**Phaser® 6700**
Color Laser Printer




# Phaser® 6700
# Service Manual

Xerox Internal-Use Only

xerox®

# Phaser® 6700 Printer 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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# Index

# About this Service Manual

The Phaser 6700 Printer Service Manual is the primary document used for 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, theory, 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.

## 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.

**Warning**

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

**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.

**Replacement Note**

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

**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.

# Manual Organization

The Phaser 6700 Printer Service Manual contains these sections:

**Introductory, Safety, and Regulatory Information:** This section contains important safety information and regulatory requirements.

**Chapter 1 - General Information:** This section contains an overview of the printer's operation, configuration, specifications, and consumables.

**Chapter 2 - Theory of Operation:** This section contains detailed functional information on the print engine components.

**Chapter 3 - Error Codes and Messages:** This section provides detailed troubleshooting procedures for error messages and codes generated by resident diagnostics.

**Chapter 4 - General Troubleshooting:** Troubleshooting covers the operation of Power On Self Test (POST) and Service Diagnostics. In addition, this section includes troubleshooting methods for situations where error indicator is not available.

**Chapter 5 - Print-Quality Troubleshooting:** This section focuses on techniques to correct image quality problems associated with the printer output.

**Chapter 6 - Adjustments and Calibrations:** This section provides procedures for the adjustment of print engine components.

**Chapter 7 - Cleaning and Maintenance:** This section provides periodic cleaning procedures for the printer.

**Chapter 8 - Service Parts Disassembly:** This section contains removal procedures for spare parts listed in the Parts List. A replacement procedure is included when necessary.

**Chapter 9 - Parts List:** This section contains exploded views of the print engine and optional Field Replaceable Units (FRUs), as well as part numbers for orderable parts.

**Chapter 10 - Wiring:** This section contains the plug/jack locations and wiring diagrams for the printer.

**Reference:** This section provides illustrations of part removal sequences, printer firmware update instructions, and a list of acronyms and abbreviations.

## Symbols Marked on the Product



Danger invisible laser radiation when open. Avoid direct exposure to beam.



Hot surface on or in the printer. Use caution to avoid personal injury.



Use caution (or draws attention to a particular component). Refer to the manual(s) for information.




It may take 30 minutes for the Fuser to cool down.



Do not touch the item.



Do not expose the item to sunlight.



Do not expose the item to light.

## Product Terms

**Caution:** A personal injury hazard exists that may not be apparent. For example, a panel may cover the hazardous area.

**Danger:** A personal injury hazard exists in the area where you see the sign.

# 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 product,
- if the printer is exposed to any excess moisture,
- if the printer is dropped or damaged,
- if you suspect that the product needs servicing or repair,
- whenever you clean the product.

# 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 and observe these other safety precautions.

- Immediately before handling any semiconductor component 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 ICs 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 Circuit Boards.

# Service Safety Summary

## General Guidelines

**For qualified service personnel only:** Refer also to the preceding "Power Safety Precautions" on page xvi.

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

**Use care when servicing with power:** Dangerous voltages may exist at several points in this product. 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.

### Class 1 Laser Product

The Phaser 6700 Printer is certified to comply with Laser Product Performance Standards set by the U.S. Department of Health and Human Services as a Class 1 Laser Product. This means that this product does not emit hazardous laser radiation; which is possible only because the laser beam is totally enclosed during all modes of customer operation. When servicing the printer or laser unit, follow the procedures specified in this manual and there will be no hazards from the laser.

## 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.

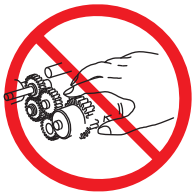


## Servicing Mechanical Components

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 motor is running.



## Servicing Fuser Components

**Warning**

This printer uses heat to fuse the image to the media. During operating, the Fuser is very hot. Allow at least 5 minutes for the Fuser to cool before you attempt to service the Fuser or adjacent components.

# 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 residential installation. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with these instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment Off and On, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiver (device being interfered with).
- Increase the separation between the printer and the receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

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

## Canada (Regulations)

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

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

## European Union

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:

CE

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

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

March 9, 1999: Electromagnetic Compatibility Directive 99/5/EC

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

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

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

# General Information

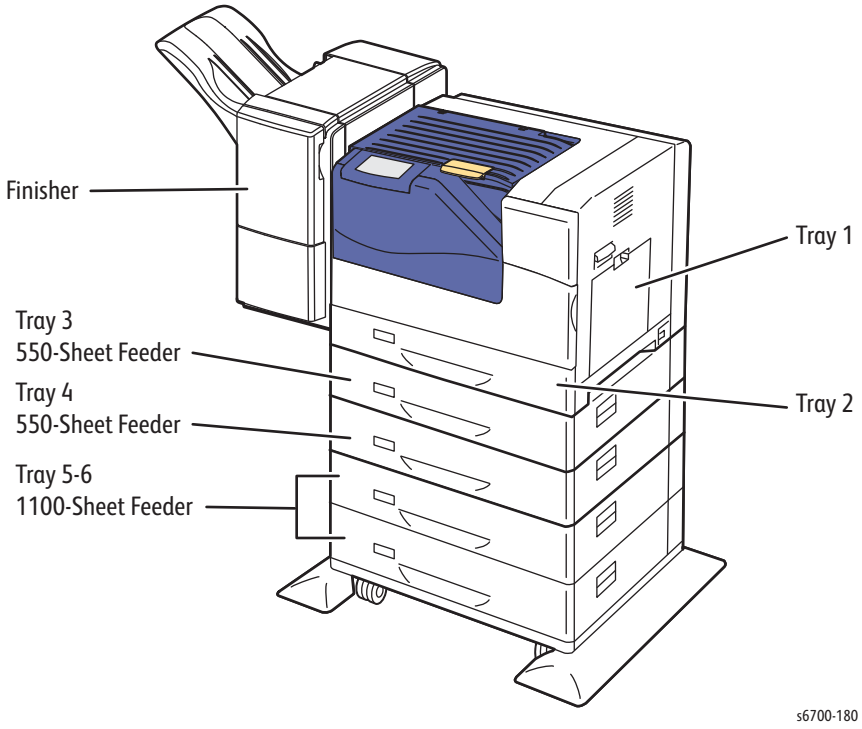
## In the chapter....

- Printer Overview
- Printer Configurations
- Parts of the Printer
- Printer Options
- Customer-Replaceable Maintenance Items
- Specifications
- External Interfaces

Chapter 1

# Printer Overview

The Phaser 6700 base configuration (N) combines a single-pass, color laser print engine with a multi-purpose, 150-sheet Tray 1 and 550-sheet Tray 2. Tray 2 is not interchangeable with optional Trays 3~6. The Output Tray holds 500 sheets facedown. The N configuration is simplex-only. Options to the Phaser 6700 add media capacity and functionality. For models not originally equipped, an optional 160 GB Hard Drive is available. Additional optional feeders (Trays 3, ~6) when installed, add a maximum of four 550-sheet universal media trays. This raises the maximum input media capacity to 2,900 sheets. On the output side, a 1000-sheet Finisher is available.




**Note**

Print the Paper Tips page from the Paper Tray Status screen accessed by touching the Printer on the Home screen for a list of supported media sizes and weights for each Tray.

## Technical Support Information

The Xerox Service Manual is the primary document used for repairing, maintaining, and troubleshooting the printer.

To ensure complete understanding of this product, participation in Xerox Service Training is strongly recommended. To service this product, Xerox certification for this product is required.

For updates to the Service Manual, Service Bulletins, knowledge base, etc., go to:

- Xerox Global Service Net -https://www.xrxgsn.com/secure/main.p
- Service Partners: http://www.office.xerox.com/partners

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

# Printer Configurations

The printer is available in these configurations

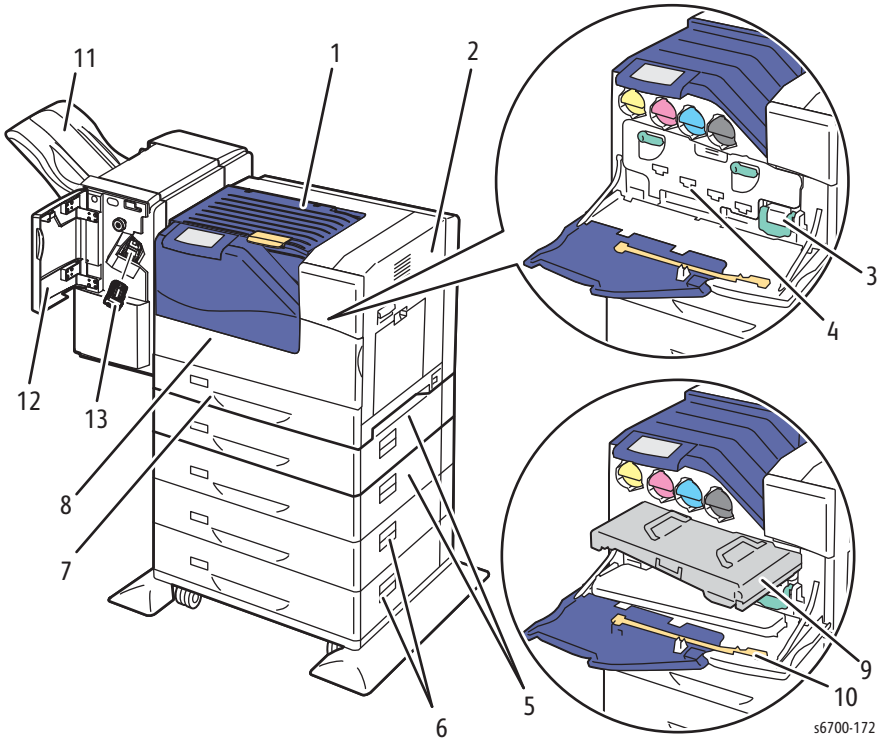
**Printer Configuration**

| Features | 6700N | 6700DN | 6700DT | 6700DX |
|---|---|---|---|---|
| Processor Speed | 1.25 GHz | 1.25 GHz | 1.25 GHz | 1.25 GHz |
| Memory Configuration[a] | 1 GB | 1 GB | 1 GB | 1 GB |
| **Print Speed (Color / Mono) Simplex** | | | | |
| Plain Paper (Letter/A4) | 47/45 | 47/45 | 47/45 | 47/45 |
| Heavy Paper (Letter/A4) | 23.5/22.5 | 23.5/22.5 | 23.5/22.5 | 23.5/22.5 |
| Glossy Paper (Letter/A4) | 15.6/15 | 15.6/15 | 15.6/15 | 15.6/15 |
| Transparency Mode (A4) | 8/8 | 8/8 | 8/8 | 8/8 |
| **Print Speed (Color / Mono) Duplex** | | | | |
| Plain Paper (Letter/A4) | 37.6/36 | 37.6/36 | 37.6/36 | 37.6/36 |
| Heavy Paper (Letter/A4) | 18.8/18 | 18.8/18 | 18.8/18 | 18.8/18 |
| **Resolutions (dpi)** | | | | |
| PCL | 600 x 600 | 600 x 600 | 600 x 600 | 600 x 600 |
| Standard | 1200 x 600 | 1200 x 600 | 1200 x 600 | 1200 x 600 |
| Photo | 2400 x 1200 | 2400 x 1200 | 2400 x 1200 | 2400 x 1200 |
| PostScript and PCL6 Fonts | Standard | Standard | Standard | Standard |
| USB 2.0 Support | Standard | Standard | Standard | Standard |
| Ethernet Interface | 10/100/ 1000 Base-TX | 10/100/ 1000 Base-TX | 10/100/ 1000 Base-TX | 10/100/ 1000 Base-TX |
| Hard Disk | Optional | Optional | Optional | Standard |
| Tray 1 (150 Sheets) | Standard | Standard | Standard | Standard |
| Tray 2[b] (550 Sheets) | Standard | Standard | Standard | Standard |
| 550-Sheet Feeder[c] | Optional | Optional | 1 x 550 | 2 x 550 |
| 1100-Sheet Feeder | Optional | Optional | Optional | Optional |
| Finisher | Optional | Optional | Optional | Optional |
| Duplex[d] | Not Available | Standard | Standard | Standard |
| Wireless LAN | Optional | Optional | Optional | Optional |
| Printer Stand | Optional | Optional | Optional | Optional |

a. Printer has one memory slot supporting 1024 MB or 2048 MB DDR2 DIMM.
b. Tray 2 is not interchangeable with Option Feeder Trays.
c. Universal Trays to a maximum of four. See"Optional Feeders" on page 1-9.
d. No duplex upgrade path available for the 6700N model.

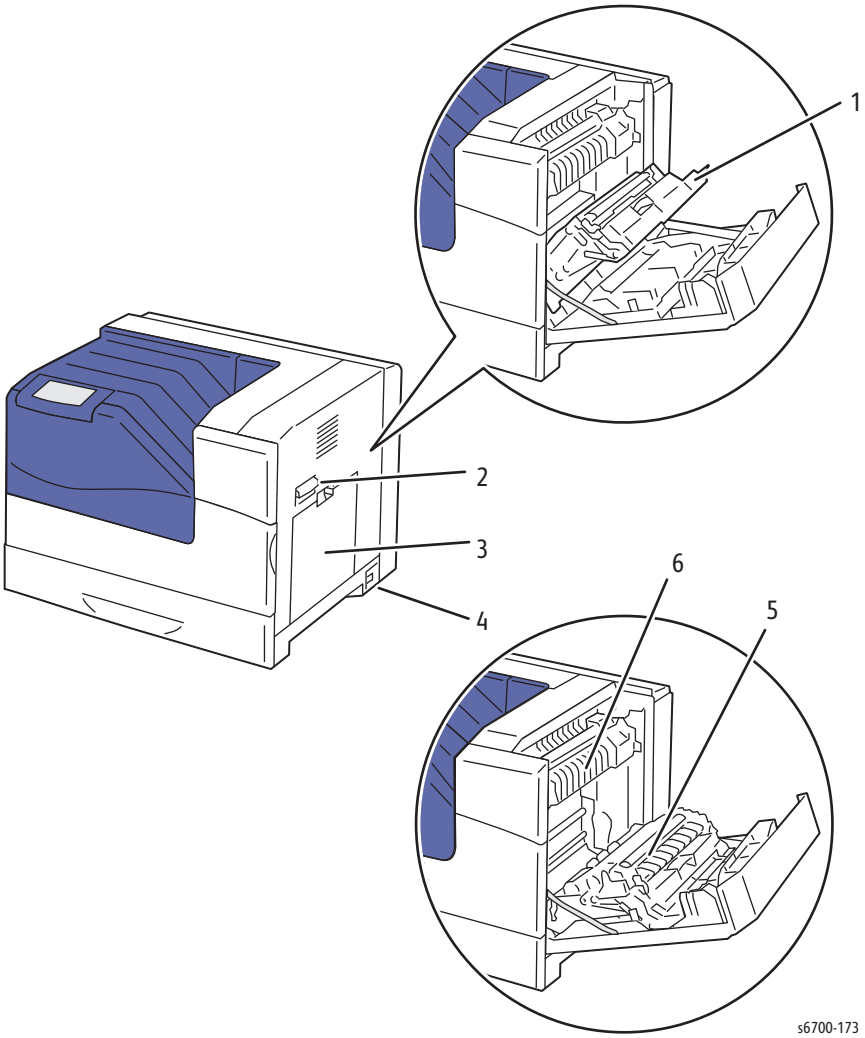
# Parts of the Printer

## Front and Side Views



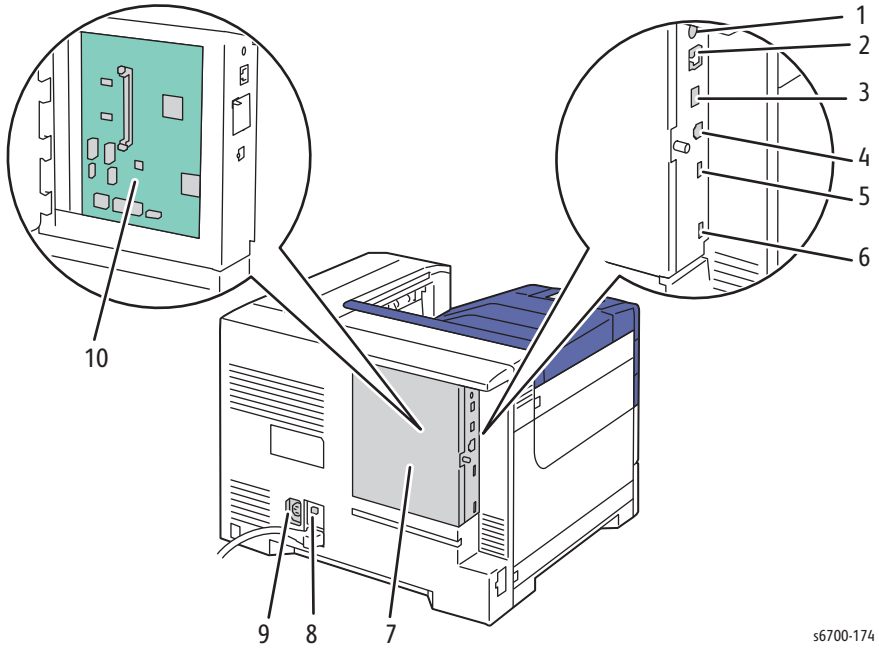

1. Horizontal Transport
2. Right Door
3. Waste Toner Cartridge
4. Inner Frame Assembly
5. Tray 3 and 4 Right Side Doors
6. Tray 5 and 6 Right Side Doors
7. Tray 2
8. Front Door
9. Transfer Belt
10. Cleaning Wand
11. Stacker Tray
12. Finisher Front Door
13. Staple Cartridge

## Right Door View



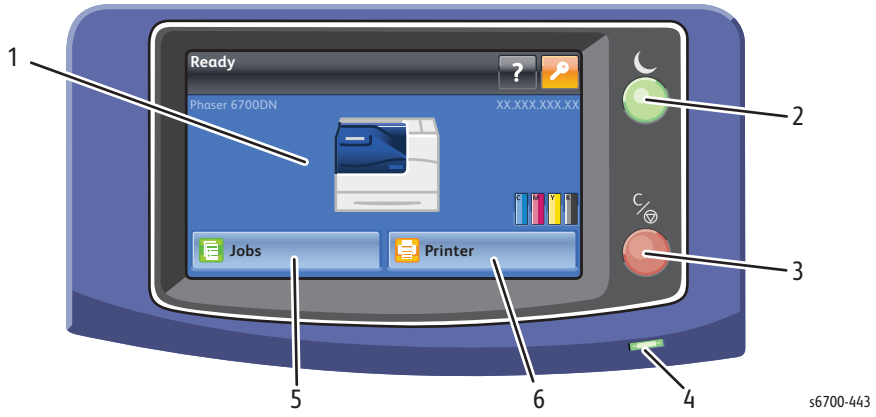

1. Duplex Chute
2. **Right Door Release**
3. **Tray 1**
4. **Power Switch**
5. Transfer Roller
6. Fuser

## Rear View




1. Engine Test Print Button
2. Host USB Connection
3. Service USB Connection
4. Ethernet Connection
5. Mode Select Port
6. Serial Port
7. IP Board Cage
8. GFI Reset Button
9. Finisher AC Output
10. IP Board

## Control Panel




1. Display - There are several basic screens: home, menus, information and parameter value setting. The home screen is the top level, with a status region at the top left, a help button and occasional Log Out button at the top right, two information fields, a printer mimic in the middle, toner gas gauges at the lower right, and Jobs and Printer buttons across the bottom. The status region has two lines for text with a “window shade” mechanism to show occasional information.
   Other screens include a top row with the screen’s icon and label at the left and one or more iconic buttons at the right: Help (?), Print (printer), Back (left arrow), OK (check mark), Cancel (X) and Home (house).
2. Power Saver - If pressed while the printer is idle and not in Low Power or Sleep mode, the Sleep mode screen is displayed for 5 seconds, during which time pressing Power Saver again returns the printer to Ready, or after which time Sleep mode is entered. If pressed while the printer is not at idle, nothing happens. When the printer is in Low Power mode, the Power Saver button light pulses On and Off in a 6-second cycle. If pressed while the printer is Low Power or Sleep mode, the printer wakes and begins warming up.
3. Pause/Cancel - If a job is printing when pressed, or when the job is deleted, printing stops after the pages already in the engine queue print. If all remaining job pages are already in the engine queue when pressed, or when the job is deleted, the job completes normally. If all remaining job pages are in the engine queue when pressed and another job is waiting to print, the Pause screen is displayed for the second job.
4. Indicator LED -The LED can be green, amber or red, and can be Off, blinking or steady. In general, it is Off when the power is Off and at times during the startup sequence, steady when the engine is idle and no job is busy, blinking when the engine or a job is doing something, green for no warnings or errors, amber for a warning condition, red for an error condition.
5. Jobs - View and manage currently active jobs. Also access the Completed Jobs list and local job submission functions. Displays up to 30 jobs in the active queue. Personal, saved and secure jobs require a Hard Drive.
6. Printer - Opens the tabbed Printer menu.

## Control Panel Special Functions

| Action | Method |
|---|---|
| Enter Service Diagnostics | From Ready to Print, press and hold the Pause Button for 5 seconds, then press and release the Power Saver Button to display the Service Diagnostics login screen. |
| Reset touchscreen parameters | From Ready to Print, press and hold the Power Saver Button for 5 seconds, then press and release the Pause Button to reset the Touchscreen to factory defaults and display the Control panel calibration screen. “Control Panel Calibration and Testing” on page 6-8. |
| Override locked Service Tools menu using Service credentials. | At the login screen:<br>User Name - **!$ecivreS**<br>Pass code - **2732** |
| Resetting the system admin (SA) pass code. | 1. Obtain the printer serial number and page count.<br>2. Call the Welcome Center for a temporary pass code.<br>3. Enter **reset** (not case sensitive) and temporary pass code at the login screen.<br>**NOTE** SA login credentials return to default values (ADMIN/1111) after 100 pages. |

# Printer Options

## Memory

The Image Processor Board features one memory slot supporting 1 GB or 2 GB DDR2 DIMMs, to a maximum of 2 GB. Memory must meet these characteristics:

- SO-DIMM; 200-PIN DDR2, 1.8V, 533MHZ
- Unbuffered, Non-parity

The Configuration page lists the amount of installed RAM.

**Note**

Remove existing memory to install the upgrade.

## Hard Disk

A 160GB hard drive is available to enable the Job Collation, Saved Jobs, Proof, Personal, and Secure Print options. The Hard Drive installs on the Image Processor Board with stand-offs and connects to the board with a single connector.

## Duplex

Automatic duplex printing is standard on all models except 6700N.

**Note**

Duplex upgrades are not available for the Phaser 6700N.

## Optional Feeders

The 550- and 1100-sheet, Optional Feeders (Trays 3 ~ 6) increase input capacity. Up to four additional Trays are supported. Electrical connection is made by a single connector.

**Supported Tray Combinations**

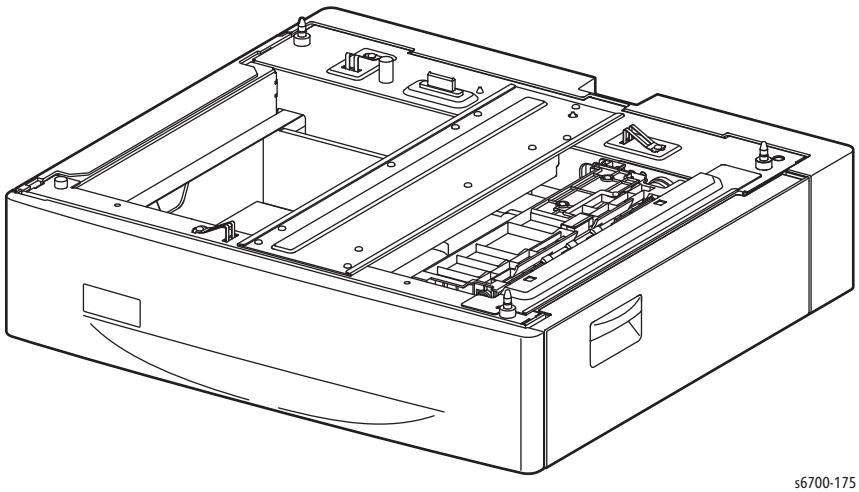
| Configuration | Tray 1 and 2 | Option Media Capacity | Trays | Total |
|---|---|---|---|---|
| 1 | 150 +550 | None | 2 | 700 |
| 2 | 150 +550 | Single 550 Feeder | 3 | 1250 |
| 3 | 150 +550 | Two 550 Feeders | 4 | 1800 |
| 4 | 150 +550 | 1100-Sheet Feeder: | 4 | 1800 |
| 5 | 150 +550 | 1100 & 550 Feeder: | 5 | 2350 |
| 6 | 150 +550 | 1100 & two 550 Feeders | 6 | 2900 |

**Note**

Print the Paper Tips page from the Paper Tray Status screen accessed by touching the Printer on the Home screen for a list of supported media sizes and weights for each Tray.

### 550-Sheet Feeder

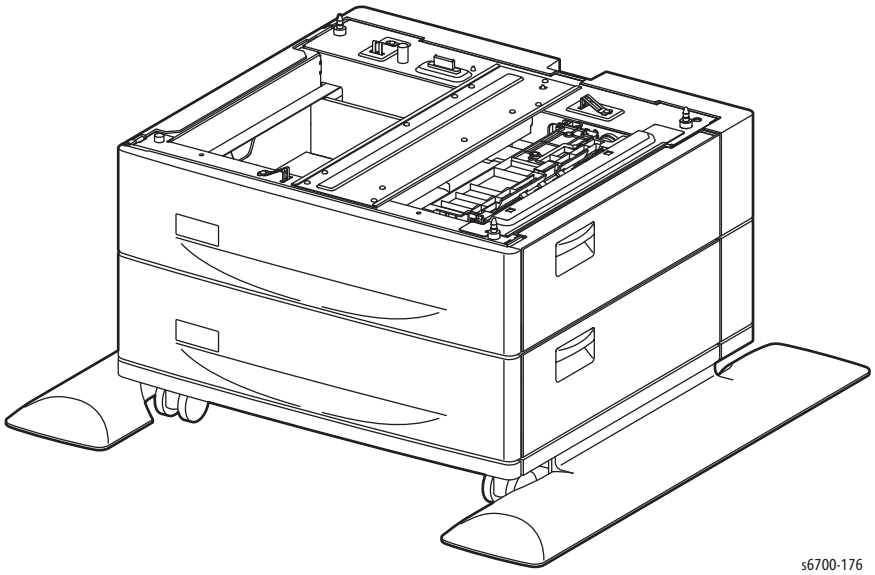
The 550-Sheet feeder adds a single, 550-sheet tray. The printer supports up to two 550-sheet feeders. The feeder is secured to the print engine with two screws located under the front edge of Tray 2 and a lock plate on the back.



s6700-175

## 1100-Sheet Feeder

The 1100-Sheet Feeder forms a base for the printer and adds two, 550-sheet trays.The feeder is secured to the print engine with two screws located under the front edge of either Tray 2 or optional feeder. A lock plate secures the feeder at the back.



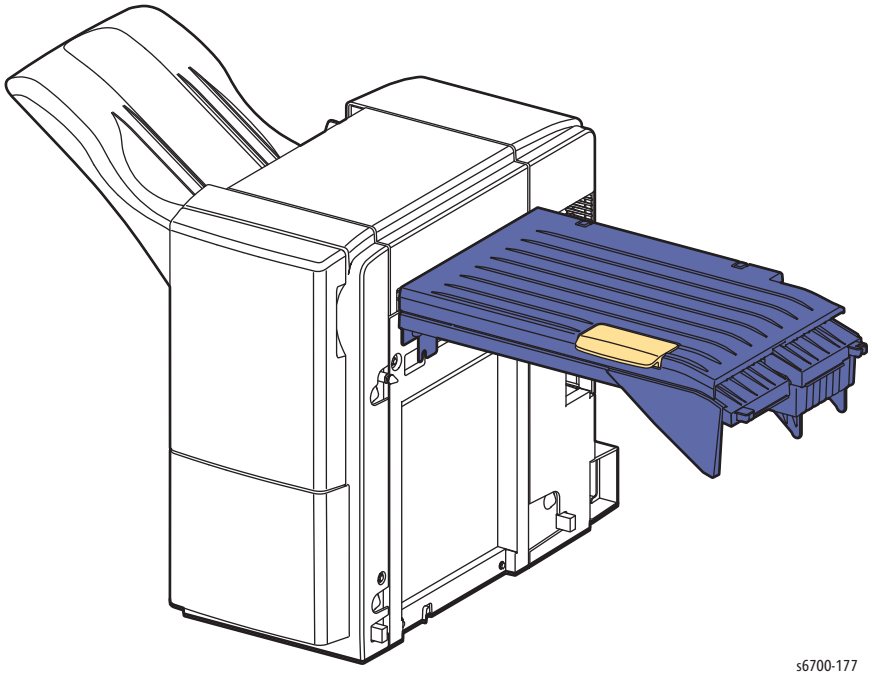

**Note**

To maintain system stability, do not install more than two 550-Sheet Feeders in a single system. Use an 1100-Sheet Feeder when more Trays or a wheeled stand are required.

## Finisher

The Finisher increases printer output capacity to 1,000 sheets. Printer output is directed to the Finisher by the Horizontal Transport. Depending on job specifications, as media enters the Finisher it is, stapled, offset and stacked. The Stapler can staple a maximum of 50 sheets of 90 gsm media. The Staple cartridge holds 5,000 staples.

Control signals reach the Finisher through a single connector. Power is supplied from the printer's AC accessory panel. No optional trays are needed to install a Finisher on the Printer.



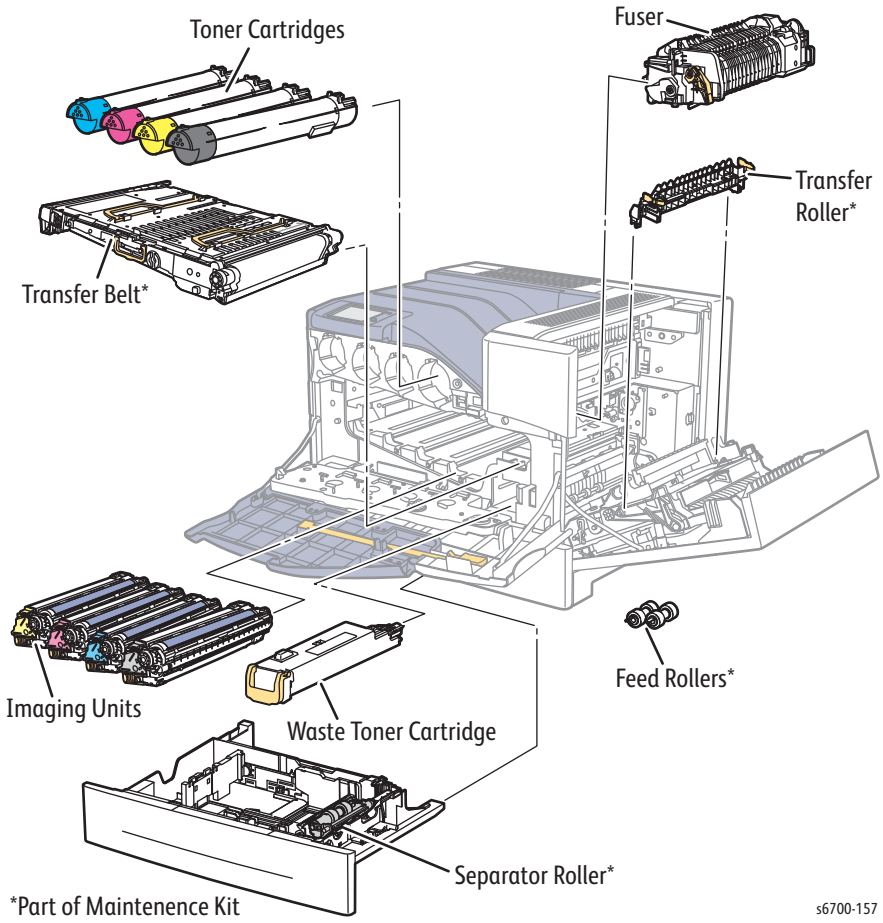
s6700-177

## Printer Stand

An option printer stand is available to add height, media storage, and mobility to configurations not equipped with the 1100-Sheet Feeder. Order part number 097S04245.

# Customer-Replaceable Maintenance Items

Maintenance items are parts or assemblies that require periodic replacement. These items are typically customer replaceable (CRU).




The listed items have limited life and require periodic replacement.

**Customer-Replaceable Maintenance Items**

| Item | Print Life Letter/A4 at 5% coverage |
|---|---|
| Imaging Unit | 50,000 pages |
| Maintenance Kit[a] | 150,000 pages |
| ■ Transfer Roller[b] | |
| ■ Transfer Belt | |
| ■ Separator Roller | |
| ■ Feed Rollers | |
| Waste Toner Cartridge | 25, 000 pages |
| Fuser | 100,000 pages |

a. After replacement, reset life counter at Control Panel.
b. Also available as an individually spared part (604K64970).

# Consumables

Consumables consist of 4 Toner Cartridges. Each Toner Cartridge has a CRUM (Customer Replaceable Unit Meter) to record toner usage information. A CRUM counts the amount of remaining toner. When toner empty is detected, Life End status is displayed.

CMY Toner is not consumed when printing in monochrome mode or when printing Gray scale. Internal counters track consumables and maintenance life.

Life ratings are based on Letter/A4-size sheets at 5 % coverage.

| item | Starter | Standard | High | PagePack |
|---|---|---|---|---|
| CMY Toner Cartridge | 5,000 | 5,000 | 12,000 | 15,000 |
| K Toner Cartridge | 7,100 | 7,100 | 18,000 | 21,000 |

# Specifications

## Electrical Specifications

| Characteristic | Specification |
|---|---|
| **Power Supply Voltage/Frequency** | |
| Line Voltages | 99-140 VAC ± 10 % |
| | 198-264 VAC ± 10 % |
| Frequency Range | 50/60 Hz ± 3 Hz |
| In-rush Current | When the power switch is turned on, the in-rush current is a maximum of 100A, and 10ms (half cycle) or less. (Cold or Hot Start / Rated Voltage: ±10 % ) |
| **Power Consumption (with all options, 110 or 220 V)** | |
| Power Saver 2 Mode | 45 W or less in deep sleep mode |
| Ready Mode (Fuser On) | 130W average, 1500 W maximum |
| Continuous Printing | 600W average, 1500 W maximum |

## Printer Specifications

| Characteristic | Specification | |
|---|---|---|
| Printing Technology | **Recording System**: Tandem four-color architecture using OPC drums and Transfer Belt | |
| | **Exposure System**: 4 laser beam scanning system | |
| | **Transfer System**: Four-color toner image transferred to the media | |
| | **Fusing System**: Thermal fusing by Free Belt Nip (FBNF) | |
| Color Medium | Cyan, Magenta, Yellow, and Black Toner Cartridges | |
| Average Image Coverage | Color | 5 % each CMYK |
| | Mono | 5 % |
| Max Image Coverage | 240 % for all C, M, Y, K combined | |
| Printer Life | 600,000 pages | |
| AMPV | 2250 | |
| Max Duty Cycle | 120,000 pages/month, 4,000 pages/day* | |
| Operating Modes | State | Operation |
| Printing | During Printing | ■ Fuser: At operating temperature<br>■ Exposure system: Working<br>■ Printing system: Working<br>■ Cooling fan: Working (high) |
| Ready | Waiting | ■ Fuser: At ready temperature<br>■ Exposure system: Rest<br>■ Printing system: Rest<br>■ Cooling fan: Working (low) |
| Power Saver 1 | Napping | ■ Fuser: At power saver 1 temperature<br>■ Exposure system: Rest<br>■ Printing system: Rest<br>■ Cooling fan: Working (low) |
| Power Saver 2 | Sleeping | ■ Working MCU (Fuser/Exposure/ Fan are rest)<br>■ Working Controller board<br>■ Cooling fan: Intermittent |
| Warm-Up Time | Approximately 3.0 minutes from Power On to Ready | |
| Operating System | Windows | 2000/2003/2008 Server/ XP/ Vista/ W7. |
| | Macintosh | OS 10.3.9 through 10.6 |
| | Linux | Redhat, SuSe, and TurboLinux 10 Desktop |
| * 120k pages per 30 day month (Letter/A4 at5 % coverage). | | |

## Memory Specifications

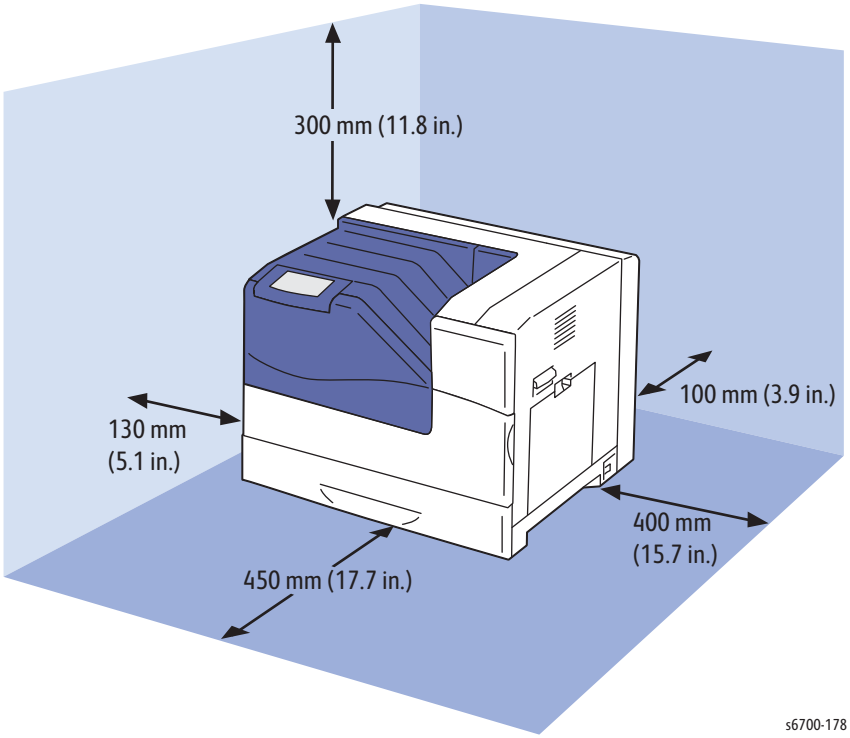
| Characteristic | Specifications | |
|---|---|---|
| Memory | Minimum | 1 GB standard memory |
| | Maximum | 2 GB |
| Supported RAM | Supports one 1024 or 2048 MB SO DIMM in one slot. | |

## First Print Output Time

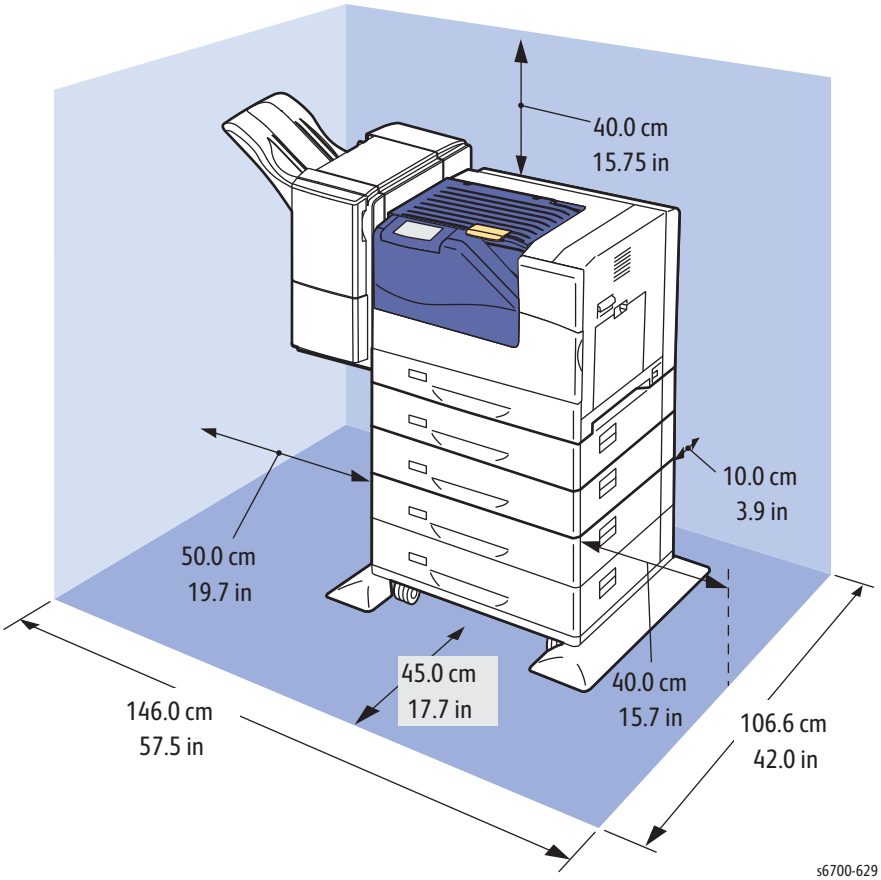
The FPOT (First Print Output Time) is 7 seconds for monochrome and 8 seconds for color. The time required from the receipt of print instructions to the output of the first sheet of printed media is calculated using these conditions (rounded to one decimal place).

- Controller processing time not included
- Printer is in Ready mode
- Standard resolution (1200 x 600)
- Media is A4/Letter
- Image process control time not included. The process control refers to controls such as TC control, electric potential control, cleaning cycle, and registration control. While the printer executes these controls, the engine may stop feeding media for a certain period of time.

## Installation Clearances




s6700-178




s6700-629

# Environmental Specifications

## Environmental Requirements

Environmental requirements are as follows.

- Operating: 5 ~ 32 ˚C, 15~85 % RH
- Guaranteed print quality range: 15 ~28˚C, 20~70 % RH
- Non-operating: -20 ~ 40 ˚C, 5~85 % RH
- Operating altitude: 0 to 3,100m (0 to 10170 ft)
- Resting surface tilt: 1 degree or less on any axis
- Ambient lighting: 3000 lux or less (without direct sun light)

## Toner Cartridge Storage

- Up to 12 months at 0 to 35 ˚C, 15 to 80 % RH.
- Up to 48 hours at -20 to 0 ˚C with 5 to 15 % RH or 35 to 40 ˚C and 80 to 95 % RH.
- Storage altitude 0 to 3,100 m. Can be extended 15000 m when shipped by air. (Provided the cargo bay is pressurized to 70.9275 Kpa or more.).

## Acoustic Noise

The noise level (at 60Hz) measured according to standard ISO7779.

**Noise Levels**

| Item | Mode | Mono | | Color | |
|---|---|---|---|---|---|
| | | Printer/ Engine | Full System [a] | Printer/ Engine | Full System[a] |
| Standby Declared A-weighted sound power level (unit: B)[b] | Ready, Power Saver | 5.30 | 5.30 | 5.30 | 5.30 |
| Operating Declared A-weighted sound power level (unit: B)[b] | 45PPM(A4) | 7.48 | 7.82 | 7.45 | 7.82 |
| Operating mean A-weighted emission sound pressure level (Bystander position (Unit: dB)[c] | 45PPM(A4) | 59 | 60 | 59 | 60 |

a. Full System Configuration: Printer/Engine + option
b. LwAd: Public sound power level = Measurement value LwA (one unit) + 0.3B
c. LpAm: Radiated Sound Pressure Level (Bystander Position)

# Reports, Information and Test Pages

The printer provides several embedded pages to help adjust printer output, troubleshoot errors, monitor consumables, track usage and check system status.

**Reports, Information and Test Pages**

| Page | Description |
|---|---|
| 2-Sided Demo | Available in the Print Reference Materials menu, the 2-sided Demo page generates a duplex print. |
| CMYK Sampler | Available in the Print Reference Materials menu, the CMYK Sampler prints a spectrum of color rectangles with the values of each component color. |
| Configuration Report | Available in the Print Reference Materials menu and printed as the Startup page at power On by default, the Configuration Report contains information about the printer's configuration and network connectivity. |
| Connection Setup | Available in the Print Reference Materials menu, the Connection Setup page instructs users on how to connect the printer to their computers and network |
| Cyan / Magenta Calibration | Printed during color adjustment procedures, this page provides samples for adjusting cyan and magenta color densities at three levels. |
| Dark Calibration | Printed during color adjustment procedures, this page provides samples for adjusting the color balance at a dark (about 60 % ) level. |
| Engine Test | The Engine Test print tests all engine functions necessary to print a page. Print this test page by pressing the Test Print button on the rear panel. See "Engine Test Print" on page 5-31. |
| Graphics Demo | Available in the Print Reference Materials menu, the Graphics Demo Page provides a detailed image for comparison. |
| Green / Black Calibration | Printed during color adjustment procedures, this page provides samples for adjusting green and black color densities at three levels. |
| Image Position Test | Available in the Resolve problems menu, the Image Position test page is printed with registration marks to visually adjust image alignment. The paper source being printed from and instructions are also printed on the page. See "Image Position" on page 6-3. |
| Light Calibration | Printed during color adjustment procedures, this page provides samples for adjusting the color balance at a light (about 20 % ) level. |
| Medium Calibration | Printed during color adjustment procedures, this page provides samples for adjusting the color balance at a medium (about 40 % ) level. |
| Office Demo | Available in the Print Reference Materials menu, the Office Demo page demonstrates the printer's color capabilities. |

**Reports, Information and Test Pages**

| Page | Description |
|---|---|
| Paper Tips | Available from the Print Reference Materials menu or Printer pull-down menu, the Paper Tips pages lists supported media for use in each tray to ensure print quality and prevent jams. The page also includes supported Xerox media part numbers, other supported media and weights. |
| PCL Font List | Available in the Print Reference Materials menu, the PCL Font page lists installed and downloaded PCL fonts. |
| PostScript Font List | Available in the Print Reference Materials menu, the PostScript Font page lists installed and downloaded PostScript fonts plus a few characters. |
| Repeating Defects | Helps show which consumables are responsible for particular defects that have shown up repeatedly. See “Repeating Defects Test Print” on page 5-35. |
| RGB Sampler | Available in the Print Reference Materials menu, the RGB Sampler prints a spectrum of color rectangles with the decimal values of each component color as a sample of printer output on 11 pages. |
| Service Usage Profile | A detailed log of printer use, tallying numbers of jams, how often features are used, usage by tray, job and page counts. |
| Spot Color Sampler | Available in the Print Reference Materials menu, the Spot Color page prints a set of Pantone Matching System swatches for coated colors on 14 pages. |
| Supplies Usage | Available in the Print Reference Materials menu, the Supplies Useage page reports the status of the printer’s consumables and CRUs. |
| System Status | Shows various information about the system status. See 8.5 System Status Page Fields, page 188 for details on content. |
| Troubleshooting Print Quality | Available in the Troubleshooting menu, the Troubleshooting Print Quality pages provide 6 pages of troubleshooting information and a set of test prints for examination. These pages assist with the diagnosis of quality problems. |
| Test Prints | Seven test prints are available in the Troubleshooting menu or from dc612: CMYK Sample Page / Cyan 50 % Fill Test Page / Magenta 50 % Fill Test Page /Yellow 50 % Fill Test Page / Black 50 % Fill Test Page / RGB Test Page / Test Patterns Test Page. See “Test Prints” on page 5-31. |
| Usage Profile | A limited log of printer use and information. See Usage Profile Page Fields on page 190 for details on content. |

# External Interfaces

## USB

| Item | Specification |
|---|---|
| Connector | Type-B x 1 |
| Protocol | USB2.0, High Speed |
| Supported Client | Windows 2000, XP, Server 2003, Vista, W7, Server 2008<br>MacOS X machine with USB<br>Linux machine with USB |

## Ethernet

| Item | Specification |
|---|---|
| Connection | RJ-45 x 1 connector |
| Protocol | See “10.2 Network Protocol” for details |
| Supported Client | Windows 2000, XP, Server 2003, Vista, W7, Server 2008,<br>Mac OS X (10.5.x or higher)<br>Linux |

## Network Protocols

### Printing Protocol

| Protocol | Transport | Maximum Session*2 |
|---|---|---|
| LPD | TCP/IP | 1 |
| Port9100 | TCP/IP | 1 |
| IPP*5 | TCP/IP | 5 |
| SMB*5 | TCP/IP | 5 |
| | NetBEUI | 5 |
| NetWare (P-Server)*5 | NCP/IPX<br>TCP/IP*1 | 1 |
| EtherTalk*5 | ATP/DDP | 1 |

### Other Protocols

| Protocol | Transport | Application / Usage |
|---|---|---|
| SNMP | UDP/IP | Driver, Installer |
| HTTP/HTTPS | TCP/IP | EWS |
| DHCP | UDP/IP | IP setup |
| BOOTP | UDP/IP | IP setup |
| RARP | TCP/IP | IP management |
| AutoIP | TCP/IP | Installer (Device discovery) |
| WINS | TCP/IP | |
| SMTP | TCP/IP | |
| Telnet | TCP/IP | |
| WSD | TCP/IP | |
| Bonjour(mDNS) | UDP/IP | |
| DDNS | TCP/IP | |

## PDL/Emulation

The decomposer is PCL. Note that the printer can accept jobs generated by its own printer driver.

| PDL | Interface | Operating system |
|---|---|---|
| PCL 5c | IEEE1284, USB, TCP/IP | |
| PCL 6 | IEEE1284, USB, TCP/IP | Windows 2000, XP, Server 2003, Vista, Server<br>2008, Windows 7 (TBD: Post RTS) |
| Post Scripts 3 | IEEE1284, USB, TCP/IP | Windows 2000, XP, Server 2003, Vista, Server 2008, Windows 7 (TBD: Post RTS)<br>Mac OS X (10.2.x or higher)<br>Mac OS 9 (TCP/IP only)<br>Linux, Unix |
| Host based (XPS) | IEEE1284, USB, TCP/IP | Windows Vista |

# Theory of Operation

## In this chapter...

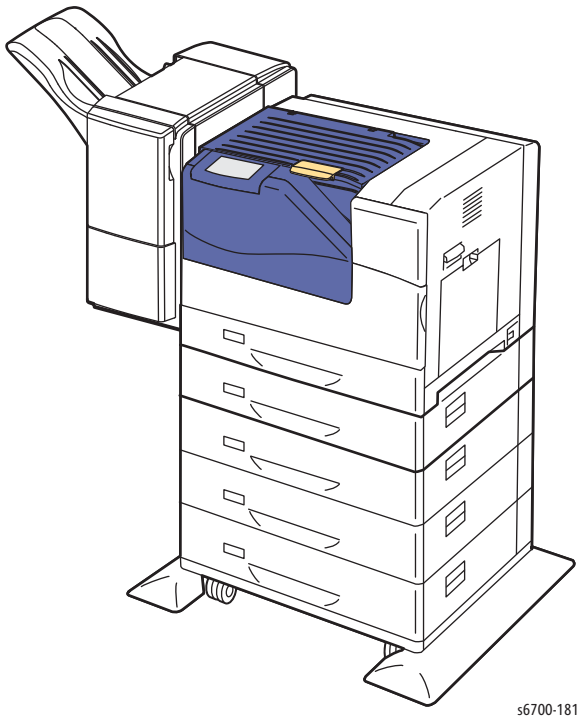
- Print Process Overview
- Sensors
- Media Handling
- Major Printer Components
- Print Quality Controls
- Optional Feeders
- Finisher Overview
- Major Finisher Components

Chapter 2

# Overview

The Phaser 6700 base configuration combines a single-pass, color laser print engine with a multi-purpose Tray 1 and a 550-sheet Tray 2. The Output Tray holds 500 sheets facedown. Phaser 6700 options add memory, media capacity, and functionality. For models not originally equipped, an 160 GB Hard Drive is available. Optional feeders (Trays 3 ~ 6) when installed, add a maximum of four 550-sheet universal trays. This raises the maximum input media capacity to 2,900 sheets. On the output side, 1000-sheet stacker/stapler is available.

This section focuses on the printer's operational characteristics providing detailed descriptions of the paper path, sensors, xerographic and major system assemblies for the printer, optional feeders, and Finisher.



s6700-181

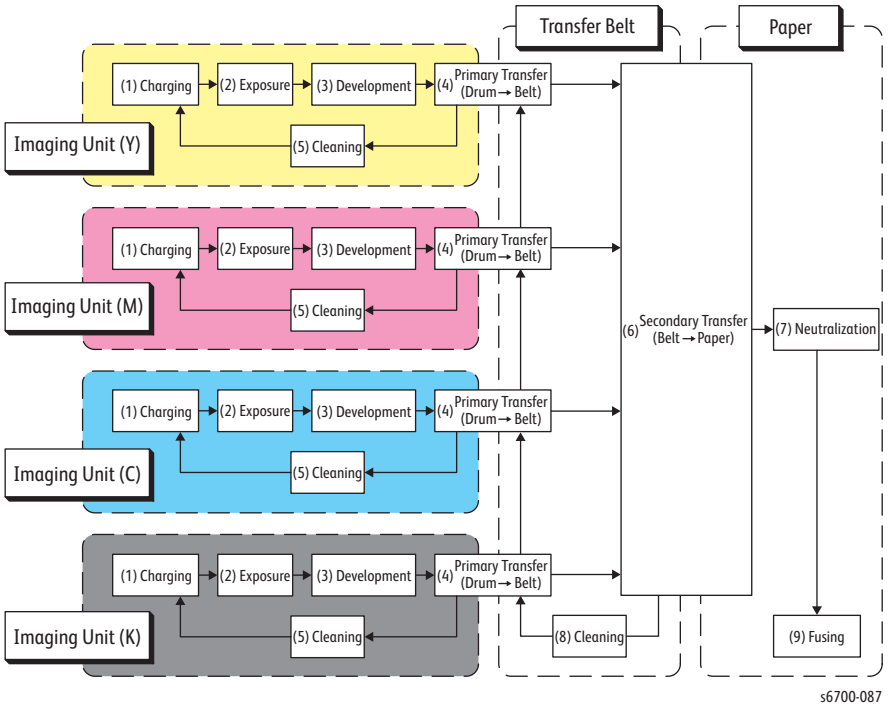
# Print Process Overview

The Phaser 6700 is a full-color xerographic laser printer using a tandem printing system having four, color-specific drum/developer sets. The four, color-separated images of the original document are created with toner on the drums and transferred in registration onto the Transfer Belt to reproduce a full color image. The completed toner image is transferred from the belt and fixed on the print medium, and then output as a print.

The printing process includes these basic steps:

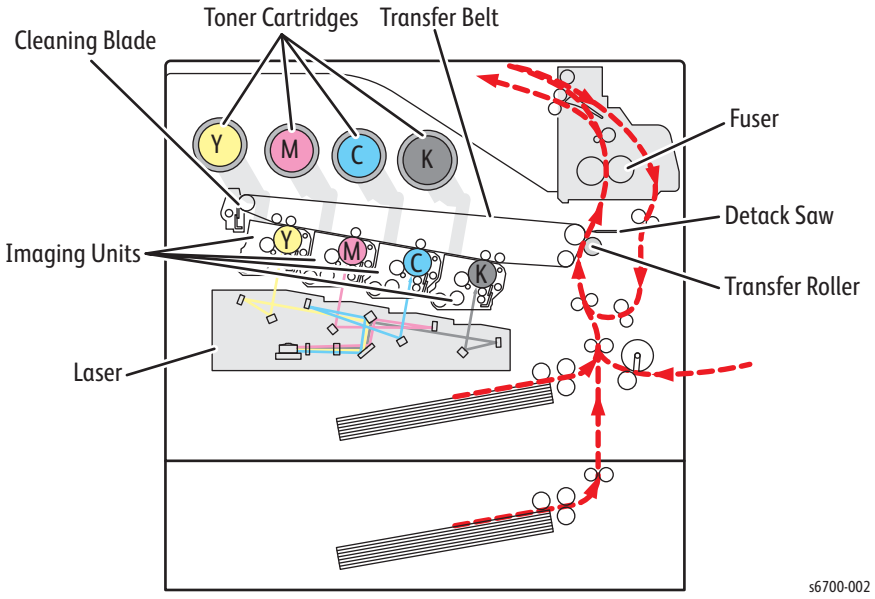
1. **Charging**: The drum surface is electrically charged.
2. **Exposure**: The imaging unit is irradiated with laser light.
3. **Development**: The image is developed with toner.
4. **Primary Transfer**: The four, color images on the drums are transferred onto the Intermediate Transfer Belt.
5. **Cleaning**: The drums are electrically neutralized and the toner remaining on the drums and BCRs is removed.
6. **Secondary Transfer**: The toner image on the Intermediate Transfer Belt is transferred onto the medium.
7. **Neutralization**: Electric charge of the paper is eliminated.
8. **Cleaning**: Toner remaining on the Intermediate Transfer Belt and 2nd bias transfer roller (BTR) is removed.
9. **Fusing**: Toner is fixed to the print medium by heat and pressure.

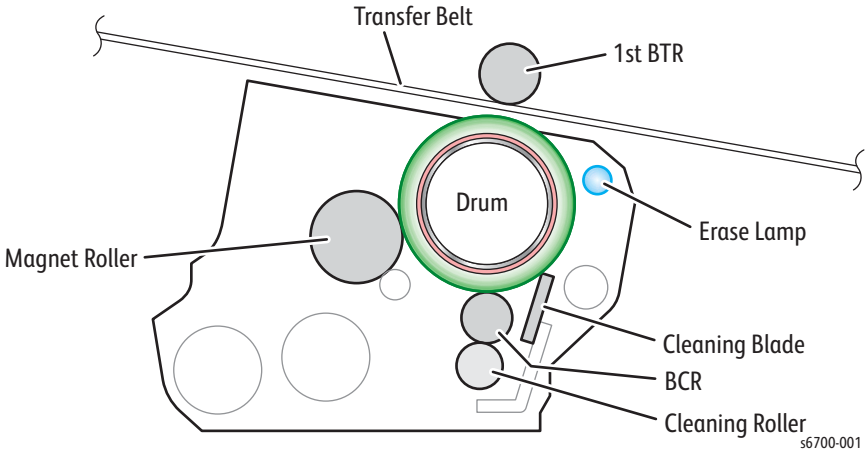
The following diagram shows the sequence of events for the xerographic process. Dashed lines indicate assemblies, solid lines indicate process.



## Print Process Components

The location of components involved in the print process are shown in the figure below. Dashed lines indicate the media path.




## Charging

In the charging process, the surface of the drum rotating at a constant speed is uniformly charged with negative polarity by the discharge from the BCR (bias charge roll).

This process is performed in parallel for all colors.

- Bias Charge Roll (BCR)

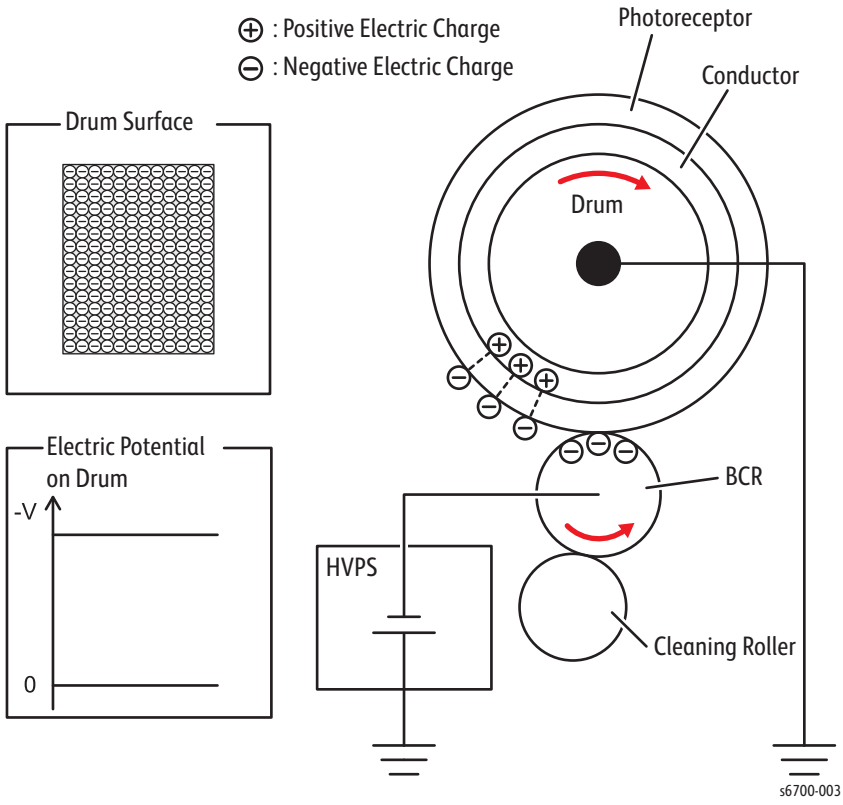
  The BCR is kept in contact with the drum and rotates following the rotations of the drum. The BCR is a conductive roll that uniformly and negatively charges the drum surface with the negative voltage applied by the HVPS.

- Drum

  The drum surface is uniformly and negatively charged with DC bias voltage. The drum surface consists of a photoreceptor (which is an insulator in the dark and a conductor in the light) backed with a conductor.

- Cleaning Roll

  The cleaning roll contacts with the BCR to remove residual toner.




## Exposure

The exposure process forms an electrostatic latent image on the negatively charged drum by scanning it with laser beams. This process occurs in parallel for all colors.

Laser beams are emitted from the laser diode in the Laser Unit. The surface of each drum is scanned from end to end in the axial direction by the rotating polygon mirror, the fixed mirror, and the lens attached to the Laser Unit scanner motor.

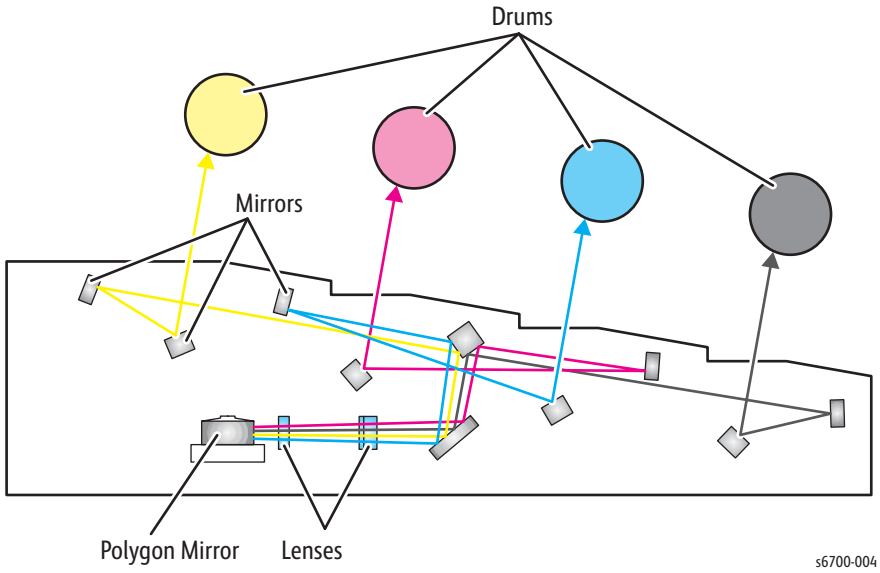
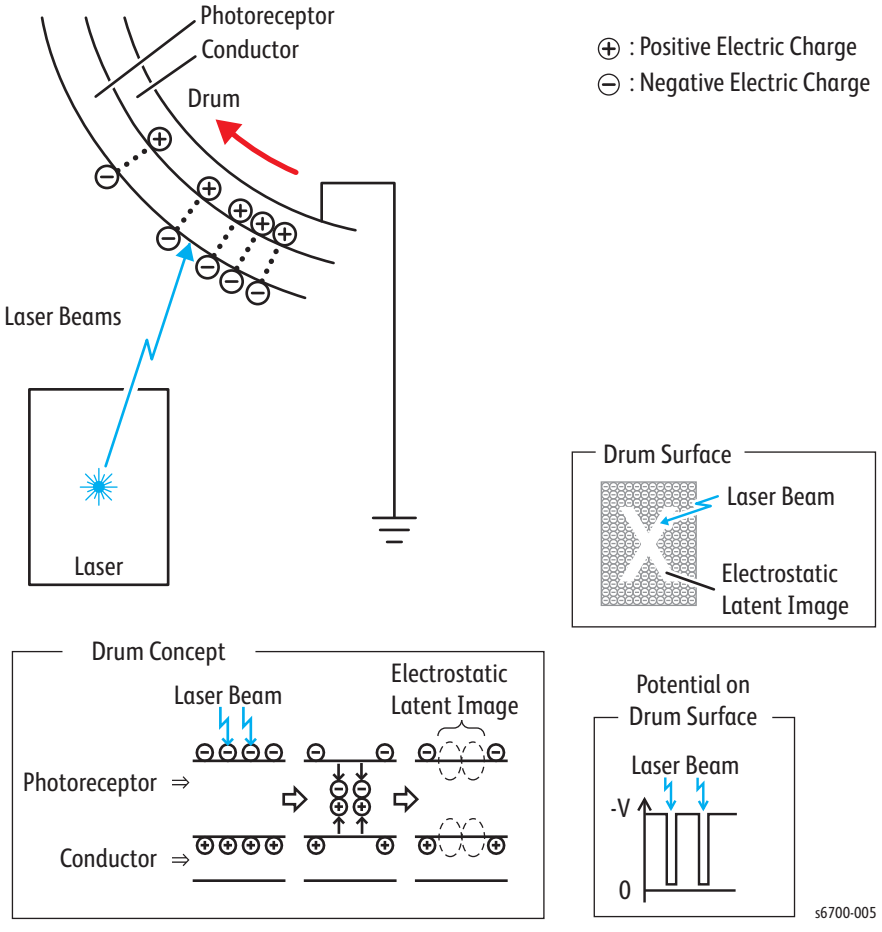


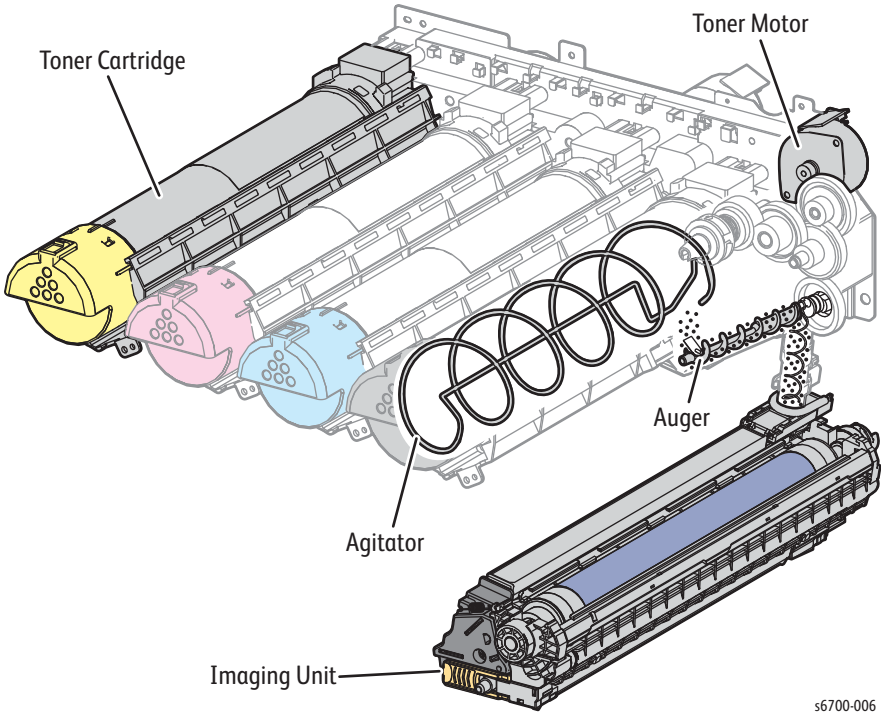

Image data from the IP Board directs the laser beam as each drum is irradiated. The areas on the drum irradiated with laser becomes conductive. This allows the negative charge on the drum surface to flow to the positive side and to cancel out the positive charge, lowering the potential on the drum surface. This low-potential area becomes the electrostatic latent image.



## Development

The development process makes a visible image appear on the drum surface by electrically attracting toner particles to the electrostatic latent image. This process is performed in parallel for all colors independently.

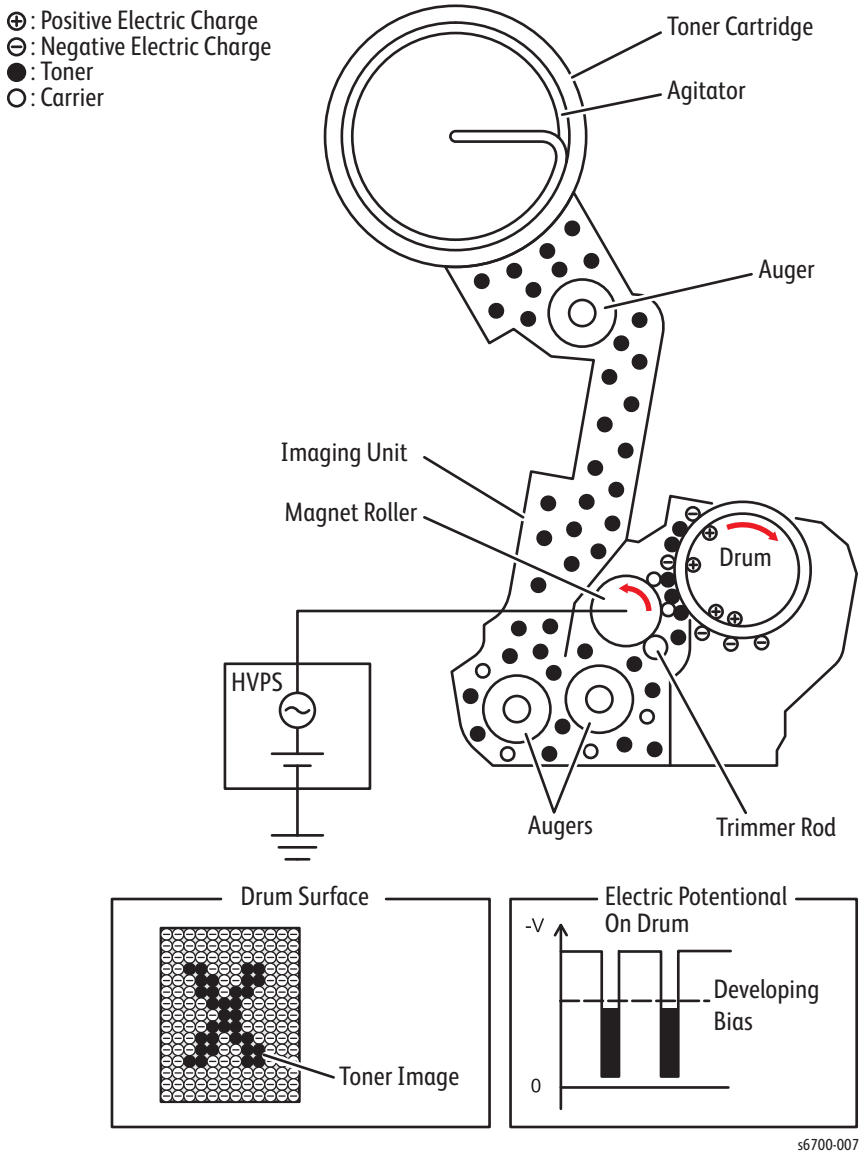
Toner is fed into the Imaging Unit by the agitator and auger driven by the Toner Motor. The amount of the toner fed is determined by the pixel count. This is called “toner dispensation”, which is controlled by two types of control, “PCDC” and “ADC”. Refer to “Toner Density Control” on page 2-80




In the Imaging Unit, the incoming toner is mixed with developer (toner/carrier mixture) by the auger, and supplied to the magnet roll located near the drum’s surface. The toner and carrier are charged by friction due to agitation (toner in negative, carrier in positive), and they attract each other electrically. The carrier, due to its magnetic properties, is attracted to the magnet roll, and then uniformly leveled by the trimmer rod.

The magnet roll is covered by a thin semi-conductive sleeve. A developing bias voltage is supplied to the sleeve from the High Voltage Power Supply (HVPS). The developing bias voltage is negative DC voltage combined with AC voltage. The DC voltage holds the magnet roll at a constant negative voltage against the photoreceptor layer of the drum. Therefore, at the area where the negative electric charge on the drum surface does not decrease, the potential is lower than that of the magnet roll, while the potential is higher than that of the magnet roll at the area where the negative charge on the drum surface decreases.

The AC voltage waveform shakes the developer on the surface of the magnet roll so that the toner easily moves to the drum. Only portions of the drum surface where the negative charge has decreased below that of the magnet roll (electrostatic latent image) attract toner to form an image.

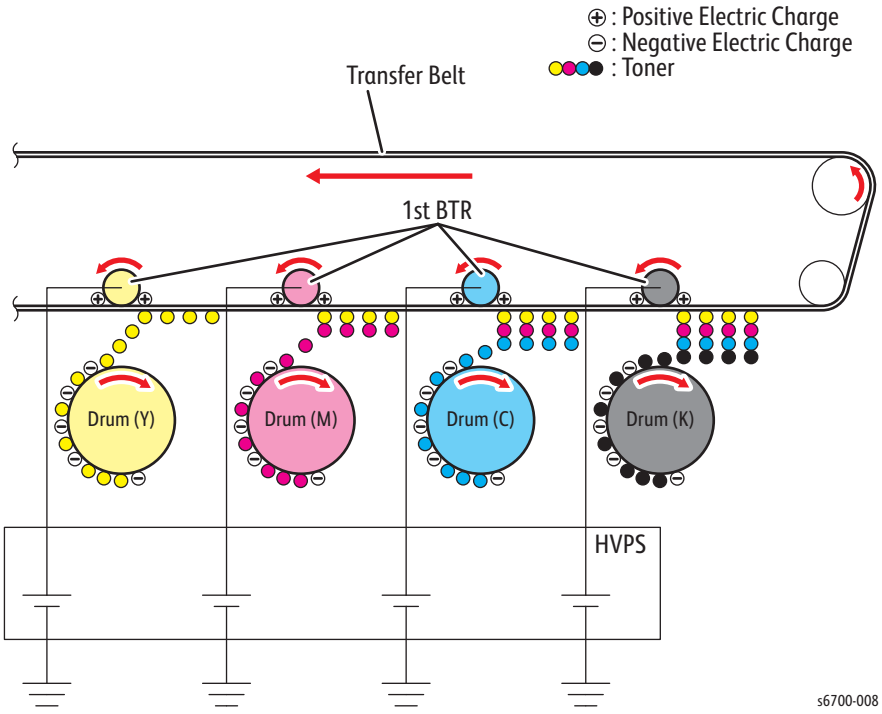


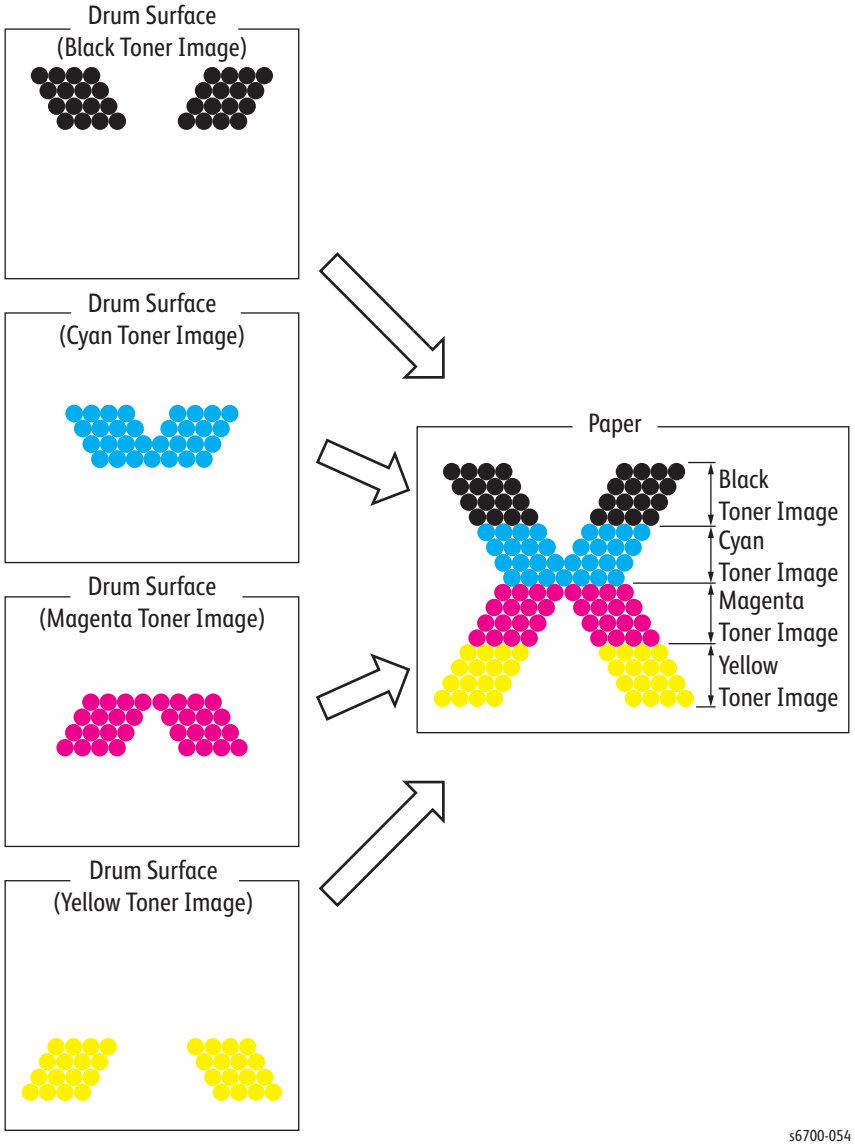
## Primary Transfer

During primary transfer, the images formed on the drums are transferred onto the Transfer Belt via the 1st BTR (first bias transfer roll). The four color images are transferred from the drums onto the Transfer Belt in Y, M, C, and K order.

The 1st BTR is a metal roll, to which the positive voltage from the HVPS is applied. The 1st BTR positively charges the backside of the Transfer Belt with the voltage generated by the contact resistance with the Transfer Belt.

The toner images on the drums move to the Transfer Belt due to the attracting force generated between the negative polarity of the toner image and the positive polarity on the Transfer Belt.




Drum Surface
(Black Toner Image)
Drum Surface
(Cyan Toner Image)
Drum Surface
(Magenta Toner Image)
Drum Surface
(Yellow Toner Image)
Paper
Black
Toner Image
Cyan
Toner Image
Magenta
Toner Image
Yellow
Toner Image
s6700-054

# Cleaning

During the cleaning process, excess toner and charge is removed from the drum and BCR surfaces.

## Drum Cleaning

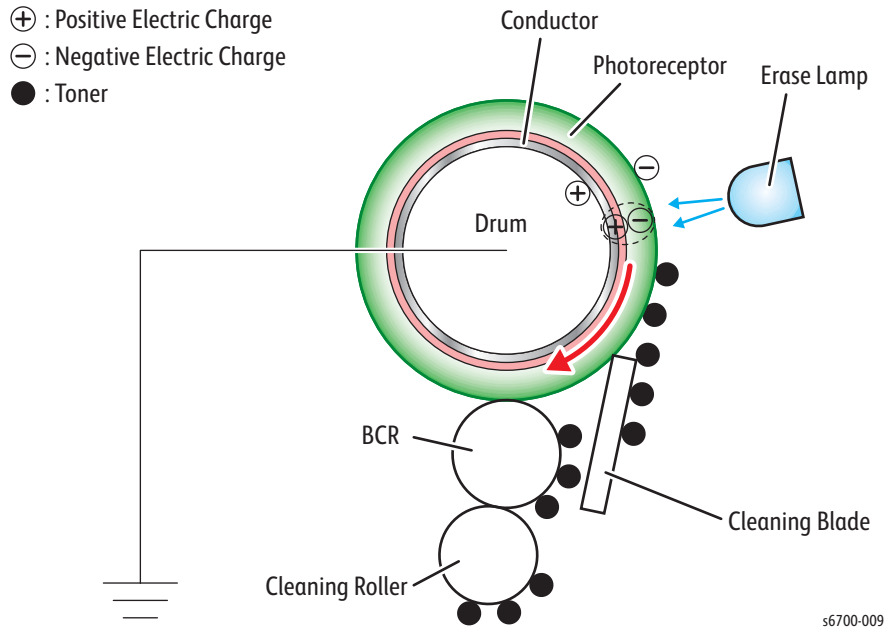
The excess toner that was not transferred to the Transfer Belt remains on the drum surface. To prevent image problems in subsequent prints, the excess toner is scraped off by the cleaning blade in contact with the drum, and then collected into the Waste Toner Box as described in “Waste Toner Collection” on page 2-16”.

## BCR Cleaning

Excess toner remaining on the BCR is removed by the cleaning roll made of spongy material, then collected into the Waste Toner Box as described in “Waste Toner Collection” on page 2-16”.

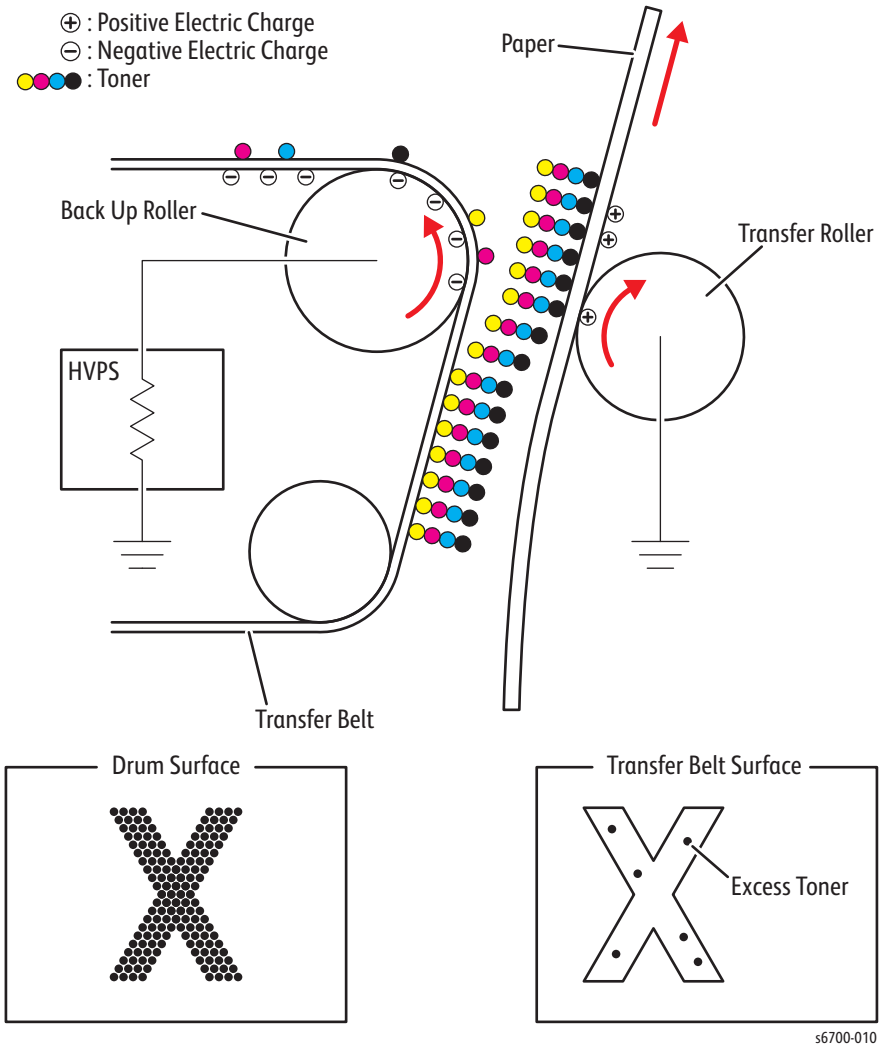
## Charge Neutralization

After primary transfer, the charge remaining on the drum is eliminated by the Erase Lamp.



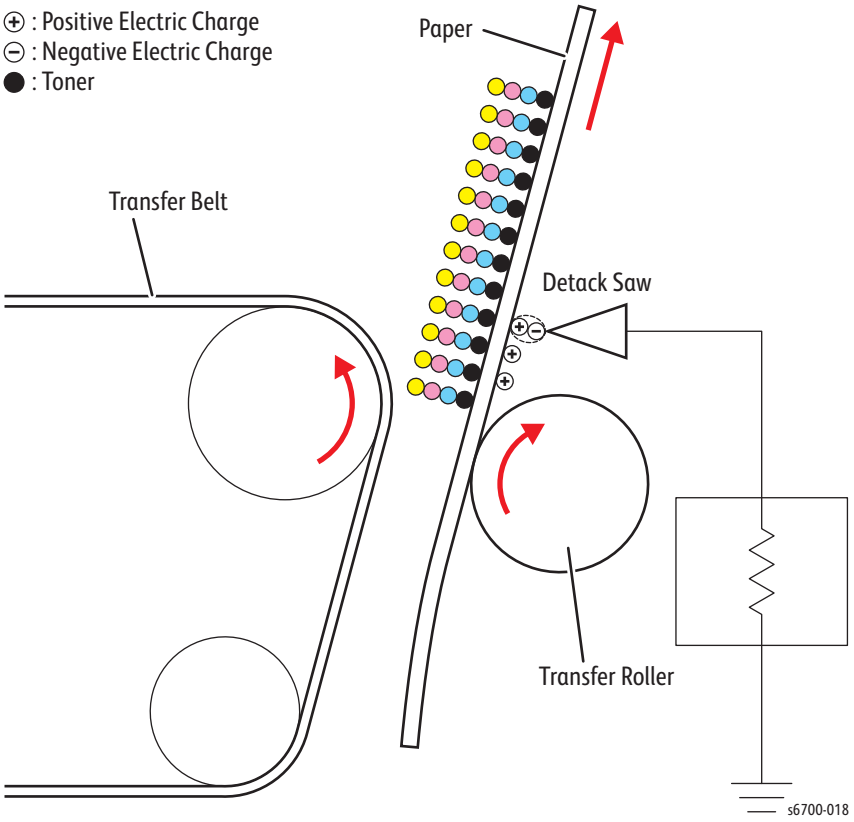
## Secondary Transfer

During secondary transfer, the toner image on the surface of the Transfer Belt is transferred onto the print medium using the Transfer Roller. The media passes between the Transfer Roller and Transfer Belt that runs in contact with the conductive roll (back up roll). The toner image on the Transfer Belt transfers to the media due to the attracting force generated between the back up roll negatively charged by the HVPS and the Transfer Roller grounded and positively polarized.



## Neutralization

During neutralization, the charge on the media is neutralized by the detack saw. The charge is neutralized to prevent toner on the media spreading to surrounding metal surfaces. The detack saw is a metal sheet held at chassis ground potential. The detack saw is installed several millimeters away from the of the Transfer Belt.

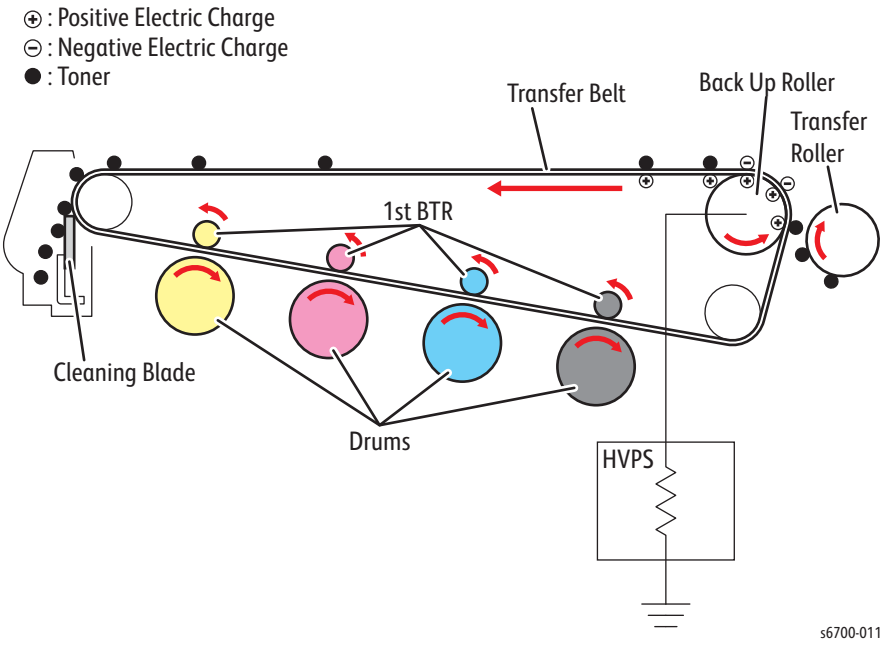


# Cleaning

During cleaning, the toner and charge remaining on the Transfer Belt and Transfer Roller are removed after the toner image is transferred onto the print medium.

## Transfer Belt Cleaning

Excess toner not transferred to the media remains on the Transfer Belt.To prevent image problems in subsequent prints, residual toner is scraped off by the cleaning blade and collected in the Waste Toner Cartridge as described in “Waste Toner Collection” on page 2-16”.



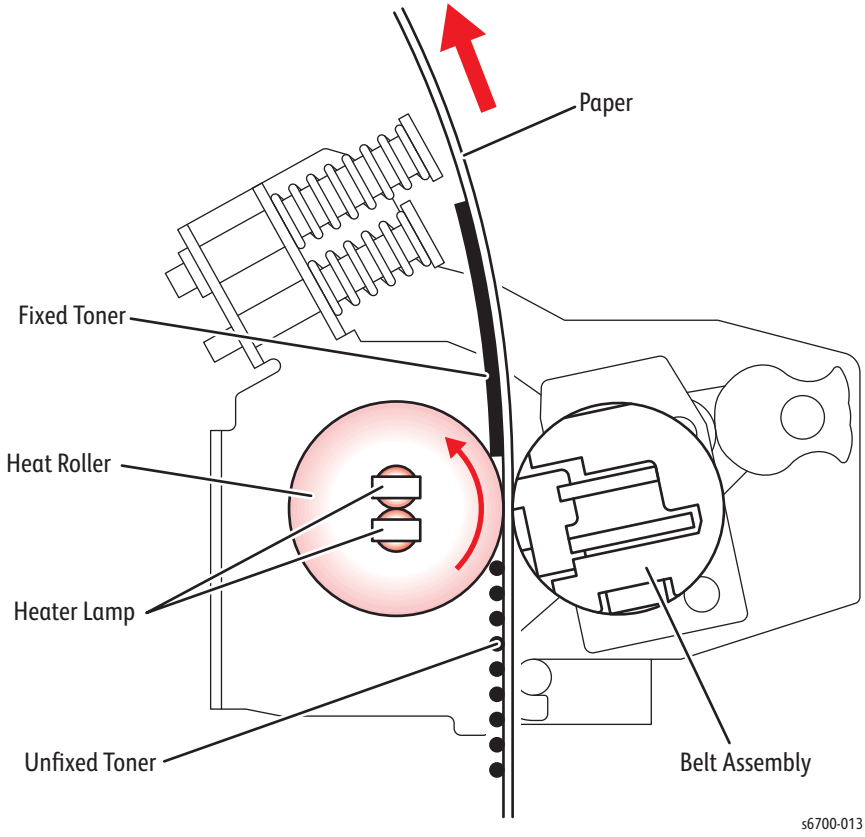

## Transfer Roller Cleaning

Excess toner deposited on the Transfer Roller is transferred back onto the Transfer Belt by the attracting force generated by the back up roll positively polarized by the HVPS. The excess toner remaining on the Transfer Belt is scraped off by the cleaning blade and collected into the Waste Toner Box as described in “Waste Toner Collection” on page 2-16”.

## Fusing

During Fusing, toner is fixed on the media by heat and pressure. The toner particles are melted by the heat roll heated by the heater lamp, and fused by the pressure between the heat roll and belt. The belt, friction-driven by the heat roll, nips the media against the heat roll.

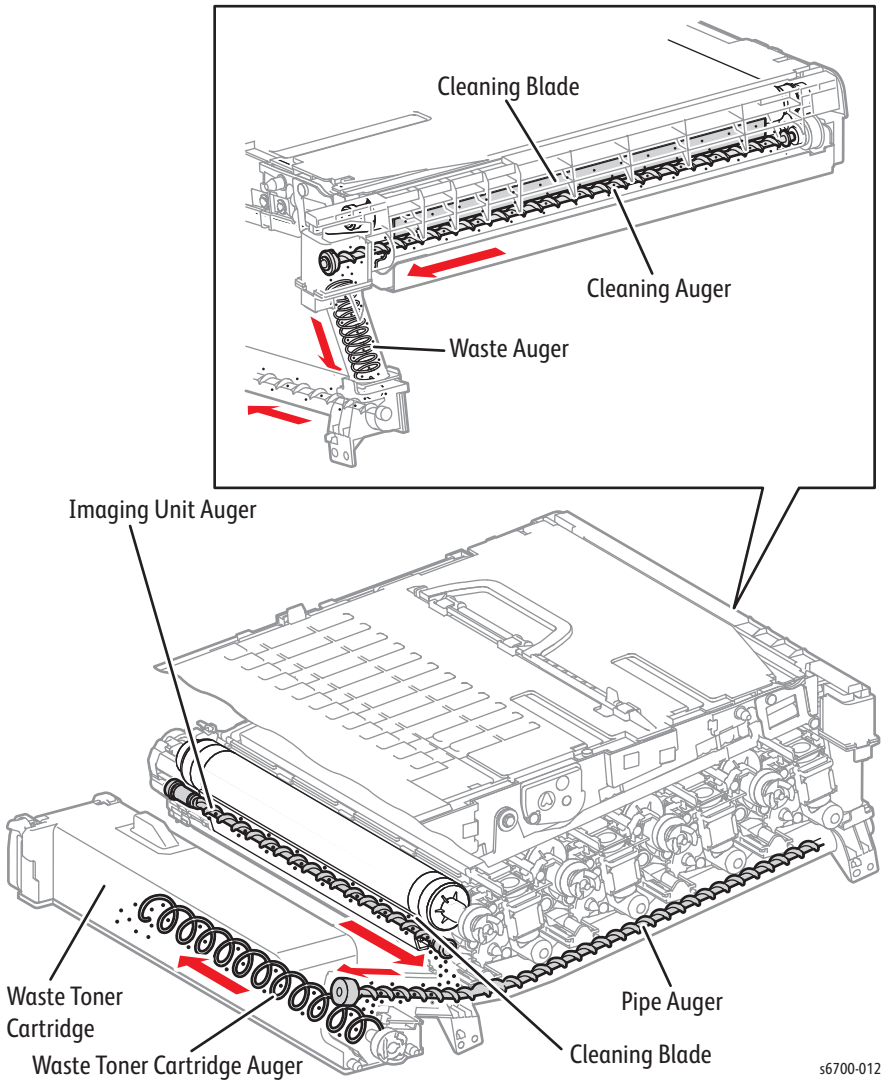
Fuser life is determined by number of prints. Life is 100K A/A4 pages to a near end of life, 125K A/A4 pages to end of life.



## Waste Toner Collection

The waste toner generated during cleaning and the degraded developer exhausted from each developer unit are transported to the Waste Toner Cartridge by multiple augers.

Waste toner status is determined by the Waste Toner Full Sensor for near full and a page counter for full. Waste Toner Cartridge life should be 25 K A/A4 pages at 5 % coverage per toner, 20 % cumulative, to almost full and another 3600 pages to full.



# Sensors

The printer contains sensors of various types that perform a variety of functions. One group of sensors track the movement of media along the paper path, and detect if a jam occurs. Other sensors detect the presence of the Toner Cartridges, stop printer activity if a door is open (interlock), and monitor fusing temperature. The types of sensors used vary with function. This table briefly describes the type and function of sensors and switches used to determine operational status and detect jams or failures.

**List of Sensor and Interlock Functions**

| Name | Type | Function |
|---|---|---|
| Level Sensors 1, 2 | Photo-receptive | Detects media stack height in Trays 2~6 |
| No Paper | Photo-receptive | Detects no paper condition in all trays |
| Take Away | Photo-receptive | Detects media entering the media path |
| Size Switch | Microswitch array | Detects loaded media size |
| Front Door | Microswitch | Detects when the Front Door is open. |
| Registration | Photo-receptive | Detects paper at the registration rollers. |
| Switching | Photo-receptive | Detects Color or B/W print mode. |
| Exit | Photo-receptive | Detects paper as it leaves the exit. |
| Full Stack | Photo-receptive | Detects when the Output Tray is full. |
| Waste Toner | Photo-receptive | Detect toner level in the Waste Toner Cartridge. |
| Envelope Mode | Photo-receptive | Detect the position of the Envelope Mode Lever on the Fuser. |
| Temperature | Thermistor | Monitor temperature of the Heat Roller. |
| Door Interlocks | Microswitch | Interrupts +24 V to the Main Motor |
| Self Priming | Photo-receptive | Detects staple ready |
| Staple Home | Photo-receptive | Detects Stapler head position |
| Low Staple | Photo-receptive | Detects Staple Cartridge near empty. |
| Thermostats | Thermostatic switches | Interrupts AC power to the Fuser. |
| Offset | Photo-receptive | Senses the position of the Offset Chute. |
| Environmental | Integrated circuit | Monitors internal temperature and humidity. |
| Home Position | Photo-receptive | Detects home position. |

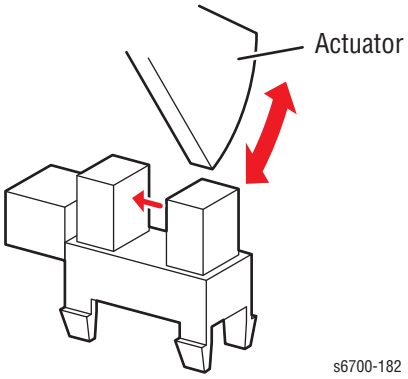
In general, there are three types of sensors are in use:

- Photo sensors
- Microswitches
- Thermistors

## Photo Sensors

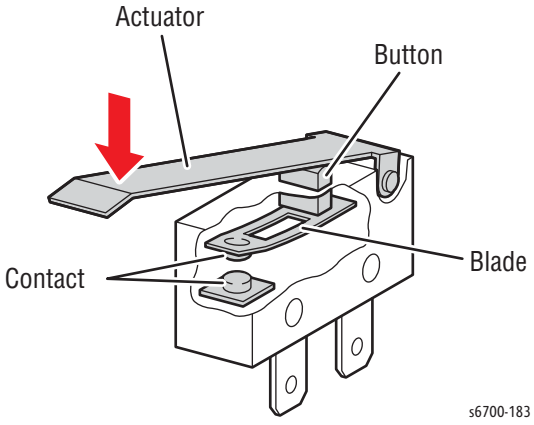
Two types of photo sensors are used, photo-reflective and photo-receptive. Photo-reflective sensors use light reflected back from an object to detect its presence. Photo-receptive sensors use an actuator or the object itself to block the light path to detect an object or condition.

Photo-reflective sensors have the light emitter and light receiver aligned on a single surface. Output of the photo-receptor is High (> +4.5 V) when light is being reflected back and Low (< +.3 V) when it isn't. Photo-receptive sensors consist of a LED in one arm of a U-shaped holder, and a photo-transistor in the other arm. When the sensing area is vacant, nothing is between the arms of the sensor, light falls on the photo-receptor sending the signal High. If the light is interrupted, the photo-transistor goes Low. The figure below shows a typical photo-receptive sensor with the Hooks (catches) used to secure the sensor to its bracket.




## Microswitches

Microswitches are used primarily as interlocks in the printer. They are in a normally open state, and close when actuated. A bank of microswitches is used to detect paper size in the universal trays. Microswitches also employ hooks or catches for retention in the bracket or frame. The figure illustrates a typical microswitch.



### Thermistor

Thermistors have a known value of resistance whose value varies with temperature. Used primarily in the Fuser for temperature sensing.

### CRUM

RFID devices that read and write data into NVRAM are otherwise known as CRUMs. CRUMs are present in Toner Cartridges, Imaging Units and Fuser. The toner CRUMs identify the cartridge type (Standard, Meter or High Capacity). The CRUMs contain an OTP part to record new or used cartridge. The rotation count, pixel count and page count data for supplies page are stored in the toner CRUM.

## Sensors in the Media Path

The following illustrations show the designations of the various sensors located along the paper path. Error reporting is dependent on these designators. Error detection is based on paper transport timing through the sensing area.

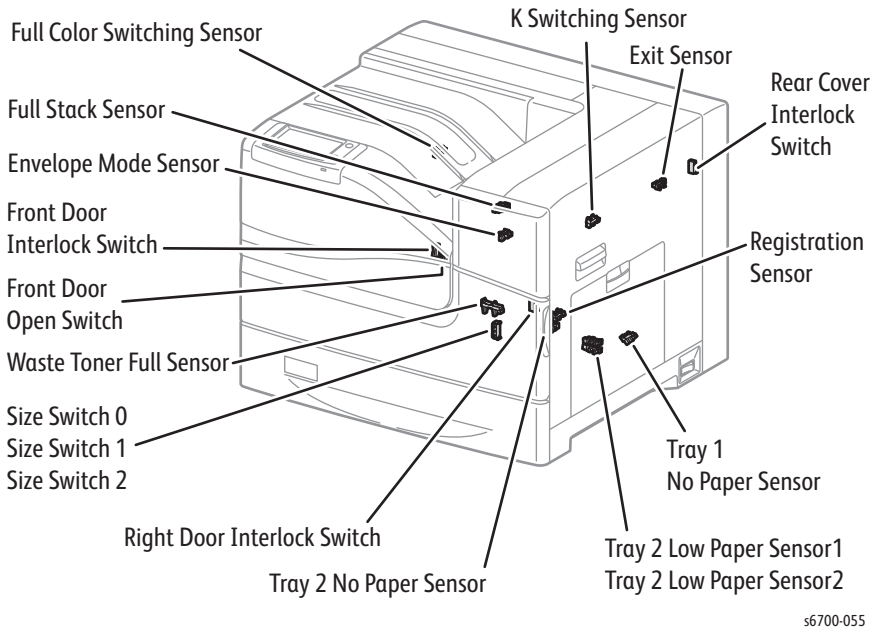
### Sensors in the Printer

#### Interlock Sensors

The Interlock Switches disable +24 V when the Front or Right Door is opened. The Rear Cover Interlock Switch blocks +5V to the Laser Unit when open.

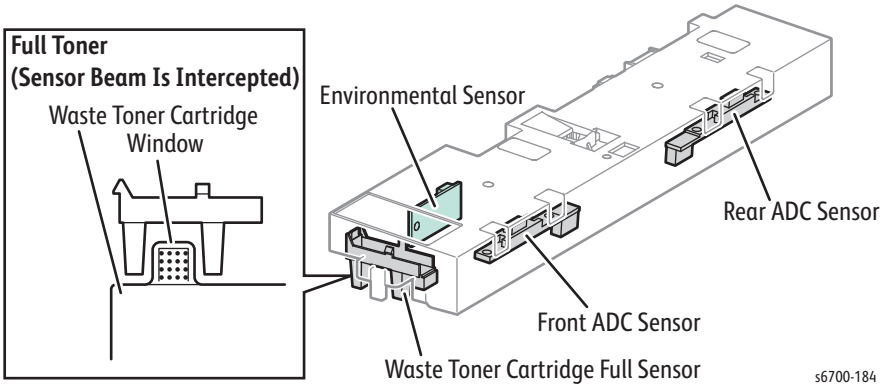
#### Media Feed Sensors

The diagram below identifies the remaining paper feed sensors in the printer, optional feeders, and Finisher.



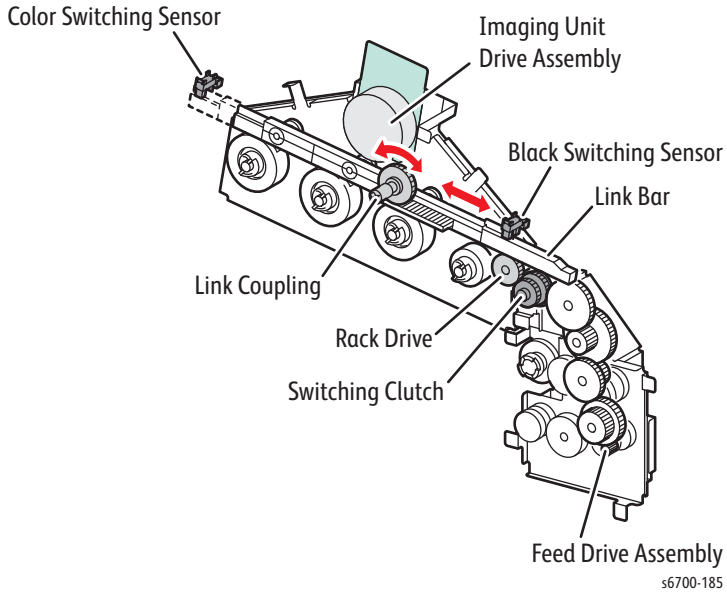
## Process Control Sensors

Process control sensors, located in the Process Control Assembly (Procon) monitor the environment, toner application, and image quality.



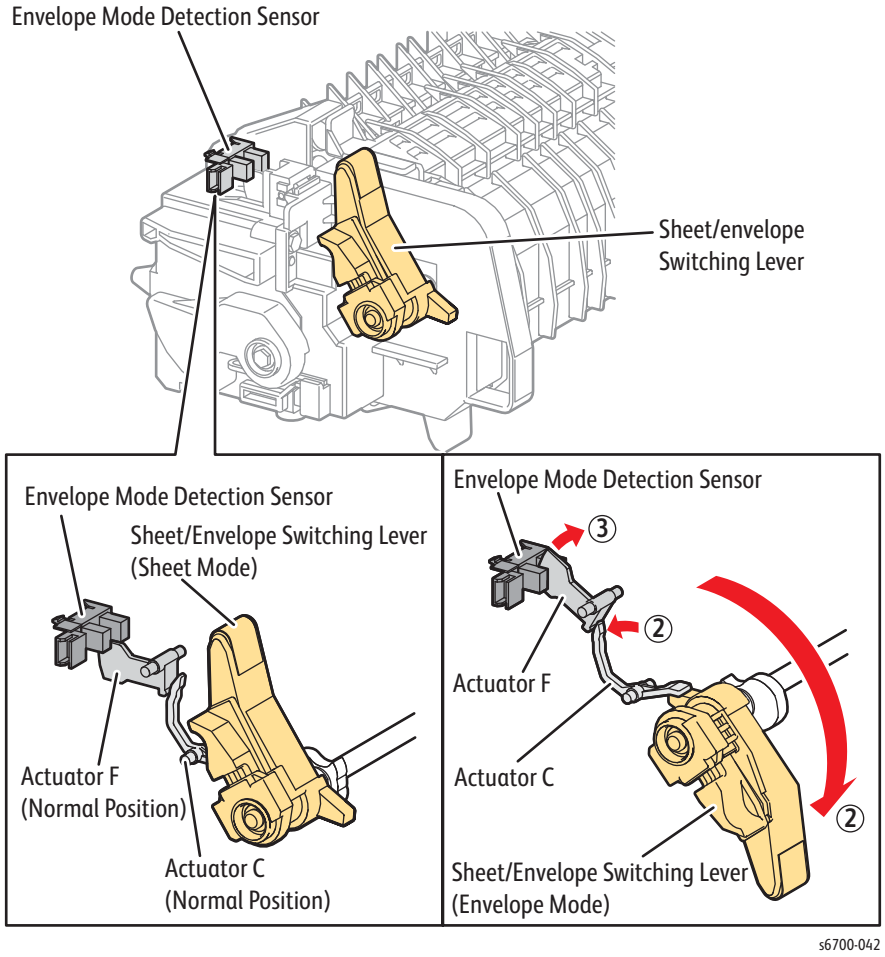

## Mode Switching Sensors

The Color and Black Switching Sensors detect link bar position to indicate which mode the printer is running in (color or B/W). The Switching Sensor blocked by the link bar indicates the current mode to the controller.



## Envelope Mode Detection

The Envelope Mode Detection Sensor, located on the Exit Assembly, detects the position of the sheet/envelope switching lever on the Fuser. The sheet/envelope switching lever is switched between Sheet Mode or Envelope Mode depending on the media used. Envelope Mode reduces Fuser nipping pressure to prevent wrinkles or slacks on envelopes due to heat and pressure during fusing.




s6700-042

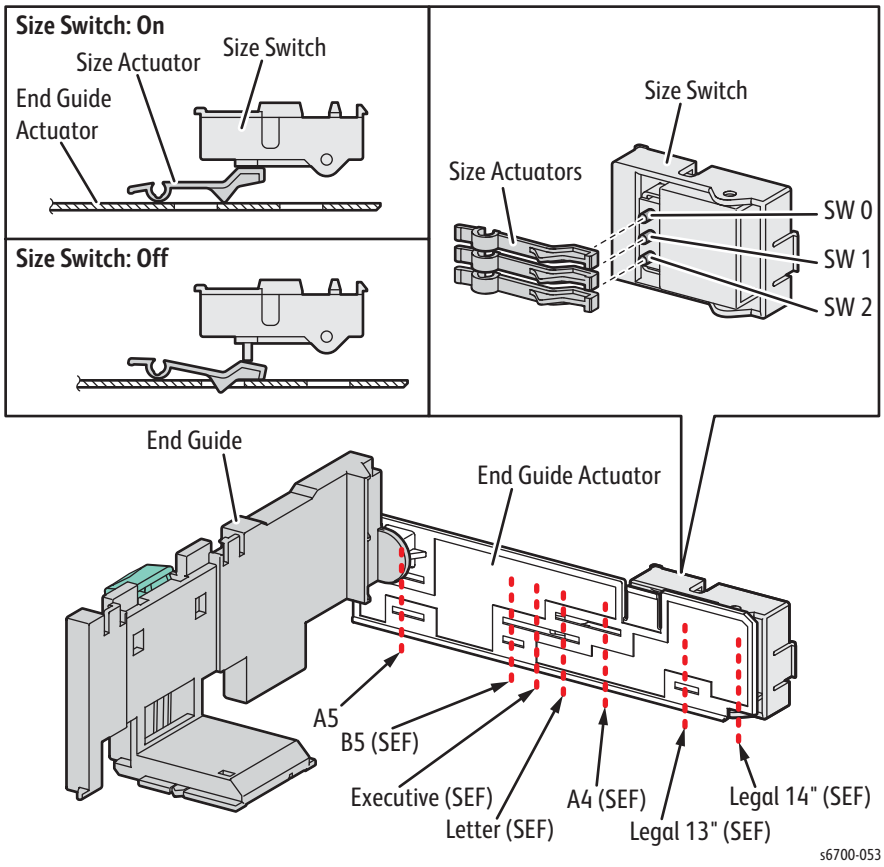
## Media Size Detection

When the Tray is inserted and the end guide aligned to the media stack, the position of the size actuator that is coupled to the end guide, turns On or Off the the switches of the Size Switch. The following table shows the correspondence between switch status and the paper size. The switches are referred to as Size Switch (SW) 0, SW1, and SW2 from top to bottom. This detection method is also used in the Optional Feeders.

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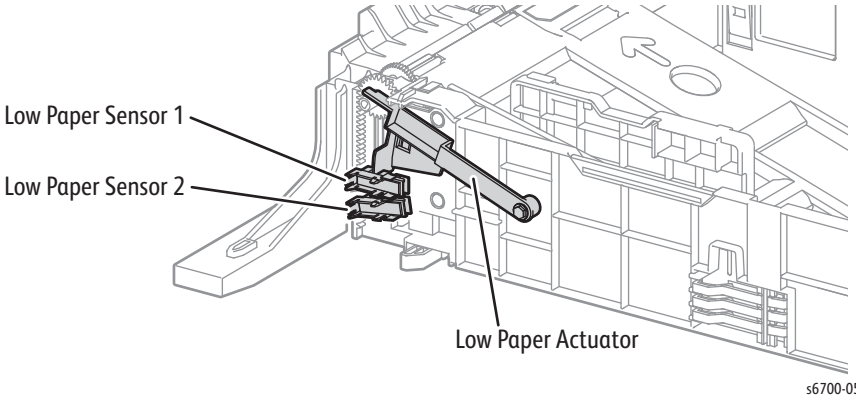
| Media Size | Size Switch[a] | | |
|---|---|---|---|
| | SW0 | SW1 | SW2 |
| Legal14" (SEF) | On | On | On |
| Legal13" (SEF) | On | On | Off |
| Executive (SEF) | On | Off | On |
| B5 (SEF) | On | Off | Off |
| A4 (SEF) | Off | On | On |
| Letter (SEF) | Off | Off | On |
| A5 | Off | On | Off |
| No Tray | Off | Off | Off |

a. On: The actuator is pushing the size switch.

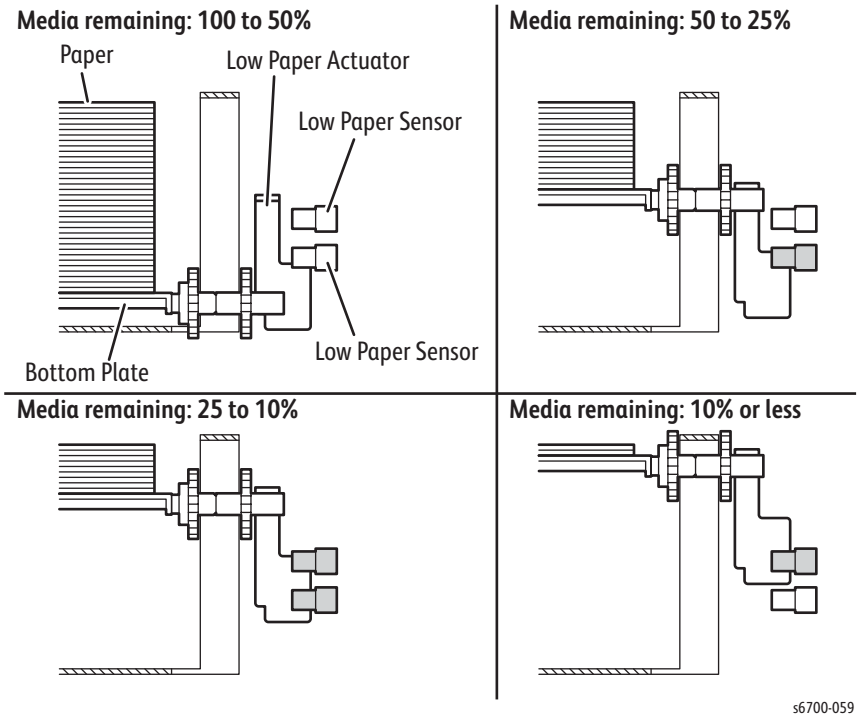


## Media Level Sensing

As media is fed from the Tray, the media level drops. When the media level reaches a certain point, an actuator interrupts the level sensors signaling level status until the No Paper Sensor is activated. Paper level sensing operates the same way for Trays 2 through 6. Tray 1 uses No Paper sensing only. The Low Paper Sensors detect the amount of the media remaining in the Tray in three levels (50, 25, and 10 % ).




s6700-058

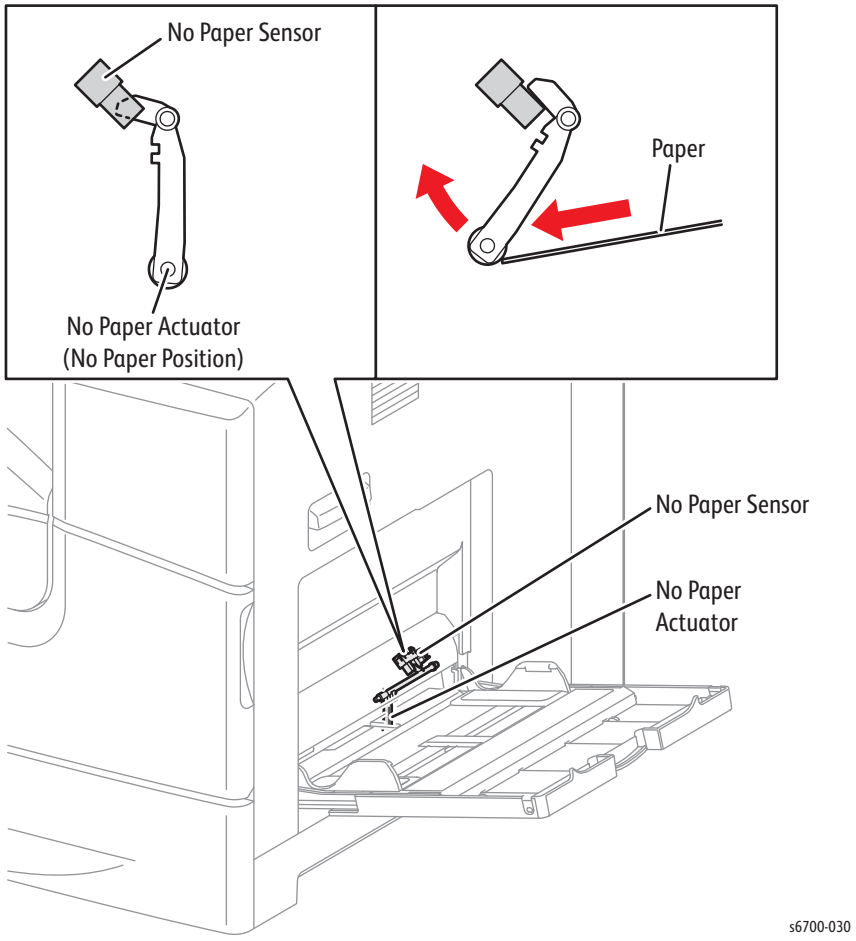



s6700-059

## Media Detection

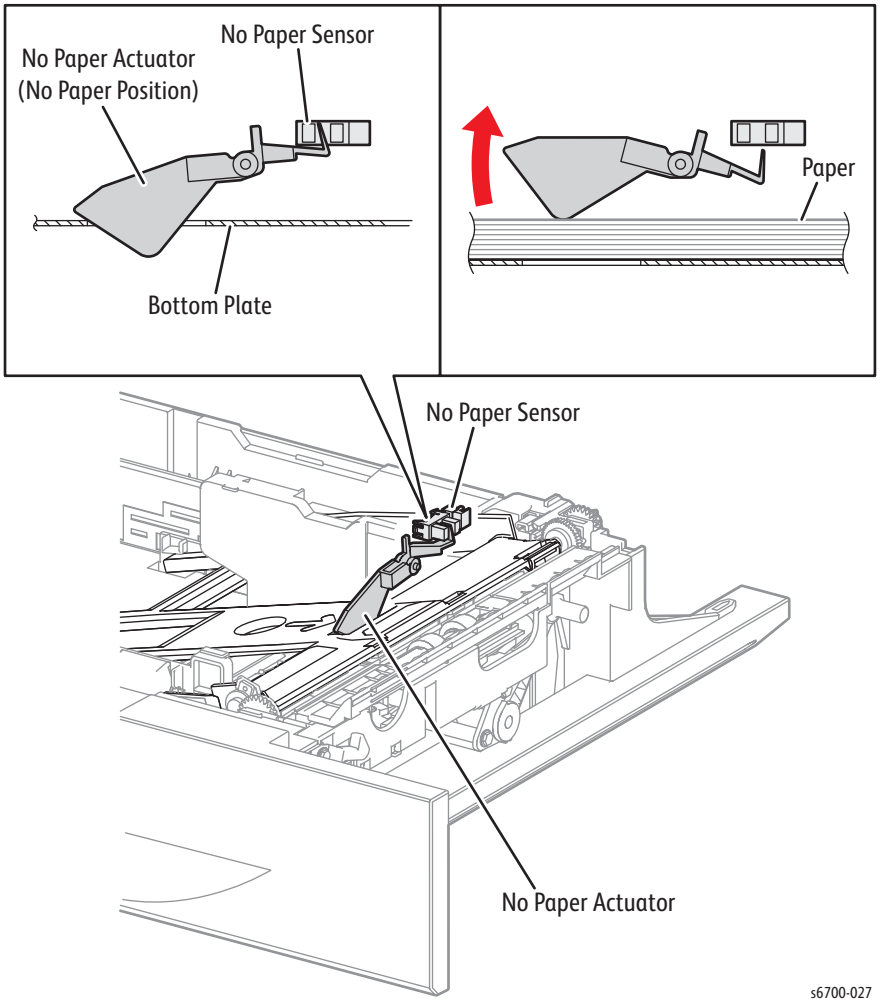
### Tray 1

The Tray 1 No Paper Sensor detects media in the Tray by an actuator.



