
- Supported types and weights for automatic 2-sided printing (MFP) [Table 5](#).
- Supported custom paper sizes [Table 6](#).

**Table 3 Supported paper types and weights**

Tray	Paper Types	Weights
All trays (trays 1-4)	Recycled Custom	60-80gsm (16-20 lb) 60-105gsm (16-28 lb)
	Plain Hole punched Pre-printed Bond Letterhead	60-105gsm (16-28 lb) 60-105gsm (16-28 lb) 60-105gsm (16-28 lb) 91-105gsm (24-28 lb) 60-105gsm (16-28 lb)
	Lightweight cardstock Lightweight glossy cardstock Cardstock Glossy cardstock	106-176 gsm (28-65 lb) 106-220 gsm (28-100 lb) 177-220 gsm (65-80 lb) 177-220 gsm (65-80 lb)
	Envelopes Labels	
	Bypass	Same as "All trays" above
	HCF, Mailbox and Finisher	Same as "All trays" above except: Glossy cardstock - not supported Cardstock - not supported Envelopes - not supported Labels - not supported

**Table 4 Supported standard paper sizes**

Tray	European Standard Sizes	North American Standard Sizes
All Trays	A4 (210 x 297mm, 8.3 x 11.7") B5 (176 x 250mm, 6.9 x 9.8") A5 (148 x 210mm, 5.8 x 8.3") JIS B5 (182 x 257mm, 7.2 x 10.1") 215 x 315mm, (8.5 x 12.4")	Letter (216 x 279mm, 8.5 x 11") Legal (216 x 356mm, 8.5 x 14") Folio (216 x 330mm, 8.5 x 13") Executive (184 x 267mm, 7.25 x 10.5") 203 x 254mm, (8 x 10")

**Table 4 Supported standard paper sizes**

Tray	European Standard Sizes	North American Standard Sizes
Bypass Tray	A6 (105 x 148mm, 4.1 x 5.8") B6 (125 x 176mm, 4.9 x 6.9") C5 envelope (162 x 229mm, 6.4 x 9") C6 envelope (114 x 162mm, 4.5 x 6.38") DL envelope (110 x 220mm, 4.33 x 8.66") JIS B6 (128 x 182mm, 5.0 x 7.2") 127 x 178mm, 5 x 7" Postcard (100 x 148mm, 3.9 x 5.8") Postcard (148 x 200mm, 5.8 x 7.9")	Legal (216 x 356mm, 8.5 x 14") Statement (140 x 216mm, 5.5 x 8.5") Monarch envelope (98 x 190mm, 3.9 x 7.5") No. 9 envelope (99 x 226mm, 3.9 x 8.9") No. 10 envelope (241 x 105mm, 4.1 x 9.5") Envelope 6 x 9 (152 x 228mm, 6 x 9 in) 76 x 127mm, 3 x 5" Postcard (89 x 140mm, 3.5 x 5.5") Postcard (102 x 152mm, 4 x 6")
HCF	A4 (210 x 297mm, 8.3 x 11.7")	Letter (216 x 279mm, 8.5 x 11")
Finisher and Mailbox	A4 (210 x 297mm, 8.3 x 11.7") B5 (176 x 250mm, 6.9 x 9.8")	Letter (216 x 279mm, 8.5 x 11") Legal (216 x 356mm, 8.5 x 14") Executive (184 x 267mm, 7.25 x 10.5") Folio (216 x 330mm, 8.5 x 13")

**Table 5 Supported paper types and weights for automatic 2-sided printing (MFP)**

Paper Types	Weights
Recycled Custom	60-80gsm (16-20 lb) 60-90gsm (16-24 lb)
Plain Hole punched Pre-printed Letterhead Bond	75-105gsm (20-28 lb)
Lightweight cardstock Lightweight glossy cardstock	106-176gsm (28-65 lb) 106-176gsm (28-65 lb)

**Table 6 Supported custom paper sizes**

Tray	Size Range
All trays	Width: 76.2-215.9mm (3.0-8.5") Length: 190-355.6mm (7.5-14")
Duplex Automatic Document Feeder	Width: 139.7-215.9mm (5.5-8.5") Length: 203.2-355.6mm (8.0-8.14")
Bypass tray	Width: 76.2-215.9mm (3-8.5") Length: 127-355.6mm (5-14")
Finisher and Mailbox	Width: 176.0-250.0mm (6.9-9.8") Length: 126.9-355.6 (8.5-14.0")

## GP 27 Environmental Data

### Operating Environment Specifications

The printer should be stored and operated under the environmental conditions shown in [Table 1](#):

**Table 1 Operating environment**

Characteristic	Specification
Installation Temperature / Humidity	Installation temperature and humidity on the condition without condensation is as follows. Operating: 10-32degC (50-90degF), 15-85%RH (no condensation) Storage: Minus 20-40degC (minus 4-104degF), 5-85%RH (no condensation)
Installation Altitude	0 to 3,100m (0 - 10,170 ft)
Installation Horizontally	Longitudinal levelness of table surface on which the printer is installed Longitudinal: 1 degree or under Lateral: 1 degree or under
Storage Temperature of a Toner Cartridge	The guaranteed period of the toner cartridge before unpacked is as follows: Normal conditions: 24 months under 5 to 32degC, 15 to 85%RH. Harsh conditions: 1 month under -20 to 0degC and 35 to 40degC, 5 to 15%RH and 80 to 90%RH. The storage altitude shall be 0 to 3,100m. Can be extended to 0 to 15,000m when shipped by air. (Provided that the cargo bay is pressurized to 70.9275Kpa or higher.
Acoustic Noise Sound Pressure (Decibels)	Operation: 56.9-58.5 dB Standby or Ready: 36.3-40.2 dB

## Environmental Specifications

### Temperature

#### Standard Configuration

- Operating temperature: 5–32°C (41–90°F)
- Optimum temperature: 15–28°C (59–82°F)

#### Relative Humidity

- Minimum/ maximum humidity range: 15–85%
- Optimal humidity range: 20–70% relative humidity at 15–28°C (59–82°F)

#### NOTE:

- Under extreme environmental conditions, such as 10°C and 85% relative humidity, printing defects can occur due to condensation in the printer.
- Print quality can be affected when operating near the limits for both temperature and humidity.

## Safety / Environment Conditions

The printer meets the safety and environmental standards shown in [Table 2](#):

**Table 2 Safety / Environment conditions**

	100-127V M/C	220-240V M/C
Safety Standard	UL60950-1, CSA 22.2 60950	IEC60950-1 / EN60950-1
Laser Safety Standard	FDA21CFR Chapter 1, Subchapter J, Section 1010, 1040	IEC60825-1 Amendment 1 + Amendment 2 / EN60825-1 Amendment 1 + Amendment 2 Class 1 Laser Product
EMI	FCC Part15 Subpart B, Class A	EN55022:2006, Class A

## Noise Levels

The printer's audible noise levels during operation and standby are shown in [Table 3](#)(B600/B610) and [Table 4](#)(B605/B615/B615\_Tall)

**Table 3 Noise levels (B600 and B615)**

Operating Mode	Sound Power (B)	Sound Pressure (dB)
Running	7.41B	56.9dB
Standby	5.30B	36.3dB

**Table 4 Noise levels (B605/B615/B615\_Tall)**

Operating Mode	Sound Power (B)	Sound Pressure (dB)
Running	7.50B	58.5dB
Standby	5.80B	40.2dB

## Elevation

For optimum performance, use the printer at elevations below 3100 m (10,170 ft.).

## GP 28 Supplies Plan Conversion

### Purpose

This procedure explains how to set the supplies plan and region if necessary.

### Procedure

1. Connect to the device's embedded web server [GP 35](#).

**NOTE:** In order to complete the next few steps, it may be necessary to log in as Admin.

2. From the Home page, click on **Details** to the right of the supplies heading.
3. The left side of the screen displays selections for several features. Scroll to the bottom and select **Supplies Plan**.

**NOTE:** Enter the passcode within 500 page counts of when it was issued, or it will not be valid.

4. Click **Plan Conversion** to access the Total Impressions screen.
5. Call Field Engineering or your NTS and provide the device serial number and total impressions that are displayed on the Supplies Plan screen. You will receive a 6 character Plan Conversion code.
6. Enter the passcode string provided in 5 and click on **Apply**.

## GP 29 How to Check a Dispenser Motor

### Purpose

This procedure explains how to check the operation of the dispenser motor and related gears. This is typically done when an error is caused from an amount of toner in the Imaging Unit's developer assembly that is insufficient to maintain density. The two likely causes are, the print cartridge is not fully seated, or the replenisher assembly is not functioning correctly.

### Procedure

#### WARNING

**Isolate the machine from the electrical supply while performing tasks that do not need electricity. Refer to GP 4. Electricity can cause death or injury. Moving parts can cause injury.**

1. Select **dC330** Component Control.
2. Remove the toner cartridge.
3. Close all covers or defeat the interlock switches.
4. Select code 041-001 for the 24VDC low voltage power supply.
5. Select the code for the toner dispenser motor and listen to the gear movement. It should be smooth and relatively quiet. You can also look at the toner gear movement on the left side of the machine where the toner is dispensed.
6. If there is clicking or chattering, the problem is related to the toner dispenser assembly.
7. Turn off the toner dispenser motor and the low voltage power supply.
8. Select **Close** to exit the routine.

## GP 30 IP (ESS) Specifications

### Supported Client Operating Systems (OS)

The machine supports the following operating systems with the latest service pack:

- Microsoft Windows 7, 8, 8.1, 10 (32bit/ 64 bit)
- Microsoft Windows Server 2008 (32bit/ 64bit)
- Microsoft Windows Server 2012 (64bit)
- Mac OS x10.10 and higher
- Novell NetWare 5.11J/5.12J
- Citrix
- Linux (includes:)
  - OpenSUSE 13.2
  - Redhat Enterprise
  - Fedora Core 24
- IBM AIX 7.2
- Oracle Solaris11.3

### Interface Characteristics

Local interface and ethernet are supported as communication means for input print data, output scanned data, and use utility with a PC. A public switched telephone network (PSTN) provides an interface for facsimile (MFP only). See the following tables for interface port specifications:

- [Table 1](#) Foreign device interface (FDI)
- [Table 2](#) Wireless interface port specifications
- [Table 3](#) USB3.0 Type-B connector
- [Table 4](#) USB2.0 Type-A connector for USB memory
- [Table 5](#) USB2.0 Type-A for IC card reader
- [Table 6](#) Ethernet interface port
- [Table 7](#) WiFi connection
- [Table 8](#) Fax connection terminal

### Ethernet

**Table 1 FDI (Foreign device interface)**

Item	Specification
Connector	Used for functions that access via 3rd party accessories such as IC card reader and coin kit (authentication/Auditron)
Protocol	One 10-pin connector is provided as standard. Device provides 5v/120mA to connected devices.

### Wireless Interface Port

**Table 2 Wireless interface port specifications\***

Item	Specification
Connectivity Technology	Wireless
Compliant Standards	IEEE802.11 n/g/b
Band width	2.4-GHz and 5-GHz
Data Transfer Rate	IEEE802.11n mode: 65 Mbps IEEE802.11g mode: 54, 48, 36, 24, 18, 12, 9, 6 Mbps IEEE802.11b mode: 11, 5.5, 2, 1 M bps
Protocol	See "Network Protocol" for details
Device Type	Wireless Adapter
Security Protocol	64(40-bit key)/128(104-bit key) WEP,WPA-PSK (TKIP,AES), WPA2-PSK(AES), WPA-Enterprise (TKIP,AES), WPA2-Enterprise (AES) (EAP method supports PEAPv0 only)
WiFi Protected Setup (WPS)	Push button configuration (PBC), Personal identification number (PIN)
*Connection to the Linux machine is not guaranteed. Only for infrastructure connection and when Linux terminal is connected with wired LAN connection.	

### USB

**Table 3 USB3.0 Type-B connector**

Item	Specification
Connector	Used for functions that access via local interface; Printer and local scan function (MFP only), DirectFax (MFP only), Status monitor, address book tool (MFP only)
Protocol	Super-speed USB 3.0 compatible

**Table 4 USB2.0 Type A connector for USB memory**

Item	Specification
Connector	Used for functions that access via local interface: USB DirectPrint and scan to USB memory (MFP front side/SFP rear)
Protocol	Hi-speed USB 2.0

**Table 5 USB2.0 Type A connector for IC card reader**

Item	Specification
Connector	Used for functions that access via local interface: IC card reader

**Table 6 Ethernet interface port**

Item	Specification
Connector	Used for functions that access via the network: printer function, network scan function (MFP only), Direct Fax (MFP only), EWS, Status monitor. (One RJ45 modular jack is provided as standard).
Protocol	10Base-T/100Base-TX/1000Base-T

**Wireless**

**Table 7 WiFi connection (wireless adapter required)**

Item	Specification
Connector	Used for functions that access the machine via the WiFi network: network scan (MFP), DirectFax (MFP), EWS, status monitor.
Protocol	One SDIO connection provided as standard

**Fax**

**Table 8 Fax connection terminal (MFP)**

Item	Specification
Connection to public line	RJ11 modular jack (2-wire)
Terminal for external telephone	RJ11 modular jack (2-wire)

**Network Protocol**

**Printing Protocol**

Printing protocol is shown in [Table 9](#).

**Table 9 Printing network protocol**

Protocol	Transport	Maximum Sessions	Remarks
Port9100	TCP/IP	1	Server2003/Vista/ Server2008/ 7/Server2008 R2 Mac OS X
LPD	TCP/IP	10	Server2003/Vista/ Server2008/ 7/Server2008 R2 Mac OS X Linux
IPP/IPPS	TCP/IP	5	Server2003/Vista/ Server2008/ 7/Server2008 R2 Mac OS X
SMB	TCP/IP	5	Server2003/Vista/ Server2008/ 7/Server2008 R2
Web Services on Devices	TCP/IP	2	(Print): Windows Vista/ Server2008/ 7 / Server2008 R2 (Scan): Windows Vista / 7

**Control and Management Protocol**

Supported protocols are shown in [Table 10](#):

**Table 10 Supported protocols**

Protocol	Scan to PC	Scan to Email
FTP	Y	N
SMB	Y	N
SMTP	N	Y

**NOTE:** Searchable PDF is supported with the MFP only.

**Management Information Base (MIB)**

Xerox Common Management Interface (XCMI) Version 3.0 is supported.

**Controller Font Configuration**

See [Table 11](#) for controller fonts.

**Table 11 Controller fonts**

Type		No. of Fonts	ROM Capacity	Supported PDL	Area
European Font	Std	82	within program ROM	PCL fonts: 83	NA/EU/DMO
	Opt	136		PostScript:136	

**Image area**

The image area specifications are shown in [Table 12](#).

**Table 12 Image area specifications**

Area Definition	Specification
Maximum scan size (platen and DADF)	215.9mm x 355.6mm
Maximum document image area (platen)	220mm x 360mm (8.66" x 14.17")

## GP 31 IIT Specifications

### Scanner

Scanner specifications for the multifunction printers are shown in [Table 1](#):

**Table 1 Scanner specifications**

Item	Specification
Scanning method	Platen: Document-fixed flatbed scanning method
	DADF: Carriage-fixed, document-feeding scanning method (2- side scanning)
Optical resolution	600 x 600 dpi/ 25.4mm (max)
Light source	LED
Maximum scanning guarantee area	Platen: 215.9mm x 355.6mm (8.5" x 14")
	DADF: 215.9mm x 355.6mm (8.5" x 14")
Scanning halftone level	256

### Platen

Platen specifications are shown in [Table 2](#):

**Table 2 Platen specifications**

Item	Description
Platen	Size: 220mm x 360mm (8.66" x 14.17") (Flat glass area)
Document image area (platen)	Max: 220mm x 360mm (8.66" x 14.17")

### DADF

DADF specifications are shown in [Table 3](#):

**Table 3 DADF specifications**

Item	Description
Document Condition	Sheets without tears, wrinkles, or folds
Document Thickness	60g/m <sup>2</sup> - 128g/m <sup>2</sup>
Auto Document Size Detection	220V region (A4): A5 SEF, A4 SEF, 8.5X10" SEF, 8.5X11" SEF, 8.5X14" SEF
	110V region (letter): (A4): 5.5X8.5" SEF, A4 SEF, 8.5X10" SEF, 8.5X11" SEF, 8.5X14" SEF
Retention Angle / Open Angle of Platen Cover with DADF	Maximum open angle: ≤ 70 deg Platen cover can be retained at any angle: 15 ± 5 through 65 ± 5 deg Platen cover self-weight drop angle: 15 ± 5 deg or less
Document Setting	Center registration
Document Tray Capacity	100 sheets of standard documents (document stack height is ≤ 13mm) Document shall not be creased/folded/swollen, etc.

## GP 32 Fax Specifications

Fax capability is available with the 4-in-1 multifunction printers. (Refer to [GP 7](#) for machine configurations.) Fax specifications are detailed in [Table 1](#). See [Table 2](#) for information on transmission time.

### Features

The fax feature offers:

- Delayed send
- Fax forward to email
- Memory receive
- Phone book search (LDAP)
- Junk fax protection
- Polling
- Secure fax
- Speed dials (up to 200 individual, 100 group)

### Fax Send/Receive Buffer

The device supports G3 communication.

### Connectable Network

The optional fax feature can be connected to the following communication networks:

- PSTN
- PBX

### Communication Ability

Fax communication specifications are shown in [Table 1](#):

**Table 1 Fax specifications**

Characteristic	Specification
Communication Mode	1. Unique SG3 2. Unique ECM 3. Unique G3 4. ITU-T SG3 5. ITU-T ECM (Error Correction Mode) 6. ITU-T G3  <i>NOTE: Select comm. priority in order as listed above.</i>
Modem Signal Processing	The following communication standards are supported: <ul style="list-style-type: none"> <li>• V.34 (33.6 /31.2 /28.8 /26.4 /24 /21.6 /19.2 /16.8 /14.4 /12 /9.6 /7.2 /4.8 /2.4 kbps)</li> <li>• V.17 (14.4 /12 /9.6 /7.2 kbps)</li> <li>• V.29 (9.6 /7.2 kbps)</li> <li>• V.27 ter (4.8 /2.4 kbps)</li> </ul>
Data transmission time (normal density/ JBIG/ platen scan)	33.6kbps/ <3 seconds (max.)
Resolution	400x400 max.
Memory	4MB

**Table 1 Fax specifications**

Characteristic	Specification
Communication Image Size	Fast scan direction size on communication: 215 mm ± 1%
Halftone/Compression	MH, MR, MMR, JBIG
Communication Control Procedure	Complies with ITU-T recommendation T.30

**Table 2 Fax transmission time**

Chart		14.4 Kbps (MMR)	28.8 Kbps (MMR)	33.6 Kbps (JBIG) <sup>a</sup>
IIEEJ No.4	Super Fine	56 sec. or less	29 sec. or less	22 sec. or less
	Fine	26 sec. or less	13 sec. or less	1 sec. or less
	Standard	19 sec. or less	10 sec. or less	7 sec. or less
ITU-T No.1	Super Fine	30 sec. or less	15 sec. or less	12 sec. or less
	Fine	15 sec. or less	8 sec. or less	6 sec. or less
	Standard	11 sec. or less	6 sec. or less	4 sec. or less
FX English Sales Text	Standard	7 sec. or less	4 sec. or less	2 sec. or less
FX Japanese Sales Text	Standard	9 sec. or less	5 sec. or less	4 sec. or less
IIEEJ No.1	Standard	75 sec. or less	38 sec. or less	20 sec. or less
a. Reference value				

**Transmission Time**

Fax transmission times (Tp) of image data in G3 mode are shown in [Table 2](#).

Resolution conversion is not performed during transmission, and density is normal.

Specified value condition: ECM (No data error)

**Incoming Call Level**

Under ideal conditions (flat line, no noise, and no other line stress), normal signal strength shall be guaranteed in the range from -3 through -43 dBm.

## GP 35 Setting Up an Ethernet Connection

### Establishing an Ethernet connection

Use these steps to establish a Ethernet Local Area Network (LAN) connection between the PWS and printer using a crossover cable.

**NOTE:** Record the original data for every change you make. You may or may not need to reset the IP address, depending on PWS usage and local network practice.

- Print a configuration report, [GP 18](#). Note the printer's IP address to restore after the procedure is complete.
- Connect the crossover cable between the PWS and printer.
- Open a Command window (CMD) on the PWS.
  - If running W7, select the start button and in the search box above, type **cmd**
  - If running W10, in the task bar search box, type **cmd** and 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 Run dialog box.

- Type **ipconfig** at the prompt, then write down the current network settings displayed.

**NOTE:** Use the IPv4 address for the Local Area Connection, not the address listed under Wireless Ethernet Connection (if enabled in your laptop).

- Perform [GP 36](#) to manually setup the IP address.
- After verifying the IP addresses are correctly configured, 'ping' the printer.
  - 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.
  - If the printer responds to the PING command, it replies four times. This should not take more than two or three seconds.
  - If the PING command times out, or responds with "host unreachable", check the IP addresses that were entered. If the IP address is correct, troubleshoot the connection using the status indicator repair adjustment procedures in Section 2 of this manual.
- 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.
- 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**.
- For the printer name or IP address, enter the printer's IP address (192.168.0.2 in this example).
- 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. Test the printer using CentreWare Internet Services

- 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 embedded web server web page of the printer will be displayed.

**NOTE:** *If you are unable to open the printer's web page, verify that embedded web server is enabled on the configuration page. If your web browser is set to use a proxy address for the internet connection, you will not be able to bring up the printer's web page as you will have no connection to that proxy server while directly connected to the printer via cross-over ethernet cable. Refer to PWS Browser Proxy Server Setting for instructions on Internet explorer proxy configuration*

## GP 36 How to Manually Configure an IP Address

### Purpose

Manual configuration of the IP address of the printer.

### Manual IP setup

To assign a static IP address to the printer:

1. At the printer control panel, press the **Home** button.
2. Touch **Device >Connectivity>Ethernet>IPv4**.
3. Touch **STATIC**.
4. At the restart system prompt, touch **Continue**.
5. Touch the **IPv4 Address** field.
6. Using the keypad, enter the address as x.x.x.x, where x is a number from 0–255, then touch **Enter**.
7. Touch the **subnet mask** field.
8. Using the keypad, enter the address as x.x.x.x, where x is a number from 0–255, then touch **Enter**.
9. Touch the **gateway address** field.
10. Using the keypad, enter the address as x.x.x.x, where x is a number from 0–255, then touch **Enter**.
11. Touch **Restart**.

## GP 37 How to Obtain Log Files

### Purpose

Obtaining logs for troubleshooting issues, typically required by 2dn level Service Support.

### Obtaining Logs using Web UI

#### Procedure

1. Connect the PC to the printer with the LAN cable GP 35.
2. Turn the power of the PC and the printer On. Check that the IP addresses are already input so that they can communicate with each other.
3. Activate the Web UI.
  - Open the URL **http://Printer IP Address/** using a web browser Figure 1.  
The following window appears:



Figure 1 Open web browser

E-8-0162-A

4. Navigate to:**System>Security>SSL/TLS Settings**, to enable HTTP-SSL/TLS communication.
5. Activate the logging tool: **System>Logs** Figure 2.
  - The following window appears:

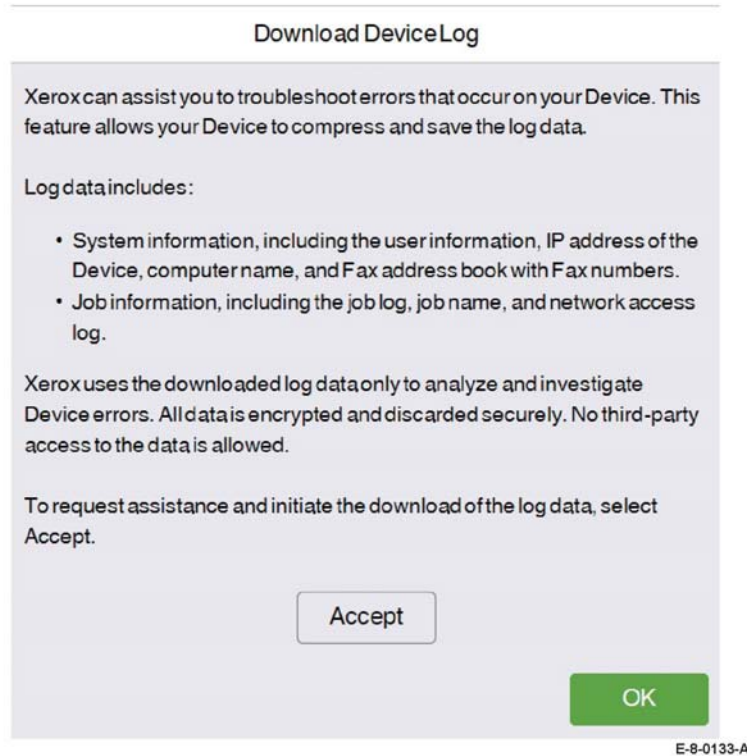


Figure 2 Logs menu

6. Collect the audit log. Select **Audit Log** in the logs menu.
  - The audit log window appears.
    - a. Check **Enable**.
    - b. Click **Export**. Collect the audit log.
    - c. The collected audit log file (.txt) is saved.

7. Collect the device log. Select **Device Log** from the logs menu.
  - The device log dialog box appears, [Figure 3](#).

## Device Log



**Figure 3 Device Log Dialog Box**

- a. Click **Accept**. Collect the device log.
  - b. The collected device log file (.dat) is saved.
8. Send the collected logs as requested to the Service Support team.

## GP 38 Electrical Specifications

### Purpose

The electrical specifications for the SFP and MFP configurations are provided in the following tables:

- [Table 1](#) Power supply voltage and frequency (SFP)
- [Table 2](#) Power supply voltage and frequency (MFP)

### Electrical Specifications (SFP)

Power supply voltage and frequency

**Table 1 Power supply voltage and frequency**

Power Supply Voltage	Frequency	Current Required
120VAC +/-10% (108–132VAC)	60Hz +/-3 Hz	11A
220–240VAC +/-10% (198–264VAC)	50Hz +/-3 Hz	6A

Power consumption:

- Power saver mode (Sleep): 1W
- Ready: 44W
- Continuous printing: 380W

### Electrical Specifications (MFP)

Power supply voltage and frequency

**Table 2 Power supply voltage and frequency**

Power Supply Voltage	Frequency	Current Required
120VAC +/-10% (108–132VAC)	60Hz +/-3 Hz	12A
220–240VAC +/-10% (198–264VAC)	50Hz +/-3 Hz	6A

Power Consumption:

- Power saver mode (Sleep): 1.2W
- Ready: 52W
- Continuous printing: 370W

## GP 39 Reset Administrator Password

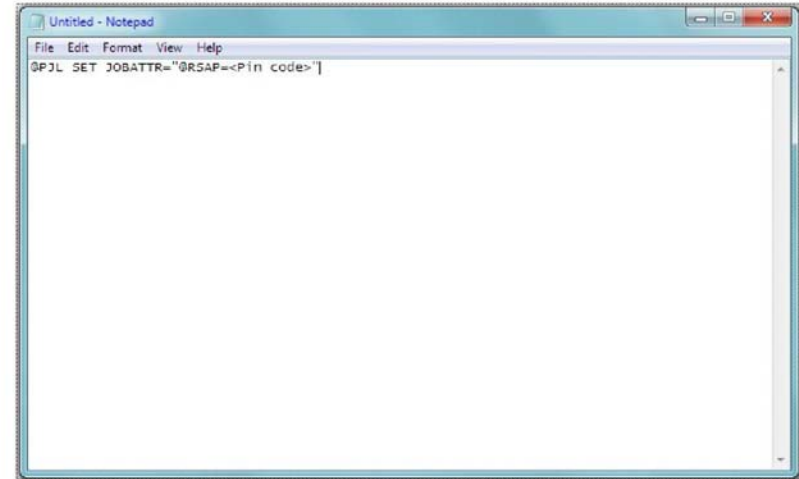
### Purpose

To reset the System Administrator password.

### Procedure

Perform the steps that follow:

1. Create a PIN code using the administrator password reset tool.
  - a. Run the administrator password reset tool.
  - b. Enter the serial number of the device with no punctuation or spaces.
  - c. Enter the total page count from the device.
  - d. Press **Calculate**.
  - e. Note the 12 digit reset code.
2. Create a reset file using Windows Notepad.
  - a. **Windows 7**
    - Go to: 'Start' >'All Programs' >'Accessories' >'Notepad'.
  - b. **Windows 8 or 10**
    - In Search window (next to the Start button or Windows icon) type 'Notepad' then select 'Notepad' from the list.
  - c. Copy the line below paste into the new Notepad text area, [Figure 1](#). **@PJL SET JOBATTR="@RSAP=<Pin code>"**
    - Replace <Pin code> with the actual 12 digit PIN code that you generated from the SA Password tool.
    - Example of PIN code: **@PJL SET JOBATTR="@RSAP=123456789123"**.



F-1-0405-A

Figure 1 Notepad example

- d. Save the Notepad file as Reset.PJL to your PC.
3. Submitting the Reset.PJL file using DirectPrint utility.
  - a. Run the DirectPrint utility.

**NOTE:** The following files can be found in an attachment to Eureka Tip ETI 1393759.

    - Admin Password Reset Tool.exe
    - DirectPrint.exe
    - Reset.PJL
    - SA Password Reset process.docx
  - b. Select the Reset.PJL file where you saved it to on your computer by clicking the "....." box next to filename.
  - c. Enter the IP address of the Machine in the field box under printer/IP.
  - d. Select Print.
  - e. You will hear a job completed tone at the machine and observe changes are being made on the UI.

**NOTE:** The process only takes a few seconds. If the UI screen is hung on changes being made, switch off, then switch on the machine, GP 10.

- f. The administrator password should now be defaulted to '1111'. use the web UI to access the device to confirm.
4. Troubleshooting reset file not accepted error, Table 1.

**Table 1 File not accepted procedure**

Status Code	Procedure
016-749	<ul style="list-style-type: none"> <li>• Verify the license string @PJM SET JOBATTR="QRSAP=&lt;Pin code&gt;" was copied to Notepad correctly.</li> <li>• Verify the PIN code is correct.</li> <li>• When generating the code, make sure the current total meter read was used.</li> </ul>

## GP 40 Xerox Supplies and Accessories

### Consumables and Maintenance Items

The parts listed in the following tables can be replaced by the customer (CRUs) or by the CSE.

- [Table 1](#): Consumables and maintenance items for MFP and SFP
- [Table 2](#): Drum Cartridge
- [Table 3](#): HFSI's
- [Table 4](#): Stapler Cartridge

Refer to Section 5 Parts List for details:

- [PL 7.1](#): Fusing
- [PL 8.1](#): Xerographic

**Table 1 Toner Cartridge**

Name	Life/Yield (pgs.)	Part Number
WW Bundled	10K	106R03947
NA/XE Std Cap	10K	106R03940
NA/XE Hi Cap	25K	106R02866
NA/XE, Extra Hi Cap	45K	106R02867
DMO, Std Cap	10K	106R03941
DMO, Hi Cap	24K	106R03943
DMO, Extra Hi Cap	45K	106R03945
WW Metered Extra Hi	45K	106R03946
NA/XE Hi Cap GSA	25K	106R04003

**Table 2 Drum Cartridge**

Name	Life/Yield (pgs.)	Part Number
WW Bundled	60K	Attached to m/c
WW CRU	60K	101R00582
NA Bundled	57K	Attached to m/c
CRU	57K	101R00582

**Table 3 HFSI's**

Name	Life/Yield (pgs.)	Part Number
Fuser Assembly 110V	200K	115R00139
Fuser Assembly 220V	200K	115R00140
Scanner Maintenance Kit (DADF)	200K	108R01490
Feed Roller Kit (tray)	100K	116R00010
Transfer Roller Kit	200K	116R00009

**Table 4 Stapler Cartridge**

<b>Name</b>	<b>Cart. for Finisher</b>	<b>Stapler Refill</b>
Stapler Cartridge (XC)	008R12964	008R12941
Package Unit	1 cartridge per carton (Qty. 5,000/ cart.)	Set of 3 (Qty. 5,000/ cart.)

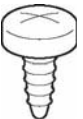
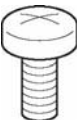

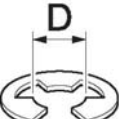
(Toner yield based on ISO/IEC 19752 Test Standard. Toner consumption will vary depending on image, area coverage and media that is used. Drum cartridge yield is based on an average 3 page job length.) Life/ yield information may vary slightly. Go to Xerox.com for current information.

## GP 41 Hardware Information

Spared hardware available for repairs and maintenance is listed in [Table 1](#). This includes miscellaneous screws and e-clips that can be used to replace hardware that is lost or damaged.

Since the VersaLink printers use various types of hardware (screws, e-clips), ensure that the correct hardware is used when installing parts. Use special caution not to confuse the screws used for plastic with those used for sheet metal. Using the wrong type of screw may result in damage to the screw threads or other problems.

**Table 1 Hardware**

Type	Shape	PL Number	Size
Screw for plastic silver, tapping	 <b>Figure 1 Plastic</b>	ST20	M3x8mm
		ST21	M3x6mm
Screw for sheet metal silver	 <b>Figure 2 Sheet metal</b>	SM3	M4x6mm
		SM18	M3x6mm
Screw for sheet metal silver, with washer and plane washer	 <b>Figure 3 Sheet metal</b>	SM20	M3x8mm
E-ring	 <b>Figure 4 E-ring</b>	E2	D4
		E6	D6

## GP 42 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	Behaviour 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 devices. 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)
C, Y, M, K	Cyan, Yellow, Magenta, Black (K=Black because black is seen as the key color)
DADF	Duplex 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
DN	FX acronym for a duplex enabled device
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 device to pre-install state
DVMA	Direct Virtual Memory Access
EH&S	Environmental Health and Safety

**Table 1 Abbreviations**

Term	Description
EJS	Easy Java Simulation
ELT	Extract, Load, Transform
Embedded Fax	A fax system included in a system device
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
EWS	Embedded Web Server
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
FPOI	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



**Table 1 Abbreviations**

Term	Description
HDD	Hard Disk Drive
HFSI	High Frequency Service Intervals
HTTP	Hyper Text Transfer Protocol
HVPS	High Voltage Power Supply
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.
ICCR	IC Card Reader
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 device 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
KPV	100KPV = 100,000 Print Volume
LAN	Local Area Network
LCD	Liquid Crystal Display

**Table 1 Abbreviations**

Term	Description
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
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.
Ipi	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
MCU	Machine Control Unit
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
MSI	Multi Sheet Inserter
ms	millisecond
N	Newton
N	FX acronym for a non-duplex/simplex only device

**Table 1 Abbreviations**

Term	Description
NA	North America
NC	Network Controller (equivalent to ESS)
NC	Normal Contrast. Copy contrast setting
NCU	Network Control Unit
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
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
PABX	Private Automatic Branch Exchange
PBX	Private Branch Exchange
PC	Personal Computer
PC Fax	Personal Computer Fax
PCI	Peripheral Component Interface
PCL	Printer Control Language
PDF	Adobe Acrobat Portable Document Format
PDL	Page Description Language
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
Process Death	A process has stopped working.
PS	Post Script
PS	Power Supply
PSTN	Private Switched Telephone Network

**Table 1 Abbreviations**

Term	Description
PSW	Portable Service Workstation
Pthread	Process Thread. A very low level operating system concept for code execution.
PV	Print Volume
PWB	Printed Wiring Board
PWBA	Printed Wiring Board Assembly
PWM	Pulse-Width Modulation
PWS	Portable Work Station
RAM	Random Access Memory
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
ROS	Raster Optical Scanner
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
SDIO	Secure Digital Input/Output

**Table 1 Abbreviations**

Term	Description
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)
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

**Table 1 Abbreviations**

Term	Description
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
TPM	Trusted Platform Module
TRC	Toner Reproduction Curve
TrueType	Standard outline font format for windows
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
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



## dC118 Jam Counter

### Description

Displays the count for jams that have occurred up to the present.

### Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **DC118 Jam Counter**.

The following Items are displayed on the **Jam Counter** screen.

- Chain-Link
- Count

**NOTE:** *Jams that have occurred since the previous exit from the diagnostics with **Exit (Clear Log)** until now will be displayed.*

*The count is reset when exiting from Diagnostics by using **Exit (Clear Log)**.*

3. Touch **Close** to return to the Diagnostics screen.
4. Exit Diagnostics, [GP 1](#).

## dC120 Failure Counter

### Description

Displays the count for failures that have occurred up to the present.

### Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **DC120 Failure Counter**.

The following Items are displayed on the **Failure Counter** screen.

- Chain-Link
- Count

**NOTE:** *Failures that have occurred since the previous exit from the Diagnostics with **Exit (Clear Log)** until now will be displayed.*

*The count is reset when exiting from Diagnostics by using **Exit (Clear Log)**.*

3. Touch **Close** to return to the Diagnostics screen.
4. Exit Diagnostics, [GP 1](#).

## dC122 Fault History

### Description

Displays the history in four categories:

- Document Feeder Jams
- Paper Jams
- Failures
- Last 40 Faults

### Procedure

1. Enter the Diagnostics, [GP 1](#).
2. Touch **dC122 Fault History**.

The following categories are displayed on the **Fault History** screen: Chain-Link, Date & Time, and Total Volume (billing print count when fault occurred) of the selected category type. Category types are:

- **Paper Jams**
- **Document Feeder Jams**
- **Failures**
- **Last 40 Faults**

**NOTE:** Various conditions

- *Failures that have occurred since the previous exit from the Diagnostics with **Exit (Clear Log)** until now will be displayed.*
  - *The count is reset when exiting from Diagnostics by using **Exit (Clear Log)**.*
  - *The Total Volume is the value of the billing counter of the fault occurrence time.*
  - *When fault occurs in a printer which doesn't have output it is displayed with 0.*
3. Select any of the fault history category types to display the chain-link, date & time, and total volume.
  4. Touch **Close** to return to the Diagnostics screen.
  5. Exit Diagnostics, [GP 1](#).

## dC125 Active Faults

### Description

Displays the active faults.

### Procedure

1. Enter the Diagnostics, [GP 1](#).
2. Touch **dC125 Active Faults**.

The chain-links are displayed on the **Active Faults** screen.

3. Touch **Close** to return to the Diagnostics screen.
4. Exit Diagnostics, [GP 1](#).

# dC126 System Registration Adjustment

## Description

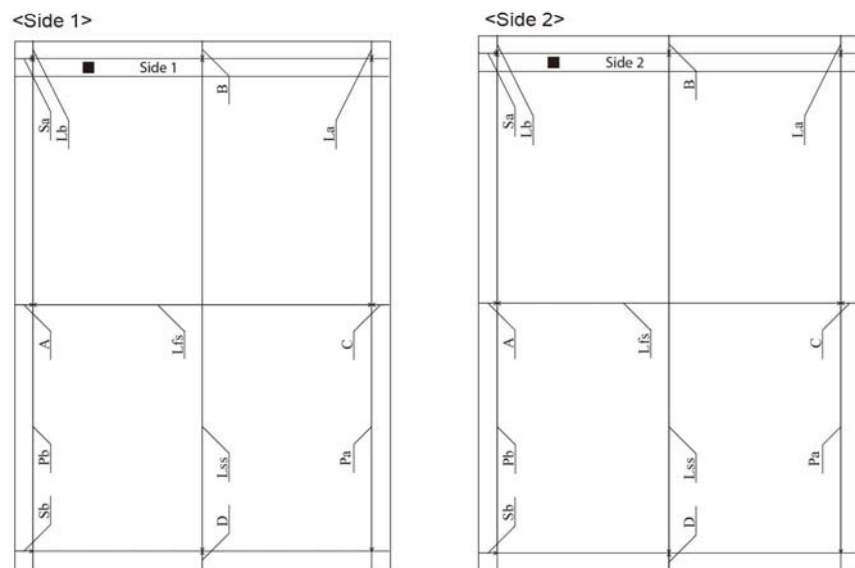
To print the built-in adjustment test pattern, perform measurements at the specified positions, and then perform any of the following adjustments to obtain the correct positions.

- Slow scan% (measuring position: Lss-Side1/2)
- Side1/Side2 registration (measuring position: A, B, C, D-Side1/2)
- Lead registration (measuring position: B-Side1/2)
- Side registration (measuring position: A-Side1/2)

## Procedure

### Printing the Test Pattern

1. Enter Diagnostics, **GP 1**.
2. Touch **dC126 System Registration Adjustment**.  
The System Registration Adjustment screen is displayed.
3. Select **Paper Supply**, then choose the adjusting tray.
4. Select **Printout Settings**, then touch **Print**. to print the test pattern (Figure 1).



E-8-0717-A

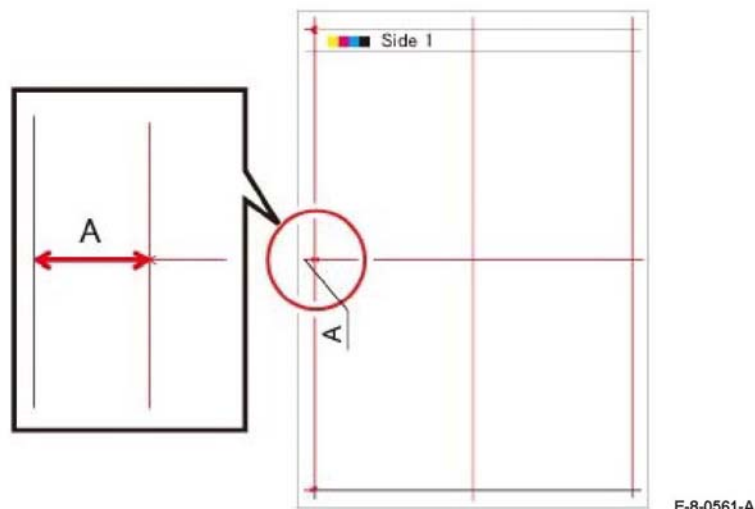
Figure 1 dC126 System registration adjustment test pattern

### Adjust the Registration

This procedure uses side regi as an example. When doing other adjustments, use the relevant location on the test pattern.

**NOTE:** The A, B, C and D locations marked on the test pattern indicate the distance from the test pattern image to the paper's edge.

1. Using the test pattern chart which was output from the tray requiring adjustment, measure the length (in millimeters) of "A" on the printed test pattern Side 1 (Figure 2).



E-8-0561-A

Figure 2 Measurement length of A in side 1

2. Measure the length (in millimeters) of "A" on the printed test pattern Side 2 (Figure 3).

## dC131 NVM Read / Write

### Description

To refer to the NVM data and set/modify it.

### Procedure

**NOTE:** The fault will be displayed after the machine reboots.

1. Enter Diagnostics, [GP 1](#).
2. Touch **dC131 NVM Read / Write** to display the **NVM Read / Write** screen.
3. Enter the chain-Link number and touch **Change**.
4. The **Current Value** and the **New Value** columns are displayed.
5. Enter the value that you wish to change to into the **New Value** column and touch **OK**.
6. The entered number is displayed in the **Current Value** column.
7. Touch **Close**.
8. Touch **Close** to return to the Diagnostics screen.
9. Exit Diagnostics, [GP 1](#).

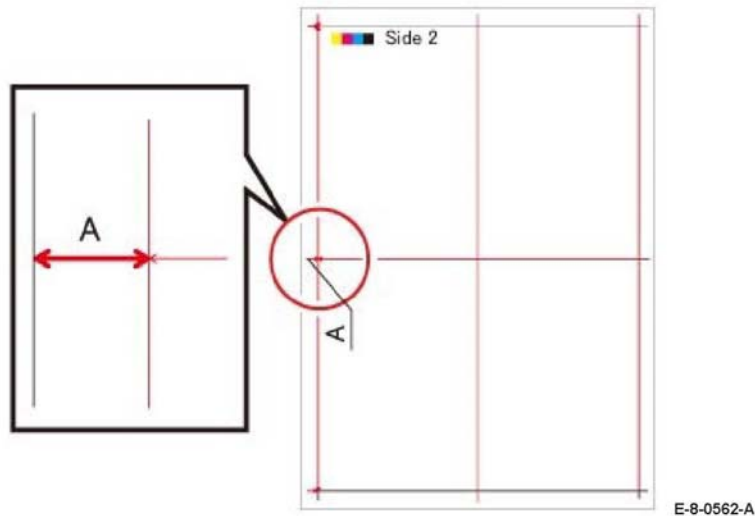


Figure 3 Measurement length of A in side 2

3. Touch **Side Registration**.
4. Select **Adjusted Side** (ex. Side 1).
5. Touch +/- to enter the value of A for side 1 which was measured earlier, or touch A to open a keypad on which to enter a value.
6. Select **Adjusted Side** (ex. Side 2).
7. Touch +/- to enter the value of A for side 2 which was measured earlier, or touch A to open a keypad on which to enter a value.
8. After setting values for side 1 and side 2, touch **Adjust**.
9. Exit Diagnostics, [GP 1](#).



## dC132 Device ID / Billing Data

### Description

To repair the mismatch of serial no., product no. and billing counter value between the MSU and ESS PWBs when one of them has been replaced by setting the values in the replaced board to those values in the unreplaced board.

The serial no., product no., and billing counter are held at the following three locations respectively:

- MCU PWB (IOT)
- EEPROM Board (SEEP Data. SYS1)
- EEPROM Board (NVM Data. SYS2)

**NOTE:** Be aware of the following:

- This function can only be used when a failure has occurred.
- When the three values (IOT, SYS1, SYS2) are the same, there is no need to continue with this diagnostic function.
- When exiting the diagnostics after matching up the serial no., the fault will be cleared after the machine reboots.

### Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **dC132 Device ID / Billing Data**. to display the **Device ID and Billing Data** screen.
3. Select the correct data area (IOT, SYS1 and SYS2) (for example, if the MCU (IOT) PWB was replaced, select SYS1 or SYS2 for entering the serial numbering in the next step.)
4. Enter the serial number.
5. Re-enter the serial number, then touch **OK**.
6. Verify that the column data for IOT, SYS1, SYS2 are now all matching.
7. Touch **Close** twice to exit out to the Diagnostics screen.
8. Exit Diagnostics, [GP 1](#).
9. The machine will reboot.

## dC135 HFSI Counter (High Frequency Service Item)

### Description

Displays the spec life (threshold value) and the current value (usage status) of the periodic replacement parts. You can change the spec life and reset the current value.

The job history can be used to record/check the previous three replacements.

See [Table 1](#) for a list of HFSI counter items.

**Table 1 HFSI Counter Items**

Chain Link	MFP/SFP	Item
950-801	MFP/SFP	Feed Roll Print Volume Tray 1
950-802	MFP/SFP	Feed Roll Print Volume Tray 2
950-803	MFP/SFP	Feed Roll Print Volume Tray 3
950-804	MFP/SFP	Feed Roll Print Volume Tray 4
950-805	MFP/SFP	Feed Roll Print Volume Tray 5
950-806	MFP/SFP	Fuser Print Volume
950-807	MFP/SFP	Fuser Heat Time
950-814	MFP/SFP	Belt Print Volume
950-816	MFP/SFP	2nd BTR Print Volume
955-806	MFP	Feed Count
955-807	MFP	Simplex Feed Count
955-810	MFP	I/L Open Count
955-812	MFP	TA Clutch On-Count
955-828	MFP	Feed Clutch On-Count
956-802	MFP	IIT Scan Count
956-803	MFP	IIT Light Lamp Time
956-804	MFP	IIT Lamp Turn On Count

### Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **dC135 HFSI Counter** to display the HFSI counter screen.
3. Enter the chain-link no. or select the parts to be replaced and touch **Details**.
4. The **Details** screen displays the chain-link and the part name of the parts to be replaced, as well as the spec life, current value, last replacement, second last replacement and third last replacement counters.
5. To reset the current value, touch **Reset**. The Reset Current Value screen is displayed.
6. Following the message and tapping **Yes** updates the last three replacement records in the HFSI counter as follows.
  - a. The second last replacement value is moved to third last replacement.
  - b. The last replacement value is moved to second last replacement.
  - c. The current value is moved to last replacement.
  - d. The current value is set to **0**.
7. To change the spec life, touch **Spec Life**. This displays the Spec Life screen.

8. Enter the new spec life (Max. 8 digits) and touch **OK**.  
The soec life value is overwritten with the new spec life value.
9. Touch **Close** to return to the HFSI Counter screen.
10. Touch **Close** to return to the Diagnostics screen.
11. Exit Diagnostics, [GP 1](#).

## dC140 Analog Component Monitoring

### Description

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.

**Table 1 Input List**

Chain-Link No.	Component	Command	Operation
010-200	Fuser NC Sensor Voltage Compression	04:Monitor	01:Start 02:Stop
010-210	Fuser NC Sensor Voltage	04:Monitor	01:Start 02:Stop
010-202	Fuser NC Sensor Voltage Difference	04:Monitor	01:Start 02:Stop
010-203	Fuser NC Sensor (Side)	04:Monitor	01:Start 02:Stop
046-200	BTR (2nd Bias Transfer Roll) Current Monitor	04:Monitor	01:Start 02:Stop
091-201	Environment Sensor Humidity	04:Monitor	01:Start 02:Stop
091-202	Environment Sensor Temperature	04:Monitor	01:Start 02:Stop
091-203	On Board Temperature	04:Monitor	01:Start 02:Stop
092-203	ATC Sensor	04:Monitor	01:Start 02:Stop

### Procedure

1. Enter Diagnostics, [GP 1](#).
2. Touch **dC140 analog monitor**.  
The **analog monitor** screen is displayed.
3. Touch **Chain-Link**.
4. Enter the relevant chain-link numbers shown in [Table 1](#) and touch **OK**.
5. Touch **Start**.
6. The resulting screen displays the following items:
  - The **chain-link** number of the component.
  - **Input or Output** code clarification.
  - **Enabled or Disabled** state.
  - The **output** level value.
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 the component operation.

9. Touch **Close** to return to the Diagnostics screen.
10. Exit Diagnostics, [GP 1](#).

## dC301 NVM Initialization

### Description

To reset the values of specific NVM parameters and to perform [dC363 NVM Backup/ Restore](#) prior to initializing the IOT area.

### 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
IOT1	Drive PWB NVM. Perform <a href="#">dC363</a> to back up the NVM values. After initializing the IOT 1 NVM, ensure that the tray module type is set correctly. Refer to <a href="#">024-361 Invalid Paper Type RAP</a> .
IOT2	Do not use
Finisher	Do not use
IFM	Do not use
IISS - IIT/IPS	IIT scanner and DADF
IISS - Extension	Do not use
Input Device	Do not use
Sys-System	Resets CSE-definable data. Change NVM value 790-900 to a 1 to regain EWS communication
Sys-User	Resets user-definable data. NVM value 790-900 remains at 1
Fault Counter	Do not use
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. Enter [dC131](#). Ensure NVM value 790-900 is set to 1. If the NVM value had to be changed, switch off, then switch on the machine, [GP 4](#). Verify that the embedded web server is working.
7. Exit Diagnostics, [GP 1](#).

## dC305 Panel Diagnostics

### Description

To perform diagnosis of the LED/ Audio which is implemented in the UI panel.

### Procedure

#### 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

### Description

Displays the logic state of input component input signals [Table 1](#), and operates the output components, [Table 2](#).

Table 1 Input list

Chain-Link	Component	Command	Operation
010-200	Fuser Relay Enable	04:Monitor	01:Start 02:Stop
010-201	Fusing Fuse Sensor	04:Monitor	01:Start 02:Stop
010-202	Envelope Mode Sensor	04:Monitor	01:Start 02:Stop
041-300	Inter Lock Side Cover	04:Monitor	01:Start 02:Stop
041-301	Inter Lock Rear Cover	04:Monitor	01:Start 02:Stop
041-302	Front Cover Sensor	04:Monitor	01:Start 02:Stop
042-200	Main Fan Alarm	04:Monitor	01:Start 02:Stop
042-201	Sub Fan Alarm	04:Monitor	01:Start 02:Stop
042-202	Main Rear Fan Alarm	04:Monitor	01:Start 02:Stop
047-201	Finisher Detect	04:Monitor	01:Start 02:Stop
071-100	Bypass (MSI) No Paper Sensor	04:Monitor	01:Start 02:Stop
071-101	Tray1 No Paper Sensor	04:Monitor	01:Start 02:Stop
071-103	Regi Sensor	04:Monitor	01:Start 02:Stop
071-104	Exit Sensor	04:Monitor	01:Start 02:Stop
071-105	Full Stack Sensor	04:Monitor	01:Start 02:Stop
071-106	Paper Size Sensor0	04:Monitor	01:Start 02:Stopv
071-107	Paper Size Sensor1	04:Monitor	01:Start 02:Stop
071-108	Paper Size Sensor2	04:Monitor	01:Start 02:Stop
071-109	Option Feeder1 Size Sensor0	04:Monitor	01:Start 02:Stop

Table 1 Input list

Chain-Link	Component	Command	Operation
071-110	Option Feeder1 Size Sensor1	04:Monitor	01:Start 02:Stop
071-111	Option Feeder1 Size Sensor2	04:Monitor	01:Start 02:Stop
071-112	Option Feeder1 No Paper Sensor	04:Monitor	01:Start 02:Stop
071-113	Option Feeder1 Path Sensor	04:Monitor	01:Start 02:Stop
071-114	Option Feeder2 Size Sensor0	04:Monitor	01:Start 02:Stop
071-115	Option Feeder2 Size Sensor1	04:Monitor	01:Start 02:Stop
071-116	Option Feeder2 Size Sensor2	04:Monitor	01:Start 02:Stop
071-117	Option Feeder2 No Paper Sensor	04:Monitor	01:Start 02:Stop
071-118	Option Feeder2 Path Sensor	04:Monitor	01:Start 02:Stop
071-119	Option Feeder3 Size Sensor0	04:Monitor	01:Start 02:Stop
071-120	Option Feeder3 Size Sensor1	04:Monitor	01:Start 02:Stop
071-121	Option Feeder3 Size Sensor2	04:Monitor	01:Start 02:Stop
071-122	Option Feeder3 No paper Sensor	04:Monitor	01:Start 02:Stop
071-123	Option Feeder3 Path Sensor	04:Monitor	01:Start 02:Stop
071-124	Option Feeder4 Size Sensor0	04:Monitor	01:Start 02:Stop
071-125	Option Feeder4 Size Sensor1	04:Monitor	01:Start 02:Stop
071-126	Option Feeder4 Size Sensor2	04:Monitor	01:Start 02:Stop
071-127	Option Feeder4 No Paper Sensor	04:Monitor	01:Start 02:Stop
071-128	Option Feeder4 Path Sensor	04:Monitor	01:Start 02:Stop
071-129	Option Feeder1 Tray Open Sensor (HCF only)	04:Monitor	01:Start 02:Stop
071-131	Option Feeder1 Lift Up Sensor (HCF only)	04:Monitor	01:Start 02:Stop
071-131	Option Feeder2 Tray Open Sensor (HCF only)	04:Monitor	01:Start 02:Stop

Table 1 Input list

Chain-Link	Component	Command	Operation
071-132	Option Feeder2 Lift Up Sensor (HCF only)	04:Monitor	01:Start 02:Stop
071-200	Main Motor Alarm (1)	04:Monitor	01:Start 02:Stop
071-202	Option Feeder1 Motor Alarm (HCF only)	04:Monitor	01:Start 02:Stop
071-203	Option Feeder2 Motor Alarm (HCF only)	04:Monitor	01:Start 02:Stop
071-204	Option Feeder3 Motor Alarm (HCF only)	04:Monitor	01:Start 02:Stop
071-205	Option Feeder4 Motor Alarm (HCF only)	04:Monitor	01:Start 02:Stop
071-206	PH Motor Alarm	04:Monitor	01:Start 02:Stop
071-207	Deve Motor Alarm	04:Monitor	01:Start 02:Stop
094-200	Drum Cartridge Retract Sensor	04:Monitor	01:Start 02:Stop
094-201	K Belt Retract Sensor	04:Monitor	01:Start 02:Stop
094-202	Waste Cartridge Full Sensor	04:Monitor	01:Start 02:Stop
094-203	2nd BTR Waste Toner Full Sensor	04:Monitor	01:Start 02:Stop

**CAUTION**

Cyclic motion is not an available option. **Do not attempt to run. DO NOT turn main motor ON under OFF state. Wait at least 15 seconds after the fuser relay is actuated to run the main motor.**

**NOTE:** Motors must be run within operational limitations.

**NOTE:** All doors must be closed (or their interlock switches defeated) and the +24 VDC supply must be switched on with chain link 041-001 before testing motors, solenoids or clutches. If a door interlock is opened while testing, the +24VDC needs to be switched on again to continue testing. (For each chain link that contains an 'O' in the Enable +24VDC column, 041-001 **must** be set to "1" before testing that chain link.)

**Table 2 Output list**

Chain-Link	Component	Enable +24VDC (041-001) O: Yes X: No	Notes
010-001	Fusing Relay	X	Do not turn motor On under Off state.
010-002	Fusing Fuse Cut	X	
010-003	Fusing Envelope Motor	X	
010-004	Fusing Common Mode	X	
010-005	Fusing Envelope Mode	X	
010-006	Fusing Retract Mode	X	
041-001	Low Voltage Power Supply ++24VDC	X	From the OFF state, start diagnostics with ++24VDC turned ON. Motor or fan will not rotate if +24VDC is OFF. Use caution when +24VDC is turned ON under machine fault conditions. If an abnormal condition occurs, turn the power off immediately.
042-001	Main Fan (Normal)	X	
042-002	Main Fan (Half)	X	
042-003	Sub Fan (Normal)	X	
042-004	Sub Fan (Half)	X	
046-001	HVPS_Clock	X	
046-002	DBAC_Clock	X	
046-003	TR_Clock	X	

**Table 2 Output list**

Chain-Link	Component	Enable +24VDC (041-001) O: Yes X: No	Notes
061-001	LPH Forcing Lighting (All solid image)	X	Uninstall the drum unit when LPH is forcibly lit. When LPH is forcibly lit while drum unit is installed and drum operation is halted, light-induced fatigue of the photoreceptor will occur. -061-001: Light the LPH forcibly (Cin100%) -061-002: Light the LPH forcibly (Cin50%) -061-003: Only thyristor transfer is performed
061-002	LPH Forcing Lighting (Cin50%)	X	
061-003	LPH Forcing Lighting (Thyristor transfer)	X	
071-001	Bypass (MSI) Feed Solenoid	O	Auto OFF See table note.
071-002	Tray1 Feed Clutch	O	Auto OFF Enable a motor output command first: - 071-069: Motor (Normal: Main&Sub) - 071-070: Motor (Slow Speed 1: Main&Sub See table note.
071-003	Take Away Clutch	O	Enable a motor output command first: - 071-069: Motor (Normal: Main&Sub) - 071-070: Motor (Slow Speed 1: Main&Sub See table note.
071-004	Regi Clutch	O	Enable a motor output command first: - 071-069: Motor (Normal: main & sub) - 071-070: Motor (Slow Speed 1: main & sub See table note.
071-005	Exit Clutch	O	Enable a Motor output command first: - 071-069: Motor (Normal: Main & sub) - 071-070: Motor (Slow Speed 1: Main & sub See table note.
071-006	Invert Clutch	O	Enable a motor output command first: - 071-069: Motor (Normal: Main&Sub) - 071-070: Motor (Slow Speed 1: Main & Sub See table note (1)
071-007	Duplex Clutch	O	Enable a motor output command first: - 071-069: Motor (Normal: Main & sub) - 071-070: Motor (Slow Speed 1: Main & sub See table note.
071-008	Tray 1 LED	O	

**Table 2 Output list**

Chain-Link	Component	Enable +24VDC (041-001) O: Yes X: No	Notes
071-010	Option Feeder1 Motor (Normal)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-011	Option Feeder1 Motor (Slow Speed 1)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-012	Option Feeder1 Motor (Slow Speed 2)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-013	Option Feeder1 Motor (Slow Speed 3)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-014	Option Feeder1 Feed Clutch	O	Auto OFF See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-015	Option Feeder1 Take Away Clutch	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-016	Option Feeder1 LED	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-020	Option Feeder2 Motor (Normal)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-021	Option Feeder2 Motor (Slow Speed 1)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-022	Option Feeder2 Motor Slow Speed 2)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-023	Option Feeder2 Motor Slow Speed 3)	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-024	Option Feeder2 Feed Clutch	O	Auto OFF See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-025	Option Feeder2 Take Away Clutch	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-026	Option Feeder2 LED	O	See table note. Optional 550-sheet feeder or 2000-sheet feeder installed in this position.
071-030	Option Feeder3 Motor (Normal)	O	See table note. Optional 550-sheet feeder installed in this position.
071-031	Option Feeder3 Motor (Slow Speed 1)	O	See table note. Optional 550-sheet feeder installed in this position.

**Table 2 Output list**

Chain-Link	Component	Enable +24VDC (041-001) O: Yes X: No	Notes
071-032	Option Feeder3 Motor (Slow Speed 2)	O	See table note. Optional 550-sheet feeder installed in this position.
071-033	Option Feeder3 Motor (Slow Speed 3)	O	See table note. Optional 550-sheet feeder installed in this position.
071-034	Option Feeder3 Feed Clutch	O	Auto OFF See table note. Optional 550-sheet feeder installed in this position.
071-035	Option Feeder3 Take Away Clutch	O	See table note. Optional 550-sheet feeder installed in this position.
071-036	Option Feeder3 LED	O	See table note. Optional 550-sheet feeder installed in this position.
071-040	Option Feeder4 Motor (Normal)	O	See table note. Optional 550-sheet feeder installed in this position.
071-041	Option Feeder4 Motor (Slow Speed 1)	O	See table note. Optional 550-sheet feeder installed in this position.
071-042	Option Feeder4 Motor (Slow Speed 2)	O	See table note. Optional 550-sheet feeder installed in this position.
071-043	Option Feeder4 Motor (Slow Speed 3)	O	See table note. Optional 550-sheet feeder installed in this position.
071-044	Option Feeder4 Feed Clutch	O	Auto OFF See table note. Optional 550-sheet feeder installed in this position.
071-045	Option Feeder4 Take Away Clutch	O	See table note. Optional 550-sheet feeder installed in this position.
071-046	Option Feeder4 LED	O	See table note. Optional 550-sheet feeder installed in this position.
071-050	Duplex Gate Solenoid	O	Auto OFF
071-051	Finisher Gate	O	

Table 2 Output list

Chain-Link	Component	Enable +24VDC (041-001) O: Yes X: No	Notes
071-061	Main Motor (Normal)	O	If the main motor is rotated independently, friction scratch between YMC drums (driven by sub motor) and transfer belt will occur. If the main motor needs to be rotated, first operate the 1st bias transfer roll YMC Retract, then uninstall the YMC drum units or transfer belt unit.
071-062	Main Motor (Slow Speed 1)	O	
071-063	Main Motor (Slow Speed 2)	O	
071-064	Main Motor (Slow Speed 3)	O	
071-065	Sub Motor (Normal)	O	If the sub motor is rotated independently, friction scratch between YMC drums (driven by main motor) and transfer belt will occur. If the sub motor needs to be rotated, first operate the 1st bias transfer roll YMC Retract, then uninstall the YMC drum units or transfer belt unit.
071-066	Sub Motor (Slow Speed 1)	O	
071-067	Sub Motor (Slow Speed 2)	O	
071-068	Sub Motor (Slow Speed 3)	O	
071-069	Motor (Normal:Main & Sub)	O	Operating the drum unit or transfer belt units for long periods of time, will create the risk of damaging or displacing the cleaning blade. Maximum rotation time for the drum unit or transfer belt is approximately 60 seconds. See table note.
071-070	Motor (Slow Speed 1:Main & Sub)	O	See table note.
071-071	Motor (Slow Speed 2:Main & Sub)		
071-072	Motor (Slow Speed 3:Main & Sub)		

Table 2 Output list

Chain-Link	Component	Enable +24VDC (041-001) O: Yes X: No	Notes
071-085	Option Feeder1 Lift Up	O	Optional 550-sheet feeder or 2000 sheet feeder installed in this position. Auto off, sequence operation.
093-010	Black Toner Dispense Motor (Normal)	O	
093-011	Black Toner Dispense Motor (Half)	O	
094-001	Drum Cartridge Retract Solenoid	O	Auto OFF Enable a motor output command first: - 071-069: Motor (Normal: main & sub) - 071-070: Motor (Slow speed 1: Main & sub) See table note (1).

### Procedure

1. Enter Diagnostics, GP 1.
2. Touch **dC330 Component Control** to display the component control screen.

#### CAUTION

*Do not use the **Cyclic Motion** feature in this function. It is not functional and could cause errors.*

**NOTE:** Two or more components can be run at the same time. This is useful when it's necessary to enable +24VDC before running other components. To run two or more components using the following steps, start the first component, then start the next component.

3. Touch **Chain-Link**.

#### CAUTION

*Avoid damaging the cleaning blade. If entering chain-link numbers for the Drum or Transfer Belt units, do not rotate the Drum or the Transfer Belt units for more than 60 seconds.*

4. Enter the chain-link number of the input/output components (Table 1 and Table 2) using the keypad and touch **OK**.
5. Touch **Start**. The component will start operating.
  - The status of the latest turned ON component is displayed on the screen.
  - A beep will sound according to the status of input components. The volume can be set by selecting **Volume**.
  - **Input/ Output** column (component type), **Status** column (operation status: High/Low), and **Counter** column (operation count) are displayed on the **Component Control** screen.
6. If running additional components, repeat the steps to enter their chain-link codes and start each component.



7. When finished operating components, touch **Stop All** to stop all component operations, or the **Trash Can** icon to stop an individual component operation.
8. Touch **Close** to return to the Diagnostics screen.
9. Exit Diagnostics, **GP 1**.

## dC362 Restore NVM Values

**CAUTION**

*For information only. Do not use this routine.*

## dC363 NVM Backup/Restore

### Description

To back up/ restore the NVM Values.

Use this function when exchanging the MCU. Back up NVM values before removing the MCU, then restore NVM values after replacing the MCU. Do not use when exchanging the ESS. Use, also when initializing the IOT area with **dC301**.

### Procedure

1. Enter Diagnostics, **GP 1**.
2. Touch **dC363 NVM Backup Restore**.  
The NVM Backup Restore screen is displayed.
3. Touch **Back Up Files** or **Restore Files**, then touch **Start**.
4. A message appears on the screen confirming restore NVM values; touch **Yes** or **No**.
5. Touch **Close** to return to the diagnostics screen.
6. Exit Diagnostics, **GP 1**.

## dC500 Blank Page Threshold Value

### Description

To set the value that is used to determine what is a blank document when performing blank page detection for fax machines.

(For machines that are frequently used by visually impaired users, the CE performs document background settings using this tool.)

### Procedure

1. Enter Diagnostics, **GP 1**.
2. Touch **dC500 Blank Page Threshold Value**.  
The **Blank Page Threshold Value** screen is displayed.
3. Follow the message and place a blank sheet of paper (A or A4) on the DADF.
4. Touch **Start**.
5. The DADF does a one-sided scan, the **Threshold Value Coefficient** is displayed and set.
6. Touch **Close** to return to the diagnostics screen.
7. Exit Diagnostics, **GP 1**.

## dC612 Print Test Pattern

### Description

Prints a test pattern that is stored in the printer for checking image quality and isolating problems.

**NOTE:** Perform this operation after verifying that there is enough paper loaded in the Tray to be used. (If the **No Paper** condition occurs during the execution, a printing failure may occur on the paper that is being run. The paper used during this function is not counted.)

### MFP Procedure

1. Enter Diagnostics, **GP 1**.
2. Touch **dC612 Print Test Pattern** to display the **Print Test Pattern** screen.
3. Set the values for the following parameters. Refer to **Table 1**.

**NOTE:** Test patterns require specific settings for some of these parameters.

- Pattern number
  - Quantity
  - Paper supply
  - Output color
  - Cin%
  - Screen
  - 2-Sided
4. Touch **Start**.

**NOTE:** If the settings for a test pattern are wrong, the message appears: (Invalid parameter. Please re-enter.) and print test pattern cannot be performed. In this case, change the settings and repeat the test print.

5. Touch **Close** to return to the diagnostics screen.
6. Exit Diagnostics, **GP 1**.

## Pattern Numbers and Images

**Table 1** includes the print test patterns commonly used to check image quality and isolate problems. The table gives the test pattern numbers, names, pattern images, and parameter settings.

