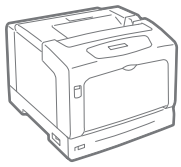
Phaser® 7100
Service Manual



Phaser® 7100
Service Manual

Xerox Internal-Use Only

xerox®

Phaser 7100
Service Manual

WARNING: The following servicing instructions are for use by qualified service personnel only. To avoid personal injury, do not perform any servicing other than that contained in the operating instructions, unless you are qualified to do so.

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Xerox Internal Use Only

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1 General and Operation Overview

This chapter includes:

About this Service Manual

The Phaser 7100 Service Manual is the primary document used for diagnosing, repairing, maintaining, and troubleshooting the printer. Use this manual as your primary resource for understanding the operational characteristics of the printer and all available options. This manual describes specifications and the diagnosis and repair of problems occurring in the printer and attached options. Also included are detailed replacement procedures, parts lists, and wiring diagrams.

Service Manual Revision

Updates are issued as the printer changes or as corrections are identified.

Technical Support Information

For manual updates, Service Bulletins, knowledge base, and technical support, go to:

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

For further technical support, contact your assigned Xerox Technical Support for this product.

Manual Terms

Various terms are used throughout this manual to either provide additional information on a specific topic or to warn of possible danger present during a procedure or action. Be aware of all symbols and terms when they are used, and always read Note, Caution, and Warning statements.

CAUTION: A caution indicates an operating or maintenance procedure, practice or condition that, if not strictly observed, results in damage to, or destruction of, equipment.

WARNING: A warning indicates an operating or maintenance procedure, practice or condition that, if not strictly observed, results in injury or loss of life.

Note: A note indicates an operating or maintenance procedure, practice or condition that is necessary to efficiently accomplish a task. A note can provide additional information related to a specific subject or add a comment on the results achieved through a previous action.

Replacement Note: A replacement note provides important information related to parts replacement. When needed, replacement notes appear at the end of the disassembly procedure.

Manual Organization

The Phaser 7100 Service Manual contains these chapters:

Chapter 1 - General and Operational Overview

This chapter contains important safety information and regulatory requirements, printer's operation, configuration, specifications, consumables, long life maintenance items, and component locations.

Chapter 2 - Error Troubleshooting

This chapter contains detailed troubleshooting procedures for error messages and codes generated by resident diagnostics. In addition, this chapter includes Service Diagnostics procedures and troubleshooting methods for situations where error indicator is not available.

Chapter 3 - Image Quality

This chapter contains the diagnostic aids for troubleshooting image quality problems, as well as image quality specifications and image defect samples associated with the printer output.

Chapter 4 - Service Parts Disassembly

This chapter contains removal procedures for spare parts listed in the Parts List. A replacement procedure is included when necessary.

Chapter 5 - Parts List

This chapter contains exploded views of the print engine and optional Field Replaceable Units (FRUs), as well as part numbers for orderable parts.

Chapter 6 - Maintenance

This chapter contains procedures for the adjustment of the print engine components, periodic cleaning for the printer, moving the printer, and firmware update.

Chapter 7 - Plug/ Jack and Wiring Diagrams

This chapter contains drawings, lists of the plug/jack locations and the wiring diagrams for the printer.

Reference A

This chapter contains an illustration of the printer's Control Panel menu structure, media guidelines, and a list of acronyms and abbreviations.

Safety

WARNING: Do not push objects (including paper clips or staples) into slots or openings on the printer. Making contact with a voltage point or shorting out a part could result in fire or electrical shock.

WARNING: Do not remove the covers or guards that are fastened with screws unless you are installing optional equipment and are specifically instructed to do so. Power should be Off when performing these installations. Disconnect the power cord when removing the covers and guards for installing optional equipment. Except for user-installable options, there are no parts that you can maintain or service behind these covers.

The following are hazards to your safety:

- The power cord is damaged or frayed.
- Liquid is spilled into the printer.
- The printer is exposed to water.

If any of these conditions occur, do the following:

1. Turn Off the printer immediately.
2. Disconnect the power cord from the electrical outlet.
3. Call an authorized service representative.

Power Safety Precautions

Power Source

For 115 VAC printers, do not apply more than 127 volts RMS between the supply conductors or between either supply conductor and ground. For 230 VAC printers, do not apply more than 254 volts RMS between the supply conductors or between either supply conductor and ground. Use only the specified power cord and connector. This manual assumes that the reader is a qualified service technician.

Plug the three-wire power cord (with grounding prong) into a grounded AC outlet only. If necessary, contact a licensed electrician to install a properly grounded outlet. If the product loses its ground connection, contact with conductive parts may cause an electrical shock. A protective ground connection by way of the grounding conductor in the power cord is essential for safe operation.

Disconnecting Power

WARNING: Turning the power Off using the power switch does not completely de-energize the printer. You must also disconnect the power cord from the printer's Alternating Current (AC) inlet. Disconnect the power cord by pulling the plug, not the cord.

Disconnect the power cord in the following cases:

- if the power cord or plug is frayed or otherwise damaged,
- if any liquid or foreign material is spilled into the printer,
- if the printer is exposed to any excess moisture,
- if the printer is dropped or damaged,
- if you suspect that the printer needs cleaning, servicing or repair,
- whenever you clean the product.

Power Cord

- Use the power cord supplied with the printer.
- Plug the power cord directly into a properly grounded electrical outlet. Make sure each end of the cord is securely connected. If you do not know if an outlet is grounded, ask an electrician to check the outlet.
- Do not use a ground adapter plug to connect the printer to an electrical outlet that does not have a ground connection terminal.

WARNING: Avoid the potential of electrical shock by ensuring that the printer is properly grounded. Electrical printers may be hazardous if misused.

- Do not use an extension cord, power strip, or surge protector.
- Verify that the printer is plugged into an outlet that is capable of providing the correct voltage and power. Review the printer's electrical specification with an electrician if necessary.
- Do not place the printer in an area where people might step on the power cord.
- Do not place objects on the power cord.

The power cord is attached to the printer as a plug-in device on the back of the printer. If it is necessary to disconnect all electrical power from the printer, disconnect the power cord from the electrical outlet.

Electrostatic Discharge (ESD) Precautions

Some semiconductor components, and the respective sub-assemblies that contain them, are vulnerable to damage by Electrostatic Discharge (ESD). These components include Integrated Circuits (ICs), Large-Scale Integrated circuits (LSIs), field-effect transistors, and other semiconductor chip components. The following techniques will reduce the occurrence of component damage caused by static electricity.

Be sure the power is Off to the chassis or circuit board, and observe all other safety precautions.

- Immediately before handling any semiconductor components assemblies, 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 electro-statically sensitive device.
- Handle IC’s and Erasable Programmable Read-Only Memories (EPROM’s) carefully to avoid bending pins.
- Pay attention to the direction of parts when mounting or inserting them on the Printed Circuit Boards (PCB’s).

Service Safety Summary

General Guidelines

For qualified service personnel only:

Refer also to the preceding Power Safety Precautions on page 1-4.

Avoid servicing alone:

Do not perform internal service or adjustment of the printer unless another person capable of rendering first aid or resuscitation is present.

Use care when servicing with power:

Dangerous voltages may exist at several points in the printer. To avoid personal injury, do not touch exposed connections and components while power is On. Disconnect power before removing the power supply shield or replacing components.

Do not wear jewelry:

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

Warning Labels

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

Safety Interlocks

Make sure all covers are in place and all Interlock Switches are functioning correctly after you have completed a printer service call. If you bypass an Interlock Switch during a service call, use extreme caution when working on or around the printer.

Servicing Electrical Components

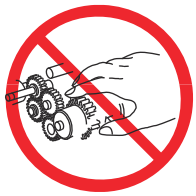
Before starting any service procedure, switch the printer power Off and unplug the power cord from the wall outlet. If you must service the printer with power applied, be aware of the potential for electrical shock.

WARNING: Do not touch any electrical component unless you are instructed to do so by a service procedure.

Servicing Mechanical Components

When servicing mechanical components within the printer, manually rotate the Drive Assemblies, Rollers, and Gears.

WARNING: Do not try to manually rotate or manually stop the drive assemblies while any printer motor is running.



Servicing Fuser Components

WARNING: This printer uses heat to fuse the toner image to paper. The Fuser is VERY HOT. Turn the printer power Off and wait at least 5 minutes for the Fuser to cool before attempting to service the Fuser or adjacent components.

Operational Safety

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

Your attention to the following safety guidelines helps to ensure the continued, safe operation of your printer.

Printer Location

- Do not block or cover the slots or openings on the printer. These openings are provided for ventilation and to prevent overheating of the printer.
- Place the printer in an area where there is adequate space for operation and servicing.
- Place the printer in a dust-free area.
- Do not store or operate the printer in an extremely hot, cold, or humid environment.
- Place the printer on a level, solid non-vibrating surface with adequate strength to hold the weight of the printer.
- Do not place the printer near a heat source.
- Do not place the printer in direct sunlight to avoid exposure to light-sensitive components.
- Do not place the printer where it is directly exposed to the cold air flow from an air conditioning unit.

Operational Guidelines

- Do not open any media tray during operation. The media from the lower trays passes through the upper trays and opening one could cause a jam.
- Do not open the doors when the printer is printing.
- Do not move the printer when it is printing.
- Keep hands, hair, neckties, etc., away from the Exit and Feed Roller.

Printer Supplies

- Use the supplies specifically designed for your printer. 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 printer, options, and supplies.

CAUTION: Use of non-Xerox supplies is not recommended. The Xerox Warranty, Service Agreements, and Total Satisfaction Guarantee do not cover damage, malfunction, or degradation of performance caused by use of non-Xerox supplies, or the use of Xerox supplies not specified for this printer. 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.

Health and Safety Incident Reporting

This section defines requirements for notification of health and safety incidents involving Xerox products (equipment and materials) at customer locations worldwide. These requirements apply to Xerox Corporation and its subsidiaries worldwide.

Objective

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

Definitions

Incident

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

Requirements

Initial Report

1. Xerox organizations have established a process for individuals to report product incidents to Xerox Environment Health & Safety (EH & S) within 24 hours of becoming aware of the event.
2. The information to be provided at the time of reporting is outlined in the Health and Safety Incident Report form.

   The Health and Safety Incident Report form used to report incidents involving Xerox products is available on Xerox Global Service Net (GSN) at https://www.xrxgsn.com/secure/main.pl?catid=12571.

   If you are unable to download the form, request a form when reporting the incident by phone, electronic mail or Fax.
3. The initial notification may be made by any of the methods that follow:
   - 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 Xerox EH & S at: usa.xerox.ehs@xerox.com.
     - Fax Xerox EH & S at: +1-585-216-8817 [intelnet 8-219-8817].
   - 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: ehs-europe@xerox.com.
     - Fax Xerox EH & S at: +44 (0) 1707 353914 [intelnet 8 668 3914].

Note: Initial notification made by phone must be followed within 24 hours by a completed Health and Safety Incident Report form sent to the indicated electronic mail address or fax number. If sending a fax, please also send the original form by 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.

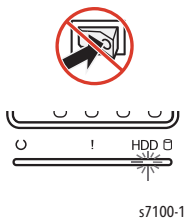
Maintenance Safety

- Do not attempt any maintenance procedure that is not specifically described in the documentation supplied with your printer.
- Do not use aerosol cleaners. Clean the printer with a dry lint-free cloth only.

Do not burn any consumables or long life maintenance items. For information on Xerox supplies recycling programs, go to www.xerox.com/gwa.

Printer Symbols

Symbol	Description
	Warning or Caution Ignoring this warning could cause serious injury or even death. Ignoring this caution could cause injury or damage to the property.
	Hot surface on or in the printer. Use caution to avoid personal injury.
	Danger invisible laser radiation when open. Avoid direct exposure to beam.
	Do not touch components as personal injury could result.
	Do not burn the Imaging Unit/ Waste Toner Box.
	Do not burn the Toner Cartridge.
	Do not burn the item.

Symbol	Description
	Do not expose the Imaging Unit to light.
	It may take 40 minutes for the Fuser to cool down.
	Cover is not self-supporting. Use care to support with your hand or the built-in support.
	Do not try to close the Toner Cover while Cover C is open.
	To prevent a printer malfunction or internal Hard Disk Drive (HDD) damage, ensure that the HDD Control Panel indicator is Off before turning Off the power switch.
	Recycle the item.
	Protective Ground symbol.

Regulatory

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)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial environment. 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 this 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.

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 receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this equipment not approved by Xerox can void the authority of the user to operate this equipment.

Note: To ensure compliance with Part 15 of the FCC rules, use shielded interface cables.

Canada

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

CAUTION: This is a Class A product. In a domestic environment, this product can cause radio interference in which case the user could be required to take adequate measures.

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

December 12, 2006: Low Voltage Directive 2006/95/EC

December 15, 2004: Electromagnetic Compatibility Directive 2004/108/EC

This printer, if used properly in accordance with the instructions, is not dangerous for the consumer or for the environment.

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

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

European Union Lot 4 Imaging Equipment Agreement Environmental Information

Environmental Information Providing Environmental Solutions and Reducing Cost

Introduction

The following information has been developed to assist users and has been issued in relation to the European Union (EU) Energy Related Products Directive, specifically the Lot 4 study on Imaging Equipment. This requires manufacturers to improve environmental performance of in scope products and supports the EU action plan on energy efficiency.

In scope products are Household and Office equipment that meet the following criteria.

- Standard monochrome format products with a maximum speed less than 66 A4 images per minute
- Standard color format products with a maximum speed less than 51 A4 images per minute

Environmental Benefits of Duplex Printing

Most Xerox® products have duplex printing, also known as 2-sided printing, capability. This enables you to print on both sides of the paper automatically, and therefore helps to reduce the use of valuable resources by reducing your paper consumption. The Lot 4 Imaging Equipment agreement requires that on models greater than or equal to 40 ppm color or greater than or equal to 45 ppm monochrome the duplex function has been auto enabled, during the setup and driver installation. Some Xerox® models below these speed bands may also be enabled with 2-sided printing settings defaulted on at the time of install. Continuing to use the duplex function will reduce the environmental impact of your work.

However, should you require simplex/ 1-sided printing, you may change the print settings in the print driver.

Paper Types

This product can be used to print on both recycled and virgin paper, approved to an environmental stewardship scheme, which complies with EN12281 or a similar quality standard. Lighter weight paper (60 g/m²), which contains less raw material and thus save resources per print, may be used in certain applications. We encourage you to check if this is suitable for your printing needs.

Power Consumption and Activation Time

The amount of electricity a product consumes depends on the way the device is used. This product is designed and configured to enable you to reduce your electricity costs. After the last print, it switches to Ready Mode. In this mode, it can print again immediately as needed. If the product is not used for a period of time, the device switches to Energy Saver Mode. In this mode, only essential functions remain active in order to enable reduced product power consumption.

Upon exiting from Energy Saver Mode, the first print takes slightly longer than in Ready Mode. This delay is the result of the system leaving Energy Saver mode and is typical of most imaging products on the market.

There is something to consider if you wish to set a longer Activation Time or would like to deactivate the Energy Saver Mode completely. The device can switch to a lower energy level only after a longer period of time or not at all.

To learn more about Xerox participation in sustainability initiatives, visit our web site at:
www.xerox.com/environment

Germany

Blendschutz

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert werden.

Lärmemission

Maschinenlärminformations-Verordnung 3. GPSGV: Der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäß EN ISO 7779.

Importeur

Xerox GmbH

Hellersbergstraße 2-4

41460 Neuss

Deutschland

Turkey RoHS Regulation

In compliance with Article 7 (d), we hereby certify “it is in compliance with the EEE regulation.”

“EEE yönetmeligine uygundur.”

Introduction

The Phaser 7100 color laser printer has a single-pass color laser-design architecture based on the electrophotographic recording principle, which offers color and mono print speed at 30/30 ppm, and resolutions up to 1200 x 1200 dots-per-inch (dpi). The printer supports Adobe PostScript 3 and PCL6, USB 2.0, and 10/100 Base-TX Ethernet. The Phaser 7100 printer provides a standard 150-Sheet Bypass Tray and a standard 250-Sheet Tray 1. The Bypass Tray supports specialty media, card stock, and envelopes. The standard paper input is 400 sheets and the maximum input with optional Trays 2, 3, and 4 is 2,050 sheets. The Output Tray holds 250 sheets facedown.

The printer options add memory, paper capacity, and functionality. Memory upgrades are available to increase the standard RAM from 1 GB up to 2 GB maximum. A 40 GB Hard Disk Drive and a 550-Sheet Feeder (up to 3 total) are available as an option. Auto-duplexing is available and no tools are required to install the Duplex Unit.

Printer Configurations

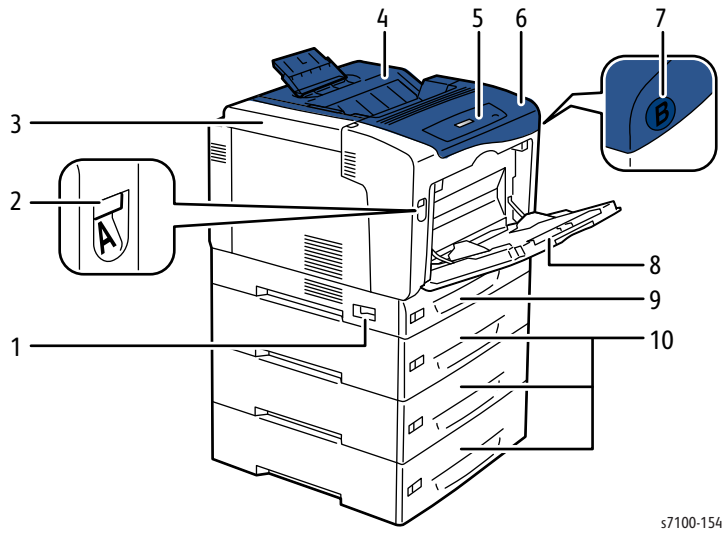
The Phaser 7100 is available in two configurations.

Features	Printer Configurations	
	7100 N	**7100 DN**
Processor and Clock Speed	667 MHz	667 MHz
Memory Configuration*	1 GB	1 GB
Print Speed (Color/ Mono) (ppm)	30/ 30	30/ 30
Adobe PostScript 3 Fonts	Standard	Standard
PCL6 Fonts	Standard	Standard
Resident Fonts	PS: 136 PCL: 82	PS: 136 PCL: 82
USB 2.0 Hi-Speed Support	Standard	Standard
Ethernet Interface	10/ 100 Base-TX	10/ 100 Base-TX
Bypass Tray (150 Sheets)	Standard	Standard
Tray 1 (250 Sheets)	Standard	Standard
Tray 2/ 3/ 4 550-Sheet Feeder	Optional	Optional
Job Collation	Standard	Standard
Duplex Unit	Optional	Standard
Hard Disk Drive (40 GB)	Optional	Optional
Printer Stand	Optional	Optional
External Wireless LAN	Optional	Optional
Printer Resolutions (dpi)		
• Standard • Enhanced • Photo	• 600 x 600 x 1 • 1200 x 1200 x 1 • 600 x 600 x 8	• 600 x 600 x 1 • 1200 x 1200 x 1 • 600 x 600 x 8
* All configurations have an additional memory slot supporting 512 MB or 1 GB DDR2 DIMM, to a maximum of 2 GB.		

Parts of the Printer

Note: For additional tips, refer to the Doors and Covers video (also available in the Phaser 7100 Training materials).

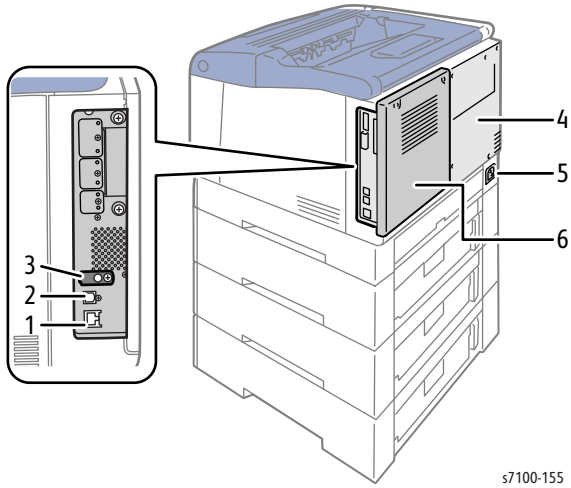
Front View



1.	Power Switch	6.	Cover A
2.	Cover A Release Latch	7.	Cover B Release Button
3.	Toner Cartridge Cover	8.	Bypass Tray
4.	Output Tray	9.	Tray 1
5.	Control Panel	10.	Optional 550-Sheet Feeders (Trays 2–4)

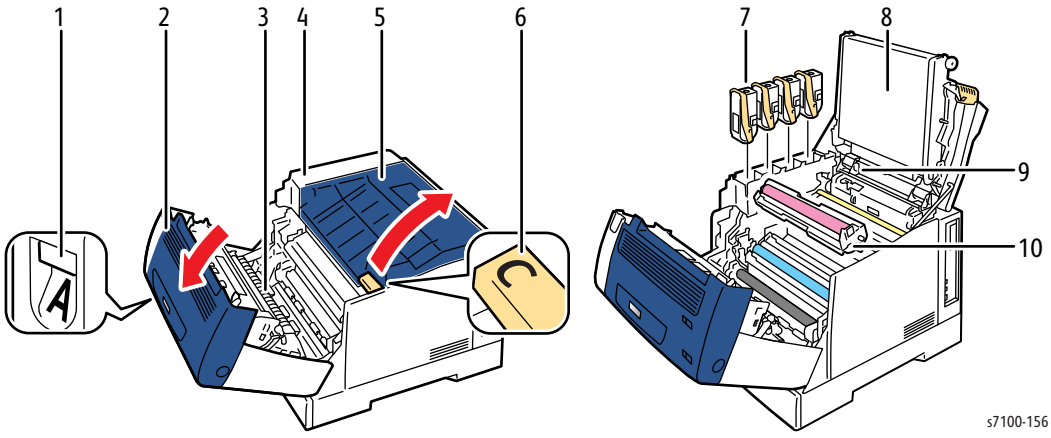
Note: A 250-sheet adjustable Tray 1 and a 150-sheet Bypass Tray are standard. Up to three optional 550-Sheet Feeders provide a maximum of five trays, for a maximum 2,050-sheet input capacity.

Rear View



1. Ethernet Connection
2. USB Connection (type B, printer port)
3. USB Connection (for Manufacturing)
4. Rear Cover
5. Power Connector
6. Image Processor PWB Cover

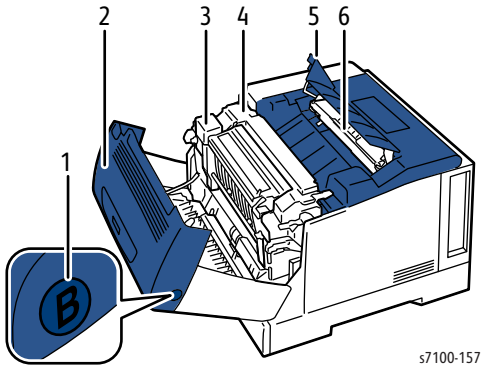
Internal Components Under Covers A and C



1. Cover A Release Latch
2. Cover A
3. Transfer Roller (2nd BTR)
4. Toner Cartridge Cover
5. Cover C (Top Cover)
6. Cover C Release Lever
7. Toner Cartridges
8. Transfer Belt (IBT Unit)
9. ROS Assembly Cleaning Tool
10. Imaging Units

Note: The Transfer Belt is not customer replaceable.

Internal Components Under Cover B and the Waste Cartridge Cover



1. Cover B Release Button
2. Cover B
3. Duplex Unit
4. Fuser Unit
5. Waste Cartridge Cover
6. Waste Cartridge

Printer Options

The Phaser 7100 printer options include:

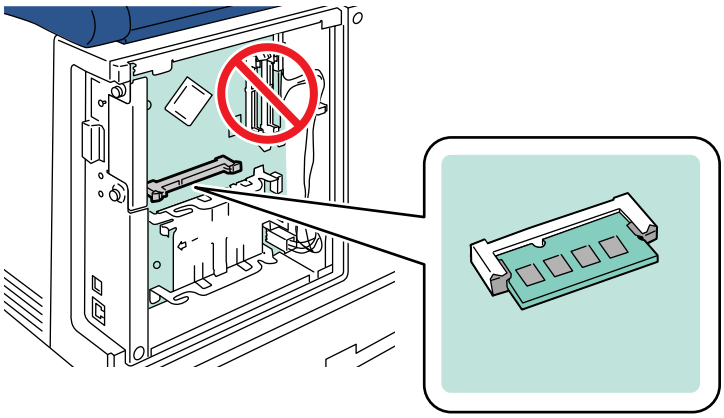
- Additional Memory (512 MB or 1 GB)
- Productivity Kit (Hard Disk Drive)
- Duplex Unit
- Optional 550-Sheet Feeder (Trays 2, 3, and 4)
- Printer Stand
- External Wireless Network Adapter

Additional Memory

The Phaser 7100 features an additional slot that accepts a 512 MB or 1 GB of DDR2 DIMM. Memory module must meet the following characteristics:

- PC2-5300 (667MHz memory bus speed)
- 200 Pin DDR2 DIMM (8 chip type)
- Unbuffered, Non-parity

The printer's Configuration page lists the standard amount of memory installed for all configurations is 1GB. The additional Memory for the Phaser 7100 printer is customer installable.



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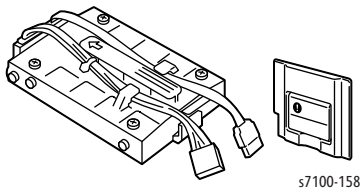
Productivity Kit (Hard Disk Drive)

The Phaser 7100 printer supports an optional internal Hard Disk Drive. The Hard Disk Drive has a maximum 40 GB capacity. Features include:

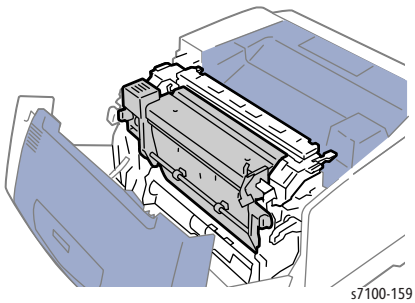
- Secure Print
- Saved Print
- Font Storage
- Large job spooling and collation
- CWIS Firmware Download
- Accounting Features

The Hard Disk Drive is an optional feature for the Phaser 7100 printer and is customer installable.



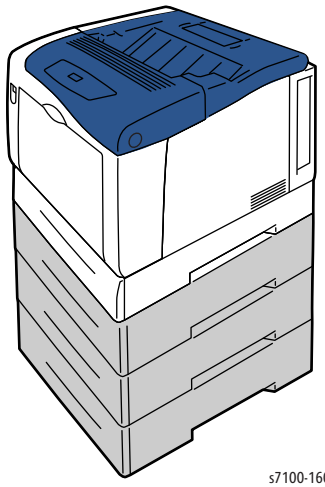
Duplex Unit

The Duplex Unit is an optional feature for the Phaser 7100 printer and is customer installable.



Optional 550-Sheet Feeder (Trays 2, 3, and 4)

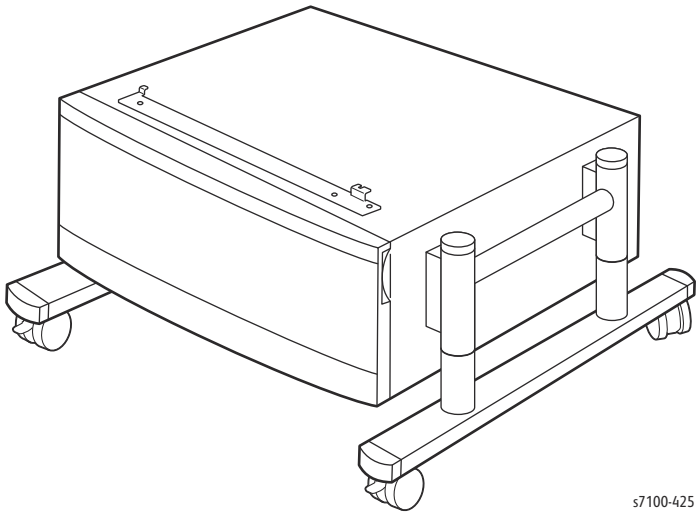
The Optional 550-Sheet Feeder increases the input capacity of the printer and can be attached to the printer underneath Tray 1. Up to three Optional 550-Sheet Feeders can be installed on the Phaser 7100 printer.The Optional 550-Sheet Feeder is customer installable.



s7100-160

Printer Stand

A Printer Stand is available as an option for the Phaser 7100 printer.



s7100-425

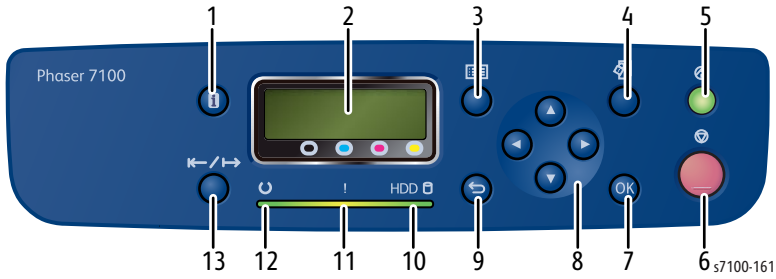
External Wireless Network Adapter

The External Wireless Network Adapter enables the printer to connect to a wireless network.

Control Panel Layout

The Control Panel consists of 12 buttons, 4 indicator lights (LED), with a 2 x 20 display. The four LEDs are Ready, Error, Hard Disk Drive (HDD), and Power Saver. The Power Saver LED blinks when firmware is accessing the HDD in Sleep Mode (when the HDD is installed). The Control Panel:

- Displays the current operating status of the printer.
- Provides access to print features.
- Provides access to information pages.
- Provides access to setup menus.
- Displays prompt to load paper, replace supplies, and clear jams.
- Displays errors and warnings.



1.	**Information** Button	Displays additional information about error or status messages on the Control Panel.
2.	**Control Panel Display**	Provides information about error or status messages.
3.	**Menu** Button	Displays or closes the system menu screen.
4.	**Print Menu** Button	Provides access to documents stored in the printer or the server, such as Secure Print.
5.	**Power Saver** Button	Enters or exits Energy Saver mode. The button illuminates when in Energy Saver mode.
6.	**Cancel** Button	Stops the current job.
7.	**OK** Button	Selects or executes the option or function displayed on the screen.
8.	**Arrow** Button	Navigates to the next menu, item, or option. To view a default setting, press the Up and Down arrow buttons at the same time.
9.	**Back** Button	Navigates up one level in the menu.
10.	**HDD** Indicator	Blinks while data is being read from or written to the Hard Disk Drive.
11.	**Error** Indicator	Comes On when a user-correctable error is present, such as a paper jam. It blinks when a system error is present, often associated with an error code.
12.	**Ready** Indicator	Comes On when the printer is online and Off when the printer is offline or has an error condition. It blinks while the printer is receiving data.
13.	**Online** Button	Changes between the online and offline state.

Control Panel Shortcut

Function	Control Panel Buttons
Enter/ Exit Service Diagnostics (Service Diagnostics Menu Map on page 2-15)	1. Press and hold **Right Arrow**. 2. Press and hold **Left Arrow**. 3. Release both buttons. 4. Press **Online** within 3 seconds.
Enter/ Exit Customer Support Engineer (CSE) Menu (to access additional reports and features, Phaser 7100 Printer Menu (Customer Support Engineer) on page 2-4)	1. Press **Up Arrow** three times. 2. Press **Menu**.
Display Serial Number Menu	1. Press **Down Arrow** + **OK** simultaneously. 2. Serial Number is displayed on the Control Panel.
Reset Counter	1. Press **Down Arrow** + **OK** simultaneously. 2. Press **Down Arrow** to find Reset Counter.
Long Boot Diagnostics	1. Turn On the printer power while pressing **Energy Saver** + **OK** simultaneously.

Consumables

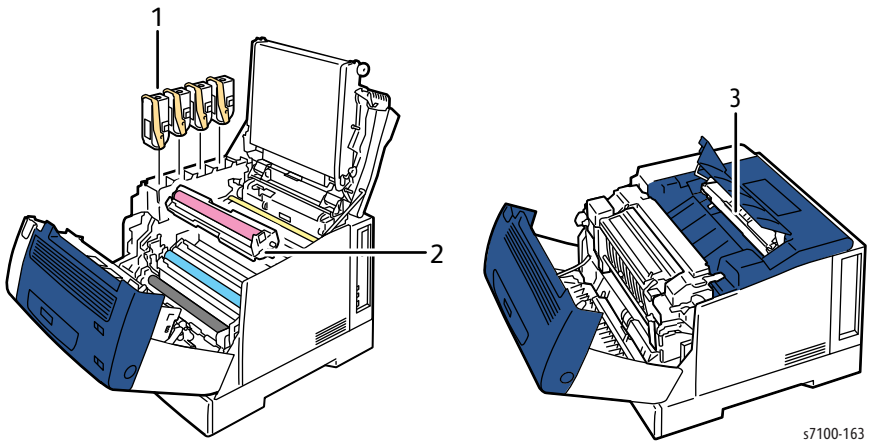
Each Toner Cartridge has a CRUM (Customer Replaceable Unit Meter) to record new or used cartridge and usage information.

The CRUM contains a company ID, Region ID, and Xerox company name. A CRUM counts the amount of remaining toner. When toner empty is detected, Life End status will be sent to indicate toner empty.

Internal counters track Consumables life usage. Life ratings are based on A-size sheets at 5 % coverage.

Phaser 7100 Consumables

Item	Description	Print Life
1.	Toner Cartridge - Standard Capacity (C/ M/ Y)	4,500 pages
	Toner Cartridge - Dual Package (C/ M/ Y)	9,000 pages
	Toner Cartridge - Dual Package (K)	10,000 pages
	Toner Cartridge - Metered Dual Package (C/ M/ Y)	9,000 pages
	Toner Cartridge - Metered Dual Package (K)	10,000 pages
	Toner Cartridge - DMO Standard Package (C/ M/ Y)	4,500 pages
	Toner Cartridge - DMO Dual Package (C/ M/ Y)	9,000 pages
	Toner Cartridge - DMO Dual Package (K)	10,000 pages
2.	Imaging Units (C/ M/ Y/ K)	24,000 pages
3.	Waste Cartridge	24,000 pages



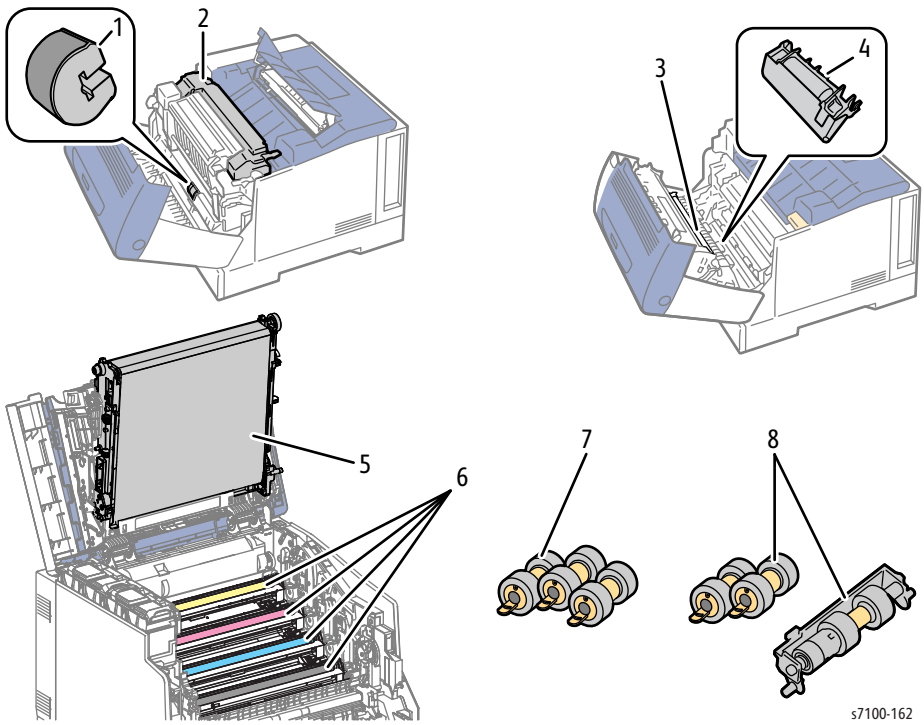
Long Life Maintenance Items

A maintenance item is a printer part or assembly that has a limited life, and requires periodic replacement. Long Life Maintenance items are typically customer replaceable.

The following listed items have limited life and require periodic replacement.

Phaser 7100 Maintenance Items

Item	Description	Print Life
1.	Bypass Tray Feed Roller	100,000 pages
2.	Fuser Unit	100,000 pages
3.	Transfer Roller (2nd BTR)	100,000 pages
4.	Separator Roller	100,000 pages
5.	Transfer Belt	200,000 pages
6.	Developer Housing Assemblies (C/ M/ Y/ K)	300,000 pages
7.	Tray 2, 3, 4 Feed Roller Kit	100,000 pages
8.	Tray 1 Feed Roller Kit	100,000 pages
Note: The life of the print engine is 300,000 pages. The Developers only need to be replaced if customer plans to continue printing beyond that point.		



Consumables and Long Life Maintenance Display Messages

Consumables Life Display Message

The consumables life span is detected at four stages: Pre Near, Near, Life End, and Dead Stop.

Consumables Life Display Message

Status	Imaging Unit	Toner Cartridge	Waste Toner
Pre Near	Ready to print Order Imaging Unit: X*1	Ready to print Order Toner Cartridge: X*2	Ready to print Order Waste Toner
Near	Ready to print Replace Imaging Unit: X*1		Ready to print Replace Waste Toner soon
Life End	Ready to print Replace Imaging Unit: X*1	Replace Toner Cartridge	Replace Waste Toner
Dead Stop	Replace Imaging Unit: X*1		
1. X can be Y, M, C, or K. 2. X can be Yellow (Y), Magenta (M), Cyan (C), or Black (K), or a combination of these letters.			

Although there are 2 Life End messages for the Imaging Unit, the message (Ready to print - Replace Imaging Unit) is the one displayed when (Drum Life End) is set to (Continue to Print). However, when Dead Stop is reached in this case, the message will change to (Replace Imaging Unit X) and the printing will stop. The displayed message for the Toner Cartridge will be different depending on the print settings such as FC/ BW, etc.

Long Life Maintenance Display Message

The Long Life Maintenance life span is detected in three stages: Near, Life End, and Dead Stop.

Long Life Maintenance Display Message

Status	Fuser Unit	Others
Near	Ready to print Replace the Fuser Unit soon	Ready to print Replace XXX_XXX *1
Life End	Ready to print Replace the Fuser Unit	Ready to print Replace XXX_XXX *1
Dead Stop	Replace the Fuser Unit	Unable to print XXX_XXX *1
*1. XXX_XXX indicates the Error Code of the applicable parts (refer to HFSI Counter Chain-Link Number List on page 2-21 in Chapter 2).		

Specifications

Printer Specifications

Characteristic	Specifications
Printing Technology	Printing System: Tandem electro-photographic color print engine with semiconductor laser beam.
	Imaging Unit Type: Organic Photo Conductor (OPC)
	Recording System: Electrophotographic method that uses OPC Drum and Intermediate Transfer Belt
	Charging System: Contact charging (Bias Charge Roller (BCR))
	Development System: Dry double-component development
	Exposure System: ROS
	Transfer System: Intermediate Belt Transfer (IBT)
	Fusing System: Thermal pressure fusing with Heat Roller (Belt nip method).
	Cleaning System: • Xero: Blade • Transfer: Blade
Printer Life	300,000 pages
Color Medium	Cyan, Magenta, Yellow, and Black Print Cartridges
Print-Quality Mode (dpi)	• Standard: 600 x 600 x 1 • Enhanced: 1200 x 1200 x 1 • Photo: 600 x 600 x 8
Image Coverage	B/W • Average: 5 % • Maximum: 100 %
	Color • Average: 20 % • Maximum: 240 %
First Page Output Time	• Mono: As fast as 9 seconds • Color: As fast as 11 seconds
Operating System	• Windows: 2003 Server/ 2008 Server/ XP Pro/ XP/ Vista/ Windows 7 • Windows 8 (available post launch)
	Mac: OS 10.5 and later
	Linux: Redhat, SuSe, and Ubuntu.

Memory Specifications

Characteristic	Specifications	
Memory	Standard	1.0 GB
	Maximum	2.0 GB
Supported RAM	Supports up to a total of 2 GB of DDR2 SODIMM with one optional memory slot for 512 MB or 1 GB.	

Electrical Specifications

Power Supply Voltage and Frequency

Characteristic	Specifications
Line Voltage	• 110-127 VAC ± 10 % • 220-240 VAC ± 10 %
Frequency Range	• 50 Hz ± 3 Hz • 60 Hz ± 3 Hz
Input Current (A)	• 110-127 VAC - 9.7 or less • 220-240 VAC - 4.7 or less
Maximum Power Dissipation	• 1122W @ 120VAC • 1118W @ 240VAC
Leakage Current	3.5m A or less
Inrush Current	Max. Inrush Current - 100A, 10 msec or less when the power switch is turned On

Power Consumption

Printing	Ready	Low Power (Standby)	Energy Saver Sleep
Less than 600 W	Less than 75 W	Less than 55 W	Less than 1 W

Environmental Specifications

Characteristic	Specifications	
Temperature		
Operating	5° to 32°C (41° to 90°F)	
Storage	-20° to 40°C (-4° to 104°F)	
Humidity (% RH)		
Operating	15 % to 85 % RH	
Optimum	5 % to 85 % RH	
Altitude		
Operating	0 to 3,100 meters (10,170 feet)	
Acoustic Noise	**Sound Power Level (Bels)**	**Sound Pressure (Decibels)**
Printing (LWAd)	7.0 B	54.0 dB(A)
Standby (LWAd)	4.3 B	25.0 dB(A)

Print Speed

Print Modes and Speeds

	Simplex (ppm)		Duplex (ipm)	
Print Mode	**Color**	**Mono**	**Color**	**Mono**
Standard 600 dpi - 600 x 600 x 1 bit	30	30	22	22
Enhanced 600 dpi - 1200 x 1200 x 1 bit (1/2 speed)	15	15	11	11
Photo 1200 dpi - 600 x 600 x 8 bit	30	30	22	22

Ready/ Sleep Mode

Engine State

- Ready Mode: ROS Motor Off, Fuser Ready
- Lower Power Mode: ROS Motor Off, Fuser Ready
- Sleep Mode: ROS Motor Off, Fuser Off
- No Setup cycle

Mode		Color		B/ W	
		Simplex	Duplex	Simplex	Duplex
Ready Mode		9.9 sec or less	16.0 sec or less	8.3 sec or less	14.0 sec or less
100V	Sleep Mode	21.9 sec or less *2	28.0 sec or less *2	20.3 sec or less *2	26.0 sec or less *2
100V	Sleep Mode	25.9 sec or less *2	32.0 sec or less *2	24.3 sec or less *2	30.0 sec or less *2
230V	Sleep Mode	27.9 sec or less *2	34.0 sec or less *2	26.3 sec or less *2	32.0 sec or less *2
* 1: 1 batch for Dup * 2: Changes depending on input voltage.					

Continuous Print Speed (ppm)

Continuous print speed is defined as the average print speed for the 2nd sheet onwards.

Note: The listed speeds do not take into account “various setup/cleaning/sagging/process control.”

Print Mode	Print	Media Mode	Bypass Tray		250-Sheet Tray		550-Sheet Tray	
					Tray 1		Tray 2/ 3/ 4	
		Speed	Sim	Dup	Sim	Dup	Sim	Dup
Normal Mode	Color	Full	30	22	30	21	30	22
		Half	15	11	15	10.5	15	11
	B/W	Full	30	22	30	21	30	22
		Half	15	11	15	10.5	15	11
* For Duplex mode calculations, front and back sides are considered separate pages.								

Paper and Tray Specifications

The following tables list the recommended Xerox paper for the Phaser 7100 printer. Recommended media lists are also available on the Xerox web sites:

- United States: www.xerox.com/paper
- Europe: www.xerox.com/europaper

Supported Paper Size

Media Type	Size	Bypass Tray	Tray 1	Trays 2/ 3/ 4	Duplex
Letter	8.5 x 11 in. (216 x 279 mm)	Yes	Yes	Yes	Yes
Legal	8.5 x 14 in. (216 x 356 mm)	Yes	Yes	Yes	Yes
Executive	7.25 x 10.5 in. (184 x 267 mm)	Yes	No	No	Yes
A3	11.7 x 16.5 in. (297 x 420 mm)	Yes	Yes	Yes	Yes
A4	8.3 x 11.7 in. (210 x 297 mm)	Yes	Yes	Yes	Yes
A5	8.3 x 5.8 in. (148 x 210 mm)	Yes	Yes	Yes	Yes
A6 - Statement	5.5 x 8.5 in. (140 x 216 mm)	Yes	Yes	Yes	Yes
Postcard	4 x 6 in. (101.6 x 152.4 mm)	Yes	No	No	Yes
Banner	8.3 x 35.5 in. (210 x 900 mm)	Yes	No	No	No
	11.7 x 47.3 in. (297 x 1200 mm)	Yes	No	No	No

Supported Paper Types and Weights

Paper Type	Paper Weight	Bypass Tray	Tray 1	Trays 2/ 3/ 4	Duplex
Plain Paper	60-80 g/m^2	Yes	Yes	Yes	Yes
Hole Punched	60-80 g/m^2	Yes	Yes	Yes	Yes
Letterhead	81-105 g/m^2	Yes	Yes	Yes	Yes
Pre-Printed	60-80 g/m^2	Yes	Yes	Yes	Yes
Recycled	60-80 g/m^2	Yes	Yes	Yes	Yes
Heavyweight	81-105 g/m^2	Yes	Yes	Yes	Yes
Cardstock	106-163 g/m^2	Yes	Yes	Yes	Yes (*)

Supported Paper Types and Weights (Continued)

Paper Type	Paper Weight	Bypass Tray	Tray 1	Trays 2/ 3/ 4	Duplex
Heavyweight Cardstock	164-216 g/m^2	Yes	Yes	Yes (**)	No
Labels	106-169 g/m^2	Yes	Yes	Yes	No
Glossy	106-163 g/m^2	Yes	No	No	No
Glossy Cardstock	164-216 g/m^2	Yes	No	No	No
Envelope		Yes	No	No	No
(*) For media weights from 106 - 120 g/m^2, select Heavyweight for Paper Type setting in the Control Panel (Control Panel > **Menu** > **Admin Menu** > **Printer Settings** > **Paper Type** > **Heavyweight**). (* *) Tray 2/3/4 only takes media up to 175 g/m^2					

Supported Envelopes

Type	Dimension	Bypass Tray	Tray 1	Trays 2/ 3/ 4
#10 Commercial Envelope	4.1 x 9.5 in. (241 x 105 mm)	Yes	No	No
Monarch Envelope	3.9 x 7.5 in. (98 x 190 mm)	Yes	No	No
DL Envelope	4.3 x 8.7 in. (110 x 220 mm)	Yes	No	No
C5 Envelope	6.4 x 9 in. (162 x 229 mm)	Yes	No	No
C6 Envelope	4.5 x 6.38 in. (114 x 162 mm)	Yes	No	No
Note: Do not use envelopes with hot melt glue, windows, or metal clasps.				

Physical Dimensions and Clearances

Printer

Characteristic	7100 N	7100 DN
Standard Configuration		
Width	19.7 in. (50.03 cm)	19.7 in. (50.03 cm)
Depth	21.2 in. (53.85 cm)	21.2 in. (53.85 cm)
Height	16.0 in. (40.64 cm)	16.0 in. (40.64 cm)
Weight	97.0 lb. (44.0 kg)	99.4 lb. (45.1 kg)
Configuration with Duplex Unit and Three Optional 550-Sheet Feeders		
Width	19.7 in. (50.03 cm)	19.7 in. (50.03 cm)
Depth	21.2 in. (53.85 cm)	21.2 in. (53.85 cm)
Height	32.2 in. (81.78 cm)	32.2 in. (81.78 cm)
Weight	163.0 lb. (74.0 kg)	165.6 lb. (75.1 kg)

Optional 550-Sheet Feeder (packaged)

Characteristic	
Width	26.0 in. (66.04 cm)
Depth	25.1 in. (63.75 cm)
Height	11.5 in. (29.20 cm)
Weight	28.6 lb. (13.0 kg)

Optional 550-Sheet Feeder (unpackaged)

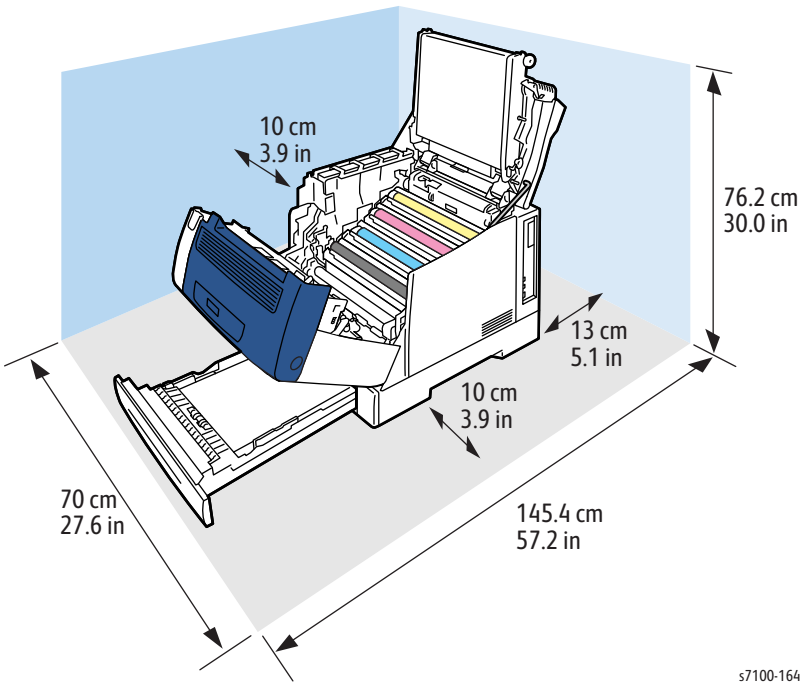
Characteristic	
Width	19.6 in. (49.78 cm)
Depth	23.4 in. (59.44 cm)
Height	6.4 in. (16.26 cm)
Weight	21.2 lb. (9.6 kg)

Clearance and Mounting Surface Specifications

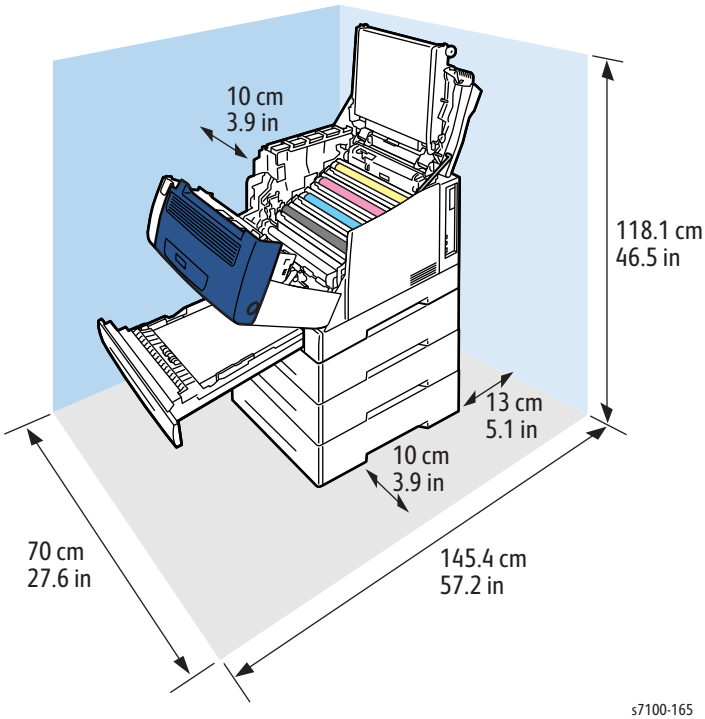
These specifications apply to any printer used as a table-top printer.

1. In order to function properly, the printer must be placed on a flat surface with the following minimum clearances.

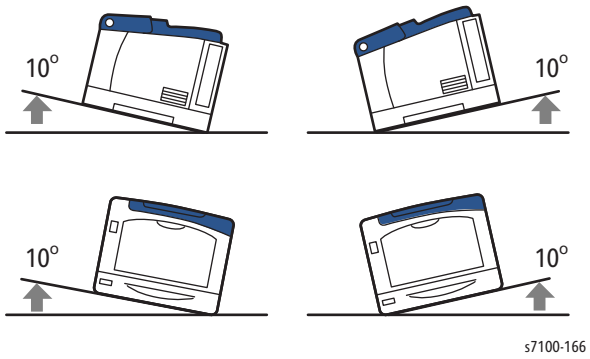
Standard Configuration



Configuration with Three Optional 550-Sheet Feeders



2. The printer must not be tipped or tilted more than 10˚ angle.



Failure to adhere to the specified mounting specifications will void all guarantees of print-quality and/or performance. Known problems that can occur as a result of exceeding the mounting surface specifications are:

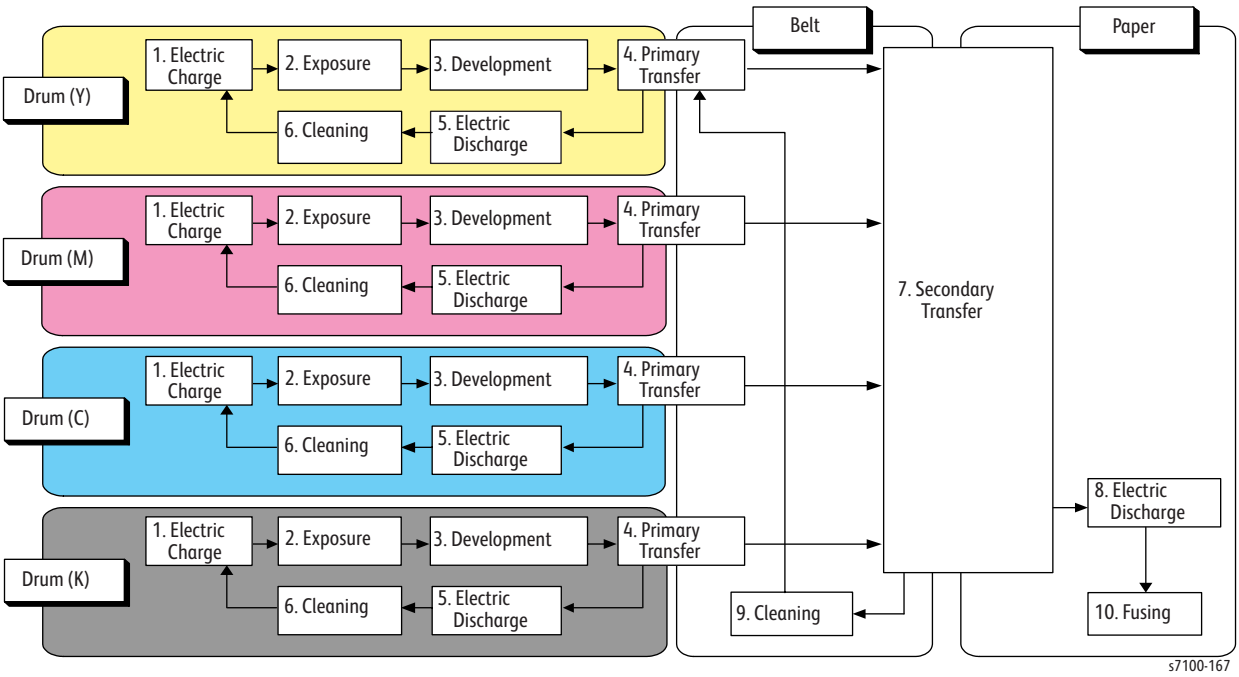
- Color-to-Color mis-registration, primarily in the horizontal direction.
- A smear or line of toner approximately 40 mm from the trailing edge of the print.

Phaser 7100 Print Process

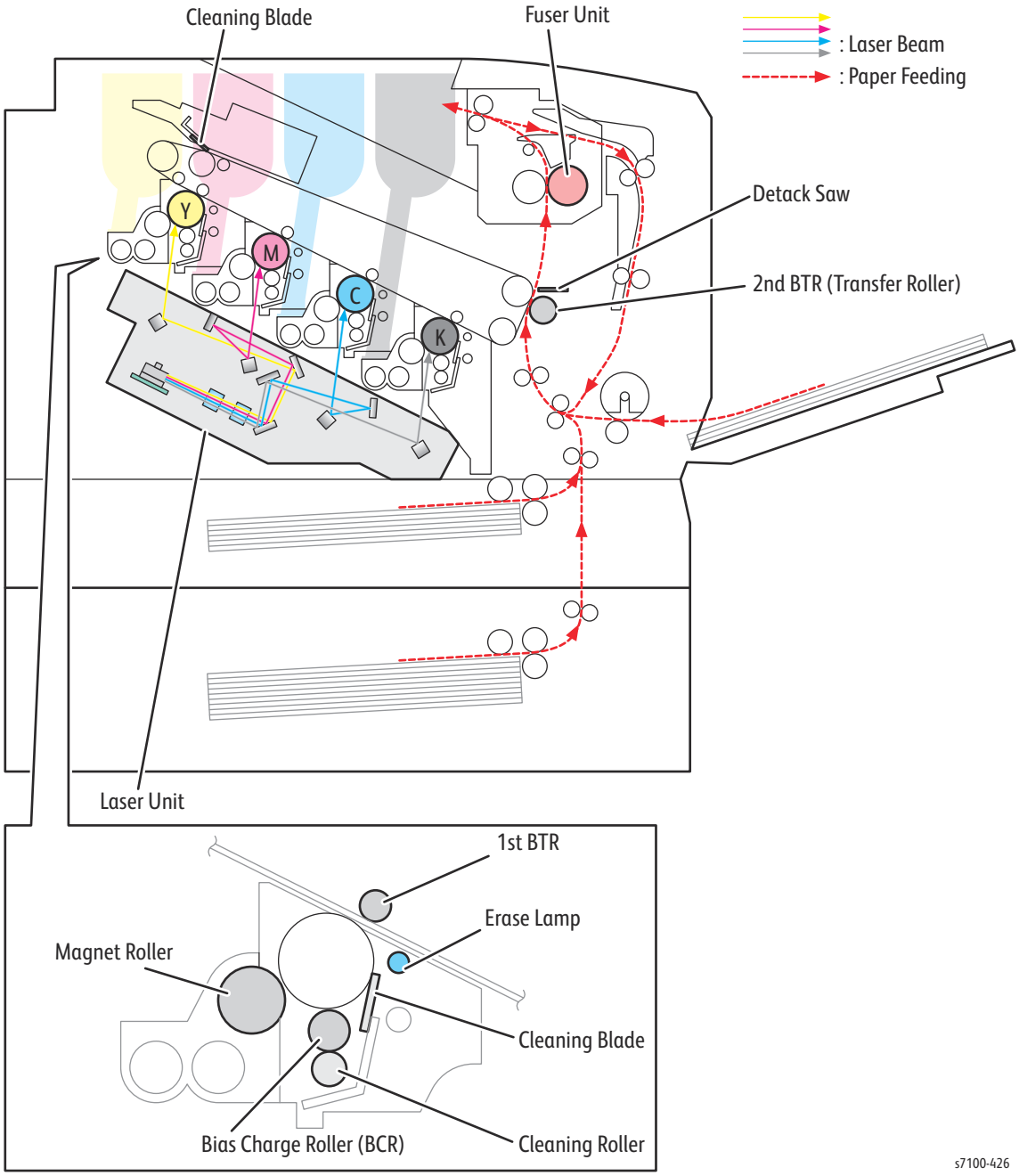
The Phaser 7100 utilizes a tandem system where each of the colors - Yellow, Magenta, Cyan, and Black (Y, M, C, K) has its own Imaging Unit and Developer. A toner image for each color is formed on the Imaging Unit and then transferred to the Intermediate Transfer Belt (Intermediate Transfer Unit). The toner image of the 4 colors are overlapped on the Intermediate Transfer Belt to form the full-color print, which is then transferred and fused onto the paper to be output.

The print process of this printer consists of the following steps:

1.	Electric Charge	Charges the Drum surface.
2.	Exposure	Exposes the image section with laser beam.
3.	Development	Develops the image section on the Drum surface with toner.
4.	Primary Transfer	Transfers the toner image on each Drum to the Intermediate Transfer Belt
5.	Electric Discharge	Discharges the electric charge on each Drum.
6.	Cleaning	Removes any remaining toner on each Drum.
7.	Secondary Transfer	Transfers the toner image on the Intermediate Transfer Belt to the paper.
8.	Electric Discharge	Discharges the electric charge on the paper.
9.	Cleaning	Removes any remaining toner on the Intermediate Transfer Belt and the 2nd BTR.
10.	Fusing	Fuses the toner on the paper with heat and pressure.



Paper Path


Cleaning Blade
Fuser Unit
: Laser Beam
: Paper Feeding
Detack Saw
2nd BTR (Transfer Roller)
Y
M
C
K
Laser Unit
1st BTR
Erase Lamp
Magnet Roller
Cleaning Blade
Bias Charge Roller (BCR)
Cleaning Roller
s7100-426

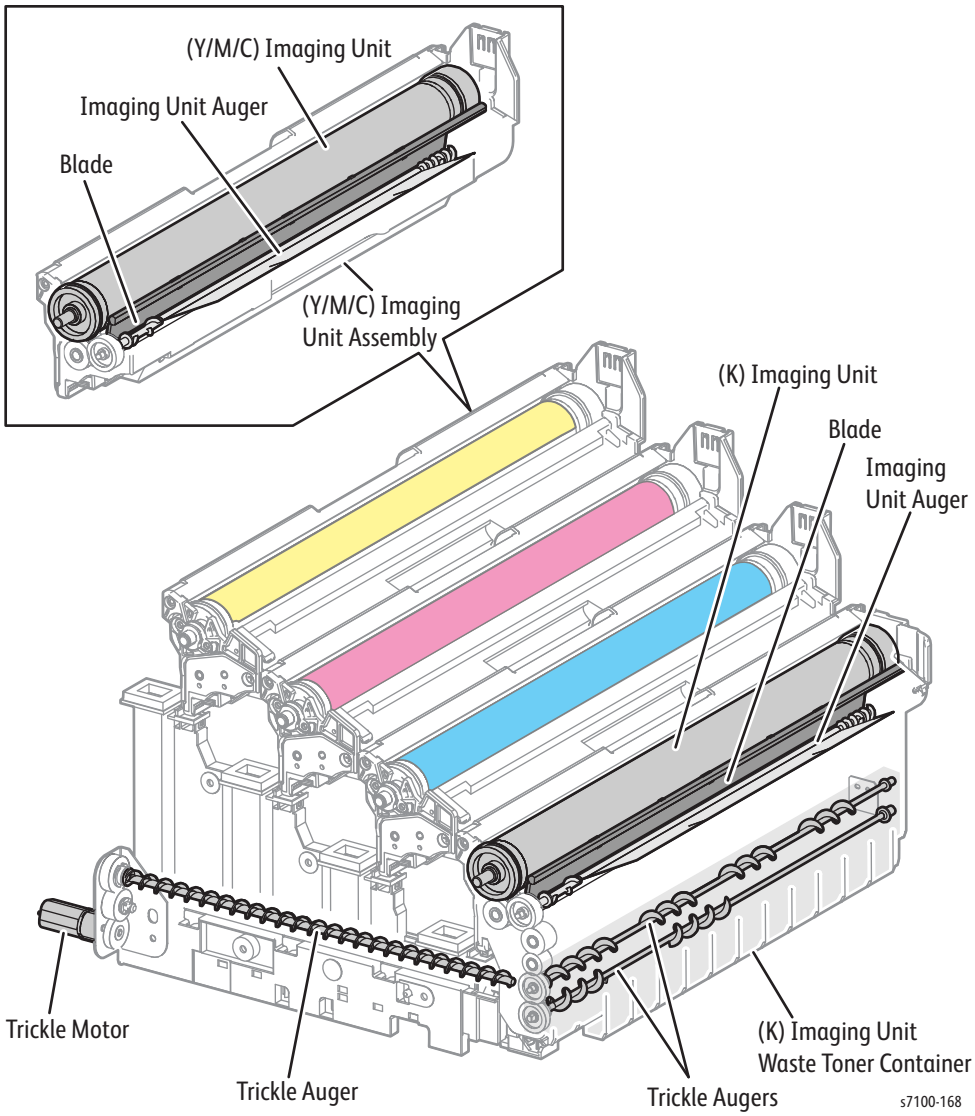
Waste Toner Collection

The Phaser 7100 printer comes with separate systems for collecting waste toner at the Intermediate Transfer section, around each Imaging Unit, and depleted toner. There are two containers for waste toner in the Phaser 7100 printer.

The intermediate transfer collection is contained within the (K) Imaging Unit for all colors. The secondary transfer collection is contained by the Waste Cartridge.

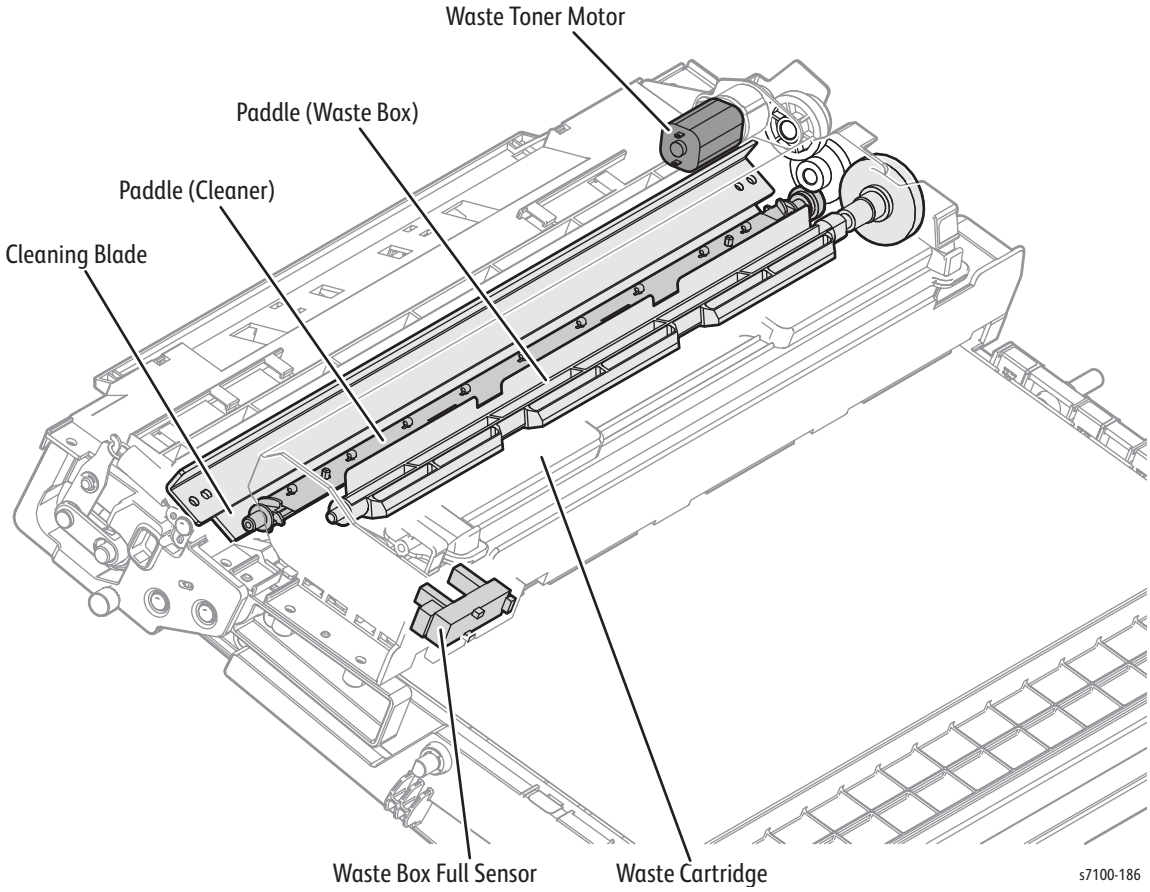
Imaging Unit (K) Waste Toner Container - Collects the waste toner that is generated during the cleaning of the Drums (Y/M/C/K).

Figure 1 - Waste Toner Collection Path to the Imaging Unit (K) Waste Toner Container



Waste Cartridge - Collects the waste toner that is generated during the cleaning of the Intermediate Transfer Belt.

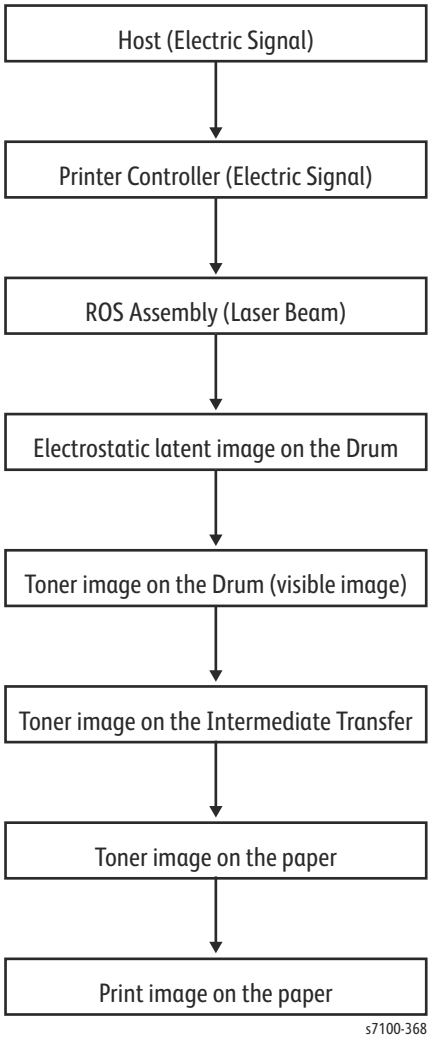
Figure 2 - Waste Toner Collection Path to the Waste Cartridge



Print Data Flow

Data Flow

The print data (electric signals) from the printer Controller processes to become a print image is shown in the following diagram.

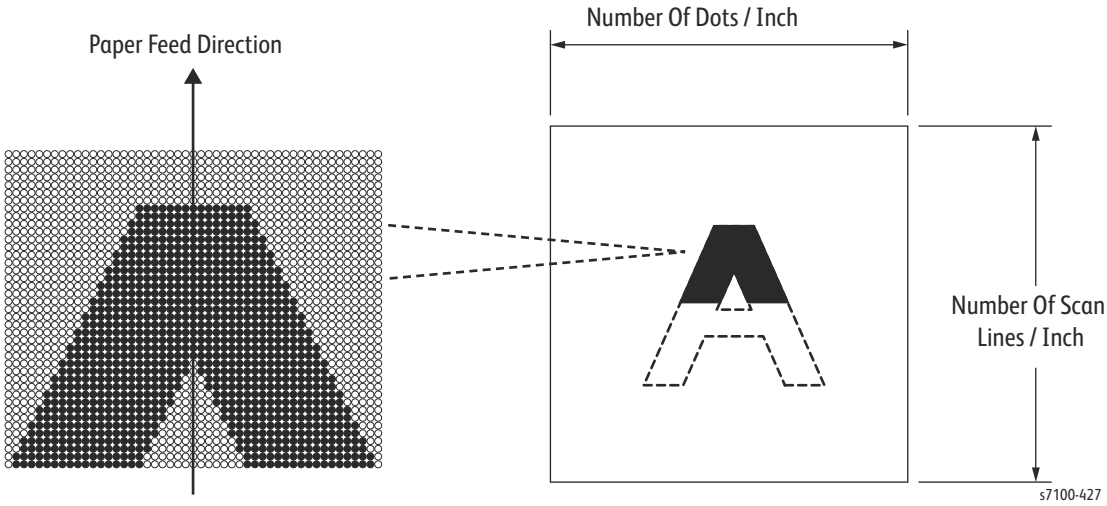


Forming a 2-Dimensional Print Image

According to the electric signals from the printer Controller (Video signals: representing image data using high and low voltages), scanning an image while turning the laser beam On/ Off creates a dot image for one line. By doing the above scan for a whole image, a complete monochromatic image (2-dimensional dot image) is created. To create a full-color image, this 2-dimensional dot image must be created for each of the 4 colors.

The resolution is calculated as follows:

- Fast Scan Direction: number of dots/ inch
- Slow Scan Direction: number of scan lines/ inch

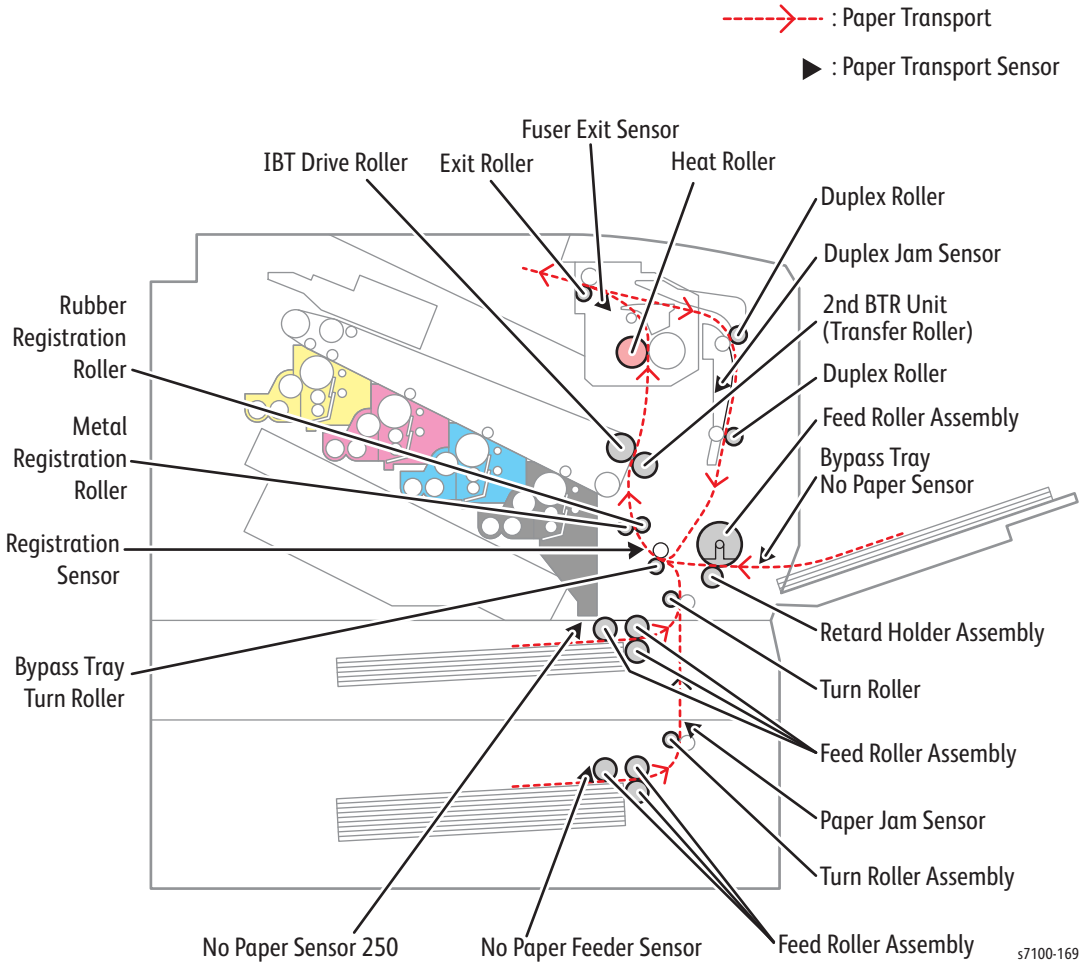


Paper Transport

This section explains the paper transport paths in the Phaser 7100 printer, as well as the flow of paper movement through each of the transport section.

Paper Feed Layout

The paper transport layout and the parts related to paper transportation in a printer with a Duplex Unit and Tray 1 attached is shown in the following illustration.



Feeding Paper from the Paper Tray

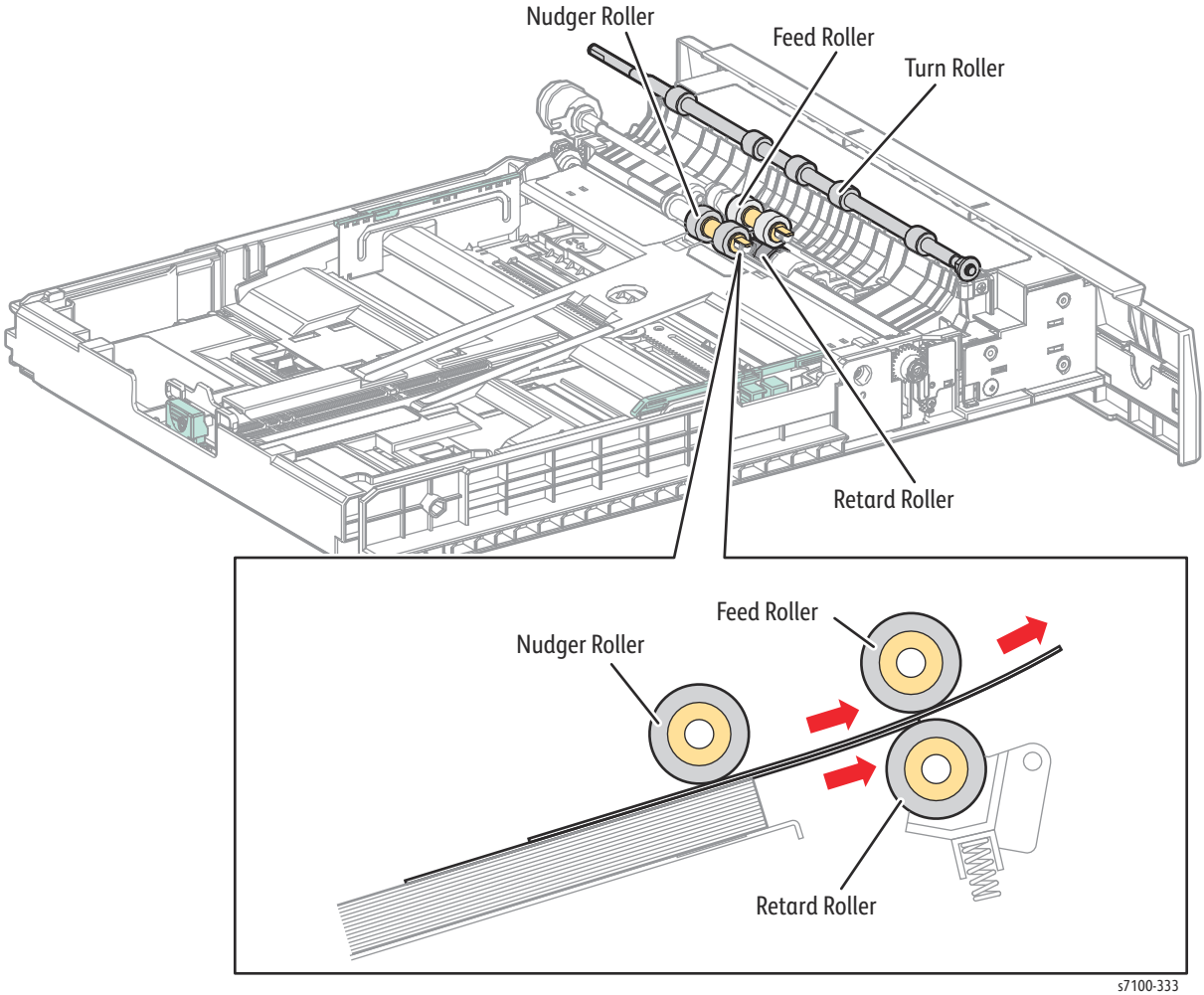
The paper loaded in the paper tray is transported towards the Feed Roller and Retard Roller by the Nudger Roller and then transported towards the Turn Roller Assembly by the rotation of Feed Roller and Retard Roller. The Nudger Roller and the Feed Roller rotate by the drive that is provided by the Paper Handling Motor through the Feed Roller Clutch.

The Retard Roller is pushed by the spring pressure beneath it, and presses against the Feed Roller to separate the paper by using rotation resistance.

When there is paper overlap, the brake force of the Torque Limiter that is linked to the Retard Roller separates the top most paper from the rest and feeds it.

The Bottom Plate Assembly is a mechanism that works with the Gear attached to the side of the paper tray. As long as the coupled Gear is not released, the device can maintain a specified position without rising/descending. Paper is fed at this position.

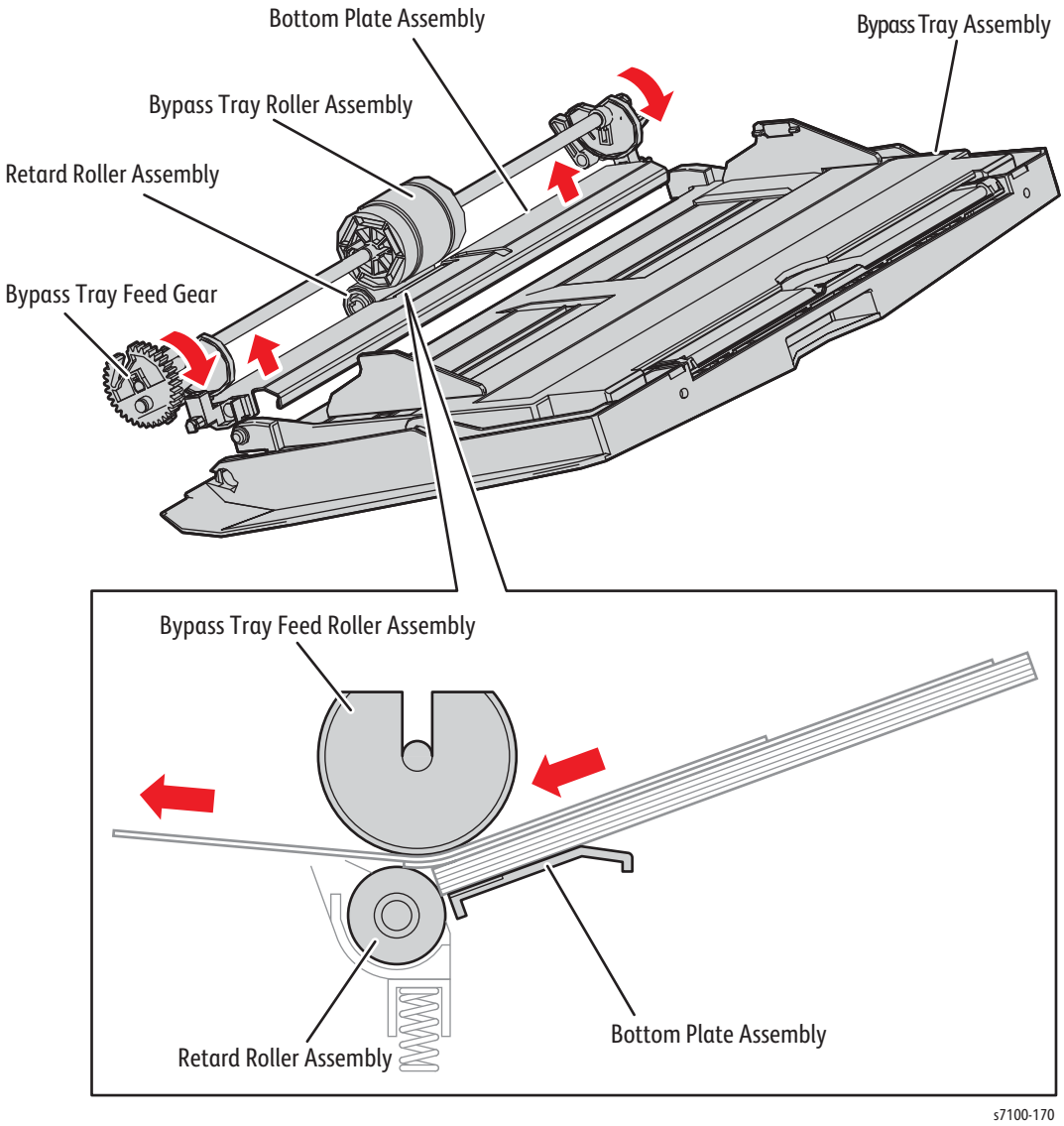
When the top level of the paper stack drops as paper is being fed, the Nudger Roller descends, the Lever releases the Gear, and the Bottom Plate Assembly rises.



Feeding Paper from the Bypass Tray

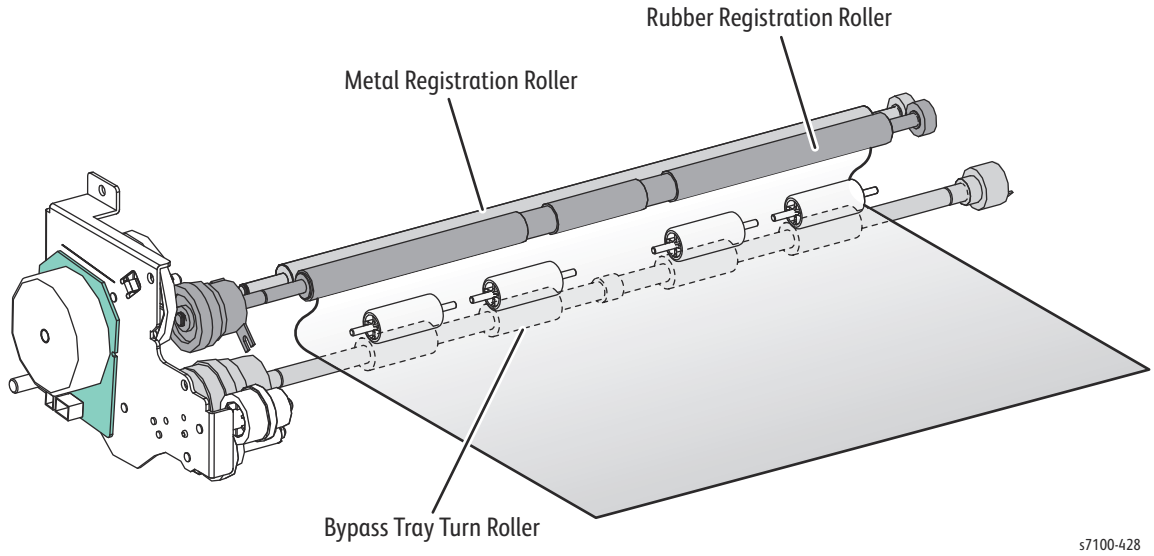
During paper feed, the paper loaded on the Bypass Tray is lifted up by the Bypass Tray Bottom Plate Assembly and pushed against the Bypass Tray Feed Roller Assembly. When two sheets are fed concurrently, only the Feed Roller rotates. The Retard Roller is coupled to a friction clutch that prevents the roller from rotating due to the extra force from feeding two sheets; this process allows the upper sheet to pass by as the lower sheet is stopped by the friction with the Retard Roller at rest. The Retard Roller is pushed toward the Feed Roller by spring pressure.

The Paper Handling Motor drives the Bypass Tray Feed Roller Assembly through the Bypass Tray Feed Gear. When the paper feed starts, the Shaft rotates and causes the attached Cam to move. The Arm and Spring rise along the trajectory of the Cam and lift up the Bypass Tray Bottom Plate Assembly.



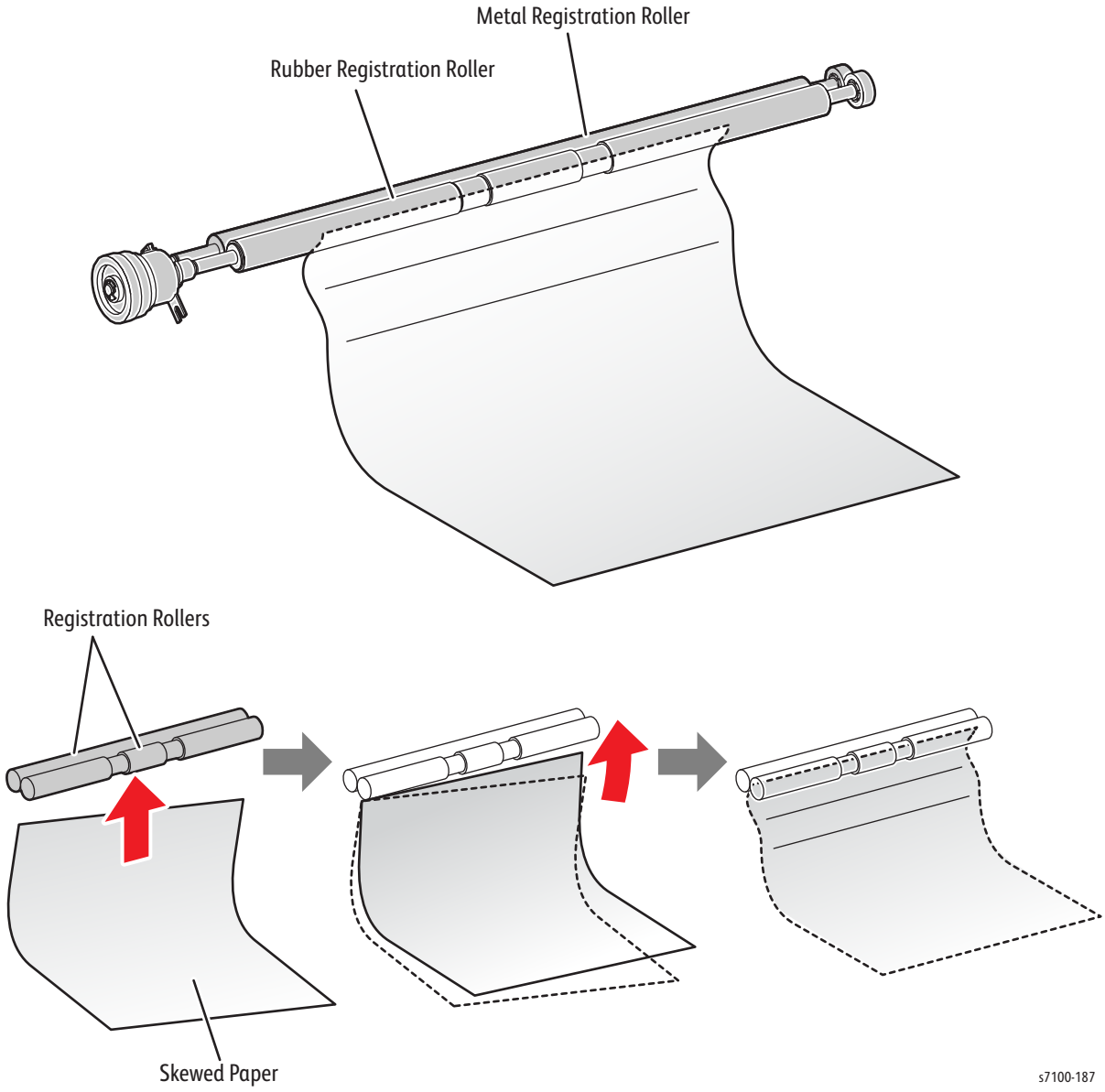
Transportation of Paper Through the Registration Section

Paper fed from Tray 1 or the Bypass Tray is transported to the Registration section by the Bypass Tray Turn Roller. The Bypass Tray Turn Roller rotates by the drive from the Paper Handling Motor through the Turn Roller Clutch.



Paper Lead Edge Adjustment

When paper is fed to the Toner Transfer section, the registration of the sheet may not be correct due to leading edge misalignment. To avoid this, the leading edge is aligned at the registration rollers before the sheet is fed across the Transfer Belt, or in front of the BTRs. The leading edge of the sheet reaches registration and is fed to the toner transfer section (Transfer Roller).



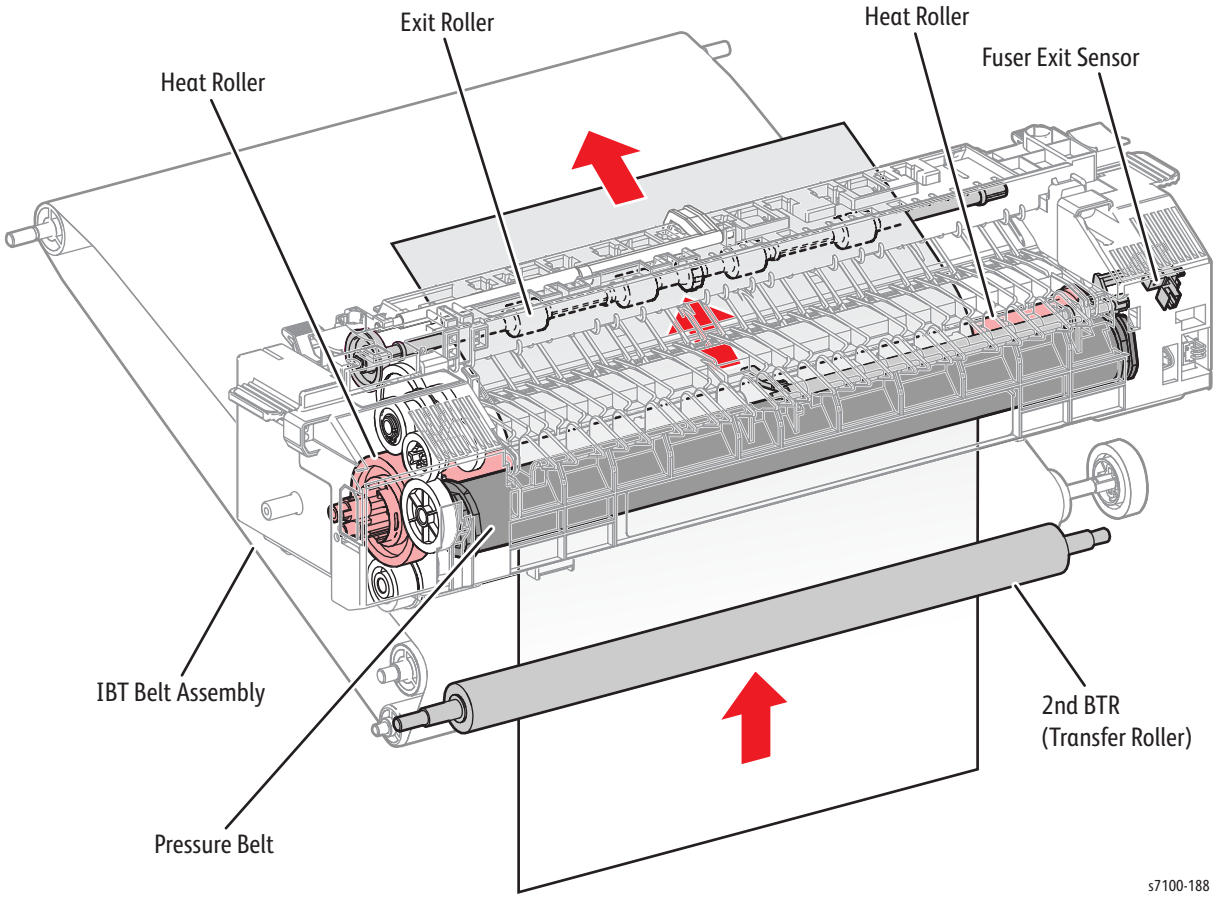
Transportation of Paper from Registration Section

After the Lead Edge of the transported paper has been aligned at the Registration section, it will then be transported at the appropriate timing by the Registration Roller to the Toner Transfer section.The Registration Roller rotates by the drive that is provided by the Paper Handling Motor through the Registration Clutch.

Transfer/ Fusing/ Paper Output

The (K) Drum Motor drives the Intermediate Transfer Belt (IBT Belt Assembly) and the 2nd BTR transfers the toner image on the Intermediate Transfer Belt onto the paper that had passed through the Registration section.

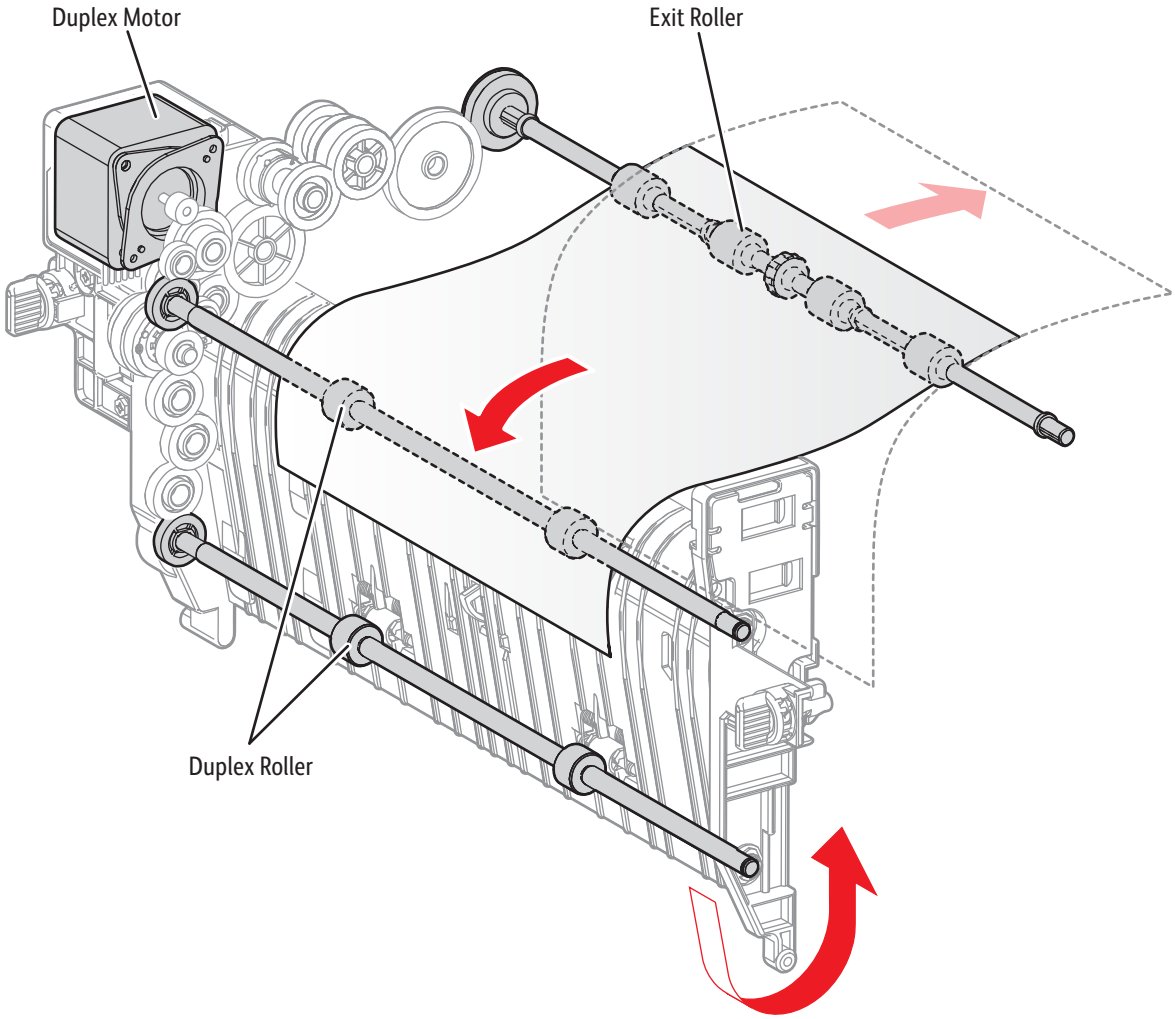
Then, the Fuser Motor drives the Heat Roller to rotate and fuse the toner on the paper while transporting it to the paper output section, where the Exit Roller then rotates in the paper output direction by the same drive from the Fuser Motor and outputs the paper. The completion of paper output is detected by the Fuser Exit Sensor.



Duplex Feed (Option)

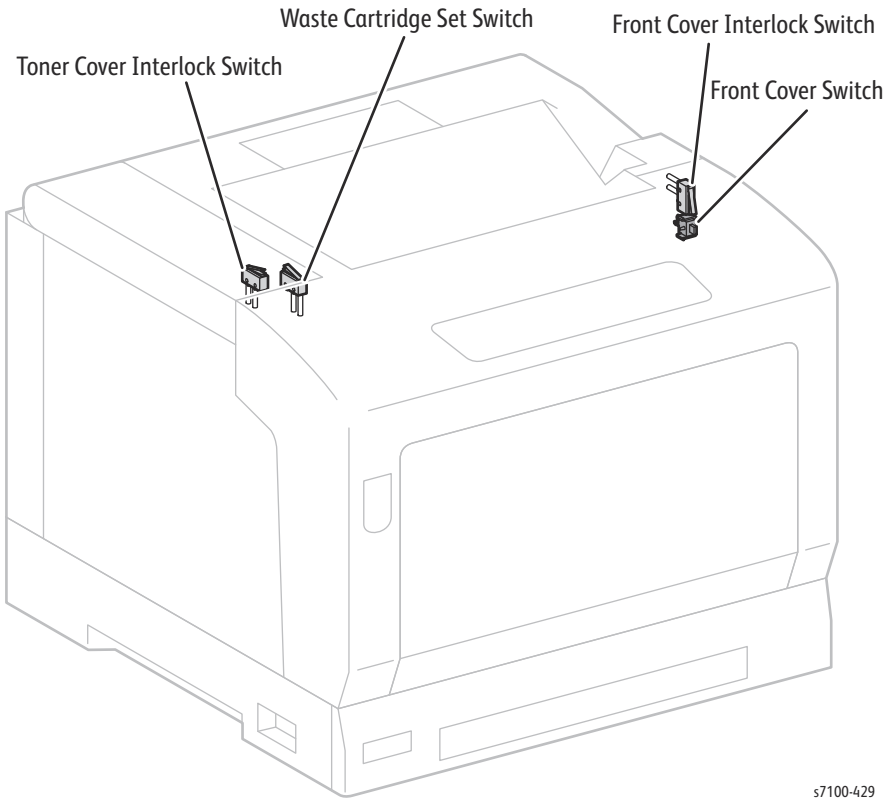
After the paper passes through the Heat Roller and completes side 1 printing, the Exit Roller changes its rotation direction to the duplex feed direction at the appropriate timing and pulls the paper into the Duplex Assembly.

The Fuser Motor drives the Exit Roller that rotates the paper in the output direction. When the Exit Roller rotates in the duplex direction, it is being driven by the Duplex Motor. Also, the Duplex Motor drives the two Duplex Rollers to transport the paper to the Registration position.



Major Assemblies and Functions

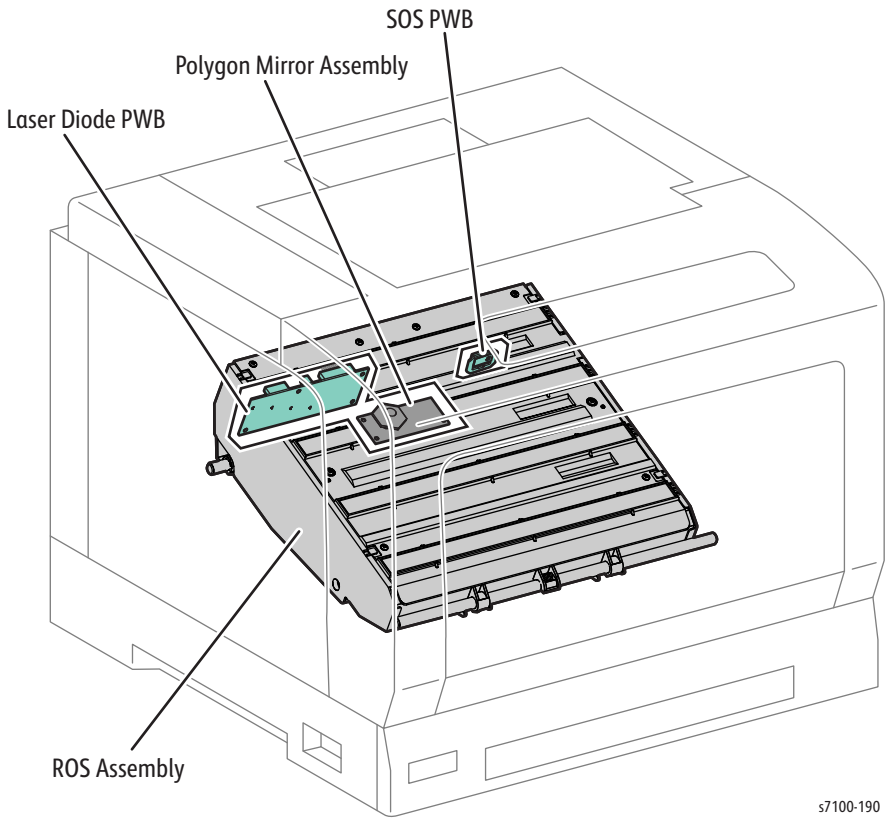
Switches



The Phaser 7100 printer contains the following Switches.

- **Toner Cover Interlock Switch** - Detects if the Toner Cover is open.
- **Waste Cartridge Set Switch** - Detects the installation of the Waste Cartridge.
- **Front Cover Interlock Switch** - Informs the LVPS to cut printer power when the Front Cover is open.
- **Front Cover Switch** - Informs the MCU PWB when the Front Cover is open.

ROS Assembly (Laser Unit) (Exposure)

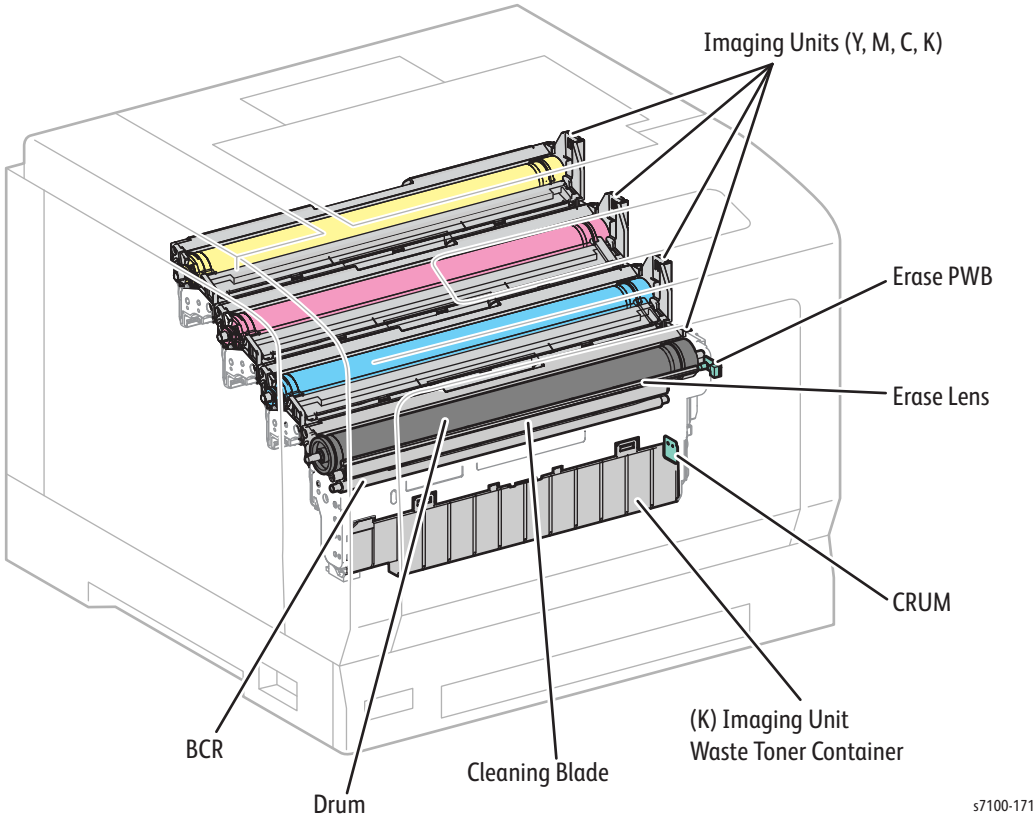


The Laser Unit is an exposure device that emits the laser beam that is used to form the electrostatic latent image on the Drum surface. The Laser Unit is made up of the following main components:

- **Laser Diode (LD) PWB** - The PWB where the LD that emit the laser beam for exposing the Drum surface are installed. It converts the image data that is input from the Image Processor PWB to the ROS Assembly into laser beam and also controls various other parts in the ROS Assembly.
- **Polygon Assembly** - This is made up of the Scanner Motor that rotates at a fixed speed and the Polygon Mirror that is attached to the Motor rotation axis.
- **SOS PWB** - The Start of Scan (SOS) PWB contains the SOS Sensor. The SOS Sensor converts incoming laser beam to electric signals that form the scan start reference and then sends the signals to the MCU PWB.

  Note: The Laser Unit (ROS Assembly) is not a serviceable component. The Laser Unit can only be replaced as a whole assembly. DO NOT disassemble the Laser Unit.

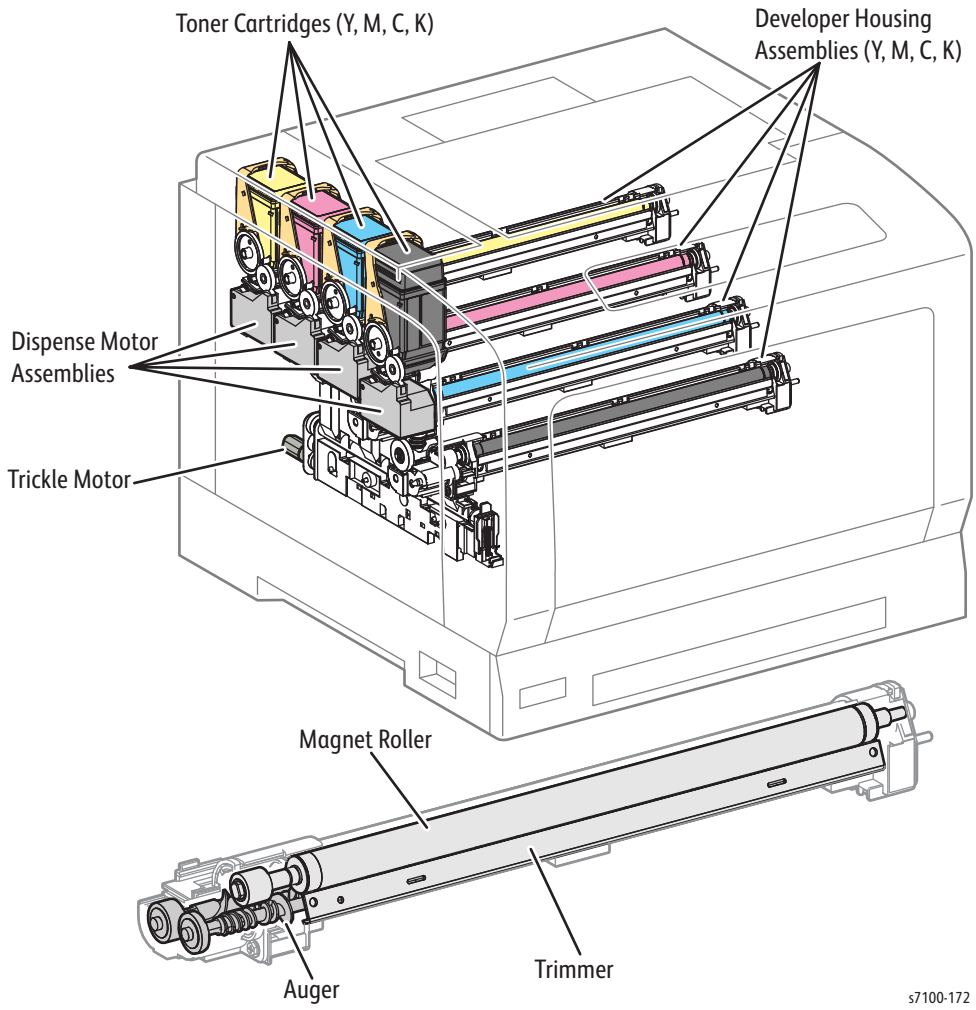
Imaging Unit (Electric Charge/ Cleaning)



The Imaging Units form electrostatic latent images and toner images. One is allocated to each color (Yellow, Magenta, Cyan, and Black). The Imaging Units are made up of the following main components:

- **Drum -** Forms electrostatic latent images and toner images.
- **Bias Charge Roller (BCR)** - Charges the Drum.
- **Cleaning Blade** - Cleans any toner remaining on the Drum after transfer of toner image onto the paper.
- **Erase Lens** - Uses the Erase Lamp to discharge the electric charge on the Drum surface.
- **CRUM** - A non-volatile memory that stores consumable data.
- **(K) Imaging Unit Waste Toner Container** - Stores the waste toner that had been collected from the Drum during the cleaning process. The Waste Toner Container for black also collects the depleted toner for all other colors.
- **Erase PWB** - The Erase Lamp is used to discharge the Drum surface. One is allocated to each color (Yellow, Magenta, Cyan, and Black).

Developer Housing Assembly (Development)

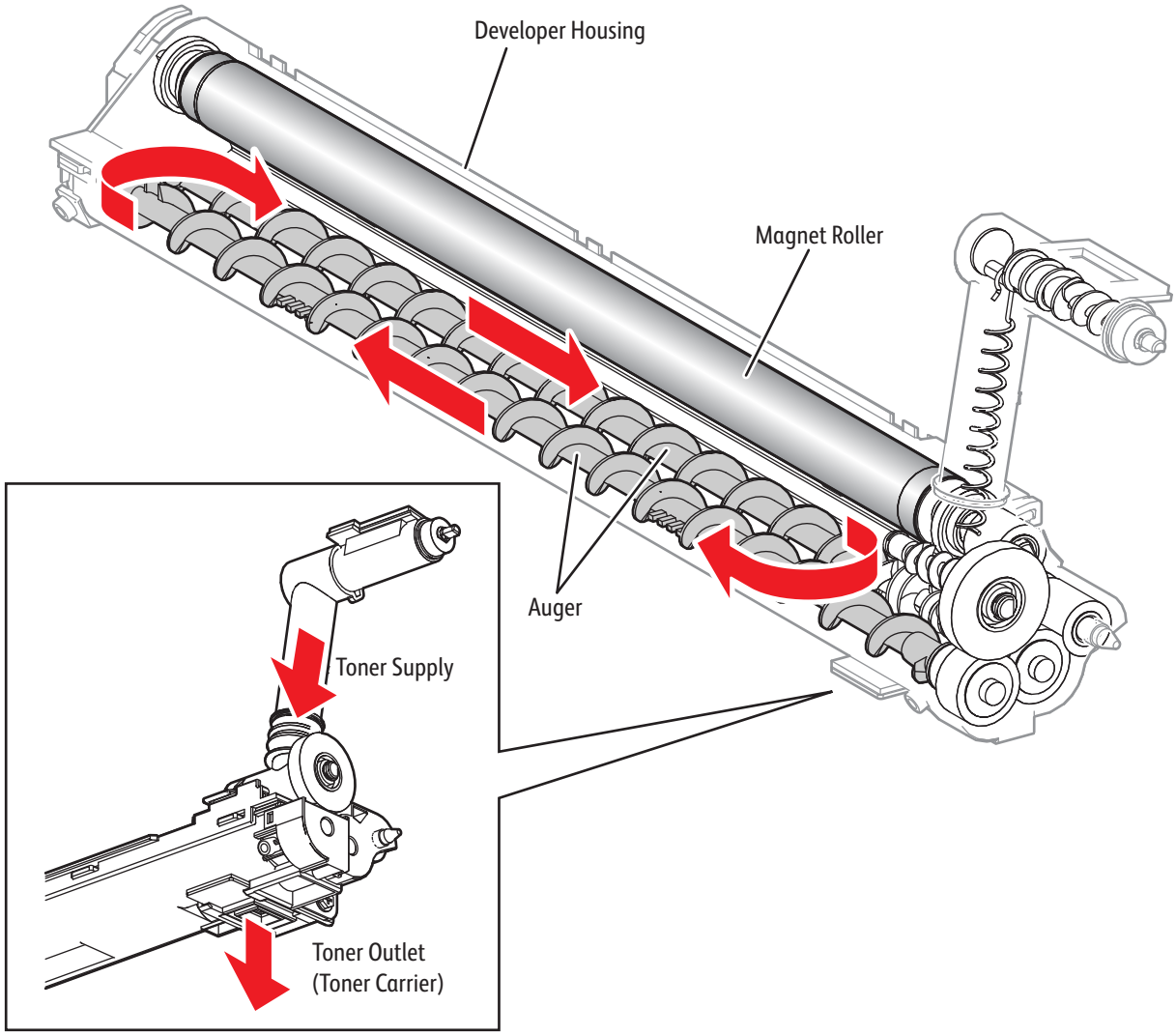


The Developer Housing Assembly contains toner and a small amount of Carrier. The Developer Housing Assembly also comes installed with a CRUM, which is a non-volatile memory that stores consumable data.

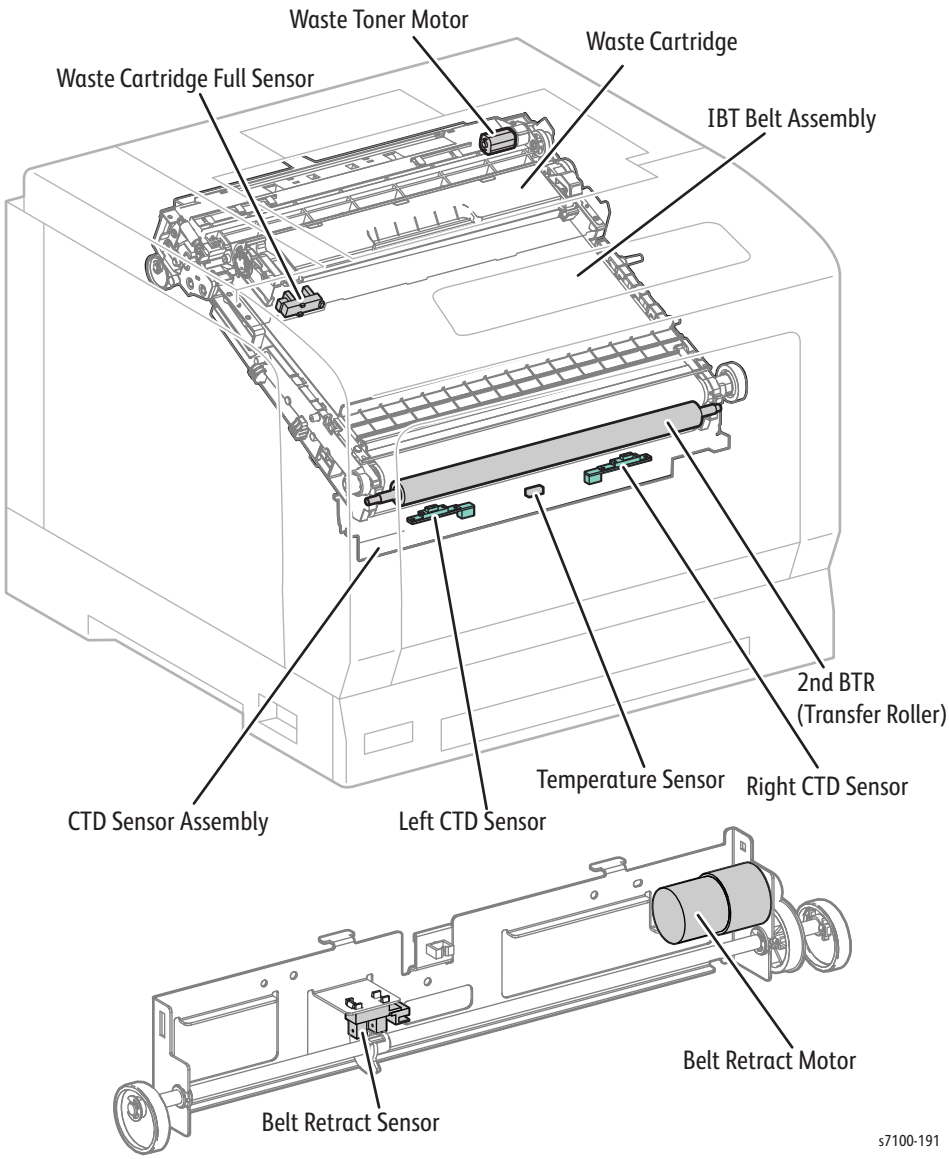
- **Dispense Motor Assembly** - Drives the Paddle in the Toner Cartridge and the Auger in the Transport section to supply toner from the Toner Cartridge to the Developer Housing Assembly. One is allocated to each color (Yellow, Magenta, Cyan, and Black).
- **Trickle Motor (Waste Auger Assembly)** - Drives the Auger to transport the used toner that is ejected from the Developer Housing Assembly into the Imaging Unit Waste Toner Container in the (K) Imaging Unit Assembly.
- **Developer Housing Assembly (Y/ M/ C/ K)** - The Housing Developer Assembly is made up of the following main components:
  - **Magnet Roller** - Contacts the Drum and forms toner images on the Drum.
  - **Auger** - Agitates the toner.
  - **Trimmer** - Evens out the layer of toner and carrier on the Magnet Roller.

Toner Supply

The Phaser 7100 uses dry bi-component magnetic toner with the two components: Toner and Carrier. Other than toner, a small amount of carrier is also present in the Toner Cartridge. To prevent the degradation of the toner, the toner together with the carrier are supplied into the Developer Housing Assembly while at the same time removing the used toner from the Developer Housing Assembly.



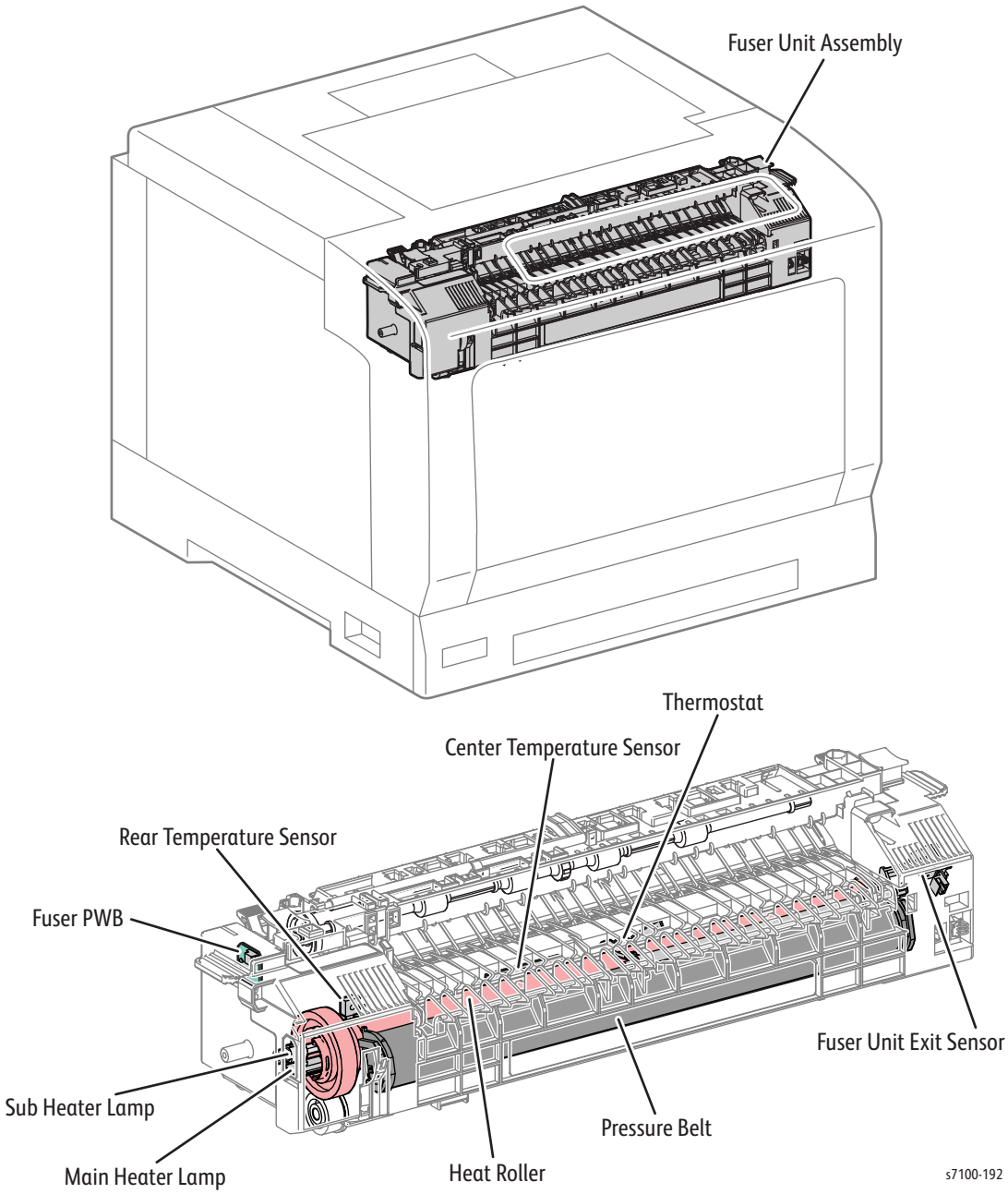
Intermediate Transfer Belt (Transfer/ Cleaning)



- **Waste Cartridge Full Sensor (Toner Full Sensor)** - Detects whether the Waste Cartridge is full with waste toner.
- **Waste Toner Motor (IBT Cleaner Motor Assembly)** - Drives the Paddle for transporting the waste toner.

- **IBT Belt Assembly** - Transferred the toner image that was formed on the Drum to the media. The IBT Belt Assembly is made up of the following main components:
  - **1st BTR Roller (Y/ M/ C/ K)** - During printing, these Rollers apply positive charge to the underside of the Intermediate Transfer Belt to transfer the toner image that was created on the Drum onto the Intermediate Transfer Belt.
  - **Intermediate Transfer Belt** - Forms the complete toner image (CMYK) on the belt surface and transfers it onto the paper.
  - **Backup Roller** - Contacts the 2nd BTR through the Intermediate Transfer Belt during the secondary transfer to transfer the toner image on the Intermediate Transfer Belt onto the paper.
  - **Belt Cleaner** - Cleans any toner remaining on the Intermediate Transfer Belt after the toner image has been transferred onto the paper.
- **Belt Retract Motor (IBT Retract Cam Assembly)** - Drives the Cam that moves the position of the IBT Belt Assembly.
- **Belt Retract Sensor (IBT Retract Cam Assembly)** - Detects the position (Color Mode/ BW Mode) of the IBT Belt Assembly.
- **Color Toner Density (CTD) Sensor Assembly** - The CTD Sensor Assembly is related to the Image Formation Control (Process Control, Color Registration Control). The CTD Sensor Assembly is made up of the following main components:
  - **CTD Sensor (Left)** - The Left CTD Sensor is a reflective Color Toner Density Sensor. This Sensor contains a LED that emits light to shine on the Intermediate Transfer Belt, a photo detector that detects the light that is reflected by the Intermediate Transfer Belt, and outputs an electric signal according to that brightness. The Left CTD Sensor detects the toner patch density on the Intermediate Transfer Belt before the secondary transfer. It is installed on the left side of the Intermediate Transfer Belt.
  - **CTD Sensor (Right)** - The Right CTD Sensor is the same type as the Left CTD Sensor. It is installed on the right side of the Intermediate Transfer Belt.
  - **Temperature Sensor** - Monitors the temperature inside the printer (in the vicinity of the Intermediate Transfer Belt). The detected temperature is used to manage the timing to perform the Color Density Control.
- **2nd BTR (Transfer Roller)** - Contacts the paper at the opposite side of the toner transfer surface and transfers the toner image that was formed on the Intermediate Transfer Belt surface onto the paper.

Fuser Assembly (Fusing/ Paper Output)

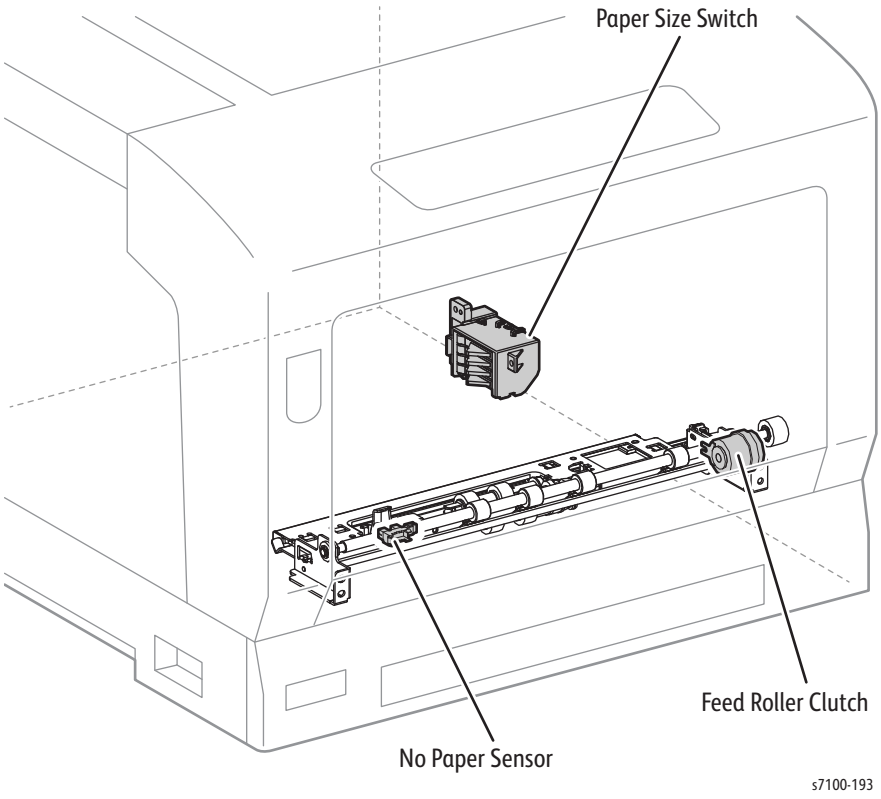


The Fuser Assembly fuses the complete toner image that was transferred onto the paper, using heat and pressure. The paper output section is also included in the Fuser Assembly. The Fuser Assembly is made up of the following main components:

- **Heat Roller** - A tube-covered hollow metal roller, which applies heat to the paper to fuse the toner.
- **Pressure Belt** - A belt that contains a pressure system within it. This pairs up with the Heat Roller and applies pressure to the paper to fuse the toner.
- **Main Heater Lamp** - A Lamp located inside the Heat Roller that heats the left and right ends of the Heat Roller.

- **Sub Heater Lamp** - A heating-coil-enclosed Lamp located inside the Heat Roller that heats the center of the Heat Roller.
- **Center Temperature Sensor** (non-contact type) - A Thermistor that is placed close to, but not in contact with the Heat Roller to detect the surface temperature of the Heat Roller and to control the On (conducting: light On)/ Off (light Off) status of the Heater Lamp based on the detected temperature.
- **Rear Temperature Senso**r (contact type) - A Thermistor that is placed in contact with the Heat Roller to detect the surface temperature of the Heat Roller and to prevent the Heat Roller from overheating.
- **Thermostat** - These are positioned in series with the Heater Lamp power supply. If the Temperature Sensors (Thermistors) have failed to prevent overheating (primary), and the contact point has reached the specified temperature, the contact will open to prevent secondary overheating.
- **Fuser PWB** - Detects whether the Fuser had ever been installed before when the Fuser Assembly is used for the first time.
- **Fuser Exit Sensor** - Detects that paper has passed through the Fuser Assembly section.
  (No paper: Sensor blocked)

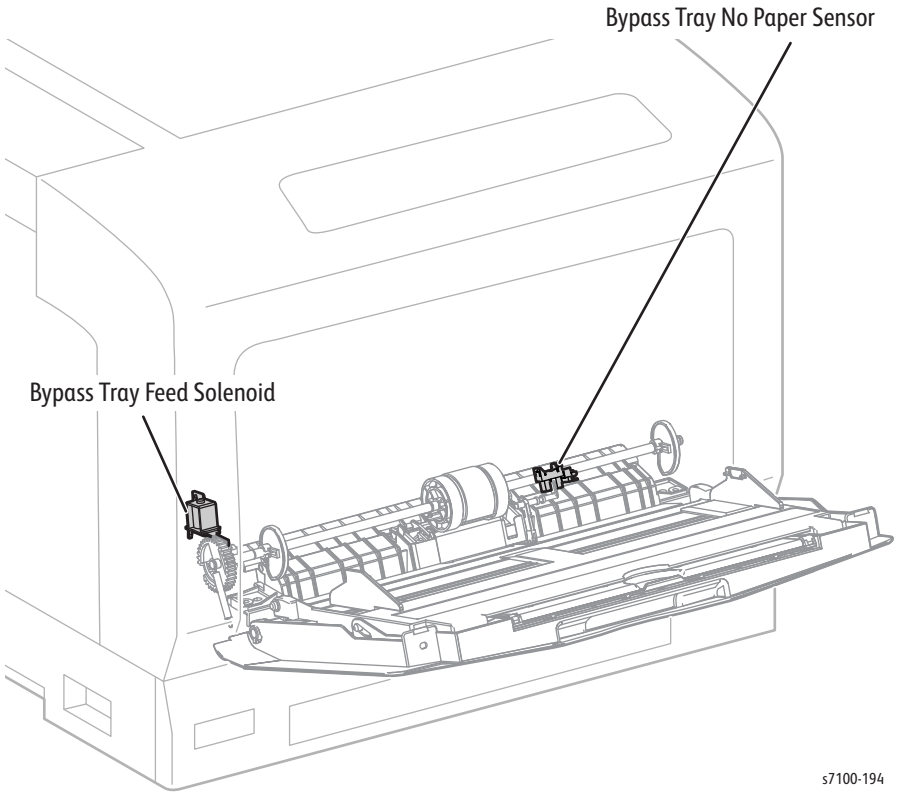
Tray 1 Paper Feeder



- **Paper Size Switch (Size Switch Holder Assembly)** - Detects the paper size in the paper tray, and whether the paper tray is installed.
- **Tray 1 No Paper Sensor** - Detects whether paper exists in the paper tray by changes in the Actuator.

  (No paper: Sensor blocked)
- **Feed Roller Clutch** - Transfers the drive of the Paper Handling Motor to the Feed Roller Assembly.

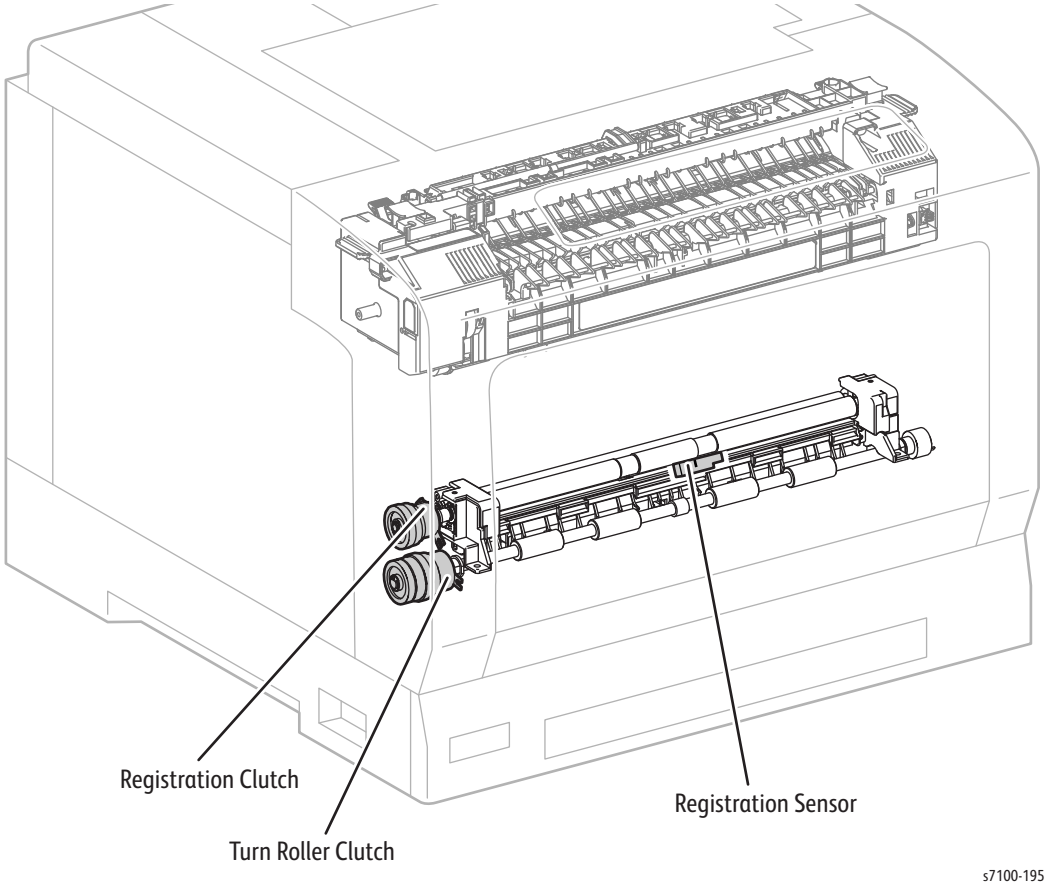
Bypass Tray



- **Bypass Tray Feed Solenoid** - Transfers the drive of the Paper Handling Motor to the Bypass Tray Feed Roller Assembly.
- **Bypass Tray No Paper Sensor** - Detects whether or not paper exists on the Bypass Tray by changes in the Actuator.

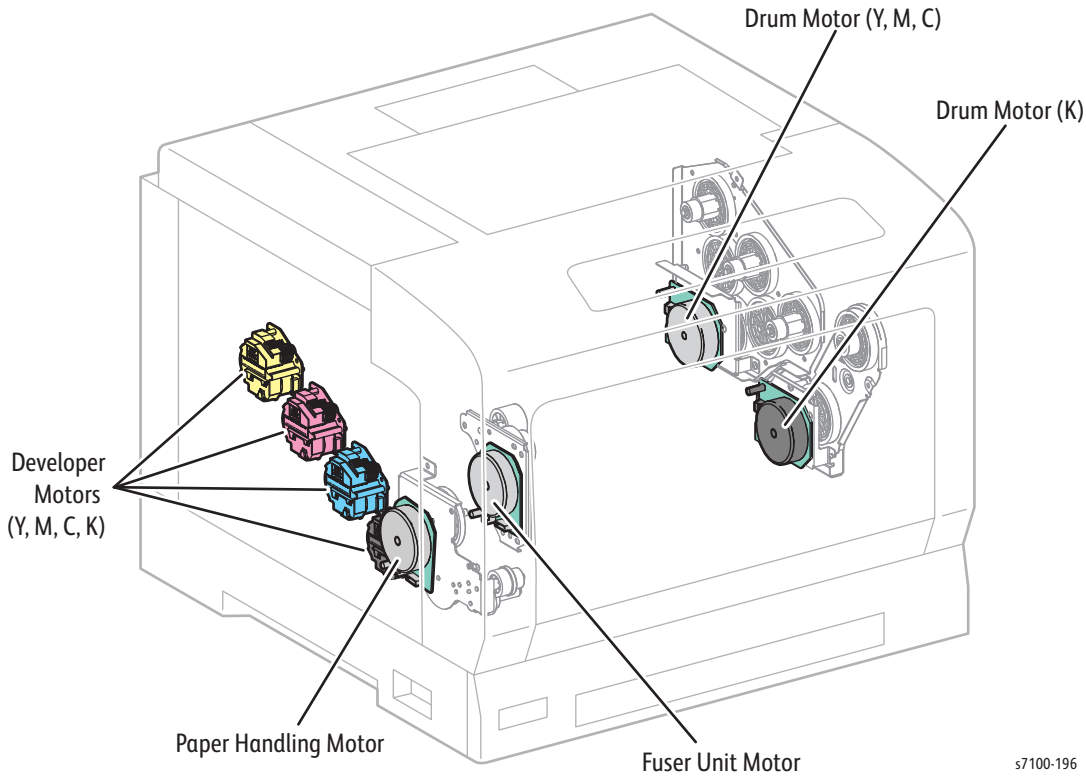
  (No paper: Sensor blocked)

Registration



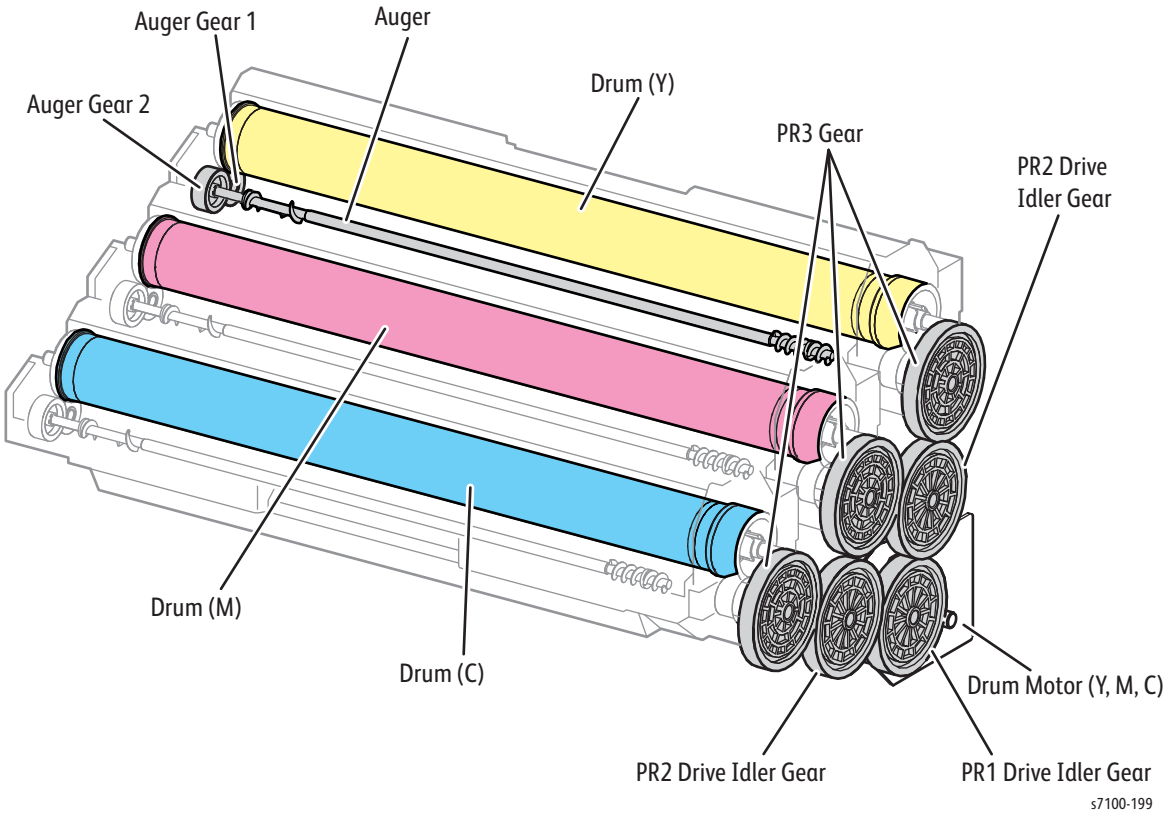
- **Registration Sensor** - A reflective Sensor that detects the paper lead edge when it has reached the Registration section (Registration Chute Assembly).
- **Turn Roller Clutch (Turn Clutch Assembly)** - Transfers the drive of the Paper Handling Motor to the Bypass Tray Turn Roller.
- **Registration Clutch** - Transfers the drive of the Paper Handling Motor to the Rubber Registration Roller and Metal Registration Roller that are part of the Registration Chute Assembly.

Drive



- **Drum Motor (Y/ M/ C) (PR Drive Assembly)** - A DC Motor that drives the Drum (Y), Drum (M), and Drum (C).
- **Drum Motor (K)** (**PR Drive Assembly)** - A DC Motor that drives the (K) Drum.
- **Developer Motor (Y/ M/ C/ K) (Developer Motor (Match Box) Assembly)** - A DC Motor that drives the Magnet Roller in the Developer Assembly.
- **Paper Handling Motor (Paper Handling Drive Assembly)** - A DC Motor that drives the Bypass Tray, Tray 1, and the Rollers in the Registration section.
- **Fuser Motor (Fuser Drive Assembly)** - A DC Motor that drives the Heat Roller in the Fuser Assembly.

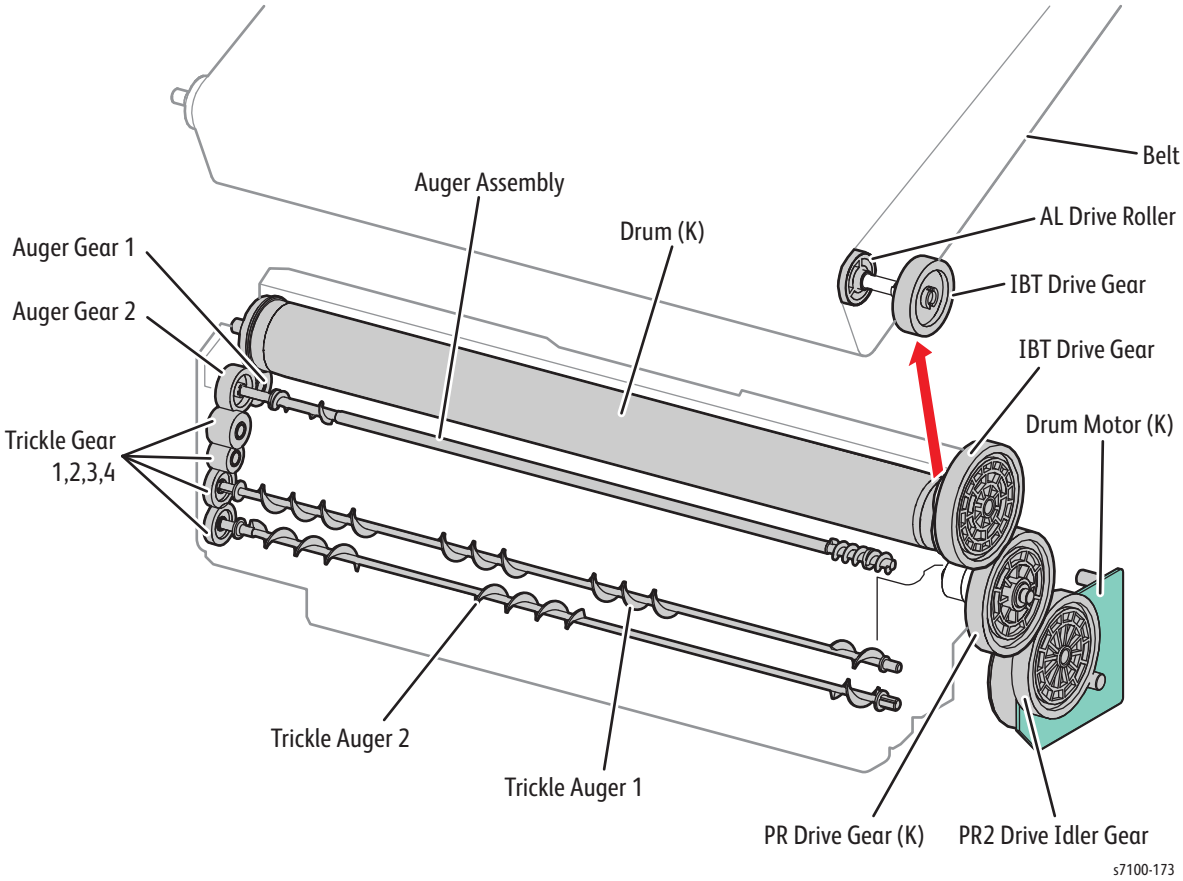
Drum Motor (Y/ M/ C)



- **(Y/ M/ C) PR Drive Assembly Components**
  - Drum Motor (Y/ M/ C)
  - PR1 Drive Idler Gear
  - PR2 Drive Idler Gear
  - PR3 Gear
- **(Y) Imaging Unit Components**
  - Drum (Y)
  - Auger Gear 1
  - Auger Gear 2
  - Auger Assembly

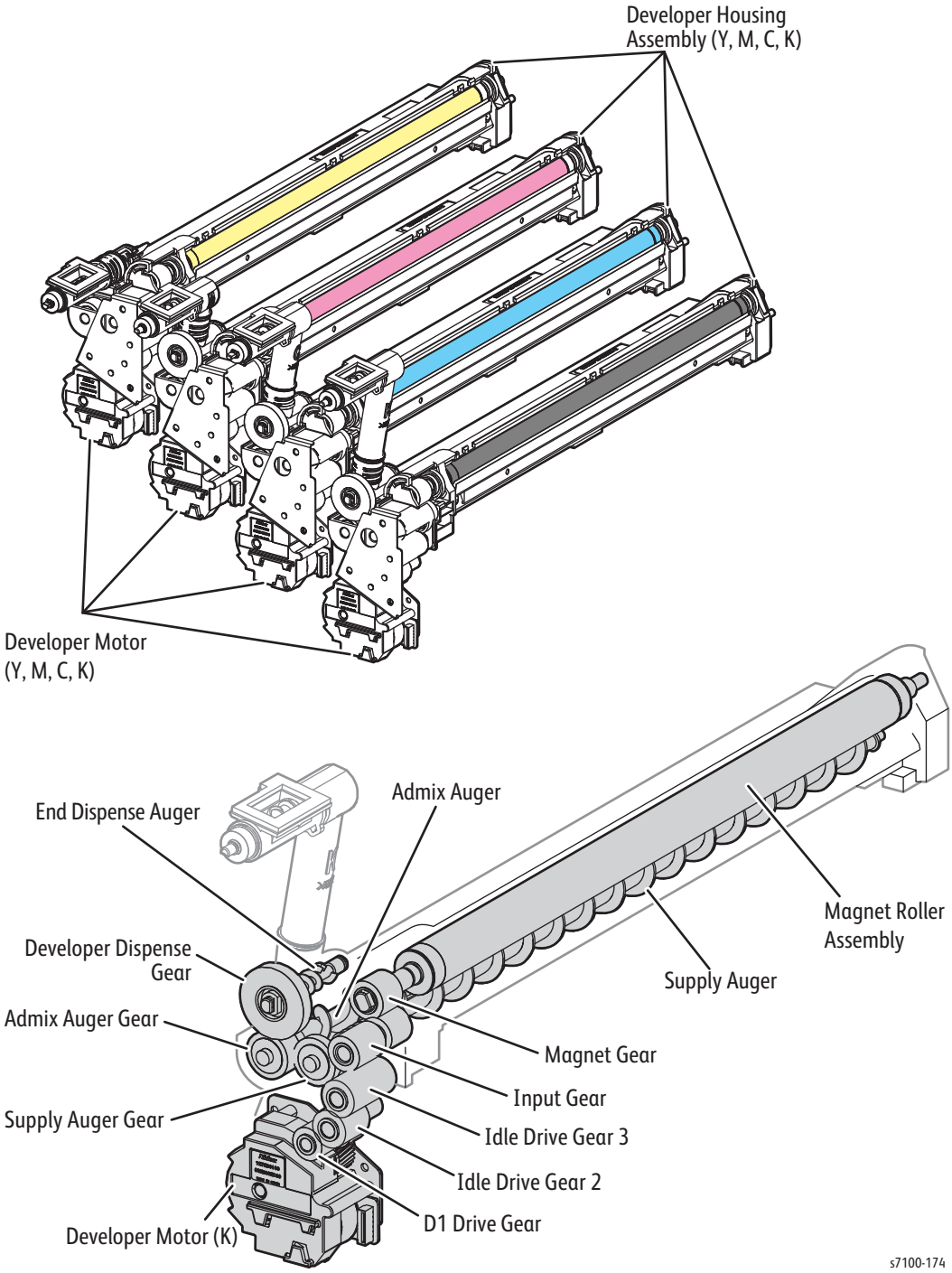
  Note: The Imaging Unit (M/ C) are also made up of the similar components.

Drum Motor (K)



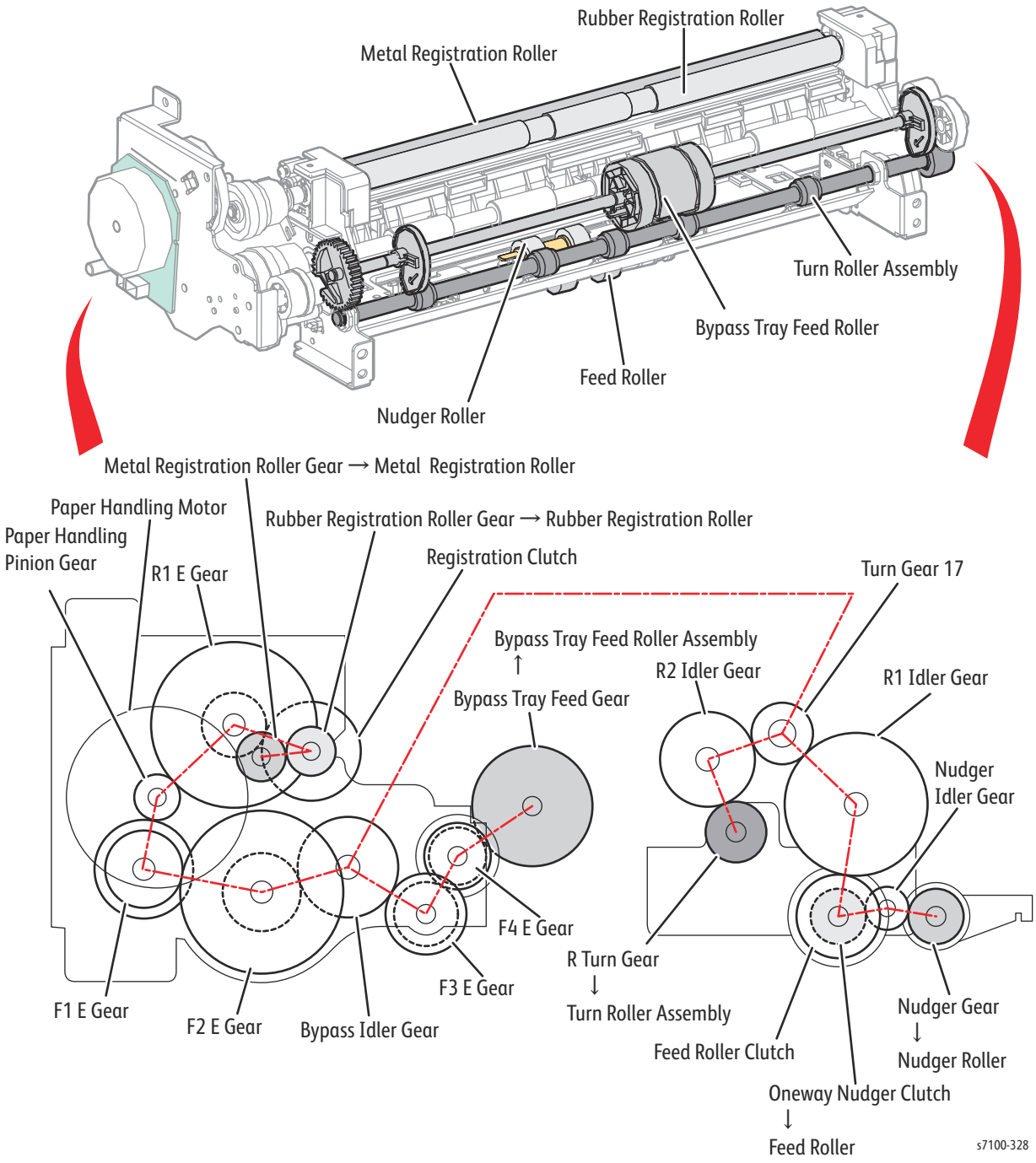
- **(K) PR Drive Assembly Components**
  - Drum Motor (K)
  - PR2 Drive Idler Gear
  - IBT Drive Gear
- **(K) Imaging Unit Components**
  - Drum (K)
  - Auger Gear 1
  - Auger Gear 2
  - Trickle Gear 1
  - Trickle Gear 2
  - Trickle Gear 3
  - Trickle Gear 4
  - Auger Assembly
  - Trickle Auger 1
  - Trickle Auger 2

Developer Motor (Y/ M/ C/ K)



Note: This is similar for the Developer Housing Assembly (Y/ M/ C).

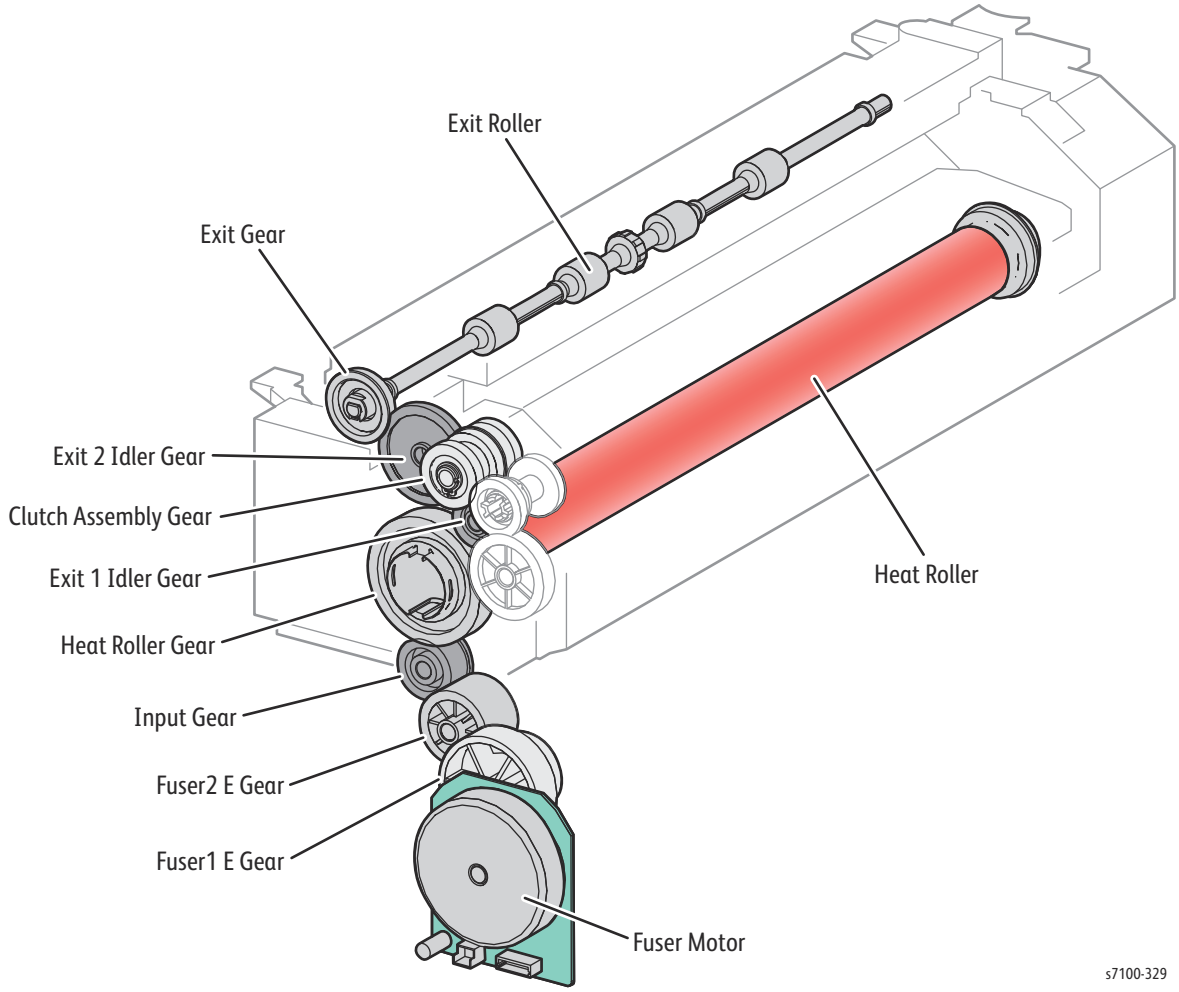
Paper Handling Motor



- Paper Handling Drive Assembly Components
  - Paper Handling Motor
  - Paper Handling Pinion Gear
  - F1 E Gear
  - F2 E Gear
  - F3 E Gear

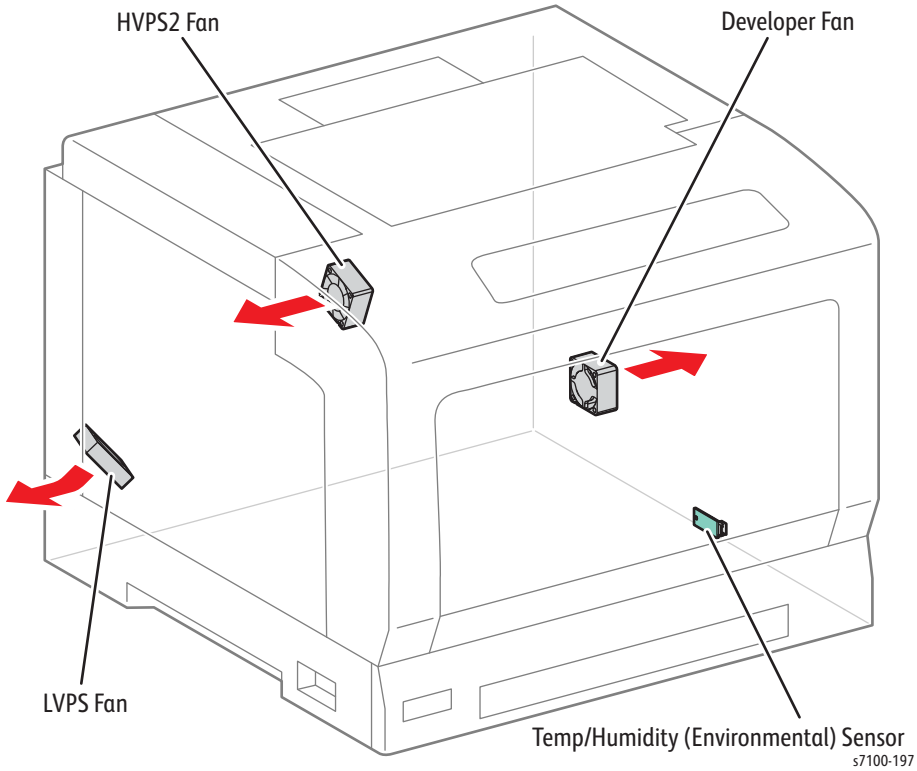
  - F4 E Gear
  - R1 E Gear
- Registration Chute Assembly Components
  - Rubber Registration Gear
  - Rubber Registration Roller
  - Metal Registration Gear
  - Metal Registration Roller
- Right Turn Bracket Assembly Components
  - R1 Idler Gear
  - R2 Idler Gear
- Nudger Support Assembly Components
  - Nudger Idle Gear
  - Nudger Gear

Fuser Motor



- Fuser Drive Assembly Components
  - Fuser Motor
  - Fuser 1 E Gear
  - Fuser 2 E Gear
- Fuser Assembly Components
  - Input Gear
  - Heat Roller Gear
  - Exit 1 Idler Gear
  - Clutch Assembly Gear
  - Exit 2 Idler Gear
  - Exit Gear
  - Exit Roller
  - Heat Roller

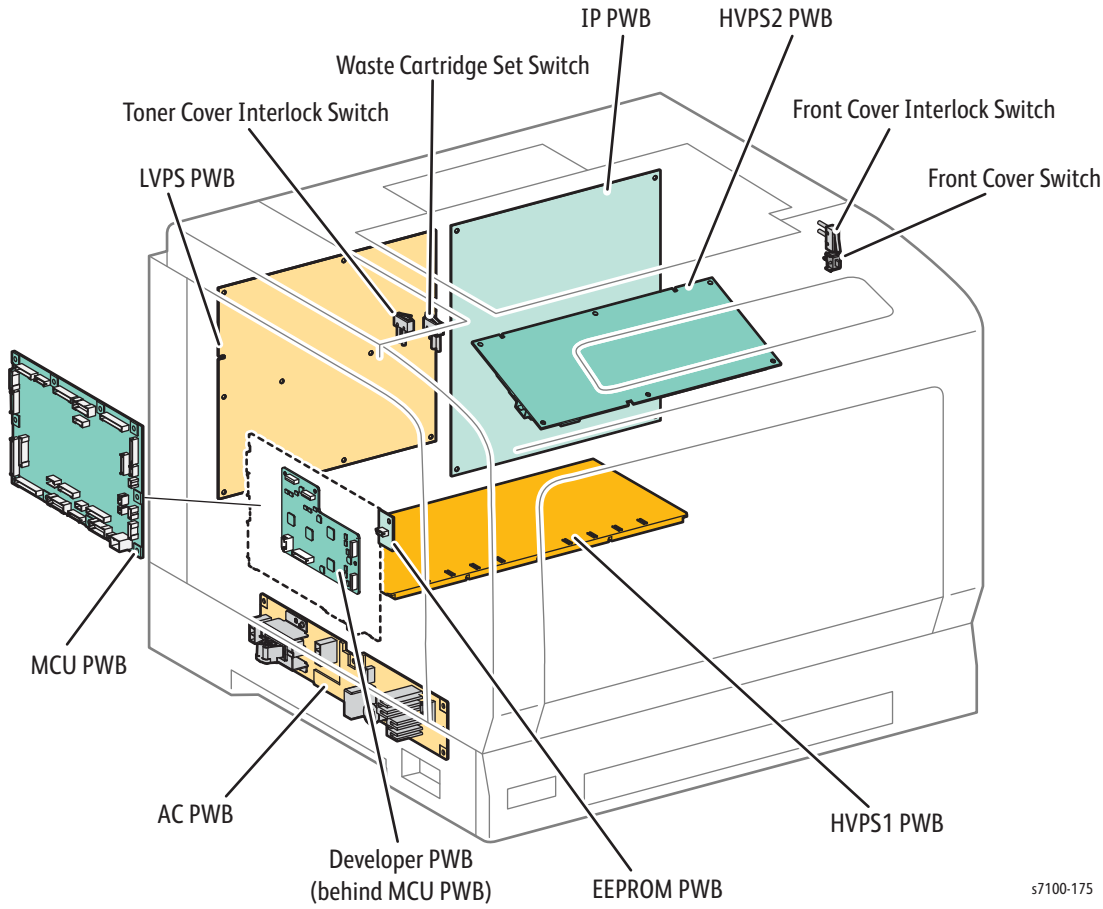
Fans and Temp/ Humidity Sensor



- **HVPS2 Fan** - Cools the vicinity of the HVPS2 PWB (the upper section of the HVPS).
- **LVPS Fan** - Cools the bottom left side of the LVPS PWB.
- **Developer Fan** - Cools the vicinity of the HVPS1 PWB (the lower section of the HVPS).
- **Temp/ Humidity (Environmental) Sensor** - Detects the temperature and humidity in the printer. The detected temperature/ humidity is used as the condition to perform the various voltage correction during Process Control.

Electrical

The electrical system consists of the Image Processor (I/P) PWB, MCU PWB, AC PWB, LVPS PWB, HVPS1 PWB, HVPS2 PWB, and EEPROM PWB.



- **Image Processor (I/P) PWB** - This is the printer Controller. The I/P PWB receives print job data and converts it to a rasterized format.
- **MCU PWB** - Communicates with the printer Controller and controls the components used in print operation.
- **AC PWB Assembly** - Supplies the AC power to the LVPS PWB. It also turns the Lamp that heats the Heat Roller in the Fuser Unit On and Off.
- **LVPS PWB** - Generates +24VDC, +5VDC, and +3.3VDC voltages from the AC power source to supply the components that need them.
- **HVPS1 PWB** - Supplies the high voltage to the BCR that are part of the Imaging Unit of each color and the Magnet Roller that are part of the Developer Housing Assembly of each color.
- **HVPS2 PWB** - Supplies the high voltage to the 1st BTR of each color and the Backup Roller that are part of the IBT Belt Assembly.
- **EEPROM PWB** - This is a non-volatile memory that stores the printer data.
- **Developer PWB** - Supplies power to the Developer Motor.
- **Front Cover Switch (Interlock Cap Switch)** - Monitors the Open/ Close state of the Front Cover.

- **Front Cover Interlock Switch (Interlock Switch Assembly)** - Detects the Open/ Close state of the Front Cover. Opening the Front Cover cuts off the DC power supply (+5VDC) to the printer.
- **Waste Cartridge Set Switch (WC Switch Assembly Kit)** - Detects the installation of Waste Cartridge. Removing the Waste Cartridge cuts off DC power supply (+5VDC) to the printer.
- **Toner Cover Interlock Switch (Interlock Switch Assembly)** - Detects the Open/ Close state of the Toner Cover. Opening the Toner Cover cuts off the DC power supply (+5VDC) to the printer.

NVRAM

The Image Processor (I/P) PWB and the MCU PWB contain an NVRAM on each PWB.

Note: When replacing the I/P PWB or MCU PWB, be sure to transfer the NVRAM from the old I/P PWB to the new I/P PWB or the old MCU PWB to the new MCU PWB.

MCU PWB NVRAM

The MCU PWB NVRAM stores information such as serial number and print volume.

Figure 1 - NVRAM on MCU PWB

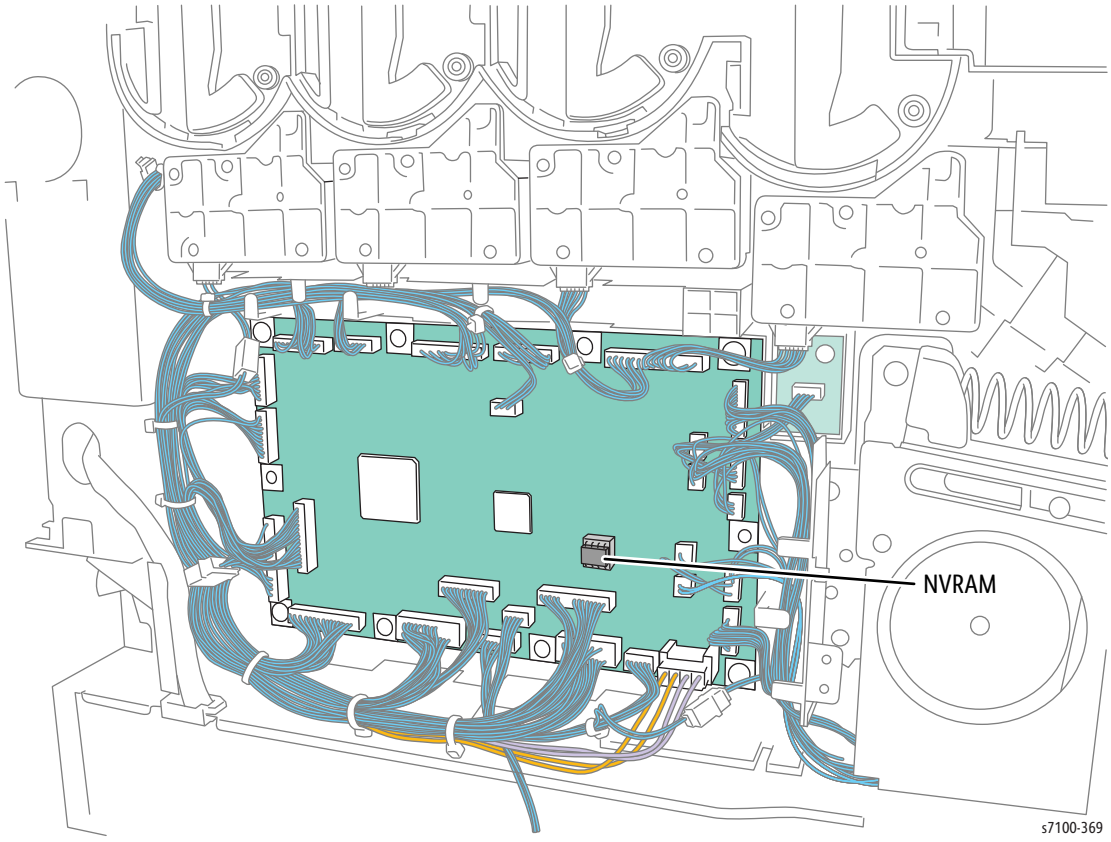
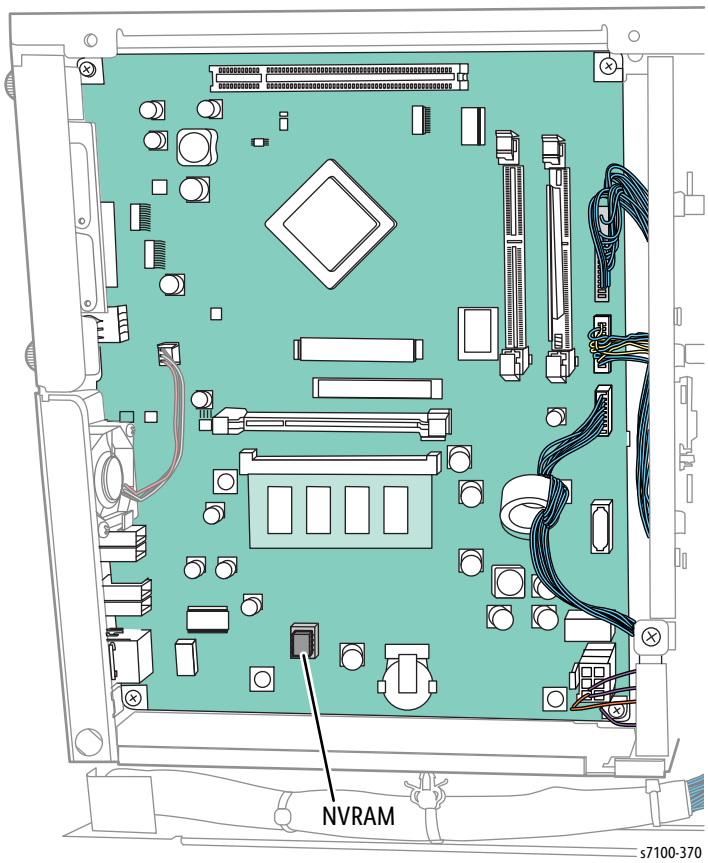


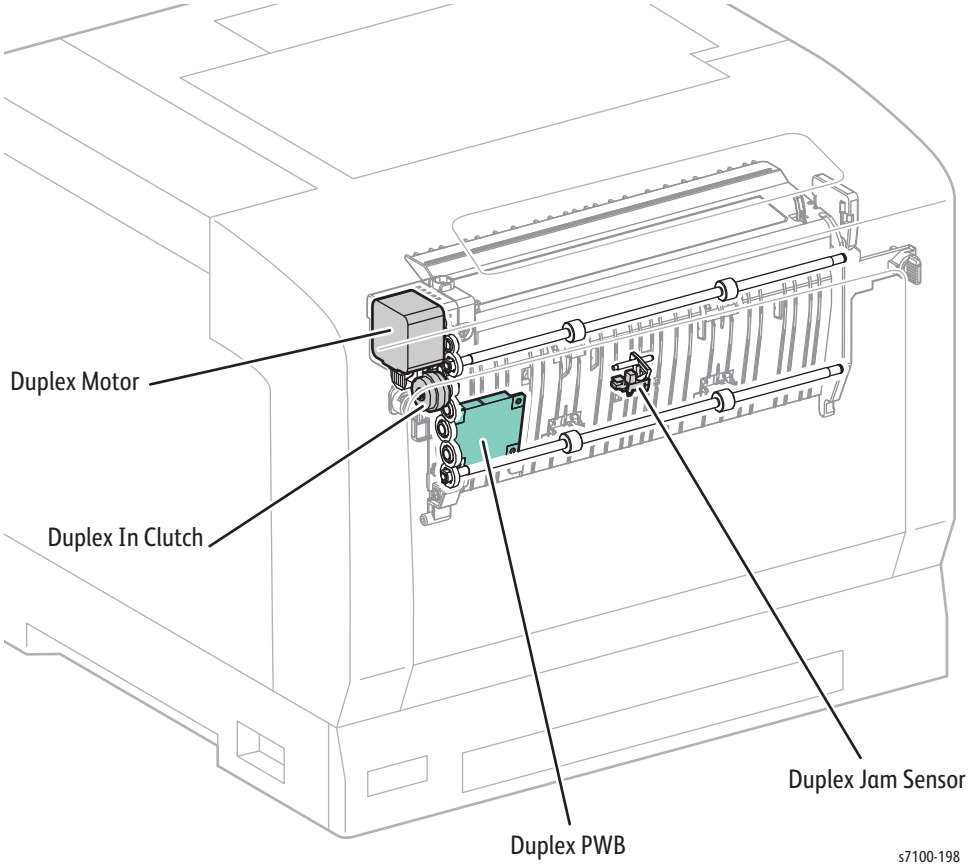
Image Processor PWB NVRAM

The Image Processor PWB NVRAM stores information such as printer settings, network settings, print language settings, and parameters information.

Figure 2 - NVRAM on Image Processor PWB



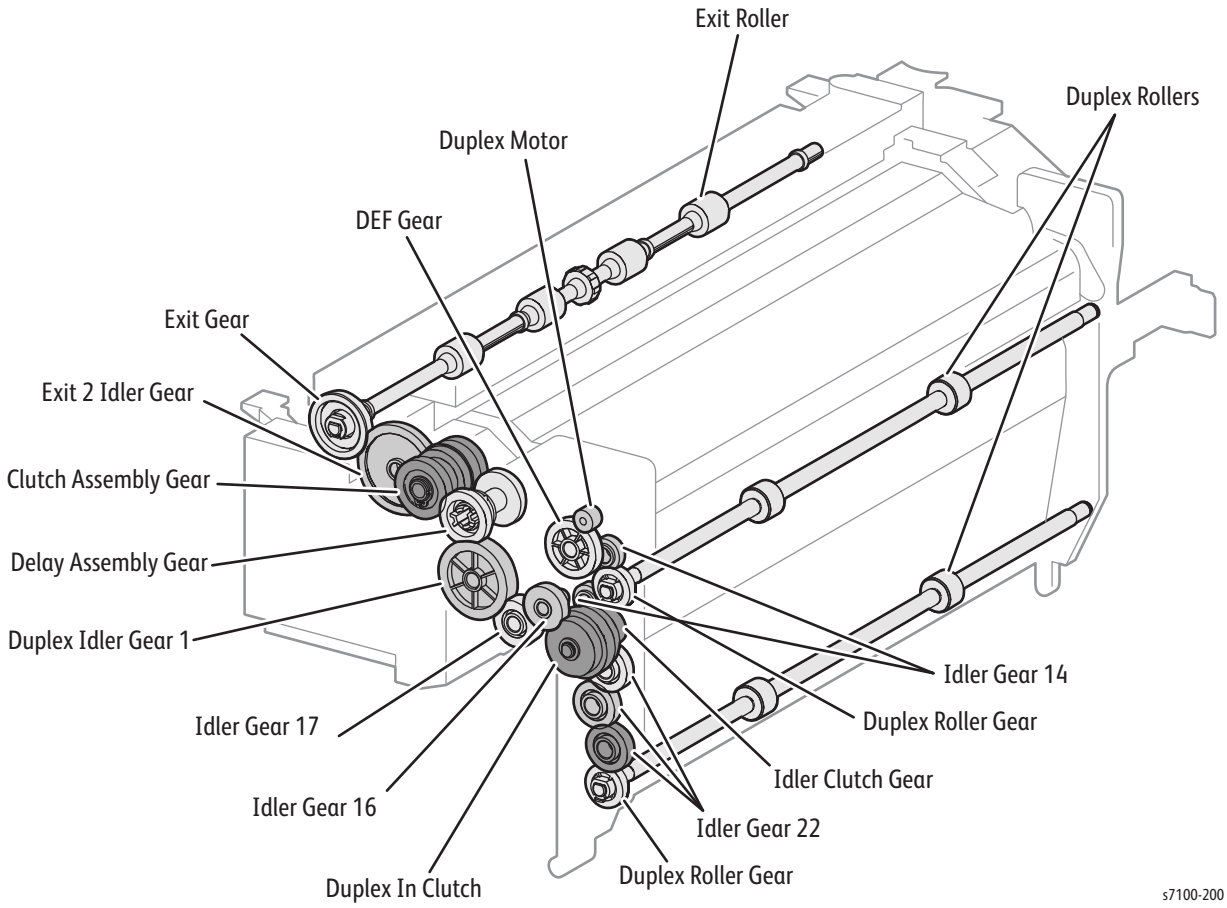
Duplex Feed (Option)



- **Duplex Clutch (Duplex In Clutch Assembly)** - Transfers the drive of the Duplex Motor to the Exit Roller that is part of the Fuser Assembly. Normally, the Exit Roller rotates in the paper output direction by the drive of the Fuser Motor. When the paper is to be reversed for side 2 print, the Duplex Clutch activates, changing the drive source to the Duplex Motor so that the Exit Roller performs reverse rotation in the Duplex Assembly direction.
- **Duplex Motor (Duplex Earth Motor Assembly)** - Drives the Duplex 1 Roller and Duplex 2 Roller to transport the paper in the Duplex Assembly.
- **Duplex Jam Sensor** - Detects whether the paper is being transported in the Duplex Assembly by changes in the Actuator.

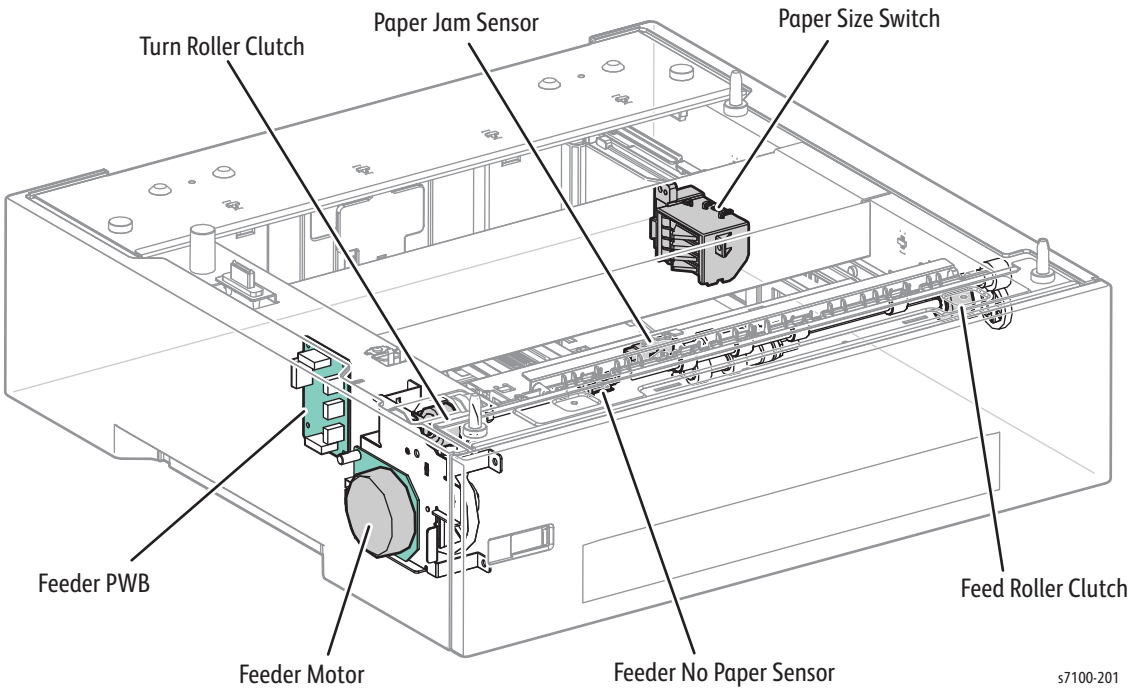
  (No paper: Sensor blocked)
- **Duplex PWB** - Controls the various components in the Duplex Assembly.

Duplex Motor (Option)



- Fuser Unit Components
  - Duplex Idler Gear 1
  - Delay Assembly Gear
  - Clutch Assembly Gear
  - Exit 2 Idler Gear
  - Exit Gear
  - Exit Roller

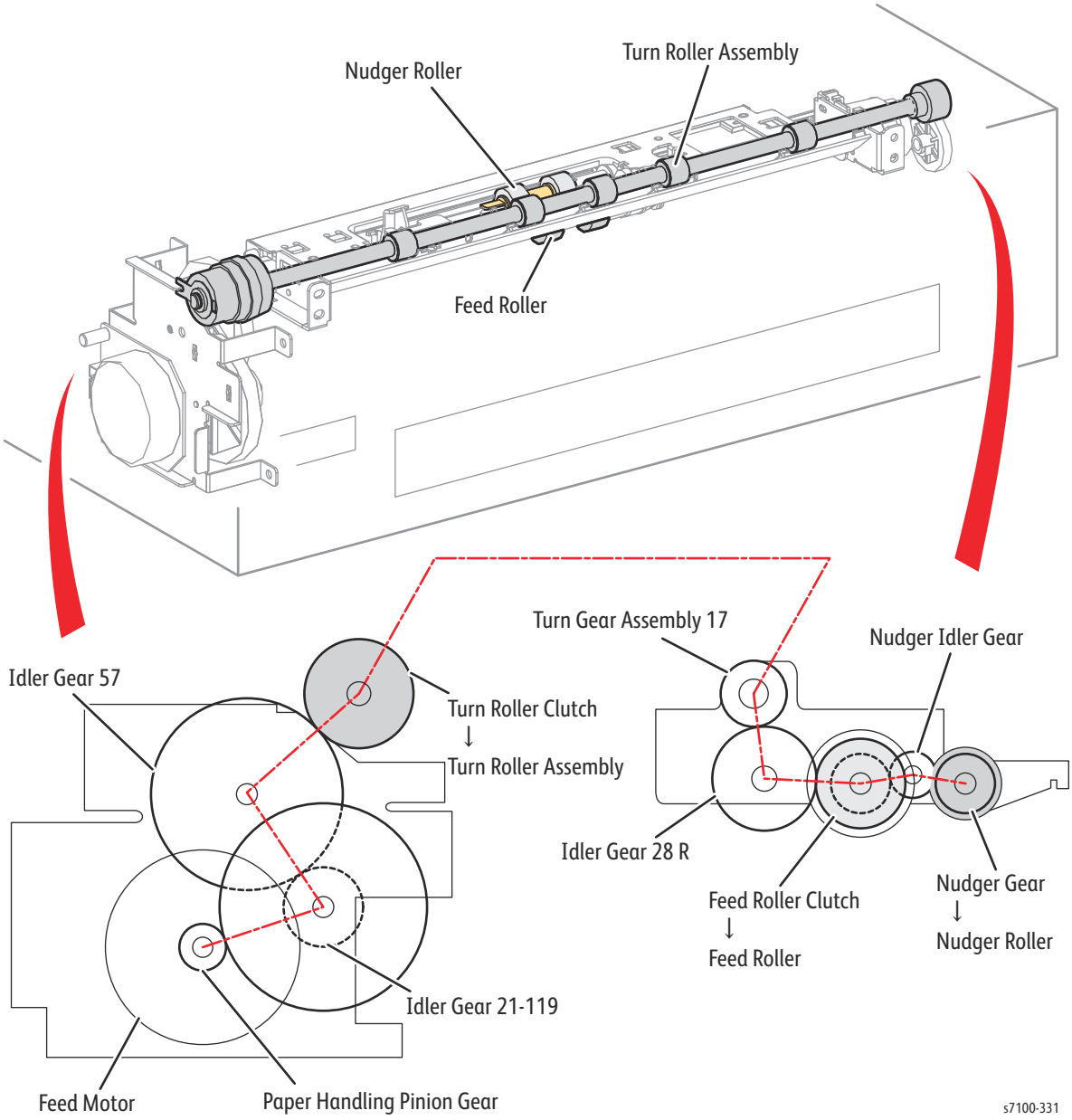
550-Sheet Feeder (Option)



- **Paper Size Switch (Size Switch Holder Assembly)** - Detects the paper size in the Tray 2, 3, or 4, and whether the Tray is installed.
- **Feed Roller Clutch** - Transfers the drive of the Feeder Motor to the Feed Roller Assembly.
- **Feeder No Paper Sensor** - Detects whether paper exists inside the 550-Sheet Feeder Tray by changes in the Actuator.

  (No paper: Sensor blocked)
- **Turn Roller Clutch** - Transfers the drive of the Feeder Motor to the Turn Roller Assembly.
- **Paper Jam Sensor** - A reflective Sensor that detects paper feed from the 550-Sheet Feeder. The Sensor is located near the Turn Roller Assembly.
- **Feeder Motor (Option Drive Assembly)** - A DC Motor that drives the 550-Sheet Feeder Rollers.
- **Feeder PWB** - Controls all the 550-Sheet Feeder components.

Feeder Motor (Option)



- Option Drive Assembly Components
  - Feeder Motor
  - Idler Gear 21-119
  - Idler Gear 57
- Nudger Support Assembly Components
  - Nudger Idler Gear
  - Nudger Gear

Operation Mode

The following 4 modes are available in the Phaser 7100 printer: Running Mode, Ready Mode, Low Power Mode, and Sleep Mode.

Running Mode

Running Mode contains operating states such as data receive/ image creation, or recording (print).

Ready Mode

The printer is ready to print at Ready state. It is possible to enter this mode within the Warm Up Time after power Off and On or from the Energy Saver Mode.

Low Power Mode

To reduce energy consumption, the printer will enter Low Power Mode when it has not received any print data within a certain time after it has entered Ready Mode. The waiting time before switching to this mode is set at 1 minute by default. It can be set in increments of 1 minute in the range between 1 and 60 minutes from the Control Panel. Furthermore, it can also changes when the Energy Saver button is pressed. The printer can be set to prohibit the transition to Low Power Mode or Sleep Mode. Furthermore, the printer will enter or exit the Low Power Mode when the Energy Saver button is pressed.

When the printer receives a Print Job or when the Energy Saver button on the Control Panel is pressed, Low Power Mode will be canceled.

Sleep Mode

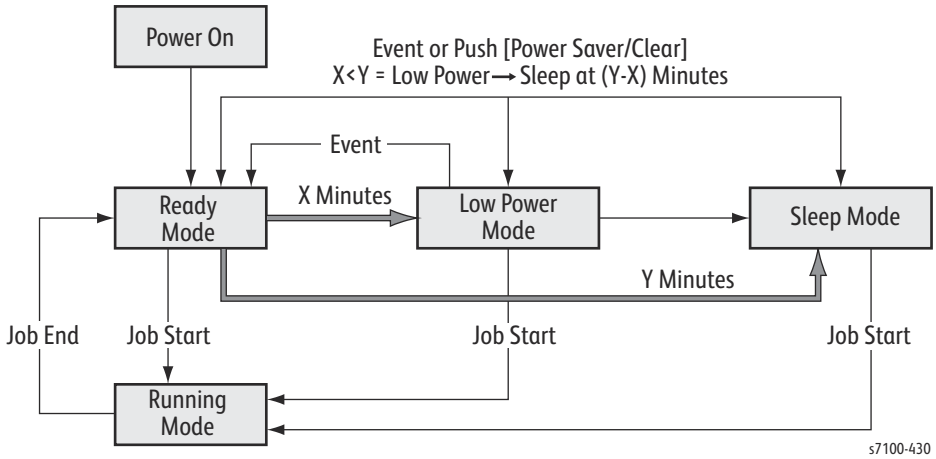
To reduce energy consumption, the printer will enter the Sleep Mode when it has not received any print data within a certain time after it has entered the Ready Mode or the Low Power Mode. (When an error, such as Out of Toner, has occurred, the printer will not transition to Sleep Mode unless the transition condition has been fulfilled). The waiting time before switching to this mode is set as 1 minute by default. It can be set in increments of 1 minute in the range between 1 and 60 minutes from the Control Panel. Furthermore, it can also transition when the Energy Saver button is pressed. The printer can be set to prohibit the transition to Low Power Mode or Sleep Mode.

When the printer receives a Print Job or when the Energy Saver button on the Control Panel is pressed, Sleep Mode will be canceled.

Engine Status

In each mode, each system of the engine is in the status below.

	Running Mode	Ready Mode	Lower Power Mode	Sleep Mode
Fuser Assembly	Maintained at operating temperature	Maintained at ready temperature	Maintained at low temperature	Stop
Printing System (Transfer/ Development, etc.)	Operating	Stop	Stop	Stop
Exposure System	Operating	Stop	Stop	Stop
Fusing Fan	Rotate	Stop	Stop	Stop
HVPS2 Fan	Rotate	Stop	Stop	Stop
LVPS Fan	Rotate (High Speed)	Rotate (Low Speed)	Rotate (Low Speed)	Stop
HDD	Accessible	Accessible	Accessible	Not accessible
ESS	Operating	Standby	Standby	Standby to receive
ESS Fan	Operating	Stop	Stop	Stop
UI	On	On	Off	Off

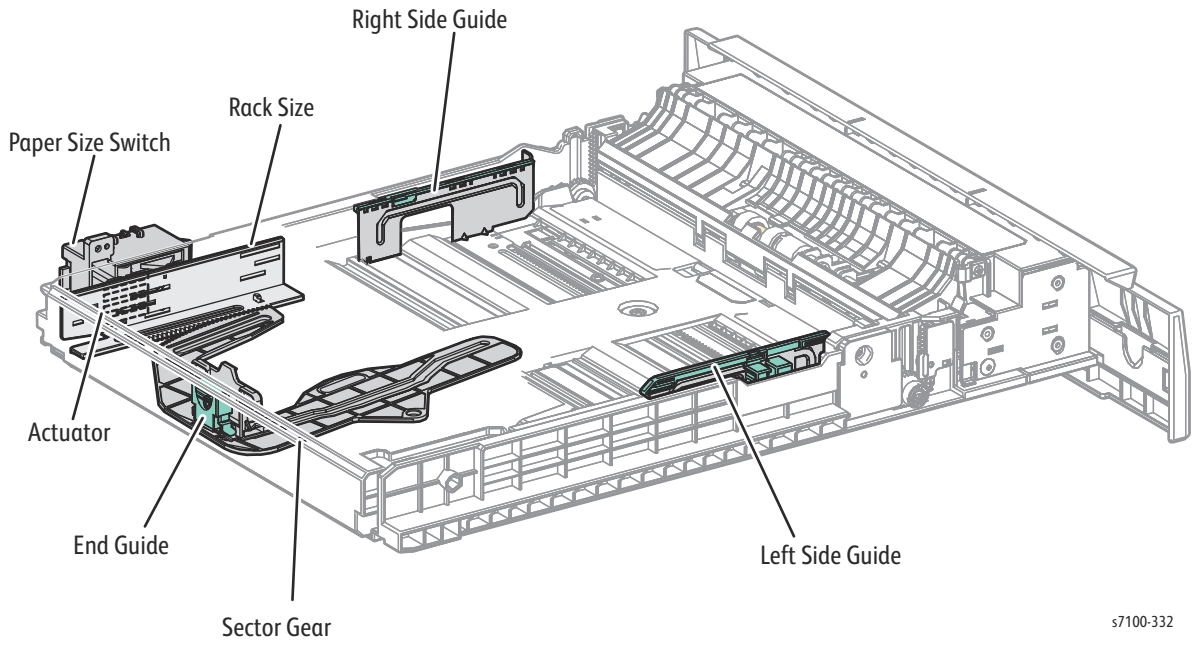


Job Control and Functions

Paper Size Detection

The Paper Size Detection function for the paper tray is the same for both the 250-Sheet Tray and the Optional 550-Sheet Tray. There is no Paper Size Detection function for the Bypass Tray.

Load paper into the paper tray and align the Left Side Guide Assembly, Right Side Guide Assembly, and End Guide Assembly to the paper. Linked to the End Guide Assembly, the combination of Sector Gear Assembly and Rack Size changes, which causes the Actuator attached to the side of the tray to push the Paper Size Switch. The combination of pushed switches in the Paper Size Switch determines the paper size.



Paper Size Switch State and Paper Size

Paper Size	Paper Size Switch *1			
	1	2	3	4
A5 LEF	1	0*2	1	1
B5 LEF	1	1	0	1
A4 LEF	1	1	1	0
Letter LEF	1	1	0	0
Letter SEF	1	0	0	1
A4 SEF	1	0	0	0

Paper Size Switch State and Paper Size (Continued)

Paper Size	Paper Size Switch *1			
	1	2	3	4
Legal 14	1	0	1	0
B4 SEF	0	1	0	1
A3 SEF	0	0	0	1
Ledger	0	0	1	1
No Tray	0	0	0	0
1. The switches are numbered from the top (1, 2, 3, and 4). **2**. 0: The state where the Sensor is not pressed				

Cancel Job

A job in progress can be canceled (aborted) from the Control Panel.

Force Print

When the printer is still waiting for data from the host during job processing, this function prints any data that is already received.

Job Timeout

When a pause occurs for a period of time (this can be changed or set as unlimited at the Control Panel) during a job transfer, the data transferred halfway will be aborted as an error.

Job Recovery

When a paper jam causes a job to fail, the job will resume automatically when the jammed paper is removed.

Print Page Mode (Print Guaranteed Mode)

In the Standard Mode, even an A3, Duplex, and 600 dpi color document with the worst compression rate can be printed uncompressed. Printing is always possible in this mode. By adding the Extension System Memory Option, even a 1200 dpi, A3, Duplex, and color document with the worst compression rate (256MB for page data only) can be printed uncompressed. Printing is always possible in this mode.

Job Spool

During LPD/ SMB, HDD Spool is possible. When there is no Hard Disk Drive, spooling is possible as long as enough memory can be freed up in the RAM to perform the spooling.

Receive Filter (IP Packet Filtering Function)

This provides a function to restrict incoming packets at the IP Protocol (IPv4/ IPv6) level.

1. IP Address Filter

   This provides the IPv4 Address related filter and the IPv6 Address related filter. This IPv4 Address related filter is applied to IPv4 packets while the IPv6 Address related filter is applied to IPv6 packets.

   – IPv4 Address related filter
   – The system data consists of a base IPv4 Filtering and a Mask value, and up to 25 (SC16163) sets (10 sets from the UI) of these can be registered.
   – IPv6 Address related filter
   – The system data consists of a base IPv6 Filtering and a Mask value, and up to 25 (SC16163) sets (10 sets from the UI) of these can be registered.
2. Protocol Type Filter
   – This restricts the Protocol Type that can be recognized at the IP layer.
3. TCP and UDP Port Filter
   – This restricts the sender port and the recipient port numbers that are attached to the received packets by their port numbers.

Secure Print

The printout will not be output until the User Password (up to 12 single byte alphanumeric character) that is specified at the Print Driver is input at the printer Control Panel. You can also specify whether to delete the data in the printer after the printout is output. The data will remain stored in the printer until it is deleted, and it is retained even after the power is turned Off and On.

Sample Set (Proof Print)

At the start, only one set will be printed out. After that, you can instruct whether to print out the remaining sets or not (deletes the remaining data) at the printer Control Panel. The data will remain stored in the printer until it is deleted, and it is retained even after the power is turned Off and On.

Delayed Print

Delayed Print allows user to set a time to start the print job. A print job can be delayed up to 24 hours from the original job submission time. The Delayed Print default time is midnight.

E-mail Print

E-mail Print can be used to print the text in an e-mail document, as well as the PDF/ TIFF document attachments.

Print Volume (PV) Management Function

This function manages the print volume for each user and can manage up to 50 users.

User Job Registration Function

This function enables the various types of print settings on the print driver to be registered under a custom name, which can then be called as needed. In addition to the 3 existing types, up to 24 other types can be registered.

E-Mail Notification

This function sends an E-mail to the address that is set in advance in the printer to notify the occurrence of an event.The E-mail contains a message describing the event that had occurred, a contact person, and the installation location. The notification to be sent can be chosen from Warning/ Caution/ Others. The printer status can also be acquired. Information such as E-mail Address, etc. can be set from the CentreWare Internet Services (CWIS).

Default Print Mode (Initial Print Speed)

The Image Output Terminal (IOT) does not have a Standby Mode. The default mode is usually in Color mode and switches to B/W mode when B/W is specified. This will not affect the FPOT. Therefore, there is no need to perform switching at the Control Panel.

Print in B/W when Out of Color Toner Function

This enables the printer to continue printing in B/W even when the color Toner had reached the end of their life spans. However, the B/W print can no longer be performed when the black Toner also has run out and the color Toner has not been replaced.

Change Warning Volume

The volume of the buzzer on the Control Panel can be changed in 3 levels (Loud, Normal, or Soft). It can also be turned Off. The default volume is Soft.

Half Speed Operation Support

If the temperature in the IOT has risen above the specified value, this function will automatically halve the operation speed and continue printing. The instances where this half speed has occurred are recorded in the Shutdown Report (Information Pages, Troubleshooting Pages, and Print Test Patterns, Reports on page 1-90).

Process Control

The Process Control prevents changes to the image quality due to varying temperature and humidity in the printer, Drum deterioration with age, etc. to always provide a stable image quality. It can be largely divided into two controls: Potential Control and Toner Supply Control.

Potential Control

The Potential control of the printer sets the Exposure Potential (ROS Laser Diode (LD) Power) and the Developer Bias (DC Voltage of the Developer). The Left CTD Sensor (the CTD Sensor that is located on the right side of the Intermediate Transfer Belt) that is part of the CTD Sensor Assembly (PL 9.1.10) reads the Toner density of the patch and the Potential Control is performed based on that value.

CTD Sensor - The CTD Sensor comprises an LED and a photo detector. The LED emits light onto the Intermediate Transfer Belt and then obtains Toner density by the light that is reflected.

Patch - The patch is a small image for Process Control that is created on the Intermediate Transfer Belt.

Potential Control Overview

1. The temperature and humidity in the printer is measured and the measured values are used to adjust the various type of voltage (ROS LD Power, BCR Applied Voltage, Developer Bias, BTR Applied Voltage), which are then used to generate a patch on the Intermediate Transfer Belt.
2. The power of the LED that emits light from the CTD Sensor is adjusted.
3. The patch density is then read by the CTD Sensor, the value of which is used to perform correction for the deterioration of the Intermediate Transfer Belt, etc., and then the appropriate ROS LD Power for the next printing will be calculated.
4. If complete correction by the ROS LD Power is not possible, the value of the Developer Bias will be adjusted.

The timings at which the Potential Control Corrections perform are: at power On, at the completion of a print job, in the middle of a print job under certain circumstances.

Toner Supply Control

The Toner Supply Control keeps the Toner density in the Developer Housing Assembly at a certain level and determines the timing to supply toner from the Toner Cartridge to the Developer Housing Assembly, as well as the toner supply amount that is required to maintain the image density. The printer calculates the toner supply amount by the ICDC Count and the toner density of the patch that is obtained by the CTD Sensor. The toner supply amount is then calculated as the operating time of the Toner Dispense Motor. Based on the calculated value, just the right amount of toner is supplied to the Developer Housing Assembly by the timing.

Toner Supply Amount Calculation by ICDC (Image Count Dispense Control) - Counts the number of pixels in an image and uses the count value to calculate the toner supply amount.

Calculation of Toner Supply Amount from Patch Density

1. The temperature and humidity in the printer is measured and the measured values are used to adjust the various type of voltage (ROS LD Power, BCR Applied Voltage, Developer Bias, BTR Applied Voltage), which are then used to generate a patch on the Intermediate Transfer Belt.
2. The power of the LED that emits light from the CTD Sensor is adjusted.
3. The patch density is then read by the CTD Sensor, the value of which is used to perform correction for the depletion of the toner, the deterioration of the Intermediate Transfer Belt, etc., and then calculate the toner supply amount.

The calculation of the toner supply amount from the patch density is performed at the same timing as the Potential Control.

Others

High Area Coverage (HAC) Mode - This mode controls the density to prevent it from dropping due to insufficient toner supply amount when performing continuous printing of HAC images. It counts the number of pixels as printing is in progress and pauses the printing when it has reached the specified value or higher to add the toner.

Low Area Coverage (LAC) Mode - Performing continuous printing of LAC images might stress the toner and cause poor transfer, background, etc. to appear. This mode is to solve that problem. It counts the number of pixels as printing is in progress and pauses printing when it has reached the specified value or lower to remove excess toner from the Developer Housing Assembly.

Color Registration Control

The Phaser 7100 is a full color printer that uses the tandem system, where each color (Yellow, Magenta, Cyan, and Black) has its own Drum and Developer Housing Assembly. Because each color forms an image on their own Drum, which are then overlaid to create one image, color shift may occur due to Drum misalignments, skewed installation positions, etc. The function to correct this is the Color Registration Control or “Regi Con.”

The Color Registration Control includes the Lead Registration Correction in the process direction (Slow Scan direction) and the Side Registration Correction and R/E Ration Correction in the lateral direction (Fast Scan direction). The correction in the process direction is performed at the IOT while the correction in the lateral direction is performed at the Controller.

> Note: The vertical direction (Slow Scan direction) is a direction perpendicular to the Drum axis and it is the direction in which the paper is transported. The horizontal direction (Fast Scan direction) is a direction parallel with the Drum axis and it is the ROS Scan direction.
>
> These controls are performed based on the values that were detected by the two Left/ Right CTD Sensors and the Temperature Sensor that are part of the CTD Sensor Assembly. Furthermore, these are the control types - the Closed Loop Regi Con and the Open Loop Regi Con.

Closed Loop Regi Con

Although this control is different from the correction in the process direction and the correction in the lateral direction, the content of the control is almost identical.

Execution Condition

- After replacing the Imaging Unit and/ or the IBT Unit (Intermediate Transfer Belt).
- When turning On the power or returning from the Sleep Mode and the change in the printer's internal temperature has reached the specific value or higher since it was last executed.
- Before a Job in Full Color Mode (process direction) and the change in the printer's internal temperature has reached the specific value or higher since it was last executed.

Control Flow

Patches are created at 2 locations (left side and right side) on the Intermediate Transfer Belt. The patch is made up of 4 single color - Yellow, Magenta, Cyan, and Black, identical shapes that are arranged in a line. The patches are read by the Left and Right CTD Sensors, the value of which are used to measure the skew with the reference color and other color.

Correction Amount Calculation

- **Vertical Direction**: Lead Registration Correction Amount - the correction amount is calculated from the average of the position misalignment at the left side and the right side.
- **Horizontal Direction**: Side Registration Correction Amount - the correction amount is calculated from the position misalignment at the left side.
- **R/E Ratio Correction Amount** - the correction amount is calculated from the difference of the position misalignment at the left side and the right side.

Open Loop Regi Con

The Color Shift for each color is predicted and corrected based on the changes in the printer internal temperature when detected by the Temperature Sensor.

Information Pages, Troubleshooting Pages, and Print Test Patterns, Reports

The following Embedded Pages and Reports are available in the Phaser 7100 printer. The pages can be accessed through the Control Panel at various locations.

Page	Description
Information Pages	
Configuration	Lists all information about the current configuration of the printer.
Menu Map	Lists all 1st, 2nd, and 3rd level Control Panel menu headings.
Font List	Contains list of fonts applicable to HP-GL/2 and PDF Bridge.
PCL Font List	Contains list of PCL fonts available internally within the printer or installed on the printer's Hard Drive, if the optional Hard Drive is installed.
PostScript Font List	Contains list of PostScript fonts available within the printer or installed on the printer's Hard Drive, if the optional Hard Drive is installed.
Language Emulation	Reports include PS Logical, HP-GL/ 2 Settings, HP-GL/ 2 Logical, HP-GL/ 2 Palette, TIFF/ JPEG Settings, TIFF/ JPEG Logical, PDF Settings, PCL Settings,
Stored Jobs	Contains list of stored jobs.
Job Counter	Contains the number of printed pages by print jobs and color impressions.
Demo Page	Provides sample print for the Phaser 7100 printer.
Job History	Contains job log of up to a maximum of 50 items.
Error History	Provides a list of error messages and codes relating to Jam errors and System (fatal) errors. The printer can retain up to 42 Jam errors and 42 System Fail errors.
Meter/ Auditron	Contains information regarding various print counters, billing meters, and coverage.
Image Quality Charts	
Access Image Quality Charts: **Menu** > **Settings** > **Admin Menu** > **Image Quality** > • Adjust Gradation • Adjust Color Regi	

Page	Description
Calibration Chart (Text/ Photo) (Adjust Gradation on page 6-12)	Contains the CMYK 100 % samples to be used for adjusting gradation including shadows, midtones, and highlights for all four colors CMYK. • Text - Use for calibrating of text and other high-definition images. • Photo - Use for calibrating graphics that include gradation and photographic images.
Color Regi Chart (manual color regi) (Color Registration on page 6-16)	Contains calibration specifications for adjusting color registration manually.
Print Test Patterns	
Access Print Test Patterns: DC612 in Service Diagnostics (**Service Diagnostics** > **Fault Diag.** > **DC612 PatternPrt**)	
Pattern # 51 - Total Chart	For detection.
Pattern # 52 - SDTP123600 (BW Grid)	For shipment inspection
Pattern # 53 - Full Halftone K 45 %	For defect detection/ banding
Pattern # 54 - Full Halftone C 50 %	For defect detection/ banding
Pattern # 55 - Full Halftone M 50 %	For defect detection/ banding
Pattern # 56 - Full Halftone R 50 %	For defect detection/ banding
Pattern # 57 - KCMY 50 % Band	For determining problems.
Reports (in Customer Support Engineer Menu Map)	
Access Reports: a. On the Control Panel, at Ready to print, press **Up Arrow** 3 times. b. Press **Menu** to view Settings. c. Press **Down Arrow** to find Print Reports. d. Press **OK**. e. Press **Up Arrow** to find the report.	
Debug Log Report	Contains information to the factory with regards of irreproducible problems or problems that arise due to the environment at the customer's location...etc.
Failure Report	Contains the list for number of times the various types of System Fails that had occurred.
Shutdown Report	Contains the list for the history of System Fails and Paper Jams that had occurred at power On.
Jam Report	Contains the list for number of times the various types of paper jams that had occurred.
HFSI Report	Contains the list for the usage status of the various Long Life Maintenance Items.

Error Troubleshooting 2

This chapter includes:

Introduction

This chapter covers the general startup and Service Diagnostics used to test system operation and troubleshooting procedures to correct problems. Also discussed are error messages and numeric codes displayed on the Control Panel or listed on the Error History Report.

The printer tracks and reports errors in a number of ways. The two types of error reporting discussed in this chapter include:

- Error messages and Chain Link codes display on the Control Panel
- Engine (fatal) and Jam Error logs display on the Control Panel or listed on the Error History Report

Troubleshooting print quality problems are covered in Chapter 3 Image Quality on page 3-1.

Servicing Instructions

The service checklist below is an overview of the path a service technician should take when servicing the printer.

Step 1: Identify the Problem	
	1. Verify the reported problem does exist. 2. Check for any error codes and write them down. 3. Print normal customer prints and service test prints. 4. Make note of any print-quality problems in the test prints. 5. Make note of any mechanical or electrical abnormalities present. 6. Make note of any unusual noise or smell coming from the printer. 7. Verify the fault codes in the Error History, Failure Report, and Shutdown Report. 8. Verify the AC input power supply is within proper specifications by measuring the voltage at the electric outlet while the printer is running.
Step 2: Inspect and Clean the Printer	
	1. Turn the printer power Off. 2. Disconnect the AC power cord from the wall outlet. 3. Verify the power cord is free from damage or short circuit and is connected properly. 4. Remove the Toner Cartridge. 5. Inspect the printer interior and remove any foreign matter such as paper clips, staples, pieces of paper, dust, or loose toner. 6. Do not use solvents or chemical cleaners to clean the printer interior. 7. Do not use any type of oil or lubricant on printer parts. 8. Use only an approved toner vacuum. 9. Clean all rubber rollers with a lint-free cloth, dampened slightly with cold water and mild detergent. 10. Inspect the interior of the printer for damaged wires, loose connections, toner leakage, and damaged or obviously worn parts. 11. If the Toner Cartridge is damaged, replace with new one.

Step 3: Find the Cause of the Problem	
	1. Refer to Messages, Chain Link Codes, and Procedures on page 2-53 procedures to find the cause of the problem. 2. Refer to Service Diagnostics on page 2-14 to check the printer and optional components. 3. Refer to Chapter 7 Plug/Jack Locators on page 7-13 to locate test points. 4. Take voltage readings as instructed in the appropriate troubleshooting procedure.
Step 4: Correct the Problem	
	1. Refer to Chapter 5 Parts List on page 5-1 to locate a part number. 2. Refer to Chapter 4 Service Parts Disassembly on page 4-1 to replace the part.
Step 5: Final Checkout	
	1. Test the printer to be sure you have corrected the initial problem and there are no additional problems present.

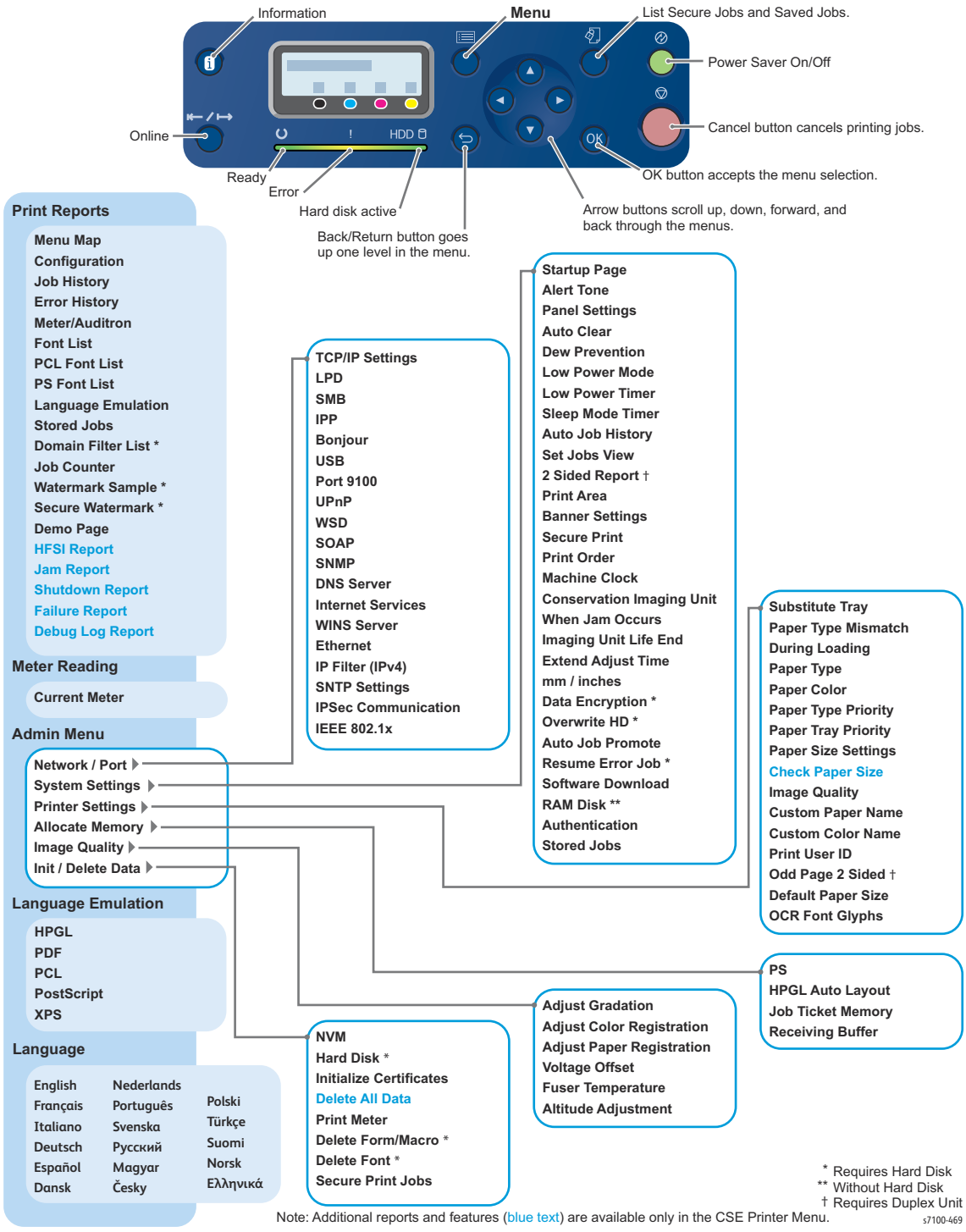
Control Panel Shortcut

Function	Control Panel Buttons
Enter/ Exit Service Diagnostics (Service Diagnostics Menu Map on page 2-15)	1. Press and hold **Right Arrow**. 1. Press and hold **Left Arrow**. 2. Release the buttons. 3. Press **Online** within 3 seconds.
Enter/ Exit Customer Support Engineer (CSE) Menu (to access additional reports and features, Phaser 7100 Printer Menu (Customer Support Engineer) on page 2-4)	1. Press **Up Arrow** three times. 2. Press **Menu**.
Display Serial Number Menu	1. Press **Down Arrow** + **OK** simultaneously. 2. Serial Number is displayed on the Control Panel.
Reset Counter	1. Press **Down Arrow** + **OK** simultaneously. 2. Press **Down Arrow** to find Reset Counter.
Long Boot Diagnostics	1. Turn On the printer power while pressing **Energy Saver** + **OK** simultaneously.

Phaser 7100 Printer Menu (Customer Support Engineer)

Additional hidden reports and features are available ONLY in the Printer Control Panel Menu. Accessing the Customer Support Engineer Printer Menu:

1. Press **Up Arrow** 3 times.
2. Press **Menu**.



Diagnostic Test

This section explains the contents of the diagnostic test in the order they are performed. If there are more than one test items with "NG" diagnostic result, action must be taken starting from items that were tested earlier.

Diagnostic Test

Item	Test Name	Control Panel Display (Test Name)	Diagnostic Result Display	Error Code	Action
1.	DRAM Test Standard memory read/ write verify test	System Memory M1	Pass Fail Skip	E02	1. Check whether there is any memory in the I/P PWB RAM DIMM #1 slot. 2. Remove and reinstall the I/P PWB RAM DIMM #1 (REP 12.18 Memory (Standard) on page 4-232). 3. Replace the I/P PWB RAM DIMM #1 (REP 12.18 Memory (Standard) on page 4-232). 4. Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
2.	DRAM Test Extension Memory Read/ Write Verify Test	System Memory M2	Pass Fail Skip	E03	1. Check whether there is any memory in the I/P PWB RAM DIMM #2 slot. 2. Remove and reinstall the I/P PWB RAM DIMM #2 (REP 12.19 Memory (Optional) on page 4-234). 3. Replace the I/P PWB RAM DIMM #2 (REP 12.19 Memory (Optional) on page 4-234). 4. Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Diagnostic Test (Continued)

Item	Test Name	Control Panel Display (Test Name)	Diagnostic Result Display	Error Code	Action
3.	Serial Line Communication Test IOT and Data Link Layer Communication Test	IOT COMM	Pass Fail	E04	1. Disconnect and reconnect the P304 MCU Cable. 2. Replace the MCU Cable. 3. Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
4.	ZEUS ASIC Test ASIC Print Path Operation Test	IO ASIC	Pass Fail	E24	1. Remove and reinstall the I/P PWB RAM DIMM #1 (REP 12.18 Memory (Standard) on page 4-232) and #2 (REP 12.19 Memory (Optional) on page 4-234). 2. Replace the I/P PWB RAM DIMM #1 (REP 12.18 Memory (Standard) on page 4-232) and #2 (REP 12.19 Memory (Optional) on page 4-234). 3. Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
5.	I2C Device Read/ Write Verify Test MAC Address Inclusive SEEPROM Test	SEEP ROM 1	Pass Fail	E06	1. Check the EEPROM contacts (for bent and broken pins, etc.) 2. Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
6.	NVM Read/ Write Verify Test OS Management Area Test	NVM I/P PWB	Pass Fail	E08	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
7.	Font ROM Test Option Font ROM Checksum Test	Option Font ROM	Pass Fail Skip	E10	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Diagnostic Test (Continued)

Item	Test Name	Control Panel Display (Test Name)	Diagnostic Result Display	Error Code	Action
8.	Real Time Clock Operation Test Calendar Register Test (Read Only)	Clock	Pass Fail	E11	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
9.	Flash Memory Test Flash Memory Checksum Test	ESS ROM	Pass Fail	E14	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
10.	Serial Line Communication Test 3 EP Machine and Data Link Layer Communication Test	EP Accessory COMM	Pass Fail Skip	E15	1. Check the I/P PWB connection between J351 and every module (between cables/ PWBs). 2. Replace the relevant module. 3. Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
11.	HDD Test HDD Self test and Read/ Write Verify Test	HDD	Pass Fail Skip	E17	1. Disconnect and reconnect the P310/ P302 HDD Cable. 2. Remove and reinstall the HDD (REP 12.21 Hard Disk Drive (Optional) on page 4-236). 3. Replace the HDD (REP 12.21 Hard Disk Drive (Optional) on page 4-236). 4. Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
12.	File System Test HDD File Check	File System	Pass Fail Skip	E27	Format the HDD. From the Control Panel, press the **Energy Saver** + **Up Arrow** + **Down Arrow** buttons, and check if it can recover.

Diagnostic Test (Continued)

Item	Test Name	Control Panel Display (Test Name)	Diagnostic Result Display	Error Code	Action
13.	Power Saver Mode Operation Test Auto Power Saver/ Recovery Test	Power Save Mode	Pass Fail	E18	Check the Power Saver setting that it is Enabled (**Print Menu** > **Admin Menu** > **System Settings** > **Low Power Mode**).
14.	Ethernet Test Ethernet PHY Chip E21 (1) Replace the I/P PWB Register Read/ Write Verify Test	Ethernet PHY	Pass Fail Skip	E21	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
15.	Serial Line Communication Test 2 IOT and Data Link Layer Communication Test	IOT COMM (2)	Pass Fail	E04	1. Disconnect and reconnect the P304 connector of the MCU Cable. 2. Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

System Booting

Special Booting

CAUTION: To prevent printer malfunction or internal hard drive damage, prior to power Off the printer, be sure to verify that the HDD indicator on the Control Panel is not On or blinking.

Special Booting is a method to startup the printer in other than its usual mode by turning the power On while pressing and holding down the buttons on the Control Panel. The Special Booting must be performed under the following conditions:

- The printer must be turned On while all the relevant buttons that are indicated as (Special Button) in the following table are pressed and held down.
- You may release the buttons after the Please Wait... message is displayed.

Special Booting

Operation	Special Button	Display During Booting/ Processing	How to Use
Log Data Initialization	**Energy Saver** + **Left**	-- BOOT MODE -- Job Log Clear Mode	Used when the log data has an error and a fail such as 116-331 has occurred, or when the log data must be cleared for version upgrade that involves a large change in versions.
NVM Full Initialize (Factory Default State)	**OK** + **Down** + **Up**	NVMEM is Cleared Please Power Off	Used when NVM initialization is not achieved with Startup by Force NVM Initialization **Energy Saver** + **Up** buttons. This method can also be used to resolve the problem, where the internal clock becomes unstable, therefore causing all the functions that use the clock to become unstable - when the NVM PWB is initialized with the backup battery detached. When an initialization is performed with this method, billing mismatch etc. occurs as when the NVM PWB is replaced.
Initialize NVM	**Energy Saver** + **Up**	-- BOOT MODE -- NVRAM Init Mode	Initializes the NVM of the configuration range (Printer Settings etc.) inside the Controller by force and starts up.
HDD Forced Formatting	**Energy Saver** + **Down** + **Up**	-- BOOT MODE -- HDD Format Mode	Formats the HDD by force. This operation resets the HDD to partitions at factory settings.

Special Booting (Continued)

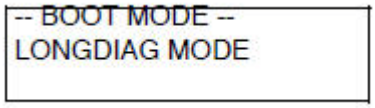
Operation	Special Button	Display During Booting/ Processing	How to Use
Startup by Forced Spool Area (HDD) Initialization (for CSE)	**Energy Saver** + **Down**	-- BOOT MODE -- HDD Initialize Mode	If an error, such as 116-324, has occurred when printing was set to be performed with the data spooled to the Hard Disk and the printer cannot be started by turning it Off then On, this initializes the Hard Disk area in which the print data is stored before starting the printer.
Download Diag Start Up	**Energy Saver** + **Right**	No display	Downloads the diagnostic program that is stored in the USB Memory or Firmware Set and performs detailed check by using the Long Boot Diag diagnostic items.
Startup by Forced Spool Area (HDD) Initialization (for User)	**Energy Saver** + **Menu**	-- BOOT MODE -- HDD Initialize Mode	Performs the "Startup by Forced Spool Area (HDD) Initialization" **Energy Saver** + **Down** buttons.
Long Boot Diag Start Up	**Energy Saver** + **OK**	-- BOOT MODE -- LongDiag Mode	Performs a more detailed check than the usual device diagnostic items at the start up of the printer.

Long Boot Diagnostic

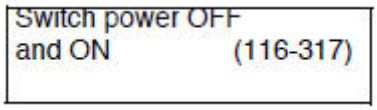
Long Boot Diagnostic is a built-in diagnostic tool that can be used to diagnose whether the I/P PWB or the installed memory is malfunctioning. The process takes approximately 5 minutes to complete.

Procedure

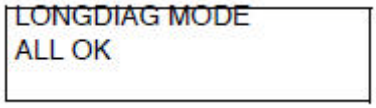
1. Turn On the printer power while pressing **Energy Saver** + **OK** simultaneously.
   The Control Panel displays -- BOOT MODE -- LONGDIAG MODE.



   If an error is detected, the Error Code (Chain-Link) will be displayed on the Control Panel. (Unlike in the Download Diag, the diagnostic result of each item is not displayed.)



2. When the Diag has completed successfully, "ALL OK" is displayed on the Control Panel.
   Turn Off the printer power.



The following table lists the Diag items pertaining error codes for "NG" Diagnostic results.

Long Boot Diag Errors

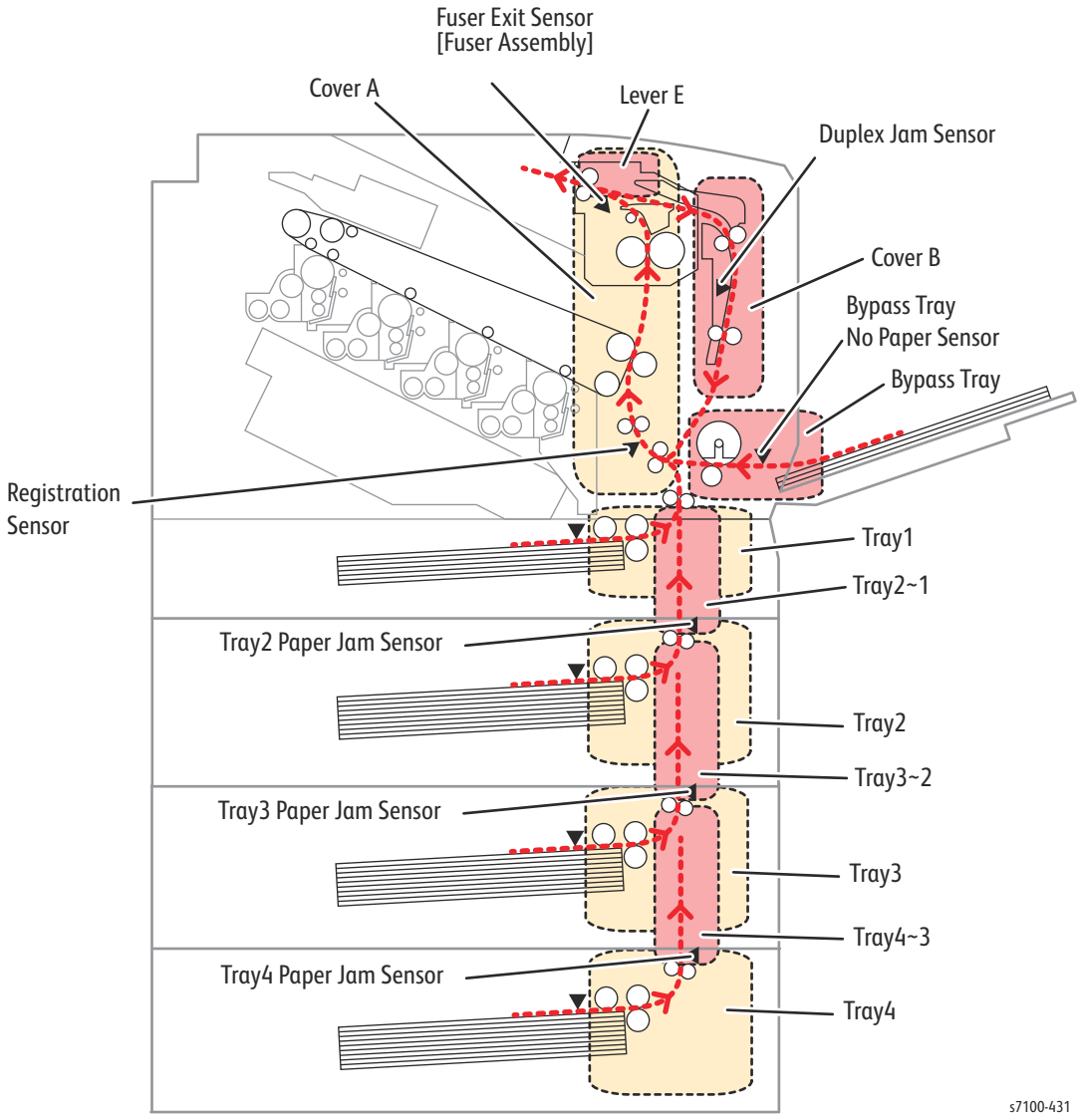
Item	Test Name	Test Content (Overview)	Control Panel Display (Error Code)
1.	Standard RAM Test	Standard RAM read/write verify test	116-315
2.	Extension RAM Test	Extension RAM read/write verify test	116-316
3.	Standard ROM Test	Standard ROM checksum test	116-317
4.	NVRAM Test	NVRAM read/write verify test	116-323
5.	Back Plane Connection Detection	Detects the connection with the Back Plane	016-327
6.	MCU Connection Detection	Detects the connection with the IOT	016-328
7.	Font ROM Test	Standard Font ROM checksum test	116-380

Long Boot Diag Errors (Continued)

Item	Test Name	Test Content (Overview)	Control Panel Display (Error Code)
8.	SEEPROM Test	SEEPROM read/write verify test	016-351
		SEEPROM expected value data test	016-350
9.	Timer Test	Timer operation check (RTC) test	116-364
10.	Page Memory Test	Page Memory Device Test	016-347
11.	USB 1.0 Host Test	USB 1.0 Host device test	016-371
12.	USB 2.0 Host Test	USB 2.0 Host device test	016-364
13.	USB 2.0 Device Test	USB 2.0 Target device test	016-365
14.	HDD Test	HDD device test	016-366
		UFS test	016-367~382
15.	UI Test	UI device test	016-362
16.	Standard ROM Write Mode Test	QRY test	016-336

Jam Zone

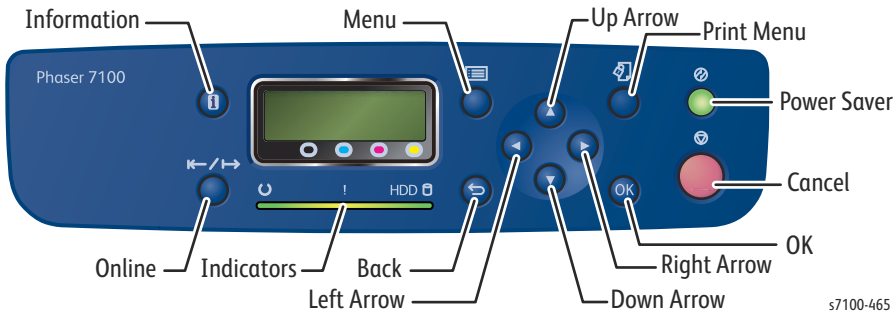
The following diagram illustrates the jam areas of the Phaser 7100 printer.



Service Diagnostics

The Phaser 7100 printer has built-in diagnostics to test electromechanical components, display status, and provide some NVRAM access. Use these tests to diagnose problems and isolate which component or sub assembly part needs replacement.

If confronted with an error that requires more than a cursory investigation to clear or when directed by a troubleshooting procedure, use Service Diagnostics to exercise selected sub-assemblies of parts in the vicinity of the reported error. Diagnostic tests are controlled from the Control Panel and are described in this chapter.



Button	Function
Up Arrow	Moves or selects an item at the same level. Use to select numbers and input values (to decrease or increase the value at the cursor).
Down Arrow	Moves or selects an item at the same level. Use to select numbers and input values (to decrease or increase the value at the cursor).
Left Arrow	Returns to the previous level. Moves the cursor to the left when entering a multiple digit number.
Right Arrow	Moves to the next level of the selection. Moves the cursor to the right when entering a multiple digit number.
Menu	Returns to the highest level of Service Diagnostics menu of the selected item.
OK	Confirms settings or runs the selected test.
Online	Use together with the Left or Right button to enter or exit Diagnostics.
Cancel	Resets a diagnostic item, cancel, or exit the menu.

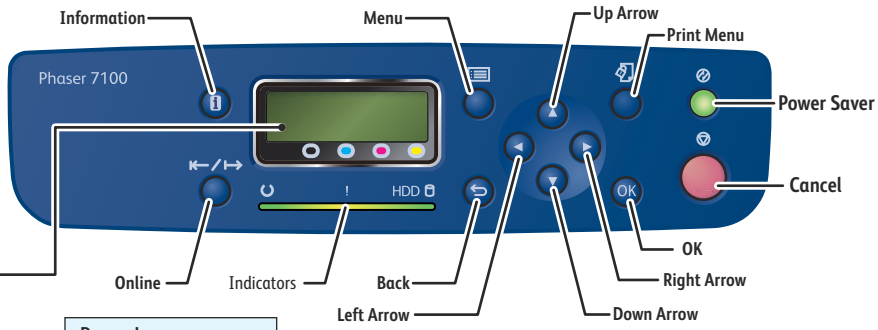
Entering Service Diagnostics

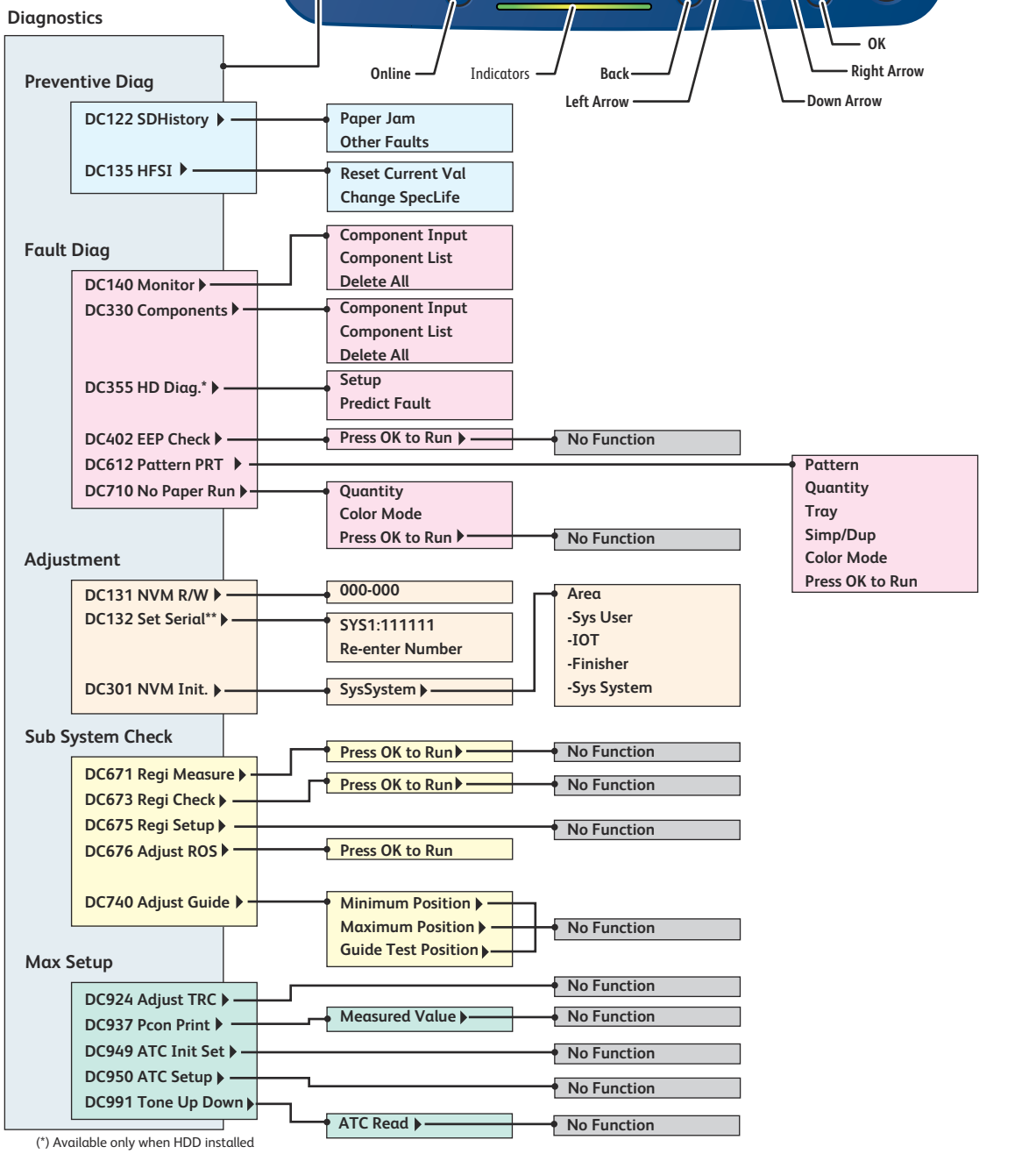
1. Press and hold **Right Arrow**.
2. Press and hold **Left Arrow**.
3. Release both buttons.
4. Press **Online** within 3 seconds. The Diagnostics Preventive Diag screen appears.

Service Diagnostics Menu Map

The Service Diagnostics menu contains five service diagnostic modes: Preventive Diag, Fault Diag, Adjustment, Subsystem Check, and Max Setup.

1. Press and hold the **Right Arrow**.
2. Press and hold the **Left Arrow**.
3. Release both buttons.
4. Press **Online** within 3 seconds.





(*) Available only when HDD installed
(**) Available only when error 124-315 occurs

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Service Diagnostics Routines

The Services Diagnostics menu provides access to the diagnostic routines.

Service Diagnostics Routines

Test	Control Panel Display	Test Description
Preventive Diag	Checks the number of failures and depletion of the consumables to prevent printer failure.	
DC122 Shutdown History	• Paper Jam • Other Faults	Provides Paper Jam and Other Faults history up to 20 previous errors.
DC135 HFSI	• ResetCurrentVal • Change SpecLife • Other Faults	Resets the Current Usage Value (Current Value) of the specified Consumable.
Fault Diag.	Performs checks on operations related to each component and determines the specific location of the failure if any.	
DC140 Analog Monitor	• Component Input • Component List • Delete All	Monitors each analog sensor for a certain period and displays the respective value.
DC330 Component Control	• Component Input • Component List • Delete All	Tests subsystems and discrete components of the printer.
DC402 EEP Check	No Function	
DC355 Hard Disk Diag (available only when HDD installed)	• Setup • Predict Fault	Use to perform setup and replacement assessment during replacement or examination of the HDD.
DC612 Print Pattern	• Pattern • Quantity • Tray • Simp/Dup (no function for test pattern numbers 51-57)	Prints the test patterns that were output from the built-in pattern generator.
DC710 No Paper Run	No Function	
Adjustment	Performs NVM-related operations.	
DC131 NVM Read/ Write	• 000-000	Provides access to read and modify specific NVM values within the I/P Board and access and read IOT NVM.
DC132 Machine Serial Number Settings (available only when error 124-315 occurs)	• SYS1:111111 • Re-enter number	Provides access to repair the mismatch of Serial Number, Product Number, and Billing Counter Value among the PWB when MCU PWB or I/P PWB is replaced, set those values stored in the non-replaced PWB to the replaced PWB.

Service Diagnostics Routines

Test	Control Panel Display	Test Description
DC301 NVM Initialize	• SysSystem • Area: - SysUser - IOT - Finisher - SysSystem	Resets the NVM value to default value of all applicable NVM within a specified service or module.
Subsystem Check	Adjusts/ corrects the printer operations of the IOT subsystem.	
DC671 RegiMeasure	No Function	
DC673 Regi Check	No Function	
DC675 Regi Setup	No Function	
DC676 Adjust ROS	• Press OK to run • Completed • Completed-Error	Corrects the ROS Lead Regi Parameter when the ROS Assembly has been replaced.
DC740 Adjust Guide	No Function	
Max Setup	Displays adjustment items. Note: The Max Setup adjustment items cannot be run.	
DC924 Adjust TRC	No Function	
DC937 Pcon Print	No Function	
DC949 ATC Init Set	No Function	
DC950 ATC Setup	No Function	
DC991 Tone Up Down	No Function	

Preventive Diag

DC122 Shutdown History

The DC122 Shutdown History routine provides Paper Jam and other faults history up to 20 previous errors.

Notes:

- Only jams and faults are registered in the History.
- Selecting Exit Diagnostics - Exit (Clear Log) when exiting from the Diag Mode will automatically clear the History.
- The History cannot be cleared by DC301 NVM Initialize.
- Jams and faults that occur during the execution of the Diag will also be registered.

Paper Jam

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Right Arrow** to display Preventive Diag DC122 SDHistory.
3. Press **Right Arrow** to display DC122 SDHistory Paper Jam.
4. Press **Right Arrow** to display the history information (Chain-Link No., Total DV, Date, Time).

   Note: For previous error history, press **Down Arrow** display the error information.
5. Press **Menu** to return to the Diagnostics Preventive Diag menu.

Other Faults

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Right Arrow** to display Preventive Diag DC122 SDHistory.
3. Press **Right Arrow** to display DC122 SDHistory Paper Jam.
4. Press **Down Arrow** to display DC122 SDHistory Other Faults.
5. Press **Right Arrow** to display the history information (Chain-Link No., Total DV, Date, Time).

   Note: For previous error history, press **Down Arrow** to display the error information.
6. Press **Menu** to return to the Diagnostics Preventive Diag menu.

DC135 HFSI

The DC135 HFSI routine allows user to reset the Current Usage Value (Current Value) of the specified Consumable.

Reset Current Value

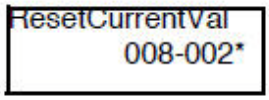
Notes:

- Although the Change Spec Life menu is displayed, it cannot be run. (It will only display the Spec Life Value.)
- Count up continues even when the Current Value has exceeded the Spec Life. However, when it has reached the maximum value, the maximum value is maintained.

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Right Arrow** to display Preventive Diag DC122 SDHistory.
3. Press **Down Arrow** and navigate to Preventive Diag DC135 HFSI.
4. Press **Right Arrow** and navigate to DC135 HFSI ResetCurrentVal.
5. Press **Right Arrow** and navigate to Reset Current Val 000-000 screen.

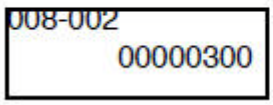
   Notes:

   - Use **Left/ Right Arrow** to move the cursor and **Up/ Down Arrow** to change the number.
   - When the cursor is at the left end of the Chain-Link Number, pressing **Left Arrow** returns to the DC135 HFSI - Reset Current Val screen at the previous level.
6. Press **OK** to confirm the Chain-Link Number. An "*" appears on the right side of the changed value.

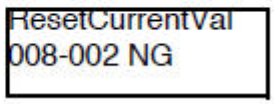


7. Press **OK** to search the Chain-Link Number.
   - If it is applicable, the current counter value appears.
   - If the input Chain-Link Number is not applicable, the NG screen appears. In this case, return to the Chain-Link Number input screen.

Applicable Chain-Link No.



Non applicable Chain-Link



8. Press **Right Arrow** to display the 0 Reset run instruction screen.
9. Press **OK** to perform the procedure.
10. After the process has completed, an "*" is displayed on the right side of the DC menu.

11. Press **Menu** to return to the Diagnostics Preventive Diag screen.

Display Spec Life

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. The Preventive Diag menu appears.
3. Press **Right Arrow** and navigate to Preventive Diag DC122 SDHistory.
4. Press **Down Arrow** and navigate to Preventive Diag DC135 HFSI.
5. Press **Right Arrow** and navigate to DC135 HFSI ResetCurrentVal.
6. Press **Down Arrow** and navigate to DC135 HFSI Change SpecLife.
7. Press the **Right Arrow** button to display Change SpecLife 000-000.

   Notes:

   - Use **Left/ Right Arrow** to move the cursor and **Up/ Down Arrow** to change the number.
   - When the cursor is at the left end of the Chain-Link Number, pressing **Left Arrow** returns to the DC135 HFSI - Change Spec Life screen at the previous level.
8. Press **OK** to confirm the Chain-Link Number. An "*" appears on the right side of the changed value.

9. Press **OK** to search the Chain-Link No.
   - If it is applicable, the current counter value appears.
   - If the input Chain-Link Number is not applicable, the NG screen appears. In this case, return to the Chain-Link Number input screen.

10. Press **Menu** to return to the Diagnostics Preventive Diag screen.

HFSI Counter Chain-Link Number List

DC135 HFSI Counter

Chain	Link	Component		Item	Specifications
950	800	Developer Housing Assemblies (C/ M/ Y/ K) (300,000 pages)	Yellow	PV	A4 LEF imp simple accumulation*1
950	804		Magenta		
950	808		Cyan		
950	812		Black		
950	816		Yellow	Rotation Time	Calculated from the Drum Cycle Frequency (Not used for determining Life)
950	820		Magenta		
950	824		Cyan		
950	828		Black		
950	832		Yellow	Pixel Count	Pixel count accumulation (Not used for determining Life)
950	836		Magenta		
950	840		Cyan		
950	844		Black		
950	848	Bypass Tray Roller (100,000 pages)		PV	A4 LEF imp simple accumulation*1
950	852	Tray 1 Feed Roller (100,000 pages)		PV	A4 LEF imp simple accumulation*1
950	856	Tray 2, 3, 4 Feed Roller (100,000 pages)	Tray 2	PV	A4 LEF imp simple accumulation*1
950	860		Tray 3		
950	864		Tray 4		
950	872	Transfer Roller (2nd BTR) (100,000 pages)		PV	A4 LEF imp simple accumulation*1
950	876	Life Extension Kit (300,000 pages) • Dispense Motor (All Colors) • Registration Roller • Trickle Motor			A4 LEF imp simple accumulation*1 Note: It is it is recommended to replace the Dispense Motor, Registration Roller, and Trickle Motor, and reset the life counter when use the engine past the rated life.

DC135 HFSI Counter (Continued)

Chain	Link	Component		Item	Specifications
950	880	Fuser Unit (100,000 pages)		PV	A4 LEF imp simple accumulation*1
950	884			Conducting Time	Counts up in 1 minute increments when the IOT Status is 'Standby' or 'Print'
950	888	IBT Unit (Transfer Belt) (200,000 pages)		PV	A4 LEF imp simple accumulation*1
950	892			Rotation Time	Calculated from the Drum Cycle Frequency

*1 Details on A4 LEF imp simple accumulation

Taking "L" as the paper length that is notified from the Controller to the MCU PWB.

a. L ≤ 216 mm (8.5 inch)*1 +1 (A4 LEF and Letter LEF or smaller)
b. L ≤ 216 mm (8.5 inch)*2 +2 (A3, and Legal or smaller)
c. L ≤ 216 mm (8.5 inch)*3 +3
d. L ≤ 216 mm (8.5 inch)*4 +4
e. L ≤ 216 mm (8.5 inch)*5 +5 (900 mm Long Paper)
f. 216 mm (8.5 inch)*5 < L +6 (1200 mm Long Paper)

Fault Diag

DC140 Analog Monitor

The DC140 Analog Monitor routine monitors each analog sensor for a certain period and displays the respective value.

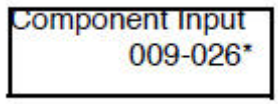
Component Input/ Run/ Stop

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Fault Diag.
3. Press **Right Arrow** and navigate to Fault Diag. DC140 Monitor.
4. Press **Right Arrow** and navigate to DC140 Monitor Component Input.
5. Press **Right Arrow** to display the Component Input 000-000 screen.

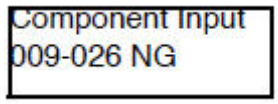
   Notes:

   - Use **Left**/ **Right Arrow** to move the cursor and **Up**/ **Down Arrow** to change the number.
   - When the cursor is at the left end of the Chain-Link Number, pressing **Left Arrow** returns to the DC140 Monitor - Component Input screen at the previous level.
6. Press **OK** to confirm the Chain-Link Number. An "*" appears on the right side of the changed value.

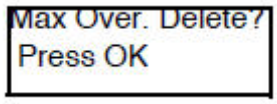
   After running a component in step 9 and then stopping the component, other components (up to 8 components) can be registered by repeating steps 5 and 6.



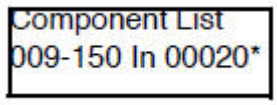
If the Chain-Link Number is not applicable, the NG screen appears.



When 8 of the components have been registered, the Max Over. Delete? - Press OK deletion confirmation screen appears. Press **OK** to complete the registration.



7. Once the Chain-Link Number is confirmed, press **OK** to return to the Component List screen and run the components at the same time.
8. The Component List screen is a DC menu under the DC140 Monitor List - Component List screen.



   The displayed information (starting from bottom left) are: Chain-Link Number, Input, and input values (monitored values).

   The component being monitored (in progress) is displayed with an "*" on the right side of the input value.
9. To stop the operation for a component, press **Cancel**.

   Note: When two or more components are registered, use **Up**/ **Down Arrow** to select the applicable component and press **Cancel**.
10. When two or more components are registered, use **Up**/ **Down Arrow** to display the next (previous) component.
11. Press **OK** to restart a component that has stopped.

    When two or more components are registered, use **Up**/ **Down Arrow** to select the applicable component and press **OK**.

Cancel All Components

1. In the operation screen of the component that is running, press **Right Arrow** to return to the DC140 Monitor - Components List screen at the previous level.
2. Press **Down Arrow** to display DC140 Monitor - Delete All screen at the same level.
3. Press **Right Arrow** to display the Delete All - Press OK to run screen.
4. Press **OK** to stop all components and delete the list. As the process is running, the Delete All - In progress screen is displayed.
5. When the Delete All - Press OK to run screen is displayed again, the process has been completed.
6. Press **Menu** to return to the Diagnostics - Fault Diag. screen.

Analog Monitor Check List (Input)

Chain	Link	Component	Description
010	200	Fuser Non-contact Sensor Voltage Compensation	The compensation element voltage of the Fuser Non-contact Sensor.
010	201	Fuser Non-contact Sensor Voltage	The detection element voltage of the Fuser Non-contact Sensor.
010	202	Fuser Non-contact Sensor Voltage Difference	The difference between detection and compensation voltage of the Fuser Non-contact Sensor.
010	203	Fuser Soft Touch Sensor	The sensor detection voltage at the Fuser terminal contact.
046	200	Black 1st Transfer Voltage Monitor	The voltage monitor value of the 1st BTR (K).
046	201	2nd BTR Current Monitor	The voltage monitor value of the 2nd BTR.
092	200	Left CTD Sensor Voltage	The density detection signal voltage value of the Left CTD Sensor.
092	201	Right CTD Sensor Voltage	The density detection signal voltage value of the Right CTD Sensor.
061	200	ROS Temperature Sensor	The detected temperature at the Thermo Sensor that is part of the CTD Sensor Assembly.
091	201	Environment Sensor Humidity	The detected humidity at the Humidity Sensor.
091	202	Environment Sensor Temperature	The detected temperature at the Humidity Sensor.

DC330 Component Control

The dc330 Component Control routine is used to test subsystems and discrete components of the printer. Two component types are defined:

- Inputs: Sensors, Switches, and Motor Encoders.
- Outputs: Motors, Solenoids, Clutches, and Heaters.

Notes:

- A maximum of 8 components (Chain-Link No.) can be registered at the same time. However, only 1 component can be run at a time.
- Refer to Component Check List (Input) on page 2-28 and Component Check List (Output) on page 2-31 for specific details of each test.

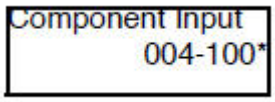
Component Input/ Run/ Stop

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Fault Diag.
3. Press **Right Arrow** and navigate to Fault Diag. DC140 Monitor.
4. Press **Down Arrow** and navigate to Fault Diag. DC330 Components.
5. Press **Right Arrow** to display the DC330 Components Component Input.
6. Press **Right Arrow** to display the Component Input 000-000 screen.

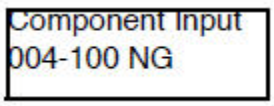
   Notes:

   - Use **Left/ Right Arrow** to move the cursor and **Up/ Down Arrow** to change the number.
   - When the cursor is at the left end of the Chain-Link Number, pressing **Left Arrow** returns to the DC330 Components Component Input screen at the previous level.
7. Press **OK** to confirm the Chain-Link Number. An "*" appears on the right side of the changed value.

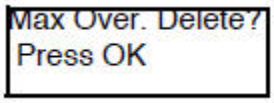
   After running a component in step 8 and then stopping the component, other components (up to 8 components) can be registered by repeating steps 6 and 7.



If the Chain-Link Number is not applicable, the NG screen appears. Press **OK** to return to the Chain-Link Number input screen.

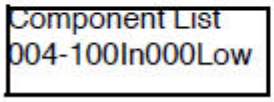


When 8 of the components have been registered, the Max Over. Delete? - Press OK deletion confirmation screen appears. At this time, press **OK** to complete the registration.

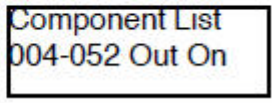


8. Once the Chain-Link Number is confirmed, press **OK** to return to the Component List screen and run the components at the same time.
9. The Component List screen is a DC menu under the DC330 Components - Component List screen.

When performing Input



When performing Output

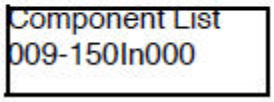


The displayed Input/Output information (starting from bottom left) are: Chain-Link Number, Input/ Output, Counter (for Input only - displays the accumulated value for the number of High/ Low changes), and Input (displays High/ Low for connector level)/ Output (displays On/ Off).

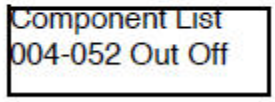
10. To stop the operation for a component, press the **Cancel** button.

    When two or more components are registered, use **Down**/ **Up Arrow** to select the applicable component and press **Cancel**.

When stopping Input



When stopping Output



11. When two or more components are registered, use **Down**/ **Up Arrow** to display the next (previous) component.
12. Press **OK** to restart a component that has stopped.

    When two or more components are registered, use **Down**/ **Up Arrow** to select the applicable component and press **OK**.

    Note: Even after the tests are stopped individually, the Chain-Link Number will remain in the list screen.

Cancel All Components

1. In the operation screen of the component that is running, press **Right Arrow** to return to the DC330 Components - Components List screen at the previous level.
2. Press **Down Arrow** to display DC330 Components - Delete All screen at the same level.
3. Press **Right Arrow** to display the Delete All - Press OK to run screen.
4. Press **OK** to stop all components and delete the list. As the process is running, the Delete All - In progress screen is displayed.
5. When the Delete All - Press OK to run screen is displayed again, the process has been completed.
6. Press **Menu** to return to the Diagnostics - Fault Diag. screen.