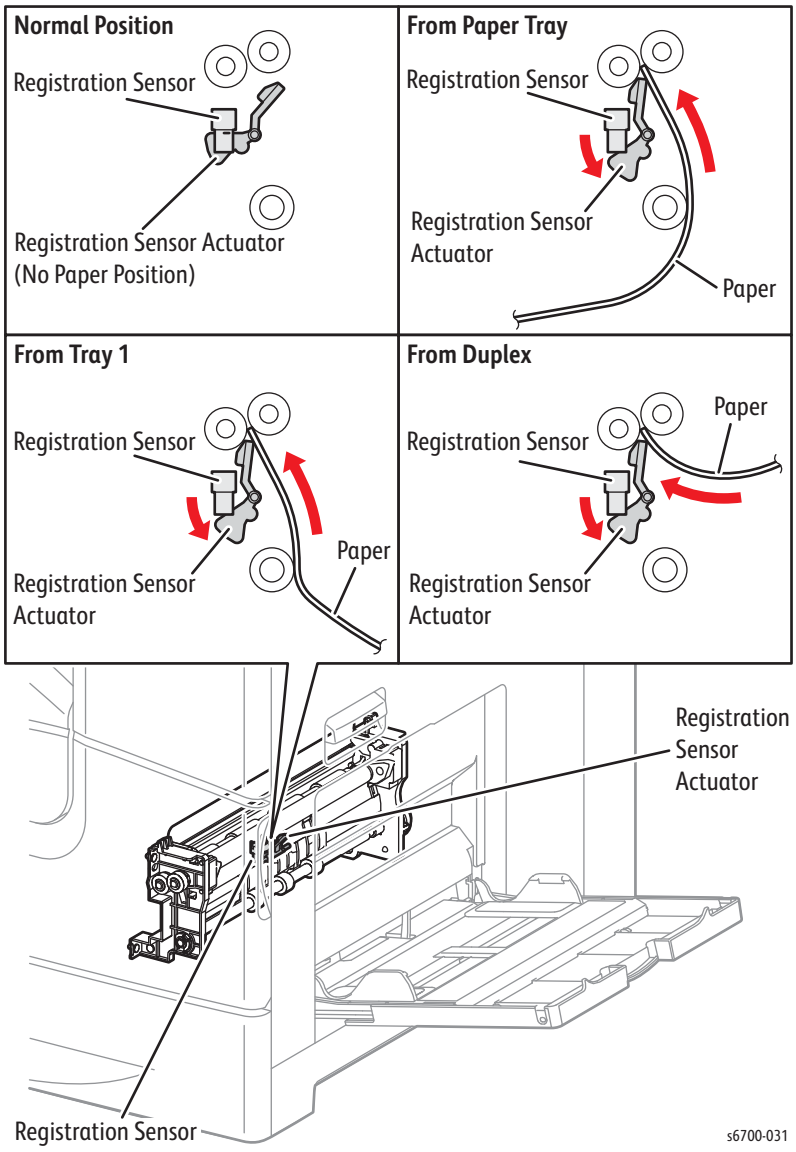
## Trays 2 through 6

When the last sheet is fed from any of the universal trays (Trays 2 ~ 6), the No Paper Sensor actuator drops into an opening in the bottom plate, blocking the sensor. Feeding is inhibited until media is loaded into the tray.



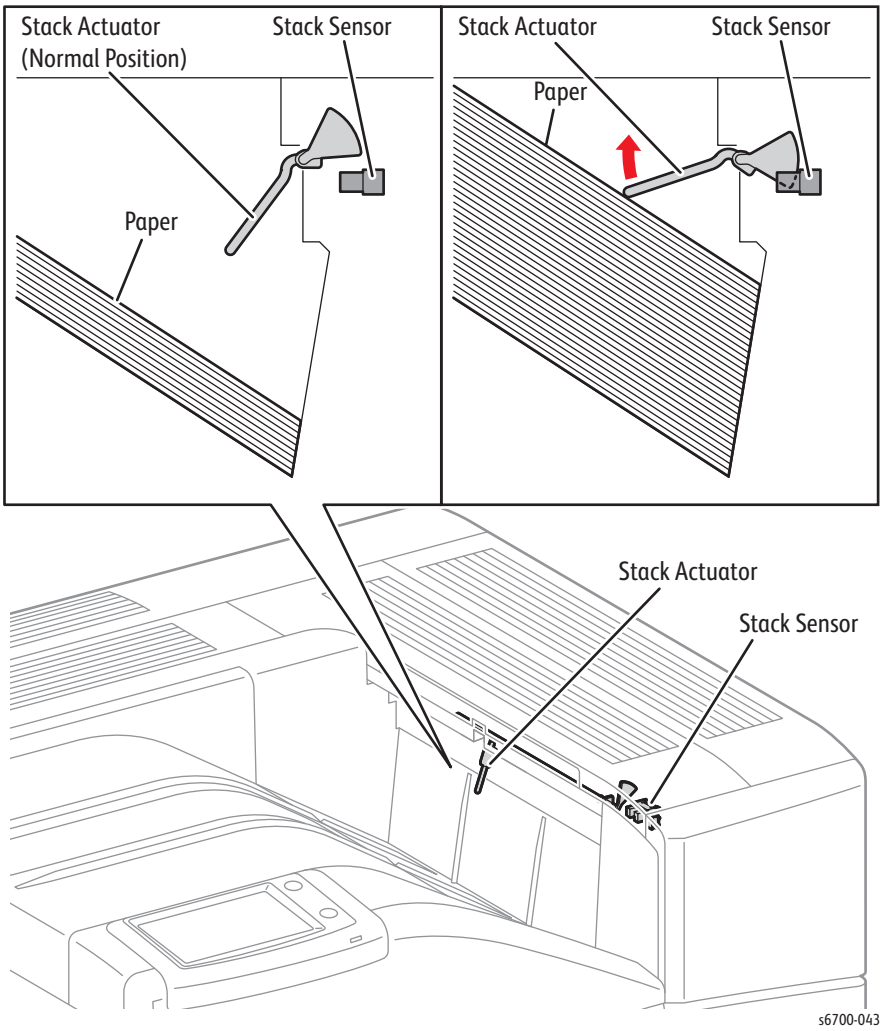
## Media Registration

The Registration Sensor detects the leading edge of the media, and by duration of the On signal, media length.



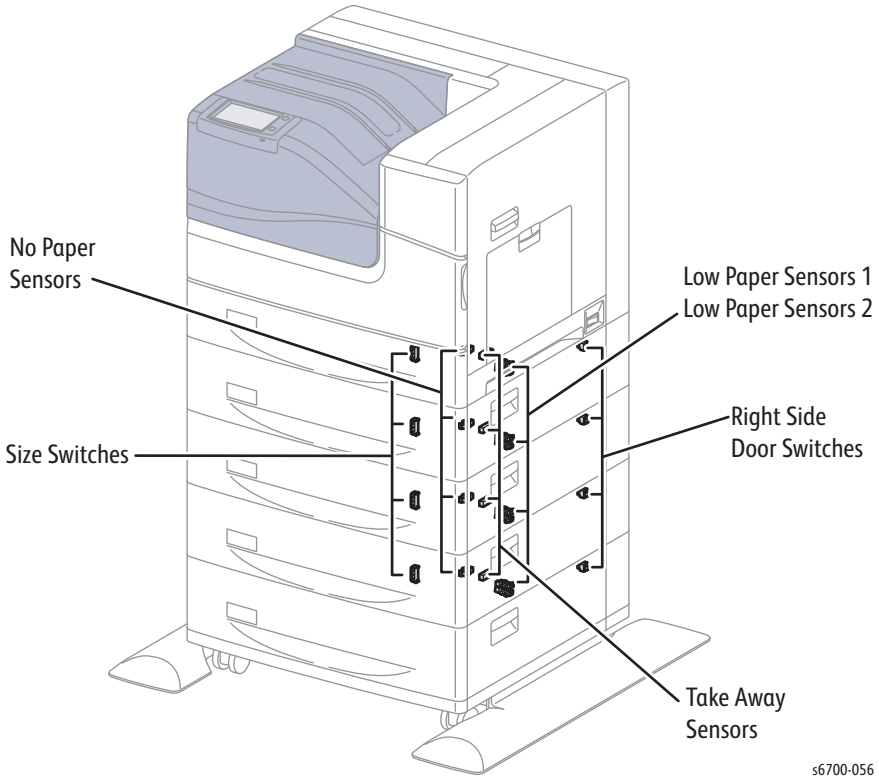
## Output Tray

The Full Stack Sensor, located above the Output Tray in the Exit Assembly detects when the Output Tray has reached its capacity.



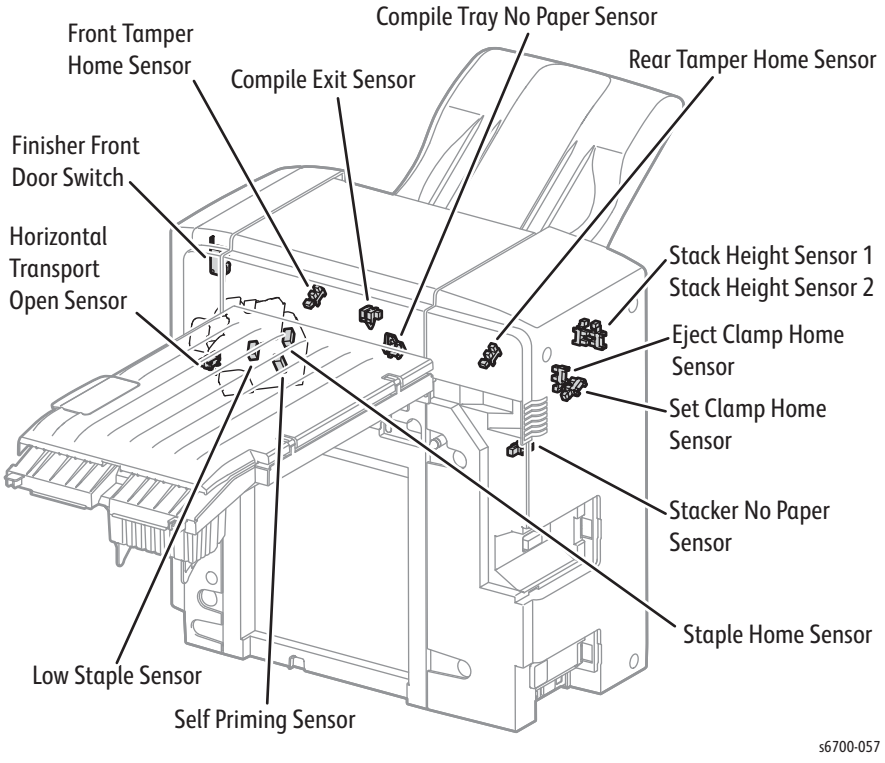
## Optional Tray Sensors

The diagram below identifies Optional Feeder sensors.



## Finisher Sensors

The diagram below identifies Finisher sensors.

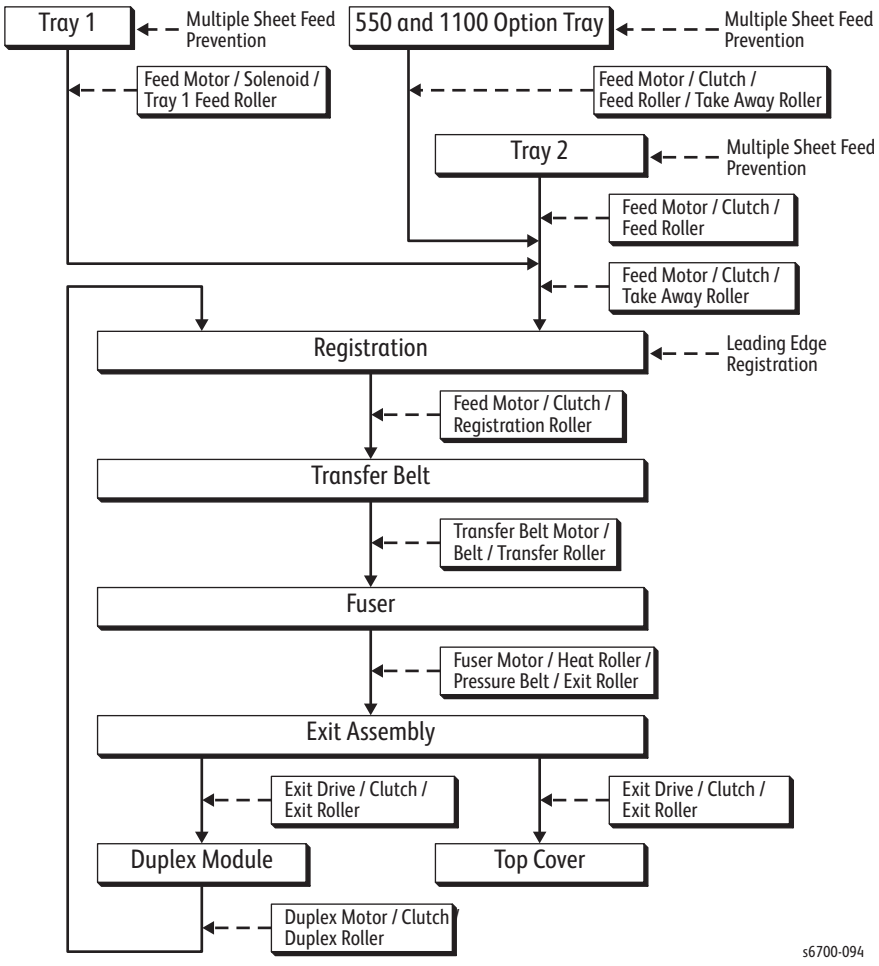


# Media Handling

Media is driven along the media path by various drive motors, belts, gear assemblies and rollers. Synchronization of these components is managed by the MCU Board. The operating system monitors sensors located along the media path throughout the print engine and attached options. As a sheet travels along the media path, sensors change state temporarily to indicate the sheet's presence. If the pattern of sensor state changes differs from the expected timing for a particular media size and path, an error is reported.

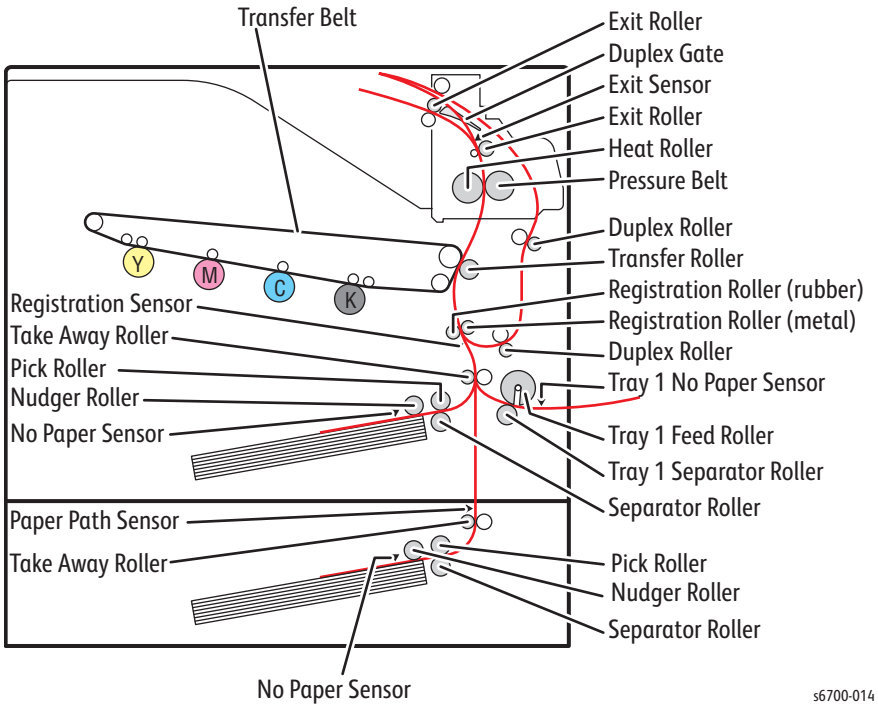
## Printer Media Path Drive

The illustration shows the flow of media, shown as solid lines, and the related drive components, shown by dashed lines, through the media path.



## Printer Media Path Components

The illustration shows the flow of media, shown as dashed lines, and identifies key drive components of the printer.



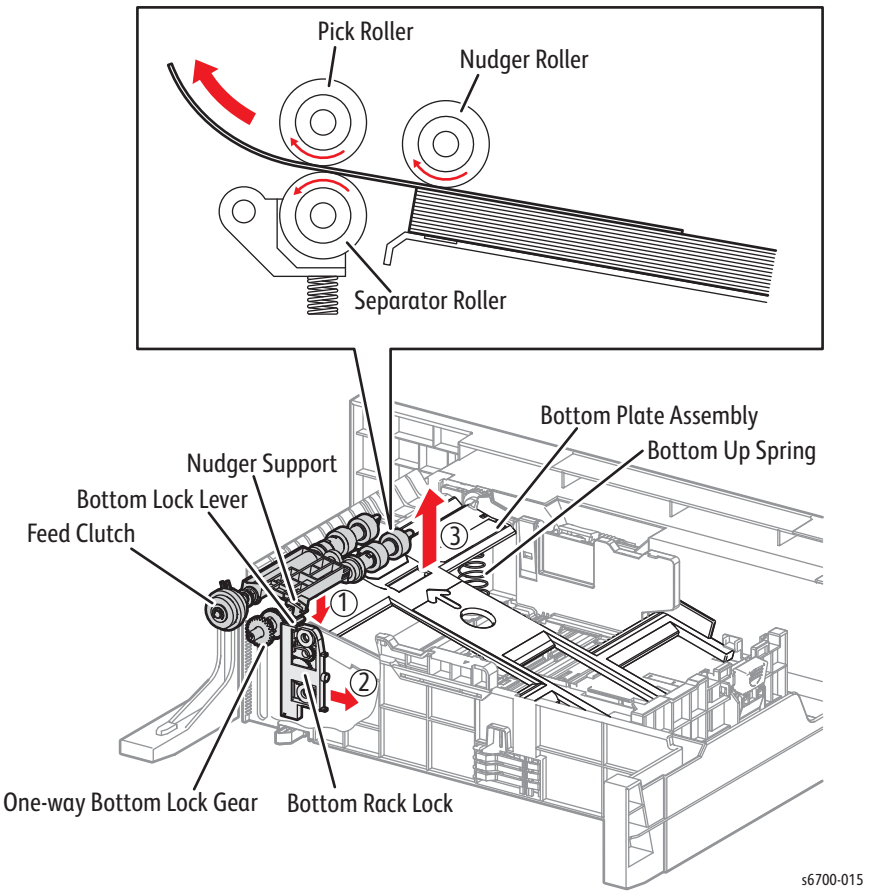
## Multipurpose Tray 1

When feeding from Tray 1 starts, the Feed Roller rotates, driven by the Feed Drive Assembly and controlled by the Tray 1 Feed Solenoid, and feeds media to the position where it is nipped between the Feed and Separator Rollers.

## Trays 2 ~ 6

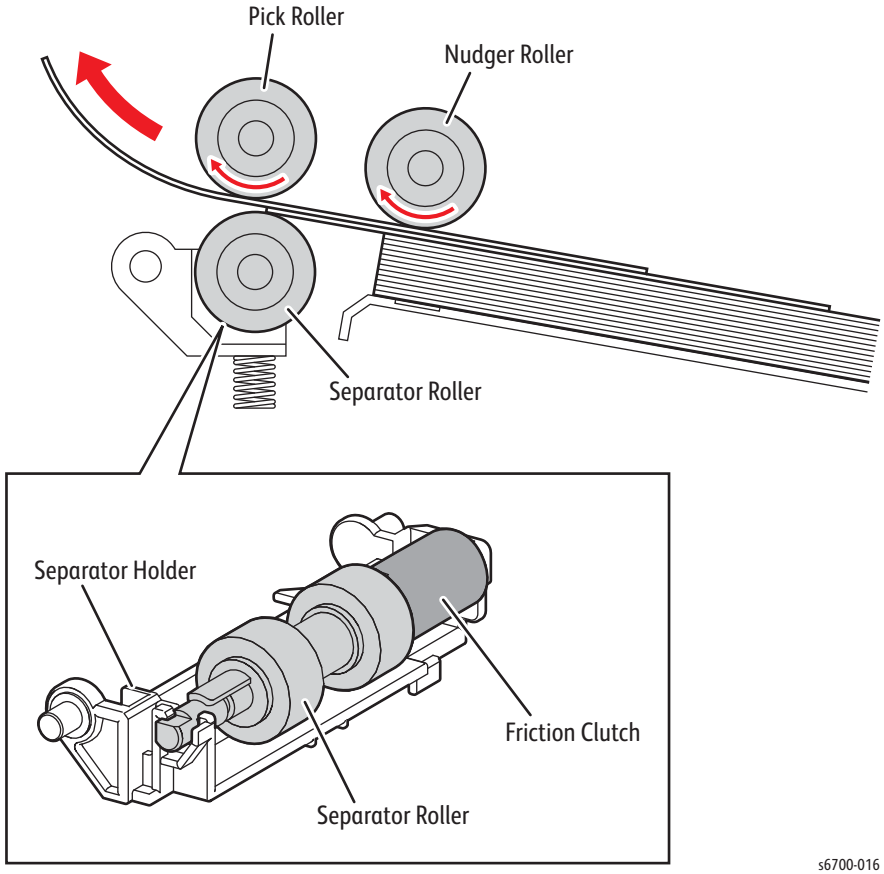
Inserting the Tray into the feeder unlocks the bottom plate. When the Tray is pushed in until it stops, the support nudger pushes the bottom lock lever and disengages the gear of the bottom rack lock from those of one way lock gear, allowing the bottom plate to rise to the feeding position by spring pressure.

When feeding starts, the Nudger Roller and Feed Roller rotate, driven by the Feed Drive Assembly and controlled by the Feed Clutch. The Nudger Roller feeds the media to the position where it is nipped between the Feed and Separator Rollers.



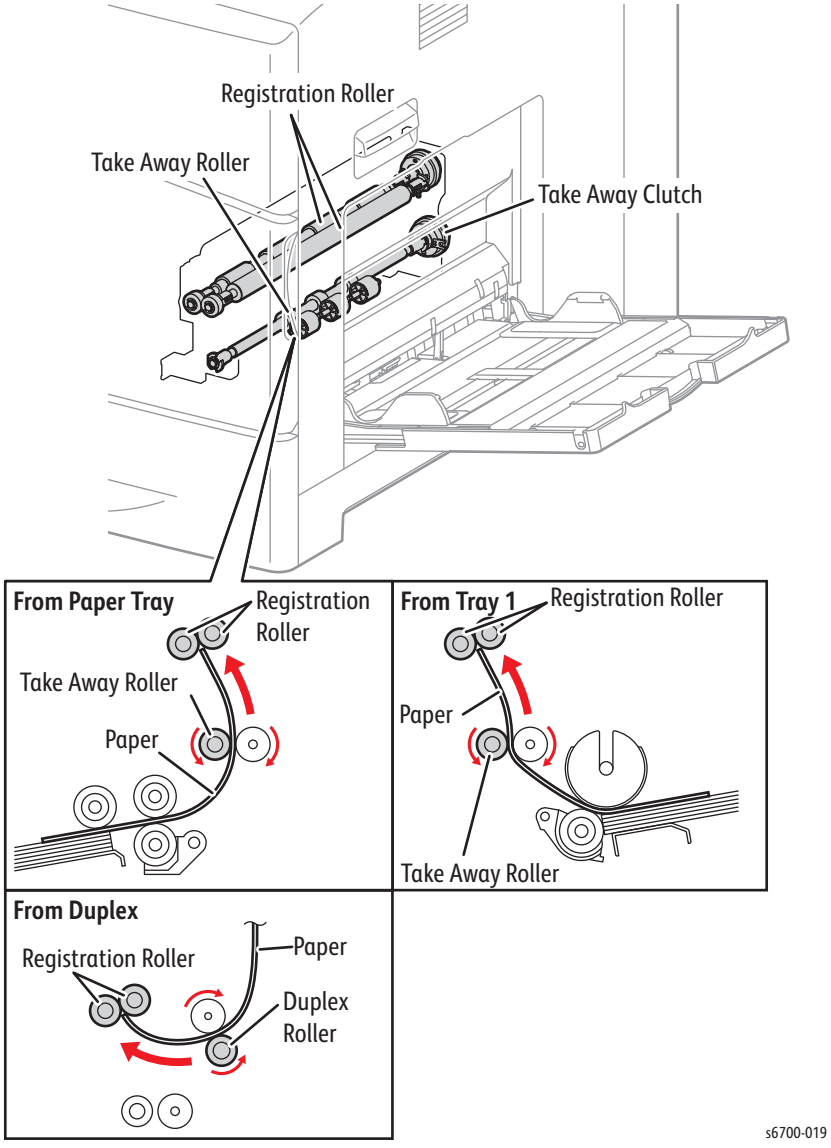
## Multiple Sheet Feed Prevention

Normally, when only one sheet is fed, both the Feed Roll and Separator Roller rotate to allow the sheet to pass. However, when two sheets are fed concurrently, the Feed Roll rotates freely, but the additional thickness engages the Separator Roller friction clutch stopping the second sheet. The Separator Roller is pushed toward the Feed Roll by spring pressure, and controlled by the friction clutch.

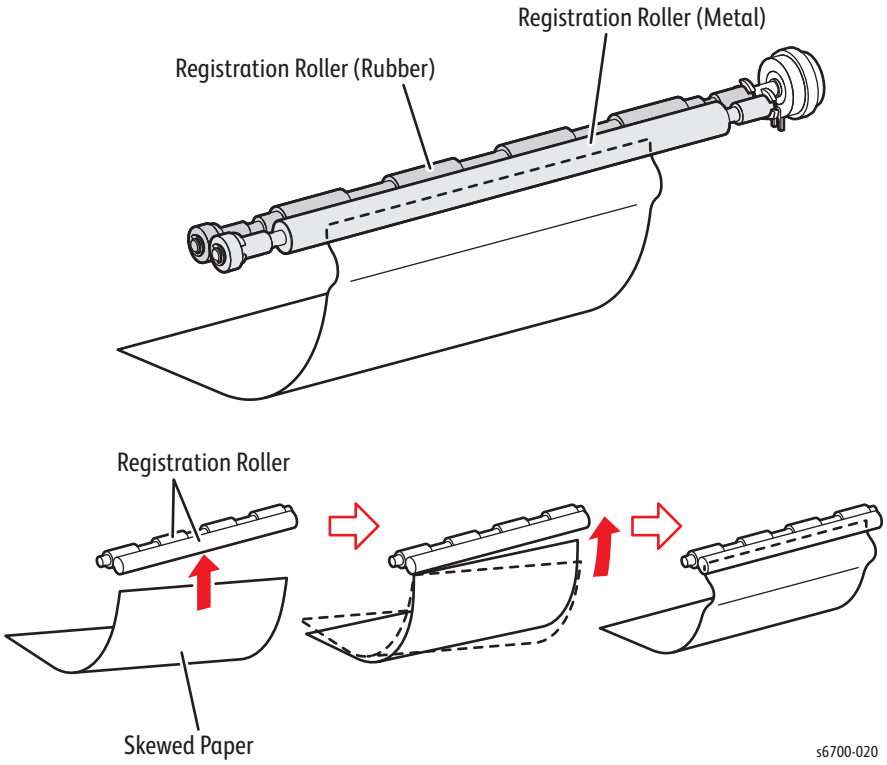


## Media Registration

Sheets fed from the trays are guided into the registration area by the Take Away Roller driven by the Feed Drive Assembly and controlled by the Take Away Clutch. Sheets fed from the duplex area are guided to the registration area by the Duplex Rollers.



The leading edge of the sheet reaches registration and is fed to the toner transfer section (Transfer Roller). When a sheet is fed to the toner transfer position, 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.

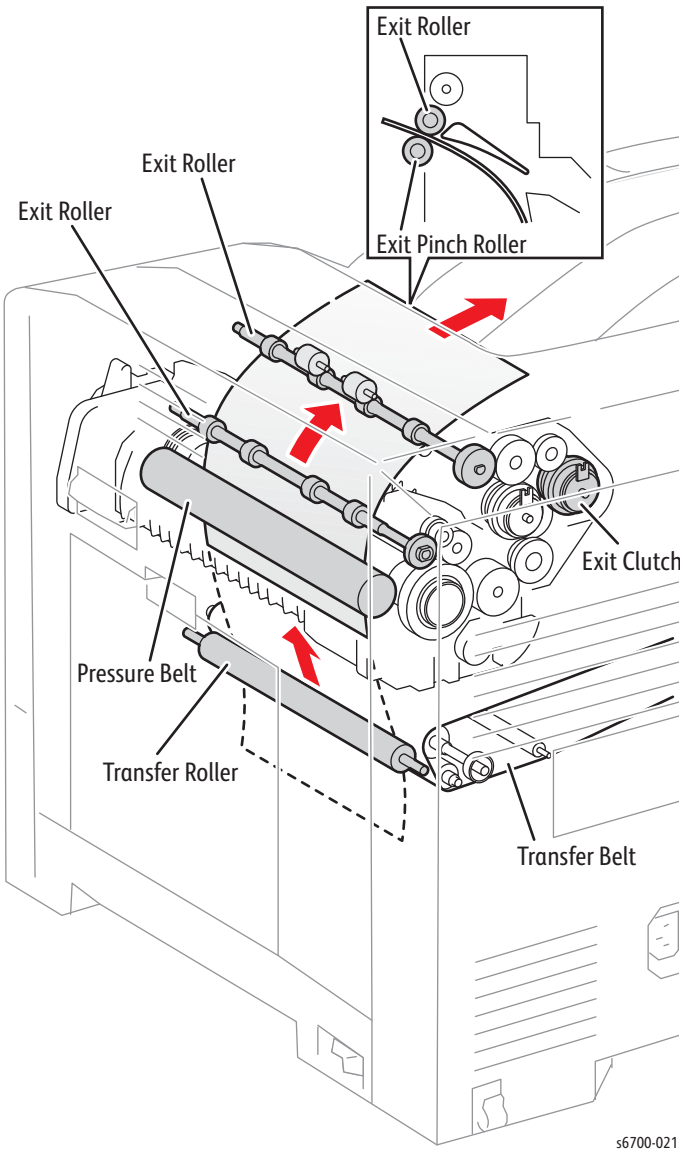



Before the registration rollers are energized, the paper is advanced from the tray to the rollers. By pushing the edge of the sheet against the registration roller that is not turning, the lead edge of the sheet is registered.

## Transfer/Fusing/Exit

Sheets that pass the registration section reach the transfer position where it is nipped between the Transfer Belt and Transfer Roller driven by the Transfer Belt Drive Assembly. The toner image on the Transfer Belt is transferred onto the sheet, and then fused by heat by the Fuser driven by the Fuser Drive Assembly while the sheet is being fed to the Exit Assembly.

In the exit section, the sheet whose side 1 or side 2 has been printed is fed to the exit direction by the Exit Roller driven by the Fuser Drive Assembly and controlled by the Exit Clutch in the Exit Drive.

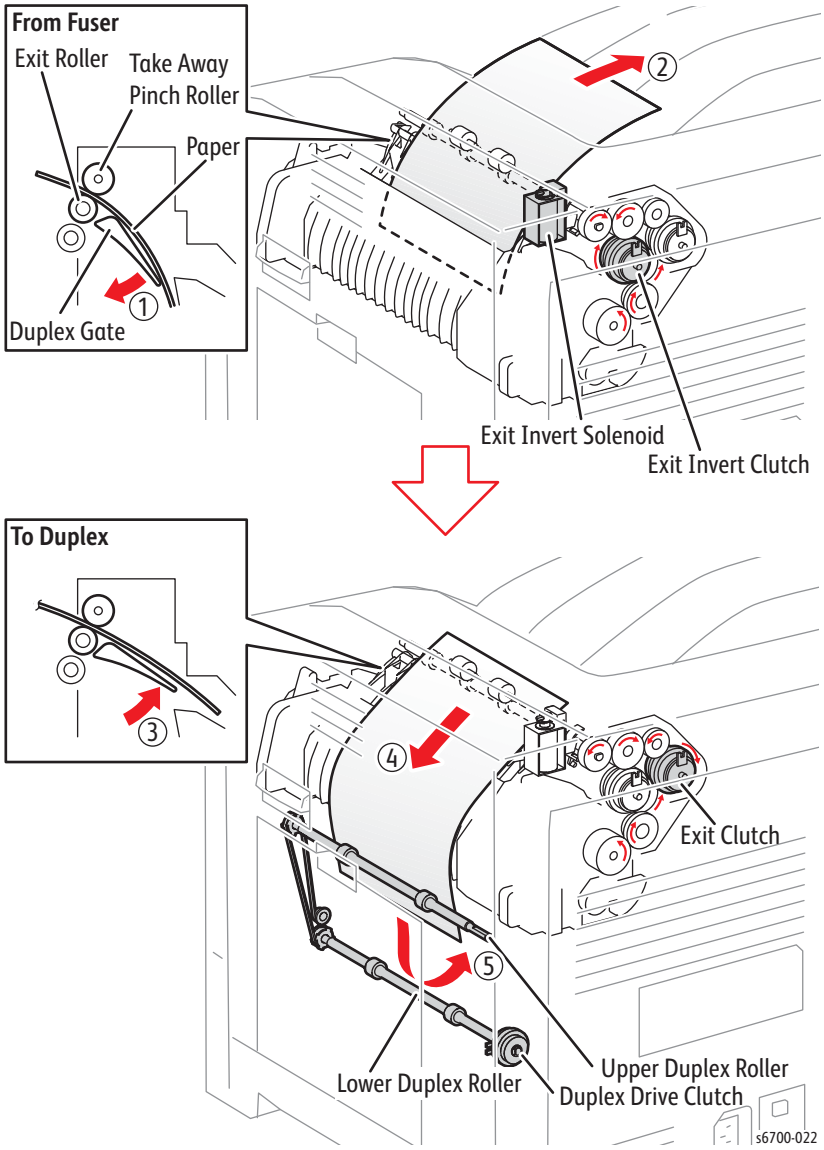


## Duplex Feed Single Sheet

As the leading edge of the sheet exits from the Fuser after printing on side 1, the Exit Inverter Solenoid turns On, lowering the duplex gate to allow the sheet to travel along the upper side of the duplex gate to the position where it becomes nipped between the exit roller and take away roller. The sheet is then fed to the Exit section by the exit roller that rotates toward the exit (reverse direction), driven by the Fuser Drive Assembly and controlled by the Exit Inverter Clutch.

After the trailing edge exits the Fuser after printing side 1, the Exit Inverter Solenoid turns Off, raising the duplex gate to its original position to allow the single-side printed sheet to be fed back to the duplex section from the exit section by the exit roller that rotates (normal direction), driven by the Fuser Drive Assembly and controlled by the Exit Clutch in the Exit Drive.

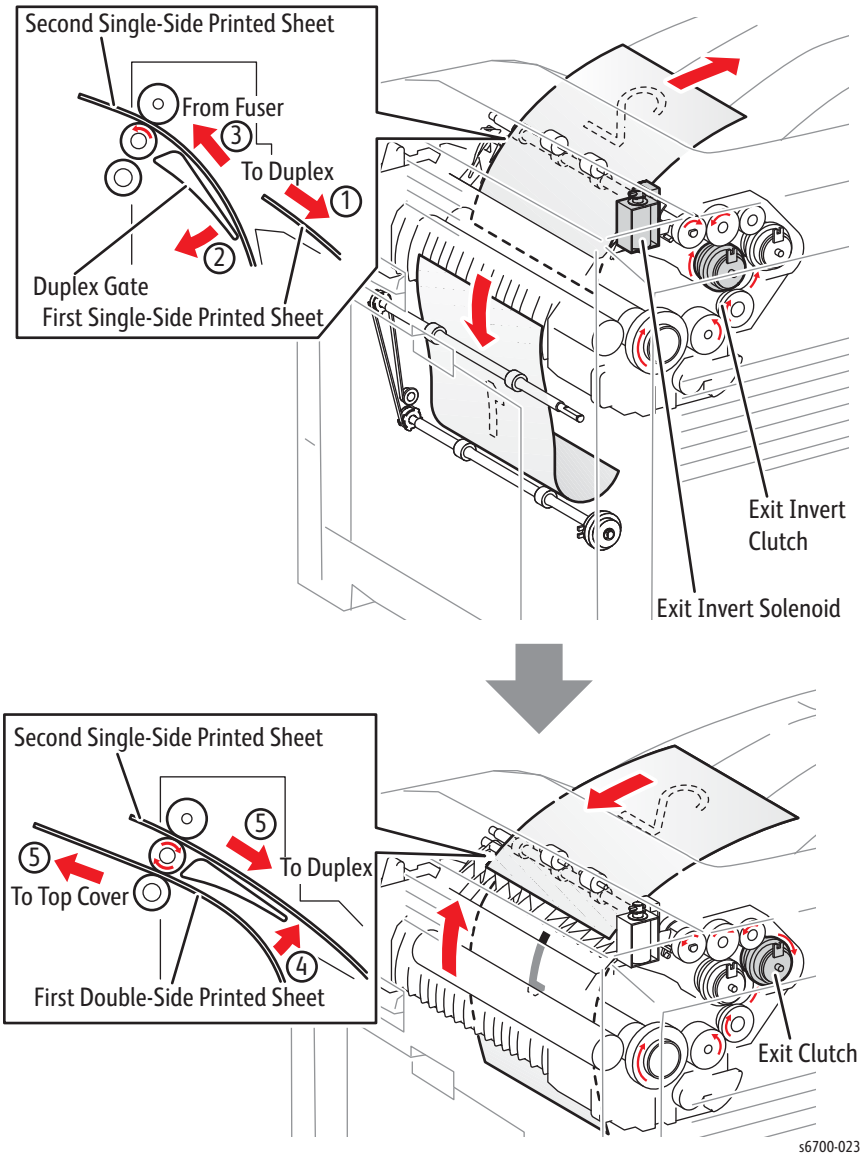
In the duplex section, the single-side-printed sheet is fed back to the registration section by the Duplex Rollers driven by the Feed Drive Assembly and controlled by the Exit Inverter Clutch. After the printing on the side 2 is completed, the sheet exits in the same manner as it does after the printing side 1 is completed.



## Duplex Feed of Multiple Sheets

After the first single-side printed sheet reaches the duplex section, the Exit Inverter Solenoid turns On, lowering the duplex gate to allow the second single-side-printed sheet to travel along the upper side of duplex gate to the upper part of the exit section. When the lead-edge of the first double-side printed sheet exits from the Fuser, the Exit Inverter Solenoid turns Off, raising the duplex gate to its original position to allow the double-side-printed sheet to be nipped between the exit roller and the take away roller and fed to the exit section by the exit roller.

As the second single-side printed sheet is fed to the duplex section, the preceding sheet is fed to the Output Tray.

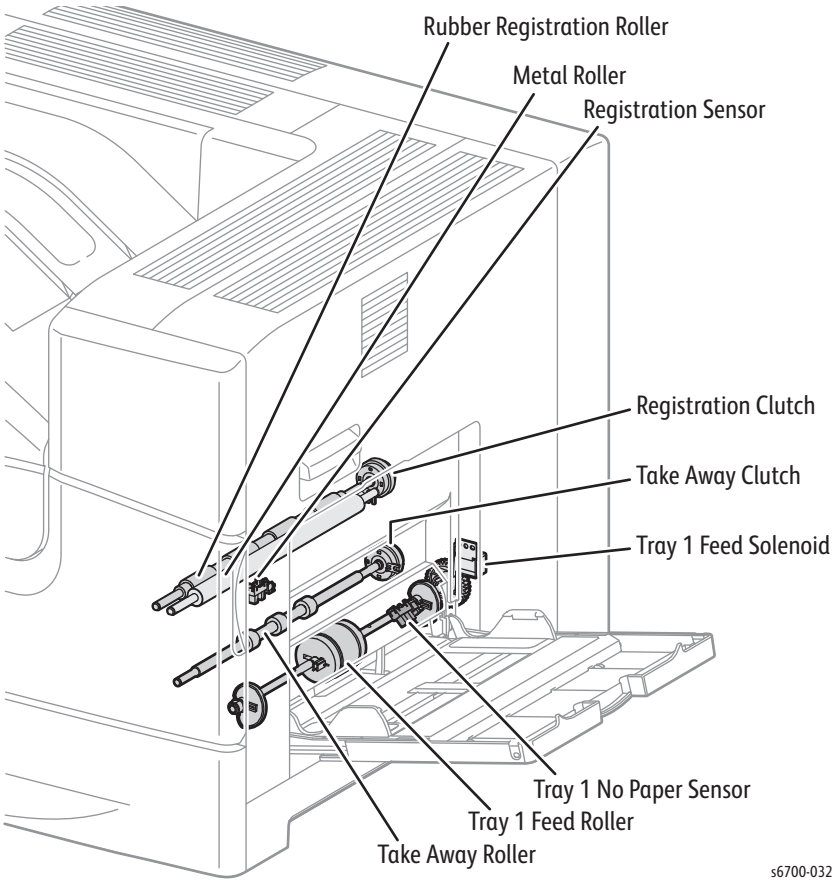


# Major Printer Components

This section describes major printer components. These components are organized into the following functional blocks.

- Tray
- Feeder
- Tray 1 & Registration Assembly
- Process Control
- Laser Unit
- Dispenser
- Imaging Units
- Transfer Belt
- Fuser
- Exit
- Duplex
- Drive
- Electrical
- Optional 550 and 1100-sheet Feeders

## Multipurpose Tray 1




- Tray 1 Feed Solenoid

The Tray 1 Feed Solenoid controls the driving torque from the Feed Drive Assembly to the Tray 1 Feed Roll.

- Take Away Clutch

The Take Away Clutch transmits the driving torque from the Feed Drive Assembly to the Take Away Roller.

- Take Away Roller

The take away roller starts rotating when the Take Away Clutch is engaged to feed the sheet from Trays 1 or 2 to the registration rollers.

- Tray 1 No Paper Sensor

The Tray 1 No Paper Sensor detects the presence/absence of media in the Tray by a change in actuator position.

- Registration Sensor

The Registration Sensor detects the leading edge of the sheet, and by duration of the On signal, media length.

- Registration Clutch

The Registration Clutch transmits the driving torque from the Feed Drive Assembly to rubber registration roller to feed media to the Fuser from the Tray or duplex unit. To register the image at the correct position on the medium, the feed timing from the registration assembly is adjusted by the duration of Registration Clutch operation.

## Trays 2 ~ 6

**Note**

Due to Tray cover dimensions, Tray 2 is not interchangeable with Trays 3~6.

Trays 2 through 6 include end and side guides that manually adjust to the media loaded in the tray. These guides contact the front and rear edges of the media to hold it in position. Media size is determined by the position of the end guide that actuates switches in the Size Switch.

- Side Guides

The front and rear side guides align the media stack along its width, perpendicular to the feed direction.

- End Guide

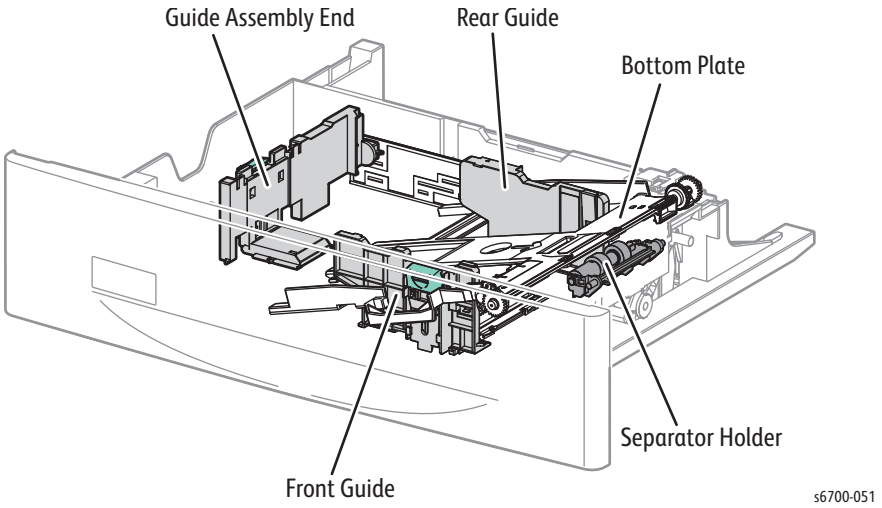
The end guide aligns the media stack lengthwise in the Tray. Based on end guide position, media size is determined by the combination of signals generated by three switches in the Size Switch.

- Separator Holder

The Separator Holder holds the Separator Roller and prevents multiple sheet feeds.

- Bottom Plate

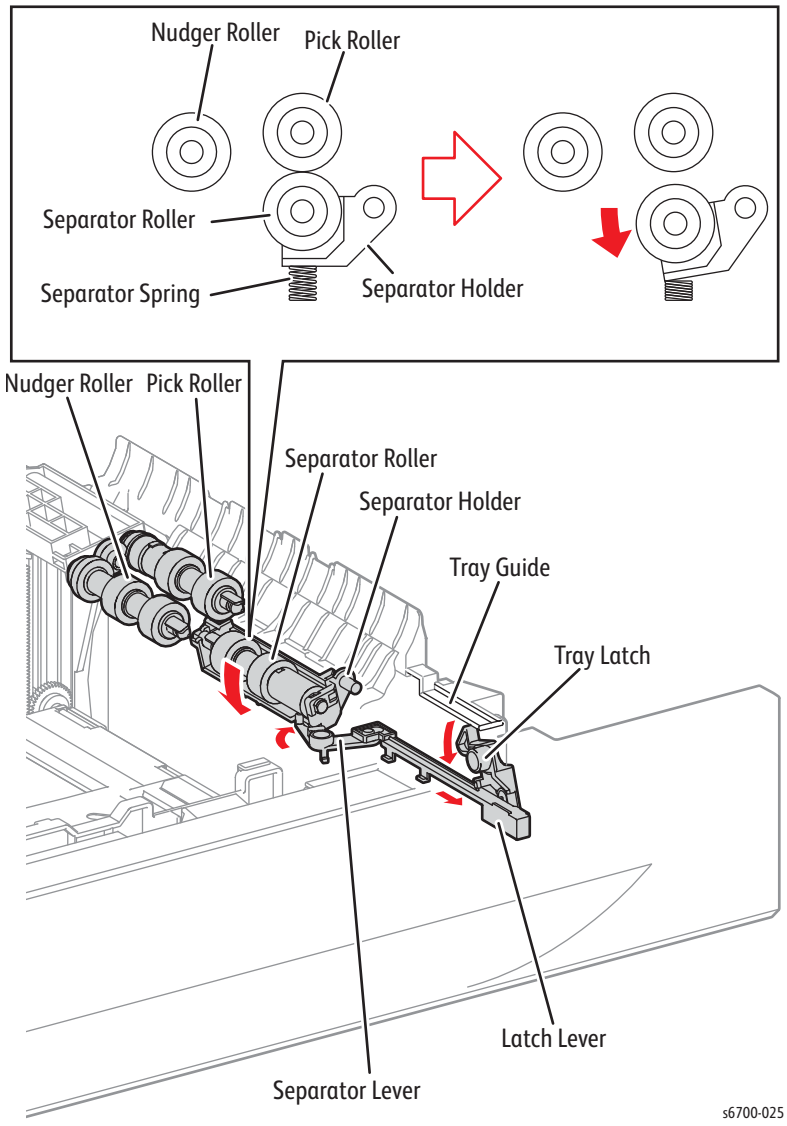
When the Tray is pulled from the feeder, the bottom plate is lowered and locked to the bottom of the Tray. Replacing the Tray releases the bottom plate from the lock, pressing the media stack against the Nudger Roll by spring pressure.



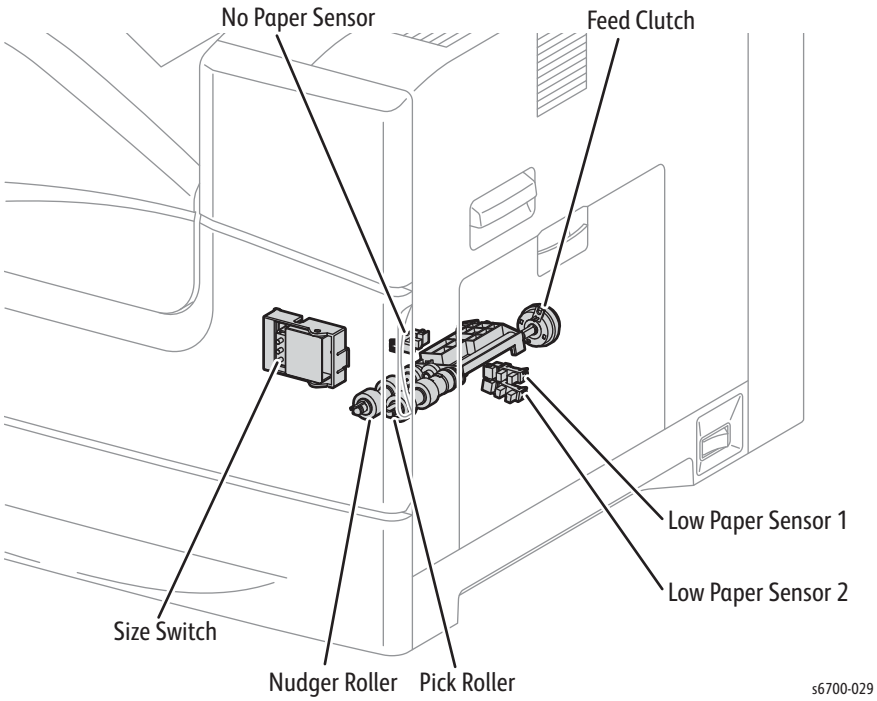

Inserting the Tray into the feeder presses the tray latch against the rail of the tray guide, swinging the tray latch downward and moving the latch lever forward. The latch lever swings the separator lever frontward, which swings the Separator Holder downward, making clearance enough for the Tray to go in.

When the Tray is inserted until it stops, the tray latch comes off from the rail of the tray guide, allowing the tray latch, latch lever, and separator lever to return to their positions. Once disengaged from the separator lever, the Separator Holder is pressed against the Feed Roller in the feeder section by the spring pressure of the separator.

When the Tray is pulled out halfway, the tray latch, latch lever, and separator lever operate in the same fashion as when the Tray is inserted, swinging the Separator Holder downward to allow Tray removal.



## Tray 2 Feeder




- Size Switch

The Size Switch detects media size and the presence of the Tray. Aligning the end guide to the media stack changes the position of the size actuator coupled to the end guide, turning On or Off the switches. Media size is determined by the combination of signal states of these switches. See “Media Size Detection” on page 2-22.

- No Paper Sensor

The No Paper Sensor detects the media in the Tray based on the position of No Paper Actuator. (No paper: Sensor beam is blocked)

- Low Paper Sensor 1 and 2

The Low Paper Sensors detect the amount of the media remaining in the Tray in three levels (50, 25, and 10 % ). See “Media Level Sensing” on page 2-23.

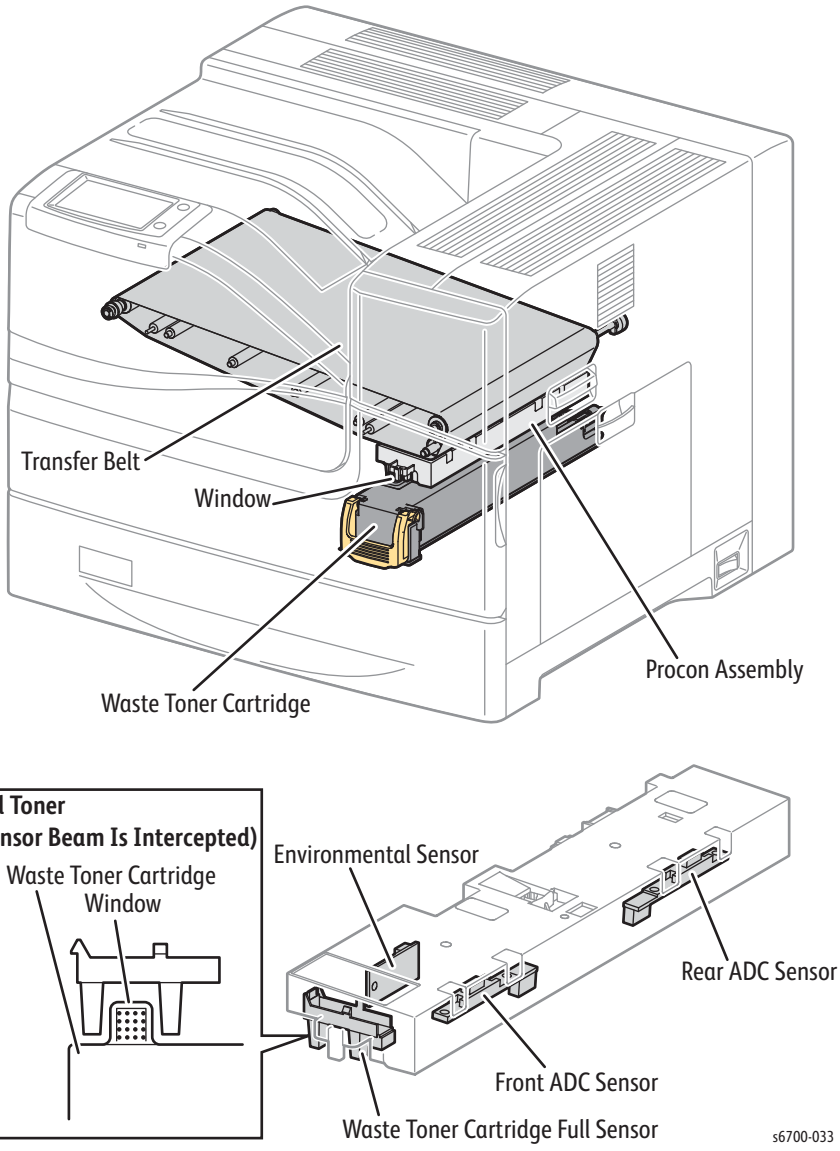
- Feed Clutch

The Feed Clutch transmits the driving torque from the Feed Drive Assembly to the Feed Roll.

- Feed Roller

When the Feed Clutch engages, the Feed Roller rotates to feed the media.

## Process Control







- Front ADC Sensor

The Front ADC Sensor detects color registration errors by reading the marks placed on the front side of the Transfer Belt. The value measured is used to adjust the Laser Unit and Imaging Unit bias voltages.

- Rear ADC Sensor

The Rear ADC Sensor detects color registration errors by reading the marks placed on the rear side of the Transfer Belt. This sensor also measures toner patch density on the Transfer Belt before the second transfer, then converts the density value into a voltage value for toner density control.

- Waste Toner Full Sensor

The Waste Toner Full Sensor detects that the Waste Toner Cartridge has become filled to capacity. When the transparent window on the upper part of the Waste Toner Cartridge is blocked by toner, the sensor light is disrupted indicating the cartridge is full

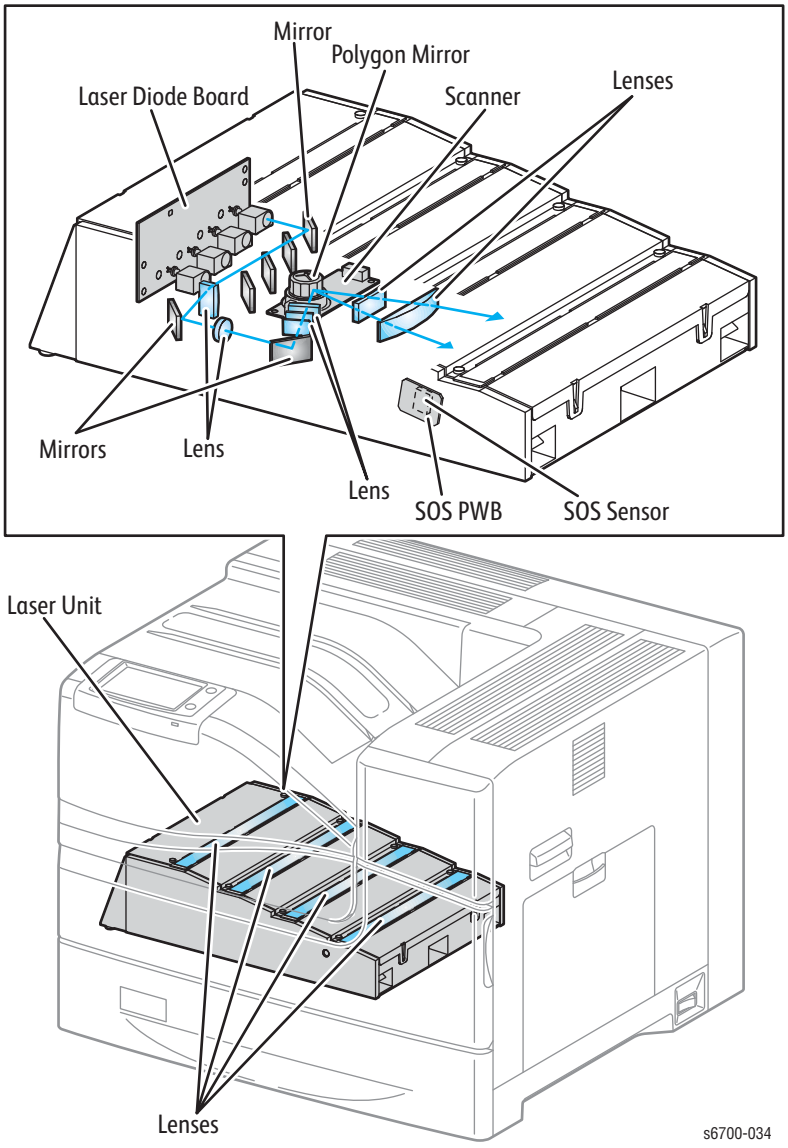
- Environmental Sensor

The Environmental Sensor measures the temperature and humidity within the printer and converts them into voltage values.

## Laser Unit

The Laser Unit generates laser beams to form electrostatic latent images on the Imaging Unit's drum surface. Replaced as a single assembly, the Laser Unit consists of these parts:

- LD PWB
- Scanner Assembly
- Lens
- SOS PWB




- Laser Diode Board

The Laser Diode Board consists of four laser diodes corresponding to Y, M, C, and K. Each diode converts the electric signals of incoming image data into laser wave or pulse. In order to stabilize the laser light during the formation of an electrostatic latent image, APC (Auto Power Control) on the Laser Diode Board monitors the laser light quantity to adjust it to the appropriate level.

- Scanner Assembly

The Scanner Assembly consists of the scanner motor that rotates at a constant speed and the polygon mirror mounted on the scanner motor shaft.

The laser light output from the LD PWB is directed onto the polygon mirror. The 12-facet, polygon mirror changes the reflection angle of the laser light as it rotates allowing the laser light to scan the Imaging Unit drum along its axial direction. Scanning is performed using one mirror facet for each line.

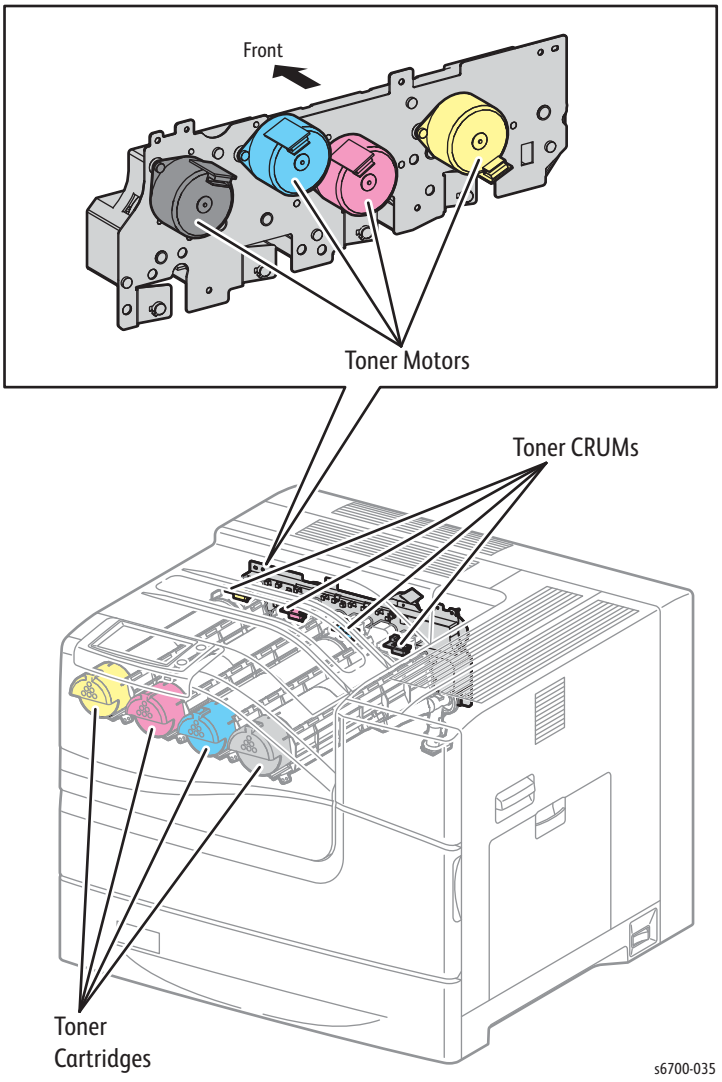
- Lens

The laser light reflected from the Polygon Mirror reaches the drum surface via the lens, mirror, and window. The lens corrects aberration, the mirror secures an optical path, and the window prevents foreign substance from entering the Laser Unit.

- Start Of Scan (SOS) PWB

The SOS sensor on the SOS PWB converts an incoming laser beam to an electric signal as a reference signal for starting scanning and transmits this signal to the MCU Board. The SOS sensor signals are used to synchronize the starting point of the image writing.

## Toner Dispense




- Toner Cartridges

The Toner Cartridges contain a mixture of toner and a small amount of carrier. that stores initial capacity, current level, region and manufacturer. The installation date is maintained in MCU NVRAM.

Toner Cartridges are available in metered or regional versions. Printers are shipped from the factory with neutral cartridges. The printer is programmed when the first non-neutral cartridge is inserted. Two regional variants, North America / Xerox Europe (NA/XE) and Developing Markets Operations (DMO) are available.The table lists Toner Cartridge part numbers for metered or regional versions. Neutral appears as the cartridge type until metered toner is enabled or a regional (NA/XE or DMO) cartridge is inserted.

**Toner Cartridge Types**

| Description | Part Number |
|---|---|
| Standard Capacity Black Toner Cartridge for NA/XE<br>Standard Capacity Cyan Toner Cartridge for NA/XE<br>Standard Capacity Magenta Toner Cartridge for NA/XE<br>Standard Capacity Yellow Toner Cartridge for NA/XE | 106R00506<br>106R00503<br>106R00504<br>106R00505 |
| High Capacity Black Toner Cartridge for NA/XE<br>High Capacity Cyan Toner Cartridge for NA/XE<br>High Capacity Magenta Toner Cartridge for NA/XE<br>High Capacity Yellow Toner Cartridge for NA/XE | 106R00510<br>106R00507<br>106R00508<br>106R00509 |
| Standard Capacity Black Toner Cartridge for DMO<br>Standard Capacity Cyan Toner Cartridge for DMO<br>Standard Capacity Magenta Toner Cartridge for DMO<br>Standard Capacity Yellow Toner Cartridge for DMO | 106R00514<br>106R00511<br>106R00512<br>106R00513 |
| High Capacity Black Toner Cartridge for DMO<br>High Capacity Cyan Toner Cartridge for DMO<br>High Capacity Magenta Toner Cartridge for DMO<br>High Capacity Yellow Toner Cartridge for DMO | 106R00526<br>106R00523<br>106R00524<br>106R00525 |
| Metered Black Toner Cartridge<br>Metered Cyan Toner Cartridge<br>Metered Magenta Toner Cartridge<br>Metered Yellow Toner Cartridge | 106R00522<br>106R00519<br>106R00520<br>106R00521 |

Toner level in the cartridge is determined by auger turns and sensors. Toner level is set to 100 % when a new cartridge is installed. Toner Cartridge life (A/A4 pages at 5 % coverage) is 15K for CMY, 21K for K for metered, 12K for CMY, 18K for K high capacity and 5K for CMY, 7.1K for K for standard and neutral.

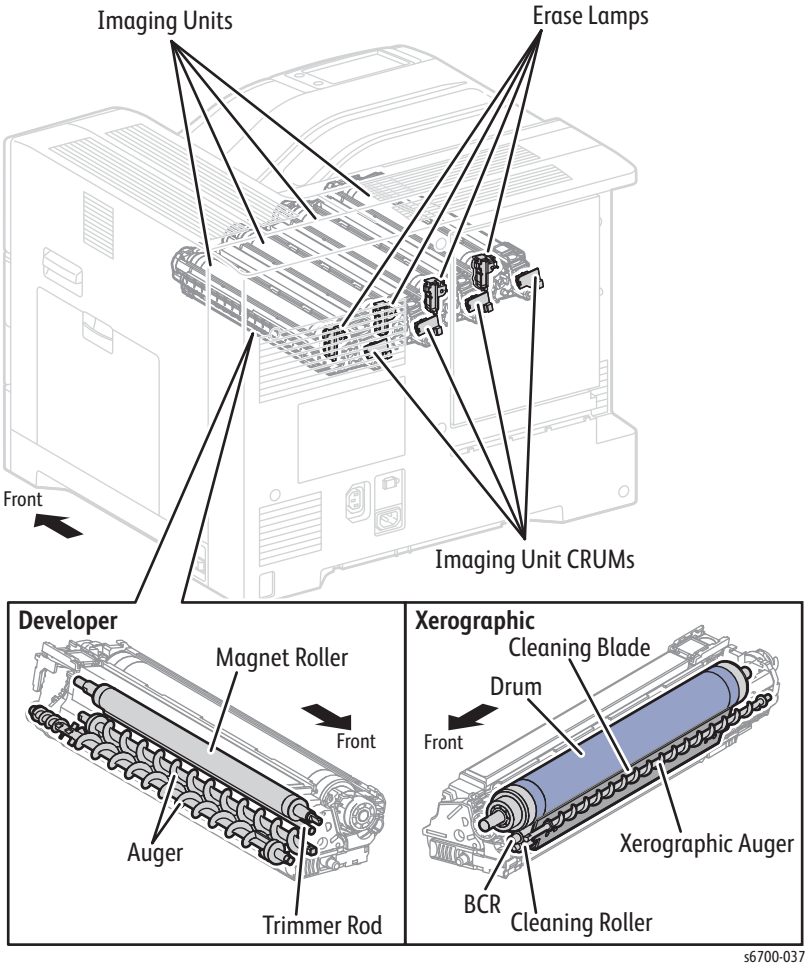
- Toner CRUMs

Toner CRUMs track Toner Cartridge type (regional/metered) and Toner Cartridge life.

- Toner Motors

The toner motors feed toner from the Toner Cartridges to the Imaging Units by driving the Toner Cartridge agitators and augers in the toner feeding route.

## Imaging Units




- Drum

The drum surface holds the electrostatic latent and toner images.

- Bias Charge Roller (BCR)

Charges the drum electrically.

- Cleaning Roll

Removes the toner remaining on the BCR.

- Cleaning Blade

Removes the toner remaining on the drum after the toner image is transferred to the medium.

- Erase Lamp

The Erase Lamp removes electrical charge from the drum surface after the toner image is transferred onto the Transfer Belt.

- Imaging Unit CRUM Connectors

The CRUM stores, reads, and writes printer-specific information regarding the CRU (Customer-Replaceable Unit).

- Magnet Roll

The magnet roll contacts the drum to form the toner image on the drum surface.

- Auger

The auger agitates the toner particles.

- Trimmer

The trimmer uniformly levels the toner/carrier particles deposited on the surface of the magnet roll.

## Transfer Belt

- 1st BTR Roll

Attracts the toner image from the drum to the Transfer Belt by positively charging the Transfer Belt.

- Belt

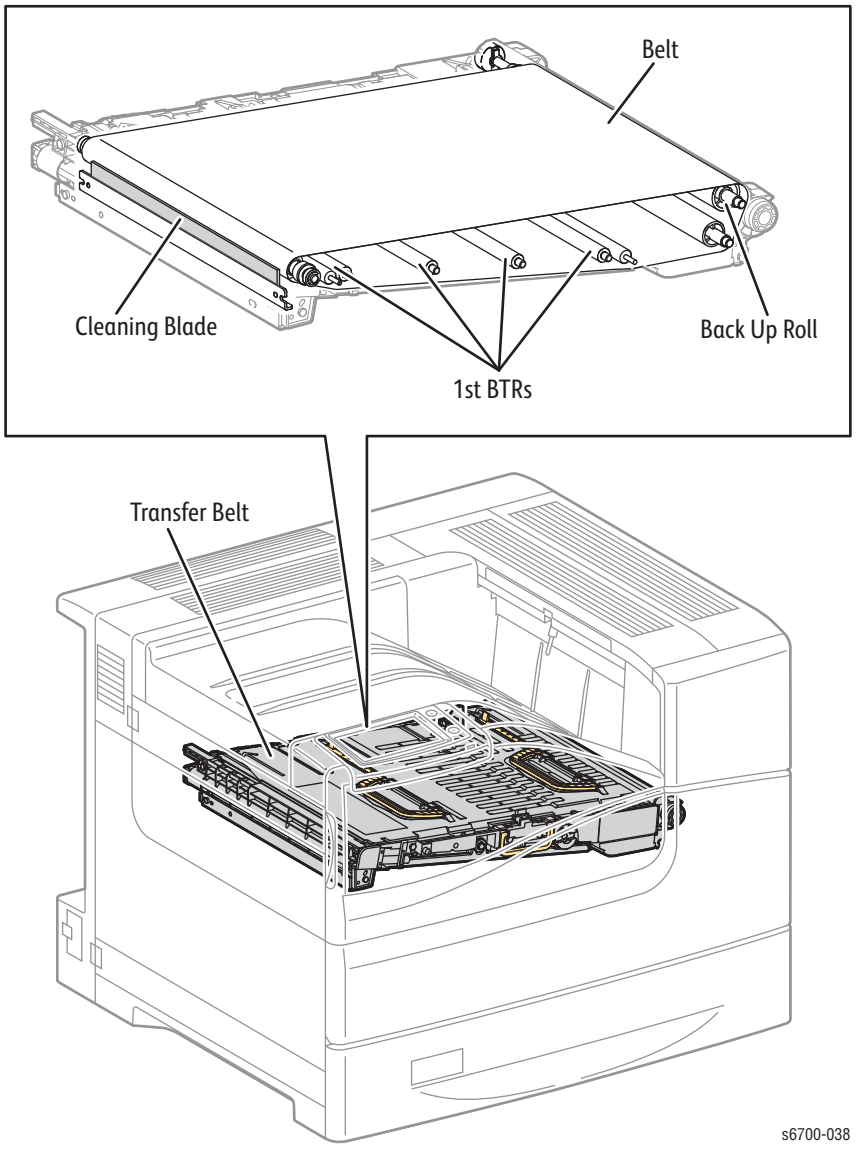
Receives the four, color-separated toner images from each drum in registration with one another.

- Backup Roll

Helps the toner particles migrate onto the belt by maintaining the belt at a position where it nearly contacts the media.

- Cleaning Blade

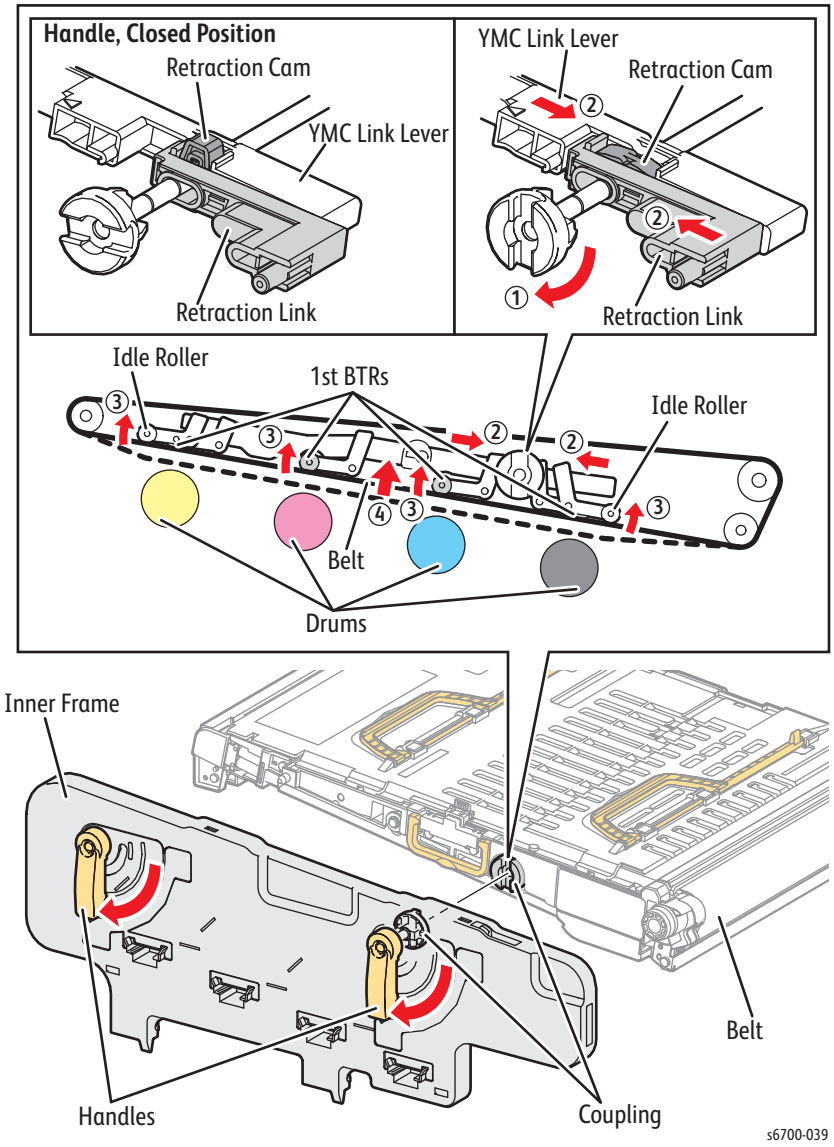
Removes excess toner from the Transfer Belt.




## Transfer Belt Latch Mechanism

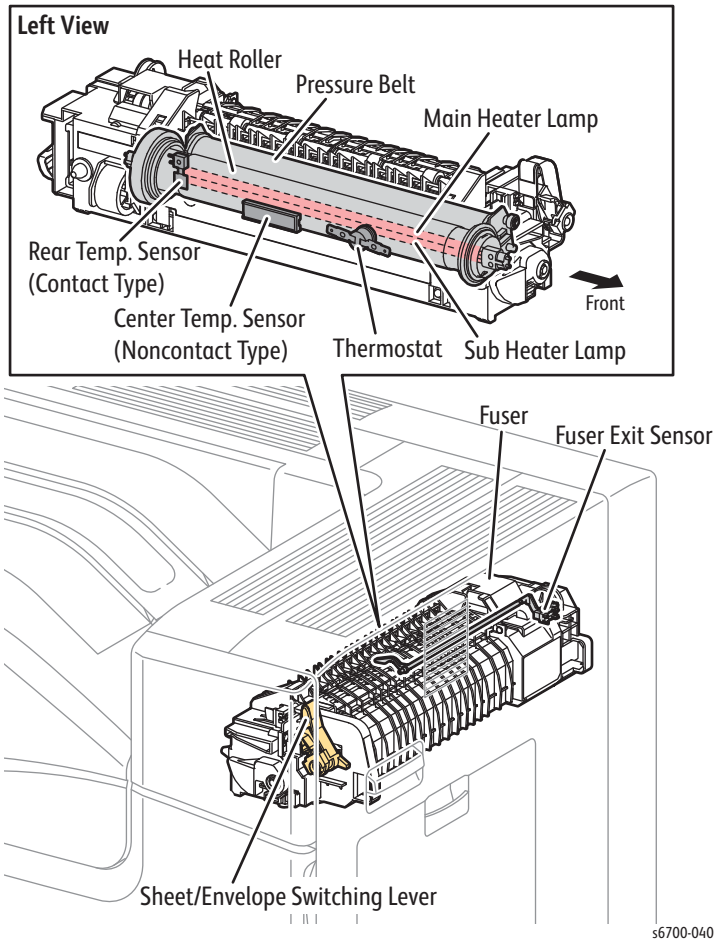
Since the Transfer Belt is positioned close to the Imaging Unit drum, removing the Transfer Belt to clear a jam may cause the Belt to contact the drum, which may damage both parts, degrading the image quality. To avoid this problem, the Belt moves away far enough from the drum. This operation is called “Retraction”.

Rotating the open/close handle of the Inner Frame Assembly to the close direction rotates the cam retract of the Transfer Belt via the coupling. The rotation of the cam retract allows the left and right roll idles and the four 1st BTRs to rise via the link retract and lever link YMC, moving the belt away from the drum to allow enough clearance for removal.


Handle, Closed Position
Retraction Cam
YMC Link Lever
Retraction Link
YMC Link Lever
Retraction Cam
Retraction Link
Idle Roller
1st BTRs
Idle Roller
Belt
Drums
Inner Frame
Belt
Handles
Coupling
s6700-039

## Fuser

The Fuser fixes the toner image onto the sheet by heat and pressure and guides the sheet into and out of the fixing position.




- Heat Roll

A metal roll that transfers heat to the sheet to fuse the toner onto the sheet.

- Pressure Belt

A belt and a spring system for pressing the sheet against the Heat Roll.

- Main Heater Lamp

A heating lamp located in the heat roll to heat left and right end sections.

- Sub Heater Lamp

A heating-coil-enclosed lamp located in the heat roll to heat its middle section.

- Center Temperature Sensor (non-contact type)

A thermistor positioned close to the heat roll in a non-contact manner to detect its surface temperature and to control the switching On/Off of the heater lamp.

- Rear Temperature Sensor (contact type)

A thermistor positioned in contact with the heat roll to detect its surface temperature and to prevent the heater lamp from overheating.

- Thermostat

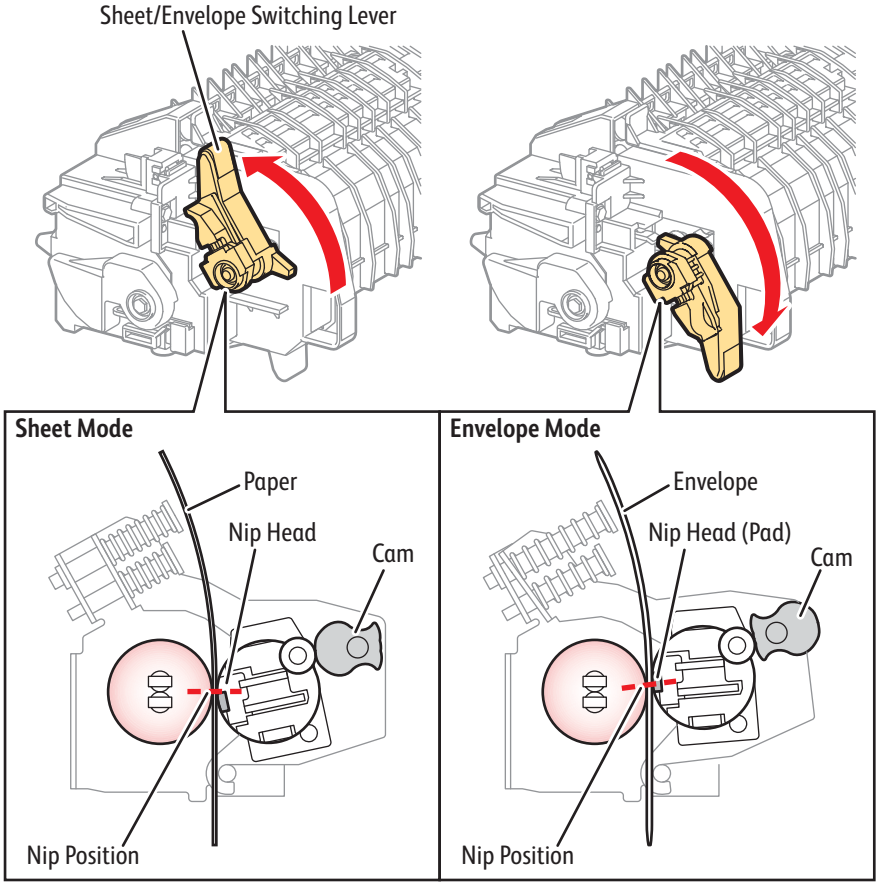
Connected in series with the power supply for the heater lamp. The thermostat prevents overheating of the heat roll by releasing the contacts when the heat roll has reached a set point temperature.

- Fuser Exit Sensor

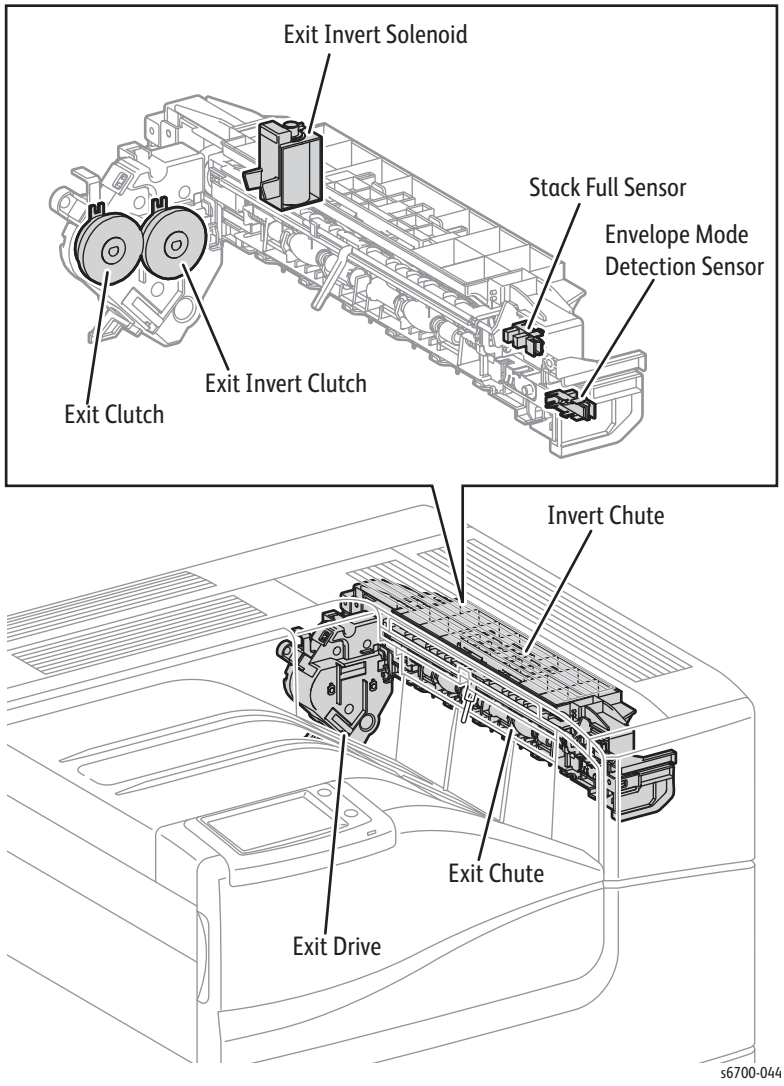
Detects whether the fused print has passed through the Fuser based on the change of the actuator position.

- Sheet/Envelope Switching Lever

The sheet/envelope switching lever is switched between Sheet Mode or Envelope Mode depending on the media used. Envelope Mode reduces nipping pressure to help prevent wrinkles or slacks on envelopes during fusing.



## Exit




- Exit Inverter Solenoid

Lowers the Duplex Gate when turned On, and raises it when turned Off, switching the media path when executing duplex printing.

- Full Stack Sensor

Detects when the output tray has reached its capacity.

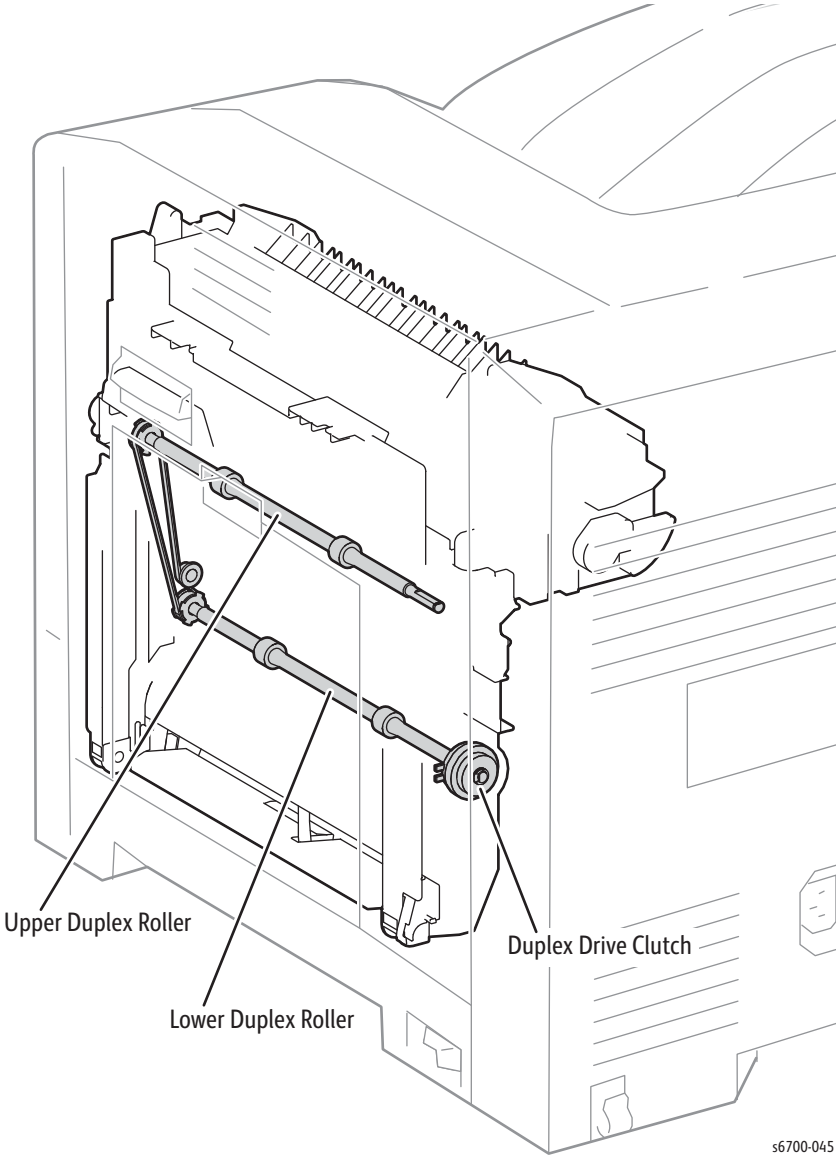
- Exit Clutch

Transmits the torque from the Fuser Drive Assembly to the Exit Roll to rotate the Exit Roll in the exit direction.

- Exit Inverter Clutch

Transmits the torque from the Fuser Drive Assembly to the Exit Roll to rotate the Exit Roll to the Duplex direction.

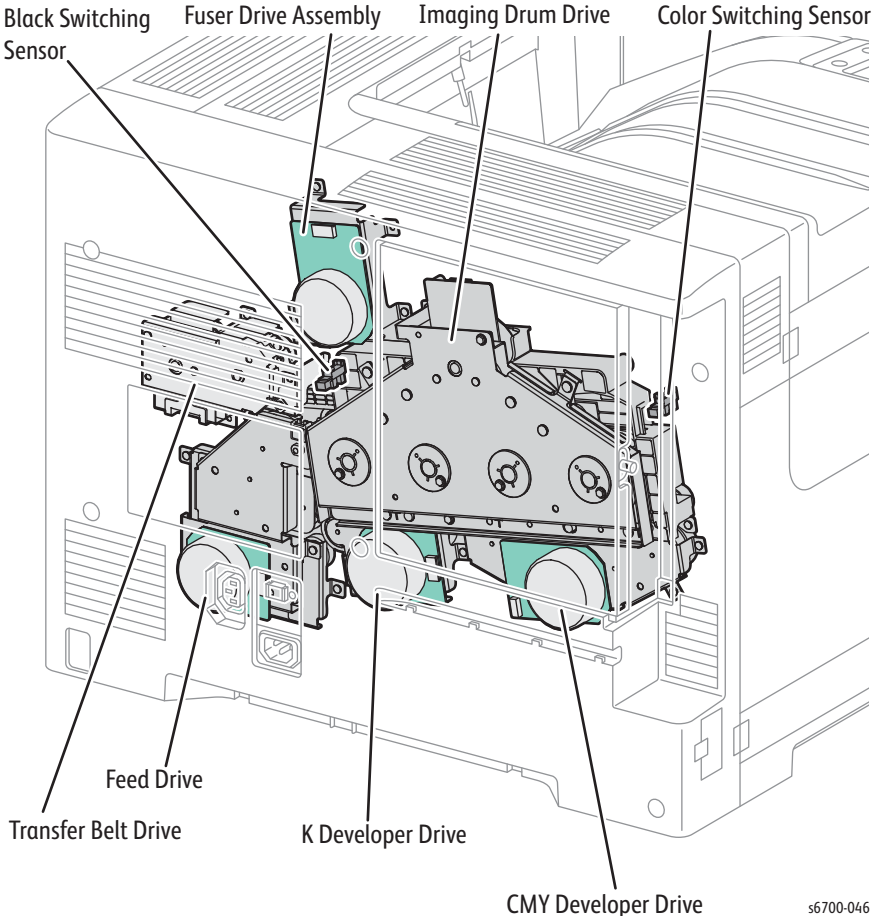
## Duplex




- Duplex Drive Clutch

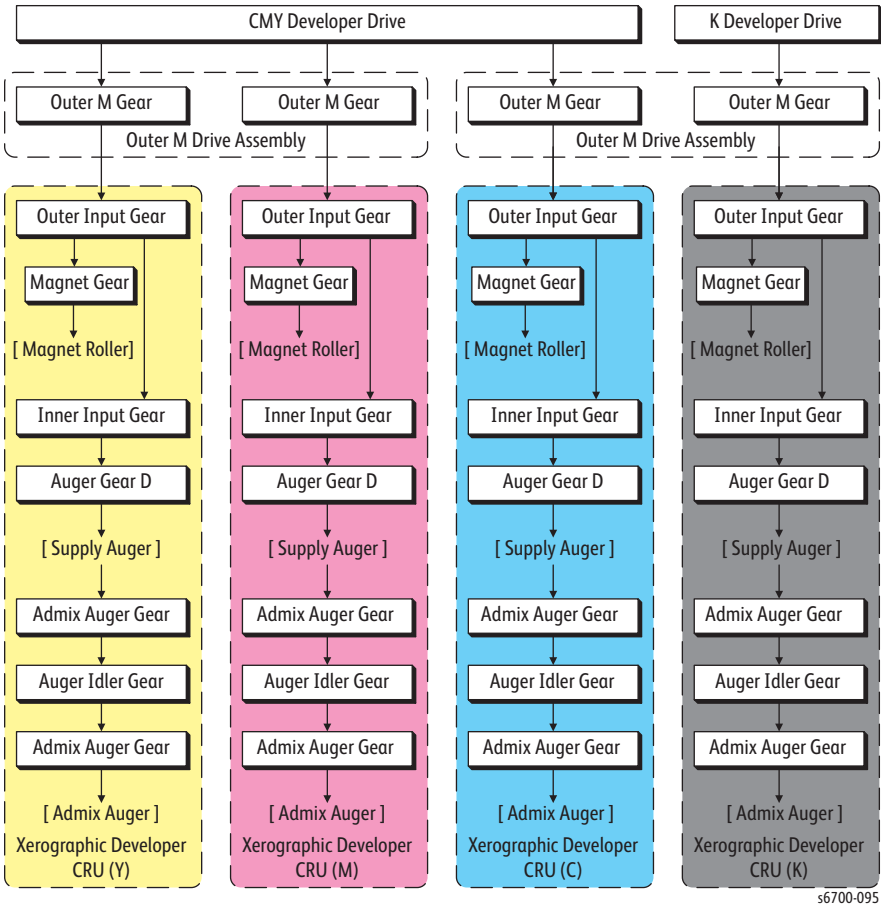
Transmits the torque from the Feed Drive Assembly to the duplex rollers.

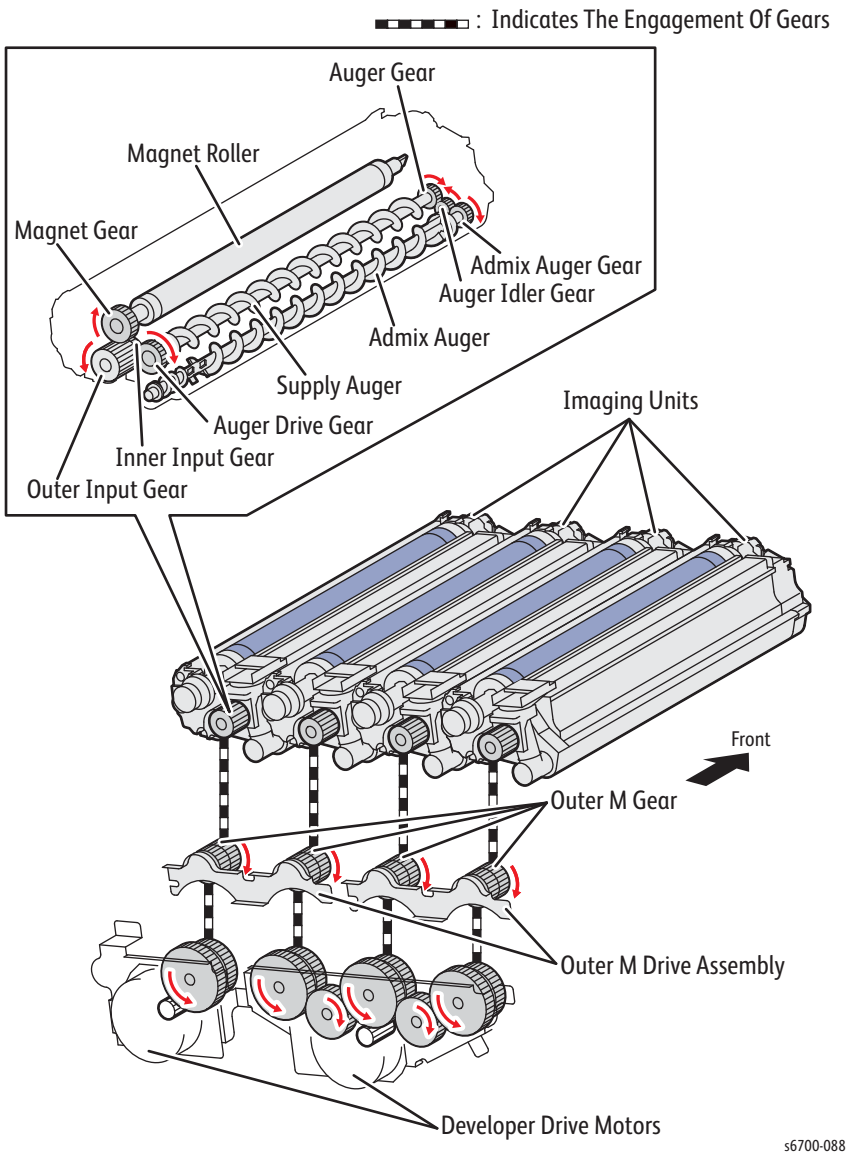
## Drive


Black Switching Sensor
Fuser Drive Assembly
Imaging Drum Drive
Color Switching Sensor
Feed Drive
Transfer Belt Drive
K Developer Drive
CMY Developer Drive
s6700-046

## CMYK Developer Drive Motors

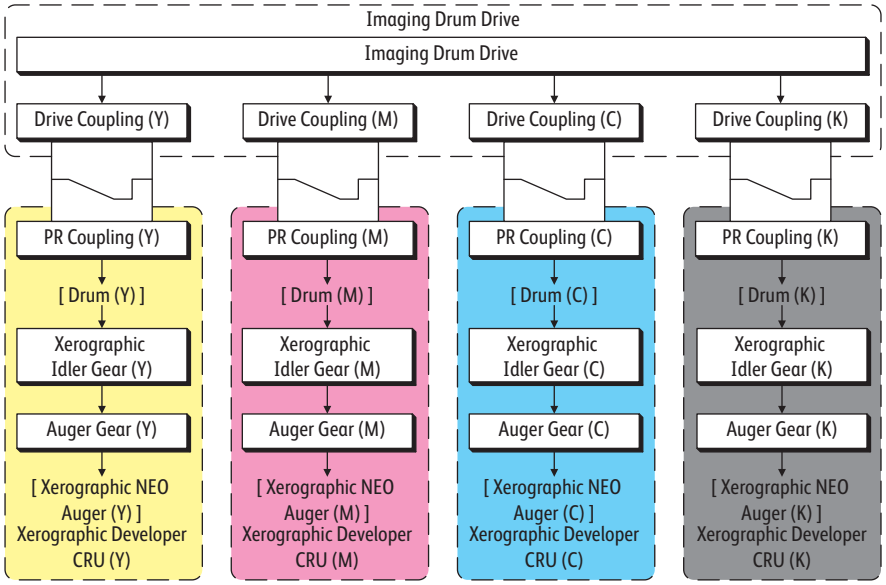
Motors that drive the augers and magnet rolls of the Imaging Units. The torque of the CMYK Developer Drive Motors are transmitted through the route below.

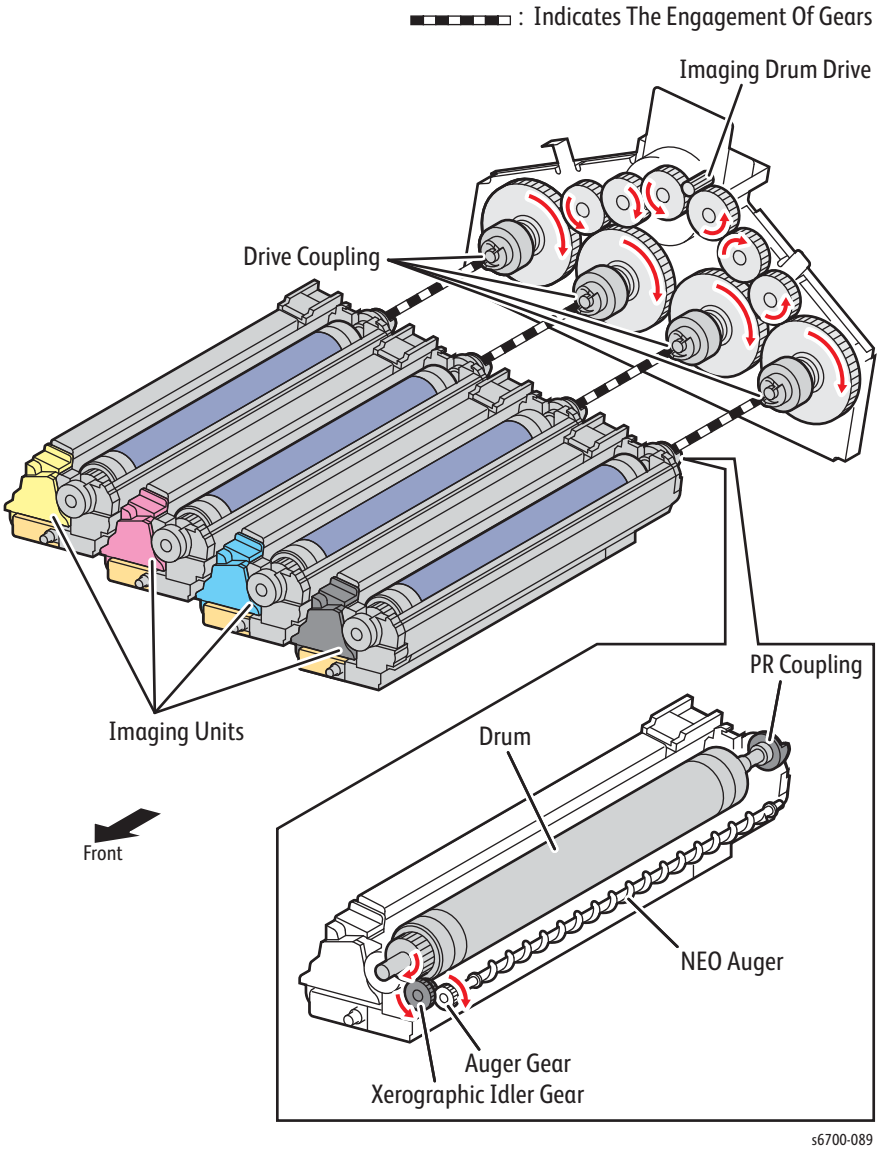



: Indicates The Engagement Of Gears
Auger Gear
Magnet Roller
Magnet Gear
Admix Auger Gear
Auger Idler Gear
Admix Auger
Supply Auger
Auger Drive Gear
Inner Input Gear
Outer Input Gear
Imaging Units
Front
Outer M Gear
Outer M Drive Assembly
Developer Drive Motors
s6700-088

## Imaging Drum Drive Assembly

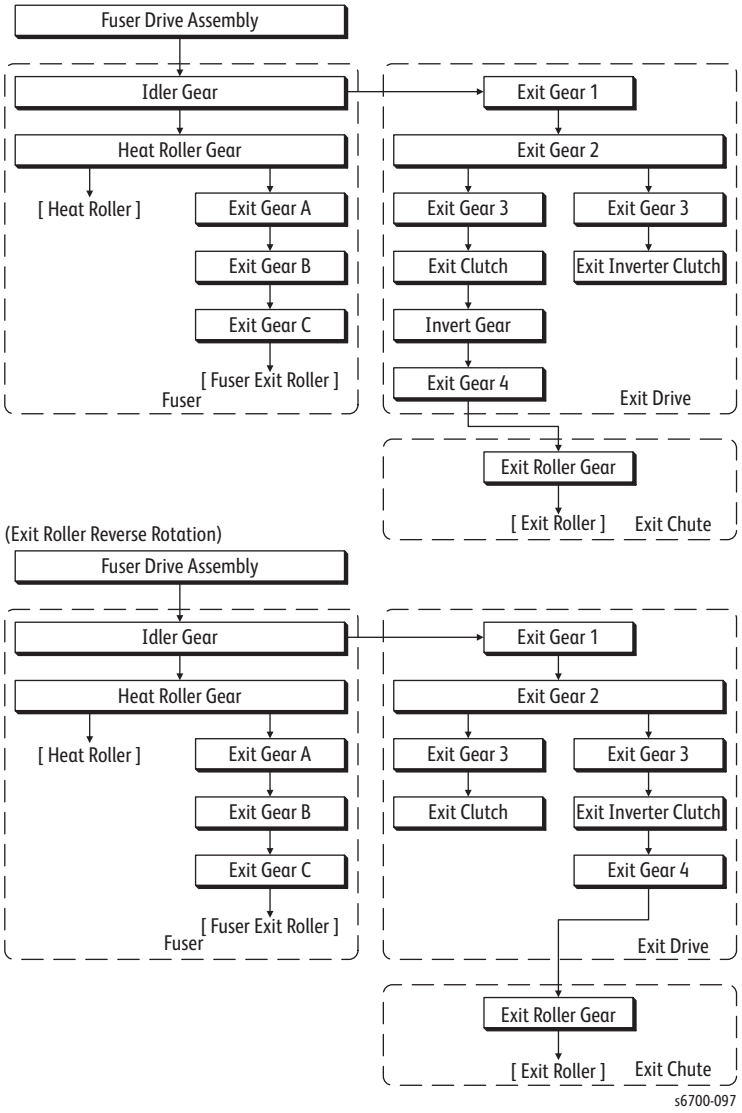
A motor that drives the Imaging Unit drums. The torque of the Imaging Drum Drive Assembly is transmitted through the route below.

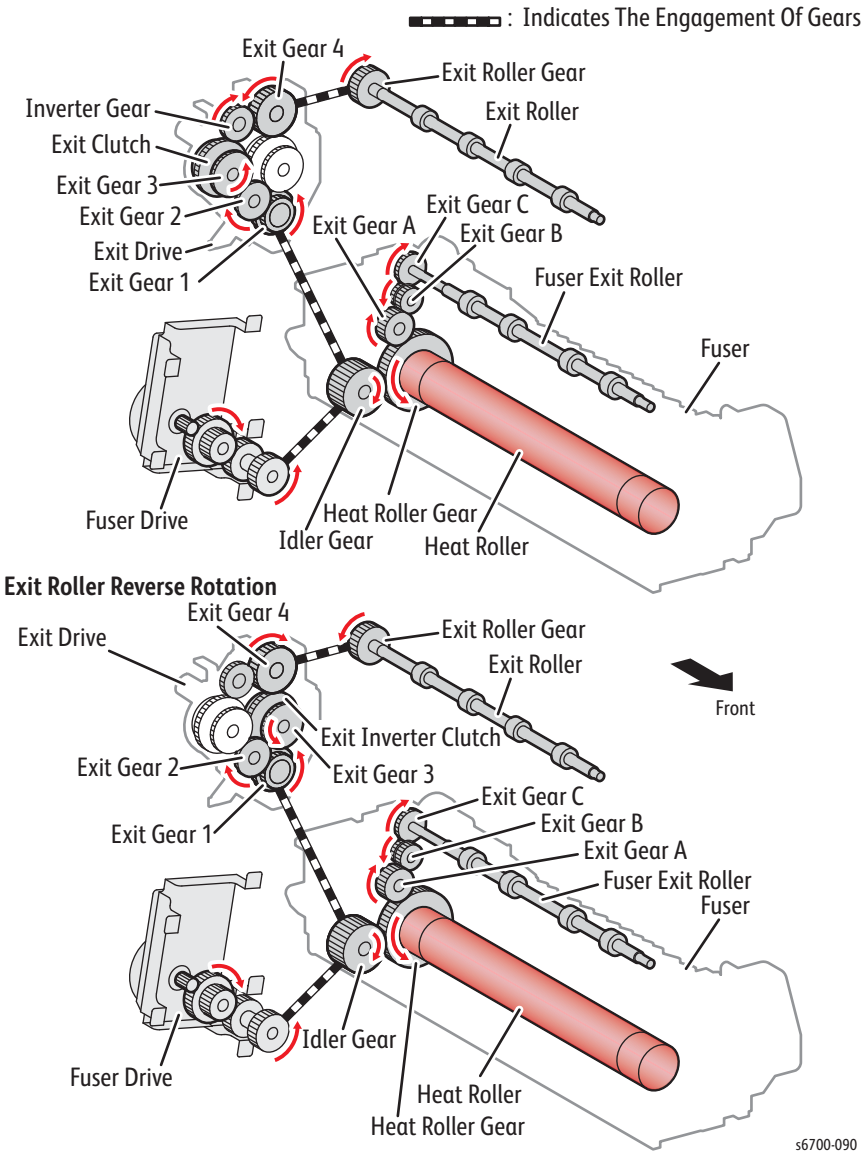



: Indicates The Engagement Of Gears
Imaging Drum Drive
Drive Coupling
PR Coupling
Imaging Units
Drum
Front
NEO Auger
Auger Gear
Xerographic Idler Gear
s6700-089

## Fuser Drive Assembly

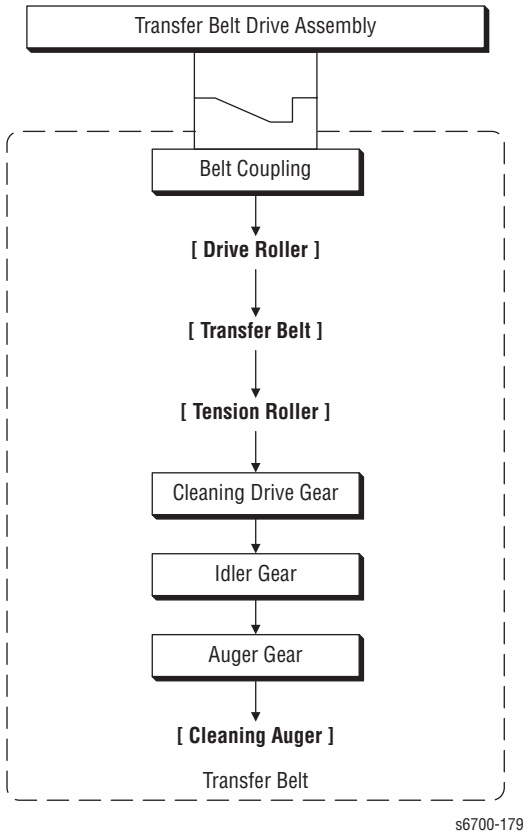
A motor and gear set that drives the Fuser and Exit Assembly. The torque of the Fuser Drive Assembly is transmitted through the route below.

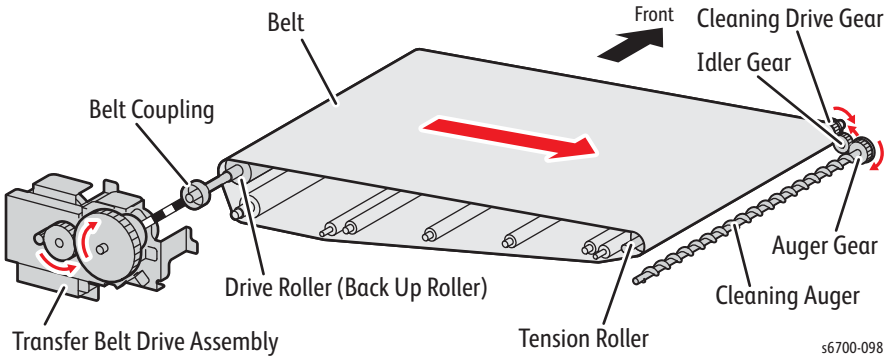



: Indicates The Engagement Of Gears
Exit Gear 4
Exit Roller Gear
Inverter Gear
Exit Roller
Exit Clutch
Exit Gear 3
Exit Gear 2
Exit Gear C
Exit Gear A
Exit Gear B
Exit Drive
Exit Gear 1
Fuser Exit Roller
Fuser
Fuser Drive
Idler Gear
Heat Roller Gear
Heat Roller
Exit Roller Reverse Rotation
Exit Gear 4
Exit Drive
Exit Roller Gear
Exit Roller
Front
Exit Inverter Clutch
Exit Gear 2
Exit Gear 3
Exit Gear C
Exit Gear 1
Exit Gear B
Exit Gear A
Fuser Exit Roller
Fuser
Idler Gear
Fuser Drive
Heat Roller
Heat Roller Gear
s6700-090

## Transfer Belt Drive Assembly

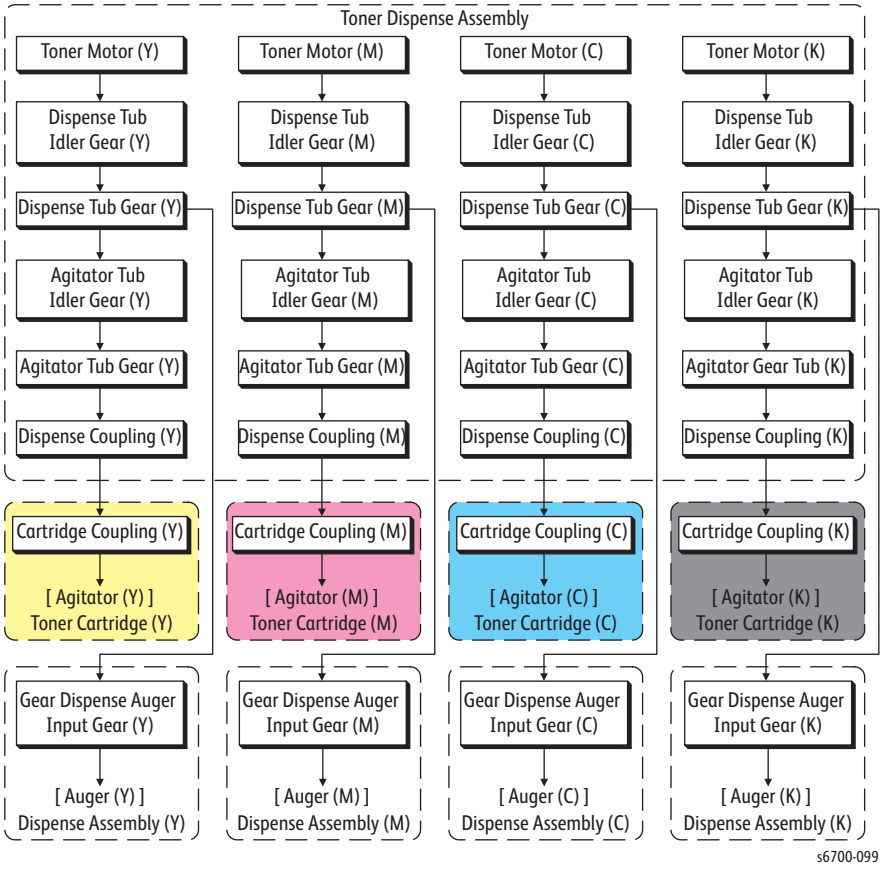
A motor that drives the Transfer Belt and by friction, the Transfer Roller. The torque of the Transfer Belt Drive Assembly is transmitted through the route below.