**Table 1** Commonly used test patterns

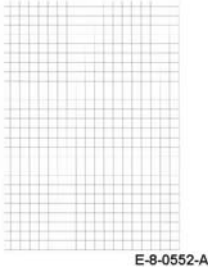
No.	Pattern name / Image	Settings
1	 <p><b>Figure 1</b> Grid</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Bypass</li> <li>– 8.5x11 Tray 1</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> (use default)</li> <li>• <b>Screen:</b> (use default)</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
15	LPH Chart IBY	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> (use default)</li> <li>• <b>Screen:</b> (use default)</li> <li>• <b>2-Sided:</b> 1-Sided</li> </ul>
21	Blank print (no image)	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> (use default)</li> <li>• <b>Screen:</b> (use default)</li> <li>• <b>2-Sided:</b> 1-Sided</li> </ul>

Table 1 Commonly used test patterns

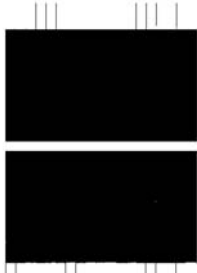
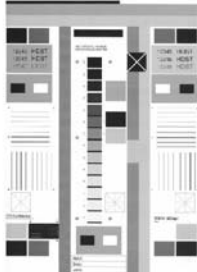
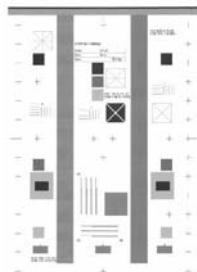
No.	Pattern name / Image	Settings
25	 <p>E-8-0565-A Figure 2 LPH chart LM</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> (use default)</li> <li>• <b>Screen:</b> (use default)</li> <li>• <b>2-Sided:</b> 1-Sided</li> </ul>
51	 <p>E-8-0554-A Figure 3 Total pattern_BW (600 binary)</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> <ul style="list-style-type: none"> <li>– Black (Mono)</li> </ul> </li> <li>• <b>Cin%:</b> (use default)</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
52	 <p>E-8-0566-A Figure 4 Total pattern_BW (1200 binary)</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> (use default)</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>

Table 1 Commonly used test patterns

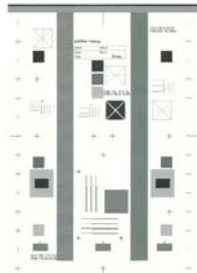


No.	Pattern name / Image	Settings
53	 <p>E-8-0572-A Figure 5 Total pattern_BW (600 multi-value)</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
54	 <p>E-8-0556-A Figure 6 Whole page half-tone (600 binary)</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> <ul style="list-style-type: none"> <li>50% Left image</li> <li>100% Right image</li> <li>0% White image (no image)</li> </ul> </li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
55	 <p>E-8-0556-A Figure 7 Whole page half-tone (1200 binary)</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> <ul style="list-style-type: none"> <li>50% Left image</li> <li>100% Right image</li> <li>0% White image (no image)</li> </ul> </li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>

Table 1 Commonly used test patterns




No.	Pattern name / Image	Settings
56	 <p><b>Figure 8 Whole page half-tone (600 multi-value)</b></p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> <ul style="list-style-type: none"> <li>50% Left image</li> <li>100% Right image</li> <li>0% White image (no image)</li> </ul> </li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
57	 <p><b>Figure 9 Gradation Chart (600 binary)</b></p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
58	 <p><b>Figure 10 Gradation Chart (1200 binary)</b></p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>

Table 1 Commonly used test patterns


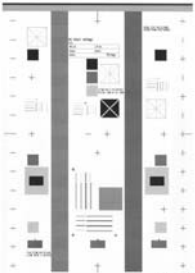
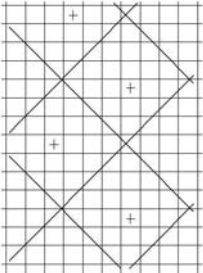
No.	Pattern name / Image	Settings
59	 <p><b>Figure 11 Gradation Chart (600 multi-value)</b></p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
60	 <p><b>Figure 12 Manufacture Total Pattern (B/W)</b></p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
61	 <p><b>Figure 13 Alignment Chart</b></p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>

Table 1 Commonly used test patterns


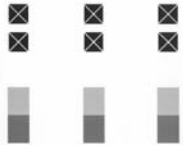
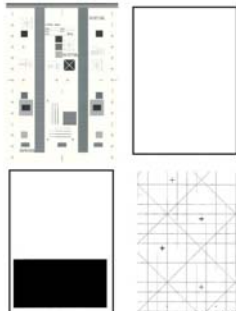
No.	Pattern name / Image	Settings
62	 <p>E-8-0559-A Figure 14 Pitch Confirmation Chart</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
63	 <p>E-8-0560-A Figure 15 Ghost chart</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>
280	 <p>Figure 16 All Bundle Print Out (A4)</p>	<ul style="list-style-type: none"> <li>• <b>Quantity:</b> 1-999</li> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-5/ MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>2-Sided:</b> (simplex/duplex)</li> </ul>

Table 1 Commonly used test patterns



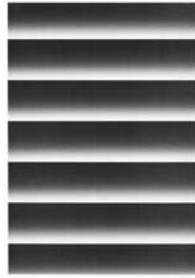
No.	Pattern name / Image	Settings
112 (MFP only)	 <p>E-8-0548-A Figure 17 IIT Analog Gradation (B/W)</p>	<ul style="list-style-type: none"> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-4/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Standard/ Gradation/ Fineness</li> <li>• <b>Simplex</b></li> </ul>
115 (MFP only)	 <p>E-8-0548-A Figure 18 Pre IPS/FS Increment (B/W)</p>	<ul style="list-style-type: none"> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-4/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Copy Error Diffusion</li> <li>• <b>Simplex</b></li> </ul>
119 (MFP only)	 <p>E-8-0549-A Figure 19 Pre IPS/SS Increment (B/W)</p>	<ul style="list-style-type: none"> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-4/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Copy Error Diffusion</li> <li>• <b>Simplex</b></li> </ul>

Table 1 Commonly used test patterns



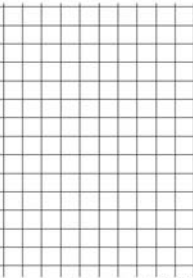

No.	Pattern name / Image	Settings
120 (MFP only)	 <p style="text-align: right;">E-8-0550-A</p> <p><b>Figure 20 Even Density of the Entire Sheet</b></p>	<ul style="list-style-type: none"> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-4/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Copy Error Diffusion</li> <li>• <b>Simplex</b></li> </ul>
123 (MFP only)	 <p style="text-align: right;">E-8-0551-A</p> <p><b>Figure 21 Pre IPS/Shading Data (B/W)</b></p>	<ul style="list-style-type: none"> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-4/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Copy Error Diffusion</li> <li>• <b>Simplex</b></li> </ul>
128 (MFP only)	 <p style="text-align: right;">E-8-0563-A</p> <p><b>Figure 22 Post IP/Grid (B/W)</b></p>	<ul style="list-style-type: none"> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-4/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Copy Error Diffusion</li> <li>• <b>Simplex</b></li> </ul>

Table 1 Commonly used test patterns

No.	Pattern name / Image	Settings
170	 <p style="text-align: right;">E-8-0553-A</p> <p><b>Figure 23 Copy ED 24 Shades Patch (B/W)</b></p>	<ul style="list-style-type: none"> <li>• <b>Paper Supply:</b> <ul style="list-style-type: none"> <li>– 8.5x11/ 8.5x13 Tray 1-4/MSI</li> </ul> </li> <li>• <b>Output Color:</b> Black (Mono)</li> <li>• <b>Cin%:</b> 0-100%</li> <li>• <b>Screen:</b> Copy Error Diffusion</li> <li>• <b>Simplex</b></li> </ul>

## dC945 IIT Calibration

### CAUTION

*Do not use. This diagnostic function appears in the list of available functions; however, it is not used by this product.*

### HEX to DEC conversion

Perform the steps that follow:

#### Using Windows 7:

1. Go to: **Start> All Programs> Accessories> Calculator.**
2. Click on the calculator View menu button.
3. Select programmer
4. Select the Hex button.
5. Enter the Hex number.
6. Select the Dec button and the result is shown.

#### Using Windows 10:

1. In the search window (next to the Start button or Windows icon) type Calculator. then select Calculator from the list.
2. Click on the calculator menu button.
3. Select Programmer.
4. Select the Hex button.
5. Enter the Hex number.
6. The result is shown in the DEC field.

## dC1010 Signals Sending Test

**NOTE:** For information only. Do not use this routine.



## dC1011 Relay On / Off Test

*NOTE: For information only. Do not use this routine.*



# Tags/MODs

## Purpose

To provide a list of all the tag numbers used, together with a description of each of the machine modifications.

## Description

Each modification to the system is assigned a unique tag number. This section of the service documentation contains a listing and brief description of all change tags.

Change tags listed in this section are listed by machine module. The module to which the tag relates is identified by the tag prefix letter.

## Tag/MOD Information

Information that may be included with each tag item is as follows:

- Tag - identifies the control number for the tag.
- Class - identifies the classification code as listed in [Classification Codes](#).
- Use - indicates the block build or model designation of the machine.
- Manufacturing Serial Number - indicates the serial number of the factory-built machines with the modification installed.
- Name - indicates the name of the retrofit.
- Purpose - provides a brief description of the modification.
- Kit Number - identifies the part number of the kit or part required to install the modification.
- Parts List On - identifies the Part List location of the modification part.
- Reference - Indicates all other Tag/MOD numbers that are related to this product configuration. These may supercede or be superceded by another Tag/MOD.

## Mod/Tag Plate Location

Tags are identified by a tag number which is recorded on a tag matrix inside the front door.

## Classification Codes

The class or classification codes are described in [Table 1](#).

**Table 1 Classification codes**

NASG Code	XE Code	Description
-	1	Safety: install this tag immediately.
M	2	Mandatory: install this tag at the next opportunity.
R	3	Repair: install this tag as a repair, at the failure of a component.
O	4	Optional: install as a customer option or a field engineering decision.
S	4	Situational: install as the situation demands.
N	5	Manufacturing: cannot be installed in the field.
-	6	Refurbishing only.



<b>Plug and Jack Locations</b>	
MFP STD Plug / Jack Location List.....	7-3
MFP Tall Plug / Jack Location List.....	7-7
SFP Plug / Jack Location List.....	7-11
Optional 550 Feeder Plug Jack Connectors.....	7-14
Finisher Plug / Jack Connectors.....	7-16
HCF Plug Jack Connectors.....	7-20
Mailbox Plug Jack Connectors.....	7-23
<b>System Wiring Diagrams</b>	
System Wiring Diagram Symbols.....	7-27
IOT System Wiring Diagrams.....	7-27
Finisher System Wiring Diagram.....	7-30
HCF System Wiring Diagram.....	7-32
Mailbox System Wiring Diagram.....	7-33
<b>Subsystem Wiring Diagrams</b>	
Interconnection Wiring Diagram Symbols.....	7-35
IOT Interconnections Diagrams.....	7-36
Finisher Interconnection Diagrams.....	7-44
HCF Interconnection Diagrams.....	7-48
Mailbox Interconnection Diagrams.....	7-50
<b>Harness Routings</b>	
IOT harness Routing.....	7-53
Finisher harness Routing.....	7-62
HCF harness Routing.....	7-64
Mailbox harness Routing.....	7-66
<b>Block Schematic Diagrams</b>	
Block Schematic Diagrams.....	7-69



## MFP STD Plug / Jack Location List

The P/J Locator diagrams show the location of primary connections within the MFP. Use these illustrations to locate connections called out in the procedures presented in Sections 2, 4, and 6. Connectors designated “CN” are listed at the end of the P/J connectors.

harness connections appear in sections System Wiring Diagrams and Subsystem Wiring Diagrams.

How to find a P/J location:

**NOTE:** For the coordinate numbers, a \*1 = High Model only and a \*2 = Low Model only.

1. Locate the P/J connector designator in the first column of [Table 1](#).
2. With this information, refer to the Map column for the figure number.
3. Use the coordinates to find the P/J connector designator's location on the map.

**Table 1 Plug / Jack Locations (MFP)**

P/J	Map	Coordinates	Connection
P/J1	<a href="#">Figure 2</a>	F-121	UI harness and console assembly UI A10
P/J4	<a href="#">Figure 2</a>	G-121	Console assembly UI A10 and main speaker
P/J100	<a href="#">Figure 1</a>	J-112	MCU PWB and MCU-HVPS-MV harness
P/J101	<a href="#">Figure 1</a>	B-102	ESS PWB and EMMC card
P/J110	<a href="#">Figure 1</a>	H-113	MCU PWB and toner CRUM harness assembly
P/J114	<a href="#">Figure 4</a>	G-152	CRUM-MV harness assembly and CRUM-MV harness assembly
P/J116	<a href="#">Figure 4</a>	E-150	Toner CRUM connector assembly and toner CRUM harness assembly
P/J122	<a href="#">Figure 4</a>	D-151	Dispenser/environmental motor assembly and dispenser/environmental harness assembly
P/J130	<a href="#">Figure 1</a>	I-112	MCU PWB and CRUM-MV harness assembly
P/J131	<a href="#">Figure 4</a>	I-152	XERO CRUM-MV harness assembly and CRUM-MV harness assembly
P/J133	<a href="#">Figure 4</a>	H-154	CRUN DC DL connector assembly and XERO CRUM-MV harness assembly
P/J140	<a href="#">Figure 1</a>	H-114	MCU PWB and TA CLT/HUM-MV harness assembly
P/J145	<a href="#">Figure 3</a>	E-140	Humidity and temperature sensors and TA CLT/HUM-MV harness assembly
P/J146	<a href="#">Figure 3</a>	I-140	Take away clutch and TA CLT/HUM-MV harness assembly
P/J171	<a href="#">Figure 4</a>	C-151	Envelope mode sensor and Dispenser/envelope harness assembly
P/J190	<a href="#">Figure 1</a>	G-113	MCU PWB and SW size harness assembly
P/J191	<a href="#">Figure 2</a>	F-128	Size switch assembly and size switch harness assembly
200	<a href="#">Figure 1</a>	J-112	Not connected
P/J220	<a href="#">Figure 1</a>	H-112	Not connected

**Table 1 Plug / Jack Locations (MFP)**

P/J	Map	Coordinates	Connection
P/J270	<a href="#">Figure 1</a>	J-112	MCU PWB and fusing DC-MV Harness assembly
P/J277	<a href="#">Figure 4</a>	F-154	Fusing assembly and fusing 110V-MV harness assembly/fusing DC harness assembly
P/J280	<a href="#">Figure 1</a>	J-113	MCU PWB and LV-MCU-MV harness assembly
P/J281	<a href="#">Figure 1</a>	J-105	LVPS PWB and Inlet harness assembly
P/J283	<a href="#">Figure 1</a>	H-104	LVPS PWB and fusing AC-MV harness assembly
P/J284	<a href="#">Figure 1</a>	H-102	LVPS PWB and LV-MCU-MV harness assembly
P/J285	<a href="#">Figure 1</a>	I-101	LVPS PWB and 24V-MCU-MV harness assembly
P/J286	<a href="#">Figure 1</a>	I-101	LVPS PWB and MCU-HVPS-MV harness assembly
P/J287	<a href="#">Figure 1</a>	I-101	LVPS PWB and ESS-PWR-MV harness assembly
P/J288	<a href="#">Figure 1</a>	I-101	LVPS PWB and motor power-MV harness assembly
P/J289	<a href="#">Figure 1</a>	I-101	LVPS PWB and main fan
P/J290	<a href="#">Figure 1</a>	J-113	MCU PWB and 24V-NCU-MV harness assembly
P/J291	<a href="#">Figure 1</a>	H-101	LVPS PWB and side interlock switch
P/J292	<a href="#">Figure 1</a>	H-101	LVPS PWB and rear interlock switch
P/J293	<a href="#">Figure 1</a>	H-101	LVPS PWB and SUB fan-MV harness assembly
P/J294	<a href="#">Figure 2</a>	H-124	(SCC) SUB FAN and SUB FAN-MV harness assembly
295	<a href="#">Figure 1</a>	H-101	LVPS PWB and rear fan2-MV harness assembly
296	<a href="#">Figure 1</a>	H-101	Rear fan1-MV harness assembly and rear fan2-MV harness assembly.
P/J300	<a href="#">Figure 1</a>	G-113	MCU PWB and MCU ESS FFC
P/J301	<a href="#">Figure 1</a>	D-104	ESS MFP PWB and ESS-power-MV harness assembly
P/J302	<a href="#">Figure 1</a>	B-104	HDD assembly and ESS MFP PWB
P/J310	<a href="#">Figure 1</a>	B-105	HDD assembly and ESS MFP PWB
311	<a href="#">Figure 1</a>	C-103	Not connected
P/J322	<a href="#">Figure 1</a>	A-104	Not connected
P/J335	<a href="#">Figure 1</a>	B-105	ESS MFP PWB and FFC MCU ESS
P/J340	<a href="#">Figure 1</a>	A-104	Ethernet port
345	<a href="#">Figure 1</a>	C-103	ESS MFP PWB and ICCR USB harness assembly
P/J346	<a href="#">Figure 1</a>	A-103	USB type A port
P/J351	<a href="#">Figure 1</a>	A-105	FDI port
P/J353	<a href="#">Figure 1</a>	D-103	ESS MFP PWB and Fax harness assembly
P/J356	<a href="#">Figure 1</a>	D-103	ESS MFP PWB and A4 fax speaker assembly
P/J380	<a href="#">Figure 1</a>	A-105	Debug port
P/J460	<a href="#">Figure 1</a>	I-114	MCU PWB and developer-MV harness assembly
P/J461	<a href="#">Figure 3</a>	G-136	Inverter clutch and developer-MV harness assembly
P/J462	<a href="#">Figure 3</a>	H-136	Exit clutch and developer-MV harness assembly
P/J466	<a href="#">Figure 3</a>	I-136	Full stack-MV harness assembly and developer-MV harness assembly
P/J467	<a href="#">Figure 3</a>	G-137	Full stack sensor and full stack-MV harness assembly

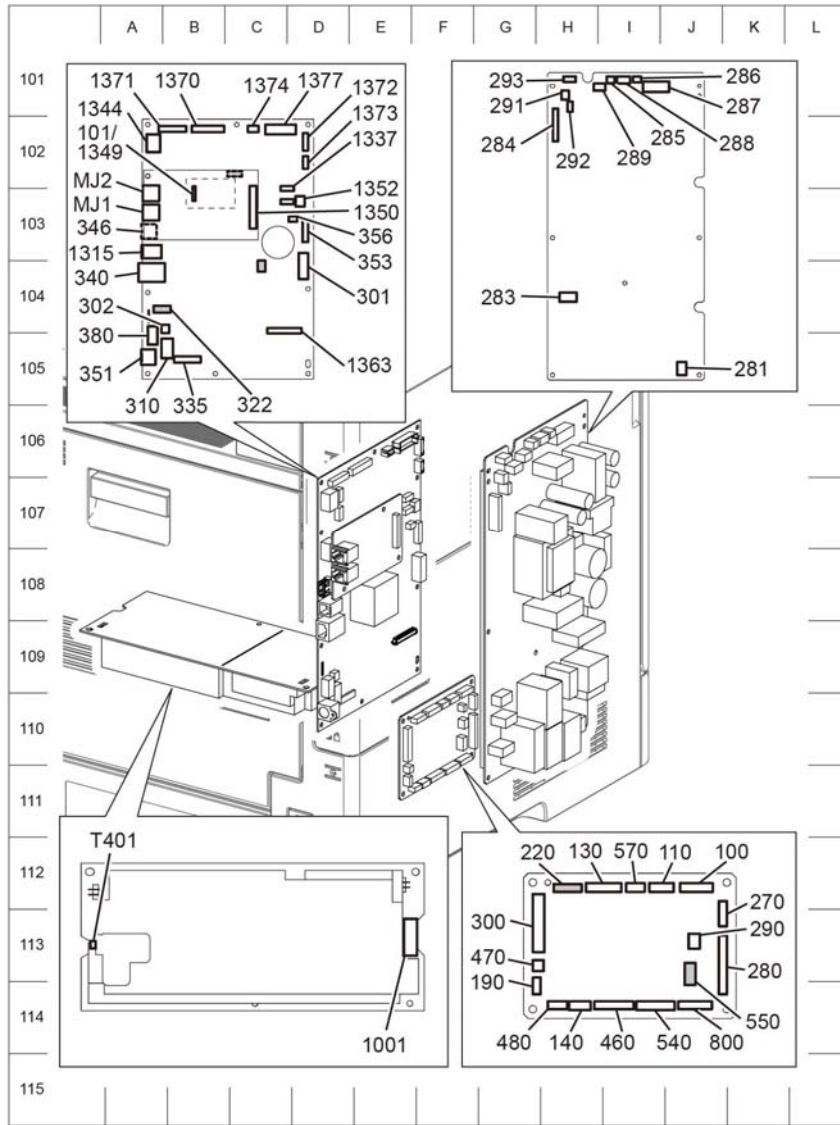
**Table 1 Plug / Jack Locations (MFP)**

P/J	Map	Coordinates	Connection
P/J468	Figure 3	F-137	Gate solenoid and developer-MV harness assembly
P/J469	Figure 3	F-138	Exit sensor and stack-MV full harness assembly
P/J470	Figure 1	G-113	MCU PWB and LED harness assembly
P/J471	Figure 2	G-128	LED tray PWB and LED harness assembly
P/J480	Figure 1	H-114	MCU PWB and MSI-MV harness assembly
P/J482	Figure 2	G-127	MSI feed solenoid and MSI-MV harness assembly
P/J483	Figure 2	G-127	No paper sensor-C harness assembly and MSI-MV harness assembly
P/J484	Figure 2	H-126	MSI no paper and MSI no paper sensor-C harness assembly
P/J540	Figure 1	I-114	MCU PWB and registration-MV harness assembly
P/J541	Figure 2	B-126	Registration/duplex-C clutch harness assembly and registration-MV harness assembly
P/J542	Figure 2	B-125	Registration clutch assembly and registration/duplex-C harness assembly
P/J543	Figure 2	A-125	Duplex clutch and registration/duplex-C clutch harness assembly
P/J544	Figure 2	B-126	Feed clutch-C harness assembly and registration-MV harness assembly
P/J545	Figure 2	B-125	Registration no paper sensor harness assembly and registration-MV harness assembly
P/J546	Figure 2	C-125	Registration sensor and registration no paper-C sensor harness assembly
P/J547	Figure 2	C-125	No paper-C sensor and registration no paper sensor harness
P/J548	Figure 2	B-125	Paper handling clutch assembly and feed-C clutch harness clutch assembly
P/J550	Figure 1	J-113	Not connected
P/J570	Figure 1	I-112	MCU PWB and Main motor-MV harness assembly
P/J571	Figure 3	H-139	Main motor and Main motor-MV harness assembly
P/J572	Figure 3	I-139	Main motor and motor power-MV harness assembly
P/J800	Figure 1	J-114	MCU PWB and OPF-MV Harness assembly
P/J801	Figure 1	H-106 (OPT FDR)	OPT feeder and OPF-MV harness assembly
P/J1001	Figure 1	E-113	HVPS PWB and MCU HVPS-MV harness assembly
P/J1315	Figure 1	A-103	USB type B port
P/J1337	Figure 1	C-103	ESS MFP PWB and ICCR USB harness assembly
P/J1344	Figure 1	A-102	ESS MFP PWB and wireless module
P/J1349	Figure 1	B-102	ESS MFP PWB and EMMC card
P/J1350	Figure 1	C-103	Fax PWB and fax harness assembly
P/J1352	Figure 1	C-103	ESS MFP PWB and UI harness assembly
P/J1363	Figure 1	C-104	ESS MFP PWB and LPH MONO head assembly

**Table 1 Plug / Jack Locations (MFP)**

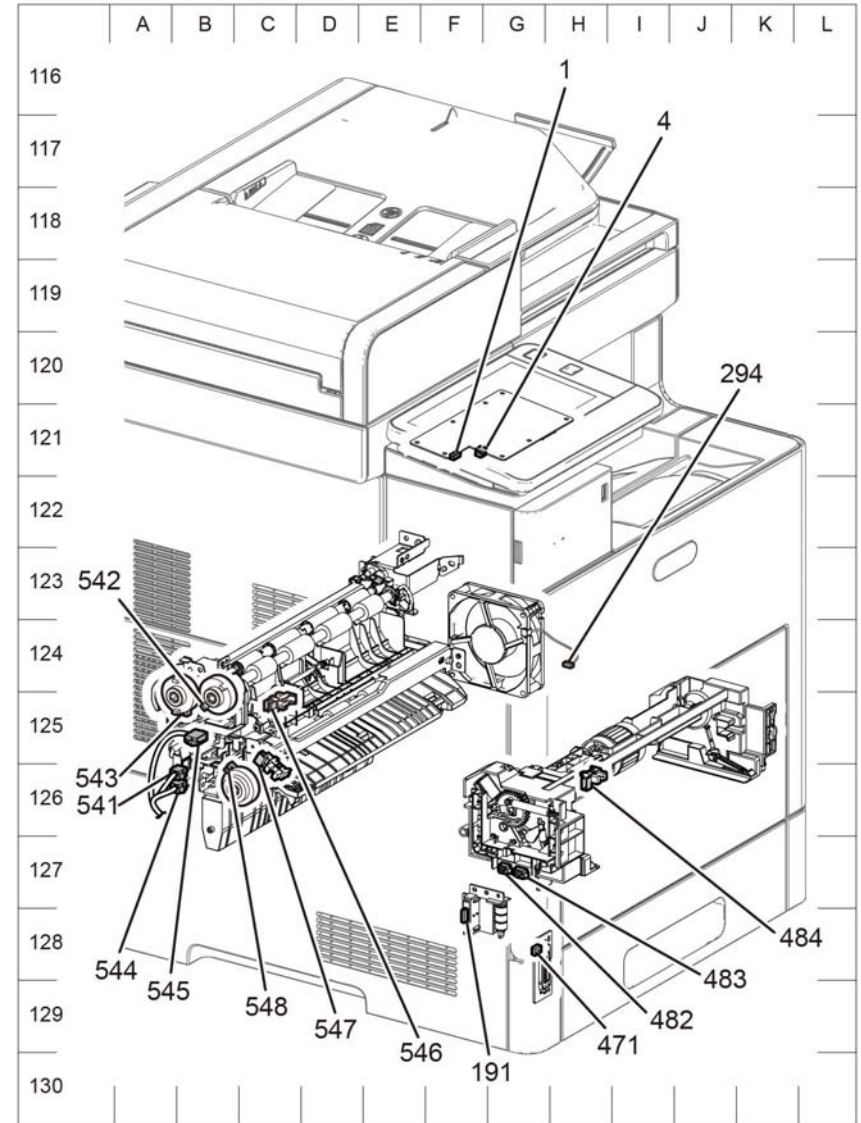
P/J	Map	Coordinates	Connection
P/J1370	Figure 1	B-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1371	Figure 1	B-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1372	Figure 1	D-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1373	Figure 1	D-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1374	Figure 1	C-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1377	Figure 1	C-102	ESS MFP PWB and DADF/IIT harness assembly
P/JMJ1	Figure 1	A-103	Network port (line)
P/JMJ2	Figure 1	A-103	Network port (phone)
P/JT401	Figure 1	A-113	HVPS PWB and bias transfer roll





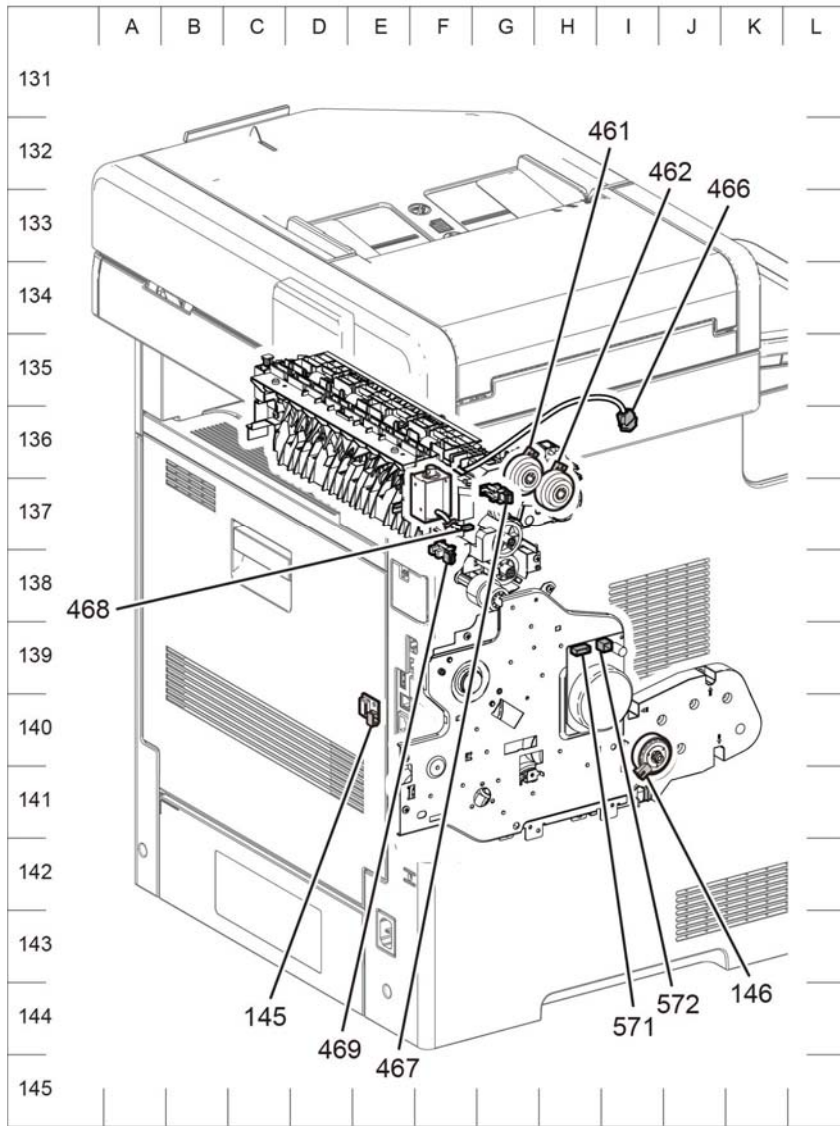
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Figure 1 MFP STD (1 of 4)



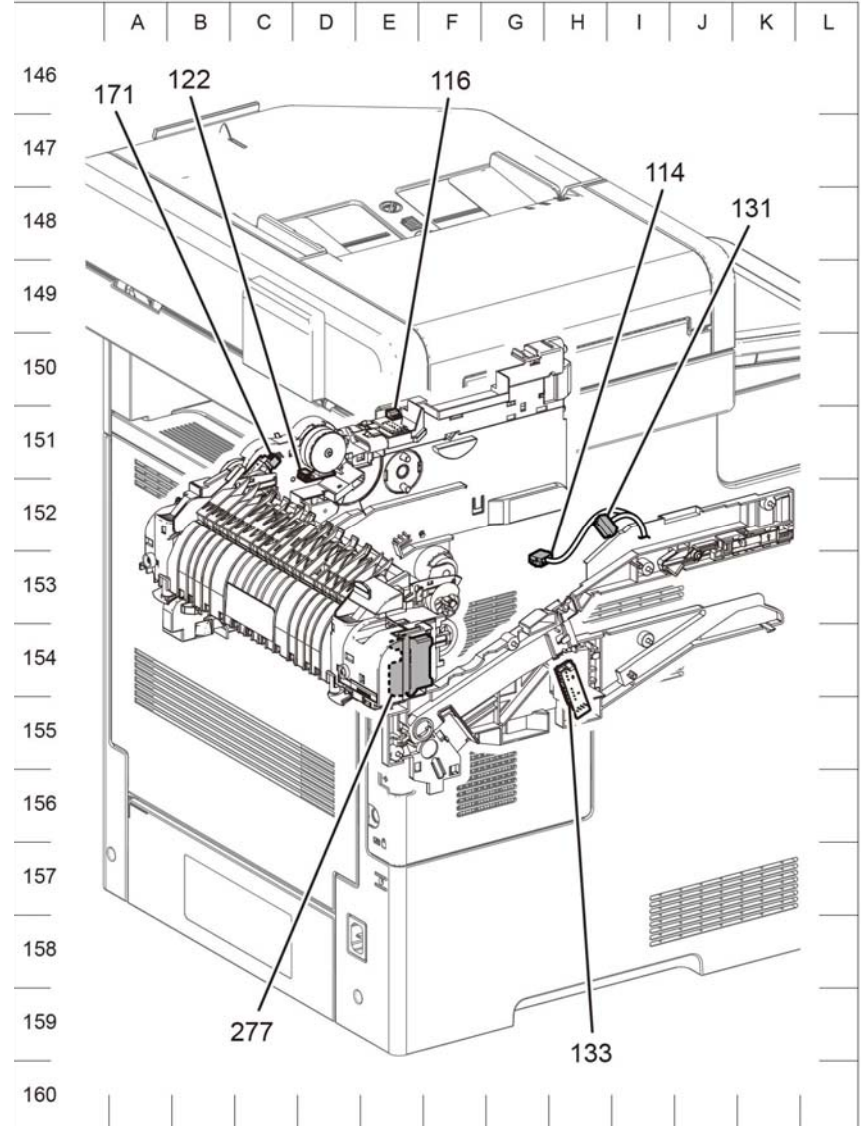
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Figure 2 MFP - std (2 of 4)



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Figure 3 MFP - Std (3 of 4)



E-8-0006-A

Figure 4 MFP - Std (4 of 4)

## MFP Tall Plug / Jack Location List

The P/J Locator diagrams show the location of primary connections within the MFP. Use these illustrations to locate connections called out in the procedures presented in Sections 2, 4, and 6. Connectors designated “CN” are listed at the end of the P/J connectors.

harness connections appear in sections System Wiring Diagrams and Subsystem Wiring Diagrams.

How to find a P/J location:

**NOTE:** For the coordinate numbers, a \*1 = High Model only and a \*2 = Low Model only.

1. Locate the P/J connector designator in the first column of [Table 1](#).
2. With this information, refer to the Map column for the figure number.
3. Use the coordinates to find the P/J connector designator's location on the map.

**Table 1 Plug / Jack Locations (MFP Tall)**

P/J	Map	Coordinates	Connection
P/J1	Figure 2	F-118	UI harness and UI AIO console assembly
P/J4	Figure 2	F-118	Main speaker and UI AIO console assembly
P/J100	Figure 1	J-112	MCU PWB and MCU-HVPS-CF harness assembly
P/J101	Figure 1	B-102	ESS MFP PWB and EMMC card
P/J110	Figure 1	I-112	MCU PWB and Toner dispenser/environmental harness assembly
P/J114	Figure 4	G-152	Toner CRUM-MV harness assembly and Toner CRUM-MV harness assembly
P/J116	Figure 4	E-150	Toner CRUM-MV Connector assembly and Toner CRUM harness assembly
P/J122	Figure 4	D-151	Dispenser/environmental motor assembly and dispenser/environmental harness assembly
P/J130	Figure 1	I-112	MCU PWB and crum-MV harness assembly
P/J131	Figure 4	I-152	XERO CRUM-MV harness assembly and CRUM-MV harness assembly
P/J133	Figure 4	H-154	XERO CRUM-MV harness assembly and CRUN DCDL connector assembly
P/J140	Figure 1	H-114	MCU PWB and TA clutch/humidity-MV harness assembly
P/J145	Figure 3	E-140	Humidity/temperature sensor and clutch/humidity-MV harness assembly
P/J146	Figure 3	I-140	Take away clutch and take away clutch/humidity-MV harness assembly
P/J171	Figure 4	C-151	Envelope mode sensor and dispenser/environmental harness assembly
P/J190	Figure 1	G-114	MCU PWB and size switch harness assembly
P/J191	Figure 2	F-128	Size switch assembly and size switch harness assembly

**Table 1 Plug / Jack Locations (MFP Tall)**

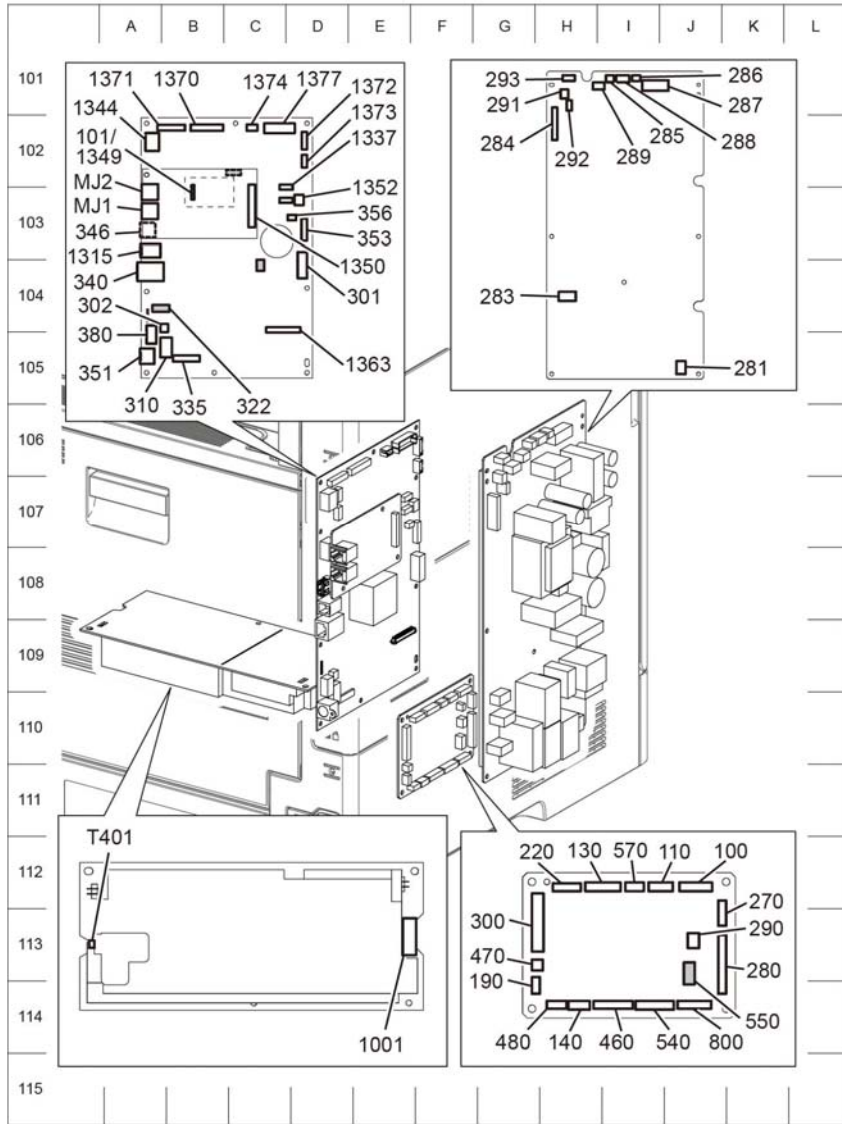
P/J	Map	Coordinates	Connection
P/J220	Figure 1	H-112	MCU PWB and finisher MCU-MV harness assembly
P/J221	Figure 3	F-137	Finisher/mailbox and finisher-MV harness assembly
P/J222	Figure 3	I-136	Finisher-MV harness assembly and finisher MCU-MV harness assembly
P/J270	Figure 3	J-112	MCU PWB and fusing CD-MV harness assembly
P/J277	Figure 4	F-154	Fusing assembly and fusing DC-MV harness assembly/fusing AC harness assembly
P/J280	Figure 1	J-113	MCU PWB and LV MCU-MV harness assembly
P/J281	Figure 1	J-105	LVPS PWB and inlet harness assembly
P/J283	Figure 1	H-104	LVPS PWB and AC fusing harness assembly
P/J284	Figure 1	H-102	LVPS PWB and LV MCU-MV harness assembly
P/J285	Figure 1	I-101	LVPS PWB and 24V MCU-MV harness assembly
P/J286	Figure 1	I-101	LVPS PWB and HVPS MCU-MV harness assembly
P/J287	Figure 1	I-101	LVPS PWB and ESS power-MV harness assembly
P/J288	Figure 1	I-101	LVPS PWB and motor power-MV harness assembly
P/J289	Figure 1	I-101	LVPS PWB and main fan
P/J290	Figure 1	J-113	MCU PWB and 24V MCU-MV harness assembly
P/J291	Figure 1	H-101	LVPS PWB and side interlock switch
P/J292	Figure 1	H-101	LVPS PWB and rear interlock switch
P/J293	Figure 1	H-101	LVPS PWB and SUB fan-MV harness assembly
P/J294	Figure 2	H-124	(SCC) sub fan-MV harness assembly
P/J300	Figure 1	G-113	MCU PWB and ESS FFC MCU
P/J301	Figure 1	D-103	ESS MFP PWB and ESS power-MV harness assembly
P/J302	Figure 1	B-104	HDD assembly and ESS MFP PWB
P/J310	Figure 1	B-105	HDD assembly and ESS MFP PWB
311***	Figure 1	C-104	Not connected *** (did not find on illustration)
P/J322	Figure 1	A-104	Not connected
P/J335	Figure 1	B-105	ESS MFP PWB and ESS MCU FFC
P/J340	Figure 1	A-104	Ethernet port
345****	Figure 1	C-103	ESS MFP PWB and front USB harness assembly ****(DID NOT FIND ON ILLUSTRATION)
P/J346	Figure 1	A-103	USB type A port
P/J351	Figure 1	A-105	FDI port
P/J353	Figure 1	D-103	ESS MFP PWB and fax harness assembly
P/J356	Figure 1	D-103	ESS MFP PWB and A4 fax speaker assembly
P/J380	Figure 1	A-105	Debug port

**Table 1 Plug / Jack Locations (MFP Tall)**

P/J	Map	Coordinates	Connection
384	Figure 1	C-102 ****S	Not connected **** (DID NOT FIND ON ILLUSTRATION)
P/J460	Figure 1	I-114	MCU PWB and developer-MV harness assembly
P/J461	Figure 3	G-136	Invert clutch and developer-MV harness assembly
P/J462	Figure 3	H-136	Exit clutch and developer-MV harness assembly
P/J466	Figure 3	I-136	Full stack-MV harness assembly and developer-MV harness assembly
P/J467	Figure 3	G-137	Full stack sensor and full stack-MV harness assembly
P/J468	Figure 3	F-137	Gate solenoid and developer-MV harness assembly
P/J469	Figure 3	F-138	Exit sensor and full stack-MV harness assembly
P/J470	Figure 1	G-113	MCU PWB and LED harness assembly
P/J471	Figure 2	G-128	LED tray PWB and LED harness assembly
P/J480	Figure 1	H-114	MCU PWB and MSI-MV harness assembly
P/J482	Figure 2	G-127	MSI feed solenoid and MSI-MV harness assembly
P/J483	Figure 2	G-127	MSI no paper sensor-C harness assembly and MSI-MV harness assembly
P/J484	Figure 2	H-126	MSI no paper sensor and MSI no paper sensor-C harness assembly
P/J540	Figure 1	I-114	MCU PWB and registration-MV harness assembly
P/J541	Figure 2	B-126	Registration/duplex-C clutch harness assembly and registration-MV harness assembly
P/J542	Figure 2	B-125	Registration clutch assembly and registration/duplex-C clutch harness assembly
P/J543	Figure 2	A-125	Duplex clutch and registration/duplex-C clutch harness assembly
P/J544	Figure 2	B-126	Feed-C clutch harness assembly and registration-MV harness assembly
P/J545	Figure 2	B-125	Registration no paper-C sensor harness assembly and
P/J546	Figure 2	C-125	Registration sensor and registration no paper-C sensor
P/J547	Figure 2	C-125	No paper sensor and registration no paper-C sensor
P/J548	Figure 2	B-125	PH clutch assembly and feed-C clutch harness assembly
P/J550	Figure 1	J-113	Not connected
P/J570	Figure 1	I-112	MCU PWB and main motor-MV harness assembly
P/J571	Figure 3	H-139	Main motor and main motor-MV harness assembly

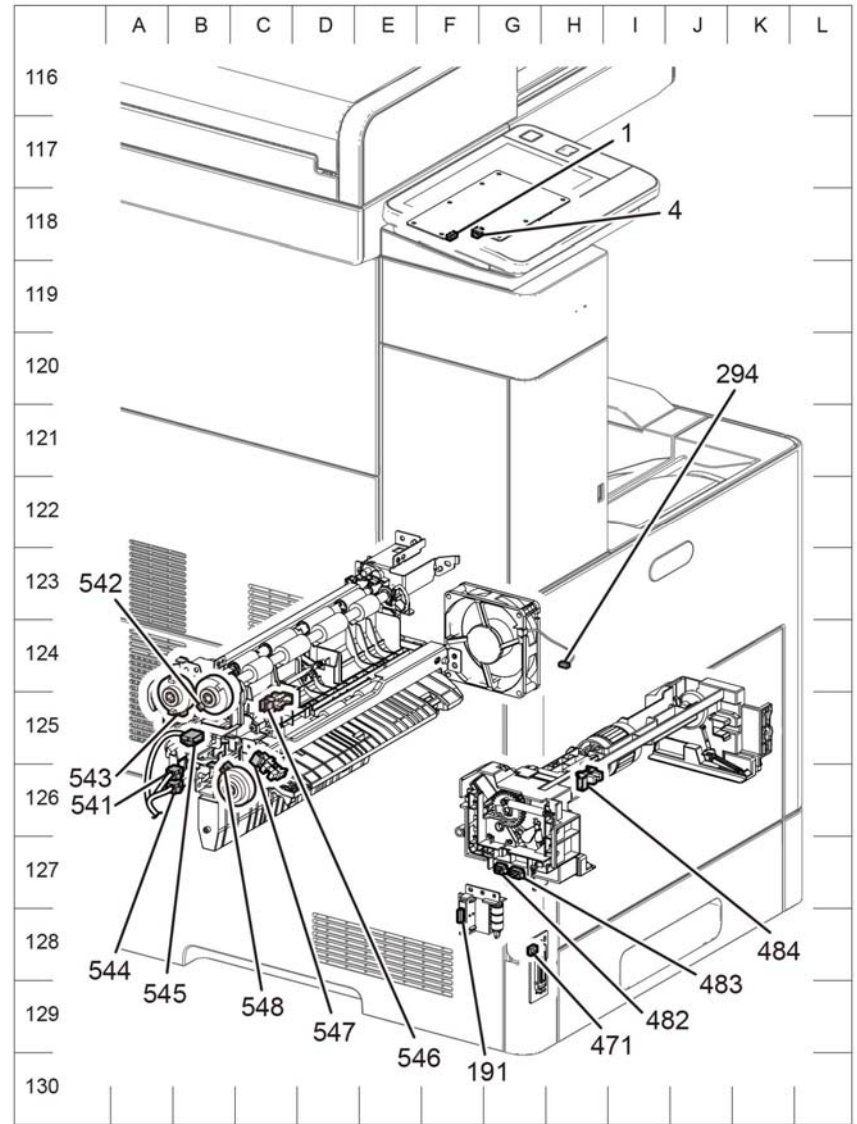
**Table 1 Plug / Jack Locations (MFP Tall)**

P/J	Map	Coordinates	Connection
P/J572	Figure 3	I-139	main motor and motor power-MV harness assembly
P/J800	Figure 1	J-114	MCU PWB and OPF-MV harness assembly
P/J801	Figure 1	H-106 (OPT FDR)	OPT feeder and OPF-MV harness assembly
P/J1001	Figure 1	E-113	HVPS PWB and MCU HVPS-MV harness assembly
P/J1315	Figure 1	A-103	USB type B port
P/J1337	Figure 1	C-103	ESS MFP PWB and ICCR USB harness assembly
P/J1344	Figure 1	A-102	ESS MFP PWB and wireless module
P/J1349	Figure 1	B-102	ESS MFP PWB and EMMC card
P/J1350	Figure 1	C-103	Fax PWB and fax harness assembly
P/J1352	Figure 1	D-103	ESS MFP PWB and UI harness assembly
P/J1363	Figure 1	C-104	ESS MFP PWB and LPH MONO head assembly
P/J1370	Figure 1	B-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1371	Figure 1	B-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1372	Figure 1	D-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1373	Figure 1	D-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1374	Figure 1	C-102	ESS MFP PWB and DADF/IIT harness assembly
P/J1377	Figure 1	C-102	ESS MFP PWB and DADF/IIT harness assembly
P/JMJ1	Figure 1	A-103	Network port (line)
P/JMJ2	Figure 1	A-103	Network port (phone)
P/JT401	Figure 1	A-113	HVPS PWB and bias transfer roll



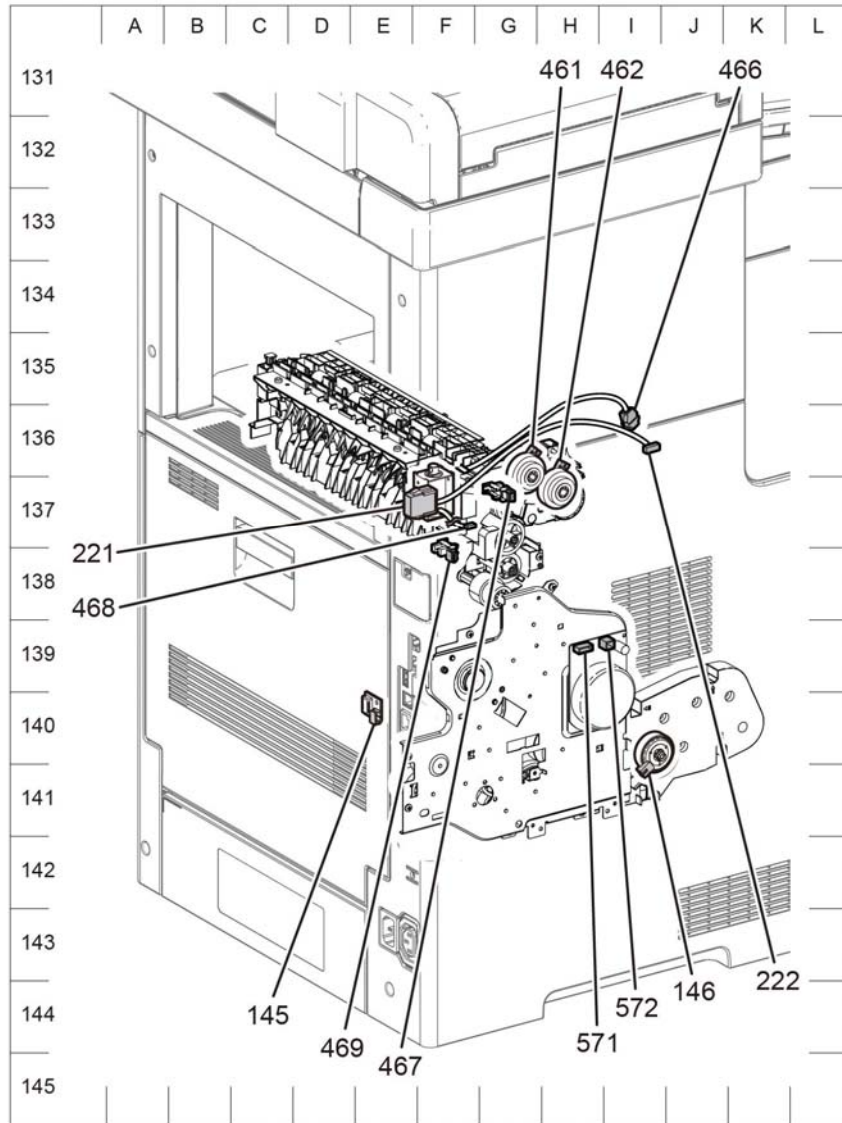
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Figure 1 MFP tall (1 of 4)



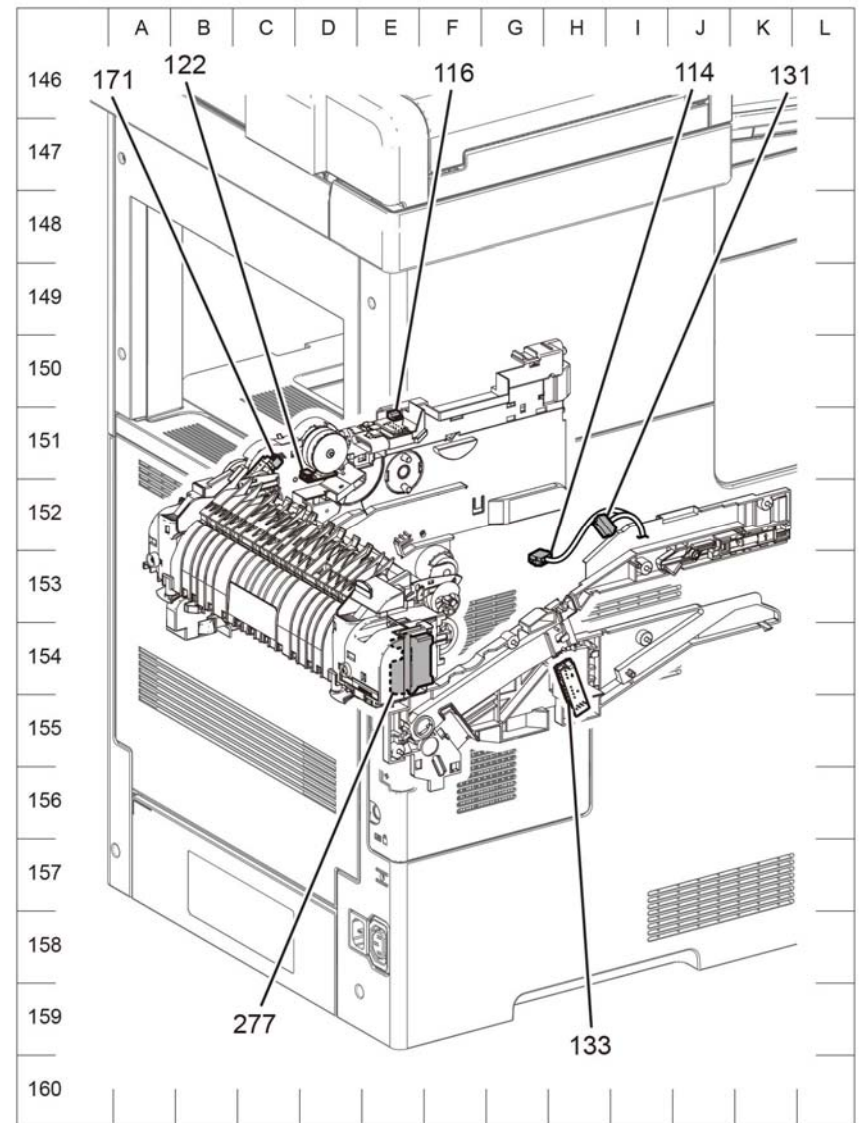
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Figure 2 MFP tall (2 of 4)



E-8-0011-A

Figure 3 MFP tall (3 of 4)



E-8-0012-A

Figure 4 MFP tall (4 of 4)

## SFP Plug / Jack Location List

The P/J Locator diagrams show the location of primary connections within the SFP. Use these illustrations to locate connections called out in the procedures presented in Sections 2, 4, and 6. Connectors designated “CN” are listed at the end of the P/J connectors.

harness connections appear in sections System Wiring Diagrams and Sub System Wiring Diagrams.

**NOTE:** For the coordinate numbers, a \*1 = High Model only and a \*2 = Low Model only.

How to find a P/J location:

1. Locate the P/J connector designator in the first column of [Table 1](#).
2. With this information, refer to the Map column for the figure number.
3. Use the coordinates to find the P/J connector designator's location on the map.

**Table 1 SFP Plug / Jack Locations**

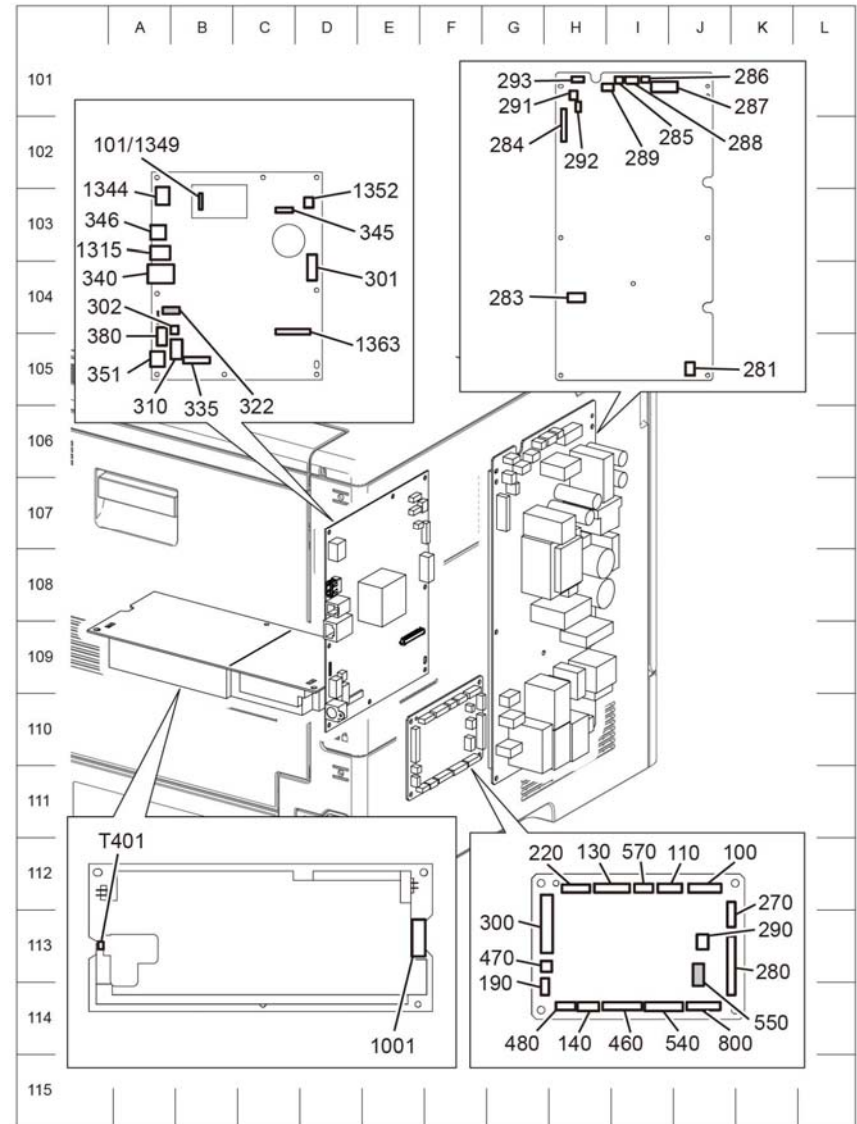
P/J	Map	Coordinates	Connection
P/J1	Figure 2	F-123	UI console assembly and UI harness assembly
P/J4	Figure 2	F-123	Main speaker and AIO UI console assembly
P/J100	Figure 1	J-113	MCU PWB and MCU-HVPS-CF harness assembly
P/J101	Figure 1	B-103	SFP ESS PWB and EMMC card
P/J110	Figure 1	I-112	MCU PWB and dispenser/environmental harness assembly
P/J114	Figure 4	G-138	CRUM-MV harness assembly and CRUM-MV harness assembly
P/J116	Figure 4	D-136	CRUM connector assembly and CRUM-MV harness assembly
P/J122	Figure 4	C-136	Dispenser/Environmental motor assembly and dispenser/environmental harness assembly
P/J130	Figure 1	I-112	MCU PWB and CRUM-MV harness assembly
P/J131	Figure 4	H-138	CRUM-MV harness assembly and XERO CRUM-MV harness assembly
P/J133	Figure 4	H-140	XERO CRUM-MV harness assembly and CRUM DCDL connector assembly
P/J140	Figure 1	H-114	MCU PWB and TA CLT/HUM-MV harness assembly
P/J145	Figure 3	E-140	Humidity and temperature sensor and TA CLT/HUM-MV harness assembly
P/J146	Figure 3	I-141	Take away clutch and TA CLT/HUM-MV harness assembly
P/J171	Figure 4	C-136	Envelope mode sensor and dispenser/environmental harness assembly
P/J190	Figure 1	G-113	MCU PWB and size switch harness assembly
P/J191	Figure 2	F-128	Size switch assembly and size switch harness assembly
P/J220	Figure 1	H-122	MCU PWB and finisher MCU-MV harness assembly

**Table 1 SFP Plug / Jack Locations**

P/J	Map	Coordinates	Connection
P/J221	Figure 3	F-137	Finisher/mailbox and finisher-MV harness assembly
P/J222	Figure 3	I-136	Finisher-MV harness assembly and finisher MCU-MV harness assembly
P/J270	Figure 1	J-112	MCU PWB and fusing DC-MV harness assembly
P/J277	Figure 4	E-140	Fusing assembly and fusing AC harness assembly/fusing DC-MV harness assembly
P/J280	Figure 1	J-113	MCU PWB and LV MCU-MV harness assembly
P/J281	Figure 1	J-105	LVPS PWB and inlet harness assembly
P/J283	Figure 1	H-104	LVPS PWB and fusing AC harness assembly
P/J284	Figure 1	H-102	LVPS PWB and LV MCU-MV harness assembly
P/J285	Figure 1	I-101	LVPS PWB and
P/J286	Figure 1	I-101	LVPS PWB and HVPS-MV MCU harness assembly
P/J287	Figure 1	I-101	LVPS PWB and ESS power-MV harness assembly
P/J288	Figure 1	I-101	LVPS PWB and motor power-MV harness assembly
P/J289	Figure 1	I-101	LVPS PWB and main fan
P/J290	Figure 1	J-113	MCU PWB and 24V MCU-MV harness assembly
P/J291	Figure 1	H-101	LVPS PWB and side interlock switch
P/J292	Figure 1	H-101	LVPS PWB and rear interlock switch
P/J293	Figure 1	H-101	LVPS PWB and sub fan-MV harness assembly
P/J294	Figure 2	H-124	(SCC) sub fan and SUB fan-MV harness assembly
P/J300	Figure 1	G-113	MCU PWB and ESS MCU FFC
P/J301	Figure 1	D-103	ESS SFP PWB and ESS power-MV harness assembly
P/J302	Figure 1	B-104	ESS SFP PWB and HDD assembly
P/J310	Figure 1	B-105	ESS SFP PWB and HDD assembly
P/J322	Figure 1	A-104	Not connected
P/J335	Figure 1	B-105	ESS MCU FFC and ESS SFP PWB
P/J340	Figure 1	A-104	Ethernet port
P/J345	Figure 1	C-103	ESS SFP PWB and front USB harness assembly
P/J346	Figure 1	A-103	USB type A port
P/J351	Figure 1	A-105	FDI port
P/J380	Figure 1	A-105	Debug port
P/J460	Figure 1	I-114	MCU PWB and developer-MV harness assembly
P/J461	Figure 3	G-136	Inverter clutch and developer-MV harness assembly
P/J462	Figure 3	H-136	Exit clutch and developer-MV harness assembly
P/J466	Figure 3	I-136	Full stack-MV harness assembly and developer-MV harness assembly
P/J467	Figure 3	G-137	Full stack sensor and full stack-MV harness assembly
P/J468	Figure 3	F-137	Gate solenoid and developer-MV harness assembly
P/J469	Figure 3	F-138	Exit sensor and full stack-MV harness assembly
P/J470	Figure 1	G-113	MCU PWB and LED harness assembly

Table 1 SFP Plug / Jack Locations

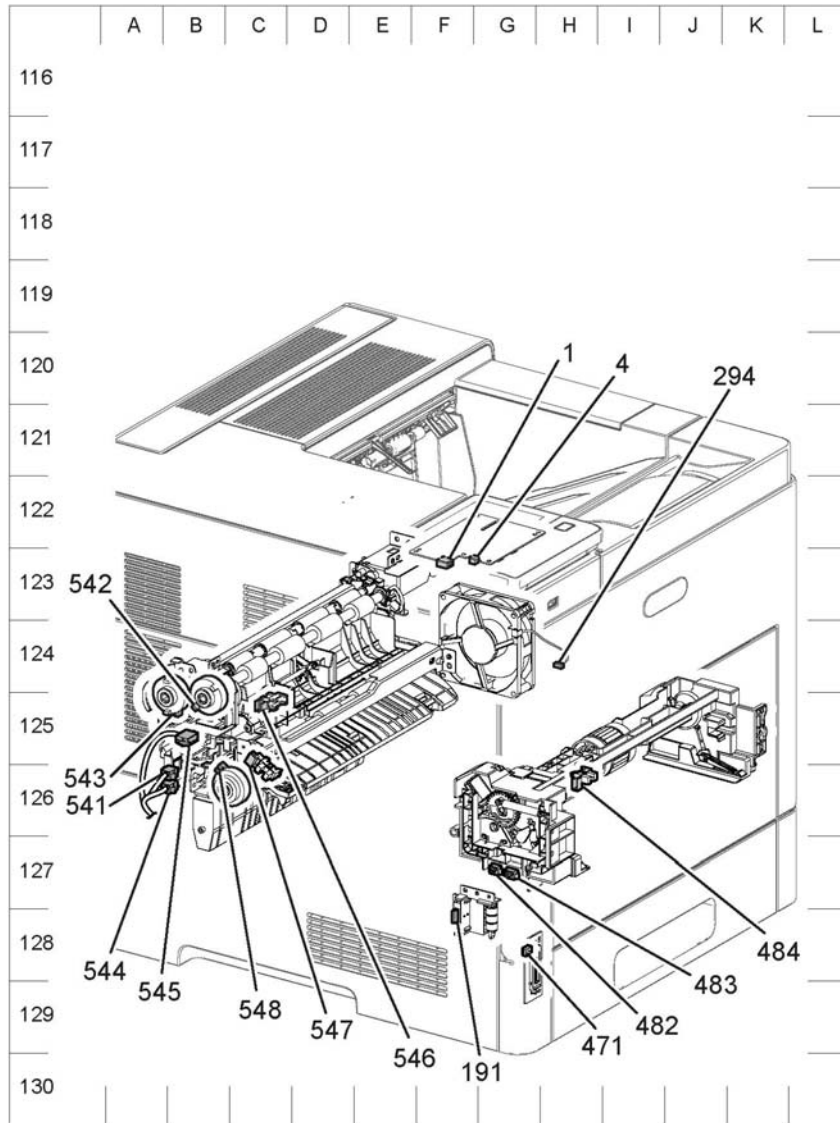
P/J	Map	Coordinates	Connection
P/J471	Figure 2	G-128	LED tray PWB and LED harness assembly
P/J480	Figure 1	H-114	MCU PWB and MSI-MV harness assembly
P/J482	Figure 2	G-127	MSI feed solenoid and MSI-MV harness assembly
P/J483	Figure 2	G-127	MSI no paper sensor-C harness assembly and MSI-MV harness assembly
P/J484	Figure 2	H-126	MSI no paper sensor and MSI no paper sensor-C harness assembly
P/J540	Figure 1	I-114	MCU PWB and registration-MV harness assembly
P/J541	Figure 2	B-126	Registration/duplex-C clutch harness assembly and registration-MV harness assembly
P/J542	Figure 2	B-125	Registration clutch and registration/duplex-C harness assembly
P/J543	Figure 2	A-125	Duplex clutch and registration/duplex-C clutch harness assembly
P/J544	Figure 2	B-126	Feed-C clutch harness assembly and registration-MV harness assembly
P/J545	Figure 2	B-125	Registration no paper sensor harness assembly and registration-MV harness assembly
P/J546	Figure 2	C-125	Registration sensor and registration no paper sensor-C harness assembly
P/J547	Figure 2	C-125	No paper sensor and registration no paper sensor-C harness assembly
P/J548	Figure 2	B-125	PH clutch assembly and feed-C clutch harness assembly
P/J550	Figure 1	J-113	Not connected
P/J570	Figure 1	I-112	MCU PWB and main motor-MV harness assembly
P/J571	Figure 3	H-139	Main motor and main motor-MV harness assembly
P/J572	Figure 3	I-139	Main motor and motor power-MV harness assembly
P/J800	Figure 1	J-114	MCU PWB and optional feeder-MV harness assembly
P/J1001	Figure 1	E-113	HVPS PWB and HVPS-MV MCU harness assembly
P/J1315	Figure 1	A-103	USB type B port
P/J1344	Figure 1	A-103	Wireless module and ESS SFP PWB
P/J1349	Figure 1	B-103	ESS SFP PWB and EMMC card
P/J1352	Figure 1	D-103	ESS SFP PWB and UI harness assembly
P/J1363	Figure 1	C-104	ESS SFP PWN and LPH MONO head assembly
P/JT401	Figure 1	A-113	HVPS PWB and bias transfer roll



E-8-0014-A

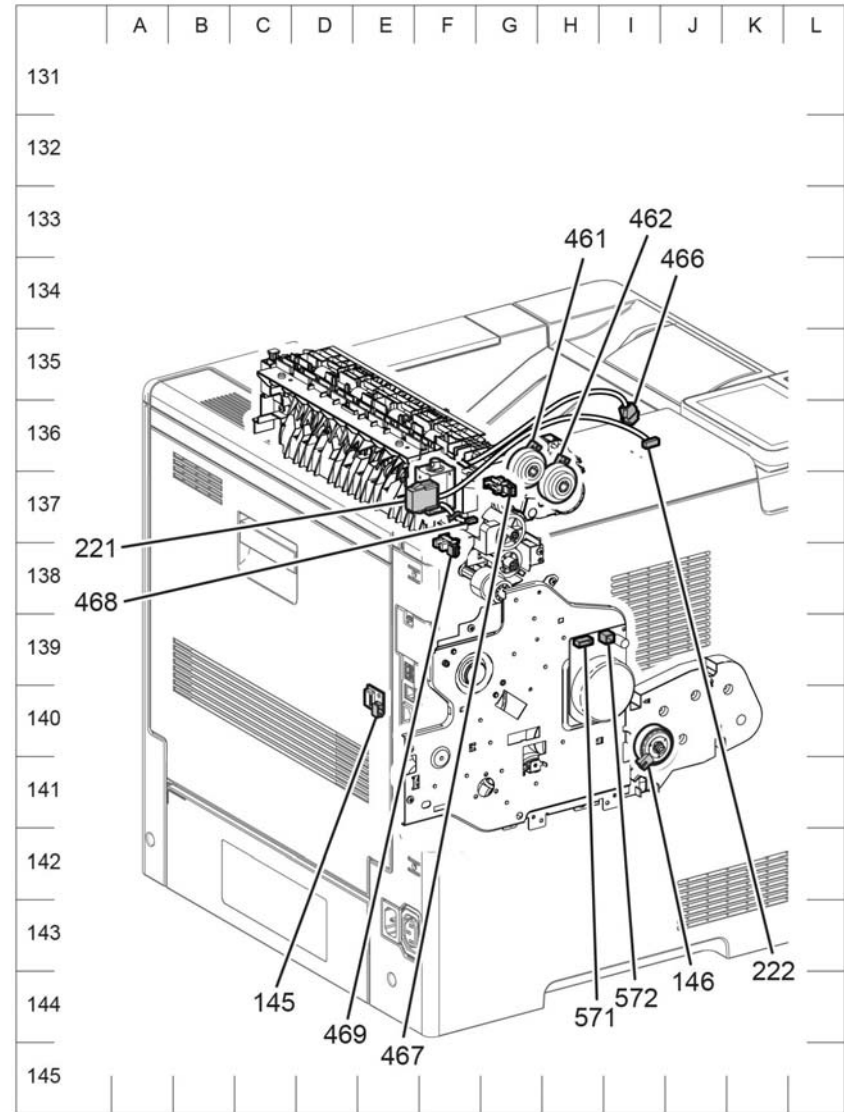
Figure 1 SPF (1 of 4)





E-8-0016-A

Figure 2 SFP (2 of 4)



E-8-0017-A

Figure 3 SFP (3 of 4)

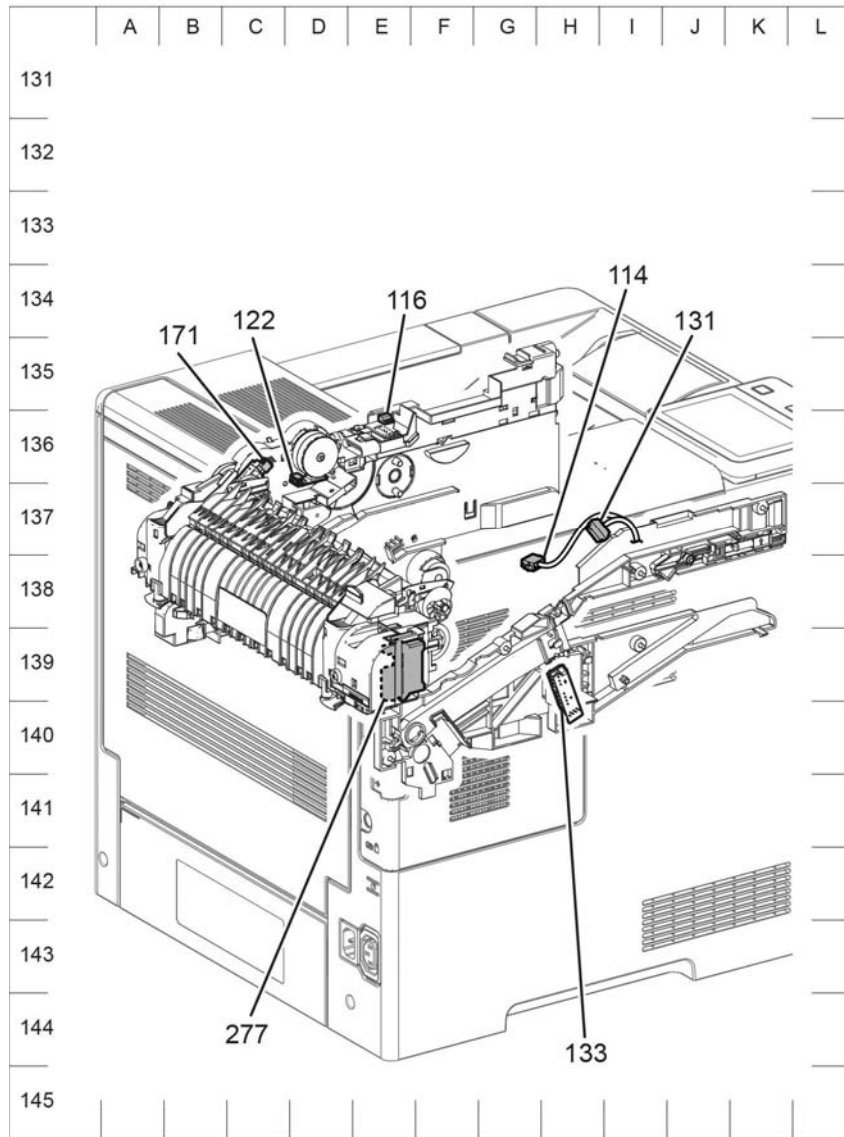
## Optional 550 Feeder Plug Jack Connectors

The P/J Locator diagrams show the location of primary connections within the HCF. Use these illustrations to locate connections called out in the procedures presented in Sections 2, 4, and 6. Connectors designated "CN" are listed at the end of the P/J connectors.