Component Check List (Input)

Input

Chain	Link	Component	Description
010	200	Fuser Motor Alarm	Detects the Alarm Signal of the Fuser Motor (PL 4.2.16)
010	203	New Fuser Sensor	
041	300	Interlock Front Cover	Detects the High/ Low states of the Front Cover Interlock Switch (PL 12.2.8)
041	301	Interlock Waste Cartridge Cover	Detects the High/ Low states of the Waste Cartridge Set Switch (PL 12.2.3)
041	302	Interlock Toner Cover	Detects the High/ Low states of the Toner Cover Interlock Switch (PL 8.1.14)
041	303	Front Cover Switch	Detects the High/ Low states of the Front Cover Switch (PL 12.2.7)
041	200	Low Voltage Power Supply Type	
042	200	High Voltage Power Supply Developer Fan Alarm	Detects the Alarm Signal of the Developer Fan (PL 12.2.16)
042	201	High Voltage Power Supply 2 Fan Alarm	Detects the Alarm Signal of the HVPS2 Fan (PL 12.1.3)
042	202	Low Voltage Power Supply Fan Alarm	Detects the Alarm Signal of the LVPS Fan (PL 12.2.22)
071	100	Bypass Tray No Paper Sensor	Detects the High/ Low states of the Bypass Tray No Paper Sensor (PL 4.4.3)
071	101	No Paper Sensor	Detects the High/ Low states of the No Paper Sensor (PL 2.2.2) (Tray1)
071	102	Registration Sensor	Detects the High/ Low states of the Registration Sensor (PL 5.1.3)
071	104	Fuser Exit Sensor	Detects the High/ Low states of the Fuser Exit Sensor (Fuser Unit) (PL 10.1.1)

Input (Continued)

Chain	Link	Component	Description
071	106	Paper Size Sensor 0	Detects the High/ Low states of Switch 0 of the Paper Size Switch (PL 2.1.6) (Tray 1)
071	107	Paper Size Sensor 1	Detects the High/ Low states of Switch 1 of the Paper Size Switch (PL 2.1.6) (Tray 1)
071	108	Paper Size Sensor 2	Detects the High/ Low states of Switch 2 of the Paper Size Switch (PL 2.1.6) (Tray 1)
071	109	Paper Size Sensor 3	Detects the High/ Low states of Switch 3 of the Paper Size Switch (PL 2.1.6) (Tray 1)
071	110	Option Feeder 1 Paper Size Sensor 0	Detects the High/ Low states of Switch 0 of the Paper Size Switch (PL 15.1.5) (Tray 2)
071	111	Option Feeder 1 Paper Size Sensor 1	Detects the High/ Low states of Switch 1 of the Paper Size Switch (PL 15.1.5) (Tray 2)
071	112	Option Feeder 1 Paper Size Sensor 2	Detects the High/ Low states of Switch 2 of the Paper Size Switch (PL 15.1.5) (Tray 2)
071	113	Option Feeder 1 Paper Size Sensor 3	Detects the High/ Low states of Switch 3 of the Paper Size Switch (PL 15.1.5) (Tray 2)
071	114	Option Feeder 2 Paper Size Sensor 0	Detects the High/ Low states of Switch 0 of the Paper Size Switch (PL 15.1.5) (Tray 3)
071	115	Option Feeder 2 Paper Size Sensor 1	Detects the High/ Low states of Switch 1 of the Paper Size Switch (PL 15.1.5) (Tray 3)
071	116	Option Feeder 2 Paper Size Sensor 2	Detects the High/ Low states of Switch 2 of the Paper Size Switch (PL 15.1.5) (Tray 3)
071	117	Option Feeder 2 Paper Size Sensor 3	Detects the High/ Low states of Switch 3 of the Paper Size Switch (PL 15.1.5) (Tray 3)
071	118	Option Feeder 3 Paper Size Sensor 0	Detects the High/ Low states of Switch 0 of the Paper Size Switch (PL 15.1.5) (Tray 4)
071	119	Option Feeder 3 Paper Size Sensor 1	Detects the High/ Low states of Switch 1 of the Paper Size Switch (PL 15.1.5) (Tray 4)
071	120	Option Feeder 3 Paper Size Sensor 2	Detects the High/ Low states of Switch 2 of the Paper Size Switch (PL 15.1.5) (Tray 4)
071	121	Option Feeder 3 Paper Size Sensor 3	Detects the High/ Low states of Switch 3 of the Paper Size Switch (PL 15.1.5) (Tray 4)
071	122	Option Feeder 1 No Paper Sensor	Detects the High/ Low states of the No Paper Sensor (PL 15.2.8) (Tray 2)
071	123	Option Feeder 2 No Paper Sensor	Detects the High/ Low states of the No Paper Sensor (PL 15.2.8) (Tray 3)

Input (Continued)

Chain	Link	Component	Description
071	124	Option Feeder 3 No Paper Sensor	Detects the High/ Low states of the No Paper Sensor (PL 15.2.8) (Tray 4)
071	125	Option Feeder 1 Paper Jam Sensor	Detects the High/ Low states of the Paper Jam Sensor (PL 15.2.3) (Tray 2)
071	126	Option Feeder 2 Paper Jam Sensor	Detects the High/ Low states of the Paper Jam Sensor (PL 15.2.3) (Tray 3)
071	127	Option Feeder 3 Paper Jam Sensor	Detects the High/ Low states of the Paper Jam Sensor (PL 15.2.3) (Tray 4)
071	128	Duplex Unit Paper Jam Sensor	Detects the High/ Low states of the Duplex Jam Sensor (PL 14.3.17)
071	200	Yellow Magenta Cyan Drum Motor Alarm	Detects the Alarm Signal of the Drum Motor (PR Drive Assembly) (Y/ M/ C) (PL 11.1.2)
071	201	Black Drum Motor Alarm	Detects the Alarm Signal of the Drum Motor (PR Drive Assembly) (K) (PL 11.1.12)
071	202	Paper Handling Motor Alarm	Detects the Alarm Signal of the Paper Handling Motor (PL 11.1.19)
071	203	Option Feeder 1 Motor Alarm	Detects the Alarm Signal of the Feeder Motor (Option Drive Assembly) (Tray 2) (PL 15.2.28)
071	204	Option Feeder 2 Motor Alarm	Detects the Alarm Signal of the Feeder Motor (Option Drive Assembly) (Tray 3) (PL 15.2.28)
071	205	Option Feeder 3 Motor Alarm	Detects the Alarm Signal of the Feeder Motor (Option Drive Assembly) (Tray 4) (PL 15.2.28)
093	200	Yellow Developer Motor Alarm	Detects the Alarm Signal of the Developer Motor (Y) (PL 11.1.17)
093	201	Magenta Developer Motor Alarm	Detects the Alarm Signal of the Developer Motor (M) (PL 11.1.17)
093	202	Cyan Developer Motor Alarm	Detects the Alarm Signal of the Developer Motor (C) (PL 11.1.17)
093	203	Black Developer Motor Alarm	Detects the Alarm Signal of the Developer Motor (K) (PL 11.1.17)
093	209	Waste Toner Cartridge Full Sensor	Detects the High/ Low states of the Waste Cartridge Full Sensor (PL 9.1.5)
094	200	Belt Retract Sensor	Detects the High/ Low states of the Belt Retract Sensor (CAM Assembly) (PL 9.1.8)

Component Check List (Output)

Output

Chain	Link	Component	Description	Limitations
010	001	Fuser Motor (Normal)	Drives the Fuser Motor (Fuser Drive Assembly) (PL 4.2.16) (Normal Speed: Forward Rotation)	
010	002	Fuser Motor (1/2)	Drives the Fuser Motor (Fuser Drive Assembly) (PL 4.2.16) (1/2 Speed: Forward Rotation)	
010	005	Fuser Relay	Turns On the Fuser Relay	
041	002	LVPS 24V	Outputs +24VDC from the LVPS PWB (PL 12.2.1)	
042	002	Developer Fan	Drives the Developer Fan (PL 12.2.16)	
042	003	LVPS Fan (Normal)	Drives the LVPS Fan (PL 12.2.22) (Normal Speed)	
042	004	LVPS Fan (1/2)	Drives the LVPS Fan (PL 12.2.22) (1/2 Speed)	
042	005	HVPS2 Fan (Normal)	Drives the HVPS2 Fan (PL 12.1.3) (Normal Speed)	
042	006	HVPS2 Fan (1/2)	Drives the HVPS2 Fan (PL 12.1.3) (1/2 Speed)	
061	001	ROS Motor	Drives the ROS Motor (ROS Assembly) (PL 7.1.1)	
071	001	(Y/ M/ C) Drum Motor (Normal)	Drives the Drum Motor (Y/ M/ C) (Drive Assembly) (PL 11.1.2) (Normal Speed: Forward Rotation)	Remove the Imaging Unit (Y/ M/ C) or the IBT Unit. If the rotation is performed without these removed, it will damage the Drum and the Belt. Even with the IBT Unit removed, rotating the Drum (Y/ M/ C) this way for too long could cause the blade to curl up.
071	002	(Y/ M/ C) Drum Motor (1/2)	Drives the Drum Motor (Y/ M/ C) (Drive Assembly) (PL 11.1.2) (1/2 Speed: Forward Rotation)	

Output (Continued)

Chain	Link	Component	Description	Limitations
071	005	Black Drum Motor (Normal)	Drives the Drum Motor (K) (PL 11.1.12) (Normal Speed: Forward Rotation)	Remove the Imaging Unit (Y/ M/ C) or the IBT Unit. If the rotation is performed without these removed, it will damage the Drum and the Belt. Even with the IBT Unit removed, rotating this way for too long could cause the blade to curl up. Also, even with the Imaging Unit (Y/ M/ C) removed, rotating this way for too long could cause the IBT blade to curl up.
071	006	Black Drum Motor (1/2)	Drives the Drum Motor (K) (PL 11.1.12) (1/2 Speed: Forward Rotation)	
071	007	Black Drum Motor (Reverse Normal)	Drives the Drum Motor (K) (PL 11.1.12) (Normal Speed: Reverse Rotation)	Remove the Imaging Unit (Y/ M/ C/ K) or the IBT Unit. If the rotation is performed without these removed, it will damage the Drum and the Belt. Even with the Imaging Unit (Y/ M/ C/ K) removed, rotating this way could cause Toner contamination (which will also affect the 2nd BTR) from the IBT Cleaner.
071	008	Black Drum Motor (Reverse 1/2)	Drives the Drum Motor (K) (PL 11.1.12) (1/2 Speed: Reverse Rotation)	
071	009	Paper Handling Motor (Normal)	Drives the Paper Handling Motor (PL 11.1.19) (Normal Speed: Forward Rotation)	
071	010	Paper Handling Motor (1/2)	Drives the Paper Handling Motor (PL 11.1.19) (1/2 Speed: Forward Rotation)	
071	013	Registration Clutch	Turns On the Registration Clutch (PL 5.1.11)	
071	014	Bypass Tray Feed Solenoid	Turns On the Bypass Tray Feed Solenoid (PL 4.3.10)	
071	015	Feed Clutch	Turns On the Feed Roller Clutch (PL 2.2.8)	
071	016	Turn Clutch	Turns On the Turn Roller Clutch (PL 5.1.9)	
071	017	Duplex Unit Clutch	Turns On the Duplex Clutch (PL 14.2.20)	

Output (Continued)

Chain	Link	Component	Description	Limitations
071	018	Option Feeder 1 Motor (Normal)	Drives the Feeder Motor (PL 15.2.28) (Tray 2) (Normal Speed)	
071	019	Option Feeder 1 Motor (1/2)	Drives the Feeder Motor (PL 15.2.28) (Tray 2) (1/2 Speed)	
071	020	Option Feeder 2 Motor (Normal)	Drives the Feeder Motor (PL 15.2.28) (Tray 3) (Normal Speed)	
071	021	Option Feeder 2 Motor (1/2)	Drives the Feeder Motor (PL 15.2.28) (Tray 3) (1/2 Speed)	
071	022	Option Feeder 3 Motor (Normal)	Drives the Feeder Motor (PL 15.2.28) (Tray 4) (Normal Speed)	
071	023	Option Feeder 3 Motor (1/2)	Drives the Feeder Motor (PL 15.2.28) (Tray 4) (1/2 Speed)	
071	024	Duplex Unit Motor (Normal)	Drives the Duplex Motor (PL 14.2.1) (Normal Speed)	
071	025	Duplex Unit Motor (1/2)	Drives the Duplex Motor (PL 14.2.1) (1/2 Speed)	
071	026	Option Feeder 1 Feed Clutch	Turns On the Feed Roller Clutch (PL 15.2.13) (Tray 2)	
071	027	Option Feeder 2 Feed Clutch	Turns On the Feed Roller Clutch (PL 15.2.13) (Tray 3)	
071	028	Option Feeder 3 Feed Clutch	Turns On the Feed Roller Clutch (PL 15.2.13) (Tray 4)	
071	029	Option Feeder 1 Turn Clutch	Turns On the Turn Roller Clutch (PL 15.2.25) (Tray 2)	
071	030	Option Feeder 2 Turn Clutch	Turns On the Turn Roller Clutch (PL 15.2.25) (Tray 3)	
071	031	Option Feeder 3 Turn Clutch	Turns On the Turn Roller Clutch (PL 15.2.25) (Tray 4)	

Output (Continued)

Chain	Link	Component	Description	Limitations
091	003	Black Developer Motor (Normal)	Drives the Developer Motor (K) (PL 11.1.17) (Normal Speed)	Before turning this On, rotate the Imaging Unit (071-005) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.
091	004	Black Developer Motor (1/2)	Drives the Developer Motor (K) (PL 11.1.17) (1/2 Speed)	Before turning this On, rotate the Imaging Unit (071-006) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.
091	005	Yellow Magenta Cyan Erase Lamp	Turns On the Erase Lamp (Y/ M/ C) (Erase PWB) (PL 6.1.9)	Make sure to remove the Imaging Unit (Y/ M/ C). If you would like to turn it On without performing the removal, rotate the Imaging Unit (Y/ M/ C) and (K) (071-001, 071-005). Note: Rotating the Imaging Unit (Y/ M/ C) this way for too long could cause the blade to curl up.
091	006	Black Erase Lamp	Turns On the Erase Lamp (K) (Erase PWB) (PL 6.1.9)	Make sure to remove the Imaging Unit (K). If you would like to turn it On without performing the removal, rotate the Imaging Unit (Y/ M/ C) and (K) (071-001, 071-005). Note: Rotating the Imaging Unit (Y/ M/ C) this way for too long could cause the blade to curl up.
091	007	Yellow Developer Motor (Normal)	Drives the Developer Motor (Y) (PL 11.1.17) (Normal Speed)	Before turning this On, rotate the Imaging Unit (071-001) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.

Output (Continued)

Chain	Link	Component	Description	Limitations
091	008	Yellow Developer Motor (1/2)	Drives the Developer Motor (Y) (PL 11.1.17) (1/2 Speed)	Before turning this On, rotate the Imaging Unit (071-002) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.
091	009	Magenta Developer Motor (Normal)	Drives the Developer Motor (M) (PL 11.1.17) (Normal Speed)	Before turning this On, rotate the Imaging Unit (071-001) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.
091	010	Magenta Developer Motor (1/2)	Drives the Developer Motor (M) (PL 11.1.17) (1/2 Speed)	Before turning this On, rotate the Imaging Unit (071-002) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.
091	011	Cyan Developer Motor (Normal)	Drives the Developer Motor (C) (PL 11.1.17) (Normal Speed)	Before turning this On, rotate the Imaging Unit (071-001) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.
091	012	Cyan Developer Motor (1/2)	Drives the Developer Motor (C) (PL 11.1.17) (1/2 Speed)	Before turning this On, rotate the Imaging Unit (071-002) first. Attempting to rotate the Developer Motor without rotating the Imaging Unit first could cause damage to the Drum and risk internal printer contamination due to toner.

Output (Continued)

Chain	Link	Component	Description	Limitations
093	003	Yellow Toner Dispense Motor	Drives the Toner Dispense Motor (Y) (Dispense Motor) (PL 8.1.15)	Before turning this On, rotate the Developer (091-007) first, and also rotate the Developer for a while (approx. 30 s) after turning it Off. As rotating this way for too long will cause contamination in the printer and background appearing on the paper due to toner cloud; perform the check only in short time periods.
093	004	Magenta Toner Dispense Motor	Drives the Toner Dispense Motor (M) (Dispense Motor) (PL 8.1.15)	Before turning this On, rotate the Developer (091-009) first, and also rotate the Developer for a while (approx. 30 s) after turning it Off. As rotating this way for too long will cause contamination in the printer and background appearing on the paper due to toner cloud; perform the check only in short time periods.
093	005	Cyan Toner Dispense Motor	Drives the Toner Dispense Motor (C) (Dispense Motor) (PL 8.1.15)	Before turning this On, rotate the Developer (091-011) first, and also rotate the Developer for a while (approx. 30 s) after turning it Off. As rotating this way for too long will cause contamination in the printer and background appearing on the paper due to toner cloud; perform the check only in short time periods.
093	006	Black Toner Dispense Motor	Drives the Toner Dispense Motor (K) (Dispense Motor) (PL 8.1.15)	Before turning this On, rotate the Developer (091-003 to ‘01’) first, and also rotate the Developer for a while (approx. 30 s) after turning it Off. As rotating this way for too long will cause contamination in the printer and background appearing on the paper due to toner cloud; perform the check only in short time periods.

Output (Continued)

Chain	Link	Component	Description	Limitations
093	007	Waste Toner Motor	Drives the Waste Toner Motor (PL 9.1.6)	Although this usually required that the Waste Cartridge is installed, it is not really a limitation.
093	008	Trickle Motor	Drives the Trickle Motor (Auger Assembly/ Trickle Guide) (PL 8.1.10)	Make sure that the Imaging Unit (K) is installed. If the rotation is performed with it removed, it can cause failures in the transport system.
094	001	Belt Retract Motor	Drives the Belt Retract Motor (Cam Assembly) (PL 9.1.8)	Although there is no limitation for this, it is not possible to switch between Color and B/W modes as this will not stop automatically.
094	003	Belt Color Mode		
094	004	Belt Monochrome Mode		

DC355 Hard Disk Diag

Notes:

- The DC355 Hard Disk Diag routine is available only when a HDD is installed.
- The menu is displayed ONLY when the Hard Disk is installed.

The DC355 Hard Disk Diag routine allows user to perform setup and replacement assessment during replacement or examination of the HDD. These routines include:

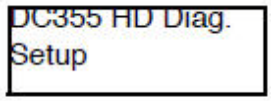
- Setup the HDD
- Run SMART (Self-monitoring, analysis and reporting technology) in the HDD to predict any HDD failure.

CAUTION: Some of the menu functions may cause the contents of the Hard Disk Drive to be deleted. Perform the procedure with care because this may result in the loss of customer's data.

Notes:

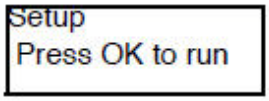
- DO NOT interrupt the procedure when this operation is in progress.
- The operation can continue even if a failure unrelated to it has occurred.

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Fault Diag.
3. Press **Right Arrow** and navigate to Fault Diag. DC140 Monitor.
4. Press **Down Arrow** and navigate to Fault Diag. DC355 HD Diag.
5. Press **Right Arrow** to display the DC355 HD Diag - Setup screen.



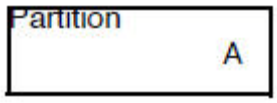
6. Press **Right Arrow** to display the Setup Partition ALL screen.
   - To set up all Partitions, go to step 7.
   - To set up the individual Partition, go to step 8.

7. Press **Down Arrow** to display the Setup - Press OK to run screen at the same level.
   Go to step 11.



8. Press **Right Arrow** to display the Partition A selection screen.

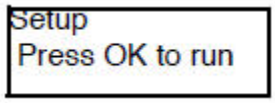
   Note: The partition can be selected using **Down/ Up Arrow** in the order of: Partition A, Partition B, Partition C, Partition D, Partition H, and Partition ALL.



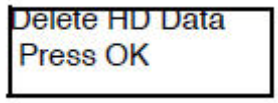
9. Press **OK** to confirm the partition to be set up.

   Note: When Partition D has been selected and confirmed, Partition D* will be displayed and button operations become available.

10. Press **OK** to display the Setup - Press OK to run screen.



11. Press **OK** to display the confirmation message Delete HDD Data - Press OK screen.



12. Press **OK** to run the setup.
    As the process is running, the Setup - In progress screen is displayed.

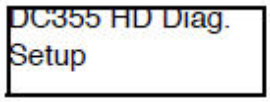
    When the process has completed successfully, the Setup - Completed screen is displayed.

When the process has completed with error, the Setup - Completed-Error screen is displayed.

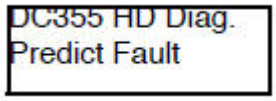
13. Press **Menu** to return to the Diagnostics - Fault Diag. screen.

Predict Fault

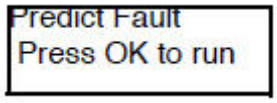
1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Fault Diag.
3. Press **Right Arrow** and navigate to Fault Diag. DC140 Monitor.
4. Press **Down Arrow** and navigate to Fault Diag. DC355 HD Diag.
5. Press **Right Arrow** to display the DC355 HD Diag - Setup screen.



6. Press **Down Arrow** to display the DC355 HD Diag. - Predict Fault screen at the same level.



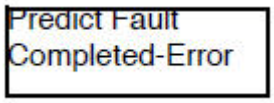
7. Press **Right Arrow** to display the run Predict Fault - Press OK to run screen.



8. Press **OK** to run the fault prediction. As the process is running, the Predict Fault - In progress screen is displayed.

When the process has completed successfully, the Predict Fault - Completed screen is displayed.

When the process has completed with error, the Predict Fault - Completed-Error screen is displayed.



9. Press **Menu** to return to the Diagnostics - Fault Diag. screen.

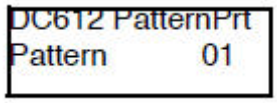
DC612 Print Pattern

The DC612 Print Pattern routine allows user to print the test patterns that were output from the built-in pattern generator.

The Phaser 7100 printer contains seven test patterns that can be printed from the Control Panel.

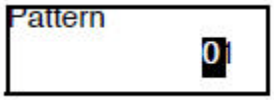
Print Test Patterns	
Note: Test pattern numbers 1 - 16 are not available in the Phaser 7100 printer.	
Access Print Test Patterns: DC612 in Service Diagnostics (**Service Diagnostics** > **Fault Diag.** > **DC612 PatternPrt**)	
Pattern # 51 - Total Chart	For detection. For adjustment in the market/ determining problems.
Pattern # 52 - SDTP123600 (BW Grid)	For shipment inspection
Pattern # 53 - Full Halftone K 45 %	For defect detection/ banding
Pattern # 54 - Full Halftone C 50 %	For defect detection/ banding
Pattern # 55 - Full Halftone M 50 %	For defect detection/ banding
Pattern # 56 - Full Halftone R 50 %	For defect detection/ banding
Pattern # 57 - KCMY 50 % Band	For determining problems.

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Fault Diag.
3. Press **Right Arrow** and navigate to Fault Diag. DC140 Monitor.
4. Press **Down Arrow** and navigate to Fault Diag. DC612 PatternPrt.
5. Press **Right Arrow** to display DC612 PatternPrt - Pattern 01 screen.



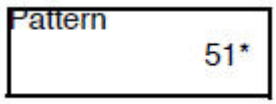
6. Press **Right Arrow** to display the Pattern No. screen.

   Note: To set the Pattern No., use **Left/ Right Arrow** to move the cursor and **Down/ Up Arrow** to change the number.

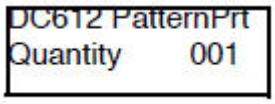


   Note: When the cursor is at the left end of the Pattern No., pressing **Left Arrow** returns to the DC612 PatternPrt - Pattern 01 screen at the previous level.

7. Press **OK** to confirm the Pattern No. An "*" is displayed at the right side of the Pattern No.



8. Press **OK** to display the DC612 PatternPrt - Quantity 001 screen.



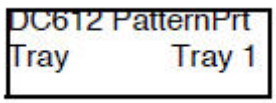
9. Press **Right Arrow** to display the quantity change screen.

   Notes:

   - The default value is 1. Quantity can be set between 1 to 999.
   - To set the copy quantity, use **Left/ Right Arrow** to move the cursor and **Down/ Up Arrow** to change the number.

10. Set the copy quantity and press **OK** to confirm it. An "*" is displayed at the right side of the copy quantity.

11. Press **OK** to display the DC612 PatternPrt - Tray selection screen.



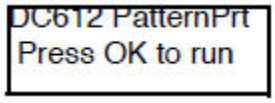
12. Press **Right Arrow** to display the tray selection screen. To select a Tray, press **Down/ Up**.

    Note: There are 5 selectable Trays: Tray 1, Tray 2, Tray 3, Tray 4, and (SMH) Bypass Tray. Tray 1 is set as the default.

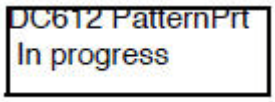
13. Set the applicable Tray and press **OK** to confirm it. An "*" is displayed at the right side of the Tray item.

Note: The items that can be set vary according to the Pattern. If there are more settings items, the relevant screens will be displayed. Set the items using the same procedure as during Tray selection.

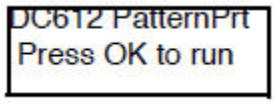
14. Press **OK** to display the DC612 PatternPrt - Press OK to run screen.



15. Press **OK** to print the test pattern. As the process is running, the DC612 PatternPrt - In progress screen is displayed. To stop printing the test pattern, press **Cancel**.



16. After the process has completed, the DC612 PatternPrt - Press OK to run screen will be displayed again.



17. Press **Menu** to return to the Diagnostics - Fault Diag. screen.

Adjustment

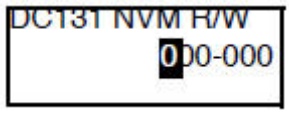
DC131 NVM Read/ Write

The DC131 NVM Read/ Write routine provides access to read and modify specific NVM values within the I/P Board and access and read IOT NVM.

CAUTION: Be careful when making changes to the NVM value. Always write down the original NVM value (for reference) prior to making any changes. Incorrect changes to an NVM value could make the printer inoperable.

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Adjustment.
3. Press **Right Arrow** and navigate to Adjustment DC131 NVM R/W.
4. Press **Right Arrow** to display the DC131 NVM R/W 000-000 Chain-Link No. input screen.

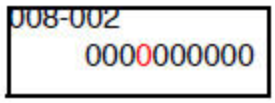
   Note: To set the Chain-Link No., use **Left/ Right Arrow** to move the cursor and **Down/ Up Arrow** to change the number.



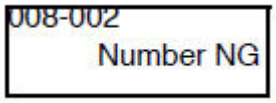
   Note: When the cursor is at the left end of the Chain-Link No., pressing **Left Arrow** returns to the Adjustment - DC131 NVM R/W screen at the previous level.

5. Press **OK** to confirm the Chain-Link No.

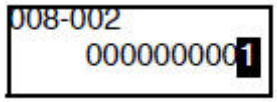
   If the Chain-Link No. is applicable, the current NVM value and the cursor will be displayed.



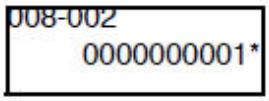
   If the Chain-Link No. is not applicable, the NG screen will be displayed. Press **OK** to return to the Chain-Link No. input screen.



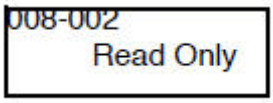
6. To change the current NVM value, use **Left/ Right** to move the cursor and **Down/ Up Arrow** to change the number.



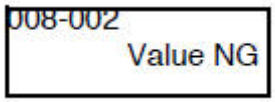
7. Press **OK** to overwrite using the changed value. When the operation has completed successfully, an "*" will appear on the right side of the new value.



When the changed value cannot overwrite the current value, or it is a Read Only NVM, the Read Only screen appears.



If the changed value is incorrect, the Value NG screen appears. Press **OK** to return to the Chain-Link No. input screen.



8. Press **Menu** to return to the Diagnostics - Adjustment menu screen.

DC132 Machine Serial Number Settings

Note: The DC132 Machine Serial Number Settings routine is available only when error 124-315 occurs.

The DC132 Set Serial routine provides access to repair the mismatch of Serial Number, Product Number, and Billing Counter Value among the PWB when MCU PWB or I/P PWB is replaced, set those values stored in the non-replaced PWB to the replaced PWB.

The menu is displayed only when the following errors occur.

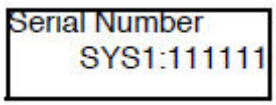
- 124-324 (Billing Counter is mismatched at 3 locations)
- 124-325 (When attempting to correct the Billing Counter at 1 location, unable to correct the Billing Counter automatically)
- 124-312 (Any Product No. Mismatch)
- 124-313 (Any Serial No. Mismatch)
- 124-315 (DC132 System Fail-2)
- 124-317 (DC132 System Fail-4)
- 124-319 (DC132 System Fail-8)
- 124-344, C124-345, C124-346, C124-347, C124-348, C124-349

CAUTION: The functions of the menus described here have great effect on the print quality and operation of the printer. In addition, they include the adjustment functions used at shipment. DO NOT change the settings unless specified otherwise in this manual.

Notes:

- 3 locations containing the information - MCU PWB (x1 location) and I/P PWB (x2 locations) each contains a Serial No., a Product No., and a Billing Counter.
- On the Control Panel display, IOT is MCU PWB while SYS1 and SYS2 are I/P PWB.

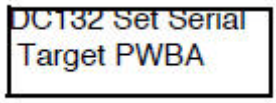
1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Adjustment.
3. Press **Right Arrow** and navigate to Adjustment DC131 NVM R/W.
4. Press **Down Arrow** and navigate to Adjustment DC132 Set Serial.
5. Press **Right Arrow** to display the Serial No. of SYS1 screen. Press **Down Arrow** to display the Serial No. of SYS2 and IOT screen.



6. Press **Down Arrow** more times, the Product No., Meter Full Color, Meter Color 1, Meter Color 2, and Meter Black values will be displayed in sequence for SYS1, SYS2 and IOT.

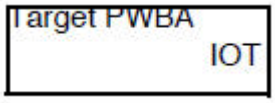
   Note: The Serial No. and Product No. of a new PWB is always be displayed with an "*".

7. Press **Down Arrow** to display the screen to select an unreplaced PWB.



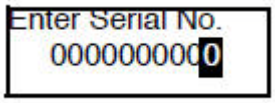
Note: The PWB which step 6 display value contains an "*" (new PWB or PWB with corrupt data) is not displayed as the target PWB. In addition, if all the PWB contain "*" due to some problems, they will not be displayed in the following screen.

8. Press **Left Arrow** and select a PWB using **Down/ Up Arrow**. Confirm the target PWB by pressing **OK** to display an "*" on the right side of the PWB.



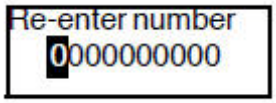
9. Press **OK** to display the Enter Serial No. screen.

Note: Use **Left/ Right Arrow** to move the cursor and **Down/ Up Arrow** to change the number.



10. Press **OK** to confirm the Serial No. If the Serial No. is correct, the re-entry screen is displayed for reconfirmation.

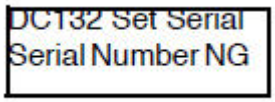
Note: Use **Left/ Right Arrow** to move the cursor and **Down/ Up Arrow** to change the number.



11. Press **OK** to confirm the Serial No.

    If the re-input Serial No. is also correct, a DC132 Set Serial - In progress screen appears and then, after a while, a DC132 Set Serial - Completed screen appears.

    If the Serial No. is incorrect, the DC132 Set Serial - Serial Number NG screen appears. Press **OK** to return to the input screen.



12. Press **Menu** to return to the Diagnostics - Adjustment menu screen.

DC301 NVM Initialize

The DC301 NVM Initialize routine allows the user to reset the NVM value to default value of all applicable NVM within a specified service or module.

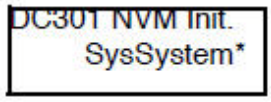
"Account" and "Auditron" are displayed in the initialization area only when the authentication mode is set to Auditron.

CAUTION: The functions of the menus described here have great effect on the print quality and operation of the printer. Therefore, do not change the settings unless specified otherwise in this manual. Use the NVM Initialization procedure as a last option when servicing the Phaser 7100.

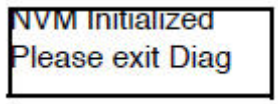
Notes:

- The NVM Initialize does not initialize settings related to the Billing Counter, M/C Serial No., Market, HSFI, Shutdown History, and Jam/ Fail Counter. The Shutdown History and Jam/ Fail Counter are cleared during Diag Exit when Exit (Clear Log) is specified.
- When NVM Initialize is performed, all the NVM values will return to their default values and revert to the state when the printer was first installed.

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Adjustment.
3. Press **Right Arrow** and navigate to Adjustment DC131 NVM R/W.
4. Press the **Down Arrow** and navigate to Adjustment DC301 NVM Init.
5. Press the **Right Arrow** to display the DC301 NVM Init. - SysSystem screen.
   - To initialize the whole SYS area, perform steps 6 and 7.
   - To separately initialize the items under the SYS area, perform steps 8 to 11.
6. Press **OK** to initialize the SYS area. After the operation, an "*" appears on the right side of the display.



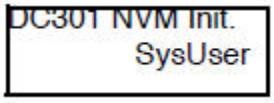
7. Press **Left Arrow** or the **Menu** to display the NVM Initialized - Please exit Diag screen, which prompts to exit the Diag.



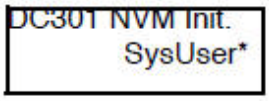
8. Use **Right Arrow** to display the initialization area selection Area - SysUser screen.

   Note: Use **Down/ Up Arrow** in the order of: Area - SysUser, Area - IOT, Area - Finisher, Area - Account, and Area - SysSystem.

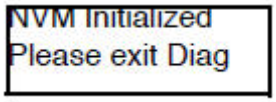
9. Press **OK** to confirm the area. When the item has been selected and confirmed, DC301 NVM Init. - SysUser appears on the run instruction screen.



10. Press **OK** to initialize the confirmed area. After the operation, an "*" appears on the right side of the display.



11. Use **Right Arrow** or **Menu** to display the NVM Initialized - Please exit Diag screen.



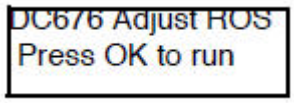
12. Press **Menu** to return to the Diagnostics - Adjustment menu screen.

Sub System Check

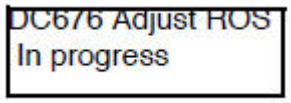
DC676 Adjust ROS

The DC671 Regi Measure routine corrects the ROS Lead Regi Parameter when the ROS Assembly has been replaced.

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Subsystem Check.
3. Press **Right Arrow** to display the Subsystem Check DC671 RegiMeasure screen.
4. Press **Down Arrow** and navigate to Subsystem Check DC676 Adjust ROS.
5. Press **Right Arrow** to display the DC676 Adjust ROS - Press OK to run screen.

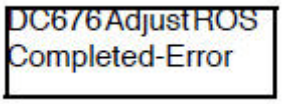


6. Press **OK** to run the ROS Exposure Point Adjustment. As the process is running, the DC676 Adjust ROS - In progress screen is displayed.



When the process has completed successfully, the DC676 Adjust ROS - Completed screen is displayed.

If the process has completed with error, the DC676 Adjust ROS - Completed-Error screen is displayed.



7. Press **Menu** to return to the Diagnostics - Adjustment menu screen.

Messages, Chain Link Codes, and Procedures

The error messages and chain link codes generated by the printer's operating system are the lead-in to the troubleshooting procedures that follow in subsequent pages. This section correlates the output of the printer's diagnostic aids and provides the troubleshooting procedures to locate and correct the reported errors.

Error Messages Abbreviations

Due to limited display space, some error messages include abbreviations. The most common abbreviations used throughout this chapter are listed in the following table.

Term	Definition
ASIC	Application-Specific Integrated Circuit
Assy	Assembly
CMY	Cyan, Magenta, Yellow
COMM	Communication
CRT	Cartridge
CRUM	Customer Replaceable Unit Memory
Dev	Developer
ER/ ERR	Error
ENV	Environment
FUNC	Function
IBT	Transfer Belt
IOT	Print Engine
K	Black
MCU	Machine Control Unit
NVM	Non-volatile Random Memory. Used instead of NVRAM.
NVRAM	Non-volatile Random Access Memory
RAM	Random Access Memory
REG	Registration
ROM	Read Only Memory
VOUT	Output voltage from ADC Sensor
Xero	Imaging Unit Drum Drive

Error Messages and Chain-Link Codes

The following table lists possible errors and page references for the corrective procedures. Use the Chain Link to identify the proper procedure to correct the error.

- The Chain-Link column lists the error codes show on the Error History Report, Shutdown Report, Failure Report, and Control Panel.
- The Control Panel Message column lists the message as it appears on the Error History Report.
- The Go to Page column references the procedure related to the error.

Error Message and Chain Link Code Display

Chain Link	Control Panel Message	Go to Page
010		
010-100	Entrance On Jam	-----
010-105	Fuser Unit Exit Sensor On Jam	2-78
010-106	Fuser Unit Exit Sensor Off Jam	2-80
010-112	Fuser Unit Exit Out Early Jam	2-78
010-311	Fuser Unit Heat Roll STS-1 Disconnection Fail	2-83
010-319	Fuser Unit NC Sensor Differential Amp Fail	2-83
010-328	Fuser Unit Warm Up Time Fail (Not Ready)	2-83
010-330	Fuser Unit Motor Fail	2-81
010-331	Heat Roll STS Over Temperature Fail	2-83
010-332	Heat Roll NC Sensor Disconnection Fail	2-83
010-333	Heat Roll NC Sensor Over Temperature Fail	2-83
010-334	Heat Roll NC Sensor Broken Fail	2-83
010-335	Heat Roll NC Sensor Range Fail	2-83
010-338	Fuser Unit On Time Fail	2-83
010-339	Heat Roll NC Sensor Low Temperature Fail	2-83
010-340	Fusing Unit Detached	2-83
010-344	Heat Roll STS Sensor Low Temperature Fail	2-83
010-345	Fusing Unit Hard Relay OFF Fail	2-83
010-346	Fuser Main Lamp Data Renewal Fail	2-83
010-347	Fuser Sub Lamp Data Renewal Fail	2-83
010-355	Fuser Cool Down Timeout Fail	2-83
010-420	Fusing Unit Assembly Change Soon (ERU)	-----

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
010-421	Fuser Unit Life End Quality	2-86
010-906	Fuser Unit Life End	2-86
016		
016-322	JBA Accounting Data Full	2-87
016-328	Cont-MCU Cable Connection Fail	2-88
016-336	Cont Program ROM Fail-2	2-89
016-350	Cont SEEP-ROM Fail-1	2-90
016-351	Cont SEEP-ROM Fail-2	2-91
016-365	Cont USB2.0 Device Fail	2-92
016-372	Cont HDD FileSystem Fail-A	2-93
016-373	Cont HDD FileSystem Fail-B	2-93
016-374	Cont HDD FileSystem Fail-C	2-93
016-375	Cont HDD FileSystem Fail-D	2-93
016-376	Cont HDD FileSystem Fail-E	2-93
016-377	Cont HDD FileSystem Fail-F	2-93
016-378	Cont HDD FileSystem Fail-G	2-93
016-379	Cont HDD FileSystem Fail-H	2-93
016-380	Cont HDD FileSystem Fail-I	2-93
016-381	Cont HDD FileSystem Fail-J	2-93
016-382	Cont HDD FileSystem Fail-P	2-93
016-400	802.1x Authentication Error (incorrect user name or password)	2-94
016-401	802.1x Authentication Method Mismatch	2-95
016-402	802.1x Authentication Timeout	2-95
016-403	802.1x Authentication Certificate Mismatch	2-96
016-404	Other 802.1x Authentication Errors	2-96
016-405	Certificate DB File Error	2-97
016-406	802.1x Authentication Client Certificate Setting Error	2-97
016-450	SMB Host Name Duplicated	2-98
016-453	Dynamic DNS - IPv6 Address Dynamic Update Failed (DMP2007)	2-98
016-454	Dynamic DNS - IPv4 Address Dynamic Update Failed	2-98

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
016-455	SNTP Timeout *report display only (the printer time is incorrect)	2-99
016-456	SNTP Time Asynchronous *Error History Report display only	2-99
016-461	Under Non-transmitted Image Log Stagnation	2-100
016-500	Cont-ROM Data Write Processing Error Detection (DLD method)	2-101
016-501	S2X-ROM Data Write Processing Error Detection (DLD method)	2-101
016-502	Any of Cont/S2X/ IOT/ ROM Write Processing Error Detection (PJL method)	2-101
016-503	Failed to Resolve SMTP Server Name	2-102
016-504	Failed to Resolve POP Server Name	2-102
016-505	POP Authentication Fail	2-102
016-514	XPS Error	2-103
016-515	XPS Short of Memory	2-103
016-516	XPS Print Ticket Description Error	2-104
016-517	Print Mode-Mixed Document for PS Booklet Print	2-104
016-518	Simultaneous Specification of PS Booklet and Watermark	2-105
016-519	Device Document Volume - Reached Limit	2-105
016-522	LDAP-SSL Authentication Error 112	2-106
016-523	LDAP-SSL Authentication Error 113	2-106
016-524	LDAP-SSL Authentication Error 114	2-107
016-525	LDAP-SSL Authentication Error 115	2-107
016-526	LDAP-SSL Authentication Error 116	2-108
016-527	LDAP-SSL Authentication Error 117	-----
016-529	Remote Download Server Timeout	2-108
016-535	No FW Update Files in Remote Download Server	2-109
016-536	Remote Download Server Name Resolution Error	2-109
016-537	Remote Download Server Connection Error	2-110
016-538	Remote Download File Write to HDD Error	2-110
016-543	Authentication Agent Error *REALM_UNKNOWN	2-111
016-545	Authentication Agent Error *CLOCKSKEW_ERR	2-111
016-556	Authentication Agent Error *SERVICE_IS_PROCESSING	2-112
016-557	Authentication Agent Error *INTERNAL_ERROR	2-112

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
016-559	Remote Download Parameter Error	2-113
016-560	Authentication Agent Communication Error	2-113
016-562	Authentication Agent Error * Duplicate IDs were detected at ICCG external authentication	2-114
016-564	Remote Download Server Authentication Error	2-114
016-565	Backup Restore Error	2-115
016-566	NVM Backup Restore Condition Error	2-116
016-567	NVM Backup Storage Destination Capacity Over	2-117
016-568	NVM Backup Restore process has failed due to some reason	2-117
016-570	Insufficient XPIF Memory	2-118
016-571	Mismatched XPIF Parameters	2-118
016-572	XPIF Media Conversion Error	2-119
016-573	XPIF Interpretation Error	2-119
016-598	E-mail Message Size Over	2-120
016-600	Logged by Incorrect KO Authentication Detection	-----
016-601	Illegal Trespassing Detected (Identification/ Authentication error due to KO/CO User ID NG or Password NG)	-----
016-700	Number of Digits for Secure Print/ Charge Print Password is fewer than minimum	2-120
016-701	Insufficient PLW Decomposer Memory	2-121
016-702	Unable to compress page due to insufficient Print Page Buffer	2-121
016-704	Job Canceled due to detection of folder full	2-122
016-705	Unable to perform Secure Print/ Print from Folder/ Pay for Print Storing from Print Driver unable to store scanned documents into a folder	2-123
016-706	Job Canceled due to detection of exceeded maximum number of users for Secure and Proof Prints	2-124
016-707	Unable to perform Proof Print	2-124
016-708	Full During Annotation/ Analog Watermark Image Storage	2-125
016-709	PLW Command Error Detected By PLW Decomposer	2-126
016-710	Delayed Print Fail	2-126
016-716	Invalid TIFF File. The files to be spooled in TIFF has exceeded the disk capacity.	2-127

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
016-718	Insufficient PCL6 Decomposer Memory	2-127
016-719	Insufficient PCL Decomposer Memory	2-128
016-720	PCL Command Error Detected By PCL Decomposer	2-128
016-721	An unexpected error occurred at the PLW decomposer during printing.	2-129
016-726	Auto SW judgment has failed.	2-129
016-727	0-page Condition detected when storing print job in folder	2-130
016-728	Invalid TIFF File. The data contains a Tag that is not set in the Image File Expansion Library.	2-130
016-729	Invalid TIFF File. The specified settings exceed the upper limit of the valid number of colors and pixels.	2-131
016-730	ART Command Error. An unsupported command was detected at ART	2-131
016-731	Invalid TIFF File. The TIFF data is broken or cut off halfway.	2-132
016-732	<Form Overlay Error> Data itself is not printed when the form specified is not registered in emulation.	2-132
016-734	Simple Destination Result Report Output Error	2-133
016-735	Updating Job Template. The system attempted to output the Job Template List while the Job Template is being updated.	2-133
016-736	Repository Lock Error	2-134
016-737	Lock Directory Deletion Error	2-134
016-738	Invalid Paper Size for PS Booklet Print	2-135
016-739	PS Booklet Document/Output Paper Mismatch	2-135
016-740	Invalid Output Tray for PS Booklet Print	2-136
016-741	Unable to Transition to Download Mode	2-136
016-742	Product ID of Download Data was detected to be different.	2-137
016-743	Printer Model/ Panel Type Error Target model in the download data and the printer model do not match.	2-137
016-744	Download Data Checksum Error	2-138
016-745	XPJL Fatal Error during Download	2-138
016-746	Sent PDF Contains Unsupported Function	2-139
016-747	Insufficient memory when drawing an annotation image	2-139
016-748	Full Status detected at folder access and job is canceled	2-140
016-749	PJL/ XPJL Detected an Unprintable Print Language	2-140

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
016-750	PDF Print Job Ticket Description Error	2-141
016-751	PDF Error	2-141
016-752	PDF Short of Memory	2-142
016-753	PDF Password Mismatched	2-142
016-755	PDF Print Prohibited	2-143
016-756	Auditron - Prohibit Service	2-143
016-757	Auditron -Invalid User	2-144
016-758	Auditron -Disabled Function	2-144
016-759	Auditron - Reached Limit	2-145
016-760	PS Decompose Error. An error occurred in the decompose processing.	2-145
016-761	Image Output. FIFO EMPTY Error	2-146
016-762	Decomposer Not Exist. The system has requested for a feature (print language, print utility, etc.) that is not installed.	2-146
016-764	SMTP Server Connection Fail	2-147
016-765	SMTP Server HDD Full	2-147
016-766	SMTP Server Error - Allocation Memory Capacity Over	2-148
016-767	SMTP Server Refused Destination Address	2-148
016-768	SMTP Server Refused Sending Address	2-149
016-769	SMTP Server DNS Not Supported	2-149
016-772	Device DNS Server Not Set for SMTP Jobs	2-150
016-773	Local Machine IP Address Failure	2-150
016-781	SMTP Server Not Found	2-151
016-782	Server Login Error. Unable to log into the server when transferring files to the server	2-152
016-789	Redirector Task Operational HDD Limit Overflow	2-153
016-792	Job Log for Specified Job ID Not Exist	2-153
016-793	MF I/O. HDD Full	2-154
016-798	No Trust Marking Option	2-154
016-799	Print Instruction Combination (Stored File Size, Paper Size, Paper Tray, Duplex Settings, and Output Tray) Error	2-155

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
016-981	Full Status Detected at HDD Access. An error where the Full is not cleared even after some time has passed.	2-155
016-982	Full Status Detected at HDD Access. An error where the Full is not cleared even after some time has passed.	2-156
018		
018-400	IPSEC Error (setting mismatch)	2-156
018-500	CA Authentication Message Receiving Server Startup Error	2-157
018-501	CA Authentication Server Communication Error	2-157
018-503	CA Authentication Server Timeout	2-158
018-504	CA Authentication Session ID Error	2-158
018-506	CA Authentication Field ID Error	2-159
018-507	CA Authentication User Authentication Error	2-159
018-508	CA Authentication Server Fatal Error	2-160
018-595	Duplicate IDs were detected at ICCG external authentication	2-160
018-596	LDAP Protocol Error - Others	2-161
021		
021-501	Invalid Server URL	2-161
021-502	Proxy Server Address Resolution Error	2-162
021-503	Server Address Resolution Error	2-163
021-504	Server Connection Error	2-164
021-505	SSL Session Error	2-165
021-506	Invalid SSL Certificate (Edge Server)	2-165
021-507	Proxy Authentication Error	2-166
021-508	Communication Timeout	2-167
021-509	Invalid Communication Message	2-165
021-510	Recall Status Mismatch (EP System)	2-168
021-511	Installation Status Mismatch (EP System)	2-168
021-512	EP-SV Installation Conflict (EP System)	2-169
021-513	EP-DX Installation Conflict (EP System)	2-169
021-514	TRESS Installation Conflict (EP System)	2-169

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
021-515	Invalid Product Code	2-165
021-516	Invalid Serial Number	2-165
021-517	Communication Failure (EP Center)	2-170
021-518	Internal Error (Edge Server)	2-170
021-519	High Load Status Detected (EP Center)	2-170
021-520	CA Communication Error	2-171
021-521	CA Communication Timeout	2-171
021-522	Certificate Library Error	2-171
021-523	Internal Error	2-172
021-524	Installation Status Mismatch	2-172
021-525	Recall Status Mismatch	2-172
021-526	Communication Library Error	2-173
021-527	Invalid Communication Message (Edge Server)	2-173
021-529	Latest Version Detected (software update)	2-173
021-530	Server Internal Error (software update)	2-174
021-531	Server High Load State Detected (software update)	2-174
021-532	Unsupported ROM Configuration Detected (software update)	2-175
021-533	User Unable to Perform (software update)	2-175
021-534	Unsupported Sub Module Detected (software update)	2-175
021-535	Unsupported Peripherals Detected (software update)	2-175
021-732	EP Accessory - Service Canceled By Disable	2-176
021-733	EP Accessory Service Canceled By Color Mode Restriction	2-176
021-750	EP-SV - Used Parts Collection Order Failed	-----
021-751	EP-SV - Inspection/ Repair/ Preliminary Diagnostic request failed	-----
021-770	EP-DX - Used Parts Collection order failed	-----
021-771	EP-DX - Inspection/ Repair/ Preliminary Diagnostic request failed	-----
021-772	EP-DX - Installation/ Removal failed	-----
021-943	EP Accessory - Print Service Paused By Disable	2-177
021-944	EP Accessory - Print Service Paused By Color Mode Restriction	2-178
021-945	EP Accessory - Service Paused By Disable	2-177

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
021-946	EP Accessory - Service Paused By Color Mode Restriction	2-178
021-948	Insufficient Number of Subtractive Accessories	2-179
021-949	Insufficient Number of Subtractive Accessories	2-179
024		
024-340	MCU Send Error Detected by Controller (invalid parameter was used)	2-180
024-341	MCU Send Error Detected by Controller (Sequence Number error)	2-180
024-342	MCU Send Error Detected by Controller (Packet Number error)	2-180
024-343	MCU Send Error Detected by Controller (Message Length error)	2-180
024-345	MCU Send Error Detected by Controller (Check Code error)	2-180
024-346	MCU Send Parity Error Detected by Controller	2-180
024-347	MCU Send Framing Error Detected by Controller	2-181
024-348	MCU Send Error Detected by Controller (Overrun error)	2-181
024-349	MCU Send Error Detected by Controller (Receive Abort error)	2-181
024-350	MCU Receive Error Detected by Controller (Sequence Number error)	2-181
024-351	MCU Receive Error Detected by Controller (Packet Number error)	2-181
024-354	MCU Receive Error Detected by Controller (Parity error)	2-181
024-356	MCU Receive Overrun Error Detected by Controller	2-181
024-359	MCU transmission receiving error detected by Controller (invalid parameter was used)	2-181
024-360	Initialization error between IOT-ESS	2-181
024-361	The paper size group data is different between the ESS and the IOT.	2-182
024-362	Image Output. PAGE-SYNC occurred before video output preparation completes.	2-183
024-363	Image Output. PAGE-SYNC completion error during video output	2-183
024-364	Image Output. DMA Transfer Error	2-184
024-365	Loopback Write Overflow	-----
024-367	Other errors from Decompress (Extension)	2-184
024-368	Image Output. PCI Bus Error	2-184
024-370	Marker Code Detection Error	2-185
024-371	The communication between the ESS and IOT has not been established, which is detected by the Controller.	2-186

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
024-372	Sending error detected by Controller	2-186
024-373	DLL communication failure recovery error detected by Controller	2-186
024-375	DLL receiving error detected by Controller	2-186
024-376	MCU Image Signal Truncation Detected by Controller	2-186
024-600	Repair the Billing Master Counter	-----
024-601	Billing Backup Counter 1 Recovery	-----
024-602	Billing Backup Counter 2 Recovery	-----
024-607	Billing Meter Type Automatic Correction (ESS NVM Correction)	-----
024-608	Billing Meter Type Automatic Correction (IOT NVM Correction)	-----
024-609	Billing Count Type Automatic Correction (ESS SEEP Correction)	-----
024-610	Billing Count Type Automatic Correction (ESS NVM Correction)	-----
024-611	Billing Count Type Automatic Correction (IOT NVM Correction)	-----
024-612	Model Break Point Automatic Correction (ESS SEEP Correction)	-----
024-613	Model Break Point Automatic Correction (ESS NVM Correction)	-----
024-614	Model Break Point Automatic Correction (IOT NVM Correction)	-----
024-700	A job that could not be printed due to unfulfilled conditions such as (Insufficient System Memory) or (HDD Not Installed) was received	2-187
024-702	Job Canceled due to Paper Jam	2-188
024-746	There are parameters that are incompatible with the specified paper type.	2-188
024-747	Unable to Continue the Operation as the Combination of Parameters (Stored File Size, Paper Size, Paper Tray, Duplex Settings, and Output Tray) Cannot be Printed.	2-189
024-748	Bates Numbering Number of Digits Over	2-189
024-900	Upper Tray Removed	2-190
024-910	Size Mismatch Tray 1: Measured Length Mismatch	2-191
024-911	Size Mismatch Tray 2: Measured Length Mismatch	2-193
024-912	Size Mismatch Tray 3: Measured Length Mismatch	2-193
024-913	Size Mismatch Tray 4: Measured Length Mismatch	2-193
024-923	Operation Y Toner Empty	2-195
024-924	Operation M Toner Empty	2-195
024-925	Operation C Toner Empty	2-195

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
024-933	Operation Y Imaging Unit End of Life	2-196
024-934	Paper Type Mismatch	2-197
024-940	Operation M Imaging Unit End of Life	2-196
024-941	Operation C Imaging Unit End of Life	2-196
024-946	Tray 1 Out Of Place	2-198
024-947	Tray 2 Out Of Place	2-198
024-948	Tray 3 Out Of Place	2-198
024-949	Tray 4 Out Of Place	2-198
024-950	Tray 1 Empty	2-199
024-951	Tray 2 Empty	2-201
024-952	Tray 3 Empty	2-201
024-953	Tray 4 Empty	2-201
024-954	Bypass Tray Empty	2-203
024-958	Bypass Tray Size Mismatch	2-205
024-959	Tray 1 Size Mismatch	2-193
024-960	Tray 2 Size Mismatch	2-193
024-961	Tray 3 Size Mismatch	2-193
024-962	Tray 4 Size Mismatch	2-193
024-965	ATS/APS No Paper APS/ ATS NG (No Paper)	2-205
024-966	ATS/APS No Destination Error APS/ ATS NG	2-206
024-985	Bypass Tray Pause Check	2-206
025		
025-596	An NG occurred when HDD Fail Forecast of Diagnostics was executed	2-207
025-597	An error occurred when HDD initialization of Diagnostics was executed	2-207
026		
026-704	XDW Error	2-208
026-705	XDW Short of Memory	2-208
026-706	XDW Print Prohibited	2-209
026-707	XDW Unlock Failed	2-209

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
026-710	S/MIME Unsupported Cipher Decrypt Fail	2-210
026-724	Remote Download File Size Error	2-210
026-725	Remote Download File Checksum Error	2-211
026-730	Paper Size of Specified Tray is Unknown	2-211
027		
027-400	Net Off Line	2-212
027-442	IPv6 - Stateless Auto Setting IP Address 1 is Duplicated	2-213
027-443	IPv6 - Stateless Auto Setting IP Address 2 is Duplicated	2-213
027-444	IPv6 - Stateless Auto Setting IP Address 3 is Duplicated	2-213
027-445	IPv6 - Manually Set IP Address is Invalid	2-214
027-446	IPv6 - Automatically Set IP Address is Duplicated	2-214
027-447	IPv6 - Link Local IP Address is Duplicated	2-215
027-452	IPv4 - IP Address is Duplicated	2-215
027-500	SMTP Server Address Resolution Fail for Mail I/O	2-216
027-501	POP Server Address Resolution Fail for Mail I/O	2-216
027-502	POP Authentication Fail for Mail I/O	2-217
027-549	SMB Protocol Error (4-009)	2-217
027-564	SMB Protocol Error (4-024)	2-218
027-565	SMB Protocol Error (4-025)	2-219
027-566	SMB Protocol Error (4-026)	2-220
027-572	SMB Protocol Error (4-032)	2-220
027-573	SMB Protocol Error (4-033)	2-220
027-574	SMB Protocol Error (4-034)	2-220
027-576	SMB Protocol Error (4-036)	2-220
027-578	SMB Protocol Error (4-038)	2-219
027-584	SMB Protocol Error (4-044)	2-221
027-701	Cable Disconnection Detected at Login to Remote Account	2-221
027-720	Link to Application During Web Service Interface - Server Not Found	2-222
027-721	Link to Application During Web Service Interface - Destination Not Found	2-222
027-722	Link to Application During Web Service Interface - Connection Timeout	2-223

Error Message and Chain Link Code Display (Continued)

Chain Link	Control Panel Message	Go to Page
027-723	Link to Application During Web Service Interface - Authentication Failure	2-223
027-724	Link to Application During Web Service Interface - Access Failure	2-224
027-725	Link to Application During Web Service Interface - Job Operation Failure	2-224
027-726	Link to Application During Web Service Interface - Unknown Job Status	2-224
027-727	Link to Application During Web Service - Invalid Parameter	2-225
027-751	Instruction Analysis Error	2-225
027-752	Mandatory User Not Entered	2-226
027-753	Invalid Instruction Service	2-226
027-754	File Signature Settings Mismatch in Instruction	2-227
027-761	Although a Web Print job was received, printing is unable to start within the [On-Demand Print Duration] (the [On-Demand Print Duration] is a KO system data)	2-228
027-762	Although a Web Print job was received, the attached job execution ticket is incorrect.	2-229
027-763	Auditron - Cannot Verify User	2-229
041		
041-310	IM Logic Fail	2-230
041-318	IOT Serial Number Fail	2-231
041-321	XPC Fail	2-231
041-322	IOT Data Fail	2-231
041-340	MCU NVM (EEPROM) Data Fail	2-232
041-400	300K Kit Change Soon	-----
041-401	300K Kit Quality Life End	2-233
042		
042-323	Drum K Motor Drive Fail	2-234
042-329	HVPS2 Fan Failure	2-236
042-335	Developer Fan (Process Fan 1) Failure	2-238
042-347	Drum YMC Motor Drive Fail	2-239
042-348	Over Temperature Detect	-----
042-398	LVPS Fan Failure	2-241
042-610	Speed Limit Status Detected	-----

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Chain Link	Control Panel Message	Go to Page
045		
045-310	Image Ready NG	2-243
045-311	Controller Comm Fail (IOT Detect)	2-243
060		
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124-312	Product Number fails when at least one Product Number is mismatched.	2-373
124-313	Serial Number fails when at least one Serial Number is mismatched.	2-373
124-314	The IOT productivity switch data was not set at all 3 locations.	2-374
124-315	At least one of the IOT productivity switch data was at the 3 locations is different. All IOT speed mismatch.	2-375
124-316	The Product a/f Model was not set at all 3 locations. Product Model Fail.	2-376
124-317	At least one of the Product a/f Model at the 3 locations is different. All Product Model mismatch.	2-375
124-318	The Product Type for SWKey was not set at all 3 locations. Product Type for SWKey fails.	2-376

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124-324	Billing Fail (by PWB Replacement). The Billing Counter is mismatched at 3 locations.	2-380
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124-339	Error due to installation of ROM DIMM for other models.	2-386
124-340	All three CRUM destinations are not set.	2-387
124-341	One of CRUM destinations is different from the others (IOT).	2-388
124-342	One of CRUM destinations is different from the others (SYS 1).	2-389
124-343	One of CRUM destinations is different from the others (SYS 2).	2-390
124-344	Billing Meter Type Fail (different at all 3 locations)	2-391
124-345	Billing Meter Type Fail (at least 1 location is mismatched, unable to correct automatically)	2-392
124-346	Billing Count Type Fail (different at all 3 locations)	2-391
124-347	Billing Count Type Fail (at least 1 location is mismatched, unable to correct automatically)	2-393
124-348	Model Break Point Fail (different at all 3 locations)	2-394
124-349	Model Break Point Fail (at least 1 location is mismatched, unable to correct automatically)	2-395
124-350	All three CRUM OEM destinations are not set.	2-396
124-351	One of CRUM OEM destinations is different from the others (IOT).	2-388
124-352	One of CRUM OEM destinations is different from the others (SYS 1).	2-389
124-353	One of CRUM OEM destinations is different from the others (SYS 2).	2-390
124-360	All three CRUM Enable/ Disable settings are not set (0 or different values are set).	2-397

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124-361	One of CRUM Enable/Disable settings is different from the others (IOT).	2-388
124-362	One of CRUM Enable/Disable settings is different from the others (SYS 1).	2-389
124-363	One of CRUM Enable/Disable settings is different from the others (SYS 2).	2-390
124-372	IOT Controller Software Malfunction	2-398
124-373	IOT Manager Software Fail	2-398
124-374	IOT IM Device Driver Software Fail	2-398
124-380	All three CRUM destinations are not set (0 or different values are set) #Case-(2).	2-399
124-381	One of CRUM destinations is different from the others (IOT) #Case-(2).	2-400
124-382	One of CRUM destinations is different from the others (SYS 1) #Case-(2).	2-401
124-383	One of CRUM destinations is different from the others (SYS 2) #Case-(2).	2-402
124-390	All three CRUM OEM destinations are not set (0 or different values are set) #Case-(2)	2-397
124-391	One of CRUM OEM destinations is different from the others (IOT) #Case-(2).	2-400
124-392	One of CRUM OEM destinations is different from the others (SYS 1) #Case-(2).	2-401
124-393	One of CRUM OEM destinations is different from the others (SYS 2) #Case-(2).	2-402
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125-311	PSWcont Unexpected Error	2-403
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127-310	Fatal Error of ESR Task	2-403
127-314	WSD Print Service-related Fatal Error	2-403
127-353	lpd-related Fatal Error	2-404
127-354	FTP Server Fatal Error	2-404
127-396	Mail I/O-related Fatal Error	2-404
127-398	IPP-related Fatal Error	2-404
127-399	JME-related Fatal Error	2-404
202		
202-399	Timer Internal Error Detected by UI Cont	2-405

Fuser Unit Exit Sensor Jam

The Fuser Unit has failed due to one of the following problems.

- After a paper that had stopped at the Registration position was transported again, the paper did not reach the Fuser Exit Sensor within the specified time.
- After the Fuser Exit Sensor has detected a paper, the paper passed by the Fuser Exit Sensor before the specified time.

Applicable Fault Codes

- 010-105: Fuser Unit Exit Sensor On Jam
- 010-112: Fuser Unit Exit Out Early Jam

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Fuser Motor (Fuser Drive Assembly), PL 4.2.16 • 2nd BTR (Transfer Roller), PL 4.3.18 • Registration Sensor, PL 5.1.3 • Registration Roller (Registration Chute Assembly), PL 5.1.1 • Registration Clutch, PL 5.1.11 • Exit Roller (Fuser Unit), PL 10.1.1 • Fuser Exit Sensor (Fuser Unit), PL 10.1.1 • Paper Handling Motor (Paper Handling Drive Assembly, PL 11.1.19 • MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper transport path Is there any debris on the paper transport path?	Remove the debris.	Go to step 2.
2.	Check the installation of the Registration Roller (Registration Chute) (REP 5.1 Registration Chute Assembly on page 4-114). Is the Registration Chute installed properly?	Go to step 3.	Reinstall the Registration Chute.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Registration Roller (Registration Chute). Is the Registration Chute damaged?	Replace the Registration Chute (REP 5.1 Registration Chute Assembly on page 4-114).	Go to step 4.
4.	Check the Registration Sensor operation. Perform DC330 Component Control on page 2-26 [071-102] to check the operation of the Registration Sensor. Is the Registration Sensor operating properly?	Go to step 5.	Go to Sensor Troubleshooting on page 2-440.
5.	Check the Registration Clutch operation. Perform DC330 Component Control on page 2-26 [071-013] to check the operation of the Registration Clutch. Is the Registration Clutch operating properly?	Go to step 6.	Go to Registration Clutch on page 2-423.
6.	Check the Paper Handling (P/H) Motor operation. Perform DC330 Component Control on page 2-26 [071-009] to check the operation of the P/H Motor. Is the P/H Motor operating properly?	Go to step 7.	Go to Paper Handling Motor on page 2-435.
7.	Check the Fuser Exit Sensor operation. Perform DC330 Component Control on page 2-26 [071-104] to check the operation of the Fuser Exit Sensor. Is the Fuser Exit Sensor operating properly?	Go to step 8.	Go to Fuser Exit Sensor on page 2-441.
8.	Check the Fuser Motor operation. Perform DC330 Component Control on page 2-26 [010-001] to check the operation of the Fuser Motor. Is the Fuser Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Fuser Motor on page 2-433.

Exit Off Jam

After a paper has passed by the Registration Sensor, the paper did not pass by the Fuser Exit Sensor within the specified time.

Applicable Fault Code

- 010-106: Fuser Exit Sensor Off Jam

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Fuser Motor (Fuser Drive Assembly), PL 4.2.16 • Fuser Exit Sensor (Fuser Unit), PL 10.1.1 • Exit Roller (Fuser Unit), PL 10.1.1 • MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper transport path Is there any debris on the paper transport path?	Remove the debris.	Go to step 2.
2.	Check the Fuser Unit. Is the Fuser Unit damaged?	Go to step 3.	Reinstall the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
3.	Check the Fuser Exit Sensor operation. Perform DC330 Component Control on page 2-26 [071-104] to check the operation of the Fuser Exit Sensor. Is the Fuser Exit Sensor operating properly?	Go to step 4.	Go to Fuser Exit Sensor on page 2-441.
4.	Check the Fuser Motor operation. Perform DC330 Component Control on page 2-26 [010-001] to check the operation of the Fuser Motor. Is the Fuser Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Fuser Motor on page 2-433.

Fuser Motor Fail

The Fuser Motor rotation failure was detected.

Applicable Fault Code

- 010-330: Fuser Unit Motor Fail

Initial Actions

- Check that the Fuser Unit is installed properly.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Front Harness Assembly, PL 4.2.11 • Fuser Motor (Fuser Drive Assembly), PL 4.2.16 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1	• Drive 2/ Bypass Tray on page 7-45

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Fuser Motor operation. Perform DC330 Component Control on page 2-26 [010-001] to check the operation of the Fuser Motor. Is the Fuser Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the installation of the Fuser Motor. Manually rotate the Fuser Motor. Does the Motor rotate?	Reinstall the Fuser Drive Assembly (REP 4.7 Fuser Drive Assembly on page 4-99).	Go to step 3.
3.	Check the connections between the Fuser Motor and MCU PWB, as well as between the Fuser Motor and LVPS PWB. Are the connectors P/J475, P/J4751, P/J4755, P/J524, P/J2711, and P/J242 connected securely?	Go to step 4.	Connect the connectors P/J475, P/J4751, P/J4755, P/J524, P/J2711, and P/J242.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the conductivity between the Fuser Motor and Relay Connector. Are the connections between P/J4755 <=> P/J4751 and between P/J242 <=> P/J2711 conducting properly?	Go to step 5.	Replace the Front Harness Assembly.
5.	Check the conductivity between the Relay Connector and LVPS PWB. Is the connection between P/J2711 <=> P/J524 conducting properly?	Go to step 6.	Replace the Main Harness Assembly.
6.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4751 <=> P/J475 conducting properly?	Go to step 7.	Replace the Main Harness Assembly.
7.	Check the voltage supply (+3.3VDC) to the Fuser Motor. Measure the voltage between the MCU PWB GND <=> P/J475-16. Is there a voltage (approx. +3.3VDC) output?	Go to step 8.	Go to +3.3VDC Power Troubleshooting on page 2-458.
8.	Check the voltage supply (+24VDC) to the Fuser Motor. Measure the voltage between the LVPS PWB GND <=> P/J524-1. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Fuser Drive Assembly (REP 4.7 Fuser Drive Assembly on page 4-99).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

Fuser Unit Fail

The Fuser Unit has failed due to one of the following problems.

- A differential circuit output error was detected between the detection output and the compensation output of the Fuser Unit NC Sensor.
- When the Lamp On time meets the following conditions, where Tws ˚C is the temperature at the Wait state start time that is obtained at the NCSCenter.
- The temperature monitor AD value of the STS-Front was detected to be higher than T[HITMP (2)] 3 times in a row.
- During Warm Up Control, an abnormal detected temperature due to NC Sensor malfunction or poor contact was detected.
- The Fuser Unit Main Lamp or Sub Lamp has been On continuously for longer than the setting time (NVM).
- At the first Lamp Off after it was turned On, the NC temperature is continuously at EP_U4_LOW_NC ˚C or lower 8 or more times in a row.
- The Thermistor disconnection detected.
- At the first Heater OFF after it was turned On, the detected temperature at the edge STS is continuously at EP_U4_LOW_STS ˚C or lower 8 or more times in a row.
- Notified at the moment the Relay is cut off from the circuit.
- The detected temperature at the NC or the STS has not changed during this period, although the Main Lamp has been On continuously for 15 s or longer.
- The Cool Down Mode has continued for EP_U4_COOL_TIME * 10 s or longer.

Applicable Fault Codes

- 010-311: Fuser Unit Heat Roll STS-1 Disconnection Fail
- 010-319: Fuser Unit NC Sensor Differential Amp Fail
- 010-328: Fuser Unit Warm Up Time Fail (Not Ready)
- 010-331: Heat Roll STS Over Temperature Fail
- 010-332: Heat Roll NC Sensor Disconnection Fail
- 010-333: Heat Roll NC Sensor Over Temperature Fail
- 010-334: Heat Roll NC Sensor Broken Fail
- 010-335: Heat Roll NC Sensor Range Fail
- 010-338: Fuser Unit On Time Fail
- 010-339: Heat Roll NC Sensor Low Temperature Fail
- 010-340: Fuser Unit Detached
- 010-344: Heat Roll STS Sensor Low Temperature Fail
- 010-345: Fuser Unit Hard Relay Off Fail
- 010-346: Fuser Main Lamp Data Renewal Fail
- 010-347: Fuser Sub Lamp Data Renewal Fail
- 010-355: Fuser Cool Down Timeout Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• DRW Fuser Harness Assembly, PL 4.1.7 • Fuser Unit, PL 10.1.1 • MCU PWB, PL 12.1.15 • AC PWB Assembly, PL 12.1.16 • LVPS PWB, PL 12.2.1 • Option Harness Assembly, PL 12.3.5	• Fuser Unit on page 7-41

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Fuser Unit. Is the Drawer Connector between the Fuser Unit and Main Unit (P/J601) free of broken/bent pins, debris, burns, and etc., and the unit is installed properly?	Go to step 2.	Reinstall the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
2.	Check the connections between the Fuser Unit and MCU PWB, as well as between the Fuser Unit and AC PWB. Are the connectors P/J601, P/J459, and P/J503 connected securely?	Go to step 3.	Connect the connectors P/J601, P/J459, and P/J503.
3.	Check the connection between the AC PWB and MCU PWB. Are the connectors P/J505 and P/J464 connected securely?	Go to step 4.	Connect the connectors P/J505 and P/J464.
4.	Check the conductivity of the DRW Fuser Harness Assembly. Are the connections between P/J601<=> P/J459 and between P/J601 <=> P/J503 conducting properly?	Go to step 5.	Replace the DRW Fuser Harness Assembly (REP 4.2 DRW Fuser Harness Assembly on page 4-80).
5.	Check the conductivity of the Option Harness Assembly. Is the connection between P/J505 <=> P/J464 conducting properly?	Go to step 6.	Replace the Option Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
6.	Check the voltage supply (+5VDC) to the Fuser Unit. Measure the voltages between the MCU PWB GND <=> P/J459-5 and MCU PWB GND <=> P/J459-13. Is there a voltage (approx. +5VDC) output?	Go to step 7.	Go to +5VDC Power Troubleshooting on page 2-457.
7.	Check the voltage supply (+3.3VDC) to the Fuser Unit. Measure the voltage between the MCU PWB GND <=> P/J459-1. Is there a voltage (approx. +3.3VDC) output?	Go to step 8.	Go to +3.3VDC Power Troubleshooting on page 2-458.
8.	Replace the Fuser Unit (REP 10.1 Fuser Unit on page 4-183). Does the error persist?	Go to step 9.	Troubleshooting complete.
9.	Replace the AC PWB (REP 12.5 AC PWB on page 4-208). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

Fuser Unit Error - Life End

The print volume has reached the specified value (Max value), which indicates that further usage will damage the Fuser Unit.

Applicable Fault Codes

- 010-421: Fuser Unit Life End Quality (operation can still continue) (quality lifespan has ended) (ERU)
- 010-906: Fuser Unit Life End

Initial Actions

- Check the Fuser life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Fuser Unit, PL 10.1.1	• Fuser Unit on page 7-41

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
2.	Perform DC135 HFSI on page 2-19 to reset the following life counters: • Chain-Link 950-880: Fuser Unit PV • Chain-Link 950-884: Fuser Unit Heat Time

JBA Accounting Data Full

The cumulated accounting data reached the specified value (15,000).

Applicable Fault Code

- 016-322: JBA Accounting Data Full

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	After an external Accounting Server has read the accounting data, turn the power Off and On.
2.	If the problem persists, refer to Common System Fail on page 2-406“.

Cont-MCU Cable Connection Fail

The controller has detected a failure at its cable connection with the MCU PWB.

Applicable Fault Code

- 016-328: Cont-MCU Cable Connection Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the connection of the cable between the I/P PWB and MCU PWB.
2.	Replace the defective cable.

Cont Program ROM Fail-2

Write command failure of Program ROM 1.

Applicable Fault Code

- 016-336: Cont Program ROM Diagnostic Fail-2

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1 • 1 GB DDR2 DIMM, PL 12.4.2	

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove and reinstall the I/P PWB ROM DIMM #1 (REP 12.18 Memory (Standard) on page 4-232).
2.	Replace the I/P PWB ROM DIMM #1(REP 12.18 Memory (Standard) on page 4-232).
3.	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Cont SEEP-ROM Diagnostic Fail-1

Unable to obtain the Product ID.

Applicable Fault Code

- 016-350: Cont SEEP-ROM Diagnostic Fail-1

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the SEEP ROM contacts (for bent and broken pins, etc.).
2.	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Cont SEEP-ROM Diagnostic Fail-2

Error has occurred at W/R/V Test.

Applicable Fault Code

- 016-351: Cont SEEP-ROM Diagnostic Fail-2

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the SEEP ROM contacts (for bent and broken pins, etc.).
2.	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Cont USB2.0 Device Fail

Error has occurred at W/R/V Test of PCI Config Space or at W/R/V Test of internal registers.

Applicable Fault Code

- 016-365: Cont USB 2.0 Device Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove and reseat all connectors on the I/P PWB.
2.	If problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Cont HDD File System Fail

The HDD has failed due to one of the following problems.

- The Boot Diag has detected an HDD logical error (partition A).
- The Boot Diag has detected an HDD logical error (partition B).
- The Boot Diag has detected an HDD logical error (partition C).
- The Boot Diag has detected an HDD logical error (partition D).
- The Boot Diag has detected an HDD logical error (partition E).
- The Boot Diag has detected an HDD logical error (partition F).
- The Boot Diag has detected an HDD logical error (partition G).
- The Boot Diag has detected an HDD logical error (partition H).
- The Boot Diag has detected an HDD logical error (partition I).
- The Boot Diag has detected an HDD logical error (partition J).
- The Boot Diag has detected an HDD logical error (partition P).

Applicable Fault Codes

- 016-372: Cont HDD FileSystem Fail-A
- 016-373: Cont HDD FileSystem Fail-B
- 016-374: Cont HDD FileSystem Fail-C
- 016-375: Cont HDD FileSystem Fail-D
- 016-376: Cont HDD FileSystem Fail-E
- 016-377: Cont HDD FileSystem Fail-F
- 016-378: Cont HDD FileSystem Fail-G
- 016-379: Cont HDD FileSystem Fail-H
- 016-380: Cont HDD FileSystem Fail-I
- 016-381: Cont HDD FileSystem Fail-J
- 016-382: Cont HDD FileSystem Fail-P

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Initialize the HDD (refer to DC355 Hard Disk Diag on page 2-38).

802.1x Authentication Failure

Authentication error has occurred due to one of the following problems.

- The user name or password that has been set in the printer is incorrect.
- The settings in the “authentication device” switch that is physically connected to the printer via the network is inappropriate.

Applicable Fault Code

- 016-400: 802.1x Authentication Error (incorrect user name or password)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Enter the correct user name or password for 802.1x authentication from the Control Panel.
2.	Check the settings in the [authentication device] switch that is physically connected to the printer via the network.

802.1x EAP Type Not Supported

A Fail signal, which indicates that the authentication method set in the printer cannot be processed, was received from the “authentication device” switch that is physically connected to the printer via the network.

Applicable Fault Code

- 016-401: 802.1x Authentication Method Mismatch (the authentication server does not support the authentication method of the printer)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set the authentication method of the printer to be the same as the one set in the authentication server.
2.	Check the 802.1x authentication method from the Control Panel.

802.1x Authentication Failure by Timing Out

The authentication was timed-out because there was no response signal from the “authentication device” switch that is physically connected to the printer via the network.

Applicable Fault Code

- 016-402: 802.1x Authentication Timeout (there was no response signal from the “authentication device”)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the switch settings and network connections of the [authentication device] switch that is physically connected to the printer via the network and connect it properly.
2.	If the problem persists, check the settings of the switch that the device is connected to and the network connection.

802.1x Certificate Failure

The root server certificate for the authentication server is not stored in the printer or it is mismatched.

Applicable Fault Code

- 016-403: 802.1x Authentication Certificate Mismatch

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Store the root server certificate for the authentication server in the printer.
2.	If the root server certificate of the authentication server cannot be obtained, disable the 802.1x setting item [Server Certificate Verification] in the device.

802.1x Inside Failure

An internal error has occurred in the 802.1x supplicant function of the printer. An incorrect protocol signal was received from the authentication server.

Applicable Fault Code

- 016-404: Other 802.1x Authentication Errors

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Retry the same operation. If this does not correct the situation, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Certificate DB File Error

When the printer is booting up after power On, an error was detected in the Certificate Database file.

Applicable Fault Code

- 016-405: Certificate DB File Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Note: Only use this option when the certificate registered is damaged. Perform Init/ Delete Data procedure - Control Panel Menu > Admin Menu > Ini/ Delete Data > Initialize Certificates.

802.1x Client Certificate Failure

Although [EAP-TLS] has been selected as the authentication method for 802.1x Authentication, it was found that the SSL Client Certificate is not set or has been deleted.

Applicable Fault Code

- 016-406: 802.1x Authentication Client Certificate Setting Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Save an SSL Client Certificate in the printer and set it as the SSL Client Certificate.
2.	If you are unable to set the SSL Client Certificate, set the authentication method to anything other than [EAP-TSL].

SMB Host Name Duplicated

A PC of the same host name exists on the network.

Applicable Fault Code

- 016-450: SMB Host Name Duplicated

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether the setting of the same host name as the device is made to another unit. If the setting is duplicate, change the host name of the device or duplicate device.
2.	If duplicate setting is not confirmed, change the device host name.

DNS Failure

DNS has failed due to one of the following problems.

- Failed to update of the IPv6 address and host name to the DNS server.
- Failed to update of the IPv4 address and host name to the DNS server.

Applicable Fault Codes

- 016-453: Dynamic DNS - IPv6 Address Dynamic Update Failed (DMP2007)
- 016-454: Dynamic DNS - IPv4 Address Dynamic Update Failed

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check that DNS server address is set properly in the device.
2.	Check with the customer's System Administrator whether the DNS server settings that allow Dynamic DNS using IPv4/ IPv6 address have been made.

SNTP Server Timeout/ Time Asynchronous

SNTP Server has failed due to one of the following problems.

- There is no response from the SNTP server within the specified time (60 s). This Chain-Link is not displayed on the panel. It can only be found in the Error History.
- A standard time synchronized source message and an asynchronous message was received from the SNTP server. This Chain-Link is not displayed on the panel. It can only be found in the Error History (081006).

Applicable Fault Codes

- 016-455: SNTP Timeout *report display only (the printer time is incorrect)
- 016-456: SNTP Time Asynchronous *Error History Report display only

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If the time on the printer is incorrect, manually set the time. • **For Timeout** - Check that SNTP server address is set properly in the device. • **For Time Asynchronous** - Check a customer System Administrator that the NTP server is operating properly.

Under Non-transmitted Image log Stagnation

A limit to was imposed on creation of new jobs due to a backlog of untransferred image logs when the System Data 'Assurance Level' is set as [High].

Applicable Fault Code

- 016-461: Under Non-transmitted Image Log Stagnation

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	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.
2.	Check the transfer settings and transfer all logs that are yet to be transferred. Or, change the transfer guarantee level to “Low”. Note that setting the transfer guarantee level to “Low” may cause the image logs to get deleted in sequence even before they are transferred.

Downloader Fail

Download error has occurred due to one of the following problems.

- Error was detected when writing into the Controller-ROM. The printer does not operate normal because the ROM content has been erased.
- Error was detected when writing into the S2X-ROM. The printer does not operate normal because the ROM content has been erased.

Applicable Fault Codes

- 016-500: Cont-ROM Data Write Processing Error Detection (DLD method)
- 016-501: S2X-ROM Data Write Processing Error Detection (DLD method)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	• **For Cont-ROM Data** - If the error remains even after retrying, replace the Controller-ROM, and download again to perform the update. • **For S2X-ROM Data** - If the error remains even after retrying, replace the S2X-ROM, and download again to perform the upgrade.

016-502

A Model Name mismatch or ROM write error has occurred at any one of the device that is a download target.

Applicable Fault Code

- 016-502: Any of Cont/S2X/ IOT/ ROM Write Processing Error Detection (PJL method)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Controller-ROM, and download firmware (Firmware Update on page 6-22) again to perform the update.

SMTP/ POP Server Fail for Redirector

SMTP/ POP server error has occurred due to DNS library call error.

Applicable Fault Codes

- 016-503: Failed to Resolve SMTP Server Name (before connecting to the server)
- 016-504: Failed to Resolve POP Server Name (before connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Specify the correct SMTP server name or specify by using the IP Address.

POP Authentication Fail for Redirector

POP authentication server error has occurred.

Applicable Fault Code

- 016-505: POP Authentication Fail (after connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Specify the correct POP Server authentication information.

XPS Error

During the XPS Bridge process, invalid schema, parameter error, XPS file damage, or XPS decomposer internal error has occurred.

Applicable Fault Code

- 016-514: XPS Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Print from the XPS Viewer using the Print Driver (ART-EX, PCL, etc.).
2.	If the problem persists, go to Common Job Fail on page 2-407.

XPS Short of Memory

Insufficient memory was detected during XPS Bridge process.

Applicable Fault Code

- 016-515: XPS Short of Memory

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If the Print Mode is High Quality, change it to Normal. If it is Normal, change it to High Speed.
2.	If the problem persists, increase the memory.
3.	If the problem still occurs despite having increased the memory to the maximum, use the driver (ART-EX, PCL, etc.) from the XPS Viewer to print.

XPS Print Ticket Description Error

The Print Ticket that is part of the XPS Document either has “Syntax that is not supported by this printer” or “Print instruction that is not supported by this printer.”

Applicable Fault Code

- 016-516: XPS Print Ticket Description Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether there is any problem with the usage method of/ print instructions from the application that sent the print job.

PS Booklet Illegal Image Mode Change

When the PS Decomp is interpreting a Booklet Job, a change in the Process Color Model or the resolution/ binary/ multi-value parameter was detected.

Applicable Fault Code

- 016-517: Print Mode-Mixed Document for PS Booklet Print

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the PostScript file such that the page device Process Color Model does not get changed in the middle of the process.

PS Booklet Conflict WM

PS Booklet and Watermarks were specified at the same time.

Applicable Fault Code

- 016-518: Simultaneous Specification of PS Booklet and Watermark

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	PS Booklet and Watermark/ UUID cannot be specified at the same time. Cancel either one.

Device DV - Reached Limit

A number of printable sides is set in the device and the number of printed sides as the job is running has reached that number.

Applicable Fault Code

- 016-519: Device Document Volume - Reached Limit

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Contact the System Administrator to request for a change in the limit of the printable sides.

LDAP SSL Error 112

SSL authentication error of the LDAP server. Unable to obtain the SSL Client Certificate.

Applicable Fault Code

- 016-522: LDAP-SSL Authentication Error 112 (Unable to obtain the Client Certificate)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	As the LDAP Server will send a request for the SSL Client Certificate, set an SSL Client Certificate in the device.

LDAP SSL Error 113

SSL authentication error of the LDAP server. The Server Certificate Data is invalid.

Applicable Fault Code

- 016-523: LDAP-SSL Authentication Error 113 (The Server Certificate Data is invalid)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Register the Root Certificate of the LDAP Server SSL Certificate in the device.

LDAP SSL Error 114

SSL authentication error of the LDAP server. The Server Certificate is not yet valid.

Applicable Fault Code

- 016-524: LDAP-SSL Authentication Error 113 (The Server Certificate Data is invalid)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the LDAP Server SSL Certificate with a valid one. Note: Although this error can be avoided by setting the [Authentication with SSL] under [LDAP Server / Directory Service] to [Off] at the printer, that this will render it unable to guarantee the authenticity of the LDAP Server it is connecting to.

LDAP SSL Error 115

SSL authentication error of the LDAP server. The Server Certificate has expired.

Applicable Fault Code

- 016-525: LDAP-SSL Authentication Error 115 (The Server Certificate has expired)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the LDAP Server SSL Certificate with a valid one. Note: Although you can also avoid this problem by turning Off the [SSL Server Verification] setting at the device, that this will render it unable to guarantee the authenticity of the LDAP Server it is connecting to.

LDAP SSL Error 116

SSL authentication error of the LDAP server. The Server Name and the Certificate are not matched.

Applicable Fault Code

- 016-526: LDAP-SSL Authentication Error 116 (The Server Name and the Certificate are mismatched)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Make sure that the address of the LDAP Server that is set in the device matches the address that is listed in the LDAP Server SSL Certificate. Note: Although you can also avoid this problem by turning Off the [SSL Server Verification] setting at the device, take note that this will render it unable to guarantee the authenticity of the LDAP Server it is connecting to.

Remote Download Server Timeout

There was no response within the specified time (45 sec) when connecting to the Remote Download server.

Applicable Fault Code

- 016-529: Remote Download Server Timeout

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the network connection. Check that the Remote Download server is properly configured and operating on the network.

Remote Download File Access Error

The specified FW update file (Download image file) is not found in the Remote Download server.

Applicable Fault Code

- 016-535: No FW Update Files in Remote Download Server

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the Remote Download server for the FW update file.

Host Name Solution Error in Remote Download

Failed to resolve the host name (server name) during the DNS access before connecting to the Remote Download server. DNS library call error.

Applicable Fault Code

- 016-536: Remote Download Server Name Resolution Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the connection to the DNS. Or, check whether the Remote Download server name has been registered in the DNS.

Remote Download Server Connection Error

The port of the connection destination Remote Download server is not open.

Applicable Fault Code

- 016-537: Remote Download Server Connection Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the network connection setting (port) of the Remote Download server.

Remote Download File Write Error

The FW update file that was obtained from the Remote Download server cannot be saved properly into the HDD.

Applicable Fault Code

- 016-538: Remote Download File Write to HDD Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the HDD for free space and delete unnecessary files. Or, replace the HDD (REP 12.21 Hard Disk Drive (Optional) on page 4-236).

Authentication Agent Error 543

The specified Realm/Domain has disappeared from the ApeosWare Authentication Agent (after the device has obtained the Realm Name List, the Domain was manually deleted at the ApeosWare Authentication Agent).

Applicable Fault Code

- 016-543: Authentication Agent Error *REALM_UNKNOWN

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Either refresh the Realm List in the device by pressing the **Refresh** button at the printer or use ApeosWare Authentication Agent to add the Domain. To refresh the Realm Info of the printer, press the **Domain** button in the authentication screen at the device to display the Domain screen and then press the **Refresh** button on that screen.

Authentication Agent Error 545

A clock skew error has occurred in the authentication. The time at the ApeosWare Authentication Agent and the Active Directory has deviated beyond the Kerberos ClockSkew upper limit that is set at the Active Directory.

Applicable Fault Code

- 016-545: Authentication Agent Error *CLOCKSKEW_ERR

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Synchronize the time of the PC that is installed with the ApeosWare Authentication Agent and the time of the PC that runs the Active Directory. Furthermore, if the Windows Time service in the PC that is installed with the ApeosWare Authentication Agent is stopped, activate it.

Authentication Agent Error 556

The system has timed out during database processing. The database that the ApeosWare Authentication Agent is connected to has overloaded and resulted in an error.

Applicable Fault Code

- 016-556: Authentication Agent Error *SERVICE_IS_PROCESSING

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	The service is currently overloaded. Wait for a while before trying to authenticate again. If the problem persists, check the ApeosWare Authentication Agent.

Authentication Agent Error 557

Other error has occurred in the authentication. This is an internal error of the ApeosWare Authentication Agent.

Applicable Fault Code

- 016-557: Authentication Agent Error *INTERNAL_ERROR

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the ApeosWare Authentication Agent.

Remote Download Parameter Error

When performing the Remote Download, an invalid value is set in the required system data.

Applicable Fault Code

- 016-559: Remote Download Parameter Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check that all system data that must be set to perform the Remote Download have been properly set. Example: Check the server settings corresponding to the IP mode, etc.

Authentication Agent Error 560

A communication error has occurred between the machine and the ApeosWare Authentication Agent.

Applicable Fault Code

- 016-560: Authentication Agent Communication Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
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.

Detected User Duplication, in a Cert Agent

Two or more entries with the same Smart Card information were found in the temporary user DB of Active Directory or Authentication Agent.

Applicable Fault Code

- 016-562: Authentication Agent error * Duplicate IDs were detected at ICCG external authentication

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Make corrections so that the temporary user entries of the Active Directory or Authentication Agent do not have the same Smart Card information.

016-564

When accessing the Remote Download server, an authentication error notification was issued from the server.

Applicable Fault Code

- 016-564: Remote Download Server Authentication Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check that the correct user name and password was specified when accessing the Remote Download server.

Backup Restore Error

When performing backup, there is no backup storage destination. When performing restore or deletion of backup files, there are no backup files.

Applicable Fault Code

- 016-565: Backup Restore Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	For USB backup, check that the USB Memory is properly installed. If the problem persists, use a PC to check the USB memory for a “backup” directory. If it is not there, create it. When performing restore or deletion of backup files from the USB backup file, check that the USB Memory is properly installed.

Backup Restore Condition Error

Backup Restore error has occurred due to one of the following problems.

- During backup, the firmware download file that has the same version as the printer cannot be found.
- During restore, the printer configuration during backup and restore does not match. Therefore, the restore cannot be performed.
- During restore, a backup file of another device was specified or an invalid backup file was specified.

Applicable Fault Code

- 016-566: NVM Backup Restore Condition Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	• During backup, save the firmware download file into the "dwld" directory in the USB memory, plug it into the printer, and then perform the backup. • During restore, use the same IOT version as those during backup. When performing restore using a USB backup file, also use the same HDD configuration. • If there is no HDD, use the same ESS ROM versions as well. If the same configuration cannot be attained, delete the backup file through the panel. • If this occurs when performing restore from an external backup file, check whether the ESS/ IOT ROM version has changed compared to when the backup file was created. Also, check whether the backup file is one that was generated by the same device.

Backup Capacity Full

The backup destination has insufficient capacity. During backup, the memory for performing data encryption is insufficient.

Applicable Fault Code

- 016-567: NVM Backup Storage Destination Capacity Over

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Before performing the HDD backup, delete existing backup files through the panel to increase the capacity. Before performing USB backup, delete the backup files in the USB memory through the panel, or use a PC to delete unnecessary files in the USB memory to increase the capacity.

Backup Restore Failed

Backup Restore error has occurred due to one of the following problems.

- An HDD access error has occurred.
- Other unexpected error has occurred.

Applicable Fault Code

- 016-568: NVM Backup Restore Process has Failed due to Some Reason

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Format the HDD (HDD Formatting on page 2-408).

Job Ticket Out of Memory

Insufficient memory was detected when the XPIF parser is interpreting the Job Ticket.

Applicable Fault Code

- 016-570: Insufficient XPIF Memory

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	At the Control Panel, increase the memory size for use by the Job Ticket, then reboot the printer and perform the Job again.

Job Ticket Wrong Parameter

The decomposer detected an instruction content in the Job Ticket that cannot be applied within the device specification.

Applicable Fault Code

- 016-571: Mismatched XPIF Parameters

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the parameters that had been specified in Job Ticket for mismatches, correct the specification as required, and then send the Job again.

Job Ticket Media Error

The decomposer detected that the paper attributes specified in the Job Ticket is one that cannot be recognized by the device as a supported paper (size, type, color).

Applicable Fault Code

- 016-572: XPIF Media Conversion Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether the paper (size, type, color) that had been specified in Job Ticket is printable at the device that it was sent to.

Job Ticket Parse Error

The XPIF parser has received and processed a Job Ticket containing a syntax that cannot be interpreted.

Applicable Fault Code

- 016-573: XPIF Interpretation Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether the client that generates the Job Ticket had been installed correctly, has met all the operation conditions, and that the combination of its version and the device's are matched.

E-mail Message Size Over

When splitting the pages, the size for 1 page's worth of e-mail data has exceeded the “Max Message Size” of the system data.

Applicable Fault Code

- 016-598: E-mail Message Size Over

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Reduce the resolution in the Send parameter (send image quality) and send again.
2.	Reduce the image using the Send parameter R/E and send again. (e.g. A3 to A4)
3.	Change the [Max Message Size] to a larger value. (Default of 10 MB is recommended.)

Password is Under Minimum Figures

A job with password shorter than the minimum digits for encryption number was received.

Note: The setting for minimum number of digits for the Secure Print/ Charge Print Password is enabled and jobs with password shorter than the minimum digit are not stored.

Applicable Fault Code

- 016-700: Number of Digits for Secure Print/Charge Print Password is Fewer Than Minimum

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Make sure that the password of the print job to be output is longer than minimum number of digits.

Out of ART EX Memory

An insufficient memory was detected while using the ART EX.

Applicable Fault Code

- 016-701: Insufficient PLW Decomposer Memory

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Increase the allocated memory of the ART EX. (In some cases, actual memory must be increased.)
2.	Change the print mode. (Example: High Quality mode > Normal mode)
3.	Reduce the resolution.
4.	Set **Page Print** mode to Enabled.
5.	Perform **Image Compression** in the Graphics tab of the Print Driver.

Out of Page Buffer

Not a single page could be compressed. Insufficient Print Page Buffer was detected.

Applicable Fault Code

- 016-702: Unable to Compress Page due to Insufficient Print Page Buffer

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set **Print Mode** to High Speed and reduce the print resolution before retrying the operation.
2.	Increase the memory to increase the page buffer.
3.	Retry the operation in **Print Page Mode**. (PLW Decomposer (=ART-EX) only) For Print Page Mode, refer to the Print Driver online help.

Folder is Full

Full status was detected at HDD access and the job was aborted.

Applicable Fault Code

- 016-704: Job Canceled due to Detection of Folder Full (the maximum no. of documents per Folder has been exceeded)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Delete unnecessary documents and then repeat the operation.

Secure Print Fail

Secure Print Fail has occurred due to the following problems.

- The Print Driver for the printer was not used. # Not for HDD standard machines but for printers with options #.
- When the Features Extension Kit is not installed, a Secure Print, Print from Folder, Charge Print, or Private Charge Print job was received.

Applicable Fault Code

- 016-705: Unable to Perform Secure Print/ Print from Folder/Pay for Print Storing from Print Driver Unable to store scanned documents into a Folder

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	**For failure #1:** Use the Print Driver for the printer. # Not for HDD standard machines but for the printer with options # **For failure #2:** Check whether the Features Extension Kit is installed in the printer. • When the Features Extension Kit is not installed: a. If the feature is not used, set [Hard Disk] in the **Options** tab to Not Available at the Print Driver. b. To use the feature, install the Features Extension Kit. • When the Features Extension Kit is installed: a. Set [Hard Disk] in the **Options** tab to Available at the Print Driver. Check whether the options required for Store to Folder are installed.

Max. User Number Exceeded

Full status was detected at HDD access and the job was aborted.

Applicable Fault Code

- 016-706: Job Canceled due to Detection of Exceeded Maximum No. of Users for Secure and Proof Prints

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Delete unnecessary documents/users and print again.

Sample Print Fail

Proof Print Registration failed because it cannot be stored without a HDD.

Applicable Fault Code

- 016-707: Unable to perform Proof Print (Does not satisfy the conditions for Proof Print due to HDD not installed/ HDD error etc.)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove the conditions that disable Sample Set.
2.	Check whether the HDD is installed. If the problem has occurred at installation, check whether the operations for Sample Set are correct.

HD Full by Annotation/ Watermark Image

When an Annotation/ Watermark image was to be stored in the HDD, Full status was detected and the job was aborted.

Applicable Fault Code

- 016-708: Full During Annotation/ Analog Watermark Image Storage

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Cancel Annotation/ Watermark and repeat the operation.
2.	Reduce the number of document pages. In Mixed Size mode, only a single size is available.
3.	For printing Stored Document, delete unnecessary documents from the HDD and repeat the operation.
4.	Expand the capacity of the HDD partition of the relevant service.

ART EX Command Error

An ART EX command error occurred during PLW processing. This error occurs when some parts of the created print file are missing or abnormal.

Applicable Fault Code

- 016-709: PLW Command Error Detected By PLW Decomposer

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set **Parallel Bi-Directional Communication** to **Off** in the Print Driver.
2.	In CWIS, set a longer time for Auto Output Time by selecting **Port Settings** > **Parallel**.
3.	Replace the parallel cable.
4.	If a long parallel cable is used, use a short cable (genuine) and try printing again.
5.	Change the BIOS settings in the PC. (Change the current parallel port settings to others.)
6.	Change the power supply outlet (socket).

Delayed Print Fail

Process conditions for Delayed Print were not met.

Applicable Fault Code

- 016-710: Delayed Print Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether the HDD is installed. If HDD is installed or HDD is full, free up the HDD capacity.
2.	If Secure Print/ Proof Print or Knowledge Storage Print is specified, disable them.
3.	Reduce the Delay Print jobs waiting to 100 jobs or less.

TIFF Data Overflow

Data overflow error has occurred.

Applicable Fault Code

- 016-716: <Invalid TIFF File> That the files to be spooled in TIFF has exceeded the disk capacity

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Install the HDD or increase the capacity of the HDD.

Out of PCL6 Memory

Out of memory error has occurred.

Applicable Fault Code

- 016-718: Insufficient PCL6 Decomposer Memory

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	As the PLW memory is fixed, decreasing the resolution may reduce the PLW memory. (Only when PLW is enabled.)

Out of PCL6 Memory

Insufficient memory was detected while using PCL.

Applicable Fault Code

- 016-719: Insufficient PCL6 Decomposer Memory

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Increase the size of PCL memory. Increasing the overall system memory will in some measure increase the memory to be allocated to the Decomposer.
2.	The PCL memory cannot be explicitly increased through UI settings or other ways. Therefore, if a job is aborted due to insufficient memory although the memory has been increased to the maximum capacity, change the Print Driver settings to see if printing becomes possible.

PCL Command Error

A PCL command error occurred during PCL processing.

Applicable Fault Code

- 016-720: PCL Command Error Detected By PCL Decomposer

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Cancel the job and try again.

Other Error

An unexpected error occurred during printing due to one of the following problems.

- Paper types cannot be determined because all the settings for Custom Paper Priority are set to Disabled in CWIS, etc.
- This error is not related to the ART system commands/ forms.
- ESCP command error.
- Incorrect control code from the input stream, etc.

Applicable Fault Code

- 016-721: An unexpected error occurred at the PLW decomposer during printing

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	In CWIS, set the **Custom Paper Priority** to Enable.

PDL Auto Switch Fail

Print language auto judgment has failed. This does not occur in PCL5/ ESCP printers.

Applicable Fault Code

- 016-726: <Auto Judgment Error> Auto SW judgment has failed.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	In CWIS, set a longer time for Auto Output Time by selecting **Port Settings** > **Parallel**.
2.	Replace the parallel cable.
3.	If a long parallel cable is used, use a short cable (genuine) and try printing again.
4.	In CWIS, change the print language from Auto to ARTEX or PS fixed by selecting **Emulation Settings** > **Print Mode**.

0-page Document is Unstorable in a Folder

The P-Formatter attempts to store a 0-page document into a Folder but the Job was canceled as 0-page documents cannot be stored in the Folder.

Applicable Fault Code

- 016-727: 0-page Condition Detected when Storing Print Job in Folder

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Make sure that any print instruction does not result in 0 page when it is to be stored in a Folder.
2.	If the printer Energy Saver is On, turn it Off and print again. Check whether the printed out document is blank. If it is, input some text.

Unsupported TIFF Data

Unsupported TIFF data error has occurred.

Applicable Fault Code

- 016-728: <Invalid TIFF File> The data contains a Tag that is not set in the Image File Expansion Library.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Inform the customer that the TIFF format file is not supported.

TIFF Data Size Too Big

TIFF data size is too big.

Applicable Fault Code

- 016-729: <Invalid TIFF File> The specified settings exceed the upper limit of the valid number of colors and pixels.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Correct it to the valid range.

Unsupported ART Command

ART IV Command Error.

Applicable Fault Code

- 016-730: <ART Command Error> An unsupported command was detected at ART

Troubleshooting Procedure

Step	Actions and Questions
1.	Reboot the printer.

Invalid TIFF Data

Invalid TIFF data error has occurred.

Applicable Fault Code

- 016-731: <Invalid TIFF File> The TIFF data is broken or cut off halfway

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Resend the data.

Form Not Registered

The decomposer detected that the form specified is not registered.

Applicable Fault Code

- 016-732: <Form Overlay Error> Data itself is not printed when the form specified is not registered in emulation.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Resend the form data.

Simple Transmission Report Invocation Error

Simple Destination Result report output has failed.

Applicable Fault Code

- 016-734: Simple Destination Result Report Output Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set **Receive via SMTP** for E-mail receive setting on the sending device.
2.	Remove the restriction on receiving E-mails from a self-domain in the receivable domain list if any.

Updating Job Template

Job template error has occurred.

Applicable Fault Code

- 016-735: <Updating Job Template> The system attempted to output the Job Template List while the Job Template is being updated.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform the operation again after the Job Template update has completed.

Remote Directory Lock Error

Creation of Lock directory has failed.

Applicable Fault Code

- 016-736: Repository Lock Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	When a lock directory (*.LCK) remained in the transfer destination, delete it manually and retry the job.
2.	Make correct settings for the permissions to the transfer destination directories.
3.	Secure a disk capacity if the HDD for the transfer destination directory is full.

Remote Lock Directory Remove Error

Deletion of Lock directory has failed. The power was turned OFF because the CDI Cable got disconnected during FTP transfer or the DFE Reset SW was pressed.

Applicable Fault Code

- 016-737: Lock Directory Deletion Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	When a lock directory (*.LCK) remained in the transfer destination, manually delete it and retry the job.

PS Booklet Illegal Output Size

The specified paper size is invalid.

Applicable Fault Code

- 016-738: Invalid Paper Size for PS Booklet Print

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Specify a paper size that can be used for booklet printing.

PS Booklet Document Output Mismatch

The specified combination of document/ paper size is invalid.

Applicable Fault Code

- 016-739: PS Booklet Document/ Output Paper Mismatch

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Specify a tray that can be used for booklet printing.

PS Booklet Output Tray Mismatch

The specified tray is invalid.

Applicable Fault Code

- 016-740: Invalid Output Tray for PS Booklet Print

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Specify a tray that can be used for booklet printing.

016-741

Unable to transit to Download Mode because download prohibition was detected due to SysData:700-420 = 1, or because a job exists. The printer did not transit to Download Mode because it detected "User Operation in Progress". (The printer remains in the "User Operation in Progress" state for 1 minute after panel operation was completed.)

Applicable Fault Code

- 016-741: Unable to Transition to Download Mode

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Cancel the Download Prohibited mode and check that the jobs have completed before retrying the operation. Check that the "Communicating" LED is Off.
2.	After completing a panel operation, wait for 1 minute or longer before starting the download operation.

016-742

The Product ID sent in the download data and the Product ID (SysData: 700-421 to 700-428) stored in the SEEP-ROM do not match.

Applicable Fault Code

- 016-742: Product ID of Download Data was detected to be different

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Because this could be due to incorrect download data, re-obtain the download data and perform the operation again.

016-743

The Model Name obtained from the installed IOT and the Model Name contained in each firmware CDI header in the downloaded file do not match. In the Controller, the comparison is between the “Model Name obtained from currently installed ROM header” and the “Model Name in download file”. <Exceptions> Model Names are not checked in IOT/ MACS because their I/F specifications are old. The panel type (HB or FCW) connected to the device during the download and the panel type (HB or FCW) contained in the Controller firmware CDI header in the download file do not match.

Applicable Fault Code

- 016-743: Printer Model/ Panel Type Error Target model in the download data and the printer model do not match

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Obtain the download file for the same model as the printer to be updated and perform the operation again.

016-744

The checksum of download data is incorrect.

Applicable Fault Code

- 016-744: Download Data Checksum Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Connect the connection cables to the device properly and try again.

016-745

Bugs during development such as download open, ioctrl error, and memory not allocated.

Applicable Fault Code

- 016-745: XPJL Fatal Error during Download (This error occurs after the XPJL has recognized that the received data is a download data)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform Firmware Update on page 6-22.

Unsupported PDF File

For PDF1.3, transparency or JBIG2 is included in the PDF file.

Applicable Fault Code

- 016-746: Sent PDF Contains Unsupported Function

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Use the driver from Acrobat Reader to print.

No Memory for Drawing Annotation

When drawing an annotation image with the copy repeat function specified, there is insufficient memory in the printer's controller board.

Applicable Fault Code

- 016-747: Insufficient memory when drawing an annotation image

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Increase the annotation image size.
2.	Reduce the number of repeat images for the repeat function.

HDD Full

Full status was detected at HDD access. Either the job was canceled or user intervention is required in 016-981.

Applicable Fault Code

- 016-748: FULL Status Detected at Folder Access and Job is Canceled

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Split the job pages so as not to allow it to become Full, or reduce the resolution if possible.
2.	Delete unnecessary Folder documents, Secure Print documents, Delayed Print documents, and etc. to secure the HDD capacity and try to print again.

JCL Syntax Error

JCL syntax error has occurred due to one of the following problems.

- The print language received from the Print Driver is a print language that cannot be printed by the printer.
- Contents Bridge was used to attempt to print a PDF file through a printer that cannot process PDF.

Applicable Fault Code

- 016-749: PJL/XPJL Detected an Unprintable Print Language

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	**For Error #1**: Use the Print Driver of the printer to print. Depending on PostScript, etc. options are necessary to print the desired print language. **For Error #2**: Do not use Contents Bridge to print a PDF file.

Print Job Ticket Description Error

When the customer uses applications such as 'ContentsBridge2005', etc. to send PDF directly, the printer received the print job ticket that was sent together with the PDF. However, the print job ticket data is either [Text that is not supported in the printer] or [Print instruction that is not supported in the printer].

Applicable Fault Code

- 016-750: PDF Print Job Ticket Description Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Obtain the Printer Setup List, the job log Report and sent print data with attached print job ticket when the problem occurred.

PDF Error

Print job error has occurred due to one of the following problems.

- Syntax error, usage of undefined command, parameter error, damaged PDF file, internal error of the PDF Decomposer has occurred during PDF Bridge process.
- When the PDF Emulation is set to '1', there was insufficient Memory.
- When the PDF Emulation is set to '1', a PDF containing OpenType Fonts was processed.

Applicable Fault Code

- 016-751: PDF Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	When the PDF Emulation is set to “1”, increase the PostScript memory.

PDF Short of Memory

Insufficient memory was detected during PDF Bridge process.

Applicable Fault Code

- 016-752: PDF Short of Memory

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If the Print Mode is High Quality, change it to Normal. If it is Normal, change it to High Speed. (Only for printers with High Quality mode.)
2.	If the problem still persists, increase the memory. If the problem still occurs despite having increased the memory to the maximum, use the driver from Acrobat Reader to print.

PDF Password Mismatched

When processing a PDF file that is protected by a password, the password in the Control Panel settings and the password specified using XPJL (set in the Contents Bridge Utility) do not match.

Applicable Fault Code

- 016-753: PDF Password Mismatched

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Specify the correct password using the Control Panel or Contents Bridge.

PDF Print Prohibited

The system processed a PDF file that is prohibited from being printed.

Applicable Fault Code

- 016-755: PDF Print Prohibited

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Use Acrobat to clear the print prohibition setting and print the PDF file.

Auditron - Prohibit Service

An Illegal User is detected.

Applicable Fault Code

- 016-756: Auditron - Prohibit Service

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Request for access to use the service from the Account Administrator.

Auditron - Invalid User

The account is not registered.

Applicable Fault Code

- 016-757: Auditron - Invalid User

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set up the account and then repeat the operation.

Auditron - Disabled Function

An Illegal Account is detected.

Applicable Fault Code

- 016-758: Auditron - Disabled Function

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set the new function that is allowed for that account and try again.
2.	Request the Account Administrator to add the rights.

Auditron - Reached Limit

The registered user has reached the limit.

Applicable Fault Code

- 016-759: Auditron - Reached Limit

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Consult with the Account Administrator and request to set the number of copies, etc.

PS Decompose Failure

An error occurred in the Decompose processing.

Applicable Fault Code

- 016-760: <PS Decompose Error> An error occurred in the Decompose processing.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Resend the job. If the problem persists, check the execution environment/ data.

FIFO Empty

Image expansion error has occurred. (FIFO Empty error).

Applicable Fault Code

- 016-761: <Image Output> FIFO EMPTY Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Print in the High Speed mode. If the problem persists, print in the Print Guarantee mode.

Print LANG Not Installed

The print language is not installed. The system has requested for a feature (print language, print utility, etc.) that is not installed. (The decomposer specified in PJL or Auto SW is not installed.)

Applicable Fault Code

- 016-762: <Decomposer Not Exist> The system has requested for a feature (print language, print utility, etc.) that is not installed.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Fix and select the decomposer from the Control Panel or with a command.

SMTP Server Connect Error

SMTP Server Response Code: 421 or 451.

Applicable Fault Code

- 016-764: SMTP Server Connection Fail (when connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Wait for a while and then perform the operation again.
2.	If error persists, contact the Network Administrator.

SMTP Server HDD Full

SMTP Server Response Code: 452.

Applicable Fault Code

- 016-765: SMTP Server HDD Full (after connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Contact the SMTP Server Administrator.
2.	Retrieve E-mails in the SMTP Server HD. Check the server capacity.

SMTP Server File System Error

SMTP Server Response Code: 552.

Applicable Fault Code

- 016-766: SMTP Server Error - Allocation Memory Capacity Over (after connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Contact the SMTP Server Administrator. Review the server capacity limit setting.

Invalid E-mail Address

SMTP Server Response Code: 550 or 551 or 553.

Applicable Fault Code

- 016-767: SMTP Server Refused Destination Address (after connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the E-mail destination and set a correct address. When the MTA requires authentication before sending, such as POP before SMTP, set the device transmission authentication correctly.

Invalid Sender Address

There was an error received from the SMTP Protocol 'MAIL FROM:' command.

Applicable Fault Code

- 016-768: SMTP Server Refused Sending Address (after connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether the Sender Address is correct.
2.	If the error persists, contact the Network Administrator.

SMTP Server Unsupported DSN

ESMTP Protocol 'EHLO' Command Response Code: 502. Or, 'DSN' does not appear in the Supported Command List received from the Server.

Applicable Fault Code

- 016-769: SMTP Server DNS Not Supported (after connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Contact the Network Administrator to check the whether the DNS is supported by the SMTP Server.
2.	Turn the communication check to Off and send.

Scan Data Repository ERR (DNS Library)

An error has occurred while calling the DNS Resolution Library.

Applicable Fault Code

- 016-772: Device DNS Server Not Set for SMTP Jobs (before connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set the DNS address. Or, set the Scan Data Repository address using IP Address.

Invalid IP Address

When connection fails, the valid flag of the resource IP Address is “False”.

Applicable Fault Code

- 016-773: Local machine IP Address failure (DHCP lease expired)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the DHCP environment. Or, set a fixed IP Address in the printer.

Server Connect ERR

Failed to connect to the SMTP mail server.

- The printer and server cannot communicate with each other at all.
- After establishing connection between the printer and the server, it was detected that the host name set in the printer is not of ASCII characters.

Applicable Fault Code

- 016-781: SMTP Server Not Found (when connecting to the server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the network cable connection.
2.	If characters other than ASCII are used for the host name set in the printer, set it to ASCII. **Authenticate** > **System Settings** > **Network Settings** > **E-mail Address/Host Name** for the printer > **Host Name**.
3.	Check whether the IP Address of the Server is correct.

Server Login ERR

<FTP> Login to the FTP Server failed. <SMB> Login to the SMB Server failed. In SMB, this error also occurs when the network cable is disconnected.

Applicable Fault Code

- 016-782: <Server Login Error> Unable to log into the server when transferring files to the server

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	For SMB, first check the connection of the network cable. If that does not solve it, proceed as follows.
2.	As EUC Code (Japanese) cannot be used in the host name of the current specification, change it to English.
3.	Register a job flow from EasyAdmin.
4.	Check [Server Name/ IP Address] with the Address List. WinNT4.0: Because SMB transfer to WinNT4.0 is not possible with IP Address, change the “Server Name/ IP Address” to Host Name. WinXP: SMB transfer is available even with IP Address.
5.	In the default settings of WinXP, empty password cannot be used for access though the network. Change the setting at WinXP to [allow access with empty password] and operate again.
6.	Set the login name and password in the destination server.
7.	Make correct settings for the attributes of the Job Template file.
8.	From a client PC, set the same account as the above as a resource using CW.

HDD Full - Job Memory

HDD error has occurred.

Applicable Fault Code

- 016-789: Redirector Task Operational HDD Limit Overflow

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	**For Send E-mail** Use a lower resolution or reduce the size before sending. Reduce the no. of pages by splitting the job into batches. Send using Black & White, etc.
2.	If problem persist, refer to HDD System Fail on page 2-408.

Specified Job Not Found

When printing the report for the job, the Job Log for the job specified in the Control Panel could not be retrieved.

Applicable Fault Code

- 016-792: Job Log for Specified Job ID Not Exist

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform the printer job again.

MF I/O HDD Full

The MF I/O Task detected HDD Full.

Applicable Fault Code

- 016-793: <MF I/O> HDD Full

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Delete the files in the HDD.

No TrustMarking Option

An HDD not available error was returned when the Decomposer called the S-Image Library.

Applicable Fault Code

- 016-798: No TrustMarking Option

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Install the necessary option (HDD).

PLW Print Instruction Fail

The Job cannot be executed with the specified combination of print parameters (Stored File Size, Paper Size, Paper Tray, Duplex Settings, and output tray).

Applicable Fault Code

- 016-799: Print Instruction Combination (Stored File Size, Paper Size, Paper Tray, Duplex Settings, and Output Tray) Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform the printer job again.

HDD Access Error

HDD Full was detected because Store to Folder, Print from Folder, Delayed Print, Sample Set, Scheduled Print, etc. was specified when the HDD partition/ide0c capacity is low. For print jobs, only the portion that is stored in the HDD is printed and then the job is ended. Therefore, this fault does not occur in [Job Fail 16-748].

Applicable Fault Code

- 016-981: Full status Detected at HDD Access. An error where the Full is not cleared even after some time has passed. (One or more pages are already stored.)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Either split the job pages so as not to allow it to become Full, or reduce the resolution if possible.
2.	Delete unnecessary Folder documents, Secure Print documents, Delayed Print documents, and etc. to secure HDD capacity and try the operation again.

HDD Access Error 2

HDD was determined to be full due to collate, stored or interrupted jobs.

Applicable Fault Code

- 016-982: Full Status Detected at HDD Access. An error where the Full is not cleared even after some time has passed. (No pages can be stored.)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Process or delete the jobs (documents) stored in the same HDD partition, and repeat the operation.
2.	Expand the HDD partition size of the relevant service.

IPSEC Error (Configuration Mismatch)

Although the IPSEC is enabled, the password is not set because “authentication method = [Pre-shared key]” or the IPSEC certificate is not set because “authentication method = [Digital Signature]”.

Applicable Fault Code

- 018-400: IPSEC Error (setting mismatch)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Clear the IPSEC setting mismatch and enable the IPSEC again. Mismatched IPSEC settings: when password is not set because “authentication method = [Pre-shared key]” or when IPSEC certificate is not set because “authentication method = [Digital Signature]”.

CA Message Receiver Boot Error (S_cert lost)

The SSL server, which is required for CA, failed to start up because the server certificate/ private key were not found at startup of the device.

Applicable Fault Code

- 018-500: CA Authentication Message Receiving Server Startup Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Use the correct settings for Paper Size, Paper Tray, Duplex Settings, Output Tray, and so on, and then retry the job.

CA Server Connection Error

When the device is performing CA authentication, it was unable to connect to the CA server. Failed to communicate.

Applicable Fault Code

- 018-501: CA Authentication Server Communication Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set the server certificate. Or, turn Off the CA function.

CA Message Receiver Timeout

Timeout has occurred because there was no response when waiting for JRM and UI decision after receiving a message from the CA server.

Applicable Fault Code

- 018-503: CA Authentication Server Timeout

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the properties information of the specified user and check whether the workstations that can log in to the server are limited.

CA Session ID Mismatch

During communication with the CA server for authentication, the CA server Session ID and the device Session ID do not match. (Communication error, device internal error, or incorrect codes)

Applicable Fault Code

- 018-504: CA Authentication Session ID Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform the authentication operation again.

CA Field ID Mismatch

During communication with the CA server for authentication, the CA server Field ID and the device Field ID does not match. (Communication error, device internal error, or incorrect codes)

Applicable Fault Code

- 018-506: CA Authentication Field ID Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform one of the following actions: • Check with the network administrator for the user name or password. • When using Windows Server 2003, synchronize the time in both the SMB server and the printer. Note: Checking of password is not possible. If the password was forgotten, it must be reset.

CA Credential Error

After the CA authentication server had requested for input of user information, the server determined that the entered information does not mismatch.

Applicable Fault Code

- 018-507: CA Authentication User Authentication Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform the authentication operation again.

CA Server Fatal Error

Server Exception message was received from the CA authentication server during the CA authentication process.

Applicable Fault Code

- 018-508: CA Authentication Server Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	User authentication has failed. The entered user name or password is invalid. Verify that the user name and password are correct and input them again.

Detected User Duplication, in LDAP

Two or more entries that have the same information as the currently used Smart Card were found in the database of the LDAP server.

Applicable Fault Code

- 018-595: Duplicate IDs were detected at ICCG external authentication (LDAP protocol)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Make corrections so that the user entries in the database of the LDAP server do not have the same Smart Card information.

LDAP Protocol Other Error

Error other than 018-595 that occurs at the authentication LDAP protocol.

Applicable Fault Code

- 018-596: LDAP Protocol Error - Others

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform the authentication operation again.

Invalid URL Detected

The server URL is grammatically incorrect. libcURL returned 'CURLE_URL_MALFORMAT'.

Applicable Fault Code

- 021-501: Invalid Server URL

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If the error is related to the installation operation, check the URL of the EP server again and enter the correct one. If the error is related to operations other than installation, use the Chain-Link to overwrite the EP (920-003) Server URL with a new value and perform the operation again.

Couldn't Resolve Proxy Name

Failed to resolve the address of the proxy server name. libcURL returned 'CURLE_COULDNT_RESOLVE_PROXY'.

Applicable Fault Code

- 021-502: Proxy Server Address Resolution Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the following: • Check the connection of the LAN cable. • Check the DNS server address settings. • Check the default gateway settings. • Check the subnet mask settings. For BB-Direct configuration, check the following: • Check the EP proxy server URL settings. (Chain-Link (920-35) or KO settings)
2.	If the problem persists after checking the above settings, there may be a network failure or DNS server failure. Contact the client's Network Administrator.

Couldn't Resolve Host Name

Failed to resolve the address of the server name. libcURL returned 'CURLE_COULDNT_RESOLVE_HOST'

Applicable Fault Code

- 021-503: Server Address Resolution Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the following: • Check the connection of the LAN cable. • Check the DNS server address settings. • Check the default gateway settings. • Check the subnet mask settings. • Check the EP server URL settings. (Chain-Link (920-003))
2.	If the problem persists after checking the above settings, there may be a network failure or DNS server failure. Contact the client's Network Administrator.

Couldn't Connect to Host/ Proxy

Unable to connect to the server or proxy server libcURL returned 'CURLE_COULDNT_CONNECT'. (Including cases where the server is not turned ON) Or, libcURL returned 'CURLE_GOT_NOTHING'.

Applicable Fault Code

- 021-504: Server Connection Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the following: • Check the connection of the LAN cable. • Check the default gateway settings. • Check the subnet mask settings. • Check the EP server settings. (Chain-Link (920-003~920-006)) For BB-Direct configuration, check the following: • Check the EP proxy server settings. (Chain-Link (920-035 to 920-039) or KO settings)
2.	If the problem persists after checking the above settings, there may be a network failure or the FQDN of the EPA server may have been changed (If the EPA Server is used). Contact the client's Network Administrator.

021-505/ 021-506/ 021-509/ 021-515/ 021-516

Invalid error has occurred due to one of the following problems.

- An error has occurred during SSL/TLS handshake. libcURL returned 'CURLE_SSL_CONNECT_ERROR'.
- The SSL certificate of the server is invalid. libcURL returned 'CURLE_SSL_PEER_CERTIFICATE'.
- The server detected an invalid message. The server has notified a SOAP Fault indicating that the message from the device is invalid. Code=Client, Subcode=InvalidMessage Or, an unexpected SOAP Fault was notified because of a failure in the server.
- The server detected an invalid product code. The server has notified a SOAP Fault indicating that the product code included in the message from the device is invalid. Code=Client, Subcode=InvalidOperation, Subcode3=InvalidProductCode
- The server detected an invalid serial number. The server has notified a SOAP Fault indicating that the serial number included in the message from the device is invalid. Code=Client, Subcode=InvalidOperation, Subcode3=InvalidSerialNumber

Applicable Fault Codes

- 021-505: SSL Session Error
- 021-506: Invalid SSL Certificate (Edge Server)
- 021-509: Invalid Communication Message
- 021-515: Invalid Product Code
- 021-516: Invalid Serial Number

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Verify that the SSL certificate is valid. Verify that the server is online.
2.	Confirm the printer serial number is correct. a. On the Control Panel, press **Down Arrow** + **OK** simultaneously. b. The Serial Number is displayed on the Control Panel.

Proxy Unauthorized Access

Authentication of the proxy server has failed. libcURL returned ‘HTTP Status: 407 Proxy Authorization Required’.

Applicable Fault Code

- 021-507: Proxy Authentication Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the following: • Check the EP proxy server authentication user. • Check the EP proxy server authentication password.
2.	If the problem persists after checking the above settings, there may be a network failure or the proxy server settings may have changed/failed. Contact the client's Network Administrator.

A Connection to Host/ Proxy has Timed Out

Communication timeout has occurred. libcURL returned 'CURLE_OPERATION_TIMEOUTED'.

Applicable Fault Code

- 021-508: Communication Timeout

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the following: • Check the connection of the LAN cable. • Check the default gateway settings. • Check the subnet mask settings. • Check the EP server settings. (Chain-Link (920-003~920-006)) For BB-Direct configuration, check the following: • Check the EP proxy server settings. (Chain-Link (920-035 to 920-039) or KO settings)
2.	If the problem persists after checking the above settings, there may be a network failure or the FQDN of the EPA server may have been changed (if the EPA Server is used). Contact the client's Network Administrator.

SOAP Fault: MC Already Unregistered

The server detected that it is already in recalled status. The server has notified a SOAP Fault indicating that the device is already in recalled status on the EP system. Code=Client, Subcode=InvalidOperation, Subcode3=AlreadyUnregistered

Applicable Fault Code

- 021-510: Recall Status Mismatch (EP System)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	No action is required if this error corresponds to a recall operation.
2.	If the error is related to operations other than recall, check whether the EP contract has expired. If it has already expired, no action is required.

SOAP Fault: MC Already Registered (WEP)

When performing installation, the server detected that it already has the WEP Installed. When performing installation, the server has notified a SOAP Fault indicating that the device already has WEP installed on the EP system. Code=Client, Subcode=InvalidOperation, Subcode3=AlreadyRegistered

Applicable Fault Code

- 021-511: Installation Status Mismatch (EP System)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check with the EP Center for the EP contract status and registration status.

021-512/ 021-513/ 021-514

Installation conflict error has occurred due to one of the following problems.

- When performing installation, the server detected that it already has the EP-SV Installed. When performing installation, the server has notified a SOAP Fault indicating that the device already has EP-SV installed on the EP system. Code=Client, Subcode=InvalidOperation, Subcode3=AlreadyRegisteredBySV
- When performing installation, the server detected that it already has the EP-DX Installed. When performing installation, the server has notified a SOAP Fault indicating that the device already has EP-DX installed on the EP system. Code=Client, Subcode=InvalidOperation, Subcode3=AlreadyRegisteredByDX
- When performing installation, the server detected that it already has the TRESS Installed. When performing installation, the server has notified a SOAP Fault indicating that the device already has EP-TRESS installed on the EP system. Code=Client, Subcode=InvalidOperation, Subcode3=AlreadyRegisteredByTRESS

Applicable Fault Codes

- 021-512: EP-SV Installation Conflict (EP System)
- 021-513: EP-DX Installation Conflict (EP System)
- 021-514: TRESS Installation Conflict (EP System)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check with the EP Center for the EP contract status and registration status.

021-517/ 021-518/ 021-519

Communication error has occurred due to one of the following problems.

- The server detected communication failure with the EP Center. The server has notified a SOAP Fault indicating that communication failure has occurred between the Edge Server (EPA-Server for configurations installed with EPA) and its back-end. Code=Server, Subcode=NextServiceNotRespond
- An internal error has occurred in the server. The server has notified a SOAP Fault indicating that an internal error has occurred in the Edge Server. Code=Server, Subcode=InternalError
- The server detected a high load status in the EP Center. The server has notified a SOAP Fault indicating that EP Center is in high load status. Code=Server, Subcode=ServiceTemporarilyUnavailable

Applicable Fault Codes

- 021-517: Communication Failure (EP Center)
- 021-518: Internal Error (Edge Server)
- 021-519: High Load Status Detected (EP Center)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check with the EP Center for the system operation status.
2.	If a failure has occurred in the EP Center, retry the operation from the UI after the EP Center has recovered.

021-520/ 021-521/ 021-522

Communication error has occurred due to one of the following problems.

- A communication error has occurred when obtaining the EP certificate. secep returned 'SECEP_COM_ERROR'.
- Timeout has occurred when obtaining the EP certificate. secep returned 'SECEP_TIMEOUT'.
- An error has occurred in the certificate library. secep returned a uncategorized error during CA communication. (Uncategorized errors when no communications were made are internal errors.)

Applicable Fault Codes

- 021-520: CA Communication Error
- 021-521: CA Communication Timeout
- 021-522: Certificate Library Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the following. • Check the connection of the LAN cable. • Check the default gateway settings. • Check the subnet mask settings. For the BB-Direct configuration: • Check the EP proxy server settings. (Chain-Link (920-035 to 920-039) or KO settings) For the EPA-Server configuration: • Check the EP server settings. (Chain-Link (920-003~920-006))
2.	If the problem persists after checking the above settings, there may be a network failure. Contact the client's Network Administrator.

An Internal Error has Occurred

Software failure where processing can still continue was detected. Or, a memory access error where processing can still continue was detected. Or, libcURL returned 'CURLE_SEND_ERROR'. Or, libcURL returned 'CURLE_RECV_ERROR'.

Applicable Fault Code

- 021-523: Internal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If the SOAP PWB has stopped, activate it.
2.	If the situation does not improve, turn the power Off and On.

A Registration/ Unregistration Conflict was Detected

A status mismatch error has occurred due to one of the following problems:

- Although installation was instructed, it was detected internally that the status is "Installed". At the start of the installation process, it was detected that the system data 'Installation Status' is not set to "Not Installed".
- Although recall was instructed, it was detected internally that the status is "Recalled". At the start of the recall process, it was detected that the system data 'Installation Status' is not set to "Installed".

Applicable Fault Codes

- 021-524: Installation Status Mismatch
- 021-525: Recall Status Mismatch

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If the problem persists, use Chain-Link (920-001) to change "Installation Status" to "Not Installed" and retry the operation.

021-526/ 021-527

Communication error has occurred due to one of the following problems.

- An error has occurred in the communication library libcURL returned an uncategorized error.
- An invalid message was received from the server. libcURL returned 'HTTP Status: 4XX'. Or, an invalid SOAP Fault was received.(e.g. An unknown code or subcode, etc.) Or, an invalid SOAP Response was received.

Applicable Fault Codes

- 021-526: Communication Library Error
- 021-527: Invalid Communication Message (Edge Server)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Confirm that the server is online.

Device Already has the Latest Firmware

When checking the software version of the printer by contacting the software update server, it was detected that all ROM in the printer already has the latest version.

Applicable Fault Code

- 021-529: Latest Version Detected (software update)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If this error was detected even though the machine is already installed with the latest version, check the running status of the system at the EP Center (software update server).

021-530/ 021-531

A software update error has occurred due to one of the following problems.

- An internal error was detected at the software update server. A response message indicating that an internal error has been detected at the software update server was notified from the server to the printer.
- A high load state was detected at the software update server. A response message indicating that the software update server is in a high load state was notified from the server to the printer.

Applicable Fault Codes

- 021-530: Server Internal Error (software update)
- 021-531: Server High Load State Detected (software update)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Wait for a while and try again.
2.	If the problem persists, perform the following in sequence. a. Check the running status of the system at the EP Center (software update server). b. If a failure has occurred in the EP Center, retry the operation from the Control Panel after the EP Center has recovered.

021-532/ 021-533/ 021-534/ 021-535

A software update error has occurred due to one of the following problems.

- When checking the software version of the printer by contacting the software update server, it was detected that the current machine ROM is of a ROM version configuration that is not a target for EP software update.
- When checking the software version of the printer by contacting the software update server, it was detected that the current machine ROM is of a ROM version configuration that prohibits a Key Operator (KO) from performing software update.
- When checking the software version of the printer by contacting the software update server, it was detected that the current machine ROM contains a Sub Module that is excluded from software update.
- When checking the software version of the machine by contacting the software update server, it was detected that there are peripherals (accessories) installed to the printer that are unsupported by EP software update.

Applicable Fault Codes

- 021-532: Unsupported ROM Configuration Detected (software update)
- 021-533: User Unable to Perform (software update)
- 021-534: Unsupported Sub Module Detected (software update)
- 021-535: Unsupported Peripherals Detected (software update)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform Firmware Update on page 6-22.

EP Accessory Error 732

With the accessory installed, either the card was missing, insufficient fee was paid, or there was insufficient card value.

Applicable Fault Code

- 021-732: EP Accessory - Disabled Function

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Insert a Xerox card, copy card or cash into the accessory, and ensure that there are sufficient fees or card value.

EP Accessory Error 733

With the Accessory installed, there was Color Mode Restriction or the upper limit was reached.

Applicable Fault Code

- 021-733: EP Accessory Service Canceled By Color Mode Restriction

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Operate the Color Restriction Key SW to allow Color. Or, replace the card with another card that does not reach its upper limit in Color mode.

EP - Service Paused By Disable

With the accessory installed, either the card was missing, insufficient fee was paid, or there was insufficient card value.

Applicable Fault Codes

- 021-943: EP Accessory - Print Service Paused By Disable
- 021-945: EP Accessory - Service Paused By Disable

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Insert a Xerox card, copy card or cash into the accessory, and ensure that there are sufficient fees or card value.

EP - Print Service Paused By Color Mode

The following errors were detected when an accessory was installed.

- 'Color Print Prohibited' is set in the machine. When color is prohibited, this error will appear when "Black" is not specified for printing from the PC even if the printed document contains only B/ W pages.
- The number of color print sheets of the Accessory (= DocuLyzer) that is installed to the printer has reached the upper limit. <<Detailed Explanation>> The 'Color Current Count Value for Each Output Color' in the Card that is inserted into the DocuLyzer has reached the 'Upper Limit for Each Output Color' that is stored in the DocuLyzer.

Applicable Fault Code

- 021-944: EP Accessory - Print Service Paused By Color Mode Restriction

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Operate the color limit keys in the machine to allow color print. Or, use the Print Driver on the PC to instruct printing in [Black & White] mode. (If instructing to print in [Auto] or [Color] mode does not improve the situation)
2.	Insert a card with count that has not reached the upper limit of the color count.

EP - Service Paused By Color Mode

With an accessory installed, there was Color Mode Restriction or the upper limit was reached.

Applicable Fault Code

- 021-946: EP Accessory - Service Paused By Color Mode Restriction

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Operate the Color Restriction Key SW to allow Color.Or, the Color has not reached the Upper Limit value yet.

021-948/ 021-949

Insufficient number of Subtractive Accessories error has occurred due to one of the following problems.

- This occurs during the printing operation or the DirectCopy operation. When the ICCG + Dispenser is jointly installed, the Dispenser was detected to have insufficient money. Or, when the ICCG + Coin Kit is jointly installed, the Coin Kit was detected to have insufficient money.
- This only occurs when a job is in the paused state, and does not occur while a job is being executed. *When the ICCG + Dispenser or Coin Kit is jointly installed, the EP-Cont detected that the money remaining in the Dispenser or the Coin Kit is insufficient and pauses the job.

Applicable Fault Codes

- 021-948: Insufficient Number of Subtractive Accessories (Print Service Paused By Subtractive Accessory Disable)
- 021-949: Insufficient Number of Subtractive Accessories (Service Paused By Subtractive Accessory Disable)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	In the case of Dispenser, insert a card that contain enough remaining number of sheets to continue the Job. In the case of Coin Kit, replenish the Coin Kit to continue the Job.

IOT-ESS Communication Fail/ Communication Fail 6

IOT communication error has occurred due to one of the following problems.

- An abnormal parameter was set in the argument of the sending function, which causes an error.
- Communication failure has occurred because no ACK was received despite having re-sent twice. (The Sequence No. of the sent Message Packet is incorrect.)
- Communication failure has occurred because no ACK was received despite having re-sent twice. (The Packet No. of the sent Message Packet is incorrect.)
- Communication failure has occurred because no ACK was received despite having re-sent twice. (The Message Length of the sent Message Packet is incorrect.)
- Communication failure has occurred because no ACK was received despite having re-sent twice. (The Check Code of the sent Message Packet is incorrect.)
- Communication failure has occurred because no ACK was received despite having re-sent twice. (A parity error was detected in the hardware at the IOT side.)

Applicable Fault Codes

- 024-340: (IOT) - MCU Send Error Detected by Controller (Invalid parameter was used)
- 024-341: (IOT) - MCU Send Error Detected by Controller (Sequence No. error)
- 024-342: (IOT) - MCU Send Error Detected by Controller (Packet No. error)
- 024-343: (IOT) - MCU Send Error Detected by Controller (Message length error)
- 024-345: (IOT) - MCU Send Error Detected by Controller (Check code error)
- 024-346: MCU Send Parity Error Detected by Controller

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to IOT System Fail on page 2-407.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

024-347 ~ 024-351/ 024-354/ 024-356/ 024-359/ 024-360

Communication error has occurred due to one of the following problems:

- Communication failure has occurred because no ACK was received despite having re-sent twice. (A framing error was detected in the hardware at the IOT side.)
- Communication failure has occurred because no ACK was received despite having re-sent twice. (An overrun error was detected in the hardware at the IOT side.)
- Communication failure has occurred because no ACK was received despite having re-sent twice. (Receive abort was detected after header authentication at the IOT side.
- This occurs when the NAK that notifies the occurrence of communication failure was received. (The Sequence No. of the received Message Packet is incorrect.)
- This occurs when the NAK that notifies the occurrence of communication failure was received. (The Packet No. of the received Message Packet is incorrect.)
- This occurs when the NAK that notifies the occurrence of communication failure was received. (A parity error was detected in the hardware of the UART.)
- This occurs when the NAK that notifies the occurrence of communication failure was received. (An overrun error was detected by hardware of the UART.)
- An abnormal parameter was set in the argument of the receiving function, which causes an error.
- IOT Driver initialization failure.

Applicable Fault Codes

- 024-347: (IOT) - MCU Send Framing Error Detected by Controller
- 024-348: (IOT) - MCU Send Error Detected by Controller (Overrun error)
- 024-349: (IOT) - MCU Send Error Detected by Controller (Receive abort error)
- 024-350: (IOT) - MCU Receive Error Detected by Controller (Sequence No. error)
- 024-351: (IOT) - MCU Receive Error Detected by Controller (Packet No. error)
- 024-354: (IOT) - MCU Receive Error Detected by Controller (Parity error)
- 024-356: (IOT) - MCU Receive Overrun Error Detected by Controller
- 024-359: MCU transmission receiving error detected by Controller (Invalid parameter was used)
- 024-360: MCU transmission receiving error detected by Controller (Invalid parameter was used)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to IOT System Fail on page 2-407.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Invalid IOT Paper Size Group Info

The paper size group settings in the Controller does not match with the paper size group information that is detected by the IOT.

Applicable Fault Code

- 024-361: The paper size group data is different between the ESS and the IOT.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Initialize the NVM (User Area) (DC301 NVM Initialize on page 2-50).
2.	Check the paper size group setting in the Controller and set a correct value.
3.	Check the Paper Size Switch (Tray 1 Error: Size Unknown on page 2-191, Tray 2, 3, 4 Error: Size Unknown on page 2-193).

024-362/ 024-363

A page error has occurred due to one of the following problems.

- During IOT output, the Page Sync becomes active before the output data is written until the FIFO is Full. Although it is usually resistant to noise interference, extreme noise may also be a cause.
- During IOT output, the Page Sync becomes negated before the specified size is output. Although it is usually resistant to noise interference, extreme noise may also be a cause.

Applicable Fault Codes

- 024-362: <Image Output> PAGE-SYNC occurred before video output preparation completes.
- 024-363: <Image Output> PAGE-SYNC completion error during video output

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to IOT System Fail on page 2-407.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

DMA Transfer Fail

During compression/expansion, although the specified data has been input, the compression/expansion process does not end. This is very likely to occur due to software malfunction or data corruption (RAM/HDD).

Applicable Fault Code

- 024-364: <Image Output> DMA Transfer Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Pull out and insert the System Memory to check the installation.
2.	Replace the RAM (REP 12.18 Memory (Standard) on page 4-232
3.	Refer to HDD System Fail on page 2-408.
4.	Refer to Common System Fail on page 2-406.

024-367/ 024-368

Error has occurred due to one of the following problems.

- Incorrect Line Sync was detected.
- An error has occurred when accessing the PCI due to problems with the PCI bus

Applicable Fault Codes

- 024-367: Other errors from Decompress (Extension)
- 024-368: <Image Output> PCI Bus Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to HDD System Fail on page 2-408.
2.	If the problem persists, go to Common System Fail on page 2-406.

Marker Code Detection Fail

When expanding only the size that was specified at the expansion, the End Code (FF02) cannot be found in the compressed data.

Applicable Fault Code

- 024-370: Marker Code Detection Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If this occurs only with specific documents (most likely due to software malfunction): a. Change the Print mode (Normal/ High Quality/ High Resolution). b. This may occur when the RAM size is changed. • Change the size of installed RAM. • Change the RAM usage size. (Change the Port settings or the Receive Buffer size.)
2.	If the problem persists, perform the following procedures. • Go to Common System Fail on page 2-406. • Go to IOT System Fail on page 2-407. • Go to HDD System Fail on page 2-408.

024-371/ 024-372/ 024-373/ 024-375/ 024-376

Communication error has occurred due to one of the following problems.

- When the Controller and IOT are turned On (including recovery from Energy Saver mode), a response from the IOT to a request to establish communications from the Controller was not detected within the specified time.
- An illegal instruction for IOT Port No., Timeout Time, Pointer, or Transfer Size was detected.
- When a message packet is sent from the Controller, the ACK packet from the IOT cannot be received within the specified time after the specified number of retries.
- An illegal instruction for IOT Port No., Timeout Time, or Pointer was detected.
- Occurs when a break in connection is detected at the loopback terminal of the image signal line.

Applicable Fault Codes

- 024-371: The communication between the ESS and IOT has not been established, which is detected by the Controller.
- 024-372: Sending error detected by Controller
- 024-373: DLL communication failure recovery error detected by Controller
- 024-375: DLL receiving error detected by Controller
- 024-376: (IOT) - MCU Image Signal Truncation Detected by Controller

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to IOT System Fail on page 2-407.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

Shortage of Memory Capacity, or No Hard Disk

The printer, when satisfies conditions 1 and 2, is to perform a job that has any of these - AnalogWaterMark/ HighbridWaterMark/ UUID added to it.

Condition 1: Any of the SW options “Paper Security Kit”, “Annotation Kit”, or “Sa kura Paper Kit” is enabled. Note that this includes cases where two or more options are enabled.

Condition 2: The HDD is not installed on the Controller PWB, or the system memory capacity is insufficient to operate the SW options enabled in Condition 1.

Applicable Fault Code

- 024-700: A job that could not be printed due to unfulfilled conditions such as [Insufficient System Memory] or [HDD Not Installed] was received

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Install the HDD to the I/P PWB.
2.	Install the memory capacity that is needed by the SW Option enabled in Condition 1 to the I/P PWB (the required capacity depends on the printer model).
3.	After completing steps 1 and 2, turn On the power and check that neither 016-210 nor 016-211 is displayed on the Control Panel. If it is displayed, refer to the corrective actions for 016-210 or 016-211.

Paper Jam

When paper jam occurs as printing is in progress for a Print Service Job (when Jam Recovery is set to "OFF").

Applicable Fault Code

- 024-702: Job Canceled due to Paper Jam

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the paper with fresh paper and resend the print job.

Print Request Failure - Paper

The paper type specified by the job is incompatible with options such as Paper Tray, Output Tray, or Automatic 2 Sided Print.

Applicable Fault Code

- 024-746: There are parameters that are incompatible with the specified paper type.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Do not specify parameters that are incompatible with the specified paper type.

Print Instruction Fail

The Job cannot be executed or continued with the specified combination of parameters (Stored File Size, Paper Size, Paper Tray, Duplex Settings, and Output Tray). This error will also appear in cases where a Job had been paused due to the occurrence of component malfunction in the middle of printing and the Job is unable to be continued even by pressing the **Start** button due to the malfunctioning component.

Applicable Fault Code

- 024-747: Unable to Continue the Operation as the Combination of Parameters (Stored File Size, Paper Size, Paper Tray, Duplex Settings, and Output Tray) Cannot be Printed.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Split the print job into smaller batches and print again.

Bates Numbering Digit Over

When printing the Bates Numbering, the maximum 9 digits or user defined digits was exceeded.

Applicable Fault Code

- 024-748: Bates Numbering No. of Digits Over

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Reduce the number of documents to be lower than the user defined number of sheets or increase the print digits to be higher than the user-specified no. of sheets and print again.

Tray 1/ 2/ 3 Of Place

Paper cannot be fed (paper path not available) as an upper Tray compared of the selected Paper Supply Tray is in [Removed] state. This fault occurs depending on the paper transport configuration of the engine.

Applicable Fault Code

- 024-900: Tray 1/ 2/ 3 (Upper Tray) Removed

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Tray 1 Paper Size Switch, PL 2.1.6 • Tray Assembly 250, PL 2.1.11 • Tray Assembly 550, PL 15.1.1 • Tray 2/3/4 Paper Size Switch, PL 15.1.5	

Troubleshooting Procedure

Step	Actions and Questions
1.	Check to make sure all trays above the tray in use are properly installed. If it is check the Paper Size Switch in DC330 Component Control on page 2-26. If it works replace the Tray. If it doesn't work, replace the Paper Size Switch. • Tray 1 Paper Size Switch (REP 2.6 Size Switch Holder Assembly on page 4-43) • Tray 2/3/4 Paper Size Switch (REP 15.3 Size Switch Holder Assembly on page 4-263)

Tray 1 Error: Size Unknown

When the paper length in Slow Scan direction is measured on the paper feed path, the detected size is different from the size detected by the Tray.

Applicable Fault Code

- 024-910: Size Mismatch Tray 1: Measured Length Mismatch

Initial Actions

- Check the paper path for debris.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Paper Size Switch, PL 2.1.6 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Paper Transport on page 7-51

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Tray. Is the Tray installed properly?	Go to step 2.	Install the Tray.
2.	Check the paper Guide. Is the paper Guide in the Tray set correctly?	Go to step 3.	Set the paper Guide.
3.	Check the Paper Size Switch operation. Perform DC330 Component Control on page 2-26 to check the On/ Off operation of each Switch of the Paper Size Switch. • Switch 0 [071-106] • Switch 1 [071-107] • Switch 2 [071-108] • Switch 3 [071-109] Are the Switches working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 4.
4.	Check the connection between the Paper Size Switch and MCU PWB. Are the connectors P/J4653A and P/J465A connected securely?	Go to step 5.	Connect the connectors P/J4653A and P/J465A.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the conductivity between the Paper Size Switch and MCU PWB. Is the connection between P/J4653A <=> P/J465A conducting properly?	Replace the Paper Size Switch (REP 2.6 Size Switch Holder Assembly on page 4-43).	Replace the Main Harness Assembly.

Tray 2, 3, 4 Error: Size Unknown

Paper size mismatch error has occurred due to one of the following problems.

- When the paper length in Slow Scan direction is measured on the paper feed path, the detected size is different from the size detected by the Tray.
- The Paper Size in Tray 1/ 2/ 3/ 4and the Paper Size specified for printing are different.

Applicable Fault Codes

- 024-911: Size Mismatch Tray 2 - Measured Length Mismatch
- 024-912: Size Mismatch Tray 3 - Measured Length Mismatch
- 024-913: Size Mismatch Tray 4 - Measured Length Mismatch
- 024-959: Tray 1 Size Mismatch
- 024-960: Tray 2 Size Mismatch
- 024-961: Tray 3 Size Mismatch
- 024-962: Tray 4 Size Mismatch

Initial Actions

- Check the paper path for debris.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Option Harness Assembly, PL 12.3.5 • Paper Size Switch, PL 15.1.5 • Option Feeder 1 Relay Harness Assembly, PL 15.2.30 • Option Rear Feeder Harness Assembly, PL 15.2.32 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Tray. Is the Tray installed properly?	Go to step 2	Install the Tray.
2.	Check the paper Guide. Is the paper Guide in the Tray set correctly?	Go to step 3	Set the paper Guide.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Paper Size Switch operation. Perform DC330 Component Control on page 2-26 to check the On/ Off operation of each Switch of the Paper Size Switch. The following numbers are listed in the order of Trays 2, 3, and 4. • Switch 0 [071-110, 071-114, 071-118] • Switch 1 [071-111, 071-115, 071-119] • Switch 2 [071-112, 071-116, 071-120] • Switch 3 [071-113, 071-117, 071-121] Are the Switches working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 4.
4.	Check the connection between the Paper Size Switch and Feeder PWB. Are the connectors P/J124 and P/J421 connected securely?	Go to step 5.	Connect the connectors P/J124 and P/J421.
5.	Check the conductivity between the Paper Size Switch and Feeder PWB. Is the connection between P/J124 <=> P/J421 conducting properly?	Go to step 6.	Replace the Option Rear Feeder Harness Assembly.
6.	Replace the Paper Size Switch (REP 15.3 Size Switch Holder Assembly on page 4-263). Does an error persists?	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285).	Troubleshooting complete.

(Y/ M/ C) Toner Cartridge Error: Life End

Toner (Y/ M/ C/ K) error has occurred due to one of the following problems.

- Printing cannot be continued during color printing because (Y/ M/ C) toner has run out. Or, color printing was specified when printing cannot be continued because (Y/ M/ C) toner has run out.
- Toner K is Empty and any of the Toner YMC is also Empty.

Applicable Fault Codes

- 024-923: Operation Y Toner Empty
- 024-924: Operation M Toner Empty
- 024-925: Operation C Toner Empty
- 093-963: Plural Toner Empty

Initial Actions

- Check the Toner Cartridge life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Toner Cartridge (Y/ M/ C), PL 8.1.1 - PL 8.1.3	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Toner Cartridge (Y/ M/ C) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).

(Y/ M/ C) Imaging Unit Cartridge Error: Life End

Imaging Unit error has occurred due to one of the following problems.

- During color printing, it was detected that printing cannot be continued because of (Y/ M/ C) Imaging Unit Life End.
- Or, color printing was specified when printing cannot be continued because of (Y/ M/ C) Imaging Unit Life End.

Applicable Fault Codes

- 024-933: Operation Y Imaging Unit End of Life
- 024-940: Operation M Imaging Unit End of Life
- 024-941: Operation C Imaging Unit End of Life

Initial Actions

- Check the Imaging Unit life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Imaging Unit (Y/ M/ C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Paper Kind Mismatch

Paper type mismatch error has occurred.

Applicable Fault Code

- 024-934: Paper Type Mismatch. This error occurs when the paper is different from the paper type specified in the Controller (unable to differentiate Plain from Heavyweight)

Initial Actions

- Inspect the tray to ensure that it is free of obstructions, is loaded with supported paper, and the Guides are adjusted correctly.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Load the correct paper into the appropriate tray.

Tray (1/ 2/ 3/ 4) Out of Place

The system detected that Tray 1/ 2/ 3/ 4 was not installed.

Applicable Fault Codes

- 024-946: Tray 1 Out Of Place
- 024-947: Tray 2 Out Of Place
- 024-948: Tray 3 Out Of Place
- 024-949: Tray 4 Out Of Place

Initial Actions

- Inspect the tray to ensure that it is free of obstructions, is loaded with supported paper, and the Guides are adjusted correctly.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Tray 1 Paper Size Switch, PL 2.1.6 • Tray Assembly 250, PL 2.1.11 • Tray Assembly 550, PL 15.1.1 • Tray 2/3/4 Paper Size Switch, PL 15.1.5	

Troubleshooting Procedure

Step	Actions and Questions
1.	Reseat the Tray. If the Tray is seated properly, check the Paper Size Switch in DC330 Component Control on page 2-26. If it works, replace the Tray. If it doesn't work, replace the Paper Size Switch. • Tray 1 Paper Size Switch (REP 2.6 Size Switch Holder Assembly on page 4-43) • Tray 2/3/4 Paper Size Switch (REP 15.3 Size Switch Holder Assembly on page 4-263)

Tray 1 Error: Paper Empty

The system detected that Tray 1 has no paper.

Applicable Fault Code

- 024-950: Tray 1 Empty

Initial Actions

- Inspect the tray to ensure that it is free of obstructions and is loaded with supported paper.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• No Paper Sensor 250, PL 2.2.2 • Feeder Harness Assembly, PL 2.2.3 • MCU PWB, PL 12.1.5 • Main Harness Assembly, PL 12.3.1	• Paper Transport on page 7-51

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper in the Tray. Is the paper in the Tray loaded correctly?	Go to step 2.	Load the paper.
2.	Check the No Paper Sensor 250 operation. Perform DC330 Component Control on page 2-26 [071-101] to check the operation of the No Paper Sensor 250. Is the Sensor working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 3.
3.	Check the connection between the No Paper Sensor 250 and MCU PWB. Are the connectors P/J4652A, P/J4651A, and P/J465A connected securely?	Go to step 4.	Connect the connectors P/J4652A, P/J4651A, and P/J465A.
4.	Check the conductivity between the No Paper Sensor 250 and Relay Connector. Is the connection between P/J4652A <=> P/J4651A conducting properly?	Go to step 5.	Replace the Feeder Harness Assembly.
5.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4651A <=> P/J465A conducting properly?	Go to step 6.	Replace the Main Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
6.	Check the voltage supply (+3.3VDC) to the No Paper Sensor 250. Measure the voltage between the MCU PWB GND <=> P/J465A-A1. Is there a voltage (approx. +3.3VDC) output?	Replace the No Paper Sensor 250 (REP 2.13 No Paper Sensor on page 4-52).	Refer to +3.3VDC Power Troubleshooting on page 2-458.

Tray 2/ 3/ 4 Error: Paper Empty

The system detected that Tray 2/ 3/ 4 has no paper.

Applicable Fault Codes

- 024-951: Tray 2 Empty
- 024-952: Tray 3 Empty
- 024-953: Tray 4 Empty

Initial Actions

- Inspect the tray to ensure that it is free of obstructions and is loaded with supported paper.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.5 • Option Harness Assembly, PL 12.3.5 • Feeder No Paper Sensor, PL 15.2.8 • Option No Paper Feed Harness Assembly, PL 15.2.9 • Option Feeder 1 Relay Harness Assembly, PL 15.2.30 • Option Rear Feeder Harness Assembly, PL 15.2.32 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper in the Tray. Is the paper in the Tray loaded correctly?	Go to step 2.	Load the paper.
2.	Check the Feeder No Paper Sensor operation. Perform DC330 Component Control on page 2-26 to check the operation of the Feeder No Paper Sensor. • Tray 2 [071-122] • Tray 3 [071-123] • Tray 4 [071-124] Is the Sensor working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 3.
3.	Check the connection between the Feeder No Paper Sensor and Feeder PWB. Are the connectors P/J123, P/J612, and P/J421 connected securely?	Go to step 4.	Connect the connectors P/J123, P/J612, and P/J421.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the conductivity between Feeder No Paper Sensor and Relay Connector. Is the connection between P/J123 <=> P/J612 conducting properly?	Go to step 5.	Replace the Option No Paper Feed Harness Assembly.
5.	Check the conductivity between the Relay Connector and Feeder PWB. Is the connection between P/J612 <=> P/J421 conducting properly?	Go to step 6.	Replace the Option Rear Feeder Harness Assembly.
6.	Check the voltage supply (+3.3VDC) to the Feeder No Paper Sensor. Measure the voltage between the Feeder PWB GND <=> P/J421-3. Is there a voltage (approx. +3.3VDC) output?	Replace the Feeder No Paper Sensor (REP 15.13 Feeder No Paper Sensor on page 4-274).	Go to step 7.
7.	Check the voltage supply (+3.3VDC) to the Feeder PWB. Measure the voltage between the Feeder PWB GND <=> P/J419-4. Is there a voltage (approx. +3.3VDC) output?	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285).	Go to step 8.
8.	Check the voltage output (+3.3VDC) from the MCU PWB. Measure the voltage between the MCU PWB GND <=> P/J461-7. Is there a voltage (approx. +3.3VDC) output?	Go to step 9.	Refer to +3.3VDC Power Troubleshooting on page 2-458.
9.	Check the connection between the Feeder PWB and MCU PWB. Are the connectors P/J419, P/J4611, and P/J461 connected securely?	Replace the following parts in sequence: • Option Feeder 1 Relay Harness Assembly • Option Harness Assembly	Connect the connectors P/J419, P/J4611, and P/J461.

Bypass Tray Error: Paper Empty

The system detected that the Bypass Tray has no paper.

Applicable Fault Code

- 024-954: Bypass Tray Empty

Initial Actions

- Inspect the tray to ensure that it is free of obstructions and is loaded with supported paper.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Front Harness Assembly, PL 4.2.11 • Bypass Tray No Paper Sensor, PL 4.4.3 • MCU PWB, PL 12.1.5 • Main Harness Assembly, PL 12.3.1	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Bypass Tray No Paper Sensor operation. Perform DC330 Component Control on page 2-26 [071-100] to check the operation of the Bypass Tray No Paper Sensor. Is the Sensor working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection of the Bypass Tray No Paper Sensor. Check the connection between the Bypass Tray No Paper Sensor and MCU PWB. Are the connectors P/J4752, P/J4751, and P/J475 connected securely?	Go to Step 3	Connect the connectors P/J4752, P/J4751, and P/J475.
3.	Check the conductivity between the Bypass Tray No Paper Sensor and Relay Connector. Is the connection between P/J4752 <=> P/J4751 conducting properly?	Go to step 4.	Replace the Front Harness Assembly.
4.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4751 <=> P/J475 conducting properly?	Go to step 5.	Replace the Main Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the voltage supply (+3.3VDC) to the Bypass Tray No Paper Sensor. Measure the voltage between the MCU PWB GND <=> P/J475-1. Is there a voltage (approx. +3.3VDC) output?	Replace the Bypass Tray No Paper Sensor (REP 4.12 Bypass Tray Sensor Bracket Assembly/ No Paper Sensor) on page 4-110).	Refer to +3.3VDC Power Troubleshooting on page 2-458.

Bypass Tray Size Mismatch

The paper size in the Bypass Tray and the paper size specified for printing are different.

Applicable Fault Codes

- 024-958: Bypass Tray Size Mismatch

Initial Actions

- Inspect the tray to ensure that it is free of obstructions, is loaded with supported paper, and the Guides are adjusted correctly.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Load the correct paper into the appropriate tray.
2.	If the problem persists, go to Sensor Troubleshooting on page 2-440.
3.	If the problem persists, go to Common Job Fail on page 2-407.

ATS/ APS No Paper (IOTsc Detect)

The paper specified for printing is not loaded in the Tray.

Applicable Fault Codes

- 024-965: ATS/ APS No Paper APS/ ATS NG (No Paper)

Initial Actions

- Inspect the tray to ensure that it is free of obstructions, is loaded with supported paper, and the Guides are adjusted correctly.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Load the correct paper into the appropriate tray.
2.	If the problem persists, go to Sensor Troubleshooting on page 2-440.
3.	If the problem persists, go to Common Job Fail on page 2-407.

ATS/ APS No Destination Error

The paper specified for printing cannot be detected.

Applicable Fault Codes

- 024-966: ATS/ APS No Destination Error APS/ ATS NG (Other Than No Paper)

Initial Actions

- Inspect the tray to ensure that it is free of obstructions, is loaded with supported paper, and the Guides are adjusted correctly.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the settings.
2.	Replace the Tray.
3.	If the problem persists, go to Sensor Troubleshooting on page 2-440.
4.	If the problem persists, go to Common Job Fail on page 2-407.

Bypass Tray Stop Check

The Bypass Tray stopped running due to an obstruction.

Applicable Fault Codes

- 024-985: Bypass Tray Pause Check

Initial Actions

- Inspect the tray to ensure that it is free of obstructions, is loaded with supported paper, and the Guides are adjusted correctly.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the paper size/ paper orientation/ paper type settings and press the **Eject/Set** key.

025-596/ 025-597

HDD error has occurred due to one of the following problems.

- A NG occurred when HDD Fail Forecast of Diagnostics was executed.
- An error occurred when HDD initialization of Diagnostics was executed.

Applicable Fault Codes

- 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.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD, PL 12.4.20	• Map 10 - Rear Side, HDD, HVPS1 PWB, I/P PWB, LVPS PWB on page 7-23

Troubleshooting Procedure

Step	Actions and Questions
1.	Reconnect the HDD wiring harness connectors.
2.	If problem persists, replace the HDD Assembly (REP 12.21 Hard Disk Drive (Optional) on page 4-236).

DocuWorks Error

Syntax error, usage of undefined command, parameter error, damaged DocuWorks file, internal error of the DocuWorks Decomposer has occurred during DocuWorks Decomposer process.

Applicable Fault Code

- 026-704: XDW Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Print from the DocuWorks Viewer using the Print Driver (ART-EX, PCL, etc.).

DocuWorks Short of Memory

Insufficient memory was detected during DocuWorks Decomposer process.

Applicable Fault Code

- 026-705: XDW Short of Memory

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If the Print mode is set to High Quality, change it to Normal. If it is set to Normal, change it to High Speed.
2.	If the problem persists, increase the memory.
3.	If the problem still occurs despite increasing the memory to the maximum, use the Print Driver (ART-EX, PCL, etc.) to print from the DocuWorks Viewer.

DocuWorks Print Prohibited

The DocuWorks Decomposer has processed a DocuWorks document that is prohibited from being printed.

Applicable Fault Code

- 026-706: XDW Print Prohibited

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	As the document has a print prohibition, input the [full access password], etc. from the DocuWorks Viewer to cancel the print prohibition and then use the Print Driver (ART-EX, PCL, etc.) to print.

DocuWorks Unlock Failed

When processing a DocuWorks file that is protected by security, the password in the UI panel settings and the password specified using XPJL (set in the Contents Bridge Utility) do not match.

Applicable Fault Code

- 026-707: XDW Unlock Failed

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	The default password that is set at the device or the password that was input when attempting to print by using the Contents Bridge Utility is incorrect. Input the correct password.
2.	Input the [full access password], etc. from the DocuWorks Viewer to cancel the print prohibition and then use the Print Driver (ART-EX, PCL, etc.) to print.

S/ MIME Unsupported Cipher Decrypt Fail

The device has received an S/MIME encrypted mail that was encrypted using an unsupported encryption method.

Applicable Fault Code

- 026-710: S/ MIME Unsupported Cipher Decrypt Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	The device was instructed to send an E-mail that was encrypted by encryption method (3DES) to an S/MIME encrypted send E-mail sender.
2.	Turn Off the FIPS140 authentication mode at the device.

Remote Download File Size Error

The size of the Remote Download file that is notified from the EP Center is different from the size of the file that was actually downloaded.

Applicable Fault Code

- 026-724: Remote Download File Size Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	The file size data that is registered in the EP Center and the size of the file that is stored in the SW repository must be checked. Contact the Support Department to request for instructions.

Remote Download File Checksum Error

The checksum of the Remote Download file that is notified from the EP Center and the checksum of the file that was actually downloaded are mismatched.

Applicable Fault Code

- 026-725: Remote Download File Checksum Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	The checksum value that is registered in the EP Center and the checksum of the file that is stored in the SW repository must be checked for matching. Contact the Support Department to request for instructions.

Can't Detect Paper Size of Specified Tray

Paper Size of specified tray is unknown.

Applicable Fault Code

- 026-730: Paper Size of Specified Tray is Unknown

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the position of the Guides in the Tray that was specified for the print Job and then try again.
2.	Check the position of the Paper Size Switch.

Net Off Line

Net off line error has occurred due to the following problems.

- Communication is not available due to other failures.
- Communication is not available because panel operation is in progress.
- Communication is not available because a third party is using remote access.

Applicable Fault Code

- 027-400: Net Off Line

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Clear any failure that is indicated by other displayed messages. If the Control Panel operation is in progress, complete it. If remote access is being used, wait for the access to end.

Duplicate IP Address/ DNS Renewal Failure of Dynamic

Duplicate IP address error has occurred due to one of the following problems.

- Another device with the same IP Address as IPv6 “Stateless Auto Setting Address 1” that is set in the printer exists in the network. *Bit 0 Duplicated address at autoConfInet6Address[0] of PFRID_IPV6_PROT_AUTO. When 027-442~027-447 occur simultaneously, the smaller link number is displayed first.
- Another device with the same IP Address as “Stateless Auto Setting Address 2” that is set in the printer exists in the network. *Bit 1 Duplicated address at autoConfInet6Address[1] of PFRID_IPV6_PROT_AUTO. When 027-442~027-447 occur simultaneously, the smaller link number is displayed first.
- Another device with the same IP Address as IPv6 “Stateless Auto Setting Address 3” that is set in the printer exists in the network. *Bit 2 Duplicated address at autoConfInet6Address[2] of PFRID_IPV6_PROT_AUTO. When 027-442~027-447 occur simultaneously, the smaller link number is displayed first.

Applicable Fault Codes

- 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

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	**For Address 1**: • Change the IPv6 “Stateless Auto Setting Address 1” of this device or the IPv6 address of the other device on the network. **For Address 2**: • Change the IPv6 “Stateless Auto Setting Address 2”of this device or the IPv6 address of the other device on the network. **For Address 3**: • Change the IPv6 “Stateless Auto Setting Address 3” of this device or the IPv6 address of the other device on the network.
2.	If the problem persists, check the IPv6 address that was set by Stateless Address Auto Setting is not used by other devices.

Illegal/ Duplicate IP Address

IP address error has occurred due to one of the following problems.

- The IPv6 “Manual Setting Address” set in the printer is invalid. *Bit 13 Address assignment error at inet6Address of PFRID_IPV6_PROT_MANUAL. When 027-442~027-447 occur simultaneously, the smaller link number is displayed first.
- Another device with the same IP Address as the IPv6 “Manual Setting Address” that is set in this printer exists in the network. *Bit 14 Duplicated address at inet6Address of PFRID_IPV6_PROT_MANUAL When 027-442~027-447 occur simultaneously, the smaller link number is displayed first.

Applicable Fault Codes

- 027-445: IPv6 - Manually Set IP Address is Invalid
- 027-446: IPv6 - Automatically Set IP Address is Duplicated

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the “IPv6 (Manual Setting Address)” of the printer to the IPv6 address that can be used as the self-printer address.
2.	If the problem persists, check the following: For Illegal IP Address: • Whether IPv6 address that was automatically set as the manual address is using an invalid address. For Duplicate Address: • Whether IPv6 address that was automatically set as the manual address is using an invalid address.

Duplicate IP Address

Another device with the same IP Address as the IPv6 “Link Local Address” that is set in the printer exists in the network. *Bit 15 Duplicated address at linkLocalAddress of PFRID_IPV6_PROT_AUTO. When 027-442~027-447 occur simultaneously, the smaller link number is displayed first.

Applicable Fault Code

- 027-447: IPv6 - Link Local IP Address is Duplicated

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the IPv6 “Link Local Address” of this device or the IPv6 address of the other device on the network.
2.	If the problem persists, check whether the IPv6 address that was automatically set as the Link Local Address is not used by other devices.

Duplicate IP Address

Another device with the same IP Address as the IPv4 address that is set in the printer exists in the network.

Applicable Fault Code

- 027-452: IPv4 - IP Address is Duplicated

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the IP Address of a PC on the network. a. For manual address setting, check that the IP Address set by the customer is not used for others. b. For each of RARP, BOOTP, and DHCP setting, check the server setting environment.
2.	Go to Network Troubleshooting on page 2-459.

SMTP/ POP Server Fail for Mail I/O

SMTP or POP server error has occurred.

Applicable Fault Codes

- 027-500: SMTP Server Address Resolution Fail for Mail I/O
- 027-501: POP Server Address Resolution Fail for Mail I/O

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	**For POP Server**: • Specify the correct POP server name or specify by using the IP Address. Check with the customer's System Administrator on whether the Mail Server is already running and the environment is already used for other purposes (such as for PC).
2.	Check whether the correct SMTP Server Address is reflected in the device setting list as follows: 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 (name: aaa.co.jp), 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 problem persists, go to Network Troubleshooting on page 2-459.

POP Authentication Fail for Mail I/O

SMTP or POP server error has occurred.

Applicable Fault Code

- 027-502: POP Authentication Fail for Mail I/O

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Specify the correct POP Server authentication information.
2.	If the problem persists, go to Network Troubleshooting on page 2-459.

SMB Protocol Error 4-009

The specified password is invalid.

Applicable Fault Code

- 027-549: SMB Protocol Error (4-009)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Confirm the network password is correct.

SMB Protocol Error 4-024

Host not found.

Applicable Fault Code

- 027-564: SMB Protocol Error (4-024)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether the Authentication Server and the device is able to communicate through the network. (Check for communication through port 137 (UDP), port 138 (UDP), and port 139 (TCP) by checking the network cable, the TCP/IP settings, and etc.)
2.	Check that SMB (TCP/IP) is already activated at the device. a. Type the network address of the device in a web browser to display the CentreWare Internet Services remote UI screen. b. Select the [Properties] tab and select [Port Settings] from the properties list in the left frame. c. Put a check mark on [Enabled] for [SMB] and check that the [TCP/IP] for [Transport Protocol] also has a check mark.
3.	If the Authentication Server is connected to the printer via a different subnet, check that the device has been set to be able to resolve the address of the Authentication Server. a. Enter the System Administrator screen on the device and check by Tools > System Settings > Connectivity & Network Setup > Remote Authentication / Directory Service > SMB Server Settings > SMB Server Setup. If By Domain &Server Names is set and the Server is specified by the NetBIOS Name. Check whether the Authentication Server and the device is able to resolve the address via WINS Server. If By Domain &Server Names is set and the Server is specified by the FQDN Name. Check whether the Authentication Server and the device is able to resolve the address via DNS Server.
4.	Check whether the NetBIOS over TCP/IP is enabled at the Authentication Server settings. a. Right-click the **My Network Places** icon and select **Properties**. b. Right-click the **Local Area Connection** icon and select **Properties**. c. Select the **General** tab in the **Local Area Connection Properties** window, select **Internet Protocol (TCP/IP)**, and then click the **Properties** button. d. Click the **Advanced** button in the **Internet Protocol (TCP/IP) Properties** window. e. Select the **WINS** tab in the **Advanced TCP/IP Settings** window and check the **NetBIOS setting**.

Troubleshooting Procedure (Continued)

Step	Actions and Questions
5.	Check whether communication via port numbers 137, 138, and 139 has been blocked at the internet connection firewall (if the Authentication Server is running WinXP). a. Right-click the **My Network Places** icon and select **Properties**. b. Right-click the **Local Area Connection** icon and select **Properties**. c. Select the **Advanced** tab in the **Local Area Network Properties** window and click the **Setting** button. d. Select the **Services** tab in the **Advanced** window and check that communication via 137 (UDP), 138 (UDP), and 139 (TCP) is allowed.

SMB Protocol Error 4-025, 4-038

Communication error has occurred.

Applicable Fault Codes

- 027-565: SMB Protocol Error (4-025)
- 027-578: SMB Protocol Error (4-038)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check whether the Authentication Server and the device is able to communicate through the network. (Check for communication through port 137 (UDP), port 138 (UDP), and port 139 (TCP) by checking the network cable, the TCP/IP settings, and etc.)

SMB Protocol Error 4-026

The library has not been initialized.

Applicable Fault Code

- 027-566: SMB Protocol Error (4-026)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	In the Port Status screen under the **Properties** tab of CentreWare Internet Services, check that SMB (TCP/IP) is enabled.

027-572/ 027-573/ 027-574/ 027-576

SMB protocol error has occurred due to one of the following problems.

- Invalid parameter
- Invalid character code
- Invalid data size
- Invalid Domain data size

Applicable Fault Codes

- 027-572: SMB Protocol Error (4-032)
- 027-573: SMB Protocol Error (4-033)
- 027-574: SMB Protocol Error (4-034)
- 027-576: SMB Protocol Error (4-036)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Confirm the network settings.

SMB Protocol Error 4-044

SMBCL_NG_INV_SECMODE The authentication server is operating under a common security mode.

Applicable Fault Code

- 027-584: SMB Protocol Error (4-044)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	The Authentication Server might have been set to Win95/Win98/Me. Set the Authentication Server might have to a Windows other than Win95/Win98/Me.

Network Cable Disconnected

During the network cable disconnection check before the Login to Remote Account operation, it was detected that the cable is disconnected.

Applicable Fault Code

- 027-701: Cable Disconnection Detected at Login to Remote Account

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the disconnected cable and reconnect it.

Ext Server / Server Host Not Found

Application cannot be found error has occurred due to one of the following problems:

- Either the specified server for linking to the application cannot be found or the DNS could not be resolved during Web service interface. An error occurred during DNS resolution for FQDN (HTTP/HTTPS) because no DNS Server is set up.
- The system attempted to link to the application during Web service interface but the host replied that the application cannot be found. Either the DS side Web UI at the link to application destination does not exist or the one time password that is embedded in the instruction does not have the access rights.

Applicable Fault Codes

- 027-720: Link to Application During Web Service Interface - Server Not Found
- 027-721: Link to Application During Web Service Interface - Destination Not Found

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check that the DNS server address is set properly. Check that the PC running the linked application (CWFS etc.) is registered in DNS.
2.	If the problem persists, go to Common Job Fail on page 2-407.

Ext Srv. Timeout Fail

A request for link to application is issued from the printer during Web service interface, but it does not receive a response within the specified time (default: 60 [s]).

Applicable Fault Code

- 027-722: Link to Application During Web Service Interface - Connection Timeout

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	If a number of documents is specified for scanning, scan one document and store it.
2.	When scanning and storing are successful, change the Link to Application timeout value. If scanning and storing are not successful, go to step 3.
3.	Check that the scan document can be uploaded from the PC browser. When uploading is successful, change the Link to Application timeout value.
4.	If the problem persists, go to Common Job Fail on page 2-407.

Ext Srv. Authentication Fail

A request for link to application is issued from the printer during Web service interface, but authentication has failed because the one-time password that is set in the instructions sent from DocuShare has expired.

Applicable Fault Code

- 027-723: Link to Application During Web Service Interface - Authentication Failure

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the user name and password to be entered for creating a job flow. (Currently, this failure does not occur because CWFS does not support authentication.)
2.	If the problem persists, go to Common Job Fail on page 2-407.

027-724/ 027-725/ 027-726

A link to application error has occurred due to one of the following problems.

- The link to application has failed (due to any cause other than service not found, timeout, or authentication failure) during Web service interface. The HTTP Status Code was detected to be 500. An invalid User ID registration is detected.
- Job operation has failed at the destination for link to application during Web service interface. An error occurred when a job is “paused”, “resumed”, or “canceled” from the Control Panel.
- The status at the destination of the link to application is unknown during Web service interface.

Applicable Fault Codes

- 027-724: Link to Application During Web Service Interface - Access Failure
- 027-725: Link to Application During Web Service Interface - Job Operation Failure
- 027-726: Link to Application During Web Service Interface - Unknown Job Status

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check that the Link to Application (CWFS) is working correctly. If ok, check the log.
2.	If the problem persists, go to Common Job Fail on page 2-407.

Ext Srv. Req Invalid Params

The parameter for the link to application is incorrect during Web service interface. The printer failed to send a link to application request due to damaged job flow, etc.

Applicable Fault Code

- 027-727: Link to Application During Web Service - Invalid Parameter

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the parameters for creating a job flow. If the problem persists, go to Common Job Fail on page 2-407.

Job Template Analysis Error

An error was detected when analyzing the given instruction.

Applicable Fault Code

- 027-751: Instruction Analysis Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Re-examine the contents of the instruction.
2.	If the problem still persists, go to Common Job Fail on page 2-407.

Mandatory User Not Entered

With the required user entry not entered, the instruction to start the job was given.

Applicable Fault Code

- 027-752: Mandatory User Not Entered

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Do not link the box to the instruction that requires user entry.
2.	Set preset values for the items in the instruction requiring user entry.
3.	If the problem still persists, go to Common Job Fail on page 2-407.

Job Flow Service Request Disabled

Job is executed by instruction when the service is disabled.

Applicable Fault Code

- 027-753: Invalid Instruction Service

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Enable the service.
2.	If the problem still persists, go to Common Job Fail on page 2-407.

Job Flow Service File Signature Setting Mismatch

When performing signature setting using XDW or PDF in an instruction, the setting in the instruction is specified as “Default” while the system data is set as “Custom”. Or, the setting in the instruction is not “Default” and it is different from the system data setting.

Applicable Fault Code

- 027-754: File Signature Settings Mismatch in Instruction

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the system data setting of the XDW/PDF signature and the signature setting that is specified in the instruction. If the system data setting is different from the setting in the instruction, either change the instruction or change the system data.
2.	If the problem persists, go to Common Job Fail on page 2-407.

Web Print Timeout

Although On-demand Print due to print request from this machine restarted and instructed the machine to print, the time “since the print was requested until the printing actually started” has exceeded the system data [= On-Demand Print Duration]. One of the causes for this error is that on-demand print was instructed for multiple documents.

Applicable Fault Code

- 027-761: Although a Web Print job was received, printing is unable to start within the [On-Demand Print Duration] (the [On-Demand Print Duration] is a KO system data)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform any one of the following actions: • If on-demand print for multiple documents was instructed using the external access function, reduce the number of documents before retrying it. • If the problem persists, enter the System Administrator mode and select System Settings > System Settings > Machine Clock / Timers > On-Demand Print Duration > to either extend the time or set it to 0. Note: [# Supplement #] When using the external access function to instruct printing of multiple documents by on-demand print, the printer does not take the print processing time into consideration until the last document is received. Therefore, for cases of large volume documents or complicated documents that require long data processing time, the printer may issue timeout even before receiving the last document. Set the validity time according to the document format to be printed.

Illegal Web Print Job Ticket

Although on-demand job was instructed to the printer using the external access function, the specified job ticket has the following inaccuracies.

- The job ticket is abnormally overwritten due to a software error in the printer.
- The job ticket is abnormally overwritten due to a bug in the external server when the job was sent.
- The job ticket is abnormally overwritten due to network problems.
- The job ticket was intentionally tampered with.

Applicable Fault Code

- 027-762: Although a Web Print job was received, the attached job execution ticket is incorrect.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Reprint the job.

Auditron - Cannot Verify User

When the comparison between the remote accounting server and the user information cannot be performed.

Applicable Fault Code

- 027-763: Auditron -Cannot Verify User

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Make sure that the external Accounting Server is working properly. Repair any network problems. Connect the cable properly. Set the device so that it can communicate properly with the external Accounting Server.

F/W Error

IM software control error detected.

Applicable Fault Code

- 041-310: IM Logic Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the firmware version of the MCU PWB. Is it the latest MCU PWB firmware version?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Update firmware (Firmware Update on page 6-22).

I/D Error

I/D error has occurred due to one of the following problems.

- The serial number is mismatched.
- The XPC is mismatched.
- The data is mismatched.

Applicable Fault Codes

- 041-318: IOT Serial Number Fail
- 041-321: XPC Fail
- 041-322: IOT Data Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

IOT NV-RAM Error

NVM (EEPROM) data error. (The specific values are not in their specified addresses.)

Applicable Fault Code

- 041-340: MCU NVM (EEPROM) Data Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • EEPROM PWB, PL 12.1.18	• Map 8 - Left Side, AC PWB, MCU PWB on page 7-21

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the connection of the EEPROM (REP 12.6 EEPROM PWB on page 4-210). Is the EEPROM connected to the MCU PWB properly?	Go to step 2.	Reinstall the EEPROM.
2.	Replace the EEPROM PWB (REP 12.6 EEPROM PWB on page 4-210). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

300K Kit Error

The print volume (PV) of the Dispense Motor, Trickle Motor, or Registration Roller has reached the specified value (A4 LEF imp = 300 kPV) which indicates that the lifespan is approaching the end.

Applicable Fault Code

- 041-401: 300K Kit Quality Life End (operation can still continue) (quality lifespan has ended) (ERU)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Roller (Registration Chute Assembly), PL 5.1.1 • Developer Housing Assemblies (C/ M/ Y/ K), PL 8.1.5 - PL 8.1.8 • Waste Auger Assembly (Trickle Guide), PL 8.1.10 • Dispense Motor Assembly, 8.1.15	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC135 HFSI on page 2-19.
2.	Reset the 300K Kit (Chain-Link 950-876).

(K) Drum Motor Failure

The change of the port status at the failure of the Drum Motor is always monitored.

Applicable Fault Code

- 042-323: Drum K Motor Drive Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (K), PL 6.1.4 • PR Harness Assembly (K), PL 11.1.23 • PR Drive Assembly Kit, PL 11.1.99 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1	• Drive 1 on page 7-43

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation state of the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (K) installed properly, with no contamination at the contact points and in contact with the left and right guides?	Go to step 2.	Clean the contact points. Reinstall the Imaging Unit (K).
2.	Check the Drum Motor (K) operation. Perform DC330 Component Control on page 2-26 [071-005] to check the rotation of the Drum Motor (K). Is the Motor working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 3.
3.	Check the installation of the Drum Motor (K) (REP 11.8 PR Drive Assembly (K) on page 4-200). Manually rotate the Drum Motor (K). Does the Motor rotate?	Reinstall the Drum Motor (K).	Go to step 4.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the connections between the Drum Motor (K) and MCU PWB, as well as between the Drum Motor (K) and LVPS PWB. Are the connectors P/J472, P/J4723, P/J4724, P/J524, P/J5246, and P/J5243 connected securely?	Go to step 5.	Re-connect the connectors P/J472, P/J4723, P/J4724, P/J524, P/J5246, and P/J5243.
5.	Check the conductivity between the Drum Motor (K) and Relay Connector. Are the connections between P/J4724 <=> P/J4723 and between P/J5243 <=> P/J5246 conducting properly?	Go to step 6.	Replace the PR Harness Assembly (K).
6.	Check the conductivity between the Relay Connector and LVPS PWB. Is the connection between P/J5246 <=> P/J524 conducting properly?	Go to step 7.	Replace the Main Harness Assembly.
7.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4723 <=> P/J472 conducting properly?	Go to step 8.	Replace the Main Harness Assembly.
8.	Check the voltage supply (+3.3VDC) to the Drum Motor (K). Measure the voltage between the MCU PWB GND <=> P/J472-16. Is there a voltage (approx. +3.3VDC) output?	Go to step 9.	Refer to +3.3VDC Power Troubleshooting on page 2-458.
9.	Check the voltage supply (+24VDC) to the Drum Motor K. Measure the voltage between LVPS PWB GND <=> P/J524-5. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Drum Motor (K) (REP 11.8 PR Drive Assembly (K) on page 4-200).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

HVPS2 Fan Failure

The HVPS2 Fan is having rotation error.

Applicable Fault Code

- 042-329: HVPS2 Fan Fail

Initial Actions

- Rotate the Fan manually to check for binding.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HVPS2 Fan, PL 12.1.3 • MCU PWB, PL 12.1.15 • Top Harness Assembly, PL 12.2.4 • Main Harness Assembly, PL 12.3.1	• Transfer on page 7-54

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the HVPS2 Fan operation. Perform DC330 Component Control on page 2-26 [042-005] to check the rotation of the HVPS2 Fan. Is the Fan working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the installation of the HVPS2 Fan (REP 12.2 HVPS2 Fan on page 4-203). Manually rotate the HVPS2 Fan. Does the Fan rotate?	Reinstall the HVPS2 Fan.	Go to step3.
3.	Check the connection between the HVPS2 Fan and MCU PWB. Are the connectors P/J468, P/J4681, and P/J4683A connected securely?	Go to step 4.	Connect the connectors P/J468, P/J4681, and P/J4683A.
4.	Check the conductivity between the HVPS2 Fan and Relay Connector. Is the connection between P/J4683A <=> P/J4681 conducting properly?	Go to step 5.	Replace the Top Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4681 <=> P/J468 conducting properly?	Replace the HVPS2 Fan (REP 12.2 HVPS2 Fan on page 4-203).	Replace the Top Harness Assembly.

Developer Fan (Process Fan 1) Failure

The Developer Fan (Process 1 Fan) is having rotation error.

Applicable Fault Code

- 042-335: Process Fan 1 Failure

Initial Actions

- Rotate the Fan manually to check for binding.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Developer Fan, PL 12.2.16 • Main Harness Assembly, PL 12.3.1	• Electrical on page 7-53

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Developer Fan operation. Perform DC330 Component Control on page 2-26 [042-002] to check the operation of the Developer Fan. Is the Belt Retract Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the installation of the Developer Fan (REP 12.14 Developer Fan on page 4-223). Manually rotate the Developer Fan. Does the Fan rotate?	Reinstall the Developer Fan.	Go to step 3.
3.	Check the connection between the Developer Fan and MCU PWB. Are the connectors P/J465 and P/J4652B connected securely?	Go to step 4.	Connect the connectors P/J465 and P/J4652B.
4.	Check the conductivity between the Developer Fan and MCU PWB. Is the connection between P/J4652B <=> P/J465 conducting properly?	Replace the Developer Fan (REP 12.14 Developer Fan on page 4-223).	Replace the Main Harness Assembly.

(Y/ M/ C) Drum Motor Failure

The port status changed when the Drum Motor has an error. This is always monitored.

Applicable Fault Code

- 042-347: Drum YMC Motor Drive Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Drum Motor (PR Drive Assembly) (Y/ M/ C), PL 11.1.2 • PR Harness Assembly (Y/ M/ C), PL 11.1.22 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Developer Fan, PL 12.2.16 • Main Harness Assembly, PL 12.3.1	• Drive 1 on page 7-43

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation state of the Imaging Unit (Y / M / C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y / M / C) installed properly, with no contamination at the contact points and it is in contact with the left and right Guides?	Go to step 2.	Clean the contact points. Reinstall the Imaging Unit (Y / M / C).
2.	Check the Drum Motor (Y / M / C) operation. Perform DC330 Component Control on page 2-26 [071-001] to check the rotation of the Drum Motor (Y / M / C). Is the Drum working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 3.
3.	Check the installation of the Drum Motor (Y / M / C) (REP 11.1 PR Drive Assembly (Y/ M/ C) on page 4-185). Manually rotate the Drum Motor (Y / M / C). Doe the Motor rotate?	Reinstall the Drum Motor (Y / M / C).	Go to step 4.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the connections between the Drum Motor (Y / M / C) and MCU PWB, as well as between the Drum Motor (Y / M / C) and LVPS PWB. Are the connectors P/J472, P/J4721, P/J4722, P/J524, P/J5245, and P/J5244 connected securely?	Go to step 5.	Connect the connectors P/J472, P/J4721, P/J4722, P/J524, P/J5245, and P/J5244.
5.	Check the conductivity between the Drum Motor (Y / M / C) and Relay Connector. Are the connections between P/J4722 <=> P/J4721 and between P/J5244 <=> P/J5245 conducting properly?	Go to step 6.	Replace the PR Harness Assembly (Y/ M/ C).
6.	Check the conductivity between the Relay Connector and LVPS PWB. Is the connection between P/J5245 <=> P/J524 conducting properly?	Go to step 7.	Replace the Main Harness Assembly.
7.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4721 <=> P/J472 conducting properly?	Go to step 8.	Replace the Main Harness Assembly.
8.	Check the voltage supply (+3.3VDC) to the Drum Motor (Y / M / C). Measure the voltage between the MCU PWB GND <=> P/J472-8. Is there a voltage (approx. +3.3VDC) output?	Go to step 9.	Refer to +3.3VDC Power Troubleshooting on page 2-458.
9.	Check the voltage supply (+24VDC) to the Drum Motor (Y / M / C). Measure the voltage between the LVPS PWB GND <=> P/J524-3. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Drum Motor (Y / M / C) (REP 11.1 PR Drive Assembly (Y/ M/ C) on page 4-185).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

LVPS Fan Failure

The LVPS Fan is not rotating up to the specified rotation count.

Applicable Fault Code

- 042-398: LVPS Fan Fail

Initial Actions

- Rotate the Fan manually to check for binding.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • LVPS Fan, PL 12.2.22 • Main Harness Assembly, PL 12.3.1	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the LVPS Fan operation. Perform DC330 Component Control on page 2-26 [042-003] to check the operation of the LVPS Fan. Is the Belt Retract Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the installation of the LVPS Fan (REP 12.16 LVPS Fan Assembly on page 4-226). Manually rotate the LVPS Fan. Is the Fan working properly?	Reinstall the LVPS Fan.	Go to step 3.
3.	Check the connection between the LVPS Fan and LVPS PWB. Are the connectors P/J523 and P/J5231 connected securely?	Go to step 4.	Connect the connectors P/J523 and P/J5231.
4.	Check the connection between the LVPS PWB and MCU PWB. Are the connectors P/J527 and P/J451 connected securely?	Go to step 5.	Connect the connectors P/J527 and P/J451.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the conductivity between the LVPS Fan and LVPS PWB. Is the connection between P/J523 <=> P/J5231 conducting properly?	Go to step 6.	Replace the Main Harness Assembly.
6.	Check the conductivity between the LVPS PWB and MCU PWB. Is the connection between P/J527 <=> P/J451 conducting properly?	Go to step 7.	Replace the Main Harness Assembly.
7.	Check the voltage supply (+24VDC) to the LVPS Fan. Perform DC330 Component Control on page 2-26 [042-003]. Measure the voltage between the LVPS PWB GND <=> P/J523-1. Is there a voltage (approx. +24VDC) output?	Replace the LVPS Fan (REP 12.16 LVPS Fan Assembly on page 4-226).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

I/F Failure Start Image Marking Timeout Error

Communication failure has occurred due to one of the following problems:

- Image preparation failure of the Controller
- Communication failure between the MCU and the Controller

Applicable Fault Codes

- 045-310: Image Ready NG
- 045-311: Controller Comm Fail (IOT Detect)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1 • Image Processor PWB, PL 12.4.1	• Overview Diagram (1 of 3) on page 7-32

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the connection between the I/P PWB and MCU PWB. Are the connectors P/J471 and P/J470 connected securely?	Go to step 2.	Connect the connectors P/J471 and P/J470.
2.	Check the conductivity between the I/P PWB and MCU PWB. Is the connection between P/J471 <=> P/J470 conducting properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206). Go to step 3.	Replace the Main Harness Assembly.
3.	Does the error persist?	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).	Troubleshooting complete.

ROS Failure

Laser error has occurred due to one of the following problems.

- The SOS is unstable (rotation is uneven).
- The laser is Off.
- The ROS did not become READY due to any of the above.
- When LD Alarm K occurs. If LD deterioration is detected, it becomes a Fail.
- After the Polygon Motor has activated, it was not judged to have reached stable rotation even after the specified time has passed.

Applicable Fault Codes

- 060-310: Warm Up Fail
- 061-340: ROS LD FAIL K
- 061-346: SOS INT-Q Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• ROS Assembly (Laser Unit), PL 7.1.1 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1	• Laser Unit (ROS) on page 7-47

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the connections between the Laser Unit and MCU PWB, as well as between the Laser Unit and LVPS PWB. Are the connectors P/J4691, P/J469, P/J5251, and P/J525 connected securely?	Go to step 2.	Connect the connector P/J4691, P/J469, P/J5251, and P/J525.
2.	Check the conductivity of the Main Harness Assembly. Are the connections between P/J4691 <=> P/J469 and between P/J5251 <=> P/J525 conducting properly?	Go to step 3.	Replace the Main Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the voltage supply (+5VDC) to the Laser Unit. Measure the voltage between the LVPS PWB GND <=> P/J525-1. Is there a voltage (approx. +5VDC) output? Close the Interlock Switch and check.	Go to step 4.	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211)
4.	Check the voltage supply (+24VDC) to the Laser Unit. Measure the voltage between the MCU PWB GND <=> P/J469-3. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Go to step 5.	Refer to +24VDC Power Troubleshooting on page 2-455.
5.	Check the voltage supply (+3.3VDC) to the Laser Unit. Measure the voltage between the MCU PWB GND <=> P/J469-8. Is there a voltage (approx. +3.3VDC) output?	Go to step 6.	Refer to +3.3VDC Power Troubleshooting on page 2-458.
6.	Replace the Laser Unit (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

Tray 1 Miss Feed Jam/ Option Regi On Jam

After a paper was fed from Tray 1, it did not reach the Registration Sensor.

Applicable Fault Code

- 071-101: Tray 1 Miss Feed Jam

Initial Actions

- Check the condition of the paper in tray.
- Check that the media is supported from tray.
- Check that the Paper Guides are set correctly.
- Check appropriate tray jam clearance door.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Turn Roller Assembly, PL 2.2.1 • Feed Roller Clutch, PL 2.2.8 • Tray 1 Feed Roller Kit, PL 2.2.99 • Registration Sensor, PL 5.1.3 • Bypass Tray Turn Roller, PL 5.1.8 • Turn Roller Clutch, PL 5.1.9 • Paper Handling Motor (P/H Drive Assembly), PL 11.1.19 • MCU PWB, PL 12.1.15 • Paper Jam Sensor, PL 15.2.3 • Feeder PWB, PL 15.2.33	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of Tray 1. Is Tray 1 installed properly?	Go to step 2.	Reinstall Tray 1.
2.	Check the paper transport path. Is there any debris found on the paper transport path?	Remove the debris from the paper transport path.	Go to step 3.
3.	Check the installation of the Feed Rollers (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54). Are the Feed Rollers installed properly?	Go to step 4.	Reinstall the Feed Rollers.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Feed Rollers. Are the Feed Rollers deformed or worn out?	Replace the Feed Rollers (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54).	Go to step 5.
5.	Check the Registration Sensor operation. Perform DC330 Component Control on page 2-26 [071-102] to check the operation of the Registration Sensor. Is the Registration Sensor operating normally?	Go to step 6.	Go to Registration Sensor on page 2-440.
6.	Check the Turn Roller Clutch operation. Perform DC330 Component Control on page 2-26 [071-016] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 7.	Go to Turn Roller Clutch on page 2-424.
7.	Check the Feed Roller Clutch operation. Perform DC330 Component Control on page 2-26 [071-015] to check the operation of the Feed Roller Clutch. Is the Feed Roller Clutch operating properly?	Go to step 8.	Go to Feed Roller Clutch on page 2-427.
8.	Check the Paper Handling (P/H) Motor operation. Perform DC330 Component Control on page 2-26 [071-009] to check the operation of the P/H Motor. Is the P/H Motor operating normally?	• When the Optional Tray is not installed, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206). • When the Optional Tray is installed, go to step 9.	Go to Paper Handling Motor on page 2-435.
9.	Check the Paper Jam Sensor operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-125] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Paper Jam Sensor on page 2-443.

Tray 2 Miss Feed Jam

After a paper was fed from Tray 2, it did not reach the Tray 2 Paper Jam Sensor.

Applicable Fault Code

- 072-101: Tray 2 Miss Feed Jam

Initial Actions

- Check the condition of the paper in tray.
- Check that the media is supported from tray.
- Check that the Paper Guides are set correctly.
- Check appropriate tray jam clearance door.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Paper Jam Sensor, PL 15.2.3 • Feed Roller Clutch, PL 15.2.13 • Turn Roller Assembly, PL 15.2.24 • Turn Roller Clutch, PL 15.2.25 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Feeder PWB, PL 15.2.33 • Option Tray 2/ 3/ 4 Feed Roller Kit, PL 15.2.99 • Retard Roller, PL 15.3.12	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of Tray 2. Is Tray 2 installed properly?	Go to step 2.	Reinstall Tray 2.
2.	Check the paper transport path. Is there any debris found on the paper transport path?	Remove the debris from the paper transport path.	Go to step 3.
3.	Check the installation of the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276). Are the Feed Rollers installed properly?	Go to step 4.	Reinstall the Feed Rollers.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Feed Rollers. Are the Feed Rollers deformed or worn out?	Replace the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).	Go to step 5.
5.	Check the Paper Jam Sensor operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-125] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating normally?	Go to step 6.	Go to Paper Jam Sensor on page 2-443.
6.	Check the Turn Roller Clutch operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-029] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 7.	Go to Turn Roller Clutch (Tray 2/ 3/ 4) on page 2-425.
7.	Check the Feed Roller Clutch operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-026] to check the operation of the Feed Roller Clutch. Is the Feed Roller Clutch operating properly?	Go to step 8.	Go to Feed Roller Clutch (Tray 2/ 3/ 4) on page 2-428.
8.	Check the Feeder Motor operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-018] to check the operation of the Feeder Motor. Is the Feeder Motor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Option Feeder Mode Error on page 2-451.

Path 2 Sensor On Jam

After the Tray 3 Paper Jam Sensor has detected a paper, the paper did not reach the Tray 2 Paper Jam Sensor.

Applicable Fault Code

- 072-103: Path 2 Sensor On Jam

Initial Actions

- Check the paper path for debris.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Paper Jam Sensor, PL 15.2.3 • Turn Roller Assembly, PL 15.2.24 • Turn Roller Clutch, PL 15.2.25 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Feeder PWB, PL 15.2.33 • Option Tray 2/ 3/ 4 Feed Roller Kit, PL 15.2.99	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper transport path. Is there any debris on the paper transport path?	Remove the debris from the paper transport path.	Go to step 2.
2.	Check the installation of the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276). Are the Feed Rollers installed properly?	Go to step 3.	Reinstall the Feed Rollers.
3.	Check the Feed Rollers. Are the Feed Rollers deformed or worn out?	Replace the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).	Go to step 4.
4.	Check the Paper Jam Sensor operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-125] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating normally?	Go to step 5.	Go to Paper Jam Sensor on page 2-443.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the Turn Roller Clutch operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-029] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 6.	Go to Turn Roller Clutch (Tray 2/ 3/ 4) on page 2-425.
6.	Check the Feeder Motor operation (Tray 2). Perform DC330 Component Control on page 2-26 [071-018] to check the operation of the Feeder Motor. Is the Feeder Motor operating normally?	Go to step 7.	Go to Option Feeder Mode Error on page 2-451.
7.	Check the Paper Jam Sensor operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-126] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Paper Jam Sensor on page 2-443.

Tray 2 Motor Fail

Option Feeder 2 Motor error.

Applicable Fault Code

- 072-310: Tray 2 Motor Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Option Left Feeder Harness Assembly, PL 15.2.31 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions
1.	Refer to Option Feeder Motor on page 2-439.

Tray 2 Mode Fail

Tray 2 DL mode has activated.

Applicable Fault Code

- 072-312: Tray 2 Mode Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Feeder PWB, PL 15.2.33	

Troubleshooting Procedure

Step	Actions and Questions
1.	Refer to Option Feeder Mode Error on page 2-451.

Tray 3 Miss Feed Jam

After a paper was fed from Tray 3, it did not reach the Tray 3 Paper Jam Sensor.

Applicable Fault Code

- 073-101: Tray 3 Miss Feed Jam

Initial Actions

- Check the condition of the paper in tray.
- Check that the media is supported from tray.
- Check that the Paper Guides are set correctly.
- Check appropriate tray jam clearance door.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Paper Jam Sensor, PL 15.2.3 • Feed Roller Clutch, PL 15.2.13 • Turn Roller Assembly, PL 15.2.24 • Turn Roller Clutch, PL 15.2.25 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Feeder PWB, PL 15.2.33 • Option Tray 2/ 3/ 4 Feed Roller Kit, PL 15.2.99	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of Tray 3. Is Tray 3 installed properly?	Go to step 2.	Reinstall Tray 3.
2.	Check the paper transport path. Is there any debris on the paper transport path?	Remove the debris from the paper transport path.	Go to step 3.
3.	Check the installation of the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276). Are the Feed Rollers installed properly?	Go to step 4.	Reinstall the Feed Rollers.
4.	Check the Feed Rollers. Are the Feed Rollers deformed or worn out?	Replace the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).	Go to step 5.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the Paper Jam Sensor operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-126] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating normally?	Go to step 6.	Go to Paper Jam Sensor on page 2-443.
6.	Check the Turn Roller Clutch operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-030] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 7.	Go to Turn Roller Clutch (Tray 2/ 3/ 4) on page 2-425.
7.	Check the Feed Roller Clutch operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-027] to check the operation of the Feed Roller Clutch. Is the Feed Roller Clutch operating properly?	Go to step 8.	Go to Feed Roller Clutch (Tray 2/ 3/ 4) on page 2-428.
8.	Check the Feeder Motor operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-020] to check the operation of the Feeder Motor. Is the Feeder Motor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Option Feeder Mode Error on page 2-451.

Path 3 Sensor On Jam

After the Tray 4 Paper Jam Sensor has detected a paper, the paper did not reach the Tray 3 Paper Jam Sensor.

Applicable Fault Code

- 073-103: Path 3 Sensor On Jam

Initial Actions

- Check the paper path for debris.
- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Paper Jam Sensor, PL 15.2.3 • Turn Roller Assembly, PL 15.2.24 • Turn Roller Clutch, PL 15.2.25 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Feeder PWB, PL 15.2.33 • Option Tray 2/ 3/ 4 Feed Roller Kit, PL 15.2.99	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper transport path. Is there any debris on the paper transport path?	Remove the debris from the paper transport path.	Go to step 2.
2.	Check the installation of the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276). Are the Feed Rollers installed properly?	Go to step 3.	Reinstall the Feed Rollers.
3.	Check the Feed Rollers. Are the Feed Rollers deformed or worn out?	Replace the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).	Go to step 4.
4.	Check the Paper Jam Sensor operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-126] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating normally?	Go to step 5.	Go to Paper Jam Sensor on page 2-443.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the Turn Roller Clutch operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-030] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 6.	Go to Turn Roller Clutch (Tray 2/ 3/ 4) on page 2-425.
6.	Check the Feeder Motor operation (Tray 3). Perform DC330 Component Control on page 2-26 [071-020] to check the operation of the Feeder Motor. Is the Feeder Motor operating normally?	Go to step 7.	Go to Option Feeder Mode Error on page 2-451.
7.	Check the Paper Jam Sensor operation (Tray 4). Perform DC330 Component Control on page 2-26 [071-127] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Paper Jam Sensor on page 2-443.

Tray 3 Motor Fail

Option Feeder 3 Motor error.

Applicable Fault Code

- 073-310: Tray 3 Motor Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Option Left Feeder Harness Assembly, PL 15.2.31 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions
1.	Refer to Option Feeder Motor on page 2-439.

Tray 3 Mode Fail

Tray 3 DL mode has activated.

Applicable Fault Code

- 073-311: Tray 3 Mode Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Feeder PWB, PL 15.2.33	

Troubleshooting Procedure

Step	Actions and Questions
1.	Refer to Option Feeder Mode Error on page 2-451.

Tray 4 Miss Feed Jam

After a paper was fed from Tray 4, it did not reach the Tray 4 Paper Jam Sensor.

Applicable Fault Code

- 074-101: Tray 4 Miss Feed Jam

Initial Actions

- Check the condition of the paper in tray.
- Check that the media is supported from tray.
- Check that the Paper Guides are set correctly.
- Check appropriate tray jam clearance door.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Paper Jam Sensor, PL 15.2.3 • Feed Roller Clutch, PL 15.2.13 • Turn Roller Assembly, PL 15.2.24 • Turn Roller Clutch, PL 15.2.25 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Feeder PWB, PL 15.2.33 • Option Tray 2/ 3/ 4 Feed Roller Kit, PL 15.2.99	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of Tray 4. Is Tray 4 installed properly?	Go to step 2.	Reinstall Tray 4.
2.	Check the paper transport path. Is there any debris on the paper transport path?	Remove the debris from the paper path transport.	Go to step 3.
3.	Check the installation of the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276). Are the Feed Rollers installed properly?	Go to step 4.	Reinstall the Feed Rollers.
4.	Check the Feed Rollers. Are the Feed Rollers deformed or worn out?	Replace the Feed Rollers (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).	Go to step 5.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the Paper Jam Sensor operation Perform DC330 Component Control on page 2-26 [071-127] to check the operation of the Paper Jam Sensor. Is the Paper Jam Sensor operating properly?	Go to step 6.	Go to Paper Jam Sensor on page 2-443.
6.	Check the Turn Roller Clutch operation (Tray 4) Perform DC330 Component Control on page 2-26 [071-031] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 7.	Go to Turn Roller Clutch (Tray 2/ 3/ 4) on page 2-425.
7.	Check the Feed Roller Clutch operation (Tray 4) Perform DC330 Component Control on page 2-26 [071-028] to check the operation of the Feed Roller Clutch. Is the Feed Roller Clutch operating properly?	Go to step 8.	Go to Feed Roller Clutch (Tray 2/ 3/ 4) on page 2-428.
8.	Check the Feeder Motor operation (Tray 4) Perform DC330 Component Control on page 2-26 [071-022] to check the operation of the Feeder Motor. Is the Feeder Motor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Option Feeder Mode Error on page 2-451.

Tray 4 Motor Fail

Option Feeder 4 Motor error.

Applicable Fault Code

- 074-310: Tray 4 Motor Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Option Left Feeder Harness Assembly, PL 15.2.31 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions
1.	Refer to Option Feeder Motor on page 2-439.

Tray 4 Mode Fail

Tray 4 DL mode has activated.

Applicable Fault Code

- 074-311: Tray 4 Mode Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Feeder PWB, PL 15.2.33	

Troubleshooting Procedure

Step	Actions and Questions
1.	Refer to Option Feeder Mode Error on page 2-451.

Bypass Tray Miss Feed Jam

After a paper was fed from the Bypass Tray, it did not reach the Registration Sensor.

Applicable Fault Code

- 075-100: Bypass Tray Miss Feed Jam

Initial Actions

- Check the condition of the paper in tray.
- Check that the media is supported from tray.
- Check that the Paper Guides are set correctly.
- Check appropriate tray jam clearance door.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Retard Roller (Separator Retard Holder Assembly), PL 3.1.8 • Bypass Tray Feed Solenoid, PL 4.3.10 • Bypass Tray Feed Roller Assembly, PL 4.4.14 • Registration Sensor, PL 5.1.3 • Bypass Tray Turn Roller, PL 5.1.8 • Turn Clutch Assembly, PL 5.1.9 • Paper Handling Motor (P/H Drive Assembly), PL 11.1.19 • MCU PWB, PL 12.1.15	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper transport path. Is there any debris on the paper transport path?	Remove the debris from the paper transport path.	Go to step 2.
2.	Check the installation of the Feed Roller (REP 4.13 Bypass Tray Feed Roller Assembly on page 4-112). Is the Feed Roller installed properly?	Go to step 3.	Reinstall the Feed Roller.
3.	Check the Feed Roller. Is the Feed Roller deformed or worn out?	Replace the Feed Roller (REP 4.13 Bypass Tray Feed Roller Assembly on page 4-112).	Go to step 4.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Registration Sensor operation. Perform DC330 Component Control on page 2-26 [071-102] to check the operation of the Registration Sensor. Is the Registration Sensor operating normally?	Go to step 5.	Go to Registration Sensor on page 2-440.
5.	Check the Turn Roller Clutch operation Perform DC330 Component Control on page 2-26 [071-016] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 6.	Go to Turn Roller Clutch on page 2-424.
6.	Check the Paper Handling (P/H) Motor operation Perform DC330 Component Control on page 2-26 [071-009] to check the operation of the P/H Motor. Is the P/H Motor operating normally?	Go to step 7.	Go to Paper Handling Motor on page 2-435.
7.	Check the Bypass Tray Feed Solenoid operation. Perform DC330 Component Control on page 2-26 [071-014] to check the operation of the Bypass Tray Feed Solenoid. Is the Bypass Tray Feed Solenoid operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Bypass Tray Feed Solenoid on page 2-448.

Regi Off Jam/ Exit On Jam/ Duplex Exit In Jam

Jam error has occurred due to one of the following problems.

- After the Registration Sensor has detected a paper, it continues to detect the paper even after the specified time had passed.
- Although the image formation is performed first, when the paper that had been delayed so as not to cause misfeeding has finally arrived, the image got truncated and results in this Jam.

Applicable Fault Codes

- 077-101: Regi Sensor Off Jam (Too Long)
- 077-119: Psync On Jam

Initial Actions

- Check the paper path for debris.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Fuser Motor (Fuser Drive Assembly), PL 4.2.16 • 2nd BTR (Transfer Roller), PL 4.3.18 • Registration Sensor, PL 5.1.3 • Registration Roller (Registration Chute Assembly), PL 5.1.1 • Registration Clutch, PL 5.1.11 • Exit Roller (Fuser Unit), PL 10.1.1 • Fuser Exit Sensor (Fuser Unit), PL 10.1.1 • Paper Handling Motor (P/H Drive Assembly), PL 11.1.19 • MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper transport path Is there any debris on the paper transport path?	Remove the debris.	Go to step 2.
2.	Check the installation of the Registration Roller (Registration Chute) (REP 5.1 Registration Chute Assembly on page 4-114). Is the Registration Chute installed properly?	Go to step 3.	Reinstall the Registration Chute.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Registration Roller (Registration Chute). Is the Registration Chute damaged?	Replace the Registration Chute (REP 5.1 Registration Chute Assembly on page 4-114).	Go to step 4.
4.	Check the Registration Sensor operation. Perform DC330 Component Control on page 2-26 [071-102] to check the operation of the Registration Sensor. Is the Registration Sensor operating properly?	Go to step 5.	Go to Sensor Troubleshooting on page 2-440.
5.	Check the Registration Clutch operation. Perform DC330 Component Control on page 2-26 [071-013] to check the operation of the Registration Clutch. Is the Registration Clutch operating properly?	Go to step 6.	Go to Registration Clutch on page 2-423.
6.	Check the Paper Handling (P/H) Motor operation. Perform DC330 Component Control on page 2-26 [071-009] to check the operation of the P/H Motor. Is the P/H Motor operating properly?	Go to step 7.	Go to Paper Handling Motor on page 2-435.
7.	Check the Fuser Exit Sensor operation. Perform DC330 Component Control on page 2-26 [071-104] to check the operation of the Fuser Exit Sensor. Is the Fuser Exit Sensor operating properly?	Go to step 8.	Go to Fuser Exit Sensor on page 2-441.
8.	Check the Fuser Motor operation. Perform DC330 Component Control on page 2-26 [010-001] to check the operation of the Fuser Motor. Is the Fuser Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Fuser Motor on page 2-433.

Option Registration On Jam

After the Tray 2 Paper Jam Sensor has detected a paper, the paper did not reach the Registration Sensor.

Applicable Fault Code

- 077-117: Option Regi On Jam

Initial Actions

- Check the paper path for debris.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Turn Roller Assembly, PL 2.2.1 • Feed Roller Clutch, PL 2.2.8 • Nudger Roller/ Feed Roller, PL 2.2.11 • Retard Roller/ Feed Roller, PL 2.3.12 • Registration Sensor, PL 5.1.3 • Bypass Tray Turn Roller, PL 5.1.8 • Turn Roller Clutch, PL 5.1.9 • Paper Handling Motor (P/H Drive Assembly), PL 11.1.19 • MCU PWB, PL 12.1.15 • Paper Jam Sensor, PL 15.2.3 • Feeder PWB, PL 15.2.33	

Troubleshooting Procedure

Step	Actions and Questions
1.	Refer to Tray 1 Miss Feed Jam/ Option Regi On Jam on page 2-246.

Duplex Regi On Jam/ Duplex Sensor On Jam

Duplex error has occurred due to one of the following problems.

- After the Duplex Jam Sensor has detected a paper, the paper did not reach the Registration Sensor within the specified time.
- After a paper has entered the Duplex Feed operation, it did not reach the Duplex Jam Sensor.

Applicable Fault Codes

- 077-123: Duplex Feed Regi Sensor On Jam
- 077-131: Duplex Wait Sensor On Check Jam

Initial Actions

- Check the paper path for debris.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor, PL 5.1.3 • Bypass Tray Turn Roller, PL 5.1.8 • Turn Roller Clutch, PL 5.1.9 • Paper Handling Motor (P/H Drive Assembly), PL 11.1.19 • MCU PWB, PL 12.1.15 • Duplex Unit, PL 14.1.1 • Duplex Motor, PL 14.2.1 • Duplex Roller, PL 14.2.9 • Duplex In Clutch Assembly, PL 14.2.20 • Duplex PWB, PL 14.3.8 • Duplex Jam Sensor, PL 14.3.17	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper transport path. Is there any debris on the paper transport path?	Remove the debris.	Go to step 2.
2.	Check the Duplex Rollers. Are the Duplex Rollers installed properly?	Go to step 3.	Reinstall the Duplex Rollers (REP 14.3 Duplex Roller on page 4-251).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Duplex Rollers. Are the Duplex Rollers deformed or worn out?	Replace the Duplex Unit (REP 14.1 Duplex Unit on page 4-249).	Go to step 4.
4.	Check the Registration Sensor operation. Perform DC330 Component Control on page 2-26 [071-102] to check the operation of the Registration Sensor. Is the Registration Sensor operating properly?	Go to step 5.	Go to Registration Sensor on page 2-440.
5.	Check the Turn Roller Clutch operation. Perform DC330 Component Control on page 2-26 [071-016] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Go to step 6.	Go to Turn Roller Clutch on page 2-424.
6.	Check the Paper Handling (P/H) Motor operation. Perform DC330 Component Control on page 2-26 [071-009] to check the operation of the P/H Motor. Is the P/H Motor operating properly?	Go to step 7.	Go to Paper Handling Motor on page 2-435.
7.	Check the Duplex Jam Sensor operation. Perform DC330 Component Control on page 2-26 [071-128] to check the operation of the Duplex Jam Sensor. Is the Duplex Jam Sensor operating properly?	Go to step 8.	Go to Duplex Jam Sensor on page 2-445.
8.	Check the Duplex Clutch operation. Perform DC330 Component Control on page 2-26 [010-017] to check the operation of the Duplex Clutch. Is the Duplex Clutch operating properly?	Go to step 9.	Go to Duplex Clutch on page 2-430.
9.	Check the Duplex Motor operation. Perform DC330 Component Control on page 2-26 [071-024] to check the operation of the Duplex Motor. Is the Duplex Motor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Duplex Motor on page 2-437.

Cover Open: Front Cover or Top Cover Open

The Front Cover Interlock was opened.

Applicable Fault Code

- 077-300: Front Cover Interlock Open

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Interlock Cap Switch Kit, PL 12.2.4	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Front Cover Switch operation. Perform DC330 Component Control on page 2-26 [041-303] to check the operation of the Front Cover Switch. Is the Front Cover Switch working properly?	Go to step 2.	Go to Front Cover Switch (Interlock Cap Switch) on page 2-449.
2.	Check the Front Cover Interlock Switch operation. Perform DC330 Component Control on page 2-26 [041-300] to check the operation of the Front Cover Switch. Is the Front Cover Switch working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Front Cover Interlock Switch on page 2-450.

Option I/F Failure: Feeder Detected

Communication error between the IOT and the Tray, or between the IOT and the Duplex Unit.

Applicable Fault Code

- 077-322: Option Comm Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Duplex Harness Assembly, PL 4.2.18 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1 • Option Harness Assembly, PL 12.3.5 • Duplex PWB, PL 14.3.8 • Duplex Relay Harness Assembly, PL 14.3.19 • Option Feeder 1 Relay Harness Assembly, PL 15.2.30 • Feeder PWB, PL 15.2.33	• Duplex on page 7-62 • 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Turn Off the printer. Remove the Duplex Unit (REP 14.1 Duplex Unit on page 4-249). Power On the printer. Does the error persist?	Go to step 2.	Go to step 6.
2.	Check the connection between the Feeder PWB and MCU PWB. Are the connectors P/J419, P/J4611, and P/J461 connected securely?	Go to step 3.	Connect the connectors P/J419, P/J4611, and P/J461.
3.	Check the conductivity between the Feeder PWB and Relay Connector. Is the connection between P/J419 <=> P/J4611 conducting properly?	Go to step 4.	Replace the Option Feeder 1 Relay Harness Assembly (REP 15.21 Option Feeder 1 Relay Harness Assembly on page 4-284).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4611 <=> P/J461 conducting properly?	Go to step 5.	Replace the Option Harness Assembly.
5.	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285). Does the error persist?	Go to step 6.	Troubleshooting complete.
6.	Check the connection between the Duplex PWB and MCU PWB. Are the connectors P/J428, P/J4672, P/J4671, and P/J467 connected securely?	Go to step 7.	Connect the connectors P/J428, P/J4672, P/J4671, and P/J467.
7.	Check the conductivity between the Duplex PWB and Relay Connector. Is the connection between P/J428 <=> P/J4672 conducting properly?	Go to step 8.	Replace the Duplex Relay Harness Assembly.
8.	Check the conductivity between the Relay Connector and Relay Connector. Is the connection between P/J4672 <=> P/J4671 conducting properly?	Go to step 9.	Replace the Duplex Harness Assembly.
9.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4671 <=> P/J467 conducting properly?	Go to step 10.	Replace the Main Harness Assembly.
10.	Replace the Duplex PWB (REP 14.6 Duplex PWB on page 4-257). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

Paper Handling (P/H) Motor Failure

The Paper Handling Motor rotation error is detected.

Applicable Fault Code

- 077-323: Paper Handling Motor Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Paper Handling Motor (P/H Drive Assembly), PL 11.1.19 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1 • Paper Handling Motor Harness Assembly, PL 12.3.9	• Drive 2/ Bypass Tray on page 7-45

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Paper Handling Motor on page 2-435.

Option Feeder Mode Fail

The Option Feeder error has occurred.

Applicable Fault Code

- 077-328: Option Feeder Mode Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Feeder PWB, PL 15.2.33	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Option Feeder Mode Error on page 2-451.

Duplex Wait Sensor On Jam/ IOT Static Jam

The following jam error has occurred due to one of the following problems.

- Jam clear
- Jam has occurred due to stationary, remaining paper that is not supported by the transport control.

Applicable Fault Codes

- 077-907: Dup Wait SNR On Jam <Standby Jam>
- 077-909: IOT Static Jam (Not Paper Hand)

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove the paper.

Paper Size Mismatch

The paper size mismatch error has occurred due to one of the following problems.

- The specified Paper Size and the loaded Paper Size are different.
- The specified Paper Type and the loaded Paper Type are different.

Applicable Fault Codes

- 077-911: Tray Paper Size Mismatch User Intervention
- 077-967: APS Paper Type Mismatch, or Printing from a Tray with different paper type (A message is displayed and the Confirmation screen appears.)
- 077-968: Tray Paper Type Mismatch User Intervention

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Load the specified paper.

HVPS Error

CC HVPS failure.

Applicable Fault Code

- 091-312: HVPS CC Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HVPS2 PWB, PL 12.1.2 • MCU PWB, PL 12.1.15 • HVPS1 PWB, PL 12.2.15 • Top Harness Assembly, PL 12.2.24 • Main Harness Assembly, PL 12.3.1	• HVPS on page 7-56

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the connection between the HVPS2 PWB and MCU PWB. Are the connectors P/J468, P/J4681, and P/J552 connected securely?	Go to step 2.	Connect the connectors P/J468, P/J4681, and P/J552.
2.	Check the conductivity between the HVPS2 PWB and Relay Connector. Is the connection between P/J552 <=> P/J4681 conducting properly?	Go to step 3.	Replace the Top Harness Assembly.
3.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4681 <=> P/J468 conducting properly?	Go to step 4.	Replace the Main Harness Assembly.
4.	Check the connection between the HVPS1 PWB and MCU PWB. Are the connectors P/J477 and P/J551 connected securely?	Go to step 5.	Connect the connectors P/J477 and P/J551.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the conductivity between the HVPS1 PWB and MCU PWB. Is the connection between P/J551 <=> P/J477 conducting properly?	Go to step 6.	Replace the Main Harness Assembly.
6.	Check the voltage supply (+24VDC) to the HVPS2 PWB. Measure the voltage between the MCU PWB GND <=> P/J468B-B10. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Go to step 7.	Go to +24VDC Power Troubleshooting on page 2-455.
7.	Check the voltage supply (+24VDC) to the HVPS1 PWB. Measure the voltage between the MCU PWB GND <=> P/J477-9. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202). Go to step 8.	Go to +24VDC Power Troubleshooting on page 2-455.
8.	Does the error persist?	Replace the HVPS1 PWB (REP 12.13 HVPS1 PWB on page 4-221). Go to step 9.	Troubleshooting complete.
9.	Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

(K) Imaging Unit Error: Life End

Imaging Unit error has occurred due to one of the following problems.

- Indicates that it is time to replace the Imaging Unit.
- The Imaging Unit life end is detected.

Applicable Fault Codes

- 091-402: Imaging Unit Quality Life End
- 091-913: Imaging Unit K End Of Life

Initial Actions

- Check the Imaging Unit life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (K), PL 6.1.4	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

(K) Imaging Unit ID Error

Imaging Unit error has occurred due to one of the following problems:

- Imaging Unit K CRUM Comm Fail
- Imaging Unit K CRUM Data Broken
- Imaging Unit K CRUM Data Mismatch

Applicable Fault Code

- 091-407: Imaging Unit K CRUM Trouble Info

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (K), PL 6.1.4	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is there an Imaging Unit other than for (K) color installed? Or, is there an Imaging Unit for other than this printer installed?	Replace the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Reinstall the Imaging Unit (K).

(Y) Imaging Unit ID Error

Imaging Unit error has occurred due to one of the following problems.

- Imaging Unit Y CRUM Comm Fail
- Imaging Unit Y CRUM Data Broken
- Imaging Unit Y CRUM Data Mismatch
- Incorrect data in the Imaging Unit Y CRUM recognition area.

Applicable Fault Codes

- 091-417: Imaging Unit Y CRUM Trouble Info
- 091-924: Imaging Unit Y CRUM Data Mismatch

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit. (Y) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is there an Imaging Unit other than for (Y) color installed? Or, is there an Imaging Unit for other than this printer installed?	Replace the Imaging Unit (Y) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Reinstall the Imaging Unit (Y).

(M) Imaging Unit ID Error

Imaging Unit error has occurred due to one of the following problems.

- Imaging Unit M CRUM Comm Fail
- Imaging Unit M CRUM Data Broken
- Imaging Unit M CRUM Data Mismatch
- Incorrect data in the Imaging Unit M CRUM recognition area.

Applicable Fault Codes

- 091-427: Imaging Unit M CRUM Trouble Info
- 091-925: Imaging Unit M CRUM Data Mismatch

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (M) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is there an Imaging Unit other than for (M) color installed? Or, is there an Imaging Unit for other than this printer installed?	Replace the Imaging Unit (M) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Reinstall the Imaging Unit (M).

(C) Imaging Unit ID Error

Imaging Unit error has occurred due to one of the following problems.

- Imaging Unit C CRUM Comm Fail
- Imaging Unit C CRUM Data Broken
- Imaging Unit C CRUM Data Mismatch
- Incorrect data in the Imaging Unit C CRUM recognition area.

Applicable Fault Codes

- 091-437: Imaging Unit C CRUM Trouble Info
- 091-926: Imaging Unit C CRUM Data Mismatch

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is there an Imaging Unit other than for (C) color installed? Or, is there an Imaging Unit for other than this printer installed?	Replace the Imaging Unit (C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Reinstall the Imaging Unit (C).

(Y/ M/ C) Imaging Unit Error: Life End

The (Y/ M/ C) Imaging Unit Life End error has occurred due to one of the following problems.

- Imaging Unit (Y/ M/ C) Quality End of Life
- The Imaging Unit life end is detected.

Applicable Fault Codes

- 091-480: Imaging Unit Y Quality End of Life
- 091-481: Imaging Unit M Quality End of Life
- 091-482: Imaging Unit C Quality End of Life
- 091-932: Imaging Unit Y End Of Life
- 091-933: Imaging Unit M End Of Life
- 091-934: Imaging Unit C End Of Life

Initial Actions

- Check the Imaging Unit life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Imaging Unit (Y/ M/ C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Belt CLN Waste Error: Life End

After the Waste Toner Full Sensor has turned On, the PV or the pixel count exceeded the defined value.

Applicable Fault Code

- 091-911: Waste Container Full

Initial Actions

- Check the Waste Container life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Waste Cartridge (Waste Toner Cartridge Assembly), PL 9.1.1 • Waste Cartridge Guide Assembly, PL 9.1.4 • Waste Cartridge Full Sensor, PL 9.1.5 • IBT Unit Kit, PL 9.1.99 • MCU PWB, PL 12.1.15 • Top Harness Assembly, PL 12.2.24 • Main Harness Assembly, PL 12.3.1	• Transfer on page 7-54

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the amount of waste toner in the Waste Cartridge. Is the Waste Cartridge fulled?	Replace the Waste Cartridge (REP 9.1 Waste Cartridge on page 4-159).	Go to step 2.
2.	Check the Waste Cartridge Full Sensor for contamination and debris. Is there any contamination or debris on the Waste Cartridge Full Sensor?	Clean the Waste Cartridge Full Sensor.	Go to step 3.
3.	Check the Waste Cartridge Full Sensor operation. Perform DC330 Component Control on page 2-26 [093-209] to check the operation of the Waste Cartridge Full Sensor. Is the Waste Cartridge Full Sensor working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 4.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the installation of Waste Cartridge Full Sensor (REP 9.4 Waste Cartridge Full Sensor on page 4-164). Is the Waste Cartridge Full Sensor installed properly?	Go to step 5.	Reinstall the Waste Cartridge Full Sensor.
5.	Check the connection between the Waste Cartridge Full Sensor and MCU PWB. Are the connectors P/J4686, P/J4685, P/J4681A, and P/J468A connected securely?	Go to step 6.	Connect the connectors P/J4686, P/J4685, P/J4681A, and P/J468A.
6.	Check the conductivity between the Waste Cartridge Full Sensor and Relay Connector. Is the connection between P/J4686 <=> P/J4685 conducting properly?	Go to step 7.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
7.	Check the conductivity between the Relay Connector and Relay Connector. Is the connection between P/J4685 <=> P/J4681A conducting properly?	Go to step 8.	Replace the Top Harness Assembly.
8.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4681A <=> P/J468A conducting properly?	Go to step 9.	Replace the Main Harness Assembly.
9.	Check the voltage supply (+5VDC) to the Waste Cartridge Full Sensor. Measure the voltage between the MCU PWB GND <=> J468A-A10. Is there a voltage (approx. +5VDC) output?	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).	Go to +5VDC Power Troubleshooting on page 2-457.

(K) Imaging Unit Error: Error

Imaging Unit error has occurred due to one of the following problems.

- Communication error of the CRUM for the Imaging Unit.
- CRUM failure for Imaging Unit K

Applicable Fault Codes

- 091-914: Imaging Unit (K) CRUM Communication Fail
- 091-915: Imaging Unit (K) CRUM Data Broken Fail

Initial Actions

- Check the Imaging Unit life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (K), PL 6.1.4 • Imaging Unit CRUM Connector Assembly, PL 6.1.6 • CRUM X Harness Assembly (K), PL 6.1.14 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Xerographics on page 7-58

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (K) installed properly, with no debris at the contact point between the Imaging Unit CRUM Connector Assembly and CRUM PWB in the Imaging Unit (K)?	Go to step 2.	Reinstall the Imaging Unit (K).
2.	Check the CRUM PWB part of the Imaging Unit (K). Is the connection terminal of the CRUM PWB part in the Imaging Unit (K) damaged?	Replace the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Go to step 3.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Imaging Unit CRUM Connector Assembly. Is the connection terminal of the Imaging Unit CRUM Connector Assembly damaged?	Replace the Imaging Unit CRUM Connector Assembly (REP 6.2 Imaging Unit CRUM Connector Assembly on page 4-124).	Go to step 4.
4.	Check the connection between the Imaging Unit CRUM Connector Assembly and MCU PWB. Are the connectors P/J4762, P/J4761, and P/J476 connected securely?	Go to step 5.	Connect the connectors P/J4762, P/J4761, and P/J476.
5.	Check the conductivity between the Imaging Unit CRUM Connector Assembly and Relay Connector. Is the connection between P/J4762 <=> P/J4761 conducting properly?	Go to step 6.	Replace the Imaging Unit CRUM Connector Assembly (REP 6.2 Imaging Unit CRUM Connector Assembly on page 4-124).
6.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4761 <=> P/J476 conducting properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Main Harness Assembly.

(K) Imaging Unit CRUM Data Mismatch Fail

A Imaging Unit that's meant for another region is being used (ID number mismatch). Incorrect Data in the CRUM Authentication Area.

Applicable Fault Code

- 091-916: Imaging Unit (K) CRUM Data Mismatch Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (K), PL 6.1.4	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is there an Imaging Unit other than for (K) color installed? Or, is there an Imaging Unit for other than this printer installed?	Replace the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Reinstall the Imaging Unit (K).

(Y) Imaging Unit Error: Error

Imaging Unit (Y) error has occurred due to one of the following problems.

- Communication error of the CRUM for Imaging Unit (Y)
- CRUM failure for Imaging Unit (Y). The data written to the Imaging Unit (Y) CRUM and the data read from the Imaging Unit (Y) CRUM do not match.

Applicable Fault Codes

- 091-917: Imaging Unit Y CRUM Communication Fail
- 091-920: Imaging Unit Y CRUM Data Broken Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit CRUM Connector Assembly, PL 6.1.6 • CRUM X Harness Assembly (Y/ M/ C), PL 6.1.15 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Xerographics on page 7-58

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y) installed properly, with no debris at the contact point between the Imaging Unit CRUM Connector Assembly and the CRUM PWB in the Imaging Unit (Y)?	Go to step 2.	Reinstall the Imaging Unit (Y).
2.	Check the CRUM PWB part of the Imaging Unit. Is the connection terminal of the CRUM PWB part in the Imaging Unit (Y) damaged?	Replace the Imaging Unit (Y) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Go to step 3.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Imaging Unit CRUM Connector Assembly. Is the connection terminal of the Imaging Unit CRUM Connector Assembly damaged?	Replace the Imaging Unit CRUM Connector Assembly (REP 6.2 Imaging Unit CRUM Connector Assembly on page 4-124).	Go to step 4.
4.	Check the connection between the Imaging Unit CRUM Connector Assembly and MCU PWB. Are the connectors P/J4552, P/J4551, and P/J455 connected securely?	Go to step 5.	Connect the connectors P/J4552, P/J4551, and P/J455.
5.	Check the conductivity between the Imaging Unit CRUM Connector Assembly and Relay Connector. Is the connection between P/J4552 <=> P/J4551 conducting properly?	Go to step 6.	Replace the CRUM X Harness Assembly (Y/ M/ C).
6.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4551 <=> P/J455 conducting properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Main Harness Assembly.

(M) Imaging Unit Error: Error

Imaging Unit (M) error has occurred due to one of the following problems.

- Communication error of the CRUM for Imaging Unit M.
- The data written to the Imaging Unit (M) CRUM and the data read from the Imaging Unit (M) CRUM do not match.

Applicable Fault Codes

- 091-918: Imaging Unit M CRUM Communication Fail
- 091-922: Imaging Unit M CRUM Data Broken Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit CRUM Connector Assembly, PL 6.1.6 • CRUM X Harness Assembly (Y/ M/ C), PL 6.1.15 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Xerographics on page 7-58

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (M) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (M) installed properly, with no debris at the contact point between the Imaging Unit CRUM Connector Assembly and the CRUM PWB in the Imaging Unit (M)?	Go to step 2.	Reinstall the Imaging Unit (M).
2.	Check the CRUM PWB part of the Imaging Unit. Is the connection terminal of the CRUM PWB part in the Imaging Unit (M) damaged?	Replace the Imaging Unit (M) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Go to step 3.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Imaging Unit CRUM Connector Assembly. Is the connection terminal of the Imaging Unit CRUM Connector Assembly damaged?	Replace the Imaging Unit CRUM Connector Assembly (REP 6.2 Imaging Unit CRUM Connector Assembly on page 4-124).	Go to step 4.
4.	Check the connection between the Imaging Unit CRUM Connector Assembly and the MCU PWB. Are the connectors P/J4553, P/J4551, and P/J455 connected securely?	Go to step 5.	Connect the connectors P/J4553, P/J4551, and P/J455.
5.	Check the conductivity between the Imaging Unit CRUM Connector Assembly and Relay Connector. Is the connection between P/J4553 <=> P/J4551 conducting properly?	Go to step 6.	Replace the CRUM X Harness Assembly (Y/ M/ C).
6.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4551 <=> P/J455 conducting properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Main Harness Assembly.

(C) Imaging Unit Error: Error

Imaging Unit (C) error has occurred due to one of the following problems.

- Communication error of the CRUM for Imaging Unit (C).
- CRUM failure for Imaging Unit (C). The data written to the Imaging Unit (C) CRUM and the data read from the Imaging Unit (C) CRUM do not match.

Applicable Fault Codes

- 091-919: Imaging Unit C CRUM Communication Fail
- 091-923: Imaging Unit C CRUM Data Broken Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit CRUM Connector Assembly, PL 6.1.6 • CRUM X Harness Assembly (Y/ M/ C), PL 6.1.15 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Xerographics on page 7-58

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Imaging Unit (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (C) installed properly, with no debris at the contact point between the Imaging Unit CRUM Connector Assembly and the CRUM PWB in the Imaging Unit (C)?	Go to step 2.	Reinstall the Imaging Unit (C).
2.	Check the CRUM PWB part of the Imaging Unit. Is the connection terminal of the CRUM PWB part in the Imaging Unit (C) damaged?	Replace the Imaging Unit (C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).	Go to step 3.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Imaging Unit CRUM Connector Assembly. Is the connection terminal of the Imaging Unit CRUM Connector Assembly damaged?	Replace the Imaging Unit CRUM Connector Assembly (REP 6.2 Imaging Unit CRUM Connector Assembly on page 4-124).	Go to step 4.
4.	Check the connection between the Imaging Unit CRUM Connector Assembly and the MCU PWB. Are the connectors P/J4554, P/J4551, and P/J455 connected securely?	Go to step 5.	Connect the connectors P/J4554, P/J4551, and P/J455.
5.	Check the conductivity between the Imaging Unit CRUM Connector Assembly and Relay Connector. Is the connection between P/J4554 <=> P/J4551 conducting properly?	Go to step 6.	Replace the CRUM X Harness Assembly (Y/ M/ C).
6.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4551 <=> P/J455 conducting properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Main Harness Assembly.

(K) Imaging Unit Error: Detached

The Imaging Unit (K) CRUM is not in the proper position (loose CRUM).

Applicable Fault Code

- 091-921: Imaging Unit (K) CRUM Not Position (loose CRUM)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (K), PL 6.1.4	

Troubleshooting Procedure

Step	Actions and Questions
1.	Reinstall the Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

(Y/ M/ C) Imaging Unit Error: Detached

The (Y/ M/ C) Imaging Unit CRUM is loose.

Applicable Fault Codes

- 091-927: Imaging Unit Y CRUM Not Position
- 091-928: Imaging Unit M CRUM Not Position
- 091-929: Imaging Unit C CRUM Not Position

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Imaging Unit (Y/ M/ C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Environment (Temp/ Humidity) Sensor Error

The Environment (external) Sensor temperature error (low temp/ high temp).

Applicable Fault Code

- 092-316: Environment Sensor Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Temp/ Humidity (Environmental) Sensor, PL 12.2.18 • Main Harness Assembly, PL 12.3.1	• Electrical on page 7-53

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Temp/ Humidity (Environmental) Sensor (REP 12.15 Temp/ Humidity (Environmental) Sensor on page 4-225). Is the Temp/ Humidity Sensor installed properly?	Go to step 2.	Reinstall the Humidity Sensor.
2.	Check the connection between the Temp/ Humidity Sensor and MCU PWB. Are the connectors P/J4651B and P/J465A connected securely?	Go to step 3.	Connect the connectors P/J4651B and P/J465A.
3.	Check the conductivity between the Temp/ Humidity Sensor and MCU PWB. Is the connection between P/J4651B <=> P/J465A conducting properly?	Go to step 4.	Replace the Main Harness Assembly.
4.	Check the voltage supply (+5VDC) to the Temp/ Humidity Sensor. Measure the voltage between the MCU PWB GND <=> P/J465A-B4. Is there a voltage (approx. +5VDC) output?	Go to step 5.	Go to +5VDC Power Troubleshooting on page 2-457.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Replace the Temp/ Humidity Sensor (REP 12.15 Temp/ Humidity (Environmental) Sensor on page 4-225). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

Temperature Sensor Error

The Temperature (internal) Sensor temperature error (low temp/ high temp).

Applicable Fault Code

- 092-317: Temperature Sensor Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Temperature Sensor (CTD Sensor Assembly Kit), PL 9.1.98 • MCU PWB, PL 12.1.15 • Main CTD Harness Assembly, PL 12.3.8	• Transfer on page 7-54

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175). Is the CTD Sensor Assembly installed properly?	Go to step 2.	Reinstall the CTD Sensor Assembly.
2.	Check the connection between the CTD Sensor Assembly and MCU PWB. Is the connector P/J4561 connected securely?	Go to step 3.	Connect the connector P/J4561.
3.	Check the conductivity between the CTD Sensor Assembly and MCU PWB. Is the connection between P/J4561 <=> P/J456 conducting properly?	Go to step 4.	Replace the Main CTD Harness Assembly.
4.	Check the connection in the CTD Sensor Assembly. Is the connector P/J4563 connected securely?	Go to step 5.	Connect the connector P/J4563.
5.	Replace the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

(Y/ M/ C/ K) Image Adjustment Patch Error

(Y/ M/ C) image adjustment patch error has occurred.

- The Y image adjustment patch is light.
- The M image adjustment patch is light.
- The C image adjustment patch is light.
- The K image adjustment patch is light.

Applicable Fault Codes

- 092-318: Patch Y Fail
- 092-319: Patch M Fail
- 092-320: Patch M Fail
- 092-321: Patch M Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • Toner Cartridge Assembly (Y/ M/ C/ K), PL 8.1.1~PL 8.1.4 • Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5~PL 8.1.8 • MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Remove the Toner Cartridge Assembly (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136). Shake the Toner Cartridge a few times, and then reinstall it. Does the error persist?	Go to step 2.	Troubleshooting complete.
2.	Replace the Toner Cartridge Assembly (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136). Does the error persist?	Go to step 3.	Troubleshooting complete.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the installation state of the Imaging Unit. Remove the Imaging Unit (Y/ M/ C/ K). Is the Imaging Unit installed properly, with no contamination at the contact points and in contact with the left and right Guides?	Go to step 4.	Clean the contact points. Reinstall the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
4.	Replace the Imaging Unit (Y) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Does the error persist?	Go to step 5.	Troubleshooting complete.
5.	Replace the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

Cover Open: Toner Cover Open

Toner Cover Interlock Open.

Applicable Fault Code

- 093-301: Toner Cover Interlock Open

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Toner Cover Interlock Switch Assembly, PL 8.1.99 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Top Harness Assembly, PL 12.2.24	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Toner Cover Interlock Switch operation. Perform DC330 Component Control on page 2-26 [041-302] to check the operation of the Toner Cover Interlock Switch. Is it working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Toner Cover Interlock Switch and LVPS PWB. Are the connectors P/J5291 and P/J529 connected securely?	Go to step 3.	Connect the connectors P/J5291 and P/J529.
3.	Check the conductivity between the Toner Cover Interlock Switch and LVPS PWB. Is the connection between P/J5291 <=> P/J529 conducting properly?	Go to step 4.	Replace the Top Harness Assembly.
4.	Check the voltage supply (+5VDC) to the Toner Cover Interlock Switch. Measure the voltage between the LVPS PWB GND <=> P/J529-1. Is there a voltage (approx. +5VDC) output? Close the Interlock Switch and check.	Replace the Toner Cover Interlock Switch (REP 8.8 Toner Cover Switch Kit on page 4-158).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

Cover Open: Waste Cover Open

Waste Cover Interlock Open.

Applicable Fault Code

- 093-302: Waste Cover Interlock Open

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Waste Cartridge (Waste Toner Cartridge Assembly), PL 9.1.1 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Waste Cartridge Switch Assembly Kit, PL 12.2.3 • Top Harness Assembly, PL 12.2.24	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Waste Cartridge (REP 9.1 Waste Cartridge on page 4-159). Is the Waste Cartridge installed properly?	Go to step 2.	Reinstall the Waste Cartridge.
2.	Check the Waste Cartridge Set Switch operation. Perform DC330 Component Control on page 2-26 [041-301] to check the operation of the Waste Cartridge Set Switch. Is it working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 3.
3.	Check the connection between the Waste Cartridge Set Switch and LVPS PWB. Are the connectors P/J5225 and P/J522 connected securely?	Go to step 4.	Connect the connectors P/J5225 and P/J522.
4.	Check the voltage supply (+5VDC) to the Waste Cartridge Set Switch. Measure the voltage between the LVPS PWB GND <=> P/J522-5. Is there a voltage (approx. +5VDC) output? Close the Interlock Switch and check.	Replace the Waste Cartridge Set Switch (REP 12.8 Waste Cartridge Switch Assembly on page 4-213).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

(Y/ M/ C/ K) Deve Motor Fail

The Developer Motor (Y/ M/ C/ K) rotation error was detected.

Applicable Fault Codes

- 093-318: Deve Y Motor Fail
- 093-319: Deve M Motor Fail
- 093-320: Deve K Motor Fail
- 093-325: Deve C Motor Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Developer Motor PWB, PL 11.1.16 • Developer Motor Assembly, PL 11.1.17 • Developer Motor Harness Assembly, PL 11.1.24 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1	• Drive 2/ Bypass Tray on page 7-45

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Developer Motor (Y/ M/ C/ K) operation. Perform DC330 Component Control on page 2-26 to check the rotation of the Deve Motor (Y/ M/ C/ K). • (Y) Developer Motor [091-007] • (M) Developer Motor [091-009] • (C) Developer Motor [091-011] • (K) Developer Motor [091-003] Is the Motor working properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Developer Motor (Y/ M/ C/ K) and Developer Motor PWB. Is the Flat Cable connected securely?	Go to step 3.	Connect the Flat Cable.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the connections between the Developer Motor PWB and MCU PWB, as well as between the Developer Motor PWB and LVPS PWB. Are the connectors P/J474, P/J4741, P/J524, P/J5248, and P/J5241 connected securely?	Go to step 4.	Connect the connectors P/J474, P/J4741, P/J524, P/J5248, and P/J5241.
4.	Check the conductivity between the Developer Motor PWB and Relay Connector. Is the connection between P/J5241 <=> P/J5248 conducting properly?	Go to step 5.	Replace the Developer Motor Harness Assembly.
5.	Check the conductivity between the Developer Motor PWB and MCU PWB. Is the connection between P/J4741 <=> P/J474 conducting properly?	Go to Step 6	Replace the Developer Motor Harness Assembly.
6.	Check the conductivity between the Relay Connector and LVPS PWB. Is the connection between P/J5248 <=> P/J524 conducting properly?	Go to Step 7	Replace the Main Harness Assembly.
7.	Check the voltage supply (+3.3VDC) to the Developer Motor PWB. Measure the voltage between the MCU PWB GND <=> P/J474-1. Is there a voltage (approx. +3.3VDC) output?	Go to Step 8	Go to +3.3VDC Power Troubleshooting on page 2-458.
8.	Check the voltage supply (+24VDC) to the Developer Motor PWB. Measure the voltages between the LVPS PWB GND <=> P/J524-9 and between LVPS PWB GND <=> P/J524-11. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the following parts in sequence: • Developer Motor (REP 11.5 Developer Motor (Match Box) Assembly on page 4-193) • Developer Motor PWB (REP 11.4 Developer Motor PWB on page 4-190)	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

(K/ Y/ M/ C) Developer Error: Life End

The Developer count has reached life end.

Applicable Fault Codes

- 093-413: Deve Life End (K)
- 093-418: Deve Life End (Y)
- 093-419: Deve Life End (M)
- 093-420: Deve Life End (C)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Developer Housing Assembly (Y), PL 8.1.5 - PL 8.1.8	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Housing Developer Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
2.	Perform DC135 HFSI on page 2-19 and reset the following Life Counters for the Developer Housing Assembly (Y/ M/ C/ K). • 950-812 - (K) Developer PV 000 • 950-828 - (K) Developer Roundtime 000 • 950-844 - (K) Developer Pixel Count 000 • 950-808 - (Y) Developer PV • 950-816 - (Y) Developer Roundtime • 950-832 - (Y) Developer Pixel Count • 950-804 - (M) Developer PV • 950-820 - (M) Developer Roundtime • 950-836 - (M) Developer Pixel Count • 950-808 - (C) Developer PV • 950-824 - (C) Developer Roundtime • 950-840 - (C) Developer Pixel Count

(Y/ M/ C/ K) Toner ID Error

(Y/ M/ C/ K) Toner ID error has occurred for one of the following problems.

- Toner (Y/ M/ C/ K) CRUM Comm Fail
- Toner (Y/ M/ C/ K) CRUM Data Broken
- Toner (Y/ M/ C/ K) CRUM Data Mismatch
- A Toner Cartridge that's meant for another region is being used (ID number mismatch).
- Incorrect Data in the Toner Cartridge (Y/ M/ C/ K) CRUM Authentication Area.

Applicable Fault Codes

- 093-426: Toner K CRUM Trouble Info
- 093-427: Toner Y CRUM Trouble Info
- 093-428: Toner M CRUM Trouble Info
- 093-429: Toner C CRUM Trouble Info
- 093-926: Toner CRUM Data Mismatch Fail K
- 093-937: Toner CRUM Data Mismatch Fail Y
- 093-938: Toner CRUM Data Mismatch Fail M
- 093-939: Toner CRUM Data Mismatch Fail C

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Toner Cartridge Assembly (Y/ M/ C/ K), PL 8.1.1 - PL 8.1.4	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136). Is there a Toner Cartridge other than for the failed color (Y/ M/ C/ K) installed? Or, is there a Toner Cartridge for other than this printer installed?	Replace with the correct the Toner Cartridge (Y/ M/ C/ K).	Reinstall the Toner Cartridge (Y/ M/ C/ K).

(K) Toner Cartridge Error: Life End

Toner Cartridge error has occurred for one of the following problems.

- The Black Dispense Motor rotation time had reached the specified value and the toner has ran out.
- Toner K is Empty and any of the Toner YMC is also Empty.

Applicable Fault Codes

- 093-912: Toner K Empty
- 093-963: Plural Toner Empty

Initial Actions

- Check the Toner Cartridge life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Toner Cartridge Assembly (K), PL 8.1.4	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Toner Cartridge (K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).

(Y/ M/ C/ K) Toner Cartridge Error: Detached

The (Y/ M/ C/ K) Toner Cartridge CRUM is loose.

Applicable Fault Codes

- 093-913: Toner CRUM Not Position Y
- 093-914: Toner CRUM Not Position M
- 093-915: Toner CRUM Not Position C
- 093-916: Toner CRUM Not Position K

Initial Actions

- Check the Toner Cartridge life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Toner Cartridge Assembly (K), PL 8.1.4	

Troubleshooting Procedure

Step	Actions and Questions
1.	Reinstall the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).

(Y/ M/ C/ K) Toner Cartridge Error: Error

Toner Cartridge (Y/ M/ C/ K) CRUM communication error has occurred due to one of the following problems.

- Toner Cartridge CRUM data Read/Write error.
- The data written to the Toner Cartridge (Y/ M/ C/ K) CRUM and the data read from the Toner Cartridge (Y/ M/ C/ K) CRUM do not match

Applicable Fault Codes

- 093-924: Toner CRUM Comm Fail K
- 093-925: Toner CRUM Data Broken Fail K
- 093-927: Toner CRUM Comm Fail Y
- 093-928: Toner CRUM Comm Fail M
- 093-929: Toner CRUM Comm Fail C
- 093-933: Toner CRUM Data Broken Fail Y
- 093-934: Toner CRUM Data Broken Fail M
- 093-935: Toner CRUM Data Broken Fail C

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Toner Cartridge Assembly (Y), PL 8.1.1 - PL 8.1.3 • Toner CRUM Connector Assembly, PL 8.1.13 • Toner CRUM Harness Assembly, PL 8.1.18 • MCU PWB, PL 12.1.15	• Development on page 7-60

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136). Is the Toner Cartridge (Y/ M/ C/ K) installed properly, with no foreign substances at the contact point between the Toner CRUM Connector Assembly and the CRUM PWB in the Toner Cartridge (Y/ M/ C/ K)?	Go to step 2.	Reinstall the Toner Cartridge (Y/ M/ C/ K).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
2.	Check the CRUM PWB part of the Toner Cartridge (Y/ M/ C/ K). Is the connection terminal of the CRUM PWB part in the Toner Cartridge (Y/ M/ C/ K) damaged?	Replace the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).	Go to step 3.
3.	Check the Toner CRUM Connector Assembly. Is the connection terminal of the Toner CRUM Connector Assembly damaged?	Replace the Toner CRUM Connector Assembly (REP 8.5 Toner CRUM Connector Assembly on page 4-151).	Go to step 4.
4.	Check the connection between the Toner CRUM Connector Assembly and MCU PWB. Are the connectors connected securely? • (Y) Toner CRUM: P/J4541 <=> P/J454 • (M) Toner CRUM: P/J4542 <=> P/J454 • (C) Toner CRUM: P/J4543 <=> P/J454 • (K) Toner CRUM: P/J4544 <=> P/J454	Go to step 5.	Connect the connectors: • (Y) Toner CRUM: P/J4541 and P/J454 • (M) Toner CRUM: P/J4542 <=> P/J454 • (C) Toner CRUM: P/J4543 <=> P/J454 • (K) Toner CRUM: P/J4544 <=> P/J454
5.	Check the conductivity between the Toner CRUM Connector Assembly and MCU PWB. Is the connection between the connectors conducting properly? • (Y) Toner CRUM: P/J4541 <=> P/J454 • (M) Toner CRUM: P/J4542 <=> P/J454 • (C) Toner CRUM: P/J4543 <=> P/J454 • (K) Toner CRUM: P/J4544 <=> P/J454	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Toner CRUM Harness Assembly.

CTD Sensor Error

CTD Sensor power down.

Applicable Fault Code

- 094-310: CTD Sensor Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• CTD Sensor Assembly Kit, PL 9.1.98 • MCU PWB, PL 12.1.15 • Main CTD Harness Assembly, PL 12.3.8	• Transfer on page 7-54

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the surface of the CTD Sensor for contamination and foreign substances. Is there any contamination or foreign substances on the Sensor surface of the Left/ Right CTD Sensor section that comprise the CTD Sensor Assembly?	Clean and remove any debris on the Sensor surface of the Left/ Right CTD Sensor.	Go to step 2.
2.	Check the installation of the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175). Is the CTD Sensor Assembly installed properly?	Go to step 3.	Reinstall the CTD Sensor Assembly.
3.	Check the connection between the CTD Sensor Assembly and MCU PWB. Are the connectors P/J4571, P/J4572, and P/J4561 connected securely?	Go to step 4.	Connect the connectors P/J4571, P/J4572, and P/J4561.
4.	Check the conductivity between the CTD Sensor Assembly and MCU PWB. Are the connections between P/J4571 <=> P/J457, between P/J4572 <=> P/J457, and between P/J4561 <=> P/J456 conducting properly?	Go to step 5.	Replace the Main CTD Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the voltage supply (+5VDC) to the CTD Sensor Assembly. Measure the voltages between the MCU PWB GND <=> P/J457-1 and between MCU PWB GND <=> P/J457-6. Is there a voltage (approx. +5VDC) output?	Go to step 6.	Go to +5VDC Power Troubleshooting on page 2-457.
6.	Check the connection in the CTD Sensor Assembly. Are the connectors P/J4573 and P/J4574 connected securely?	Go to step 7.	Connect the connectors P/J4573 and P/J4574.
7.	Replace the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

IBT Unit Error: Life End

When the IBT Unit HFSI Counter reached the IBT Unit Dead Stop (NVM).

Applicable Fault Codes

- 094-311: IBT Unit Dead Stop
- 094-420: IBT Unit End Warning

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• IBT Unit Kit, PL 9.1.99	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2.	Perform DC135 HFSI on page 2-19 and reset the following Life Counters for the IBT Unit. • 950-888- IBT Unit PV • 950-892 - IBT Unit Round Time

Switching Sensor Failure

The Switching Sensor error has occurred due to one of the following problems.

- Retract was not detected within the specified time (2400 ms) after the 1st BTR Retract operation has started.
- Contact was not detected within the specified time (2400 ms) after the 1st BTR Contact operation had started.

Applicable Fault Codes

- 094-320: 1st BTR Retract Fail/1st BTR Home Position Fail
- 094-321: 1st BTR Contact Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• IBT Retract Cam Assembly, PL 9.1.8 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168). Is the IBT Retract Cam Assembly installed properly?	Go to step 2.	Reinstall the IBT Retract Cam Assembly.
2.	Check the installation of the IBT Unit (REP 9.10 IBT Unit on page 4-177). Is the IBT Unit installed properly?	Go to step 3.	Reinstall the IBT Unit.
3.	Check the Belt Retract Sensor operation. Perform DC330 Component Control on page 2-26 [094-200] to check the operation of the Belt Retract Sensor. Is the Belt Retract Sensor operating properly?	Go to step 4.	Go to Belt Retract Sensor on page 2-442.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Belt Retract Motor operation. Perform DC330 Component Control on page 2-26 [094-001] to check the operation of the Belt Retract Motor. Is the Belt Retract Motor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Belt Retract Motor on page 2-432.

2nd BTR Error: Life End

When the 2nd BTR Unit (Transfer Roller) HFSI Counter reached the 2nd BTR Unit End Warning (NVM).

Applicable Fault Code

- 094-422: 2nd BTR Unit End Warning (Quality Life End)

Initial Actions

- Check the Transfer Roller life. Access **CWIS** > **Status** > **Consumables**.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Transfer Roller (2nd BTR Unit), PL 4.3.18	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
2.	Perform DC135 HFSI on page 2-19 and reset the following Life Counters for the 2nd BTR. • 950-872 - 2nd BTR PV

102-356 EWS Soft Fail

An EWS-related fatal error. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Code

- 102-356: EWS-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform the following sequences: a. Go to Common System Fail on page 2-406. b. Go to HDD System Fail on page 2-408. c. Go to Network Troubleshooting on page 2-459. d. Go to USB Port Testing on page 2-462.

116-220

When transitioning to the Download mode, the Downloader, which is a software that performs download in the ESS, has failed during the software startup initialization.

Applicable Fault Code

- 116-220: Downloader Initialization Failure during Transition to Download Mode (In Normal mode and in Forced Download mode)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the connection of the System Memory on the I/P PWB. If the problem occurs frequently, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228). If the problem persists, go to Common System Fail on page 2-406.

116-312/ 116-313

Encryption error has occurred due one of the following problems.

- During start up, an irregularity was detected in the HDD Encryption Key.
- Although the Encryption Key is set, the HDD itself is not encrypted.

Applicable Fault Codes

- 116-312: <HDD Encrypt Key Fail> During start up, an irregularity was detected in the Encryption Key
- 116-313: <HDD Encrypt Key Fail> During start up, an irregularity was detected in the Encryption Key

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to HDD System Fail on page 2-408. After the recovery, set the HDD Encryption Key correctly.

116-314 Ethernet Address Fail

An ethernet error was detected.

Applicable Fault Code

- 116-314: Ethernet Address Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the installation of the SEEPROM on the I/P PWB. If the problem persists, perform the following procedure to correct it. • Go to Network Troubleshooting on page 2-459. • Go to USB Port Testing on page 2-462.

116-315 ESS RAM DIMM #1 W/R Check Fail

An error was detected when performing W/R to the I/P PWB RAM DIMM #1.

Applicable Fault Code

- 116-315: ESS RAM DIMM #1 W/R Check Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• 1 GB DDR2 DIMM (Standard), PL 12.4.2 • I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	• Remove and reinstall the I/P PWB RAM DIMM #1. • Replace the I/P PWB RAM DIMM #1 (REP 12.18 Memory (Standard) on page 4-232). • Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-317 Standard ROM DIMM Check Fail

An error was detected at the Standard ROM DIMM check.

Applicable Fault Code

- 116-317: ESS ROM DIMM #1 Check Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-321/116-322

Encryption error has occurred due one of the following problems.

- A problem has occurred in the software processing and it is unable to continue with the subsequent processes. Other Adjustments (reference) The counter number that is used in the Counter Report has exceeded the defined value.
- A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-321: SysCon Error
- 116-322: WebDAV-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Common System Fail on page 2-406.

116-323 ESS NVRAM W/R Check Fail

During the Read/Write check at power ON, an ESS-NVRAM PWB hardware error was detected by the OS/ DD.

Applicable Fault Code

- 116-323: ESS NVRAM W/R Check Fail (NV-RAM parts failure)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• 1 GB DDR2 DIMM (Standard), PL 12.4.2 • I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove and reinstall the NVRAM I/P PWB (REP 12.18 Memory (Standard) on page 4-232) and turn On the power.
2.	If the 116-323 problem persists, replace the NVRAM PWB (REP 12.18 Memory (Standard) on page 4-232).
3.	As 116-334 will occur after the NVRAM I/P PWB is replaced, go to 116-334 ESS NVRAM Data Compare Fail on page 2-333.
4.	If the 116-323 problem still persists, go to 016-782/ 016-784 Fail on page 2-409.