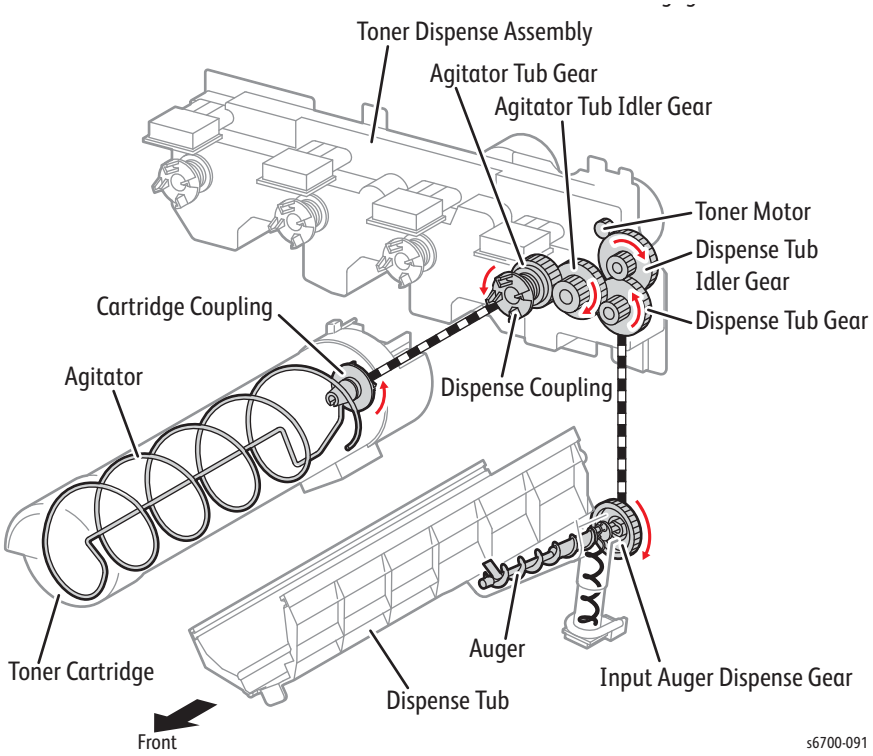


## Toner Motors

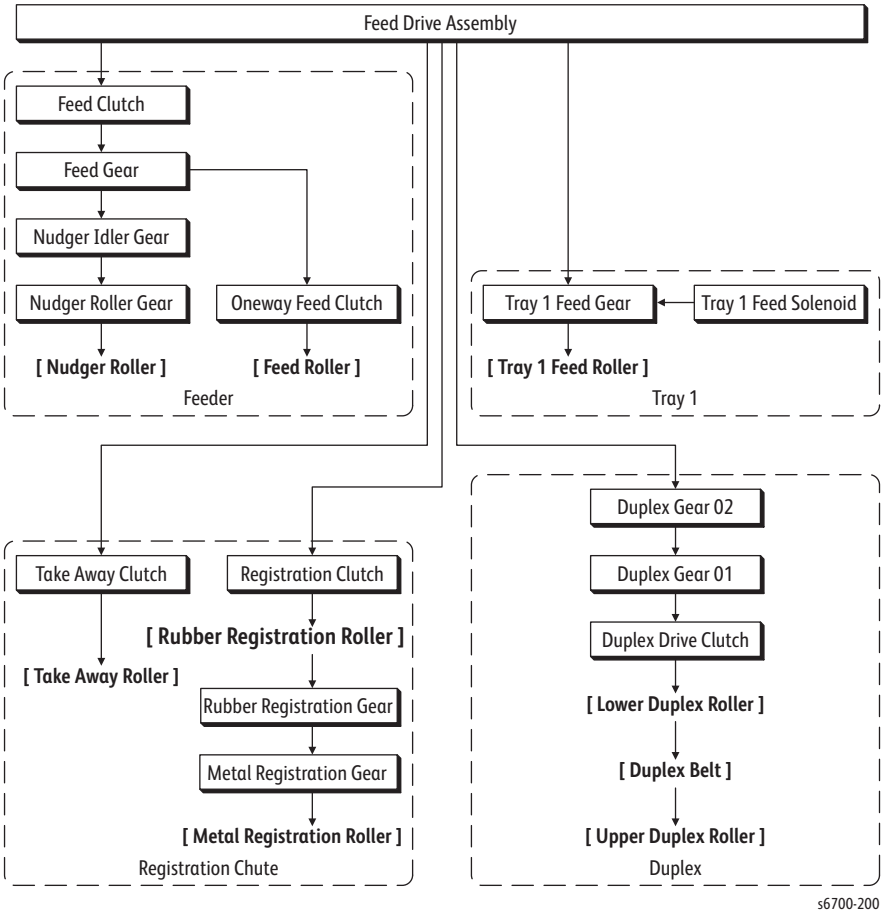
The toner motors drive the Toner Cartridge agitators and toner delivery augers.

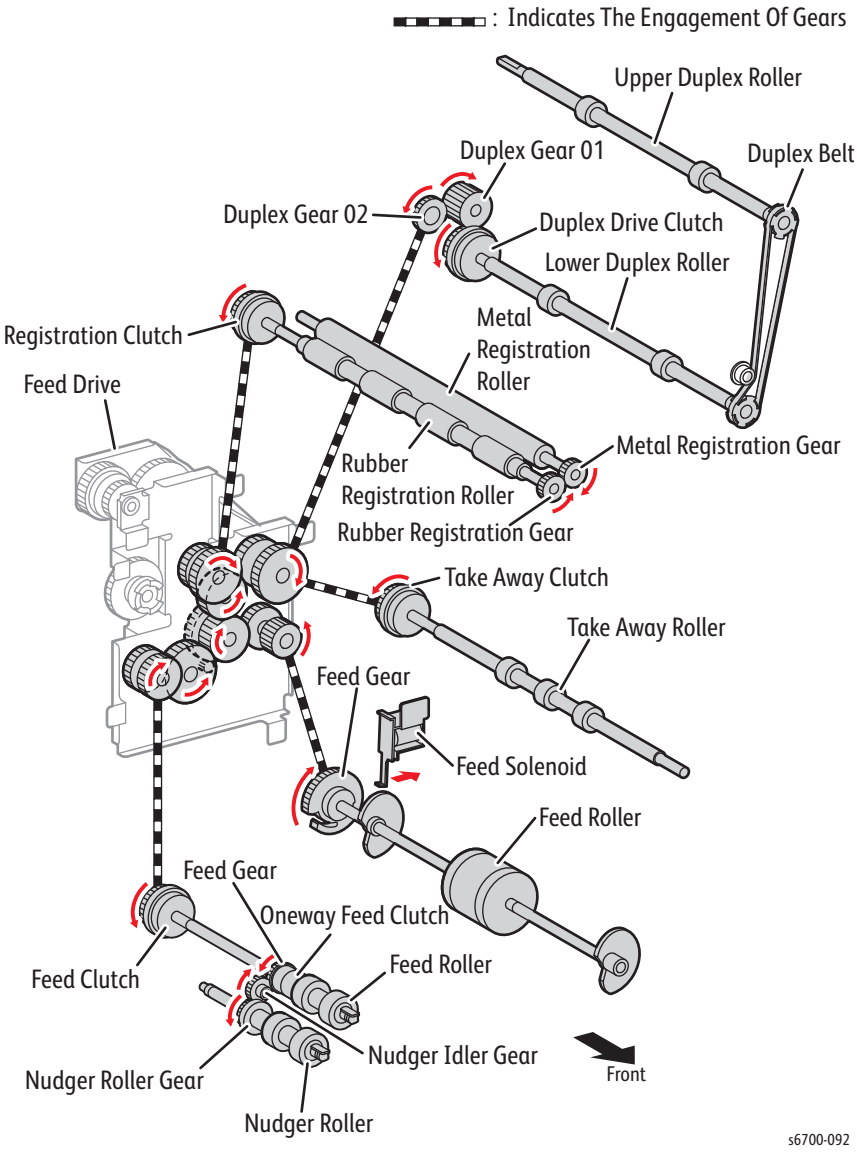


## Feed Drive Assembly

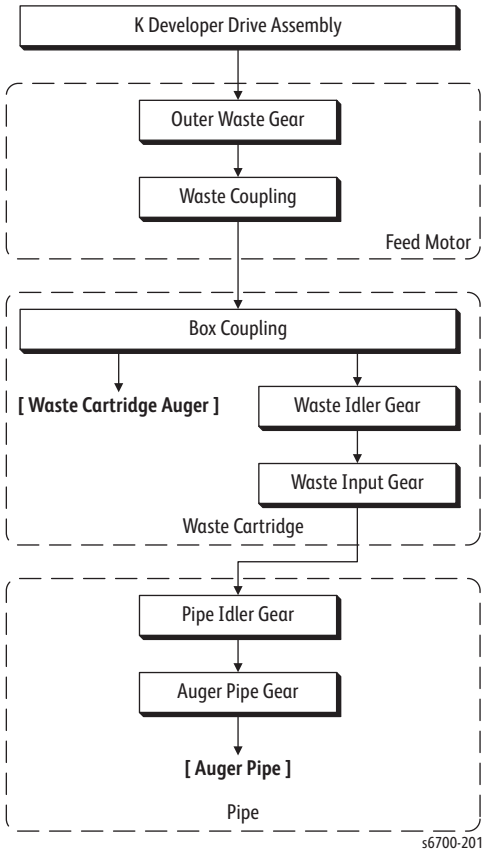
Drives the media feed, registration, Tray 1, and duplex and includes the Switching Clutch that transmits the torque of the Feed Drive Assembly to the link guide to switch between the Color and B/W modes. Feed Drive Assembly drive is transmitted as follows.

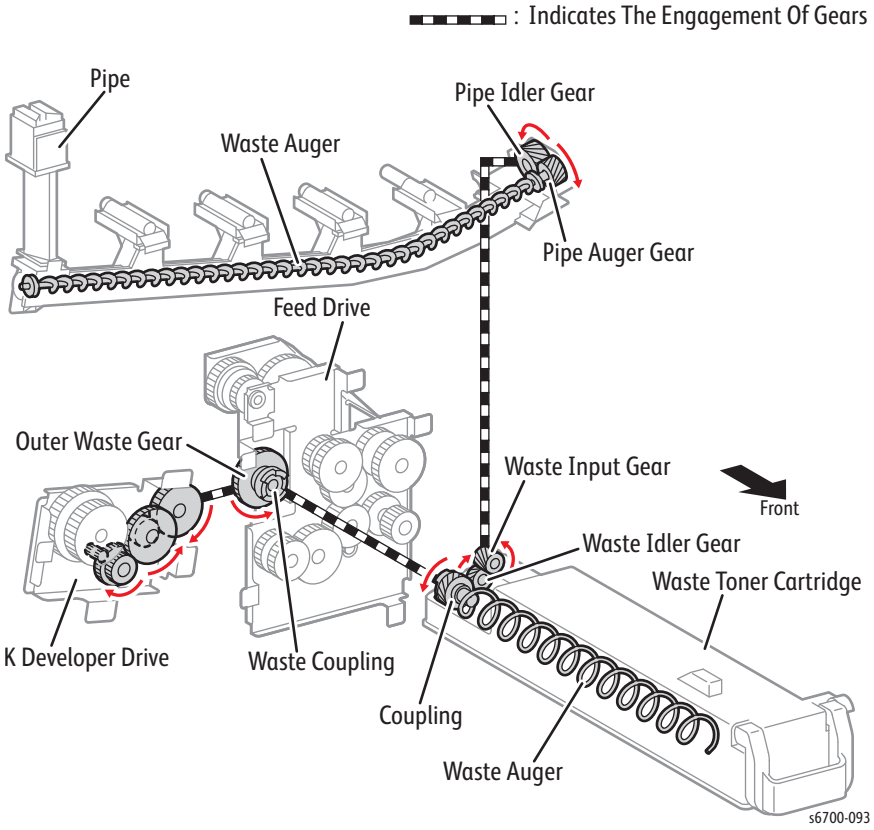



: Indicates The Engagement Of Gears
Upper Duplex Roller
Duplex Gear 01
Duplex Belt
Duplex Gear 02
Duplex Drive Clutch
Lower Duplex Roller
Registration Clutch
Metal
Registration
Roller
Feed Drive
Metal Registration Gear
Rubber
Registration Roller
Rubber Registration Gear
Take Away Clutch
Take Away Roller
Feed Gear
Feed Solenoid
Feed Roller
Feed Gear
Oneway Feed Clutch
Feed Clutch
Feed Roller
Nudger Idler Gear
Front
Nudger Roller Gear
Nudger Roller
s6700-092

## Excess Toner Collection

The K Developer Drive Assembly drives the augers of the Waste Toner Cartridge and Waste Auger.






## Color and B/W Mode

Color mode uses all four colors while B/W mode uses Black only. To deactivate the color components during the B/W mode, drive transmission is switched.

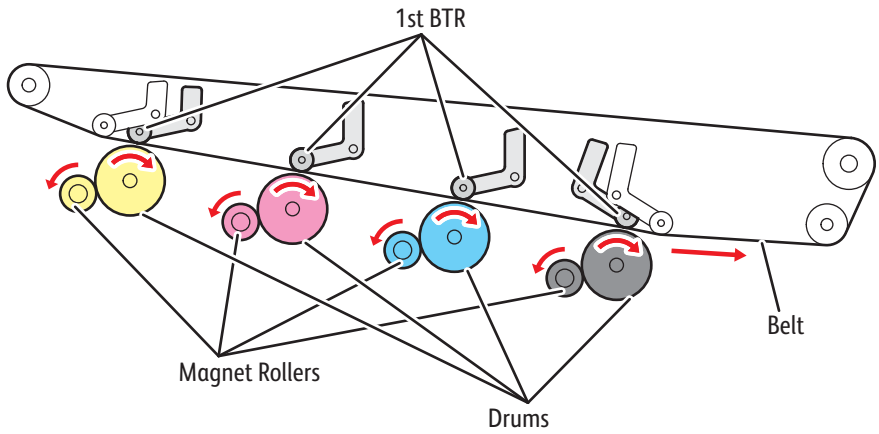
### Operation in Color Mode

In Color mode, the Transfer Belt contacts the four Imaging Unit drums and corresponding 1st BTRs. The Imaging Drum, CMY Developer Drive, and K Developer Drive Assemblies drive the Imaging Unit drums and corresponding magnet rolls to form a color-separated image on each drum.

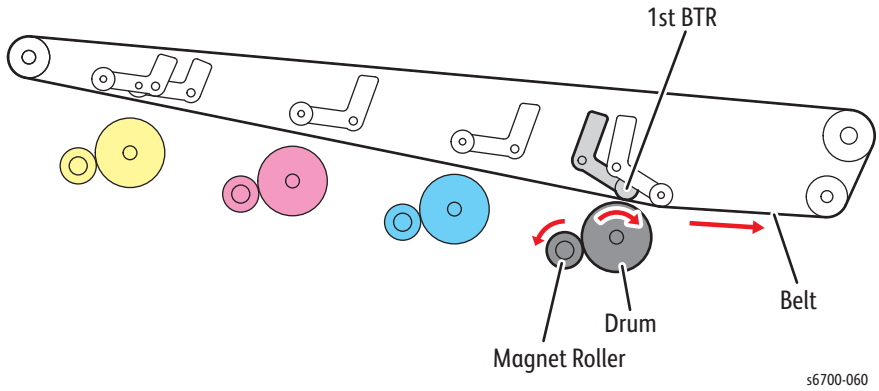
### Operation in B/W Mode

In B/W mode, the Transfer Belt contacts the Black Imaging Unit drum and1st BTR only. The Black drum is driven by the Imaging Drum Drive Assembly. The CMY Developer Drive Assembly is disengaged, and the K Developer Drive Assembly drives the Imaging Unit magnet roll to form an image on the Black drum.

**Full Color Mode**

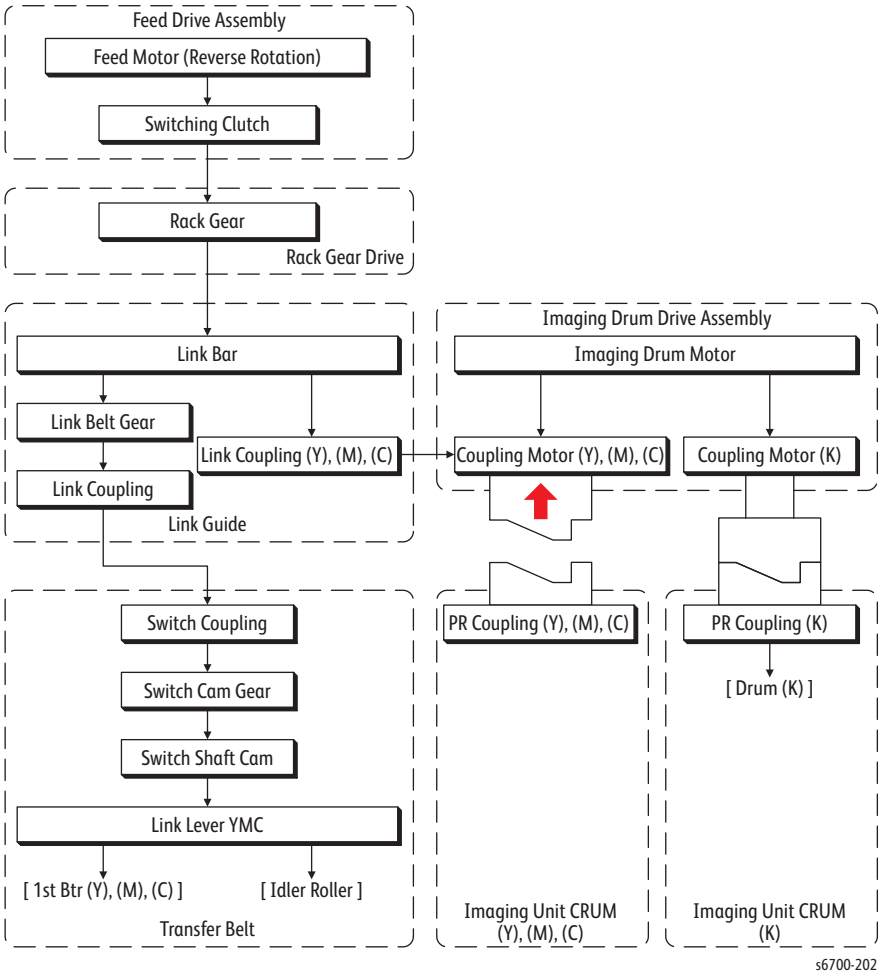



**Black And White Mode**




## Switching Between Color and B/W Modes

Switching between Color and B/W modes is controlled by the rotation of the Feed Drive Assembly (B/W mode: reverse, Color mode: normal) and engagement of the Switching Clutch. When the switching clutch is turned On, the torque from the Feed Drive Assembly horizontally drives the link bar in the link guide via the rack drive to rotate the link coupling assembly and the three link couplings (Y/M/C). The position of the link bar is detected by the Color and Black Switching Sensors.




## Rotation of the Coupling Link

The coupling link drives the switch cam shaft in the Transfer Belt, moving the link lever YMC horizontally inside the Transfer Belt to control the three color 1st BTRs.

- B/W mode: 1st BTRs for Y, M, and C are positioned near the Belt and the drums.
- Color mode: 1st BTRs for Y, M, and C are in contact with the Belt and the drums.

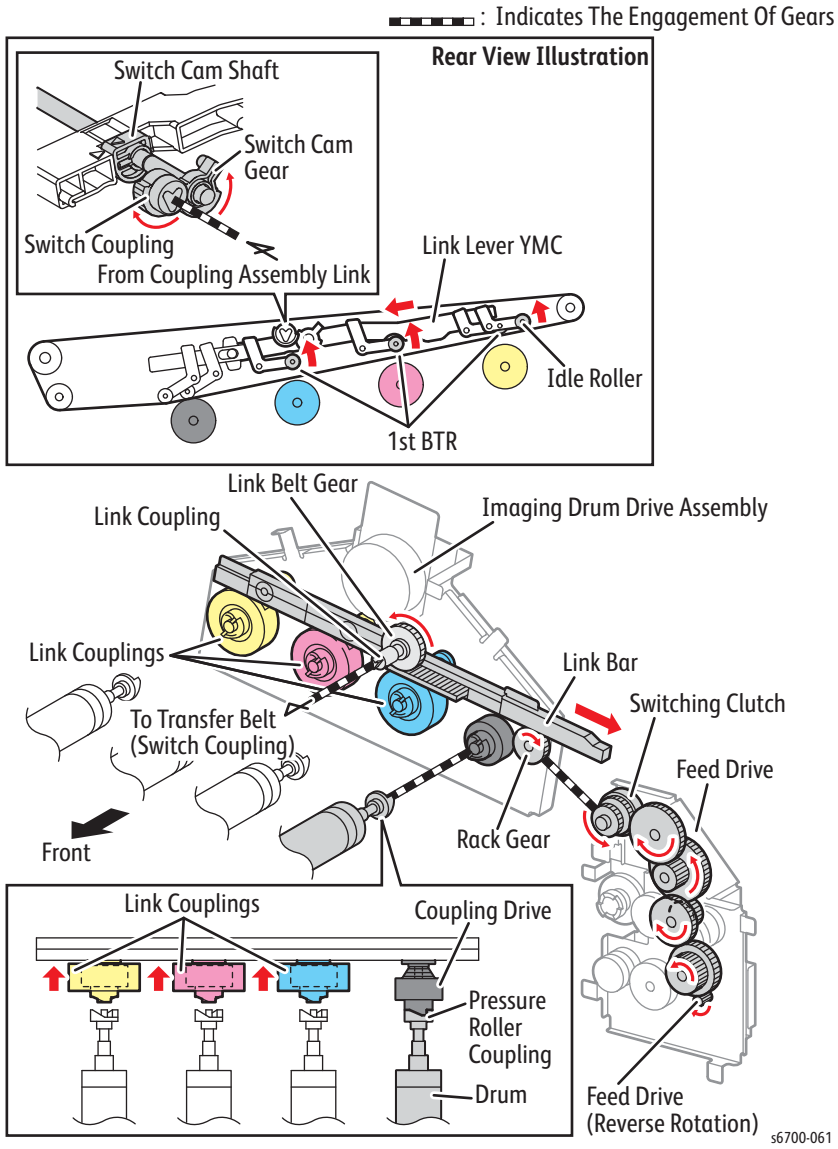
## Rotation of the Link Coupling

The link couplings rotate to engage or disengage the couplings for the torque transmission between the Feed Drive Assembly and the three drums (Y, M, C).

- B/W mode: The couplings are disengaged to disconnect drive from the Feed Drive Assembly to the drums (Y, M, C).
- Color mode: The couplings are engaged to transmit drive from the Feed Drive Assembly to the drums (Y, M, C).

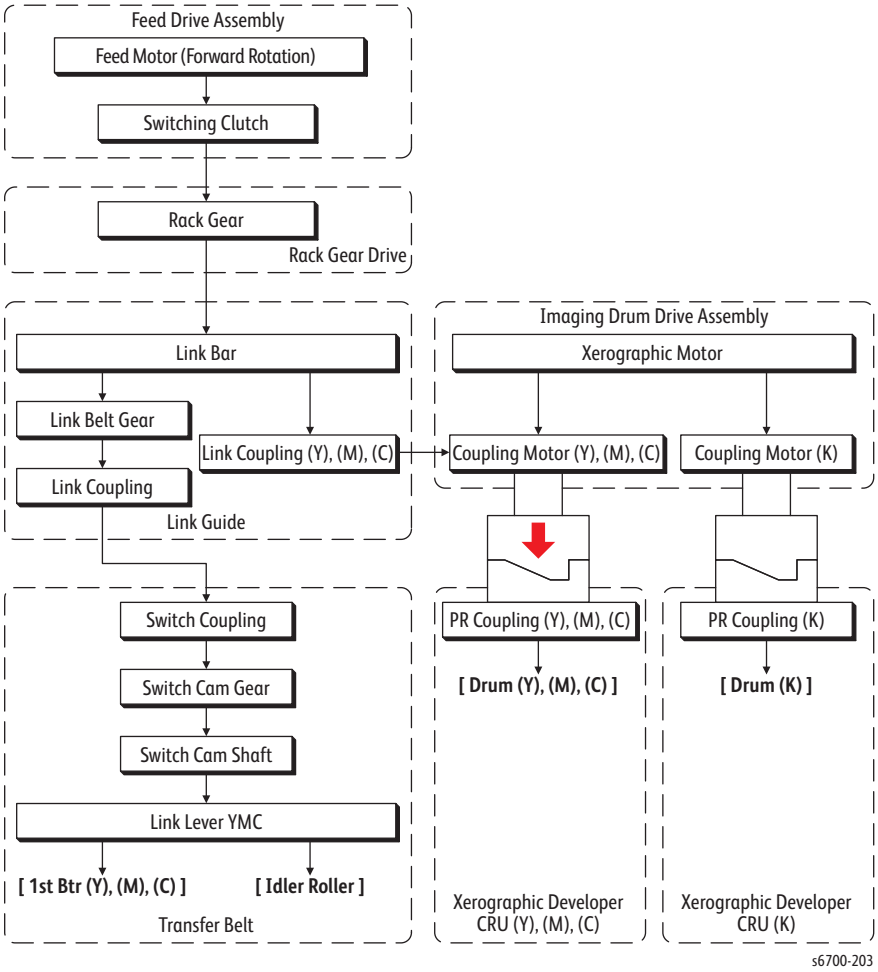
## Switch to B/W Mode

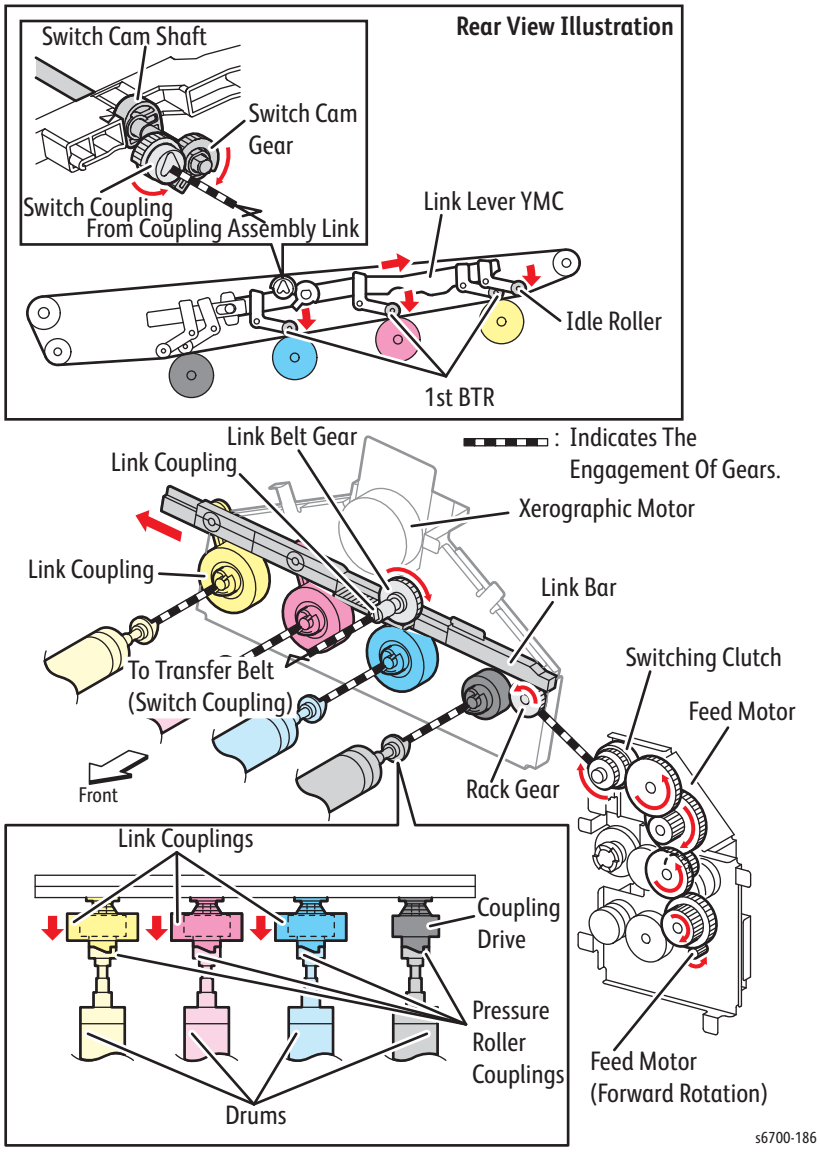
Drive switching to B/W mode is transmitted through the route below.



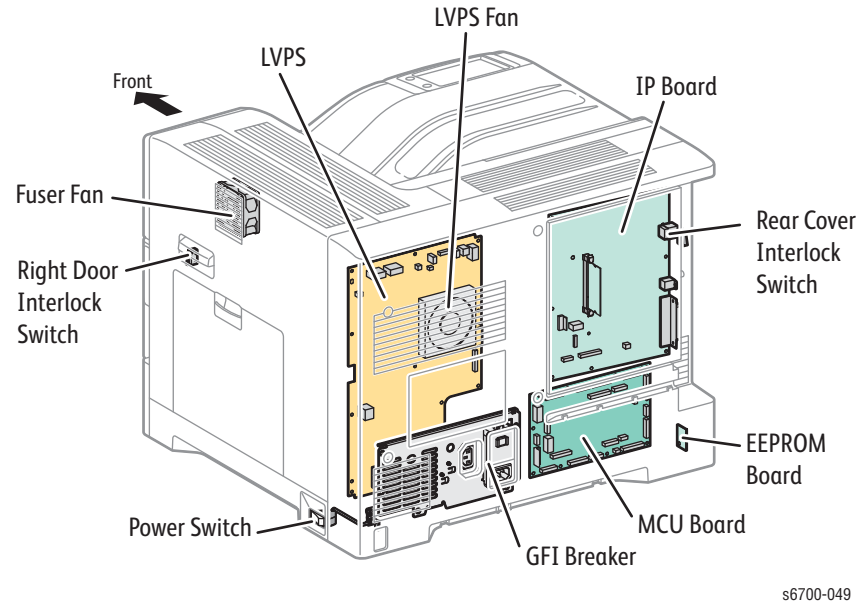
## Switch To Color Mode

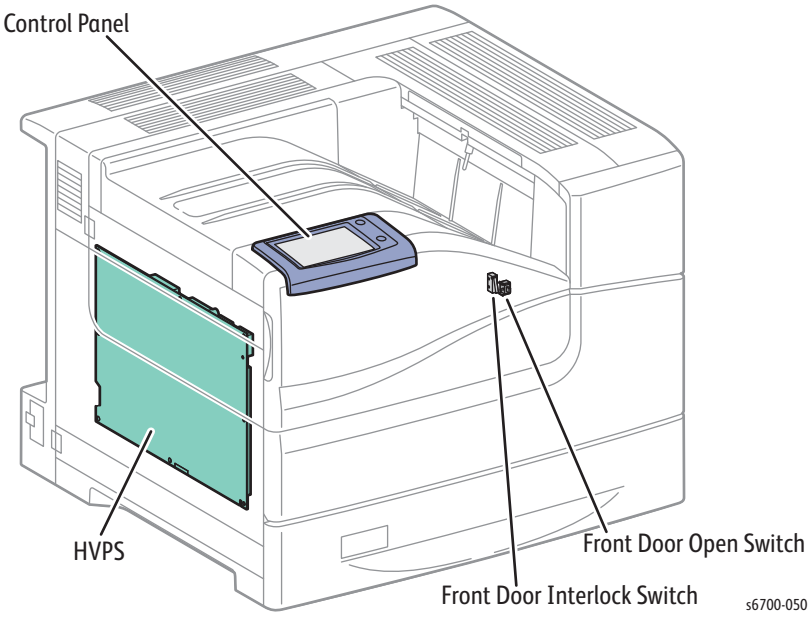
The switching to the Color mode is transmitted through the route below.




Rear View Illustration
Switch Cam Shaft
Switch Cam Gear
Switch Coupling
From Coupling Assembly Link
Link Lever YMC
Idle Roller
1st BTR
Link Belt Gear
: Indicates The Engagement Of Gears.
Link Coupling
Xerographic Motor
Link Coupling
Link Bar
To Transfer Belt
(Switch Coupling)
Switching Clutch
Feed Motor
Front
Rack Gear
Link Couplings
Coupling Drive
Pressure Roller Couplings
Drums
Feed Motor
(Forward Rotation)
s6700-186

## Electrical




### Fans

- Fuser Fan

Exhausts heat generated near the Fuser.

- LVPS Fan

Exhausts heat generated near the LVPS.

## Switches

- Power Switch

Turns On/Off the AC power to the printer.

- Front Door Interlock

Detects the open/close of the Front Cover. Interrupts DC power to the printer (+24VDC) when the Front Door is opened.

- Front Door Open

Detects the open/close of the Front Door and blocks power to the Laser Unit.

- Right Door Interlock

Detects the open/close of the Right Door. Interrupts DC power to the printer (+24VDC) when the Right Door is opened.

- Rear Cover Interlock

Detects the presence/absence of the Rear Cover. Interrupts the DC power to the laser Unit (+5VDC) when the Rear Cover is removed.

- GFI Breaker

Opens the circuit when the leakage current of the AC power supply exceeds the rated value.

## Circuit Boards

- LVPS (Low Voltage Power Supply)

Supplies the AC power from the power supply to the heater section of the Fuser and generates stable low DC voltage to be used by the logic circuits and other components.

- HVPS (High Voltage Power Supply)

Supplies high voltage to the BCRs and the Magnet Rolls for each color.

- MCU Board (Machine Control Unit)

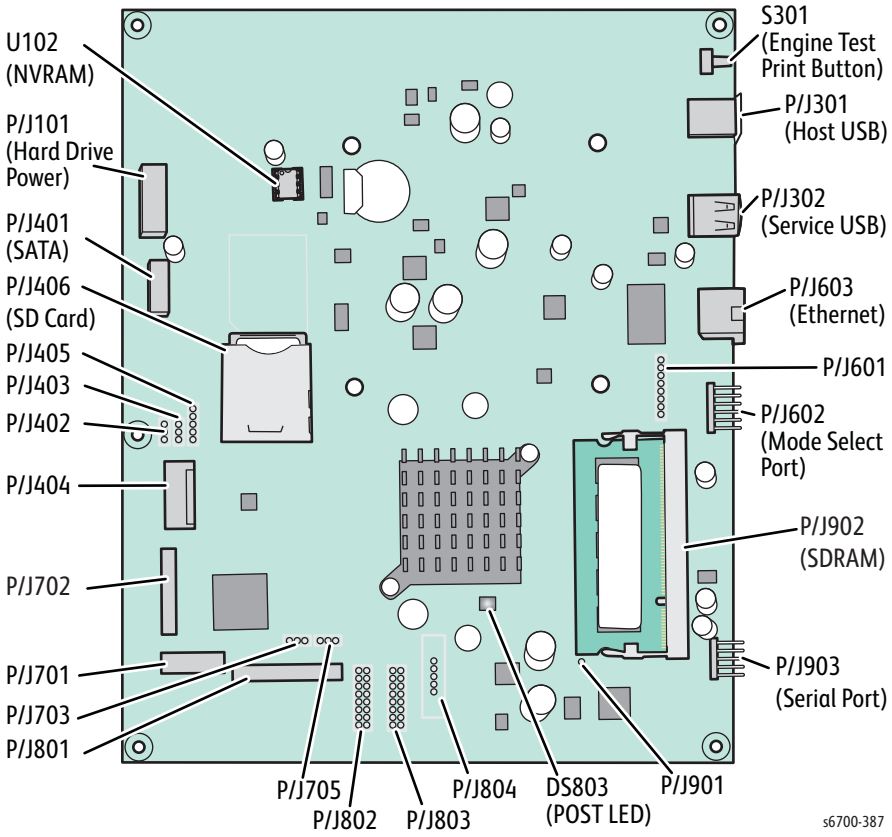
Controls the print operation based on the communication with the print controller and on the information from the sensors or switches.

- Image Processor Board (ESS)

The IP Board connected to the MCU Board controls the entire system (diagnostic, interface, image processing, etc.). Critical user-defined configuration parameters are periodically saved to NVRAM and the SD Card. Data is automatically restored to a replacement SD Card or NVRAM EEPROM on power up.

Components attached to the IP Board include:

- 4GB SD Card containing boot firmware, application software and system configuration parameters.
- 32KB, 8-pin NVRAM EEPROM contains device (configuration, page counts, activation date, etc.) data.
- 1GB Micron DDR2 RAM module.
- Hard Drive (optional) mounted to the IP Board with stand-offs and connected to P/J101 for power and P/J401 SATA.




- EEPROM Board

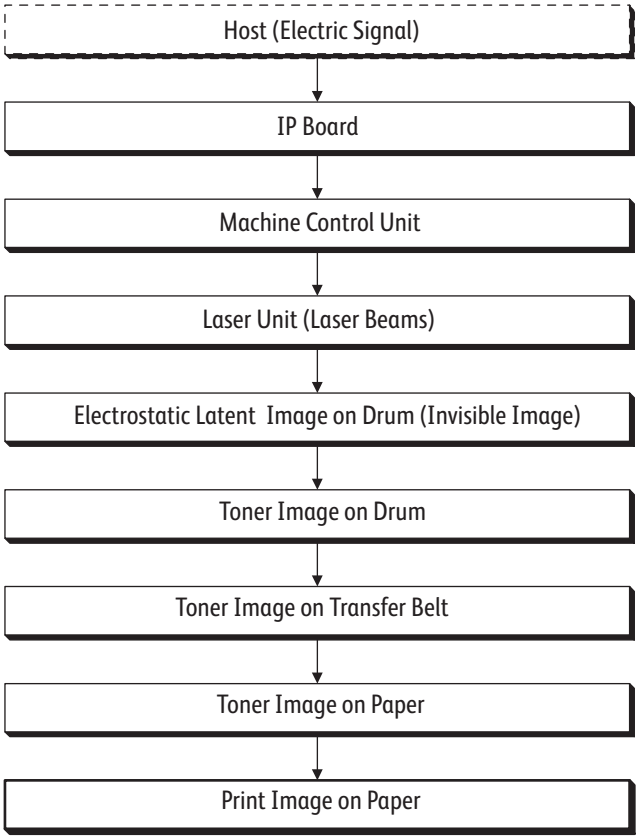
Stores the printer-specific information.

- Control Panel

Allows the user to view the printer status or execute operations via the LCD, LED, and buttons.

## Data Flow

The print data (electric signal) from the printer controller flows as shown below before it is turned into a print.



# Print Quality Controls

## Operating Modes

The printer operates in the these four modes:

| Mode | Operation |
|---|---|
| Printing | ■ Fuser: Held at operating temperature.<br>■ Exposure system: Operating status<br>■ Printing system: Operating status<br>■ Cooling fan: Operating status (high speed) |
| Ready | ■ Fuser: Held at ready temperature.<br>■ Exposure system: Stop status<br>■ Printing system: Stop status<br>■ Cooling fan: Operating status (low speed) |
| Sleep | ■ Fuser: Stop status<br>■ Exposure system: Stop status<br>■ Printing system: Stop status<br>■ Cooling fan: Operating status (low speed) |
| Deep Sleep | ■ Fuser: Stop status<br>■ Exposure system: Stop status<br>■ Printing system: Stop status<br>■ Cooling fan: Stopped |

## Laser Intensity Control

Image data is input to the laser diodes in the Laser Unit as electric signals, then converted by the laser diodes to optical signals. Since variations occur in laser light intensity, optics (such as lenses), or drum sensitivity, the laser light intensity is monitored and controlled by the laser diodes. The Laser Unit incorporates four laser diodes, one for each color, and adjusts light intensity automatically for each color.

## Image Process Control

The parameters related to image formation must be corrected to stabilize printing. The control of the entire printing process including the parameter correction control is called "process control".

The process control is performed by the following two methods after every 30 cumulative prints upon termination of a print run or during a continuous run:

- Potential Control
- Toner Density Control

To supplement these two controls, the following controls are provided:

- High Area Coverage Mode
- Admix Mode

## Potential Control

To attain stable image density, the drum charging voltage, the developing DC voltage and the laser diode output are adjusted according to the developing capability of each color carrier. The adjusted drum charging voltage, developing DC voltage, and laser light amount are fed back to keep the image density constant

The outline of control is as follows:

1. The Environmental Sensor detects the temperature and humidity.
2. The patches of respective colors (yellow, magenta, cyan, and black) for the potential control are generated and transferred onto the Transfer Belt.
3. The ADC Sensor detects the density of the patches on the Transfer Belt.
4. The drum charging voltage, developing DC voltage and the laser light intensity are adjusted for each color according to the detected patch density.

## Toner Density Control

The toner density must be kept constant to stabilize the print image quality. The control system for this purpose is called toner density control.

### Pixel Count Dispense Control

The quantity of the toner required in the developing process is calculated in terms of toner-dispensing time based on the pixel count being input to the Laser Unit. The amount of the toner fed to the Imaging Units is controlled by turning on the toner motors for the calculated time.

### Auto Density Control

Patches of Yellow, Magenta, Cyan, and Black for the toner density control are generated, and transferred onto the Transfer Belt. The ADC Sensor measures the densities of these patches and compares them with a reference value. If the toner density is lower than the reference, the toner dispense quantity is increased at the next printing. If the toner density is higher than the reference value, the toner dispense quantity is reduced. Dispense quantity is calculated on a color-by-color basis.

### High Area Coverage Mode

Continuous printing of high-area coverage images that exceed the toner dispense capability lowers toner density in the Imaging Units. High Area Coverage Mode postpones the next sheet feed and dispenses toner during this time if the toner dispense time has reached the specified value during continuous printing.

### Admix Mode

This mode executes extra toner dispensation to prevent the toner density from being lowered whenever the value of the toner density control patch measured by the ADC Sensor falls far below the reference value. If the toner density level cannot be recovered after this operation, it is determined that the toner has run out.

## ADC Sensor Adjustment

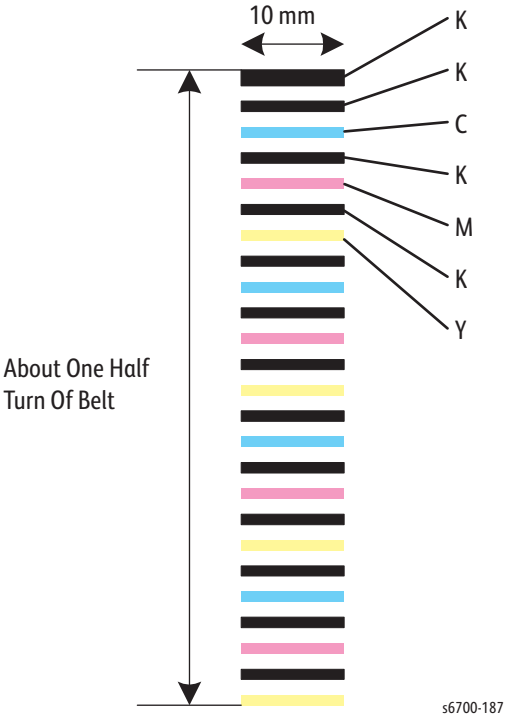
The ADC Sensor illuminates the toner patch applied to the Transfer Belt. ADC light reflected from the target is converted to output signals. To ensure an accurate patch density measurement, the surface of the ADC Sensor is cleaned to remove dust due to toner, etc., and the light quantity adjustment is made so that the reflected light satisfies the target value when the toner patch is created.

## Color Registration Control

The printer uses a tandem system where the drums and developers are provided for each colors. Since the four color-separated images are overlaid onto the print, a color shift may occur. Color registration control calculates how much the registration is shifted and adjusts the Laser Unit write timing. Lateral registration control adjusts all four colors in the lateral direction. Color registration control is executed during process control based on the change in the internal temperature and print count.

The control is outlined below:

1. With no toner on the Transfer Belt, the output value of the ADC Sensor is measured to determine the threshold value.
2. The patch for color registration control is generated on the Transfer Belt. This patch is composed of four cycles of a color pattern, each containing 10mm-wide color bars starting with a black trigger line followed by K, C, K, M, K, and Y (in this order).




3. The density of the patch is measured by the ADC Sensor.
4. The correction amount is calculated from the threshold value determined in 1) and the patch density measured in 3).
5. Laser Unit write timing is changed according to the shift correction amount.

## Fuser Temperature Control

To control Fuser temperature, the target temperature is set, and then the heat lamp is turned On or Off to maintain heat roll surface temperature. The surface temperature of the heat roll is detected by non-contact temperature sensor located in the center of the heat roll and a soft- touch sensor located at each end of the heat roll.

However, the soft- touch sensor may detect a temperature lower than the actual value if the distance between the sensor and the heat roll has increased for some reason. To protect the Fuser in such a case, the heater lamp is turned Off if the warm-up target temperature is not reached within a specified time.

This target temperature varies depending on printer activity such as warm-up, printing, or during process control, and is set according to the interior temperature detected by the Environmental Sensor, the temperature difference between the middle and the ends of the heat roll, the printing mode, and the input supply voltage.

### Cool Down

As printing continues, the heat roll temperature becomes nonuniform between the area that contacts the sheet and the area that does not. In such a case, media feeding is suspended for a certain duration to compensate for the temperature non uniformity of the Heat Roll. When the temperature of the heat roll ends is high, cool down is performed to lower the temperature to the target value.

### Warm-up

The non-contact temperature sensor in the middle section of the heat roll loses its measuring accuracy when the temperature of the sensor itself is -5˚C (23˚F) or below. If internal temperatures fall below -5˚C (23˚F), the sensor is heated to maintain accuracy.

# Optional Feeders

The 550- and 1100-sheet, optional feeders (Trays 3 ~ 6) increase input capacity. Up to four additional Trays per printer are supported. Electrical connection is made by a single connector. This brings the maximum media storage capacity to 2,900 sheets. This section describes in detail the paper path, sensors, major assemblies, and operational characteristics of the option feeders.

## Trays

**Note**

All the optional trays (3~6) are identical.

- Side Guides

The front and rear side guides align the media stack along its width, perpendicularly to the feeding direction.

- End Guide

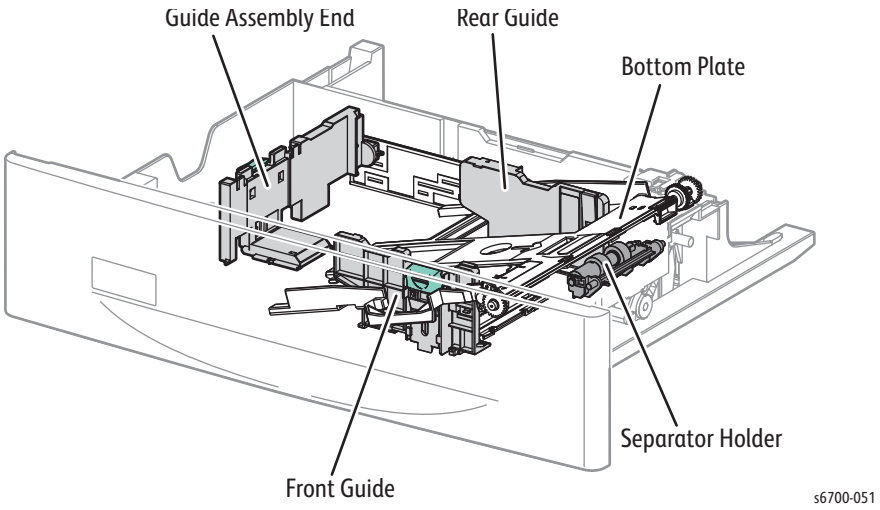
The end guide aligns the media stack lengthwise in the Tray. Based on end guide position, media size is determined by the combination of signals generated by three switches in the Size Switch.

- Separator Holder

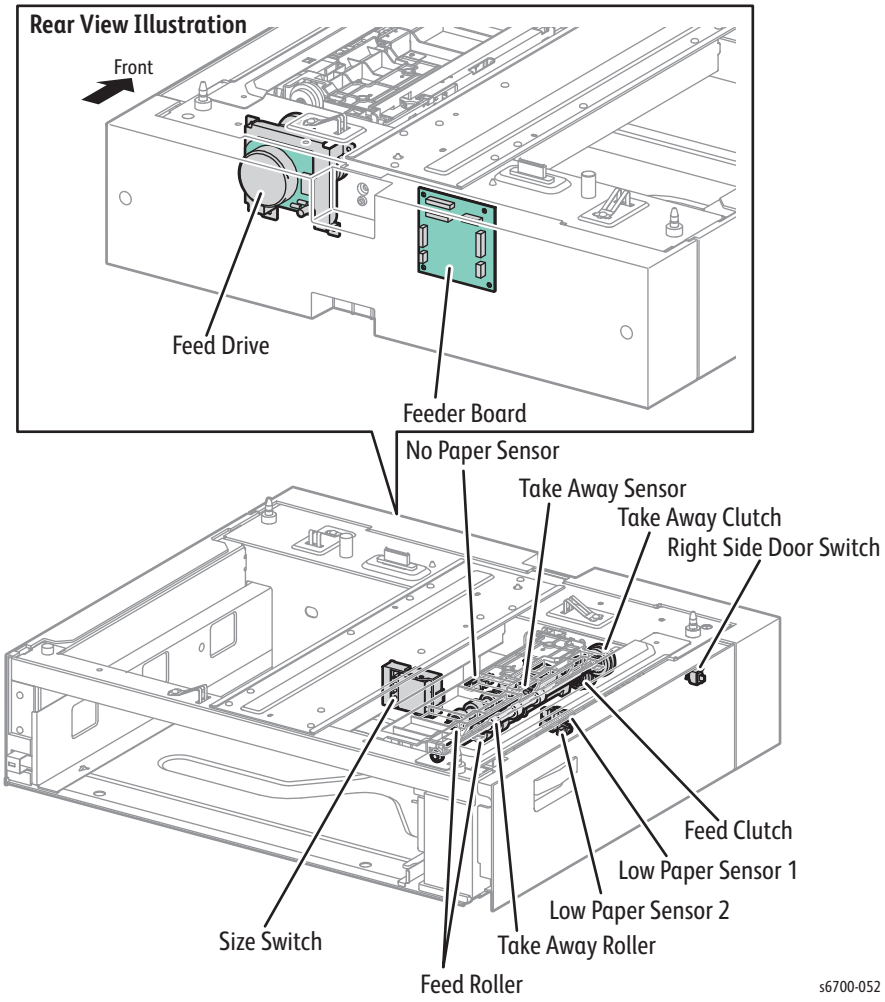
The Separator Holder that includes the Separator Roller and the Feed Roll nip the media to prevent multiple sheet feeds.

- Bottom Plate

When the Tray is pulled from the feeder, the bottom plate is lowered and locked to the bottom of the Tray. Replacing the Tray releases the bottom plate from the lock, pressing the media stack against the Nudger Roll by the spring pressure.



## Electrical




- Size Switch

The Size Switch detects media size and the presence of the Tray. Aligning the end guide to the media stack changes the position of the size actuator coupled to the end guide, turning On or Off the switches The media size is determined by the combination of signal states of these switches. See “Media Size Detection” on page 2-22.

- No Paper Sensor

The No Paper Sensor detects the presence/absence of print media in the paper tray based on the position of ACTUATOR NO PAPER. (No paper: Sensor beam is blocked)

- Low Paper Sensor

The Low Paper Sensor detects the amount of the print media remaining in the Tray in three levels (50, 25, and 10 %). See “Media Level Sensing” on page 2-23.

- Feed Clutch

The Feed Clutch transmits the driving torque from the Feeder Motor to the Feed Roll.

- Feed Roll

When the Feed Clutch operates, the Feed Roll starts rotating to feed media.

- Take Away Clutch

The Take Away Clutch transmits drive from the Feeder Motor to the Take Away Roller.

- Take Away Roller

The Take Away Roller starts rotating when the drive from the Feeder Motor is engaged by the Take Away Clutch feeding media from the Tray to the media path.

- Take Away Sensor

Detects that the media has reached the registration section.

- Feeder Board

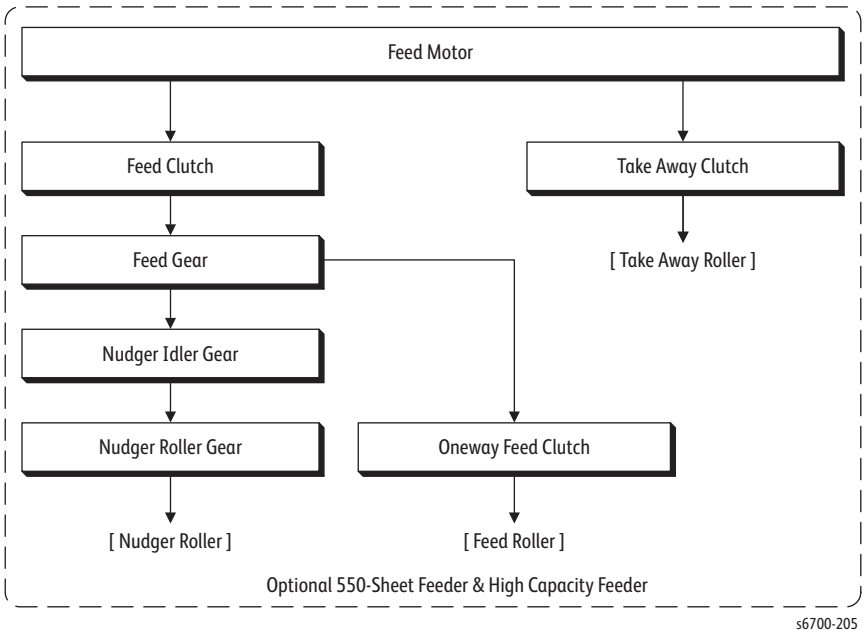
Controls the motors, sensors, and clutches in the Option Feeder.

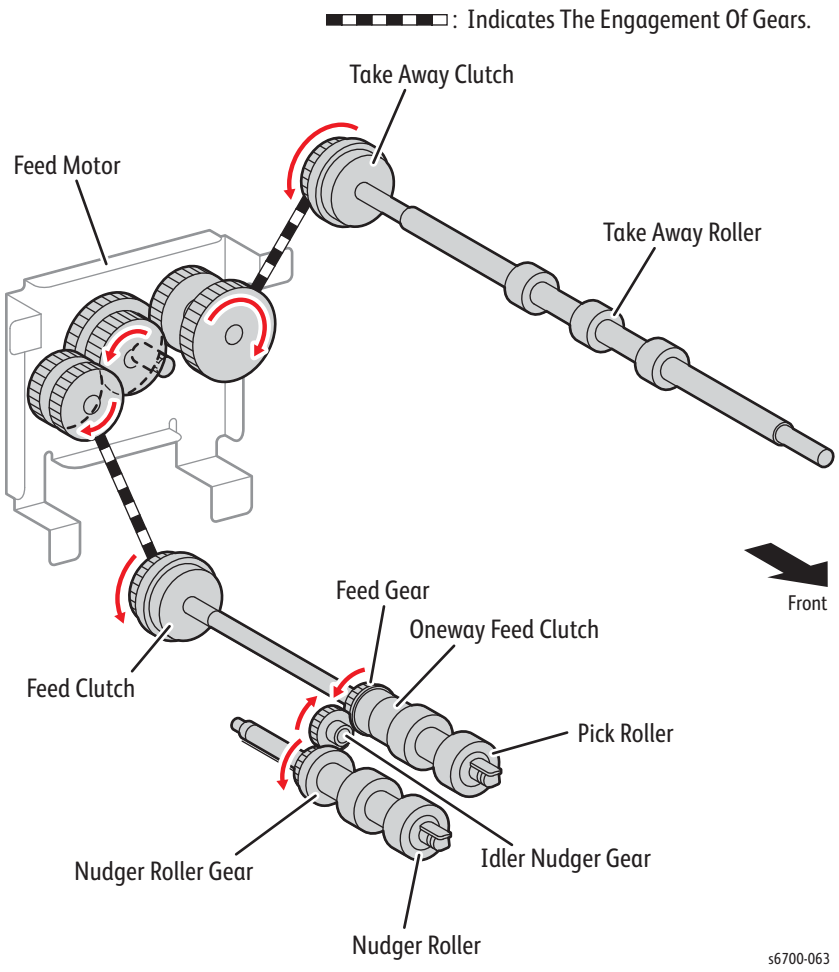
- Right Side Door Interlock

Interrupts DC power (+24VDC) when the Right Door is opened.

## Feed Drive

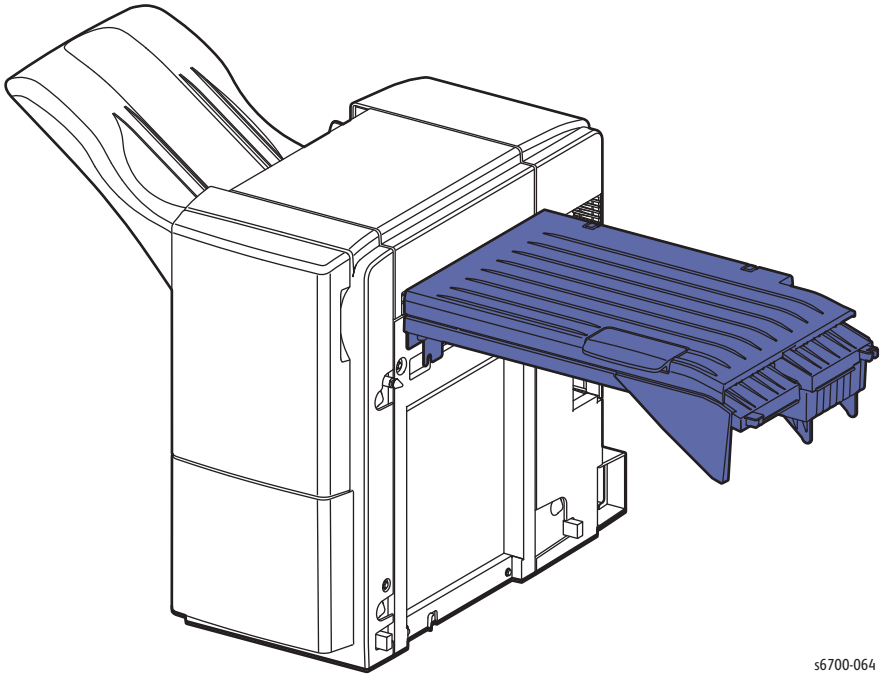
The Feed Drive Assembly drive is transmitted through the route below.




: Indicates The Engagement Of Gears.
Take Away Clutch
Feed Motor
Take Away Roller
Front
Feed Gear
Oneway Feed Clutch
Feed Clutch
Pick Roller
Idler Nudger Gear
Nudger Roller Gear
Nudger Roller
s6700-063

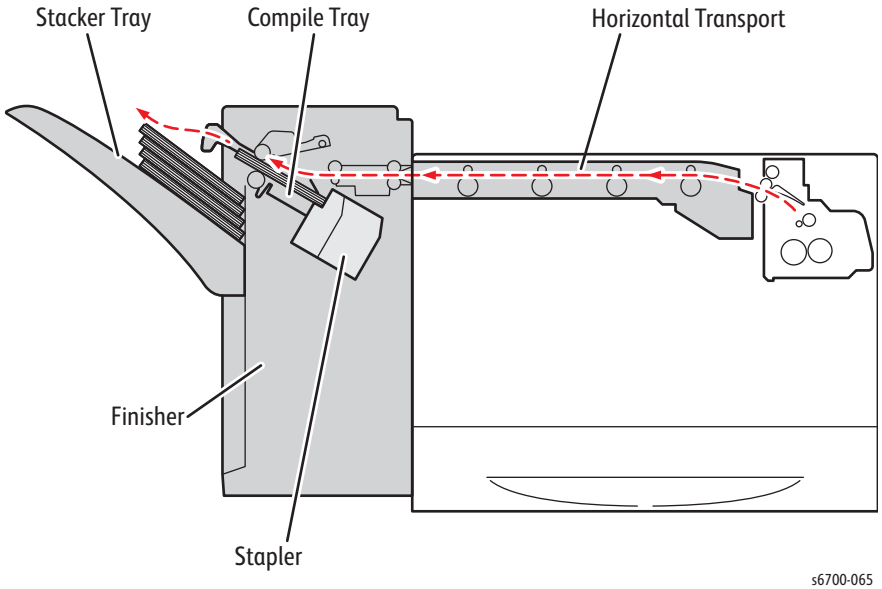
# Finisher Overview

The Finisher is a customer installed option that adds stapling and stacking with offset. The Finisher docks with the printer and uses an accessory interface connection on the printer.



s6700-064

The Finisher is described in these functional blocks:




s6700-065

- Horizontal Transport

Moves sheets ejected from the printer to the Finisher.

- Compile Tray

Aligns the sheets.

- Stapler

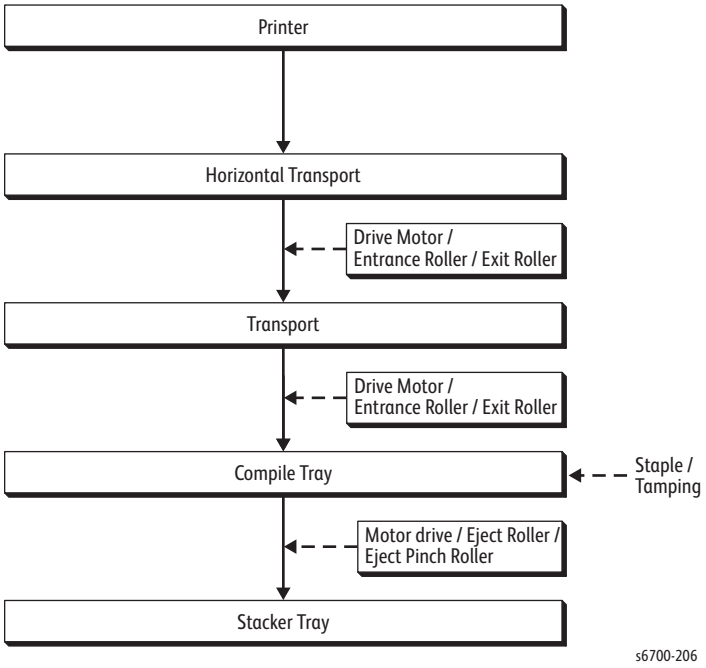
Staples the sheets in the specified position.

- Stacker Tray

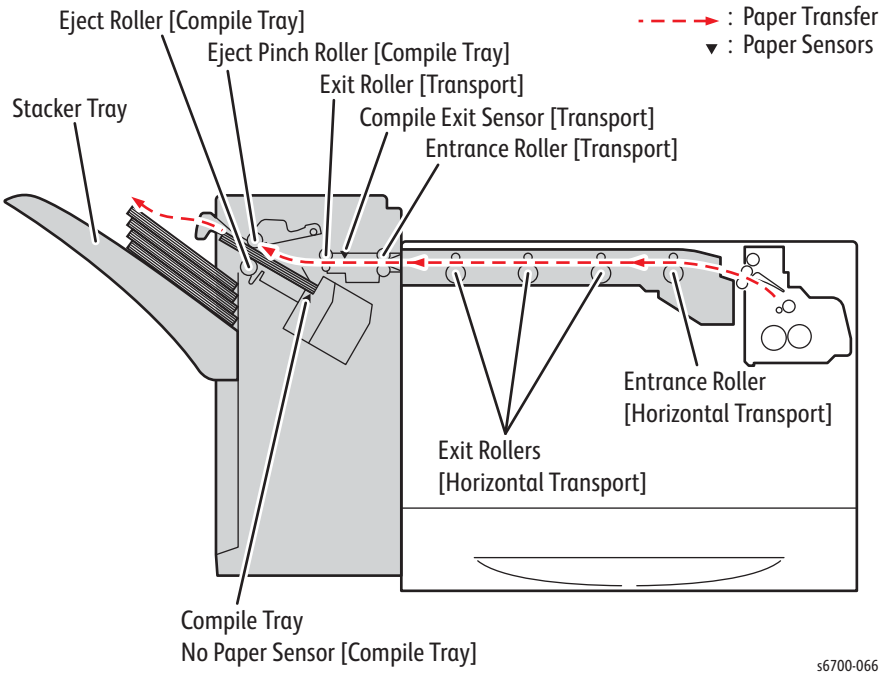
Holds the sheets ejected.

## Finisher Media Path

Shown below is the media path for the Output Tray, through Exit, the Horizontal Transport, and the Finisher.

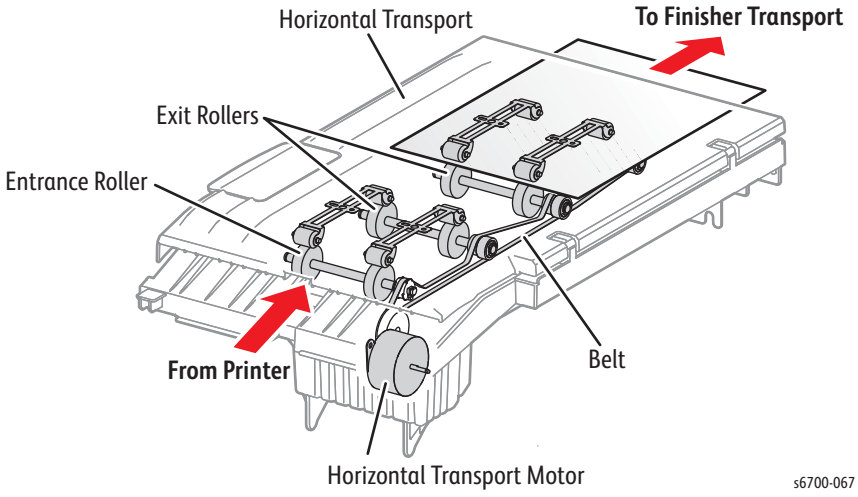


## Media Path Components



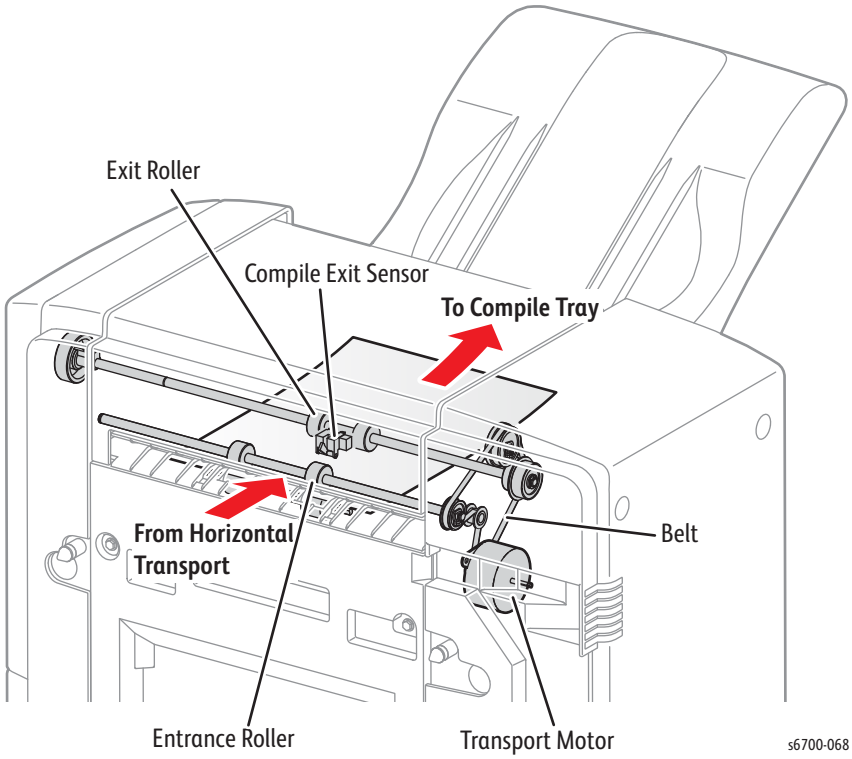

### Horizontal Transport

As media exits the printer, the printer's Exit Sensor signal activates the Horizontal Transport Drive Assembly feeds the media to the Finisher entrance.



## Finisher Transport

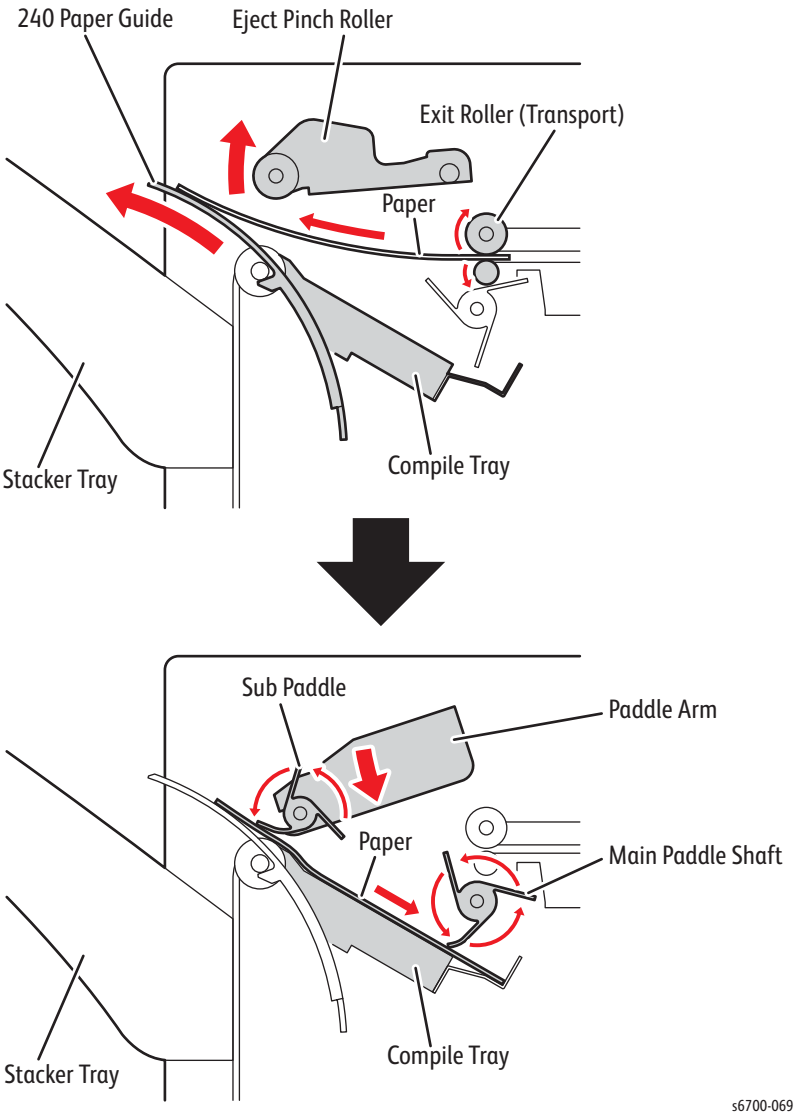
The sheet exits the Horizontal Transport and is fed to the Compile Tray by the Entrance and Exit Rollers driven by the Transport Motor. The sheet is detected by the Compile Tray Exit Sensor.



## Compile Tray

While the paper guide slides out toward the Stacker Tray, driven by the Eject Motor, the Eject Pinch Roller retracts upward to allow the sheet to enter from the Finisher transport and fall onto the Compile Tray.

If stapling or tamping are not specified, the Eject Pinch Roller lowers to allow the sheet to exit to the Stacker Tray. If stapling or tamping is specified, the Paddle Arm Assembly is lowered by the Paddle Arm Solenoid directing the sheet onto the Compile Tray. Next, the Sub Paddle of the Paddle Arm Assembly and the Main Paddle of the Main Paddle Shaft rotate driven by the Transport Motor, to align the sheet against the Compile Tray flange.



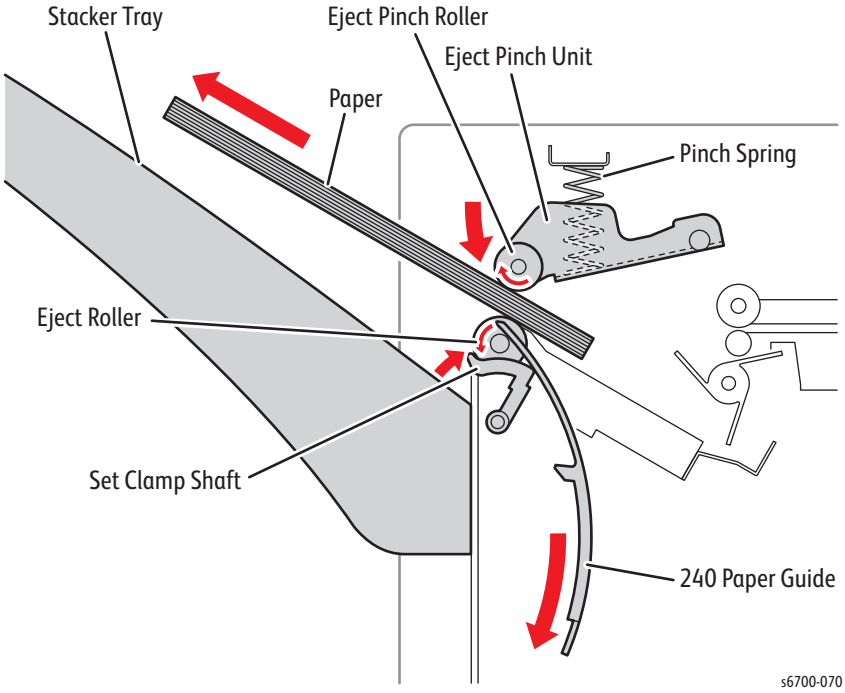
## Ejection to Stacker Tray

When stapling or tamping is complete, the Eject Pinch Roller is lowered by the Eject Motor and the spring pressure of the Pinch Spring to guide the sheet to the Eject Rollers.

The sheet is ejected to the Stacker Tray by the Eject Roller that rotates in the normal direction driven by the Eject Motor and controlled by the sector gear. During ejection to the Stacker Tray, the 240 Paper Guide slides back to its original position driven by the Eject Motor so as not to obstruct the sheet.

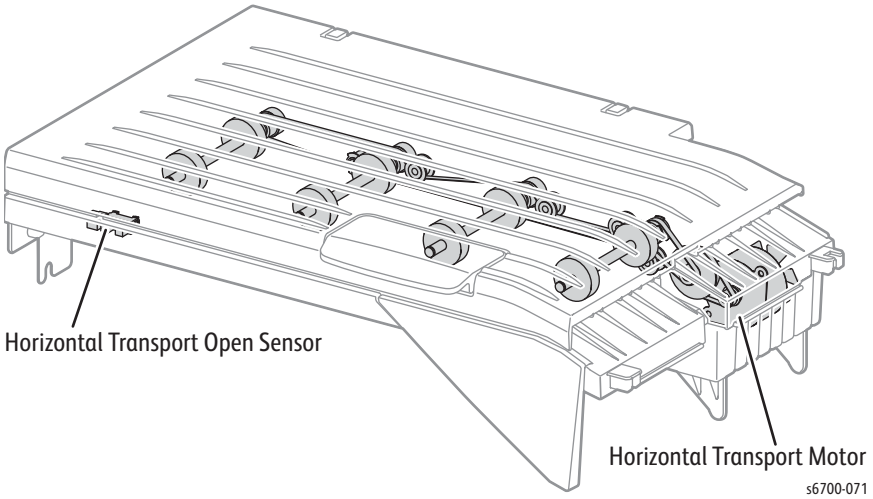
The Set Clamp Clutch engages the Eject Motor to the Set Clamp Shaft, retracting the holder of the Set Clamp Shaft inside the Finisher so as not to obstruct the sheet.

After the eject, the holder of the Set Clamp Shaft returns to its original position to hold down the ejected sheet.



# Major Finisher Components

## Horizontal Transport

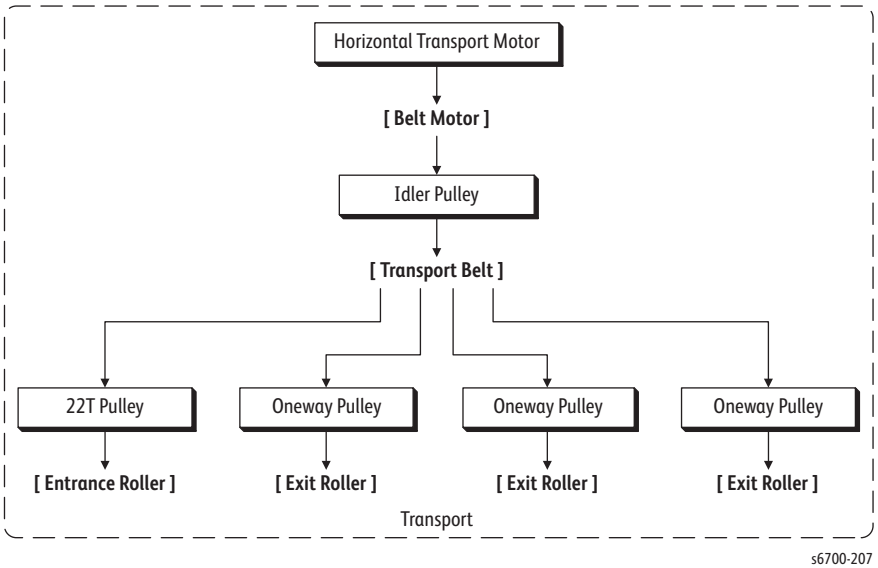


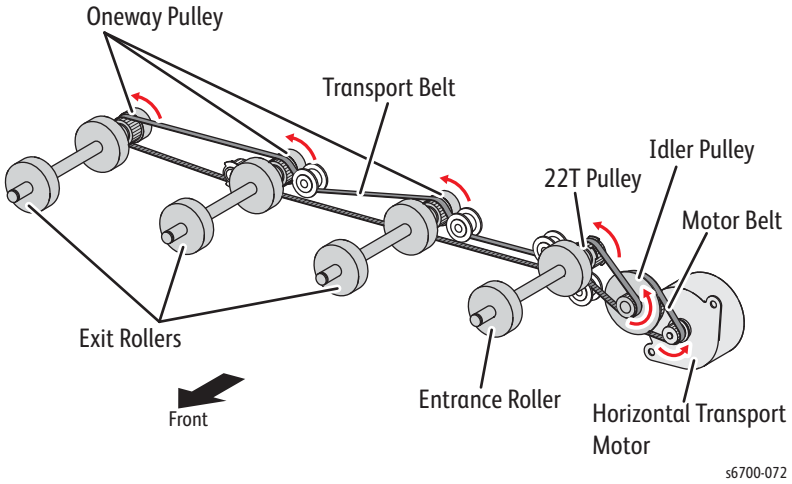

- Horizontal Transport Cover Open Sensor

A switch to detect when the Top Cover of the Horizontal Transport is open.

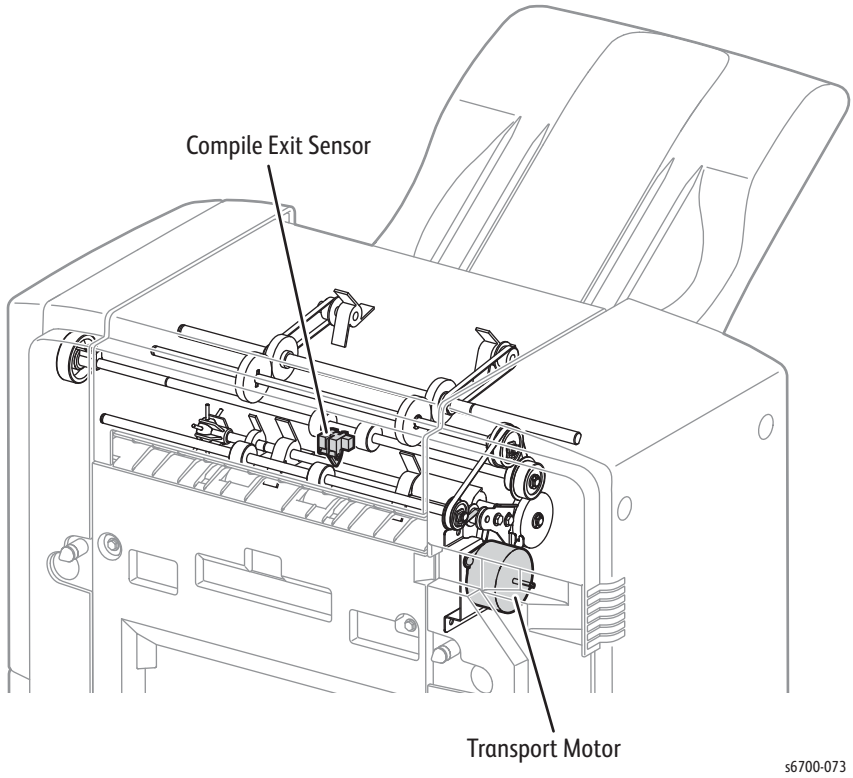
- Horizontal Transport Drive Assembly

A motor that drives the belt for paper feeding in the Horizontal Transport. It is provided with the Fan that exhausts heat out of the Horizontal Transport. Horizontal Transport Motor drive is transmitted through the route below.






## Finisher Transport

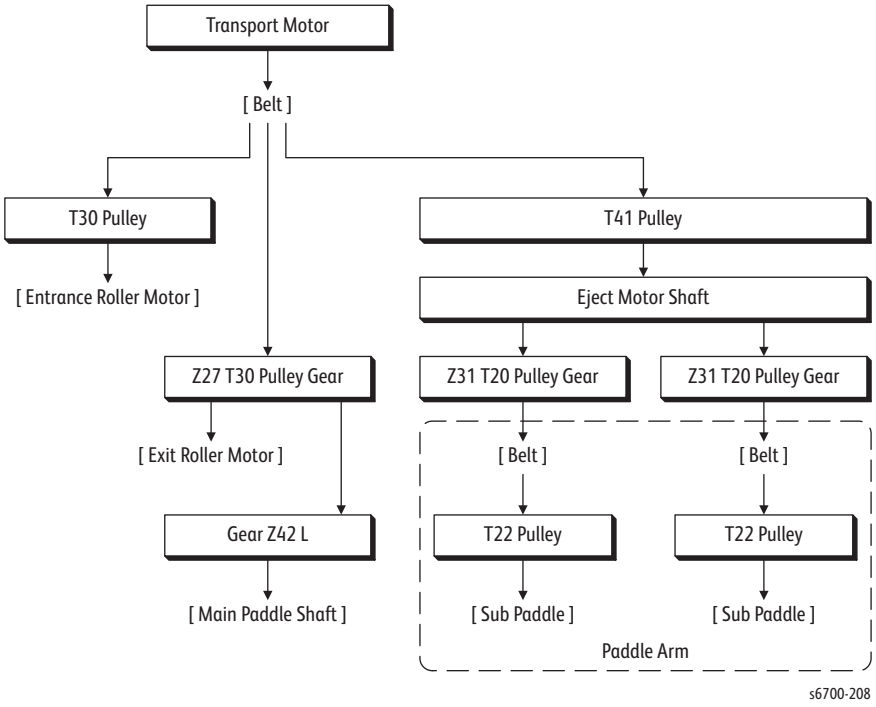



- Compile Tray Exit Sensor (PL 14.7.9)

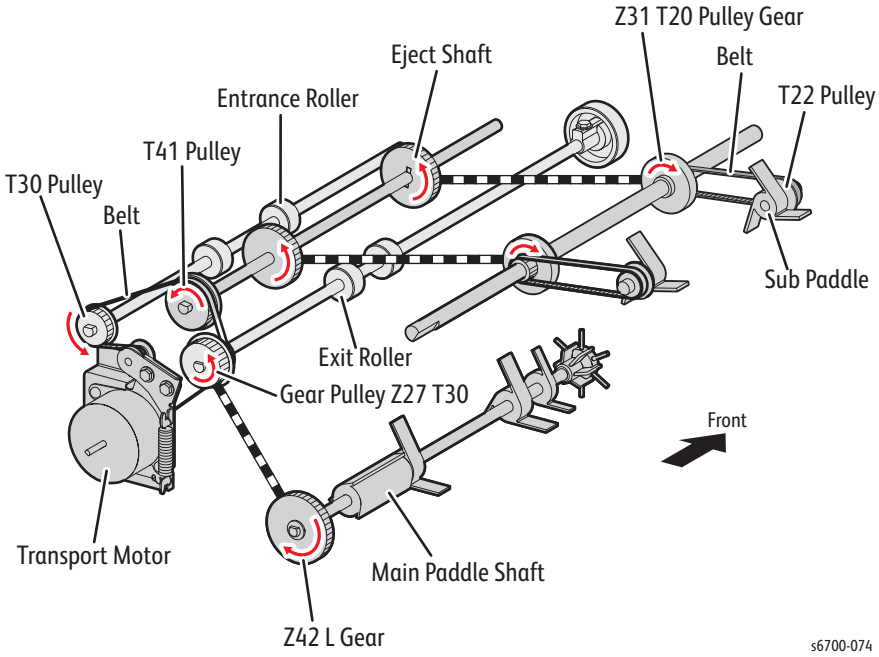
A sensor for detecting the presence of the paper in the Finisher transport based on the change of its actuator position.

- Transport Motor (PL 14.7.16)

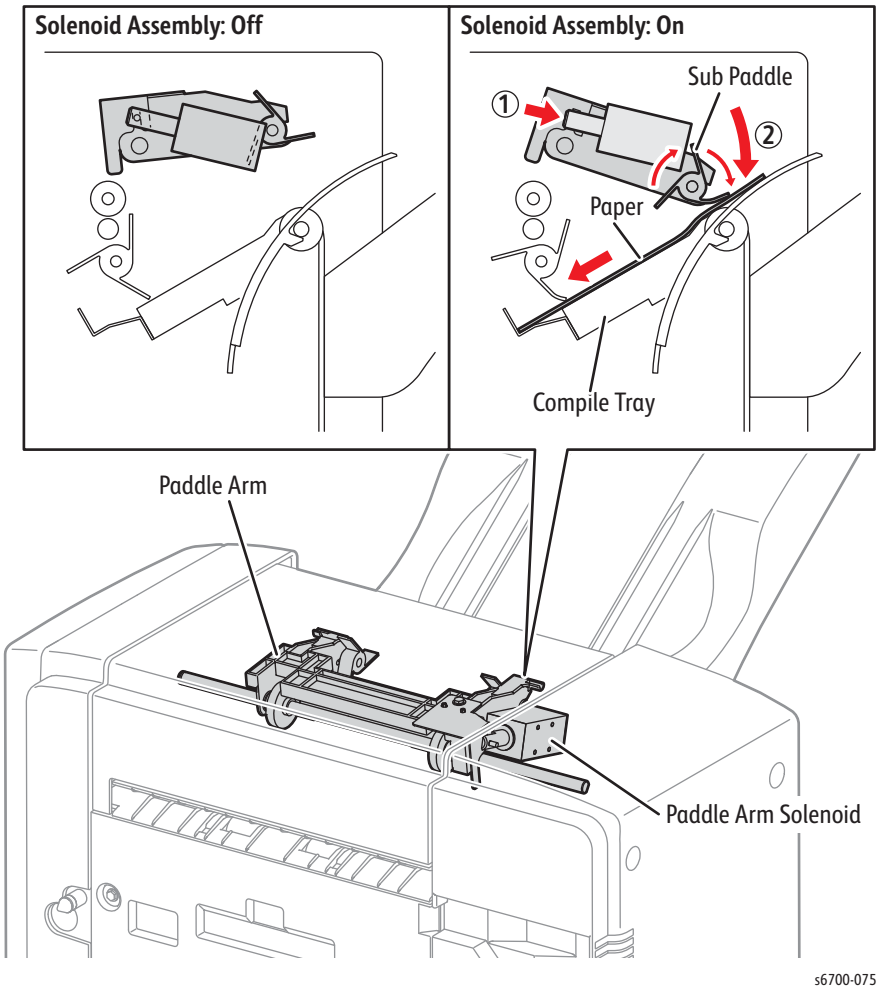
A motor that drives all feeding-related rollers in the Finisher transport, Compile Tray, and Stacker Tray. Transport Motor drive is transmitted through the route below.




: Indicates The Engagement Of Gears.



## Compile Tray




- Paddle Arm Solenoid (PL 14.6.20)

A solenoid that lowers the Paddle Arm onto the sheet fed from the Finisher transport, allowing the rotating Sub Paddle to align the sheet to the flange of the Compile Tray.

- Compile Tray No Paper Sensor (PL 14.8.13)

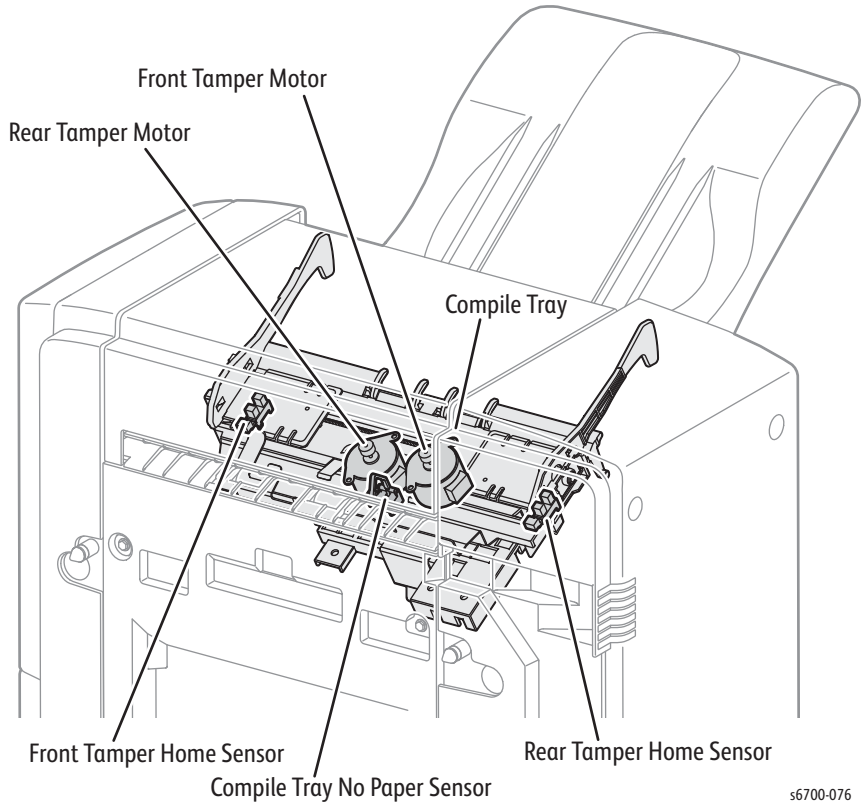
Detects the presence of the paper in the Compile Tray based on the change of its actuator position. (Paper present: Sensor beam received)

- Front Tamper Home Sensor (PL 14.8.9)

A sensor for detecting that the Front Tamper Guide (PL 14.8.4) is at its home position. (Home position: Sensor beam blocked).

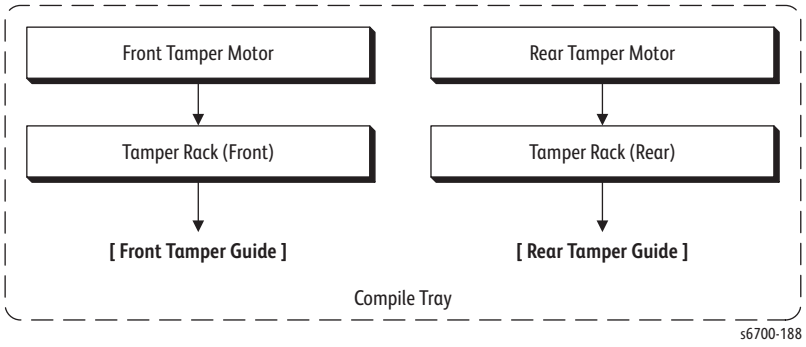
- Rear Tamper Home Sensor (PL 14.8.9)

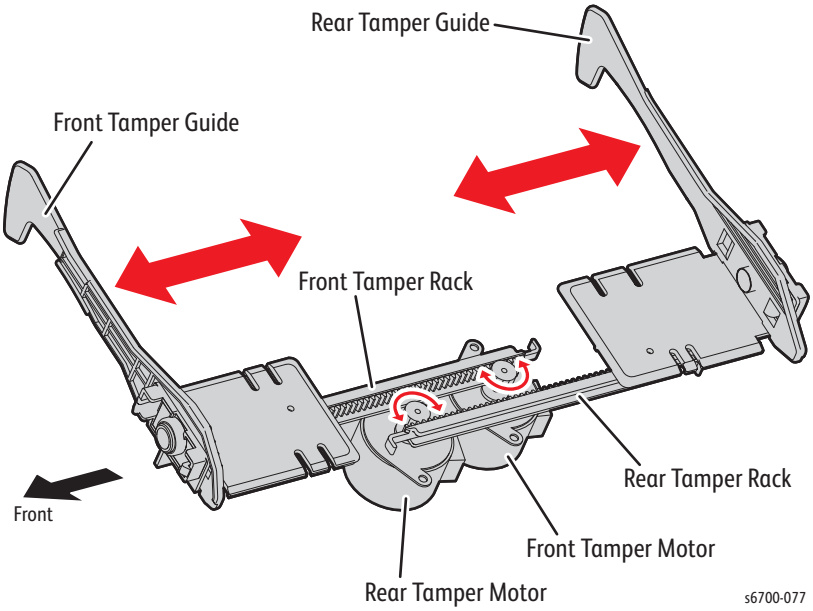
A sensor for detecting that the rear tamper guide (PL 14.8.5) is at its home position. (Home position: Sensor beam blocked)




- Front Tamper Motor
- Rear Tamper Motor

Motors that move the Tamper Guides for tamping operation. Tamper Motor drive is transmitted through the route below.






## Operations in Compile Tray

In the Compile Tray, sheets fed from the Finisher transport undergo a tamping operation to align the sheets in the width direction, and the offset stacking operation for placing the sets of sheets staggered in the Stacker Tray.

### Tamping

Sheets fed from the Finisher transport undergo the tamping operation in the Compile Tray. Tamping refers to the operation of aligning the sheet to the specified position by sliding the Front and Rear Tamper Guides, driven by the Tamper Motors, until they contact the sheet edges.

Tamping is executed when the specified time has elapsed since the Compile Tray No Paper Sensor detects an incoming sheet. Tamping occurs every time a sheet is fed, and is repeated once more after tamping the last sheet is completed.

Tamping includes the following two modes:

- Front Tamping

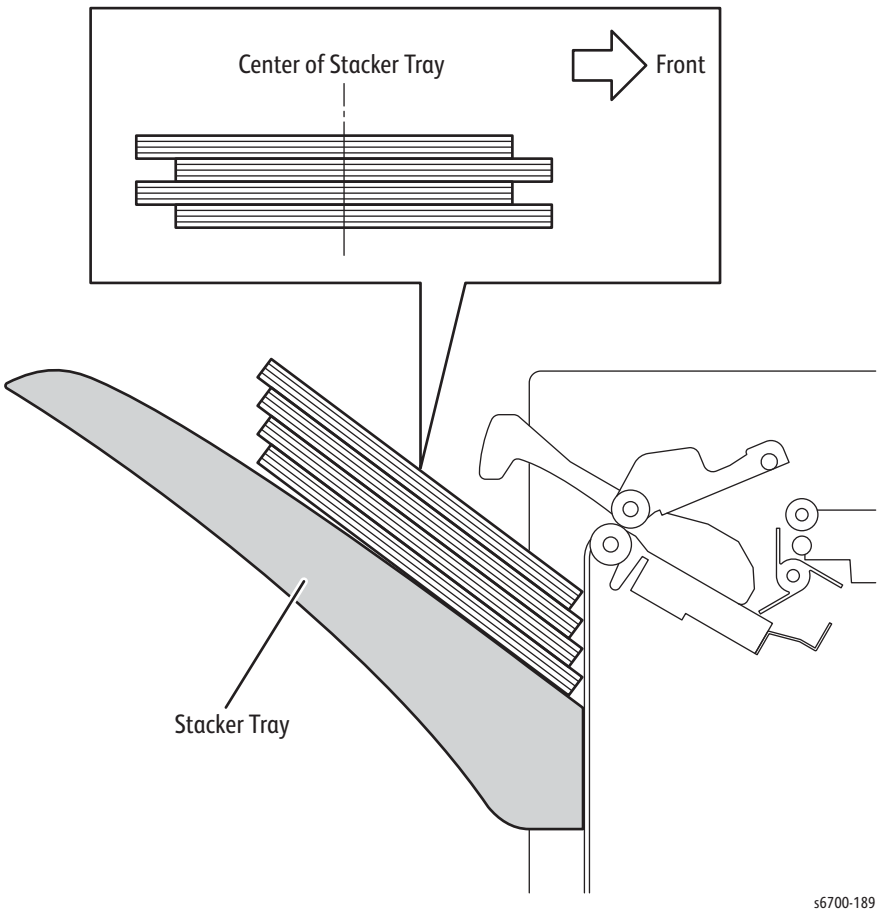
Activates the Rear Tamper only, with the Front Tamper locked at its home position.

- Rear Tamping

Activates the Front Tamper only, with the Rear Tamper locked at its home position.

### Offset Stacking

Offset stacking staggers the position where the ejected sheets land on the Stacker Tray to help separate the stack of sheets into groups such as jobs or collated sets.




## Stapler

- Low Staple Sensor

A photo-interrupter type sensor for detecting the remaining quantity of the staples. (Staples low: Sensor beam blocked)

- Self Priming Sensor

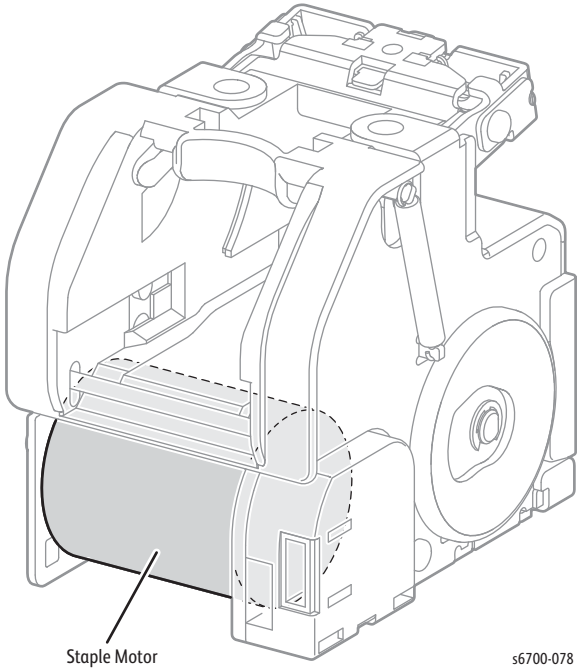
A photo-interrupter type sensor for detecting that the staple has reached the Stapler Head or that stapling has failed.

- Staple Home Sensor

A photo-interrupter type sensor for detecting that the Stapler Head is at its home position or that stapling has failed. It also triggers the Staple Motor to stop. (Home position: Sensor beam blocked)

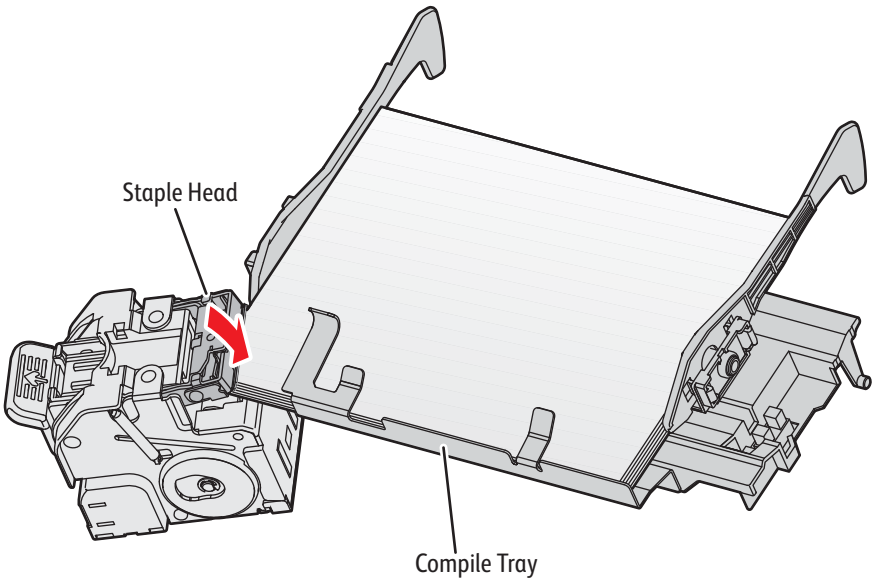
- Staple Motor

A motor that drives the Stapler Head to execute stapling. Rotates clockwise to activate the Stapler Head, and counterclockwise to return it to its original position.




## Stapling

Sheets entering from the Finisher transport undergo tamping in the Compile Tray, then are stapled, maximum 50 sheets (A/A4-size 20# paper), in the position specified



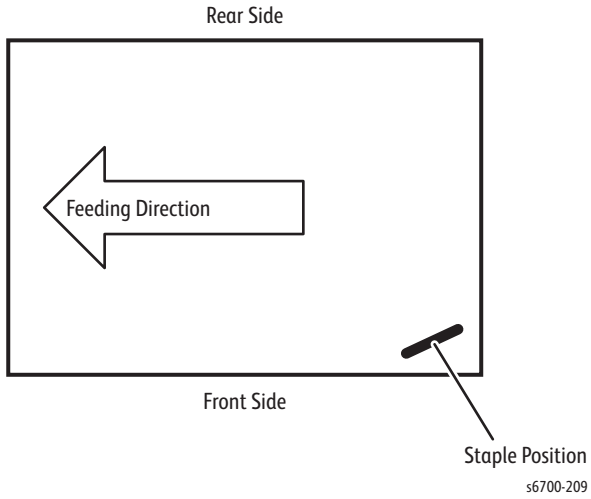

Stapling starts when the number of sheets deposited in the Compile Tray has reached the number of sheets for one set. The Stapler Assembly is driven by the staple motor to the stack and staples the stack as it comes down to the sheets.

When the staple motor rotates in the normal direction (clockwise), the Stapler Holder applies a staple onto the sheets and then returns to its home position. If stapling is not completed correctly, the staple motor rotates in the reverse direction (counterclockwise) to drive the Stapler Holder back to its home position.

When staples are low, the Low Staple Sensor raises a warning message and suspends stapling. This warning message is also displayed when the Staple Cartridge is not installed.

### Stapling Position

The staple is applied in the upper corner at an angle of 25 degrees after the sheets are aligned to the front edge by the Rear Tamper Guide.



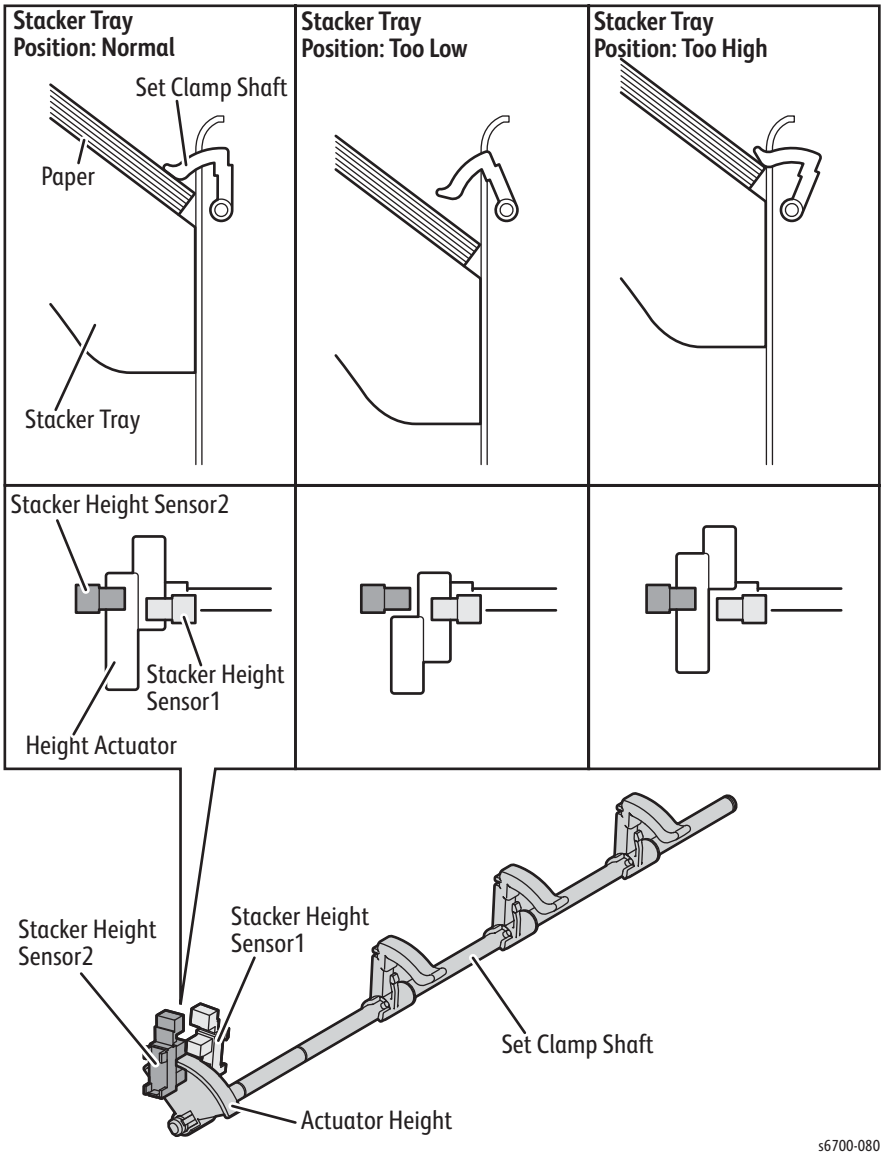

## Stacker Tray

The Stacker Tray holds the sheets ejected from the Compile Tray by shifting to an appropriate position according to the height of the sheet stack. The capacity is 50 sets or 750 sheets of one size.

- Stack Height Sensors 1 and 2

Detects the height of the sheet stack on the Stacker Tray based on the change of its actuator position. The Stacker Motor moves up or down the Stacker Tray based on the detection results. The table shows the correspondence between the detection results and Stacker Tray movement.

| Sensor 1 Detection | Sensor 2 Detection | Tray Movement | Evaluation |
|---|---|---|---|
| Beam Blocked | Beam Received | Up | Too Low |
| Beam Blocked | Beam Blocked | As Is | Normal |
| Beam Received | Beam Blocked | Down | Too High |

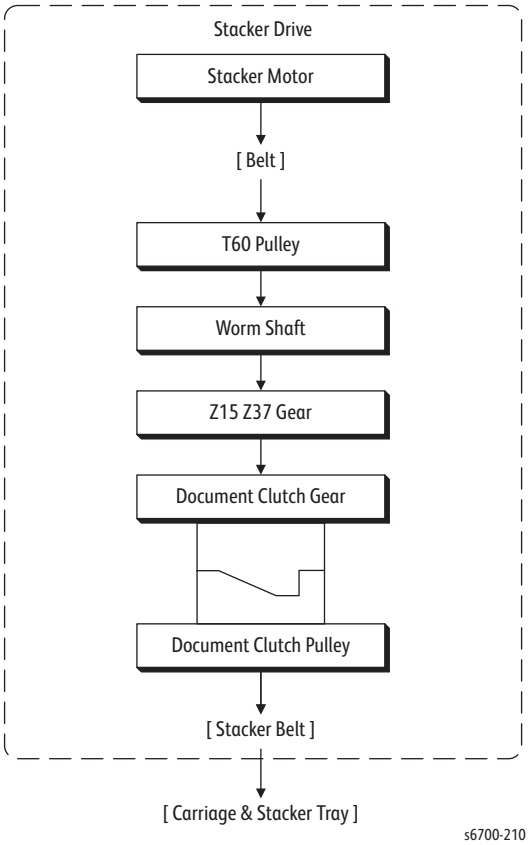


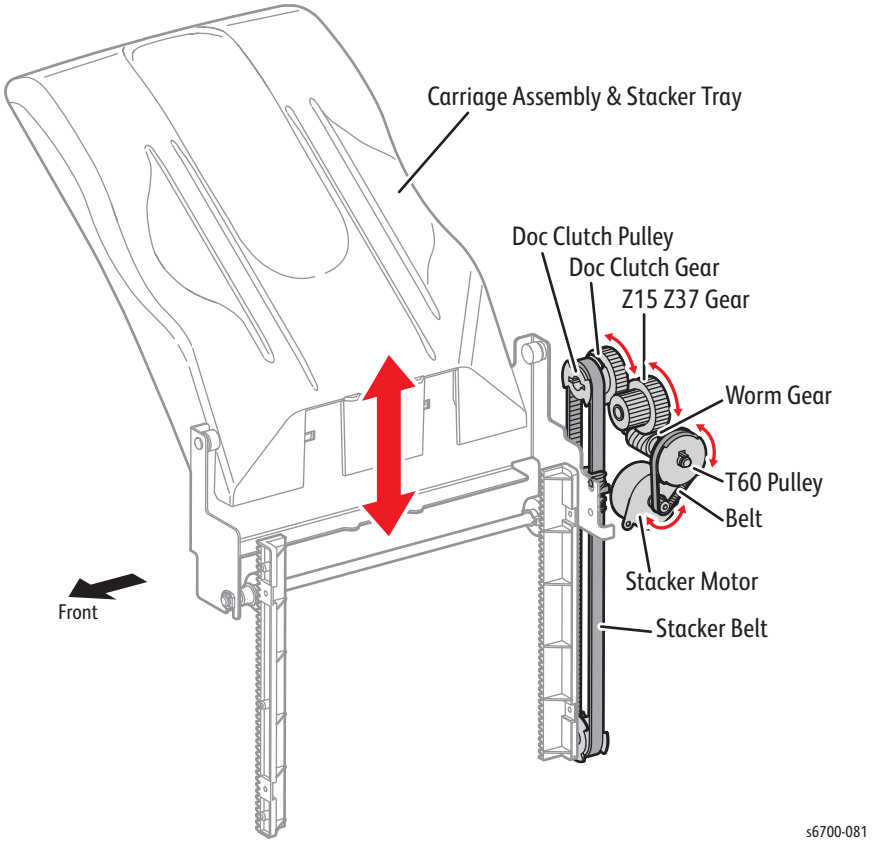

- Stacker No Paper Sensor

A sensor for detecting that the Stacker Tray is at the topmost position (home position). It also detects when the Stacker Tray is empty.

- Stacker Drive Assembly

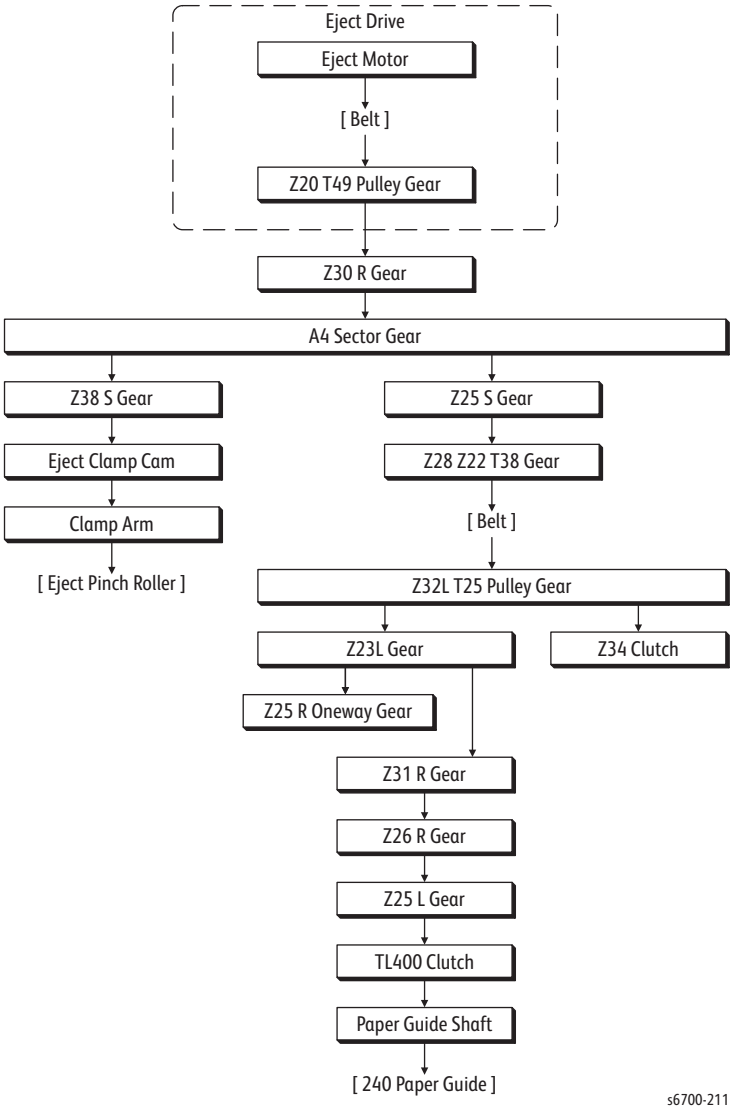
A motor that moves up or down the Stacker Tray. Rotates clockwise to raise and counterclockwise to lower the Stacker Tray. Stacker Motor drive is transmitted through the route below.

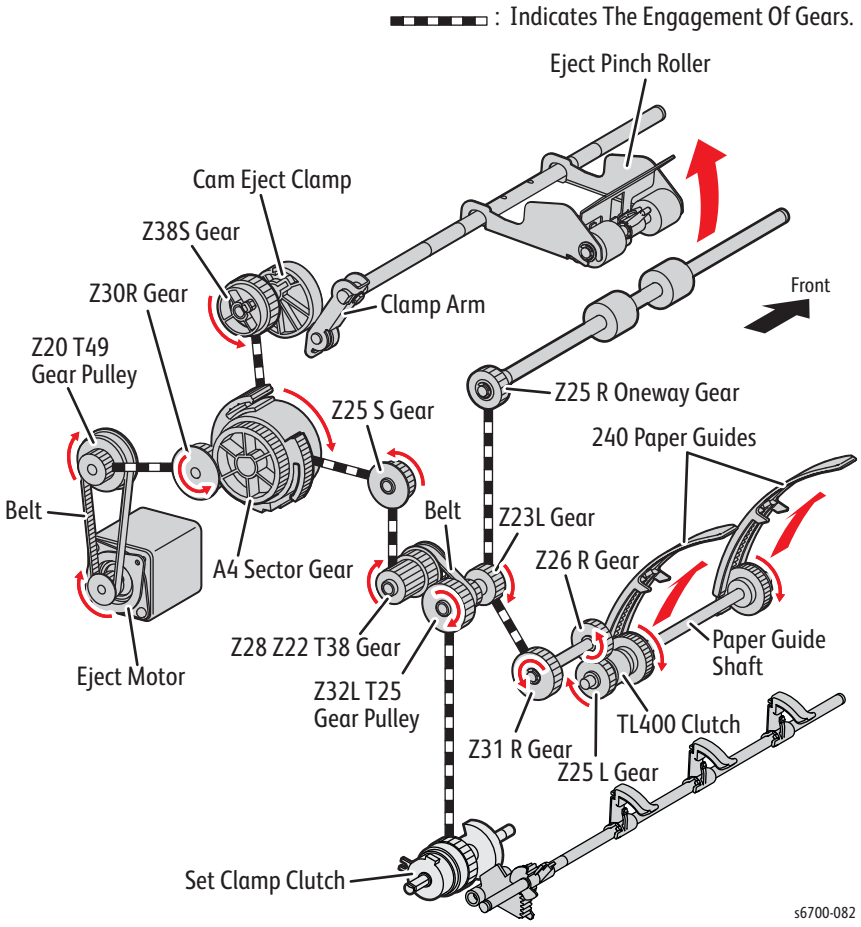



Carriage Assembly & Stacker Tray
Doc Clutch Pulley
Doc Clutch Gear
Z15 Z37 Gear
Worm Gear
T60 Pulley
Belt
Stacker Motor
Stacker Belt
Front
s6700-081

- Eject Motor

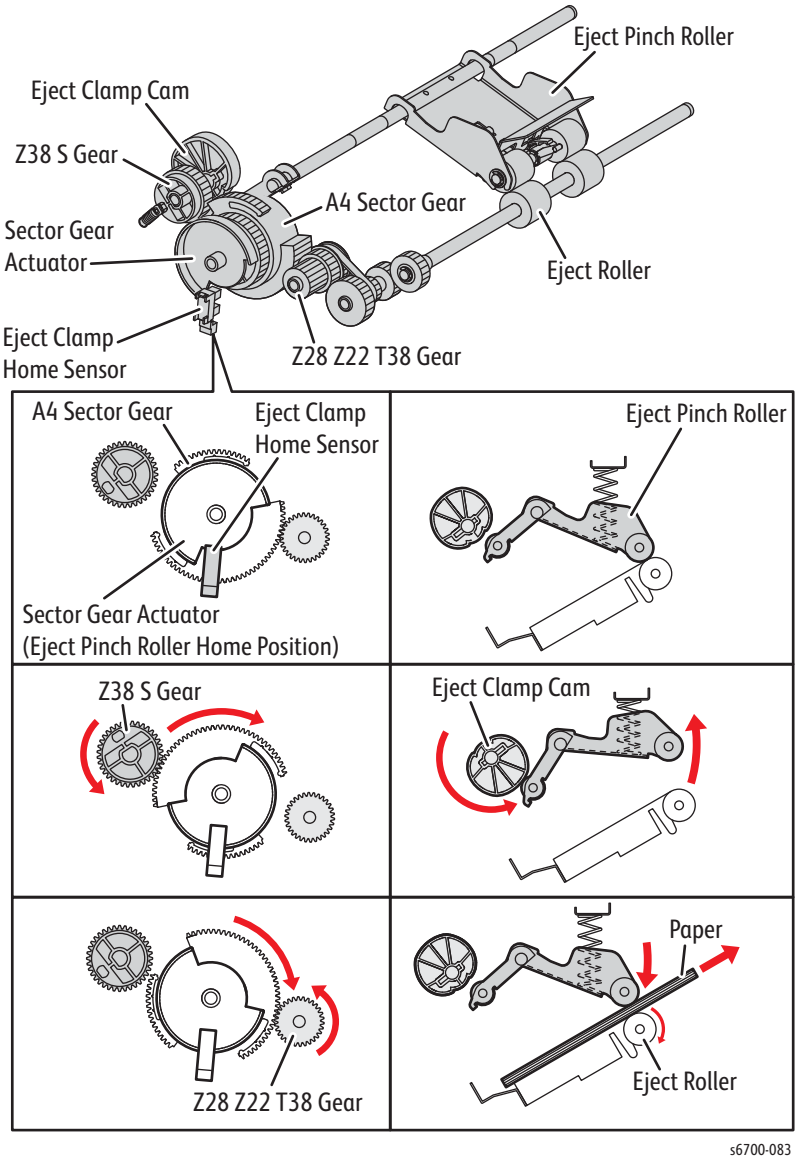
A stepping motor that drives sheet-ejecting components such as the Eject Clamp and the Set Clamp. Eject Motor drive is transmitted through the route below.