Harness connections appear in sections System Wiring Diagrams and [Table 1](#).

How to find a P/J location:

1. Locate the P/J connector designator in the first column of [Table 1](#).
2. With this information, refer to the Map column for the figure number.
3. Use the coordinates to find the P/J connector designator's location on the map.



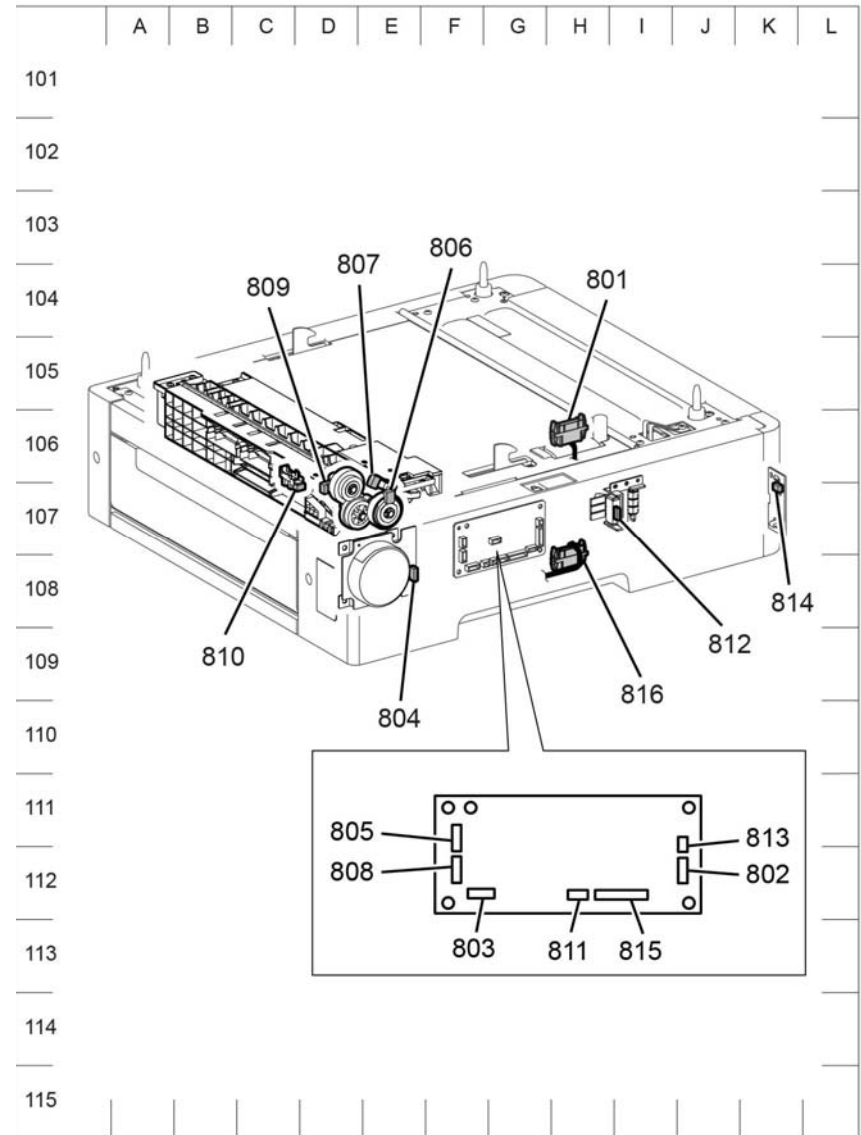
E-8-0018-A

Figure 4 SFP (4 of 4)

## Optional Feeder list of the P/J Connectors

Table 1 Connectors

P/J	Maps	Coordinates	Description
P/J801	Figure 1	H-106	IOT and optional feeder-2C harness assembly
P/J802	Figure 1	J-112	Optional feeder PWBA and harness assembly OPF 2C
P/J803	Figure 1	F-112	Optional Feeder PWBA and optional feeder harness assembly
P/J804	Figure 1	E-108	Main motor harness assembly and harness assembly FDR motor
P/J805	Figure 1	F-111	Optional feeder PWBA and feed harness assembly
P/J806	Figure 1	E-107	Optional feeder feed clutch and feeder harness assembly
P/J807	Figure 1	E-107	Optional feeder no paper sensor and feeder harness assembly
P/J808	Figure 1	F-112	Optional feeder PWB and turn harness assembly
P/J809	Figure 1	D-106	Optional feeder take away clutch and turn harness assembly
P/J810	Figure 1	D-106	Optional feeder paper path sensor and turn harness assembly
P/J811	Figure 1	H-112	Optional feeder PWB and size harness assembly
P/J812	Figure 1	I-107	Optional feeder size switch assembly and size harness assembly
P/J813	Figure 1	J-112	Optional feeder PWB and LED harness assembly
P/J814	Figure 1	K-106	LED tray assembly and LED harness assembly
P/J815	Figure 1	I-112	Optional feeder PWB and feeder drawer harness assembly
P/J816	Figure 1	H-107	Succeeding optional feeder and feeder drawer harness assembly



E-8-0019-A

Figure 1 Optional feeder

## Finisher Plug / Jack Connectors

The P/J Locator diagrams show the location of primary connections within the SFP. Use these illustrations to locate connections called out in the procedures presented in Sections 2, 4, and 6. Connectors designated “CN” are listed at the end of the P/J connectors.

harness connections appear in sections System Wiring Diagrams and [Table 1](#).

How to find a P/J location:

1. Locate the P/J connector designator in the first column of [Table 1](#).
2. With this information, refer to the Map column for the figure number.
3. Use the coordinates to find the P/J connector designator’s location on the map.

## Finisher P/J Connectors Location List

Table 1 Connectors

P/J	Maps	Coordinates	Description
P/J590	Figure 1	I-147	Connects harness assembly AC and LVPS
P/J591	Figure 1	I-153	Connects harness assembly FIN DC and LVPS
P/J621	Figure 2	A-156	Connects harness ass FIN IF and harness assembly FIN-CF
P/J8860	Figure 1	E-153	Connects harness assembly FIN SNR1 and PWB GPF A4FIN
P/J8861	Figure 1	D-150	Connects harness assembly tamper MOT, clutch and PWB GPF A4FIN
P/J8862	Figure 1	C-150	Connects harness assembly FIN MOT and PWB GPF A4FIN
P/J8863	Figure 1	A-151	Connects harness assembly stapler M and PWB GPF A4FIN
P/J8864	Figure 1	A-151	Connects harness assembly FIN IL and PWB GPF A4FIN
P/J8865	Figure 1	D-153	Connects harness assembly FIN SNR2 and PWB GPF A4FIN
P/J8866	Figure 1	F-153	Connects harness assembly FIN IF and PWB GPF A4FIN
P/J8867	Figure 1	G-151	Connects harness assembly FIN DC and PWB GPF A4FIN
P/J8868	Figure 1	E-151	Connects harness assembly FIN MOT and PWB GPF A4FIN
P/J8869	Figure 1	A-152	Connects solenoid assembly gate and PWB GPF A4FIN
P/J8869	Figure 1	C-156	A4FIN
P/J8872	Figure 1	F-152	Not connected
P/J8873	Figure 1	E-152	Not connected
P/J8874	Figure 1	D-152	Connects harness assembly FIN SNR2 and PWB GPF A4FIN
P/J8875	Figure 1	B-153	Connects harness assembly compile tamper MOT clutch and PWB GPF A4FIN
P/J8876	Figure 1	C-153	Connects harness assembly staple unit and PWB GPF A4FIN
P/J8877	Figure 1	F-153	Connects harness assembly FIN SNR1 and PWB GPF A4FIN
P/J8878	Figure 1	B-150	Connects harness assembly FIN MOT and PWB GPF A4FIN
P/J8891	Figure 2	E-154	Connects harness assembly FIN SNR1 and stacker tray no-paper and full sensor
P/J8892	Figure 2	C-153	Connects harness assembly FIN SNR1 and sub paddle home sensor
8893	TBD	TBD	Connects harness assembly FIN SNR1 and rear cover interlock sensor

Table 1 Connectors

P/J	Maps	Coordinates	Description
P/J8895	Figure 4	F-154	Connects harness assembly FIN SNR2 and eject home SNR
P/J8896	Figure 3	G-152	Connects harness assembly FIN compile sensor and compile exit sensor
P/J8897	Figure 3	D-157	Connects harness assembly staple unit and stapler assembly
P/J8898	Figure 5	C-152	Connects harness assembly FIN SNR2 and right tamper home SNR
P/J8899	Figure 5	I-153	Connects harness assembly FIN SNR2 and left tamper home SNR
P/J8900	Figure 4	G-154	Connects harness assembly FIN SNR2 and set clamp home SNR
P/J8901	Figure 4	I-152	Connects harness assembly FIN SNR2 and stacker height SNR1
P/J8902	Figure 4	I-154	Connects harness assembly FIN SNR2 and stacker height SNR2
P/J8903	Figure 5	G152	Connects harness assembly tamper MOT, clutch and right tamper MOT
P/J8904	Figure 5	E-153	Connects harness assembly tamper MOT, clutch and left tamper MOT
P/J8906	Figure 2	B-149	Connects harness assembly FIN MOT and eject belt MOT
P/J8907	Figure 2	C-156	Connects harness assembly FIN MOT and stacker MOT
P/J8908	Figure 3	C-157	Connects harness assembly stapler M and stapler assembly
P/J8909	Figure 3	B-153	Connects harness assembly FIN IL and switch safety L
P/J8910	Figure 3	D-152	Connects harness assembly FIN TRANS M1 and motor assembly
P/J8912	Figure 4	H-154	Connects harness assembly compile tamper MOT, clutch and set clump clutch
P/J8913	Figure 3	I-151	Connects harness assembly FIN SNR1 and harness assembly FIN compile sensor
P/J8914	Figure 3	I-150	Connects harness assembly FIN MOT and harness assembly FIN TRANS M1
P/J8935	Figure 3	I-151	Rear Cover Interlock Sensor

## Finisher PWB Connector Locations

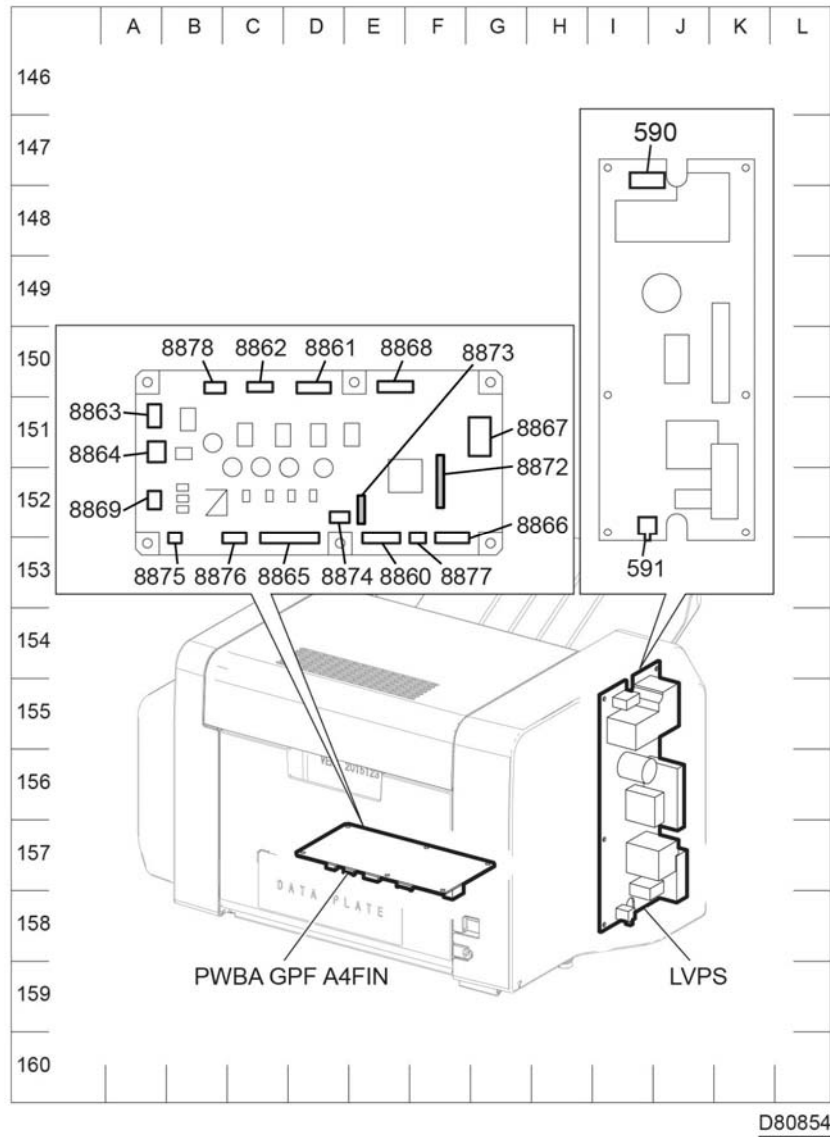


Figure 1 Finisher P/J layout diagram

## Sensor and Motor locations

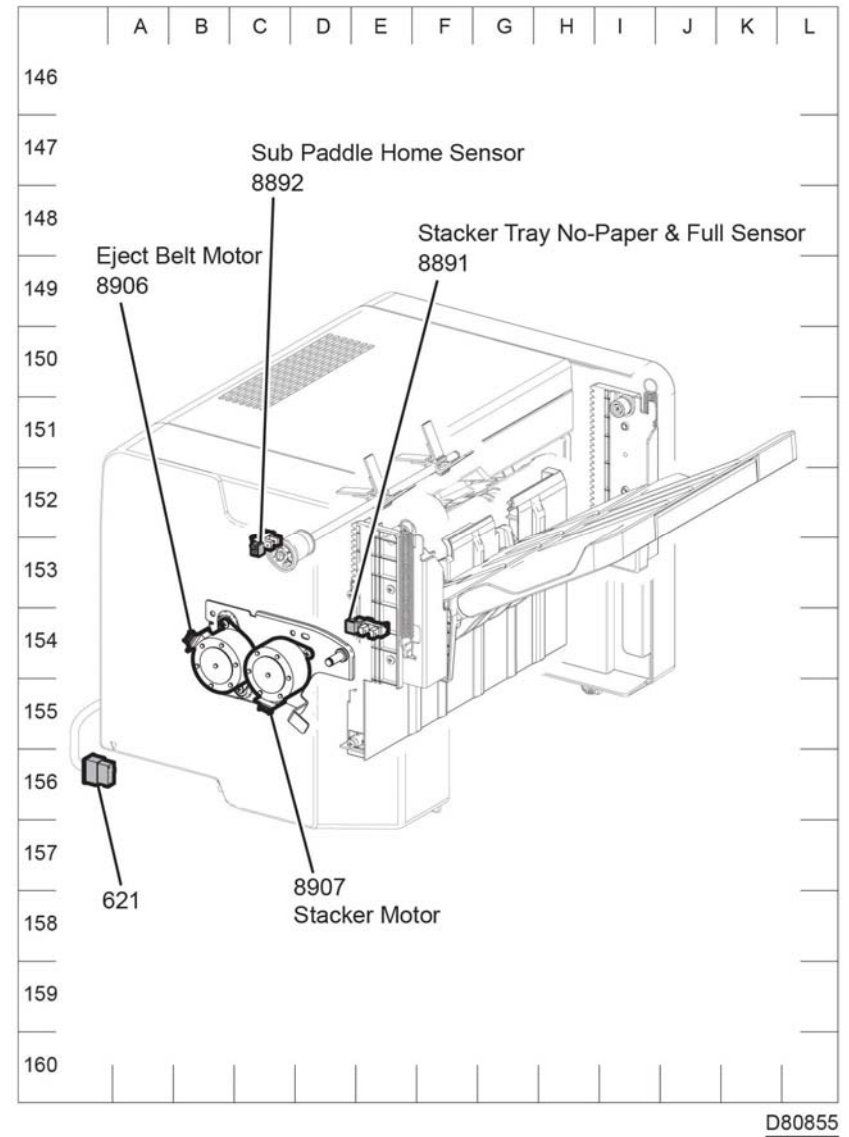
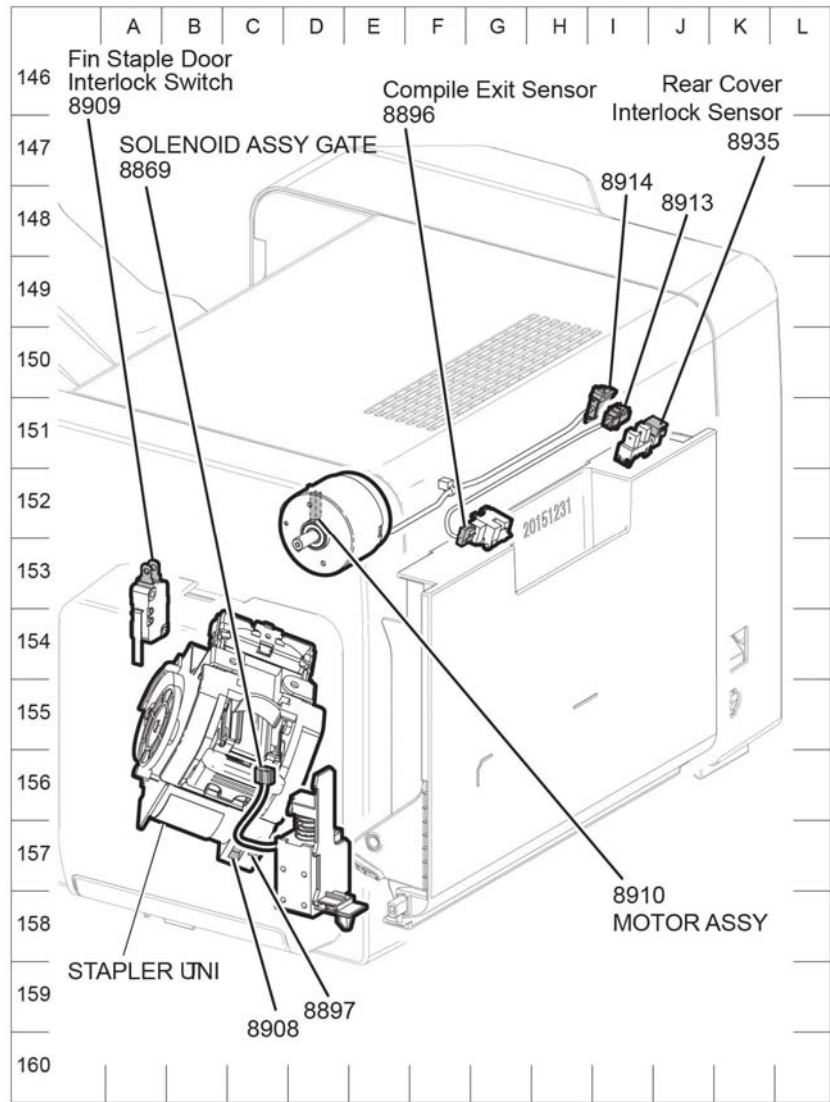
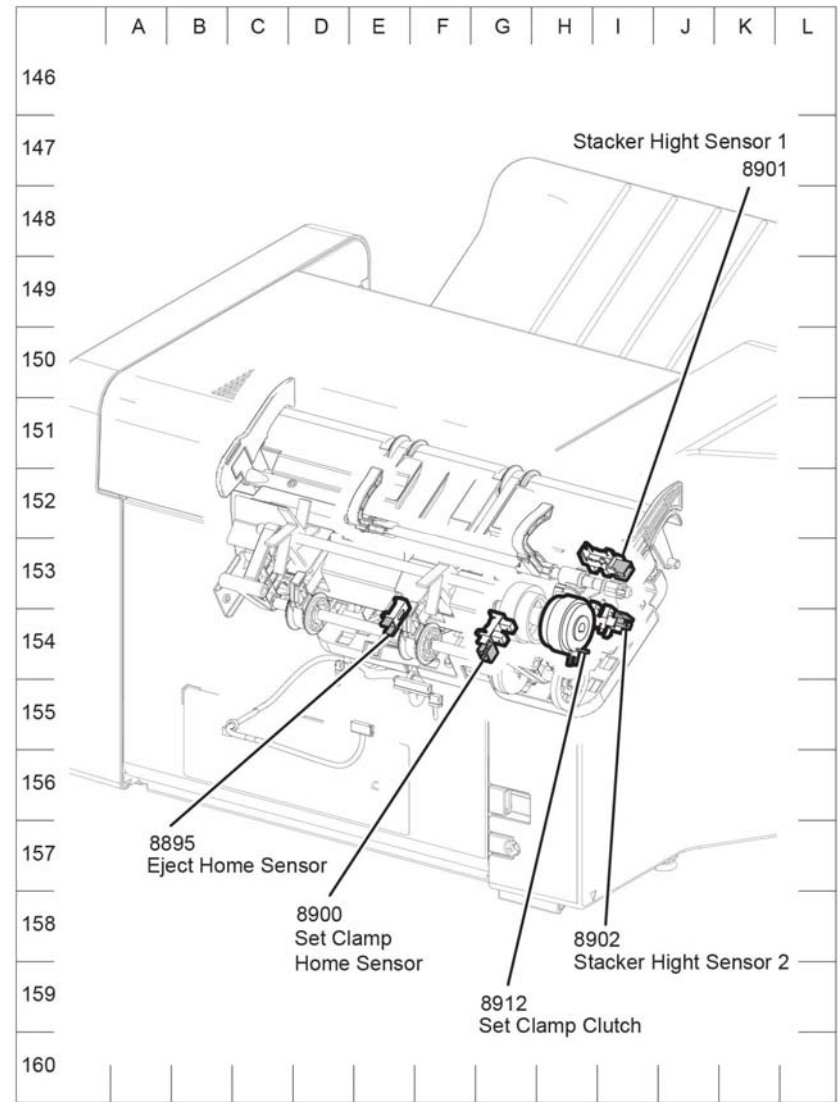


Figure 2 Connector locations, sensors and motors (1/4)



D80856

Figure 3 Connector locations, sensors and motors (2/4)



D80857

Figure 4 Connector locations, sensors and motors (3/4)

## HCF Plug Jack Connectors

The P/J Locator diagrams show the location of primary connections within the HCF. Use these illustrations to locate connections called out in the procedures presented in Sections 2, 4, and 6. Connectors designated "CN" are listed at the end of the P/J connectors.

Harness connections appear in sections System Wiring Diagrams and [Table 1](#).

How to find a P/J location:

1. Locate the P/J connector designator in the first column of [Table 1](#).
2. With this information, refer to the Map column for the figure number.
3. Use the coordinates to find the P/J connector designator's location on the map.

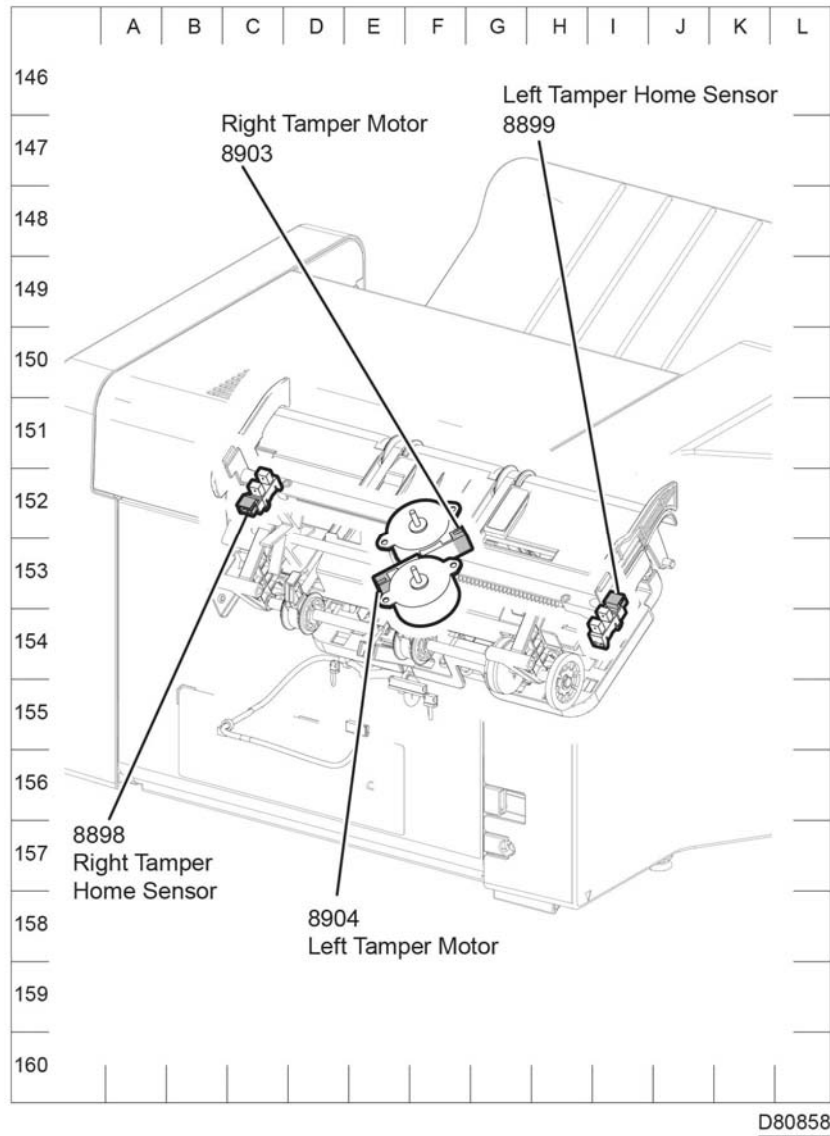


Figure 5 Connector locations sensors and motors (4/4)



## HCF list of the P/J Connectors

**Table 1 Connectors**

P/J	Maps	Coordinates	Description
P/J802	Figure 1	J-113	Connects PWBA OPF and harness assembly OPF 2C
P/J803	Figure 1	G-113	Connects PWBA OPF and harness assembly FDR motor
P/J804	Figure 1	E-107	Connects Main Motor assembly and harness assembly FDR motor
P/J805	Figure 1	G-112	Connects PWBA OPF and harness assembly feed
P/J806	Figure 1	E-108	Connects OPT Feed Clutch and harness assembly feed
P/J807	Figure 1	E-107	Connects OPT Feeder No Paper Sensor and harness assembly Feed
P/J808	Figure 1	G-113	Connects PWBA OPF and harness assembly turn
P/J809	Figure 1	E-108	Connects OPT Takeaway Clutch and harness assembly Turn
P/J810	Figure 1	D-106	Connects OPT Paper Path Sensor and harness assembly Turn
P/J811	Figure 1	I-113	Connects PWBA OPF and harness assembly T-Open/Lift Motor
P/J812	Figure 1	C-109	Connects Tray Open Sensor and harness assembly T-Open/Lift Motor
P/J813	Figure 1	J-112	Connects PWBA OPF and harness assembly OPF LED
P/J814	Figure 1	I-107	Connects Tray LED assembly and harness assembly OPF LED
P/J815	Figure 1	G-106	Connects PWBA assembly OPF 550 and harness assembly FDR Drawer 2
P/J818	Figure 1	H-112	Connects harness assembly OPF2-C and harness assembly FDR Drawer 2
P/J820	Figure 1	H-114	Connects PWBA OPF and harness assembly lift motor I/L
P/J821	Figure 1	C-108	Connects harness assembly T-Open/Lift motor and main motor assembly P1
P/J822	Figure 1	H-113	Connects PWBA OPF and harness assembly lift up sensor
P/J823	Figure 1	F-107	Connects harness assembly lift up sensor and lift up sensor
P/J824	Figure 1	J-113	Connects PWBA OPF and rear cover interlock switch

## HCF Connector locations

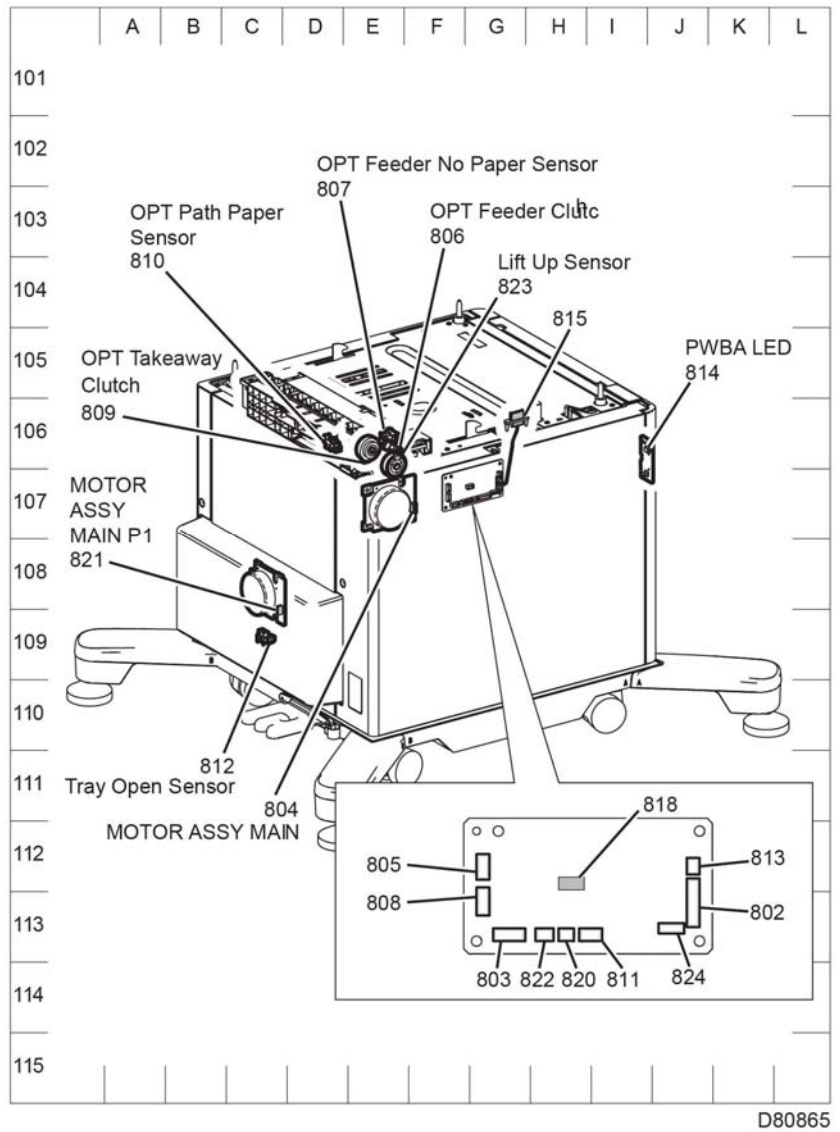


Figure 1 HCF P/J locations

## Mailbox Plug Jack Connectors

The P/J Locator diagrams show the location of primary connections within the SFP. Use these illustrations to locate connections called out in the procedures presented in Sections 2, 4, and 6. Connectors designated “CN” are listed at the end of the P/J connectors.

Harness connections appear in sections System Wiring Diagrams and [Table 1](#).

How to find a P/J location:

1. Locate the P/J connector designator in the first column of [Table 1](#).
2. With this information, refer to the Map column for the figure number.
3. Use the coordinates to find the P/J connector designator’s location on the map.

## Mailbox list of the P/J Connectors

Table 1 Connectors

P/J	Maps	Coordinates	Description
P/J590	Figure 1	I-147	Connects harness assembly MBX AC and LVPS
P/J591	Figure 1	I-153	Connects harness assembly MBX DC and LVPS
P/J621	Figure 2	A-156	Connects harness ass MBX IF and harness assembly finisher-CF
P/J8865	Figure 1	E-147	Connects harness assembly MBX sensor and PWB GPF A4MBX
P/J8866	Figure 1	B-147	Connects harness assembly MBX IF and PWB GPF A4MBX
P/J8867	Figure 1	C-149	Connects harness assembly MBX DC and PWB GPF A4MBX
P/J8868	Figure 1	A-151	Connects harness assembly MBX TRANS M and GPF A4MBX
P/J8869	Figure 1	A-151	Connects harness assembly TRANS S and PWB GPF A4MBX
P/J8870	Figure 1	A-148	Connects harness assembly vertical sensor and PWB GPF A4MBX
P/J8871	Figure 1	F-147	Connects harness assembly TRANS S and PWB GPF A4MBX
P/J8872	Figure 1	B-148	No connections
P/J8873	Figure 1	C-148	No connections
P/J8931	Figure 2	G-150	Connects harness assembly MBX sensor and bin-1 full paper sensor
P/J8932	Figure 2	F-152	Connects harness assembly MBX sensor and bin-2 full paper sensor
P/J8933	Figure 2	E-152	Connects harness assembly MBX sensor and bin-3 full paper sensor
P/J8934	Figure 2	D-152	Connects harness assembly MBX sensor and bin-4 full paper sensor
P/J8935	Figure 3	B-153	Connects harness assembly MBX sensor and rear cover interlock sensor
P/J8936	Figure 3	C-151	Connects harness assembly vertical sensor and PWB vertical sensor rev
P/J8937	Figure 3	F-156	Connects harness assembly vertical LED and PWB vertical sensor LED
P/J8938	Figure 3	B-150	Connects harness assembly MBX TRANS M and motor assembly
P/J8939	Figure 3	E-154	Connects harness assembly TRANS S and solenoid assembly gate
P/J8940	Figure 2	C-153	Connects harness assembly TRANS S and bin-2 gate solenoid
P/J8941	Figure 2	C-153	Connects harness assembly TRANS S and bin-3 gate solenoid

Table 1 Connectors

P/J	Maps	Coordinates	Description
P/J8942	Figure 2	C-154	Connects harness assembly TRANS S and bin-4 gate solenoid
P/J8943	Figure 3	J-155	Connects harness assembly vertical LED and harness assembly vertical sensor

# Mailbox locations

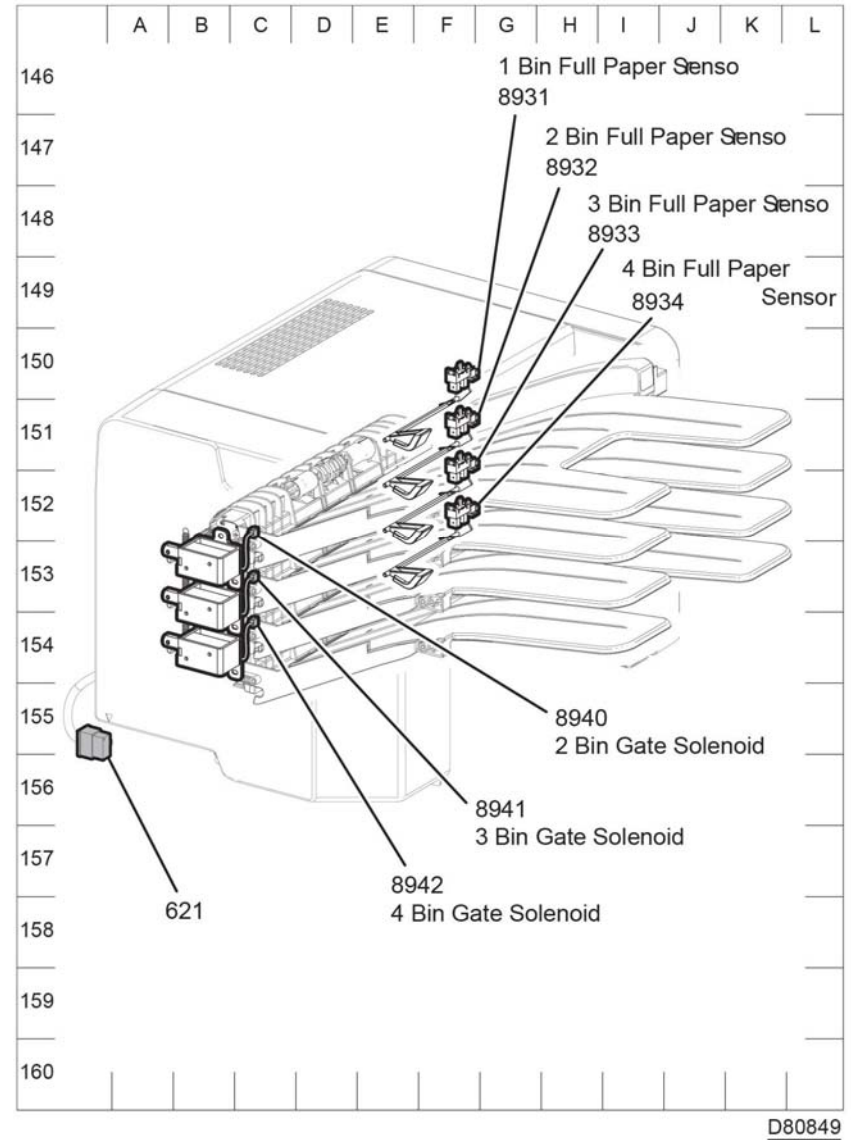
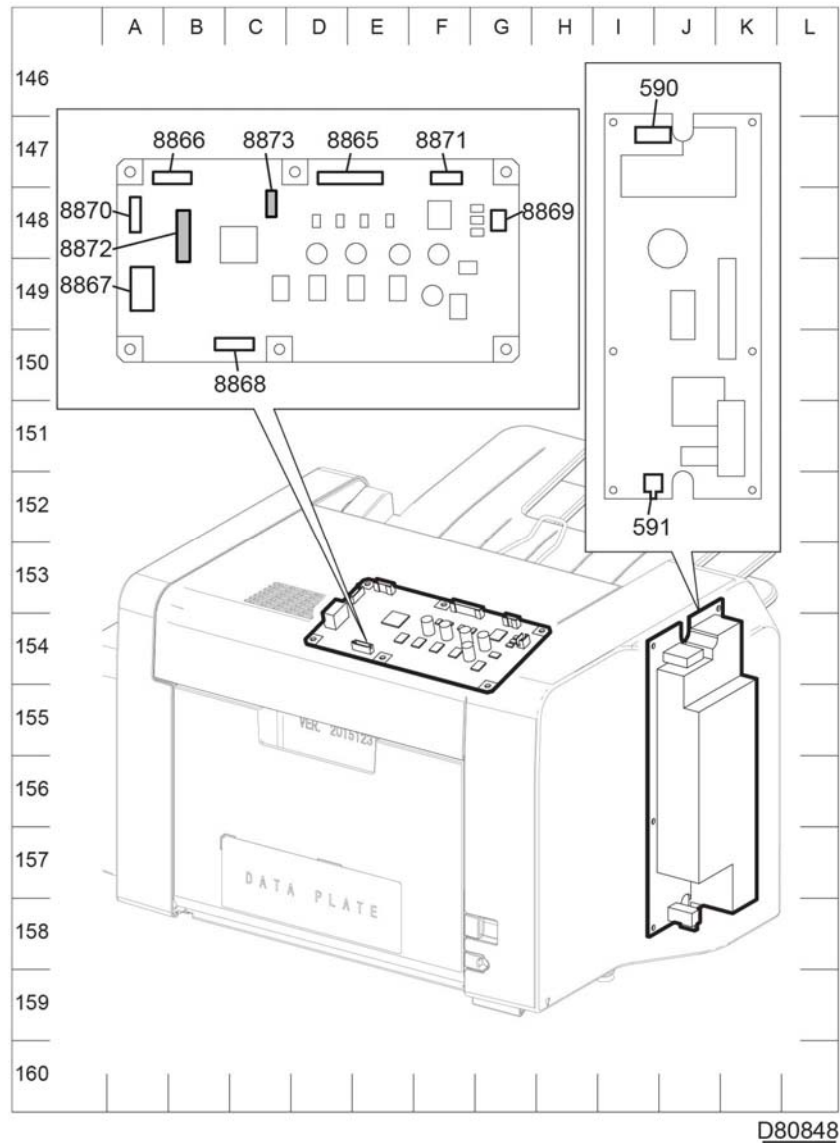


Figure 1 IOT P/J layout diagram

Figure 2 Connector locations (1/2)

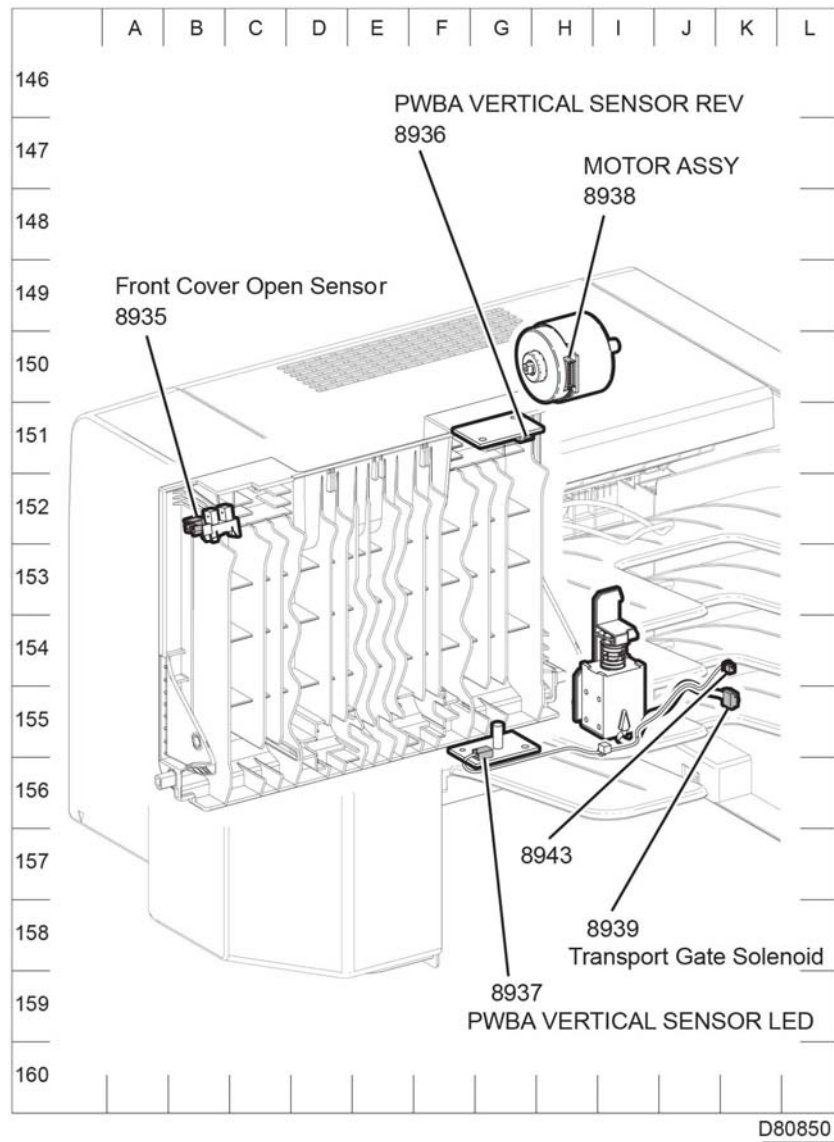

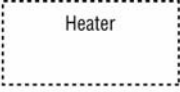





Figure 3 Connector locations (2/2)

## System Wiring Diagram Symbols

Table 1 shows the symbols used in the system wiring diagrams.

**Table 1 Wiring Diagram Symbols**

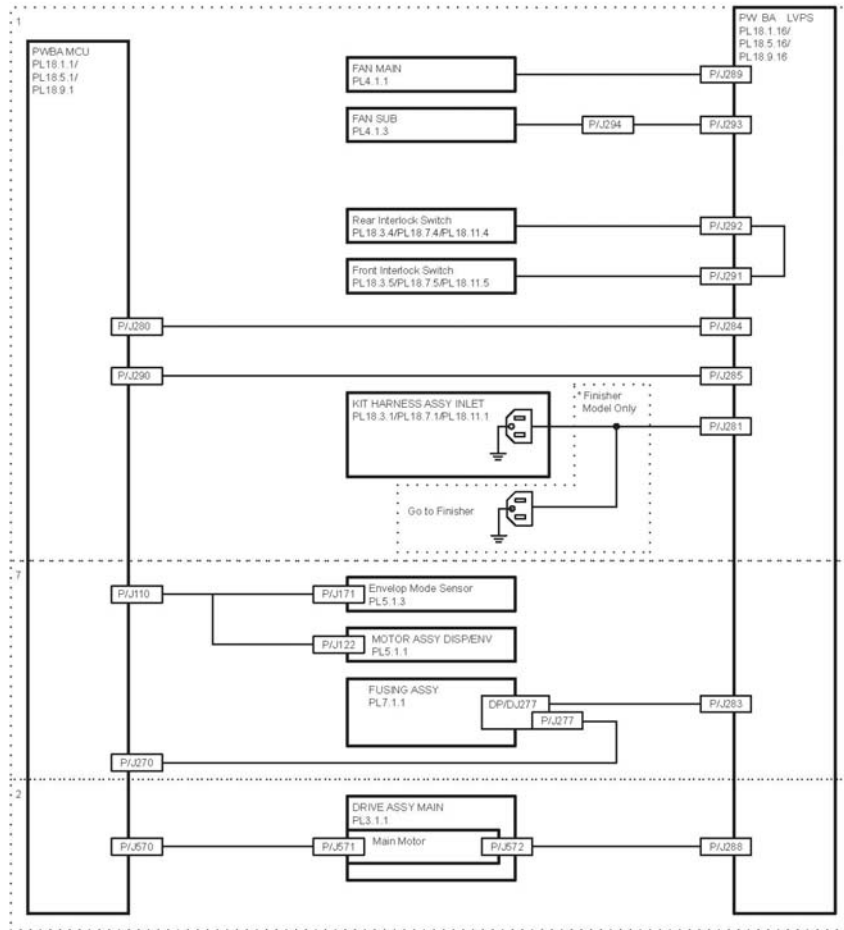
	<p>Represents the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Parts List.</p>
<p>Subassembly 1</p> <p><b>Figure 1 Represents the parts</b></p>	
 <p>Subassembly 2</p> <p><b>Figure 2 Represents functional parts</b></p>	<p>Represents functional parts attached with functional parts name.</p>
 <p>Subassembly 3</p> <p><b>Figure 3 Represents the control</b></p>	<p>Represents the control and its outline in the PWB.</p>
 <p>Safety Interlock Switch</p> <p><b>Figure 4 Safety Interlock Switch</b></p>	<p>Indicates a Safety Interlock Switch.</p>
 <p><b>Figure 5 frame ground</b></p>	<p>Indicates a frame ground.</p>

## IOT System Wiring Diagrams

Refer to Table 1 for a list of the diagrams for the major printer systems and the connection details shown in each diagram.

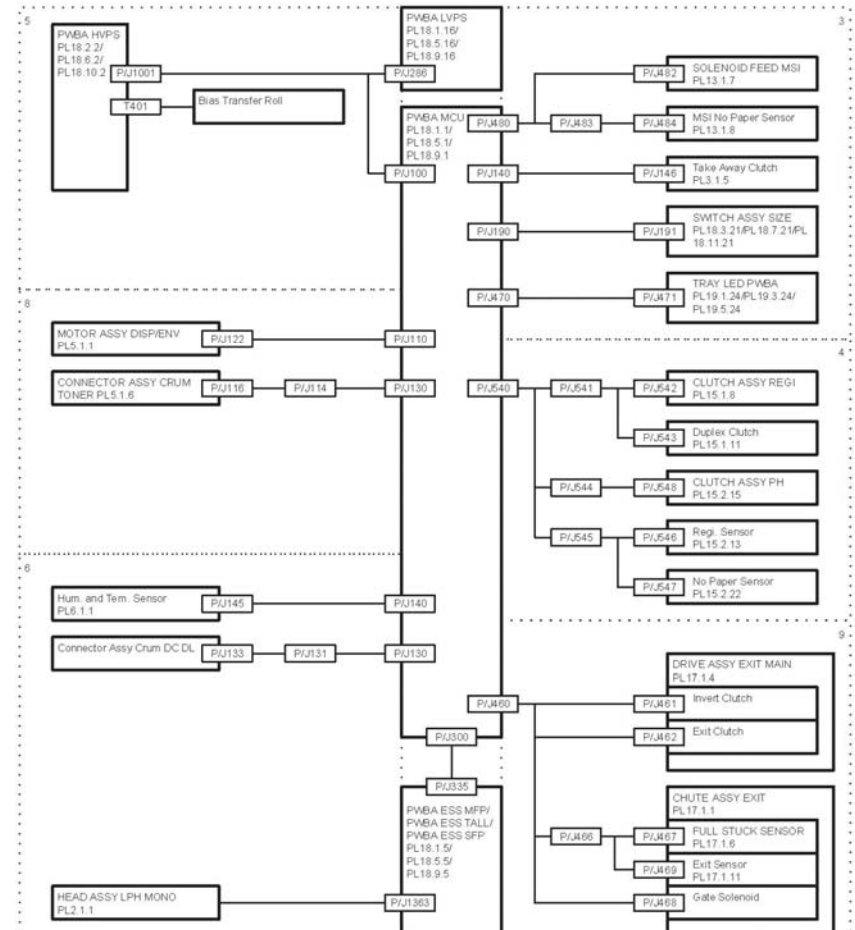
**Table 1 System wiring diagrams**

Figure	System and Connections
Figure 1	MCU Control
Figure 2	Power Supply
Figure 3	Optional Feeder
Figure 4	ESS Control
Figure 5	Accessories



E-8-0683-A

Figure 1 MCU control system wiring diagram



E-8-0684-A

Figure 2 Power supplies system wiring diagram 2



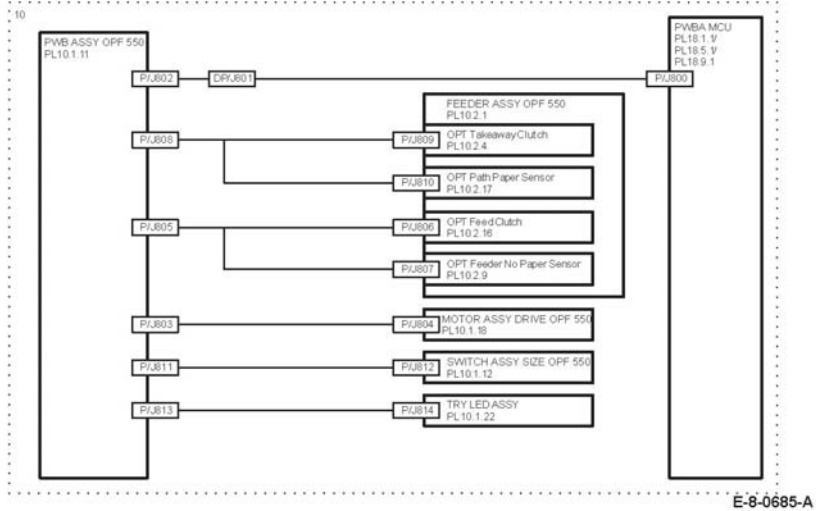
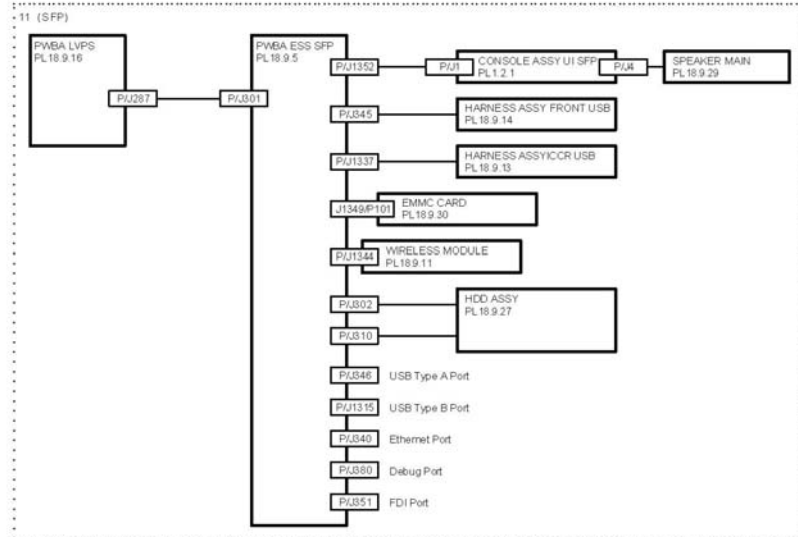
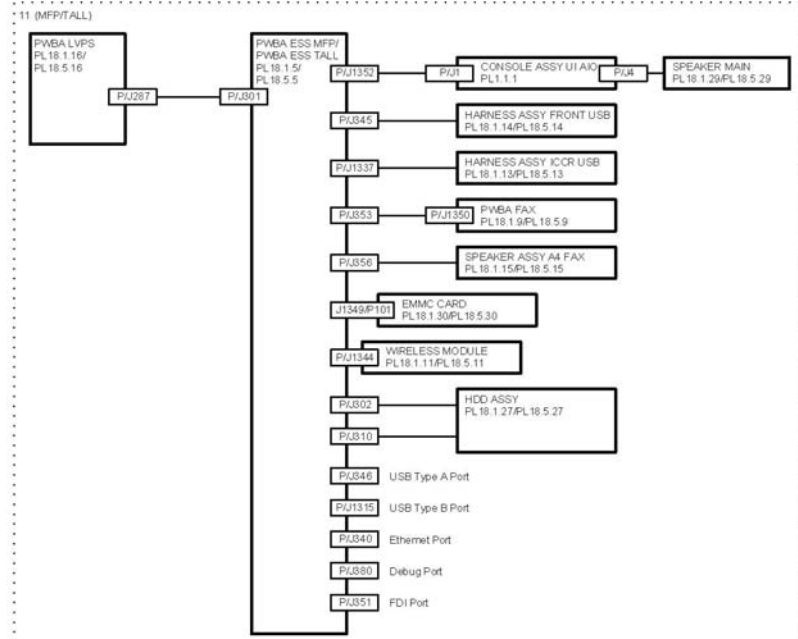


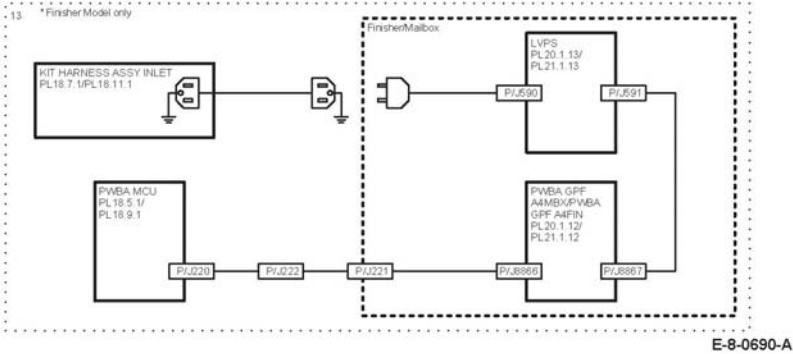
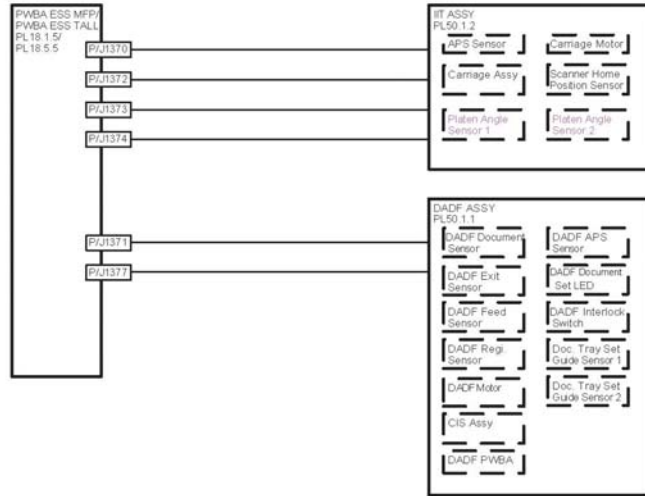
Figure 3 Optional feeder system wiring diagram



E-8-0688-A

Figure 4 ESS Control system wiring diagram

12 (MFP/TALL)



E-8-0690-A

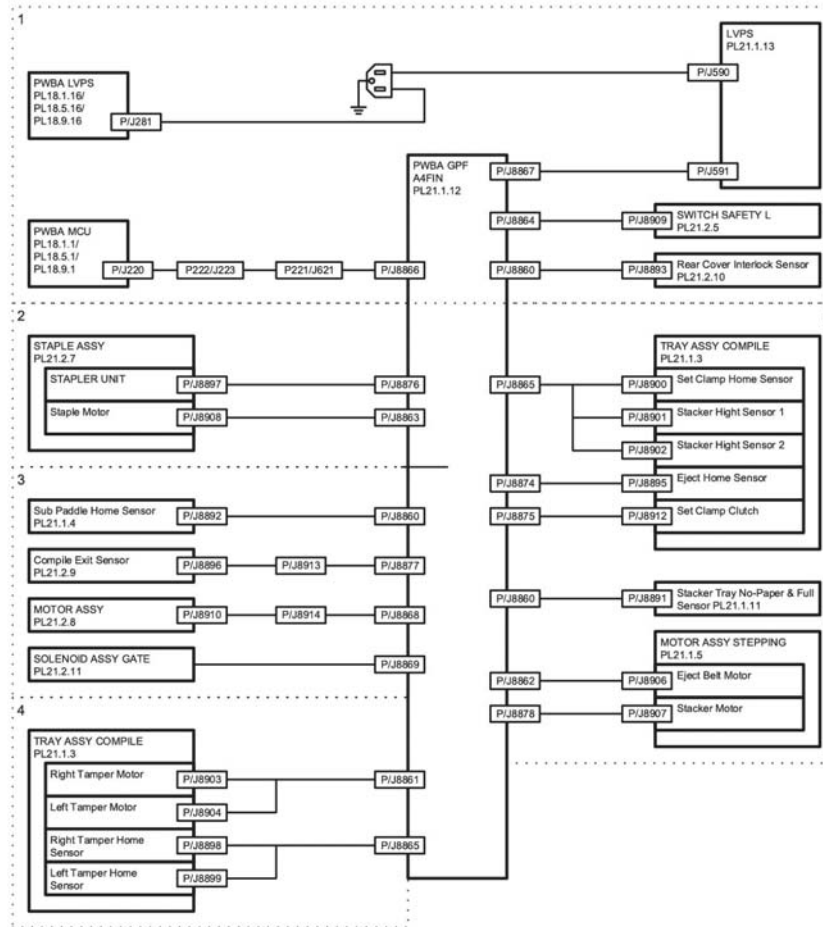
Figure 5 Accessories

## Finisher System Wiring Diagram

Figure 1 shows the symbols used in the system wiring diagrams.

	<p>Represents the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Parts List.</p>
	<p>Represents functional parts attached with functional parts name.</p>
	<p>Represents the control and its outline in the PWB.</p>
	<p>Indicates a Safety Interlock Switch.</p>
	<p>Indicates a frame ground.</p>

Figure 1 Wiring Diagram Symbols



D80859

Figure 2 System diagram

# HCF System Wiring Diagram

Figure 1 shows the symbols used in the system wiring diagrams.

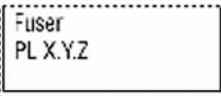
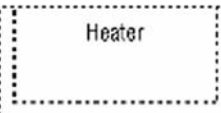

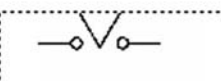

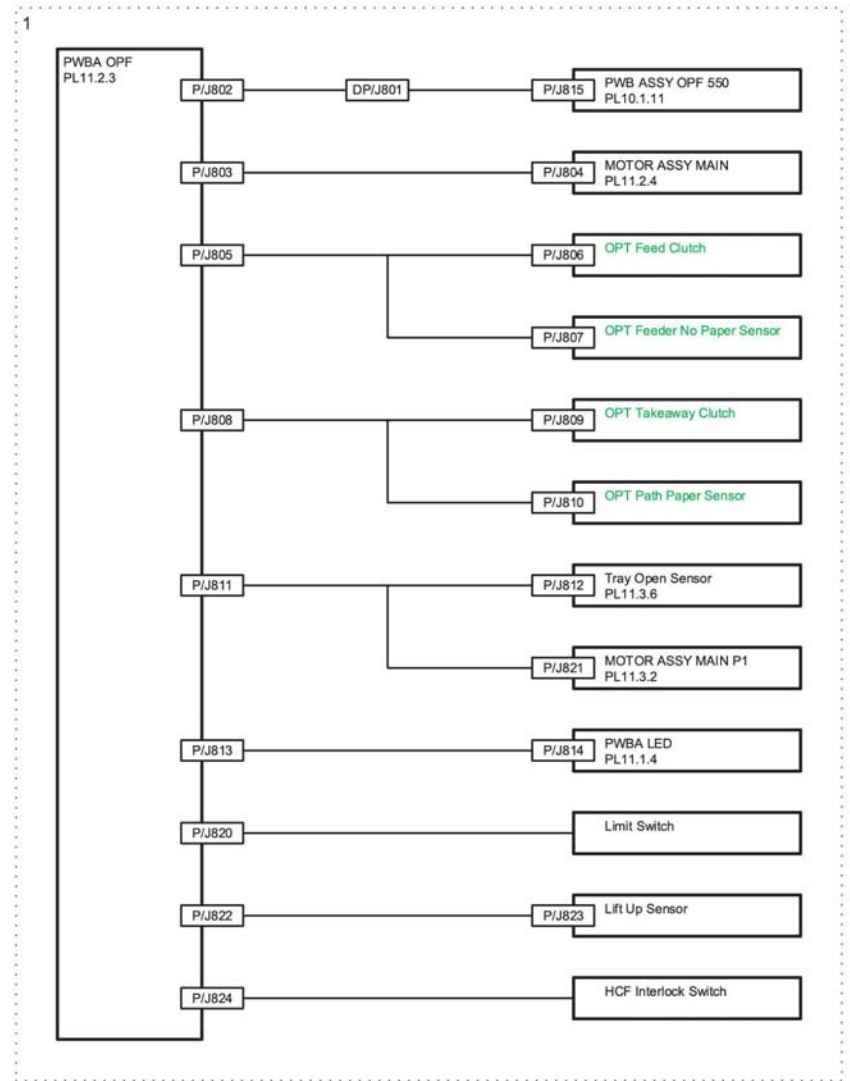
	<p>Represents the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Parts List.</p>
	<p>Represents functional parts attached with functional parts name.</p>
	<p>Represents the control and its outline in the PWB.</p>
	<p>Indicates a Safety Interlock Switch.</p>
	<p>Indicates a frame ground.</p>

Figure 1 Wiring Diagram Symbols



D80866

Figure 2 HCF system diagram

# Mailbox System Wiring Diagram

Figure 1 shows the symbols used in the system wiring diagrams.

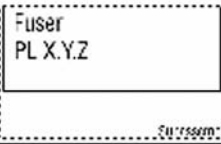
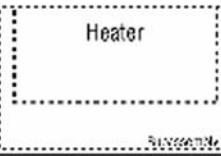
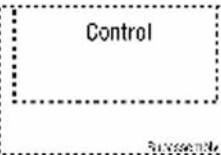
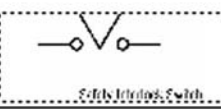

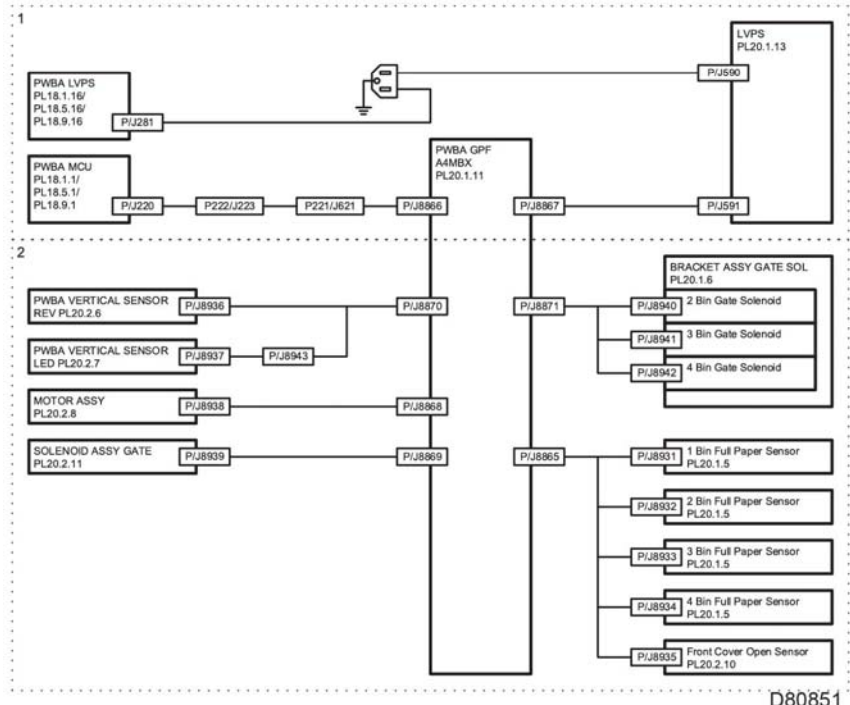
	<p>Represents the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Parts List.</p>
	<p>Represents functional parts attached with functional parts name.</p>
	<p>Represents the control and its outline in the PWB.</p>
	<p>Indicates a Safety Interlock Switch.</p>
	<p>Indicates a frame ground.</p>

Figure 1 Wiring Diagram Symbols






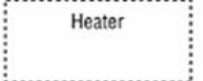
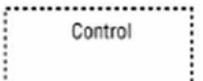

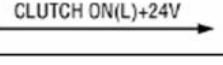
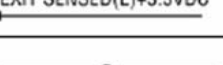



D80851

Figure 2 System diagram

## Interconnection Wiring Diagram Symbols

Figure 1 shows the symbols used in the wiring diagrams for the printer subsystems.

Symbol	Component/Function
	Denotes a Plug.
	Denotes a Jack.
	Denotes Pin yy and Jack yy of the connector Pxx and Jxx.
	Denotes a Jumper Point (JPxxx/xxx). Each end of the Jumper connection has a numeric designation.
	Denotes the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Parts List.
	Denotes functional parts attached with functional parts name.
	Denotes the control and its outline in the PWB.
	Denotes a connection between parts with harness or wired, attached with signal name/contents.
	Denotes function, and logic value of the signal to operate the function (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal.
	Denotes function, and logic value of the signal when the function operated (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates direction of signal.
	Denotes a connection between wires.

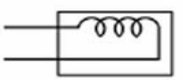



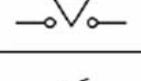


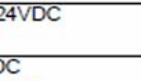





Symbol	Component/Function
	Denotes a Clutch or Solenoid.
	Denotes a Motor.
	Denotes a Photo Sensor.
	Denotes an LED.
	Denotes a Safety Interlock Switch.
	Denotes an On-Off Switch (single-pole, single-throw switch).
	Denotes an On-Off Switch (Temperature - normally closed).
	Denotes an NPN Photo-transistor.
	Denotes DC voltage when the Interlock Switch in MCU PWB turns On.
	Denotes DC voltage.
	Denotes signal ground.
	Denotes analog ground.
	Denotes return.

Figure 1 Subsystem Wiring Diagram Symbols

## IOT Interconnections Diagrams

This section shows the connection diagrams for the printer subsystems including the 550 option feeder tray.

Refer to [Table 1](#) for a list of the connection diagrams for the printer subsystems and the connection details shown in each diagram.