116-324 Exception Fail

A fatal software exception process has occurred in the CPU of the Controller PWB. The cause of this is largely due to Controller software malfunction.

Applicable Fault Code

- 116-324: System Detected an Exception Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• 1 GB DDR2 DIMM (Standard), PL 12.4.2 • I/P PWB, PL 12.4.1 • HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn Off the printer power, then turn On the power while pressing the **Energy Saver** button and the **Down** button. Maintain that state for 6 seconds and the printer will delete the print data that causes the error and then reboots itself.
2.	If the problem persists, perform the following, pull out and reinsert or replace the RAM DIMM (REP 12.18 Memory (Standard) on page 4-232).
Corrective actions when the problem occurred at power On:	
3.	Check whether the error persists after returning from Energy Saver Mode and take a note on the result, and then perform steps 1 to 6 in Common System Fail on page 2-406.
4.	If the problem persists, prepare for the recovery operation since the system may be recovered by the procedures in HDD System Fail on page 2-408. Check with the customer whether important data is stored on the HDD.
5.	If no important data is stored on the HDD, perform the procedure in HDD System Fail on page 2-408. If the problem persists, reinstall the removed HDD (REP 12.21 Hard Disk Drive (Optional) on page 4-236).
6.	If important data is stored on the HDD, replace it with the HDD you brought and turn the printer power Off and On. (If you have brought an HDD.) If the problem persists, reinstall the HDD and replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-325 ESS Fan Fail

Irregularity has occurred in the ESS Fan rotation.

Applicable Fault Code

- 116-325: ESS Fan Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1 • I/P PWB Fan, PL 12.4.6	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the ESS Fan (REP 12.20 Image Processor PWB Fan on page 4-235).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-328/ 116-329

System error has occurred due to one of the following problems.

- Failure was detected in the level 2 cache within the CPU.
- A serial I/F related system call error was detected

Applicable Fault Codes

- 116-328: CPU Built-in Level 2 Cache Failure
- 116-329: <Serial I/F-related Fatal Error> System call error related to Serial I/F.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Common System Fail on page 2-406.

116-330 HDD File System Fail

HDD checksum error at power On or the HDD was not formatted.

Applicable Fault Code

- 116-330: HDD File System Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to HDD System Fail on page 2-408.

116-331 Invalid Log Info

Log related error was detected.

Applicable Fault Code

- 116-331: Log Management Information Incorrect The detection area is the NVM log management information area, the same as for NVM Fail.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove the HDD (REP 12.21 Hard Disk Drive (Optional) on page 4-236). Turn the printer power On then Off. Reinstall the HDD and turn the printer power On.
2.	If the problem persists, go to HDD System Fail on page 2-408.

116-332 ESS Standard ROM Error

An ESS On Board Standard ROM error was detected.

Applicable Fault Code

- 116-332: ESS On Board ROM Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove and reinstall the Standard ROM (REP 12.18 Memory (Standard) on page 4-232) on the I/P PWB.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-334 ESS NVRAM Data Compare Fail

During the Read/Write check at power ON, “ESS-NVRAM with default factory settings installed” or “ESS-NVRAM data is incorrect” was detected in the System Cont. At the detection of 116-334, because the ESS-NVRAM data has been overwritten by the initialization data in the ESS-ROM, turning the power OFF and ON after that causes mismatches in 3 locations for each type that results in a system fail (124-3xx).

Applicable Fault Code

- 116-334: ESS NVRAM Data Compare Fail (NV-RAM parts working properly)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• 1 GB DDR2 DIMM, PL 12.4.2 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Because the mismatch error 124-3xx in 3 locations for each type are expected at the power Off/ On after the detection of 116-334, follow the procedure for the appropriate Fault Code and use the suitable DC132 Machine Serial Number Settings on page 2-47 to fix the problem.
2.	If the 116-334 persists after turning the power Off and On, remove and reinstall the NVRAM I/P PWB (REP 12.18 Memory (Standard) on page 4-232) and turn On the printer power.
3.	If the problem still persists, replace the NVRAM I/P PWB (REP 12.18 Memory (Standard) on page 4-232).
4.	If the problem still persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
5.	If the 116-334 problem persists, go to Common System Fail on page 2-406.

116-336/ 116-337

NVRAM error has occurred due to one of the following problems.

- An error was detected when HDD was accessed.
- A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-336: <Redirector Fail> HDD failure detected in the Redirector.
- 116-337: SNTP-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to HDD System Fail on page 2-408.

116-338 JBA Fatal Error

A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Code

- 116-338: JBA-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Common System Fail on page 2-406.

116-340 Memory Not Enough

Insufficient memory was detected at initialization. A PS option requiring an additional memory was installed but memory was not added.

Applicable Fault Code

- 116-340: <Memory Not Enough> The Page Memory, Entry Buffer and Work Area are insufficient. Malloc error, etc. The task cannot start up.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove the PostScript Option then reboot the printer to operate, and increase the Controller memory permanently.

116-341 ROM VER Incorrect

The versions of several installed ROM DIMM are incorrect. An unusable combination of ROM DIMMs are installed. When installing multiple ROM DIMMs, it is necessary to match both the major versions and the minor versions.

Applicable Fault Code

- 116-341: <ROM DIMM Version Mismatch> The versions of several installed ROM DIMM are incorrect. An unusable combination of ROM DIMMs are installed. When installing multiple ROM DIMMs, it is necessary to match both the major versions and the minor versions.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the versions of the multiple ROM DIMMs installed and replace them with an appropriate combination of DIMMs. When installing multiple ROM DIMMs, it is necessary to match both the major versions and the minor versions.

116-342 SESAMi Manager Fail

An SNMP Agent-related fatal error. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Code

- 116-342: SESAMi Manager Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the version of the Firmware. If it is not the latest, download the latest firmware (Firmware Update on page 6-22).

116-343 Main PWBA IC Fail

Irregularity was detected in the IC of the I/P PWB.

Applicable Fault Code

- 116-343: Main PWBA IC Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Common System Fail on page 2-406.

116-348/ 116-349/ 116-351

System error has occurred due to one of the following problems.

- A response such as system function recall error was detected.
- An error when calling the Pflite function at SIF.
- A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-348: <Redirector Fail> Various fatal errors detected by the redirector.
- 116-349: An error occurred when calling the Pflite function using the SIF.
- 116-351: An EtherTalk-related fatal error.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On. Perform the same operation and check whether the problem is reoccurring.
2.	If the problem persists, go to Common System Fail on page 2-406. If Common System Fail procedure is NG, go to Network Troubleshooting on page 2-459.

116-353 HDD Physical Fail

During start up, a physical irregularity was detected in the HDD, and it is unable to start up.

Applicable Fault Code

- 116-353: <HDD Physical Fail>

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to HDD System Fail on page 2-408.

116-354 HDD Product Fail

During start up, a Product Code error was detected in the HDD, and it is unable to start up. It is possible that the HDD had been formatted by the printer of a different product.

Applicable Fault Code

- 116-354: <HDD Product Code Fail> The printer was not started up due to a Product Code error detected in the HDD on booting.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	To overwrite to the HDD of another product (HDD System Fail on page 2-408) to perform the special boot forced formatting.

116-355 Agent Soft Fail

A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Code

- 116-355: An SNMP Agent-related fatal error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On. Perform the same operation and check whether the problem is reoccurring. If the problem persists, go to HDD System Fail on page 2-408.

116-356 HDD Format Fail

While formatting the HDD, either an out-of-spec HDD was connected or an error has occurred in the HDD.

Applicable Fault Code

- 116-356: <HDD Format Fail> The printer was not started up due to an insufficient HDD capacity error detected during HDD formatting.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to HDD System Fail on page 2-408.

116-357 PostScript Error/ 116-359 PLW Soft Fail

Software processing error has occurred and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-357: PS Fatal System Error
- 116-359: A PLW Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Common System Fail on page 2-406.

116-360 SMB Soft Fail

A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Code

- 116-360: An SMB-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Network Troubleshooting on page 2-459.

116-361/ 116-362

HDD error has occurred due to one of the following problems.

- The SpoolCont detected an error at HDD access.
- A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-361: An SPL HDD Fatal Error
- 116-362: SSDP Software Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to HDD System Fail on page 2-408.

116-364 Timer Fail

A Timer error was detected.

Applicable Fault Code

- 116-364: Timer Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-365/ 116-366/ 116-368 Dump Print Fail

Software processing error has occurred due to one of the following problems.

- The number of files that was instructed to be input/ output from the HDD have exceeded the number of files that can be simultaneously output.
- A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-365: SPL Fatal Error
- 116-366: Print Utility Operational Failure and operation failure of the Report Generator
- 116-368: Dump Print Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Common System Fail on page 2-406.

116-367 Parallel IF Soft Fail/ 116-370 XJCL Fail

A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-367: General Parallel Fatal Error
- 116-370: XJCL Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Network Troubleshooting on page 2-459.

116-371/ 116-372/ 116-380/ 116-384/ 116-385

A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-371: PCL Decomposer Software Fail
- 116-372: A P-Formatter Fatal Error
- 116-380: ESS Font ROM DIMM #1 Check Failure
- 116-384: DCS Fatal Error
- 116-385: IDC Software Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Common System Fail on page 2-406.

116-373/ 116-374/ 116-378/ 116-379

A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 116-373: A Dynamic DNS-related Fatal Error
- 116-374: An Auto SW Fatal Error
- 116-378: MCR (Mail Contents Requester) Fatal Error
- 116-379: MCC (Mail Contents Creator) Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Network Troubleshooting on page 2-459.

116-376 Port 9100 Software Fail

Software error has occurred.

Applicable Fault Code

- 116-376: Port 9100 Software Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Network Troubleshooting on page 2-459.

116-377 Video DMA Fail

Video DMA failure was detected.

Applicable Fault Codes

- 116-377: Video DMA Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Common System Fail on page 2-406.

116-380 ESS Font ROM DIMM #1 Check Fail

En error was detected at the ESS Font ROM DIMM #1 check.

Applicable Fault Code

- 116-380: ESS Font ROM DIMM #1 Check Failure

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Remove and reinstall the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228). Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-387 MRC HW Fatal Error

A fatal error has occurred.

Applicable Fault Code

- 116-387: MRC HW Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• 1 GB DDR DIMM, PL 12.4.2 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the I/P PWB RAM (REP 12.18 Memory (Standard) on page 4-232).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

116-388 No HD that Should Be

An HDD error has occurred. Although the configuration requires a HDD, it was detected that the HDD is not installed.

Applicable Fault Code

- 116-388: The necessary HD was not installed.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• HDD Productivity Kit, PL 12.4.20	

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On. If the problem persists, reinstall the HDD (REP 12.21 Hard Disk Drive (Optional) on page 4-236).
2.	If the problem persists, go to HDD System Fail on page 2-408.

116-389 No Add-On RAM that Should Be

RAM error has occurred. Although the configuration (with HDD, etc.) requires an Extension RAM, it was detected that the Extension RAM is not installed.

Applicable Fault Code

- 116-389: The necessary additional RAM was not installed.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• 1 GB SO-DIMM (Extension System Memory), PL 12.4.3 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Reinstall or replace the Extension Memory (REP 12.19 Memory (Optional) on page 4-234).
2.	If the problem persists, go to Common System Fail on page 2-406.

116-390 Standard ROM and NVM Version Mismatch

A mismatch in the versions of the Standard ROM and NVM was detected.

Applicable Fault Code

- 116-390: Standard ROM and NVM Version Mismatch

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Initialize the NVM (DC301 NVM Initialize on page 2-50).

116-391 Illegal Code (Country/ Territory/ Size Group)

At the start up after power On (reboot included), the country code/ territory code/ paper size group stored in the SEEP-ROM is checked and it was detected that one or more of them are undefined. However, at the start up after power On (reboot included) for the following 3 patterns, the error check is performed and it will start up as normal.

- Board shipment inspection ID Board (Bell mechanism) connected.
- Device assembly ID Board (Ebi mechanism) connected.
- Special booting (**Energy Saver** + **Reset** + **Power On**)... (Device assembly ID board substitution procedure).

Applicable Fault Code

- 116-391: Country Code/ Territory Code/ Paper Size Group Setting Error Detected

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set correct Country Code/ Territory Code/ Paper Size Group in the SEEP-ROM. Chain-Link Number: • 700-165 = country code • 700-338 = territory code • 700-402 = paper size group Refer to the NVM Values document for the correct data to be is set.
2.	After setting the correct values in the SEEP-ROM, initialize NVM (Sys-System) (DC301 NVM Initialize on page 2-50). If the Initialize NVM (Sys-System) was not performed, the NVM values that were generated from the wrong SEEP-ROM data will not be updated with the correct values.

116-393/ 116-394

System data error has occurred due to one of the following problems.

- AAA-related fatal error was detected.
- Before the AAA Manager Task had reached Task Available (Ready to Copy is displayed) during the boot sequence, abnormal settings of system data in the authentication system and the accounting system was detected. This is caused by system data mis-setting from tools other than KO TOOLS. If abnormal settings of system data in the authentication system and the accounting system was detected, the system will perform automatic change (to automatically cancel the error settings) and then automatically reboot. This Fault detection is caused by system data mis-setting from tools other than KO TOOLS.

Applicable Fault Codes

- 116-393: AAA Manager Fatal Error
- 116-394: Abnormal Authentication Mode and Accounting Mode Settings Detected during AAA Manager Boot Sequence

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Upgrade firmware to the latest version (Firmware Update on page 6-22).

116-395 USB Soft Fail

A USB-related fatal error. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Code

- 116-395: A USB-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On and check whether the problem is reoccurring. If the problem persists, go to Network Troubleshooting on page 2-459.

116-396 FIPS140 Self Test Fail

During start up, an error was detected by the self test of the FIPS140 certificate encryption module. Self test error due to invalid ROM (FW).

Applicable Fault Code

- 116-396: <FIPS140 Self Test Fail> During start up, an error was detected by the self test of the FIPS140 encryption module.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the ROM (FW) or upload again.

116-397 AAAmgr Illegal Setting Area Coverage Threshold

When the setting value of the system data in the boot sequence, fulfilled any of the following conditions. 720-061 (threshold B) <= 720-060 (threshold A)

- If the value of Chain-Link 720-060 is lower than 720-061 a Fault will be detected.
- As a Fault will be detected when the value of Chain-Link 720-060 is lower than 720-061, the value of Chain-Link 720-060 must not be lower than 720-061.

Applicable Fault Code

- 116-397: Plain Total Color Judgment Threshold Value Settings Incorrect

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Set the value of system data such that it conforms to the following relative value. Chain-Link 720-061 (threshold B) > Chain-Link 720-060 (threshold A) Note: The value of Chain-Link 720-060 cannot be lower than that of 720-061.

116-399 Under Initialization for 10 Minutes

When 10 minutes had passed after the Pflite has started up, 'the printer remains in initializing state' was detected. More than 10 minutes had passed in a situation where neither Ack nor Nack was returned from any task. This failure is detected only in startup modes such as [Normal Cold Boot] and [Reboot Mode (during Diag exit, etc.)]. In other modes such as [Recovery from Energy Saver] and [Special Boot Mode], the failure is not detected because the timeout time of 10 minutes is difficult to guarantee.

- Reboot the printer once if it remains in initializing state even when the 10-minute timeout time has passed after power On.
- Obtain the 'PfShowInfo8' log and save it in the HDD before rebooting.
- 'Ready to Print' is displayed and the error code is not displayed at normal start up after rebooting.
- If 116-399 occurs again after rebooting, the System Fail screen is displayed.

Applicable Fault Code

- 116-399: The printer is still being initialized after 10 minutes has passed since it was started up (including when it is returning from Sleep Mode).

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On again.

116-701 Out of Memory-Duplex Fail

The title with two or more lines was printed on 2 pages because 2 Sided Print is not available due to insufficient memory.

Applicable Fault Code

- 116-701: One-page data was printed on multiple pages during 2 Sided Print (The title with two or more lines was printed on 2 pages)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Expand the memory or install the HDD if the HD is not installed.

116-702 Print with Substitute Font

Printing performed with a substitute font.

Applicable Fault Code

- 116-702: Print With Substitute Font

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Use a valid font.

116-703 PostScript LANG Interprete ERR

Printing performed with a substitute font.

Applicable Fault Code

- 116-703: <PS Interpret error> An error has occurred in language analysis.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Common System Fail on page 2-406. When another PostScript printer exists at the customer site, print data on that printer and check if the same problem occurs.

116-710 HP-GL/2 Memory Overflow

HP-GL/2 memory overflows.

Applicable Fault Code

- 116-710: HP-GL Spool File Overflow

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Increase the HP-GL spool size. Or, install the HDD.

116-711 PLW Size/ Orientation Mismatch

Form Overlay is impossible because the size/ orientation of the PLW form's drawing is different from that of the paper.

Applicable Fault Code

- 116-711: <PLW form synthesis error> Form Overlay is impossible because the size/orientation of the PLW form's drawing is different from that of the paper.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Select paper that has the same size and orientation as the registered form.

116-712 Out of Area-Form REGI ERR

The PLW form/logo data cannot be registered due to insufficient RAM or HD space.

Applicable Fault Code

- 116-712: <Insufficient PLW form capacity> The PLW form/logo data cannot be registered due to insufficient RAM or HD space.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	After checking the registered forms/ logos using the Operation Panel utility, delete the unnecessary forms/ logos. Or, increase the allocated capacity of the RAM disk.

116-713 Job Divided by HDD Full

Collate operation was split when HDD Full occurred in Print Service.

Applicable Fault Code

- 116-713: <HDD Full Warning> The job output was split into batches due to HDD Full.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Delete the stored documents and clear HDD Full. If the problem persists, split the job so that HDD Full does not occur. If the problem persists (when HDD failure is suspected), go to HDD System Fail on page 2-408.

116-714 HP-GL/2 Command ERR

HP-GL/2 command error occurred.

Applicable Fault Code

- 116-714: A HP-GL command error was detected.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Correct or remove the data in the print data that causes the error. If the problem persists (when HDD failure is suspected), go to: • Network Troubleshooting on page 2-459 • Printing can be performed but Abnormally on page 2-410

116-715 Max Form to PLW Registered

The PLW form data cannot be registered because of the restriction on the number of forms.

Applicable Fault Code

- 116-715: <PLW form registration error> The PLW form data cannot be registered because of the restriction on the number of forms.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	After checking the registered forms using the Operation Panel utility, delete the unnecessary forms/logos. Or, delete the unnecessary forms with Print Command.

116-718 Selected PLW Form Not Registered

The specified form is not registered.

Applicable Fault Code

- 116-718: <PLW form synthesis error> The specified form is not registered.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Use a registered form or register the required form.

116-720 PCL Memory Low, Page Simplified

Memory error has occurred.

Applicable Fault Code

- 116-720: PCL Memory Low, Page Simplified

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Deactivate the unnecessary ports. Adjust various buffer memory sizes. Increase the memory.

116-725 HDD Full for Image Log

Disk Fail has occurred in the log image storage area when System Data ‘Assurance Level' is set as Low.

Applicable Fault Code

- 116-725: Disk Fail at Log Image Area

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Try to perform the job again. If there is no improvement after trying a few times, delete any unwanted documents that are stored in the device.

116-737 Out of Area-Data REGI ERR

The user defined data (external characters, patterns, etc) cannot be registered due to insufficient RAM capacity.

Applicable Fault Code

- 116-737: <Insufficient ART user defined area> The user defined data (external characters, patterns, etc) cannot be registered due to insufficient RAM capacity.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Delete the registered user-defined data. Or, increase the allocated capacity for RAM.

116-738 Size/ Orientation Mismatch

Form Overlay is impossible because the size/ orientation of the form's drawing is different from that of the paper.

Applicable Fault Code

- 116-738: <Form Overlay Error> Form Overlay is impossible because the size/ orientation of the form's drawing is different from that of the paper.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Select paper that has the same size and orientation as the registered form.

116-739 Out of Disk Area-Form/ Logo REGI ERR

The form/ logo data cannot be registered due to insufficient RAM or Hard Disk space.

Applicable Fault Code

- 116-739: <Insufficient form/logo capacity> The form/ logo data cannot be registered due to insufficient RAM or Hard Disk space.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	After checking the registered forms/logos using the Operation Panel utility, delete the unnecessary forms/logos. Or, increase the allocated capacity of the RAM disk.

116-740 Arithmetic Error

The value calculated in the Interpreter exceeded the limit.

Applicable Fault Code

- 116-740: <Value Calculation Error> The value calculated in the Interpreter exceeded the limit.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Upgrade the printer driver.

116-741 Max Form to Not PLW Registered

The form data cannot be registered due to the restriction on the number of forms.

Applicable Fault Code

- 116-741: <Form registration error> The form data cannot be registered due to the restriction on the no. of forms.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	After checking the registered forms using the Operation Panel utility, delete the unnecessary forms/logos. Or, delete the unnecessary forms with Print Command.

116-742 Max Logo Registered

The logo data cannot be registered due to the restriction on the number of logos.

Applicable Fault Code

- 116-742: <Logo registration error> The logo data cannot be registered due to the restriction on the no. of logos.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	After checking the registered logos using the Operation Panel utility, delete the unnecessary logos. Or, delete the unnecessary logos with Print Command.

116-743 Out of Buffer Area-Form/ Logo REGI ERR

<Form/logo cannot be registered (insufficient area) The received data (form/logo) exceeded the registered buffer size.

Applicable Fault Code

- 116-743: <Form/logo size overflow> The received data (form/logo) exceeded the registered buffer size.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Increase the size of the Form Registration Area using the Operation Panel. Or, install the HD.

116-745 ART Command ERR

During Decompose, the Decomposer checks for errors in grammar and values that exceed their respective limit values.

Applicable Fault Code

- 116-745: <ART Command Error> During Decompose, the Decomposer checks for errors in grammar and values that exceed their respective limit values.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	After checking the registered logos using the Operation Panel utility, delete the unnecessary logos. Or, delete the unnecessary logos with Print Command.

116-746 Selected Form Not Registered

The specified form is not registered.

Applicable Fault Code

- 116-746: <Form Overlay Error> The specified form is not registered.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Increase the size of the Form Registration Area using the Operation Panel. Or, install the HD.

116-747/ 116-748

Paper error has occurred due one of the following problems.

- After subtracting the paper margin from the valid coordinate area, the result of the calculation will be negative.
- Drawing data does not exist in the page data.

Applicable Fault Codes

- 116-747: <White page was detected.> After subtracting the paper margin from the valid coordinate area, the result of the calculation will be negative.
- 116-748: <White page was detected.> Drawing data does not exist in the page data.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Try a different media size. View print preview.

116-749 PostScript Font Error

The specified font is not found in the ROM or the HDD.

Applicable Fault Code

- 116-749: <PS Font Error> Job was aborted because the specified font is not found.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Add fonts. Or, specify a substitute font.

116-752 Print Job Ticket Description Warning

When a user instructs to print from an application that directly sends PDF, such as 'ContentsBridge2005', the machine received the print job ticket sent together with the PDF but the job ticket data includes [printing instructions that are not supported by the machine]. In particular, the job ticket also contains printing instructions that are only supported by other machines that was developed after this machine was released. Part of those settings will be canceled or changed to continue with the processing.

Applicable Fault Code

- 116-752: PDF print job ticket description warning

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Although some functions that are not supported by the printer were specified in the print job ticket, those instructions will be canceled because they are unrelated to the functions provided in the printer and the printing will continue. You can check for the canceled functions by outputting the Job History Report. To use the canceled printing instructions, print to a printer that supports those functions. Obtain the Printer Setup List, the job log Report and sent print data with attached print job ticket when the problem occurred. Go to Common Job Fail on page 2-407.

118-310 IPSEC Internal Fail

An internal error was detected during initialization of the IPSEC.

Applicable Fault Code

- 118-310: IPSEC Internal Error

Troubleshooting Procedure

Step	Actions and Questions
1.	Turn the printer power Off and On.

121-314 Customize User Prompts Fail

User prompts error has occurred.

Applicable Fault Code

- 121-314: Customize User Prompts Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Change the system data (Chain-Link) so that it will not trigger the [Detection Condition]. (E.g. to allow Card Auditron level 2/Smart Card Auditron level 2 in Network Accounting mode, set the Customize User Prompts to 'both' or 'prompt 1 only')

121-318 Auth/ Account Settings is not Supported

During boot, a prohibited combination of authentication/ accounting system data and connected accessory is detected and the authentication/accounting setting was automatically changed. Check the limitations on the combination of authentication mode/ accounting mode/ connected accessory and apply the correct authentication/ accounting settings. Check whether the accessory settings (system data) and the connected accessory are correct.

Applicable Fault Code

- 121-318: Auth/ Account Settings is not Supported

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	None applicable because it is automatic reboot.

124-310/ 124-311

Product Number or Serial Number error has occurred due to one of the following problems.

- The Product Number that is stored in 3 locations are not initialized.
- The Serial Number that is stored in 3 locations are not initialized.

Applicable Fault Codes

- 124-310: Product No. Fail (contents corrupted, the Controller PWB was replaced)
- 124-311: Serial No. Fail (contents corrupted, the Controller PWB was replaced)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-312 DC132 12/ 124-313 DC132 10

Product Numbers or Serial Numbers error has occurred due to one of the following problems.

- At least one of the Product Numbers that is stored in 3 locations is different.
- At least one of the Serial Numbers that is stored in 3 locations is different.

Applicable Fault Codes

- 124-312: Product Number fails when at least one Product Number is mismatched.
- 124-313: Serial Number fails when at least one Serial Number is mismatched.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47.
2.	Compare the 3 Product Number/ Serial Number.
3.	If all 3 are different, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
4.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
5.	If 2 among the 3 are matched, perform DC132 Machine Serial Number Settings on page 2-47 to match all 3 values.

124-314 DC132 01

Although the IOT speed that is stored in the 3 locations are matched, their values are not set (0).

Applicable Fault Code

- 124-314: The IOT productivity switch data was not set at all 3 locations. IOT speed fails (Contents corrupted. The PWB was replaced.)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-315 DC132 02/ 124-317 DC132 04

Speed mismatch or Product Model Identification data error has occurred due to one of the following problems.

- At least one of the IOT Speed that is stored in 3 locations is different.
- At least one of the Product a/f Model identification data that is stored in the 3 locations is different.

Applicable Fault Codes

- 124-315: At least one of the IOT productivity switch data was at the 3 locations is different. All IOT speed mismatch. (Contents corrupted. The PWB was replaced.)
- 124-317: At least one of the Product a/f Model at the 3 locations is different. All Product Model mismatch. (Contents corrupted. The PWB was replaced.)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC131 NVM Read/ Write on page 2-45.
2.	Compare the following 3 values: • DC131 [700-600] • DC131 [700-601] • DC131 [700-602]
3.	Compare the 3 data. If all 3 are different, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
4.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
5.	If 2 among the 3 are matched, perform DC132 Machine Serial Number Settings on page 2-47 to match all 3 values.

124-316 DC132 03/ 124-318 DC132 07

Product a/f Model identification data or Product Type for SW Key error has occurred due to one of the following problems.

- Although the Product a/f Model identification data that is stored in the 3 locations are matched, their values are not set (0).
- Although the Product Type For SWKey that is stored in the 3 locations are matched, their values are not set (0).

Applicable Fault Codes

- 124-316: The Product a/f Model was not set at all 3 locations. Product Model fails. (Contents corrupted. The PWB was replaced.)
- 124-318: The Product Type For SWKey was not set at all 3 locations. Product Type For SWKey fails. (Contents corrupted. The PWB was replaced.)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-319 DC132 08

At least one of the Product Type For SWKey that is stored in 3 locations is different.

Applicable Fault Code

- 124-319: At least one of the Product Type for SWKey at the 3 locations is different. All Product Type for SWKey Mismatch. (Contents corrupted. The PWB was replaced.)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC131 NVM Read/ Write on page 2-45.
2.	Compare the following 3 values: • DC131 [700-606] • DC131 [700-607] • DC131 [700-608]
3.	Compare the 3 data. If all 3 are different, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
4.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
5.	If 2 among the 3 are matched, perform DC132 Machine Serial Number Settings on page 2-47 to match all 3 values.

124-320 SEEPROM Fail

Write error has occurred in the SEEPROM on the I/P PWB.

Applicable Fault Code

- 124-320: SEEPROM Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• EEPROM PWB, PL 12.1.18 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Reinstall the EEPROM (REP 12.6 EEPROM PWB on page 4-210).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-321 Backup SRAM Fail

Write error has occurred in the NVM on the I/P PWB.

Applicable Fault Code

- 124-321: Backup SRAM Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1 • 1 GB DDR2 DIMM, PL 12.4.2	

Troubleshooting Procedure

Step	Actions and Questions
1.	Reinstall the NVRAM (REP 12.18 Memory (Standard) on page 4-232).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-324 All Billings Mismatch

The Billing Counters that are stored in multiple locations are all different.

Applicable Fault Code

- 124-324: <Cannot Copy/Scan/Print Fail> Billing Fail (By PWB Replacement. The Billing Counter is mismatched at 3 locations.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-325 Billing Restoration Fail

At least one Billing Counter is not matched and correction is not possible.

Applicable Fault Code

- 124-325: <Cannot Print Fail> Unable to perform the Billing Counter auto correction when attempting to correct the Billing at one location.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47.
2.	Compare the 3 Serial Number. If all 3 are different, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
3.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
4.	If 2 among the 3 are matched, replace the PWB that has the different value.

124-326 IOT Speed Not Registered

At boot, the status of speed registration procedure for IOT was detected to be 1 or 2.

Applicable Fault Code

- 124-326: IOT Speed Not Registered

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	This failure will start the IOT speed change procedure and the user should follow the dialog that is displayed on the UI to enter the SW Key for IOT speed change.

124-327 IOT Speed Change SW Fail

An irregularity was detected in the middle of the IOT speed change procedure.

1. Failed to transition to Diag Mode
2. Failed at DC132
3. Failed at SEEP-ROM R/W
4. Failed at reboot

Applicable Fault Code

- 124-327: SW Error Detected During IOT Speed Change Procedure

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform firmware upgrade (Firmware Update on page 6-22).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-333 ASIC Fail (Panther)/ 124-337 ESS Standard RAM Error

RAM error has occurred due to one of the following problems.

- Server error was detected.
- An ESS On Board Standard RAM error was detected.

Applicable Fault Codes

- 124-333: Panther Error
- 124-337: ESS Standard RAM (Standard ROM) Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• 1 GB DDR2 DIMM, PL 12.4.2	

Troubleshooting Procedure

Step	Actions and Questions
1.	Reinstall the NVRAM (REP 12.18 Memory (Standard) on page 4-232).
2.	If the problem still persists, go to Common System Fail on page 2-406.

124-338 Same Font ROMs Found

The system detected that a duplicate Font ROM was installed.

Applicable Fault Code

- 124-338: Same Font ROMs Found

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-339 ROM DIMM of Another Product Found

It was detected that ROM DIMM from other machine models is installed.

Applicable Fault Code

- 124-339: Error due to installation of ROM DIMM for other models.

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-340 CRUM Market Fail ALL

Although the CRUM Destination Value that is stored in the 3 locations are matched, their values are not set (0).

Applicable Fault Code

- 124-340: All three CRUM destinations are not set (0 or different values are set).

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

124-341 CRUM Market/ 124-351 CRUM OEM/ 124-361 CRUM Validation Fail MCU

CRUM error has occurred due to one of the following problems.

- At least one of the CRUM Destination Value that is stored in the 3 locations is not matched (the contents stored in the MCU PWB do not match).
- At least one of the CRUM OEM Destination that is stored in the 3 locations is not matched (the contents stored in the MCU PWB do not match)
- At least one of the CRUM Enabled/Disabled that is stored in the 3 locations is not matched (the contents stored in the MCU PWB do not match).

Applicable Fault Codes

- 124-341: One of CRUM destinations is different from the others (IOT).
- 124-351: One of CRUM OEM destinations is different from the others (IOT).
- 124-361: One of CRUM Enable/Disable settings is different from the others (IOT).

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47, **SYS 1**.
2.	If the problem persists, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

124-342 CRUM Market/ 124-352 CRUM OEM/ CRUM Validation Fail SYS 1

CRUM error has occurred due to one of the following problems.

- At least one of the CRUM Destination Value that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).
- At least one of the CRUM OEM Destination that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).
- At least one of the CRUM Enabled/ Disabled that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).

Applicable Fault Codes

- 124-342: One of CRUM destinations is different from the others (SYS 1).
- 124-352: One of CRUM OEM destinations is different from the others (SYS 1).
- 124-362: One of CRUM Enable/Disable settings is different from the others (SYS 1).

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47, **MCU PWB**.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-343 CRUM Market/ 124-353 CRUM OEM/ 124-363 CRUM Validation Fail SYS 2

CRUM error has occurred due to one of the following problems.

- At least one of the CRUM Destination Value that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).
- At least one of the CRUM OEM Destination that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).
- At least one of the CRUM Enabled/Disabled that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).

Applicable Fault Codes

- 124-343: One of CRUM destinations is different from the others (SYS 2).
- 124-353: One of CRUM OEM destinations is different from the others (SYS 2).
- 124-363: One of CRUM Enable/Disable settings is different from the others (SYS 2).

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47, **SYS 2**.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-344 All Billings Meter/ 124-346 All Billings Count Types Mismatch

Billing error has occurred due to one of the following problems.

- The Billing Meter Types that are stored in multiple locations are all different.
- The Billing Count Types that are stored in multiple locations are all different.

Applicable Fault Codes

- 124-344: Billing Meter Type Fail (different at all 3 locations)
- 124-346: Billing Count Type Fail (different at all 3 locations)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-345 Billing Meter Type Restoration Fail

When at least one Billing Meter Type is not matched and the machine automatic correction has failed to correct the problem.

Applicable Fault Code

- 124-345: Billing Meter Type Fail (at least 1 location is mismatched, unable to correct automatically)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC131 NVM Read/ Write on page 2-45 to compare the following NVM values. • If the values of 720-002 and 720-062 are the same, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206). • If the values are different, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-347 Billing Count Type Restoration Fail

When at least one Billing Count Type is not matched and the machine automatic correction has failed to correct the problem.

Applicable Fault Code

- 124-347: Billing Count Type Fail (at least 1 location is mismatched, unable to correct automatically)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC131 NVM Read/ Write on page 2-45 to compare the following NVM values. • If the values of 720-052 and 720-063 are the same, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206). • If the values are different, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-348 All Model Break Points Mismatch

The Model Break Points that are stored in multiple locations are all different.

Applicable Fault Code

- 124-348: Model Break Point Fail (different at all 3 locations)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-349 Model Break Point Restoration Fail

When at least one Model Break Point is not matched and the machine automatic correction has failed to correct the problem.

Applicable Fault Code

- 124-349: Model Break Point Fail (at least 1 location is mismatched, unable to correct automatically)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC131 NVM Read/ Write on page 2-45 to compare the following NVM values. • If the values of 720-057 and 720-064 are the same, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206). • If the values are different, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-350 CRUM OEM Fail All

Although the CRUM OEM Destination that is stored in the 3 locations are matched, their values are not set (0).

Applicable Fault Code

- 124-350: All three CRUM OEM destinations are not set (0 or different values are set).

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

124-360 CRUM Validation/ 124-390 CRUM OEM Fail All

CRUM error has occurred due to one of the following problems.

- Although the CRUM Enabled/ Disabled that is stored in the 3 locations are matched, their values are not set (0).
- Although the CRUM OEM Destination that is stored in the 3 locations are matched, their values are not set (0).

Applicable Fault Codes

- 124-360: All three CRUM Enable/ Disable settings are not set (0 or different values are set).
- 124-390: All three CRUM OEM destinations are not set (0 or different values are set). #Case-(2)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

124-372/ 124-374

Controller Software error has occurred due to one of the following problems.

- IOT Controller software malfunction. The Paper Size data that is notified from the IOT is “0” while the Tray status is other than “Broken” or “Pulled out” (Ready or Empty).
- The IOT Controller software has detected a fatal error. This may also occur when the system data that is obtained within the Cont at start up is incorrect.(E.g. when AR64515 has occurred) Although this occurs at the “Exit (Keep Log)” Diag Exit after the SysUser NV initialization or performing the IOT NV write, it will not occur when using “Exit (Clear Log)”.

Applicable Fault Codes

- 124-372: IOT Controller software malfunction
- 124-374: IOT IM Device Driver Software Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to IOT System Fail on page 2-407.

124-373 IOT Manager SW Fail

This error occurs if the accounting mode is changed when there are stored documents. When changing the accounting mode, print out and/or delete all the stored documents to clear them before changing the accounting mode.

Applicable Fault Code

- 124-373: IOT Manager Software Fail

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to IOT System Fail on page 2-407.

124-380 CRUM Market Fail All (2)

Although the CRUM Destination Value that is stored in the 3 locations are matched, their values are not set (0).

Applicable Fault Code

- 124-380: All three CRUM destinations are not set (0 or different values are set) #Case-(2).

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Image Processor PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-381 CRUM Market/ 124-391 CRUM OEM Fail MCU

CRUM error has occurred due to one of the following problems.

- At least one of the CRUM Destination Value that is stored in the 3 locations is not matched (the contents stored in the MCU PWB do not match).
- At least one of the CRUM OEM Destination that is stored in the 3 locations is not matched (the contents stored in the MCU PWB do not match).

Applicable Fault Codes

- 124-381: One of CRUM destinations is different from the others (IOT). #Case-(2)
- 124-391: One of CRUM OEM destinations is different from the others (IOT). #Case-(2)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47, **SYS 1**.
2.	If the problem persists, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

124-382 CRUM Market/ 124-392 CRUM OEM Fail SYS 1 (2)

CRUM error has occurred due to one of the following problems.

- At least one of the CRUM Destination Value that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).
- At least one of the CRUM OEM Destination that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).

Applicable Fault Codes

- 124-382: One of CRUM destinations is different from the others (SYS 1). #Case-(2)
- 124-392: One of CRUM OEM destinations is different from the others (SYS 1). #Case-(2)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47, **MCU PWB**.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

124-383 CRUM Market/ 124-393 CRUM OEM Fail SYS 2 (2)

CRUM error has occurred due to one of the following problems.

- At least one of the CRUM Destination Value that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).
- At least one of the CRUM OEM Destination that is stored in the 3 locations is not matched (the contents stored in the Controller PWB do not match).

Applicable Fault Codes

- 124-383: One of CRUM destinations is different from the others (SYS 2). #Case-(2)
- 124-393: One of CRUM OEM destinations is different from the others (SYS 2). #Case-(2)

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• I/P PWB, PL 12.4.1	

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform DC132 Machine Serial Number Settings on page 2-47, **SYS 2**.
2.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).

125-311/ 127-310/127-314

Software processing error has occurred due to one of the following problems.

- PSW Cont software malfunction. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.
- The ESR task has generated a fatal error.
- A problem has occurred in the WSD Print Service software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 125-311: PSWcont Unexpected Error
- 127-310: Fatal Error of ESR Task
- 127-314: WSD Print Service-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Common System Fail on page 2-406.

127-353/ 127-354/ 127-396/ 127-398/ 127-399

Software processing error has occurred due to one of the following problems.

- An lpd-related fatal error. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.
- A Mail I/O-related fatal error. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.
- An IPP-related fatal error. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.
- A JME-related fatal error. A problem has occurred in the software processing and it is unable to continue with the subsequent processes.

Applicable Fault Codes

- 127-353: lpd-related Fatal Error
- 127-354: FTP Server Fatal Error
- 127-396: Mail I/O-related Fatal Error
- 127-398: IPP-related Fatal Error
- 127-399: JME-related Fatal Error

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Go to Network Troubleshooting on page 2-459.

202-399 Timer Internal Fail

The System Data = 700-124 (Auto Clear Timer (Combining Auto Resume Timer, Auditron Off Timer and Tools Off Timer)) settings value was detected to be from 1 to 29 in an MF device. This failure does not occur in Prt machines for values of 1 to 29.

Applicable Fault Code

- 202-399: Timer Internal Error Detected by UI Cont

Initial Actions

- Power cycle the printer.
- If the problem persists, perform the following procedure.

Troubleshooting Procedure

Step	Actions and Questions
1.	Check the System Data = 700-124 (Auto Clear Timer, Auto Resume Timer, Auditron Off Timer and Tools Off Timer) value. This failure will occur when values of 1 to 29 is set in the MF device. • Other than 700-124, this failure may also occur when any timer-related System Data settings value is changed. In that case, check the corresponding System Data for the correct value.
2.	If the problem persists, go to Common System Fail on page 2-406.

Other Errors

Common System Fail

The following procedure applies to failures at System Fail or Sub System Fail, regardless of whether it is during power On or during job processing.

Initial Actions

- What job was performed when the problem occurred?
- Check the job settings from the Control Panel.
- Check whether HDD spool is enabled/ disabled.
- Collect other information as much as possible to reproduce the error.

Troubleshooting Procedure

Step	Actions and Questions
1.	Perform I/P PWB Diagnostic. Refer to Image Processor (I/P) PWB LEDs on page 2-413.
2.	Check the version of the Firmware. If it is not the latest, download the latest firmware (Firmware Update on page 6-22).
3.	Turn the power Off and On.
4.	Turn the power Off and On by using the breaker (unplug from and plug to the power outlet).
5.	If the problem persists, check the installation status of the I/P PWB, MCU PWB, and cable connectors. Reconnect the cables/reinstall the PWB's as needed, and then perform the same operation where the error had occurred.
6.	Turn the power Off, remove and insert the I/P PWB RAM DIMM (REP 12.18 Memory (Standard) on page 4-232), then turn the power On again to perform the same operation where the error occurred.
7.	If the problem persists after turning the power On, turn the power Off and replace the RAM DIMM (REP 12.18 Memory (Standard) on page 4-232). After turning the power On, perform the same operation where the error had occurred.
8.	If the problem still persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228) and perform the same operation where the error had occurred.
9.	Return the DC131 NVM Read/ Write on page 2-45 [700-530]. Reboot Target at Fail Occurrence) to "**1**".

Common Job Fail

1. Change any possible mechanical settings for corrective actions or detection conditions and repeat the operation.
2. Check the version of the Firmware. If it is not the latest, download the latest firmware (Firmware Update on page 6-22).
3. Get the procedures for reproducing an error according to the operation that was performed when the error occurred.
   - The exact time of occurrence during Job execution.
   - The Job settings from the Panel.
   - Whether the HDD spool is enabled/disabled.
   - Collect other information as much as possible for reproducing the error.

IOT System Fail

1. Check the installation status of the I/P PWB and MCU PWB connector cables.
2. If the problem still persists, refer to Common System Fail on page 2-406.
3. If the problem persists, replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

HDD System Fail

HDD Formatting

Forcedly re-formatting the HDD by special booting will forcedly return the partition status to the factory setting. HDD failures might be recovered by re-formatting.

CAUTION: Formatting will delete all the data in the HDD.

Procedure

Step	Actions and Questions
1.	Disconnect and reconnect the HDD harness, check the installation of the HDD and install it securely. Perform Steps 1 to 6 of Common System Fail on page 2-406. If the problem persists, go to the next step.
2.	If the problem persists, perform the forced initialization by special booting. • Startup by Force Spool Range (HDD) Initialization It is the operation to forcedly clear the HDD when the printer is started up. [Operation or Details] a. Turning the power ON while pressing the [Energy Saver] and [Down] buttons at the same time initializes the data stored in the HDD Partition No. 4. b. Initialization by special booting in this item targets only on the previously specified area in the HDD partition and does not affect the other areas. Here, perform the same operation where the error occurred.
3.	If the problem persists, perform the forced formatting by special booting. • Starting the forced HDD formatting (this procedure should not be let known to the users) This operation forcedly restores the HDD to the partition status at factory settings. Perform HDD formatting by turning the power On while pressing the **Energy Saver** button, **Up + Down** buttons at the same time. Here, perform the same operation where the error occurred.
4.	If the problem persists, replace the HDD and perform the same operation where the error had occurred.
5.	If the problem persists, replace the I/P PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228) and perform the same operation where the error had occurred.
6.	Return the NVM that was set in Step 1 (DC131 NVM Read/ Write on page 2-45 [700-530]: Reboot Target at Fail Occurrence) to “1”.

HDD Job Fail

1. Perform the procedure in Common Job Fail on page 2-407.
2. If the problem persists, perform the procedure in HDD System Fail on page 2-408.

016-782/ 016-784 Fail

1. As EUC Code (Japanese) cannot be used in the host name of the current specification, change it to English.
2. Register a job flow from EasyAdmin. Now even if the host name is in EUC Code (Japanese), transfer is possible.
3. Check [Server Name/IP Address] with the Address List.
   – WinNT 4.0: If IP Address is specified, SMB transfer to WinNT 4.0 becomes unavailable.

   Change [Server Name/IP Address] to a host name.
   – Win XP: SMB transfer is available even with IP Address.
4. Perform the following procedures to check for the failure where SMB transfer is unavailable via the Address List.
   a. Ask (a PDC server manager) to add this printer to a domain.
   b. Ask the Administrator to set a local user and password in the PC storage server (or a domain client higher than WIN workstation). This local user and password = the user and password in the Address List.
   c. Ask the Administrator to grant permission for the user that has been created in the scan data storage folder of the PC storage server (or the domain client higher than WIN2000) in Step (2) (for NTFS, FAT32 is not used). After that, share the folder and set the permission for sharing.
   d. The workgroup name in the SMB properties shown from the appropriate device internet service = the same as the domain (a) to be used as a domain name. If the procedure in (a) is inappropriate, the error 016-782 occurs. If the procedures in (b) and (c) are inappropriate, the error 016-784 occurs.
   e. If the problem persists, go to Common Job Fail on page 2-407.

No Output is Available, No Data is Printed

1. Check whether the firmware and the Print Driver are of the latest version.
   If it is not the latest, download the latest firmware (Firmware Update on page 6-22).
   After checking the above items, check whether the Indicator is blinking and take the corrective actions accordingly.

When the Indicator (Panel Send/ Receive Lamp) is blinking:

- It is highly possible that print data cannot be decomposed in the Printer.
- Perform the corrective actions in the Network Troubleshooting on page 2-459, and then collect the following information:
  - Configuration Report
  - Check the panel message (error message, etc.)
  - Error History Report
  - Job History Report
  - Shutdown History Report
  - Print Driver name and version
  - Check the Print Driver settings in [Details]

When the Indicator (Panel Send/ Receive Lamp) is not blinking:

It is highly possible that connection is not established and hence print data has not reached the Printer. Collect information equivalent to the items: “2.4.2 [Not connected to network] or [Unable to find the device from the PC].”

Printing can be performed but Abnormally

1. Check the version of the Firmware and the Print Driver. If it is not the latest, download the latest Firmware (Firmware Update on page 6-22).
2. Ask the customer about the status of unavailable printing and based on it, collect the following information:
   - Configuration Report
   - Check the PDL name
   - Print Driver name and version
   - Check the Print Driver settings in [Details]
   - Print the Printer settings of every mode
   - Print samples of improper printing
   - Print samples of normal printing (including samples from other printers)

Control Panel and LED Troubleshooting

Follow the steps below in order depending on the symptom. Test the printer after each step to see if the problem has been resolved.

Control Panel is functional, but the printer does not come to a "Ready" state

1. Disconnect the printer from the network or USB.
2. Power Off the printer.
3. Remove and reseat the Image Processor PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
4. Feel the Fuser Unit to see if it is warm, if not, try replacing the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
5. Refer to +24VDC Power Troubleshooting on page 2-455.

Control Panel LED is On, Control Panel Display is Blank

Will the printer print a job that is sent to it? If yes, start at step #2.

1. Remove and reseat the Image Processor PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
2. Check to see if the wiring harness has been disconnected from the Control Panel. If the connection is OK, replace the Control Panel (REP 1.12 Control Panel Assembly on page 4-29).
3. Replace the Image Processor Board (REP 12.17 Image Processor (I/P) PWB on page 4-228).
4. Refer to +24VDC Power Troubleshooting on page 2-455.
5. A LVPS Fan failure can also cause the printer to not enable +24VDC. This can appear to be a failure of the LVPS PWB. Verify that the Fan turns on when the printer is turned On.

Printer Hangs with the Xerox Logo Displayed, or Reboots

1. Verify that the printer is plugged directly into a wall outlet and that the circuit is capable of meeting the power specifications for the printer (voltage within the specified range and less than a 10% drop in voltage when printing). The printer will not perform reliably when plugged into a surge protector, power strip or an un-interruptible power supply.
2. Power Off the printer, disconnect the network or USB cable and then power the printer back On. If the printer comes to Ready, print an internal page from the Control Panel, then make a print from a laptop connected directly to the printer. If both of the print jobs are successful, the problem is a network issue and normal network troubleshooting procedures should be used. If the printer does not come to Ready, try pressing the Cancel button to clear any jobs from the queue that could be causing the printer to hang. The Cancel button may have to be pressed multiple times to clear out all jobs. Then try to print internal pages and from a laptop again.
3. Initialize NVRAM.

Using the Customer Menu on the Control Panel:

a. From the Control Panel menu, press the **Menu** button.
b. Press the **Down Arrow** button, navigate to Admin Menu, and press the **OK** button.
c. Press the **Down Arrow** button, navigate to Init/ Delete Data, and press the **OK** button.
d. The Init/ Delete Data NVM screen appears.
e. Press the **Right Arrow** button to display the NVM Press OK to Init screen.
f. Press the **OK** button.
g. The NVM Initializing... screen appears.
h. The printer reboots.

Using the Service Diagnostics Menu:

- Refer to DC301 NVM Initialize on page 2-50 for detail procedures.

4. Perform Engine Only Test Print (see Engine Test Print on page 3-48).
5. Remove and reseat the Image Processor PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
6. Try printing one of the prints using DC612 in Service Diagnostics (DC612 Print Pattern on page 2-42).
7. Replace individually, in order of priority:
   – Image Processor EEPROM PWB (Figure 2 - NVRAM Location on page 4-231)
   – Image Processor PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228)
8. Corrupt NVRAM on the MCU PWB can cause the printer to continually reboot. As a last step, try replacing the MCU PWB (REP 12.4 MCU PWB on page 4-206).

Image Processor (I/P) PWB LEDs

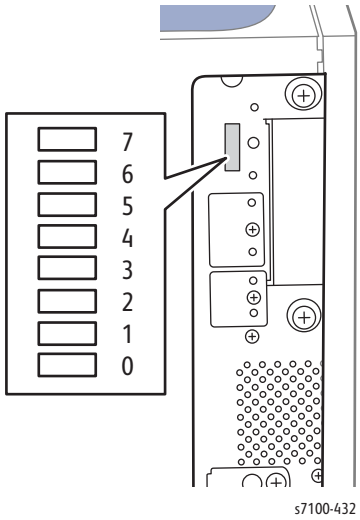
Assessment on the condition of the parts and the condition of the I/P PWB can be done based on the On/ Off states of the 8 LED's on the I/P PWB. To check the condition of an error where no Error Code is displayed, check the LED display on the I/P PWB.

As the device that can be connected differs depending on the board, it does not always necessarily mean that diagnostic is possible. In the following table, items that are installed as features are marked with "O".

Procedure

1. Turn Off the printer.
2. Unplug the power cord from the outlet.
3. Remove the Blind Board of the I/P PWB.
4. Plug in the power plug and turn On the power switch.

Checking LEDs



Assessment Based on LED ON/ OFF States

Main Unit Lower 7,6,5,4	Main Unit Upper 3,2,1,0	State/ Condition	Related H/W	Failure Location/ Details	Chain-Link
0,0,0,0	0,0,0,0	Initial state at Power On	I/P PWB	Not all are ON: Failure at power source? Failure at Assy?	
X,X,X,X	X,X,X,0	Interrupt vector setting completed	I/P PWB	ON: I/P PWB Error	
X,X,X,X	X,X,0,X	EBC (ROM Controller) initialization completed	I/P PWB	ON: I/P PWB Error	
X,X,X,X	X,X,0,0	Reserved (ON)			
X,X,X,X	X,0,X,X	Reserved (ON)			
X,X,X,X	X,0,X,0	D-Cache zero clear	I/P PWB	ON: I/P PWB Error	
X,X,X,X	X,0,0,X,	Reserved (OFF)			
X,X,X,X	X,0,0,0	Enable software wait processing of DDR output buffer	I/P PWB	ON: I/P PWB Error	
X,X,X,X	0,X,X,X	DDR Controller usual initialization start	I/P PWB	ON: I/P PWB Error	
0,X,X,X	0,X,X,X	Recovery processing from CPU OFF start	I/P PWB	ON: I/P PWB Error	
0,0,0,0	X,X,X,X	DDR initialization has failed	RAM	Blinking: RAM Error	
0,0,X,X	X,X,X,X	Save data check error	RAM	Blinking: RAM Error	
X,X,X,X	0,X,X,0	DDR initialization has completed	RAM	ON: RAM Error	
X,X,X,X	0,X,0,X	I-Cache/D-Cache is disabled	I/P PWB	ON: I/P PWB Error	
X,X,X,X	0,X,0,0	CPU internal register setting	I/P PWB	ON: I/P PWB Error	
0,X,X,0	X,X,X,X	DDR memory write check	RAM	ON: RAM Error	
0,0,0,0	X,X,X,X	DDR R/W test has failed	RAM	Blinking: RAM Error	

Assessment Based on LED ON/ OFF States (Continued)

Main Unit Lower 7,6,5,4	Main Unit Upper 3,2,1,0	State/ Condition	Related H/W	Failure Location/ Details	Chain-Link
X,X,X,X	0,0,X,X	DDR memory read check & zero clear has completed	RAM	ON: RAM Error	
X,X,X,X	0,0,X,0	Copy to memory for Panbug program (TEXT portion)	ROM/ RAM	ON: ROM/ RAM Error	
X,X,X,X	0,0,0,X	Copy to memory for Panbug program (BASE portion)	ROM/ RAM	ON: ROM/ RAM Error	
X,X,X,X	0,0,0,0	FPU register test has completed	I/P PWB	ON: I/P PWB Error	
X,X,X,0	X,X,X,X	Jump preparation to CCode has completed	I/P PWB	ON: I/P PWB Error	
X,X,0,X	X,0,X,X	Standard RAM diagnostic start	RAM	ON: Standard RAM Error	116-315
X,X,0,X	X,0,X,0	Standard RAM diagnostic completed			
X,X,0,X	X,0,0,X	Extension RAM diagnostic start	RAM	ON: Extension RAM Error	116-316
X,X,0,X	X,0,0,0	Extension RAM diagnostic completed			
X,X,0,X	0,X,X,X	Standard ROM diagnostic start	ROM	ON: Standard ROM Error	116-317
X,X,0,X	0,X,X,0	Standard ROM diagnostic completed			
X,X,0,X	0,X,0,X	NVRAM diagnostic start	NVM/ I/P PWB	ON: NVRAM Error	116-323
X,X,0,X	0,X,0,0	NVRAM diagnostic completed			
X,X,0,0	X,X,X,0	Transition from MiniOS to CORE (DIAG) completed			
0,0,X,X	X,X,0,X	UI Cable Disconnect Detection	UI/ I/P PWB	ON: UI Cable Connection Error	116-326
0,0,X,X	X,X,0,0	MCU Harness Disconnect Detection	MCU/ I/P PWB	ON: MCU Harness Connection Error	116-328
X,0,X,X	X,X,X,X	IO ASIC diagnostic start	I/P PWB	ON: ASIC Error	
X,0,X,X	X,X,X,0	IO ASIC diagnostic completed			

Assessment Based on LED ON/ OFF States (Continued)

Main Unit Lower 7,6,5,4	Main Unit Upper 3,2,1,0	State/ Condition	Related H/W	Failure Location/ Details	Chain-Link
X,O,X,X	X,X,O,X	Codec ASIC diagnostic start	I/P PWB	ON: ASIC Error	
X,O,X,X	X,X,O,O	Codec ASIC diagnostic completed			
X,O,X,X	X,O,X,X	Standard FontROM diagnostic start	ROM	ON: ASIC Error	116-380
X,O,X,X	X,O,X,O	Standard FontROM diagnostic completed			
X,O,X,X	X,O,O,X	Extension FontROM diagnostic start	ROM	ON: ASIC Error	016-341
X,O,X,X	X,O,O,O	Extension FontROM diagnostic completed			
X,O,X,X	O,X,X,X	SEEP diagnostic start	SEEPROM	ON: SEEPROM Error	016-351 016-350
X,O,X,X	O,X,X,O	SEEP diagnostic completed			
X,O,X,X	O,X,O,X	Timer diagnostic start	I/P PWB	ON: Timer Error	116-364
X,O,X,X	O,X,O,O	Timer diagnostic completed			
X,O,X,X	O,O,X,X	PageMemory diagnostic start	RAM	ON: RAM Error	016-347
X,O,X,X	O,O,X,O	PageMemory diagnostic completed			
X,O,X,O	X,X,O,X	RTC diagnostic start	RTC	ON: RTC Error	016-342
X,O,X,O	X,X,O,O	RTC diagnostic completed			
X,O,X,O	X,O,X,X	UI Check start	UI/ I/P PWB	ON: I/P PWB/ UI Error	016-362
X,O,X,O	X,O,X,O	UI Check completed			
X,O,X,O	X,O,O,X	Lyra diagnostic start	JPEG/ I/P PWB	ON: JPEG Card Error	
X,O,X,O	X,O,O,O	Lyra diagnostic completed			
X,O,X,O	O,X,X,X	USB 1.0 Host diagnostic start	I/P PWB	ON: I/P PWB Error	
X,O,X,O	O,X,X,O	USB 1.0 Host diagnostic completed			
X,O,X,O	O,X,O,X	USB 2.0 Host diagnostic start	I/P PWB	ON: I/P PWB Error	016-364

Assessment Based on LED ON/ OFF States (Continued)

Main Unit Lower 7,6,5,4	Main Unit Upper 3,2,1,0	State/ Condition	Related H/W	Failure Location/ Details	Chain-Link
X,O,X,O	O,X,O,O	USB 2.0 Host diagnostic completed			
X,O,X,O	O,O,X,X	USB 2.0 Device diagnostic start	I/P PWB	ON: I/P PWB Error	016-365
X,O,X,O	O,O,X,O	USB 2.0 Device diagnostic completed			
X,O,X,O	O,O,O,X	HDD diagnostic start	HDD/ I/P PWB	ON: HDD/ I/P PWB Error	016-366 016-367
X,O,X,O	O,O,O,O	HDD diagnostic completed			
X,O,O,X	X,X,X,X	HDD (UFS) diagnostic start	HDD	ON: HDD Error	016-372 ~ 382
X,O,O,X	X,X,X,O	HDD (UFS) diagnostic start			
X,O,O,X	O,O,O,X	Standard ROM diagnostic start	I/P PWB	ON: Standard ROM Error	116-317 016-336
X,O,O,X	O,O,O,O	Standard ROM diagnostic complete			
O,X,X,X	X,X,X,X	Energy Saver transition (Standby --> Low Power)	System overall	Energy Saving	
O,X,X,X	X,X,X,O	Energy Saving (Low Power)	System overall	Energy Saving	
O,X,X,X	X,X,O,X	Energy Saving (Sleep)	System overall	Energy Saving	
X,X,X,X	X,X,X,X	Energy Saving (CPU Off)	System overall	Energy Saving	
O,X,X,X	X,X,O,O	Energy Saver transition (Low Power > Sleep)	System overall	Energy Saving	
O,X,X,X	X,O,X,X	Energy Saving (Semi Low Power)	System overall	Energy Saving	
O,X,X,X	X,O,X,O	Energy Saver transition (Sleep > Semi Low Power)	System overall	Energy Saving	
O,X,X,X	X,O,O,O	Energy Saver transition (Semi Low Power > Sleep)	System overall	Energy Saving	

Assessment Based on LED ON/ OFF States (Continued)

Main Unit Lower 7,6,5,4	Main Unit Upper 3,2,1,0	State/ Condition	Related H/W	Failure Location/ Details	Chain-Link
O,X,X,X	O,X,X,O	Energy Saver transition (LowPower > Standby)	System overall	Energy Saving	
O,X,X,X	O,X,O,X	Energy Saver transition (Sleep > Ready)	System overall	Energy Saving	
O,O,O,O	O,O,O,O	VxWORKS booting completed normally, recovery from Energy Saver Mode	System overall	Normal Operation	

Media Jam and Paper Path Troubleshooting

Media-Based Problems

1. Check that the correct type of media is being used; for the correct media types and weights, see Paper and Tray Specifications on page 1-35. The customer should be using a quality laser printer paper. The printer may have trouble picking glossy or overly smooth paper.
2. Inspect the media for bent, torn, or folded corners.
3. Check the media path for obstructions or debris.
4. Ensure that the correct media type is set in the Control Panel.
5. Change the media from Short-Edge Feed to Long-Edge Feed (or vice versa), if applicable.
6. Ensure the Pick and Feed Rollers are clean and not excessively worn.
7. Try printing from a different tray to ensure problem is not tray specific.
8. Try printing on a different media. Not all media that fall within specifications will feed reliably.
9. Ensure that the paper guides are set correctly.
10. Load a fresh ream of paper in the tray.

Multiple-Sheet Pick

1. Ensure that the media is in good condition and is listed on the Recommended Media List as supported; quality office printer paper works best.
   - United States: www.xerox.com/paper
   - Europe: www.xerox.com/europaper
2. Ensure that the printer is printing within its environmental specifications by printing and reviewing the Status page.
3. Remove the tray, remove, fan, and reload the media. Ensure that the guides are securely against the paper and the tray has not been over filled.
4. Try loading paper from a fresh ream, fan the paper, and then insert into the tray or flip existing paper over.
5. Check the tray's Retard Roller for damage.
6. Try printing from a different tray to verify if problem is tray specific.
7. Clean the Feed Rollers with a clean, dry, lint-free wipe.
8. Replace the Feed Rollers (Tray 1 - REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54) (Tray 2/ 3/ 4 - REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).
9. Replace the Tray (Tray 1 - PL 2.1.11, Tray 2/ 3/ 4 - PL 15.1.1).

Mis-Pick

1. Check that the correct type of media for the tray is being used and the paper Guides are set correctly.
2. Remove, fan, and reload the media. Ensure that the tray has not been over filled.
3. Try loading paper from a fresh ream, fan the paper, and then insert into the tray or flip existing paper over.
4. Clean the Feed Rollers with a clean, dry, lint-free wipe.
5. Troubleshoot the pick assembly.

Skewed Image

The image area is not parallel, skewed, with the sides of the page but the printer neither jams nor displays an error code.

1. Remove the tray and ensure the paper guides are set correctly.
2. Check that the correct type of media for the tray is being used.
3. Ensure that the tray has not been over filled. (Skewed images are a common defect when the Bypass Tray is overfilled.)
4. Check the paper path for scraps of paper or other debris.
5. Verify the Feed Rollers are installed correctly.
6. Clean the Feed Rollers with a clean, dry, lint-free wipe.
7. Troubleshoot the Pick Assembly.

Damaged Prints

The printed page exits the printer either wrinkled, creased, or torn. The printer neither jams nor displays an error code.

1. Stop the page at various points in the media path to determine where the media becomes damaged.
2. Try using the next heaviest type of paper.
3. Feed paper through the printer from each tray. Is the paper damaged when fed out of one tray but not when fed out of the others? If so, inspect the tray for damage, ensure that the media guides are set correctly and verify that the proper media is being used.
4. If media shows damage from all trays, check for a problem in registration area of the media path.
5. Inspect the tray and media path for debris or broken components.

Wrinkled Envelopes

Envelope wrinkling of varying severity can sometimes occur. In general, envelope wrinkling is considered a laser technology limitation due to the fusing process which relies on heat and pressure to bond toner to the media. The #10 Commercial envelopes are particularly susceptible to wrinkling.

Testing different manufacturer's envelopes demonstrated that some brands of #10 Commercial envelopes exhibit less wrinkling when loaded face down with the flap oriented to the right side of the Bypass Tray not the left as indicated on the tray label.

1. Check the media path for obstructions or debris.
2. Check that the paper Guides are set correctly.
3. Check that the Bypass Tray has not been over filled.
4. Test envelopes from other manufacturers to find the best result.

Fuser Jams

1. Check that the Fuser Unit is properly seated, locked, and operates normally.
2. Ensure that the media is in good condition and is listed on the Recommended Media List as supported; quality office printer paper works best. Try loading new media from a fresh ream.
   - United States: www.xerox.com/paper
   - Europe: www.xerox.com/europaper
1. Ensure that the loaded media matches the Control Panel settings.
2. Are the margins on the page greater than 5 mm?
3. Check the Fuser Unit area for debris.
4. Visually inspect the Fuser baffle for burrs.
5. Perform DC330 Component Control on page 2-26 to check the operation of the Fuser Motor:
   - Fuser Motor (Normal) [010-001]
   - Fuser Motor (1/2) [010-002]

Exit Jams

1. Ensure the paper is in good condition and is the correct type for the printer. See Paper and Tray Specifications on page 1-35 for the correct media types, sizes and weights for each tray.
2. Ensure the printer is within its operating environmental specifications.
3. If media is showing excessive curl when exiting, try turning the media over, loading new media from a fresh ream, or a different type of media.
4. Ensure that the loaded media matches the Control Panel settings.
5. Change the media from Short-Edge Feed to Long-Edge Feed (or vice versa), if applicable.
6. Is the jam caused by a heavy, stiff paper being used for two-sided printing? In such cases, use a lighter weight paper.
7. If visible, check and clean the paper path of all debris or scraps of paper.
8. Does the Exit Roller turn? Perform the Duplex Motor test in Service Diagnostics (DC330 Component Control on page 2-26).
9. Refer to Duplex Regi On Jam/ Duplex Sensor On Jam on page 2-269 for troubleshooting duplex jams if the Duplex Motor test fails.
10. Perform DC330 Component Control on page 2-26 [Chain Link 071-104] to check the Fuser Exit Sensor.

Clutch Troubleshooting

Registration Clutch

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Clutch, PL 5.1.11 • MCU PWB, PL 12.1.15	• Paper Transport on page 7-51

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Registration Clutch operation. Perform DC330 Component Control on page 2-26 [071-013] to check the operation of the Registration Clutch. Is the Registration Clutch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Registration Clutch and MCU PWB. Is the connector P/J458 connected securely?	Go to step 3.	Connect the connector P/J458.
3.	Check the resistance of the Registration Clutch. Turn Off the power, remove the Registration Clutch (REP 5.5 Registration Clutch Assembly on page 4-120), and check the wire resistance between the two terminals. Is the wire resistance 144 Ohms (at 20° C)?	Go to step 4.	Replace the Registration Clutch Assembly (REP 5.5 Registration Clutch Assembly on page 4-120).
4.	Check the voltage supply (+24VDC) to the Registration Clutch. Measure the voltage between the MCU PWB GND <=> P/J458-1. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Registration Clutch Assembly (REP 5.5 Registration Clutch Assembly on page 4-120).	Go to +24VDC Power Troubleshooting on page 2-455.

Turn Roller Clutch

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Turn Roller Clutch (Turn Clutch Assembly), PL 5.1.9 • MCU PWB, PL 12.1.15	• Paper Transport on page 7-51

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Turn Roller Clutch operation. Perform DC330 Component Control on page 2-26 [071-016] to check the operation of the Turn Roller Clutch. Is the Turn Roller Clutch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Turn Roller Clutch and MCU PWB. Is the connector P/J453 connected securely?	Go to step 3.	Connect the connector P/J453.
3.	Check the resistance of the Turn Roller Clutch Turn Off the power, remove the Turn Roller Clutch (REP 5.4 Turn Clutch Assembly on page 4-119), and check the wire resistance between the two terminals. Is the resistance 137 Ohms (at 20˚ C)?	Go to step 4.	Replace the Turn Clutch Assembly (REP 5.4 Turn Clutch Assembly on page 4-119).
4.	Check the voltage supply (+24VDC) to the Turn Roller Clutch. Measure the voltage between the MCU PWB GND <=> P/J453-1. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Turn Clutch Assembly (REP 5.4 Turn Clutch Assembly on page 4-119).	Go to +24VDC Power Troubleshooting on page 2-455.

Turn Roller Clutch (Tray 2/ 3/ 4)

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Option Harness Assembly, PL 12.3.5 • Turn Roller Clutch, PL 15.2.25 • Option Feeder 1 Relay Harness Assembly, PL 15.2.30 • Option Left Feeder Harness Assembly, PL 15.2.31 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Turn Roller Clutch operation. Perform DC330 Component Control on page 2-26 to check the operation of the Turn Roller Clutch: • Tray 2 [071-029] • Tray 3 [071-030] • Tray 4 [071-031] Is the Turn Roller Clutch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Turn Roller Clutch and Feeder PWB. Are the connectors P/J219 and P/J420 connected securely?	Go to step 3.	Connect the connectors P/J219 and P/J420.
3.	Check the conductivity between the Turn Roller Clutch and Feeder PWB. Is the connection between P/J219 <=> P/J420 conducting properly?	Go to step 4.	Replace the Option Left Feeder Harness Assembly.
4.	Check the resistance of the Turn Roller Clutch Turn Off the power, remove the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280), and check the wire resistance between the two terminals. Is the resistance approximately 144 Ohms (at 68˚ F)?	Go to step 5.	Replace the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the voltage supply (+24VDC) to the Turn Roller Clutch. Measure the voltage between the Feeder PWB GND <=> P/J420-1. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280).	Go to step 6.
6.	Check the voltage supply (+24VDC) to the Feeder PWB. Measure the voltages between the Feeder PWB GND <=> P/J419-6 and Feeder PWB GND <=> P/J419-7. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285)	Go to step 7.
7.	Check the voltage output (+24VDC) from the MCU PWB. Measure the voltages between the MCU PWB GND <=> P/J461-4 and MCU PWB GND <=> P/J461-5. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Go to step 8.	Go to +24VDC Power Troubleshooting on page 2-455.
8.	Check the connection between the Feeder PWB and MCU PWB. Are the connectors P/J419, P/J4611, and P/J461 connected securely?	Replace the following parts in sequence: • Option Harness Assembly • Option Feeder 1 Relay Harness Assembly	Connect the connectors P/J419, P/J4611, and P/J461.

Feed Roller Clutch

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Feed Roller Clutch (Paper Handling Clutch Assembly), PL 2.2.8 • Turn Roller Clutch (Turn Clutch Assembly), PL 5.1.9 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Paper Transport on page 7-51

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Feed Roller Clutch operation. Perform DC330 Component Control on page 2-26 [071-015] to check the operation of the Feed Roller Clutch. Is the Feed Roller Clutch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Feed Roller Clutch and MCU PWB. Are the connectors P/J4652A and P/J465A connected securely?	Go to step 3.	Connect the connectors P/J4652A and P/J465A.
3.	Check the conductivity between the Feed Roller Clutch and MCU PWB. Is the connection between P/J4652A <=> P/J465A conducting properly?	Go to step 4.	Replace the Main Harness Assembly.
4.	Check the resistance of the Feed Roller Clutch Turn Off the power, remove the Feed Roller Clutch (REP 2.14 Feed Roller Clutch on page 4-53), and check the wire resistance between the two terminals. Is the resistance approximately 115 Ohms (at 68˚ F)?	Go to step 5.	Replace the Feed Roller Clutch (REP 2.14 Feed Roller Clutch on page 4-53).
5.	Check the voltage supply (+24VDC) to the Turn Roller Clutch. Measure the voltage between the MCU PWB GND <=> P/J465A-A4. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Turn Clutch Assembly (REP 5.4 Turn Clutch Assembly on page 4-119).	Go to +24VDC Power Troubleshooting on page 2-455.

Feed Roller Clutch (Tray 2/ 3/ 4)

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Option Harness Assembly, PL 12.3.5 • Feed Roller Clutch, PL 15.2.13 • Option Feeder 1 Relay Harness Assembly, PL 15.2.30 • Option Rear Feeder Harness Assembly, PL 15.2.32 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Feed Roller Clutch operation. Perform DC330 Component Control on page 2-26 to check the operation of the Turn Roller Clutch: • Tray 2 [071-026] • Tray 3 [071-027] • Tray 4 [071-028] Is the Feed Roller Clutch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Feed Roller Clutch and Feeder PWB. Are the connectors P/J220 and P/J421 connected securely?	Go to step 3.	Connect the connectors P/J220 and P/J421.
3.	Check the conductivity between the Feed Roller Clutch and Feeder PWB. Is the connection between P/J220 <=> P/J421 conducting properly?	Go to step 4.	Replace the Option Rear Feeder Harness Assembly.
4.	Check the resistance of the Turn Roller Clutch Turn Off the power, remove the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280), and check the wire resistance between the two terminals. Is the resistance approximately 144 Ohms (at 68˚ F)?	Go to step 5.	Replace the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280).

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
5.	Check the voltage supply (+24VDC) to the Turn Roller Clutch. Measure the voltage between the Feeder PWB GND <=> P/J420-1. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280).	Go to step 6.
6.	Check the voltage supply (+24VDC) to the Feeder PWB. Measure the voltages between the Feeder PWB GND <=> P/J419-6 and Feeder PWB GND <=> P/J419-7. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285)	Go to step 7.
7.	Check the voltage output (+24VDC) from the MCU PWB. Measure the voltages between the MCU PWB GND <=> P/J461-4 and MCU PWB GND <=> P/J461-5. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Go to step 8.	Go to +24VDC Power Troubleshooting on page 2-455.
8.	Check the connection between the Feeder PWB and MCU PWB. Are the connectors P/J419, P/J4611, and P/J461 connected securely?	Replace the following parts in sequence: • Option Harness Assembly • Option Feeder 1 Relay Harness Assembly	Connect the connectors P/J419, P/J4611, and P/J461.

Duplex Clutch

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Duplex Harness Assembly, PL 4.2.18 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1 • Duplex In Clutch Assembly, PL 14.2.20 • Duplex PWB, PL 14.3.8 • Duplex Relay Harness Assembly, PL 14.3.19	• Duplex on page 7-62

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Duplex Clutch operation. Perform DC330 Component Control on page 2-26 [071-017] to check the operation of the Duplex Clutch. Is the Duplex Clutch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Duplex Clutch and Duplex PWB. Is the connector P/J431 connected securely?	Go to step 3.	Connect the connector P/J431.
3.	Check the resistance value of Duplex Clutch. Turn Off the power, remove the Duplex Clutch (REP 14.4 Duplex In Clutch Assembly/ Duplex Drive Gear Assembly Kit on page 4-254), and check the wire resistance between the two terminals. Is the resistance approximately 280 Ohms (at 68˚ F)?	Go to step 4.	Replace the Duplex Clutch (REP 14.4 Duplex In Clutch Assembly/ Duplex Drive Gear Assembly Kit on page 4-254).
4.	Check the voltage supply (+24VDC) to the Duplex Clutch. Measure the voltage between the Duplex PWB GND <=> P/J431-1. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Duplex Clutch (REP 14.4 Duplex In Clutch Assembly/ Duplex Drive Gear Assembly Kit on page 4-254).	Go to step 5.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the voltage supply (+24VDC) to the Duplex PWB. Measure the voltages between the Duplex PWB GND <=> P/J428-4 and Duplex PWB GND <=> P/J428-5. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Duplex Clutch (REP 14.4 Duplex In Clutch Assembly/ Duplex Drive Gear Assembly Kit on page 4-254).	Go to step 6.
6.	Check the voltage output (+24VDC) from the MCU PWB. Measure the voltages between the MCU PWB GND <=> P/J467-4 and between MCU PWB GND <=> P/J467-5. Is there a voltage (approx. +24VDC) output?	Go to step 7.	Go to +24VDC Power Troubleshooting on page 2-455.
7.	Check the connection between the Duplex PWB and MCU PWB. Are the connectors P/J428, P/J4672, P/J4671, and P/J467 connected securely?	Replace the following parts in sequence: • Duplex Relay Harness Assembly • Duplex Harness Assembly • Main Harness Assembly	Connect the connectors P/J428, P/J4672, P/J4671, and P/J467.

Motor Troubleshooting

Belt Retract Motor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Front Harness Assembly, PL 4.2.11 • Belt Retract Sensor (IBT Retract Cam Assembly), PL 9.1.8 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Transfer on page 7-54

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Belt Retract Motor operation. Perform DC330 Component Control on page 2-26 [094-001] to check the operation of the Belt Retract Motor. Is the Belt Retract Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Belt Retract Motor and MCU PWB. Are the connectors P/J4662, P/J4661, and P/J466 connected securely?	Go to step 3.	Connect the connectors P/J4662, P/J4661, and P/J466.
3.	Check the conductivity between the Belt Retract Motor and Relay Connector. Is the connection between P/J4662 <=> P/J4661 conducting properly?	Go to step 4.	Replace the Front Harness Assembly.
4.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4661 <=> P/J466 conducting properly?	Go to step 5.	Replace the Main Harness Assembly.
5.	Check the voltage supply (+24VDC) to the Belt Retract Motor. Measure the voltage between the MCU PWB GND <=> P/J466-3. Is there a voltage (approx. +24VDC) output?	Replace the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).	Go to +24VDC Power Troubleshooting on page 2-455.

Fuser Motor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Front Harness Assembly, PL 4.2.11 • Fuser Motor (Fuser Drive Assembly), PL 4.2.16 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1	• Drive 2/ Bypass Tray on page 7-45

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Fuser Motor operation. Perform DC330 Component Control on page 2-26 [010-001] to check the operation of the Fuser Motor. Is the Fuser Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the installation of the Fuser Motor. Manually rotate the Fuser Motor. Does the Motor rotate?	Reinstall the Fuser Motor (REP 4.7 Fuser Drive Assembly on page 4-99).	Go to step 3.
3.	Check the connections between the Fuser Motor and MCU PWB, as well as between the Fuser Motor and the LVPS PWB. Are the connectors P/J475, P/J4751, P/J4755, P/J524, P/J2711, and P/J242 connected securely?	Go to step 4.	Connect the connectors P/J475, P/J4751, P/J4755, P/J524, P/J2711, and P/J242.
4.	Check the conductivity between the Fuser Motor and Relay Connector. Are the connections between P/J4755 <=> P/J4751 and between P/J242 <=> P/J2711 conducting properly?	Go to step 5.	Replace the Front Harness Assembly.
5.	Check the conductivity between the Relay Connector and LVPS PWB. Is the connection between P/J2711 <=> P/J524 conducting properly?	Go to step 6.	Replace the Main Harness Assembly.
6.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4751 <=> P/J475 conducting properly?	Go to step 7.	Replace the Main Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
7.	Check the voltage supply (+3.3VDC) to the Fuser Motor. Measure the voltage between the MCU PWB GND <=> P/J475-16. Is there a voltage (approx. +3.3VDC) output?	Go to step 8.	Go to +3.3VDC Power Troubleshooting on page 2-458.
8.	Check the voltage supply (+24VDC) to the Fuser Motor. Measure the voltage between the LVPS PWB GND <=> P/J524-1. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Fuser Drive Assembly (REP 4.7 Fuser Drive Assembly on page 4-99).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

Paper Handling Motor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Paper Handling Motor (P/H Drive Assembly), PL 11.1.19 • MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1 • Paper Handling Motor Harness Assembly, PL 12.3.9	• Drive 2/ Bypass Tray on page 7-45

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Paper Handling (P/H) Motor operation. Perform DC330 Component Control on page 2-26 [010-009] to check the operation of the P/H Motor. Is the P/H Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the installation of the P/H Motor. Manually rotate the P/H Motor. Does the Motor rotate?	Reinstall the P/H Motor (REP 11.7 Paper Handling Drive Assembly on page 4-197).	Go to step 3.
3.	Check the connections between the P/H Motor and the MCU PWB, as well as between the P/H Motor and the LVPS PWB. Are the connectors P/J471, P/J4711, P/J524, P/J5247, and P/J5242 connected securely?	Go to step 4.	Connect the connectors P/J471, P/J4711, P/J524, P/J5247, and P/J5242.
4.	Check the conductivity between the P/H Motor and Relay Connector. Is the connection between P/J5242 <=> P/J5247 conducting properly?	Go to step 5.	Replace the Paper Handling Motor Harness Assembly.
5.	Check the conductivity between the P/H Motor and MCU PWB. Is the connection between P/J4711 <=> P/J472 conducting properly?	Go to step 6.	Replace the Paper Handling Motor Harness Assembly.
6.	Check the conductivity between the Relay Connector and LVPS PWB. Is the connection between P/J5246 <=> P/J524 conducting properly?	Go to step 7.	Replace the Main Harness Assembly.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
7.	Check the voltage supply (+3.3VDC) to the P/H Motor. Measure the voltage between the MCU PWB GND <=> P/J471-16. Is there a voltage (approx. +3.3VDC) output?	Go to step 8.	Go to +3.3VDC Power Troubleshooting on page 2-458.
8.	Check the voltage supply (+24VDC) to the P/H Motor. Measure the voltage between the LVPS PWB GND <=> P/J524-7. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Paper Handling Motor (REP 11.7 Paper Handling Drive Assembly on page 4-197).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

Duplex Motor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Duplex Harness Assembly, PL 4.2.18 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1 • Duplex Motor, PL 14.2.1 • Duplex PWB, PL 14.3.8 • Option Duplex Sensor Harness Assembly, PL 14.3.9	• Duplex on page 7-62

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Duplex Motor operation. Perform DC330 Component Control on page 2-26 [071-024] to check the operation of the Duplex Motor. Is the Duplex Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Duplex Motor and Duplex PWB. Is the connector P/J429 connected securely?	Go to step 3.	Connect the connector P/J429.
3.	Check the voltage supply (+24VDC) to the Duplex Motor. Measure the voltages between the Duplex PWB GND <=> P/J429-1 and Duplex PWB GND <=> P/J429-2. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Duplex Motor (REP 14.2 Duplex Motor on page 4-250).	Go to step 4.
4.	Check the voltage supply (+24VDC) to the Duplex PWB. Measure the voltages between the Duplex PWB GND <=> P/J428-4 and Duplex PWB GND <=> P/J428-5. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Duplex PWB (REP 14.6 Duplex PWB on page 4-257).	Go to step 5.
5.	Check the voltage output (+24VDC) from the MCU PWB. Measure the voltages between the MCU PWB GND <=> P/J467-4 and MCU PWB GND <=> P/J467-5. Is there a voltage (approx. +24VDC) output?	Go to step 6.	+24VDC Power Troubleshooting on page 2-455

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
6.	Check the connection between the Duplex PWB and MCU PWB. Are the connectors P/J428, P/J4672, P/J4671, and P/J467 connected securely?	Replace the following parts in sequence: • Duplex Relay Harness Assembly • Duplex Harness Assembly • Main Harness Assembly	Connect the connectors P/J428, P/J4672, P/J4671,and P/J467.

Option Feeder Motor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Feeder Motor (Option Drive Assembly), PL 15.2.28 • Option Left Feeder Harness Assembly, PL 15.2.31 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Feeder Motor operation. Perform DC330 Component Control on page 2-26 to check the operation of the Feeder Motor: • Tray 2 [071-018] • Tray 3 [071-020] • Tray 4 [071-022] Is the Feeder Motor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the installation of Feeder Motor. Manually rotate the Feeder Motor. Does the Motor rotate?	Reinstall the Feeder Motor (REP 15.20 Option Drive Assembly on page 4-283).	Go to step 3.
3.	Check the connection between the Feeder Motor and Feeder PWB. Are the connectors P/J422, P/J221, and P/J222 connected securely?	Go to step 4.	Connect the connectors P/J422, P/J221, and P/J222.
4.	Check the conductivity between Feeder Motor and Feeder PWB. Are the connections between P/J221 <=> P/J422 and P/J222 <=> P/J422 conducting properly?	Go to step 5.	Replace the Option Left Feeder Harness Assembly.
5.	Check the voltage supply (+24VDC) to the Feeder Motor. Measure the voltage between the Feeder PWB GND <=> P/J422-6. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Option Drive Assembly (REP 15.20 Option Drive Assembly on page 4-283).	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285).

Sensor Troubleshooting

Registration Sensor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor Harness (Registration Chute Assembly), PL 5.1.1 • Registration Sensor, PL 5.1.3 • MCU PWB, PL 12.1.15	• Paper Transport on page 7-51

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Registration Sensor operation. Perform DC330 Component Control on page 2-26 [071-102] to check the operation of the Registration Sensor. Is the Registration Sensor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Registration Sensor and MCU PWB. Are the connectors P/J4731 and P/J473 connected securely?	Go to step 3.	Connect the connectors P/J4731 and P/J473.
3.	Check the conductivity between the Registration Sensor and MCU PWB. Is the connection between P/J4731 <=> P/J473 conducting properly?	Go to step 4.	Replace the Registration Chute Assembly (REP 5.1 Registration Chute Assembly on page 4-114).
4.	Check the voltage supply (+3.3VDC) to the Registration Sensor. Measure the voltage between the MCU PWB GND <=> P/J473-3. Is there a voltage (approx. +3.3VDC) output?	Replace the Registration Sensor (REP 5.2 Registration Sensor on page 4-116).	Go to +3.3VDC Power Troubleshooting on page 2-458.

Fuser Exit Sensor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• DRW Fuser Harness Assembly, PL 4.1.7 • Fuser Exit Sensor (Fuser Assembly), PL 10.1.1 • MCU PWB, PL 12.1.15	• Fuser Unit on page 7-41

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Fuser Exit Sensor operation. Perform DC330 Component Control on page 2-26 [071-104] to check the operation of the Fuser Exit Sensor. Is the Fuser Exit Sensor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Fuser Exit Sensor and MCU PWB. Are the connectors P/J601 and P/J459 connected securely?	Go to step 3.	Connect the connectors P/J601 and P/J459.
3.	Check the conductivity between the Fuser Exit Sensor and MCU PWB. Is the connection between P/J601 <=> P/J459 conducting properly?	Go to step 4.	Replace the DRW Fuser Harness Assembly (REP 4.2 DRW Fuser Harness Assembly on page 4-80).
4.	Check the voltage supply (+5VDC) to the Fuser Exit Sensor. Measure the voltage between the MCU PWB GND <=> P/J459-5. Is there a voltage (approx. +5VDC) output?	Replace the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).	Go to +5VDC Power Troubleshooting on page 2-457.

Belt Retract Sensor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Front Harness Assembly, PL 4.2.11 • Belt Retract Sensor (IBT Retract Cam Assembly), PL 9.1.8 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Transfer on page 7-54

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Belt Retract Sensor operation. Perform DC330 Component Control on page 2-26 [094-200] to check the operation of the Belt Retract Sensor. Is the Belt Retract Sensor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Belt Retract Sensor and MCU PWB. Are the connectors P/J4663, P/J4661, and P/J466 connected securely?	Go to step 3.	Connect the connectors P/J4663, P/J4661, and P/J466.
3.	Check the conductivity between the Belt Retract Sensor and Relay Connector. Is the connection between P/J4663 <=> P/J4661 conducting properly?	Go to step 4.	Replace the Front Harness Assembly.
4.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4661 <=> P/J466 conducting properly?	Go to step 5.	Replace the Main Harness Assembly.
5.	Check the voltage supply (+3.3VDC) to the Belt Retract Sensor. Measure the voltage between the MCU PWB GND <=> P/J466-4. Is there a voltage (approx. +3.3VDC) output?	Replace the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).	Go to +3.3VDC Power Troubleshooting on page 2-458.

Paper Jam Sensor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Option Harness Assembly, PL 12.3.5 • Paper Jam Sensor, PL 15.2.3 • Option Paper Feed Jam Harness s Assembly, PL 15.2.6 • Option Feeder 1 Relay Harness Assembly, PL 15.2.30 • Option Left Feeder Harness Assembly, PL 15.2.31 • Feeder PWB, PL 15.2.33	• 550-Sheet Feeder on page 7-64

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Paper Jam Sensor operation. Perform DC330 Component Control on page 2-26 to check the operation of the Paper Jam Sensor: • Tray 2: 071-125 • Tray 3: 071-126 • Tray 4: 071-127 Is the Paper Jam Sensor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Paper Jam Sensor and Feeder PWB. Are the connectors P/J122, P/J611, and P/J420 connected securely?	Go to step 3.	Connect the connectors P/J122, P/J611, and P/J420.
3.	Check the conductivity between the Paper Jam Sensor and Feeder PWB. Is the connection between P/J122 <=> P/J4611 conducting properly?	Go to step 4.	Replace the Option Paper Feed Jam Harness Assembly.
4.	Check the conductivity between the Relay Connector and Feeder PWB. Is the connection between P/J611 <=> P/J420 conducting properly?	Go to step 5.	Replace the Option Left Feeder Harness Assembly.
5.	Check the voltage supply (+3.3VDC) to the Paper Jam Sensor. Measure the voltage between the Feeder PWB GND <=> P/J420-6. Is there a voltage (approx. +3.3VDC) output?	Replace the Paper Jam Sensor (REP 15.11 Paper Jam Sensor on page 4-271).	Go to step 6.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
6.	Check the voltage supply (+3.3VDC) to the Feeder PWB. Measure the voltage between the Feeder PWB GND <=> P/J419-4. Is there a voltage (approx. +3.3VDC) output?	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285).	Go to step 7.
7.	Check the voltage output (+3.3VDC) from the MCU PWB. Measure the voltage between the MCU PWB GND <=> P/J461-7. Is there a voltage (approx. +3.3VDC) output?	Go to step 8.	Go to +3.3VDC Power Troubleshooting on page 2-458.
8.	Check the connection between the Feeder PWB and MCU PWB. Are the connectors P/J419, P/J4611, and P/J461 connected securely?	Replace the following parts in sequence: • Option Feeder 1 Relay Harness Assembly • Option Harness Assembly	Connect the connectors P/J419, P/J4611, and P/J461.

Duplex Jam Sensor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Duplex Harness Assembly, PL 4.2.18 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1 • Duplex PWB, PL 14.3.8 • Option Duplex Sensor Harness Assembly, PL 14.3.9 • Duplex Jam Sensor, PL 14.3.17 • Duplex Relay Harness Assembly, PL 14.3.19	• Duplex on page 7-62

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Duplex Jam Sensor operation. Perform DC330 Component Control on page 2-26 [071-128] to check the operation of the Duplex Jam Sensor. Is the Duplex Jam Sensor operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Duplex Jam Sensor and Duplex PWB. Are the connectors P/J125 and P/J430 connected securely?	Go to step 3.	Connect the connectors P/J125 and P/J430.
3.	Check the conductivity between the Duplex Jam Sensor and Duplex PWB. Is the connection between P/J125 <=> P/J430 conducting properly?	Go to step 5.	Replace the Option Duplex Sensor Harness Assembly.
4.	Check the voltage supply (+3.3VDC) to the Duplex Jam Sensor. Measure the voltage between the Duplex PWB GND <=> P/J430-1. Is there a voltage (approx. +3.3VDC) output?	Replace the Duplex Jam Sensor (REP 14.7 Duplex Jam Sensor on page 4-259).	Go to step 5.
5.	Check the voltage supply (+3.3VDC) to the Duplex PWB. Measure the voltage between the Duplex PWB GND <=> P/J428-7. Is there a voltage (approx. +3.3VDC) output?	Replace the Duplex PWB (REP 14.6 Duplex PWB on page 4-257).	Go to step 6.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
6.	Check the voltage output (+3.3VDC) from the MCU PWB. Measure the voltage between the MCU PWB GND <=> P/J467-7. Is there a voltage (approx. +3.3VDC) output?	Go to step 7.	Go to +3.3VDC Power Troubleshooting on page 2-458.
7.	Check the connection between the Duplex PWB and MCU PWB. Are the connectors P/J428, P/J4672, P/J4671, and P/J467 connected securely?	Replace the following parts in sequence: • Duplex Relay Harness Assembly • Duplex Harness Assembly • Main Harness Assembly	Connect the connectors P/J428, P/J4672, P/J4671,and P/J467.

Switching Sensor

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• IBT Retract Cam Assembly, PL 9.1.8 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation of the IBT Retract Cam Assembly. Is the IBT Retract Cam Assembly installed properly?	Go to step 2.	Reinstall the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
2.	Check the installation of the IBT Unit. Is the IBT Unit installed properly?	Go to step 3.	Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).
3.	Check the Belt Retract Sensor operation. Perform DC330 Component Control on page 2-26 [094-200] to check the operation of the Belt Retract Sensor. Is the Belt Retract Sensor operating properly?	Go to step 4.	Go to Belt Retract Sensor on page 2-442.
4.	Check the Belt Retract Motor operation. Perform DC330 Component Control on page 2-26 [094-001] to check the operation of the Belt Retract Motor. Is the Belt Retract Motor operating normally?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to Belt Retract Motor on page 2-432.

Solenoid Troubleshooting

Bypass Tray Feed Solenoid

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Front Harness Assembly, PL 4.2.11 • Bypass Tray Feed Solenoid, PL 4.3.10 • MCU PWB, PL 12.1.15 • Main Harness Assembly, PL 12.3.1	• Overview Diagram (1 of 3) on page 7-32 • Drive 2/ Bypass Tray on page 7-45

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Bypass Tray Solenoid operation. Perform DC330 Component Control on page 2-26 [071-014] to check the operation of the Bypass Tray Feed Solenoid. Is the Bypass Tray Feed Solenoid operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Bypass Tray Feed Solenoid and MCU PWB. Are the connectors P/J4753, P/J4751, and P/J475 connected securely?	Go to step 3.	Connect the connectors P/J4753, P/J4751, and P/J475.
3.	Check the conductivity between the Bypass Tray Feed Solenoid and MCU PWB. Is the connection between P/J4753 <=> P/J4751 conducting properly?	Go to step 4.	Replace the Front Harness Assembly.
4.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4751 <=> P/J475 conducting properly?	Go to step 5.	Replace the Main Harness Assembly.
5.	Check the voltage supply (+24VDC) to the Bypass Tray Feed Solenoid. Measure the voltage between the MCU PWB GND <=> P/J475-4. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the Bypass Tray Feed Solenoid (REP 4.9 Bypass Tray Feed Solenoid on page 4-104).	Go to +24VDC Power Troubleshooting on page 2-455.

Switch Troubleshooting

Front Cover Switch (Interlock Cap Switch)

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Front Interlock Switch Assembly Kit, PL 12.2.4 • Top Harness Assembly, PL 12.2.24 • Main Harness Assembly, PL 12.3.1	• Transfer on page 7-54

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Front Cover Switch operation. Perform DC330 Component Control on page 2-26 [041-303] to check the operation of the Front Cover Switch. Is the Front Cover Switch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Front Cover Switch and MCU PWB. Are the connectors P/J4682A, P/J4681A, and P/J468 connected securely?	Go to step 3.	Connect the connectors J4682A, P/J4681A, and P/J468.
3.	Check the conductivity between the Front Cover Switch and Relay Connector. Is the connection between P/J4682A <=> P/J4681A conducting properly?	Go to step 4.	Replace the Top Harness Assembly.
4.	Check the conductivity between the Relay Connector and MCU PWB. Is the connection between P/J4681A <=> P/J468 conducting properly?	Replace the Front Cover Switch (REP 12.9 Front Interlock Switch Assembly on page 4-214).	Replace the Main Harness Assembly.

Front Cover Interlock Switch

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • LVPS PWB, PL 12.2.1 • Front Interlock Switch Assembly Kit, PL 12.2.4 • Top Harness Assembly, PL 12.2.24	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Front Cover Interlock Switch operation. Perform DC330 Component Control on page 2-26 [041-300] to check the operation of the Front Cover Interlock Switch. Is the Front Cover Interlock Switch operating properly?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 2.
2.	Check the connection between the Front Cover Interlock Switch and LVPS PWB. Are the connectors P/J5226 and P/J522 connected securely?	Go to step 3.	Connect the connectors P/J5226 and P/J522.
3.	Check the conductivity between the Front Cover Interlock Switch and LVPS PWB. Is the connection between P/J5226 <=> P/J522 conducting properly?	Go to step 4.	Replace the Top Harness Assembly.
4.	Check the voltage supply (+5VDC) to the Front Cover Interlock Switch. Measure the voltage between the LVPS PWB GND <=> P/J522-1. Is there a voltage (approx. +5VDC) output? Close the Interlock Switch and check.	Replace the Front Interlock Switch (REP 12.9 Front Interlock Switch Assembly on page 4-214).	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).

Sheet Feeder Troubleshooting

Option Feeder Mode Error

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• Feeder PWB, PL 15.2.33	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Tray where the problem has occurred.		
2.	Check the firmware version of the Feeder PWB. Is it the latest Feeder PWB firmware version? If Feeder PWB firmware version is not available, replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285).	Replace the Feeder PWB (REP 15.22 Feeder PWB on page 4-285).	Update the firmware version of the Feeder PWB.

Feeder Composition

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • Duplex Unit, PL 14.1.1 • 550-Sheet Feeder Assembly, PL 15.1.2	

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the connection of the 550-Sheet Feeder Assembly. Is 4 or more Sheet Feeder Assembly connected?	Remove the extra 550-Sheet Feeder Assembly until only 3 or fewer are left.	Go to step 2.
2.	Check the connection of 550-Sheet Feeder Assembly. Is there an Option Feeder for other than this printer installed?	Connect the 550-Sheet Feeder Assembly to the printer.	Go to step 3.
3.	Check the Duplex Unit. Is there an Option Duplex Unit for other than this printer installed?	Connect the Duplex Unit to the printer.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

Electrical Troubleshooting

Electrical Components Service Hints

The Electrical Components Service Hints contain instructions to check various components prior to replacing the Boards.

1. **Check for known problems listed in Eureka and GSN web site**.

   Service technicians are always looking for ways to help with printer problems. Refer to the experts; Eureka and GSN may already provide a solution.

2. **Print an engine Test Page**.

   Perform an Engine Test Print on page 3-48; use this test page to determine if the print engine (vs. the Image Processor) is working.

3. **Never use an Uninterruptible Power Supplies (UPS)**.

   UPS devices may not have the capacity to power the printer. A quality, high capacity surge protector may be OK for the printer, but only if it is not also supporting other high-current devices. For testing purposes, use a dedicated circuit to verify operation.

4. **Reseat all cables connected to the boards**.

   Any loose cable connection can cause the printer to fail.

5. **Disconnect the printer from the network and connect with cross-over cable**.

   Some networks interfere with the printer's ability to boot up and can hang the printer connect with a cross-over cable and verify the network port. Verify the USB port with another USB cable.

6. **Disconnect all 3rd party devices and cables, then reboot the printer**.

   Xerox printers are tested without 3rd party devices and cables; these may cause the printer to fail. Always remove these devices and test the printer.

7. **Simplify the printer**.

   Disconnect the Lower Tray assemblies, and other optional equipment. Verify if the option is causing the printer to fail.

8. **Verify dedicated AC connection to the printer**.

   Test the printer on a dedicated AC circuit. Verify the AC voltage is correct. If there is a significant AC voltage drop (6 volts or more on a 120V circuit) when the printer is turned On, the circuit is too heavily loaded and will cause problems for the printer.

9. **Reseat all memory modules and verify if the memory is supported**.

   Refer to Printer Configurations on page 1-19 for memory configurations. Corrupted RAM modules have caused printer failures and should be tested. Some 3rd party RAM modules will not work in the printer. Was 3rd party RAM recently installed?

10. **Replace the NVRAM Chip**.

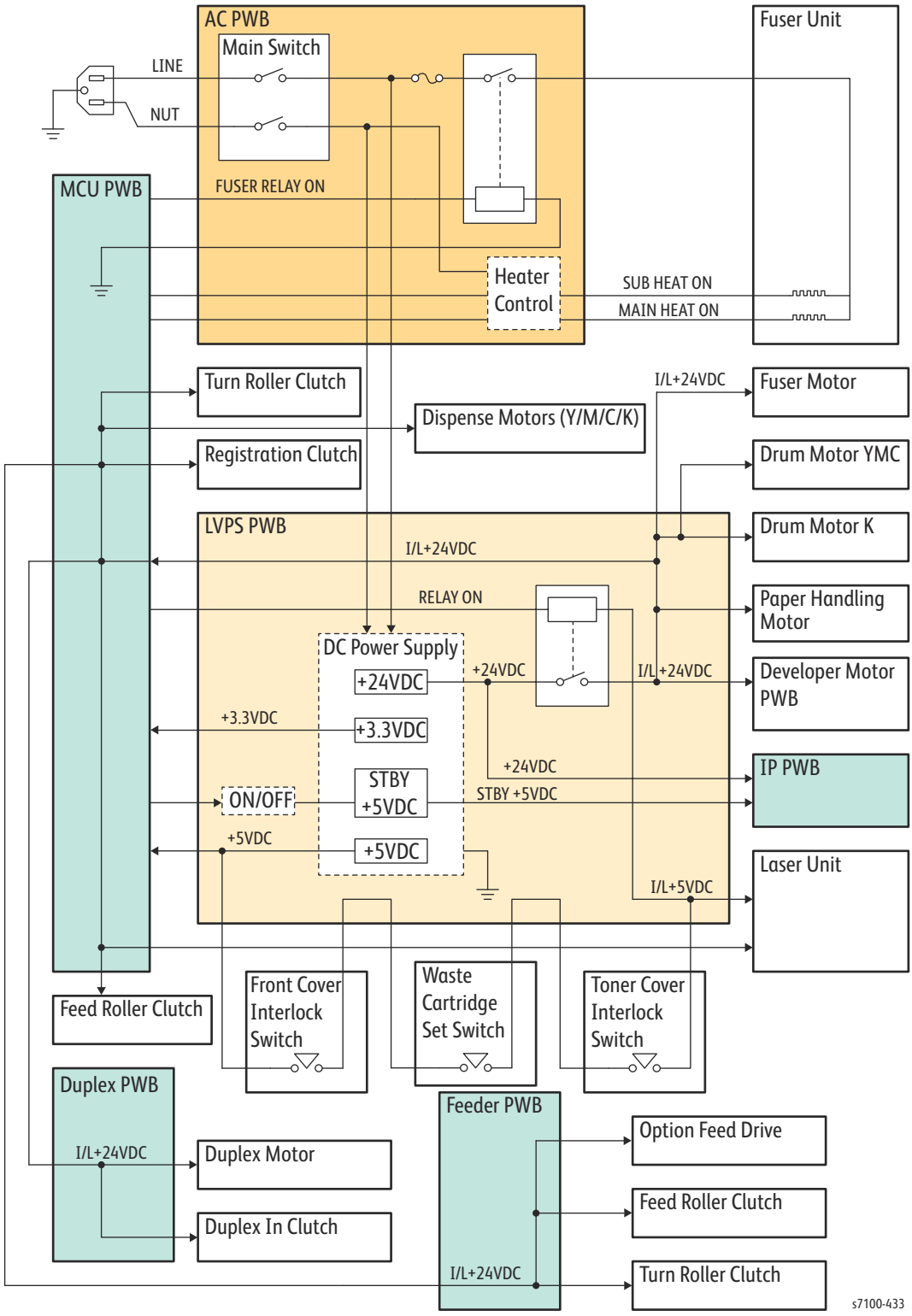
    The Phaser 7100 printer contains NVRAM (Non-Volatile RAM) chips (one on the MCU PWB and one on the I/P PWB) that may cause printer problems. If the NVRAM chip is a replaceable part, try installing a new one (NVRAM MCU PWB - PL 12.1, NVRAM I/P PWB - PL 12.4).

11. **Check for available firmware upgrades and update as appropriate**.

    If the problem is re-occurring, a firmware upgrade may be available to resolve the problem.

Voltage

The following diagram illustrates the voltage supply for the Phaser 7100 printer.



+24VDC Power Troubleshooting

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • AC PWB, PL 12.1.16 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1 • AC LV Harness Assembly, PL 12.3.4	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the wiring harness connections between the LVPS PWB and MCU PWB. Are the connectors P/J528 and P/J463 connected securely?	Go to step 2.	Connect the connectors P/J528 and P/J463.
2.	Check the conductivity between the LVPS PWB and MCU PWB. Is the connection between connectors P/J528 <=> P/J463 conducting properly?	Go to step 3.	Replace the Main Harness Assembly.
3.	Check the voltage output (+24VDC) from the LVPS PWB. Measure the voltages between the LVPS PWB GND <=> P/J528-4 and LVPS PWB GND <=> P/J528-3. Is there a voltage (approx. +24VDC) output? Close the Interlock Switch and check.	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 4.
4.	Turn the power Off and On then check. Cut Off the power supply, wait for a while, and then restore the power supply. Does an error occur?	Go to step 5.	Troubleshooting complete.
5.	Check the AC voltage supply to the LVPS PWB. Is the voltage between LVPS PWB P/J521-1 <=> P/J521-3 110-240VAC?	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).	Go to step 6.
6.	Check the connection between the LVPS PWB and AC PWB. Are the connectors P/J521 and P/J502 connected securely?	Go to step 7.	Connect the connectors P/J521 and P/J502.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
7.	Check the conductivity between the LVPS PWB and AC PWB. Is the connection between P/J521 <=> P/J502 conducting properly?	Replace the AC PWB (REP 12.5 AC PWB on page 4-208).	Replace the AC LV Harness Assembly.

+5VDC Power Troubleshooting

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • AC PWB, PL 12.1.16 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1 • AC LV Harness Assembly, PL 12.3.4	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the wiring harness connections between the LVPS PWB and MCU PWB. Are the connectors P/J527 and P/J451 connected securely?	Go to step 2.	Connect the connectors P/J527 and P/J451.
2.	Check the conductivity between the LVPS PWB and MCU PWB. Is the connection between connectors P/J527 <=> P/J451 conducting properly?	Go to step 3.	Replace the Main Harness Assembly.
3.	Check the voltage output (+5VDC) from the LVPS PWB. Measure the voltage between the LVPS PWB GND <=> P/J527-1. Is there a voltage (approx. +5VDC) output?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 4.
4.	Turn the power Off and On then check. Cut off the power supply, wait for a while, and then restore the power supply. Does an error occur?	Go to step 5.	Troubleshooting complete.
5.	Check the AC voltage supply to the LVPS PWB. Is the voltage between the LVPS PWB P/J521-1 <=> P/J521-3 110-240VAC?	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).	Go to step 6.
6.	Check the connection between LVPS PWB and AC PWB. Are the connectors P/J521 and P/J502 connected securely?	Go to step 7.	Connect the connectors P/J521 and P/J502.
7.	Check the conductivity between the LVPS PWB and AC PWB. Is the connection between P/J521 <=> P/J502 conducting properly?	Replace the AC PWB (REP 12.5 AC PWB on page 4-208).	Replace the AC LV Harness Assembly.

+3.3VDC Power Troubleshooting

Troubleshooting Reference

Applicable Parts	Wiring and Plug/Jack Map References
• MCU PWB, PL 12.1.15 • AC PWB, PL 12.1.16 • LVPS PWB, PL 12.2.1 • Main Harness Assembly, PL 12.3.1 • AC LV Harness Assembly, PL 12.3.4	• Power on page 7-38

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the wiring harness connections between the LVPS PWB and MCU PWB. Are the connectors P/J527 and P/J451 connected securely?	Go to step 2.	Connect the connectors P/J527 and P/J451.
2.	Check the conductivity between the LVPS PWB and MCU PWB. Is the connection between connectors P/J527 <=> P/J451 conducting properly?	Go to step 3.	Replace the Main Harness Assembly.
3.	Check the voltage output (+3.3VDC) from the LVPS PWB. Measure the voltage between the LVPS PWB GND <=> P/J527-3. Is there a voltage (approx. +3.3VDC) output?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Go to step 4.
4.	Turn the power Off and On then check. Cut off the power supply, wait for a while, and then restore the power supply. Does an error occur?	Go to step 5.	Troubleshooting complete.
5.	Check the AC voltage supply to the LVPS PWB. Is the voltage between LVPS PWB P/J521-1 <=> P/J521-3 110-240VAC?	Replace the LVPS PWB (REP 12.7 LVPS PWB on page 4-211).	Go to step 6.
6.	Check the connection between LVPS PWB and AC PWB. Are the connectors P/J521 and P/J502 connected securely?	Go to step 7.	Connect the connectors P/J521 and P/J502.
7.	Check the conductivity between the LVPS PWB and AC PWB. Is the connection between P/J521 <=> P/J502 conducting properly?	Replace the AC PWB (REP 12.5 AC PWB on page 4-208).	Replace the AC LV Harness Assembly.

Network Troubleshooting

This procedure details a method of troubleshooting network printing problems.

Windows Ethernet Port Verification

1. Connect a crossover cable between the printer and computer's Ethernet Ports.
2. Verify that the printer is Ready.
3. From the computer menu, click **Start** > **Run** at the computer to access the Run dialog.
4. In the **Run** window, type cmd and click **OK** to launch the MS-DOS command window.
5. At the MS_DOS command prompt, type ipconfig and press **Enter** to display the computer's network information:
   - DNS Suffix
   - IP Address
   - Subnet Mask
   - Default Gateway
6. Print the Configuration page to verify that TCP/ IP is enabled and obtain the current TCP/ IP values stored in the printer's NVRAM.

   Note: Configure the printer's TCP/ IP network parameters to enable direct communication with the computer.
7. Disable DHCP/ BootP, and AutoIP on the printer.
8. Select an IP address for the printer that matches the computer, except for the last field, which must be unique.
9. Edit the printer's Gateway and Subnet Mask to match the computer.
10. At the MS_DOS command prompt, type ping followed by a space and the printer's IP address, and then press **Enter**. If the number of packets sent and received match, the Ethernet Port is functional. If the request times out and fails to reply, either the cable or the port is defective.

Ethernet Port Verification for LOCAL LINK Default IP Addresses

An alternate method is required to test the Ethernet port when the PC's IP address falls within the range 169.254.xxx.xxx. PCs that have not been configured for a specific network default to a "LOCAL LINK" value within the 169.254.xxx.xxx range.

Notes:

- To comply with industry standards, Phaser products cannot be manually configured for IP addresses within the LOCAL LINK range.
- Always print the Configuration page to obtain a record of the printer settings before changing the IP address. After testing the printer, be sure to restore the printer's original network settings.

1. Connect a crossover cable between the PC and printer.
2. Verify the printer is Ready.
3. Use the printer's Control Panel to enable AutoIP:
   a. From the Control Panel, press **Menu**.
   b. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
   c. Press **Down Arrow** and navigate to Network/ Port, and press **OK**.
   d. Press **Down Arrow** and navigate to TCP/ IP Settings, and press **OK**.
   e. Press **Down Arrow** and navigate to IPv4 Settings, and press **OK**.
   f. Press **Right Arrow** to display the Get IP Address screen.
   g. Press **Down Arrow** and navigate to DHCP/ Auto IP, and press **OK**.
   h. Press **Menu** to return to the Ready to Print screen.
4. After the printer's IP address is set, test communication by sending the "PING" command.
5. If the test fails, install a different cable and retest.

Mac OS X Ethernet Port Verification

For Mac OS 10.5.x/ 10.6.x/ 10.7.x

1. Turn the printer On and wait until it is Ready.
2. To check the computer's TCP/ IP settings, use the Apple menu to select **System Preferences**.
3. Select **Network**.
4. In the left column of the **Network** window, select **Ethernet**.
5. The computer's IP Address, Subnet Mask, and Gateway should be displayed on the Network window after selecting Ethernet (in step 4 above).
6. Print the Configuration page and verify that TCP/ IP is enabled on the printer.
7. Select an IP address for the printer that matches the computer, except for the last field, which must be unique.
8. Edit the printer's Gateway and Subnet Mask to exactly match the computer's.
9. Connect a crossover cable between the Ethernet Ports on the printer and the Mac.
10. Test the application using Network Utility by double-clicking the hard drive icon.
11. Select **Applications** > **Utilities** > **Network Utility**.
12. Click the **PING** tab.
13. Enter the printer's IP address.
14. Configure the utility to ping the printer four times. The test will end after four attempts.
15. Click the **PING** button to complete the test.
16. If the number of packets sent and received match, the test was successful and the Ethernet port is functioning.

USB Port Testing

In situations where USB communications fail, test the printer's USB Port directly using a USB cable and a second, known good USB Port. A successful test using this procedure eliminates the printer's USB Port as the root cause.

Initial Actions

- Check that the driver software is properly installed on the host.
- Make sure the USB cable is connected at both ends and is serviceable.
- Print a Configuration page and verify that USB 2.0 is enabled in the printer's NVRAM.
- Reboot the printer.
- If the problem persists, follow the procedure below.

  Note: The testing procedure was developed for Windows XP. If a different operating system is in use, adapt the steps as necessary.

USB Port Verification

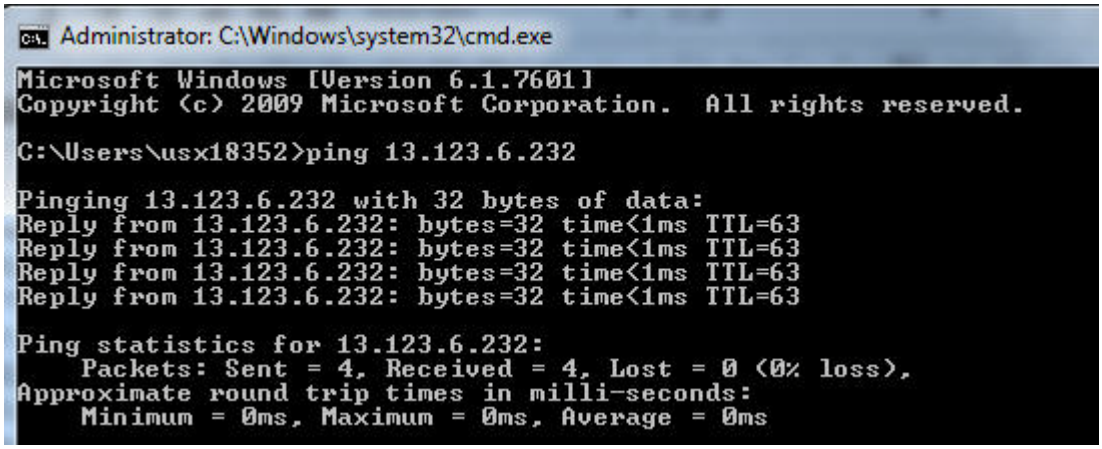
1. Verify that the printer is Ready.
2. Insert the "Software and Product Documentation" CD-ROM into the computer.
3. If the installer autoruns, exit the installer window.
4. Connect a USB cable between the printer and computer's USB Ports. The computer automatically detects the new hardware and assigns a driver.

   Note: If the driver is not installed on the computer, locate the driver files on the CD-ROM. Once the files are located, the computer installs the driver and automatically configures it to match the printer's feature set.
5. On the computer, click **Start** > **Settings** > **Printers and Faxes**.
6. Locate the printer being tested, right-click and from the pull-down menu, select **Properties**.
7. Open the **General** tab and click **Print Test Page** to generate the test print. If the test page prints, the USB port is functioning normally.

Operating System and Application Problems

Verify Settings

1. Verify the settings on the Configuration page.
   - TCP/IP v4: Enabled
   - IP Address: xxx.xxx.xxx.xxx
   - Subnet Mask: 255.xxx.xxx.xxx
   - Router/Gateway: xxx.xxx.xxx.xxx
   - Automatic Addressing: DHCP or Disabled
   - DHCP Server: xxx.xxx.xxx.xxx
   - Self Assigned Address State: Enabled or Disabled
   - Self Assigned Address: xxx.xxx.xxx.xxx
   - LPR/LPD: Enabled or Disabled
   - Port Number: 515
2. Ping the printer (from a PC):
   a. Open a Windows command prompt.
   b. Type 'ping printer IP's' address.
   c. Verify that there is communication between the printer and the computer.
3. Verify that the client is logged on to the network and printing to the correct print queue. The user should also have access to the printer queue.



Windows XP, Windows 7/ Vista, Windows Server Troubleshooting

Note: For Windows XP, select Classic Look or Windows XP procedures will not match the following procedures.

1. To select **Classic Look**, click **Start**, select **Control Panel**, and select **Taskbar** and **Start** Menu.
2. Select the **Start Menu** tab and then **Classic Start Menu**.
3. Click **OK**.

This troubleshooting section assumes you have completed the following tasks.

- Loaded a Phaser printer PCL or PostScript printer driver.
- Printed and kept a current copy of the Configuration page.

Verify Driver Installation

1. From the desktop, right-click **My Network Places**, and select **Properties**.
2. Right-click **Local Area Connection** and select **Properties**.
3. Click the **General** tab. View the list of installed network protocols to verify that TCP/IP is installed. (For more information, contact your network administrator.)
4. Click **Install** to install any components not listed, and then restart your computer.
5. From the **Start** menu, select **Start** > **Settings** > **Printers and Faxes**.
6. Right-click the printer icon, and select **Properties**.
7. Click the **Advanced** tab. Verify that the correct printer driver is installed.
8. Click the **Ports** tab. Verify that the IP Address in the **Print to the Following Ports** list is identical to the one on the Configuration page. You may need to click the **Configure Port** button to see the IP address. If necessary, re-select the TCP/IP number used for the printer.
9. Try to ping the printer.
10. Access the CentreWare IS.

Windows Printing Problems

1. Try printing a test page from the printer driver's Properties dialog box.
2. Try printing from another application.
3. Try printing to another network printer.
4. Try printing from another computer.

Macintosh Troubleshooting (Mac OS 10.5 and Higher)

The following procedures eliminates cabling, communication, and connection problems. Once you complete these steps, print a test page from your software application.

Note: If the job prints, no further troubleshooting is necessary. If there are print-quality problems, refer to the User Guide at www.xerox.com/office/7100support.

Verify the settings on a Macintosh

- Configure IPv4: Manually
- IP Address: xxx.xxx.xxx.xxx
- Subnet Mask: 255.xxx.xxx.xxx
- Router: xxx.xxx.xxx.xxx
- DNS Server: xxx.xxx.xxx.xxx
- Server Domain: xxx.xxx.xxx.xxx

IPv6 Address: xxxx::xxx:xxxx:xxx:xxx:xxx:xxxx

Macintosh Troubleshooting OS 10.5 Step-by-Step

Perform these steps only for Mac OS 10.5 and higher.

1. Open the **Network Utility** and click the **Ping** tab.
2. Enter the printer's IP address.
3. Click **Ping**. If you do not get a response, verify that your TCP/IP settings are correct for your printer and computer.

   Note: See also: www.xerox.com/office/7100support

Macintosh Printing Problems

Note: The following steps are for diagnosing a networked printer running Mac OS X, version 10.5 or later, and assume that CentreWare access is enabled. If you are using Mac OS X, but an earlier version than 10.5, upgrade first.

1. Cycle power the printer Off and On, and then try printing again.
2. Determine the printer's IP address from the Control Panel or Startup page. Return the Control Panel to the initial menu, and then check to make sure it indicates Ready to Print.
3. Make sure you can connect to the printer via network from the host: Open a Safari or Internet Explorer window to the printer's IP address.
   a. If you cannot see the CentreWare IS page from the printer CentreWare IS web server, the printer may be Off, on a different network, or the host is not networked correctly. Try Steps **b** through **f** to correct the problem. If you make any changes to the network, try printing the job again.
   b. Open **System Preferences**, select **Network** > **Ethernet** > **Advanced** > **TCP/ IP** tab. Make sure you have a valid IP address. Correct the settings and retry if needed.

c. If you are on a network with a proxy server, ensure the local connections are excluded from the proxy. Check **System Preferences** > **Advanced** > **Proxies** tab; in the **Bypass proxy settings for these Hosts and Domains**, ensure the local network devices are excluded from proxy redirection.
   - For example: If you open Safari to the printer IP and get an error message similar to Error – the request item could not be loaded by the proxy, you are probably accessing the proxy server for a local address. This is incorrect.

d. Open the **Terminal** tool located at **Applications** > **Utilities**, and select **New Window**. Once you have a prompt, try network connectivity using the Ping command.
   - For example: ping 13.62.70.112 checks for echo replies from the printer with that IP address.

e. In the Terminal tool, try using Traceroute to determine if you are on the same subnet as your system.
   - For example: traceroute 13.62.70.112 should produce exactly one hop before completing the trace. Correct as needed, and retry your print job.

f. If you still cannot connect to the printer via network, try another computer.

4. If there is still no output, try printing from a simple application. In the **Applications** folder, locate and open **TextEdit**, select **New File**, and create a small test document. From the **File** menu, select **Print**.
5. In the **Applications** folder, locate the **TextEdit** tool and try to print the document again.
   a. Once you have opened a document or created a new document, from the **File** menu, select **Print**.
   b. Click on the **Printer** pull-down menu, and select your **Phaser 7100** printer. If your printer is not listed, then select **Add Printer**.
   c. From the pull-down menu, select **Internet Printing Protocol - IPP or Line Printer Daemon - LPD**. Enter the printer's IP address in the **Printer's Address** text area.
   d. From the pull-down menu, click **Print Using**, and **Select a driver to use**, and then select **XEROX**. A scrolling list should display.
   e. Pick the **Xerox Phaser 7100** configuration. You can check the exact configuration on the printer's Startup page in the upper right corner.
   f. The newly added printer displays in bold on the printer list, indicating it is the default printer. When you are done adding the new printer, close the **Printer List** dialog.
   g. From the **Printer** pull-down menu, select your printer. In the dialog box, click **Print**.
6. If you can print from the **TextEdit** tool, but cannot print from your application, the problem is likely in your application. Check for upgrade availability or contact the application vendor for further diagnosis.

UNIX/ Linux

This section includes:

- Quick Install Steps
- Additional Resources

Your printer supports connection to a variety of UNIX platforms through the Network interface. The workstations currently supported by CentreWare for UNIX/ Linux to a network-connected printer are:

- Sun Solaris
- IBM AIX
- Hewlett-Packard HP-UX
- Linux (i386) tested on SUSE 10.0, RedHat 9, Fedora Core1

The following procedures enable you to connect your printer using any of the supported versions of UNIX or Linux listed above.

Quick Install Steps

Perform the following procedures to set up the printer and install the appropriate drivers.

From the Printer

To set up the printer:

1. Verify that both TCP/IP protocol and the proper connector are enabled.
2. On the Control Panel, select one of these IP address options:
   - Allow the printer to set up a DHCP address
   - Enter the IP address manually
3. Print the Configuration page and keep it for reference.

From Your Computer

To install the CentreWare for Unix driver:

1. Go to www.xerox.com/office/7100drivers.
2. Under the **Operating System** pull-down menu, select the platform your are running (UNIX), and file type (Drivers).
3. Click **Go to Downloads**.
4. From the list of provided files, download the **PrinterPackageXPXX** and the appropriate CentreWare printer driver for your platform <OS>XPXX 4.xx.x.tar.
   a. As root untar the Driver and Printer package, this will create two subdirectories. Cd to <O/S>InstallPackage and type ./setup to install the driver.
   b. CD to the **PrinterPackagexpxx** and type **./setup** to install the printer specific data files.
   c. Type **xpadmin** to open the admin tool for creating print queues. Select the printer from the list of discovered printers you want to print to. Click on the printer icon at the top left of the screen to add a print queue.

5. Print a test page and verify the print quality of the printed page.

   Note: If print-quality problem exists, or your job did not print, refer to the User Guide at www.xerox.com/office/7100support.

Image Quality

3

This chapter includes:

Print-Quality Problems Overview

Print-quality defects can be attributed to printer components, consumables, paper, internal software, external software applications, and environmental conditions. To successfully troubleshoot print-quality problems, eliminate as many variables as possible. The first step is to generate prints using information pages embedded in the printer on laser paper from the Recommended Media List (RML). Refer to Paper and Tray Specifications on page 1-35 for supported and specialty paper that have been tested and approved for use in the Phaser 7100 printer. Use paper from a fresh ream that is acclimated to room temperature and humidity.

If the print-quality defect is still present when printing on approved paper from an unopened ream of paper, then investigate software applications and environmental conditions.

Determine the temperature and humidity under which the printer is operating. Compare this to the Environmental Specifications on page 1-33. Extreme temperature and humidity can adversely affect the xerographic and fusing characteristics of the printer.

When analyzing a print-quality defect, first determine if the defect occurs in all colors or only one color and if it is repeating or random occurrence. Continuous defects in the process direction, such as Voids and Lines, are the most difficult to diagnose. Inspect the visible surfaces of all Rollers for obvious defect. If no defects are found, replace the Toner Cartridge, Imaging Unit, Fuser Unit, Transfer Roller (2nd BTR), Transfer Belt, and Laser Unit one at a time until the defect is eliminated.

Defects Associated with Specific Printer Components

Some print-quality problems can be associated with specific assemblies. Refer to the specific print-quality troubleshooting procedure for detail information.

Associated Assemblies

Defects	Toner Cartridge	Fuser Unit	Developer Housing	Imaging Unit	Transfer Belt (IBT Unit)	Laser Unit
Banding		X	X	X	X	X
Background Contamination	X			X	X	
Black Print	X					X
Blank Print						X
Deletions			X	X	X	
Light or Undertone Print	X			X	X	X
Mottle			X			
Offsetting		X			X	

Associated Assemblies (Continued)

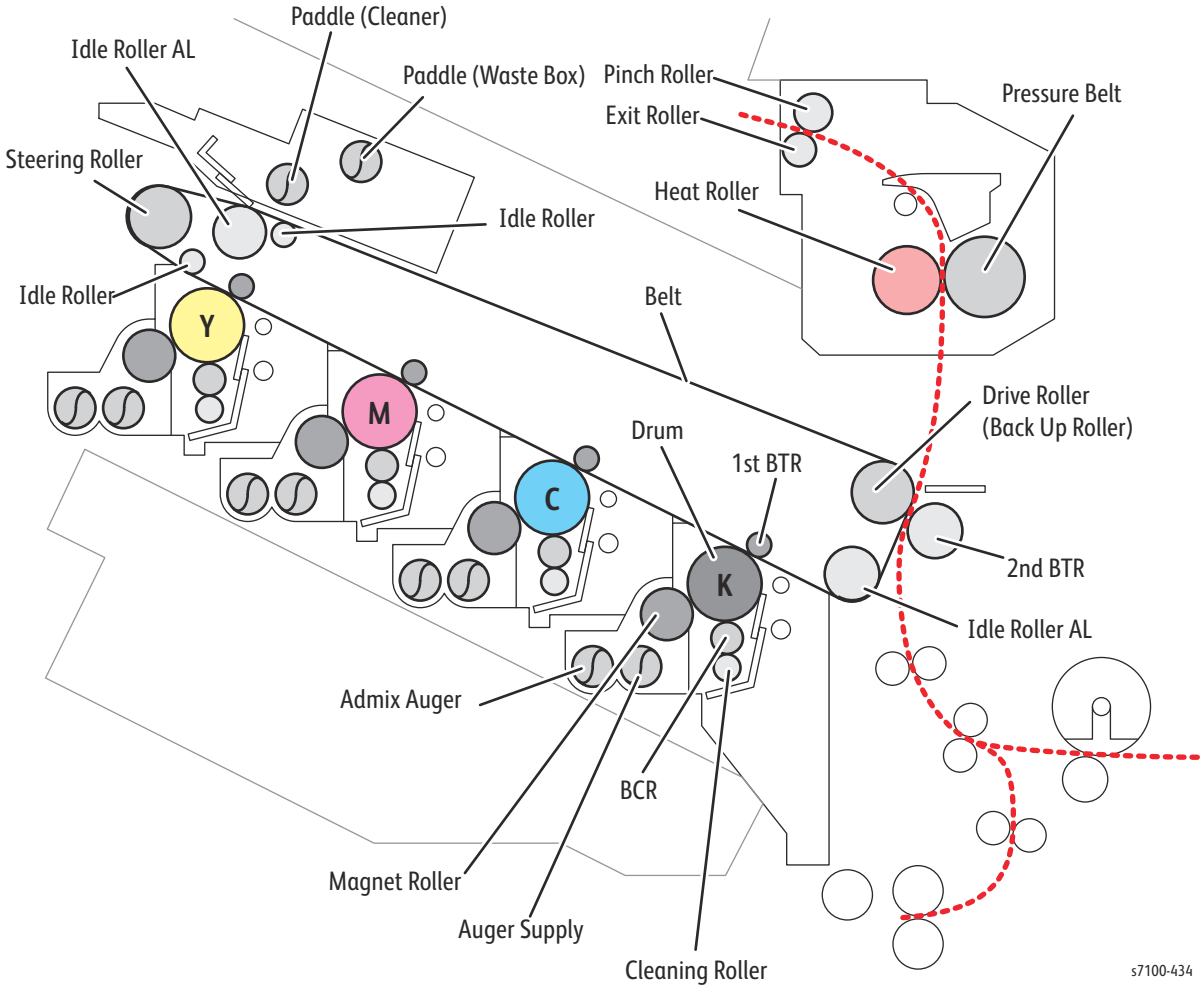
Defects	Toner Cartridge	Fuser Unit	Developer Housing	Imaging Unit	Transfer Belt (IBT Unit)	Laser Unit
Partial Band	X			X	X	X
Repeating Defects		X	X	X	X	X
Spots	X	X	X	X	X	X
Streaks	X	X	X	X		X
Toner Detection Color Stripes	X					

Repeating Defect Measurement

When horizontal streaks or spots appear in a constant cycle, the problem might be due to damaged Fuser, Waste Cartridge, Developer, Imaging Unit, Registration Roller, or Transfer Roller. Measure the interval between defects and use the following table to identify the affected Roller.

Component Name		Defect Distance (mm)
Fuser Assembly	Pinch Roller	44.0
	Exit Roller	44.0
	Heat Roller	82.6
	Pressure Belt	94.5
2nd BTR (Transfer Roller)	2nd BTR	67.5
Transfer Belt (IBT Unit)	Drive Roller	70.7
	1st BTR	25.1
	Idle Roller AL	56.5
	Idle Roller	25.1
	Steering Roller	70.7
	Paddle	277.8
Waste Cartridge	Paddle	220.6
Developer Housing Assembly	Magnet Roller	28.6
	Auger Admix	27.2
	Auger Supply	27.2

Component Name		Defect Distance (mm)
Imaging Unit	Drum	94.2
	BCR	37.7
	Cleaning Roller	31.4
Registration Roller	Registration Roller	44.0



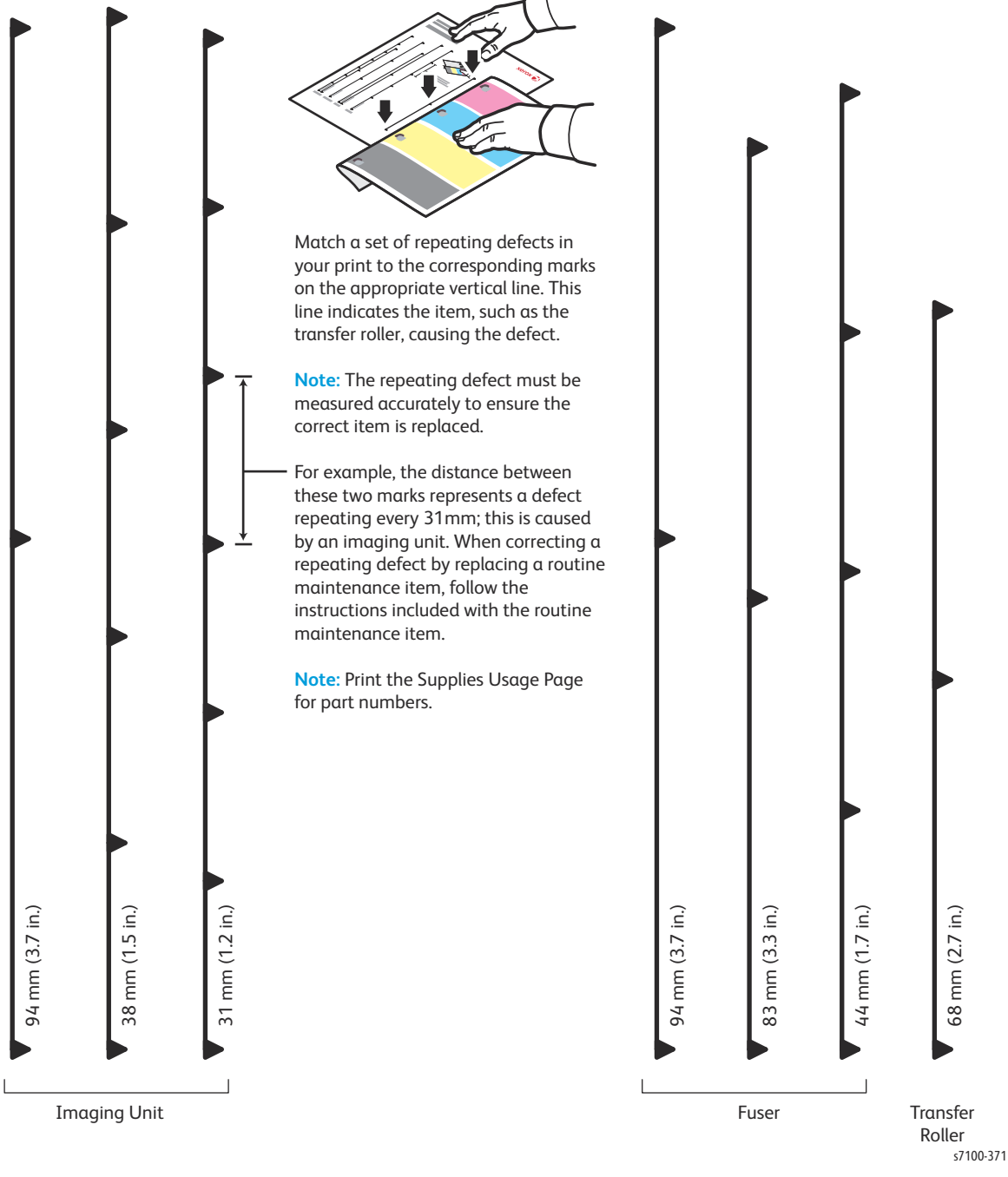
Xerox® Phaser® 7100
Repeating Defects

Match a set of repeating defects in your print to the corresponding marks on the appropriate vertical line. This line indicates the item, such as the transfer roller, causing the defect.

Note: The repeating defect must be measured accurately to ensure the correct item is replaced.

For example, the distance between these two marks represents a defect repeating every 31mm; this is caused by an imaging unit. When correcting a repeating defect by replacing a routine maintenance item, follow the instructions included with the routine maintenance item.

Note: Print the Supplies Usage Page for part numbers.



Checklist Before Troubleshooting Print-Quality

Check Printer Condition

Consumable and Long Life Maintenance Items

Check the consumable counters to determine the amount of life remaining in each Toner Cartridge, Imaging Unit, and Fuser Unit. Replace any consumable or maintenance item that is at of near end of life before troubleshooting print defects.

Low toner can cause problems, such as fading, streaking, White lines, or dropouts. Imaging Units approaching end of life may produce high frequency banding and affect the printer's ability to maintain toner density increasing calibration cycles.

Cleaning

Paper, ink debris, and dust particles can accumulate inside the printer and cause print-quality problem such as Smearing. Clean the inside of the printer to prevent these problems.

Operating Environment

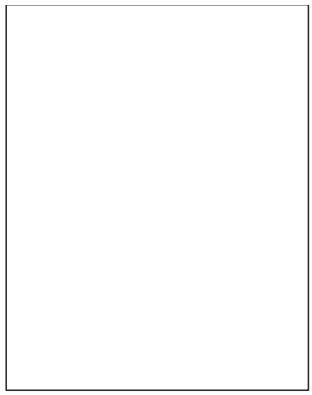
Check the temperature, humidity, clearances, and supporting surface meet specifications. Refer to Environmental Specifications on page 1-33.

Media Condition

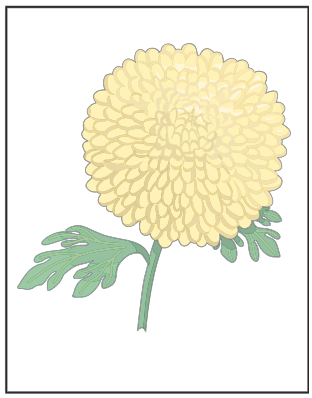
Paper should be fresh and stored in the operating environment for 12 hours before use for printing. The print-quality is best when quality paper is fed from the tray. The print quality is evaluated on the maximum size of each centerline media. Check the condition and type of media loaded. Refer to Media Guidelines on page A-2 for details on determining proper media condition.

System Checklist

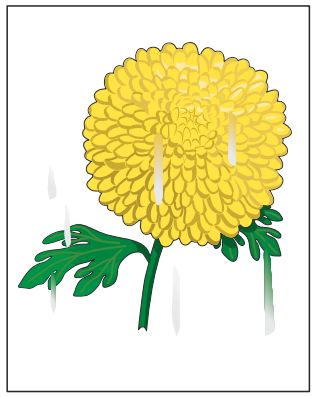
Entire page is white or one color is missing from image.

1.	Ensure the packaging material is removed from the Imaging Units.	 Blank Print
2.	Check the Toner Cartridge installation.	
3.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	

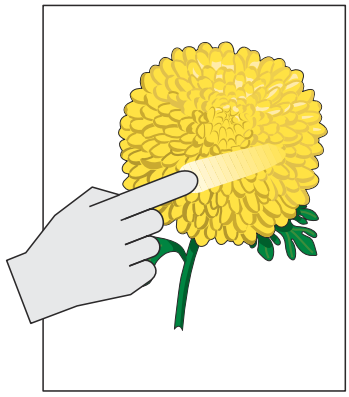
Colors too light or too dark

	Actions	Example Print
1.	Check that the correct media is being used and the media settings for the Tray match.	 Light or Undertone Print
2.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**). Change the Toner Cartridges if necessary (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).	
3.	If the media surface is rough, increase media weight settings for the Tray (**Control Panel Menu** > **Admin Menu** > **Printer Settings** > **Paper Type**).	

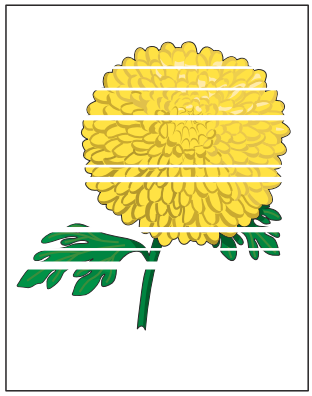
Smears, Smudges, or Streaks

	Actions	Example Print
1.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	 Smudges or Smears
2.	If you are printing on an uneven print surface, change the Paper Type settings (**Control Panel Menu** > **Admin Menu** > **Printer Settings** > **Paper Type**).	
3.	Verify that the paper is within the printer specifications (refer to Paper and Tray Specifications on page 1-35).	
4.	Use a fresh ream of paper.	
5.	Check AC input voltage (refer to Electrical Troubleshooting on page 2-453).	
6.	Check the Fuser Unit connections (refer to Fuser Unit on page 7-41).	

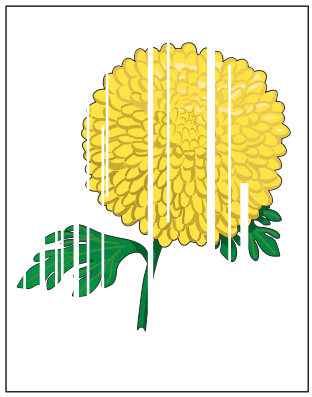
Toner missing or easily rubbed off.

	Actions	Example Print
1.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	 Unfused Image
2.	Check that the correct paper is being used and the paper settings for the Tray match. • Paper Type - **Control Panel Menu** > **Admin Menu** > **Printer Settings** > **Paper Type** • Paper Size Settings - **Control Panel Menu** > **Admin Menu** > **Printer Settings** > **Paper Size Settings**	
3.	Select a heavier paper type.	

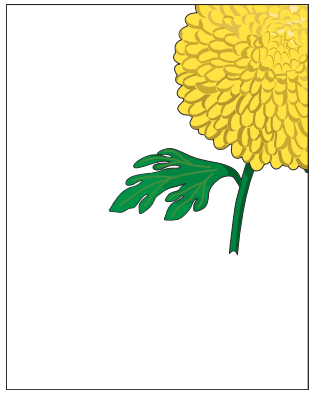
Streaks appear on the page.

	Actions	Example Print
1.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	 Horizontal Band, Void, or Streaks
2.	Check the Imaging Unit life counters (access **CWIS** > **Status** > **Consumables**).	

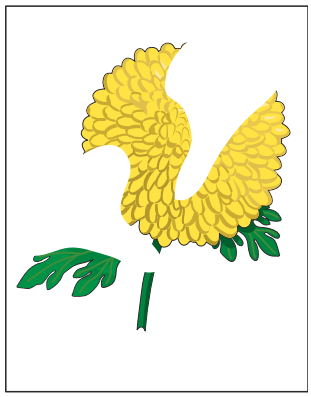
Vertical White lines or Streaks - One color

	Actions	Example Print
1.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	 Vertical Blank Lines
2.	Clean the Laser Lens (Cleaning the Laser Lenses on page 6-5) of the affected color.	
3.	Check for debris blocking the laser light path.	
4.	Check the Fuser Rollers for damage or contamination.	

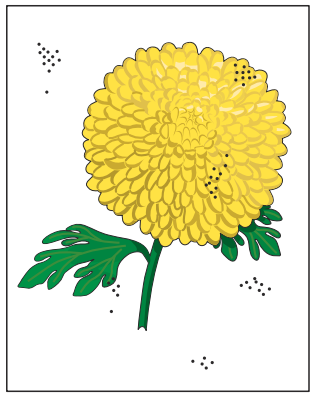
Page Margins are inconsistent.

	Actions	Example Print
1.	Ensure the Paper Size Settings for the Tray is correct (**Control Panel Menu** > **Admin Menu** > **Printer Settings** > **Paper Size Settings**).	 Image Not Centered
2.	Ensure the margins are set correctly in your software application.	

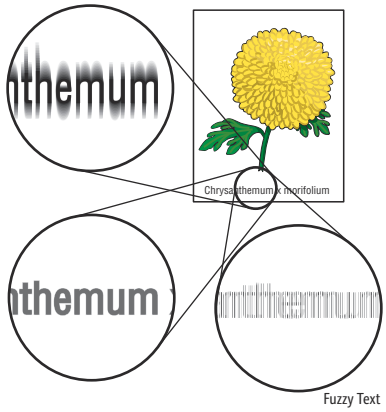
Part or all the page prints in Cyan, Magenta, Yellow, or Black.

	Action	Example Print
1.	Check the Toner Cartridge installation.	 Partial Band
2.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	

Toner spots appear on the page and printing is blurred.

	Actions	Example Print
1.	Check the Toner Cartridge installation.	 Random Spots
2.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	
3.	Change the loaded paper.	
4.	Check humidity levels.	
5.	Check for genuine Xerox Toner Cartridges.	

Characters have jagged or uneven edges.

	Action	Example Print
1.	Check the Toner Cartridge life counters (access **CWIS** > **Status** > **Consumables**).	 Fuzzy Text
2.	If you are using downloaded fonts, verify that the fonts are supported by the printer, the host computer, and the software application.	

Print-Quality Troubleshooting

Print-Quality Defect Definitions

The following table lists the print-quality defect corrective procedure, their definition, and the page where each procedure is provided.

Defect	Description	Page
IQ-1 Light Print (Weak Gradation)	The overall density of the image is light.	3-13
IQ-2 Blank Print	The entire image area is blank.	3-15
IQ-3 Black Print	Part of the image or the entire image is black.	3-17
IQ-4 Vertical Bands, Voids, or Streaks (In Paper Feed Direction)	There are extremely light or completely white streaks in the paper feed direction on the image.	3-19
IQ-5 Horizontal Bands, Voids, or Streaks	There are extremely light or completely white streaks perpendicular to the paper feed direction on the image.	3-22
IQ-6 Vertical Color Streaks	There are vertical color streaks or lines in the paper feed direction.	3-25
IQ-7 Horizontal Color Streaks	There are horizontal color streaks or lines in the paper feed direction.	3-27
IQ-8 Partial Image	There are extremely light or completely white parts on the image at narrow areas of the paper.	3-29
IQ-9 Toner Contamination	The whole paper or part of the paper is contaminated by toner.	3-31
IQ-10 Ghost Image	Parts of the previous page or current page appear as ghost images on the paper after 95 mm.	3-33
IQ-11 Background Contamination	There is toner contamination on all or most of the page.	3-35
IQ-12 Skew	The printed image is not parallel with both sides of the paper.	3-37
IQ-13 Damaged Paper	Paper comes out from the printer wrinkled, folded, or worn-out.	3-39
IQ-14 Poor Fusing	The toner image is not completely fused to the paper. The image easily rubs off.	3-42
IQ-15 Color Registration	The four colors (Yellow, Black, Cyan, and Magenta) of the image are not registered correctly into one image.	3-43
IQ-16 Fringe	There is toner scattering around the image of multiple color sections.	3-45
IQ-17 Auger Mark	Uneven density. Downward right slanted stripe patterns appearing in approximately 20 mm pitch.	3-47

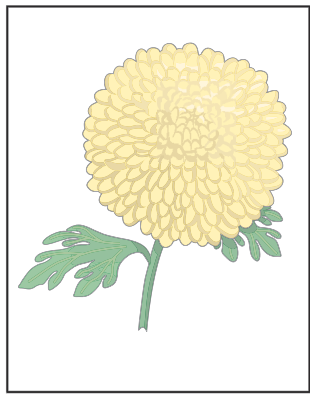
IQ-1 Light Print (Weak Gradation)

The overall density of the image is light.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Transfer Roller (2nd BTR), PL 4.3.18 • Toner Cartridge (Y/ M/ C/ K), PL 8.1.1 - PL 8.1.4 • CTD Sensor Assembly, PL 9.1.10 • HVPS2 PWB, PL 12.1.2 • HVPS1 PWB, PL 12.2.15	 Light or Undertone Print

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper condition. Is the paper dry, recommended type, and loaded in the tray correctly? Replace the paper with new recommended unpacked paper (refer to Paper and Tray Specifications on page 1-35). Resend a print job. Does the image print normal?	Troubleshooting complete.	Go to step 2.
2.	Check the Toner Cartridges (Y/ M/ C/ K) installation. Reinstall the Toner Cartridges (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136) and perform test print. Does the image print normal?	Troubleshooting complete.	Go to step 3.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the CTD Sensor Assembly installation. Is the CTD Sensor Assembly installed correctly?	Go to step 4.	Reinstall the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175).
4.	Check the surface of the CTD Sensor for contamination and debris. Is there any contamination or debris at the Sensor surface of the CTD Sensor Assembly?	Clean the CTD Sensor surface and remove any debris. Note: Do not use alcohol.	Go to step 5.
5.	Check the Transfer Roller (2nd BTR) installation. Is the Transfer Roller installed properly?	Go to step 6.	Reinstall the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
6.	Check the Transfer Roller. Is the Transfer Roller dirty or damaged?	Go to step 7.	Replace the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108). Reset the Counter. a. Press **Down Arrow** + **OK**. b. Scroll through the menu, select **Reset Counter**, and press **OK**. c. Select **2ndBiasTrans.Roll** and press **OK** to reset the Transfer Roller.
7.	Check the HVPS2 PWB connectors. Are the connectors seated securely?	Go to step 8.	Reconnect the wiring harness connectors.
8.	Check the HVPS1 PWB connector. Is the connector seated securely?	Replace the HVPS1 PWB (REP 12.13 HVPS1 PWB on page 4-221).	Reconnect the wiring harness connector.

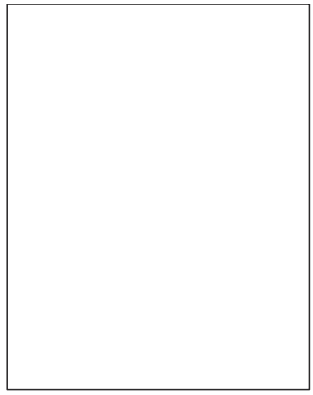
IQ-2 Blank Print

The entire image area is blank.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Transfer Roller (2nd BTR), PL 4.3.18 • Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • ROS Assembly (Laser Unit), PL 7.1.1 • IBT Unit, PL 9.1.99 • HVPS2 PWB, PL 12.1.2 • HVPS1 PWB, PL 12.2.15	 Blank Print

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Laser beam path. Is there any obstruction between the Laser Unit and the Imaging Units (Y/ M/ C/ K)?	Remove the obstruction.	Go to step 2.
2.	Check the IBT Unit. Is the high voltage terminal of the IBT Unit free from contamination and it is in proper contact with the Spring?	Go to step 3.	Clean the high voltage terminal. Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).
3.	Check the Transfer Roller installation. Is the Transfer Roller installed properly?	Go to step 4.	Reinstall the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Laser Unit. Use paper to cover half of the Laser Unit window and resend a print job. Is the printout half white and half black? Note: If the Laser Unit is normal, the half will have the test pattern printed on it instead of being solid black.	Replace the Laser Unit (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130).	Go to step 5.
5.	Check the HVPS2 PWB connectors. Are the connectors seated securely?	Go to step 6.	Reconnect the wiring harness connectors.
6.	Check the HVPS1 PWB connector. Is the connector seated securely?	Replace the HVPS1 PWB (REP 12.13 HVPS1 PWB on page 4-221).	Reconnect the wiring harness connector.

IQ-3 Black Print

Part of the image or the entire image is black.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • ROS Assembly (Laser Unit), PL 7.1.1 • MCU PWB, PL 12.1.15 • HVPS1 PWB, PL 12.2.15	 Black Print

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 2. Take action only for the applicable color.	Go to step 2. Take action without color restriction.
2.	Check the Imaging Units (Y/ M/ C/ K). Are the Imaging Units (Y/ M/ C/ K) installed properly, with no deformation and contamination at the contact points and they are in contact with the left and right Guides?	Go to step 3.	Inspect and clean the contact points. Reinstall the Imaging Units (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
3.	For color, switch the Imaging Unit (Y/ M/ C). Does the problematic image appear in the same color as it did so far?	Go to step 4.	Replace the Imaging Unit (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121) of the color that is causing the problem.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the charged state of the Drum. Use paper to cover the whole Laser Unit window and resend a print job. Is the print solid black? Note: If the Drum is charged normally, a fully white printout will be printed.	Replace the HVPS1 PWB (REP 12.13 HVPS1 PWB on page 4-221).	Go to step 5.
5.	Check the Laser Unit. Use paper to cover half of the Laser Unit window and resend a print job. Is the printout half white and half black? Note: If the Laser Unit is normal, the half will have the test pattern printed on it instead of solid black.	Replace the Laser Unit (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130).	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

IQ-4 Vertical Bands, Voids, or Streaks (In Paper Feed Direction)

There are extremely light or completely white streaks in the paper feed direction on the image.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Transfer Roller (2nd BTR), PL 4.3.18 • Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • ROS Assembly (Laser Unit), PL 7.1.1 • Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5 - PL 8.1.8 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	 Vertical Blank Lines

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 2. Take action only for the applicable color.	Go to step 2. Take action without color restriction.
2.	Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Check the Laser Unit window. Is the Laser Unit window of a particular color (Y/ M/ C/ K) contaminated?	Clean the Laser Unit window for the applicable color.	Go to step 3.
3.	Check the Laser beam path. Is there any obstruction between the Laser Unit and the Imaging Units (Y/ M/ C/ K)? Check the vicinity of the Developer Housing Assembly (Y/ M/ C/ K) Developer Roller Bottom Cover for stuck items such as fibers, etc.	Remove the obstruction.	Go to step 4.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Developer Roller for color omission. Can a partial color omission be seen on the Developer Roller for a particular color (Y/ M/ C/ K)? Note: Observe carefully as sometimes slight depressions are visible at the layer of toner on the Developer Roller.	Replace the Developer Housing Assembly for the applicable color (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).	Go to step 5.
5.	Check the Imaging Unit surface. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is each Drum surface of the Imaging Unit (Y/ M/ C/ K) normal, with no contamination or damage?	Go to step 6.	Replace the Imaging Unit for the applicable color (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
6.	Check the Charge Roller surface. Is each Charge Roller surface of the Imaging Unit (Y/ M/ C/ K) normal, with no contamination or damage?	Go to step 7.	Replace the Imaging Unit for the applicable color (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
7.	Check the paper transfer path. Is there any contamination or obstruction on the transfer path between the paper feed and output? For horizontal streak problems, check the applicable positions for abnormalities such as debris, deformation of the ribs, and etc.	Remove the obstruction. Replace the applicable parts: • IBT Unit (REP 9.10 IBT Unit on page 4-177) OR • Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108) OR • Fuser Unit (REP 10.1 Fuser Unit on page 4-183)	Go to step 8.
8.	Check the Intermediate Transfer Belt. Is the IBT Unit normal, without contamination, damage, or wear and tear?	Go to step 9.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
9.	Check the Transfer Roller (2nd BTR). Is the Transfer Roller normal, without any contamination, damage, or wear and tear?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108). Reset the Transfer Roller counter (Resetting the Transfer Roller (2nd BTR) Counter on page 6-12).

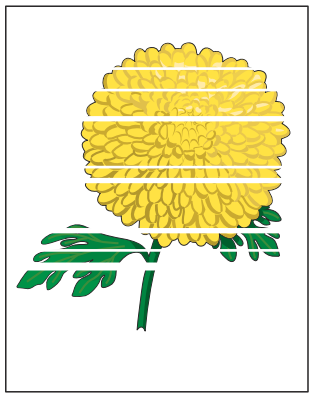
IQ-5 Horizontal Bands, Voids, or Streaks

There are extremely light or completely white streaks perpendicular to the paper feed direction on the image.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Transfer Roller (2nd BTR), PL 4.3.18 • Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5 - PL 8.1.8 • IBT Unit, PL 9.1.99 • HVPS2 PWB, PL 12.1.2 • HVPS1 PWB, PL 12.2.15	 Horizontal Band, Void, or Streaks

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 2. Take action only for the applicable color.	Go to step 2. Take action without color restriction.
2.	Check the Imaging Unit. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y/ M/ C/ K) installed properly, with no deformation and contamination at the contact points and it is in contact with the left and right Guides?	Go to step 3.	Inspect and clean the contact points. Reinstall the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	For color, switch the Imaging Unit (Y/ M/ C). Does the problematic image appear in the same color as it did so far?	Go to step 4.	Replace the Imaging Unit for the color that caused the problem (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
4.	Check the Developer Unit installation. Is the Developer Housing Assembly (Y/ M/ C/ K) installed properly, with no contamination at the high voltage terminal?	Go to step 5.	Clean the high voltage terminal. Reinstall the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
5.	Check the Developer Unit. Is the Developer Housing Assembly (Y/ M/ C/ K) normal, without any contamination, damage, or wear and tear?	Go to step 6.	Replace the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
6.	Check the HVPS1 PWB connector. Is the connector seated securely?	Go to step 7.	Connect the wiring harness connector.
7.	Check the Transfer Roller (2nd BTR) installation. Is the Transfer Roller installed properly?	Go to step 8.	Reinstall the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
8.	Check the Intermediate Transfer Belt. Is the IBT Unit normal, without contamination, damage, or wear and tear?	Go to step 9.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
9.	Check the IBT Unit. Is the high voltage terminal of the IBT Unit free from contamination and it is in proper contact with the Spring?	Go to step 10.	Clean the high voltage terminal. Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
10.	Check the Transfer Roller (2nd BTR). Is the Transfer Roller normal, without any contamination, damage, or wear and tear?	Go to step 11.	Replace the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108). Reset the Transfer Roller counter (Resetting the Transfer Roller (2nd BTR) Counter on page 6-12).
11.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). Does the error persist?	Go to step 12.	Troubleshooting complete.
12.	Check the HVPS2 PWB connectors. Are the connectors seated securely?	Replace the HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202).	Reconnect the wiring harness connectors.

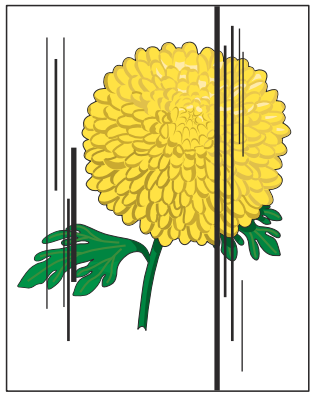
IQ-6 Vertical Color Streaks

There are vertical color streaks or lines in the paper feed direction.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5 - PL 8.1.8 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	 Vertical Stripes

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 2. Take action only for the applicable color.	Go to step 2. Take action without color restriction.
2.	Check the Imaging Unit. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y/ M/ C/ K) installed properly, with no deformation and contamination at the contact points and it is in contact with the left and right Guides?	Go to step 3.	Inspect and clean the contact points. Reinstall the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
3.	For color, switch the Imaging Unit. (Y/ M/ C). Does the problematic image appear in the same color as it did so far?	Go to step 4.	Replace the Imaging Unit for the color that caused the problem (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the IBT Unit (Transfer Belt). Is the Transfer Belt normal, without contamination, damage, or wear and tear?	Go to step 5.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
5.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). Does the error persist?	Go to step 6.	Troubleshooting complete.
6.	Check the Developer Housing Assembly. Is the Developer Housing Assembly (Y/ M/ C/ K) normal, without any contamination, damage, or wear and tear?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).

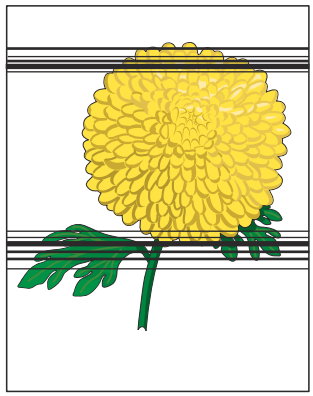
IQ-7 Horizontal Color Streaks

There are horizontal color streaks or lines in the paper feed direction.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5 - PL 8.1.8 • IBT Unit, PL 9.1.99 • HVPS2 PWB, PL 12.1.2 • HVPS1 PWB, PL 12.2.15	 Horizontal Stripes

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 2. Take action only for the applicable color.	Go to step 2. Take action without color restriction.
2.	Check the Imaging Unit installation. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y/ M/ C/ K) installed properly, with no deformation and contamination at the contact points and it is in contact with the left and right Guides?	Go to step 3.	Inspect and clean the contact points. Reinstall the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
3.	For color, switch the Imaging Unit. (Y/ M/ C). Does the problematic image appear in the same color as it did so far?	Go to step 4.	Replace the Imaging Unit for the color that caused the problem (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Developer Unit installation. Is the Developer Housing Assembly (Y/ M/ C/ K) installed properly, with no contamination at the high voltage terminal?	Go to step 5.	Clean the high voltage terminal. Reinstall the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
5.	Check the Developer Unit. Is the Developer Housing Assembly (Y/ M/ C/ K) normal, without any contamination, damage, or wear and tear?	Go to step 6.	Replace the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
6.	Check the HVPS1 PWB connector. Is the connector seated securely?	Go to step 7.	Connect the wiring harness connector.
7.	Check the Intermediate Transfer Belt. Is the IBT Unit normal, without contamination, damage, or wear and tear?	Go to step 8.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
8.	Check the IBT Unit. Is the high voltage terminal of the IBT Unit free from contamination and it is in proper contact with the Spring?	Go to step 9.	Clean the high voltage terminal. Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).
9.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). Does the error persist?	Go to step 10.	Troubleshooting complete.
10.	Check the HVPS2 PWB connectors. Are the connectors seated securely?	Replace the HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202).	Connect the wiring harness connectors.

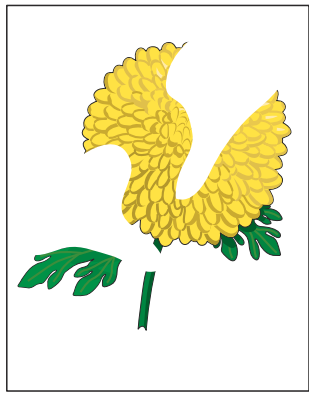
IQ-8 Partial Image

There are extremely light or completely white parts on the image at narrow areas of the paper.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Transfer Roller (2nd BTR), PL 4.3.18 • Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	 Partial Band

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for moisture effect on the paper. Load a freshly opened (or one that has been sealed in moisture controlled environment) recommended paper and perform test print. Is the image printed normally?	Troubleshooting complete.	Go to step 2.
2.	Print 30 pages for each image type. Does the error persist?	Go to step 3.	Troubleshooting complete.
3.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 4. Take action only for the applicable color.	Go to step 4. Take action without color restriction.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	For color, switch the Imaging Unit. (Y/ M/ C). Does the problematic image appear in the same color as it did so far?	Go to step 5.	Replace the Imaging Unit for the color that caused the problem (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
5.	Check the Intermediate Transfer Belt. Is the IBT Unit normal, without contamination, damage, or wear and tear?	Go to step 6.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
6.	Check the IBT Unit installation. Is the high voltage terminal of the IBT Unit free from contamination and it is in proper contact with the Spring?	Go to step 7.	Clean the high voltage terminal. Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).
7.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). Does the error persist?	Go to step 8.	Troubleshooting complete.
8.	Check the Transfer Roller (2nd BTR) installation. Is the Transfer Roller installed properly?	Go to step 9.	Reinstall the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
9.	Check the Transfer Roller (2nd BTR). Is the Transfer Roller normal, without any contamination, damage, or wear and tear?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108). Reset the Transfer Roller counter (Resetting the Transfer Roller (2nd BTR) Counter on page 6-12).

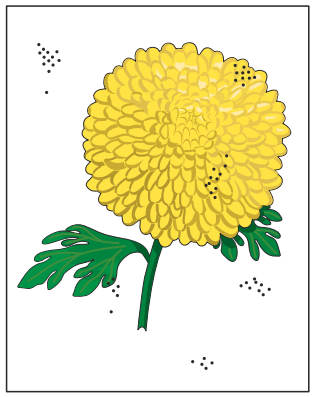
IQ-9 Toner Contamination

The whole paper or part of the paper is contaminated by toner.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5 - PL 8.1.8 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	 Random Spots

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Print 30 pages for each image type. Does the error persist?	Go to step 2.	Troubleshooting complete.
2.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 3. Take action only for the applicable color.	Go to step 3. Take action without color restriction.
3.	Check the Imaging Unit surface. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is each Drum surface of the Imaging Unit (Y/ M/ C/ K) normal, with no contamination or damage?	Go to step 4.	Replace the Imaging Unit for the applicable color (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
4.	Check the Charge Roller surface. Is each Charge Roller surface of the Imaging Unit (Y/ M/ C/ K) normal, with no contamination or damage?	Go to step 5.	Replace the Imaging Unit for the applicable color (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
5.	Check the shade on the Developer Roller. Is the shade (toner density) too light at the Developer Roller for a particular color (Y/ M/ C/ K)? Is the shade (toner density) too dark at the Developer Roller for a particular color (Y/ M/ C/ K) and there is toner dispersal around the Housing?	Replace the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).	Go to step 6.
6.	Check the Intermediate Transfer Belt. Is the IBT Unit normal, without contamination, damage, or wear and tear?	Go to step 7.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
7.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). Does the error persist?	Go to step 8.	Troubleshooting complete.
8.	Check the Developer Housing Assembly. Is the Developer Housing Assembly (Y/ M/ C/ K) normal, without any contamination, damage, or wear and tear?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Replace the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).

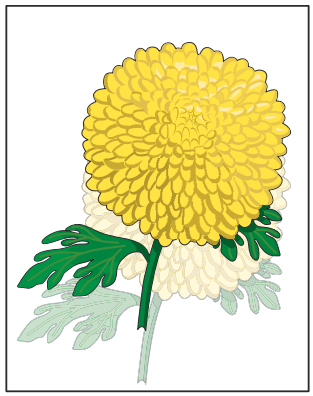
IQ-10 Ghost Image

Parts of the previous page or current page appear as ghost images on the paper after 95 mm.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • Erase PWB, PL 6.1.9 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	 Residual Image/Ghosting

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 2. Take action only for the applicable color.	Go to step 2. Take action without color restriction.
2.	Check the Imaging Unit installation. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y/ M/ C/ K) installed properly, with no deformation and contamination at the contact points and it is in contact with the left and right Guides?	Go to step 3.	Inspect and clean the contact points. Reinstall the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
3.	For color, switch the Imaging Unit. (Y/ M/ C). Does the problematic image appear in the same color as it did so far?	Go to step 4.	Replace the Imaging Unit for the color that caused the problem (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the lighting up of the Erase Lamp. Activate DC330 Component Control on page 2-26 of Erase Lamp On (Chain-Links 091-005, 091-006). Does the LED light up?	Go to step 5.	Connect the wiring harness connector.
5.	Check the IBT Unit. Is the high voltage terminal of the IBT Unit free from contamination and it is in proper contact with the Spring?	Go to step 6.	Clean the high voltage terminal. Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).
6.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

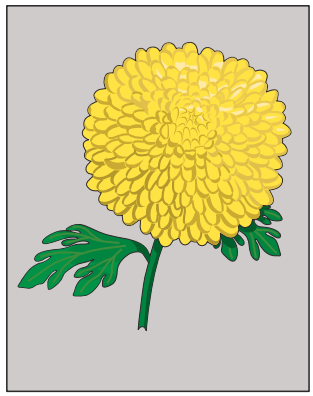
IQ-11 Background Contamination

There is toner contamination on all or most of the page.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5 - PL 8.1.8 • CTD Sensor Assembly, PL 9.1.10 • HVPS1 PWB, PL 12.2.15	 Background Contamination

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Print 30 pages for each image type. Does the error persist?	Go to step 2.	Troubleshooting complete.
2.	Check the Imaging Unit installation. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y/ M/ C/ K) installed properly, with no deformation and contamination at the contact points and it is in contact with the left and right Guides?	Go to step 3.	Inspect and clean the contact points. Reinstall the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
3.	Check the Charge Roller surface. Is each Charge Roller surface of the Imaging Unit (Y/ M/ C/ K) normal, with no contamination or damage?	Go to step 4.	Replace the Imaging Unit for the applicable color (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the shade on the Developer Roller. Is the shade (toner density) too light at the Developer Roller for a particular color (Y/ M/ C/ K)? Is the shade (toner density) too dark at the Developer Roller for a particular color (Y/ M/ C/ K) and there is toner dispersal around the Housing?	Replace the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).	Go to step 5.
5.	Check the surface of the CTD Sensor for contamination and debris. Is there any contamination or debris at the Sensor surface of the CTD Sensor Assembly?	Clean the CTD Sensor surface and remove any debris.	Go to step 6.
6.	Check the Developer Housing Assembly installation. Is the Developer Housing Assembly (Y/ M/ C/ K) installed properly, with no contamination at the high voltage terminal?	Go to step 7.	Clean the high voltage terminal. Reinstall the Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
7.	Check the HVPS1 PWB connector. Is the connector seated securely?	Replace the HVPS1 PWB (REP 12.13 HVPS1 PWB on page 4-221).	Connect the wiring harness connector.

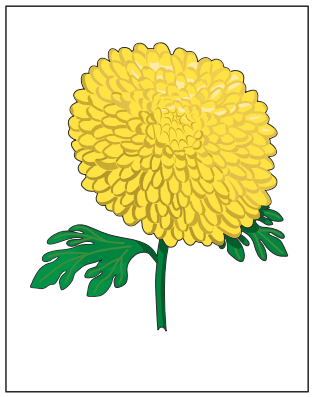
IQ-12 Skew

The printed image is not parallel with both sides of the paper.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Tray 1 Feed Roller Kit, PL 2.2.99 • Bottom Plate Assembly, PL 2.3.4 • Transfer Roller (2nd BTR), PL 4.3.18 • Registration Chute Assembly, PL 5.1.1 • IBT Retract Cam Assembly, PL 9.1.8 • IBT Unit, PL 9.1.99 • Fuser Unit, PL 10.1.1 • Tray 2/ 3/ 4 Feed Roller Kit, PL 15.2.99	 Skew Distortion

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation surface of the printer (refer to Clearance and Mounting Surface Specifications on page 1-38). Is the printer installation surface flat, with no bumps? Are the legs of the printer installed properly?	Go to step 2.	Correct the installation surface.
2.	Check the paper for correct placement. Remove the paper Tray, align the Guides, and reseat the paper. Install the paper Tray and perform test print. Does the image print normally?	Troubleshooting complete.	Go to step 3.
3.	Check the Bottom Plate Assembly operation in the paper Tray. Remove the paper Tray. Is the Bottom Plate Assembly in the paper Tray not skewed and does it rise properly?	Go to step 4.	Reinstall the Bottom Plate Assembly (REP 2.17 Bottom Plate Assembly on page 4-59).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the paper transport path Rollers. Are the Rollers on the paper transport path normal without contamination, damage, or wear and tear and installed properly?	Go to step 5.	Clean and reinstall or replace the applicable Rollers. • Tray 1 Feed Roller (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54) • Tray 2/3/4 Feed Roller (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276)
5.	Check the Transfer Roller (2nd BTR) installation. Is the Transfer Roller installed properly?	Go to step 6.	Reinstall the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
6.	Check the Fuser Unit installation. Is the Fuser Unit installed properly?	Go to step 7.	Reinstall the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
7.	Check the IBT Unit. Is the high voltage terminal of the IBT Unit free from contamination and it is in proper contact with the Spring?	Go to step 8.	Clean the high voltage terminal. Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).
8.	Check the IBT Unit (Transfer Belt). Is the Transfer Belt normal, without contamination, damage, or wear and tear? Perform DC330 Component Control on page 2-26 to check the operation of the IBT Unit: • [094-001] Belt Retract Motor Does the Belt Retract Motor operate normally? • [094-200] Belt Retract Sensor Does the Belt Retract Sensor operate normally?	Replace the Registration Chute (REP 5.1 Registration Chute Assembly on page 4-114).	Replacement items: • For Belt Retract Motor failure: Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). • For Belt Retract Sensor failure: Replace the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).

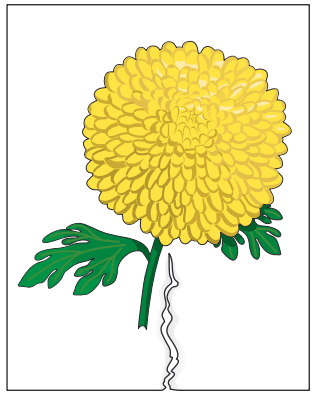
IQ-13 Damaged Paper

Paper comes out from the printer wrinkled, folded, or worn-out.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Tray 1 Feed Roller Kit, PL 2.2.99 • Transfer Roller (2nd BTR), PL 4.3.18 • Bypass Tray Feed Roller, PL 4.4.14 • Registration Chute Assembly, PL 5.1.1 • Fuser Unit, PL 10.1.1 • Tray 2/ 3/ 4 Feed Roller Kit, PL 15.2.99	 Damaged Print Media

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the paper for correct placement. Remove the paper Tray, align the Guides, and reseat the paper. Install the paper Tray and perform test print. Does the image print normally?	Troubleshooting complete.	Go to step 2.
2.	Check for moisture effect on the paper. Load a freshly opened (or one that has been sealed in moisture controlled environment) recommended paper and perform test print. Is the image printed normally?	Troubleshooting complete.	Go to step 3.
3.	Check the Paper Type settings. Does the printed paper match the Paper Type that is set?	Go to step 4.	Set the correct Paper Type (Adjusting Paper Type on page 6-18).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the paper transport path Is there any contamination or obstruction on the transport path between the paper feed and output?	Remove obstruction.	Go to step 5.
5.	Check the paper transport path Rollers. Are the Rollers on the paper transport path normal without contamination, damage, or wear and tear and installed properly?	Go to step 6.	Clean and reinstall or replace the applicable Rollers. • Bypass Tray Feed Roller (REP 4.13 Bypass Tray Feed Roller Assembly on page 4-112) • Tray 1 Feed Roller (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54) • Tray 2/3/4 Feed Roller (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276)
6.	Check the Transfer Roller (2nd BTR) installation. Is the Transfer Roller installed properly?	Go to step 7.	Reinstall the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
7.	Check the Fuser Unit installation. Is the Fuser Unit installed properly?	Go to step 7.	Reinstall the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
8.	Remove the Fuser Unit (REP 10.1 Fuser Unit on page 4-183). Turn the Gear manually and inspect the Heat Roller. Is the Heat Roller normal, with no contamination or damage?	If the problem in only with one tray, replace its Feed Roller first. • Bypass Tray Feeder Roller (REP 4.13 Bypass Tray Feed Roller Assembly on page 4-112) • Tray 1 Feed Roller (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54) • Tray 2/3/4 Feed Roller (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276) If the problem is with all trays, replace the Fuser Unit first (REP 10.1 Fuser Unit on page 4-183). If those parts don't fix the issue, replace the following parts in the following order: • Registration Chute (REP 5.1 Registration Chute Assembly on page 4-114) • Transfer Roller (2nd BTR (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108)	Replace the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).

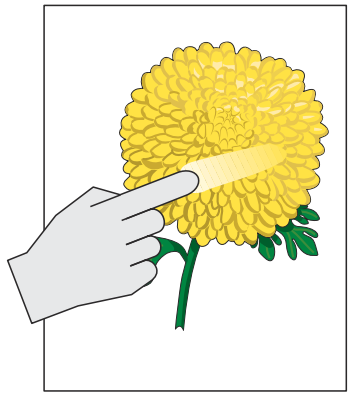
IQ-14 Poor Fusing

The toner image is not completely fused to the paper. The image easily rubs off.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Fuser Unit, PL 10.1.1	 Unfused Image

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the Paper Type settings. Does the printed paper match the Paper Type that is set?	Go to step 1.	Set the correct paper type (Adjusting Paper Type on page 6-18).
2.	Check for moisture effect on the paper. Load a freshly opened (or one that has been sealed in moisture controlled environment) recommended paper and perform test print. Is the image printed normally?	Troubleshooting complete.	Go to step 3.
3.	Check the Fuser temperature. Adjust the Fuser temperature (Adjusting the Fuser on page 6-20) and then perform a test print. Is the image printed normally?	Troubleshooting complete.	Replace the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).

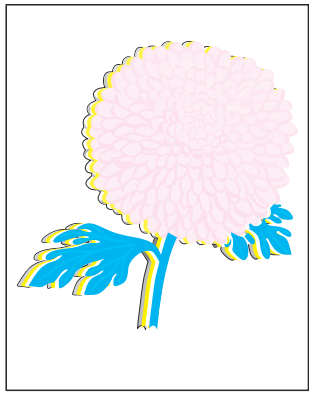
IQ-15 Color Registration

The four colors (Yellow, Black, Cyan, and Magenta) of the image are not registered correctly into one image.

Initial Action

- Check the paper transfer path is free of paper dust and debris
- Perform automatic Regicon (Automatic Color Registration Adjustment on page 6-16).

Troubleshooting Reference

Applicable Parts	Example Print
• Imaging Unit (Y/ M/ C), PL 6.1.1 • Imaging Unit (K), PL 6.1.4 • ROS Assembly (Laser Unit), PL 7.1.1 • CTD Sensor Assembly, PL 9.1.10 • IBT Unit, PL 9.1.99 • MCU PWB, PL 12.1.15	 Color Registration

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Print 30 pages for each image type. Does the error persist?	Go to step 2.	Troubleshooting complete.
2.	Check the installation surface of the printer (refer to Clearance and Mounting Surface Specifications on page 1-38). Is the printer installation surface flat, with no bumps? Are the legs of the printer installed properly?	Go to step 3.	Correct the installation surface.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
3.	Check the Imaging Unit installation. Remove the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121). Is the Imaging Unit (Y/ M/ C/ K) installed properly, with no deformation and contamination at the contact points and it is in contact with the left and right Guides?	Go to step 4.	Inspect and clean the contact points. Reinstall the Imaging Units (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
4.	Check the surface of the CTD Sensor for contamination and debris (REP 9.9 CTD Sensor Assembly on page 4-175). Is there any contamination or debris at the Sensor surface of the CTD Sensor Assembly?	Clean the CTD Sensor surface and remove any debris.	Go to step 5.
5.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177). Does the error persist?	Go to step 6.	Troubleshooting complete.
6.	Check the Laser Unit. Use paper to cover half of the Laser Unit window and resend a print job. Is the printout half white and half black? Note: If the Laser Unit is normal, the half will have the test pattern printed on it instead of being solid black.	Replace the Laser Unit (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130).	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).

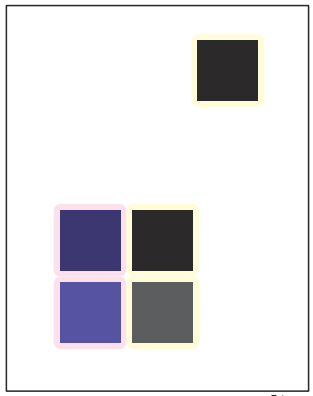
IQ-16 Fringe

There is toner scattering around the image of multiple color sections.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Transfer Roller (2nd BTR), PL 4.3.18 • IBT Unit, PL 9.1.99 • HVPS2 PWB, PL 12.1.2	 Fringe

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check for moisture effect on the paper. Load a freshly opened (or one that has been sealed in moisture controlled environment) recommended paper and perform test print. Is the image printed normally?	Troubleshooting complete.	Go to step 2.
2.	Check the Paper Type settings. Does the printed paper match the Paper Type that is set?	Go to step 3.	Set the correct paper type (Adjusting Paper Type on page 6-18).
3.	Check the transfer voltage. Perform Adjusting Voltage Offset on page 6-19. Perform a test print. Is the image printed normally?	Troubleshooting complete.	Go to step 4.

Troubleshooting Procedure (Continued)

Step	Actions and Questions	Yes	No
4.	Check the Transfer Roller (2nd BTR) installation. Is the Transfer Roller installed properly?	Go to step 6.	Reinstall the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
5.	Check the Transfer Roller (2nd BTR). Is the Transfer Roller normal, without any contamination, damage, or wear and tear?	Go to step 6.	Replace the Transfer Roller (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108). Reset the Transfer Roller counter (Resetting the Transfer Roller (2nd BTR) Counter on page 6-12).
6.	Check the IBT Unit. Is the high voltage terminal of the IBT Unit free from contamination and it is in proper contact with the Spring?	Go to step 7.	Clean the high voltage terminal. Reinstall the IBT Unit (REP 9.10 IBT Unit on page 4-177).
7.	Check the Intermediate Transfer Belt. Is the IBT Unit normal, without contamination, damage, or wear and tear?	Go to step 8.	Replace the IBT Unit (REP 9.10 IBT Unit on page 4-177).
8.	Check the HVPS2 PWB connectors. Are the connectors seated securely?	Replace the HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202).	Reconnect the wiring harness connectors.

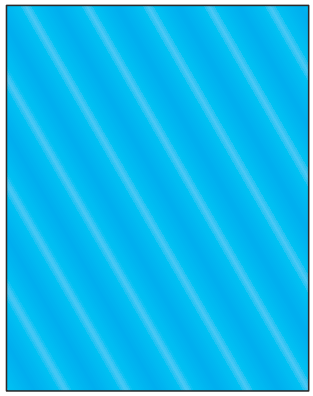
IQ-17 Auger Mark

Uneven density. Downward right slanted stripe patterns appearing in approximately 20 mm pitch.

Initial Action

- Check the paper transfer path is free of paper dust and debris.

Troubleshooting Reference

Applicable Parts	Example Print
• Developer Housing Assembly (Y/ M/ C/ K), PL 8.1.5 - PL 8.1.8 • MCU PWB, PL 12.1.15	 AugerMark

Troubleshooting Procedure

Step	Actions and Questions	Yes	No
1.	Check the installation surface of the printer (refer to Clearance and Mounting Surface Specifications on page 1-38). Is the printer installation surface flat, with no bumps? Are the legs of the printer installed properly?	Go to step 2.	Correct the installation surface.
2.	Check for the color that is causing the problem. Obtain a sample for the color problem or perform color print. Is the problem only with a particular color?	Go to step 3. Take action only for the applicable color.	Go to step 3. Take action without color restriction.
3.	Replace the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137). Does the error persist?	Replace the MCU PWB (REP 12.4 MCU PWB on page 4-206).	Troubleshooting complete.

Print Test Patterns

A variety of test prints are available from the customer menu and service diagnostics to aid in determining the quality of output from the printer to assist in troubleshooting problems.

Engine Test Print

For checking the IOT operation, the built-in test pattern in the MCU PWB can be printed by the printer alone.

The test print from the MCU PWB directly outputs the data from the MCU PWB. Therefore, even if problems has occurred at the controller side, the correct printout can still be output as long as the IOT is normal. By performing the test print, it is then possible to determine whether the printing failure is due to controller problems or IOT problems.

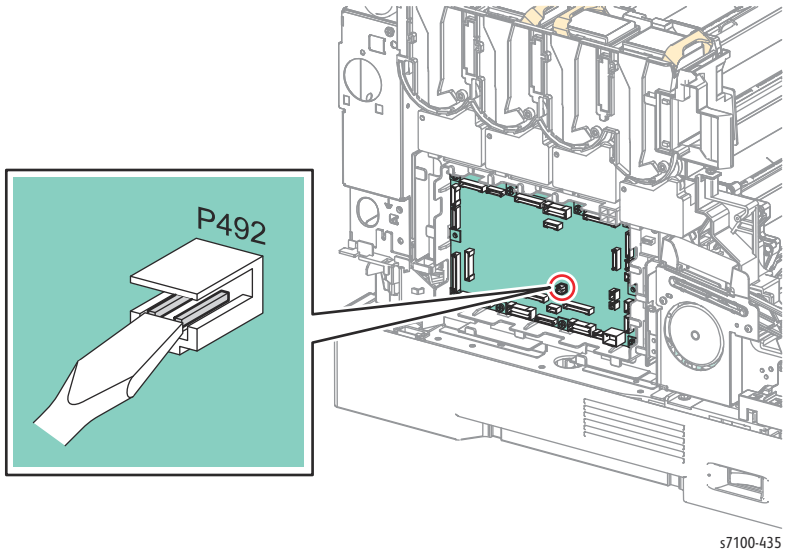
Printing Test Pattern

1. Load paper in the Tray.
2. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
3. Turn the printer On.

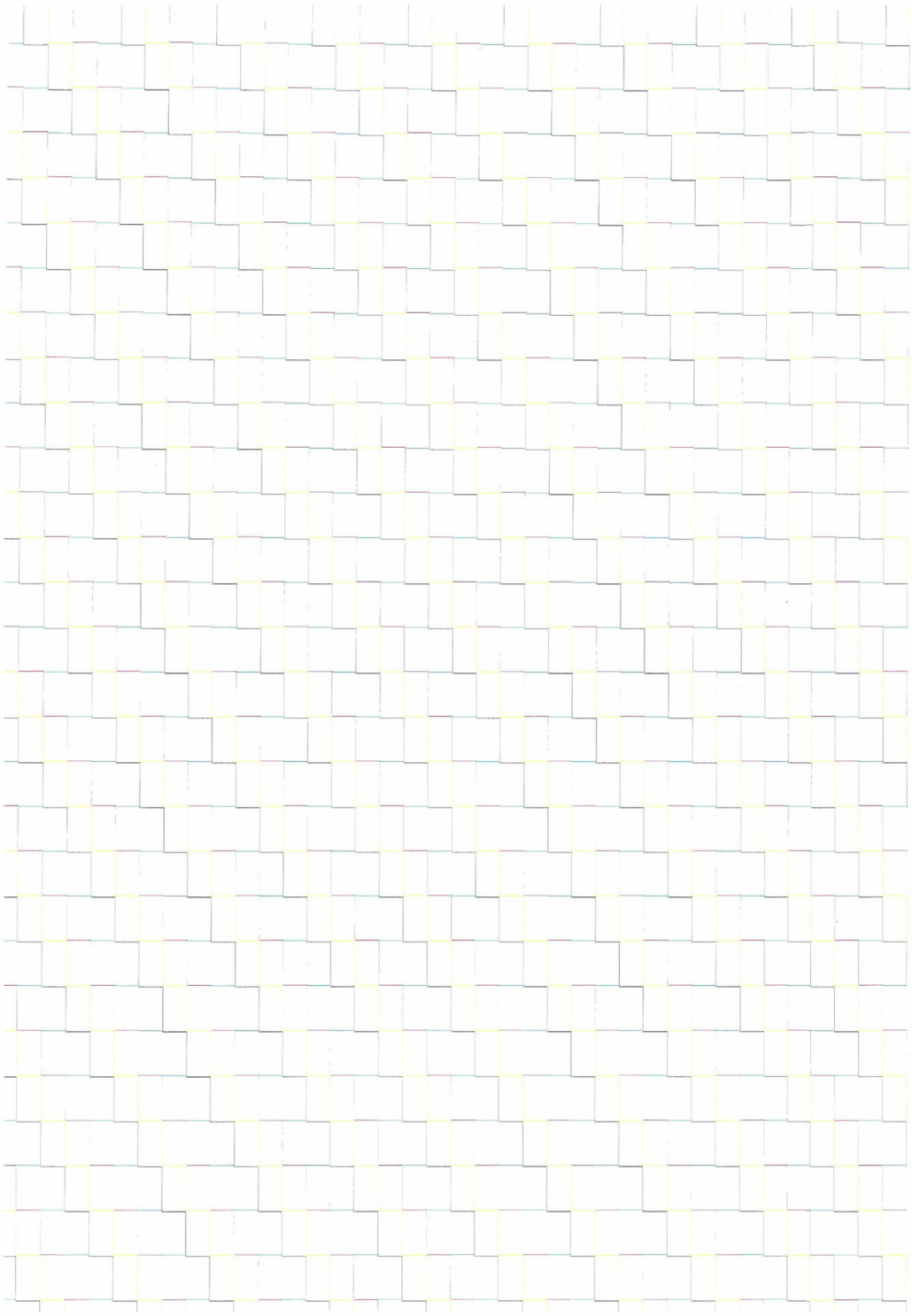
WARNING: When performing the following procedures, never touch the conducting parts and drives. When touching the pad on the PWB with a flat head screwdriver, never touch any other area except the specified one. Short-circuiting any other unspecified areas may result in an unrecoverable error.

4. When the printer is ready to print, short-circuit the MCU PWB test print pad (P492) with a flat head screwdriver.

   Note: Every time the MCU PWB is short-circuited, one sheet of test print is output.



Print Engine Test Print Pattern



dc612 Print Test Patterns

Test prints are available from the Control Panel's Troubleshooting menu to aid in determining the quality output from the printer and to assist in troubleshooting the problems.

Print Test patterns routine outputs test patterns stored in the engine firmware or IP Board controller PS software. The patterns will be used by the service personnel to identify, repair and validate the operability of printer xerographic and paper handling from all paper sources, options and output sources.

The Phaser 7100 printer contains seven test patterns that can be printed from the Control Panel.

Print Test Patterns	
Note: Test pattern numbers 1 - 16 are not available in the Phaser 7100 printer.	
Access Print Test Patterns: DC612 in Service Diagnostics (**Service Diagnostics** > **Fault Diag.** > **DC612 PatternPrt**)	
Pattern # 51 - Total Chart	For detection. For adjustment in the market/ determining problems.
Pattern # 52 - SDTP123600 (BW Grid)	For shipment inspection
Pattern # 53 - Full Halftone K 45 %	For defect detection/ banding
Pattern # 54 - Full Halftone C 50 %	For defect detection/ banding
Pattern # 55 - Full Halftone M 50 %	For defect detection/ banding
Pattern # 56 - Full Halftone R 50 %	For defect detection/ banding
Pattern # 57 - KCMY 50 % Band	For determining problems.

Note: Make sure to load larger size paper (Tabloid/ A3) when printing print test patterns # 51 - # 57. The print test patterns do not scale down for 8.5 x 11/ A4 size paper. If the print test patterns are printed on 8.5 x 11/ A4 size paper, only partial test patterns will be shown on the paper.

Accessing dc612

1. Enter Service Diagnostics menu (Entering Service Diagnostics on page 2-14).
2. Press **Down Arrow** and navigate to Diagnostics Fault Diag.
3. Press **Right Arrow** and navigate to Fault Diag.
4. Press **Right Arrow** and navigate to Fault Diag. DC612 PatternPrt.
5. Press **Right Arrow** and navigate to find the pattern number.

   Note: Test pattern numbers 1 - 16 are not available in the Phaser 7100 printer.
6. Press **Right Arrow** and select the pattern number.
7. Use **Up/ Down Arrow** to change the pattern number (#51 - 57) and press **OK**.
8. An "*" is displayed next to the pattern number.
9. Press **OK** to display the quantity information.

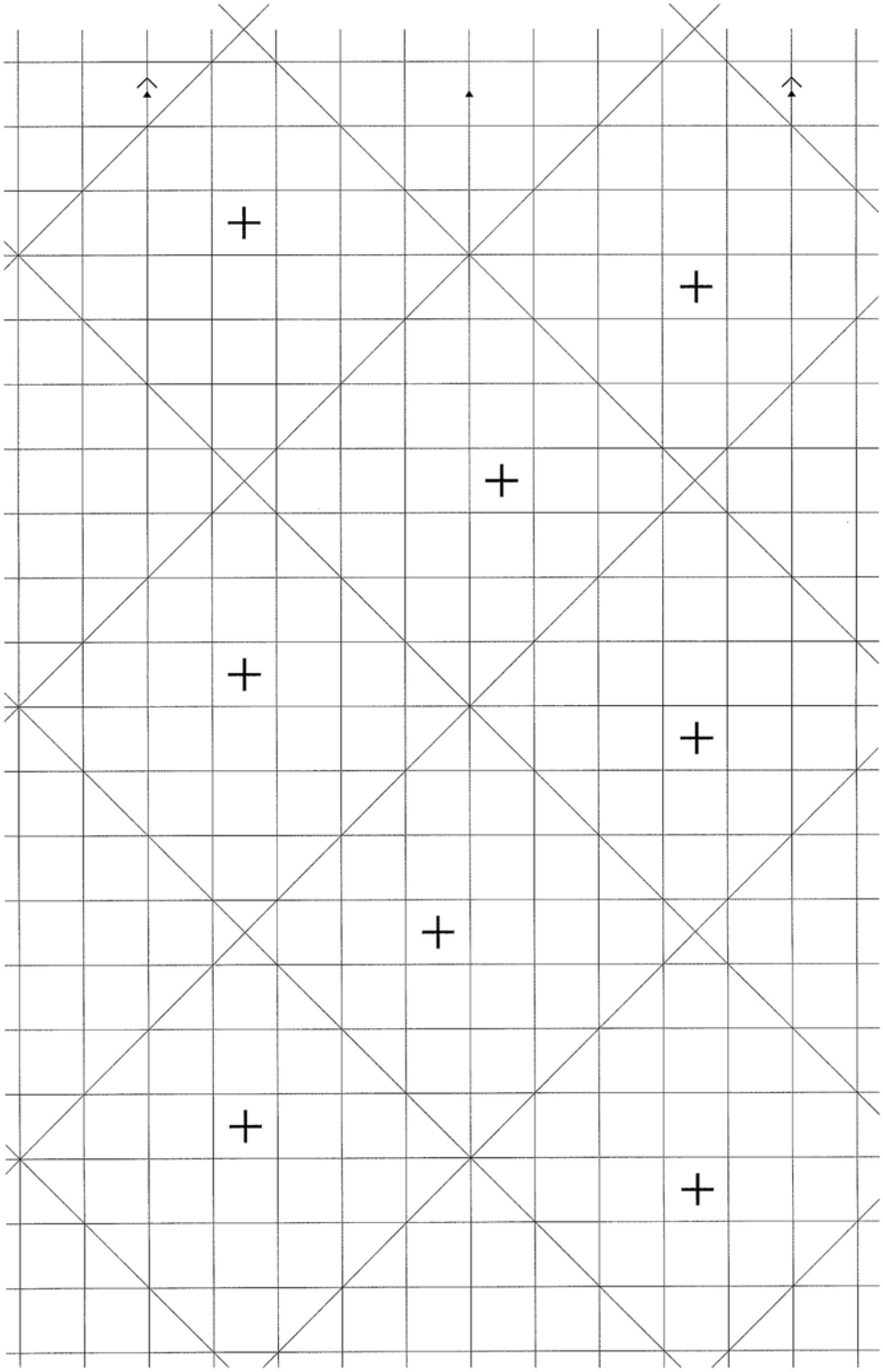
10. Press **Right Arrow** and use **Up**/ **Down Arrow** to change the quantity information.
11. Press **OK**.
12. An "*" is displayed next to the quantify information.
13. Press **OK** to display the Tray selection.
14. Press **Right Arrow** to the Tray selection option.
15. Use **Up**/ **Down Arrow** to change the Tray.
16. Press **OK** to confirm printing from the selected Tray.
17. An "*" is displayed next to the Tray information.
18. Press **OK**.
19. A Press the OK to run message appears.
20. Press **OK** to print.

Pattern #51

Print Test pattern #51 is used for detection and adjustment to determine problems.

Pattern #52

Print Test pattern #52 is used for shipment inspection.



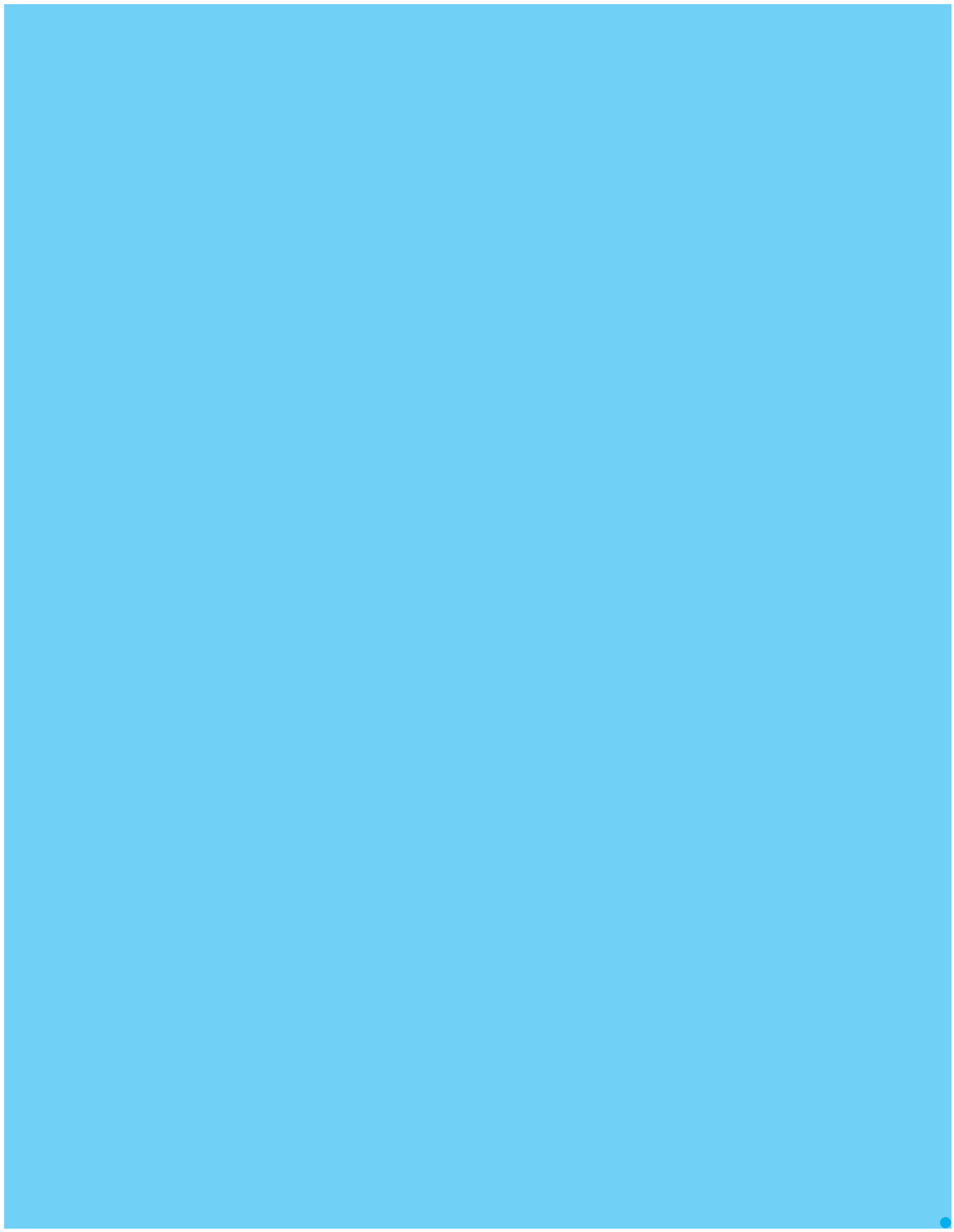
Pattern #53

Print Test pattern #53 is used for detection of banding.

Pattern53

Pattern #54

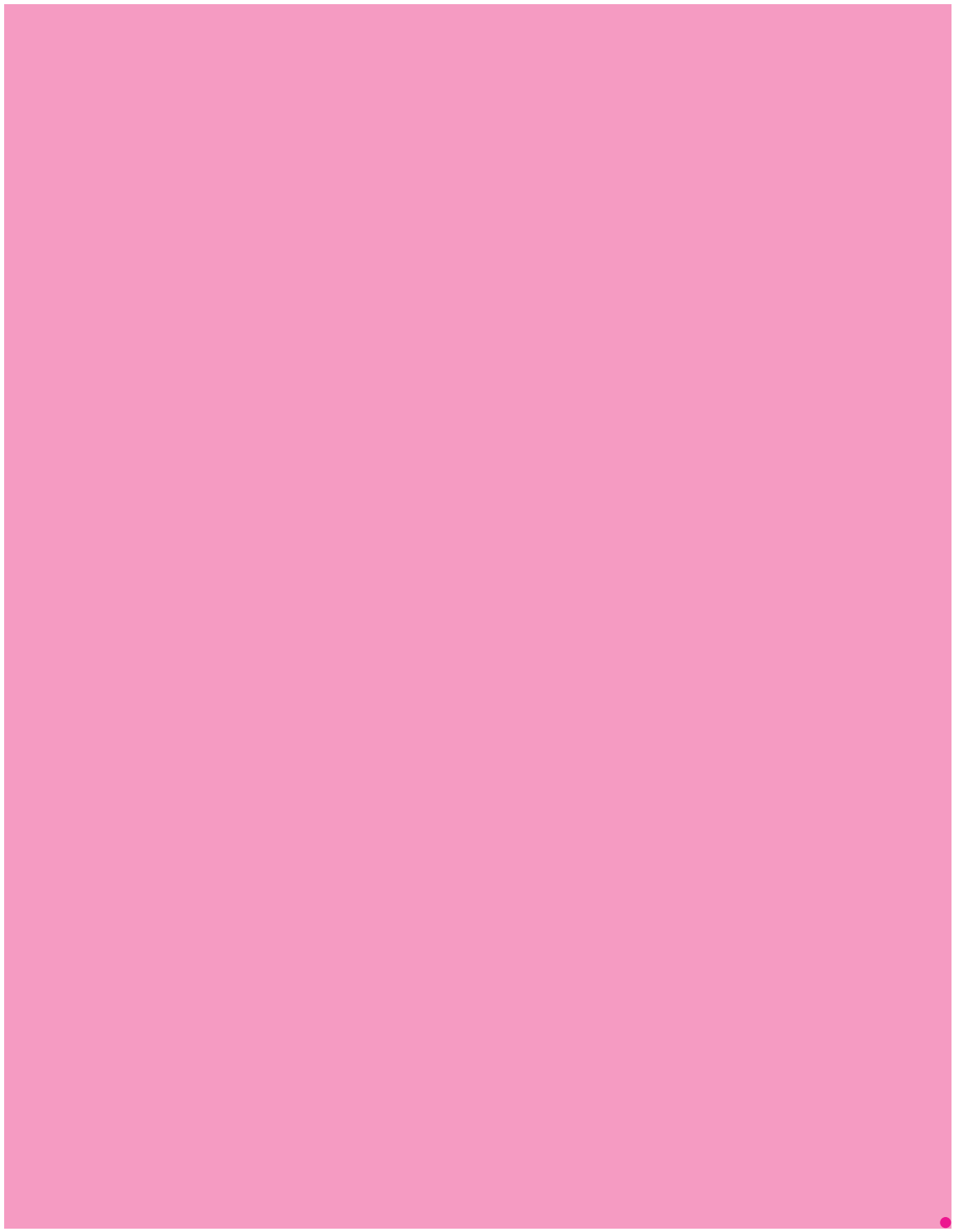
Print Test pattern #54 is used for detection of banding.



Pattern54

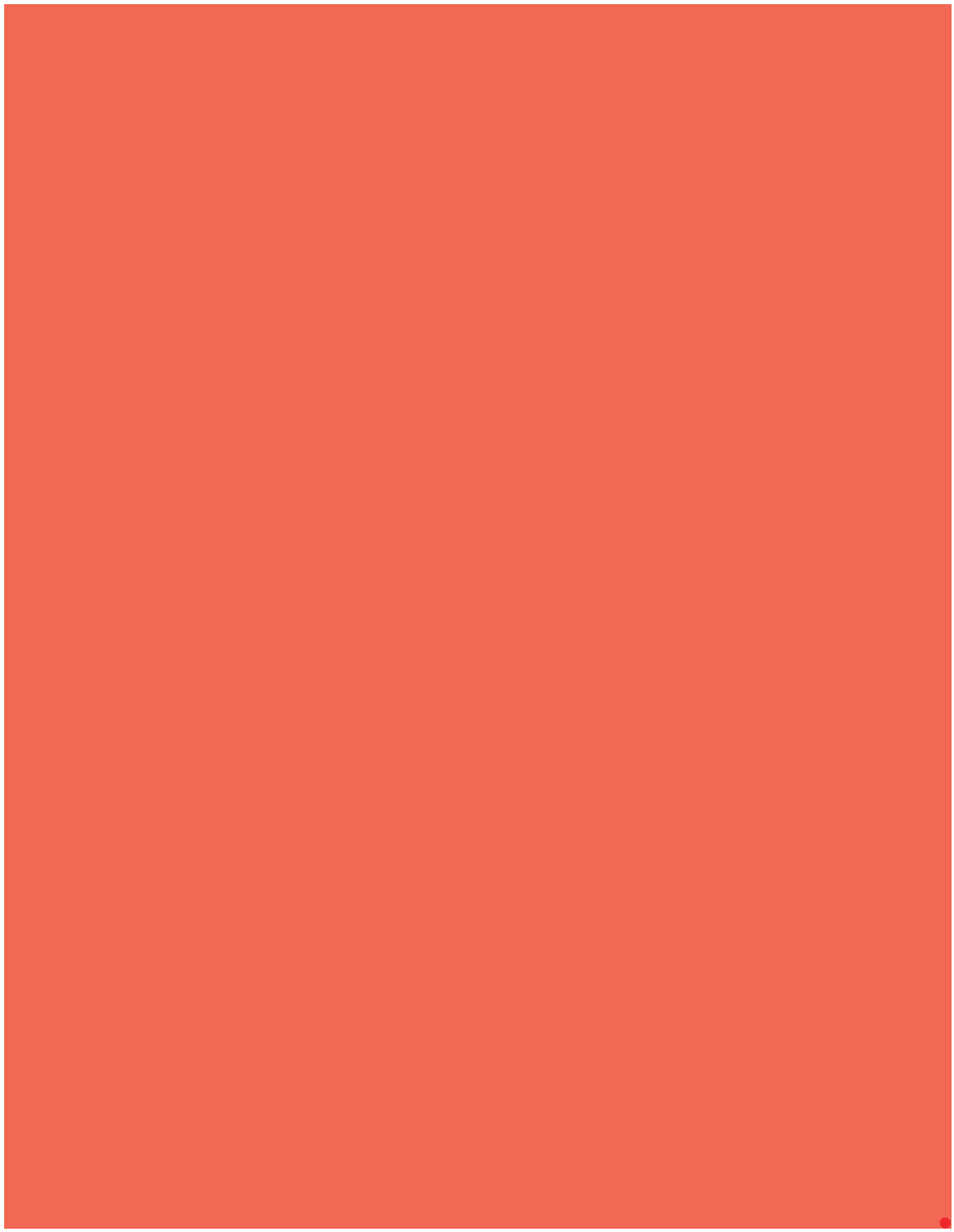
Pattern #55

Print Test pattern #55 is used for detection of banding.



Pattern #56

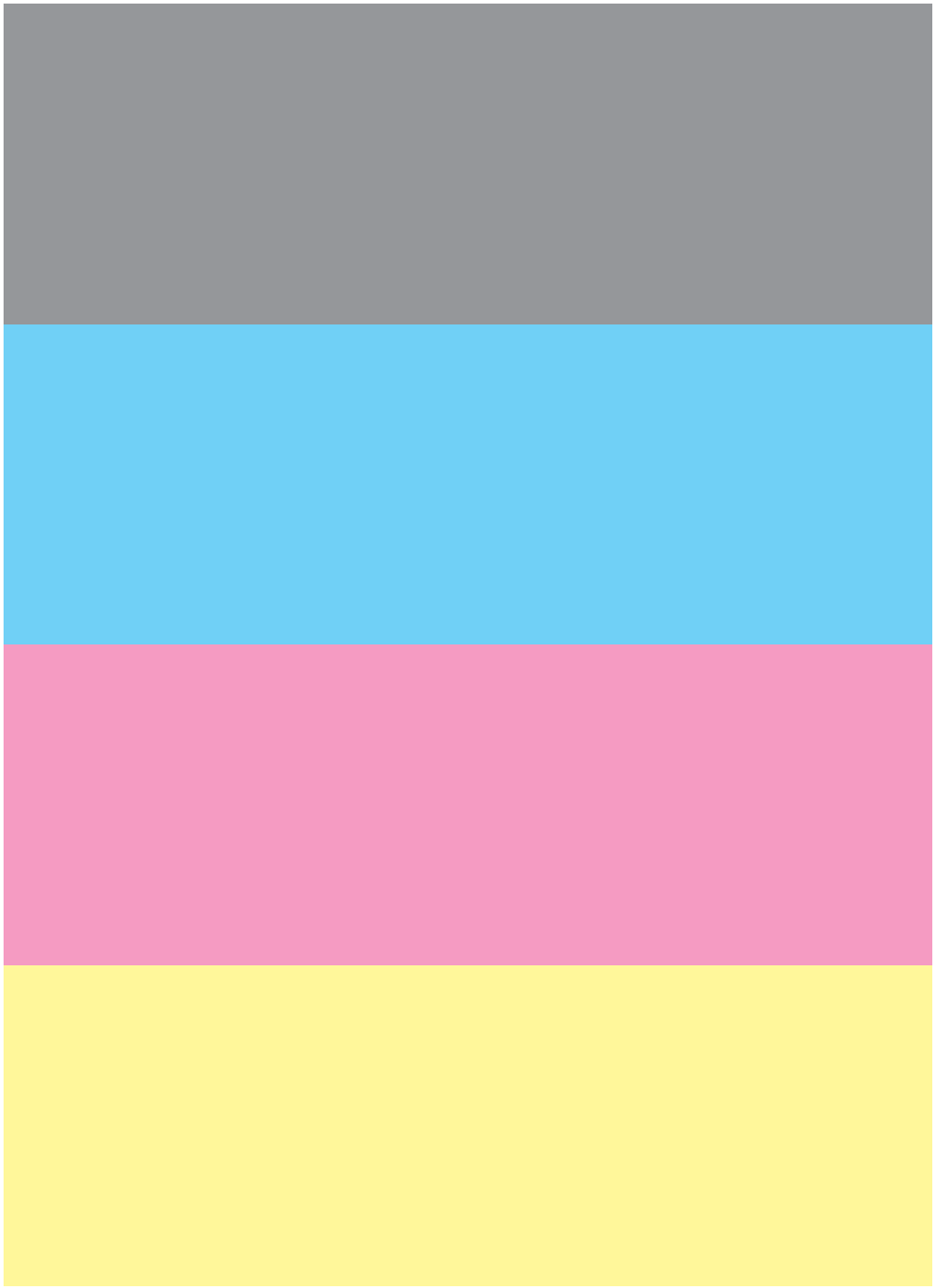
Print Test pattern #56 is used for detection of banding.



Pattern56

Pattern #57

Print Test pattern #57 is used for determining problems.



Pattern57

Image Quality Specifications

The Image Quality specifications are provided as follows.

Environmental Condition

- Temperature: 10° C - 32° C
- Humidity: 15 % RH - 85 % RH (85 % RH at 28° C)

Quality Paper

The print-quality is best when quality paper is fed from the tray. The image quality is evaluated on the maximum size of each standard paper.

- Color Print-Quality: Xerox-brand X-Pression paper
- Black and White Quality: Xerox-brand 4200 paper

Paper Condition

Paper should be fresh and stored in the operating environment for 12 hours before use for printing.

Printer Condition

The specified print-quality is guaranteed with the printer in specified normal environmental condition.

Specifications

The following charts provide specifications for Skew, Perpendicularity, Linearity, Parallelism, Registration, and Magnification.

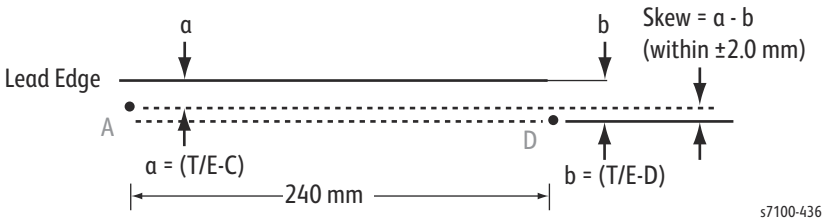
Image Quality Specifications

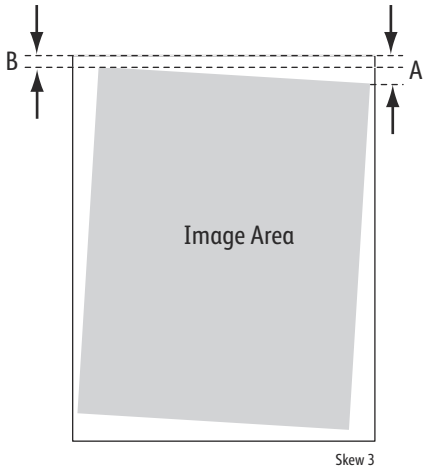
Characteristic	Specification
Skew	All Trays
Perpendicularity	200 mm ± 1.3 mm
Linearity	• Vertical: 400 mm ± 1.0 mm • Horizontal: 240 mm ± 0.7 mm • Diagonal: 282 mm ± 0.8 mm
Parallelism	400 mm ± 2.0 mm
Lead Registration	All Trays
Side Registration	All Trays

Image Quality Specifications (Continued)

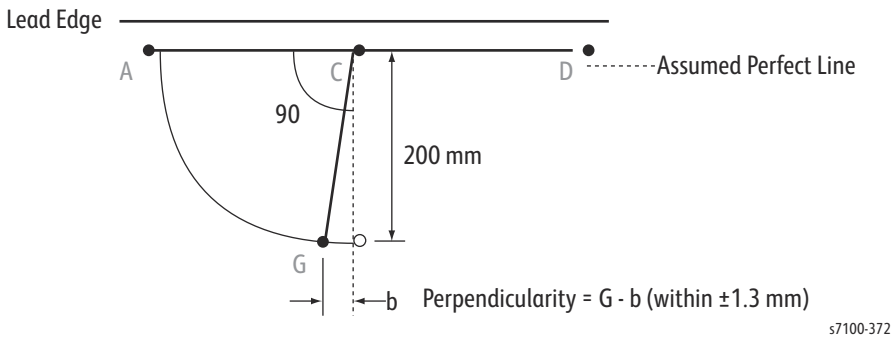
Characteristic	Specification
Magnification Deviation (Reduce/ Enlarge Error)	• Vertical: 400 mm ± 0.5 % • Horizontal: 240 mm ± 0.5 %

Skew

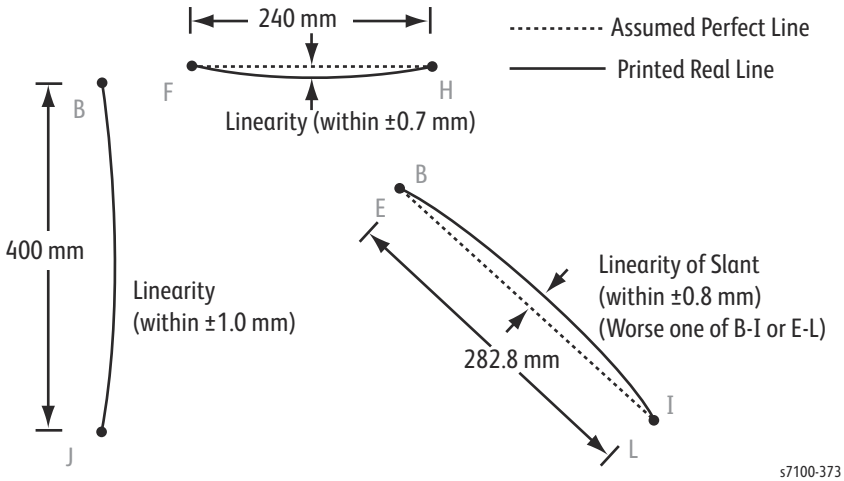




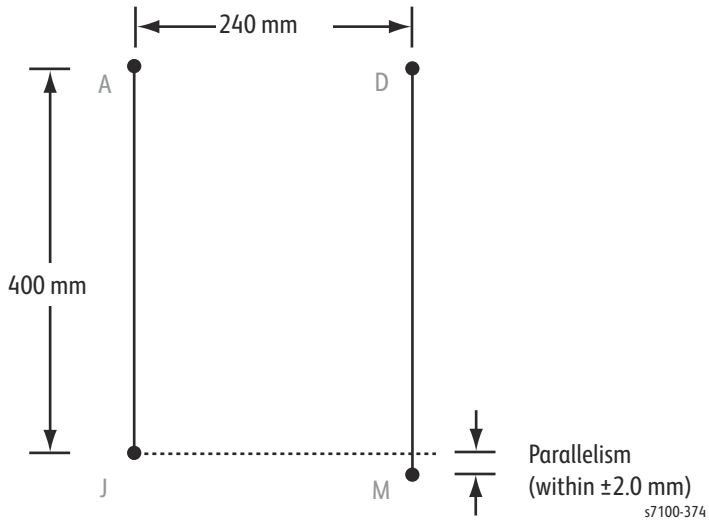
Perpendicularity



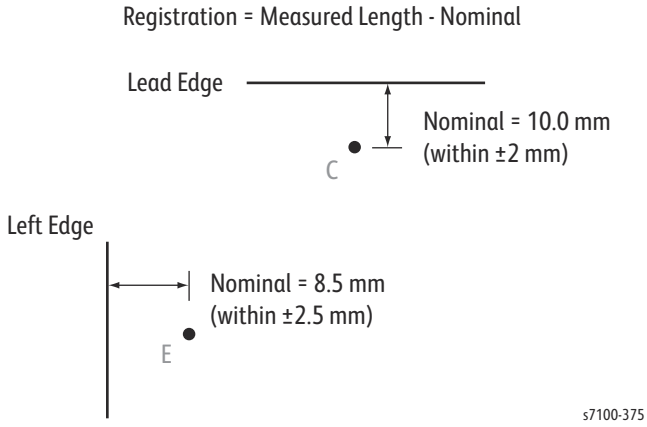
Linearity



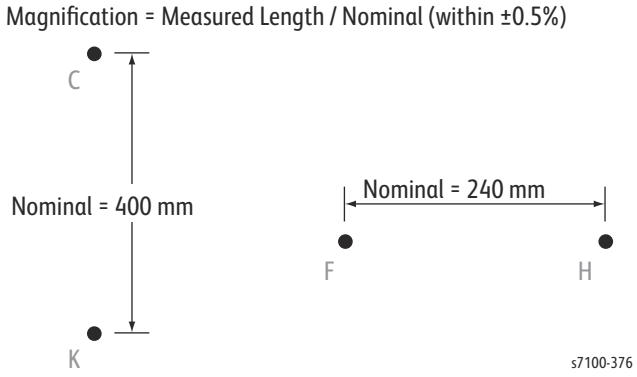
Parallelism



Registration



Magnification



Maximum Print Area

Note: The printer has 4 mm margins on all sides.

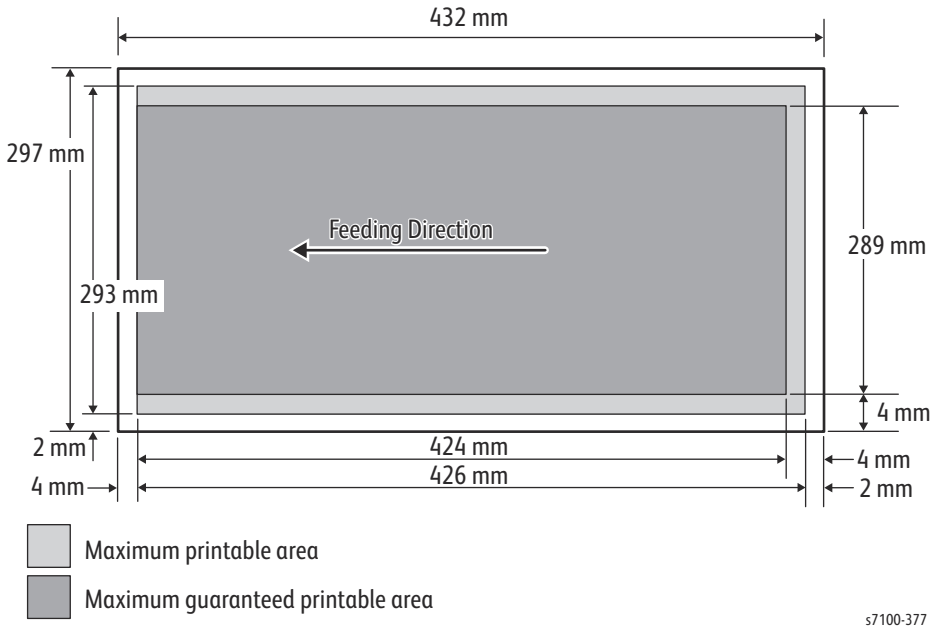
Feedable Paper Size

The print engine can feed the following paper sizes:

- Minimum Paper Size: 75 mm (W) X 98 mm (L)
- Maximum Paper Size: 297 mm (W) X 432 mm (L)

Maximum and Guaranteed Printable Area

- Maximum Printable Area: 293 mm (W) (A3 width) x 426 mm (L) (Ledger length)
- Maximum Guaranteed Printable Area: 289 mm (W) X 424 mm (L)



For the maximum printable area of banner sheet longer than 431.8 mm, it is necessary to mask the areas 4 mm from the leading edge, 2 mm from the trailing edge, and 2 mm from the side edges as unprintable area at the controller side.

- Maximum Printable Area of Banner Sheet: 293 mm (W) (A3 width) x 1194 mm (L) (1200 mm Banner sheet)

Two sizes of banner sheets are supported:

- Banner sheet 1: 297 mm x 1200 mm
- Banner sheet 2: 210 mm x 900 mm

Service Parts Disassembly

4

This chapter includes:

Contents

Overview

This chapter contains the removal procedures for field-replaceable parts listed in Chapter 5, Parts List. In most cases, the replacement procedure is simply the reverse of the removal procedure.

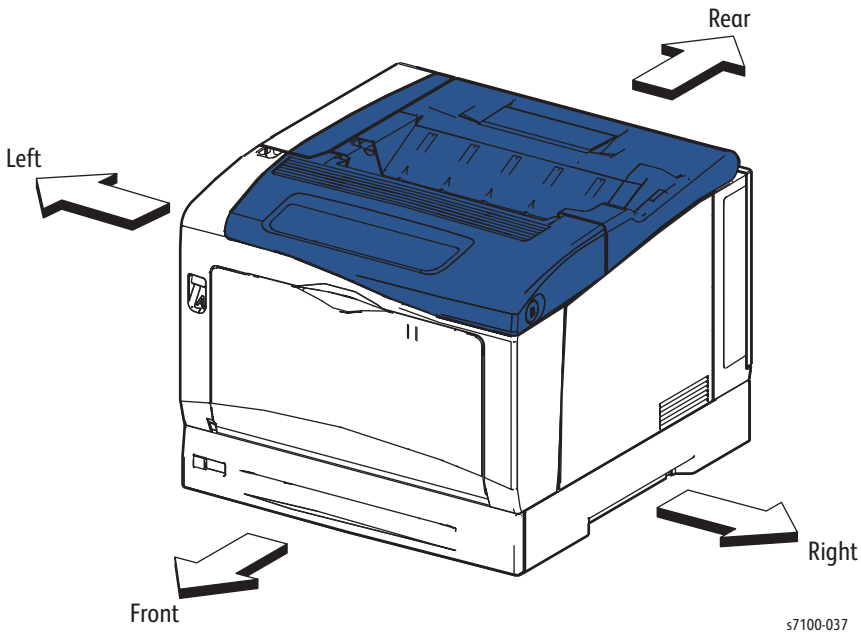
In some instances, additional steps are necessary and are provided for replacement of the parts. For specific assemblies and parts, refer to the Parts List on page 5-1.

> Note: Always use the correct type and size screw (see Fastener Types on page 4-8). Using the wrong screw can damage tapped holes. Do not use excessive force to remove or install either a screw or a printer part.

Standard Orientation of the Printer

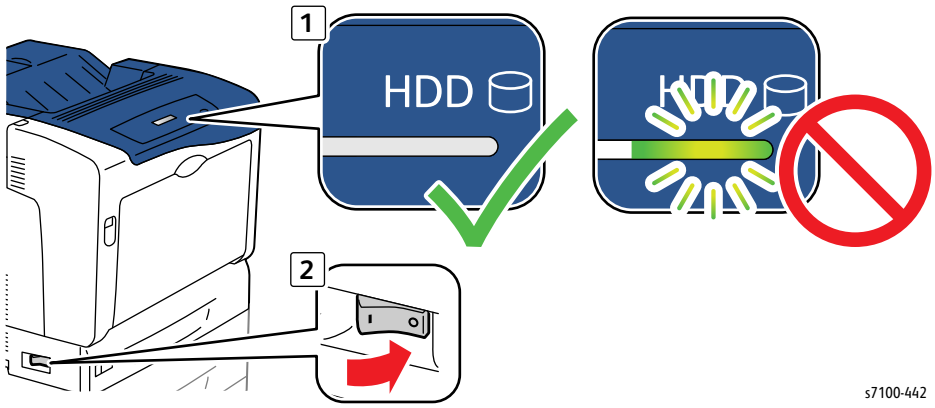
When needed, printer orientation is called out in the procedure as an aid to locating parts. Figure 1 illustrates the right, left, front, and rear sides of the printer.

Figure 1



Preparation

CAUTION: To prevent printer malfunction or internal hard drive damage, prior to power Off the printer, be sure to verify that the HDD indicator on the Control Panel is not On or blinking.



WARNING: Unplug the power cord from the wall outlet.

WARNING: Allow the Fuser Unit to cool before performing any procedures.

CAUTION: Many parts are secured by plastic tabs. Do not over flex or force these parts. Do not over torque screws threaded into plastic.

Note: Names of parts that appear in the removal procedures may not match the names that appear in the Parts List. For example, a part called Paper Tray in a removal procedure may appear on the Parts List as Cassette Assembly. While using removal procedure, ignore any prerequisite procedures for parts already removed.

1. Wear an Electrostatic Discharge wrist strap.
2. Turn Off power and disconnect the power cord from the wall outlet.
3. Disconnect all cables from the printer.
4. Remove the Toner Cartridges (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).

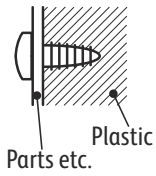
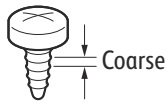
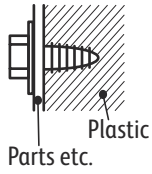
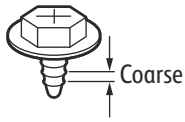
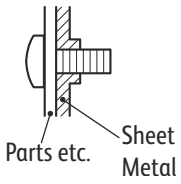
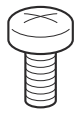
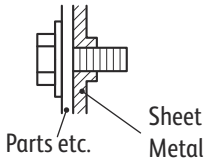
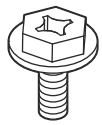
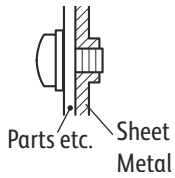
Notations in the Disassembly Text

- The notation “(item X)” points to a numbered callout in the illustration corresponding to the disassembly procedure being performed.
- The notation “PLX.X.X” indicates that this component is listed in the Parts List.
- Arrows in an illustration show direction of movement when removing or replacing a component.
- The notation “(tap, plastic, 10 mm)” or “(metal, 6 mm)” refer to the type of screw being removed.

Note: Provides information specific to the replacement of parts or assemblies.

Fastener Types

The following table lists the types of screws used to assemble the printer. The procedures provide dimensions for screws being removed.

Type	Application	Shape	Characteristics
Self-tapping, plastic			1. Silver colored. 2. Screw thread is coarse compared to metal screw. 3. Screw tip is thin.
Self-tapping, plastic, with flange			1. Black colored. 2. Screw thread is coarse compared to metal screw. 3. Screw has a flange. 4. Screw tip is thin.
Sheet Metal, silver			1. Silver colored. 2. Diameter is uniform.
Self-tapping, hex-head, plastic, with flange			1. Silver colored. 2. Screw has a flange. 3. Diameter is uniform.
Sheet Metal, silver with lock washer			1. Silver colored. 2. Includes a toothed washer. 3. Diameter is uniform. 4. Used for grounding terminals.

CAUTION: Use care when installing self-tapping screws in plastic. To properly start the screw in plastic, turn the screw counter-clockwise until you feel the screw engage the threads, then tighten as usual. Improperly aligning or over tightening the screw can result in damage to previously tapped threads. Always use the correct type and size screw. Using the wrong screw can damage tapped holes. Do not use excessive force to remove or install either a screw or a printer part.

Covers

REP 1.1 Top Cover Assembly

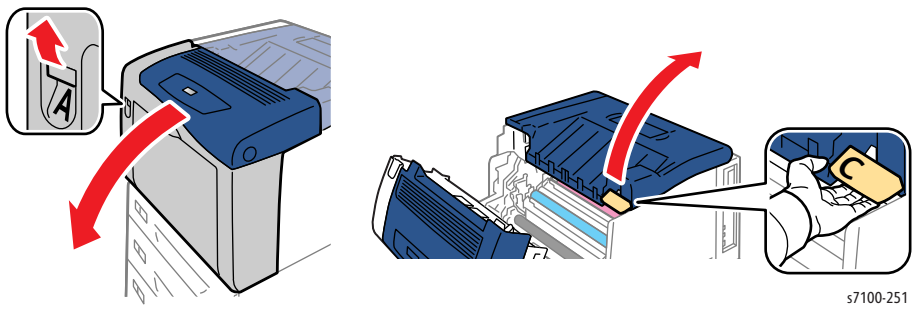
PL 1.1.1

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

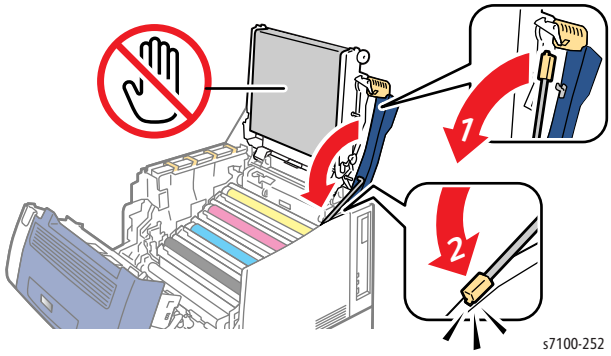
1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Frame Assembly (PL 4.1.6).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



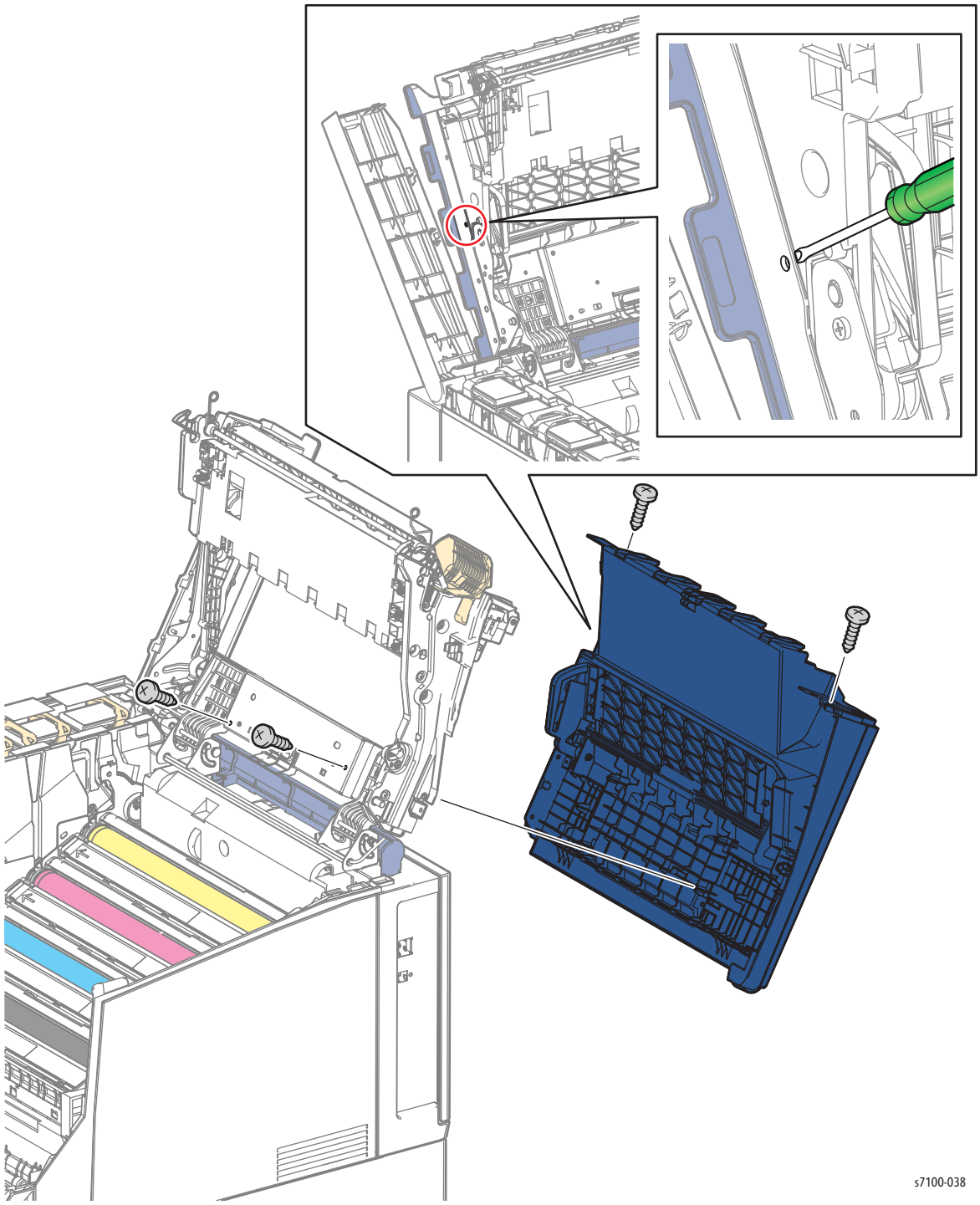
4. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt.



5. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).

6. Remove 4 screws that secure the Top Cover Assembly.
7. Use a flat tip screwdriver to release the boss of the Top Cover Assembly.
8. Remove the Top Cover Assembly.



REP 1.2 Waste Cover Assembly

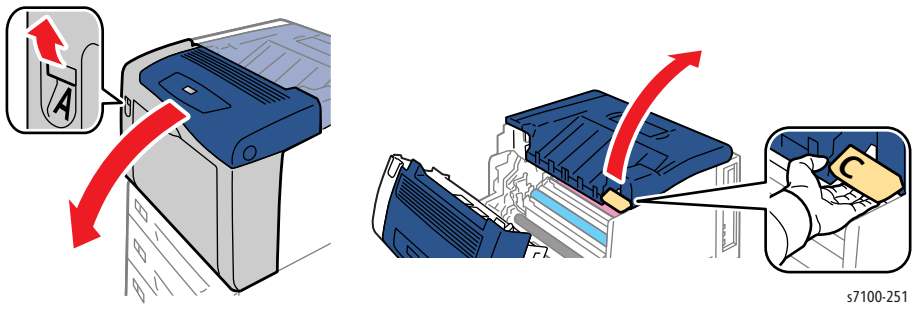
PL 1.1.2

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

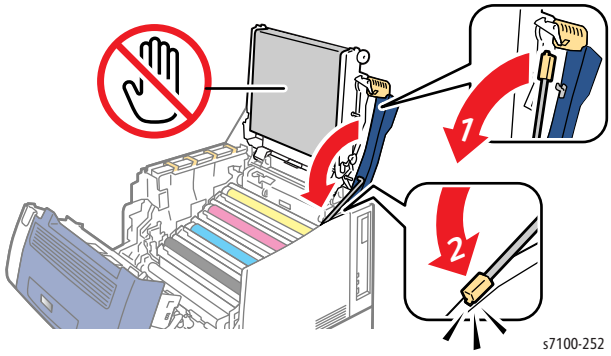
1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Frame Assembly (PL 4.1.6).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.

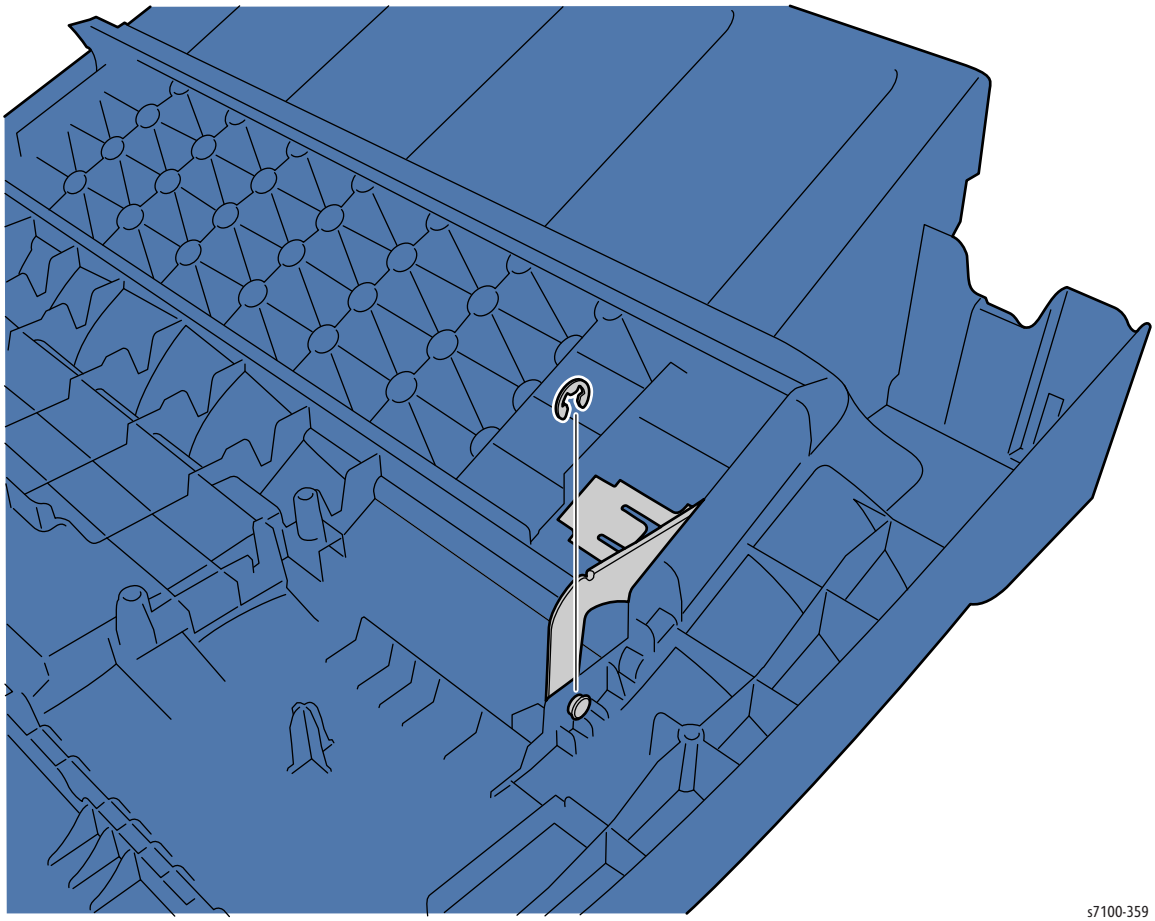


4. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

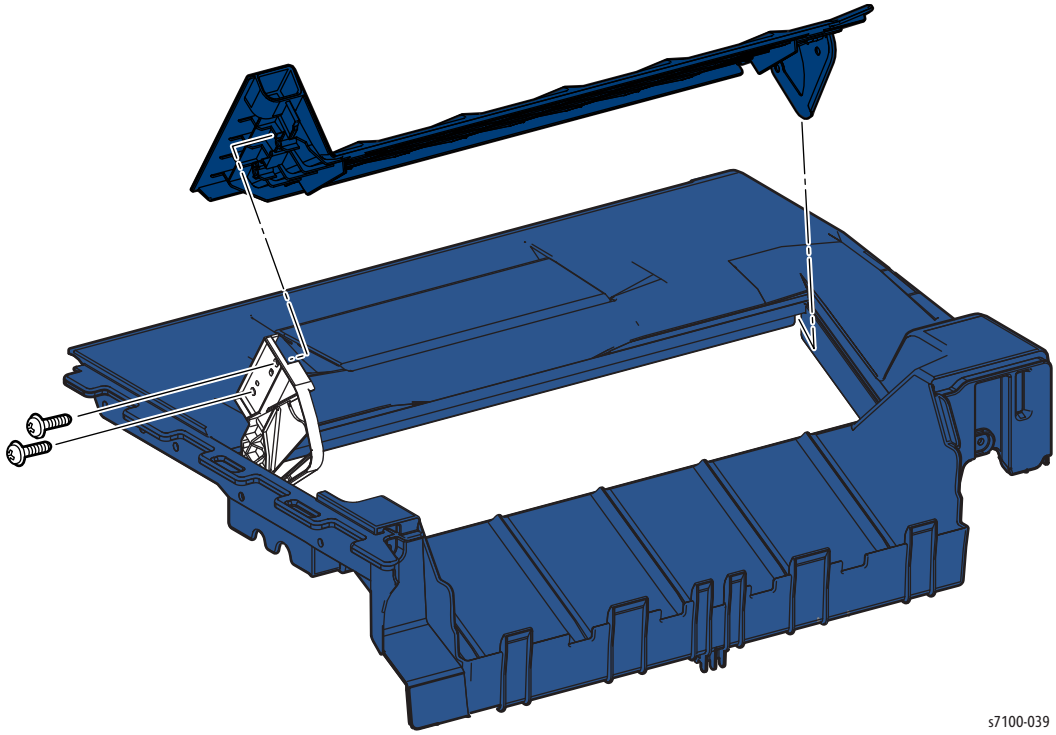
CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt.



5. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
6. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
7. Turn the Top Cover Assembly over.
8. Remove the E-ring.



9. Open the Waste Cover Assembly.
10. Remove 2 screws (silver, tapped, 8mm) that secure the Waste Cover Assembly.
11. Lift and remove the Waste Cover Assembly.



REP 1.3 Left Waste Cartridge Arm

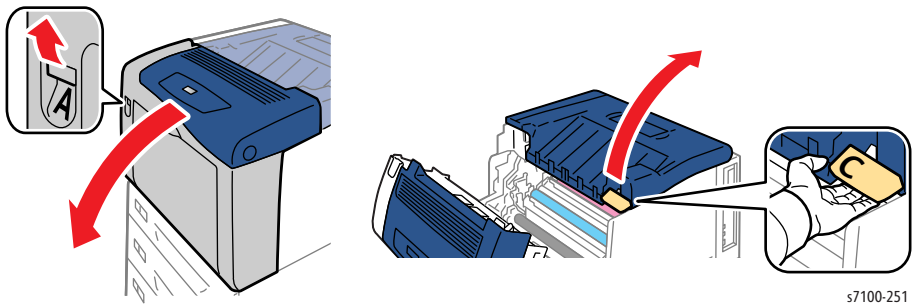
PL 1.1.5

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

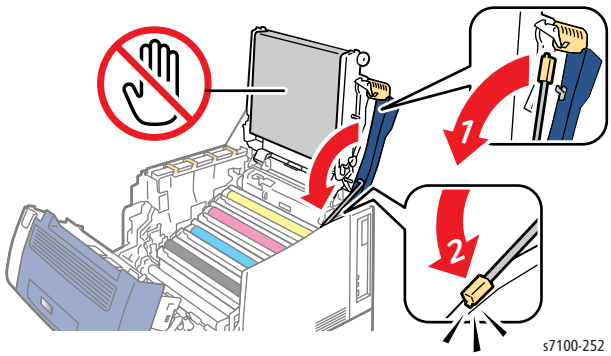
1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Frame Assembly (PL 4.1.6).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



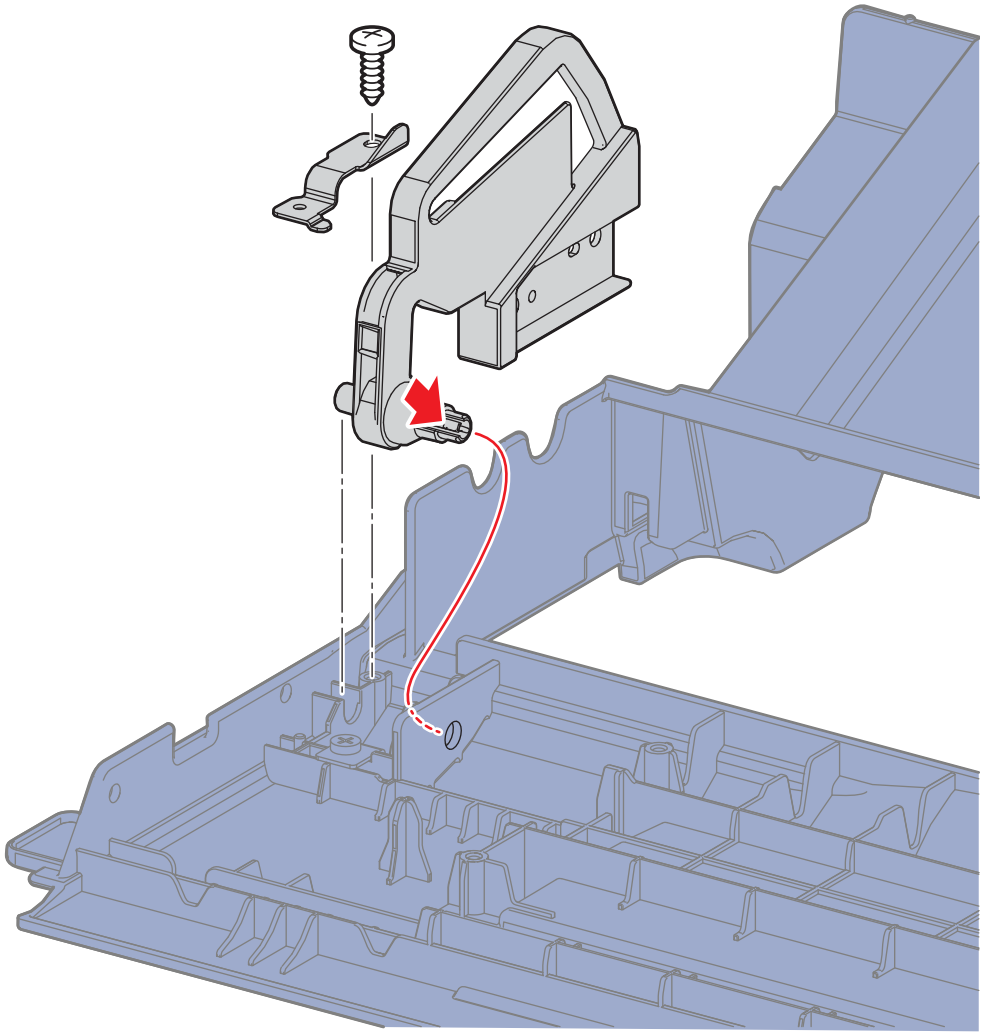
4. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt.



5. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).

6. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
7. Remove the Waste Cover Assembly (REP 1.2 Waste Cover Assembly on page 4-12).
8. Remove one screw (silver, tapped, 6mm) that secures the Waste Cartridge Arm Support (PL 1.1.36).
9. Remove the Waste Cartridge Arm Support.
10. Release the notch to remove the Left Waste Cartridge Arm from the Top Cover Assembly.



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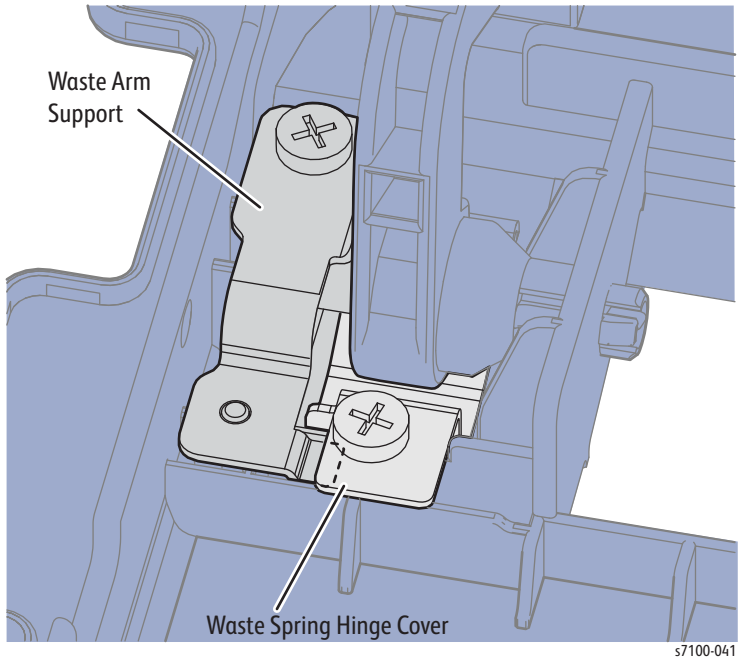
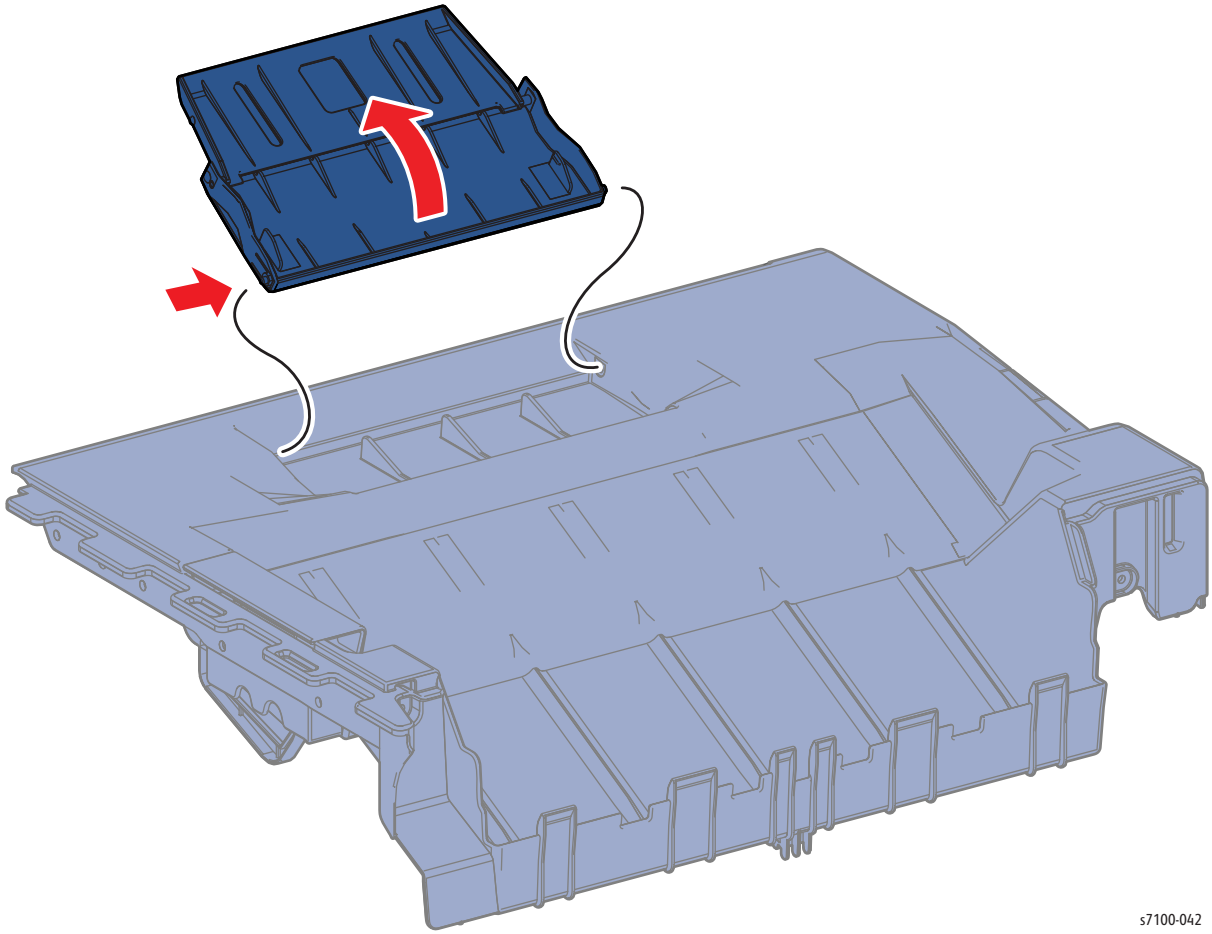
Replacement Note: When installing the Waste Arm Support, make sure the Arm Support is seated underneath the Waste Spring Hinge Cover (PL 1.1.37).



REP 1.4 Extension Cover Assembly

PL 1.1.7

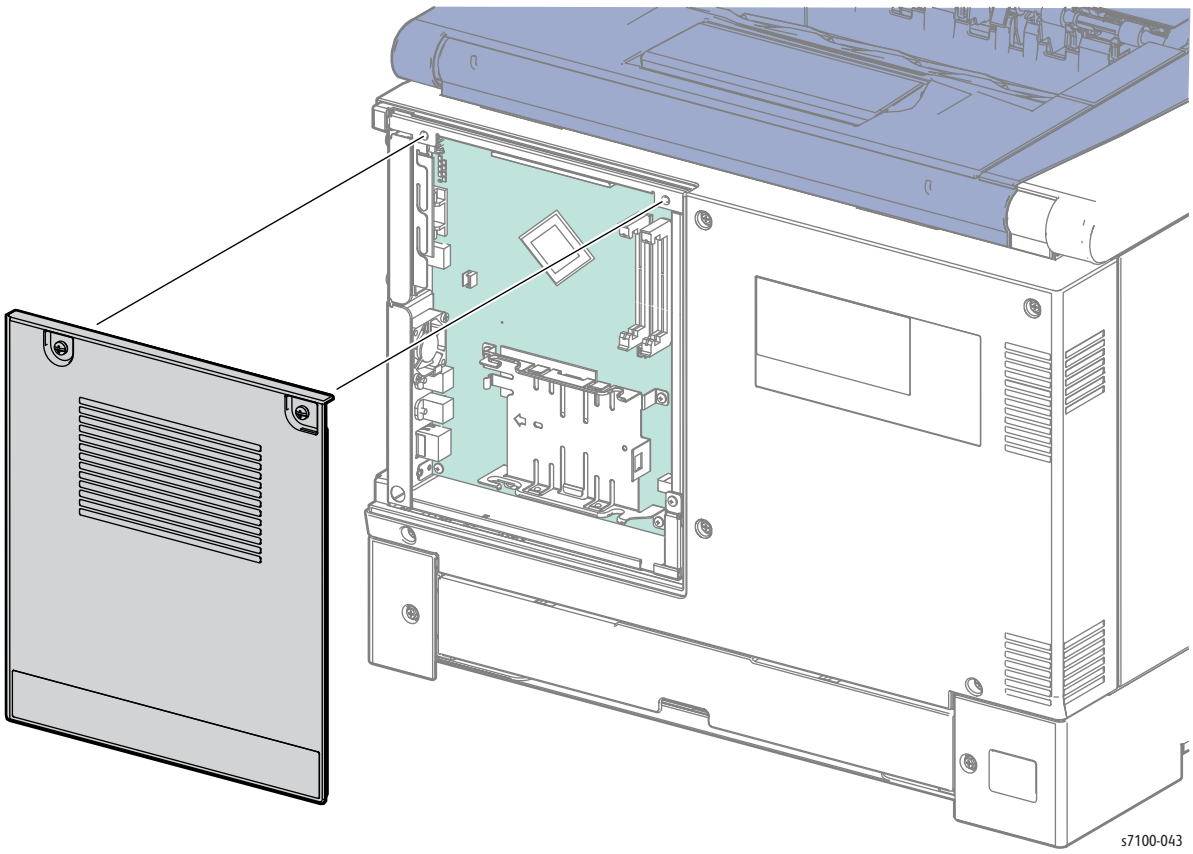
1. Push the Extension Cover Assembly toward the middle to release the boss.
2. Slide the Extension Cover Assembly out to remove.



REP 1.5 Image Processor (I/P) PWB Cover Assembly

PL 1.1.8

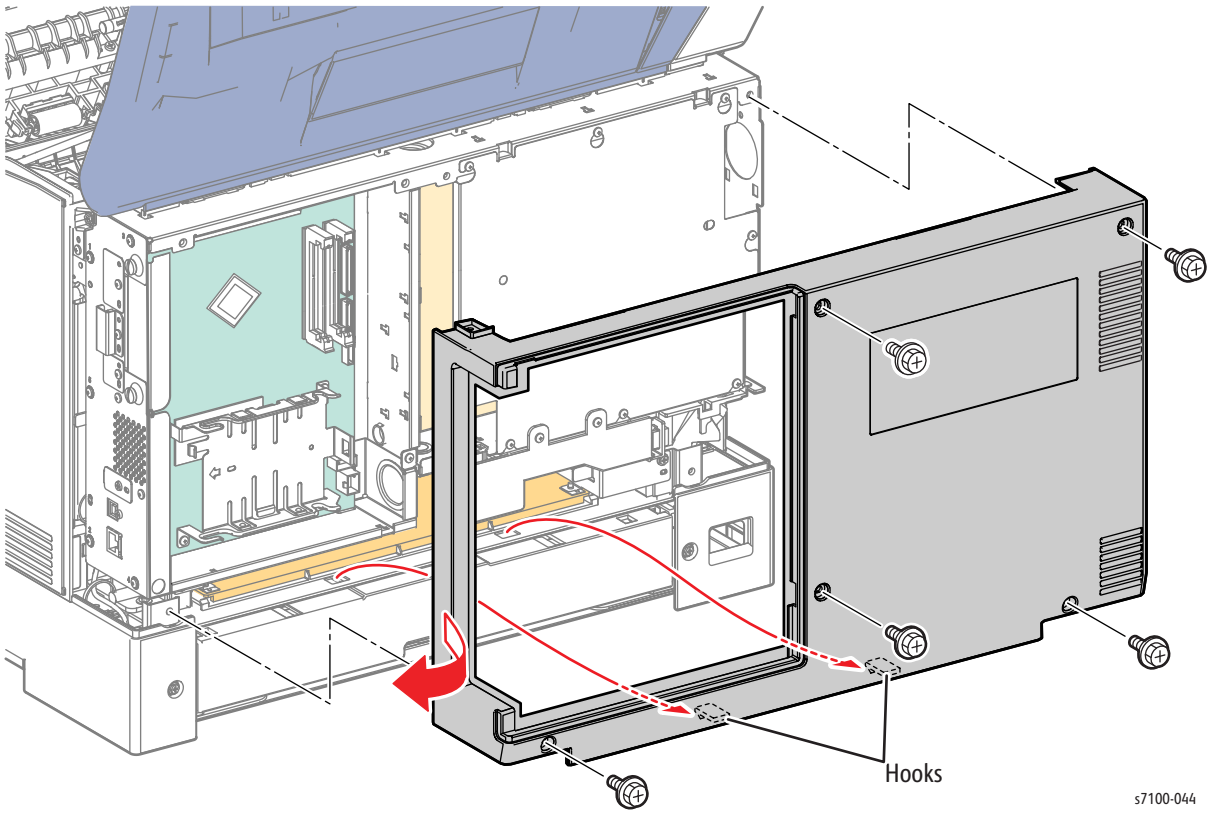
1. Loosen the 2 screws that secure the I/P PWB Cover Assembly.
2. Remove the I/P PWB Cover Assembly.