: Indicates The Engagement Of Gears.
Eject Pinch Roller
Cam Eject Clamp
Z38S Gear
Z30R Gear
Clamp Arm
Front
Z20 T49
Gear Pulley
Z25 S Gear
Z25 R Oneway Gear
240 Paper Guides
Belt
Belt
Z23L Gear
Z26 R Gear
A4 Sector Gear
Z28 Z22 T38 Gear
Paper Guide
Shaft
Eject Motor
Z32L T25
Gear Pulley
TL400 Clutch
Z31 R Gear
Z25 L Gear
Set Clamp Clutch
s6700-082

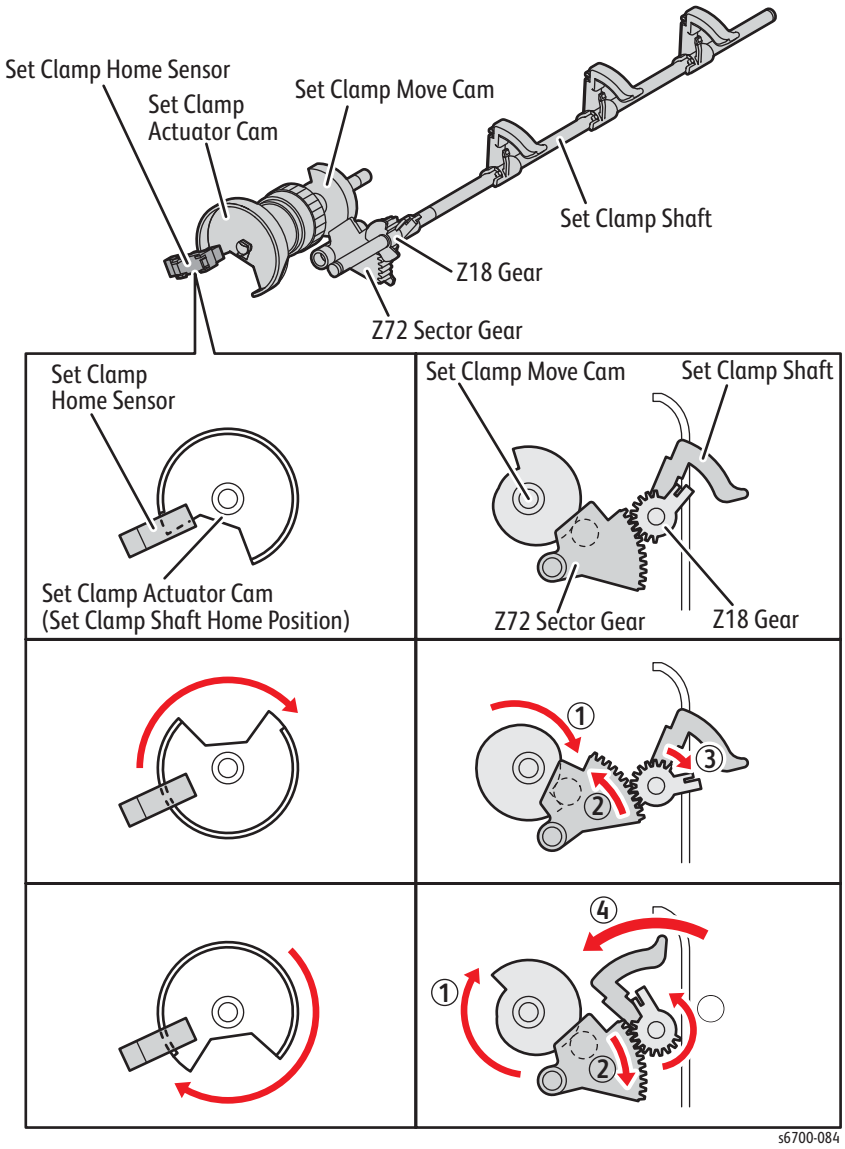
- Eject Clamp Home Sensor

A sensor for detecting that the Eject Clamp is at its home position.



- Set Clamp Home Sensor

A sensor for detecting the Set Clamp is at its home position.

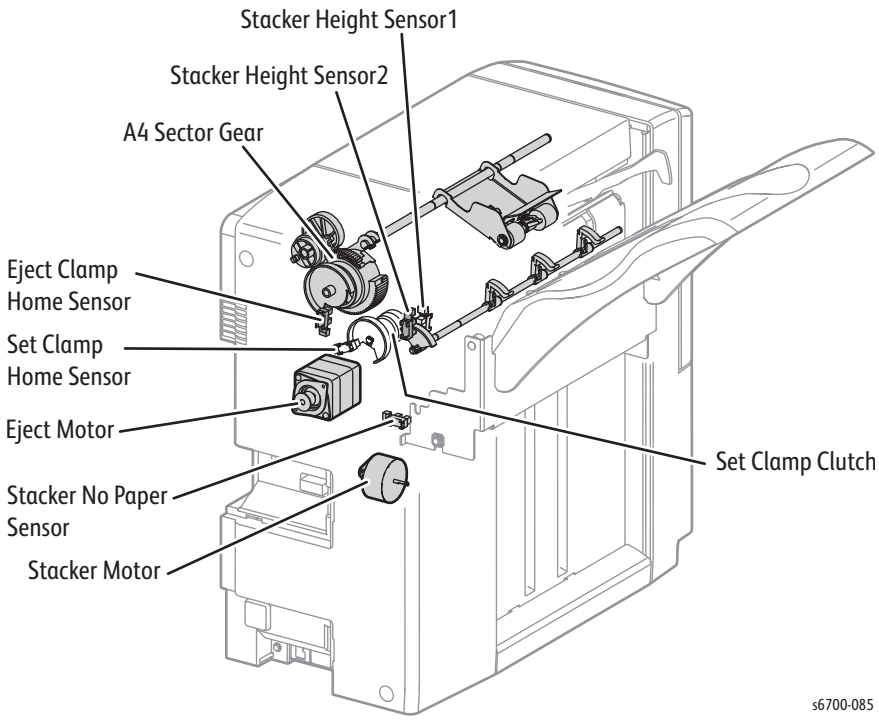



- Set Clamp Clutch

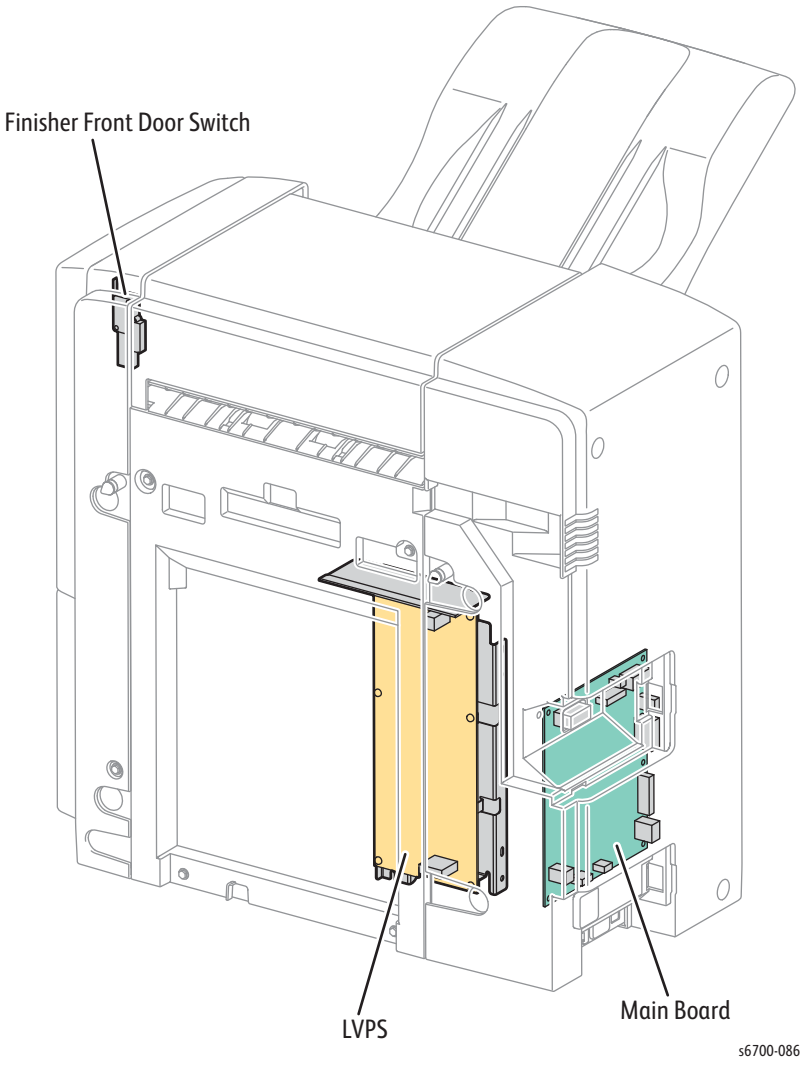
A clutch that transmits the torque from the Eject Motor to the Set Clamp Shaft.

- Sector Gear

Controls the movement of the 240 Paper Guide by changing the transmission route from the Eject Motor. (Refer to 4. Torque Transmission Route.)


Stacker Height Sensor1
Stacker Height Sensor2
A4 Sector Gear
Eject Clamp Home Sensor
Set Clamp Home Sensor
Eject Motor
Stacker No Paper Sensor
Stacker Motor
Set Clamp Clutch
s6700-085

## Electrical




- Front Door Switch

Detects whether the Front Cover is open. Interrupts the DC power to the components in the Finisher (+24VDC) when the Front Door is opened.

- Main Board

A board that controls the components in the Finisher.

- LVPS

Converts the AC power from the printer into stable low voltage DC power to be used for such components as logic circuits in the Finisher.

# Error Messages and Codes

## In this chapter...


- Introduction
- Servicing Instructions
- Messages, Codes, and Procedures
- Troubleshooting Procedures


Chapter 3

# Introduction

This chapter describes numeric codes displayed for status and error messages displayed on the Control Panel, listed on the System Status page or Service Usage Profile pages, or shown in CWIS or Job Tracker. These messages serve as the entry point into the troubleshooting process.

Troubleshooting of problems not directly indicated by or associated with an error message or code is covered in Chapter 4, General Troubleshooting. Print quality problems are covered in Chapter 5, Print Quality Troubleshooting.

## Fault and Status Message Format

System faults indicate a serious problem with the printer. Printing usually stops until the fault is corrected. Faults are indicated by a chain-code of the form (3nn.nnn.nn) and one or more descriptive text strings. As an example, a Fuser jam might produce the following on the Control Panel:

377.106.04 Printer Error Jam at Fuser

Notice the chain code fields are separated by dots.

System status events are typically less serious and may or may not stop printer operation. Status messages are indicated by a status code of the form nn-nnn-nn and one or more descriptive text strings. An example status message for the Fuser jam would appear as:

10-106-00 The printer is unavailable. Jam at Fuser.

Again, notice the status code fields are separated by dashes, not dots like the fault code. This is important when searching this manual and other Service databases for error information.

## Viewing Fault and Status Messages at the Control Panel

The printer stores the last 60 messages of either type. A current, since last reboot, log for faults and messages is available in the Information tab of the Printer menu. Current faults lists the chain code and text. Touching the list entry displays the fault popup. Current messages lists the status message text string.

To view the Fault History from the Control Panel, touch **Printer > Tools > Setup > Service Tools** > Fault History.

## Viewing Fault and Status Messages in CWIS

Status codes and messages are displayed in CWIS.

1. Open a web browser and enter the printer's IP address into the browser.
2. Select the Status Tab at the top of the CWIS application.
3. Refresh the screen to view fault and status information in the Alerts area.

Each line item includes the chain-code, description, and suggested skill level needed to correct the alert.

## Printing the Fault History

The fault history is included on the System Status page and Service Usage Profile.

1. From the Control Panel, touch **Printer > Tools > Setup > Service Tools**.
2. Touch the Printer icon to open the drop-down menu.
3. Touch the desired report to print.

Each report includes chain-code, description, page count and date of up to 60 faults.

# Servicing Instructions

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

**Step 1: Identify the Problem**

1. Check Current Faults and Current Messages in the Printer menu for information related to existing problems.
2. Check fault history in the Service Tools menu to review recent faults and/or jams.
3. Print the Engine Test Print to test print engine function.
4. Print normal customer prints and demo prints.
5. Make note of any print-quality problems in the test prints.
6. Make note of any mechanical or electrical abnormalities present.
7. Make note of any unusual noise or smell coming from the printer.
8. Print the System Status and Service Usage Profile embedded pages.
9. Verify the AC supply is within 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 power cord from the wall outlet.
3. Verify the power cord is undamaged and connected properly.
4. Remove the Imaging Units and protect them from light.
5. Remove the Transfer Belt.
6. Inspect the printer interior and remove any foreign matter such as paper clips, staples, pieces of paper, dust, or loose toner.
7. Do not use solvents or chemical cleaners to clean the printer interior.
8. Do not use any type of oil or lubricant on printer parts.
9. Use only an approved toner vacuum.
10. Clean all rubber rollers with a lint-free cloth, dampened slightly with cold water and mild detergent.
11. Clean all four laser windows.
12. Inspect the interior of the printer for damaged wires, loose connections, toner leakage, and damaged or worn parts.
13. If the Imaging Units appear damaged, replace with new ones.

| Step 3: Find the Cause of the Problem |
|---|
| 1. Use fault and status codes to locate the cause of the problem.<br>2. Use Service Diagnostics to check the printer and optional components.<br>3. Use the Wiring Diagrams and Plug/Jack Locator to locate test points.<br>4. Take voltage readings as instructed in the troubleshooting procedure. |
| **Step 4: Correct the Problem** |
| 1. Use the Parts List to locate a part number.<br>2. Use the FRU Disassembly procedures to replace the part. |
| **Step 5: Final Checkout** |
| Test the printer to be sure you have corrected the initial problem and there are no additional problems present. |

# Messages, Codes, and Procedures

The error messages and 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 messages include abbreviations. The most common abbreviations used throughout this chapter are listed here.

| Term | Definition |
|---|---|
| ADC | Automatic Density Control |
| Assy | Assembly |
| CTD | ADC Sensor |
| CMY | Cyan, Magenta, Yellow |
| CRUM | Customer Replaceable Unit Memory |
| Dev | Developer |
| H-Xport | Horizontal Transport |
| IBT | Transfer Belt |
| IOT | Print Engine |
| K | Black |
| VOUT | Output voltage from ADC Sensor |
| Xero | Imaging Unit Drum Drive |

## Fault and Status Summary

The fault and status summary tables list possible fault and status codes displayed on the Control Panel, CWIS or Job Tracker, listed on the System Status page or Service Usage Profile. Also listed are the corresponding messages and a page reference for the corrective procedure.

- The Code column shows the chain-link code as it appears on the display when the fault occurs during normal operation.
- The message column lists the message displayed for the fault or status event.
- The Page column links to the troubleshooting procedure related to the fault or status event.

### Faults

Table 1 lists all faults in ascending chain-link numeric order. Go to the referenced troubleshooting procedure for additional information on the fault's cause. Table 2 lists status codes in ascending numeric order and includes related fault chain-links. Use these tables to identify the proper procedure to correct the reported error.

**Table 1. Fault Code Summary**

| Code | Message | Page |
|---|---|---|
| 303.301.01 | XPC Failure | 3-39 |
| 303.302.02 | XPC Failure | 3-39 |
| 309.001.01 | Laser Failure | 3-42 |
| 309.002.02 | Laser Failure | 3-42 |
| 309.003.03 | Laser Failure | 3-42 |
| 309.003.01 | Engine Motor Failure | 3-44 |
| 309.004.01 | Engine Motor Failure | 3-46 |
| 310.310.01 | Fuser is Missing or Misinstalled | 3-64 |
| 310.311.02 | Fuser Failure | 3-65 |
| 310.312.05 | Fuser Failure | 3-65 |
| 310.313.06 | Fuser Failure | 3-65 |
| 310.314.07 | Fuser Failure | 3-65 |
| 310.315.09 | Fuser Failure | 3-65 |
| 310.316.12 | Fuser Failure | 3-65 |
| 310.317.13 | Fuser Failure | 3-65 |
| 310.318.14 | Fuser Failure | 3-65 |
| 310.319.04 | Fuser Failure | 3-65 |
| 310.320.03 | Fuser Failure | 3-65 |
| 310.321.15 | Fuser Failure | 3-65 |
| 310.322.16 | Fuser Failure | 3-65 |
| 310.323.17 | Fuser Failure | 3-65 |
| 310.324.20 | Fuser Failure | 3-65 |
| 310.325.22 | Fuser Failure | 3-65 |

**Table 1. Fault Code Summary**

| Code | Message | Page |
|---|---|---|
| 310.326.21 | Fuser Failure | 3-65 |
| 310.327.23 | Fuser Failure | 3-65 |
| 310.328.18 | Fuser Failure | 3-65 |
| 310.330.01 | Engine Motor Failure | 3-63 |
| 310.333.10 | Fuser Failure | 3-65 |
| 310.334.11 | Fuser Failure | 3-65 |
| 310.335.08 | Fuser Failure | 3-65 |
| 310.338.19 | Fuser Failure | 3-65 |
| 310.398.01 | Engine Fan Failure | 3-67 |
| 310.902.02 | Fuser Failure | 3-69 |
| 310.903.03 | Fuser Failure | 3-69 |
| 312.098.01 | Finisher Failure | 3-70 |
| 312.099.01 | Finisher Communication Failure | 3-71 |
| 312.099.02 | Finisher Communication Failure | 3-71 |
| 312.099.03 | Finisher Communication Failure | 3-71 |
| 312.099.04 | Finisher Communication Failure | 3-71 |
| 312.099.05 | Finisher Communication Failure | 3-71 |
| 312.099.06 | Finisher Communication Failure | 3-71 |
| 312.099.07 | Finisher Communication Failure | 3-71 |
| 312.211.01 | Finisher Failure | 3-73 |
| 312.212.01 | Finisher Failure | 3-75 |
| 312.213.01 | Finisher Failure | 3-77 |
| 312.221.01 | Finisher Failure | 3-79 |
| 312.222.01 | Finisher Failure | 3-81 |
| 312.223.01 | Finisher Failure | 3-79 |
| 312.224.01 | Finisher Failure | 3-81 |
| 312.260.01 | Finisher Failure | 3-83 |
| 312.261.01 | Finisher Failure | 3-83 |
| 312.283.01 | Finisher Failure | 3-85 |
| 312.284.01 | Finisher Failure | 3-85 |
| 312.291.01 | Finisher Failure | 3-87 |
| 312.300.01 | Finisher Failure | 3-89 |
| 312.450.01 | Jam in Horizontal Transport | 3-96 |
| 312.451.01 | Jam at Finisher | 3-96 |
| 312.452.01 | Jam at Finisher | 3-98 |
| 312.453.01 | Jam at Finisher | 3-96 |
| 312.454.01 | Jam at Finisher | 3-98 |
| 316.151.01 | Engine NVRAM Failure | 3-104 |
| 316.152.02 | Engine NVRAM Failure | 3-104 |
| 316.153.03 | Engine NVRAM Failure | 3-104 |

**Table 1. Fault Code Summary**

| Code | Message | Page |
|---|---|---|
| 316.154.04 | Engine NVRAM Failure | 3-104 |
| 316.155.05 | Engine NVRAM Failure | 3-104 |
| 316.156.06 | Engine NVRAM Failure | 3-104 |
| 316.157.07 | Engine NVRAM Failure | 3-104 |
| 316.158.08 | Engine NVRAM Failure | 3-104 |
| 316.159.09 | Engine NVRAM Failure | 3-104 |
| 316.405.05 | Firmware Failure | 3-105 |
| 316.406.06 | Firmware Failure | 3-105 |
| 316.407.07 | Firmware Failure | 3-105 |
| 316.408.08 | Firmware Failure | 3-105 |
| 316.409.09 | Firmware Failure | 3-105 |
| 316.410.10 | Firmware Failure | 3-105 |
| 316.411.11 | Firmware Failure | 3-105 |
| 316.412.12 | Firmware Failure | 3-105 |
| 316.413.13 | Firmware Failure | 3-105 |
| 316.414.14 | Engine Firmware Failure | 3-105 |
| 319.410.01 | Printer Failure | 3-106 |
| 342.324.01 | Engine Motor Failure | 3-108 |
| 342.325.01 | Engine Motor Failure | 3-109 |
| 342.329.01 | Engine Fan Failure | 3-68 |
| 342.601.02 | Transfer Belt Failure | 3-110 |
| 342.601.03 | Transfer Belt Failure | 3-110 |
| 345.301.01 | Printer Failure | 3-112 |
| 345.302.02 | Printer Failure | 3-112 |
| 345.303.03 | Printer Failure | 3-112 |
| 345.304.04 | Printer Failure | 3-112 |
| 345.305.05 | Printer Failure | 3-112 |
| 345.306.06 | Printer Failure | 3-112 |
| 370.099.01 | Feeder Communication Failure | 3-114 |
| 371.101.08 | Misfeed in Tray 1 | 3-116 |
| 371.216.01 | Engine Motor Failure | 3-119 |
| 372.101.09 | Misfeed in Tray 2 | 3-120 |
| 372.215.01 | Option Feeder Configuration Failure | 3-122 |
| 373.098.01 | Option Feeder Failure | 3-126 |
| 373.101.01 | Misfeed in Tray 3 | 3-128 |
| 373.102.05 | Jam at Tray 3 Right Side Door | 3-138 |
| 373.216.01 | Feeder Motor Failure | 3-131 |
| 374.098.01 | Option Feeder Failure | 3-126 |
| 374.101.02 | Misfeed in Tray 4 | 3-128 |
| 374.102.06 | Jam at Tray 4 Right Side Door | 3-138 |

**Table 1. Fault Code Summary**

| Code | Message | Page |
|---|---|---|
| 374.216.01 | Feeder Motor Failure | 3-131 |
| 375.098.01 | Option Feeder Failure | 3-126 |
| 375.101.03 | Misfeed in Tray 5 | 3-128 |
| 375.102.07 | Jam at Tray 5 Right Side Door | 3-138 |
| 375.216.01 | Feeder Motor Failure | 3-131 |
| 376.098.01 | Optional Feeder Failure | 3-126 |
| 376.101.04 | Misfeed in Tray 6 | 3-128 |
| 376.216.01 | Feeder Motor Failure | 3-131 |
| 377.101.03 | Jam at Right Side Door | 3-133 |
| 377.102.01 | Jam at Right Side Door. | 3-133 |
| 377.103.06 | Jam at Fuser | 3-136 |
| 377.104.05 | Jam at Fuser | 3-136 |
| 377.106.04 | Jam at Fuser | 3-136 |
| 377.110.08 | Jam at Tray (3~ 6) Right Side Door | 3-138 |
| 377.123.02 | Jam at Right Door (duplex) | 3-133 |
| 377.131.07 | Jam at Right Door (duplex) | 3-133 |
| 377.900.10 | Jam at Right Side Door | 3-133 |
| 377.901.09 | Jam at Tray (3~ 6) Right Side Door | 3-138 |
| 391.301.01 | Engine Sensor Failure | 3-141 |
| 391.302.02 | Engine Sensor Failure | 3-141 |
| 391.303.03 | Engine Sensor Failure | 3-141 |
| 391.304.04 | Engine Sensor Failure | 3-141 |
| 391.305.05 | Engine Sensor Failure | 3-141 |
| 391.306.06 | Engine Sensor Failure | 3-141 |
| 391.307.07 | Engine Sensor Failure | 3-141 |
| 391.308.08 | Engine Sensor Failure | 3-141 |
| 391.312.01 | Printer Failure | 3-145 |
| 391.901.02 | Black (K) Imaging Unit Failure | 3-143 |
| 391.902.03 | Black (K) Imaging Unit Failure | 3-143 |
| 391.903.02 | Yellow (Y) Imaging Unit Failure | 3-143 |
| 391.904.03 | Yellow (Y) Imaging Unit Failure | 3-143 |
| 391.905.02 | Magenta (M) Imaging Unit Failure | 3-143 |
| 391.906.03 | Magenta (M) Imaging Unit Failure | 3-143 |
| 391.907.02 | Cyan (C) Imaging Unit Failure | 3-143 |
| 391.908.03 | Cyan (C) Imaging Unit Failure | 3-143 |
| 392.310.01 | Density Sensor Failure | 3-146 |
| 392.311.02 | Density Sensor Failure | 3-146 |
| 392.320.01 | Density Sensor Failure | 3-146 |
| 392.661.01 | Engine Sensor Failure | 3-149 |
| 392.662.01 | Overheat Failure | 3-149 |

**Table 1. Fault Code Summary**

| Code | Message | Page |
|---|---|---|
| 392.670.01 | Yellow (Y) Imaging Unit Failure | 3-151 |
| 392.671.01 | Magenta (M) Imaging Unit Failure | 3-151 |
| 392.672.01 | Cyan (C) Imaging Unit Failure | 3-151 |
| 392.673.01 | Black (K) Imaging Unit Failure | 3-151 |
| 393.901.02 | Black (K) Toner Failure | 3-153 |
| 393.902.03 | Black (K) Toner Failure | 3-153 |
| 393.903.02 | Yellow (Y) Toner Failure | 3-153 |
| 393.904.03 | Yellow (Y) Toner Failure | 3-153 |
| 393.905.02 | Magenta (M) Toner Failure | 3-153 |
| 393.906.03 | Magenta (M) Toner Failure | 3-153 |
| 393.907.02 | Cyan (C) Toner Failure | 3-153 |
| 393.908.03 | Cyan (C) Toner Failure | 3-153 |

## Status Messages

Table 2 lists status codes in ascending numeric order and includes status messages, the related fault chain-links. The Page column provides a link to the troubleshooting procedure when available.

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 01-503-00 | The Tray 3 Right Side door is open. User intervention is required to close the door. Print service is not available. | Printer error. Tray 3 Right Side Door is open. | None | 3-35 |
| 01-504-00 | The Tray 4 Right Side door is open. User intervention is required to close the door. Print service is not available. | Printer error. Tray 4 Right Side Door is open. | None | 3-35 |
| 01-505-00 | The Tray 5 Right Side door is open. User intervention is required to close the door. Print service is not available. | Printer error. Tray 5 Right Side Door is open. | None | 3-35 |
| 01-506-00 | The Tray 6 Right Side door is open. User intervention is required to close the door. Print service is not available. | Printer error. Tray 6 Right Side Door is open. | None | 3-35 |
| 01-510-00 | The Printer Front Door is open. User intervention is required to close the door. Print service is not available. | Printer error. Front Door is open. | None | 3-37 |
| 01-520-01 | The Right Side Door is open. User intervention is required to close the door. Print service is not available. | Printer error. Right Side Door is open. | None | 3-38 |
| 01-540-01 | Paper removed from or added to Tray 1. User intervention is required at the local user interface to confirm Tray 1 settings. Print service can continue if the correct paper is available in other paper trays. | Tray 1 Settings. | None | |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 01-540-02 | Paper removed from or added to Tray 2. User intervention is required at the local user interface to confirm Tray 2 settings. Print service can continue if the correct paper is available in other paper trays. | Tray 2 Settings. | None | |
| 01-540-03 | Paper removed from or added to Tray 3. User intervention is required at the local user interface to confirm Tray 3 settings. Print service can continue if the correct paper is available in other paper trays. | Tray 3 Settings. | None | |
| 01-540-04 | Paper removed from or added to Tray 4. User intervention is required at the local user interface to confirm Tray 4 settings. Print service can continue if the correct paper is available in other paper trays. | Tray 4 Settings. | None | |
| 01-540-05 | Paper removed from or added to Tray 5. User intervention is required at the local user interface to confirm Tray 5 settings. Print service can continue if the correct paper is available in other paper trays. | Tray 5 Settings. | None | |
| 01-540-06 | Paper removed from or added to Tray 6. User intervention is required at the local user interface to confirm Tray 6 settings. Print service can continue if the correct paper is available in other paper trays. | Tray 6 Settings. | None | |
| 01-545-02 | Tray 2 is a dedicated paper tray. User intervention is required to adjust the paper guides to the dedicated size. Print service can continue if the correct paper is available in other paper trays. | Printer error. Paper in Tray 2 has changed. | None | |
| 01-545-03 | Tray 3 is a dedicated paper tray. User intervention is required to adjust the paper guides to the dedicated size. Print service can continue if the correct paper is available in other paper trays. | Printer error. Paper in Tray 3 has changed. | None | |
| 01-545-04 | Tray 4 is a dedicated paper tray. User intervention is required to adjust the paper guides to the dedicated size. Print service can continue if the correct paper is available in other paper trays. | Printer error. Paper in Tray 4 has changed. | None | |
| 01-545-05 | Tray 5 is a dedicated paper tray. User intervention is required to adjust the paper guides to the dedicated size. Print service can continue if the correct paper is available in other paper trays. | Printer error. Paper in Tray 5 has changed. | None | |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 01-545-06 | Tray 6 is a dedicated paper tray. User intervention is required to adjust the paper guides to the dedicated size. Print service can continue if the correct paper is available in other paper trays. | Printer error.<br>Paper in Tray 6 has changed. | None | |
| 03-275-00 | <> <> <> | Ready To Print. | None | |
| 03-300-00 | XPC error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable.<br>XPC Failure. | 303.301.01<br>303.302.02 | 3-39 |
| 03-504-01 | Machine is offline while in diagnostics; new jobs will not be accepted over the network. System Administrator intervention is required to bring the machine back online using the local user interface. Print service is not available. | The machine is offline. | None | |
| 07-513-02 | Tray 2 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Dedicated Tray 2 is open. | None | 3-40 |
| 07-513-03 | Tray 3 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Dedicated Tray 3 is open. | None | 3-40 |
| 07-513-04 | Tray 4 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Dedicated Tray 4 is open. | None | 3-40 |
| 07-513-05 | Tray 5 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Dedicated Tray 5 is open. | None | 3-40 |
| 07-513-06 | Tray 6 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Dedicated Tray 6 is open. | None | 3-40 |
| 07-514-02 | Tray 2 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 2 is open. | None | 3-40 |
| 07-514-03 | Tray 3 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 3 is open. | None | 3-40 |
| 07-514-04 | Tray 4 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 4 is open. | None | 3-40 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 07-514-05 | Tray 5 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 5 is open. | None | 3-40 |
| 07-514-06 | Tray 6 is open. User intervention is required to close the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 6 is open. | None | 3-40 |
| 09-000-00 | Xerographic system error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Laser Failure. | 309.001.01 309.002.02 309.003.03 | 3-42 |
| 09-600-00 | The Waste Cartridge is near full. User intervention is required to reorder the Waste Cartridge (P/N 108R00975); do not replace until prompted. Print service is unaffected. | Waste Cartridge is near full. | None | 3-48 |
| 09-601-00 | The Waste Cartridge is full. User intervention is required to replace the Waste Cartridge (P/N 108R00975). Print service is not available. | Printer error. Waste Cartridge is full. | None | 3-48 |
| 09-602-00 | The Cyan Toner Cartridge is nearly empty. User intervention is required to reorder the Cyan Toner Cartridge; do not replace until prompted. Print service is unaffected. | Cyan (C) Toner is low. | None | 3-49 |
| 09-603-00 | The Magenta Toner Cartridge is nearly empty. User intervention is required to reorder the Magenta Toner Cartridge; do not replace until prompted. Print service is unaffected. | Magenta (M) Toner is low. | None | 3-49 |
| 09-604-00 | The Yellow Toner Cartridge is nearly empty. User intervention is required to reorder the Yellow Toner Cartridge; do not replace until prompted. Print service is unaffected. | Yellow (Y) Toner is low. | None | 3-49 |
| 09-605-00 | The Black Toner Cartridge is nearly empty. User intervention is required to reorder the Black Toner Cartridge; do not replace until prompted. Print service is unaffected. | Black (K) Toner is low. | None | 3-49 |
| 09-607-00 | The Maintenance Kit is near end of life. User intervention is required to reorder the Maintenance Kit (P/N 604K73140); do not replace until prompted. Print service is unaffected. | Maintenance Kit is Near End Of Life. | None | 3-55 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-608-00 | The Cyan Imaging Unit is near end of life. User intervention is required to reorder the Cyan Imaging Unit (P/N 108R00971); do not replace until prompted. Print service is unaffected. | Cyan (C) Imaging Unit is Near End Of Life. | None | 3-51 |
| 09-609-00 | The Magenta Imaging Unit is near end of life. User intervention is required to reorder the Magenta Imaging Unit (P/N 108R00972); do not replace until prompted. Print service is unaffected. | Magenta (M) Imaging Unit is Near End Of Life. | None | 3-51 |
| 09-610-00 | The Yellow Imaging Unit is near end of life. User intervention is required to reorder the Yellow Imaging Unit (P/N 108R00973); do not replace until prompted. Print service is unaffected. | Yellow (Y) Imaging Unit is Near End Of Life. | None | 3-51 |
| 09-611-00 | The Black Imaging Unit is near end of life. User intervention is required to reorder the Black Imaging Unit (P/N 108R00974); do not replace until prompted. Print service is unaffected. | Black (K) Imaging Unit is Near End Of Life. | None | 3-51 |
| 09-612-00 | The Fuser has past end of life. User intervention is required to replace the Fuser (P/N 126K32220-110V or P/N 126K32230-220V). Print service may be degraded. | Fuser is PAST End Of Life. | None | 3-54 |
| 09-613-00 | The Maintenance Kit has past end of life. User intervention is required to reorder the Maintenance Kit (P/N 604K73140); do not replace until prompted. Print service may be degraded. | Maintenance Kit is PAST End Of Life. | None | 3-55 |
| 09-614-00 | The Envelope Lever in the Fuser is not in position for printing on envelopes. User intervention is required to move the Envelope Lever down to reduce wrinkling when printing on envelopes. Print service may be degraded. | Fuser Envelope Lever is Up. | None | 3-53 |
| 09-615-00 | The Cyan Imaging Unit has past end of life. User intervention is required to replace the Cyan Imaging Unit (P/N 108R00971). Print service may be degraded. | Cyan (C) Imaging Unit is PAST End Of Life. | None | 3-51 |
| 09-616-00 | The Magenta Imaging Unit has past end of life. User intervention is required to replace the Magenta Imaging Unit (P/N 108R00972). Print service may be degraded. | Magenta (M) Imaging Unit is PAST End Of Life. | None | 3-51 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-617-00 | The Yellow Imaging Unit has past end of life. User intervention is required to replace the Yellow Imaging Unit (P/N 108R00973). Print service may be degraded. | Yellow (Y) Imaging Unit is PAST End Of Life. | None | 3-51 |
| 09-618-00 | The Black Imaging Unit has past end of life. User intervention is required to replace the Black Imaging Unit (P/N 108R00974). Print service may be degraded. | Black (K) Imaging Unit is PAST End Of Life. | None | 3-51 |
| 09-619-00 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01511-standard capacity or P/N 106R01523-high capacity). Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-619-01 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01519) Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-619-02 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01503-standard capacity or P/N 106R01507-high capacity). Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-619-03 | The Cyan Toner (C) is empty. User intervention is required to replace the Cyan Toner (C). Black and white printing can continue. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-619-04 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01515). Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-619-09 | The Cyan Toner (C) is empty. User intervention is required to replace the Cyan Toner (C). Black and white printing can continue. | Cyan (C) Toner is empty. | None | 3-49 |
| 09-620-00 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01512-standard capacity or P/N 106R01524-high capacity). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-620-01 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01520). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-620-02 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01504-standard capacity or P/N 106R01508-high capacity). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-620-03 | The Magenta Toner (M) is empty. User intervention is required to replace the Magenta Toner (M). Black and white printing can continue. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-620-04 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01516). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-620-09 | The Magenta Toner (M) is empty. User intervention is required to replace the Magenta (M) Toner Cartridge (P/N 106R01575). Black and white printing can continue. | Magenta (M) Toner is empty. | None | 3-49 |
| 09-621-00 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01513-standard capacity or P/N 106R01525-high capacity). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-621-01 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01521). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-621-02 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01505-standard capacity or P/N 106R01509-high capacity). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-621-03 | The Yellow Toner (Y) is empty. User intervention is required to replace the Yellow Toner (Y). Black and white printing can continue. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-621-04 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01517). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-621-09 | The Yellow Toner (Y) is empty. User intervention is required to replace the Yellow Toner (Y). Black and white printing can continue. | Yellow (Y) Toner is empty. | None | 3-49 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-623-00 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01511-standard capacity or P/N 106R01523-high capacity). Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-623-01 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01519) Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-623-02 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01503-standard capacity or P/N 106R01507-high capacity). Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-623-03 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge with a genuine Xerox product. Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-623-04 | The Cyan Toner Cartridge is empty. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01515). Print service is not available. | Printer error. Cyan (C) Toner is empty. | None | 3-49 |
| 09-624-00 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01512-standard capacity or P/N 106R01524-high capacity). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-624-01 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01520). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-624-02 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01504-standard capacity or P/N 106R01508-high capacity). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-624-03 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge with a genuine Xerox product. Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-624-04 | The Magenta Toner Cartridge is empty. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01516). Print service is not available. | Printer error. Magenta (M) Toner is empty. | None | 3-49 |
| 09-625-00 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01513-standard capacity or P/N 106R01525-high capacity). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-625-01 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01521). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-625-02 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01505-standard capacity or P/N 106R01509-high capacity). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-625-03 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner (Y). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-625-04 | The Yellow Toner Cartridge is empty. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01517). Print service is not available. | Printer error. Yellow (Y) Toner is empty. | None | 3-49 |
| 09-626-00 | The Black Toner Cartridge is empty. User intervention is required to replace the Black Toner Cartridge (P/N 106R01514-standard capacity or P/N 106R01526-high capacity). Print service is not available. | Printer error. Black (K) Toner is empty. | None | 3-49 |
| 09-626-01 | The Black Toner Cartridge is empty. User intervention is required to replace the Black Toner Cartridge (P/N 106R01522). Print service is not available. | Printer error. Black (K) Toner is empty. | None | 3-49 |
| 09-626-02 | The Black Toner Cartridge is empty. User intervention is required to replace the Black Toner Cartridge (P/N 106R01506-standard capacity or P/N 106R01510-high capacity). Print service is not available. | Printer error. Black (K) Toner is empty. | None | 3-49 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-626-03 | The Black Toner Cartridge is empty. User intervention is required to replace the Black Toner Cartridge with a genuine Xerox product. Print service is not available. | Printer error. Black (K) Toner is empty. | None | 3-49 |
| 09-626-04 | The Black Toner Cartridge is empty. User intervention is required to replace the Black Toner Cartridge (P/N 106R01518). Print service is not available. | Printer error. Black (K) Toner is empty. | None | 3-49 |
| 09-627-00 | The Cyan Imaging Unit has reached end of life. User intervention is required to replace the Cyan Imaging Unit (P/N 108R00971). Print service is not available. | Printer error. Cyan (C) Imaging Unit is PAST End Of Life. | None | 3-51 |
| 09-628-00 | The Magenta Imaging Unit has reached end of life. User intervention is required to replace the Magenta Imaging Unit (P/N 108R00972). Print service is not available. | Printer error. Magenta (M) Imaging Unit is PAST End Of Life. | None | 3-51 |
| 09-629-00 | The Yellow Imaging Unit has reached end of life. User intervention is required to replace the Yellow Imaging Unit (P/N 108R00973). Print service is not available. | Printer error. Yellow (Y) Imaging Unit is PAST End Of Life. | None | 3-51 |
| 09-630-00 | The Black Imaging Unit has reached end of life. User intervention is required to replace the Black Imaging Unit (P/N 108R00974). Print service is not available. | Printer error. Black (K) Imaging Unit is PAST End Of Life. | None | 3-51 |
| 09-631-00 | The Envelope Lever in the Fuser is in the position for printing on envelopes. User intervention is required to move the Envelope Lever up to allow printing on non-envelope media. Print service is not available. | Printer error. Fuser Envelope Lever is Down. | None | 3-53 |
| 09-632-00 | The Fuser has past end of life. User intervention is required to replace the Fuser (P/N 126K32220-110V or P/N 126K32230-220V). Print service is not available. | Printer error. Fuser is PAST End Of Life. | None | 3-54 |
| 09-633-00 | The Maintenance Kit has reached end of life. User intervention is required to replace the Maintenance Kit (P/N 604K73140). Print service is not available. | Printer error. Maintenance Kit is PAST End Of Life. | None | 3-55 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-634-00 | The Cyan Toner Cartridge is missing or not locked. User intervention is required to install or lock the Cyan Toner Cartridge (P/N 106R01511-standard capacity or P/N 106R01523-high capacity) Print service is not available. | Printer error. Cyan (C) Toner is missing. | None | 3-49 |
| 09-634-01 | The Cyan Toner Cartridge is missing or not locked. User intervention is required to install or lock the Cyan Toner Cartridge (P/N 106R01519). Print service is not available. | Printer error. Cyan (C) Toner is missing. | None | 3-49 |
| 09-634-02 | The Cyan Toner Cartridge is missing or not locked. User intervention is required to install or lock the Cyan Toner Cartridge (P/N 106R01503-standard capacity or P/N 106R01507-high capacity) Print service is not available. | Printer error. Cyan (C) Toner is missing. | None | 3-49 |
| 09-634-03 | The Cyan Toner Cartridge is missing or not locked. User intervention is required to install or lock the Cyan Toner Cartridge. Print service is not available. | Printer error. Cyan (C) Toner is missing. | None | 3-49 |
| 09-634-04 | The Cyan Toner Cartridge is missing or not locked. User intervention is required to install or lock the Cyan Toner Cartridge (P/N 106R01515). Print service is not available. | Printer error. Cyan (C) Toner is missing. | None | 3-49 |
| 09-635-00 | The Magenta Toner Cartridge is missing or not locked. User intervention is required to install or lock the Magenta Toner Cartridge (P/N 106R01512-standard capacity or P/N 106R01524-high capacity). Print service is not available. | Printer error. Magenta (M) Toner is missing. | None | 3-49 |
| 09-635-01 | The Magenta Toner Cartridge is missing or not locked. User intervention is required to install or lock the Magenta Toner Cartridge (P/N 106R01520). Print service is not available. | Printer error. Magenta (M) Toner is missing. | None | 3-49 |
| 09-635-02 | The Magenta Toner Cartridge is missing or not locked. User intervention is required to install or lock the Magenta Toner Cartridge (P/N 106R01504-standard capacity or P/N 106R01508-high capacity). Print service is not available. | Printer error. Magenta (M) Toner is missing. | None | 3-49 |
| 09-635-03 | The Magenta Toner Cartridge is missing or not locked. User intervention is required to install or lock the Magenta Toner Cartridge. Print service is not available. | Printer error. Magenta (M) Toner is missing. | None | 3-49 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-635-04 | The Magenta Toner Cartridge is missing or not locked. User intervention is required to install or lock the Magenta Toner Cartridge (P/N 106R01516). Print service is not available. | Printer error. Magenta (M) Toner is missing. | None | 3-49 |
| 09-636-00 | The Yellow Toner Cartridge is missing or not locked. User intervention is required to install or lock the Yellow Toner Cartridge (P/N 106R01513-standard capacity or P/N 106R01525-high capacity). Print service is not available. | Printer error. Yellow (Y) Toner is missing. | None | 3-49 |
| 09-636-01 | The Yellow Toner Cartridge is missing or not locked. User intervention is required to install or lock the Yellow Toner Cartridge (P/N 106R01521). Print service is not available. | Printer error. Yellow (Y) Toner is missing. | None | 3-49 |
| 09-636-02 | The Yellow Toner Cartridge is missing or not locked. User intervention is required to install or lock the Yellow Toner Cartridge (P/N 106R01505-standard capacity or P/N 106R01509-high capacity). Print service is not available. | Printer error. Yellow (Y) Toner is missing. | None | 3-49 |
| 09-636-03 | The Yellow Toner Cartridge is missing or not locked. User intervention is required to install or lock the Yellow Toner Cartridge. Print service is not available. | Printer error. Yellow (Y) Toner is missing. | None | 3-49 |
| 09-636-04 | The Yellow Toner Cartridge is missing or not locked. User intervention is required to install or lock the Yellow Toner Cartridge (P/N 106R01517). Print service is not available. | Printer error. Yellow (Y) Toner is missing. | None | 3-49 |
| 09-637-00 | The Black Toner Cartridge is missing or not locked. User intervention is required to install or lock the Black Toner Cartridge (P/N 106R01514-standard capacity or P/N 106R01526-high capacity) Print service is not available. | Printer error. Black (K) Toner is missing. | None | 3-49 |
| 09-637-01 | The Black Toner Cartridge is missing or not locked. User intervention is required to install or lock the Black Toner Cartridge (P/N 106R01522). Print service is not available. | Printer error. Black (K) Toner is missing. | None | 3-49 |
| 09-637-02 | The Black Toner Cartridge is missing or not locked. User intervention is required to install or lock the Black Toner Cartridge (P/N 106R01506-standard capacity or P/N 106R01510-high capacity) Print service is not available. | Printer error. Black (K) Toner is missing. | None | 3-49 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-637-03 | The Black Toner Cartridge is missing or not locked. User intervention is required to install or lock the Black Toner Cartridge. Print service is not available. | Printer error. Black (K) Toner is missing. | None | 3-49 |
| 09-637-04 | The Black Toner Cartridge is missing or not locked. User intervention is required to install or lock the Black Toner Cartridge (P/N 106R01518). Print service is not available. | Printer error. Black (K) Toner is missing. | None | 3-49 |
| 09-638-01 | The Black Imaging Unit is missing or not installed correctly. User intervention is required to replace the Black Imaging Unit (P/N 108R00974). Print service is not available. | Printer error. Black (K) Imaging Unit is missing. | None | 3-51 |
| 09-638-02 | The Cyan Imaging Unit is missing or not installed correctly. User intervention is required to replace the Cyan Imaging Unit (P/N 108R00971). Print service is not available. | Printer error. Cyan (C) Imaging Unit is missing. | None | 3-51 |
| 09-638-03 | The Magenta Imaging Unit is missing or not installed correctly. User intervention is required to replace the Magenta Imaging Unit (P/N 108R00972). Print service is not available. | Printer error. Magenta (M) Imaging Unit is missing. | None | 3-51 |
| 09-638-04 | The Yellow Imaging Unit is missing or not installed correctly. User intervention is required to replace the Yellow Imaging Unit (P/N 108R00973). Print service is not available. | Printer error. Yellow (Y) Imaging Unit is missing. | None | 3-51 |
| 09-639-00 | The Fuser is missing or not installed correctly. User intervention is required to install or lock the Fuser (P/N 126K32220-110V or P/N 126K32230-220V). Print service is not available. | The printer is unavailable. Fuser is missing or misinstalled. | 10.310.01 | 3-64 |
| 09-644-00 | A non-Xerox Cyan Toner Cartridge is in use. No user intervention is required. Print service is available, but Image Quality may be degraded. | Cyan (C) Toner is not genuine Xerox. | None | |
| 09-645-00 | A non-Xerox Magenta Toner Cartridge is in use. No user intervention is required. Print service is available, but Image Quality may be degraded. | Magenta (M) Toner is not genuine Xerox. | None | |
| 09-646-00 | A non-Xerox Yellow Toner Cartridge is in use. No user intervention is required. Print service is available, but Image Quality may be degraded. | Yellow (Y) Toner is not genuine Xerox. | None | |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-647-00 | A non-Xerox Black Toner Cartridge is in use. No user intervention is required. Print service is available, but Image Quality may be degraded. | Black (K) Toner is not genuine Xerox. | None | |
| 09-648-00 | Cyan Imaging Unit error. User intervention is required to replace the Cyan Imaging Unit (P/N 108R00971). Print service is not available. | Invalid Cyan (C) Imaging Unit. | None | 3-56 |
| 09-649-00 | Magenta Imaging Unit error. User intervention is required to replace the Magenta Imaging Unit (P/N 108R00972). Print service is not available. | Invalid Magenta (M) Imaging Unit. | None | 3-56 |
| 09-650-00 | Yellow Imaging Unit error. User intervention is required to replace the Yellow Imaging Unit (P/N 108R00973). Print service is not available. | Invalid Yellow (Y) Imaging Unit. | None | 3-56 |
| 09-651-00 | Black Imaging Unit error. User intervention is required to replace the Black Imaging Unit (P/N 108R00974). Print service is not available. | Invalid Black (K) Imaging Unit. | None | 3-56 |
| 09-652-00 | The Transfer Belt is missing. User intervention is required to replace the Transfer Belt (included in the Maintenance Kit (P/N 604K73140). Print service is not available. | Printer error. Transfer Belt is missing. | None | 3-57 |
| 09-653-00 | The Transfer Roller is missing. User intervention is required to replace the Transfer Roller (included in the Maintenance Kit (P/N 604K73140). Print service is not available. | Printer error. Transfer Roller is missing. | None | 3-58 |
| 09-654-00 | The shipping ribbon was not removed from the Cyan Imaging Unit. User intervention is required to remove the shipping ribbon from the Imaging Unit. Print service is not available. | Printer error. Ribbon in Cyan (C) Imaging Unit. | None | 3-59 |
| 09-655-00 | The shipping ribbon was not removed from the Magenta Imaging Unit. User intervention is required to remove the shipping ribbon from the Imaging Unit. Print service is not available. | Printer error. Ribbon in Magenta (M) Imaging Unit. | None | 3-59 |
| 09-656-00 | The shipping ribbon was not removed from the Yellow Imaging Unit. User intervention is required to remove the shipping ribbon from the Imaging Unit. Print service is not available. | Printer error. Ribbon in Yellow (Y) Imaging Unit. | None | 3-59 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-657-00 | The shipping ribbon was not removed from the Black Imaging Unit. User intervention is required to remove the shipping ribbon from the Imaging Unit. Print service is not available. | Printer error. Ribbon in Black (K) Imaging Unit. | None | 3-59 |
| 09-658-00 | The Cyan Toner (C) is not compatible. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01511-standard capacity or P/N 106R01523-high capacity). Print service is not available. | Printer error. Invalid Cyan (C) Toner Cartridge. | None | 3-60 |
| 09-658-01 | The Cyan Toner (C) is not compatible. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01519) Print service is not available. | Printer error. Invalid Cyan (C) Toner Cartridge. | None | 3-60 |
| 09-658-02 | The Cyan Toner (C) is not compatible. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01503-standard capacity or P/N 106R01507-high capacity). Print service is not available. | Printer error. Invalid Cyan (C) Toner Cartridge. | None | 3-60 |
| 09-658-03 | The Cyan Toner (C) is not compatible. User intervention is required to replace the Cyan Toner (C). Print service is not available. | Printer error. Invalid Cyan (C) Toner Cartridge. | None | 3-60 |
| 09-658-04 | The Cyan Toner (C) is not compatible. User intervention is required to replace the Cyan Toner Cartridge (P/N 106R01515). Print service is not available. | Printer error. Invalid Cyan (C) Toner Cartridge. | None | 3-60 |
| 09-659-00 | The Magenta Toner (M) is not compatible. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01512-standard capacity or P/N 106R01524-high capacity). Print service is not available. | Printer error. Invalid Magenta (M) Toner Cartridge. | None | 3-60 |
| 09-659-01 | The Magenta Toner (M) is not compatible. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01520). Print service is not available. | Printer error. Invalid Magenta (M) Toner Cartridge. | None | 3-60 |
| 09-659-02 | The Magenta Toner (M) is not compatible. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01504-standard capacity or P/N 106R01508-high capacity). Print service is not available. | Printer error. Invalid Magenta (M) Toner Cartridge. | None | 3-60 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-659-03 | The Magenta Toner (M) is not compatible. User intervention is required to replace the Magenta Toner Cartridge with a genuine Xerox product. Print service is not available. | Printer error. Invalid Magenta (M) Toner Cartridge. | None | 3-60 |
| 09-659-04 | The Magenta Toner (M) is not compatible. User intervention is required to replace the Magenta Toner Cartridge (P/N 106R01516). Print service is not available. | Printer error. Invalid Magenta (M) Toner Cartridge. | None | 3-60 |
| 09-660-00 | The Yellow Toner (Y) is not compatible. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01513-standard capacity or P/N 106R01525-high capacity). Print service is not available. | Printer error. Invalid Yellow (Y) Toner Cartridge. | None | 3-60 |
| 09-660-01 | The Yellow Toner (Y) is not compatible. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01521). Print service is not available. | Printer error. Invalid Yellow (Y) Toner Cartridge. | None | 3-60 |
| 09-660-02 | The Yellow Toner (Y) is not compatible. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01505-standard capacity or P/N 106R01509-high capacity). Print service is not available. | Printer error. Invalid Yellow (Y) Toner Cartridge. | None | 3-60 |
| 09-660-03 | The Yellow Toner (Y) is not compatible. User intervention is required to replace the Yellow Toner Cartridge with a genuine Xerox product. Print service is not available. | Printer error. Invalid Yellow (Y) Toner Cartridge. | None | 3-60 |
| 09-660-04 | The Yellow Toner (Y) is not compatible. User intervention is required to replace the Yellow Toner Cartridge (P/N 106R01517). Print service is not available. | Printer error. Invalid Yellow (Y) Toner Cartridge. | None | 3-60 |
| 09-661-00 | The Black Toner (K) is not compatible. User intervention is required to replace the Black Toner Cartridge (P/N 106R01514-standard capacity or P/N 106R01526-high capacity). Print service is not available. | Printer error. Invalid Black (K) Toner Cartridge. | None | 3-60 |
| 09-661-01 | The Black Toner (K) is not compatible. User intervention is required to replace the Black Toner Cartridge (P/N 106R01522). Print service is not available. | Printer error. Invalid Black (K) Toner Cartridge. | None | 3-60 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 09-661-02 | The Black Toner (K) is not compatible. User intervention is required to replace the Black Toner Cartridge (P/N 106R01506-standard capacity or P/N 106R01510-high capacity). Print service is not available. | Printer error. Invalid Black (K) Toner Cartridge. | None | 3-60 |
| 09-661-03 | The Black Toner (K) is not compatible. User intervention is required to replace the Black Toner Cartridge with a genuine Xerox product. Print service is not available. | Printer error. Invalid Black (K) Toner Cartridge. | None | 3-60 |
| 09-661-04 | The Black Toner (K) is not compatible. User intervention is required to replace the Black Toner Cartridge (P/N 106R01518). Print service is not available. | Printer error. Invalid Black (K) Toner Cartridge. | None | 3-60 |
| 09-662-00 | The Fuser is not compatible. User intervention is required to replace the Fuser. User intervention is required to replace the Fuser. | Printer error. Invalid Fuser. | None | 3-62 |
| 09-663-00 | The Transfer Belt is not compatible. User intervention is required to replace the Transfer Belt (included in the Maintenance Kit P/N 604K73140). Print service is not available. | Printer error. Invalid Transfer Belt. | None | |
| 10-105-01 | Paper jam behind the Right Side Door. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Jam at Right Side Door. | 377.102.01<br>377.123.02<br>377.101.03<br>377.131.07 | 3-133 |
| 10-105-02 | Paper jam behind the Right Side Door. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Jam at Right Side Door. | 377.900.10 | 3-133 |
| 10-106-00 | Paper jam in the Fuser. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Jam at Fuser. | 377.106.04<br>377.104.05<br>377.103.06 | 3-136 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 10-300-00 | Fuser error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Fuser Failure. | 310.311.02<br>310.320.03<br>310.319.04<br>310.312.05<br>310.313.06<br>310.314.07<br>310.335.08<br>310.315.09<br>310.333.10<br>310.334.11<br>310.316.12<br>310.317.13<br>310.318.14<br>310.321.15<br>310.322.16<br>310.323.17<br>310.328.18<br>310.338.19<br>310.324.20<br>310.326.21<br>310.325.22<br>310.327.23<br>310.902.02<br>310.903.03 | 3-65 |
| 10-330-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Engine Motor Failure. | 309.003.01/<br>309.004.01<br>310.330.01/<br>342.324.01/<br>342.325.01/<br>371.216.01 | 3-44<br>3-46<br>3-63<br>3-108<br>3-109<br>3-119 |
| 10-398-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Engine Fan Failure. | 310.398.01<br>342.329.01 | 3-67<br>3-68 |
| 12-099-00 | Finisher communication error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Finisher Communication Failure. | 312.099.01<br>312.099.02<br>312.099.03<br>312.099.04<br>312.099.05<br>312.099.06<br>312.099.07 | 3-71 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 12-221-00 | Finisher error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Finisher Failure. | 312.098.01<br>312.211.01<br>312.212.01<br>312.213.01<br>312.221.01<br>312.223.01<br>312.222.01<br>312.224.01<br>312.260.01<br>312.261.01<br>312.283.01<br>312.284.01<br>312.291.01<br>312.300.01 | 3-70<br>3-73<br>3-75<br>3-77<br>3-79<br>3-79<br>3-81<br>3-81<br>3-83<br>3-83<br>3-85<br>3-85<br>3-87<br>3-89 |
| 12-409-00 | The Staple Cartridge is empty or missing. User intervention is required to install the Staple Cartridge (P/N 008R12941). Print service is not available. | Printer error. Staple Cartridge is empty. | None | 3-91 |
| 12-423-00 | Staple jam in the Finisher. User intervention is required to clear the jam. Print service is not available. | Printer error. Staple is jammed. | None | 3-92 |
| 12-430-00 | Finisher Stapler error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | Printer error. Unable to staple. | None | 3-94 |
| 12-450-00 | Paper jam in the Finisher. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Jam at Finisher. | 312.451.01<br>312.452.01<br>312.453.01<br>312.454.01 | 3-96<br>3-98<br>3-96<br>3-98 |
| 12-451-00 | Paper jam in the Horizontal Transport. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Jam in Horizontal Transport. | 312.450.01 | 3-96 |
| 12-493-00 | The Output Tray is full. User intervention is required to empty the tray. Print service is not available. | Printer error. Output Tray is full. | None | 1.71 |
| 12-494-00 | The Finisher Output Tray is full. User intervention is required to empty the tray. Print service is not available. | Printer error. Finisher Output Tray is full. | None | 1.69 |
| 12-495-00 | Finisher Main Tray error. User intervention is required to remove paper from tray. Print service is not available. | Printer error. Finisher Output Tray is jammed. | None | 3-100 |
| 12-564-00 | The Finisher Front Door is open. User intervention is required to close the door. Print service is not available. | Printer error. Finisher Front Door is open. | None | 3-102 |
| 12-565-00 | Paper Transport Cover is open. User intervention is required to close the cover. Print service is not available. | Printer error. Paper Transport Cover is open. | None | 3-103 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 12-715-00 | The Staple Cartridge is empty or missing. User intervention is required to install the Staple Cartridge (P/N 008R12941). Print service can continue without stapling. | Staple Cartridge is empty. | None | 3-91 |
| 12-723-00 | Staple jam in the Finisher. User intervention is required to clear the jam. Print service can continue without stapling. | Staple is jammed. | None | 3-92 |
| 16-150-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Engine NVRAM Failure. | 316.151.01<br>316.152.02<br>316.153.03<br>316.154.04<br>316.155.05<br>316.156.06<br>316.157.07<br>316.158.08<br>316.159.09 | 3-104 |
| 16-400-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Firmware Failure. | 316.405.05<br>316.406.06<br>316.407.07<br>316.408.08<br>316.409.09<br>316.410.10<br>316.411.11<br>316.412.12<br>316.413.13<br>316.414.14 | 3-105 |
| 16-506-00 | Cloning operation in progress. No user intervention is required; please wait for the cloning process to complete. Print service is temporarily disabled. | The printer is unavailable. Your Administrator is reconfiguring the system. Services will not be available. | None | |
| 17-510-00 | Internet Protocol (IPv6) duplicate address detected. User intervention is required to configure a unique IP address and Power Off/On the machine. Print service may be degraded. | Duplicate IPv6 address detected. Reconfigure with a unique address. | None | |
| 17-513-00 | Internet Protocol (IPv4) duplicate address detected. User intervention is required to configure a unique IP address and Power Off/On the machine. Print service may be degraded. | Duplicate IPv4 address detected. Reconfigure with a unique address. | None | |
| 17-562-00 | Machine is unable to contact the remote Xerox SMart eSolutions Communication Server. User intervention is required to review SMart eSolutions settings. Machine services are unaffected. | No communications with Xerox SMart eSolutions server. Contact System Administrator. | 16.891 | |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 17-563-00 | Machine is unable to contact the remote Xerox SMart eSolutions Communication Server. User intervention is required to review SMart eSolutions settings. Machine services are unaffected. | No communications with Xerox SMart eSolutions server. Contact System Administrator. | 16.892 | |
| 41-000-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Unrecognized Status. | None | 3-107 |
| 42-601-00 | Transfer Belt error. User intervention is required to Power Off the machine, remove and reinsert the Transfer Belt then Power On; if problem persists, install a new Transfer Belt or call for assistance. Print service is not available. | The printer is unavailable. Transfer Belt Failure. | 342.601.02<br>342.601.03 | 3-110 |
| 70-099-00 | Paper Feeder communication error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Feeder Communication Failure. | 370.099.01 | 3-114 |
| 70-532-00 | The paper required for the current job is not available. User intervention is required to load the correct paper. Print service is not available. | Printer error. Paper not available. | None | 3-118 |
| 71-101-00 | Misfeed in Tray 1. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Misfeed in Tray 1. | 371.101.08 | 3-116 |
| 71-103-00 | Unknown paper size or type detected in Tray 1. User intervention is required at the local user interface to confirm Tray 1 settings. Print service can continue if the correct paper is available in other paper trays. | Printer error. Paper Size Jam from Tray 1. | None | |
| 71-531-00 | Tray 1 is empty. User intervention is required to add paper to Tray 1. Print service is not available. | Printer error. Tray 1 is empty. | None | 3-118 |
| 71-532-00 | The paper required for the current job is not available. User intervention is required to load the correct paper. Print service is not available. | Printer error. Tray 1 paper not available. | None | 3-118 |
| 72-101-00 | Misfeed in Tray 2. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Misfeed in Tray 2. | 372.101.09 | 3-120 |
| 72-103-00 | Paper jam in Tray 2. User intervention is required to clear the paper jam in Tray 2. Print service is not available. | Printer error. Paper Size Jam from Tray 2. | None | 3-40 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 72-215-00 | Paper Feeder configuration error. User intervention is required to Power Off the machine, configure the Paper Feeder then Power On; if problem persists, call for assistance. Print service is not available. | The printer is unavailable. Optional Feeder Configuration Failure. | 372.215.01 | 3-122 |
| 72-530-00 | Tray 2 is empty. User intervention is required to add paper to the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 2 is empty. | None | 3-124 |
| 72-531-00 | Tray 2 is empty. User intervention is required to add paper to the tray. Print service is not available. | Printer error. Tray 2 is empty. | None | 3-124 |
| 72-532-00 | The paper required for the current job is not available. User intervention is required to load the correct paper. Print service is not available. | Printer error. Tray 2 paper not available. | None | 3-124 |
| 72-535-00 | Tray 2 is nearly empty. User intervention is required to add paper to the tray. Print service is unaffected. | Tray 2 is nearly empty. | None | 3-124 |
| 72-539-00 | Tray 2 is open. User intervention is required to close the tray. Print service is not available. | Printer error. Tray 2 is open. | None | 3-40 |
| 73-101-00 | Misfeed in Tray 3. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Misfeed in Tray 3. | 373.101.01 | 3-128 |
| 73-102-00 | Misfeed in Tray 3. User intervention is required to clear the paper jam in Tray 3. Print service is not available. | Printer error. Jam at Tray 3 Right Side Door. | 373.102.05 377.110.08 377.901.09 | 3-138 |
| 73-103-00 | Paper jam in Tray 3. User intervention is required to clear the paper jam in Tray 3. Print service is not available. | Printer error. Paper Size Jam from Tray 3. | None | 3-40 |
| 73-530-00 | Tray 3 is empty. User intervention is required to add paper to the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 3 is empty. | None | 3-124 |
| 73-531-00 | Tray 3 is empty. User intervention is required to add paper to Tray 3. Print service is not available. | Printer error. Tray 3 is empty. | None | 3-124 |
| 73-532-00 | The paper required for the current job is not available. User intervention is required to load the correct paper. Print service is not available. | Printer error. Tray 3 paper not available. | None | 3-124 |
| 73-535-00 | Tray 3 is nearly empty. User intervention is required to add paper to the tray. Print service is unaffected. | Tray 3 is nearly empty. | None | 3-124 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 73-539-00 | Tray 3 is open. User intervention is required to close the tray. Print service is not available. | Printer error.<br>Tray 3 is open. | None | 3-40 |
| 74-101-00 | Misfeed in Tray 4. User intervention is required to clear the paper jam. Print service is not available. | Printer error.<br>Misfeed in Tray 4. | 374.101.02 | 3-128 |
| 74-102-00 | Misfeed in Tray 4. User intervention is required to clear the paper jam in Tray 4. Print service is not available. | Printer error.<br>Jam at Tray 4<br>Right Side Door. | 374.102.06<br>377.110.08<br>377.901.09 | 3-138 |
| 74-103-00 | Paper jam in Tray 4. User intervention is required to clear the paper jam in Tray 4. Print service is not available. | Printer error.<br>Paper Size Jam<br>from Tray 4. | None | 3-40 |
| 74-530-00 | Tray 4 is empty. User intervention is required to add paper to the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 4 is empty. | None | 3-124 |
| 74-531-00 | Tray 4 is empty. User intervention is required to add paper to the tray. Print service is not available. | Printer error.<br>Tray 4 is empty. | None | 3-124 |
| 74-532-00 | The paper required for the current job is not available. User intervention is required to load the correct paper. Print service is not available. | Printer error.<br>Tray 4 paper not available. | None | 3-124 |
| 74-535-00 | Tray 4 is nearly empty. User intervention is required to add paper to the tray. Print service is unaffected. | Tray 4 is nearly empty. | None | 3-124 |
| 74-539-00 | Tray 4 is open. User intervention is required to close the tray. Print service is not available. | Printer error.<br>Tray 4 is open. | None | 3-40 |
| 75-101-00 | Misfeed in Tray 5. User intervention is required to clear the paper jam. Print service is not available. | Printer error.<br>Misfeed in Tray 5. | 375.101.03 | 3-128 |
| 75-102-00 | Misfeed in Tray 5. User intervention is required to clear the paper jam in Tray 5. Print service is not available. | Printer error.<br>Jam at Tray 5<br>Right Side Door. | 375.102.07<br>377.110.08<br>377.901.09 | 3-138 |
| 75-103-00 | Paper jam in Tray 5. User intervention is required to clear the paper jam in Tray 5. Print service is not available. | Printer error.<br>Paper Size Jam<br>from Tray 5. | None | 3-40 |
| 75-530-00 | Tray 5 is empty. User intervention is required to add paper to the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 5 is empty. | None | 3-124 |
| 75-531-00 | Tray 5 is empty. User intervention is required to add paper to the tray. Print service is not available. | Printer error.<br>Tray 5 is empty. | None | 3-124 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 75-532-00 | The paper required for the current job is not available. User intervention is required to load the correct paper. Print service is not available. | Printer error. Tray 5 paper not available. | None | 3-124 |
| 75-535-00 | Tray 5 is nearly empty. User intervention is required to add paper to the tray. Print service is unaffected. | Tray 5 is nearly empty. | None | 3-124 |
| 75-539-00 | Tray 5 is open. User intervention is required to close the tray. Print service is not available. | Printer error. Tray 5 is open. | None | 3-40 |
| 76-101-00 | Misfeed in Tray 6. User intervention is required to clear the paper jam. Print service is not available. | Printer error. Misfeed in Tray 6. | 376.101.04 | 3-128 |
| 76-102-00 | Paper jam in Tray 6. User intervention is required to clear the paper jam in Tray 6. Print service is not available. | Printer error. Jam at Tray 6 Right Side Door. | 377.110.08 377.901.09 | 3-138 |
| 76-103-00 | Paper jam in Tray 6. User intervention is required to clear the paper jam in Tray 6. Print service is not available. | Printer error. Paper Size Jam from Tray 6. | None | 3-40 |
| 76-530-00 | Tray 6 is empty. User intervention is required to add paper to the tray. Print service can continue if the correct paper is available in other paper trays. | Tray 6 is empty. | None | 3-124 |
| 76-531-00 | Tray 6 is empty. User intervention is required to add paper to the tray. Print service is not available. | Printer error. Tray 6 is empty. | None | 3-124 |
| 76-532-00 | The paper required for the current job is not available. User intervention is required to load the correct paper. Print service is not available. | Printer error. Tray 6 paper not available. | None | 3-124 |
| 76-535-00 | Tray 6 is nearly empty. User intervention is required to add paper to the tray. Print service is unaffected. | Tray 6 is nearly empty. | None | 3-124 |
| 76-539-00 | Tray 6 is open. User intervention is required to close the tray. Print service is not available. | Printer error. Tray 6 is open. | None | 3-40 |
| 77-098-00 | Paper Feeder error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Optional Feeder Failure. | 373.098.01 374.098.01 375.098.01 376.098.01 | 3-126 |
| 77-216-00 | Paper Feeder error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Feeder Motor Failure. | 373.216.01 374.216.01 375.216.01 376.216.01 | 3-131 |
| 89-560-00 | Print Engine calibration in progress. No user intervention is required; please wait. The machine is temporarily unavailable. | Calibrating. | None | |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 91-312-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Printer Failure. | 319.410.01<br>345.301.01<br>345.302.02<br>345.303.03<br>345.304.04<br>345.305.05<br>391.312.01 | 3-106<br>3-112<br>3-112<br>3-112<br>3-112<br>3-112<br>3-145 |
| 91-901-00 | Black Imaging Unit error. User intervention is required to Power Off the machine, remove and reinsert the Imaging Unit, then Power On; if problem persists, install a new Imaging Unit or call for assistance. Print service is not available. | The printer is unavailable. Black (K) Imaging Unit Failure. | 391.901.02/<br>391.902.03 | 3-143 |
| 91-903-00 | Yellow Imaging Unit error. User intervention is required to Power Off the machine, remove and reinsert the Imaging Unit, then Power On; if problem persists, install a new Imaging Unit or call for assistance. Print service is not available. | The printer is unavailable. Yellow (Y) Imaging Unit Failure. | 391.903.02<br>391.904.03 | 3-143 |
| 91-905-00 | Magenta Imaging Unit error. User intervention is required to Power Off the machine, remove and reinsert the Imaging Unit, then Power On; if problem persists, install a new Imaging Unit or call for assistance. Print service is not available. | The printer is unavailable. Magenta (M) Imaging Unit Failure. | 391.905.02<br>391.906.03 | 3-143 |
| 91-907-00 | Cyan Imaging Unit error. User intervention is required to Power Off the machine, remove and reinsert the Imaging Unit, then Power On; if problem persists, install a new Imaging Unit or call for assistance. Print service is not available. | The printer is unavailable. Cyan (C) Imaging Unit Failure. | 391.907.02<br>391.908.03 | 3-143 |
| 92-310-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Density Sensor Failure. | 392.310.01<br>392.311.02<br>392.320.01 | 3-146 |
| 92-330-00 | Density Sensor error. User intervention is required to clean sensor. Print service may be degraded. | Dusty Density Sensor. | None | 3-146 |
| 92-573-00 | The Printer is warming up. No user intervention is required; please wait. Print service is unaffected. | Warming Up. | None | |
| 92-660-00 | The Printer is warming up. Machine temperature is below normal operating parameters. Print service may be degraded. | Print speed reduced due to internal temperature. | None | 3-149 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 92-661-00 | System error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Engine Sensor Failure. | 391.301.01<br>391.302.02<br>391.303.03<br>391.304.04<br>391.305.05<br>391.306.06<br>391.307.07<br>391.308.08<br>392.661.01 | 3-141<br>3-141<br>3-141<br>3-141<br>3-141<br>3-141<br>3-141<br>3-141<br>3-149 |
| 92-662-00 | Internal system error. User intervention is required to Power Off/On machine; service is required if problem persists. Print service is not available. | The printer is unavailable. Overheat Failure. | 392.662.01 | 3-149 |
| 92-670-00 | Yellow Imaging Unit error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Yellow Imaging Unit Failure. | 392.670.01 | 3-151 |
| 92-671-00 | Magenta Imaging Unit error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Magenta Imaging Unit Failure. | 392.671.01 | 3-151 |
| 92-672-00 | Cyan Imaging Unit error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Cyan Imaging Unit Failure. | 392.672.01 | 3-151 |
| 92-673-00 | Black Imaging Unit error. User intervention is required to Power Off/On the machine; service is required if the problem persists. Print service is not available. | The printer is unavailable. Black Imaging Unit Failure. | 392.673.01 | 3-151 |
| 93-901-00 | Black Toner Cartridge error. User intervention is required to Power Off the machine, remove and reinsert the Toner Cartridge, then Power On; if problem persists, install a new Toner Cartridge. Print service is not available. | The printer is unavailable. Black (K) Toner Failure. | 393.901.02/<br>393.902.03 | 3-153 |
| 93-903-00 | Yellow Toner Cartridge error. User intervention is required to Power Off the machine, remove and reinsert the Toner Cartridge, then Power On; if problem persists, install a new Toner Cartridge. Print service is not available. | The printer is unavailable. Yellow (Y) Toner Failure. | 393.903.02/<br>393.904.03 | 3-153 |

**Table 2. Status Code Summary**

| Code | Status Message | Control Panel Message | Related Chain-link | Page |
|---|---|---|---|---|
| 93-905-00 | Magenta Toner Cartridge error. User intervention is required to Power Off the machine, remove and reinsert the Toner Cartridge, then Power On; if problem persists, install a new Toner Cartridge. Print service is not available. | The printer is unavailable. Magenta (M) Toner Failure. | 393.905.02/ 393.906.03 | 3-153 |
| 93-907-00 | Cyan Toner Cartridge error. User intervention is required to Power Off the machine, remove and re | The printer is unavailable. Cyan (C) Toner Failure. | 393.907.02/ 393.908.03 | 3-153 |

# Troubleshooting Procedures

**Note**

Whenever a part is replaced, cycle the power to check the repair. If the error persists, proceed to the next step in the procedure.

## Tray 3 ~ 6 Right Side Door Open

The Optional Feeder right side door switch indicates the door is open.

### Applicable Codes

- 01-503-00 Tray 3 Right Side door is open
- 01-504-00 Tray 4 Right Side door is open
- 01-505-00 Tray 5 Right Side door is open
- 01-506-00 Tray 6 Right Side door is open

### Initial Actions

- Check the actuator on the right door.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Right Side Door, PL12.1.14<br>■ Right Door Switch, PL12.2.2<br>■ Feeder Board, PL12.3.4<br>■ Lower Option Harness, PL12.3.11 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 7 - 550-Sheet Feeder” on page 10-13<br>■ “Feeder Board” on page 10-44 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the switch actuator on the right side door.<br>The right side door is undamaged. | Go to Step 2. | Replace the feeder. |
| 2 | Test the Right Door Switch for the affected tray using dc330:<br>■ Tray 3 (073-008)<br>■ Tray 4 (074-014)<br>■ Tray 5 (075-014)<br>■ Tray 6 (076-017)<br>The signal changes (On/Off). | Go to Step 3. | Go to Step 4. |
| 3 | Check continuity of the Lower Option Harness between P/J353 on the Feeder Board and P/J360 at the switch.<br>The harness is undamaged. | Go to Step 4. | Replace the Lower Option Harness (page 8-201). |
| 4 | Check for 3.3V at P/J353 on the Feeder Board.<br>Is 3.3V available at J353-1? | Replace the Right Door Switch (page 8-193). | Go to Step 5. |
| 5 | Replace the Feeder Board (page 8-200).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete |

# Front Door Open

The Front Door Open Switch indicates the Front Door is open.

## Applicable Code

- 01-510-00 Front Door is open

## Initial Actions

- Check the actuator on the Front Door.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Front Door, PL1.2.17<br>■ Front Door Open Switch, PL1.2.3<br>■ Front Interlock Harness, PL1.2.1<br>■ Exit Harness, PL11.1.7<br>■ LVPS, PL10.2.2<br>■ MCU Board, PL10.2.18 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "LVPS" on page 10-25 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the actuator on the Front Door.<br>The door is undamaged. | Go to Step 2. | Replace the Front Door (page 8-26). |
| 2 | Test the Front Door Open Switch using dc330 (077-302).<br>The signal changes (On/Off). | Go to Step 3. | Go to Step 4. |
| 3 | Check continuity of the Exit Harness between P/J20 on the MCU Board and P/J212 at the switch.<br>The harness is undamaged. | Go to Step 4. | Replace the Exit Harness. |
| 4 | Check for 3.3V at P/J20-11 on the MCU Board.<br>Is 3.3V available at JJ20-11? | Replace the Front Door Open Switch (page 8-68). | Go to Step 5. |
| 5 | Replace the LVPS (page 8-182).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete |

## Right Side Door Open

The Right Door Interlock Switch indicates the Right Door is open.

### Applicable Code

- 01-520-01 Right Door is open

### Initial Actions

- Check the actuator on the Front Door.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Right Door Interlock Actuator, PL4.1.97<br>■ Right Door Interlock Switch, PL4.2.96<br>■ LVPS, PL10.2.2<br>■ MCU Board, PL10.2.18 | ■ "Map 4 - LVPS and IP Board" on page 10-8<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "LVPS" on page 10-25 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Right Door Interlock Actuator.<br>The actuator is undamaged. | Go to Step 2. | Replace the actuator (page 8-44). |
| 2 | Test the Right Door Interlock Switch using dc330 (077-301).<br>The signal changes (On/Off). | Go to Step 4. | Go to Step 3. |
| 3 | Replace the Right Door interlock Switch (page 8-72).<br>Does the error persist? | Go to Step 4. | Complete. |
| 4 | Replace the LVPS (page 8-182).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete |

# XPC Failure

An internal data (XPC) error was detected by the print engine.

## Applicable Codes

- 03-300-00 XPC Failure
- 303.301.01 Serial number error
- 303.302.02 XPC Failure

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Does the error persist after a power cycle? | Go to Step 2. | Complete. |
| 2 | Initialize Engine NVM using dc301. The error persists. | Replace the MCU Board (page 8-152). | Complete. |

## Tray 2 ~ 6 is Open

The Size Switch indicates the Tray is open.

### Applicable Codes

- 07-513-02 Dedicated Tray 2 is open
- 07-513-03 Dedicated Tray 3 is open
- 07-513-04 Dedicated Tray 4 is open
- 07-513-05 Dedicated Tray 5 is open
- 07-513-06 Dedicated Tray 6 is open
- 07-514-02 Dedicated Tray 2 is open
- 07-514-03 Dedicated Tray 3 is open
- 07-514-04 Dedicated Tray 4 is open
- 07-514-05 Dedicated Tray 5 is open
- 07-514-06 Dedicated Tray 6 is open
- 72-103-00 Paper Size Jam from Tray 2
- 72-539-00 Tray 2 is Open
- 73-103-00 Paper Size Jam from Tray 3
- 73-539-00 Tray 3 is Open
- 74-103-00 Paper Size Jam from Tray 4
- 74-539-00 Tray 4 is Open
- 75-103-00 Paper Size Jam from Tray 5
- 75-539-00 Tray 5 is Open
- 76-103-00 Paper Size Jam from Tray 6
- 76-539-00 Tray 6 is Open

### Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Tray, PL2.1.1<br>■ Size Switch, PL3.1.1<br>■ LPP/MOT Harness, PL11.2.5<br>■ Feeder Assy, PL3.2.1<br>■ MCU Board, PL10.2.18 | ■ “Map 2 - Fuser and Feeder” on page 10-6<br>■ “Map 7 - 550-Sheet Feeder” on page 10-13<br>■ “Map 8 - 1100-Sheet Feeder” on page 10-14<br>■ “Tray 1 and 2 Feeder” on page 10-27<br>■ “Feeder Board” on page 10-44 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Tray guides and Size Switch actuators.<br>The Tray is undamaged. | Go to Step 2. | Replace the Tray. |
| 2 | Test the Size Switch for the indicated Tray using dc741.<br>The signal changes (On/Off) when the Tray is removed. | Go to Step 4. | Go to Step 3. |
| 3 | Check continuity of the LPP/MOT Harness between P/J18 on the MCU Board and P/J219 at the switch.<br>For optional trays, check the Lower Option Harness P/J353 and P/J365.<br>The harness is undamaged. | Replace the Size Switch (page 8-69). | Replace the harness. |
| 4 | Replace the Feeder/Registration Assembly (page 8-41) for Tray 2 faults, or the Optional Feeder for Trays 3~6.<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Laser Failure

A Laser Unit failure was detected.

## Applicable Codes

- 09-000-00 Laser Failure
- 309.001.01 Warm up error
- 309.002.02 Rotation failure after ready
- 309.003.03 Laser diode error
- 10-330-00 Engine Motor Failure

## Initial Actions

- Verify the Rear Cover is installed and secure.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Chain-link 309.003.03 may indicate the Rear Interlock Switch is open interrupting 5V power to the Laser Unit causing the error.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Laser Unit, PL5.2.1<br>■ MCU Board, PL10.2.18<br>■ Rear Interlock Switch, PL1.3.6 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Laser Unit" on page 10-31 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Laser Unit motor using dc330 (061-001).<br>The Laser Unit is operational. | Go to Step 7. | Go to Step 2. |
| 2 | Remove the Rear Cover to check the Rear Interlock Switch.<br>The switch is operational. | Go to Step 3. | Replace the switch (page 8-161). |
| 3 | Check P/J701 on the IP Board.<br>The connection is secure. | Go to Step 4. | Secure the connection. |
| 4 | Check P/J303 on the LVPS.<br>The connection is secure. | Go to Step 5. | Secure the connection. |
| 5 | Check PJ151, PJ152 and PJ153 on the Laser Unit.<br>The connections are secure. | Go to Step 6. | Secure the connections. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **6** | Check P/J3 on the MCU Board. The connection is secure. | Go to Step 7. | Secure the connection. |
| **7** | Replace the Laser Unit (page 8-93). Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Engine Motor Failure - K Developer Drive

An error associated with the K Developer Drive Assembly was detected.

**Warning**

Allow the Fuser to cool before servicing the printer.

## Applicable Error

- 309.003.01 K Developer Drive Assembly failure

## Initial Actions

- Cycle system power.
- Remove and reseat the Black Imaging Unit.
- If the problem persists, follow the procedure below.

### Troubleshooting Reference Table

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Black Imaging Unit, PL5.1.11<br>■ K Developer Drive, PL9.2.10<br>■ MCU Board, PL10.2.18<br>■ Drive Gear Kit, PL9.2.99<br>■ Harness Assy LPP/ MOT, PL11.2.5 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 6 - Drive” on page 10-10<br>■ “Drive” on page 10-29 |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Cycle system power.<br>Does the error persist? | Go to Step 2. | Complete |
| 2 | Check the Black Imaging Unit for excessive wear or damage. Rotate the Imaging Unit mag roller (lower small white gear located at the back of the Imaging Unit) to check operation.<br>The Imaging Unit is undamaged. | Go to Step 3. | Replace the Black Imaging Unit. |
| 3 | Check P/J6 on the MCU Board and P/J253 on the K Developer Drive.<br>The connections are secure. | Go to Step 4. | Secure the connections. |
| 4 | Test the K Developer Drive using dc330 (093-004).<br>Does the motor rotate? | Replace the MCU Board (page 8-152). | Go to Step 5. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Check installation of the K Developer Drive.<br>Is the drive installed correctly? | Go to Step 6. | Correct the installation. |
| **6** | Check continuity of the Harness Assy LPP/ MOT between P/J253 and P/J6 on the MCU Board.<br>The harness is undamaged. | Go to Step 7. | Replace the harness. |
| **7** | Check for 24V at P/J6 of the MCU Board.<br>Is 24 V available at P/J6-2 and -4 when the Front Interlock Switch is closed? | Replace the K Developer Drive (page 8-171). | Go to Step 8. |
| **8** | Replace the Drive Gear Kit (page 8-178).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Engine Motor Failure - CMY Developer Drive

An error associated with the CMY Developer Drive Assembly was detected.

**Warning**

Allow the Fuser to cool before servicing the printer.

## Applicable Codes

- 309.004.01 YMC Developer Drive Assembly failure
- 10-330-00 Engine Motor Failure

## Initial Actions

- Cycle system power.
- Remove and reseat the Imaging Units.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Imaging Unit, PL5.1.8<br>■ Magenta Imaging Unit, PL5.1.9<br>■ Cyan Imaging Unit, PL5.1.10<br>■ CMY Developer Drive, PL9.2.9<br>■ Drive Gear Kit, PL9.2.99<br>■ MCU Board, PL10.2.18<br>■ Harness Assy LPP/ MOT, PL11.2.5 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 6 - Drive” on page 10-10<br>■ “Drive” on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Cycle system power.<br>Does the error persist? | Go to Step 2. | Complete |
| 2 | Check the Imaging Units for excessive wear or damage. Rotate each Imaging Unit mag roller (lower small white gear located at the back of the Imaging Unit) to check operation.<br>The Imaging Units are undamaged. | Go to Step 3. | Replace the affected Imaging Unit. |
| 3 | Check P/J5 on the MCU Board and P/J252 on the CMY Developer Drive.<br>The connections are secure. | Go to Step 4. | Secure the connections. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Test the CMY Developer Drive using dc330 (093-001).<br>Does the motor rotate? | Replace the MCU Board (page 8-152). | Go to Step 5. |
| **5** | Check installation of the CMY Developer Drive.<br>Is the drive installed correctly? | Go to Step 6. | Correct the installation. |
| **6** | Check continuity of the Harness Assy LPP/ MOT between P/J252 and P/J5 on the MCU Board.<br>The harness is undamaged. | Go to Step 7. | Replace the harness. |
| **7** | Check for 24V at P/J315 on the LVPS.<br>Is 24 V available at P/J315-1 when the Front Interlock Switch is closed? | Go to Step 8. | Replace the LVPS (page 8-182). |
| **8** | Replace the MCU Board (page 8-152).<br>Does the error persist? | Replace the CMY Developer Drive (page 8-167). | Complete. |

# Waste Cartridge is Full / Near Full

The Waste Toner Full Sensor indicates the cartridge is full or nearly full.

## Applicable Code

- 09-600-00 Waste Cartridge is Near Full
- 09-601-00 Waste Cartridge is Full

## Initial Actions

- Replace the Waste Toner Cartridge.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Procon Assy, PL5.3.1<br>■ Waste Toner Full Sensor PL5.3.13<br>■ Exit Harness, PL11.1.7<br>■ MCU Board, PL10.2.18 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Xerographic" on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the Waste Toner Cartridge.<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Test the Waste Toner Full Sensor using dc330 (091-001).<br>The signal changes (On/Off). | Go to Step 3. | Go to Step 4. |
| 3 | Check continuity of the Exit Harness between P/J16 on the MCU Board and P/J106 at the sensor.<br>The harness is undamaged. | Go to Step 4. | Replace the Exit Harness. |
| 4 | Check for 5V at P/J16-6 on the MCU Board.<br>Is 5V available at P/J16-6? | Replace the Waste Toner Full Sensor (page 8-100). | Go to Step 5. |
| 5 | Replace the Procon Assy (page 8-95).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete |

## CMYK Toner is Low or Empty

The Toner CRUM indicates the Toner Cartridge is low or empty.

### Applicable Codes

- 09-602-00 Cyan Toner is Low
- 09-602-00 Cyan Toner is Low
- 09-603-00 Magenta Toner is Low
- 09-604-00 Yellow Toner is Low
- 09-605-00 Black Toner is Low
- 09-619-00 Cyan Toner is Empty
- 09-619-01 Cyan Toner is Empty
- 09-619-02 Cyan Toner is Empty
- 09-619-03 Cyan Toner is Empty
- 09-619-04 Cyan Toner is Empty
- 09-619-09 Cyan Toner is Empty
- 09-620-00 Magenta Toner is Empty
- 09-620-01 Magenta Toner is Empty
- 09-620-02 Magenta Toner is Empty
- 09-620-03 Magenta Toner is Empty
- 09-620-04 Magenta Toner is Empty
- 09-620-09 Magenta Toner is Empty
- 09-621-00 Yellow Toner is Empty
- 09-621-01 Yellow Toner is Empty
- 09-621-02 Yellow Toner is Empty
- 09-621-03 Yellow Toner is Empty
- 09-621-04 Yellow Toner is Empty
- 09-621-09 Yellow Toner is Empty
- 09-623-00 Cyan Toner is Empty
- 09-623-01 Cyan Toner is Empty
- 09-623-02 Cyan Toner is Empty
- 09-623-03 Cyan Toner is Empty
- 09-623-04 Cyan Toner is Empty
- 09-624-00 Magenta Toner is Empty
- 09-624-01 Magenta Toner is Empty
- 09-624-02 Magenta Toner is Empty
- 09-624-03 Magenta Toner is Empty
- 09-624-04 Magenta Toner is Empty
- 09-625-00 Yellow Toner is Empty
- 09-625-01 Yellow Toner is Empty
- 09-625-02 Yellow Toner is Empty
- 09-625-03 Yellow Toner is Empty
- 09-625-04 Yellow Toner is Empty
- 09-626-00 Black Toner is Empty
- 09-626-01 Black Toner is Empty
- 09-626-02 Black Toner is Empty
- 09-626-03 Black Toner is Empty
- 09-626-04 Black Toner is Empty
- 09-634-00 Cyan Toner Missing
- 09-634-01 Cyan Toner Missing
- 09-634-02 Cyan Toner Missing
- 09-634-03 Cyan Toner Missing
- 09-634-04 Cyan Toner Missing
- 09-635-00 Magenta Toner Missing
- 09-635-01 Magenta Toner Missing
- 09-635-02 Magenta Toner Missing
- 09-635-03 Magenta Toner Missing
- 09-635-04 Magenta Toner Missing
- 09-636-00 Yellow Toner Missing
- 09-636-01 Yellow Toner Missing
- 09-636-02 Yellow Toner Missing
- 09-636-03 Yellow Toner Missing
- 09-636-04 Yellow Toner Missing
- 09-637-00 Black Toner Missing
- 09-637-01 Black Toner Missing
- 09-637-02 Black Toner Missing
- 09-637-03 Black Toner Missing
- 09-637-04 Black Toner Missing

## Initial Actions

- Replace the affected Toner Cartridge.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Toner Cartridge (Y), PL6.1.1<br>■ Toner Cartridge (M), PL6.1.2<br>■ Toner Cartridge (C), PL6.1.3<br>■ Toner Cartridge (K), PL6.1.4<br>■ CRUM Connector Assy, PL6.1.10<br>■ MCU Board, PL10.2.18<br>■ Toner CRUM Harness, PL11.1.1 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Dispense and Development" on page 10-37 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the indicated Toner Cartridge.<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Check connections between P/J11 on the MCU Board and indicated CRUM Connector: P/J204(Y), P/J205 (M), P/J206(C), P/J207 (K).<br>The connection is secure. | Go to Step 3. | Secure the connection. |
| 3 | Check Toner CRUM Harness continuity between P/J11 on the MCU Board and indicated CRUM Connector: P/J204(Y), P/J205 (M), P/J206(C), P/J207 (K).<br>The harness is undamaged. | Go to Step 4. | Replace the Toner CRUM Harness. |
| 4 | Check for 2.5V at P/J11-3(Y), -7(M), -11(C), -15(K) on the MCU Board.<br>Is 2.5V available to the indicated Toner CRUM? | Replace the affected Toner Cartridge. | Replace the MCU Board (page 8-152). |

# CMYK Imaging Unit is Near/Past End of Life or Missing

The Imaging Unit CRUM indicates the Imaging Unit is near, past end of life, or missing.

## Applicable Codes

- 09-608-00 Cyan Imaging Unit is Near End of Life
- 09-609-00 Magenta Imaging Unit is Near End of Life
- 09-610-00 Yellow Imaging Unit is Near End of Life
- 09-611-00 Black Imaging Unit is Near End of Life
- 09-615-00 Cyan Imaging Unit is Past End of Life
- 09-616-00 Magenta Imaging Unit is Past End of Life
- 09-617-00 Yellow Imaging Unit is Past End of Life
- 09-618-00 Black Imaging Unit is Past End of Life
- 09-627-00 Cyan Imaging Unit is Past End of Life
- 09-628-00 Magenta Imaging Unit is Past End of Life
- 09-629-00 Yellow Imaging Unit is Past End of Life
- 09-630-00 Black Imaging Unit is Past End of Life
- 09-638-01 Black Imaging Unit is Missing
- 09-638-02 Cyan Imaging Unit is Missing
- 09-638-03 Magenta Imaging Unit is Missing
- 09-638-04 Yellow Imaging Unit is Missing

## Initial Actions

- Replace the affected Imaging Unit.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Imaging Unit, PL5.1.8<br>■ Magenta Imaging Unit, PL5.1.9<br>■ Cyan Imaging Unit, PL5.1.10<br>■ Black Imaging Unit, PL5.1.11<br>■ Imaging Unit CRUM, PL5.2.4<br>■ MCU Board, PL10.2.18<br>■ CRUM / Disp Harness, PL11.2.4 | ■ “Map 1 - CRU Detection” on page 10-5<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Xerographic” on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the indicated Imaging Unit.<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Check connections between P/J12 on the MCU Board and indicated CRUM Connector: P/J208(Y), P/J209 (M), P/J210(C), P/J211 (K).<br>The connection is secure. | Go to Step 3. | Secure the connection. |
| 3 | Check CRUM/Disp Harness continuity between P/J12 on the MCU Board and indicated CRUM Connector: P/J208(Y), P/J209 (M), P/J210(C), P/J211(K).<br>The harness is undamaged. | Go to Step 4. | Replace the CRUM/ Dispense Harness. |
| 4 | Check for 2.5V at P/J12-3(Y), -7(M), -11(C), -15(K) on the MCU Board.<br>Is 2.5V available to the indicated Imaging Unit CRUM? | Replace the affected Imaging Unit. | Replace the MCU Board (page 8-152). |

# Fuser Envelope Lever is Up/Down

The Envelope Mode Sensor indicates the Fuser's envelope lever is in the wrong position for the media being fed.

## Applicable Code

- 09-614-00 Fuser Envelope Lever is Up
- 09-631-00 Fuser Envelope Lever is Down

## Initial Actions

**Warning**

Allow the Fuser to cool before servicing the printer.

- Check the envelope lever is in the correct position for the media in use.
- Cycle system power.
- If the problem persists, follow the procedure below.

### Troubleshooting Reference Table

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Envelop Mode Sensor PL7.2.10<br>■ MCU Board, PL10.2.18<br>■ Exit Harness, PL11.1.7 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Remove the Fuser and check the envelope lever and actuator.<br>The lever and actuator are undamaged. | Go to Step 2. | Replace the Fuser (page 8-17). |
| 2 | Test the Envelope Mode Sensor using dc330 (010-206).<br>The signal changes (On/Off). | Go to Step 3. | Go to Step 4. |
| 3 | Check continuity of the Exit Harness between P/J20 on the MCU Board and P/J225 at the sensor.<br>The harness is undamaged. | Go to Step 4. | Replace the Exit Harness. |
| 4 | Check for 3.3V at P/J20-1 on the MCU Board.<br>Is 3.3V available at JJ20-1? | Replace the Envelope Mode Sensor (page 8-121). | Replace the MCU Board (page 8-152). |

# Fuser is Past End of Life

Fuser CRUM indicates the Fuser has reached end of service.

## Applicable Codes

- 309-612-00 Fuser is Past End of Life
- 309.632.00 Fuser is Past End of Life

## Initial Actions

**Warning**

Allow the Fuser to cool before servicing the printer.

- Replace the Fuser.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser, PL7.1.99<br>■ Fuser Harness, PL7.1.4<br>■ MCU Board, PL10.2.18 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the Fuser.<br>Does the error persist? | Go to Step 2. | Complete. |
| 2 | Check Fuser connections PJ180-S and P/J1 on the MCU Board.<br>The connections are secure and undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Check Fuser Harness continuity between P/J1 and P/J180-S.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |
| 4 | Replace the Fuser (page 8-17).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Maintenance Kit is Near/Past End of Life

Maintenance Kit counter indicates the Transfer Belt, Transfer Roller and Feed Rollers have reached end of service.

## Applicable Codes

- 09-607-00 Maintenance Kit is Near End of Life
- 09-613-00 Maintenance Kit is Past End of Life
- 309.633.00 Maintenance Kit is Past End of Life

## Initial Actions

- Replace the Maintenance Kit.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Maintenance Kit, PL5.1.99<br>■ MCU Board, PL10.2.18 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reset the Maintenance Kit counter in the Reset HSFI Counters screen under Service Tools.<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Invalid CMYK Imaging Unit

The Imaging Unit CRUM indicates the Imaging Unit is not valid for this model.

## Applicable Codes

- 09-648-00 Invalid Cyan Imaging Unit
- 09-649-00 Invalid Magenta Imaging Unit
- 09-650-00 Invalid Yellow Imaging Unit
- 09-651-00 Invalid Black Imaging Unit

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Imaging Unit, PL5.1.8<br>■ Magenta Imaging Unit, PL5.1.9<br>■ Cyan Imaging Unit, PL5.1.10<br>■ Black Imaging Unit, PL5.1.11<br>■ Imaging Unit CRUM, PL5.2.4<br>■ MCU Board, PL10.2.18<br>■ CRUM / Disp Harness, PL11.2.4 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Xerographic" on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Imaging Unit part number.<br>The Imaging Unit is the correct part for this model. | Go to Step 2. | Replace the affected Imaging Unit. |
| 2 | Check connections between P/J12 on the MCU Board and indicated CRUM Connector: P/J208(Y), P/J209 (M), P/J210(C), P/J211 (K).<br>The connection is secure. | Go to Step 3. | Secure the connection. |
| 3 | Check CRUM/Disp Harness continuity between P/J12 on the MCU Board and indicated CRUM Connector: P/J208(Y), P/J209 (M), P/J210(C), P/J211(K).<br>The harness is undamaged. | Go to Step 4. | Replace the CRUM/ Dispense Harness. |
| 4 | Check for 2.5V at P/J12-3(Y), -7(M), -11(C), -15(K) on the MCU Board.<br>Is 2.5V available to the indicated Imaging Unit CRUM? | Replace the affected Imaging Unit. | Replace the MCU Board (page 8-152). |

# Transfer Belt is Missing

Electrical contact to the Transfer Belt is broken.

## Applicable Code

- 09-652-00 Transfer Belt is Missing

## Initial Actions

- Reseat the Transfer Belt.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Maintenance Kit, PL5.1.99<br>■ HVPS, PL5.2.3<br>■ Transfer Belt Bias Assy, PL5.2.6<br>■ MCU Board, PL10.2.18 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Xerographic" on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Inner Frame Assembly for damage or improper operation.<br>The Inner Frame Assy is undamaged. | Go to Step 2. | Replace the Inner Frame Assy (page 8-129). |
| 2 | Check Transfer Belt electrical contacts.<br>The contacts are undamaged. | Go to Step 3. | Replace the Maintenance Kit. |
| 3 | Check P/J13 on the MCU Board and P/J331 on the HVPS.<br>The connections are secure. | Go to Step 4. | Secure the connections. |
| 4 | Check continuity of the ROS/HV harness between P/J13 and P/J331.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |
| 5 | Check the Transfer Belt Bias Assy electrical contacts.<br>The contacts are undamaged. | Go to Step 4. | Replace the Transfer Belt Bias Assy (page 8-90). |
| 6 | Replace the HVPS (page 8-86).=.<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Transfer Roller is Missing

Electrical contact to the Transfer Roller is broken.

## Applicable Code

- 09-653-00 Transfer Roller is Missing

## Initial Actions

- Reseat the Transfer Roller.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Transfer Roller, PL4.4.99<br>■ HVPS, PL5.2.3<br>■ MCU Board, PL10.2.18<br>■ ROS/HV Harness, PL11.2.2 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Xerographic" on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check electrical contacts under the Transfer Roller.<br>The contacts are undamaged. | Go to Step 2. | Repair the contacts. |
| 2 | Check P/J13 on the MCU Board and P/J331 on the HVPS.<br>The connections are secure. | Go to Step 3. | Secure the connections. |
| 3 | Check continuity of the ROS/HV harness between P/J13 and P/J331.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |
| 4 | Replace the Transfer Roller (page 8-11).<br>The error persists. | Replace the HVPS (page 8-86). | Complete. |

## Ribbon in CMYK Imaging Unit

The shipping ribbon is present on one or more of the installed Imaging Units.

### Applicable Codes

- 09-654-00 Ribbon in Cyan Imaging Unit
- 09-655-00 Ribbon in Magenta Imaging Unit
- 09-656-00 Ribbon in Yellow Imaging Unit
- 09-657-00 Ribbon in Black Imaging Unit

### Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Imaging Unit, PL5.1.8<br>■ Magenta Imaging Unit, PL5.1.9<br>■ Cyan Imaging Unit, PL5.1.10<br>■ Black Imaging Unit, PL5.1.11<br>■ Imaging Unit CRUM, PL5.2.4<br>■ MCU Board, PL10.2.18<br>■ CRUM / Disp Harness, PL11.2.4 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Xerographic" on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Imaging Unit.<br>The shipping ribbon has been removed from the Imaging Unit. | Go to Step 2. | Remove the shipping ribbon. |
| 2 | Check connections between P/J12 on the MCU Board and indicated CRUM Connector: P/J208(Y), P/J209 (M), P/J210(C), P/J211 (K).<br>The connection is secure. | Go to Step 3. | Secure the connection. |
| 3 | Check CRUM/Disp Harness continuity between P/J12 on the MCU Board and indicated CRUM Connector: P/J208(Y), P/J209 (M), P/J210(C), P/J211(K).<br>The harness is undamaged. | Go to Step 4. | Replace the CRUM/ Dispense Harness. |
| 4 | Check for 2.5V at P/J12-3(Y), -7(M), -11(C), -15(K) on the MCU Board.<br>Is 2.5V available to the indicated Imaging Unit CRUM? | Replace the affected Imaging Unit. | Replace the MCU Board (page 8-152). |

## Invalid CMYK Toner Cartridge

The Toner Cartridge CRUM indicates the Toner Cartridge is not for use in this model.

### Applicable Codes

- 09-658-00 Invalid Cyan Toner Cartridge
- 09-658-01 Invalid Cyan Toner Cartridge
- 09-658-02 Invalid Cyan Toner Cartridge
- 09-658-03 Invalid Cyan Toner Cartridge
- 09-658-04 Invalid Cyan Toner Cartridge
- 09-659-00 Invalid Magenta Toner Cartridge
- 09-659-01 Invalid Magenta Toner Cartridge
- 09-659-02 Invalid Magenta Toner Cartridge
- 09-659-03 Invalid Magenta Toner Cartridge
- 09-659-04 Invalid Magenta Toner Cartridge
- 09-660-00 Invalid Yellow Toner Cartridge
- 09-660-01 Invalid Yellow Toner Cartridge
- 09-660-02 Invalid Yellow Toner Cartridge
- 09-660-03 Invalid Yellow Toner Cartridge
- 09-660-04 Invalid Yellow Toner Cartridge
- 09-661-00 Invalid Black Toner Cartridge
- 09-661-01 Invalid Black Toner Cartridge
- 09-661-02 Invalid Black Toner Cartridge
- 09-661-03 Invalid Black Toner Cartridge
- 09-661-04 Invalid Black Toner Cartridge

### Initial Actions

- Check Toner Cartridge part number.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Toner Cartridge (Y), PL6.1.1<br>■ Toner Cartridge (M), PL6.1.2<br>■ Toner Cartridge (C), PL6.1.3<br>■ Toner Cartridge (K), PL6.1.4<br>■ CRUM Connector Assy, PL6.1.10<br>■ MCU Board, PL10.2.18<br>■ Toner CRUM Harness, PL11.1.1 | ■ “Map 1 - CRU Detection” on page 10-5<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Dispense and Development” on page 10-37 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the indicated Toner Cartridge.<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Check connections between P/J11 on the MCU Board and indicated CRUM Connector: P/J204(Y), P/J205 (M), P/J206(C), P/J207 (K).<br>The connection is secure. | Go to Step 3. | Secure the connection. |
| 3 | Check Toner CRUM Harness continuity between P/J11 on the MCU Board and indicated CRUM Connector: P/J204(Y), P/J205 (M), P/J206(C), P/J207 (K).<br>The harness is undamaged. | Go to Step 4. | Replace the Toner CRUM Harness. |
| 4 | Check for 2.5V at P/J11-3(Y), -7(M), -11(C), -15(K) on the MCU Board.<br>Is 2.5V available to the indicated Toner CRUM? | Replace the affected Toner Cartridge. | Replace the MCU Board (page 8-152). |

# Invalid Fuser

The installed Fuser is incorrect, as reported by the Fuser CRUM, for this model.

## Applicable Code

- 09-662-00 Invalid Fuser

## Initial Actions

**Warning**

Allow the Fuser to cool before servicing the printer.

- Check Fuser part number.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser, PL7.1.99<br>■ Fuser Harness, PL7.1.4<br>■ MCU Board, PL10.2.18 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Fuser part number.<br>The Fuser is correct for this model. | Go to Step 2. | Install the correct Fuser (page 8-17). |
| 2 | Check Fuser connections PJ180-S and P/J1 on the MCU Board.<br>The connections are secure. | Go to Step 3. | Secure the connections. |
| 3 | Remove the Fuser harness and check continuity between P/J1 and P/J180-S.<br>The harness is undamaged. | Go to Step 4. | Replace the Fuser harness. |
| 4 | Replace the Fuser (page 8-17).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Engine Motor Failure - Fuser Drive Assy

A problem with the Fuser Drive Assembly was detected.

## Applicable Codes

- 10-330-00 Engine Motor Failure
- 310.330.01 Engine Motor Failure

## Initial Actions

**Warning**

Allow the Fuser to cool before servicing the printer.

- Reseat the Fuser in the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

### Troubleshooting Reference Table

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Harness Assy FSR, PL7.1.4<br>■ Fuser Drive Assy, PL9.1.1<br>■ MCU Board, PL10.2.18 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the Fuser.<br>Does the error persist? | Go to Step 2. | Complete. |
| 2 | Check Fuser Drive Assy connection P/J250 and P/J4B on the MCU Board.<br>The connections are secure. | Go to Step 3. | Secure the connection. |
| 3 | Test the Fuser Drive using dc330 (010-008).<br>The Fuser Drive rotates. | Go to Step | Go to Step 4. |
| 4 | Check Fuser harness continuity between P/J4B and P/250.<br>The harness is undamaged. | Replace the MCU Board (page 8-152). | Replace the harness. |
| 5 | Check for 24V at P/J4B-2.<br>1. Close the Front Interlock Switch.<br>2. Run the Fuser Drive Assy using dc330 (010-008).<br>3. Check P/J4B-2 for 24V.<br>Is 24 V available at P/J4B-2? | Replace the Fuser Drive Assy (page 8-130). | Replace the MCU Board (page 8-152). |

# Fuser is Missing or Misinstalled

Fuser is missing or incorrectly installed.

## Applicable Codes

- 09-639-00 Fuser is Missing or Misinstalled
- 310.310.01 Fuser is Missing or Misinstalled

## Initial Actions

**Warning**

Allow the Fuser to cool before servicing the printer.

- Reseat the Fuser in the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

### Troubleshooting Reference Table

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser, PL7.1.99<br>■ Harness Assy FSR, PL7.1.4<br>■ MCU Board, PL10.2.18 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Replace the Fuser.<br>Does the error persist? | Go to Step 2. | Complete. |
| 2 | Check Fuser connections PJ180-S and P/J1 on the MCU Board.<br>The connections are secure and undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Remove the Fuser harness and check continuity between P/J1 and P/J180-S.<br>The harness is undamaged. | Replace the MCU Board (page 8-152). | Replace the harness. |

# Fuser Failure

A failure was detected in the Fuser.

## Applicable Codes

- 10-300-00 Fuser Failure
- 310.311.02 STS Disconnect error
- 310.312.05 Detection sensor disconnect
- 310.313.06 AD output detection error
- 310.314.07 Compensation sensor disconnect
- 310.315.09 AD output detection error (at NC)
- 310.316.12 STS-NC damage
- 310.317.13 NC low temp error
- 310.318.14 STS low temp error
- 310.319.04 Differential amp circuit damage
- 310.320.03 STS high temp error
- 310.321.15 Hard relay off
- 310.322.16 Main data update error
- 310.323.17 Sub data update error
- 310.324.20 Continuous lamp on error (sub)
- 310.325.22 Unexpected status
- 310.326.21 Cool down timeout
- 310.327.23 Unexpected status
- 310.328.18 Warm up ready timeout
- 310.333.10 NC high temp error
- 310.334.11 STS-NC damage
- 310.335.08 AD output detection error
- 310.338.19 Continuous lamp on error (main)

## Initial Actions

**Warning**

Allow the Fuser to cool before servicing the printer.

- Reseat the Fuser in the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser, PL7.1.99<br>■ Harness Assy FSR, PL7.1.4<br>■ MCU Board, PL10.2.18<br>■ LVPS Cage, PL10.2.1 | ■ “Map 2 - Fuser and Feeder” on page 10-6<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Fuser and Exit” on page 10-39 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Replace the Fuser.<br>Does the error persist? | Go to Step 2. | Complete. |
| 2 | Check Fuser connections PJ180-S and P/J1 on the MCU Board.<br>The connections are secure and undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Remove the Fuser harness and check continuity between P/J1 and P/J180-S.<br>The harness is undamaged. | Replace the MCU Board (page 8-152). | Replace the harness. |
| 4 | Check Fuser connector P/J180 and LVPS connector P/J304.<br>The connections are secure and undamaged. | Go to Step 5. | Secure the connections. |
| 5 | Check Fuser harness continuity between P/J180 to LVPS P/J304.<br>The harness is undamaged. | Go to Step 6. | Replace the harness |
| 6 | Replace the MCU Board (page 8-152).<br>Does the error persist? | Replace the LVPS (page 8-182). | Complete. |

# Engine Fan Failure - Fuser Fan

A failure was detected in the Fuser Fan.

## Applicable Codes

- 10-398-00 Engine Fan Failure
- 310.398.01 Fuser Fan error

## Initial Actions

- Check for obstructions or accumulations of dust or debris blocking fan rotation.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser Fan, PL4.1.8<br>■ Harness RH Cover, PL4.3.16<br>■ MCU Board, PL10.2.18<br>■ Harness RH Motor, PL11.2.3 | ■ "Map 3 - Right Door" on page 10-7<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

**Note**

Fan Alarm tests turn On the target Fan, then check for the Fan's Alarm signal returning to the MCU Board.

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Fuser Fan Alarm signal using dc330 (010-210).<br>The Fan Alarm state is Off. | Replace the MCU Board (page 8-152). | Go to Step 2. |
| 2 | Replace the Fuser Fan (page 8-71).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses | Complete. |

# Engine Fan Failure - LVPS Fan

A failure was detected in the LVPS fan.

## Applicable Codes

- 10-398-00 Engine Fan Failure
- 342.329.01 LVPS Fan error

## Initial Actions

- Check for obstructions or accumulations of dust or debris blocking fan rotation.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser Fan, PL10.1.9<br>■ LVPS, PL10.2.1<br>■ LVPS Harness, PL11.1.2<br>■ MCU Board, PL10.2.18 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “LVPS” on page 10-25 |

**Note**

Fan Alarm tests turn On the target Fan, then check for the Fan’s Alarm signal returning to the MCU Board.

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the LVPS Fan Alarm signal using dc330 (042-206).<br>The Fan Alarm state is Off. | Replace the MCU Board (page 8-152). | Go to Step 2. |
| 2 | Replace the LVPS Fan (page 8-153).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses | Complete. |

# Fuser Failure

A communication or CRUM data error was detected in the Fuser.

## Applicable Codes

- 310.902.02 Fuser Unit Communication Error
- 310.903.03 CRUM data error

## Initial Actions

- Reseat the Fuser to the printer.
- Check Fuser product compatibility.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser, PL7.1.99<br>■ Harness Assy FSR, PL7.1.4<br>■ MCU Board, PL10.2.18 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Replace the Fuser.<br>Does the error persist? | Go to Step 2. | Complete. |
| 2 | Check Fuser connections PJ180-S and P/J1 on the MCU Board.<br>The connections are secure and undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Check Fuser harness continuity between P/J1 and P/J180-S.<br>The harness is undamaged. | Replace the MCU Board (page 8-152). | Replace the harness. |

# Finisher Failure

The printer detected a logic mode failure in the Finisher.

## Applicable Codes

- 12-221-00 Finisher Failure
- 312.098.01 Finisher logic mode error

## Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Harness, Finisher, PL11.1.8<br>■ Finisher Main Board, PL14.4.12<br>■ Harness Assy IF, PL14.11.7 | ■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Communication and Power" on page 10-49 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check system software version.<br>The software is current. | Go to Step 2. | Update the system software. |
| 2 | Check Finisher connections P/J8890 and CN4 to the printer.<br>The connections are secure and undamaged. | Go to Step 3. | Secure the connections. |
| 3 | Remove the Finisher I/F harness and check continuity between P/J8890 and CN4.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |
| 4 | Check P/J22 on the MCU Board.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| 5 | Remove the Finisher harness and check continuity between P/J22 and P/J122.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| 6 | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the Finisher. | Complete. |

## Finisher Communication Failure

The printer detected a communication failure with the Finisher.

### Applicable Codes

- 12-099-00 Finisher Communication Failure
- 312.099.01 Data Link Disconnect
- 312.099.02 Receive Buffer Overflow
- 312.099.03 Data Link Disconnect
- 312.099.04 Data Link Error
- 312.099.05 Initialization Ack Error
- 312.099.06 Initialization Complete Error
- 312.099.07 Device Controller Error

### Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Harness, Finisher, PL11.1.8<br>■ Finisher Main Board, PL14.4.12<br>■ Harness Assy IF, PL14.11.7 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Communication and Power" on page 10-49 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check system software version.<br>The software is current. | Go to Step 2. | Update the system software. |
| 2 | Check Finisher connections P/J8890 and CN4 to the printer.<br>The connections are secure and undamaged. | Go to Step 3. | Secure the connections. |
| 3 | Remove the Finisher I/F harness and check continuity between P/J8890 and CN4.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check P/J22 on the MCU Board.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| **5** | Remove the Finisher harness and check continuity between P/J22 and P/J122.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Stack Height Sensor 1

Stack Height Sensor 1 signal is not detected within the specified time after the Stacker Tray starts moving up.