**Table 1 Subsystem connection Diagrams and Connection Details**

Printer Subsystem	Diagram
Power connection diagram	<a href="#">Figure 1</a>
Drive connection diagram	<a href="#">Figure 2</a>
Bypass tray (MSI) connection diagram	<a href="#">Figure 3</a>
Paper transfer connection diagram	<a href="#">Figure 4</a>
HVPS connection diagram	<a href="#">Figure 5</a>
Xerographic connection diagram	<a href="#">Figure 6</a>
Fuser connection diagram	<a href="#">Figure 7</a>
Developer connection diagram	<a href="#">Figure 8</a>
Exit connection diagram	<a href="#">Figure 9</a>
Optional 550 feeder connection diagram	<a href="#">Figure 10</a>
Controller connection diagram (MFP)	<a href="#">Figure 11</a>
Controller connection diagram (SFP)	<a href="#">Figure 12</a>
Scanner connection diagram	<a href="#">Figure 13</a>
Finisher mailbox connection diagram	<a href="#">Figure 14</a>



## Power connection diagram

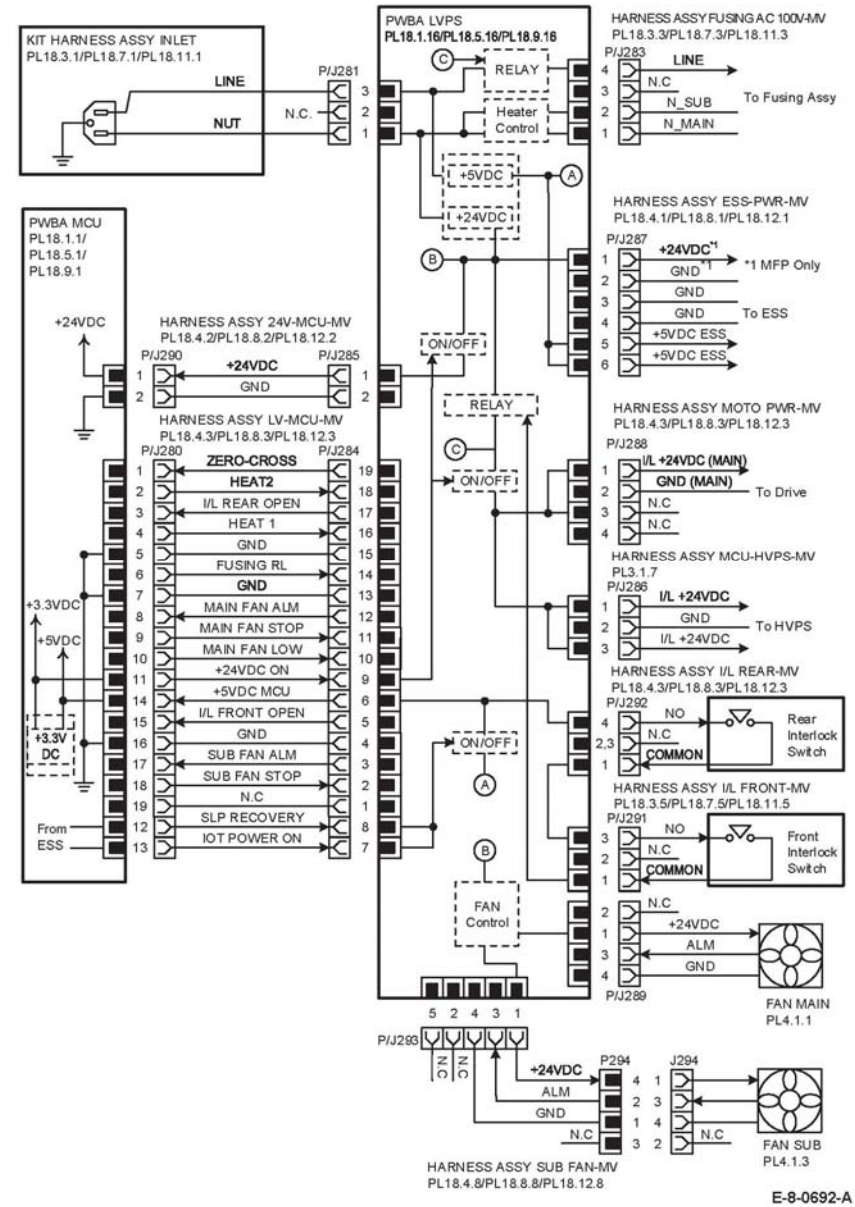


Figure 1 Power connection diagram

### LVPS over current protection circuit

Each output (+24VDC, +5VDC) of LVPS stops all outputs if it is shorted to ground or between ground.

### LVPS overvoltage protection circuit

- Each output (+24VDC, +5VDC) of LVPS stops all outputs if there is overvoltage.
- The operating voltage of the overvoltage protection of each output is as following:
  - +24VDC: 27 VDC~36 VDC
  - +5VDC: 7 VDC

### Drive connection diagram

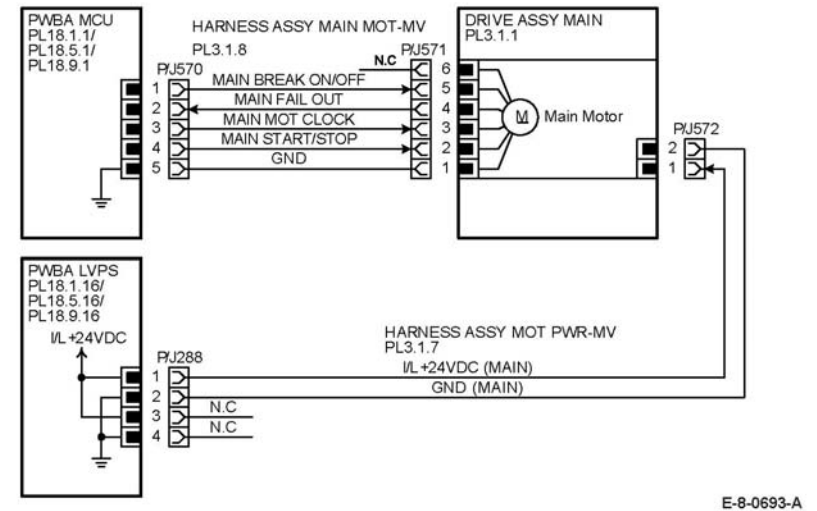
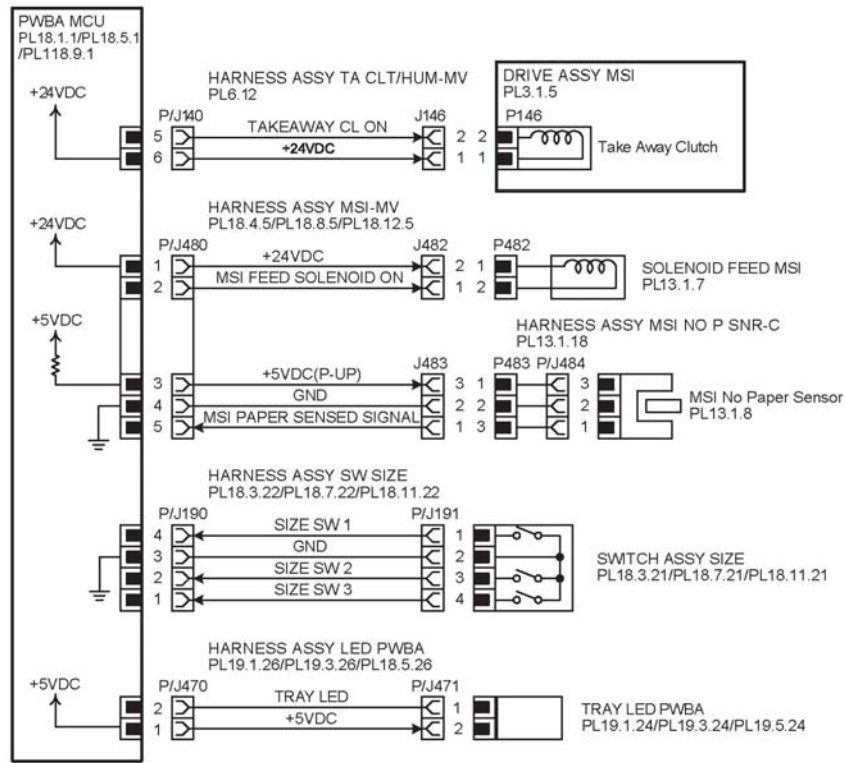


Figure 2 Drive connection diagram

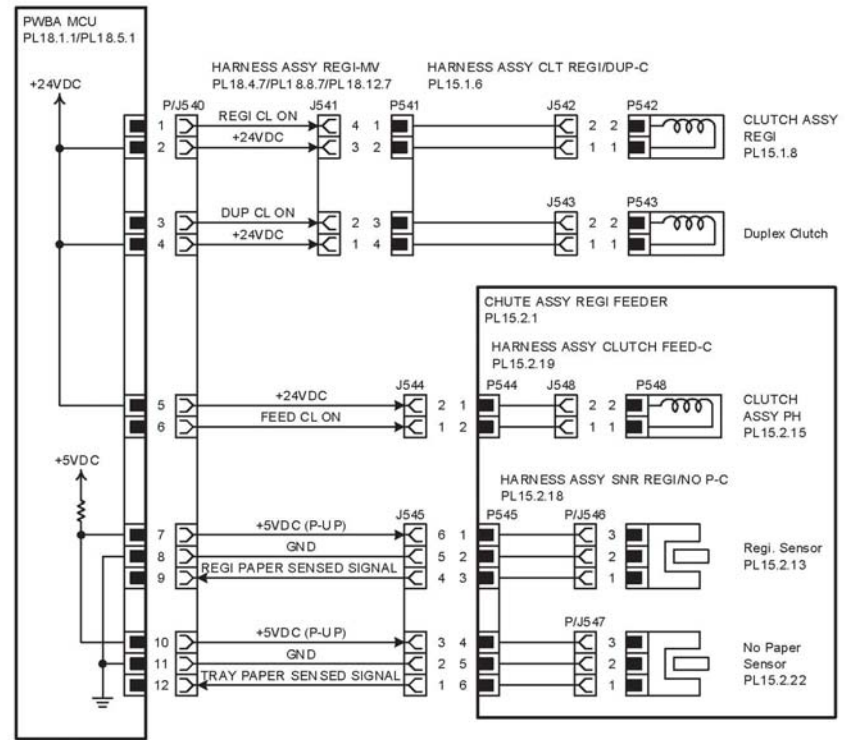
### Bypass Tray (MSI) connection diagram



E-8-0695-A

Figure 3 Bypass Tray (MSI) connection diagram

### Paper Transfer connection diagram

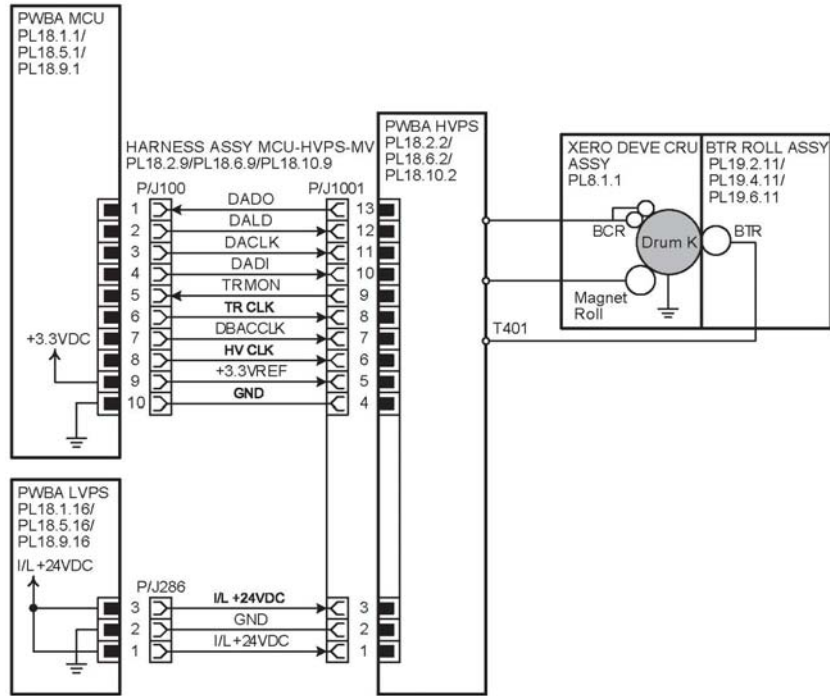


E-8-0696-A

Figure 4 Paper Transfer connection diagram

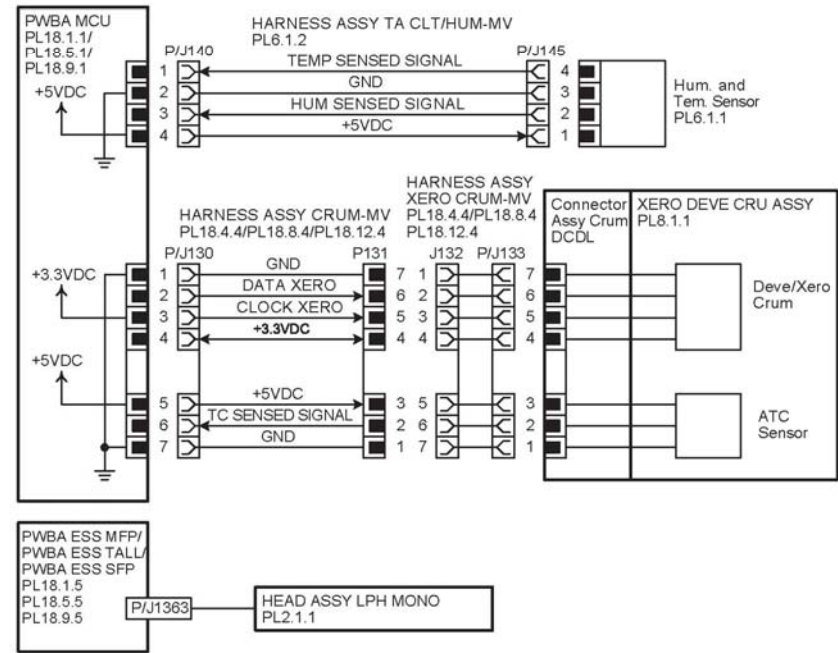
### HVPS connection diagram

### Xerographic connection diagram



E-8-0697-A

Figure 5 HVPS connection diagram



E-8-0698-A

Figure 6 Xerographic connection diagram

## Controller connection diagram

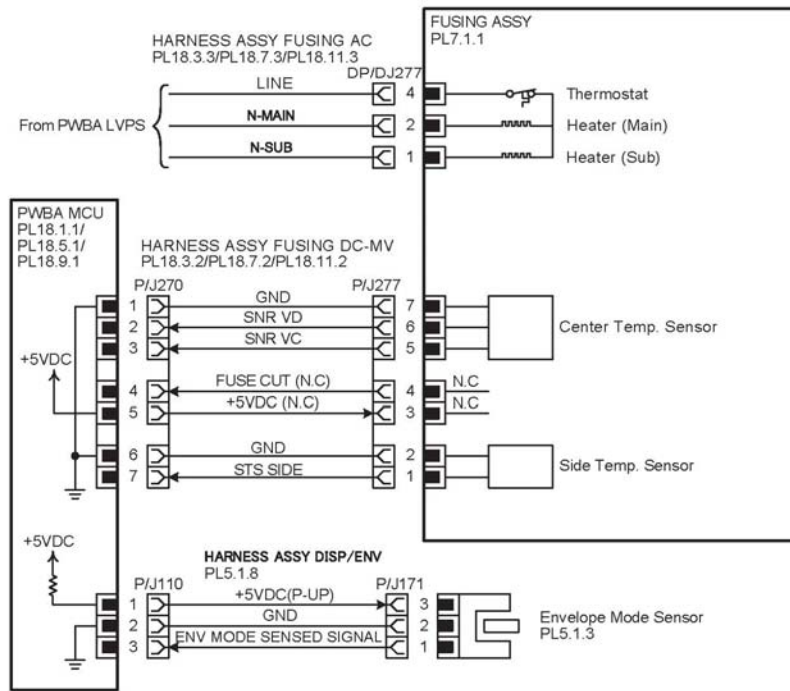


Figure 7 Controller connection diagram

E-8-0700-A

## Developer connection diagram

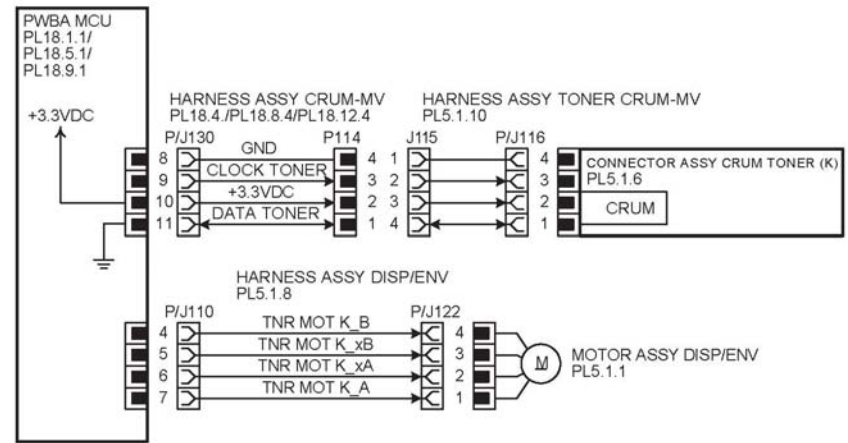
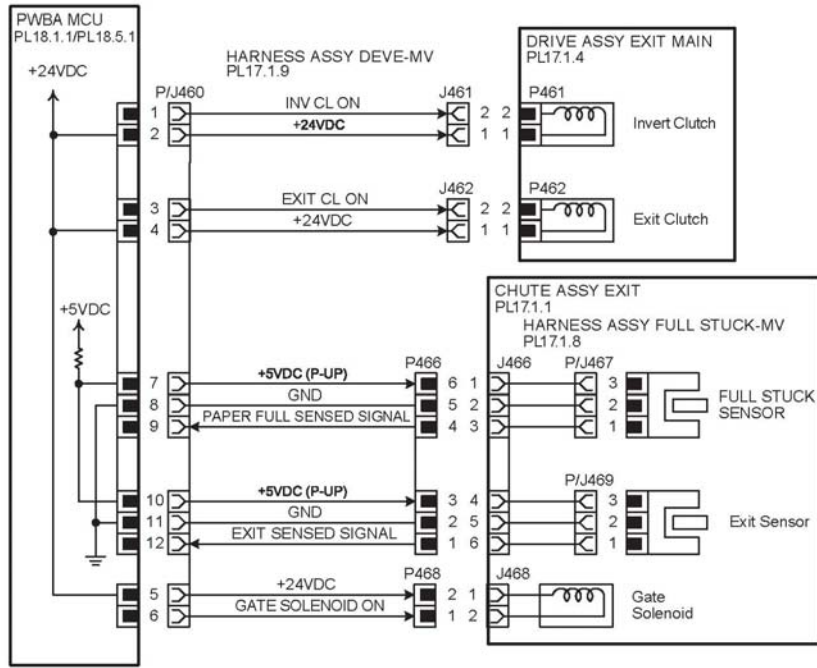


Figure 8 Developer connection diagram

E-8-0702-A

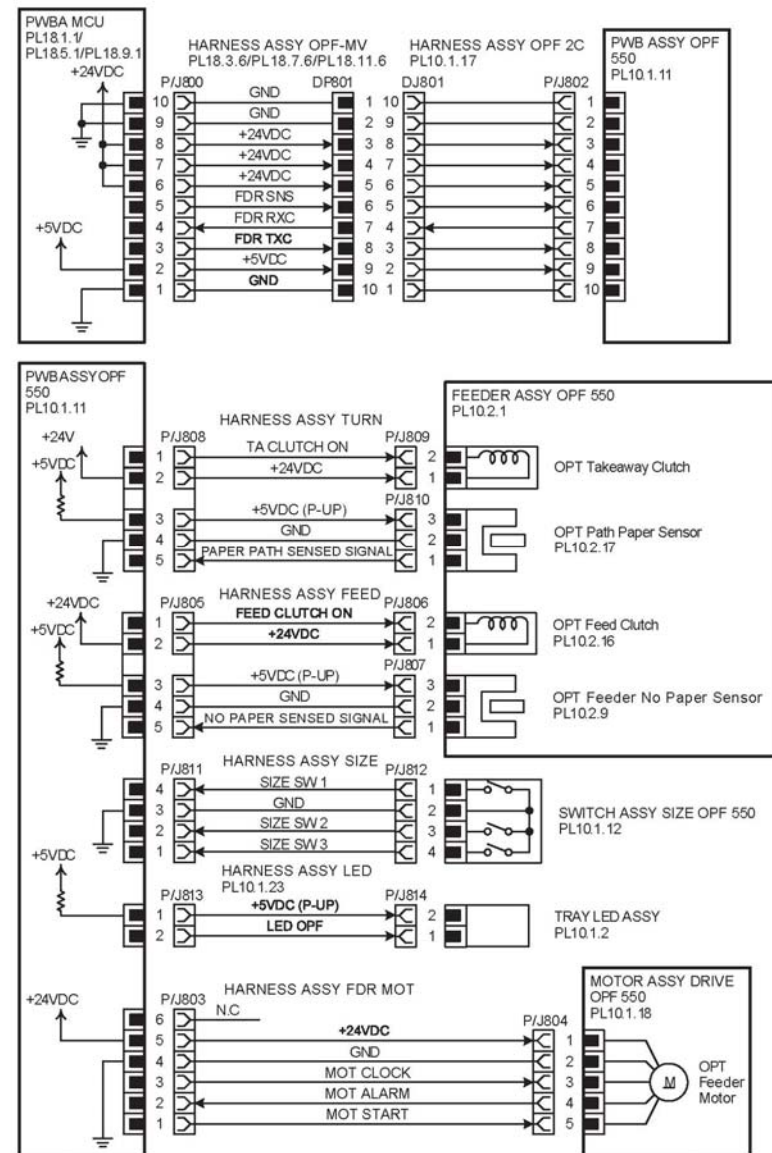
## Exit connection diagram



E-8-0703-A

Figure 9 Exit connection diagram

## 550 Option Feeder connection diagram



E-8-0704-A

Figure 10 Optional 550 feeder connection diagram

# Controller connection diagram (MFP and SFP)

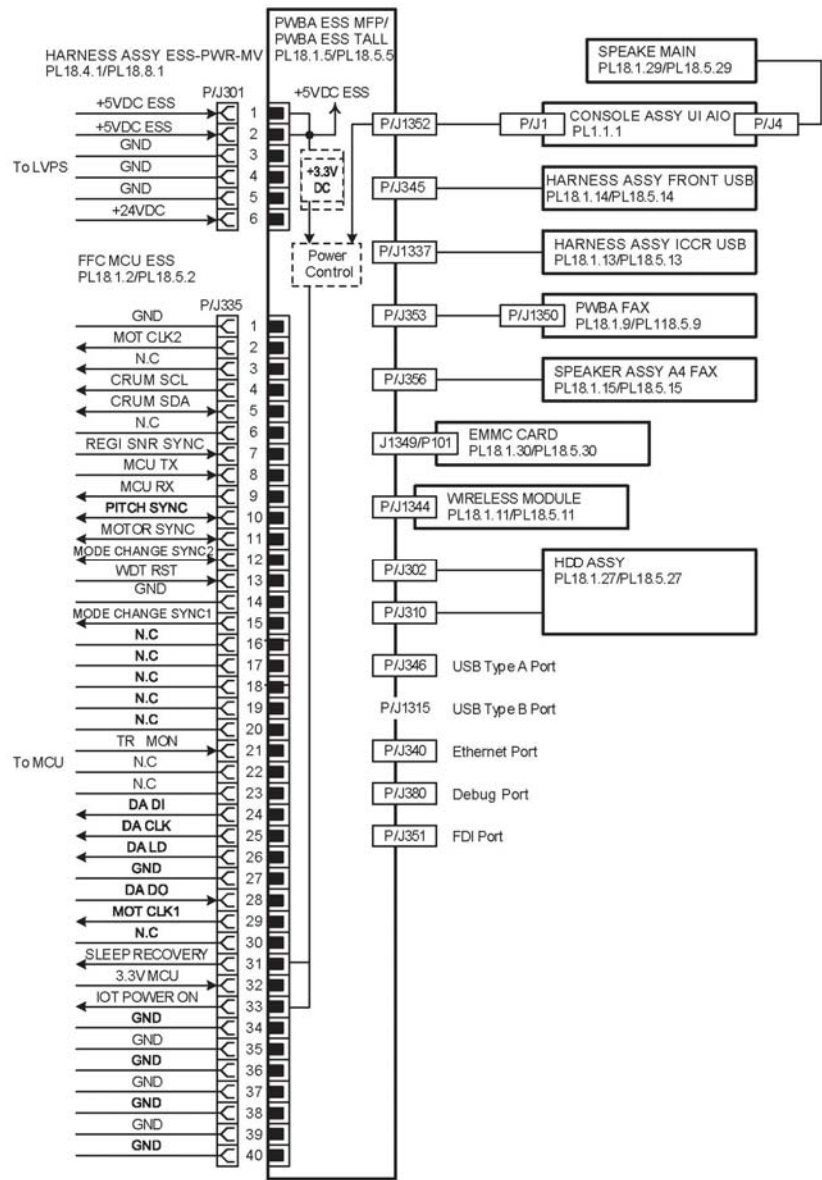


Figure 11 Controller connection diagram (MFP)

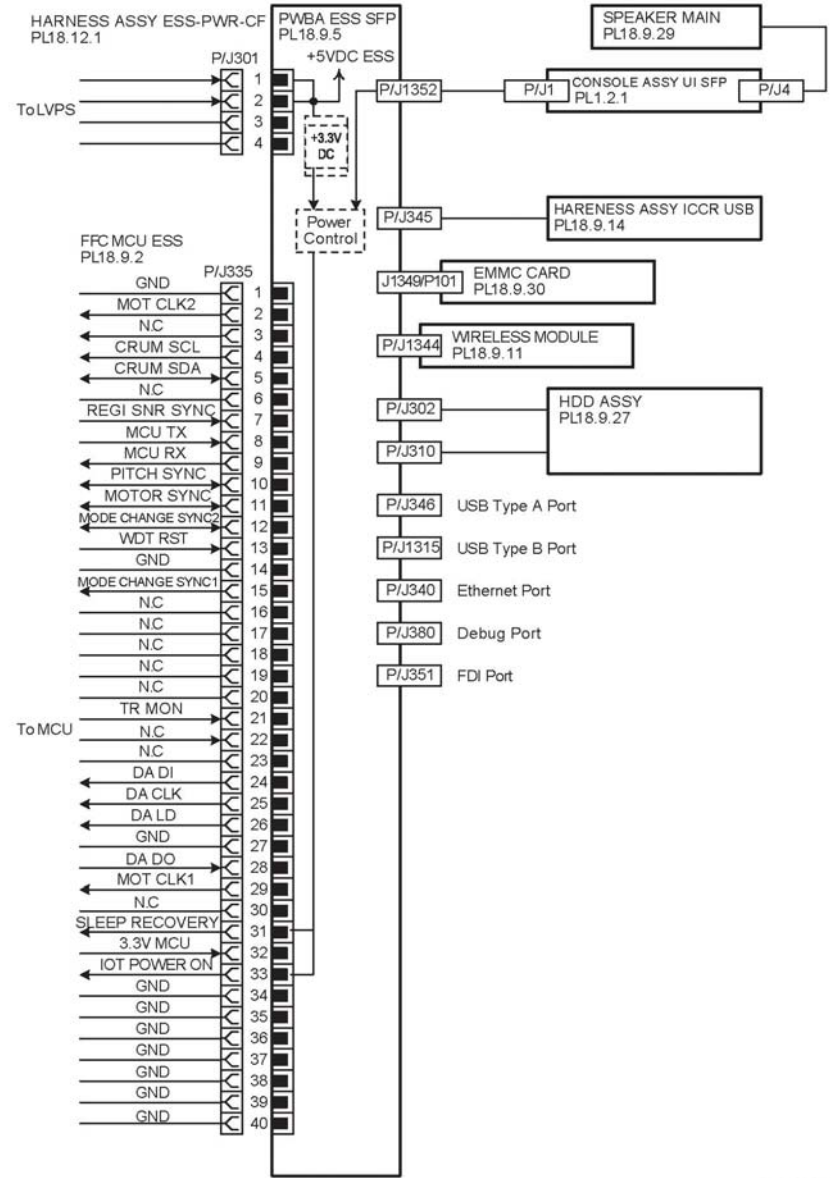


Figure 12 Controller connection diagram (SFP)

E-8-0706-A

E-8-0709-A

## Scanner connection diagram

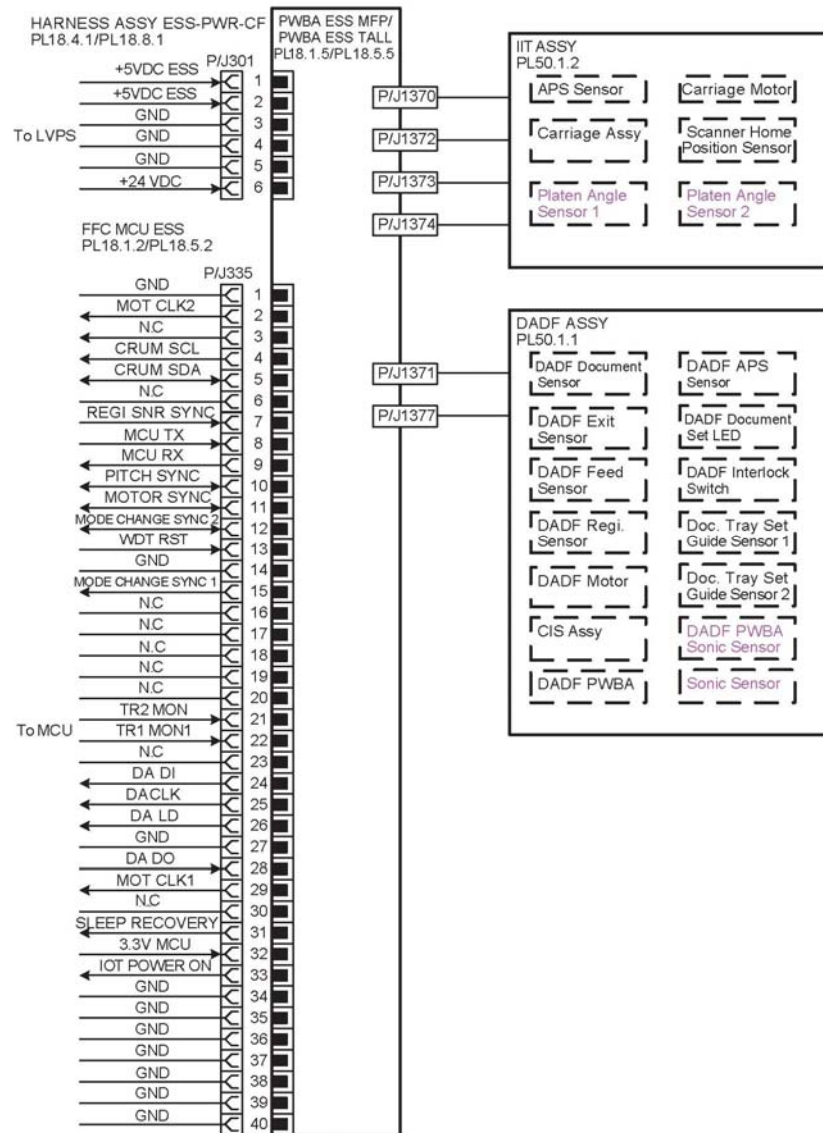


Figure 13 Scanner connection diagram

E-8-0710-A

## Finisher and Mailbox connection diagram

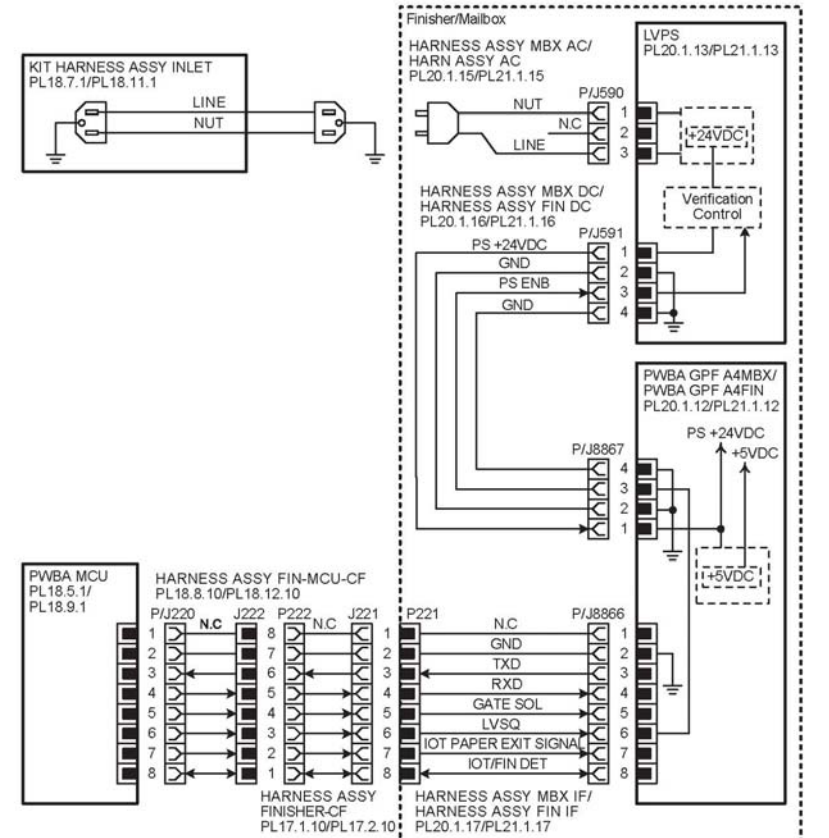





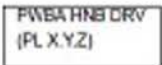





Figure 14 Finisher and mailbox connection diagram

E-8-0713-A

# Finisher Interconnection Diagrams

## Symbol Legend

Figure 1 describes symbols used on the electrical Diagram.

Symbol	Description
	Denotes a Plug
	This is a Jack.
	Denotes Pin YY and Jack YY of the connector PXX and JXX.
	Denotes the parts PL X.Y.Z indicates the "Z" part of the PL X.Y in Chapter 5 Parts List.
	Denotes a functional part with the functional part name.
	Denotes a control in an outline in the PWB.
	Denotes a connection between parts with a harness or wires attached with signal names and contents.
	Denotes the function, logic value of the signal to operate the function (L: Low, H: High). The given voltage is for the signal in the high status. The arrow indicates the direction of the signal.
	Denotes the function, logic value of the signal to operate the function (L: Low, H: High). The given voltage is for the signal in the high status. The arrow indicates the direction of the signal.


Symbol	Description
	Denotes a connection between wires.
I/L +24VDC	Denotes a DC Voltage when the Interlock Switch in the HNB MCU WITH CPU turns on.
+5VDC +3.3VDC	Denotes DC Voltages
SG	Denotes signal ground
AG	Denotes analog ground
RTN	Denotes the return

Figure 1 Electrical Symbols



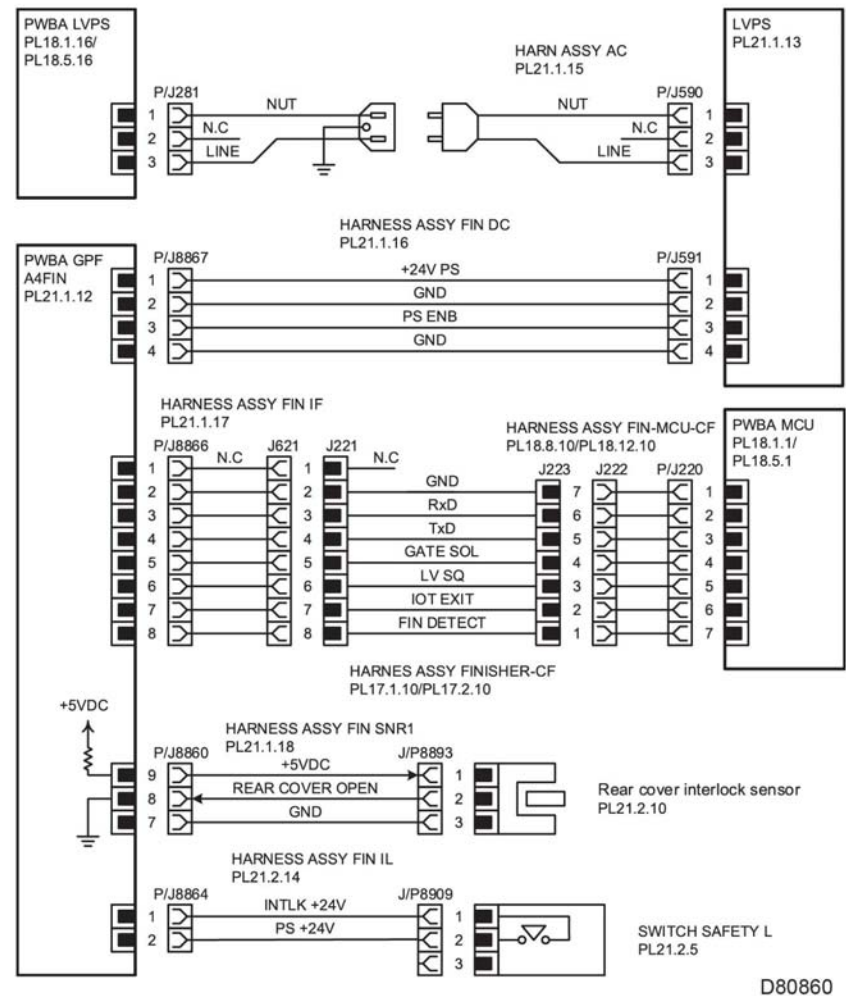
## Finisher Configuration of the Interconnections Diagrams

Refer to [Figure 1](#) for a list of the connection diagrams for the finisher subsystems and the connection details shown in each diagram.

**Table 1 Subsystem connection Diagrams**

Finisher Subsystem	Diagram
Power connection diagram	<a href="#">Figure 2</a>
Stapler connection diagram	<a href="#">Figure 3</a>
Paper Transport connection diagram	<a href="#">Figure 4</a>
Tamper connection diagram	<a href="#">Figure 5</a>
Ejector/stacker connection diagram	<a href="#">Figure 6</a>

## Finisher Power



**Figure 2 Power connection diagram**

LVPS over current protection circuit

Each output (+24VDC, +5VDC) of LVPS stops all outputs if it is shorted to ground or between ground.

LVPS overvoltage protection circuit

Each output (+24VDC, +5VDC) of LVPS stops all outputs if there is an overvoltage.

The operating voltage of the overvoltage protection of each output is as follows:

- 24VDC: 27VDC~36VDC
- 5VDC: 7VDC

**Finisher Stapler**

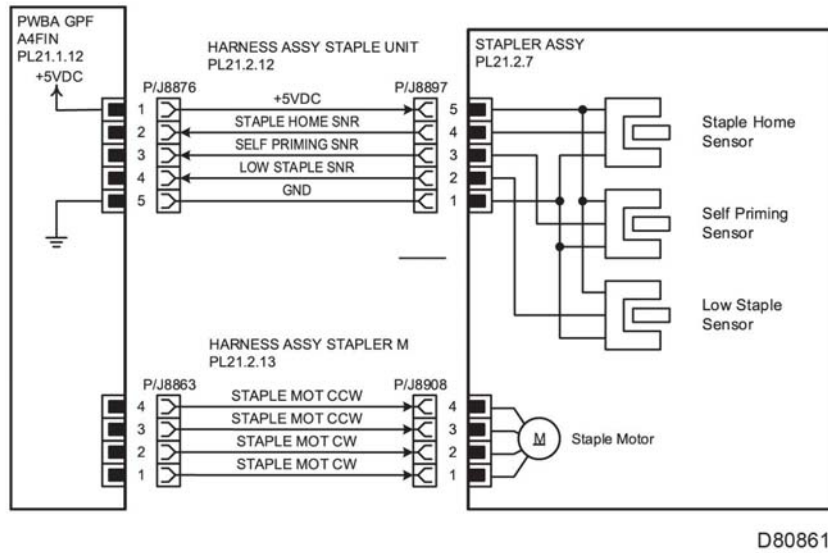


Figure 3 Stapler connection diagram

**Finisher Paper Transport**

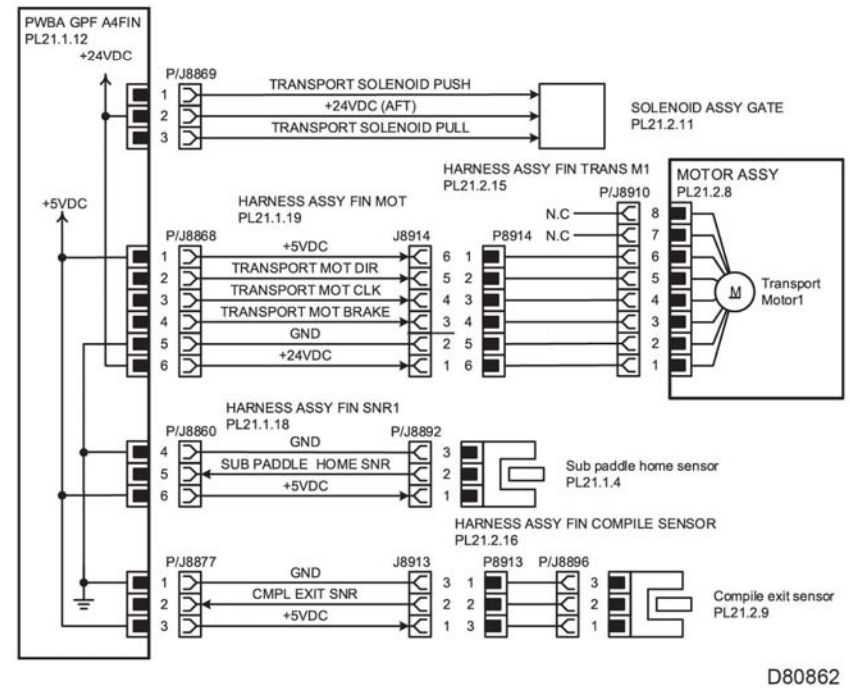


Figure 4 Paper Transport connection diagram

Finisher Tamper

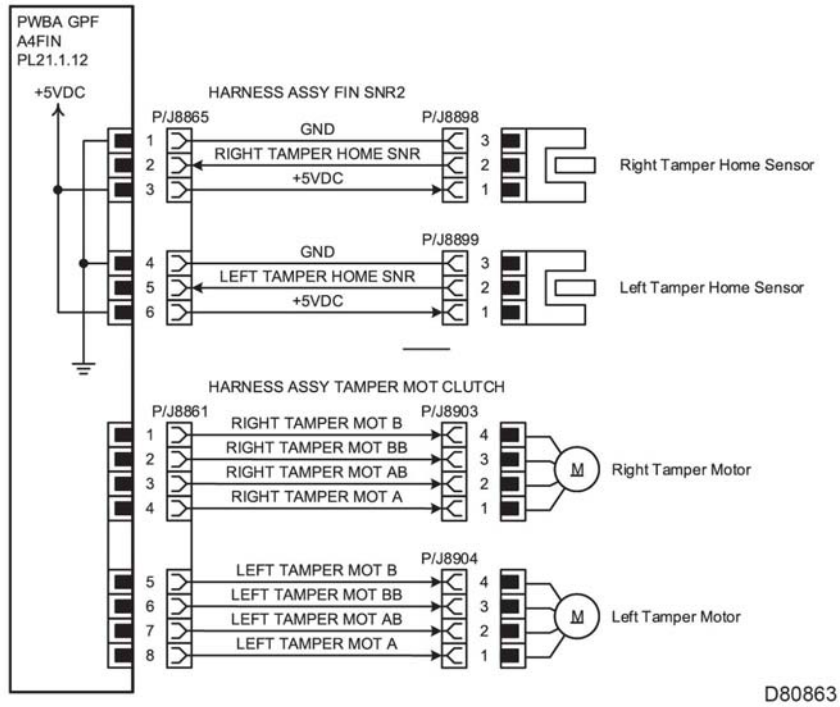


Figure 5 Tamper connection diagram

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Finisher Ejector/Stacker

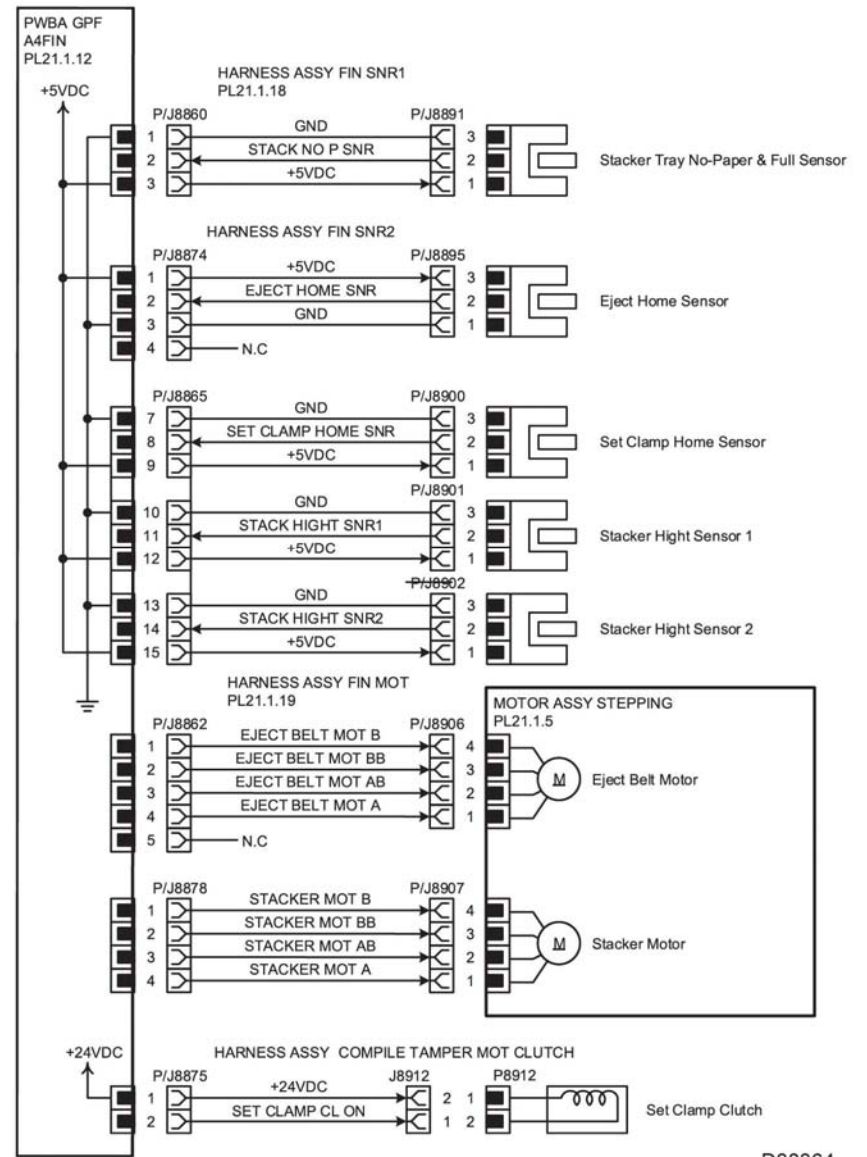





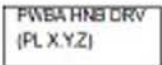





Figure 6 Ejector/stacker connection diagram

D80864

# HCF Interconnection Diagrams

## Symbol Legend

Figure 1 describes symbols used on the diagrams.

Symbol	Description
	Denotes a Plug
	This is a Jack.
	Denotes Pin YY and Jack YY of the connector PXX and JXX.
	Denotes the parts PL X.Y.Z indicates the "Z" part of the PL X.Y in Chapter 5 Parts List.
	Denotes a functional part with the functional part name.
	Denotes a control in an outline in the PWB.
	Denotes a connection between parts with a harness or wires attached with signal names and contents.
	Denotes the function, logic value of the signal to operate the function (L: Low, H: High). The given voltage is for the signal in the high status. The arrow indicates the direction of the signal.
	Denotes the function, logic value of the signal to operate the function (L: Low, H: High). The given voltage is for the signal in the high status. The arrow indicates the direction of the signal.


Symbol	Description
	Denotes a connection between wires.
I/L +24VDC	Denotes a DC Voltage when the Interlock Switch in the HNB MCU WITH CPU turns on.
+5VDC +3.3VDC	Denotes DC Voltages
SG	Denotes signal ground
AG	Denotes analog ground
RTN	Denotes the return

Figure 1 Electrical Symbols

## HCF Interconnection Diagrams Sections

Refer to Figure 1 for a list of the connection diagrams for the HCF subsystems and the connection details shown in each diagram.

Table 1 Subsystem connection Diagrams

HCF Subsystem	Diagram
Paper transport connection diagram	Figure 2
Signal and switches connection diagram	Figure 3

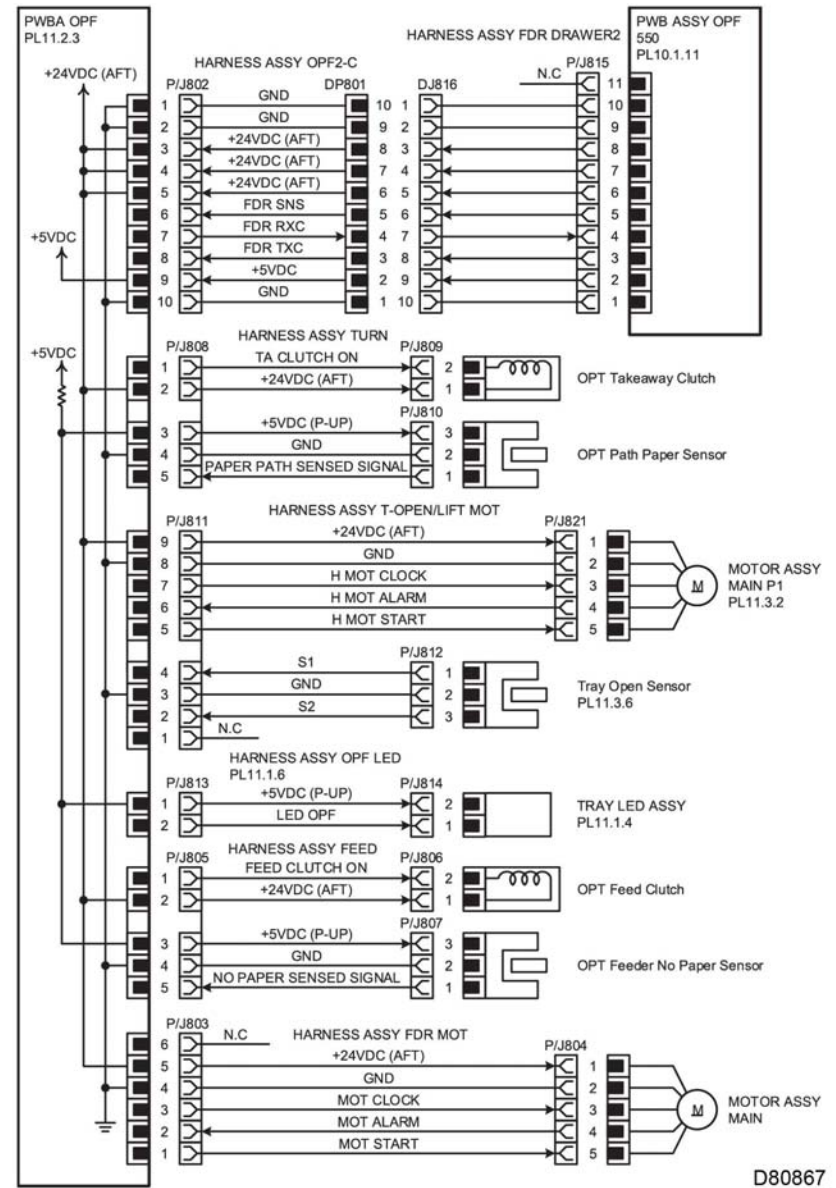


Figure 2 Paper transport connection diagram

## Mailbox Interconnection Diagrams

### Symbol Legend

Figure 1 describes symbols used on the electrical Diagrams.

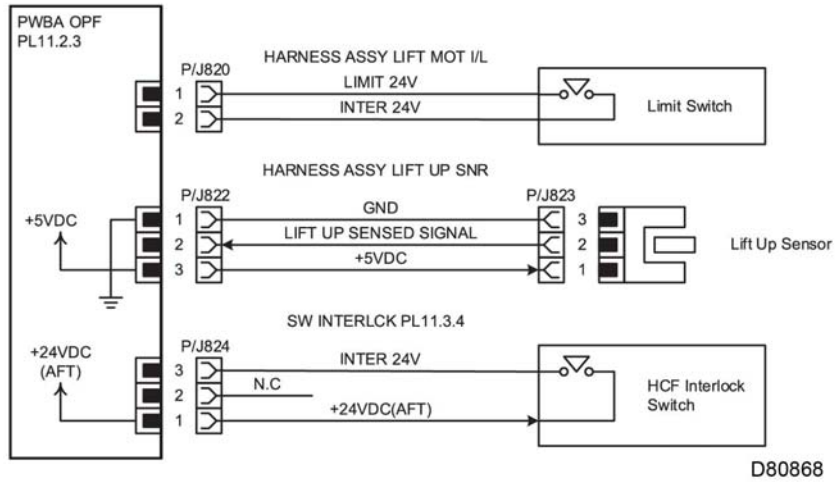



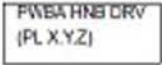







Figure 3 Signal and switches connection diagram

Symbol	Description
	Denotes a Plug
	This is a Jack.
	Denotes Pin YY and Jack YY of the connector PXX and JXX.
	Denotes the parts PL X.Y.Z indicates the "Z" part of the PL X.Y in Chapter 5 Parts List.
	Denotes a functional part with the functional part name.
	Denotes a control in an outline in the PWB.
	Denotes a connection between parts with a harness or wires attached with signal names and contents.
	Denotes the function, logic value of the signal to operate the function (L: Low, H: High). The given voltage is for the signal in the high status. The arrow indicates the direction of the signal.
	Denotes the function, logic value of the signal to operate the function (L: Low, H: High). The given voltage is for the signal in the high status. The arrow indicates the direction of the signal.


Symbol	Description
	Denotes a connection between wires.
I/L +24VDC	Denotes a DC Voltage when the Interlock Switch in the HNB MCU WITH CPU turns on.
+5VDC +3.3VDC	Denotes DC Voltages
SG	Denotes signal ground
AG	Denotes analog ground
RTN	Denotes the return

Figure 1 Electrical Symbols



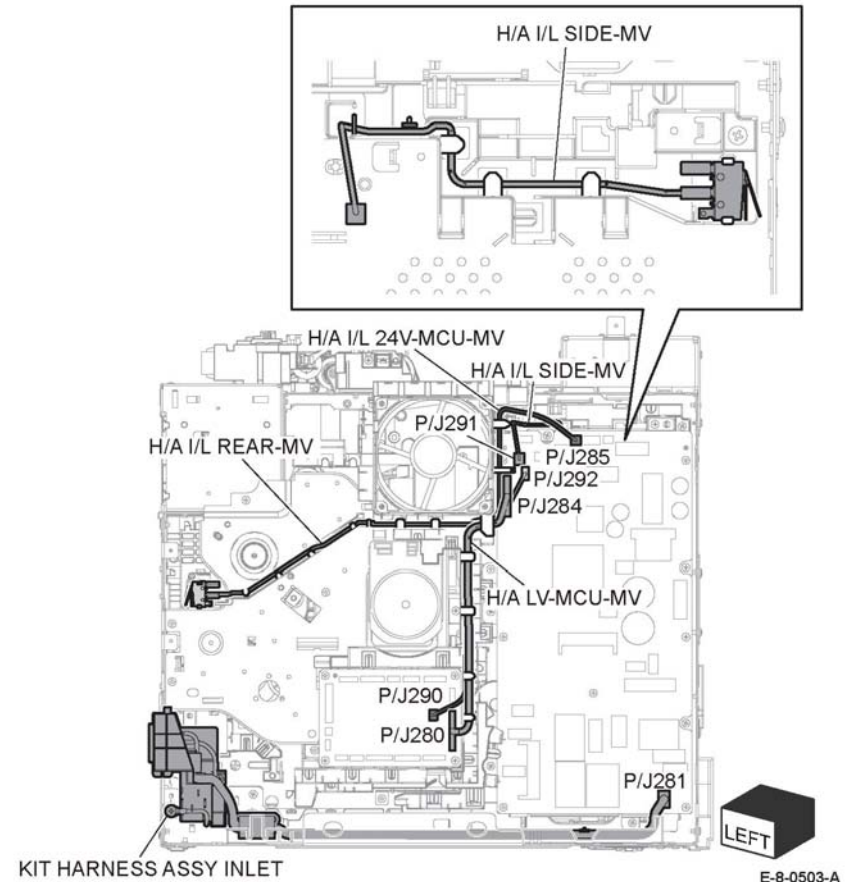


# IOT harness Routing

The following illustrations show factory harness routing paths through the IOT chassis. Refer to [Table 1](#) for a list of available routing diagrams.

**Table 1 IOT Chassis harness Routing Diagrams**

Diagram	Description
Figure 1	Inlet, I/L rear MV, I/L side MV, 24V MCU MV, LV MCU MV
Figure 2	LED, sub fan-MV
Figure 3	Main motor-MV, Motor power-MV
Figure 4	MSI-MV (Bypass tray), MSI no paper sensor, OPF-MV, size switch
Figure 5	Registration/Duplex Clutch, Feed Clutch, Registration-MV, Registration Sensor, no paper sensor.
Figure 6	BTR, MCU HVPS-MV
Figure 7	CRUM-MV, xerographic CRUM-MV
Figure 8	Take away clutch, Humidity-MV
Figure 9	Fusing AC, Fusing DC-MV
Figure 10	Dispenser, Environmental-MV, CRUM-MV
Figure 11	Finisher-MV, finisher MCU-MV, developer-MV, full stack-MV
Figure 12	UI, FFC MCU ESS, fax, ICCR USB, front USB, ESS power-MV, DADF/IIT, FCC LPH (MFP std)
Figure 13	Speaker assembly A4 fax, Main Speaker (MFP std)
Figure 14	UI, FFC MCU ESS, fax, ICCR USB, front USB, ESS power-MV, DADF/IIT, FCC LPH (MFP-tall)
Figure 15	Speaker assembly A4 fax, Main Speaker (MFP tall)
Figure 16	UI, FFC MCU ESS, front USB, ESS Power-MV, FFC LPH (SFP)
Figure 17	Main speaker (SFP)



**Figure 1 Inlet, I/L rear MV, I/L side MV, 24V MCU MV, LV MCU MV**

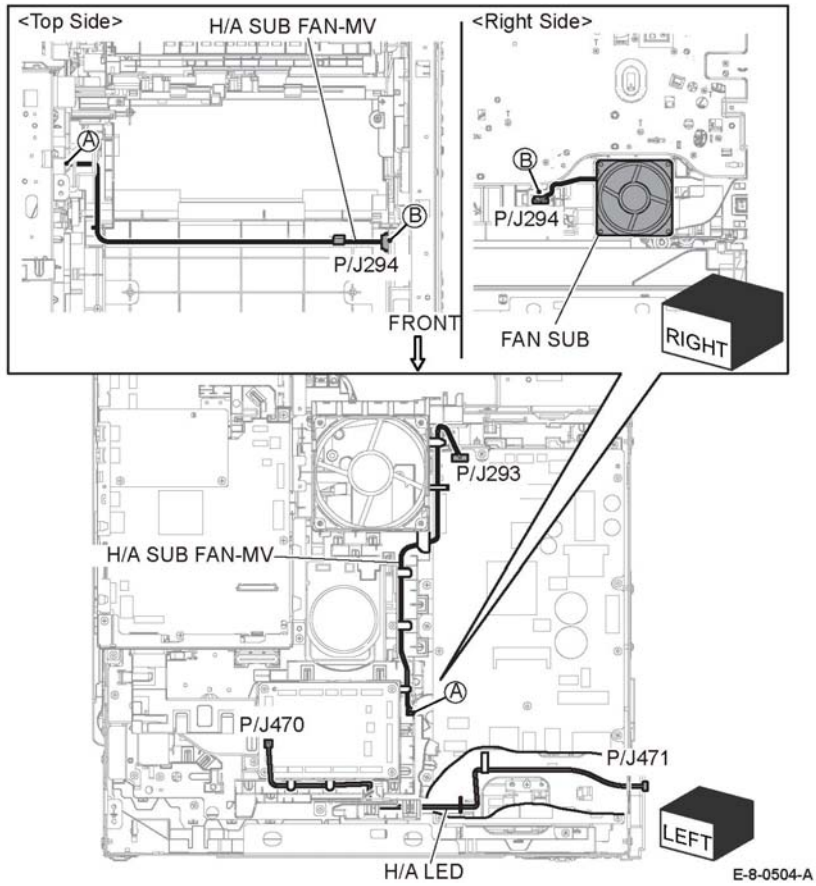


Figure 2 LED, sub fan\_MV

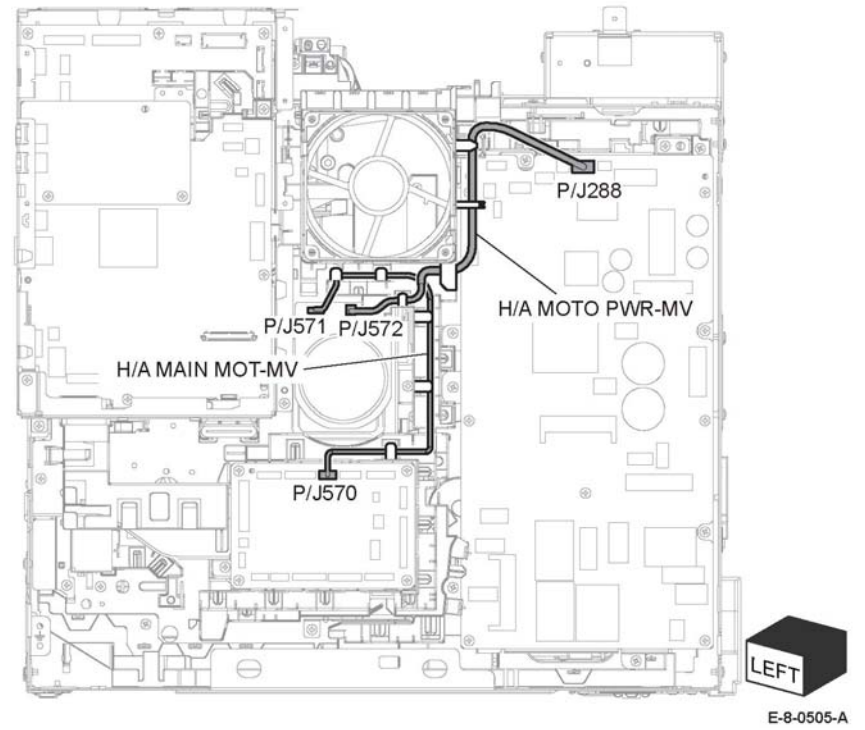


Figure 3 Motor power-MV, Main motor

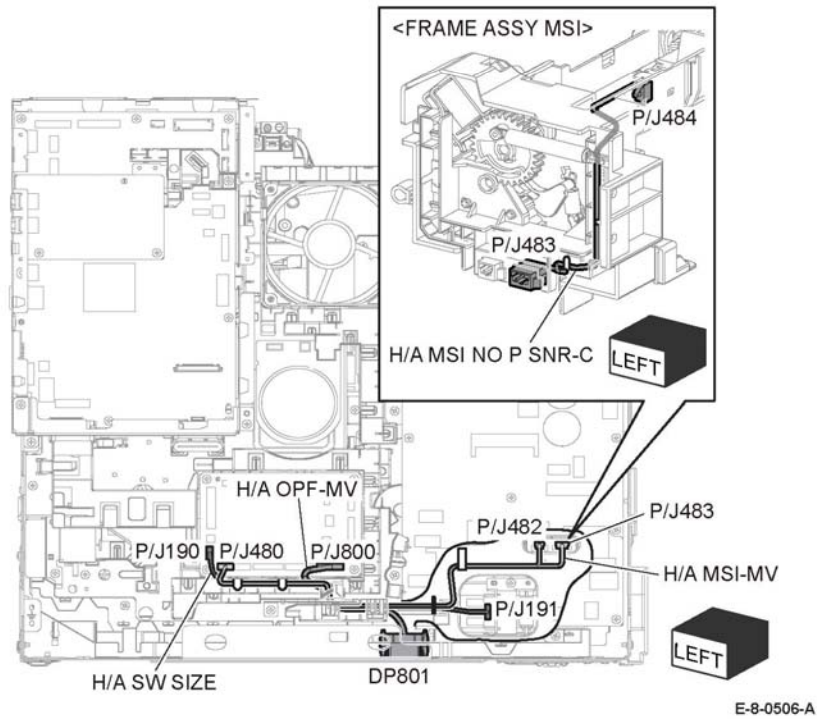


Figure 4 MSI-MV (Bypass tray), MSI no paper sensor, OPF-MV, size switch

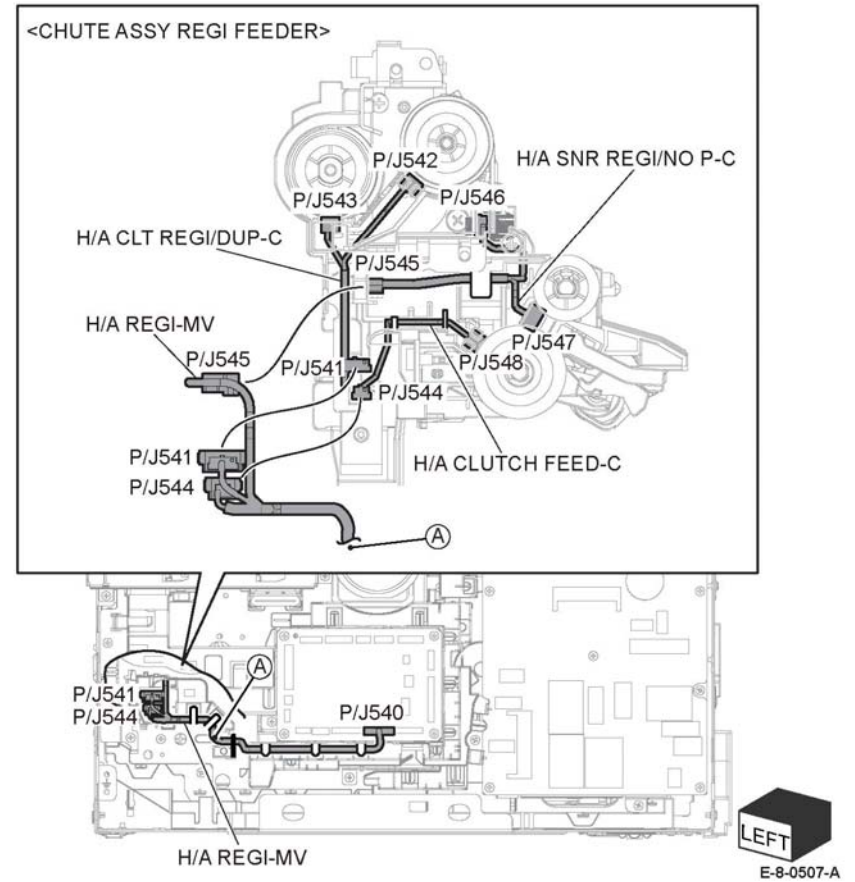


Figure 5 Registration/Duplex Clutch, Feed Clutch, Registration-MV, Registration Sensor, no paper sensor.