REP 1.6 Rear Cover

PL 1.1.9

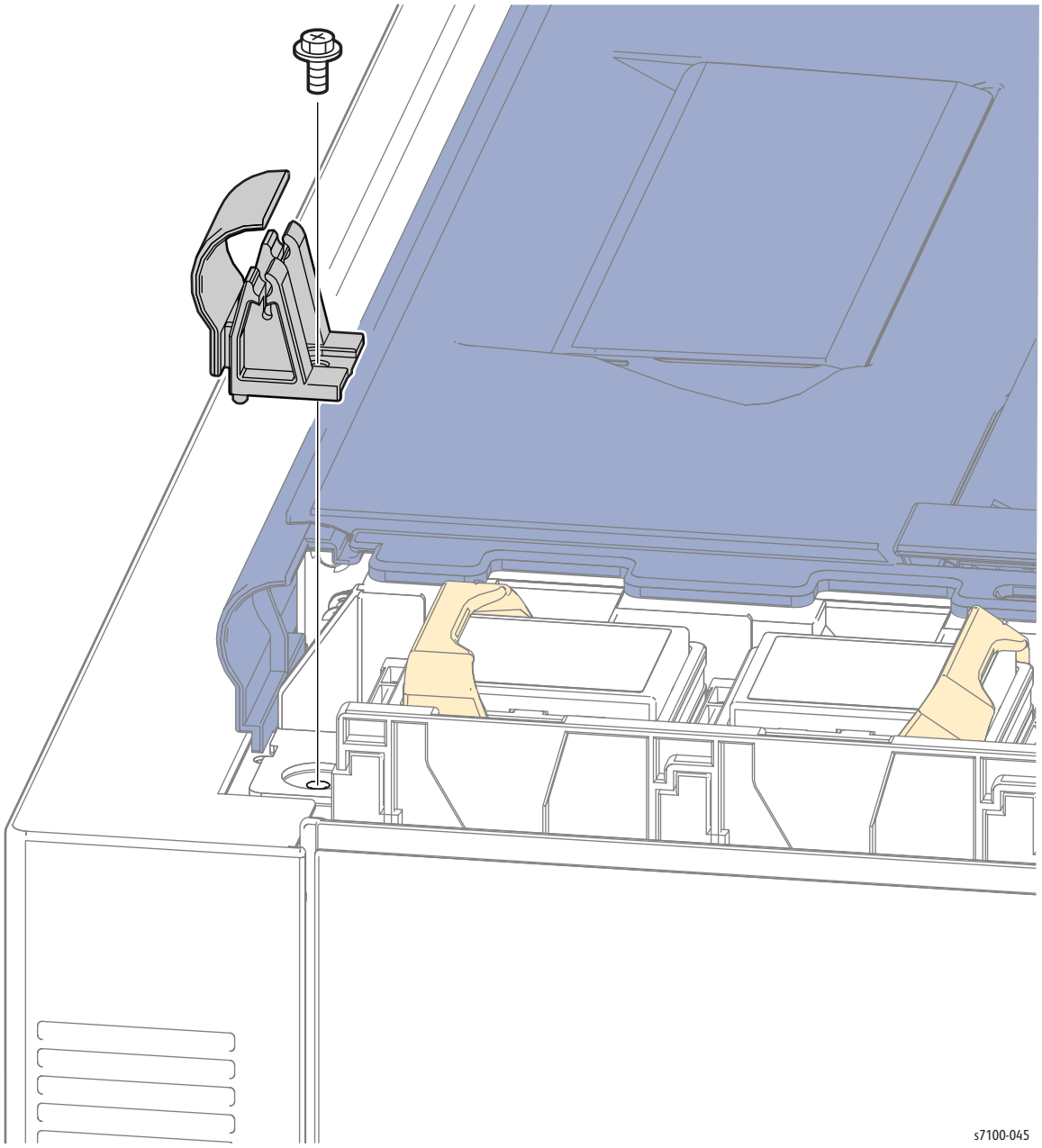
1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove 5 screws (silver, 6mm) that secure the Rear Cover.
3. Release the 2 hooks on the inner bottom of the Rear Cover.
4. Shift the Rear Cover toward the left rear and pull out to remove.



REP 1.7 Toner Cartridge Hinge Cover

PL 1.1.10

1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Remove one screw (silver, 6mm) that secures the Toner Cartridge Hinge Cover.
3. Remove the Hinge Cover.



REP 1.8 Rear Upper Cover

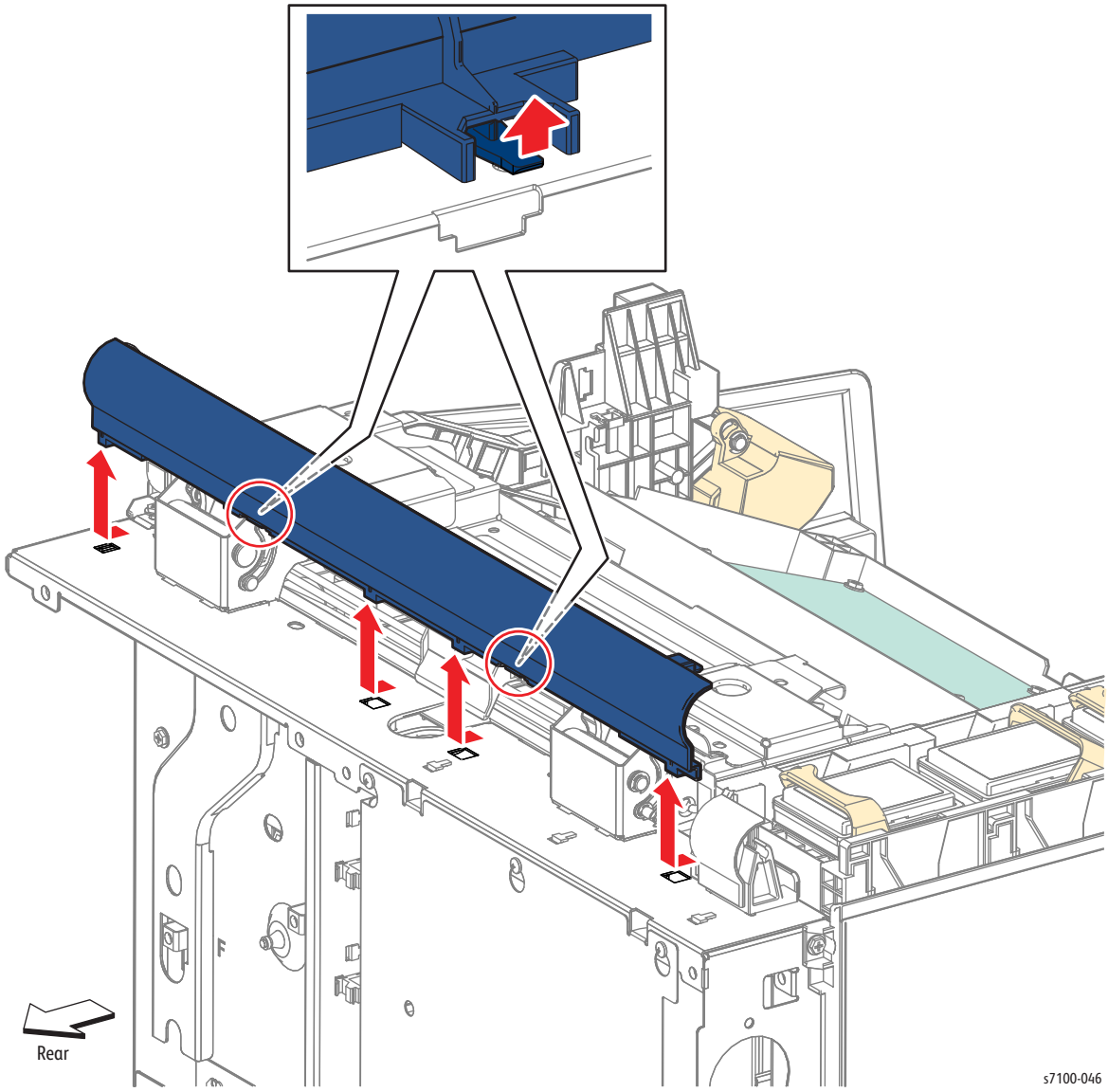
PL 1.1.11

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
4. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
5. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).

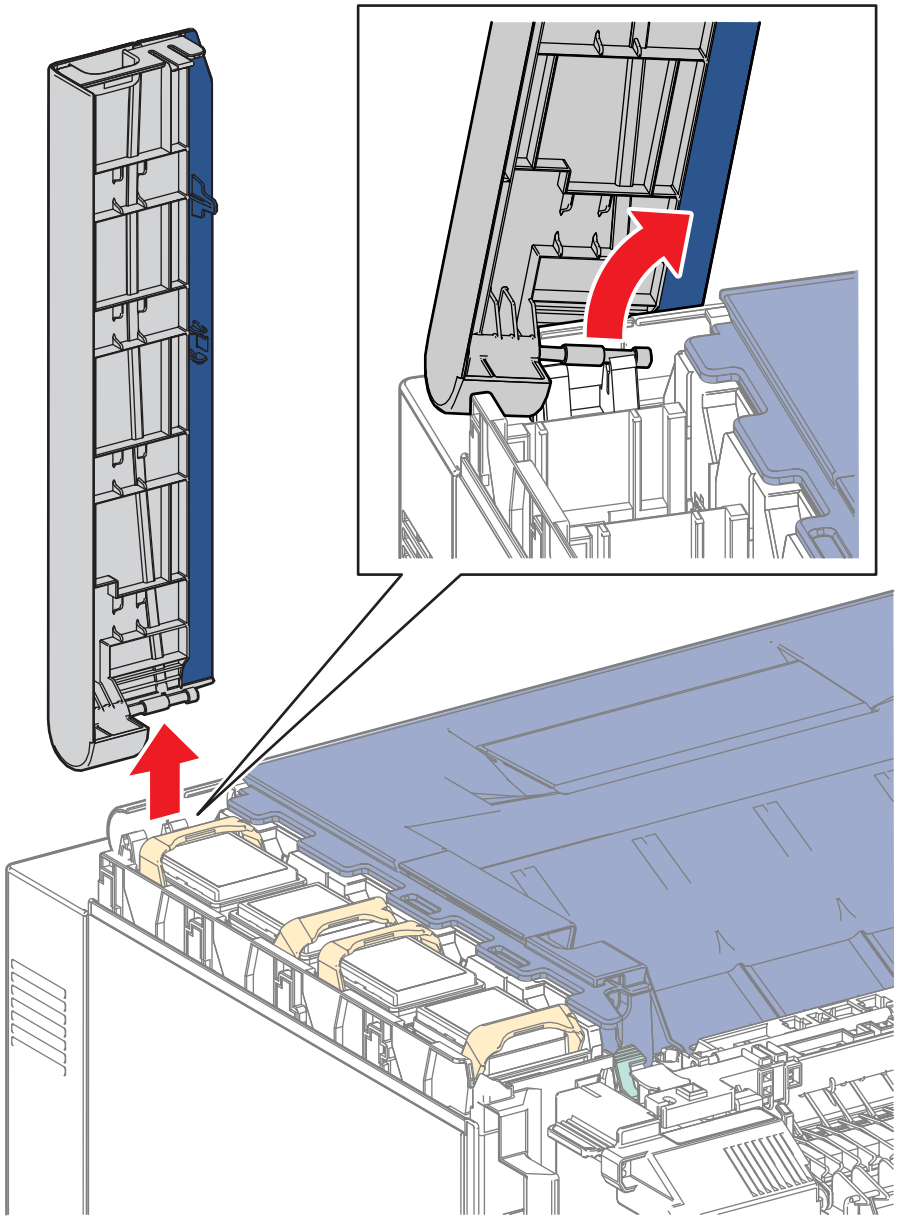
6. Close the Top Cover Assembly Frame.
7. Release the 2 hooks on the bottom of the Rear Upper Cover while sliding and lifting the Cover toward the rear of the printer to remove.



REP 1.9 Toner Cartridge Cover Assembly

PL 1.1.12

1. Open the Toner Cartridge Cover Assembly.
2. Lift the Toner Cartridge Cover Assembly at an angle to release the shaft from the fasteners to remove.

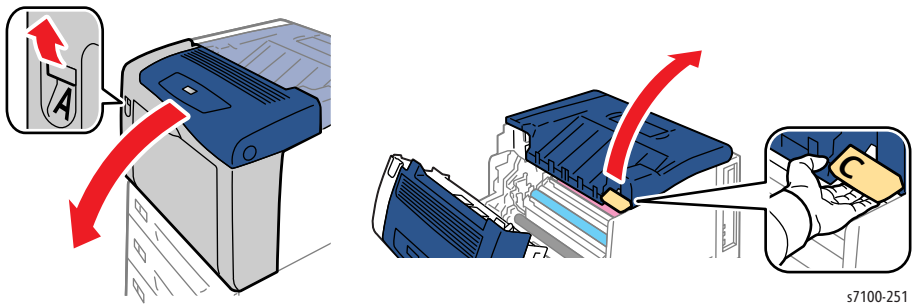


REP 1.10 Left Side Cover

PL 1.1.15

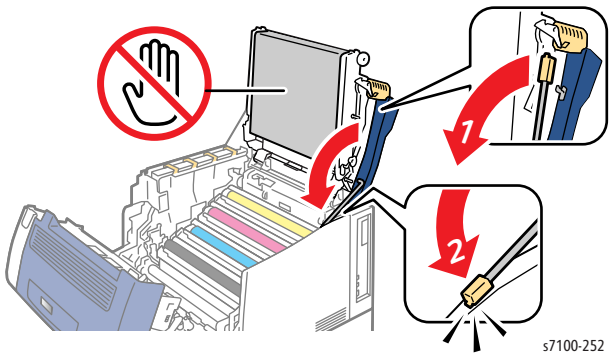
1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19)
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Release latch A and open the Front Frame Assembly (PL 4.1.6).
4. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



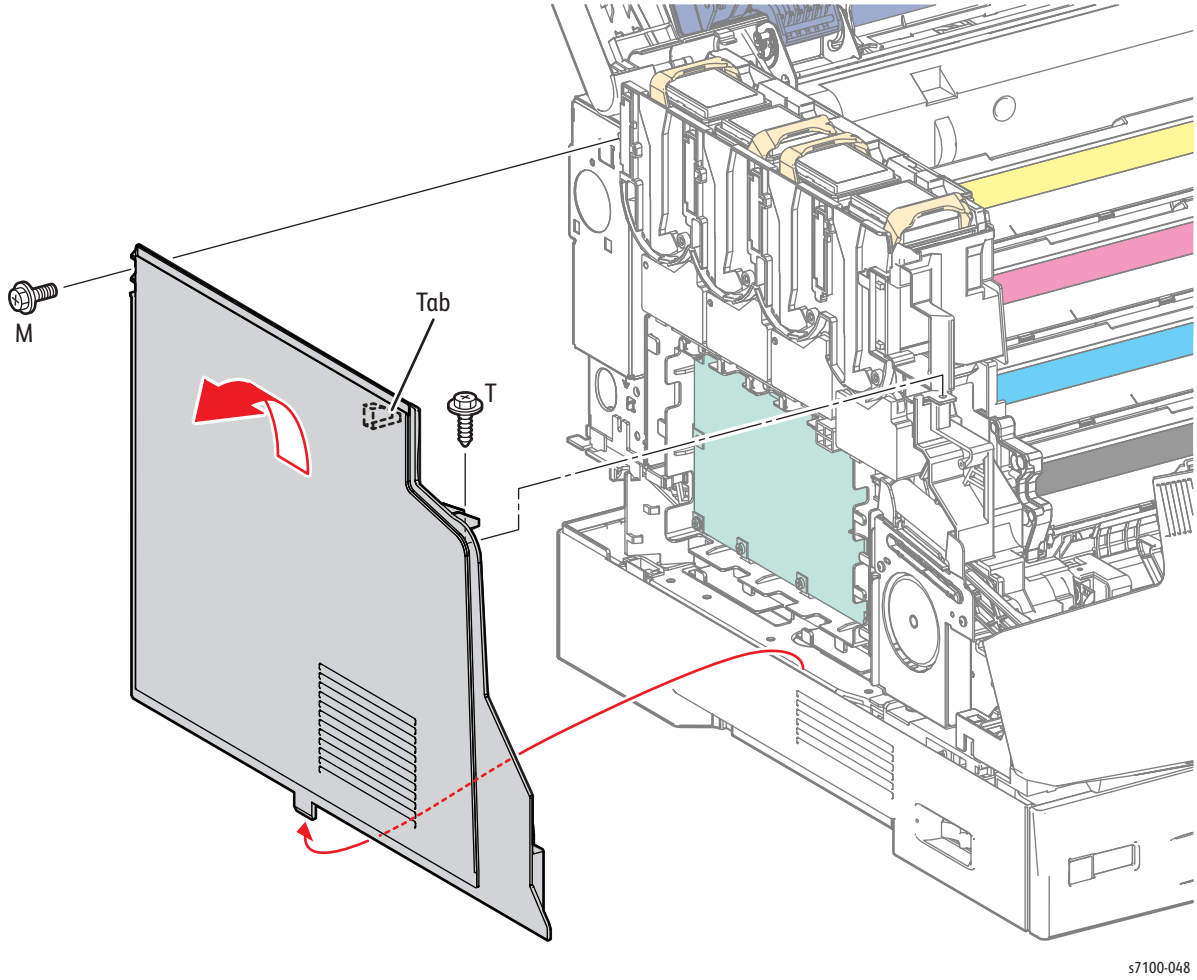
5. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt.



6. Remove one screw (silver, 6mm) and one screw (silver, tapped, 10mm) that secure the Left Side Cover.
7. Lift the Left Side Cover while releasing the tab at the bottom of the Cover from the protrusion of the Left Feeder Cover (PL 2.1.13) and slide the Left Side Cover up and out to remove.

Figure 1



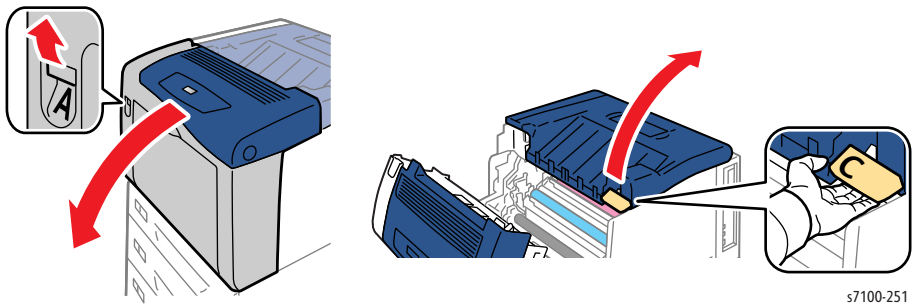
Replacement Note: Be sure to install the screws (plastic and metal) in the correct places as shown in Figure 1 on page 4-26.

REP 1.11 Right Side Cover

PL 1.1.16

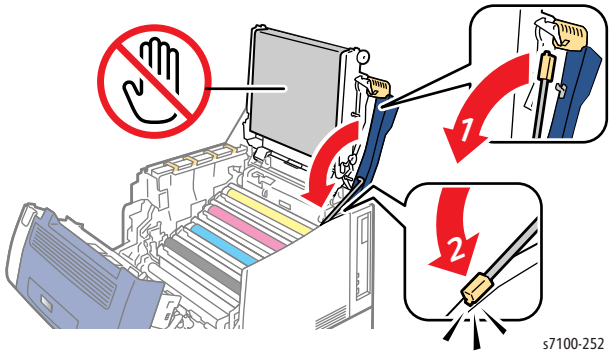
1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19)
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Release latch A and open the Front Frame Assembly (PL 4.1.6).
4. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



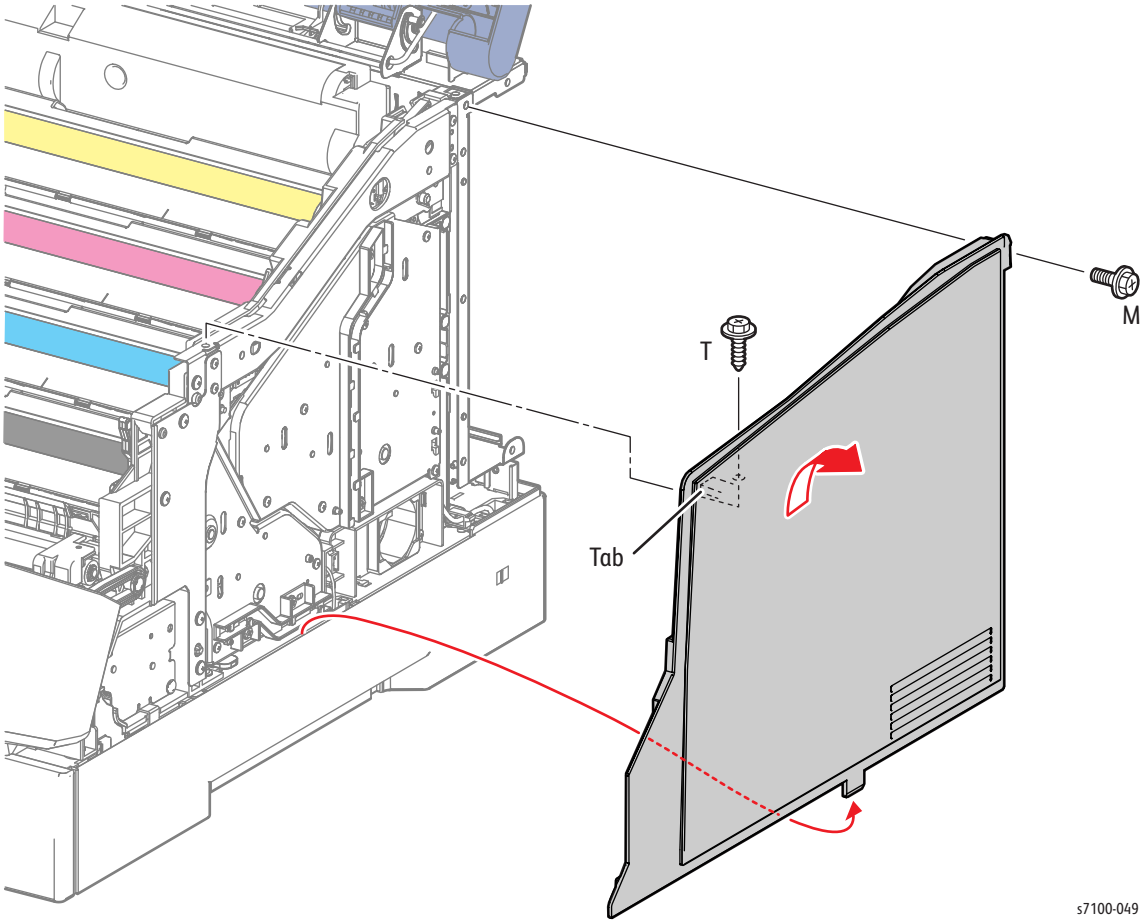
5. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt.



6. Remove 1 screw (silver, 6mm) and one screw (silver, tapped, 10mm) that secure the Right Side Cover.
7. Lift the Right Cover while releasing the tab at the bottom of the Cover from the protrusion of the Right Feeder Cover (PL 2.1.3) and slide the Right Side Cover up and out to remove.

Figure 1

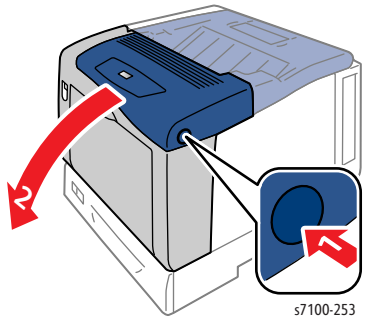


Replacement Note: Be sure to install the correct screws (plastic and metal) in the correct places as shown in Figure 1 on page 4-28.

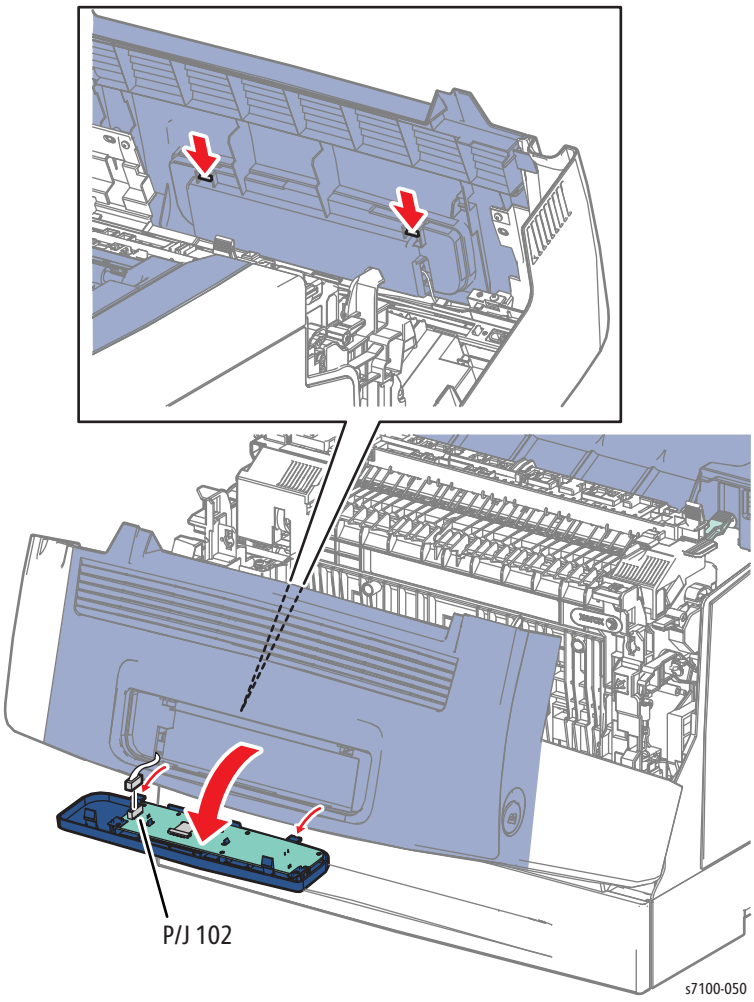
REP 1.12 Control Panel Assembly

PL 1.1.17

1. Press the B button and open the Front Cover Assembly (PL 1.1.38).



2. Release the 2 hooks that secure the Control Panel to the Front Cover Assembly.
3. Tilt the Control Panel toward the front, disconnect the wiring harness connector P/J102, and remove the Control Panel Assembly.

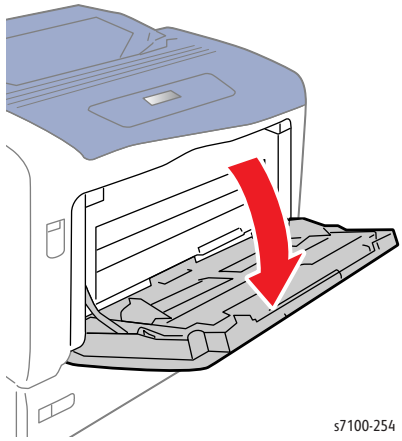


REP 1.13 Bypass Tray Stopper Spring/ Stopper

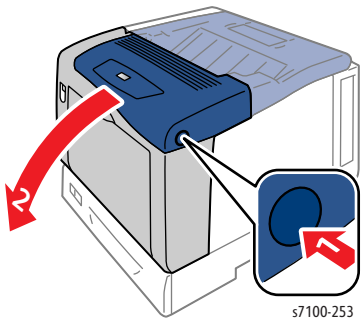
PL 1.1.23/ PL 1.1.24

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool.

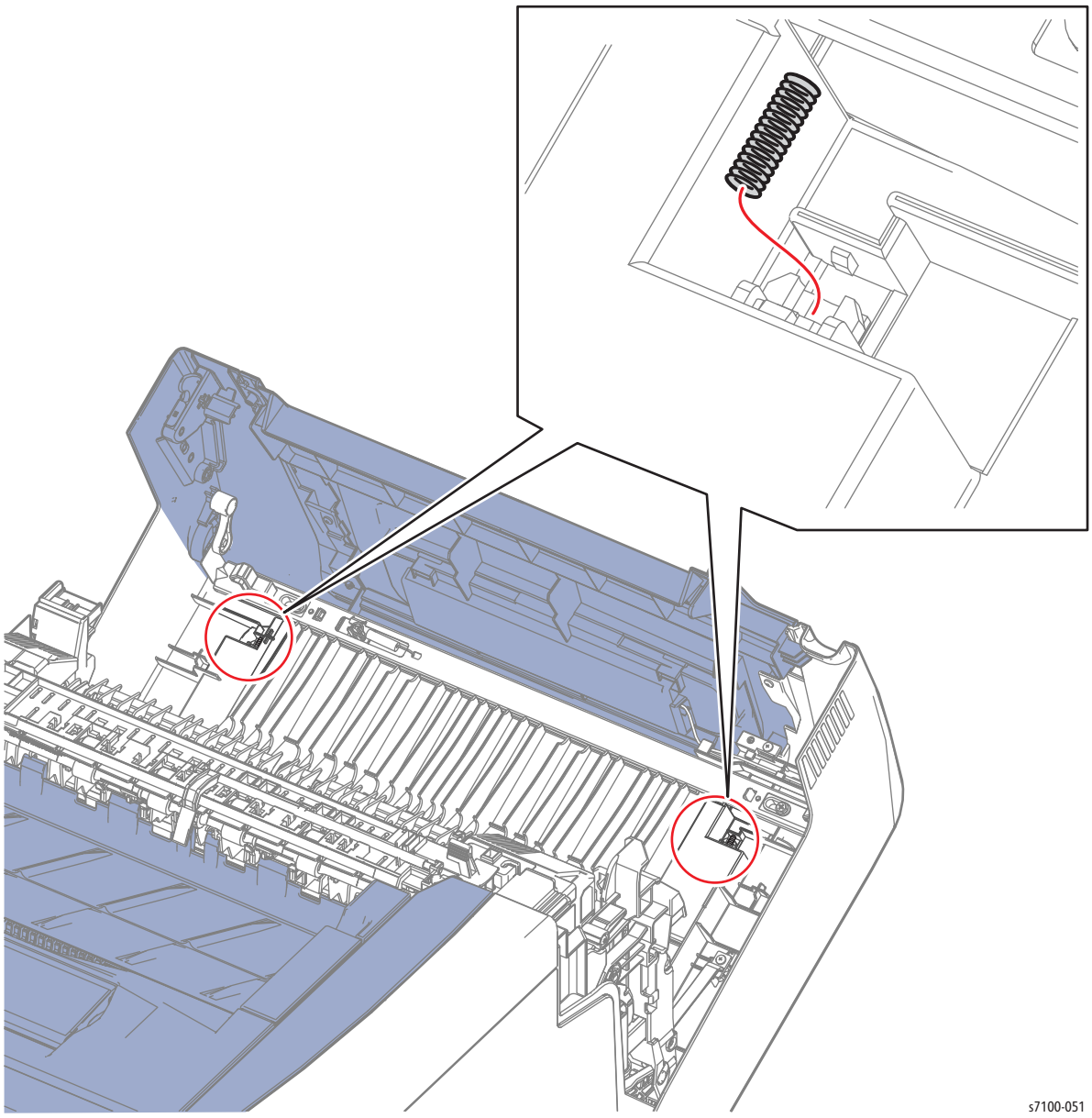
1. Open the Bypass Tray Cover Assembly (PL 3.1.9).



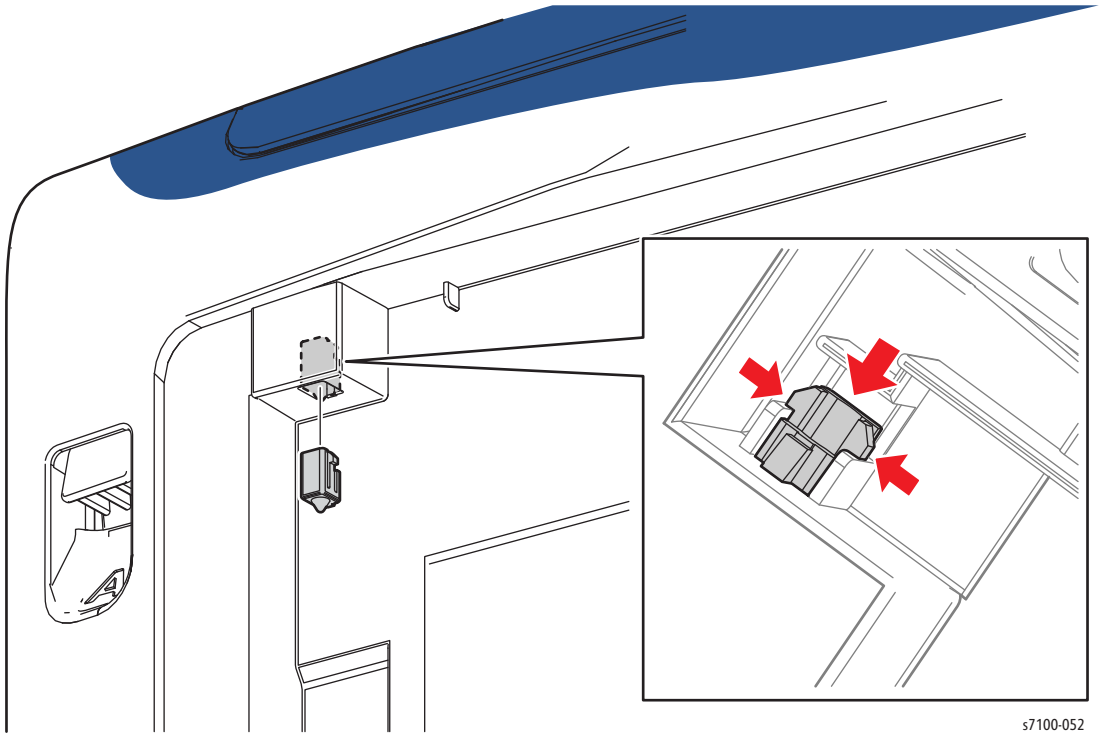
2. Press the B button and open the Front Cover Assembly (PL 1.1.38).



3. Remove the Bypass Tray Stopper Springs (PL 1.1.23).



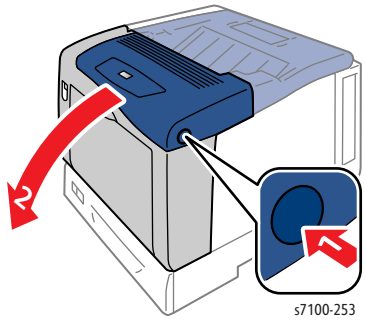
4. On the side of the Bypass Tray Cover Assembly, press to release the hooks that secure the Bypass Tray Stopper and remove the Stopper.



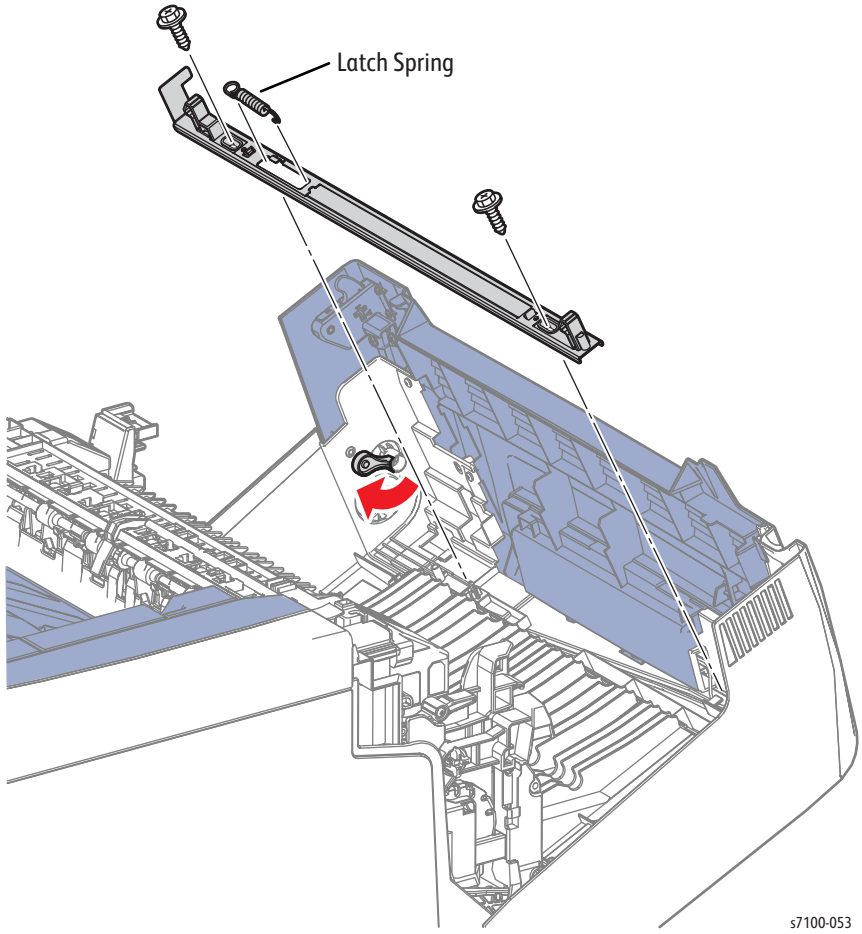
REP 1.14 Front Latch Assembly and Latch Spring

PL 1.1.27/ PL 1.1.32

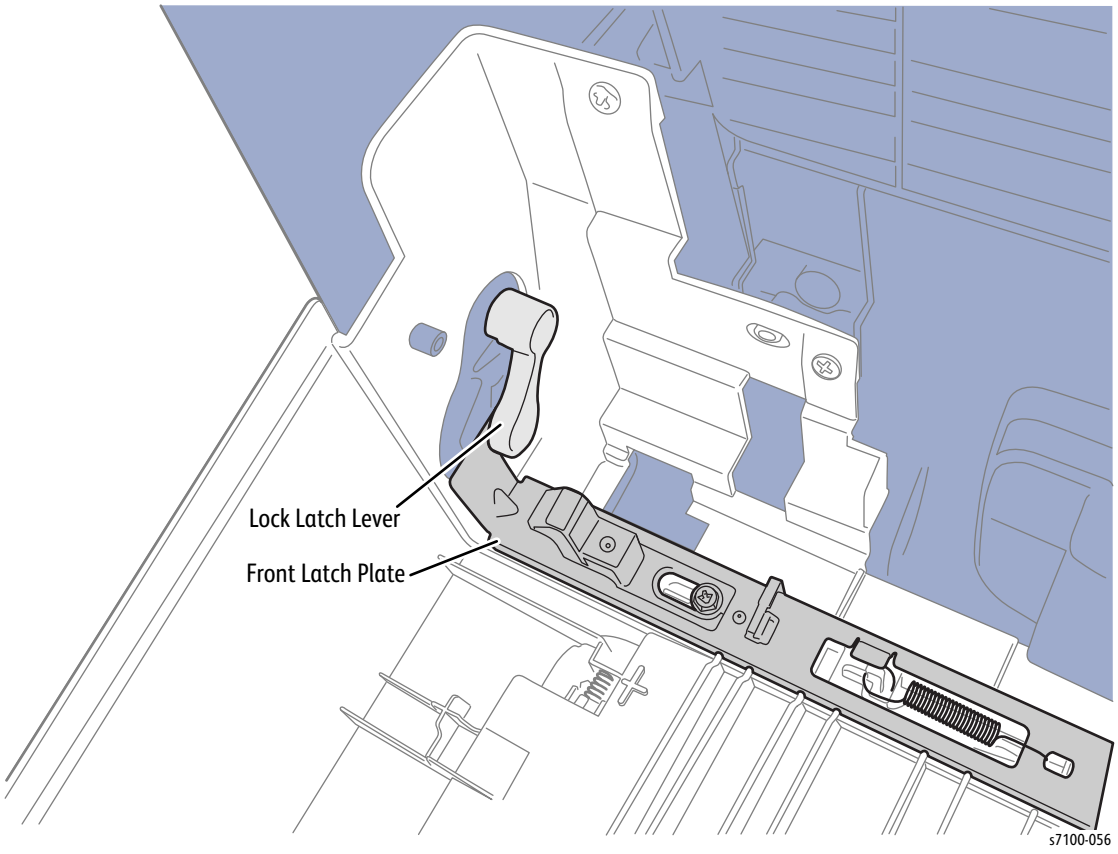
1. Press the B button to open the Front Cover Assembly (PL 1.1.38).



2. Release the Latch Spring from the Front Latch Assembly.
3. Remove 2 screws (silver, tapped, 10mm) that secure the Front Latch Assembly.
4. Rotate the Lock Latch Lever (PL 1.1.20) to release and remove the Front Latch Assembly.



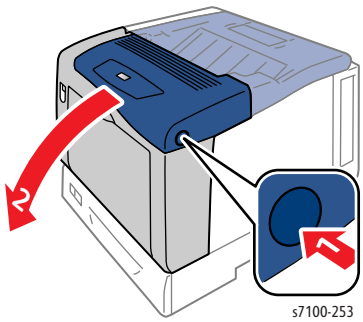
Replacement Note: Be sure the Lock Latch Lever (PL 1.1.20) sits in front of the Front Latch Plate (PL 1.1.30).



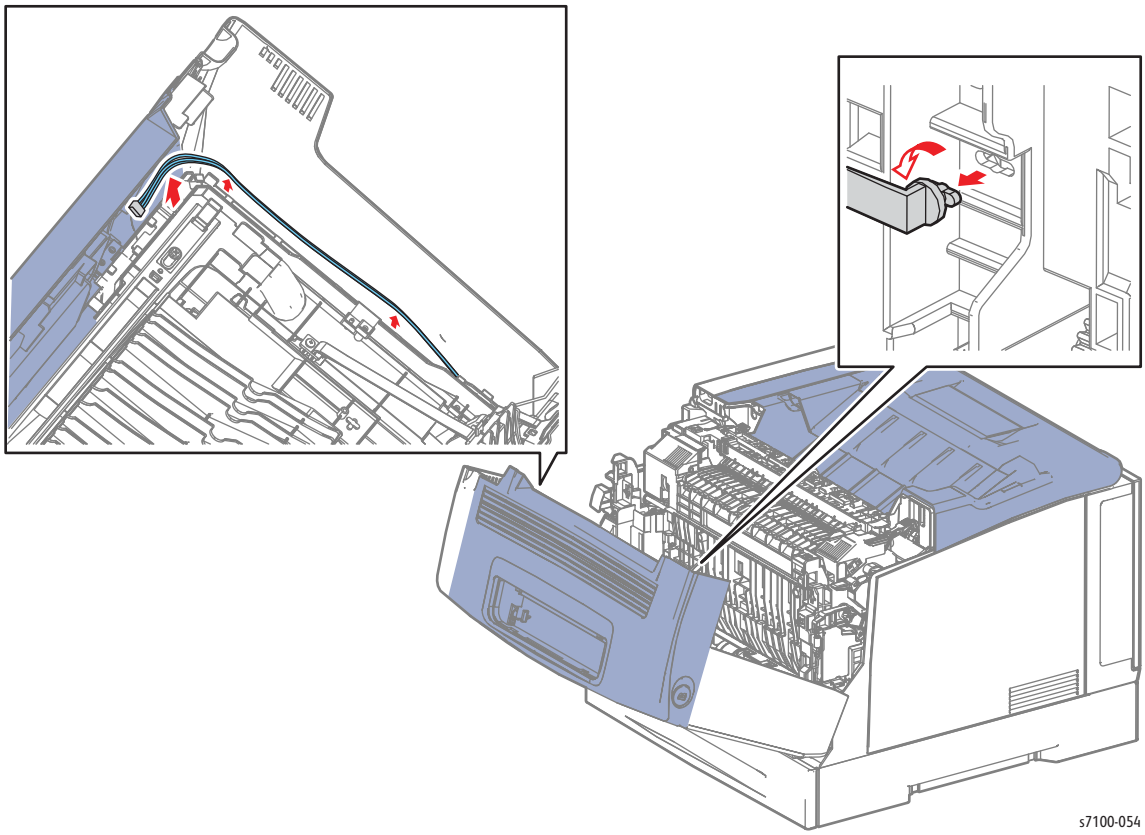
REP 1.15 Front Cover Assembly

PL 1.1.38

1. Remove the Control Panel (REP 1.12 Control Panel Assembly on page 4-29).
2. Remove the Bypass Tray (REP 3.5 Bypass Tray Assembly on page 4-73).
3. Remove the Bypass Tray Cover Assembly (REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover on page 4-71).
4. Press the B button to open the Front Cover Assembly (PL 1.1.38).

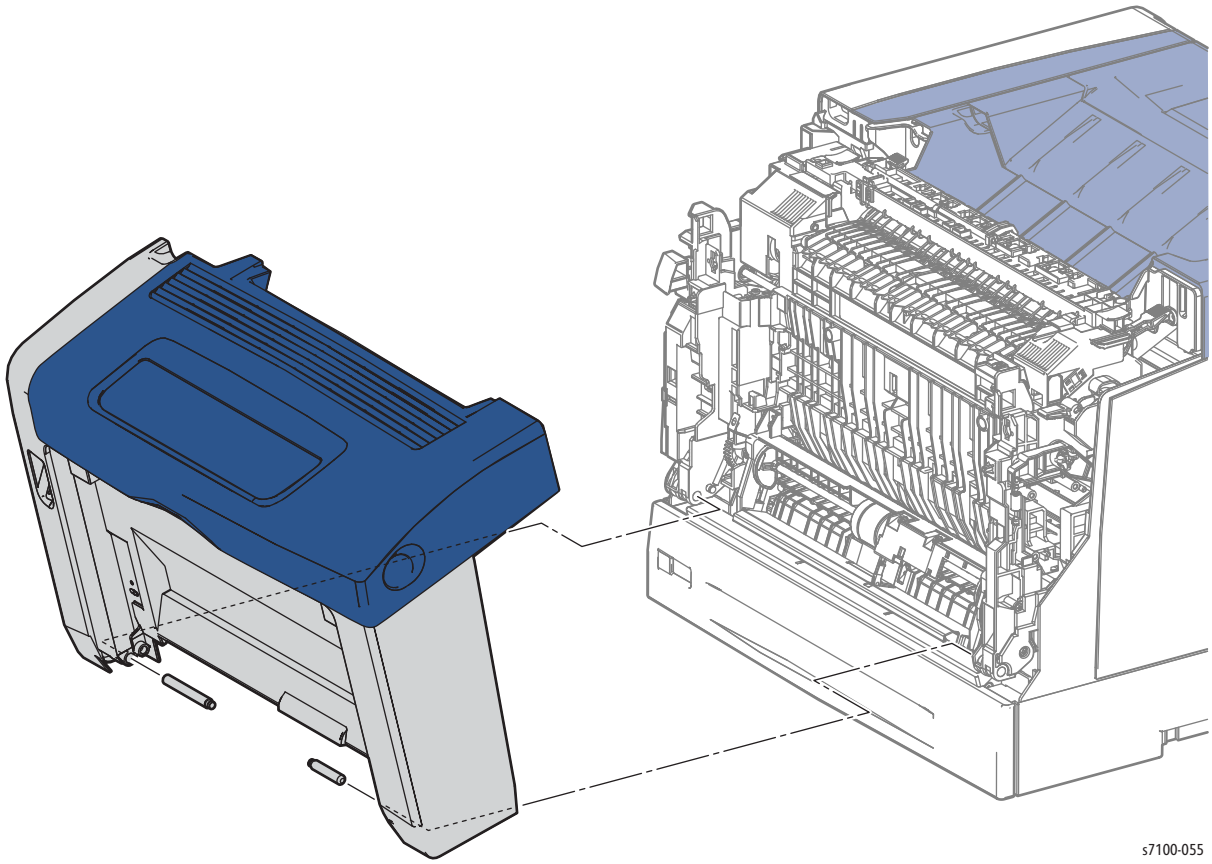


5. Release the wiring harness from the Harness Guide.
6. Rotate and release the Cover Strap.



7. Pull the 2 Pins toward the inner side to remove.
8. Remove the Front Cover Assembly.

Figure 1



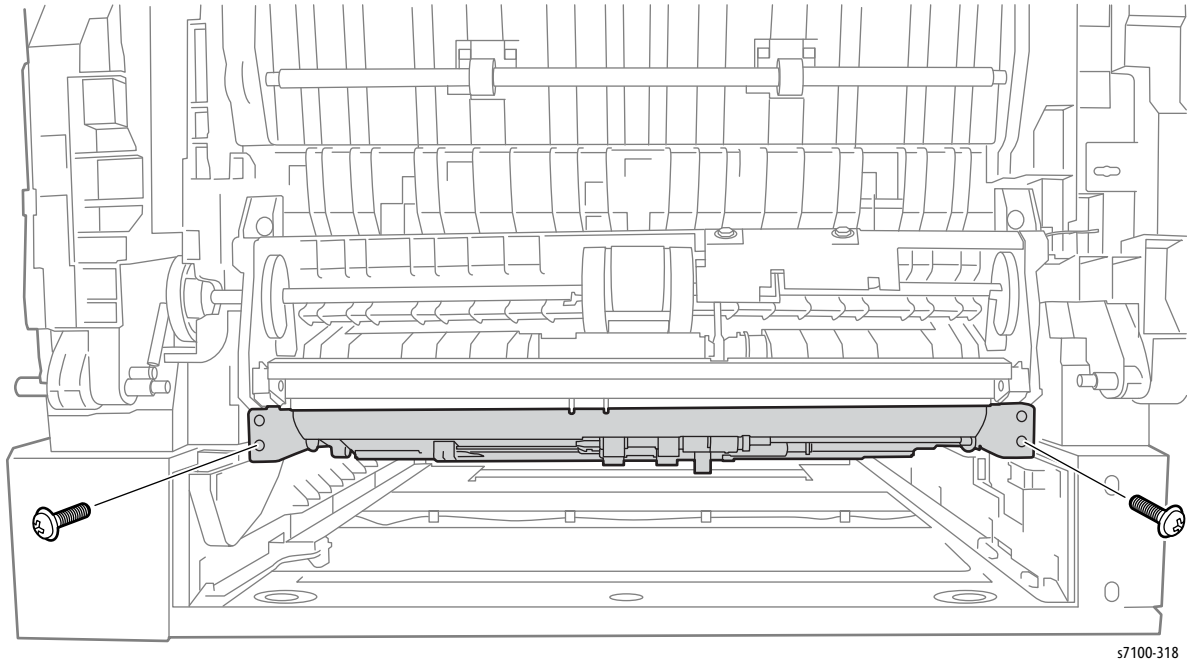
Replacement Note: Be sure to install the long Pin on the left inner side and the short Pin on the right inner side of the Front Cover Assembly (see Figure 1 on page 4-36).

250-Sheet Feeder

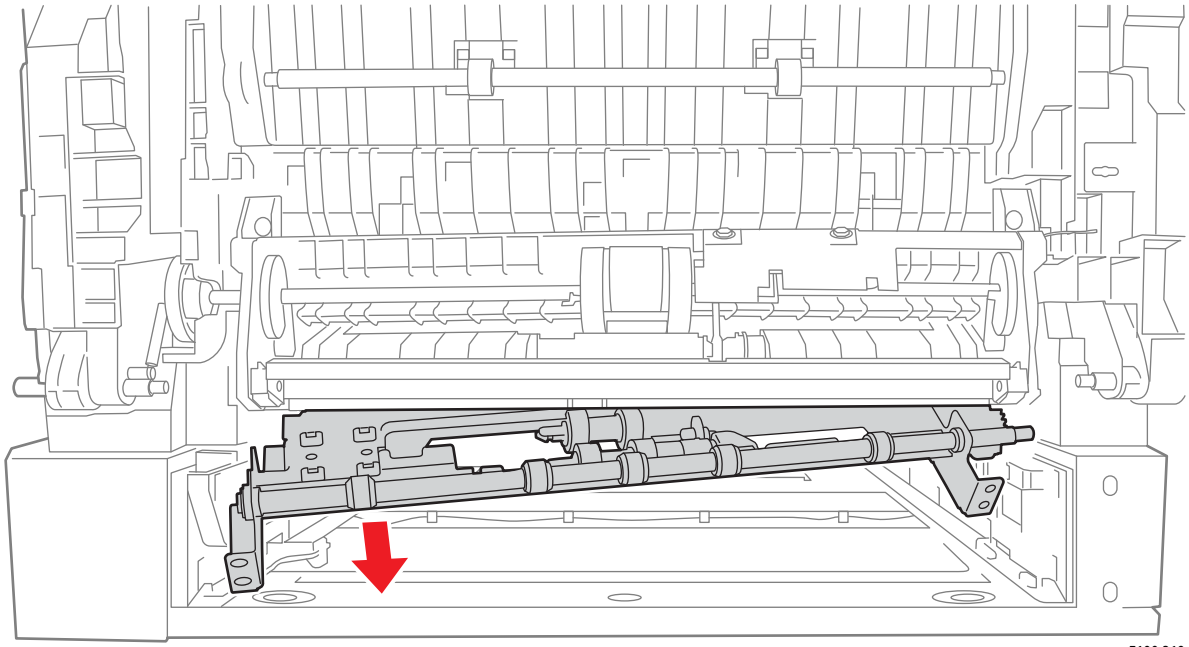
REP 2.1 Feeder Assembly

PL 2.1.1

1. Remove Tray 1.
2. Remove the Bypass Tray Frame Assembly (REP 3.1 Bypass Tray Frame Assembly on page 4-69).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44).
8. Remove the Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41).
9. Remove the Right Turn Gear (REP 2.2 Right Turn Gear Assembly on page 4-39).
10. Remove 2 screws (silver, tapped, 12mm) that secure the Feeder Assembly.



11. Shift the Feeder Assembly toward the front to release the 2 bosses from the frame.
12. Pull the left side forward while pushing the right side of the Feeder Assembly toward the rear and remove the Feeder Assembly.

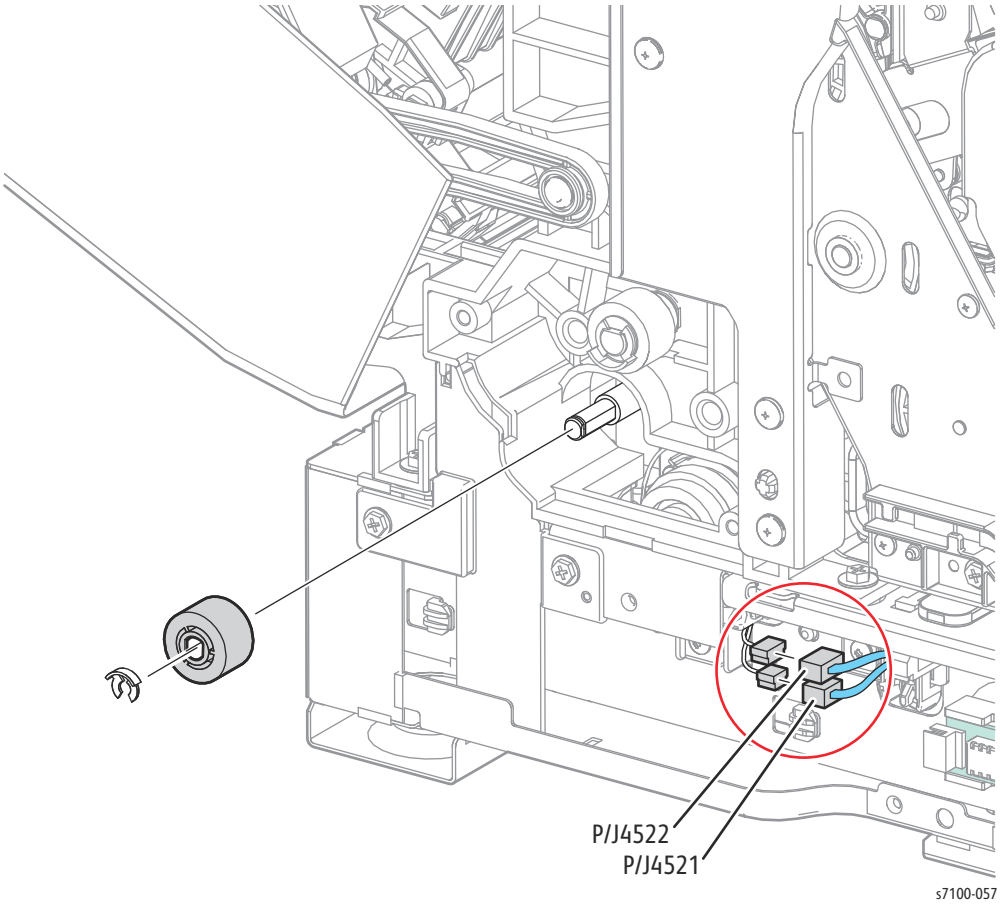


Replacement Note: Be sure to insert the right side of the Feeder Assembly first then the left side. Move the left side forward and lift the right side and place the Feeder Assembly in position.

REP 2.2 Right Turn Gear Assembly

PL 2.1.2

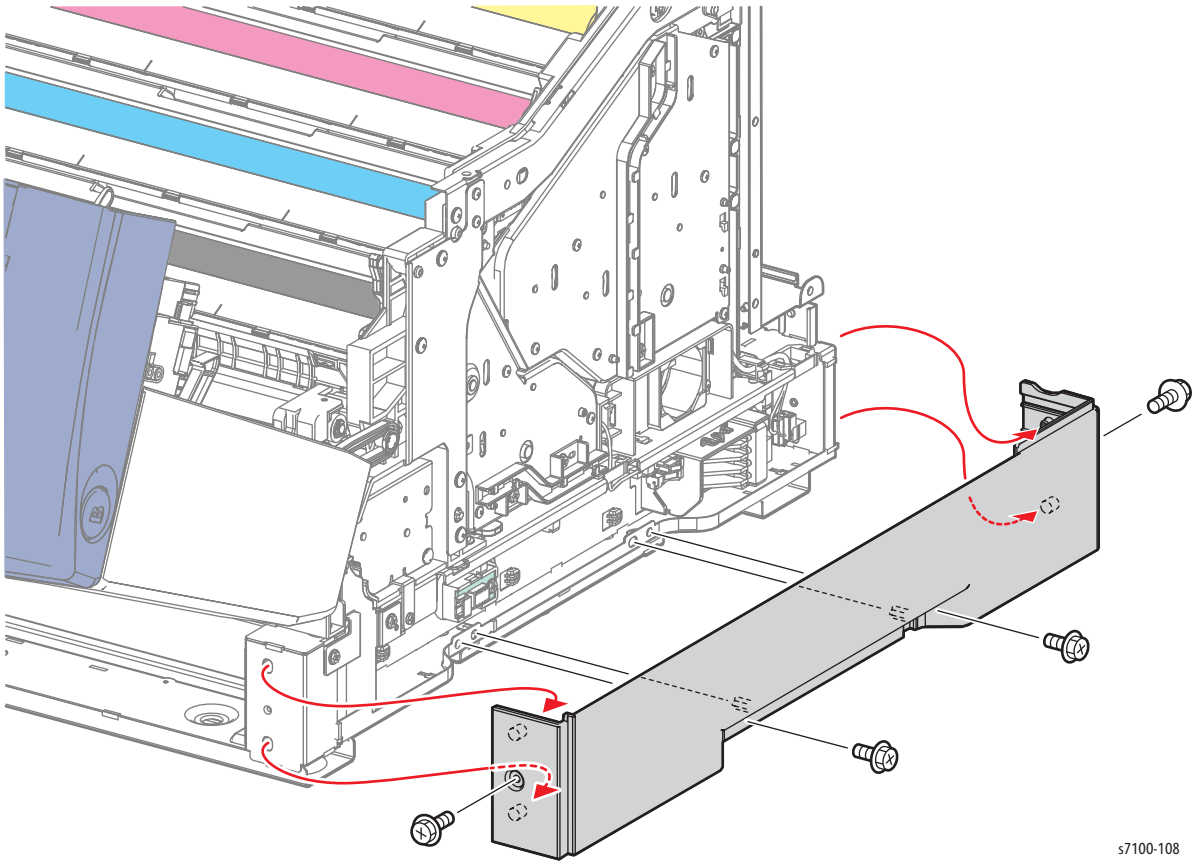
1. Remove Tray 1.
2. Remove the Bypass Tray Frame Assembly (REP 3.1 Bypass Tray Frame Assembly on page 4-69).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44).
8. Remove the Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41).
9. Remove the KL clip that secures the Right Turn Gear (PL 2.1.2).
10. Remove the Right Turn Gear.
11. Disconnect the 2 Feeder Assembly wiring harness connectors P/J4521 and P/J4522.



REP 2.3 Right Feeder Cover

PL 2.1.3

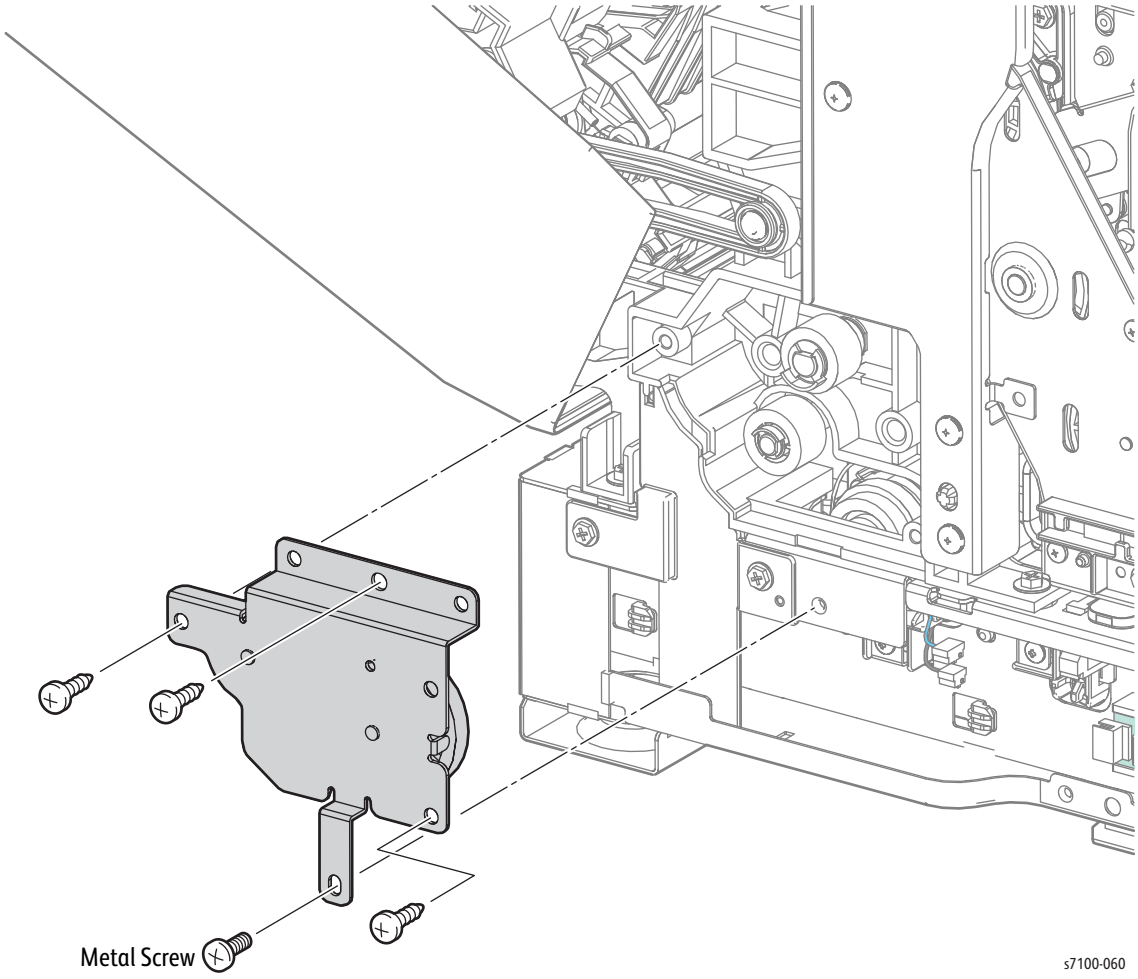
1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove 4 screws (silver, 6mm) that secure the Right Feeder Cover.
6. Release the 2 bosses of the Feeder Cover from the frame while sliding the Right Feeder Cover out to remove.



REP 2.4 Right Turn Bracket Assembly

PL 2.1.4

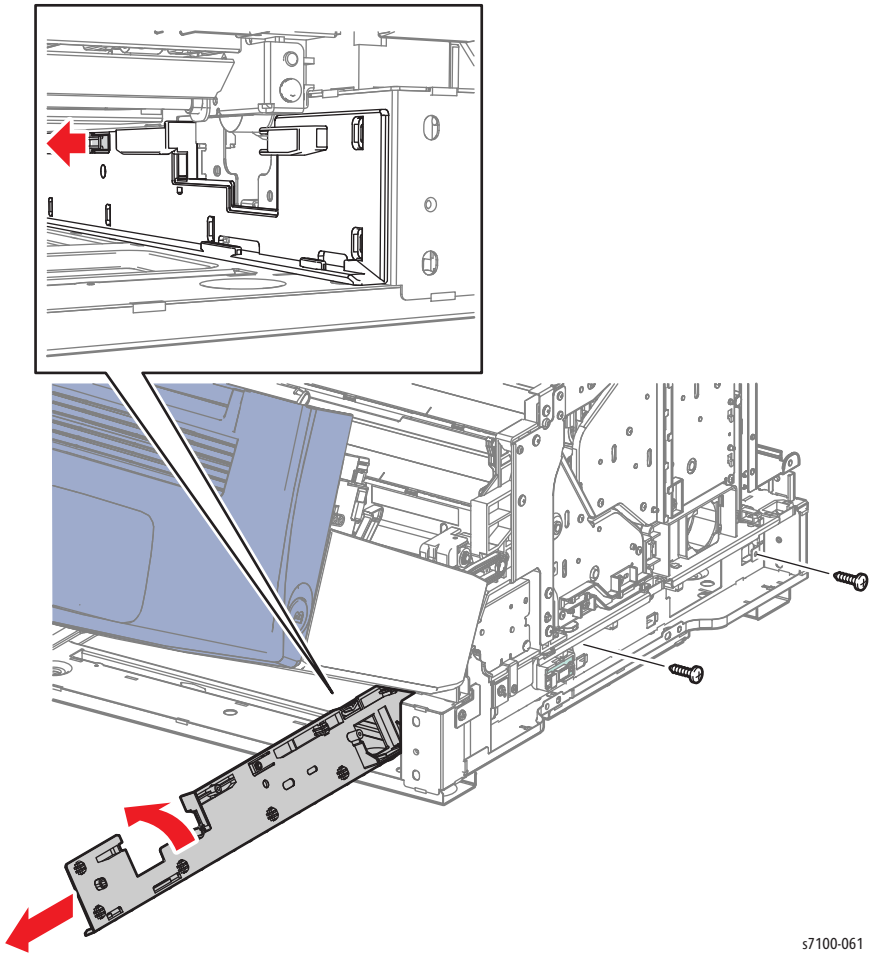
1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Remove 3 screws (silver, tapped, 12mm, plastic) and one metal screw (silver, tapped, 12mm) that secure the Right Turn Bracket Assembly.
7. Remove the Right Turn Bracket Assembly.



REP 2.5 Right Tray Guide Assembly

PL 2.1.5

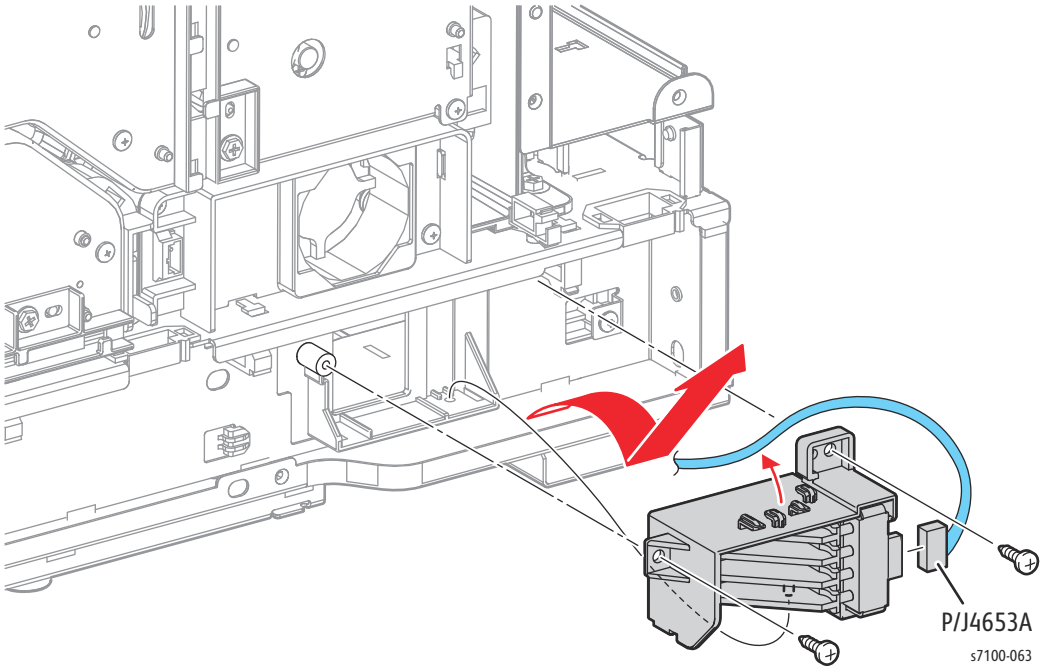
1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Remove the Tray Cover (REP 2.11 Tray Cover on page 4-50).
7. Remove the Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44).
8. Remove 2 screws (silver, tapped, 10mm) that secure the Right Tray Guide Assembly.
9. Remove the Size Switch Holder Assembly (REP 2.6 Size Switch Holder Assembly on page 4-43) from the Right Tray Guide Assembly.
10. From the inside of the printer, release the hook that secures the Right Tray Guide Assembly while pushing the Guide Assembly toward the front inner side of the printer and pull the Guide Assembly out to remove.



REP 2.6 Size Switch Holder Assembly

PL 2.1.6

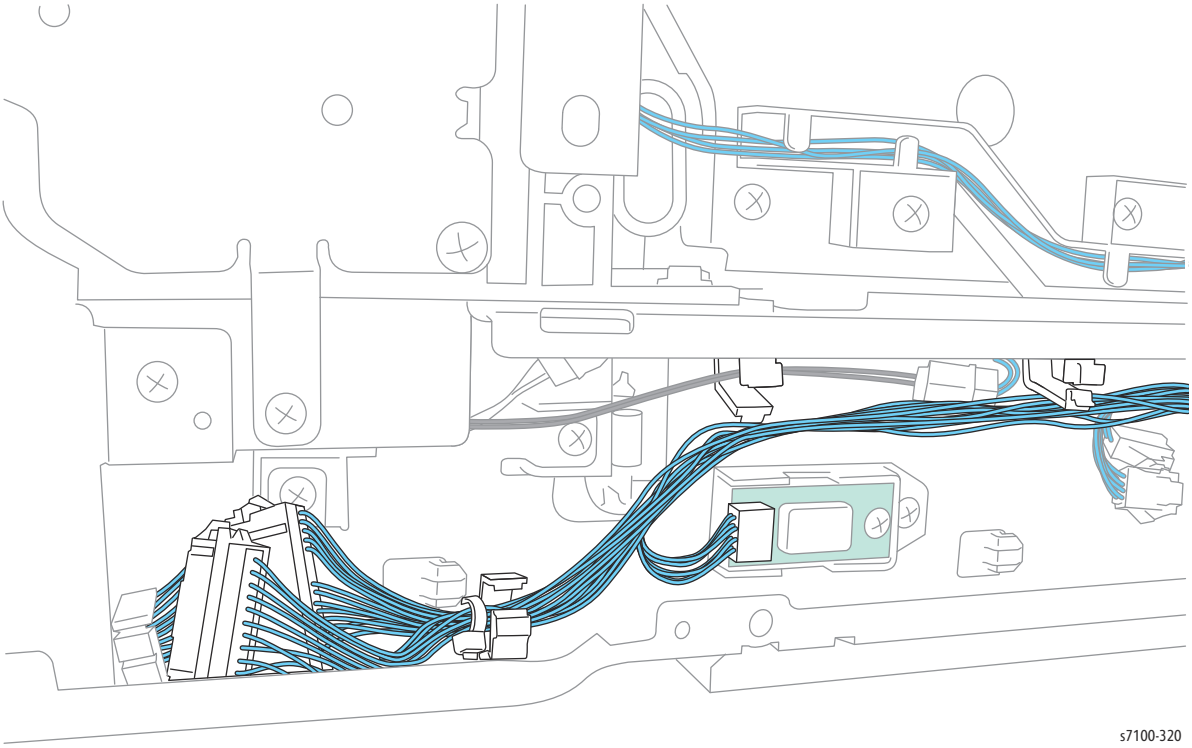
1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Remove 2 screws (silver, tapped, 8mm) that secure the Size Switch Holder Assembly.
7. Slightly lift and remove the Size Switch Assembly.
8. Disconnect the wiring harness connector P/J4653A.



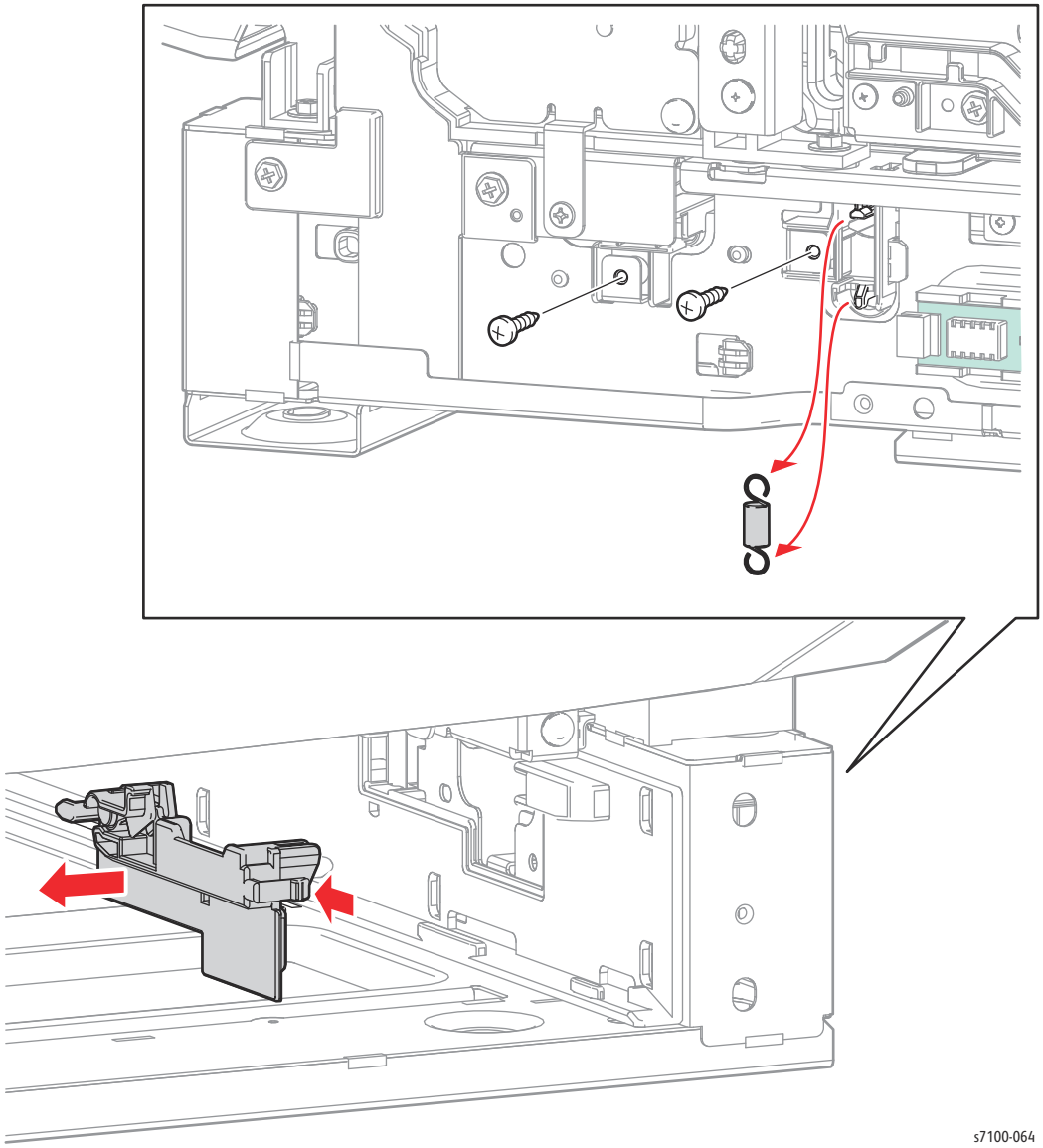
REP 2.7 Protect Cover Assembly

PL 2.1.8

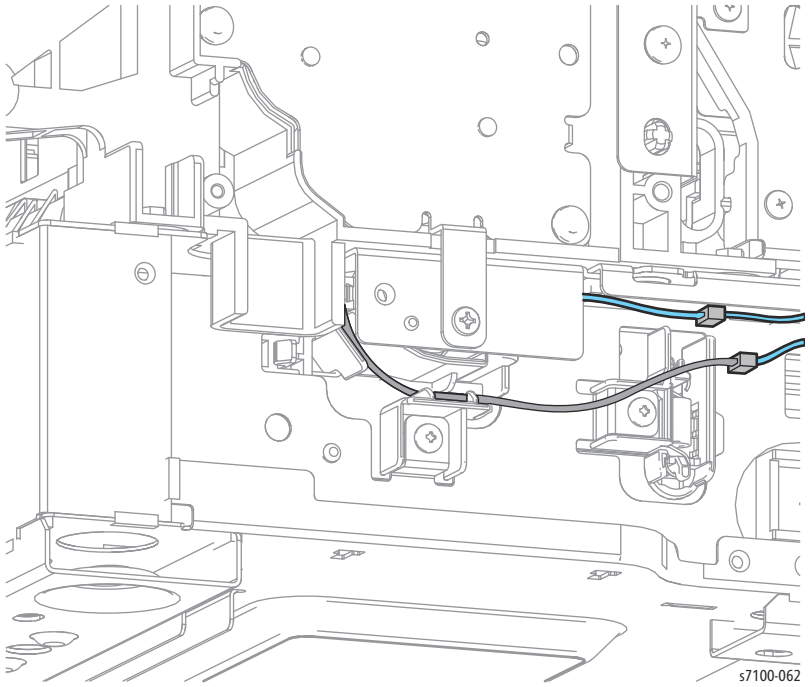
1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Release the wiring harnesses from the harness holders on the Protect Cover Assembly.



7. Remove the Nudger Spring (PL 2.1.7) from the Right Tray Guide Assembly (PL 2.1.5) and the Protect Cover Assembly (PL 2.1.8).
8. Remove 2 screws (silver, tapped, 10mm) that secure the Protect Cover Assembly.
9. Release the hook that secures the Protect Cover Assembly while sliding the Cover out to remove.



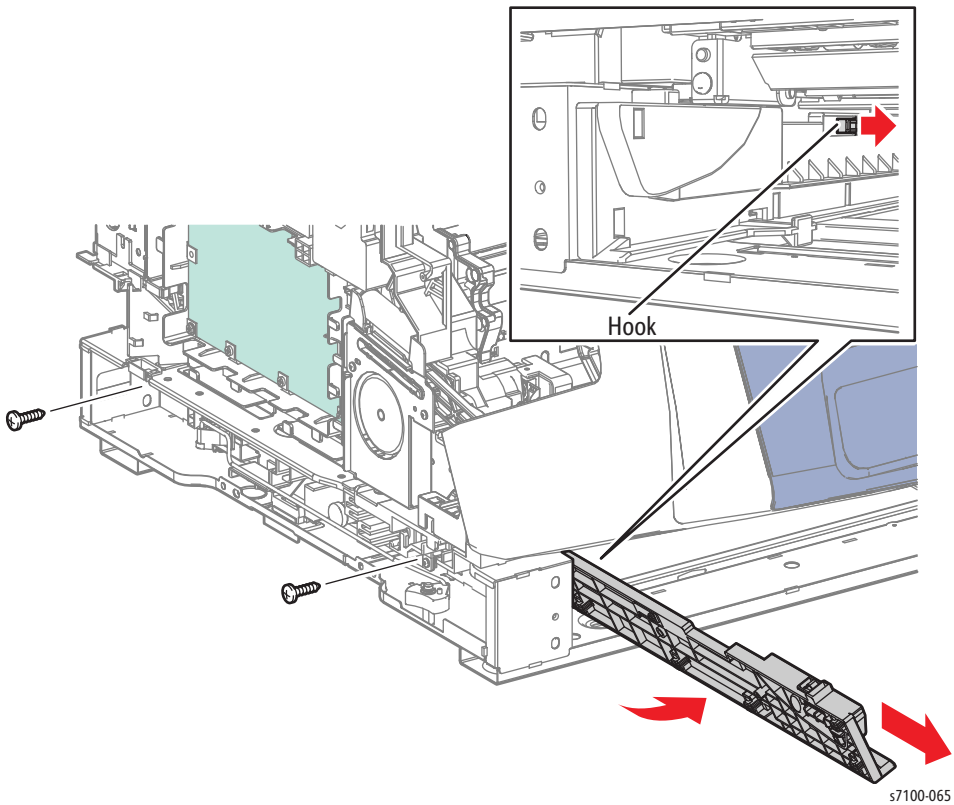
Replacement Note: Be sure to seat the Paper Handling Clutch and No Paper Sensor wiring harnesses properly to prevent damaging by the Tray Guide Assembly.



REP 2.8 Left Tray Guide Assembly

PL 2.1.9

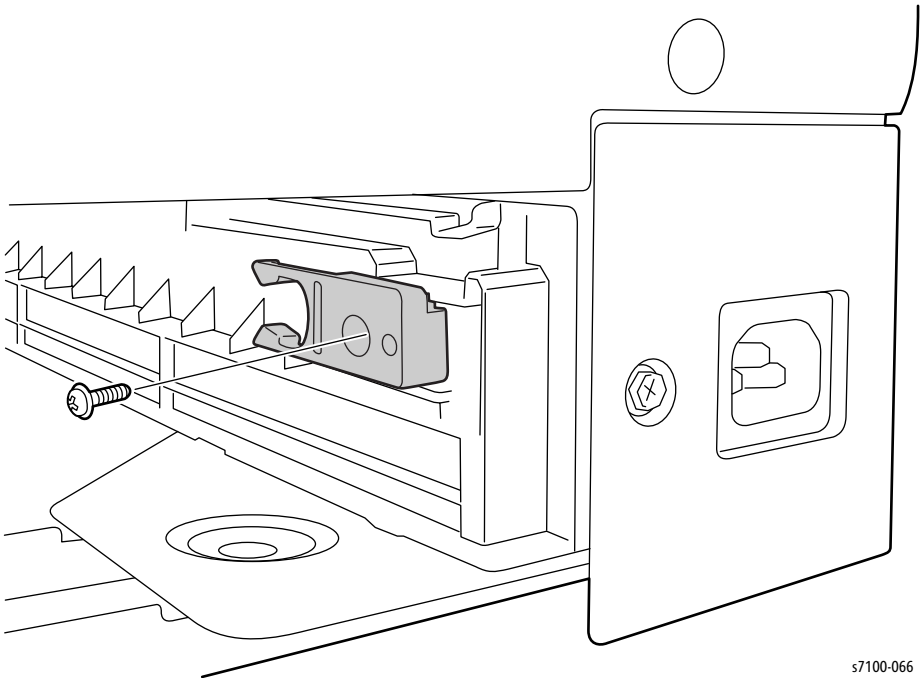
1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Remove the Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44).
7. Remove the Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41).
8. Remove the Feeder Assembly (REP 2.1 Feeder Assembly on page 4-37).
9. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
10. Remove the Left Feeder Cover (REP 2.10 Left Feeder Cover on page 4-49).
11. Remove the Tray Cover (REP 2.11 Tray Cover on page 4-50).
12. Remove 2 screws (silver, tapped, 10mm) that secure the Tray Guide Assembly.
13. From the inside of the printer, release the hook that secures the Left Tray Guide Assembly while pushing the Guide Assembly toward the front and inner side of the printer and pull the Guide Assembly out to remove.



REP 2.9 Tray Stopper

PL 2.1.10

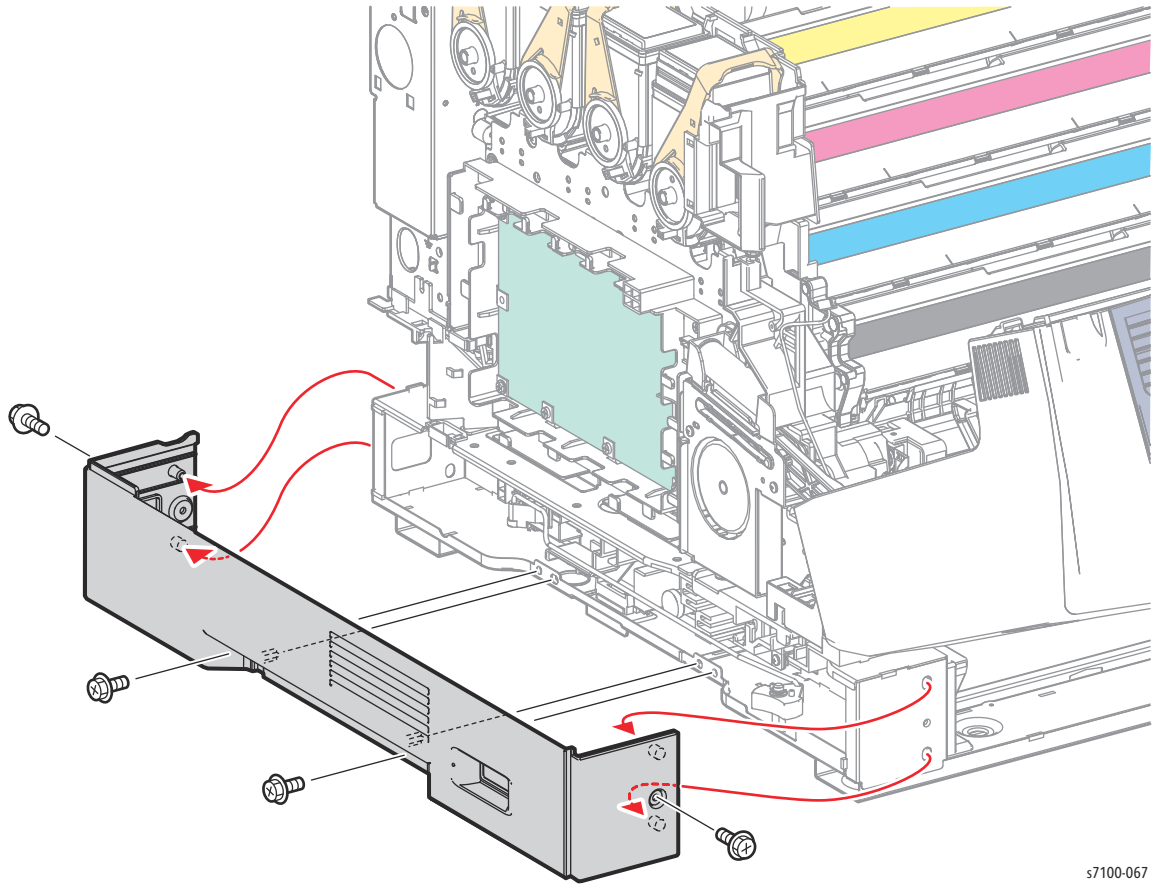
1. Remove the Tray 1.
2. Remove the Tray Cover (REP 2.11 Tray Cover on page 4-50).
3. Remove 1 screw that secures the Tray Stopper.
4. Remove the Tray Stopper.



REP 2.10 Left Feeder Cover

PL 2.1.13

1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
5. Remove 4 screws (silver, 6mm) that secure the Left Feeder Cover.
6. Release the 2 bosses of the Feeder Cover from the frame while sliding the Left Feeder Cover out to remove.

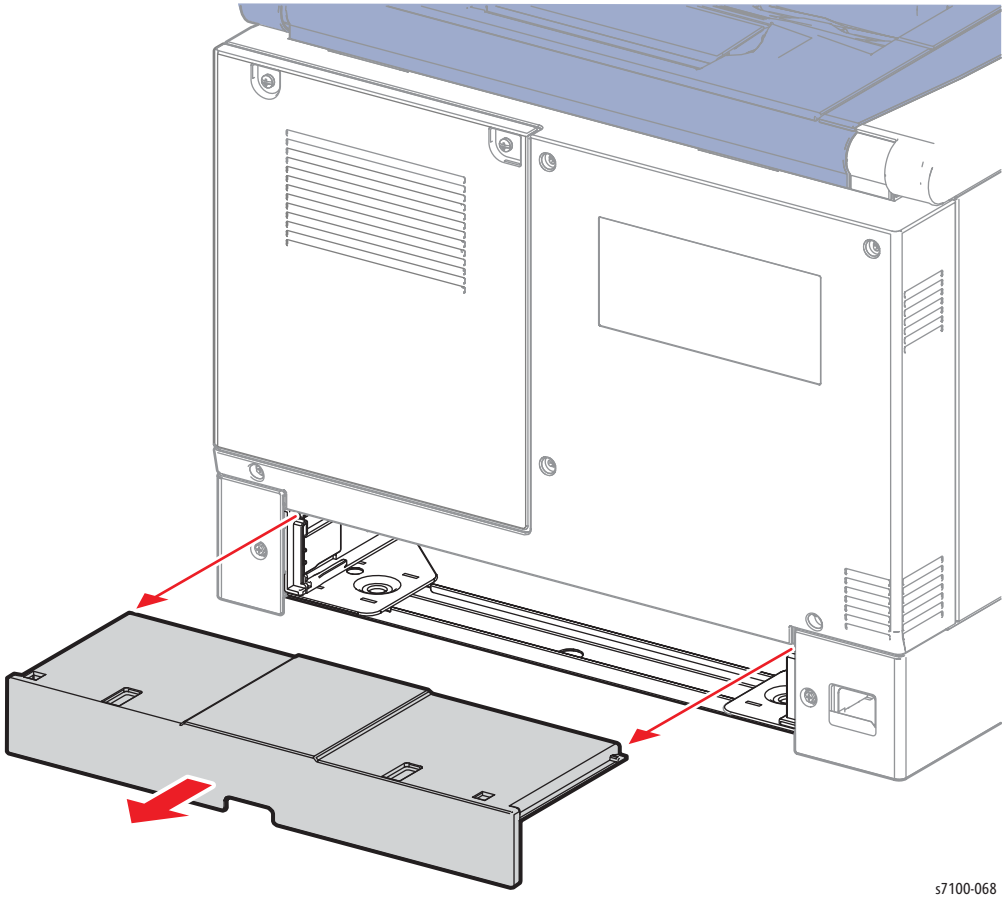


REP 2.11 Tray Cover

PL 2.1.14

1. From the rear side of the printer, pull out the Tray Cover.

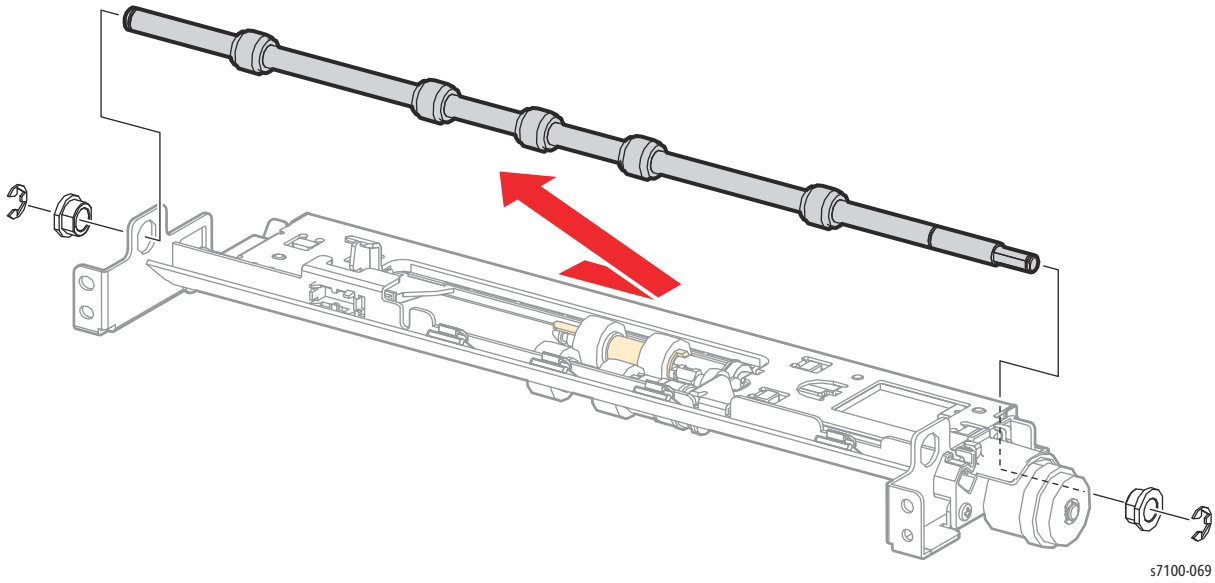
   Note: If there is a catch while pulling out the Tray Cover, slightly lift the Cover while pulling it out.



REP 2.12 Turn Roller Assembly

PL 2.2.1

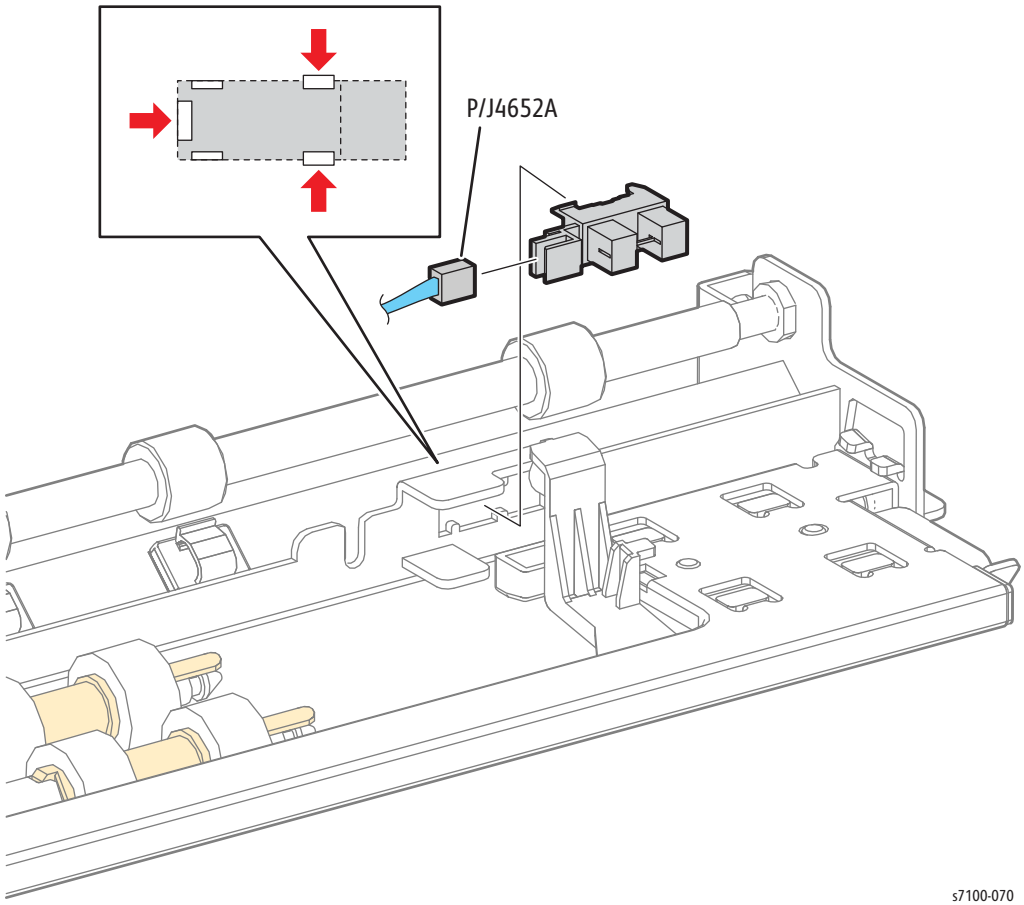
1. Remove Tray 1.
2. Remove the Bypass Tray Frame Assembly (REP 3.1 Bypass Tray Frame Assembly on page 4-69).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44).
8. Remove the Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41).
9. Remove the Feeder Assembly (REP 2.1 Feeder Assembly on page 4-37).
10. Remove the E-rings that secure the left and right Sleeve Bearings (PL 2.2.6).
11. Remove the Sleeve Bearings that secure the Turn Roller Assembly.
12. Slide the Turn Roller Assembly toward the right, free the Shaft from the Sleeve Bearing hole while lifting the Turn Roller to remove.



REP 2.13 No Paper Sensor

PL 2.2.2

1. Remove Tray 1.
2. Remove the Bypass Tray Frame Assembly (REP 3.1 Bypass Tray Frame Assembly on page 4-69).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44).
8. Remove the Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41).
9. Remove the Feeder Assembly (REP 2.1 Feeder Assembly on page 4-37).
10. Disconnect the wiring harness connector P/J4652A.
11. Release the hooks that secure the No Paper Sensor and remove the Sensor.

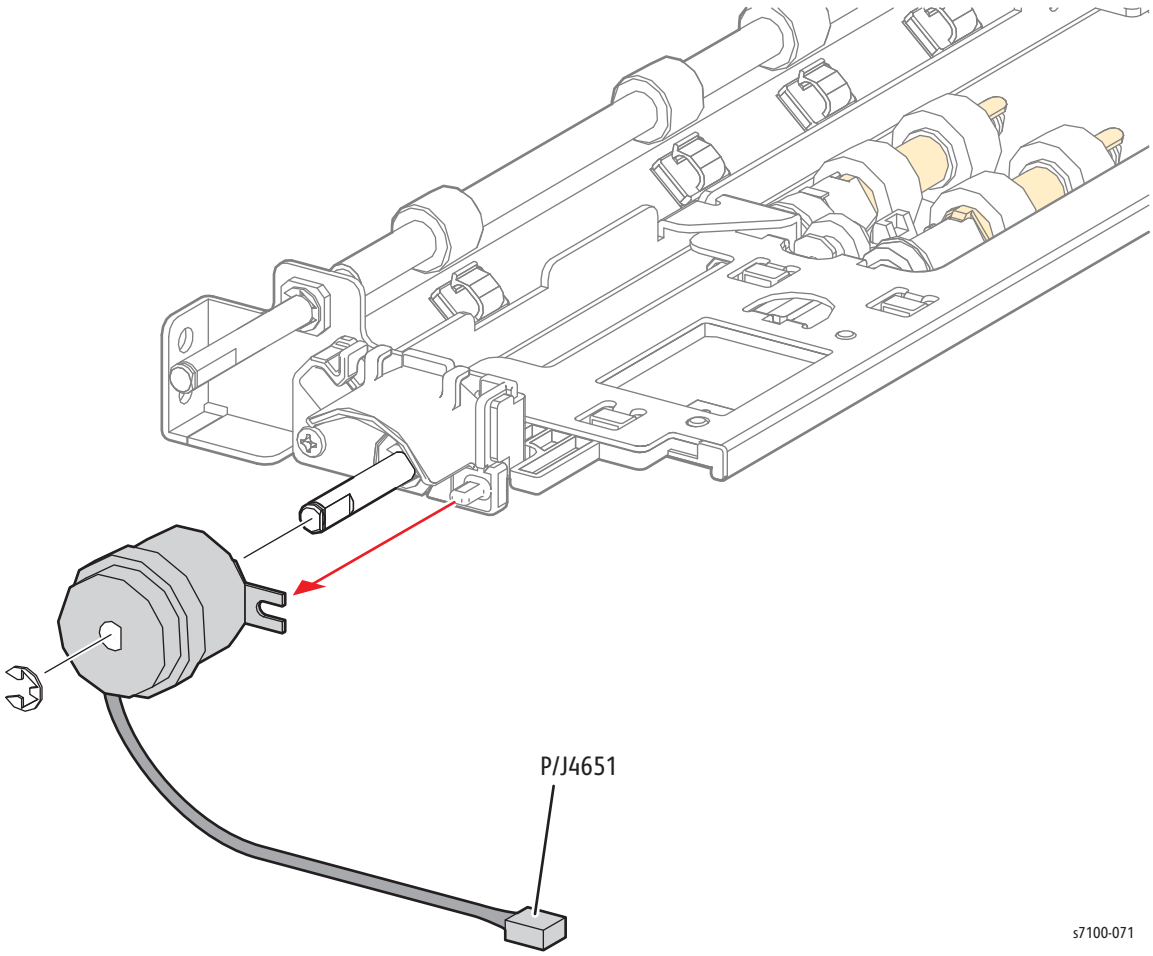


REP 2.14 Feed Roller Clutch

PL 2.2.8

1. Remove Tray 1.
2. Remove the Bypass Tray Frame Assembly (REP 3.1 Bypass Tray Frame Assembly on page 4-69).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44).
8. Remove the Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41).
9. Remove the Feeder Assembly (REP 2.1 Feeder Assembly on page 4-37).

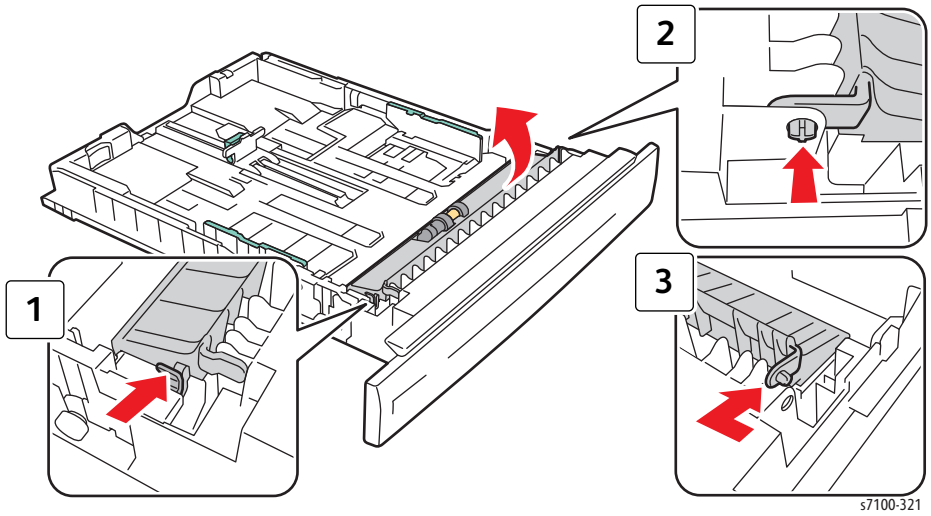
   Note: P/J4651 has been disconnected in the Feeder Assembly removal procedure.
10. Remove the E-ring that secures the Feed Roller Clutch.
11. Release the convex part of the Feed Roller Clutch from the frame while pulling the Clutch out from the Shaft.



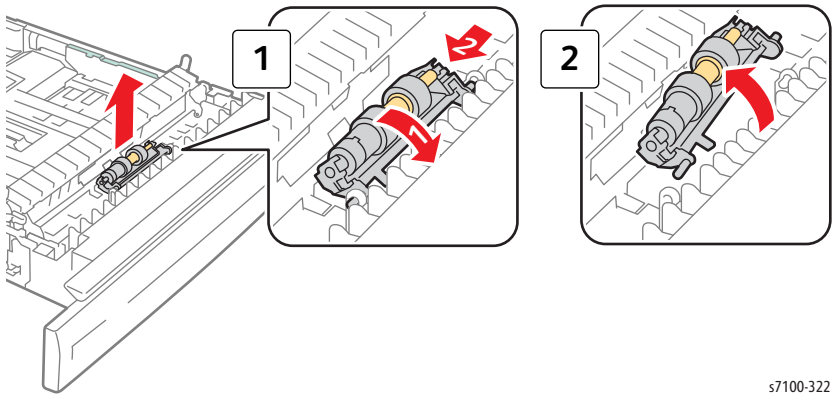
REP 2.15 Feed Roller/ Retard Roller Assembly

PL 2.2.11/ PL 2.2.99

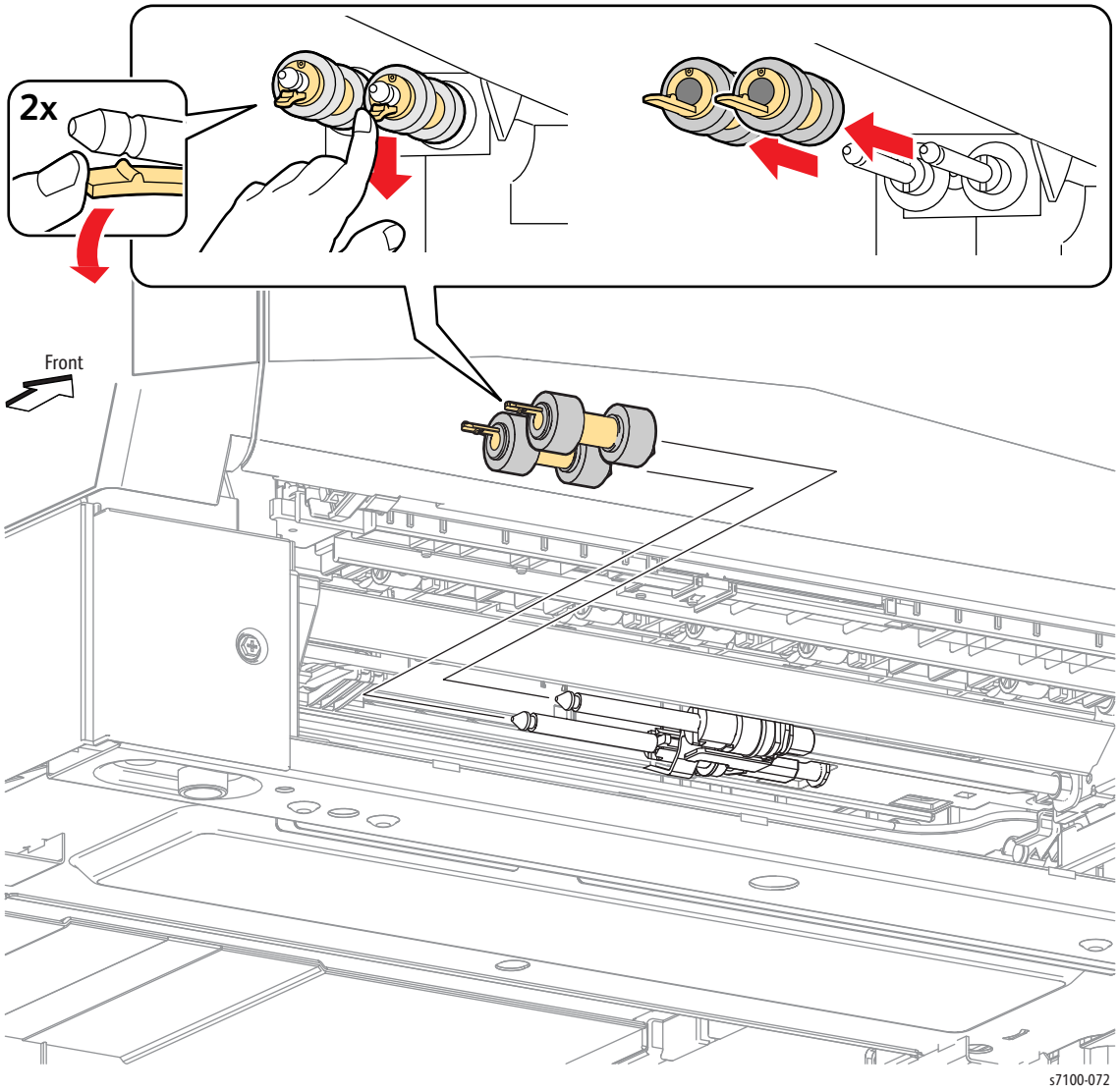
1. Remove Tray 1.
2. Press the Latch inward, release the left and right tabs and open the Retard Chute (PL 2.3.21).



3. Rotate the Retard Roller Assembly upward while sliding the Retard Roller Assembly toward the left side, and remove the Retard Roller Assembly.

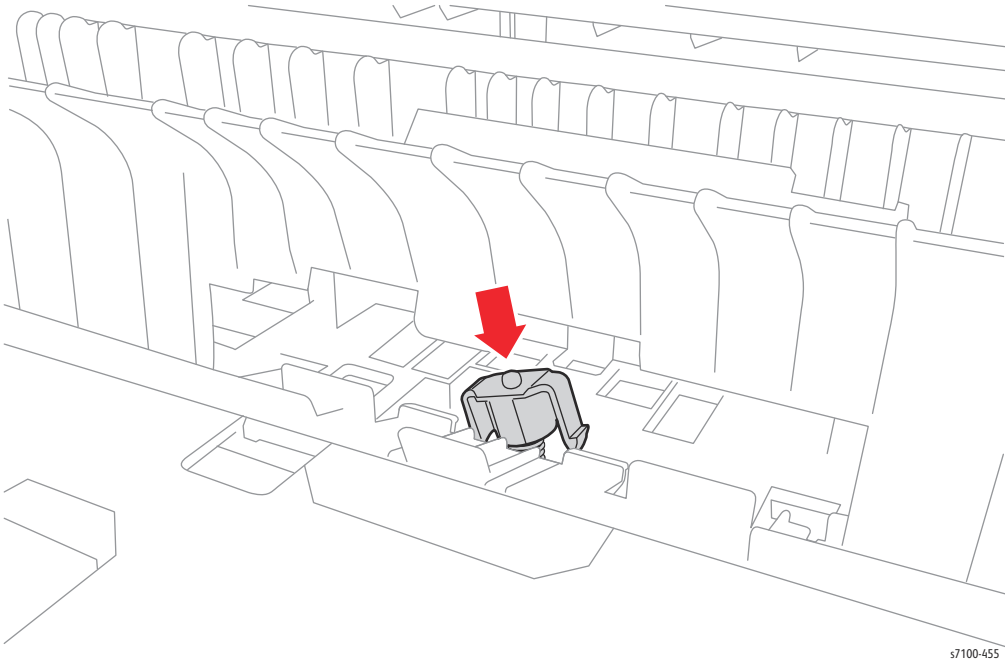


4. Release the hook that secures the Feed Roller and pull the Roller out from the Shaft.

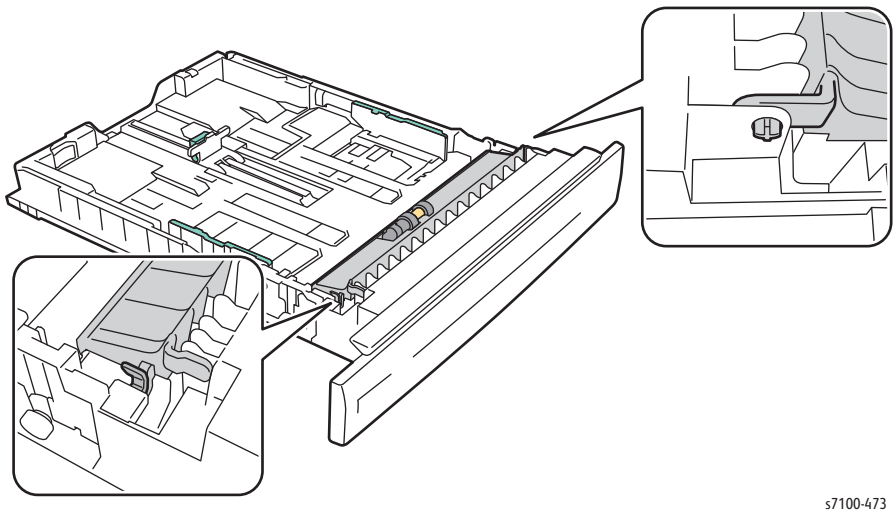


Replacement Notes:

- Be sure to secure the Retard Spring (PL 2.3.16) prior to installing the Retard Roller Assembly.



- Make sure the latch is completely seated when installing the Retard Chute.

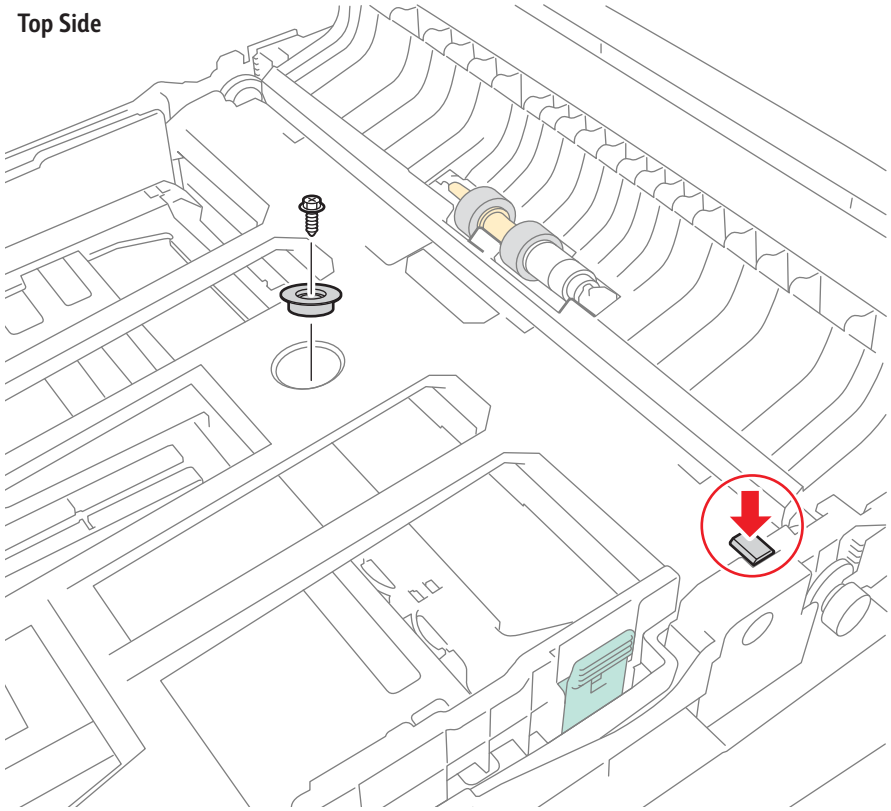


REP 2.16 Left Side Guide/ Right Side Guide

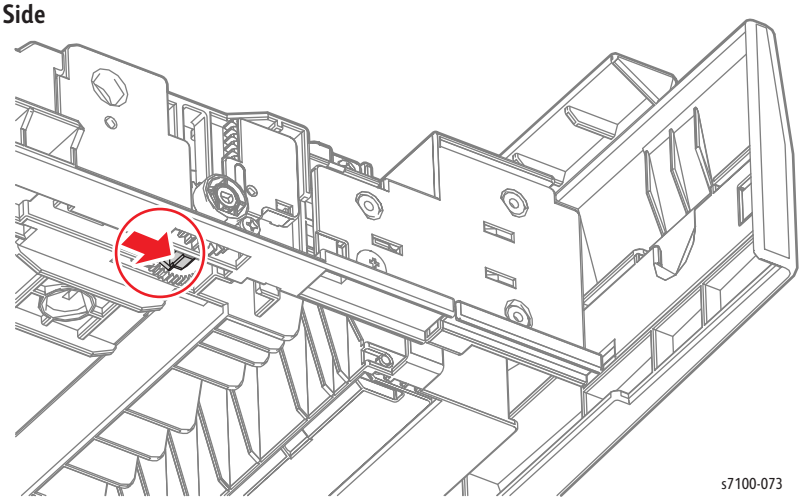
PL 2.3.1/ PL 2.3.3

1. Remove Tray 1.
2. Release the 2 Lock Levers to raise the Bottom Plate Assembly (PL 2.3.4).
3. Remove one screw (silver, tapped, 8mm) that secures the Pinion Gear and remove the Gear.

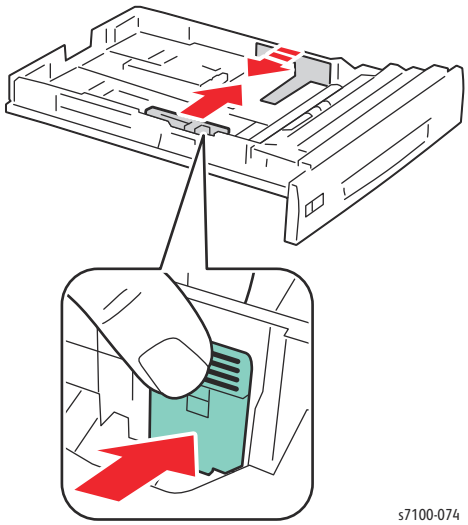
Top Side



Bottom Side



4. Press the knob of the Right Side Guide Assembly and move it toward the inner side.
5. While pressing down on the 2 hooks that attach the Right Guide Assembly to the Base Housing (PL 2.3.43), free the 3 tabs of the Right Guide Assembly from the Base Housing notch and remove the Right Guide Assembly.
6. Move the Left Side Guide Assembly toward the inner side.
7. While pressing down the 2 hooks that attach the Left Side Guide Assembly to the Base Housing, free the 3 tabs of the Left Side Guide Assembly from the Base Housing notch and remove the Left Side Guide Assembly.

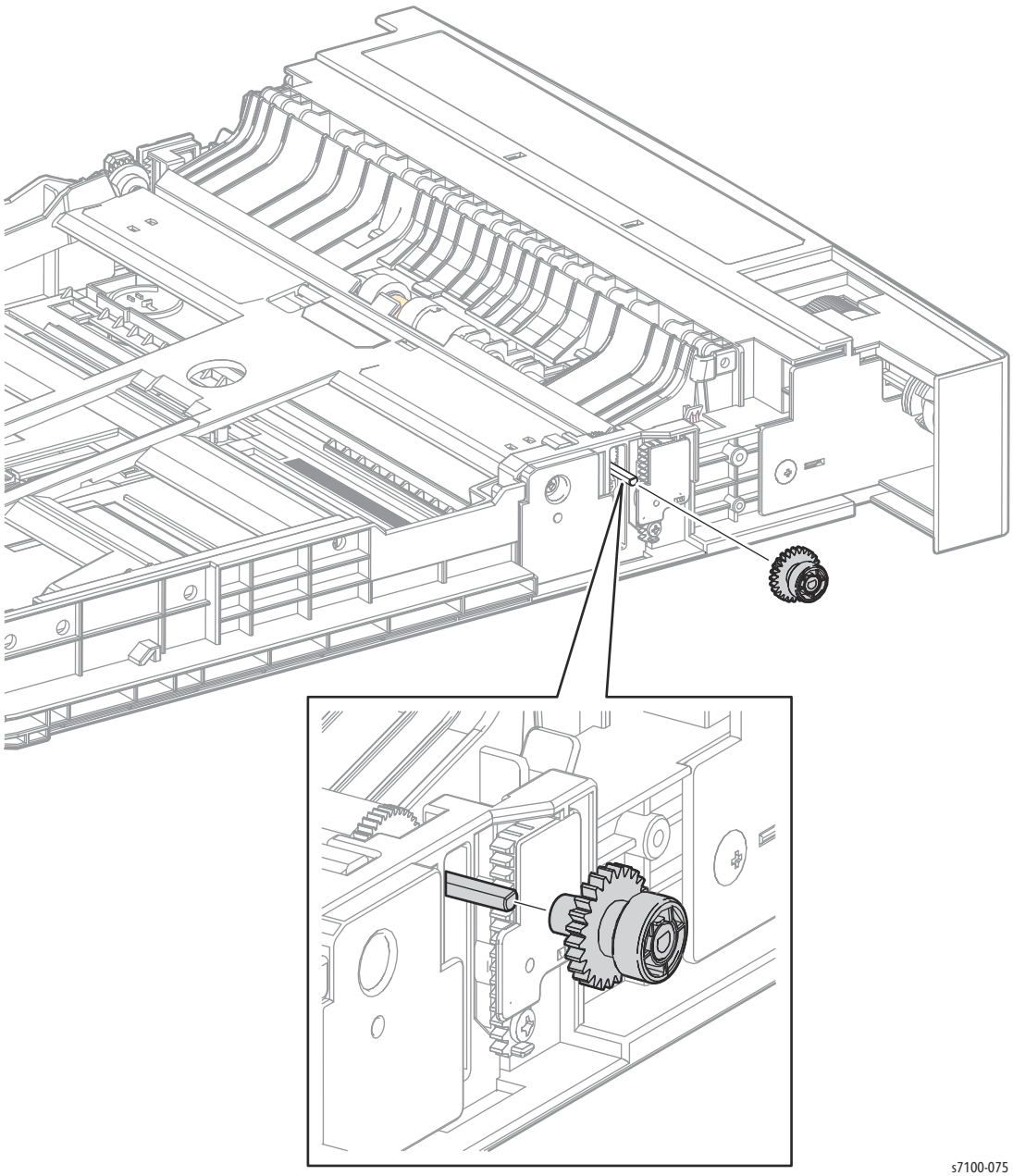


REP 2.17 Bottom Plate Assembly

PL 2.3.4

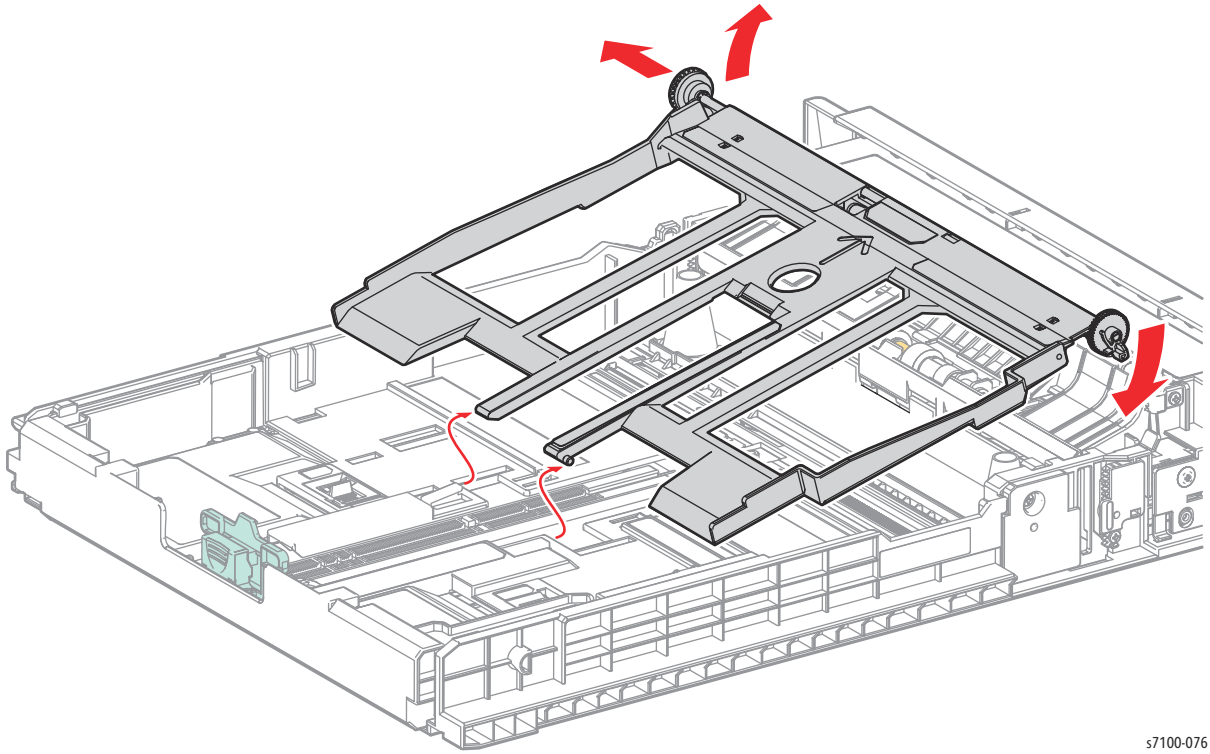
1. Remove Tray 1.
2. Remove the Left/ Right Side Guide Assembly (REP 2.16 Left Side Guide/ Right Side Guide on page 4-57).
3. Release the hook of the Right PB Gear (PL 2.3.35) and pull it out from the Shaft to remove.

Figure 1



4. Press down on the Shaft of the Bottom Plate while moving the Left PB Gear (PL 2.3.10) side upwards from the Base Housing, then pull out the Shaft slightly to lift up the front of the Bottom Plate Assembly.
5. Release the notches on the rear side of the Bottom Plate Assembly and remove the Plate Assembly.

Figure 2



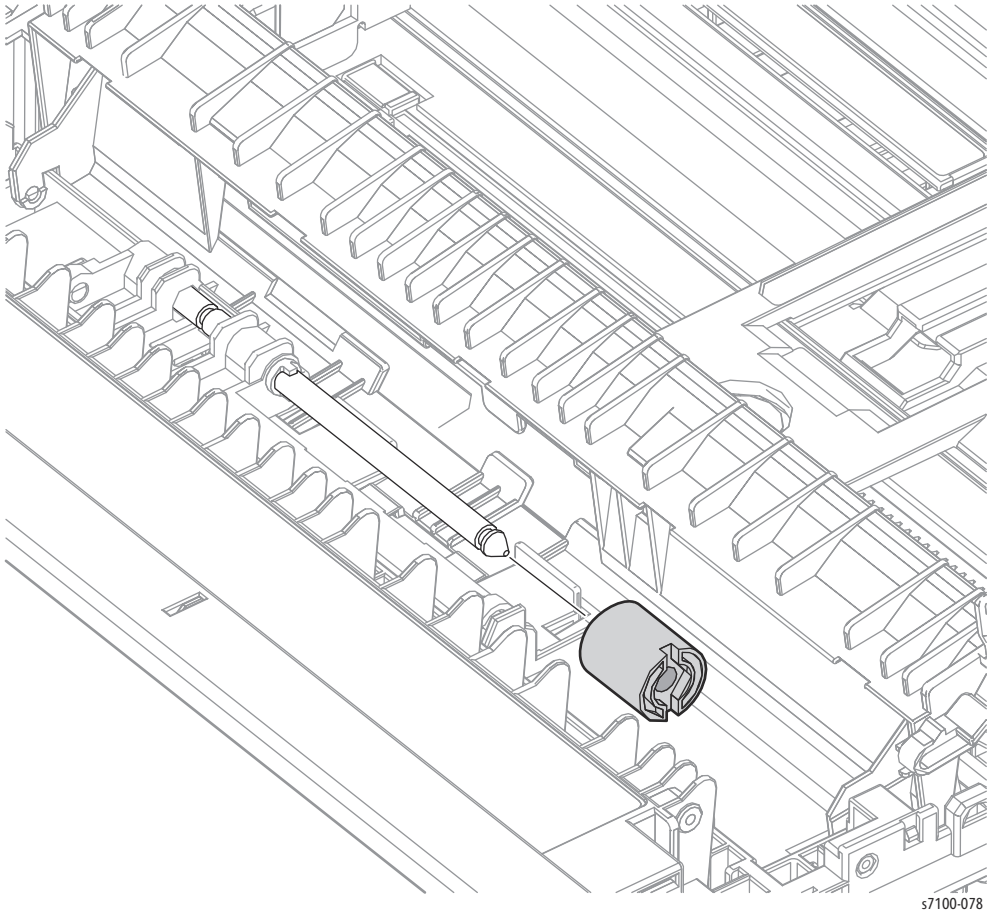
Replacement Notes:

- When installing the Right PB Gear, make sure you install the Right PB Gear with the D cut surface of the Shaft facing up (see Figure 1 on page 4-59). This way, the hook of the Right PB Gear will be facing down and the Bottom Plate Assembly can be positioned correctly.
- When installing the Bottom Plate Assembly, be sure the Bottom Up Spring (PL 2.3.17) is mounted securely.

REP 2.18 Retard Friction Clutch

PL 2.3.13

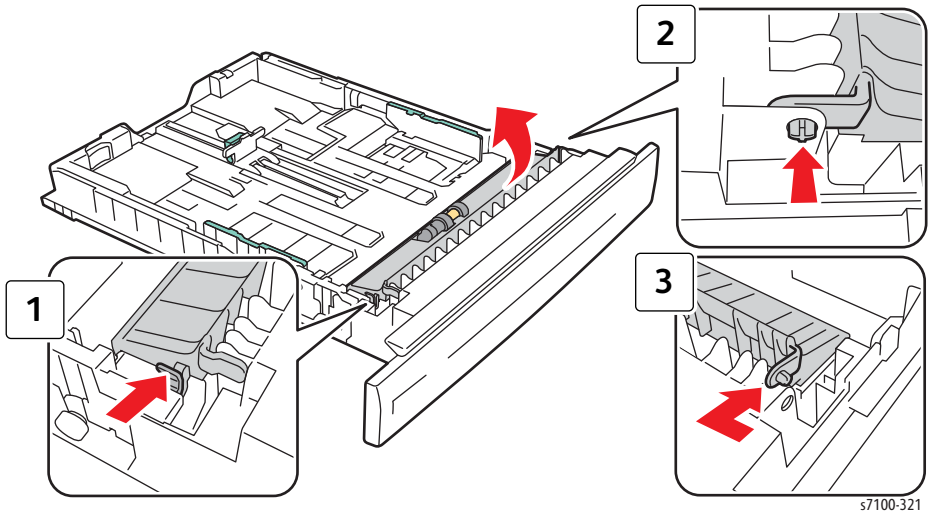
1. Remove Tray 1.
2. Remove the Feed Roller (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54).
3. Pull the Retard Friction Clutch out from the Shaft to remove.



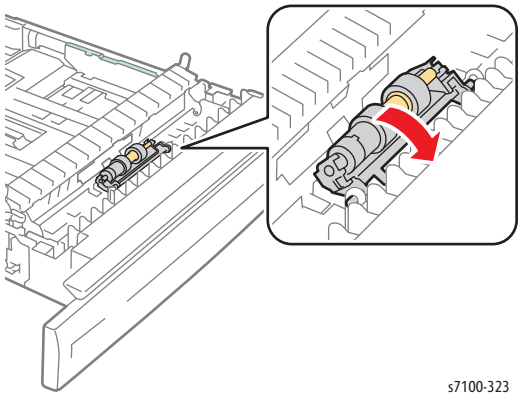
REP 2.19 Retard Spring

PL 2.3.16

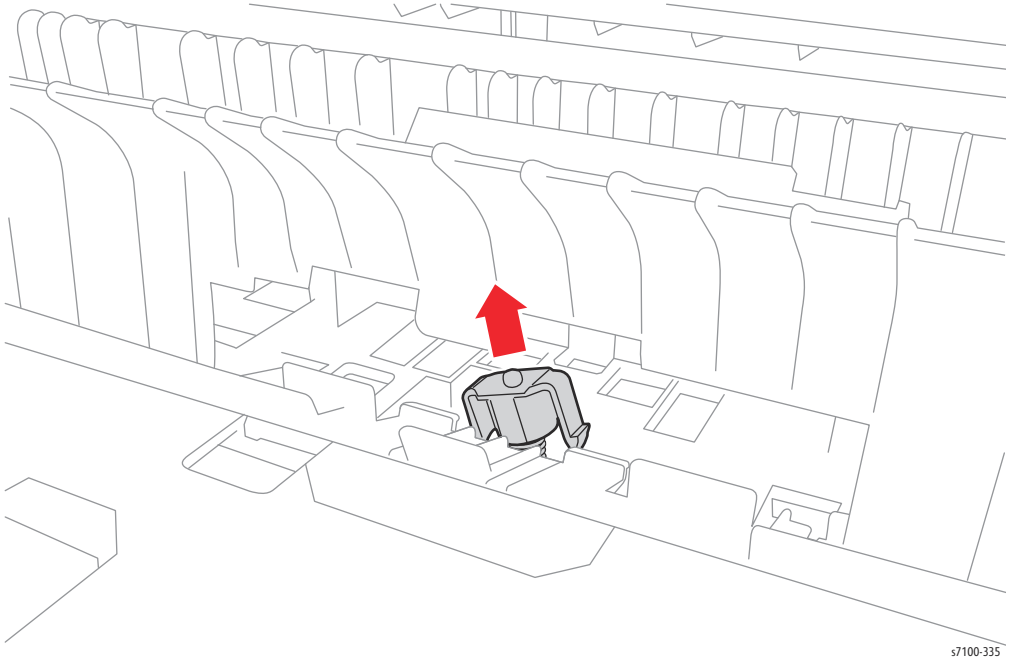
1. Remove Tray 1.
2. Press the Latch inward, release the left and right tabs and open the Retard Chute (PL 2.3.21).



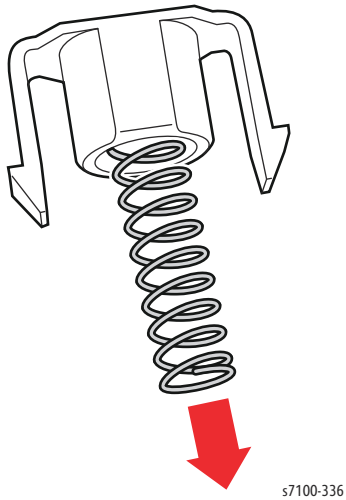
3. Rotate the Feed Roller Assembly upward.



4. Press and release the Separator Spring Holder (PL 2.3.45) from the Tray.



5. Remove the Separator Spring Holder together with the Retard Spring.
6. Remove the Retard Spring.



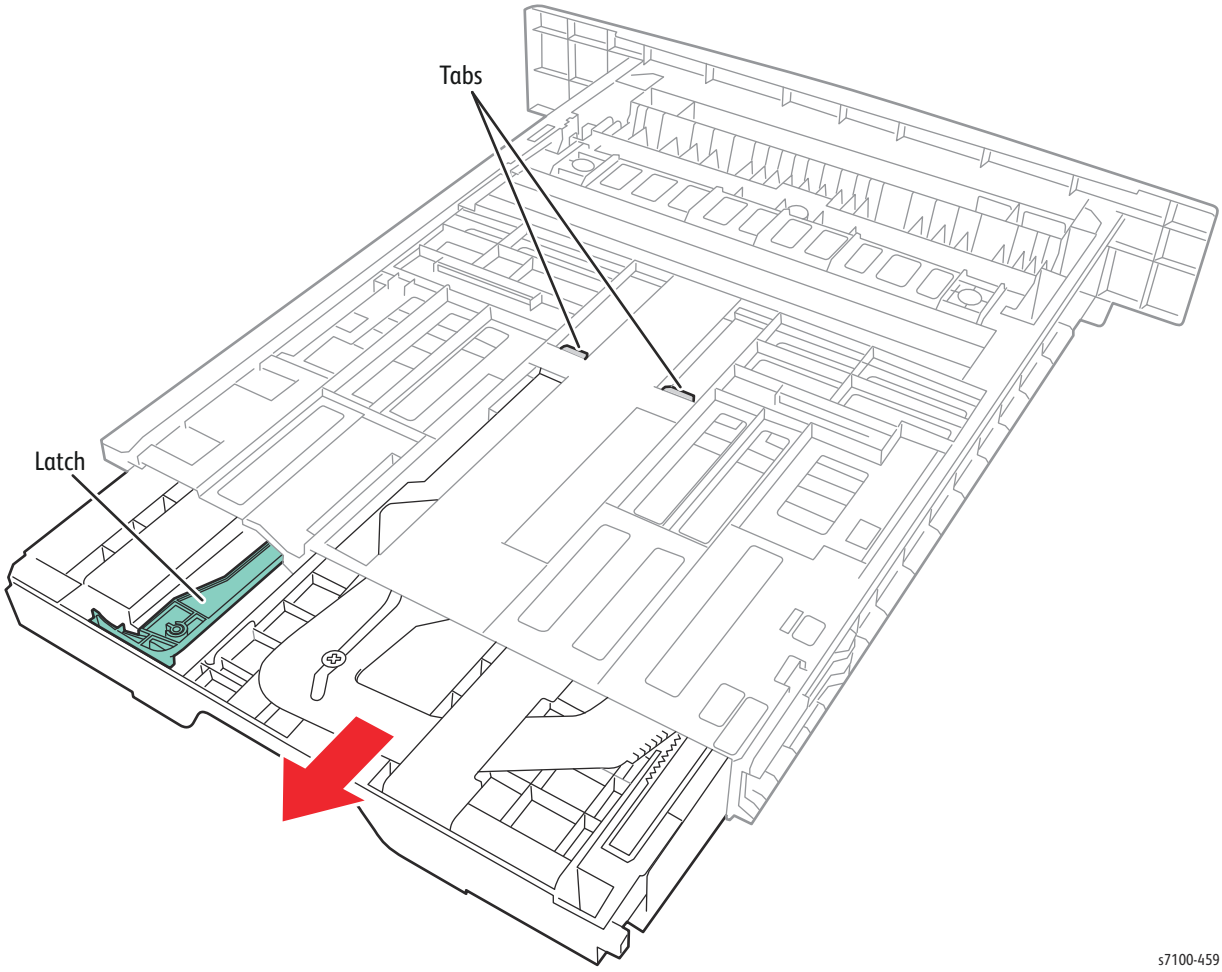
REP 2.20 End Guide Assembly

PL 2.3.31

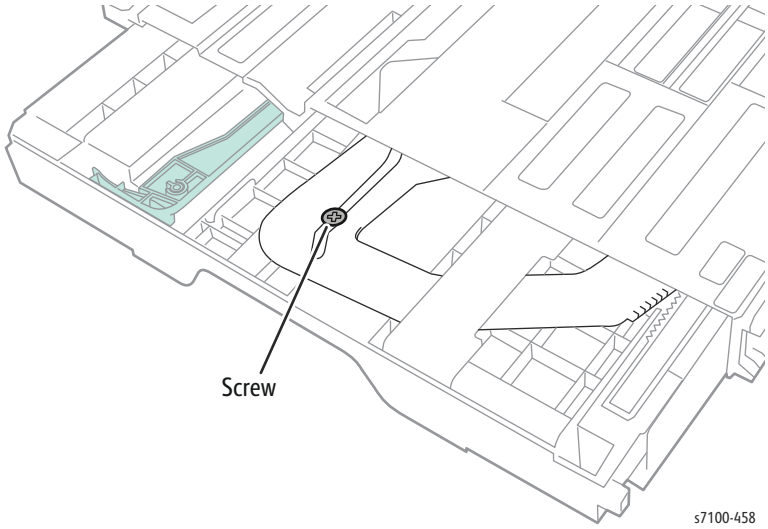
1. Remove Tray 1.

   Note: If the paper Tray is loaded with A3 paper, steps 2 and 3 are not required.

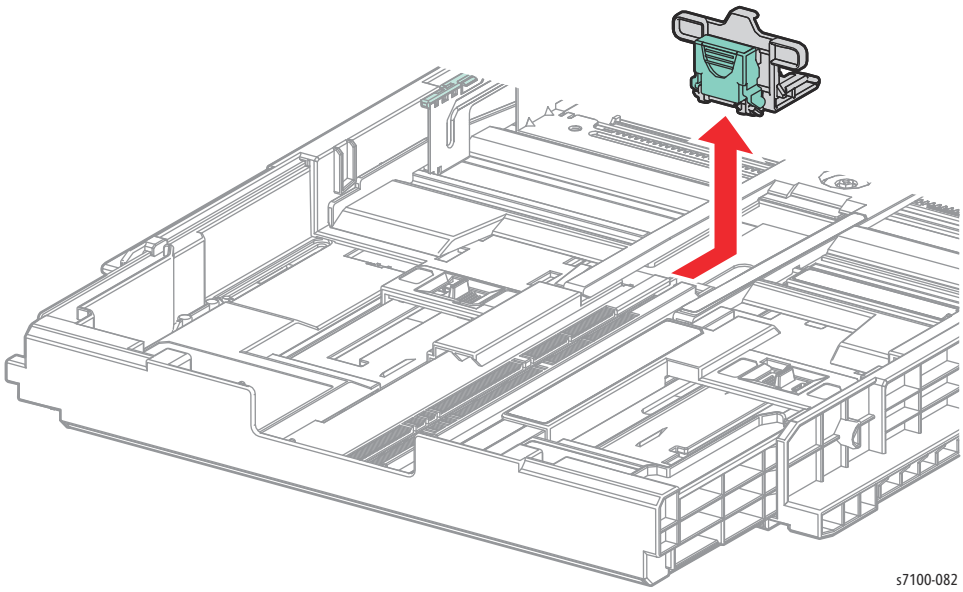
2. Turn the Tray over, press the Lever while pressing the tabs on the bottom of the Tray and pull the Exit Housing Assembly (PL 2.3.32) to the rear.



3. Remove one screw (silver, tapped, 8 mm) that secures the End Guide Assembly.



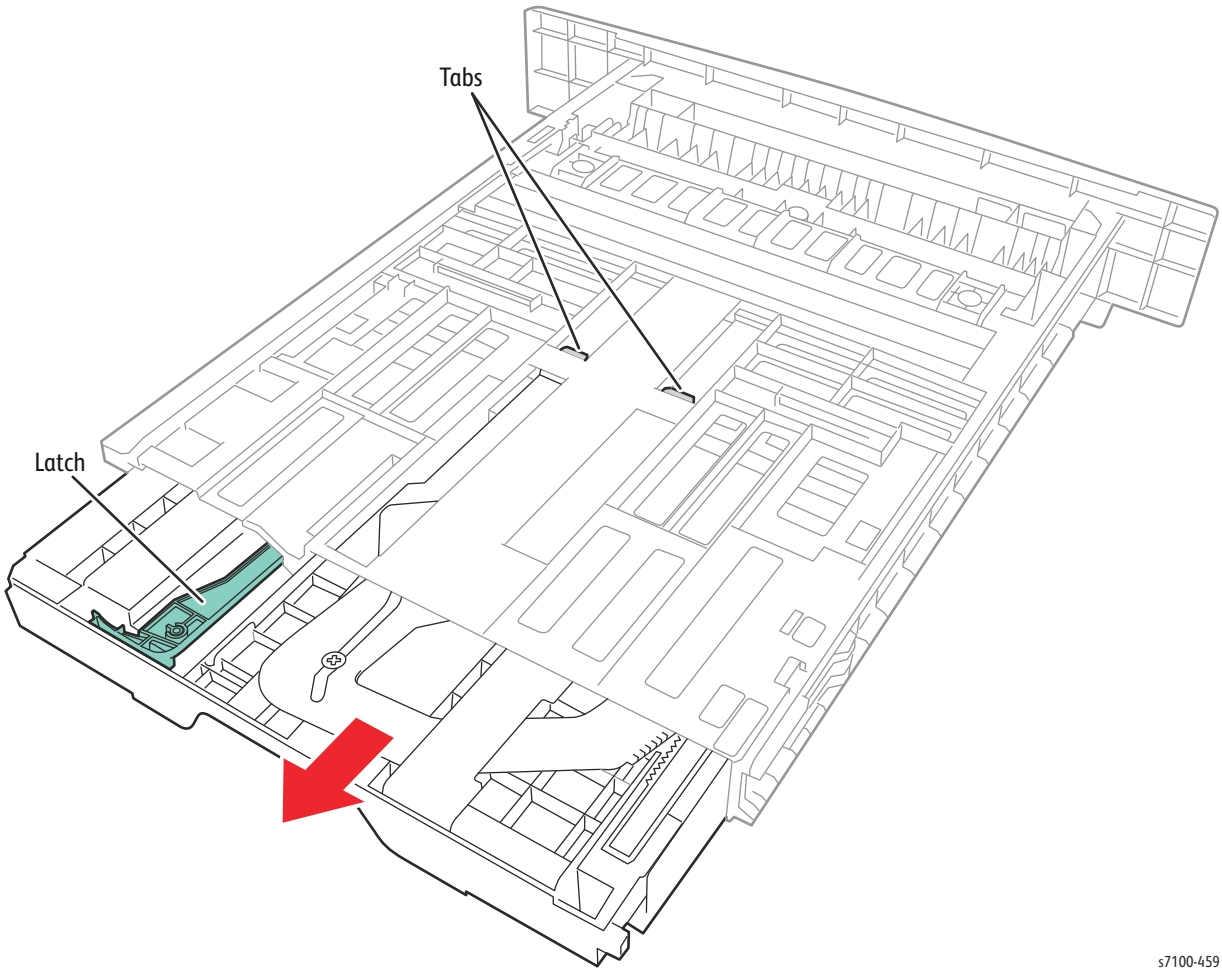
4. Turn the Exit Housing Assembly over and slide the End Guide Assembly to the front until it can go no further and remove the End Guide Assembly from the Exit Housing Assembly.



REP 2.21 Exit Housing Assembly

PL 2.3.32

1. Remove Tray 1.
2. Turn the Tray over, press the Lever while pressing the tabs on the bottom of the Tray and pull the Exit Housing Assembly (PL 2.3.32) to the rear.

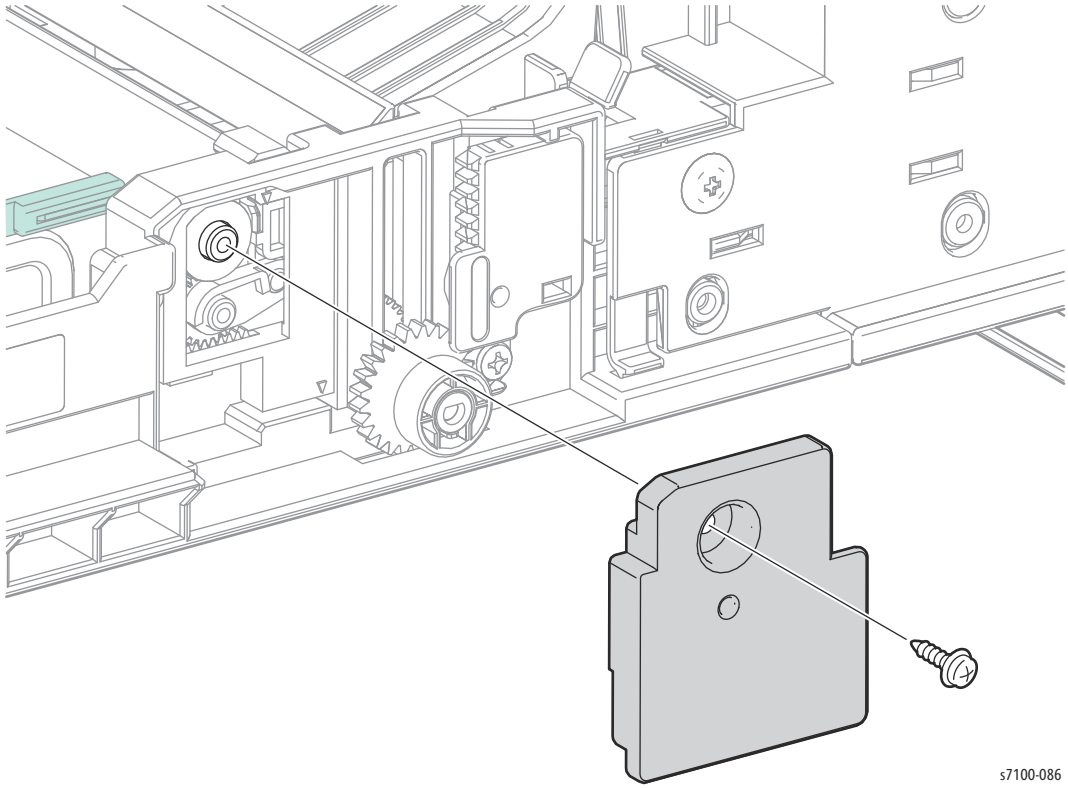


REP 2.22 Lift Up Gear

PL 2.3.34 - PL 2.3.42

1. Remove Tray 1.
2. Remove one screw (silver, tapped, 10 mm) that secures the Bottom Up Cover (PL 2.3.42) and remove the Cover.

Figure 1

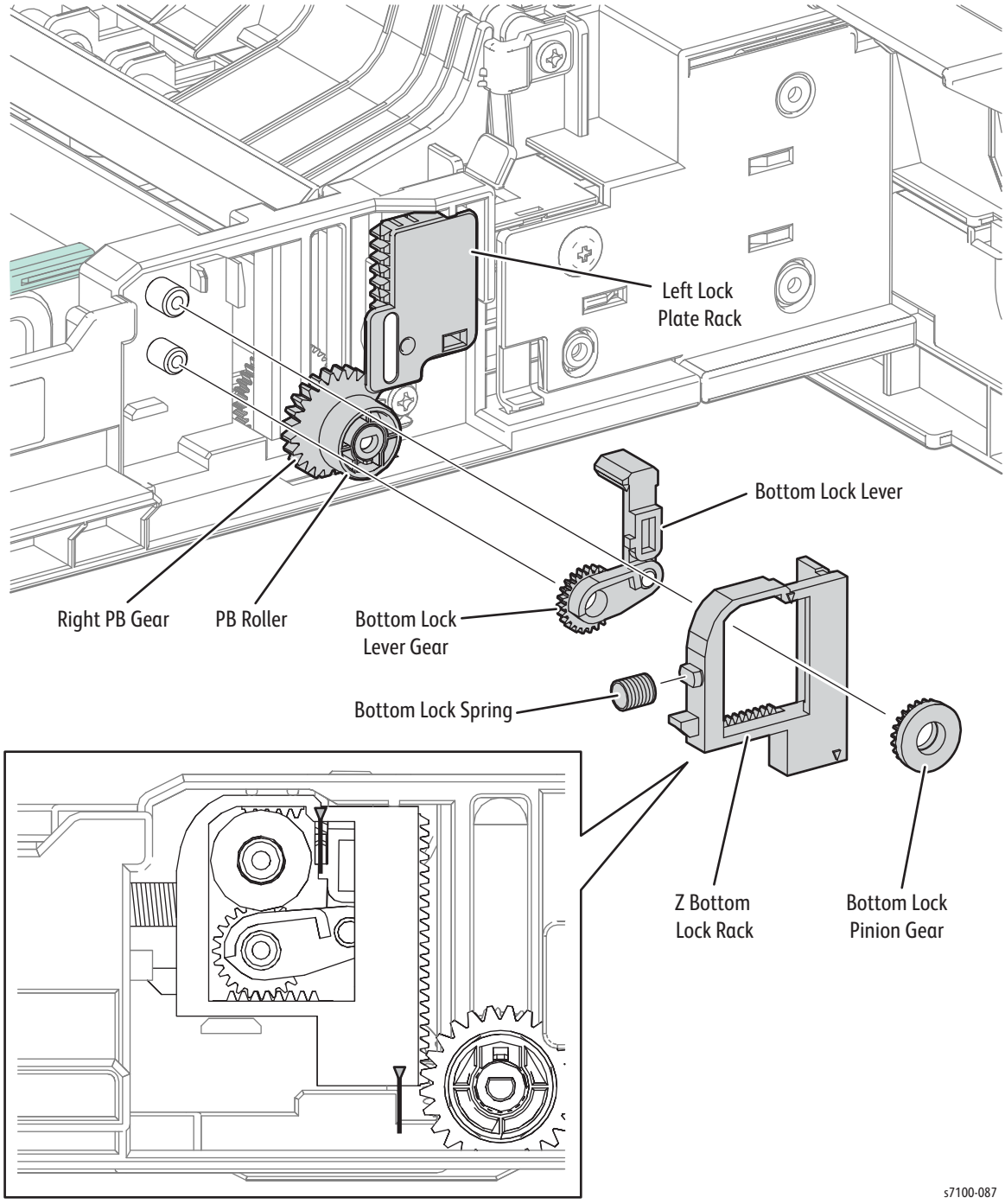


Note: When removing various parts of the Lift Up Gear Kit in the following step, be careful not to drop or lose any parts (see Figure 2 on page 4-68).

3. Remove the various parts of the Lift Up Gear Kit.

Replacement Note: When installing the various parts of the Lift Up Gear Kit, their phases must be aligned. Install the parts such that each is positioned to match the 2 triangle marks at the Z Bottom Lock Rack and install the Bottom Lock Pinion Gear as the last step.

Figure 2

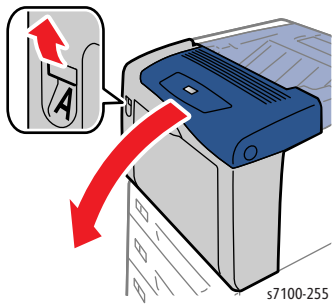


Bypass Tray

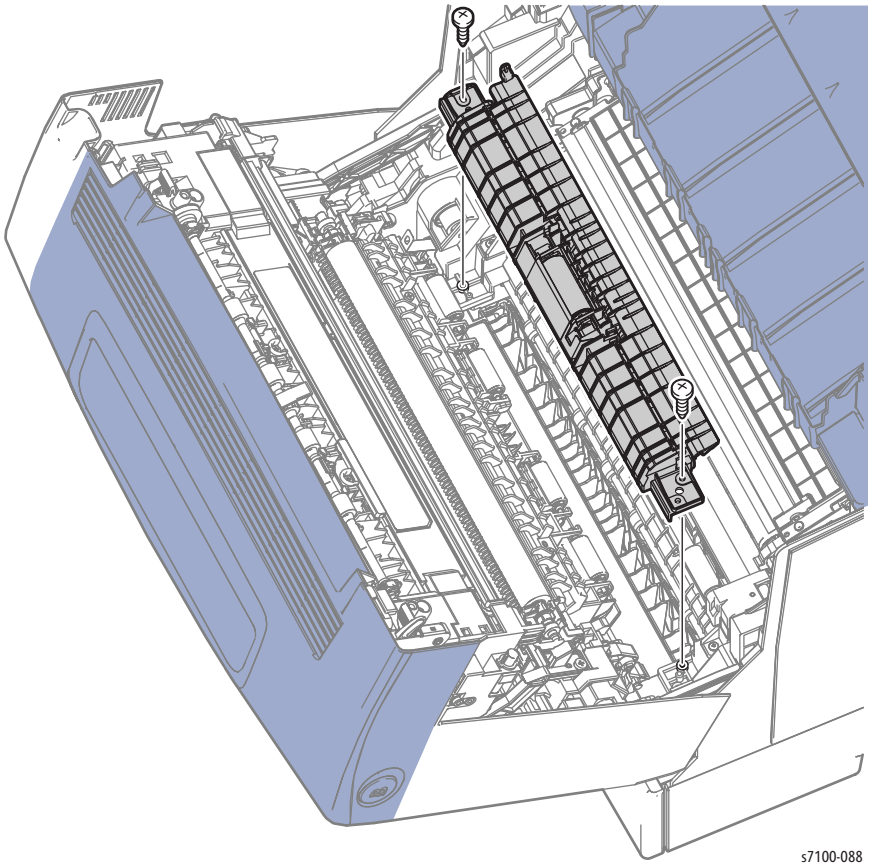
REP 3.1 Bypass Tray Frame Assembly

PL 3.1.2

1. Release latch A and open the Front Frame Assembly (PL 4.1.6).



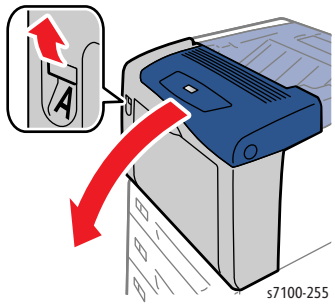
2. Remove 2 screws (silver, tapped, 10 mm) that secure the Bypass Tray Frame Assembly to the printer.
3. Remove the Bypass Tray Frame Assembly from the printer.



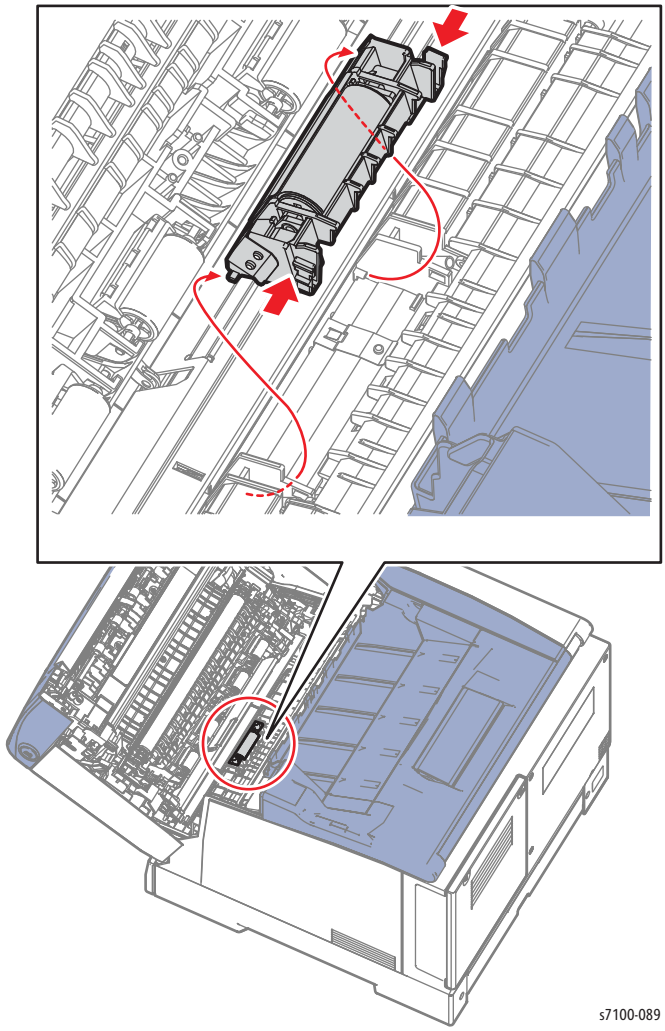
REP 3.2 Separator Retard Holder Assembly

PL 3.1.8

1. Release latch A and open the Front Frame Assembly (PL 4.1.6).



2. Press the knobs on the left and right of the Separator Retard Holder Assembly to release the locks and free the bosses on the bottom left and right of the Retard Holder Assembly to remove.

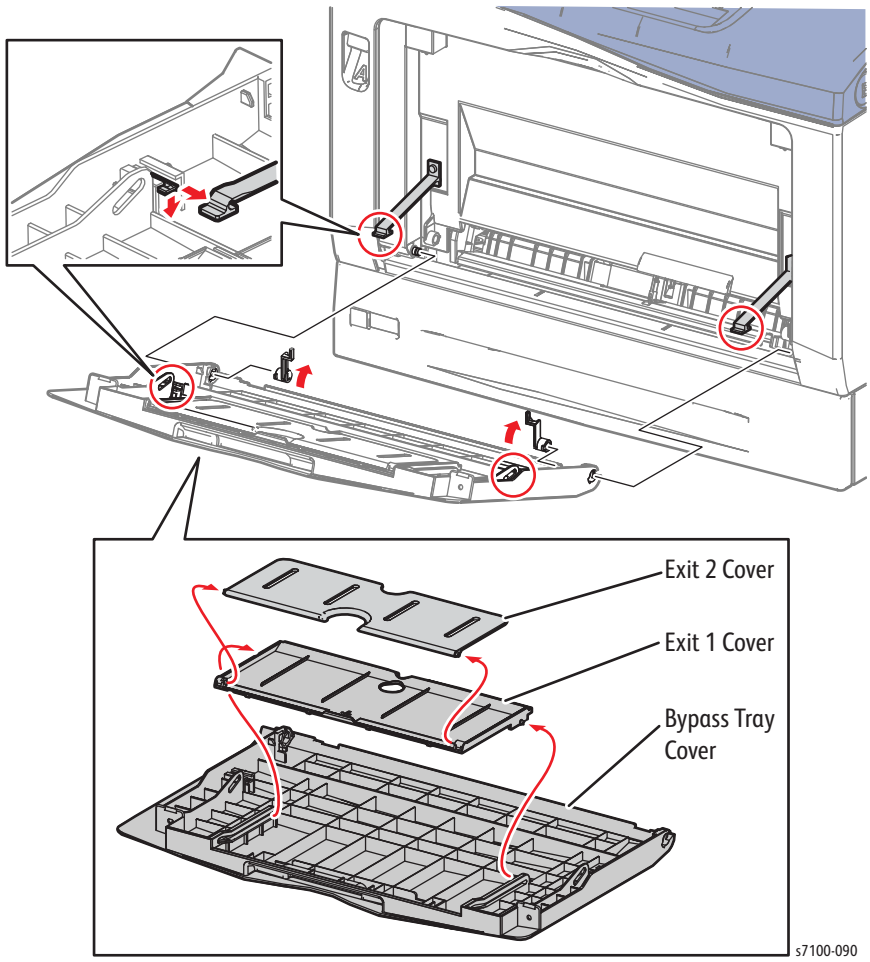


REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover

PL 3.1.9/ PL 3.1.14/ PL 3.1.15

1. Open the Bypass Tray Cover Assembly (PL 3.1.9).
2. Remove the Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73).
3. While pressing down on the 2 tabs on the Bypass Tray Cover side of the Bypass Tray Strap (PL 3.1.1), slide the Bypass Tray Strap horizontally to remove it.

   Note: In the following steps, be careful not to mix the Left and Right Bypass Tray Cover Locks (PL 3.1.11/ PL 3.1.12) in the following step. The Left Bypass Tray Cover Lock has an "**L**" engraved mark, while the Right Bypass Tray Cover Lock has an "**R**" engraved mark.
4. Rotate the Left/ Right Bypass Tray Cover Lock that secure the Bypass Tray Cover Assembly to the Left/ Right Pin (PL 3.1.10/ PL 3.1.13) upward and pull the Bypass Tray Cover Assembly toward the inner side to remove it.
5. Release the Left/ Right Pin that secures it to the printer and remove the Bypass Tray Cover (PL 3.1.16).
6. Release the boss on the Exit 1 Cover from the groove of the Bypass Tray Cover and remove the Exit 1 Cover and Exit 2 Cover.

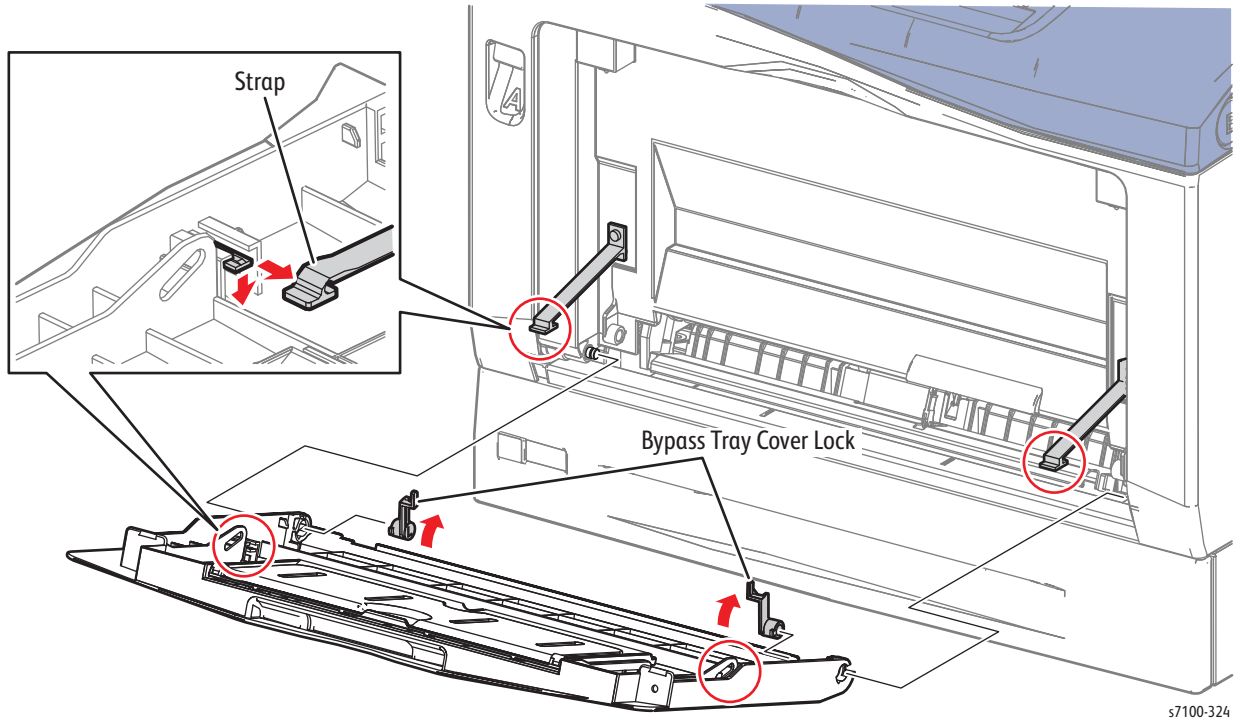


REP 3.4 Left/ Right Bypass Tray Cover Lock

PL 3.1.11/ PL 3.1.12

1. Open the Bypass Tray Cover (PL 3.1.9).
2. Remove the Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73).
3. While pressing down on the 2 tabs on the Bypass Tray Cover side of the Bypass Tray Strap (PL 3.1.1), slide the Bypass Tray Strap horizontally to remove it.

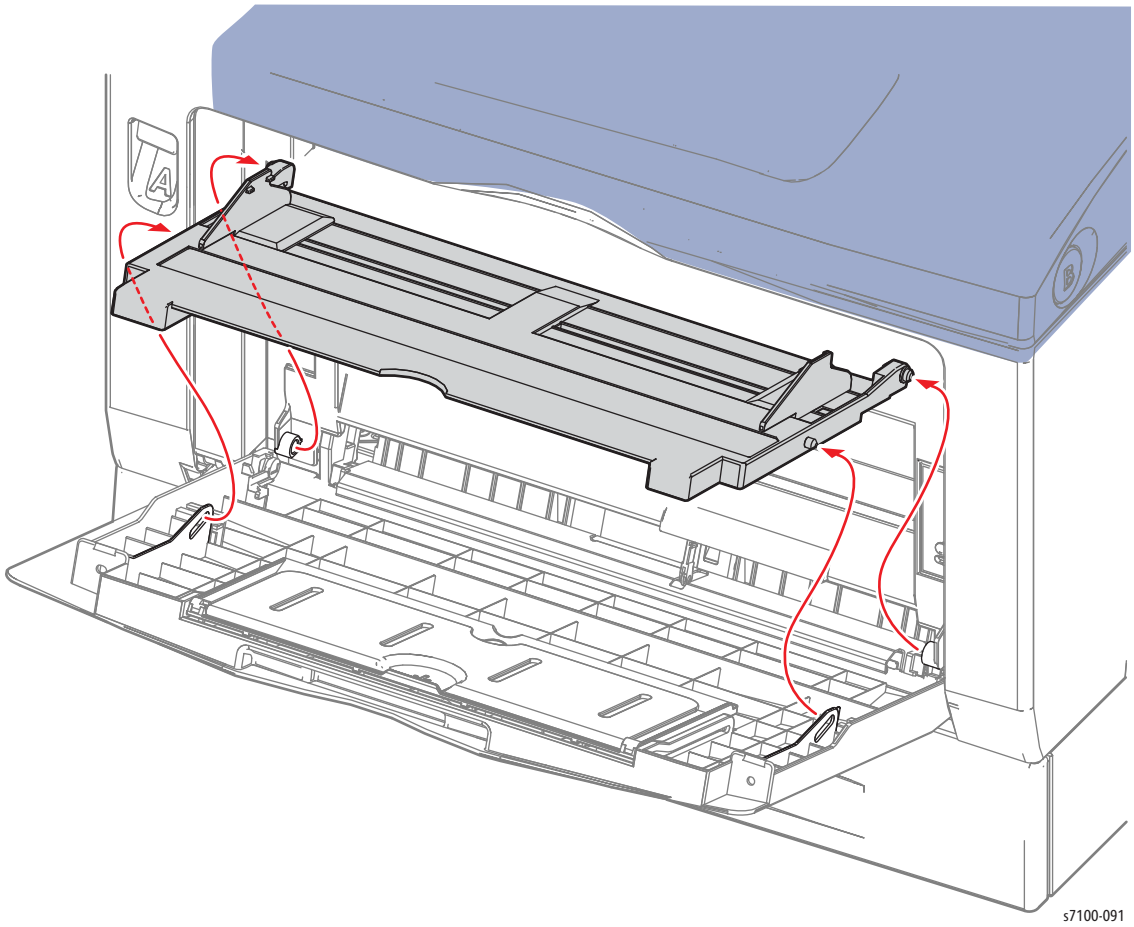
   Note: Be careful not to mix the left and the right of Left/ Right Bypass Tray Cover Lock (PL 3.1.11/ PL 3.1.12). The Left Bypass Tray Cover Lock has an "**L**" engraved mark, while the Right Bypass Tray Cover Lock has an "**R**" engraved mark.
4. Rotate the Left/ Right Bypass Tray Cover Lock that secure the Bypass Tray Cover Assembly to the Left/ Right Pin (PL 3.1.10/ PL 3.1.13) upward and pull the Bypass Tray Cover Assembly toward the inner side to remove it.



REP 3.5 Bypass Tray Assembly

PL 3.1.20

1. Open the Bypass Tray Cover Assembly (PL 3.1.9).
2. Release the 2 bosses on the front of the Bypass Tray Assembly from the Bypass Tray Cover.
3. Release the 2 bosses on the rear of the Bypass Tray Assembly from Bypass Tray Cover and remove the Bypass Tray Assembly.



Front Frame

REP 4.1 Front Frame Assembly

PL 4.1.6

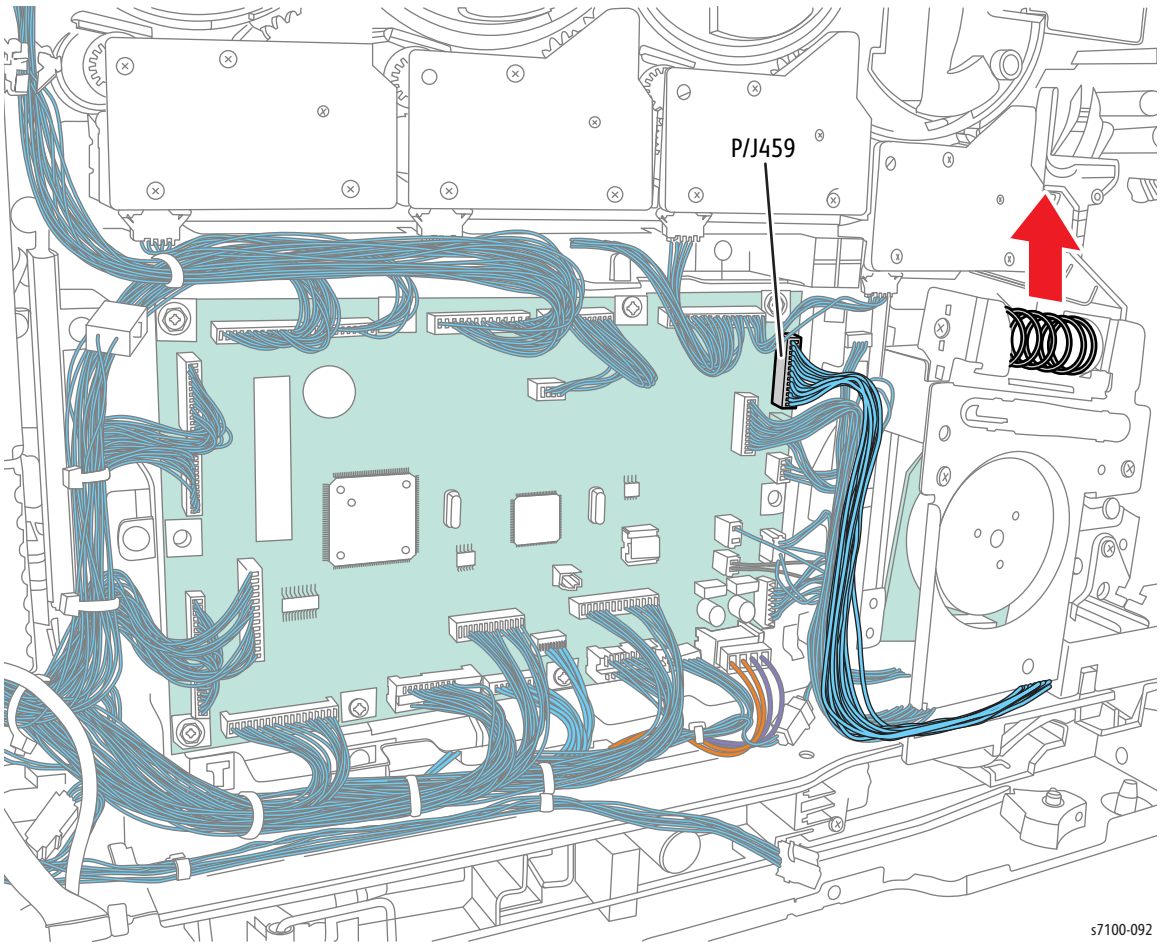
WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

1. Remove Tray 1.
2. Remove the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Feeder Cover (REP 2.10 Left Feeder Cover on page 4-49).
8. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
9. Remove the Control Panel Assembly (REP 1.12 Control Panel Assembly on page 4-29).
10. Remove the Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73).
11. Remove the Bypass Tray Cover (REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover on page 4-71).
12. Remove the Front Cover Assembly (REP 1.15 Front Cover Assembly on page 4-35).

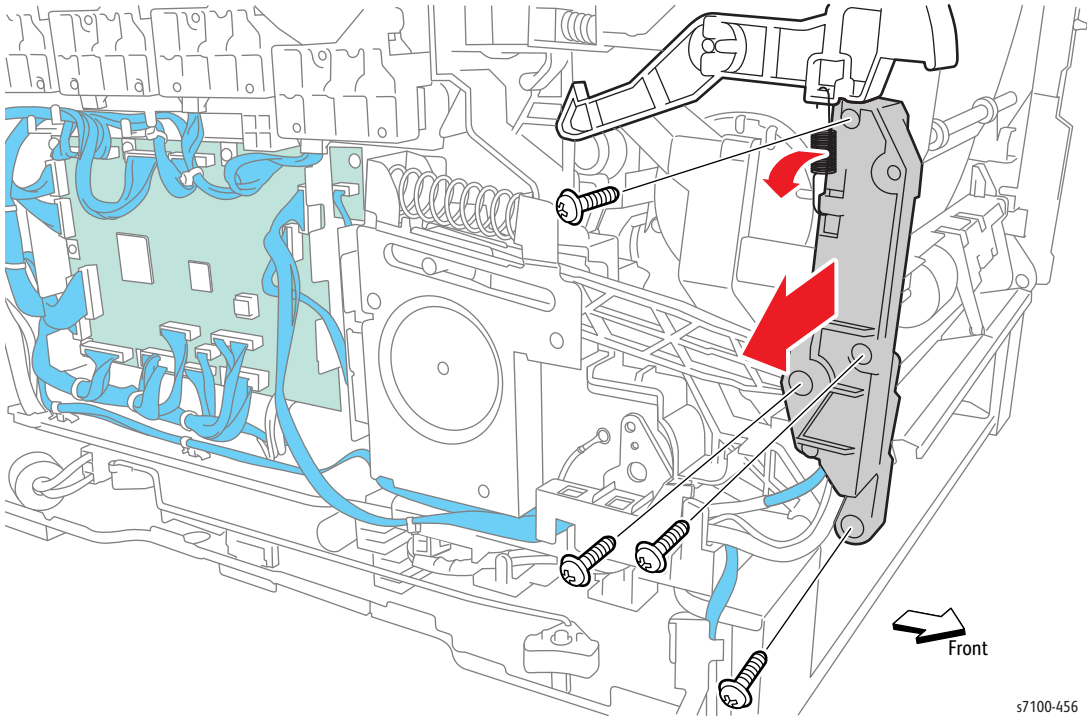
Note: If you wish to perform the next operations with the Front Cover Assembly removed, insert the removed Left and Right Pins (PL 3.1.10/ PL 3.1.13) back to their original positions and secure them in place before starting the procedure.

13. Move the wiring harness out of the way.
14. Disconnect the wiring harness connector P/J459 on the MCU PWB.
15. Remove the Damper Spring (PL 4.1.3) from the Damper Assembly.

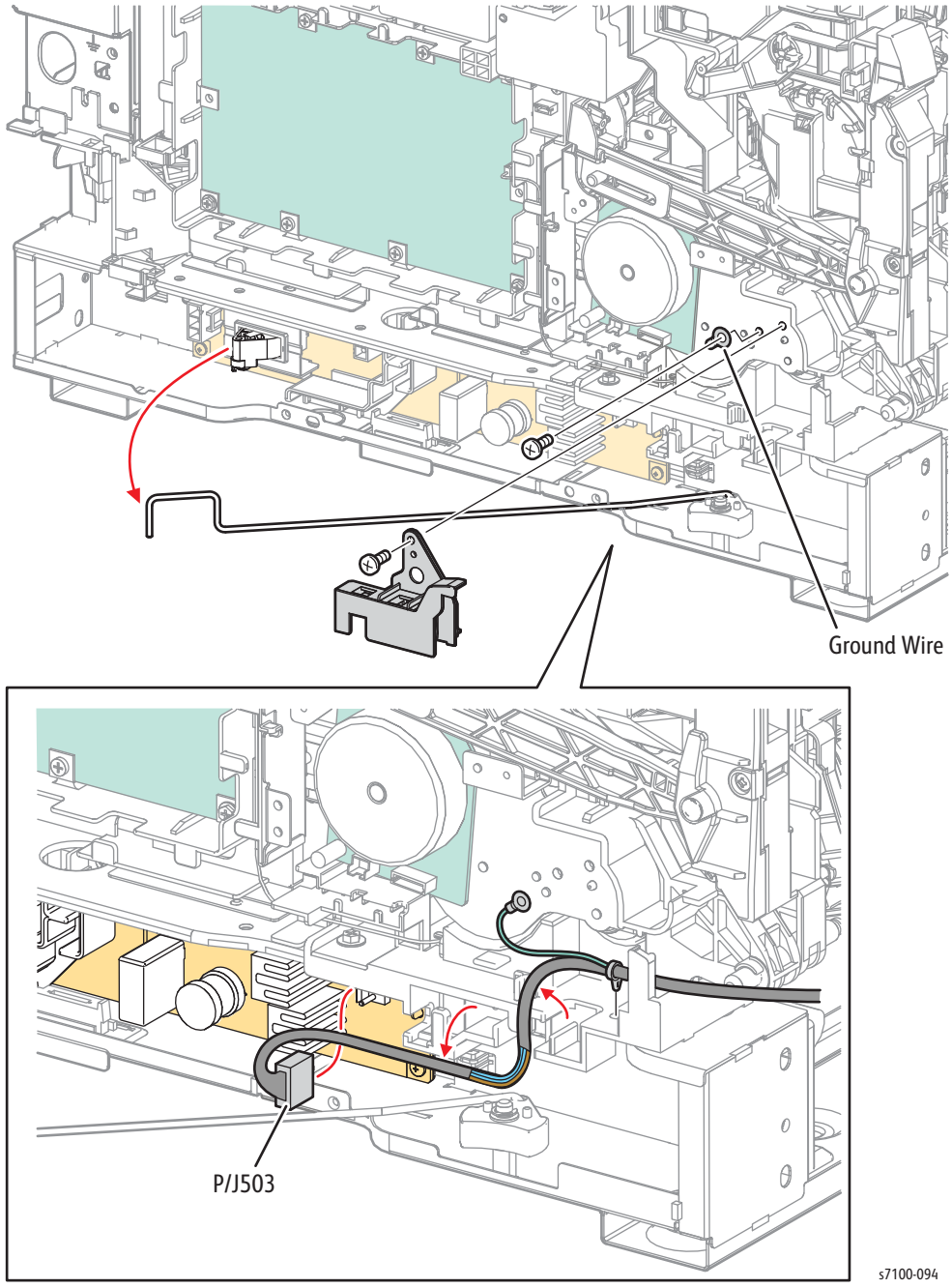
Note: Be sure to close the Front Frame Assembly prior to removing the Spring.



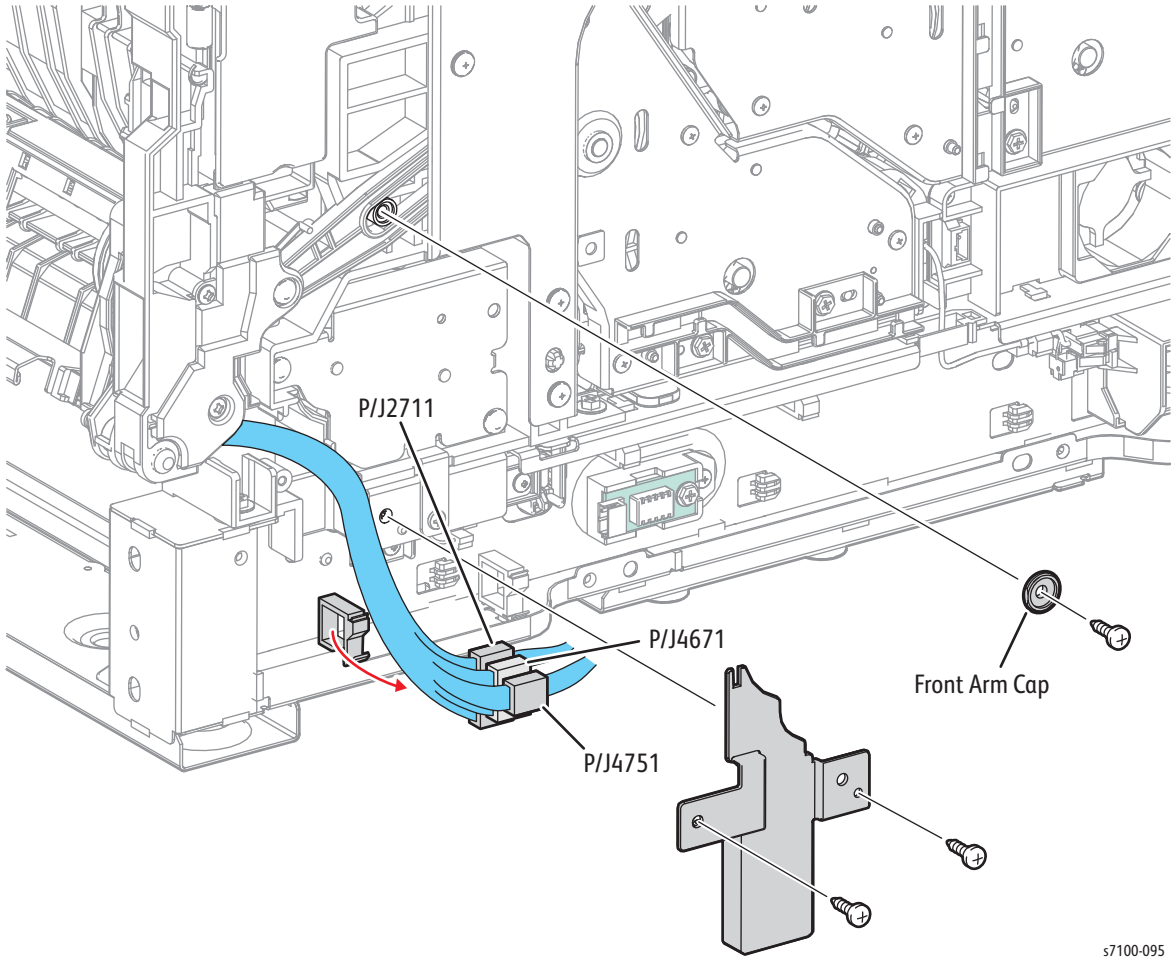
16. Remove the Latch Spring (PL 4.2.4).
17. Remove 3 screws (silver, tapped, 8 mm) and one screw (silver, tapped, 12 mm) that secure the AC Cover (PL 4.2.12).
18. Remove the AC Cover.



19. Remove one screw (silver, 6 mm) that secures the Harness Holder (PL 11.1.21) to the Paper Handling Drive Assembly (PL 11.1.19) and remove the Harness Holder.
20. Remove one screw (silver, 6 mm) that secures the Ground Wire to the Paper Handling Drive Assembly and remove the Ground Wire.
21. Release the Main Switch Link Shaft (PL 13.1.14).
22. Disconnect the wiring harness connector P/J503 that is connected to the AC PWB (PL 12.1.16).
23. Release the wiring harness that is connected to the left of the Front Frame Assembly.



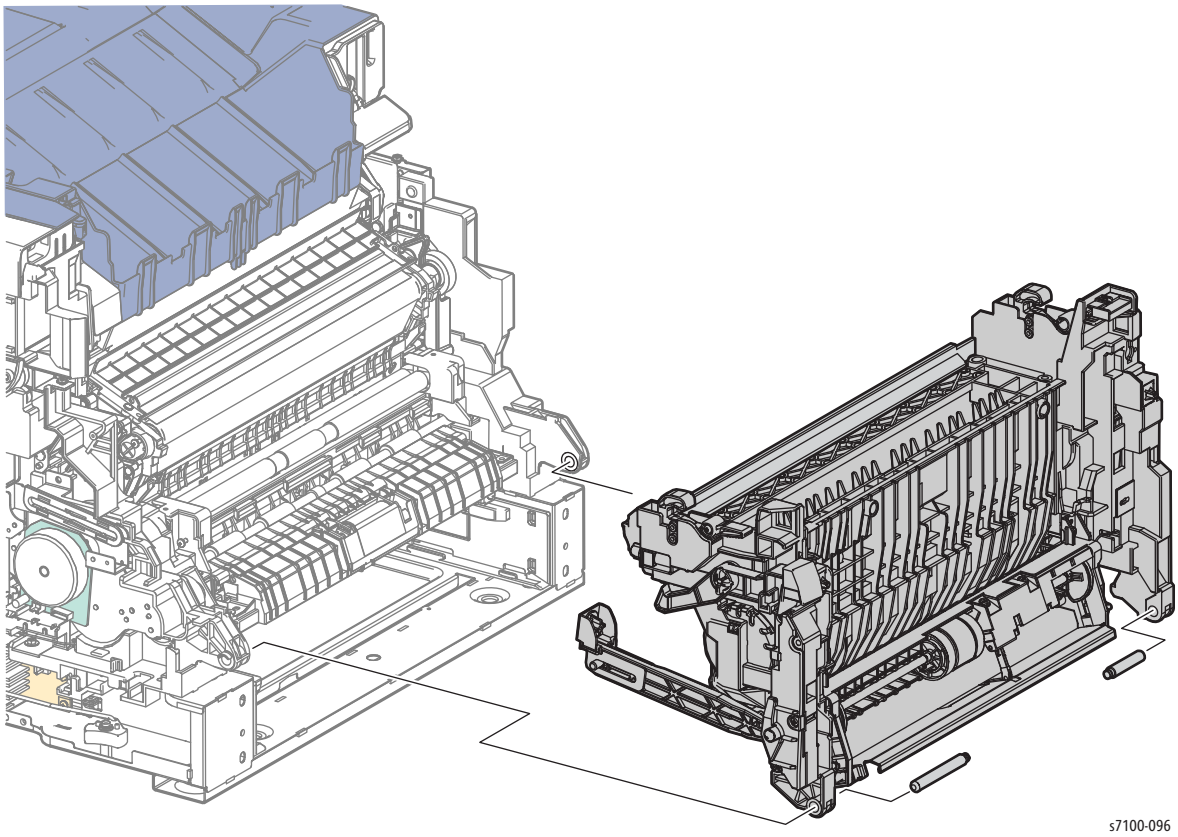
24. Remove 2 screws (silver, tapped, 10 mm) that secure the Front Harness Cover (PL 2.1.16) to the printer and remove the Front Harness Cover.
25. Release the clamp and free the harness that are connected to the right side of the Front Frame Assembly.
26. Disconnect the 3 wiring harness connectors (P/J2711, P/J4671, P/J4751) that are connected to the right side of the Front Frame Assembly.
27. Remove one screw (silver, tapped, 12 mm) that secures the Front Arm Cap (PL 4.1.1) to the Front Frame Assembly and remove the Front Arm Cap.



Note: Be sure to hold the Front Frame Assembly when performing the following steps as it may drop.

Note: The Left and Right Pins in the following step have been removed in step 12. The Pins will only be present if reinstalled as suggested in the Note on page 4-75 after step 12.

28. Pull the Left and Right Pins out to remove.
29. Release latch A and pull the Front Frame Assembly toward the front to remove.



REP 4.2 DRW Fuser Harness Assembly

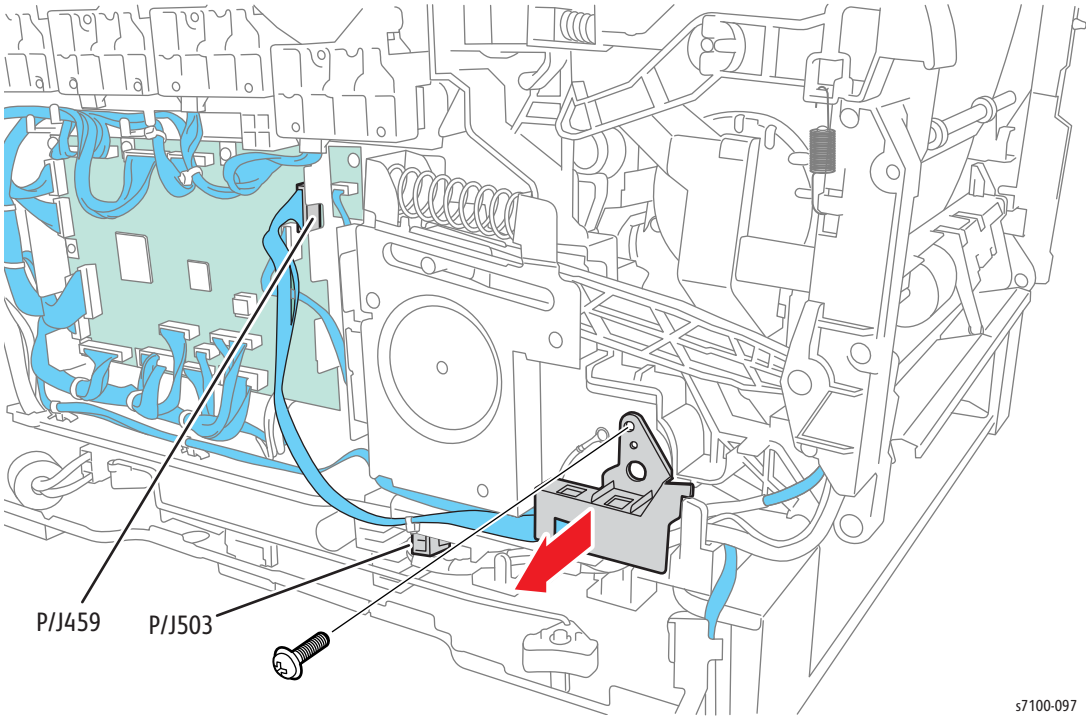
PL 4.1.7

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

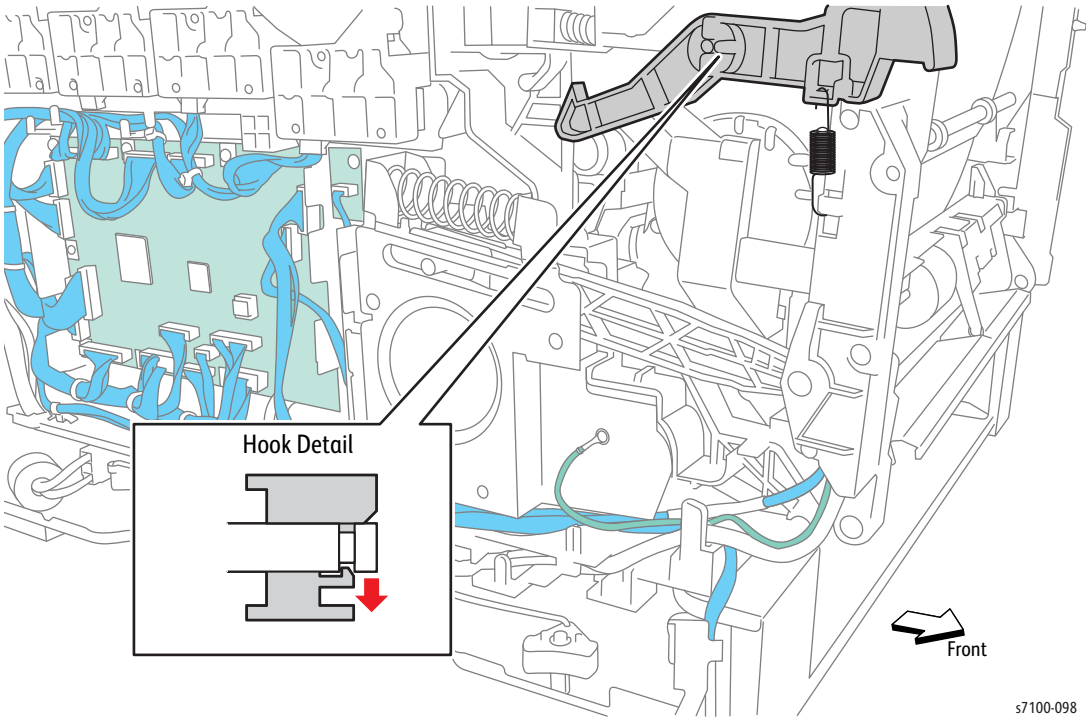
1. Remove Tray 1.
2. Remove the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
6. Remove the Left Feeder Cover (REP 2.10 Left Feeder Cover on page 4-49).
7. Remove the Control Panel Assembly (REP 1.12 Control Panel Assembly on page 4-29).
8. Remove the Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73).
9. Remove the Bypass Tray Cover (REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover on page 4-71).
10. Remove the Front Cover Assembly (REP 1.15 Front Cover Assembly on page 4-35).

Note: If you wish to perform the next operations with the Front Cover Assembly removed, insert the removed Left and Right Pins (PL 3.1.10/ PL 3.1.13) back to their original positions and temporarily fix them in place before starting the procedure.

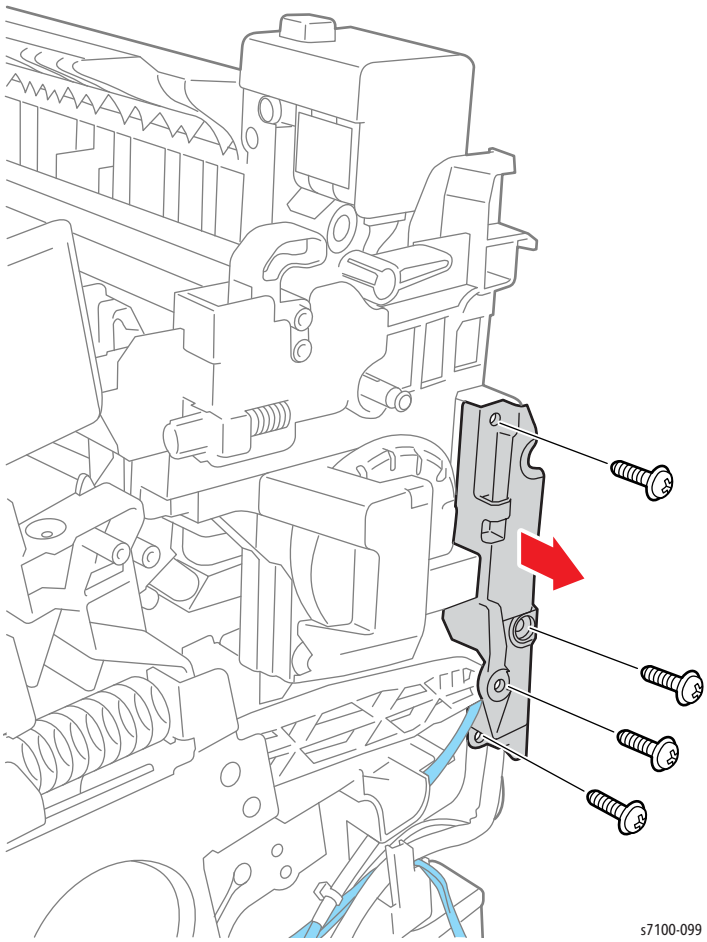
11. Move the wiring harness out of the way.
12. Disconnect the wiring harness connectors P/J459 on the MCU PWB (PL 12.1.15) and P/J503 on the AC PWB (PL 12.1.16).
13. Remove one screw (silver, 6 mm) that secures the Harness Holder (PL 11.1.21) to the Paper Handling Drive Assembly (PL 11.1.19) and remove the Harness Holder.
14. Release the wiring harness that is connected to the left of the Front Frame Assembly.



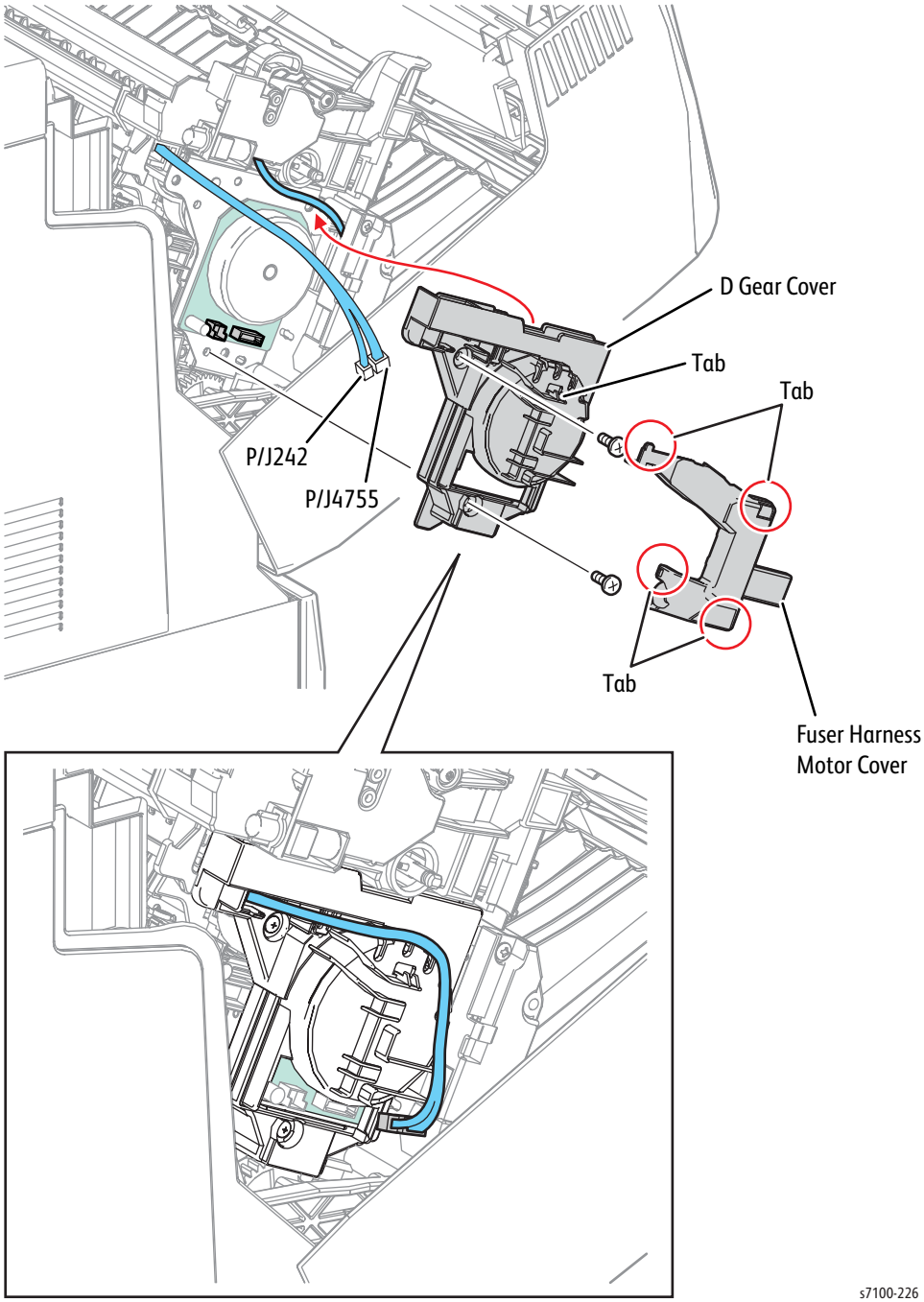
15. Release and remove the Latch Spring (PL 4.2.4).
16. Release the hook that secures the Left Latch Lever to the shaft and remove the Left Latch Lever.



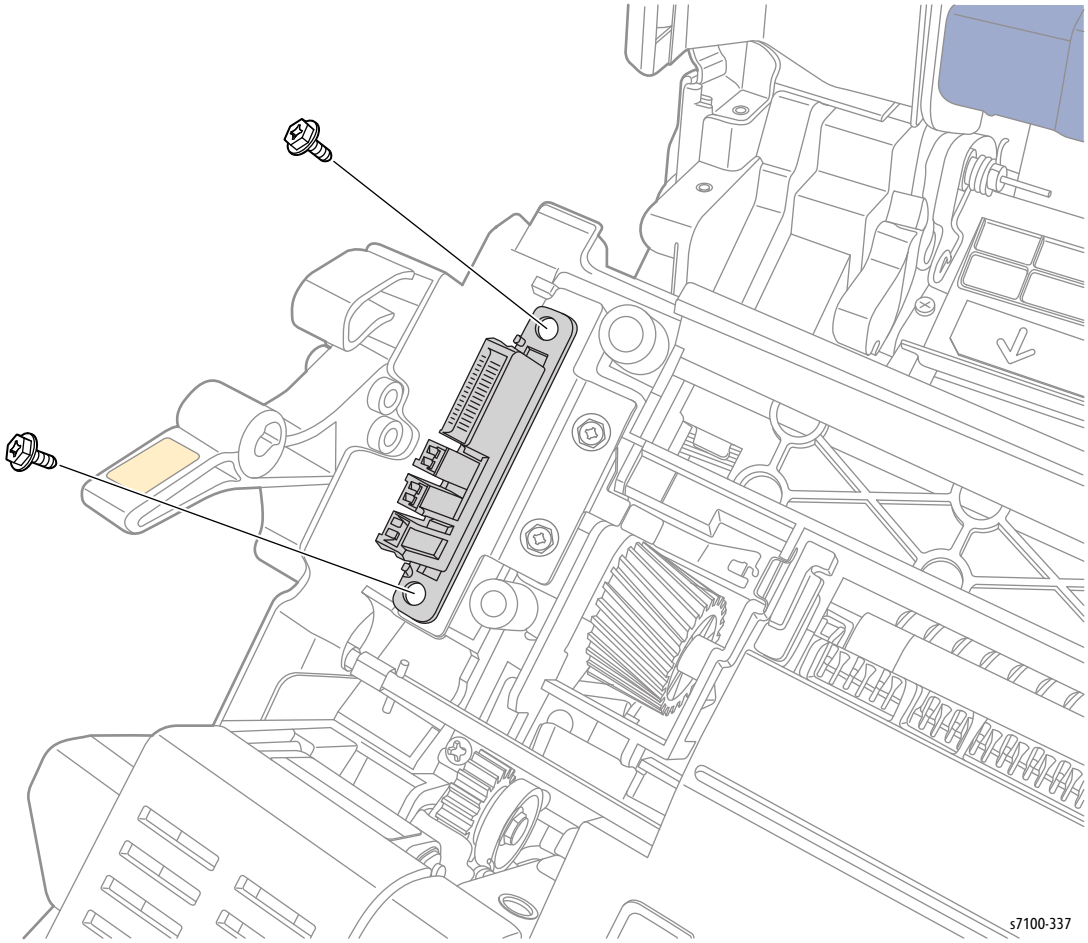
17. Remove 3 screws (silver, tapped, 8 mm) and one screw (silver, tapped, 12 mm) that secure the AC Cover (PL 4.2.12).
18. Remove the AC Cover.



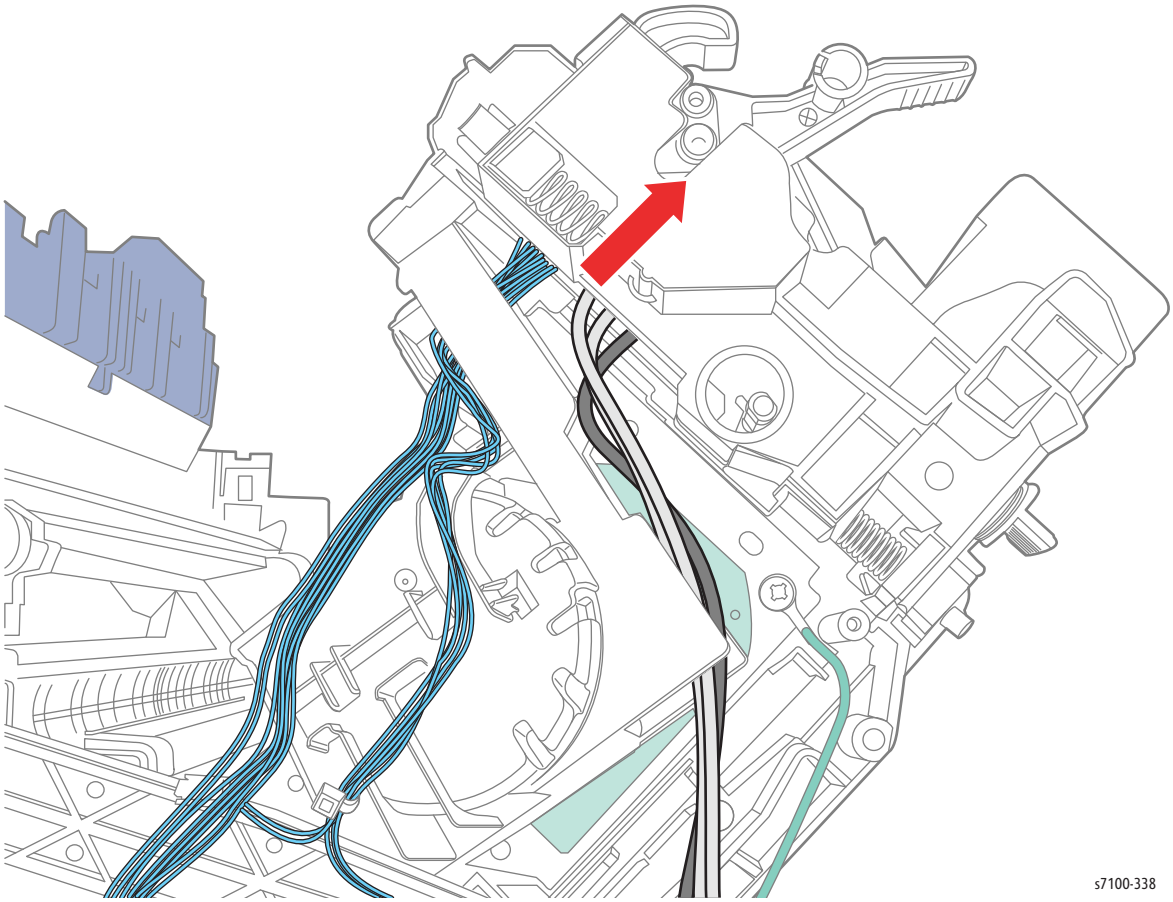
19. Release the 4 tabs that secure the Fuser Motor Harness Cover (PL 4.2.14) and remove the Fuser Motor Harness Cover.
20. Disconnect the wiring harness connectors P/J242 and P/J4755 that are connected to the Fuser Drive Assembly.
21. Remove 2 screws (silver, 6 mm) that secure the D Gear Cover to the Front Frame Assembly.
22. Release the wiring harness from the D Gear Cover and release the 2 tabs while removing the D Gear Cover.



23. Remove 2 screws that secure the wiring harness connector.



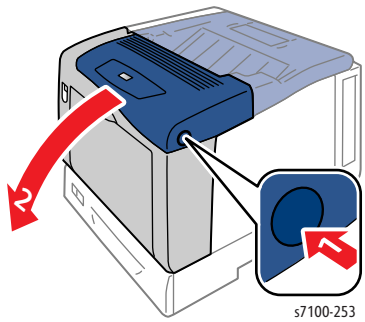
24. Release the wiring harnesses from the D Gear Cover and route the wiring harnesses through the hole while pulling the wiring harness assembly out to remove.



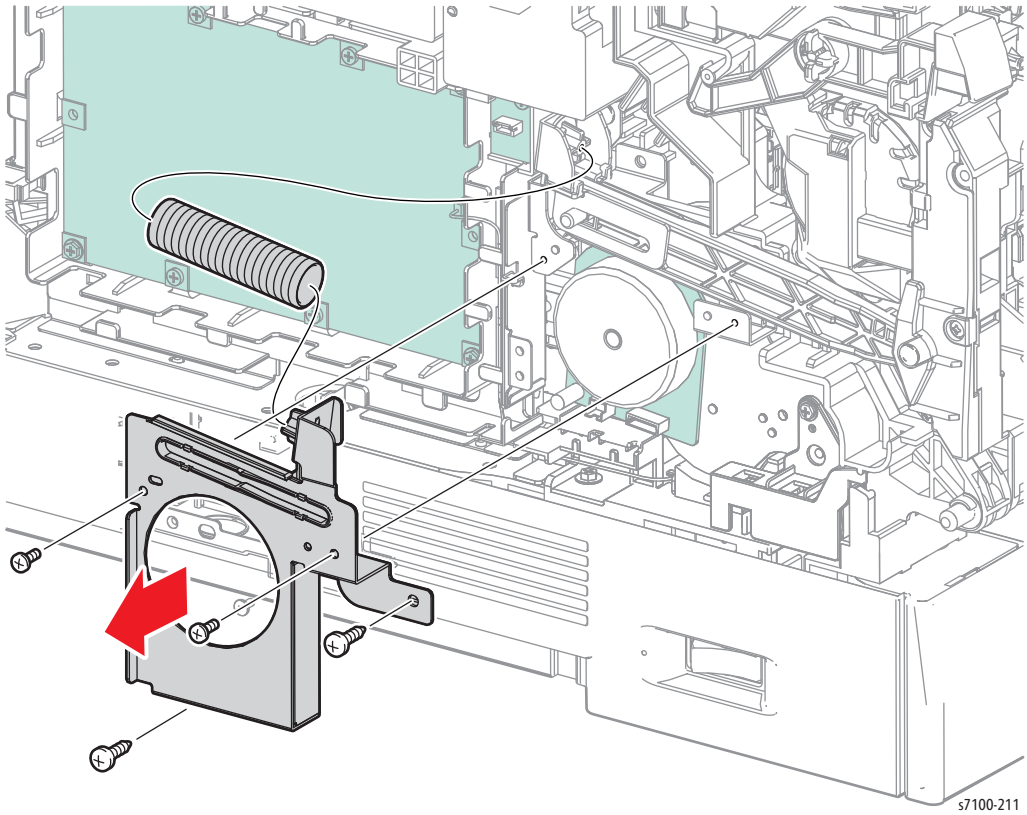
REP 4.3 Slide Bracket Assembly/ Slide Guide

PL 4.1.8/ PL 4.1.9

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
4. Press the B button and open the Front Cover Assembly (PL 1.1.38).

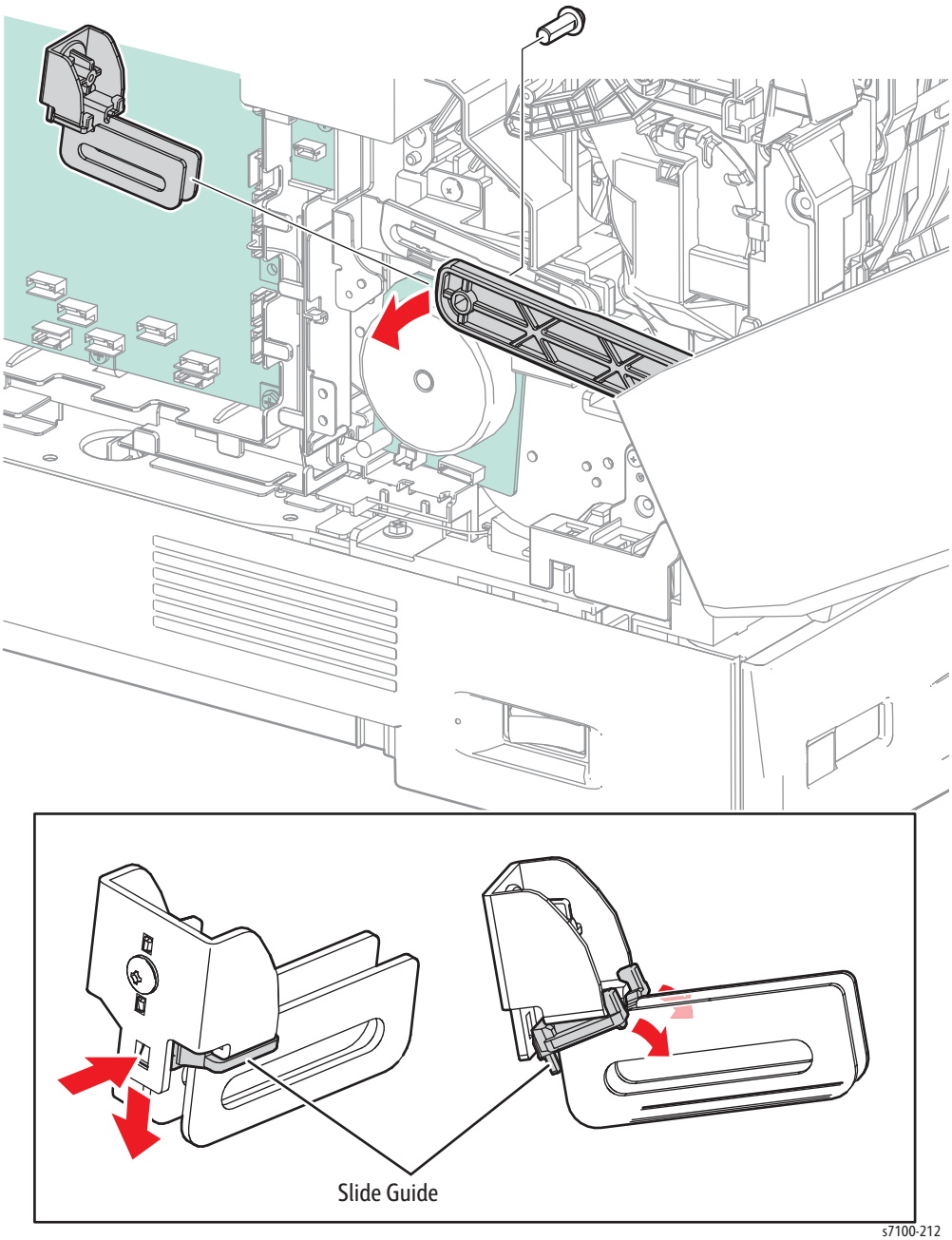


5. Remove the Damper Spring (PL 4.1.3) from the Damper Assembly.
6. Remove 2 screws (silver, tapped, 12 mm) and 2 screws (silver, 6 mm) that secure the Rail Bracket Assembly (PL 4.1.5) and remove the Rail Bracket.



CAUTION: When moving the Front Left Arm Support (PL 4.2.13) towards you in the next step, do not apply excessive force to prevent breaking the installation section of the Arm Support.

7. Open the Front Left Arm Support towards you and remove the Support Pin from the inner side.
8. Remove the Slide Bracket Assembly from the Front Left Arm Support.
9. Release and push down the hook on the rear of the Slide Guide and release the 2 hooks on the front to remove Slide Guide.

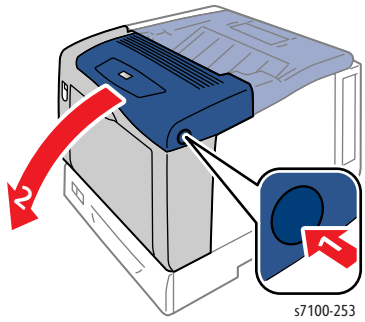


REP 4.4 Right/ Left Latch Lever, Latch Spring

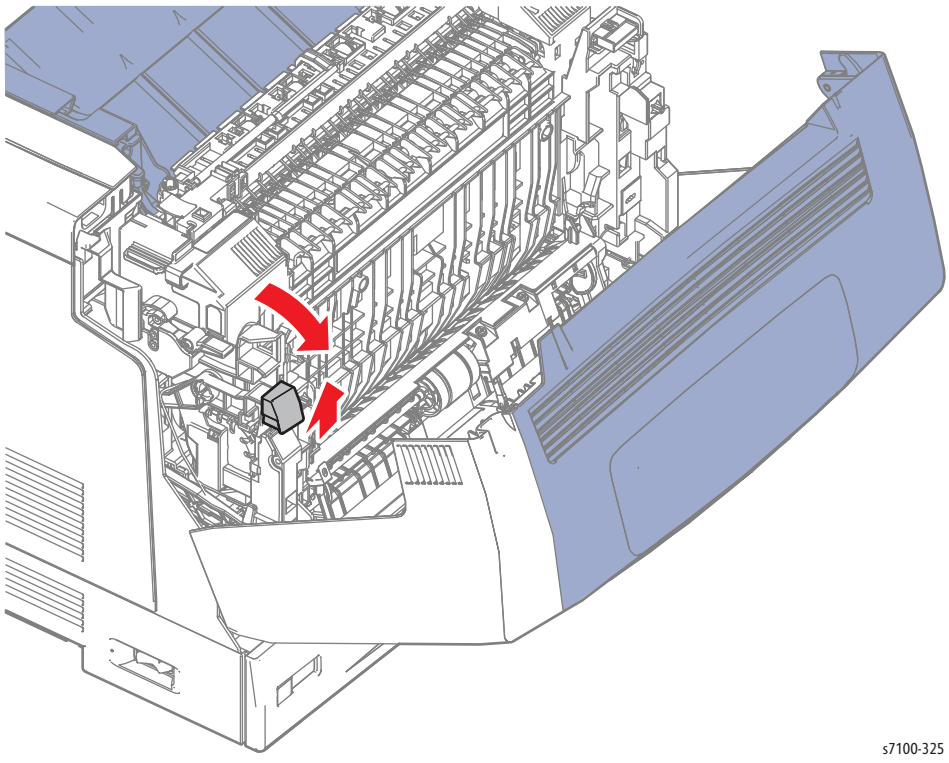
PL 4.2.1/ PL 4.2.3/ PL 4.2.4

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before servicing the printer.

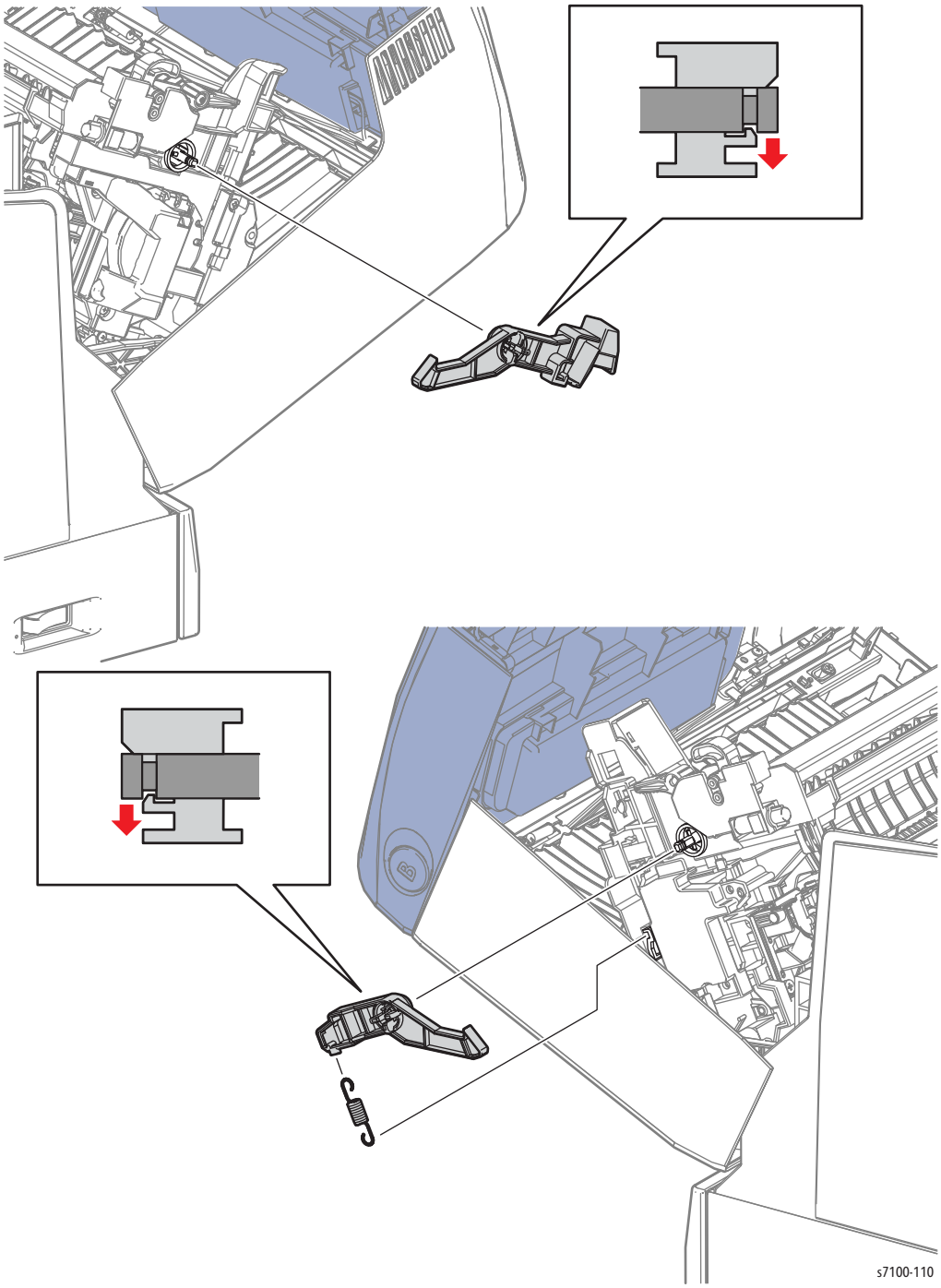
1. Press the B button and open the Front Cover Assembly (PL 1.1.38).



2. Release latch A and open the Front Frame Assembly) (PL 4.1.6) until it is in a position where it is convenient to perform the operation and maintain that position to perform the subsequent steps.



3. Release the hook that secures the Left Latch Lever to the shaft and remove the Left Latch Lever.
4. Release the hook that secures the Right Latch Lever to the shaft and remove the Right Latch Lever together with the Latch Spring.
5. Remove the Latch Spring from the Right Latch Lever.



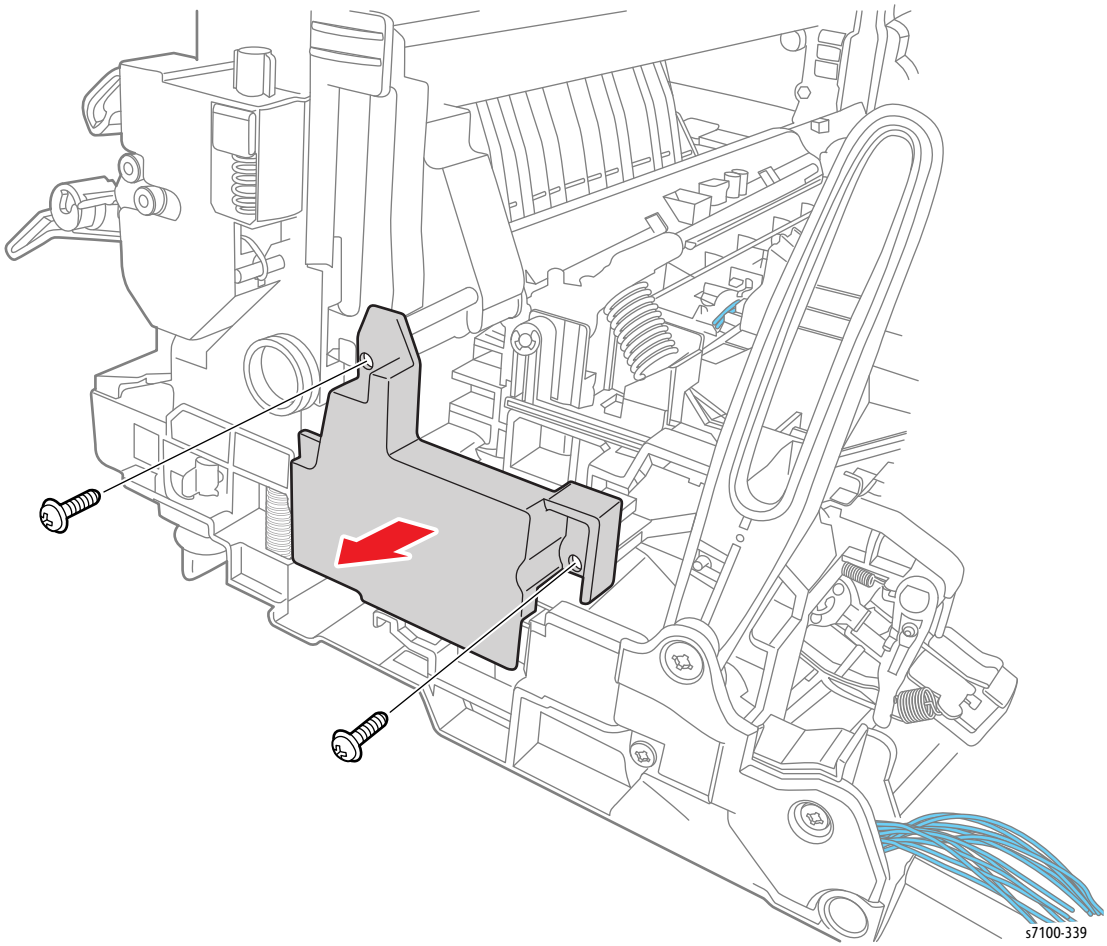
REP 4.5 Front Frame Sub Assembly

PL 4.2.9

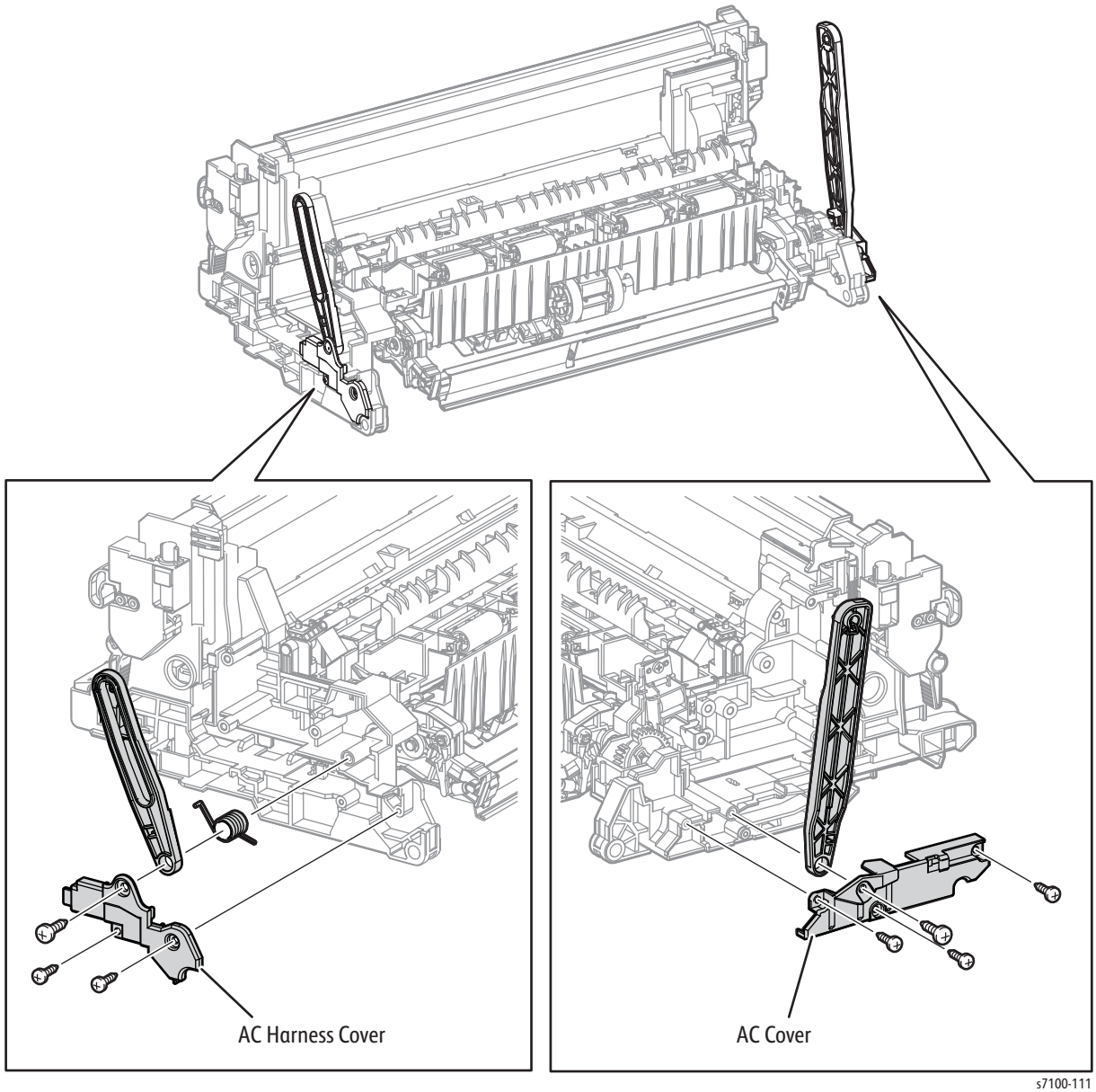
WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

1. Remove Tray 1.
2. Remove the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
3. Remove the Transfer Roller (2nd BTR Unit) (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
7. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
8. Remove the Left Feeder Cover (REP 2.10 Left Feeder Cover on page 4-49).
9. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
10. Remove the Control Panel Assembly (REP 1.12 Control Panel Assembly on page 4-29).
11. Remove the Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73).
12. Remove the Bypass Tray Cover (REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover on page 4-71).
13. Remove the Front Cover Assembly (REP 1.15 Front Cover Assembly on page 4-35).
14. Remove the Front Frame Assembly (REP 4.1 Front Frame Assembly on page 4-74).
15. Remove the Right Latch Lever/ Left Latch Lever/ Latch Spring (REP 4.4 Right/ Left Latch Lever, Latch Spring on page 4-89).
16. Remove the Lever Shaft Assembly (PL 4.2.2).
17. Remove the Fuser Drive Assembly (REP 4.7 Fuser Drive Assembly on page 4-99).
18. Remove the Chute Assembly (REP 4.8 Chute Assembly on page 4-103).

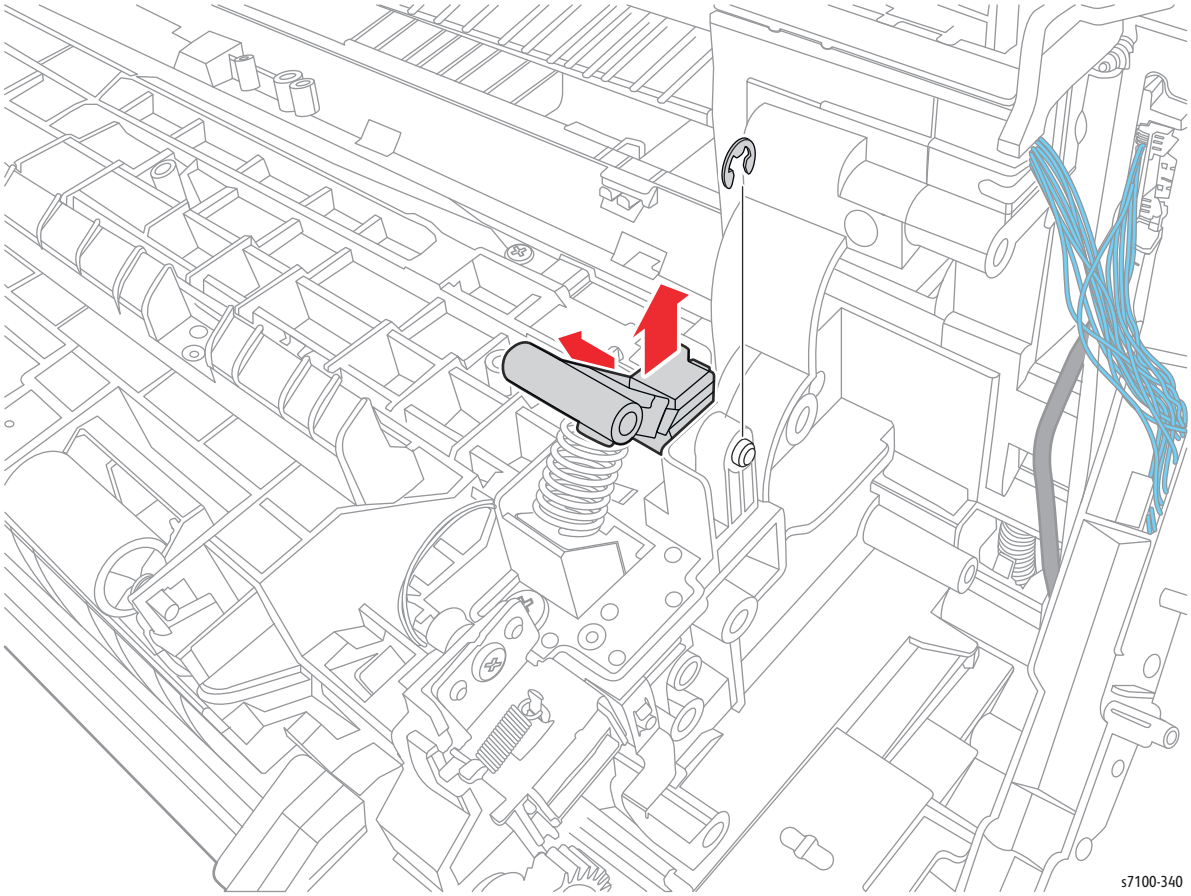
19. Remove 2 screws (silver, tapped, 8 mm) that secure the Right Harness Cover (PL 4.2.6) and remove the Cover.



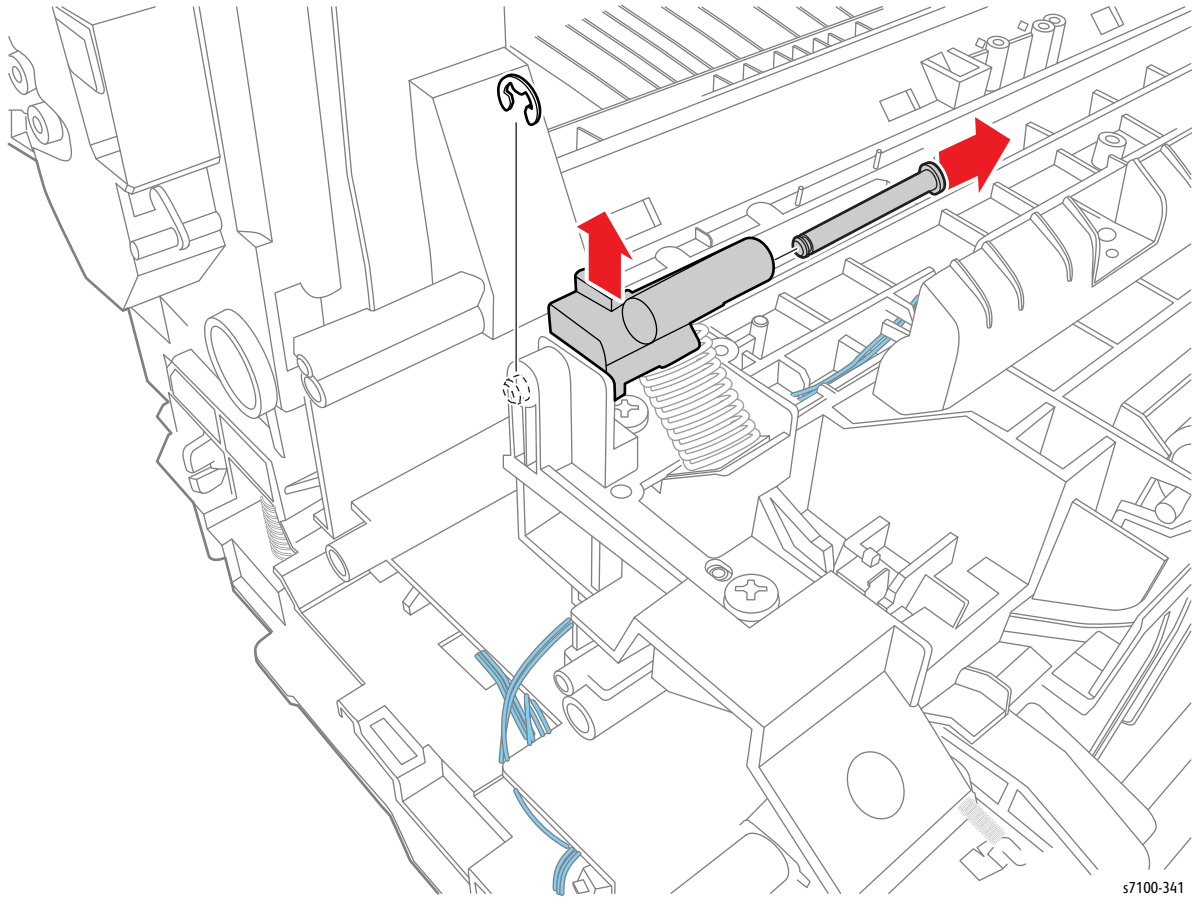
20. Remove 2 screws (silver, tapped, 8 mm) and one screw (silver, tapped, 12 mm) that secure the AC Harness Cover (PL 4.2.8) and remove the Cover.
21. Remove the Front Right Support Arm (PL 4.2.5).
22. Remove the Right Arm Spring (PL 4.2.7).
23. Remove 3 screws (silver, tapped, 8 mm) and one screw (silver, tapped, 12 mm) that secure the AC Cover (PL 4.2.12) and remove the Cover.
24. Remove the Front Left Support Arm (PL 4.2.13).



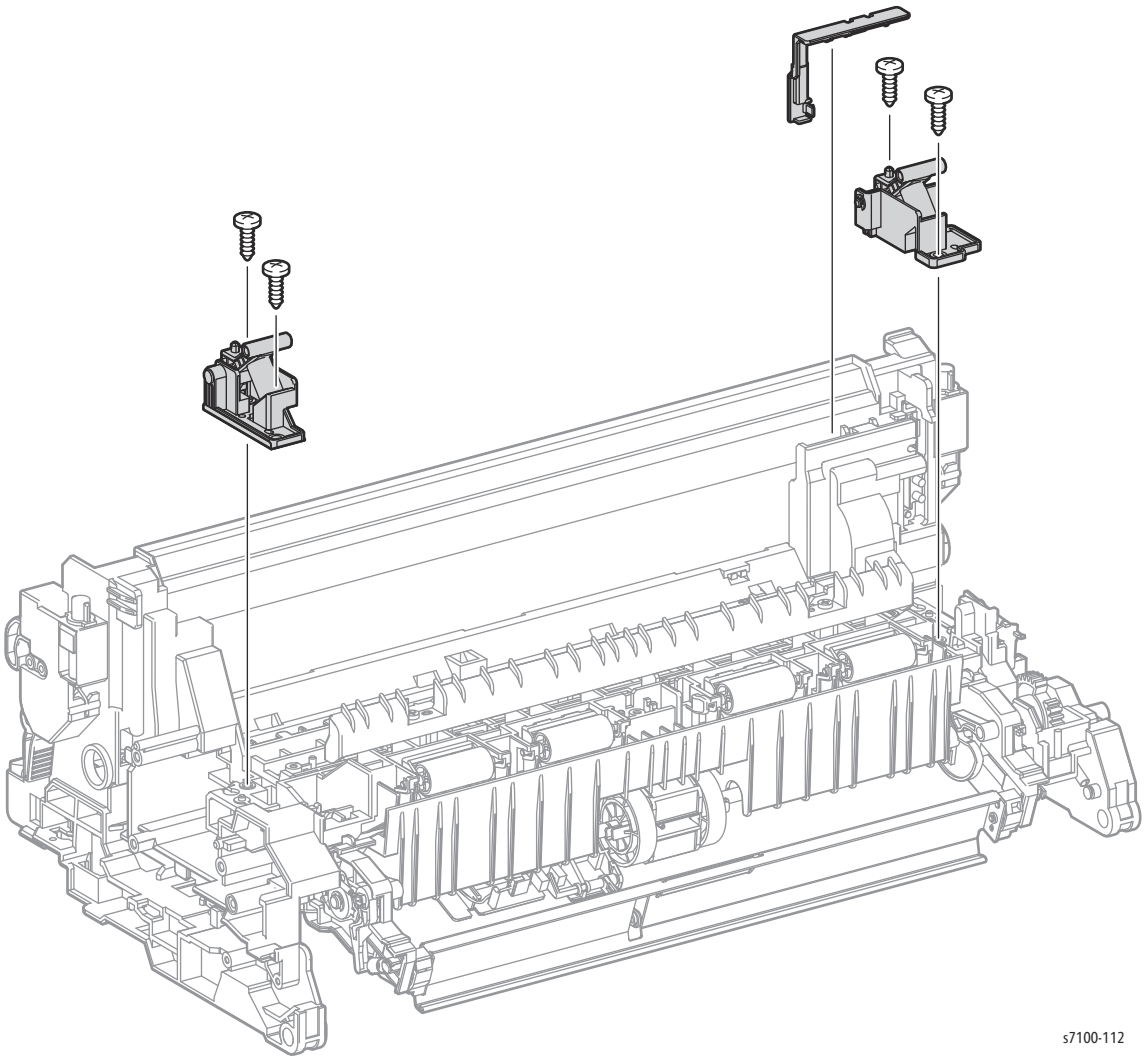
25. Remove the E-ring on the right side.
26. Remove the right 2nd BTR Lever (PL 4.3.28)



27. Remove the E-Ring on the left side.
28. Remove the Lever Pin (PL 4.3.26).
29. Remove the left 2nd BTR Lever (PL 4.3.28).



30. Remove 2 screw (silver, tapped, 12 mm) that secure the Right Bracket Assembly (PL 4.3.25-29) and remove the Right Bracket Assembly.
31. Remove 2 screws (silver, tapped, 12 mm) that secure the Left Bracket Assembly (PL 4.3.26-31) and remove the Left Bracket Assembly.
32. Remove the Top Harness Cover (PL 4.3.22).



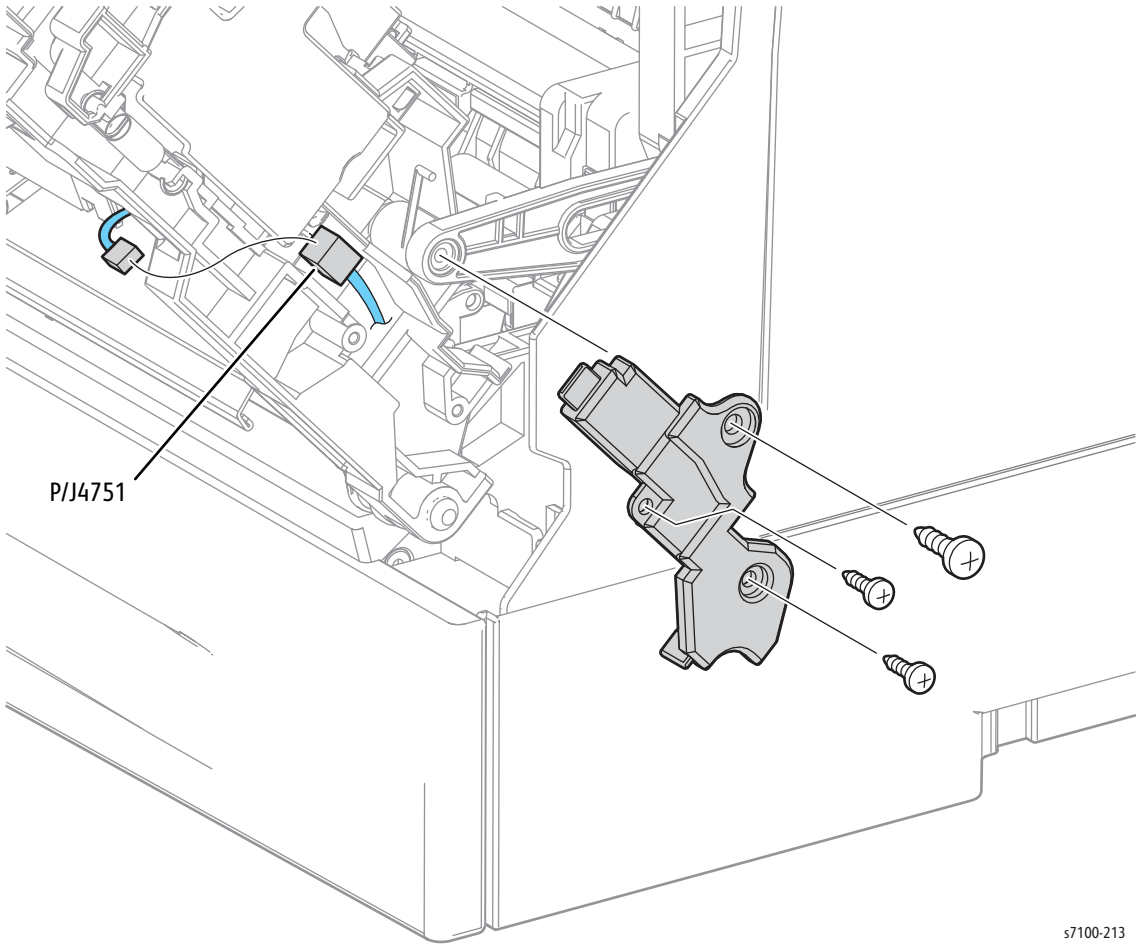
REP 4.6 Bypass Tray Feed Frame Assembly

PL 4.2.10

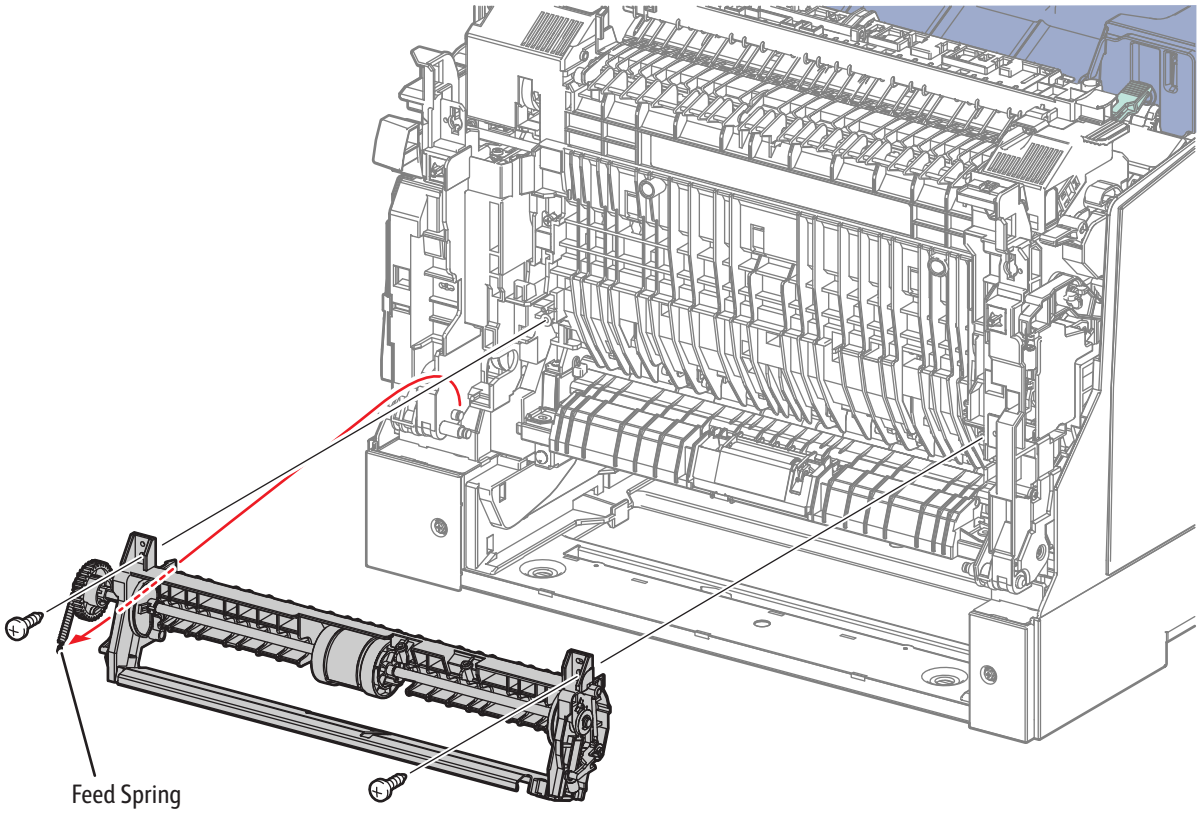
1. Remove Tray 1.
2. Remove the Control Panel Assembly (REP 1.12 Control Panel Assembly on page 4-29).
3. Remove the Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73).
4. Remove the Bypass Tray Cover (REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover).
5. Remove the Front Cover Assembly (REP 1.15 Front Cover Assembly on page 4-35).

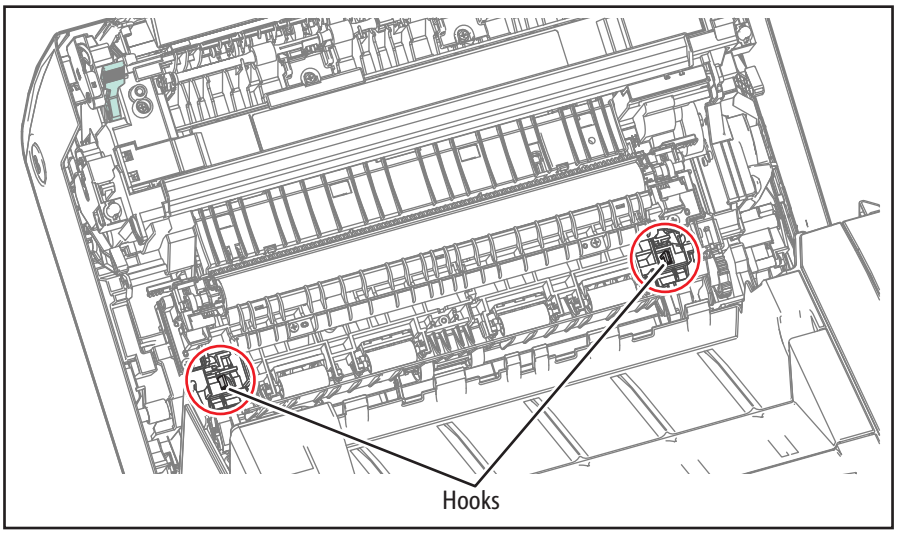
   Note: If you wish to perform the next steps with the Front Cover Assembly removed, insert the removed Left/ Right Pin (PL 3.1.10/ PL 3.1.13) back to their original position and temporarily fix them in place before starting the procedure.

6. Remove 2 screws (silver, tapped, 8 mm) and one screw (silver, tapped, 12 mm) that secure the AC Harness Cover (PL 4.2.8) and remove the Cover.
7. Disconnect the wiring harness connector P/J4751 that is connected to the Bypass Tray No Paper Sensor (PL 4.4.3) and remove the harness through the hole.



8. Remove the Bypass Tray Feed Spring (PL 4.4.18) that is attached to the Bypass Tray Feed Frame Assembly.
9. Remove 2 screws (silver, tapped, 12 mm) that secure the Bypass Tray Feed Frame Assembly to the printer.
10. Release the 2 hooks that secure the Bypass Tray Feed Frame Assembly, release the 2 bosses on the left and the right and remove the Bypass Tray Feed Frame Assembly.





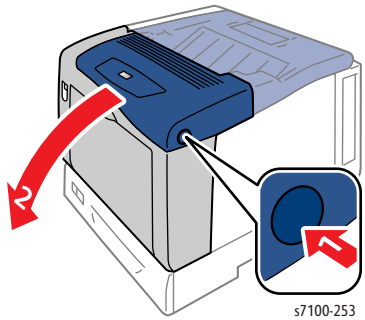
s7100-113

REP 4.7 Fuser Drive Assembly

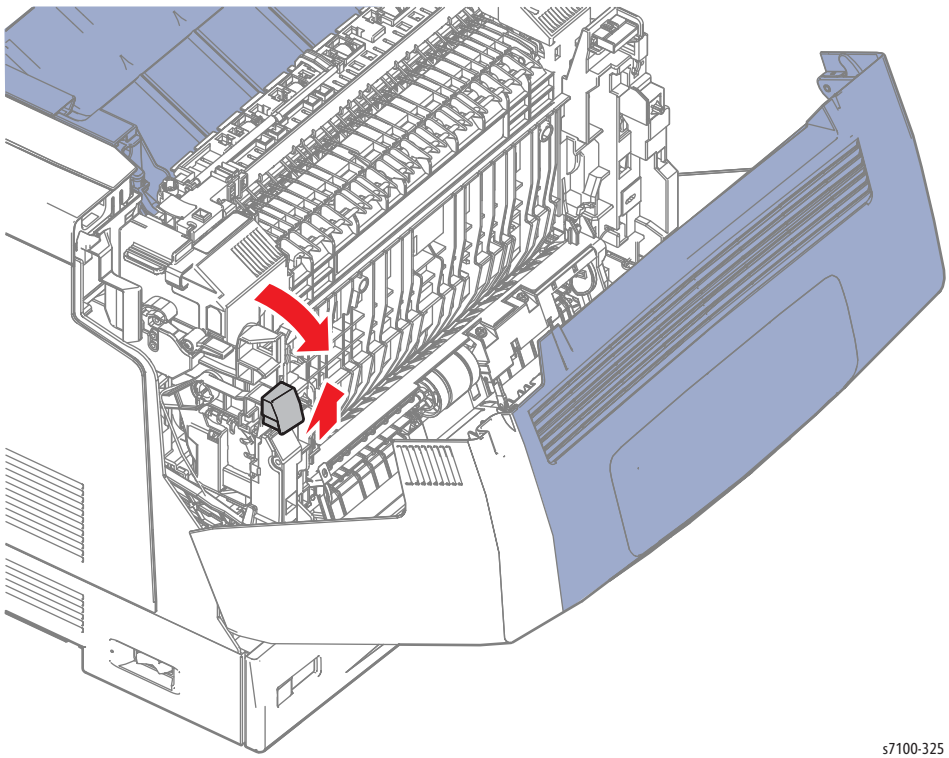
PL 4.2.16

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

1. Press the B button and open the Front Cover Assembly (PL 1.1.38).

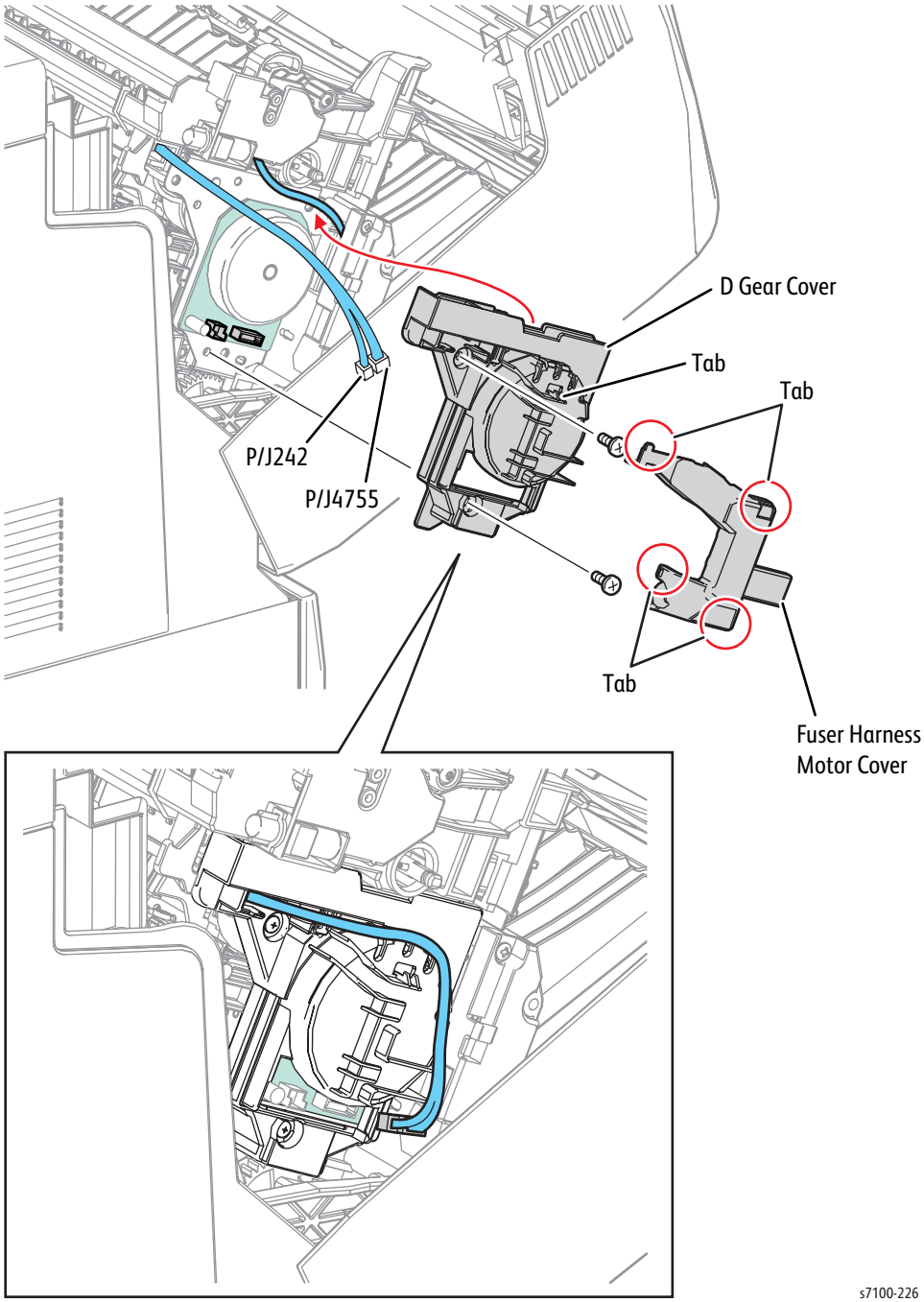


2. Remove the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
3. Release latch A and open the Front Frame Assembly (PL 4.1.6) until it is in a position where it is convenient to perform the operation and maintain that position to perform the subsequent steps.