## Applicable Code

- 312.211.01 Finisher Stacker Tray failure

## Initial Actions

- Check for obstructions preventing Stacker Tray movement.
- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Harness, PL11.1.8<br>■ Stack Height Sensor 1, PL14.4.3<br>■ Finisher Main Board, PL14.4.12<br>■ Stacker Drive Assy, PL14.9.7<br>■ MOT3 Harness, PL14.9.25<br>■ Finisher LVPS, PL14.10.10<br>■ SNR2 Harness, PL 14.11.6<br>■ IF Harness, PL14.11.7 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 11 - Drive and Main Board” on page 10-18<br>■ “Communication and Power” on page 10-49<br>■ “Stacker” on page 10-53 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Stacker Drive and belts for obstacles or wear.<br>Are there obstacles or belt wear in the vertical transport mechanism? | Remove obstacles or replace worn parts. | Go to Step 2. |
| 2 | Test Stack Height Sensor 1 using dc330 (012-040).<br>The sensor signal changes (On/Off). | Go to Step 7. | Go to Step 3. |
| 3 | With Stack Height Sensor 1 turned On in diagnostics, check for 5V at P/J8873-1.<br>Is 5 V available at P/J8873-1? | Replace Stack Height Sensor 1 (page 8-247). | Go to Step 4 |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check Finisher Main Board connection P/J8989.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| **5** | Check SNR2 harness continuity between P/J8989 and P/J8873.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | With Stack Height Sensor 1 turned On in diagnostics, check for 5V at P/J8989-6B on the Finisher Main Board.<br>Is 5 V available at P/J8989-6B? | Replace the MCU Board (page 8-152). | Replace the Finisher Main Board (page 8-253). |
| **7** | Test the Stacker Drive using dc330 (012-026 Up, 012-027 Down).<br>The Stacker Tray moves up and downs (On/Off). | Go to Step 12. | Go to Step 8. |
| **8** | Check MOT3 harness continuity between P/J8983 on the Finisher Main Board and P/J8891 on the Stacker Drive.<br>The harness is undamaged. | Go to Step 9. | Secure the connections. |
| **9** | With the Stacker Drive turned On in diagnostics, check for 24V at P/J8986-1 and -3 on the Finisher Main Board.<br>Is 24V available at P/J8986? | Replace the Stacker Drive (page 8-285). | Go to Step 10. |
| **10** | Check for 24V at P/J8980-1 on the Finisher Main Board.<br>Is 24V available at P/J8980-1. | Replace the MCU Board (page 8-152). | Go to Step 11. |
| **11** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **12** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Stacker No Paper Sensor

The Stacker Tray continues to move up following an On signal from the Stacker Tray No Paper Sensor.

## Applicable Codes

- 12-221-00 Finisher Failure
- 312.212.01 Finisher Stacker Tray upper limit failure

## Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Harness, PL11.1.8<br>■ Stack Height Sensor 1, PL14.4.3<br>■ Stack Height Sensor 2, PL14.4.3<br>■ Finisher Main Board, PL14.4.12<br>■ Stacker Drive Assy, PL14.9.7<br>■ MOT3 Harness, PL14.9.25<br>■ Finisher LVPS, PL14.10.10<br>■ SNR2 Harness, PL 14.11.6<br>■ IF Harness, PL14.11.7 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 11 - Drive and Main Board” on page 10-18<br>■ “Communication and Power” on page 10-49<br>■ “Stacker” on page 10-53 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Stacker Drive and belts for obstacles or wear.<br>Are there obstacles or belt wear in the vertical transport mechanism? | Remove obstacles or replace worn parts. | Go to Step 2. |
| 2 | Test Stack Height Sensor 1 using dc330 (012-040).<br>The sensor signal changes (On/Off). | Go to Step 4. | Go to Step 3. |
| 3 | With Stack Height Sensor 1 turned On in diagnostics, check for 5V at P/J8873-1.<br>Is 5 V available at P/J8873-1? | Replace Stack Height Sensor 1 (page 8-247). | Go to Step 6. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Test Stack Height Sensor 2 using dc330 (012-041).<br>The sensor signal changes (On/Off). | Go to Step 9. | Go to Step 5. |
| **5** | With Stack Height Sensor 2 turned On in diagnostics, check for 5V at P/J8874-1.<br>Is 5 V available at P/J8874-1? | Replace Stack Height Sensor 2 (page 8-247). | Go to Step 6. |
| **6** | Check Finisher Main Board connection P/J8989.<br>The connection is secure and undamaged. | Go to Step 7. | Secure the connection. |
| **7** | Check SNR2 harness continuity between P/J8989 and P/J8873.<br>The harness is undamaged. | Go to Step 8. | Replace the harness. |
| **8** | With Stack Height Sensor 1 turned On in diagnostics, check for 5V at P/J8989-6B on the Finisher Main Board.<br>Is 5 V available at P/J8989-6B? | Go to Step 9. | Replace the Finisher Main Board (page 8-253). |
| **9** | Test the Stacker Drive using dc330 (012-026 Up, 012-027 Down).<br>The Stacker Tray moves up and downs (On/Off). | Go to Step 14. | Go to Step 10. |
| **10** | Check MOT3 harness continuity between P/J8983 on the Finisher Main Board and P/J8891 on the Stacker Drive.<br>The harness is undamaged. | Go to Step 11. | Secure the connections. |
| **11** | With the Stacker Drive turned On in diagnostics, check for 24V at P/J8986-1 and -3 on the Finisher Main Board.<br>Is 24V available at P/J8986? | Replace the Stacker Drive (page 8-285). | Go to Step 12. |
| **12** | Check for 24V at P/J8980-1 on the Finisher Main Board.<br>Is 24V available at P/J8980-1. | Replace the MCU Board (page 8-152). | Go to Step 13. |
| **13** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **14** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Stacker Lower Limit

Stack Height Sensor 2 signal is not detected within the specified time after the Stacker Tray starts moving down.

## Applicable Codes

- 12-221-00 Finisher Failure
- 312.213.01 Finisher Stacker Tray lower limit failure

## Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Harness, PL11.1.8<br>■ Stack Height Sensor 2, PL14.4.3<br>■ Finisher Main Board, PL14.4.12<br>■ Stacker Drive Assy, PL14.9.7<br>■ MOT3 Harness, PL14.9.25<br>■ Finisher LVPS, PL14.10.10<br>■ SNR2 Harness, PL 14.11.6<br>■ IF Harness, PL14.11.7 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 11 - Drive and Main Board” on page 10-18<br>■ “Communication and Power” on page 10-49<br>■ “Stacker” on page 10-53 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Stacker Drive and belts for obstacles or wear.<br>Are there obstacles or belt wear in the vertical transport mechanism? | Remove obstacles or replace worn parts. | Go to Step 2. |
| 2 | Test Stack Height Sensor 2 using dc330 (012-041).<br>The sensor signal changes (On/Off). | Go to Step 7. | Go to Step 3. |
| 3 | With Stack Height Sensor 2 turned On in diagnostics, check for 5V at P/J8874-1.<br>Is 5 V available at P/J8874-1? | Replace Stack Height Sensor 2 (page 8-247). | Go to Step 4 |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check Finisher Main Board connection P/J8989.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| **5** | Check SNR2 harness continuity between P/J8989 and P/J8874.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | With Stack Height Sensor 2 turned On in diagnostics, check for 5V at P/J8989-6B on the Finisher Main Board.<br>Is 5 V available at P/J8989-9B? | Replace the MCU Board (page 8-152). | Replace the Finisher Main Board (page 8-253). |
| **7** | Test the Stacker Drive using dc330 (012-026 Up, 012-027 Down).<br>The Stacker Tray moves up and downs (On/Off). | Go to Step 12. | Go to Step 8. |
| **8** | Check MOT3 harness continuity between P/J8983 on the Finisher Main Board and P/J8891 on the Stacker Drive.<br>The harness is undamaged. | Go to Step 3. | Secure the connections. |
| **9** | With the Stacker Drive turned On in diagnostics, check for 24V at P/J8986-1 and -3 on the Finisher Main Board.<br>Is 24V available at P/J8986? | Replace the Stacker Drive (page 8-285). | Go to Step 10. |
| **10** | Check for 24V at P/J8980-1 on the Finisher Main Board.<br>Is 24V available at P/J8980-1. | Replace the MCU Board (page 8-152). | Go to Step 11. |
| **11** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **12** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Front Tamper Home Position

Front Tamper Home Sensor state change not detected within the specified time after Front Tamper moves from home position.

**Caution**

Use care when manually moving the front tamper. Grasp the tamper as close to the tamper's base as possible and move the tamper slowly just enough to actuate the sensor, verify freedom of movement and check Tamper Motor operation.

## Applicable Codes

- 12-221-00 Finisher Failure
- 312.221.01 Finisher Front Tamper Home Sensor On failure
- 312.223.01 Finisher Front Tamper Home Sensor Off failure

## Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Main Board, PL14.4.12<br>■ Compile Tray, PL14.8.1<br>■ Front Tamper Home Sensor, PL14.8.9<br>■ Tamper Motor, PL14.8.18<br>■ MOT1 Harness, PL14.11.3<br>■ SNR1 Harness, PL14.11.5 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 10 - Compile Tray" on page 10-17<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Communication and Power" on page 10-49<br>■ "Transport and Compile Tray" on page 10-51 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Front Tamper motion by gently moving the tamper.<br>The tamper moves freely. | Go to Step 2. | Replace the Compile Tray (page 8-277). |
| 2 | Test Front Tamper Home Sensor using dc330 (012-031) and gently moving the front tamper in and out of the sensing area.<br>The sensor signal changes (On/Off). | Go to Step 7. | Go to Step 3. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **3** | With Front Tamper Home Sensor turned On in diagnostics, check for 5V at P/J8881-1.<br>Is 5 V available at P/J8881-1? | Replace the Front Tamper Home Sensor (page 8-280). | Go to Step 4 |
| **4** | Check Finisher Main Board connection P/J8988.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| **5** | Check SNR1 harness continuity between P/J8988 and P/J8881.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | With Front Tamper Home Sensor turned On in diagnostics, check for 5V at P/J8988-6 on the Finisher Main Board.<br>Is 5 V available at P/J8988-6? | Replace the MCU Board (page 8-152). | Replace the Finisher Main Board (page 8-253). |
| **7** | Test the Front Tamper Motor using dc330 (012-012).<br>The motor rotates (On/Off). | Go to Step 12. | Go to Step 8. |
| **8** | Check MOT1 harness continuity between P/J8983 on the Finisher Main Board and P/J8884 on the Tamper Motor.<br>The harness is undamaged. | Go to Step 9. | Replace the harness. |
| **9** | With the Front Tamper Motor turned On in diagnostics, check for 24V at P/J8983-11.<br>Is 24V available at P/J8983-11? | Replace the Front Tamper Motor (page 8-283). | Go to Step 10. |
| **10** | Check for 24V at P/J8980-1 on the Finisher Main Board.<br>Is 24V available at P/J8980-1. | Replace the MCU Board (page 8-152). | Go to Step 11. |
| **11** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **12** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Rear Tamper Home Position

Rear Tamper Home Sensor state change not detected within the specified time after Rear Tamper moves from home position.

## Applicable Codes

- 12-221-00 Finisher Failure
- 312.222.01 Finisher Rear Tamper Home Sensor On failure
- 312.224.01 Finisher Rear Tamper Home Sensor Off failure

## Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Remove the Finisher Rear and Top Covers to access the applicable parts.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Main Board, PL14.4.12<br>■ Compile Tray, PL14.8.1<br>■ Rear Tamper Home Sensor, PL14.8.9<br>■ Tamper Motor, PL14.8.18<br>■ MOT1 Harness, PL14.11.3<br>■ SNR1 Harness, PL14.11.5 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 10 - Compile Tray” on page 10-17<br>■ “Map 11 - Drive and Main Board” on page 10-18<br>■ “Communication and Power” on page 10-49<br>■ “Transport and Compile Tray” on page 10-51 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Rear Tamper motion by gently moving the tamper.<br>The tamper moves freely. | Go to Step 2. | Replace the Compile Tray (page 8-277). |
| 2 | Test Rear Tamper Home Sensor using dc330 (012-032) and gently moving the front tamper in and out of the sensing area.<br>The sensor signal changes (On/Off). | Go to Step 7. | Go to Step 3. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **3** | With Rear Tamper Home Sensor turned On in diagnostics, check for 5V at P/J8882-1.<br>Is 5 V available at P/J8882-1? | Replace the Front Tamper Home Sensor (page 8-280). | Go to Step 4 |
| **4** | Check Finisher Main Board connection P/J8988.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| **5** | Check SNR1 harness continuity between P/J8988 and P/J8882.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | With Rear Tamper Home Sensor turned On in diagnostics, check for 5V at P/J8988-9 on the Finisher Main Board.<br>Is 5 V available at P/J8988-9? | Replace the MCU Board (page 8-152). | Replace the Finisher Main Board (page 8-253). |
| **7** | Test the Rear Tamper Motor using dc330 (012-016).<br>The motor rotates (On/Off). | Go to Step 12. | Go to Step 8. |
| **8** | Check MOT1 harness continuity between P/J8983 on the Finisher Main Board and P/J8883 on the Tamper Motor.<br>The harness is undamaged. | Go to Step 9. | Replace the harness. |
| **9** | With the Rear Tamper Motor turned On in diagnostics, check for 24V at P/J8983-6.<br>Is 24V available at P/J8983-6? | Replace the Front Tamper Motor (page 8-283). | Go to Step 10. |
| **10** | Check for 24V at P/J8980-1 on the Finisher Main Board.<br>Is 24V available at P/J8980-1. | Replace the MCU Board (page 8-152). | Go to Step 11. |
| **11** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **12** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Eject Clamp Home Position

Eject Clamp Home Sensor state change not detected within the specified time.

## Applicable Codes

- 12-221-00 Finisher Failure
- 312.260.01 Finisher Eject Clamp Home Sensor On failure
- 312.261.01 Finisher Eject Clamp Home Sensor Off failure

## Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Remove the Finisher Rear Cover to access the applicable parts.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Eject Clamp Home Sensor, PL14.4.3<br>■ Finisher Main Board, PL14.4.12<br>■ Eject Motor, PL14.5.6<br>■ SNR2 Harness, PL14.11.6<br>■ MOT2 Harness, PL14.11.4 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 10 - Compile Tray" on page 10-17<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Stacker" on page 10-53 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check eject clamp motion by rotating the Eject Clamp Drive gears.<br>The eject clamp moves freely. | Go to Step 2. | Replace any damaged parts. |
| 2 | Test Eject Clamp Home Position Sensor using dc330 (012-036) and rotating the eject clamp in and out of the sensing area.<br>The sensor signal changes (On/Off). | Go to Step 7. | Go to Step 3. |
| 3 | With Eject Clamp Home Position Sensor turned On in diagnostics, check for 5V at P/J8870-1.<br>Is 5 V available at P/J8870-1? | Replace the Eject Clamp Home Position Sensor (page 8-249). | Go to Step 4 |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check Finisher Main Board connection P/J8988.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| **5** | Check SNR2 harness continuity between P/J8989 and P/J8870.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | With Eject Clamp Home Position Sensor turned On in diagnostics, check for 5V at P/J8989-11A on the Finisher Main Board.<br>Is 5 V available at P/J8989-11A? | Replace the MCU Board (page 8-152). | Replace the Finisher Main Board (page 8-253). |
| **7** | Test the Eject Motor using dc330 (012-025).<br>The motor rotates (On/Off). | Go to Step 12. | Go to Step 8. |
| **8** | Check MOT2 harness continuity between P/J8984 on the Finisher Main Board and P/J8878 on the Eject Motor.<br>The harness is undamaged. | Go to Step 9. | Replace the harness. |
| **9** | Check for 24V at P/J8884-5 and P/J8884-5.<br>Is 24V available at P/J8884-5 and P/J8884-5? | Replace the Eject Drive Assy (page 8-254). | Go to Step 10. |
| **10** | Check for 24V at P/J8980-1 on the Finisher Main Board.<br>Is 24V available at P/J8980-1. | Replace the MCU Board (page 8-152). | Go to Step 11. |
| **11** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **12** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Set Clamp Home Position

Set Clamp Home Sensor state change not detected within the specified time.

## Applicable Codes

- 312.283.01 Finisher Eject Clamp Home Sensor On failure
- 312.284.01 Finisher Eject Clamp Home Sensor Off failure

## Initial Actions

- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Remove the Finisher Rear Cover to access the applicable parts.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Set Clamp Home Sensor, PL14.4.3<br>■ Set Clamp Cam Actuator, PL14.4.6<br>■ Set Clamp Clutch, PL14.5.25<br>■ Finisher Main Board, PL14.4.12<br>■ Eject Motor, PL14.5.6<br>■ SNR2 Harness, PL14.11.6<br>■ MOT2 Harness, PL14.11.4 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 10 - Compile Tray" on page 10-17<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Stacker" on page 10-53 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check eject clamp motion by rotating the Eject Clamp Drive gears.<br>The eject clamp moves freely. | Go to Step 2. | Repair any damaged parts. |
| 2 | Test Set Clamp Home Position Sensor using dc330 (012-037) and rotating the set clamp cam actuator in and out of the sensing area.<br>The sensor signal changes (On/Off). | Go to Step 7. | Go to Step 3. |
| 3 | With Set Clamp Home Position Sensor turned On in diagnostics, check for 5V at P/J8871-1.<br>Is 5 V available at P/J8871-1? | Replace the Set Clamp Home Position Sensor (page 8-248). | Go to Step 4 |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check Finisher Main Board connection P/J8988.<br>The connection is secure and undamaged. | Go to Step 5. | Secure the connection. |
| **5** | Check SNR2 harness continuity between P/J8989 and P/J8870.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | With Set Clamp Home Position Sensor turned On in diagnostics, check for 5V at P/J8989-3B on the Finisher Main Board.<br>Is 5 V available at P/J8989-3B? | Replace the MCU Board (page 8-152). | Replace the Finisher Main Board (page 8-253). |
| **7** | Test the Eject Motor using dc330 (012-025).<br>The motor rotates (On/Off). | Go to Step 10. | Go to Step 8. |
| **8** | Check MOT2 harness continuity between P/J8984 on the Finisher Main Board and P/J8878 on the Eject Motor.<br>The harness is undamaged. | Go to Step 9. | Replace the harness. |
| **9** | Check for 24V at P/J8884-5 and P/J8884-5.<br>Is 24V available at P/J8884-5 and P/J8884-5? | Replace the Eject Drive Assy (page 8-254). | Go to Step 10. |
| **10** | Test the Set Clamp Clutch Z34 using dc330 (012-021).<br>The clutch clicks (On/Off). | Go to Step 14. | Go to Step 11. |
| **11** | Check MOT2 harness continuity between P/J8984 on the Finisher Main Board and P/J8877 on the Set Clamp Clutch.<br>The harness is undamaged. | Go to Step 12. | Replace the harness. |
| **12** | Check for 24V at P/J8884-4 on the Finisher Main Board.<br>Is 24V available at P/J8884-4? | Replace the MCU Board (page 8-152). | Go to Step 13. |
| **13** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **14** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - Stapler Home Position

Staple Head Home Sensor On not detected within the specified time after staple motor reverse rotation starts.

## Applicable Code

- 312.291.01 Finisher Stapler Home Sensor On failure

## Initial Actions

- Check Staple Cartridge installation
- Reseat Finisher connections to the printer
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Remove the Finisher Front and Rear Covers to access the applicable parts.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Stapler, PL14.8.20<br>■ Finisher Main Board, PL14.4.12<br>■ SNR1 Harness, PL14.11.5<br>■ MOT1 Harness, PL14.11.3 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 10 - Compile Tray” on page 10-17<br>■ “Map 11 - Drive and Main Board” on page 10-18<br>■ “Stapler” on page 10-55 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check stapler motion by rotating the black gears on the side of the Stapler.<br>The mechanism moves freely. | Go to Step 2. | Replace the Stapler (page 8-284). |
| 2 | Test Stapler Home Position Sensor using dc330 (012-035) and rotating Stapler gears to move the Stapler clamp in and out of the sensing area.<br>The sensor signal changes (On/Off). | Go to Step 6. | Go to Step 3. |
| 3 | Check Stapler connections to the Finisher Main Board P/J8886 and P/J8988.<br>The connections are secure and undamaged. | Go to Step 4. | Secure the connections. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check SNR1 harness continuity between P/J8988 and P/J8886.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |
| **5** | With Stapler Home Position Sensor turned On in diagnostics, check for 5V at P/J8886-5.<br>Is 5 V available at P/J8886-5? | Replace the Stapler (page 8-284). | Replace the Finisher Main Board (page 8-253). |
| **6** | Check for 24V at P/J8980-1 of the LVPS harness.<br>Is 24V available at P/J8884-1? | Replace the MCU Board (page 8-152). | Go to Step 7. |
| **7** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **8** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Failure - NVM Read/Write Error

An error detected during NVM access operation.

## Applicable Codes

- 12-221-00 Finisher Failure
- 312.300.01 Finisher NVM failure

## Initial Actions

- Reseat Finisher connections to the printer
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Remove the Finisher Rear Cover, if necessary, to access applicable parts.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Harness, PL11.1.8<br>■ Finisher Main Board, PL14.4.12<br>■ I/F Harness, PL14.11.7 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Communication and Power" on page 10-49 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Initialize Finisher NVM using dc301, then exit and reboot the system.<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Check system software version.<br>The software is current. | Go to Step 3. | Update the system software. |
| 3 | Check Finisher connections P/J8890 and CN4 to the printer.<br>The connections are secure and undamaged. | Go to Step 4. | Secure the connections. |
| 4 | Remove the Finisher I/F harness and check continuity between P/J8890 and CN4.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Check P/J22 on the MCU Board.<br>The connection is secure and undamaged. | Go to Step 6. | Secure the connection. |
| **6** | Remove the Finisher harness and check continuity between P/J22 and P/J122.<br>The harness is undamaged. | Go to Step 7. | Replace the harness. |
| **7** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Staple Cartridge is Empty

The low staple sensor in the Stapler indicates the Staple Cartridge is empty.

## Applicable Codes

- 12-409-00 Staple Cartridge is Empty
- 12-715-00 Staple Cartridge is Empty

## Initial Actions

- Replace the Staple Cartridge.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Main Board, PL14.4.12<br>■ Stapler, PL14.8.20<br>■ SNR1 Harness, PL14.11.5 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 10 - Compile Tray" on page 10-17<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Stapler" on page 10-55 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Low Staple Sensor using dc330 (012-033).<br>The sensor signal changes (On/Off). | Go to Step 4. | Go to Step 2. |
| 2 | Checking SNR1 Harness continuity between P/J8988 on the Finisher Main Board and P/J8886 from the Stapler.<br>The harness is undamaged? | Replace the Compile Exit Sensor (page 8-271). | Replace the harness. |
| 3 | Checking for 5V at P/J8988-10 on the Finisher Main Board.<br>Is 5V available at J8988-10? | Replace the Stapler (page 8-284). | Secure the connection. |
| 4 | Replace the Finisher Main Board (page 8-253).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Staple is Jammed

The staple home sensor in the Stapler indicates the staple motor could not rotate.

## Applicable Codes

- 12-423-00 Staple is jammed
- 12-723-00 Staple is jammed

## Initial Actions

- Check for obstructions in the Stapler.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Main Board, PL14.4.12<br>■ Stapler, PL14.8.20<br>■ MOT1 Harness, PL14.11.3<br>■ SNR1 Harness, PL14.11.5 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 10 - Compile Tray" on page 10-17<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Stapler" on page 10-55 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Stapler motor using dc330 (012-046).<br>The signal changes (On/Off) and an audible noise is heard. | Go to Step 4. | Go to Step 2. |
| 2 | Checking MOT1 Harness continuity between P/J8983 on the Finisher Main Board and P/J8887 from the Stapler.<br>The harness is undamaged? | Go to Step 3. | Replace the harness. |
| 3 | Checking for 24V at P/J8983-1 and -2 on the Finisher Main Board.<br>Is 24V available at J8988-1and -3? | Replace the Stapler (page 8-284). | Go to Step 7. |
| 4 | Test the staple home sensor using dc330 (012-046).<br>The signal changes (On/Off). | Go to Step 7. | Go to Step 5. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Checking SNR1 Harness continuity between P/J8988 on the Finisher Main Board and P/J8886 from the Stapler.<br>The harness is undamaged? | Go to Step 6. | Replace the harness. |
| **6** | Checking for 5V at P/J8988-10 on the Finisher Main Board.<br>Is 5V available at J8988-10 on the Finisher Main Board? | Replace the Stapler (page 8-284). | Secure the connection. |
| **7** | Replace the Finisher Main Board (page 8-253).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Unable to Staple

The staple home sensor in the Stapler indicates the stapler motor did not rotate.

## Applicable Code

- 12-430-00 Unable to staple

## Initial Actions

- Check for obstructions in the Stapler.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Main Board, PL14.4.12<br>■ Stapler, PL14.8.20<br>■ MOT1 Harness, PL14.11.3<br>■ SNR1 Harness, PL14.11.5 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 10 - Compile Tray" on page 10-17<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Stapler" on page 10-55 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the staple home sensor using dc330 (012-046).<br>The signal changes (On/Off). | Go to Step 4. | Go to Step 2. |
| 2 | Checking SNR1 Harness continuity between P/J8988 on the Finisher Main Board and P/J8886 from the Stapler.<br>The harness is undamaged? | Go to Step 3. | Replace the harness. |
| 3 | Checking for 5V at P/J8988-10 on the Finisher Main Board.<br>Is 5V available at J8988-10 on the Finisher Main Board? | Replace the Stapler (page 8-284). | Secure the connection. |
| 4 | Test the Stapler motor using dc330 (012-046).<br>The signal changes (On/Off) and an audible noise is heard. | Go to Step 7. | Go to Step 5. |
| 5 | Checking MOT1 Harness continuity between P/J8983 on the Finisher Main Board and P/J8887 from the Stapler.<br>The harness is undamaged? | Go to Step 6. | Replace the harness. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **6** | Checking for 24V at P/J8983-1 and -2 on the Finisher Main Board.<br>Is 24V available at J8988-1and -3? | Replace the Stapler (page 8-284). | Go to Step 7. |
| **7** | Replace the Finisher Main Board (page 8-253).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Jam at Finisher - Compile Exit Sensor Jam

Compile Exit Sensor state change not detected within the specified time. This typically indicates media stuck in the Compile Tray or Horizontal Transport.

## Applicable Codes

- 12-450-00 Jam at Finisher
- 312.450.01 Compile Exit Sensor On failure
- 312-451-00 Jam in Horizontal Transport
- 312.451.01 Compile Exit Sensor Off failure
- 312.453.01 Media remains at Compile Exit Sensor

## Initial Actions

- Check for obstructions or debris in the Horizontal Transport.
- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Remove the Finisher Front, Rear and Top Covers to access the applicable parts.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Compile Exit Sensor, PL14.7.9<br>■ Finisher Main Board, PL14.4.12<br>■ SN2 Harness, PL14.11.6 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 10 - Compile Tray” on page 10-17<br>■ “Map 11 - Drive and Main Board” on page 10-18<br>■ “Transport and Compile Tray” on page 10-51 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Compile Exit Sensor using dc330 (012-029). To actuate the sensor, open the Horizontal Transport Cover and use the Exit Roller Knob to manually feed media into the Compile Tray.<br>The sensor signal changes (On/Off). | Go to Step 7. | Go to Step 2. |
| 2 | Check for 5V at P/J8869-1.<br>Is 5 V available at P/J8869-1? | Replace the Compile Exit Sensor (page 8-271). | Go to Step 3 |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **3** | Check Finisher Main Board connection P/J8989.<br>The connection is secure and undamaged. | Go to Step 4. | Secure the connection. |
| **4** | Check for 5V at P/J8989-12B on the Finisher Main Board.<br>Is 5 V available at P/J8989-12B? | Replace the SNR2 harness. | Go to Step 5. |
| **5** | Check for 24V at P/J8884-4 on the Finisher Main Board.<br>Is 24V available at P/J8884-4? | Replace the Finisher Main Board (page 8-253). | Go to Step 6. |
| **6** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **7** | Check Finisher connections P/J8890 and CN4 to the printer.<br>The connections are secure and undamaged. | Go to Step 8. | Secure the connections. |
| **8** | Remove the Finisher I/F harness and check continuity between P/J8890 and CN4.<br>The harness is undamaged. | Go to Step 9. | Replace the harness. |
| **9** | Check P/J22 on the MCU Board.<br>The connection is secure and undamaged. | Go to Step 10. | Secure the connection. |
| **10** | Remove the Finisher harness and check continuity between P/J22 and P/J122.<br>The harness is undamaged. | Go to Step 11. | Replace the harness. |
| **11** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Jam at Finisher - Compile No Paper Sensor Jam

Compile No Paper Sensor state change not detected within the specified time. This typically indicates media stuck in the Compile Tray possibly due to an eject failure.

## Applicable Codes

- 12-450-00 Jam at Finisher
- 312.452.01 Compile No Paper Sensor On failure
- 312.454.01 Media remains at Compile Tray No Paper Sensor

## Initial Actions

- Check for obstructions or debris in the Compile Tray.
- Reseat Finisher connections to the printer.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Note**

Remove the Finisher Front, Rear and Top Covers to access the applicable parts.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Compile No Paper Sensor, PL14.8.13<br>■ Finisher Main Board, PL14.4.12<br>■ SN1 Harness, PL14.11.5 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 10 - Compile Tray” on page 10-17<br>■ “Map 11 - Drive and Main Board” on page 10-18<br>■ “Transport and Compile Tray” on page 10-51 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Compile No Paper Sensor using dc330 (012-030). To actuate the sensor, lift the Compile Tray’s Eject Pinch Roller Assy and using a pencil or similar tool, push down on the actuator.<br>The sensor signal changes (On/Off). | Go to Step 5. | Go to Step 2. |
| 2 | Check for 5V at P/J8988-3 on the Finisher Main Board.<br>Is 5 V available at P/J8988-3? | Replace the Compile No Paper Sensor (page 8-282). | Go to Step 3 |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **3** | Check for 24V at P/J8884-4 on the Finisher Main Board.<br>Is 24V available at P/J8884-4? | Replace the Finisher Main Board (page 8-253). | Go to Step 4. |
| **4** | Remove the Finisher LVPS harness and check continuity between P/J591 on the LVPS and P/J8980 on the Finisher Main Board.<br>The harness is undamaged. | Replace the Finisher LVPS (page 8-289). | Replace the harness. |
| **5** | Check Finisher connections P/J8890 and CN4 to the printer.<br>The connections are secure and undamaged. | Go to Step 6. | Secure the connections. |
| **6** | Remove the Finisher I/F harness and check continuity between P/J8890 and CN4.<br>The harness is undamaged. | Go to Step 7. | Replace the harness. |
| **7** | Check P/J22 on the MCU Board.<br>The connection is secure and undamaged. | Go to Step 8. | Secure the connection. |
| **8** | Remove the Finisher harness and check continuity between P/J22 and P/J122.<br>The harness is undamaged. | Go to Step 9. | Replace the harness. |
| **9** | Replace the Finisher Main Board (page 8-253).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Output Tray is Jammed

The Stack Height Sensors indicate the Stacker Drive Assembly did not move the Stacker Tray to the home position.

## Applicable Code

- 12-495-00 Finisher Output Tray is jammed

## Initial Actions

- Check for obstructions in Stacker Tray drive.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Stack Height Sensor 1 and 2, PL14.4.3<br>■ Stacker Drive Assy, PL14.9.7<br>■ Finisher Main Board, PL14.4.12<br>■ MOT3 Harness, PL14.9.25<br>■ SNR2 Harness, PL14.11.6 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Stacker" on page 10-53 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test Stack Height Sensor 1 using dc330 (012-040).<br>The signal changes (On/Off). | Go to Step 4. | Go to Step 2. |
| 2 | Checking SNR2 Harness continuity between P/J8989 on the Finisher Main Board and P/J8873 from the sensor.<br>The harness is undamaged? | Go to Step 3. | Replace the harness. |
| 3 | Checking for 5V at P/J8989-6B on the Finisher Main Board.<br>Is 5V available at J8989-6B on the Finisher Main Board? | Replace Stack Height Sensor 1 (page 8-247). | Go to Step 10. |
| 4 | Test Stack Height Sensor 2 using dc330 (012-041).<br>The signal changes (On/Off). | Go to Step 7. | Go to Step 5. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Checking SNR2 Harness continuity between P/J8989 on the Finisher Main Board and P/J8874 from the sensor.<br>The harness is undamaged? | Go to Step 6. | Replace the harness. |
| **6** | Checking for 5V at P/J8989-9B on the Finisher Main Board.<br>Is 5V available at J8989-9B on the Finisher Main Board? | Replace Stack Height Sensor 2 (page 8-247). | Go to Step 10. |
| **7** | Test the Stacker Drive Assy using dc330 (012-060 up/ 012-061 down).<br>The Stacker Tray moves. | Go to Step 10. | Go to Step 8. |
| **8** | Checking MOT3 Harness continuity between P/J8983 on the Finisher Main Board and P/J8891 from the Stacker Drive Assy.<br>The harness is undamaged? | Go to Step 9. | Replace the harness. |
| **9** | Checking for 24V at P/J8986-1 and -2 on the Finisher Main Board.<br>Is 24V available at J8986-1and -3? | Replace the Stacker Drive Assy (page 8-285). | Go to Step 10. |
| **10** | Replace the Finisher Main Board (page 8-253).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Finisher Front Door is Open

The Front Door interlock Switch indicates the Front Door is open.

## Applicable Codes

- 12-564-00 Finisher Front Door is open

## Initial Actions

- Check for damage to the actuator on the door.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Finisher Main Board, PL14.4.12<br>■ Front Cover Assy, PL14.3.5<br>■ Interlock Bracket Assy, PL14.10.1<br>■ I/L Switch Harness, PL14.11.2 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 11 - Drive and Main Board" on page 10-18<br>■ "Communication and Power" on page 10-49 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Front Door for damage.<br>The Front Door is undamaged. | Go to Step 2. | Replace the Front Cover (page 8-244). |
| 2 | Test the Interlock Switch using dc330 (012-042).<br>The signal changes (On/Off). | Go to Step 5. | Go to Step 3. |
| 3 | Checking I/L Switch Harness continuity between P/J8988 on the Finisher Main Board and P/J8880 from the switch.<br>The harness is undamaged? | Go to Step 4. | Replace the harness. |
| 4 | Checking for 24V at P/J8982-1 on the Finisher Main Board.<br>Is 24V available at J8988-1? | Replace the Interlock Switch (page 8-288). | Go to Step 5. |
| 5 | Replace the Finisher Main Board (page 8-253).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

## Paper Transport Cover is Open

The Horizontal Transport Cover Open Sensor indicates the cover is open.

### Applicable Code

- 12-565-00 Paper Transport Cover is open

### Initial Actions

- Check for damage to the actuator on the cover.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ H-Xport Top Cover, PL14.2.3<br>■ Finisher Main Board, PL14.4.12<br>■ Cover Open Sensor, PL14.2.35 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 9 - Horizontal Transport" on page 10-16<br>■ "Transport and Compile Tray" on page 10-51 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Horizontal Top Cover for damage.<br>The cover is undamaged. | Go to Step 2. | Replace the Top Cover (page 8-235). |
| 2 | Test the cover sensor using dc330 (012-043).<br>The signal changes (On/Off). | Go to Step 5. | Go to Step 3. |
| 3 | Checking HTU Harness continuity between P/J8987 on the Finisher Main Board and P/J8864 from the switch.<br>The harness is undamaged? | Go to Step 4. | Repair the harness. |
| 4 | Checking for 5V at P/J8987-3 on the Finisher Main Board.<br>Is 5V available at J8987-3? | Replace the Switch (page 8-238). | Go to Step 5. |
| 5 | Replace the Finisher Main Board (page 8-253).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Engine NVRAM Failure

An NVM error was detected on the MCU Board.

## Applicable Codes

- 16-150-00 Engine NVRAM Failure
- 316.151.01 NVM version read failure
- 316.152.02 Copy area read failure of 3 area write data
- 316.153.03 Ack error at 1-byte read
- 316.154.04 Ack error at continuous read
- 316.155.05 Write cannot start by device busy
- 316.156.06 Cannot Write verify error
- 316.157.07 Cannot finish write process
- 316.158.08 Read error of verify data
- 316.159.09 Write process retry over

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Engine NVRAM<br>■ MCU Board, PL10.2.18 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Initialize Engine NVM using dc301, then exit and reboot the system.<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Use dc361 to save machine NVRAM contents to the IP Board.<br>The transfer was successful. | Restore the saved engine file. | Go to Step 3. |
| 3 | Check the Engine Control (MCU) Board NVM Chip (U630) for correct installation.<br>Is the NVM installed correctly? | Replace the MCU Board (page 8-152). | Reseat the NVRAM device in the MCU Board. |

## Engine Firmware Failure

A firmware error was detected in the engine.

### Applicable Codes

- 16-400-00 Firmware Failure
- 316.405.05 Exception handing
- 316.406.06 Exception handing
- 316.407.07 Exception handing
- 316.408.08 Exception handing
- 316.409.09 Exception handing
- 316.410.10 Exception handing
- 316.411.11 Exception handing
- 316.412.12 Exception handing
- 316.413.13 Exception handing
- 316.414.14 Exception handing

### Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Initialize Engine NVM using dc301, then exit and reboot the system. The error persists. | Go to Step 2. | Complete. |
| 2 | Check system firmware version. The firmware is current. | Go to Step 3. | Update the system firmware. |
| 3 | Check connections to the MCU Board, then cycle system power. Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Printer Failure - Image Marking Time Out

Start image marking time out error.

## Applicable Codes

- 319.410.01 Command response time out.
- 91-312-00 Printer Failure

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ IP Board, PL10.1.5<br>■ MCU Board, PL10.2.18 | ■ "Map 4 - LVPS and IP Board" on page 10-8<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check all IP Board connections.<br>The connections are secure. | Go to Step 2. | Secure the connections. |
| 2 | Replace the IP Board (page 8-150), then cycle system power.<br>Does the error persist? | Replace the MCU Board (page 8-152) | Complete. |

## Unrecognized Status

The print engine has reported an unknown status to the controller.

### Applicable Code

- 41-000-00 Unrecognized Engine Status.

### Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| Unknown | |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Capture the unique status code displayed in the fault frame and escalate to Engineering for support. | | |

# Engine Motor Failure - Transfer Belt Drive Assembly

An error associated with the Transfer Belt Drive (IBT Motor) was detected.

## Applicable Codes

- 10-330-00 Engine Motor Failure
- 342.324.01 Transfer Belt Drive Assembly (IBT) failure

## Initial Actions

- Cycle system power.
- Remove and reseat the Transfer Belt.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Transfer Belt Drive, PL9.1.3<br>■ MCU Board, PL10.2.18<br>■ Harness Assy RH/ MOT, PL11.2.3 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 6 - Drive" on page 10-10<br>■ "Drive" on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Cycle system power.<br>Does the error persist? | Go to Step 2. | Complete |
| 2 | Check the Transfer Belt for excessive wear or edge damage. Rotate the Transfer Belt to check operation.<br>The Transfer Belt is undamaged. | Go to Step 3. | Replace the Transfer Belt (page 8-12). |
| 3 | Check P/J7 on the MCU Board and P/J254 on the Transfer Belt Drive.<br>The connections are secure. | Go to Step 4. | Secure the connections. |
| 4 | Test the IBT Motor Alarm signal using dc330 (093-019).<br>The IBT Motor Alarm state is Off. | Replace the MCU Board (page 8-152). | Go to Step 5. |
| 5 | Replace the Transfer Belt Drive (page 8-135). The error persists. | Visually inspect and test continuity of all applicable harnesses | Complete. |

# Engine Motor Failure - Imaging Unit Drive Assembly

An error associated with the Imaging Unit Drive (Xero Drive Motor) was detected.

## Applicable Codes

- 10-330-00 Engine Motor Failure
- 342.325.01 Xero Drive Motor failure

## Initial Actions

- Cycle system power.
- Remove and reseat the CMY Imaging Units.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Imaging Unit, PL5.1.8<br>■ Magenta Imaging Unit, PL5.1.9<br>■ Cyan Imaging Unit, PL5.1.10<br>■ Imaging Unit Drive, PL9.2.6<br>■ MCU Board, PL10.2.18<br>■ Harness Assy DISP/FSR, PL11.2.6 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 6 - Drive" on page 10-10<br>■ "Drive" on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the CMY Imaging Units for excessive wear or damage. Check rotation of the OPC Drum coupling (upper white gear located at the back of the Imaging Unit). The Imaging Units are undamaged and each drum rotates. | Go to Step 2. | Replace the affected Imaging Unit. |
| 2 | Cycle system power. Does the error persist? | Go to Step 3. | Complete |
| 3 | Test the Xero Drive Motor Alarm signal using dc330 (093-022). The Xero Drive Motor state is Off. | Replace the MCU Board (page 8-152). | Go to Step 4. |
| 4 | Replace the Imaging Unit Drive (page 8-175). The error persists. | Visually inspect and test continuity of all applicable harnesses | Complete. |

# Transfer Belt Failure

Communication error with the Transfer Belt was detected.

## Applicable Codes

- 42-601-00 Transfer Belt Failure
- 342.601.02 Transfer Belt communication failure
- 342.602.03 Transfer Belt data error

## Initial Actions

- Cycle system power.
- Remove and reseat the Transfer Belt.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Transfer Belt Drive, PL9.1.3<br>■ MCU Board, PL10.2.18<br>■ Harness Assy RH/ MOT, PL11.2.3 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 6 - Drive" on page 10-10<br>■ "Drive" on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Cycle system power.<br>Does the error persist? | Go to Step 2. | Complete |
| 2 | Replace the Transfer Belt (page 8-12).<br>Does the error persist? | Go to Step 3. | Complete |
| 3 | Check P/J7 on the MCU Board and P/J254 on the Transfer Belt Drive.<br>The connections are secure. | Go to Step 4. | Secure the connections. |
| 4 | Test the Transfer Belt Drive using dc330 (094-001).<br>Does the motor rotate? | Replace the MCU Board (page 8-152). | Go to Step 5. |
| 5 | Check Transfer Belt Drive installation.<br>Is the drive installed correctly? | Go to Step 6. | Correct the installation. |
| 6 | Check continuity of the Harness Assy RH/ MOT between P/J254 and P/J7 on the MCU Board.<br>The harness is undamaged. | Go to Step 7. | Replace the harness. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **7** | Check for 24V at P/J7 of the MCU Board.<br>Is 24 V available at P/J6-2 and -4 when the Front Interlock Switch is closed? | Replace the Transfer Belt Drive (page 8-135). | Replace the MCU Board (page 8-152). |

# Printer Failure

An Interface failure was detected between the MCU and Image Processor Boards.

## Applicable Errors

- 345.301.01: Ack Received Sig High
- 345.302.02: Ack Received Sig Low
- 345.303.03: Receive Buffer Overflow
- 345.304.04: Send Buffer Overflow High
- 345.305.05: Send Buffer Overflow Low
- 345.306.06: Software detects No I/O
- 91-312-00 Printer Failure

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ IP Board, PL10.1.5<br>■ MCU Board, PL10.2.18<br>■ Harness ESS PWR, PL11.1.3<br>■ Harness ESS, PL11.1.10 | ■ "Map 4 - LVPS and IP Board" on page 10-8<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "IP Board and Control Panel" on page 10-41 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Cycle system power.<br>Does the error persist? | Go to Step 2. | Complete |
| 2 | Check P/J2 on the MCU Board and P/J802 on the IP Board.<br>The connections are secure. | Go to Step 3. | Secure the connections. |
| 3 | Check continuity of the IP Board Harness between P/J802 and P/J2 on the MCU Board.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |
| 4 | Check P/J321 on the IP Board and P/J306 on the LVPS.<br>The connections are secure. | Go to Step 5. | Secure the connections. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Check for 5V and 3.3V at P/J306 -3, 4 and 5 on the LVPS<br>Is 5 and 3.3 V available at P/J306 when the Front Interlock Switch is closed? | Go to Step 6. | Replace the LVPS (page 8-182). |
| **6** | Replace the IP Board (page 8-150).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Feeder Communication Failure

A communication failure was detected between the MCU Board and the optional feeder.

**Warning**

Use two people to lift the printer from the optional feeder.

**Caution**

Remove the Finisher, if installed, before lifting the printer from the optional feeder.

## Applicable Codes

- 70-099-00 Feeder Communication Failure
- 370.099.01 Feeder Communication Failure

## Initial Actions

- Check optional feeder installation.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Harness LPP/ MOT, PL11.2.5<br>■ Harness OPT TOP, PL12.3.1<br>■ Feeder Board, PL12.3.4 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 7 - 550-Sheet Feeder” on page 10-13<br>■ “Feeder Board” on page 10-44 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the option connectors on the printer and optional feeder for damage.<br>The connectors are undamaged. | Go to Step 2. | Replace the affected option harness. |
| 2 | Check P/J21 on the MCU Board and P/J181 and P/J350 on the Feeder Board.<br>The connections are secure. | Go to Step 3. | Secure the connections. |
| 3 | Check continuity of the Upper Option Harness between P/J181 and P/J350.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check continuity of the LPP/MOT Harness between P/J181 and PJ21 on the MCU Board.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |
| **5** | Replace the Feeder Board (page 8-200).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Misfeed in Tray 1

Media fed from Tray 1 did not reach the Registration Sensor on time.

## Applicable Codes

- 71-101-00 Tray 1 misfeed
- 371.101.08 Tray 1 misfeed

## Initial Actions

- Confirm Tray 1 is securely attached to the printer.
- Check the media path for obstructions.
- Check the media guides are set correctly.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Take Away Clutch, PL3.3.12<br>■ Tray 1 Separator Roller PL3.1.99<br>■ Registration Sensor, PL3.3.22<br>■ Registration Sensor Harness, PL3.3.23<br>■ Feed Roller, PL4.2.21<br>■ Tray 1 Feed Solenoid, PL4.2.99<br>■ Feed Drive Assy, PL9.1.4<br>■ MCU Board, PL10.2.18<br>■ Registration Harness, PL11.1.5<br>■ Harness RH/MOT, PL11.2.3 | ■ “Map 2 - Fuser and Feeder” on page 10-6<br>■ “Map 3 - Right Door” on page 10-7<br>■ “Tray 1 and 2 Feeder” on page 10-27<br>■ “Drive” on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Feed and Separator Rollers for contamination or damage.<br>The rollers are clean and undamaged. | Go to Step 2. | Clean or replace the rollers. |
| 2 | Test the Registration Sensor using dc330 (10-202).<br>The signal changes (On/Off). | Go to Step 4. | Go to Step 3. |
| 3 | Check for 3.3V at P/J10-7 on the MCU Board.<br>Is 3.3 V available at P/J10-7 when the Front Interlock Switch is closed? | Replace the Registration Sensor (page 8-39). | Replace the MCU Board (page 8-152). |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Test the Paper Feed motor Alarm using dc330 (10-204).<br>The signal changes (On/Off). | Replace the Feed Drive Assy (page 8-199). | Go to Step 5. |
| **5** | Test the Tray 1 Feed Solenoid using dc330 (71-006).<br>The solenoid plunger moves. | Go to Step 7. | Go to Step 6. |
| **6** | Check for 24V at P/J9-10 on the MCU Board.<br>Is 24 V available at P/J9-10? | Replace the Solenoid, Gear & Clutch Kit (page 8-55). | Replace the MCU Board (page 8-152). |
| **7** | Test the Take Away Clutch using dc330 (72-008)<br>The clutch signal changes (On/Off). | Go to Step 9. | Go to Step 8. |
| **8** | Check for 24V at P/J10-5 on the MCU Board<br>Is 24 V available at P/J10-5?. | Replace the Take Away Clutch (page 8-37). | Go to Step 9. |
| **9** | Replace the MCU Board (page 8-152).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses. | Complete. |

# Tray 1 is Empty

The No Paper Sensor indicates the Tray 1 is empty or nearly empty.

## Applicable Codes

- 72-531-00 Tray 1 is Empty
- 72-532-00 Tray 1 paper not available.

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ No Paper Actuator, PL3.2.10<br>■ No Paper Sensor, PL3.2.11<br>■ No Paper Sensor Harness, PL3.2.12<br>■ Feeder Assy, PL3.2.1, PL12.4.29<br>■ Registration Sensor Harness, PL3.3.23<br>■ MCU Board, PL10.2.18 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Tray 1 and 2 Feeder" on page 10-27 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the No Paper Sensor Actuator for obstructions or damage.<br>The actuator is undamaged. | Go to Step 2. | Replace the Actuator (page 8-35). |
| 2 | Test the No Paper Sensor using dc330 (71-104):<br>The sensor signal changes (On/Off). | Replace the MCU Board (page 8-152). | Go to Step 3. |
| 3 | Check for 3.3V at P/J10-10 on the MCU Board.<br>Is 3.3 V available at P/J10-10? | Replace the No Paper Sensor (page 8-36). | Go to Step 4. |
| 4 | Replace the MCU Board (page 8-152).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses. | Complete. |

# Engine Motor Failure - Feed Drive Assembly

An error associated with the Feed Drive Assembly was detected.

## Applicable Codes

- 10-330-00 Engine Motor Failure
- 371.216.01 Feed Drive Assembly (PH) failure

## Initial Actions

- Cycle system power.
- Remove and reseat Tray 2.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Feed Drive Assy, PL9.1.4<br>■ MCU Board, PL10.2.18<br>■ Harness Assy RH/ MOT, PL11.2.3 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 6 - Drive" on page 10-10<br>■ "Drive" on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Cycle system power.<br>Does the error persist? | Go to Step 2. | Complete |
| 2 | Test the Feed Drive Motor Alarm signal using dc330 (010-204).<br>The Feed Drive Motor state is Off. | Replace the MCU Board (page 8-152). | Go to Step 3. |
| 3 | Replace the Feed Drive (page 8-140).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses | Complete. |

# Misfeed in Tray 2

Media fed from Tray 2 did not reach the Registration Sensor on time.

## Applicable Code

- 72-101-00 Misfeed in Tray 2
- 372.101.09 Tray 2 misfeed

## Initial Actions

- Check Tray 2 installation and condition.
- Check the media path for obstructions.
- Check the media guides in the tray are set correctly.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Feed & Separator Roller Kit PL2.1.99<br>■ Feed Clutch, PL3.2.2<br>■ Take Away Clutch, PL3.3.12<br>■ Registration Sensor, PL3.3.22<br>■ Registration Sensor Harness, PL3.3.23<br>■ Feed Drive, PL9.1.4<br>■ MCU Board, PL10.2.18<br>■ Registration Harness, PL11.1.5<br>■ Harness RH/ MOT, PL11.2.3 | ■ “Map 2 - Fuser and Feeder” on page 10-6<br>■ “Map 3 - Right Door” on page 10-7<br>■ “Tray 1 and 2 Feeder” on page 10-27<br>■ “Drive” on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Feed and Separator Rollers for contamination, wear or damage.<br>The rollers are clean and undamaged. | Go to Step 2. | Replace the rollers (page 8-6). |
| 2 | Test the Registration Sensor using dc330 (10-202).<br>The signal changes (On/Off). | Go to Step 4. | Go to Step 3. |
| 3 | Check for 3.3V at P/J10-7 on the MCU Board.<br>Is 3.3 V available at P/J10-7 when the Front Interlock Switch is closed? | Replace the Registration Sensor (page 8-39). | Replace the MCU Board (page 8-152). |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Test the Feed Drive Motor Alarm using dc330 (10-204).<br>The signal changes (On/Off). | Replace the Feed Drive Assy (page 8-199). | Go to Step 5. |
| **5** | Test the Take Away Clutch using dc330 (72-008)<br>The clutch signal changes (On/Off). | Go to Step 7. | Go to Step 6. |
| **6** | Check for 24V at P/J10-5 and -10 on the MCU Board.<br>Is 24 V available at P/J10-5? | Replace the Take Away Clutch (page 8-37). | Replace the MCU Board (page 8-152). |
| **7** | Test the Feed Clutch using dc330 (72-007)<br>The clutch signal changes (On/Off). | Go to Step 8. | Go to Step 9. |
| **8** | Check for 24V at P/J10-3 on the MCU Board.<br>Is 24 V available at P/J10-3? | Replace the Feed Clutch (page 8-34). | Go to Step 9. |
| **9** | Replace the MCU Board (page 8-152).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses. | Complete. |

# Optional Feeder Configuration Failure

An unsupported Optional Feeder configuration was detected. In multiple feeder configurations, isolate the affected component by removing individual feeders from the system until the error clears.

**Warning**

Use two people to lift the printer from the optional feeder.

**Caution**

Remove the Finisher, if installed, before lifting the printer from the optional feeder.

## Applicable Codes

- 72-215-00 Optional feeder configuration failure
- 372.215.01 Optional feeder configuration failure

## Initial Actions

- Cycle system power.
- Reseat feeder connections.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Harness LPP/ MOT, PL11.2.5<br>■ 550-Sheet Feeder, PL12.1.2<br>■ Harness OPT TOP, PL12.3.1<br>■ Feeder Board, PL12.3.4<br>■ 1100-Sheet Feeder, PL13.1.1 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 7 - 550-Sheet Feeder” on page 10-13<br>■ “Map 8 - 1100-Sheet Feeder” on page 10-14<br>■ “Drive” on page 10-29<br>■ “Feeder Board” on page 10-44<br>■ “Feeder Interconnection” on page 10-45 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Cycle system power.<br>Does the error persist? | Go to Step 2. | Complete |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 2 | Compare feeder configuration with these allowed configurations.<br>■ 550 Sheet Feeder (x1)<br>■ 550 Sheet Feeder (x2)<br>■ 1100 Sheet Feeder (x1)<br>■ 550 Sheet (x1) + 1100 Sheet (x1)<br>■ 550 Sheet (x2) + 1100 Sheet (x1)<br>Is the configuration supported? | Go to Step 3. | Reconfigure the system to a supported configuration. |
| 3 | Check PJ21 on the MCU Board and PJ181 and PJ350 on the Feeder Board.<br>The connections are secure. | Go to Step 4. | Correct the installation. |
| 4 | Check continuity of the Upper Option Harness between P/J181 and P/J350 on the Feeder Board.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |
| 5 | Check continuity of the Harness Assy LPP/ MOT between P/J181 and P/J21 on the MCU Board.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| 6 | Replace the Feeder Board (page 8-200).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Tray 2 ~ 6 is Empty

The No Paper Sensor indicates the Tray is empty or nearly empty.

**Warning**

Use two people to lift the printer from the optional feeder.

**Caution**

Remove the Finisher, if installed, before lifting the printer from the optional feeder.

## Applicable Codes

- 72-530-00 Tray 2 is Empty
- 72-532-00 Tray 2 paper not available.
- 72-535-00 Tray 2 is nearly empty
- 72-530-00 Tray 3 is Empty
- 73-532-00 Tray 3 paper not available.
- 73-535-00 Tray 3 is nearly empty
- 74-530-00 Tray 4 is Empty
- 74-532-00 Tray 4 paper not available.
- 74-535-00 Tray 4 is nearly empty
- 75-530-00 Tray 5 is Empty
- 75-532-00 Tray 5 paper not available.
- 75-535-00 Tray 5 is nearly empty
- 76-530-00 Tray 6 is Empty
- 76-532-00 Tray 6 paper not available.
- 76-535-00 Tray 6 is nearly empty

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ No Paper Actuator, PL3.2.10<br>■ No Paper Sensor, PL3.2.11<br>■ No Paper Sensor Harness, PL3.2.12<br>■ Feeder Assy, PL3.2.1, PL12.4.29<br>■ Feeder Board, PL12.3.4<br>■ Registration Sensor Harness, PL3.3.23<br>■ Lower Option Harness, PL12.3.11<br>■ MCU Board, PL10.2.18 | ■ “Map 2 - Fuser and Feeder” on page 10-6<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Tray 1 and 2 Feeder” on page 10-27 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the No Paper Sensor Actuator for obstructions or damage.<br>The actuator is undamaged. | Go to Step 2. | Replace the Actuator (page 8-35). |
| 2 | Test the No Paper Sensor for the affected Tray using dc330:<br>■ Tray 2 (72-105)<br>■ Tray 3 (73-002)<br>■ Tray 4 (74-008)<br>■ Tray 5 (75-008)<br>■ Tray 6 (76-011)<br>The sensor signal changes (On/Off). | Replace the MCU Board (page 8-152). | Go to Step 3. |
| 3 | Check for 3.3V at P/J10-10 on the MCU Board or P/J353-6 on the Feeder Board.<br>Is 3.3 V available at P/J10-10 or P/J353-6? | Replace the No Paper Sensor (page 8-36). | Go to Step 4. |
| 4 | Replace the MCU Board (page 8-152) or Feeder Board (page 8-200).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses. | Complete. |

# Optional Feeder Failure

An error in an attached Optional Feeder was detected. Use the error code to isolate the affected component.

**Warning**

Use two people to lift the printer from the optional feeder.

**Caution**

Remove the Finisher, if installed, before lifting the printer from the optional feeder.

## Applicable Codes

- 373.098.01 Tray 3 Optional Feeder Error
- 374.098.01 Tray 4 Optional Feeder Error
- 375.098.01 Tray 5 Optional Feeder Error
- 376.098.01 Tray 6 Optional Feeder Error
- 77-098-00 Optional Feeder Failure

## Initial Actions

- Cycle system power.
- Reseat feeder connections.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Harness LPP/ MOT, PL11.2.5<br>■ 550-Sheet Feeder, PL12.1.2<br>■ Harness OPT TOP, PL12.3.1<br>■ Feeder Board, PL12.3.4<br>■ 1100-Sheet Feeder, PL13.1.1 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 7 - 550-Sheet Feeder” on page 10-13<br>■ “Map 8 - 1100-Sheet Feeder” on page 10-14<br>■ “Drive” on page 10-29<br>■ “Feeder Board” on page 10-44<br>■ “Feeder Interconnection” on page 10-45 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check system software versions. If necessary, update the system software and cycle system power. Does the error persist? | Go to Step 2. | Complete |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **2** | Check P/J21 on the MCU Board and P/J181 and P/J350 on the Feeder Board.<br>The connections are secure. | Go to Step 3. | Correct the installation. |
| **3** | Check continuity of the Upper Option Harness between P/J181 and P/J350 on the Feeder Board.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |
| **4** | Check continuity of the Harness Assy LPP/ MOT between P/J181 and P/J21 on the MCU Board.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |
| **5** | Replace the Feeder Board (page 8-200).<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

# Misfeed in Tray 3 ~ 6

Media fed from the indicated Tray did not reach the Take Away Sensor on time.

**Warning**

Use two people to lift the printer from the optional feeder.

**Caution**

Remove the Finisher, if installed, before lifting the printer from the Optional Feeder.

## Applicable Codes

- 73-101-00 Misfeed in Tray 3
- 373.101.01 Tray 3 misfeed
- 74-101-00 Misfeed in Tray 4
- 374.101.02 Tray 4 misfeed
- 75-101-00 Misfeed in Tray 5
- 375.101.03 Tray 5 misfeed
- 76-101-00 Misfeed in Tray 6
- 376.101.04 Tray 6 misfeed

## Initial Actions

- Check installation of the indicated Tray.
- Reload the indicated tray with media from an newly opened package.
- Check media size settings for the affected tray.
- Check operation of the Right Door, Upper Chute and Turn Chute on the indicated tray.
- Check the media path for obstructions at the point media stops.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Feed Drive, PL12.3.2<br>■ Feeder Board, PL12.3.4<br>■ OPT MOT Harness, PL12.3.5<br>■ OPT CL Harness, PL12.3.12<br>■ Take Away Sensor, PL12.4.3<br>■ Take Away Clutch, PL12.4.5<br>■ Feed Clutch, PL12.4.9<br>■ Feed Roller Kit, PL12.4.99 | ■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 7 - 550-Sheet Feeder” on page 10-13<br>■ “Map 8 - 1100-Sheet Feeder” on page 10-14<br>■ “Feeder Board” on page 10-44<br>■ “Feeder Interconnection” on page 10-45 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Feed, Nudger, Separator, and Take Away Rollers for wear, contamination or damage.<br>The rollers are clean and undamaged. | Go to Step 2. | Replace the affected rollers. |
| 2 | Test the Take Away Sensor for the affected tray using dc330:<br>■ Tray 3 (73-001)<br>■ Tray 4 (74-007)<br>■ Tray 5 (75-007)<br>■ Tray 6 (76-010)<br>The sensor signal changes (On/Off). | Go to Step 4. | Go to Step 3. |
| 3 | Check for 3.3V at P/J353-5 on the Feeder Board.<br>Is 3.3 V available at P/J353-5 when the Interlock Switch is closed? | Replace the Take Away Sensor (page 8-202). | Go to Step 9. |
| 4 | Test the Feed Drive Motor Alarm for the affected tray using dc330<br>■ Tray 3 (73-012)<br>■ Tray 4 (74-006)<br>■ Tray 5 (75-004)<br>■ Tray 6 (76-009)<br>The alarm signal changes (On/Off). | Replace the affected Feed Drive Assy (page 8-199). | Go to Step 5. |
| 5 | Test the Take Away Clutch for the affected tray using dc771:<br>■ Tray 3 (73-013)<br>■ Tray 4 (74-004)<br>■ Tray 5 (75-005)<br>■ Tray 6 (76-005)<br>The clutch signal changes (On/Off). | Go to Step 7. | Go to Step 6. |
| 6 | Check for 24V at P/J354-1 on the Feeder Board.<br>Is 24 V available at P/J355-1 when the Interlock Switch is closed? | Replace the Take Away Clutch (page 8-203). | Go to Step 9. |
| 7 | Test the Feed Clutch for the affected tray using dc330:<br>■ Tray 3 (73-014)<br>■ Tray 4 (74-005)<br>■ Tray 5 (75-005)<br>■ Tray 6 (76-005)<br>The clutch signal changes (On/Off). | Go to Step 8 | Go to Step 9. |
| 8 | Check for 24V at P/J354-3 on the Feeder Board.<br>Is 24 V available at P/J354-3 when the Interlock Switch is closed? | Replace the Feed Clutch (page 8-205). | Go to Step 9. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **9** | Replace the affected Tray's Feeder Board (page 8-200).<br>The error persists. | Go to Step 10. | Complete. |
| **10** | Replace the MCU Board (page 8-152).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses. | Complete. |

# Optional Feeder Failure - Feed Drive Motor

A failure in the Feed Drive motor of an attached Optional Feeder was detected. Use the error code to isolate the affected component.

**Warning**

Use two people to lift the printer from the optional feeder.

**Caution**

Remove the Finisher, if installed, before lifting the printer from the optional feeder.

## Applicable Codes

- 373.216.01 Tray 3 Feeder Motor Failure
- 374.216.01 Tray 4 Feeder Motor Failure
- 375.216.01 Tray 5 Feeder Motor Failure
- 376.216.01 Tray 6 Feeder Motor Failure
- 77-216-00 Feeder Motor Failur113e

## Initial Actions

- Cycle system power.
- Reseat feeder connections.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Harness LPP/ MOT, PL11.2.5<br>■ 550-Sheet Feeder, PL12.1.2<br>■ Harness OPT TOP, PL12.3.1<br>■ Feeder Board, PL12.3.4<br>■ 1100-Sheet Feeder, PL13.1.1 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “Map 7 - 550-Sheet Feeder” on page 10-13<br>■ “Map 8 - 1100-Sheet Feeder” on page 10-14<br>■ “Drive” on page 10-29<br>■ “Feeder Board” on page 10-44<br>■ “Feeder Interconnection” on page 10-45 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Feed Drive for the indicated tray using dc330:<br>■ Tray 3 (73-011)<br>■ Tray 4 (74-003)<br>■ Tray 5 (75-003)<br>■ Tray 6 (76-003)<br>The motor rotates (On/Off). | Go to Step 8. | Go to Step 2. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **2** | Check P/J355 on the Feeder Board and P/J357 on the Feed Drive motor.<br>The connections are secure. | Go to Step 3. | Secure the connection. |
| **3** | Check for 24V at P/J355-2 and -4 on the Feeder Board.<br>Is 24 V available at P/J355-2 and -4 when the Interlock Switch is closed? | Replace the Feed Drive (page 8-199). | Go to Step 4. |
| **4** | Check for 24V at P/J350-10, -11, -12 on the Feeder Board.<br>Is 24V available at P/J350-10, -11, -12 when the Interlock Switch is closed? | Replace the Feeder Board (page 8-200). | Go to Step 5. |
| **5** | Check continuity of the Upper Option harness.<br>The harness is undamaged. | Go to Step 6. | Replace the harness. |
| **6** | Check for 24V at P/J307-3, -4, -5, -6 on the LVPS.<br>Is 24V available at P/J308 when the Front Interlock Switch is closed? | Go to Step 7. | Replace the LVPS (page 8-182). |
| **7** | Check continuity of the LVPS Harness between P/J308 and PJ24 on the MCU Board.<br>The harness in undamaged. | Replace the MCU Board (page 8-152). | Replace the harness. |
| **8** | Print a test print.<br>Does the error persist? | Replace the Feeder Board (page 8-200). | Complete. |

# Jam at Right Side Door

Media remains at the Registration Sensor or in the duplex path.

**Warning**

Allow the Fuser to cool before servicing the printer.

## Applicable Codes

- 10-105-01 Jam at Right Side Door
- 10-105-02 Jam at Right Side Door
- 377.101.03: Regi Off Jam
- 377.102.01: Psync On Jam
- 377.123.02: Duplex Regi On Jam
- 377.131.07: Duplex On Jam
- 377-900-10: Static Jam

## Initial Actions

- Check installation of the indicated Tray.
- Reload the indicated tray with media from an newly opened package.
- Check media size settings for the affected tray.
- Check operation of the Right Door, Upper Chute and Turn Chute on the indicated tray.
- Check the media path for obstructions at the point media stops.
- Check Fuser installation.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Feeder Assembly, PL3.2.1<br>■ Registration Sensor Actuator, PL3.3.20<br>■ Registration Sensor, PL3.3.22<br>■ Registration Sensor Harness, PL3.3.23<br>■ Duplex Drive Clutch, PL4.3.9<br>■ Duplex Roller, PL4.3.10<br>■ Exit Inverter Solenoid, PL7.3.3<br>■ Feed Drive, PL9.1.4<br>■ MCU Board, PL10.2.18<br>■ Registration Harness, PL11.1.5<br>■ OPT/CL Harness, PL12.3.12 | ■ “Map 2 - Fuser and Feeder” on page 10-6<br>■ “Map 3 - Right Door” on page 10-7<br>■ “Map 6 - Drive” on page 10-10<br>■ “Tray 1 and 2 Feeder” on page 10-27<br>■ “Drive” on page 10-29<br>■ “Fuser and Exit” on page 10-39 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **1** | Check the Transfer Belt, Transfer Roller and Fuser installation.<br>The parts are installed correctly. | Go to Step 2. | Correct the installation. |
| **2** | Check the Registration Sensor Actuator.<br>The actuator is undamaged and moves freely. | Go to Step 3. | Replace the actuator (page 8-40). |
| **3** | Test the Registration Sensor using dc330 (10-202).<br>The signal changes (On/Off). | Go to Step 5. | Go to Step 4. |
| **4** | Check for 3.3V at P/J10-7 on the MCU Board.<br>Is 3.3 V available at P/J10-7 when the Front Interlock Switch is closed? | Replace the Registration Sensor (page 8-39). | Replace the MCU Board (page 8-152). |
| **5** | Is the media jam at the registration area behind the Right Door Assy? | Go to Step 6. | Go to Step 9. |
| **6** | Inspect the registration rollers.<br>The rollers are clean and undamaged. | Go to Step 7. | Clean or replace the rollers. |
| **7** | Test the registration rollers using dc711 (Registration Roller).<br>The registration rollers rotate. | Go to Step 8. | Replace the Feeder/ Registration Assy (page 8-41). |
| **8** | The error persists. | Replace the MCU Board (page 8-152), | Complete. |
| **9** | Is the media jam in the duplex area? | Go to Step10. | Go to Step 16. |
| **10** | Inspect the Duplex Rollers.<br>The rollers are clean and undamaged. | Go to Step 11. | Clean or replace the Duplex Rollers (page 8-58). |
| **11** | Test the Duplex Roller using dc771.<br>The roller rotates (On/Off). | Go to Step 16. | Go to Step 12. |
| **12** | Test the Duplex Drive Clutch using dc330 (77-001).<br>The clutch signal turns (On/Off). | Go to Step 14. | Go to Step 13. |
| **13** | Check for 24V at P/J9-12 on the MCU Board.<br>Is 24V available at P/J9-12 when the Right Door Interlock Switch closed? | Replace the Duplex Drive Clutch (page 8-58). | Replace the MCU Board (page 8-152). |
| **14** | Test the Feed Drive using dc330 (10-008)<br>The Feed Drive rotates. | Go to Step 16. | Go to Step 15. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **15** | Check for 24V at P/J7B-2 and 7B-4 on the MCU Board.<br>Is 24 V available at P/J7B-2 and 7B-4 when the Right Door Interlock Switch is closed? | Replace the Feed Drive Assy (page 8-140). | Replace the MCU Board (page 8-152). |
| **16** | Is the media jam in the Inverter Chute area? | Go to Step 17. | Confirm jam location. |
| **17** | Test the Exit Inverter Solenoid using dc330 (10-013)<br>The Solenoid moves Up/Down? | Go to Step 19. | Go to Step 18. |
| **18** | Check for 3.3V at P/J19 on the MCU Board.<br>Is 3.3V available at P/J19-16 when the Front Interlock Switch is closed? | Replace the Exit Inverter Solenoid (page 8-126). | Go to Step 19. |
| **19** | Replace the MCU Board (page 8-152).<br>The error persists. | Visually inspect and test continuity of all applicable harnesses. | Complete. |

# Jam at Fuser

The Fuser exit sensor indicates media remains in the Fuser.

**Warning**

Allow the Fuser to cool before servicing the printer.

**Note**

Reset the Fuser life counter after installation of a new Fuser.

## Applicable Codes

- 377.103.06: Exit Off Jam
- 377.104.05: Exit Off Early Jam
- 377.106.04: Exit On Jam

## Initial Actions

- Check media condition.
- Check the media path for obstructions.
- Check media settings for the source tray.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Fuser Harness, PL 7.1.4<br>■ Fuser, PL7.1.99<br>■ Fuser Drive, PL9.1.1<br>■ MCU Board, PL10.2.18<br>■ Dispense/Fuser Harness, PL11.2.6 | ■ “Map 2 - Fuser and Feeder” on page 10-6<br>■ “Map 6 - Drive” on page 10-10<br>■ “LVPS” on page 10-25<br>■ “Drive” on page 10-29<br>■ “Fuser and Exit” on page 10-39 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Fuser rollers, gear and connector for damage or debris.<br>The rollers, gear and connector are undamaged. | Go to Step 2. | Replace the Fuser (page 8-17). |
| 2 | Test the Fuser exit sensor using dc330 (10-205).<br>The signal changes (On/Off). | Go to Step 8. | Go to Step 3. |
| 3 | Check P/J1 on the MCU Board and P/J304 on the LVPS.<br>The connections are secure. | Go to Step 4. | Secure the connections. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check for 3.3V at P/J180-S pin 10 on the Fuser Harness.<br>Is 3.3 V available at P/J180-S pin 10 when the Interlock Switch is closed? | Replace the Fuser (page 8-17). | Go to Step 5. |
| **5** | Check for 3.3V at P/J1-4 on the MCU Board.<br>Is 3.3V available at P/J1-4 when the Interlock Switch is closed? | Replace the Fuser Harness. | Go to Step 5. |
| **6** | Check for 3.3V at P/J308-4 on the LVPS.<br>Is 3.3V available at P/J308-4 when the Front Interlock Switch is closed? | Go to Step 7. | Replace the LVPS (page 8-182). |
| **7** | Check continuity of the LVPS Harness between P/J308 and PJ24 on the MCU Board.<br>The harness in undamaged. | Go to Step 8. | Replace the harness. |
| **8** | Test the Fuser Drive using dc330 (10-008)<br>The Fuser Drive rotates. | Go to Step 15. | Go to Step 8. |
| **9** | Check P/J4 on the MCU Board and P/J250 at the motor.<br>The connections are secure. | Go to Step 9. | Secure the connections. |
| **10** | Check for 24V at P/J250-7 and -9 on the Feed Drive.<br>Is 24 V available at P/J250-7 and -9 when the Right Door Interlock Switch is closed? | Replace the Feed Drive Assy (page 8-140). | Go to Step 11. |
| **11** | Check continuity of the Dispense/ Fuser harness between P/J4B on the MCU Board and P/J250 on the Feed Drive motor.<br>The harness is undamaged. | Go to Step 12. | Replace the harness. |
| **12** | Check for 24V at P/J23-1,-2, and -3 on the MCU Board.<br>Is 24 V available at P/J23 with the Right Door Interlock Switch closed? | Replace the MCU Board (page 8-152). | Replace the harness. |
| **13** | Check for 24V at P/J305-1,-2, and -3 on the LVPS.<br>Is 24V available at P/J305 when the Interlock Switch is closed? | Go to Step 13. | Replace the LVPS (page 8-182). |
| **14** | Check continuity of the LVPS PWR Harness between P/J305 and PJ23 on the MCU Board.<br>The harness in undamaged. | Replace the MCU Board (page 8-152). | Replace the harness. |

# Jam at Tray 3 ~ 6 Right Side Door

The Take Away Sensor detects media in the media path of the indicated feeder.

**Warning**

Use two people to lift the printer from the optional feeder.

**Caution**

Remove the Finisher, if installed, before lifting the printer from the optional feeder.

## Applicable Codes

- 73-102-00 Jam at Tray 3 Right Side Door
- 373.102.05 Tray 3 Right Door Jam
- 74-102-00 Jam at Tray 4 Right Side Door
- 374.102.06 Tray 4 Right Door Jam
- 75-102-00 Jam at Tray 5 Right Side Door
- 375.102.07 Tray 5 Right Door Jam
- 76-102-00 Jam at Tray 6 Right Door Jam
- 377.110.08 Option Regi On Jam
- 377.901.09 Option Static Jam

## Initial Actions

- Check the affected paper tray for correct installation.
- Reload the indicated tray with media from a newly opened package and set the guides snugly against the media.
- Check media size settings for the affected tray.
- Check operation of the Right Door, Upper Chute and Turn Chute on the indicated tray.
- Check the media path for obstructions at the point media stops.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ MCU Board, PL10.2.18<br>■ Feed Drive, PL12.3.2<br>■ Feeder Board, PL12.3.4<br>■ Harness OPT MOT, PL12.3.5<br>■ Harness OPT CL, PL12.3.12<br>■ Take Away Sensor, PL12.4.3<br>■ Take Away Clutch, PL12.4.5<br>■ Feed Clutch, PL12.4.9<br>■ Feed & Separator Roller Kit, PL12.4.99 | ■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Map 7 - 550-Sheet Feeder" on page 10-13<br>■ "Map 8 - 1100-Sheet Feeder" on page 10-14<br>■ "LVPS" on page 10-25<br>■ "Drive" on page 10-29<br>■ "Feeder Board" on page 10-44<br>■ "Feeder Interconnection" on page 10-45 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Feed and Separator Rollers of the affected tray are installed correctly, free of contamination and not worn.<br>The rollers are clean and undamaged. | Go to Step 2. | Clean or replace the affected rollers. |
| 2 | Test the Take Away Sensor for the affected tray using dc330:<br>■ Tray 3 (73-001)<br>■ Tray 4 (74-007)<br>■ Tray 5 (75-007)<br>■ Tray 6 (76-010)<br>The sensor signal changes (On/Off). | Go to Step 4. | Go to Step 3 |
| 3 | Check for 3.3V at P/J353-5 on the Feeder Board.<br>Is 3.3 V available at P/J353-5 when the Interlock Switch is closed? | Replace the Take Away Sensor (page 8-202). | Go to Step 9. |
| 4 | Test the Feed Drive Motor Alarm for the affected tray using dc330:<br>■ Tray 3 (73-012)<br>■ Tray 4 (74-006)<br>■ Tray 5 (75-004)<br>■ Tray 6 (76-009)<br>The motor rotates (On/Off). | Replace the Feed Drive (page 8-199). | Go to Step 5. |
| 5 | Test the Take Away Clutch for the affected tray using dc771:<br>■ Tray 3 (73-013)<br>■ Tray 4 (74-004)<br>■ Tray 5 (75-005)<br>■ Tray 6 (76-005)<br>The clutch signal changes (On/Off). | Go to Step 7. | Go to Step 6. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **6** | Check for 24V at P/J354-1 on the affected Tray's Feeder Board.<br>Is 24 V available at P/J355-1 when the Interlock Switch is closed? | Replace the Take Away Clutch (page 8-203). | Go to Step 9. |
| **7** | Test the Feed Clutch for the affected tray using dc330:<br>■ Tray 3 (73-014)<br>■ Tray 4 (74-005)<br>■ Tray 5 (75-005)<br>■ Tray 6 (76-005)<br>The clutch signal changes (On/Off). | Go to Step 8 | Go to Step 9. |
| **8** | Check for 24V at P/J354-3 on the affected Tray's Feeder Board.<br>Is 24 V available at P/J354-3 when the Interlock Switch is closed? | Replace the Feed Clutch (page 8-205). | Go to Step 9. |
| **9** | Replace the Feeder Board (page 8-200).<br>Does the error persist? | Go to Step 10. | Complete. |
| **10** | Replace the MCU Board (page 8-152).<br>Does the error persist? | Visually inspect and test continuity of all applicable harnesses. | Complete. |

## Engine Sensor Failure - Mode Switching Sensors

A failure was detected in the Black (K) or FC (Full Color CMY) Switching Sensor.

### Applicable Codes

- 391.301.01 K and FC sensors are On
- 391.302.02 K Sensor On timeout error
- 391.303.03 FC Sensor On timeout error
- 391.304.04 K Sensor Off timeout error
- 391.305.05 FC Sensor Off timeout error
- 391.306.06 Unknown sensor state
- 391.307.07 Unknown sensor state
- 391.308.08 Unknown sensor state
- 92-661-00 Engine Sensor Failure

### Initial Actions

- Check Transfer Belt installation.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Transfer Belt, PL5.1.1<br>■ Imaging Unit Link Drive, PL9.2.98<br>■ Switching Sensor Assy, PL9.2.1<br>■ MCU Board, PL10.2.18<br>■ Harness RH/ MOT, PL11.2.3<br>■ Harness CRUM/ DISP, PL11.2.4 | ■ “Map 1 - CRU Detection” on page 10-5<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9.<br>■ “Map 6 - Drive” on page 10-10.<br>■ “LVPS” on page 10-25<br>■ “Drive” on page 10-29 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Replace the Transfer Belt and cycle system power.<br>Does the error persist? | Go to Step 2. | Complete. |
| 2 | Check guide link operation.<br>Does the link slide smoothly back and forth between the Switching Sensors? | Go to Step 3. | Reseat or replace the Imaging Unit Link Drive (page 8-175). |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **3** | Test the Black Switching Sensor using dc330 (93-017).<br>The sensor signal changes (On/Off). | Go to Step 8. | Go to Step 4. |
| **4** | Check continuity of the RH/MOT harness between P/J9 on the MCU Board and P/J200 at the sensor.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |
| **5** | Check for 3.3V at P/J9-16 on the MCU Board.<br>Is 3.3 V available at P/J9-16? | Replace the Black Switching Sensor (page 8-145). | Go to Step 6. |
| **6** | Check for 3.3V at P/J24-4 on the MCU Board.<br>Is 3.3V available at P/J24-4 when the Front Interlock Switch is closed? | Replace the MCU Board (page 8-152). | Go to Step 7. |
| **7** | Check continuity of the LVPS Harness between P/J308 and PJ24 on the MCU Board.<br>The harness in undamaged. | Replace the LVPS (page 8-182). | Replace the harness. |
| **8** | Test the Color Switching Sensor using dc330 (93-018).<br>The sensor signal changes (On/Off). | Go to Step 13. | Go to Step 9. |
| **9** | Check continuity of the Dispense/ CRUM harness between P/J15 on the MCU Board and P/J201 at the sensor.<br>The harness is undamaged. | Go to Step 10. | Replace the harness. |
| **10** | Check for 3.3V at P/J15-1 on the MCU Board.<br>Is 3.3 V available at P/J15-1? | Replace the Color Switching Sensor (page 8-149). | Go to Step 11. |
| **11** | Check for 3.3V at P/J24-4 on the MCU Board.<br>Is 3.3V available at P/J24-4 when the Front Interlock Switch is closed? | Replace the MCU Board (page 8-152). | Go to Step 7. |
| **12** | Check continuity of the LVPS Harness between P/J308 and PJ24 on the MCU Board.<br>The harness in undamaged. | Replace the LVPS (page 8-182). | Replace the harness. |
| **13** | If the error persists, replace these components, in order, until the error is resolved.<br>1. Imaging Unit Link Drive, PL9.2.98<br>2. MCU Board, PL10.2.18 | | |

# Imaging Unit Failure

A communication or CRUM data failure was detected in one or more of the Imaging Units.

## Applicable Codes

- 91-901-00 Black (K) Imaging Unit Failure
- 391.901.02 Black (K) Imaging Unit communication error
- 91-903-00 Yellow (Y) Imaging Unit Failure
- 391.903.02 Yellow (Y) Imaging Unit communication error
- 91-905-00 Magenta (M) Imaging Unit Failure
- 391.905.02 Magenta (M) Imaging Unit communication error
- 91-907-00 Cyan (C) Imaging Unit Failure
- 391.907.02 Cyan (C) Imaging Unit communication error
- 391.902.03 Black (K) Imaging Unit Data error
- 391.904.03 Yellow (Y) Imaging Unit Data error
- 391.906.03 Magenta (M) Imaging Unit Data error
- 391.908.03 Cyan (C) Imaging Unit Data error

## Initial Actions

- Reseat the affected Imaging Unit.
- Check the Imaging Unit is the correct part number for this model.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Imaging Unit, PL5.1.8<br>■ Magenta Imaging Unit, PL5.1.9<br>■ Cyan Imaging Unit, PL5.1.10<br>■ Black Imaging Unit, PL5.1.11<br>■ CRUM Connector Assy, PL5.2.4<br>■ Harness CRUM/ DISP, PL11.2.4<br>■ MCU Board, PL10.2.18 | ■ “Map 1 - CRU Detection” on page 10-5.<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9.<br>■ “Dispense and Development” on page 10-37. |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the affected Imaging Unit and cycle system power.<br>Does the error persist? | Go to Step 2. | Complete. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **2** | Replace the affected imaging Unit.<br>Does the error persist? | Go to Step 3. | Complete. |
| **3** | Check P/J12 on the MCU Board and Imaging Unit CRUM connectors:<br>■ P/J208 (Y)<br>■ P/J209 (M)<br>■ P/J210 (C)<br>■ P/J211 (K)<br>The connections are secure. | Go to Step 4. | Secure the connections. |
| **4** | Check continuity of the Dispense/ CRUM harness.<br>The harness is undamaged. | Go to Step 5. | Replace the harness. |
| **5** | Check for 2.5V at P/J12-3, -7, -11, or -15 on the MCU Board.<br>Is 2.5 V available at P/J12 for the affected Imaging Unit? | Replace the Imaging Unit CRUM Connector (page 8-88). | Replace the MCU Board (page 8-152). |

# Printer Failure - HVPS Failure

A communication failure with the HVPS was detected.

## Applicable Error

- 91-312-00 Printer Failure
- 391.312.01 HVPS Error

## Initial Actions

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ HVPS, PL5.2.3<br>■ MCU Board, PL10.2.18<br>■ Harness ROS/HV, PL11.2.2 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “HVPS” on page 10-35 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check P/J13 on the MCU Board and P/J331 on the HVPS.<br>The connections are secure. | Go to Step 2. | Secure the connection. |
| 2 | Check continuity of the ROS/HV Harness between P/J331 and PJ13 on the MCU Board.<br>The harness in undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Replace the HVPS.<br>Does the error persist? | Replace the MCU Board (page 8-152). | Complete. |

## Density Sensor Failure - ADC Sensor

An error was detected in the Front or Rear ADC sensor located in the Procon Assembly.

### Applicable Error

- 92-310-00 Density Sensor Failure
- 392.310.01 CTD Rear Sensor Vdark error
- 392.311.02 CTD Rear Sensor Vcin error
- 392.320.01 CTD Front Sensor AD transition value error

### Initial Actions

- Clean the sensors using the built-in wiper.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Procon Assy, PL5.3.1<br>■ MCU Board, PL10.2.18<br>■ Harness Erase/Exit, PL11.2.1 | ■ "Map 4 - LVPS and IP Board" on page 10-8<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "LVPS" on page 10-25<br>■ "Xerographic" on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check P/J17 on the MCU Board and P/J108 on the Procon Assy.<br>The connections are secure. | Go to Step 2. | Secure the connection. |
| 2 | Check continuity of the Erase/Exit Harness between P/J108 and PJ17 on the MCU Board.<br>The harness in undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Check for 5V at P/J17-9 and -14 on the MCU Board.<br>Is 5V available at P/J17-9 and -14 when the Front Interlock Switch is closed? | Replace the Procon Assy (page 8-95). | Go to Step 4. |
| 4 | Check for 5V at P/J24-17 on the MCU Board.<br>Is 5V available at P/J24-17 when the Front Interlock Switch is closed? | Replace the MCU Board (page 8-152). | Go to Step 5. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Check continuity of the LVPS Harness between P/J308 and PJ24 on the MCU Board.<br>The harness in undamaged. | Replace the LVPS (page 8-182). | Replace the harness. |
| **6** | If the error persists, replace these components, in order, until the error is resolved.<br>1. Procon Assy, PL5.3.1<br>2. MCU Board, PL10.2.18 | | |

# Dusty Density Sensor

The Front or Rear ADC sensor located in the Procon Assembly is dirty.

## Applicable Code

- 92-330-00 Dusty Density Sensor

## Initial Actions

- Clean the sensors using the built-in wiper.

  **Note**

  Wipe the sensors three or four times to clean each sensor completely. Density improvement may not occur until 30 or 40 pages are printed.

- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Procon Assy, PL5.3.1<br>■ MCU Board, PL10.2.18<br>■ Harness Erase/Exit, PL11.2.1 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9<br>■ “LVPS” on page 10-25<br>■ “Xerographic” on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Clean the sensors.<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Replace the Procon Assy (page 8-95).<br>The error persists. | Replace the MCU Board (page 8-152). | Complete. |

# Engine Sensor Failure - Environmental Sensor

An error was detected in the Environmental Sensor (Temperature/ Humidity Sensor). The sensor detects a temperature or humidity anomaly.

**Note**

The printer may stop or operate at half speed mode as a result of this error.

## Applicable Errors

- 92-660-00 Print speed reduced due to internal temperature
- 92-661-00 Engine Sensor Failure
- 392.661.01 Temperature error
- 92-662-00 Overheat Failure
- 392.662.01 Overheat error

## Initial Actions

- Check for obstructions blocking system airflow.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Environmental Sensor, PL5.3.15<br>■ Procon Assy, PL 5.3.1<br>■ Harness Assy CTD/HUM, PL 5.3.2<br>■ MCU Board, PL10.2.18<br>■ Harness Erase/Exit, PL11.2.1 | ■ “Map 1 - CRU Detection” on page 10-5<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9.<br>■ “LVPS” on page 10-25<br>■ “Xerographic” on page 10-33 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the Environmental Sensor using dc140 Analog Monitor.<br>Temperature and Humidity readings are within ranges. | Go to Step 2. | Go to Step 3. |
| 2 | Cycle system power.<br>Does the error persist? | Go to Step 3 | Complete. |
| 3 | Check P/J17 on the MCU Board and P/J106 on the Procon Assy.<br>The connections are secure. | Go to Step 4. | Secure the connections. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | Check continuity of the Erase/Exit Harness between P/J106 and PJ16 on the MCU Board.<br>The harness in undamaged. | Go to Step 5. | Replace the harness. |
| **5** | Check for 5V at P/J16-10 on the MCU Board.<br>Is 5V available at P/J16-10 when the Front Interlock Switch is closed? | Go to Step 8. | Go to Step 6. |
| **6** | Check for 5V at P/J24-17 on the MCU Board.<br>Is 5V available at P/J24-17 when the Front Interlock Switch is closed? | Replace the MCU Board (page 8-152). | Go to Step 7. |
| **7** | Check continuity of the LVPS Harness between P/J308 and PJ24 on the MCU Board.<br>The harness in undamaged. | Replace the LVPS (page 8-182). | Replace the harness. |
| **8** | Remove the Procon Assy (page 8-95) and check continuity of the CTD/ Hum harness between P/J106 and P/J213 at the sensor.<br>The harness is undamaged. | Replace the Environmental Sensor (page 8-101). | Replace the harness. |
| **9** | If the error persists, replace these components, in order, until the error is resolved.<br>1. Environmental Sensor, PL5.3.15<br>2. Procon Assy, PL 5.3.1<br>3. MCU Board, PL10.2.18 | | |

# Imaging Unit Failure

A calibration patch error (low image density) was detected.

## Applicable Codes

- 92-670-00 Yellow Imaging Unit Failure
- 392.670.01 Yellow image adjustment patch error
- 92-671-00 Magenta Imaging Unit Failure
- 392.671.01 Magenta image adjustment patch error
- 92-672-00 Cyan Imaging Unit Failure
- 392.672.01 Cyan image adjustment patch error
- 92-673-00 Black Imaging Unit Failure
- 392.673.01 Black image adjustment patch error

## Initial Actions

- Reseat the affected Imaging Unit.
- Check the Imaging Unit is the correct part number for this model.
- Check Transfer Belt installation.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Imaging Unit, PL5.1.8<br>■ Magenta Imaging Unit, PL5.1.9<br>■ Cyan Imaging Unit, PL5.1.10<br>■ Black Imaging Unit, PL5.1.11<br>■ Transfer Belt, PL5.1.1<br>■ HVPS, PL5.2.3<br>■ Harness Assy ROS/HV (PL11.2.2)<br>■ MCU Board, PL10.2.18 | ■ “Map 1 - CRU Detection” on page 10-5.<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9.<br>■ “HVPS” on page 10-35. |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the affected Imaging Unit and cycle system power.<br>Does the error persist? | Go to Step 2. | Complete. |
| 2 | Replace the affected imaging Unit.<br>Does the error persist? | Go to Step 3. | Complete. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **3** | Reseat the Transfer Belt and cycle system power.<br>Does the error persist? | Go to Step 4. | Complete. |
| **4** | Replace the Transfer Belt (page 8-12).<br>Does the error persist? | Go to Step 5. | Complete. |
| **5** | Check P/J332 on the HVPS and the HV contacts to the Bias Transfer Assy.<br>The connections are secure. | Go to Step 6. | Secure the connections. |
| **6** | Check P/J13 on the MCU Board and P/J331 on the HVPS.<br>The connections are secure. | Go to Step 5. | Secure the connections. |
| **7** | Check continuity of the ROS/HV Harness between P/J331 and PJ31 on the MCU Board.<br>The harness in undamaged. | Replace the HVPS (page 8-182). | Replace the MCU Board (page 8-152). |
| **8** | If the error persists, replace these components, in order, until the error is resolved.<br>1. Bias Housing Assy, PL 5.2.2<br>2. HVPS, PL5.2.3<br>3. Harness Assy ROS/HV (PL11.2.2)<br>4. MCU Board, PL10.2.18 | | |

## CMYK Toner Failure

A communication or CRUM data failure was detected in one of the Toner Cartridges.

### Applicable Codes

- 93-901-00 Black (K) Toner Failure
- 393.901.02 Black (K) Toner Cartridge communication error
- 393.902.03 Black (K) Toner Cartridge data error
- 93-903-00 Yellow (Y) Toner Failure
- 393.903.02 Yellow (Y) Toner Cartridge communication error
- 393.904.03 Yellow (Y) Toner Cartridge data error
- 93-905-00 Magenta (M) Toner Failure
- 393.905.02 Magenta (M) Toner Cartridge communication error
- 393.906.03 Magenta (M) Toner Cartridge data error
- 93-907-00 Cyan (C) Toner Failure
- 393.907.02 Cyan (C) Toner Cartridge communication error
- 393.908.03 Cyan (C) Toner Cartridge data error

### Initial Actions

- Reseat the affected Toner Cartridge.
- Check the Toner Cartridge is the correct part number for this model.
- Cycle system power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Yellow Toner Cartridge, PL6.1.1<br>■ Magenta Toner Cartridge, PL6.1.2<br>■ Cyan Toner Cartridge, PL6.1.3<br>■ Black Toner Cartridge, PL6.1.4<br>■ CRUM Connector Assy, PL6.1.10<br>■ MCU Board, PL10.2.18<br>■ Harness TN CRUM, PL11.1.1 | ■ “Map 1 - CRU Detection” on page 10-5.<br>■ “Map 5 - MCU Board and Laser Unit” on page 10-9.<br>■ “Dispense and Development” on page 10-37. |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Reseat the affected Toner Cartridge and cycle system power.<br>Does the error persist? | Go to Step 2. | Complete. |

**Troubleshooting Procedure Table (continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **2** | Replace the affected Toner Cartridge.<br>Does the error persist? | Go to Step 3. | Complete. |
| **3** | Check P/J11 on the MCU Board and toner CRUM connections P/J204(Y), P/J205(M), P/J206(C) and P/J207(K).<br>The connections are secure. | Go to Step 4. | Secure the connections. |
| **4** | Check continuity of the TN/CRUM Harness between the CRUM connections and P/J11 on the MCU Board.<br>The harness in undamaged. | Go to Step 5. | Replace the harness. |
| **5** | Check for 2.5V at P/J11-3, -7, -11, and -15 on the MCU Board<br>Is 2.5 V available at P/J11? | Replace the Toner CRUM Connector Assy (page 8-108). | Replace the MCU Board (page 8-152). |

# General Troubleshooting

## In this chapter...


- Introduction
- System Startup
- Power On Self Test (POST)
- Service Diagnostics
- Control Panel Troubleshooting
- DC Power Supply Troubleshooting
- +24 VDC Interlock Switches
- Abnormal Noises
- Operating System and Application Problems


Chapter 4

# Introduction

This chapter covers the System Startup, Power On Self Test (POST), Service Diagnostics, and troubleshooting problems not associated with a fault code or error message.

For troubleshooting problems associated with a fault code or Control Panel error message, refer to “Messages, Codes, and Procedures” on page 3-4. Print-quality problems are covered in “Print-Quality Troubleshooting” on page 5-9.

## Initial Actions

Some problems are easy to resolve. Use these steps in an attempt to quickly isolate the problem.

1. Turn Off the printer, wait 5 seconds, then turn On the printer. This often solves problems related to power transients, ESD, and software errors.
2. If a message appears on the Control Panel, see “Messages, Codes, and Procedures” on page 3-4 for specific procedures related to error messages.
3. Check the power cord. Is the power cord plugged into the printer and directly into a properly grounded electrical outlet? Is the power cord damaged?
4. Check the electrical outlet. Is the outlet turned off by a switch or breaker?
5. Does other electrical equipment plugged into the outlet operate?
6. Are all options properly installed?

## Display Problems

If the Control Panel display is blank:

1. Turn Off the printer, wait 10 seconds, then turn On the printer.
2. The Xerox logo should appear on the display while POST tests run. If not, see “Control Panel Troubleshooting” on page 4-77.
3. When all tests and operating system loading is complete, “Ready to Print” should appear at the top left corner of the display.

**Note**

If the touchscreen is illuminated but unresponsive, press and hold the Power Saver button for 5 seconds, then press and release the Pause button to reset the touchscreen to factory defaults and initiate the touchscreen diagnostics. Refer to “Control Panel Calibration and Testing” on page 6-8.

If the problem persists, see “Control Panel Troubleshooting” on page 4-77, and “DC Power Supply Troubleshooting” on page 4-81.

## Printing Problems

If menu settings entered from the Control Panel have no effect, change or disable print settings from the print driver, the print utilities, or the application.

**Note**

Settings made in the application, print driver, or print utilities override settings made from the Control Panel.

If a job did not print correctly or incorrect characters were printed, check the following:

1. Check for “Ready To Print” on the display before sending a print job.
2. Check the loaded media.
3. Check the print driver.
4. Check the printer connections to Ethernet or USB.
5. Verify that the correct print media size is selected.
6. If using a print spooler, verify that the spooler has not stalled.
7. Check the printer network interface from the Network tab of the About This Printer menu. Determine the host interface you are using. Print a Configuration page to verify that the current interface settings are correct.

### Slow Printing

Printing complex images in Photo Mode for duplex jobs greater than 4 pages reduces print speed due to memory limitations. This is indicated when the printer cycles down, then back up following the 4th page. Increasing installed memory to 2GB eliminates this behavior. Another option is to switch to standard mode.

Another cause of slow operation is the use of data encryption on the Hard Drive. If User Data Encryption is enabled through CWIS, print processing slows as the encrption/decryption process occurs resulting in a reduction of print speeds of up to 40 % .

### Secure Print

If secure print is not available or not printing, refer to the requirements below.

- Secure Print requires a Hard Drive for print file storage. Check for the presence of a Hard Drive mounted on the IP Board.
- The number of secure print jobs the printer can store is dependent on the job size including number of pages, graphics, color attributes, and the amount of memory or Hard Disk space.

### Misfeed

If print media misfeeds or multiple feeds occur, check the following:

1. Make sure the print media meets the specifications. Refer to“Media Guidelines” on page A-2.
2. Fan the media before loading it.
3. Check the media guides.
4. Check the fill level in each Tray. Reduce the amount of media loaded in the Tray if necessary.
5. Load the media to correctly position the “print first” side.
6. Turn the media over or around and try printing again.
7. Fill trays with only one type of media.
8. Remove the top and bottom sheets of a ream before loading.
9. Do not reload media until the media source is empty.
10. Try loading media from a newly opened ream.
11. Check the Feed Rollers for contamination or wear. Replace if necessary.

### Jamming in the Media Path

Use the dc330 roller tests to exercise drive assemblies, clutches and motors in combination to test media transport at specific locations in the media path.

### Fault Isolation

Print an Engine Test print to isolate errors to either the MCUI or IP Boards. If the printer prints the test print successfully, troubleshoot the IP Board and connected components. If the Engine Test print fails, troubleshoot the print engine starting with “AC Power Supply Troubleshooting” on page 4-80.

## System Startup

Listed here is a typical startup routine from a cold start. The printer requires approximately 2 minutes to complete this sequence when equipped with a Hard Drive, 3 minutes without.

1. The printer performs a Power-On Self Test (POST) of the minimal essential hardware components to enable the operating systems to load and boot into a minimal-power safe state. See “Power On Self Test (POST)” on page 4-5.
2. A static power-on splash screen with the Xerox and Energy Star logos is displayed.
3. A dynamic warm-up screen appears showing the version of system software and a scrolling activity bar.
4. The home screen is displayed with status of warming up or calibrating.
5. The status message changes to Ready to Print when the printer is ready to accept jobs.

# Power On Self Test (POST)

POST diagnostics provides a quick means of isolating a defective subsystem associated with the Image Processor Board (IP Board), SDRAM, and Control Panel.

## POST Sequence

POST uses a separate and independent boot code; this code runs independently from the printer's operating system.

1. When power is turned On, the Health LED is lit on the IP Board, to indicate power is initiated.
2. The UART for debug serial port is initialized.
3. The SDRAM DIMM and EEPROM are tested, which included data and address lines. If an error is detected, the boot process halts and the error is indicated by a text message to the Control panel display and a blink code on the Health LED.

   **Note**

   An attempt is made to write detailed information to the serial port (which should work as the RAM is not being used at this point and the debug serial port is initialized).

4. The CPU loads its FPGA. If an error occurs, the system attempts to continue the boot process to allow for recovery and a text message is displayed on the Control Panel and a the Health LED blinks the appropriate code.
5. The IP Board health is checked. If there is a failure, the Health LED blinks.
6. The Operating System (OS) is loaded from ROM and the OS is brought up.

## POST Error Reporting

POST reports errors using the Health LED located on the IP Board and, when possible, an error message displayed on the Control Panel.

Hard faults prevent the boot sequence from continuing; the boot sequence aborts with no further tests attempted. When a hard fault occurs, the error code will be flashed on the LED's., and if possible, displayed on the UI screen.

## LED Blink Patterns

This table lists blink codes for each error. All errors blink the LED a certain number of times @ 2 Hz, pause for 2 seconds, and then repeat.

.

**POST Health LED Error Blink patterns**

| Blink Code | Message | Action |
|---|---|---|
| 2 blinks | RAM error | Replace DIMM, if error persists, IP Board. |
| 3 blinks | FPGA error | Update SW, if error persists, replace SD Card |
| 4 blinks | EEPROM error | Replace IP board EEPROM |
| 6 blinks | UI Failure | Replace the Control Panel |
| 7 blinks | UI Version Error | Update SW |

## Errors

### RAM Error

A RAM error is displayed on the Control Panel when the test detects errors on the RAM DIMM installed on the IP Board. This error most often means an incompatible DIMM is installed, the DIMM is installed incorrectly or is missing. However, it can mean the DIMM is faulty. In rare instances, it could mean the IP Board and/or the DIMM socket is faulty.

### FPGA Error

An FPGA error can mean either the FPGA binary on the SD card is missing and/or corrupt, or the FPGA itself is faulty (controller error). It is not possible in all cases to identify which one of these is the real problem. Therefore, reinstalling the SW using AltBoot may or may not fix the problem. If it does not, replace the IP Board.

### EEPROM Error

This indicates the IP Board EEPROM is missing or could not be read.

### UI Failure

This indicates that communication with the Control Panel could not be established. It most likely means the Control Panel or harness is disconnected or defective. Although not likely, it could also mean the controller (UI cable socket) is defective.

### UI Version Error

Indicates a system SW version error. Use AltBoot to update system firmware.

# Service Diagnostics

The Phaser 6700 has built-in diagnostics that provide tests for sensors, motors clutches, and solenoids. Access is also provided to system status, NVM addresses, and several test prints. Using these tools, technicians can diagnose problems quickly by isolating which component or subassembly requires service.

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 assemblies or parts in the vicinity of the reported error. Diagnostic tests are controlled from the Control Panel.

**Note**

Clear pending print jobs before attempting to enter Service Diagnostics. No new jobs are processed while the printer is in diagnostic mode.

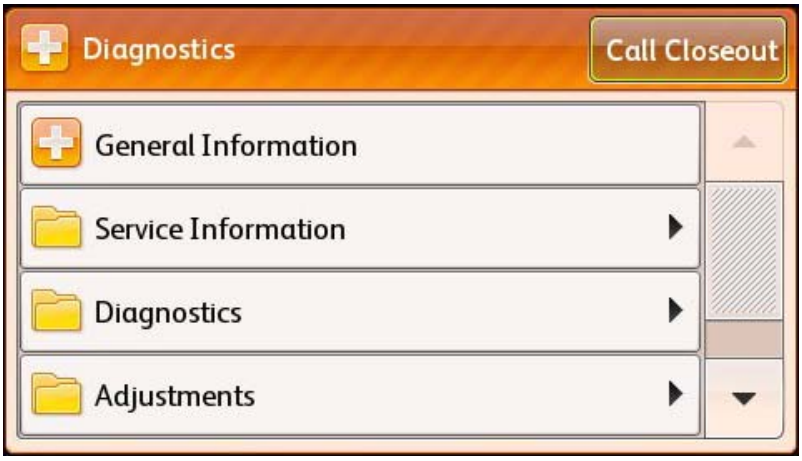
## Entering Service Diagnostics

Service Diagnostics is accessible using these methods. Login using 6789.

- With the printer in the Ready state, press and hold the Pause Button for 5 seconds, then press and release the Power Saver Button. This method is available even with the menus locked.
- From the Printer > Setup > Service Tools menu, touch Service Diagnostics. The Service Diagnostics screen appears. If the Tools Menu is locked, use the CSE login credentials (user = !$ecivreS and password = 2732). CSE login to the Tools menu can be disabled by the admin from CWIS.

**Note**

If the system is unable to access Service Diagnostics, “Unable to enter service diagnostics at this time. Please try again.” appears on the display.




These routines are available in Service Diagnostics. Detailed descriptions of each utility or test follow this overview.

### General Information

General Information lists information about the printer.

- Product Code
- Serial Number
- Total Images
- Active IP Address
- Software Version

### Service Information

Service Information lists utilities for managing counters, reviewing status and access to embedded test prints.

- dc104 Usage Counters
- dc108 Software Versions
- dc122 Fault History
- dc135 CRU/HFS Read and Reset
- dc612 Test Patterns

### Diagnostics

Diagnostics lists utilities for testing components and combinations of components.

- dc140 Analog Monitor
- dc330 Component Control
- dc711 Roller Test
- dc741 Paper Size Switch Test

### Adjustments

Adjustments lists utilities for accessing NVRAM and making xerographic process adjustments.

- dc131 NVM Access
- dc301 NVM initialization
- dc361 NVM Save and Restore
- dc701 Fuser Temp Setup
- dc909 Calibrate for Paper
- dc960 High Altitude

### Maintenance

Maintenance lists utilities for managing consumables.

- dc122 Fault History
- dc135 CRU/HFS Read and Reset
- dc137 Page Pack

## Exiting Service Diagnostics

After all service mode activities are complete, touch Call Closeout. The Call Closeout screen appears. Available options include the reset of the fault history logs (Reset Counters), Exit, Exit & Reboot and Cancel. It is recommended that following diagnostic testing or an NVM parameter change, reboot the printer to return it to correct operation.



# Service Diagnostics Tests and Utilities

Most diagnostic tests are straightforward and require no additional explanation. However, there are some that require specific conditions be met to achieve meaningful results. These instructions cover each test group, listing special instructions, conditions, or other information necessary to successfully interpret the results of the diagnostic tests.

## dc104 Usage Counters

Usage Counters displays printer usage information.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Service Information.
3. Touch dc104 Usage Counters.
4. The dc104 Usage Counters screen is displayed. Total impressions for Color and Black are displayed. Touch Usage Counters and select the desired counter to view.
   - Impression Counters
   - Sheet Counters
5. Touch X to exit.

## dc108 Software Version

Software Version displays the current system software versions.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Service Information.
3. Touch dc108 Software Version.
4. The System Software Version screen is displayed listing current firmware versions for the printer and attached options.
5. Touch the Back Arrow to exit.

## dc122 Fault History

Fault History displays the most recent (last 40) faults.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Service Information.
3. Touch dc122 Fault History.
4. A Fault History screen is displayed. Information includes:
   - Chain Link
   - Description
   - Date & Time
5. Touch the Fault for additional details.
6. An Information screen appears with fault details.
7. Touch X to exit the Information screen.
8. Touch the Back Arrow to exit.

## dc131 NVM Access

**Note**

Write down existing values before making any changes.

NVM Access displays the value for a given NVM parameter ID and will write new values into given locations. Refer to “NVM Parametric Values” on page A-9.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc131 NVM Access.
4. Enter the two part NVM parameter identifier.
5. Touch Read.
6. The selected NVM parameter is added to a table showing parameters accessed since invoking the routine.
7. Check the displayed value is appropriate. If not, differs from that documented or a modification is required:
   a. Enter the new value for that NVM parameter
   b. Touch Write
   c. The new value is written into NVM
   d. The value is updated in the list displayed on the UI
8. If further NVM parameters require review, repeats steps 4~7.

**Note**

Select Exit and Reboot during Call Closeout after any NVM value change.

## dc135 CRU/HFSI

The CRU/HFSI (dc135) routine provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch the Service Info tab.
3. Select dc135 CRU/HSFI.
4. A dc135 CRU/HFSI screen is displayed. Information includes:
   - Name
   - % Remaining
5. To reset a non-CRUM supply item, select the item. Touch the Reset Counter button to reset the life counter.
6. Touch X to exit.

## dc137 Page Pack

**Note**

Page Pack requires unique CRU components, a valid Page Pack PIN and an established Page Pack contract.

Use the Page Pack utility to enable or disable the Page Pack feature.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Maintenance.
3. Select dc137 Page Pack.
4. Touch the desired state.
5. Touch Save to store the new state.
6. Touch X to exit.

## dc140 Analog Monitor

The Analog Monitor (dc140) routine monitors one or more analog inputs for diagnostic troubleshooting.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch the Diagnostics tab.
3. Select dc140 Analog Monitor.
4. A dc140 Analog Monitor screen is displayed. Information includes:
   - Component Name
   - Status
   - Range
   - Value
5. Select the item to be monitored. Select Start.
6. The value is displayed for the selected component.
7. To stop the process, select Stop or Stop All.
8. Click X to exit.

## dc301 NVM Initialization

The NVM Initialization utility resets selected NVM to their factory default settings. NVM areas are defined by domain. To select NVM parameters to reset, follow these instructions.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc301 NVM Initialization.
4. A dc301 NVM Initialization screen is displayed.
5. Touch the domain to reset. Controller provides three NVM Data areas, Engine one and, if installed, Finisher provides one.
6. To reset User, System or All NVM parameters to factory defaults, touch Controller, then touch the NVM Data area and touch Initialize.
7. A prompt appears to confirm the initialization request. Touch Initialize to reset NVM.
8. After confirmation, the display returns to the Adjustments menu and status messages appear at the top of the display during the reset process.

Engine and Finisher domains reset system NVM for the target board.

**Note**

Select Exit & Reboot during call closeout after any NVM operations.

## dc330 Component Control

Component Control (dc330) is used to test subsystems and discreet components of the printer and attached options. Two component types are defined:

- Inputs: sensors, switches, and motor encoders.
- Outputs: motors, fans, solenoids, clutches, lamps (e.g. LED's) and heaters.

**Note**

To view status of Fuser, ADC output voltage and environmental sensors, use dc140.

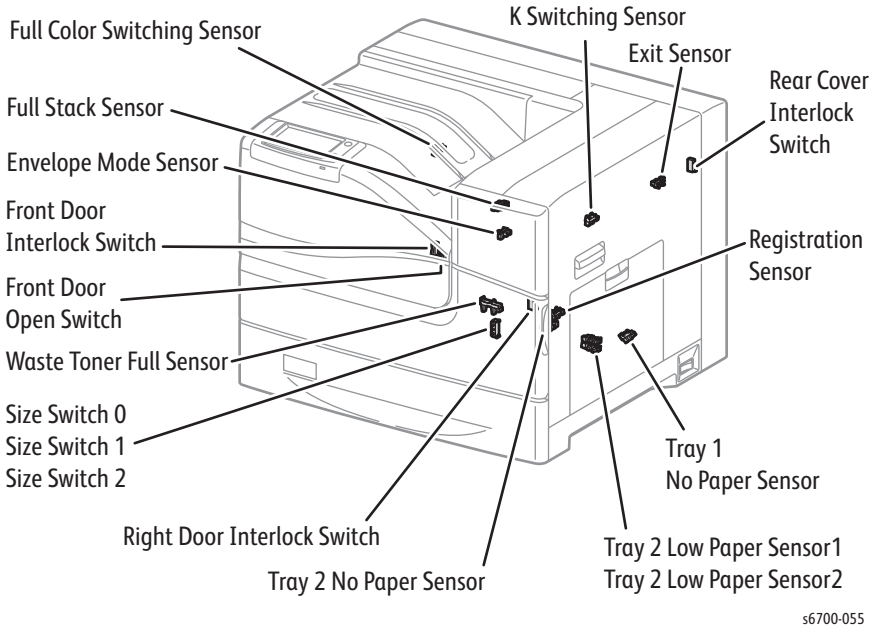
To select a component test:

1. Access the Service Diagnostics menu (page 4-7).
2. Touch the Diagnostics tab.
3. Select dc330 Component Control.
4. A dc330 Component Control screen is displayed. Information includes:
   - Chain Link
   - I/O (input or output)
   - Component
5. From the Chain pull-down menu, select the Chain number.
6. Select the component for test.
7. Select Start to perform the test.
8. Select Stop/Stop All to stop the test.
9. Touch X to exit the component test.

**Note**

Sensor, motor, clutch, and solenoid test results appear as On or Off states. Tests also allow audible and visual confirmation of operation where applicable. The following dc330 Component Control Tables list each component chain link and component test.

## Input Control Codes for Print Engine Sensors



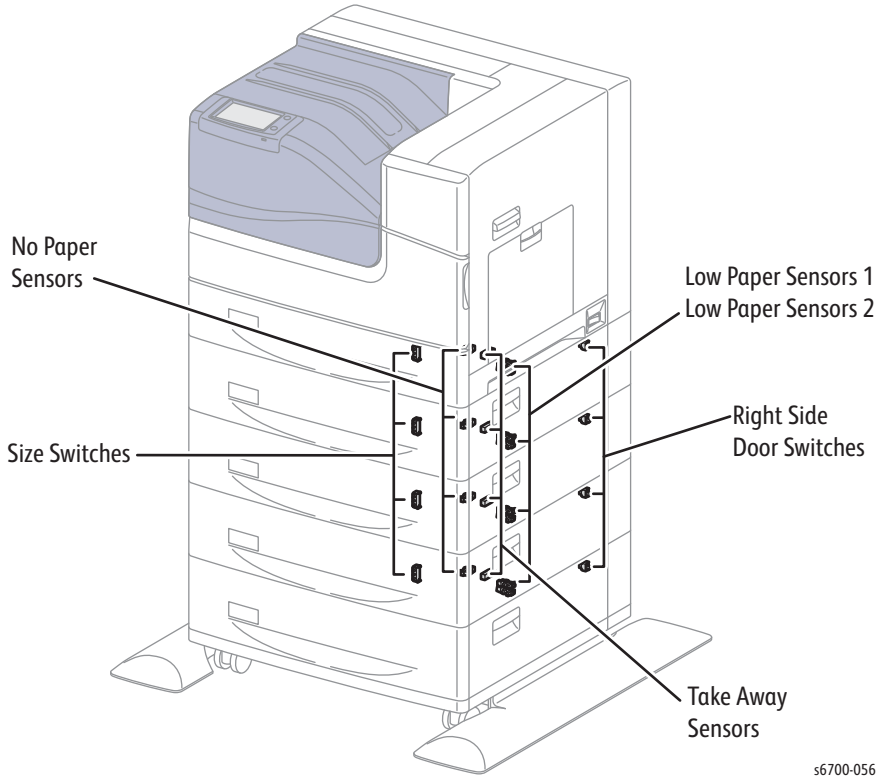

### Print Engine dc330 Input Component Control Codes

| Code | Component | Code | Component |
|---|---|---|---|
| 010-209 | Fuser Motor Alarm | 072-105 | Tray 2 No Paper Sensor |
| 010-210 | Fuser Fan Alarm | 072-106 | Tray 2 Low Paper Sensor1 |
| 010-205 | Exit Sensor | 072-107 | Tray 2 Low Paper Sensor2 |
| 010-206 | Envelope Mode Sensor | 072-108 | Tray 2 Size Switch 0 |
| 010-207 | Fuser Enable | 072-109 | Tray 2 Size Switch 1 |
| 042-206 | LVPS Fan Alarm | 072-110 | Tray 2 Size Switch 2 |
| 077-300 | Front Door Interlock | 077-302 | Front Door Open Switch |
| 077-301 | Right Door Interlock | 093-022 | Xero Drive Motor Alarm |
| 047-200 | Detect Commander | 093-017 | Black Switching Sensor |
| 010-208 | Finisher Detect | 093-018 | Color Switching Sensor |
| 010-204 | Feed Drive Alarm | 093-020 | K Dev Motor Alarm |
| 010-202 | Registration Sensor | 093-021 | YMC Dev Motor Alarm |
| 010-203 | Full Stack Sensor | 091-001 | Waste Toner Full Sensor |
| 071-104 | Tray 1 No Paper Sensor | 093-019 | IBT Motor Alarm |

**Note**

No input control code or dc330 test exists for the Rear Cover Interlock Switch. To test the switch, either test directly with a DMM, or look for the 309.003.03 (Laser Unit failure) error to indicate a defective switch.