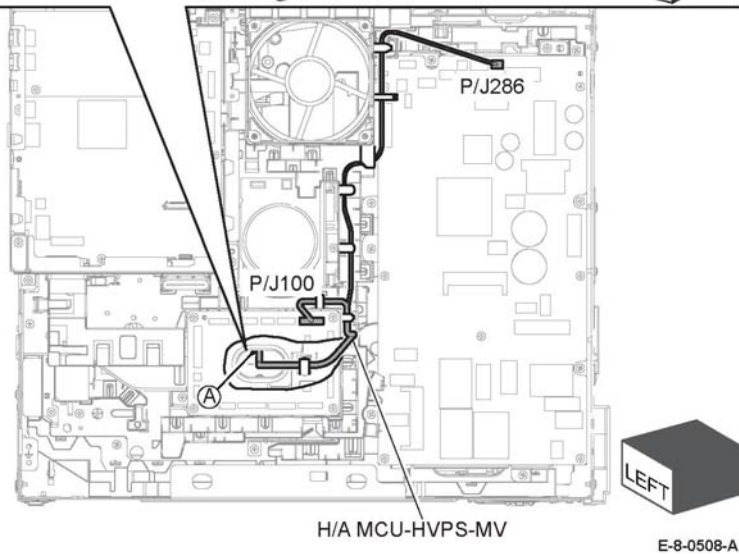
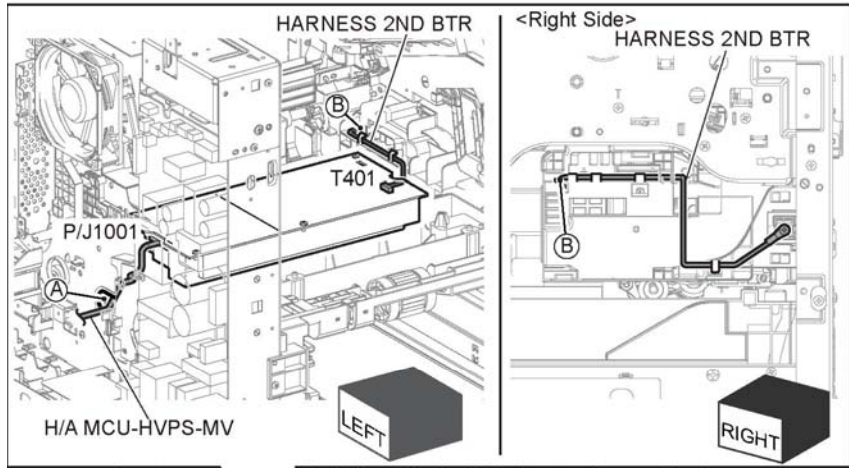


Figure 6 BTR, MCU HVPS-MV

E-8-0508-A

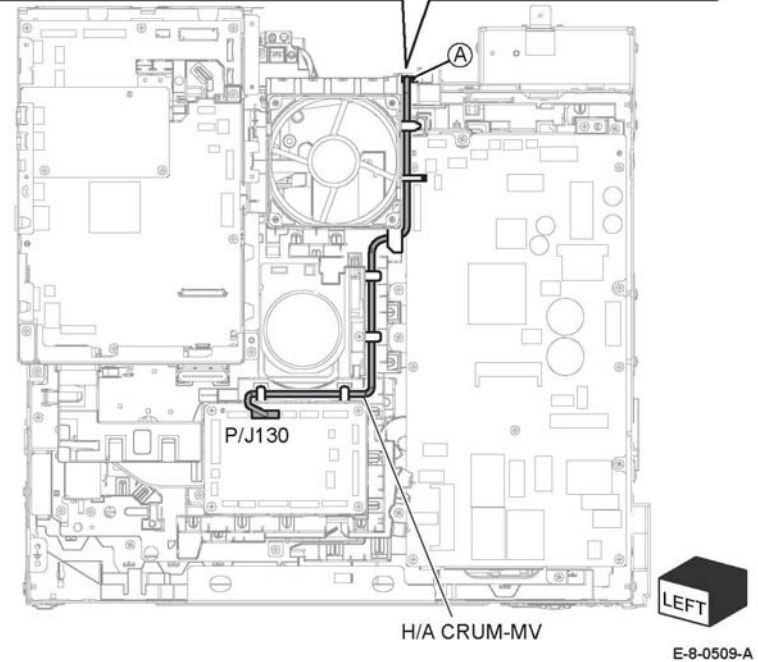
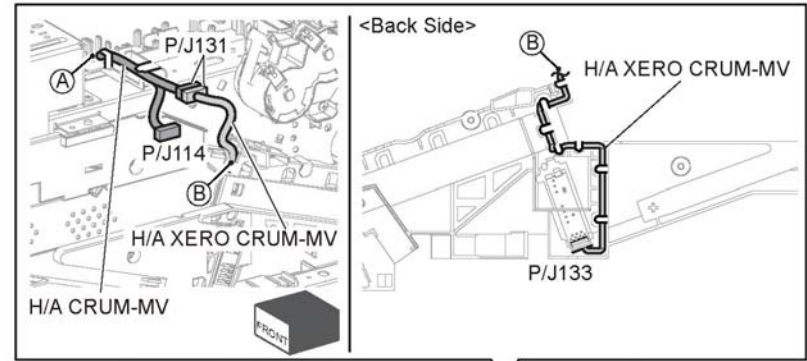


Figure 7 CRUM-MV, xerographic CRUM-MV

E-8-0509-A

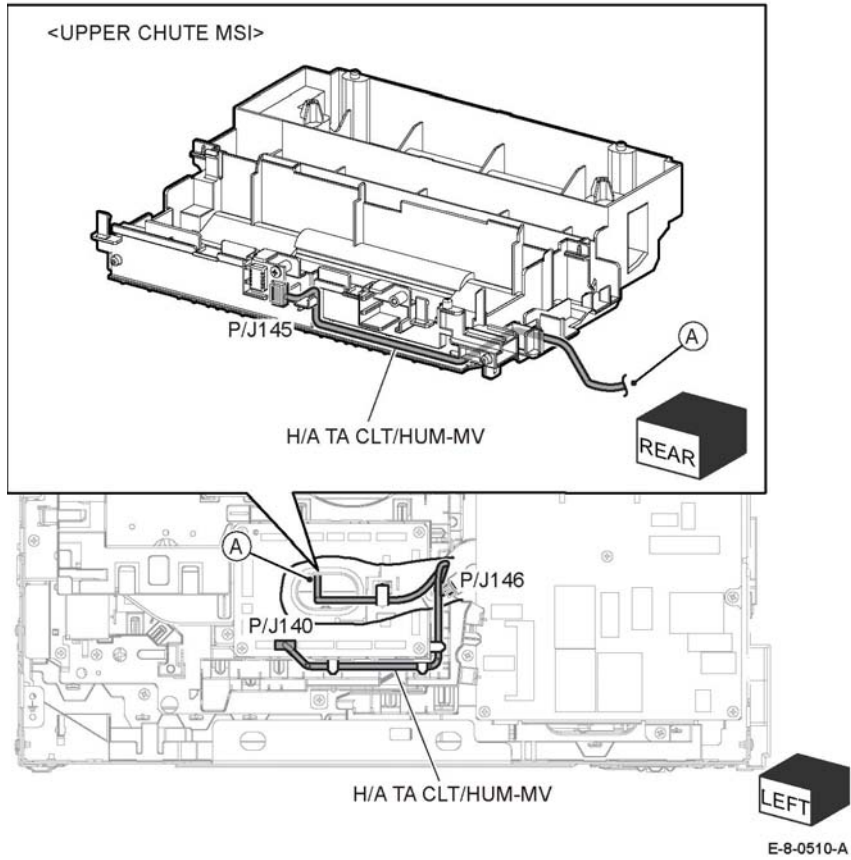


Figure 8 Take away clutch, Humidity-MV

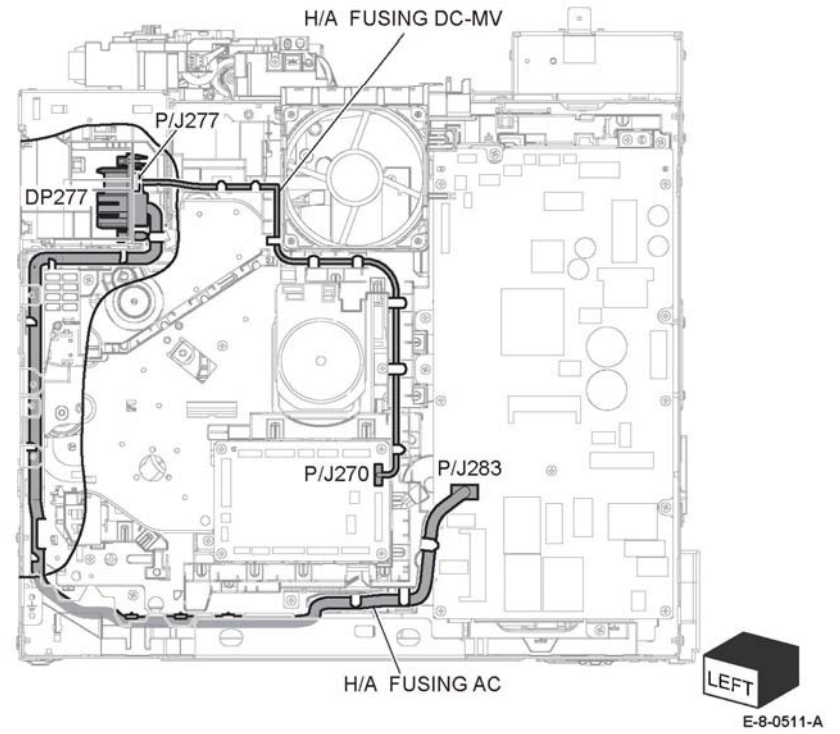


Figure 9 Fusing AC, Fusing DC-MV

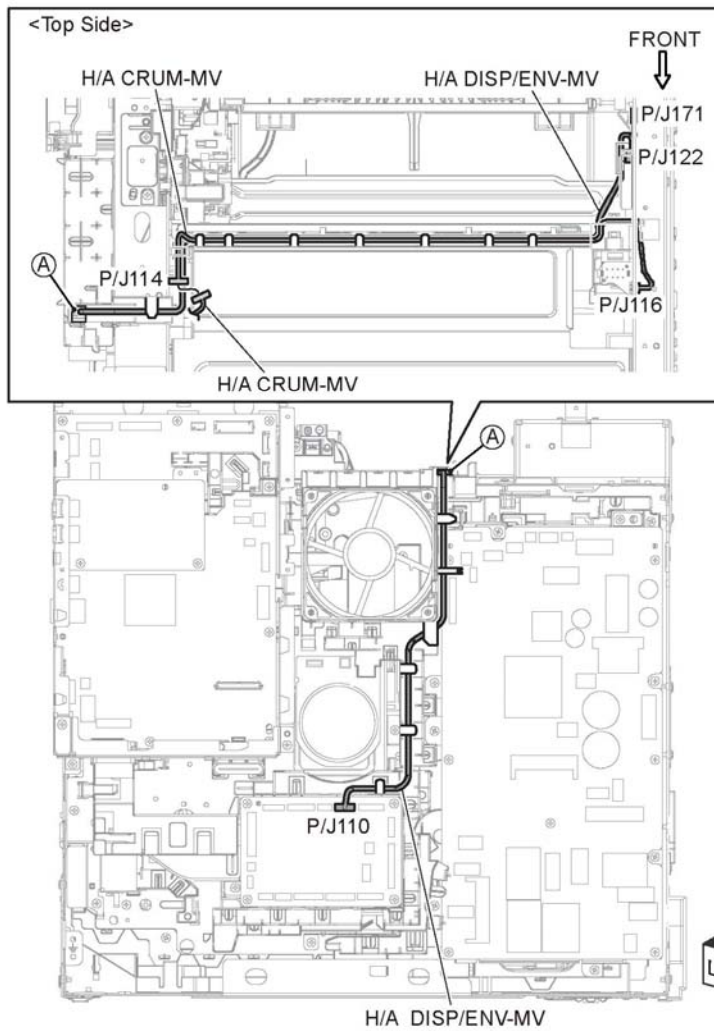


Figure 10 Dispenser, Environmental-MV, CRUM-MV

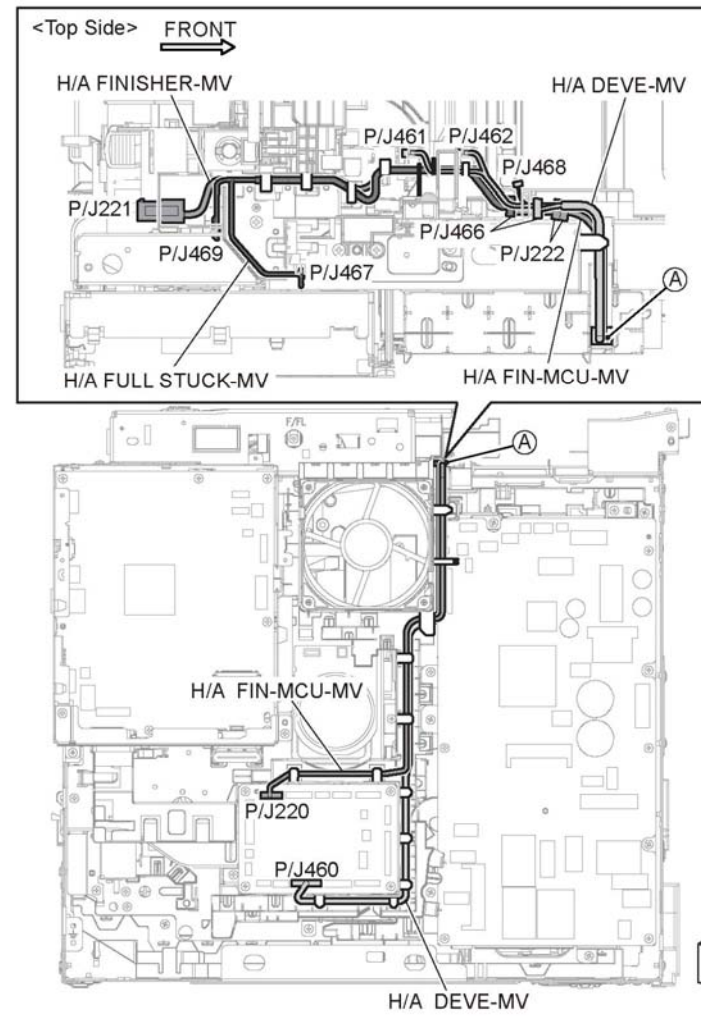


Figure 11 Finisher-MV, finisher MCU-MV, developer-MV, full stack-MV

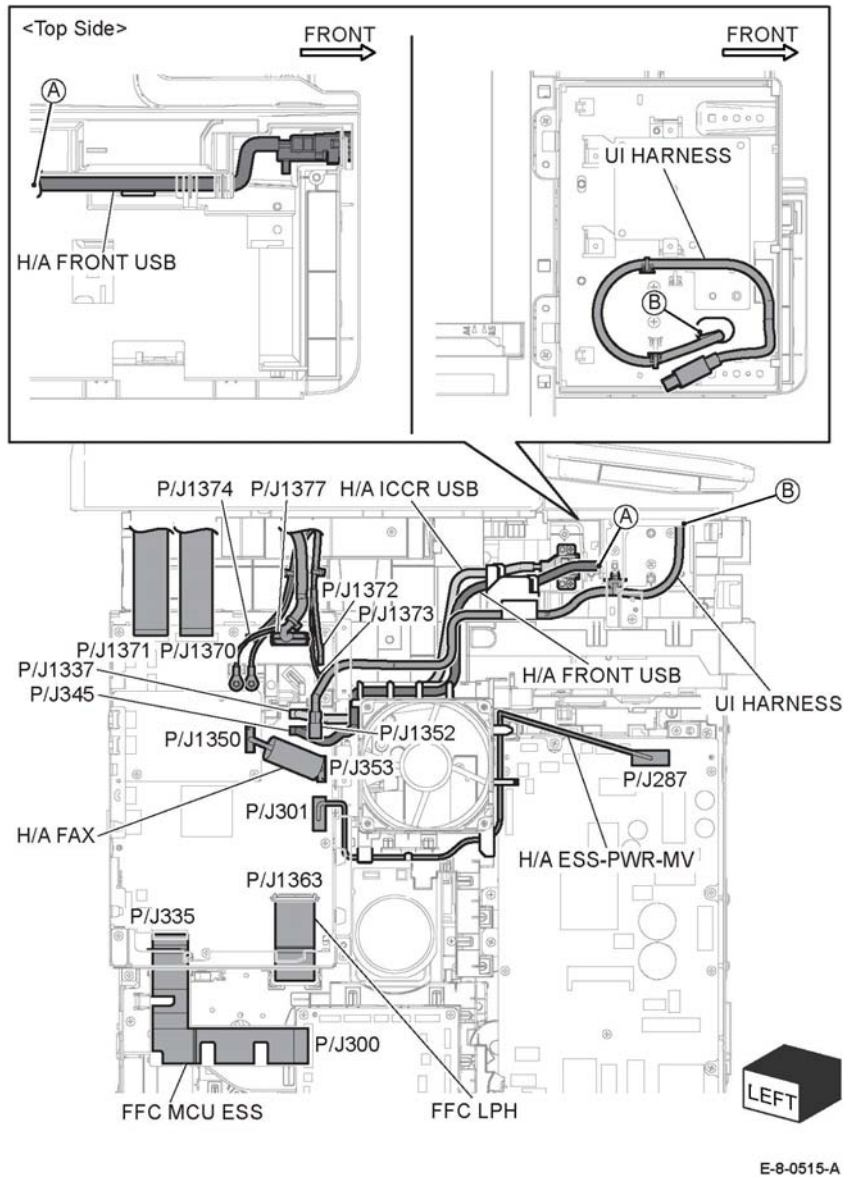


Figure 12 UI, FFC MCU ESS, fax, ICCR USB, front USB, ESS power-MV, DADF/IIT, FCC LPH (MFP std)

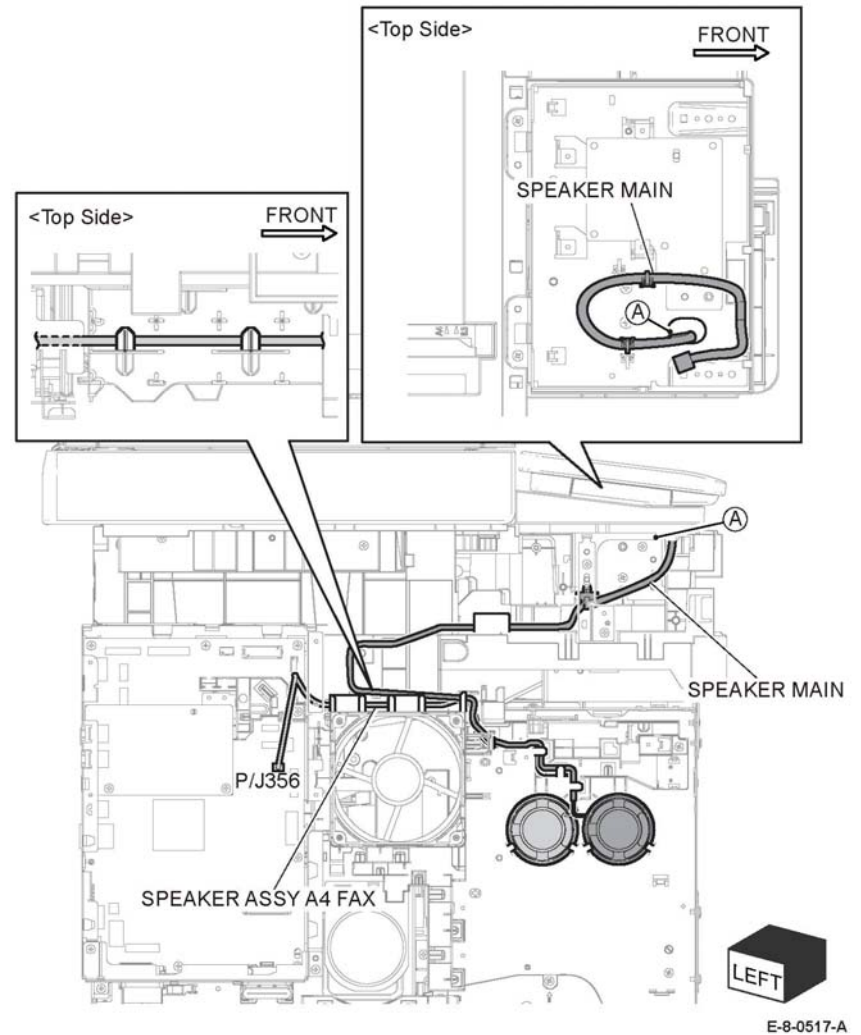


Figure 13 Speaker assembly A4 fax, Main Speaker (MFP std)

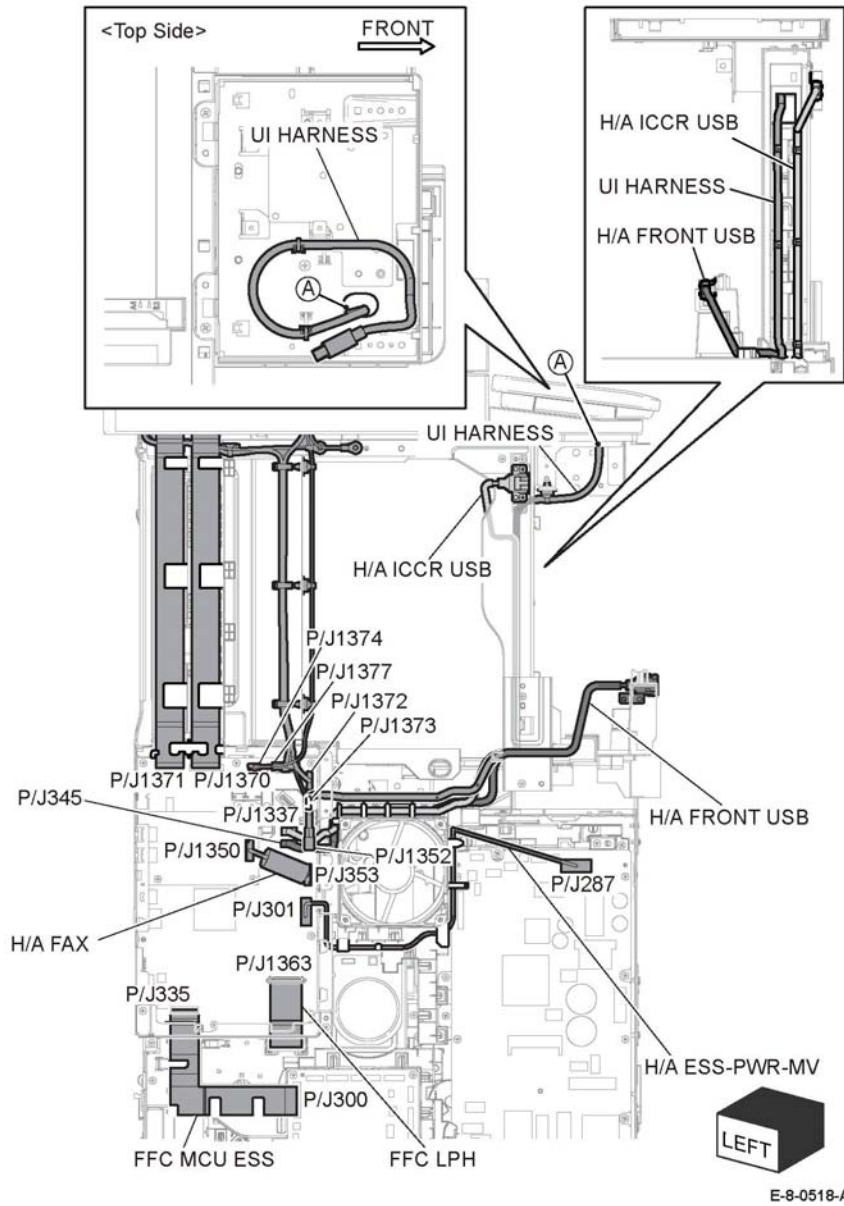


Figure 14 UI, FFC MCU ESS, fax, ICCR USB, front USB, ESS power-MV, DADF/IIT, FCC LPH (MFP-tall)

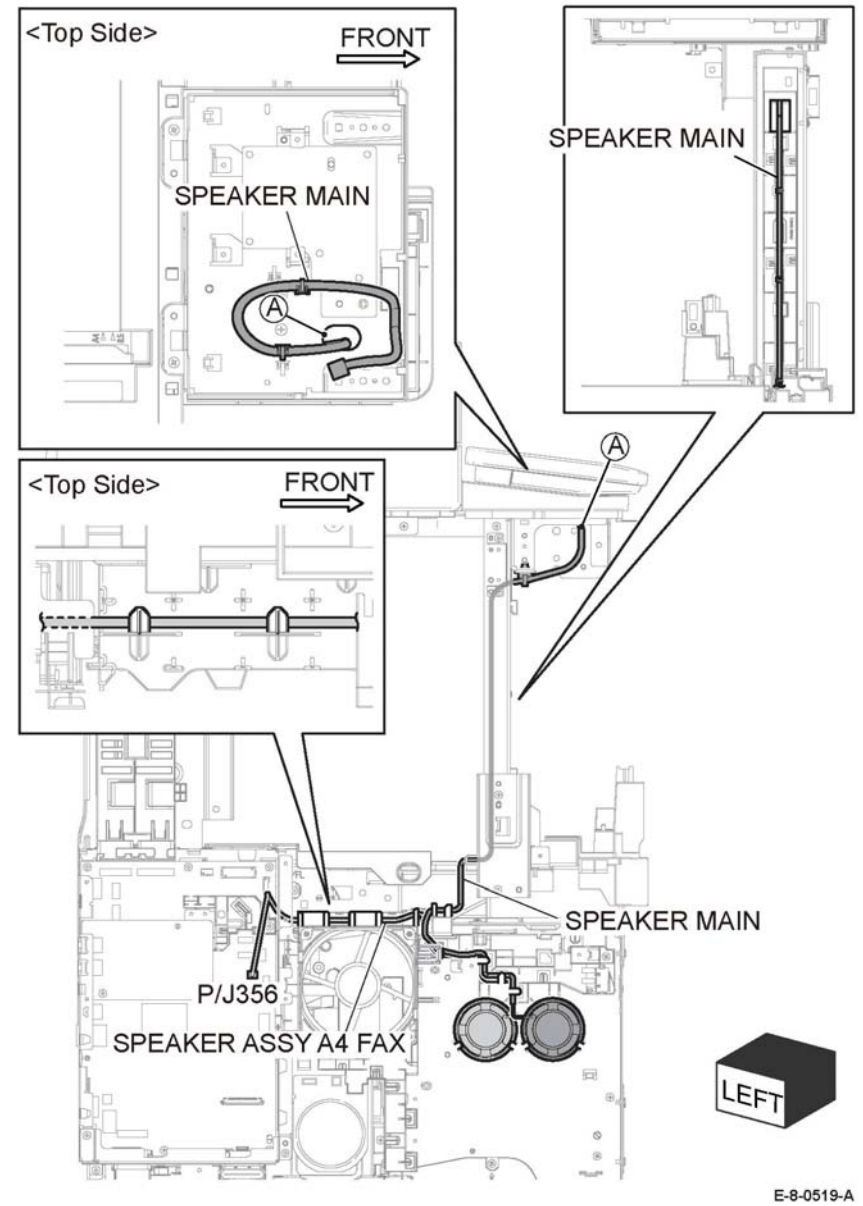


Figure 15 Speaker assembly A4 fax, Main Speaker (MFP tall)



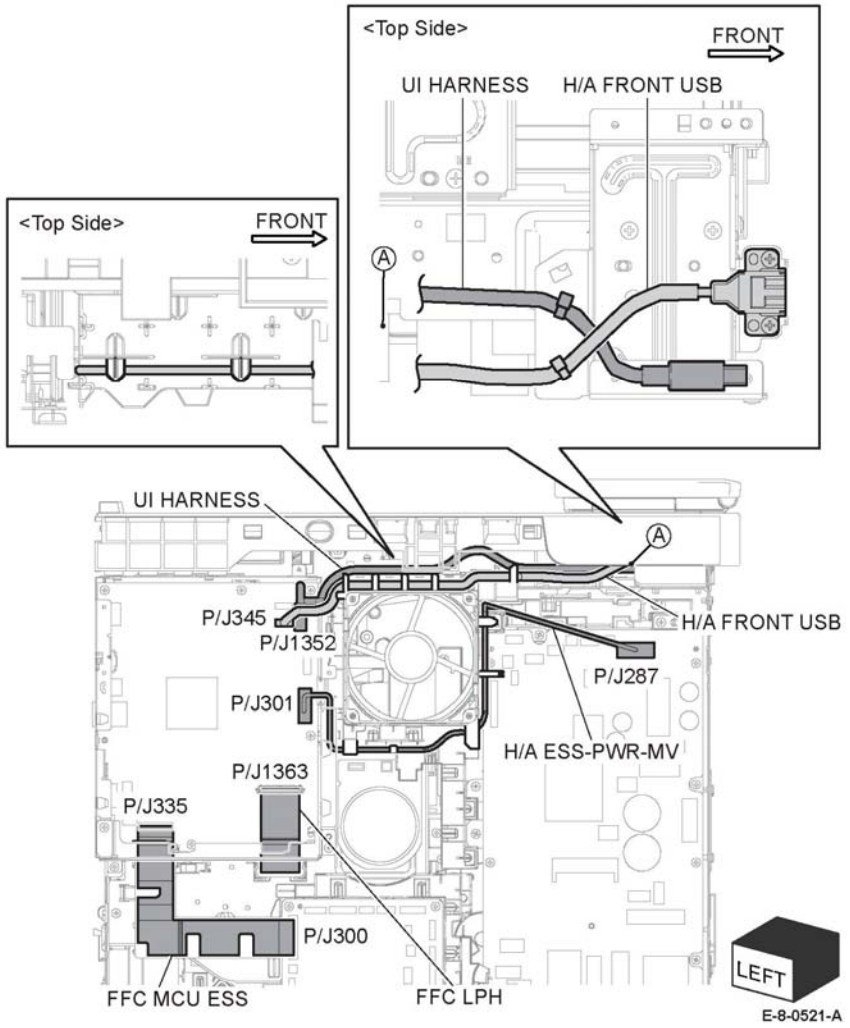


Figure 16 UI, FFC MCU ESS, front USB, ESS Power-MV, FFC LPH (SFP)

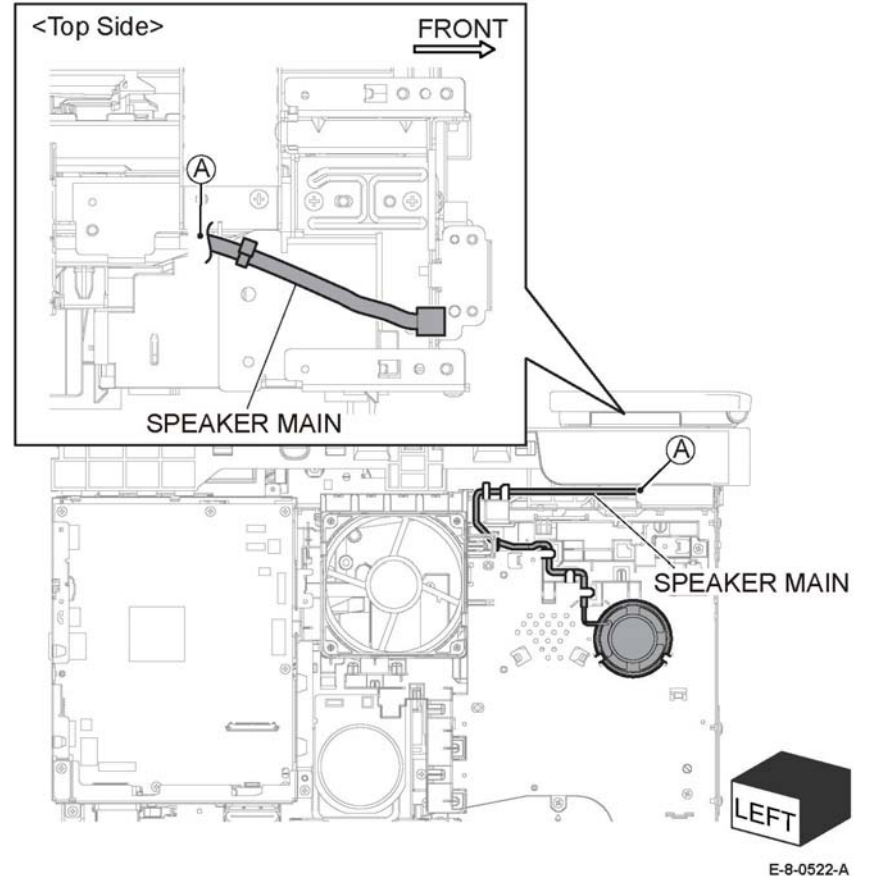


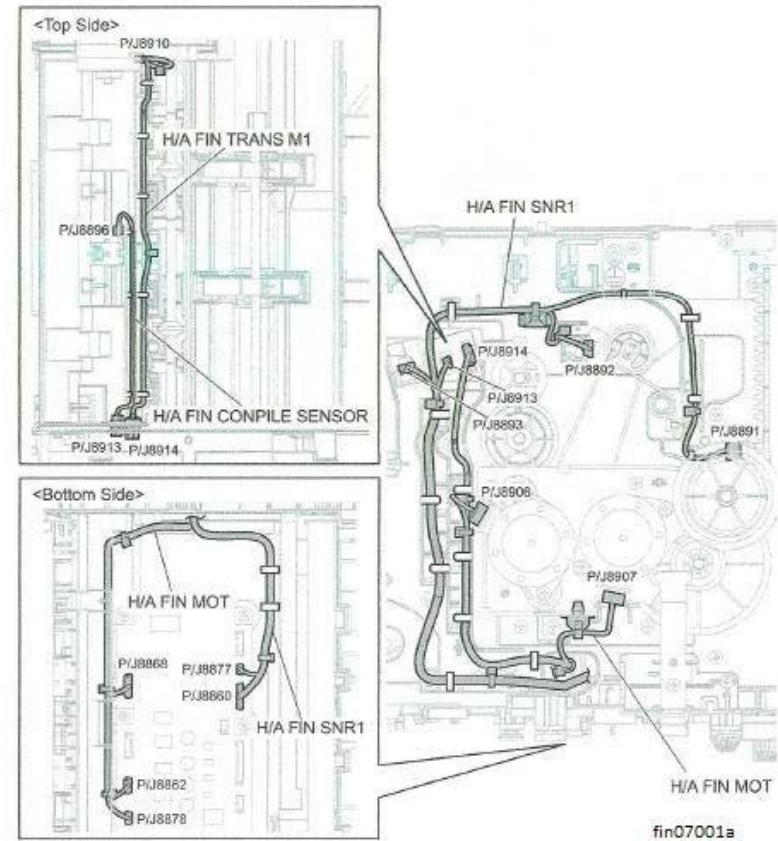
Figure 17 Main speaker (SFP)

## Finisher harness Routing

The following illustrations show factory harness routing paths through the finisher chassis. Refer to [Table 1](#) for a list of available routing diagrams.

**Table 1 Finisher Chassis Routing harness Diagrams**

Diagrams	Description
<a href="#">Figure 1</a>	Finisher motor, compile sensor, sensor 1
<a href="#">Figure 2</a>	Finisher I/L and stapler
<a href="#">Figure 3</a>	Finisher tamper motor
<a href="#">Figure 4</a>	Finisher AC and DC



**Figure 1 Finisher motor, compile sensor, sensor 1**

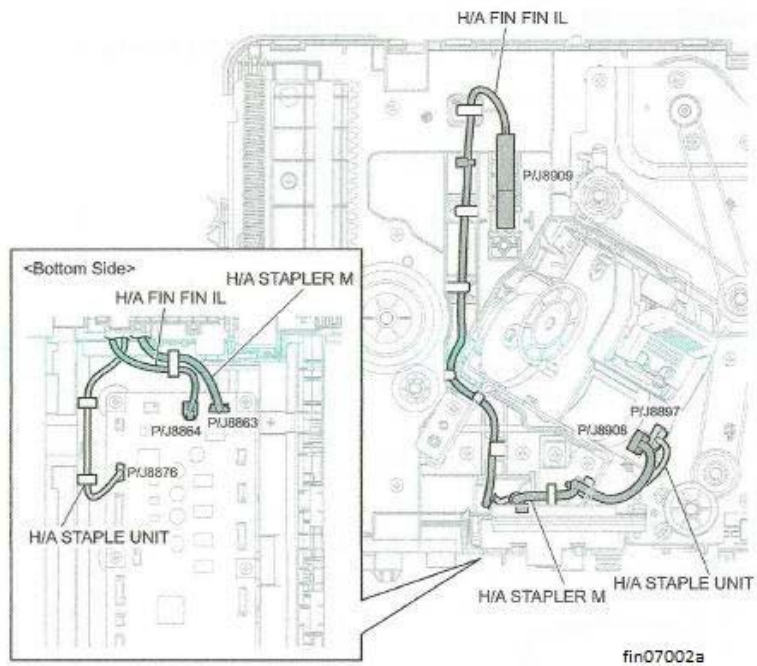


Figure 2 Finisher I/L and stapler

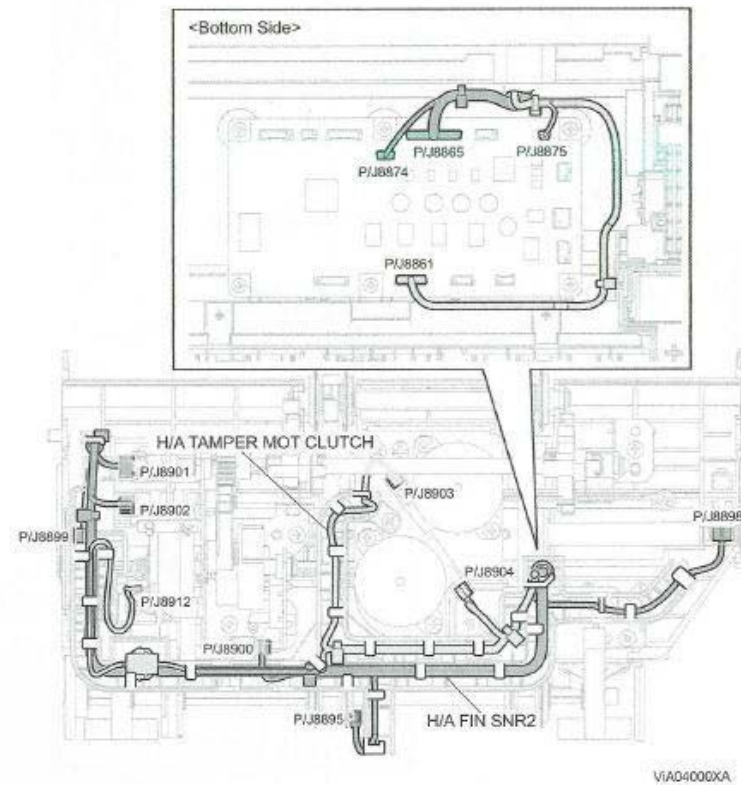


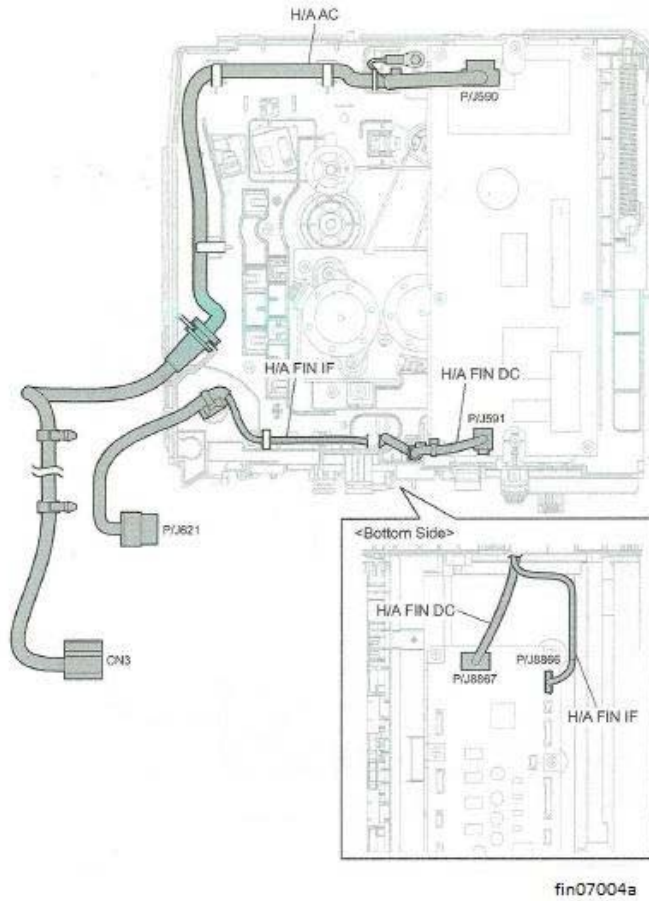
Figure 3 Finisher tamper motor

## HCF harness Routing

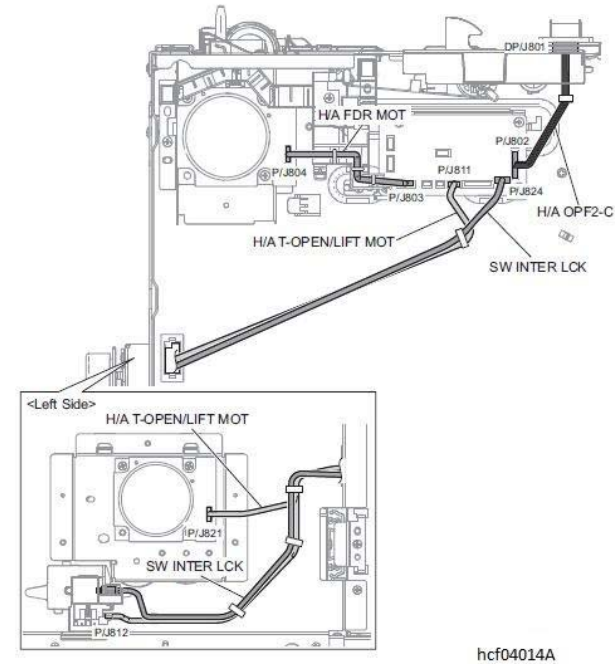
The following illustrations show factory harness routing paths through the HCF chassis. Refer to [Table 1](#) for a list of available routing diagrams.

**Table 1 HCF Chassis Routing harness Diagrams**

Diagrams	Description
Figure 1	T-open, lift motor, rear interlock switch, FDR motor, OPF2-C
Figure 2	Feed, lift motor I/L, lift up sensor
Figure 3	Turn
Figure 4	OPF LED



**Figure 4 Finisher AC and DC**



**Figure 1 T-open, lift motor, rear interlock switch, FDR motor, OPF2-C**

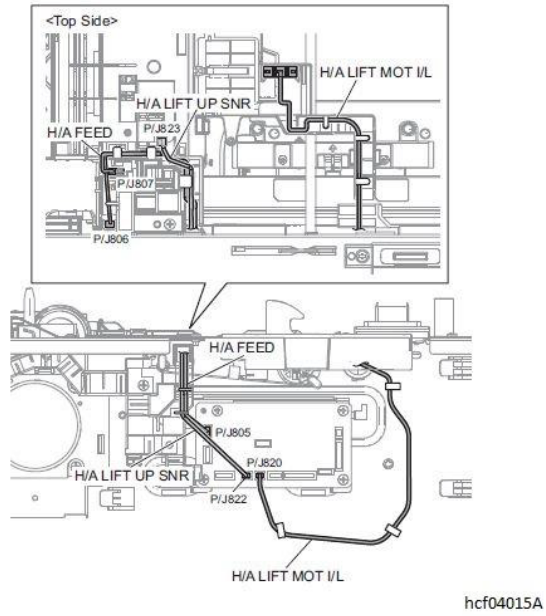


Figure 2 Feed, lift motor I/L, lift up sensor

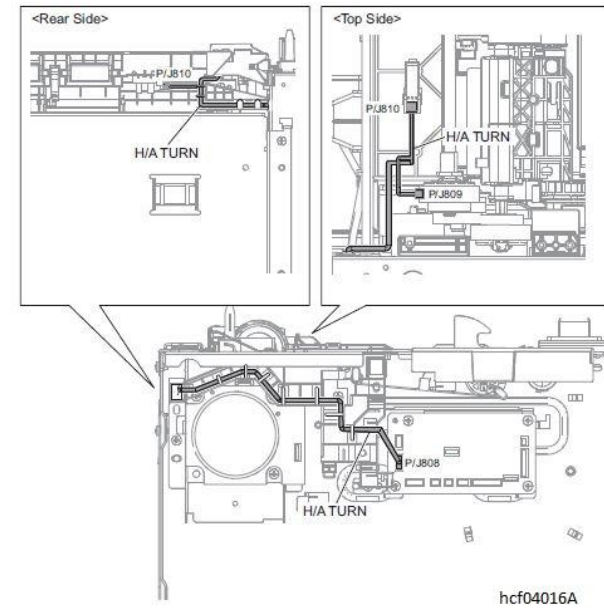


Figure 3 harness for turn

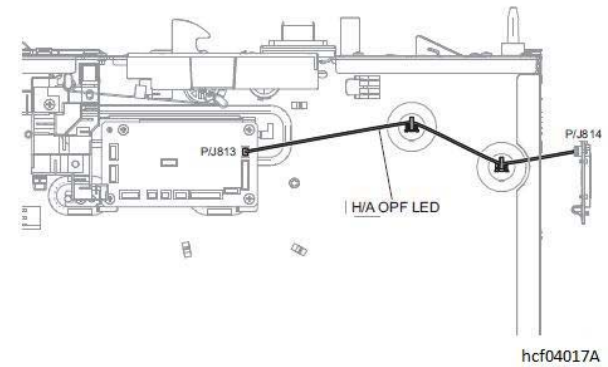


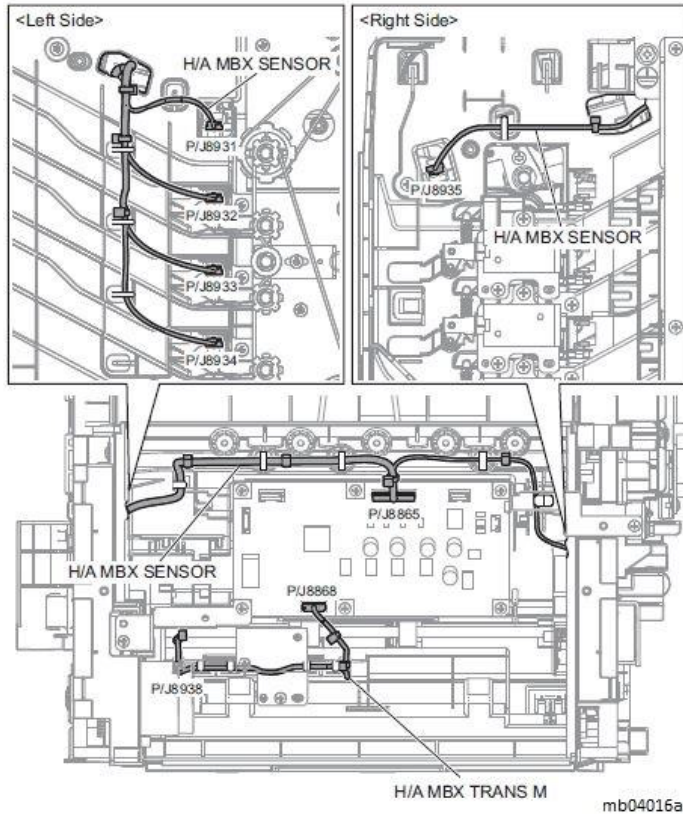
Figure 4 harness for OFF LED

# Mailbox harness Routing

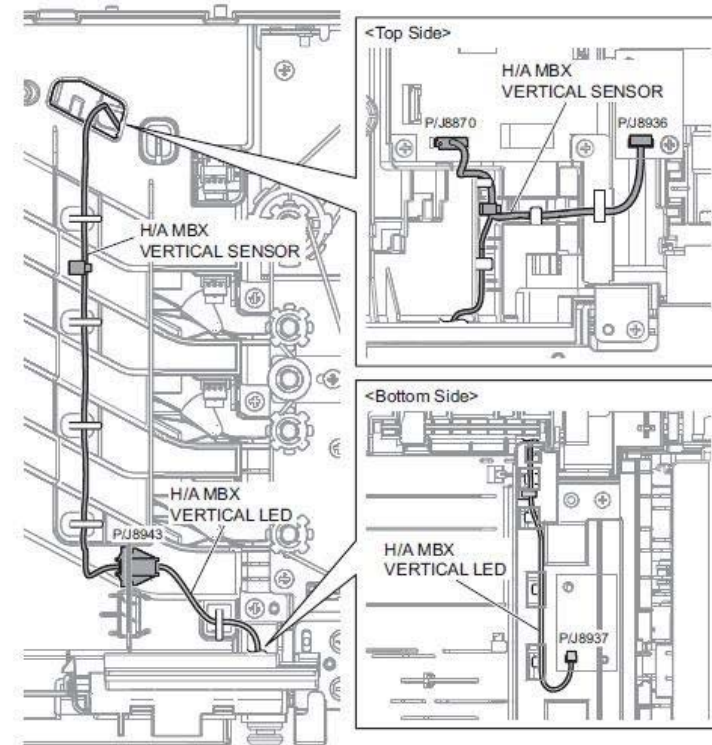
The following illustrations show factory harness routing paths through the mailbox chassis. Refer to [Table 1](#) for a list of available routing diagrams.

**Table 1 Mailbox Chassis Routing harness Diagrams**

Diagrams	Description
Figure 1	MBX sensor/harness assembly MBX trans M
Figure 2	Vertical sensor and LED
Figure 3	Trans S
Figure 4	MBX IF/ harness assembly MBX AC and DC



**Figure 1 MBX sensor/harness assembly MBX trans M**



**Figure 2 Vertical sensor and LED**

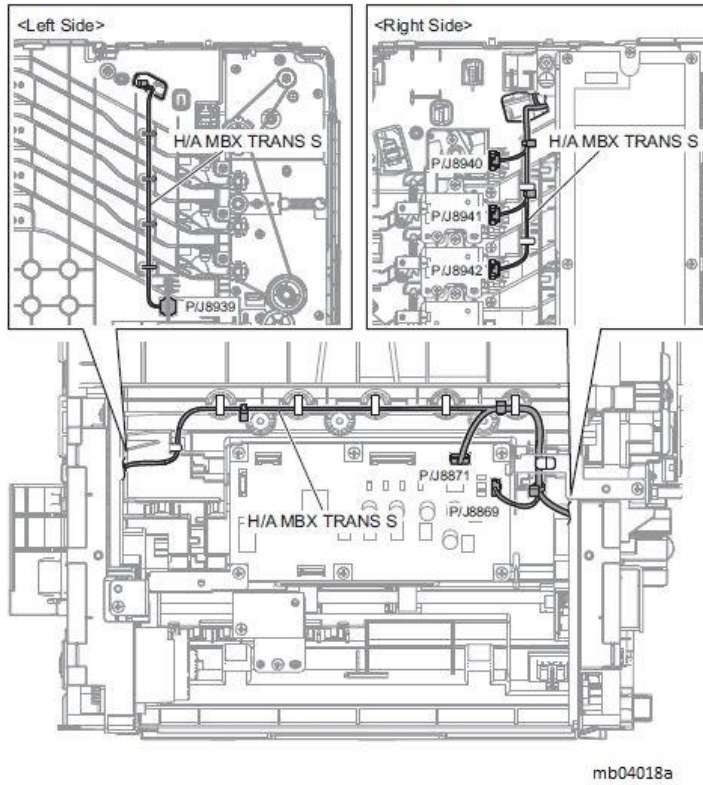


Figure 3 Trans S

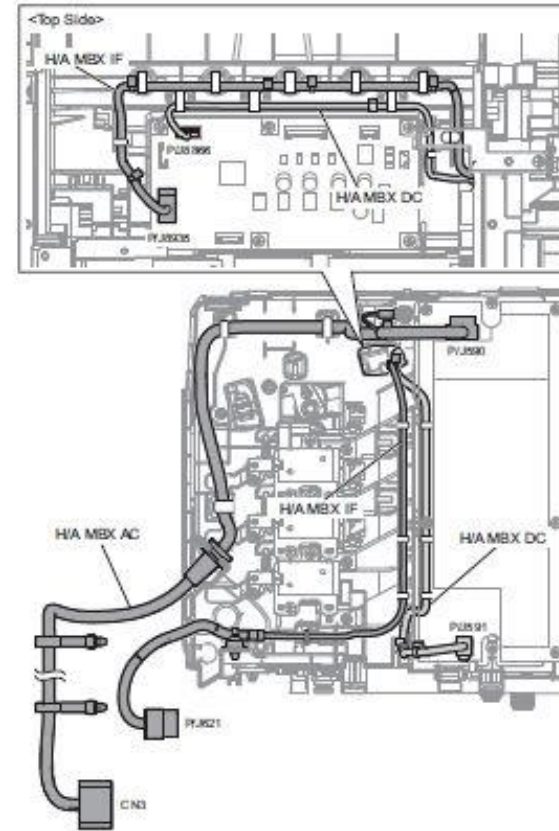


Figure 4 MBX IF/ harness assembly MBX AC and DC





## Block Schematic Diagrams

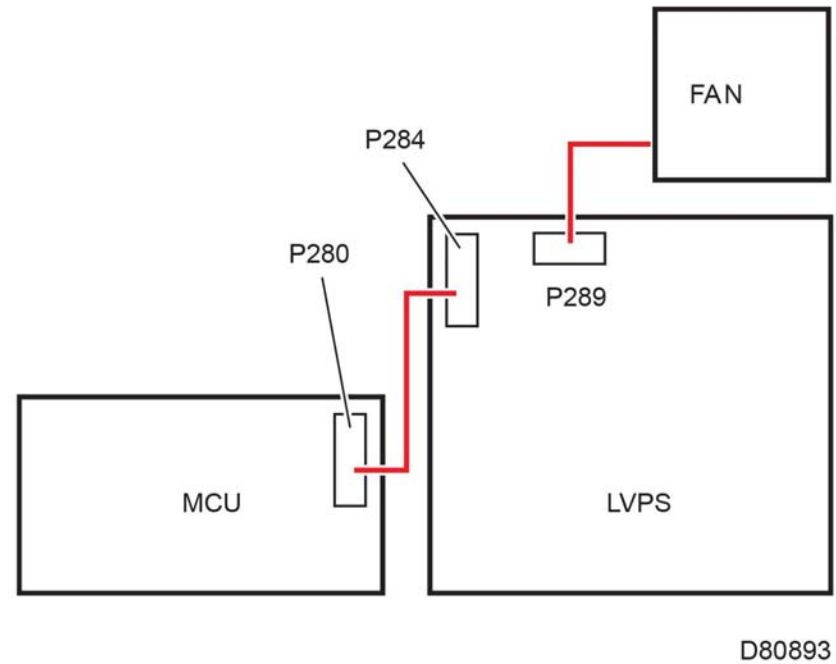
The following illustrations show factory harness routing paths through the MFP chassis. Refer to [Table 1](#) for a list of available routing diagrams.

**Table 1 MFP Chassis harness Routing Diagrams**

Diagram	Description
Figure 1	MCU, LVPS, fan
Figure 2	MCU, OP-FDA 550, OP-FDR-MCU
Figure 3	CTD sensor assembly
Figure 4	Motor, MCU, LVPS
Figure 5	Fusing, MCU, LVPS
Figure 6	ESS, MCU
Figure 7	REGI, NPP, tray1 MCU
Figure 8	MSI no paper sensor, MCU
Figure 9	Rear fan, MCU, LVPS
Figure 10	Sub fan, MCU, LVPS
Figure 11	IOT, MCU, HCF, OPF PWB
Figure 12	Optional feeder 550, upper OPF 550, upper HCF, OPF PWB
Figure 13	MCU, toner cover sensor
Figure 14	DEVE solenoid, MCU
Figure 15	MCU, HVPS
Figure 16	Exit sensor, MCU
Figure 17	TA CLT, MSI SOL, MCU
Figure 18	Feed clutch, REGI clutch, MCU
Figure 19	REGI Clutch, MCU
Figure 20	Exit clutch, REGI clutch
Figure 21	I/L side, MCU, LVPS
Figure 22	I/L rear, MCU, LVPS
Figure 23	Switching CLT(K CLT), switching SNR(K SNR), MCU
Figure 24	550 OPF PWB, OPT path PPR SNR
Figure 25	550 OPF PWB, optional feed clutch
Figure 26	550 OPF PWB, OPT take away clutch
Figure 27	550 OPF PWB, OPF forward motor
Figure 28	MCU, inverter clutch
Figure 29	MCU, K module sensor
Figure 30	MCU, switching clutch assembly
Figure 31	OPF 550 PWB, OPF feeder no paper sensor
Figure 32	Sub motor, MCU, LVPS
Figure 33	MCU, envelope mode sensor
Figure 34	MCU, fusing envelope motor
Figure 35	OPF PWB, HCF paper path sensor

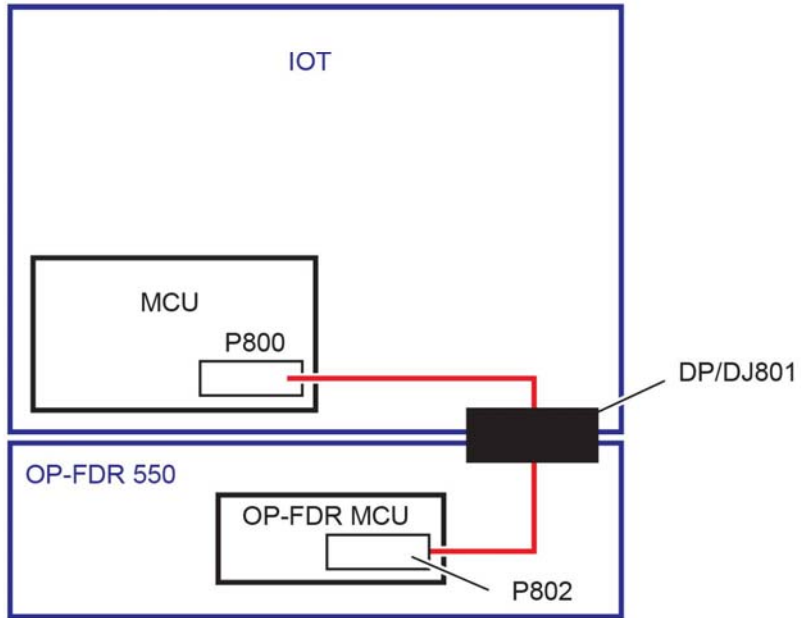
**Table 1 MFP Chassis harness Routing Diagrams**

Diagram	Description
Figure 36	OPF PWB, HVF feed clutch
Figure 37	OPF PWB, HCF take away clutch
Figure 38	OPF PWB, HCF feed motor
Figure 39	OPF PWB, lift up sensor
Figure 40	OPF PWB, lift motor
Figure 41	OPF PWB, HCF no paper sensor
Figure 42	PH motor, MCU, LVPS
Figure 43	Developer motor (Y/M/C)
Figure 44	MCU, full stuck sensor
Figure 45	MCU, Size switch assembly (tray 1)
Figure 46	OPF 550 PWB, OPF 550 size switch assembly
Figure 47	OPF PWB, tray open sensor
Figure 48	MCU, MSI no paper sensor



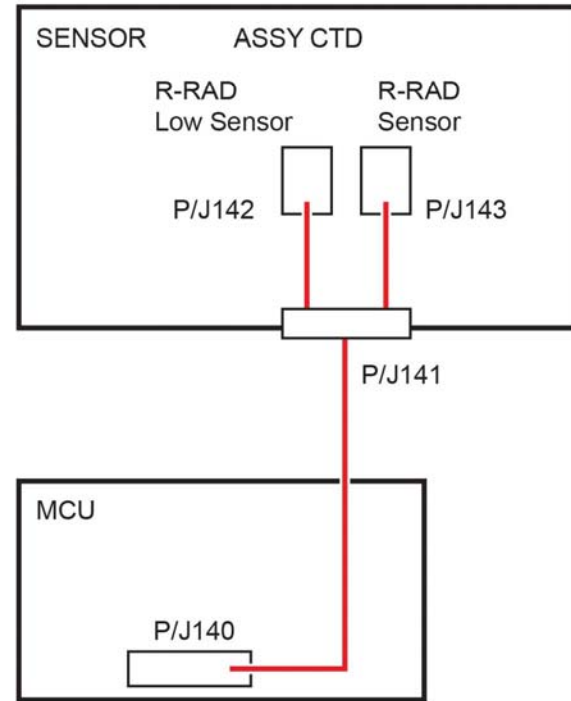
**Figure 1 MCU, LVPS, fan**

D80893



D80894

Figure 2 MCU, OP-FDR 550



D80895

Figure 3 R-RAD sensor

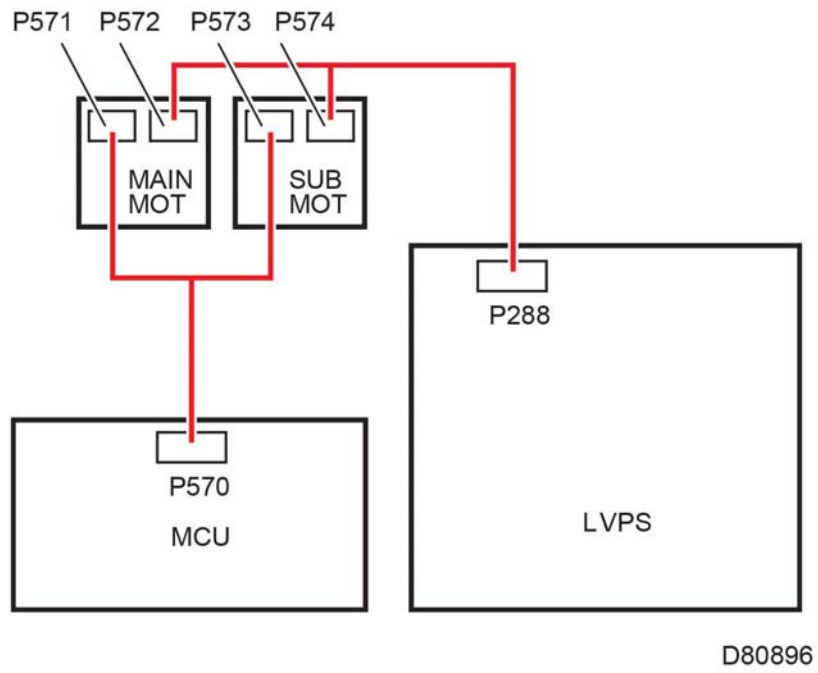


Figure 4 Main motor

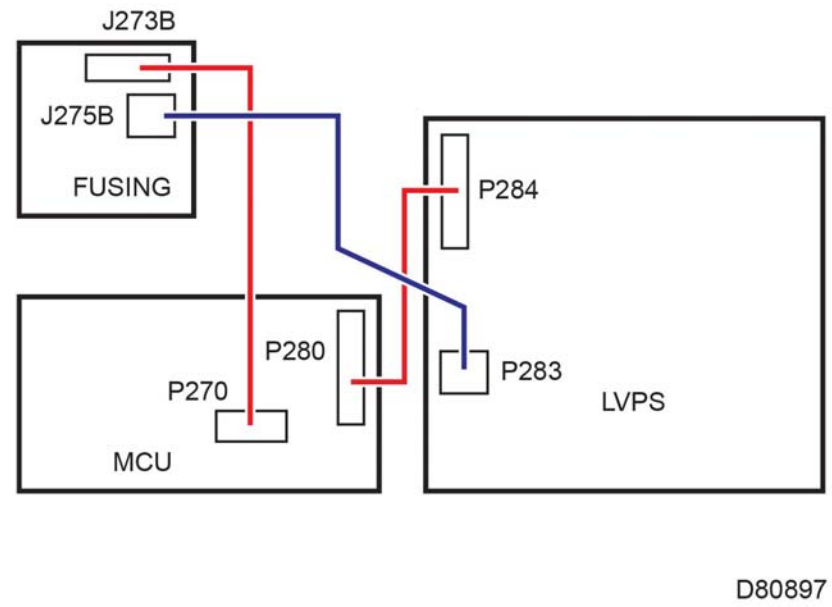


Figure 5 Fusing

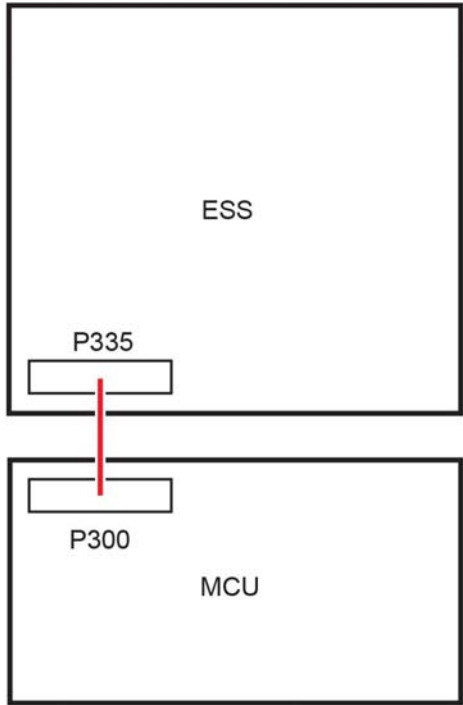


Figure 6 ESS

D80898

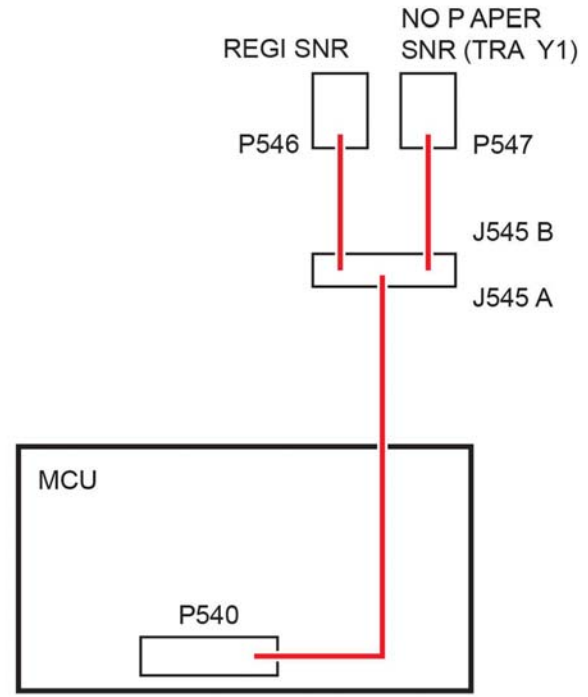


Figure 7 REGI

D80899

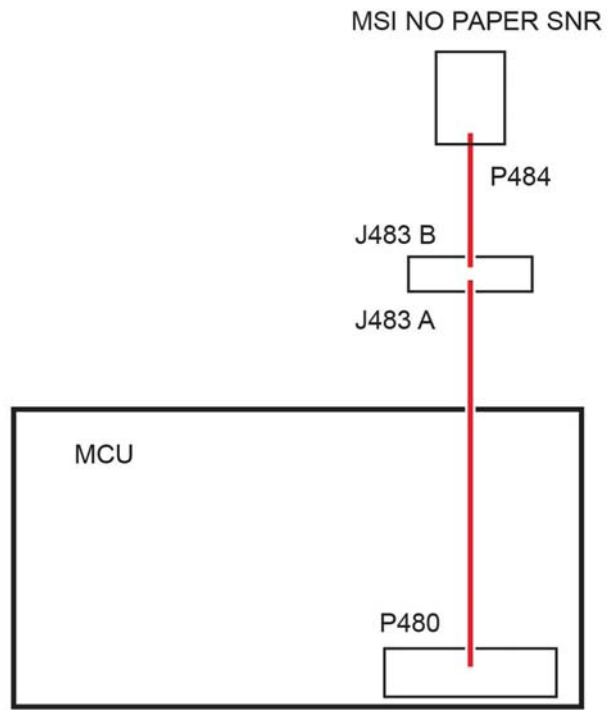


Figure 8 MSI no paper sensor

D80900

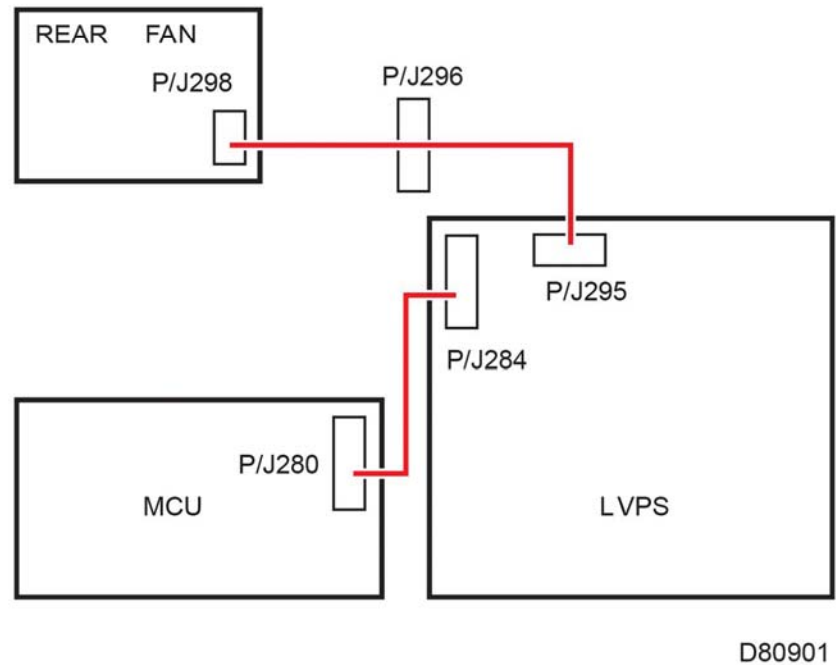


Figure 9 Supply Rear fan

D80901

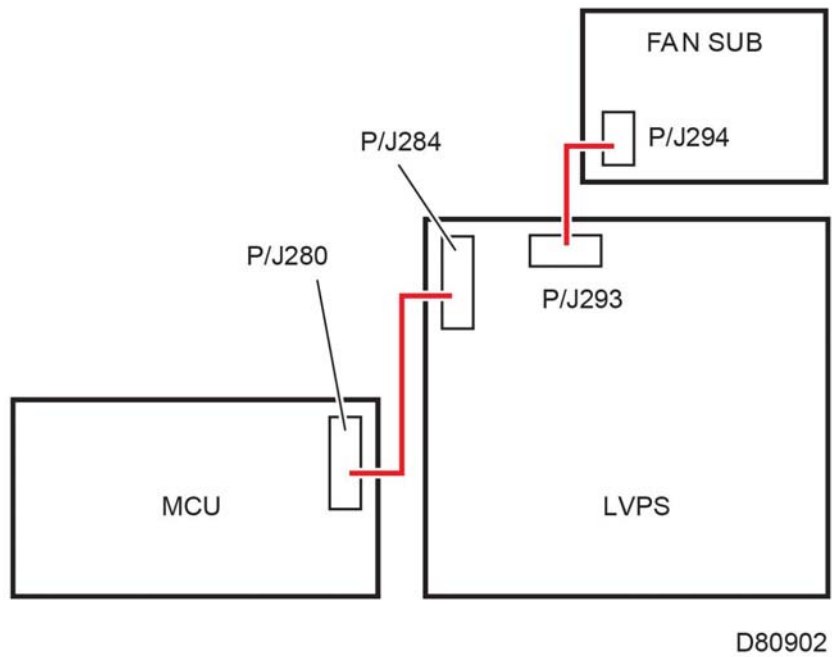


Figure 10 Sub fan

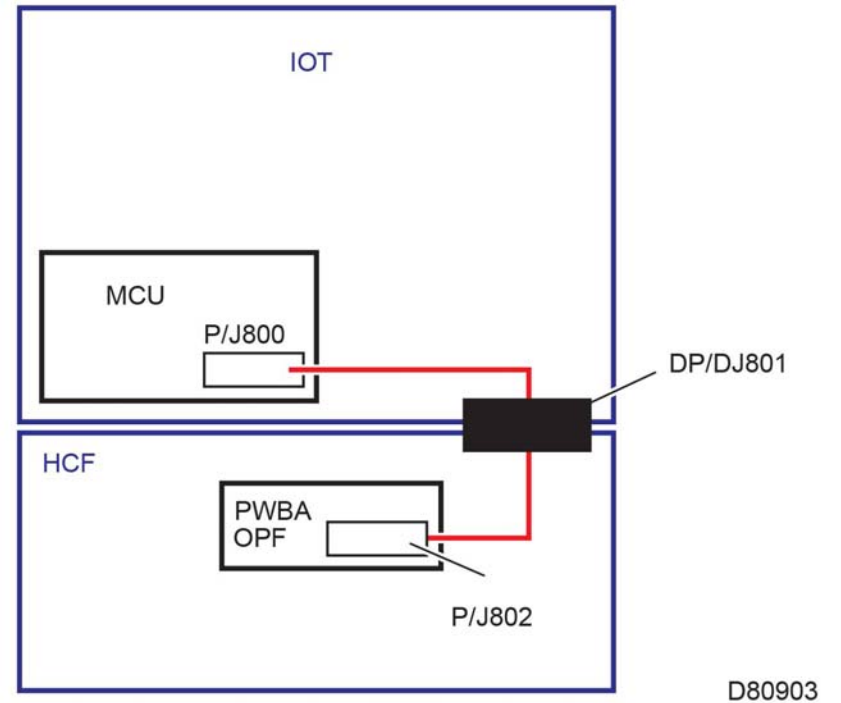
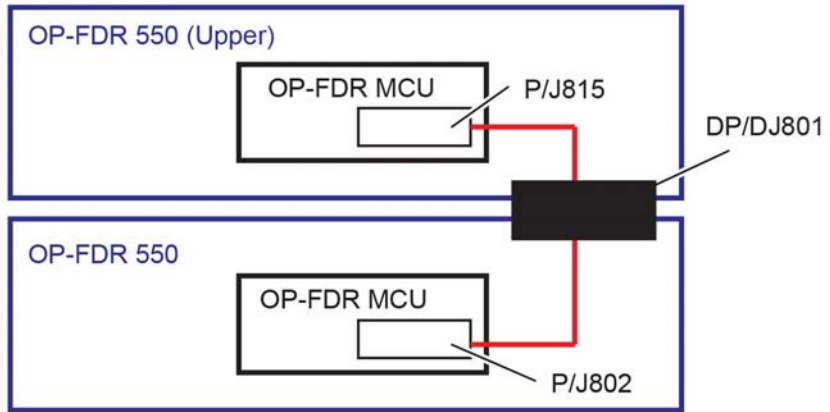
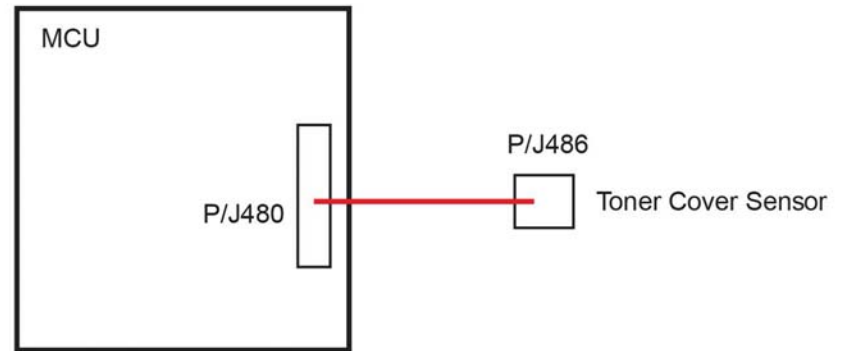