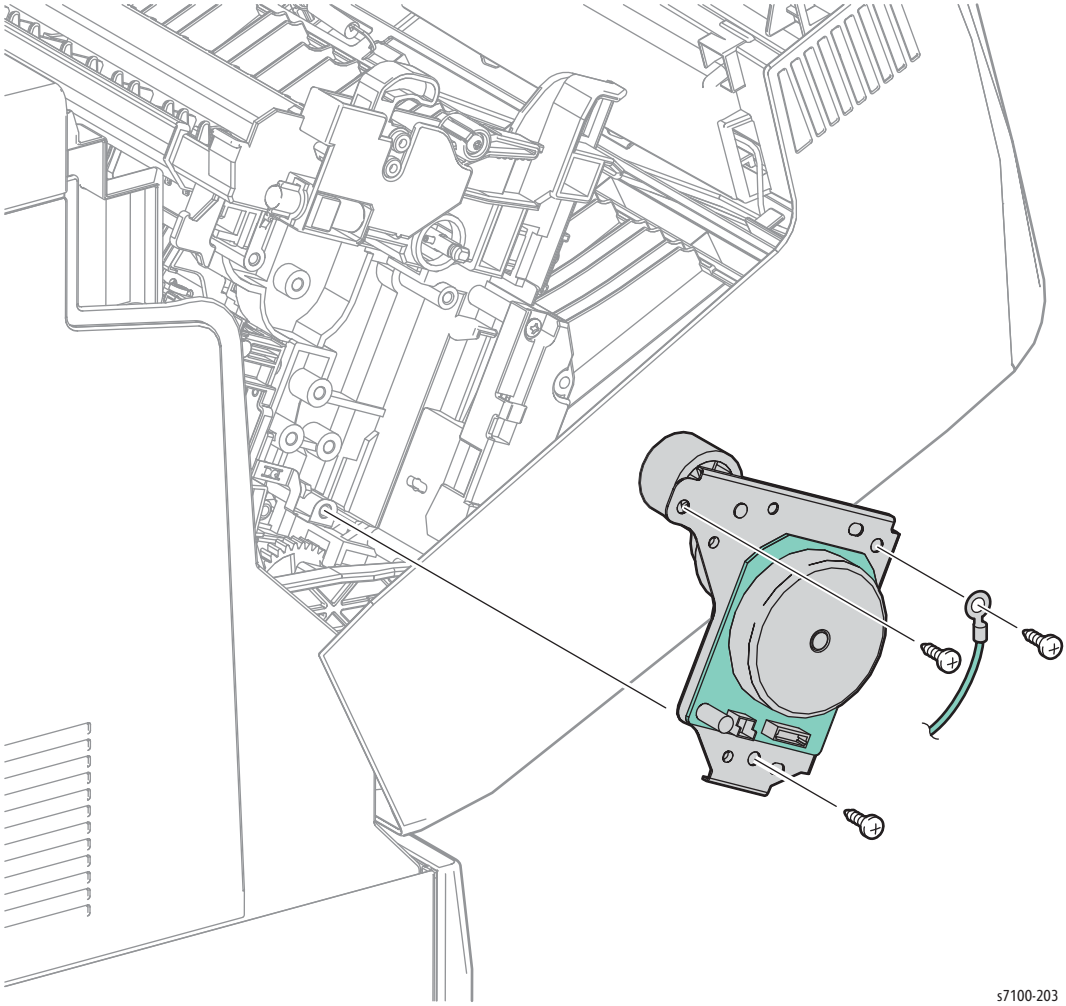


4. Remove the Left Latch Lever (REP 4.4 Right/ Left Latch Lever, Latch Spring on page 4-89).

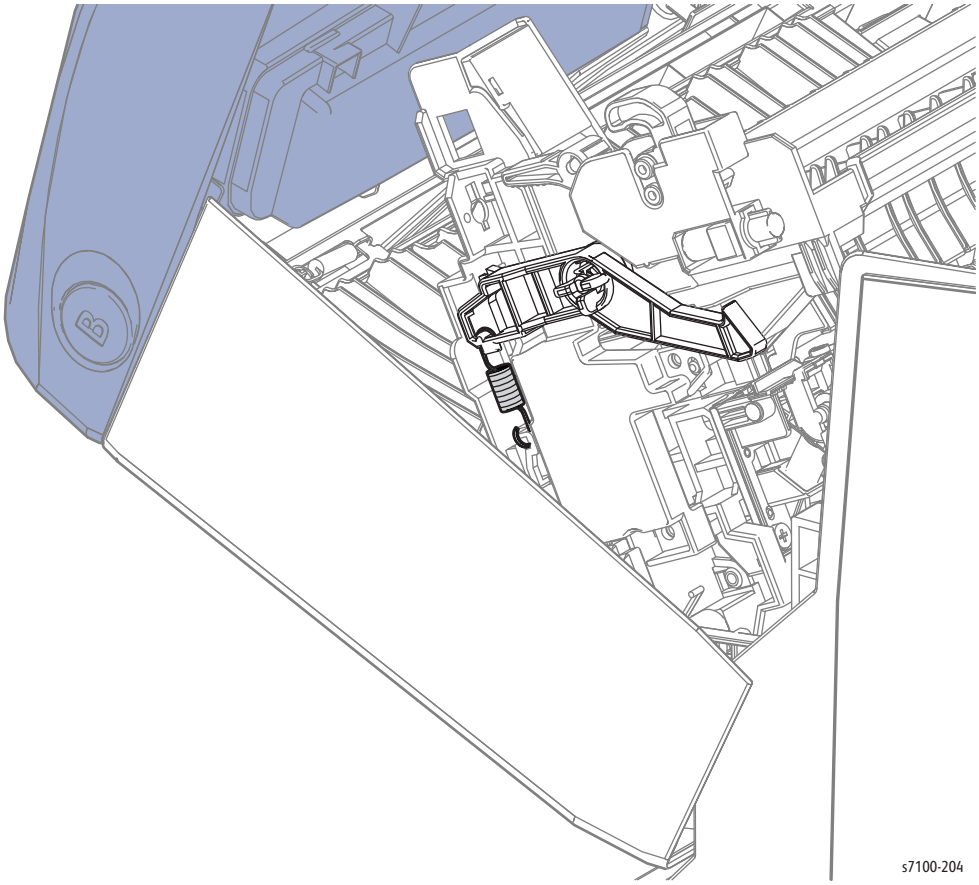
5. Release the 4 tabs that secure the Fuser Motor Harness Cover (PL 4.2.14) to the D Gear Cover (PL 4.2.15) and remove the Fuser Motor Harness Cover.
6. Disconnect the wiring harness connectors P/J242 and P/J4755 that are connected to the Fuser Drive Assembly and remove the harness from D Gear Cover.
7. Remove 2 screws (silver, 6 mm) that secure the D Gear Cover to the Front Frame Assembly.
8. Release the wiring harness from the D Gear Cover and release the 2 tabs while removing the D Gear Cover.



9. Remove 3 screws (silver, tapped, 12 mm) that secure the Fuser Drive Assembly to the Front Frame Assembly, together with the Ground Wire.
10. Remove the Fuser Drive Assembly from the Front Frame Assembly.



Replacement Note: Be sure to re-attach the Latch Spring (PL 4.2.4) to the Right Latch Lever (PL 4.2.3) if the Spring is not attached to the Lever.

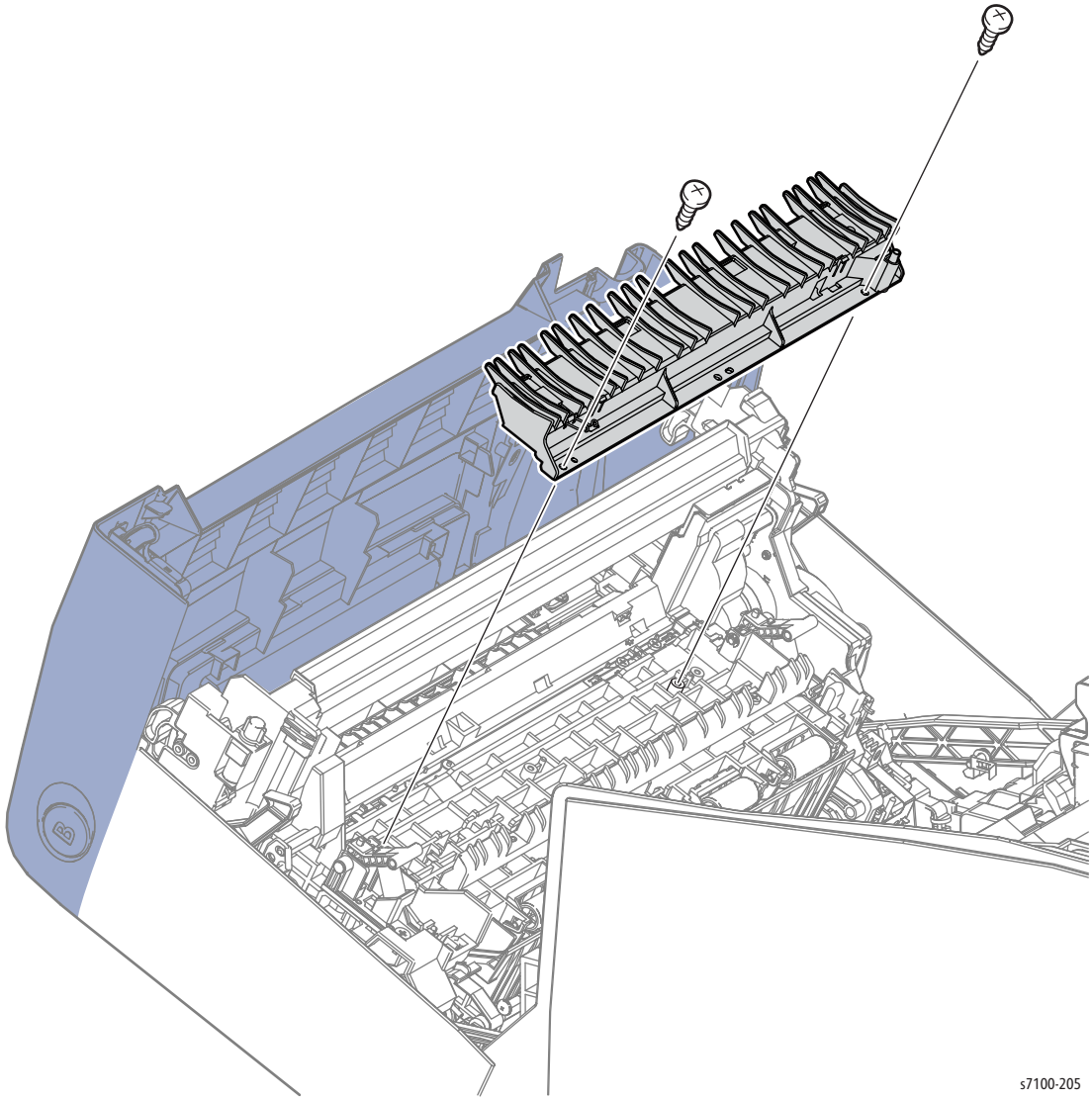


REP 4.8 Chute Assembly

PL 4.2.17

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

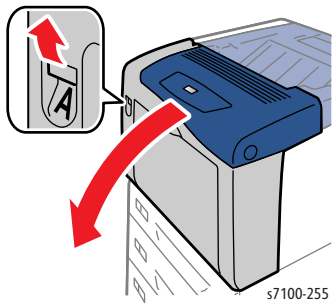
1. Remove the Fuser Unit (REP 10.1 Fuser Unit on page 4-183).
2. Remove the Transfer Roller (2nd BTR Unit) (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
3. Remove 2 screws (silver, tapped, 8 mm) that secure the Chute Assembly to the Front Frame Assembly and remove the Chute Assembly.



REP 4.9 Bypass Tray Feed Solenoid

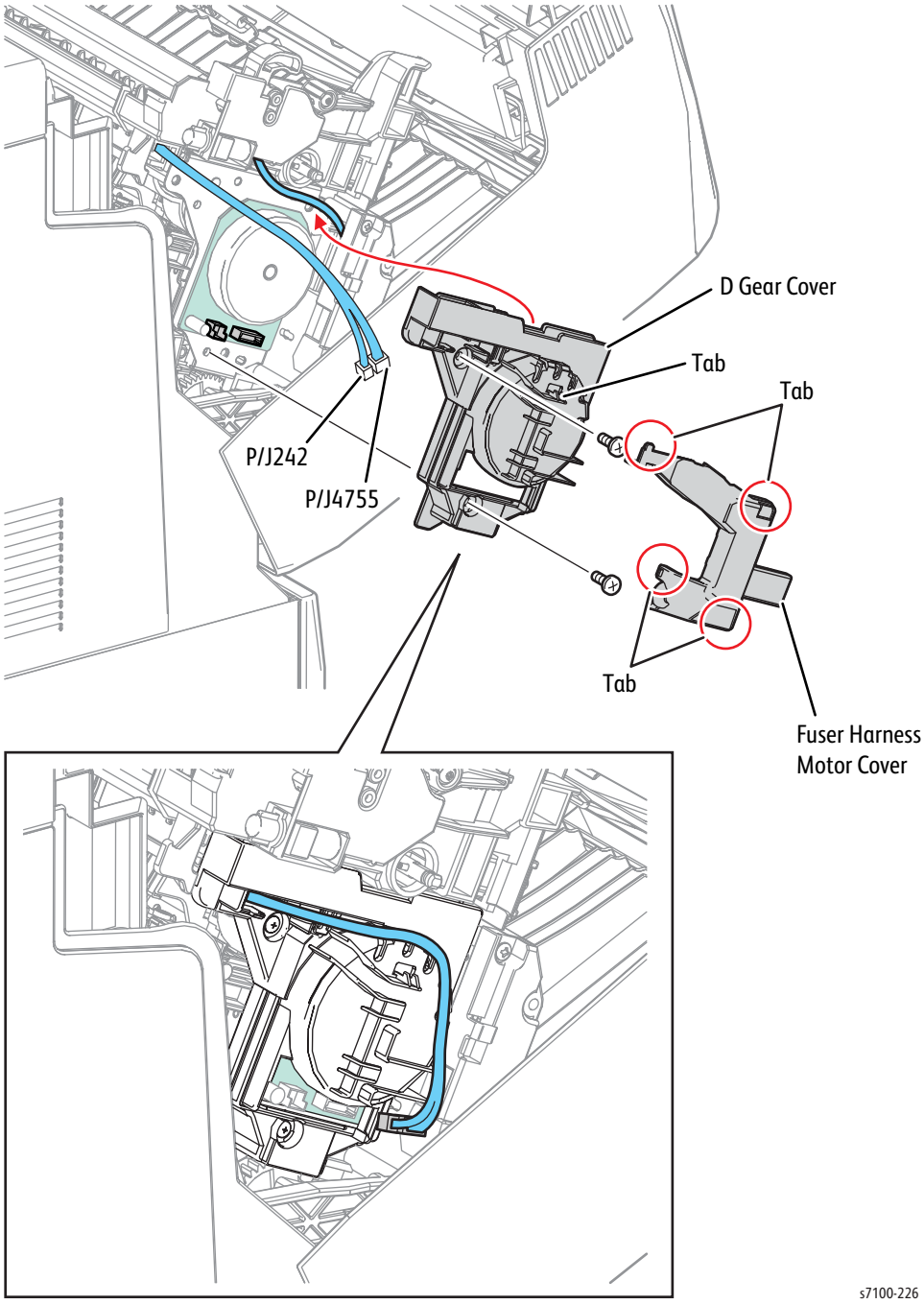
PL 4.3.10

1. Release latch A and open the Front Frame Assembly (PL 4.1.6) until it is in a position where it is convenient to perform the operation and maintain that position to perform the subsequent steps.

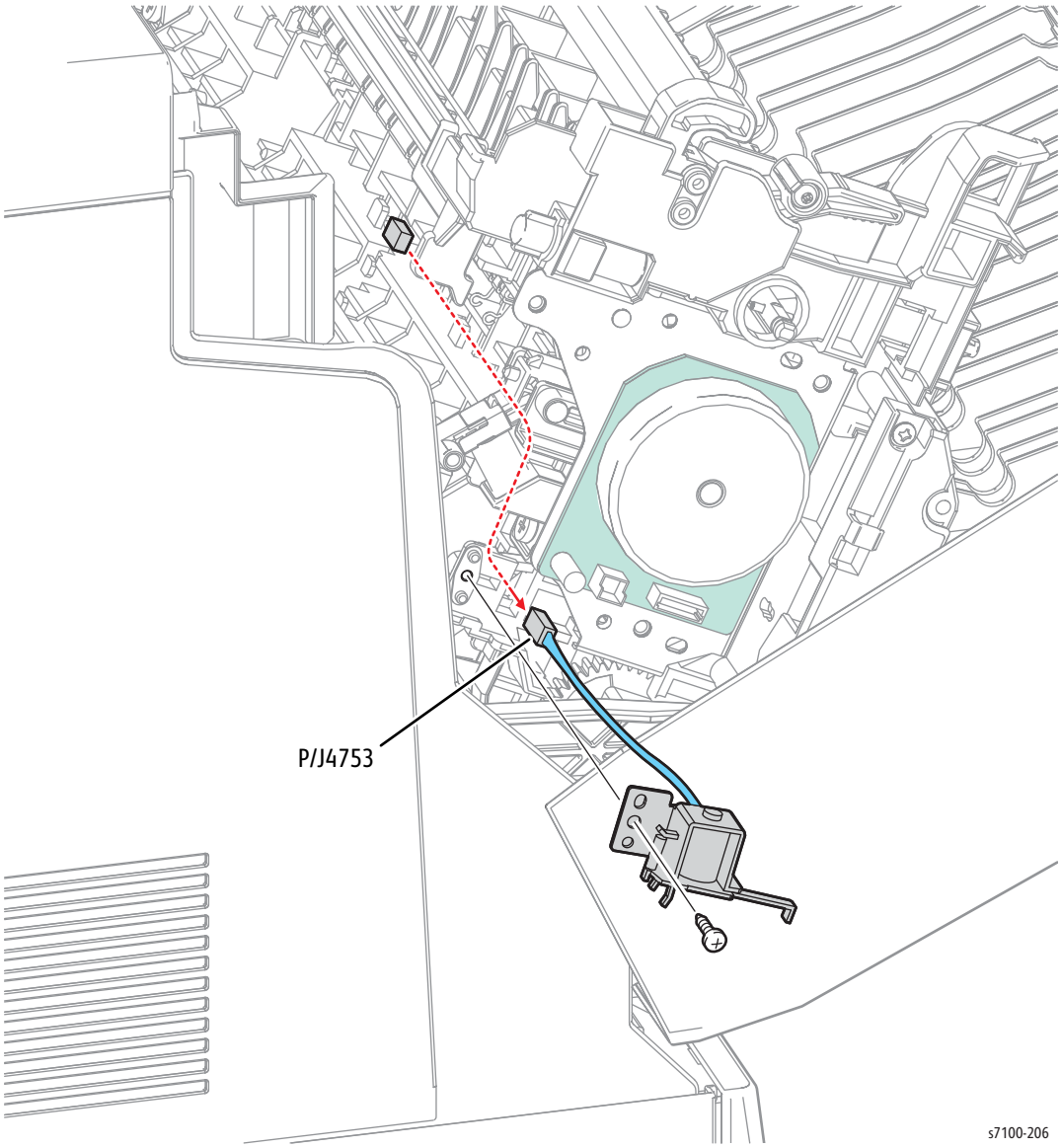


2. Remove the Transfer Roller (2nd BTR Unit) (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108).
3. Remove the Left Latch Lever (REP 4.4 Right/ Left Latch Lever, Latch Spring on page 4-89).

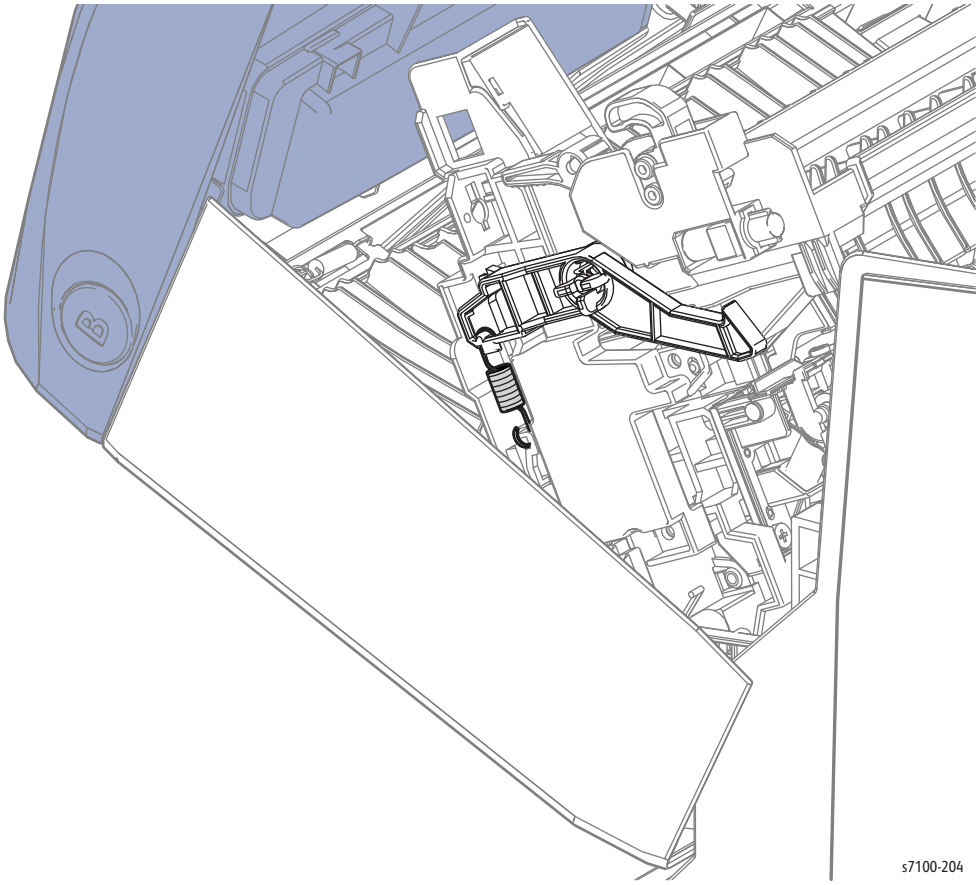
4. Release the 4 tabs that secure the Fuser Motor Harness Cover (PL 4.2.14) to the D Gear Cover (PL 4.2.15) and remove the Fuser Motor Harness Cover.
5. Disconnect the wiring harness connectors (P/J242 and P/J4755) that are connected to the Fuser Drive Assembly and remove the harness from D Gear Cover.
6. Remove 2 screws (silver, 6 mm) that secure the D Gear Cover to the Front Frame Assembly.
7. Release the wiring harness from the D Gear Cover and release the 2 tabs while removing the D Gear Cover.



8. Disconnect the wiring harness connector P/J4753 that is connected to the Bypass Tray Feed Solenoid.
9. Remove the harness that is connected to the Bypass Tray Feed Solenoid from the Harness Guide.
10. Remove one screw (silver, tapped, 8 mm) that secures the Bypass Tray Feed Solenoid to the Front Frame Assembly and remove the Bypass Tray Feed Solenoid.



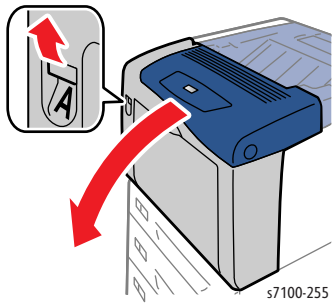
Replacement Note: Be sure to re-attach the Latch Spring (PL 4.2.4) to the Right Latch Lever (PL 4.2.3) if the Spring is not attached to the Lever.



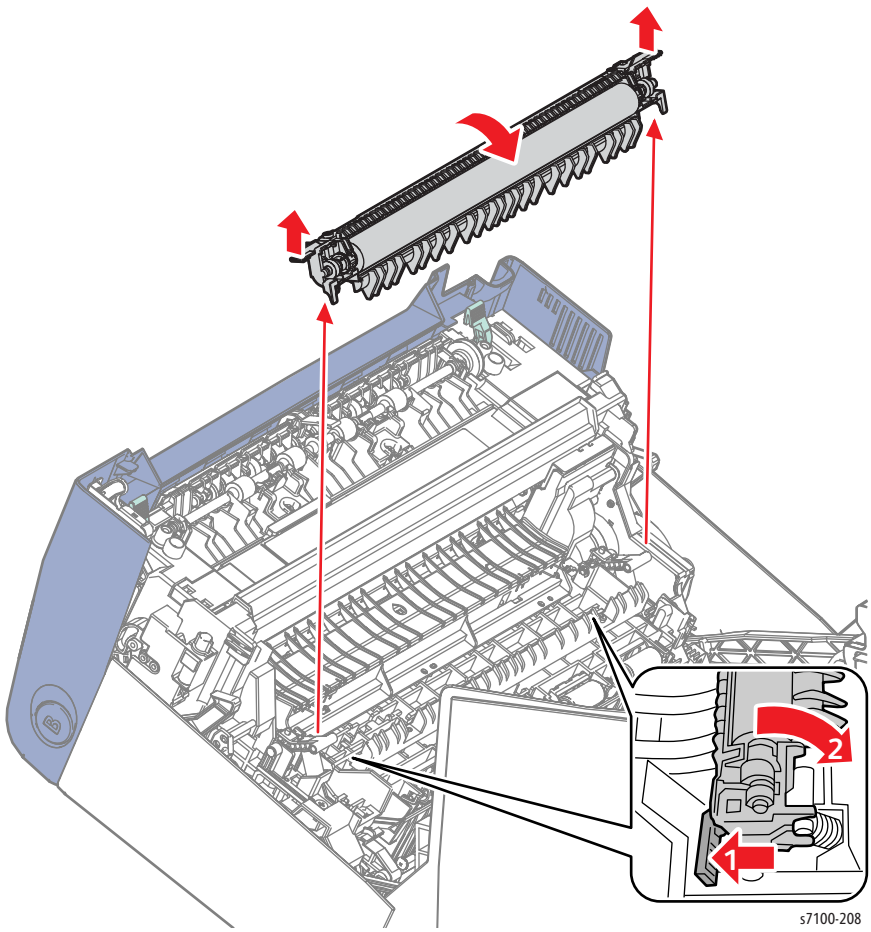
REP 4.10 Transfer Roller (2nd BTR Unit)

PL 4.3.18

1. Release latch A and open the Front Frame Assembly (PL 4.1.6).



2. Press the latches on the left and the right of the Transfer Roller while turning and lifting it upwards to remove.

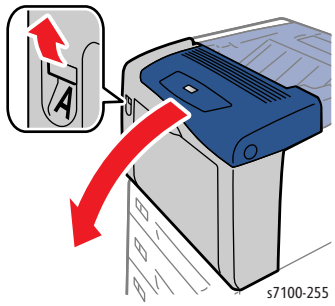


Replacement Note: After replacing the Transfer Roller (2nd BTR), be sure to reset the 2nd BTR Counter (Resetting the Transfer Roller (2nd BTR) Counter on page 6-12).

REP 4.11 Pinch Roller Kit

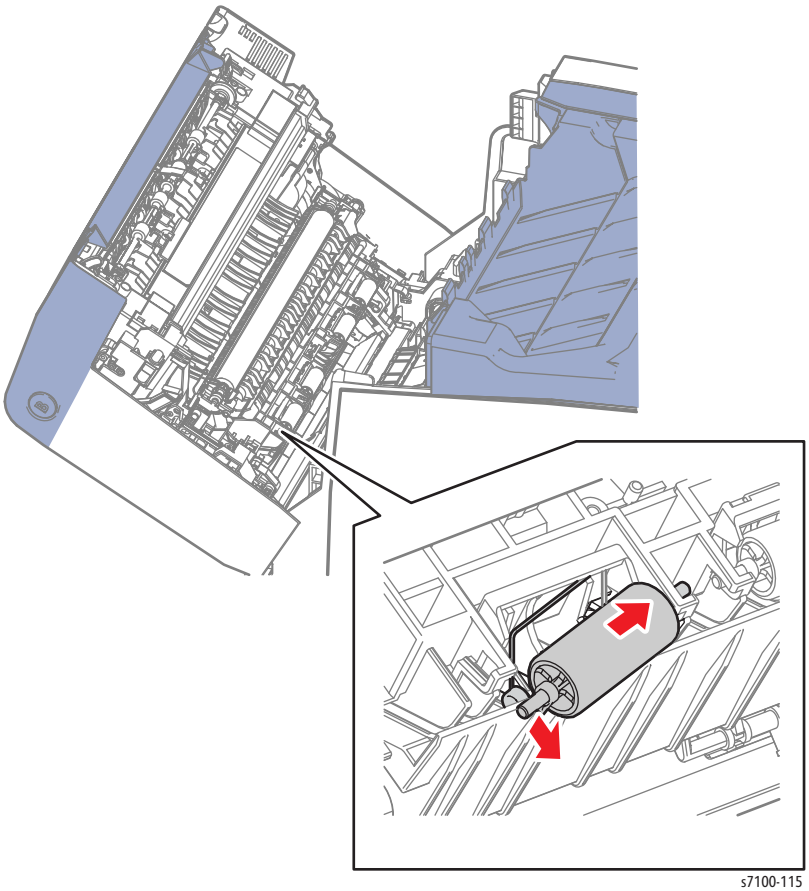
PL 4.3.99

1. Release latch A and open the Front Frame Assembly (PL 4.1.6).



CAUTION: When pushing the Turn Pinch Roller Assembly (PL 4.3.13) to the side in the next step, do not apply excessive force to prevent from damaging the Turn Pinch Roller Assembly.

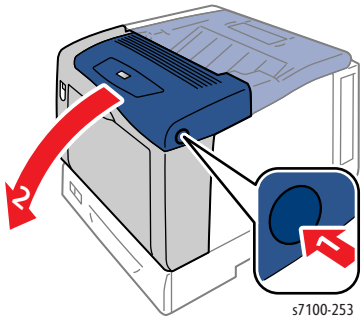
2. While pushing the Turn Pinch Roller Assembly to one side, free the shaft at the other side from the frame.
3. Remove the Turn Pinch Roller Assembly and the Turn Pinch Spring (PL 4.3.15).



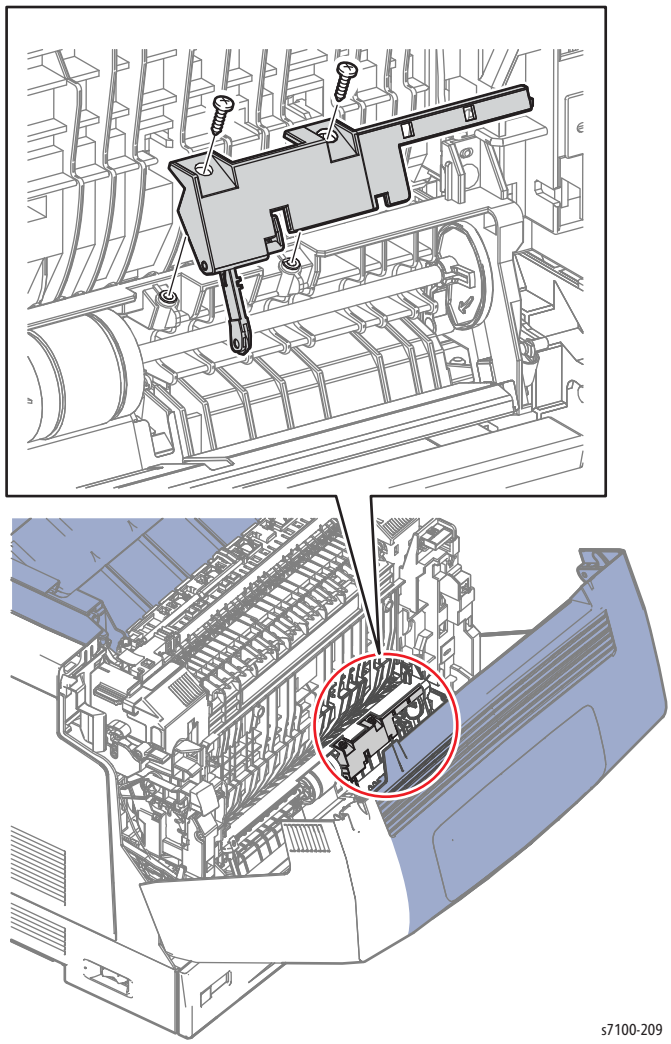
REP 4.12 Bypass Tray Sensor Bracket Assembly/ No Paper Sensor)

PL 4.4.1

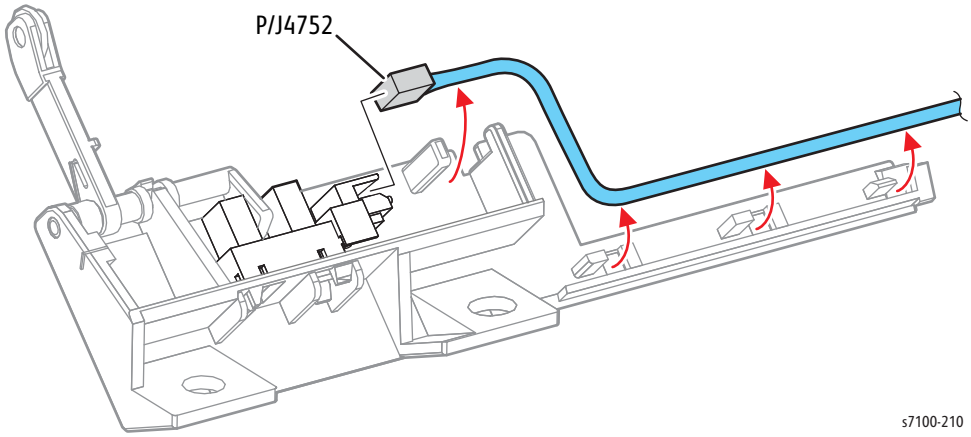
1. Press the B button and open the Front Cover Assembly (PL 1.1.38).



2. Remove 2 screws (silver, tapped, 8 mm) that secure the Bypass Tray Sensor Bracket Assembly to the Bypass Tray Feed Frame (PL 4.4.5).



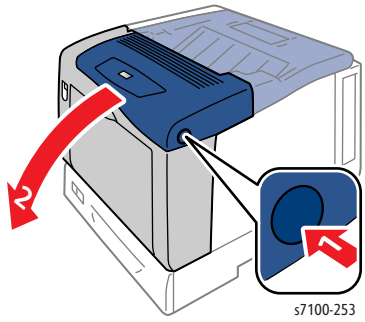
3. Turn the Bypass Tray Sensor Bracket Assembly over and disconnect the wiring harness connector P/J4752.
4. Release the wiring harness from the Harness Guide and remove the Bypass Tray Sensor Bracket Assembly.



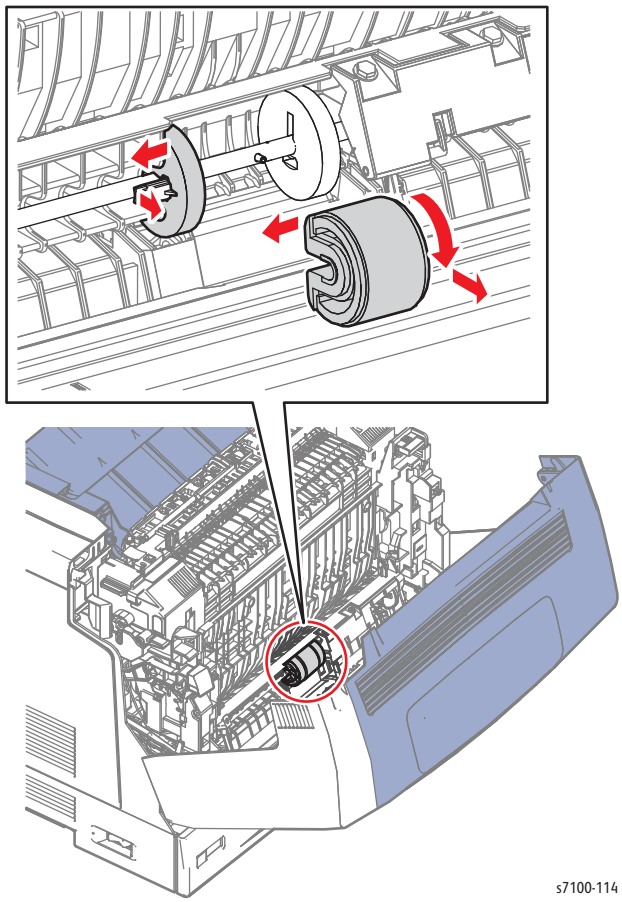
REP 4.13 Bypass Tray Feed Roller Assembly

PL 4.4.14

1. Press the B button and open the Front Cover Assembly (PL 1.1.38).



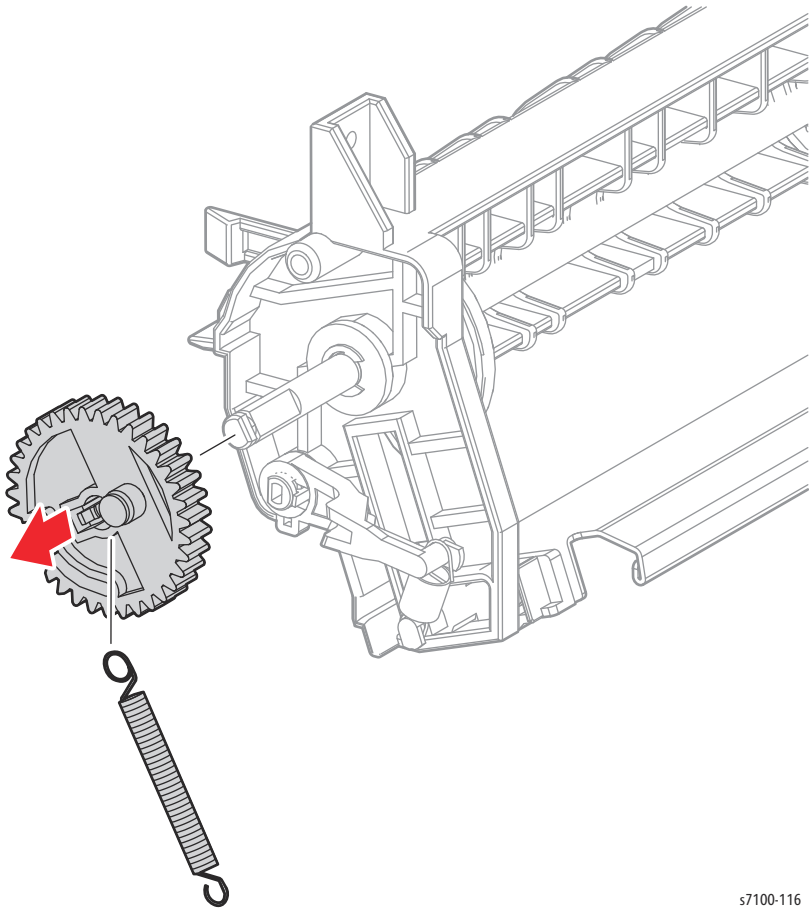
2. Release the hook that secures the left side of the Bypass Tray Core Roller (PL 4.4.16) and move the Roller to the left until it can go no further.
3. Move the Bypass Tray Feed Roller Assembly to the left until it can go no further, free it from the pin on the shaft, rotate it 90˚ to the front and remove the Feed Roller.



REP 4.14 Bypass Tray Feed Spring/ Feed Gear

PL 4.4.99

1. Remove Tray 1.
2. Remove the Control Panel Assembly (REP 1.12 Control Panel Assembly on page 4-29).
3. Remove the Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73).
4. Remove the Bypass Tray Cover Assembly (REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover on page 4-71).
5. Remove the Front Cover Assembly (REP 1.15 Front Cover Assembly on page 4-35).
6. Remove the Bypass Tray Feed Frame Assembly (REP 4.6 Bypass Tray Feed Frame Assembly on page 4-97).
7. Remove the Bypass Tray Feed Spring from the Bypass Tray Feed Gear.
8. Release the hook that secures the Bypass Tray Feed Gear to the shaft and remove the Bypass Tray Feed Gear.



Registration

REP 5.1 Registration Chute Assembly

PL 5.1.1

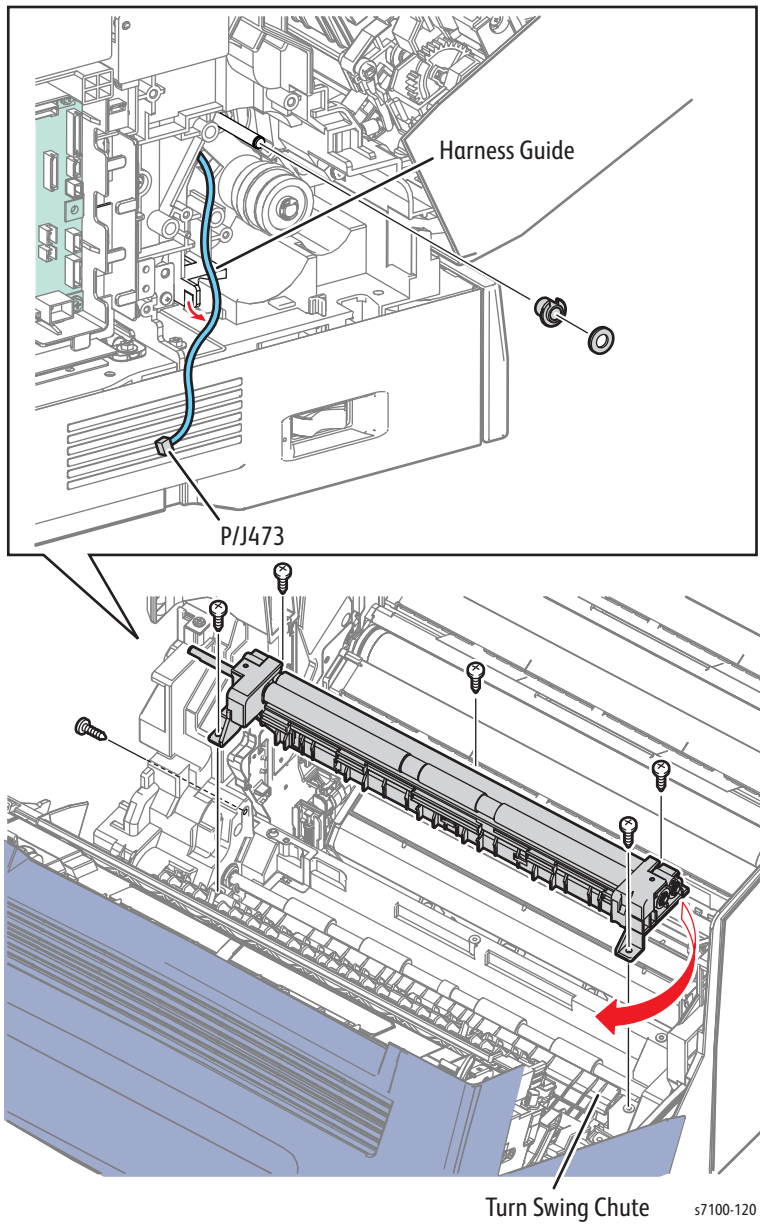
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

Note: For additional tips, refer to the Registration Chute Assembly Removal video (also available in the Phaser 7100 Training materials).

1. Remove the (K) Imaging Unit (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
5. Remove the Paper Handling Drive Assembly (REP 11.7 Paper Handling Drive Assembly on page 4-197).
6. Remove the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175).
7. Remove the Registration Clutch Assembly (REP 5.5 Registration Clutch Assembly on page 4-120).

Note: P/J473 has been disconnected in the Paper Handling Drive Assembly removal procedure.

8. Remove the Washer (PL 5.1.13) from the shaft of the Registration Clutch Assembly.
9. Remove the Registration Bearing (PL 5.1.12) that secures the Shaft of the Registration Chute Assembly.
10. Release the wiring harness from the Harness Guide.
11. Remove 6 screws (silver, tapped, 10 mm) that secure the Registration Chute Assembly to the printer.
12. Open the Turn Swing Chute.
13. Release the 2 bosses on the left and right of the Registration Chute Assembly, move the Registration Chute Assembly towards the front right, while lifting the Registration Chute to remove.

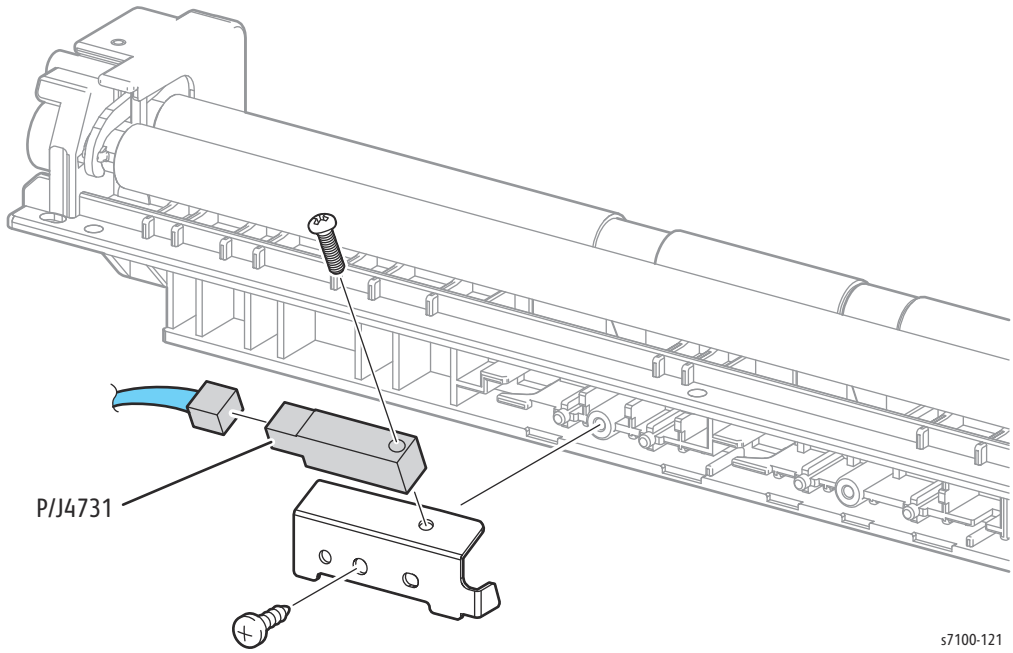


REP 5.2 Registration Sensor

PL 5.1.3

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the (K) Imaging Unit (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
5. Remove the Paper Handling Drive Assembly (REP 11.7 Paper Handling Drive Assembly on page 4-197).
6. Remove the Registration Clutch Assembly (REP 5.5 Registration Clutch Assembly on page 4-120).
7. Remove the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175).
8. Remove the Registration Chute Assembly (REP 5.1, REP 5.1 Registration Chute Assembly on page 4-114).
9. Remove one screw (silver, tapped, 10 mm) that secures the Registration Sensor Assembly and remove the Registration Sensor Assembly.
10. Disconnect the wiring harness connector P/J4731 that is connected to the Registration Sensor and remove the Registration Sensor Assembly.
11. Remove one screw that secures the Registration Sensor and remove the Sensor.



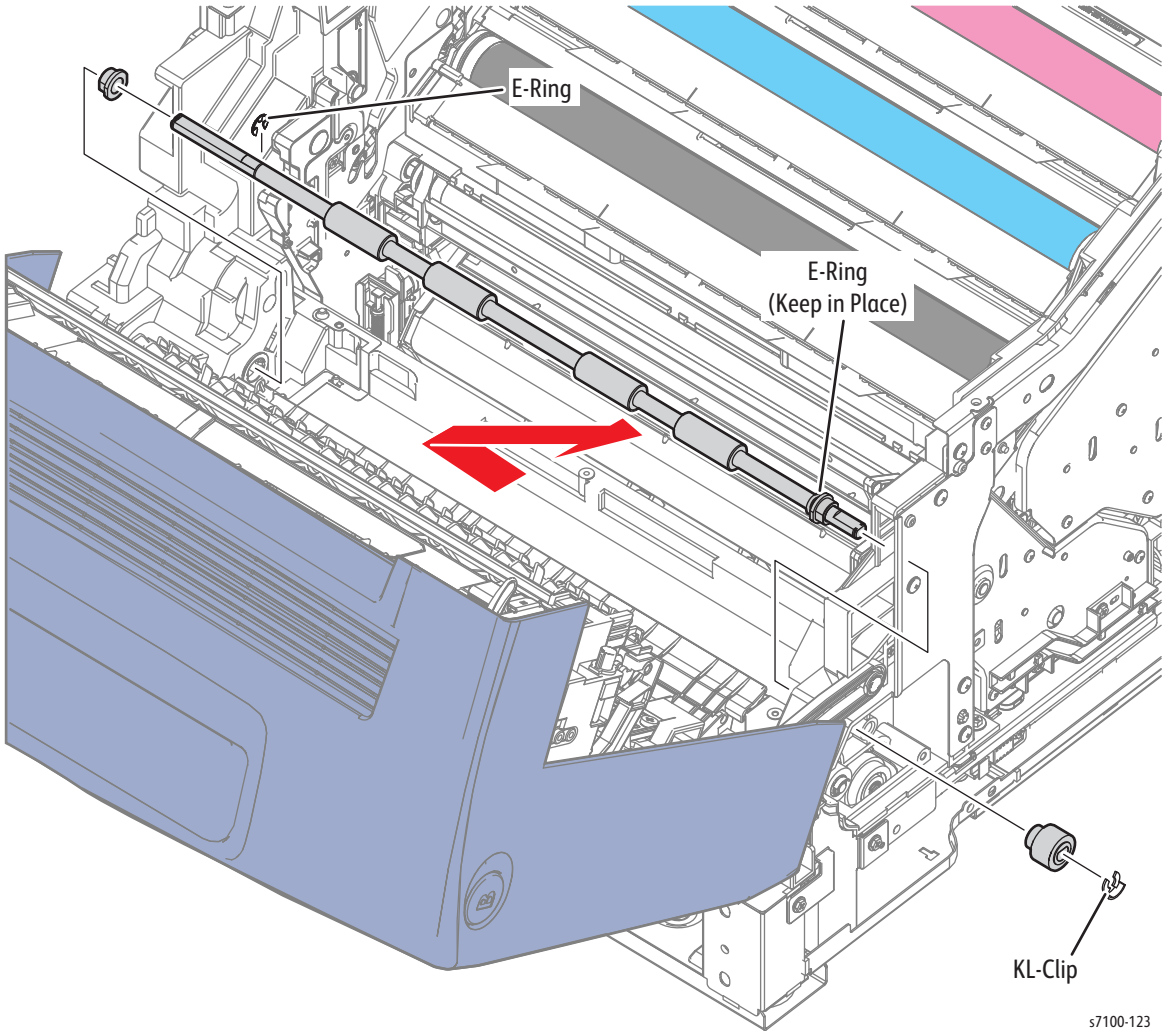
REP 5.3 Bypass Tray Turn Roller

PL 5.1.8/ PL 5.1.98

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove Tray 1.
2. Remove the (K) Imaging Unit (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
8. Remove the Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41).
9. Remove the Paper Handling Drive Assembly (REP 11.7 Paper Handling Drive Assembly on page 4-197).
10. Remove the Registration Clutch Assembly (REP 5.5 Registration Clutch Assembly on page 4-120).
11. Remove the CTD Sensor Assembly (REP 9.9 CTD Sensor Assembly on page 4-175).
12. Remove the Registration Chute Assembly (REP 5.1 Registration Chute Assembly on page 4-114).
13. Remove the Turn Clutch Assembly (REP 5.4 Turn Clutch Assembly on page 4-119).

14. Remove the KL Clip that secures the Turn Gear Assembly 17 (PL 5.1.6) to the Bypass Tray Turn Roller.
15. Pull out and remove the Turn Gear Assembly 17.
16. Remove the E-ring that secure the left Bearing (PL 5.1.7).
17. Slide the left and right Bearings towards the inner side.
18. Slide the Bypass Tray Turn Roller to the left, free the right side of the Bypass Tray Turn Roller from the hole, and then pull it to the right and upwards to remove.



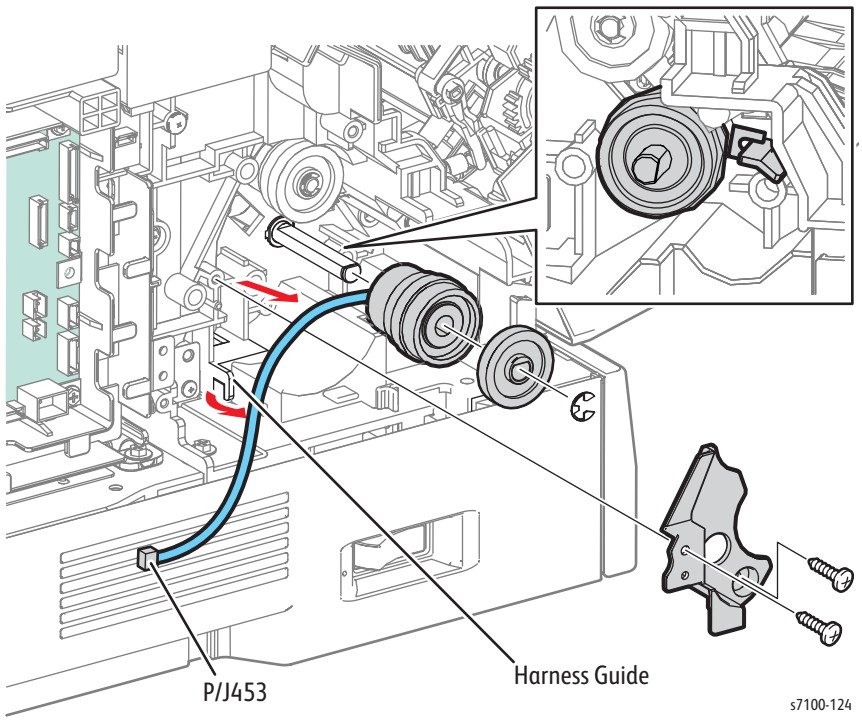
REP 5.4 Turn Clutch Assembly

PL 5.1.9

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
4. Remove the Paper Handling Drive Assembly (REP 11.7 Paper Handling Drive Assembly on page 4-197).

   Note: P/J453 has been disconnected in the Paper Handling Drive Assembly removal procedure.
5. Remove 2 screws (silver, tapped, 10 mm) that secure the CTD Harness Cover (PL 11.1.29) to the printer and remove the CTD Harness Cover.
6. Remove the E-ring that secures the Bypass Tray Idle Gear (PL 5.1.10).
7. Pull out and remove the Bypass Tray Idle Gear from the Bypass Tray Turn Roller.
8. Release the harness that is connected to the Turn Clutch Assembly from the Harness Guide.
9. While freeing the depressed part of the Turn Clutch Assembly from the protrusion of the printer, remove the Turn Clutch Assembly by pulling it out from the Bypass Tray Turn Roller.

Figure 1



Replacement Notes:

– Be sure to place the Gear with the thick side facing the inner side.
– Align the Clutch with the notch (see Figure 1 on page 4-119).

REP 5.5 Registration Clutch Assembly

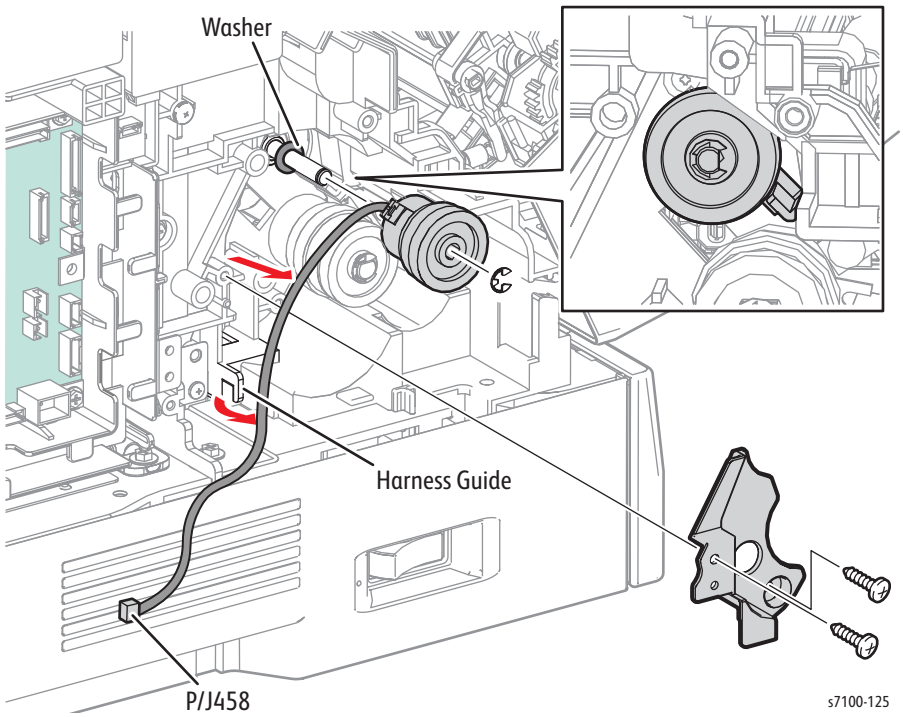
PL 5.1.11/ PL 5.1.99

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
4. Remove the Paper Handling Drive Assembly (REP 11.7 Paper Handling Drive Assembly on page 4-197).

   Note: P/J458 has been disconnected in the Paper Handling Drive Assembly removal procedure.
5. Remove 2 screws (silver, tapped, 10 mm) that secure the CTD Harness Cover to the printer and remove the CTD Harness Cover.
6. Release the wiring harness that is connected to the Registration Clutch Assembly from the Harness Guide.
7. Remove the E-ring that secures the Registration Clutch Assembly.

   Note: When removing the Registration Clutch Assembly in the following step, be careful not to drop the Washer (PL 5.1.13) that is attached to the Shaft.
8. While freeing the depressed part of the Registration Clutch Assembly from the boss of the printer, remove the Registration Clutch Assembly by pulling it out from the Shaft.

Figure 1



Replacement Note: Align the Clutch with the notch (see Figure 1 on page 4-120).

Xerographics

REP 6.0 Imaging Unit (Y/ M/ C/ K)

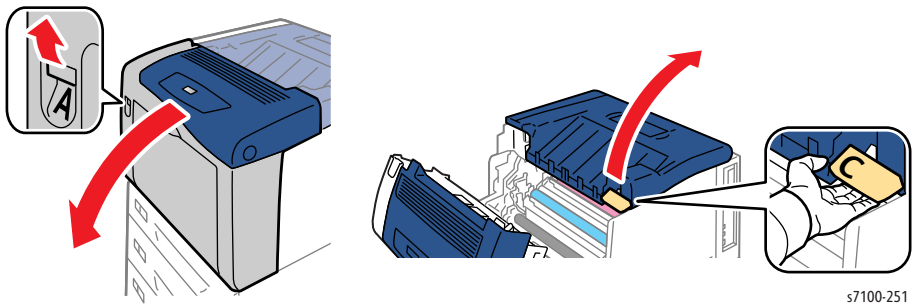
PL 6.1.1/ PL 6.1.4

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

Note: The C, M, and Y Imaging Units are the same part and can be placed in any location.

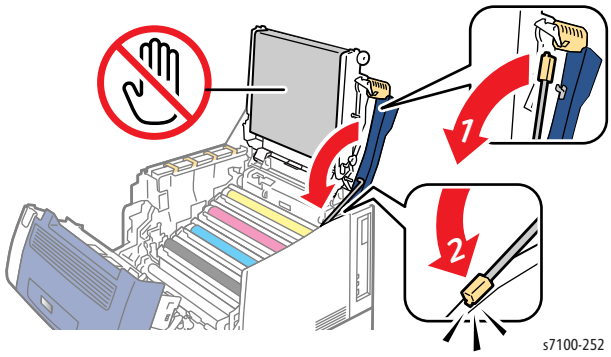
1. Release latch A and open the Front Frame Assembly (PL 4.1.6).
2. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.

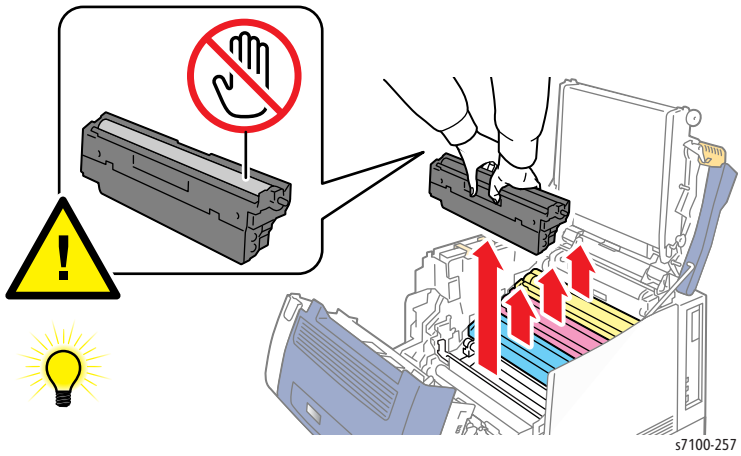


CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt.

3. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.



4. Pull the Imaging Unit (Y/ M/ C/ K) upward to remove.

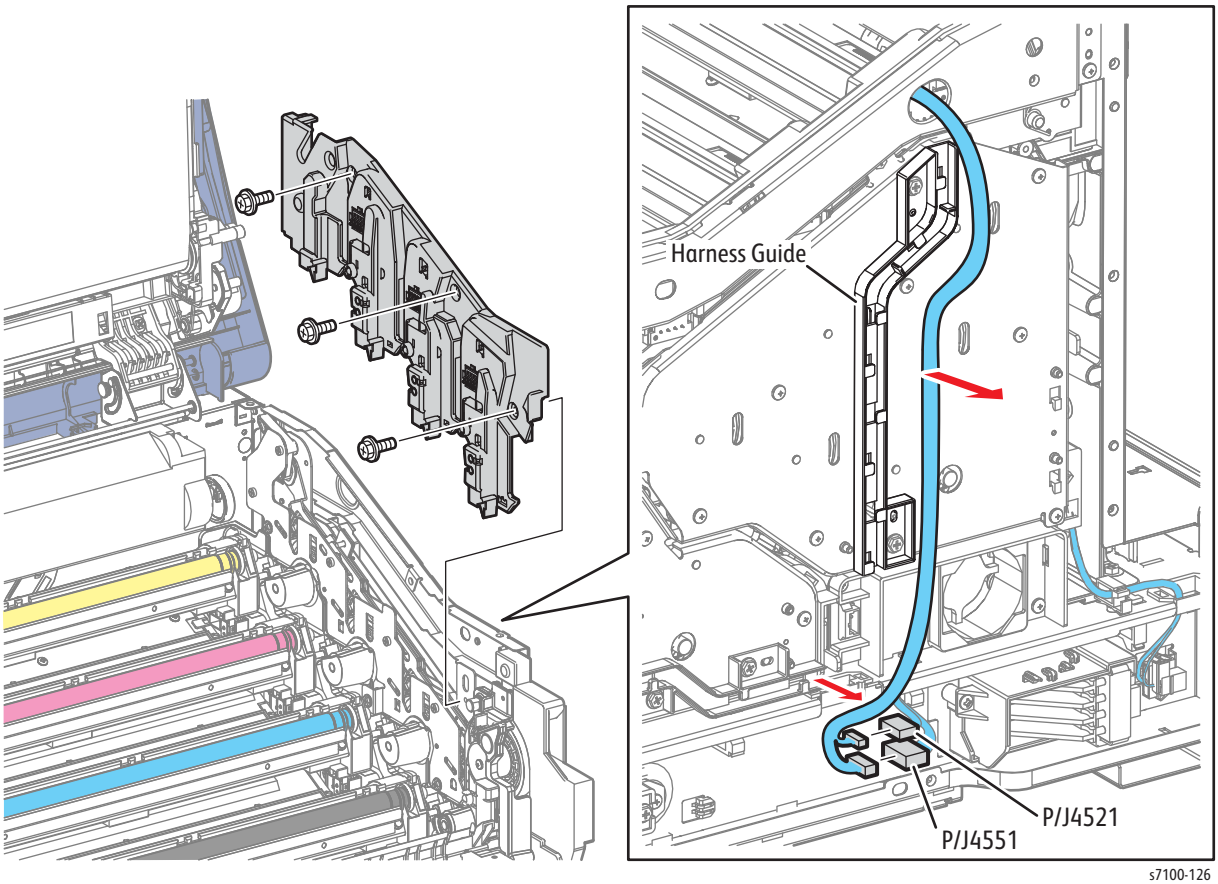


REP 6.1 Right Imaging Unit Guide Assembly

PL 6.1.5

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Release the wiring harness from the Harness Guide.
8. Disconnect the wiring harness connectors P/J4521 and P/J4551 that are connected to the Right Imaging Unit Guide Assembly.
9. Remove 3 screws (silver, 6mm) that secure the Right Imaging Unit Guide Assembly to the printer.
10. Remove the Right Imaging Unit Guide Assembly.



REP 6.2 Imaging Unit CRUM Connector Assembly

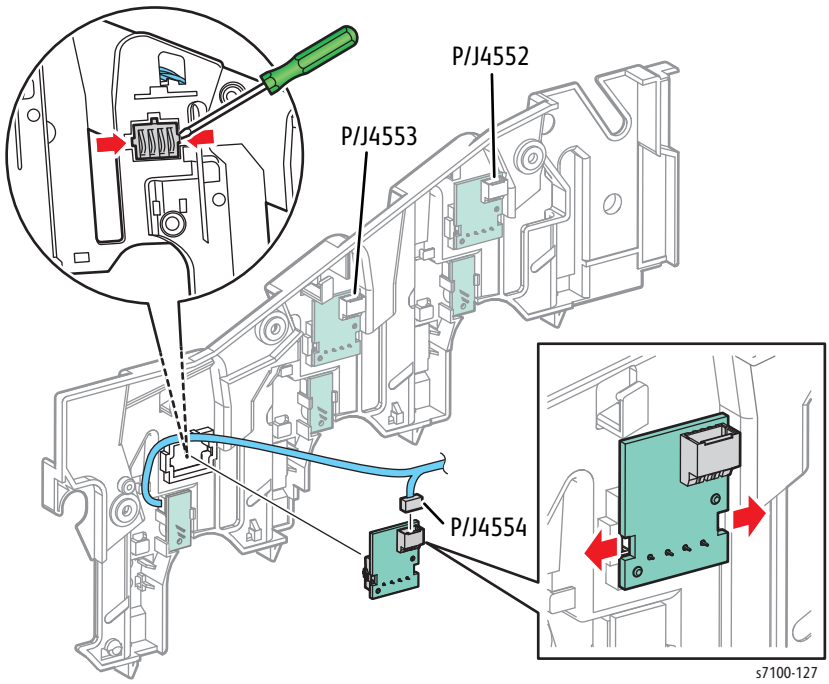
PL 6.1.6

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

Note: The Imaging Unit CRUM Connector can be removed from the Right Imaging Unit Guide Assembly (PL 6.1.5) or the K Imaging Unit Guide Assembly (PL 6.1.11).

Removing the Imaging Unit CRUM Connector Assembly from the Right Imaging Unit Guide Assembly

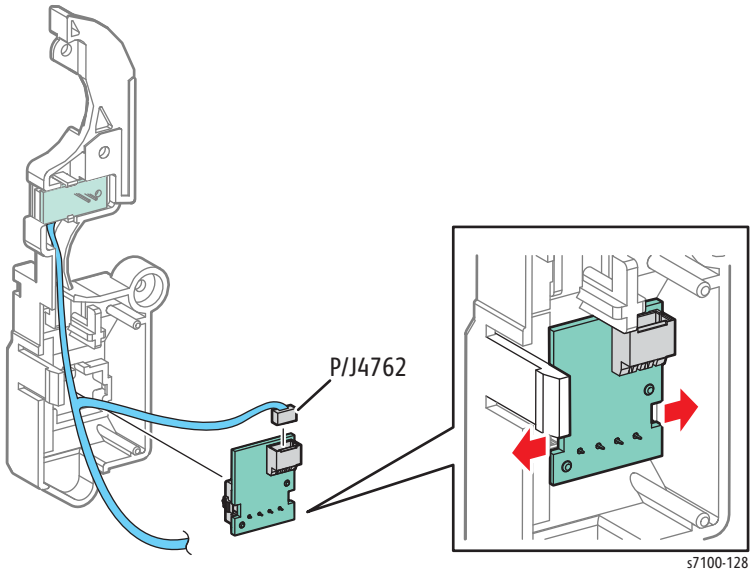
1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Disconnect the wiring harness connector from the Imaging Unit CRUM Connector.
8. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
9. Release the hooks that secure the Imaging Unit CRUM Connector.
10. Remove the Imaging Unit CRUM Connector Assembly.



Removing the Imaging Unit CRUM Connector Assembly from the (K) Imaging Unit Guide Assembly

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
8. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
9. Remove the (K) Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
10. Remove the (K) Imaging Unit Guide Assembly (REP 6.4 (K) Imaging Unit Guide Assembly on page 4-128).
11. Disconnect the wiring harness connector from the Imaging Unit CRUM Connector.
12. Release the hooks that secure the Imaging Unit CRUM Connector.
13. Remove the Imaging Unit CRUM Connector Assembly.



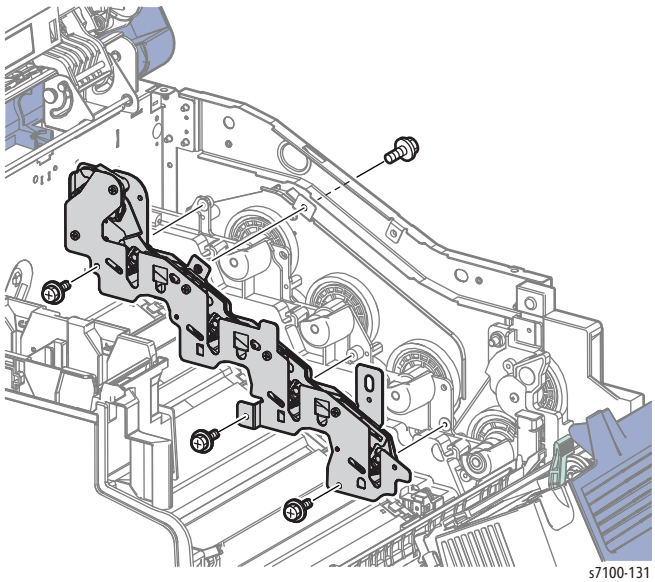
REP 6.3 Right Latch Assembly

PL 6.1.10

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

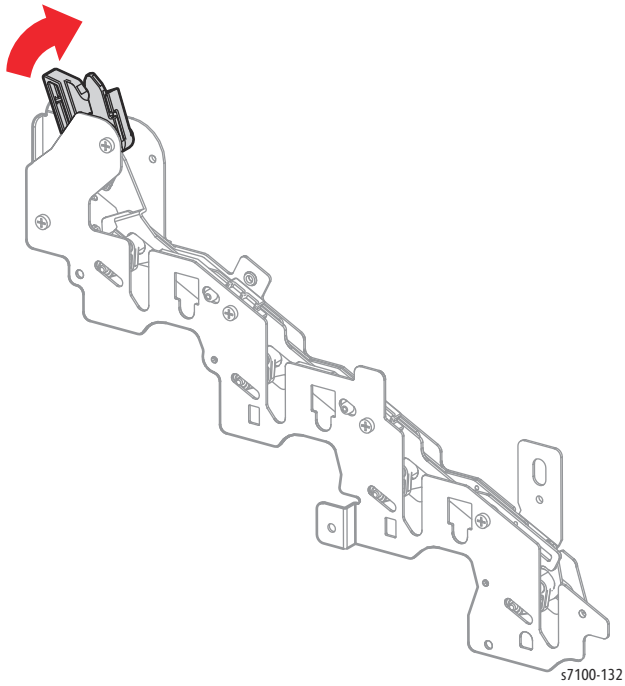
1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
8. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
9. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
10. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
11. Remove the Developer Housing Assemblies (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
12. Remove the (K) Imaging Unit Guide Assembly (REP 6.4 (K) Imaging Unit Guide Assembly on page 4-128).
13. Remove 4 screws (silver, 6 mm) that secure the Right Latch Assembly to the printer and remove the Right Latch Assembly.

Figure 1



Replacement Note: After installing the Right Latch Assembly, position the Link section of the Right Latch Assembly as shown in Figure 2. If the Link section is not positioned correctly, it will not be able to link with the IBT Unit which could damage the IBT Unit.

Figure 2

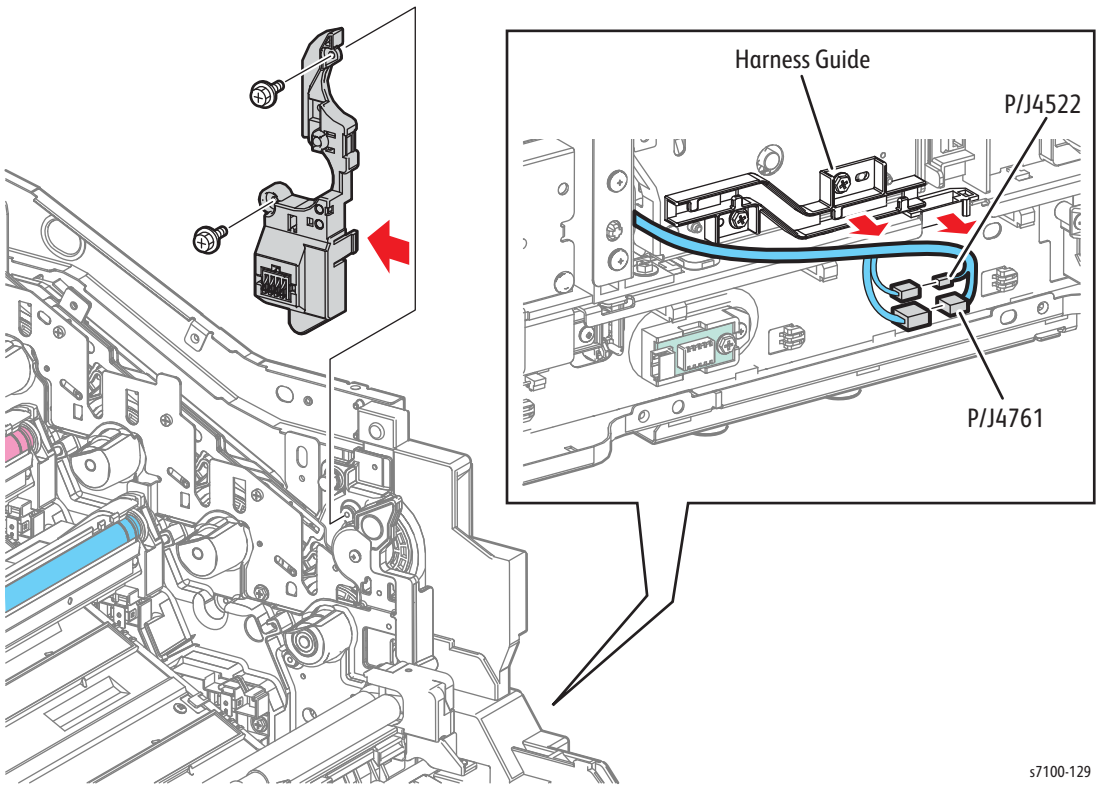


REP 6.4 (K) Imaging Unit Guide Assembly

PL 6.1.11

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
8. Release the wiring harness from the Harness Guide.
9. Disconnect the 2 wiring harness connectors P/J4522 and P/J4761 that are connected to the (K) Imaging Unit Guide Assembly.
10. Remove 2 screws (silver, 6 mm) that secure the (K) Imaging Unit Guide Assembly to the printer.
11. Release the hook that secures the (K) Imaging Unit Guide Assembly to the printer and remove the K Imaging Unit Guide Assembly.

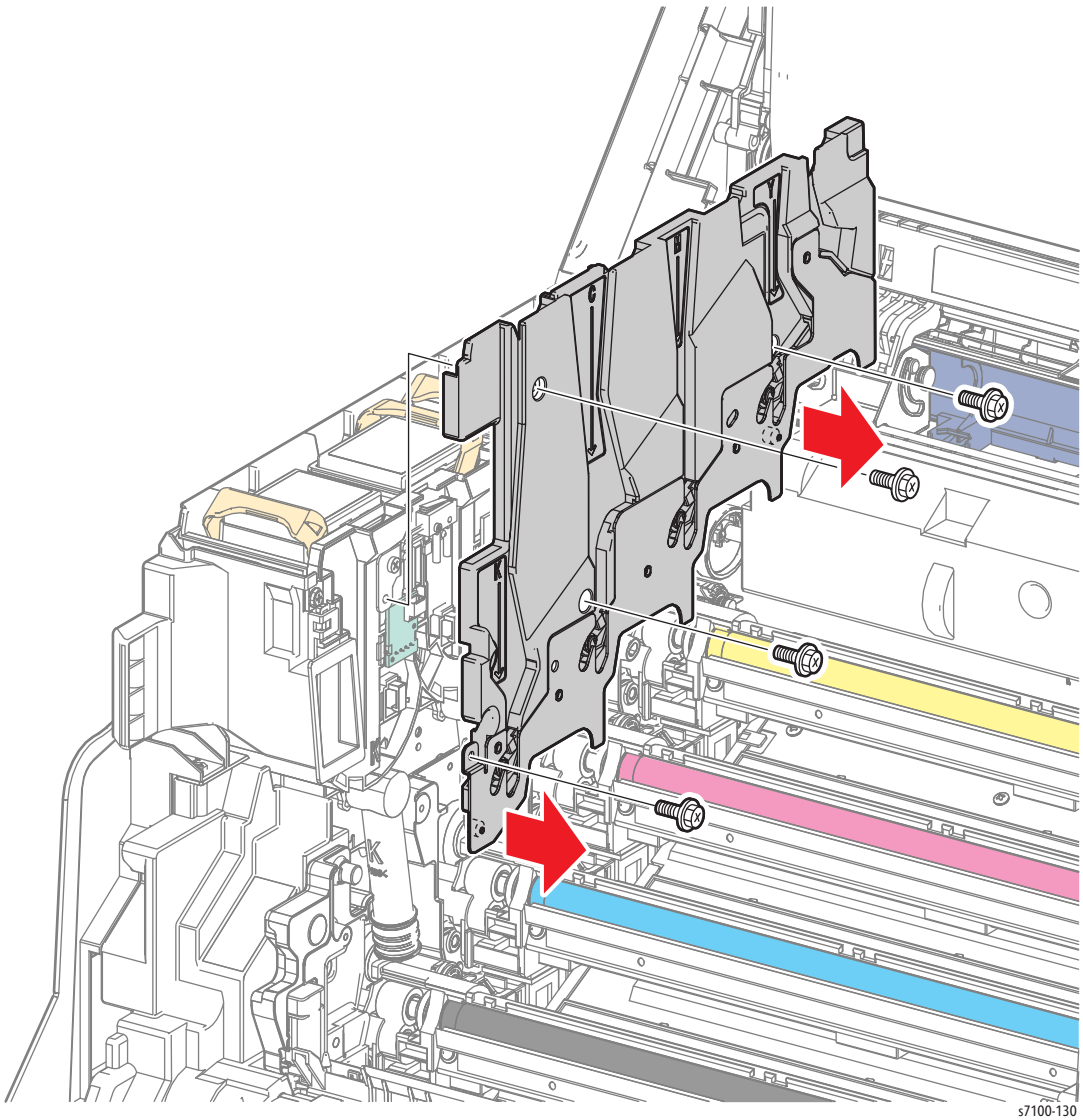


REP 6.5 Left Imaging Unit Guide Assembly

PL 6.1.13

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove 4 screws (silver, 6 mm) that secure the Left Imaging Unit Guide Assembly to the printer.
3. Pull the front side of the Left Imaging Unit Guide Assembly to the right to release the boss at the front, and then release the boss at the rear to remove the Left Imaging Unit Guide Assembly.



Replacement Note: Be sure to install the Shaft of the (Y/ M/ C/ K) Developer Housing Assembly (PL 8.1.5/ PL 8.1.6/ PL 8.1.7/ PL 8.1.8) properly before installing the Left Imaging Unit Guide Assembly.

ROS

REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly

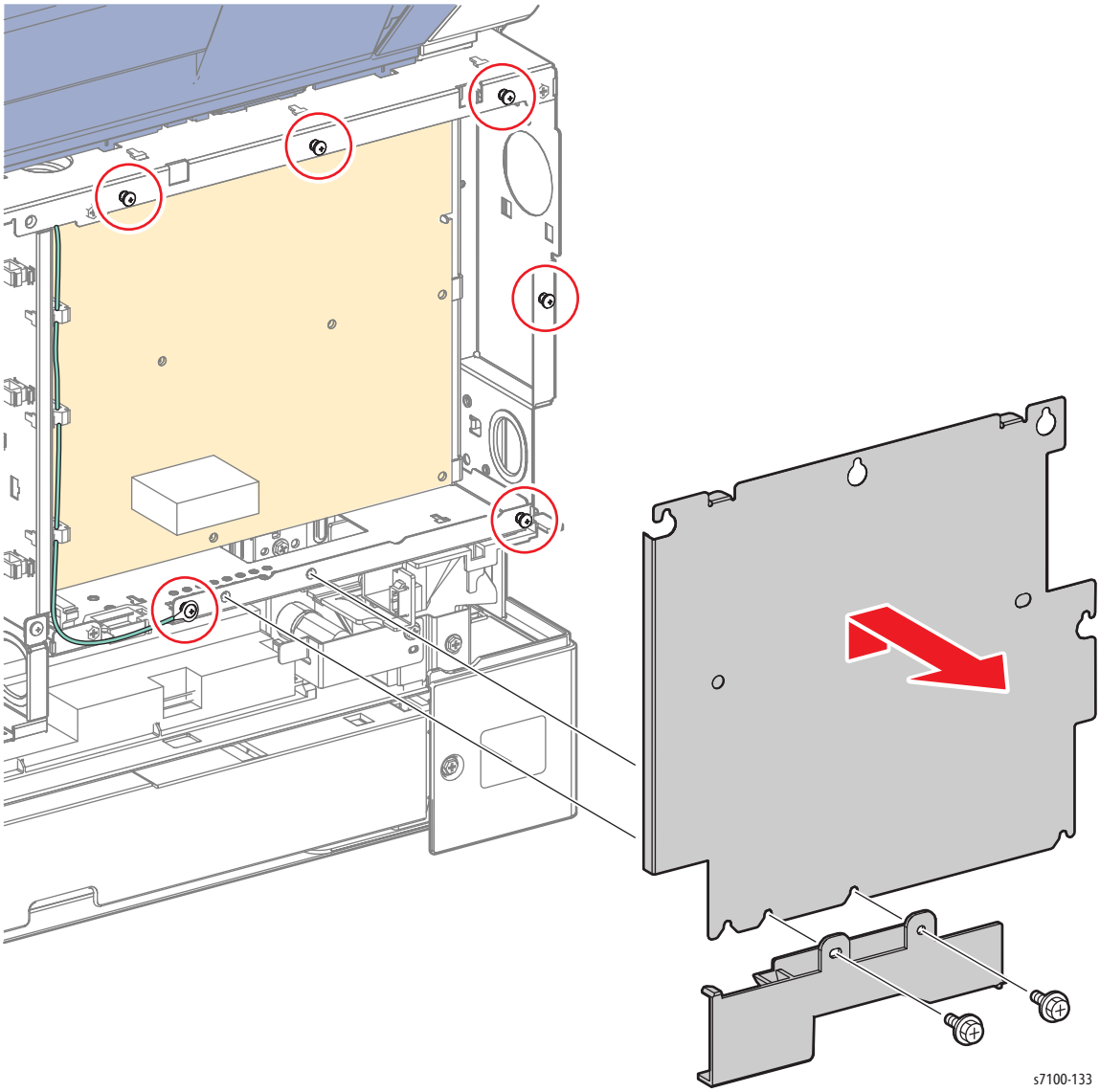
PL 7.1.1/ PL 7.1.2/ PL 7.1.3/ PL 7.1.4

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

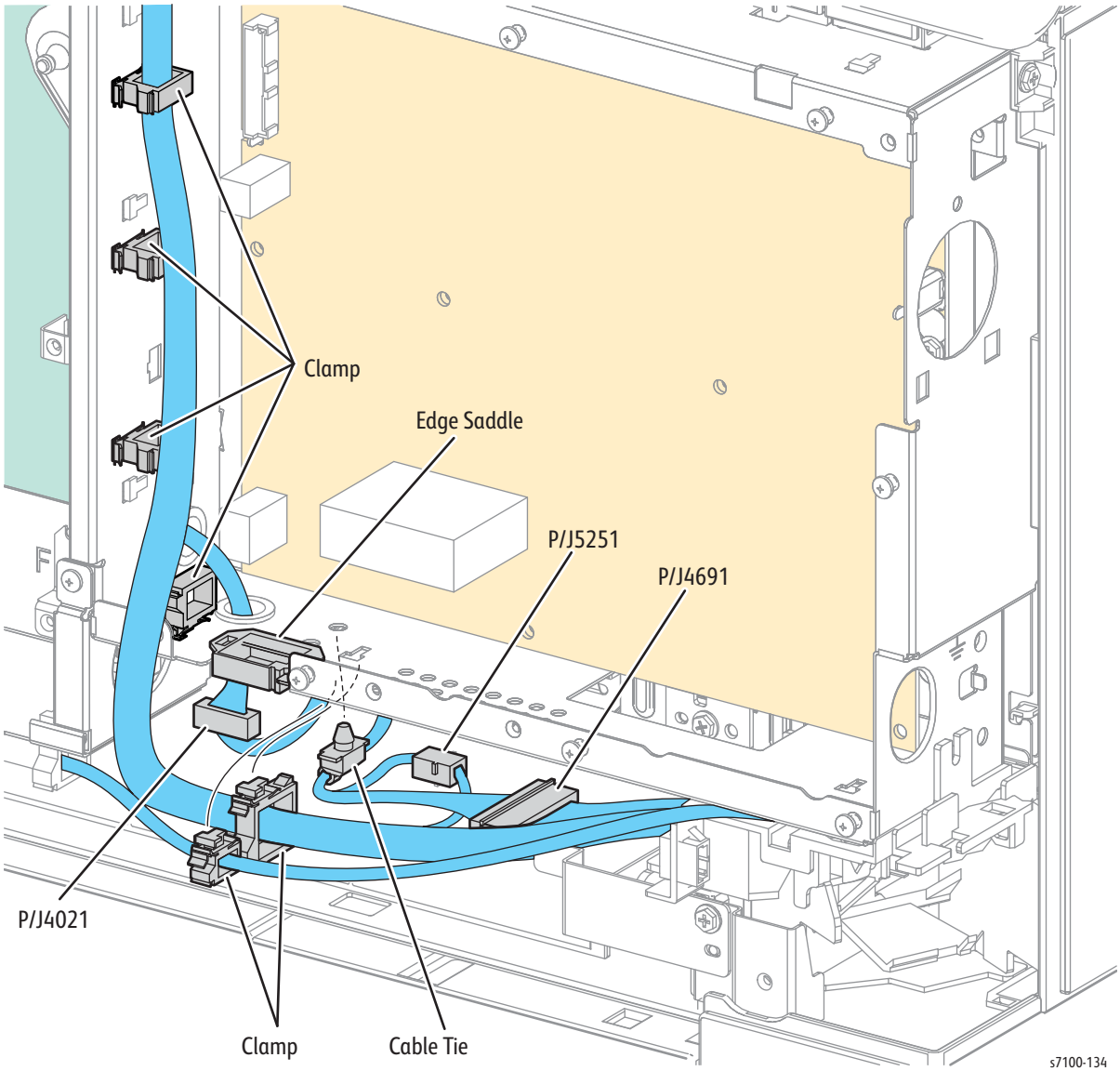
Note: For additional tips, refer to the ROS Assembly Removal video (also available in the Phaser 7100 Training materials).

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
8. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
9. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
10. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
11. Remove the (Y/ M/ C/ K) Developer Housing Assembly (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
12. Remove the (K) Imaging Unit Guide Assembly (REP 6.4 (K) Imaging Unit Guide Assembly on page 4-128).

13. Remove 2 screws (silver, 6 mm) that secure the Lower LVPS Duct (PL 12.2.9).
14. Remove the Lower LVPS Duct.
15. Loosen 5 screws (silver, 6 mm) that secure the LVPS Shield Plate (PL 12.2.2) and 1 screw that secures the Ground Wire.
16. Remove the LVPS Shield Plate.



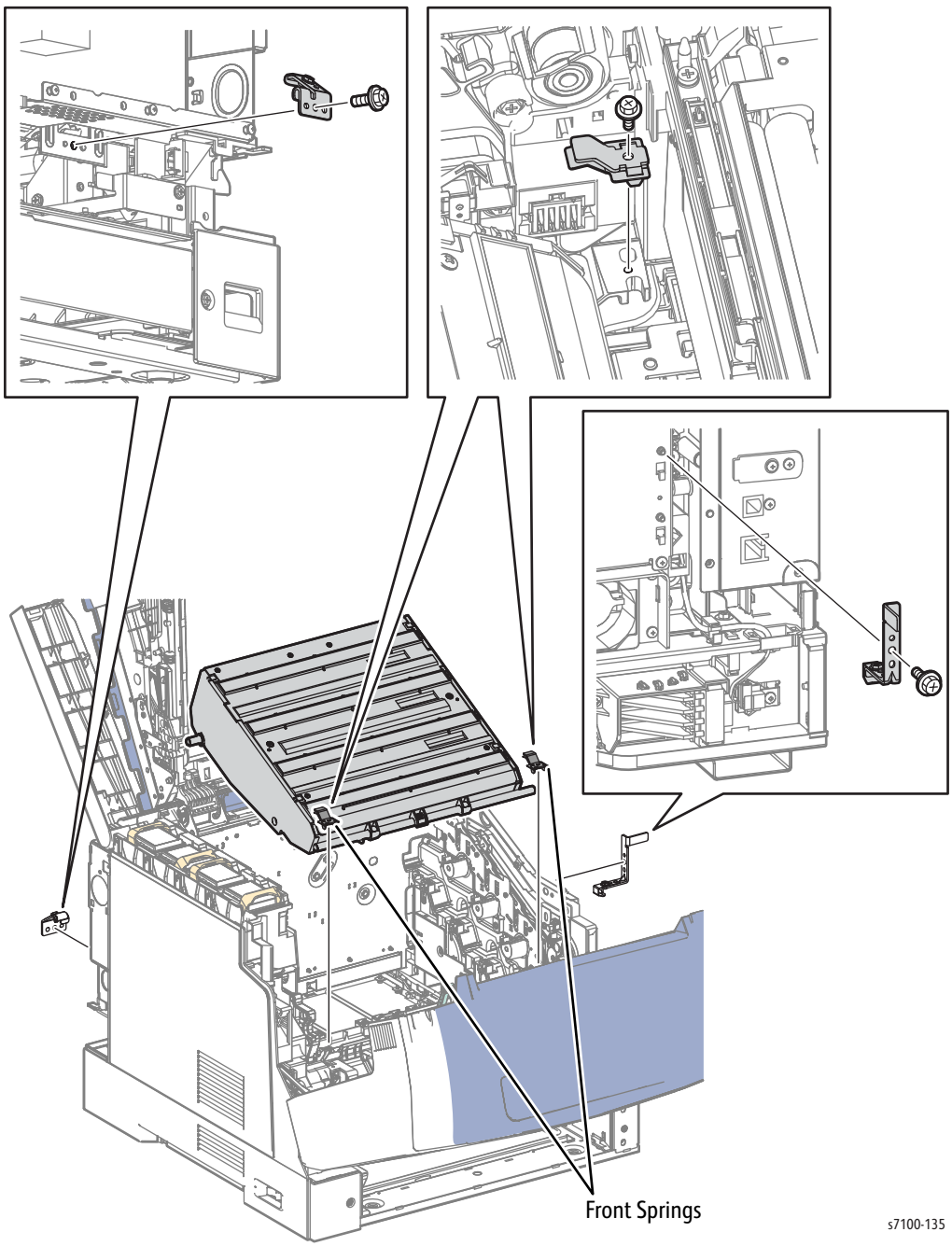
17. Release the wiring harness from the 4 clamps and the Edge Saddle beside the LVPS.
18. Release the wiring harness from the 2 clamps below the LVPS.
19. Disconnect the 3 wiring harness connectors (P/J4691, P/J5251, and P/J4021) that are connected to the Laser Unit (hidden behind the harness).
20. Release the cable tie from the printer frame.



21. Remove one screw (silver, 6 mm) that secures the Left Rear Spring Assembly on the rear of the printer and remove the Rear Left Spring Assembly.
22. Remove one screw (silver, 6 mm) that secures the Right Rear Spring Assembly on the right side of the printer and remove the Right Rear Spring Assembly.
23. Remove 2 screws (silver, 6 mm) that secure the 2 Front Springs and remove the Front Springs.

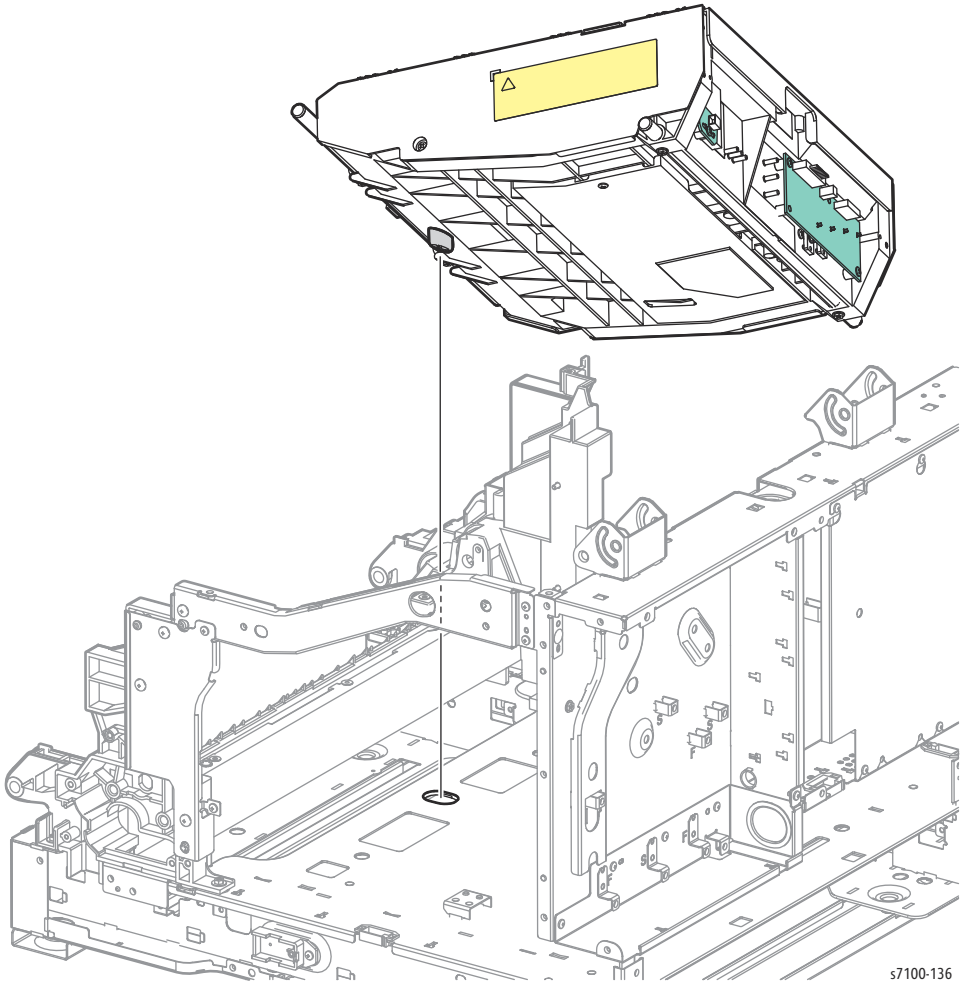
    Note: When removing the Laser Unit in the following step, make sure to move the wiring harnesses in the rear to prevent from damaging the harnesses.

24. Lift and remove the Laser Unit from the printer.

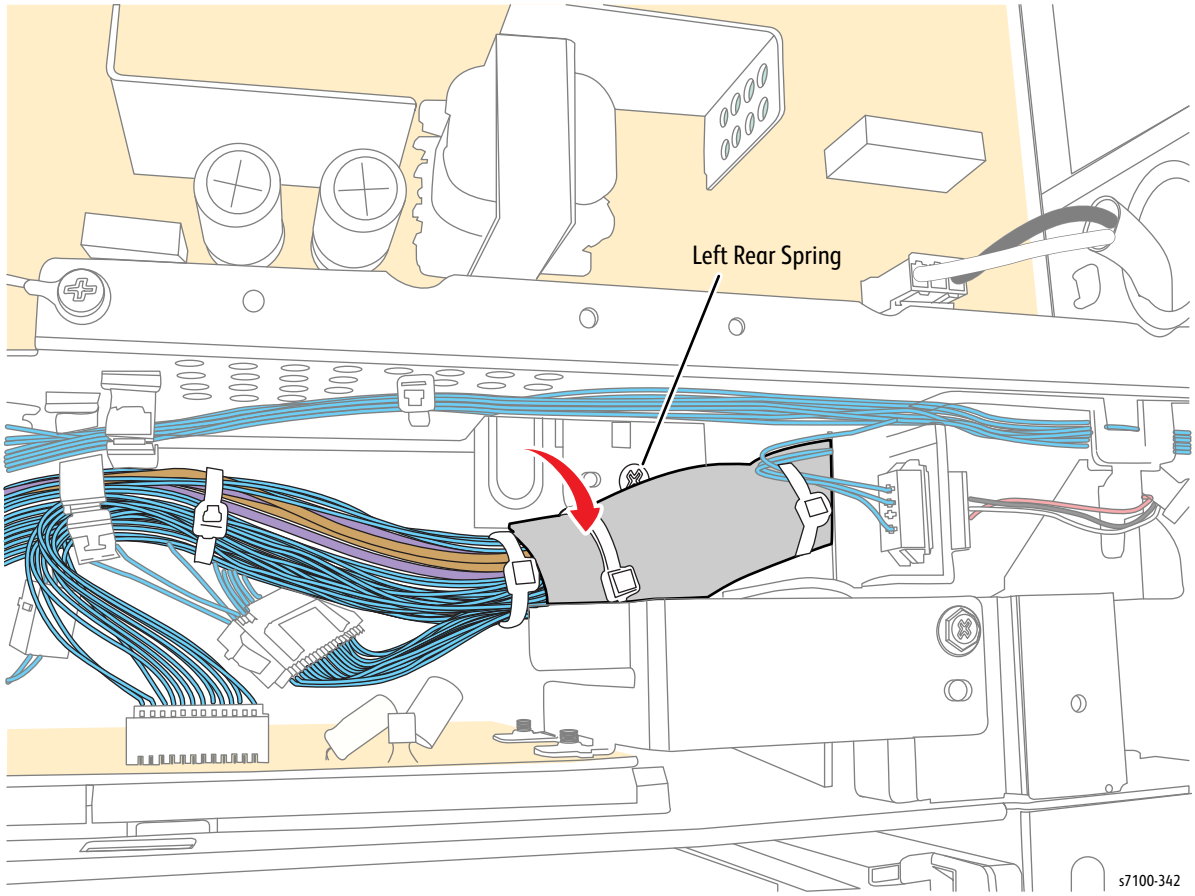


Replacement Notes:

- When installing the Laser Unit, be sure to align the boss with the hole in the printer frame. If the Laser Unit is installed with the boss position misaligned, the printer will not function properly.



- Keep the cables in the rear of the printer unclipped before installing the Left Rear Spring (PL 7.1.4).



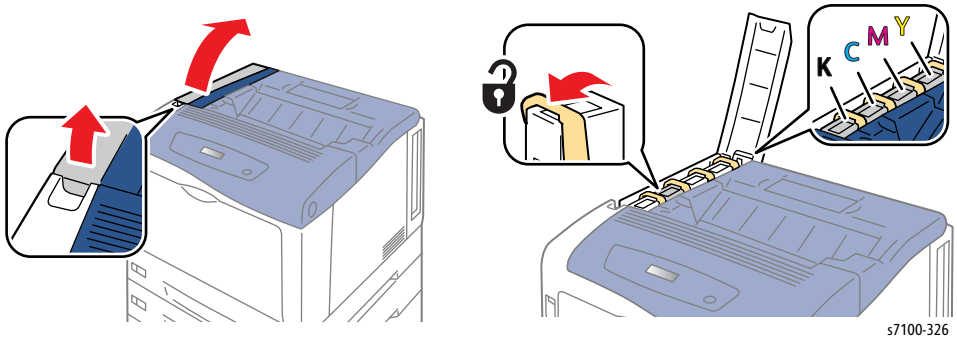
- Perform DC676 ROS Exposure Point Adjustment (DC676 Adjust ROS on page 2-52).

Development

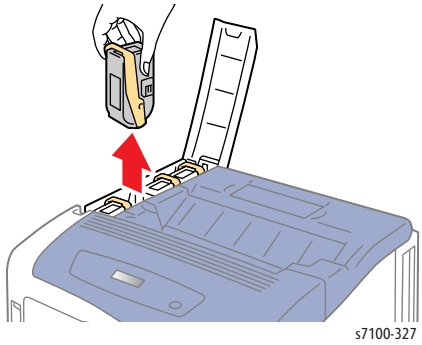
REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K)

PL 8.1.1 - PL 8.1.4

1. Open the Toner Cartridge Cover Assembly (PL 1.1.12).
2. Release the Toner Cartridge lock.



3. Pull the Toner Cartridge out to remove.



REP 8.1 Developer Housing Assembly (Y/ M/ C/ K)

PL 8.1.5 - PL 8.1.8

Note: This procedure applies to all four Developers (Y/ M/ C/ K).

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

Note: For additional tips, refer to the Developer Housing Assembly Removal video (also available in the Phaser 7100 Training materials).

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).

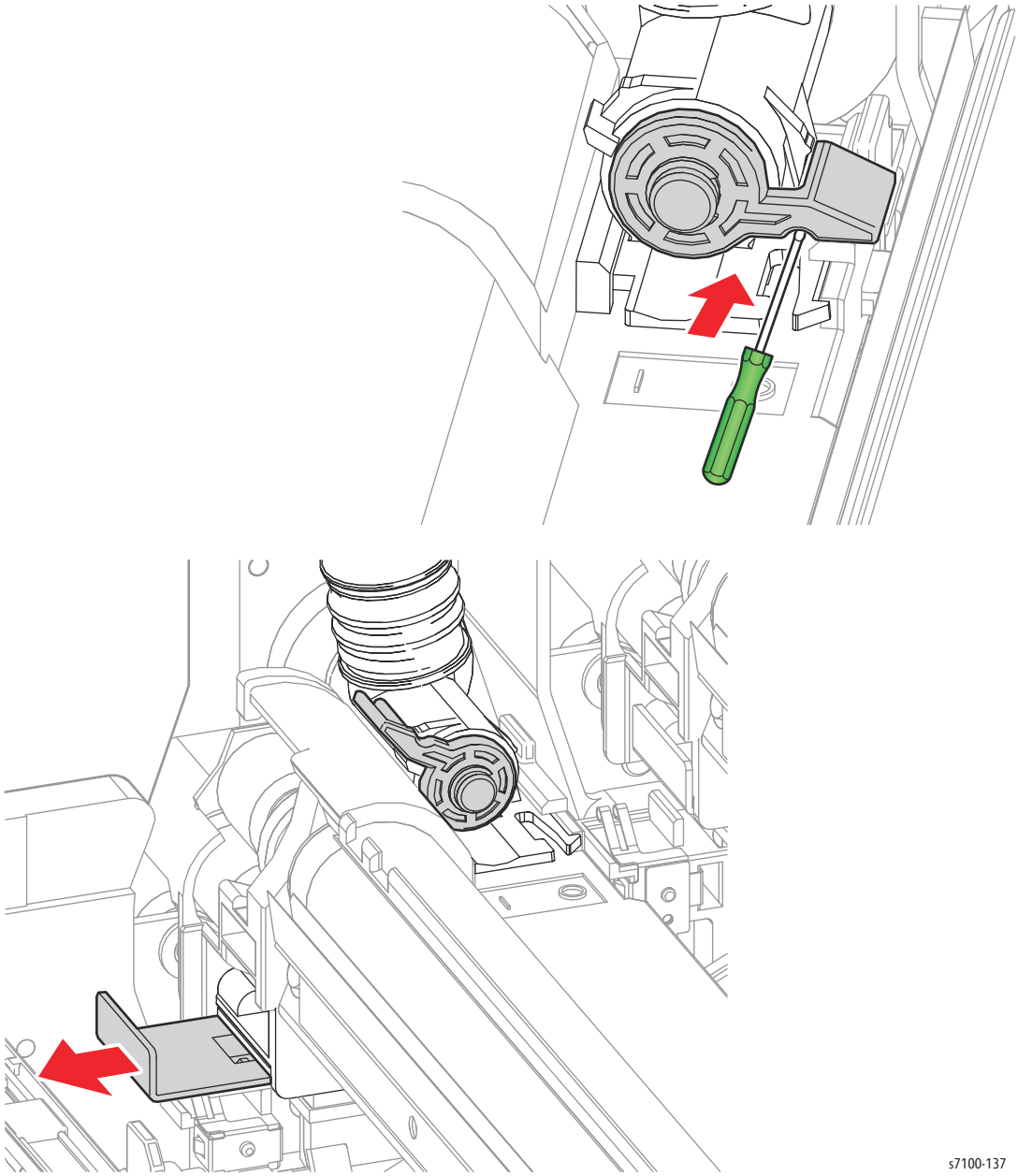
   Note: Steps 7 and 8 are to be performed only when removing the Yellow Developer Housing Assembly.

7. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
8. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
9. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
10. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).

Note: When opening/ closing the Lever in the following step, make sure to move it all the way until it is latched. If this step is not performed correctly, it may cause the toner in the Developer Housing Assembly to spill.

11. Use a flat tip screwdriver to close the Lever at the joint section of the Toner Dispenser.
12. Pull out and close the Shutter.

Figure 1

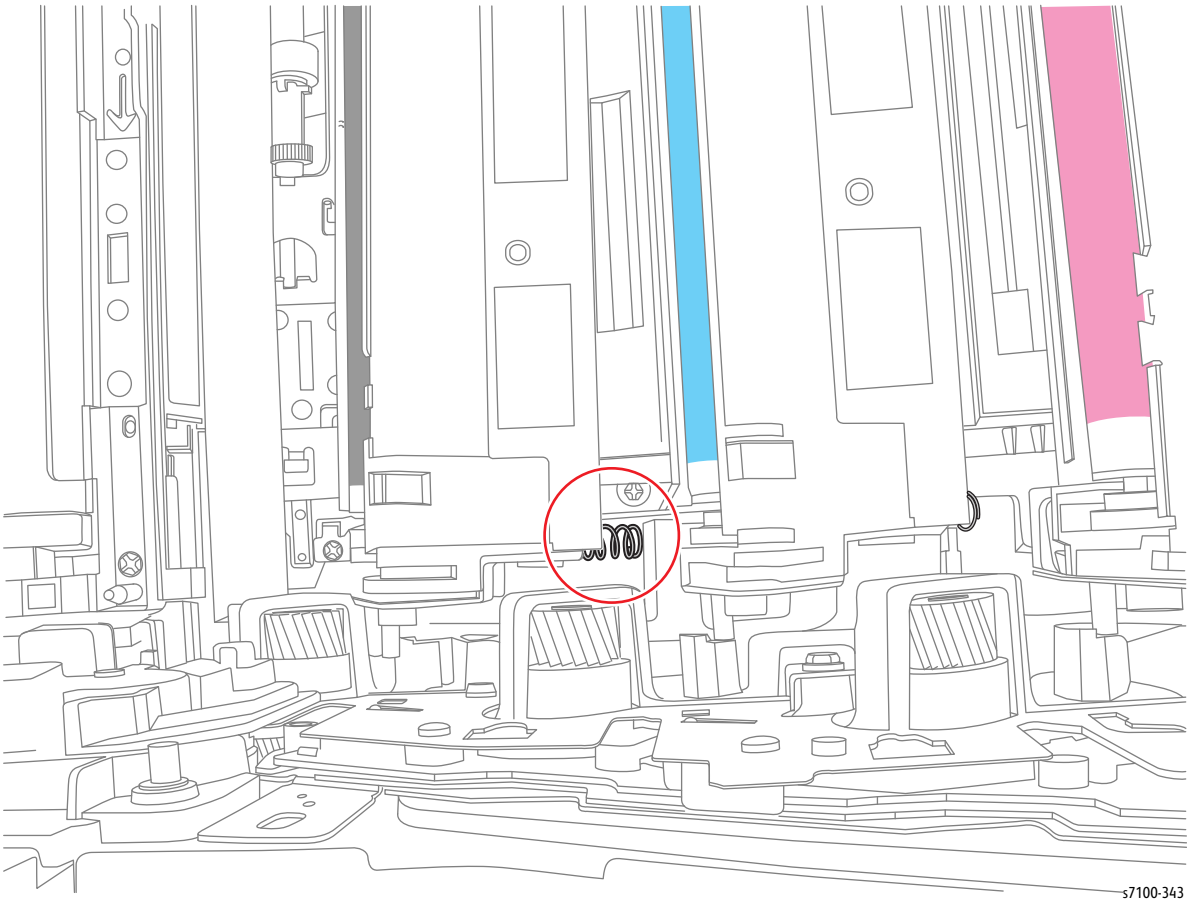


13. Lift the Shaft (see Figure 3) on the right side of the Developer Housing Assembly (Y/ M/ C/ K) from the groove, then slant the right side of the Developer Housing Assembly (Y/ M/ C/ K) to the front while pulling it upwards.

    Notes:

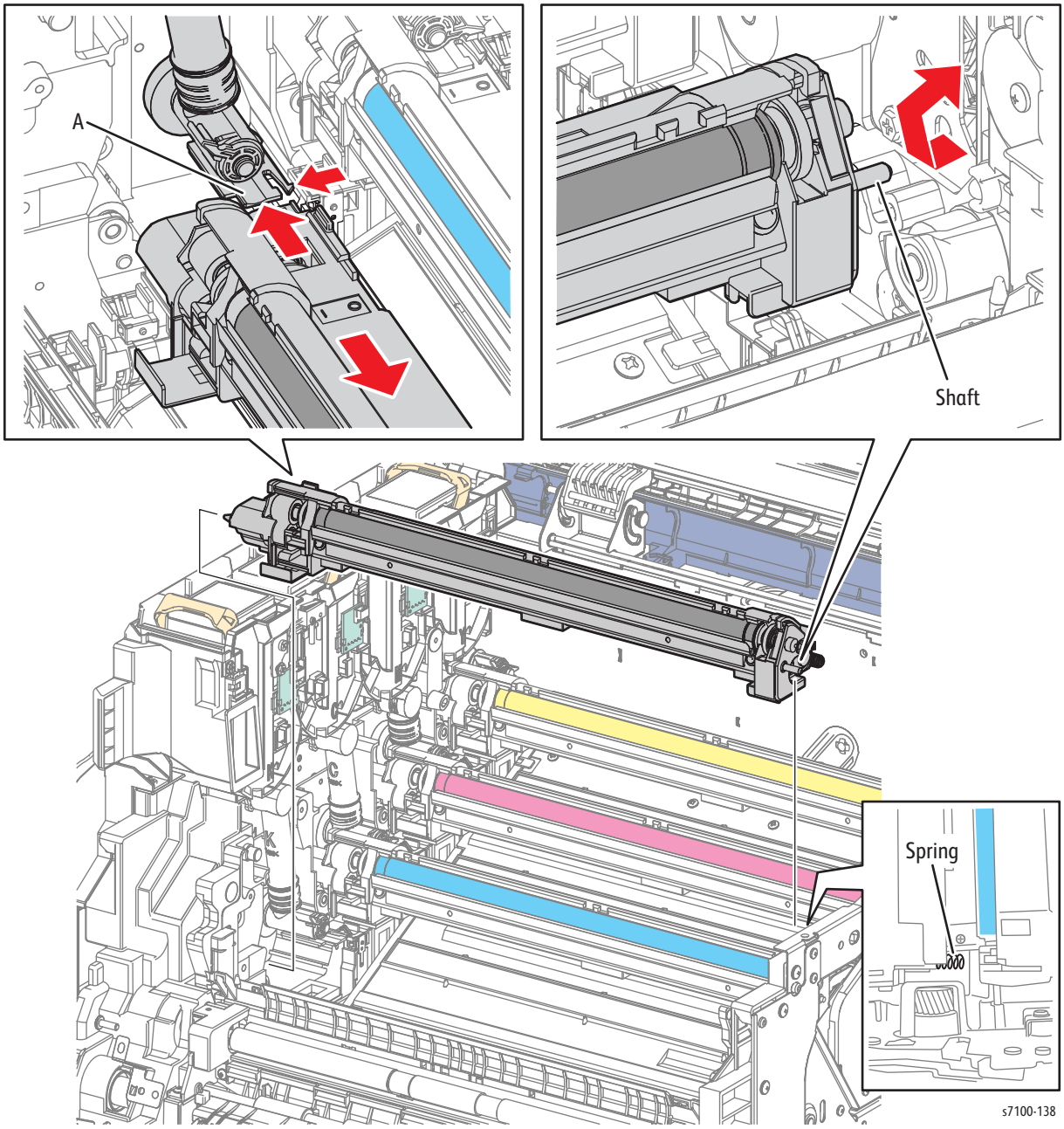
    - When removing the Developer Housing Assembly (Y/ M/ C/ K) in the following step, be careful when handling the Developer Housing Assembly to prevent from spilling the toner from the Toner Dispenser.
    - Be careful not to drop or lose the Spring that is attached to the Developer Housing Assembly (Y/ M/ C/ K).

Figure 2

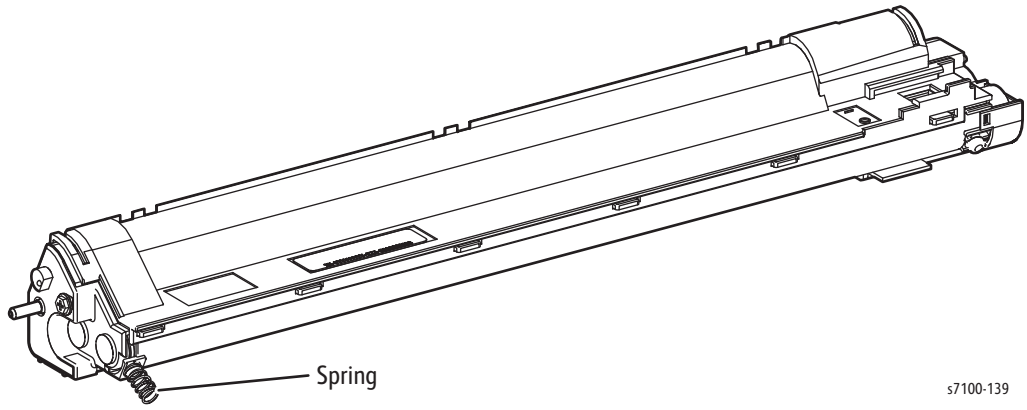


14. Release the hook at the joint section of the Toner Dispenser, then pull out and remove the Developer Housing Assembly (Y/ M/ C/ K) from the joint section of the Toner Dispenser while pressing the **A** section indicated in Figure 3.

Figure 3



Replacement Note: When installing the Developer Housing Assembly Y/M/C/K, make sure that the Spring is attached in the correct position.



Note: When replacing the Developer Housing Assembly Y/M/C/K with a new one, make sure to reset the life counter (DC135 HFSI on page 2-19). Reset 3 Chain-Links for each Developer Housing Assembly.

Component	Chain	Link	Counter Names
Developer Housing Assembly (Y)	950	800	(Y) Developer PV
	950	816	(Y) Developer Roundtime
	950	832	(Y) Developer Pixel Count
Developer Housing Assembly (M)	950	804	(M) Developer PV
	950	820	(M) Developer Roundtime
	950	836	(M) Developer Pixel Count
Developer Housing Assembly (C)	950	808	(C) Developer PV
	950	824	(C) Developer Roundtime
	950	840	(C) Developer Pixel Count
Developer Housing Assembly (K)	950	812	(K) Developer PV
	950	828	(K) Developer Roundtime
	950	844	(K) Developer Pixel Count

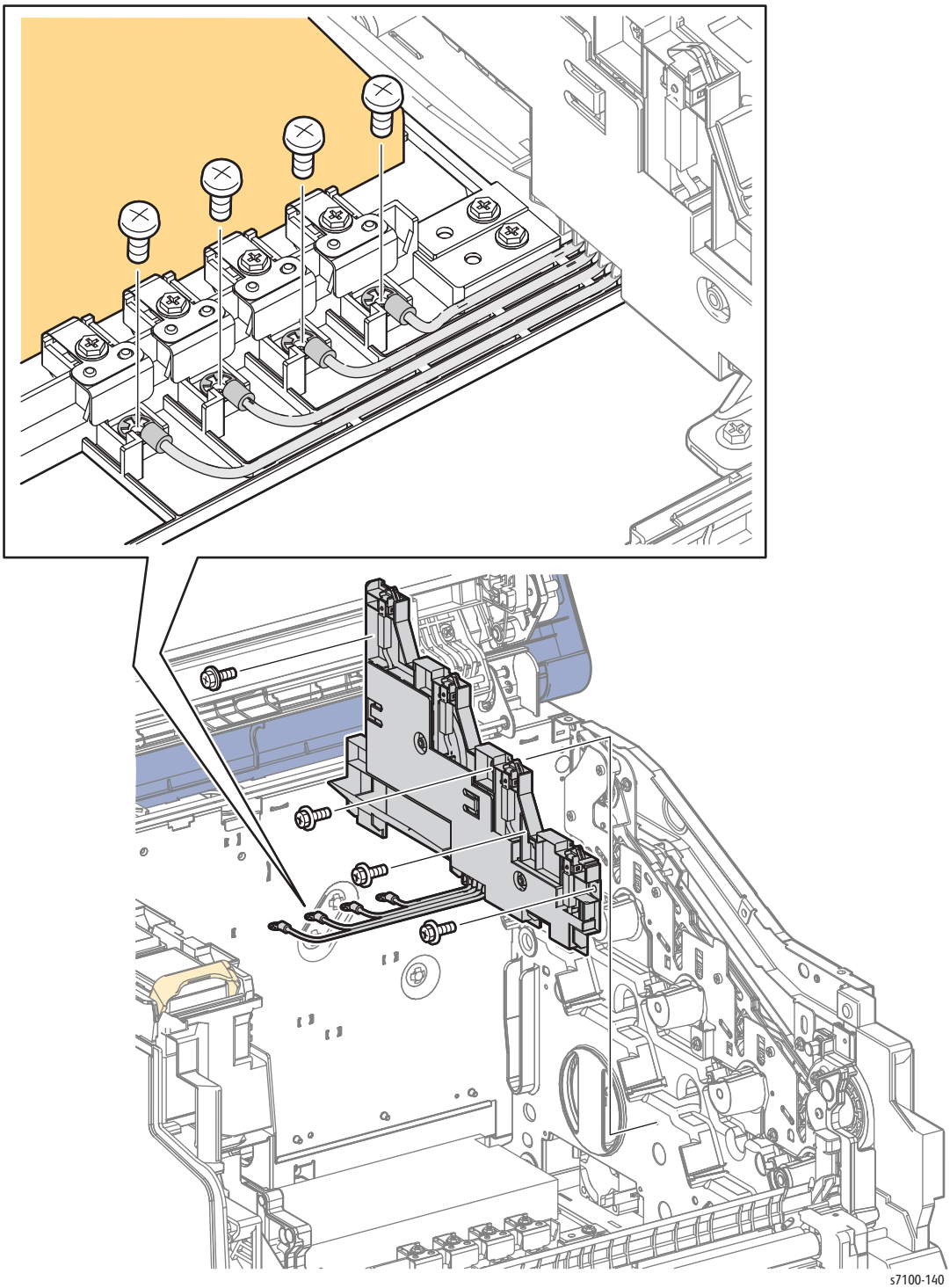
REP 8.2 Right Hand HV Guide Assembly

PL 8.1.9

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
8. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
9. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
10. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
11. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
12. Remove the Laser Unit (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130).

13. Remove 4 screws (silver, 6 mm) that secure the HV Guide Assembly to the printer.
14. Remove 4 screws (silver, 6 mm) that secure the wiring harness that is connected to the HVPS to the HV Guide Assembly (PL 12.2.11).
15. Remove the HV Guide Assembly.



REP 8.3 Waste Auger Assembly (Trickle Guide Assembly)

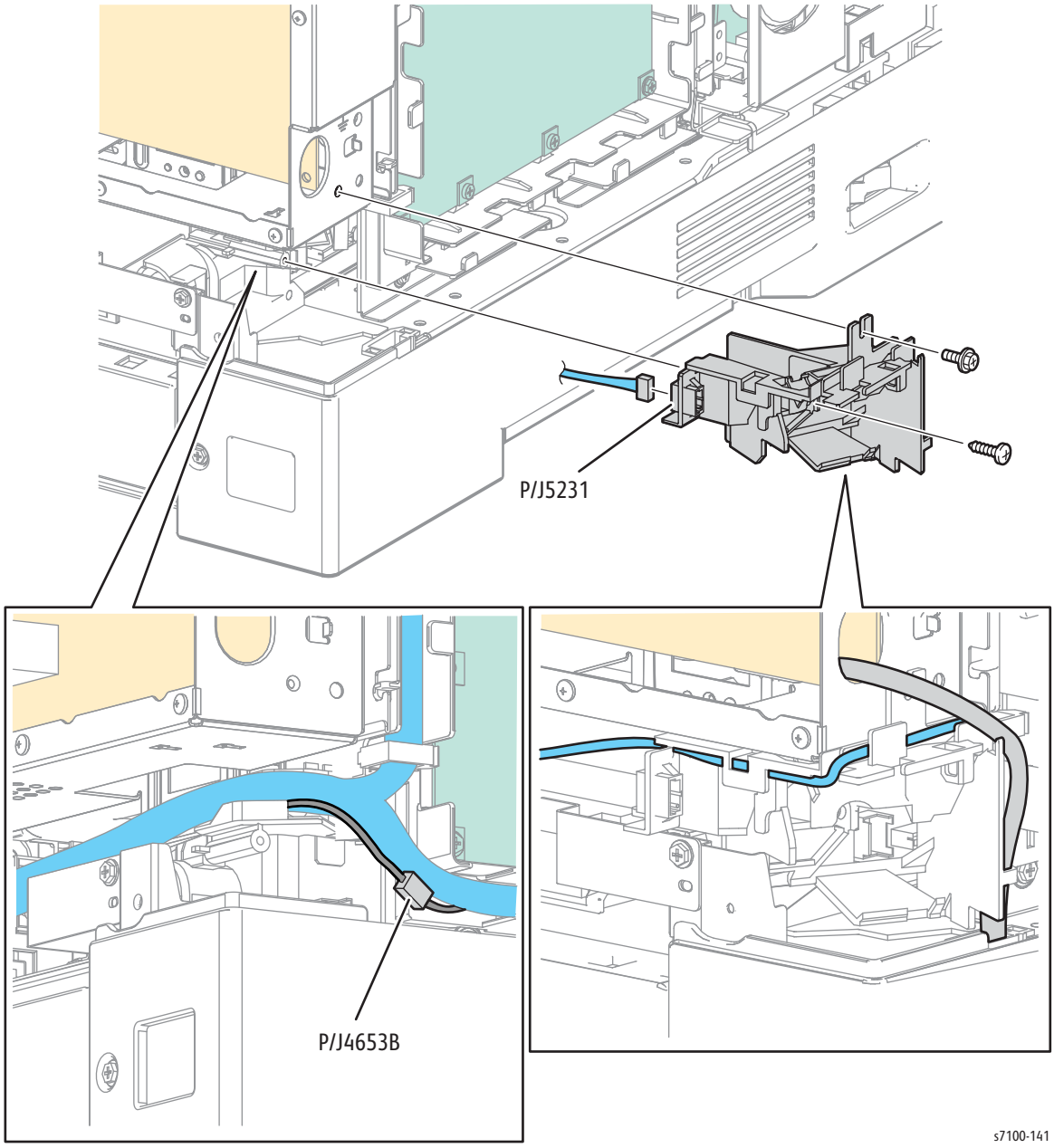
PL 8.1.10

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

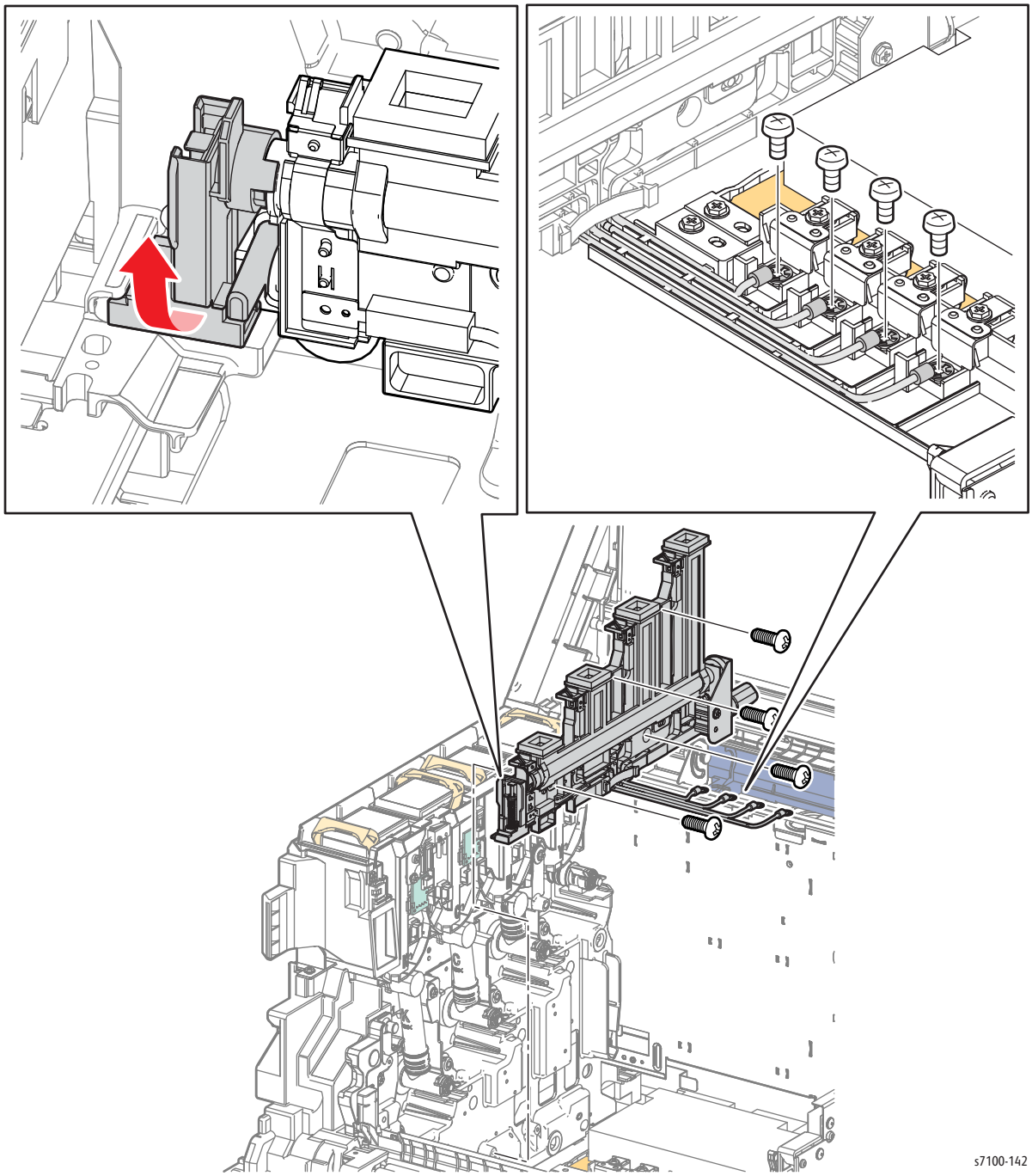
Note: For additional tips, refer to the Waste Auger Assembly Removal video (also available in the Phaser 7100 Training materials).

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
7. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
8. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
9. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
10. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
11. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
12. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
13. Remove the Laser Unit (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130).
14. Remove the LVPS Fan Assembly (REP 12.16 LVPS Fan Assembly on page 4-226).

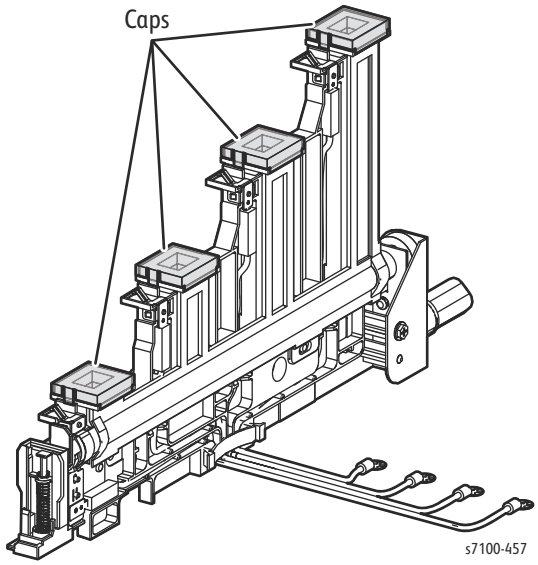
15. Remove one screw (silver, tapped, 10 mm) and one screw (silver, 6 mm) that secure the Fan Holder Duct Assembly (PL 12.2.20).
16. Release the wiring harness from the Fan Holder Duct Assembly.
17. Remove the Fan Holder Duct Assembly.
18. Disconnect the wiring harness connector P/J5231 that is connected to the Fan Holder Duct Assembly.
19. Disconnect the wiring harness connector P/J4653B that is connected to the Waste Auger Assembly (Trickle Guide Assembly).



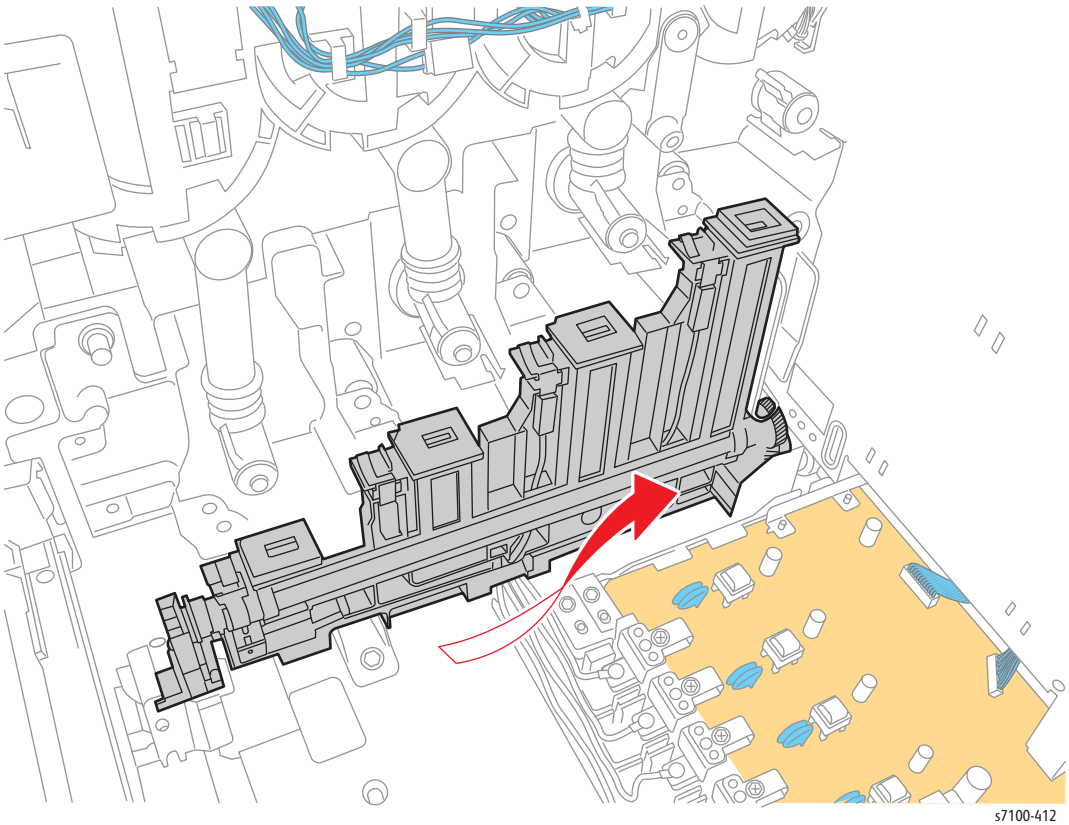
20. Remove 4 screws (silver, 6 mm) that secure the harness that is connected to the HV Main Guide Assembly (PL 12.2.11).
21. Remove 4 screws (silver, 6 mm) that secure the Waste Auger Assembly to the printer.
22. Release the Waste Auger Assembly from the groove and pull it out to remove.



23. Use the Caps from the new Waste Auger Assembly to cover the removed Waster Auger Assembly to prevent toner spill.



Replacement Note: Tilt the Waste Auger Assembly with the Motor and Gear toward the rear with the Gear sits behind the printer frame.



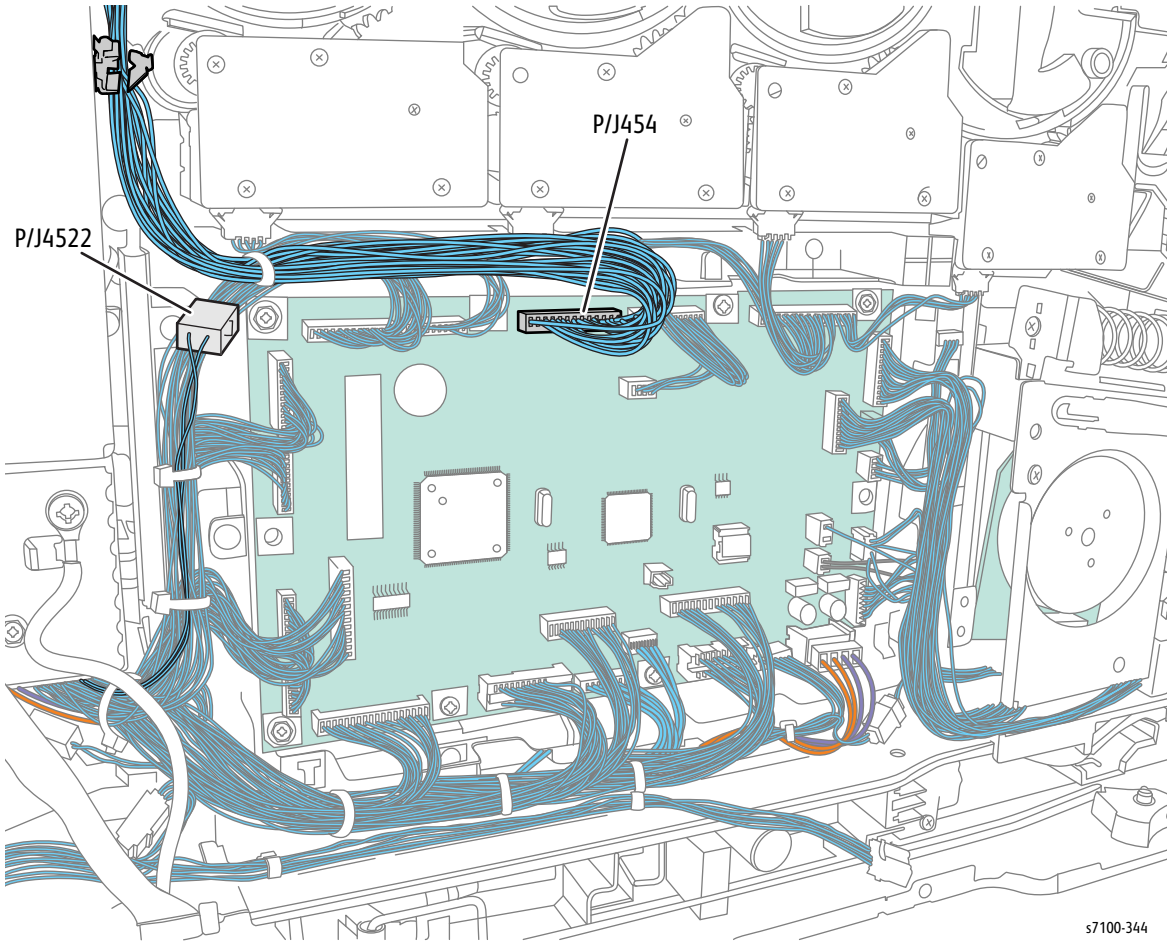
REP 8.4 Dispense Guide Assembly

PL 8.1.12

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).
3. Remove Tray 1.
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
8. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
9. Remove the Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21).
10. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
11. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
12. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
13. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
14. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
15. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
16. Remove the LVPS Fan Assembly (REP 12.16 LVPS Fan Assembly on page 4-226).

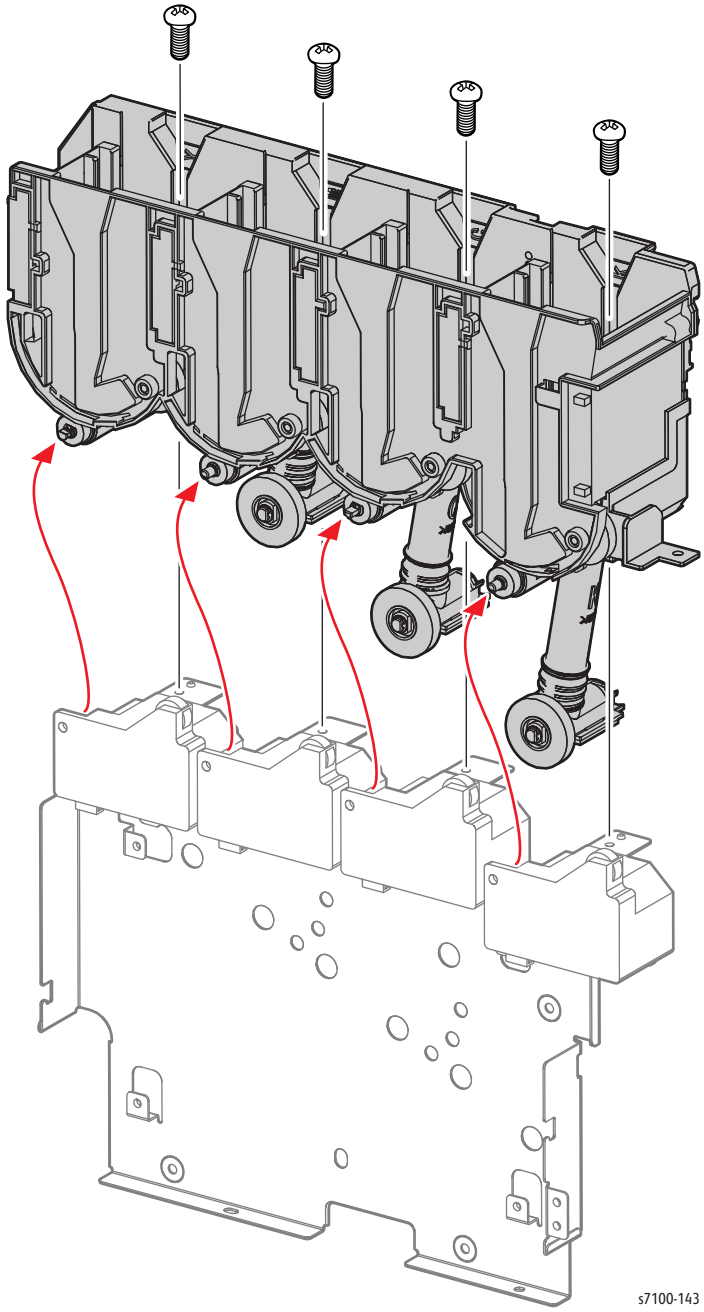
17. Disconnect one wiring harness connector P/J454 from the MCU PWB.
18. Disconnect the wiring harness connector P/J4522.
19. Release the wiring harness from the clamp.



20. Remove 4 screws (silver, 6 mm) that secure the Dispense Guide Assembly to the MCU Plate.

    Note: When removing the Dispense Guide Assembly in the next step, be careful when handling the Developer Housing Assembly to prevent from spilling toner from the Toner Dispenser.

21. Release the 4 bosses of the Dispense Guide Assembly from the hole of the Dispense Motor Assembly (PL 8.1.15) and remove the Dispense Guide Assembly.

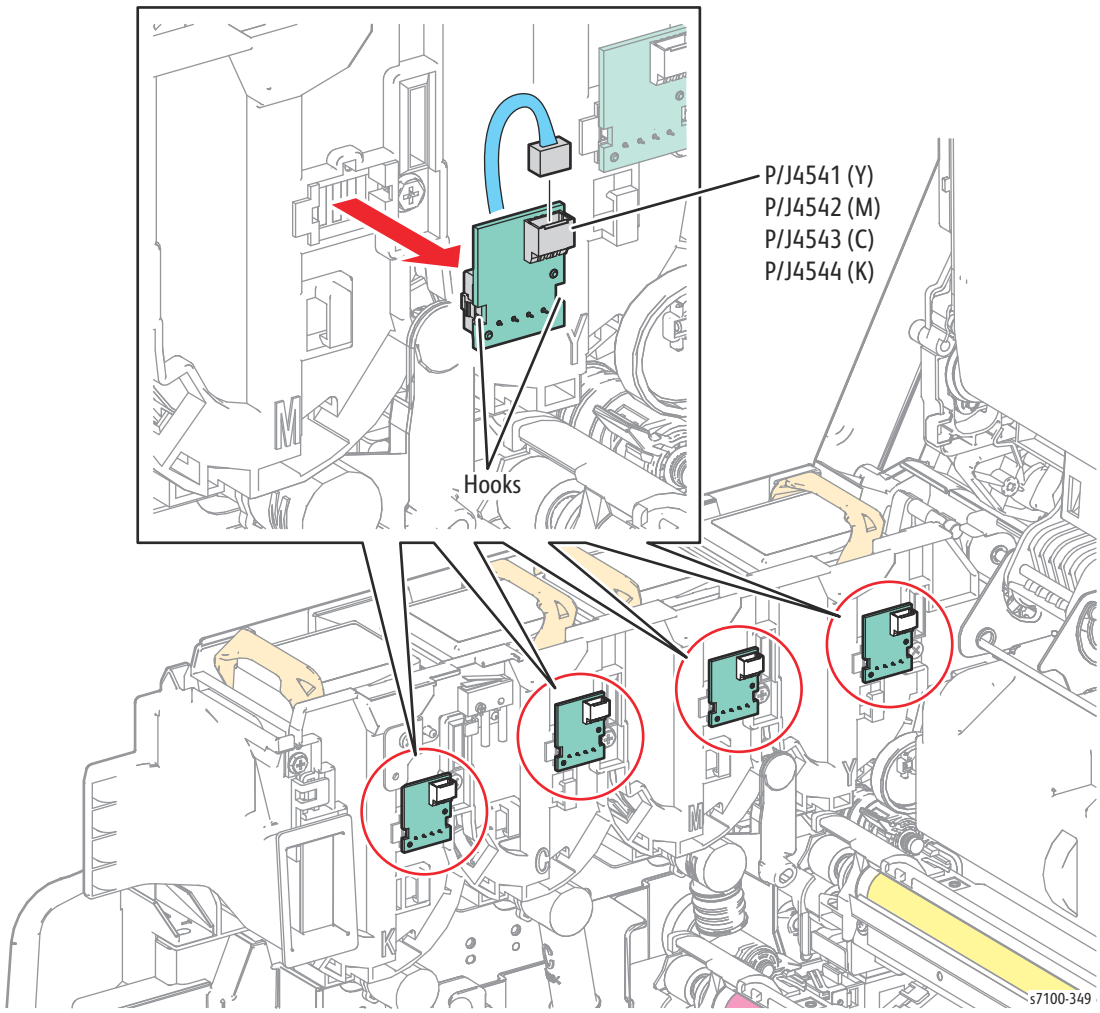


REP 8.5 Toner CRUM Connector Assembly

PL 8.1.13

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
3. Disconnect the wiring harness connector (P/J4541, P/J4542, P/J4543, P/J4544) that is connected to the Toner CRUM Connector Assembly.
4. Use a flat tip screwdriver to release the 2 hooks that secure the Toner CRUM Connector Assembly to the printer and remove the Toner CRUM Connector Assembly.



REP 8.6 Dispense Motor Assembly

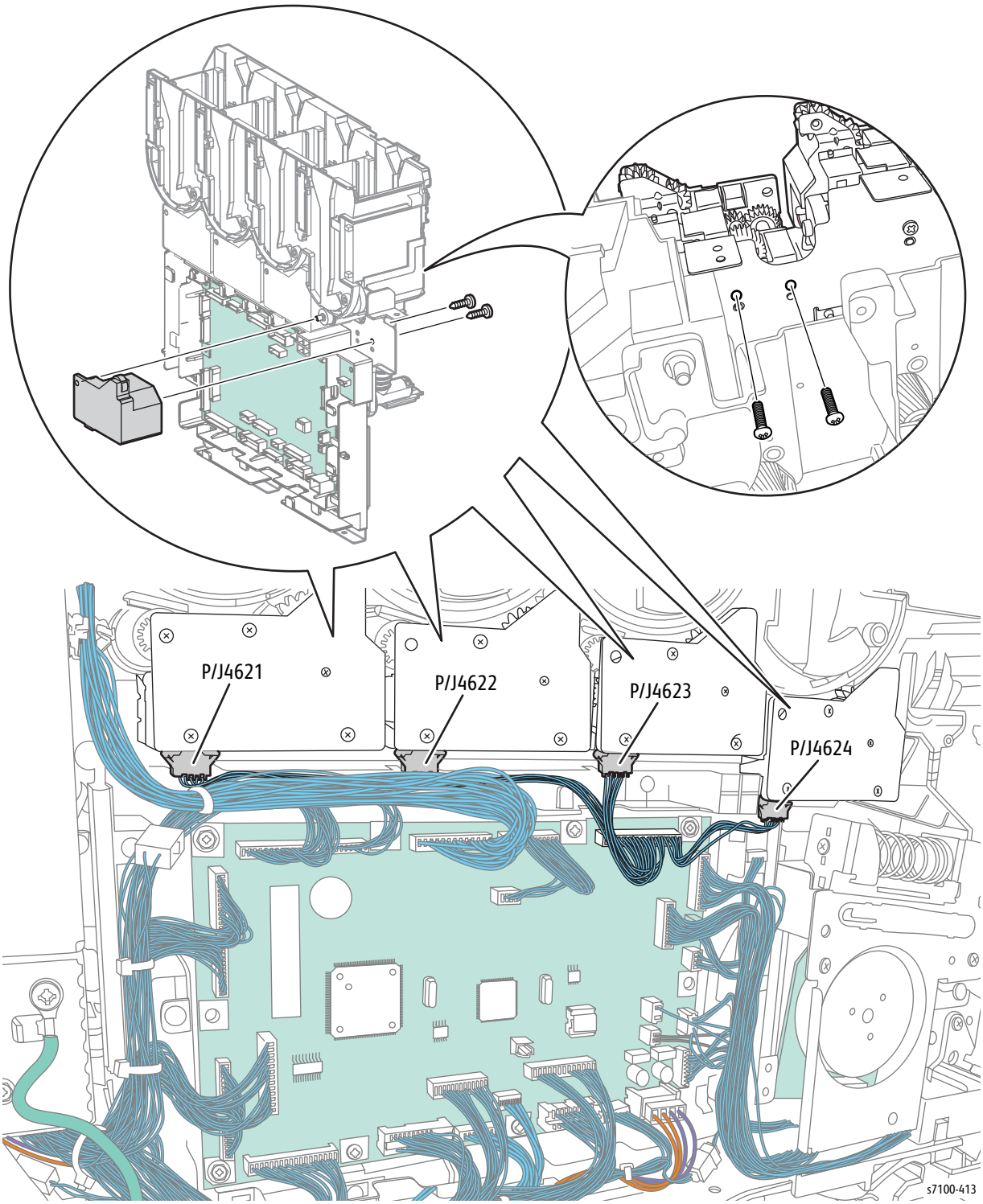
PL 8.1.15

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

Note: The Dispense Motor Assembly removal procedure applies for all 4 Dispense Motor Assembly (Y/ M/ C/ K).

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).
3. Remove Tray 1.
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
8. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
9. Remove the Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21).
10. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
11. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
12. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
13. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
14. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
15. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).
16. For Yellow and Magenta Dispense Motor Assemblies, remove the MCU Plate (REP 8.7 MCU Plate on page 4-154).

17. Disconnect the wiring harness connector (P/J4621, P/J4622, P/J4623, P/J4624) from the Dispense Motor Assembly (Y/ M/ C/ K).
18. Remove 2 screws (silver, tapped, 8 mm) that secure the Dispense Motor Assembly to the MCU Plate.
19. Remove the Dispense Motor Assembly.



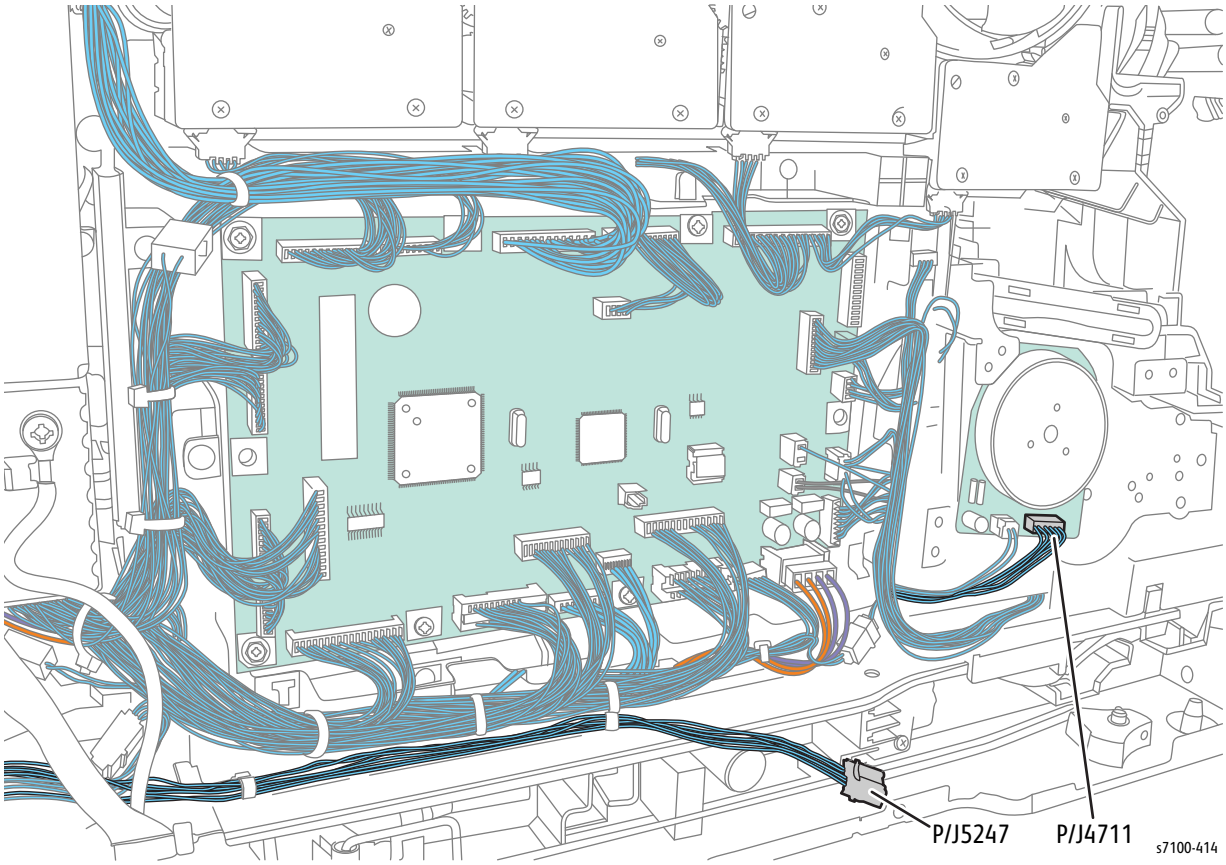
REP 8.7 MCU Plate

PL 8.1.17

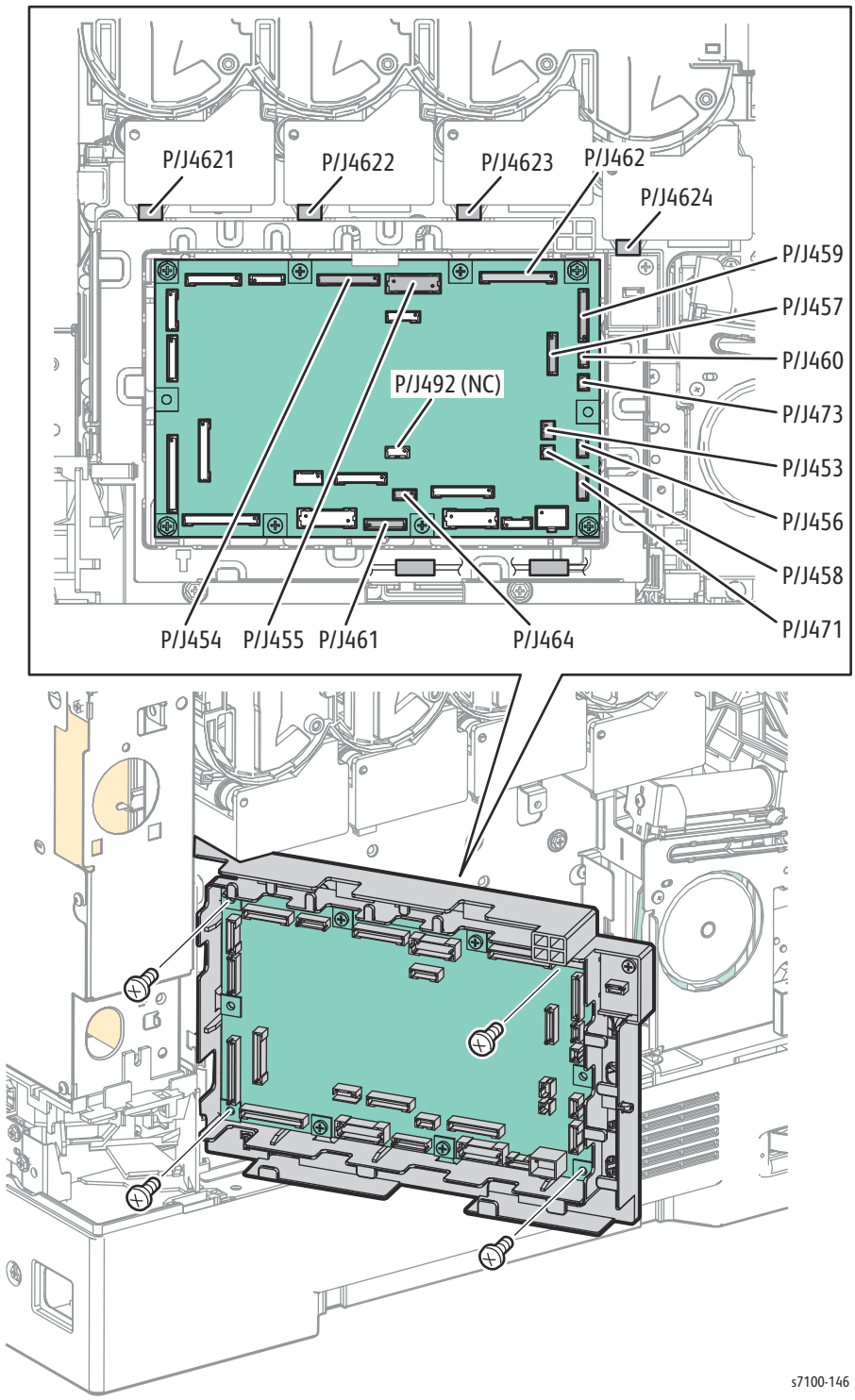
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).
3. Remove Tray 1.
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
8. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
9. Remove the Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21).
10. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
11. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
12. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
13. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
14. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
15. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137).

16. Disconnect the Paper Handling Motor wiring harness connector P/J4711 and Relay wiring harness connector P/J5247.

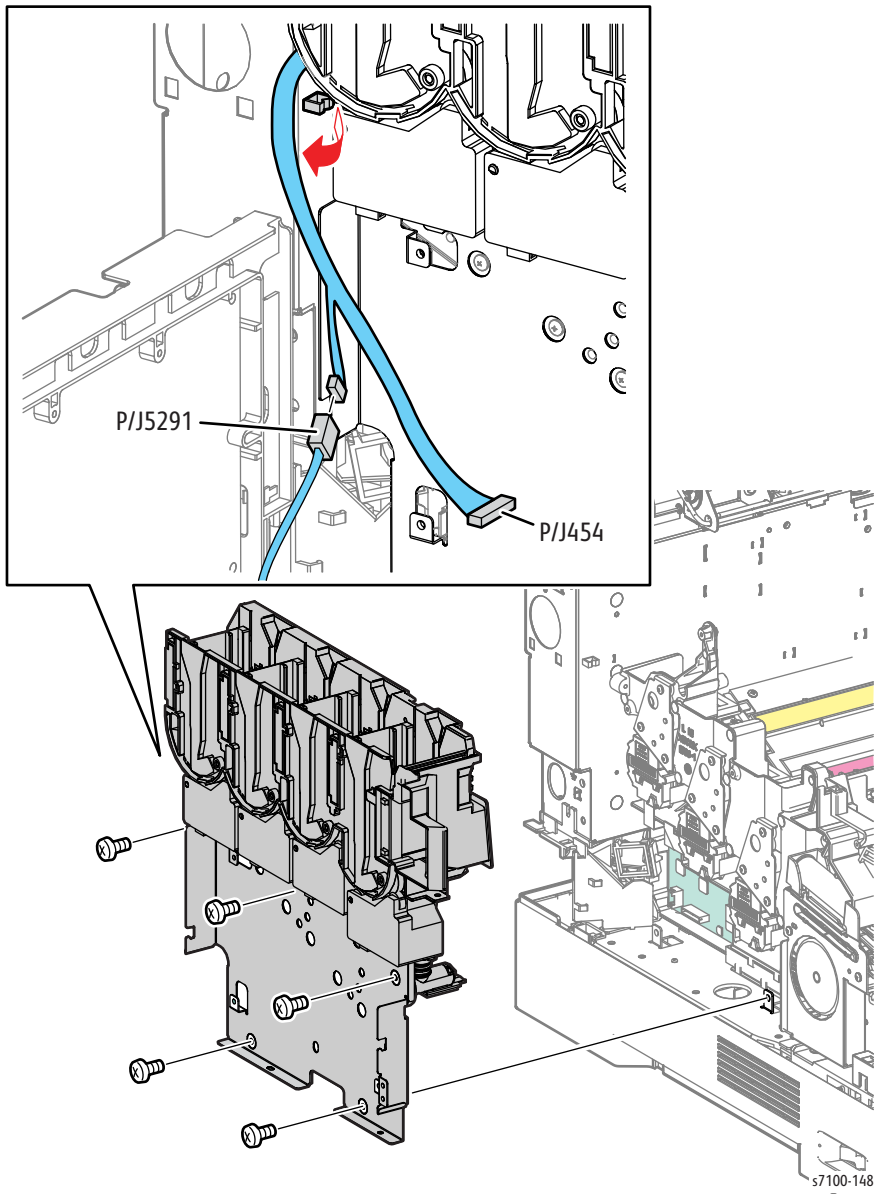


17. Disconnect the wiring harness connectors (P/J4621, P/J4622, P/J4623, and P/J4624) that are connected to the Dispense Motor Assembly.
18. Disconnect the wiring harness connectors that are connected to the MCU PWB, except for P/J462.
19. Remove 4 screws (silver, 6 mm) that secure the MCU Harness Guide to the printer.
20. Remove the MCU Harness Guide toward the rear of the printer.



21. Disconnect the wiring harness connector P/J5291 from the harness that is connected to the MCU Plate and remove the harness from the clamp.
22. Remove 5 screws (silver, 6 mm) that secure the MCU Plate to the printer.

    Note: When removing the MCU Plate in the next step, be careful when handling the Developer Housing Assembly to prevent from spilling the toner from the Toner Dispenser.
23. Remove the MCU Plate.



24. Remove the Dispense Guide Assembly (REP 8.4 Dispense Guide Assembly on page 4-148).
25. Remove the Dispense Motor Assembly (REP 8.6 Dispense Motor Assembly on page 4-152).

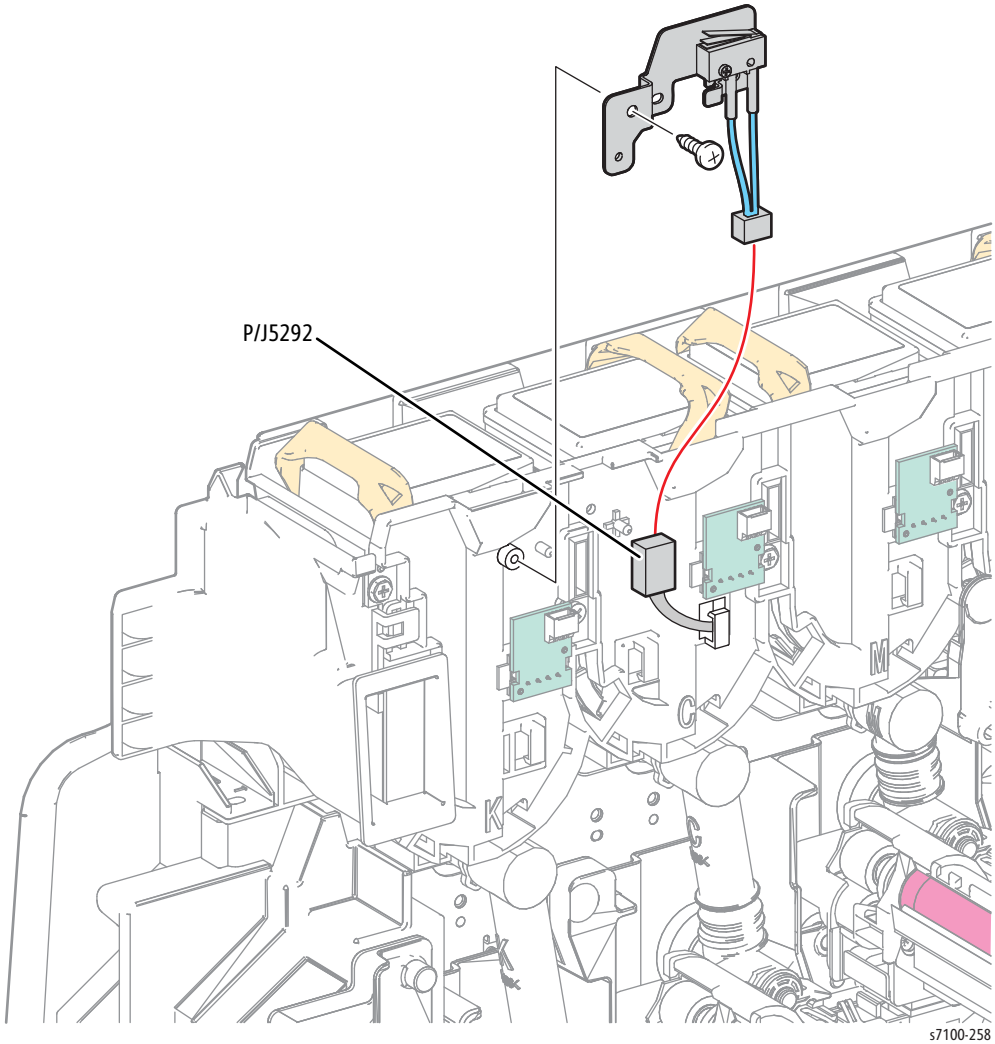
    Replacement Note: When installing the MCU Plate, be careful not to get the flat cable that is connected to the Developer Motor PWB (PL 11.1.16) pinched.

REP 8.8 Toner Cover Switch Kit

PL 8.1.98

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
3. Disconnect the wiring harness connector P/J5292 that is connected to the Interlock Switch Assembly (PL 8.1.14).
4. Remove one screw (silver, tapped, 8 mm) that secures the Toner Cartridge Interlock Switch Plate (PL 8.1.16) to the printer.
5. Release the 2 bosses from the Toner Cartridge Interlock Switch Plate to remove from the Toner Cover Switch.

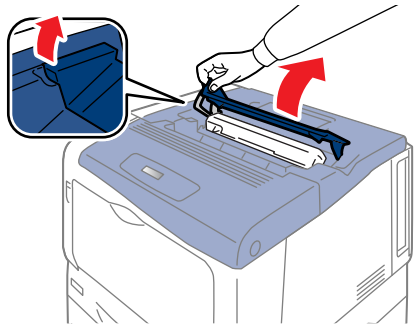


Transfer

REP 9.1 Waste Cartridge

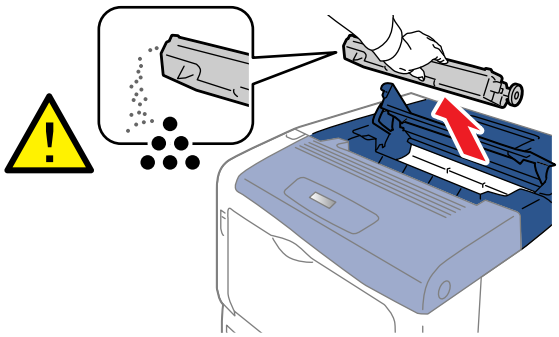
PL 9.1.1

1. Open the Top Waste Cover (PL 1.1.4).



CAUTION: Be careful not to spill toner from the Waste Cartridge.

2. Pull the Waste Cartridge out to remove.



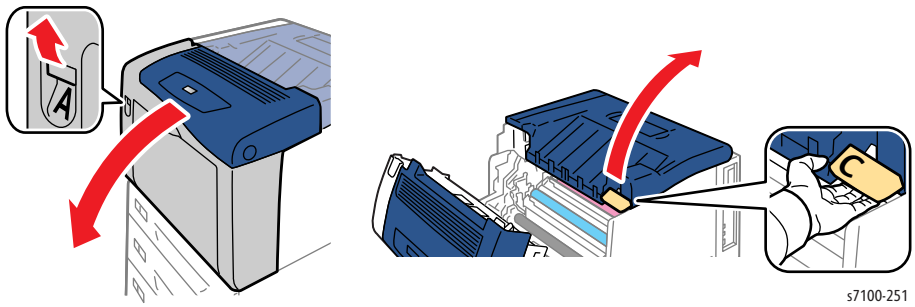
REP 9.2 IBT Belt Cleaner Cover Assembly

PL 9.1.3

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

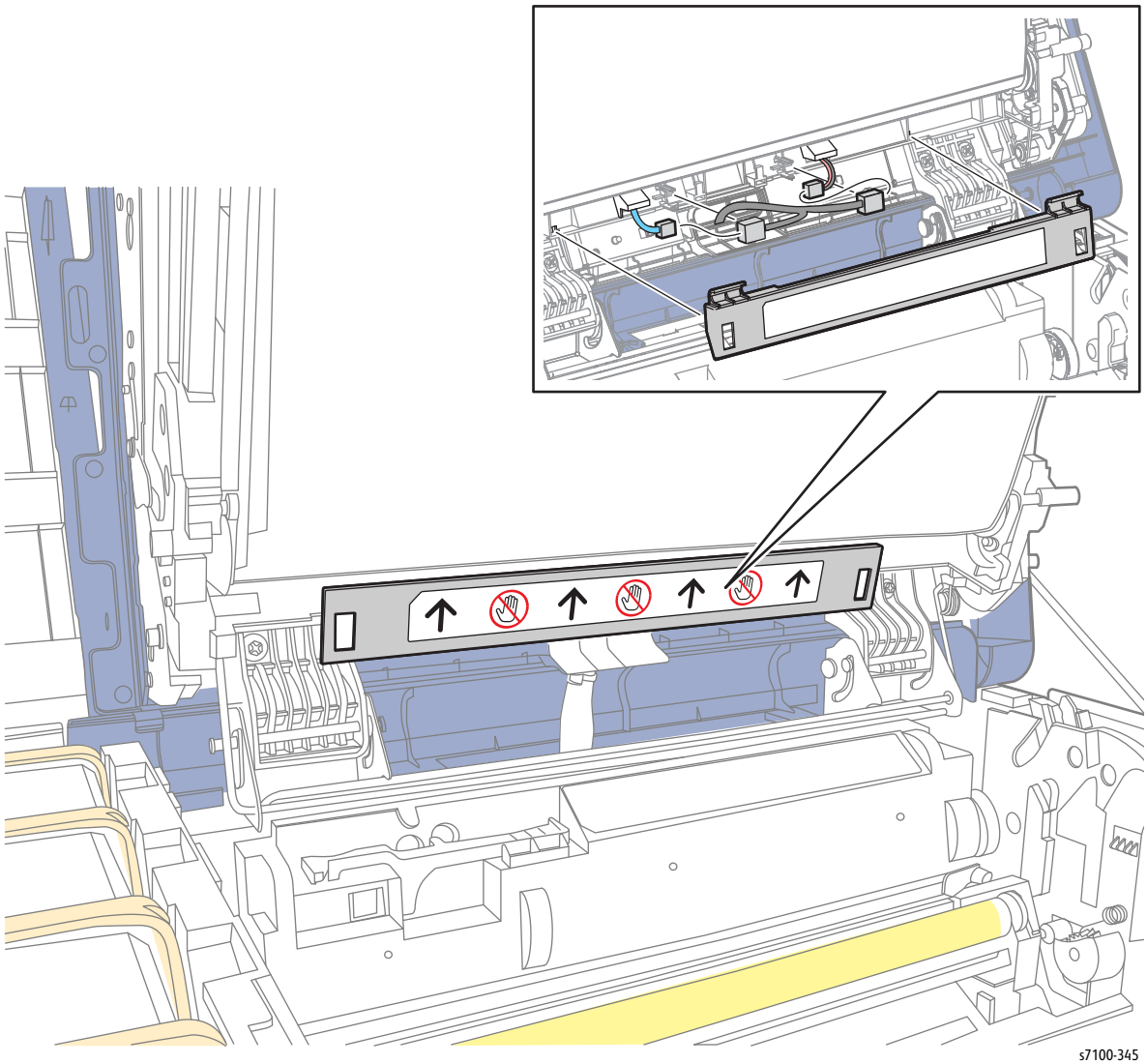
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Frame Assembly (PL 4.1.6).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).



4. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

5. Release the 2 hooks that secure the IBT Cleaner Cover Assembly (PL 9.1.3) to the IBT Unit and remove the IBT Cleaner Cover Assembly.



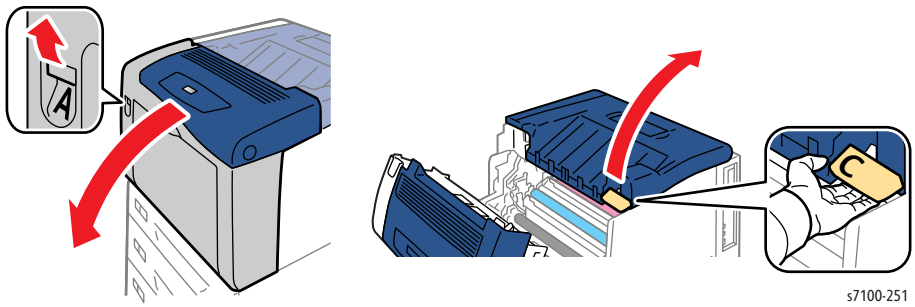
REP 9.3 Waste Cartridge Guide Assembly

PL 9.1.4

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

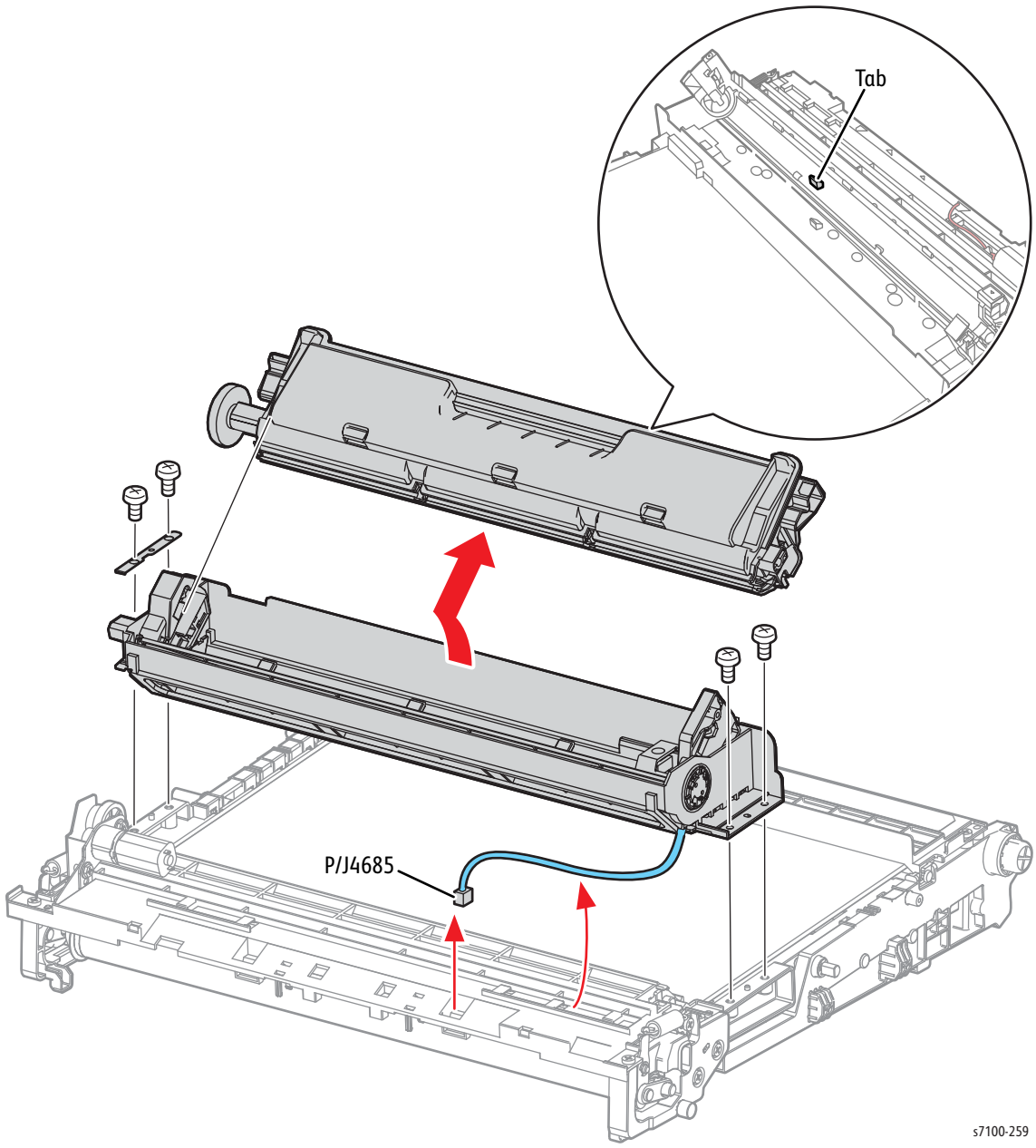
1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Frame Assembly (PL 4.1.6).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).



4. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).

5. Turn the Waste Cartridge Assembly (PL 9.1.1) upward and pull it out from the left and right guide to remove it.
6. Disconnect the wiring harness connector P/J4685 that is connected to the Waste Cartridge Guide Assembly and release the wiring harness from the Harness Guide.
7. Remove 4 screws (silver, tapped, 8 mm) that secure the Waste Cartridge Guide Assembly.
8. Remove the Waste Cartridge Guide Assembly together with the Front Guide Plate.

   Note: When removing the Waste Cartridge Guide Assembly in the next step, be careful not to spill toner onto the Belt.
9. Pivot the Waste Cartridge Guide Assembly upward to release the tab underneath it to remove.



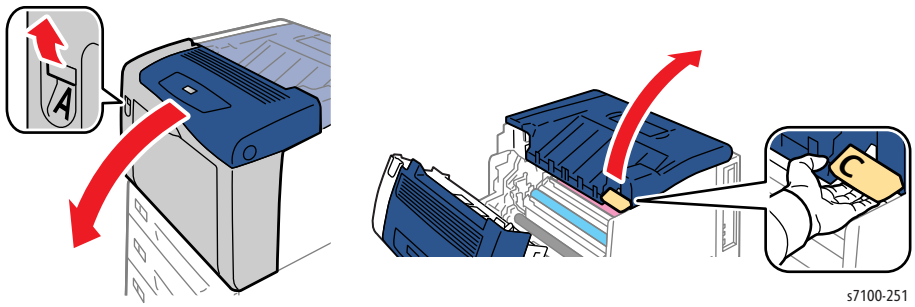
REP 9.4 Waste Cartridge Full Sensor

PL 9.1.5

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

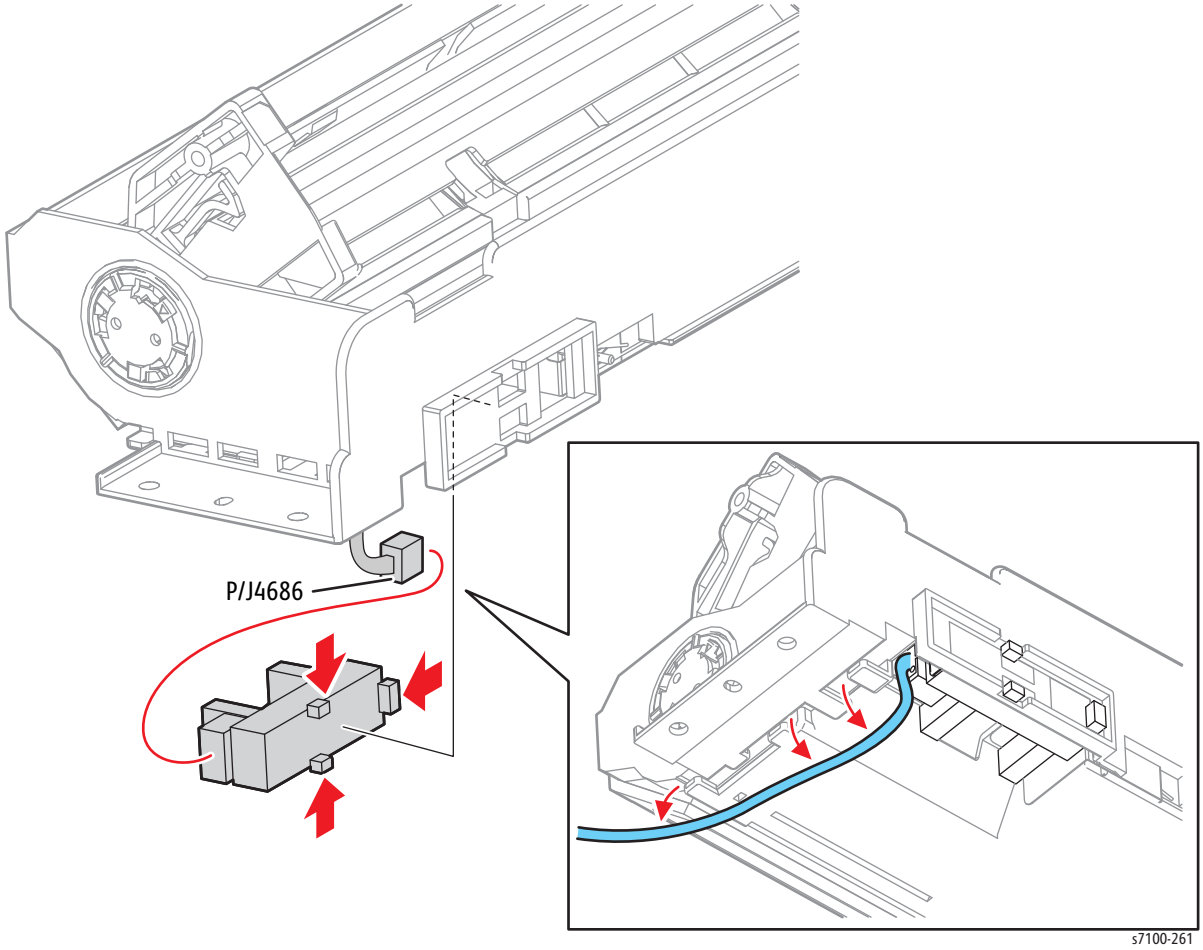
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Frame Assembly (PL 4.1.6).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).



4. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
5. Remove the Waste Cartridge Guide Assembly (REP 9.3 Waste Cartridge Guide Assembly on page 4-162).

6. Remove the wiring harness from the Harness Guide.
7. Release the 3 hooks that secure the Toner Full Sensor and remove the Sensor.
8. Disconnect the wiring harness connector P/J4686 that is connected to the Toner Full Sensor.



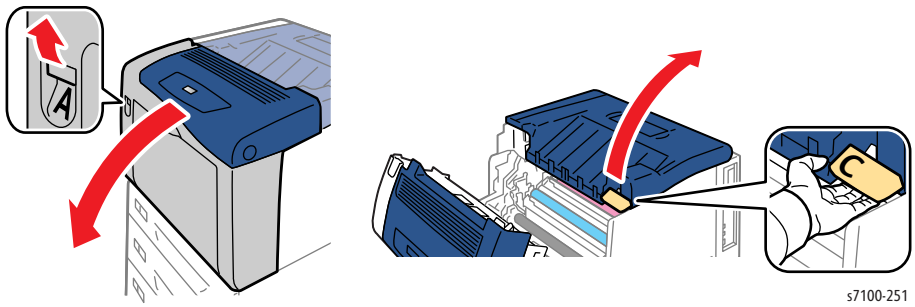
REP 9.5 IBT Cleaner Motor Assembly

PL 9.1.6

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

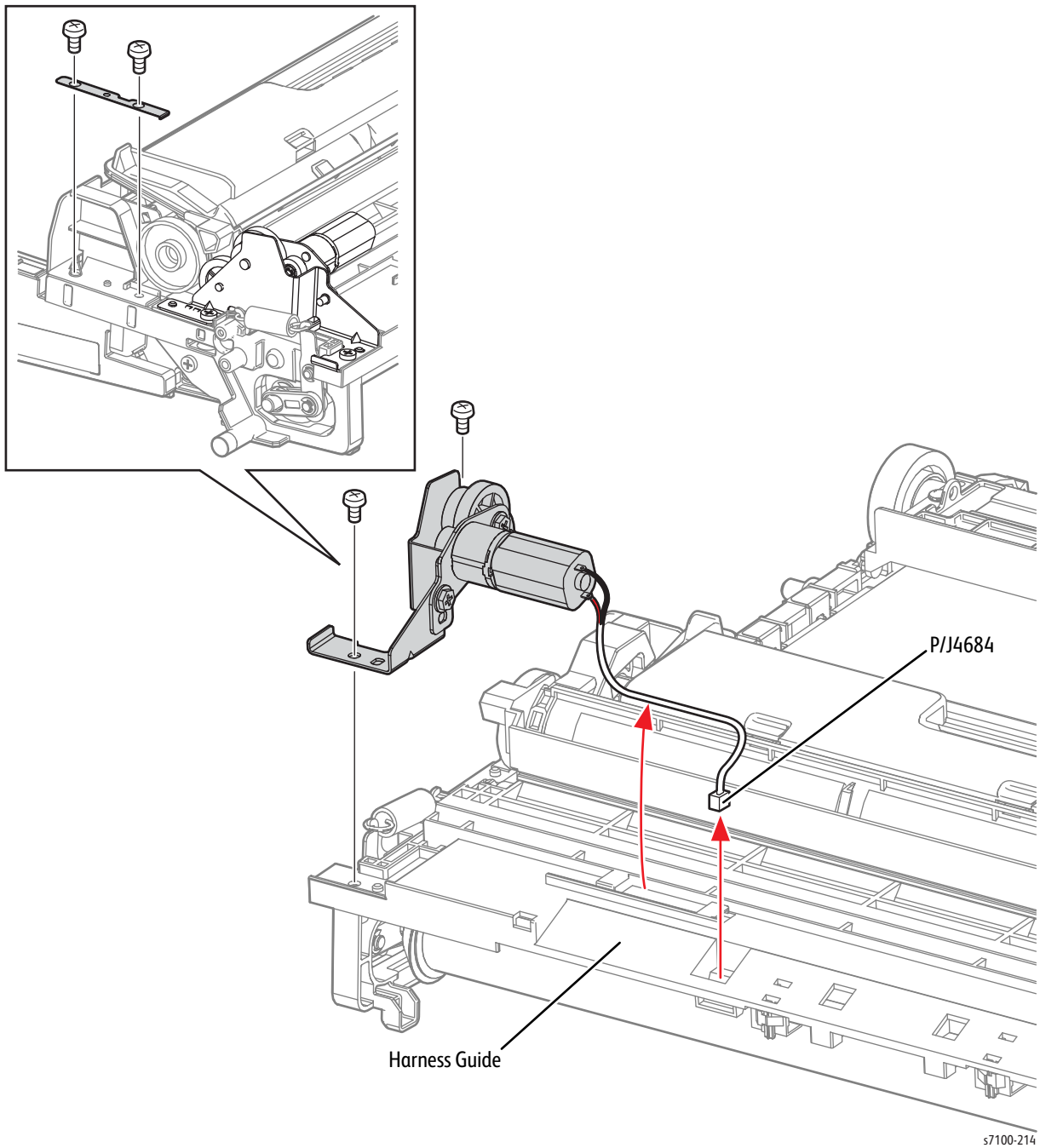
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Frame Assembly (PL 4.1.6).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).



4. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).

5. Remove 2 screws (silver, tapped, 8 mm) that secure the Front Guide Plate (PL 9.1.7) and remove the Plate.
6. Disconnect the wiring harness connector P/J4684 that is connected to the IBT Cleaner Motor Assembly and release the wiring harness from the Harness Guide.
7. Remove 2 screws (silver, tapped, 8 mm) that secure the IBT Cleaner Motor Assembly.
8. Remove the IBT Cleaner Motor Assembly.

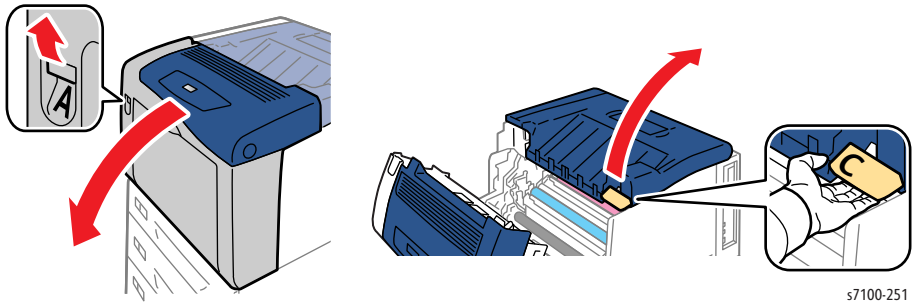


REP 9.6 IBT Retract Cam Assembly

PL 9.1.8

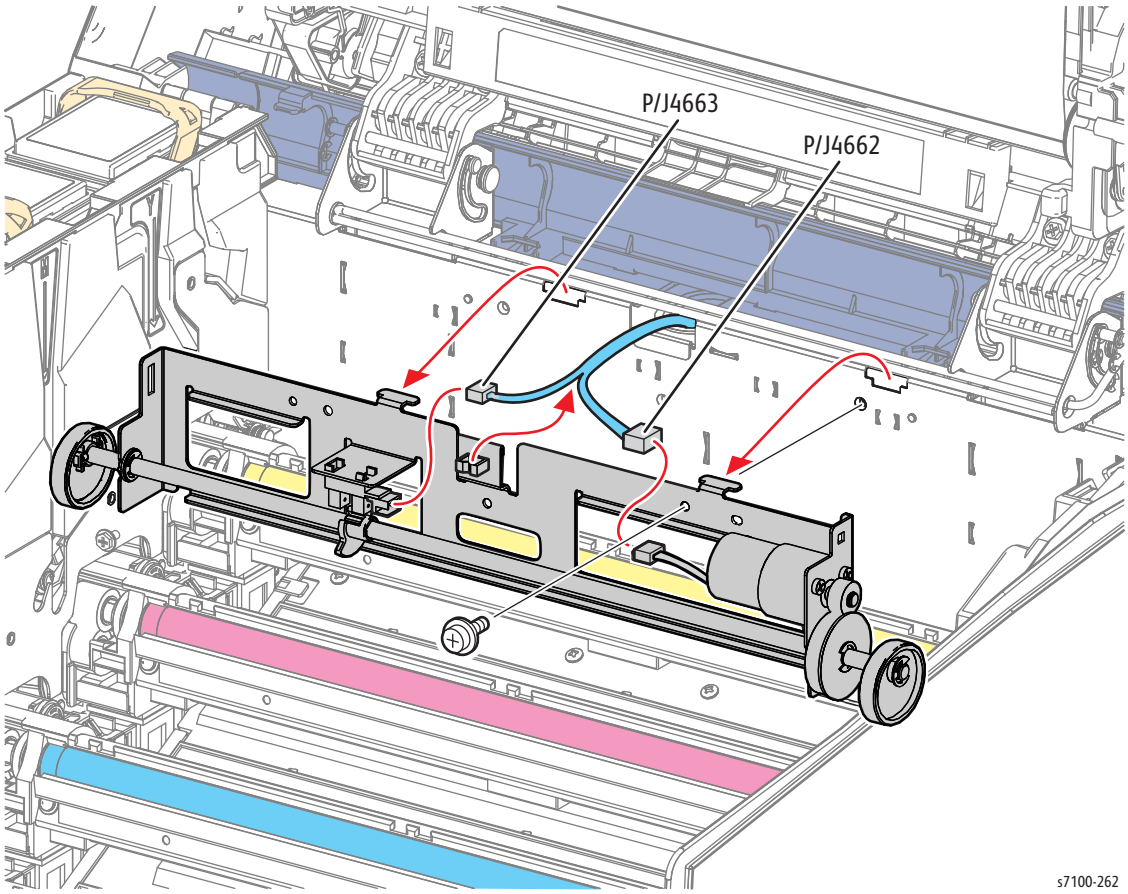
1. Release latch A and open the Front Frame Assembly (PL 4.1.6).
2. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



3. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).

4. Disconnect the 2 wiring harness connectors P/J4662 and P/J4663 that are connected to the IBT Retract Cam Assembly and remove the harness from the clamp.
5. Remove one screw (silver, 6 mm) that secures the IBT Retract Cam Assembly to the printer.
6. Remove the IBT Retract Cam Assembly.

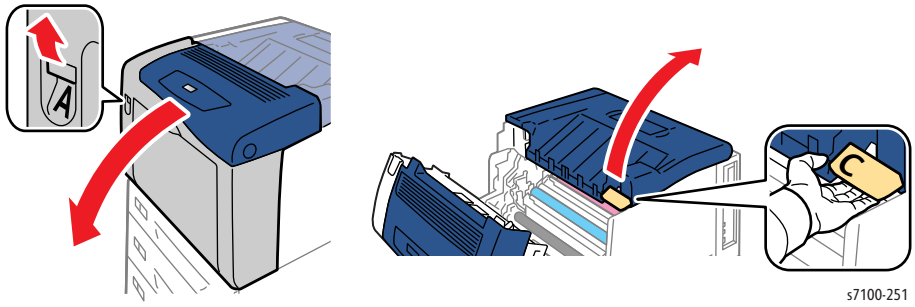


REP 9.7 Cam Cover

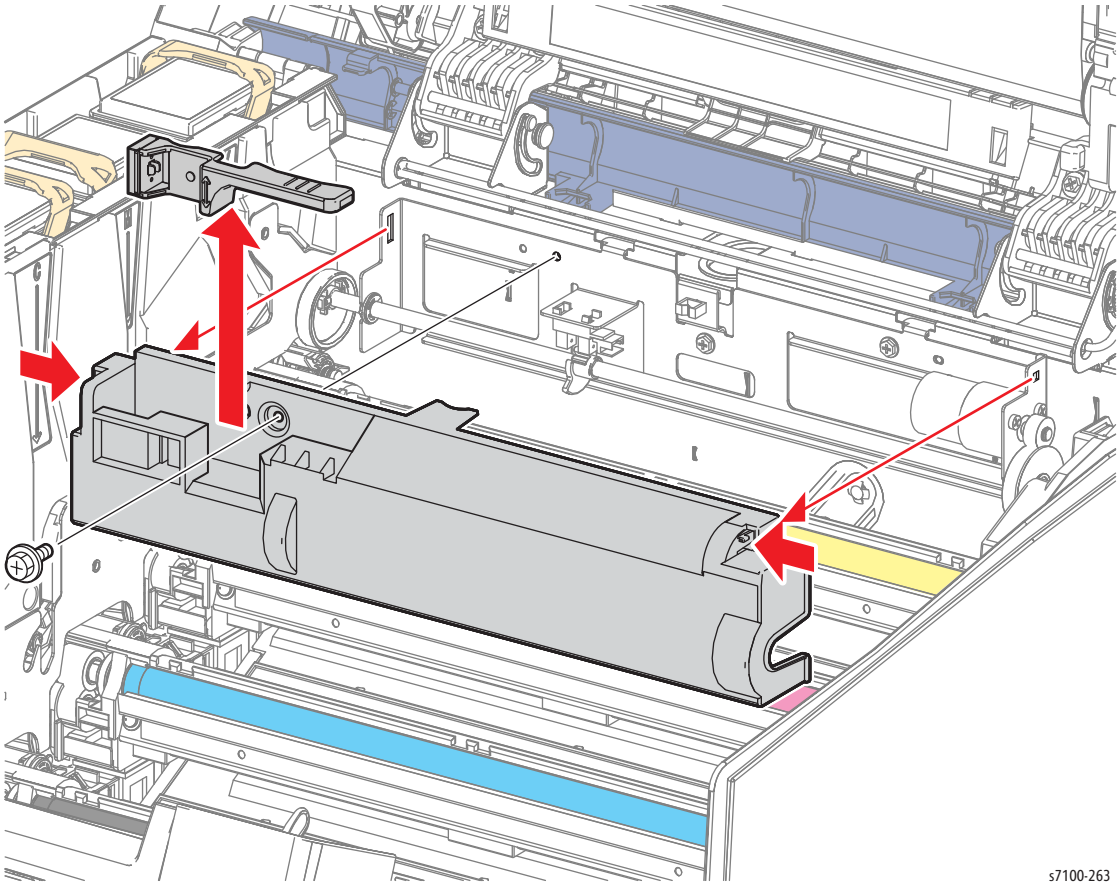
PL 9.1.9

1. Release Latch A and open the Front Frame Assembly (PL 4.1.6).
2. Release Latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



3. Lift and remove the ROS Cleaner Assembly (PL 9.1.21).
4. Remove one screw (silver, 6 mm) that secures the Cam Cover to the printer.
5. Release the 2 hooks that secure the Cam Cover to the printer and remove the Cam Cover.



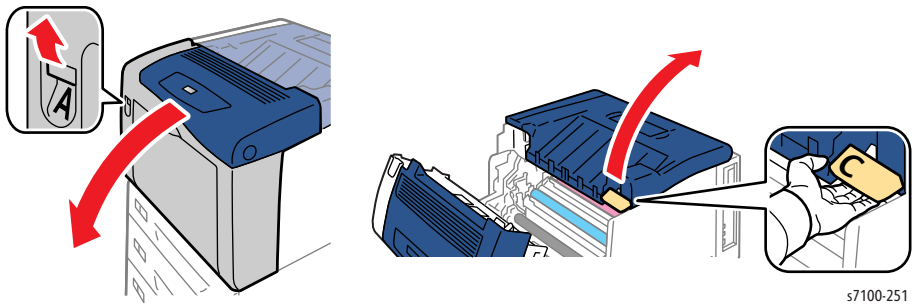
REP 9.8 Top Right Guard Frame/ Holder Stand Bar

PL 9.1.25/ PL 9.1.97

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

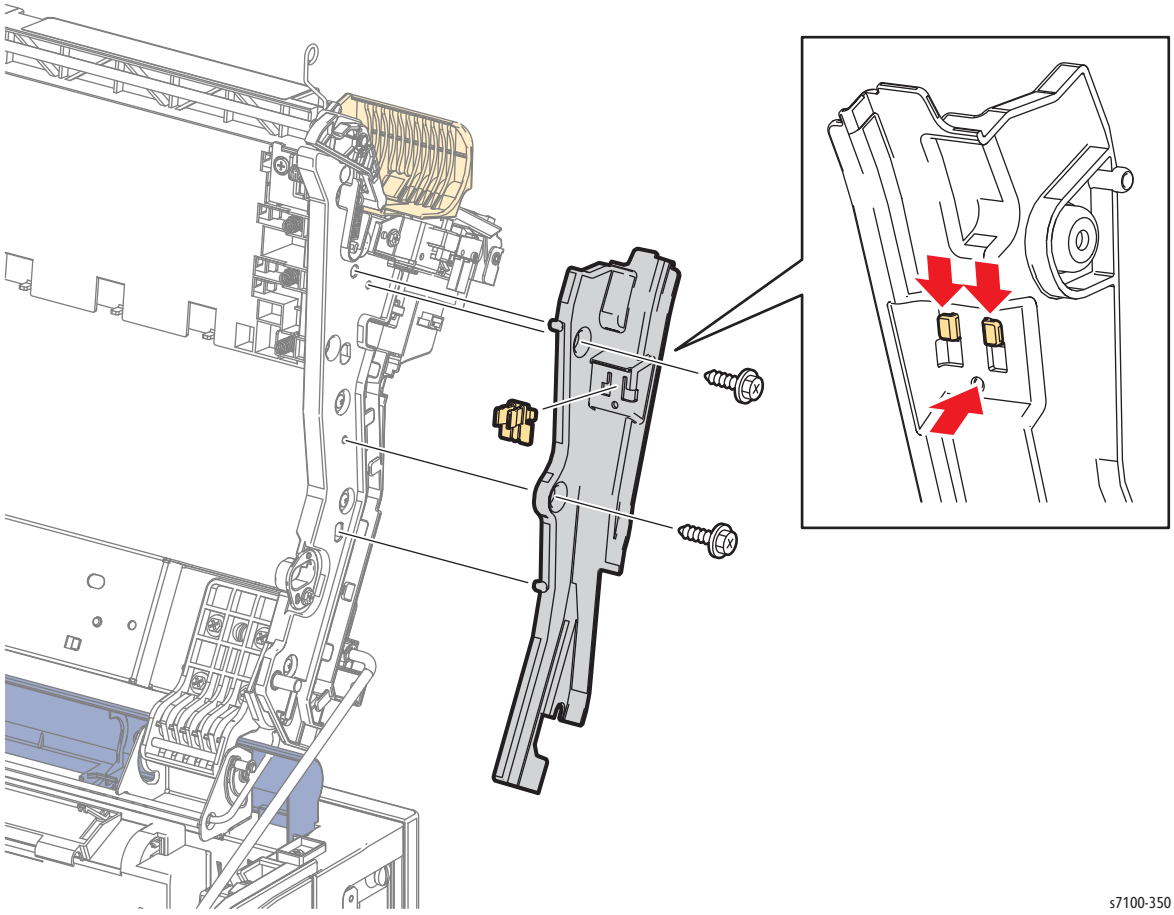
1. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
2. Release latch A and open the Front Cover Assembly (PL 1.1.38).
3. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



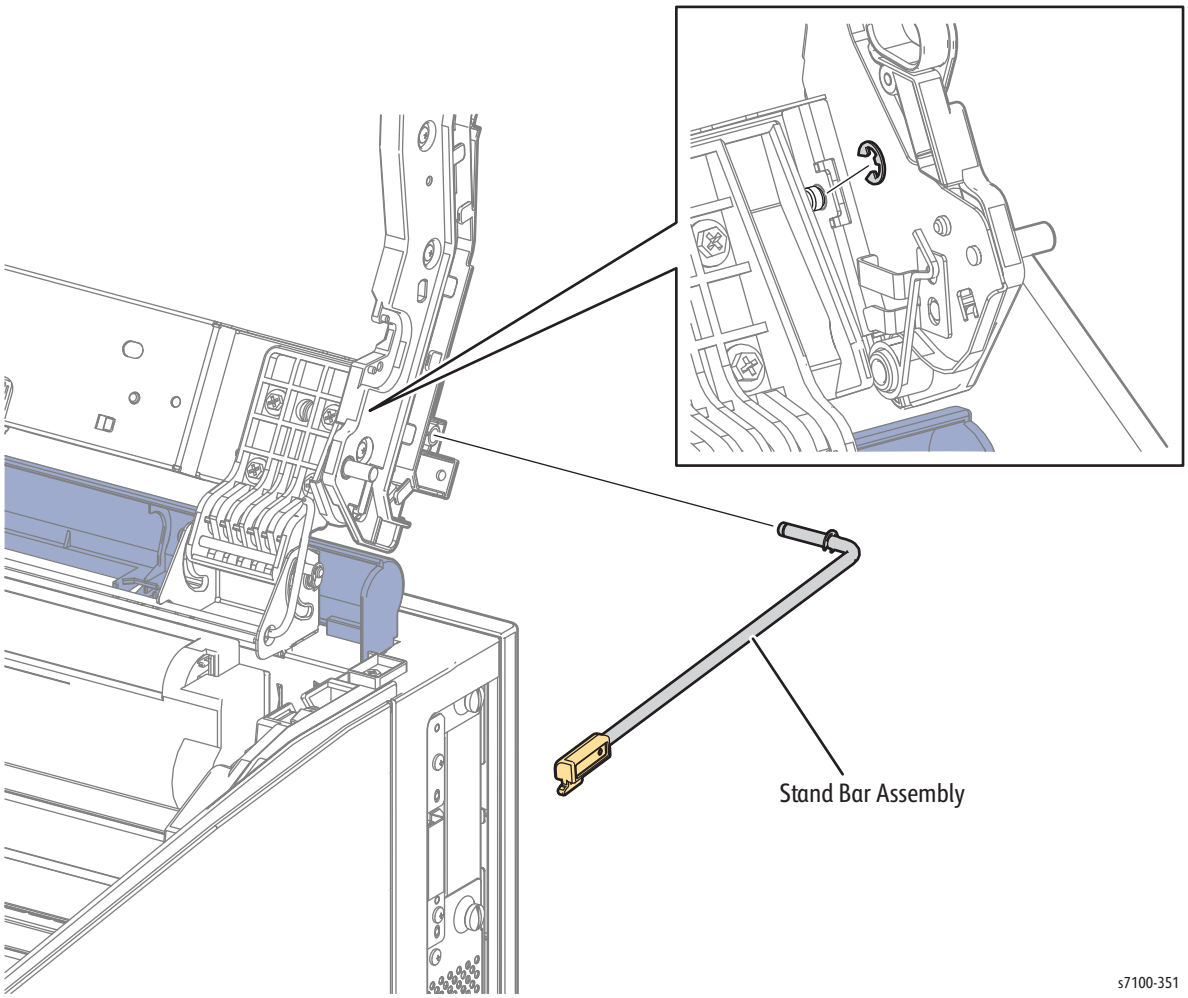
4. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
5. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).

6. Remove 2 screws (silver, tapped, 8 mm) that secure the Top Right Guard Frame and remove the Frame.
7. While pushing in and sliding the protrusion of the Stand Bar Holder, release the Holder from the Top Right Guard Frame.



Note: When removing the E-ring in the following step, be careful not to drop or lose the E-spring in the printer.

8. Remove the E-ring that secures the Stand Bar Assembly (PL 9.1.26).
9. Remove the Stand Bar Assembly.



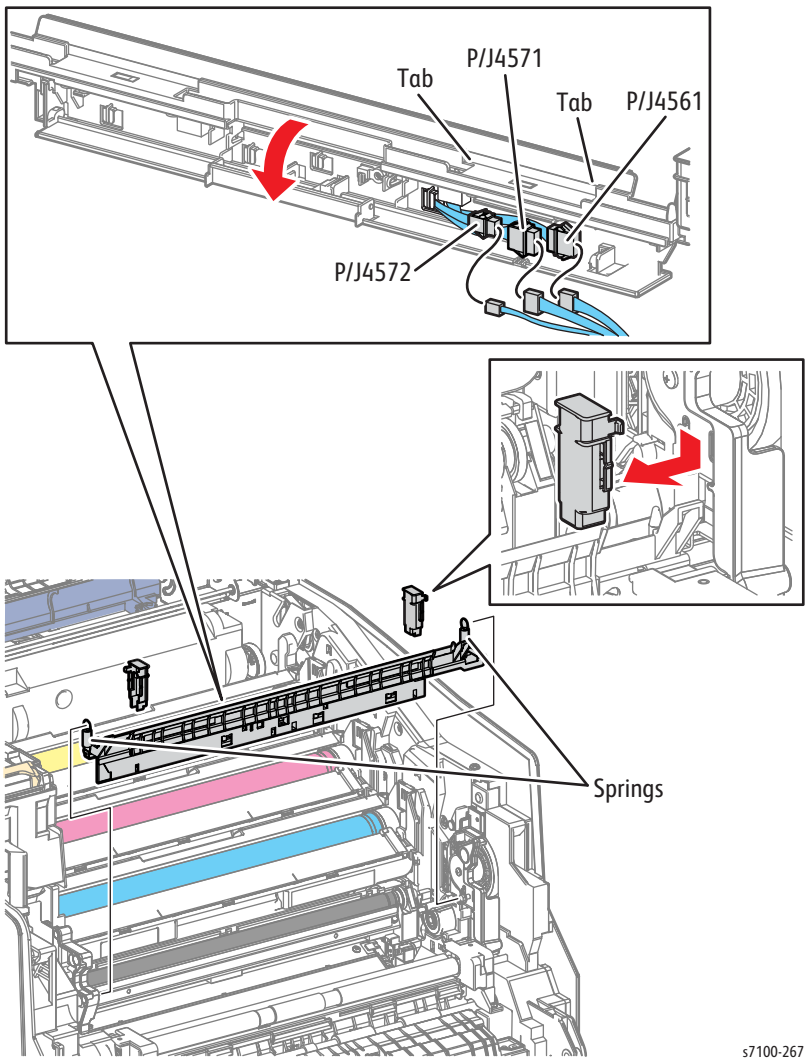
REP 9.9 CTD Sensor Assembly

PL 9.1.98

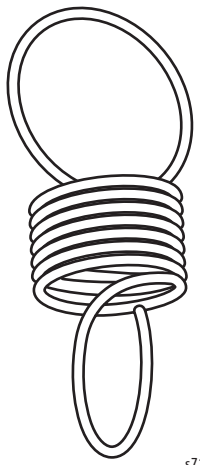
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Press down on the left and right Spring Caps (PL 9.1.11) and remove the Spring Caps.

   Note: For the following steps, be careful not to drop or lose the CTD Hold Spring (PL 9.1.12).
3. Release the tabs to open the Cover on the rear of the CTD Sensor Assembly and disconnect the wiring harness connectors (P/J4561, P/J4571, and P/J4572).
4. Release the left and right CTD Hold Springs from the screws that they are attached to.
5. Lift and remove the CTD Sensor Assembly.



Replacement Note: Be sure the larger loop on the Springs are attached to the screws on the printer frame.



s7100-448

REP 9.10 IBT Unit

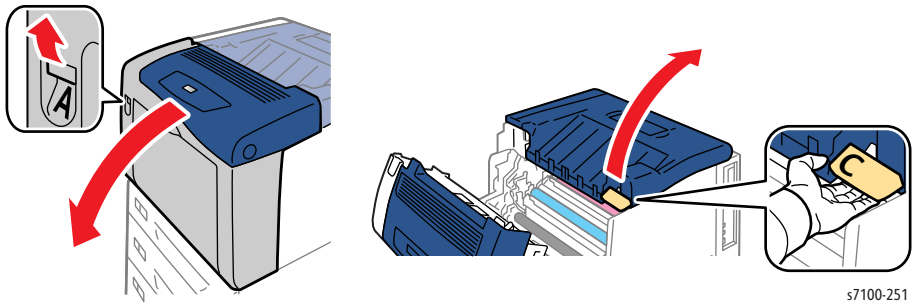
PL 9.1.99

CAUTION: Do not touch the IBT Belt surface. Carefully place the IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

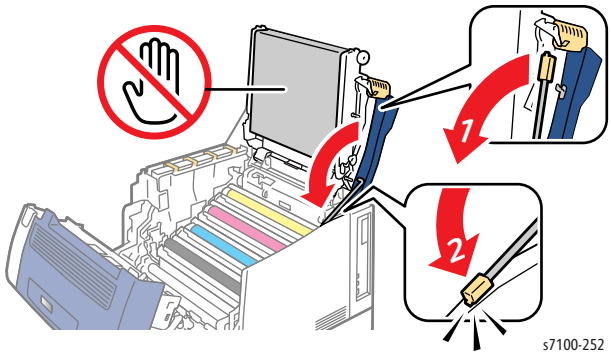
Note: For additional tips, refer to the IBT Unit Removal video (also available in the Phaser 7100 Training materials).

1. Release latch A and open the Front Frame Assembly (PL 4.1.6).
2. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.12).

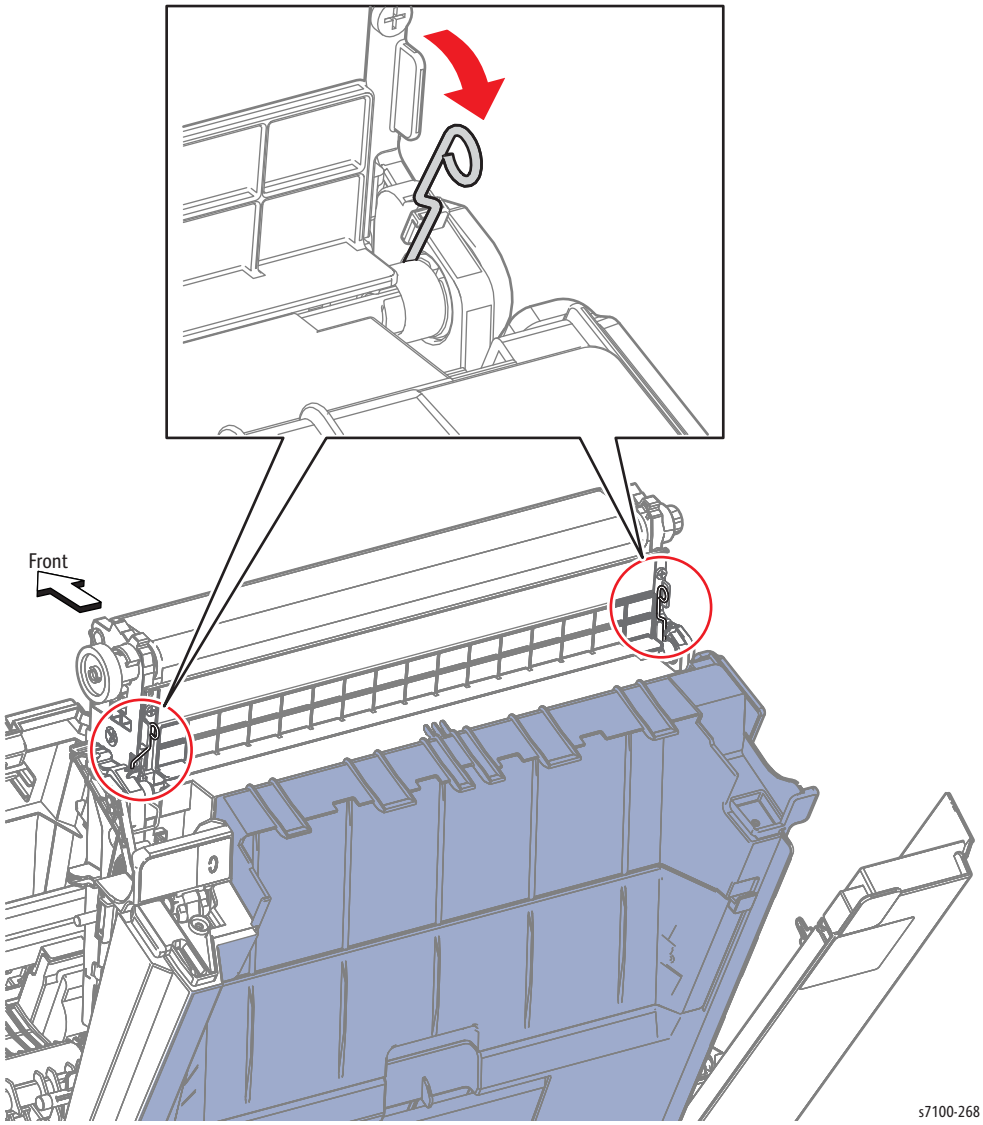


3. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt.



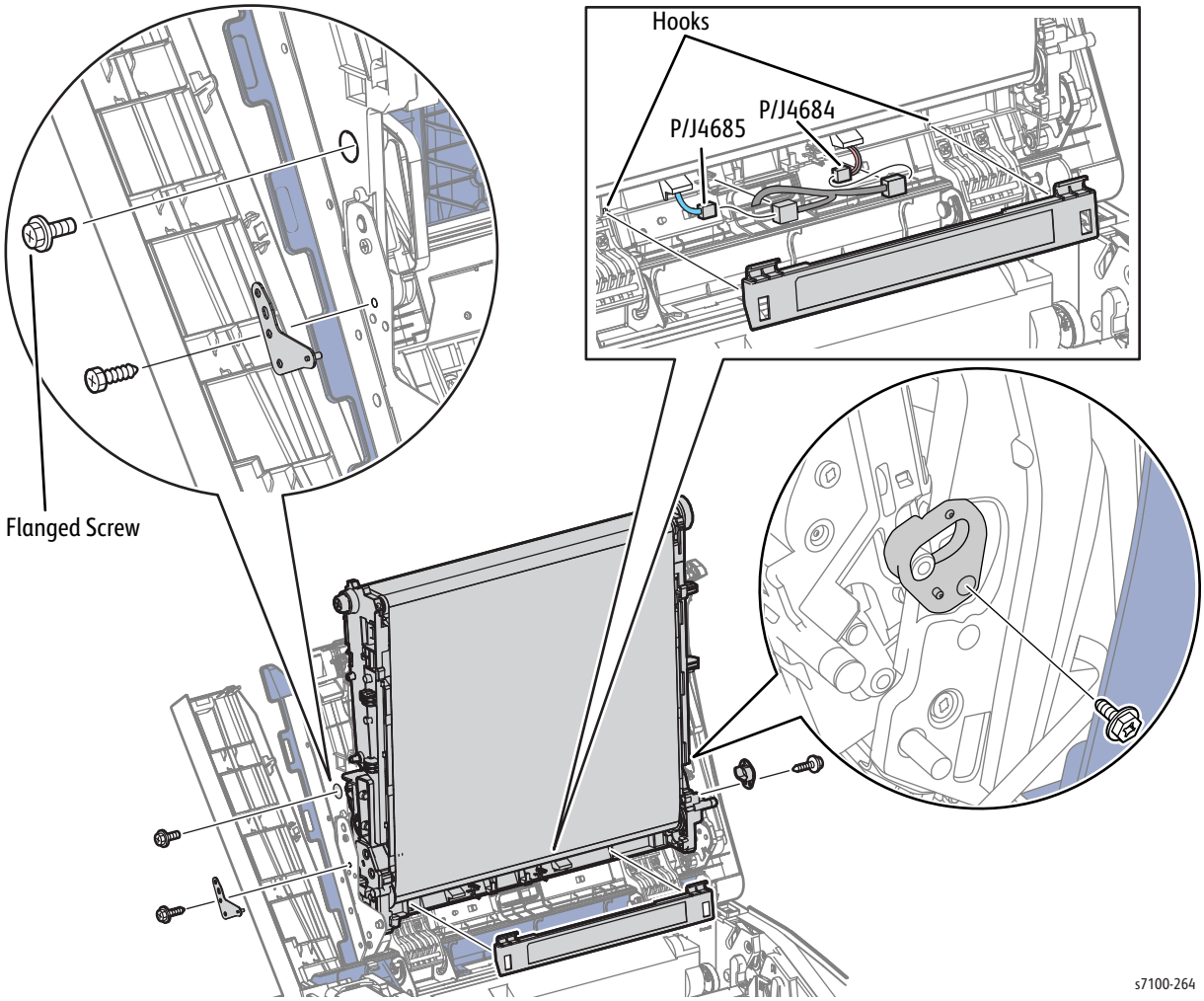
4. Release the Springs from the Top Frame prior to opening the Top Cover Assembly. This allows to perform the removal procedure easier.



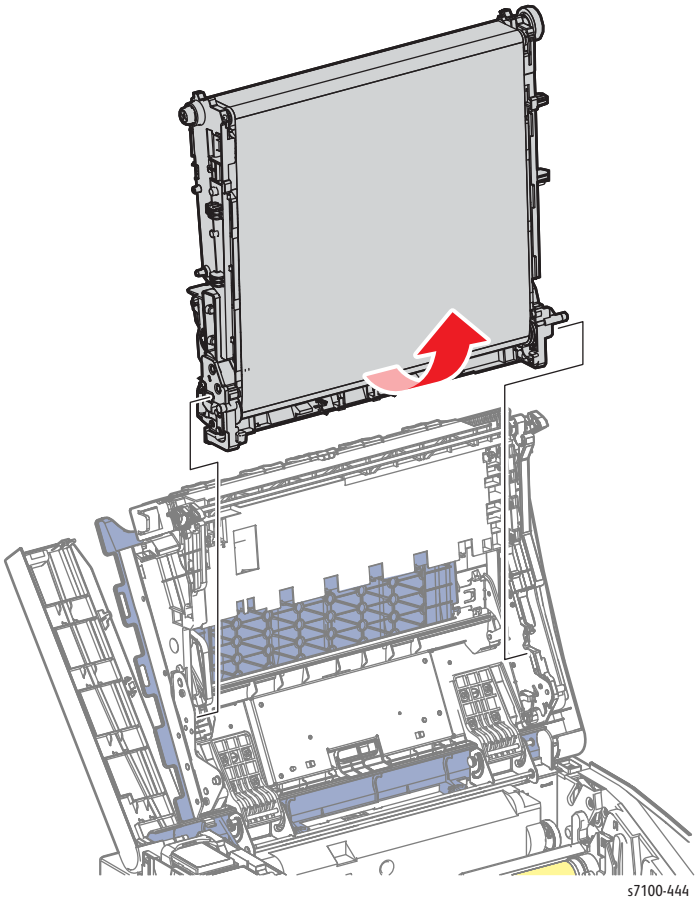
5. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).

6. Release the 2 hooks that secure the IBT Cleaner Cover Assembly (PL 9.1.3) to the IBT Unit and remove the IBT Cleaner Cover Assembly.
7. Disconnect the 2 wiring harness connectors P/J4684 and P/J4685 that are connected to the IBT Unit and release the wiring harnesses from the Harness Guide.

   Note: Be sure to move the wiring harnesses out of the way to prevent catching the IBT Unit.
8. Remove one Flange screw (PL 9.1.20) on the inside of the Top Frame.
9. Remove one screw (silver, tapped, 8 mm) that secures the Right IBT Holder (PL 9.1.14) to the IBT Unit and remove the Right IBT Holder.
10. Remove one screw (silver, tapped, 8 mm) that secures the Left IBT Holder (PL 9.1.15) to the IBT Unit and remove the Left IBT Holder.



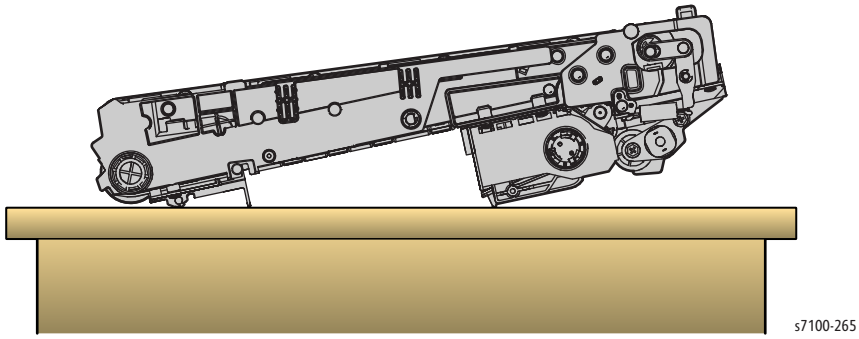
11. Lift and slide the IBT Unit towards the right side to remove.



IBT Unit Placement

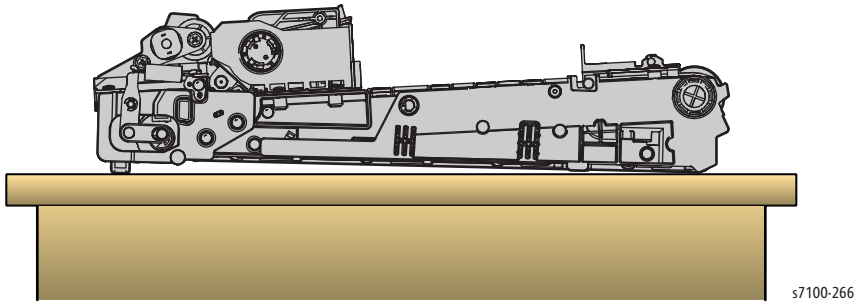
Option 1

Place the removed IBT Unit on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing down.

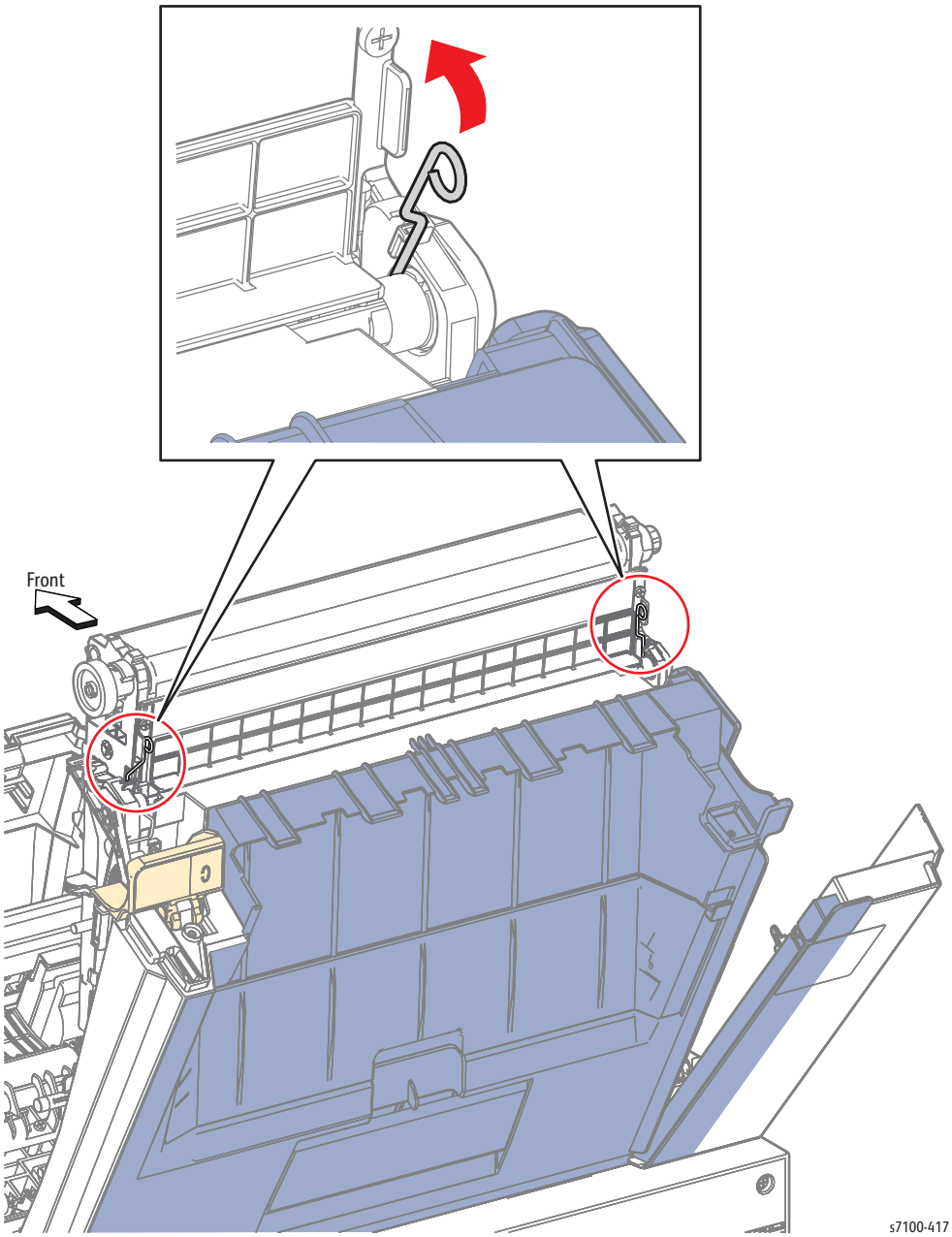


Option 2

When there is a need to remove any parts that are installed on the IBT Unit, turn it over (from the Option placement) and place it on a flat surface that is free of any contamination, or dust, etc. with the Waste Cartridge Assembly facing up.



Replacement Note: When installing the IBT Unit, make sure to position the Spring towards the Top Frame. Then, after the IBT Unit is installed, return the Spring to the position where it connects to the IBT Unit (the correct position for the Spring).



Note: When replacing the IBT Unit with a new one, the Life Counter (DC135 HFSI on page 2-19) of the following Chain-Link number (950-888, 950-892) must be reset.

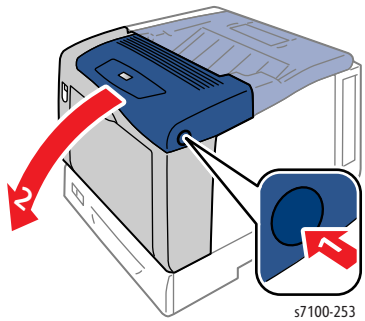
Fuser

REP 10.1 Fuser Unit

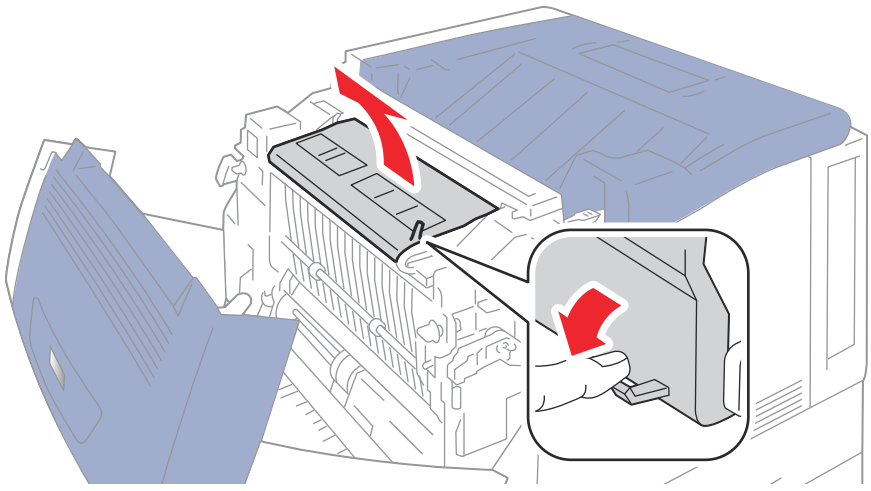
PL 10.1.1

WARNING: The Fuser may be hot. Turn the printer power Off and allow at least 30 minutes for the Fuser to cool before removing the Fuser.

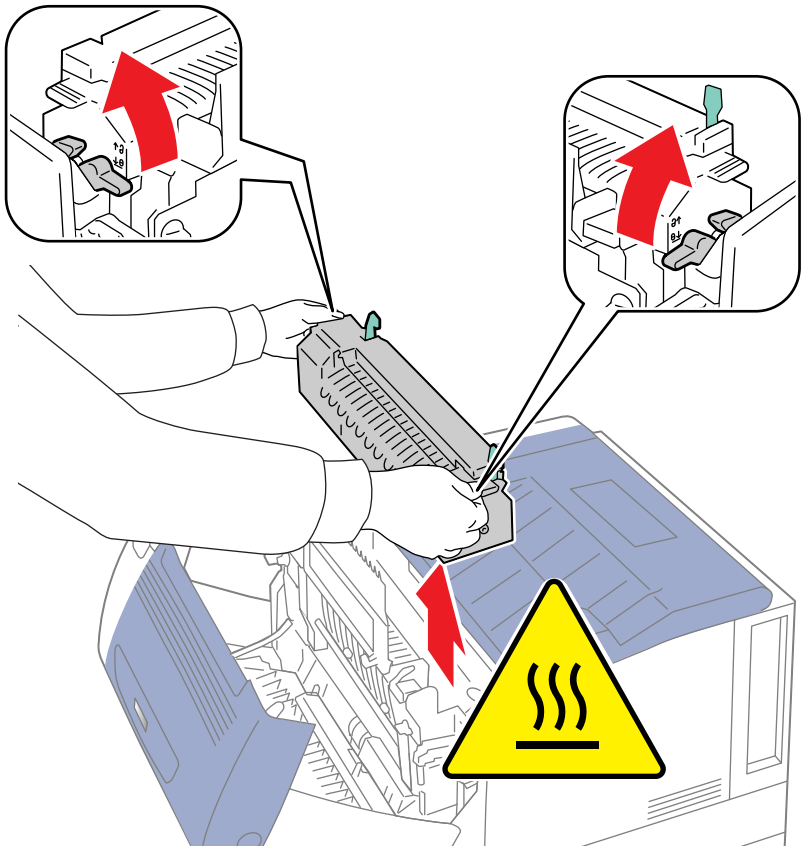
1. Press the B button and open the Front Cover Assembly (PL 1.1.38).



2. Press the tab and open the Upper Duplex Chute (PL 14.3.2).



3. Release the Fuser Unit Levers upward and lift the left and right handles to remove the Fuser Unit.

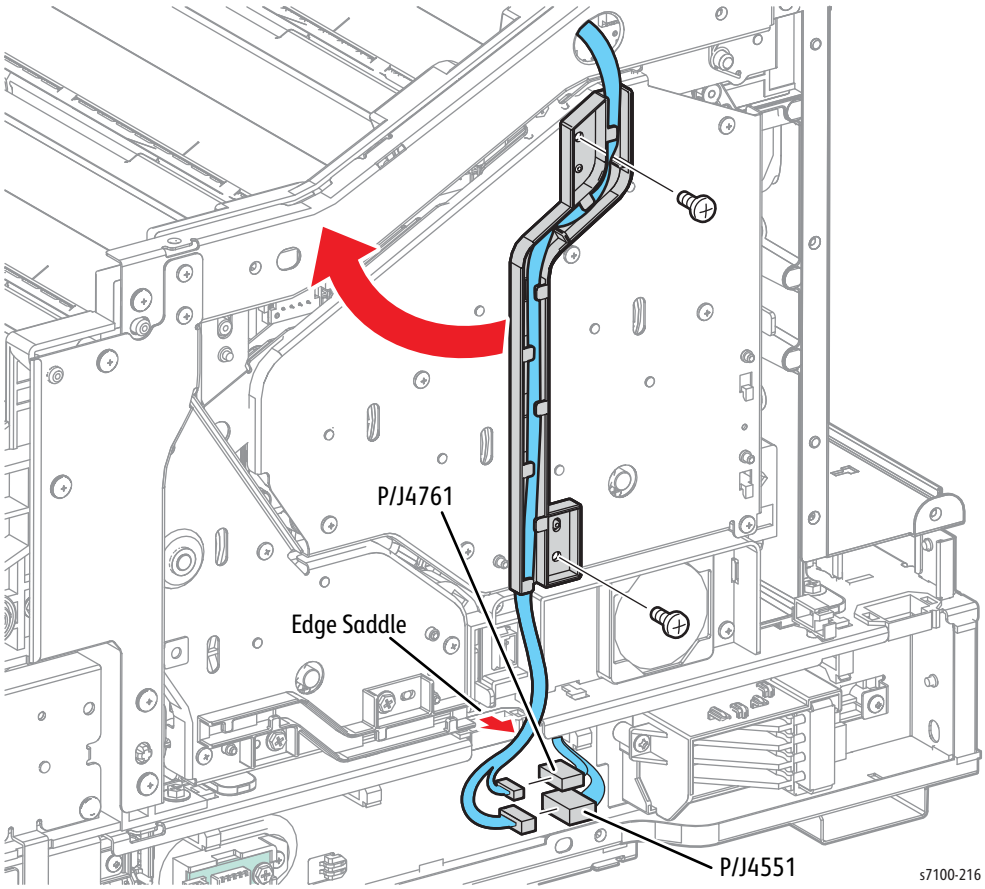


Drive

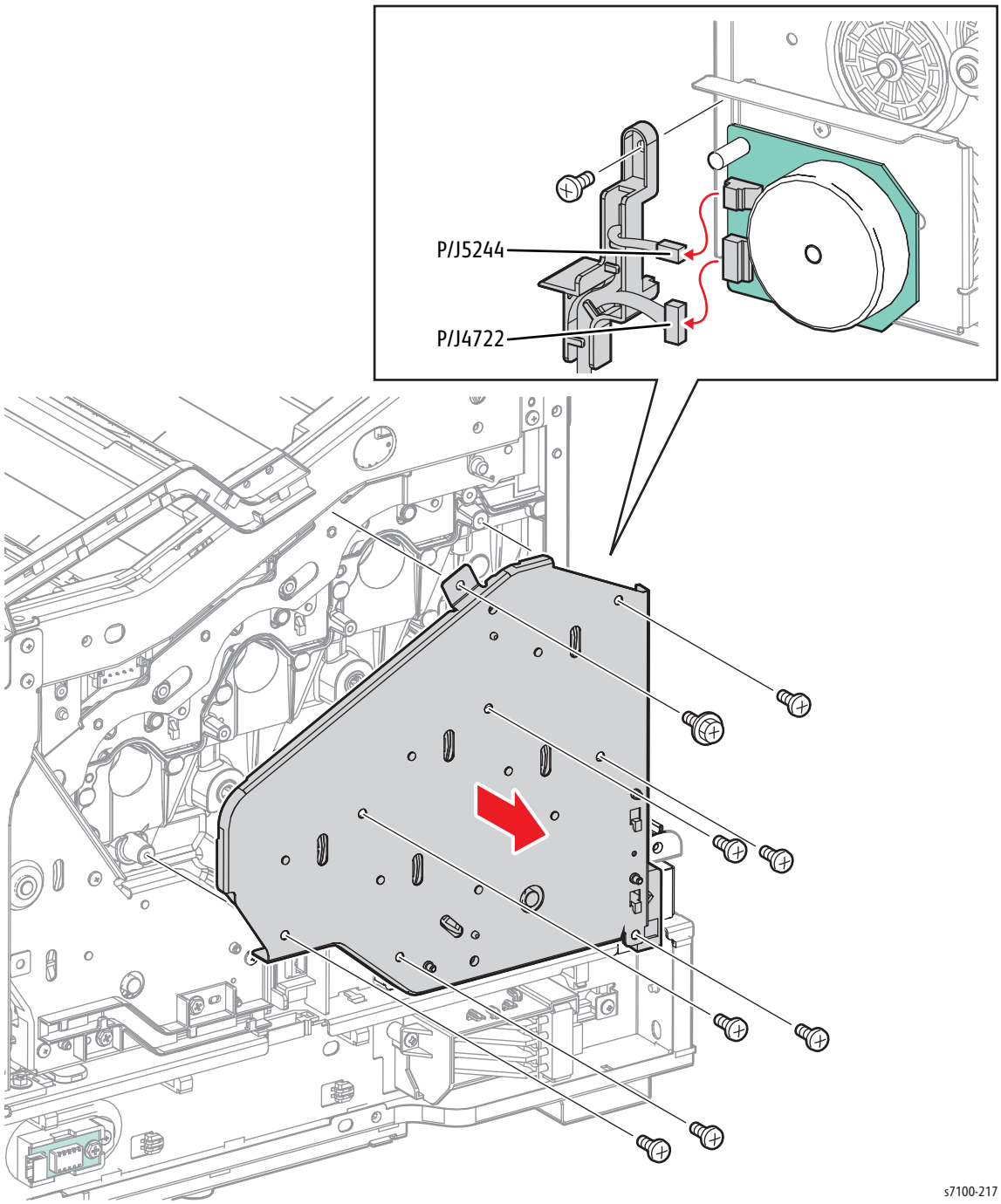
REP 11.1 PR Drive Assembly (Y/ M/ C)

PL 11.1.2

1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Release the wiring harness from the Edge Saddle.
7. Disconnect the 2 wiring harness connectors P/J4551 and P/J4761 that are connected to the Right Imaging Unit Guide Assembly.
8. Remove 2 screws (silver, 6 mm) that secure the Imaging Unit CRUM Harness Guide (PL 11.1.3) and remove the Harness Guide.



9. Remove 8 screws (silver, tapped, 6 mm) that secure the (Y/ M/ C) PR Drive Assembly to the printer and open the Drive Assembly towards the rear.
10. Remove one screw (silver, 6 mm) that secures the (Y/ M/ C) PR Harness Guide (PL 11.1.1) to the (Y/ M/ C) PR Drive Assembly and remove the Harness Guide.
11. Disconnect 2 wiring harness connectors P/J4722 and P/J5244 that are connected to the (Y/ M/ C) PR Drive Assembly.



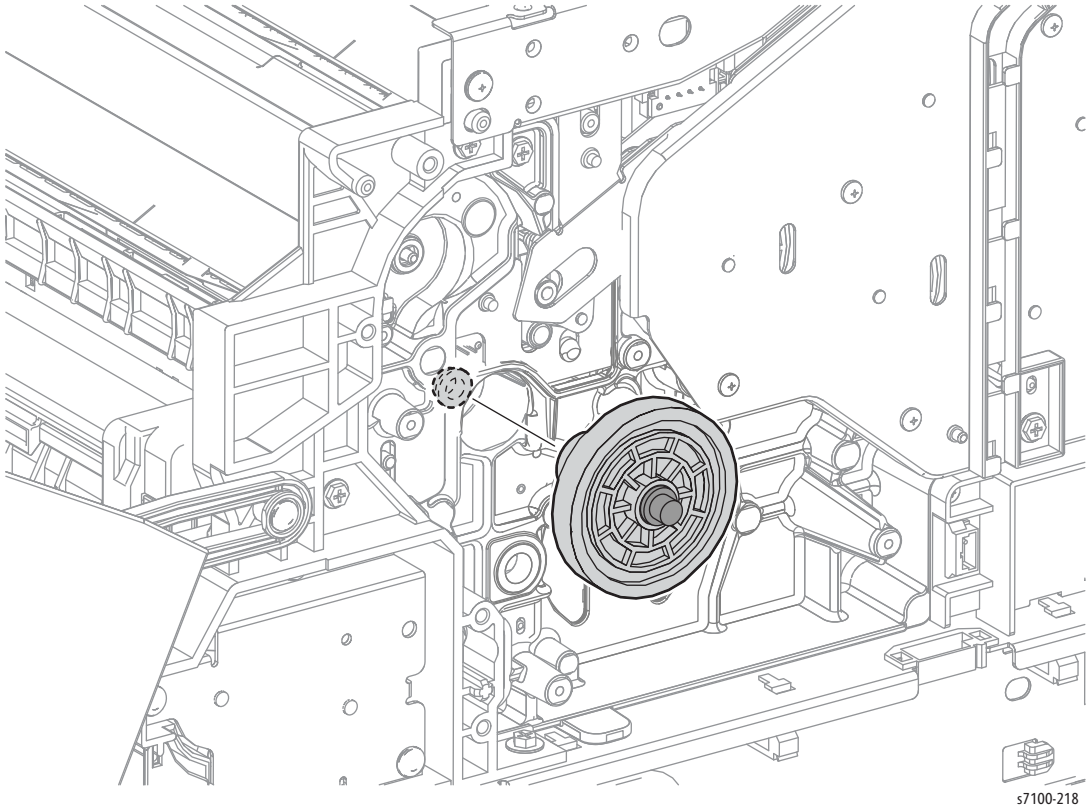
REP 11.2 Input Imaging Unit Shaft Assembly

PL 11.1.5

1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Remove the PR Drive Assembly (K) (REP 11.8 PR Drive Assembly (K) on page 4-200).

   Note: When pulling out the Input Imaging Unit Shaft Assembly in the following step, make sure not to drop or lose the Ball Bearings (PL 11.1.4).

7. Pull out and remove the Input Imaging Unit Shaft Assembly from the printer.



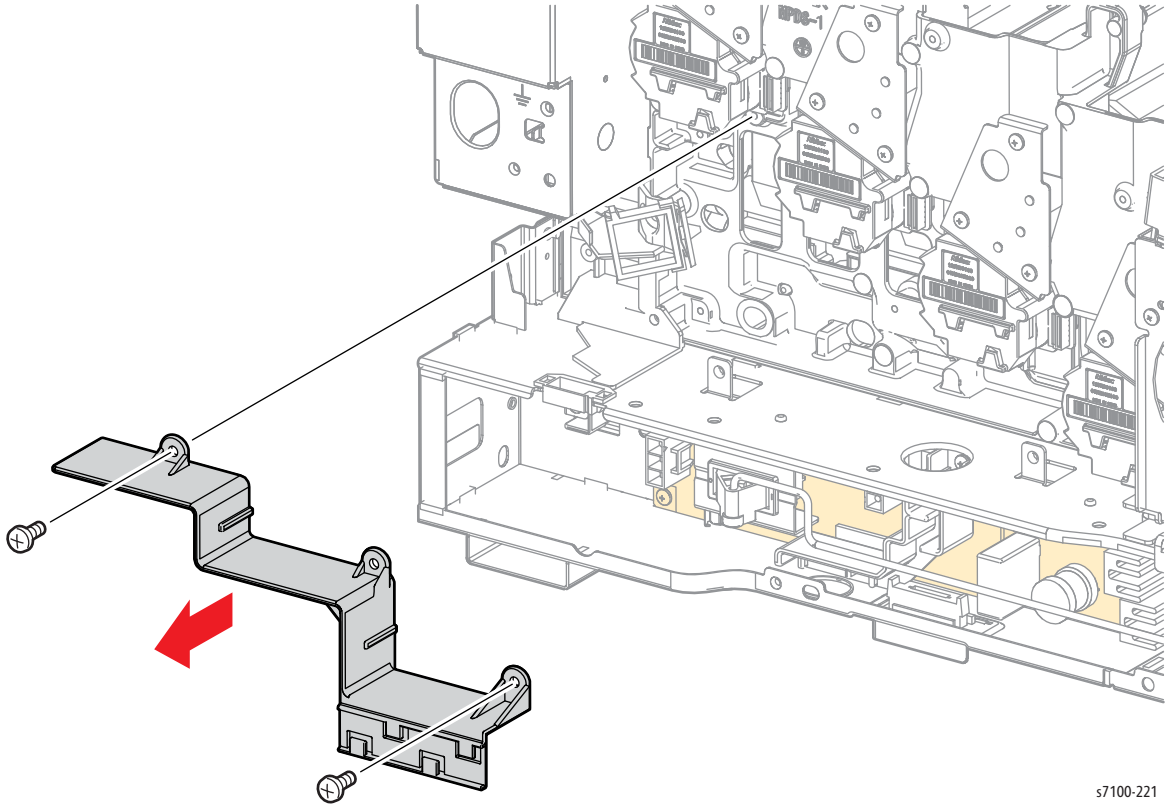
REP 11.3 Wire Wall Housing

PL 11.1.15

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).
3. Remove Tray 1.
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
8. Remove the Toner Cartridge Cover Assembly (REP 1.7, page 4-24).
9. Remove the Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21).
10. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
11. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
12. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
13. Remove the Right Imaging Unit Guide Assembly (REP 6.1, REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
14. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
15. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)
16. Remove the MCU Plate (REP 8.7 MCU Plate on page 4-154).
17. Remove the LVPS Fan Assembly (REP 12.16 LVPS Fan Assembly on page 4-226).
18. Remove the Developer Motor PWB (REP 11.4 Developer Motor PWB on page 4-190).

19. Remove 2 screws (silver, 6 mm) that secure the Wire Wall Housing to the printer and remove the Wire Wall Housing.



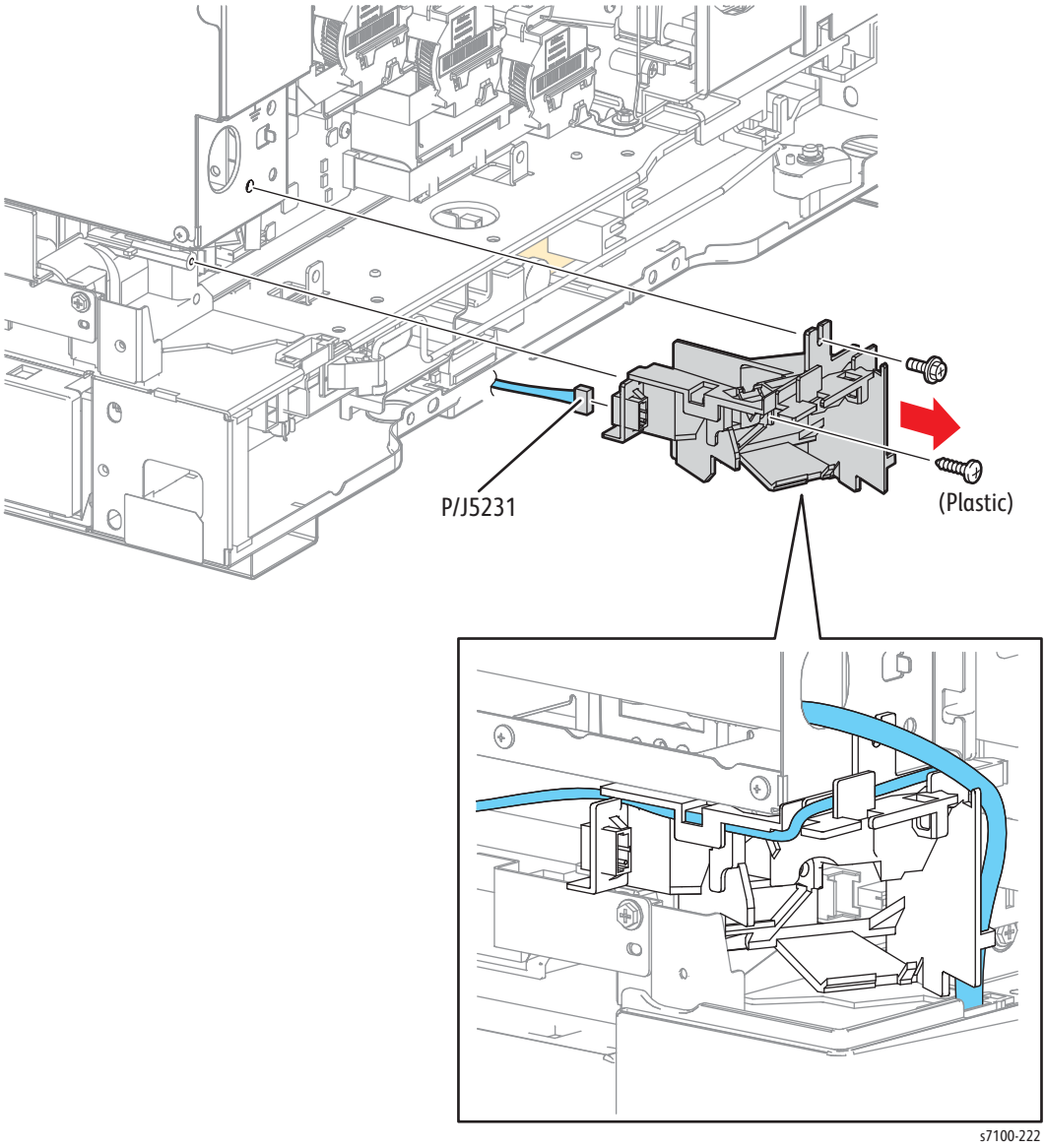
REP 11.4 Developer Motor PWB

PL 11.1.16

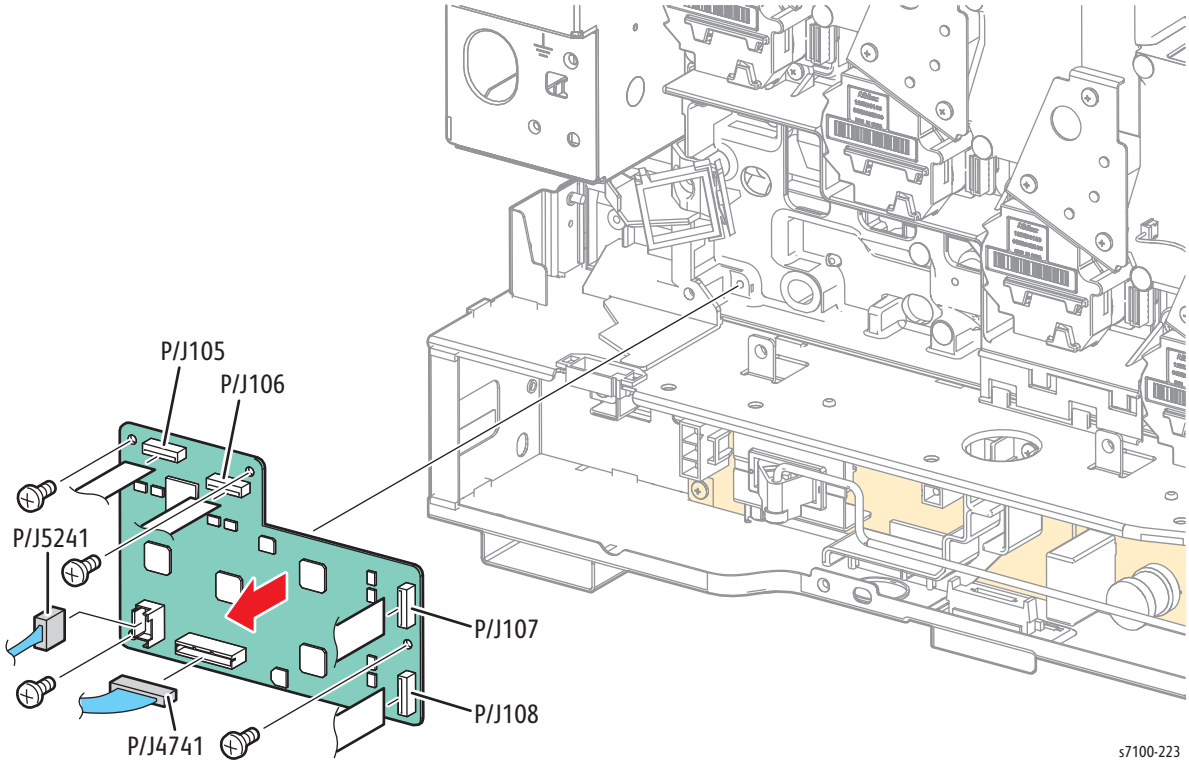
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).
3. Remove Tray 1.
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
8. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
9. Remove the Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21).
10. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
11. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
12. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
13. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
14. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
15. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)
16. Remove the MCU Plate (REP 8.7 MCU Plate on page 4-154).
17. Remove the LVPS Fan Assembly (REP 12.16 LVPS Fan Assembly on page 4-226).

18. Remove one screw (silver, tapped, 8 mm) and one screw (silver, 6 mm) that secure the Harness Guide Duct (PL 12.2.23).
19. Disconnect the wiring harness connector P/J5231that is connected to the Harness Guide Duct.
20. Remove Harness Guide Duct.



21. Disconnect the Flat Cable connectors (P/J105, P/J106, P/J107, P/J108) that are connected to the Developer Motor PWB.
22. Remove 4 screws (silver, 6 mm) that secure the Developer Motor PWB to the printer.
23. Disconnect 2 wiring harness connectors P/J5241 and P/J4741 that are connected to the Developer Motor PWB and remove the Developer Motor PWB.