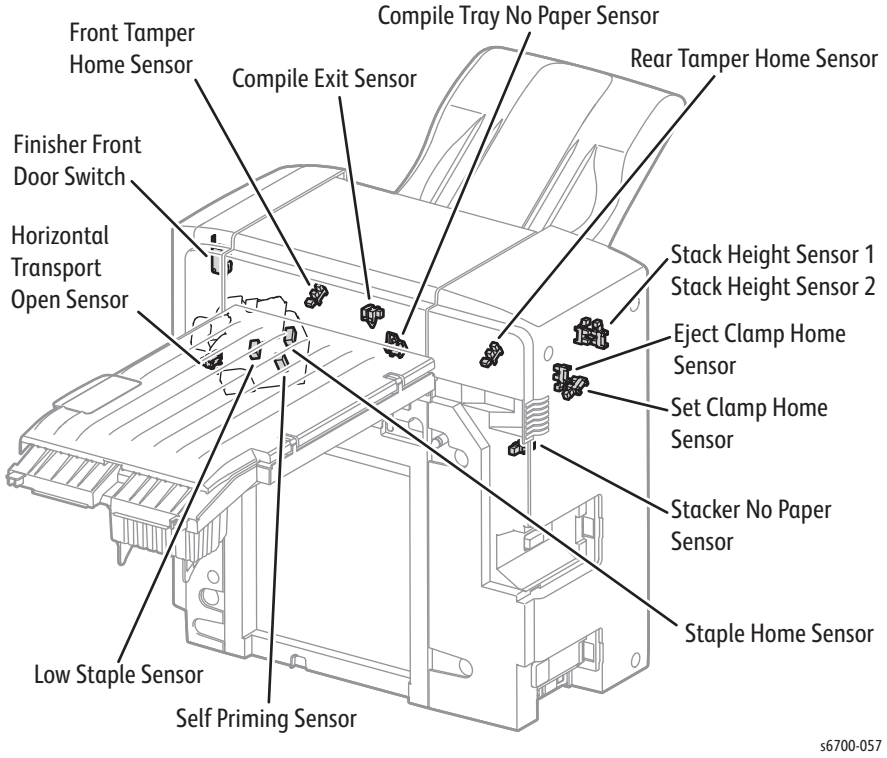
## Input Control Codes for Optional Feeder Sensors




**Optional Feeder dc330 Input Component Control Codes**

| Code | Component | Code | Component |
|---|---|---|---|
| 073-012 | Tray 3 Feed Motor Alarm | 075-004 | Tray 5 Feed Motor Alarm |
| 073-001 | Tray 3 Take Away Sensor | 075-007 | Tray 5 Take Away Sensor |
| 073-002 | Tray 3 No Paper Sensor | 075-008 | Tray 5 No Paper Sensor |
| 073-003 | Tray 3 Size Switch 0 | 075-009 | Tray 5 Size Switch 0 |
| 073-004 | Tray 3 Size Switch 1 | 075-010 | Tray 5 Size Switch 1 |
| 073-005 | Tray 3 Size Switch 2 | 075-011 | Tray 5 Size Switch 2 |
| 073-006 | Tray 3 Low Paper Sensor1 | 075-012 | Tray 5 Low Paper Sensor1 |
| 073-007 | Tray 3 Low Paper Sensor2 | 075-013 | Tray 5 Low Paper Sensor2 |
| 073-008 | Tray 3 Right Door Switch | 075-014 | Tray 5 Right Door Switch |
| 074-006 | Tray 4 Feed Motor Alarm | 076-009 | Tray 6 Feed Motor Alarm |
| 074-007 | Tray 4 Take Away Sensor | 076-010 | Tray 6 Take Away Sensor |
| 074-008 | Tray 4 No Paper Sensor | 076-011 | Tray 6 No Paper Sensor |
| 074-009 | Tray 4 Size Switch 0 | 076-012 | Tray 6 Size Switch 0 |
| 074-010 | Tray 4 Size Switch 1 | 076-013 | Tray 6 Size Switch 1 |
| 074-011 | Tray 4 Size Switch 2 | 076-014 | Tray 6 Size Switch 2 |
| 074-012 | Tray 4 Low Paper Sensor 1 | 076-015 | Tray 6 Low Paper Sensor 1 |
| 074-013 | Tray 4 Low Paper Sensor 2 | 076-016 | Tray 6 Low Paper Sensor 2 |
| 074-014 | Tray 4 Right Door Switch | 076-017 | Tray 6 Right Door Switch |

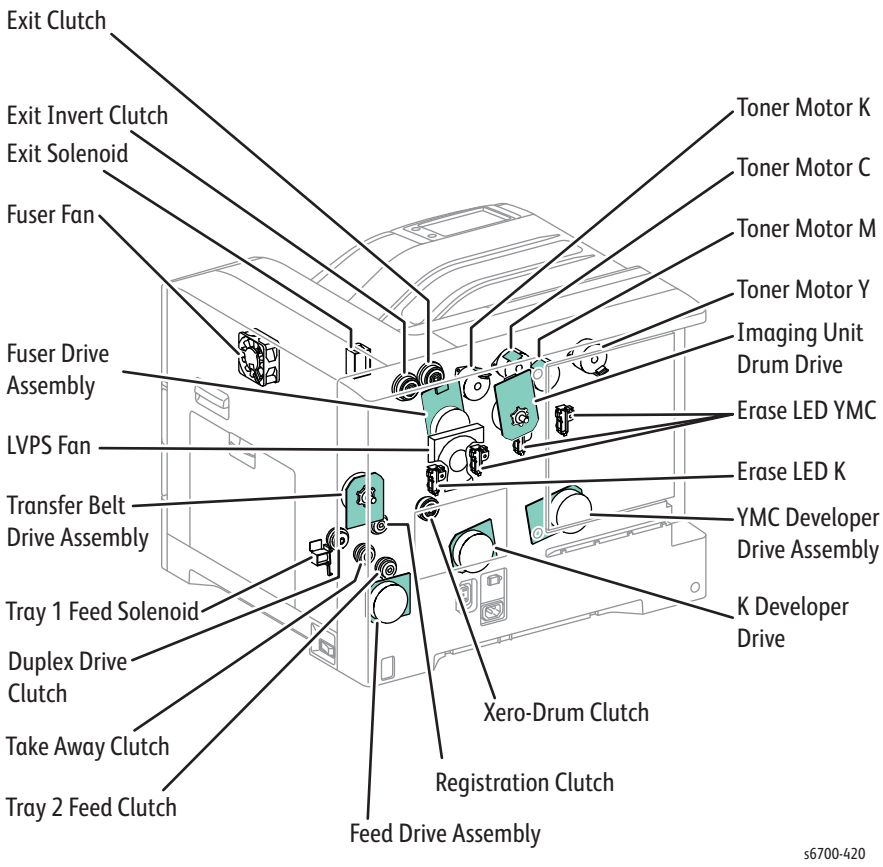
## Input Control Codes for Finisher Sensors




**Finisher dc330 Input Component Control Codes**

| Code | Component | Code | Component |
|---|---|---|---|
| 012-029 | Compile Tray Exit Sensor | 012-036 | Eject Clamp Home Sensor |
| 012-030 | Compile Tray No Paper Sensor | 012-037 | Set Clamp Home Sensor |
| 012-031 | Front Tamper Home Sensor | 012-038 | Stacker No Paper Sensor |
| 012-032 | Rear Tamper Home Sensor | 012-040 | Stack Height Sensor 1 |
| 012-033 | Low Staple Sensor | 012-041 | Stack Height Sensor 2 |
| 012-034 | Self Priming Sensor | 012-042 | Front Door Switch |
| 012-035 | Staple Home Sensor | 012-043 | Horizontal Transport Cover |

## Output Control Codes for Print Engine Components



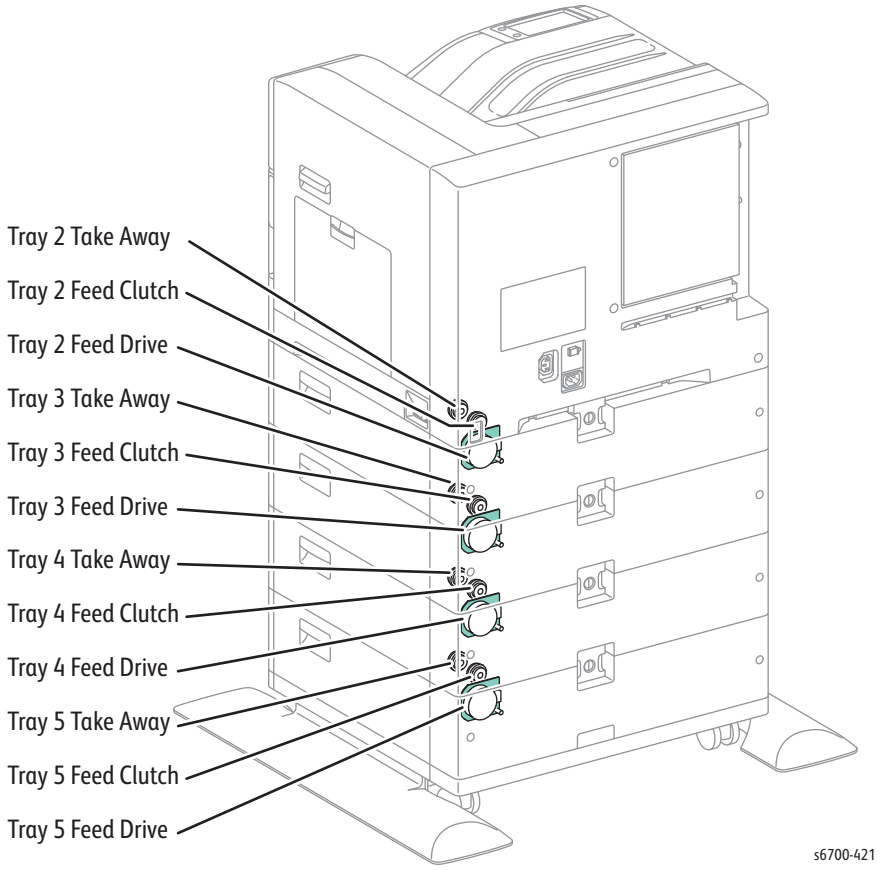

**Print Engine dc330 Output Control Codes**

| Code | Component | Code | Component |
|---|---|---|---|
| 010-001, 002, 003 | Fuser Motor (High, Med, Low) | 093-011, 012, 013 | Xero Drive Motor (High, Med, Low) |
| 042-004, 005 | Fuser Fan (High, Low) | 093-014 | Xero-Drum Clutch |
| 010-006 | Fuser Control | 093-015 | Erase YMC LED |
| 042-001 | LVPS Fan | 093-016 | Erase K LED |
| 061-001 | Laser Motor (int) | 093-001, 002, 003 | YMC Dev Drive Motor (High, Med, Low) |
| 010-007, 008, 009 | Feed Motor (High, Med, Low) | 093-004, 005, 006 | K Dev Drive Motor (High, Med, Low) |
| 077-001 | Duplex Clutch | 093-007 | Toner Motor Y |
| 010-010 | Registration Clutch | 093-008 | Toner Motor M |
| 071-006 | Tray 1 Feed Solenoid | 093-009 | Toner Motor C |
| 072-007 | Tray 2 Feed Clutch | 093-010 | Toner Motor K |
| 072-008 | Tray 2 Take Away Clutch | 094-001, 002, 003 | IBT Motor (High, Med, Low) |
| 010-011 | Exit Clutch | 094-005, 006, 007 | IBT Motor Reverse (High, Med, Low) |

**Print Engine dc330 Output Control Codes (Continued)**

| Code | Component | Code | Component |
|---|---|---|---|
| 010-012 | Exit Invert Clutch | 094-008, 009, 010 | IBT Motor + Xero Int (High, Med, Low) |
| 010-013 | Exit Solenoid | 094-011 | IBT Color Mode Int |
| 010-014, 015, 016 | Feed Motor rev. (High, Middle, Low) | | |

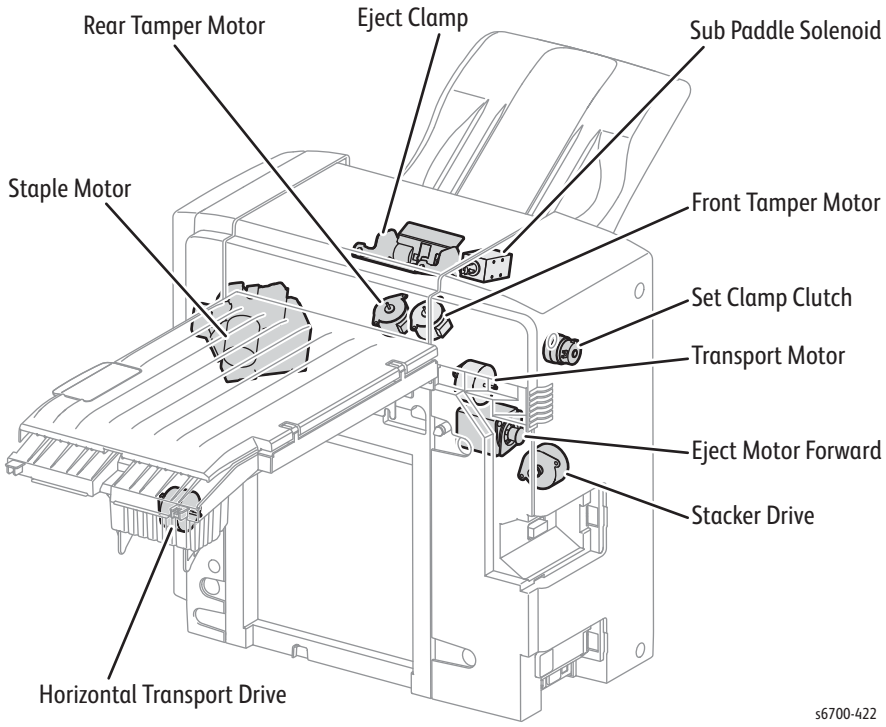
## Output Control Codes for Optional Feeder Components




**Option Feeder dc330 Output Control Codes**

| Code | Component | Code | Component |
|---|---|---|---|
| 073-009, 010, 011 | Tray 3 Feed Drive (High, Middle, Low) | 075-001, 002, 003 | Tray 5 Feed Drive (High, Middle, Low) |
| 073-013 | Tray 3 Take Away Clutch | 075-005 | Tray 5 Take Away Clutch |
| 073-014 | Tray 3 Feed Clutch | 075-006 | Tray 5 Feed Clutch |
| 074-001, 002, 003 | Tray 4 Feed Drive (High, Middle, Low) | 076-001, 002, 003 | Tray 6 Feed Drive (High, Middle, Low) |
| 074-004 | Tray 4 Take Away Clutch | 076-004 | Tray 6 Take Away Clutch |
| 074-005 | Tray 4 Feed Clutch | 076-005 | Tray 6 Feed Clutch |

## Output Control Codes for Finisher Components




**Finisher dc330 Output Control Codes**

| Code | Component | Code | Component |
|---|---|---|---|
| 012-013 | Sub Paddle Solenoid | 012-046 | Staple Motor Forward |
| 012-018 | Transport Motor Reverse | 012-047 | Staple Motor Reverse |
| 012-020, 022 | Front Tamper Motor Front (Low, High) | 012-050 | Set Clamp Clutch |
| 012-023, 025 | Front Tamper Motor Rear (Low, High) | 012-052 | Eject Clamp Up |
| 012-026, 028 | Rear Tamper Motor Front (Low, High) | 012-053 | Eject Clamp Down |
| 012-029, 031 | Rear Tamper Motor Rear (Low, High) | 012-054, 055 | Eject Motor Forward (Low, High) |
| 012-032, 033, 034, 035 | Horizontal Transport Drive Forward | 012-060 | Stacker Drive Up |
| 012-036, 037, 038 | Transport Motor Forward (Low, Middle, High) | 012-061 | Stacker Drive Down |
| 012-039 | Horizontal Transport Drive Reverse | | |

## dc361 NVM Save and Restore

NVM Save and Restore saves or restores system NVM contents to or from the installed SD Card or, if installed, a USB memory device. Use this routine to save and restore system and customer parameters.

**Note**

The printer automatically creates several copies of system configuration data. A master copy is created and time stamped at first-time power On. Master files are never overwritten and are useful when current system files are corrupt. The printer also writes a daily backup copy of IP Board NVM on a 15-day rotation. These files appear in the file list on the dc361 NVM Save and Restore screen. Files are listed by order of time stamp.

To save NVM parameters, follow these instructions.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc361 NVM Save and Restore. A dc361 NVM Save and Restore screen is displayed.
4. Touch Machine NVM. If a USB memory device is installed, a prompt appears to select the memory device to receive the NVM files. After selecting the device, the display returns to the dc361 NVM Save and Restore screen.
5. Touch Save to save NVM to the selected device. The routine creates three, time-stamped files, controller SD Card (IP Board), NVM EEPROM (IP Board), and engine EEPROM (MCU Board). The IP Board SD Card holds customer configuration parameters. The IP Board EEPROM stores system configuration parameters and the engine EEPROM stores engine control parameters.
6. A progress window appears to monitor the process. If an error occurs, a status message appears at the top of the display.

To restore NVM parameters, follow these instructions.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc361 NVM Save and Restore. A dc361 NVM Save and Restore screen is displayed.
4. Touch the correct saved file listed, then touch Restore.
5. A progress window appears to monitor the restore process. If an error occurs, a status message appears at the top of the display.

**Note**

Select Exit & Reboot during call closeout after any NVM operations.

## dc612 Test Patterns

The dc612 Test Patterns provides access to embedded test prints useful for troubleshooting image quality and media transport problems. Options include number of prints, source tray and simplex or duplex printing.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Service information.
3. Select dc612 NVM Test Patterns. A dc612 Print Test Patterns screen is displayed including these prints:
   - CMYK Sample page
   - 50% solid fills of Cyan, Magenta, Yellow and Black
   - RGB Test Print
   - Test Patterns page
   - Fuser Cleaning page

See “Test Prints” on page 5-31 for additional information on dc612 test prints.

## dc701 Fuser Temp Setup

The dc701 Fuser Temp Setup utility is used to adjust Fuser temperatures to compensate for media weight or improve toner adhesion.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc701 Fuser Temp Setup. A dc701 Fuser Temp Setup screen is displayed.
4. Touch the print mode to apply the Fuser temperature changes.
5. Touch the media weight to associate with the Fuser temperature setting.
6. Increment or decrement the default setting and touch Write to save the change. To reset the default, Write a value of zero.

**Note**

Fuser temperature adjustment range is +/- 6 for each media type.

## dc711 Roller Test

The dc711 Roller Test exercises select motors, clutches, solenoids and rollers in combination to verify proper operation.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Diagnostics.
3. Select dc711 Roller Test. A dc711 Roller Test screen appears listing these options:
   - Exit Roller forward and reverse
   - Duplex Roller
   - Registration Roller
   - Tray 2 ~ 6 Feed Rollers
   - Tray 2 ~ 6 Take Away Rollers
4. Touch the roller to test and touch Start to begin the test.
5. Touch Stop to end the test.

## dc741 Paper Size Switch

The dc741 Paper Size Switch Test monitors the signal from Tray 2 ~ 6 Size Switches and indicates signal status as each switch is opened and closed. Use the media guides in the Tray to actuate the switches or reach into the back of the Tray cavity and actuate the switches manually.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Diagnostics.
3. Select dc741 Paper Size Switch Test. A dc741 Paper Size Switch Test screen appears listing tests for each Size Switch detected.
4. Select the target Tray.
5. The current state of the switches and the media size represented appears.

## dc909 Calibrate for Paper

The dc909 Calibrate for Paper utility is used to adjust Transfer Roller charge to compensate for media type or weight. Increased charge on the Transfer Roller increases toner attraction to the media. Refer to “Secondary Transfer” on page 2-12 for details of the toner transfer process.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc909 Calibrate for Paper. A dc909 Calibrate for Paper screen appears.
4. Touch the media type to apply the charge changes.
5. Increment or decrement the default setting and touch Write to save the change. To reset the default, Write a value of zero.

**Note**

Fuser temperature adjustment range is +/- 6 for each media type.

## dc960 High Altitude

The dc960 Altitude Adjustment utility is used to adjust print process control to compensate for installations at higher altitudes. If the printer is installed more than 2000 meters above sea level, use dc960 to change print process control parameters.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc960 Altitude Adjustment. A dc909 Altitude Adjustment screen appears.
4. Touch the correct altitude setting and touch Write to save the new setting to NVM.
5. The Current Setting changes to reflect the new value.

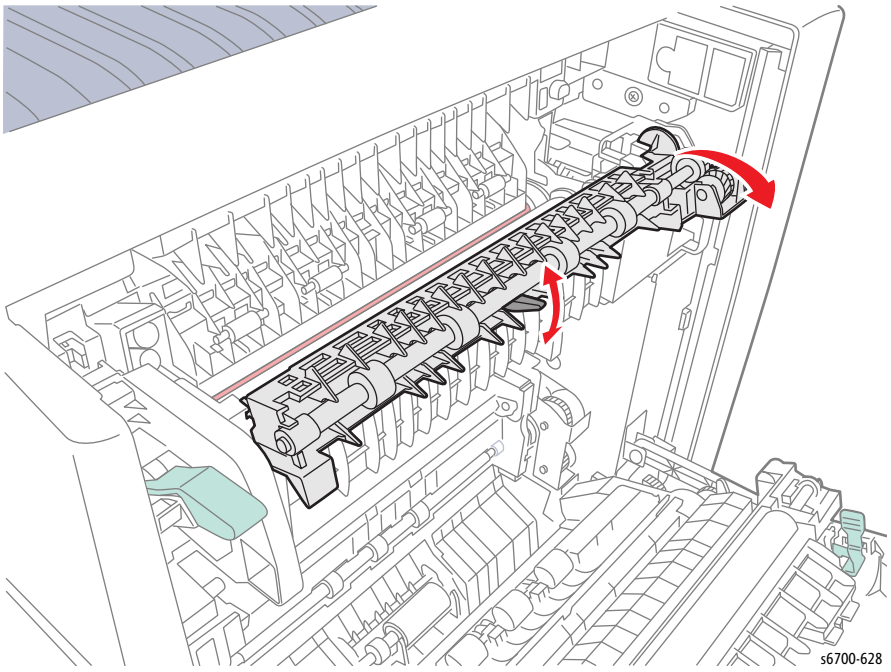
# Print Engine Test Procedures

## Exit Sensor

**Warning**

Allow the Fuser to cool before servicing the printer.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Exit Sensor.
6. Open the Right Door.
7. Touch Start to perform the test.
8. Lift the Fuser jam chute to toggle the signal (On/Off).
9. Touch Stop/Stop All to stop the test.

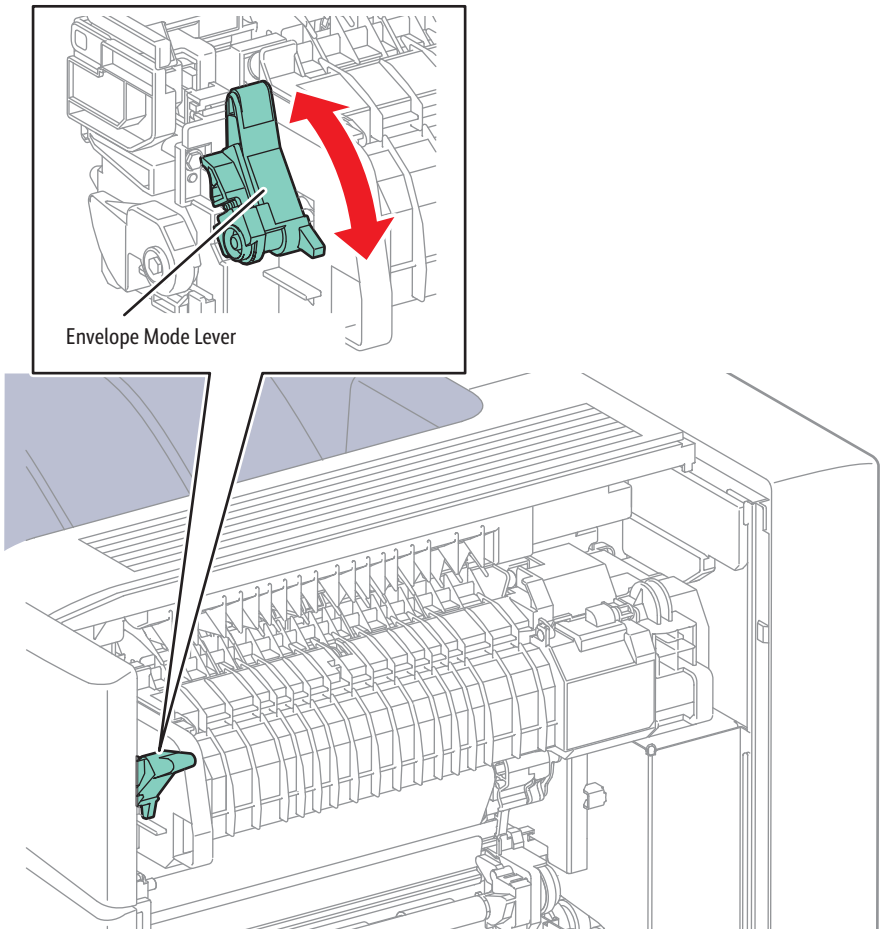


## Envelope Mode Detection Sensor

**Warning**

Allow the Fuser to cool before servicing the printer.

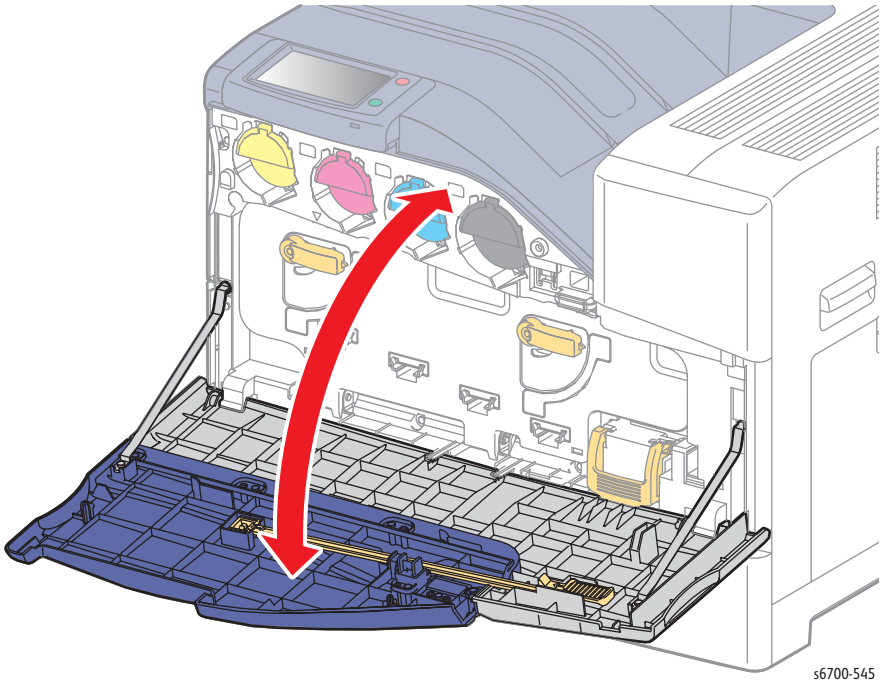
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Envelope Mode Detection Sensor.
6. Open the Right Door.
7. Touch Start to perform the test.
8. Lower the envelope mode lever to toggle the signal (On/Off).
9. Touch Stop/Stop All to stop the test.




s6700-544

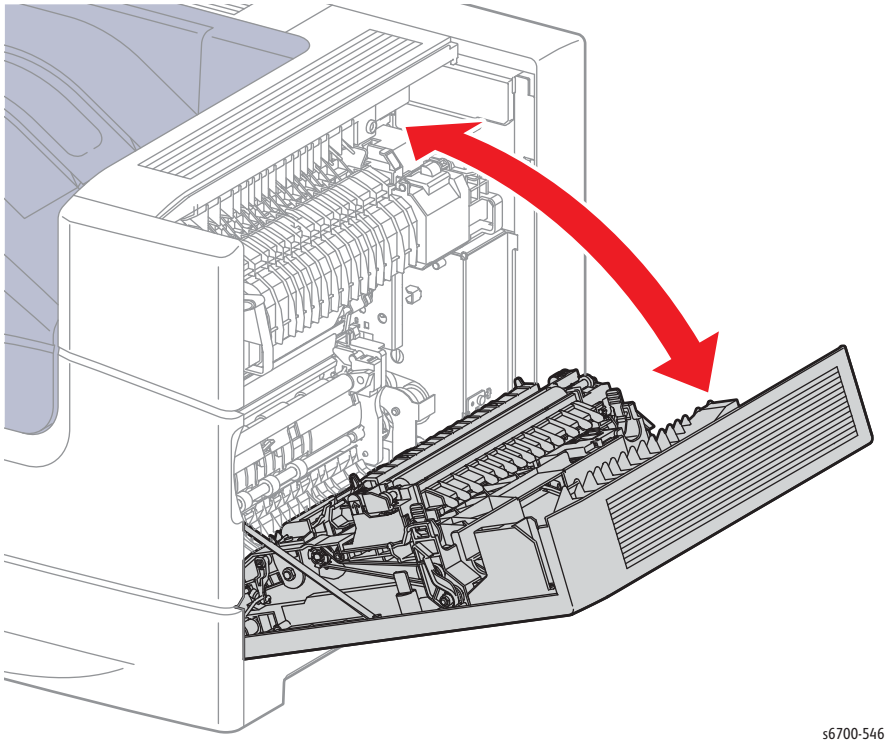
## Front Door Interlock Switch

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 77.
5. Touch Front Door Interlock or Front Door Open Switch.
6. Touch Start to perform the test.
7. Open and close the Front Door to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



## Right Door Interlock Switch

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 77.
5. Touch Right Door Interlock.
6. Touch Start to perform the test.
7. Open and close the Right Door to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



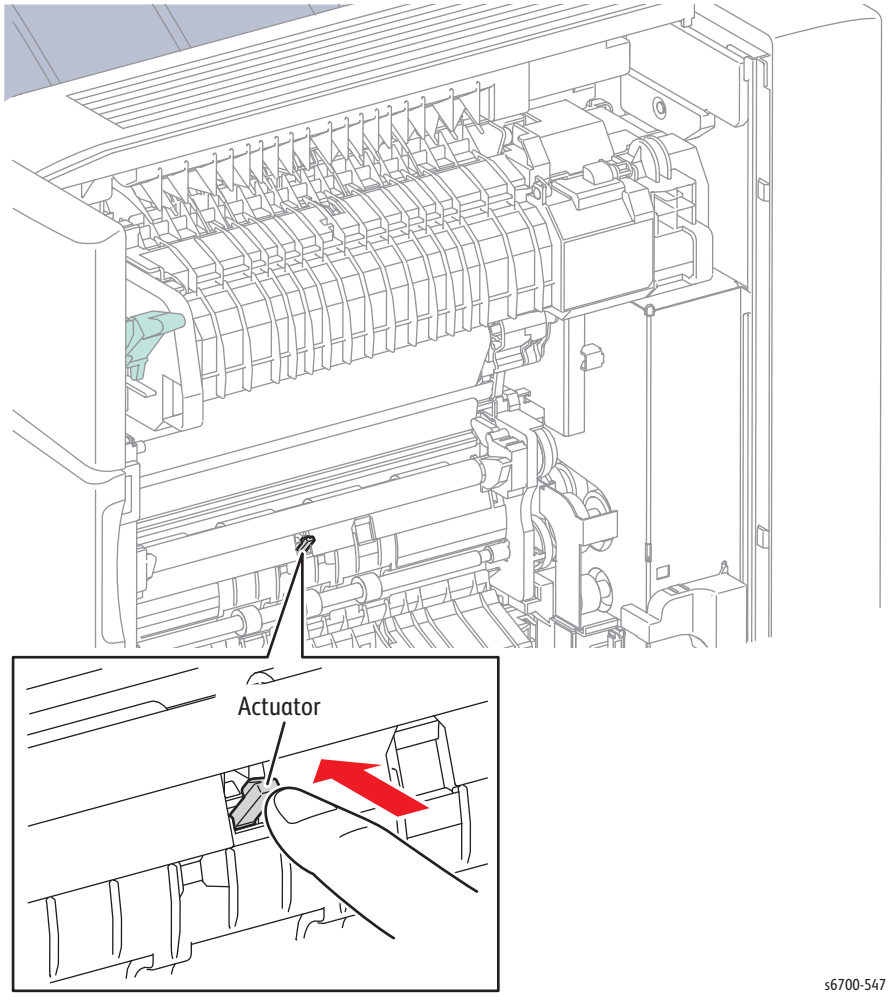
s6700-546

## Registration Sensor

**Warning**

Allow the Fuser to cool before servicing the printer.

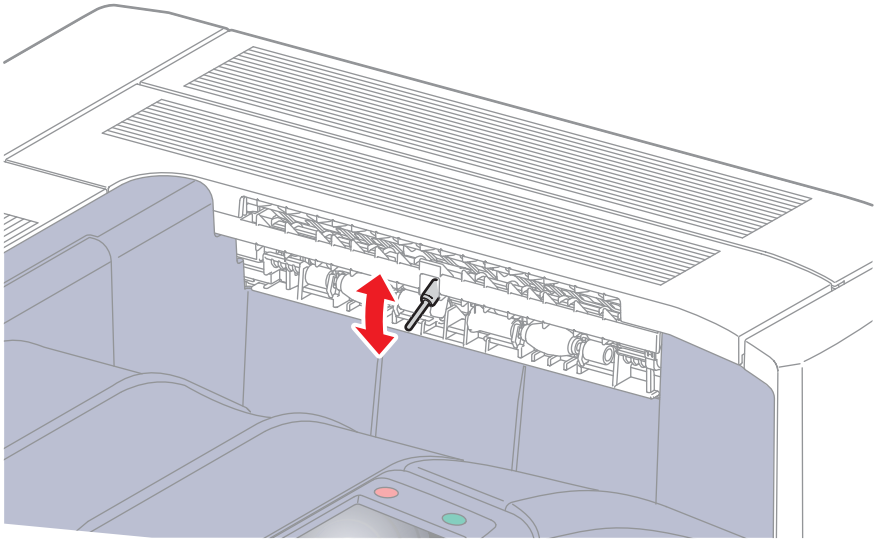
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Regi Sensor.
6. Open the Right Door.
7. Push and release the registration actuator to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.




s6700-547

## Full Stack Sensor

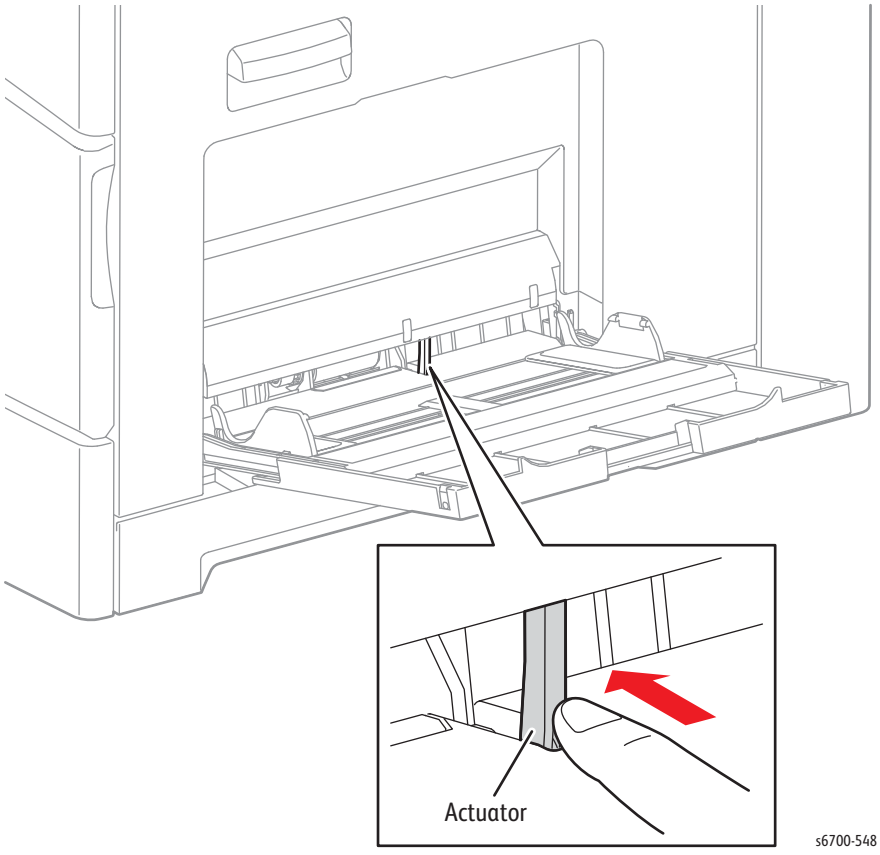
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Full Stack Sensor.
6. Open the Horizontal Transport Cover (if installed).
7. Lift and release the Full Stack Actuator to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



s6700-549

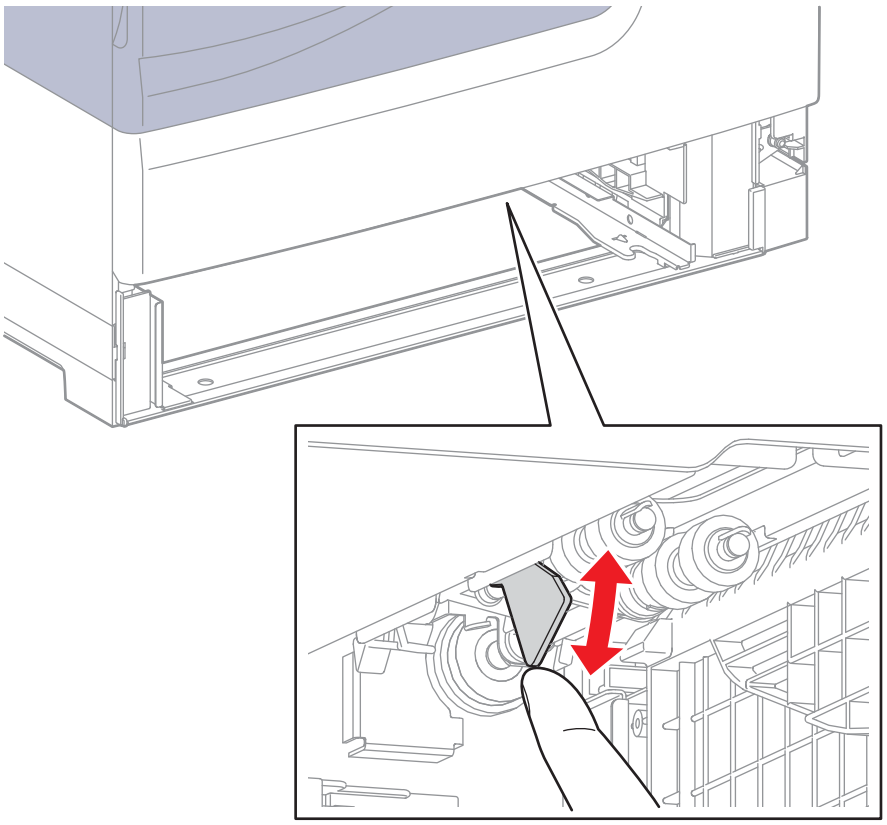
## Tray 1 No Paper Sensor

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 71.
5. Touch Tray 1 No Paper Sensor.
6. Open Tray 1 if closed.
7. Push and release the no paper actuator to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



## Tray 2 No Paper Sensor

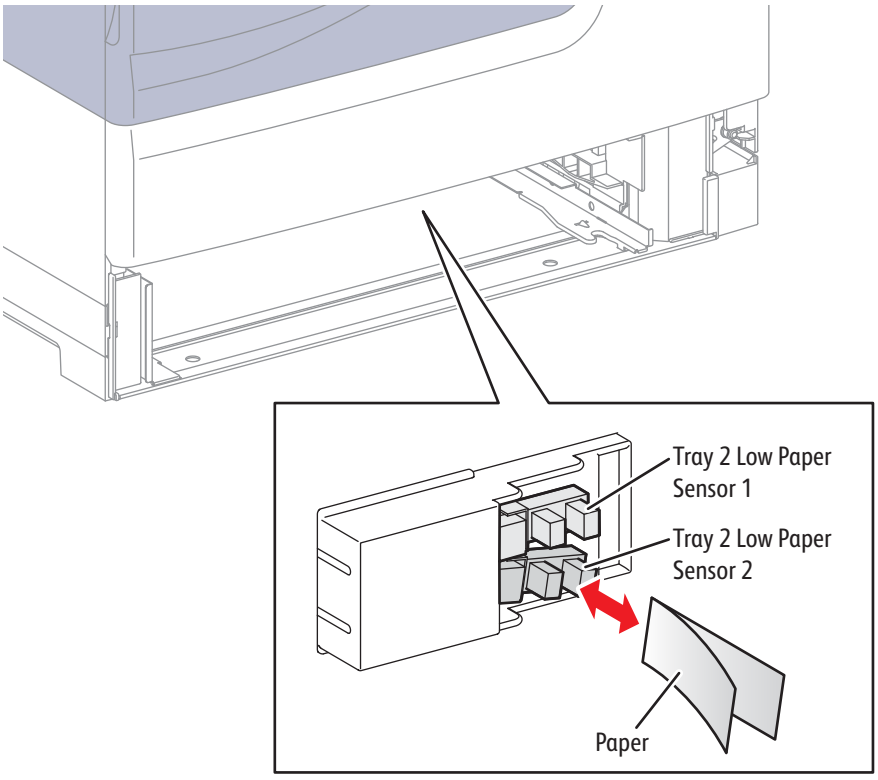
1. Remove Tray 2.
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 72.
6. Touch Tray 2 No Paper Sensor.
7. Lift and release the no paper actuator to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



s6700-550

## Tray 2 Low Paper Sensors 1 and 2

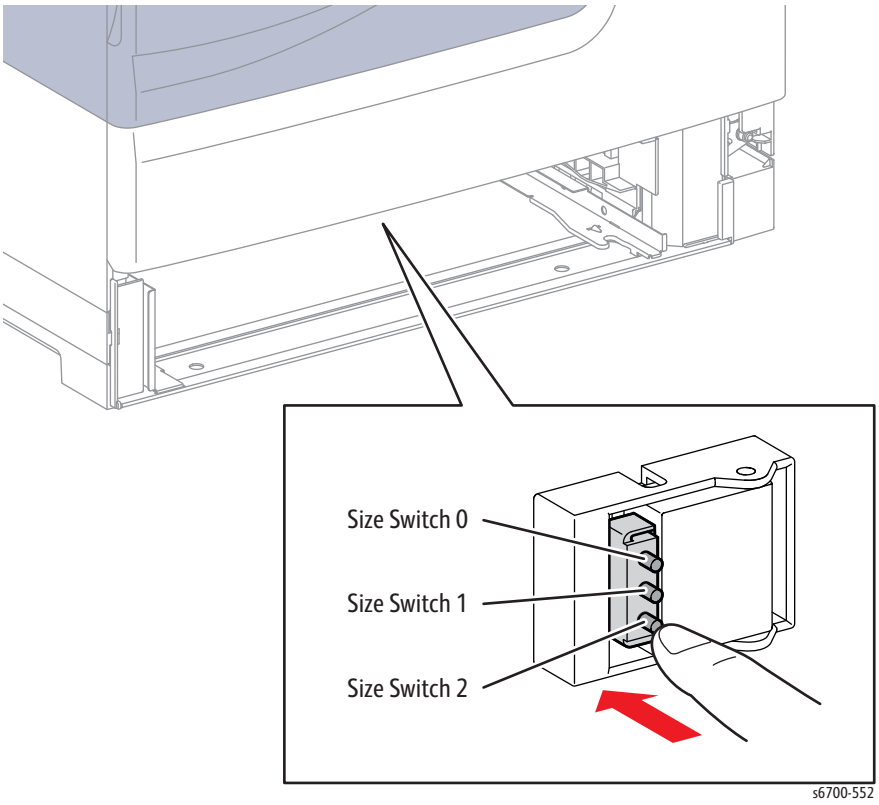
1. Remove Tray 2.
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 72.
6. Touch Tray 2 Low Paper Sensor 1 or 2.
7. Block the Low Paper Sensors to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.




s6700-551

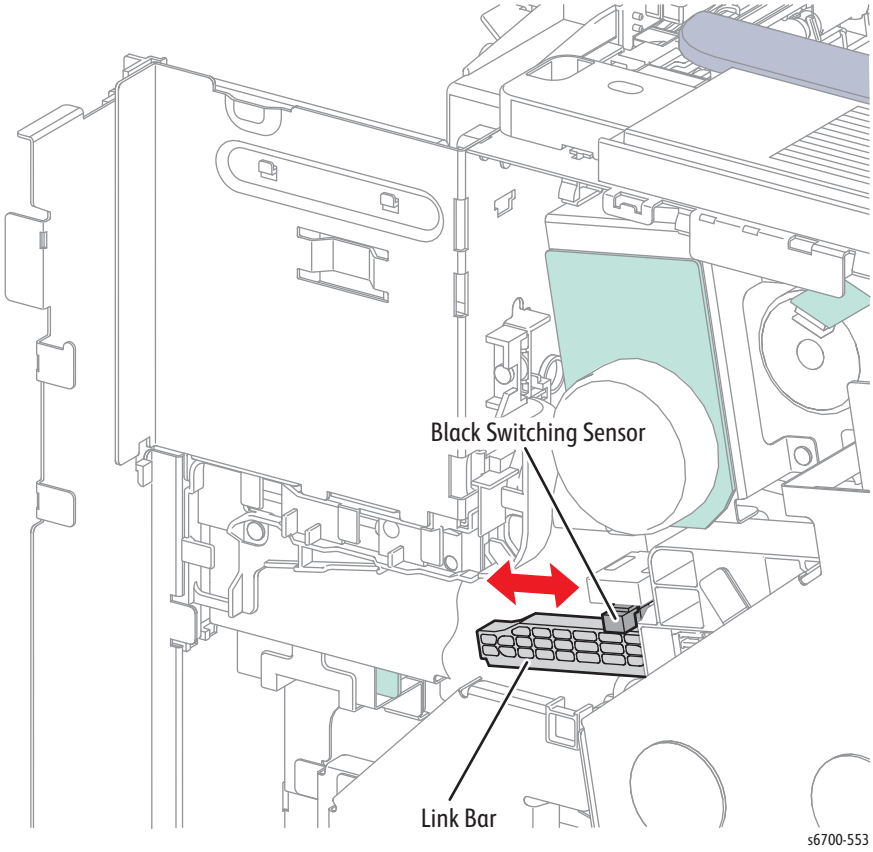
## Tray 2 Size Switch

1. Remove Tray 2.
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 72.
6. Touch Tray 2 Size Sensor 1 or 2.
7. Push each switch actuator to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



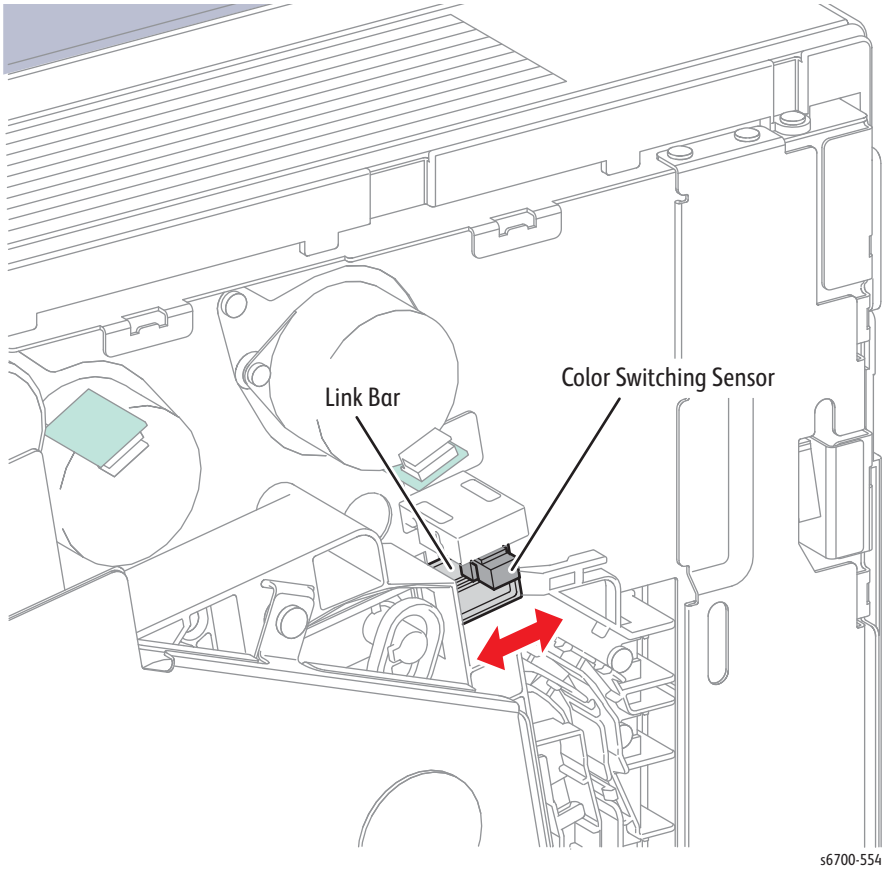
## Black Switching Sensor

1. Access, but do not remove the Black Switching Sensor (page 8-145).
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 93.
6. Touch Black Switching Sensor.
7. Slide the link bar to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



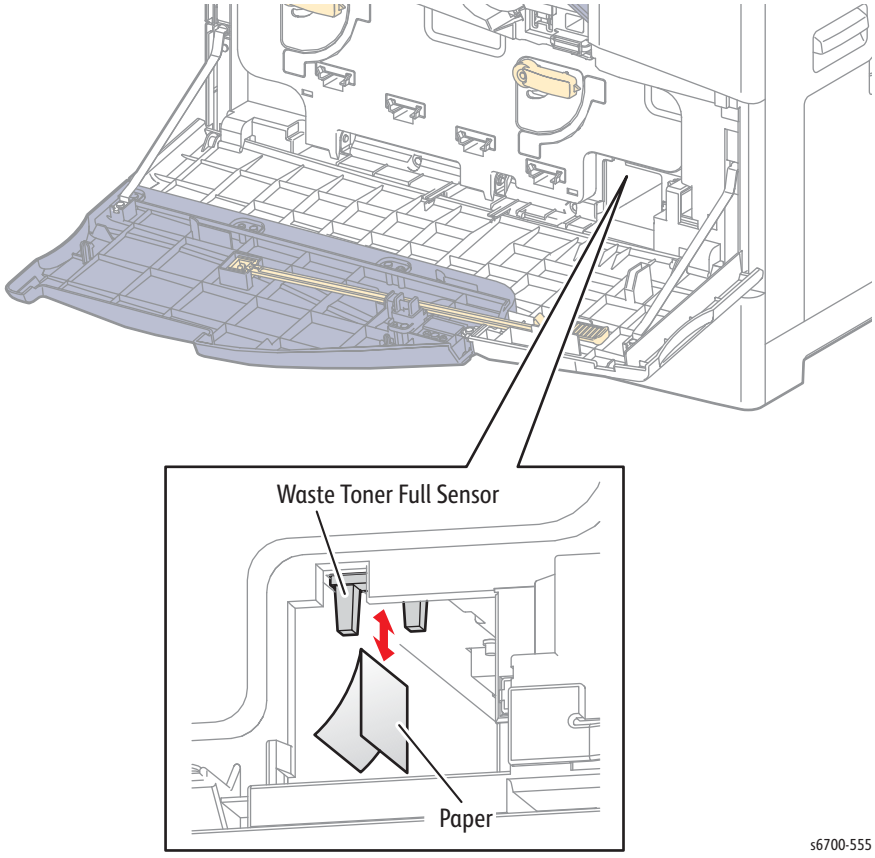
## Color Switching Sensor

1. Access, but do not remove the Color Switching Sensor (page 8-149).
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 93.
6. Touch Color Switching Sensor.
7. Slide the link bar to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



## Waste Toner Full Sensor

1. Open the Front Door.
2. Remove the Waste Toner Cartridge (page 8-16).
3. Access Service Diagnostics (page 4-7).
4. Touch Diagnostics.
5. Touch dc330 Component Control.
6. Touch the Chain pull-down and select Chain 91.
7. Touch Waste Toner Full Sensor.
8. Block the sensor to toggle the signal (On/Off).
9. Touch Stop/Stop All to stop the test.



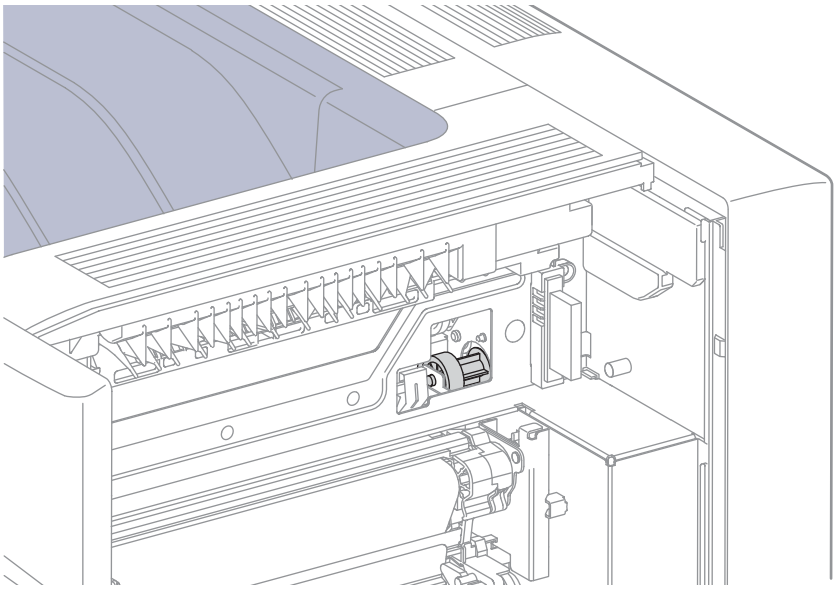
## Fuser Drive Assembly

**Warning**

Allow the Fuser to cool before servicing the printer.

In typical office environments the Fuser Drive Assembly is audible during testing. If background noise is a problem, remove the Fuser (page 8-17) and defeat the Interlock Switch to directly view operation of the Fuser Drive Assembly.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Fuser Motor (High, Med, or Low).
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.

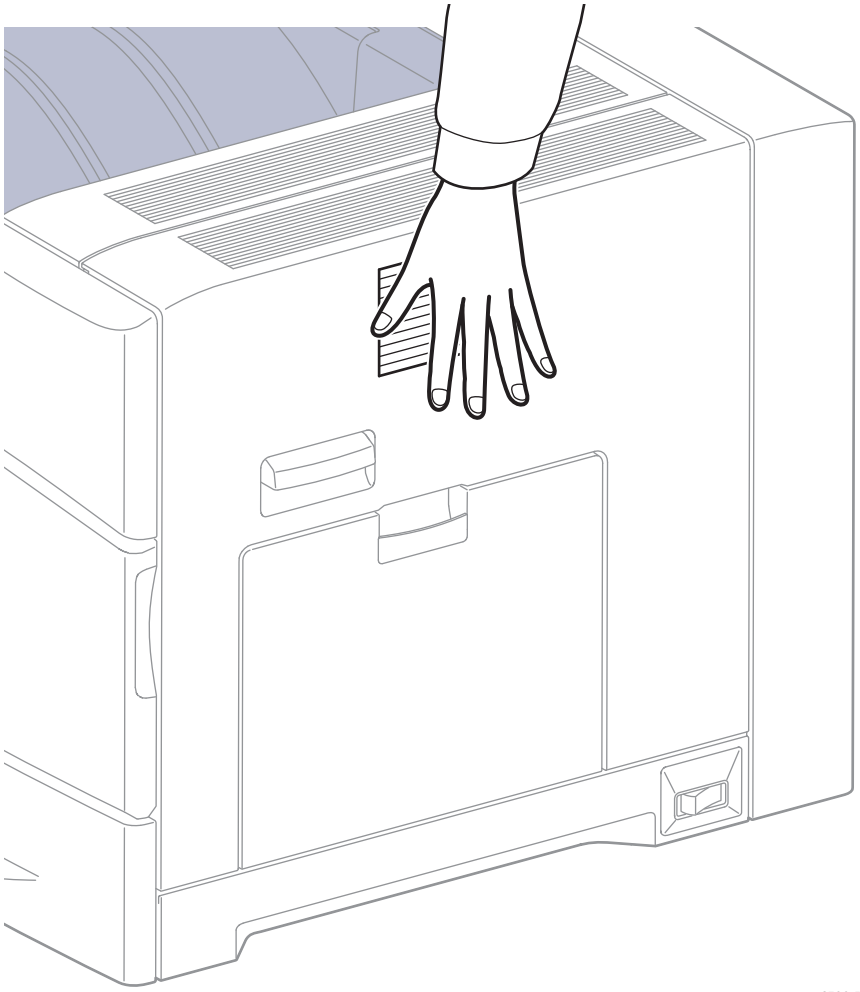


s6700-556

## Fuser Fan

Confirm operation by airflow from the Fuser Fan vent.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Fuser Fan (High or Low).
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.

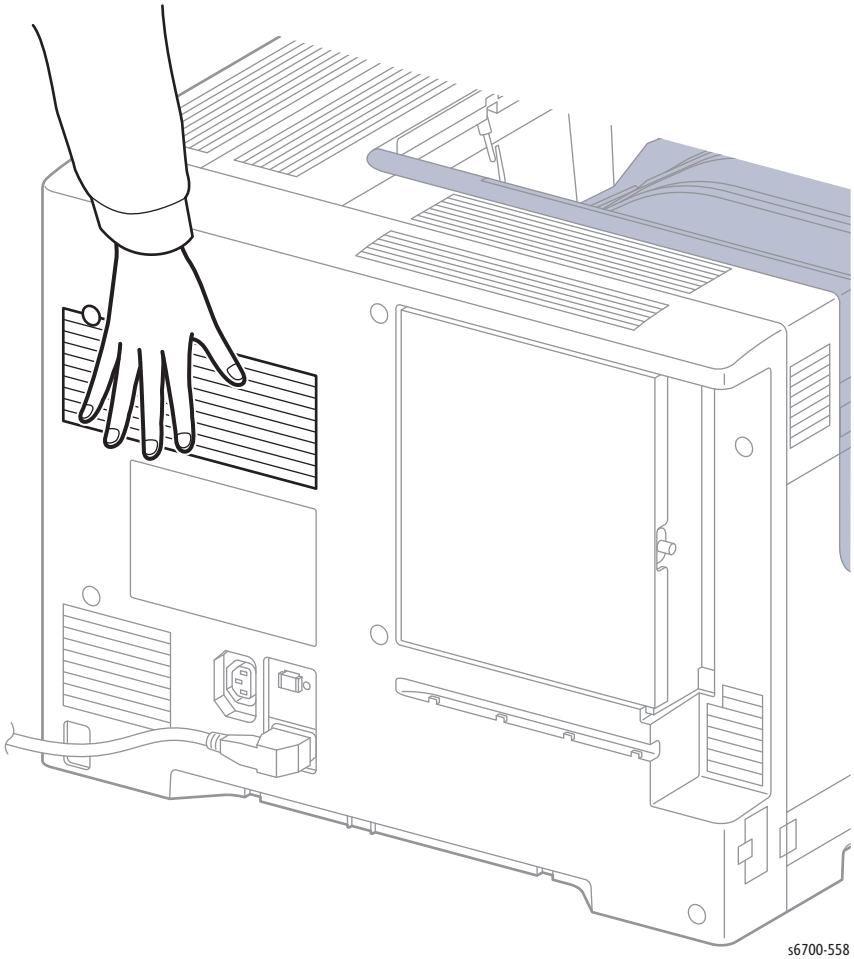


s6700-557

## LVPS Fan

Confirm operation by airflow from the LVPS Fan vent.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 42.
5. Touch LVPS Fan (High or Low).
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.

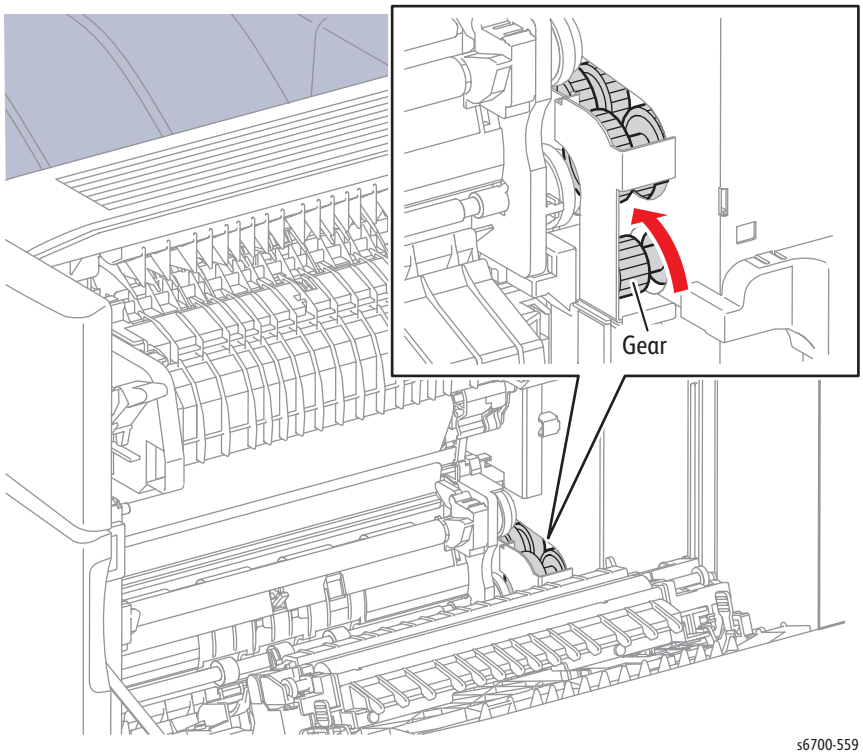


s6700-558

## Feed Drive Assembly

In typical office environments the Feed Drive Assembly is audible during testing. If background noise is a problem, open the Right Door and defeat the Interlock Switch to directly view operation of the Feed Drive Assembly.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Paper Feed Motor (High, Med or Low).
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.



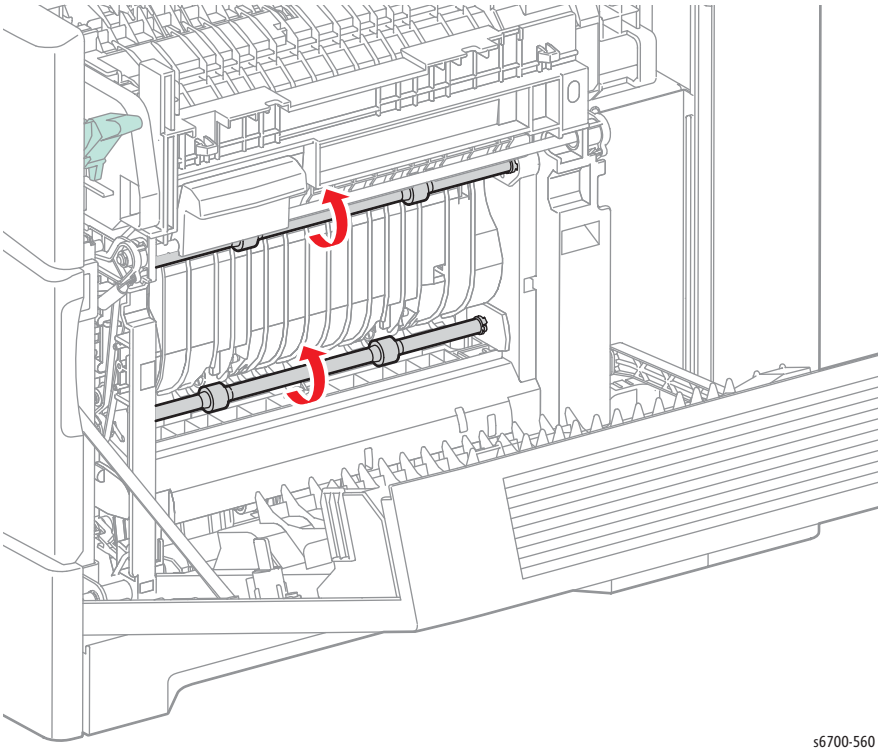

s6700-559

## Duplex Dive Clutch

The Duplex Drive Clutch is engaged to drive the Duplex Rollers. Use the Duplex Roller test to check operation of the Duplex Drive Clutch.

In typical office environments the Duplex Rollers are audible during testing. If background noise is a problem, open the Right Door, raise the duplex frame and defeat the Interlock Switch to directly view operation of the Duplex Rollers.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Duplex Roller.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.



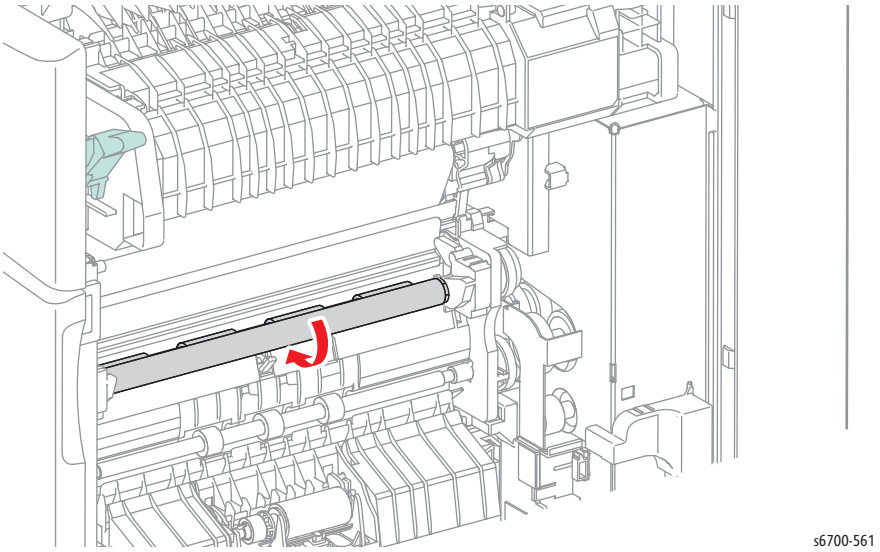
s6700-560

## Registration Clutch

The Registration Clutch is engaged to drive the registration rollers. Use the Registration Roller test to check operation of the Registration Clutch.

In typical office environments the registration rollers are audible during testing. If background noise is a problem, open the Right Door and defeat the Interlock Switch to directly view operation of the registration rollers.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Registration Roller.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.

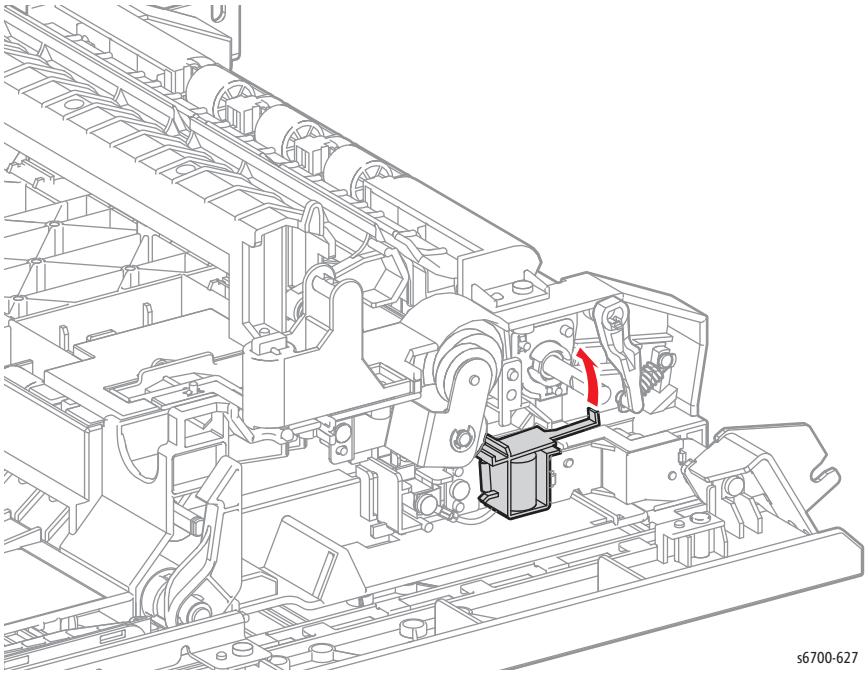


s6700-561

## Tray 1 Feed Solenoid

In typical office environments the Tray 1 Feed Solenoid is audible during testing. If background noise is a problem, open the Right Door and defeat the Interlock Switch to directly view operation of the Tray 1 Feed Solenoid plunger located on the duplex frame.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 71.
5. Touch Tray 1 Feed Solenoid.
6. Touch Start to perform the test.The test automatically stops.

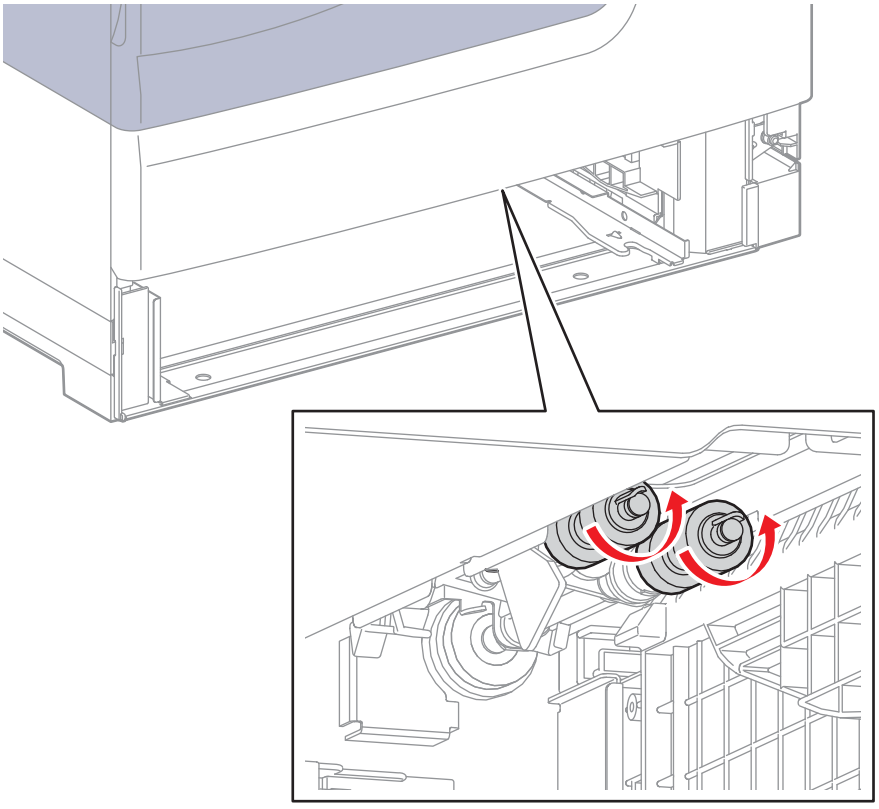


## Tray 2 Feed Clutch

The Tray 2 Feed Clutch is engaged to drive the Tray 2 Feed Rollers. Use the Tray 2 Feed Roller test to check operation of the Tray 2 Feed Clutch.

In typical office environments the Tray 2 Feed Rollers are audible during testing. If background noise is a problem, remove Tray 2 to directly view operation of the Tray 2 Feed Rollers.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Tray 2 Feed Roller.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.



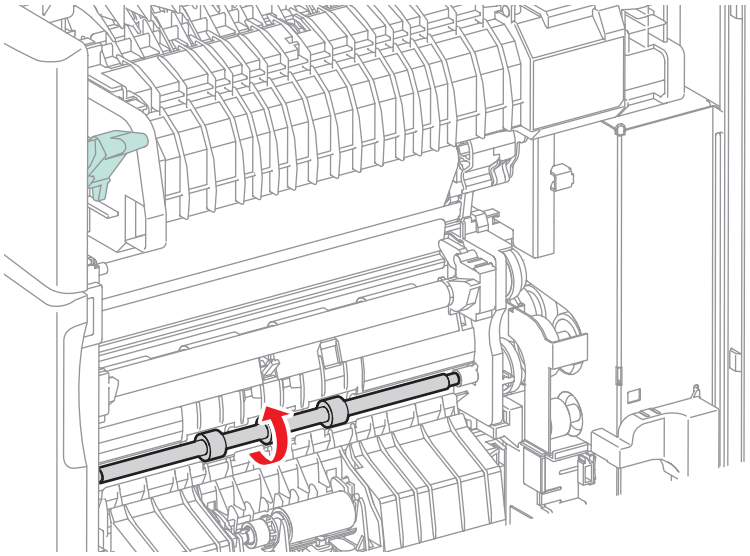
s6700-562

## Tray 2 Take Away Clutch

The Tray 2 Take Away Clutch is engaged to drive the Tray 2 take away roller. Use the Tray 2 Take Away Roller test to check operation of the Tray 2 Take Away Clutch.

In typical office environments the Tray 2 take away roller is audible during testing. If background noise is a problem, open the Right Door and defeat the Interlock Switch to directly view operation of the Tray 2 take away roller.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Tray 2 Take Away Roller.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.



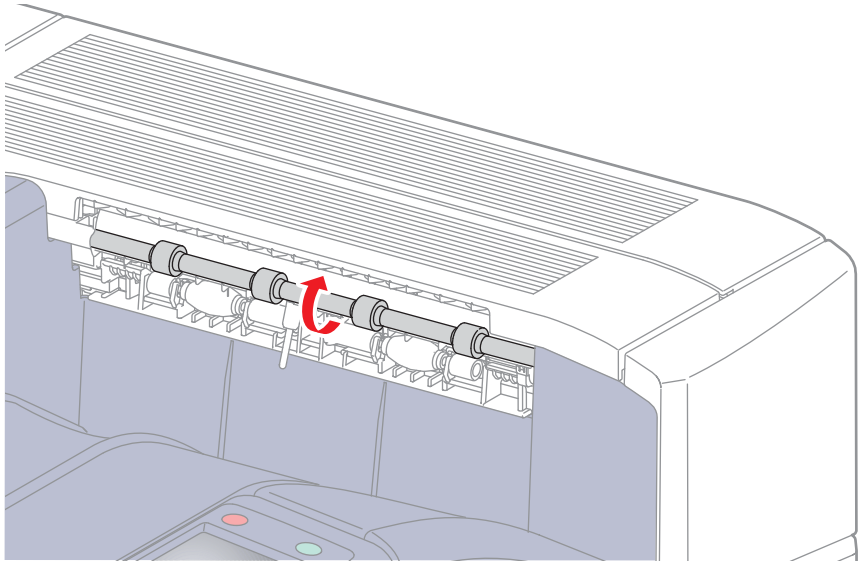
s6700-563

## Exit Clutch

The exit clutch, part of the Exit Drive Assembly, is engaged to drive the exit roller with the Fuser Drive Assembly. Use the Exit Roller Forward test to check operation of the exit clutch.

In typical office environments the exit roller is audible during testing. If background noise is a problem, open the Right Door, defeat the Interlock Switch, and open the Fuser jam access to directly view operation of the exit roller.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Exit Roller Forward.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.



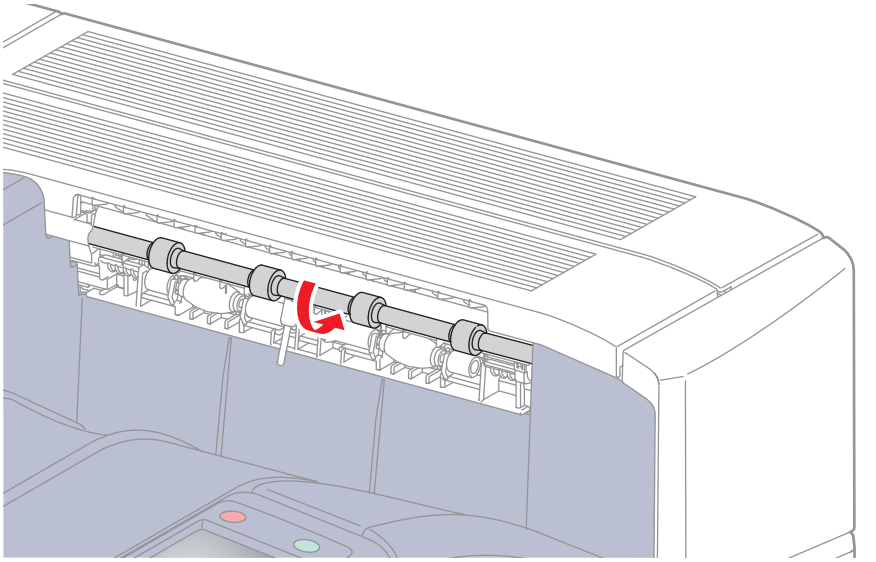
s6500-564

## Exit Inverter Clutch

The exit inverter clutch, part of the Exit Drive Assembly, is engaged to drive the exit roller in reverse with the Fuser Drive Assembly. Use the Exit Roller Reverse test to check operation of the exit inverter clutch.

In typical office environments the exit roller is audible during testing. If background noise is a problem, open the Right Door, defeat the Interlock Switch, and open the Fuser jam access to directly view operation of the exit roller.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Exit Roller Reverse.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.



s6500-565

## Exit Inverter Solenoid

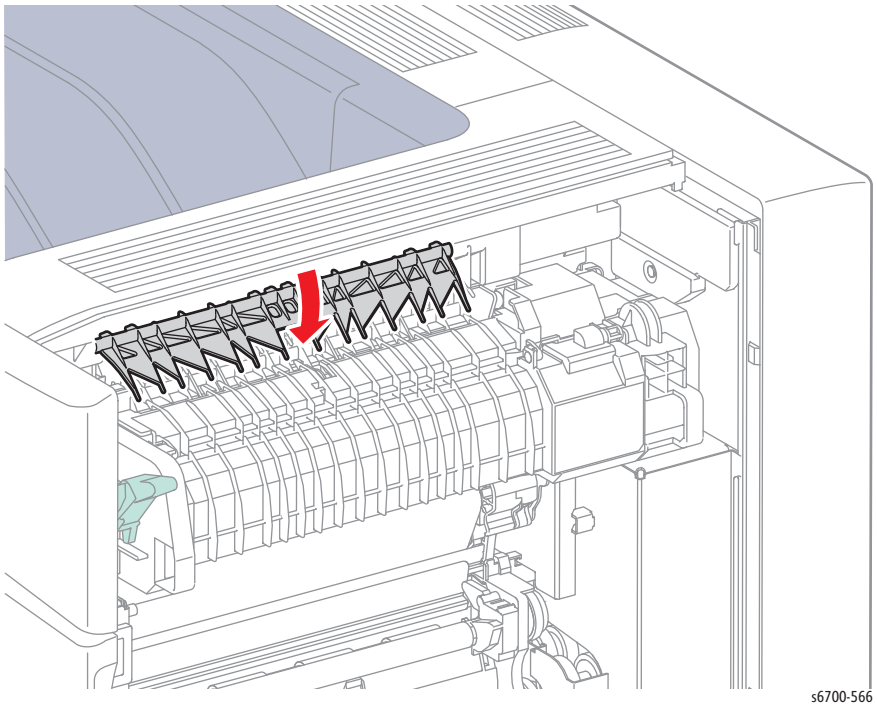
**Warning**

Allow the Fuser to cool before servicing the printer.

The exit inverter solenoid, part of the Invert Chute Assembly, actuates the diverter gate during duplex printing. Use the Exit Solenoid test to check operation of the exit inverter solenoid.

In typical office environments the exit inverter solenoid is audible during testing. If background noise is a problem, open the Right Door, defeat the Interlock Switch, to directly view operation of the diverter gate.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 10.
5. Touch Exit Solenoid.
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.




s6700-566

## Imaging Unit Link Drive

**Caution**

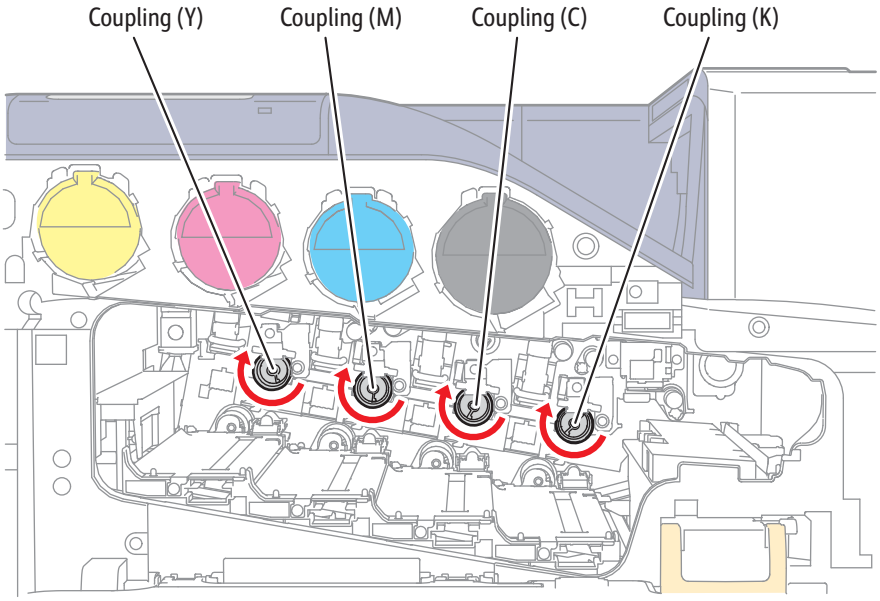
Cover the Imaging Units to prevent exposure to light.

**Caution**

Toner may collect on the Transfer Belt and leak from the Transfer Belt auger port. Use care when handling the Transfer Belt to avoid toner spills and belt damage.

In typical office environments the Imaging Unit Link Drive is audible during testing. If background noise is a problem, follow these steps to directly view operation of the Imaging Unit Link Drive.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Open the Front Cover.
5. Open the Right Door.
6. Open the Inner Frame Assembly.
7. Remove the Transfer Belt (page 8-12).
8. Remove the Imaging Units (page 8-14).
9. Defeat the Front and Right Door Interlock Switches.
10. Touch the Chain pull-down and select Chain 93.
11. Touch Xero Drive Motor (High, Med, or Low).
12. Touch Start to perform the test.
13. Touch Stop/Stop All to stop the test.




s6700-567

## Color Mode Switching Clutch

**Caution**

Cover the Imaging Units to prevent exposure to light.

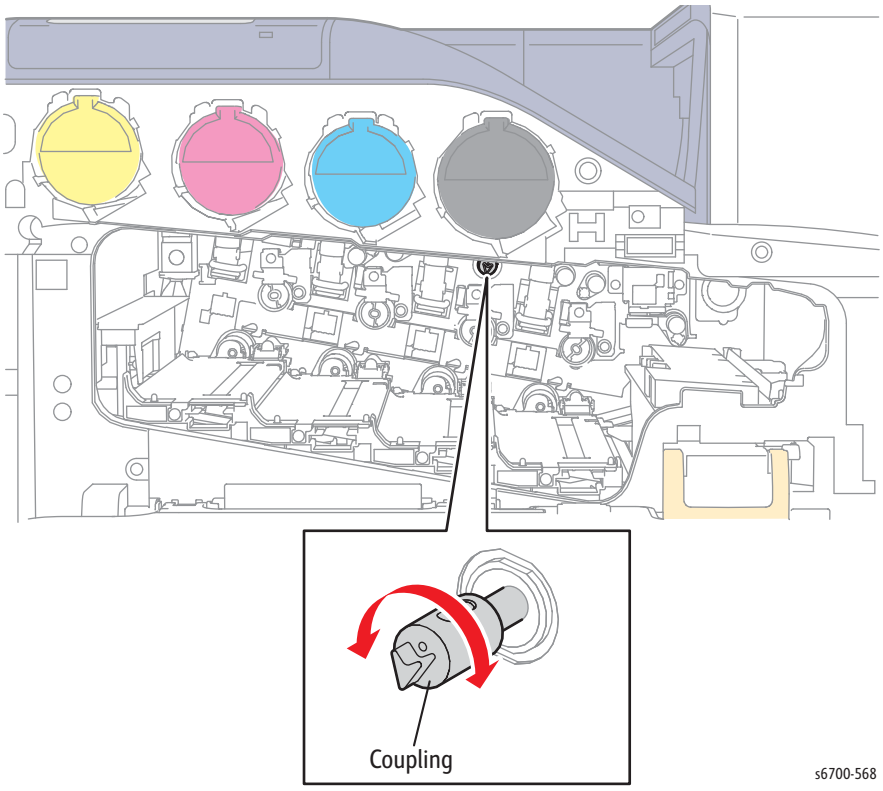
**Caution**

Toner may collect on the Transfer Belt and leak from the Transfer Belt auger port. Use care when handling the Transfer Belt to avoid toner spills and belt damage.

The color mode switching clutch is part of the Feed Drive Assembly.

In typical office environments the Imaging Unit Link Drive is audible during testing. If background noise is a problem, follow these steps to directly view operation of the Imaging Unit Link Drive.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Open the Front Cover.
5. Open the Right Door.
6. Open the Inner Frame Assembly.
7. Remove the Transfer Belt (page 8-12).
8. Remove the Imaging Units (page 8-14).
9. Defeat the Front Cover and Right Door Interlock Switches.
10. Touch the Chain pull-down and select Chain 93.
11. Touch Xero Clutch.
12. Touch Start to perform the test.
13. Touch Stop/Stop All to stop the test.



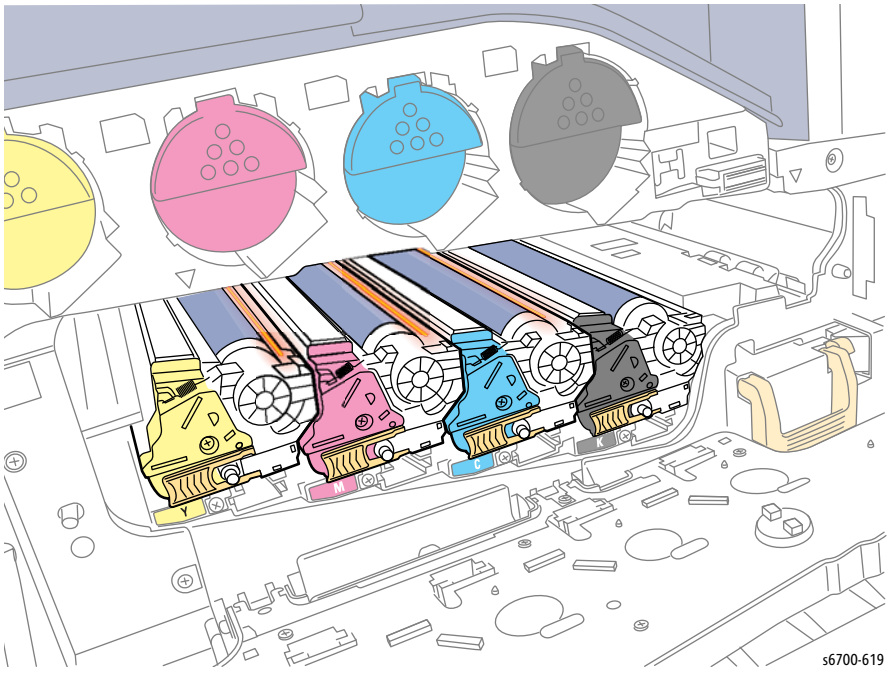
## Erase LED Assemblies

**Caution**

Toner may collect on the Transfer Belt and leak from the Transfer Belt auger port. Use care when handling the Transfer Belt to avoid toner spills and belt damage.

The Erase LEDs illuminate a strip along the length of the Imaging Units during testing. Follow these steps to directly view operation of the Erase LED Assemblies.

1. Access Service Diagnostics (page 4-7).
2. Touch **Diagnostics**.
3. Touch **dc330 Component Control**.
4. Open the Front Cover.
5. Open the Right Door.
6. Open the Inner Frame Assembly.
7. Remove the Transfer Belt (page 8-12).
8. **Touch the Chain** pull-down and select **Chain** 93.
9. Touch Erase LED CMY or Erase LED K.
10. Touch **Start** to perform the test.
11. Touch **Stop/Stop All** to stop the test.



## Developer Drive Assemblies

**Caution**

Cover the Imaging Units to prevent exposure to light.

**Caution**

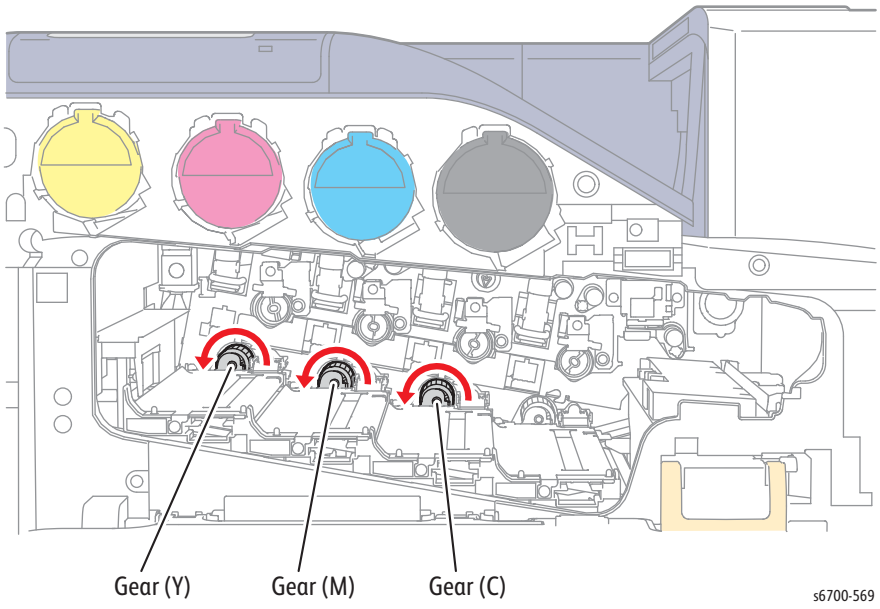
Toner may collect on the Transfer Belt and leak from the Transfer Belt auger port. Use care when handling the Transfer Belt to avoid toner spills and belt damage.

**Note**

Selecting CMY Dev Drive engages the three drive gears shown below. The K Dev Drive test engages a single drive gear for the Black Imaging Unit.

In typical office environments the Developer Drive Assemblies are audible during testing. If background noise is a problem, follow these steps to directly view operation of the Developer Drive Assemblies.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Open the Front Cover.
5. Open the Right Door.
6. Open the Inner Frame Assembly.
7. Remove the Transfer Belt (page 8-12).
8. Remove the Imaging Units (page 8-14).
9. Defeat the Front and Right Door Interlock Switches.
10. Touch the Chain pull-down and select Chain 93.
11. Touch YMC or K Dev Drive Motor (High, Med, or Low).
12. Touch Start to perform the test.
13. Touch Stop/Stop All to stop the test.



## Toner Dispense Assembly

**Caution**

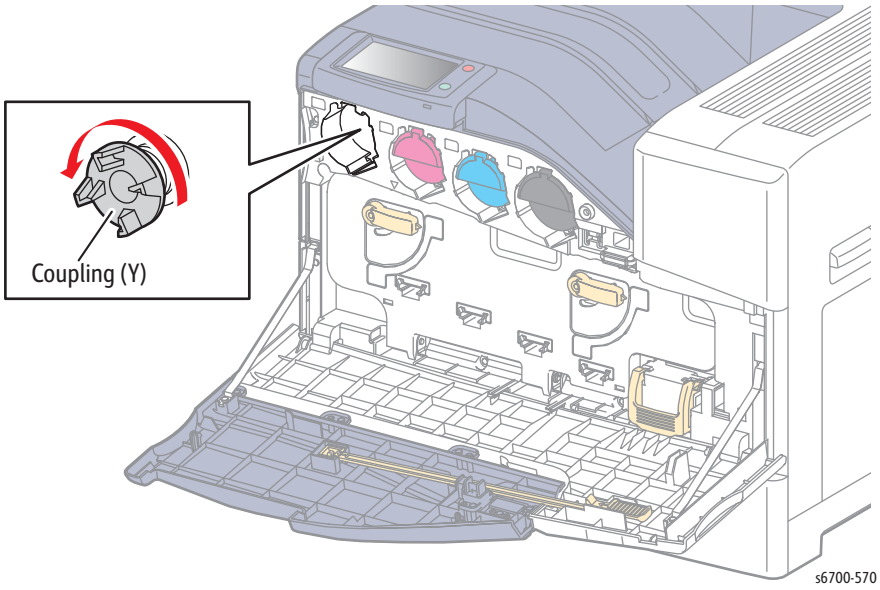
Remove the Toner Cartridges if testing the toner motors longer than 2 or 3 seconds.

**Caution**

Toner may leak from the Toner Cartridge delivery port. Use care when handling the Toner Cartridges to avoid toner spills.

In typical office environments the toner motors are audible during testing. If background noise is a problem, follow these steps to directly view operation of the Toner Dispense Assembly.

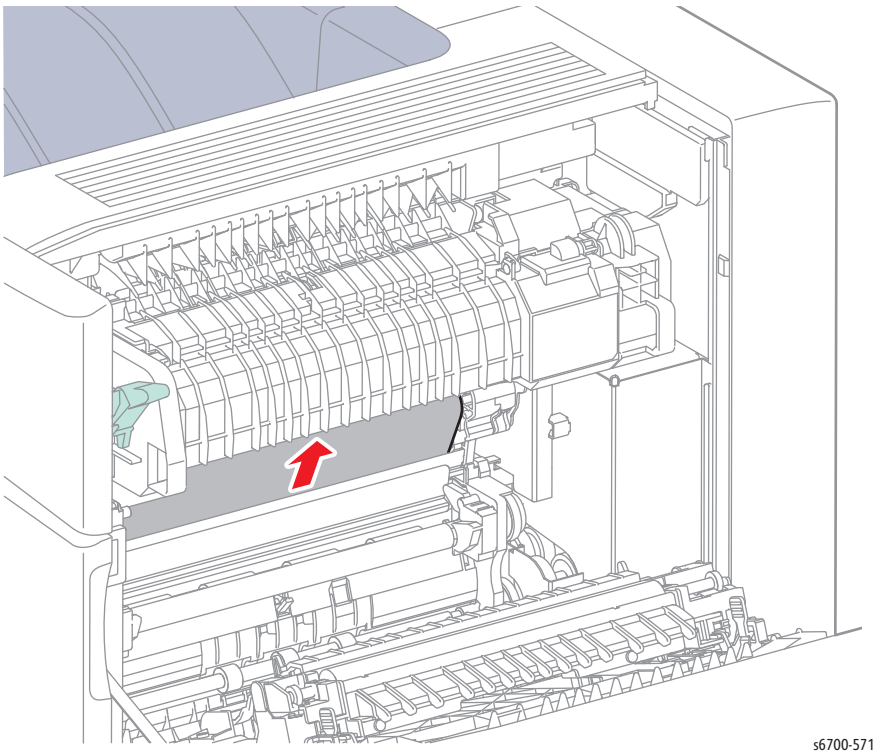
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Open the Front Cover.
5. Remove the Toner Cartridges (page 8-18)
6. Defeat the Front Cover Interlock Switches.
7. Touch the Chain pull-down and select Chain 93.
8. Touch Y, M, C or K Toner Motor (High, Med, or Low).
9. Touch Start to perform the test.
10. Touch Stop/Stop All to stop the test.



## Transfer Belt Drive Assembly

In typical office environments the Transfer Belt Drive Assembly is audible during testing. If background noise is a problem, follow these steps to directly view operation of the Transfer Belt being driven by the Transfer Belt Drive Assembly.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Open the Right Door.
5. Defeat the Right Cover Interlock Switches.
6. Touch the Chain pull-down and select Chain 94.
7. Touch IBT Motor (High, Med, or Low).
8. Touch Start to perform the test.
9. Touch Stop/Stop All to stop the test.

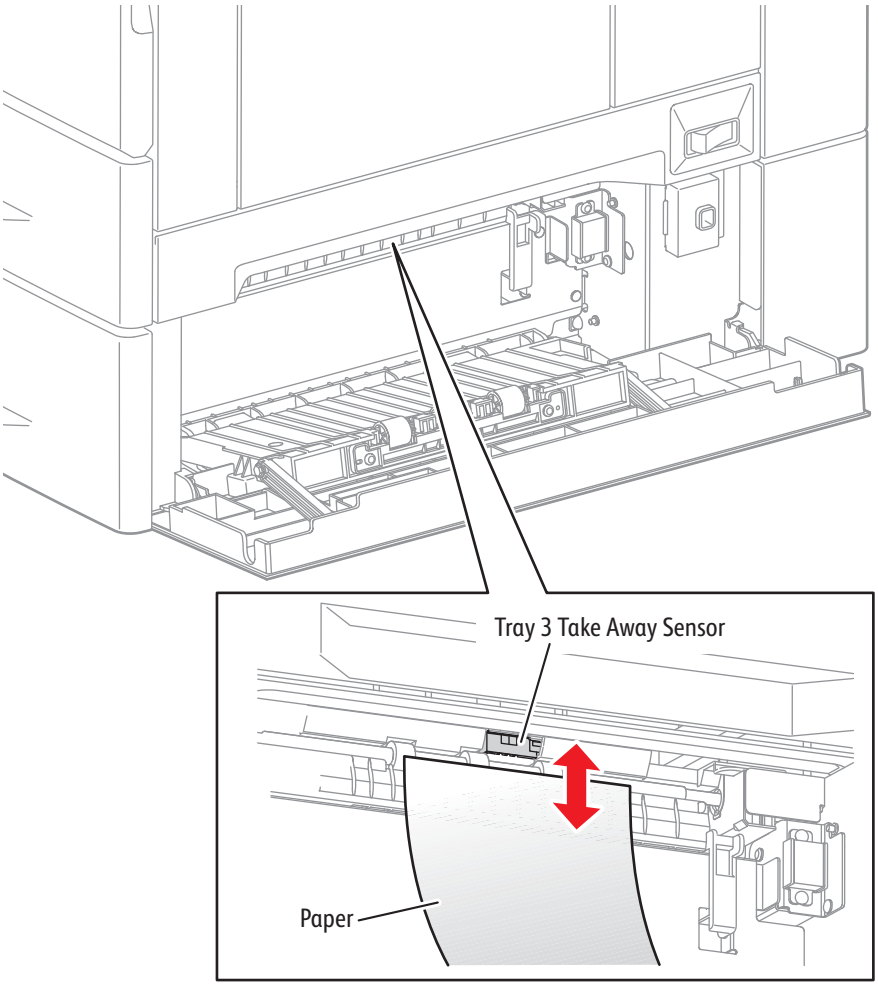


s6700-571

# Optional Feeder Test Procedures

## Tray 3 ~ 6 Take Away Sensor

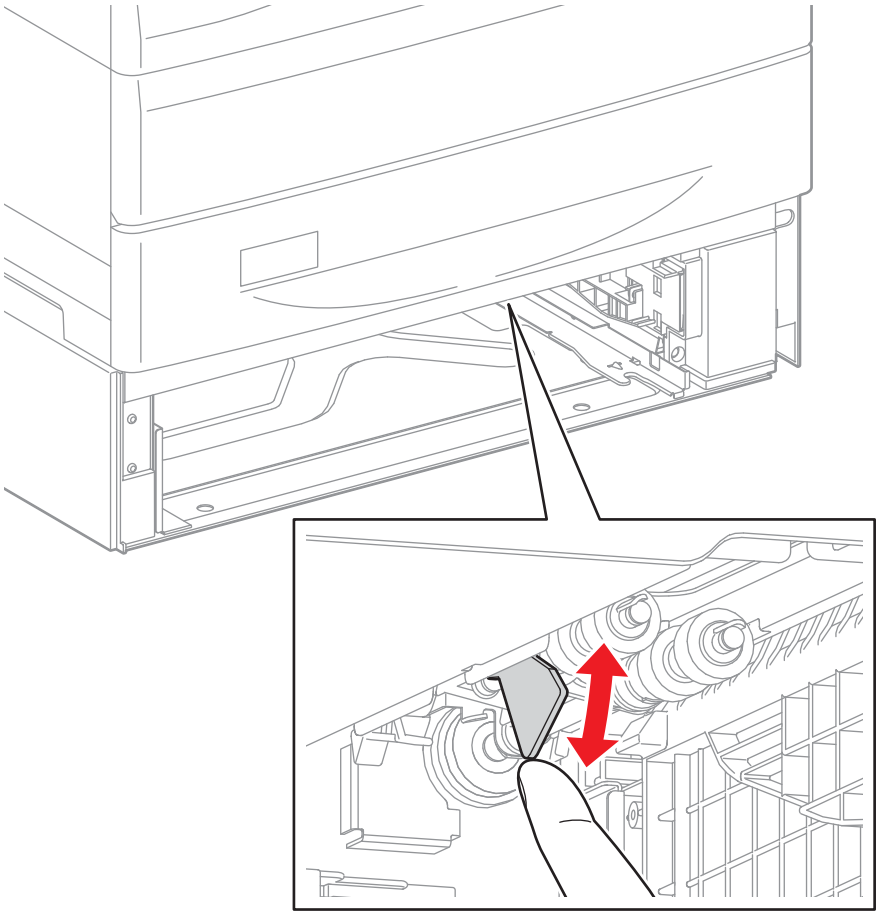
1. Open the Feeder Right Door.
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 73, 74, 75, or 76.
6. Touch Tray Paper Path Sensor.
7. Insert a sheet of media into the media path to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.




s6700-572

## Tray 3 ~ 6 No Paper Sensor

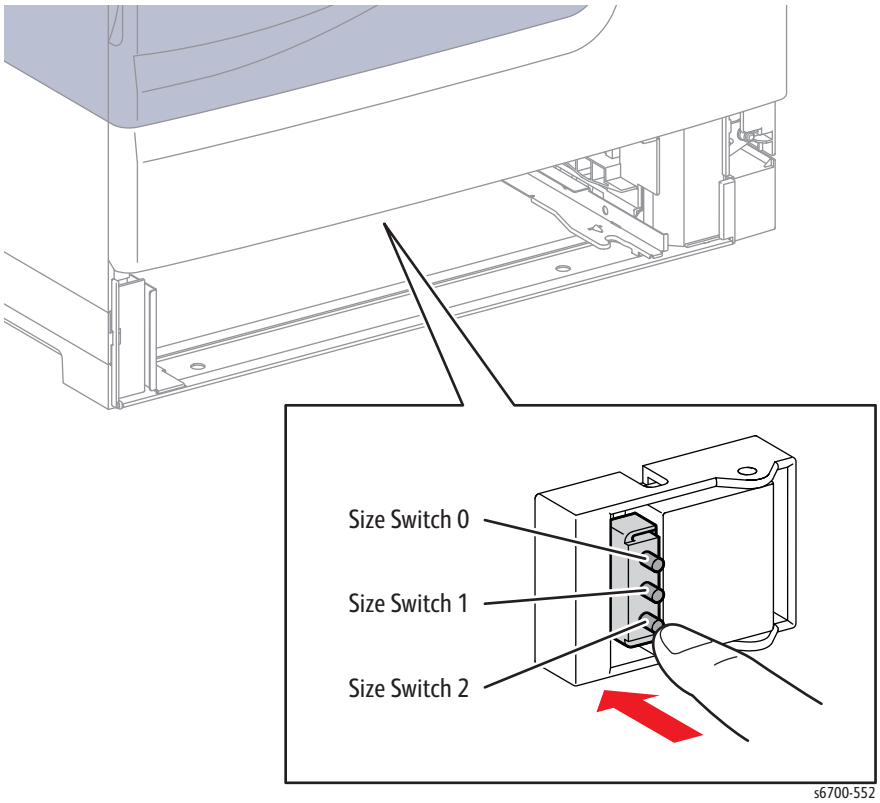
1. Remove the Tray.
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 73, 74, 75, or 76.
6. Touch Tray No Paper Sensor.
7. Lift and release the No paper Sensor actuator to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



s6700-573

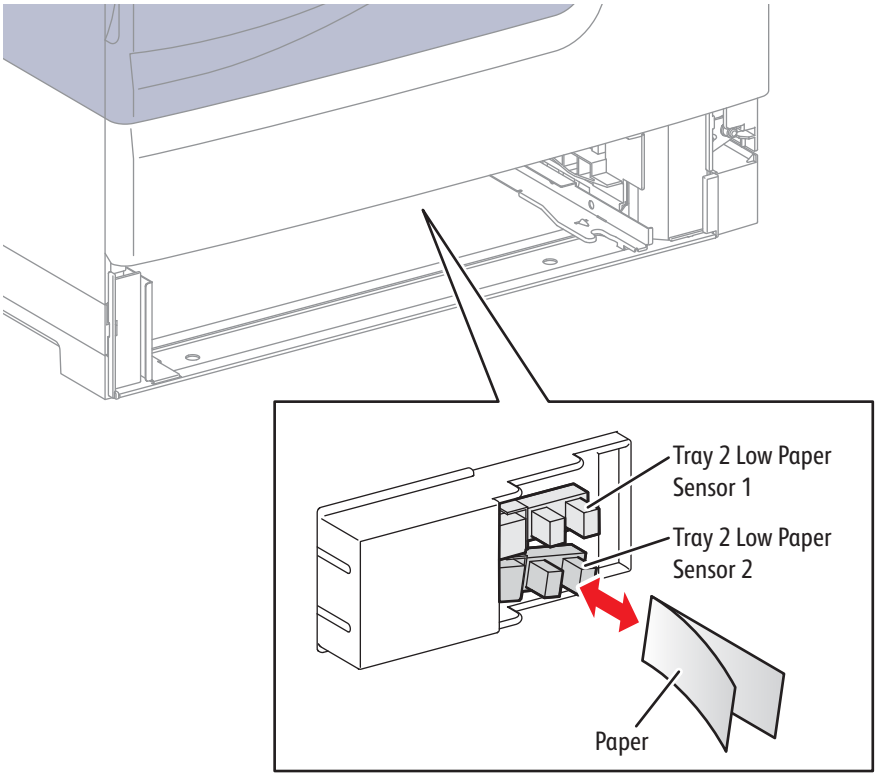
## Tray 3 ~ 6 Size Switch

1. Remove the Tray.
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 73, 74, 75, or 76.
6. Touch Tray Size Sensor 0, 1 or 2.
7. Push each switch actuator to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



## Tray 3 ~ 6 Low Paper Sensors 1 and 2

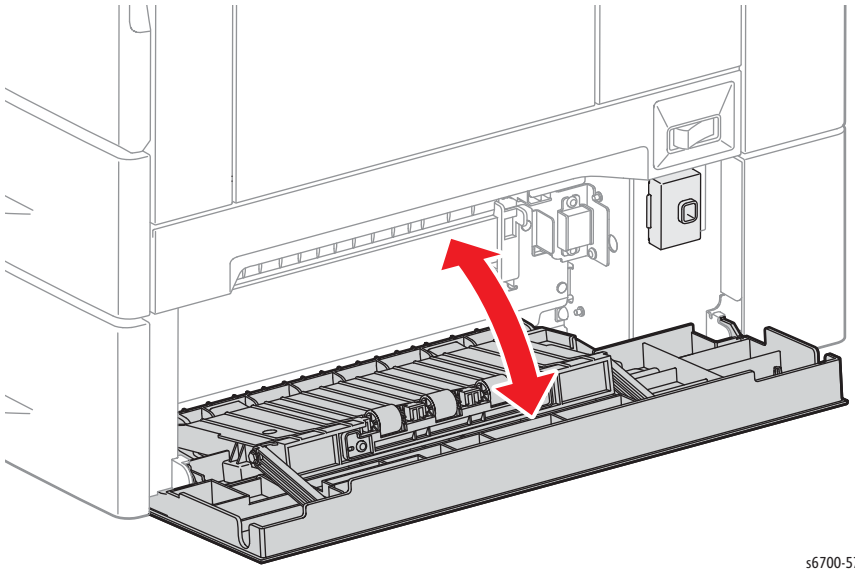
1. Remove the Tray.
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 73, 74, 75, or 76.
6. Touch Tray Low Paper Sensor 1 or 2.
7. Block the sensor to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.




s6700-551

## Tray 3 ~ 6 Right Side Door Switch

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 73, 74, 75, or 76.
5. Touch Tray Right Side Door Switch.
6. Open and close the Right Door to toggle the signal (On/Off).
7. Touch Stop/Stop All to stop the test.

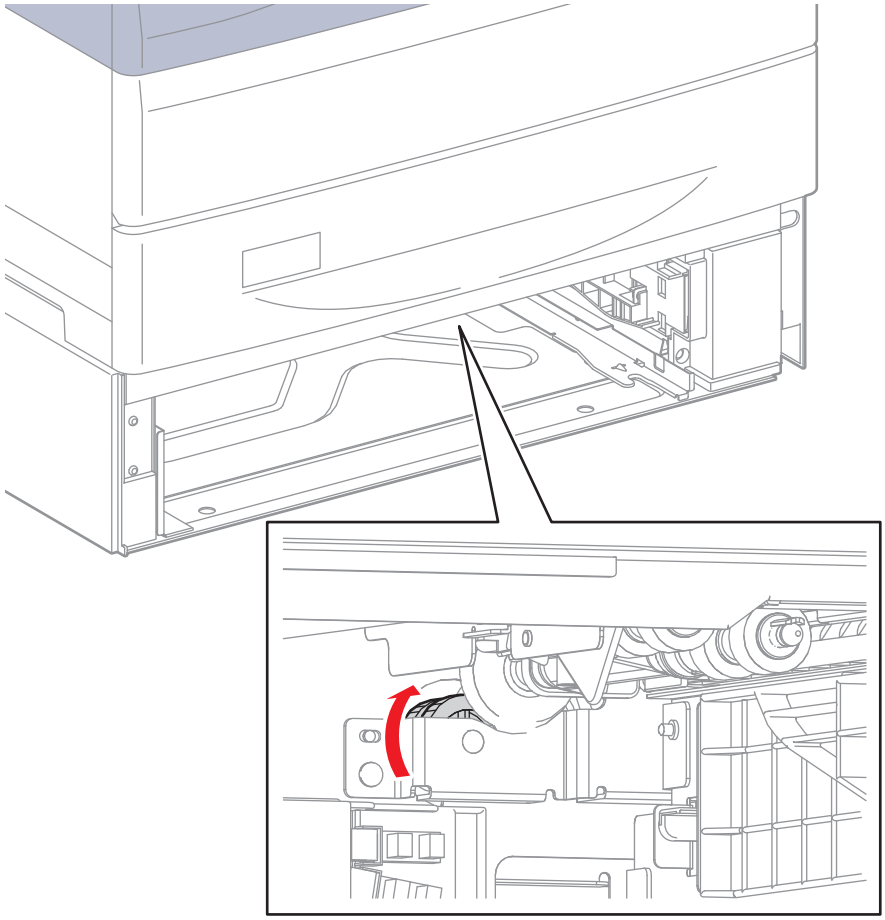


s6700-574

## Tray 3 ~ 6 Feed Drive Assembly

In typical office environments the Feed Drive Assembly for the Optional Feeders is audible during testing. If background noise is a problem, remove the Tray to directly view operation of the Feed Drive.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 73, 74, 75, or 76.
5. Touch Tray Feed Motor (High, Med, or Low).
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.



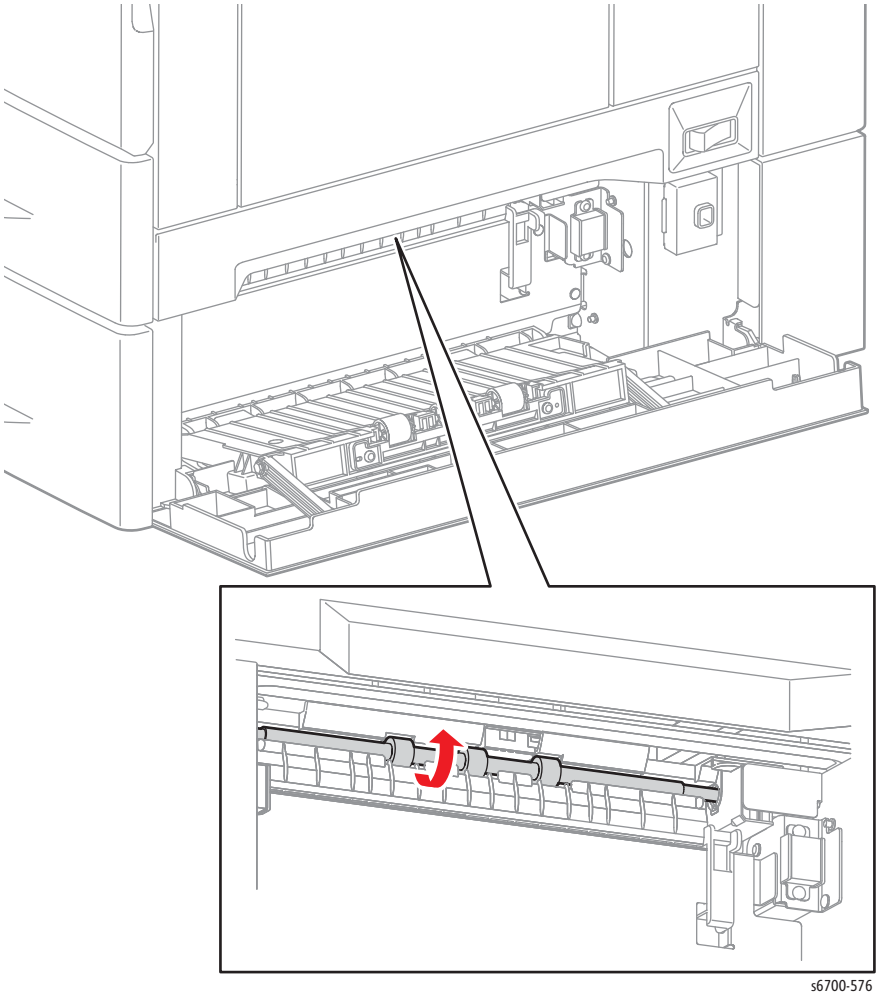
s6700-575

## Tray 3 ~ 6 Take Away Clutch

The Option Feeder take away clutches are engaged to drive the take away rollers. Use the Tray Take Away Roller test to check operation of the take away clutch.

In typical office environments the take away rollers for the Optional Feeders are audible during testing. If background noise is a problem, open the Feeder Right Side Door and defeat the Door Switch to directly view operation of the take away roller.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Tray Take Away Roller for the tray being tested.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.



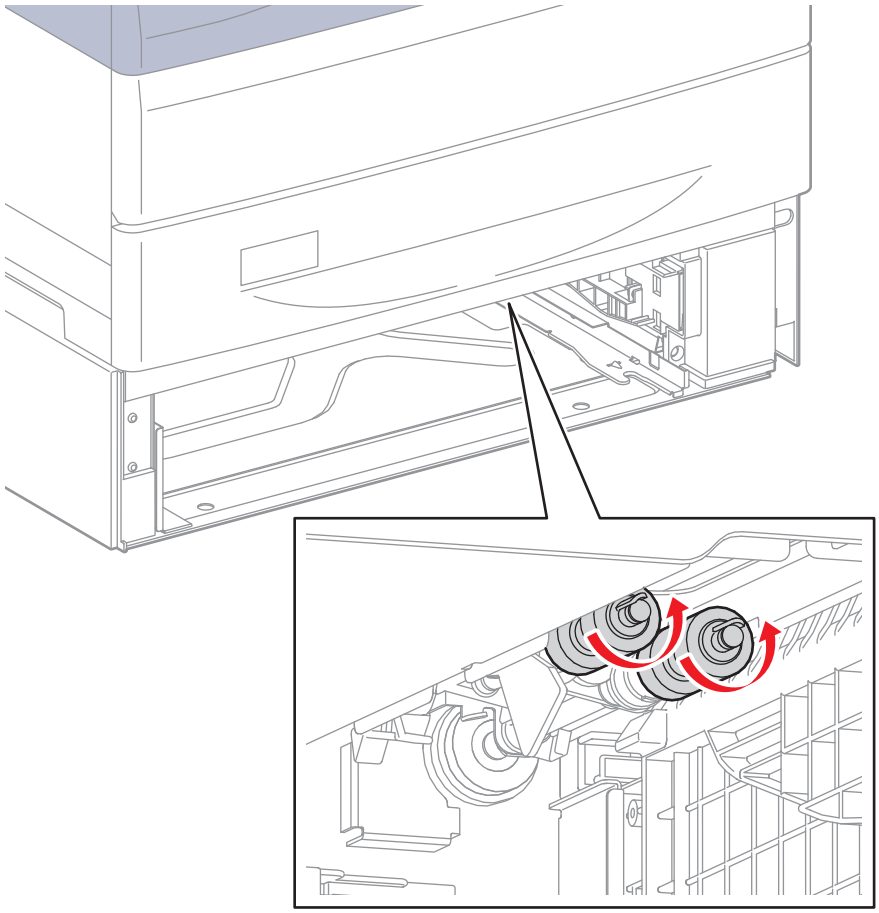
s6700-576

## Tray 3 ~ 6 Feed Clutch

The Option Feeder Feed Clutches are engaged to drive the Feed Rollers with the Feed Drive Assembly. Use the Tray Feed Roller test to check operation of the Feed Clutch.

In typical office environments the Feed Rollers for the Optional Feeders are audible during testing. If background noise is a problem, remove the Tray to directly view operation of the Feed Rollers.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc711 Roller Test.
4. Touch Tray Feed Roller for the tray being tested.
5. Touch Start to perform the test.
6. Touch Stop/Stop All to stop the test.