Figure 11 IOT and HCF



D80904

Figure 12 Optional feeder



D80906

Figure 13 Toner cover sensor

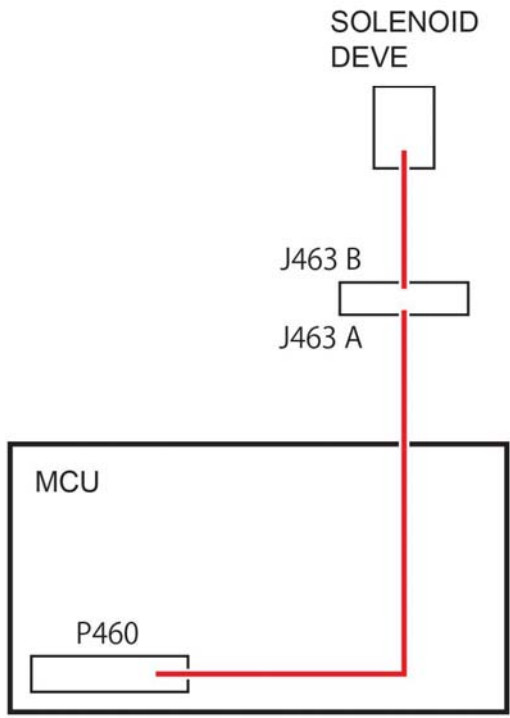


Figure 14 Solenoid drive

D80907

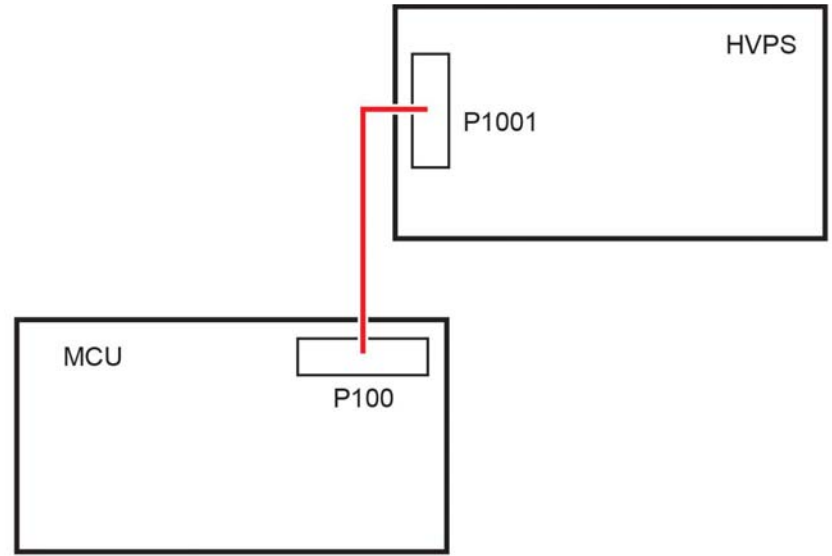


Figure 15 MCU and HVPS

D80908



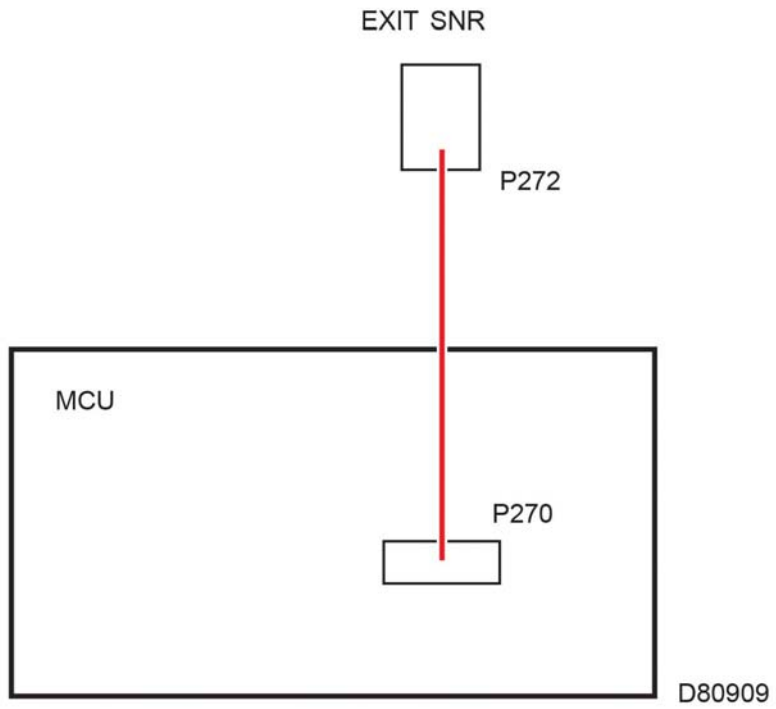


Figure 16 Exit sensor

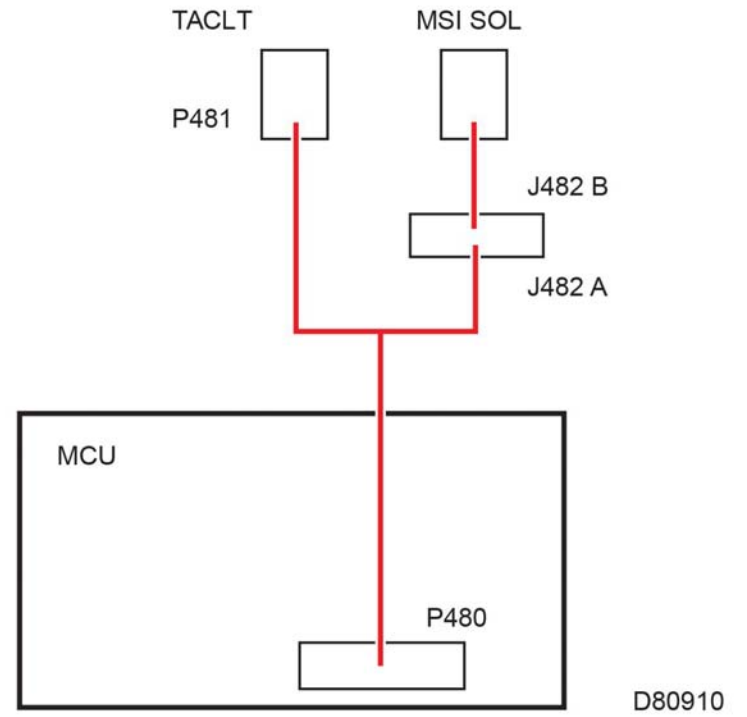
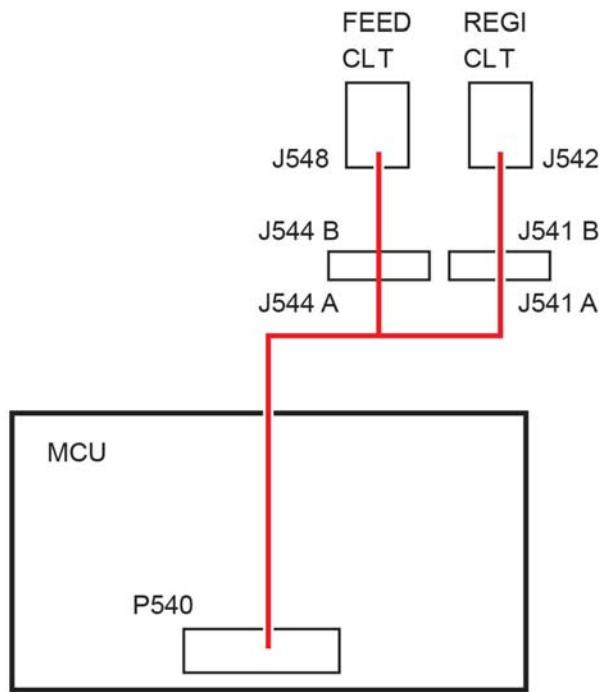
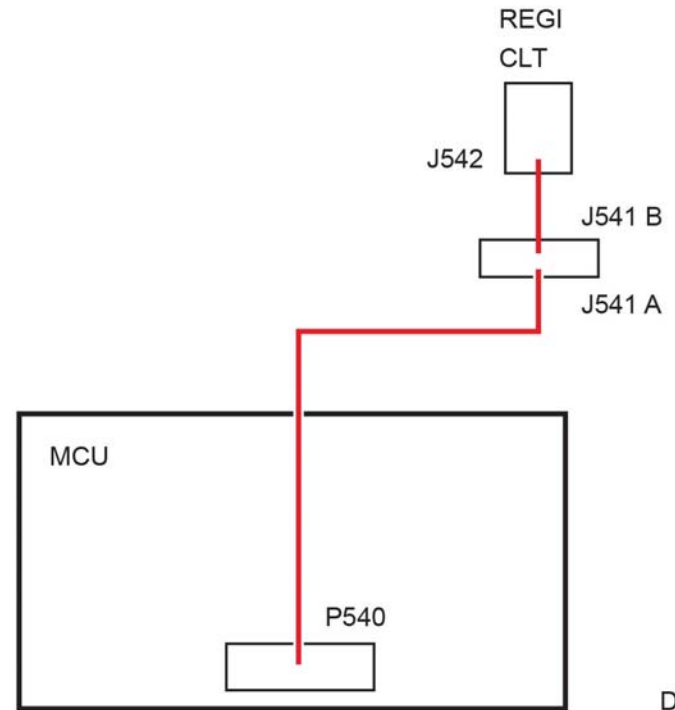


Figure 17 TCLT and MSI solenoid



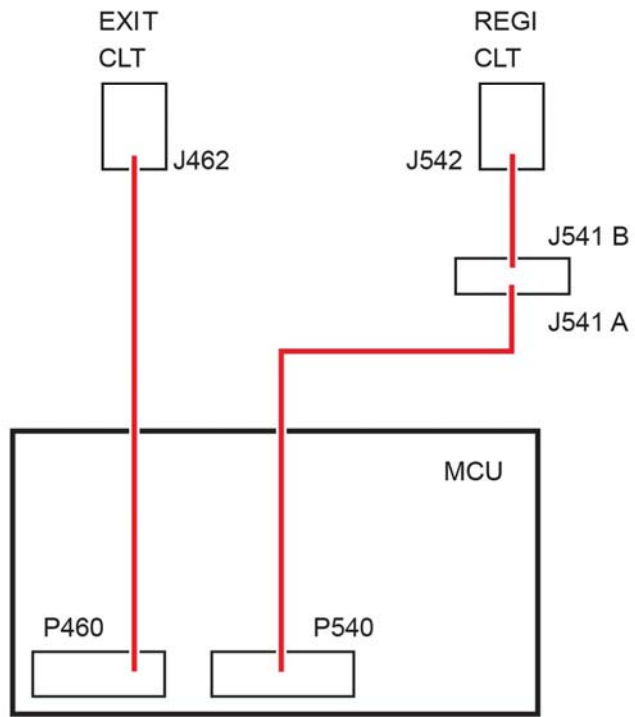
D80911

Figure 18 Feed and REGI clutch



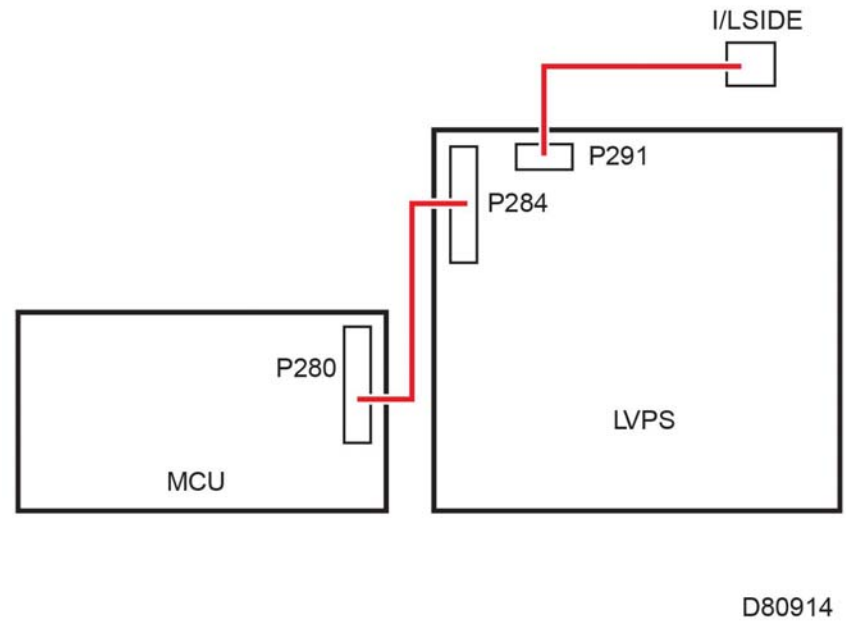
D80912

Figure 19 REGI clutch



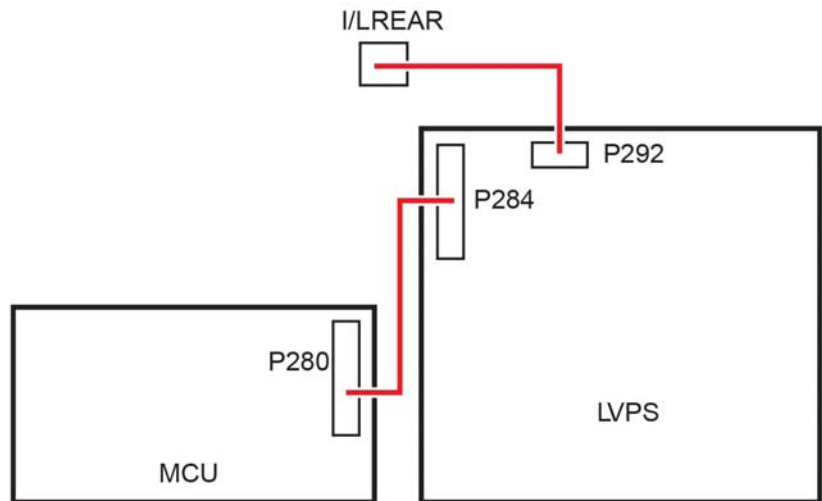
D80913

Figure 20 Exit clutch, REGI clutch



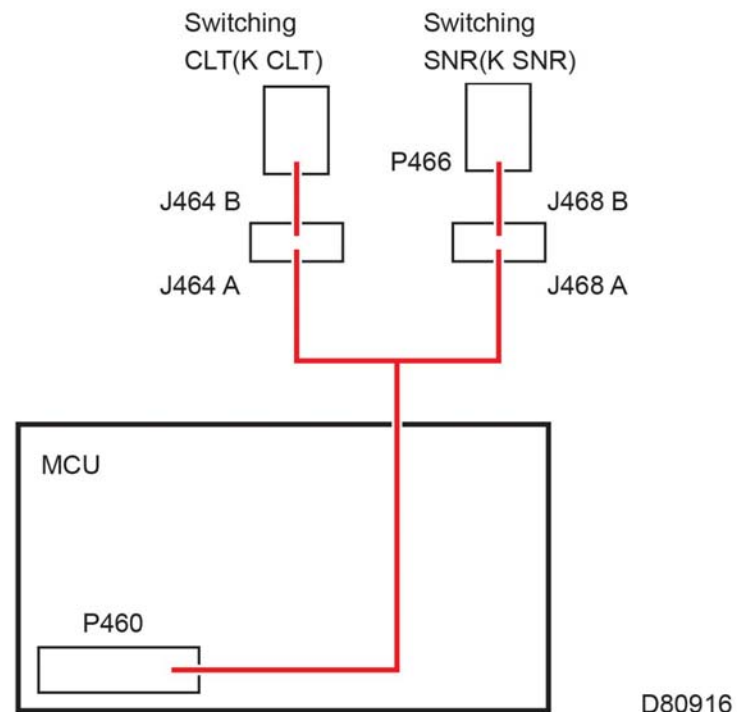
D80914

Figure 21 I/L side, MCU, LVPS



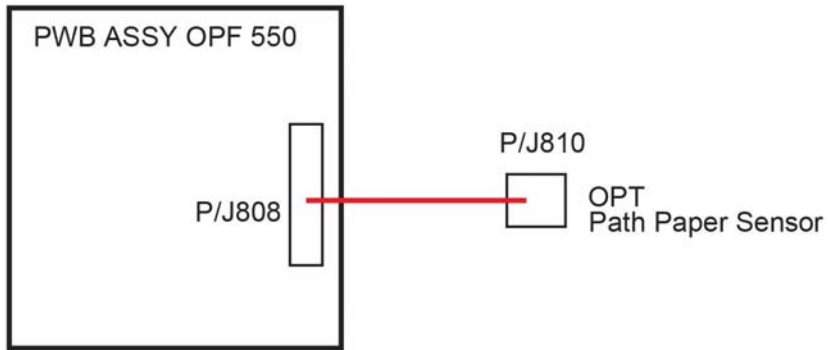
D80915

Figure 22 I/L rear, MCU, LVPS



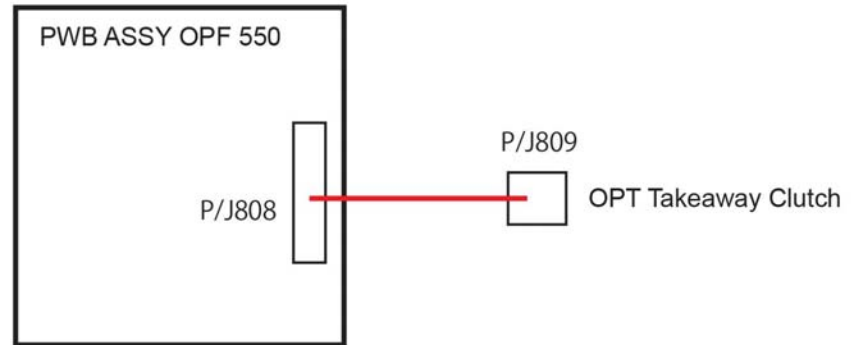
D80916

Figure 23 Switching CLT(K CLT), switching SNR(KSNR), MCU



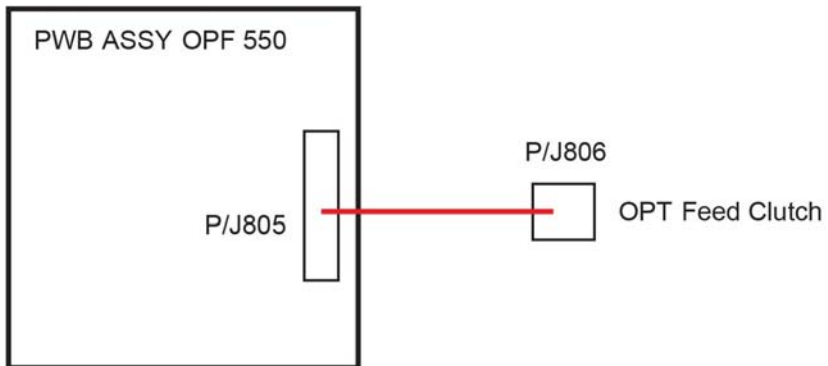
D80917

Figure 24 550 OPF PWB, OPT paper path SNR



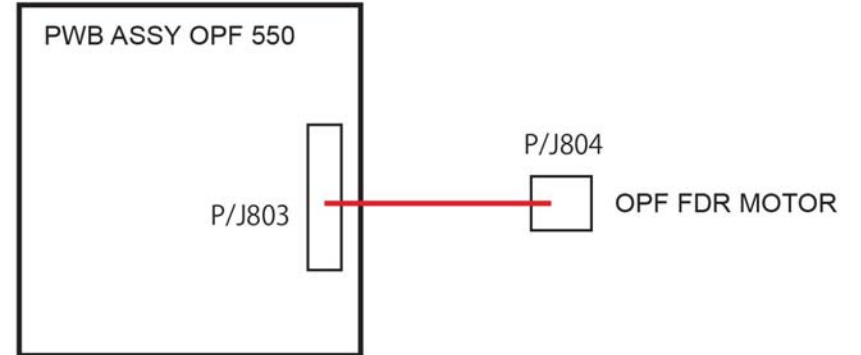
D80919

Figure 26 550 OPF PWB, OPF take away clutch



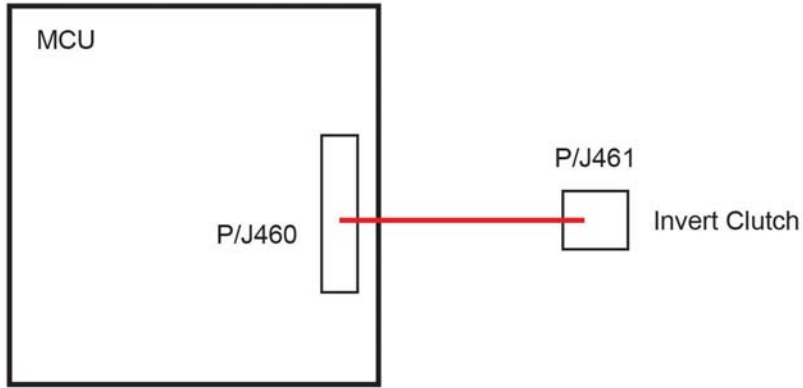
D80918

Figure 25 550 OPF PWB, optional feed clutch



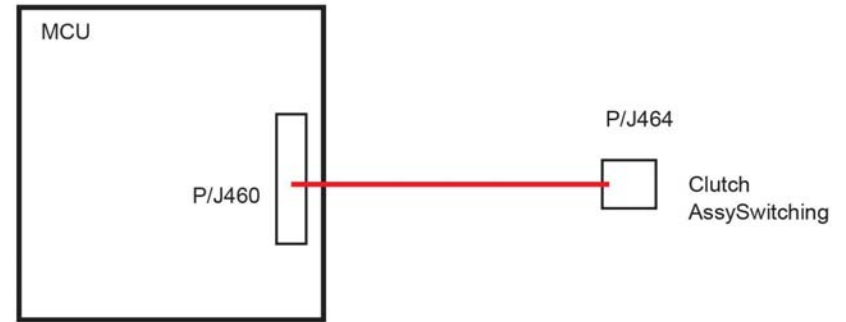
D80920

Figure 27 550 OPF PWB, OPF forward motor



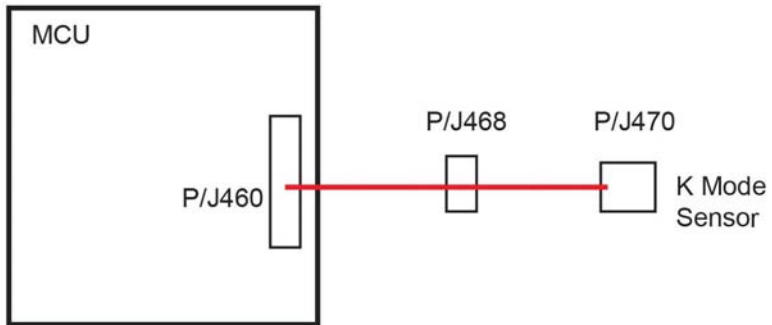
D80921

Figure 28 MCU, inverter clutch



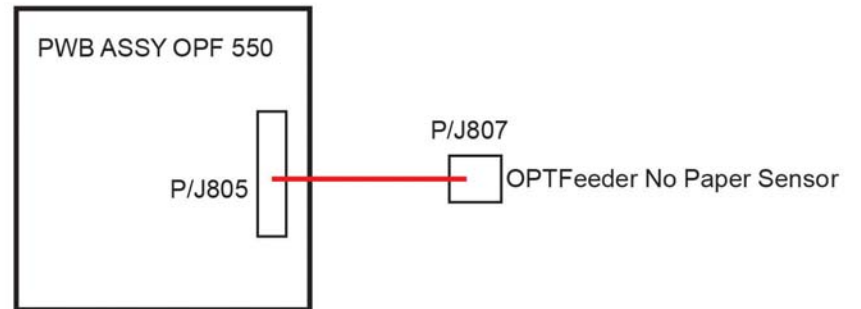
D80923

Figure 30 MCU, switching clutch assembly



D80922

Figure 29 MCU, K module sensor



D80924

Figure 31 OPF 550 PWB, OPF feeder no paper sensor

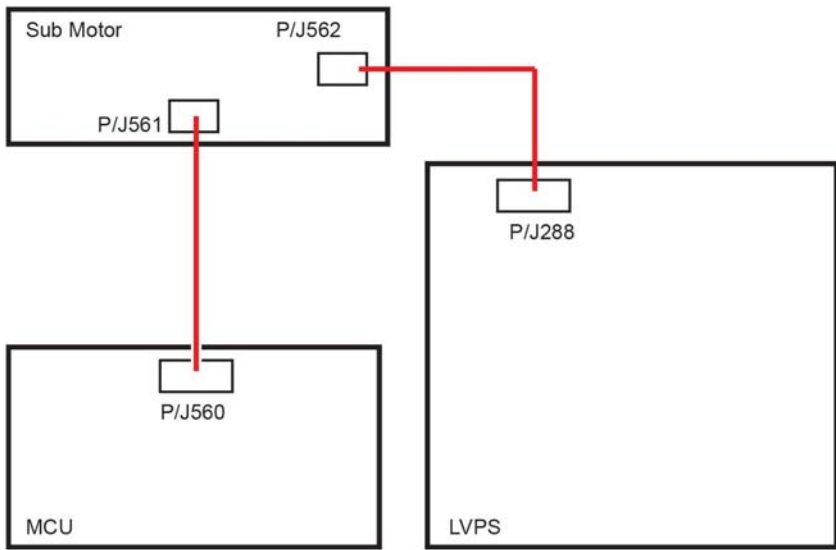


Figure 32 Sub motor, MCU, LVPS

D80925

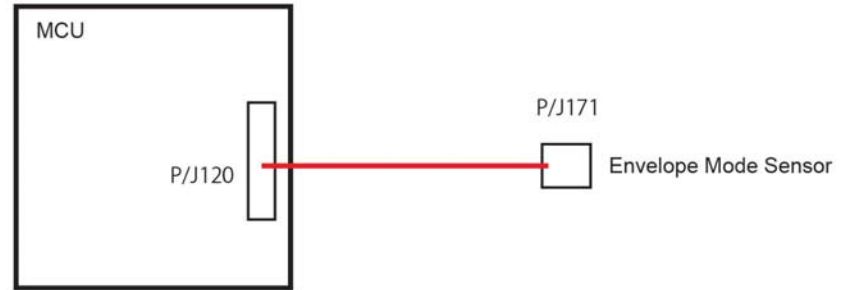


Figure 33 MCU, envelope mode sensor

D80926

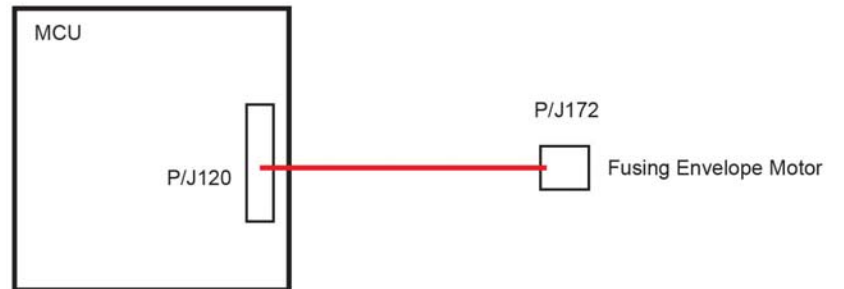


Figure 34 MCU, fusing envelope motor

D80927

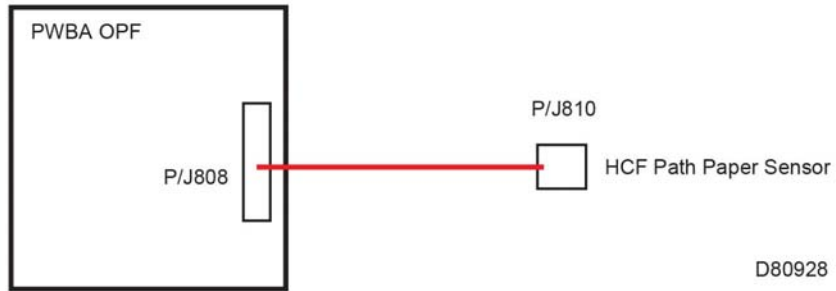


Figure 35 OPF PWB, HCF paper path sensor

D80928

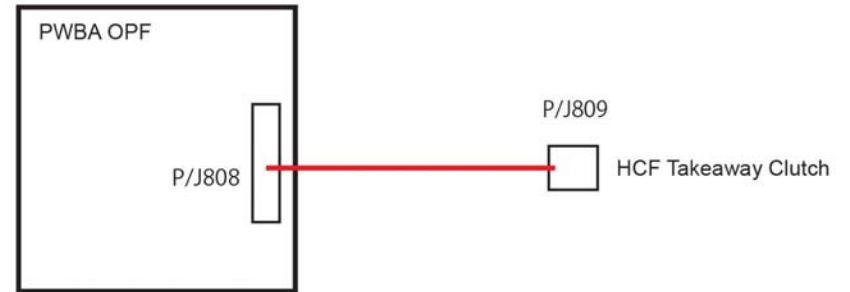


Figure 37 OPF PWB, HCF take away clutch

D80930

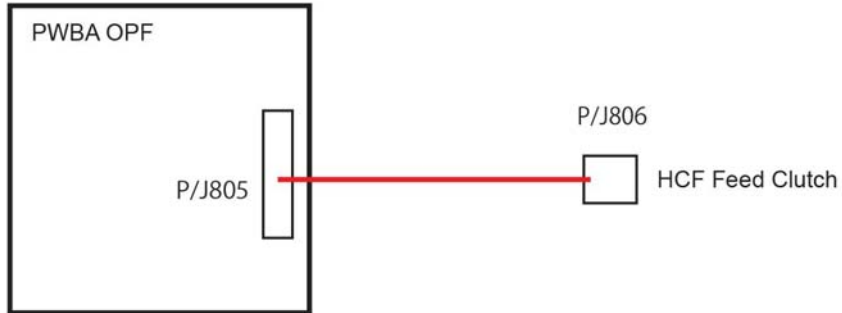


Figure 36 OPF PWB, HCF feed clutch

D80929

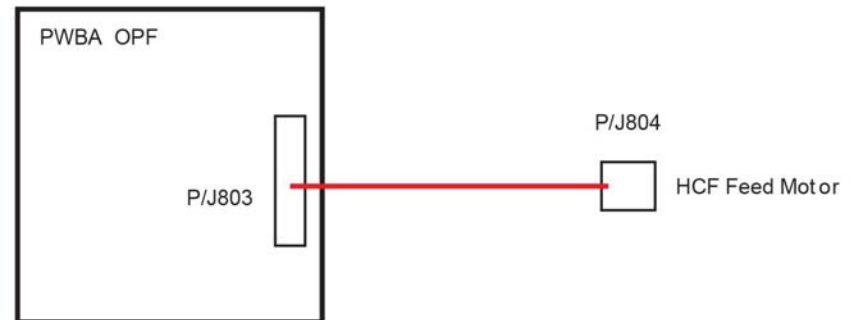
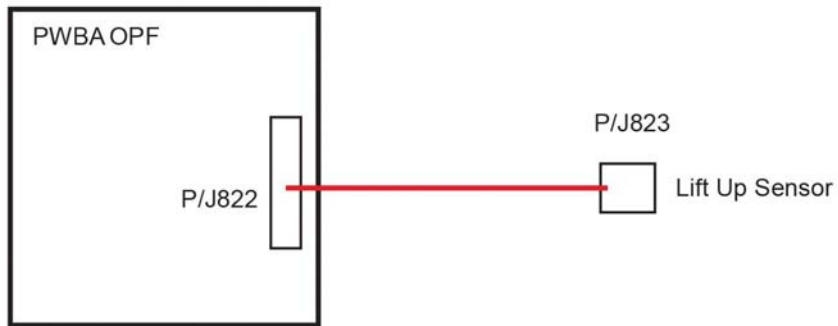


Figure 38 OPF PWB, HCF feed motor

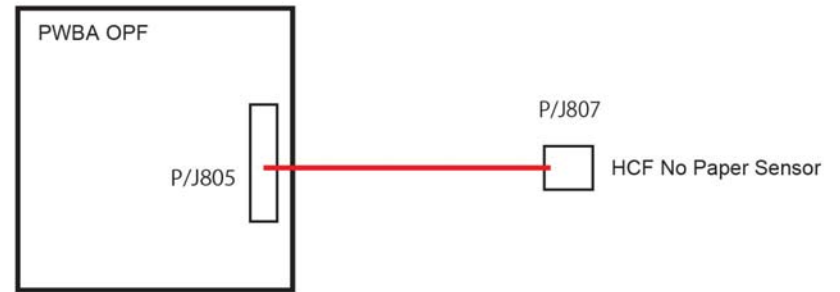
D80931





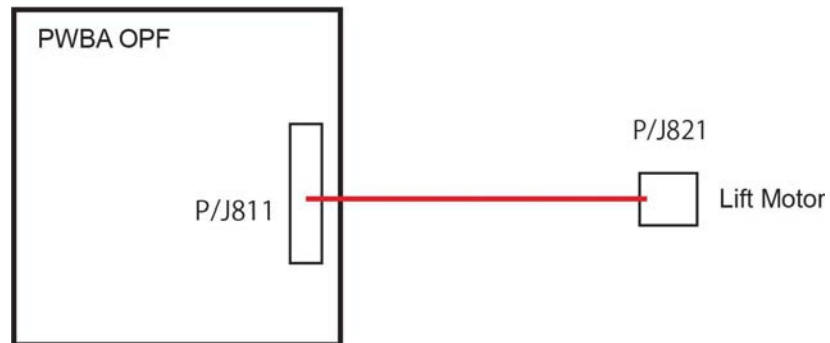
D80932

Figure 39 OPF PWB, lift up sensor



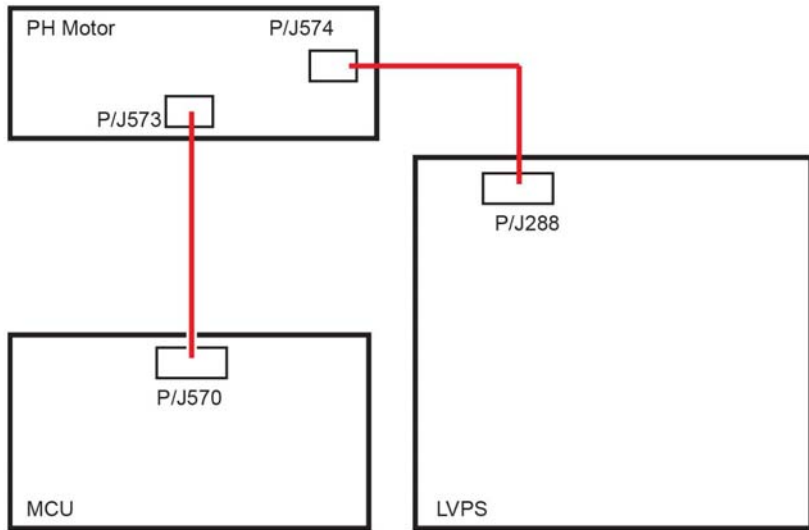
D80934

Figure 41 OPF PWB, HCF no paper sensor



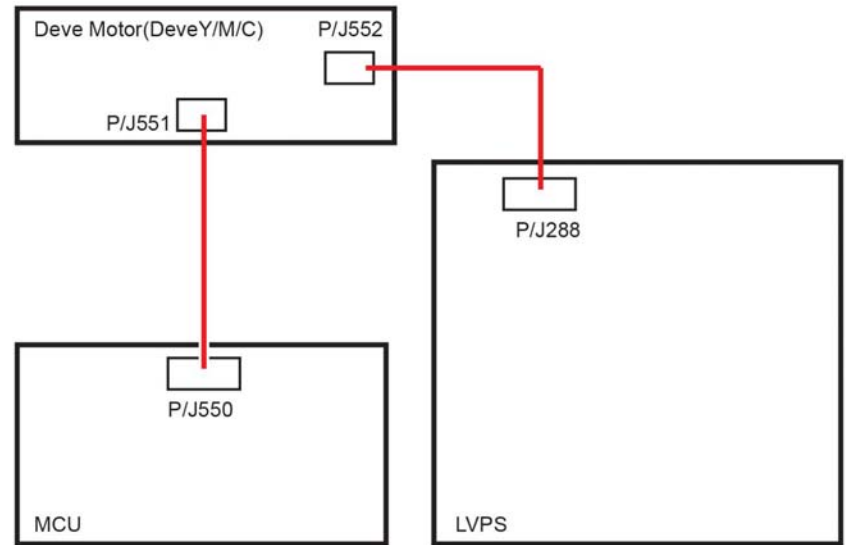
D80933

Figure 40 OPF PWB, lift motor



D80935

Figure 42 PH motor, MCU, LVPS



D80936

Figure 43 Developer motor (Y/M/C)

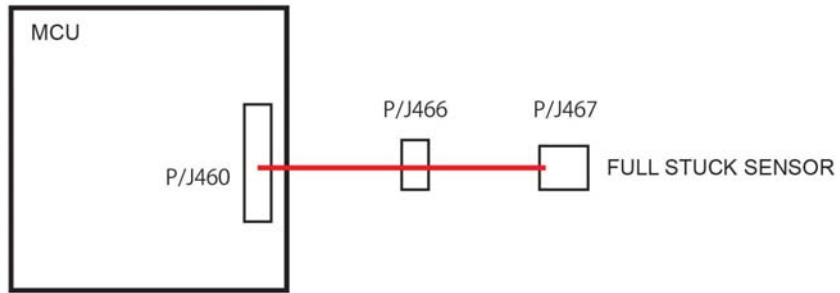


Figure 44 MCU, full stuck sensor

D80937

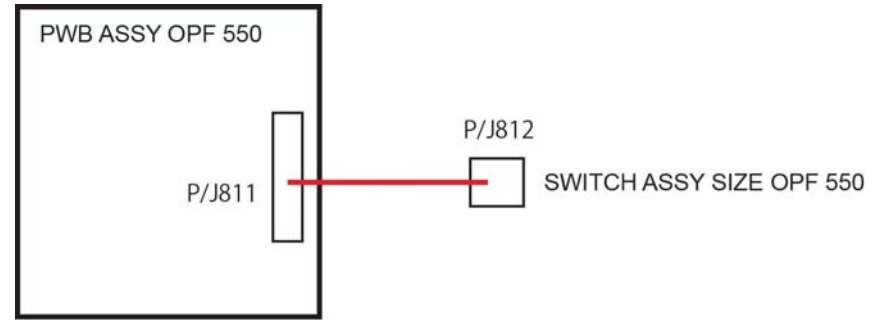


Figure 46 OPF 550 PWB, OPF 550 size switch assembly

D-8-0939-A

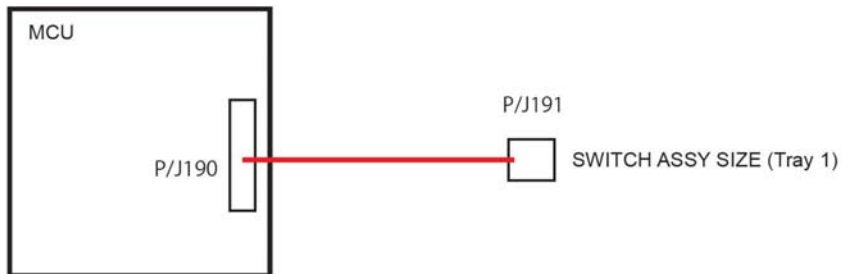


Figure 45 MCU, size switch assembly (tray 1)

D80938

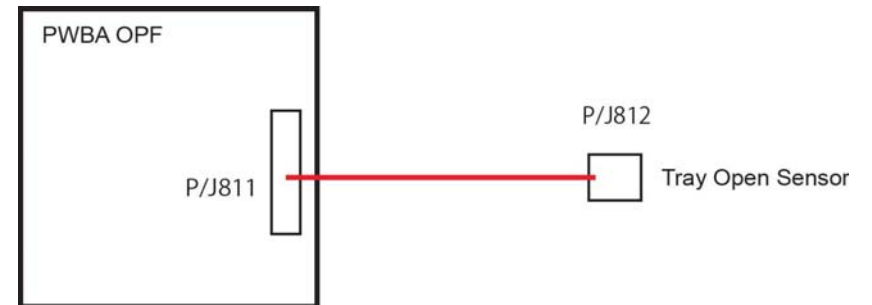
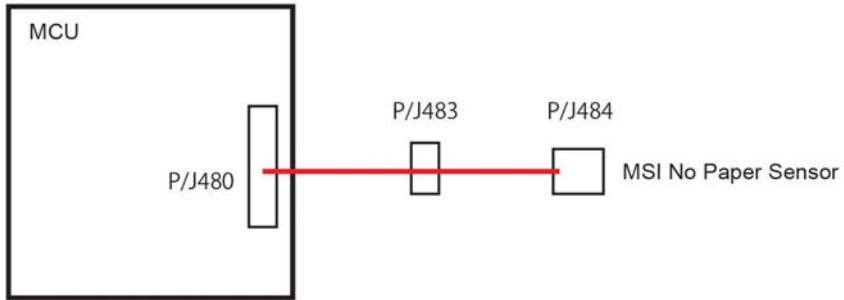


Figure 47 OPF PWB, tray open sensor

D-8-0940-A



D80941

Figure 48 MCU, MSI no paper sensor

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## 8 Principles of Operation

VersaLink Product Overview .....	8-3
Printing Process .....	8-9
Scanning Process .....	8-14
Paper Path .....	8-15
Major Components' Functions .....	8-20
Control.....	8-33
Data Flow .....	8-35
Control.....	8-36
Drive Transmission Route.....	8-38
Options for VersaLink® B600/610 and B605/615 .....	8-41



## VersaLink Product Overview

The VersaLink® B600 and B610 are mono LED printers. The output tray holds 250 80 gsm (20 lb.) sheets. VersaLink® B600 and B610 options add media capacity and wireless connectivity. A configuration with one additional 550-Sheet feeder is supported.

The VersaLink B605, B615 and B615\_Tall versions have a LED print engine with a duplex automatic document feeder (DADF). The output tray holds 250, 80gsm (20lb.) sheets. Options include up to 4 additional feeders, fax capability, and a high capacity feeder, finisher and/or mailbox. Refer to Sec 6, GP 7 for details.

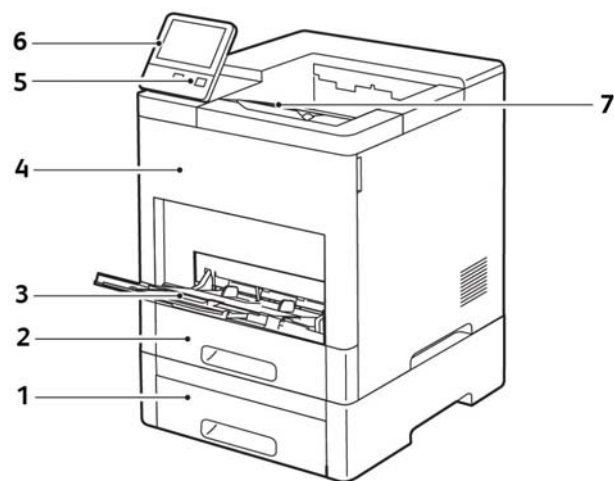
The following pages detail principles of operation and major component functions:

- Parts of the VersaLink B600 and B610 SFP
- Parts of the VersaLink B605/B615 and B615\_Tall Version MFP

### Parts of the VersaLink B600 and B610 SFP

#### VersaLink® B600 and B610 front and right side views

Figure 1 VersaLink® B600 and B610 front and right side views shows the printer's front and right side views with parts identified in Table 1.



E-8-0924-A

Figure 1 VersaLink® B600 and B610 SFP front and right side views

Table 1 Front and right side parts identification

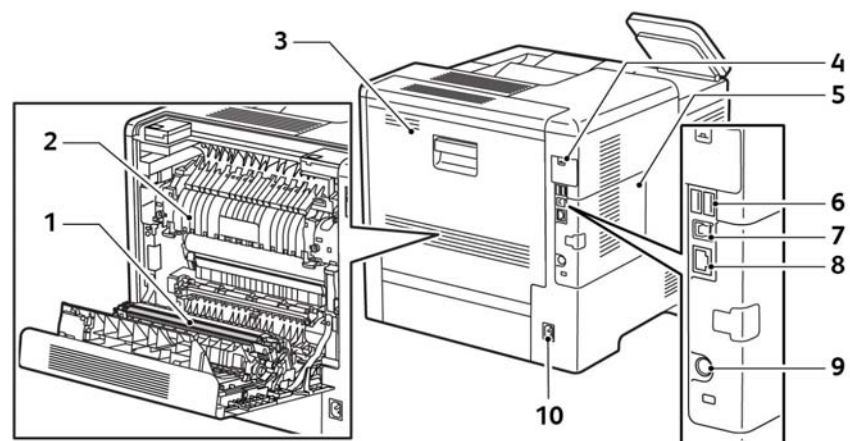
1.	Tray 2, Optional 550-sheet feeder	5.	Power/Wake Button
2.	Tray 1	6.	Control Panel
3.	Bypass tray	7.	Output Tray Extension
4.	Front door		

Table 1 Front and right side parts identification

5.	Power/Wake button		
----	-------------------	--	--

### VersaLink® B600 and B610 rear and left side Views

Figure 2 VersaLink® B600 and B610 rear and left side views shows the printer's rear and left side views with parts identified in Table 2 rear and left side parts identification.



E-8-0925-A

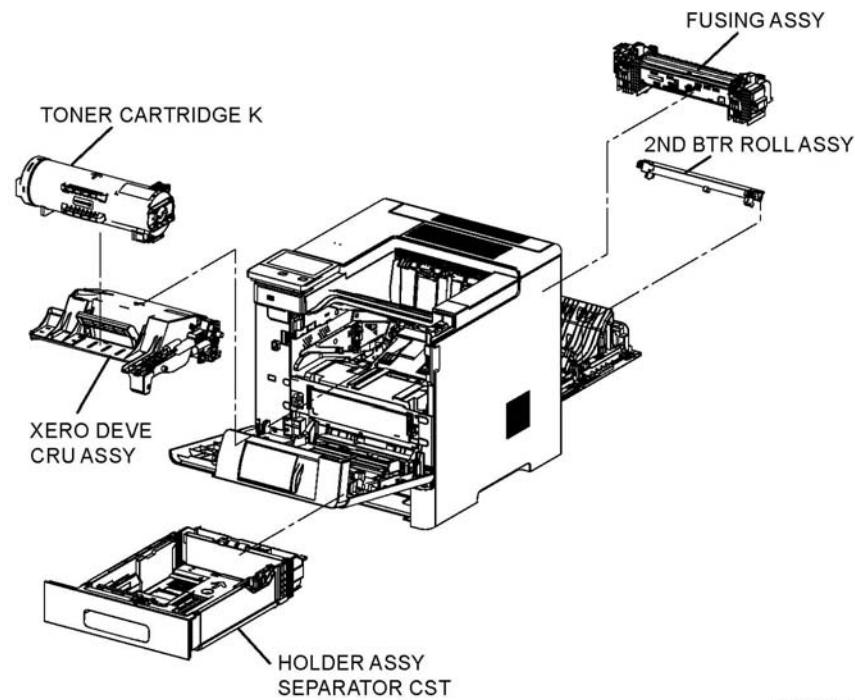
Figure 2 VersaLink® B600 and B610 SFP rear and left side views

Table 2 Rear and left side parts identification

1.	Transfer roller	6.	USB port type A
2.	Fuser	7.	USB Port type A
3.	Rear door	8.	Ethernet connection
4.	Wireless network adapter port cover	9.	FDI port
5.	Left side cover, (access to optional productivity kit)	10.	Power connector

## VersaLink® B600 and B610 Internal Parts

Figure 3 VersaLink® B600 and B610 internal parts shows the printer's front and right side view with internal parts.



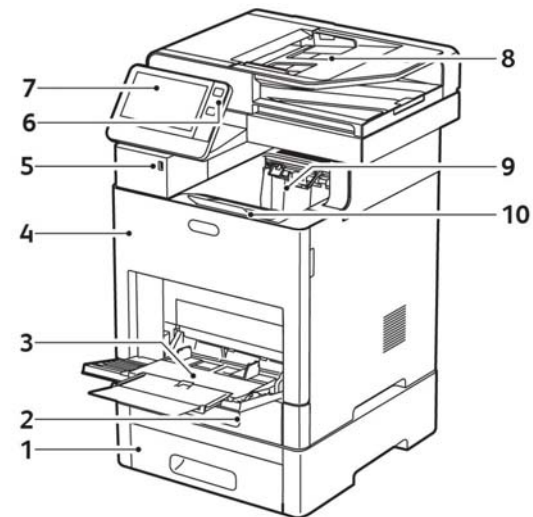
E-8-0594-A

Figure 3 VersaLink® B600 and B610 internal parts

## Parts of the VersaLink B605/B615 and B615\_Tall Version MFP

VersaLink® B605/B615 front and right-side Views

Figure 4 shows the VersaLink® B605 and B615 front and right side view with parts identified in Table 3.



E-8-0926-A

Figure 4 VersaLink® B605 and B615 MFP front and right side view

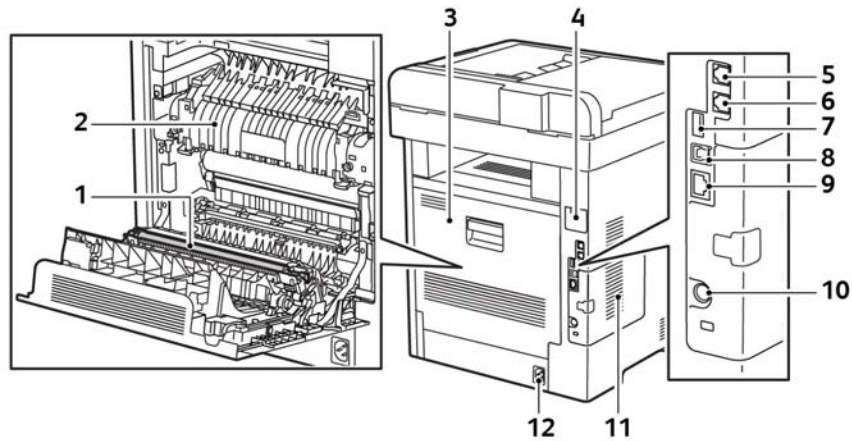
Table 3 Front and right side parts identification

1.	Tray 2, Optional 550-sheet feeder	6.	Power/wake button
2.	Tray 1	7.	Touch screen
3.	Bypass tray	8.	Duplex automatic document feed
4.	Front door	9.	Output tray
5.	USB memory port	10.	Output tray extension



**VersaLink® B605 and B615 rear and left side Views**

Figure 5 VersaLink® B605 and B615 rear and left side views shows the printer's rear and left side views with parts identified in Table 4 rear and left side parts identification.



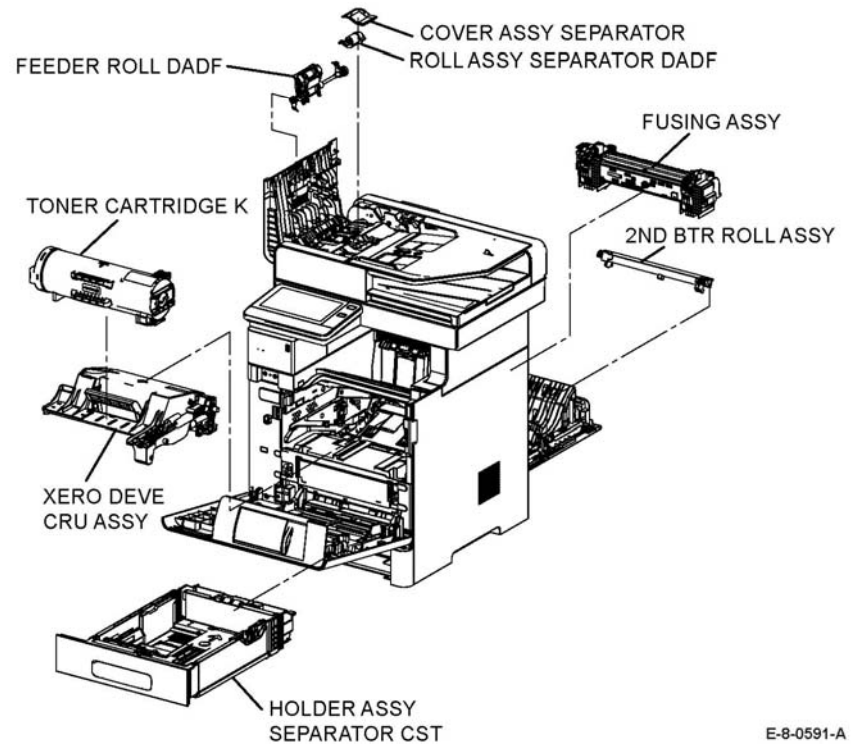
E-8-0927-A

**Figure 5 VersaLink® B605 and B615 MFP rear and left side view**

**Table 4 Rear and left side parts Identification**

1. Transfer roller	7. USB port, type A
2. Fuser	8. USB port, type B
3. Rear door	9. Ethernet connection
4. Wireless network adapter port cover	10. FDI port
5. Phone connector	11. Left-side panel (access to optional Productivity Kit)
6. FAX line connector	12. Power connector

Figure 6 shows the printer's front and right side view with internal parts.

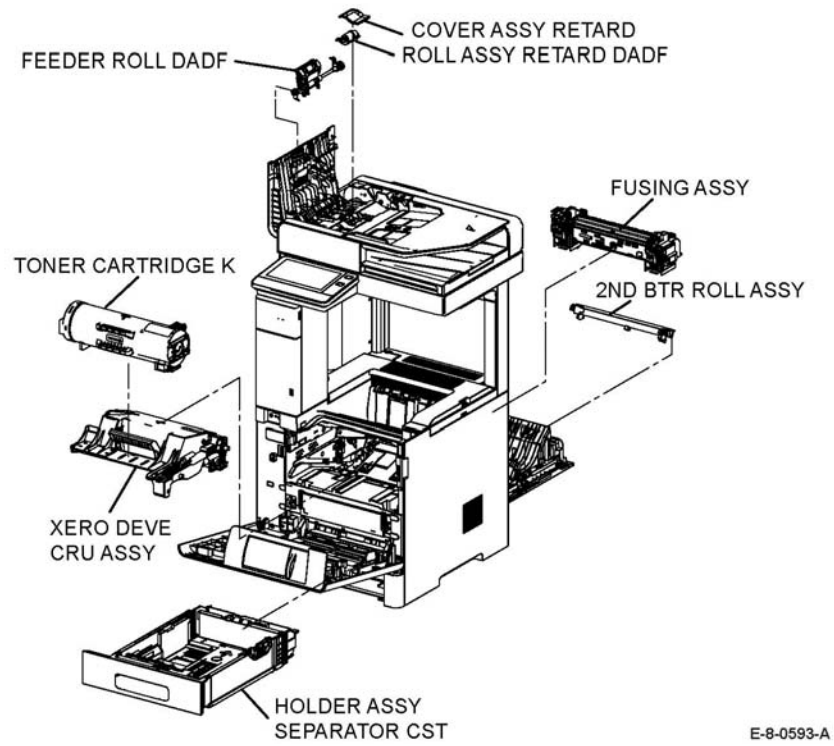


E-8-0591-A

**Figure 6 VersaLink® B605/B615 version internal parts**

**VersaLink® B615\_Tall Version Internal Parts**

Figure 7 shows the printer's front and right side view with internal parts.



E-8-0593-A

**Figure 7 VersaLink® B615\_Tall version internal parts**

## Control Panel Layout

The VersaLink® B605/B615 and B615\_Tall Version Control panel shown in **Figure 8**, consists of a touchscreen, a keypad, and several buttons. These buttons are used to navigate the menu system, perform functions, and select operational modes. **Table 5** lists the function of each control.



E-8-0929-A

**Figure 8 VersaLink® B605/B615 and B615\_Tall version control panel**

**Table 5 Control panel parts identification**

1.	Touch screen display	4.	Home button
2.	Administrator logon	5.	NFC area
3.	Power/Wake	6.	Status LED

## Control Panel Layout

The VersaLink® B600 and B610 control panel shown in **Figure 9**, consists of a touch screen, a keypad, and several buttons. These buttons are used to navigate the menu system, perform functions, and select operational modes. **Table 6** lists the function of each control.



E-8-0930-A

**Figure 9 VersaLink® B600 and B610 control panel**

**Table 6 Control panel parts identification**

1.	NFC area	4.	Home button
2.	Touch Screen display	5.	Power/Wake
3.	Administrator login	6.	Status LED

## Configurations

The configurations for this printer are described in this section.

### Basic Configuration

The printer has the basic configurations depending on the destination. See Figure 10.

- Print engine main unit (MSI and 250 feeder unit as the standard paper feeding)
- Consumables (CRU)

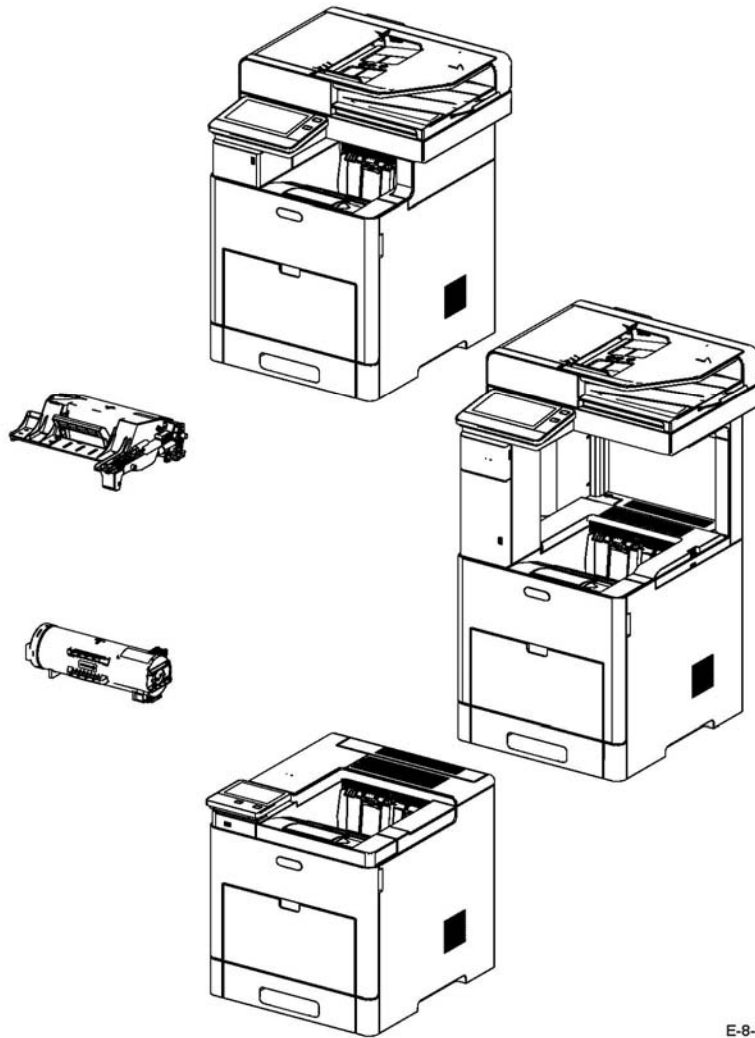
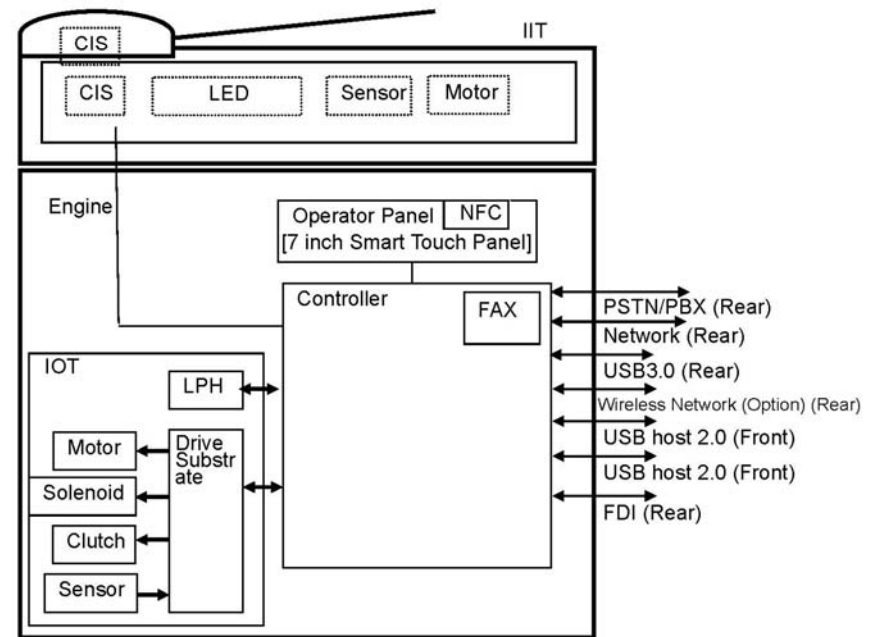


Figure 10 Basic configuration

E-8-0574-A

### MFP Functional Configuration

The functional configuration for this printer is shown in Figure 11.

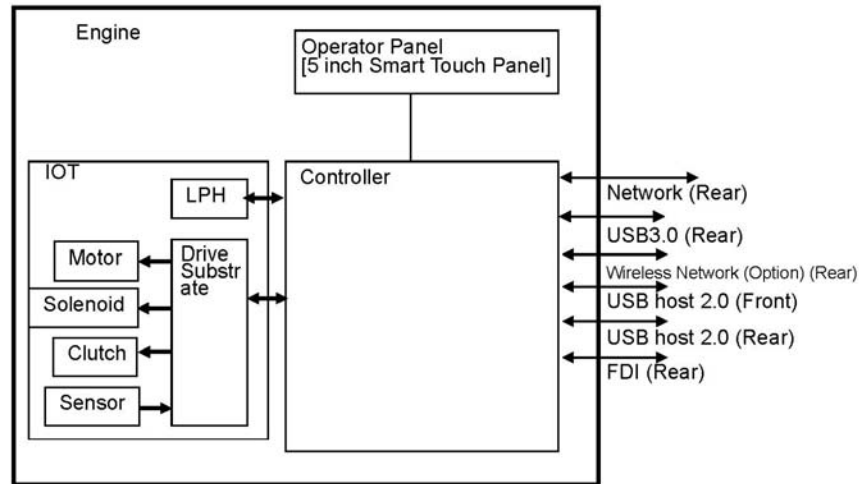


E-8-0575-A

Figure 11 MFP functional configuration

## SFP Functional Configuration

The functional configuration for the SFP printer is shown in Figure 12.



E-8-0576-A

Figure 12 SFP functional configuration

## Printing Process

This section describes the operational characteristics of the VersaLink® B600/505 and B610/605. It provides detailed descriptions of the media path, xerographics, and major assemblies for each model.

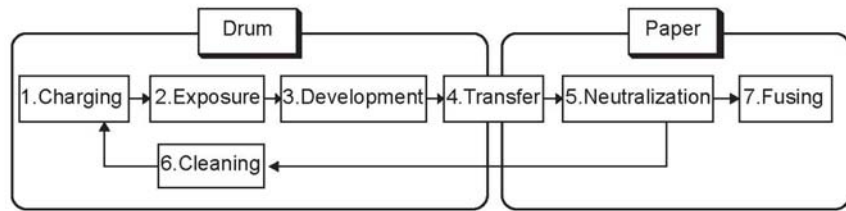
### Summary of Printing Process

This device is an LED-based black and white xerographic printer. The image of the original document is created with toner on the drum surface and then transferred onto the paper. As the paper is fed by the feeding mechanism through the steps listed below, the toner image is transferred from the drum surface onto the paper then fused to form the completed print.

The printer's printing process comprises the following basic steps:

1. Charging: The drum surface is electrically charged.
2. Exposure: The image is formed on the drum surface by the light from the LED (Light-Emitting Diodes).
3. Development: The image is developed with toner.
4. Transfer: The toner image on the drum surface is transferred onto the paper.
5. Neutralization: Electric charge of the paper is eliminated.
6. Cleaning: Excess toner on the drum, BCR and BTR is removed and transported to the waste toner collection area.
7. Fusing: The toner is fixed to the print medium by heat and pressure.

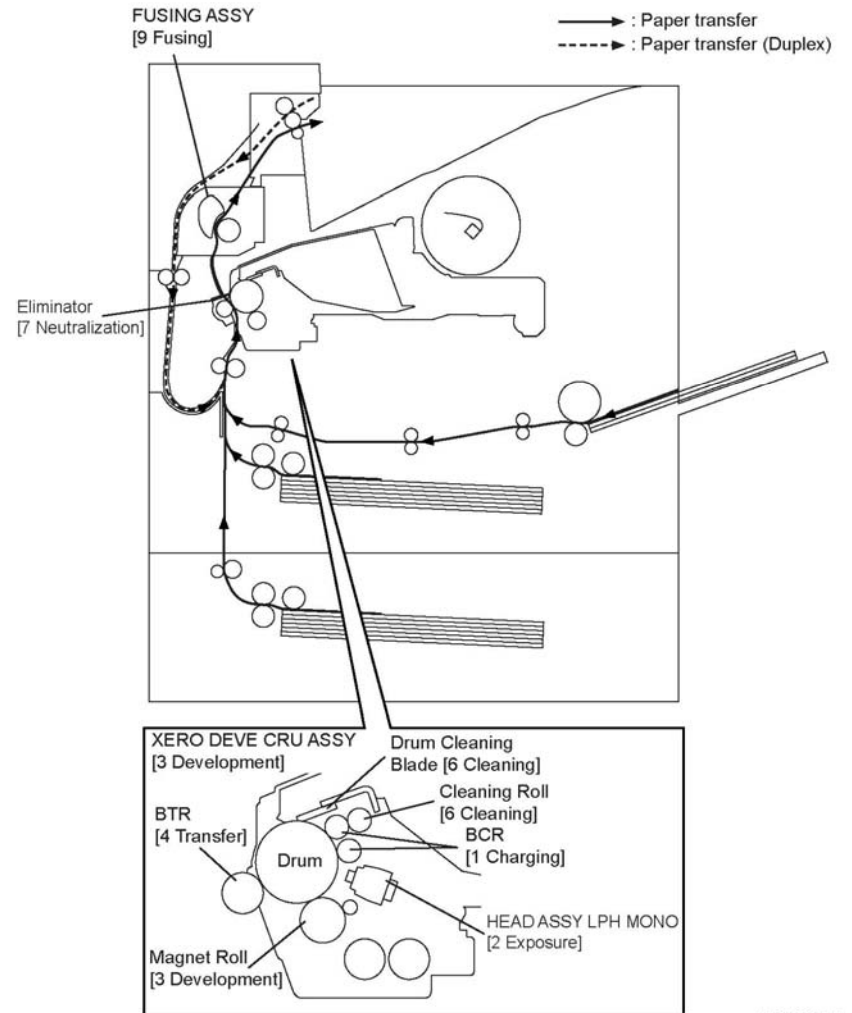
Figure 1 shows the printing process flow.



E-8-0623-A

Figure 1 Printing process flow

Figure 2 shows the printing process functions outline.



E-8-0624-A

Figure 2 Printing process functions

## Charging

In the charging process, the surface of the drum rotating at a constant speed is uniformly charged with negative polarity by the discharge from the Bias Charge Roll (BCR).

- Bias Charge Roll (BCR)  
The BCR is kept in contact with the drum and rotates following the rotations of the drum. The BCR is a conductive roll that uniformly and negatively charges the drum surface with the negative voltage applied by the HVPS.
- Drum  
The drum surface is uniformly and negatively charged with DC bias voltage.  
The drum surface consists of a photoreceptor (which is an insulator in the dark and a conductor in the light) backed with a conductor.
- Cleaning roll  
The cleaning roll physically contacts the BCR to remove the toner from it.

## Exposure

The Exposure process forms an invisible electrostatic latent image on the negatively charged drum surface by illuminating it with the Light Emitting Diodes (LEDs).

This device uses the LED Print Head (LPH) for the exposure process. The LPH consists of numerous illuminating points that are lined in the main scanning direction. The LPH of this device consists of 21 newly developed Self-Scanning\* Light Emitting Diodes (SLEDs). With 506 illuminating points per SLED, the total number of illuminating points on 21 SLEDs amounts to 10626, achieving a high resolution of 1200 dpi in the main scanning direction. Utilizing the switching characteristics of the PNP thyristor, makes the PN junction work as a light emitting diode to provide the scanning function.

The LEDs emit lights according to the printing data (image data) output from the printer controller, and the lights pass through the lenses to be converged onto the drum surface. The LED illuminates the points on the drum surface corresponding to the pixels (micro points composing characters or pictures) of the printing data. When the LED illuminates the drum surface, the illuminated area becomes conductive. This allows the negative charge on the drum surface to flow to the positive side and cancel the positive charge, lowering the potential on the drum surface. This low-potential area becomes the electrostatic latent image.

## Development

The development process makes a visible image appear on the drum surface by electrically attracting toner particles to the electrostatic latent image.

### Toner Dispensing **Figure 3**

The toner supplied from the toner cartridge is fed into the drum cartridge by the toner dispensing auger in the drum cartridge and the paddle in the toner cartridge driven by the motor assembly disp/env.

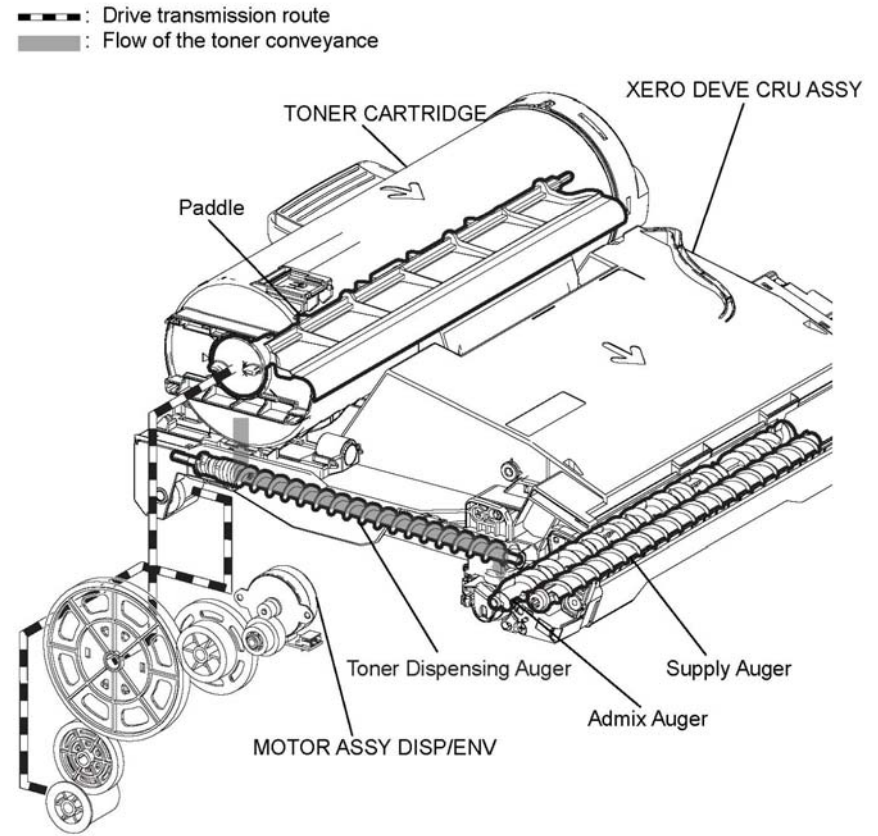


Figure 3 Toner dispensing during development

E-8-0628-A

## Development

In the developer section, the incoming toner is mixed with the existing developer (toner/carrier mixture) by the admix auger and the supply auger, and then supplied to the magnet roll located near the drum surface as shown in Figure 4. The toner and carrier are charged by friction due to agitation (toner in negative, carrier in positive), and they attract each other electrically. The carrier, due to its magnetic properties, is attracted to the magnet roll, and then uniformly leveled by the trimmer rod.