REP 11.5 Developer Motor (Match Box) Assembly

PL 11.1.17

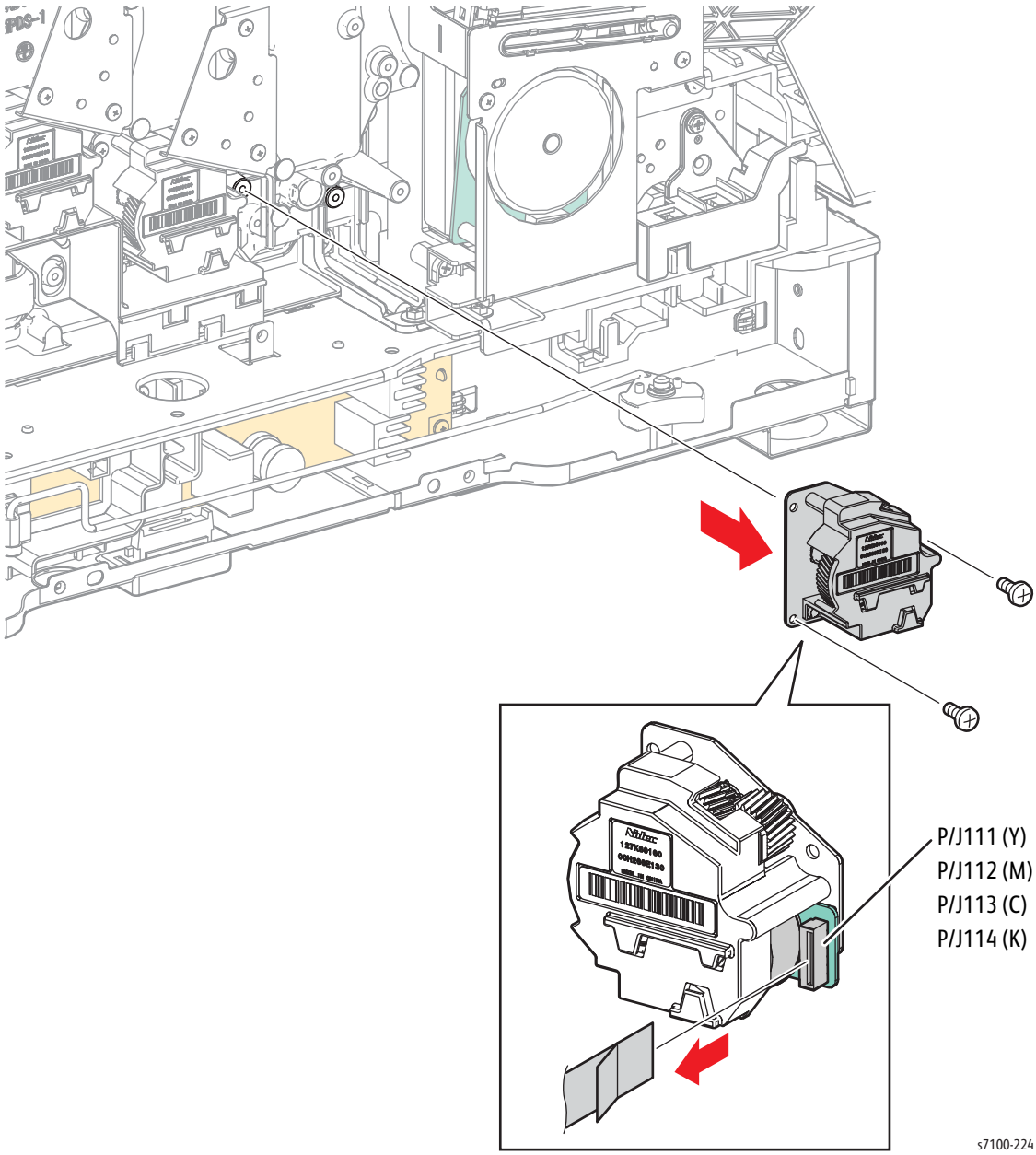
CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

Note: For additional tips, refer to the Developer Motor Assembly Removal video (also available in the Phaser 7100 Training materials).

Note: The following procedure applies for all 4 Developer Motor Assemblies.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).
3. Remove Tray 1.
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
8. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
9. Remove the Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21).
10. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
11. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
12. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
13. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
14. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
15. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)
16. Remove the MCU Plate (REP 8.7 MCU Plate on page 4-154).
17. Remove the Developer Drive Assembly (REP 11.6 Developer Drive Assembly on page 4-195).

18. Disconnect the flat cable connectors (P/J111, P/J112, P/J113, P/J114) from the wiring harness connector of the Developer Motor Assembly.
19. Remove 2 screws (silver, 6 mm) that secure the Developer Motor Assembly to the printer and remove the Motor Assembly.



REP 11.6 Developer Drive Assembly

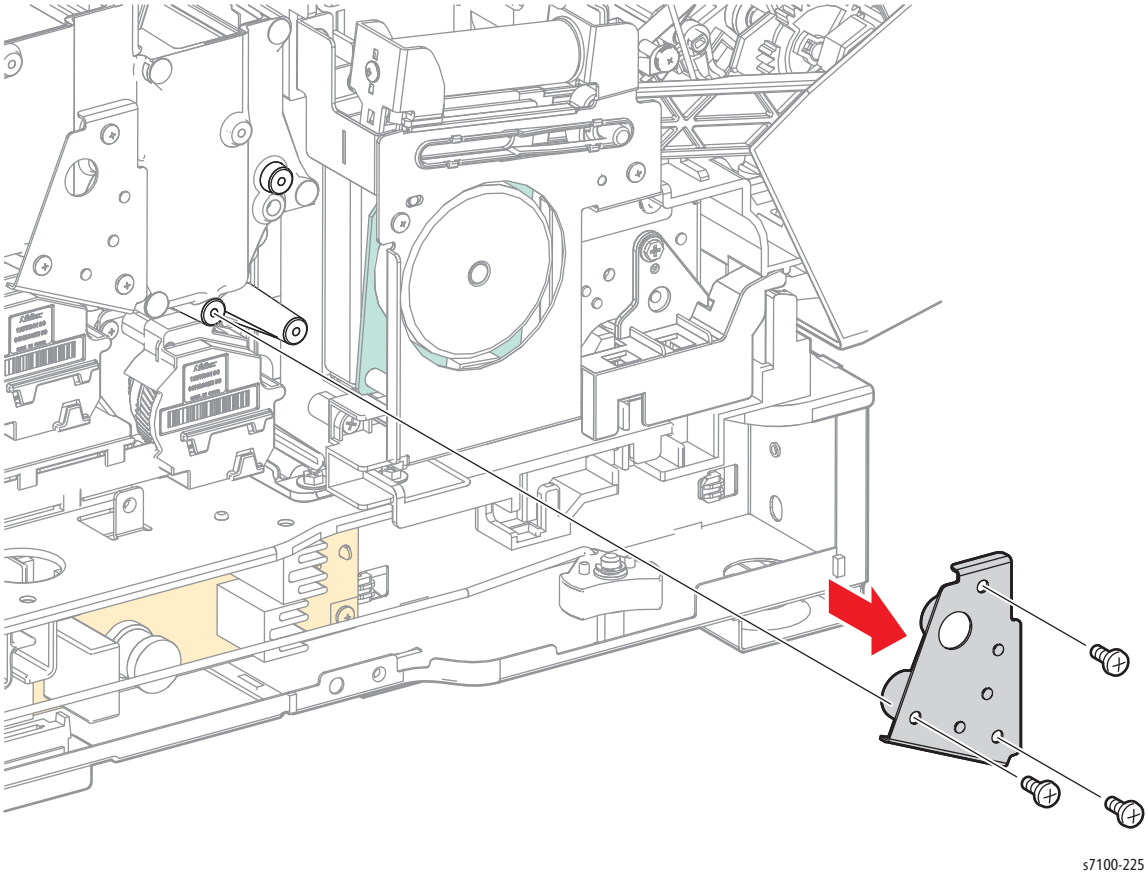
PL 11.1.18

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

Note: The following procedure applies for all 4 Developer Drive Assemblies.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove the Toner Cartridge (Y/ M/ C/ K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136).
3. Remove Tray 1.
4. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
5. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
6. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
7. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
8. Remove the Toner Cartridge Cover Assembly (REP 1.9 Toner Cartridge Cover Assembly on page 4-24).
9. Remove the Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21).
10. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
11. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
12. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
13. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
14. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
15. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)
16. Remove the MCU Plate (REP 8.7 MCU Plate on page 4-154).

17. Remove 3 screws (silver, 6 mm) that secure the Developer Drive Assembly to the printer and remove the Developer Drive Assembly.



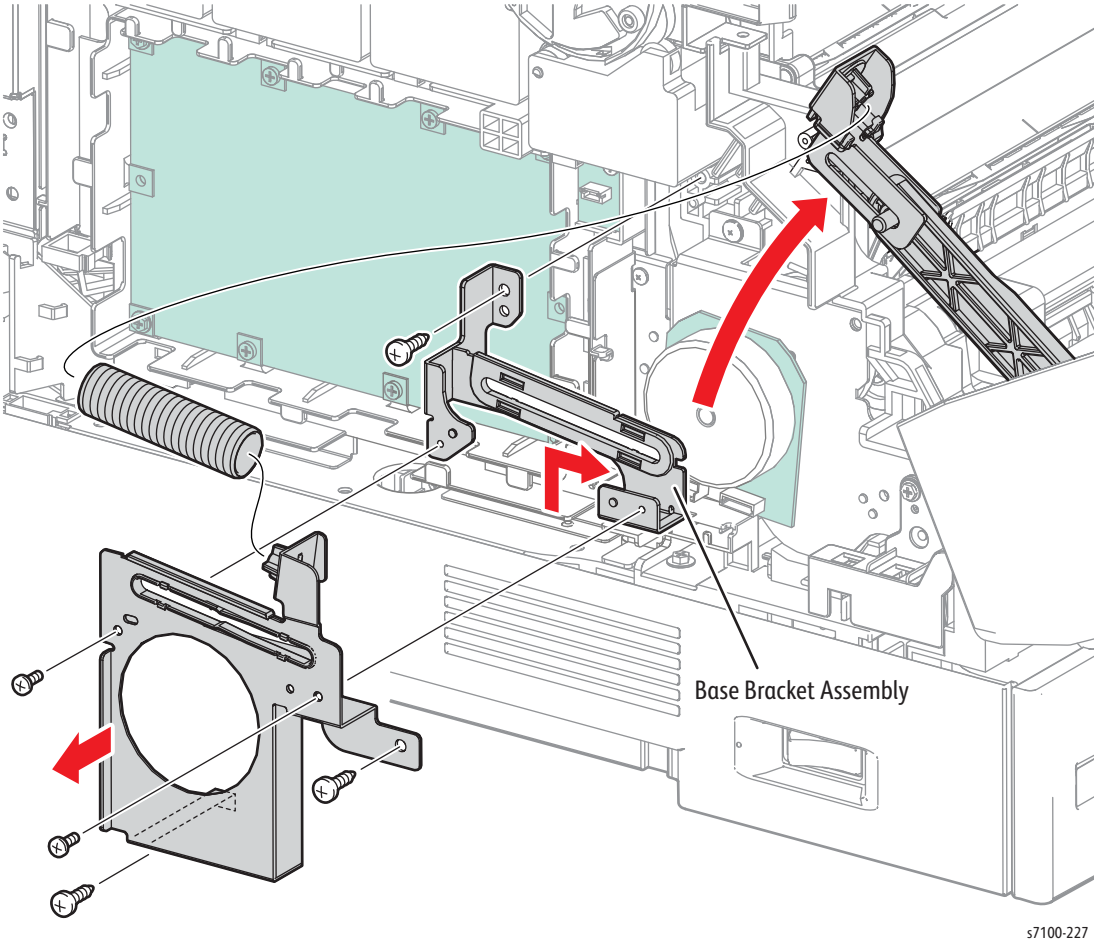
s7100-225

REP 11.7 Paper Handling Drive Assembly

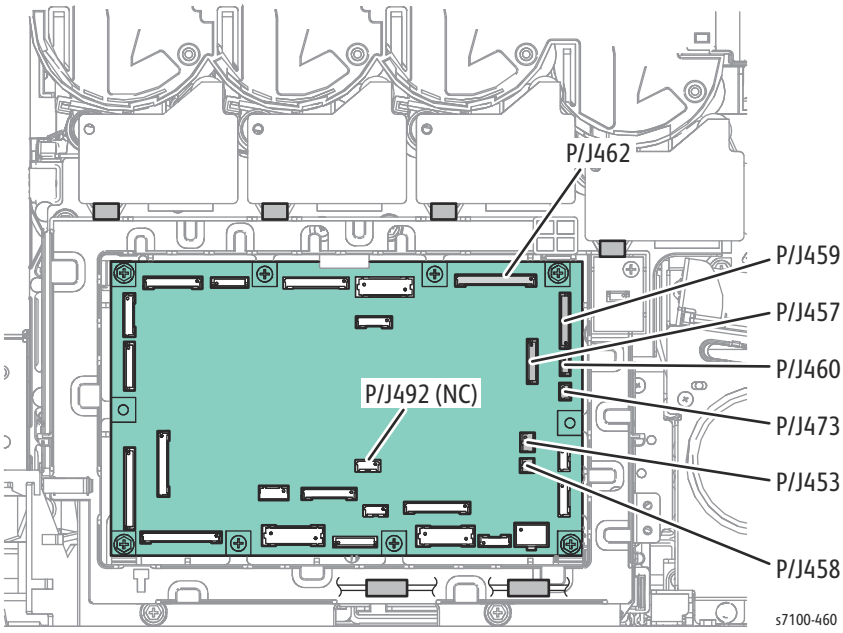
PL 11.1.19

Note: For additional tips, refer to the Paper Handling Drive Assembly Removal video (also available in the Phaser 7100 Training materials).

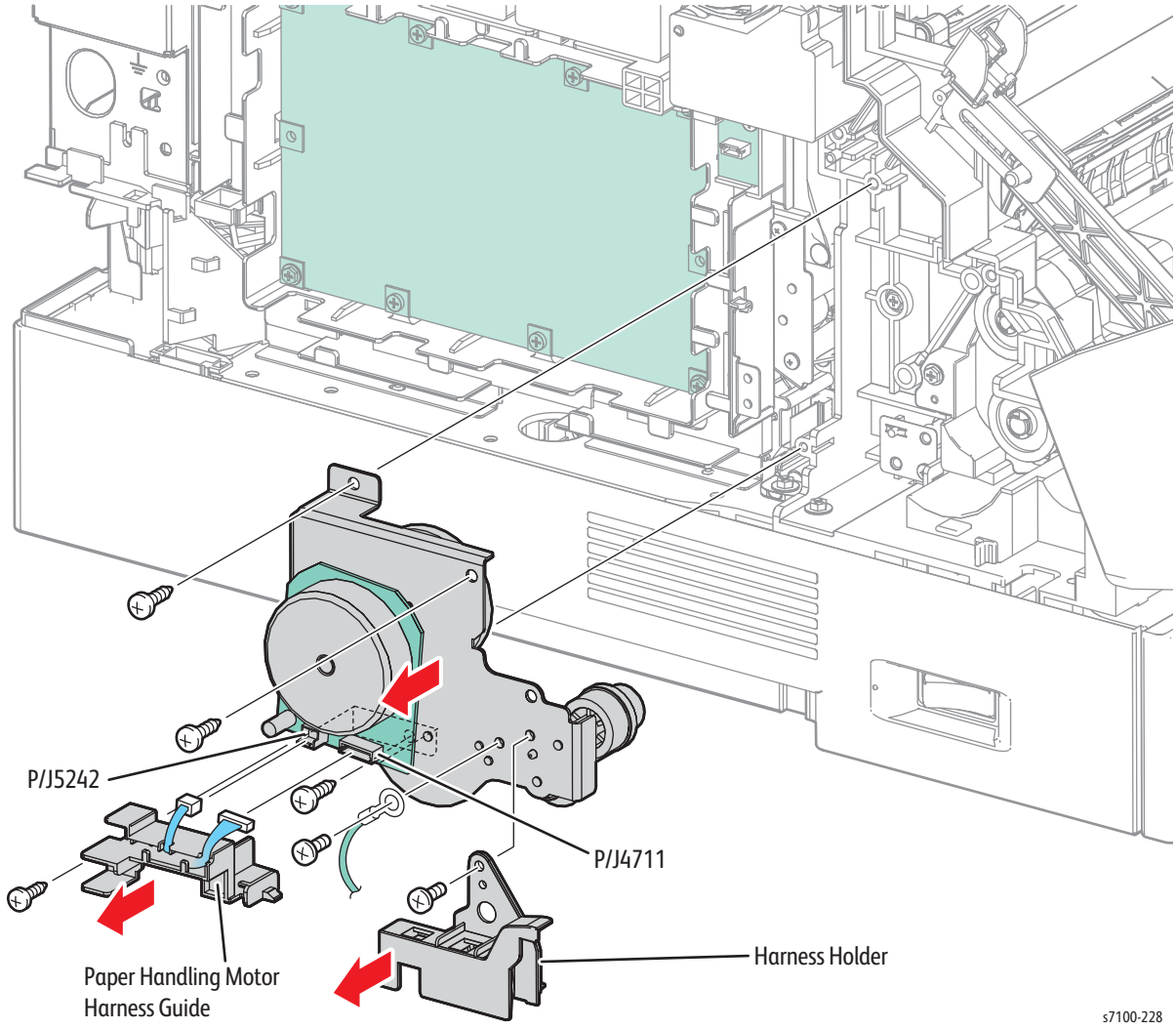
1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
4. Remove the Damper Spring (PL 4.1.3) from the Damper Assembly.
5. Remove 2 screws (silver, tapped, 12 mm) and 2 screws (silver, 6 mm) that secure the Rail Bracket Assembly (PL 4.1.5) to the printer and remove the Rail Bracket Assembly.
6. Lift the Front Left Support Arm (PL 4.2.13) upward.
7. Remove one screw (silver, tapped, 12 mm) that secures the Base Bracket Assembly (PL 4.1.2) to the printer.
8. Lift and shift the Base Bracket Assembly to remove.



9. Disconnect the wiring harness connectors (P/J453, P/J457, P/J458, P/J459, P/J460, and P/J473).



10. Disconnect 2 wiring harness connectors P/J4711 and P/J5242 that are connected to the Drive Assembly.
11. Remove one screw (silver, 6 mm) that secures the Paper Handling Motor Harness Guide (PL 11.1.20) to the printer and remove the Harness Guide.
12. Remove one screw (silver, 6 mm) that secures the Harness Holder (PL 11.1.21) to the Paper Handling Drive Assembly and remove the Harness Holder.
13. Remove one screw (silver, 6 mm) that secures the Ground Wire to the Paper Handling Drive Assembly and remove the Ground Wire.
14. Remove 3 screws (silver, tapped, 12 mm) that secure the Paper Handling Drive Assembly to the printer and remove the Drive Assembly.

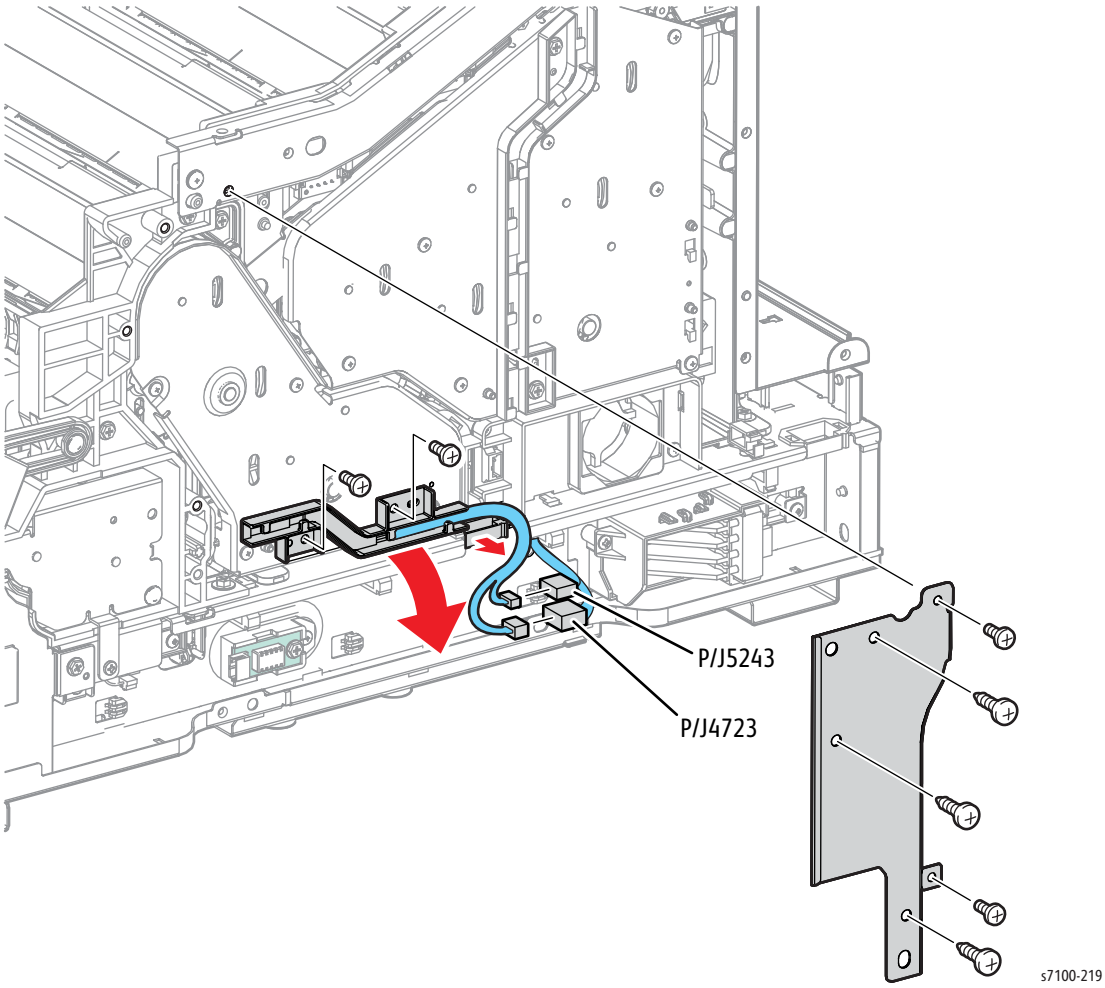


Replacement Note: Be sure to install the Rail Bracket Assembly prior to dressing the wiring harnesses.

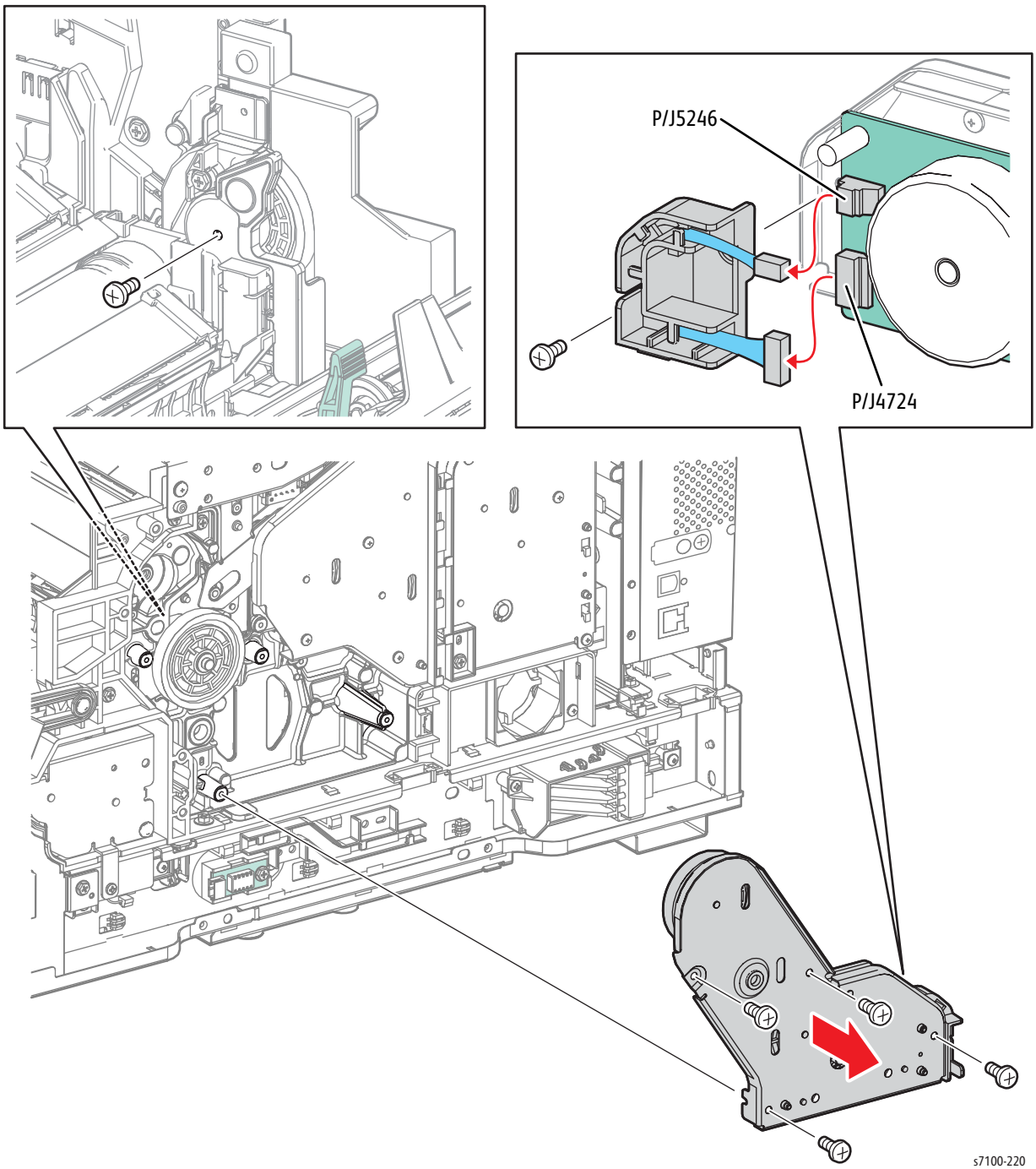
REP 11.8 PR Drive Assembly (K)

PL 11.1.99

1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Remove 2 screws (silver, 6 mm) and 3 screws (silver, tapped, 12 mm) that secure the Right Front Outside Frame (PL 11.1.14) to the printer and remove the Right Front Outside Frame.
7. Release the wiring harness from the Edge Saddle.
8. Disconnect 2 wing harness connectors P/J4523 and P/J4723 that are connected to the Imaging Unit Guide Assembly (K).
9. Remove 2 screws (silver, 6 mm) that secure the Harness Guide (K) (PL 11.1.13) and remove the Harness Guide.



10. Remove 5 screws (silver, 6 mm) that secure the PR Drive Assembly (K) to the printer and remove the Drive Assembly.
11. Remove one screw (silver, 6 mm) that secures the PR Harness Guide (K) (PL 11.1.11) to the PR Drive Assembly (K) and remove the Harness Guide.
12. Disconnect the 2 wiring harness connectors P/J4724 and P/J5246 that are connected to the PR Drive Assembly (K).



Electrical

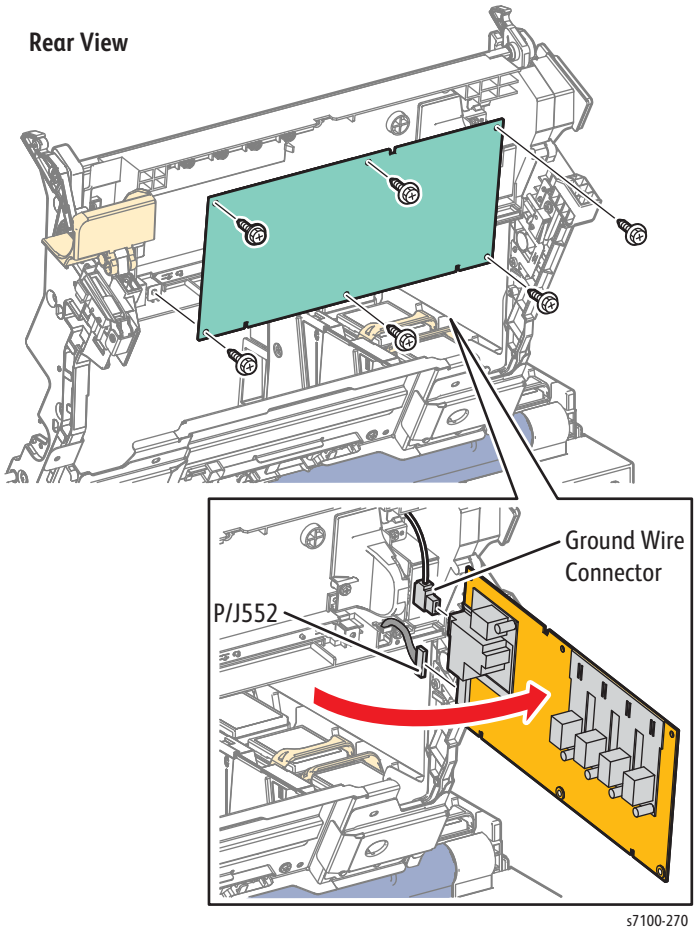
REP 12.1 HVPS2 PWB

PL 12.1.2

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Remove 6 screws (silver, tapped, 8 mm) that secure the HVPS2 PWB to the HV Transfer Guide (PL 12.1.12).
4. Open the HVPS2 PWB and disconnect the wiring harness connector P/J552 and Ground connector.
5. Remove the HVPS2 PWB.

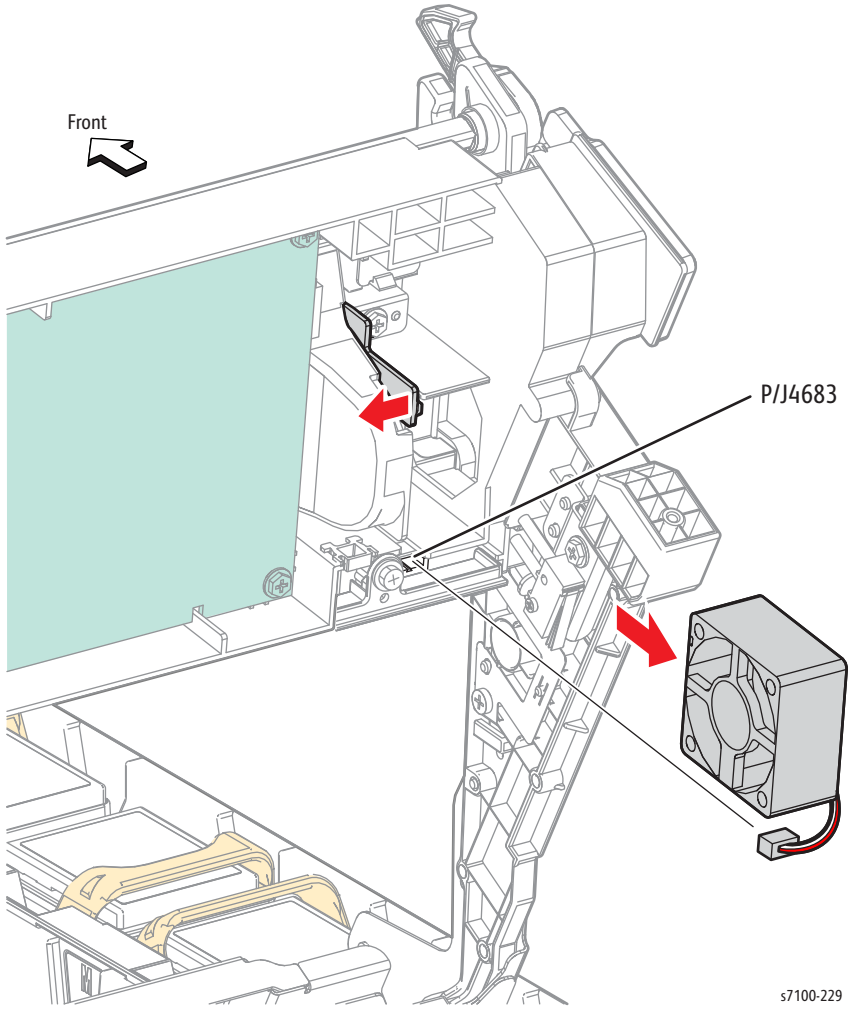


REP 12.2 HVPS2 Fan

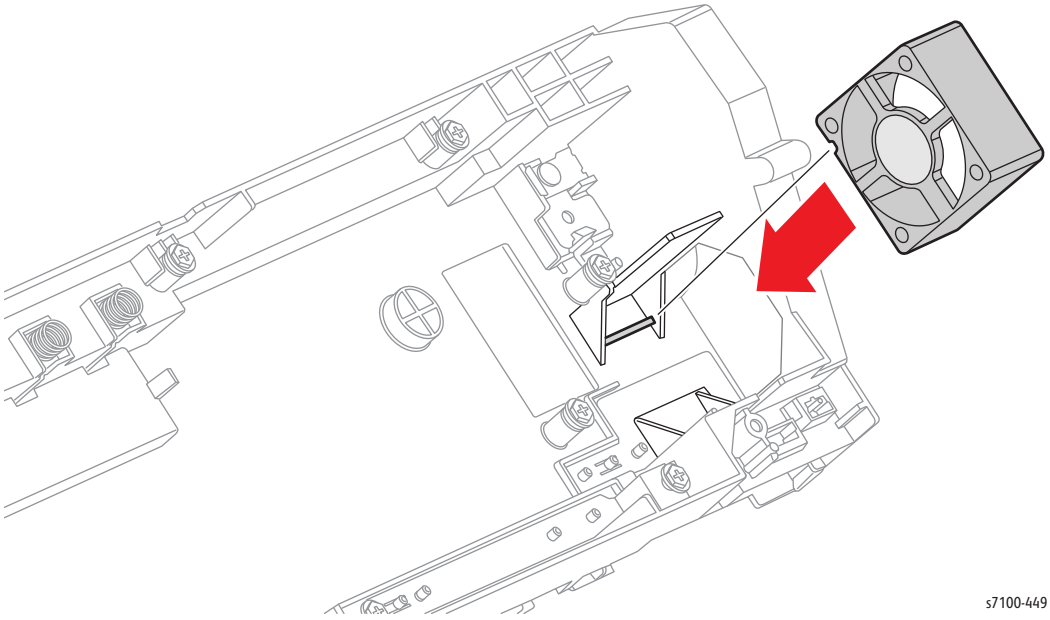
PL 12.1.3

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Disconnect one wiring harness connector P/J4683 that is connected to the HVPS2 Fan.
4. Release the boss that is attached to the IBT Duct (PL 12.1.4) and pull the HVPS2 Fan out to remove.



Replacement Note: Be sure to install the Fan with the label facing inward and the groove sits in place on the Top Cover Assembly.

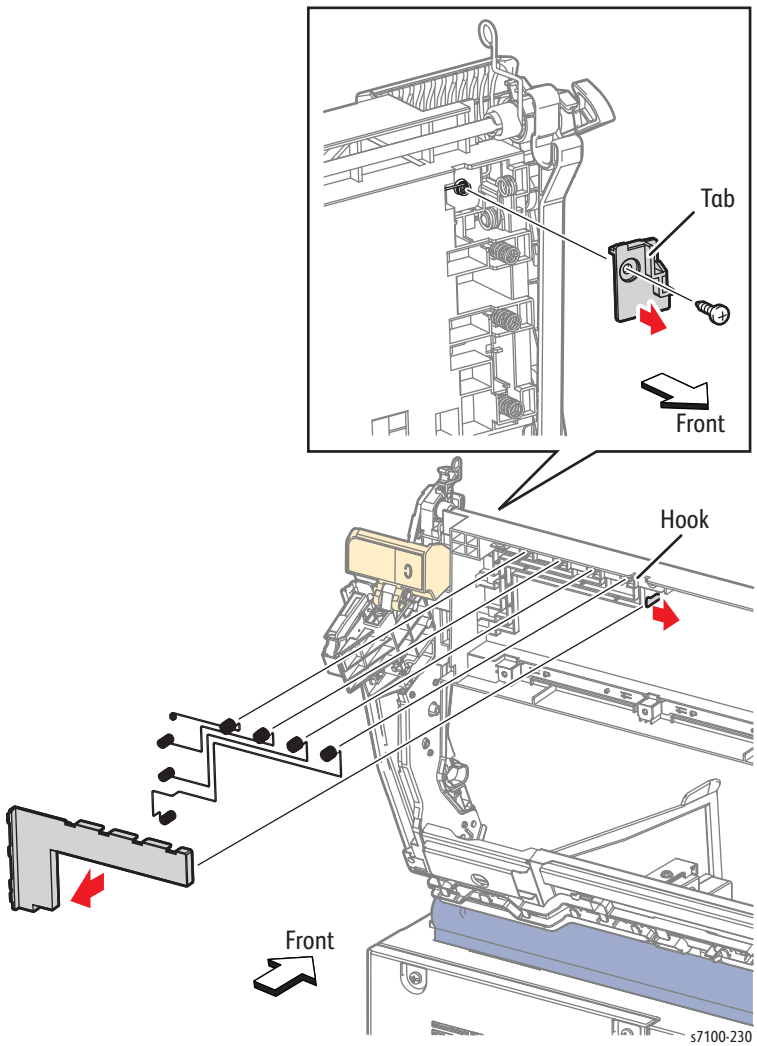


REP 12.3 Conductor Wire (Y/ M/ C/ K)

PL 12.1.6 - PL 12.1.9

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Remove the HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202).
4. Remove one screw (silver, tapped, 8 mm) that secures the (K) Contact Plate (PL 12.1.11).
5. Release the tab and remove the Contact Plate.
6. Release the hook that secures the Conductor Cover (PL 12.1.5) and remove the Conductor Cover.
7. Remove the Conductor Wire (Y/ M/ C/ K).



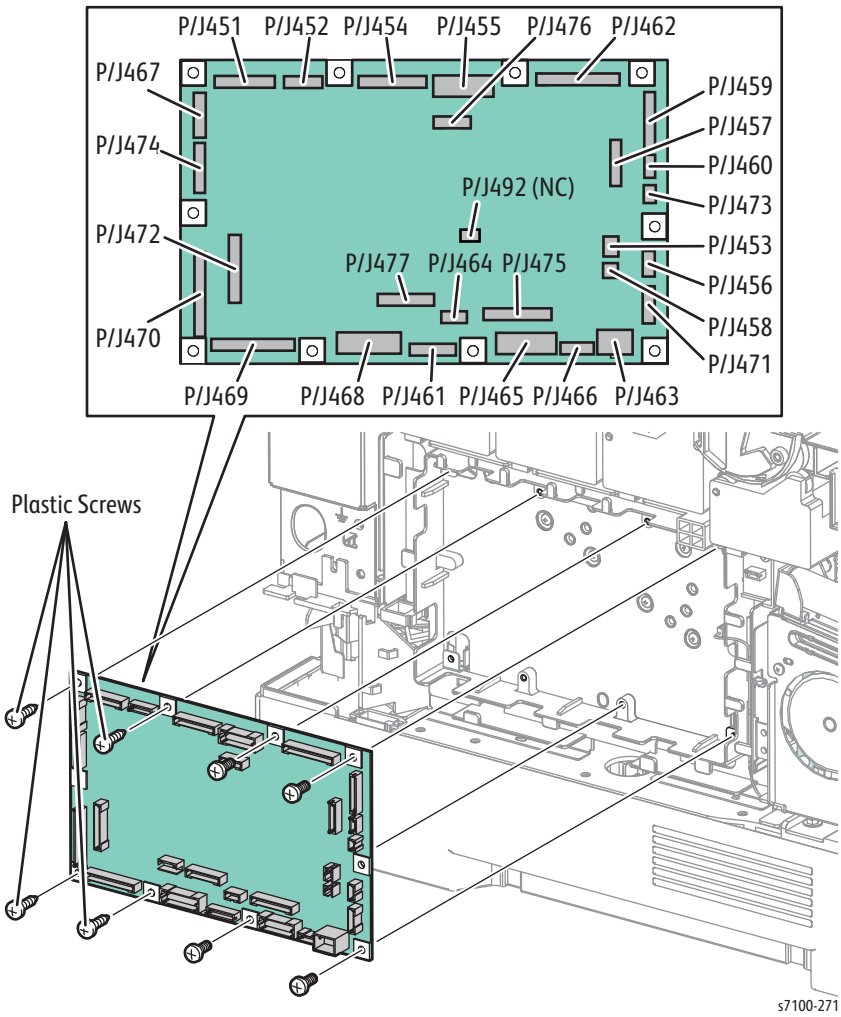
Replacement Note: For (K) Conductor Wire, be sure the Conductor is secured in order to install the Contact Plate.

REP 12.4 MCU PWB

PL 12.1.15

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
4. Disconnect all the wiring harness connectors that are connected to the MCU PWB.
5. Remove 4 screws (silver, tapped, 8 mm) and 4 screws (silver, 6 mm) that secure the MCU PWB to the printer.
6. Remove the MCU PWB.



Replacement Note: When replacing the MCU PWB, be sure to remove the NVRAM from the old PWB and transfer it to the new PWB.

Note: Observe the orientation of the NVRAM device before removing it from the MCU PWB.

Figure 1 - NVRAM Orientation

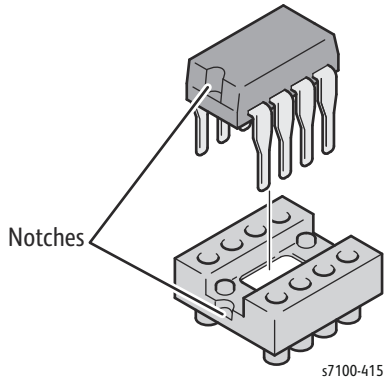
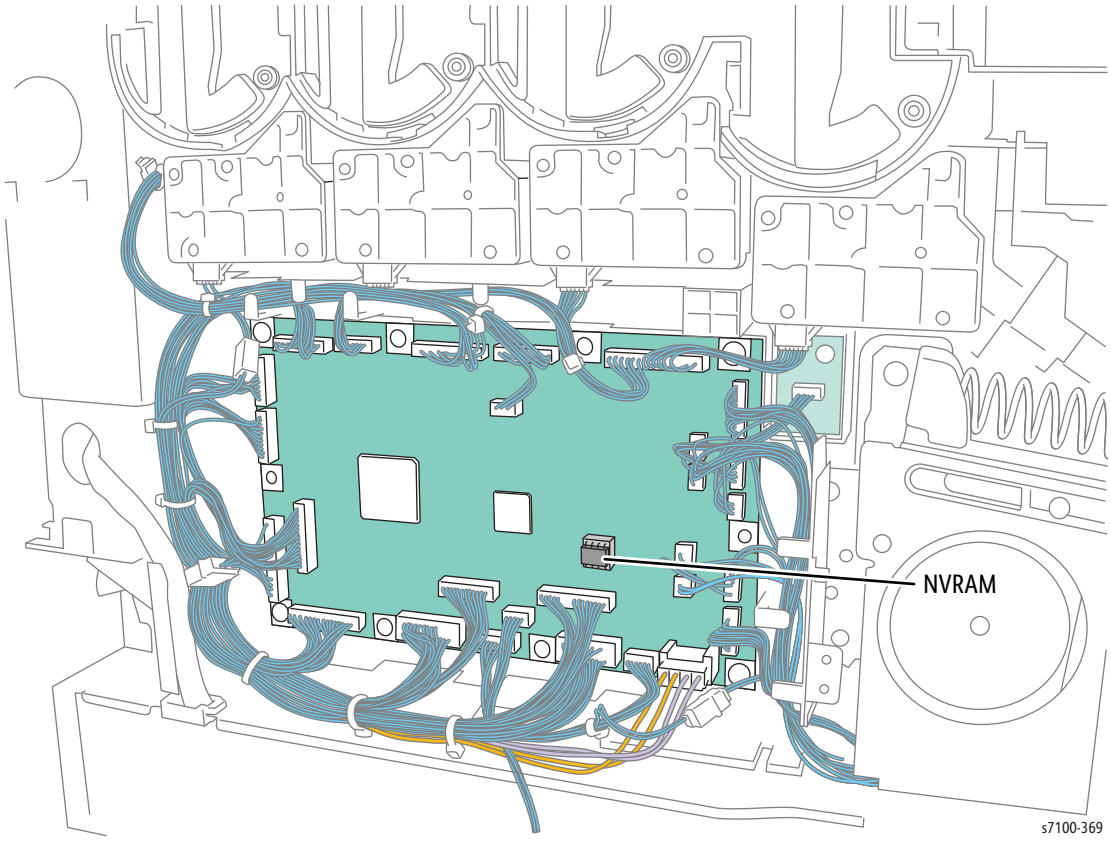


Figure 2 - NVRAM Location



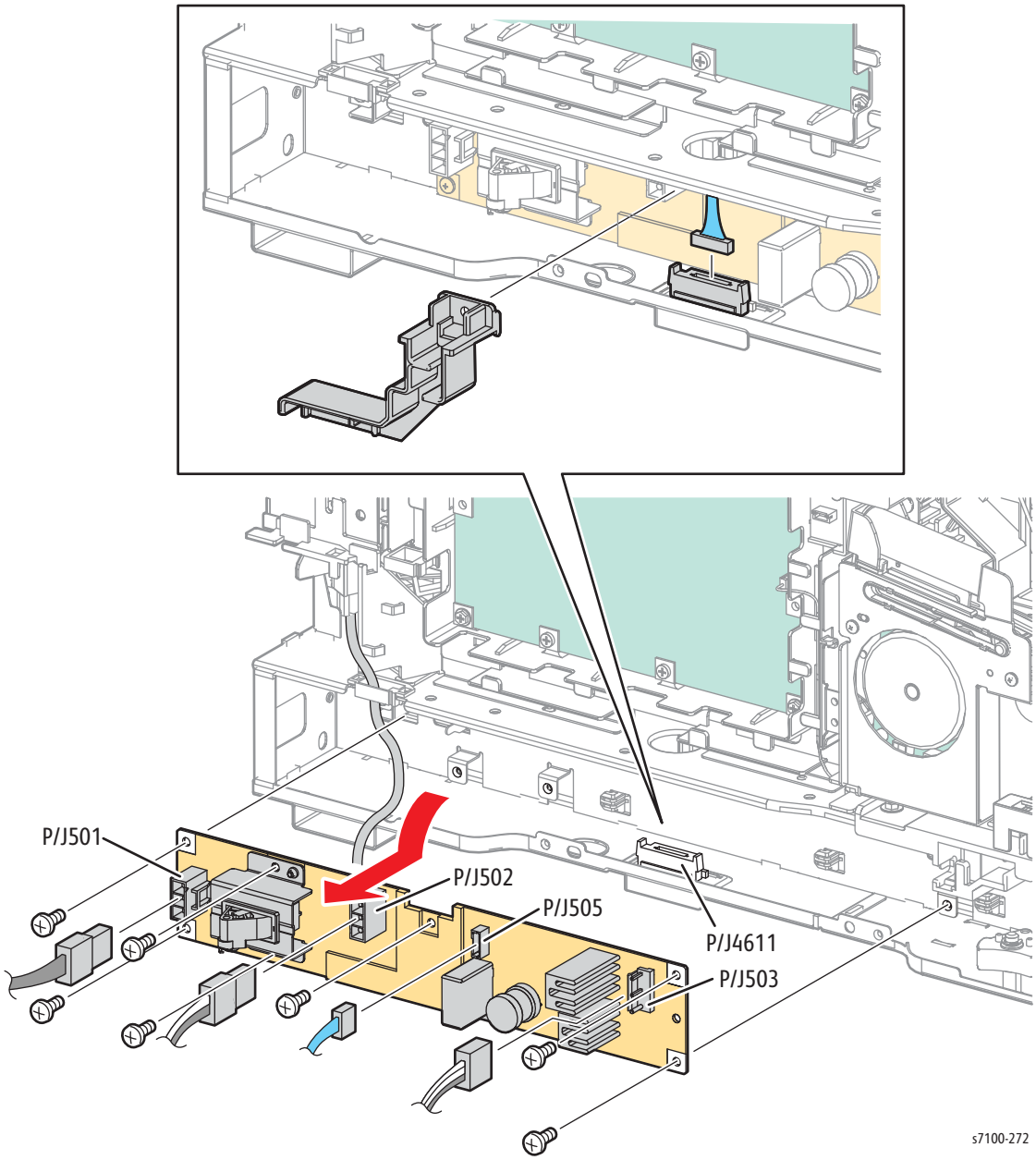
REP 12.5 AC PWB

PL 12.1.16

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
5. Remove the Left Feeder Cover (REP 2.10 Left Feeder Cover on page 4-49).

6. Remove the Main Switch Link Shaft (PL 13.1.14).
7. Release the wiring harness with the Clamp from the printer frame.
8. Disconnect the wiring harness connector P/J4611 from the Connector Drawer that is connected to the 550-Sheet Feeder.
9. Remove one screw (silver, 6 mm) that secures the Option Feeder Harness Guide (PL 12.1.17).
10. Disconnect the wiring harness and remove the Option Feeder Harness Guide.
11. Disconnect all wiring harness connectors that are connected to the AC PWB.
12. Remove 7 screws (silver, 6 mm) that secure the AC PWB to the printer.
13. Tilt the AC PWB upward at angle to remove.

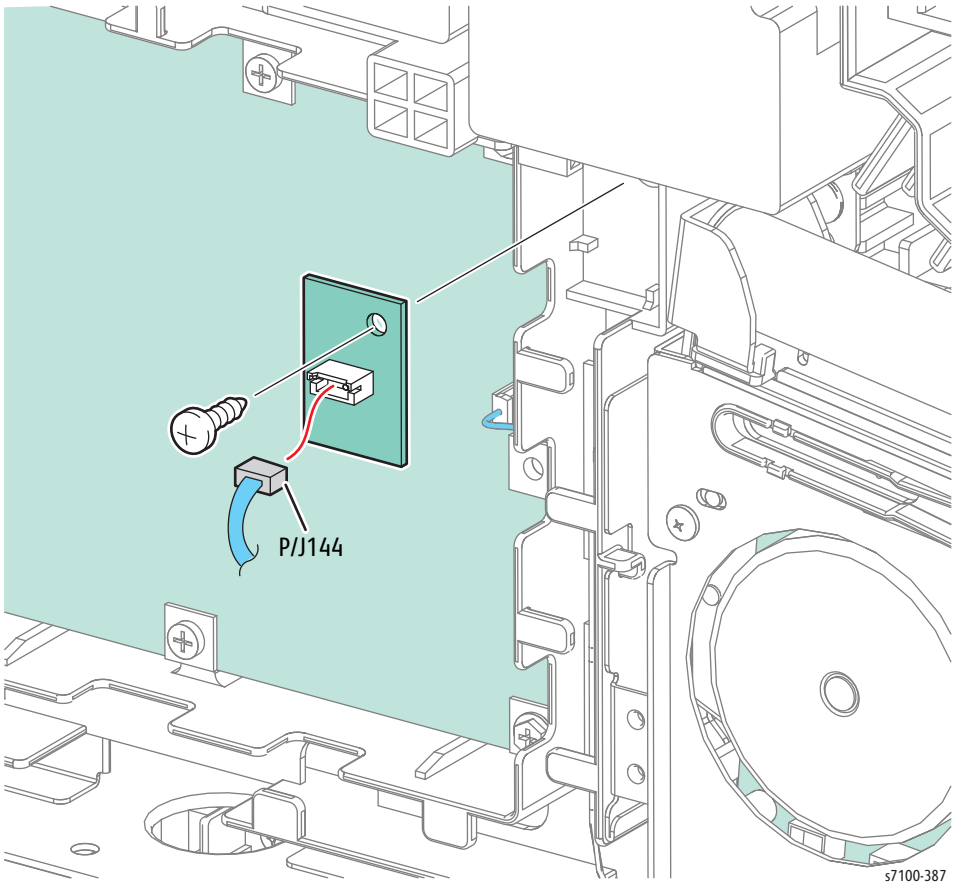


REP 12.6 EEPROM PWB

PL 12.1.18

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
4. Disconnect the wiring harness connector P/J144 that is connected to the EEPROM PWB.
5. Remove one screw (silver, tapped, 8 mm) that secures the EEPROM PWB to the printer.
6. Remove the EEPROM PWB.

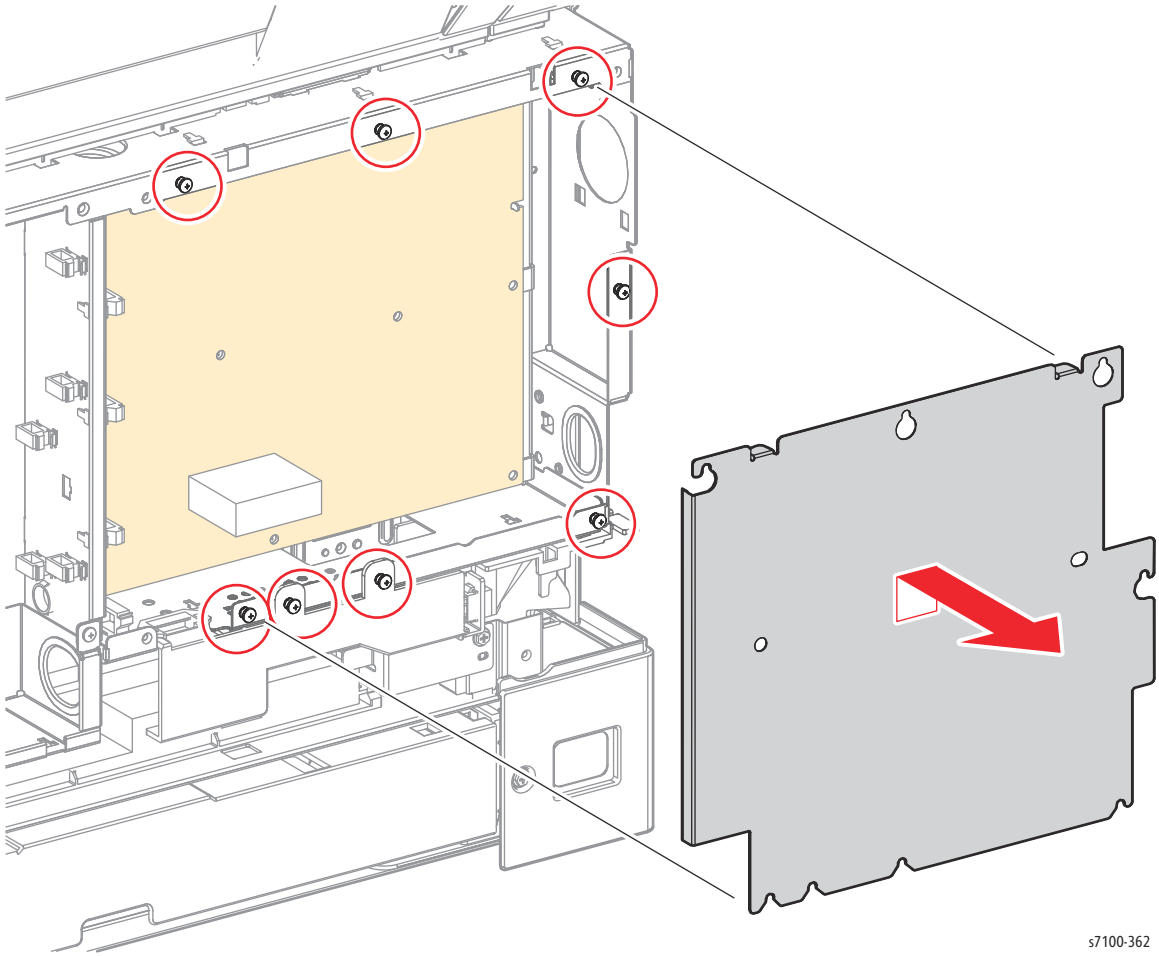


REP 12.7 LVPS PWB

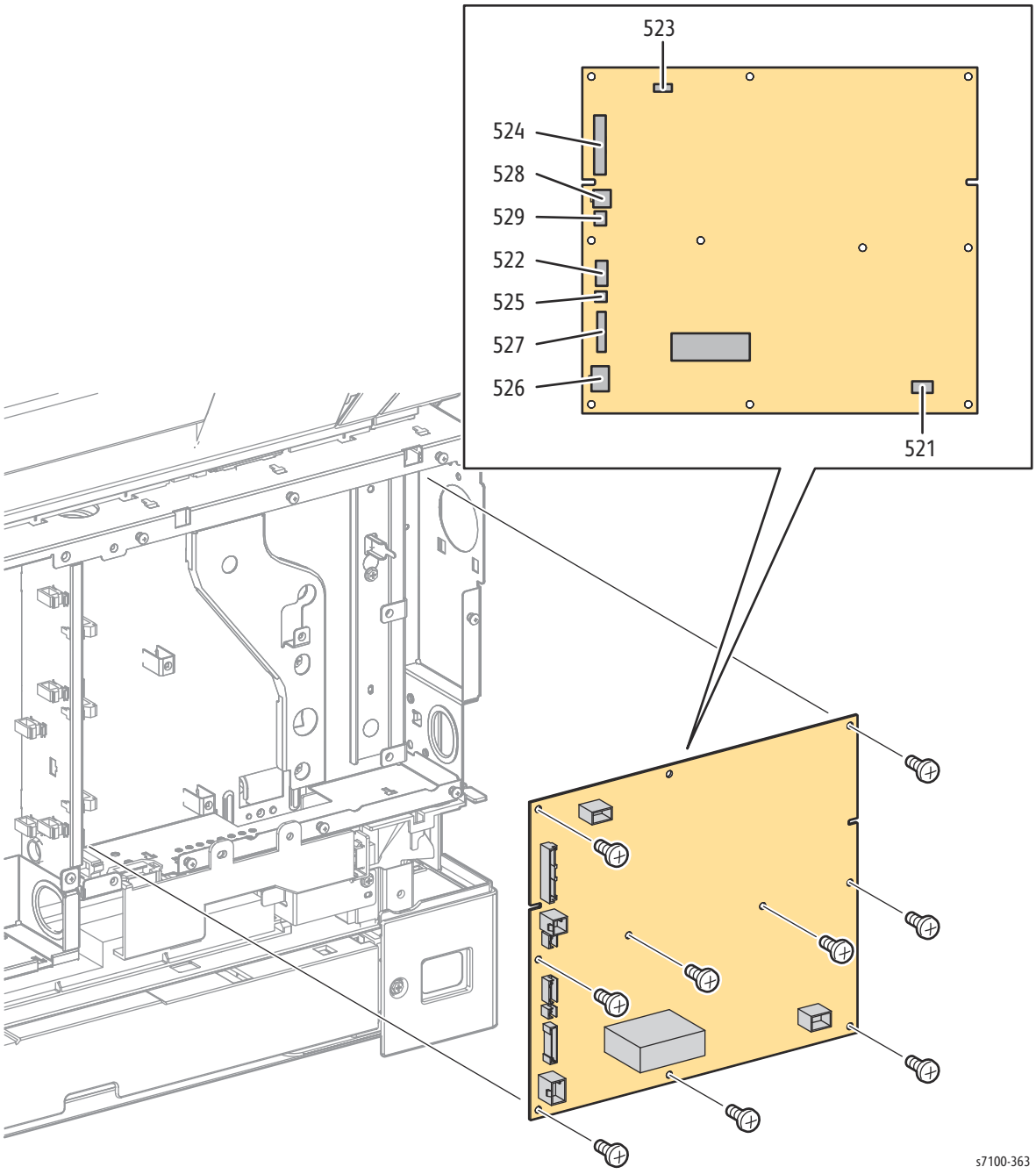
PL 12.2.1

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Loosen 8 screws (silver, 6 mm) that secure the LVPS Shield Plate (PL 12.2.2).
4. Slide the LVPS Shield Plate upward and toward the rear of the printer to remove.



5. Disconnect 9 wiring harness connectors (P/J521, P/J522, P/J523, P/J524, P/J525, P/J526, P/J527, P/J528, P/J529) that are connected to the LVPS PWB.
6. Remove 9 screws (silver, 6 mm) that secure the LVPS PWB to the printer.
7. Remove the LVPS PWB.

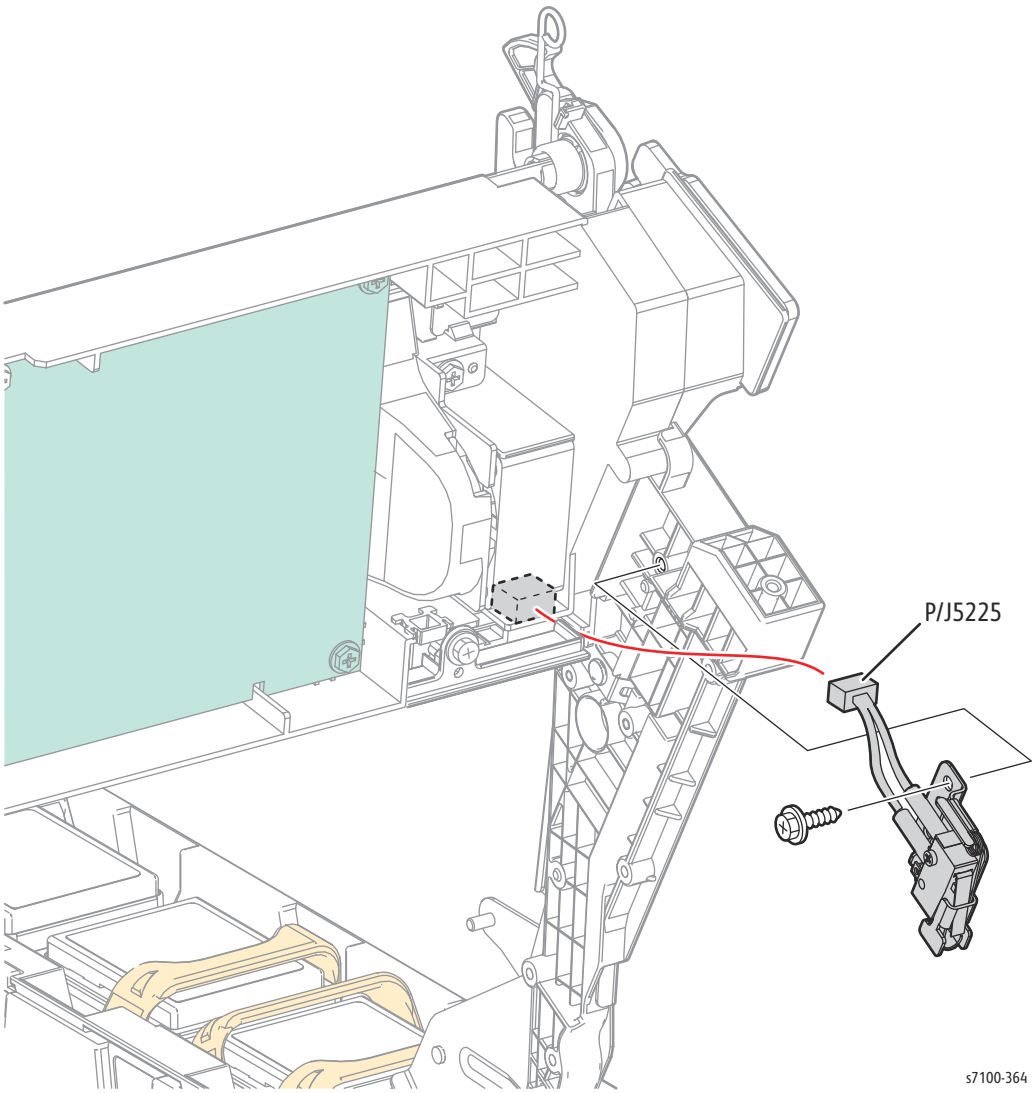


REP 12.8 Waste Cartridge Switch Assembly

PL 12.2.3

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Disconnect the wiring harness connector P/J5225 that is connected to the Waste Cartridge Switch Assembly.
4. Remove one screw (silver, 10 mm) that secures the Waste Cartridge Switch Assembly to the Top Frame Assembly and remove the Switch Assembly.

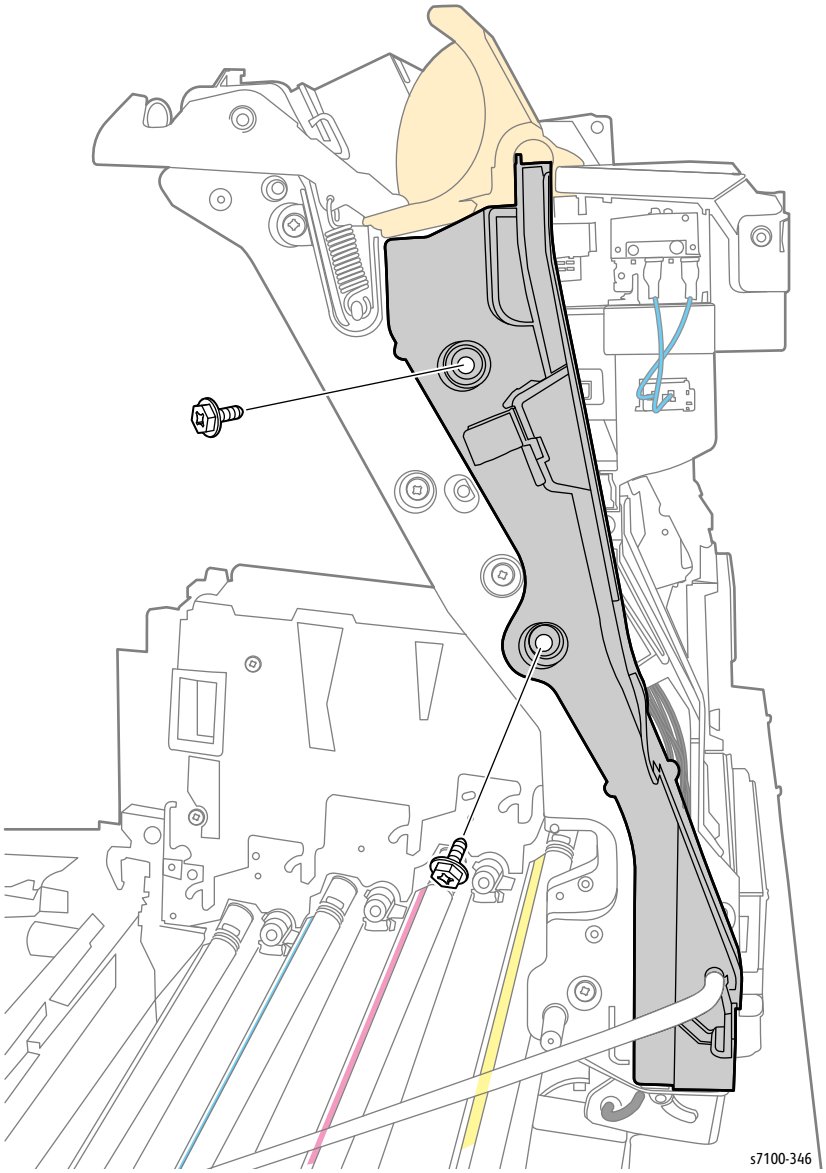


REP 12.9 Front Interlock Switch Assembly

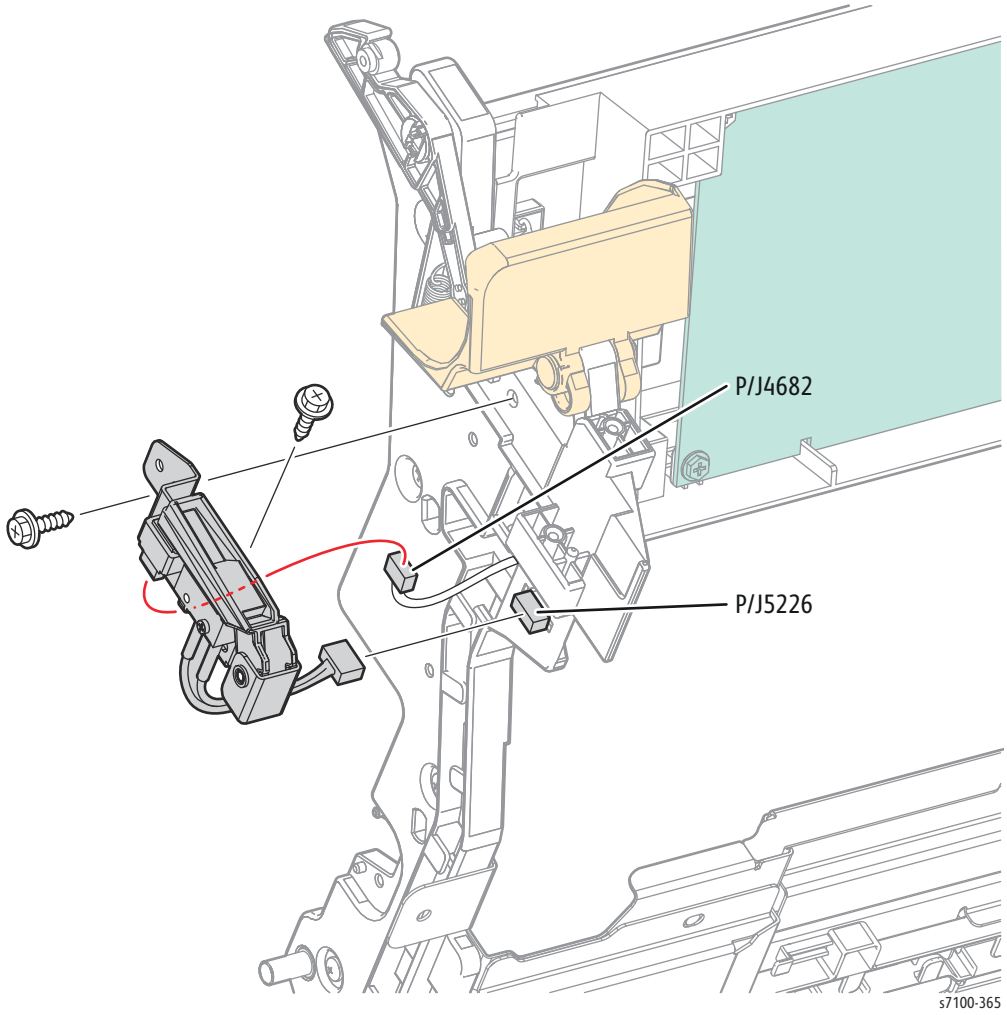
PL 12.2.4

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Remove 2 screws that secure the Top Right Guard Frame (PL 9.1.25).
4. Remove the Top Right Guard Frame.



5. Disconnect the wiring harness connector P/J5226 that is connected to the Interlock Switch Assembly (PL 12.2.8).
6. Disconnect the wiring harness connector P/J4682 that is connected to the Interlock Cap Switch (PL 12.2.7).
7. Remove 2 screws (silver, tapped, 8 mm) that secure the Front Cover Interlock Switch Assembly to the Top Frame Assembly (PL13.1.7) and remove the Front Cover Interlock Switch Assembly.

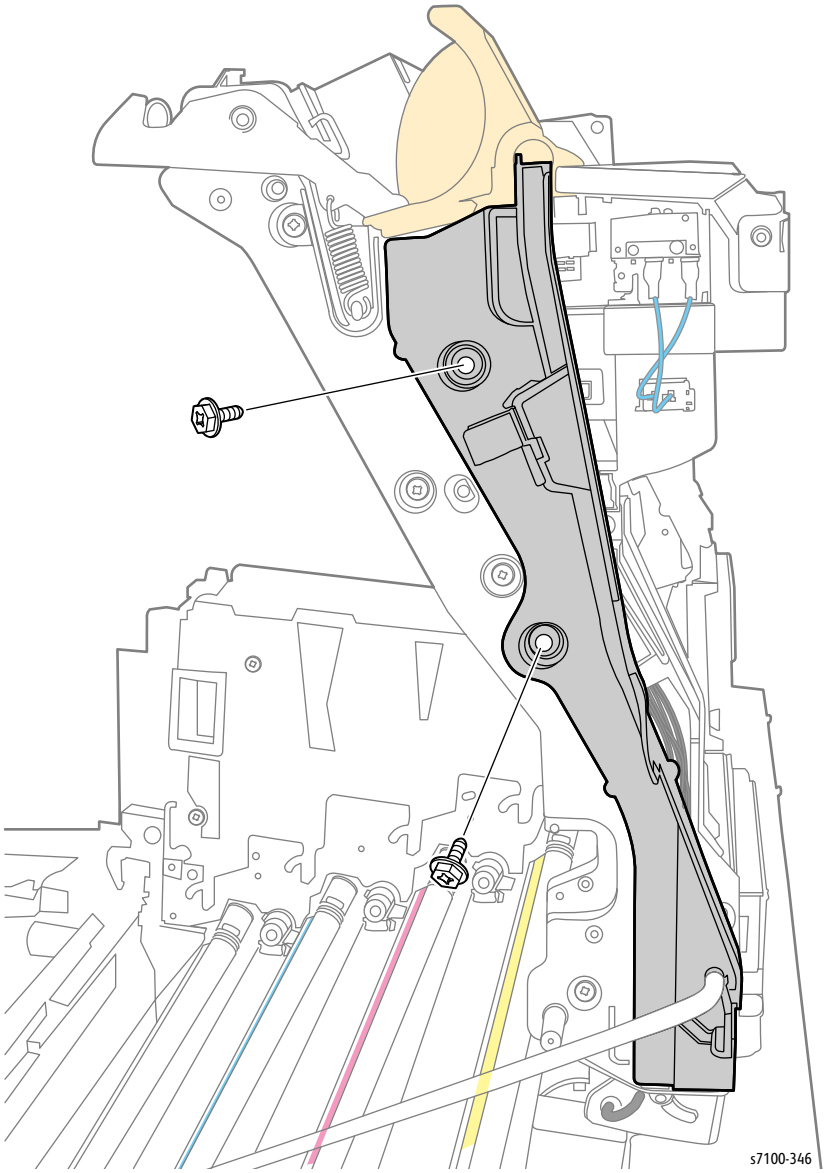


REP 12.10 Interlock Cap Switch (Front Cover Switch)

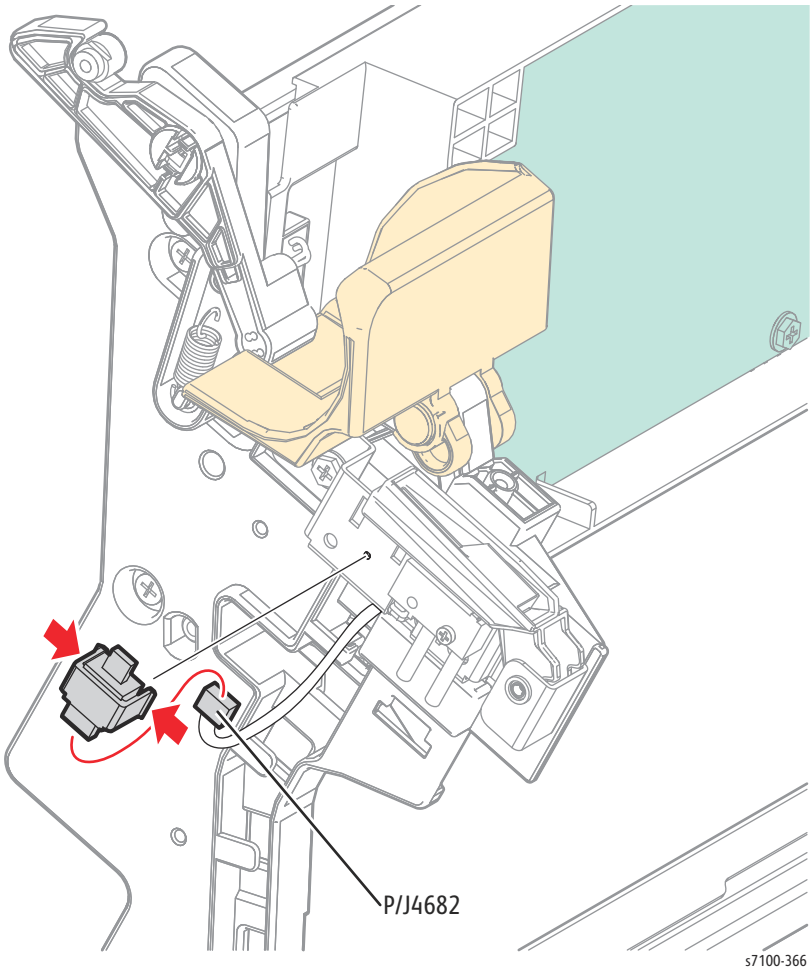
PL 12.2.7

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Remove 2 screws that secure the Top Right Guard Frame (PL 9.1.25).
4. Remove the Top Right Guard Frame.



5. Disconnect the wiring harness connector P/J4682 that is connected to the Interlock Cap Switch.
6. Release the 2 hooks that secure the Interlock Cap Switch to the Front Interlock Switch Assembly Kit (PL 12.2.4) and remove the Interlock Cap Switch.

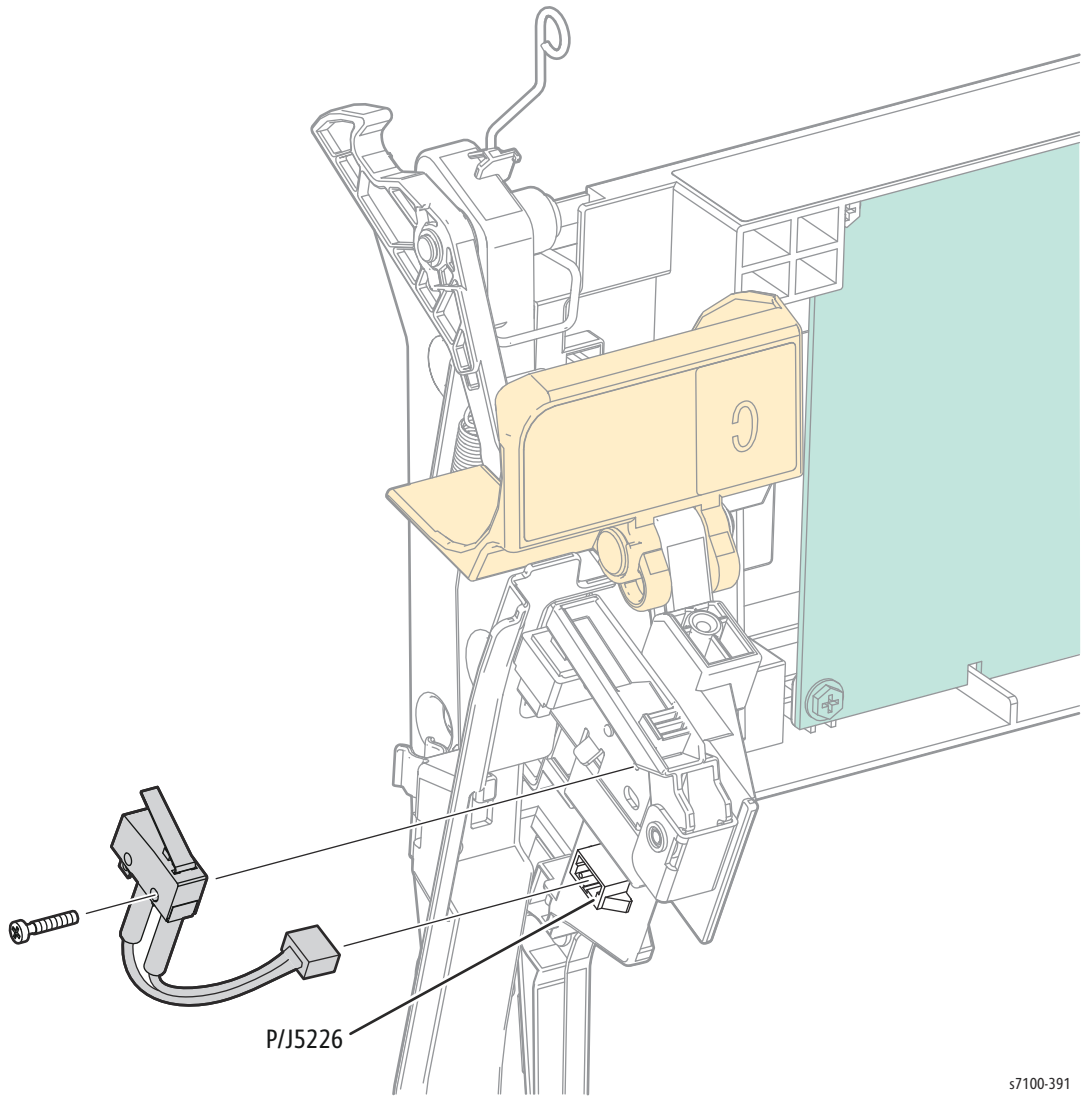


REP 12.11 Front Cover Interlock Switch Assembly

PL 12.2.8

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Disconnect the wiring harness connector P/J5226 that is connected to the Interlock Switch Assembly.
4. Remove one screw that secures the Front Cover Interlock Switch Assembly to the Top Frame Sub Assembly (PL 13.1.7) and remove the Interlock Switch Assembly.



REP 12.12 HV Main Guide Assembly

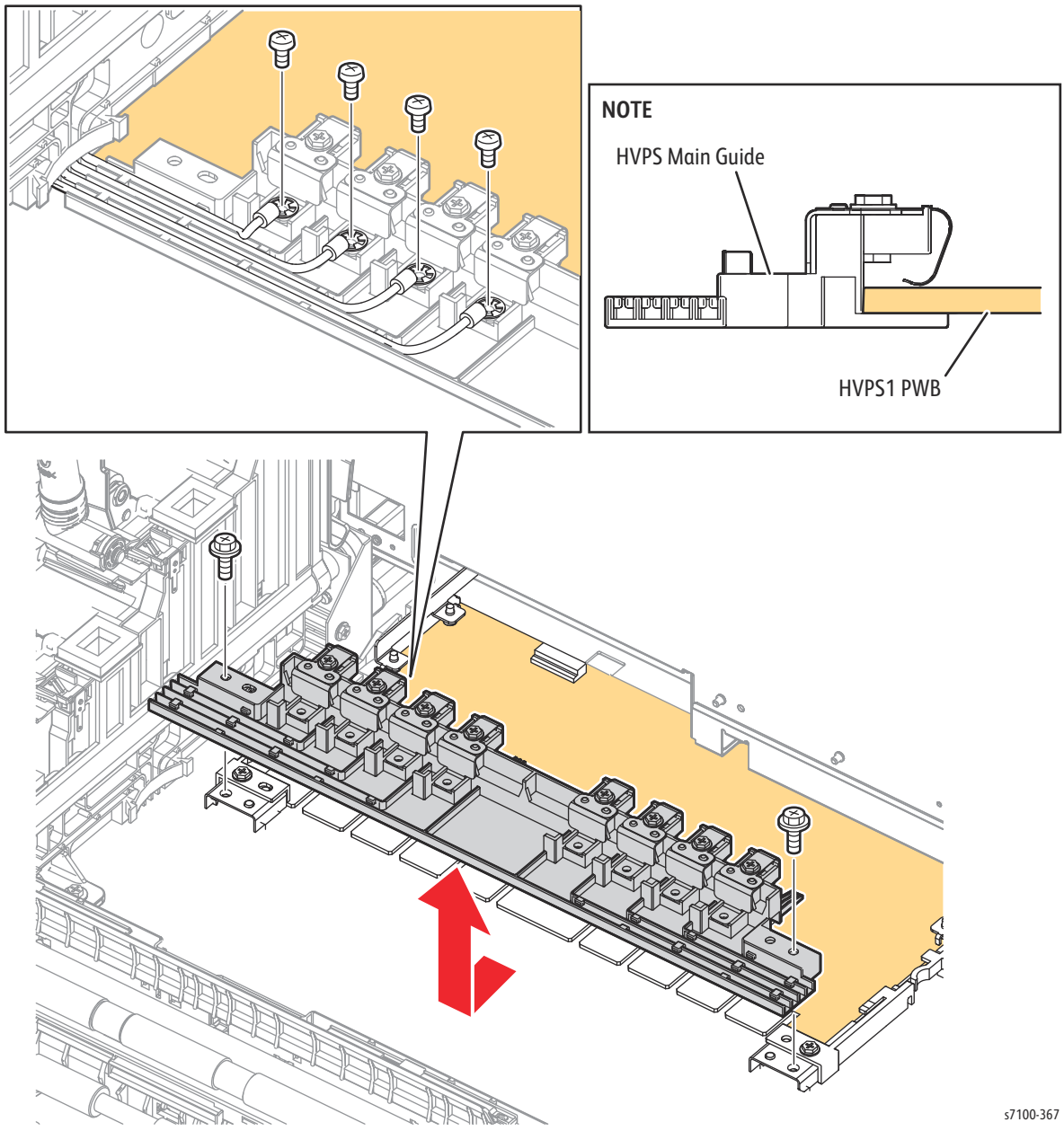
PL 12.2.11

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/ M/ C/ K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121).
2. Remove Tray 1.
3. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
4. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
5. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
6. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
7. Remove the Cam Cover (REP 9.7 Cam Cover on page 4-170).
8. Remove the IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168).
9. Remove the Right Imaging Unit Guide Assembly (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123).
10. Remove the Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129).
11. Remove the Developer Housing Assembly (Y/ M/ C/ K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)
12. Remove the Laser Unit (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130).
13. Remove the Right Hand HV Guide Assembly (REP 8.2 Right Hand HV Guide Assembly on page 4-142).

14. Remove 4 screws (silver, 6 mm) that secure the harnesses that are connected to the HV Main Guide Assembly.
15. Remove 2 screws (silver, 6 mm) that secure the HV Main Guide Assembly to the printer.

    Note: Lightly press on the left and right sides of the HV Main Guide Assembly to loosen it from the 8 Conductors of the HVPS1 PWB.
16. Remove the HV Main Guide Assembly.

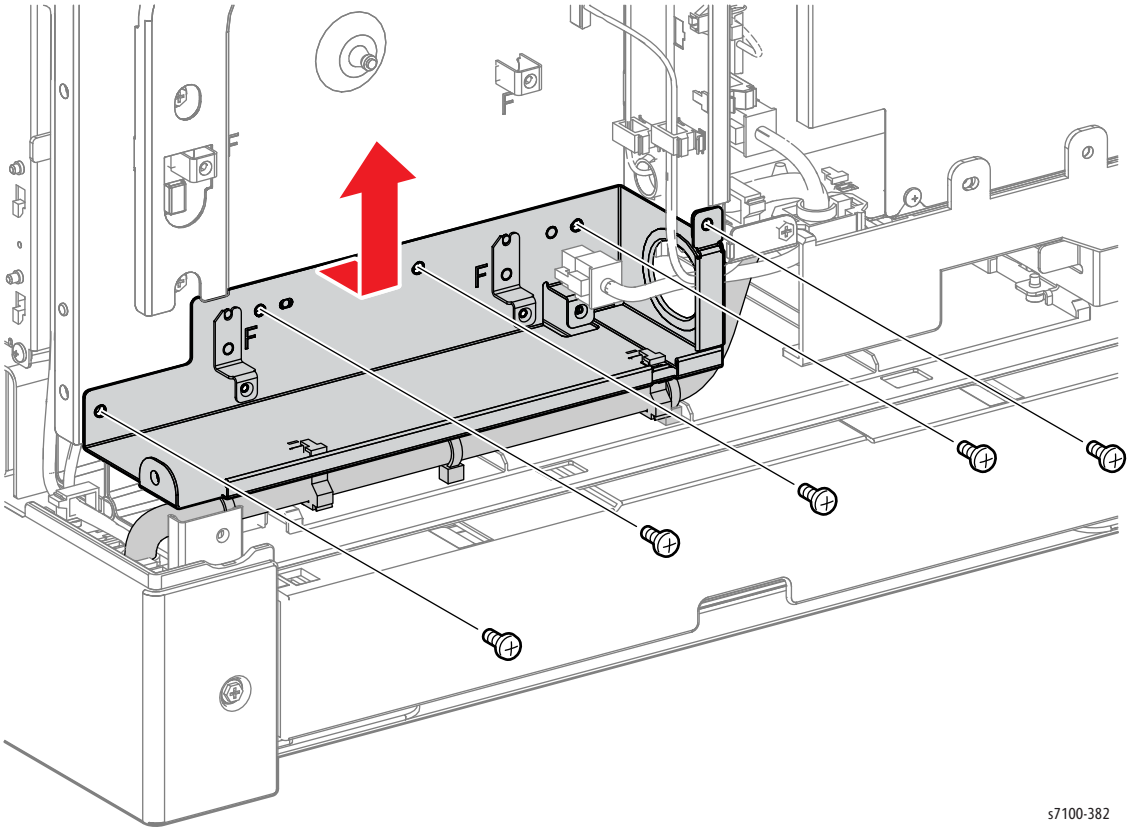


REP 12.13 HVPS1 PWB

PL 12.2.15

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

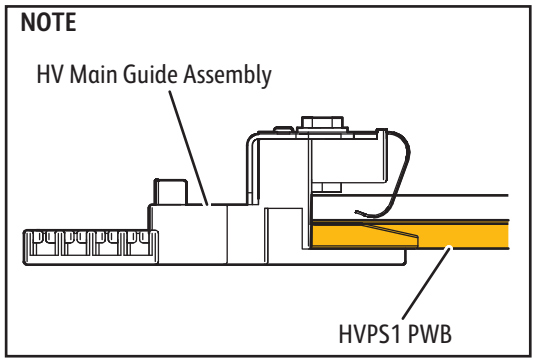
1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
4. Remove the Image Processor PWB (REP 12.17 Image Processor (I/P) PWB on page 4-228).
5. Remove 5 screws (silver, 6 mm) that secure the Rear Frame Assembly to the printer.
6. Free the Rear Frame Assembly upwards together with the harness that is attached underneath it.

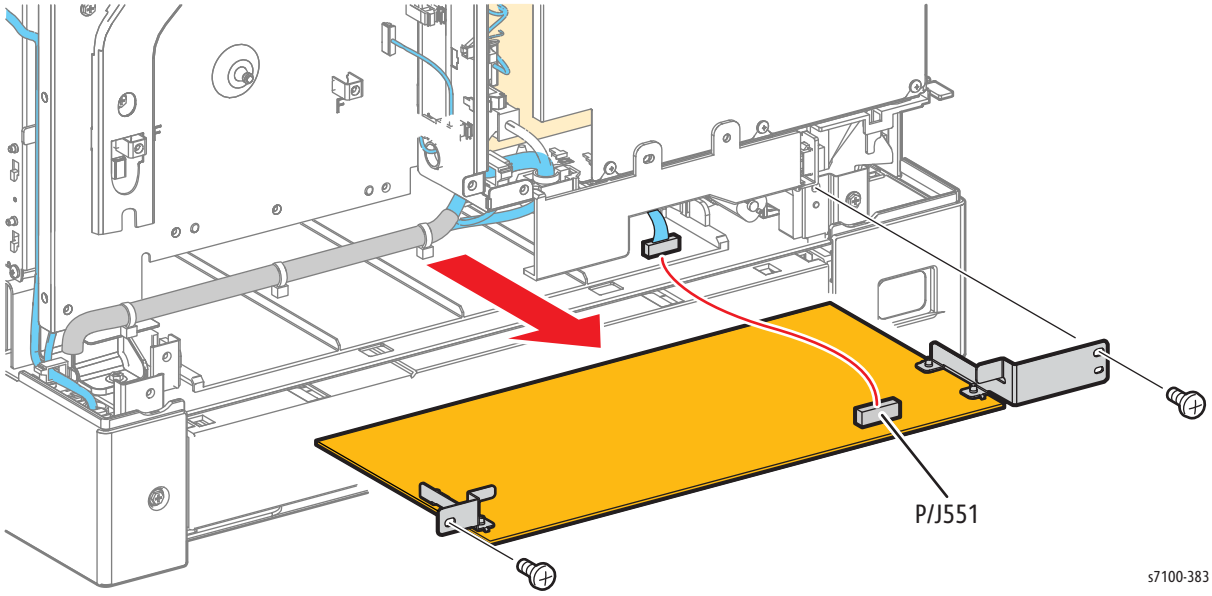


7. Remove 2 screws (silver, 6 mm) that secure the HVPS1 PWB to the printer.

   Note: Lightly apply force alternately on the left and right sides of the HV Main Guide Assembly to loosen it from the 8 Conductors of the HVPS1 PWB.

8. Pull out the HVPS1 PWB slightly and disconnect the wiring harness connector P/J551 that is connected to the HVPS1 PWB.
9. Remove the HVPS1 PWB.

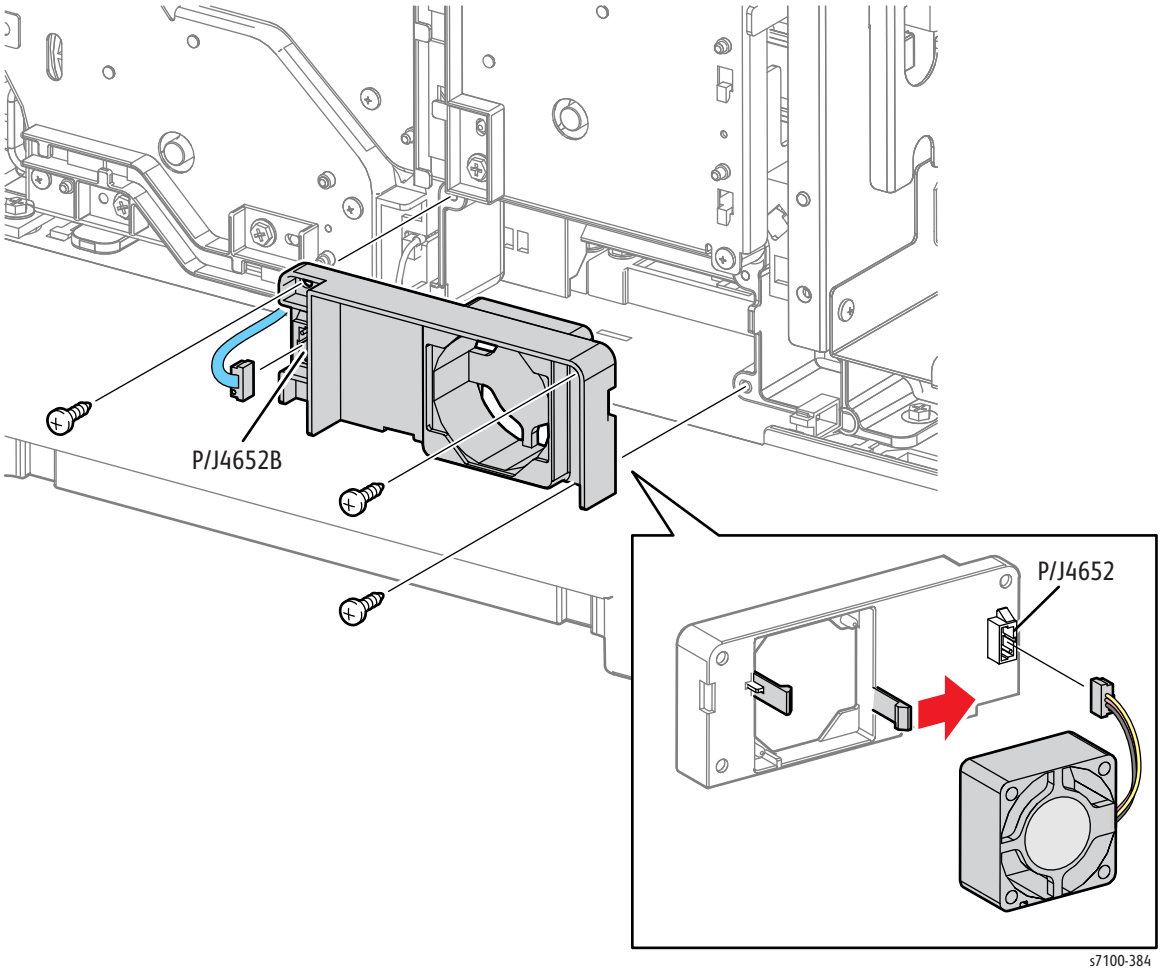




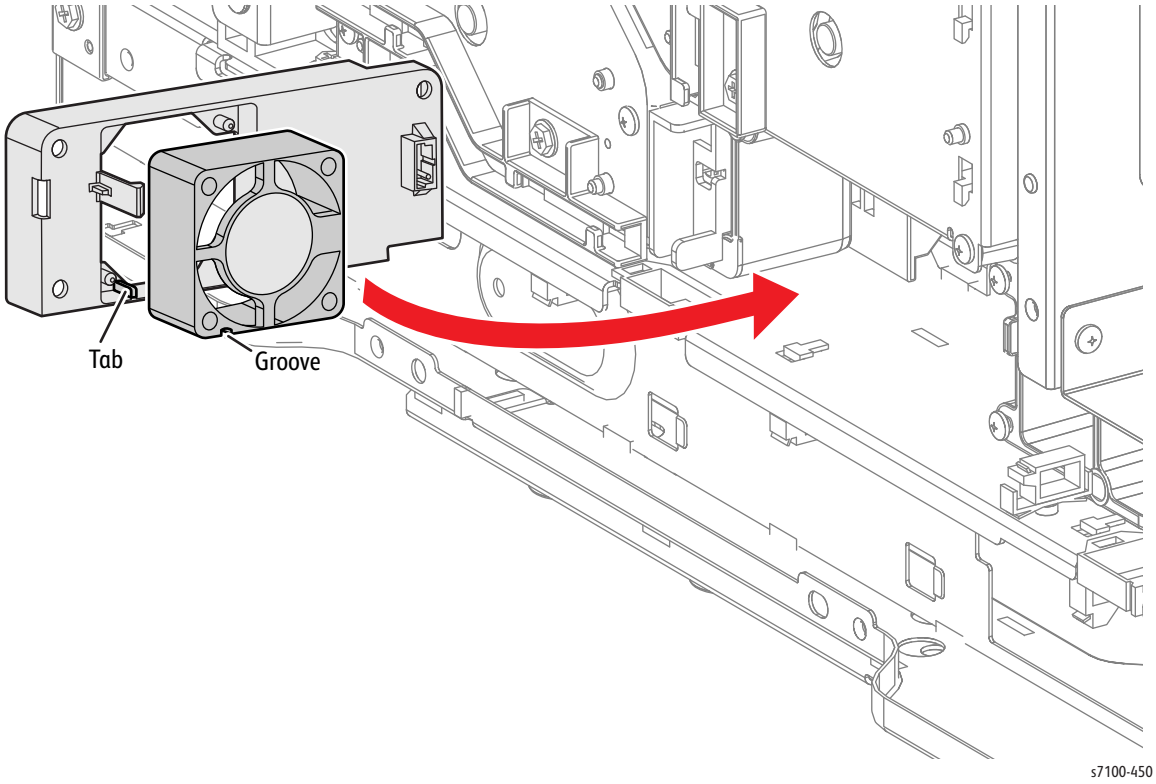
REP 12.14 Developer Fan

PL 12.2.16

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
4. Disconnect the wiring harness connector P/J4652B that is connected to the Developer Fan Duct (PL 12.2.17).
5. Remove 3 screws (silver, tapped, 8 mm) that secure the Developer Fan Duct to the printer.
6. Remove the Developer Fan Duct together with the Developer Fan.
7. Disconnect the wiring harness connector P/J4652B on the harness that is connected to the Developer Fan.
8. Release the 2 hooks that secure the Developer Fan and remove the Fan.



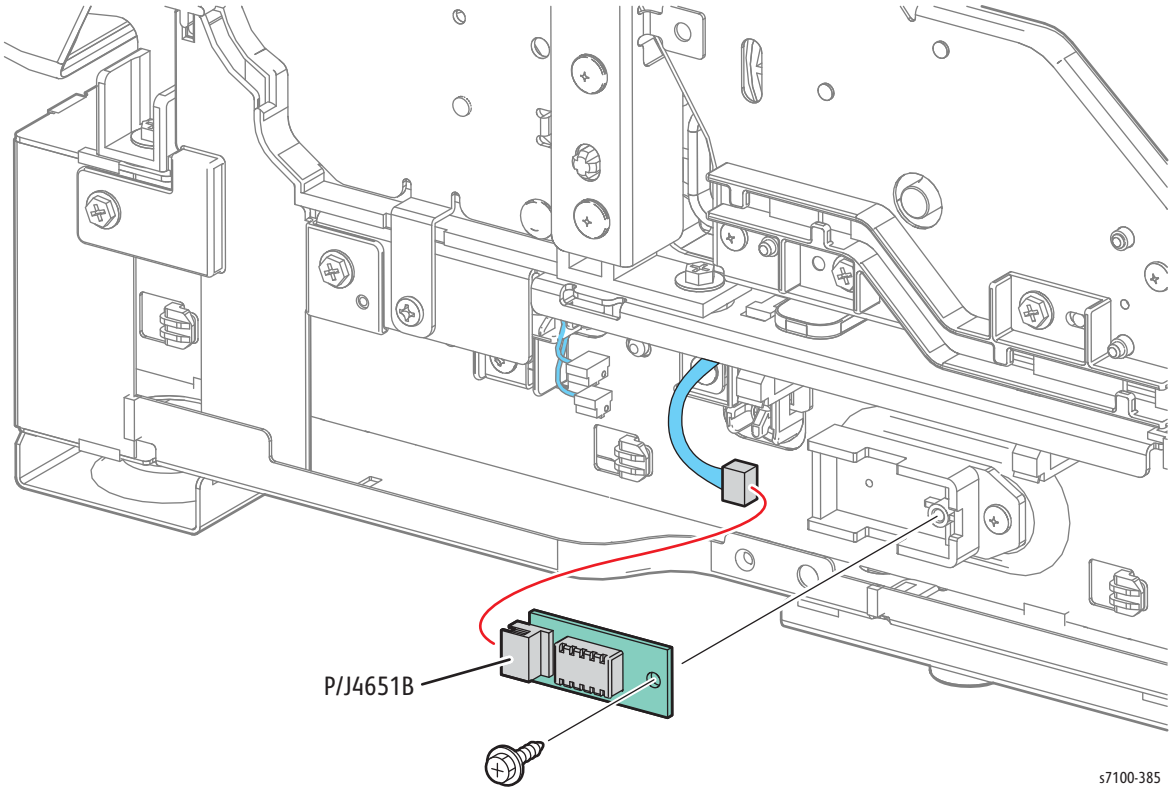
Replacement Note: Be sure to install the Fan with the label facing inward and the groove sits in place in the Fan Duct.



REP 12.15 Temp/ Humidity (Environmental) Sensor

PL 12.2.18

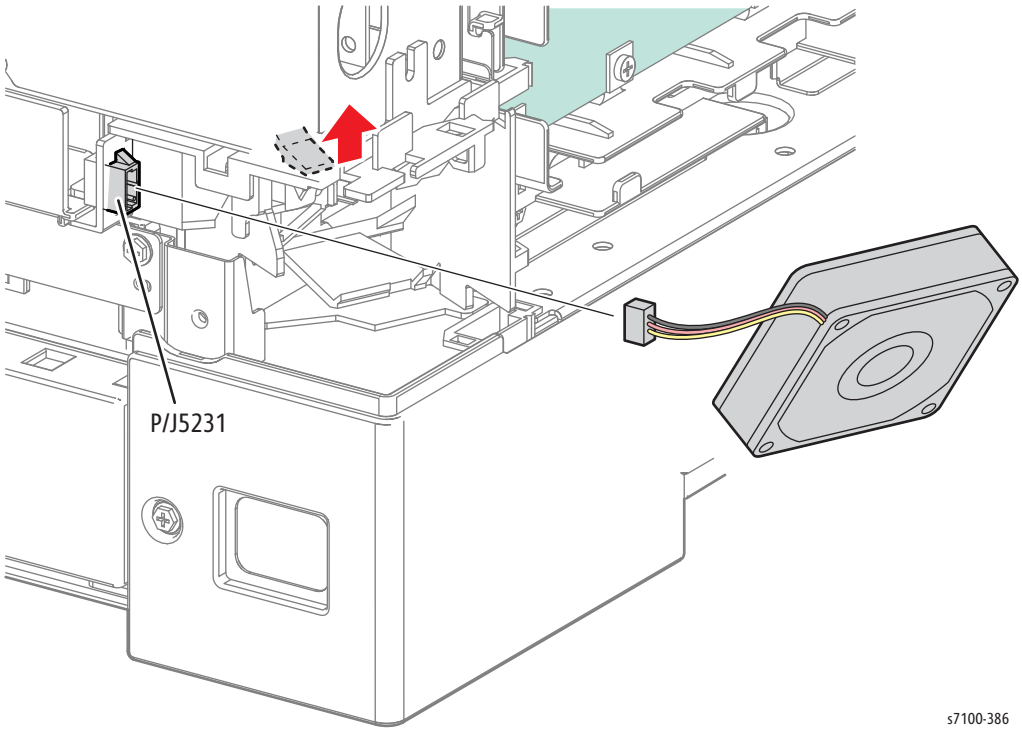
1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
5. Remove the Right Feeder Cover (REP 2.3 Right Feeder Cover on page 4-40).
6. Disconnect the wiring harness connector P/J4651B that is connected to the Temp/ Humidity Sensor.
7. Remove one screw (silver, tapped, 8 mm) that secures the Temp/ Humidity Sensor to the Temp/ Humidity Sensor PWB Housing (PL 12.2.19).
8. Remove the Temp/ Humidity Sensor.



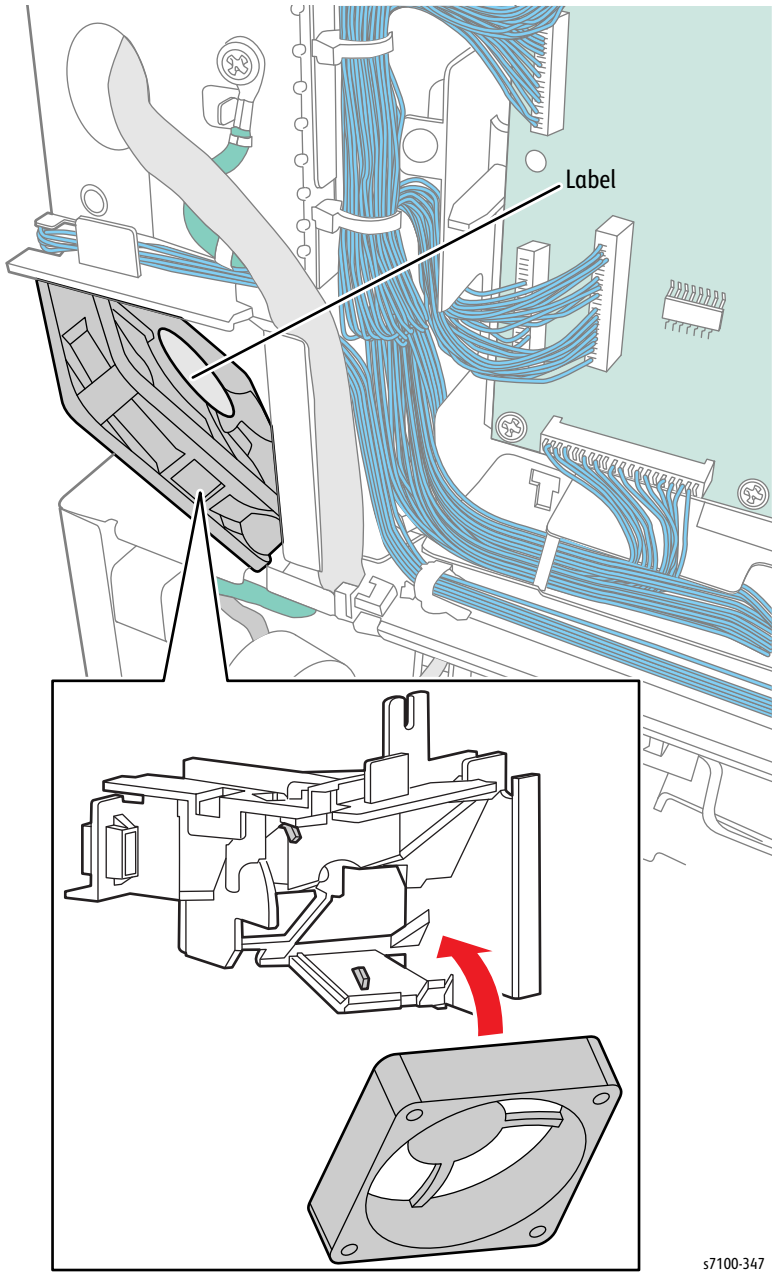
REP 12.16 LVPS Fan Assembly

PL 12.2.22

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
4. Disconnect the wiring harness connector P/J5231 that is connected to the LVPS Fan Assembly.
5. Release the hook that secures the LVPS Fan Assembly and remove the Fan.



Replacement Note: Be sure to install the Fan with the label facing inward and the groove sits in place on the Fan Duct.



REP 12.17 Image Processor (I/P) PWB

PL 12.4.1

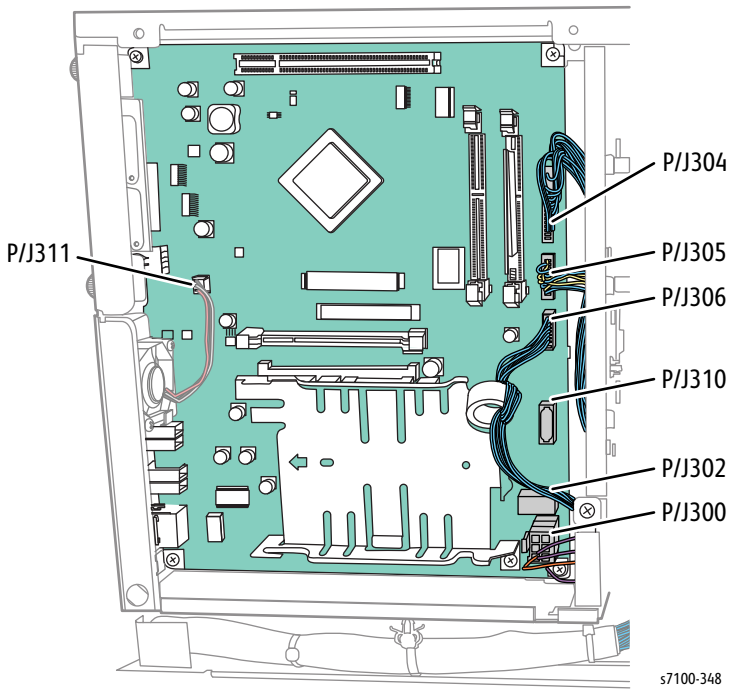
CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

Notes:

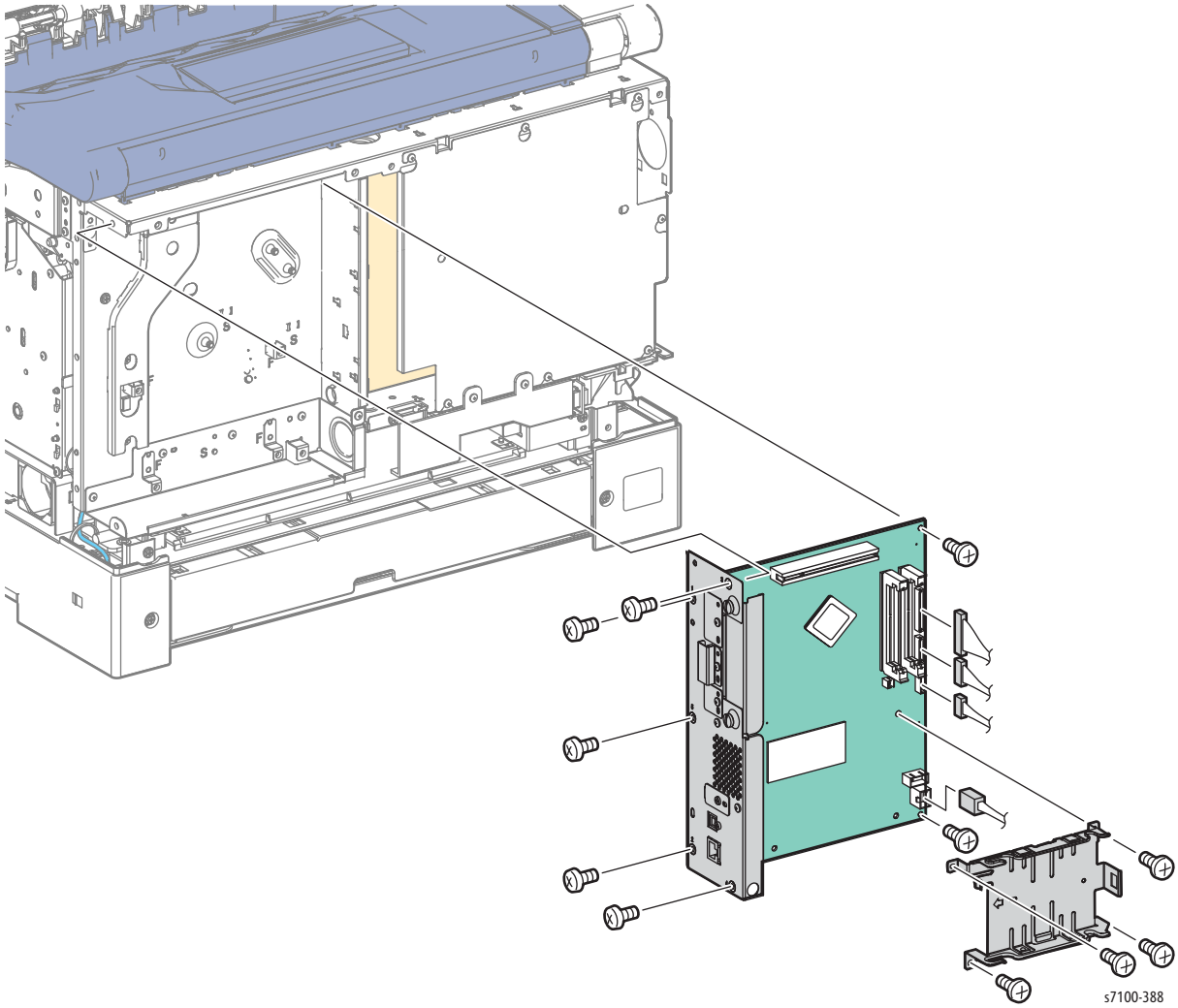
- When replacing the Image Processor PWB, remember to remove the NVRAM from the old PWB and install it to the new PWB.
  - Take note although the printer can still work by using the new NVRAM on the new Image Processor PWB, it will not inherit the setting values from the old one.
- The Image Processor PWB is installed to the HDD Bracket. Be sure remove the HDD Bracket and then switch the SODIMM RAM.
- After replacing the Image Processor PWB with a new one, an error code will be displayed. To clear the error, perform DC132 Machine Serial Number Settings on page 2-47 in Service Diagnostics and set the Serial Number.

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
3. Remove the Right Side Cover (REP 1.11 Right Side Cover on page 4-27).
4. Disconnect the 5 wiring harness connectors (P/J300, P/J304, P/J305, P/J306, and P/J311) that are connected to the Image Processor PWB.

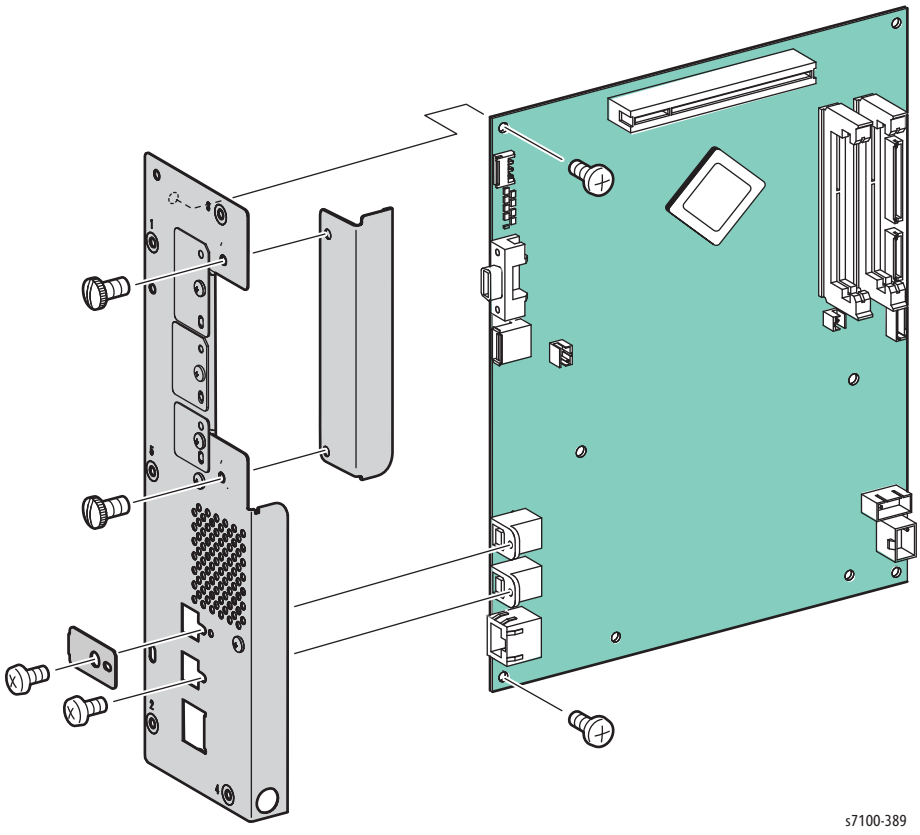
   Note: P/J302 and P/J310 need to be disconnected only when the HDD is installed.



5. Remove 4 screws (silver, 6 mm) that secure the HDD Bracket and remove the HDD Bracket.
6. Remove 2 screws (silver, 6 mm) that secure Image Processor PWB to the printer.
7. Remove the 5 screws that secure the Interface I/P PWB Plate Assembly (PL 12.4.13).
8. Pull the I/P Board out away from the printer.



9. Remove 2 Thumb screws that secure the Plate (PL 12.4.14) and remove the Plate.
10. Remove 2 screws (silver, 6 mm) that secure the USB Port Plate and remove the Plate.
11. Remove 2 screws (silver, 6 mm) that secure the I/P PWB to the Interface Image Processor PWB Plate Assembly and remove the I/P PWB.



Replacement Notes:

– When replacing the I/P PWB, remember to remove the NVRAM from the old I/P PWB and install it to the new I/P PWB.
– Be sure to move the SODIMM RAM from the old I/P PWB to the new I/P PWB.

Note: Observe the orientation of the NVRAM device before removing it from the I/P PWB.

Figure 1 - NVRAM Orientation

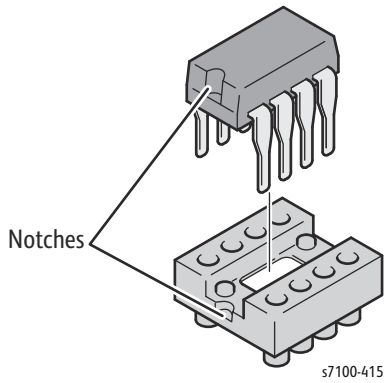
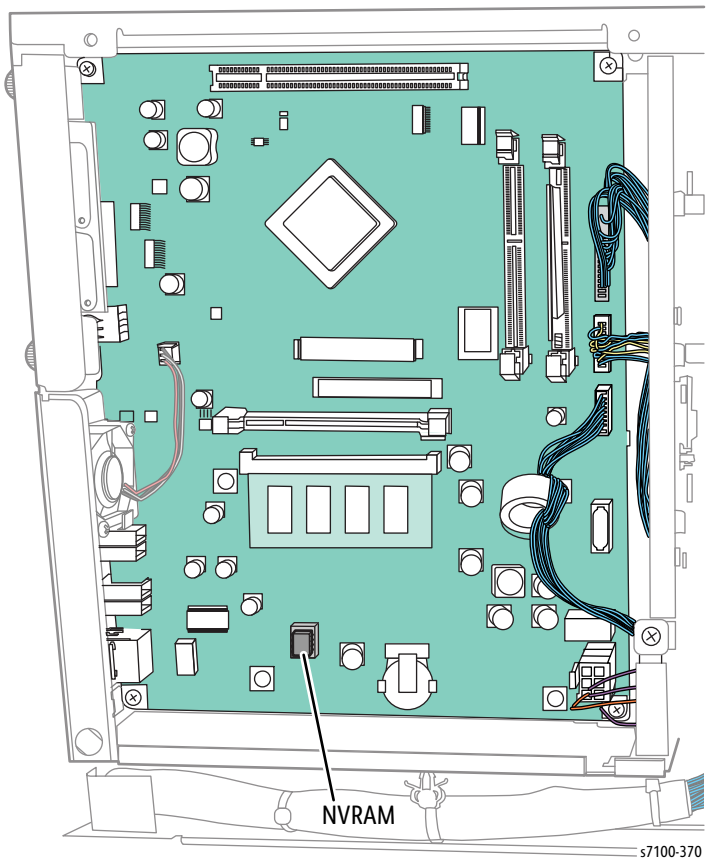


Figure 2 - NVRAM Location

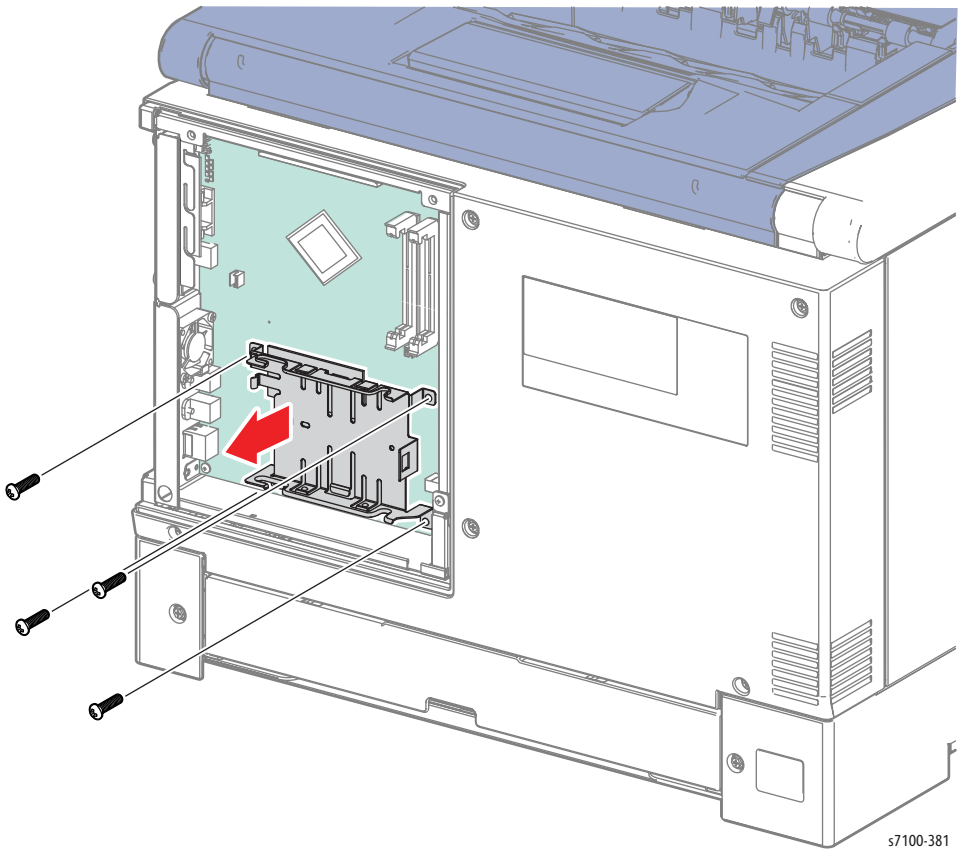


REP 12.18 Memory (Standard)

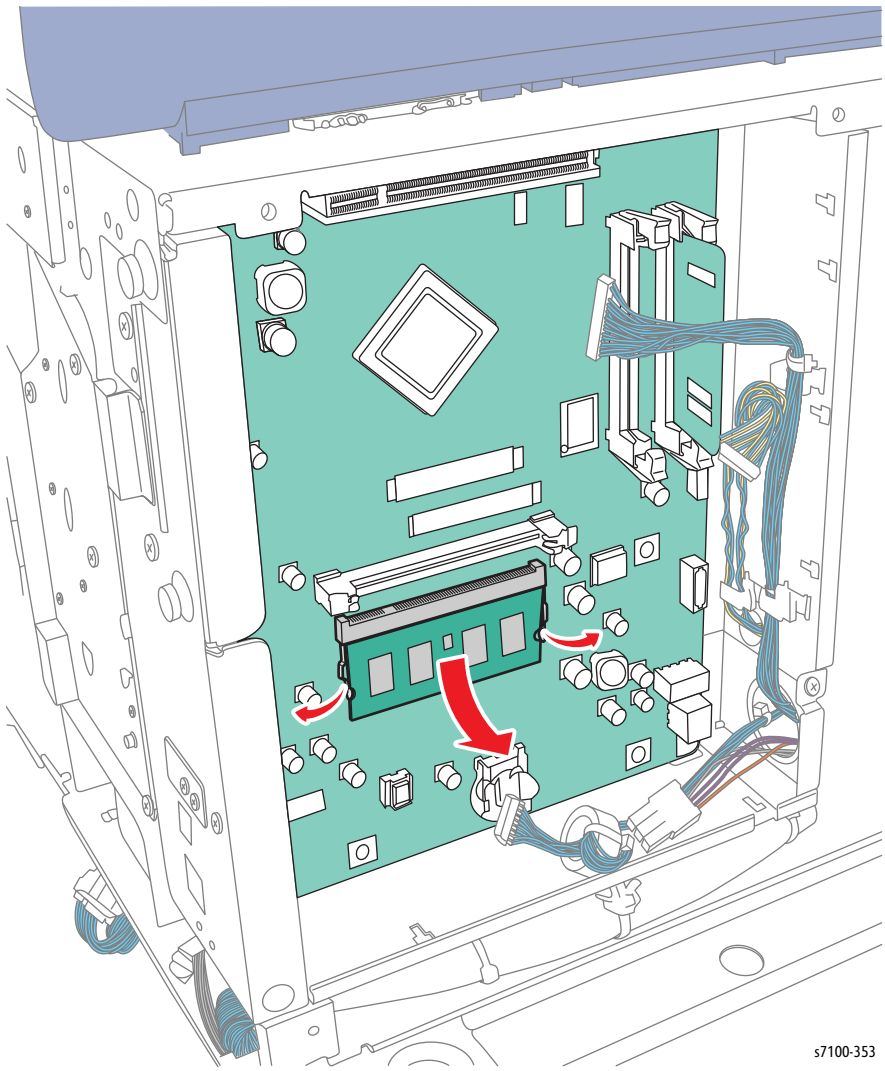
PL 12.4.2

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Remove 4 screws that secure the Hard Drive Bracket (PL 12.4.4).
3. Remove the Hard Drive Bracket.



4. Release the latches and slide the Memory Card out to remove.

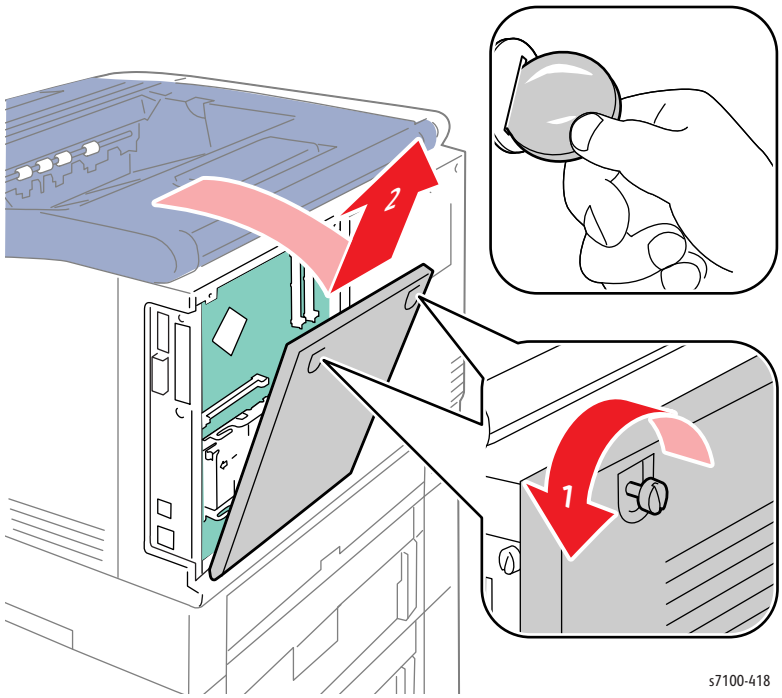


REP 12.19 Memory (Optional)

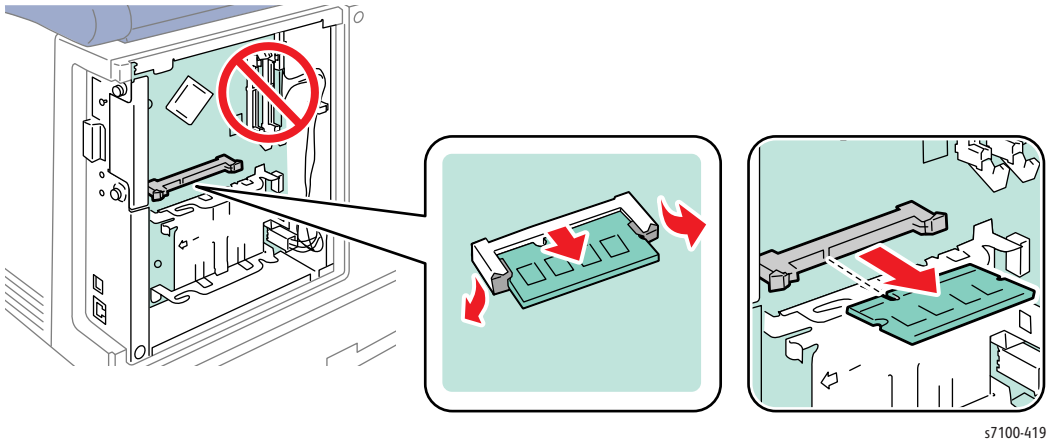
PL 12.4.3

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Loosen 2 screws that secure the Image Processor PWB Cover and remove the Cover.



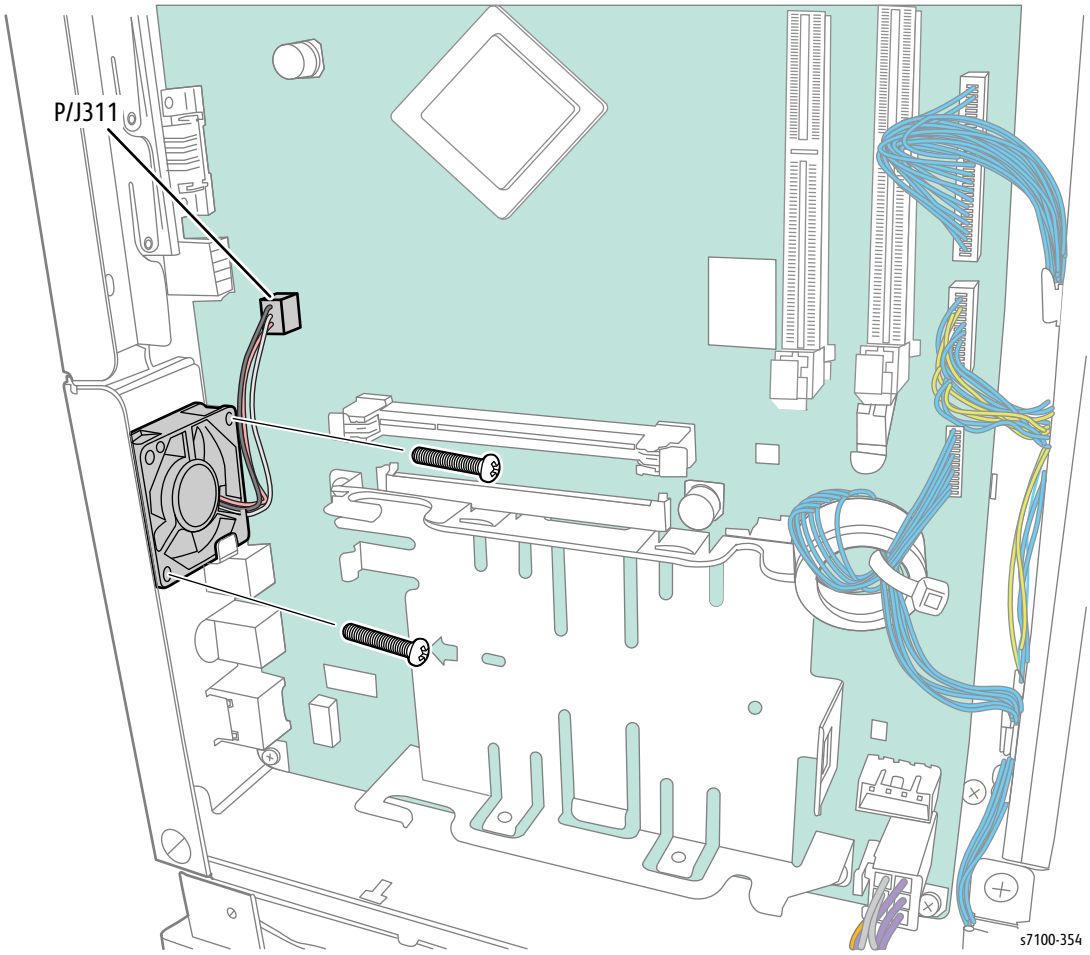
2. Release the latches and pull the Memory Card out to remove.



REP 12.20 Image Processor PWB Fan

PL 12.4.6

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Disconnect the wiring harness connector P/J311.
3. Remove 2 screws that secure the Fan.
4. Remove the Fan.

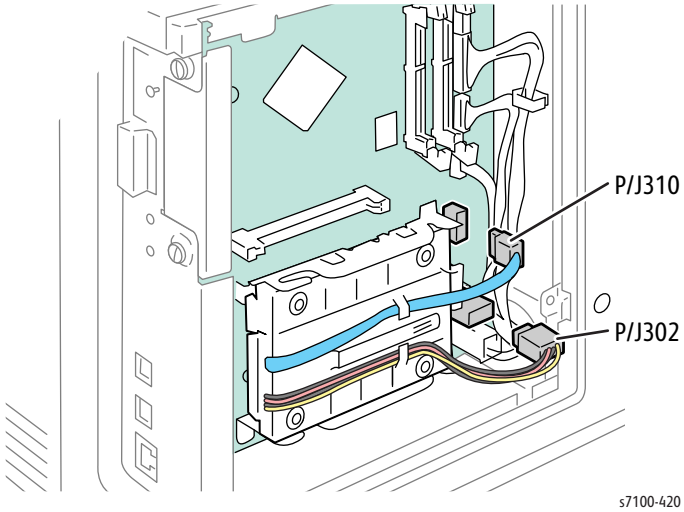


REP 12.21 Hard Disk Drive (Optional)

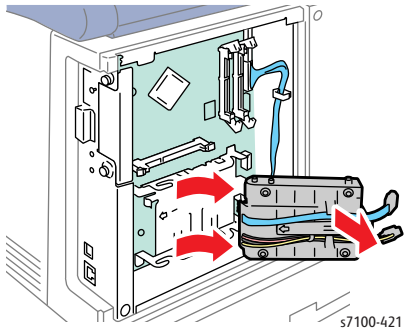
PL 12.4.20

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19).
2. Disconnect 2 wiring harness connectors P/J302 and P/J310 from the I/P PWB.



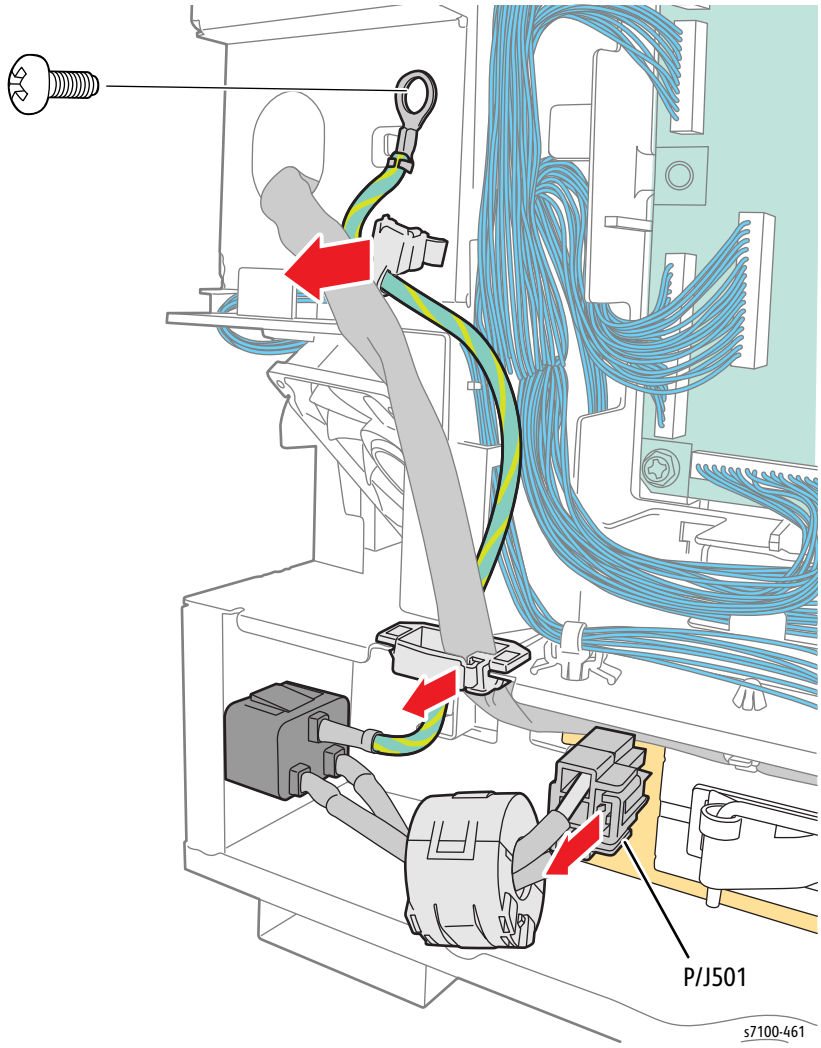
3. Release the clip that secures the Hard Disk Drive and remove the Hard Disk Drive from the Bracket.



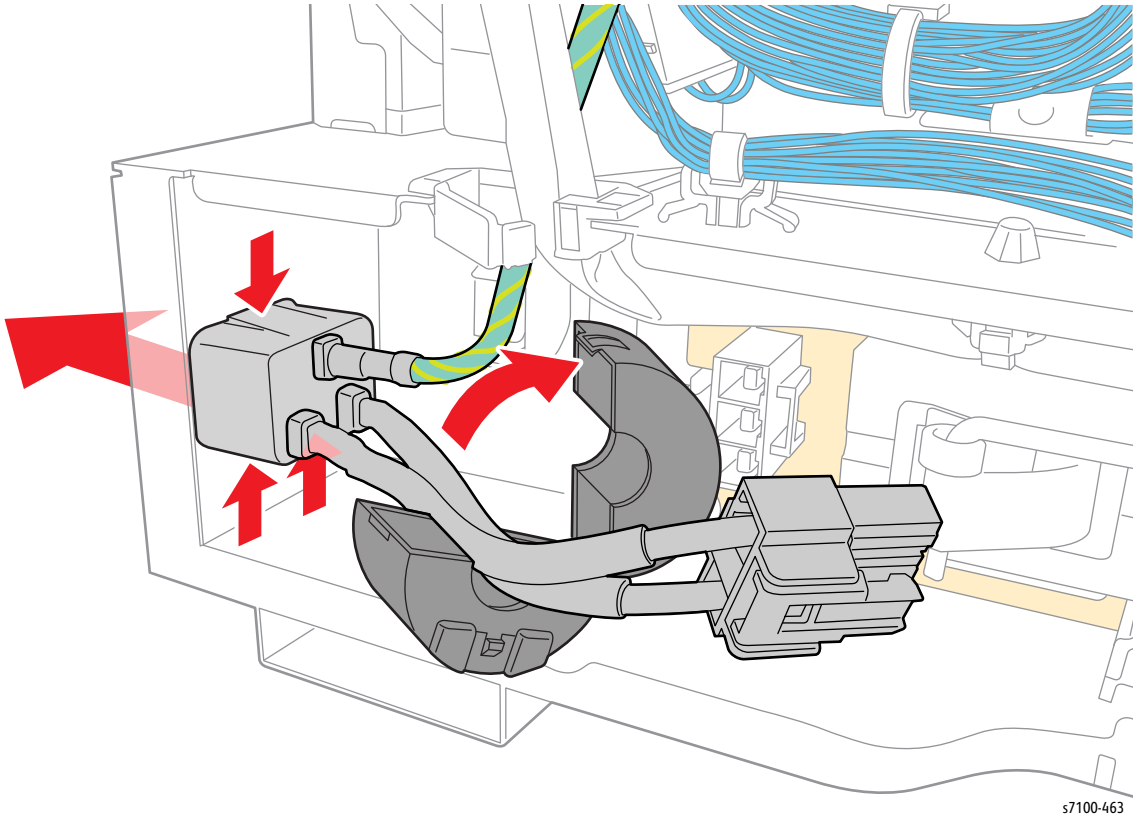
REP 12.22 AC-In Harness Assembly

PL 12.1.14

1. Remove Tray 1.
2. Remove the I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19)
3. Remove the Rear Cover (REP 1.6 Rear Cover on page 4-20).
4. Remove the Left Side Cover (REP 1.10 Left Side Cover on page 4-25).
5. Remove the Left Feeder Cover (REP 2.10 Left Feeder Cover on page 4-49).
6. Disconnect the wiring harness connector P/J501.
7. Remove 1 screw that secures the Ground Wire.
8. Release the Ground Wire and the clip from the printer frame.
9. Open the harness holder and release the Ground Wire from the holder.



10. Release the clip that secures the Ferrite Core and remove the Ferrite Core.
11. Release the 3 clips that secure the AC-In Harness Assembly from the printer frame and pull the AC-In Harness Assembly out.



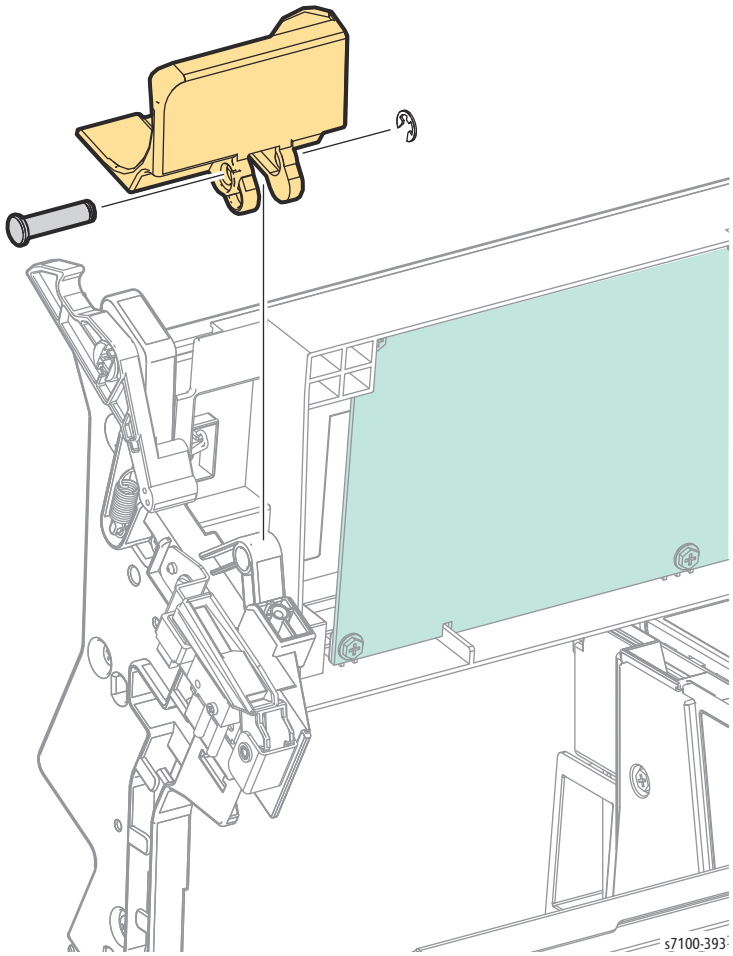
Frame

REP 13.1 Top Lever

PL 13.1.4

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Remove the E-ring that secures the Top Right Shaft (PL 13.1.3).
4. Pull out the Top Right Shaft and remove the Top Lever.

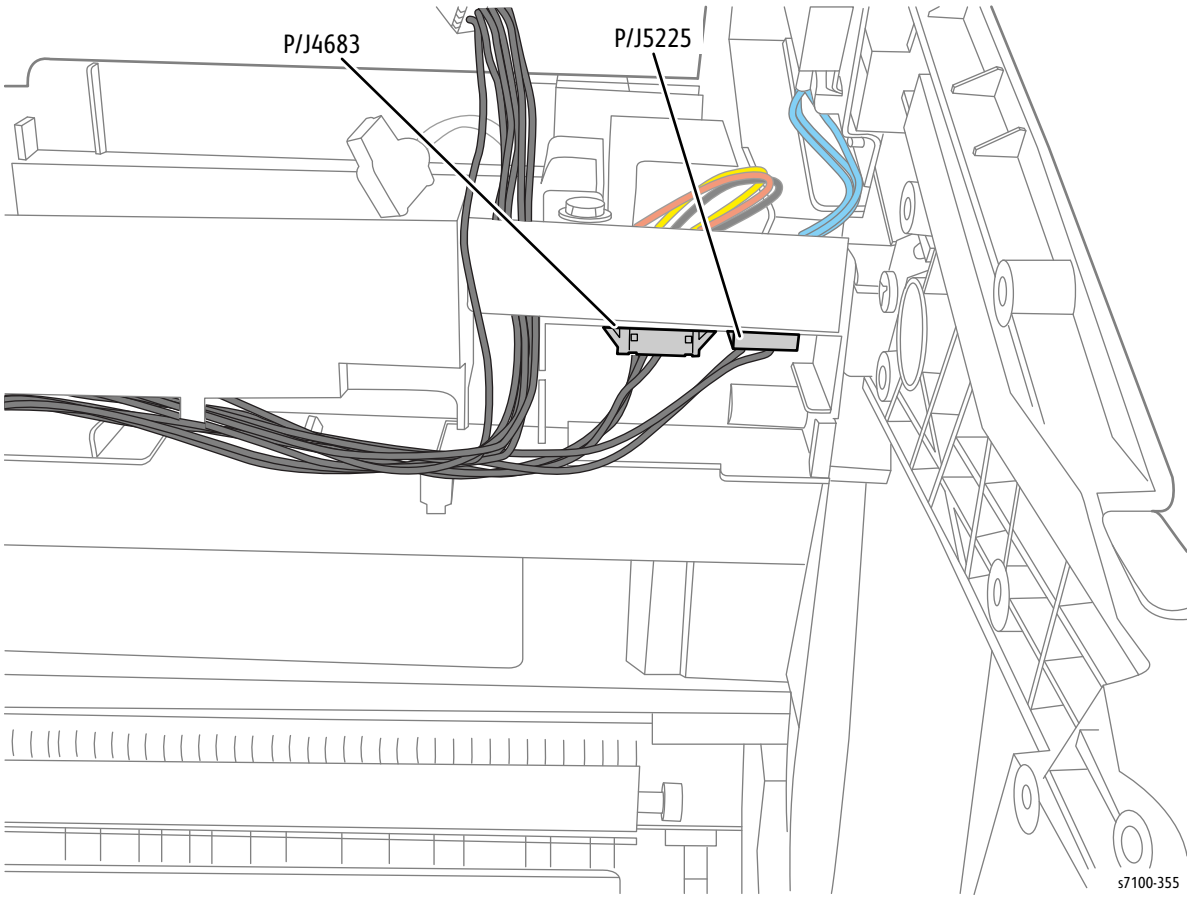


REP 13.2 Top Frame Sub Assembly

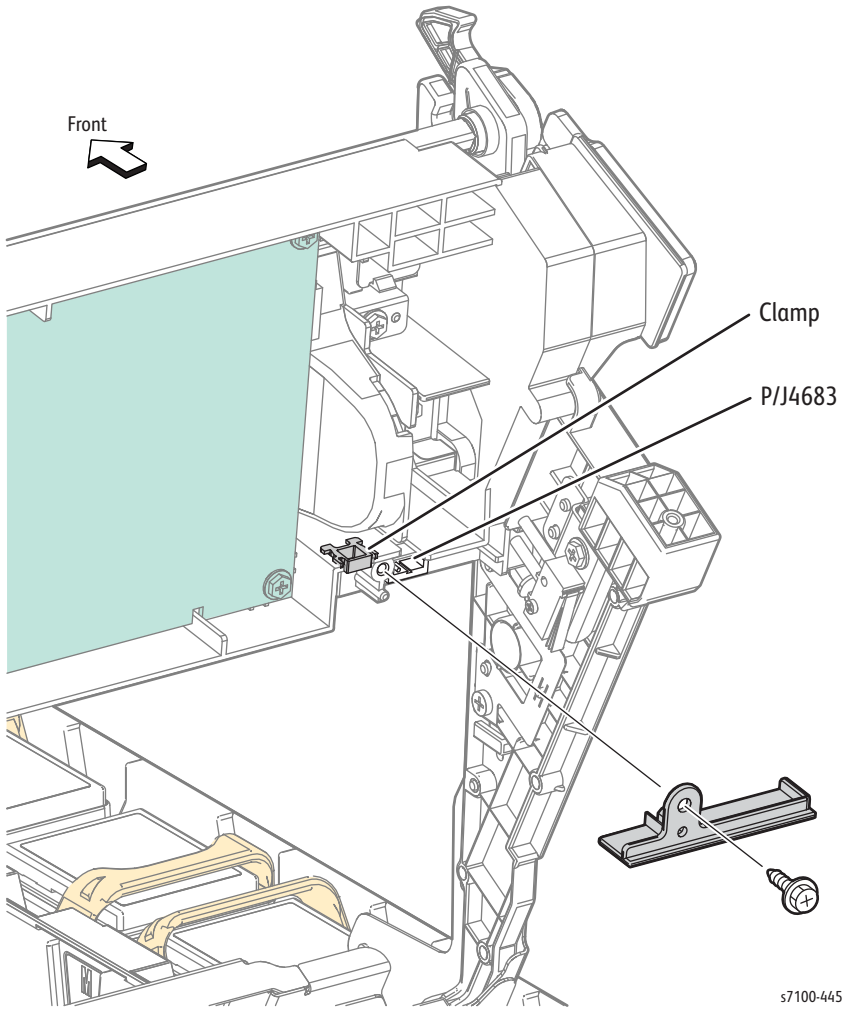
PL 13.1.7

CAUTION: Do not touch the IBT Belt surface.

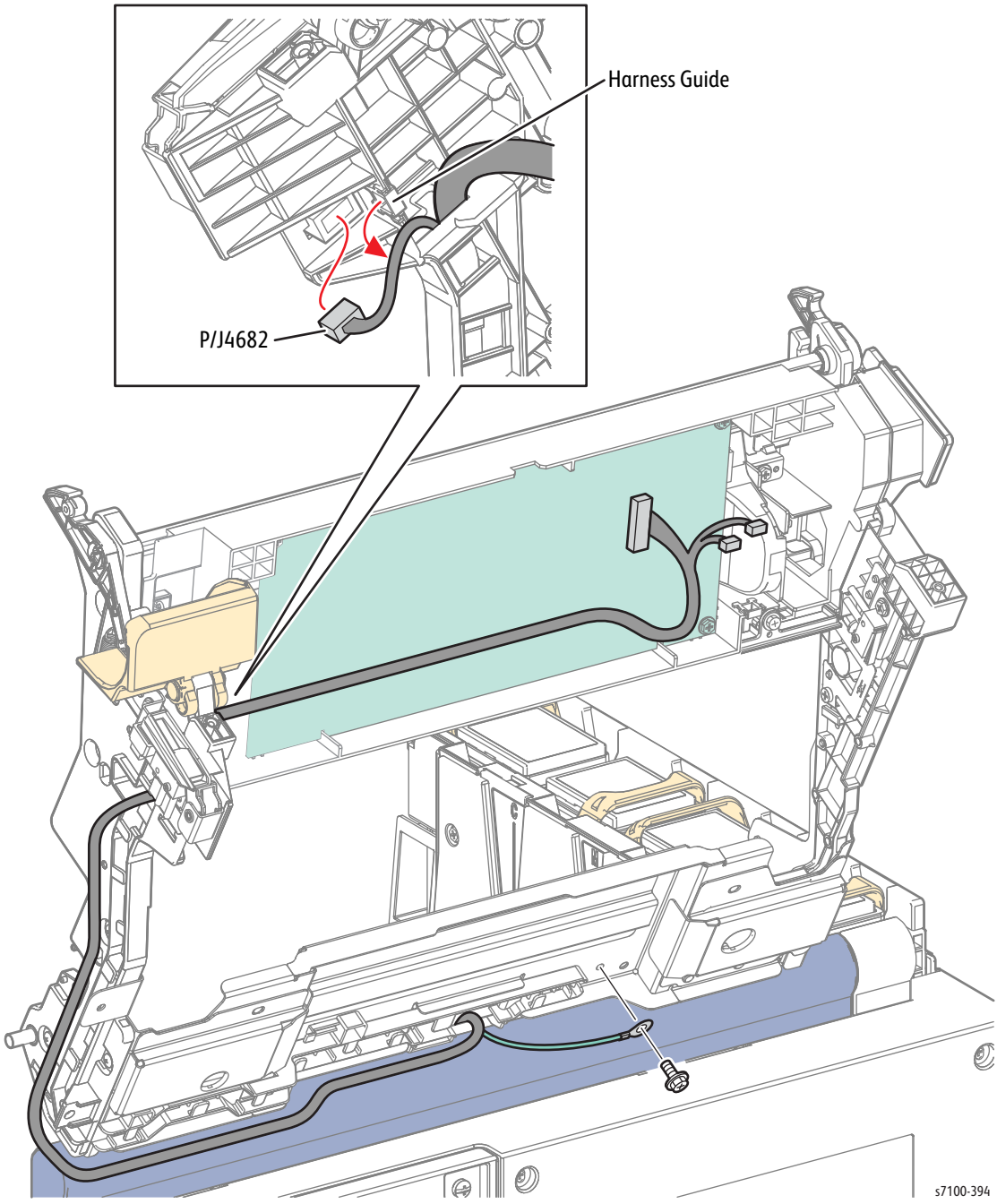
1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Remove the Top Right Guard Frame (REP 9.8 Top Right Guard Frame/ Holder Stand Bar on page 4-172).
4. Remove the HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202).
5. Close the Top Frame Assembly.
6. Disconnect the 2 Relay connectors P/J4683 and P/J5225 that are attached to the HV Transfer Guide (PL 12.1.12) and remove the harness from the Harness Guide.



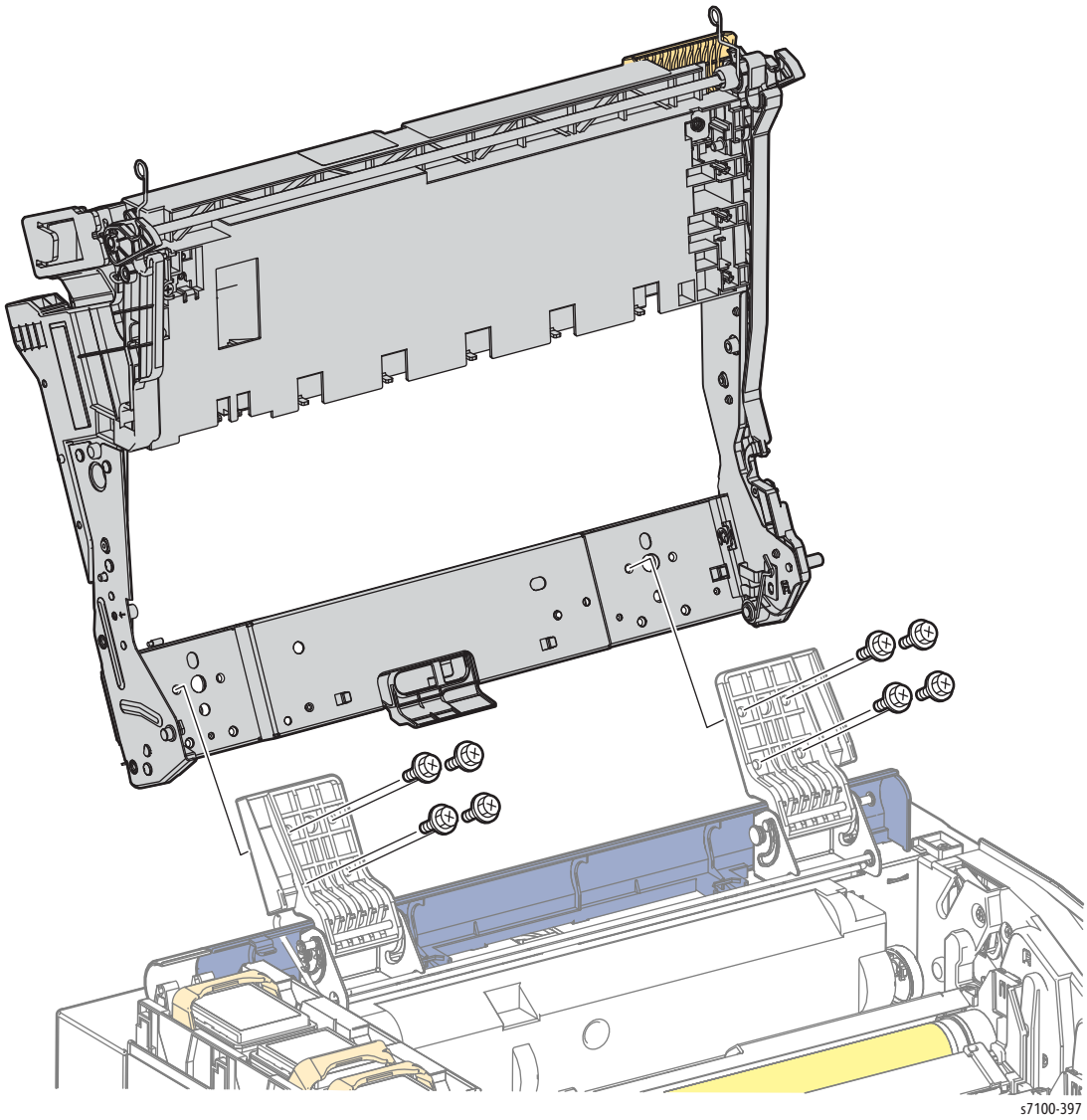
7. Remove one screw that secures the Transfer Box Harness Cover (PL 12.1.13).
8. Release the Clamp to remove the wiring harness.



9. Disconnect the wiring harness connector P/J4682 that is attached to the Top Frame and release the harness from the Saddle Edge.
10. Remove the harness from the Harness Guide of the Top Frame Sub Assembly.
11. Remove one screw (silver, 6 mm) that secures the Ground Wire and disconnect the Ground Wire.



12. Remove 8 screws (silver, 6 mm) that secure the Left/ Right Arm Plate Hinge (PL 13.1.8/ PL 13.1.9).
13. Remove the Top Frame Sub Assembly.



REP 13.3 Left Arm Plate Hinge/ Right Arm Plate Hinge

PL 13.1.8/ PL 13.1.9

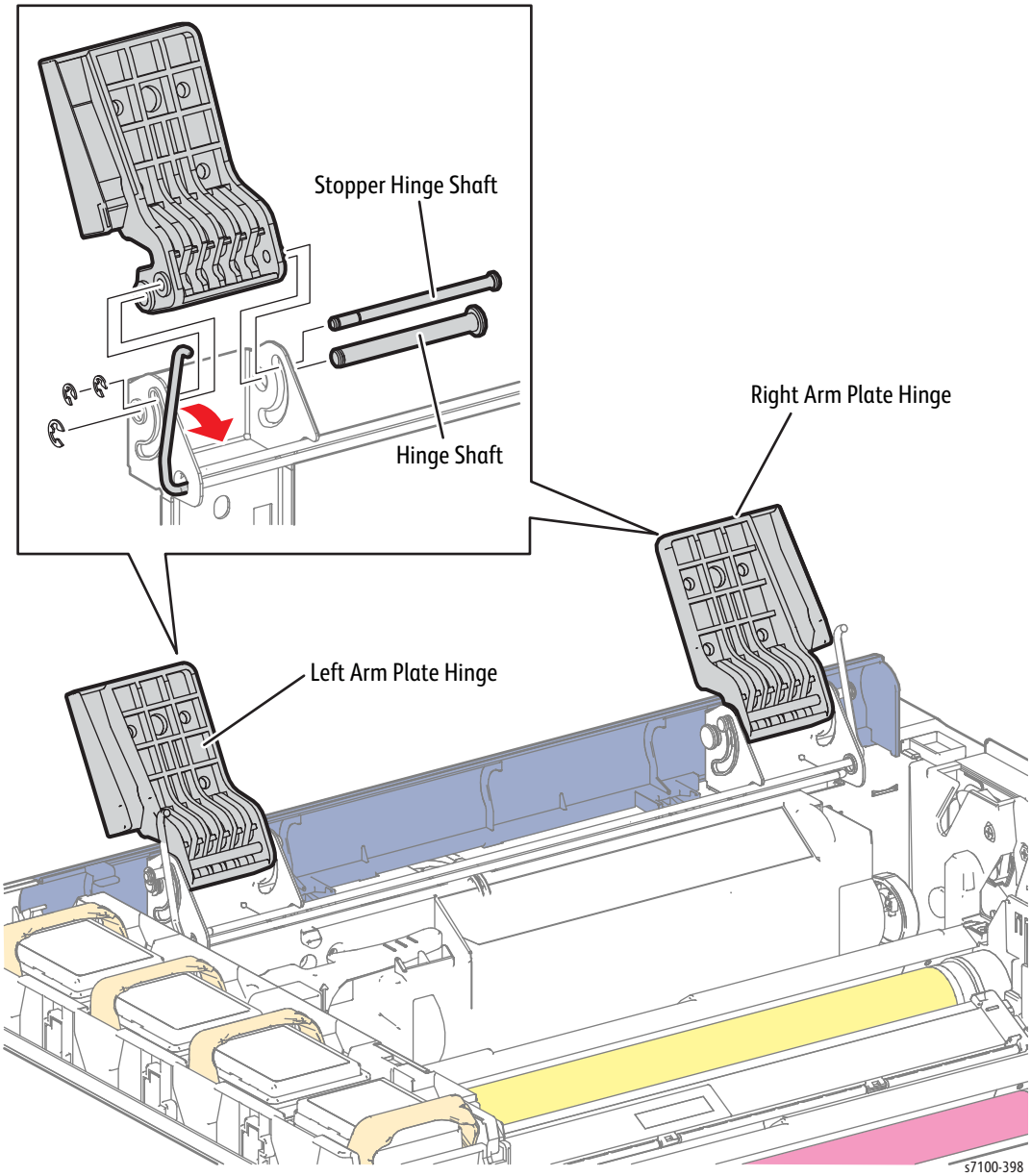
CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).
2. Remove the Top Cover Assembly (REP 1.1 Top Cover Assembly on page 4-9).
3. Remove the Top Right Guard Frame (REP 9.8 Top Right Guard Frame/ Holder Stand Bar on page 4-172).
4. Remove the HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202).
5. Remove the Top Frame Sub Assembly (REP 13.2 Top Frame Sub Assembly on page 4-240).

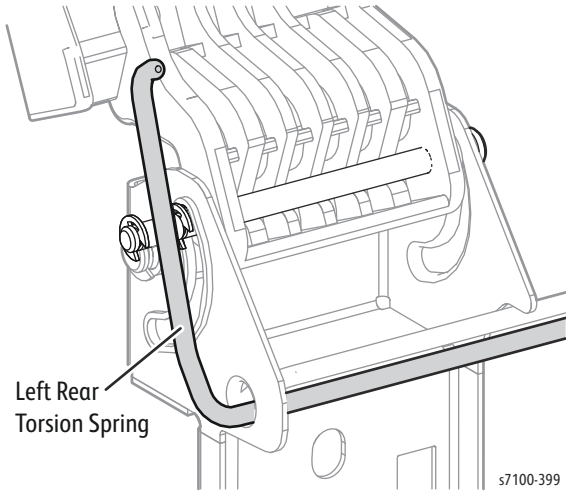
6. Remove the 2 E-rings that secure the Left Stopper Hinge Shaft (PL 13.1.12).

CAUTION: When freeing the Left Rear Torsion Spring towards you, take extra care with the operation as the Spring contains strong force.

7. While freeing the Left Rear Torsion Spring towards you, pull out the Left Stopper Hinge Shaft to remove the Shaft.
8. Remove the E-ring that secures the Left Hinge Shaft.
9. Pull out and remove the Hinge Shaft.
10. Remove the Left Arm Plate Hinge.
11. Remove the Right Arm Plate Hinge by performing the same steps 6 to 10.



Replacement Note: Position the Left/ Right Rear Torsion Spring in between the 2 E-rings that are attached to the Stopper Hinge Shaft.



REP 13.4 Transfer Spring Kit/ Latch Frame Kit

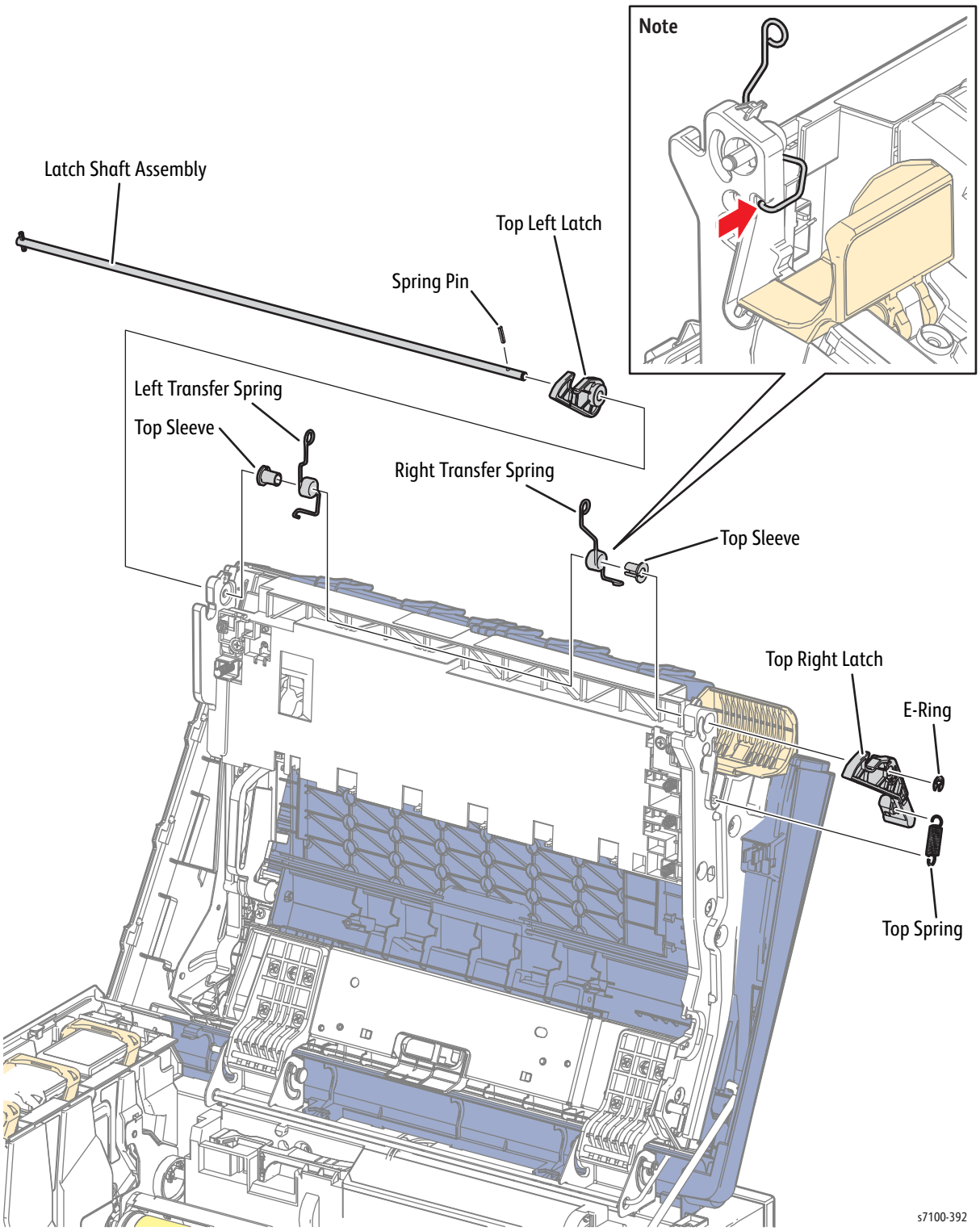
PL 13.1.17/ PL 13.1.18

CAUTION: Do not touch the IBT Belt surface.

1. Remove the IBT Unit (REP 9.10 IBT Unit on page 4-177).

   Note: When removing the IBT Unit, release the spring from its shelter if it had been put aside, and then remove the Top Spring from the hole at the side surface to free it completely.

2. Remove the E-ring (PL 13.1) from the Latch Shaft Assembly (PL 13.1.2).
3. Remove the Top Right Latch (PL 13.1.50 from the Right Top Shaft PL 13.1.3).
4. Shift the Latch Shaft Assembly to the left and remove the Spring Pin (PL 13.1.19) that is attached to the right of the Latch Shaft Assembly.
5. While pulling out the Latch Shaft Assembly further to the left, remove the 2 Top Sleeves (PL 13.1.16) and the Left and Right TRNS Springs (PL 13.1.17/ PL 13.1.18) from the Latch Shaft Assembly.
6. Remove the Top Left Latch from the Latch Shaft Assembly.



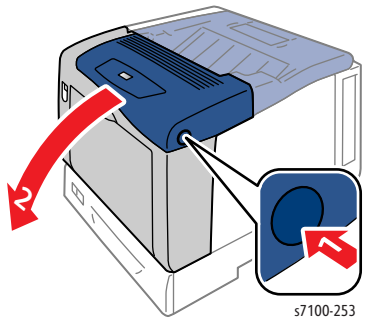
Replacement Note: When installing the Left and Right Transfer Springs, be sure to insert the Top Spring to the hole at the side surface.

Duplex (Option)

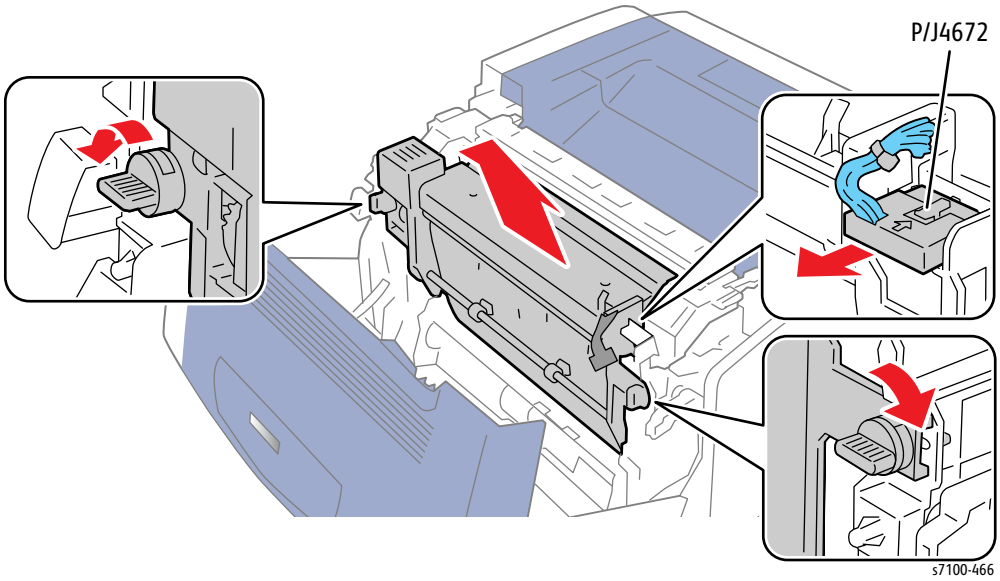
REP 14.1 Duplex Unit

PL 14.1.1

1. Press the B button and open the Front Cover Assembly (PL 1.1.38).



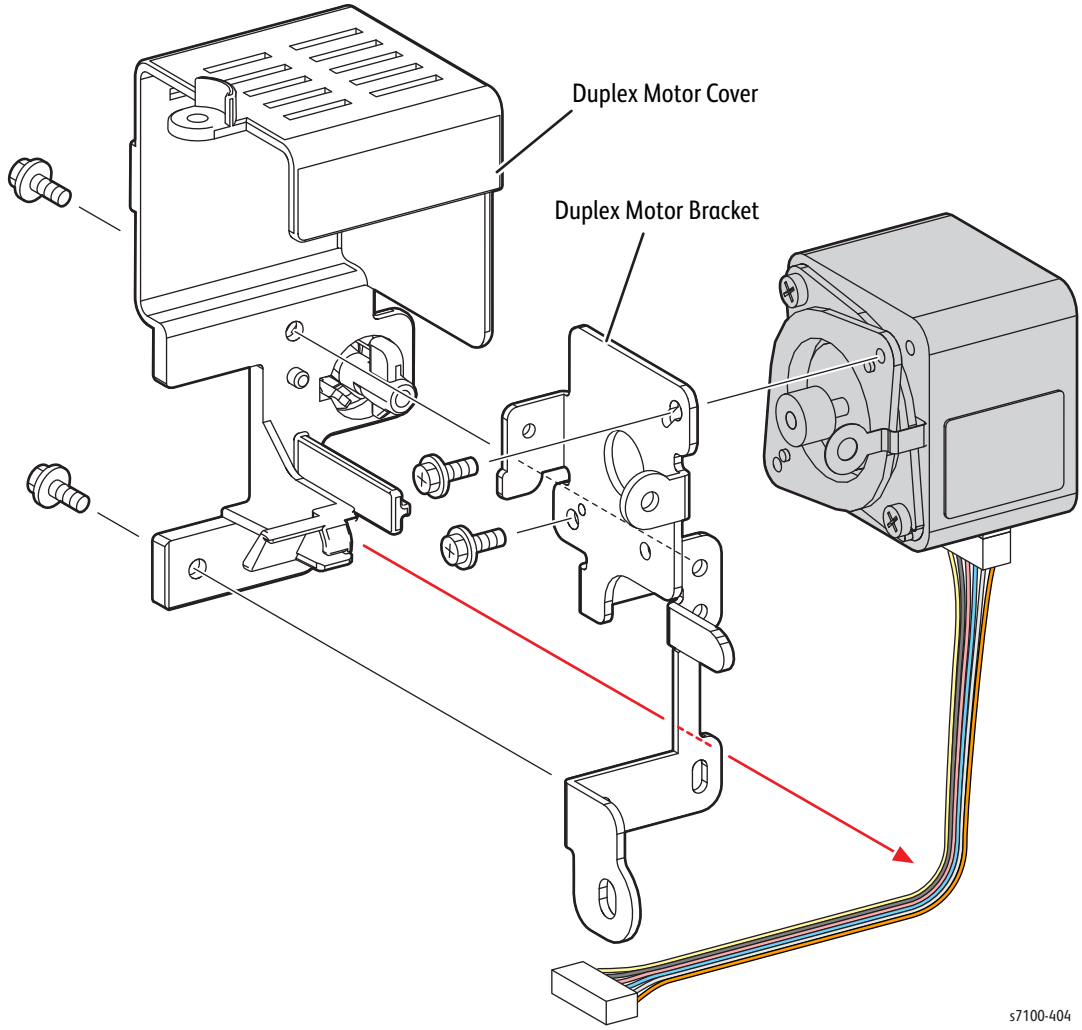
2. Disconnect the wiring harness connector P/J4672 that is connected to the Duplex Unit.
3. Turn the left and right Duplex Lock Levers (PL 14.2.4) 90˚ inward, tilt and lift the Duplex Unit to remove.



REP 14.2 Duplex Motor

PL 14.2.1

1. Remove the Duplex Unit (REP 14.1 Duplex Unit on page 4-249).
2. Remove the Duplex Motor Assembly (REP 14.5 Duplex Motor Assembly on page 4-256).
3. Disconnect the cable of the Duplex Motor Assembly from the Duplex Motor Cover (PL 14.2.3).
4. Remove 2 screws (silver, collared, 6 mm) that secure the Duplex Motor Cover to the Duplex Motor Bracket (PL 14.2.2) and remove the Duplex Motor Cover.
5. Remove 2 screw (silver, collared, 6 mm) that secure the Duplex Motor to the Duplex Motor Bracket and remove the Duplex Motor.



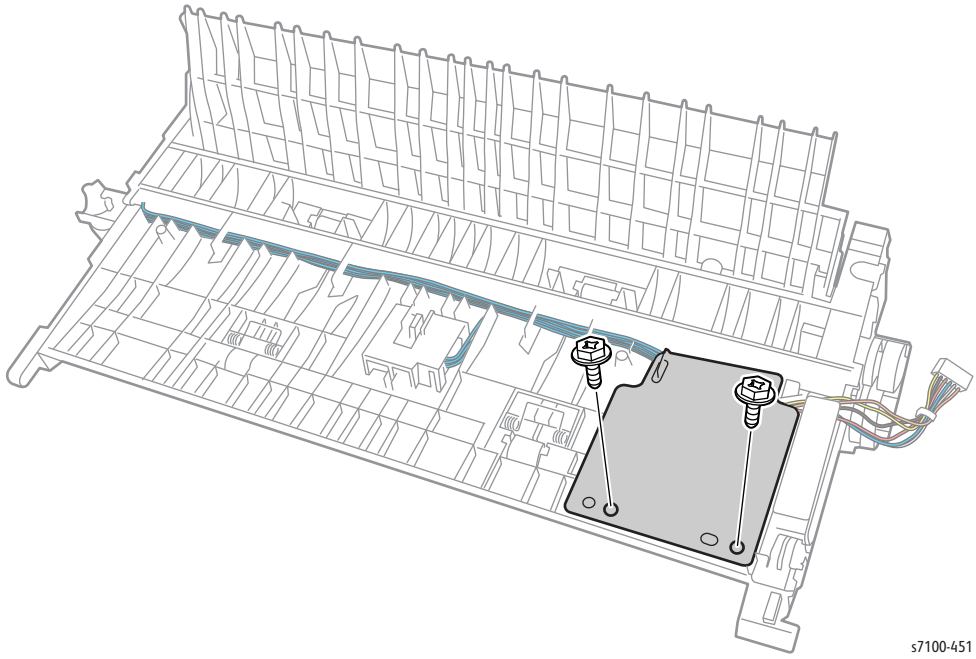
REP 14.3 Duplex Roller

PL 14.2.9

1. Remove the Duplex Unit (REP 14.1 Duplex Unit on page 4-249).
2. Remove the Duplex Motor Assembly (REP 14.5 Duplex Motor Assembly on page 4-256).

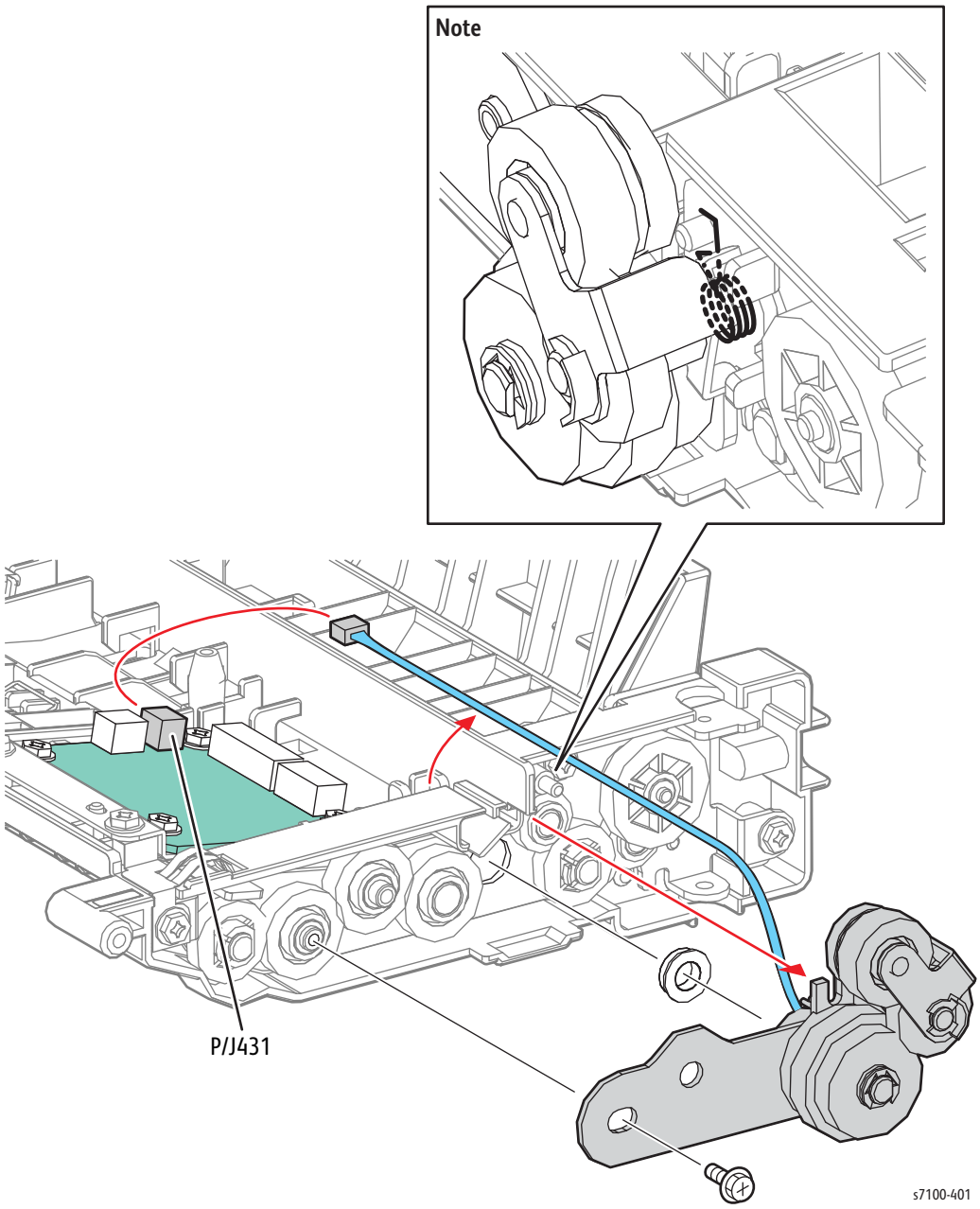
   Note: When removing the Duplex Drive Gear Assembly (PL 14.2.22) in the following step, be careful not to drop the Bearing and the Gear.
3. Remove 2 screws that secure the PWB Shield (PL 14.3.10) and remove the Shield.

Figure 1



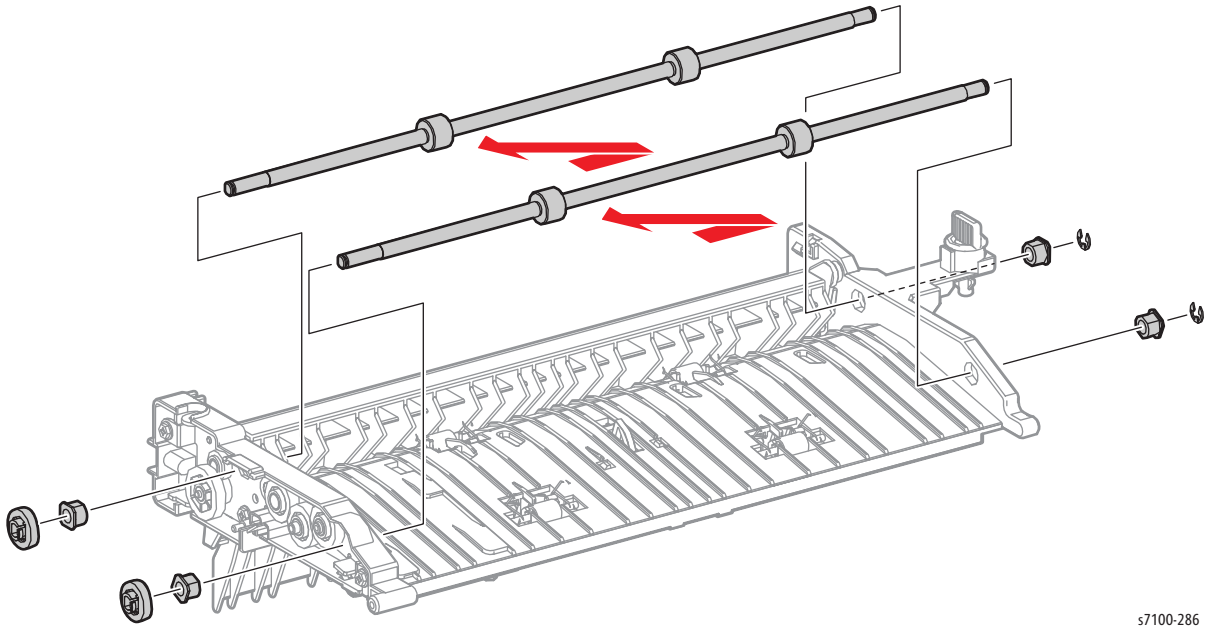
4. Disconnect the wiring harness connector P/J431 that is connected to the Duplex PWB (PL 14.3.8).
5. Remove one screw (silver, 6 mm) that secures the Duplex Drive Gear Assembly.
6. Remove the Duplex Drive Gear Assembly from the Duplex Unit.

Figure 2



7. Remove the E-ring on the right side that secures the top Duplex Roller.
8. Pull out and remove the Duplex Roller Gear (PL 14.2.10) and the left and right Earth Bearings (PL 14.2.5) from the top Duplex Roller.
9. Slide the top Duplex Roller to the right, free the left tip of the Duplex Roller from the hole of the Bearing, and then pull it to the left and upwards to remove it.
10. Remove the E-ring on the right side that secures the bottom Duplex Roller.
11. Pull out and remove the Duplex Roller Gear (PL14.2.10) and the left and right Earth Bearings (PL 14.2.5) from the bottom Duplex Roller.
12. Slide the bottom Duplex Roller to the right, free the left tip of the Duplex Roller from the hole of the Bearing, and then pull it to the left and upwards to remove it.

Figure 3



Replacement Note: When installing the Duplex Drive Gear Assembly (PL 14.2.22) to the Duplex Unit, do not forget to reattach the Swing Spring (PL14.2.17) (see Figure 2 on page 4-252).

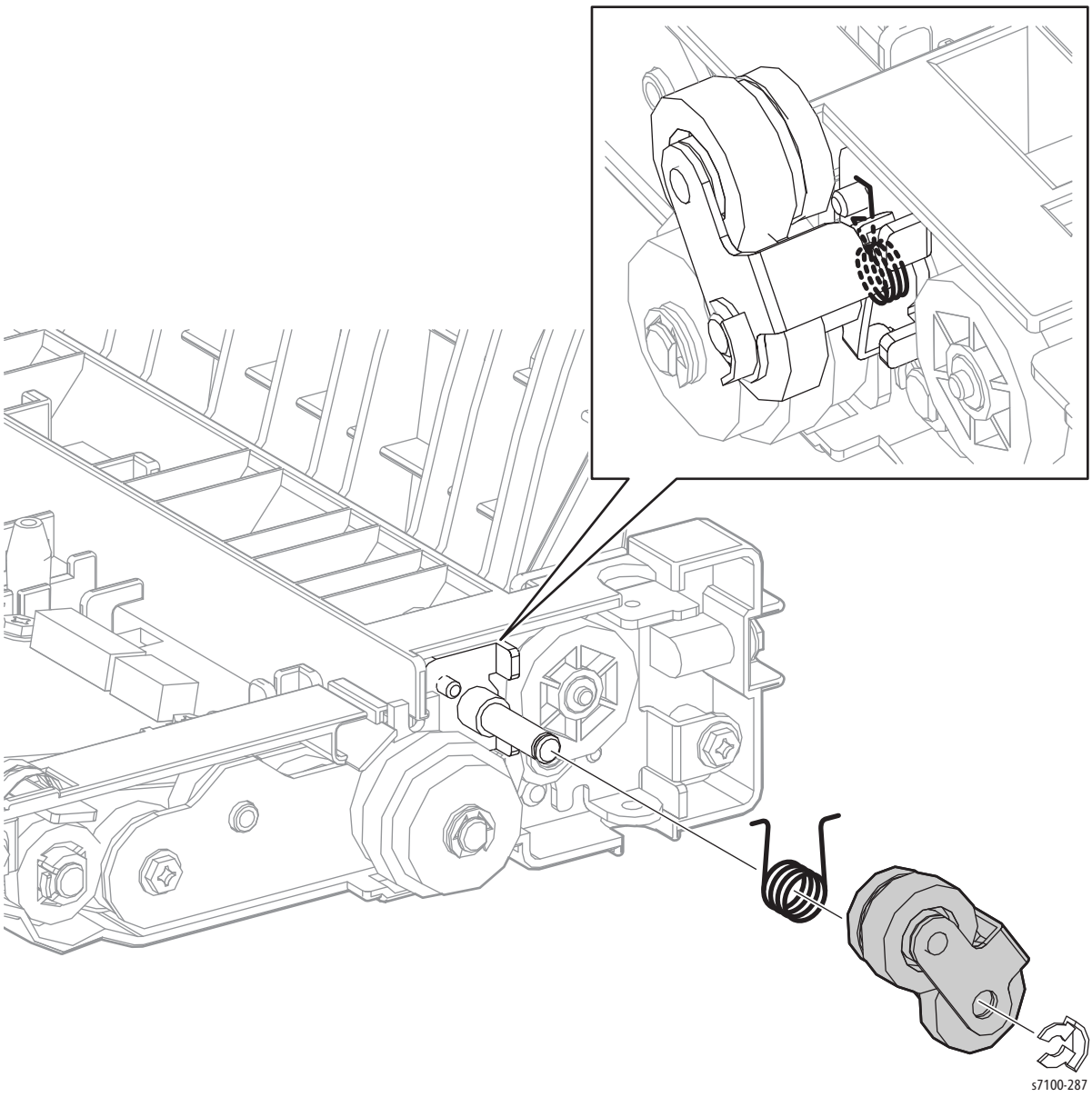
REP 14.4 Duplex In Clutch Assembly/ Duplex Drive Gear Assembly Kit

PL 14.2.20/ PL 14.2.22

1. Remove the Duplex Unit (REP 14.1 Duplex Unit on page 4-249).
2. Remove the Duplex Motor Assembly (REP 14.5 Duplex Motor Assembly on page 4-256).

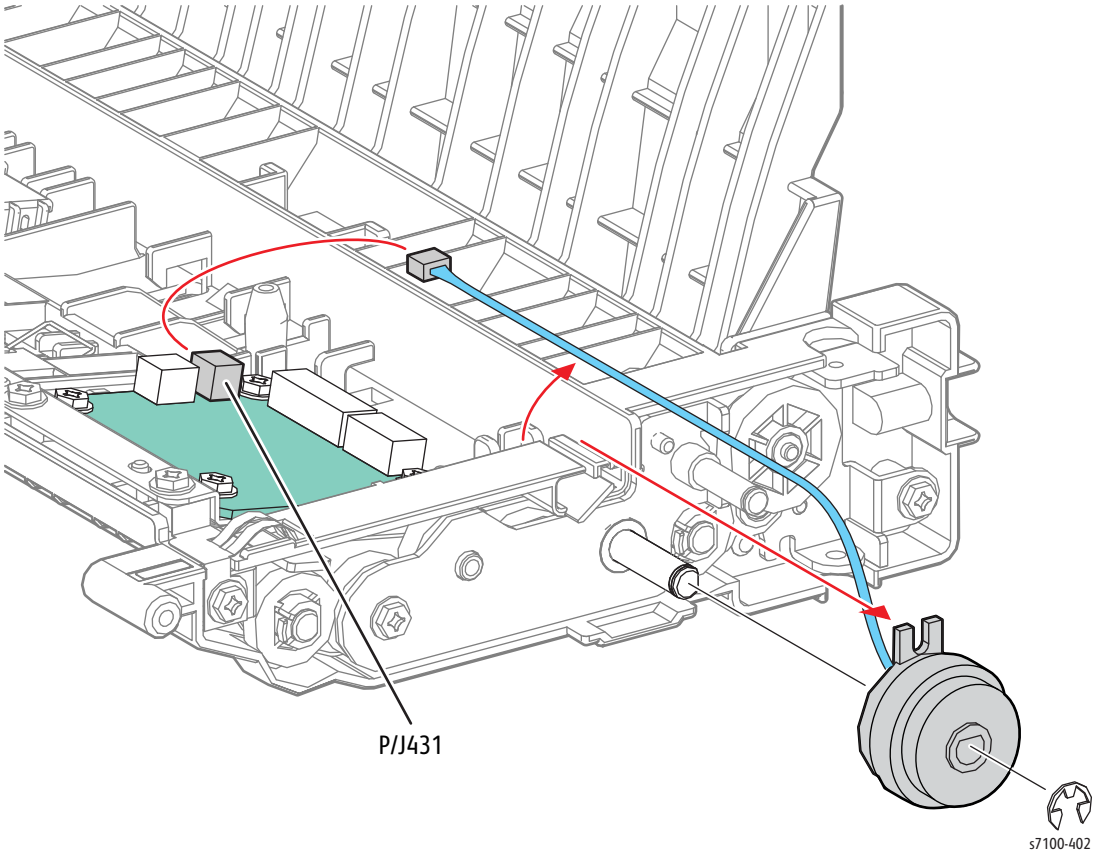
   Note: When removing the Idle Gear Assembly in the following step, do not drop the Swing Spring (PL 14.2.17) and the Idle Gear 16 (PL 14.2.15).
3. Remove the KL Clip that secures the Idle Gear Assembly and remove the Idle Gear Assembly.

Figure 1



4. Disconnect the wiring harness connector P/J431 that is connected to the Duplex PWB (PL 14.3.8).
5. Remove the E-ring that secures the Duplex In Clutch Assembly.
6. While freeing the depressed part of the Duplex In Clutch Assembly from the protrusion of the Duplex Unit, remove the Duplex In Clutch Assembly.

Figure 2

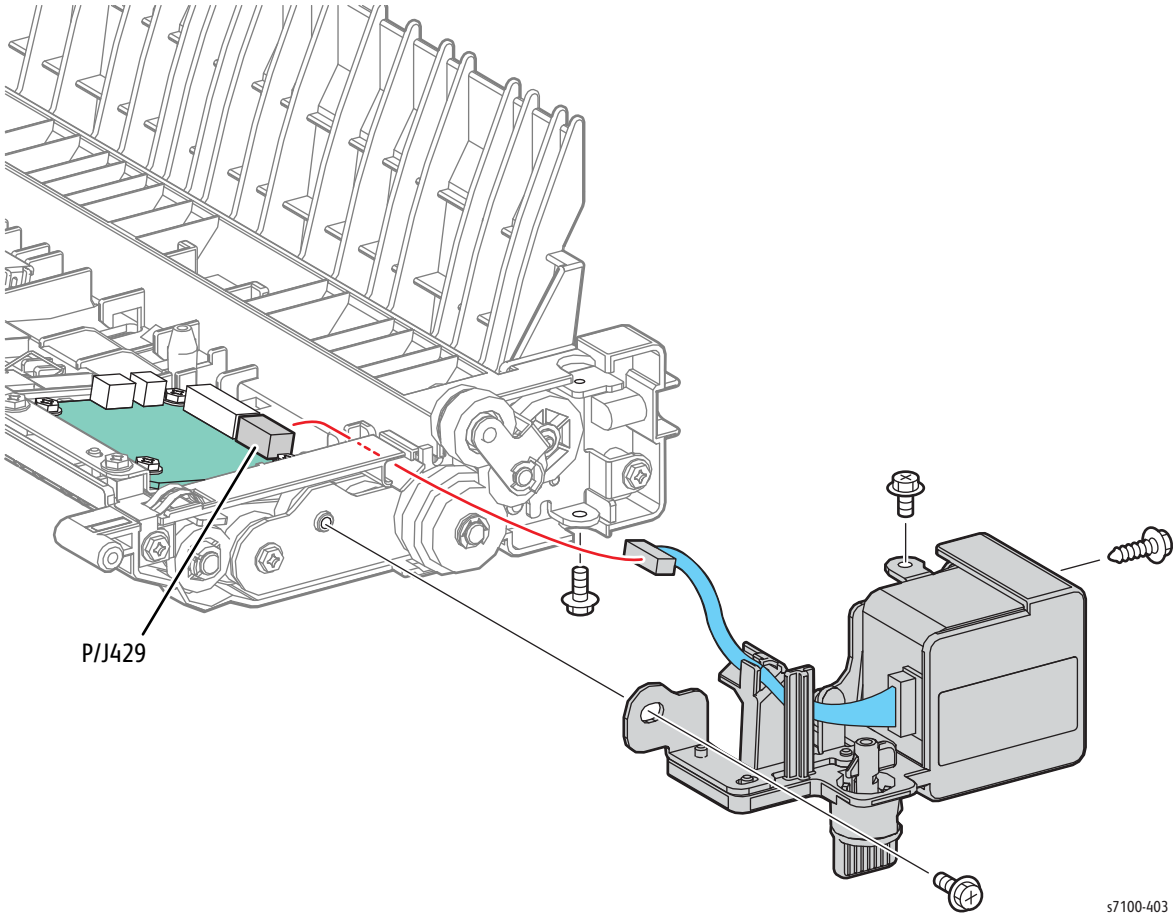


Replacement Note: When installing the Duplex Idle Gear Assembly to the Duplex Unit, do not forget to reattach the Swing Spring (PL 14.2.17) (see Figure 1 on page 4-254).

REP 14.5 Duplex Motor Assembly

PL 14.2.98

1. Remove the Duplex Unit (REP 14.1 Duplex Unit on page 4-249).
2. Disconnect the wiring harness connector P/J429 that is connected to the Duplex PWB.
3. Remove one screw (silver, collared, tapped, 8 mm) and 3 screws (silver, collared, 6 mm) that secure the Duplex Motor Assembly.
4. Remove the Duplex Motor Assembly from the Duplex Unit.

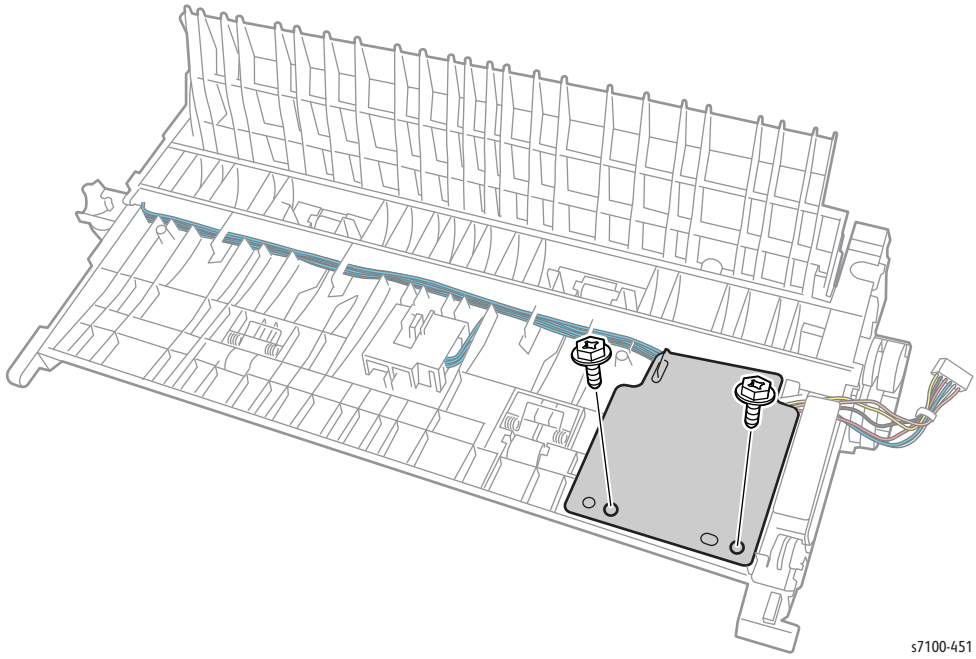


REP 14.6 Duplex PWB

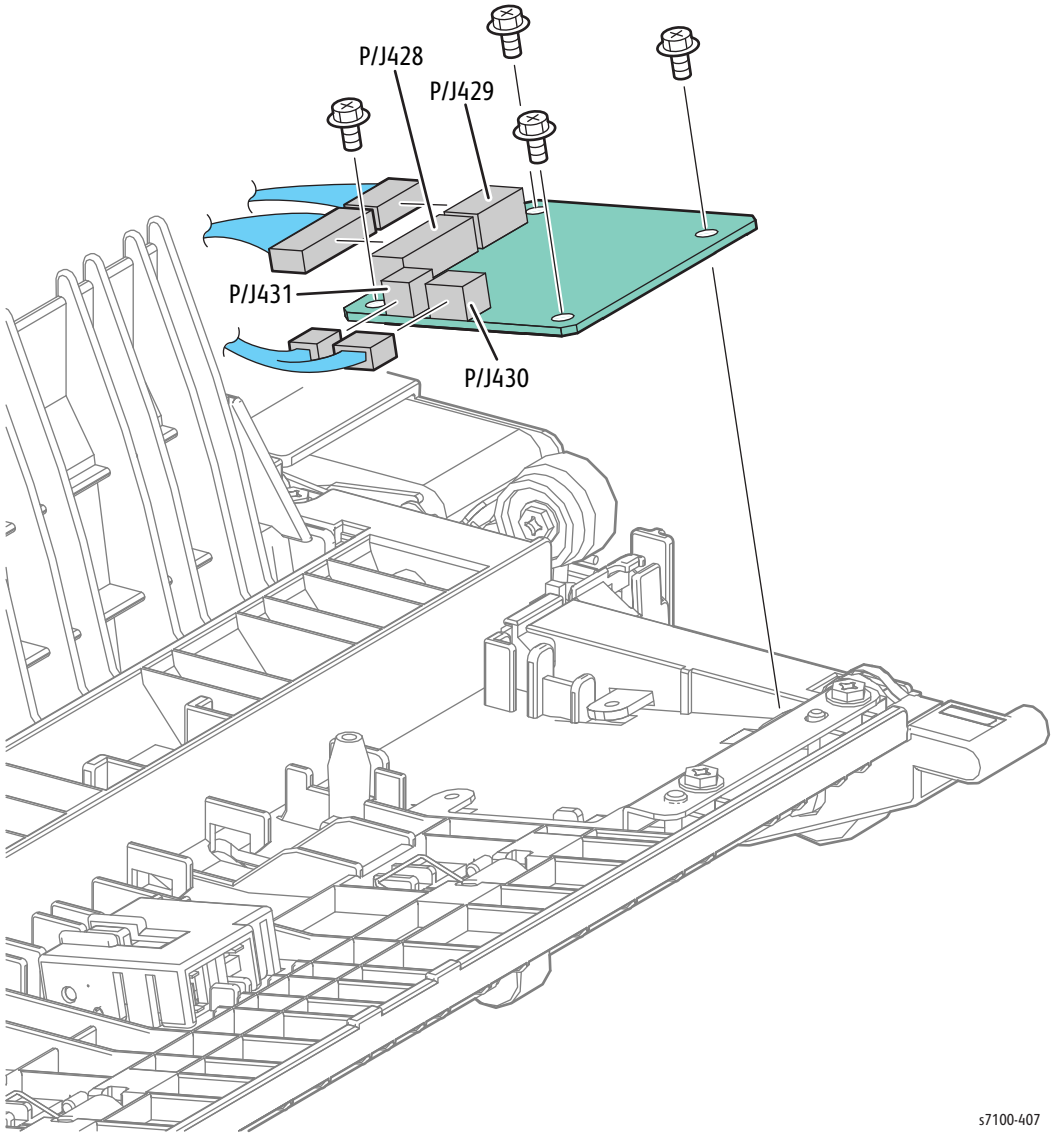
PL 14.3.8

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the Duplex Unit (REP 14.1 Duplex Unit on page 4-249).
2. Remove 2 screws that secure the PWB Shield (PL 14.3.10) and remove the Shield.



3. Disconnect the 4 wiring harness connectors (P/J428, P/J429, P/J430, and P/J431) that are connected to the Duplex PWB.
4. Remove 4 screws (silver, collared, 6 mm) that secure the Duplex PWB and remove the Duplex PWB.

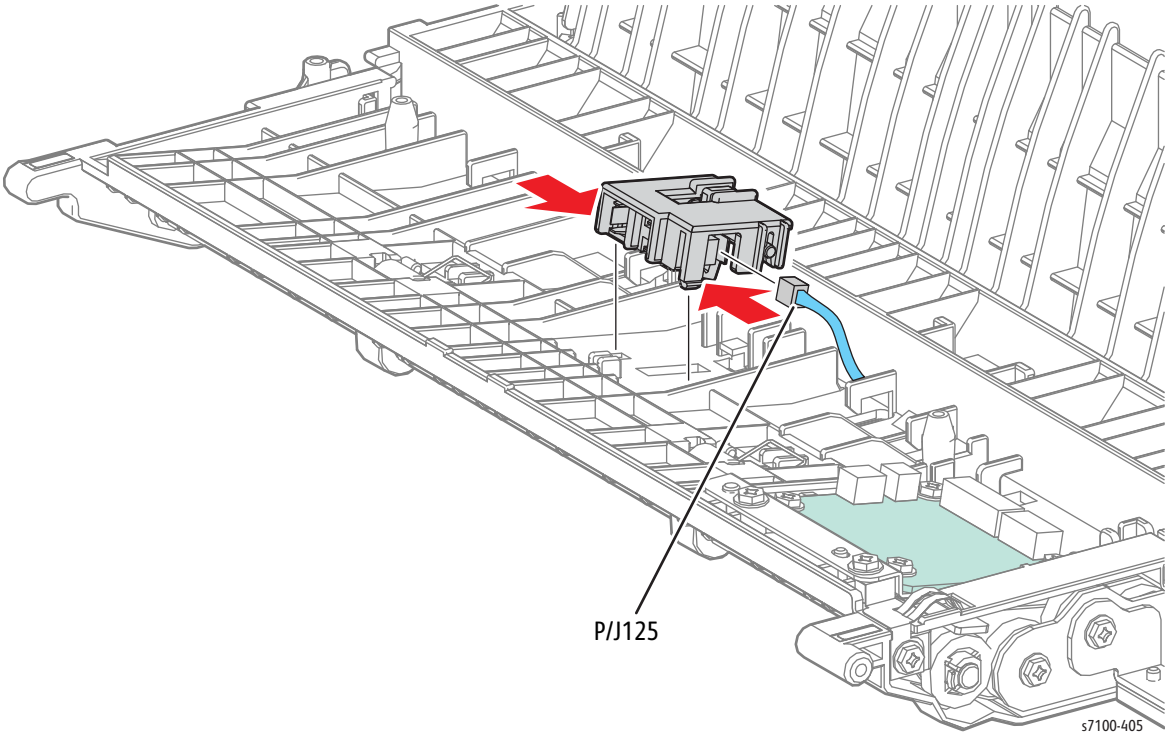


REP 14.7 Duplex Jam Sensor

PL 14.3.17

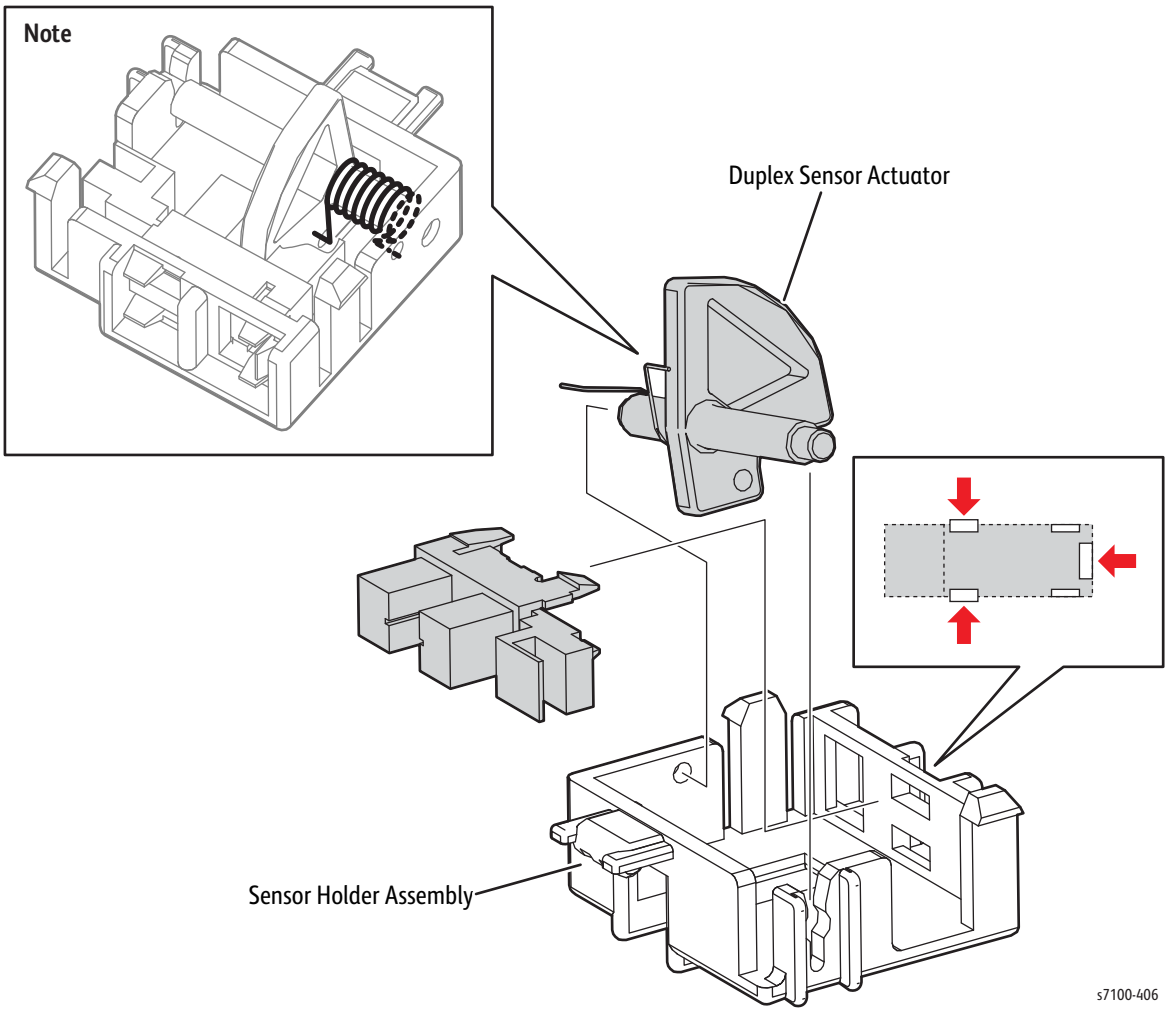
1. Remove the Duplex Unit (REP 14.1 Duplex Unit on page 4-249).
2. Release the 2 hooks of the Sensor Holder Assembly (PL 14.3.14) and remove the Sensor Holder Assembly.
3. Disconnect the wiring harness connector P/J125 that is connected to the Duplex Jam Sensor.

Figure 1



4. Remove the shaft of the Duplex Sensor Actuator (PL 14.3.16) from its seat and remove the Actuator together with the Actuator Spring (PL 14.3.15).
5. Release the 3 hooks that secure the Duplex Jam Sensor and remove the Sensor from the Sensor Holder Assembly.

Figure 2



Replacement Note: When installing the Duplex Sensor Actuator to the Sensor Holder Assembly, do not forget to reattach the Actuator Spring (see Figure 2 on page 4-260).

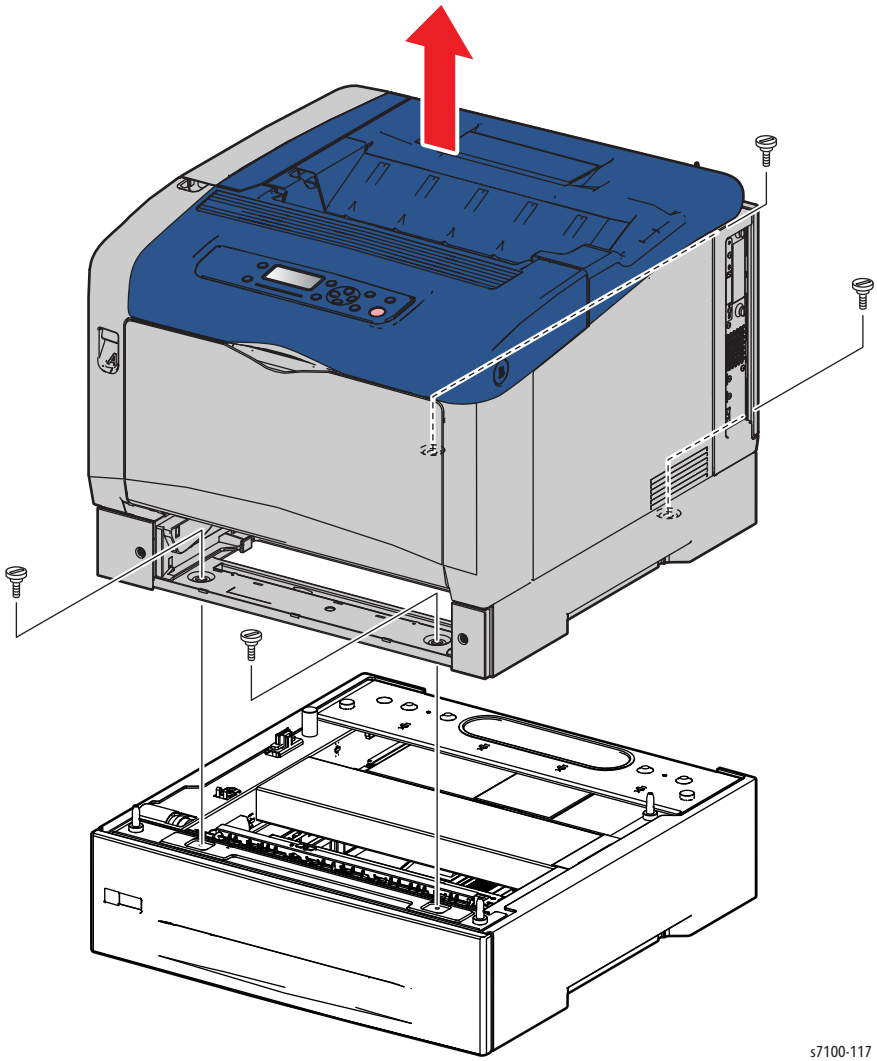
550-Sheet Feeder and Tray (Option)

REP 15.1 550-Sheet Feeder Assembly

PL 15.1.2

WARNING: The printer is heavy and should be lifted by three people. Use safety lifting and handling techniques when moving the printer (refer to Moving the Printer on page 6-10).

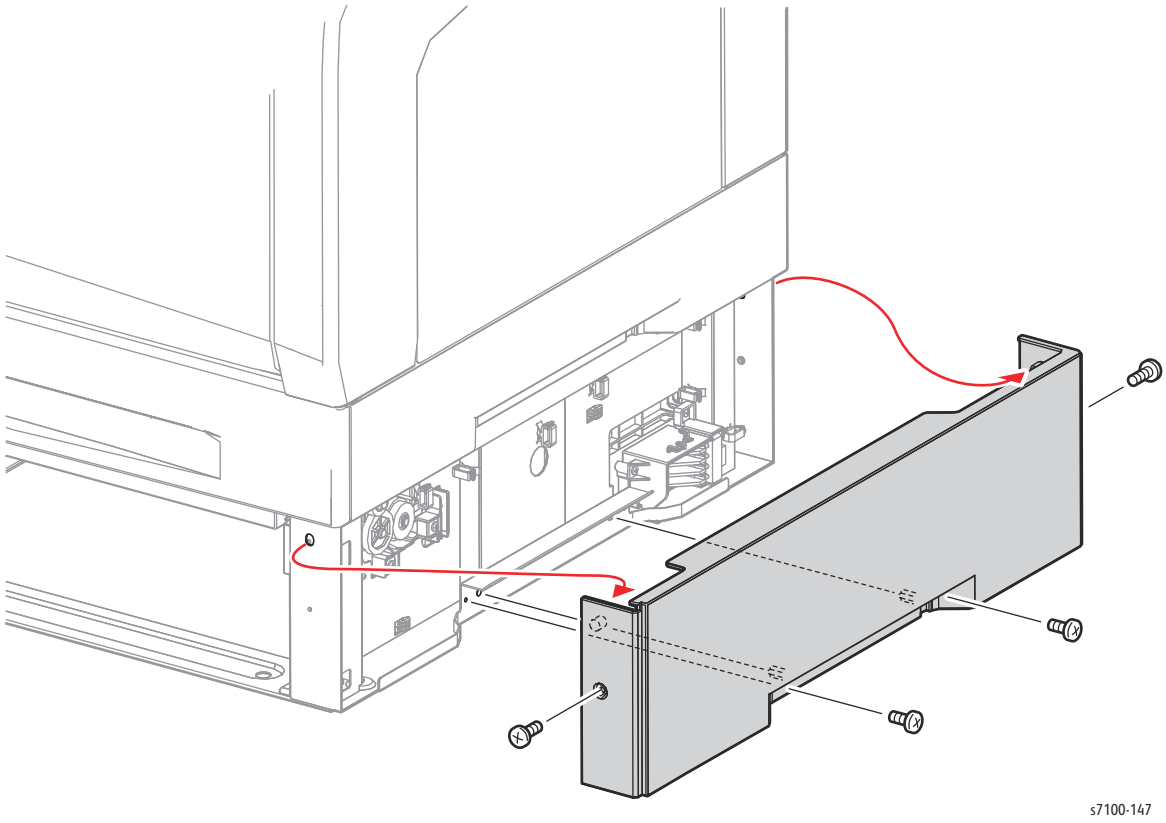
1. Remove Tray 1.
2. Remove four M4 Joint Feeder Screws (PL 15.1.14) that secure the printer to the 550-Sheet Feeder Assembly.
3. Make sure that the printer is level before lifting it directly upwards to remove it from the 550-Sheet Feeder Assembly.



REP 15.2 550 Right Feeder Cover

PL 15.1.3

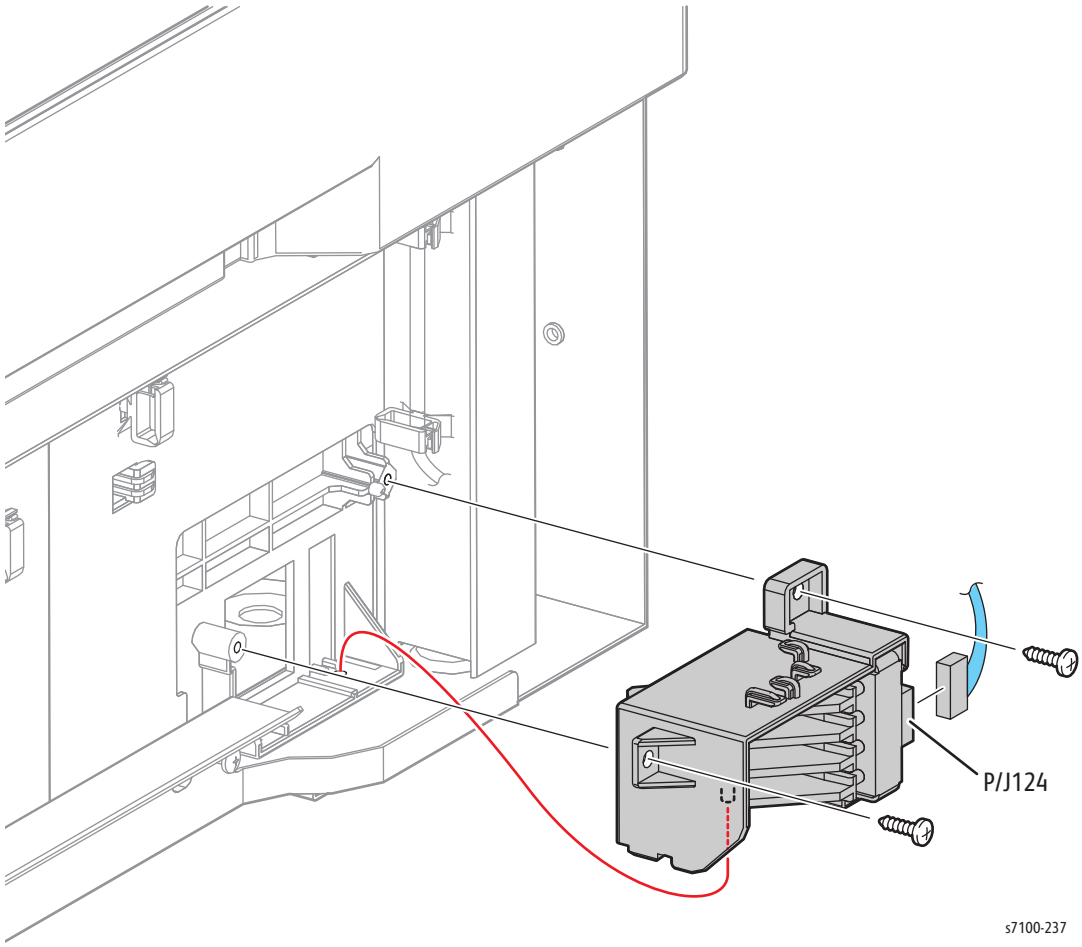
1. Remove 4 screws (silver, 6 mm) that secure the Right Feeder Cover.
2. Free the boss at the front of the Right Feeder Cover from the boss hole, then free the boss at the rear from the boss hole and remove the Right Feeder Cover.



REP 15.3 Size Switch Holder Assembly

PL 15.1.5

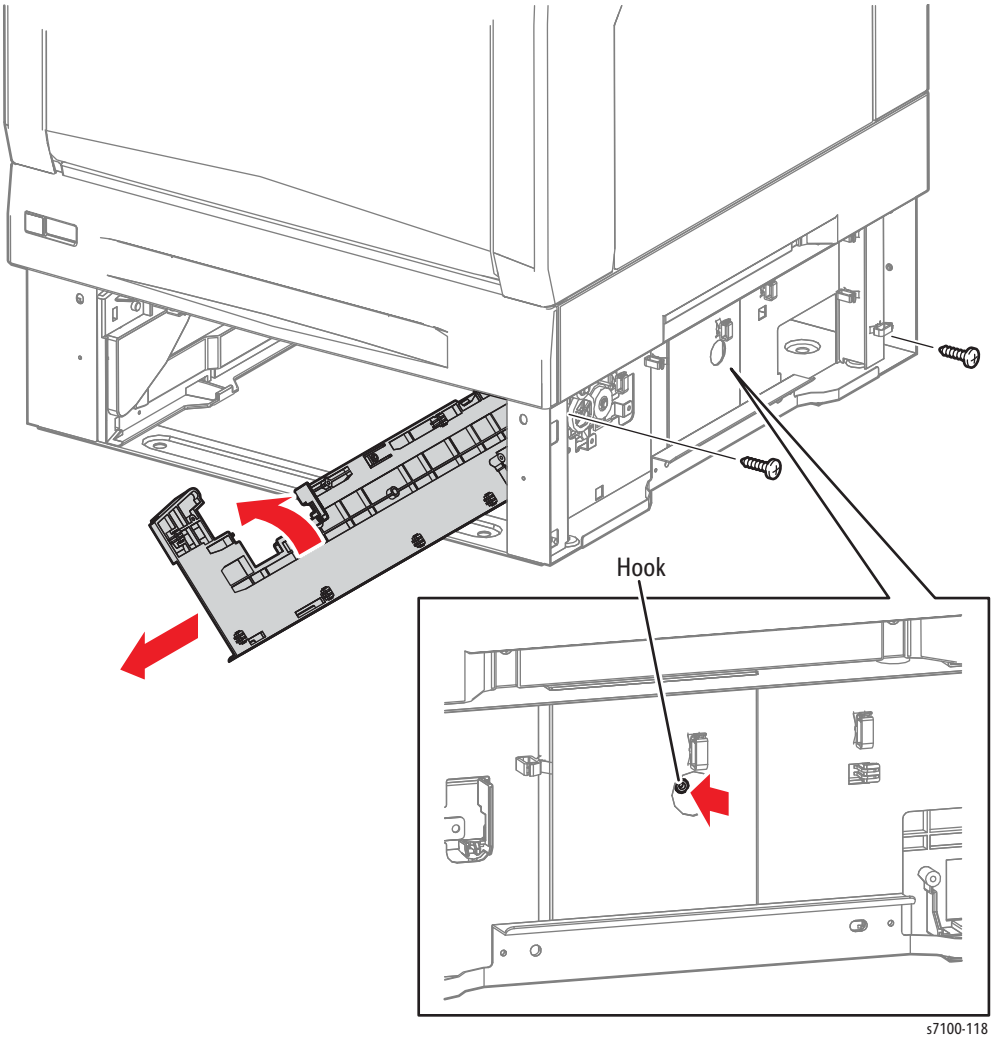
1. Remove the Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
2. Disconnect the wiring harness connector P/J124 that is connected to the Size Switch Holder Assembly.
3. Remove 2 screw (silver, tapped, 8 mm) that secure the Size Switch Holder Assembly to the 550-Sheet Feeder Assembly and remove the Size Switch Holder Assembly.



REP 15.4 550 Right Tray Guide

PL 15.1.6

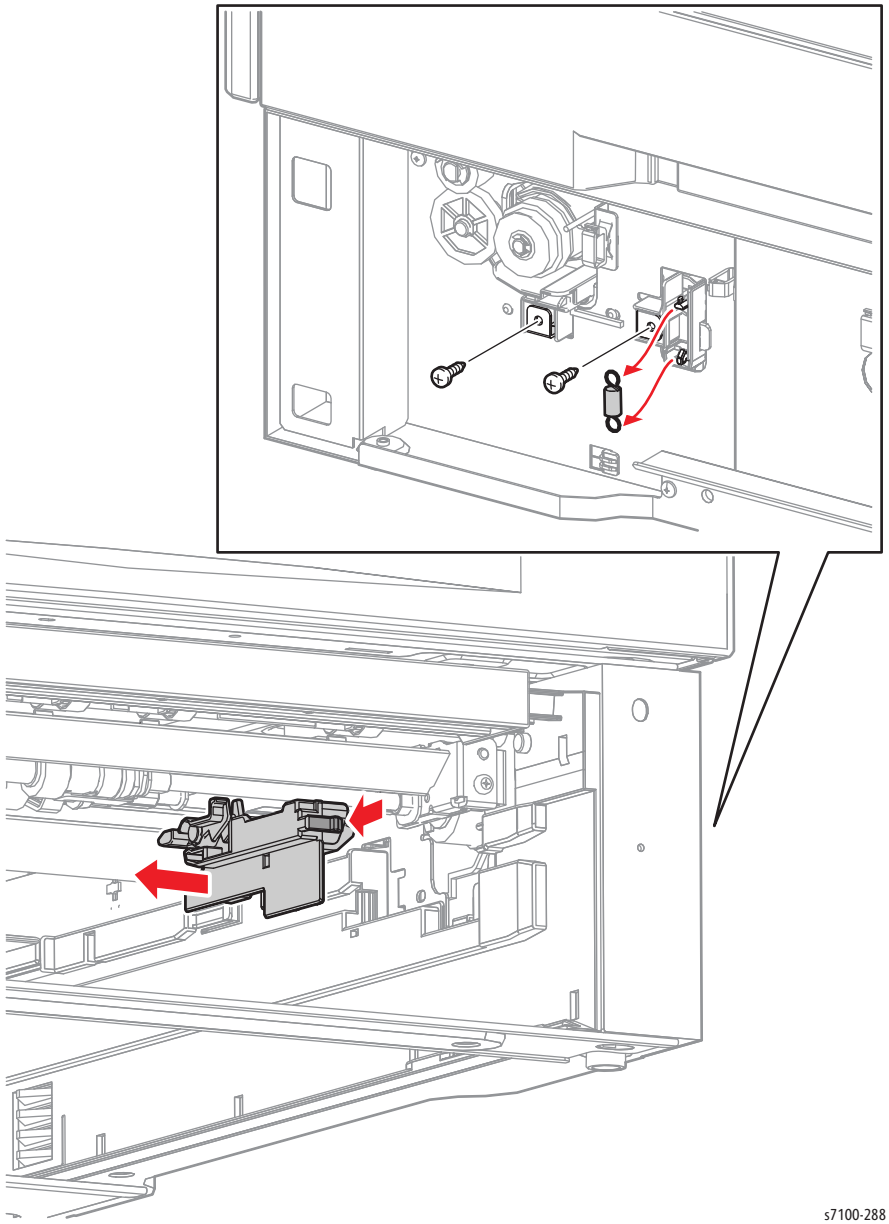
1. Remove Tray 2/ 3/ 4.
2. Remove the Tray Cover (REP 15.9 Tray Cover on page 4-269).
3. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
4. Remove the 550 Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
5. Remove the Turn Chute Assembly (REP 15.10 Turn Chute Assembly on page 4-270).
6. Remove the Size Switch Holder Assembly (REP 15.3 Size Switch Holder Assembly on page 4-263).
7. Remove the Protect Cover Assembly (REP 15.5 Protect Cover Assembly on page 4-265).
8. Remove 2 screw (silver, tapped, 8 mm) that secure the 550 Right Tray Guide.
9. While releasing the hook of Right Tray Guide, shift the Right Tray Guide temporarily to the front, release the 7 hooks from the hole and continue to shift the Right Tray Guide until it is laid down horizontally to remove it.



REP 15.5 Protect Cover Assembly

PL 15.1.7

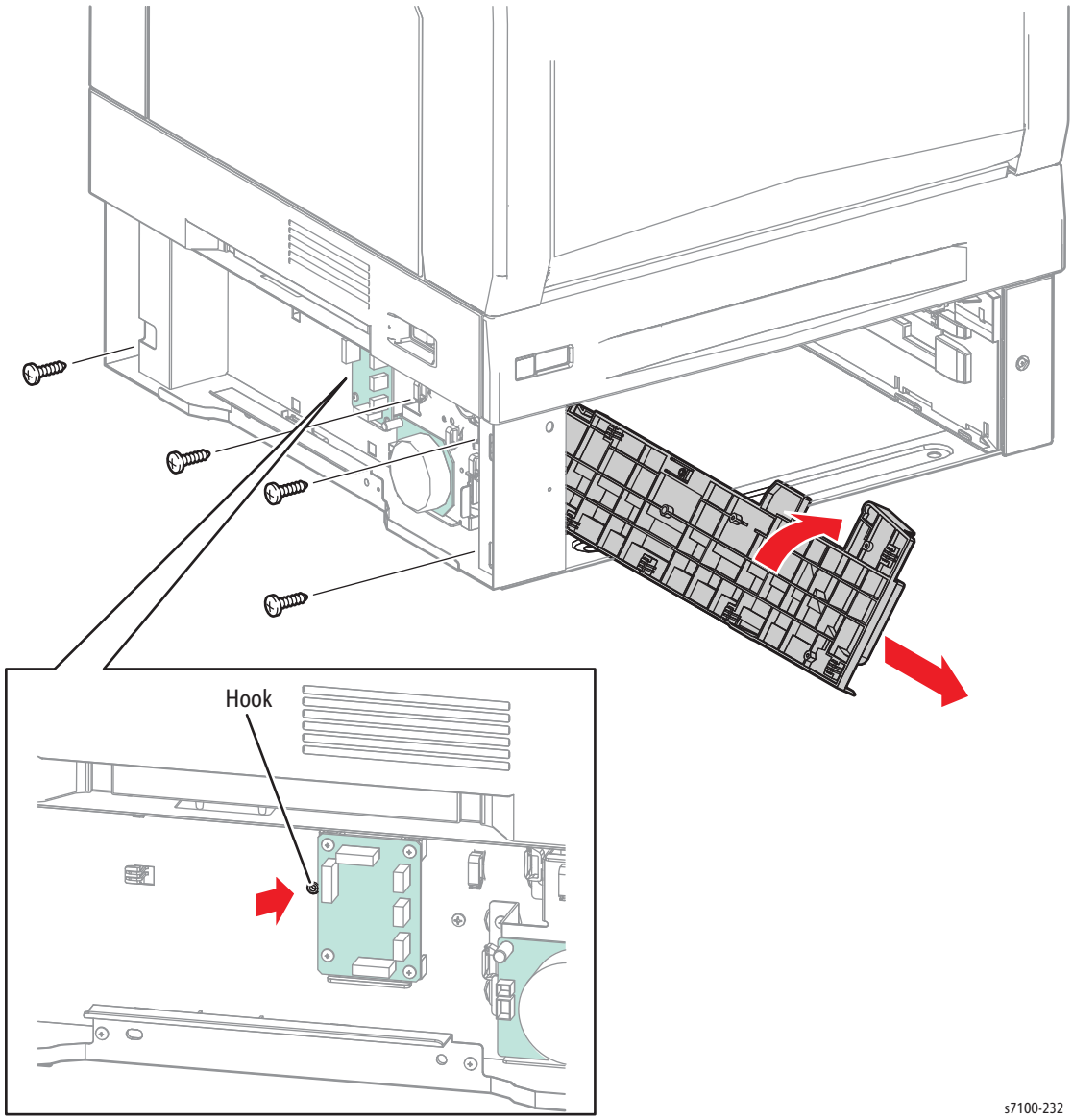
1. Remove Tray 2/ 3/ 4.
2. Remove the 550 Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
3. Remove the Nudger Spring (PL 15.1.8) from the 550 Right Tray Guide (PL 15.1.6) and the Protect Cover Assembly.
4. Remove 2 screw (silver, tapped, 8 mm) that secure the Protect Cover Assembly.
5. Release the hook that secures the Protect Cover Assembly and free the protrusion from the 550 Right Tray Guide to remove the Protect Cover Assembly.



REP 15.6 550 Left Tray Guide

PL 15.1.9

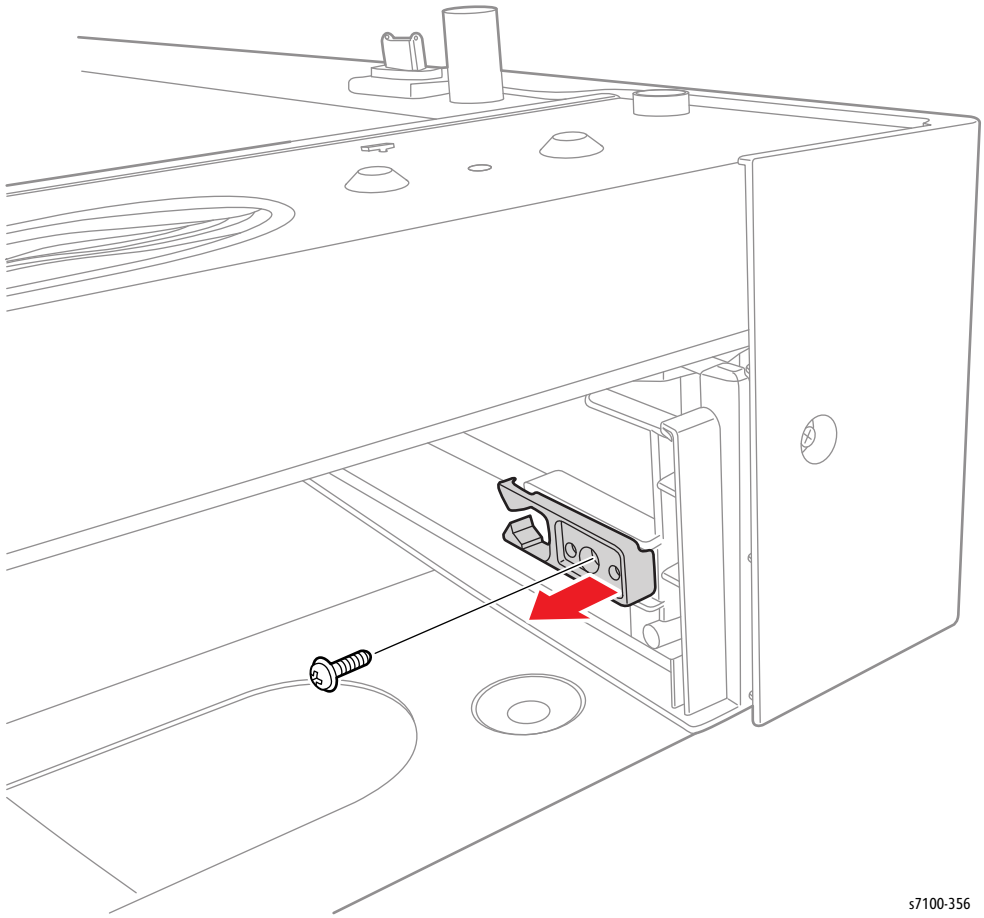
1. Remove Tray 2/ 3/ 4.
2. Remove the Tray Cover (REP 15.9 Tray Cover on page 4-269).
3. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
4. Remove the Turn Chute Assembly (REP 15.10 Turn Chute Assembly on page 4-270).
5. Remove 4 screws (silver, tapped, 8 mm) that secure the 550 Left Tray Guide Assembly.
6. While releasing the hook of Left Tray Guide Assembly, slide the Left Tray Guide Assembly temporarily to the front, release the 7 hooks from the hole to incline the Left Tray Guide Assembly until it is horizontal and remove it.



REP 15.7 Tray Feeder Stopper

PL 15.1.10

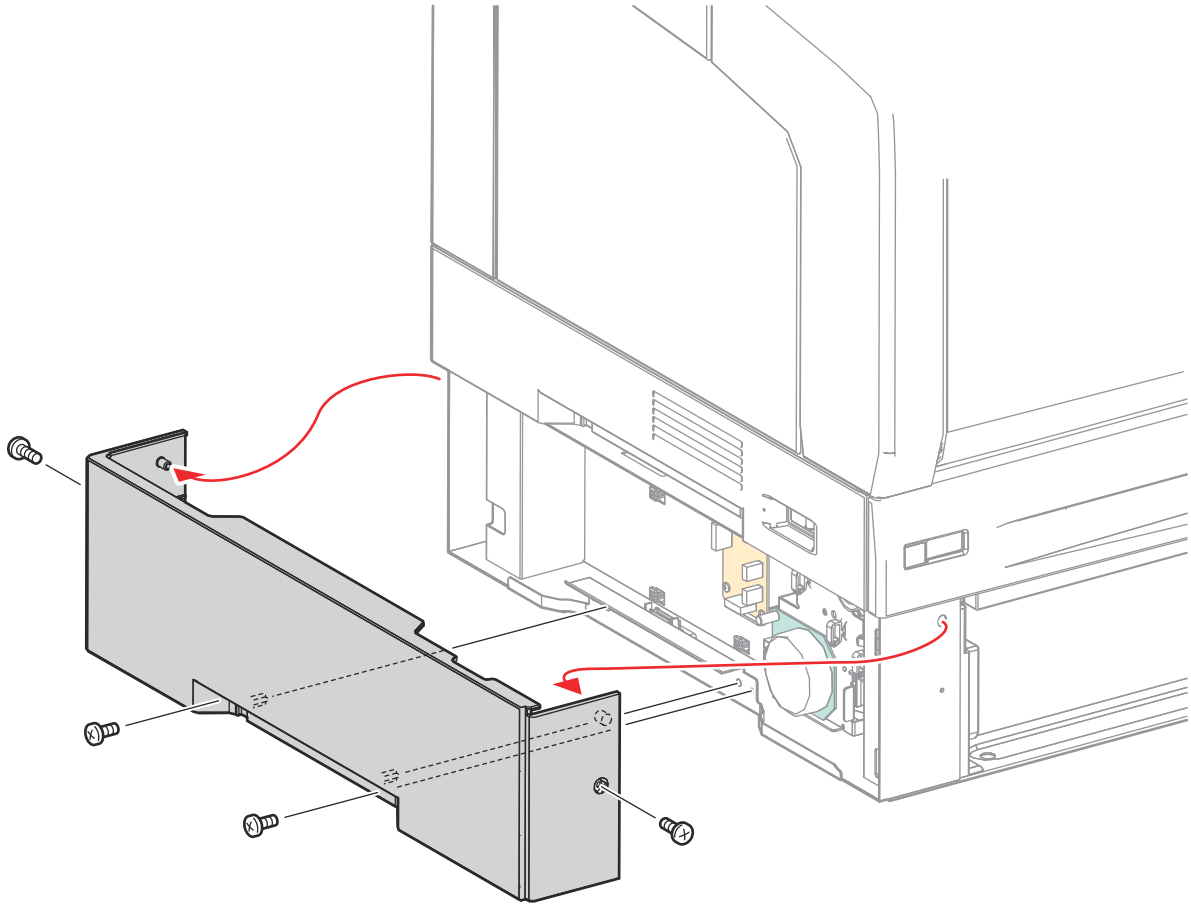
1. Remove the Paper Tray.
2. Remove the Tray Cover (REP 15.9 Tray Cover on page 4-269).
3. Remove one screw that secures the Tray Feeder Cover.
4. Remove the Tray Feeder Cover.



REP 15.8 550 Left Feeder Cover

PL 15.1.11

1. Remove 4 screws (silver, 6 mm) that secure the Left Feeder Cover.
2. Free the boss at the front of the Left Feeder Cover from the boss hole, then free the boss at the rear from the boss hole and remove the Left Feeder Cover.



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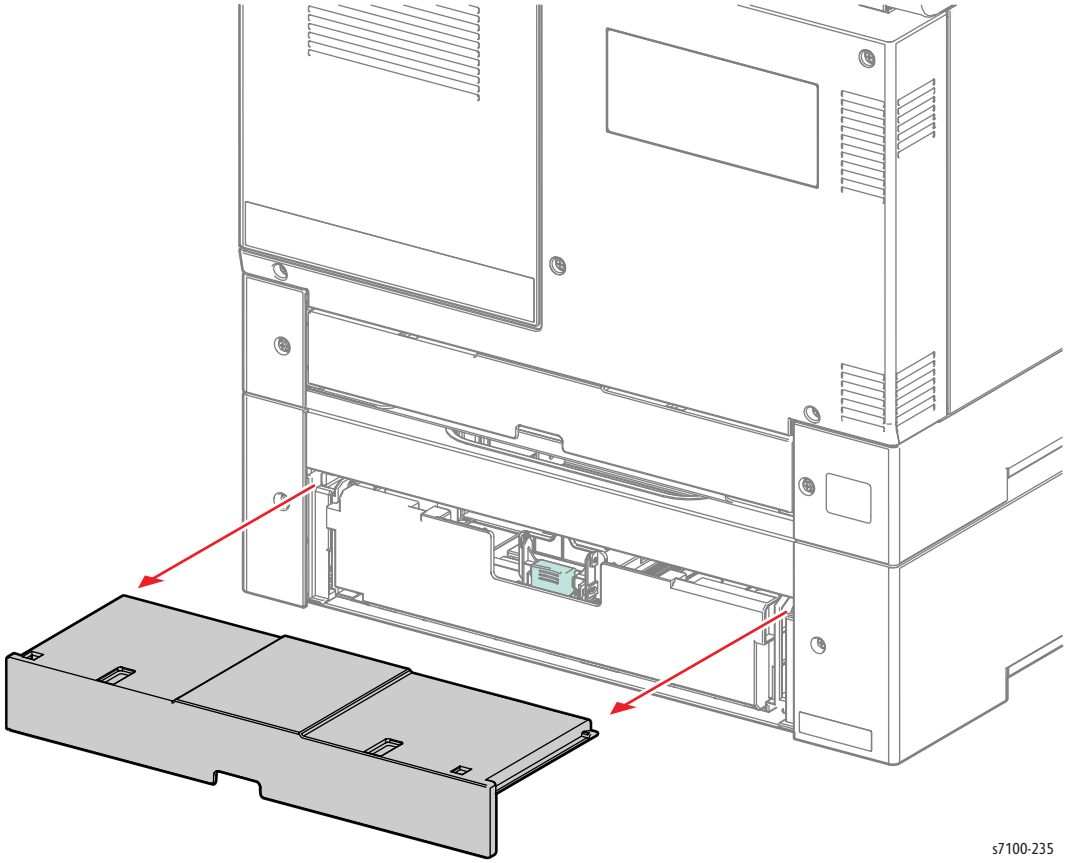
REP 15.9 Tray Cover

PL 15.1.13

1. From the rear side of the printer, pull out the Tray Cover.

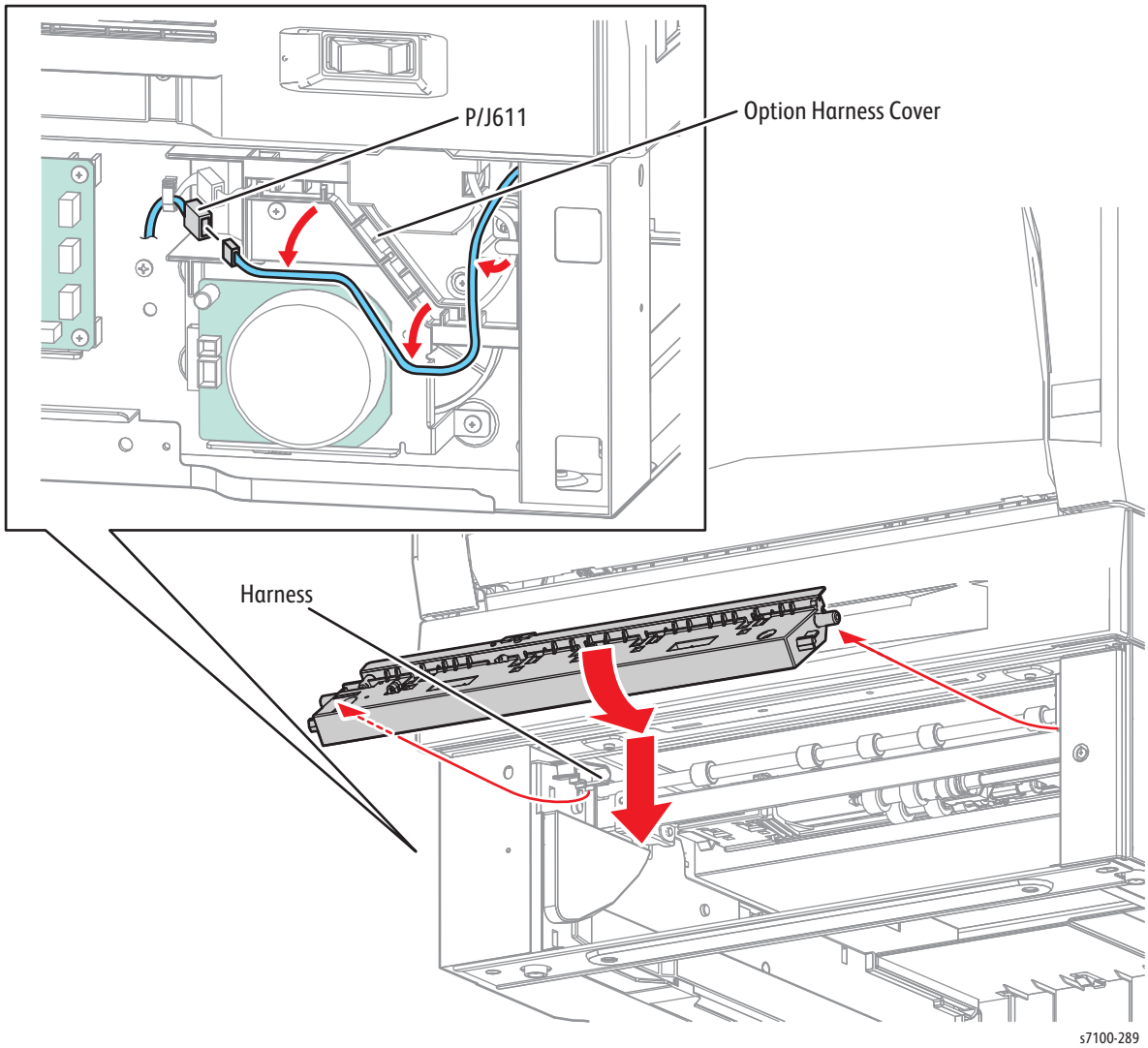
   Note: If there is a catch while pulling out the Tray Cover, slightly lift the Cover while pulling it out.



REP 15.10 Turn Chute Assembly

PL 15.1.15

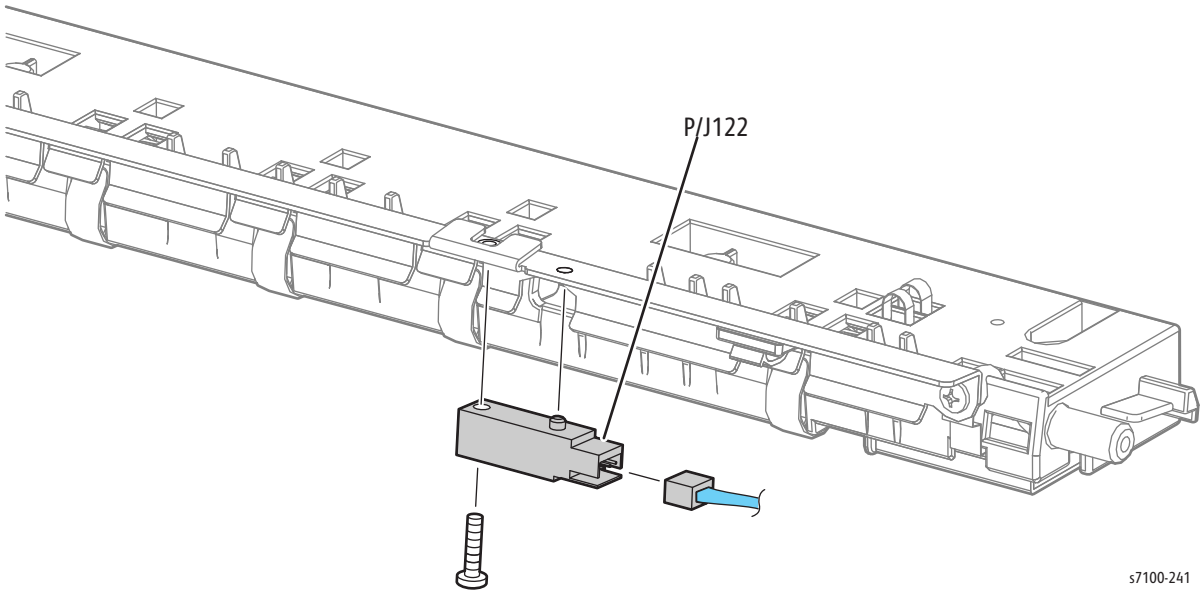
1. Remove Tray 2/ 3/ 4.
2. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
3. Disconnect the wiring harness connector P/J611 on the harness that is connected to the Turn Chute Assembly.
4. Remove the harness that is connected to the Turn Chute Assembly from the Option Harness Cover (PL 15.2.29).
5. Press the front of the Turn Chute Assembly down and toward the rear while rotating the Turn Chute Assembly downwards.
6. Pull the Turn Chute Assembly temporarily to the front and remove it from the bottom.
7. Remove the harness that is connected to the Turn Chute Assembly from the corner hole.



REP 15.11 Paper Jam Sensor

PL 15.2.3

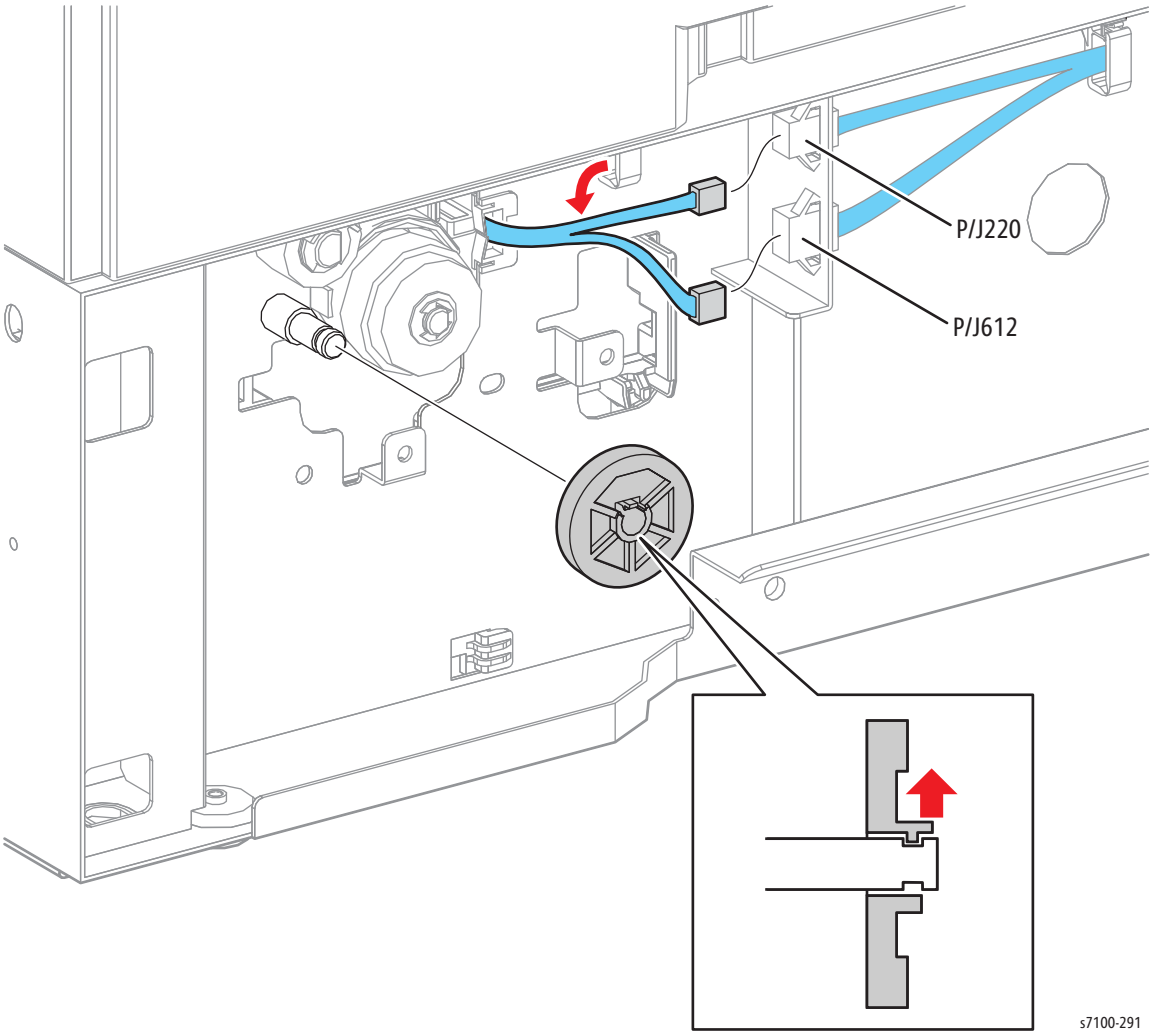
1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Remove the Turn Chute Assembly (REP 15.10 Turn Chute Assembly on page 4-270).
3. Remove one screw (silver, 12 mm) that secures the Paper Jam Sensor and remove the Sensor.
4. Disconnect the wiring harness connector P/J122 that is connected to the Paper Jam Sensor to remove the Sensor.