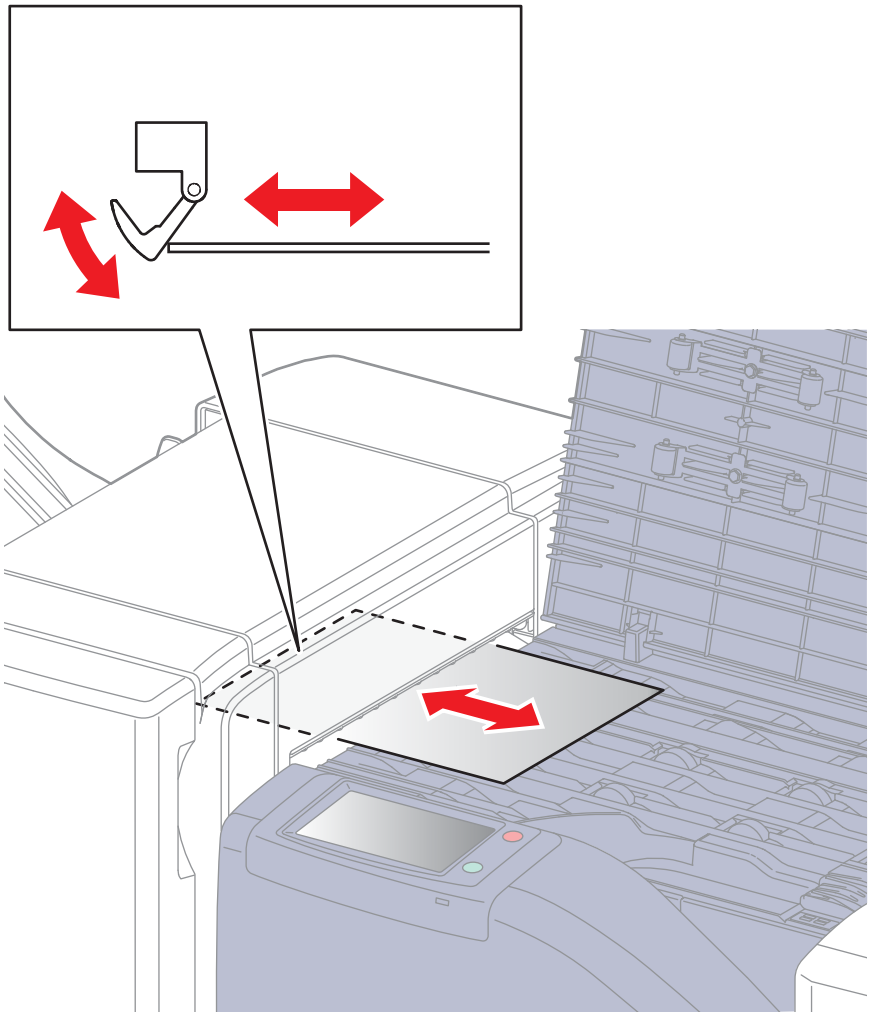


s6700-577

# Finisher Test Procedures

## Compile Tray Exit Sensor

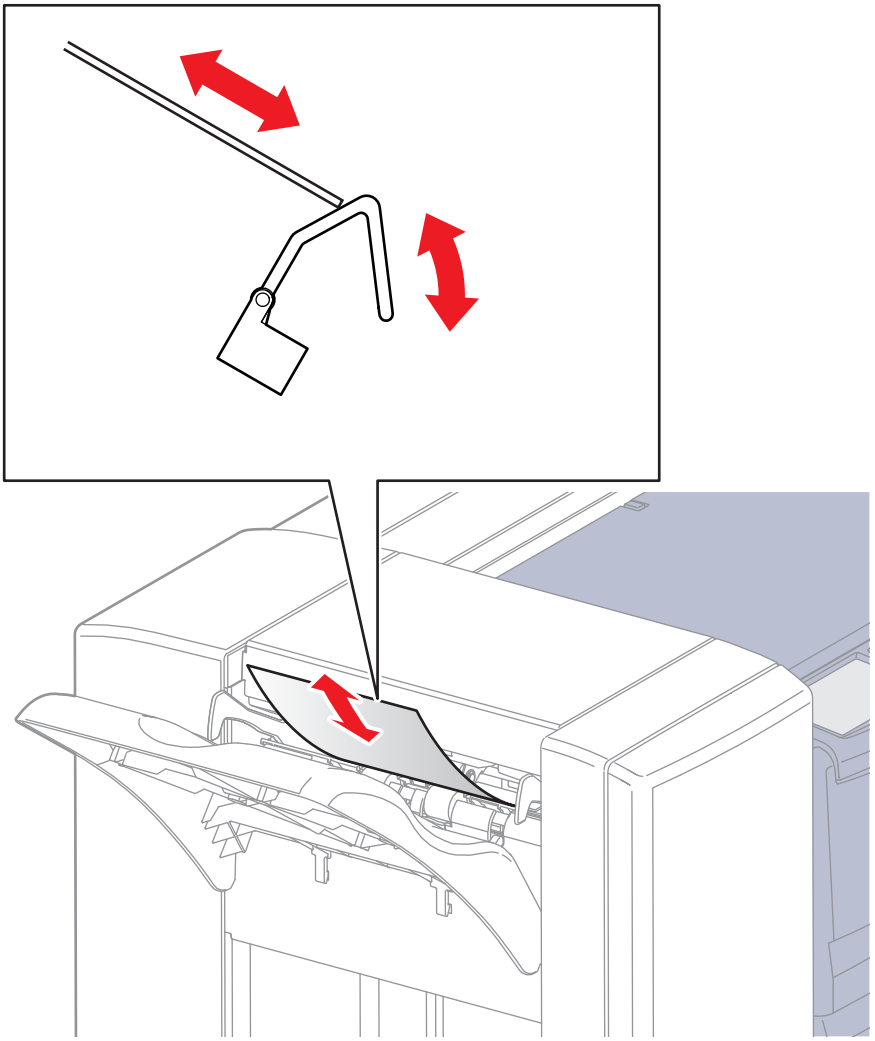
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Compile Exit Sensor.
6. Touch Start to perform the test.
7. Open the Horizontal Transport Cover.
8. Open the Finisher Front Door.
9. Insert a sheet into the media path. Using the Finisher jam knob to feed media through the Finisher, actuate the Compile Exit Sensor (On/Off).
10. Touch Stop/Stop All to stop the test.



s6700-578

## Compile Tray No Paper Sensor

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Compile Tray No Paper Sensor.
6. Touch Start to perform the test.
7. Open the Horizontal Transport Cover.
8. Open the Finisher Front Door.
9. Insert a sheet into the media path. Using the Finisher jam knob to feed media through the Finisher, actuate the Compile Tray No Paper Sensor (On/Off).
10. Touch Stop/Stop All to stop the test.



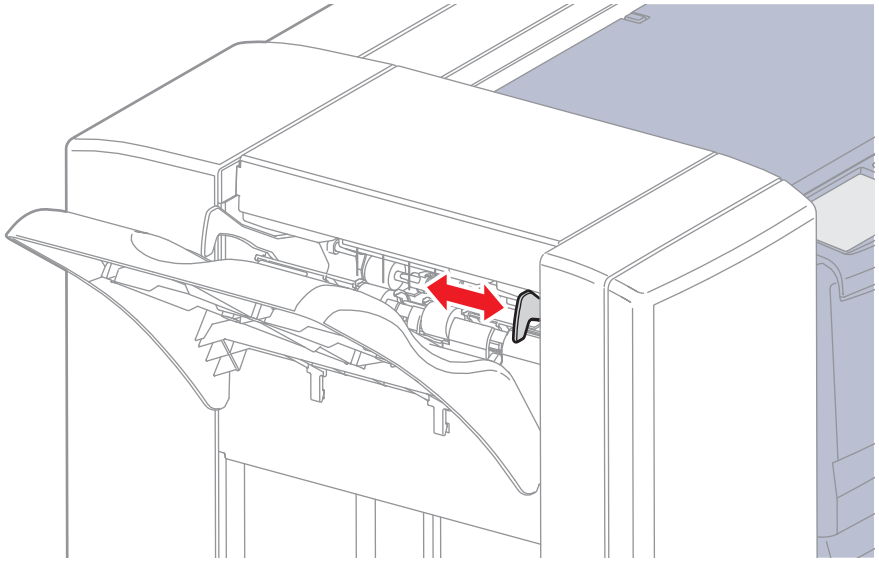
s6700-579

## Front and Rear Tamper Home Sensor

**Caution**

Use care when manually moving the tampers. Grasp the tamper as close to the tamper's base as possible and move the tamper slowly just enough to actuate the sensor.

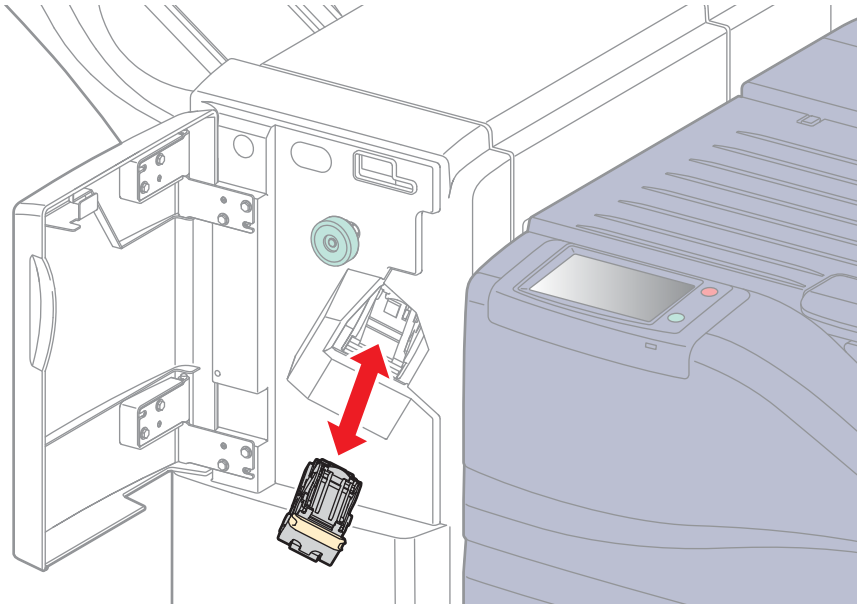
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Front or Rear Tamper Home Sensor.
6. Touch Start to perform the test.
7. Gently move the tamper in and out of home position (On/Off).
8. Touch Stop/Stop All to stop the test.



s6700-580

## Low Staple, Self Priming, and Staple Home Sensors

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Low Staple, Self Priming, or Staple Home Sensor.
6. Touch Start to perform the test.
7. Remove the Staple Cartridge to toggle the sensor (On/Off).
8. Touch Stop/Stop All to stop the test.



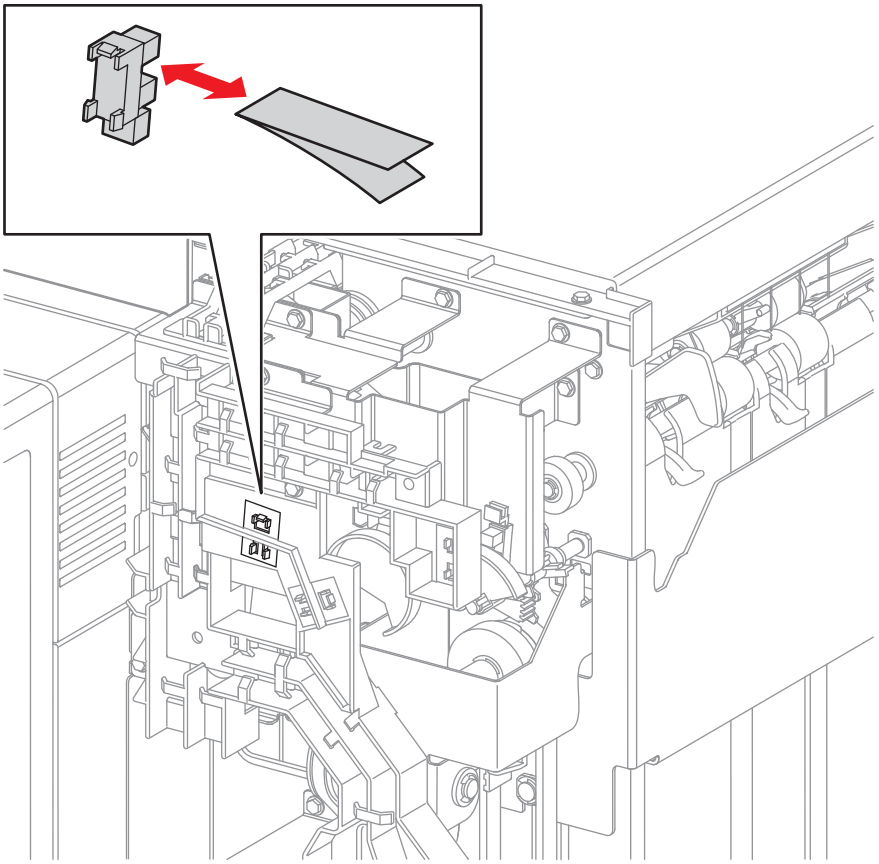
s6700-581

## Eject Clamp Home Sensor

**Note**

Restore all electrical connections to the Finisher following removal of the Rear Cover.

1. Remove the Finisher Rear Cover (page 8-240).
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 12.
6. Touch Eject Clamp Home Sensor.
7. Touch Start to perform the test.
8. Block the sensor to toggle the signal (On/Off).
9. Touch Stop/Stop All to stop the test.



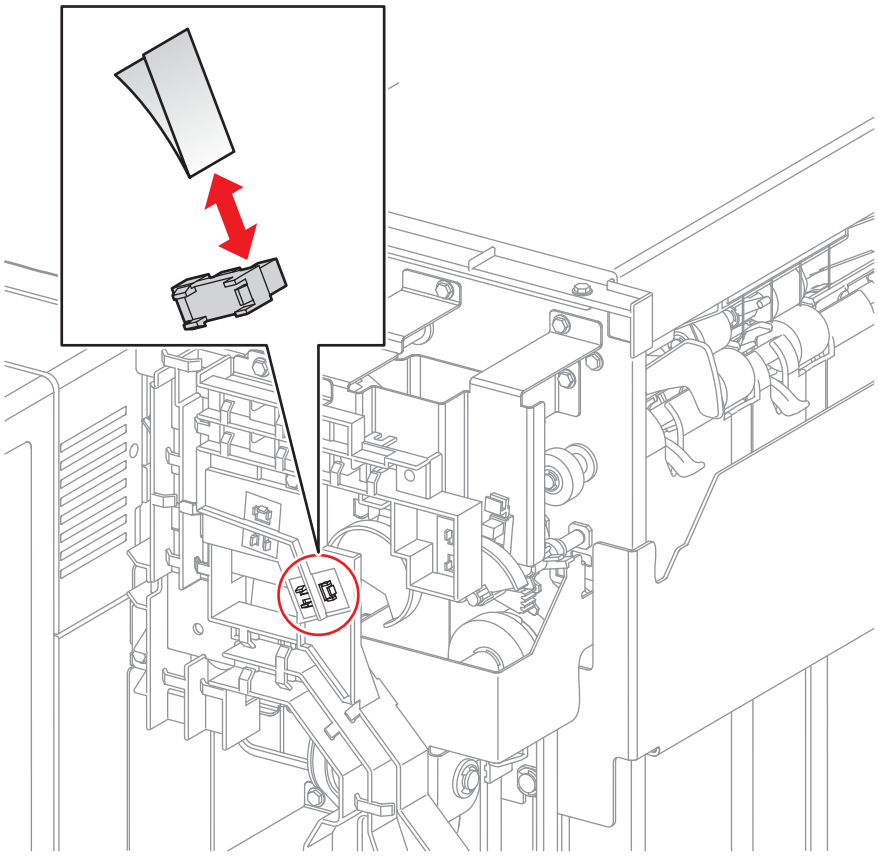
s6700-582

## Set Clamp Home Sensor

**Note**

Restore all electrical connections to the Finisher following removal of the Rear Cover.

1. Remove the Finisher Rear Cover (page 8-240).
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 12.
6. Touch Set Clamp Home Sensor.
7. Touch Start to perform the test.
8. Block the sensor to toggle the signal (On/Off).
9. Touch Stop/Stop All to stop the test.



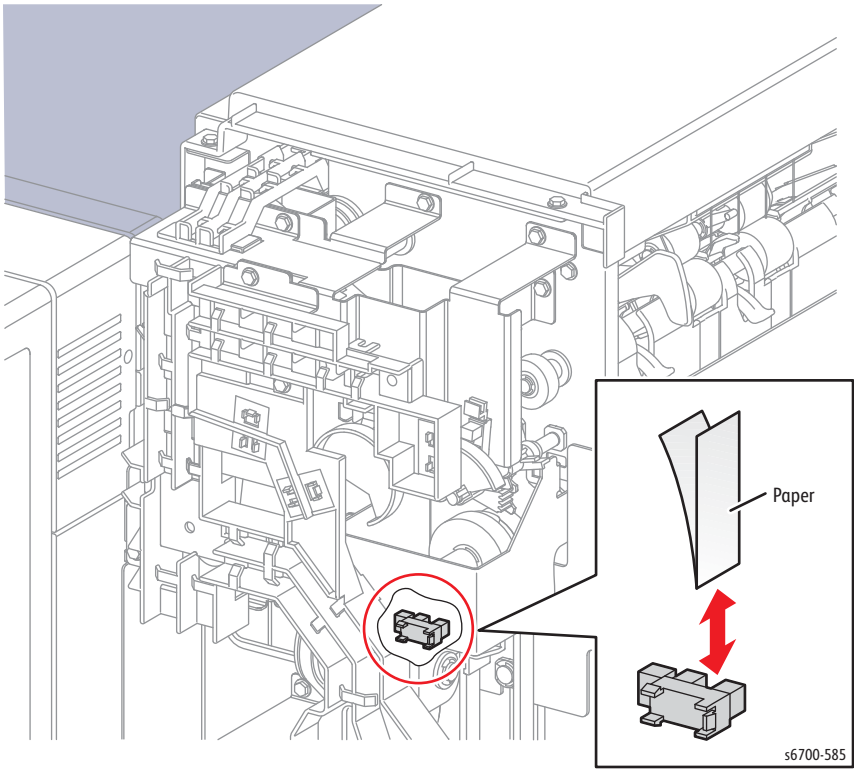
s6700-583

## Stacker No Paper Sensor

**Note**

Restore all electrical connections to the Finisher following removal of the Rear Cover.

1. Remove the Finisher Rear Cover (page 8-240).
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 12.
6. Touch Stacker No Paper Sensor.
7. Touch Start to perform the test.
8. Block the sensor to toggle the signal (On/Off).
9. Touch Stop/Stop All to stop the test.

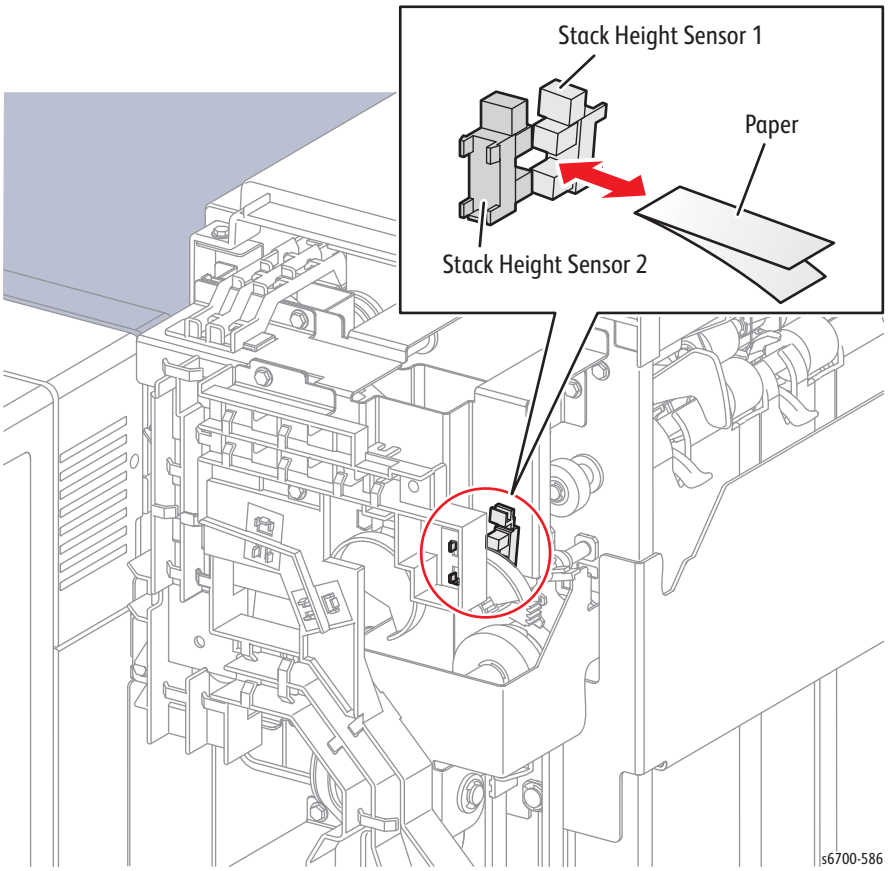


## Stack Height Sensors

**Note**

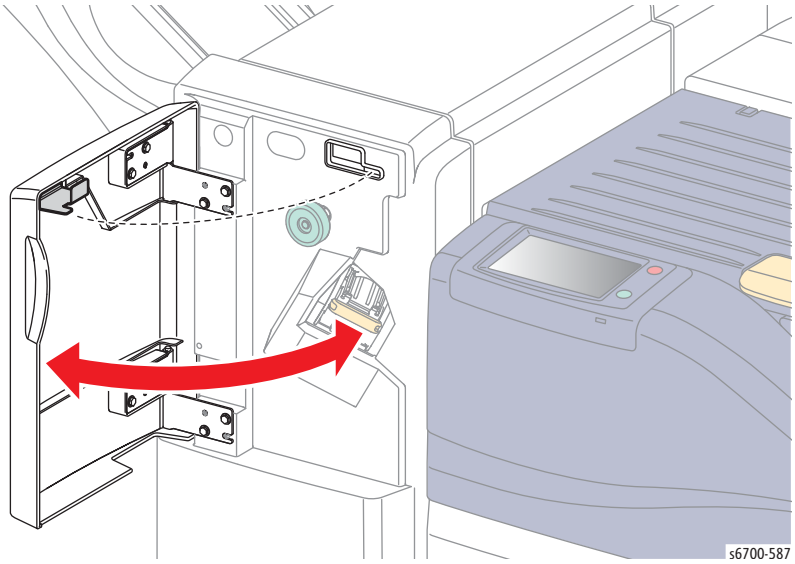
Restore all electrical connections to the Finisher following removal of the Rear Cover.

1. Remove the Finisher Rear Cover (page 8-240).
2. Access Service Diagnostics (page 4-7).
3. Touch Diagnostics.
4. Touch dc330 Component Control.
5. Touch the Chain pull-down and select Chain 12.
6. Touch Stack Height Sensor 1 or 2.
7. Touch Start to perform the test.
8. Block the sensor to toggle the signal (On/Off).
9. Touch Stop/Stop All to stop the test.



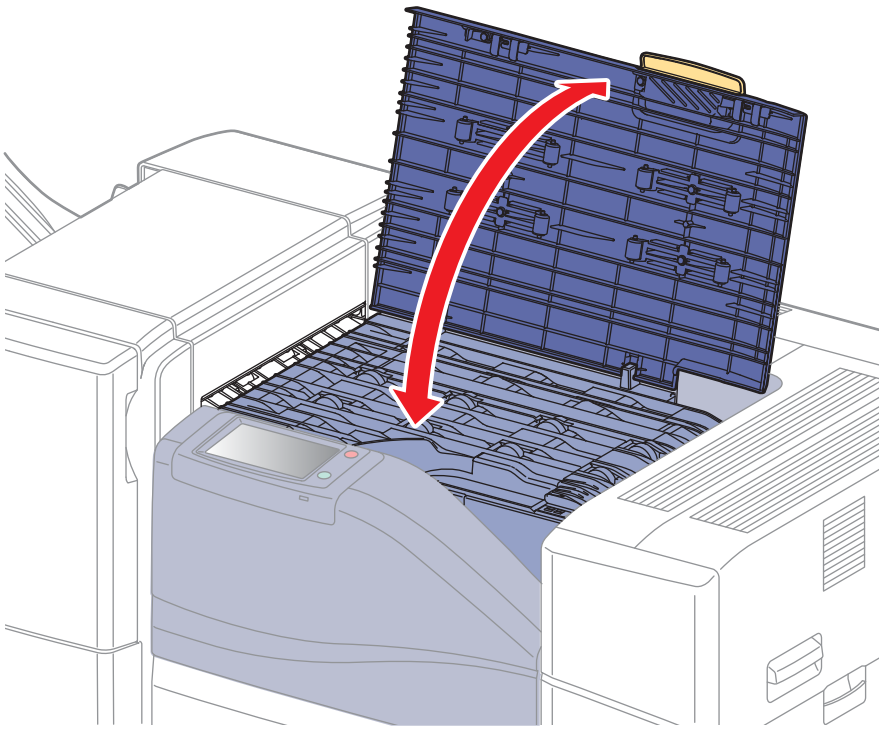
## Finisher Front Door Interlock Switch

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Finisher Front Door Switch.
6. Touch Start to perform the test.
7. Open and close the Finisher Front Door to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.



## Horizontal Transport Open Switch

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch H-Xport Cover Sensor.
6. Touch Start to perform the test.
7. Open and close the Horizontal Transport Cover to toggle the signal (On/Off).
8. Touch Stop/Stop All to stop the test.

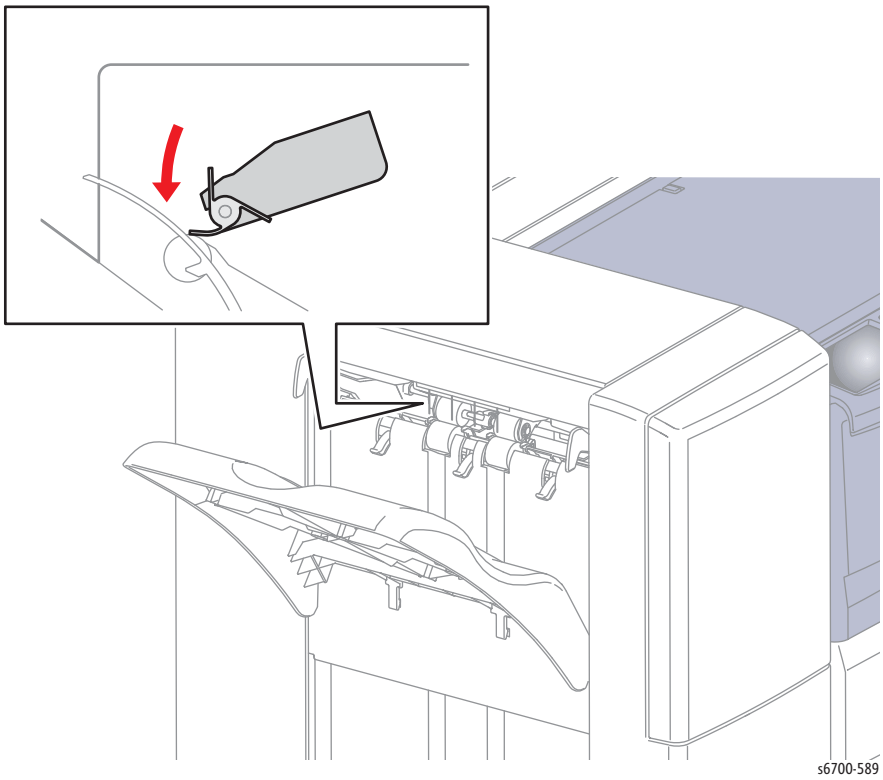


s6700-588

## Sub Paddle Solenoid

The paddle solenoid drives the paddle arm onto the media. The action of the paddle arm confirms operation of the paddle solenoid.

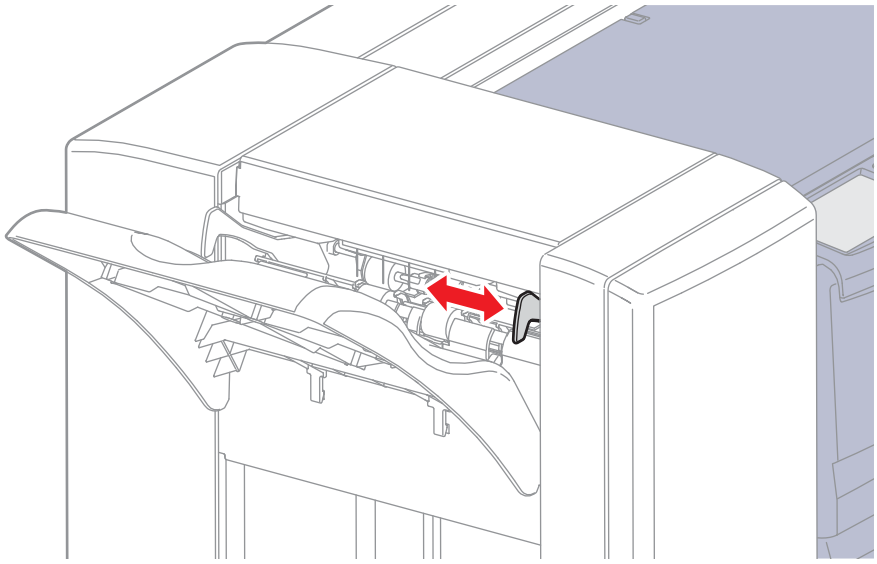
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Paddle Solenoid.
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.



## Tamper Motors

The Tamper Motors drive the front and rear tampers to align the media stack. The action of the tamper confirms operation of the Tamper Motor.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Front or Rear Tamper Motor (High or Low).
6. Touch Start to perform the test.
7. Touch Stop/Stop All to stop the test.



s6700-580

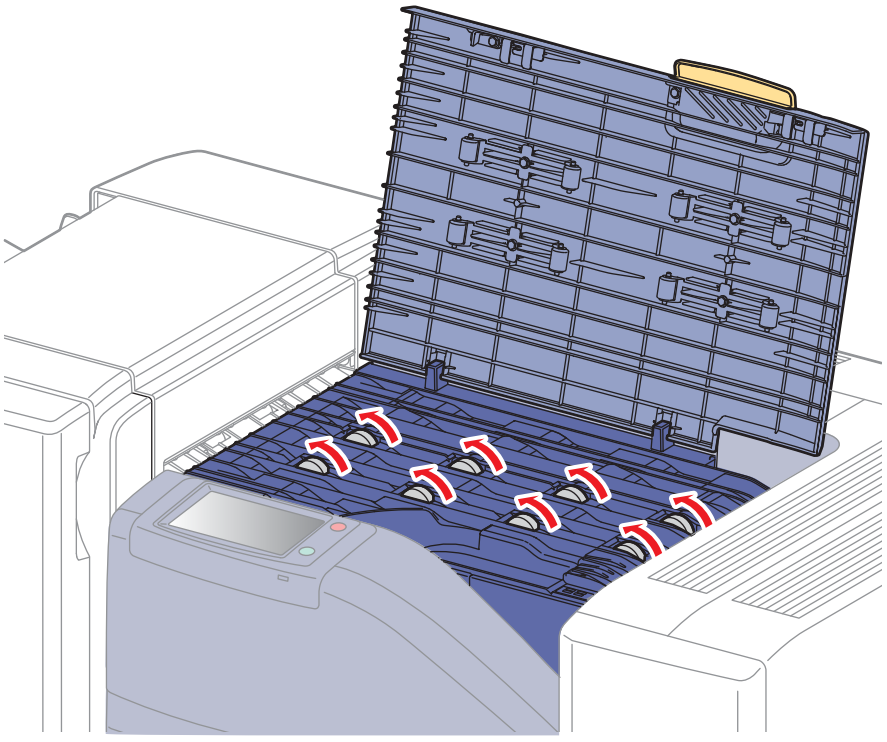
## Horizontal Transport Drive Assembly

The Horizontal Transport Drive Assembly drives the transport rollers in the Horizontal Transport to move media between the printer exit and Finisher. The action of the transport rollers confirms operation of the Horizontal Transport Drive Assembly.

**Note**

The H-Xport Rev test only drives the roller closest to the printer exit.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch H-Xport Motor (1, 2, 3, 4 or Rev).
6. Open the Horizontal Transport Cover.
7. Touch Start to perform the test.
8. Touch Stop/Stop All to stop the test.

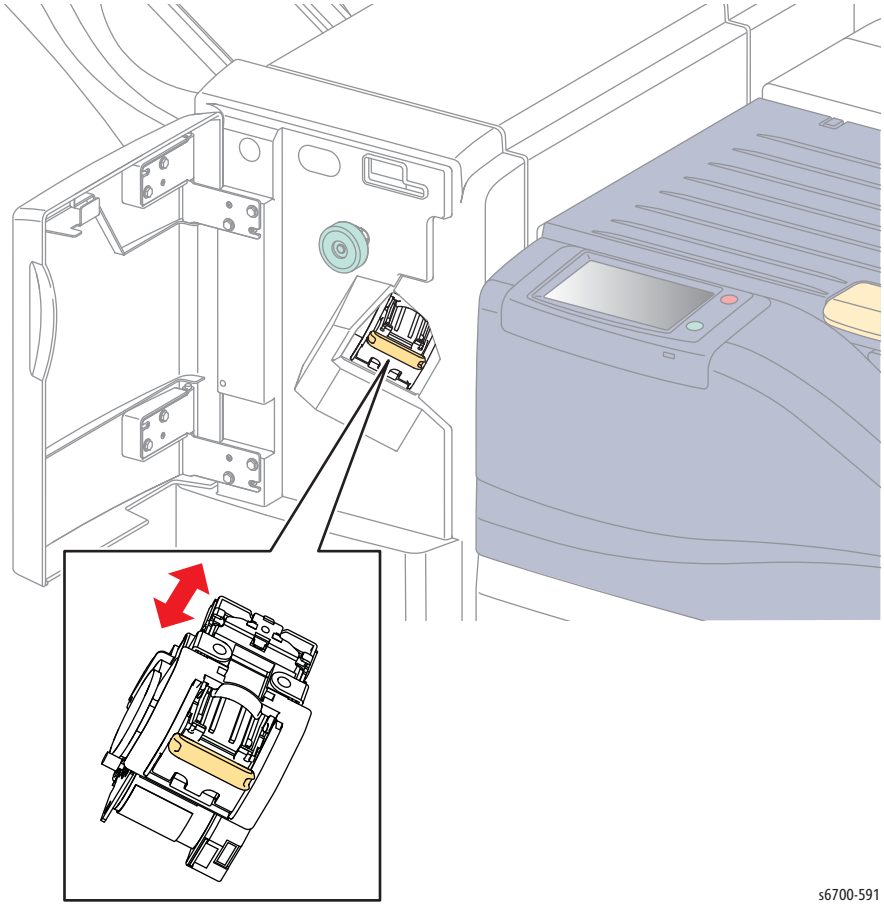


s6700-590

## Staple Motor

The staple motor drives the Stapler to staple media. The action of the staple head confirms operation of the staple motor.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Open the Finisher Front Door.
5. Remove the Staple Cartridge.
6. Defeat the Finisher Front Door Interlock.
7. Touch the Chain pull-down and select Chain 12.
8. Touch Staple Motor (Forward or Reverse).
9. Touch Start to perform the test.
10. Touch Stop/Stop All to stop the test.



s6700-591

## Set Clamp Clutch

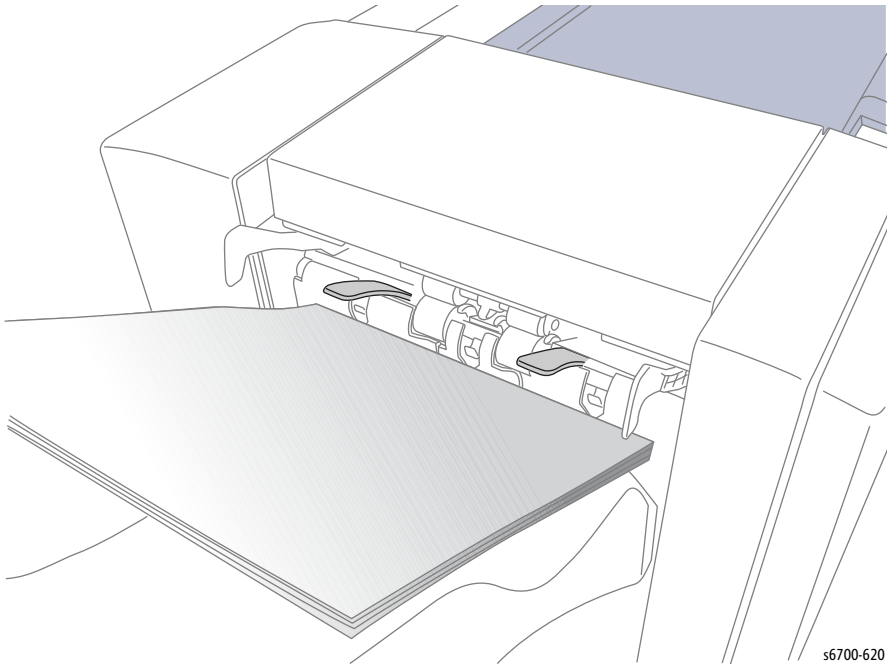
The set clamp clutch makes an audible click when energized by the test.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Set Clamp Clutch.
6. Touch Start to perform the test.

## Eject Motor

The eject motor drives the eject chute and media guides to deliver media to the Stacker Tray. The media guides extend and retract from the Finisher exit when the test successfully rotates the eject motor.

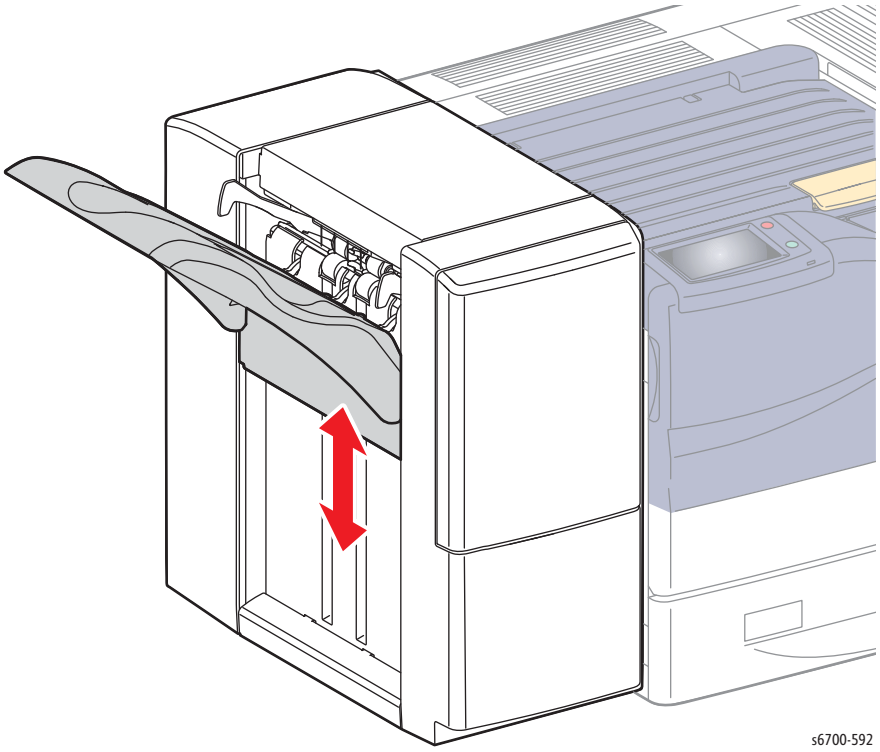
1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Eject Motor Forward (High or Low).
6. Touch Start to perform the test.



## Stacker Drive Assembly

The Stacker Drive Assembly drives the Stacker Tray up and down. Motion of the Stacker Tray confirms operation of the Stacker Drive Assembly.

1. Access Service Diagnostics (page 4-7).
2. Touch Diagnostics.
3. Touch dc330 Component Control.
4. Touch the Chain pull-down and select Chain 12.
5. Touch Stacker Motor (Up or Down).
6. Touch Start to perform the test. The Stacker Tray will move either up or down for a few seconds.



s6700-592

# Control Panel Troubleshooting

## No Display after Power is Turned On.

1. Cycle system power and check for POST errors.
2. Reseat connectors on the Image Processor Board.
3. Print an Engine Test print.
4. Refer to “DC Power Supply Troubleshooting” on page 4-81.
5. Replace the Control Panel (page 8-63).
6. Replace the Control Panel wiring harnesses.

## Printer Hangs at the Xerox Logo, or Continuously Reboots

This is most often caused by corrupted system firmware. Use these steps to correct this problem.

1. Is the printer plugged directly into a wall outlet? Is the circuit capable of meeting printer power requirements (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 un-interruptible power supply.
2. Power Off the printer, disconnect the network or USB cable, then power the printer back On. If the printer comes to Ready To Print, print an embedded page from the Print Reference Materials menu. Next, print from a laptop directly connected to the printer. If both tests are successful, the problem is a network issue. Use normal network troubleshooting procedures to solve the problem.
3. If the printer does not come to Ready To Print, 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 printing embedded pages again.
4. Replace the SD Card on the Image Processor Board.
5. Reload system firmware with AltBoot from the USB Port.

## Ready LED is On, Display is Blank

1. Cycle system power and check for POST errors.
2. Reseat IP Board and Control Panel connections.
3. Replace the Control Panel (page 8-63).
4. Replace the IP Board (page 8-150).
5. Replace the Control Panel wiring harness.

# Control Panel has Failed

The Control Panel either fails to illuminate or the buttons fail to operate after the power switch is turned On.

**Note**

If the touchscreen is illuminated but unresponsive, press and hold the Power Saver button for 5 seconds, then press and release the Pause button to reset the touchscreen to factory defaults and initiate touchscreen diagnostics. Refer to “Control Panel Calibration and Testing” on page 6-8.

## Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack Map References |
|---|---|
| ■ Control Panel, PL1.1.1<br>■ Control Panel Harness,PL1.1.2<br>■ Image Processor Board, PL10.1.5<br>■ LVPS, PL10.2.1 | ■ “Map 1 - CRU Detection” on page 10-5<br>■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “IP Board and Control Panel” on page 10-41 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check connections between the Image Processor Board and the Control Panel. Are P/J327 and P/J370 secure? | Go to Step 2. | Secure the connections. |
| 2 | Check the Control Panel Harness harness for continuity. Disconnect:<br>■ P/J327 from the IP Board<br>■ P/J370 from the Control Panel<br>The harnesses is undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Replace the Control Panel (page 8-63). Does the error persist? | Replace the IP Board (page 8-150) | Complete. |

# Intermittent Problems

This is not an exact procedure, but a set of recommended actions that can help locate the cause of an intermittent problem.

1. Check the fault history. Recent service actions may provide information about the problem. For example, a component that was recently replaced to correct another problem may cause the new intermittent problem.
2. Run the printer in a mode that exercises the suspect function. The printer may fail more frequently or may fail completely under these conditions. Look for signs of failure or abnormal operation. An intermittent problem is usually associated with a fault code, a jam code, or some other observable symptom.
3. Update system firmware. Use AltBoot if the installed firmware is the current version. See “Firmware Restore Using AltBoot” on page A-5.
4. Initialize NVM of the affected region using dc301. If unsure, initialize all Controller and Engine system NVM data. Exit & reboot from diagnostics.
5. Use the troubleshooting procedure associated with intermittent symptoms, examine all applicable parts. Look for:
   a. contamination, such as a feed roller that has a build up of dirt or toner
   b. wear, such as gear teeth that are rounded or have excessive backlash
   c. HFSI, even if they are not near or have not exceeded life values
   d. chafing wires, especially against moving components
   e. misaligned, improperly adjusted, or incorrectly installed components
   f. slow or slipping clutches; slow or binding solenoids
   g. damaged components
   h. excessive heat, or symptoms of excessive heat, such as the discoloration of a component
   i. loose cables or wires
   j. packing materials not removed
6. Use the troubleshooting procedure associated with intermittent symptoms, perform all adjustments related to the applicable parts listed in the troubleshooting table. Verify adjustments can be made, there is an adequate range of adjustment, and the adjustment is set at or near the nominal value. Any abnormality observed may indicate the cause of the problem. For example, a component is adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may indicate of the cause of the problem.
7. Use Service Diagnostics to operate all applicable parts listed in the troubleshooting table associated with the intermittent problem. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
8. Check that the AC and DC power are within specification (refer to “Electrical Specifications” on page 1-13).
9. Get technical advice or assistance when it is appropriate. This will depend upon the situation and the established local procedures.
10. Examine the defective parts associated with the failing function. Refer to the parts list and wiring diagrams to determine part interactions.
11. Operate all of the components that are not in the RAP, but are associated with the function that is failing with in Diagnostics, refer to the wiring diagrams. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
12. Replace any components or consumables that are known to be a frequent cause of the problem. When doing this, consider the cost and time required. If the suspected item is inexpensive, can be installed quickly, and has a high probability of resolving the problem, then it is reasonable to replace it.

# Inoperable Printer Troubleshooting

No response from printer when the main power is switched On. The Control Panel and LED are not illuminated.

## AC Power Supply Troubleshooting

**Warning**

Hazardous AC voltage is present at the Power Panel and LVPS when the printer is connected to the AC outlet. Disconnect the Power Cord from the AC supply before servicing the power supply.

### Initial Actions

- Confirm the printer is plugged directly into a dedicated AC outlet.
- Check the AC outlet.
- Check the Power Cord.
- Reset the GFI Breaker.

If the error persists, eliminate the possibility that an installed option is the cause of the problem by following these steps.

1. Power printer Off.
2. Remove all installed options (Optional Feeders, Finisher, Hard Drive).
3. Power the printer On. If printer powers up normally, plug in the options one at a time until the defective option is isolated. If the printer remains inoperative, use the following procedure to locate the problem.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ Power Panel, PL10.1.12<br>■ Power Cord, PL10.1.19<br>■ LVPS, PL10.2.1 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “LVPS” on page 10-25 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the Power Cord.<br>Is the Power Cord plugged into the printer and AC outlet? | Go to Step 2. | Connect the Power Cord. |
| 2 | Check the voltage at the AC wall outlet.<br>Is there approximately 110 or 220 VAC at the AC outlet? | Go to Step 3. | Notify the customer. |
| 3 | Check the power switch linkage.<br>The linkage is connected. | Go to Step 4. | Connect the linkage. |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 4 | Replace the Power Panel (page 8-154).<br>The error persists. | Replace the LVPS (page 8-182) | Complete. |

# DC Power Supply Troubleshooting

DC voltages are supplied by the LVPS. The LVPS includes protection circuitry that limits possible damage to printer components in the event of a short or transient event.

## LVPS

Use this procedure to check the condition of the LVPS.

**Warning**

Hazardous AC voltage is present at the Power Panel and LVPS when the printer is connected to the AC outlet. Disconnect the Power Cord from the AC supply before servicing the power supply.

### Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack Map References |
|---|---|
| ■ LVPS, PL10.2.1<br>■ LVPS Power Harness, PL11.1.2<br>■ LVPS Harness, PL11.1.9<br>■ MCU Board, PL10.2.18 | ■ “Map 4 - LVPS and IP Board” on page 10-8<br>■ “LVPS” on page 10-25 |

**Troubleshooting Procedure Table**

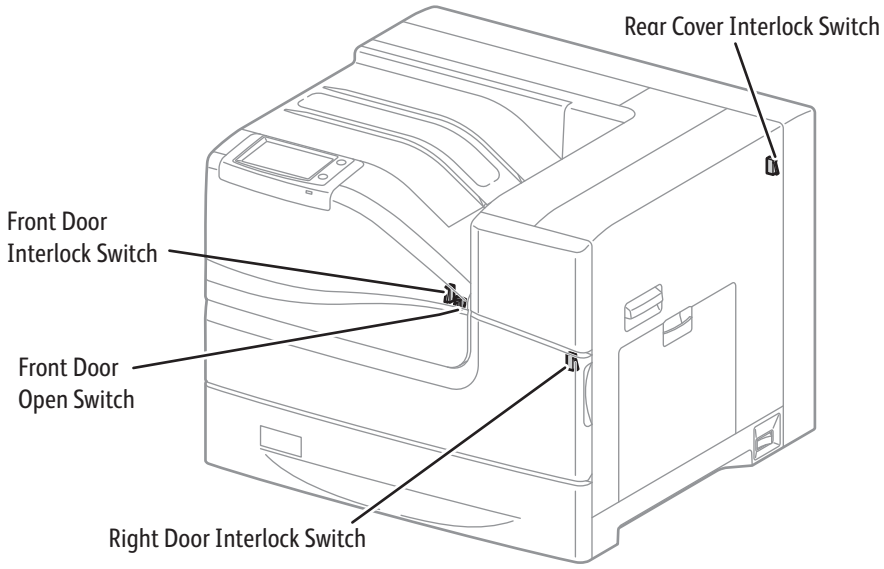
| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the AC power supply (page 4-80).<br>The error persists. | Go to Step 2. | Complete. |
| 2 | Check all connections to the LVPS.<br>The connections are secure. | Go to Step 3. | Secure the connections. |
| 3 | Remove the LVPS harness and check harness continuity between P/J305 and P/J23 on the MCU Board.<br>The harness is undamaged. | Go to Step 4. | Replace the harness. |

**Troubleshooting Procedure Table (Continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **4** | 1. Disconnect J305 and J306 from the LVPS.<br>2. Turn the Power Switch On.<br>3. Measure the DC voltages at these points on the LVPS:<br>■ P306-3 = +5 V<br>■ P306-4 = +3.3 V<br>■ P305-1 = +24 V<br>Are all of the voltages present? | Go to Step 5. | Replace the LVPS (page 8-182) |
| **5** | Check LV PWR Harness continuity.<br>The harness is undamaged. | Replace the MCU Board (page 8-152) | Repair the harness. |

## +24 VDC Interlock Switches

The Interlock Switches disable +24 V to the electromechanical components when the Front or Right Door is opened. The Rear Cover Interlock Switch blocks +5V to the Laser Unit when open.




### Initial Actions

- Check the switch actuator located on the cover or door.
- Check for obstructions, damage or debris blocking switch motion.
- Cycle printer power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack Map References |
|---|---|
| ■ Front Door Interlock, PL1.2.1<br>■ Front Cover Switch, PL 1.2.3<br>■ Right Door Interlock, PL4.1.96<br>■ MCU Board, PL10.2.18<br>■ Rear Cover Interlock, PL 11.2.2 | ■ "Map 1 - CRU Detection" on page 10-5<br>■ "Map 4 - LVPS and IP Board" on page 10-8<br>■ "LVPS" on page 10-25<br>■ "Laser Unit" on page 10-31 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Test the switch using dc330:<br>■ Front Door (077-300)<br>■ Front Cover (077-302)<br>■ Right Door (077-301)<br>The switch signal changes (On/Off). | Replace the MCU Board (page 8-152) | Replace the switch. |

# Image Processor Board

This procedure is used to isolate the Image Processor Board, or one of its on-board options as the root cause of the failure.

## Initial Actions

- Remove all installed options (Optional Feeders, Finisher, Hard Drive)
- Cycle printer power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack References |
|---|---|
| ■ IP Board, PL10.1.6<br>■ IP Power Harness, PL11.1.3<br>■ Options | ■ "Map 4 - LVPS and IP Board" on page 10-8<br>■ "IP Board and Control Panel" on page 10-41 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print the Engine Test print (page 5-31).<br>The test print is printed. | Go to Step 2. | Troubleshoot the print engine. |
| 2 | Reseat all connections to the IP Board and restart the printer.<br>Does the error persist? | Go to Step 3. | Complete. |
| 3 | Check for +5 V and +3.3 V at P/J404.<br>■ P/J404-3 <=> P/J404-2 = +5 V<br>■ P/J404-4 <=> P/J404-2 = +3.3 V<br>■ P/J404-5 <=> P/J404-2 = +3.3 V<br>Are the voltages present? | Replace the IP Board (page 8-150) | Go to Step 4. |
| 4 | Check continuity of the IP Board Power Harness.<br>Disconnect P/J404 from the IP Board and P/J306 from the LVPS.<br>Is the harness damaged? | Replace the harness. | Replace the LVPS (page 8-182) |

# Printer Continually Displays Warming Up

**Warning**

Allow the Fuser to cool before servicing the printer.

## Initial Actions

- Reseat the Fuser.
- Cycle printer power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack Map References |
|---|---|
| ■ Fuser, PL7.1.99<br>■ Harness Assy FSR, PL7.1.4<br>■ MCU Board, PL10.2.18<br>■ LVPS Cage, PL10.2.1 | ■ "Map 2 - Fuser and Feeder" on page 10-6<br>■ "Map 5 - MCU Board and Laser Unit" on page 10-9<br>■ "Fuser and Exit" on page 10-39 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Fuser connections PJ180-S and P/J1 on the MCU Board.<br>The connections are secure and undamaged. | Go to Step 2. | Replace the harness. |
| 2 | Remove the Fuser harness and check continuity between P/J1 and P/J180-S.<br>The harness is undamaged. | Go to Step 3. | Replace the harness. |
| 3 | Check Fuser connector P/J180 and LVPS connector P/J304.<br>The connections are secure and undamaged. | Go to Step 4. | Secure the connections. |
| 4 | Check Fuser harness continuity between P/J180 to LVPS P/J304.<br>The harness is undamaged. | Replace the Fuser (page 8-17). | Repair the harness |
| 5 | Replace the MCU Board (page 8-152).<br>Does the error persist? | Replace the LVPS (page 8-182). | Complete. |

# Abnormal Noises

## Abnormal Noise When Power is Turned On

The printer performs a mechanical initialization routine when powered On. This routine exercises transport drives, rollers, and other electromechanical components. I a component fails a fault code is displayed. If the printer boots successfully and an abnormal noise is heard, use Service Diagnostics to isolate the noisy component.

## Abnormal Noise During Standby

Noise during printer standby is typically caused by a Fan or a xerographic component used during the printer's calibration routine. Test the Fans, Imaging Units and Transfer Belt using Service Diagnostics to isolate the noisy component.

## Abnormal Noise During Printing

Noise during printing is likely caused by a media transport or xerographic component. Test the Feed, Fuser, Transfer Belt and Imaging Unit Drive Assemblies. Test the Feed and Take Away Rollers using Service Diagnostics. Print several Fuser Cleaning test prints in simplex and duplex to exercise all the media transport components to isolate the noisy component.

## Loud Clicking During Printing

This is could indicate a problem with waste toner transport. Remove the Transfer Belt and check for an accumulation of toner around the Transfer Belt's waste toner auger port. If toner has accumulated, replace the Transfer Belt and check the waste toner auger system for obstructions.

# Electrical Noise

There is a variable pitch sound coming from the printer. Electrical noise can be either noise in the electrical lines or static in electromagnetic communications.

## Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

**Troubleshooting Reference Table**

| Applicable Parts | Wiring and Plug/Jack Map References |
|---|---|
| ■ Imaging Units, PL5.1.8~11<br>■ Transfer Belt, PL5.1.99<br>■ HVPS, PL5.2.3 | "HVPS" on page 10-35 |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check for sources of external noise.<br>1. Are there other electrical appliances within 3 meters of the printer?<br>2. Turn the electrical appliances Off or relocate the printer at least 6 meters away from other electrical appliances.<br>Does the noise persist? | Go to Step 2. | Complete |
| 2 | Check the AC ground.<br>Is AC power supply outlet wired and grounded appropriately? | Go to Step 3. | Notify the customer. |
| 3 | Check the Transfer Belt high-voltage connections.<br>Are the terminals on the Transfer Belt, and the four springs in the frame dirty and/or damaged? | Clean or replace the Transfer Belt (page 8-12) and contacts. | Go to Step 4. |
| 4 | Check the Imaging Unit connections.<br>Are the terminals on each Imaging Unit, and Bias Housing Assy dirty or damaged? | Clean or replace the Imaging Unit (page 8-14) and contacts. | Go to Step 5. |
| 5 | Reseat the Imaging Units.<br>Does the noise persist? | Go to Step 6. | Complete |
| 6 | Reseat the Transfer Belt.<br>Does the noise persist? | Reseat connections on the HVPS. | Complete |

# Operating System and Application Problems

## Windows 2000, Windows XP, Windows Server Troubleshooting

**Note**

For Window XP, select Classic Look or the Windows XP procedures will not match the following procedures. To select Classic Look, click Start, Settings, Taskbar, and Start Menu. Select the Start Menu tab, and then Classic Start Menu. 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 Network Settings

1. Verify the settings on the Configuration page.
   - IP Address Source is set to: DHCP, Control Panel, BOOTP, or Auto IP (depending on your network configuration).
   - Current IP Address is set correctly. (Note this address if it is assigned by Auto IP, DHCP, or BOOTP.)
   - Subnet Mask is set correctly (if used).
   - Default Gateway is set correctly (if used).
   - LPR is enabled. Verify that the LPR and AppSocket settings are set as desired.
   - Interpreters: Auto, PCL, or PostScript (depending on your driver).
2. Verify that the client is logged into the network and printing to the correct print queue. The user should also have access to the Phaser printer queue.
3. Reset network settings to factory defaults.

## 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.

## Macintosh Troubleshooting

The following procedures eliminates cabling, communication, and connection problems. Once you complete these steps, print a test page from your software application.

Use these steps **only** for Mac OS 10.3.9 through 10.5.

1. For AppleTalk, use the steps below. For TCP/IP, proceed to step 2.
   a. From the printer's Control Panel, verify that the EtherTalk is enabled. If it not, enable EtherTalk, and reset the printer.
   b. Print the Configuration page and verify that EtherTalk is enabled.
   c. From the Configuration page, verity the Zone. If you have multiple zones on your network, verify that your printer appears in the desired zone.
2. Open the Network Utility and click the Ping tab.
3. Enter the printer's IP address.
4. Click Ping. If you do not get a response, verify that your TCP/IP settings are correct for your printer and computer.

# Print-Quality Troubleshooting

## In this chapter...


- Print-Quality Overview
- Checklist Before Troubleshooting Print-Quality
- Print-Quality Troubleshooting
- Test Prints
- Image Specifications


Chapter 5

# Print-Quality Overview

Print-quality defects can be attributed to printer components, non-Xerox consumables, media, internal software, external software applications, and environmental conditions. To successfully troubleshoot print-quality problems, eliminate as many variables as possible.

The printer includes several tools to help resolve print-quality defects. Located in the Troubleshooting menu under the Printer menu Tools tab is the Troubleshooting Print Quality tutorial. In the Resolve Problems menu are procedures for correcting common print defects. The Test Pages menu provides a list of basic test prints useful for identifying faulty xerographic components.

The first step is to generate prints using test pages embedded in the printer on a fresh ream of paper from the approved media list. Use paper acclimated to room temperature and humidity. If the print-quality defect remains after printing on approved media from an unopened ream of paper, use the procedures that follow to isolate the printer defect and repair the quality problem. If the embedded page print correctly, investigate the customer's application or environment.

Determine the temperature and humidity under which the printer is operating. Compare this to the "Environmental Specifications" on page 1-17. Extreme temperature and humidity can adversely affect print quality.

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 a 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 defects. If no defects are found, replace the Imaging Unit, Laser Unit, Transfer Belt, and Fuser one at a time until the defect is eliminated.

## Defects Associated with Specific Printer Components

Some print-quality problems are associated with specific assemblies. The xerographic component is listed with the associated print-quality defects. Refer to the specific print-quality troubleshooting procedure for detail information.

### Laser Unit

- Blank Print
- Vertical Blank Lines
- Vertical Stripes
- Partial Band

### Transfer Belt

- Light or Undertone Print
- Vertical Stripes
- Partial Band
- Random Spots
- Repeating Bands, Lines, Marks, or Spots
- Background Contamination

### Fuser

- Vertical Stripes
- Repeating Bands, Lines, Marks, or Spots
- Unfused Image

### Imaging Units

- Light or Undertone Print
- Vertical Blank Lines
- Vertical Stripes
- Partial Band
- Random Spots
- Repeating Bands, Lines, Marks, or Spots
- Background Contamination

# Checklist Before Troubleshooting Print-Quality

## Check Printer Condition

### Consumable and Maintenance Items

Check the consumable counters to determine the amount of life remaining in each Toner Cartridge, Imaging Unit, Maintenance Kit and Fuser. 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, toner, and dust particles can accumulate inside the printer and cause print-quality problems such as smearing or specks. Clean the inside of the printer to reduce these problems.

### Operating Environment

Check the temperature, humidity, clearances, and supporting surface meet specifications. Refer to "Specifications" on page 1-13.

### Media Condition

Check the condition and type of media loaded. Refer to "Media Guidelines" on page A-2 for details on determining proper media condition.

## Troubleshooting Print Quality Tutorial

A step by step print quality troubleshooting tutorial focusing on the identification and resolution of common print quality problems is available to print from the Troubleshooting menu. The tutorial includes instructions, test prints and videos demonstrating corrective actions. These print quality problems are addressed in the tutorial:

- Smears, smudges and streaks
- Repeating defects
- Colors align incorrectly
- Colors too light or dark
- Page margins are inconsistent
- Side 1 and 2 are not aligned
- Vertical White lines or streaks in one color
- Toner missing or easy to rub off

### Print the Tutorial

Print the tutorial for troubleshooting and repair instructions.

1. Touch the Printer button on the Control Panel.
2. Touch the Tools tab.
3. Touch Troubleshooting.
4. Touch Troubleshoot Print Quality.
5. Touch Print to print the tutorial.

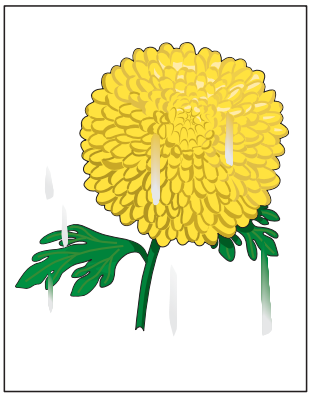
If the print quality problem is described in the tutorial, follow the instructions to correct the defect.

## Symptom Checklist

Based on the observed defect, check the following items prior to performing troubleshooting. These actions may help resolve the problem without troubleshooting the printer.

**Smears, smudges or streaks.**

a. If you are printing on an uneven print surface, change the Media Type settings in the Tray Settings menu.
b. Verify that the paper is within the printer specifications.
c. Load media from a fresh ream.
d. Run the cleaning procedure from Smears, Smudges and Streaks in the Resolve Problems menu.
e. Check AC input voltage.
f. Check Fuser connections.



Smudges or Smears

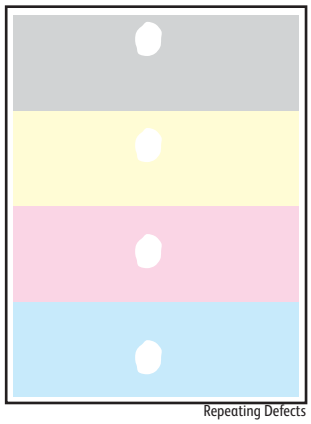
**Repeating Spots or lines.**

a. Print the Repeating Defects page to locate the affected part.

**Note**

A video is available in Repeating Spots or Lines in the Resolve Problems menu showing how to use the repeating Defects page.

b. Replace the affected part.

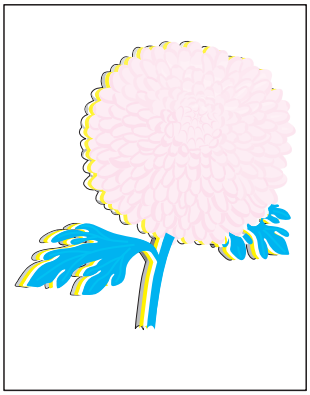


Repeating Defects

**Colors align incorrectly**

This problem can occur after installing a new black Toner Cartridge.

a. Clean inside the printer.
b. Check Imaging Unit life. Replace any that are near or at end of life.
c. Check the Transfer Belt for near end of life or damage.
d. Verify the printer is on a level surface.
e. Run Colors Align Incorrectly in the Resolve Problems menu. This routine attempts to align the images vertically and horizontally. Failure to correctly align the images may indicate a color density problem.

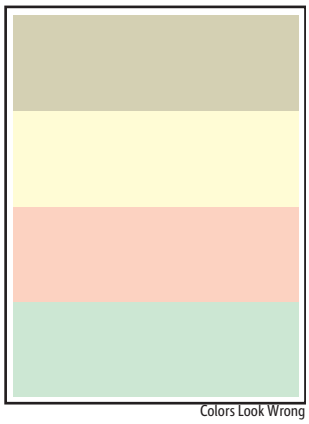


Color Registration

**Colors look wrong.**

a. Verify the printer is on a level surface.

b. Run Calibrate Color from the Resolve Problems menu.



Colors Look Wrong

**Colors too light or too dark**.

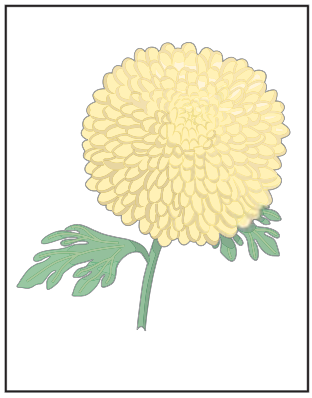
a. Check that the correct media is being used and the media settings for the Tray match.

b. The toner level may be too low. Check the amount of toner and change the Toner Cartridges if necessary.

c. Clean the ADC Sensors using the wiper built-in to the Procon Assembly. See “Cleaning the ADC Sensors” on page 7-3.

**Note**

A video is available in Colors Too Light or Too Dark in the Resolve Problems menu showing how to clean the ADC Sensors.

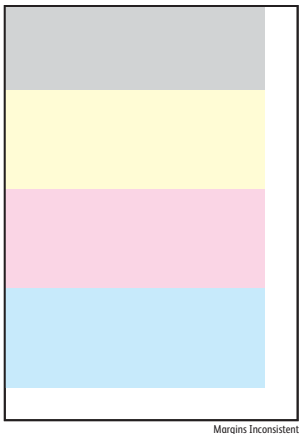


Light or Undertone Print

d. If the media surface is rough, increase media weight settings for the Tray.

**Page Margins are inconsistent.**

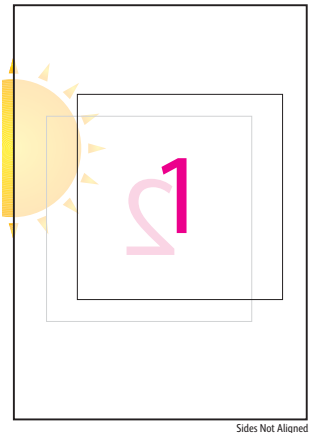
a. Run Page Margins are Inconsistent from the Resolve Problems menu.



Margins Inconsistent

**Sides 1 and 2 are not aligned.**

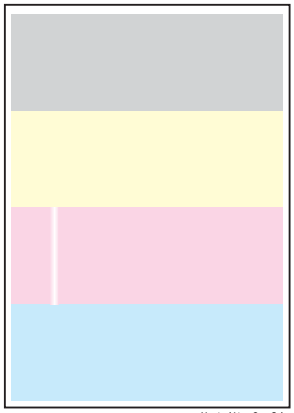
a. Run Sides 1 & 2 Are Not Aligned from the Resolve Problems menu.



Sides Not Aligned

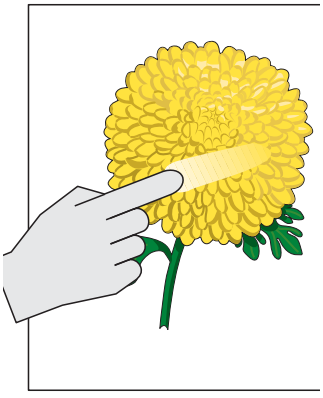
**Vertical White lines or Streaks - One color.**

a. Clean the laser lens of the affected color using the cleaning wand.
b. Check for debris blocking the laser light path.
c. Check the Fuser rollers for damage or contamination.


Vertical Line-One Color

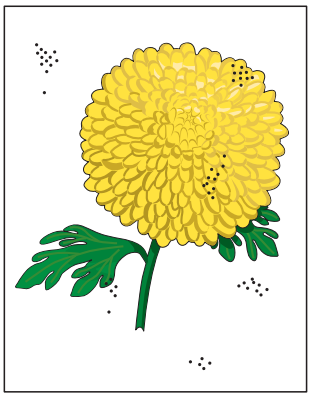
**Toner missing or easily rubbed off.**

a. Check that the correct media is being used and the media settings for the Tray match.
b. Check the Fuser envelope lever position.
c. Select a heavier media type at the Control Panel.


Unfused Imag

**Toner spots appear on the page and printing is blurred.**

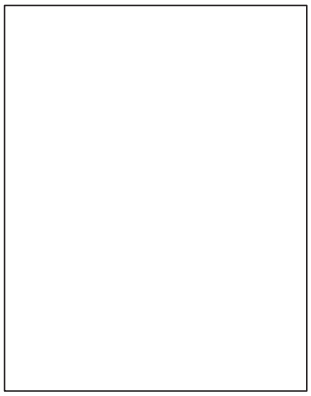
a. Check Toner Cartridge installation.
b. Check Toner Cartridge life counters.
c. Change loaded media.
d. Check humidity levels.
e. Check for genuine Xerox Toner Cartridges.



Random Spots

**Entire page is white or one color is missing from image**.

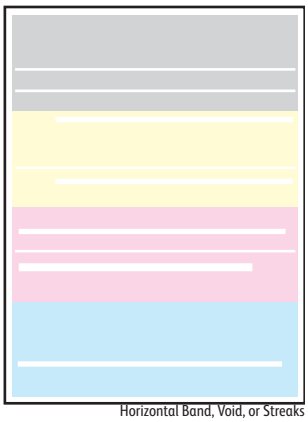
a. Ensure the packaging material is removed from the Imaging Units.
b. Check Toner Cartridge installation.
c. Check Toner Cartridge life counters.



Blank Print

**Streaks appear on the page.**

a. Check Toner Cartridge life counters.
b. Check Imaging Unit life counters.
c. Check consumable life counts.



Horizontal Band, Void, or Streaks

# 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 | Go to |
|---|---|---|
| Light or Undertone Print | The image density is too light in all colors. | page 5-10 |
| Blank Print | The entire image area is blank. | page 5-12 |
| Black Print | The entire image area is black. | page 5-14 |
| Vertical Blank Lines | There are faded or completely non-printed lines along the page. | page 5-15 |
| Horizontal Band, Voids, or Streaks | There are areas of the image that are extremely light or are missing entirely. | page 5-16 |
| Vertical Stripes | There are black lines along the page in the direction of the paper travel. | page 5-17 |
| Horizontal Stripes | There are dark lines running parallel with the leading edge of the print. | page 5-18 |
| Partial Band | Areas of the image are extremely light or missing. | page 5-19 |
| Random Spots | Spots of toner are randomly scattered. | page 5-20 |
| Repeating Bands, Lines, Marks, or Spots | Recurring lines, marks, or spots on the page. | page 5-21 |
| Background Contamination | There is toner contamination on all or most of the page. | page 5-24 |
| Skew | The image is not parallel with both sides of the paper. | page 5-25 |
| Damaged Media | The paper is wrinkled, folded, or worn-out. | page 5-27 |
| Unfused Image | The toner is not completely fused. | page 5-29 |
| Color Registration | A printed yellow or black image is not overlapped on a cyan or magenta image correctly. | page 5-30 |

# Light or Undertone Print

The overall image density is too light in all colors.

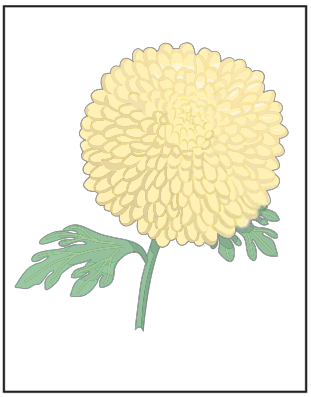
## Initial Actions

- Check for genuine Xerox Toner Cartridges.
- Check consumable life counters.
- Check for obstructions or debris in the beam path between the Laser and the Imaging Units.
- Check the media settings at the Control Panel.
- Clean the ADC Sensors (page 7-3).

**Note**

It may take 20 to 30 prints before ADC Sensor cleaning effects image quality.

### Troubleshooting Reference Table

| Applicable Parts | Example Print |
|---|---|
| ■ Transfer Belt, PL5.1.99<br>■ Transfer Roller, PL5.1.99<br>■ Dispense Assy, PL6.1.9<br>■ MCU Board, PL10.2.18 |  <br>Light or Undertone Print |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print the CMYK test print to determine if one or all colors are affected.<br>Is one or more of the colors faint? | Go to Step 2. | Go to Step 3. |
| 2 | Clean the laser windows with the provided cleaning tool, then reseat and lock the Toner Cartridges.<br>The image prints correctly. | Complete | Go to Step 3. |

**Troubleshooting Procedure Table (Continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 3 | Caution: Do not run the toner motor more than a few seconds.<br>Test the toner motors using dc330<br>■ 093-007 (Y)<br>■ 093-008 (M)<br>■ 093-009 (C)<br>■ 093-010 (K)<br>Do the motors rotate? | Go to Step 5. | Replace the Toner Dispense Assy (page 8-105), then go to Step 4. |
| 4 | The image prints correctly. | Complete | Go to Step 5. |
| 5 | Reseat the Transfer Belt and Transfer Roller.<br>The image prints correctly. | Complete | Go to Step 6. |
| 6 | Replace the Transfer Belt (page 8-12)<br>The image prints correctly. | Complete | Go to Step 7. |
| 7 | Replace the Transfer Roller (page 8-11).<br>The image prints correctly. | Complete | Replace the MCU Board (page 8-152). |

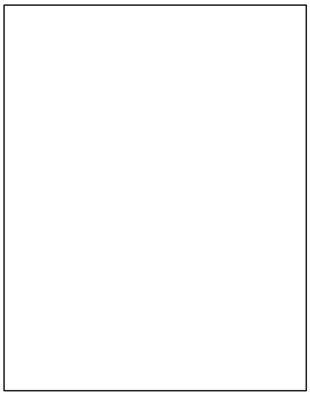
# Blank Print

The entire image area is blank.

## Initial Actions

- Check for genuine Xerox Toner Cartridges.
- Load media from a fresh ream acclimated to room temperature.
- Check the media path for obstructions or debris.
- Print an Engine Test print to isolate the problem between the IP Board and MCU Board.
- Check for obstructions in the beam path between the Laser Unit and Imaging Units.
- Check the Imaging Units for shipping ribbons.

**Troubleshooting Reference Table**

| Applicable Parts | Example Print |
|---|---|
| ■ Transfer Belt, PL5.1.99<br>■ HVPS, PL5.2.3<br>■ MCU Board, PL10.2.18 |  <br>Blank Print |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Remove the Transfer Belt and check the high-voltage contacts for damage.<br>Are the Transfer Belt contacts damaged or dirty? | Clean or replace the Transfer Belt (page 8-12), then Step 2. | Go to Step 2. |
| 2 | Reseat the Imaging Units.<br>The image prints correctly. | Complete | Go to Step 3. |
| 3 | Replace the Transfer Belt (page 8-12)<br>The image prints correctly. | Complete | Go to Step 4. |
| 4 | Replace the Transfer Roller (page 8-11).<br>The image prints correctly. | Complete | Go to Step 5. |

**Troubleshooting Procedure Table (Continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Replace the HVPS (page 8-86)<br>The image prints correctly. | Complete | Replace the MCU Board (page 8-152). |

# Black Print

The entire image is black.

## Initial Actions

- Check the media path for obstructions or debris.
- Reseat the Toner Cartridges.

**Troubleshooting Reference Table**

| Applicable Parts | Example Print |
|---|---|
| ■ Transfer Belt, PL5.1.99<br>■ HVPS, PL5.2.3<br>■ MCU Board, PL10.2.18 |  <br>Black Print |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print an Engine test print.<br>The image prints correctly. | Reprint customer image. | Go to Step 2. |
| 2 | Check Imaging Unit high-voltage contacts.<br>The contacts are undamaged? | Go to Step 3. | Replace the affected Imaging Unit contacts |
| 3 | Replace the Bias Housing Assy (page 8-84).<br>The image prints correctly. | Complete. | Go to Step 4. |
| 4 | If the error persists, replace these components, in order, until the error is resolved.<br>1. Transfer Belt, PL5.1.99<br>2. HVPS, PL5.2.3<br>3. MCU Board, PL10.2.18 | | |

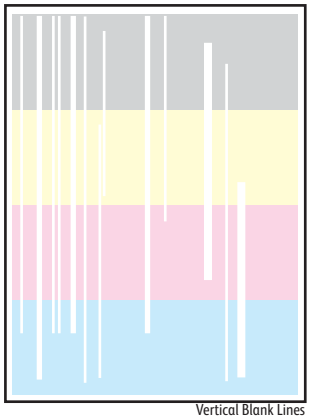
# Vertical Blank Lines

There are faded or completely non-printed lines along the page in the direction of the paper travel from the leading edge to the trailing edge.

## Initial Actions

- Check the area around the Laser Unit windows and openings in the Imaging Unit. Small obstructions, such as hair or fibers, can create streaks.
- Clean the laser windows using the cleaning tool provided.
- Check the media path for obstructions or debris.

**Troubleshooting Reference Table**

| Applicable Parts | Example Print |
|---|---|
| ■ Imaging Unit Y, PL5.1.8<br>■ Imaging Unit M, PL5.1.9<br>■ Imaging Unit C, PL5.1.10<br>■ Imaging Unit K, PL5.1.11<br>■ Transfer Belt, PL5.1.99<br>■ Fuser, PL7.1.99<br>■ MCU Board, PL10.2.18 |  <br>Vertical Blank Lines |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print a CMYK test print.<br>The streaks appear in a single color. | Replace affected Imaging Unit (page 8-14). | Go to Step 2. |
| 2 | Inspect the Transfer Belt surface.<br>Is there any damage to the surface? | Replace the Transfer Belt (page 8-12). | Go to Step 3. |
| 3 | Inspect the laser beam path.<br>Are there any obstructions between the Laser Unit and Imaging Units? | Remove the foreign substances. | Go to Step 4. |
| 4 | Check the Fuser pressure and heat rollers for contamination or damage.<br>The Fuser is clean and undamaged. | Go to Step 5. | Clean or replace the Fuser (page 8-17). |
| 5 | Replace the Transfer Belt (page 8-12).<br>The image prints correctly. | Complete. | Replace the MCU Board (page 8-152). |

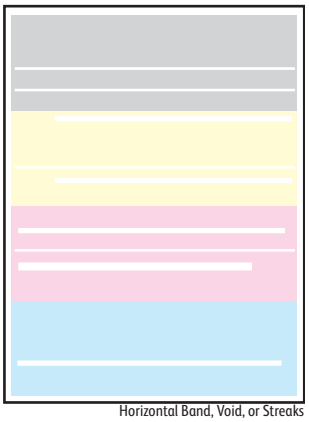
## Horizontal Band, Voids, or Streaks

There are areas of the image that are extremely light or are missing entirely. These missing areas form wide bands which cover a wide area horizontally, perpendicular to the paper feed direction.

### Initial Actions

- Print the CMYK 50 % Sample Test Print and attempt to isolate the defect to a specific color or interval. Troubleshoot the affected color or compare to the Repeating Defects page.
- Check the media path for obstructions or debris.

**Troubleshooting Reference Table**

| Applicable Parts | Example Print |
|---|---|
| ■ Transfer Roller, PL4.4.1<br>■ Imaging Unit Y, PL5.1.8<br>■ Imaging Unit M, PL5.1.9<br>■ Imaging Unit C, PL5.1.10<br>■ Imaging Unit K, PL5.1.11<br>■ Transfer Belt, PL5.1.1<br>■ HVPS, PL5.2.3 |  <br>Horizontal Band, Void, or Streaks |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print a CMYK Sample test print.<br>The defects appear in a single color. | Replace affected Imaging Unit (page 8-14). | Go to Step 2. |
| 2 | Measure the defect interval and compare to the diameters listed in the “Repeating Defects Component Locator” on page 5-22.<br>The defect interval compares to a component diameter. | Replace the indicated component. | Replace the Transfer Belt (page 8-12). |

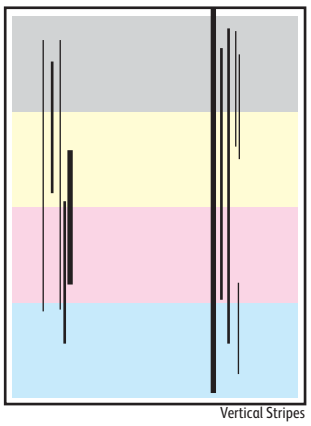
## Vertical Stripes

There are black lines along the page in the direction of the paper travel from the leading edge to the trailing edge.

### Initial Actions

- Check the media path for obstructions or debris.
- Check media condition. Try using media from a fresh ream.
- Print several test prints to clean the media path.

**Troubleshooting Reference Table**

| Applicable Parts | Example Print |
|---|---|
| ■ Fuser, PL7.1.99<br>■ Transfer Belt, PL5.1.99 |  <br>Vertical Stripes |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print a CMYK test print.<br>The defects appear in a single color. | Replace affected Imaging Unit (page 8-14). | Go to Step 2. |
| 2 | Measure the defect interval and compare to the diameters listed in the “Repeating Defects Component Locator” on page 5-22.<br>The defect interval compares to a component diameter. | Replace the indicated component. | Replace the Transfer Belt (page 8-12). |
| 3 | Print several Fuser Cleaning pages.<br>The defect persists. | Replace the Fuser (page 8-17). | Complete. |

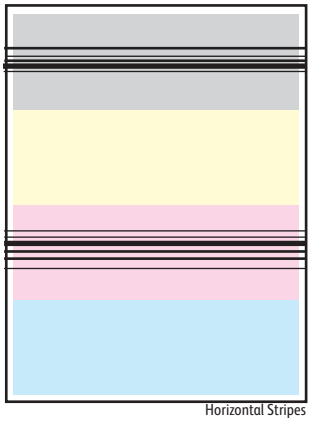
## Horizontal Stripes

There are black lines running parallel with the leading edge of the print, perpendicular to the direction of the paper travel.

### Initial Actions

- Check the media path for obstructions or debris.

**Troubleshooting Reference Table**

| Applicable Notes | Example Print |
|---|---|
| ■ Transfer Roller, PL4.4.1<br>■ Imaging Unit Y, PL5.1.8<br>■ Imaging Unit M, PL5.1.9<br>■ Imaging Unit C, PL5.1.10<br>■ Imaging Unit K, PL5.1.11<br>■ Fuser, PL7.1.99<br>■ Transfer Belt, PL5.1.1 |  <br>Horizontal Stripes |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print a CMYK test print.<br>The defects appear in a single color. | Replace affected Imaging Unit (page 8-14). | Go to Step 2. |
| 2 | Measure the defect interval and compare to the diameters listed in the “Repeating Defects Component Locator” on page 5-22.<br>The defect interval compares to a component diameter. | Replace the indicated component. | Go to Step 3. |
| 3 | Check the Transfer Belt.<br>Is the Transfer Belt dirty (finger printers, oil, etc.) or scratched? | Replace the Transfer Belt (page 8-12). | Go to Step 4. |
| 4 | Print several Fuser Cleaning pages.<br>The defect persists. | Replace the Fuser (page 8-17). | Complete. |

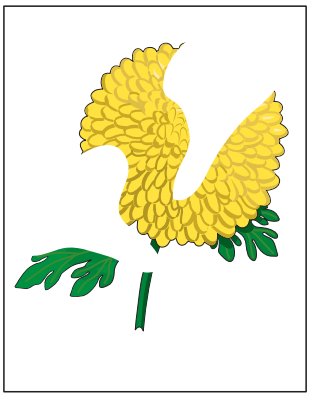
# Partial Band

There are areas of the image that are extremely light or are missing in a limited area on the paper.

## Initial Actions

- Check the media path for obstructions or debris.
- Check media condition. Try using media from a fresh ream.
- Reseat the Toner Cartridges.

### Troubleshooting Reference Table

| Applicable Notes | Example Print |
|---|---|
| ■ Transfer Roller, PL4.4.1<br>■ Transfer Belt, PL5.1.1<br>■ Fuser, PL7.1.99<br>■ MCU Board, PL10.2.18 |  <br>Partial Band |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print the Repeating Defects page.<br>The defect compares to one shown on the test print. | Replace the affected component. | Go to Step 2. |
| 2 | Inspect the Transfer Belt surface.<br>The Transfer Belt is clean and undamaged. | Go to Step 3. | Replace the Transfer Belt (page 8-12). |
| 3 | Check the Transfer Roller.<br>The Transfer Roller is clean and undamaged. | Replace the Fuser (page 8-17). | Replace the Transfer Roller (page 8-11) |

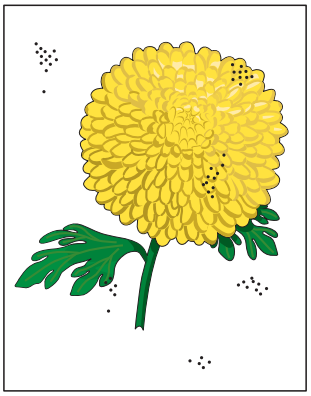
## Random Spots

There are spots of toner randomly scattered across the page.

### Initial Actions

- Check the media path for obstructions or debris.
- Check media condition. Try using media from a fresh ream.
- Print 10 Fuser Cleaning pages using dc612 to clean the media path.

**Troubleshooting Reference Table**

| Applicable Notes | Example Print |
|---|---|
| ■ Transfer Belt, PL5.1.1<br>■ HVPS, PL5.2.3 |  <br>Random Spots |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check Humidity level using dc140.<br>The humidity is within specification. | Go to Step 2. | Advise customer. |
| 2 | Print several Fuser Cleaning pages to clean media path components.<br>The spots continue to appear. | Go to Step 3. | Complete. |
| 3 | Examine prints for repeating patterns indicating a contaminated component.<br>The spot pattern repeats. | Go to page 5-21. | Go to Step 4. |
| 4 | The spots are limited to the top half of the print. | Replace the Transfer Belt (page 8-12). | Replace the HVPS (page 8-86). If the defect persists, replace the MCU Board (page 8-152). |

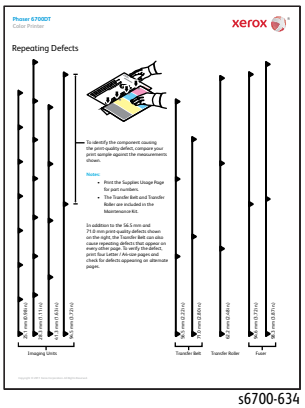
# Repeating Bands, Lines, Marks, or Spots

There are recurring lines, marks, or spots on the page.

## Initial Actions

- Check the media path for obstructions or debris.

### Troubleshooting Reference Table

| Applicable Notes | Example Print |
|---|---|
| ■ Transfer Roller, PL4.4.1<br>■ Imaging Unit Y, PL5.1.8<br>■ Imaging Unit M, PL5.1.9<br>■ Imaging Unit C, PL5.1.10<br>■ Imaging Unit K, PL5.1.11<br>■ Fuser, PL7.1.99<br>■ Transfer Belt, PL5.1.1 |  <br>s6700-634 |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print the Repeating Defects page from the Resolve Problems menu and compare the defects with the intervals shown.<br><br>Spots, lines, or marks appear at regular intervals. | Refer to “Repeating Defects Component Locator” on page 5-22. and replace the defective component. | Refer to “Random Spots” on page 5-20. |

**Repeating Defects Component Locator**

| Part | Roll | Part No. | Interval (mm) |
|---|---|---|---|
| Imaging Unit | Drum | PL5.1.8 ~ 11 | 94.5 |
| | BCR | | 28.3 |
| | BCR-CLN | | 25.1 |
| | Mag Roller | | 31.3 |
| | Supply Auger | | 41.3 |
| | Mix Auger | | 41.3 |
| Transfer Belt | 1st BTR | PL5.1.1 | 31.4 |
| | BUR + IBT | | 71.0 |
| | Tension Roller | | 56.5 |
| | Idle Roller | | 314. |
| Transfer Roller | 2nd BTR | | 62.2 |
| Fuser | Heat Roller | PL7.1.99 | 98.3 |
| | Belt | | 94.6 |
| | Exit Roller | | 47.4 |
| | Pinch Roller | | 25.1 |
| Exit Roller | Exit Roller | PL7.2.2 | 44.3 |
| Exit Pinch Roller | Pinch Roller | PL7.2.3 | 31.4 |

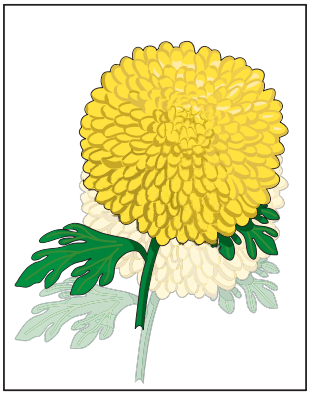
# Residual Image or Ghosting

There are faint, ghostly images appearing on the page. The images may be either from a previous page or from the page currently being printed.

## Initial Actions

- Check the media path for obstructions or debris.
- Check Tray media settings
- Reload Tray with fresh media.

**Troubleshooting Reference Table**

| Applicable Notes | Example Print |
|---|---|
| ■ Erase LED Assy, PL5.1.2<br>■ Imaging Unit Y, PL5.1.8<br>■ Imaging Unit M, PL5.1.9<br>■ Imaging Unit C, PL5.1.10<br>■ Imaging Unit K, PL5.1.11<br>■ Fuser, PL7.1.99<br>■ Transfer Belt, PL5.1.1<br>■ MCU Board, PL10.2.18 |  <br>Residual Image/Ghosting |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Did the client print a large number of the same image? | Go to Step 2. | Go to Step 3. |
| 2 | Set media type to next heaviest type and print several test prints. The image prints correctly. | Complete | Go to Step 3. |
| 3 | Test the Erase LEDs using dc330:<br>■ 93-015 CMY<br>■ 93-016 K<br>The erase LEDs light correctly. | Go to Step 4. | Replace the affected Erase LED (page 8-82). |
| 4 | Check the Fuser pressure and heat rollers. The Fuser is clean and undamaged. | Go to Step 5. | Replace the Fuser (page 8-17). |
| 5 | Replace the HVPS (page 8-86). The image prints correctly. | Complete | Replace the MCU Board (page 8-152). |

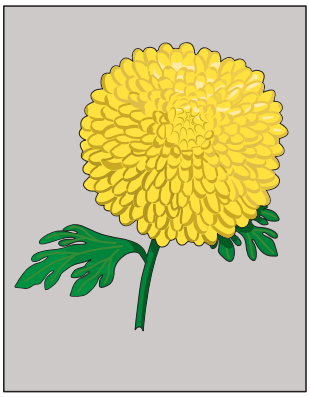
## Background Contamination

There is toner contamination on all or most of the page. The contamination appears as a very light gray dusting.

### Initial Actions

- Check Machine Humidity on the Configuration Report.
- Check the media path for obstructions or debris.
- Check Tray media settings match loaded media.
- Check the daily print volume.High daily volume can fatigue the Imaging Units.
- Load fresh media.

**Troubleshooting Reference Table**

| Applicable Notes | Example Print |
|---|---|
| ■ Transfer Roller, PL4.4.1<br>■ Transfer Belt, PL5.1.1<br>■ MCU Board, PL10.2.18 |  <br>Background Contamination |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print several test prints.<br>The image prints correctly. | Complete. | Go to Step 2. |
| 2 | Reseat the Transfer Roller.<br>The image prints correctly. | Complete. | Go to Step 3. |
| 3 | Reseat the Transfer Belt.<br>The image prints correctly. | Go to Step 4. | Replace the Transfer Belt (page 8-12). If the defect persists, replace the MCU Board (page 8-152). |

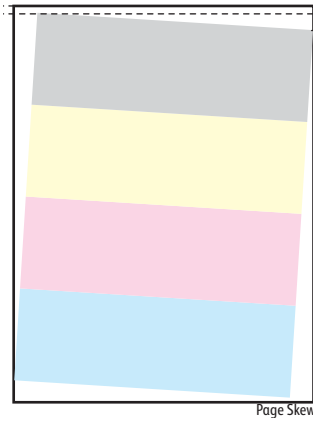
# Skew

The printed image is not parallel with both sides of the paper.

## Initial Actions

- Check the media path for obstructions or debris.
- Check Tray guides and settings.
- Check media condition. Load fresh media.
- Source media from different trays to isolate the source of the skewed media.

**Troubleshooting Reference Table**

| Applicable Notes | Example Print |
|---|---|
| ■ Separator Roller, PL3.1.99<br>■ Feeder/Registration Assy, PL3.2.1<br>■ Right Door Assembly, PL4.1.99<br>■ Feed Roller, PL4.2.21<br>■ 550-Sheet Feeder, PL12.1.2<br>■ 1100-Sheet Feeder, PL13.1.1 |  <br>Page Skew |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Open and close the Right Door.<br>The door latches properly. | Go to Step 2. | Replace any defective parts. |
| 2 | Reload media in the Tray.<br>The image prints correctly. | Complete | Go to Step 6. |
| 3 | Check the Feed, Nudger and Separator Rollers in the affected Tray.<br>The rollers are clean and undamaged. | Go to Step 4. | Replace the rollers. |
| 4 | Adjust image position for the affected Tray using the Page Margins Inconsistent routine in the Resolve Problems menu of Troubleshooting.<br>The image prints correctly. | Complete. | Go to Step 5. |

**Troubleshooting Procedure Table (Continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| **5** | Check the right side door of the affected Tray.<br>The door and Turn Chute are undamaged. | Go to Step 6. | Repair or replace damaged parts. |
| **6** | Test the registration rollers using dc711.<br>The rollers rotate. | Go to Step 7. | Replace the Feeder/ Registration Assembly (page 8-41). |
| **7** | Replace the Right Door Assembly (page 8-46).<br>The image prints correctly. | Complete. | Replace the Optional Feeder Assembly. |

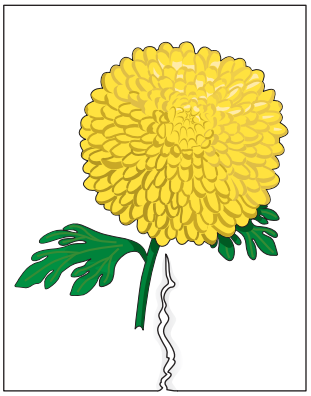
# Damaged Media

Media exits the printer wrinkled, folded, or torn.

## Initial Actions

- Check the media path for obstructions or debris.
- Check media type, weight and Tray guides.
- Print test prints from each tray, simplex and duplex, to locate the point in the media path where damage occurs.

**Troubleshooting Reference Table**

| Applicable Notes | Example Print |
|---|---|
| ■ Separator Roller, PL3.1.99<br>■ Feeder/Registration Assy, PL3.2.1<br>■ Right Door Assembly, PL4.1.99<br>■ Feed Roller, PL4.2.21<br>■ Fuser, PL7.1.99<br>■ Exit Chute Assy, PL7.2.99<br>■ 550-Sheet Feeder, PL12.1.2<br>■ 1100-Sheet Feeder, PL13.1.1 |  <br>Damaged Print Media |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print several test prints selecting a different source trays to isolate the affected Tray.<br>Media damage is from a single Tray. | Go to Step 2. | Go to Step 3. |
| 2 | Check media feeding from the affected Tray.<br>1. Remove the source Tray.<br>2. Reload media in the Tray.<br>3. Print a test print.<br>The media is undamaged. | Complete. | Exchange the Tray and retest. If media damage continues, go to Step 3. If not, replace the Tray. |

**Troubleshooting Procedure Table (Continued)**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 3 | Stall test to determine where media path damage occurs.<br>Replace the following, in order, until the defective component is found.<br>■ Feed Rollers (page 8-6)<br>■ Feeder/Registration Assy (page 8-41).<br>■ Fuser (page 8-17)<br>■ Transfer Belt (page 8-12)<br>■ Exit Chute Assy (page 8-123) | | |

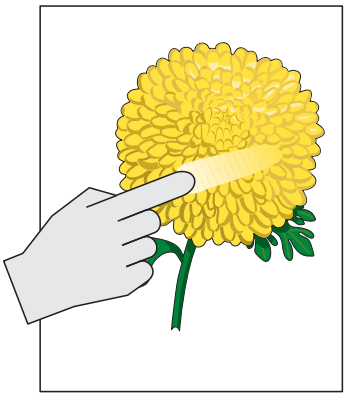
# Unfused Image

The image is not completely fused to the paper. The image easily rubs off.

## Initial Actions

- Check the media, settings and toner type.
- Check the printer is plugged directly into a known-good, grounded AC outlet.
- Check the position of the envelope lever on the Fuser.
- Check the Fuser connection (P/J180).

**Troubleshooting Reference Table**

| Applicable Notes | Example Print |
|---|---|
| ■ Fuser, PL7.1.99<br>■ LVPS, PL10.2.1 |  <br>Unfused Image |

**Troubleshooting Procedure Table**

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Check the media.<br>The media clean, dry and approved. | Go to Step 2. | Replace the media. |
| 2 | Check the Toner Cartridges.<br>The Toner Cartridges are Xerox. | Go to Step 3. | Replace with Xerox toner. |
| 3 | Test Fuser operating temperature using dc140.<br>Fuser temperature is within normal range (150 - 180 degrees C). | Replace the media. If the error persists, replace the Fuser. | Go to Step 4. |
| 4 | Remove the Fuser and check the connections.<br>The connection is secure and undamaged. | Replace the Fuser (page 8-17). | Repair or replace the Fuser harness. |

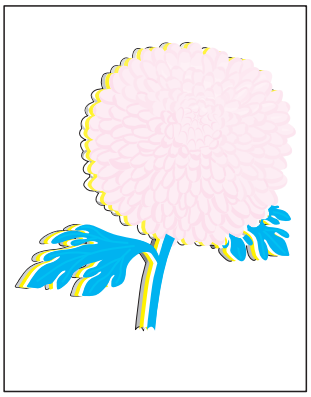
# Color Registration

A printed yellow or black image is not overlapped on a cyan or magenta image correctly.

## Initial Actions

- Clean the ADC Sensors using the built-in wiper in the Procon Assy.
- Run the Colors Align Incorrectly routine in the Resolve problems menu.
- Cycle system power.

### Troubleshooting Reference Table

| Applicable Notes | Example Print |
|---|---|
| ■ Procon Assy, PL5.3.1<br>■ Imaging Unit Y, PL5.1.8<br>■ Imaging Unit M, PL5.1.9<br>■ Imaging Unit C, PL5.1.10<br>■ Imaging Unit K, PL5.1.11<br>■ Transfer Belt, PL5.1.1<br>■ IP Board, PL10.1.5<br>■ MCU Board, PL10.2.18 |  <br>Color Registration |

### Troubleshooting Procedure Table

| Step | Actions and Questions | Yes | No |
|---|---|---|---|
| 1 | Print the Test patterns test page.<br>The color registration areas of the print appear correct. | Check the printing application. | Go to Step 2. |
| 2 | Clean the ADC Sensors using the wiper in the Procon Assy.<br>**NOTE** It may require up to 40 prints before images improve after sensor cleaning.<br>The image prints correctly. | Complete. | Go to Step 3. |
| 3 | Print the Engine Test Print.<br>The image prints correctly. | Replace the IP Board (page 8-150). | Go to Step 4. |
| 4 | Replace the Procon Assy (page 8-95).<br>The image prints correctly. | Complete. | Go to Step 5. |
| 5 | Replace the Transfer Belt (page 8-12).<br>The image prints correctly. | Complete. | Replace the MCU Board (page 8-152). |

# Test Prints

A variety of test prints are available for troubleshooting print quality defects and to confirm proper printer operation. Test prints are available from the Printer > Tools > Troubleshooting menu and in Service Diagnostics under the Service Information menu (dc612).

## Fault Isolation

Test prints can isolate printing problems to the MCU Board or IP Board by eliminating image data transfer between the two. Test prints print directly from ROM bypassing the IP Board. This allows examination of print engine function in isolation.

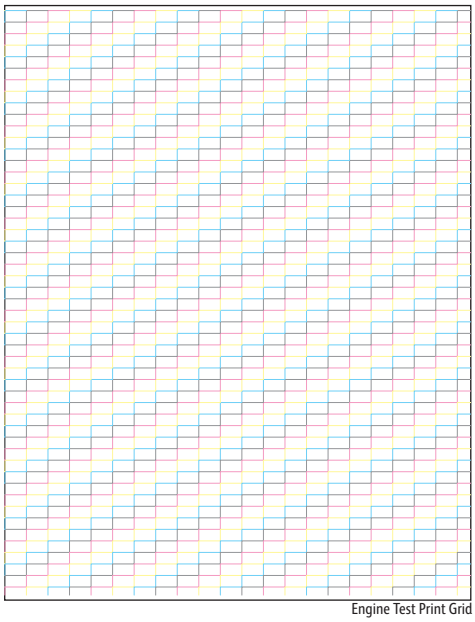
Test prints are also useful for stimulating asynchronous (dynamic) events related to the print process, or as a test for media path and media related problems. Some other key features of test prints:

- Is the only diagnostic utility to exercise the entire print cycle.
- Isolated from the operating system (PostScript). Runs from firmware.
- Isolates the Image Processor Board from Engine Control Board.
- Captures static or dynamic events.
- Helps to isolate events that cause print artifacts or prevents printing.

## Engine Test Print

Engine Test print produces a step pattern stored in MCU firmware. The print tests all engine functions necessary to print a page. Print this test page by pressing the Test print button on the rear panel. See “Rear View” on page 1-6.

Isolate printer hardware problems to either the print engine or IP Board by printing the Engine Test print. If the print is successfully printed, focus on the IP Board or its components (RAM, Hard Drive, SD Card, etc.). If the print fails, refer to Section 4 for print engine troubleshooting help.

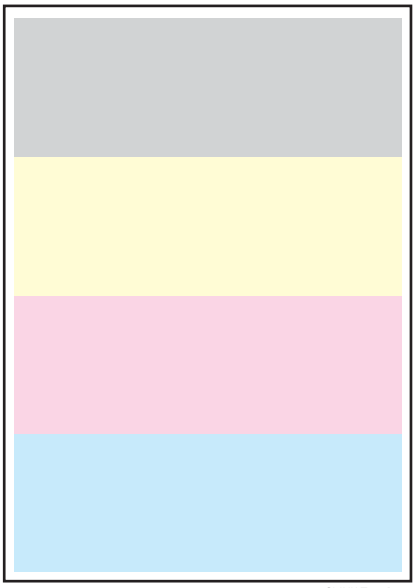


Engine Test Print Grid

## CMYK Sample Test Print

This test print provides 20 % density for combination of cyan, magenta, and black on the whole page. This test is used to identify problems with balance of three color toners or another toner. Compare the print with this example to determine the problem.

- Checks Cyan, Magenta, or Yellow Toner Cartridge, HVPS, Imaging Units, biasing contacts.
- Used to troubleshoot repeating defects, missing colors, streaks, voids or banding.

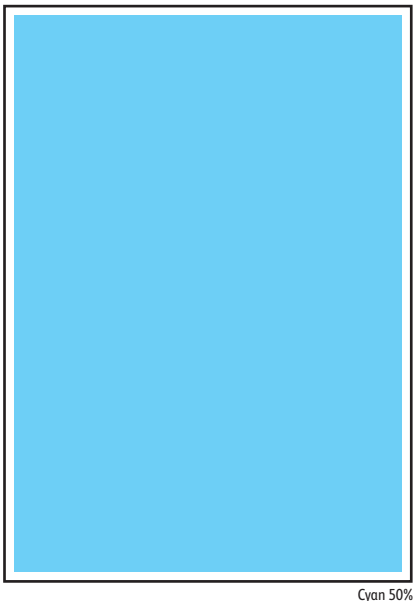


CMYK Test Print

## Cyan 50% Test Print

This test print provides 50 % cyan fill coverage within printable margins. Use this test print to isolate defects to this specific color. Inspect the Toner Cartridge and Imaging Unit of the affected color. Replace the Toner Cartridge or Imaging Unit as needed.

- Checks Cyan Toner Cartridge, HVPS, Imaging Units, biasing contacts.

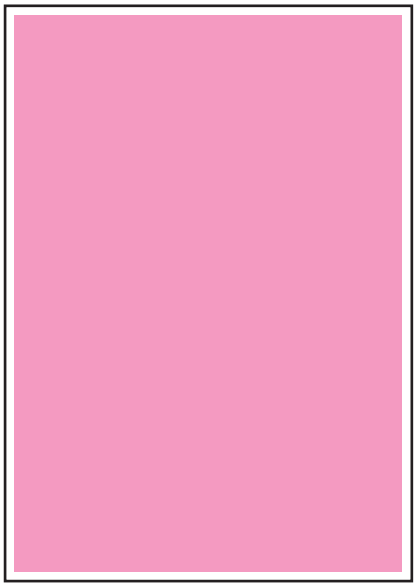


Cyan 50%

## Magenta 50% Test Print

This test print provides 50 % magenta fill coverage within printable margins. Use this test print to isolate defects to this specific color. Inspect the Toner Cartridge and Imaging Unit of the affected color. Replace the Toner Cartridge or Imaging Unit as needed.

- Checks Magenta Toner Cartridge, HVPS, Imaging Units, biasing contacts.

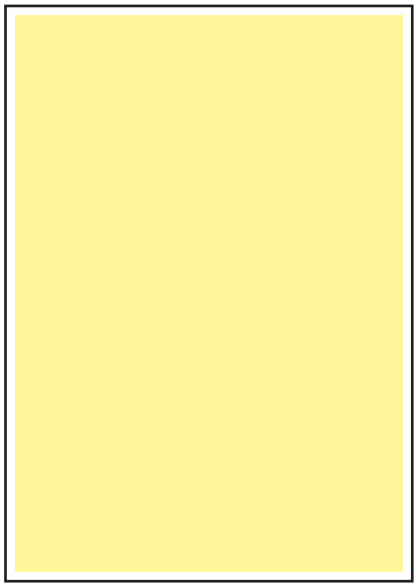


Magenta 50%

## Yellow 50% Test Print

This test print provides 50 % yellow fill coverage within printable margins. Use this test print to isolate defects to this specific color. Inspect the Toner Cartridge and Imaging Unit of the affected color. Replace the Toner Cartridge or Imaging Unit as needed.

- Checks Yellow Toner Cartridge, HVPS, Imaging Units and biasing contacts.

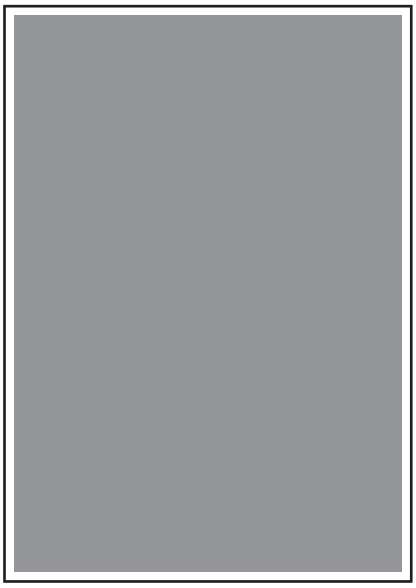


Yellow 50%

## Black 50% Test Print

This test print provides 50 % black fill coverage within printable margins. Use this test print to isolate defects to this specific color. Inspect the Toner Cartridge and Imaging Unit of the affected color. Replace the Toner Cartridge or Imaging Unit as needed.

- Checks the black Toner Cartridge, HVPS, Imaging Units, Biasing Contacts.



Black 50%

## RGB Test Print

This test print provides 80 % density for cyan, magenta, yellow, and black on the whole page. This test is used to identify problems with the toner when printing pictures or photos. Compare the test print with this example to determine the problem.

- Checks Toner Cartridge and dispense for the problem color.
- Used to troubleshoot wrinkling, roller marks, scratches or cold offset (fusing).

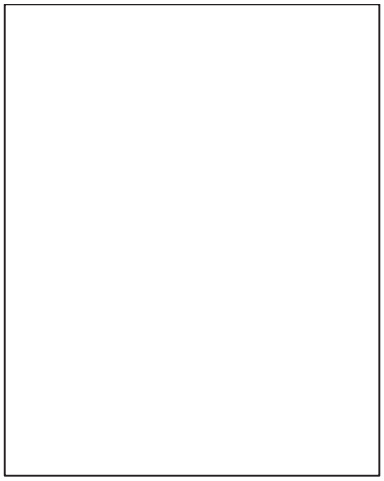


RGB Test Print

## Fuser Cleaning Test Print

This chase page is used to test media transport without using toner and clean media path components of toner build up.

Initial page(s) may have toner streaks/ smudges on them, successive prints should be cleaner and cleaner. It could require 3 or 4 sets to clear the contamination.

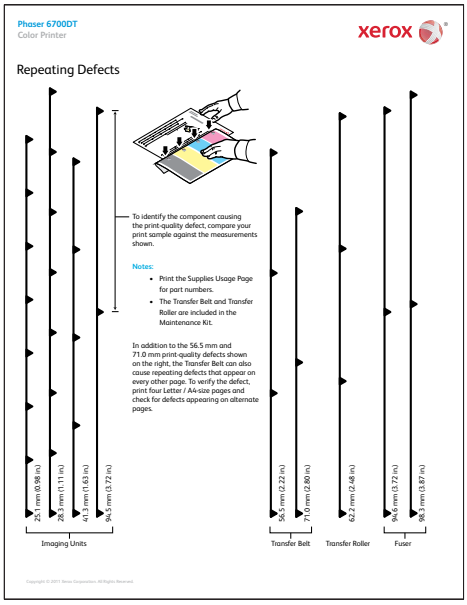


s6700-631

## Repeating Defects Test Print

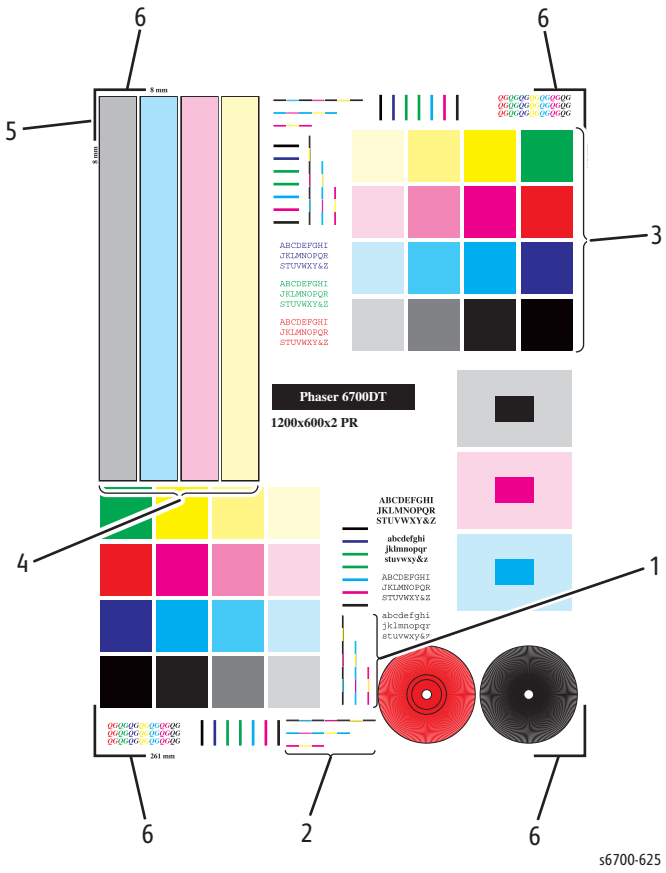
This page is used to identify the component causing repetitive defects on the output image. Print this page from Repeating Spots or Lines in the Resolve Problems menu.

Follow the instructions on the page to determine the affected component.



## Test Patterns Test Print

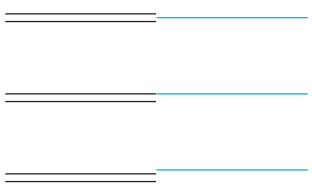
This test print is used to identify problems related to color registration, margins, density, and image size. Compare the test print with this example to determine the problem.




s6700-625

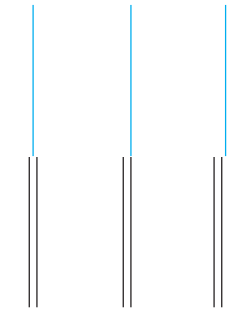
## Analyzing the Test Patterns Test Print

1. Color Registration (Horizontal): The colored lines should match up as shown below. If alignment is bad, run the Colors Align Incorrectly procedure in the Resolve Problems menu.




s6700-633

2. Color Registration (Vertical): The colored lines should match up as shown below. If alignment is bad, run the Colors Align Incorrectly procedure in the Resolve Problems menu.



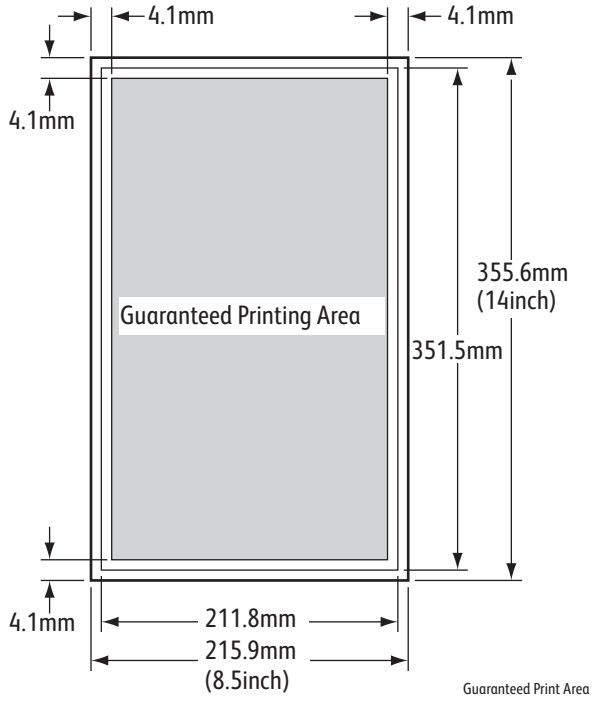

s6700-632

3. Uniform RGB: The secondary color squares should be uniformly colored with no mottling.
4. Density: The color bars should have even density from top to bottom.
5. Margins: Should be 8 mm from the edge of the paper to the line.
6. Image Size: the image height should be 261 mm between the top and bottom lines. The image width should be 192 mm between the left and right lines.

# Image Specifications

## Print Area

- Maximum Print Area: 210.9 mm (8.3 inches) × 351.6 mm (13.8 inches)
- Guaranteed printable area: 207.9 mm (8.2inches) × 347.6 mm (13.7 inches)




Guaranteed Print Area

**Image Specifications**

| Characteristic | Specification | Detail |
|---|---|---|
| Guaranteed Image | 207.9 x 347.6 | All trays |
| Skew | </= +/- 1.1 mm @ 180mm | Leading edge |
| Perpendicularity | </= +/- 1.0 mm @ 140mm | Leading edge |
| Margins | </= +/- 2.00 mm | Leading edge |
| | </= +/- 2.50 mm | Side edge |
| Magnification | </= 100 +/- 0.5 % @ 280mm | Vertical simplex |
| | </= 100 +/- 0.8 % @ 280mm | Vertical duplex |
| | </= 100 +/- 0.5 % @ 180mm | Horizontal simplex |
| | </= 100 +/- 0.8 % @ 180mm | Horizontal duplex |
| Curl | </= 20mm | Full speed |
| | </= 30mm | Medium speed |

# Adjustments and Calibrations

## In this chapter...


- Adjustments
- NVRAM Utilities
- Service Diagnostic NVRAM Utilities
- Calibrations
- Parameter Shadowing


Chapter 6

# Adjustments

The Service Diagnostics Adjustments menu lists utilities for accessing NVRAM and making xerographic process adjustments.

- dc131 NVM Access
- dc301 NVM initialization
- dc361 NVM Save and Restore
- dc701 Fuser Temp Setup
- dc909 Calibrate for Paper
- dc960 High Altitude

## Color Adjustments

Automatic color adjustments occur periodically to maintain optimal print quality. Two types of print process adjustments are used; process control (procon) and registration control (regicon).

Procon adjustments occur:

- During power up
- Periodically during continuos printing
- At the end of each print job
- After installation of a new Toner Cartridge or Imaging Unit
- After a maintenance Kit counter reset
- After cleaning the ADC Sensors.

Regicon adjustments occur:

- During power up
- After a change in temperature or humidity is detected
- After installation of a new Toner Cartridge or Imaging Unit

Two manual color adjustments are available at Printer > Tools > Adjust Color. Color Calibration offers color density and grey balance adjust options. Color Registration provides automated horizontal and vertical color registration adjustment.

## Image Position

The Page Margins Inconsistent and Sides 1 & 2 are not Sufficiently Aligned routines allow manual adjustment of image placement on the print up, down, left, right or on side 1 and 2 for each tray.

Initial launch of the Image Position routine includes:

- Displays the media type loaded in the selected tray
- Allows the user to print the test pattern
- Provides a list of current Image Position adjustment values for all media and trays
- Restore image position values to factory default settings.

Image Position adjustments include:

- A printed tutorial page explaining how to perform the adjustment
- The lead edge (up/down) of the image for each supported media grouping
- The side edge (left/right) of the image for the available trays
- Side 2 for the adjustments on supported media types

The range of adjustment is -15 to +15 up or down and -32 to +32 left or right. Each increment equals 0.17 mm. Total accustomed is +/- 2.5 mm up or down and +/- 5.5 mm left or right.

**Note**

Image position adjustments up or down apply to all trays.

### Procedure

1. Touch Printer to access the Printer menu.
2. Touch the Tools tab.
3. Touch Troubleshooting to access the Troubleshooting menu.
4. Touch Resolve Problems.
5. Select page margins are Inconsistent to adjust simplex page margins and Sides 1&2 are not Sufficiently Aligned to adjust margins front and back for duplex prints.
6. Follow instructions given on the Control Panel or page to make the required adjustments.
7. Make necessary adjustment and touch the Done button to save the changes.

**Note**

The Restore Defaults button resets all image position values to factory default settings on all Trays.

# NVRAM Utilities

Printer settings are stored in the IP Board SD Card and EEPROM. Control Panel menus include several utilities for managing these two NVM storage areas.