The magnet roll is covered by a thin semi-conductive sleeve all over the surface. The DB (Developing Bias) voltage is supplied to this semiconductor sleeve from the High Voltage Power Supply (HVPS). The DB voltage is negative DC voltage combined with AC voltage. The DC voltage keeps the magnet roll at a constant negative voltage against the photoreceptor layer of the drum. Therefore, at the area where the negative electric charge on the drum surface does not decrease, the potential is lower than that of the magnet roll, while the potential is higher than that of the magnet roll at the area where the negative charge on the drum surface decreases. The AC voltage shakes the developer on the surface of the magnet roll so that the toner easily flies to the drum. Thus, only the portions of the drum surface where the negative charge has decreased below that of the magnet roll (electrostatic latent image) attract the toner to form an image on the drum. Once the toner is deposited on the drum, the potential and the toner-attracting force of the corresponding portion decreases because the increase of negative charge lowers the potential at that portion.

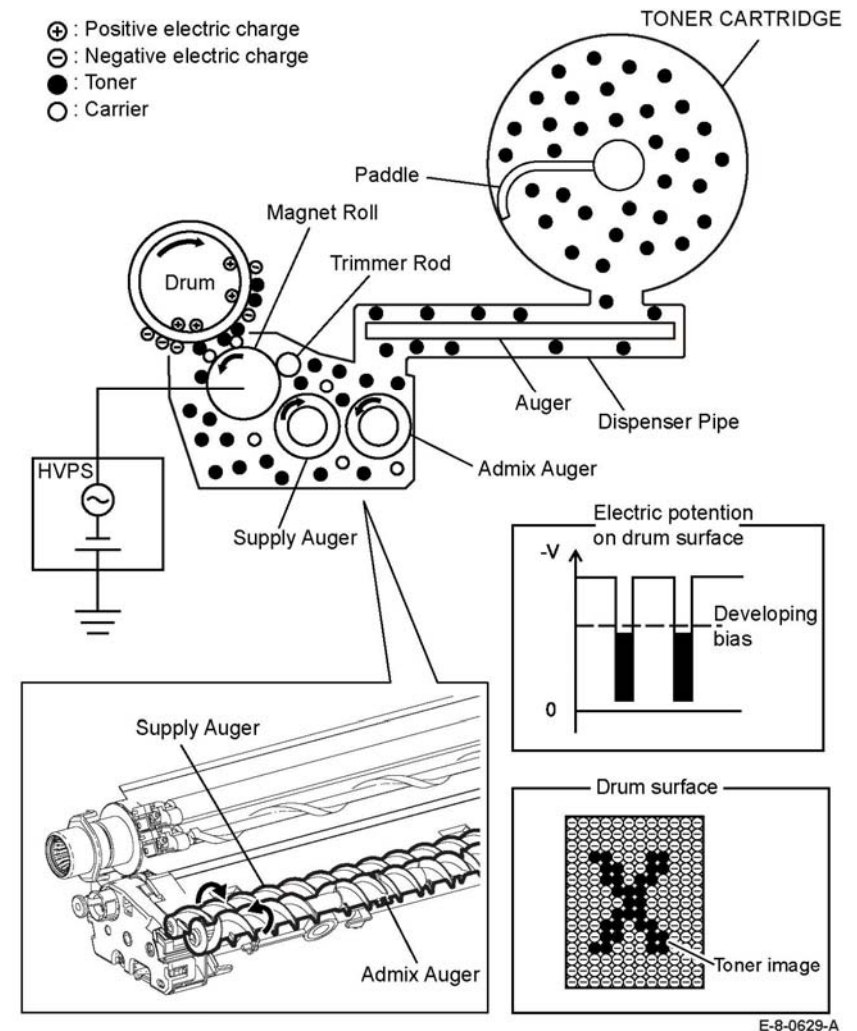


Figure 4 Development process



## Transfer

In the transfer process, the toner image formed on the drum surface is transferred onto the paper via the bias transfer roller (BTR).

The BTR is a conductive roll, in contact with the drum and supplied with high voltage from the High Voltage Power Supply (HVPS). When the paper moves from the BTR to the drum, the BTR applies a positive charge to the paper. The toner image on the drum is transferred from the drum to the paper. This attraction occurs due to the negative charge induced in the conductive layer of the drum being attracted to the positive charge on the back side of the paper.

## Neutralization

In the neutralization process, the charge on the paper is neutralized or eliminated by the eliminator. The charge is neutralized (removed) to prevent the toner on the paper from spreading over the surrounding metal surfaces. The eliminator is a metal sheet that is held at the ground potential. It neutralizes the positive charge applied in the transfer process by applying a negative charge to the back side of the paper.

## Cleaning (Drum)

In the cleaning process, excess toner and charge is removed from the drum, BCR and BTR surfaces to eliminate the charge on the drum surface.

### Drum Cleaning

The excess toner that was not transferred to the drum in the transfer process remains on the drum surface. To prevent the excess toner from causing problems in the subsequent processes, the toner is scraped off by the drum cleaning blade in contact with the drum surface, then collected into the waste cartridge.

### BCR Cleaning

The cleaning roll made of a spongy material contacts the BCR (bias charge roll) surface, scrapes off the remaining toner, then transports it to the waste toner collection area.

### BTR Cleaning

The excess toner deposited on the BTR in the transfer process contaminates the backside of the subsequent sheets. To prevent this the HVPS sends negative high voltage to the BTR to reverse-transfer the toner from the BTR to the drum. The cleaning blade, in contact with the drum, scrapes off the reverse-transferred toner from the drum and transports it to the waste toner collection area.

## Fusing

In the fusing process, toner is fixed onto the print medium by heat and pressure. The toner particles are melted by the heat roll heated by the heater lamp, and fused onto the print medium by the pressure between the heat roll and the pressure belt. The pressure belt, friction-driven by the heat roll, nips the print media against the heat roll by using its pressurizing mechanism.

## Waste Toner Collection

The excess toner generated by the drum cleaning is fed to the waste toner collection area by the drum cleaning wiper in the drum cartridge as shown [Figure 5](#). The drum cleaning wiper is driven by the main motor.

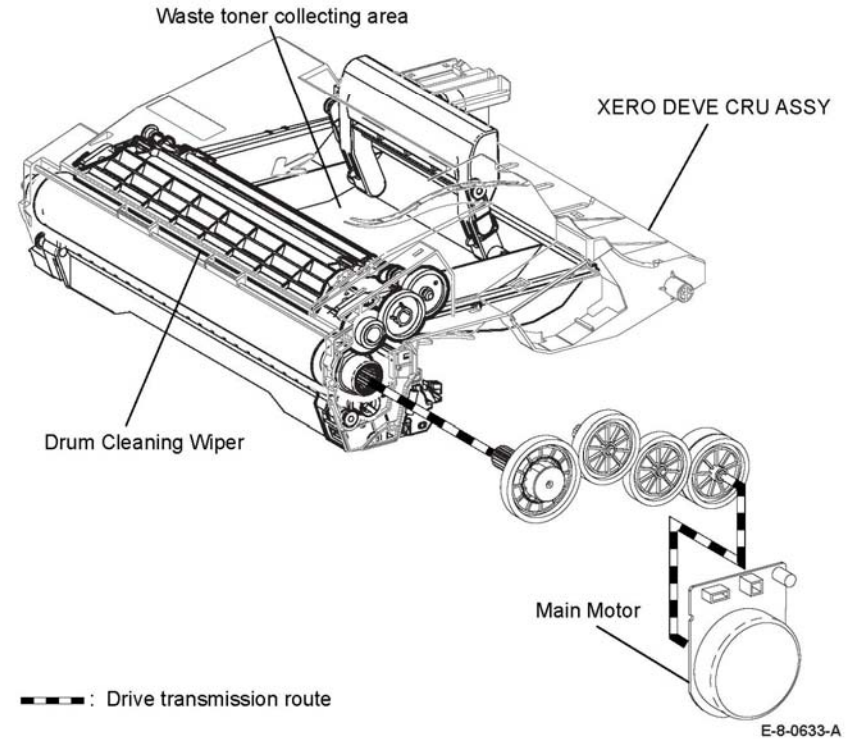


Figure 5 Waste toner collection

## Scanning Process

### Document Scanning

The scanner assembly shown in [Figure 1](#) consists of the Image Input Terminal (IIT) and the Duplex Automatic Document feeder (DADF). The CIS assembly in the Image Input Terminal scans the front side of the document and the CIS assembly in the DADF feeder scans the back side of the document.

### Document Scanning at the Platen (IIT)

The scanner assembly consists of the Image Input Terminal (IIT) and the Duplex Automatic Document Feeder (DADF). The CIS assembly in the Image Input Terminal scans the front side of the document and the CIS assembly in the Duplex Automatic Document feeder scans the back side of the document.

The carriage assembly consists of components such as the CIS Image sensor for converting image to data, the LED Array for illuminating the original, and the rod scope for converting the original image to a full-size erect image.

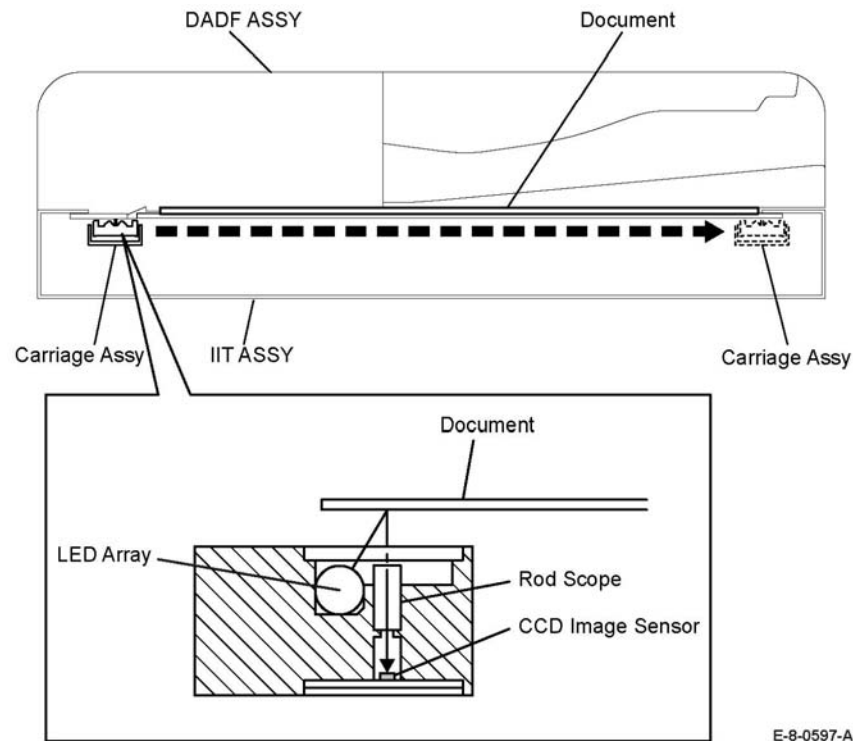


Figure 1 Scanning at platen (IIT) assembly

### Document Scanning at the DADF

This DADF, shown in [Figure 2](#), has a different system from the conventional document feeder, being capable of scanning both the front and back sides of the document during the one-pass conveyance.

The CIS assembly on the IIT assembly reads the front side of the document, and the CIS assembly on the DADF assembly reads the back side of the document. These two scanning parts are arranged to interpose the paper path from both sides, allowing both sides of the document to be scanned without rotation.

The document is fed by the torque from the DADF motor at the speed corresponding to the set magnification. The document passes the scanner home position; Constant Velocity Transport (CVT) of the carriage assembly in the IIT, and the reflected image is read by the CIS image sensor.

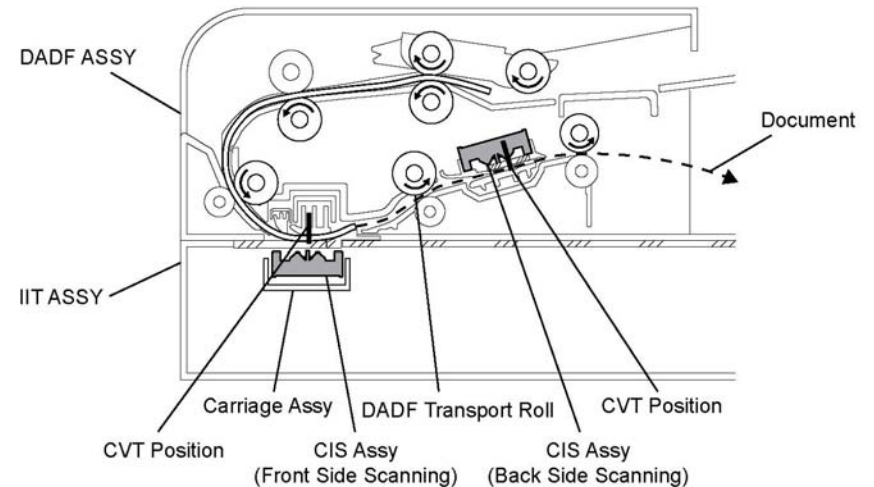


Figure 2 Scanning at DADF assembly

## Paper Path

This section describes the paper feed path of the entire device and the paper feed process in each feed section.

### Paper Path Layout

Figure 1 shows the paper feed layout when the tray module is installed, and the components associated with feeding the paper.

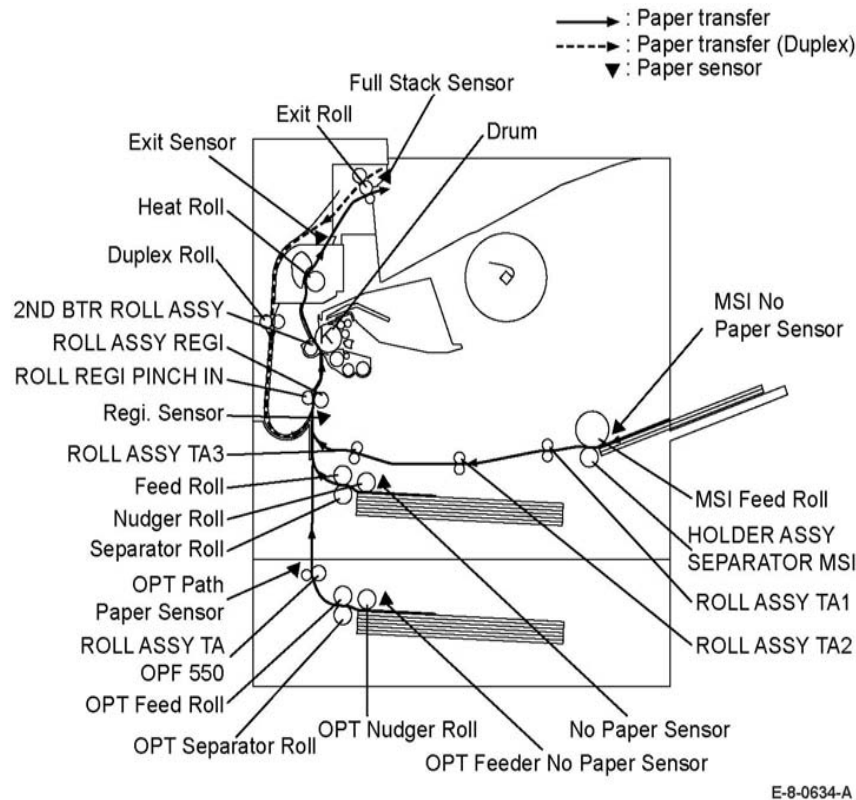


Figure 1 Paper path layout

### Feeding from Paper Cassette

Figure 2 shows how the paper loaded in the paper cassette is fed between the feed roll and the separator roll by the nudger roll, then fed farther to the registration section by the rotation of the feed roll and the separator roll.

- The nudger roll and the feed roll are rotated by the main motor via the clutch assembly PH.

- The separator roll, pressed from underneath by the spring pressure and forced against the feed roll, fans a sheet by the rotation friction.
- When the sheet is lapped over, the break force of the torque limiter combined with the separator roll, separates and feeds the top sheet.
- The plate assembly bottom is the mechanism driven with the gear located on the side of the paper cassette.
- Unless the interlock gear is unlocked, the plate assembly bottom keeps the state that it is not lowered or elevated from the arbitrary position. The sheet is fed at this position.
- As paper is fed and the stack of paper decreases by several sheets, the nudger roll lowers down and the lever unlocks the gear, which elevates the plate assembly bottom.

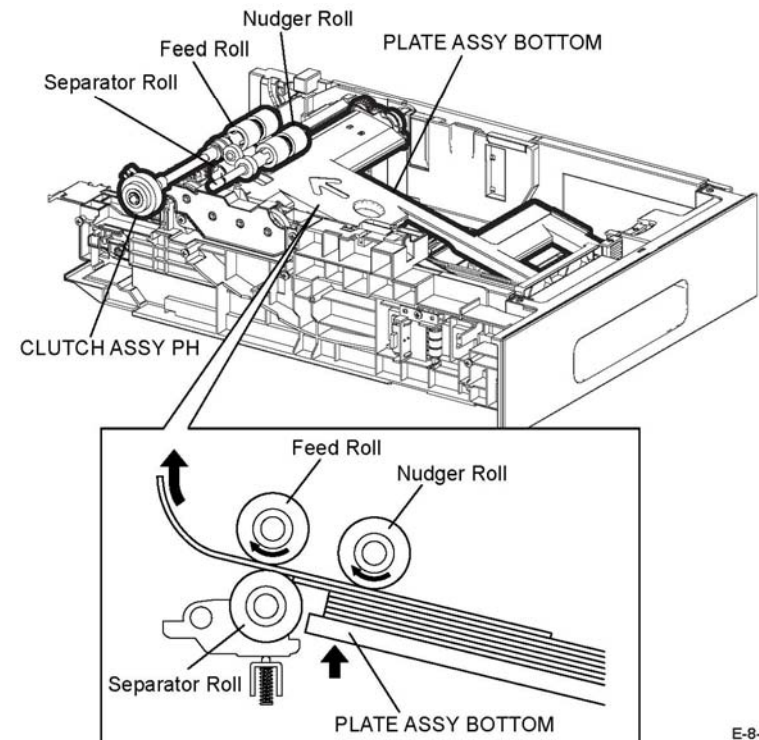


Figure 2 Feeding from paper cassette

### Feeding from Bypass Tray

When sheet feeding from the MSI starts, the MSI feed roll rotates, driven by the main motor and controlled by the solenoid feed MSI, to feed the sheet to the position where it is nipped between the MSI feed roll and the MSI separator roll (holder assembly separator MSI). As the MSI feed roll rotates, the MSI left cam and MSI right Cam also rotate to lift the plate assembly bottom MSI via the latch MSI L and latch MSI R to the position for sheet feeding. See Figure 3.

Normally, when only one sheet is fed, both the MSI feed roll and MSI separator roll rotate to allow the sheet to pass. However, when two sheets are fed concurrently, only the MSI feed roll rotates and the MSI separator roll is locked. This allows the upper sheet to pass by being separated from the lower sheet that is stopped by the friction with the MSI Separator roll at rest.

The MSI separator roll is pushed toward the MSI feed roll by spring pressure, and controlled by the torque limiter (clutch assembly friction) with which it is coupled.

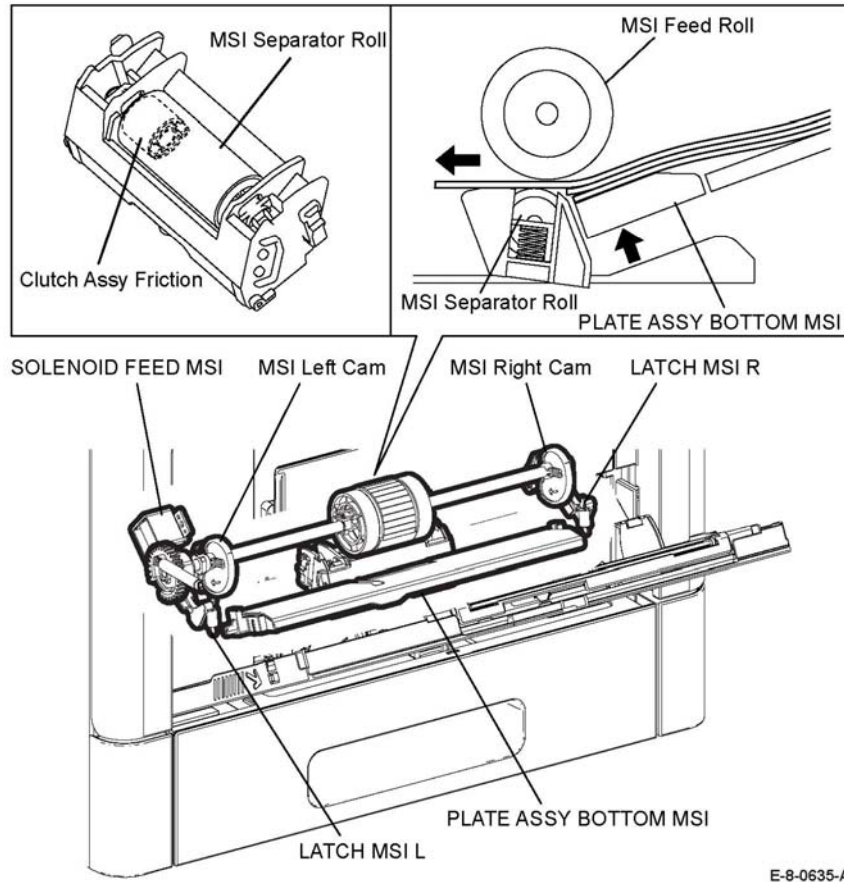


Figure 3 Feeding from the bypass tray

## Feeding in the Registration Section

### Feeding to the Registration Section

The sheet fed from the MSI is fed to the registration section by the roll assembly TA1, roll assembly TA2, and roll assembly TA3 driven by the main motor. Refer to Figure 4.

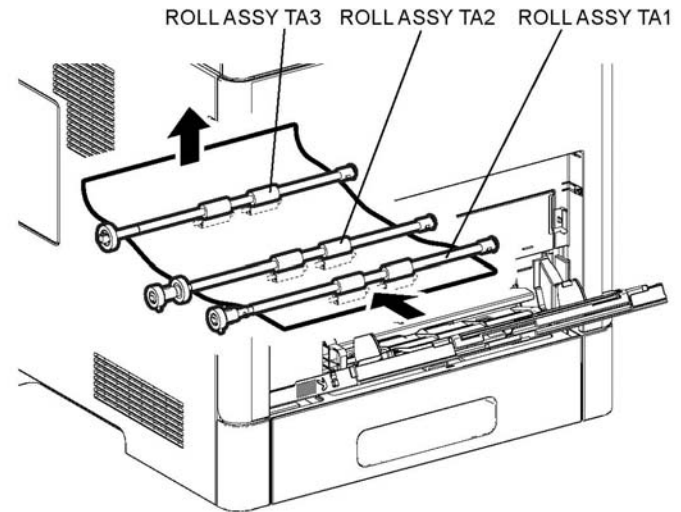


Figure 4 Feeding through the takeaway rolls

The sheet fed from the paper cassette is passed through the chute directly and fed to the registration section. Refer to Figure 5.

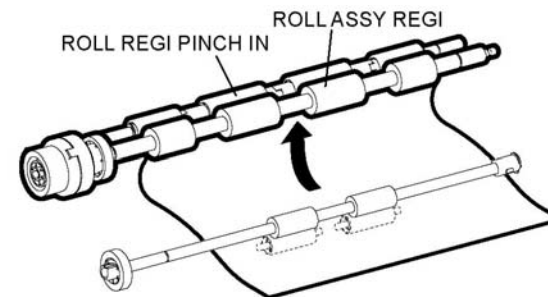


Figure 5 Feeding to the registration section

### Lead-Edge Registration (paper skew correction)

When a sheet fed out of the MSI or tray directly reaches the toner transfer section, the toner image may not be transferred at the correct position on the sheet due to misalignment of lead edges in the MSI or tray.

To avoid this problem, the lead edge position of the sheet needs to be corrected at the registration section before the sheet is forwarded to the toner transfer section.

By thrusting the edge of the sheet fed out of the MSI or tray against the locked roll assembly regi, the sheet's lead edge position is corrected. Refer to [Figure 6](#).

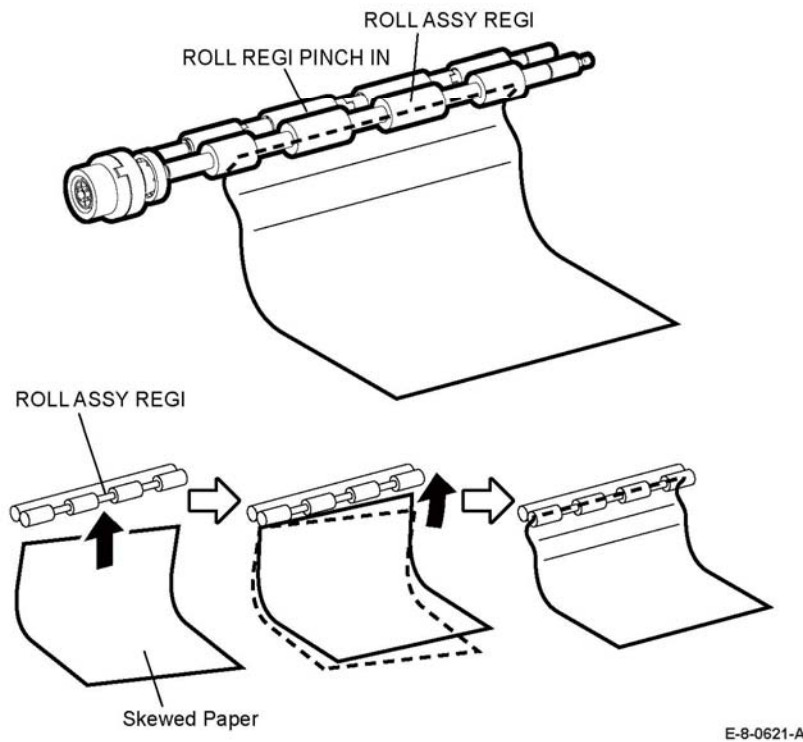


Figure 6 Sheet leading edge position correction

### Feeding from the Registration Section

The sheet is fed to the toner transfer section by the rotation of the roll assembly regi at the proper timing, after the lead edge position of the sheet fed is corrected in the registration section. The roll assembly regi is rotated by the main motor drive via the clutch assembly regi.

## Transfer / Fusing / Exit

On the sheet passed through the registration section, the toner image on the drum is transferred by the drum and bias transfer roll, rotated by the main motor drive. The sheet is then fed to the exit section where the toner image is fused by the heat roll, rotated by the main motor. Refer to Figure 7. The main motor drive is transmitted to the exit clutch, and the exit roll is rotated in the sheet exit direction. The printed sheet is ejected from the printer. The exit sensor detects when the sheet completely exits the printer.

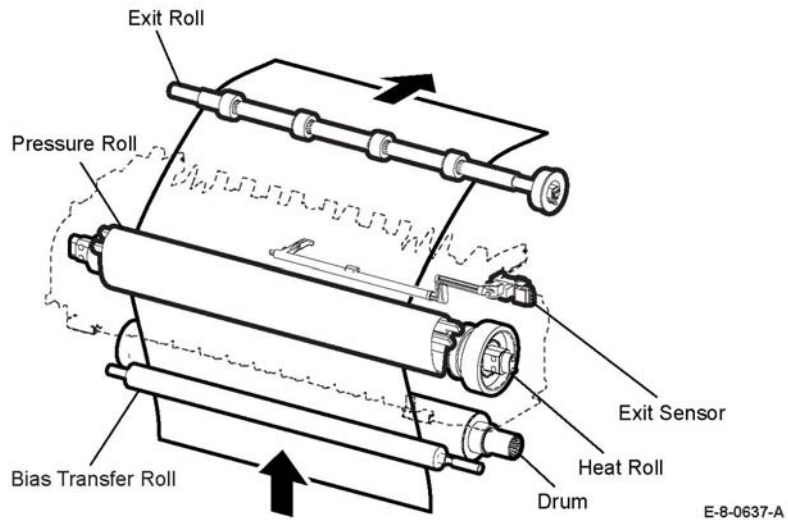


Figure 7 Feeding through the transfer/fusing/exit

## Envelope Mode Mechanism

For printing envelopes, the envelope drive motor rotates the envelope cam shaft to switch into the envelope mode. In the envelope mode, the pressure roll moves away from the heat roll, which reduces the pressure. Refer to Figure 8.

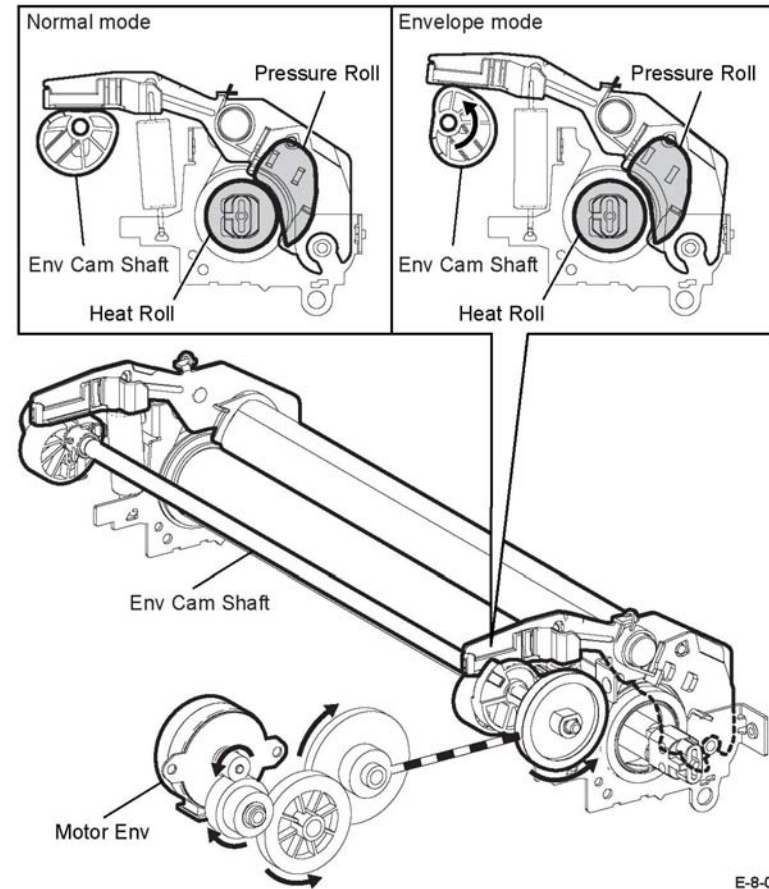


Figure 8 Feeding through envelope mode

## Feeding through the Duplexer

After the sheet is passed through the heat roll and side 1 printing is completed, the sheet is output to the upper exit along the lower gate at the lower position. The main motor drive is transferred to the invert clutch which rotates the exit roll in reverse.

The main motor drive is transferred to the exit clutch, which rotates the exit roll forward. The sheet is fed to the duplex assembly along the lower gate, which is shifted to the upper position by the gate solenoid.

The duplex roll is driven by the PH motor which feeds the sheet to the registration position. After the sheet passes the heat roll and side 2 printing has completed, the sheet is output to the lower exit. The exit roll rotates forward and the lower gate is at the upper position. Refer to [Figure 9](#).

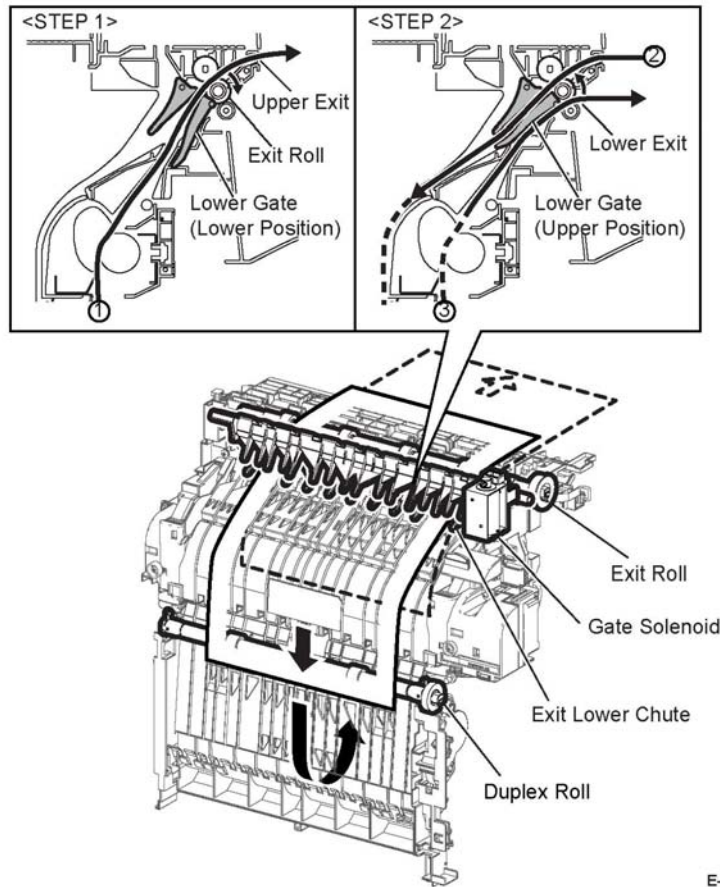


Figure 9 Feeding through the duplexer

## DADF Paper Path (MFP)

When the sheet feeding from the document feeder tray of the DADF starts, the DADF nudger roll and the DADF feed roll rotation is driven by the DADF motor. The sheet is nipped between the DADF feed roll and the retard pad while being fed into the DADF. Refer to [Figure 10](#).

Inside the DADF, the sheet is fed by the DADF takeaway roll rotated by the DADF motor, aligned by the DADF registration roll rotated by the DADF motor, and fed to the scanner home (CVT: Constant Velocity Transport) position in the carriage assembly, and is scanned (simplex). Then, the sheet is fed by the DADF transport roll rotated by the DADF motor to the CVT position, and is scanned (duplex).

After being scanned, the sheet is ejected by the DADF exit roll rotated by the DADF motor to the DADF's document output tray.

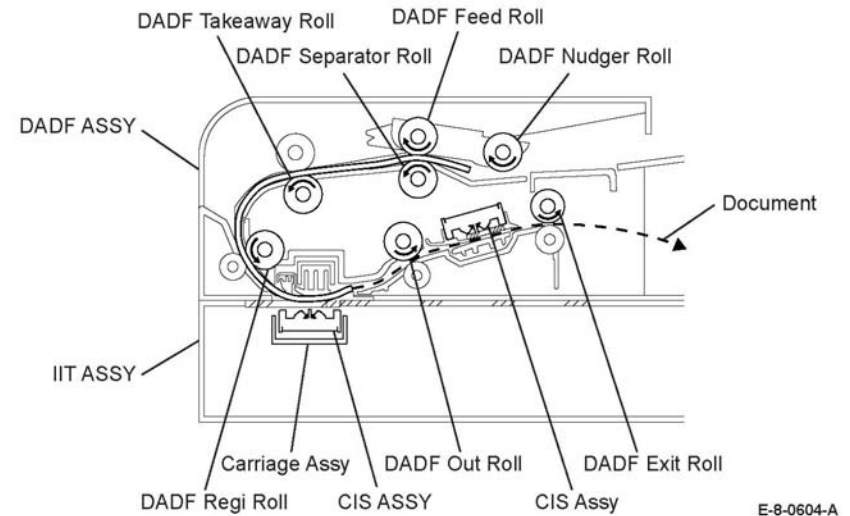


Figure 10 Feeding through the DADF

## Major Components' Functions

This section describes the major functional components of the printer and the scanner with corresponding illustrations. These components are classified into the following blocks based on the printer and scanner configurations.

### LPH

Figure 1 shows the Laser Print Head (LPH) assembly. (PL 2.1 Item 1)

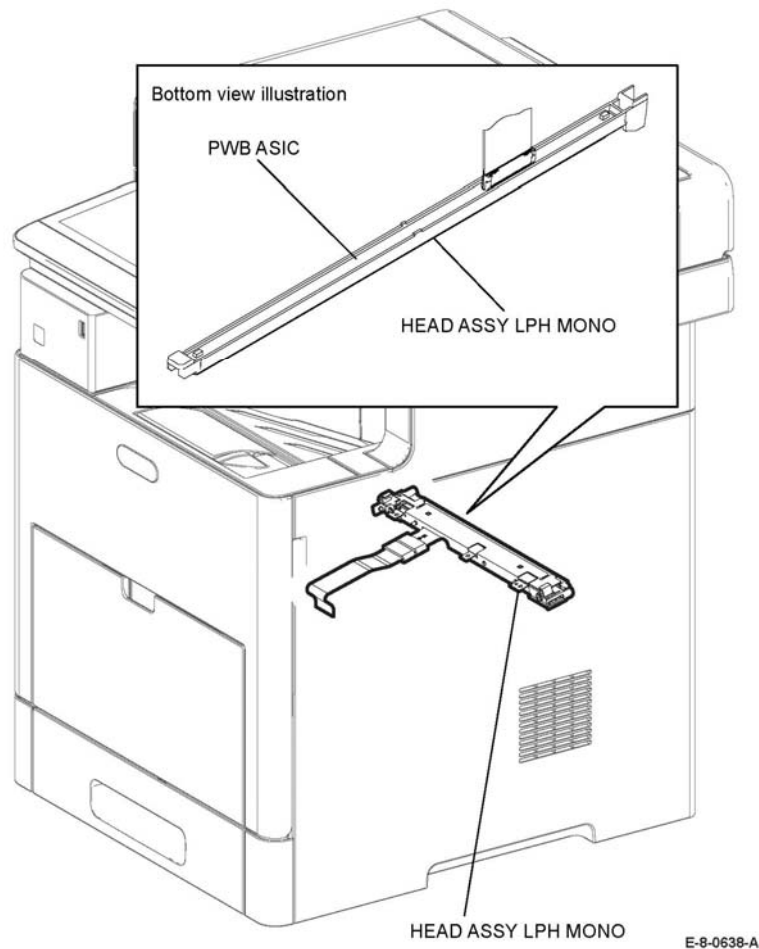


Figure 1 LPH function

### Head assembly LPH mono (PL 2.1 Item 1)

An exposure device for creating an electrostatic latent image on the drum surface.

The head assembly LPH mono mainly consists of the following part:

- PWB ASIC  
A PWB that bridges between the PWBA ESS MFP/PWBA ESS SFP and the head assembly LPH mono.

### Drive

Figure 2 shows the drive assembly. (PL 3.1 Item 1)

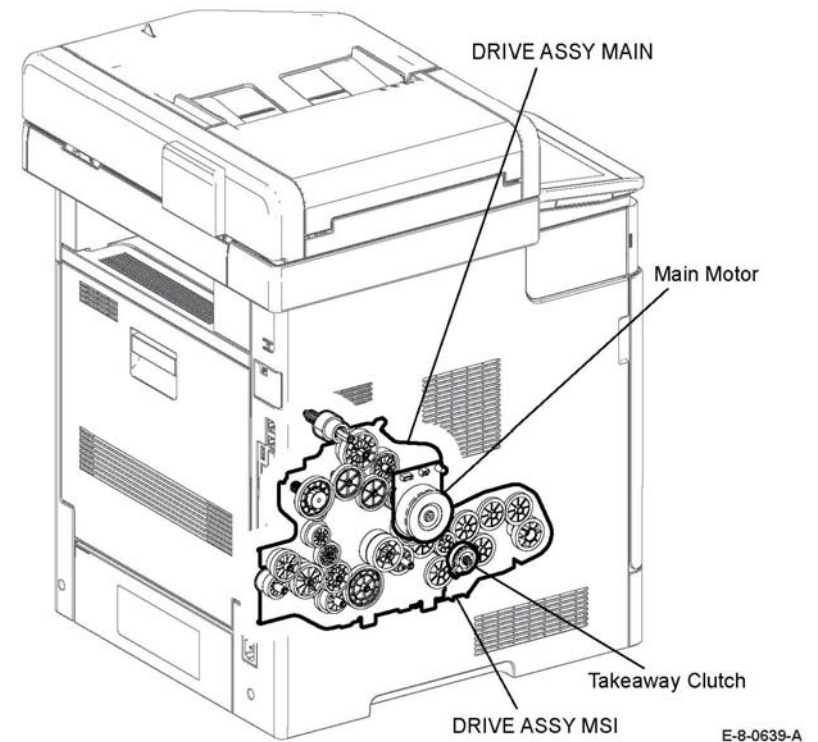


Figure 2 Drive function

### Drive Assembly Main (PL 3.1 Item 1)

The drive assembly main, consists mainly from the following parts:

- Main motor  
The DC motor that drives the heat roll in the fuser assembly, the exit roll in the exit section, each roller of the paper feed section (feed from the MSI/tray, registration, and duplex feed), the magnet roll in the drum cartridge, the heat roll in the fusing assembly, the exit roll in the exit section and the drum in the drum cartridge (or Xero Deve CRU assembly.)



### Drive assembly MSI

The drive assembly PH mainly consists of the following part:

- MSI takeaway clutch  
Transfers the drive from the main motor to the roll assembly TA1, the roll assembly TA2, and the roll assembly TA3.

### Air Flow

Figure 3 shows the air flow (MFP shown).

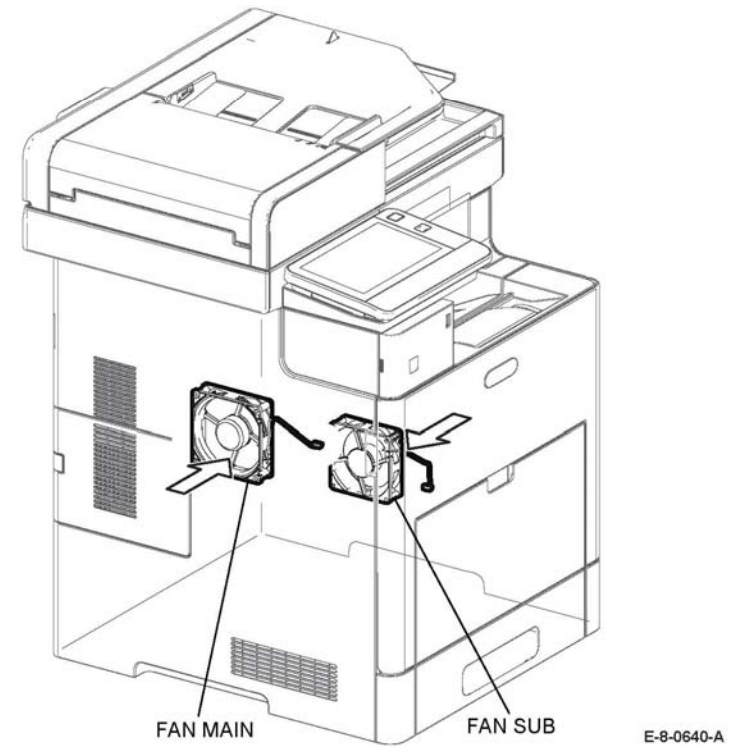


Figure 3 Air flow

### Air Flow

#### Fan Main

Takes air in from outside the machine, and prevents temperature rise inside the machine.

#### Fan Sub

Takes air in from outside the machine, and prevents temperature rise inside the machine.

## Toner Dispensing

Figure 4 shows the toner dispensing system.

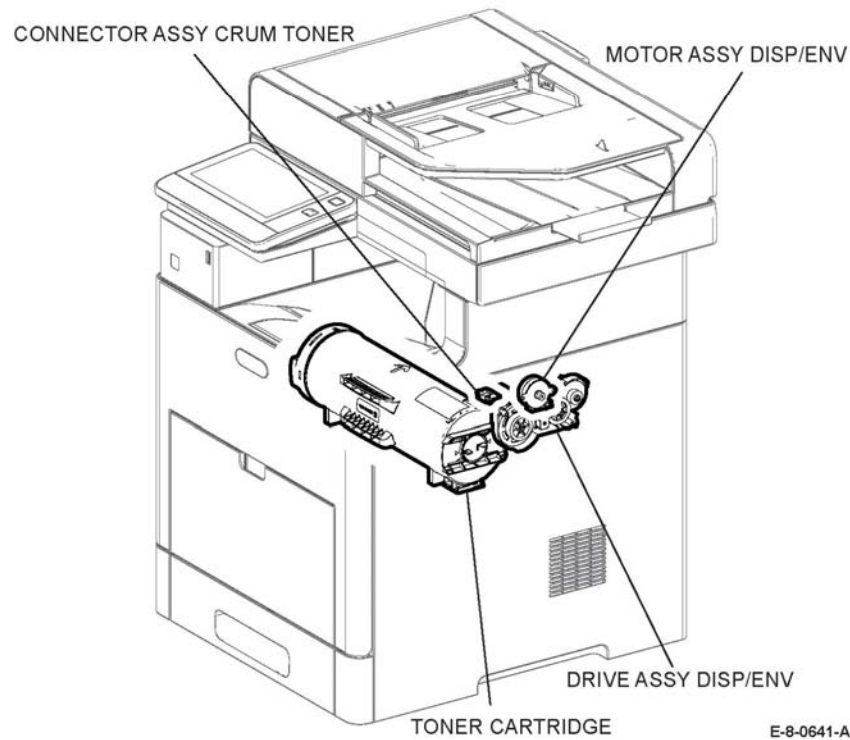


Figure 4 Toner dispensing function

### Drive Assembly Disp./Env (PL 5.1 Item 2)

The drive assembly disp./env mainly consists of the following component:

### Motor assembly Disp./Env (PL 5.1 Item 1)

- Drives the paddle in the toner cartridge, the toner dispensing auger of the drum cartridge and feeds toner to the development section of the drum cartridge.

### Toner Cartridge

Stores the waste toner and a small amount of carriers. Also, installs the CRUM which is an involatile memory to store the machine information.

### Connector Assembly Crum Toner (PL 5.1 Item 2)

Detects if the toner cartridge being connected is a regular part.

## Xerographics and Transfer

Figure 5 shows the xerographics and transfer systems.

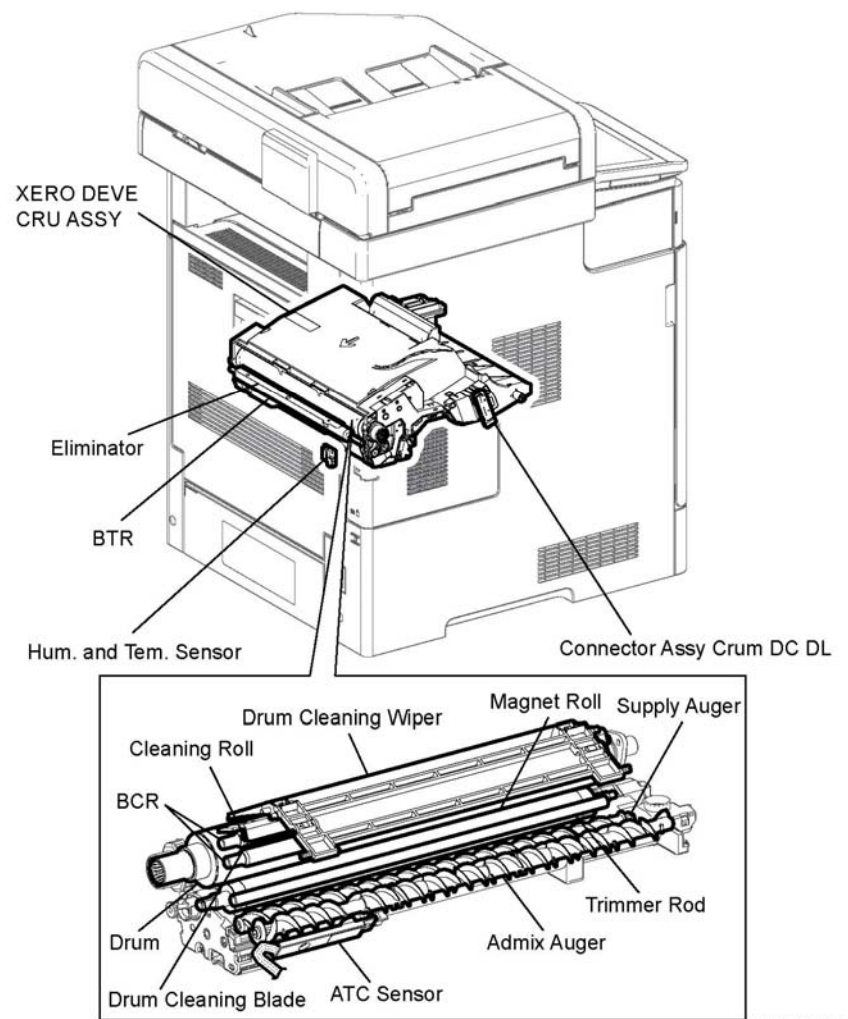


Figure 5 Xerographics and transfer functions

### Humidity and Temperature Sensor

- Detects the humidity and temperature

### **Drum Cartridge (Xero Dev CRU Assembly)**

A unit that consists of the drum to form the static latent image and toner image, and the developer to develop toner to the drum.

- Drum  
Forms the static latent image and the toner image.
- BCR  
Charges the drum.
- Cleaning roll  
Cleans toner on the BCR surface.
- Drum cleaning blade  
Cleans the remaining toner in the drum after the toner image is transferred on the sheet.
- Magnet roll  
Contacts with the drum and forms the toner image on the drum.
- Admix auger, supply auger  
Stirs toner.
- Trimmer rod  
Equalizes toner and carriers on the magnet roll.
- ATC sensor  
Detects the toner concentration in the development unit.

### **BTR Roller Assembly (PL 19.2 Item 11)**

The BTR roller assembly mainly consists of the following components:

- BTR (Bias transfer roll)  
Contacts with the reverse side of the toner transfer face on the sheet, and transfers the toner image formed on the drum to the sheet.
- Eliminator  
neutralizes the sheet.

### **Connector Assembly Crum DC CL**

Detects whether the correct drum cartridge is set to the Xero IOT assembly.

## Fusing

Figure 6 shows the fusing function.

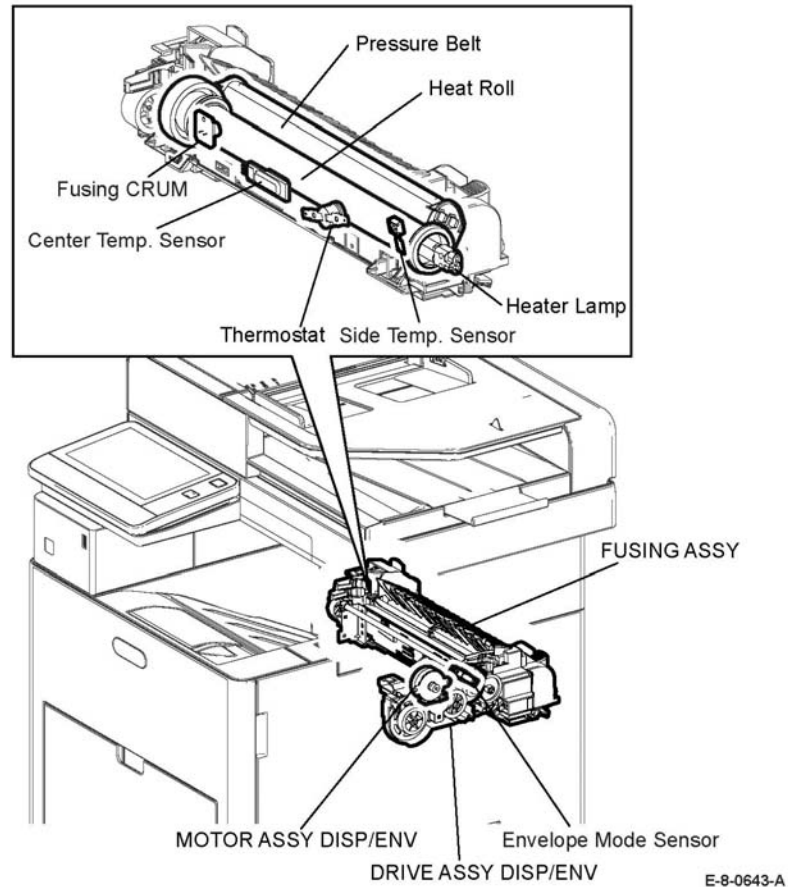


Figure 6 Fuser function

### Fuser assembly

The fuser assembly is a unit that fuses the complete toner image transferred on the sheet with the sheet by heat and pressure.

The Fuser assembly mainly consists of the following components:

- Heat roll  
A metal roller, with a surface for transferring heat to fuse toner on a sheet covered by the tube.
- Pressure belt

A belt contained the pressurization system inside. Combined with the heat roll, impresses toner on the sheet.

- Heater lamp  
A heating element sealed inside the Heat roll.
- Center temperature sensor  
A thermistor that reacts corresponding to temperature changes, located in the heat roll. The sensor detects the heat roll's surface temperature, preventing abnormally high temperature.
- Side temperature sensor  
A thermistor that reacts corresponding to temperature changes, located in the heat roll. The sensor detects the heat roll's surface temperature, preventing abnormally high temperature.
- Thermostat  
Located in series with the heater lamp's power source. A secondary device to prevent excessive temperature in the heat roll if the temperature sensors fail.
- Fusing CRUM  
Detects whether the correct fusing assembly is set to the printer

### Drive Assembly Disp./Env

The drive assembly disp./env mainly consists of the following components:

- Motor assembly disp./env  
A motor that rotates the nip retract shaft assembly and switches the position of the pressure roll to one for the envelope mode.
- Envelope mode sensor  
A sensor that detects the state of the envelope mode, on or off.

## Paper Transport

Figure 7 shows the paper transport system.

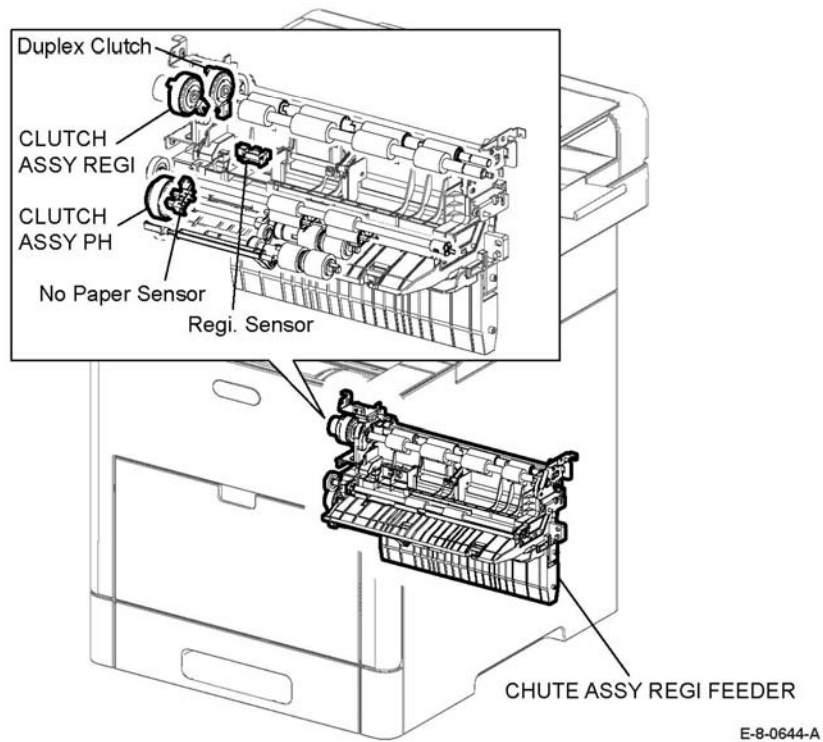


Figure 7 Paper transport function

### Clutch Assembly Regi

Transfers the drive from the main motor to the roll registration assembly.

### Chute Assembly Registration Feeder

The chute assembly regi feeder mainly consists of the following components:

- No paper sensor  
Actuator movement detects presence or absence of paper in the paper cassette.
- Registration sensor  
Detects when the lead edge of a sheet has reached the registration section.

### Clutch Assembly PH

Transfers the drive from the main motor to the feed roll.

### Duplex Clutch

Transfers the drive from the main motor to the duplex roll inside the duplex assembly.

## Bypass

Figure 8 shows the bypass function.

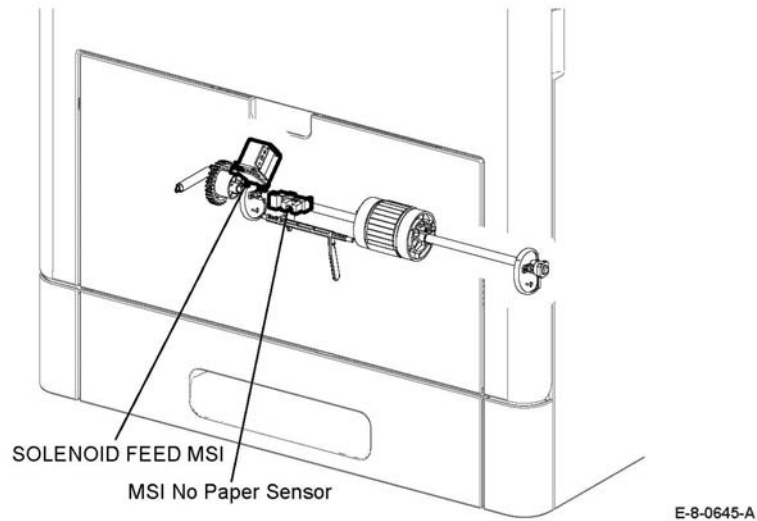


Figure 8 Bypass function

### MSI No Paper Sensor

Actuator movement indicates presence or absence of paper in the MSI.

### Solenoid Feed MSI

Transfers the drive from the main motor to the MSI feed roll.

## Exit

Figure 9 shows the exit function.

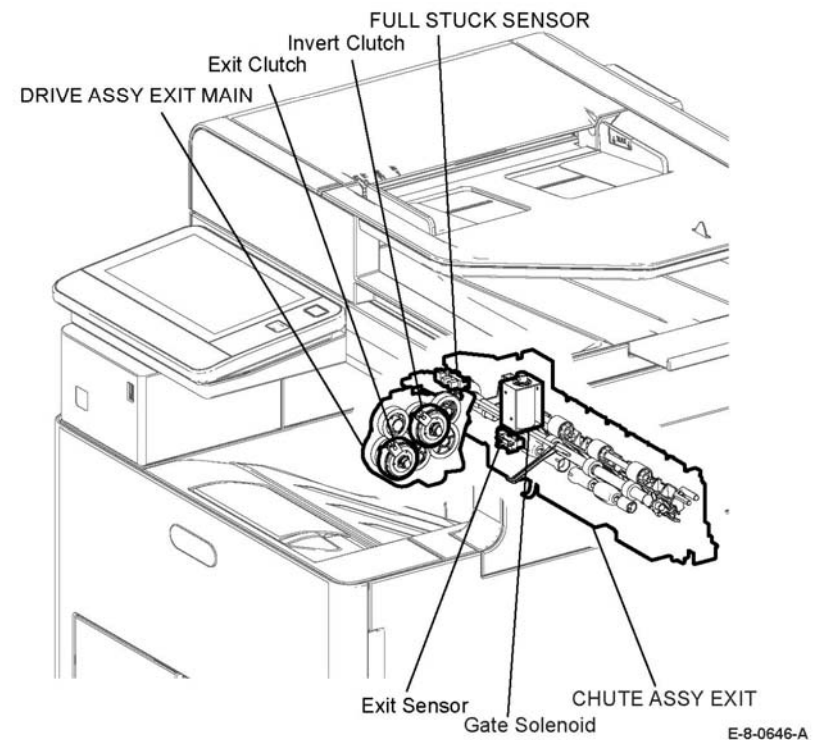


Figure 9 Exit Function

### Exit Sensor

Detects a sheet as it passes out of the fuser.

### Chute Assembly Exit

The chute assembly exit mainly consists of the following components.

- Exit sensor  
Transfers the drive from the main motor to the exit roll. The exit roll rotates in the paper exit direction.
- Full stack sensor  
Detects when the exit tray is full.
- Gate solenoid  
Moves the gate that switches the paper exit.

### Drive Assembly Exit Main (Figure 9)

The drive assembly exit main, consists mainly of the following components.

- Exit Clutch  
Transfers the drive of the main motor to the exit roll. The exit roll rotates the paper exit direction.
- Invert Clutch  
Transfers the drive of the main motor to the exit roll. The exit roll rotates the duplex feed direction.

## Electrical

Figure 10 shows the electrical function. (MFP shown)

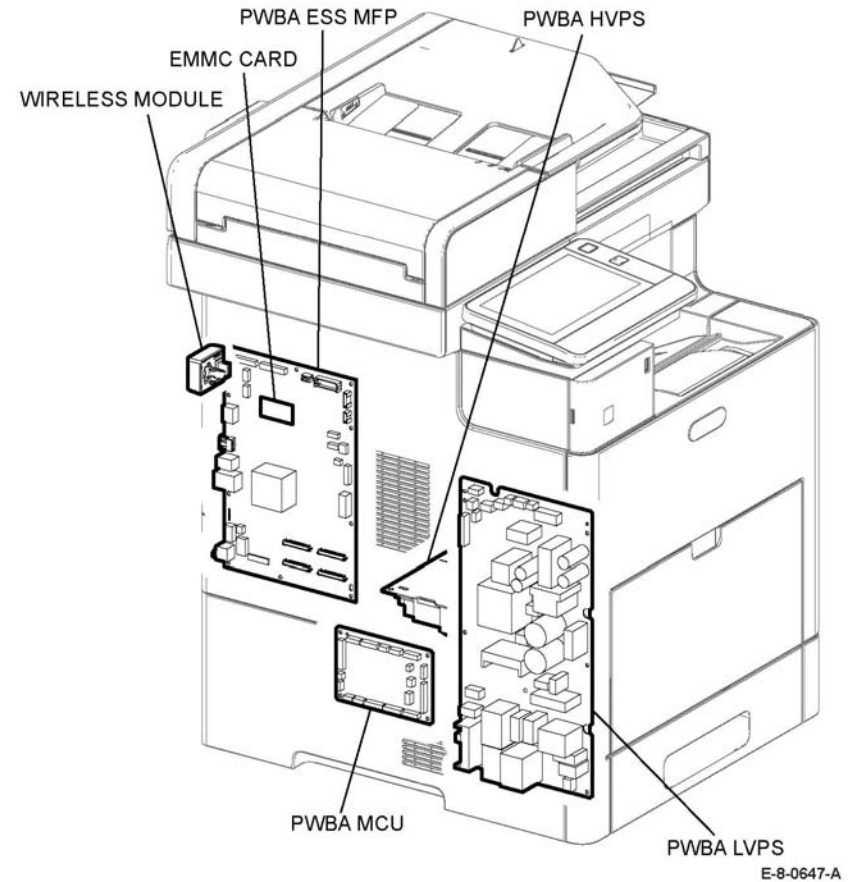


Figure 10 Electrical function

### PWBA MCU

Performs communication with the printer controller and controls each component in printing.

### PWBA ESS MFP

A printer controller. Controls printing by communicating with the PWBA MCU, head assembly LPH mono, and console assembly UI AIO.

### PWBA LVPS

Generates the +24VDC and +5VDC from the AC power source to provide power for each component.

### PWBA HVPS

Provides high voltage to the BTR, the magnet roll and BCR contained in the drum cartridge.

### WIRELESS MODULE

Controls the wireless network interface.

### EMMC BOARD

Non-volatile memory that stores the machine information.

### Interlock Function

Figure 11 shows the interlock function.

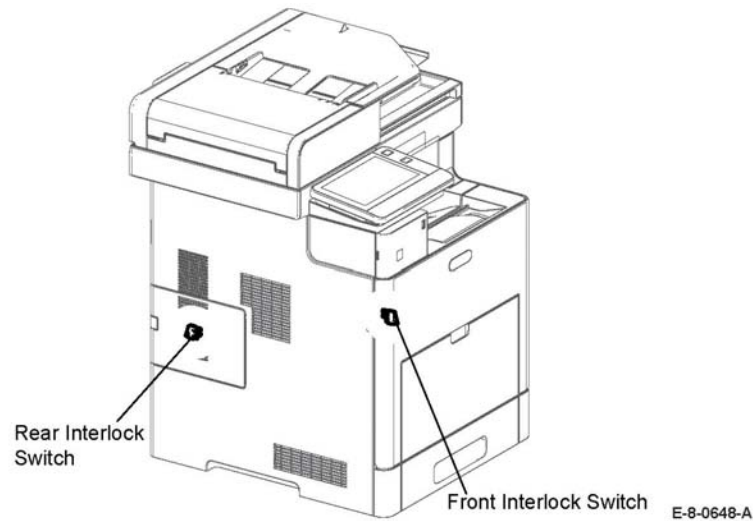


Figure 11 Interlock function

#### Rear Interlock switch

Detects the opening and closing of the rear cover.

#### Side Interlock switch

Detects the opening and closing of the side cover.

### UI (MFP Std.)

Figure 12 shows the UI function for the MFP standard printer.

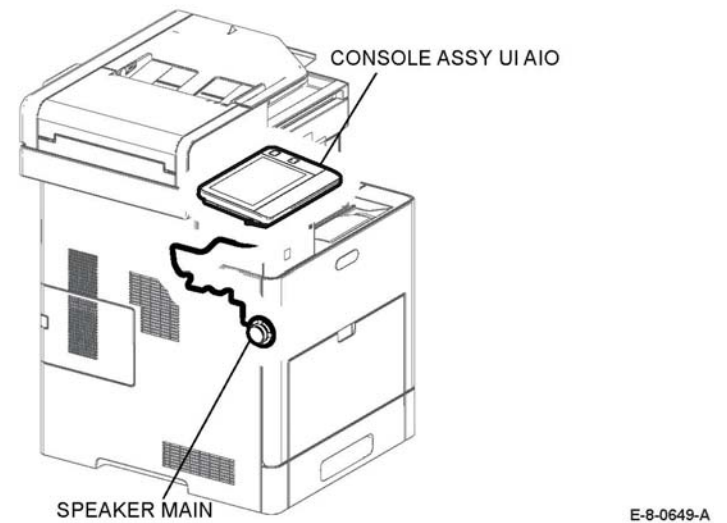


Figure 12 UI function (B605/B615) MFP Std.

#### Console Assembly UI AIO

The console assembly UI AIO displays the state of the printer and fax using the LCD and LED, and operates the printer and fax by using the buttons.

#### Speaker Main

Generates the operational sound for the console assembly UI AIO. The speaker is attached to the main device.



## UI (MFP\_Tall)

Figure 13 shows the UI function for the MFP\_Tall configuration.

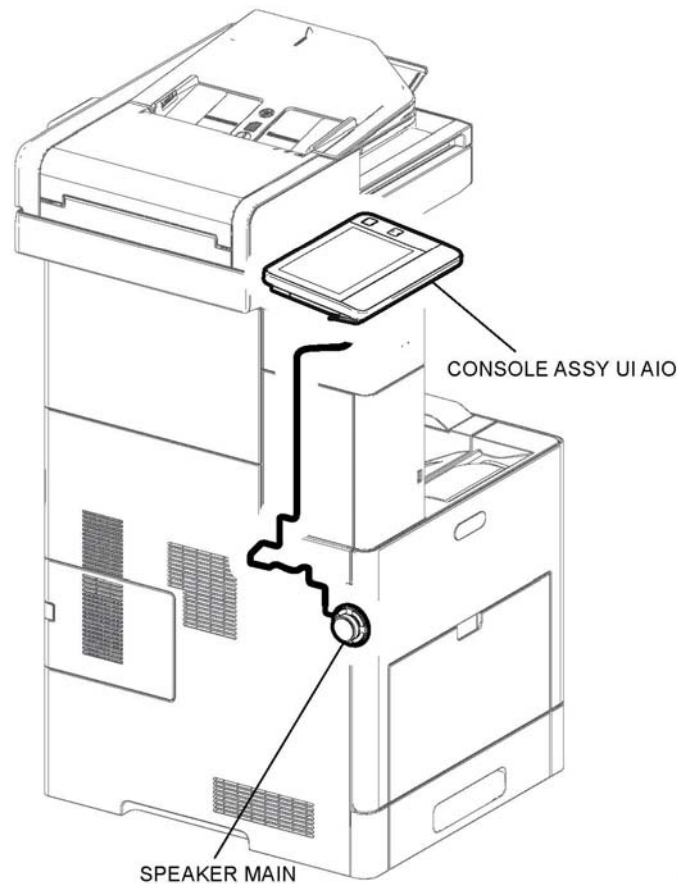


Figure 13 UI function (B615) MFP\_Tall

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### Console Assembly

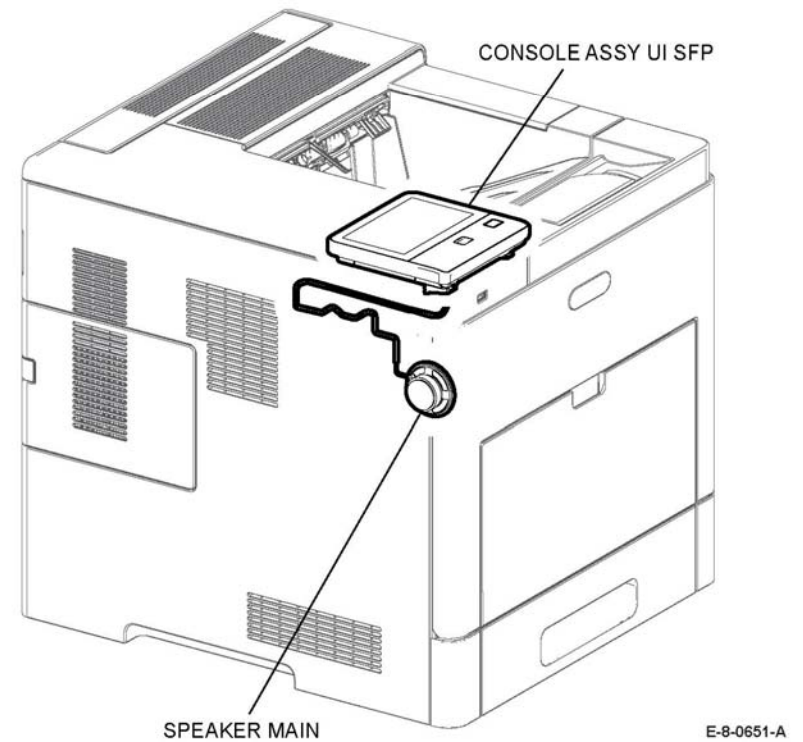
The console assembly UI AIO displays the state of the printer and FAX using the LCD and LED, and operates the printer and fax by using the buttons.