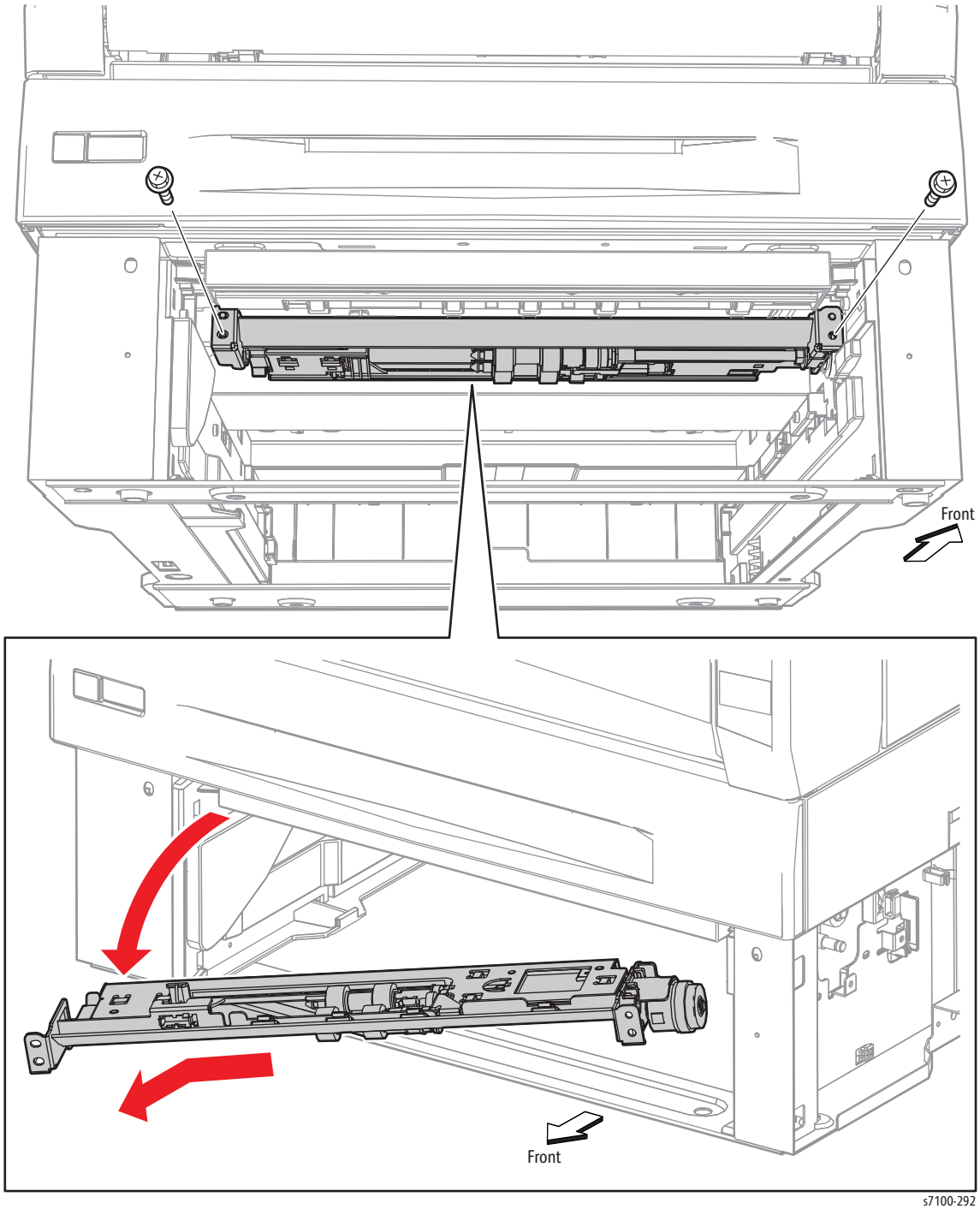
REP 15.12 Feeder Sub Assembly

PL 15.2.7

1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Remove the 550 Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
3. Remove the Protect Cover Assembly (REP 15.5 Protect Cover Assembly on page 4-265).
4. Release the hook that secures the Right Idle Gear 28 (PL 15.2.23) and pull out the Gear to remove.
5. Disconnect the 2 wiring harness connectors P/J220 and P/J612 on the harness that is connected to the Feeder Sub Assembly.
6. Release the Clamp to remove the wiring harness that is connected to the Feeder Sub Assembly.



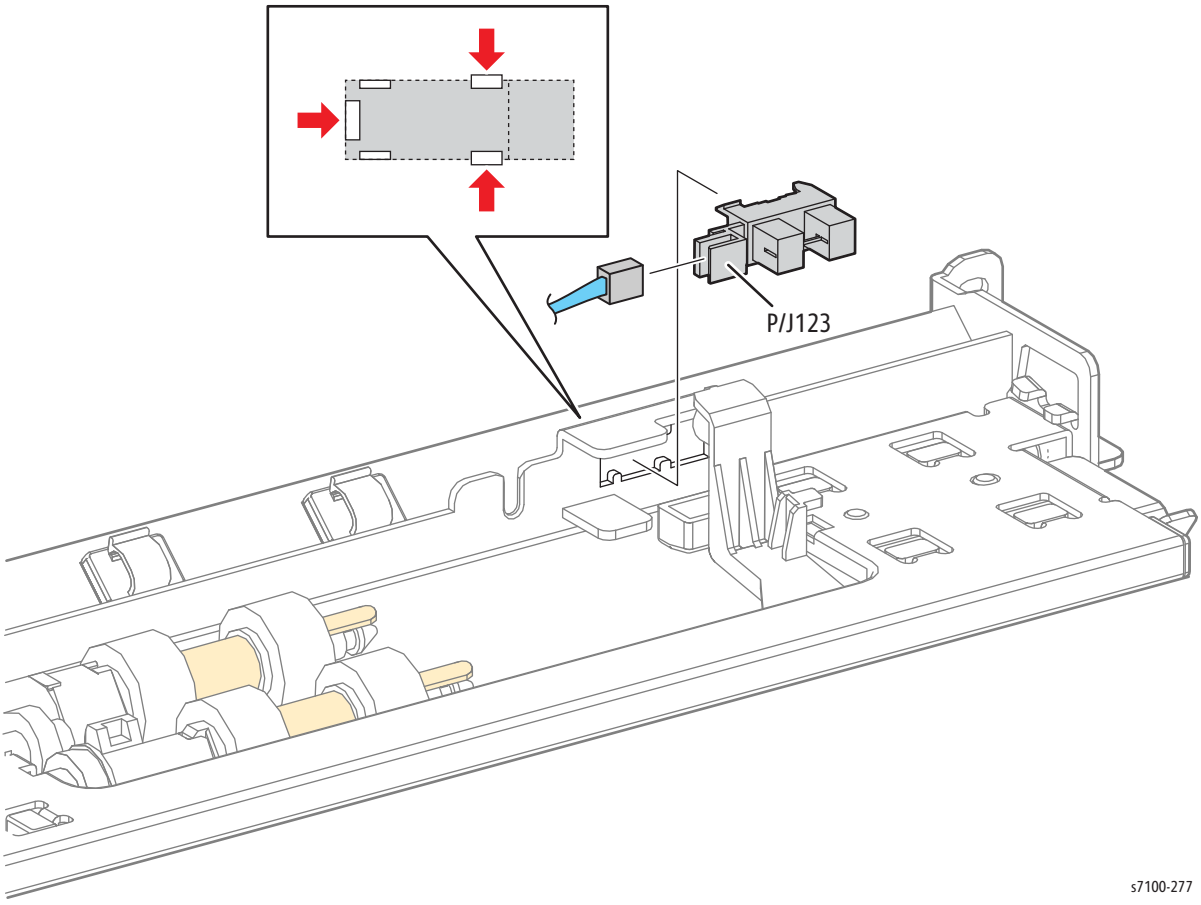
7. Remove 2 screw (silver, collared, 10 mm) that secure the Feeder Sub Assembly.
8. Shift the Feeder Sub Assembly temporarily to the front, free the 2 protrusions from the hole, lower the left side of the Feeder Sub Assembly and remove it towards you.



REP 15.13 Feeder No Paper Sensor

PL 15.2.8

1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Remove the 550 Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
3. Remove the Protect Cover Assembly (REP 15.5 Protect Cover Assembly on page 4-265).
4. Remove the Feeder Sub Assembly (REP 15.12 Feeder Sub Assembly on page 4-272).
5. Disconnect the wiring harness connector P/J123 that is connected to the Feeder No Paper Sensor.
6. Release the 3 hooks that secure the Feeder No Paper Sensor to the Feeder Sub Assembly and remove the Sensor.

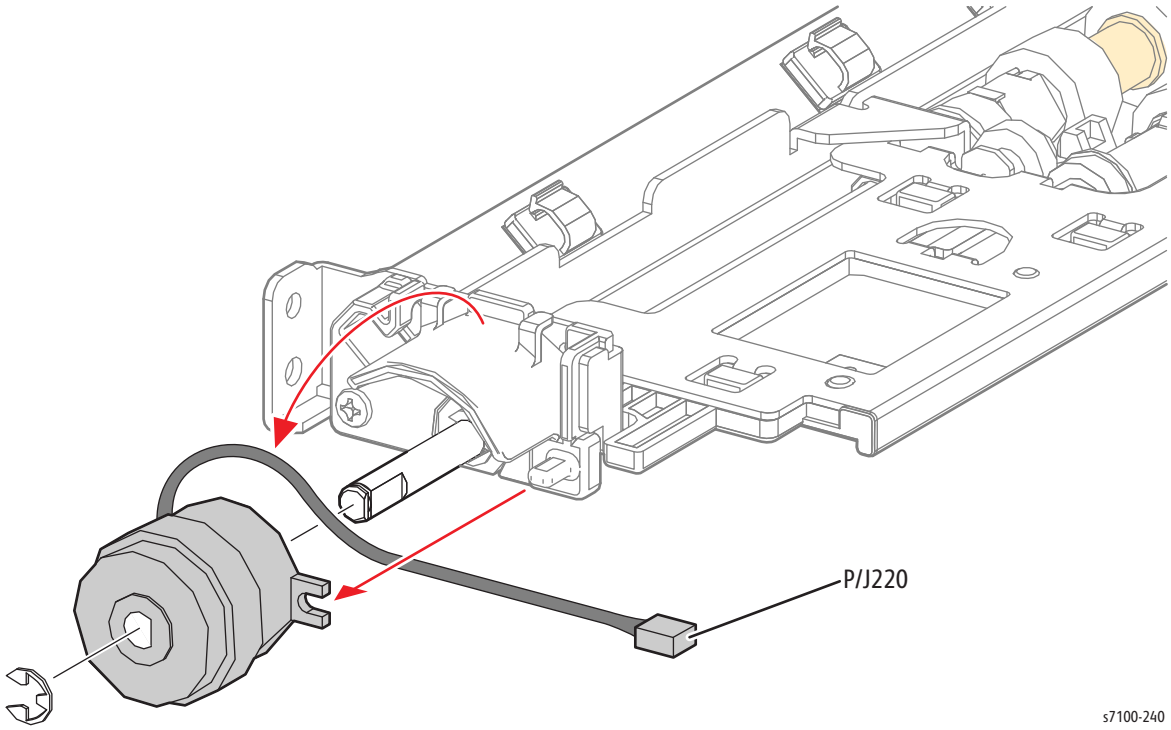


REP 15.14 Feed Roller Clutch

PL 15.2.13

1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Remove the 550 Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
3. Remove the Protect Cover Assembly (REP 15.5 Protect Cover Assembly on page 4-265).
4. Remove the Feeder Sub Assembly (REP 15.12 Feeder Sub Assembly on page 4-272).

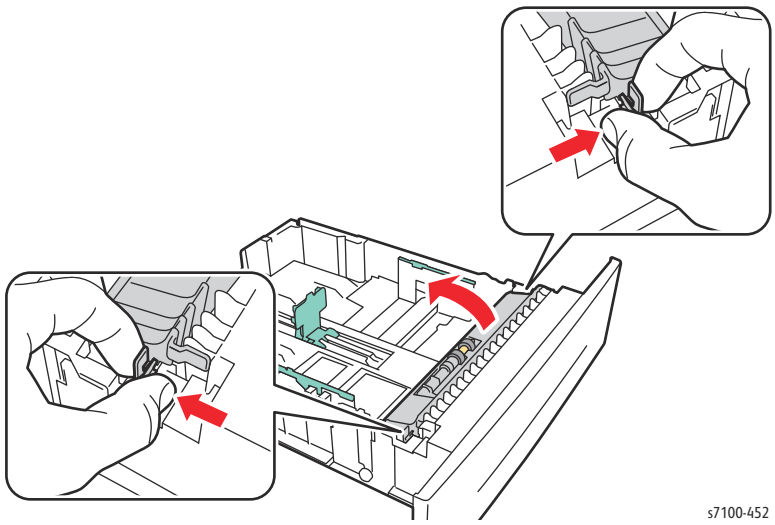
   Note: P/J220 should have been disconnected during the Feeder Sub Assembly removal procedure.
5. Remove the E-ring that secures the Feed Roller Clutch to the Feed Shaft (PL 15.2.18).
6. While freeing the depressed part of the Feed Roller Clutch from the protrusion of the Top Retard Holder (PL 15.2.11), remove the Feed Roller Clutch by pulling it out from the Feed Shaft.



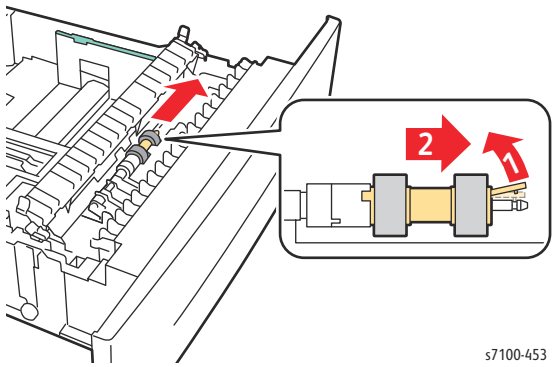
REP 15.15 Tray 2/ 3/ 4 Feed Roller

PL 15.2.99/ PL 15.3.12

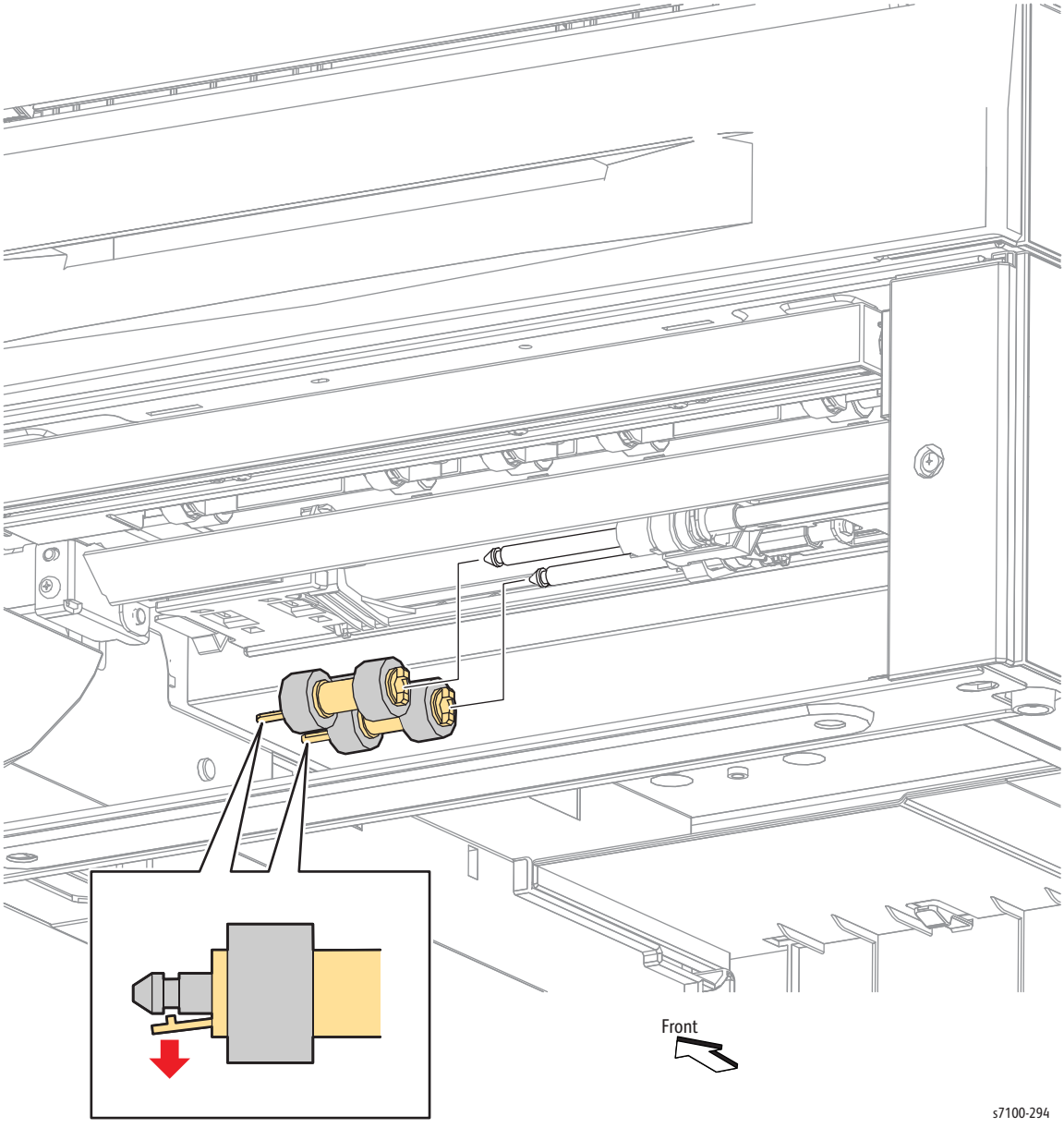
1. Remove Tray 2/ 3/ 4.
2. Press the left and right Latches to release the left and right tabs and open the Retard Chute.



3. Release the hook that secures the Feed Roller and pull the Roller out to remove.



4. Release the hook that secures the front Feed Roller to the Feed Shaft (PL 15.2.18), and pull out the front Feed Roller to remove.
5. Release the hook that secures the rear Feed Roller to the Shaft, and pull out the rear Feed Roller to remove.

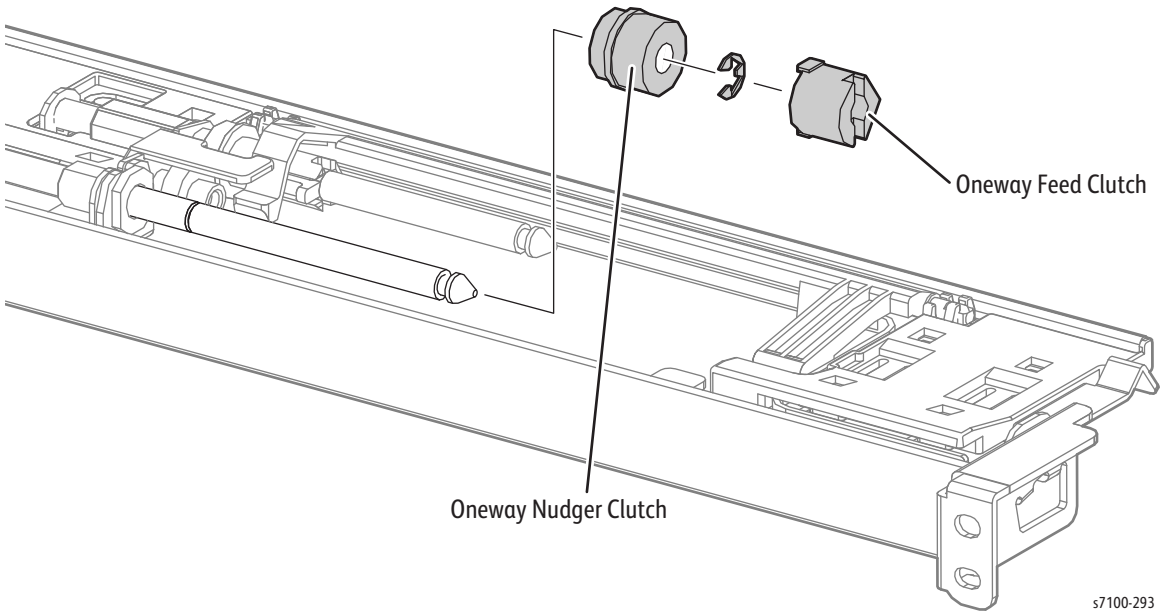


REP 15.16 Oneway Feed Clutch/ Oneway Nudger Clutch

PL 15.2.16/ PL 15.2.17

Note: If only the Oneway Feed Clutch is to be removed, skip steps 1 to 4 and start from step 5 - Remove the Feed Roller Assembly (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).

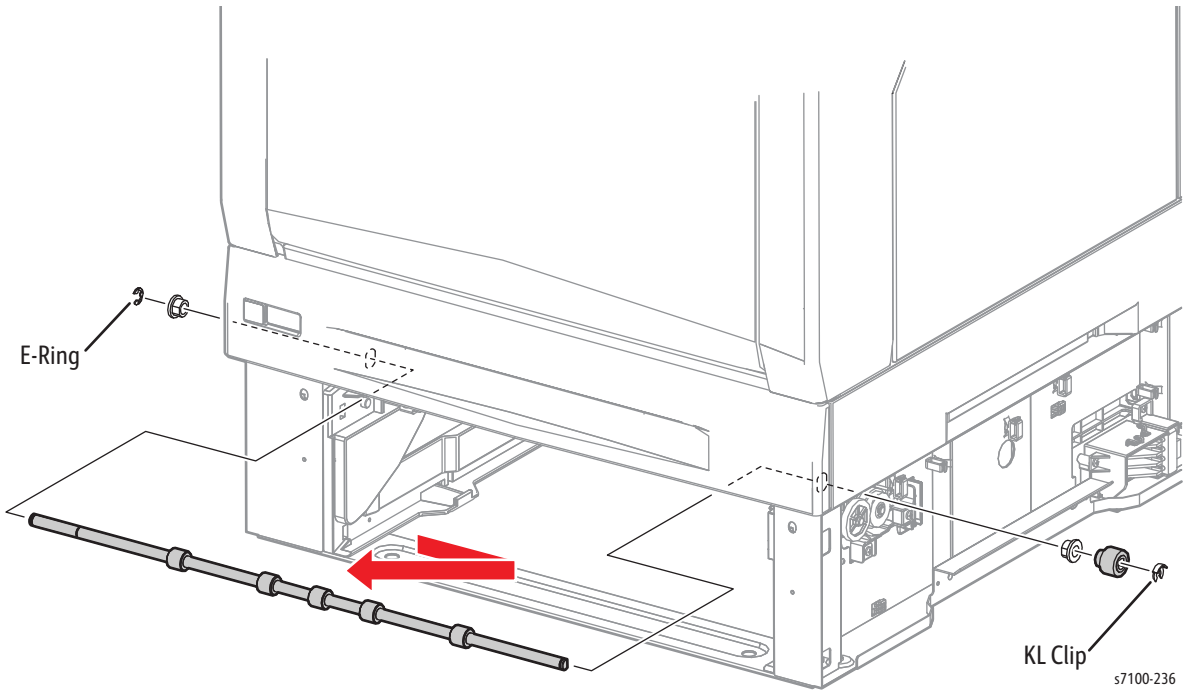
1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Remove the 550 Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
3. Remove the Protect Cover Assembly (REP 15.5 Protect Cover Assembly on page 4-265).
4. Remove the Feeder Sub Assembly (REP 15.12 Feeder Sub Assembly on page 4-272).
5. Remove the Feed Roller Assembly (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).
6. Slide the Oneway Feed Clutch out to remove.
7. Remove the E-Clip that secures the Oneway Nudger Clutch.
8. Remove the Oneway Nudger Clutch.



REP 15.17 Turn Roller Assembly

PL 15.2.24

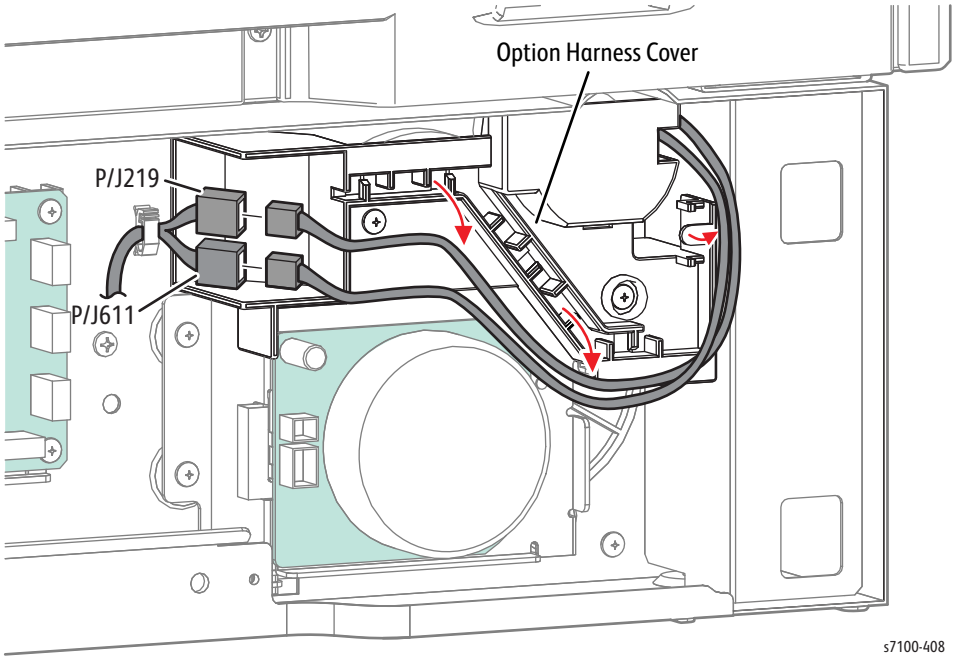
1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Remove the 550 Right Feeder Cover (REP 15.2 550 Right Feeder Cover on page 4-262).
3. Remove the Turn Chute Assembly (REP 15.10 Turn Chute Assembly on page 4-270).
4. Remove the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280).
5. Remove the KL Clip that secures the Turn Roller Assembly to the Turn Gear Assembly 17 (PL 15.2.22), and pull out the Turn Gear Assembly to remove.
6. Remove the E-ring that secures the left Bearing.
7. Pull out and remove the left and right Bearings from the Turn Roller Assembly.
8. Slide the Turn Roller Assembly temporarily to the right, free the left tip of the Turn Roller Assembly from the hole of the Bearing, and then pull it to the left and forward to remove it.



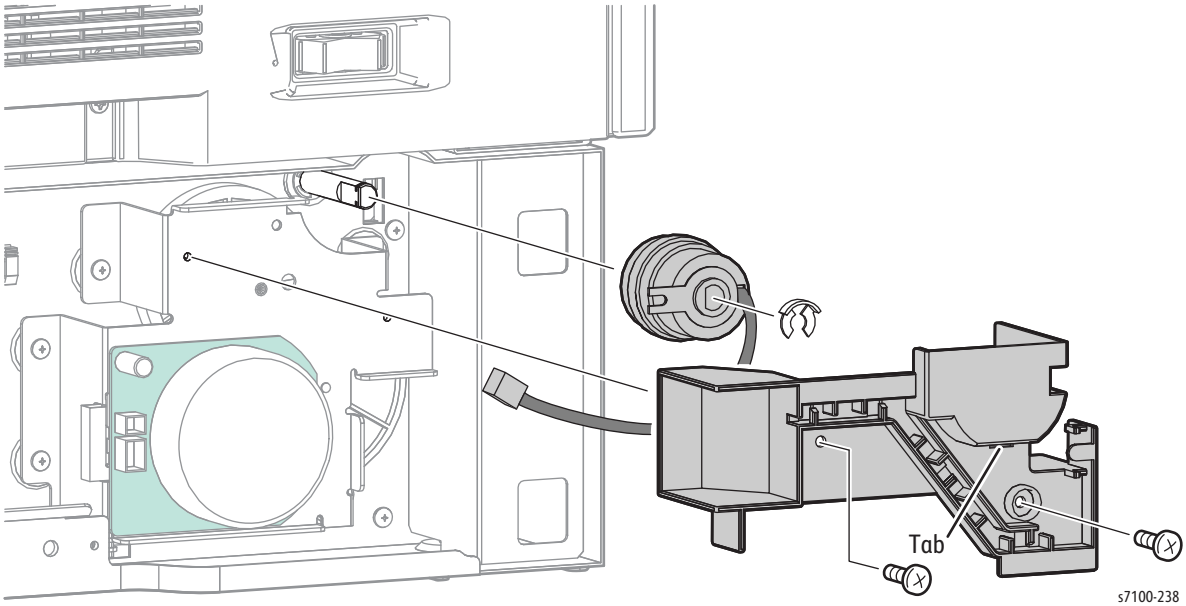
REP 15.18 Turn Roller Clutch

PL 15.2.25

1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Disconnect the 2 wiring harness connectors P/J219 and P/J611.
3. Remove the 2 wiring harnesses that are secured to the Option Harness Cover (PL 15.2.29).



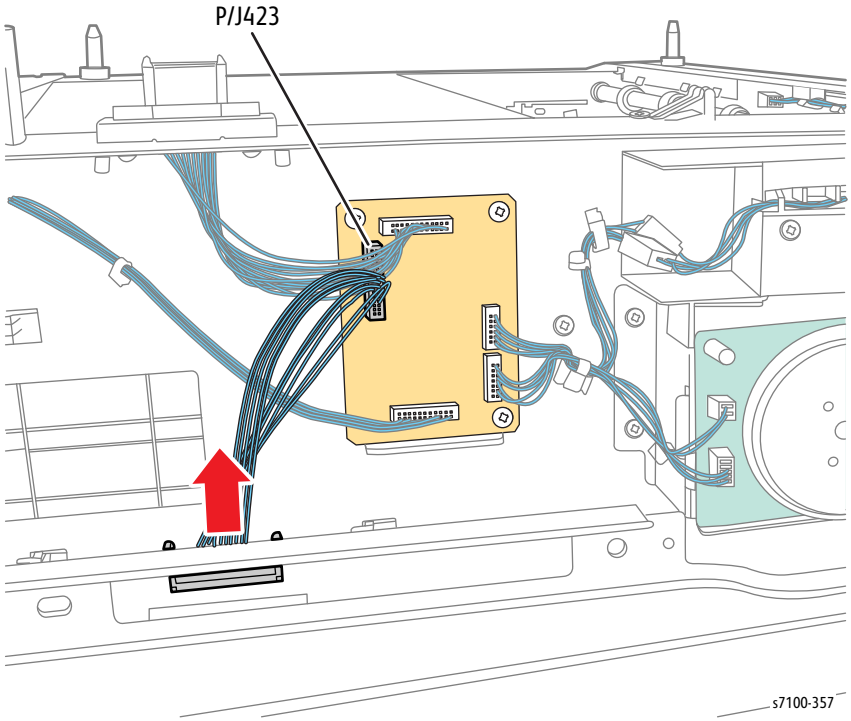
4. Remove 2 screws (silver, 6 mm) that secure the Option Harness Cover.
5. Release the tab on the back of the Option Harness Cover and remove the Cover.
6. Remove the KL Clip that secures the Turn Roller Clutch to the Turn Roller Assembly (PL 15.2.24).
7. While freeing the depressed part of the Turn Roller Clutch from the protrusion of the Option Drive Assembly (PL 15.2.28), remove the Turn Roller Clutch by pulling it out from the Turn Roller Assembly.



REP 15.19 Option Feeder 2 Relay Harness Assembly

PL 15.2.26

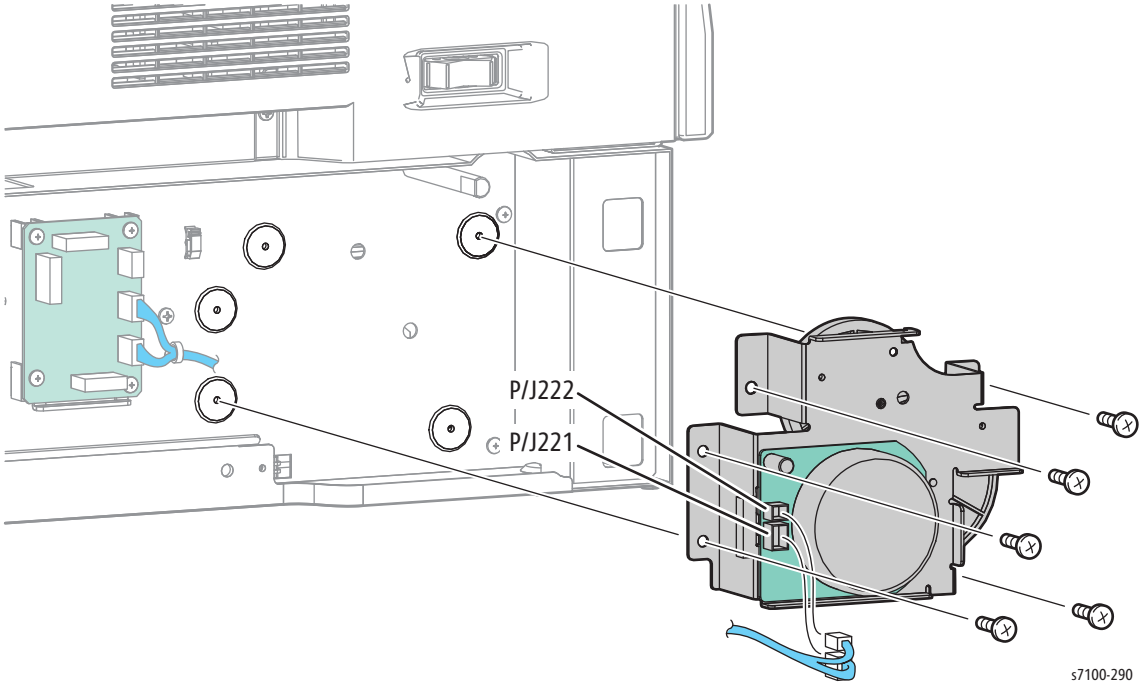
1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Disconnect the wiring harness connector P/J423 from the Feeder PWB (PL 15.2.33).
3. Release and remove the Feeder 2 Relay Harness Assembly from the 550-Sheet Feeder Frame.



REP 15.20 Option Drive Assembly

PL 15.2.28

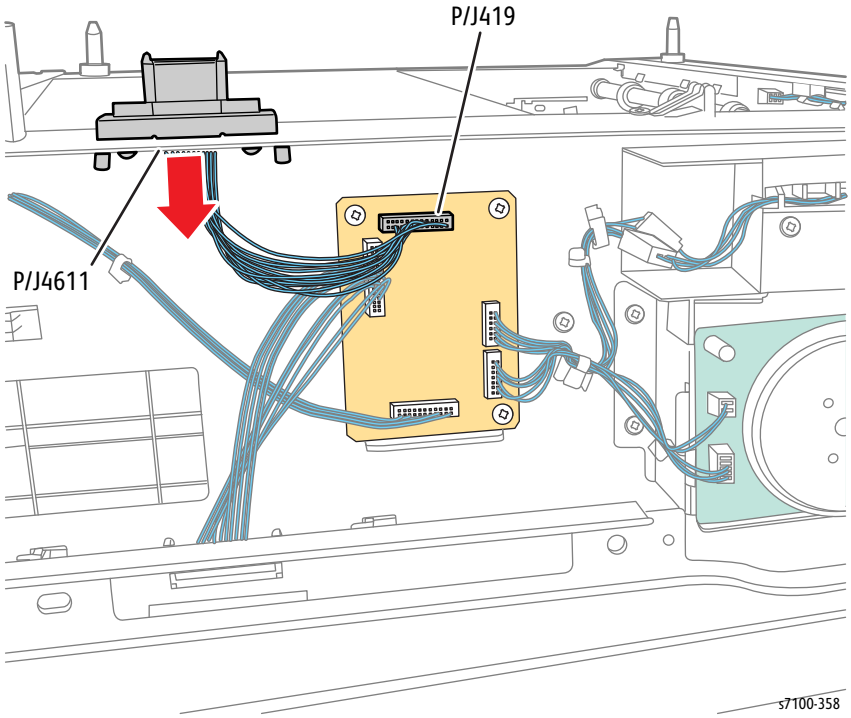
1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Remove the Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280).
3. Disconnect the 2 wiring harness connectors P/J221 and P/J222 that are connected to the Option Drive Assembly.
4. Remove 5 screws (silver, 6 mm) that secure the Option Drive Assembly to the 550-Sheet Feeder.



REP 15.21 Option Feeder 1 Relay Harness Assembly

PL 15.2.30

1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Disconnect the wiring harness connector P/J419 from the Feeder PWB (PL 15.2.33).
3. Release and remove the Feeder 1 Relay Harness Assembly connector P/J4611 from the 550-Sheet Feeder Frame.

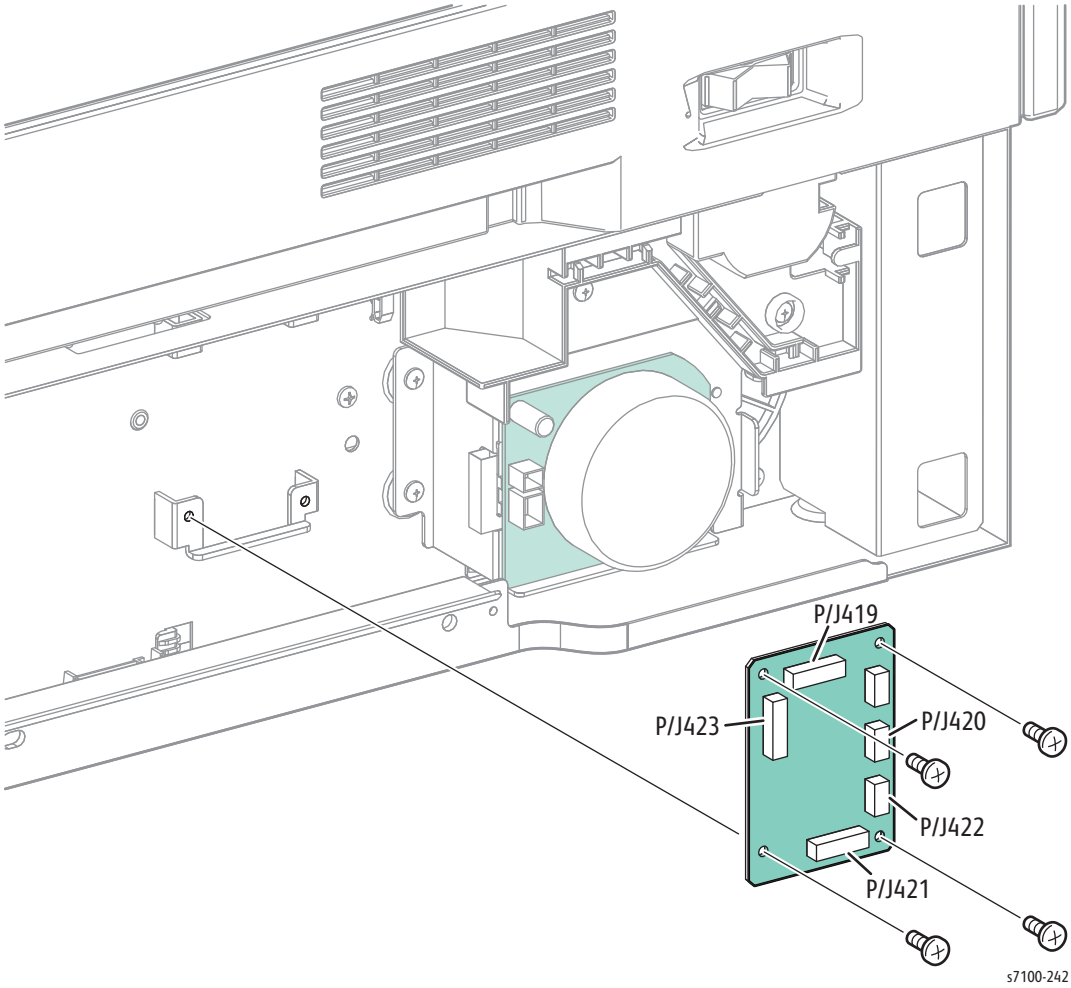


REP 15.22 Feeder PWB

PL 15.2.33

CAUTION: PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

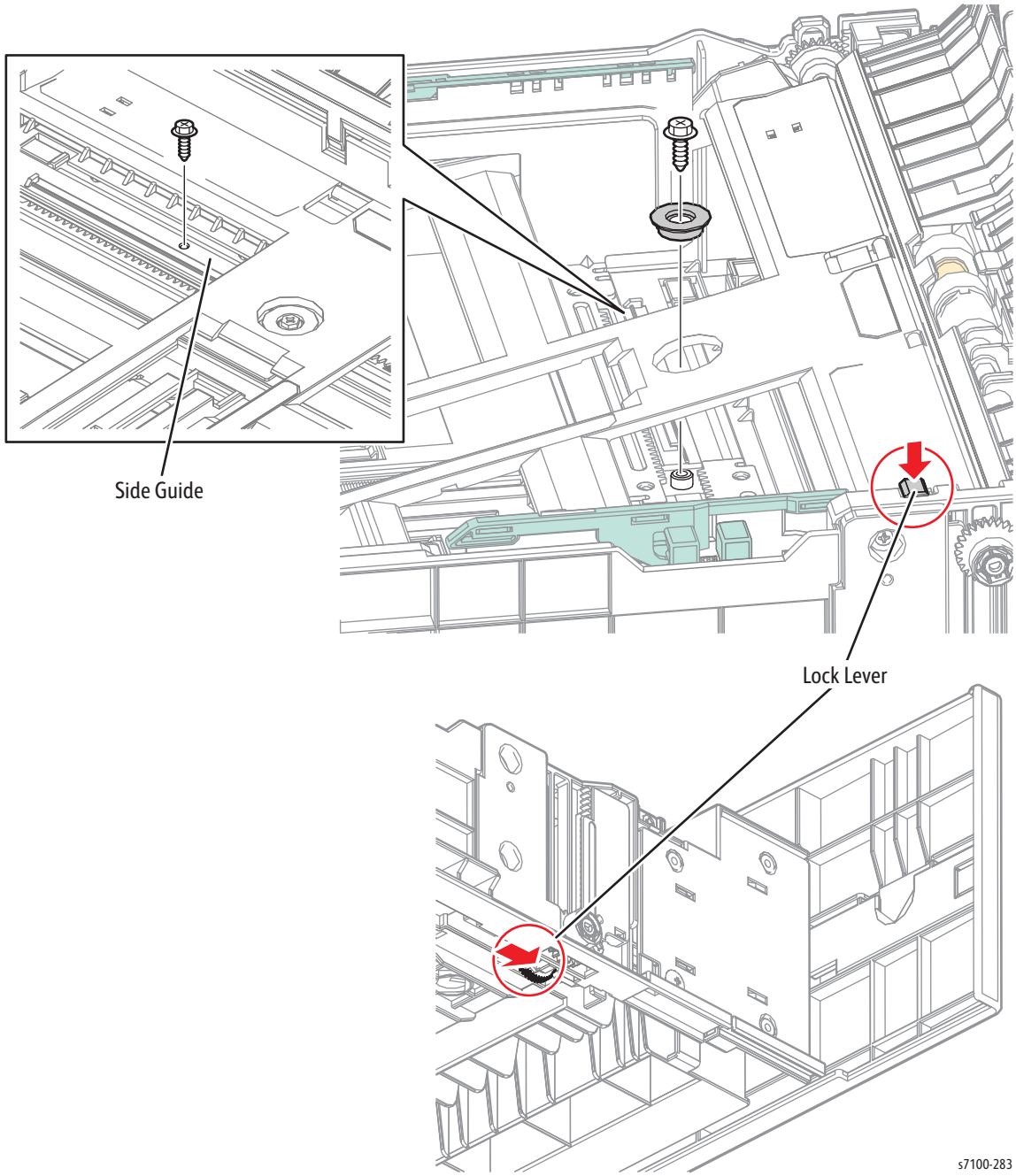
1. Remove the 550 Left Feeder Cover (REP 15.8 550 Left Feeder Cover on page 4-268).
2. Disconnect 5 wiring harness connectors (P/J419, P/J420, P/J421, P/J422, and P/J423) that are connected to the Feeder PWB.
3. Remove 4 screws (silver, 6 mm) that secure the Feeder PWB and remove the Feeder PWB.



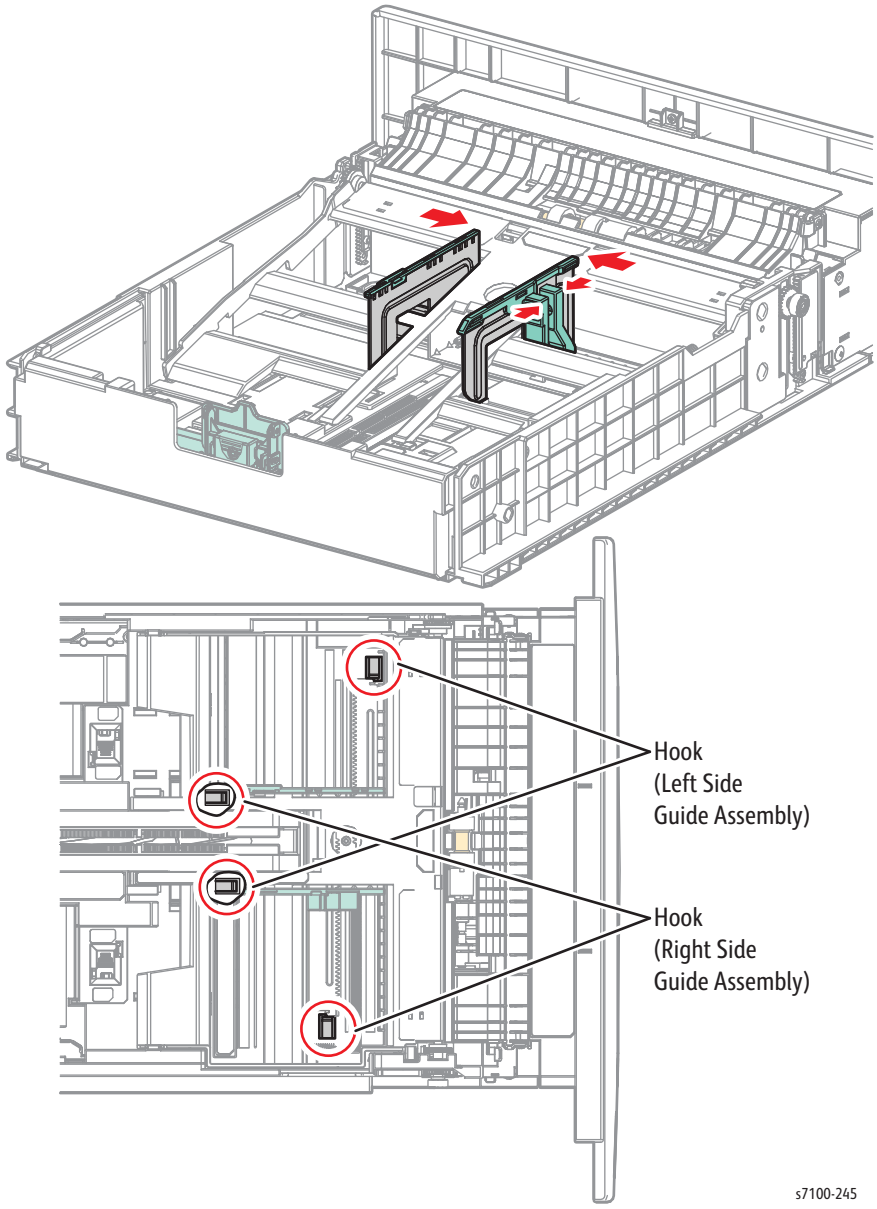
REP 15.23 Right Side Guide/ Left Side Guide

PL 15.3.1/ PL 15.3.3

1. Remove Tray 2/ 3/ 4.
2. Release the 2 Locks and put the Bottom Plate Assembly (PL 15.3.4) into a raised position.
3. Remove one screw (silver, collared, tapped, 8 mm) that secures the Pinion Gear (PL 15.3.2) and remove the Pinion Gear.
4. Remove the screw that restricts the movement of the Side Guide within the inner side.



5. Pinch the knob of the Right Side Guide Assembly and move it towards the inner side.
6. While pressing down the 2 hooks that attach the Right Side Guide Assembly to the Base Housing (PL 15.3.47), free the3 tabs of the Right Side Guide Assembly from the notch of the Base Housing and remove the Right Side Guide Assembly.
7. Move the Left Side Guide Assembly towards the inner side.
8. While pressing down the 2 hooks that attach the Left Side Guide Assembly to the Base Housing, free the 3 tabs of the Left Side Guide Assembly from the notch of the Base Housing and remove the Left Side Guide Assembly.

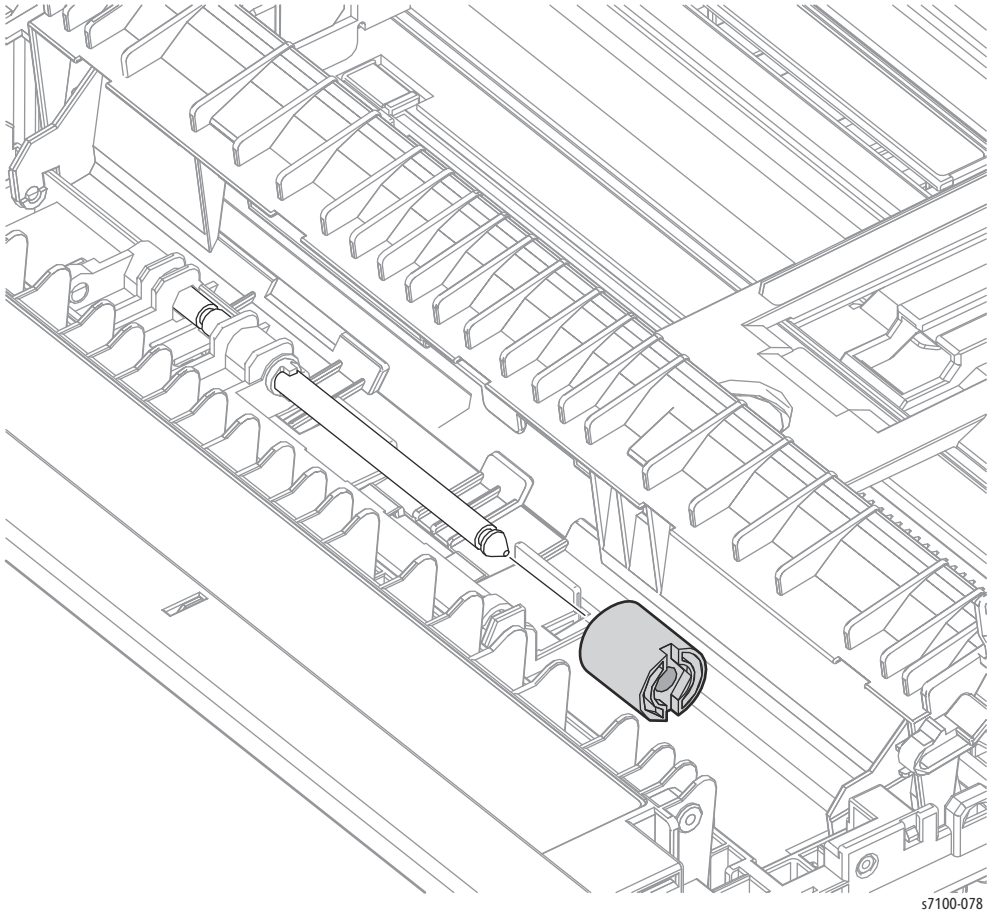


Replacement Note: When installing the Pinion Gear, make sure that both Right Side Guide Assembly and Left Side Guide Assembly have been moved towards the outer side until they could go no further before performing the installation.

REP 15.24 Friction Clutch

PL 15.3.13

1. Remove Tray 2/ 3/ 4.
2. Remove the Feed Roller Assembly (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276).
3. Pull out and remove the Friction Clutch from the shaft of the Retard Holder (PL 15.3.15).

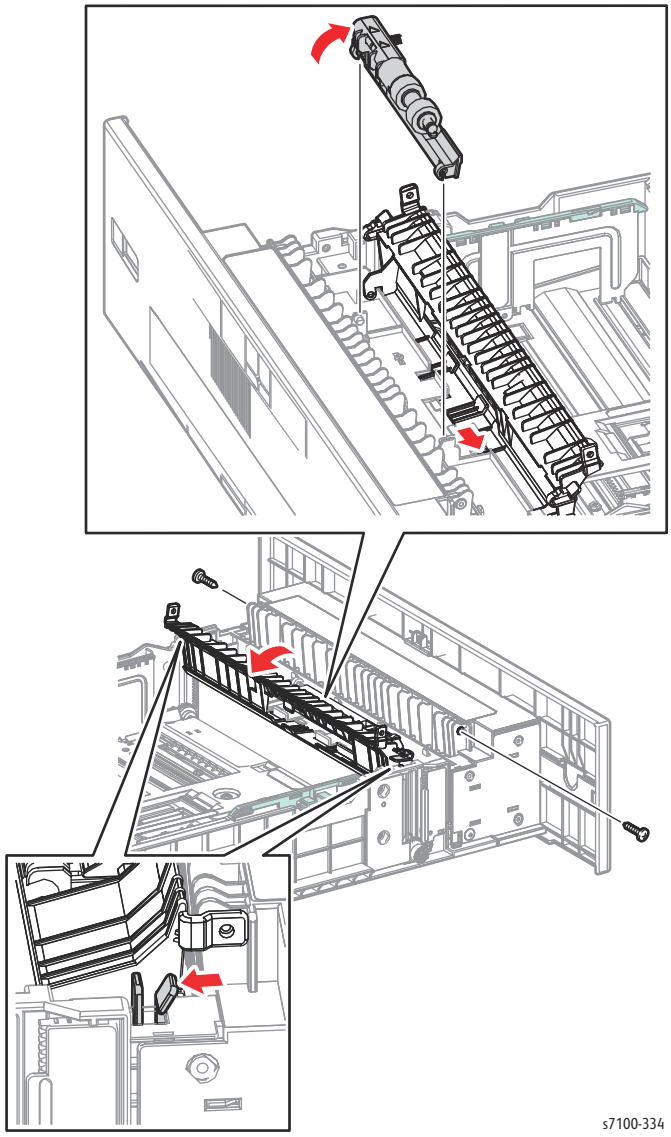


REP 15.25 Retard Holder Assembly

PL 15.3.15

1. Remove Tray 2/ 3/ 4.
2. Remove 2 screws (silver, tapped, 8 mm) that secure the Retard Chute (PL 15.3.21).
3. Release the left and right hook and open the Retard Chute.

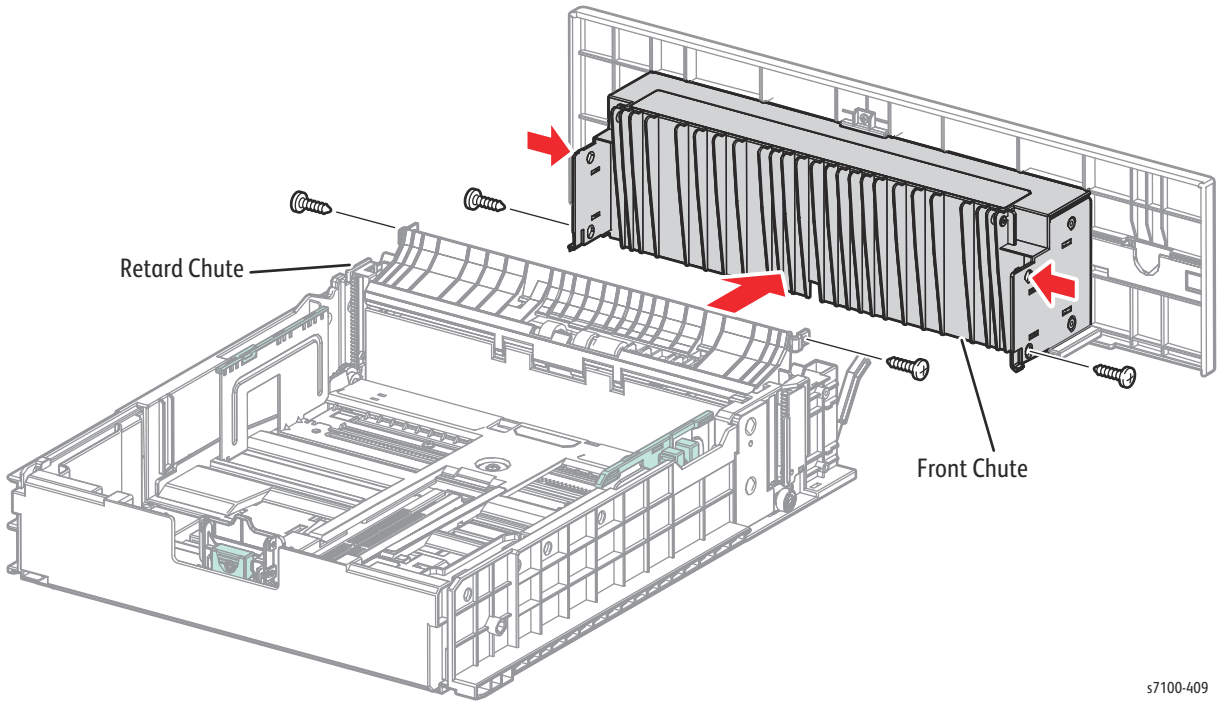
   Note: When performing the next step, do not drop or lose the Retard Spring (PL 15.3.16) that is attached to the Retard Holder Assembly.
4. Slightly release the hook on the right side of the Retard Holder Assembly outward and rotate the Retard Holder Assembly 90˚.
5. Open the hook on the right side of the Retard Holder Assembly outward and free the hole of the Retard Holder Assembly from the boss that is attached to the hook to remove it.



REP 15.26 Option Tray Handle

PL 15.3.23

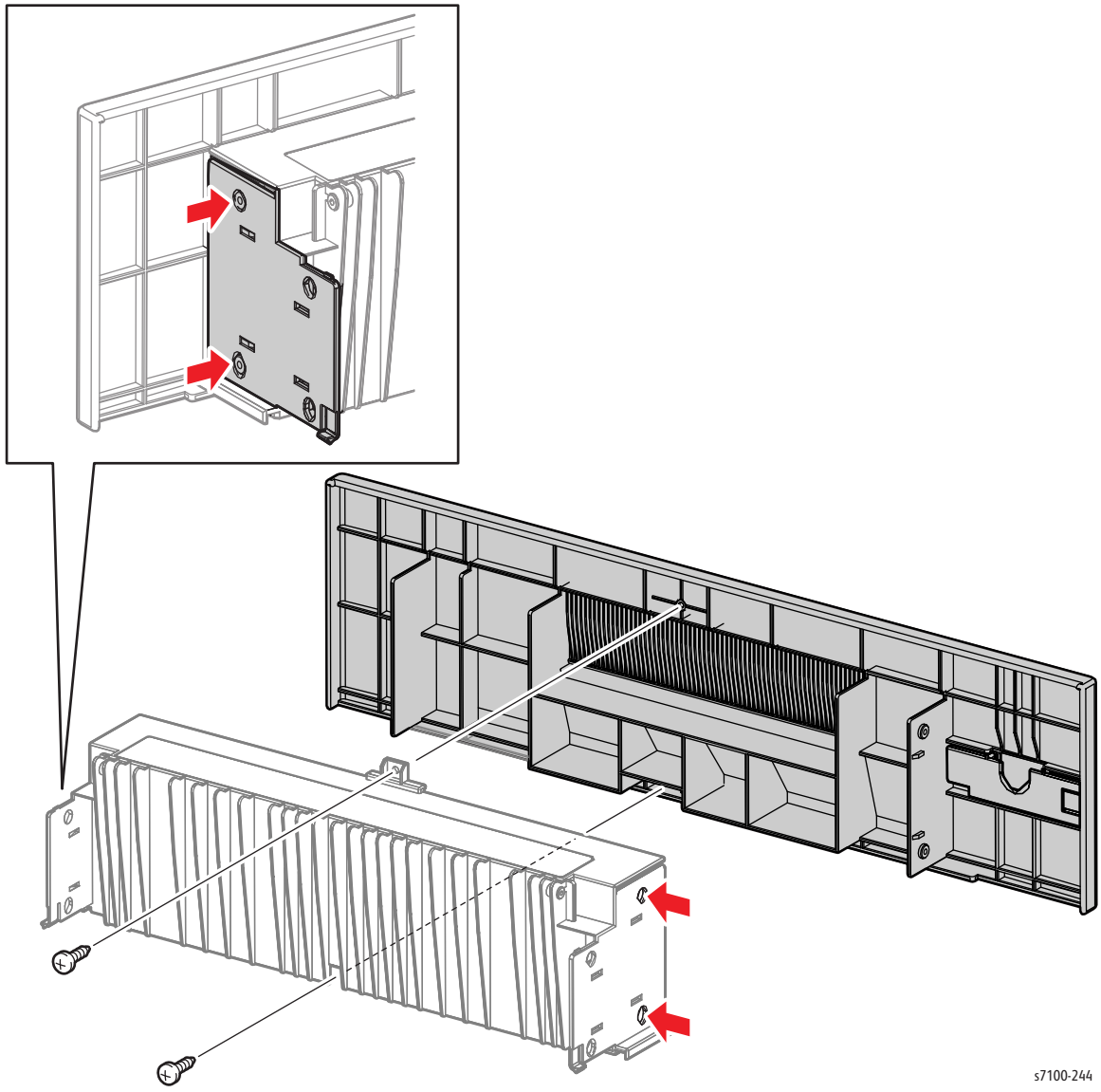
1. Remove Tray 2/ 3/ 4.
2. Remove 2 screws (silver, tapped, 8 mm) that secure the Retard Chute (PL 15.3.21).
3. Remove 2 screws (silver, tapper, 8 mm) that secure the Front Chute (PL 15.3.22).
4. Use a screwdriver to release the locks while pushing in the bosses on the right and left sides of the Front Chute.
5. Remove the Front Chute from the Base Housing (PL 15.3.47).



6. Remove 2 screws (silver, tapped, 8 mm) that secure the Tray Handle.

   Note: When performing the following step, be careful not to drop the Paper Size Stopper (PL 15.3.26) and the Paper Size Card (PL 15.3.25).

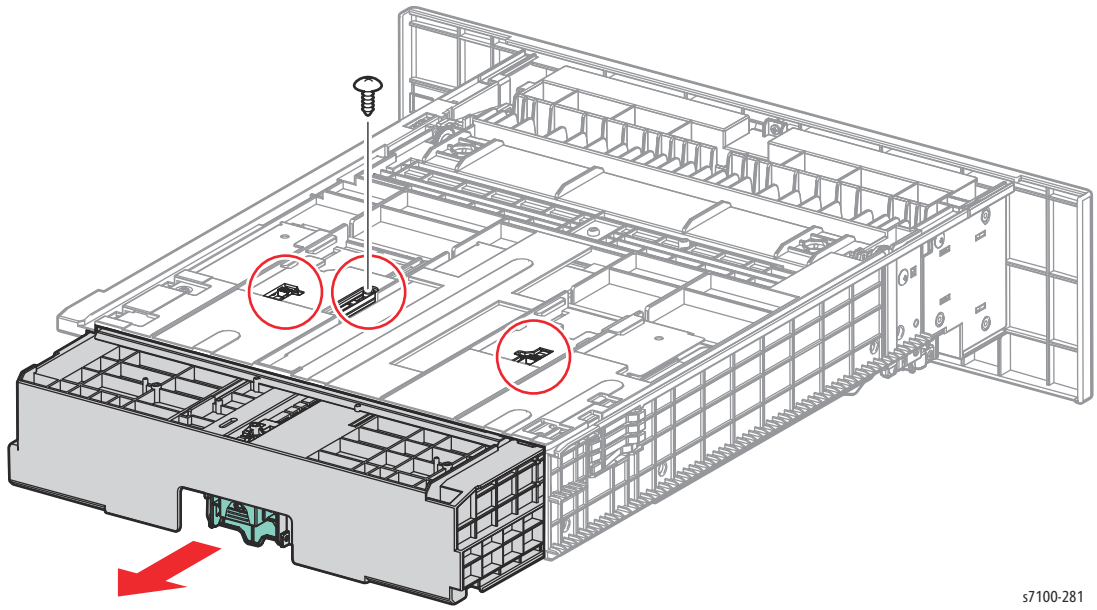
7. Use a screwdriver to release the locks while pushing in the 4 bosses on the right and lefts sides of the Front Chute and remove the Tray Handle.



REP 15.27 Exit Housing Assembly

PL 15.3.28

1. Remove Tray 2/ 3/ 4.
2. Turn the Tray over and remove one screw (silver, tapped, 8 mm) that secures the Exit Housing Assembly.
3. Free the groove of the Exit Housing Assembly from the screw hole and the Lock Lever protrusions of the Tray while pulling the Exit Housing Assembly out to remove.



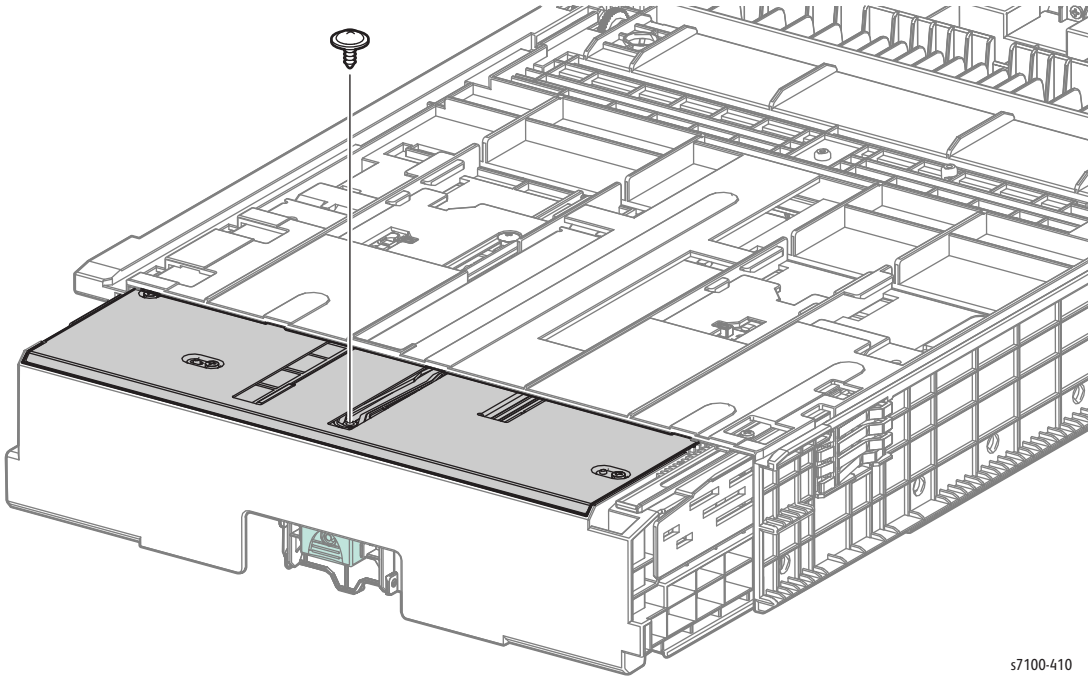
REP 15.28 End Guide Assembly

PL 15.3.31

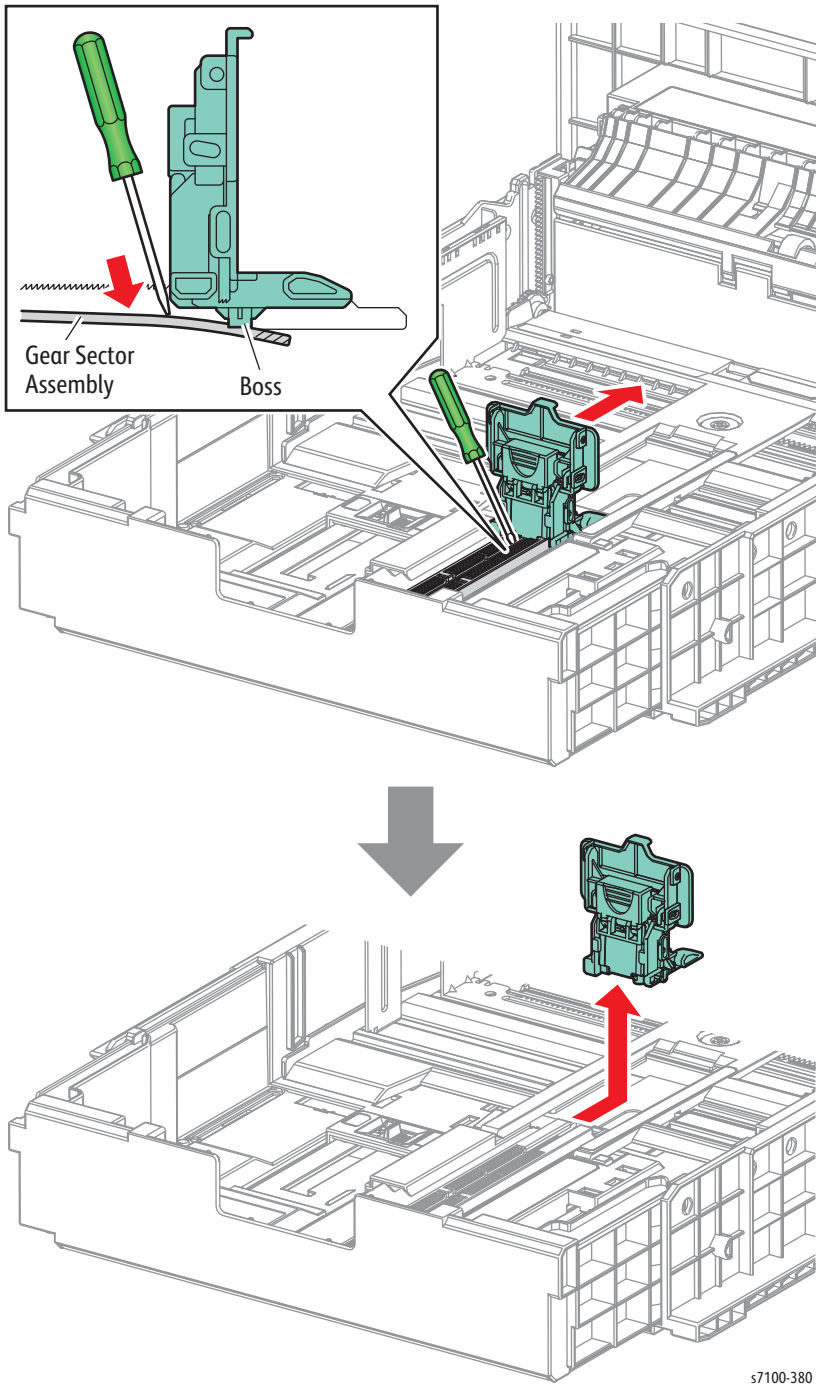
1. Remove Tray 2.

   Note: If the paper Tray is loaded with A3 paper, steps 2 and 3 are not required.

2. Release the A4 Exit Locks (PL 15.3.32) and shift the Sub Housing Assembly (PL 15.3.28) to the rear.
3. Pinch and hold the lever of the 550 End Guide Assembly (PL 15.3.31) and align the End Guide Assembly to the position for A3 Paper Size.
4. Turn the Tray upside down and remove one screw (silver, tapped, 8 mm) that secures the End Guide Assembly.



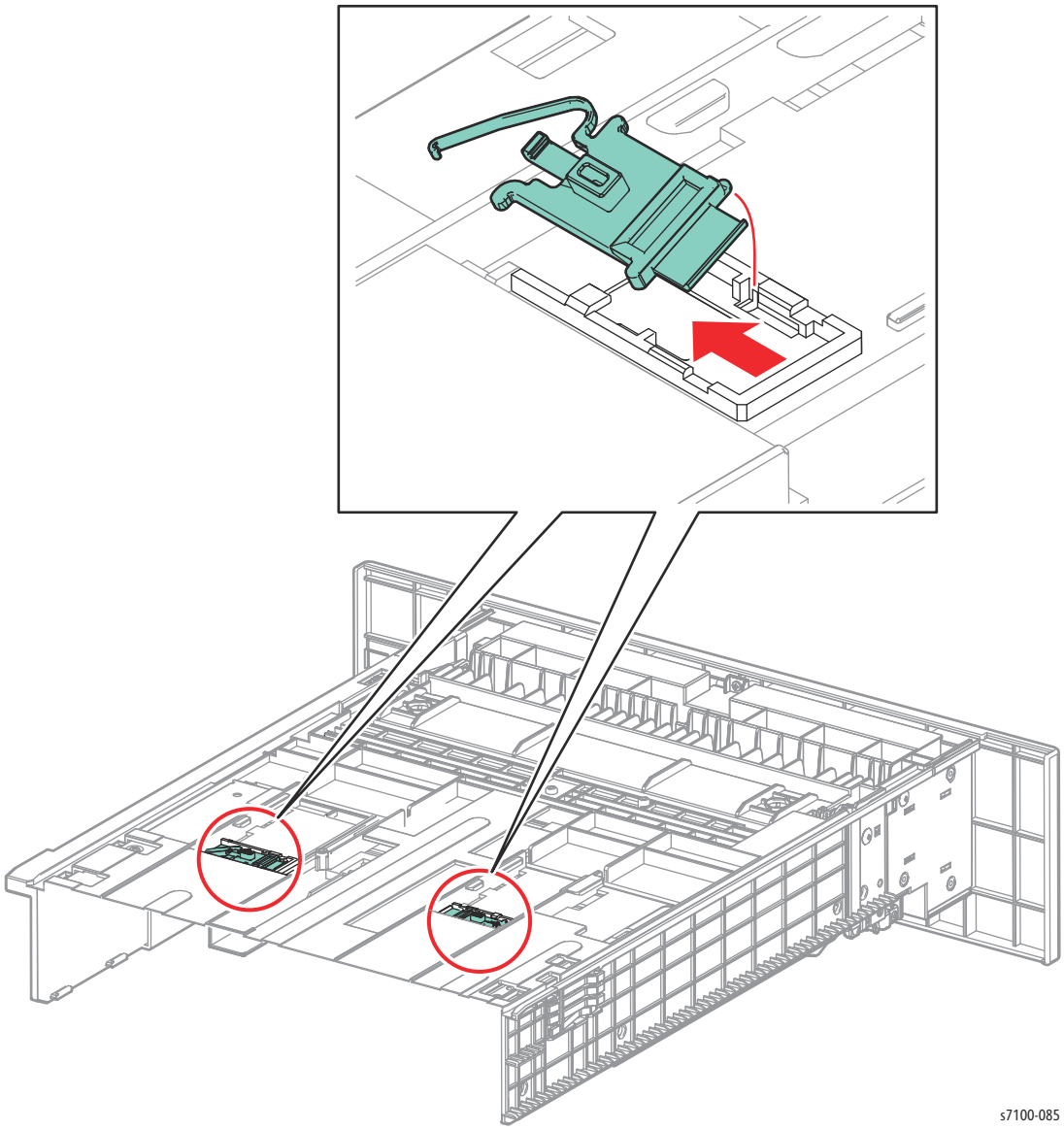
5. Pinch and hold the lever of the End Guide Assembly and slide the End Guide Assembly to the front until it can go no further.
6. Use a screwdriver to push down the Gear Sector Assembly (PL 15.3.29) and bend the Gear Sector Assembly, then remove the boss of the End Guide Assembly from the groove of the Gear Sector Assembly.
7. Pinch and hold the lever of the End Guide Assembly and remove the End Guide Assembly from the paper Tray.



REP 15.29 Exit Lock

PL 15.3.32

1. Remove Tray 2/ 3/ 4.
2. Remove the Exit Housing Assembly (REP 15.27 Exit Housing Assembly on page 4-292).
3. Move the Exit Lock horizontally to slant and remove it.



Parts List

5

In this chapter...

Serial Number Format

Changes to Xerox products are made to accommodate improved components as they become available. It is important when ordering parts to include the following information:

- Component's part number
- Product type or model number
- Serial Number of the printer

The serial numbers are only reset to the starting serial number when the ending serial number is reached. At that time the revision digit will be rolled. Serial numbers below 10001 are reserved for XOG Final Integration Center (FIC) sites if reserialization is needed.

The serial numbers are only reset to the starting serial number when the ending serial number is reached. At that time the revision digit will be rolled. Serial numbers below 10001 are reserved for XOG Final Integration Center (FIC) sites if reserialization is needed.

Note: Not all of the serial number will be used. This is a buffer in case additional units are built by Fuji Xerox for each model of printer during pre-production.

110V Engine Format

The nine-digit serial number has the following format:

- **PPPSSSSSS**
- **PPP** = Three digit alphanumeric product code
- **SSSSSS** = Six digit numeric serial number

Table 1: 110V Engine Format

Product	Product Code	Starting Serial Number	Ending Serial Number
Pre-Production (PP)			
7100_DN, 110V Engine	XP6	002501	002700
Mass Production (MP)			
7100_DN, 110V Engine	XP6	003201	012500
* Not all of the serial numbers will be used. This is a buffer in case additional units are built by FX during pre-production * Serial numbers between 002701 - 003200 are reserved for XOG FIC sites if reserialization is needed. A serial number break or a new serial number range will be provided when a major product change occurs.			

220V Engine Format

- MMMSSSSSSc
- **MMM** = Manufacturing Location Code, 3 digit numeric code
- **SSSSSS** = Six digit numeric serial number
- **c** = check digit

Table 2: 220V Engine Format

Product	Product Code	Manufacturing Location Code	Starting Serial Number	Ending Serial Number
Pre-Production (PP)				
7100V_N, 220V Engine	XP7	333	012501	012630
7100V_DN, 220V Engine	XP7	333	012631	012700
Mass Production (MP)				
7100V_N, 220V Engine	XP7	333	012701	028820
7100V_DN, 220V Engine	XP7	333	028821	037500
* Not all of the serial numbers will be used. This is a buffer in case additional units are built by FX during pre-production.				

Examples

110V Printer

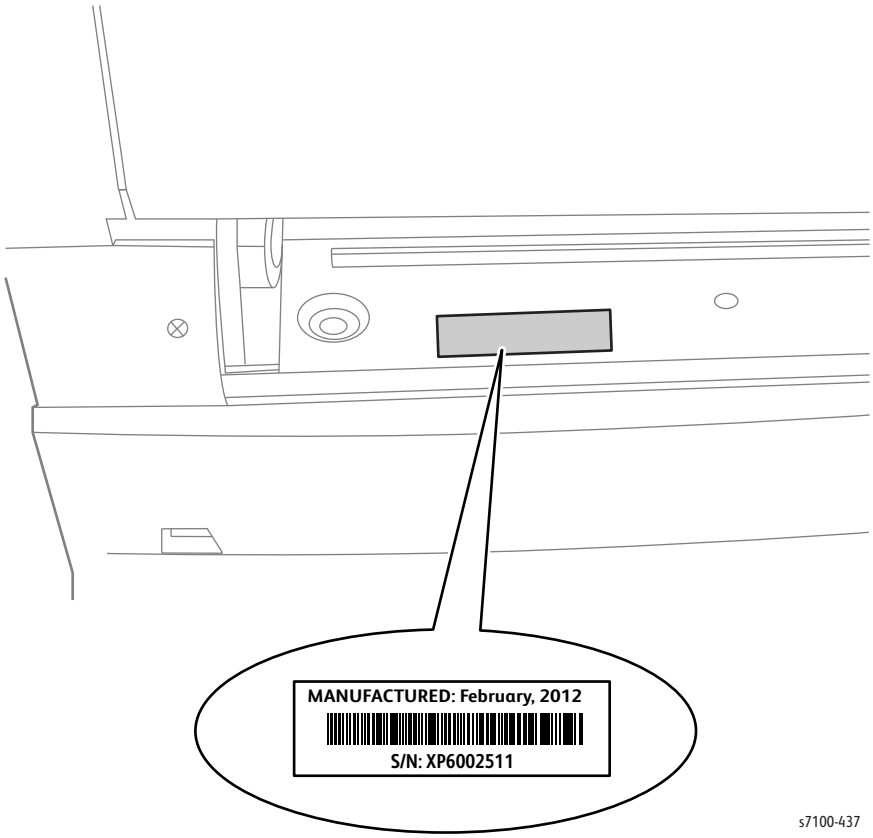
- XP6005005: Xerox Serial Number
- Product code for 110V printer = XP6
- Serial number for 7100_DN = 005005

220V Printer

- 3330157363
- Manufacturing location code for 220V printer = 333
- Serial number for 7100V_N = 015736
- Check digit = 3

Serial Number Location and Layout

The serial number label is located on the printer frame underneath Tray 1.



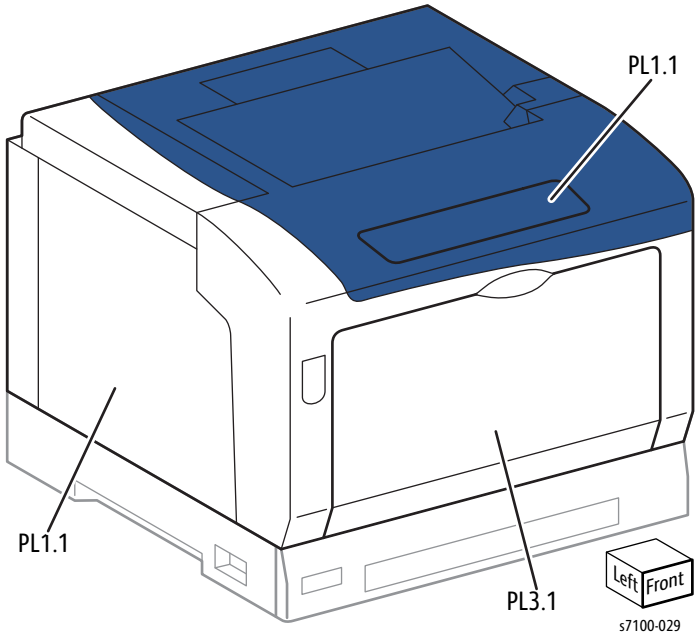
Using the Parts List

- ID No.: The callout number from the exploded part diagram.
- Name/ Description: The name of the part to be ordered and the number of parts supplied per order.
- Part Number: The material part number used to order that specific part.
- Parts identified throughout this manual are referenced PL#.#.#; For example, PL3.1.10 means the part is item 10 of Parts List 3.1.
- A black triangle preceding a number followed by a parenthetical statement in an illustrated parts list means the item is a parent assembly, made up of the individual parts called out in parentheses.
- The notation “with X~Y” following a part name indicates an assembly that is made up of components X through Y. For example, “1 (with 2~4)” means part 1 consists of part 2, part 3, and part 4.
- The notation “J1<>J2 and P2” is attached to a wire harness. It indicates that connector Jack 1 is attached to one end of the wire harness and connector J2 is attached to the other end that is plugged into P2.

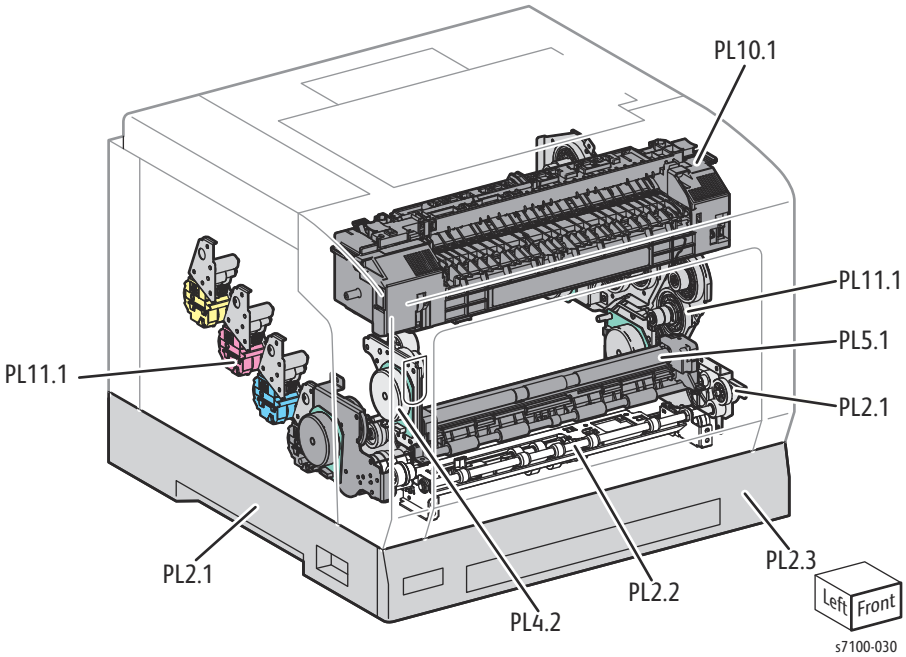
  Note: Only parts showing part numbers are available for ordering by support. Parts not showing part numbers are available on the parent assembly.

General Overview

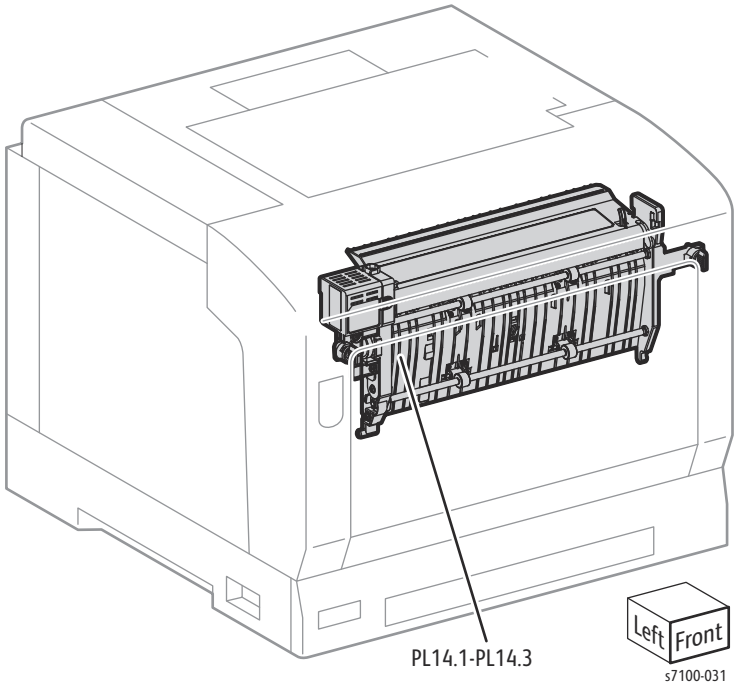
Cover



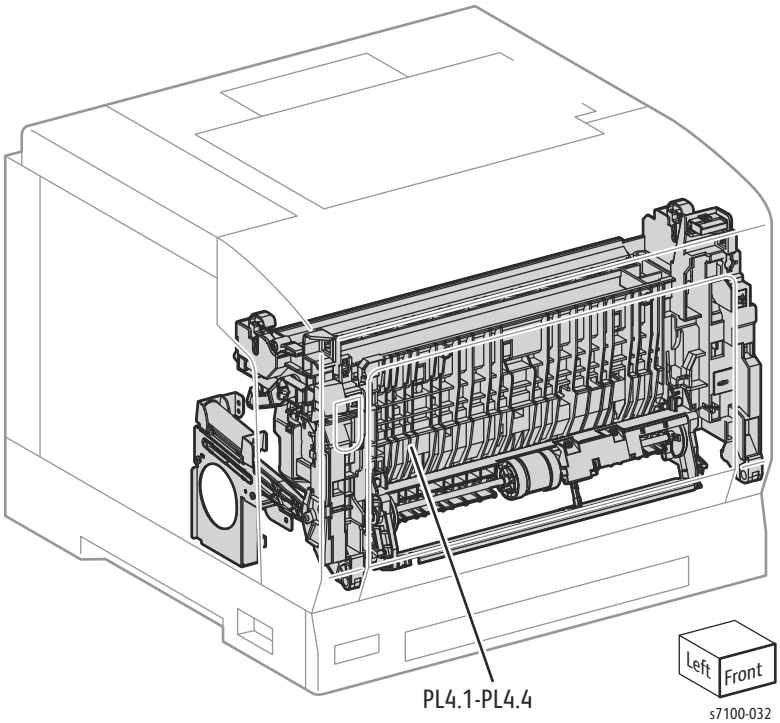
Fuser, Drive, Tray, Frame, Registration



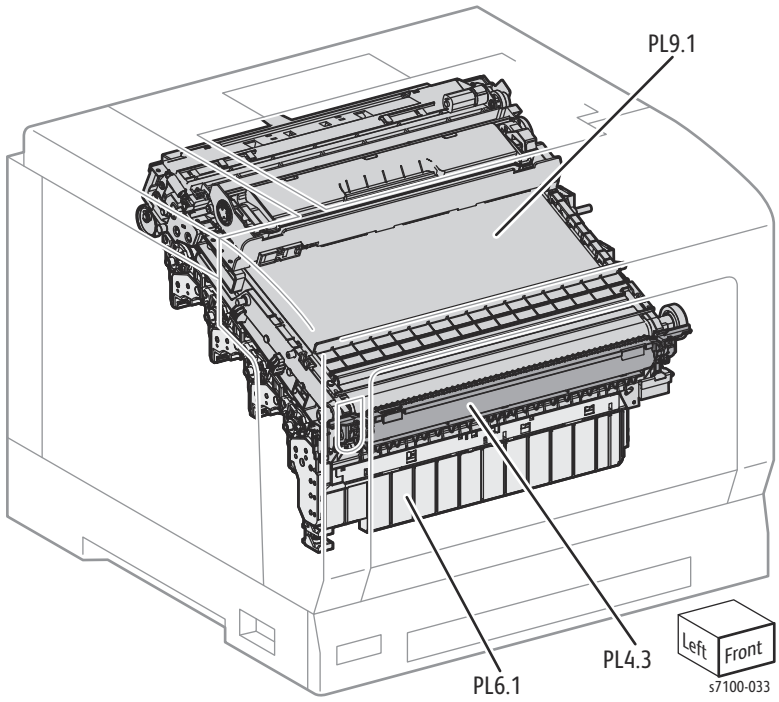
Duplex



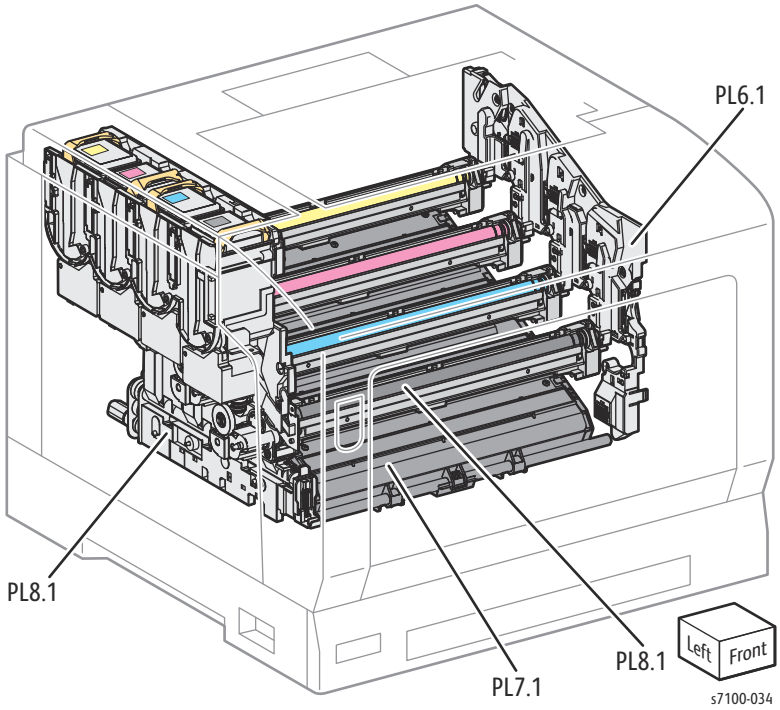
Frame



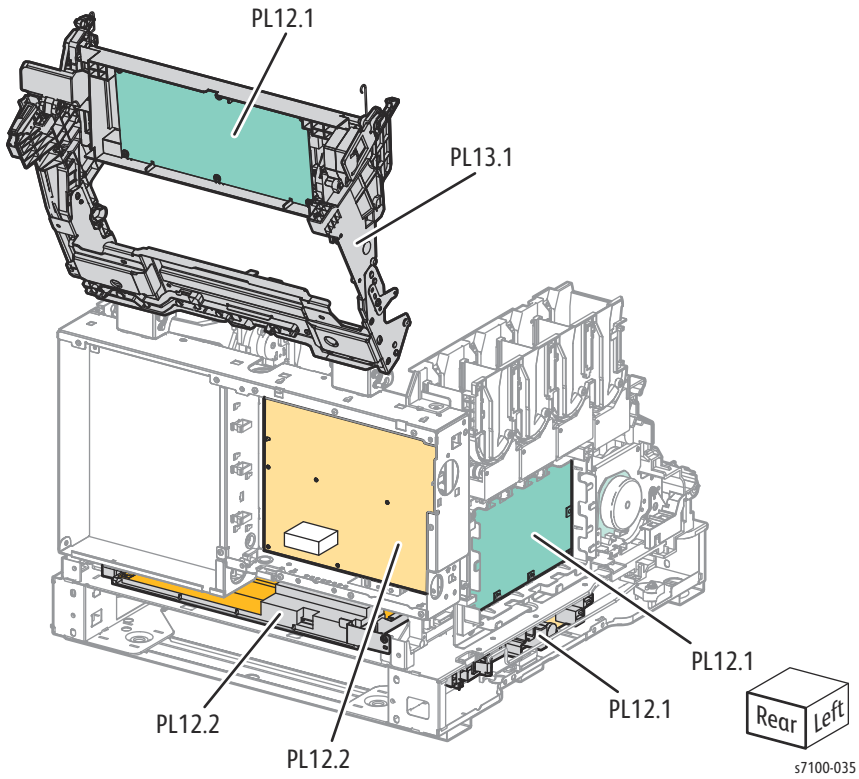
Xerographics, Frame, Transfer



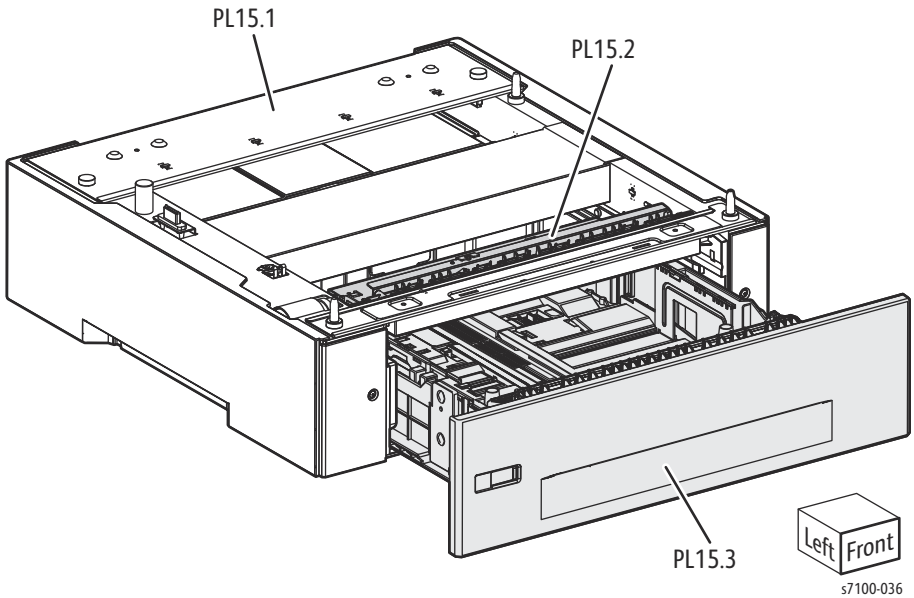
Xerographics, ROS, Development



Electrical, Frame

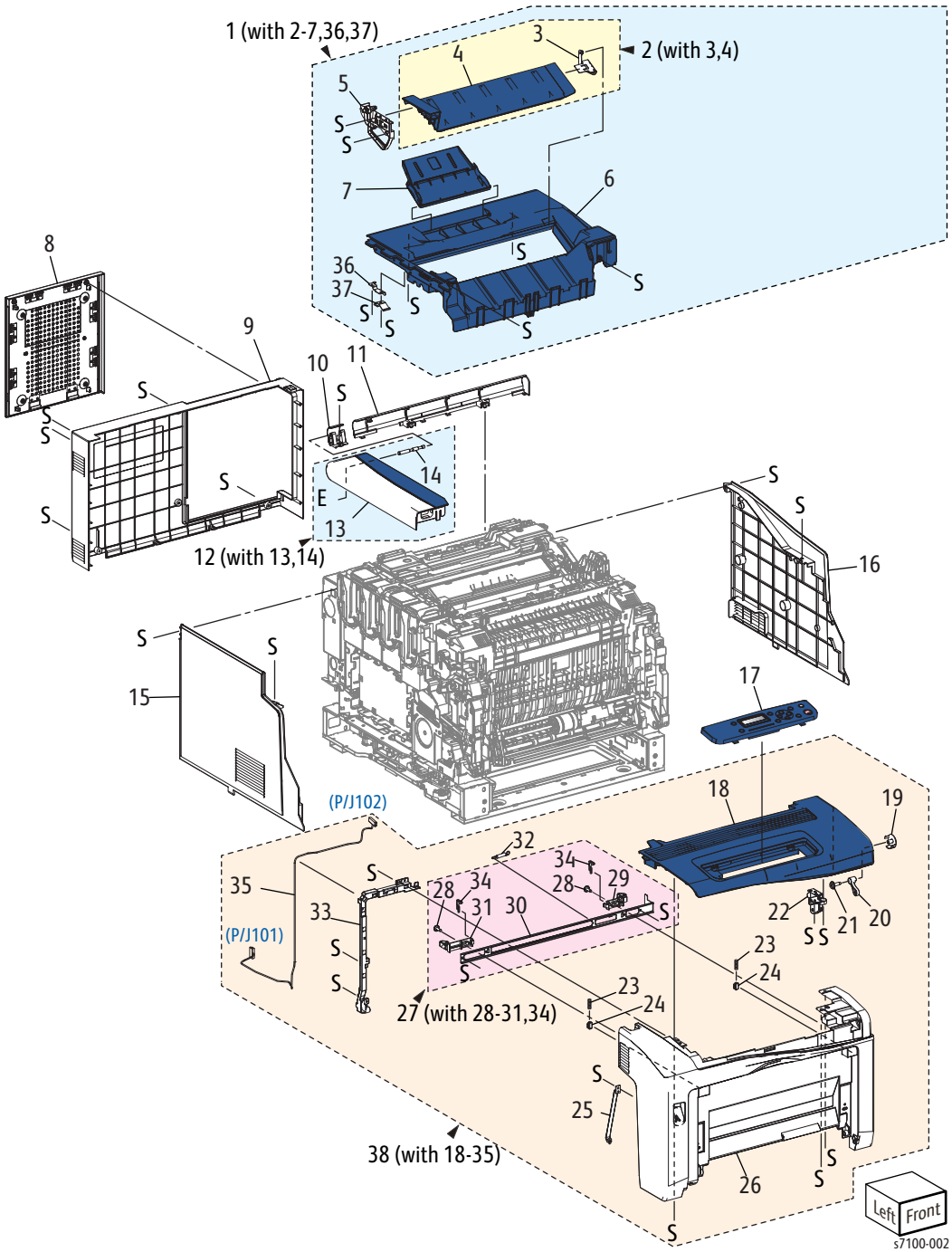


550-Sheet Feeder



Parts List

Parts List 1.1 Cover



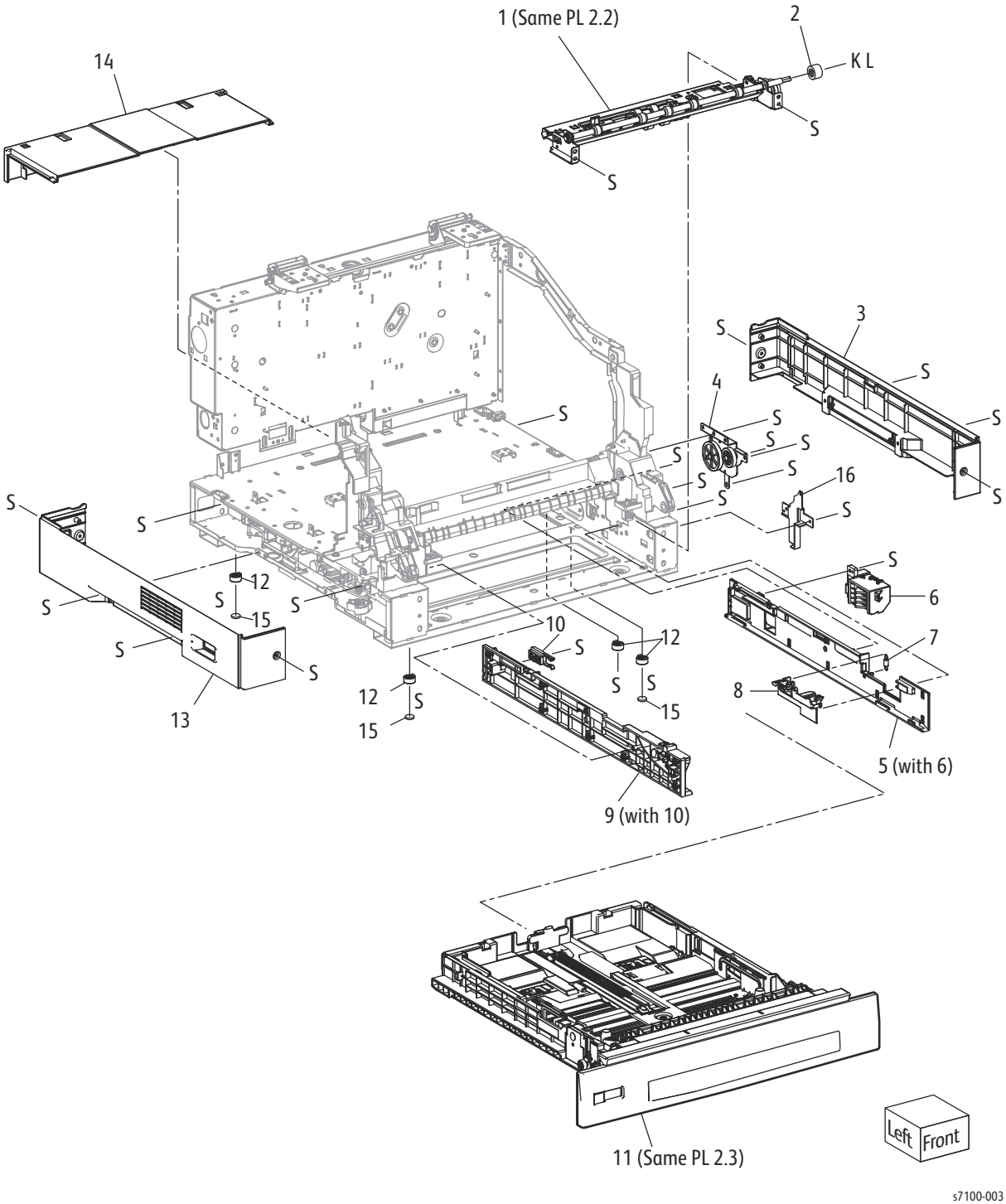
Parts List 1.1 Cover

Item	Description	Part Number
1.	Cover Assembly Top (with 2-7, 36, 37) (REP 1.1 Top Cover Assembly on page 4-9)	848K28787
2.	Waste Cover Assembly (with 3-4) (REP 1.2 Waste Cover Assembly on page 4-12)	
3.	Right Waste Cover Plate Assembly	
4.	Top Waste Cover	
5.	Left Waste Cartridge Arm (REP 1.3 Left Waste Cartridge Arm on page 4-15)	
6.	Main Top Cover	
7.	Extension Cover Assembly (REP 1.4 Extension Cover Assembly on page 4-18)	
8.	I/P PWB Cover Assembly (REP 1.5 Image Processor (I/P) PWB Cover Assembly on page 4-19)	848K73020
9.	Rear Cover (REP 1.6 Rear Cover on page 4-20)	848E39663
10.	Toner Cartridge Hinge Cover (REP 1.7 Toner Cartridge Hinge Cover on page 4-21)	848E47262
11.	Rear Upper Cover (REP 1.8 Rear Upper Cover on page 4-22)	848E41131
12.	Toner Cartridge Cover Assembly (with 13,14) (REP 1.9 Toner Cartridge Cover Assembly on page 4-24)	848K73030
13.	Toner Cartridge Cover	
14.	Toner Cartridge Shaft	
15.	Left Side Cover (REP 1.10 Left Side Cover on page 4-25)	848E39622
16.	Right Side Cover (REP 1.11 Right Side Cover on page 4-27)	848K42043
17.	Control Panel (Panel Assembly) (REP 1.12 Control Panel Assembly on page 4-29)	848K73000
18.	Top Front Cover	
19.	Front Lever Cover	
20.	Lock Latch Lever	
21.	Flange Screw	
22.	Interlock Actuator Assembly	
23.	Bypass Tray Stopper Spring (REP 1.13 Bypass Tray Stopper Spring/ Stopper on page 4-30)	
24.	Bypass Tray Stopper (REP 1.13 Bypass Tray Stopper Spring/ Stopper on page 4-30)	

Parts List 1.1 Cover (Continued)

Item	Description	Part Number
25.	Front Cover Strap	
26.	Front Cover	
27.	Front Latch Assembly (with 28-31, 34) (REP 1.14 Front Latch Assembly and Latch Spring on page 4-33)	
28.	Flange Screw	
29.	Right Front Latch	
30.	Front Latch Plate	
31.	Left Front Latch	
32.	Latch Spring (REP 1.14 Front Latch Assembly and Latch Spring on page 4-33)	
33.	Harness Guide	
34.	ER Latch Stopper	
35.	Control Panel (UI) Harness Assembly	
36.	Waste Arm Support	
37.	Waste Cover Hinge Spring	
38.	Front Cover Assembly (with 18-35) (REP 1.15 Front Cover Assembly on page 4-35)	604K76943

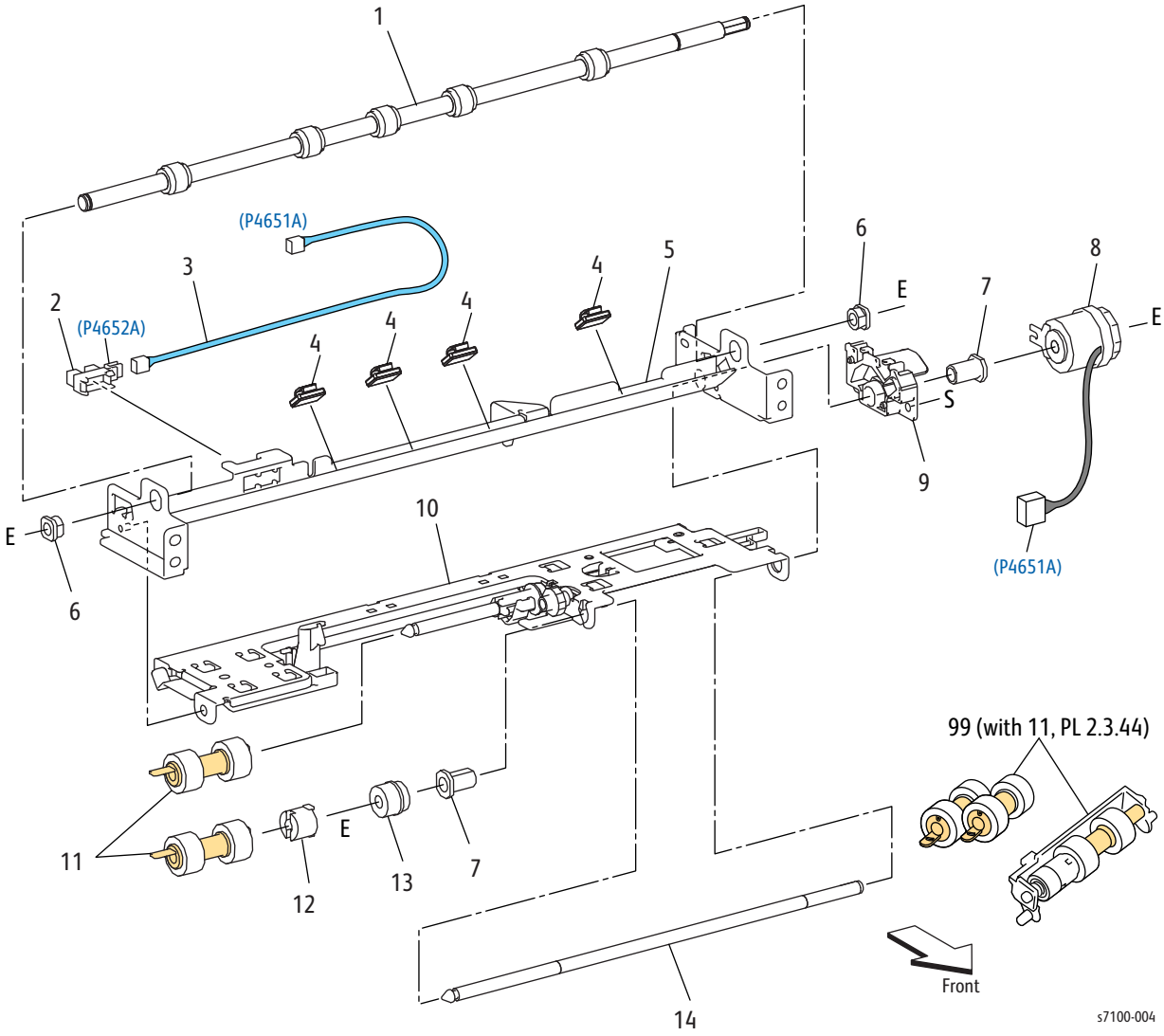
Parts List 2.1 250-Sheet Feeder (1 of 2)



Parts List 2.1 250-Sheet Feeder (1 of 2)

Item	Description	Part Number
1.	Feeder Assembly (with PL 2.2) (REP 2.1 Feeder Assembly on page 4-37)	059K65242
2.	Right Turn Gear Assembly (REP 2.2 Right Turn Gear Assembly on page 4-39)	007K16930
3.	Right Feeder Cover 250 (REP 2.3 Right Feeder Cover on page 4-40)	848E42760
4.	Right Turn Bracket Assembly (REP 2.4 Right Turn Bracket Assembly on page 4-41)	068K69391
5.	Right Tray Guide Assembly 250 (with 6) (REP 2.5 Right Tray Guide Assembly on page 4-42)	
6.	Size Switch Holder Assembly (REP 2.6 Size Switch Holder Assembly on page 4-43)	019K07952
7.	Nudger Spring	
8.	Protect Cover Assembly (REP 2.7 Protect Cover Assembly on page 4-44)	
9.	Left Tray Guide Assembly 250 (with 10) (REP 2.8 Left Tray Guide Assembly on page 4-47)	
10.	Tray Stopper (REP 2.9 Tray Stopper on page 4-48)	803E12630
11.	Tray Assembly 250 (with PL 2.3)	050K69895
12.	Foot	
13.	Left Feeder Cover 250 (REP 2.10 Left Feeder Cover on page 4-49)	848E42190
14.	Tray Cover (REP 2.11 Tray Cover on page 4-50)	848E42770
15.	Rubber Foot	
16.	Front Harness Cover	

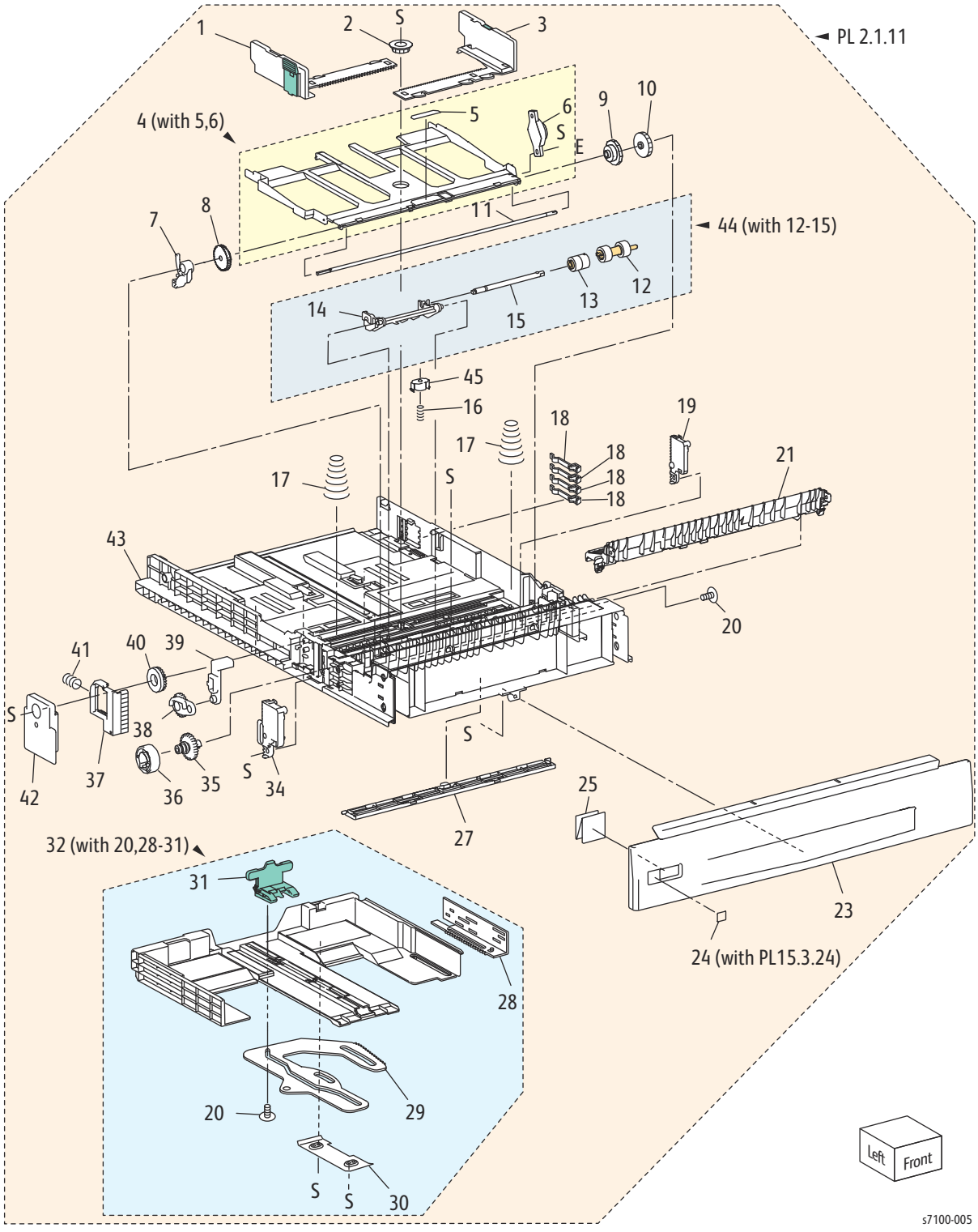
Parts List 2.2 250-Sheet Feeder (2 of2)



Parts List 2.2 250-Sheet Feeder (2 of 2)

Item	Description	Part Number
1.	Turn Roller Assembly (IOT) (REP 2.12 Turn Roller Assembly on page 4-51)	
2.	No Paper Sensor 250 (REP 2.13 No Paper Sensor on page 4-52)	130E87280
3.	Feeder Harness Assembly	
4.	Clamp	
5.	Retard Chute Assembly 250	
6.	Bearing	
7.	Nudger Bearing	
8.	Feed Roller Clutch (Paper Handling Clutch Assembly 250) (REP 2.14 Feed Roller Clutch on page 4-53)	121K45670
9.	Top Right Retard Holder	
10.	Nudger Support Assembly	
11.	Feed Roller (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54)	Included with Tray 1 Feed Roller Kit (see PL 2.2.99)
12.	Oneway Feed Clutch	
13.	Oneway Nudger Clutch	
14.	Feed Shaft	
99.	Tray 1 Feed Roller Kit (with 11, PL 2.3.44) (REP 2.15 Feed Roller/ Retard Roller Assembly on page 4-54)	604K78861

Parts List 2.3 Tray 1 (250)



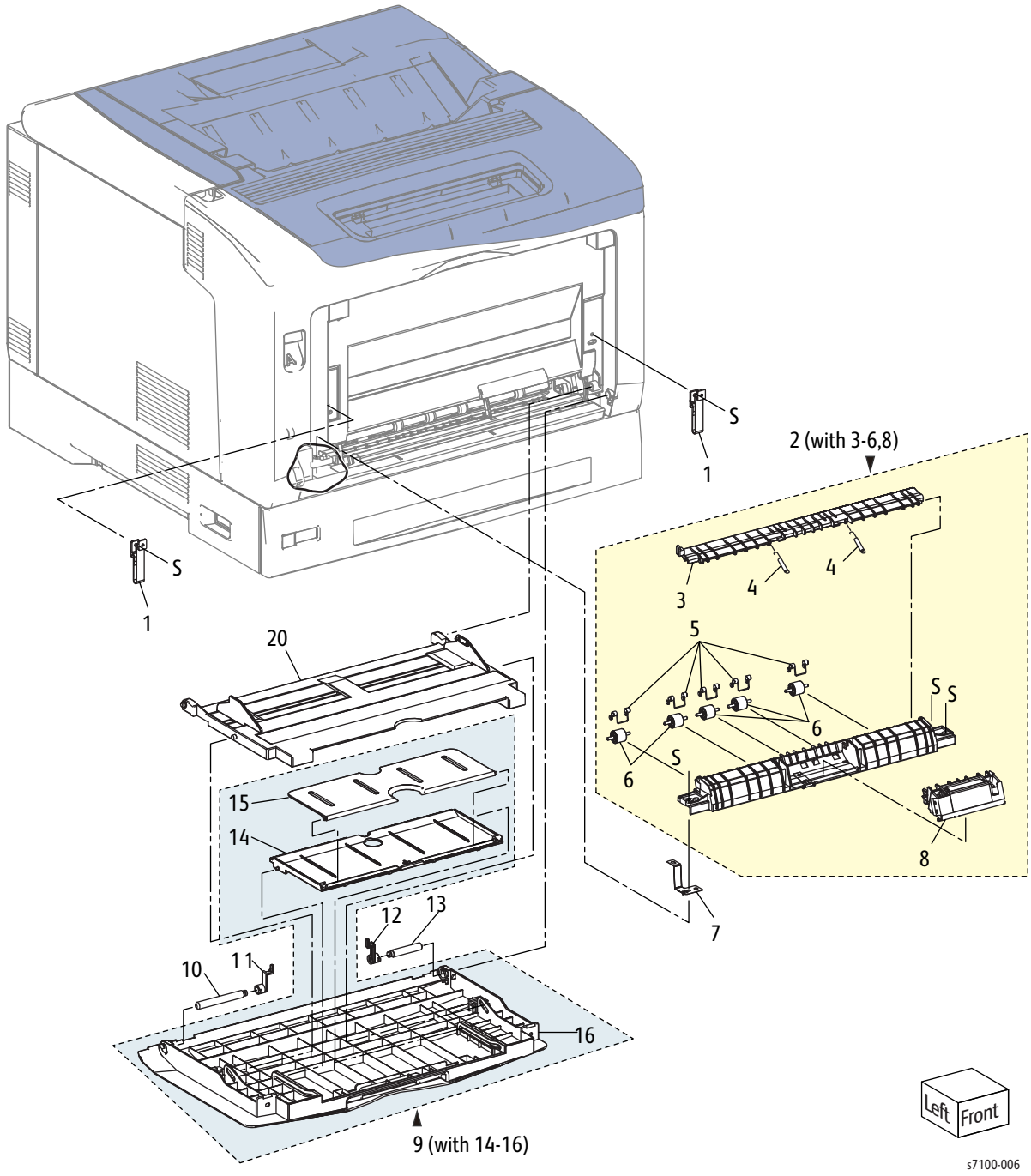
Parts List 2.3 Tray 1 (250)

Item	Description	Part Number
1.	Left Side Guide (REP 2.16 Left Side Guide/ Right Side Guide on page 4-57)	
2.	Pinion Gear	
3.	Right Side Guide (REP 2.16 Left Side Guide/ Right Side Guide on page 4-57)	
4.	Bottom Plate Assembly (with 5, 6) (REP 2.17 Bottom Plate Assembly on page 4-59)	
5.	PB Pad	
6.	Bottom Damper 550	
7.	PB Stopper	
8.	Bottom Lock Oneway Gear	
9.	Bottom Damper Oneway Gear	
10.	Left PB Gear	
11.	PB Shaft	
12.	Feed Roller	
13.	Z Retard Friction Clutch (REP 2.18 Retard Friction Clutch on page 4-61)	
14.	Retard Holder	
15.	Tray Retard Shaft	
16.	Retard Spring (REP 2.19 Retard Spring on page 4-62)	
17.	Bottom Up Spring 250	
18.	Size Actuator	
19.	Z Gear Lock Plate 250	
20.	Tapping Screw	
21.	Retard Chute	
22.	-----	
23.	Tray Handle 250	
24.	Tray Number Label Kit (with PL 15.3.24)	604K59300
25.	Paper Size Card	
26.	-----	
27.	Bottom Chute Cover	

Parts List 2.3 Tray 1 (250) (Continued)

Item	Description	Part Number
28.	Size Rack	
29.	Sector Gear Assembly	
30.	Exit Cover	
31.	End Guide Assembly 250 (REP 2.20 End Guide Assembly on page 4-64)	
32.	Exit Housing Assembly 250 (with 20, 28-31) (REP 2.21 Exit Housing Assembly on page 4-66)	
33.	-----	
34.	Left Lock Plate Rack 250	
35.	Right PB Gear	
36.	PB Roller	
37.	Z Bottom Lock Rack 250	
38.	Bottom Lever Lock Gear	
39.	Bottom Lock Lever	
40.	Bottom Lock Pinion Gear	
41.	Bottom Lock Spring	
42.	Bottom Up Cover 250	
43.	Base Housing 250	
44.	Separator Holder Assembly (with 12-15)	Included with Tray 1 Feed Roller Kit (see PL 2.2.99, page 5-15)
45.	Separator Spring Holder	

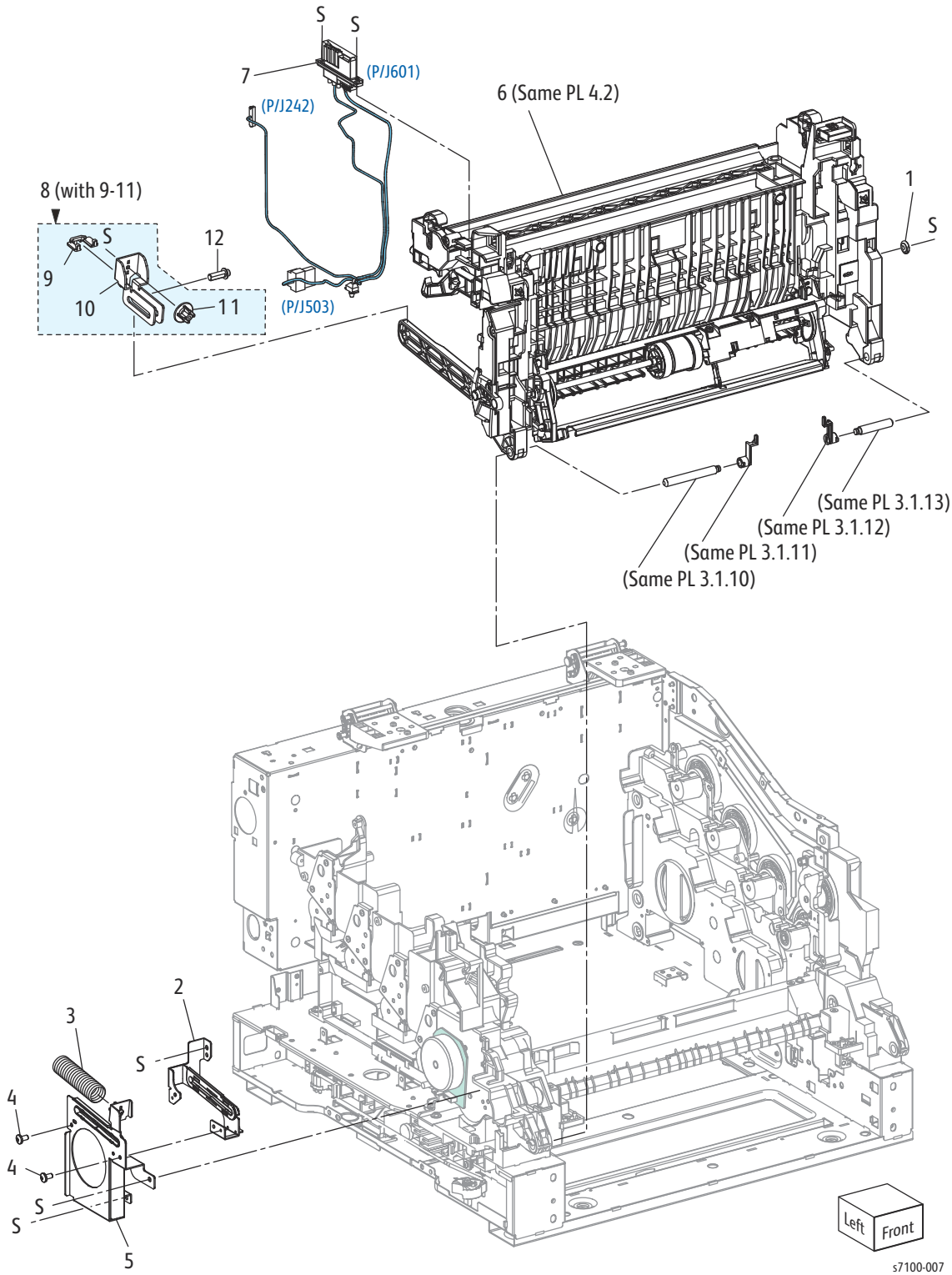
Parts List 3.1 Bypass Tray



Parts List 3.1 Bypass Tray

Item	Description	Part Number
1.	Bypass Tray Strap	
2.	Bypass Tray Frame Assembly (with 3-6, 8) (REP 3.1 Bypass Tray Frame Assembly on page 4-69)	
3.	Turn Swing Chute	
4.	Swing Chute Spring	
5.	Tray Pinch Turn Spring	
6.	Tray Pinch Turn Roller	
7.	Bypass Tray F Earth Plate	
8.	Separator Retard Holder Assembly (REP 3.2 Separator Retard Holder Assembly on page 4-70)	604K76880
9.	Bypass Tray Cover Assembly (with 14-16) (REP 3.3 Bypass Tray Cover Assembly/ Exit 1 Cover/ Exit 2 Cover on page 4-71)	848K33510
10.	Left Pin	
11.	Left Bypass Tray Cover Lock (REP 3.4 Left/ Right Bypass Tray Cover Lock on page 4-72)	803E04600
12.	Right Bypass Tray Cover Lock (REP 3.4 Left/ Right Bypass Tray Cover Lock on page 4-72)	803E04610
13.	Right Pin	
14.	Exit 1 Cover	
15.	Exit 2 Cover	
16.	Bypass Tray Cover	
17.	-----	
18.	-----	
19.	-----	
20.	Bypass Tray Assembly (REP 3.5 Bypass Tray Assembly on page 4-73)	050K69881

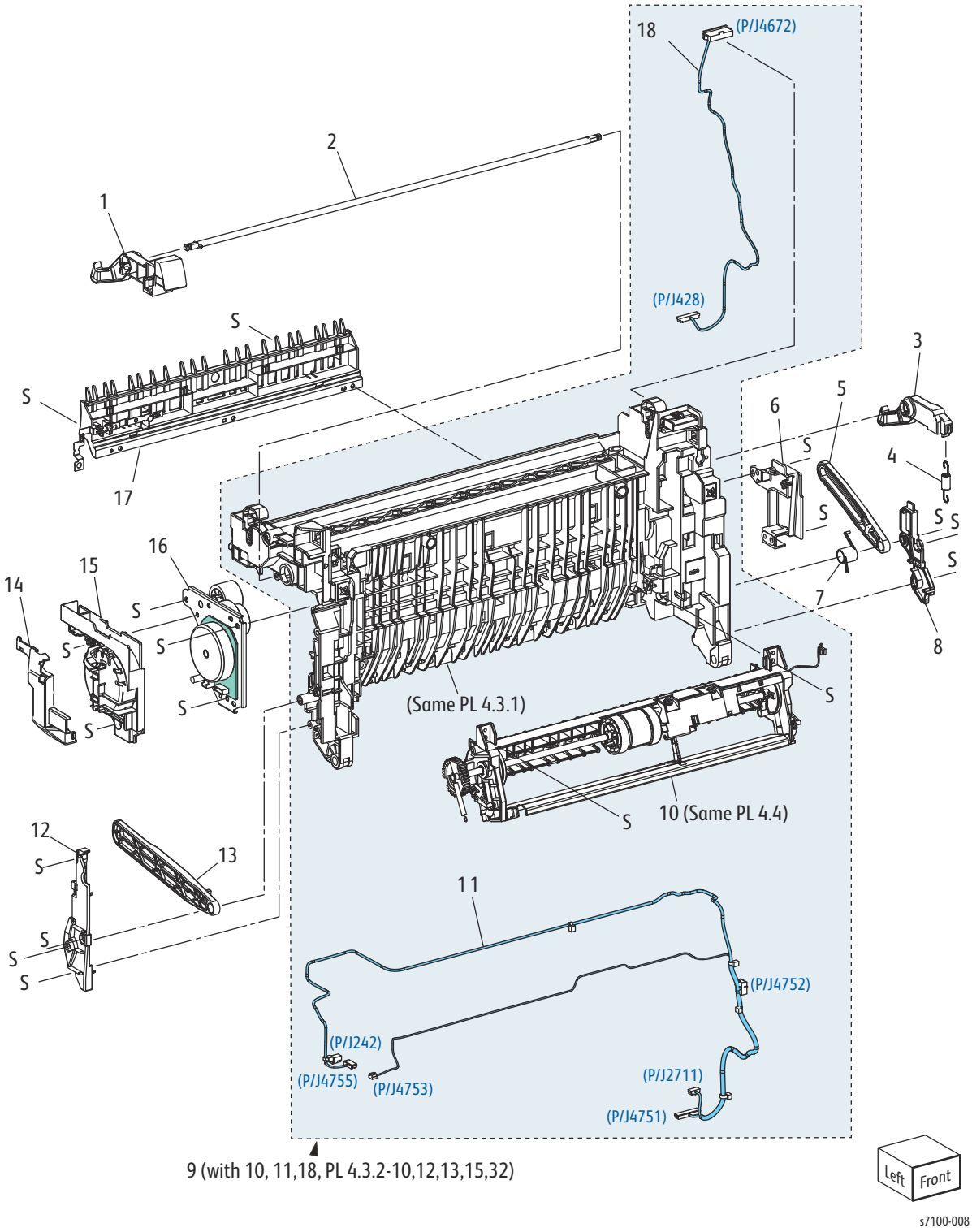
Parts List 4.1 Front Frame (1 of 4)



Parts List 4.1 Front Frame (1 of 4)

Item	Description	Part Number
1.	Front Arm Cap	
2.	Base Bracket Assembly	
3.	Damper Spring	
4.	Screw (M3 x 6B)	
5.	Rail Bracket Assembly	
6.	Front Frame Assembly Kit (same with PL 4.2 w/o 19-23) (REP 4.1 Front Frame Assembly on page 4-74)	
7.	DRW Fuser Harness Assembly (110V) (REP 4.2 DRW Fuser Harness Assembly on page 4-80)	962K75021
	DRW Fuser Harness Assembly (220V)	962K91000
8.	Slide Bracket Assembly (with 9-11) (REP 4.3 Slide Bracket Assembly/ Slide Guide on page 4-87)	
9.	Slide Guide (REP 4.3 Slide Bracket Assembly/ Slide Guide on page 4-87)	
10.	Slide Support Bracket	
11.	Spring Holder	
12.	Support Pin	

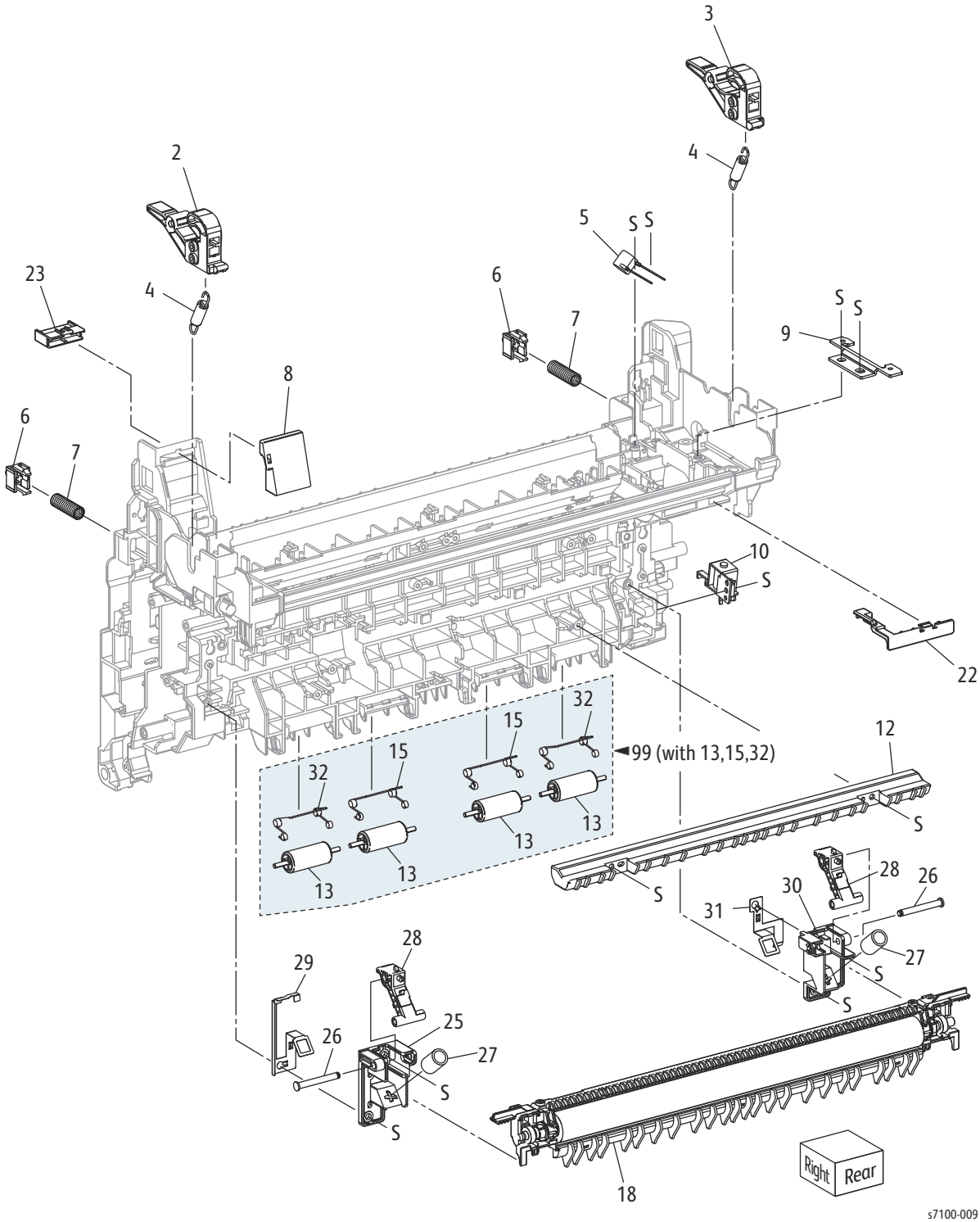
Parts List 4.2 Front Frame (2 of 4)



Parts List 4.2 Front Frame (2 of 4)

Item	Description	Part Number
1.	Left Latch Lever (REP 4.4 Right/ Left Latch Lever, Latch Spring on page 4-89)	
2.	Lever Shaft Assembly	
3.	Right Latch Lever (REP 4.4 Right/ Left Latch Lever, Latch Spring on page 4-89)	
4.	Latch Spring (REP 4.4 Right/ Left Latch Lever, Latch Spring on page 4-89)	
5.	Front Right Support Arm	
6.	Right Harness Cover	
7.	Right Arm Spring	
8.	AC Harness Cover	
9.	Front Frame Sub Assembly (with 10, 11, 18, PL 4.3.2-10, 12, 13, 15, 32) (REP 4.5 Front Frame Sub Assembly on page 4-91)	604K76861
10.	Bypass Tray Feed Frame Assembly (all of PL 4.4) (REP 4.6 Bypass Tray Feed Frame Assembly on page 4-97)	
11.	Front Harness Assembly	
12.	AC Cover	
13.	Front Left Support Arm	
14.	Fuser Motor Harness Cover	
15.	D Gear Cover	
16.	Fuser Drive Assembly (REP 4.7 Fuser Drive Assembly on page 4-99)	007K15890
17.	Chute Assembly (REP 4.8 Chute Assembly on page 4-103)	
18.	Duplex Harness Assembly	

Parts List 4.3 Front Frame (3 of 4)



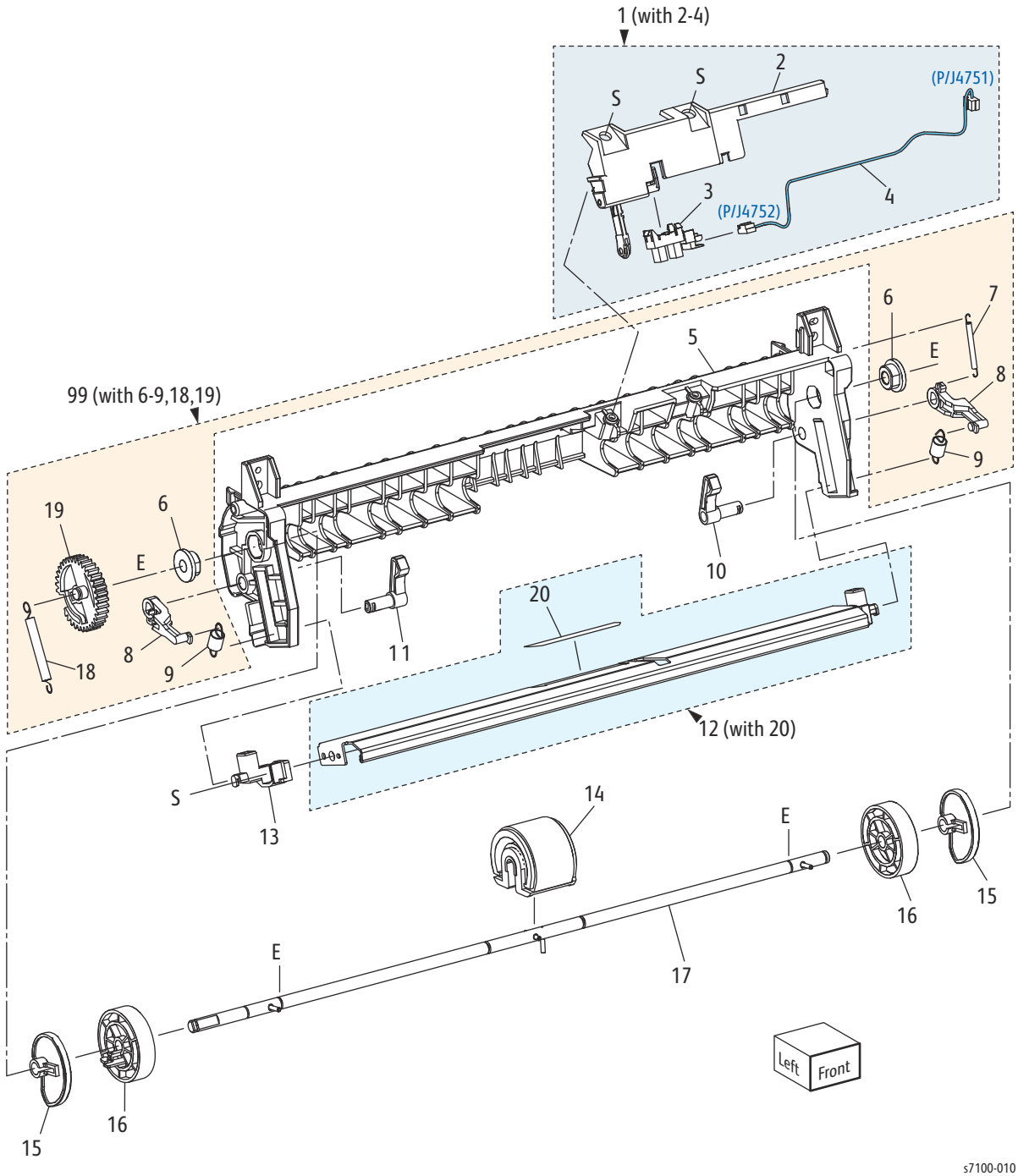
Parts List 4.3 Front Frame (3 of 4)

Item	Description	Part Number
1.	-----	
2.	Right CRU Fusing Lever	
3.	Left CRU Fusing Lever	
4.	Lever Spring	
5.	Resistor	
6.	Main Holder	
7.	Main Spring	
8.	FD Harness Cover	
9.	Connector Bracket	
10.	Bypass Tray Feed Solenoid (REP 4.9 Bypass Tray Feed Solenoid on page 4-104)	121K45700
11.	-----	
12.	Low Trans Chute	
13.	Turn Pinch Roller Assembly	
14.	-----	
15.	Turn Pinch Spring (silver)	
16.	-----	
17.	-----	
18.	Transfer Roller (2nd BTR Unit) (REP 4.10 Transfer Roller (2nd BTR Unit) on page 4-108)	604K78291
19.	-----	
20.	-----	
21.	-----	
22.	Top Harness Cover	
23.	Connector Cap	
24.	-----	
25.	Right Lever Base	
26.	Lever Pin	
27.	Lever Spring	
28.	2nd BTR Lever	
29.	Right Base Ground Plate	

Parts List 4.3 Front Frame (3 of 4) (Continued)

Item	Description	Part Number
30.	Left Lever Base	
31.	Left Base Ground Plate	
32.	Turn Out Pinch Spring (light yellow)	
99.	E Pinch Roller Kit (with 13 x 4 pcs, 15 x 2 pcs, 32 x 2 pcs) (REP 4.11 Pinch Roller Kit on page 4-109)	

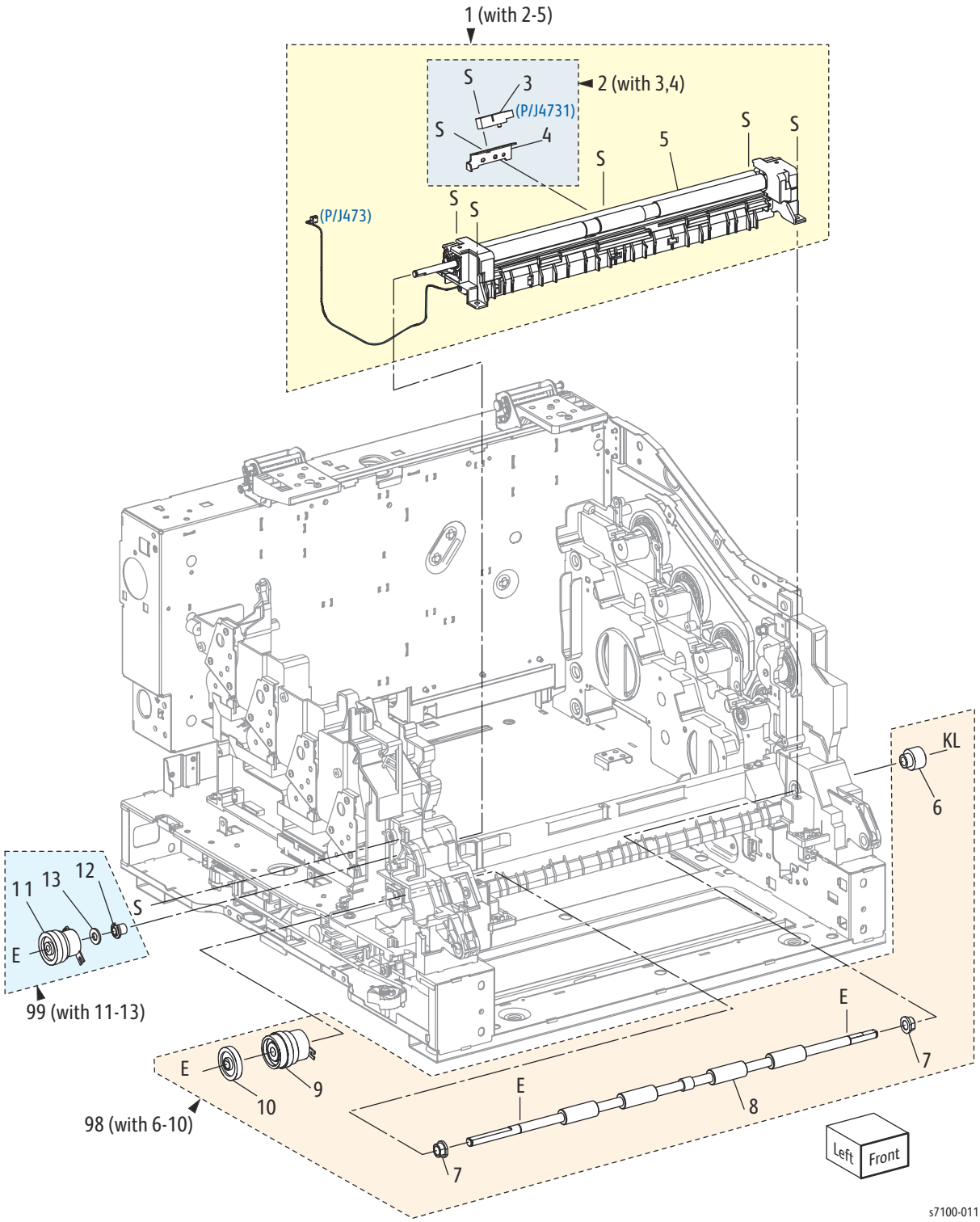
Parts List 4.4 Front Frame (4 of 4)



Parts List 4.4 Front Frame (4 of 4)

Item	Description	Part Number
1.	Bypass Tray Sensor Bracket Assembly (with 2-4) (REP 4.12 Bypass Tray Sensor Bracket Assembly/ No Paper Sensor) on page 4-110)	068K69191
2.	Bypass Tray Sensor Bracket	
3.	Bypass Tray No Paper Sensor (REP 4.12 Bypass Tray Sensor Bracket Assembly/ No Paper Sensor) on page 4-110)	930W00113
4.	Bypass Tray Sensor Harness Assembly	
5.	Bypass Tray Feed Frame	
6.	Bypass Tray Feed Bearing	
7.	Out Earth 2 Spring	
8.	Bypass Tray Arm	
9.	Spring	
10.	Right Follower	
11.	Left Follower	
12.	Bypass Tray Bottom Plate Assembly (with 20)	
13.	Left Bypass Tray Holder	
14.	Bypass Tray Feed Roller Assembly (REP 4.13 Bypass Tray Feed Roller Assembly on page 4-112)	604K76890
15.	Bypass Tray Cam	
16.	Bypass Tray Core Roller	
17.	Bypass Tray Shaft Assembly	
18.	Bypass Tray Feed Spring	
19.	Bypass Tray Feed Gear	
20.	Bypass Tray Pad	
99.	Bypass Tray Gear & Arm Kit (with 6-9, 18, 19) (REP 4.14 Bypass Tray Feed Spring/ Feed Gear on page 4-113)	604K76870

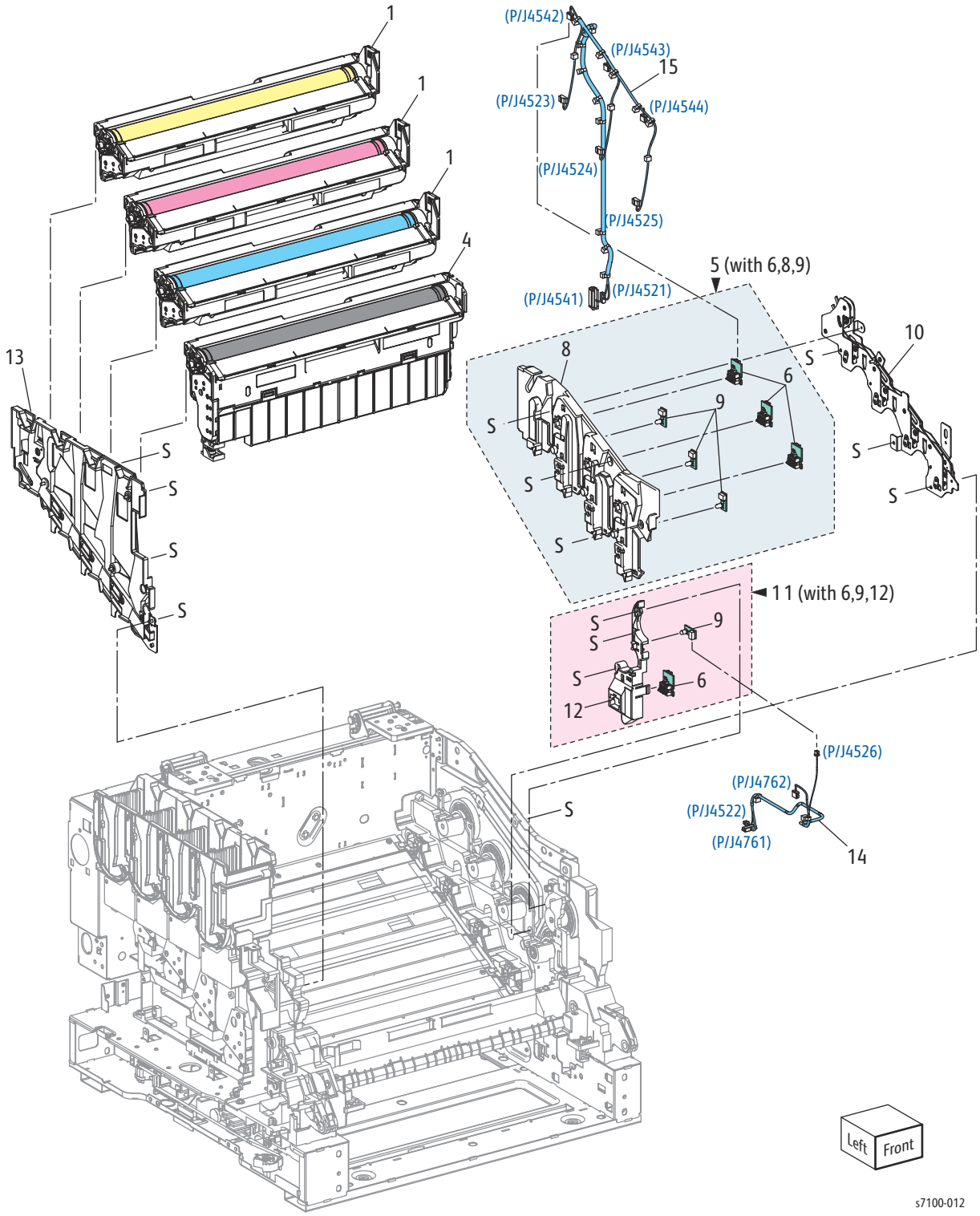
Parts List 5.1 Registration



Parts List 5.1 Registration

Item	Description	Part Number
1.	Registration Chute Assembly (with 2-5) (REP 5.1 Registration Chute Assembly on page 4-114)	054K41143
2.	Registration Sensor Assembly (with 3, 4)	
3.	Registration Sensor (REP 5.2 Registration Sensor on page 4-116)	130E89381
4.	Registration Sensor Plate	
5.	Chute Assembly	
6.	Turn Gear Assembly 17	
7.	Bearing	
8.	Bypass Tray Turn Roller (REP 5.3 Bypass Tray Turn Roller on page 4-117)	
9.	Turn Clutch Assembly (REP 5.4 Turn Clutch Assembly on page 4-119)	
10.	Bypass Tray Idle Gear	
11.	Registration Clutch Assembly (REP 5.5 Registration Clutch Assembly on page 4-120)	
12.	FRM Registration Bearing	
13.	Plain Washer	
98.	Bypass Tray Turn Roller Kit (with 6-10)	604K76910
99.	Registration Clutch Kit (with 11-13) (REP 5.5 Registration Clutch Assembly on page 4-120)	604K76900

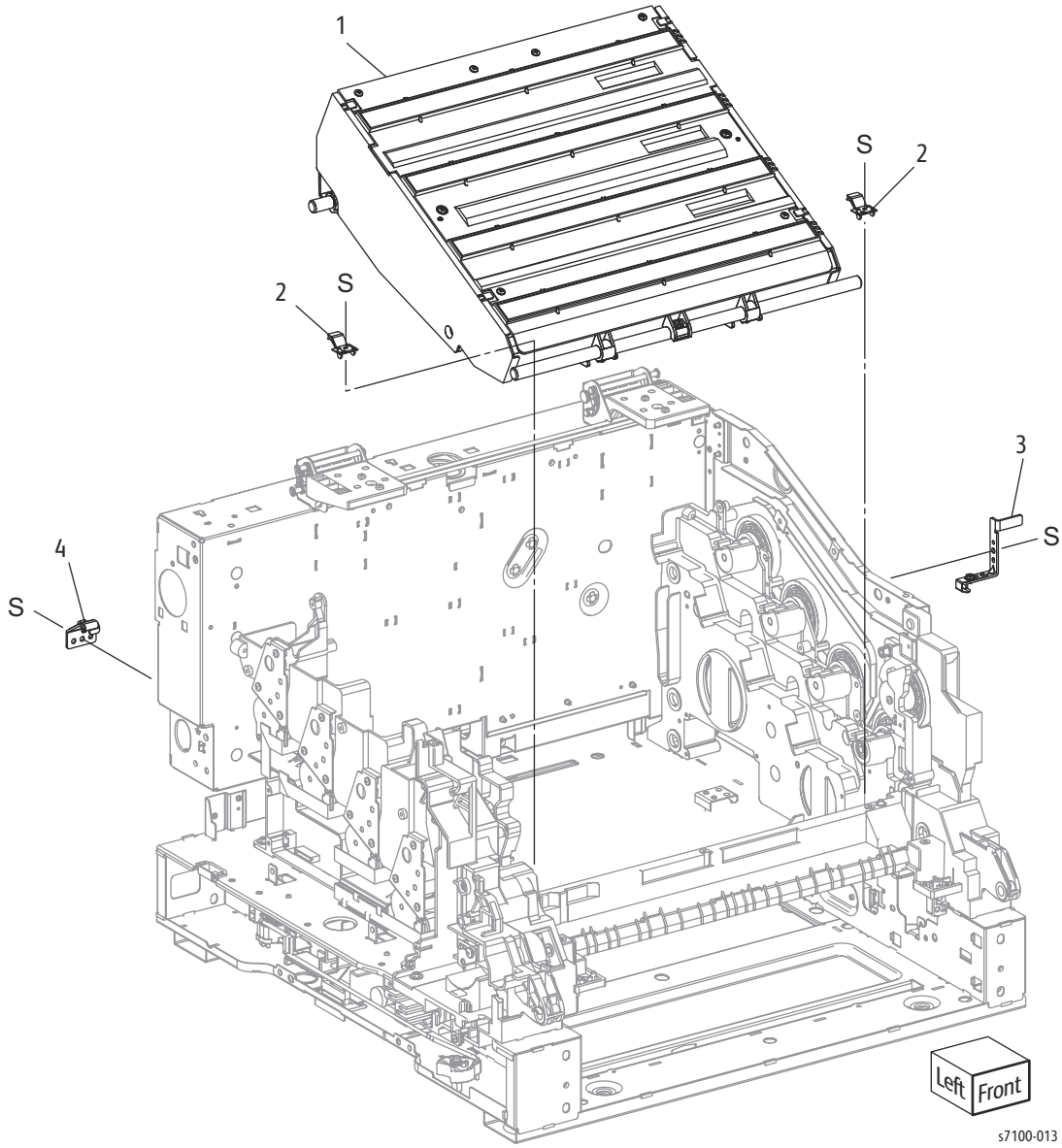
Parts List 6.1 Xerographics



Parts List 6.1 Xerographics

Item	Description	Part Number
1.	Imaging Unit (Y/ M/ C) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121)	See Supplies and Accessories
2.	-----	
3.	-----	
4.	Imaging Unit (K) (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121)	See Supplies and Accessories
5.	Right Imaging Unit Guide Assembly (with 6, 8, 9) (REP 6.1 Right Imaging Unit Guide Assembly on page 4-123)	032K08280
6.	Imaging Unit CRUM Connector Assembly (REP 6.2 Imaging Unit CRUM Connector Assembly on page 4-124)	113K83410
7.	-----	
8.	Right Imaging Unit Guide	
9.	Erase PWB Assembly	
10.	Right Latch Assembly (REP 6.3 Right Latch Assembly on page 4-126)	003K87760
11.	Imaging Unit Guide Assembly (K) (with 6, 9, 12) (REP 6.4 (K) Imaging Unit Guide Assembly on page 4-128)	032K06610
12.	Imaging Unit Guide (K)	
13.	Left Imaging Unit Guide Assembly (REP 6.5 Left Imaging Unit Guide Assembly on page 4-129)	
14.	CRUM X Harness Assembly (K)	
15.	CRUM X Harness Assembly (Y/ M/ C)	

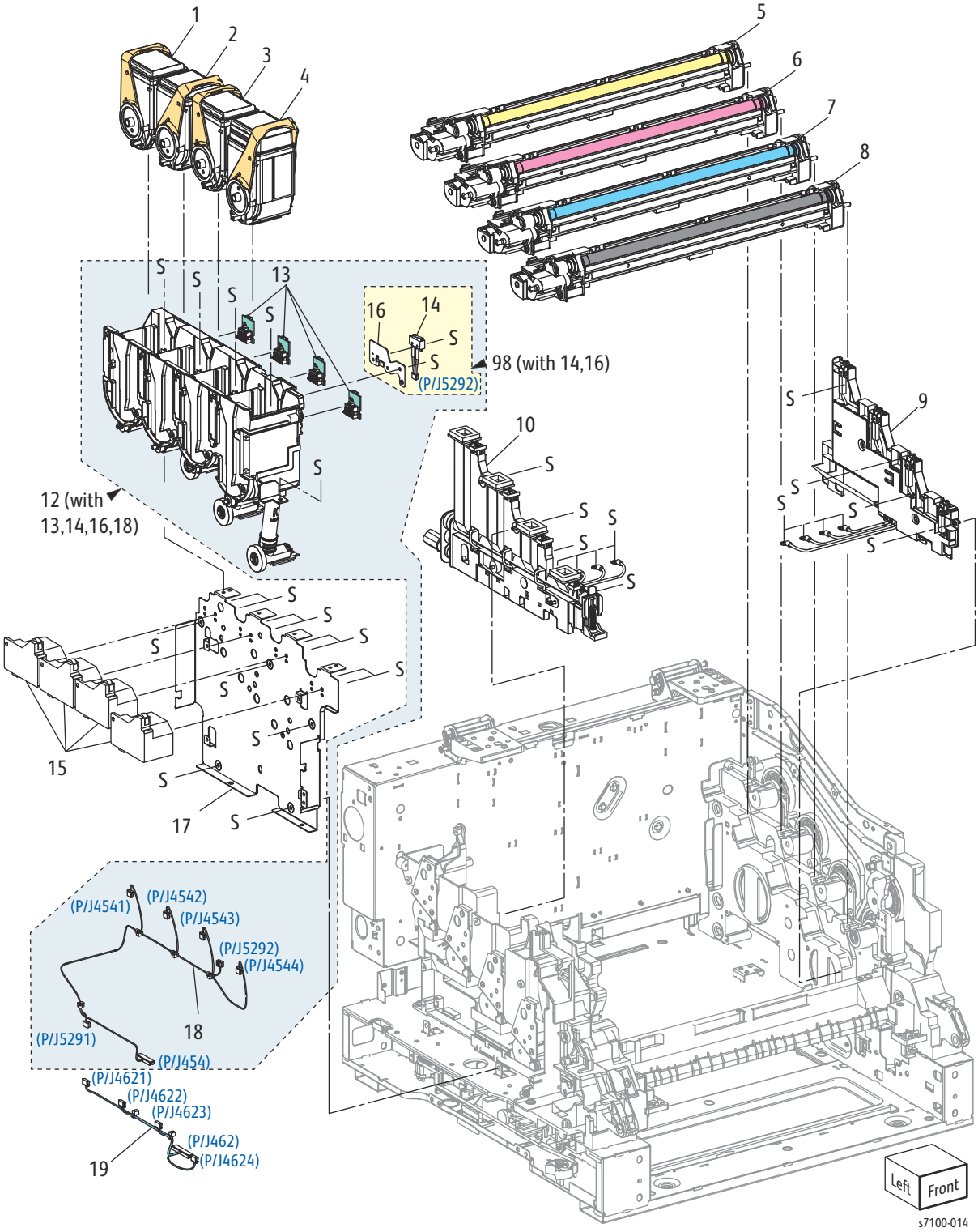
Parts List 7.1 ROS (Laser Unit)



Parts List 7.1 ROS (Laser Unit)

Item	Description	Part Number
1.	ROS Assembly (Laser Unit) (REP 7.1 ROS Assembly (Laser Unit)/ Front Spring Assembly/ Right Rear Spring Assembly/ Left Rear Spring Assembly on page 4-130)	062K21146
2.	Front Spring Assembly	
3.	Right Rear Spring Assembly	
4.	Left Rear Spring Assembly	

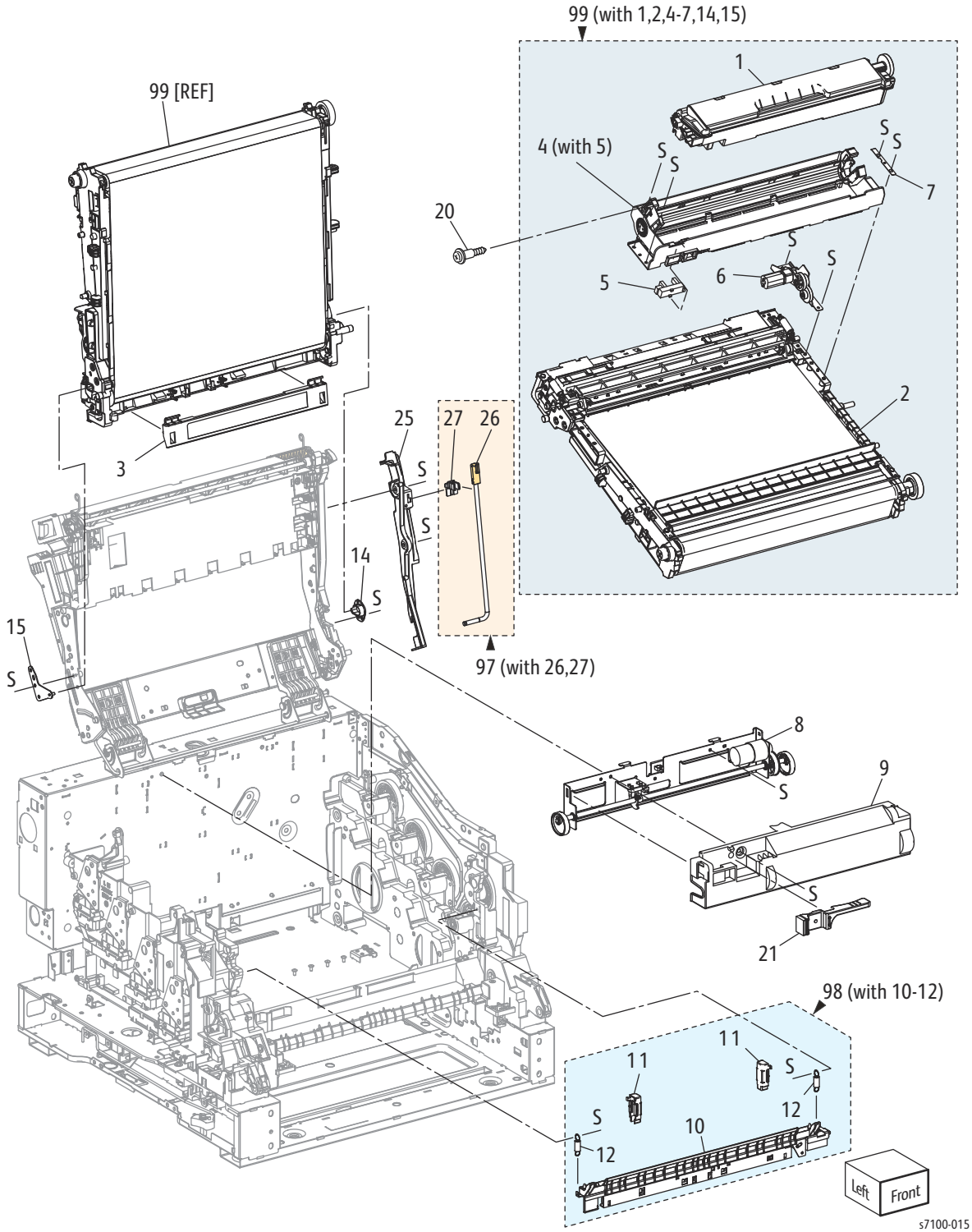
Parts List 8.1 Development



Parts List 8.1 Development

Item	Description	Part Number
1.	Toner Cartridge Assembly (Y) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136)	See Supplies and Accessories
2.	Toner Cartridge Assembly (M) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136)	See Supplies and Accessories
3.	Toner Cartridge Assembly (C) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136)	See Supplies and Accessories
4.	Toner Cartridge Assembly (K) (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136)	See Supplies and Accessories
5.	Developer Housing Assembly (Y) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)	604K58515
6.	Developer Housing Assembly (M) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)	604K58525
7.	Developer Housing Assembly (C) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)	604K58535
8.	Developer Housing Assembly (K) (REP 8.1 Developer Housing Assembly (Y/ M/ C/ K) on page 4-137)	604K58545
9.	Right Hand HV Guide Assembly (REP 8.2 Right Hand HV Guide Assembly on page 4-142)	
10.	Waste Auger Assembly (Trickle Guide) (REP 8.3 Waste Auger Assembly (Trickle Guide Assembly) on page 4-144)	604K79620
11.	-----	
12.	Dispense Guide Assembly (with 13, 14, 16, 18) (REP 8.4 Dispense Guide Assembly on page 4-148)	094K93340
13.	Toner CRUM Connector Assembly (REP 8.5 Toner CRUM Connector Assembly on page 4-151)	113K83410
14.	Toner Cover Interlock Switch Assembly	
15.	Dispense Motor Assembly (REP 8.6 Dispense Motor Assembly on page 4-152)	127K59941
16.	Toner Cartridge Interlock Switch Plate	
17.	MCU Plate (REP 8.7 MCU Plate on page 4-154)	
18.	Toner CRUM Harness Assembly	
19.	Dispense Harness Assembly	
98.	Toner Cover Switch Kit (with 14,16) (REP 8.8 Toner Cover Switch Kit on page 4-158)	604K59152

Parts List 9.1 Transfer



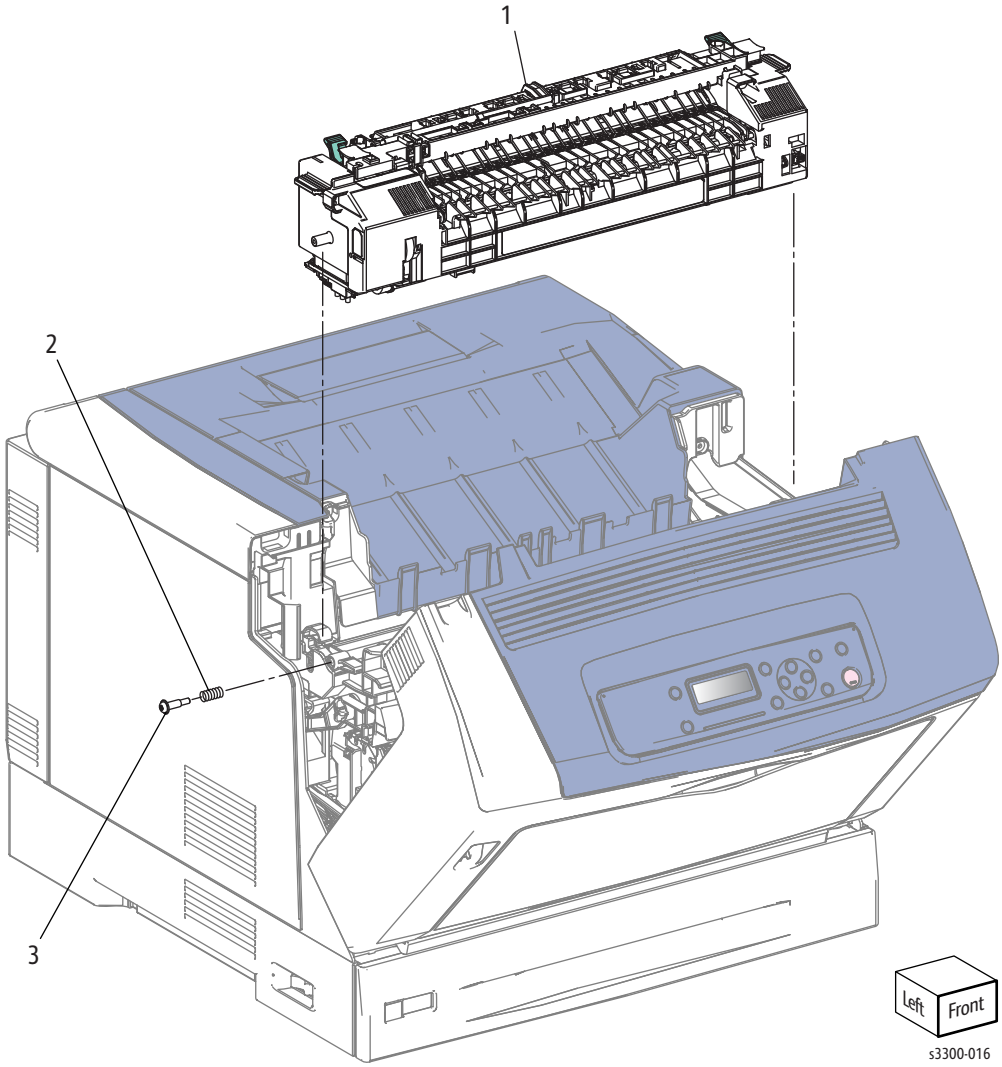
Parts List 9.1 Transfer

Item	Description	Part Number
1.	Waste Cartridge (Waste Toner Box Assembly)	See Supplies and Accessories
2.	IBT Belt Assembly	
3.	IBT Cleaner Cover Assembly (REP 9.2 IBT Belt Cleaner Cover Assembly on page 4-160)	848K41820
4.	Waste Cartridge Guide Assembly (with 5) (REP 9.3 Waste Cartridge Guide Assembly on page 4-162)	
5.	Waste Cartridge Full Sensor (REP 9.4 Waste Cartridge Full Sensor on page 4-164)	
6.	IBT Cleaner Motor Assembly (REP 9.5 IBT Cleaner Motor Assembly on page 4-166)	
7.	Front Guide Plate	
8.	IBT Retract Cam Assembly (REP 9.6 IBT Retract Cam Assembly on page 4-168)	008K92071
9.	Cam Cover (REP 9.7 Cam Cover on page 4-170)	
10.	CTD Sensor Assembly	
11.	Spring Cap	
12.	CTD Hold Spring	
13.	-----	
14.	Right IBT Holder	
15.	Left IBT Holder	
16.	-----	
17.	-----	
18.	-----	
19.	-----	
20.	Flange Screw	
21.	ROS Cleaner Assembly	
22.	-----	
23.	-----	
24.	-----	
25.	Top Right Guard Frame (REP 9.8 Top Right Guard Frame/ Holder Stand Bar on page 4-172)	
26.	Stand Bar Assembly	

Parts List 9.1 Transfer (Continued)

Item	Description	Part Number
27.	Stand Bar Holder	
97.	Holder Stand Bar Kit (with 26,27) (REP 9.8 Top Right Guard Frame/ Holder Stand Bar on page 4-172)	604K59791
98.	CTD Sensor Assembly Kit (with 10-12) (REP 9.9 CTD Sensor Assembly on page 4-175)	604K59180
99.	IBT Unit Kit (with 1-2, 4-7, 14-15) (REP 9.10 IBT Unit on page 4-177)	604K76391

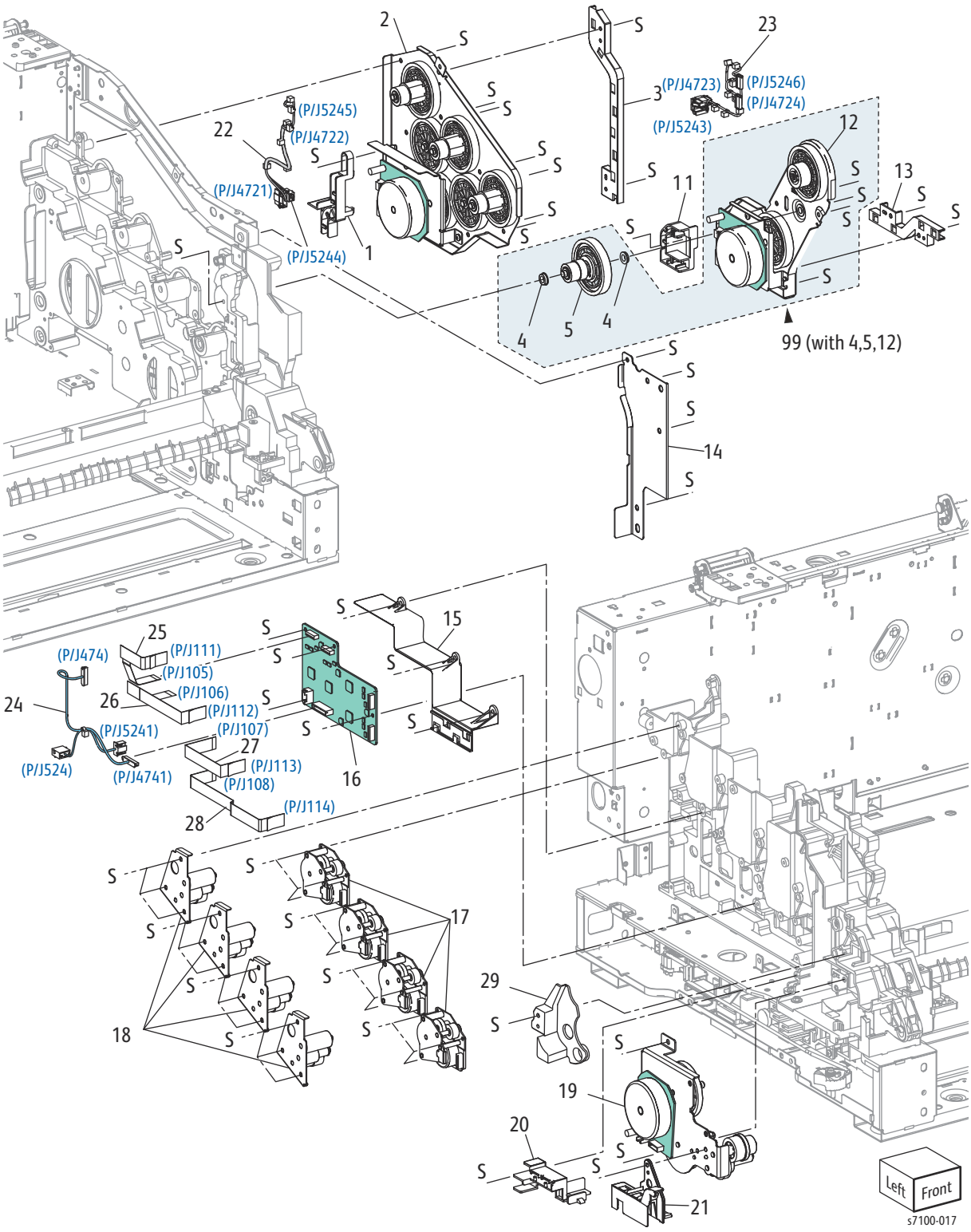
Parts List 10.1 Fuser



Parts List 10.1 Fuser

Item	Description	Part Number
1.	Fuser Unit (110V) (REP 10.1 Fuser Unit on page 4-183)	604K78380
	Fuser Unit (220V) (REP 10.1 Fuser Unit on page 4-183)	604K78390
2.	CRU Spring	
3.	CRU Screw	

Parts List 11.1 Drive



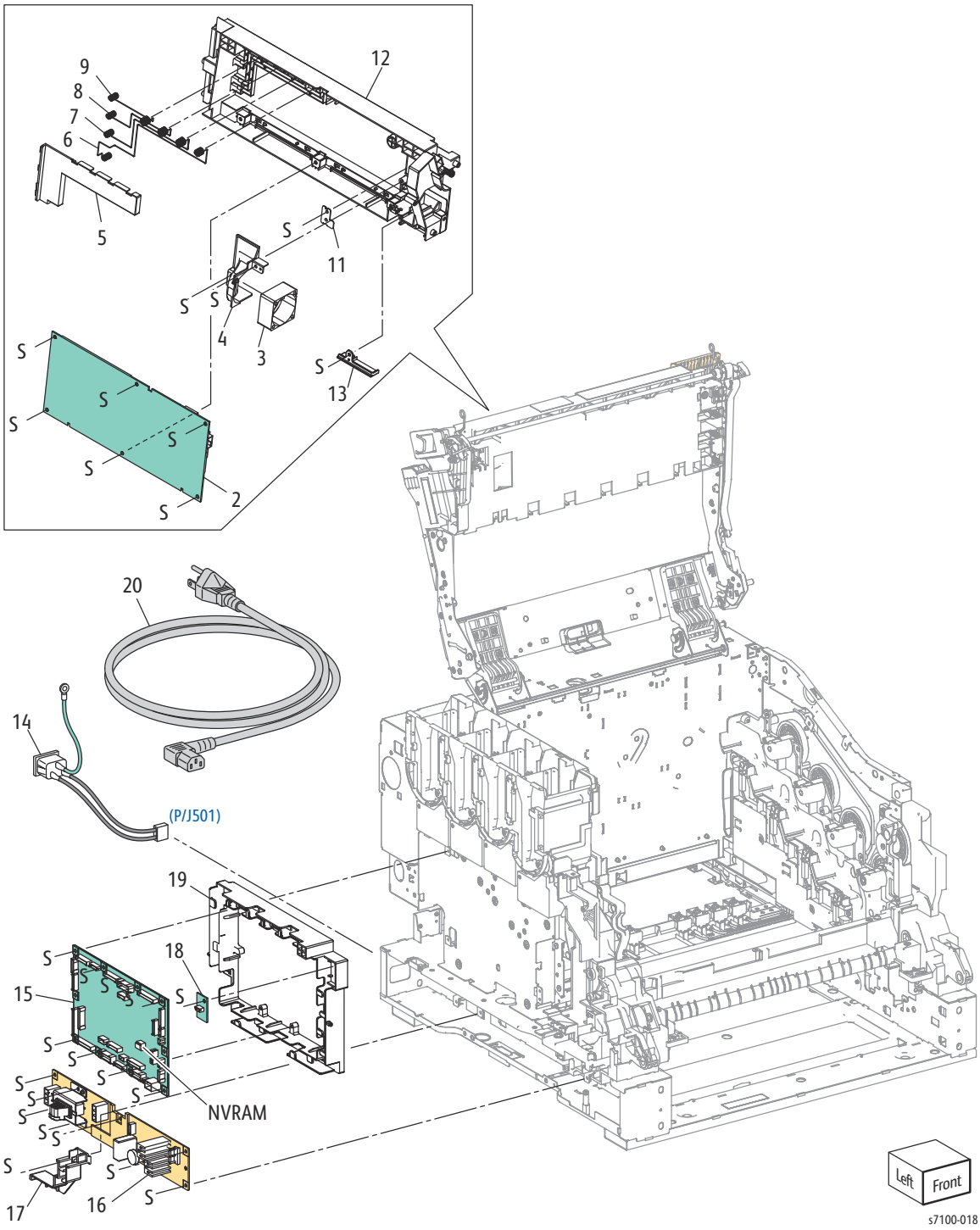
Parts List 11.1 Drive

Item	Description	Part Number
1.	PR Harness Guide (Y/ M/ C)	
2.	PR Drive Assembly (Y/ M/ C) (REP 11.1 PR Drive Assembly (Y/ M/ C) on page 4-185)	007K15843
3.	Imaging Unit CRUM Harness Guide	
4.	Ball Bearing	
5.	Input Imaging Unit Shaft Assembly (REP 11.2 Input Imaging Unit Shaft Assembly on page 4-187)	
6.	-----	
7.	-----	
8.	-----	
9.	-----	
10.	-----	
11.	PR Harness Guide (K)	
12.	PR Drive Assembly (K)	
13.	Harness Guide (K)	
14.	Right Front Outside Frame	
15.	Wire Wall Housing (REP 11.3 Wire Wall Housing on page 4-188)	
16.	Developer Motor PWB (REP 11.4 Developer Motor PWB on page 4-190)	960K48101
17.	Developer Motor (Match Box) Assembly (REP 11.5 Developer Motor (Match Box) Assembly on page 4-193)	127K64120
18.	Developer Drive Assembly (REP 11.6 Developer Drive Assembly on page 4-195)	007K15861
19.	E Paper Handling Drive Assembly (REP 11.7 Paper Handling Drive Assembly on page 4-197)	007K15881
20.	Paper Handling Motor Harness Guide	
21.	Harness Holder	
22.	PR Harness Assembly (Y/ M/ C)	
23.	PR Harness Assembly (K)	
24.	Developer Motor Harness Assembly	
25.	Flexible Flat Cable (FFC) (Y) Match Cable Assembly	
26.	Flexible Flat Cable (FFC) (M) Match Cable Assembly	

Parts List 11.1 Drive (Continued)

Item	Description	Part Number
27.	Flexible Flat Cable (FFC) (C) Match Cable Assembly	
28.	Flexible Flat Cable (FFC) (K) Match Cable Assembly	
29.	CTD Harness Cover	
99.	PR Drive Assembly Kit (K) (with 4, 5, 12) (REP 11.8 PR Drive Assembly (K) on page 4-200)	604K76852

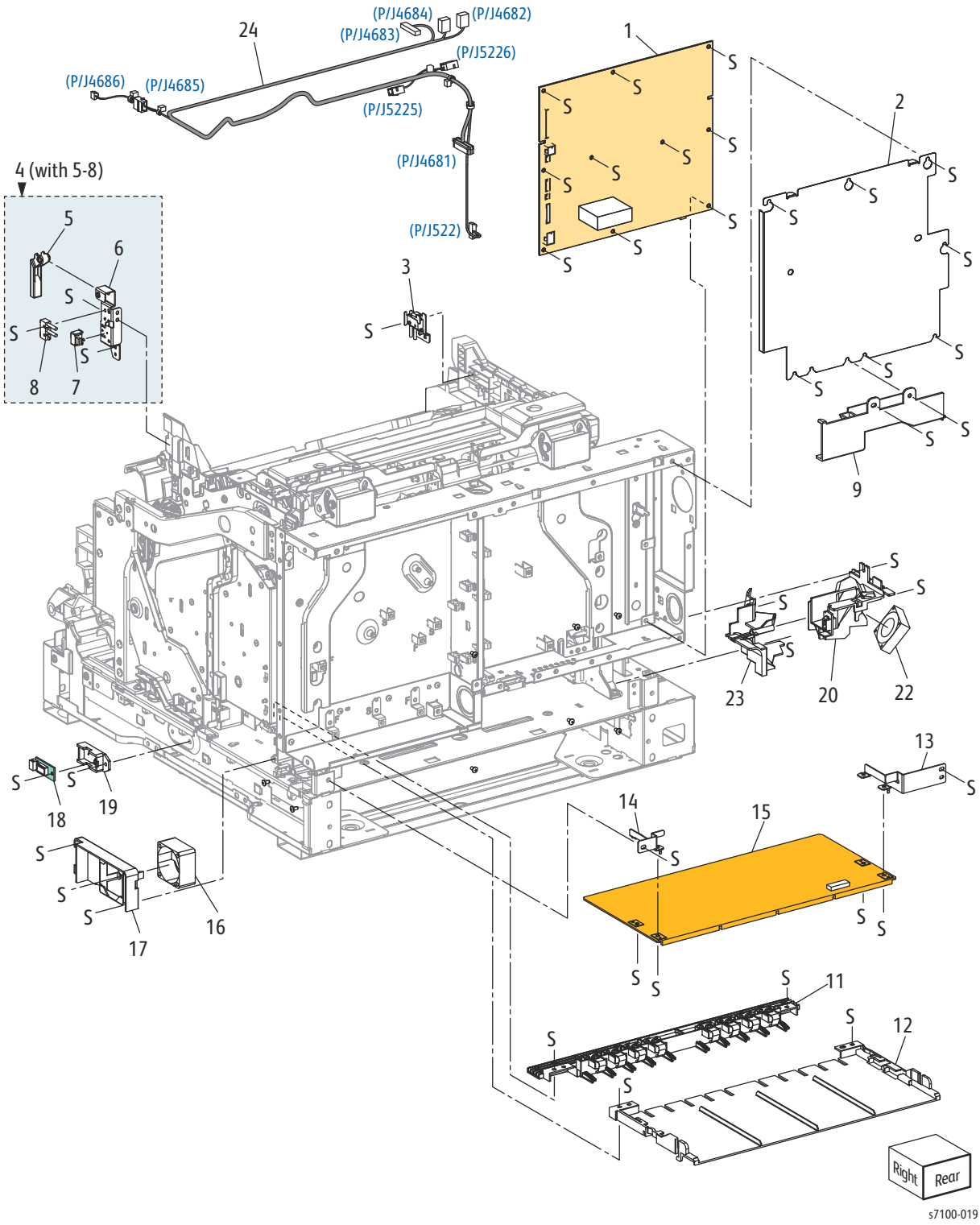
Parts List 12.1 Electrical (1 of 4)



Parts List 12.1 Electrical (1 of 4)

Item	Description	Part Number
1.	-----	
2.	HVPS2 PWB (REP 12.1 HVPS2 PWB on page 4-202)	105K23863
3.	HVPS2 Fan (REP 12.2 HVPS2 Fan on page 4-203)	127E85940
4.	IBT Duct	
5.	Conductor Cover	
6.	Wire Conductor (Y) (REP 12.3 Conductor Wire (Y/ M/ C/ K) on page 4-205)	
7.	Wire Conductor (M) (REP 12.3 Conductor Wire (Y/ M/ C/ K) on page 4-205)	
8.	Wire Conductor (C) (REP 12.3 Conductor Wire (Y/ M/ C/ K) on page 4-205)	
9.	Wire Conductor (K) (REP 12.3 Conductor Wire (Y/ M/ C/ K) on page 4-205)	
10.	-----	
11.	Backup Roller Contact Plate	
12.	HV Transfer Guide	
13.	Transfer Box Harness Cover	
14.	AC-In Harness Assembly 100V (REP 12.22 AC-In Harness Assembly on page 4-237)	962K74933
	AC-In Harness Assembly 200V	962K90980
15.	MCU PWB (REP 12.4 MCU PWB on page 4-206)	960K64553
16.	AC PWB Assembly 100V (REP 12.5 AC PWB on page 4-208)	960K47050
	AC PWB Assembly 200V (REP 12.5 AC PWB on page 4-208)	960K55150
17.	Option Feeder Harness Guide	
18.	EEPROM PWB (REP 12.6 EEPROM PWB on page 4-210)	960K47800
19.	MCU Harness Guide	
20.	Power Cord	

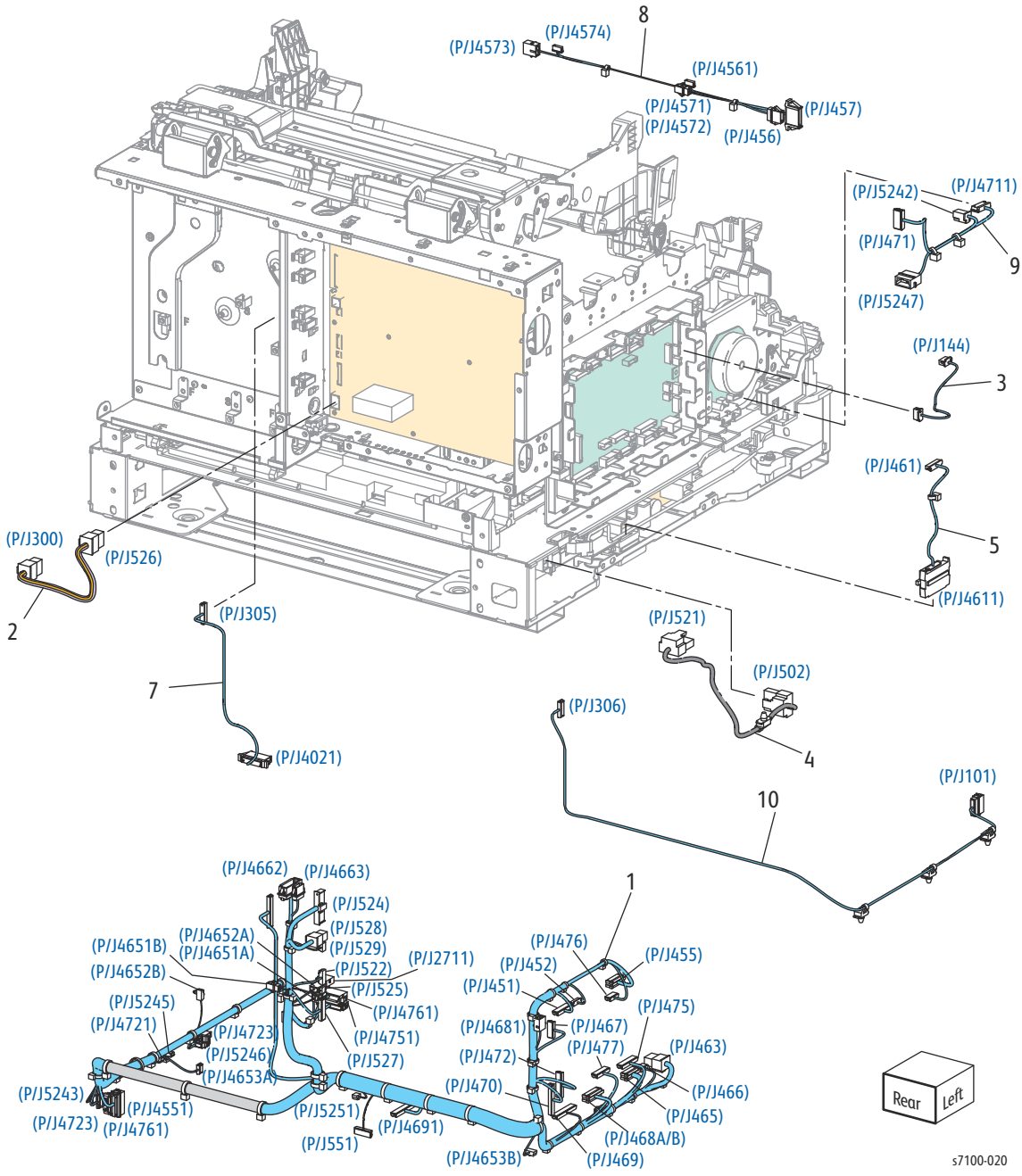
Parts List 12.2 Electrical (2 of 4)



Parts List 12.2 Electrical (2 of 4)

Item	Description	Part Number
1.	LVPS PWB 110V (REP 12.7 LVPS PWB on page 4-211)	105E20371
	LVPS PWB 220V (REP 12.7 LVPS PWB on page 4-211)	105E19461
2.	LVPS Shield Plate	
3.	Waste Cartridge Switch Assembly Kit (REP 12.8 Waste Cartridge Switch Assembly on page 4-213)	604K59271
4.	Front Interlock Switch Assembly Kit (with 5-8) (REP 12.9 Front Interlock Switch Assembly on page 4-214)	604K59284
5.	Interlock Lever	
6.	Interlock Bracket	
7.	Interlock Cap Switch (Front Cover Switch) (REP 12.10 Interlock Cap Switch (Front Cover Switch) on page 4-216)	
8.	Front Cover Interlock Switch Assembly (REP 12.11 Front Cover Interlock Switch Assembly on page 4-218)	
9.	Lower LVPS Duct	
10.	-----	
11.	HV Main Guide Assembly (REP 12.12 HV Main Guide Assembly on page 4-219)	
12.	Bottom HV Guide	
13.	Left Hand HVPS Handle Bracket	
14.	Right Hand HVPS Handle Bracket	
15.	HVPS1 PWB (REP 12.13 HVPS1 PWB on page 4-221)	105K23853
16.	Developer Fan (REP 12.14 Developer Fan on page 4-223)	127E85940
17.	Developer Fan Duct	
18.	Temp/ Humidity (Environmental) Sensor (REP 12.15 Temp/ Humidity (Environmental) Sensor on page 4-225)	130E93460
19.	Temp/ Humidity Sensor PWB Housing	
20.	Fan Holder Duct Assembly	
21.	-----	
22.	LVPS Fan Assembly (REP 12.16 LVPS Fan Assembly on page 4-226)	127K61780
23.	Harness Guide Duct	
24.	Top Harness Assembly	

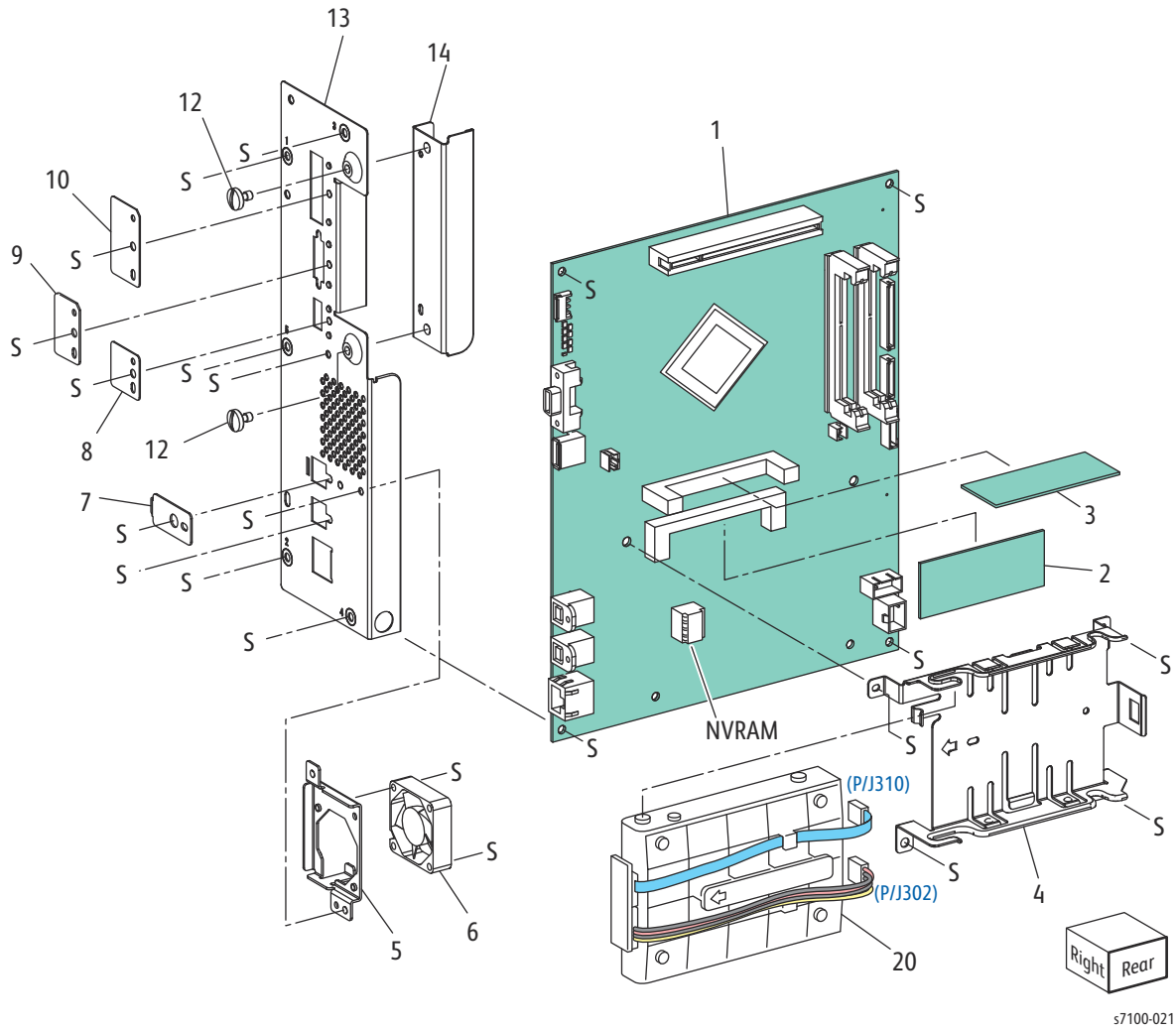
Parts List 12.3 Electrical (3 of 4)



Parts List 12.3 Electrical (3 of 4)

Item	Description	Part Number
1.	Main Harness Assembly	
2.	ESS Power Harness Assembly	
3.	X Pro Harness Assembly	
4.	AC LV Harness Assembly	
5.	Option Harness Assembly	
6.	-----	
7.	Video Harness Assembly	
8.	Main CTD Harness Assembly	
9.	Paper Handling Motor Harness Assembly	
10.	Main UI Harness Assembly	

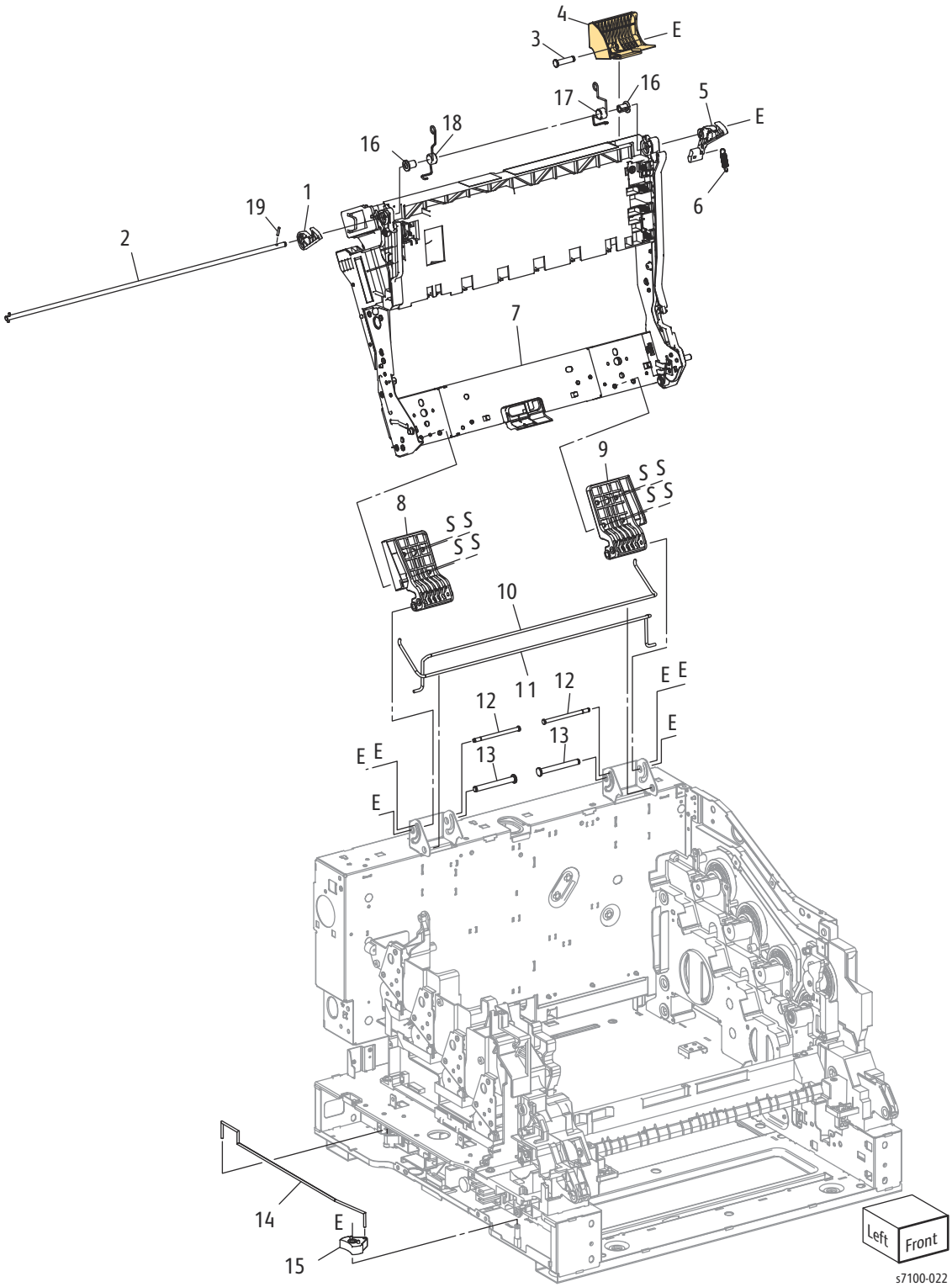
Parts List 12.4 Electrical (4 of 4)



Parts List 12.4 Electrical (4 of 4)

Item	Description	Part Number
1.	Image Processor PWB (ESS PWB) US/ 110V (REP 12.17 Image Processor (I/P) PWB on page 4-228)	604K77272
2.	1 GB DDR2 DIMM (REP 12.18 Memory (Standard) on page 4-232)	133K26363
3.	1GB SO-DIMM (Extension System Memory) (REP 12.19 Memory (Optional) on page 4-234)	237E25731
4.	HDD Bracket	
5.	ESS Fan Bracket	
6.	I/P PWB Fan (REP 12.20 Image Processor PWB Fan on page 4-235)	127E86110
7.	USB Panel	
8.	USB Host Panel	
9.	EPSV Panel	
10.	Serial Debug Panel	
11.	-----	
12.	PCI Screw	
13.	ESS Interface Plate Assembly	
14.	Plate	
15.	-----	
16.	-----	
17.	-----	
18.	-----	
19.	-----	
20.	HDD Productivity Service Kit (REP 12.21 Hard Disk Drive (Optional) on page 4-236)	604K78960

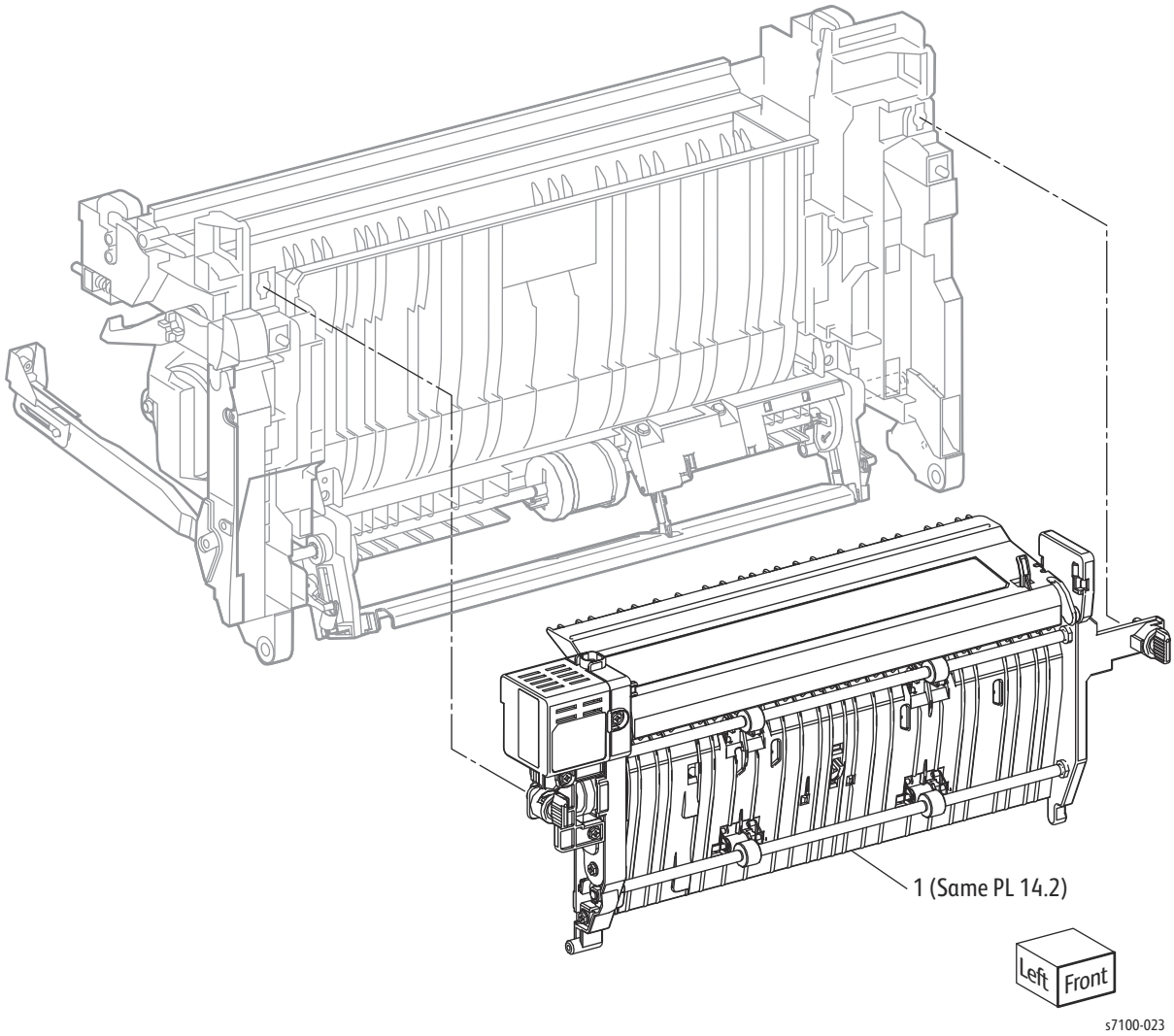
Parts List 13.1 Frame



Parts List 13.1 Frame

Item	Description	Part Number
1.	Top Left Latch	
2.	Latch Shaft Assembly	
3.	Top Right Shaft	
4.	Top Lever	
5.	Top Right Latch	
6.	Top Spring	
7.	Top Frame Sub Assembly (REP 13.2 Top Frame Sub Assembly on page 4-240)	
8.	Left Arm Plate Hinge (REP 13.3 Left Arm Plate Hinge/ Right Arm Plate Hinge on page 4-244)	815E60580
9.	Right Arm Plate Hinge (REP 13.3 Left Arm Plate Hinge/ Right Arm Plate Hinge on page 4-244)	815E60590
10.	Right Torsion Spring	
11.	Left Torsion Spring	
12.	Stopper Hinge Shaft	
13.	Hinge Shaft	
14.	Main Switch Link Shaft	
15.	Main Switch Key	
16.	Top Sleeve	
17.	Right Transfer Spring (REP 13.4 Transfer Spring Kit/ Latch Frame Kit on page 4-247)	
18.	Left Transfer Spring (REP 13.4 Transfer Spring Kit/ Latch Frame Kit on page 4-247)	
19.	Pin	

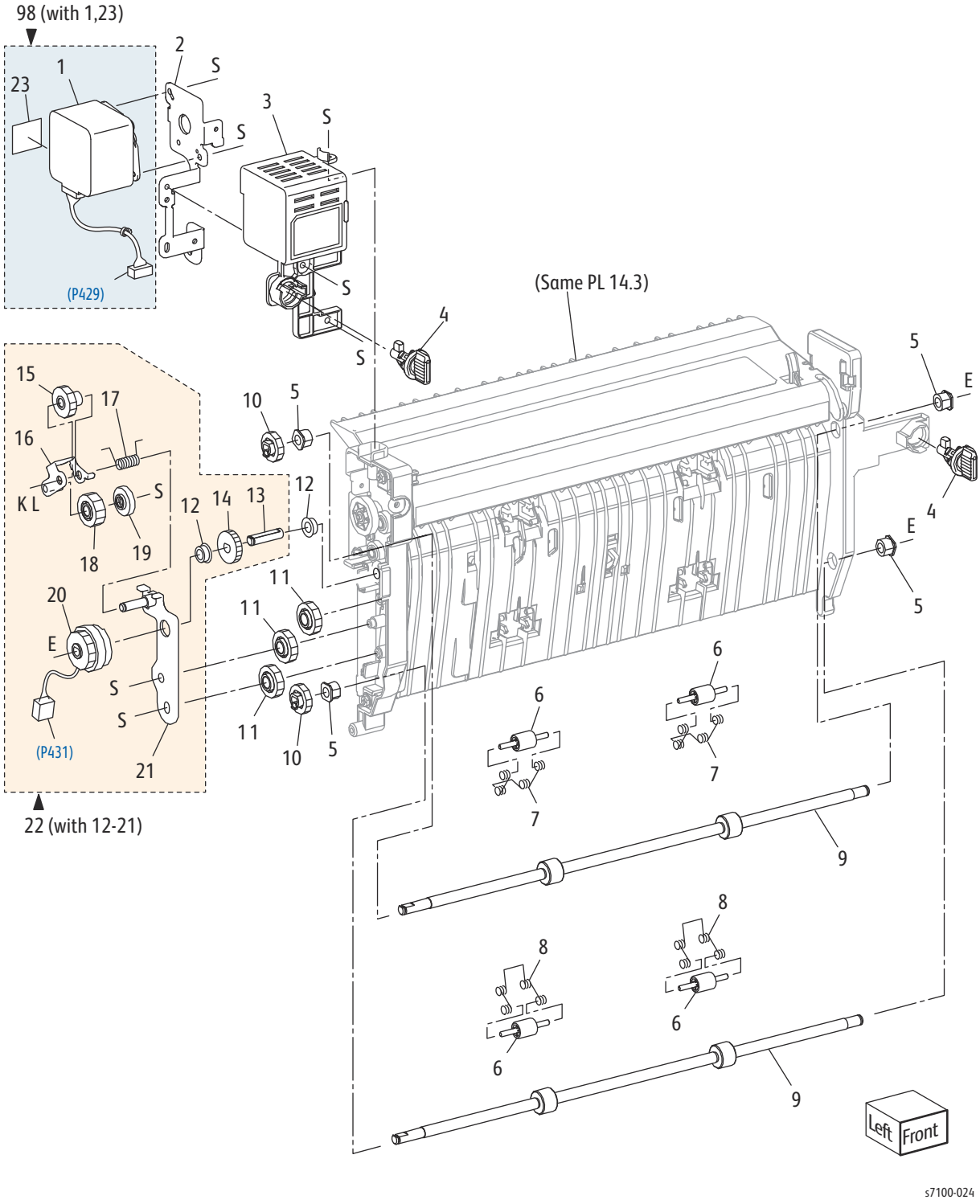
Parts List 14.1 Duplex (1 of 3)



Parts List 14.1 Duplex (1 of 3)

Item	Description	Part Number
1.	Duplex Unit (REP 14.1 Duplex Unit on page 4-249)	604K78531

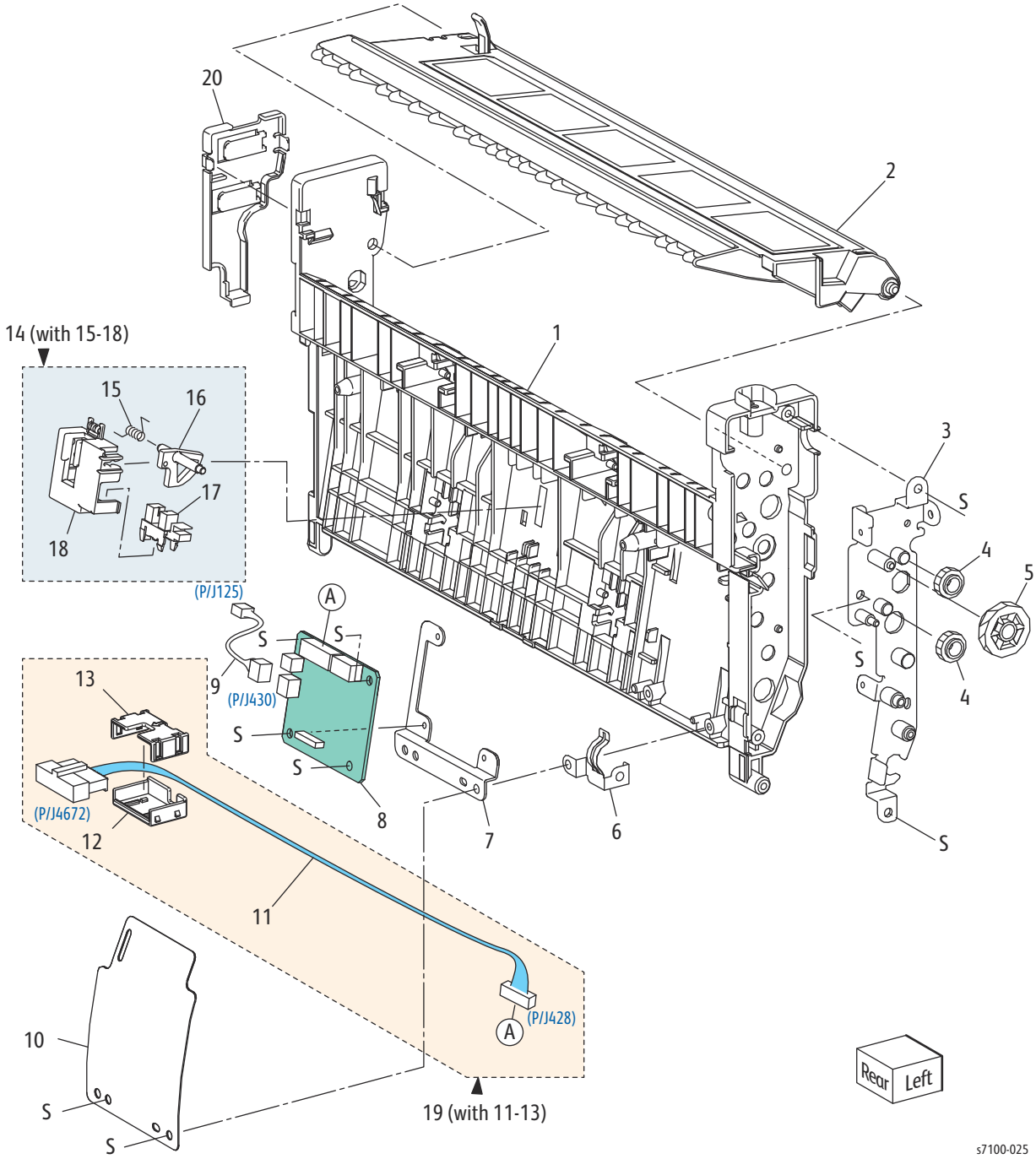
Parts List 14.2 Duplex (2 of 3)



Parts List 14.2 Duplex (2 of 3)

Item	Description	Part Number
1.	Duplex Earth Motor (REP 14.2 Duplex Motor on page 4-250)	
2.	Duplex Motor Bracket	
3.	Duplex Motor Cover	
4.	Duplex Lock Lever	
5.	Earth Bearing	
6.	Duplex Pinch Roller	
7.	Roller 1 Pinch Spring	
8.	Roller 2 Pinch Spring	
9.	Duplex Roller (REP 14.3 Duplex Roller on page 4-251)	
10.	Duplex Roller Gear	
11.	Idle Gear 22	
12.	Bearing	
13.	Clutch Shaft	
14.	Idle Clutch Gear	
15.	Idle Gear 16	
16.	Swing Bracket Assembly	
17.	Swing Spring	
18.	Idle Gear 17	
19.	Duplex Collar	
20.	Duplex In Clutch Assembly (REP 14.4 Duplex In Clutch Assembly/ Duplex Drive Gear Assembly Kit on page 4-254)	
21.	Duplex B Bracket Assembly	
22.	Duplex Drive Gear Assembly Kit (with 12-21) (REP 14.4 Duplex In Clutch Assembly/ Duplex Drive Gear Assembly Kit on page 4-254)	604K59701
23.	Caution Label	
98.	Duplex Motor Assembly Kit (with 1, 23) (REP 14.5 Duplex Motor Assembly on page 4-256)	604K76950

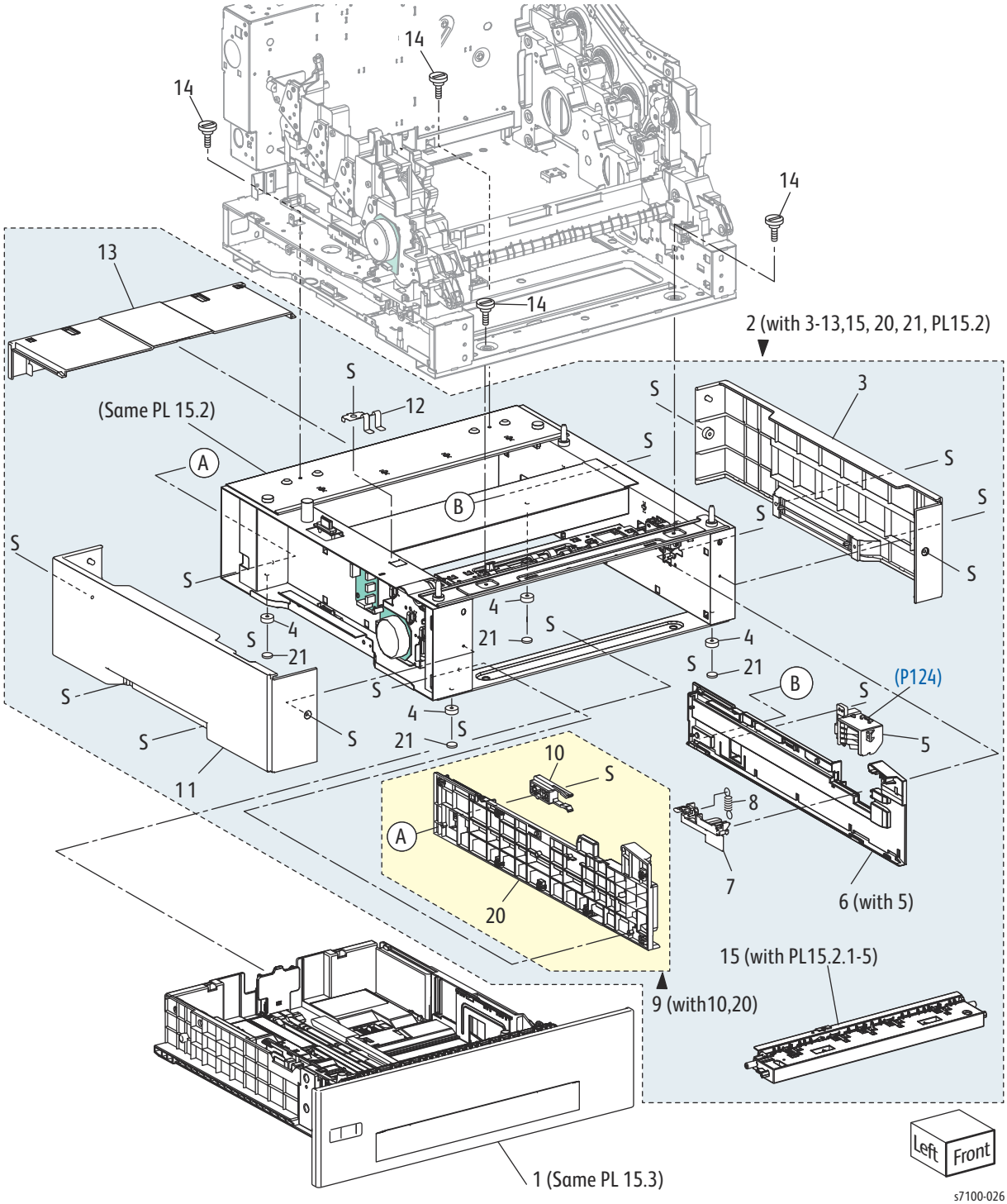
Parts List 14.3 Duplex (3 of 3)



Parts List 14.3 Duplex (3 of 3)

Item	Description	Part Number
1.	Duplex Frame	
2.	Upper Duplex Chute	
3.	Duplex A Bracket Assembly	
4.	Idle Gear 14	
5.	DEF Gear	
6.	Ground Frame Duplex Plate	
7.	PWB Plate	
8.	E Duplex PWB (REP 14.6 Duplex PWB on page 4-257)	960K50324
9.	Option Duplex Sensor Harness Assembly	
10.	PWB Shield	
11.	Duplex Relay Harness	
12.	Connector A Cover	
13.	Connector B Cover	
14.	Sensor Holder Assembly (with 15-18)	
15.	Actuator Spring	
16.	Duplex Sensor Actuator	
17.	Duplex Jam Sensor (REP 14.7 Duplex Jam Sensor on page 4-259)	930W00113
18.	Sensor Holder	
19.	Duplex Relay Harness Assembly (with 11-13)	
20.	Duplex Harness Cover	

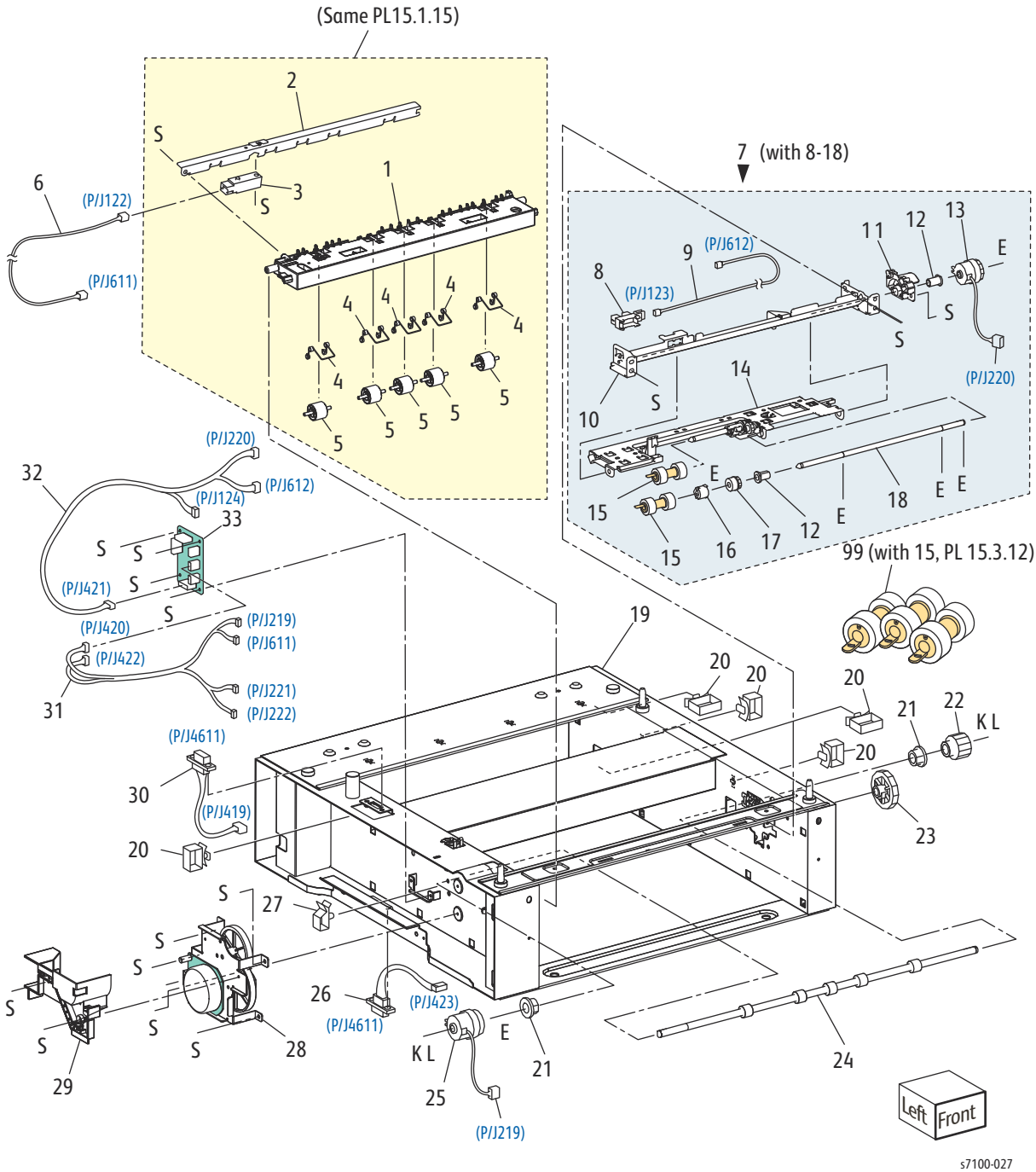
Parts List 15.1 550-Sheet Feeder (1 of 2)



Parts List 15.1 550-Sheet Feeder (1 of 2)

Item	Description	Part Number
1.	Tray Assembly 550	604K76922
2.	550-Sheet Feeder Assembly (with 3-13, 15, 20, 21, PL 15.2) (REP 15.1 550-Sheet Feeder Assembly)	See Supplies and Accessories
3.	Right Feeder Cover 550 (REP 15.2 550 Right Feeder Cover)	
4.	E Optional Foot	
5.	Size Switch Holder Assembly (REP 15.3 Size Switch Holder Assembly on page 4-263)	019K07952
6.	Right Tray Guide 550 (with 5) (REP 15.4 550 Right Tray Guide on page 4-264)	
7.	Protect Cover Assembly (REP 15.5 Protect Cover Assembly on page 4-265)	
8.	Nudger Spring	
9.	Left Tray Guide 550 (with 10, 20) (REP 15.6 550 Left Tray Guide on page 4-266)	
10.	Tray Feeder Stopper (REP 15.7 Tray Feeder Stopper on page 4-267)	003E74910
11.	Left Feeder Cover 550 (REP 15.8 550 Left Feeder Cover on page 4-268)	
12.	Earth Spring	
13.	Tray Cover (REP 15.9 Tray Cover on page 4-269)	848E42770
14.	Joint Feeder Screw M4	826E16531
15.	Turn Chute Assembly (with PL 15.2.1 - PL 15.2.5) (REP 15.10 Turn Chute Assembly on page 4-270)	054K42631
16.	-----	
17.	-----	
18.	-----	
19.	-----	
20.	Left Tray Guide 550	
21.	Rubber Foot	

Parts List 15.2 550-Sheet Feeder (2 of 2)



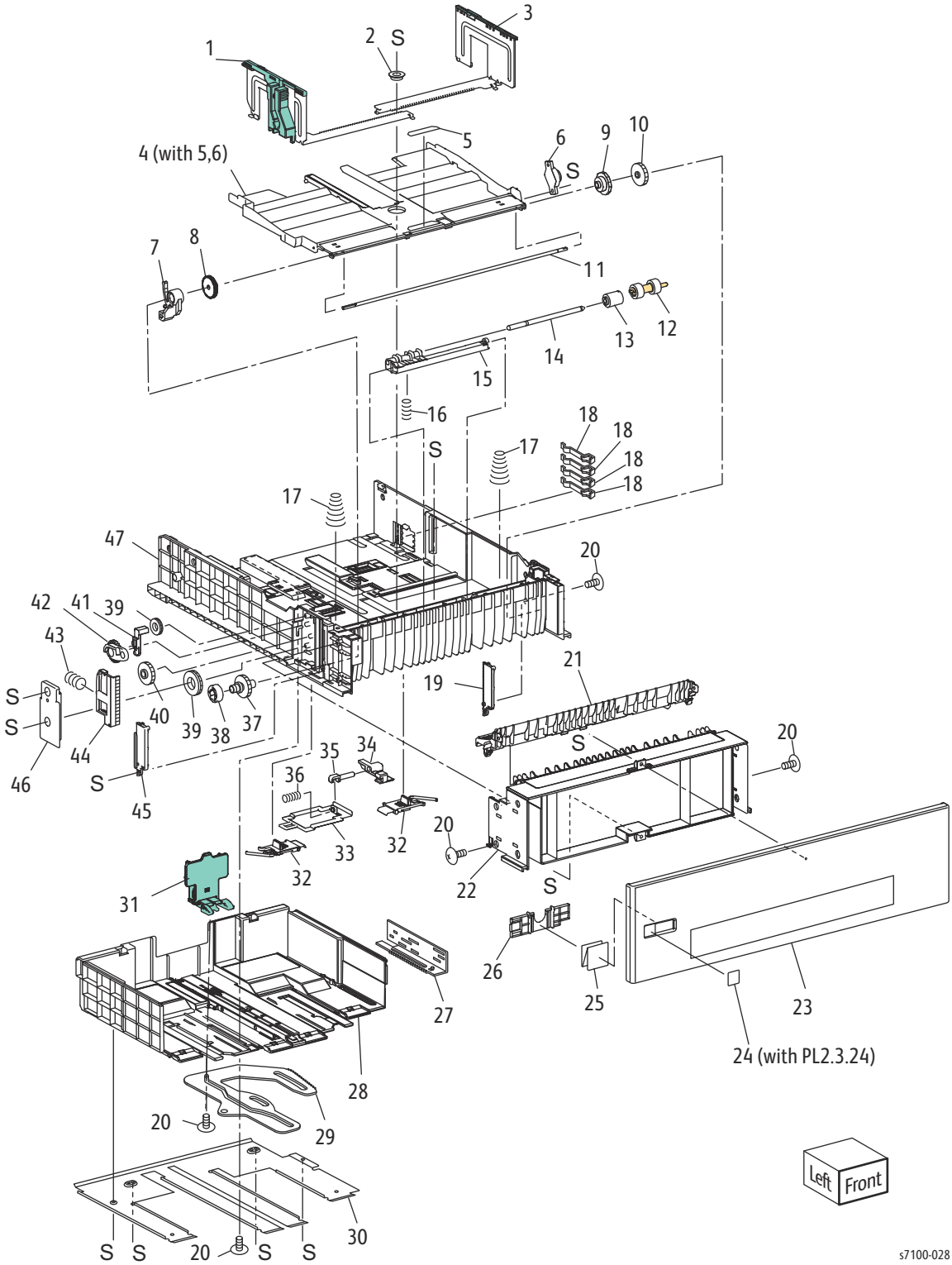
Parts List 15.2 550-Sheet Feeder (2 of 2)

Item	Description	Part Number
1.	Turn Chute	
2.	Chute Plate	
3.	Paper Jam Sensor (REP 15.11 Paper Jam Sensor on page 4-271)	130E89381
4.	Pinch Spring	
5.	Turn Pinch Roller	
6.	Option Paper Feed Jam Harness Assembly	
7.	Feeder Sub Assembly (with 8-18) (REP 15.12 Feeder Sub Assembly on page 4-272)	059K64952
8.	Feeder No Paper Sensor (REP 15.13 Feeder No Paper Sensor on page 4-274)	130E87280
9.	Option No Paper Feed Harness Assembly	
10.	Retard Chute Assembly	
11.	Top Retard Holder	
12.	Nudger Bearing	
13.	Feed Roller Clutch (REP 15.14 Feed Roller Clutch on page 4-275)	121K45670
14.	Nudger Support Assembly	
15.	Tray 2/ 3/ 4 Feed Roller (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276)	Included with Tray 2/ 3/ 4 Feed Roller Kit (see PL 15.2.99, page 5-62)
16.	Oneway Feed Clutch (REP 15.16 Oneway Feed Clutch/ Oneway Nudger Clutch on page 4-278)	
17.	Oneway Nudger Clutch (REP 15.16 Oneway Feed Clutch/ Oneway Nudger Clutch on page 4-278)	
18.	Feed Shaft	
19.	Option Frame Assembly	
20.	Clamp	
21.	Bearing	
22.	Turn Gear Assembly 17	
23.	Right Idle Gear 28	
24.	Turn Roller Assembly (REP 15.17 Turn Roller Assembly on page 4-279)	
25.	Turn Roller Clutch (REP 15.18 Turn Roller Clutch on page 4-280)	121K45680

Parts List 15.2 550-Sheet Feeder (2 of 2) (Continued)

Item	Description	Part Number
26.	Option Feeder 2 Relay Harness Assembly (REP 15.19 Option Feeder 2 Relay Harness Assembly on page 4-282)	962K83640
27.	Wire Saddle	
28.	Option Drive Assembly (REP 15.20 Option Drive Assembly on page 4-283)	007K16210
29.	Option Harness Cover	
30.	Option Feeder 1 Relay Harness Assembly (REP 15.21 Option Feeder 1 Relay Harness Assembly on page 4-284)	962K83630
31.	Option Left Feeder Harness Assembly	
32.	Option Rear Feeder Harness Assembly	
33.	Feeder PWB (REP 15.22 Feeder PWB on page 4-285)	960K37771
99.	Option Tray 2/ 3/ 4 Feed Roller Kit (with 15, PL 15.3.12) (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276)	604K78871

Parts List 15.3 Tray 550



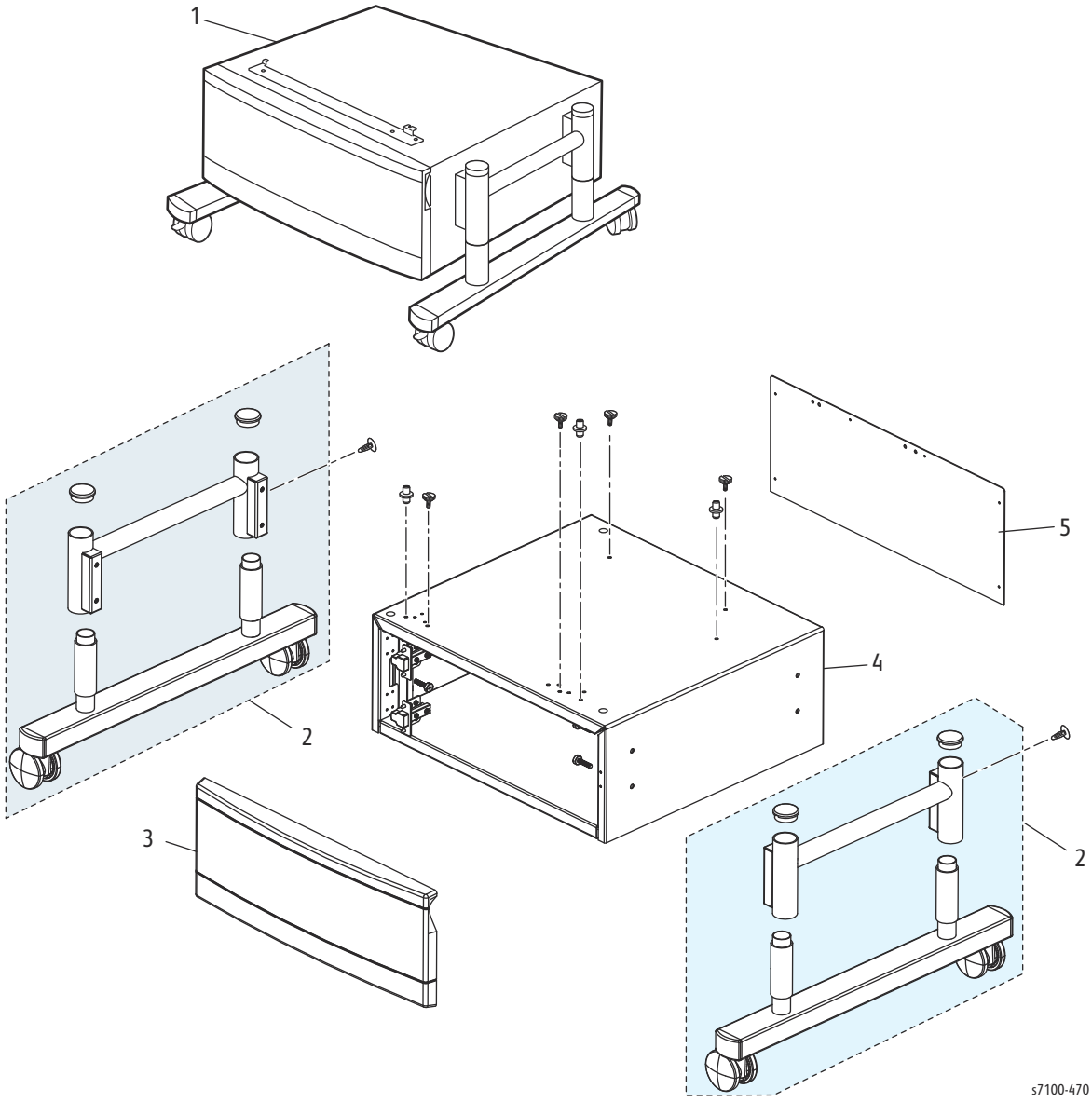
Parts List 15.3 Tray 550

Item	Description	Part Number
1.	Left Side Guide Assembly (REP 15.23 Right Side Guide/ Left Side Guide on page 4-286)	
2.	Pinion Gear	
3.	Right Side Guide Assembly (REP 15.23 Right Side Guide/ Left Side Guide on page 4-286)	
4.	Bottom Plate Assembly (with 5, 6)	
5.	PB Pad 550	
6.	Bottom Damper 550	
7.	PB Stopper 550	
8.	Bottom Lock Oneway Gear	
9.	Bottom Damper Oneway Gear	
10.	PB Left Gear	
11.	PB Shaft	
12.	Feed Roller (REP 15.15 Tray 2/ 3/ 4 Feed Roller on page 4-276)	Included with Tray 2/ 3/ 4 Feed Roller Kit (see PL 15.2.99, page 5-62)
13.	Friction Clutch (REP 15.24 Friction Clutch on page 4-288)	
14.	Retard Shaft	
15.	Retard Holder (REP 15.25 Retard Holder Assembly on page 4-289)	
16.	Retard Spring	
17.	Bottom Up Spring 550	
18.	Size Actuator	
19.	Right Gear Lock Plate 550	
20.	Tapping Screw	
21.	Retard Chute	
22.	Front Chute 550	
23.	Tray Handle 550 (REP 15.26 Option Tray Handle on page 4-290)	
24.	Tray Number Label Kit (with PL 2.3.24)	604K59300
25.	Paper Size Card	
26.	Paper Size Stopper	
27.	Size Rack	

Parts List 15.3 Tray 550 (Continued)

Item	Description	Part Number
28.	Exit Housing Assembly (REP 15.27 Exit Housing Assembly on page 4-292)	
29.	Gear Sector Assembly	
30.	Exit Cover	
31.	End Guide Assembly 550 (REP 15.28 End Guide Assembly on page 4-293)	
32.	A4 Exit Lock (REP 15.29 Exit Lock on page 4-295)	
33.	Exit Lock Link	
34.	Bottom Plate Link	
35.	Lock Rack Pin	
36.	Link Lock Spring	
37.	PB Right Gear	
38.	PB Roller	
39.	Bottom Lock Pinion Gear	
40.	Bottom Lock Gear 40	
41.	Bottom Lock Lever Assembly 550	
42.	Bottom Lock Lever Gear	
43.	Bottom Lock Spring	
44.	Bottom Lock Rack 550	
45.	Left Gear Lock Plate 550	
46.	Bottom Up Cover Assembly 550	
47.	Base Housing 550	

Parts List 16.1 Printer Stand



Parts List 16.1 Printer Stand

Item	Description	Part Number
1.	Stand Assembly	097S04552
2.	Leg Stand Assembly	078K00830
3.	Door Assembly	078K00840
4.	Frame Assembly	
5.	Cover, Rear	

Xerox Supplies and Accessories

Parts List Reference	Description	Part Number
Consumables		
North America/ Xerox Europe		
PL 8.1.1	Toner Cartridge - Standard Capacity - Cyan	106R02599
	Toner Cartridge - Standard Capacity - Magenta	106R02600
	Toner Cartridge - Standard Capacity - Yellow	106R02601
	Toner Cartridge - Dual Package - Cyan	106R02602
	Toner Cartridge - Dual Package - Magenta	106R02603
	Toner Cartridge - Dual Package - Yellow	106R02604
	Toner Cartridge - Dual Package - Black	106R02605
DMO Unique		
PL 8.1.1	Toner Cartridge - Standard Capacity - Cyan	106R02606
	Toner Cartridge - Standard Capacity - Magenta	106R02607
	Toner Cartridge - Standard Capacity - Yellow	106R02608
	Toner Cartridge - Dual Package - Cyan	106R02609
	Toner Cartridge - Dual Package - Magenta	106R02610
	Toner Cartridge - Dual Package - Yellow	106R02611
	Toner Cartridge - Dual Package - Black	106R02612
Metered		
PL 8.1.1	Toner Cartridge - Dual Package - Cyan	106R02620
	Toner Cartridge - Dual Package - Magenta	106R02621
	Toner Cartridge - Dual Package - Yellow	106R02622
	Toner Cartridge - Dual Package - Black	106R02623
Long Life Maintenance Items		
PL 2.2.99	Tray 1 Feed Roller Assembly Kit	604K78861
PL 4.3.18	Transfer Roller (2nd BTR Unit)	604K78291
PL 4.4.14	Bypass Tray Feed Roller Assembly	604K76890

Parts List Reference	Description	Part Number
PL 6.1.1	Imaging Unit - Cyan	108R01148
	Imaging Unit - Magenta	
	Imaging Unit - Yellow	
	Imaging Unit - Black	108R01151
PL 8.1.5	Developer Housing Assembly - Yellow	604K58515
PL 8.1.6	Developer Housing Assembly - Magenta	604K58525
PL 8.1.7	Developer Housing Assembly - Cyan	604K58535
PL 8.1.8	Developer Housing Assembly - Black	604K58545
PL 9.1.1	Waste Cartridge	106R02624
PL 9.1.99	Transfer Belt (IBT Unit)	604K76391
PL 10.1.1	Fuser Assembly (110V)	604K78380
	Fuser Assembly (220V)	604K78390
PL 15.2.99	Tray 2, 3, 4 Feed Roller Assembly Kit	604K78871
Options		
PL 12.4.20	HDD Productivity Service Kit	604K78960
PL 14.1.1	Duplex Unit	604K78531
PL 15.1.2	550-Sheet Feeder Assembly	097S04485
PL 16.1.1	Printer Stand	097S04552

Power Cords

Description	Part Number
Power Cord, North America (NEMA 5-15), 120 V	117K31400
Power Cord, 220 V Common EU	152S06413
Power Cord, Cable Assembly, UK, 220 V	152S06414
Power Cord, Denmark, 220V	152S06415
Power Cord, Switzerland, 220V	152S06416

Kits

Description	Part Number
Hardware Kit	604K76930
Repack Kit	695K33750

Maintenance

6

This chapter includes:

Service Maintenance Procedure

Maintenance Safety

- Do not attempt any maintenance procedure that is not specifically described in the documentation supplied with your printer.
- Do not use aerosol cleaners. Clean the printer with a dry lint-free cloth only.

Do not burn any consumables or routine maintenance items. For information on Xerox supplies recycling programs, go to www.xerox.com/gwa.

Perform the following procedures whenever you check, service, or repair a printer. Cleaning the printer, as outlined in the following steps, assures proper operation of the printer and reduces the probability of having to service the printer in the future.

The frequency of use, the type of paper printed on, and operating environment are factors in determining how critical cleaning the printer is and how often it is necessary.

Recommended Tools

- Toner vacuum cleaner
- Clean water
- Clean, dry, lint-free cloth
- Black, light protective bag

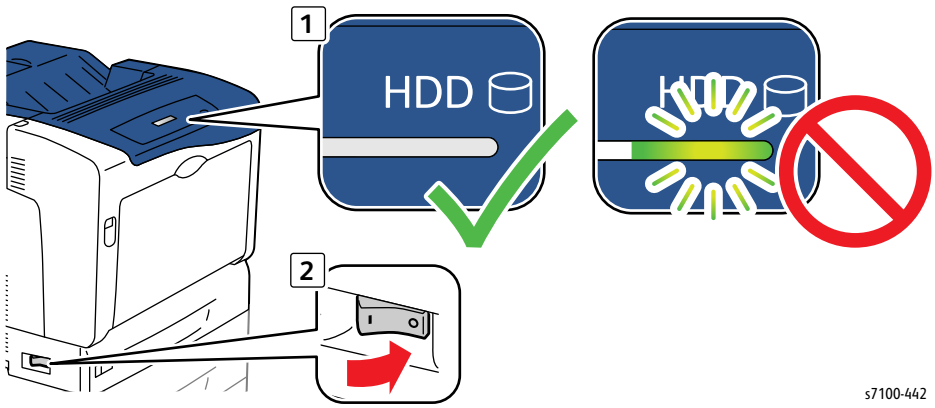
Repair, Inspect, and Prevent (RIP) Procedure

- Perform these routine maintenance procedures during the course of servicing the printer.
- Clean the Feed Rollers, Transfer Rollers, and Paper Guides; replace if necessary.
- Remove and clean the paper trays.
- Print a Configuration and Error History pages; diagnose, and repair any problems as indicated.
- Check cleanliness of the interior and exterior, including Fans; if necessary, clean (dust or vacuum) these areas.
- Review proper printer operation using a customer file, if possible. Check with the customer regarding any special applications they may be using.
- Review with the customer all work that was performed and discuss proper printer care.

Cleaning

CAUTION: Never apply alcohol or other chemicals to any parts of the printer. Never use a damp cloth to clean up toner. If you remove the Imaging Units, place them in a light-protective bag or otherwise protect them as exposure to light can quickly degrade performance and result in early failure.

CAUTION: To prevent printer malfunction or internal hard drive damage, prior to power Off the printer, be sure to verify that the HDD indicator on the Control Panel is not On or blinking.



Perform the following general cleaning steps as indicated by the printer's operating environment. Use a dry lint-free cloth or a lint-free cloth moistened with water for all cleaning unless directed otherwise in this manual. Wipe with a dry, lint-free cloth if a moistened cloth is used.

Inspect the vents on the exterior of the printer for dust. Clean as necessary.

1. Record number of sheets printed.
2. Print several sheets of paper to check for problems or defects.
3. Turn the printer power Off and disconnect the power cord.
4. Remove the following components before cleaning:
   - Rear Cover (REP 1.6 Rear Cover on page 4-20)
   - Left Side Cover (REP 1.10 Left Side Cover on page 4-25)
   - Right Side Cover (REP 1.11 Right Side Cover on page 4-27)
   - Toner Cartridges (REP 8.0 Toner Cartridge Assembly (Y/ M/ C/ K) on page 4-136)
   - Imaging Units (REP 6.0 Imaging Unit (Y/ M/ C/ K) on page 4-121)
   - Waste Cartridge (REP 9.1 Waste Cartridge on page 4-159)

Appropriate cleaning procedures, as listed in the following table, should be performed when specific print-quality or paper transport problems occur.

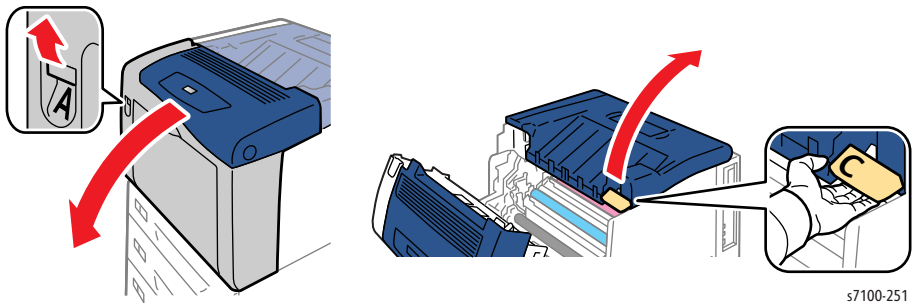
Problem Type	Solution
The prints have voids or light streaks through one or more colors, use the following instructions to clean the laser lenses.	Clean the Laser Lenses (page 6-5).
The print or color density is too light, missing, or the background is foggy, clean the Density Sensors.	Clean the Density Sensors (page 6-8).

Cleaning the Laser Lenses

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

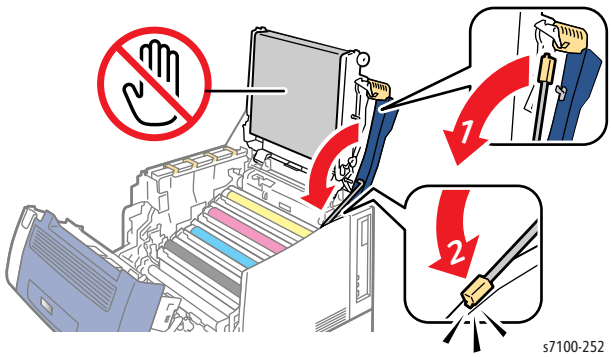
1. Release latch A and open the Front Frame Assembly (PL 4.1.6).
2. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.



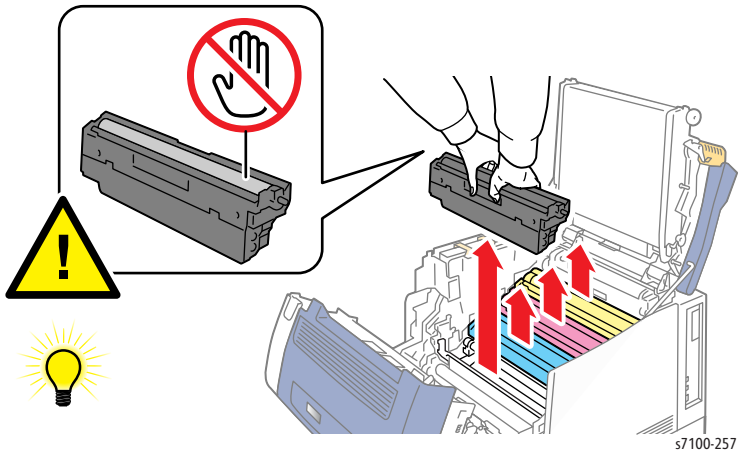
CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt. Scratches, dirt, or oil from your hands on the belt can deteriorate print quality.

3. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

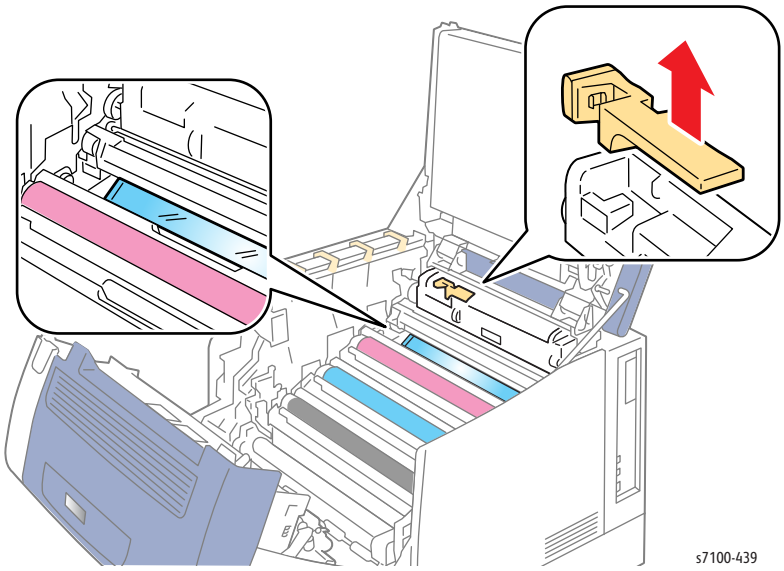


Note: For the following steps, only remove one Imaging Unit at a time when cleaning the laser lens.

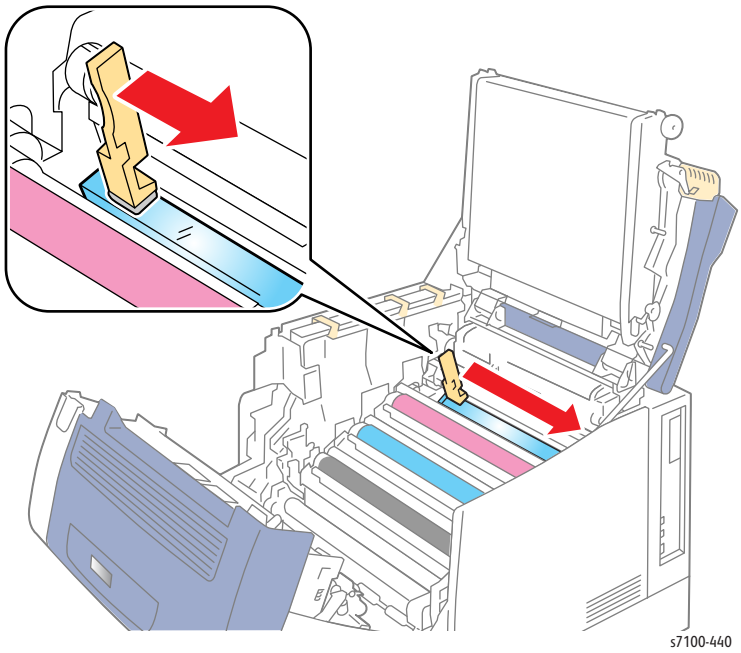
4. Lift and remove the Imaging Unit (Y/ M/ C/ K).



5. Lift and remove the ROS Cleaning Tool.



6. Clean the laser lens by wiping the length of its surface three times using the soft end of the cleaning tool.
7. Repeat steps 4 through 6 for each color.

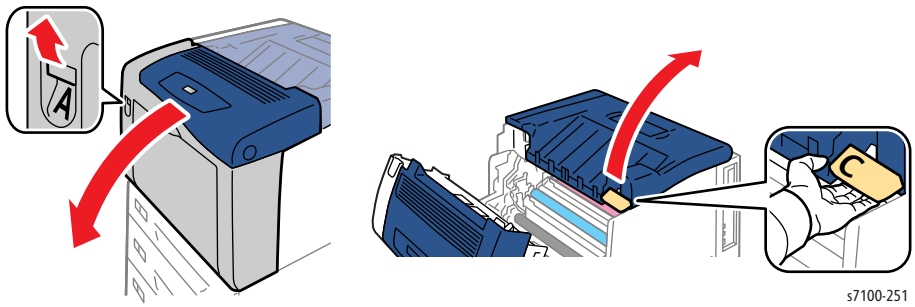


Cleaning the Density Sensors

CAUTION: Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

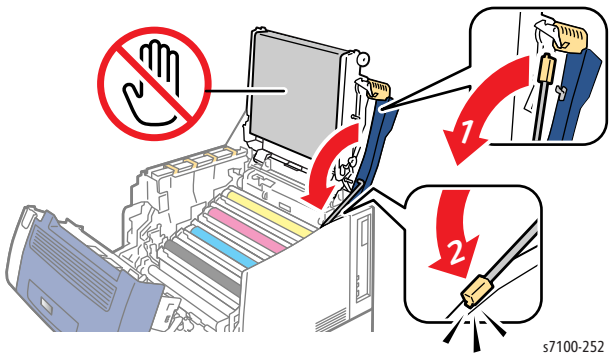
1. Release latch A and open the Front Frame Assembly (PL 4.1.6).
2. Release latch C and open the Top Cover Assembly (PL 1.1.1) together with the Toner Cartridge Cover Assembly (PL 1.1.12).

CAUTION: Be sure to hold the Toner Cartridge Cover Assembly together with the Top Cover Assembly to prevent the Toner Cartridge Cover Assembly from swinging loosely.

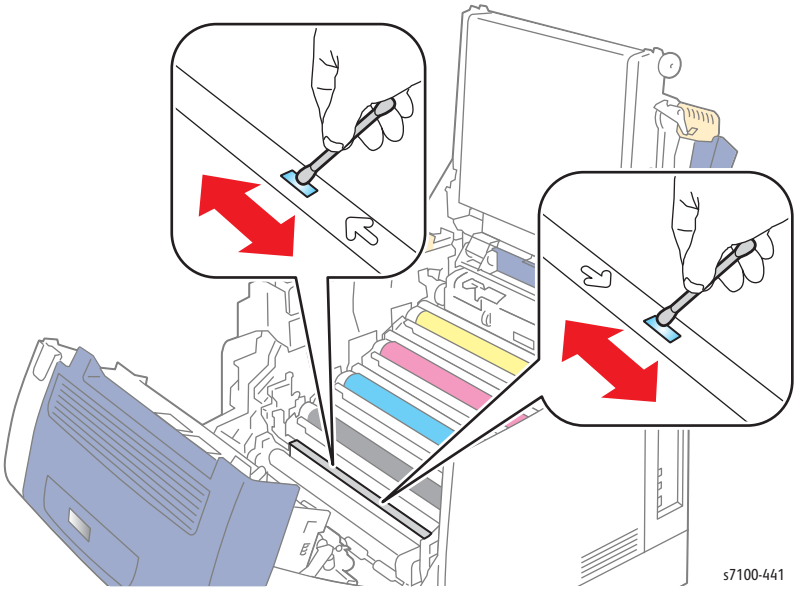


CAUTION: Do not touch the bottom of the IBT Belt to prevent damaging the IBT Belt. Scratches, dirt, or oil from your hands on the belt can deteriorate print quality.

3. Release the Stand Bar Assembly (PL 9.1.26) from the Top Cover Assembly and secure the Stand Bar in the holder.

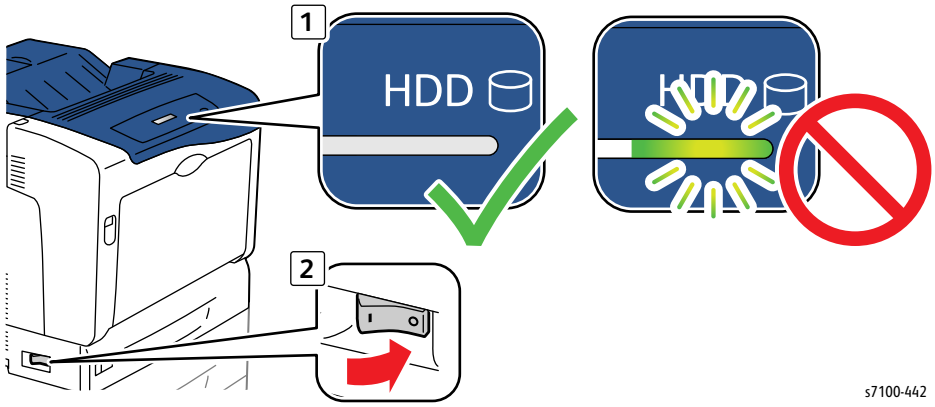


4. Use a dry cotton swab to clean the color Toner Density Sensors.



Moving the Printer

CAUTION: To prevent printer malfunction or internal hard drive damage, prior to power Off the printer, be sure to verify that the HDD indicator on the Control Panel is not On or blinking.

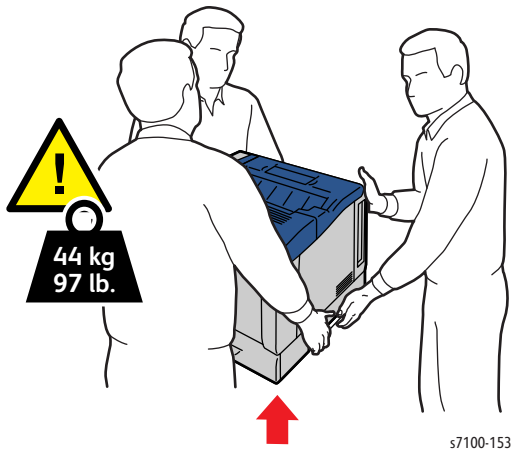


WARNING: Parts of the printer are hot. Wait at least 30 minutes for the printer to cool before moving or packing the printer.

WARNING: Use the power switch to turn Off the printer, and unplug all cables and cords. Do not turn the printer Off by pulling the power cord or using a power-strip with an On/Off switch.

WARNING: Back injury could result if you do not lift the printer properly.

The printer is heavy and must be lifted by three people. Use safety lifting and handling techniques when moving the printer.



When shipping the printer, repack the printer using the original packing material and boxes or a Xerox packaging kit. Instructions for repacking the printer are included in the kit. If you do not have all the original packaging, or are unable to repackage the printer, contact your local Xerox service representative.

CAUTION: Failure to repackage the printer properly for shipment can result in damage to the printer. Damage to the printer caused by improper packaging is not covered by the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

Adjustments

Resetting the Transfer Roller (2nd BTR) Counter

The Transfer Roller Counter must be reset when a Transfer Roller is replaced.

1. On the Control Panel, press **Down Arrow** + **OK** simultaneously.
2. The Reset Counter screen appears.
3. Press **OK**.
4. The Reset Counter 2ndBiasTransRoll screen appears.
5. Press **OK**.
6. Press **OK** again to reset the Transfer Roller Counter.
7. The Reset completed for 2nd Bias Trans Roll appears.
8. Press **Menu** to return to the Ready to Print screen.

Adjust Gradation

Adjust Gradation feature allows user to adjust the Shadows, Midtones, and Highlights for all four colors C/ M/ Y/ K using the Control Panel or CenterWare IS.

CAUTION: The Phaser 7100 printer does not have a standard chart for measurement. This feature is available only for Reference. It is NOT recommended to perform this procedure. Improper settings may affect print quality.

Using the Control Panel

1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to Image Quality, and press **OK**.
4. Press **Down Arrow** and navigate to Adjust Gradation, and press **OK**.
5. Press **Down Arrow** and navigate to Adjust Gradation Photo or Text screen, and press **OK**.
6. The Text or Photo CalibrationChart screen appears.
7. Press **OK**.
8. A Load 8.5 x 11 in Tray 5 (Bypass Tray) and press OK message appears.

   Note: Be sure to load paper Long-Edge Feed.
9. A Calibration Chart printing.... please wait message appears.
10. Press **Back** to return to the Text or Photo CalibrationChart screen.
11. Press **Down Arrow** to display the Enter Value menu.
12. Press **Right Arrow** to display the color to be adjusted.

    Note: Use the **Down**/ **Up Arrow** to find and select the color to be adjusted.

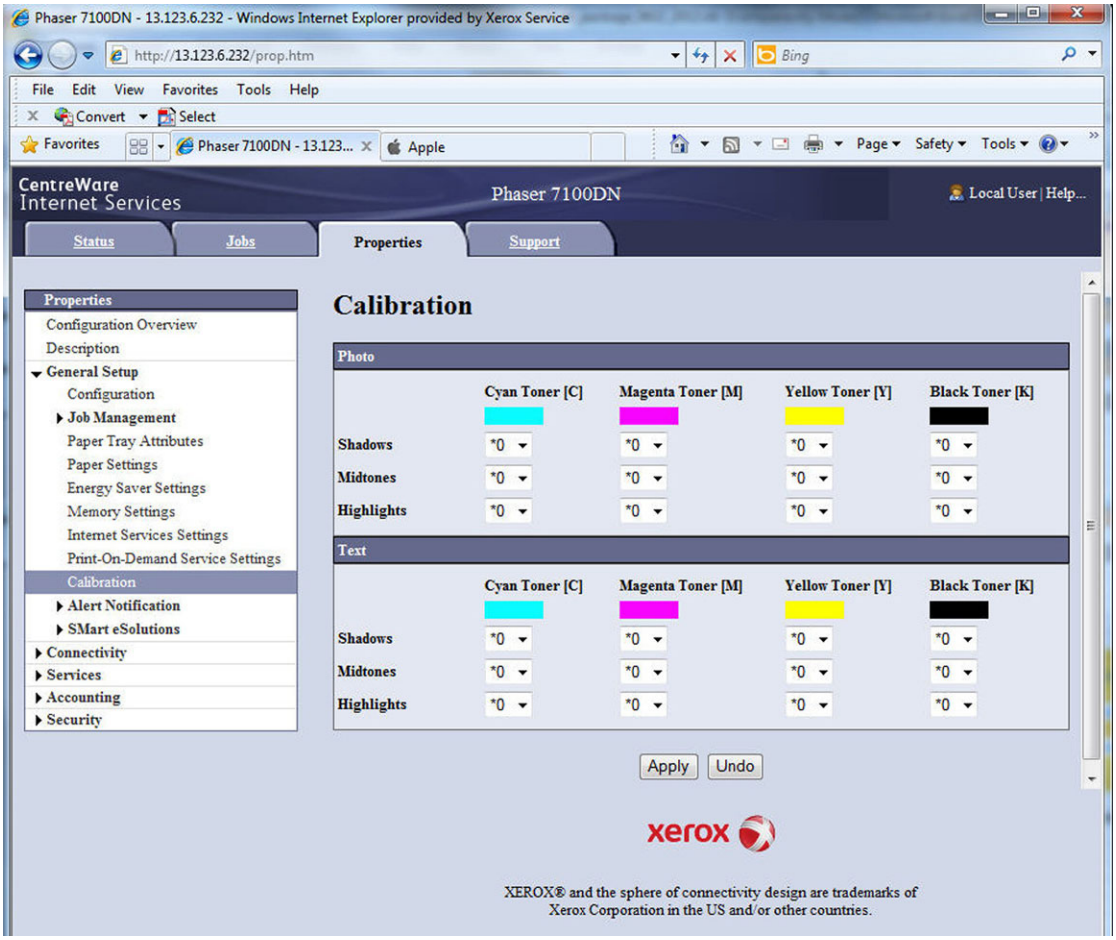
13. Press **OK** to display the value fields for the selected color.

    Note: Use the **Down/ Up Arrow** to adjust the value and **Left/ Right Arrow** to navigate from one field to the other.

14. Press **Back** to return to the Text or Photo CalibrationChart screen.
15. Press **Menu** to return to the Ready to Print screen.

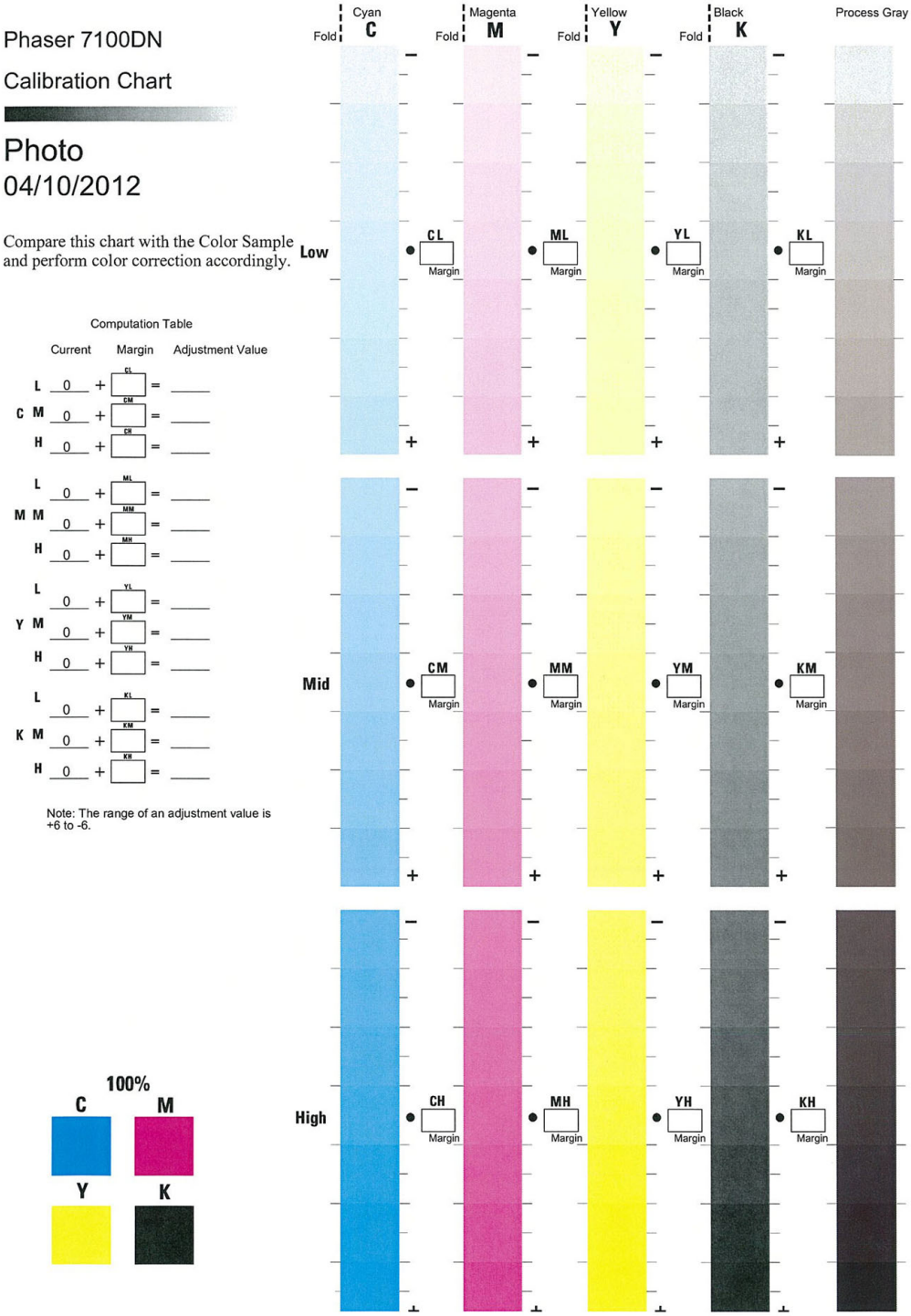
Using CWIS

1. Open a web browser.
2. Enter the printer's IP address.
3. On the top menu, click **Properties**.
4. On the left side, expand General Setup.
5. Select **Calibration**.
6. A Calibration window appears on the left side.
7. Use the pull-down selections to make appropriate adjustments for each color of the Photo/ Text (Shadows, Midtones, and Highlights).
8. Click **Apply** to complete the procedure.

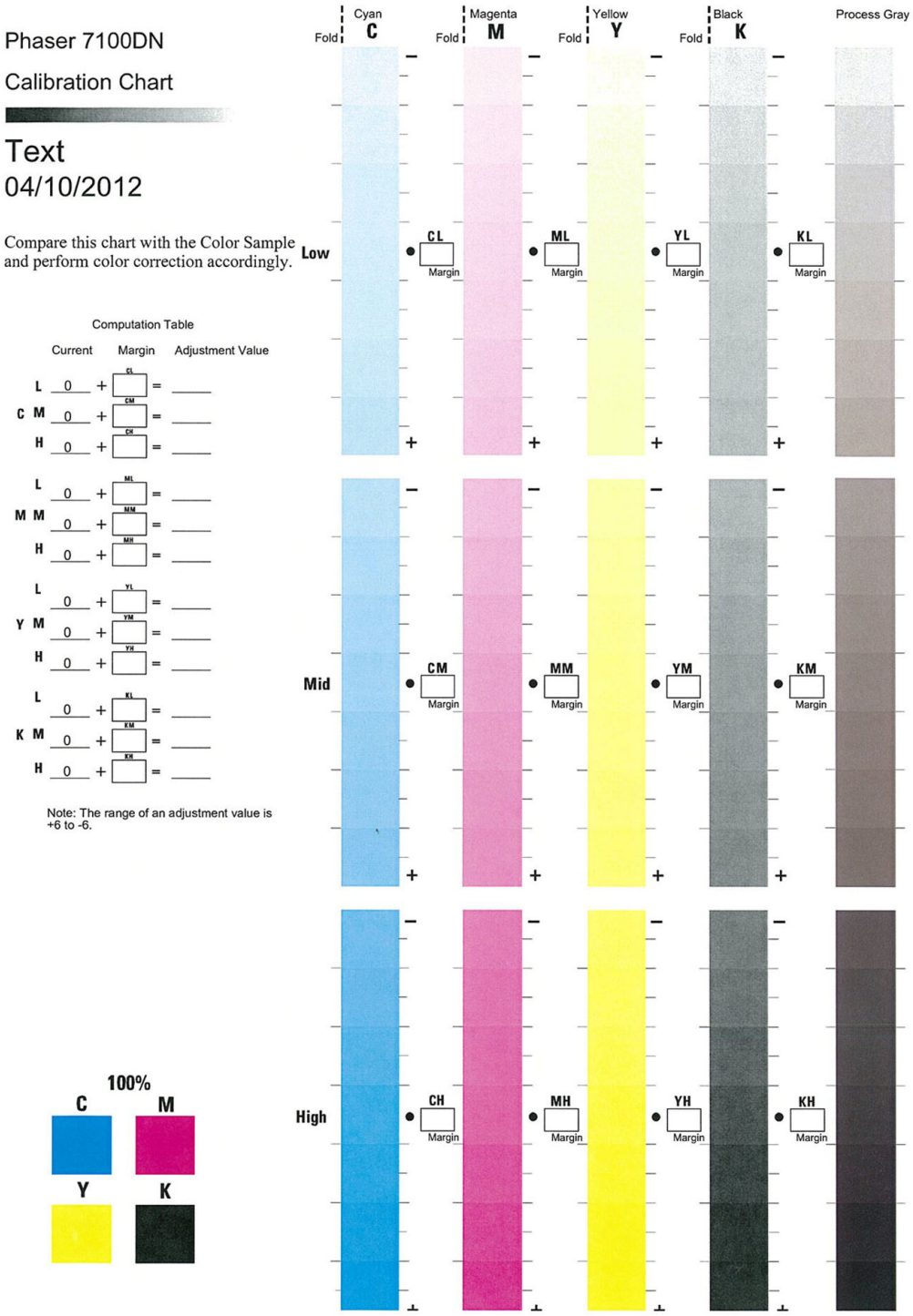


9. A Settings have been changed window appears.

Calibration Chart - Photo



Calibration Chart - Text



Color Registration

The printer automatically adjusts color registration when automatic adjustment is turned On and every time a new Toner Cartridge is installed. Color registration can be adjusted manually any time the printer is idle. Any time the printer is moved, color registration must be adjusted.

Automatic Color Registration Adjustment

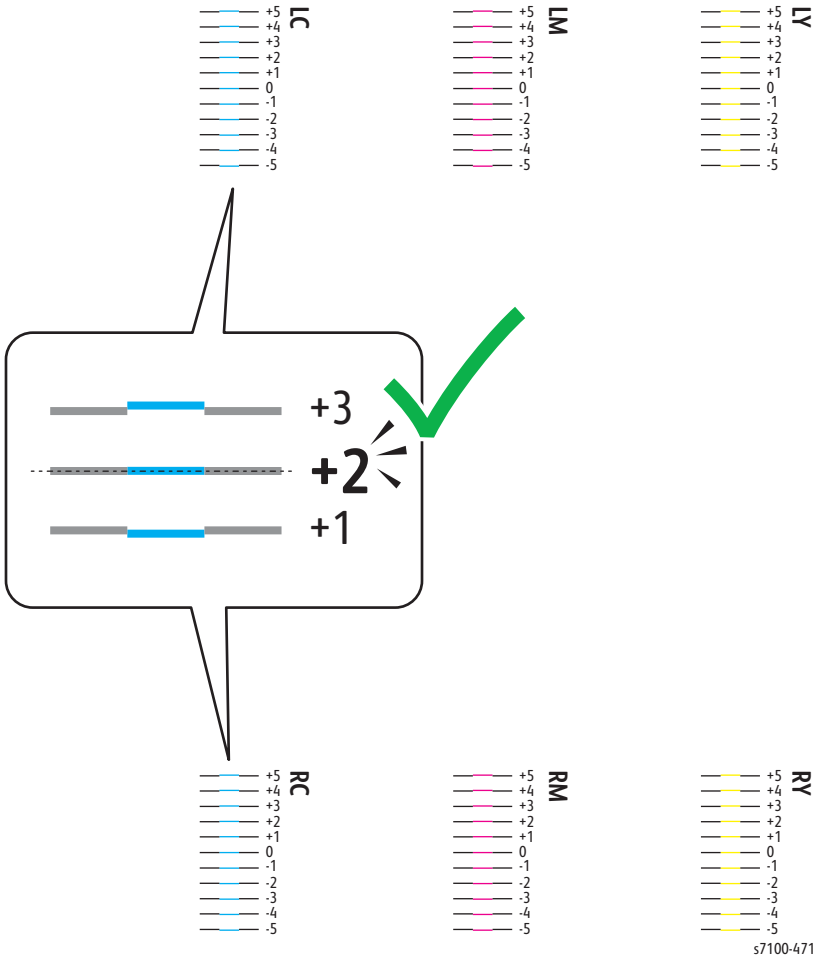
1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to Image Quality, and press **OK**.
4. Press **Down Arrow** and navigate to Adjust Color Regi, and press **OK**.
5. Press **Down Arrow** and navigate to Auto Color Regi, and press **OK**.
6. A Press OK to adjust color registration screen appears.
7. Press **OK** to perform Color Registration process.
8. A Color registration is being adjusted... message appears while color registration is in progress.
9. Press **Menu** to return to the Ready to Print screen.

Manual Color Registration Adjustment

Note: Be sure to load paper Long-Edge Feed in the Bypass Tray when performing manual Color Registration procedure.

1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to Image Quality, and press **OK**.
4. Press **Down Arrow** and navigate to Adjust Color Regi, and press **OK**.
5. Press **Down Arrow** and navigate to Manual Color Regi, and press **OK**.
6. Press **Down Arrow** and navigate to Color Regi Chart, and press **OK**.
7. A Load 8.5 x 11 in Tray 5 (Bypass Tray) and press OK message appears.

   Note: Be sure to load paper Long-Edge Feed.
8. Press **OK** to print the Color Registration Chart.
9. Starting with the left side calibration lines, LY, LM, and LC, circle the line in each group where the color bar aligns with the adjacent black bars.
10. Repeat the process for the right side calibration lines, RY, RM, and RC.



11. Press **Back**.
12. Press **Down Arrow** and navigate to Adjust Color Regi, and press **OK**.
13. The Adjust Color Regi Adjust Cyan message appears.
14. Press **Down Arrow** and navigate to the desired color - Adjust Yellow, Adjust Magenta, Adjust Cyan, or Start Adjustment.
15. Select the color to be adjusted.
16. Press **OK**.
17. Navigate to the left or right field to enter the value. Use **Arrows** to adjust the value to what you circled in steps 9 and 10, then press **OK**.
18. Press **Back Arrow** to return to the Adjust Color Regi Adjust Cyan screen.
19. Press **Down Arrow** and navigate to Start Adjustment, and press **OK**.
20. A Press OK to start color adjustment message appears.
21. Press **OK**.
22. A Color Registration adjusted message appears.
23. Press **Back**, then repeat steps 14 through 23 for the other colors.
24. Print the Color Registration Chart, then repeat the process until the color registration corrections are completed.

Adjusting Paper Type

Adjust Paper Type adjustment compensates for paper thickness within a paper type.

- If the printed image is too light, use a heavier paper type.
- If the printed image is mottled or blotchy-looking, use a lighter paper type.

Procedure

1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to Printer Settings, and press **OK**.
4. Press **Down Arrow** and navigate to Paper Type, and press **OK**.
5. Press **Down Arrow** and navigate to the desired paper tray, and press **OK**.
6. Press **Down Arrow** and navigate to the paper type, and press **OK** to adjust the paper type.
7. Press **Menu** to return to the Ready to Print screen.

Adjusting Voltage Offset

Voltage Offset adjustment is used to specify the bias voltage for printing on the selected paper type.

- If the printed image is too light, increase the offset for the paper.
- If the printed image is mottled or blotchy-looking, decrease the offset for the paper.

Procedure

1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to Image Quality, and press **OK**.
4. Press **Down Arrow** and navigate to Voltage Offset, and press **OK**.
5. Use **Up/ Down Arrow** and navigate to the paper type for the adjustment, then press **OK**.
   - Plain
   - Bond
   - Recycled
   - Heavy Weight
   - Cardstock
   - Glossy
   - Glossy Card
   - HW Glossy Card
   - Postcard
   - Envelope
   - Labels
6. Press **OK** to select the paper type.
7. Use **Up/ Down Arrow** to increase or decrease the amount of offset, then press **OK** to apply the setting.

   Note: The Image Transfer Voltage can be adjusted within the range of 1 - 16 in increments of 1. The default setting is 6.
8. Repeat this procedure for adjustment of each paper type.
9. Press **Menu** to return to the Ready to Print screen.

Adjusting the Fuser

Adjust Fuser adjustment is used for optimum print quality across a wide range of paper types.

- If the toner on a print is smearing or can be rubbed off the paper, increase the offset for the paper.
- If the toner is blistered or mottled, decrease the offset for the paper.

Procedure

1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to Image Quality, and press **OK**.
4. Press **Down Arrow** and navigate to Fuser Temperature, and press **OK**.
5. Use **Up/ Down Arrow** and navigate to the paper type for the adjustment, then press **OK**.
   - Plain
   - Bond
   - Recycled
   - Heavy Weight
   - Cardstock
   - Glossy
   - Glossy Card
   - HW Glossy Card
   - Envelope
   - Postcard
   - Labels
6. Press **OK** to select the paper type.
7. Use **Up/ Down Arrow** to select the value (1 - 5) and press **OK** to apply the setting.
8. Repeat the procedure for each paper type that needs adjustment.
9. Press **Menu** to return to the Ready to Print screen.

Adjusting Altitude

Adjust Altitude procedure adjusts the altitude to match that of the location where the printer is installed. If the altitude setting is incorrect, it can cause print-quality problems.

Procedure

1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to Image Quality, and press **OK**.
4. Press **Down Arrow** and navigate to Altitude Adjustmt, and press **OK**.
5. Press **Up/ Down Arrow** to select the altitude for the location of the printer, and press **OK**.
   - 0 to 1000m ASL
   - 1001 to 2000m ASL
   - 2001 to 3000m ASL
   - 3001m ASL & above
6. Press **Menu** to return to the Ready to Print screen.

Enabling Dew Prevention

Moisture can condense inside a printer where the humidity is above 85 % or when a cold printer is located in a warm room. Condensation can form in a printer after it has been sitting in a cold room that is heated quickly.

Procedure

1. On the Control Panel, press **Menu**.
2. Press **Down Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down Arrow** and navigate to System Settings, and press **OK**.
4. Press **Down Arrow** and navigate to Dew Prevention, and press **OK**.
5. Use **Up/ Down Arrow** and select **Enabled**, and press **OK**.
6. Press **Menu** to return to the Ready to Print screen.

Firmware Update

Note: The firmware update for Macintosh version will be available post launch.

Two methods are available for updating firmware:

- Ethernet port with Download Tool
- USB printer port with Download Tool

Note: If a Hard Disk Drive is installed, firmware can be downloaded via CWIS.

1. Open a web browser.
2. Enter the printer's IP address.
3. On the top menu, click **Properties**.
4. On the left side, expand Services > Machine Software > Manual Upgrades.
5. Under Machine Software window, browse for the firmware filename and select the green button to begin the download the process

Enabling Software Upgrades/ Download

Verify that Software Upgrades/ Download is Enabled (using the Control Panel and/ or CWIS).

Notes:

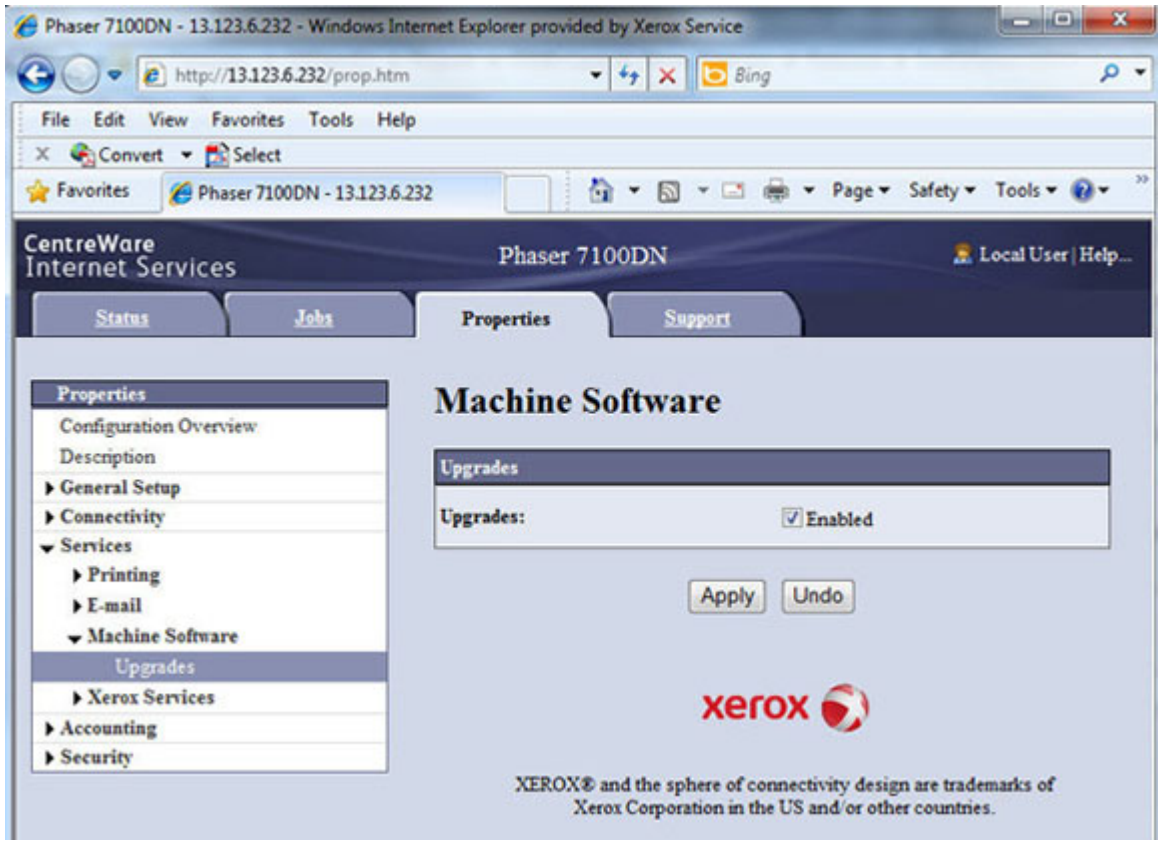
- For updating firmware using the Ethernet port, Software Upgrades/ Download must be Enabled on both the Control Panel and in CWIS.
- For updating firmware using the USB printer port, only Software Download must be Enabled on the Control Panel.

Using the Control Panel

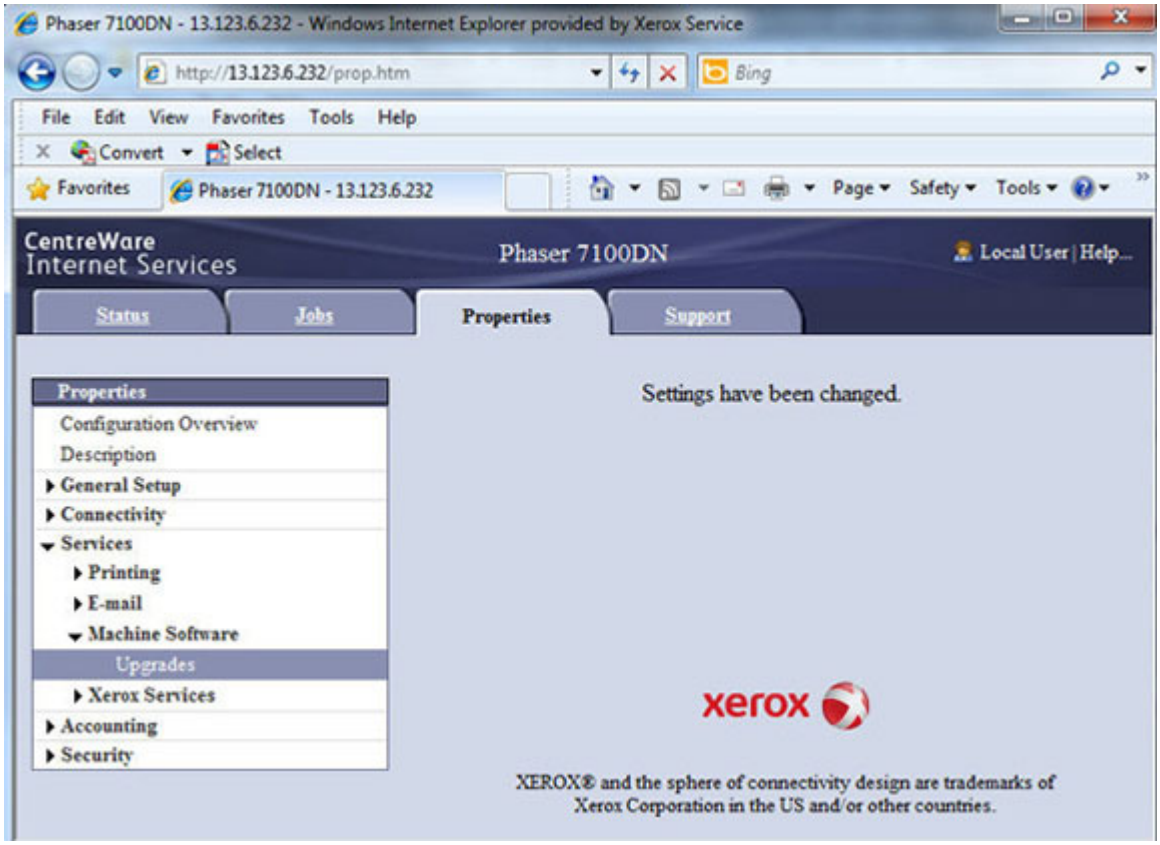
1. On the Control Panel, press **Menu**.
2. Press **Down/ Up Arrow** and navigate to Admin Menu, and press **OK**.
3. Press **Down/ Up Arrow** and navigate to System Settings, and press **OK**.
4. Press **Down/ Up Arrow** and navigate to Software Download, and press **OK**.
5. Press **Down/ Up Arrow** and navigate to Enabled, and press **OK**.
6. Verify that a “dot” is displayed in front of Enabled.
7. Press **Menu** to return to the Ready to Print screen.

Using CWIS

1. Open a web browser.
2. Enter the printer's IP address.
3. On the top menu, click **Properties**.
4. On the left side, expand Services > Machine Software > Upgrades.
5. Under Upgrades window, select Enabled (if not selected).
6. Click **Apply**.



7. Verify that the settings have been changed.



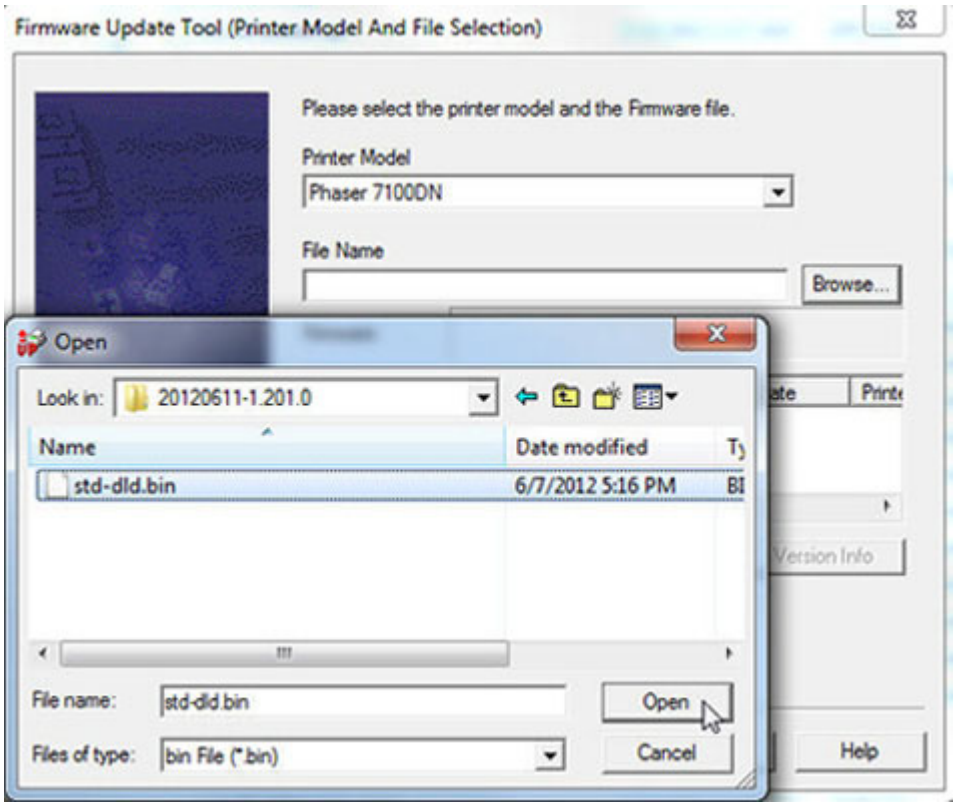
Ethernet Port with Download Tool (Windows version)

Note: Be sure to download the appropriate firmware file and Download tool from the Xerox support web site.

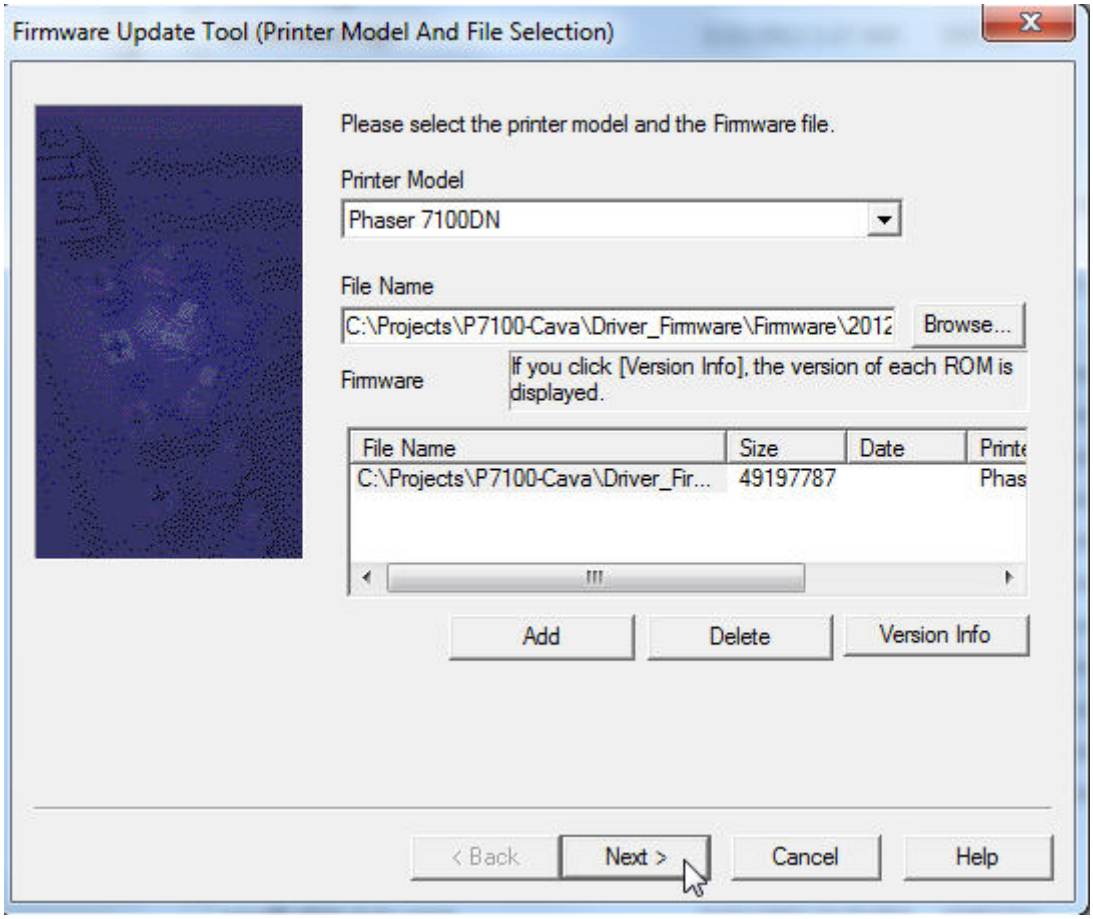
Note: Software Upgrades/ Download must be set to Enabled on the Control Panel and in CWIS in order to perform firmware update (refer to Enabling Software Upgrades/ Download on page 6-22).

1. On the computer, locate the Download Tool application.
2. Double-click the FWDLMgr.exe file.

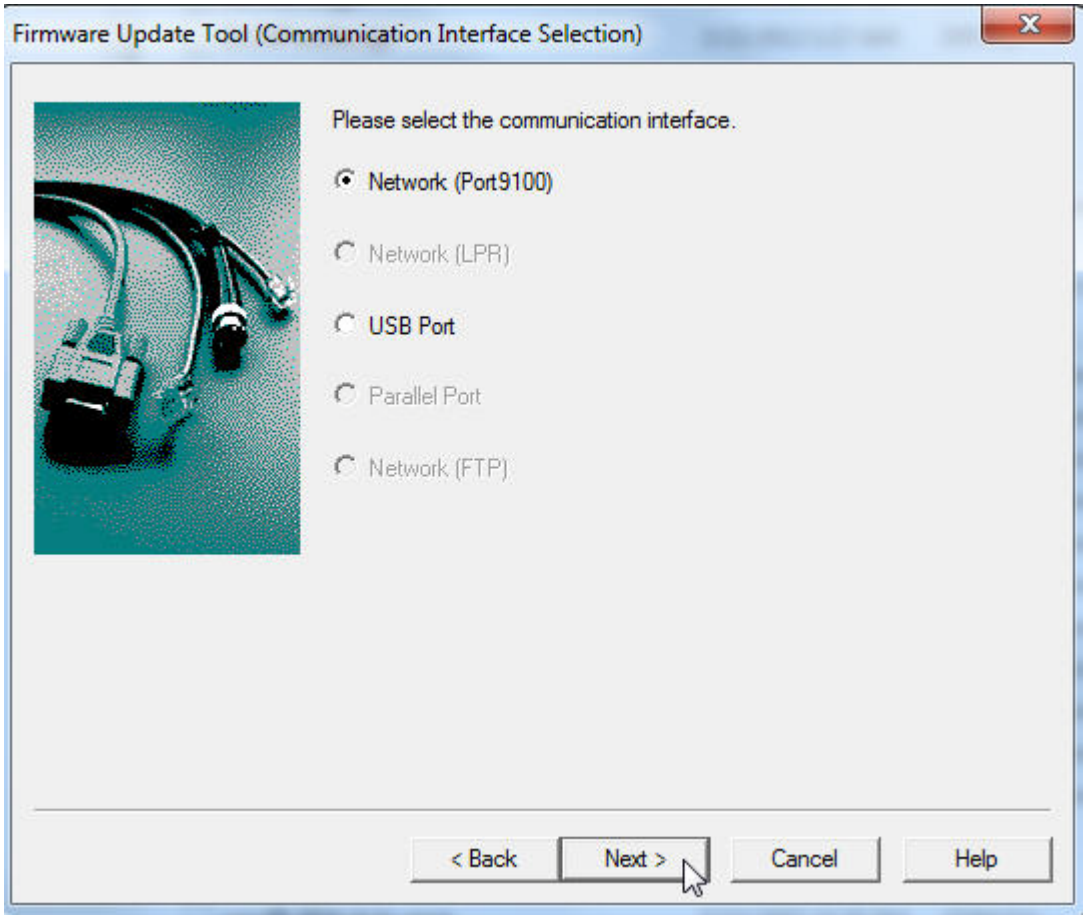
3. Click **Agree**.
4. The Firmware Update Tool (Printer Model And File Selection) window appears.
5. From the Printer Model list, select Phaser 7100N or Phaser 7100DN.
6. Click **Browse** and navigate the folders to locate the std-dld.bin file.
7. Select the std-dld.bin file.
8. Click **Open**.



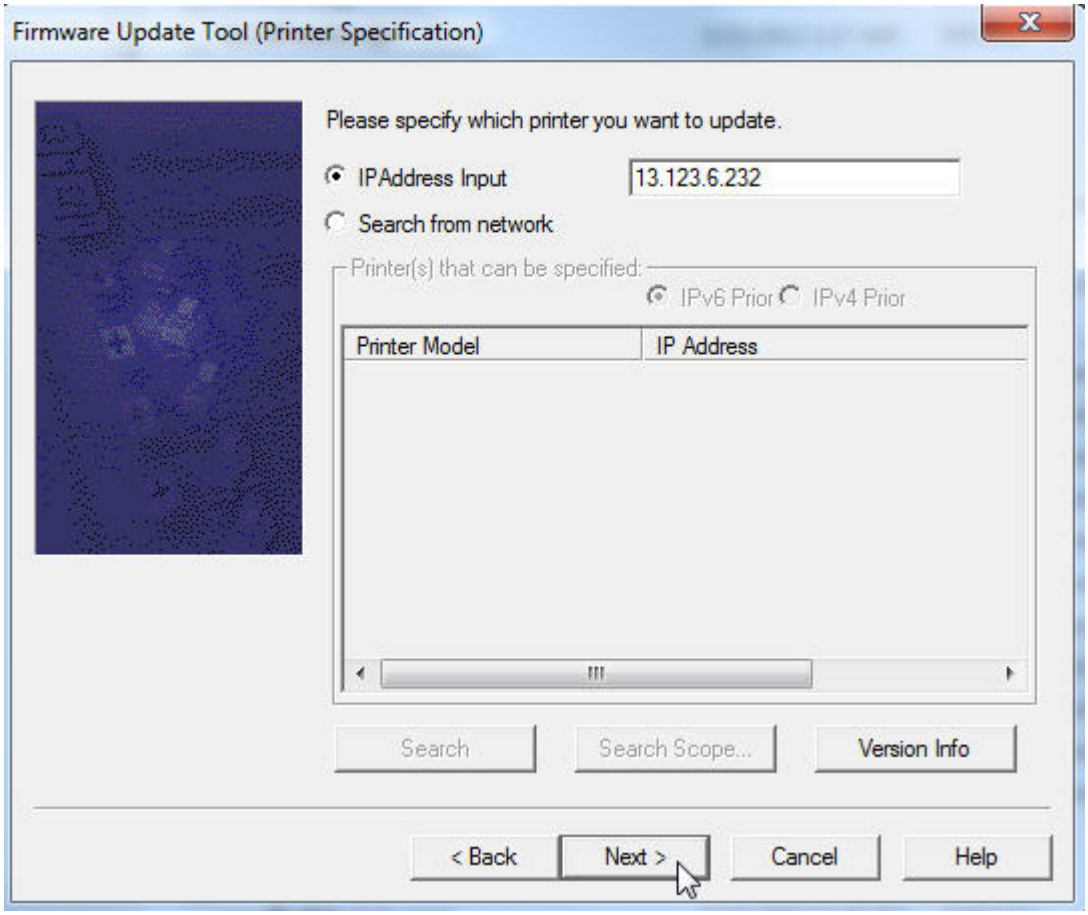
9. Click **Add** to add the file.
10. Click **Next** to continue.



11. Select Network (Port9100).
12. Click **Next** to continue.



13. In the IPAddress Input field, enter the printer's IP address.
14. Click **Next** to continue.



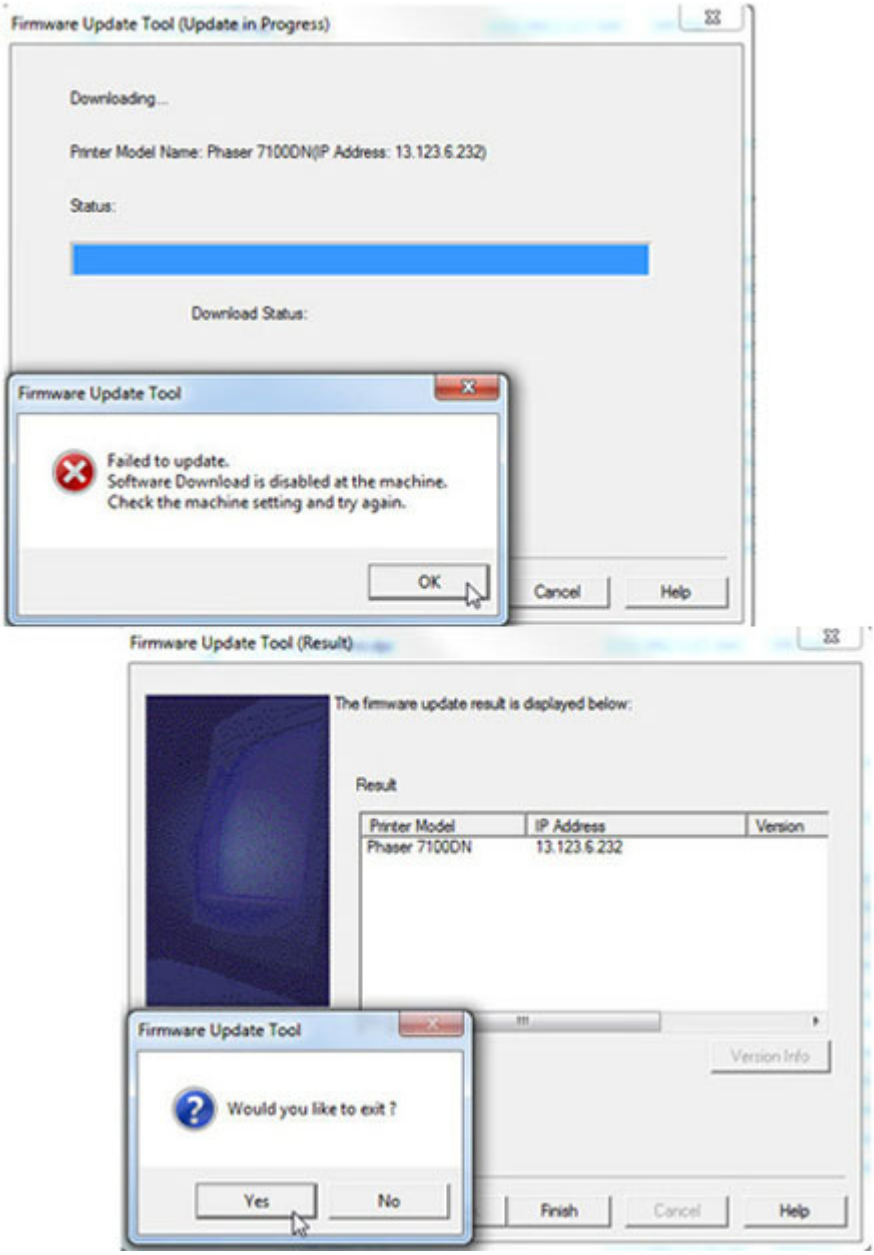
CAUTION: DO NOT power Off the printer while firmware update is in progress.

15. The Firmware Update Tool (Update in Progress) window appears showing firmware download status.

    Note: If a Failed to update message appears, Software Upgrades/ Download is not enabled (in CWIS and/or Control Panel), refer to Enabling Software Upgrades/ Download on page 6-22 to enable Software Upgrade.

    Click **OK**, **Finish**, and **Yes** to continue.

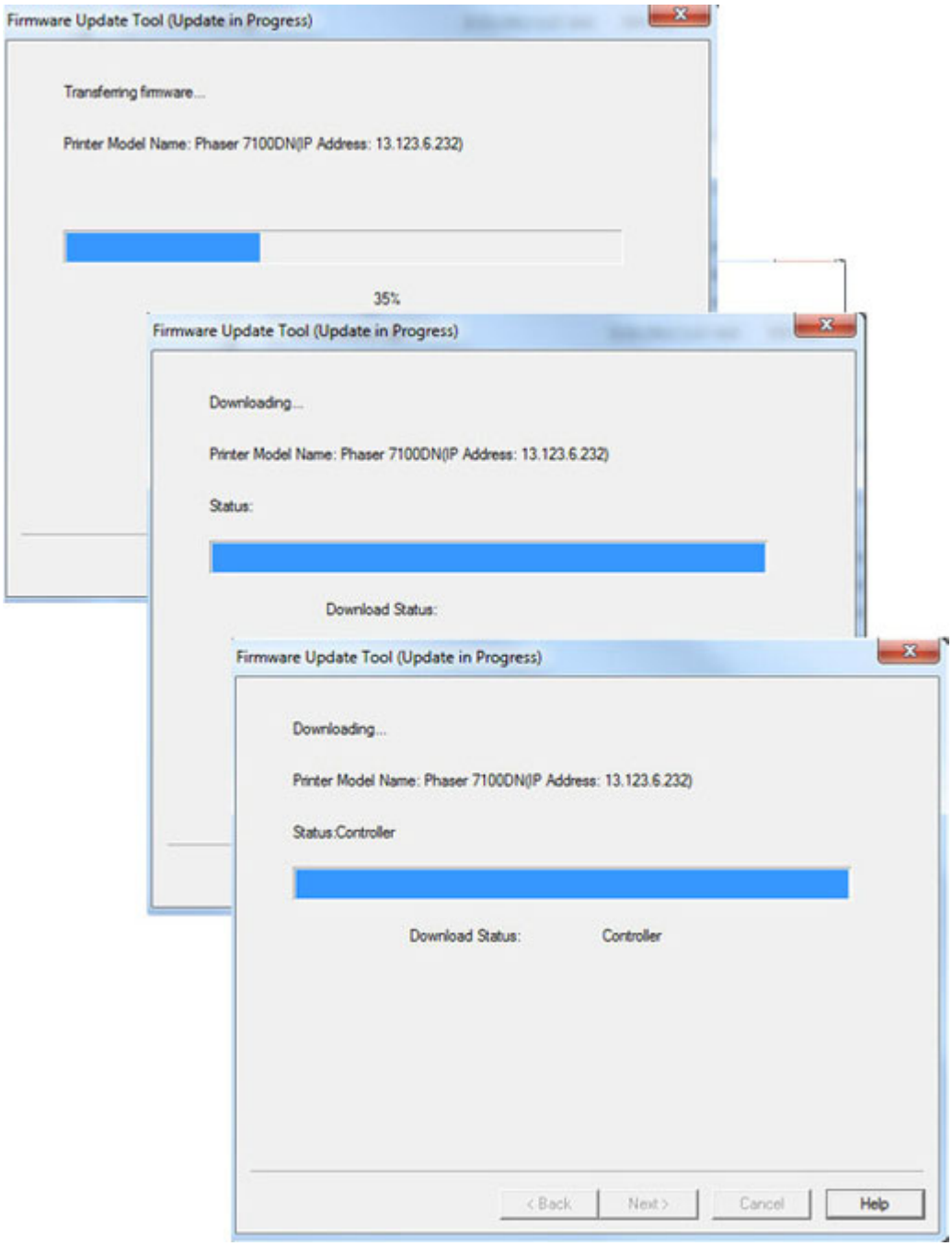
    Firmware Update Failed Message



Control Panel Message

- Processing data...
- Completed with error 016-741 (Software Upgrade Enabled on CWIS, and Disabled on the Control Panel)
- Completed with error 017-755 (Software Upgrade Disabled on CWIS, and Enabled on the Control Panel)

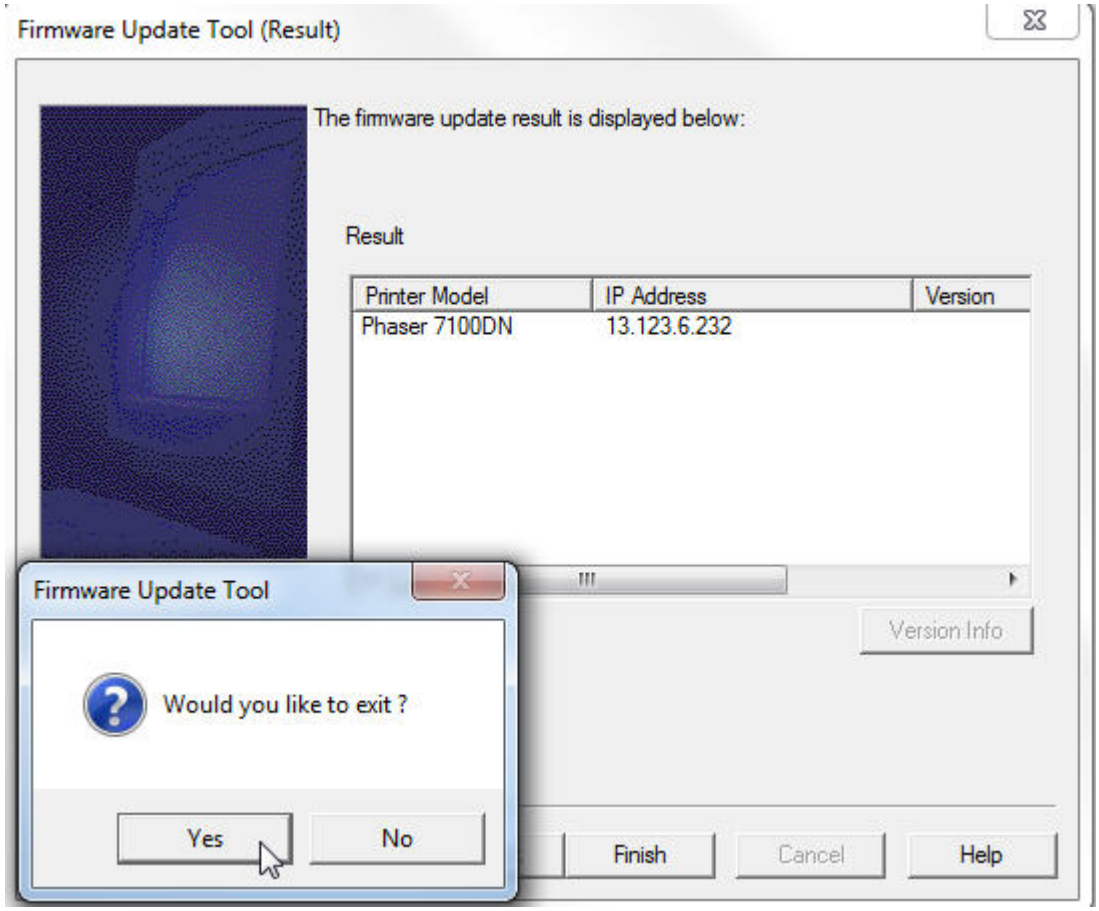
Firmware Update Progress



16. On the Control Panel, the Download Mode message appears.

    Note: The firmware update process takes approximately 6 minutes to complete.

17. The printer reboots.
18. On the Control Panel, various messages appear Xerox (R) -> Initializing Postscript -> Xerox (R) Toner Cartridge -> Ready to Print until the process is completed.
19. On the computer, click **Finish** and **Yes** to close the windows.



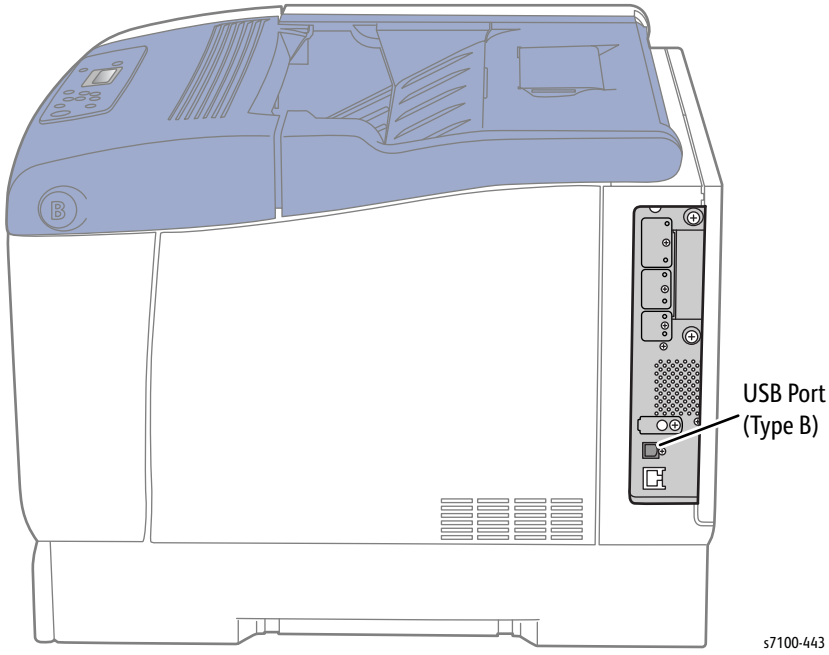
20. Print a Configuration page and verify the firmware version information.

USB Port with Download Tool (Windows version)

Note: Be sure to download the appropriate firmware file and Download tool from the Xerox support web site.

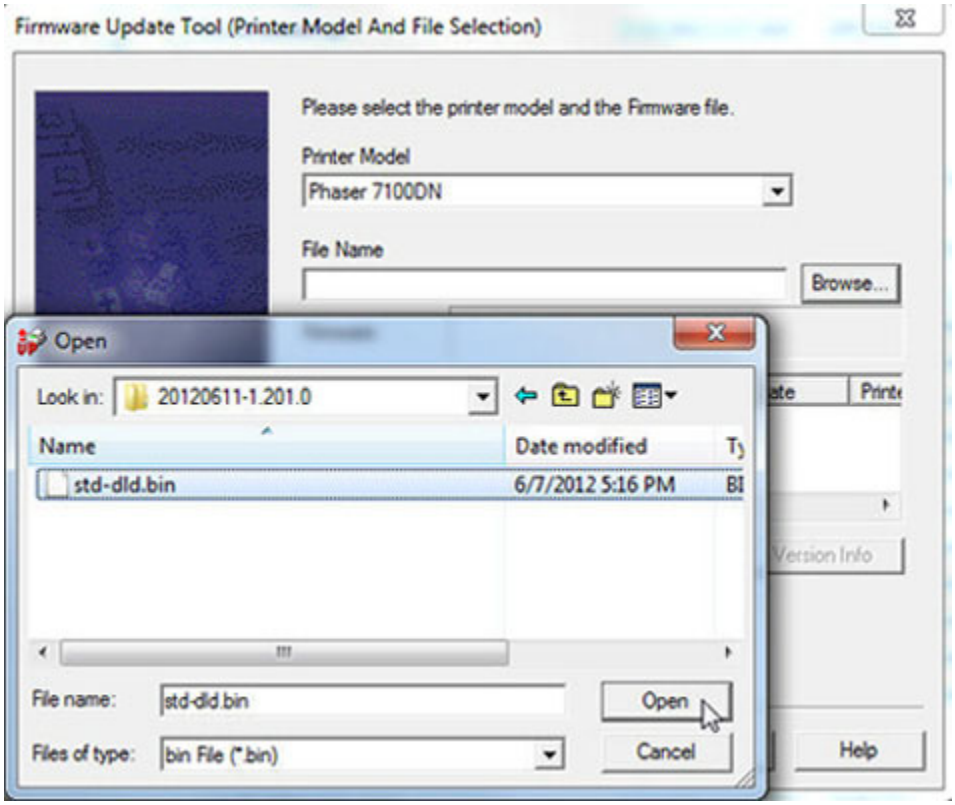
Note: Software Download must be set to Enabled on the Control Panel in order to perform firmware update (refer to Enabling Software Upgrades/ Download on page 6-22).

1. Connect the USB cable from the computer to the USB port (Type B) on the printer.

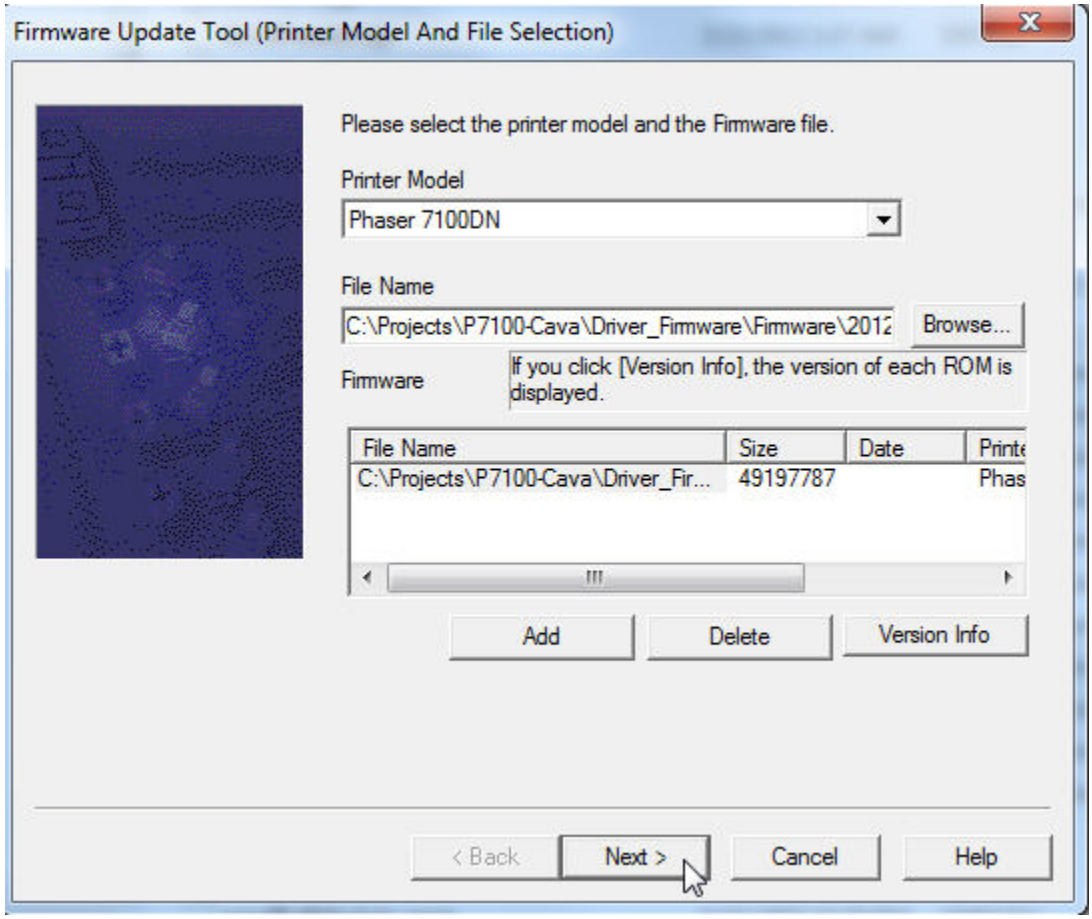


2. On the computer, locate the Download Tool application.
3. Double-click the FWDLMgr.exe file.

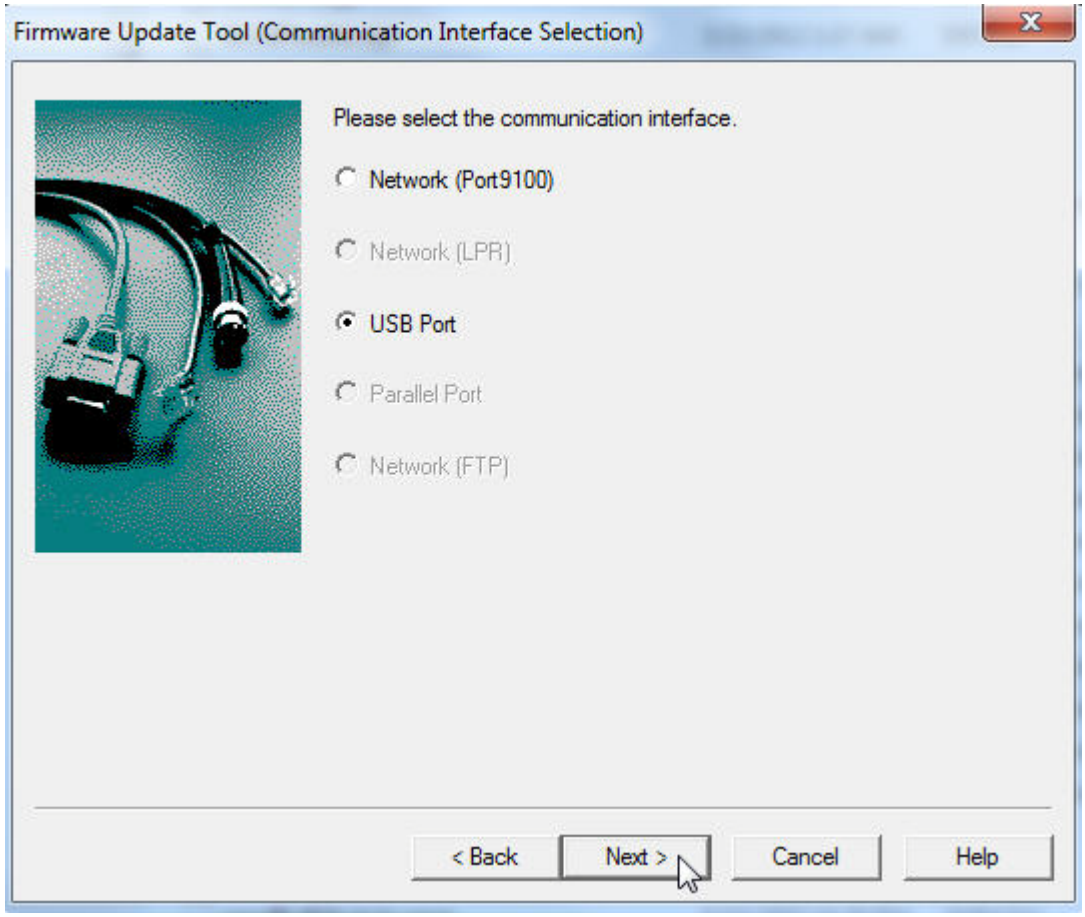
4. Click **Agree**.
5. The Firmware Update Tool (Printer Model And File Selection) window appears.
6. From the Printer Model list, select Phaser 7100N or Phaser 7100DN.
7. Click **Browse** and navigate to locate the std-dld.bin file.
8. Select the std-dld.bin file.
9. Click **Open**.



10. Click **Add** to add the file.
11. Click **Next** to continue.



12. Select USB Port.
13. Click **Next** to continue.



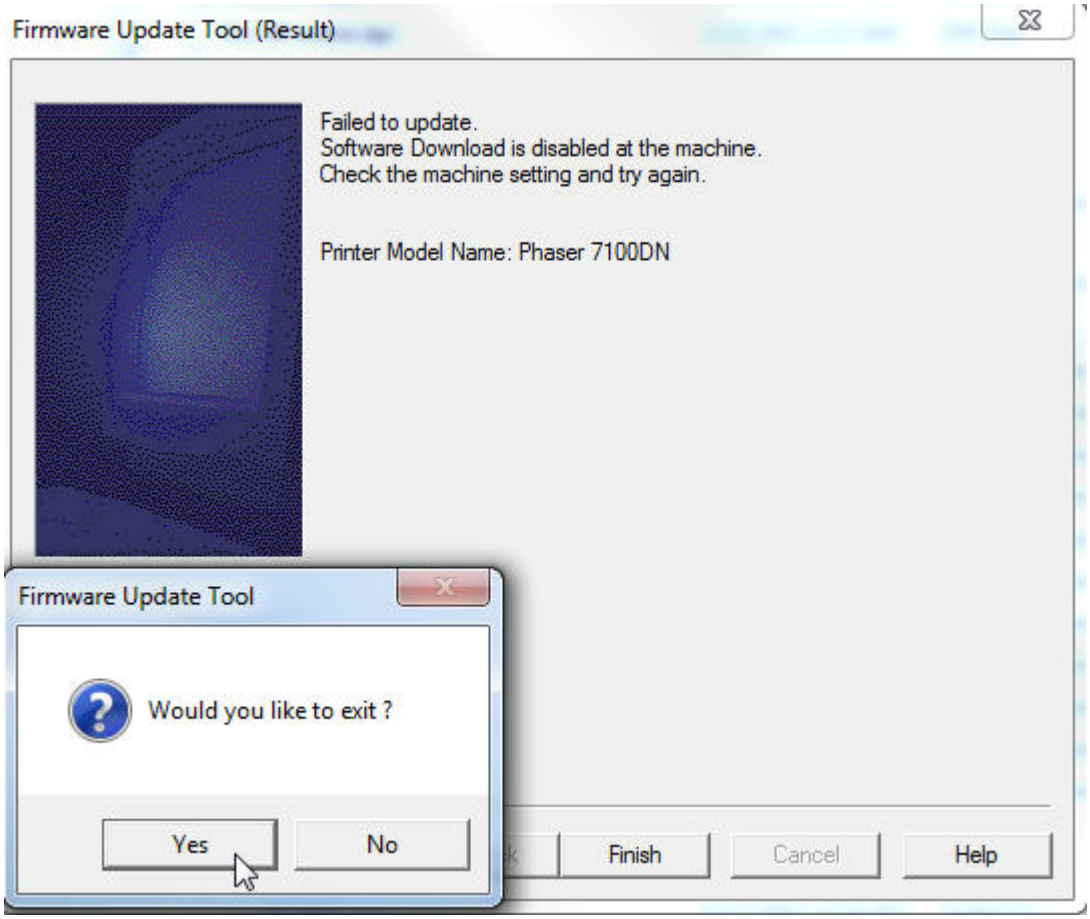
CAUTION: DO NOT power Off the printer while firmware update is in progress.

14. The Firmware Update Tool (Update in Progress) window appears showing firmware download status.

    Note: If a Failed to update message appears, Software Download is not enabled (on the Control Panel), refer to Enabling Software Upgrades/ Download on page 6-22 to enable Software Download.

    Click **Finish** and **Yes** to continue.

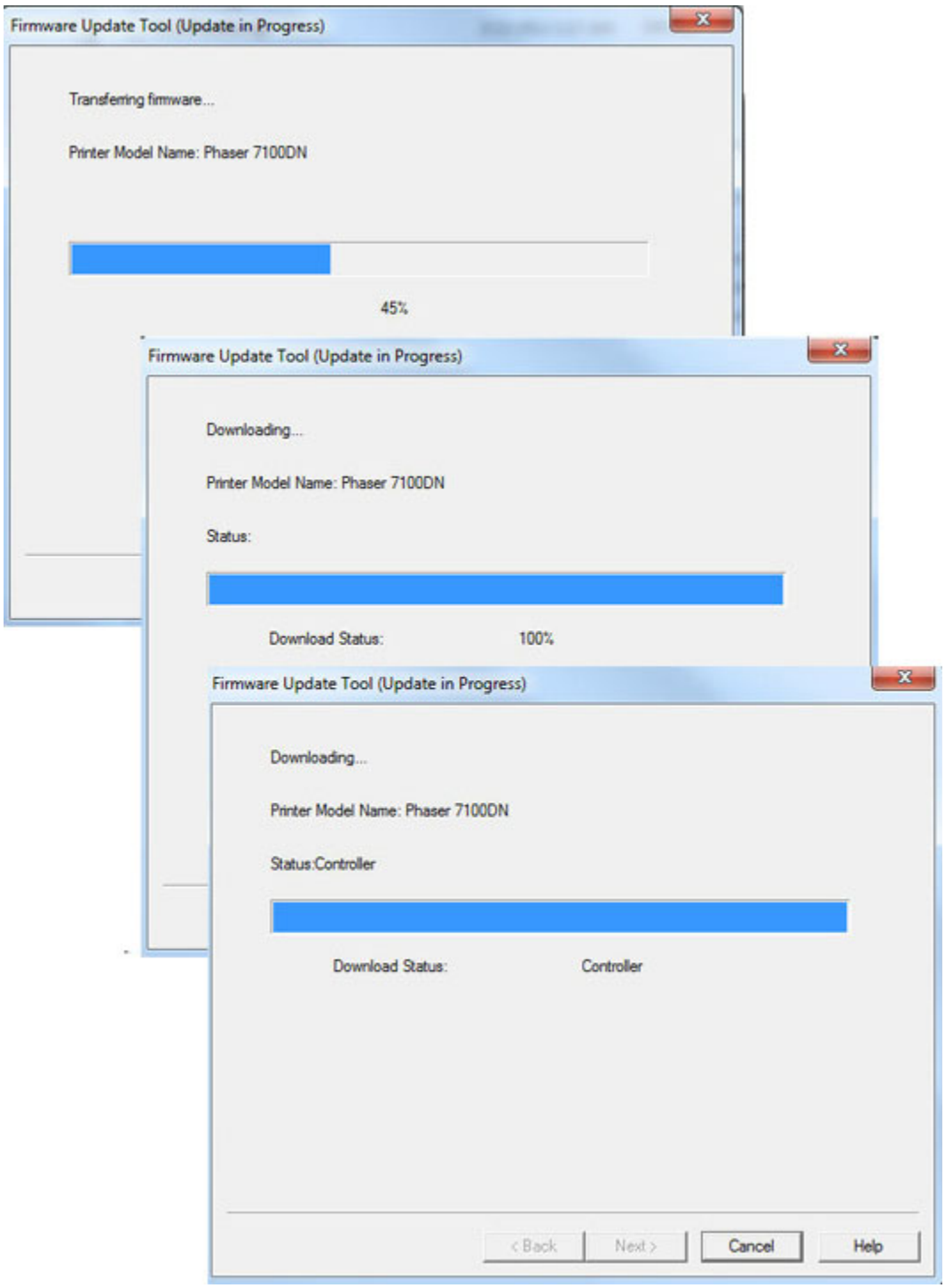
    Firmware Update Failed Message



    Control Panel Message

    – Processing data...
    – Completed with error 016-741 (Software Upgrade Enabled on CWIS, and Disabled on the Control Panel)

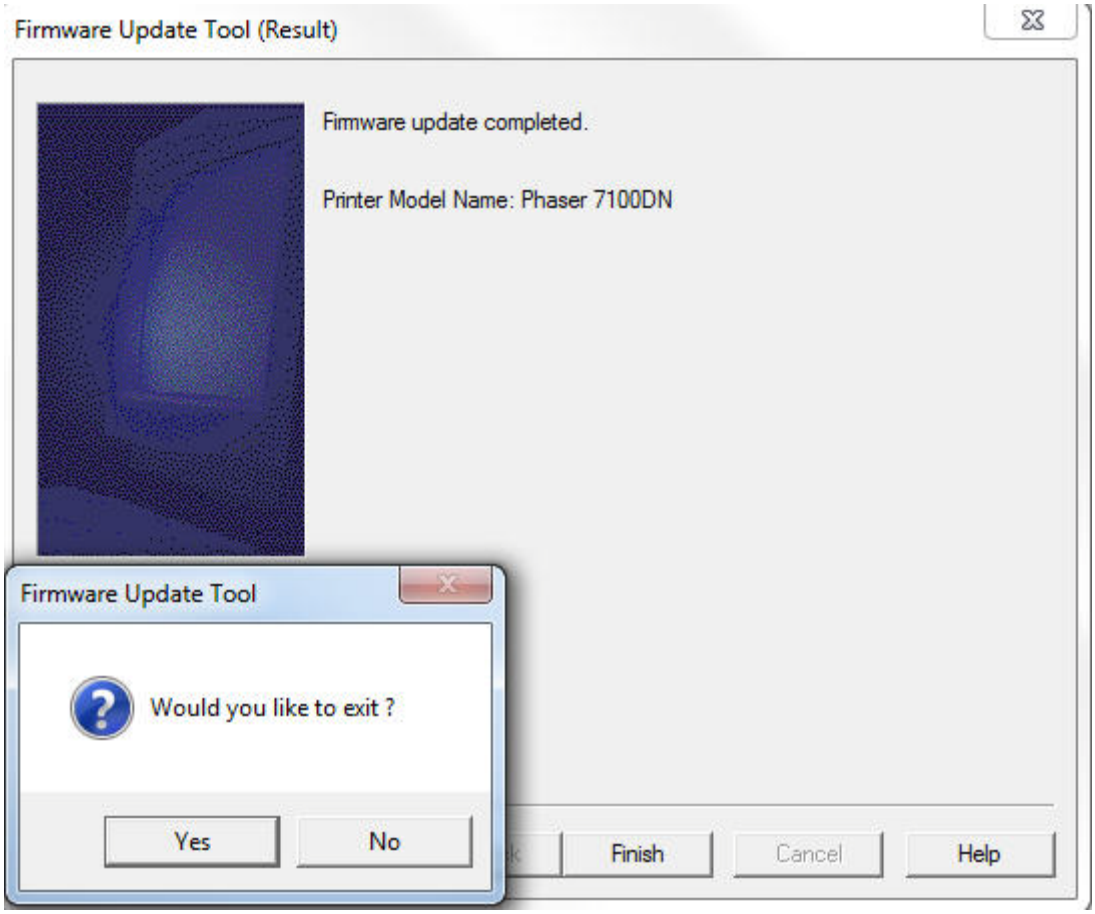
Firmware Update Progress



15. On the Control Panel, a Download Mode message appears.

    Note: The firmware update process takes approximately 6 minutes to complete.

16. The printer reboots.
17. On the Control Panel, various messages appear Xerox (R) -> Initializing Postscript -> Xerox (R) Toner Cartridge -> Ready to Print until the process is completed.
18. On the computer, click **Finish** and **Yes** to close the windows.



19. Print a Configuration page and verify the firmware version information.

7 Plug/Jack and Wiring Diagrams

This chapter includes:

Plug/Jack Diagrams and Designators

This chapter contains the Plug/Jack Designators, Locators, and wiring diagrams for the print engine and all options.

The Plug/Jack Locator diagrams show the P/J locations within the printer, Optional 550-Sheet Feeder, and Duplex Unit. Use these illustrations to locate P/J connectors called out in the Troubleshooting procedures presented in Chapters 2 and 3.

The Plug/Jack locators consist of the P/J Designator Tables and the P/J Locator Diagrams.

- The P/J column lists the Plug/Jack numbers in numerical order.
- The Map column provides the map number of the specific areas (i.e., Electrical, Laser Unit...etc.)
- The Coordinates column lists the diagram coordinates for the location of the connector.
- The Remarks column provides a brief description of each connection.

1. Locate the P/J connector designator in the first column of the table.
2. With this information, go to the map listed in the second column.
3. Use the coordinates to locate the connection indicated on the map with its P/J designation number.

Print Engine Plug/Jack Designators

Print Engine Plug/Jack Designators

P/J	Map	Coordinates	Remarks
101	8	G-106	Connection between the Main UI Harness Assembly (PL 12.3.10) and the Control Panel Harness Assembly (PL 1.1.35).
102	1	E-108	Connection between the Control Panel Harness Assembly (PL 1.1.35) and the Control Panel (PL 1.1.17).
105	2	C-105	Connection between the Developer Motor PWB (PL 11.1.16) and the Developer Motor (Y) (PL 11.1.11).
106	2	C-106	Connection between the Developer Motor PWB (PL 11.1.16) and the Developer Motor (M) (PL 11.1.11).
107	2	C-106	Connection between the Developer Motor PWB (PL 11.1.16) and the Developer Motor (C) (PL 11.1.11).
108	2	C-107	Connection between the Developer Motor PWB (PL 11.1.16) and the Developer Motor (K) (PL 11.1.11).
111	2	B-104	Connection between the Developer Motor (Y) (PL 11.1.11) and the Developer Motor PWB (PL 11.1.16).
112	2	C-105	Connection between the Developer Motor (M) (PL 11.1.11) and the Developer Motor PWB (PL 11.1.16).
113	2	C-106	Connection between the Developer Motor (C) (PL 11.1.11) and the Developer Motor PWB (PL 11.1.16).
114	2	D-107	Connection between the Developer Motor (K) (PL 11.1.11) and the Developer Motor PWB (PL 11.1.16).
144	8	F-105	Connection between the X Pro Harness Assembly (PL 12.3.3) and the EEPROM PWB (PL 12.1.18).
242	1	D-104	Connection between the Front Harness Assembly (PL 4.2.11) and the Fuser Drive Assembly (Fuser Unit Motor) (PL 4.2.16).
	14	I-111	
300	10	F-110	Connection between the Image Processor PWB (PL 12.4.1) and the ESS Power Harness Assembly (PL 12.3.2).
302	10	F-109	Connection between the Hard Disk Drive (PL 12.4.20) and the Image Processor PWB (ESS PWB) (PL 12.4.1).
304	10	F-107	Connection between the Image Processor PWB (PL 12.4.1) and the Main Harness Assembly (PL 12.3.1)
305	10	F-108	Connection between the Image Processor PWB (ESS PWB) (PL 12.4.1) and the Video Harness Assembly (PL 12.3.7).
306	10	F-108	Connection between the Image Processor PWB (ESS PWB) (PL 12.4.1) and the Main UI Harness Assembly (PL 12.3.10).

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
310	10	F-109	Connection between the Hard Disk Drive (PL 12.4.20) and the Image Processor PWB (ESS PWB) (PL 12.4.1).
451	8	C-110	Connection between the MCU PWB (PL 12.1.15) and the Main UI Harness Assembly (PL 12.3.10).
	9	E-102	
452	8	C-110	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	E-102	
453	8	G-112	Connection between the MCU PWB (PL 12.1.15) and the Turn Clutch Assembly (PL 5.1.9).
454	8	D-110	Connection between the MCU PWB (PL 12.1.15) and the Toner CRUM Harness Assembly (PL 8.1.18)
	9	F-102	
455	8	E-110	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	G-102	
456	8	G-112	Connection between the MCU PWB (PL 12.1.15) and the Main CTD Harness Assembly (PL 12.3.8).
457	8	G-111	Connection between the MCU PWB (PL 12.1.15) and the Main CTD Harness Assembly (PL 12.3.8).
458	8	G-112	Connection between the MCU PWB (PL 12.1.15) and the Registration Clutch Assembly (PL 5.1.11).
459	7	B-103	Connection between the MCU PWB (PL 12.1.15) and the DRW Fuser Harness Assembly (PL 4.1.7).
	8	G-110	
460	8	G-111	Connection between the MCU PWB (PL 12.1.15) and the X-Pro Harness Assembly (PL 12.3.3).
461	8	E-112	Connection between the MCU PWB (PL 12.1.15) and the Option Harness Assembly (PL 12.3.5).
462	8	F-110	Connection between the MCU PWB (PL 12.1.15) and the Dispense Harness Assembly (PL 8.1.19).
463	8	G-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	I-104	
464	8	E-112	Connection between the MCU PWB (PL 12.1.15) and the Option Harness Assembly (PL 12.3.5).
465	8	F-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	G-104	

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
466	8	F-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	H-104	
467	8	B-110	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	E-103	
468	8	D-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	F-104	
469	8	C-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	E-105	
470	8	B-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL12.3.1).
	9	E-104	
471	8	G-112	Connection between the MCU PWB (PL 12.1.15) and the Paper Handling Motor Harness Assembly (PL 12.3.9).
472	8	B-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	E-104	
473	8	G-111	Connection between the MCU PWB (PL 12.1.15) and the Registration Harness [Registration Chute Assembly] (PL 5.1.1).
474	8	B-111	Connection between the MCU PWB (PL 12.1.15) and the Deve Motor Harness Assembly (PL 11.1.24).
475	8	F-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	G-104	
476	8	E-110	Connection between the MCU PWB (PL12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	G-102	
477	8	D-112	Connection between the MCU PWB (PL 12.1.15) and the Main Harness Assembly (PL 12.3.1).
	9	F-104	
492	8	E-111	Not used.
501	8	C-106	Connection between the AC PWB Assy (PL 12.1.16) and the AC In Harness Assembly (PL 12.1.14).
502	8	E-106	Connection between the AC PWB Assy (PL 12.1.16) and the AC LV Harness Assembly (PL 12.3.4).
503	7	D-106	Connection between the AC PWB Assy (PL 12.1.16) and the DWR Fuser Harness Assembly (PL 4.1.7).
	8	G-107	

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
505	8	E-107	Connection between the AC PWB Assy (PL 12.1.16) and the Option Harness Assembly (PL 12.3.5).
521	10	I-108	Connection between the LVPS PWB (PL 12.2.1) and the AC LV Harness Assembly (PL 12.3.4).
522	4	F-111	Connection between the LVPS PWB (PL 12.2.1) and the Top Harness Assembly (PL 12.2.24).
	10	G-108	
523	10	G-106	Connection between the LVPS PWB (PL 12.2.1) and the Main Harness Assembly (PL 12.3.1).
524	10	G-107	Connection between the LVPS PWB (PL 12.2.1) and the Main Harness Assembly (PL 12.3.1).
	11	E-103	
525	10	G-108	Connection between the LVPS PWB (PL 12.2.1) and the Main Harness Assembly (PL 12.3.1).
	11	E-104	
526	10	G-109	Connection between the LVPS PWB (PL 12.2.1) and the ESS Power Harness Assembly (PL 12.3.2).
527	10	G-108	Connection between the LVPS PWB (PL 12.2.1) and the Main Harness Assembly (PL 12.3.1).
	11	E-104	
528	10	G-107	Connection between the LVPS PWB (PL 12.2.1) and the Main Harness Assembly (PL 12.3.1).
	11	E-103	
529	10	G-107	Connection between the LVPS PWB (PL 12.2.1) and the Main Harness Assembly (PL 12.3.1).
	11	E-103	
551	10	G-110	Connection between the Main Harness Assembly (PL 12.3.1) and the HV1 Power Supply PWB (PL 12.2.15)
	11	F-106	
552	3	E-106	Connection between the Top Harness Assembly (PL 12.2.24) and the HVPS2 PWB (PL 12.1.2)
	5	H-108	
601	1	D-103	Connection between the DWR Fuser Harness Assembly (PL 4.1.7) and the Fuser Assembly (PL 10.1.1)
	7	I-109	
2711	6	C-110	Connection between the Main Harness Assembly (PL 12.3.1) and the Front Harness Assembly (PL 4.2.11).
	9	B-111	
	13	C-110	
4021	10	F-109	Connection between the ROS Assembly (PL 7.1.1) and interim connector.

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
4521	6	G-110	Connection between the Main Harness Assembly (PL 12.3.1) and the (K) Harness Assembly (PL 11.1.23).
	9	F-111	
4522	6	F-110	Connection between the Main Harness Assembly (PL 12.3.1) and the PR (K) Harness Assembly (PL11.1.23).
	9	E-111	
4523	2	H-103	Connection between the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15) and the (Y) Erase PWB (PL 6.1.9).
4524	2	H-104	Connection between the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15) and the (M) Erase PWB (PL 6.1.9).
4525	2	I-104	Connection between the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15) and the (C) Erase PWB (PL 6.1.9).
4526	2	I-105	Connection between the (K) CRUM X Harness Assembly (PL 6.1.14) and the (K) Erase PWB (PL 6.1.9).
4541	2	B-103	Connection between the Toner CRUM Harness Assembly (PL 8.1.18) and the (Y) Toner CRUM Connector Assembly (PL 8.1.13).
4542	2	C-103	Connection between the Toner CRUM Harness Assembly (PL 8.1.18) and the (M) Toner CRUM Connector Assembly (PL 8.1.13).
4543	2	C-104	Connection between the Toner CRUM Harness Assembly (PL 8.1.18) and the (C) Toner CRUM Connector Assembly (PL 8.1.13).
4544	2	D-104	Connection between the Toner CRUM Harness Assembly (PL 8.1.18) and the (K) Toner CRUM Connector Assembly (PL 8.1.13).
4551	6	G-110	Connection between the Main Harness Assembly (PL 12.3.1) and the (K) CRUM X Harness Assembly (PL 6.1.14).
	9	F-112	
4552	2	H-103	Connection between the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15) and the (Y) Imaging Unit CRUM Connector Assembly (PL 6.1.6).
4553	2	H-104	Connection between the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15) and the (M) Imaging Unit CRUM Connector Assembly (PL 6.1.6).
4554	2	I-104	Connection between the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15) and the (C) Imaging Unit CRUM Connector Assembly (PL 6.1.6).
4561	2	D-112	Connection between the Main CTD Harness Assembly (PL 12.3.8) and the Temperature Sensor (CTD Sensor Assembly) (PL 9.1.10).
4571	2	C-112	Connection within the Main CTD Harness Assembly (PL 12.3.8).
4572	2	C-112	Connection between the Main CTD Harness Assembly (PL 12.3.8) and the CTD Harness (CTD Sensor Assembly) (PL 9.1.10).
4573	2	D-112	Connection between the Main CTD Harness Assembly (PL 12.3.8) and the Left CTD Sensor (CTD Sensor Assembly) (PL 9.1.10).

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
4574	2	G-111	Connection between the CTD Harness (CTD Sensor Assembly) (PL 9.1.10) and the Right CTD Sensor (CTD Sensor Assembly) (PL 9.1.10).
4611	8	E-107	Connection between the Option Harness Assembly (PL 12.3.5) and the Option Feed 1 Relay Harness Assembly (PL 15.2.30) (Option 550 Feeder).
4621	8	C-104	Connection between the Dispense Harness Assembly (PL 8.1.19) and the (Y) Dispense Motor Assembly (PL 8.1.15).
4622	8	D-104	Connection between the Dispense Harness Assembly (PL 8.1.19) and the (M) Dispense Motor Assembly (PL 8.1.15).
4623	8	E-104	Connection between the Dispense Harness Assembly (PL 8.1.19) and the (C) Dispense Motor Assembly (PL 8.1.15).
4624	8	F-105	Connection between the Dispense Harness Assembly (PL 8.1.19) and the (K) Dispense Motor Assembly (PL 8.1.15).
4651A	1	H-111	Connection between the Main Harness Assembly (PL 12.3.1) and the Feeder Harness Assembly (PL 2.2.3).
	9	C-111	
4651B	6	E-110	Connection between the Main Harness Assembly (PL 12.3.1) and the Temp/ Humidity (Environmental) Sensor (PL 12.2.18).
	9	D-111	
4652A	1	H-111	Connection between the Feeder Harness Assembly (PL 2.2.3) and the No Paper Sensor (PL 2.2.2).
	9	C-110	
4652A	1	E-111	Connection between the Main Harness Assembly (PL 12.3.1) and the Feed Roller Clutch (Paper Handling Clutch Assembly) (PL 2.2.8).
4652B	6	G-109	Connection between the Main Harness Assembly (PL 12.3.1) and the Developer Fan (Process Fan) (PL 12.2.16).
	9	F-111	
4653A	6	I-110	Connection between the Main Harness Assembly (PL 12.3.1) and the Paper Size Switch (Size Switch Holder Assembly) (PL 2.1.6).
	9	I-112	
4653B	2	B-106	Connection between the Main Harness Assembly (PL 12.3.1) and the Trickle Motor (Trickle Guide Assembly) (PL 8.1.10).
	9	D-106	
4661	10	F-106	Connection between the Main Harness Assembly (PL 12.3.1) and the Front Harness Assembly (PL 4.2.11).
	11	E-103	
4662	2	E-103	Connection between the Front Harness Assembly (PL 4.2.11) and the BTR Retract Motor (IBT Retract Cam Assembly) (PL 9.1.8).
4663	2	D-103	Connection between the Front Harness Assembly (PL 4.2.11) and the BTR Retract Sensor (IBT Retract Cam Assembly) (PL 9.1.8).

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
4671	6	C-111	Connection between the Main Harness Assembly (PL 12.3.1) and the Duplex Harness Assembly (PL 4.2.18) (Option Duplex).
	9	B-111	
	13	C-110	
4672	1	I-102	Connection between the Duplex Harness Assembly (PL 4.2.18) and the Duplex Relay Harness Assembly (PL 14.3.19).
4681	4	E-109	Connection between the Main Harness Assembly (PL 12.3.1) and the Top Harness Assembly (PL 12.2.24).
	10	F-106	
	11	E-102	
4682	3	I-105	Connection between the Top Harness Assembly (PL 12.2.24) and the Front Cover Switch (PL 12.2.7).
	5	E-110	
4683	3	D-106	Connection between the Top Harness Assembly (PL 12.2.24) and the HVPS2 Fan (Process Fan) (PL 12.1.3).
	5	E-105	
4684	3	E-104	Connection between the IBT Cleaner Motor Assembly (PL 9.1.6) and the LVPS PWB (PL 12.2.1).
	4	E-107	
4685	3	D-105	Connection between the IBT Unit (PL 9.1.99) and the LVPS PWB (PL 12.2.1).
	4	F-107	
4686	3	D-106	Connection between the Waste Sensor Harness (Waste Cartridge Guide Assembly) (PL 9.1.4) and the Waste Cartridge Full Sensor (PL 9.1.5).
4691	10	G-109	Connection between the Main Harness Assembly (PL 12.3.1) and the Laser Unit (ROS Assembly) (PL 7.1.1).
	11	E-110	
4711	8	G-106	Connection between the Paper Handling Motor Harness Assembly (PL 12.3.9) and the Paper Handling Motor (Paper Handling Drive Assembly) (PL 11.1.19).
4721	6	J-109	Connection between the Main Harness Assembly (PL 12.3.1) and the (Y/ M/ C) PR Harness Assembly (PL 11.1.22).
	9	H-111	
4722	6	H-108	Connection between the PR (Y/ M/ C) Harness Assembly (PL 11.1.22) and the (Y/ M/ C) Drum Motor (Drive Assembly) (PL 11.1.2).
4723	6	H-110	Connection between the Main Harness Assembly (PL 12.3.1) and the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15).
	9	G-112	
4724	6	F-109	Connection between the PR (K) Harness Assembly (PL 11.1.23) and the (K) Drum Motor (K Drive Assembly) (PL 11.1.12).
4731	1	F-111	Connection between the Registration Harness (Registration Chute Assembly) (PL 5.1.1) and the Registration Sensor (PL 5.1.3).

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
4741	2	C-106	Connection between the Developer Motor PWB (PL 11.1.16) and the MCU PWB (PL 12.1.15).
4751	6	D-111	Connection between the Main Harness Assembly (PL 12.3.1) and the Front Harness Assembly (PL 4.2.11).
	9	B-111	
	13	C-111	
4752	1	I-104	Connection between the Front Harness Assembly (PL 4.2.11) and the Bypass Tray No Paper Sensor (PL 4.4.3).
	13	A-104	
4753	1	F-104	Connection between the Front Harness Assembly (PL 4.2.11) and the Bypass Tray Feed Solenoid (PL 4.3.10).
	13	G-108	
4754	1	G-104	Connection between the Bypass Tray No Paper Sensor (PL 4.4.3) and Interim Connector.
4755	1	D-104	Connection between the Front Harness Assembly (PL 4.2.11) and the Fuser Unit Motor (Fuser Drive Assembly) (PL 4.2.16).
	13	J-111	
4761	6	G-110	Connection between the Main Harness Assembly (PL 12.3.1) and the (K) CRUM X Harness Assembly (PL 6.1.15).
	9	F-111	
4762	2	I-106	Connection between the (K) CRUM Harness Assembly (PL 6.1.14) and the (K) Imaging Unit CRUM Connector Assembly (PL 6.1.6).
5225	3	D-106	Connection between the Top Harness Assembly (PL 12.2.24) and the Waste Cartridge Set Switch (PL 12.2.3).
	5	E-104	
5226	3	H-105	Connection between the Top Harness Assembly (PL 12.2.24) and the Front Cover Interlock Switch (PL 12.2.8).
	5	E-110	
5231	10	I-109	Connection between the Main Harness Assembly (PL 12.3.1) and the LVPS Fan Assembly (PL 12.2.22).
5241	2	B-106	Connection between the Developer Motor PWB (PL 11.1.16) and the Main Harness Assembly (PL 12.3.1).
5242	8	G-106	Connection between the Paper Handling Motor Harness Assembly (PL 12.3.9) and the Paper Handling Motor (Paper Handling Drive Assembly) (PL 11.1.19).
5243	6	H-109	Connection between the Main Harness Assembly (PL 12.3.1) and the (Y/ M/ C) CRUM X Harness Assembly (PL 6.1.15).
	9	G-111	
5244	6	J-109	Connection between the Main Harness Assembly (PL 12.3.1) and the (Y/ M/ C) Harness Assembly (PL 11.1.22).
	9	I-111	

Print Engine Plug/Jack Designators (Continued)

P/J	Map	Coordinates	Remarks
5245	6	I-108	Connection between the (Y/ M/ C) PR Harness Assembly (PL 11.1.22) and the (Y/ M/ C) Drum Motor (YMC Drive Assembly) (PL 11.1.2).
5246	6	G-109	Connection between the (K) PR Harness Assembly (PL 11.1.23) and the (K) Drum Motor (K Drive Assembly) (PL 11.1.12).
5247	8	E-106	Connection between the Main Harness Assembly (PL 12.3.1) and the Paper Handling Motor Harness Assembly (PL 12.3.9).
5248	2	B-106	Connection between the Main Harness Assembly (PL 12.3.1) and the Deve Motor Harness Assembly (PL 11.1.24).
5251	10	G-109	Connection between the Main Harness Assembly (PL 12.3.1) and the Laser Unit (ROS Assembly) (PL 7.1.1).
	11	E-111	
5291	2	B-105	Connection between the LVPS PWB (PL 12.2.1) and the Toner Cover Interlock Switch (PL 8.1.14).
5292	2	D-104	Connection between the Main Harness Assembly (PL 12.3.1) and the Toner Cover Interlock Switch (PL 8.1.14).

Option Duplex Plug/Jack Designators

P/J	Map	Coordinates	Remarks
125	12	F-107	Connection between the Duplex Jam Sensor (PL 14.3.17) and the Duplex Sensor Harness Assembly (PL 14.3.9).
428	12	H-107	Connection between the Duplex PWB (PL 14.3.8) and the Duplex Relay Harness Assembly (PL 14.3.19).
429	12	I-107	Connection between the Duplex PWB (PL 14.3.8) and the Duplex Motor (PL 14.2.1).
430	12	H-108	Connection between the Duplex PWB (PL 14.3.8) and the Duplex Sensor Harness Assembly (PL 14.3.9).
431	12	H-107	Connection between the Duplex PWB (PL 14.3.8) and the Duplex In Clutch Assembly (PL 14.2.20).
4672	12	A-104	Connection between the Duplex Harness Assembly (PL 4.2.18) and the Duplex Relay Harness Assembly (PL 14.3.19).
	13	F-102	

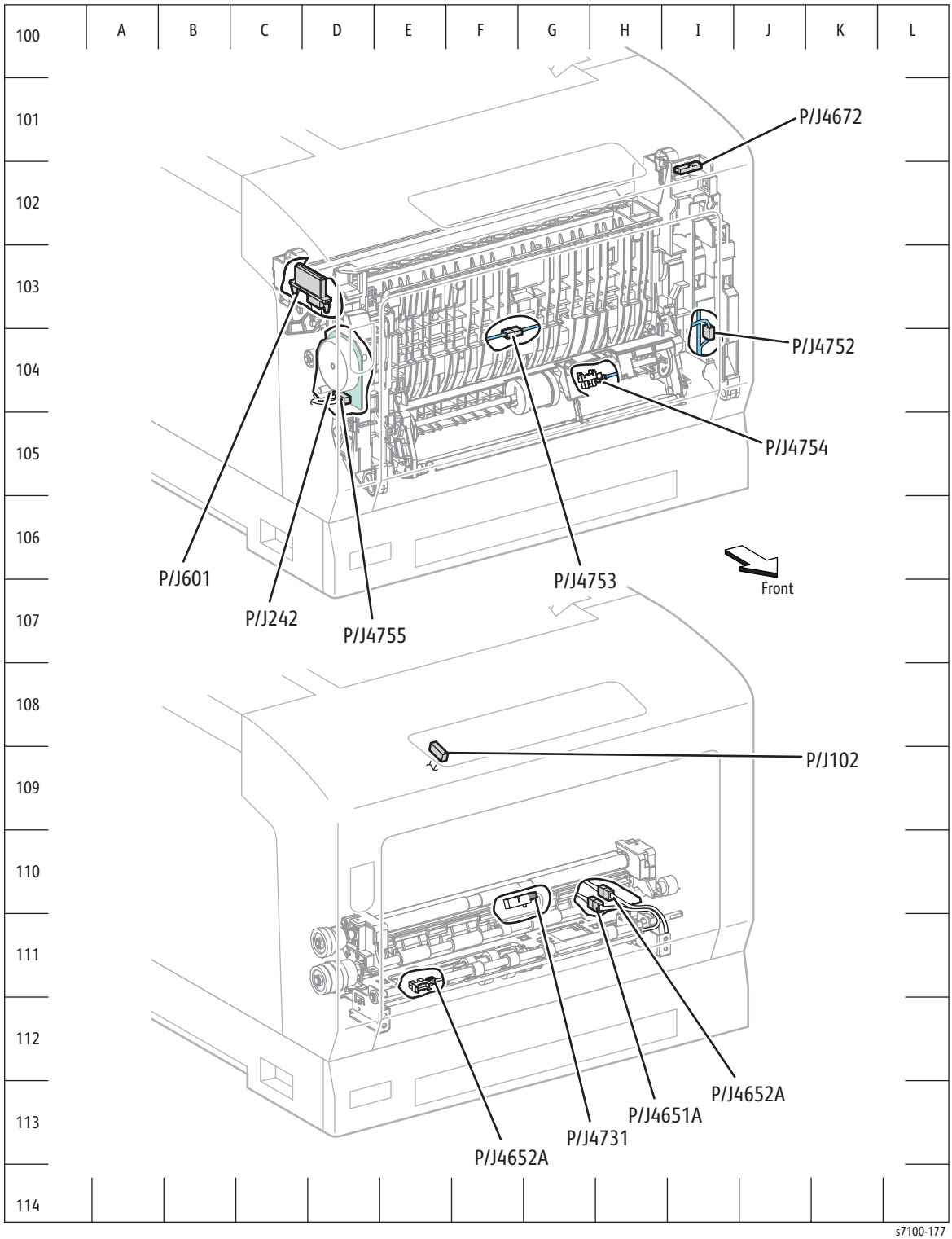
Option 550-Sheet Feeder Plug/Jack Designators

P/J	Map	Coordinates	Remarks
122	14	F-108	Connection between the Paper Jam Sensor (PL 15.2.3) and the Paper Feed Jam Harness Assembly (PL 15.2.6).
123	14	F-108	Connection between the Feeder No Paper Sensor (PL 15.2.8) and the No Paper Feed Harness Assembly (PL 15.2.9).
124	14	G-107	Connection between the Paper Size Switch Holder Assembly (PL 15.1.5) and the Option Rear Feed Harness Assembly (PL 15.2.32).
219	14	D-109	Connection between the Turn Roller Clutch (PL 15.2.25) and the Option Left Feed Harness Assembly (PL 15.2.31).
220	14	I-107	Connection between the Feed Roller Clutch (PL 15.2.13) and the Option Rear Feed Harness Assembly (PL 15.2.32).
221	14	D-109	Connection between the Option Drive Assembly (PL 15.2.28) and the Feeder PWB (PL 15.2.33).
222	14	D-109	Connection between the Option Drive Assembly (PL 15.2.28) and the Feeder PWB (PL 15.2.33).
419	14	C-103	Connection between the Feed PWB Assembly (PL 15.2.33) and the Option Feed 1 Relay Harness Assembly (PL 15.2.30).
420	1514	C-104	Connection between the Feed PWB Assembly (PL 15.2.33) and the Option Left Feed Harness Assembly (PL 15.2.31).
421	14	C-104	Connection between the Feed PWB Assembly (PL 15.2.33) and the Option Rear Feed Harness Assembly (PL 15.2.32).
422	14	C-104	Connection between the Feed PWB Assembly (PL 15.2.33) and the Option Left Feed Harness Assembly (PL 15.2.31).
423	14	B-103	Connection between the Feed PWB Assembly (PL 15.2.33) and the Option Feed 2 Relay Harness Assembly (PL 15.2.26).
611	14	D-109	Connection between the Paper Feed Jam Harness Assembly (PL 15.2.6) and the Option Left Feed Harness Assembly (PL 15.2.31).
612	14	I-107	Connection between the No Paper Feed Harness Assembly (PL 15.2.9) and the Option Rear Feed Harness Assembly (PL 15.2.32).

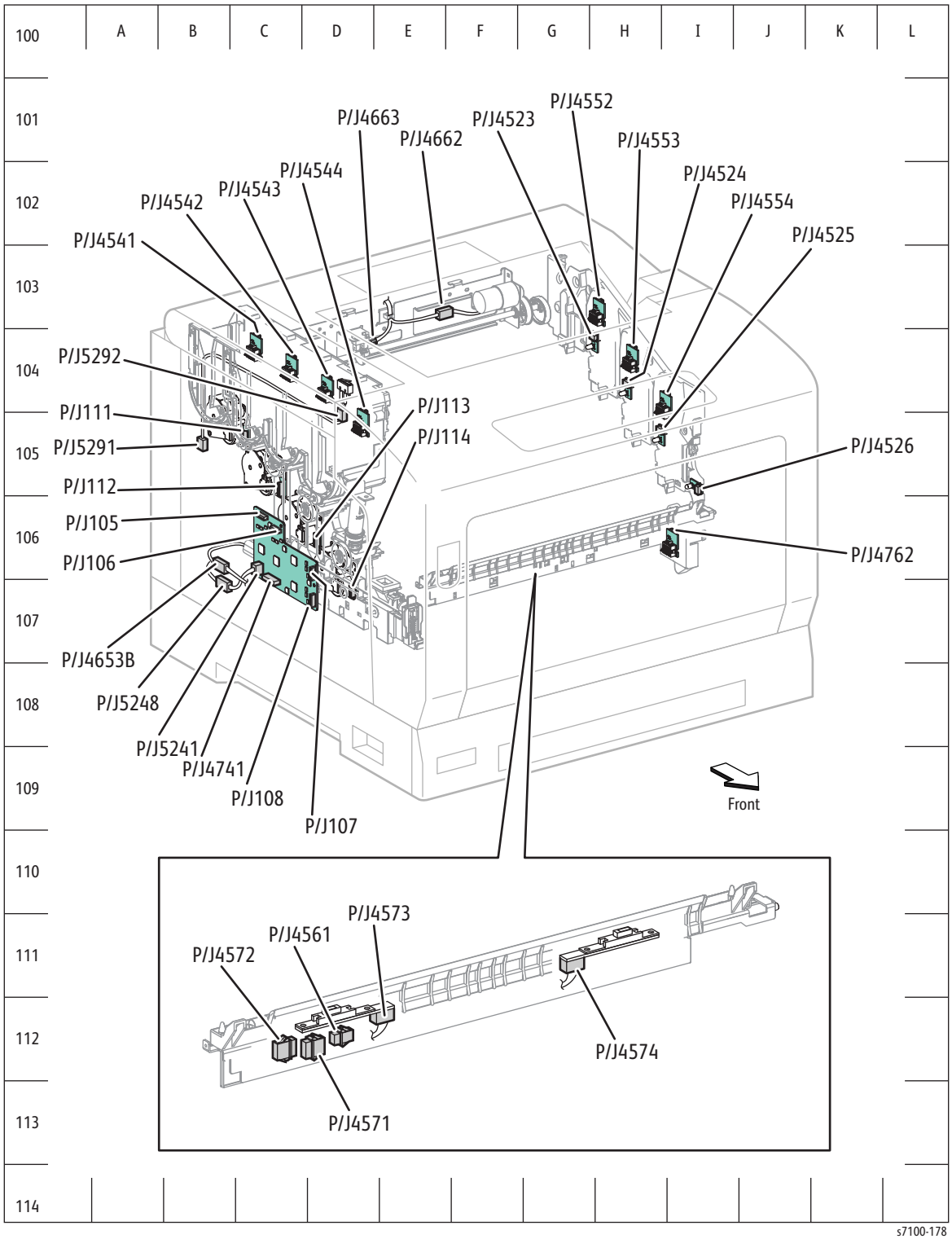
Plug/Jack Locators

Maps 1 through 14 indicate the location of key connections within the printer, Duplex Unit, and 550-Sheet Feeder Unit. Connections are referenced by their P/J designation.

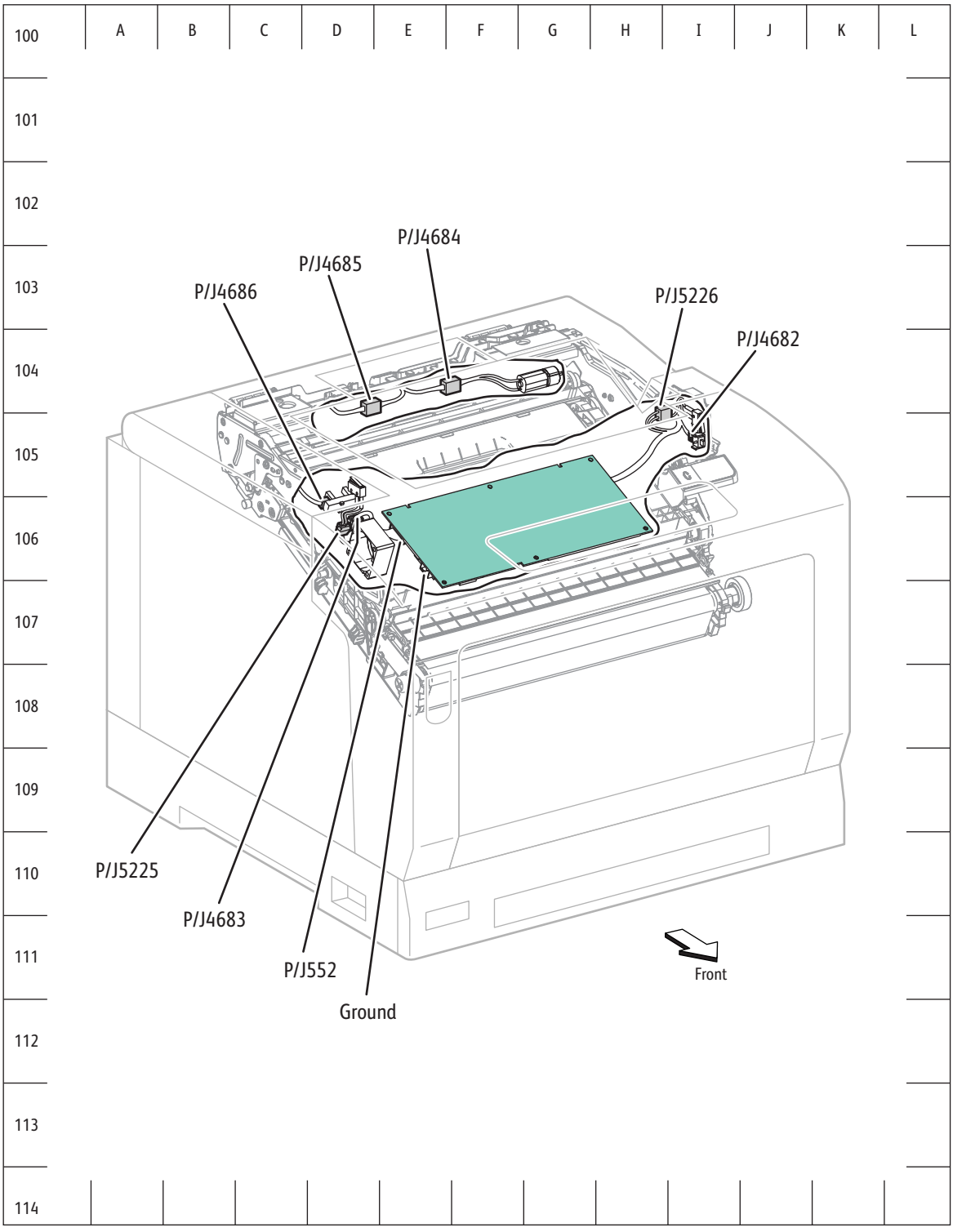
Map 1 - Front Side, Feeder, Fuser, Registration



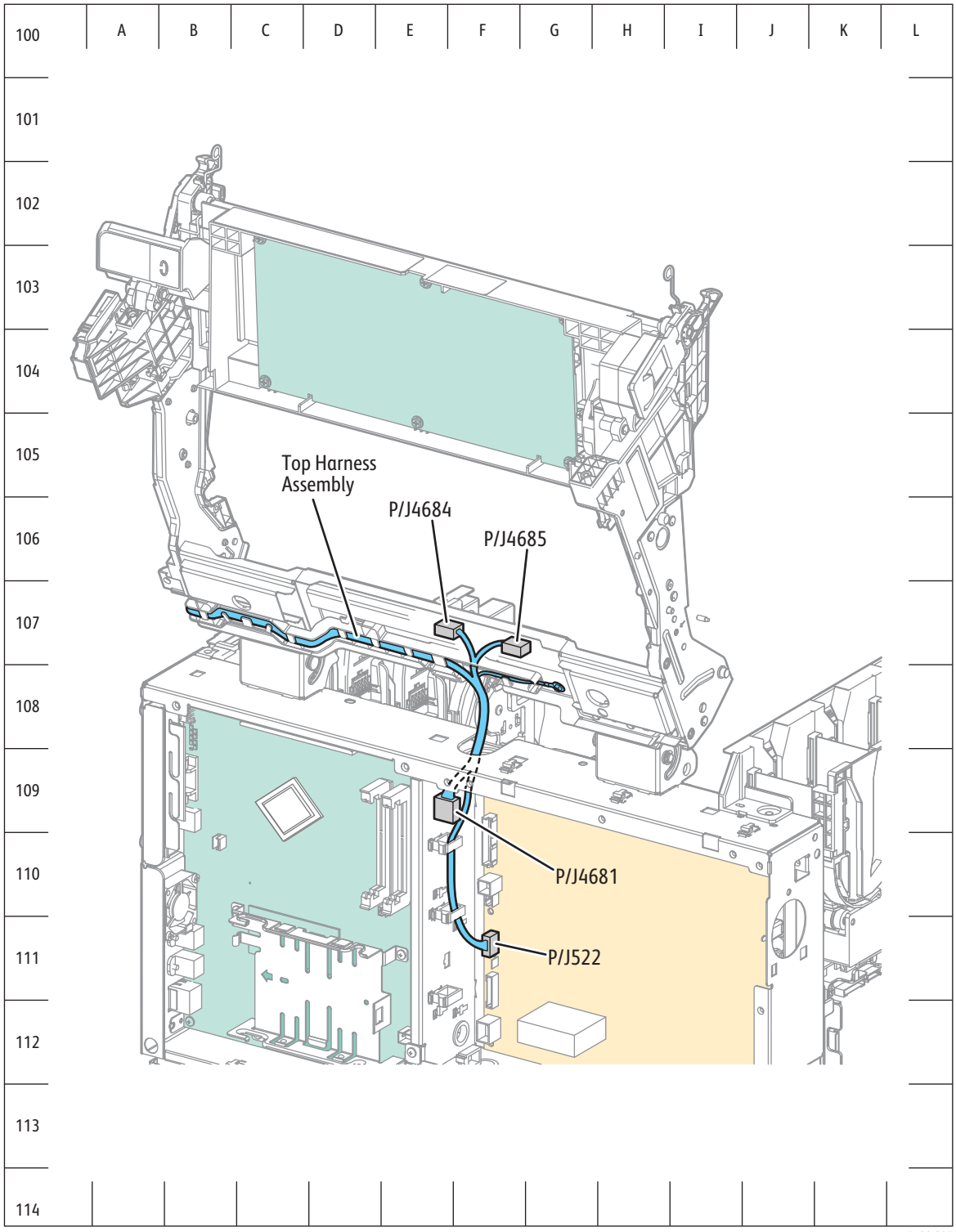
Map 2 - Front Side, Left Side, CTD Sensor, Developer PWB, CRUM



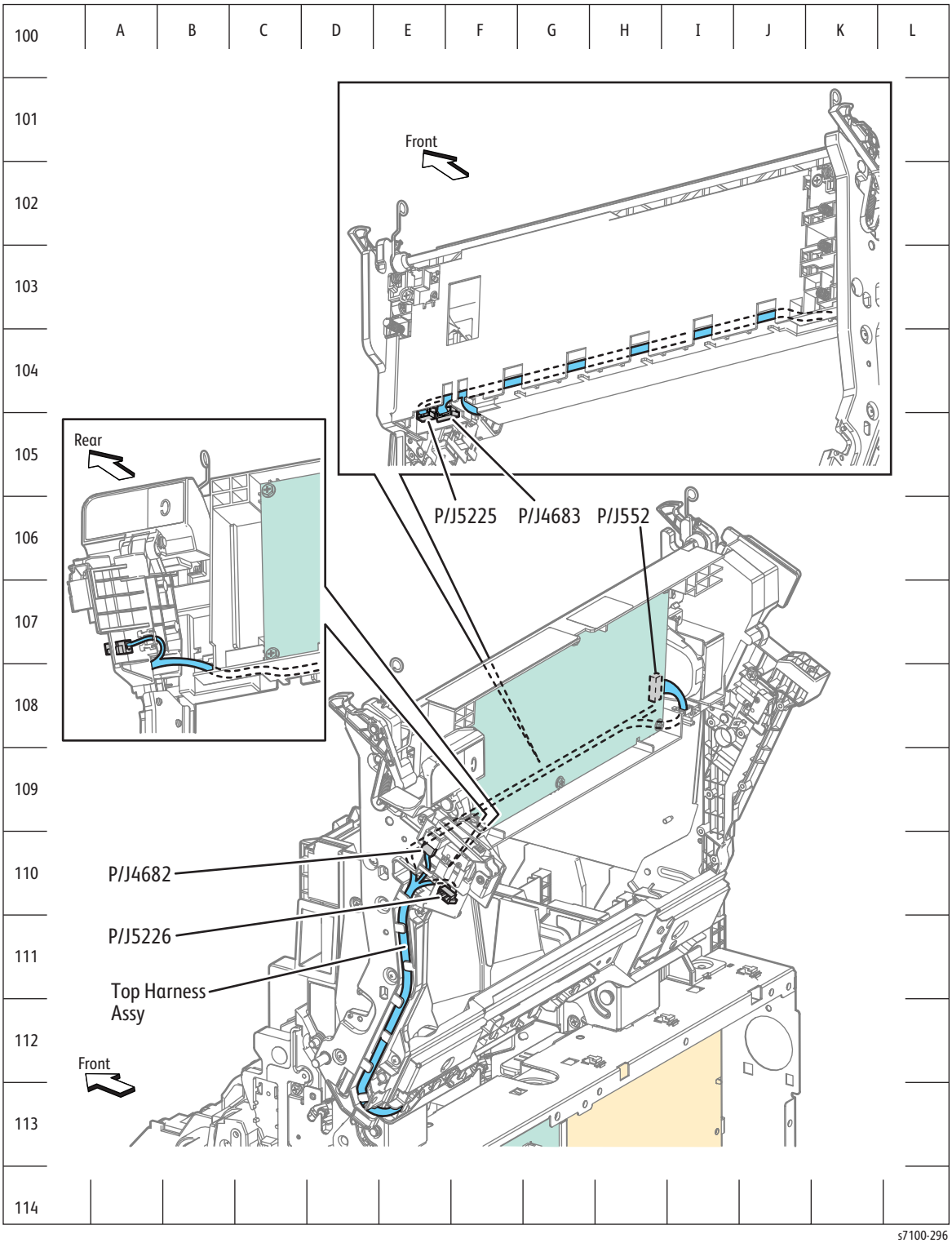
Map 3 - Top Front, HVPS2 PWB, Interlock Switch, Transfer



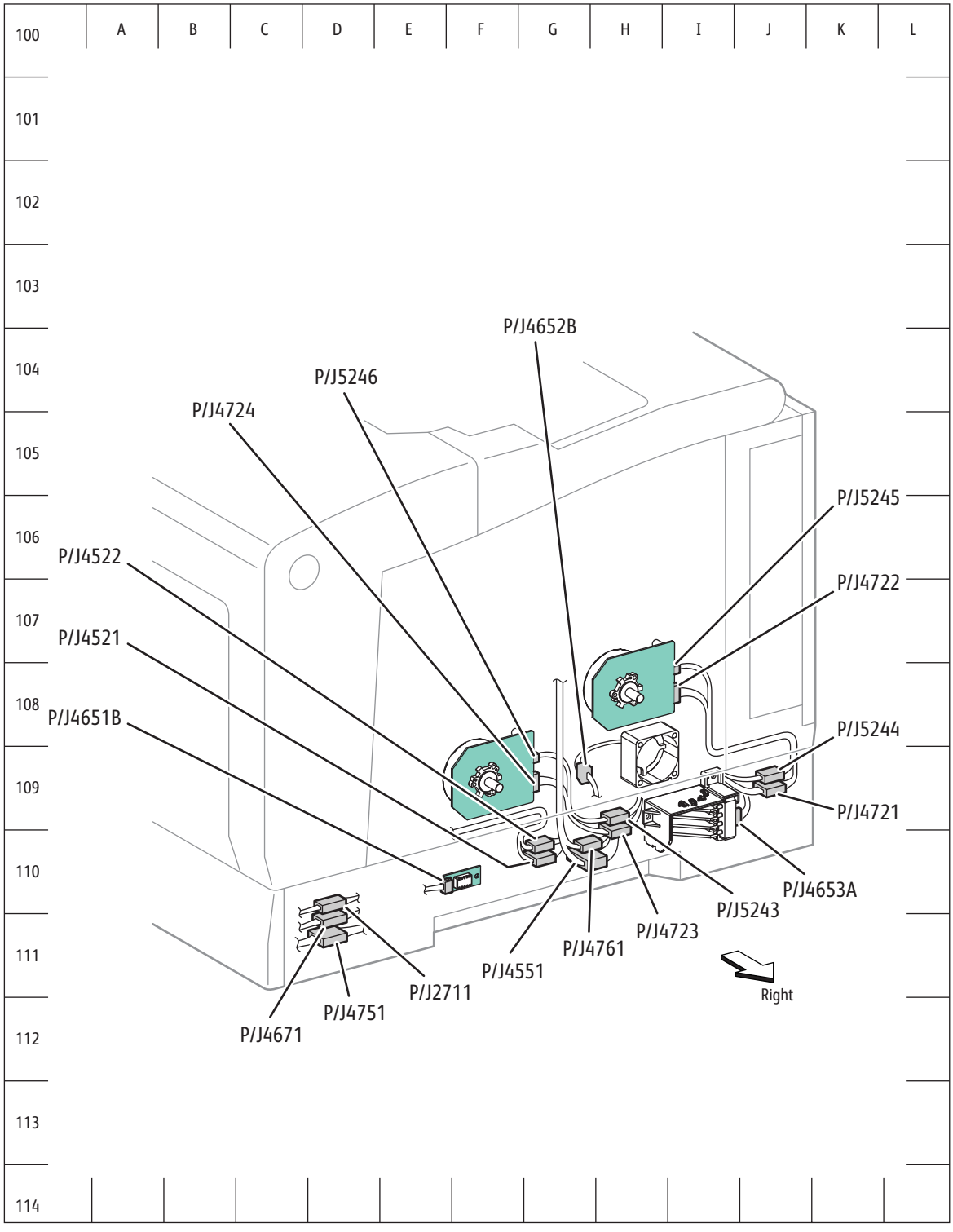
Map 4 - Top Rear, LVPS PWB



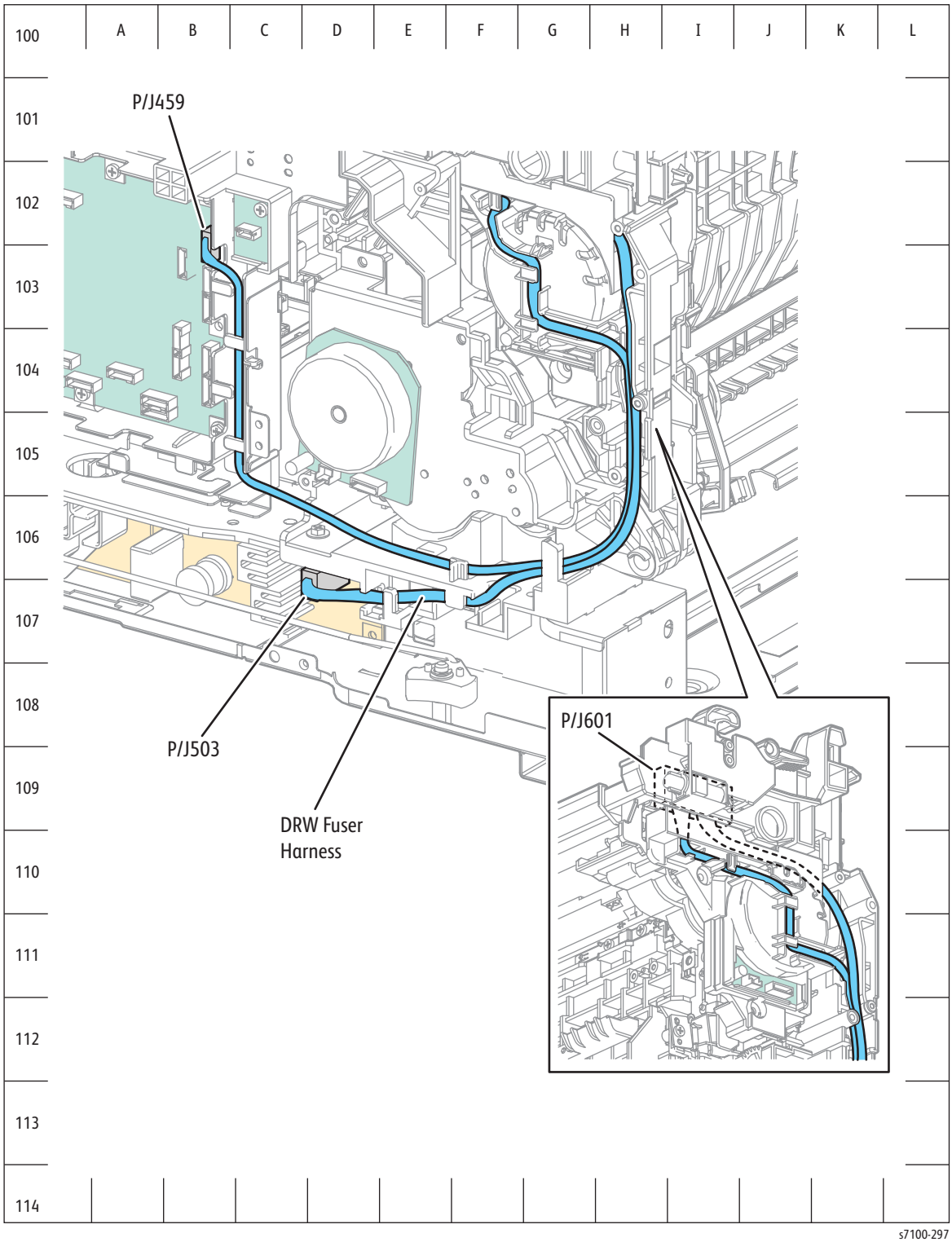
Map 5 - Top Rear, Frame, Interlock Switch



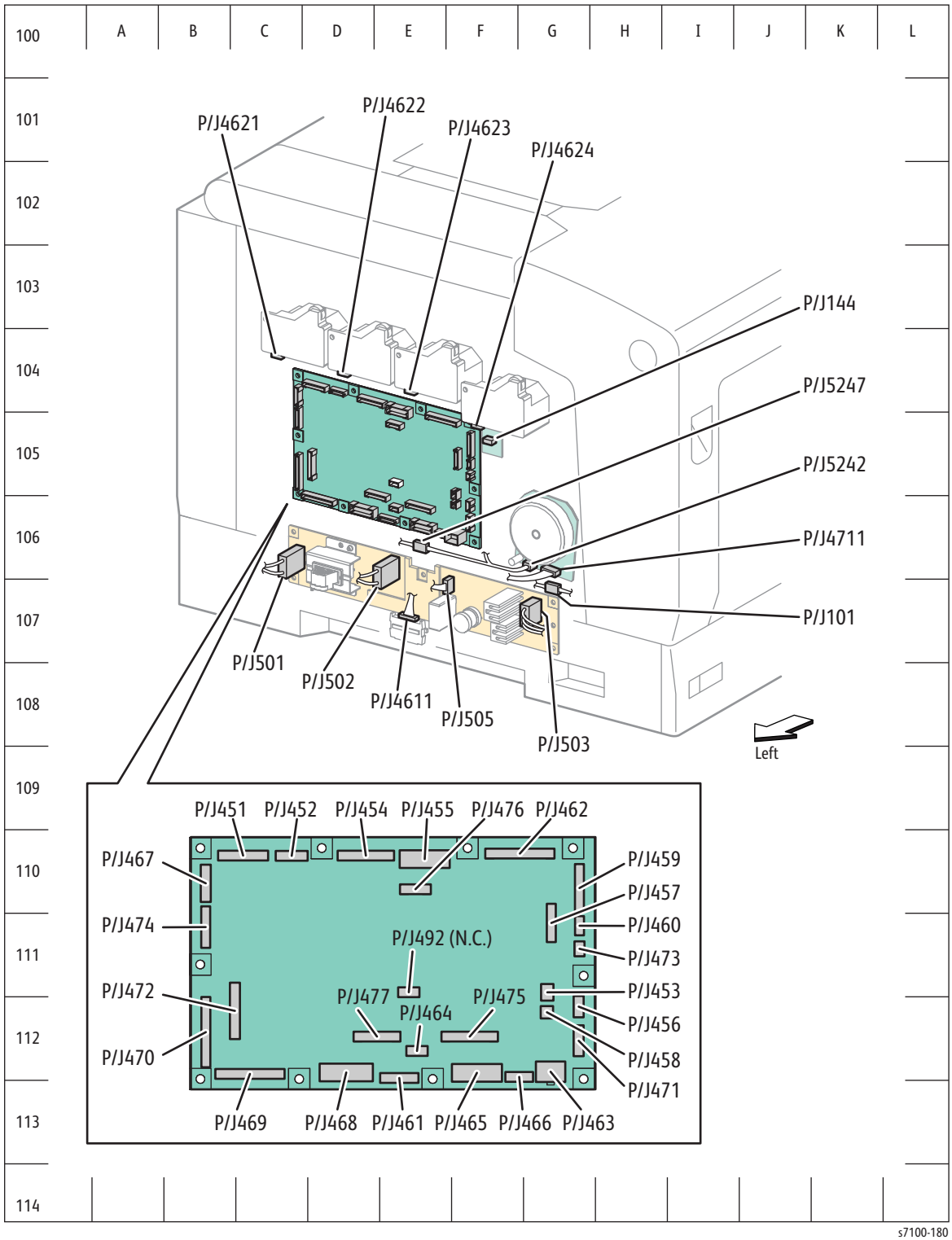
Map 6 - Right Side, Temp/ Humidity Sensor, Size Switch



Map 7 - Left Side, AC PWB

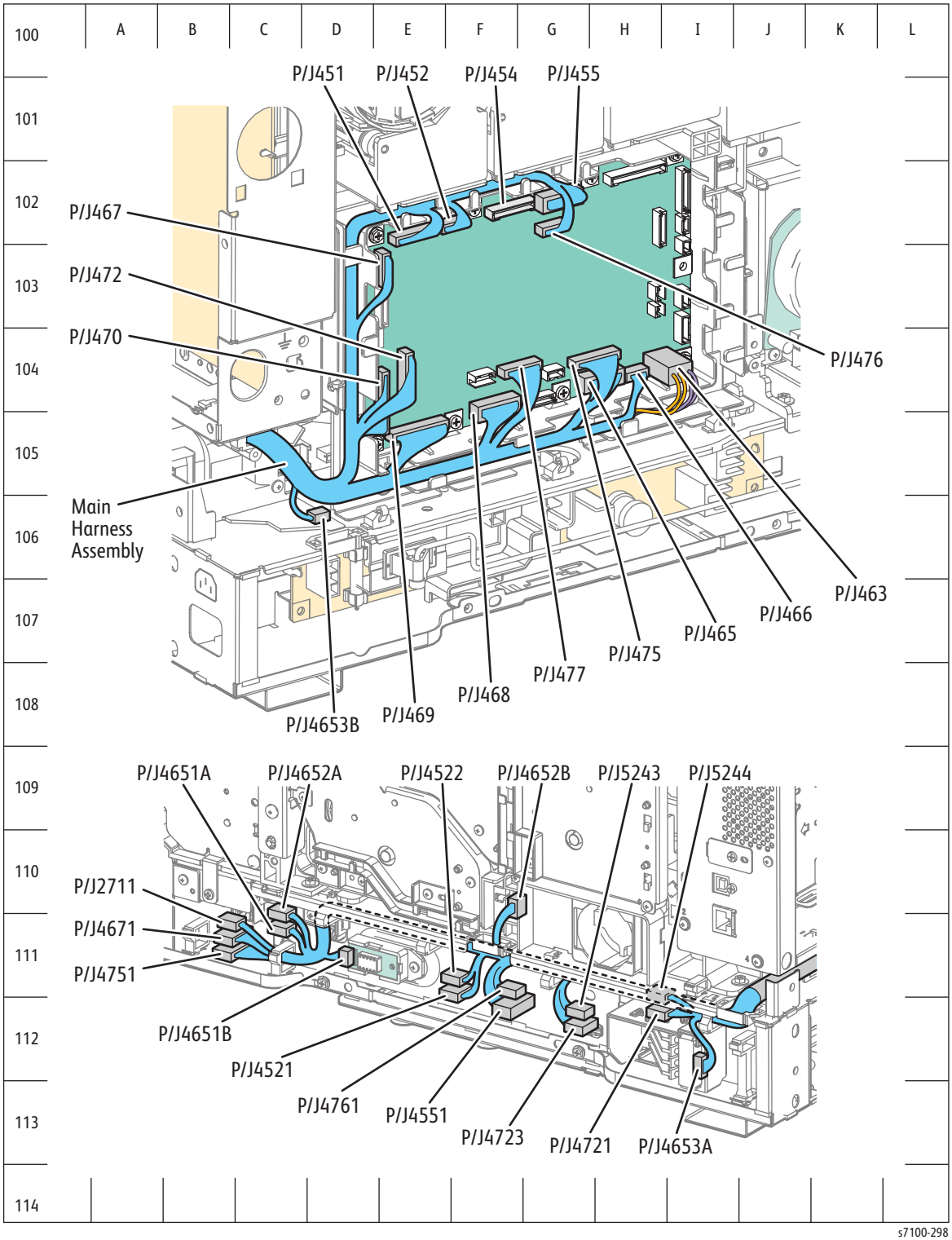


Map 8 - Left Side, AC PWB, MCU PWB

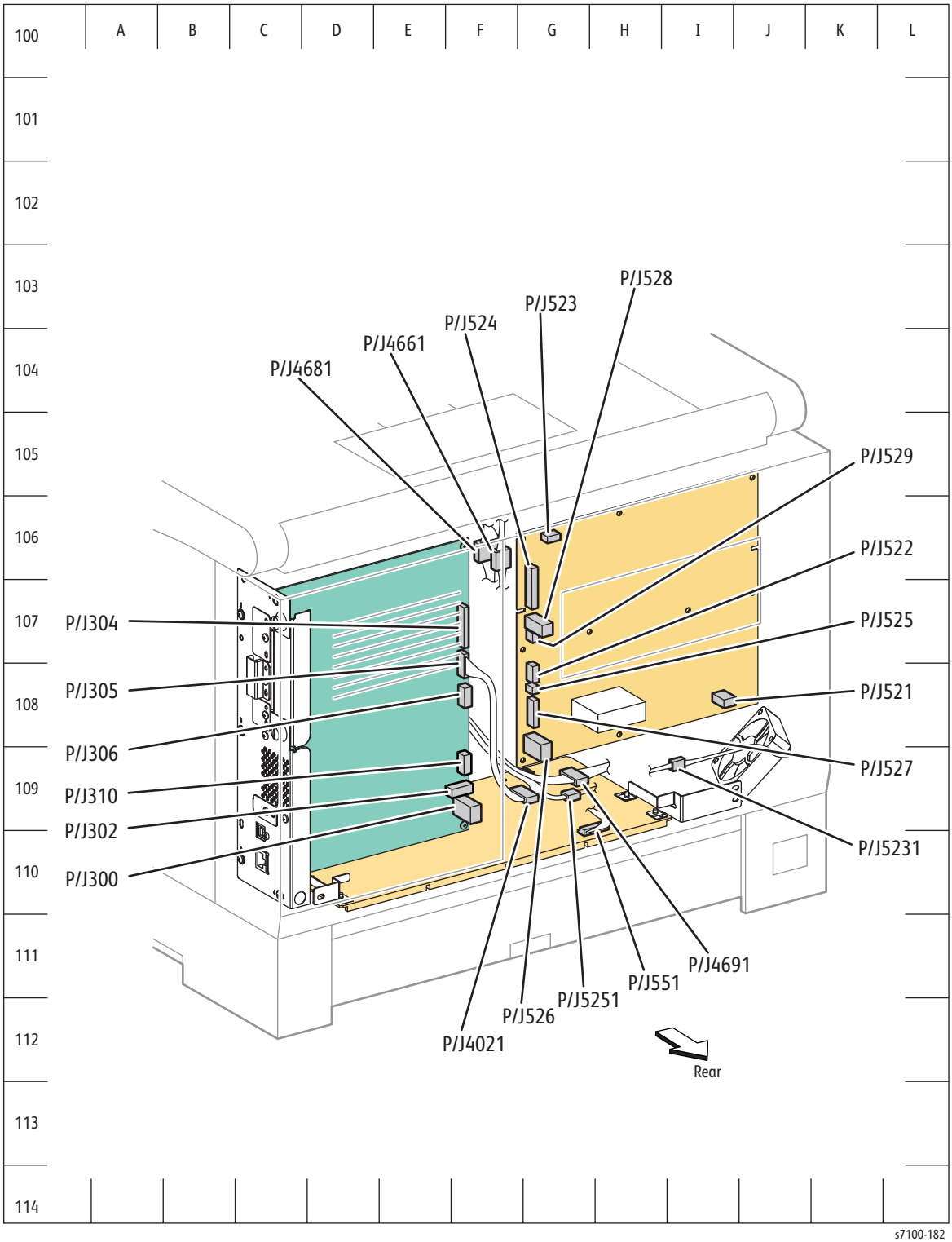


s7100-180

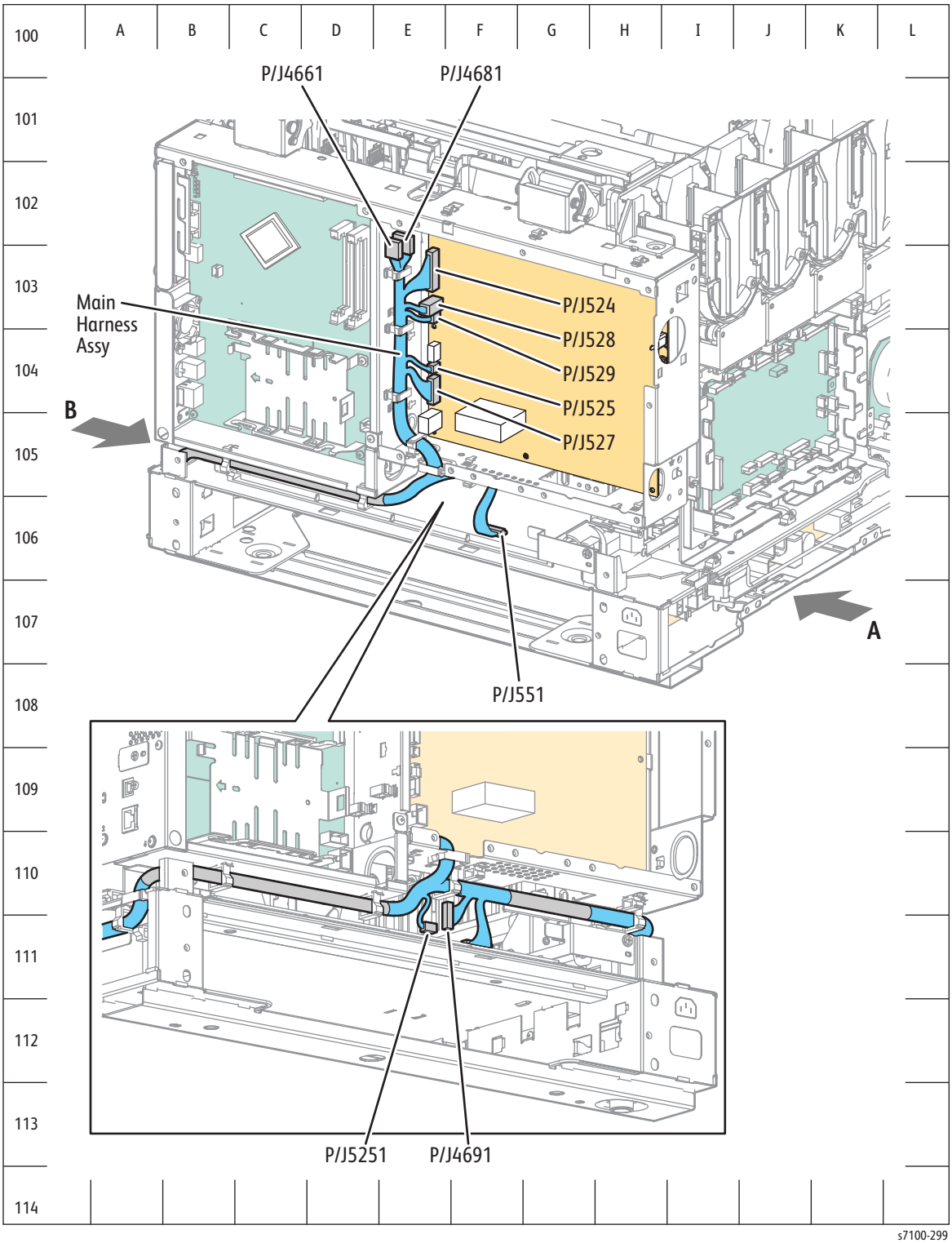
Map 9 - Rear Side, Feeder, MCU PWB, Size Switch



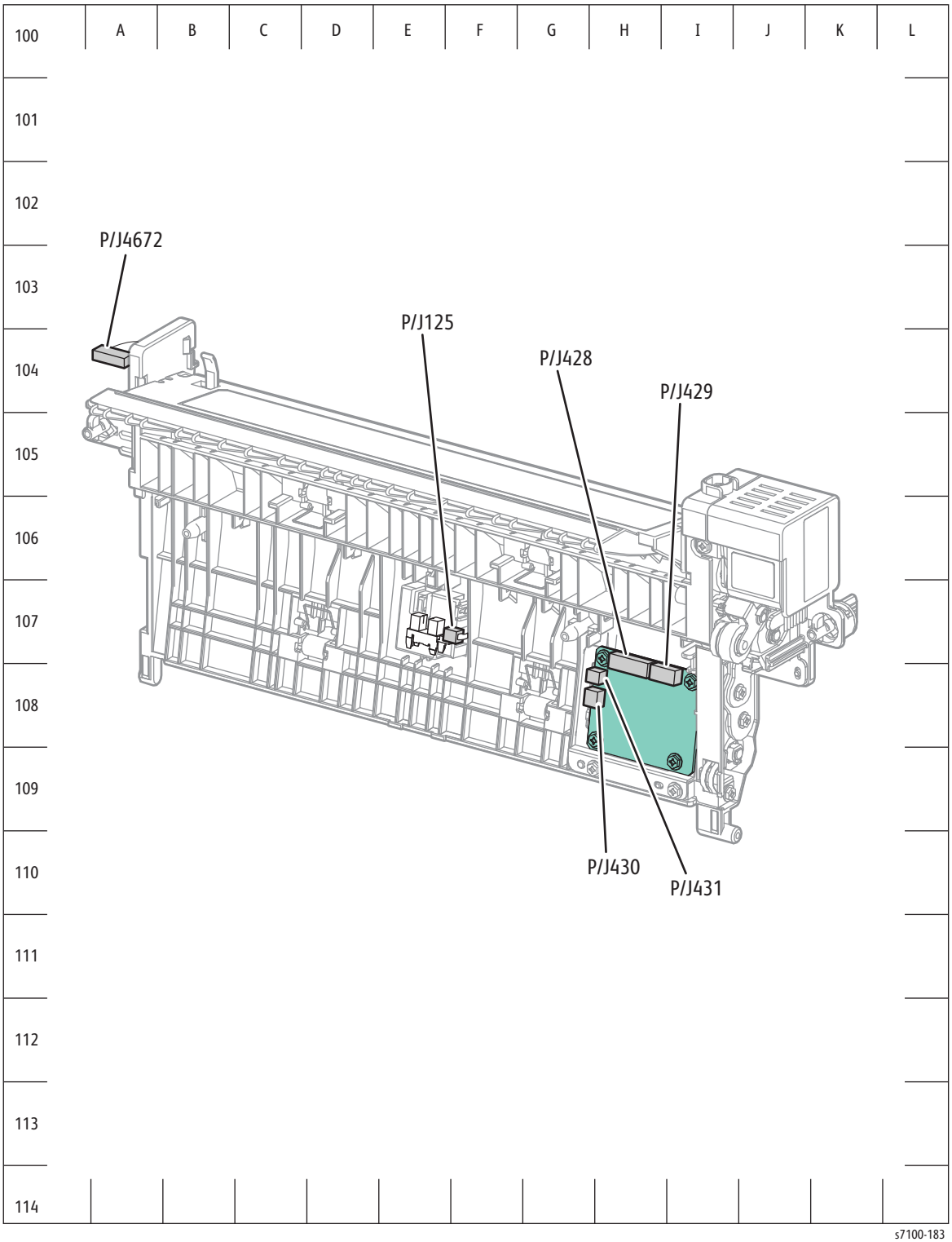
Map 10 - Rear Side, HDD, HVPS1 PWB, I/P PWB, LVPS PWB



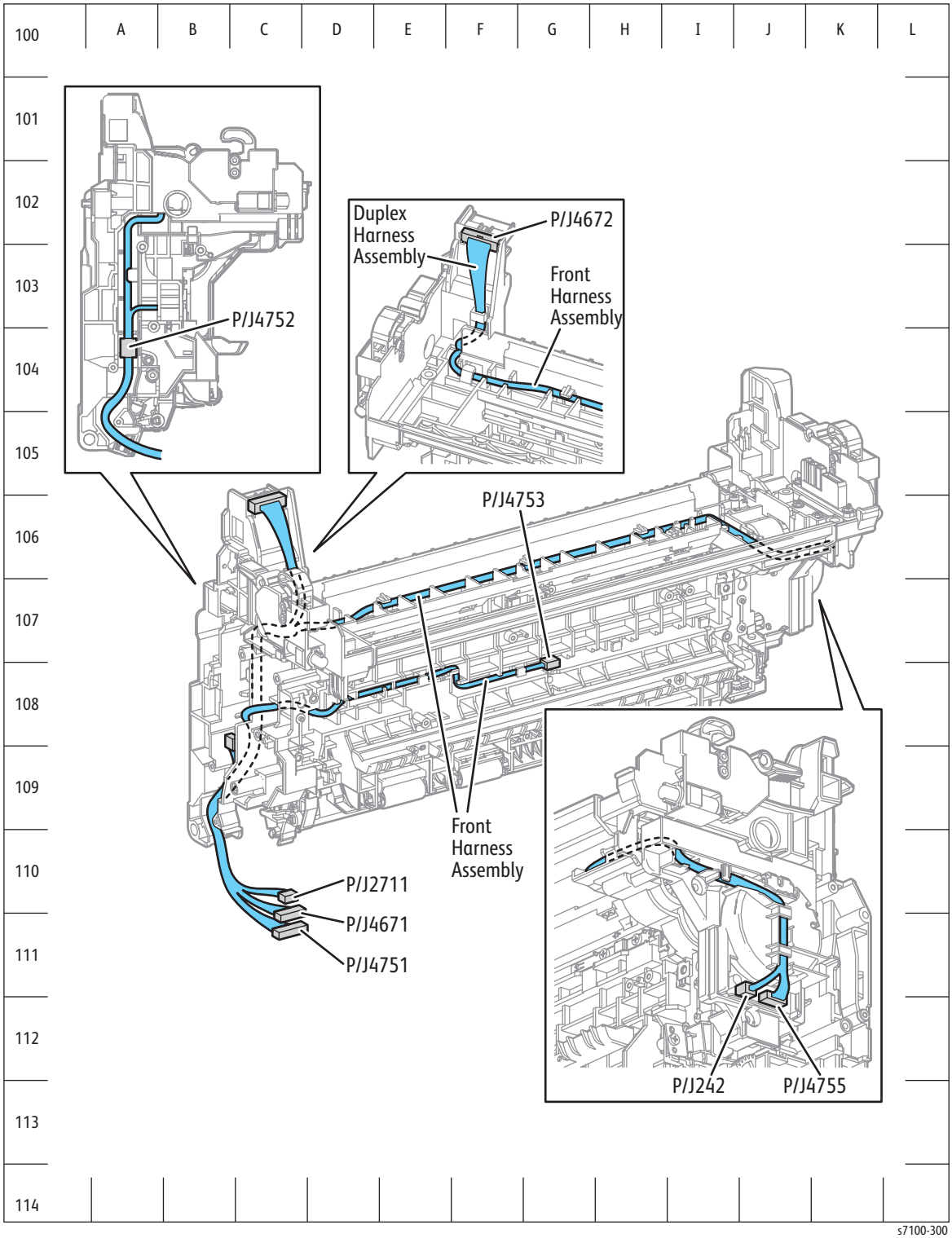
Map 11 - Laser Unit, LVPS PWB



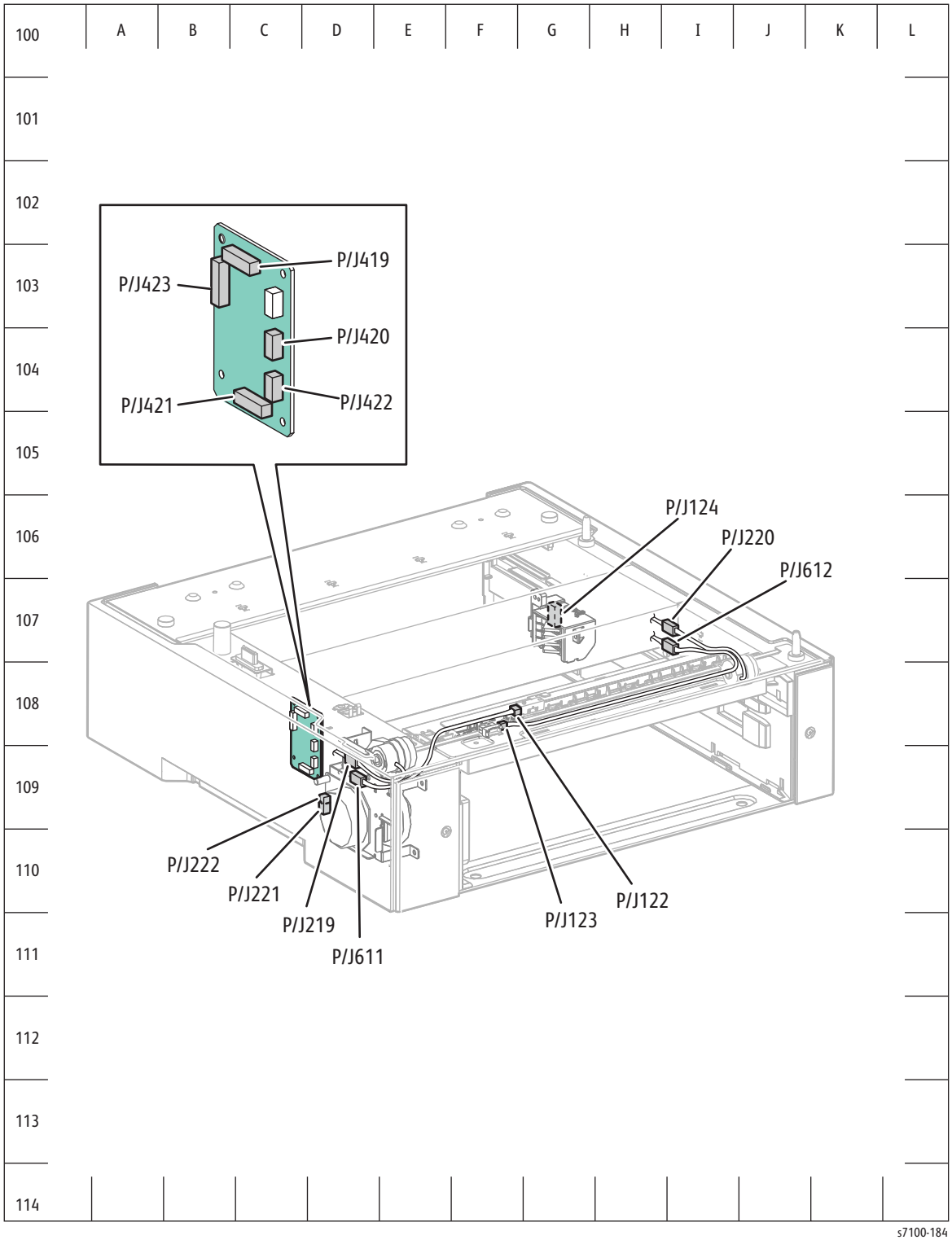
Map 12 - Duplex PWB



Map 13 - Duplex Unit

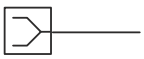


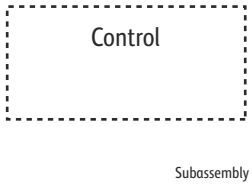
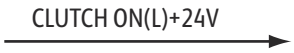
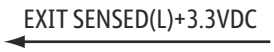
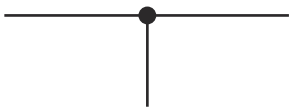
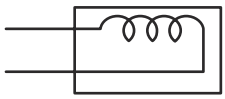
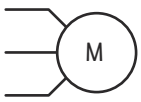
Map 14 - 550-Sheet Feeder

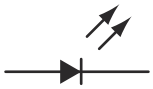
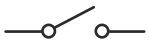
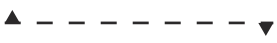


Notations Used in the Wiring Diagrams

The following table lists the symbols used in the wiring diagrams.

Symbol	Description
 Plug	Denotes a Plug.
 Jack	Denotes a Jack.
P/Jxx  YY Plug and Jack	Denotes Pin yy and Jack yy of the connector Pxx and Jxx.
JPxxx  Jumper	Denotes a Jumper Point (JPxxx/xxx). Each end of the Jumper connection has a numeric designation.
 Subassembly 1	Denotes the parts.PL X.Y.Z implies the item “Z” of plate (PL) “X.Y” in Parts List.
 Subassembly 2	Denotes functional parts attached with functional parts name.

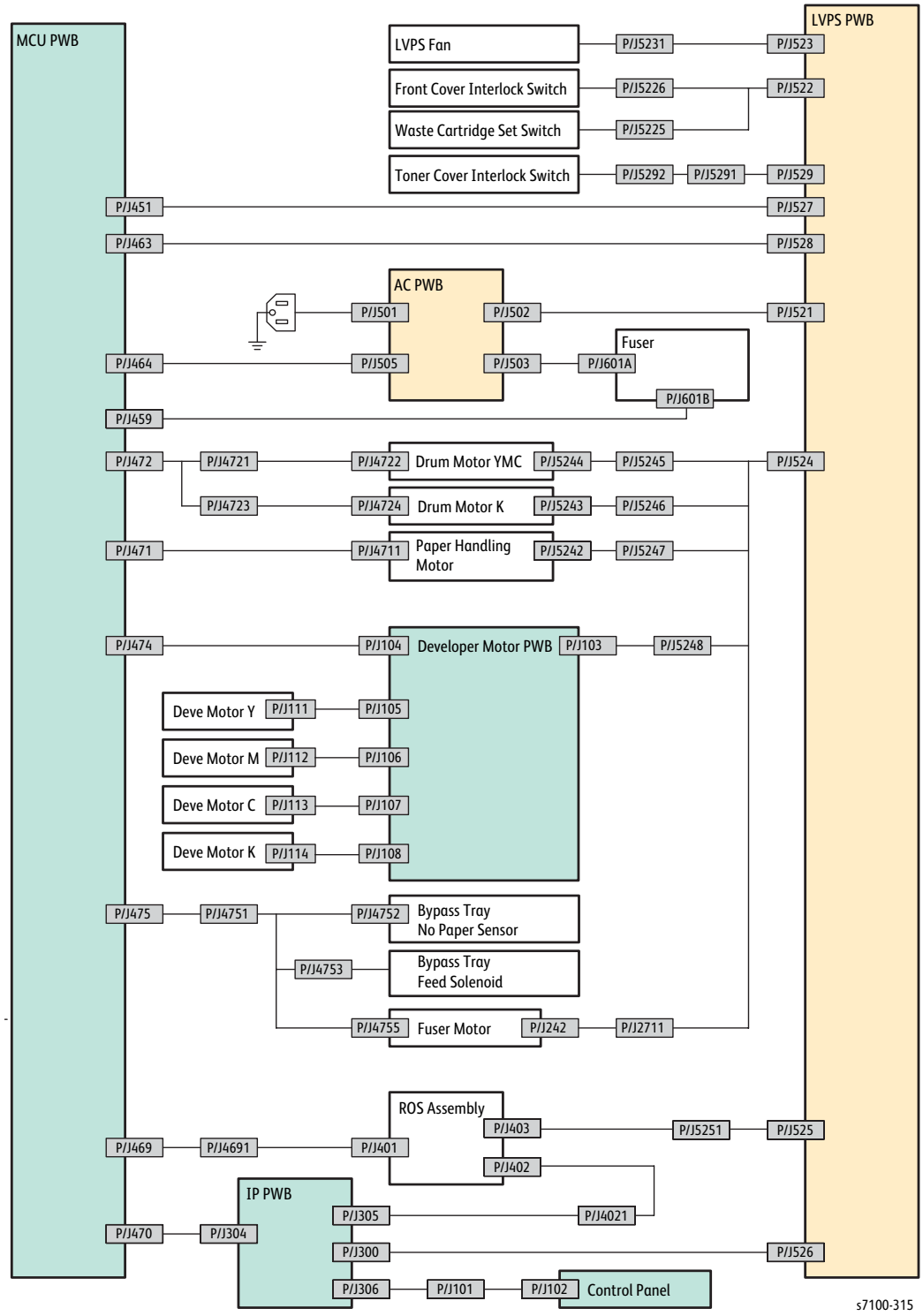
Symbol	Description
 Subassembly 3	Denotes the control and its outline in the Board.
 Connection Wire	Denotes a connection between parts with harness or wires, attached with signal name/contents.
 Function Logic 1	Denotes the function, and logic value of the signal to operate the function (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal.
 Function Logic 2	Denotes the function, and logic value of the signal when the function is operated (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal.
 Connection of Wires	Denotes a connection between wires.
 Solenoid/Clutch	Denotes a Clutch or Solenoid.
 Motor	Denotes a Motor.

Symbol	Description
 Optic Sensor	Denotes a Photo Sensor.
 LED	Denotes an LED.
 Safety Interlock Switch	Denotes a Safety Interlock Switch.
 On Off Switch	Denotes an On-Off Switch (single-pole, single-throw switch).
 Temperature Switch	Denotes an On-Off Switch (Temperature - normally close).
	Denotes an NPN Photo-transistor.
Interconnection	Represents an interconnection between parts using wiring harness or wire.
 Interconnection, Differing	Represents an interconnection which differs according to the specifications.

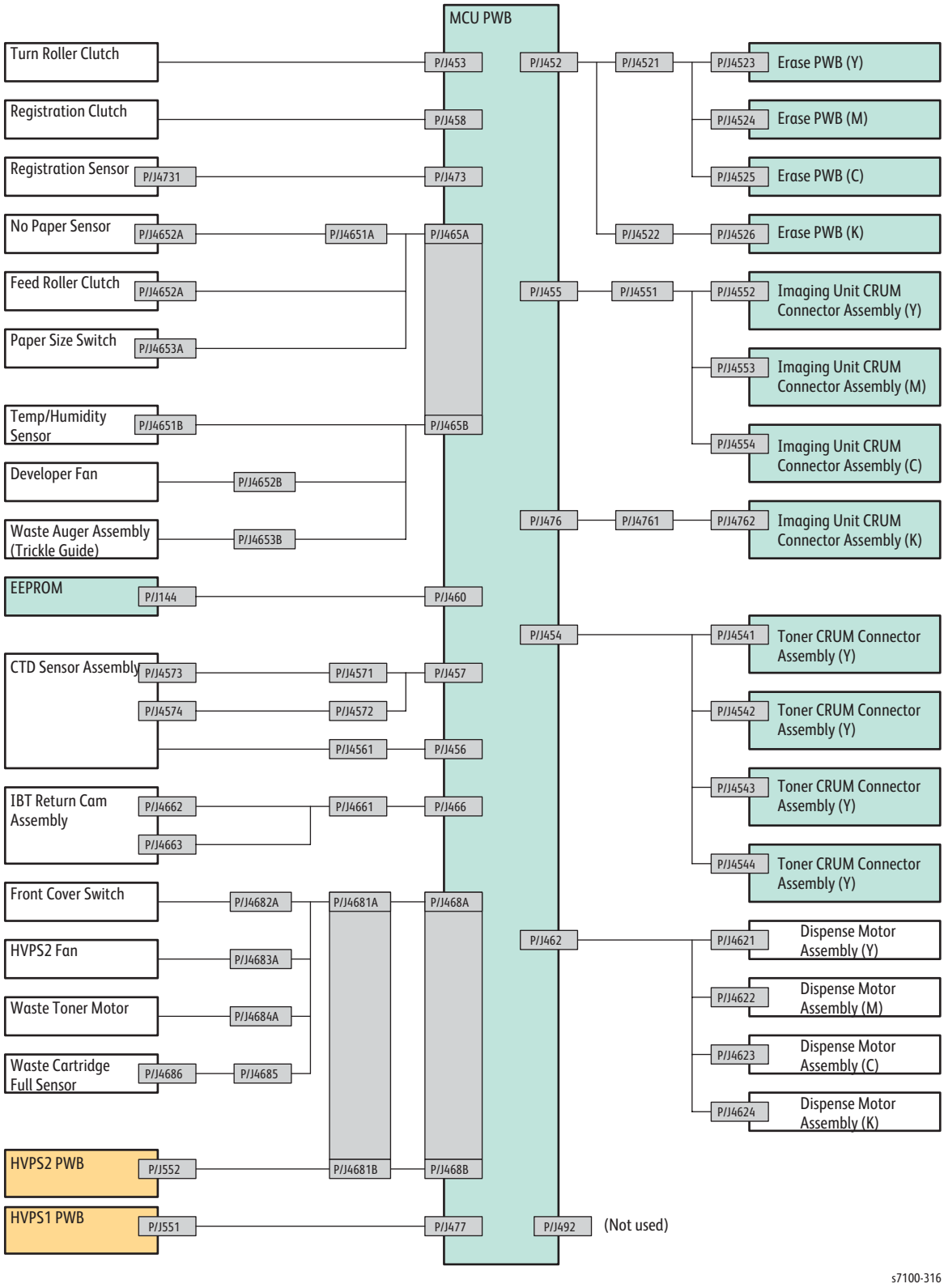
Symbol	Description
 Interconnection, Conductive Part	Represents an interconnection between parts using a conductive part such as a Plate Spring.
I/L +24 VDC	Denotes DC voltage when the Interlock Switch in the MCU Board turns On.
+5 VDC +3.3 VDC	Denotes DC voltage.
SG	Denotes signal ground.
AG	Denotes analog ground.
RTN	Denotes return.

Overview Wiring Diagrams

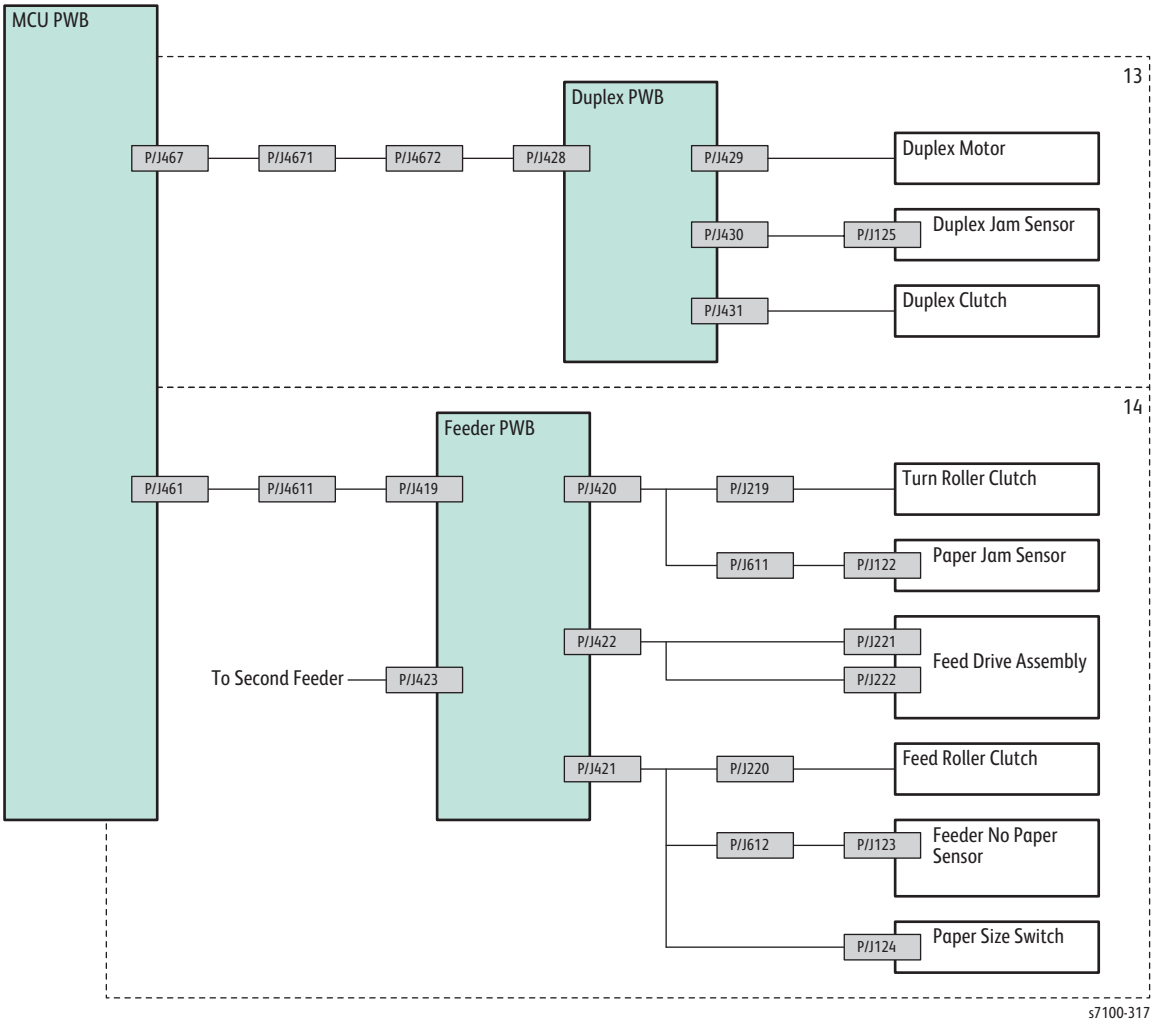
Overview Diagram (1 of 3)



Overview Diagram (2 of 3)



Overview Diagram (3 of 3)



Print Engine Wiring Diagrams

Wiring Diagram Organization

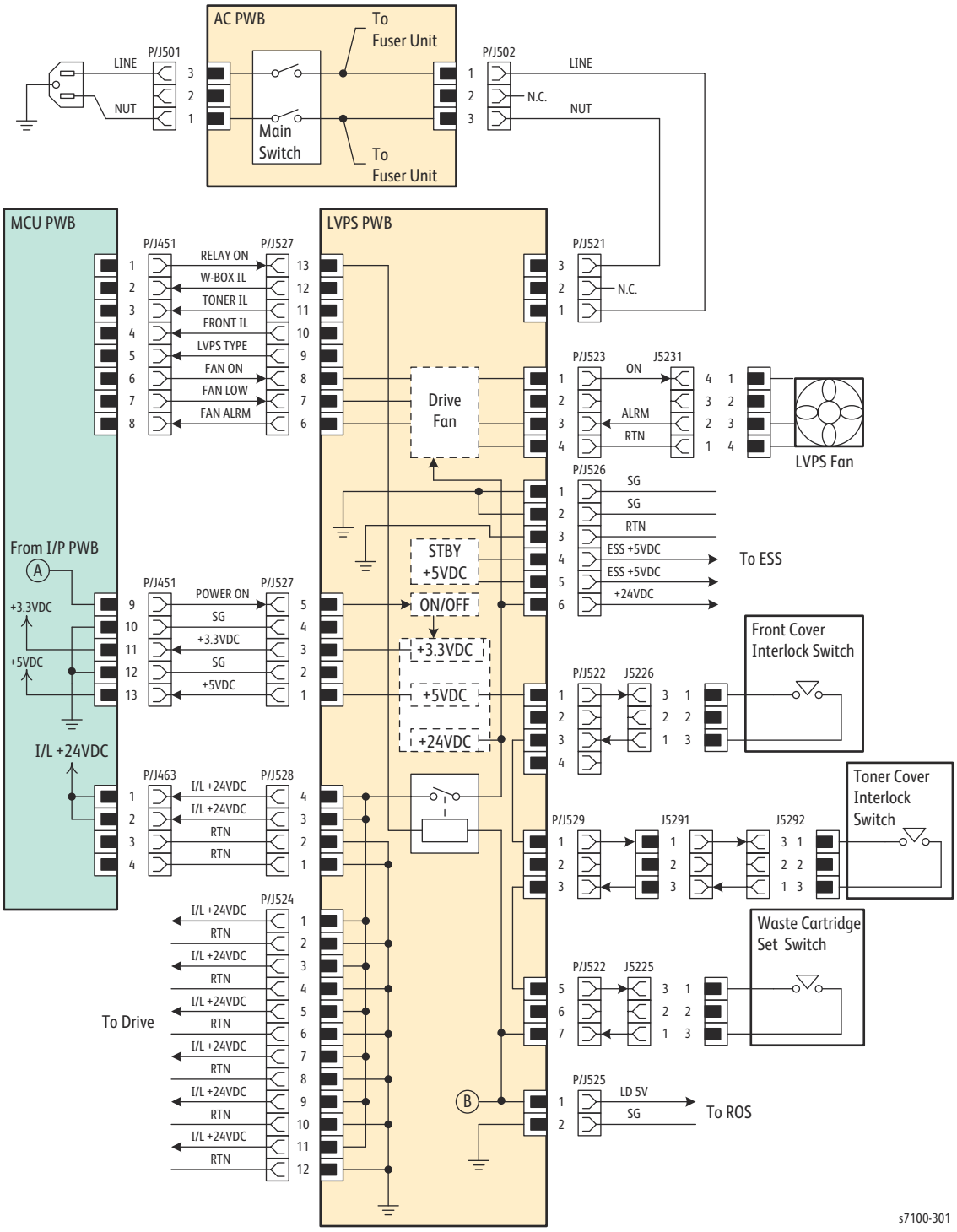
The Connection Charts are divided into 14 sections and shows the connection between the parts in detail.

1	**Power**
	Connection between the LVPS Fan Assembly and the LVPS PWB.
	Check the conductivity between Front Cover Interlock Switch and the LVPS PWB.
	Check the conductivity between Waste Cartridge Set Switch and the LVPS PWB.
	Check the conductivity between Toner Cover Interlock Switch and the LVPS PWB.
	Connection between the AC PWB and the LVPS PWB.
	Connection between the MCU PWB and the LVPS PWB.
2	**Fusing Unit**
	Connection between the Fuser Unit and the MCU PWB.
	Connection between the AC PWB and the MCU PWB.
	Connection between the Fuser Unit and the AC PWB.
3	**Drive 1**
	Connection between the Drum Motor (Y/ M/ C) and the MCU PWB.
	Connection between the Drum Motor (Y/ M/ C) and the LVPS PWB.
	Connection between the Drum Motor (K) and the MCU PWB.
	Connection between the Drum Motor (K) and the LVPS PWB.
	Connection between the Paper Handling Motor and the MCU PWB.
	Connection between the Paper Handling Motor (Y/ M/ C) and the LVPS PWB.
4	**Drive 2/ Bypass Tray**
	Connection between the Deve Motor PWB Assembly and the MCU PWB.
	Connection between the Deve Motor PWB Assembly and the LVPS PWB.
	Connection between the Fuser Unit Motor and the MCU PWB.
	Connection between the Fuser Unit Motor and the LVPS PWB.
	Connection between the Bypass Tray No Paper Sensor and the MCU PWB.
	Connection between the Bypass Tray Feed Solenoid and the MCU PWB.

5	**ROS**
	Connection between the Laser Unit (ROS Assembly) and the MCU PWB.
	Connection between the Laser Unit (ROS Assembly) and the LVPS PWB.
6	**Controller**
	Connection between the Image Processor PWB and the MCU PWB.
	Connection between the Image Processor PWB and the LVPS PWB.
	Connection between the Laser Unit (ROS Assembly) and the Image Processor PWB.
7	**Paper Transport**
	Connection between the Turn Roller Clutch and the MCU PWB.
	Connection between the Registration Clutch and the MCU PWB.
	Connection between the Registration Sensor and the MCU PWB.
	Connection between the No Paper Sensor and the MCU PWB.
	Connection between the Feed Roller Clutch and the MCU PWB.
	Connection between the Paper Size Switch and the MCU PWB.
8	**Electrical**
	Connection between the Temp/ Humidity (Environmental) Sensor and the MCU PWB.
	Connection between the Developer Fan (Process Fan) and the MCU PWB.
	Connection between the Waste Auger (Trickle Guide) Assembly and the MCU PWB.
	Connection between the EEPROM PWB and the MCU PWB.
9	**Transfer**
	Connection between the CTD Sensor Assembly and the MCU PWB.
	Connection between the IBT Retract Cam Assembly and the MCU PWB.
	Connection between the Front Cover Switch and the MCU PWB.
	Connection between the HVPS2 Fan and the MCU PWB.
	Connection between the Waste Toner Motor and the MCU PWB.
	Connection between the Waste Cartridge (Toner Full) Full Sensor and the MCU PWB.
10	**HVPS**
	Connection between the HVPS2 PWB and the MCU PWB.
	Connection between the HVPS1 PWB and the MCU PWB.

11	**Xerographics**
	Connection between the Erase PWB Assembly (Y) and the MCU PWB.
	Connection between the Erase PWB Assembly (M) and the MCU PWB.
	Connection between the Erase PWB Assembly (C) and the MCU PWB.
	Connection between the Erase PWB Assembly (K) and the MCU PWB.
	Connection between the Imaging Unit CRUM Connector Assembly (Y) and the MCU PWB.
	Connection between the Imaging Unit CRUM Connector Assembly (M) and the MCU PWB.
	Connection between the Imaging Unit CRUM Connector Assembly (C) and the MCU PWB.
	Connection between the Imaging Unit CRUM Connector Assembly (K) and the MCU PWB.
12	**Development**
	Connection between the Toner CRUM Connector Assembly (Y) and the MCU PWB.
	Connection between the Toner CRUM Connector Assembly (M) and the MCU PWB.
	Connection between the Toner CRUM Connector Assembly (C) and the MCU PWB.
	Connection between the Toner CRUM Connector Assembly (K) and the MCU PWB.
	Connection between the Dispense Motor Assembly (Y) and the MCU PWB.
	Connection between the Dispense Motor Assembly (M) and the MCU PWB.
	Connection between the Dispense Motor Assembly (C) and the MCU PWB.
	Connection between the Dispense Motor Assembly (K) and the MCU PWB.
13	**Option Duplex**
	Connection between the MCU PWB and the Duplex PWB.
	Connection between the Duplex Motor and the Duplex PWB.
	Connection between the Duplex Jam Sensor and the Duplex PWB.
	Connection between the Duplex Clutch and the Duplex PWB.
14	**Option 550-Sheet Feeder**
	Connection between the MCU PWB and the Feeder PWB.
	Connection between the Turn Roller Clutch and the Feeder PWB.
	Connection between the Paper Jam Sensor and the Feeder PWB.
	Connection between the Option Drive Assembly and the Feeder PWB.
	Connection between the Feed Roller Clutch and the Feeder PWB.
	Connection between the Feeder No Paper Sensor and the Feeder PWB.
	Connection between the Paper Size Switch and the Feeder PWB.

Power


AC PWB
To Fuser Unit
Main Switch
To Fuser Unit
LINE
NUT
P/J501
P/J502
N.C.
MCU PWB
LVPS PWB
P/J451
P/J527
RELAY ON
W-BOX IL
TONER IL
FRONT IL
LVPS TYPE
FAN ON
FAN LOW
FAN ALRM
P/J521
Drive Fan
P/J523
J5231
ON
ALRM
RTN
LVPS Fan
P/J526
SG
SG
RTN
ESS +5VDC
ESS +5VDC
+24VDC
To ESS
From I/P PWB
STBY +5VDC
ON/OFF
+3.3VDC
+5VDC
+24VDC
POWER ON
SG
+3.3VDC
SG
+5VDC
+3.3VDC
+5VDC
I/L +24VDC
P/J463
P/J528
I/L +24VDC
I/L +24VDC
RTN
RTN
P/J522
J5226
Front Cover Interlock Switch
P/J529
J5291
J5292
Toner Cover Interlock Switch
P/J524
To Drive
Waste Cartridge Set Switch
P/J522
J5225
P/J525
LD 5V
SG
To ROS
s7100-301

Power Signal Lines

Signal Line Name	Description
Relay On	The On/ Off Control signal of the Interlock Relay in the LVPS
W-Box IL	The Open Detection signal of the Waste Cartridge Set Switch
Toner IL	The Open Detection signal of the Toner Cover Interlock Switch
Front IL	The Open Detection signal of the Front Cover Interlock Switch
LVPS Type	The Identification signal of the 100V/ 200 V LVPS system
Fan On	The On/ Off Control signal of the LVPS Fan (MCU PWB > LVPS PWB)
Fan Low	The rotation speed Switching signal of the LVPS Fan (MCU PWB > LVPS PWB)
Fan Alarm	The Alarm signal from the LVPS Fan (LVPS PWB > MCU PWB)
Power On	The On/ Off Control signal of the voltage output (+3.3VDC, +5VDC, +24VDC) from the LVPS
On	The On/ Off Control signal of the LVPS Fan
Alarm	The Alarm signal from the LVPS Fan

Overcurrent Protection

The various output from the LVPS each comes with an overcurrent protection. The status for each output when a sort circuit has occurred between it and the Ground is shown in the following table.

Note: **X**: Output is stopped, **-**: Output is normal or stopped

Shorted Output	Output Status					Conditions
	3.3V Main	5V Standby	5V Main	24V	24V Interlock	
3.3V Main	X	-	-	-	-	4A or lower (Fuse)
5V Standby	X	X	X	X	X	8 to 12A
5V Main	X	-	-	-	-	4A or lower (Fuse)
24V	-	-	-	X	X	-
24V Interlock	-	-	-	-	X	17 to 21A

Note: For the 3.3 Main, its output will return to normal after the short circuit is fixed. For the 5V Standby, 24V, and 24V Interlock, the outputs can be restored by turning the power Off and waiting for the specified time before turning it On again.

Overvoltage Protection

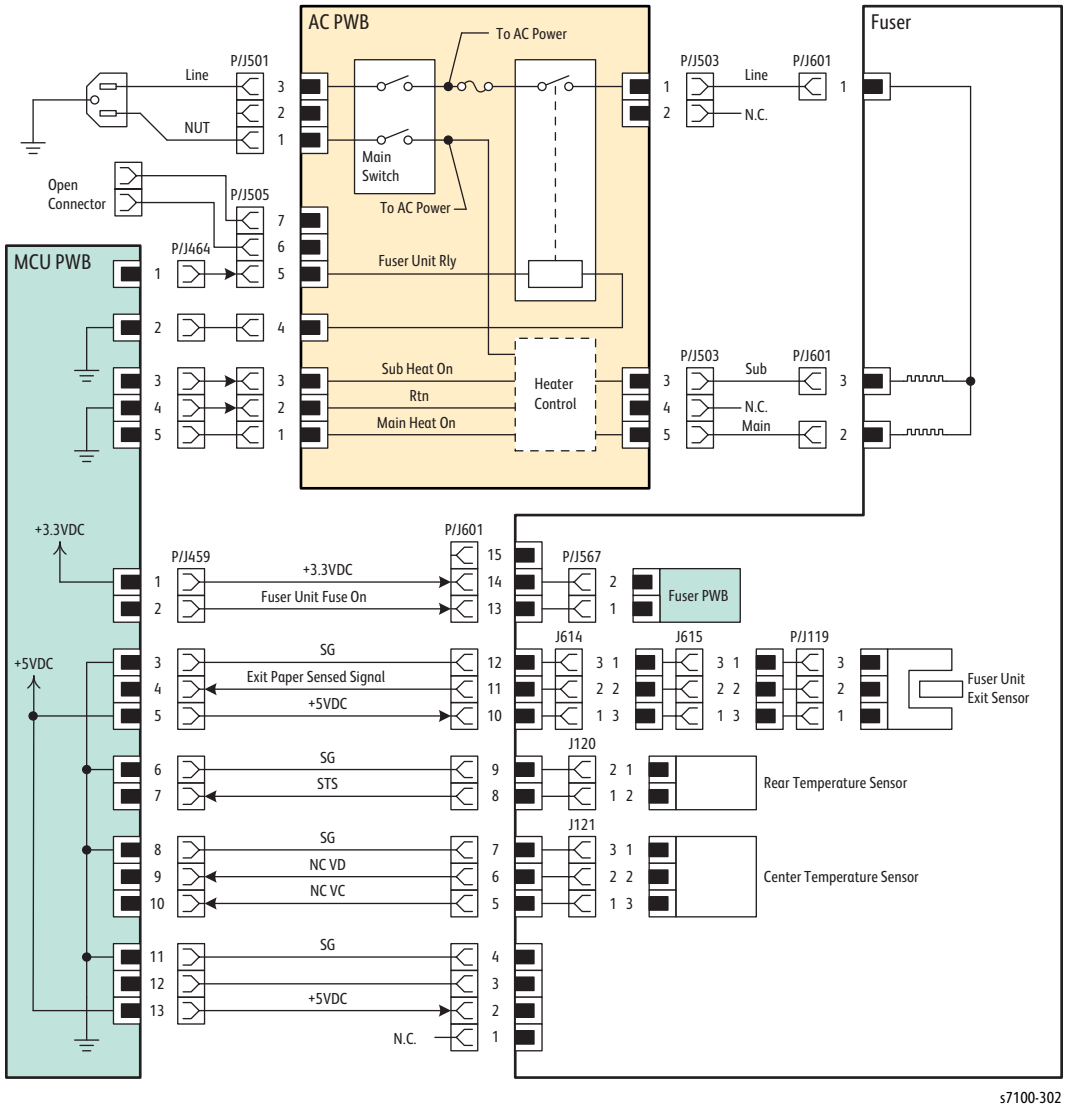
The various output from the LVPS each comes with an overvoltage protection. The status for the various output during an overvoltage is shown in the following table.

Note: **X**: Output is stopped, **-**: Output is normal or stopped

Shorted Output	Output Status					Conditions
	3.3V Main	5V Standby	5V Main	24V	24V Interlock	
3.3V Main	X	X	X	X	X	4.5V or lower
5V Standby	X	X	X	X	X	8V or lower
5V Main	X	X	X	X	X	8V or lower
24V	-	-	-	X	X	32V or lower
24V Interlock	-	-	-	X	X	32V or lower

Note: The outputs can be restored by turning the power Off and waiting for the specified time before turning it On again.

Fuser Unit



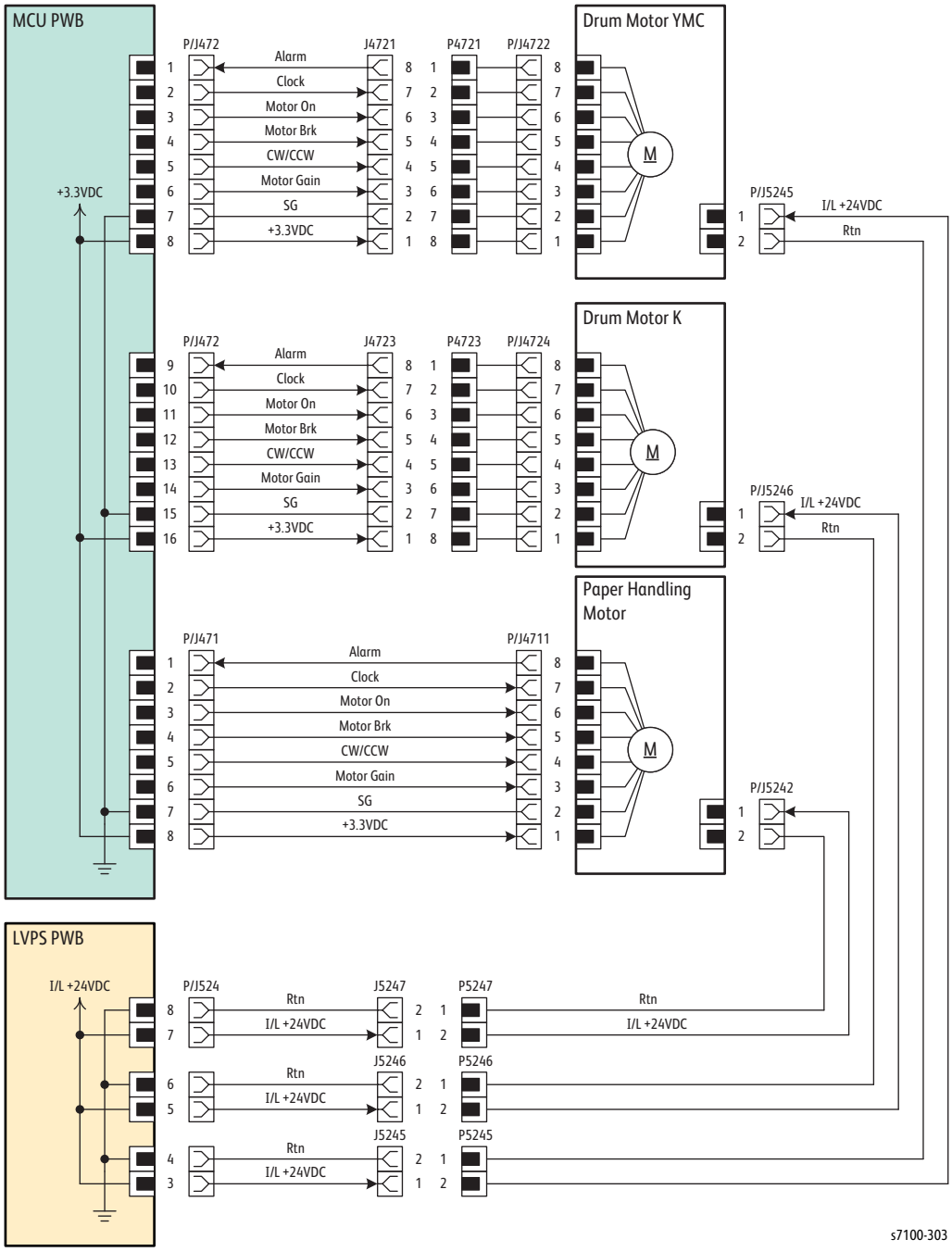
Fuser Unit Signal Lines

Signal Line Name	Description
Fuser Unit Relay	The On/ Off Control signal of the Fuser Unit Relay in the AC PWB (MCU PWB -> AC PWB)
Sub Heat On	The Sub Heater Lamp On signal (LVPS PWB -> MCU PWB)
Main Heat On	The Main Heater Lamp On signal (LVPS PWB -> MCU PWB)
Sub	The Sub Heater Lamp On signal
Main	The Main Heater Lamp On signal
Fuser Unit Fuser On	The Fuser Unit Fuse On signal

Fuser Unit Signal Lines (Continued)

Signal Line Name	Description
Exit Paper Sensed Signal	The signal for detecting the paper output at the Fuser Unit by the Fuser Unit Exit Sensor (Paper detected: L)
STS	Heat Roller surface temperature data measured by the Rear Temp Sensor that is used for the detection of high temperatures (analog value)
NC VD	Heat Roller surface temperature data measured by the Center Temp Sensor that is used for the temperature control (analog value)
NC VC	

Drive 1



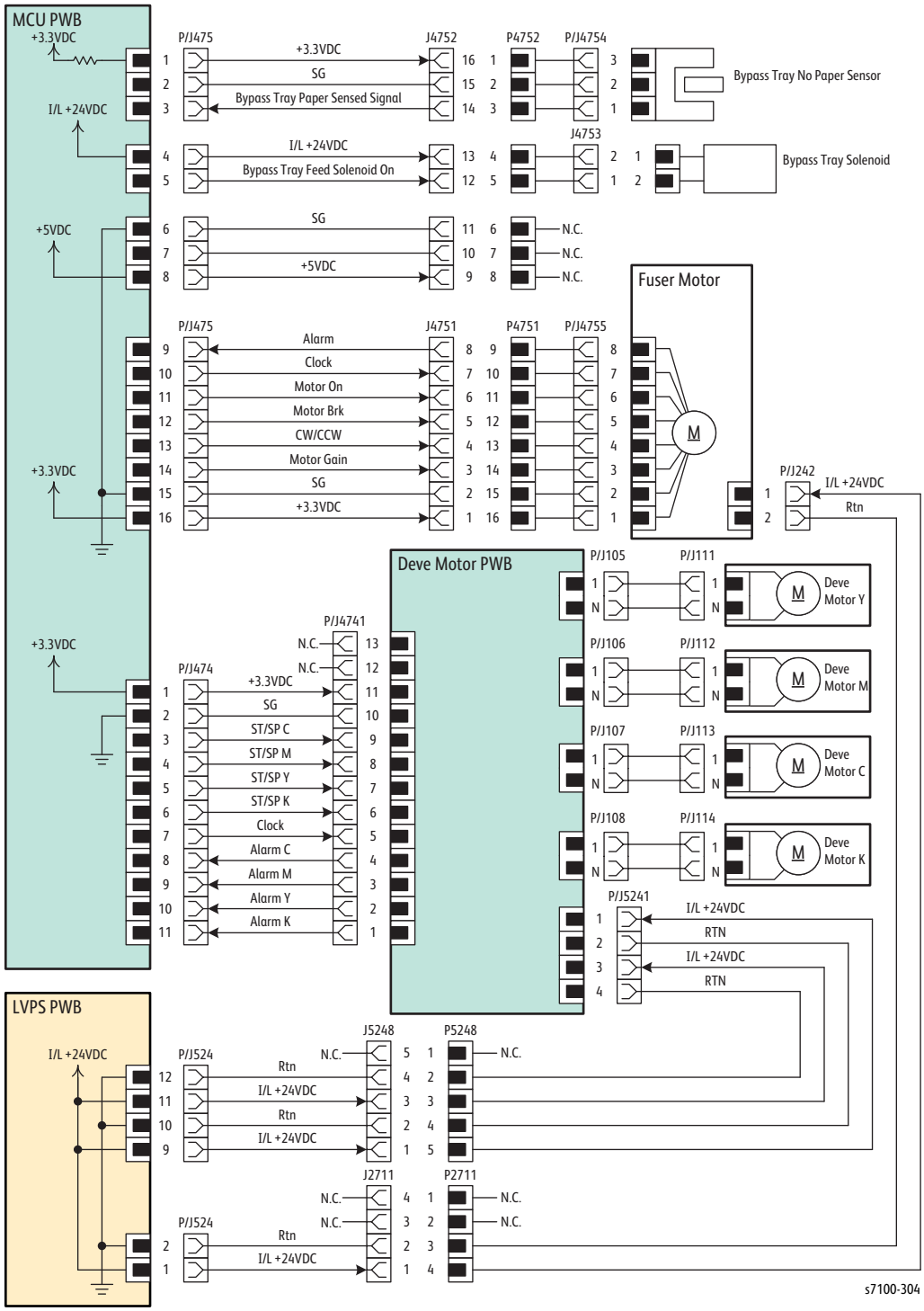
Drive 1 Signal Lines

Signal Line Name	Description
Alarm (Drum Motor YMC)	The Alarm signal from the Drum Motor (Y/ M/ C)
Clock (Drum Motor YMC)	The Clock signal of the Drum Motor (Y/ M/ C)

Drive 1 Signal Lines (Continued)

Signal Line Name	Description
Motor On (Drum Motor YMC)	The On/ Off Control signal of the Drum Motor (Y/ M/ C)
Motor BRK (Drum Motor YMC)	The Control signal of the Drum Motor (Y/ M/ C)
CW/ CCW (Drum Motor YMC)	The Forward rotation/ Reverse rotation Control signal of the Drum Motor (Y/ M/ C)
Motor Gain (Drum Motor YMC)	The Control signal of the Drum Motor (Y/ M/ C)
Alarm (Drum Motor K)	The Alarm signal from the Drum Motor (K)
Clock (Drum Motor K)	The Clock signal of the Drum Motor (K)
Motor On (Drum Motor K)	The On/ Off Control signal of the Drum Motor (K)
Motor BRK (Drum Motor K)	The Control signal of the Drum Motor (K)
CW/ CCW (Drum Motor K)	The Forward rotation/ Reverse rotation Control signal of the Drum Motor (K)
Motor Gain (Drum Motor K)	The Control signal of the Drum Motor (K)
Alarm (Paper Handling Motor)	The Alarm signal from the Paper Handling Motor
Clock (Paper Handling Motor)	The Clock signal of the Paper Handling Motor
Motor On (Paper Handling Motor)	The On/ Off Control signal of the Paper Handling Motor
Motor BRK (Paper Handling Motor)	The Control signal of the Paper Handling Motor
CW/ CCW (Paper Handling Motor)	The Forward rotation/ Reverse rotation Control signal of the Paper Handling Motor
Motor Gain (Paper Handling Motor)	The Control signal of the Paper Handling Motor

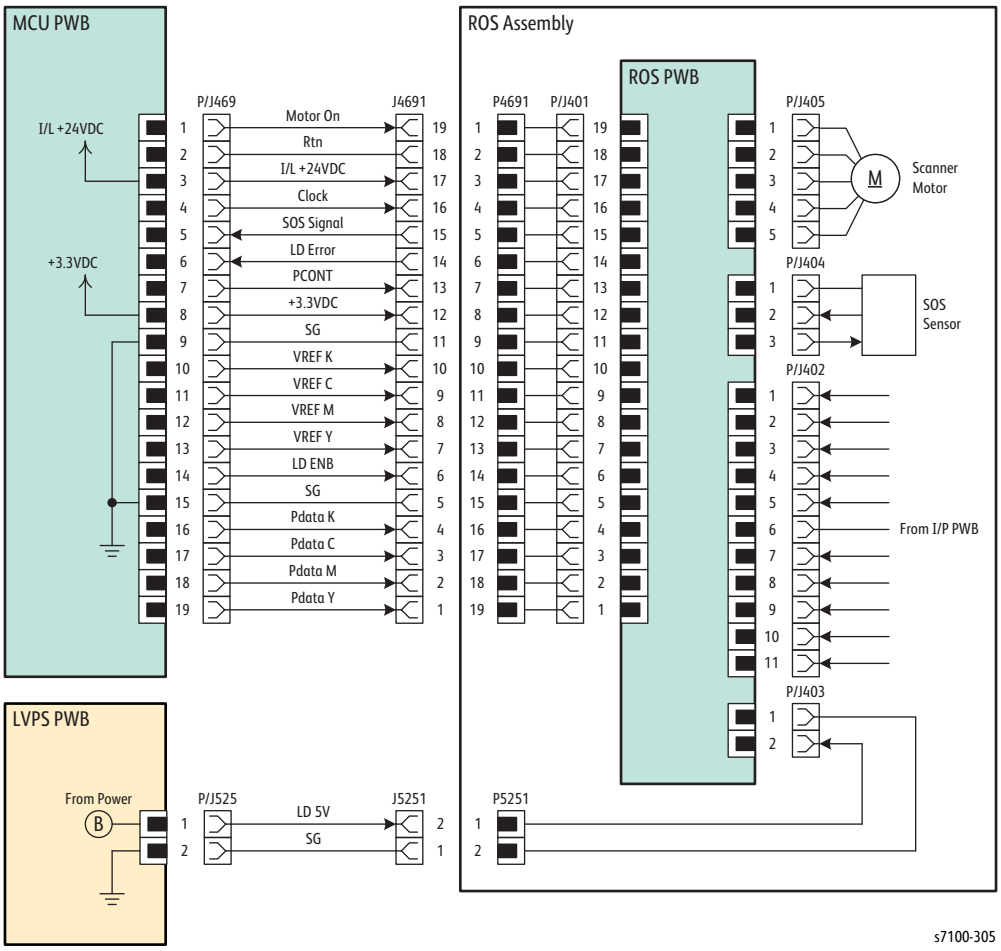
Drive 2/ Bypass Tray



Drive 2/ Bypass Tray Signal Lines

Signal Line Name	Description
Bypass Tray Paper Sensed Signal	The signal for detecting paper in the Bypass Tray by the Bypass Tray No Paper Sensor (Paper detected: L)
Bypass Tray Feed Solenoid On	The On/ Off Control signal of the Bypass Tray Feed Solenoid
Alarm (Fuser Motor)	The Alarm signal from the Fuser Motor
Clock (Fuser Motor)	The Clock signal of the Fuser Motor
Motor On (Fuser Motor)	The On/ Off Control signal of the Fuser Motor
Motor BRK (Fuser Motor)	The Control signal of the Fuser Motor
CW/ CCW (Fuser Motor)	The Forward rotation/ Reverse rotation Control signal of the Fuser Motor
Motor Gain (Fuser Motor)	The Control signal of the Fuser Motor
ST/ SP C (Deve Motor)	The On/ Off Control signal of the Developer Motor (C)
ST/ SP M (Deve Motor)	The On/ Off Control signal of the Developer Motor (M)
ST/ SP Y (Deve Motor)	The On/ Off Control signal of the Developer Motor (Y)
ST/ SP K (Deve Motor)	The On/ Off Control signal of the Developer Motor (K)
Clock (Deve Motor)	The Clock signal of the Developer Motor (Y/ M/ C/ K)
Alarm C (Deve Motor)	The Alarm signal from the Developer Motor (C)
Alarm M (Deve Motor)	The Alarm signal from the Developer Motor (M)
Alarm Y (Deve Motor)	The Alarm signal from the Developer Motor (Y)
Alarm K (Deve Motor)	The Alarm signal from the Developer Motor (K)

Laser Unit (ROS)



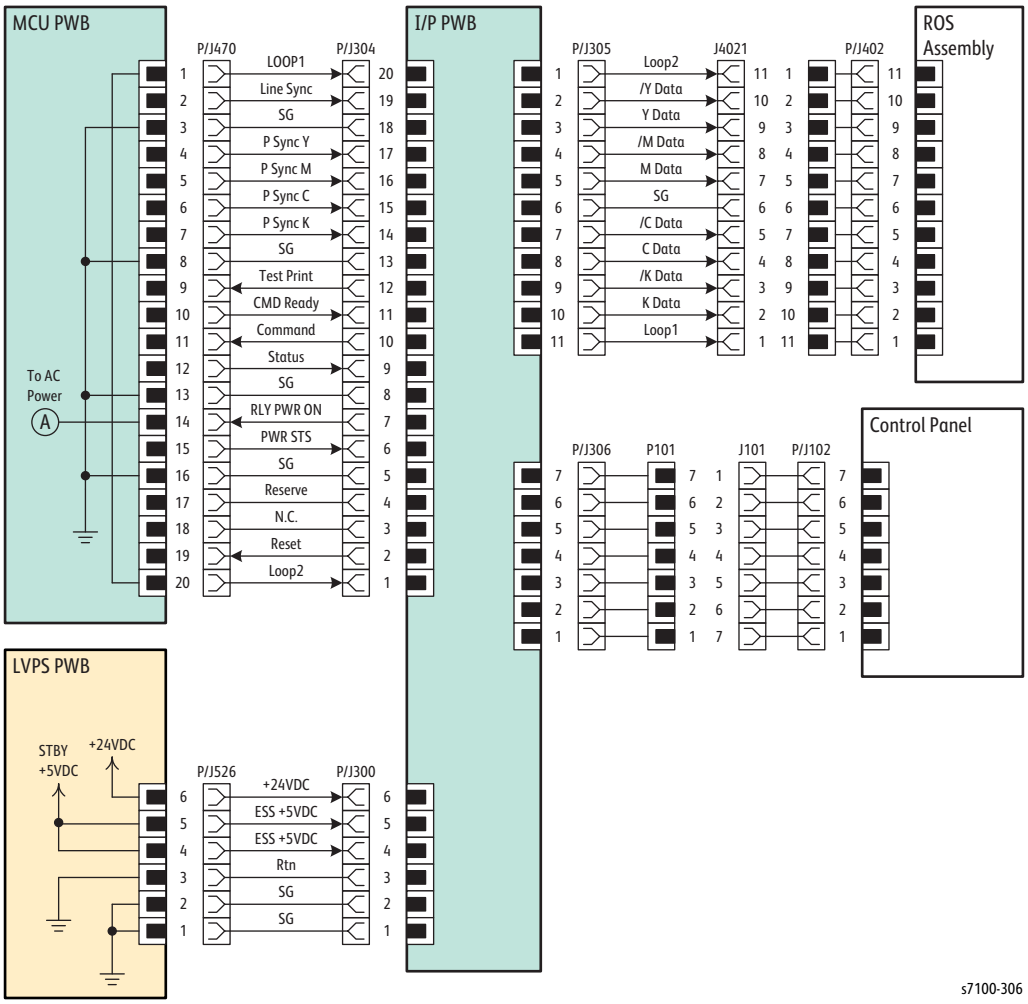
ROS Signal Lines

Signal Line Name	Description
Motor On	The On/ Off Control signal of the Scanner Motor in the Laser Unit (ROS Assembly)
Clock	The Clock signal of the Scanner Motor in the Laser Unit (ROS Assembly)
SOS Signal	The Laser Beam Scan Start Reference signal detected by the SOS Sensor in the Laser Unit (ROS Assembly)
LD Error	The Error signal from the LD (Laser Diode) in the Laser Unit (ROS Assembly)
PCONT	The Control signal of the LD in the Laser Unit (ROS Assembly)

ROS Signal Lines (Continued)

Signal Line Name	Description
VREF K	The Power Setting value of the Laser Diode in the Laser Unit (ROS Assembly)
VREF C	
VREF M	
VREF Y	
LD ENB	The Control signal of the Laser Diode in the Laser Unit (ROS Assembly)
PDATA K	Image Data signal
PDATA C	
PDATA M	
PDATA Y	

Controller



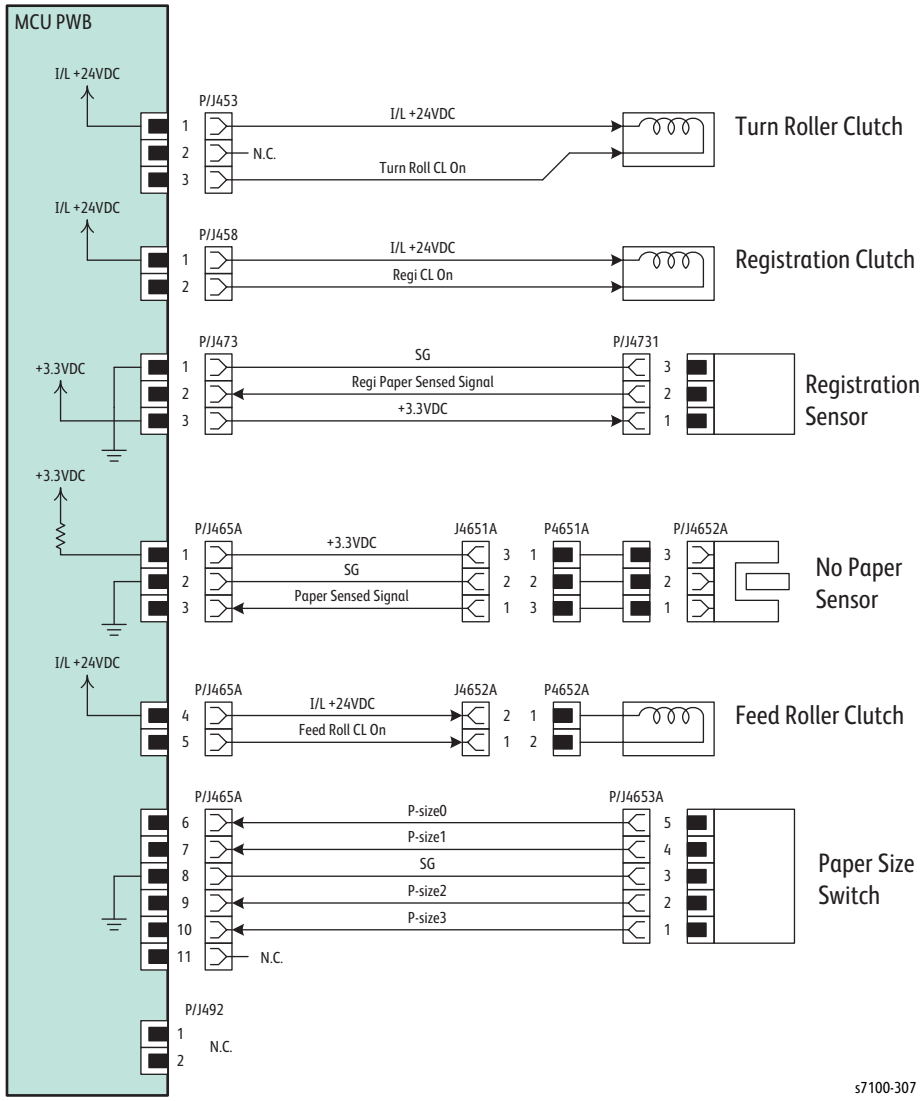
Controller Signal Lines

Signal Line Name	Description
Loop 1	Controller Control signal
Line Sync	
P Sync Y	
P Sync M	
P Sync C	
P Sync K	
Test Print	Print Execution signal
CMD Ready	Controller Control signal

Controller Signal Lines (Continued)

Signal Line Name	Description
Command	The Communication signal between the MCU PWB and the Image Processor PWB
RLY PWR ON	Controller Control signal
PWR STS	
Reset	
Loop 2	

Paper Transport



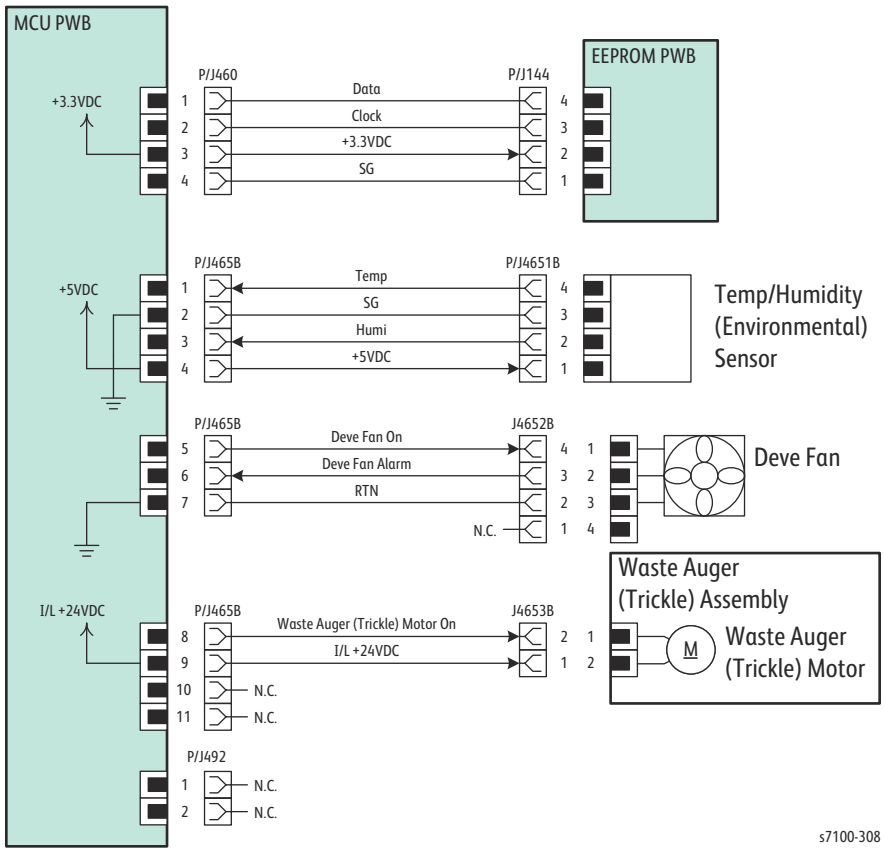
Paper Transport Signal Lines

Signal Line Name	Description
Turn Roll CL On	The On/ Off Control signal of the Turn Roller Clutch
Regi CL On	The On/ Off Control signal of the Registration Clutch
Regi Paper Sensed Signal	The signal for detecting paper at the Registration section by the Registration Sensor
Paper Sensed Signal	The signal for detecting paper in the Tray by the No Paper Sensor
Feed Roll CL On	The On/ Off Control signal of the Feed Roller Clutch

Paper Transport Signal Lines (Continued)

Signal Line Name	Description
P-Size 0	The On/ Off Detection signal of SW 0 for the Paper Size Switch (*1)
P-Size 1	The On/ Off Detection signal of SW 1 for the Paper Size Switch
P-Size 2	The On/ Off Detection signal of SW 2 for the Paper Size Switch
P-Size 3	The On/ Off Detection signal of SW 3 for the Paper Size Switch
*1 The Paper Size Switch is numbered from top to down as SW 0, SW 1, SW 2, and SW 3.	

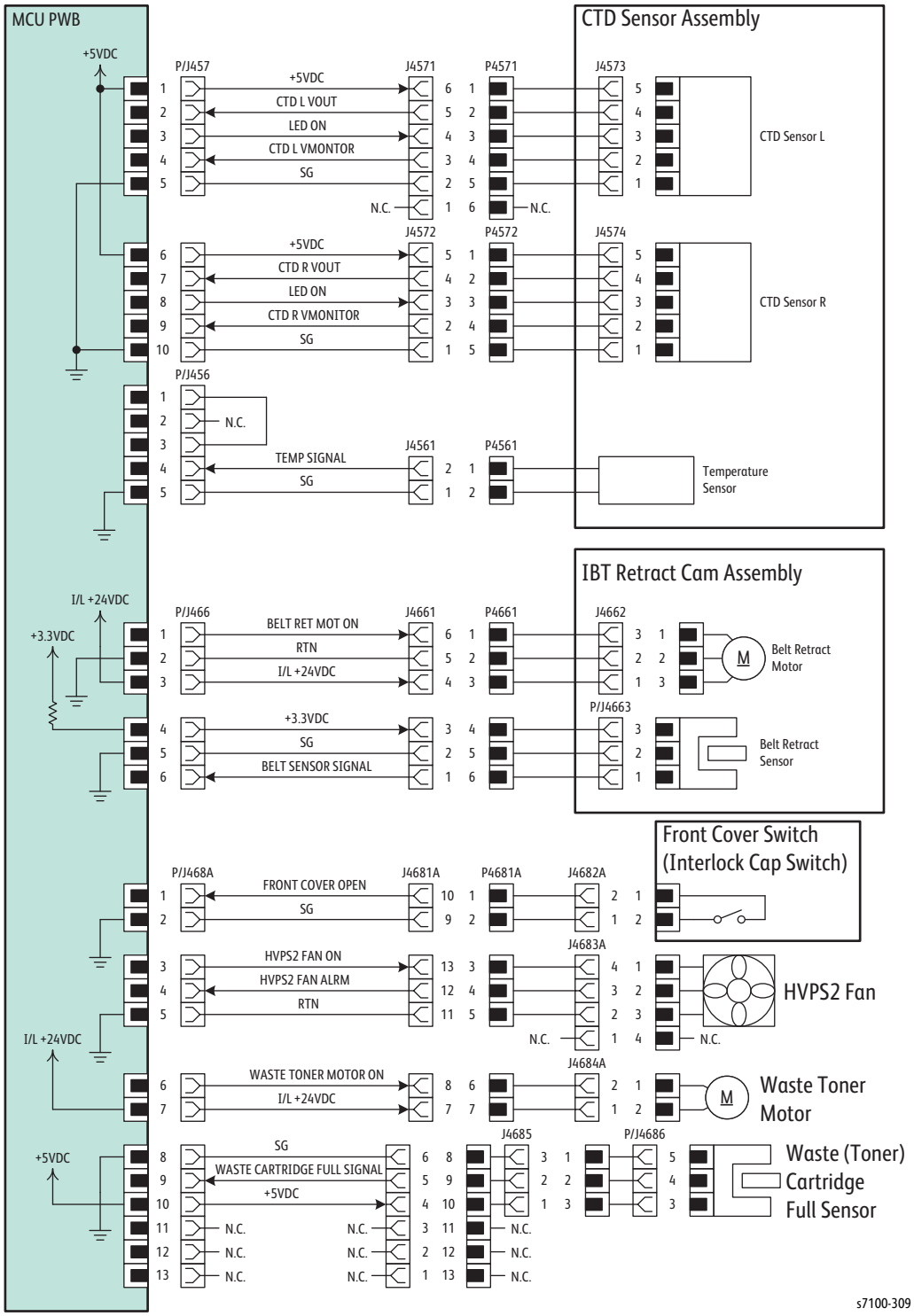
Electrical



Electrical Signal Lines

Signal Line Name	Description
Data (EEPROM PWB)	The Data Read/ Write Control signal to the EEPROM PWB
Clock (EEPROM PWB)	
Temp	The temperature data in the printer that is measured by the Temp/ Humidity (Environmental) Sensor (analog value)
Humi	The humidity data in the printer that is measured by the Temp/ Humidity (Environmental) Sensor (analog value)
Deve Fan On	The On/ Off Control Signal of the Developer Fan (Developer Fan)
Deve Fan Alarm	The Alarm signal from the Developer Fan
Waste Auger (Trickle) Motor On	The On/ Off Control signal of the Waste Auger (Trickle) Motor

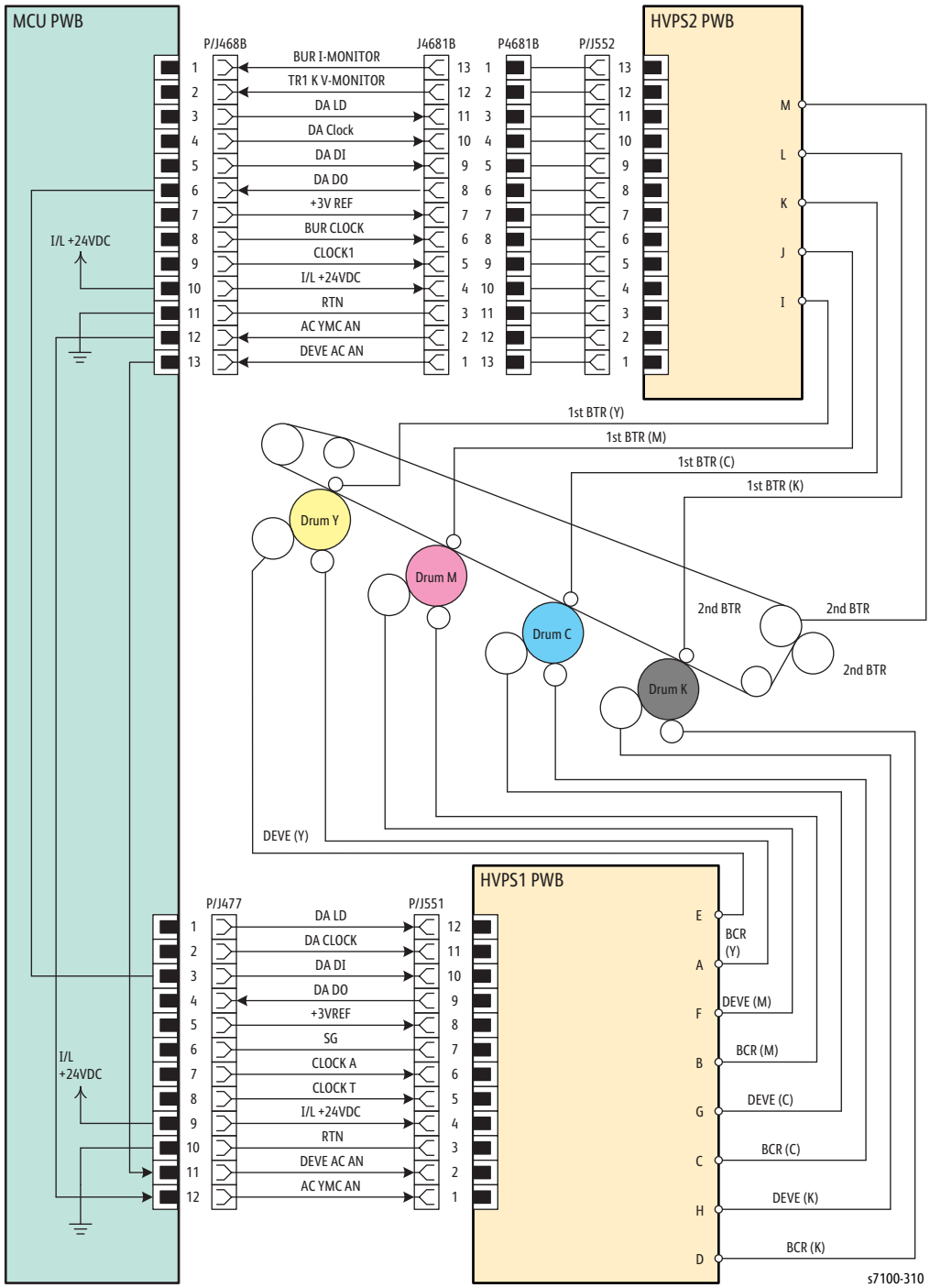
Transfer


MCU PWB
+5VDC
P/J457
+5VDC
CTD L VOUT
LED ON
CTD L VMONTOR
SG
N.C.
J4571
P4571
J4573
CTD Sensor Assembly
CTD Sensor L
J4572
P4572
J4574
+5VDC
CTD R VOUT
LED ON
CTD R VMONITOR
SG
CTD Sensor R
P/J456
N.C.
TEMP SIGNAL
SG
J4561
P4561
Temperature Sensor
I/L +24VDC
+3.3VDC
P/J466
BELT RET MOT ON
RTN
I/L +24VDC
J4661
P4661
J4662
IBT Retract Cam Assembly
M
Belt Retract Motor
+3.3VDC
SG
BELT SENSOR SIGNAL
P/J4663
Belt Retract Sensor
Front Cover Switch (Interlock Cap Switch)
P/J468A
FRONT COVER OPEN
SG
J4681A
P4681A
J4682A
HVPS2 FAN ON
HVPS2 FAN ALRM
RTN
J4683A
HVPS2 Fan
I/L +24VDC
WASTE TONER MOTOR ON
I/L +24VDC
J4684A
Waste Toner Motor
+5VDC
SG
WASTE CARTRIDGE FULL SIGNAL
+5VDC
J4685
P/J4686
Waste (Toner) Cartridge Full Sensor
s7100-309

Transfer Signal Lines

Signal Line Name	Description
CTD L VOut	The toner density measured value by the Left CTD Sensor
LED On (CTD Sensor L)	The LED On signal of the Left CTD Sensor
CTD L VMonitor	The power monitor voltage value of the Left CTD Sensor
CTD R VOut	The toner density measured value by the Right CTD Sensor
LED ON (CTD Sensor R)	The LED On signal of the Right CTD Sensor
CTD R VMonitor	The power monitor voltage value of the Right CTD Sensor
Temp Signal	The temperature data in the printer that is measured by the Temperature Sensor (analog value)
Belt RET MOT On	The On/ Off Control signal of the Belt Retract Motor
Belt Sensor Signal	The 1st BTR Belt Contact/ Retract Detection signal by the Belt Retract Sensor
Front Cover Open	The Front Cover Open/ Close detection by the Front Cover Switch (Cover open: H)
HVPS2 Fan On	The On/ Off Control signal of the HVPS2 Fan
HVPS2 Fan ALRM	The Alarm signal from the HVPS2 Fan
Waste Toner Motor On	The On/ Off Control signal of the Waste Toner Motor
Waste Cartridge Full Signal	The signal for detecting the Waste Toner Full in the Waste Cartridge by the Waste Cartridge (Toner) Full Sensor

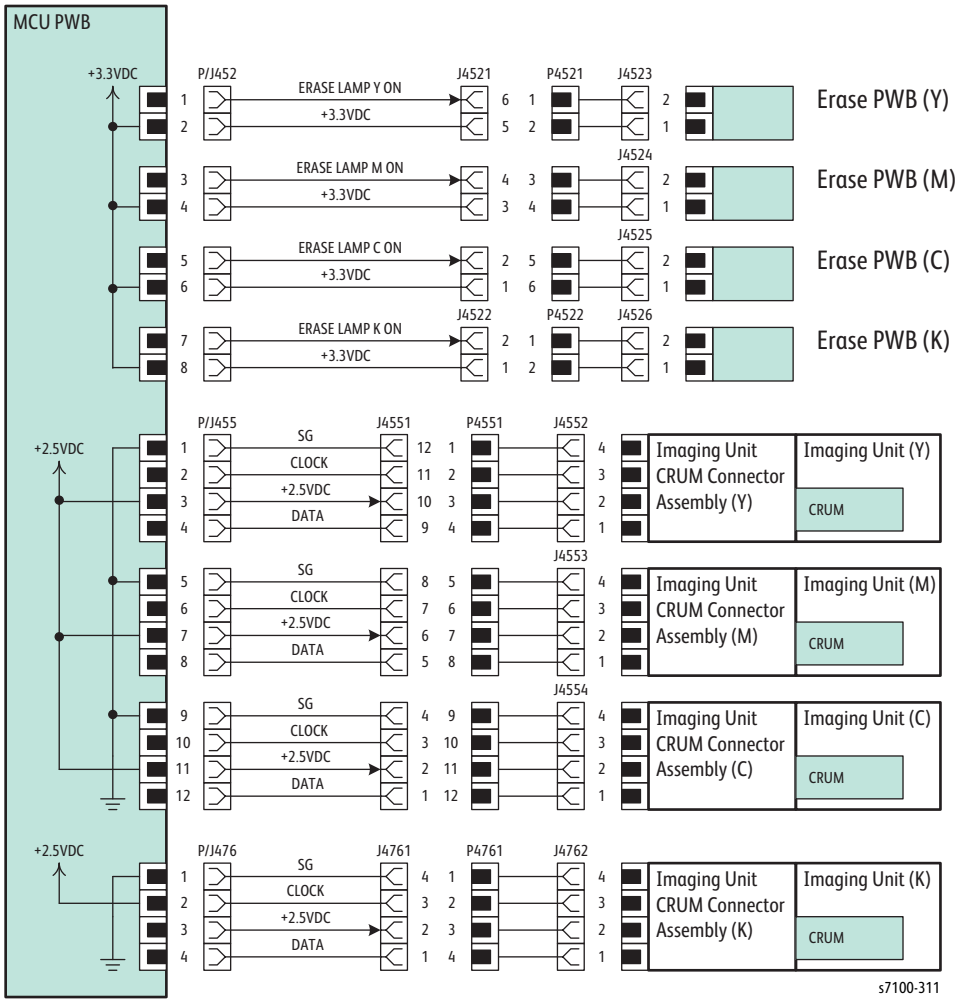
HVPS


MCU PWB
HVPS2 PWB
P/J468B
J4681B
P4681B
P/J552
BUR I-MONITOR
TR1 K V-MONITOR
DA LD
DA Clock
DA DI
DA DO
+3V REF
BUR CLOCK
CLOCK1
I/L +24VDC
RTN
AC YMC AN
DEVE AC AN
M
L
K
J
I
I/L +24VDC
1st BTR (Y)
1st BTR (M)
1st BTR (C)
1st BTR (K)
Drum Y
Drum M
Drum C
Drum K
2nd BTR
2nd BTR
2nd BTR
DEVE (Y)
HVPS1 PWB
P/J477
P/J551
DA LD
DA CLOCK
DA DI
DA DO
+3VREF
SG
CLOCK A
CLOCK T
I/L +24VDC
RTN
DEVE AC AN
AC YMC AN
I/L +24VDC
E
A
F
B
G
C
H
D
BCR (Y)
DEVE (M)
BCR (M)
DEVE (C)
BCR (C)
DEVE (K)
BCR (K)
s7100-310

HVPS Signal Lines

Signal Line Name	Description
BUR I-Monitor (HVPS2 PWB)	The current Monitor signal of the 2nd BUR (Back Up Roller)
TR1 K V-Monitor (HVPS2 PWB)	The Voltage Monitor signal of the 1st BTR (K)
DA LD (HVPS2 PWB)	The Output Voltage Level Control signal of the 1st BTR (Y/ M/ C/ K) / 2nd BUR (Back Up Roller)
DA Clock (HVPS2 PWB)	
DA DI (HVPS2 PWB)	
DA DO (HVPS2 PWB)	
BUR Clock (HVPS2 PWB)	The Clock signal of the 2nd BUR (Back Up Roller)
Clock 1 (HVPS2 PWB)	The Clock signal of the 1st BTR (Y/ M/ C/ K)
DA LD (HVPS1 PWB)	The Output Voltage Level Control signal of the Developer Bias (Y/ M/ C/ K) / BCR (Y/ M/ C/ K)
DA Clock (HVPS1 PWB)	
DA DI (HVPS1 PWB)	
DA DO (HVPS1 PWB)	
Clock A (HVPS1 PWB)	The Clock signal of the Developer Bias (Y/ M/ C/ K) AC component
Clock T (HVPS1 PWB)	The Clock signal of the Developer Bias (Y/ M/ C/ K) DC component/ BCR (Y/ M/ C/ K)
Deve AC AN	The On/ Off Control signal of the Developer Bias (K)
AC YMC AN	The On/ Off Control signal of the Developer Bias (Y/ M/ C)

Xerographics



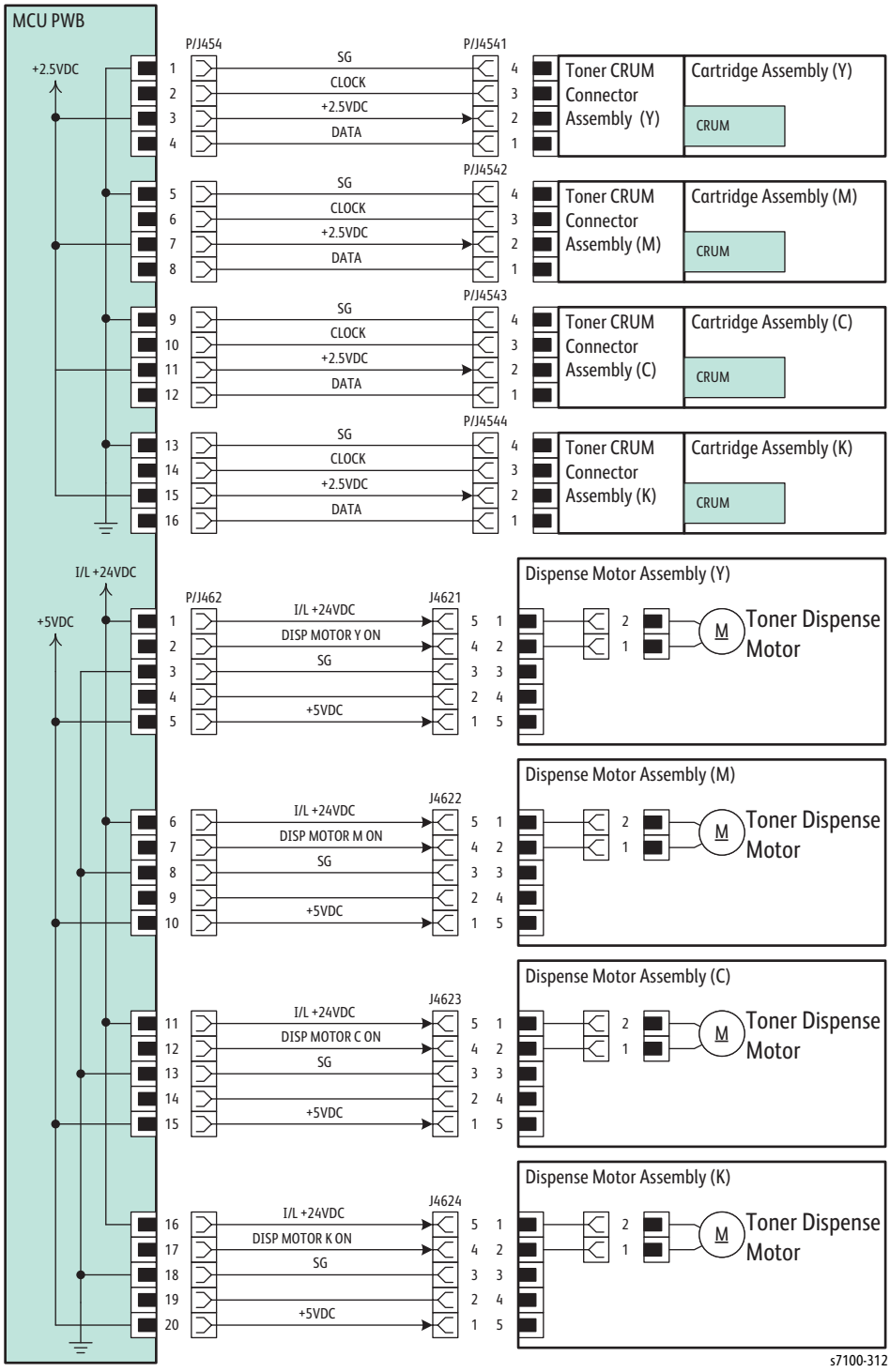
Xerographics Signal Lines

Signal Line Name	Description
Erase Lamp Y On	The On/ Off Control signal of the Erase Lamp (Y) in the Erase PWB Assembly (Y)
Erase Lamp M On	The On/ Off Control signal of the Erase Lamp (M) in the Erase PWB Assembly (M)
Erase Lamp C On	The On/ Off Control signal of the Erase Lamp (C) in the Erase PWB Assembly (C)
Erase Lamp K On	The On/ Off Control signal of the Erase Lamp (K) in the Erase PWB Assembly (K)

Xerographics Signal Lines (Continued)

Signal Line Name	Description
Clock (XERO Assy (Y))	The Data Read/ Write Control signal to the CRUM in the Imaging Unit (Y)
Data (XERO Assy (Y))	
Clock (XERO Assy (M))	The Data Read/ Write Control signal to the CRUM in the Imaging Unit (M)
Data (XERO Assy (M))	
Clock (XERO Assy (C))	The Data Read/ Write Control signal to the CRUM in the Imaging Unit (C)
Data (XERO Assy (C))	
Clock (XERO Assy (K))	The Data Read/ Write Control signal to the CRUM in the Imaging Unit (K)
Data (XERO Assy (K))	

Development

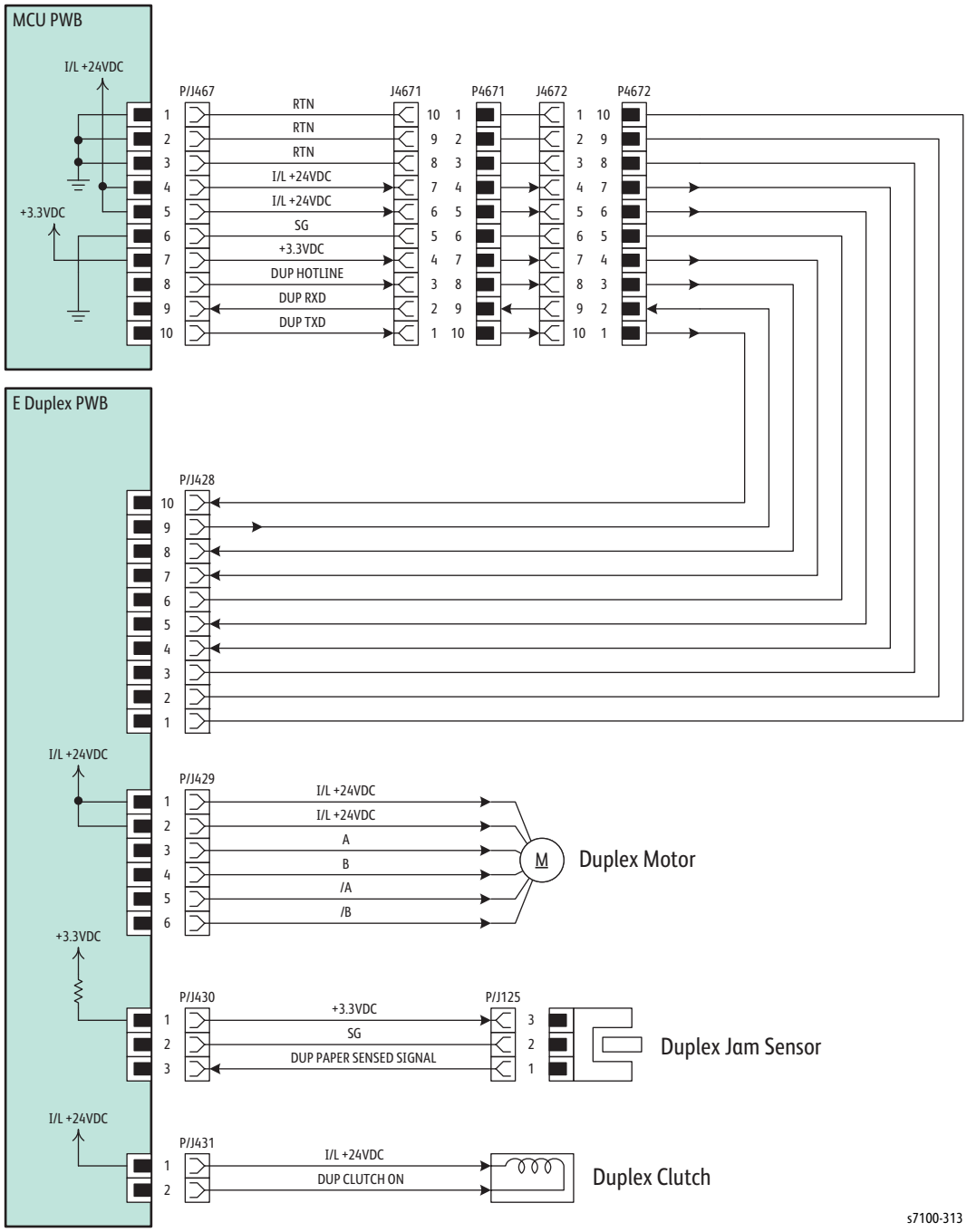


Development Signal Lines

Signal Line Name	Description
Clock (Cartridge Assy (Y))	The Data Read/ Write Control signal to the CRUM in the Cartridge Assembly (Y)
Data (Cartridge Assy (Y))	
Clock (Cartridge Assy (M))	The Data Read/ Write Control signal to the CRUM in the Cartridge Assembly (M)
Data (Cartridge Assy (M))	
Clock (Cartridge Assy (C))	The Data Read/ Write Control signal to the CRUM in the Cartridge Assembly (C)
Data (Cartridge Assy (C))	
Clock (Cartridge Assy (K))	The Data Read/ Write Control signal to the CRUM in the Cartridge Assembly (K)
Data (Cartridge Assy (K))	
Disp Motor Y On	The On/ Off Control signal of the Toner Dispense Motor (Y)
Disp Motor M On	The On/ Off Control signal of the Toner Dispense Motor (M)
Disp Motor C On	The On/ Off Control signal of the Toner Dispense Motor (C)
Disp Motor K On	The On/ Off Control signal of the Toner Dispense Motor (K)

Option Duplex Wiring Diagram

Duplex

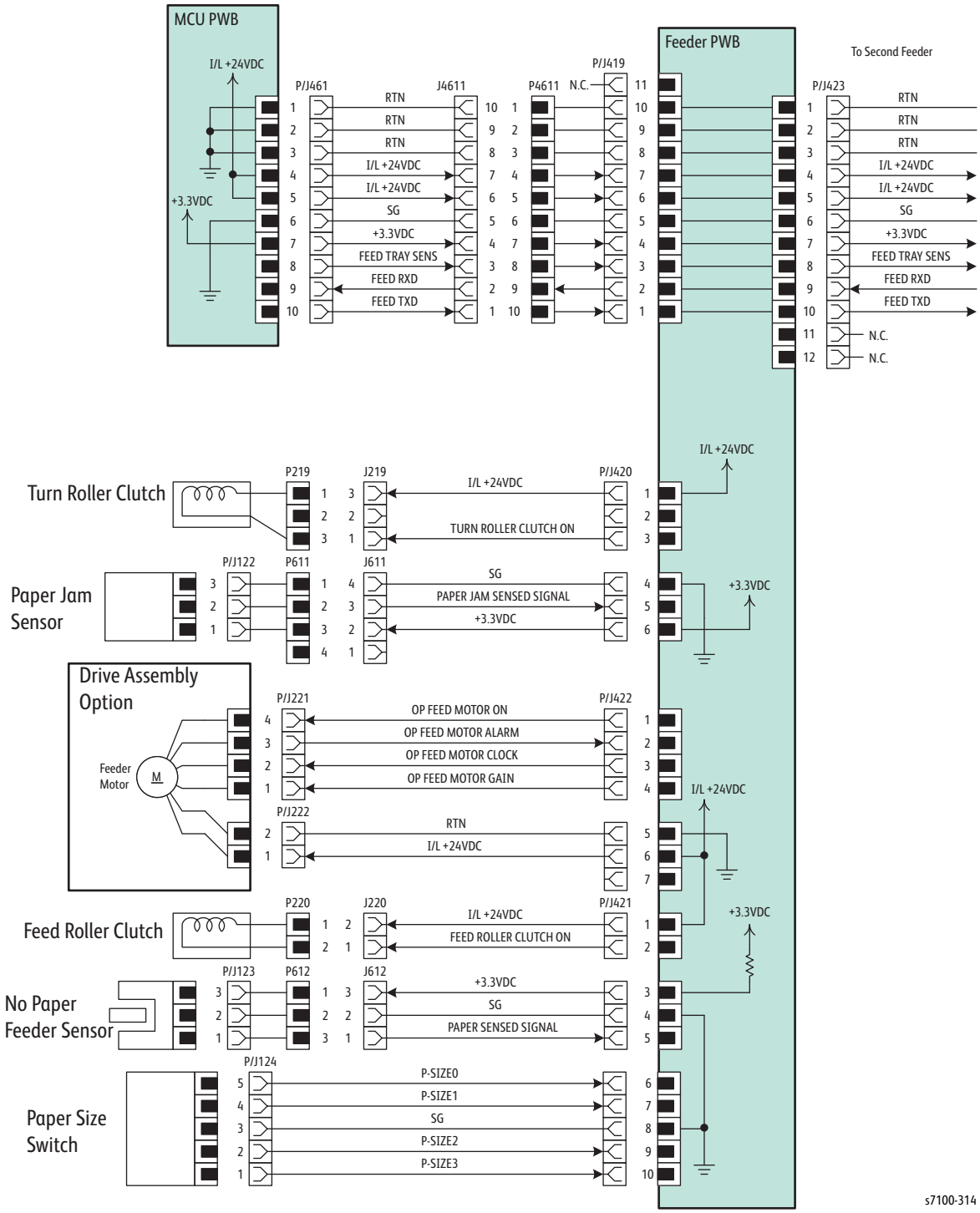


Option Duplex Signal Lines

Signal Line Name	Description
Dup Hotline	The Control signal of the Duplex PWB
Dup RXD	The Communication signal between the MCU PWB and the Duplex PWB
Dup TXD	
A	The Excitation signal of the Duplex Motor
B	
/A	
/B	
Dup Paper Sensed Signal	The signal for detecting paper at the Duplex section by the Duplex Jam Sensor (Paper detected: L)
Dup Clutch On	The On/ Off Control signal of the Duplex Clutch

Option 550-Sheet Feeder Wiring Diagram

550-Sheet Feeder



Option 550-Sheet Feeder Signal Lines

Signal Line Name	Description
Feed Tray Sens	The Clock signal that is used by the CPU on the Feeder PWB to determine the level at which it is installed to. (Sent from the MCU PWB)
Feed RXD	The Communication signal between the MCU PWB and the Feeder PWB
Feed TXD	
Turn Roll Clutch On	The On/ Off Control signal of the Turn Roller Clutch
Paper Jam Sensed Signal	The signal for detecting paper at the Paper Feed Position of the Option Tray by the Paper Jam Sensor (Paper detected: L)
OP Feed Motor On	The On/ Off Control signal of the Feeder Motor
OP Feed Motor Alarm	The Alarm signal from the Feeder Motor
OP Feed Motor Clock	The Clock signal of the Feeder Motor
OP Feed Motor Gain	The Control signal of the Feeder Motor
Feed Roll Clutch On	The On/ Off Control Signal of the Feed Roller Clutch
Paper Sensed Signal	The signal for detecting paper in the Option Tray by the Feeder No Paper Sensor
P-Size 0	The On/ Off Detection signal of SW 0 for the Paper Size Switch (***1**)
P-Size 1	The On/ Off Detection signal of SW 1 for the Paper Size Switch
P-Size 2	The On/ Off Detection signal of SW 2 for the Paper Size Switch
P-Size 3	The On/ Off Detection signal of SW 3 for the Paper Size Switch
***1** The Paper Size Switch is numbered from top to down as SW 0, SW 1, SW 2, and SW 3.	

Reference

A

This chapter includes:

Media Guidelines

Print media is paper, transparencies, labels, envelopes, coated paper and several other types. The printer prints on a variety of print media. Selecting the appropriate print media for the printer helps avoid printing problems. This chapter describes how to select, store, and load print media.

For the best results in color, a 75 g/m² (20 lb.) xerographic, long grain paper is recommended. For the best results in black and white, use 90 g/m² (24 lb.) xerographic, long grain paper.

When loading paper, identify the recommended print side on the paper package, and load the paper accordingly.

Paper Characteristics

The following paper characteristics affect print quality and printer reliability. Use these guidelines when evaluating the customer's paper stock.

Weight

The trays automatically feed paper weights from 60 to 220 g/m² (16 to 32 lb. bond) grain long. Paper lighter than 60 g/m² (16 lb.) might not feed properly, and could cause paper jams. For best performance, use 75 g/m² (20 lb. bond) grain long paper.

Curl

Curl is the tendency of media to curve at its edges. Excessive curl can cause feeding problems. Curl usually occurs after the paper passes through the printer, where it is exposed to high temperatures. Storing paper unwrapped in humid conditions, even in the paper tray, can contribute to curling prior to printing and cause feeding problems.

Smoothness

The degree of surface smoothness directly affects print quality. If the paper is too rough, the toner does not fuse to the paper properly, resulting in poor print quality. If the paper is too smooth, it can cause feeding problems. Smoothness between 150 and 250 Sheffield points produces the best print quality.

Moisture Content

The amount of moisture in the paper affects both print quality and the ability of the printer to feed the paper properly. Paper should remain in its original packaging until loaded. This limits the exposure of the paper to moisture changes that can degrade its performance.

Grain Direction

Grain refers to the alignment of paper fibers in a sheet of paper. Grain is either long, running the length of the paper, or short, running the width of the paper. For 60 to 135 g/m² (16 to 36 lb. bond) paper, long grain fibers are recommended. For papers heavier than 135 g/m² (36 lb. bond), short grain is preferred.

Fiber Content

Most high-quality xerographic paper is made from 100 % chemically pulped wood. Paper containing fibers such as cotton possess characteristics that can result in degraded paper handling.

Recommended Paper

Refer to the Phaser 7100 Recommended Media List (RML) for media approved for use in this product.

Unacceptable Paper

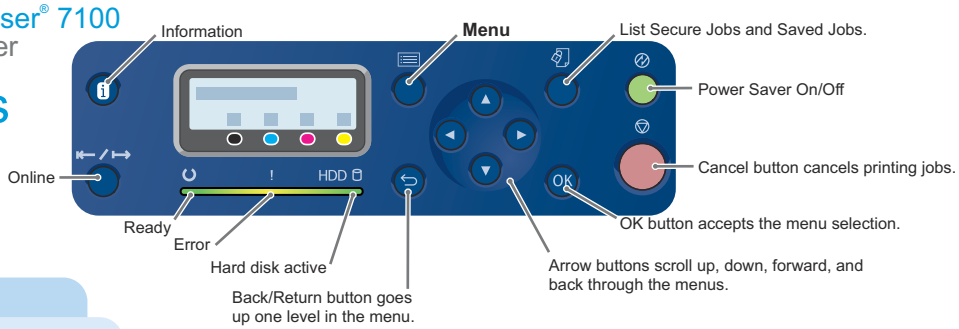
The following paper types are not recommended:

- Chemically treated papers used to make copies without carbon paper, also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper
- Preprinted papers with chemicals affected by Fuser temperatures
- Preprinted forms that require registration (the print location on the page) greater than ±0.09 in., such as optical character recognition (OCR) forms. In some cases, the application can adjust registration to successfully print on these forms.
- Coated papers (erasable bond), synthetic papers, thermal papers
- Rough-edged, rough or heavily textured surface papers or curled papers
- Recycled papers containing more than 25 % post-consumer waste that do not meet DIN 19 309
- Multiple-part forms or documents
- Perforated or pre-cut label paper

Phaser 7100 Printer Menu

Xerox® Phaser® 7100
Color Printer

Menus



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Language

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- Adjust Paper Registration
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- During Loading
- Paper Type
- Paper Color
- Paper Type Priority
- Paper Tray Priority
- Paper Size Settings
- Image Quality
- Custom Paper Name
- Custom Color Name
- Print User ID
- Odd Page 2 Sided †
- Default Paper Size
- OCR Font Glyphs

PS
- HPGL Auto Layout
- Job Ticket Memory
- Receiving Buffer

* Requires Hard Disk
** Without Hard Disk
† Requires Duplex Unit

s7100-464

Acronyms and Abbreviations

Acronym	Description
3TM	Three Tray Module
A3	Paper size 297 millimeters (11.69 inches) x 420 millimeters (16.54 inches).
A4	Paper size 210 millimeters (8.27 inches) x 297 millimeters (11.69 inches).
A5	Paper size 148 millimeters (5.82 inches) x 210 millimeters (2.10 inches).
AC	Alternating Current is type of current available at power source for the printer.
ADC	Automatic Density Control
AMPV	Average Monthly Print Volume
AOC	Auto Offset Control, Automatic Offset Control
ASSY	Assembly
ATM	Adobe Type Manager
ATVC	Auto Transfer Voltage Control
BCR	Bias Charge Roller
BP	Backplane
BSD	Block Schematic Diagram
BTM	Bottom
BTR	Bias Transfer Roller
B/W	Black & White
CAM	Cam Shaft
CCD	Charged Coupled Device (Photoelectric Converter)
CCP	Carbonless Copy Paper
CCPM	Color Pages Per Minute
CCW	Counterclock-Wise
CD	Circuit Diagram
CD	Compact Disc
CE	Customer Engineer
CE Mark	European Conformity
CLT	Clutch

Acronym	Description
CMYK	Toner colors for the printer: Y=yellow, C=cyan, M=magenta, K=black
CRD	(PostScript) Color Rendering Dictionary
CRU	Customer Replaceable Unit
CRUM	Customer Replaceable Unit Meter/Memory
CSE	Customer Support Engineer
CST	Cassette
CTD	Color Toner Density Sensor
CVT	Constant Velocity Transport
CW	Clockwise
CWIS	CentreWare Internet Services
dB	Decibel
DC	Direct Current is type of power for printer components. Machine converts AC power from power source to DC power.
DCN	Disconnect
DDNS	Dynamic Domain Name System
DDR2 DIMM	Double Data Rate Dual In-Line Memory Module
DEV	Developer
DHCP	Dynamic Host Configuration Protocol
DIMM	Dual In-line Memory Module
DMO	Developing Markets Organization
DMP	Damper
DPI	Dot Per Inch
DRV	Drive
DUP	Duplex (2-sided printing)
EA-HG	Emulsion Aggregate High Glass
EC	European Community
ECM	Error Correction Mode
EEC	European Economic Community
EEPROM	Electrically Erasable Programmable Read-Only Memory
EH & S	Environment Health & Safety

Acronym	Description
EN12281	International Standards - Printing and business paper
EOM	End of Message
EOP	End of Procedure
ESA	Electrostatic Attachment
ESD	Electrostatic Discharge. A transfer of charge between bodies at different electrostactic potential.
ESS	Printer Controller
EU	European Union
FCC	Federal Communications Commission
FDR	Feeder
FE	Field Engineer
FFC	FFC Cable
FIC	Final Integration Center
FIFO	First In First Out
FIP	Fault Isolation Procedure
FPOT	First Print Output Time
FR/ FRNT	Front
FRU	Field Replaceable Unit
GB	Giga Byte
GND	Ground
GSN	Global Service Net
HAC	High Area Coverage
HARN	Harness
HCF	High-Capacity Feeder
HDD	Hard Disk Drive
HFSI	High Frequency Service Item
HSG	Housing
HUM	Humidity
HV	High Voltage
HVPS	High Voltage Power Supply
Hz	Hertz (cycles per second)

Acronym	Description
HW	Hardware
IBT	Intermediate Belt Transfer
IC	Integrated Circuit
ICDC	Image Count Dispense Control
IDT	Intermediate Drum Transfer
IEC	International Electrotechnical Commission
I/F	Interface
IOT	Image Output Terminal - the ROS/Xerox/paper handling/fusing portion of the printer
IP	Image Processor
IP	Internet Protocol
IPM	Impression Per Minutes
IPP	Internet Present Provider
IPX	Internetwork Packet Exchange
IQ	Image Quality
ISO	International Organization for Standardization
KB	Kilo Byte
LAC	Low Area Coverage
LAN	Local Area Network
LCD	Liquid Crystal Display
LD	Laser Diode
LED	Light Emitting Diode
LEF	Long-Edge Feed
L/H	Left Hand
LPD	Line Printer Daemon
LSI	Large Scale Integrated Circuit
LTR	Letter Size Paper (8.5 x 11 inches)
LVPS	Low Voltage Power Supply
MAC	Paper Access Control
MB	Mega Byte
MCU	Machine Control Unit (Engine Control Board)

Acronym	Description
MHz	Mega Hertz
MIB	Management Information Base
MM	Millimeters
MOB	Marks On Belt
MOT	Motor
MPS	Multi-Page Signal
MPT	Multi-Purpose Tray
NCR	No Carbon Requred
NCS	Non-Contact Sensor
NCU	Network Control Unit
NOHAD	Noise Ozone Heat Altitude Dust
NPP	No Paper
NSF	Non-Standard Facilities
NSS	Non-Standard Set-up
NVM	Non-Volatile Memory
NVRAM	Non-Volatile Random Access Memory
OCR	Optical Character Recognition
OEM	Original Equipment Manufacturer
OHP	Overhead Print (Transparency)
OPC	Organic Photo Conductor
OPT	Optional
OS	Operating System
PB	Push Button
PBX	Private Branch Exchange
PC	Personal Computer
PC	Photo Conductor
PCB	Printed Circuit Board
PCDC	Pixel Count Dispense Control
PCL	Printer Command Language
PDF	Portable Document Format
PDL	Page Description Language

Acronym	Description
PH	Paper Handling
PHY	Physical Layer
P/J	Plug Jack (electrical connections)
PJL	Printer Job Language
PL	Parts List
POP3	Post Office Protocol version 3
POST	Power On Self Test
PPD	PostScript Printer Description
PPM	Pages Per Minute
PPR	Partial Page Request
PPS	Pages
PPS	Pulses Per Second
PR	Photoreceptor
PU	Print Unit
PV	Print Volume Management
PWB	Printed Wiring Board
PWBA	Printed Wiring Board Assembly
RAM	Random Access Memory
RAP	Repair Analysis Procedure
R/E	Reduction/Enlargement refers to features selection or components that enable reduction or enlargement
RegiCon	Registration Control
RET	Retard
RGB	Three primary colors of light - Red Green Blue
RH	Relative Humidity
RIP	Repair, Inspect, and Prevent
RLS	Release
RMS	Root Mean Square Voltage
ROM	Read-Only Memory
ROS	Raster Output Scanner. Device that transfers digitally processed image, using laser light, to photoreceptor - Laser Unit.

Acronym	Description
RTD	Retard
SA	Systems Administrator
SDTP	Standard Digital Test Pattern
SEF	Short-Edge Feed
SIM	Simplex - Single Side printing
SLED	New LED Print Head
SLP	Service Location Protocol
SMART	Self-monitoring, analysis and reporting technology
SMB	Server Message Block
SNMP	Simple Network Management Protocol
SNR	Sensor
SOC	Service Order Code
SODIMM	Small Outline Dual In-line Memory Module
SOL	Solenoid
SOS	Start of Scan
STM	Single Tray Module
STS	Soft Touch Sensor
SW	Software
T/A	Takeaway
TCP	Transmission Control Protocol
TDC	Toner Density Control
TIFF	Tagged Image File Format
TM	Tray Module
TNR	Toner
TRNS	Transport
TV	Television
UDP	User Datagram Protocol
UI	User Interface
USB	Universal Serial Bus
VAC	Volts Alternating Current
WC	Waste Cartridge

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Numerics

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