### Speaker Main

Generates the operational sound for the console assembly UI AIO. The speaker is attached to the main device

## UI (SFP)

Figure 14 shows the UI function for the SFP.



E-8-0651-A

Figure 14 UI function (B600/B610) SFP

### Console assembly

The console assembly UI SFP displays the state of the printer using the LCD and LED, and operates the printer using the buttons.

### Speaker Main

Generates the operational sound for the console assembly UI AIO. The speaker is attached to the main device.

## Fax

Figure 15 shows the fax function. (MFP standard shown)

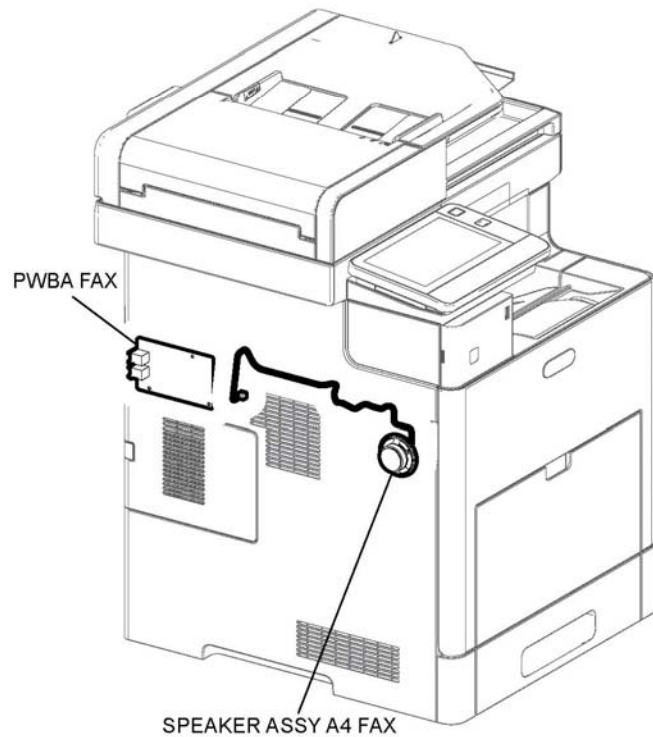


Figure 15 Fax function (MFP Std.)

### Fax PWBA (PL 3.1 Item 1)

The PWBA for controlling the fax signal.

### Speaker Assembly A4 Fax (PL 18.1 Item 14)

Indicates that the incoming call is a fax. The speaker assembly A4 is attached to the main device.

## Scanner

Figure 16 shows the scanner function. (MFP only)

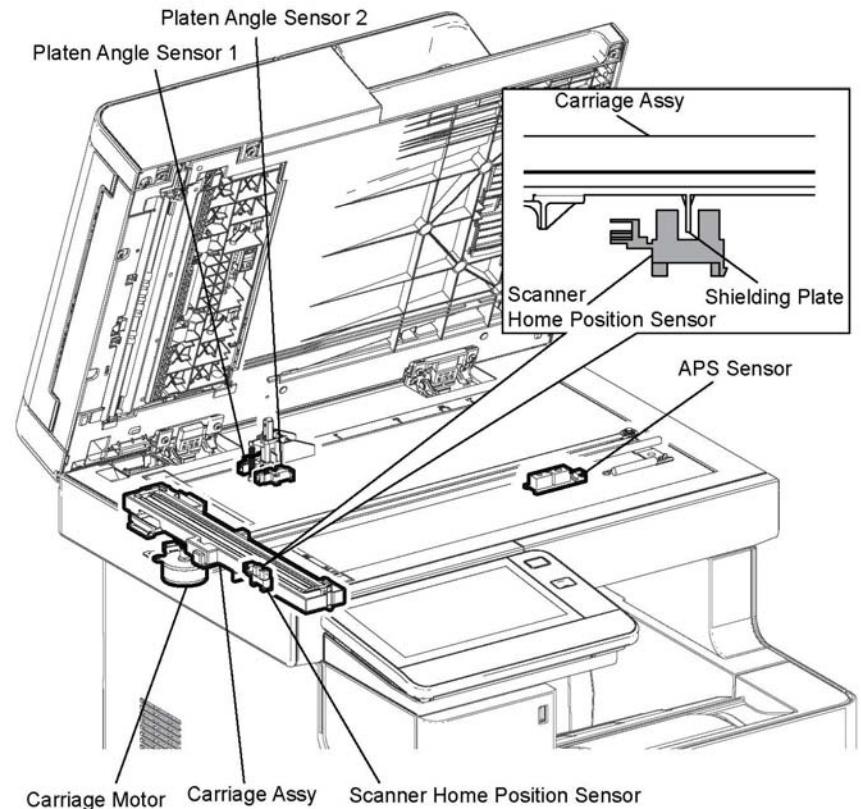


Figure 16 Scanner IIT function (MFP)

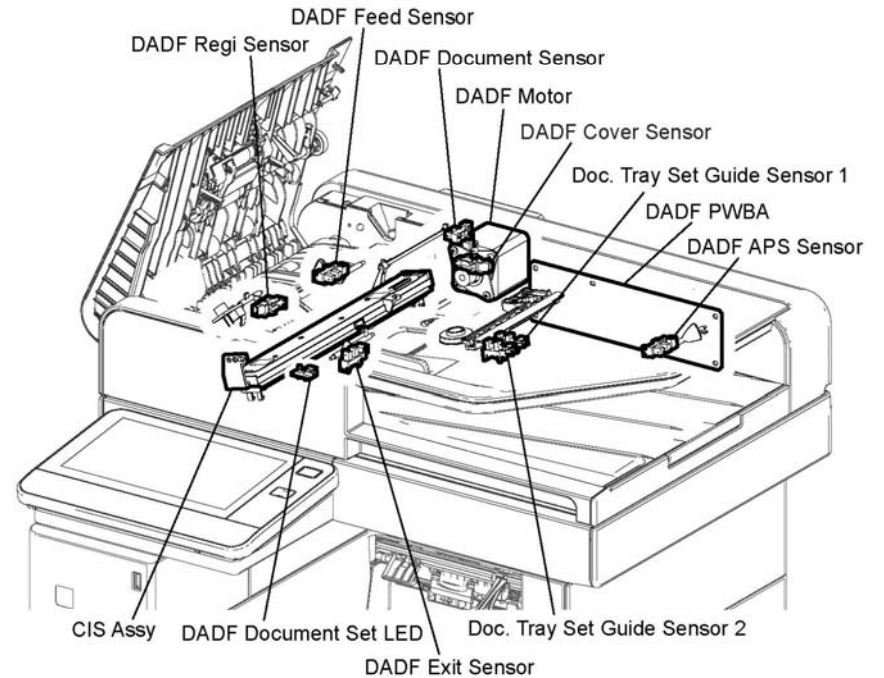
### IIT Assembly (PL 50.1 Item 2)

- Carriage motor (scanner motor)  
The stepper motor that drives the carriage assembly.
- Scanner home position sensor (CVT position)

As part of the rear side of the carriage assembly frame, the sensor functions as an actuator and blocks the light on the scanner home position sensor, thus detecting the registration position. This sensor detects the home position of the carriage assembly. When the carriage assembly is in the home position, the light is shielded, and when not in the home position, the light is unshielded.

- Platen angle sensor  
Detects whether the platen is open or closed.
- APS sensor  
Detects the document size on the platen glass.

#### Scanner DADF Assembly Function (Figure 17 / PL 50.1 Item 1)



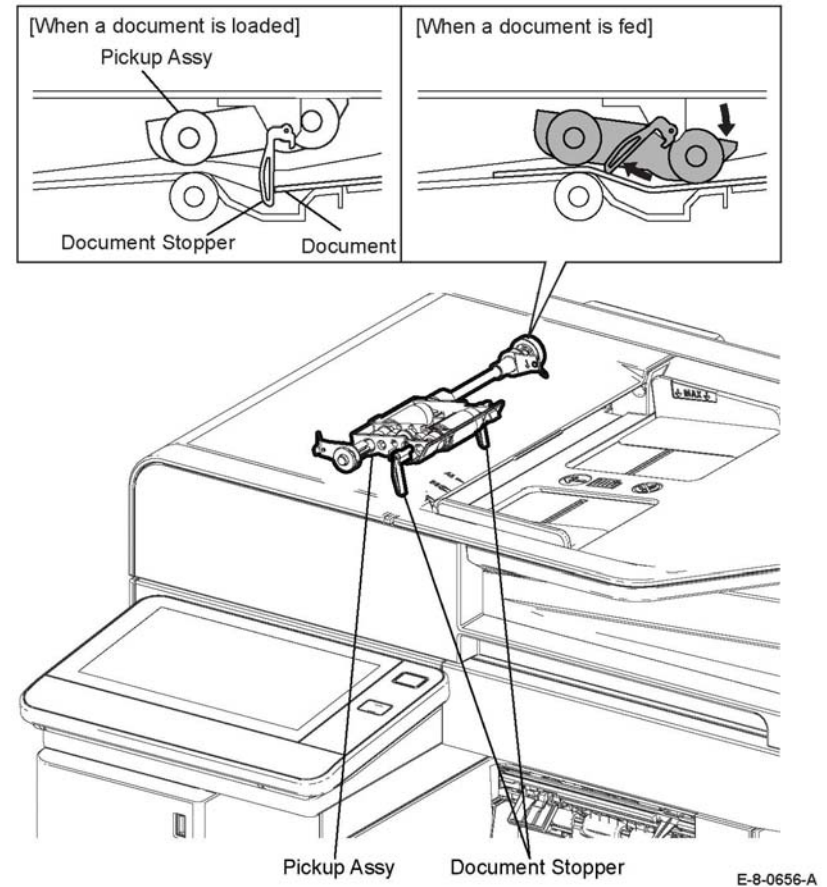
E-8-0655-A

**Figure 17 Scanner DADF function**

- DADF document sensor  
A sensor that detects when a document is present or absent on the DADF feeder tray.  
(Document present: light on sensor) (Document absent: no light on sensor)
- DADF cover sensor  
A sensor that detects whether or not the DADF top cover is open.  
(Open: entrance of light) (Closed: No entrance of light)
- DADF feed sensor  
Located near the side of the DADF feed roll and detects the paper passing.  
(Paper present: entrance of light) (Paper absent: No entrance of light)
- DADF registration sensor  
Located near side of the DADF regi roll and detects the paper passing.  
(Paper present: entrance of light) (Paper absent: No entrance of light)
- DADF Motor  
The DADF motor rotates the DADF nudger roll, DADF feed roll, DADF takeaway roll, DADF regi roll, DADF transport roll, and DADF exit roll.

- CIS array assembly  
Scans the image on the back side of the document in the duplex mode.
- DADF Board  
Controls the entire DADF system.
- DADF exit sensor  
Detects a sheet passing through the paper path around the exit.
- DADF Document set LED  
LED is on when a document is placed on the tray. LED is off when the document is removed
- Document tray set guide sensor 1/2  
Detects the paper width set on the DADF feeder, and turns on and off depending on position of the side guide.
- DADF APS sensor  
Detects the paper length set on the DADF feeder, and turns on and off depending on the position of the side guide.

### Document Stopper Function **Figure 18**



**Figure 18 Document stopper function**

- When a document is loaded in the DADF, the document stopper is locked to prevent the document from being moved forward.
- When the DADF starts feeding, the front portion of the pickup assembly is lowered. This unlocks the document stopper that blocks the document. When the document stopper is pressed by the lead edge of the document in the feed direction, the document is fed. When the paper feed is completed, the pickup assembly returns to its original position.

## DADF Pinch Roll Figure 19

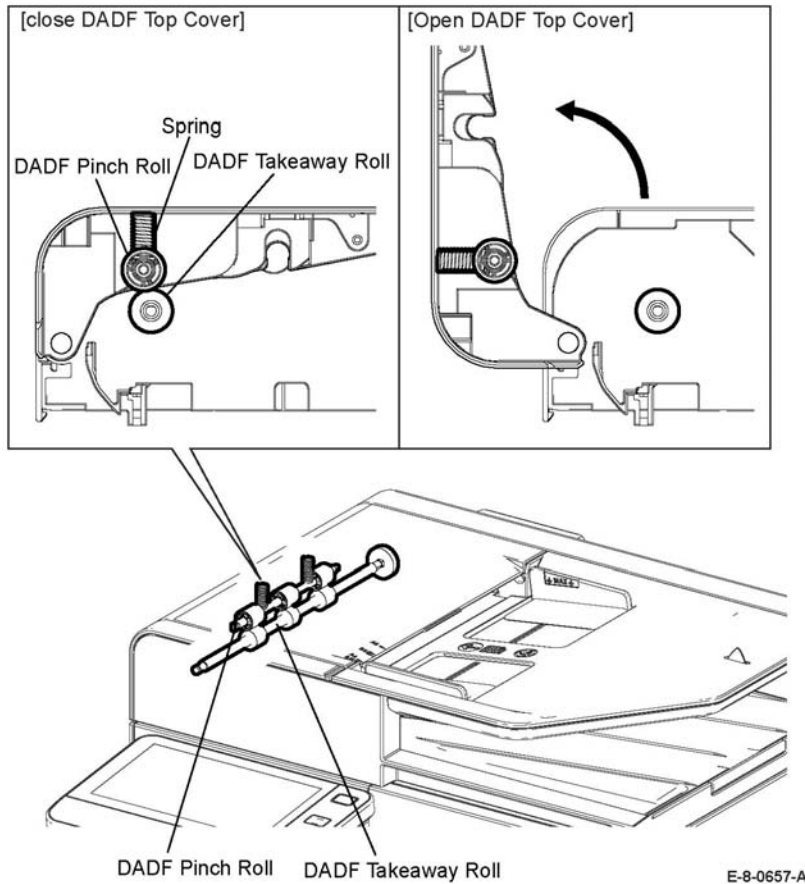


Figure 19 DADF Pinch roll function

- The DADF pinch roll is normally pressed against the direction of the DADF takeaway roll by the spring pressure. Documents are fed between the DADF pinch roll and the DADF takeaway roll to the CVT window by the rotation of the DADF takeaway roll. A document that jams between the DADF pinch roll and the DADF takeaway roll, is hard to retrieve due to the high spring pressure of DADF pinch roll. To retrieve jammed documents, open the DADF top cover to release the spring pressure. This creates clearance between the DADF pinch roll and the DADF takeaway roll.

## Control

This section describes the components that control the printer processes, registration, fusing, and scanning.

### Process Control

#### Process Control

The parameters related to image formation must be corrected to stabilize printing. This control involves the entire printing process including the parameter correction control. The process control is performed by the following two methods after every 30 cumulative prints upon termination of a print run or during a continuous run:

- Potential control
- Toner density control

To supplement these two controls, the following controls are provided:

- High area coverage mode
- Admix mode

#### Potential Control

To stabilize the print image density, the drum charging voltage, the developing DC voltage, and the LED light amount of the LPH are adjusted according to the ever-changing developing capability of the developer. The adjusted drum charging voltage, the developing DC voltage, and the LED light amount of the LPH are fed back to keep the print image density constant.

The potential control follows this process:

- Sensor humidity and temperature (Hum. and Tem. sensor) detects the temperature and humidity.
- The patches for the potential control are generated and transferred onto the belt.
- The ADC sensor (density sensor) detects the density of the patches on the belt.
- The drum charging voltage, the developing DC voltage, and the LED light amount of the LPH, are adjusted according to the detected patch density.

#### Toner Density control

The toner density must be kept constant to stabilize the print image quality. The control system for this purpose is called toner density control and includes the following:

- ICDC (Image Count Dispense Control)

The quantity of the toner to be consumed in the developing process is calculated in terms of toner-dispensing time based on the quantity of the video signals that have been input to the LPH. The amount of the toner to be fed to the developer section is controlled by turning on the Toner Motor for the toner-dispensing time thus calculated.

- ADC (Auto Density Control)

The toner density control is generated under the specified potential condition, and then transferred onto the belt. The ADC sensor measures the density and compares it with the reference value. If the toner density is lower than the reference value, the toner dispense quantity is increased at the next printing. If the toner density is higher than the reference value, the toner dispense quantity is reduced at the next printing. The toner dispense quantity is calculated in terms of the toner-dispensing time.

### High Area Coverage Mode

A continuous printing of data involving high area coverage exceeding the extra toner dispense capability causes the toner density in the developer to be lowered. The high area coverage mode postpones the next page feed and dispenses the toner during this time if the toner dispense time has reached the specified value during a continuous printing.

### Admix Mode

This mode executes extra toner dispensation to prevent the toner density from being lowered whenever the value of the toner density control patch measured by the ADC sensor falls far below the reference value. If the toner density level cannot be recovered even after this operation, the control determines that the toner has run out.

### ADC Sensor Adjustment

The ADC sensor is a reflection type sensor that irradiates the light from its LED onto the target, detects the reflected light at its photoreceptor, and outputs electric signals responsive to the amount of the detected light. To ensure an accurate patch density measurement, clean the ADC sensor surfaces to remove soil due to toner, or other contaminants. The light quantity adjustment is made so that the reflected light quantity satisfies the predetermined value when the patch for potential control and toner density control are created.

### Registration Control

The registration control calculates how much the registration is shifted, and adjusts the LPH write timing. The lateral registration control adjusts in lateral directions.

The registration control is executed during a process control based on the change in the internal temperature and the print count.

The registration control follows this process:

1. With no toner except for K toner patch on the belt, the output values of the R-RAD Low sensor and the R-RAD sensor are measured to determine the threshold value and the light intensity value.
2. The patch for registration control is generated on the belt.
3. The density of the patch is measured by the R-RAD Low sensor and the R-RAD sensor.
4. The shift correction amount is calculated from the threshold value determined in step 1 and the patch density measured in step 3.
5. The LPH write timing is changed according to the shift correction amount.

### Fuser Assembly Control

#### Fuser Assembly Temperature Control

To control the fuser assembly temperature, the target temperature is set, and then the heater lamp is turned on/off so that the surface temperature of the heat roll satisfies the target value.

The surface temperature of the Heat roll is detected by the Temp. sensor (STS = Soft Touch sensor) in the middle of the Heat roll and the Temp. sensors (STS) at the end sections. When the temperature detected is higher than the target value, the Heater Lamp is turned OFF. When the temperature is below the target value, the Heater Lamp is turned ON.

However, the STS may detect a temperature lower than the actual value when an error occurs during the temperature detection. To prevent, in such a case, the Heater Lamp from activating for an excessive duration causing the Fuser assembly to melt or burn, the Heater Lamp is turned off unless Warm-up is completed within the specified time.

The target temperature varies depending on the printer status such as warm-up, printing, or process control, and is calibrated according to the interior temperature detected by the sensor Hum Temp, the temperature difference between the middle and the ends of the Heat roll, the printing mode, and the input power supply voltage.

### Cooling Down

As the printing continues, the temperature of the Heat roll becomes nonuniform between the area that contacts the sheet and the area that does not. In such a case, the paper feeding is suspended for a certain duration to compensate for the temperature non uniformity of the heat roll. This is called cooling down. When the temperature of the Heat roll end is high, cooling down is performed to lower the temperature to the target value.

### Document Scanning Steps

A CCD Image sensor is used to read image data from the document. To ensure stabilized image reading, the CCD Image sensor output is adjusted. Adjustment includes Automatic Gain Control (AGC) and Automatic Offset Control (AOC).

Reference data for adjustment is collected and used to perform compensation on the read image data. Reference data is obtained by reading image data from a white reference plate via the CCD image sensor. Compensation includes shading compensation, white variation compensation, and black variation compensation. These adjustment and compensation steps are described as follows:

- AGC (Auto Gain Control): White level variation adjustment  
During AGC, the scanner assembly is moved to the position of the white reference plate, and the exposure lamp is illuminated. The light reflected from the white reference plate is read by the CMOS Image sensor as the white reference value, which is used to adjust CMOS Image sensor output.
- AOC (Auto Offset Control)  
AOC is performed by turning off the exposure lamp after AGC. This state is read by the CMOS Image sensor as the black reference value, which is used to adjust CMOS Image sensor output. (The order of AGC and AOC adjustment depends on the model.)
- Shading compensation  
Shading compensation compensates for pixel-by-pixel sensitivity variations and the non uniformity of lamp light in the fast scanning direction. The AGC and AOC adjustment values are used to compensate for the image data read by the CCD Image sensor.

## Data Flow

### Data Flow (IOT)

Figure 1 shows the flow of the print data (electric signal) from the printer controller as it becomes a printed image.

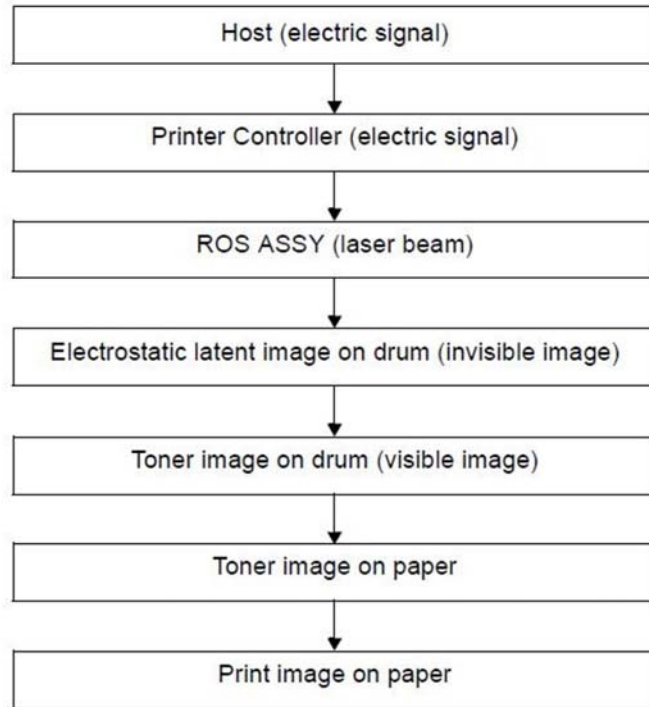


Figure 1 Data Flow (IOT)

### Data Flow (Scanner)

The image data from the document set on the IIT or DADF goes through the following components before it is printed at the engine. Refer to Figure 2.

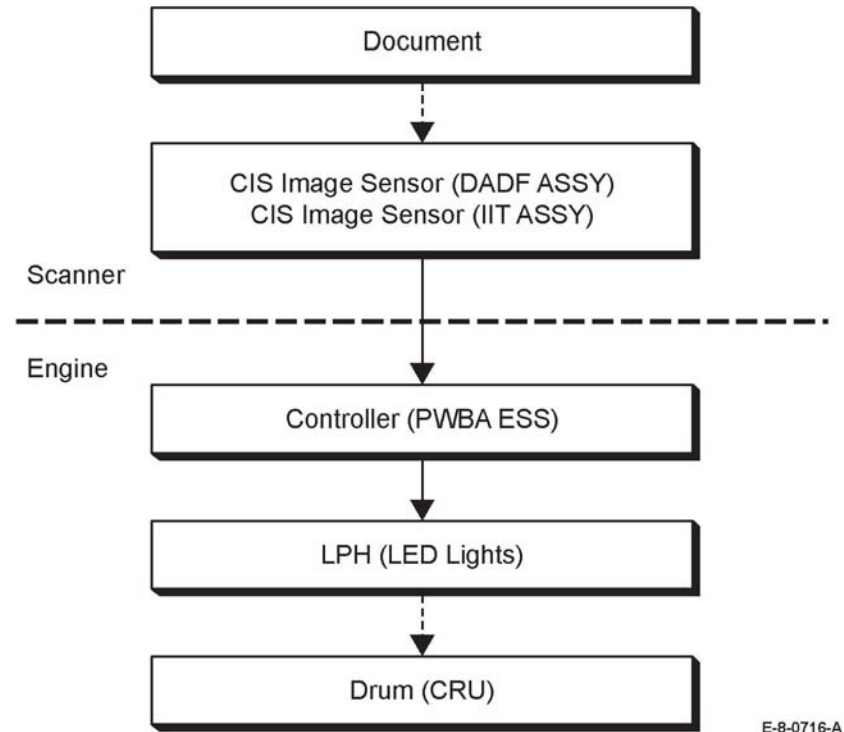


Figure 2 Data Flow (Scanner)

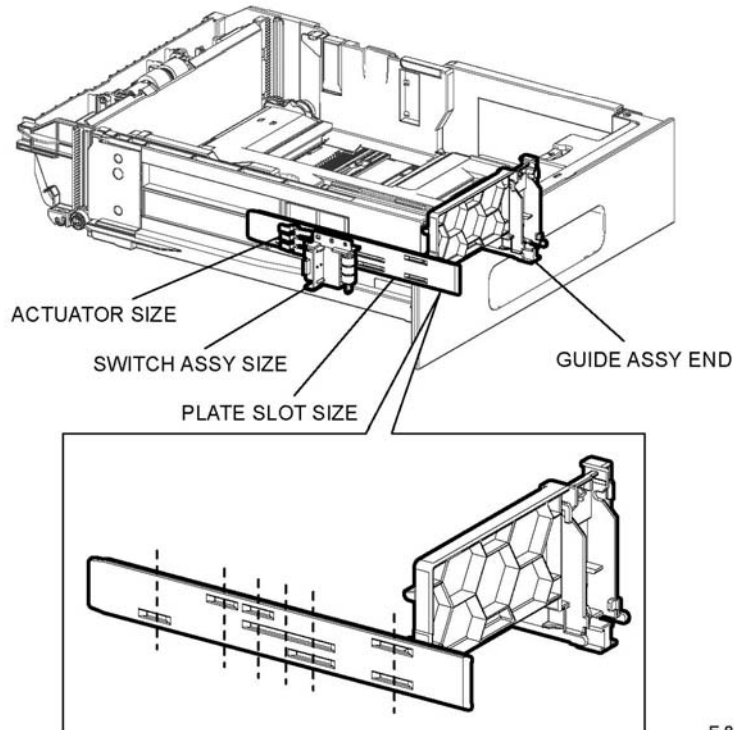
E-8-0716-A

## Control

This section describes the components that control the printer processes, registration, fusing, and scanning.

### Paper Size Detect (Optional Feeder only)

Load paper in the paper cassette, and adjust the left guide assembly, right guide assembly, and end guide assembly to the paper size. Linked with the end guide assembly, the position of the size slot plate is changed, and the three size actuators on the side of the cassette depress the size switch assembly. The detected paper size corresponds to the combination of actuators depressing the size switch. Refer to [Figure 1](#).



E-8-0605-A

Figure 1 Option feeder size switch

## Process Control

### Process Control

The parameters related to image formation must be corrected to stabilize printing. This control involves the entire printing process including the parameter correction control. The process control is performed by the following two methods after every 30 cumulative prints upon termination of a print run or during a continuous run:

- Potential control
- Toner density control

To supplement these two controls, the following controls are provided:

- High area coverage mode
- Admix mode

### Potential Control

To stabilize the print image density, the drum charging voltage, the developing DC voltage, and the LED light amount of the LPH are adjusted according to the ever-changing developing capability of the developer. The adjusted drum charging voltage, the developing DC voltage, and the LED light amount of the LPH are fed back to keep the print image density constant.

The potential control follows this process:

1. Sensor humidity and temperature (Hum. and Tem. sensor) detects the temperature and humidity.
2. The patches for the potential control are generated and transferred onto the belt.
3. The ADC sensor (density sensor) detects the density of the patches on the belt.
4. The drum charging voltage, the developing DC voltage, and the LED light amount of the LPH, are adjusted according to the detected patch density.

### Toner Density control

The toner density must be kept constant to stabilize the print image quality. The control system for this purpose is called toner density control and includes the following:

- ICDC (Image Count Dispense Control)

The quantity of the toner to be consumed in the developing process is calculated in terms of toner-dispensing time based on the quantity of the video signals that have been input to the LPH. The amount of the toner to be fed to the developer section is controlled by turning on the Toner Motor for the toner-dispensing time thus calculated.

- ADC (Auto Density Control)

The toner density control is generated under the specified potential condition, and then transferred onto the belt. The ADC sensor measures the density and compares it with the reference value. If the toner density is lower than the reference value, the toner dispense quantity is increased at the next printing. If the toner density is higher than the reference value, the toner dispense quantity is reduced at the next printing. The toner dispense quantity is calculated in terms of the toner-dispensing time.

### High Area Coverage Mode

A continuous printing of data involving high area coverage exceeding the extra toner dispense capability causes the toner density in the developer to be lowered. The high area coverage mode postpones the next page feed and dispenses the toner during this time if the toner dispense time has reached the specified value during a continuous printing.



## Admix Mode

This mode executes extra toner dispensation to prevent the toner density from being lowered whenever the value of the toner density control patch measured by the ADC sensor falls far below the reference value. If the toner density level cannot be recovered even after this operation, the control determines that the toner has run out.

## ADC Sensor Adjustment

The ADC sensor is a reflection type sensor that irradiates the light from its LED onto the target, detects the reflected light at its photoreceptor, and outputs electric signals responsive to the amount of the detected light. To ensure an accurate patch density measurement, clean the ADC sensor surfaces to remove soil due to toner, or other contaminants. The light quantity adjustment is made so that the reflected light quantity satisfies the predetermined value when the patch for potential control and toner density control are created.

## Registration Control

The registration control calculates how much the registration is shifted, and adjusts the LPH write timing.

The registration control is executed during a process control based on the change in the internal temperature and the print count.

The registration control follows this process:

1. With a toner patch on the belt, the output values of the R-RAD Low sensor and the R-RAD sensor are measured to determine the threshold value and the light intensity value.
2. The patch for registration control is generated on the belt.
3. The density of the patch is measured by the R-RAD Low sensor and the R-RAD sensor.
4. The shift correction amount is calculated from the threshold value determined in step 1 and the patch density measured in step 4.
5. The LPH write timing is changed according to the shift correction amount.

## Fuser Assembly Control

### Fuser Assembly Temperature Control

To control the fuser assembly temperature, the target temperature is set, and then the heater lamp is turned on/off so that the surface temperature of the heat roll satisfies the target value.

The surface temperature of the heat roll is detected by the temperature sensor (NC sensor = non-contact sensor) in the middle of the heat roll and the temperature sensor (STS) at the end section. When the temperature detected is higher than the target value, the heater lamp is turned OFF. When the temperature is below the target value, the heater lamp is turned ON.

However, the NC sensor and STS may detect a temperature lower than the actual value when an error occurs during the temperature detection. To prevent, in such a case, the heater lamp from activating for an excessive duration causing the fuser assembly to melt or burn, the heater lamp is turned off unless warm-up is completed within the specified time.

The target temperature varies depending on the printer status such as warm-up, printing, or process control, and is calibrated according to the interior temperature detected by the sensor hum temp, the temperature difference between the middle and the ends of the heat roll, the printing mode, and the input power supply voltage.

## Cooling Down

As the printing continues, the temperature of the heat roll becomes non-uniform between the area that contacts the sheet and the area that does not. In such a case, the paper feeding is suspended for a certain duration to compensate for the temperature non uniformity of the heat roll. This is called cooling down. When the temperature of the heat roll end is high, cooling down is performed to lower the temperature to the target value.

## Document Scanning Steps

A CIS Image sensor is used to read image data from the document. To ensure stabilized image reading, the CIS Image sensor output is adjusted. Adjustment includes Automatic Gain Control (AGC) and Automatic Offset Control (AOC).

Reference data for adjustment is collected and used to perform compensation on the read image data. Reference data is obtained by reading image data from a white reference plate via the CCD image sensor. Compensation includes shading compensation, white variation compensation, and black variation compensation. These adjustment and compensation steps are described as follows:

- **AGC (Auto Gain Control): White level variation adjustment**  
During AGC, the scanner assembly is moved to the position of the white reference plate, and the exposure lamp is illuminated. The light reflected from the white reference plate is read by the CMOS Image sensor as the white reference value, which is used to adjust CMOS Image sensor output.
- **AOC (Auto Offset Control)**  
AOC is performed by turning off the exposure lamp after AGC. This state is read by the CMOS Image sensor as the black reference value, which is used to adjust CMOS Image sensor output. (The order of AGC and AOC adjustment depends on the model.)
- **Shading compensation**  
Shading compensation compensates for pixel-by-pixel sensitivity variations and the non uniformity of lamp light in the fast scanning direction. The AGC and AOC adjustment values are used to compensate for the image data read by the CCD Image sensor.

## Drive Transmission Route

This section describes the drive transmission between the motors and gears.

### Paper Feed (MSI to registration)

Figure 1 shows the drive transmission from the MSI section to the registration section, where the rolls and gears are driven by the main motor.

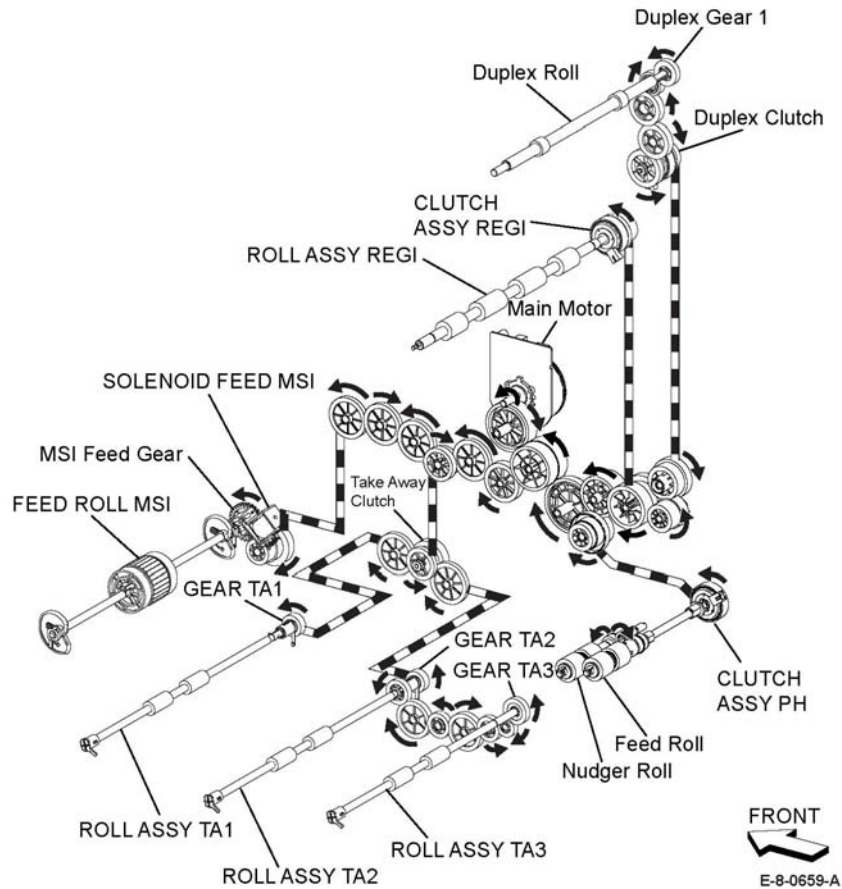


Figure 1 Paper feed (MSI to registration)

### Paper Feed (Fuser to Exit)

Figure 2 shows the drive transmission from the fuser section to the exit section where the rolls and gears are driven by the main motor.

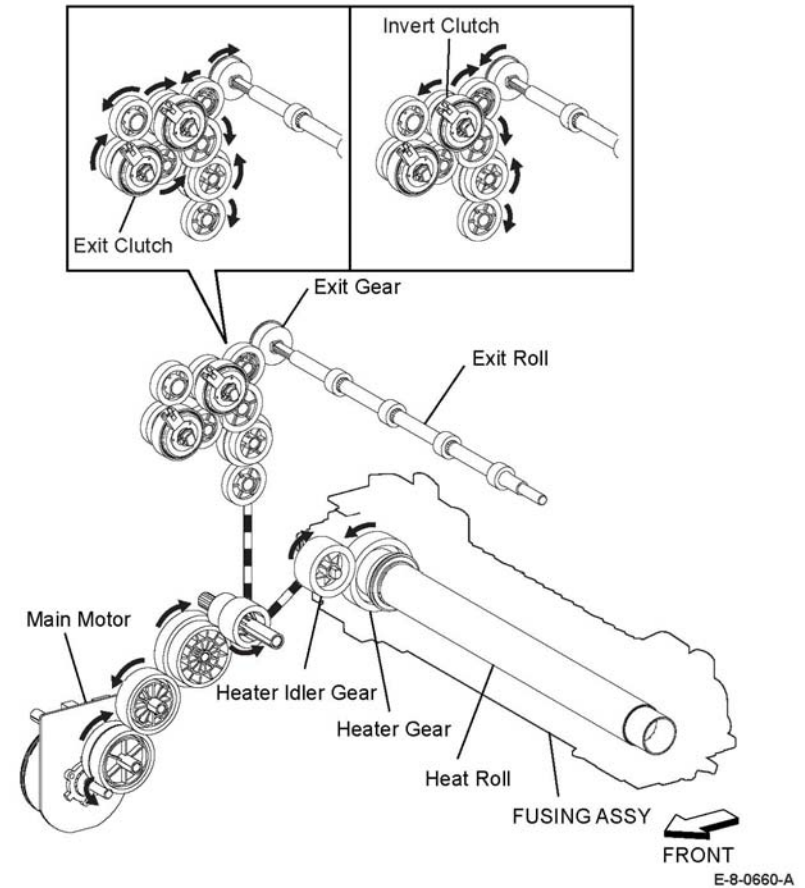


Figure 2 Paper feed (fuser to exit)

## Drum

Figure 3 shows the drive transmission of the drum, where the rolls and gears are driven by the main motor.

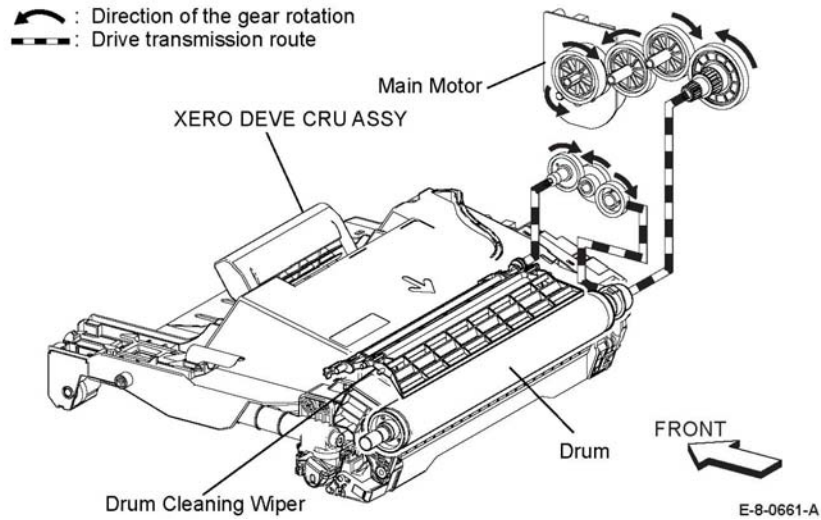


Figure 3 Drum

## Development Feed

Figure 4 shows the drive transmission of the development feed components, where the rolls and gears are driven by the main motor.

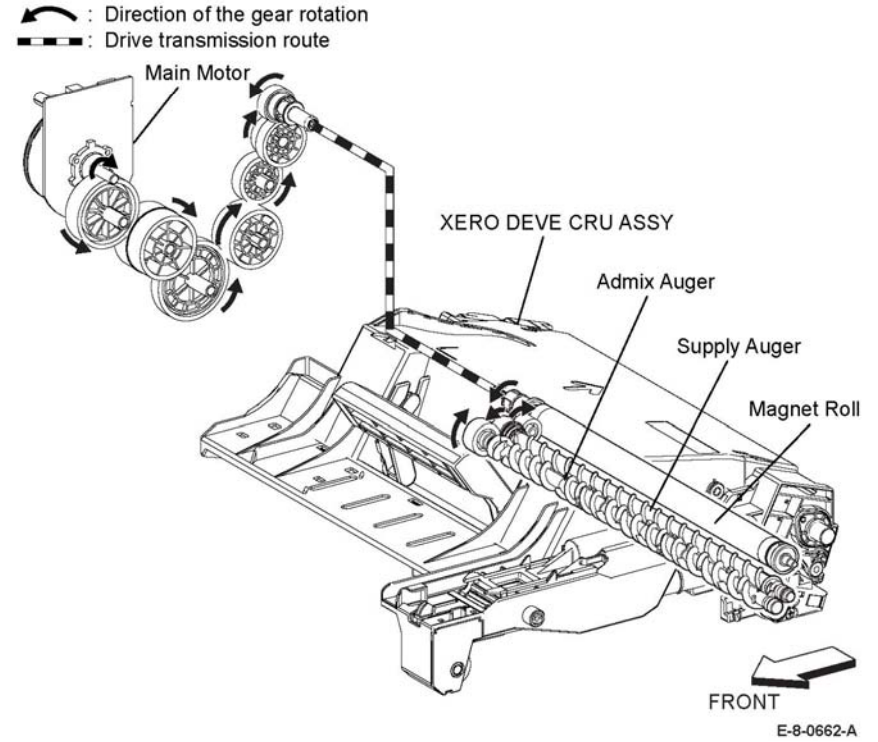


Figure 4 Development feed

## Toner Dispensing and Nip Retracting

Figure 5 describes the drive transmission of the toner dispensing and nip retracting where the rolls and gears are driven by the motor assembly disp./env.

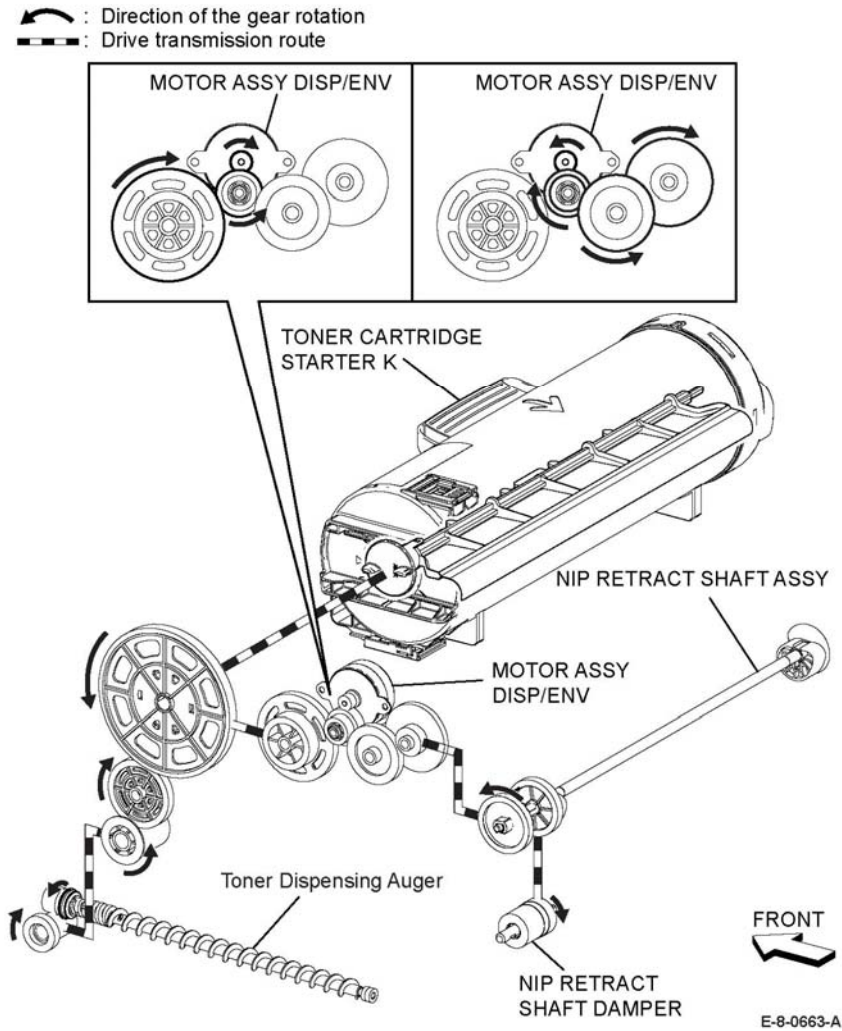


Figure 5 Toner dispensing and nip retracting

## DADF Motor

Figure 6 shows the drive transmission route from the DADF motor to each roller.

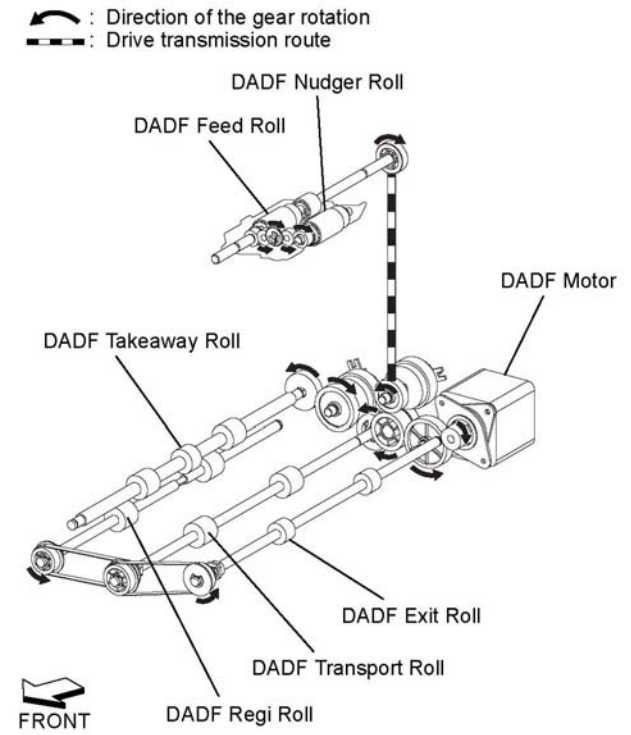


Figure 6 DADF motor

E-8-0606-A

## Options for VersaLink® B600/610 and B605/615

VersaLink® B600/610 and B605/615 options add media capacity, and functionality.

This section describes in detail the media path, sensors, major assemblies, and operational characteristics for each of these options.

- 550-Sheet feeder
- Wireless adaptor
- 2000 sheet HCF
- Mailbox
- Finisher

The options are documented in their respective installation instructions. Refer to [Figure 1](#) for the option feeder functions.

### Option Feeder and Cassette Functionality

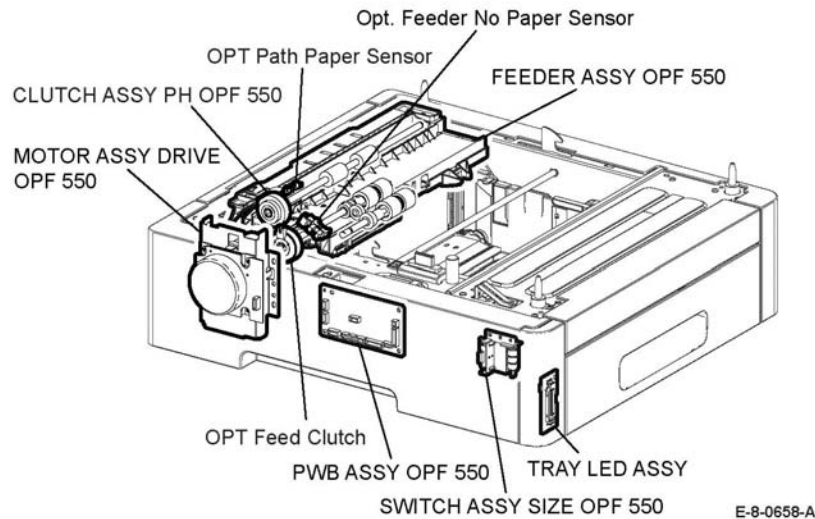


Figure 1 Option feeder functions

#### PWB Assembly OPF 550 (PL 10.1 Item 11)

Controls each component in the optional tray.

#### Size Switch Assembly OPF 550 (PL 10.1 Item 12)

The option feeder size switch shown in [Figure 2](#), detects paper size, and presence or absence of paper in the 550 paper cassette.

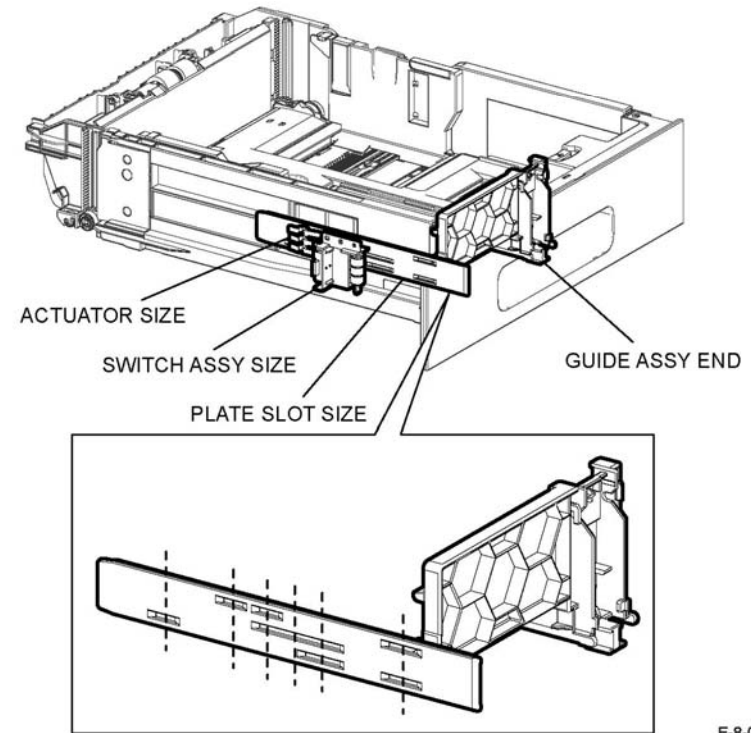


Figure 2 Option feeder size switch

#### Motor Assembly Drive OPF 550 (PL 10.1 Item 12)

The DC motor that drives each roll of the paper feed section in the optional tray.

#### Feeder Assembly OPF 550 (PL 10.1 Item 1)

The OPT feeder assembly mainly consists of the following components:

- Clutch assembly PH OPF  
Transfers the drive from the motor assembly drive OPF 550 to the roll assembly TA OPF 550.
- OPF feeder no paper sensor  
Based on actuator position, the sensor detects the presence or absence of paper in the paper cassette.
- OPF Feed Clutch  
Transfers the drive from the motor assembly OPF 550 to the OPF feed roll.
- OPT Paper Path sensor  
Detects that a lead edge of a sheet reached the registration section.

#### Tray LED Assembly (PL 10.1 Item 22)

Lights the LED when the paper is set on the paper tray.



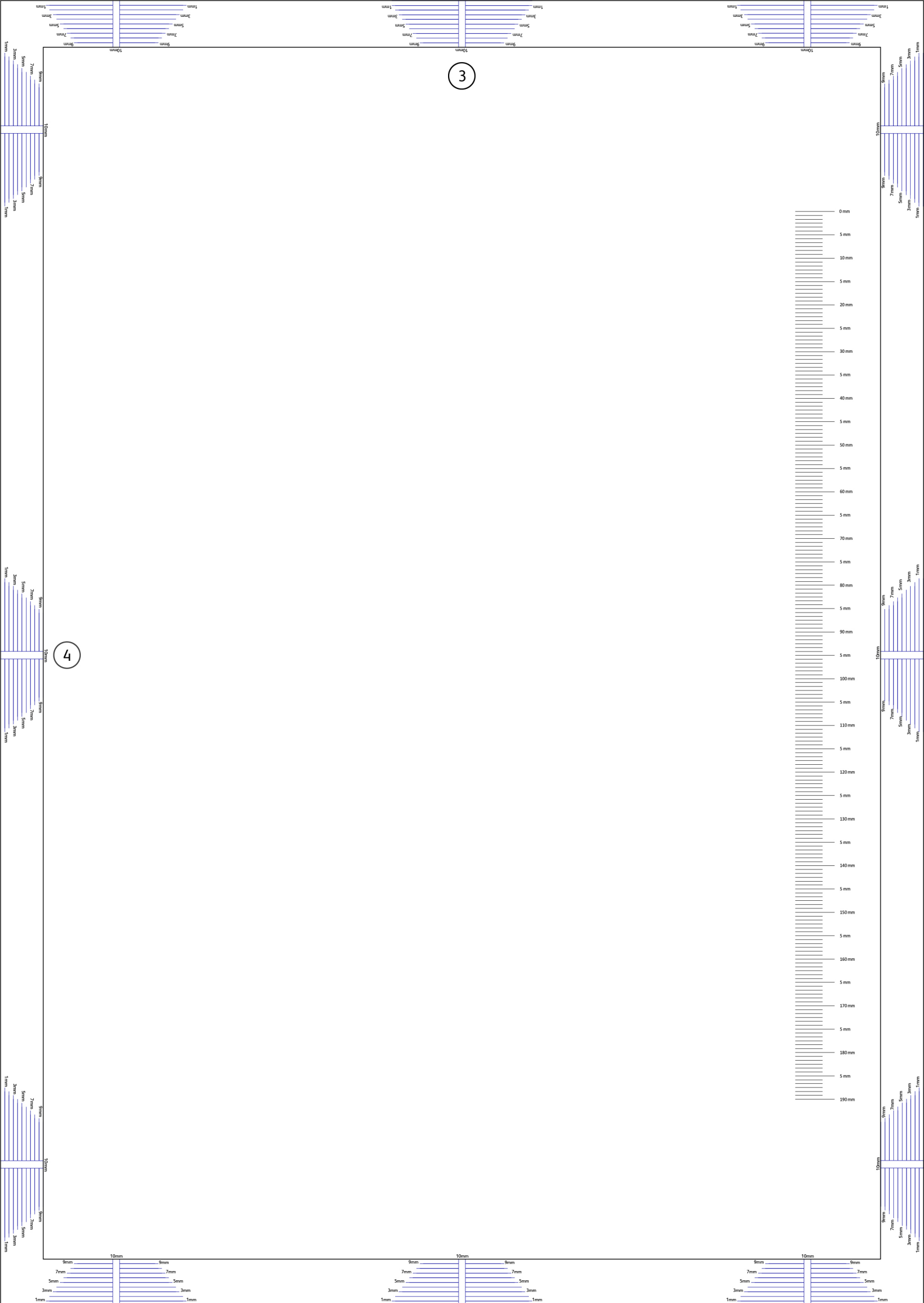


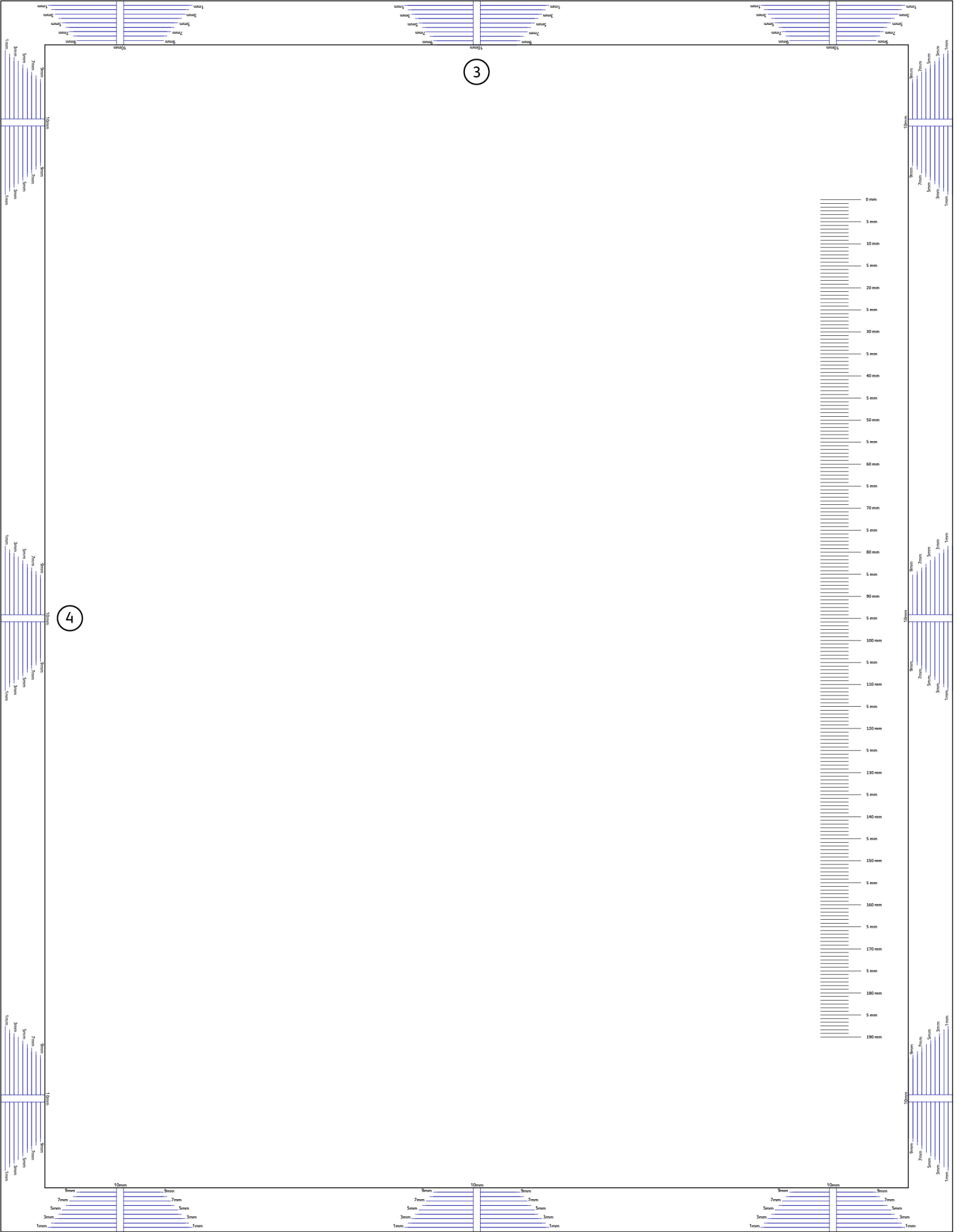


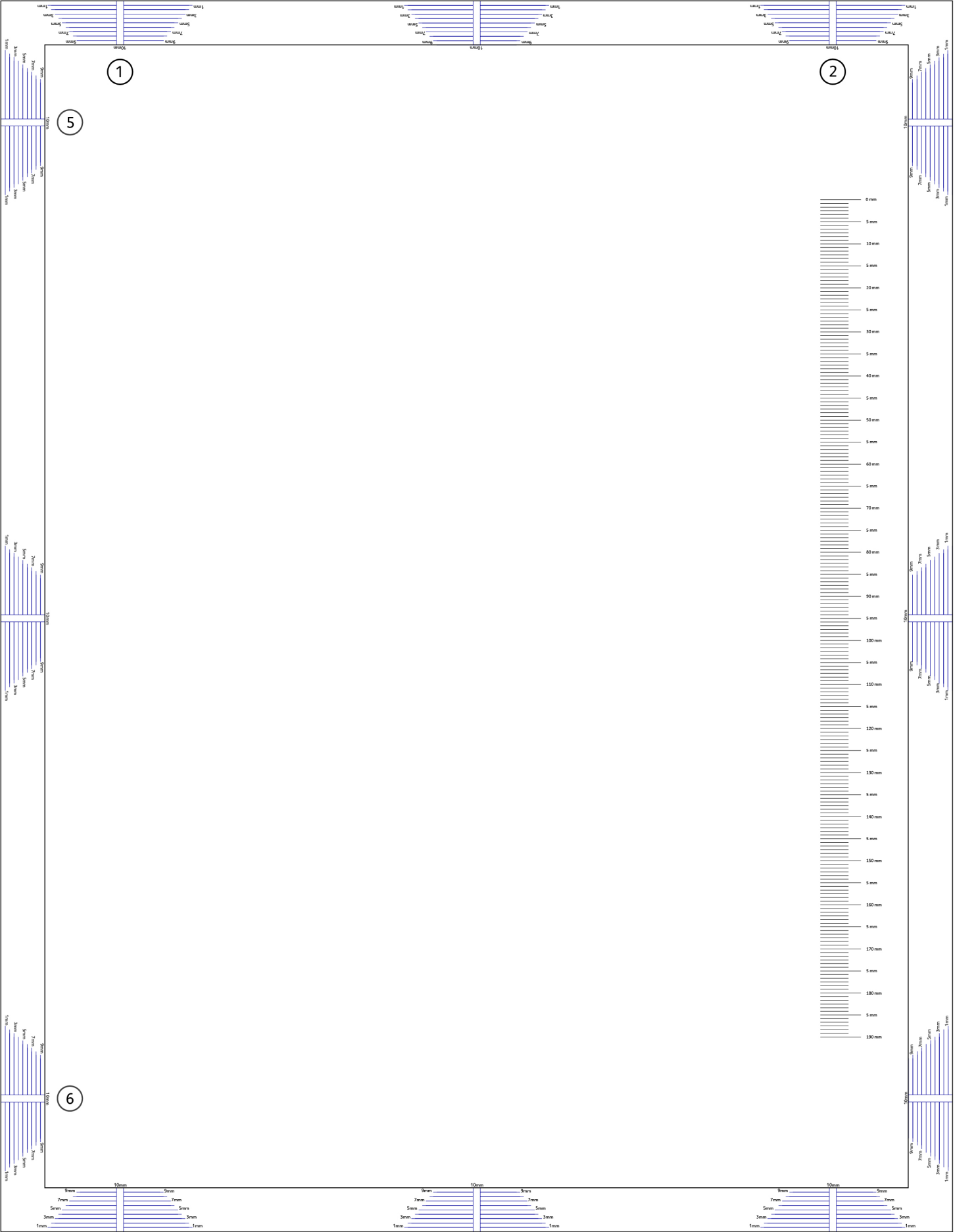


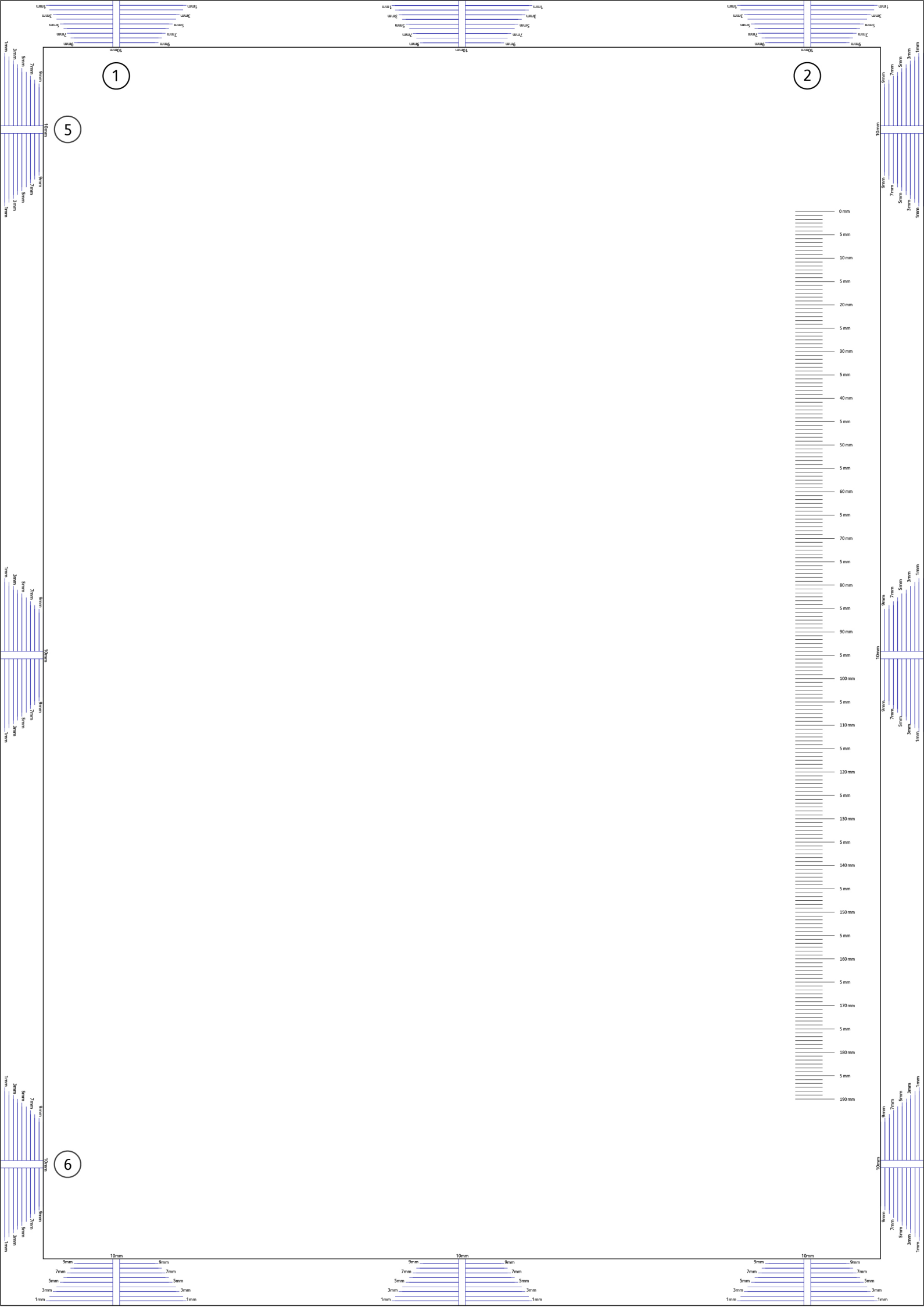
## Reference Library

- Registration Test Pattern A4
- Registration Test Pattern Letter
- Skew Test Pattern Letter
- Skew Test Pattern A4
- EHS 700 - Health & Safety Incident Report Form for Incidents Involving a Xerox Product (1/2)
- EHS 700 - Health & Safety Incident Report Form for Incidents Involving a Xerox Product (2/2)
- PUBLICATION COMMENT SHEET









**CONFIDENTIAL**  
(when filled in)



## EHS 700 - Health & Safety Incident Report Form for Incidents Involving a Xerox Product

For incidents in Canada: PIPEDA consent given <input type="checkbox"/> YES <input type="checkbox"/> NO	<b>EH&amp;S Office Use ONLY</b> EH&S Incident Reference Number:
PIPEDA is the Canadian "Personal Information Protection and Electronic Documents Act."	
For incidents in the EU: Safe Harbour Complaint <input type="checkbox"/> YES <input type="checkbox"/> NO	

**\*Date Of Incident** (mm / dd / yyyy):

### Product Description

**\*Model No. or Product Name:**

Product Serial Number:

Serial Number(s) of Accessory (ies):

Installation Date:

Total Copy Meter:

Date of last service maintenance:

List damaged and affected part(s) of the machine by description and part number:

**Description**

**Part Number**

**\*Location of product and affected part(s):**

### Customer Identification

**\*Customer Name:**

**\*Name of Customer Contact Person:**

**\*Address:**

E-mail:

**\*Telephone:**

Fax:

### Customer Service Engineer Identification

**\*Name** (required for Xerox serviced equipment):

Employee:

E-mail:

Location:

**\*Phone** (required for Xerox serviced equipment):

### Individual Providing Notification

**\*Name:**

**\*Title:**

**\*Telephone Number:**

**\*Organization:**

E-Mail:

**Mailing Address:**

**\*Date Report Submitted:**

\* Required information is preceded by asterisk, **title shown in red**, with a tan wash background



**Details of Incident**

**\*Description Of Incident: (Check all that apply)**

Smoke

**Describe quantity and duration of smoke:**

Fire with open flames seen

Electric shock to operator or service representative

Physical injury/illness to operator or service representative

**Describe:**

Other, describe:

**MANDATORY DESCRIPTION** (above): Provide a detailed description of all valid factors that may have contributed to the incident. Hardware involved in the incident should be preserved and retained for further investigation should investigation be deemed necessary by EH&S.

LIST INCIDENT DESCRIPTIONS AND SUPPORT DIAGRAMS/DATA INCLUDED OR ATTACHED:

**\*Any damage to customer property?** No  Yes  Describe:

**\*Did external emergency response provider(s) such as a fire department, ambulance, etc. respond?**

No  Yes  Identify: (i.e., source, names of individuals)

**Apparent cause of incident (identify part that is suspected to be responsible for the incident)**

**\*Preliminary actions taken to mitigate incident:**

**Instructions:** E-mail or fax both pages of this completed form to EH&S:

**e-mail:** usa.product.incident@xerox.com or fax 585-422-8217 [ Intelnet 8\*222-8217 ]

\* Required information is preceded by asterisk, **title shown in red** with a tan wash background



## PUBLICATION COMMENT SHEET

Please copy this master sheet and use it to help us to improve this publication. We would like you to tell us about improvements to its accuracy, format and quality.

Please give specific references, i.e.: page numbers and figure numbers and attach marked up photocopies wherever possible. If you have identified a solution please include your suggestions with your reply.

Please also answer the customer satisfaction question set.

When you have completed the PCS, send it by internal mail to the address below. Alternatively, scan and email to [edoc.feedback@xerox.com](mailto:edoc.feedback@xerox.com). You will receive an acknowledgement and feedback on your comments. Please ensure that your name and CBU/District location code are fully completed.

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PRODUCT AND PUBLICATION TITLE:	PUBLICATION REVISION DATE:	SOFTWARE REVISION LEVEL:				
PAGE NUMBER:	COMMENT Please submit a marked-up photocopy of the relevant pages					
<b>CUSTOMER SATISFACTION QUESTION SET</b>						
QUESTION	NOT APPLICABLE	VERY SATISFIED	SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	DISSATISFIED	VERY DISSATISFIED
DO YOU FIND THE MANUAL IS TECHNICALLY ACCURATE?						
DO YOU FIND THE FORMAT OF THE MANUAL EASY TO USE?						
WHAT IS YOUR OVERALL SATISFACTION LEVEL WITH THE MANUAL						
<b>FOR OFFICE USE ONLY</b>	Communications & Marketing Solutions Xerox Bessemer Road Welwyn Garden City Hertfordshire, AL7 1BU UK Attention: Steve Abbott					
RECEIVED DATE:						
PCS. NUMBER:						
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DUE DATE:						



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