## Reset NVRAM

NVRAM Reset, available at Printer > Tools > Setup > Service Tools, returns a user-defined NVM parameters to their factory default value.

## Reset Control Panel Touch Screen

Press and hold the Power Saver button for 5 seconds, then press and release the Pause button to reset the touchscreen to factory defaults and initiate touchscreen diagnostics. Refer to “Control Panel Calibration and Testing” on page 6-8.

## Maintenance Kit Life Count Reset

Maintenance Kit Life Count reset, available at Printer > Tools > Setup > Service Tools > Reset HSFI Counters, clears the Maintenance Kit counter and initiates a Procon adjustment following installation of the new Maintenance Kit.

## Network Reset

Network Reset, available at Printer > Tools > Setup > Network and USB > Ethernet, returns all user-defined network settings to their factory default values.

# Service Diagnostic NVRAM Utilities

## dc131 - NVM Read/Write

**Caution**

Use care 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.

The NVM Read / Write (dc131) routine provides the capability to review and modify machine control parameters stored in Non-Volatile Memory (NVM).

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select **dc131 NVM Access**.

**Note**

The NVM ID has two numeric fields; the NVM value range is from 1 to 999. Not all NVM fields can be modified. Reference the NVM tables starting on page A-9 for information regarding each NVM parameter.

## dc301 - NVM Initialization

**Caution**

Use the NVM Initialization procedure as a last option when servicing the Phaser 6700. A power cycle may be required to return the printer to normal operation.

The NVM Initialization (dc301) routine enables the reset of NVM values to their default settings within a specified module. Multiple modules may be initialized by a single request.

The NVM parameters initialized within each domain are dependent on the initialization type (user data, system data, and all data). Certain groups of NVM parameters are not affected by the NVM Initialization such as billing counters, even in the case of an all data initialization.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch the Adjustments tab.
3. Select dc301 NMV Initialization.
4. Select the appropriate Domain and NVM Data options.
   - Domain - Controller, Engine, Finisher
   - NVM Data - User, System, All

   **Note**

   The User, System and All NVM Data options are only available in the Controller (IP Board) domain. Engine and Finisher domains offer the System NVM Data option.
5. Touch the Initialize button to perform the procedure.
6. A confirmation screen is displayed “Are you sure you want to initialize NVM?”
7. Touch the Initialize button.

8. After the NVM Initialization procedure is complete, an Initialization successful message is displayed.
9. Touch the Close button to exit the NVM Initialization screen. Reboot the printer at call closeout.

## dc361 - NVM Save and Restore

The NVM Save and Restore (dc361) routine allows the user to back-up NVM data and restore the machine's NVM parameters to their previous values following a service action.

NVM Save and Restore can be used to recover a machine's NVM values from one of 15 auto-saved sets of parameters. The auto-save automatically stores the contents of the IP Board SD Card and EEPROM every day into a 15-day queue. Manually saving NVM copies the current contents of the IP Board SD Card, EEPROM and MCU Board EEPROM to NVRAM.

NVM Save and Restore also includes the ability to copy files between the modules and a USB thumb drive.

### Saving NVM

1. Access the Service Diagnostics menu (page 4-7).
2. Touch the Adjustments tab.
3. Select dc361 NVM Save and Restore.
4. From the UI screen, select Machine NVM.
5. From the pull-down menu, select Save.
6. A progress message Saving NVM in Progress is displayed.
7. When NVM Save procedure is complete, the dc361 NVM Save and Restore menu is displayed showing three newly created Platforms (Controller SD Card. NVM EEPROM and Machine NVM). These three files are immediately available for restoration.
8. Touch the Close button to exit the dc361 NVM Save and Restore screen.

### Restoring NVM

1. Access the Service Diagnostics menu (page 4-7).
2. Touch the Adjustments tab.
3. Select dc361 NVM Save and Restore.
4. From the pull-down menu, select the Platform (module) you want to restore.
5. A progress message Restoring NVM in Progress is displayed.
6. When NVM Restore procedure is complete, the dc361 NVM Save and Restore menu is displayed.
7. Touch the Close button to exit the dc361 NVM Save and Restore screen.

## dc701 Fuser Temperature Setup

The dc701 Fuser Temp Setup utility is used to adjust Fuser temperatures to compensate for media weight or improve toner adhesion.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc701 Fuser Temp Setup. A dc701 Fuser Temp Setup screen is displayed.
4. Touch the print mode (standard or Photo) to apply the Fuser temperature changes.
5. Touch the media weight to associate with the Fuser temperature setting.
6. Increment or decrement the default setting and touch Write to save the change. To reset the default, Write a value of zero.
7. Print several test print to check print quality.

**Note**

Fuser temperature adjustment range is +/- 6 for each media type.

## dc909 Calibrate for Paper

The dc909 Calibrate for Paper utility is used to adjust Transfer Roller charge to compensate for media type or weight. Increased charge on the Transfer Roller increases toner attraction to the media. Refer to “Secondary Transfer” on page 2-12 for details of the toner transfer process.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc909 Calibrate for Paper. A dc909 Calibrate for Paper screen appears.
4. Touch the media type to apply the charge changes.
5. Increment or decrement the default setting and touch Write to save the change. To reset the default, Write a value of zero.
6. Print several test print to check print quality.

**Note**

Transfer Roller bias voltage adjustment range is +/- 6 for each media type.

## dc960 High Altitude

The dc960 Altitude Adjustment utility is used to adjust print process control to compensate for installations at higher altitudes. If the printer is installed more than 2000 meters above sea level, use dc960 to change print process control parameters.

1. Access the Service Diagnostics menu (page 4-7).
2. Touch Adjustments.
3. Select dc960 Altitude Adjustment. A dc960 Altitude Adjustment screen appears.
4. Touch the correct altitude setting and touch Write to save the new setting to NVM.
5. The Current Setting changes to reflect the new value.

# Calibrations

## Control Panel Calibration and Testing

Panel diagnostics includes various tests that help troubleshoot issues with the display or buttons. A touchscreen calibration routine is available to align touching the screen to the on screen display. Always calibrate the touchscreen after replacing the Control Panel.

**Note**

If you are unable to navigate the menus, press and hold the Power Saver button for 5 seconds, then press and release the Pause button to reset the touchscreen to factory defaults and initiate a touchscreen calibration routine.

Run Panel Diagnostics from the Service Tools menu.

1. Touch Panel Diagnostics on the Service Tools menu.
2. A list of tests is displayed on the Panel Diagnostics menu.
   - LCD Pixel Test
   - Touch Panel Test
   - Touch Panel Calibration
   - Button Test
   - Display Vertical Test
   - Exit
3. Touch the desired test on the Control Panel.
4. To exit any test while the test is in progress, press the pause button.
5. To exit Panel Diagnostics, touch Exit.

**Control Panel Calibration Menu**

| Type of Test | Description |
|---|---|
| LCD Pixel Test | Test pixel colors in the display. |
| Touch Panel Calibration | ■ Performs a nine point calibration of the touchscreen to align the touch sensitive layer with the underlying LCD display.<br>■ Resets calibration data to factory defaults. |
| Touch Panel Test | Touch the panel to confirm each touch point is accurately sensed. |
| Display Vertical Test | Inspect for luminosity defects in the LCD display. |
| Button Test | Test Control Panel button function. |
| Exit | Exit Control Panel Calibration. |

# Parameter Shadowing

This function periodically saves critical, user-defined NVM parameters stored in the IP Board SD Card and EEPROM. When a replacement SD Card or EEPROM is installed, the printer restores the NVM parameters to the new part.

**Caution**

When troubleshooting problems related to the IP Board, do not replace the SD Card and EEPROM simultaneously. Replace one part and reboot. If the problem persists, replace the other part. Replacing both parts at once can result in the loss of customer configuration data.

# Cleaning and Maintenance

In this chapter...

- Service Maintenance Procedure
- Cleaning
- Maintenance

Chapter 7

# Service Maintenance Procedure

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, Average Monthly Print Volume (AMPV), type of media printed on, and operating environment are factors in determining how critical cleaning the machine is and how often it is necessary. Record the number of sheets printed.

## Recommended Tools

- Toner vacuum cleaner
- Clean water
- Clean, dry, lint-free cloth
- Black light-protective bag

# Cleaning

Perform the following general cleaning steps as indicated by the printer's operating environment.

**Caution**

Never apply alcohol or other chemicals to any part of the printer. Never use a damp cloth to clean up toner. If you remove an Imaging Unit, place it in a light-protective bag or otherwise protect it as exposure to light can quickly degrade performance and result in early failure.

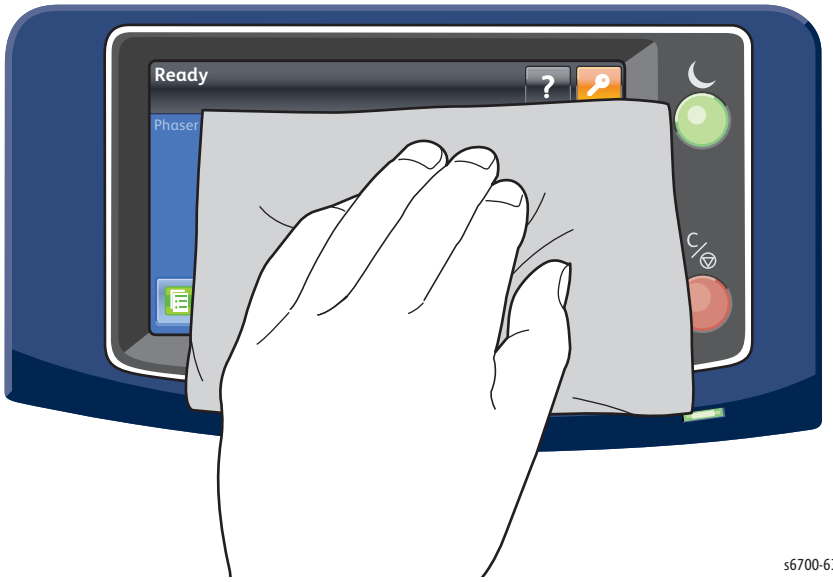
1. Record number of sheets printed.
2. Print several sheets of paper to check for problems or defects.
3. Turn the printer power Off and disconnect the power cord.
4. Remove the Imaging Units, Fuser, Toner Cartridges, and Transfer Belt before cleaning.
5. Clean all Fans.
6. Ensure that all cover vents are clean and free of obstructions.
7. Remove any debris or foreign objects from the Fuser, Transfer Belt, Imaging Unit, and inside of the printer.
8. Remove and clean the paper trays.
9. Clean all rubber rollers with a lint-free cloth slightly dampened with cold water.
10. Clean the ADC Sensors (page 7-3).
11. Clean all four laser lenses (page 7-4).

## Cleaning the Control Panel

**Caution**

The LCD is easily scratched.

Use a soft, lint-free cloth to remove dust and fingerprints from the Control Panel.

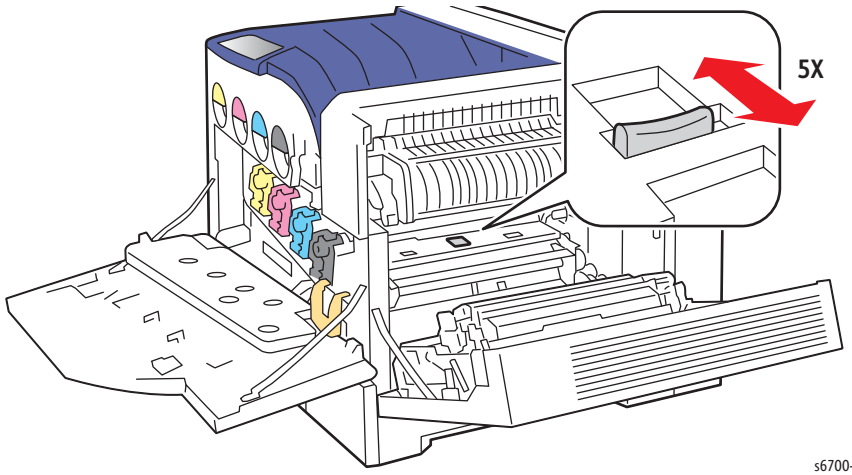



## Cleaning the ADC Sensors

1. Open the Front Door.
2. Open the Inner Frame Assembly.
3. Open the Right Door.
4. Remove the Transfer Belt (page 8-12).
5. Use the wiper in the Procon Assembly to clean the ADC Sensors. Wipe the sensors at least 5 times to thoroughly clean the sensors.

**Note**

Toner density usually recovers after 20 or 30 color prints.



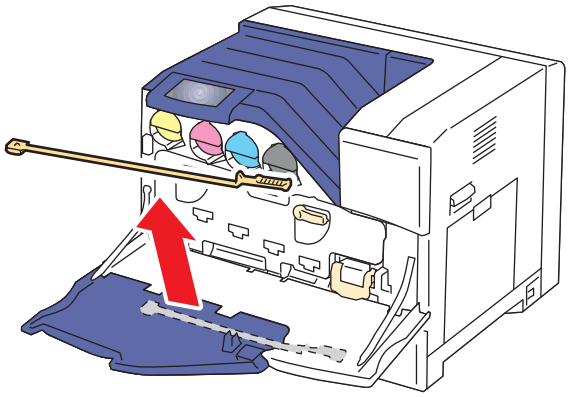
## Cleaning the Laser Lenses

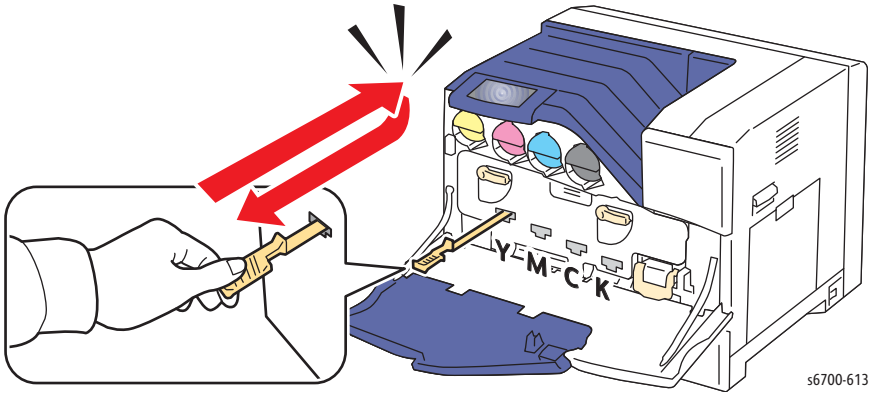
Clean all 4 laser lenses anytime an Imaging Unit is installed or vertical stripes begin to appear in the output.

1. Open the Front Door.
2. Using the provided cleaning wand, wipe each laser lens twice to thoroughly clean each lens.

**Note**

When installing a new Imaging Unit, replace the pad at the end of the cleaning wand. A new pad is included with each replacement Imaging Unit.





# Maintenance

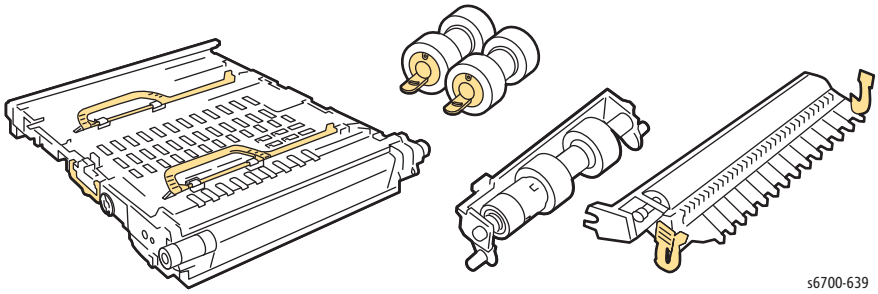
## RIP (Repair, Inspect, and Prevent) Procedure

Perform these routine maintenance procedures during the course of servicing the printer.

- Clean the Feed Rollers, Exit Rollers, and Guides; replace if necessary.
- Remove and clean the paper trays.
- Print a Configuration and Error History pages, diagnose, and repair any problems as indicated.
- Clean the Fans and vents.
- 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 running.
- Review with the customer all work that was performed and discuss proper printer care.

## Maintenance Kit - 604K73140

The Maintenance Kit includes a Transfer Belt, Transfer Roller and Feed Rollers to facilitate servicing the printer. A Maintenance Kit is Past End of Life message and subsequent hard stop indicates when Maintenance Kit replacement is necessary.




**Replacement Note**

Reset the Maintenance Kit Life counter available at Printer > Tools > Setup > Service Tools > Reset HSFI Counters, after installing a new kit.

## Moving the Printer

**Warning**

Remove all options before moving the printer.

**Warning**

To avoid injury, use 3 people to lift the printer.

**Caution**

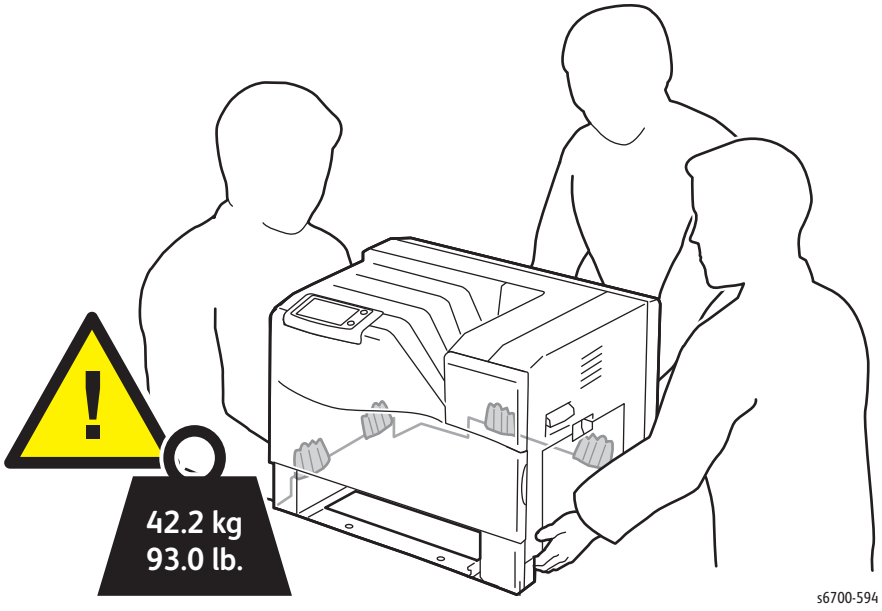
When moving the printer over long distances, use the Repack Kit, 695K28490. Instructions are included with the kit.

Before moving the printer, do the following:

1. Turn the printer Off and disconnect the Power Cord and other cables from the the printer.
2. Allow the printer to cool about 30 minutes.
3. Remove media from the trays.

When moving the printer:

- Use 3 people to lift and move the printer.
- When lifting the printer, grasp the areas as shown in the illustration.
- Do not tilt the printer more than 10 degrees to the front or back, or left or right. Tilting the printer more than 10 degrees may cause toner spillage.




**Caution**

Failure to repackage the printer properly for shipment can result in damage to the printer not covered by the warranty, Service Agreement, or Total Satisfaction Guarantee.

After moving the printer:

1. Remove the Toner Cartridges and Imaging Units, then clean any toner or other debris inside the printer.
2. Reinstall any parts removed
3. Clean all 4 laser lenses (page 7-4).
4. Reconnect the printer to the cables and power cord.
5. Plug in and turn On the printer.

# Service Parts Disassembly

## In this chapter...


- Overview
- Maintenance and Consumables
- Print Engine Covers
- Feeder / Registration Assembly
- Right Door
- Print Engine Electrical
- Print Engine Drive
- Print Engine Chassis
- 550-Sheet Feeder
- 1100-Sheet Feeder
- Finisher


Chapter 8

# Overview

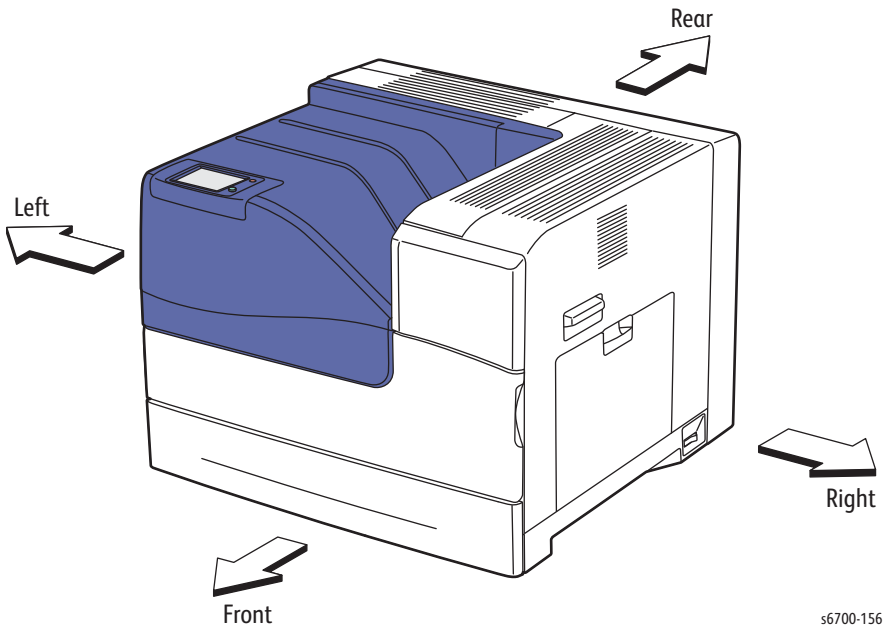
This section contains the removal procedures for field-replaceable parts listed in the Parts List. In most cases, the replacement procedure is simply the reverse of the removal procedure. In some instances, additional steps are necessary and are provided for replacement of the parts. For specific assemblies and parts, refer to Chapter 9.

**Note**

Part names that appear in the removal procedures may not match names that appear in the Parts List. For example, a part called Tray in a removal procedure may appear on the Parts List as Cassette, Assy. When working on a removal procedure, ignore any prerequisite procedure for parts already removed.

## Standard Orientation of the Printer

When needed, the orientation of the printer is called out in the procedure as an aid for locating the printer parts. The following figure identifies the Front, Rear, Left, and Right sides of the printer.




## Preparation

Before you begin any procedure:

**Warning**

Unplug the power cord from the wall outlet.

**Warning**

Allow the Fuser to cool before servicing the printer.

**Caution**

Many parts are secured by plastic tabs. Do not over flex or force these parts. Do not over torque screws threaded into plastic.

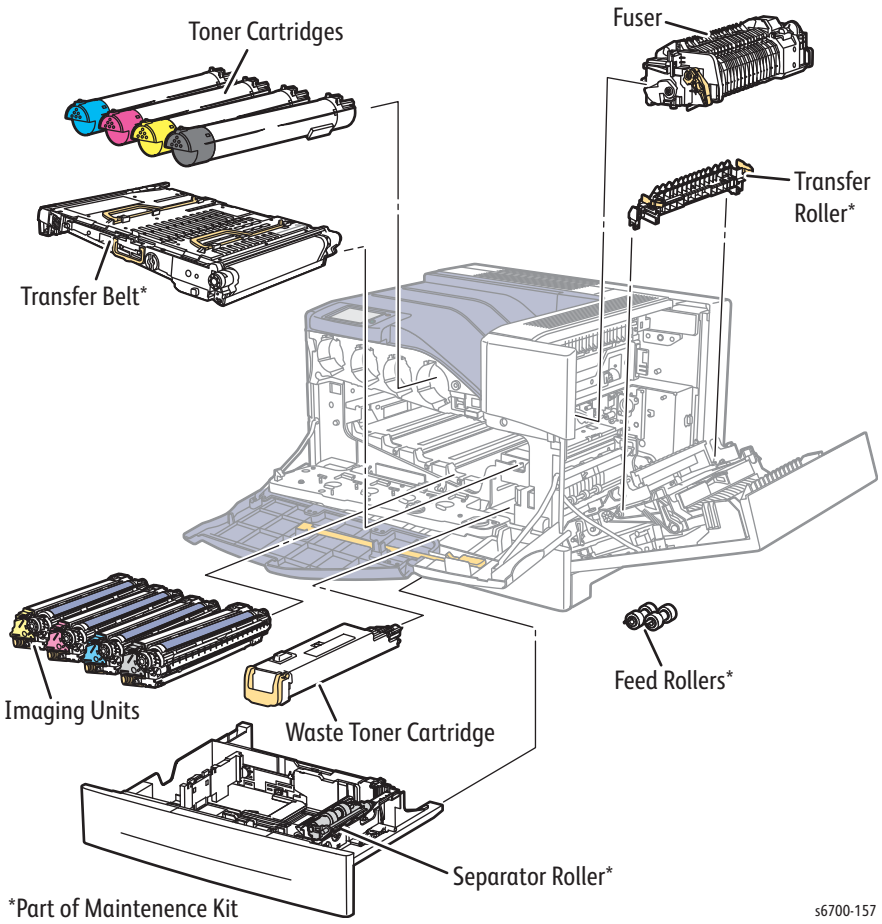
**Caution**

Do not remove Red-colored screws. These screws secure key chassis components. Removal of Red-colored screws can result in chassis misalignment.

**Caution**

Cover the Imaging Units to avoid light exposure.

1. Wear an Electrostatic Discharge wrist strap.
2. Turn Off power and disconnect the power cord from the wall outlet and printer.
3. Disconnect all cables from the printer.
4. Remove these items:
   - Imaging Units
   - Transfer Belt
   - Transfer Roller
   - Trays
   - Fuser
   - Toner Cartridges



## 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 “PL*X.X.X*” indicates that this component is listed in the Parts List.
- Bold 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.

**Replacement Note**

Provides information specific to the replacement of parts or assemblies.

**Caution**

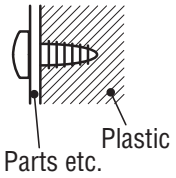
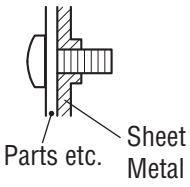
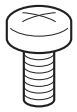
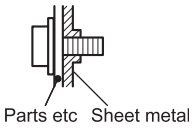
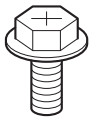
Do not remove Red screws. These screws secure key components. Removal of Red-colored screws can result in chassis misalignment.

Use care when installing self-tapping screws in plastic. To properly start the screw in plastic, turn the screw counter-clockwise in the hole until you feel the screw engage the threads, then tighten as usual. Improper alignment 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.

## Fastener Types

This table lists fastener types used to assemble the system. The removal procedures provide dimensions for screws and clips being removed.

| Type | Application | Shape |
|---|---|---|
| Screw for plastic, Silver, tapping<br>■ Screw thread is coarse compared to metal screw.<br>■ Screw tip is thin. |  |  |
| Screw for metal, Silver<br>■ Fine threads.<br>■ Diameter is uniform. |  |  |
| Screw for metal, Silver, with flange<br>■ Fine threads.<br>■ Diameter is uniform |  |  |

## Hardware Kit - 604K56670

**Hardware Kit**

| Fastener Type | Size | Parts List Designator | Quantity |
|---|---|---|---|
| Screw for plastic, Silver, self-tapping | M4 x 10mm | ST6 | 2 |
| Screw for plastic, Silver, self-tapping | M3 x 8mm | ST7 | 2 |
| Sheet metal screw, Silver | M3 x 4mm<br>M3 x 6mm | SM1<br>SM2 | 2<br>2 |
| Sheet metal screw, Silver, with flange | M3 x 6mm<br>M3 x 8mm | SM11<br>SM12 | 2<br>2 |
| E-Ring, 3 mm (1) | D3<br>D4 | E1<br>E2 | 2<br>2 |

# Maintenance and Consumables

Maintenance items include the Separator Roller in the Trays, Transfer Belt, Transfer Roller, Feed Rolls, and Fuser. Consumables consist of the Waste Toner Cartridge, Toner Cartridges, and Imaging Units. The Maintenance Kit bundles the Transfer Belt, Transfer Roller, Separator and Feed Rollers. The Transfer Roller is also available seprately.

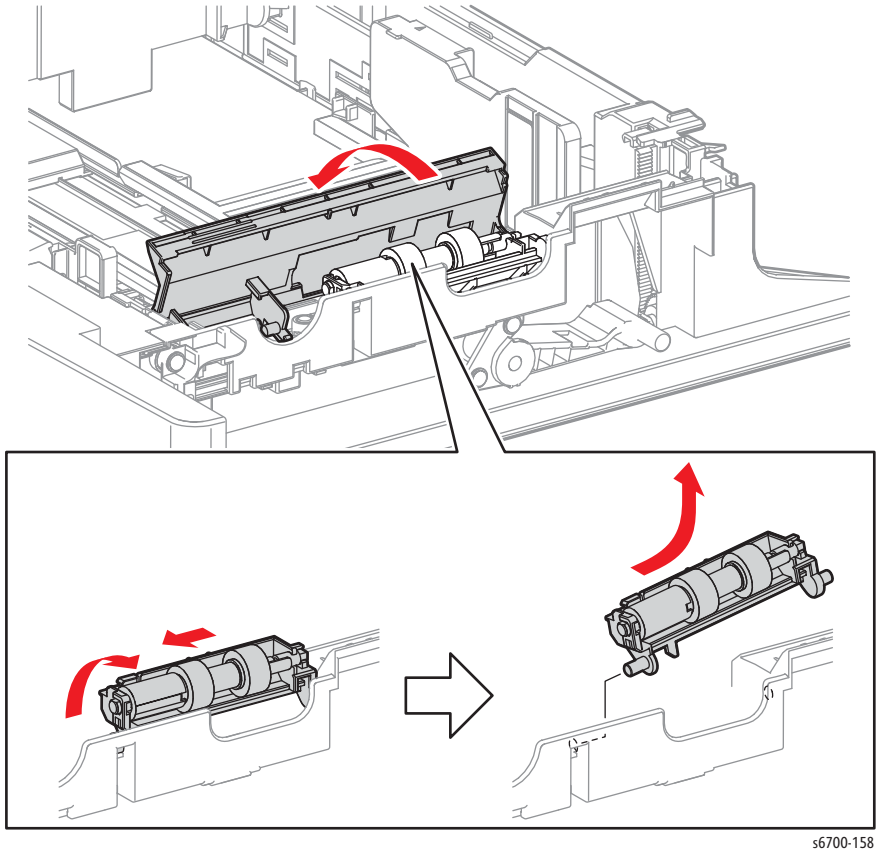
**Note**

After replacing the Maintenance Kit, reset the life counter.

## Tray Feed and Separator Roller Kit

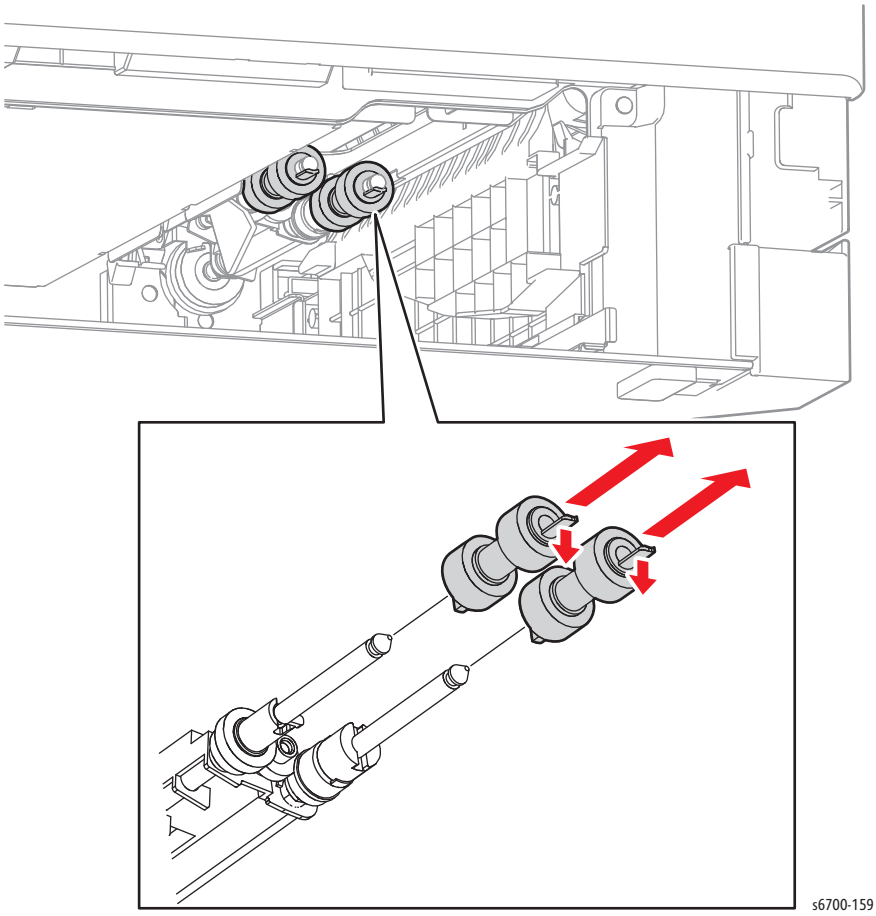
### PL2.1.99

1. Remove the Tray.
2. Open the separator cover.
3. Raise the Separator Roller, then slide it forward to remove it from the Tray.



s6700-158

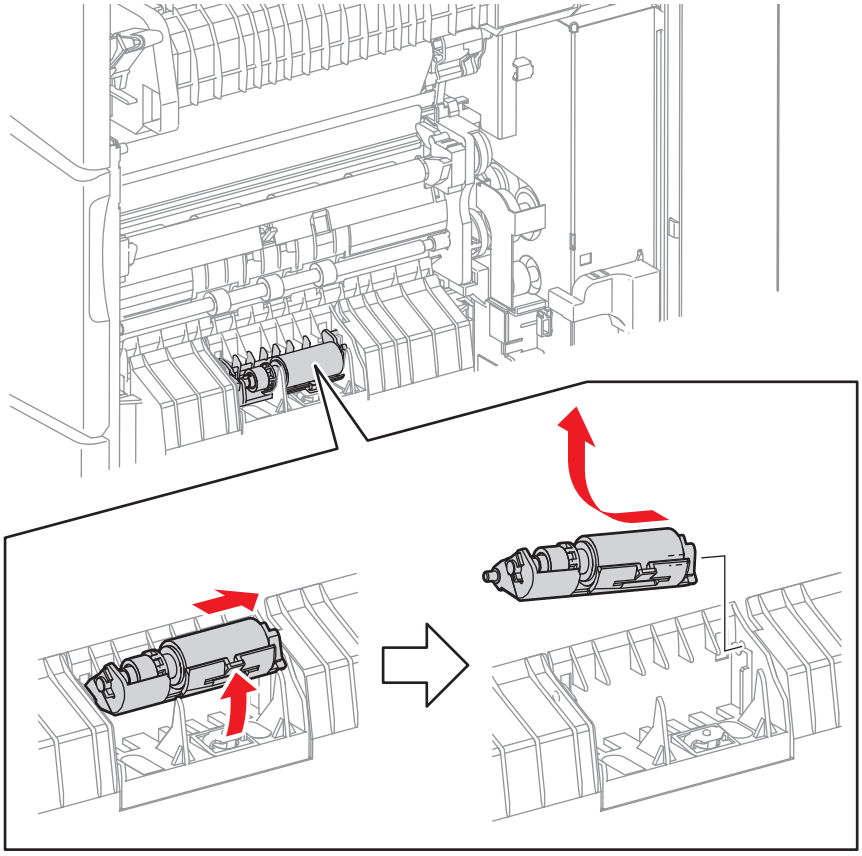
4. Remove the Feed Rollers from the shafts by releasing the hooks.



## Tray 1 Separator Roller

### PL3.1.99

1. Open the Right Door.
2. Raise the Tray 1 Separator Roller, then slide it backward to release the boss.

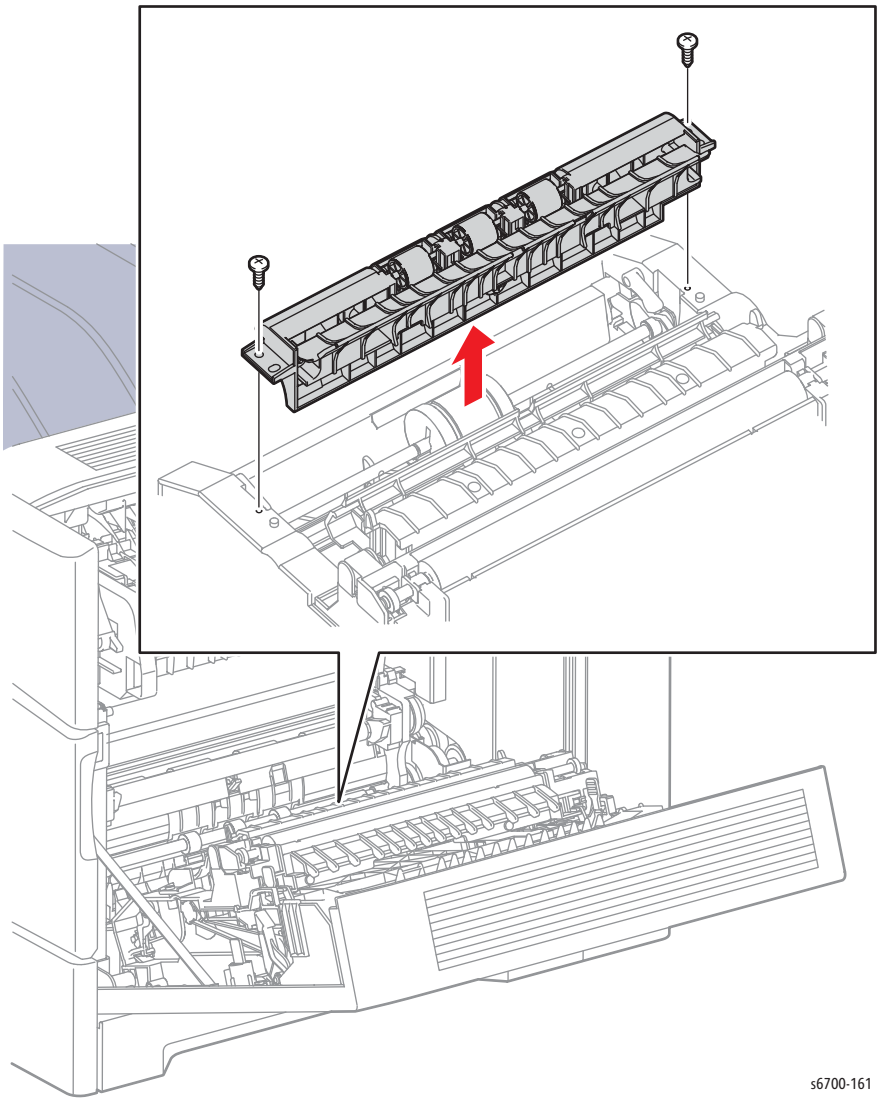


s6700-160

# Feed Roller

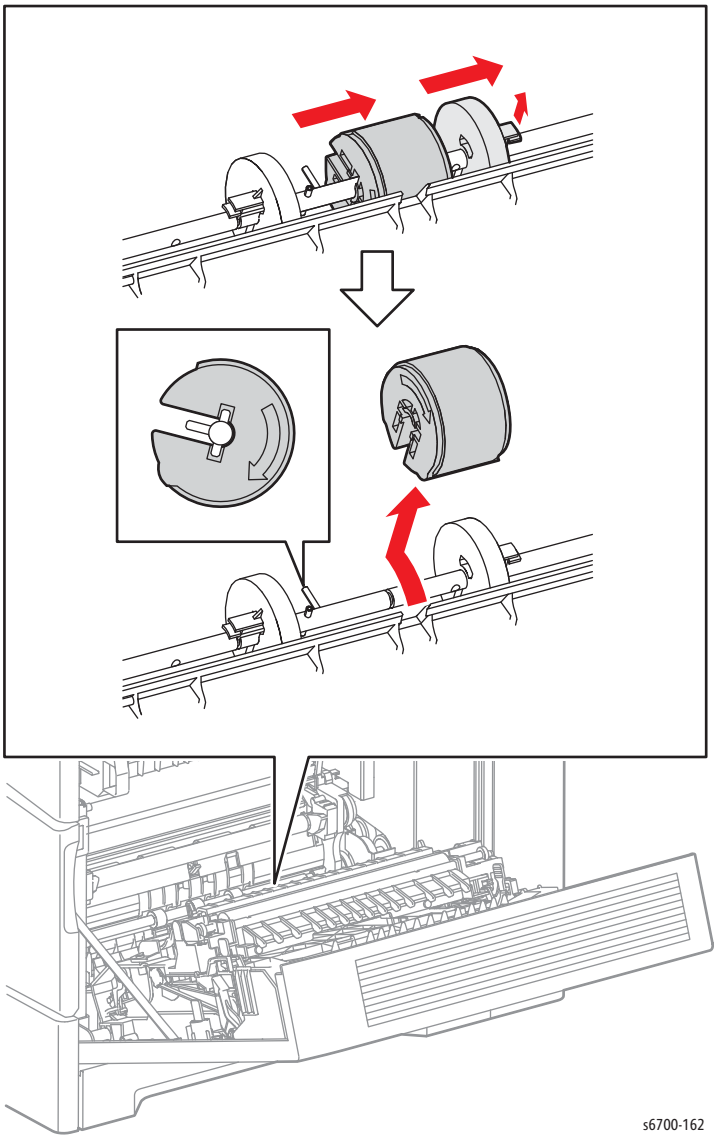
## PL4.2.21

1. Open the Right Door.
2. Remove 2 screws (silver, tapping, 8mm) that secure the chute to the Right Door.



s6700-161

3. Release the hook of the roll core, then slide the roll core to the rear.
4. Release the groove on the Feed Roller from the vertical pin on the shaft by sliding the Feed Roll to the rear.
5. Remove the Feed Roller from the shaft by rotating the Feed Roller 180 degrees.

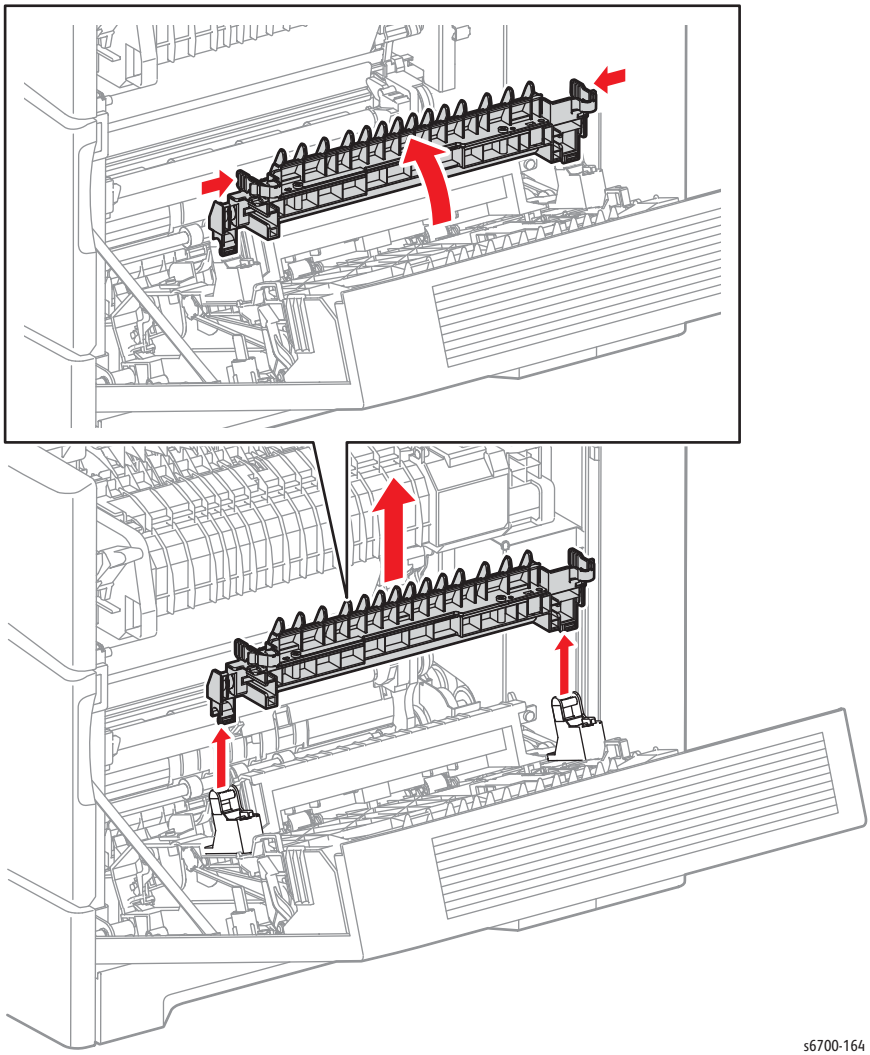


s6700-162

## Transfer Roller

### PL4.4.99

1. Open the Right Door.
2. Release the front and rear hooks of the Transfer Roller and raise the roller to remove it.



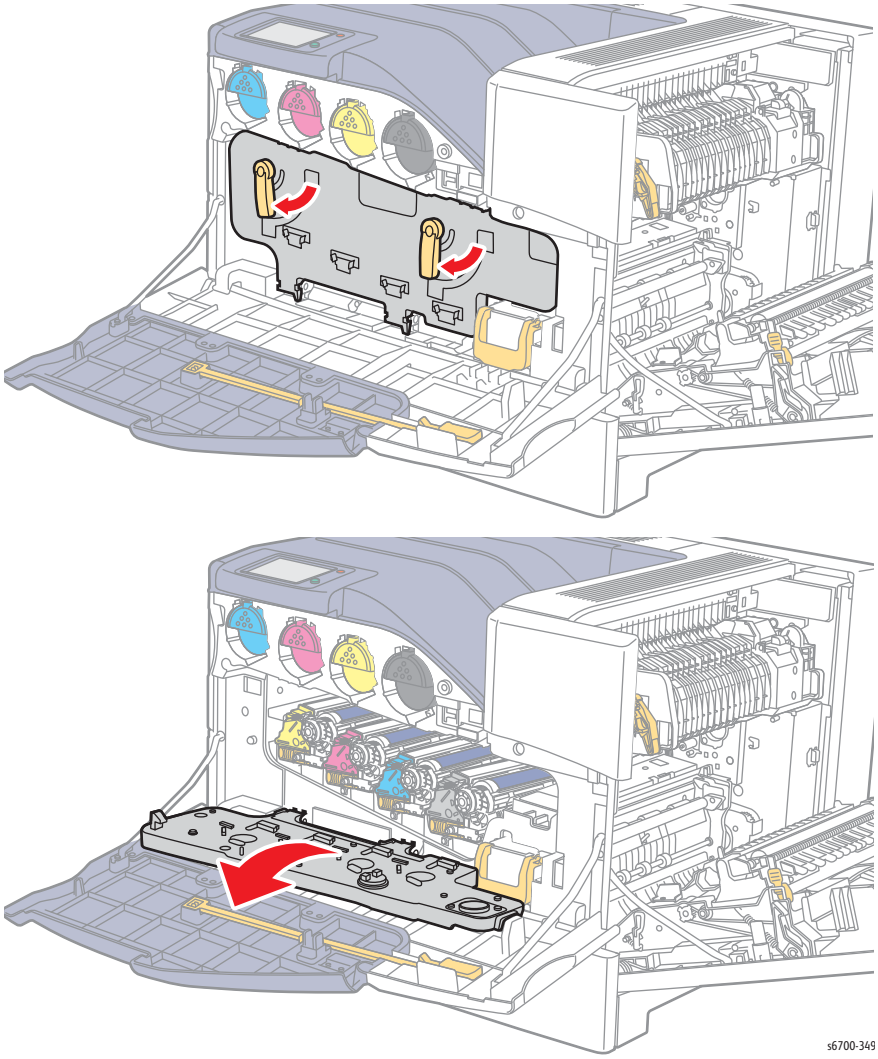
# Transfer Belt

## PL5.1.99

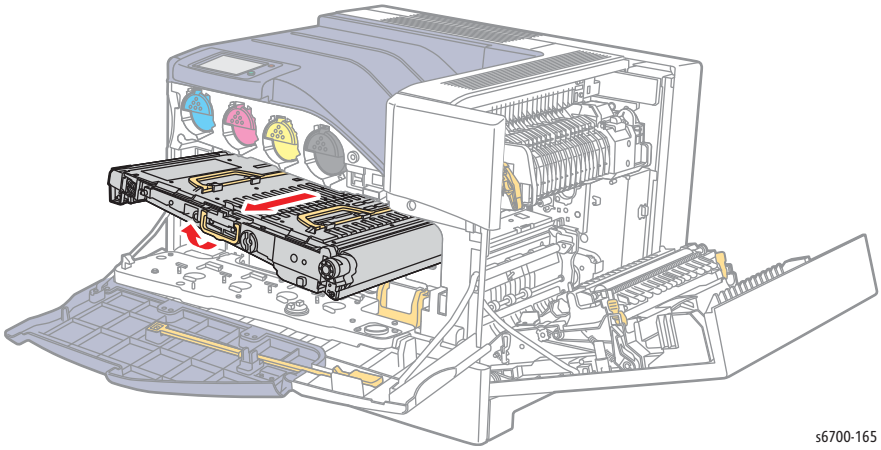
**Caution**

Toner may collect on the Transfer Belt and leak from the Transfer Belt auger port. Use care when handling the Transfer Belt to avoid toner spills and belt damage.

1. Open the Right Door.
2. Open the Front Door.
3. Unlock and open the Inner Frame Assy.



3. Pull the Transfer Belt out slowly until the upper handles are accessible.

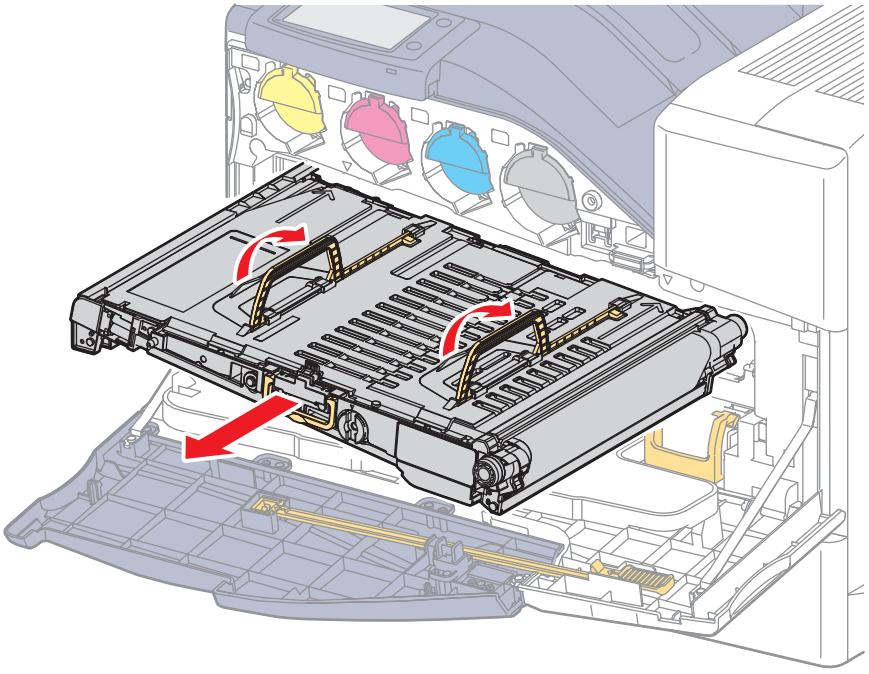


s6700-165

**Note**

To properly remove the Transfer Belt, hold the handles, taking care not to touch the belt.

5. Raise the top handles.
6. Holding the top handles, remove the Transfer Belt from the printer.



s6700-166

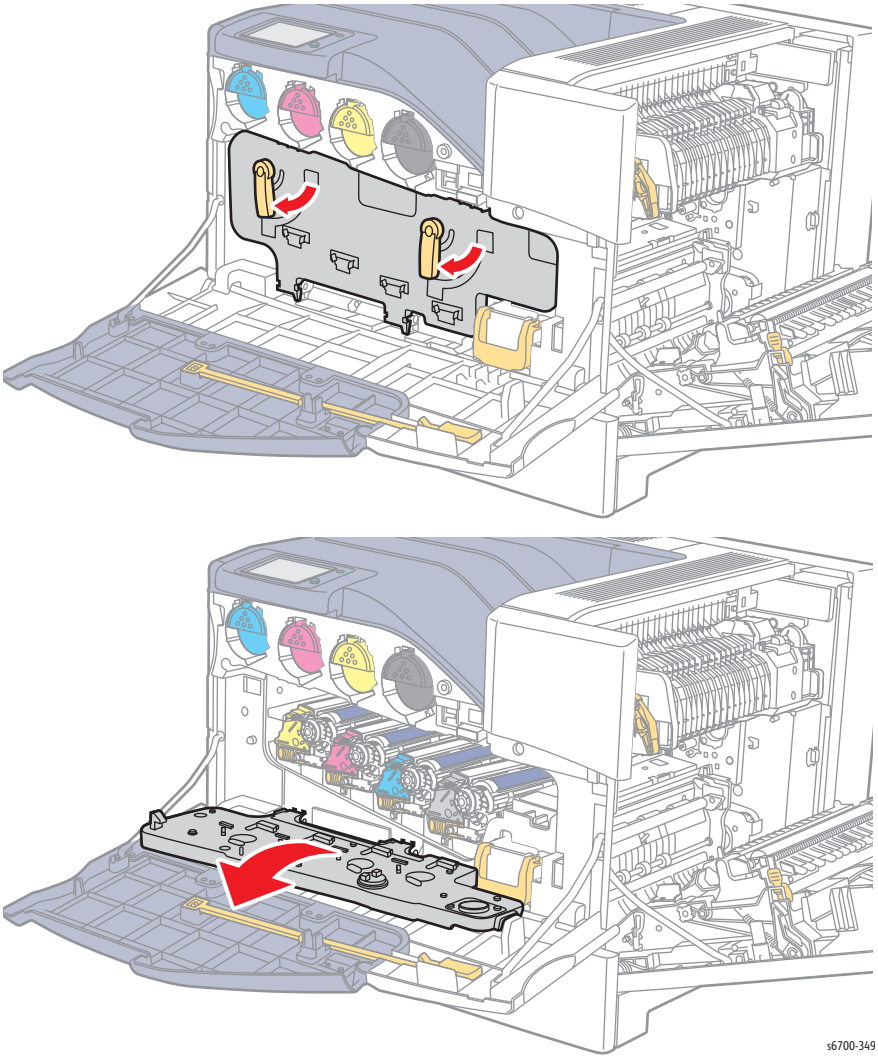
# Imaging Units

## PL5.1.8~5.1.11

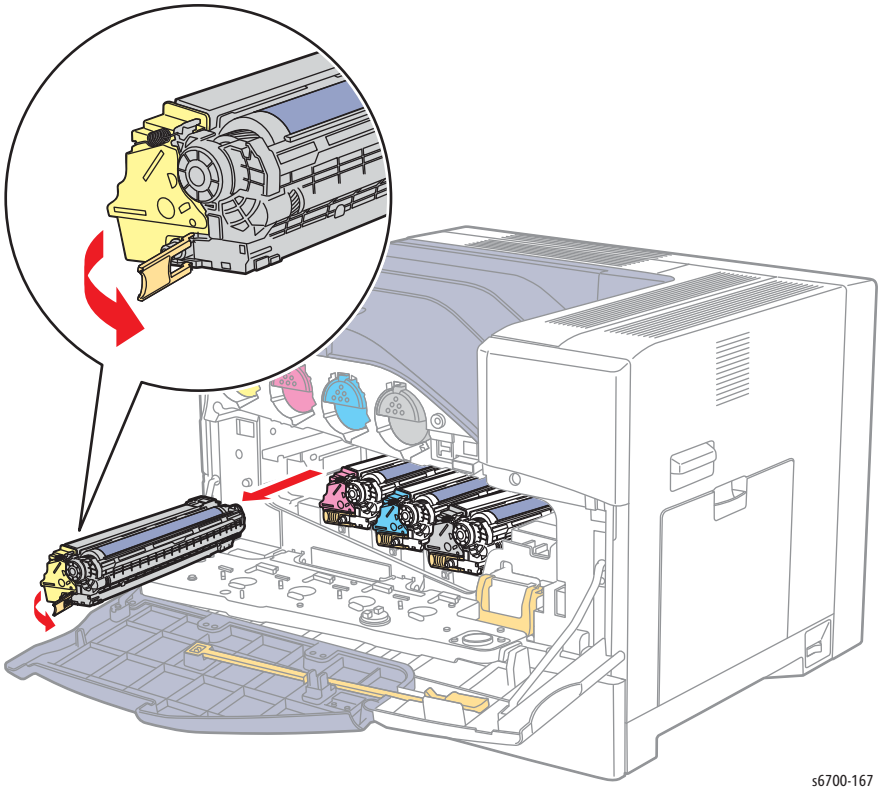
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Unlock and open the Inner Frame Assy.



3. Release the handle of the Imaging Unit.
4. Holding the handle, pull the Imaging Unit slowly from the printer.




**Replacement Note**

Remove 2 sealing tapes from the new Imaging Unit after installation.

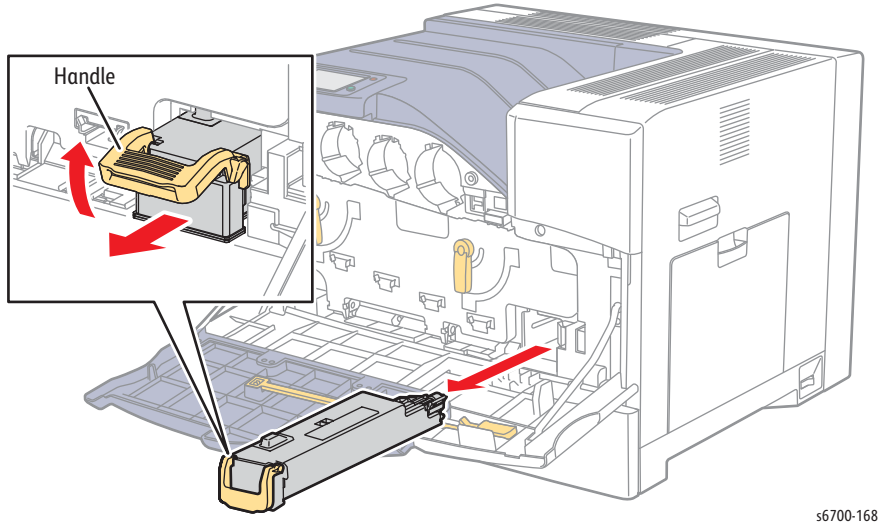
# Waste Toner Cartridge

## PL6.1.13

**Caution**

Toner may collect on the Waste Toner Cartridge and leak from the fill port. Use care when handling the Waste Toner Cartridge to avoid toner spills.

1. Open the Front Door.
2. Raise the Waste Toner Cartridge handle to release the lock.
3. Holding the handle, pull the Waste Toner Cartridge out of the printer.



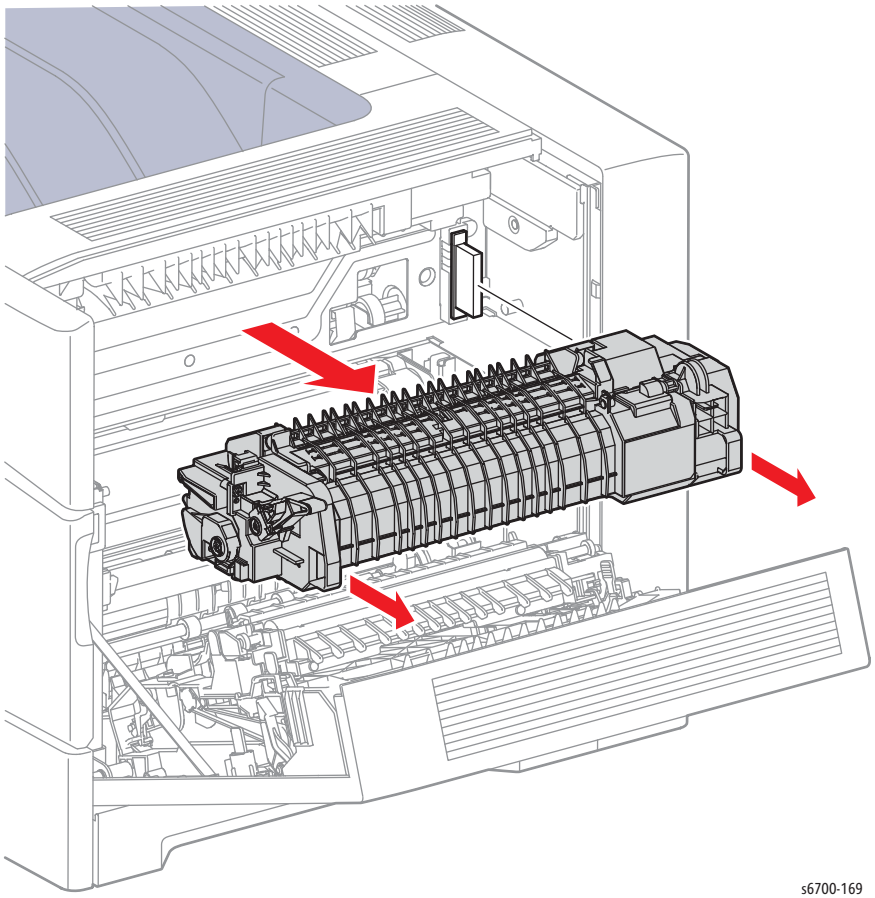
# Fuser

## PL7.1.99

**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Holding the Fuser handles, pull the Fuser forward to remove it.



s6700-169

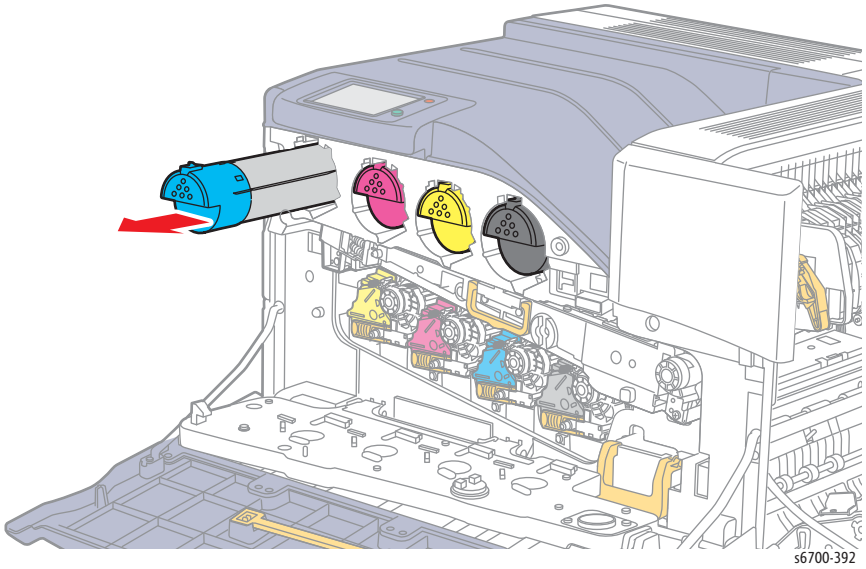
**Replacement Note**

Cycle system power after installing the replacement Fuser.

## Toner Cartridges

### PL6.1.1 ~ 4

1. Open the Front Door.
2. Holding the handle, pull the Toner Cartridge forward to remove it.



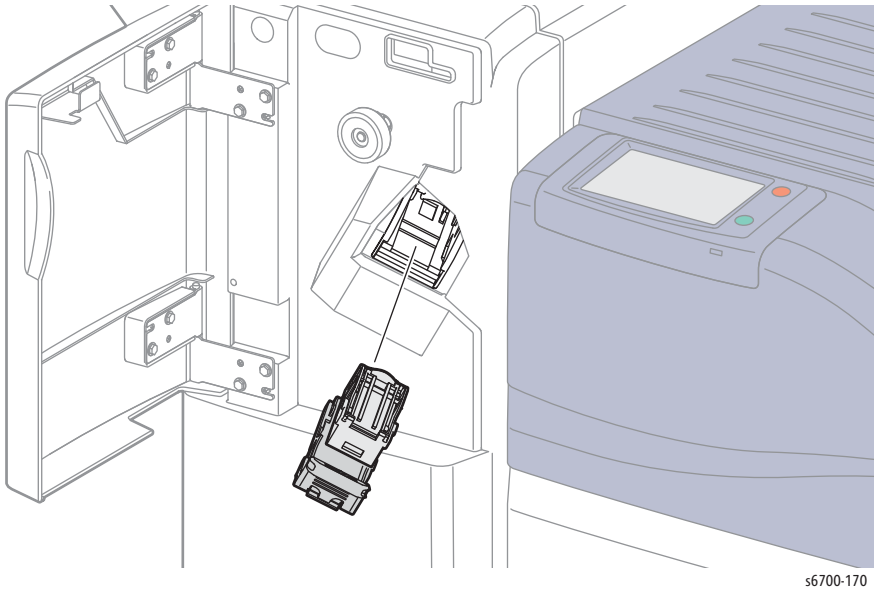

**Replacement Note**

Push the Toner cartridge into the chassis until the hook is engaged.

## Staple Cartridge

### PL14.8.21

1. Open the Finisher Front Door.
2. Pull the Staple Cartridge from the Stapler to remove.



# Print Engine Covers

## Top Cover

### PL1.1.3

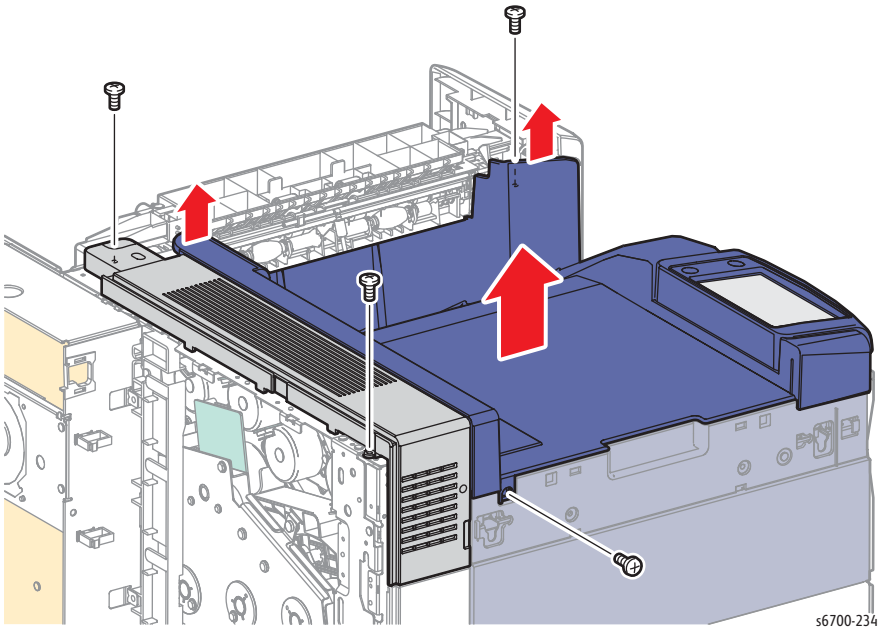
**Warning**

Allow the Fuser to cool before servicing the printer.

**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Right Door.
3. Remove the Upper Inner Front Cover (page 8-25).
4. Remove the Upper Finisher Docking Cover (page 8-21).
5. Remove the Output Tray (page 8-21).
6. Remove the Rear Cover (page 8-31).
7. Remove the Exit Cover (page 8-22).
8. Remove the Control Panel (page 8-63).
9. Remove 4 screws (silver, 6mm) that secure the Top Cover Assy and release 2 bosses from the right side.



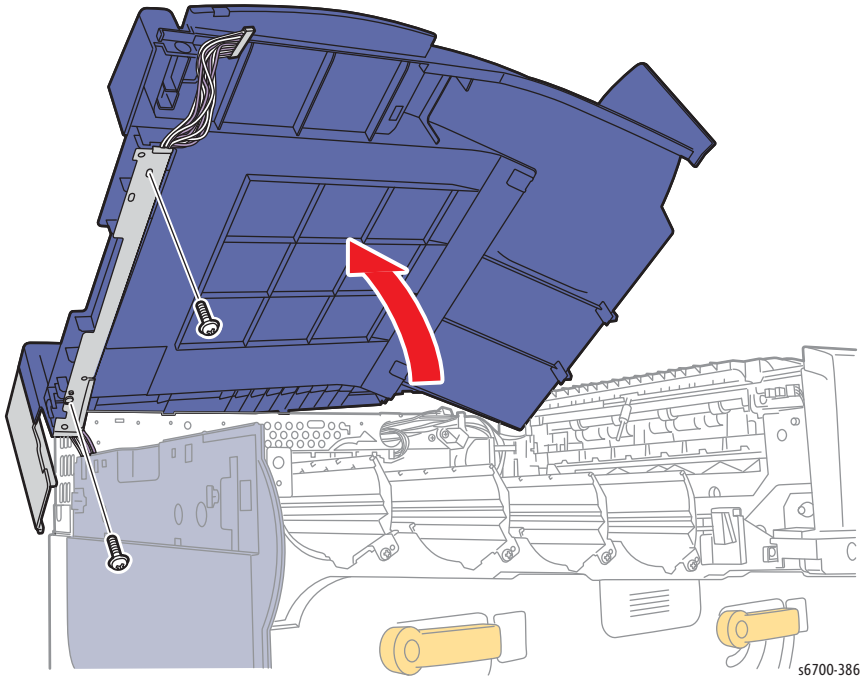

**Note**

Stop here if the Top Cover is being removed to access other parts. At this point rotate the Top Cover to repair underlying parts. Continue this procedure only when replacing the Top Cover.

**Caution**

When performing the next step, do not damage the Full Stack Actuator.

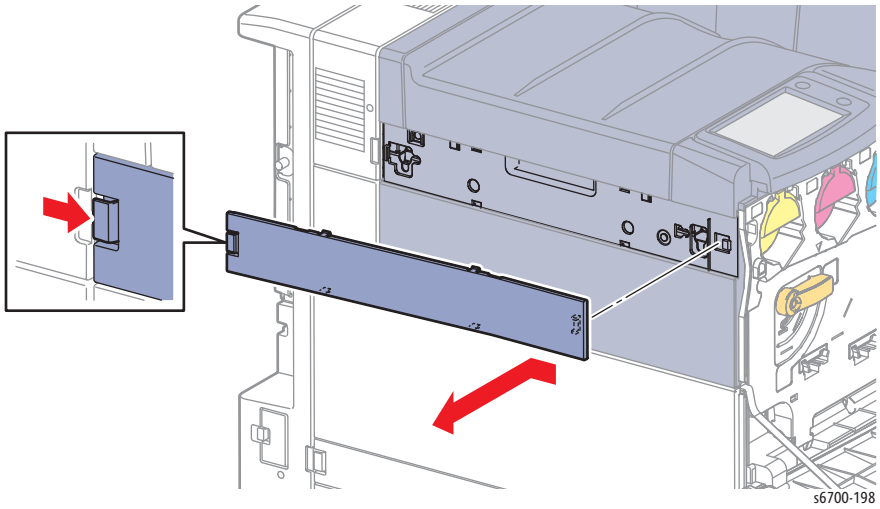
10. Lift the cover and release the Control Panel harness cable tie remove the 2 screws that secure the Control Panel harness guide cover and release 1 hook that secures the ferrite bead cover.
11. Slowly lift the cover and release the Control Panel Harness from the guide to remove the cover.



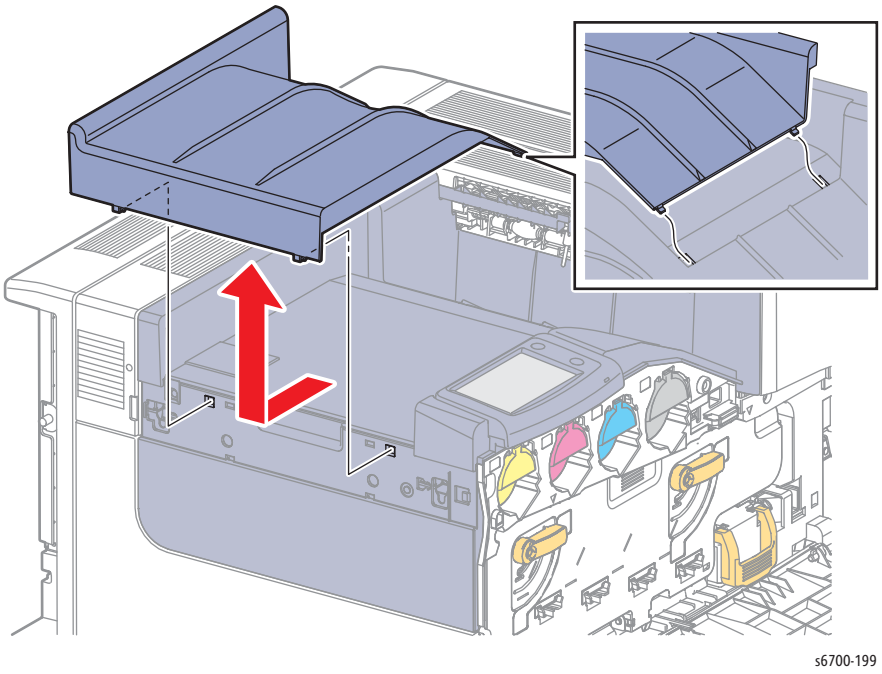
# Output Tray

## PL1.1.5

1. Release the hook to remove the Upper Finisher Docking Cover.




2. Remove the Output Tray by releasing the hook and shifting the Output Tray left.



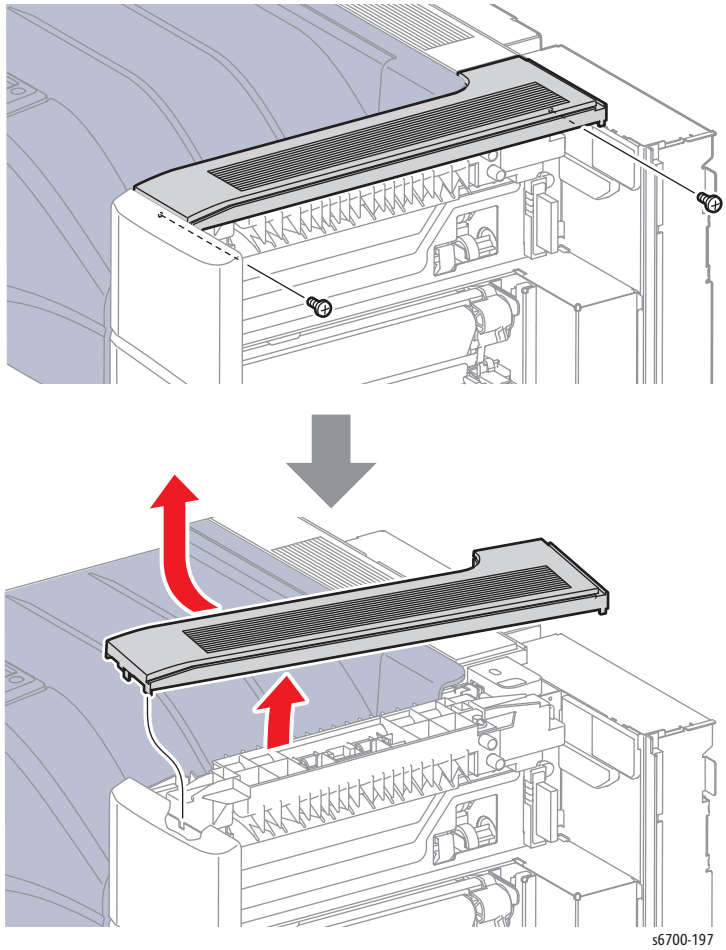
# Exit Cover

## PL1.1.9

**Warning**

Allow the Fuser to cool before servicing the printer.

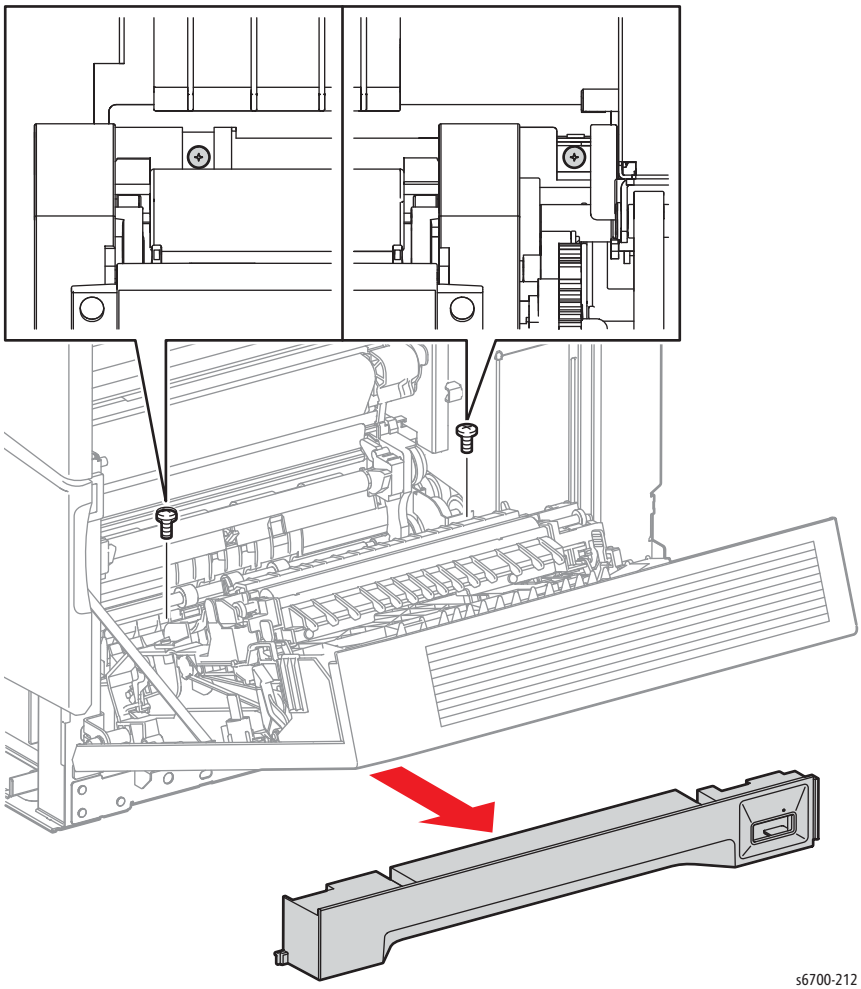
1. Open the Right Door.
2. Remove the Rear Cover (page 8-31).
3. Remove 2 screws (silver, 6mm) that secure the Exit Cover to remove the cover.



## Lower Right Cover

### PL1.1.11

1. Remove the Tray.
2. Open the Right Door.
3. Remove the Rear Cover (page 8-31).
4. Remove 2 screws (silver, 6mm) that secure the lower right cover.
5. Close the Right Door to remove the cover.



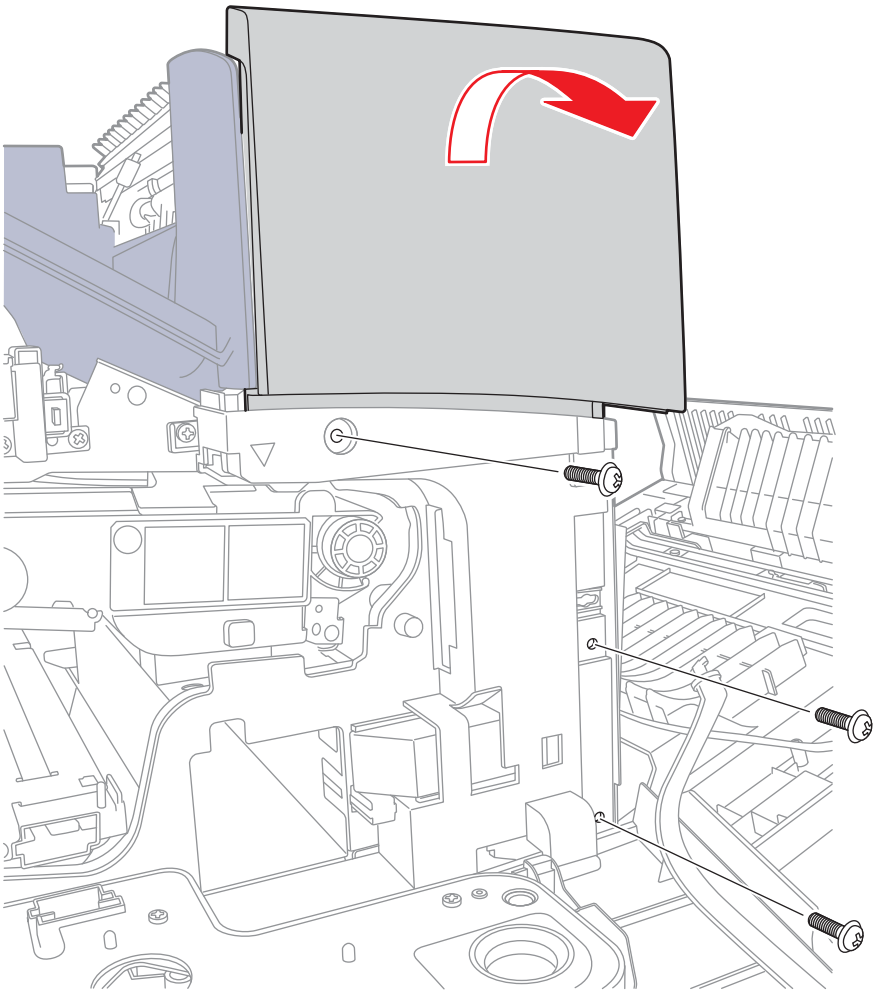
# Upper Front Cover

## PL1.2.5

**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Right Door.
3. Remove the Exit Cover (page 8-22).
4. Open Inner Frame Assy.
5. Release the Front Cover Stopper Strap from the chassis.
6. Remove 3 screws (silver, 6mm) from the Lower Inner Front Cover.
7. Lift the cover to release 3 hooks and remove Upper Front Cover.



s6700-366

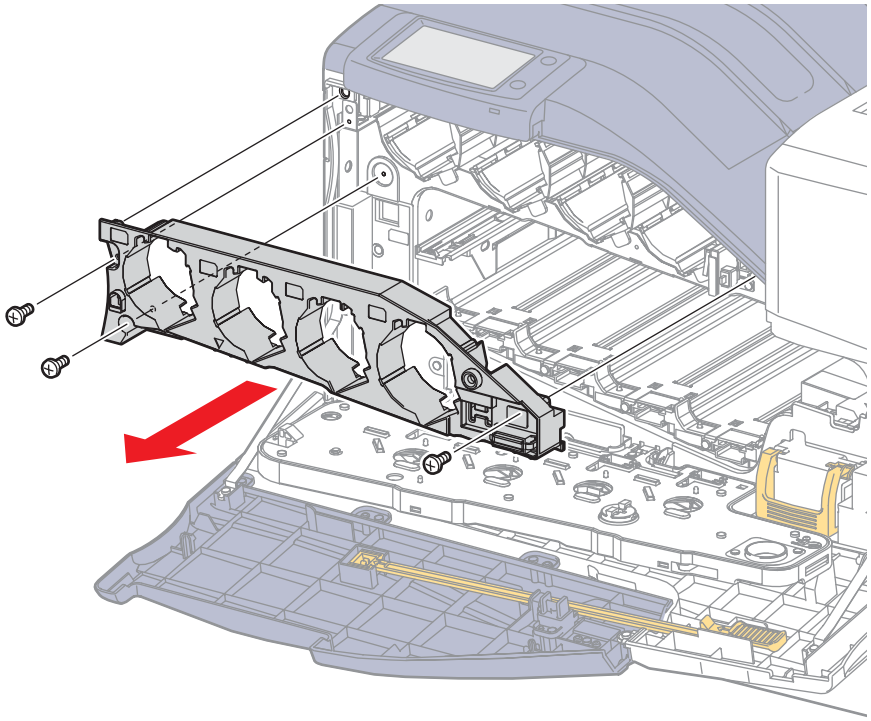
# Upper Inner Front Cover

## PL1.2.6

**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Remove the Toner Cartridges (page 8-18).
3. Open the Inner Frame Assy.
4. Remove 3 screws (silver, 6mm) that secure the Upper Inner Front Cover to the chassis.



s6700-233

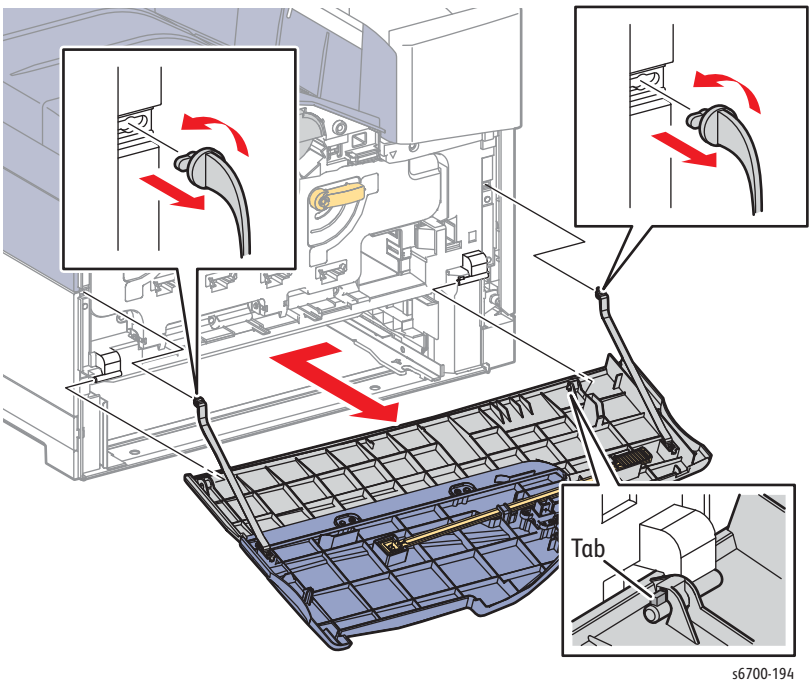
# Front Door

## PL1.2.17

**Caution**

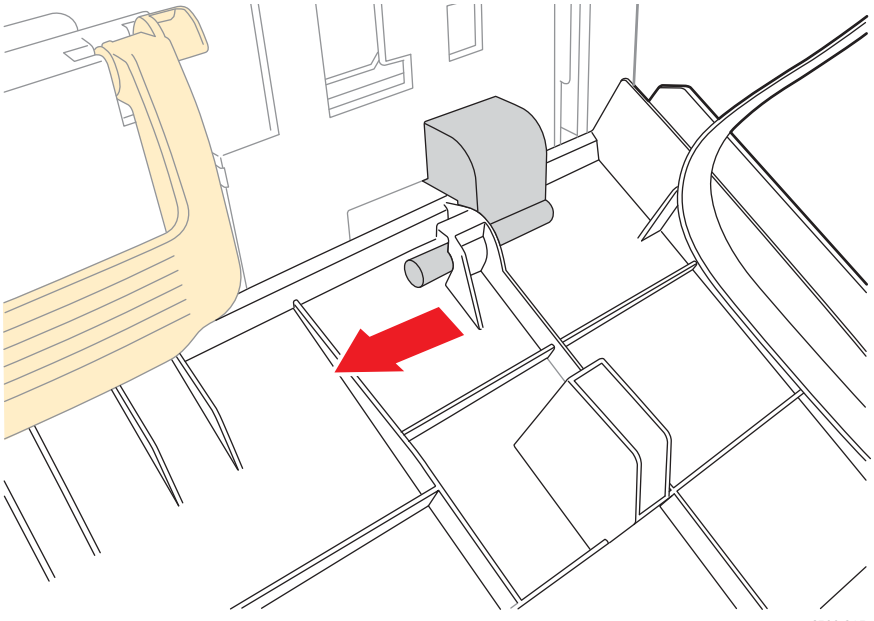
Front Door hinge points are easily damaged.

1. Open the Front Door.
2. Remove the Stopper Straps by rotating the straps 90 degrees to align the tab and notch.




s6700-194

3. Slide the Front Door left to release the cover from the hinge.



s6700-247

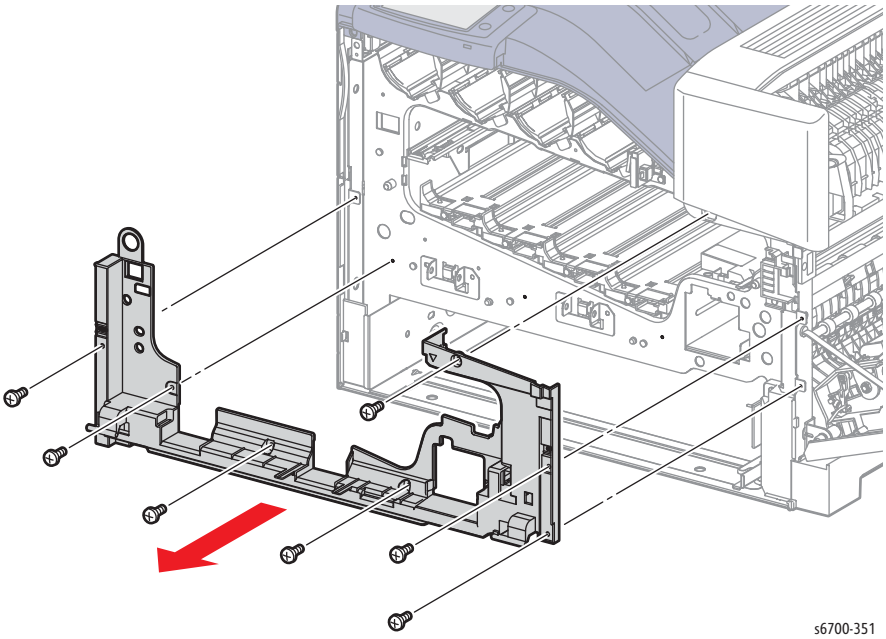
# Lower Inner Front Cover

## PL1.2.24

**Caution**

Cover the Imaging Units to prevent exposure to light.

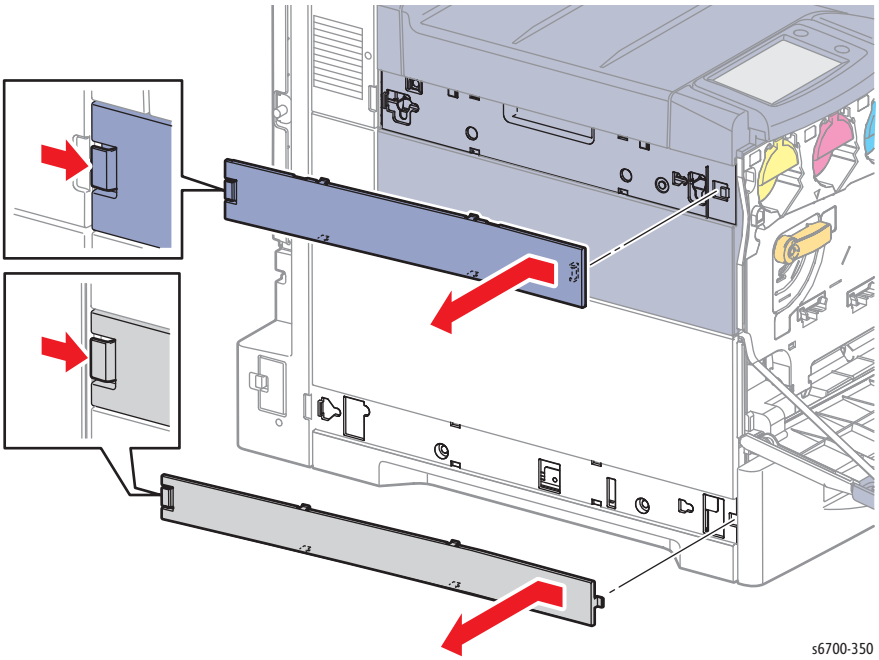
1. Remove the Front Door (page 8-26).
2. Remove the Waste Toner Cartridge (page 8-16).
3. Remove the Inner Frame Assy (page 8-129).
4. Remove the Upper Inner Front Cover (page 8-25).
5. Remove 7 screws (silver, 6mm) that secure the Lower Inner Front Cover to the chassis.



## Left Cover

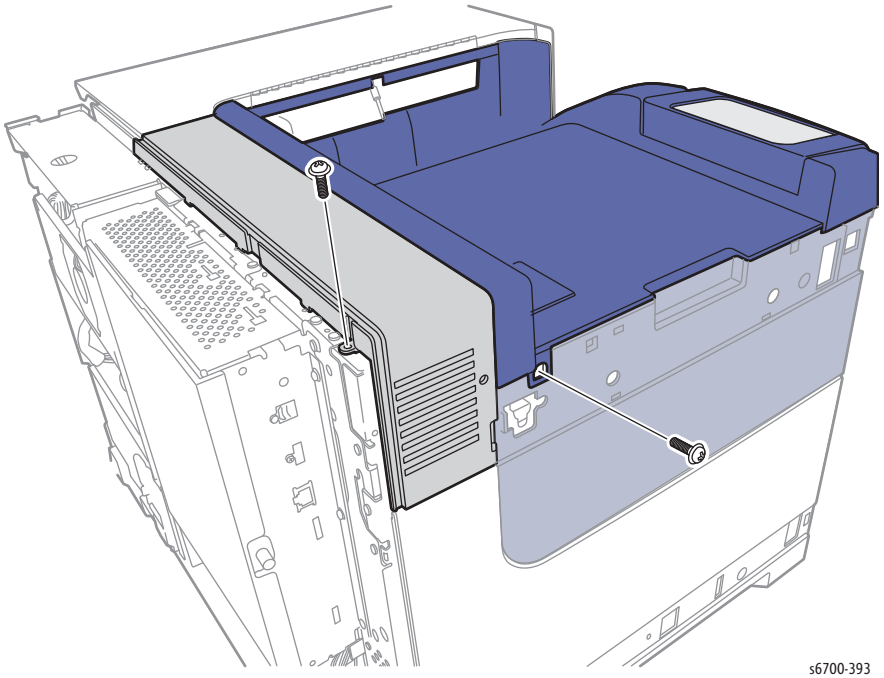
### PL1.3.2

1. Remove the Tray.
2. Open the Front Door.
3. Remove the Rear Cover (page 8-31).
4. Slide the Upper and Lower Finisher Docking Covers to the front to release the hooks and remove the covers.

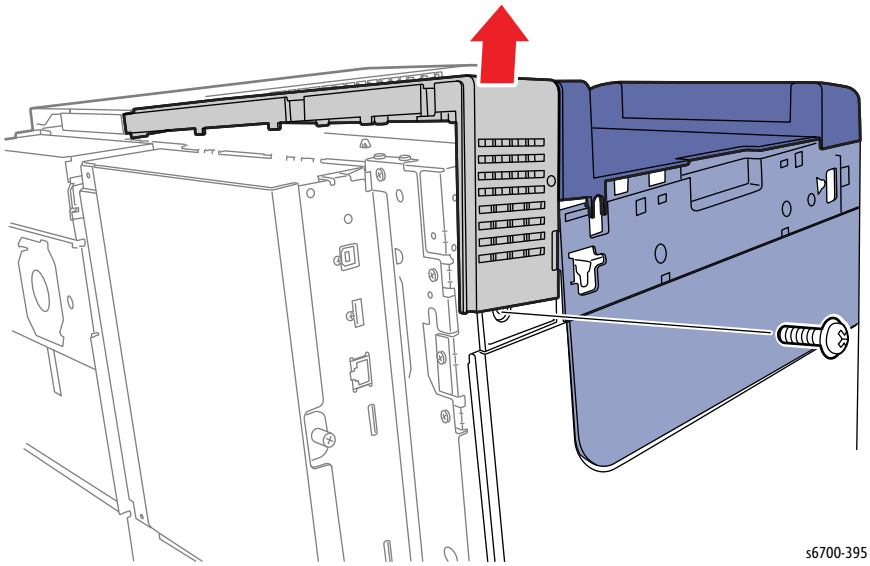



5. Remove the Output Tray (page 8-21).

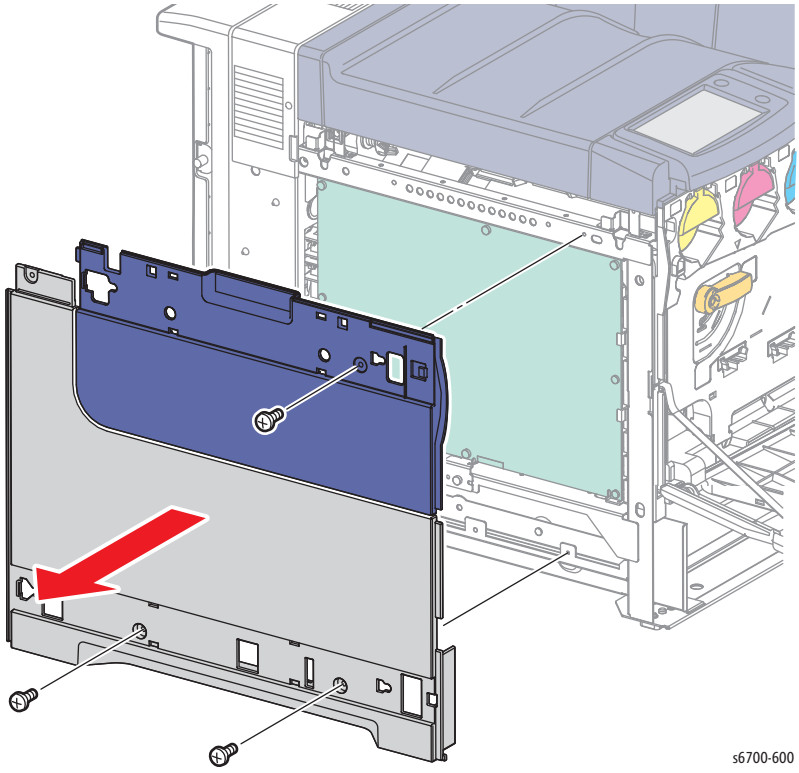
6. Remove 1 screw (silver, 6mm) from the Rear Top Cover and 1 screw (silver, 6mm) from the Top Cover.




7. Lift the Rear Top Cover to access 1 screw (silver, 6mm) that secures the Left Cover.



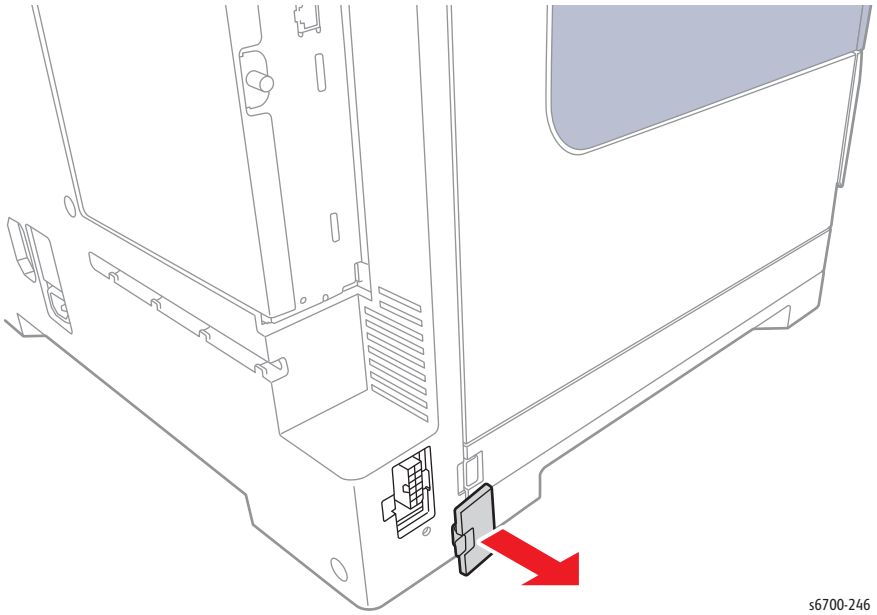
8. Remove 3 screws (silver, 6mm) and lift the Left Cover to release 1 tab at the bottom.



# Rear Cover

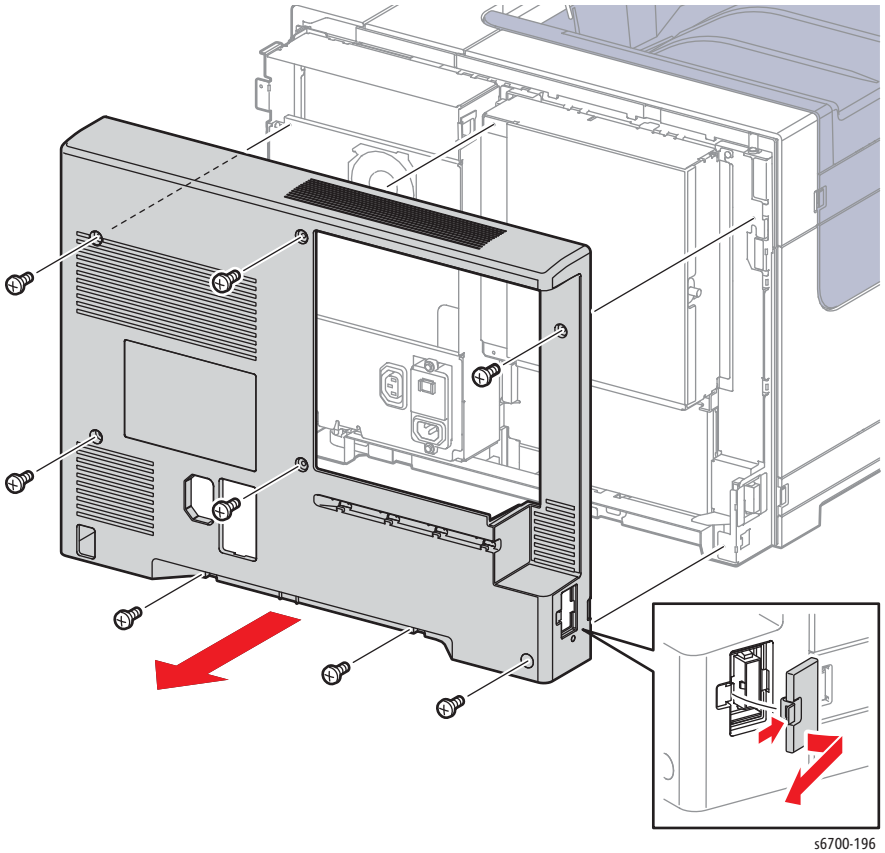
## PL1.3.5

1. Release the hook that secures the Finisher Port Cover and remove the cover.



s6700-246

2. Remove 8 screws (silver, 6mm) that secure the Rear Cover to the chassis.
3. Remove the Rear Cover from the printer.

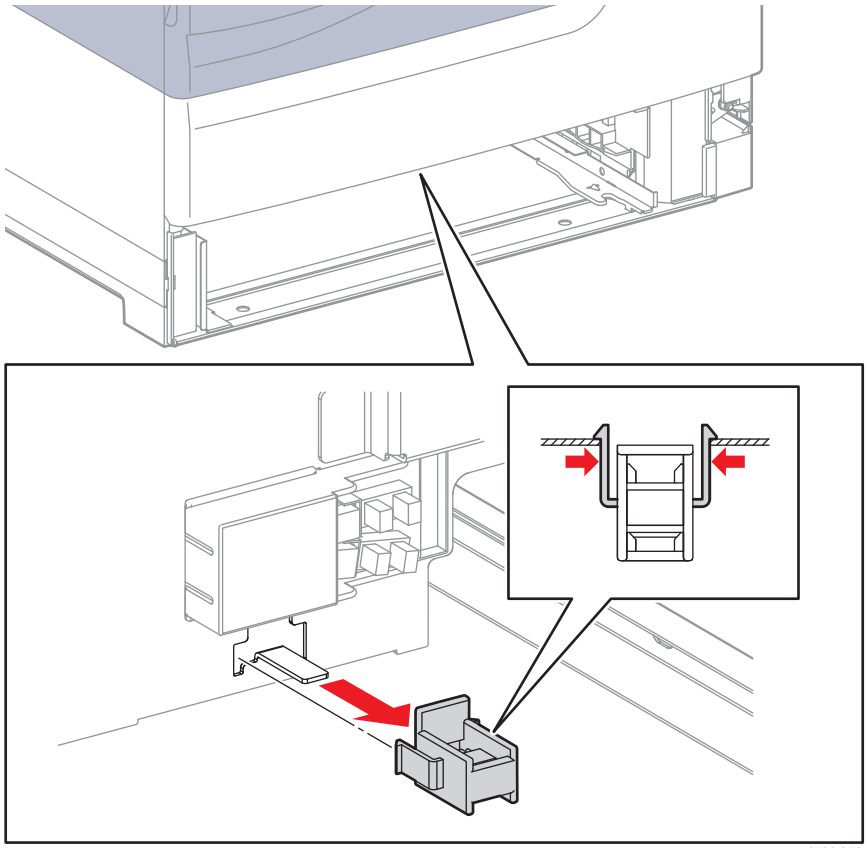


s6700-196

## Tray Bottom Plate Release Block

### PL3.1.5

1. Remove Tray 2.
2. Squeeze the sides of the block to release the hooks and remove the block.



s6700-352

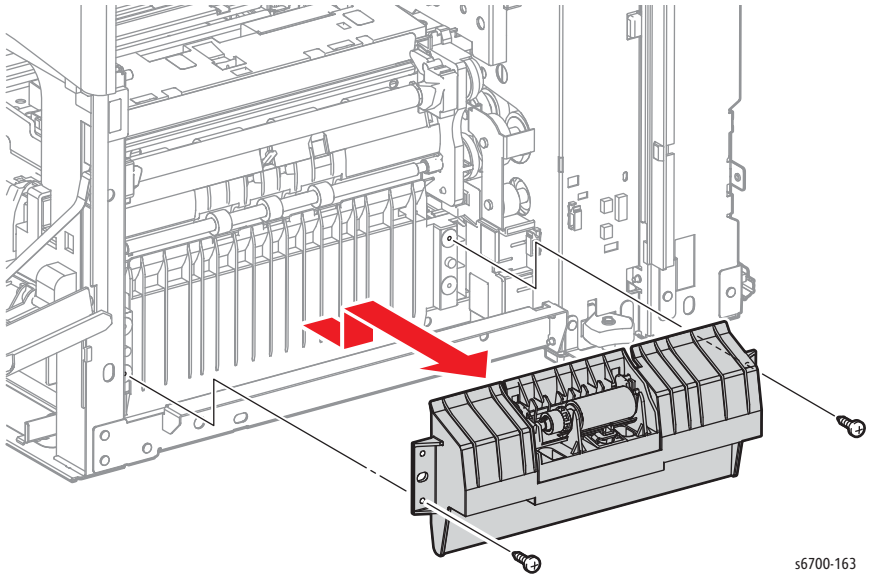
# Tray 1 Separator Roller Assembly

## PL3.1.7

**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove the Tray.
2. Open the Front Door.
3. Open the Right Door.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly (page 8-46).
7. Remove 2 screws (silver, tapping, 8mm) that secure the Tray 1 Separator Roller Assy to the chassis.

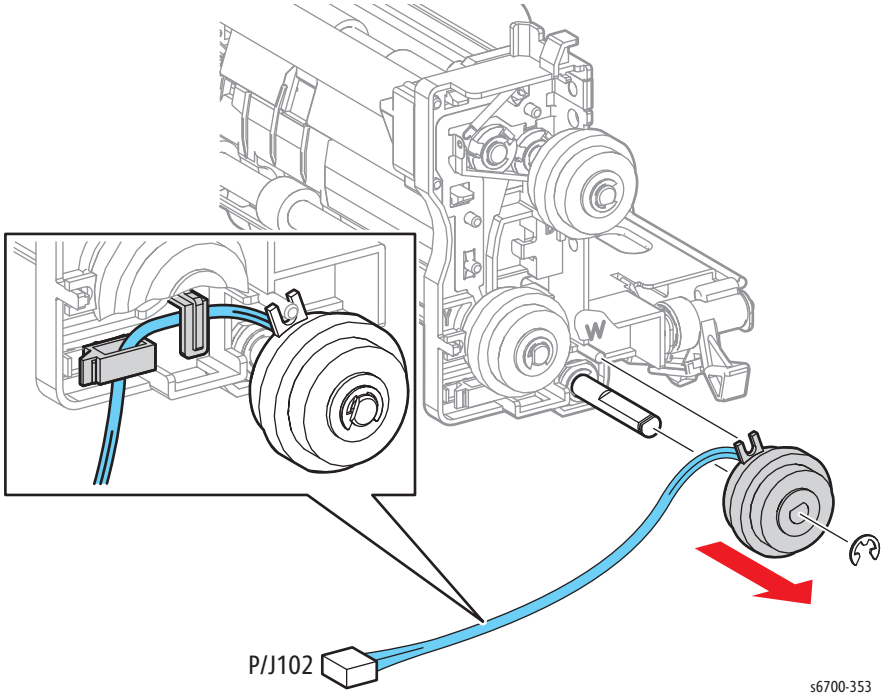


# Feeder / Registration Assembly

## Feed Clutch

### PL3.2.2

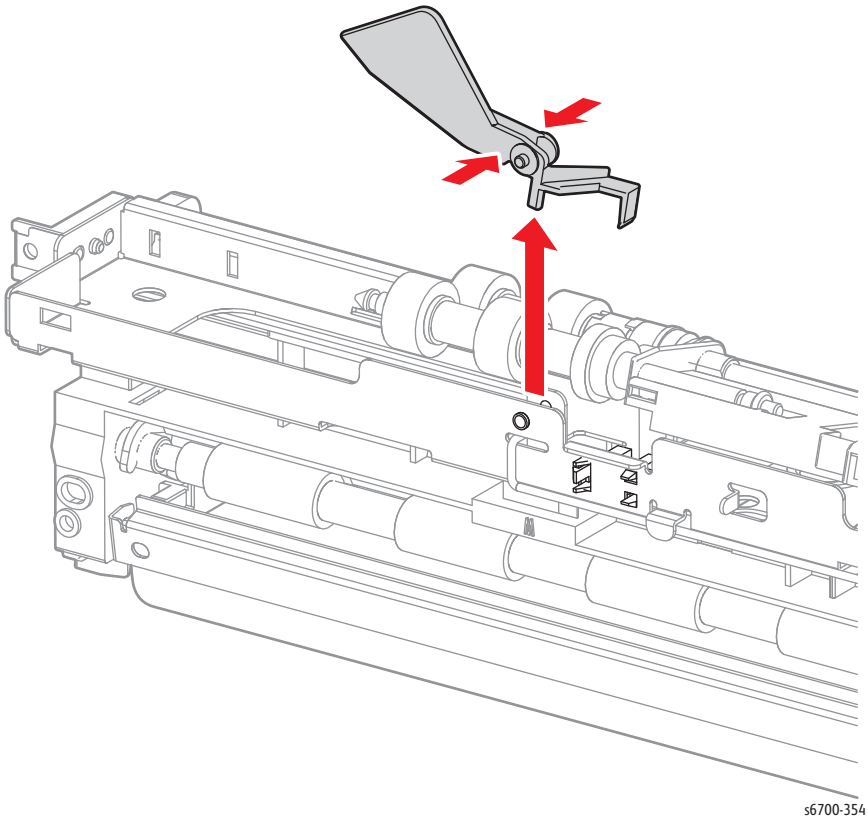
1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Feeder/Registration Assembly (page 8-41).
8. Remove the E-ring that secures the clutch to the feed shaft, disconnect P/J102 and release the clutch harness from the feeder to remove the clutch.



# Tray 2 No Paper Actuator

## PL3.2.10

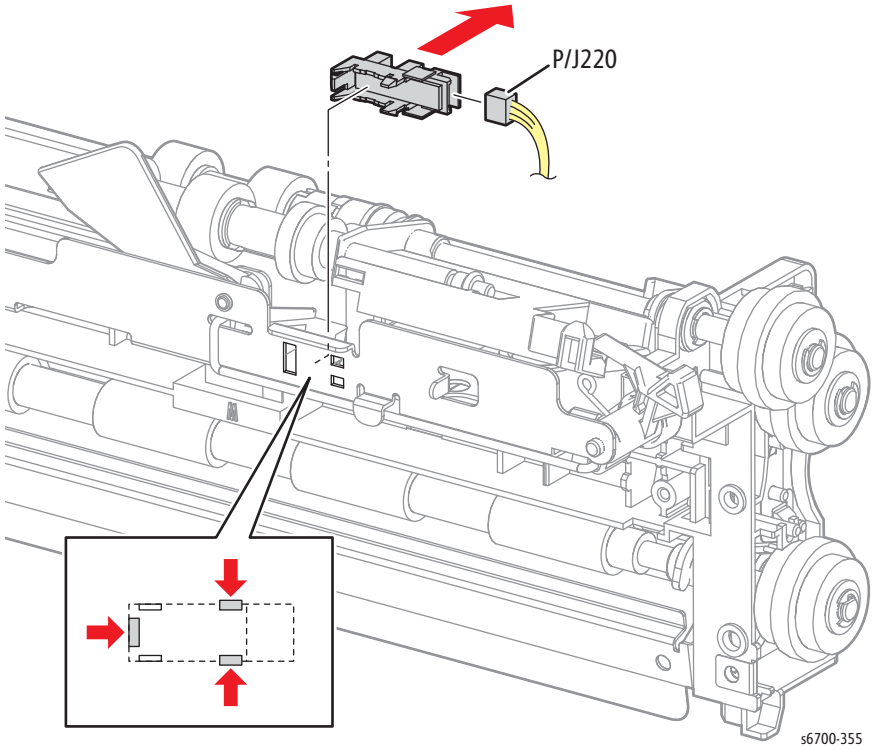
1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Feeder/Registration Assembly (page 8-41).
8. Squeeze the actuator to release the bosses that secure the actuator to the feeder.



## Tray 2 No Paper Sensor

### PL3.2.11

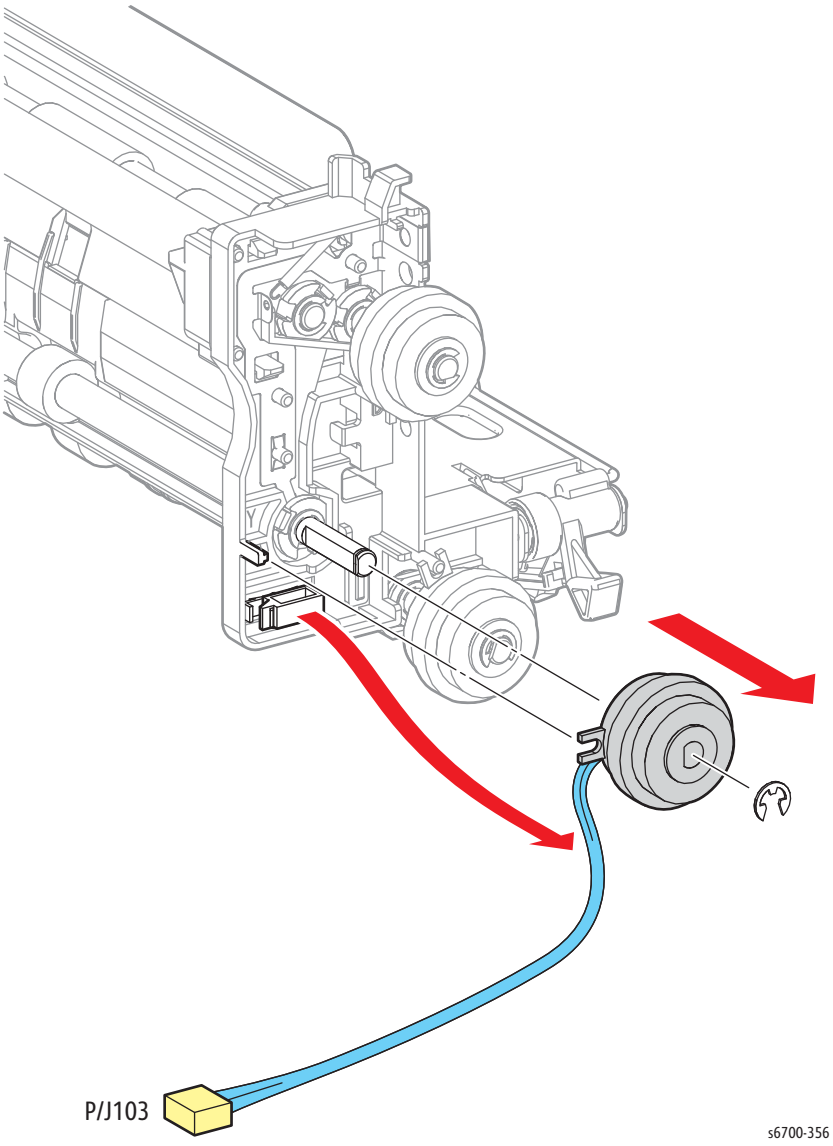
1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Feeder/Registration Assembly (page 8-41).
8. Release the 3 hooks that secure the sensor to the feeder.
9. Disconnect P/J220 and remove the sensor.



# Take Away Clutch

## PL3.3.12

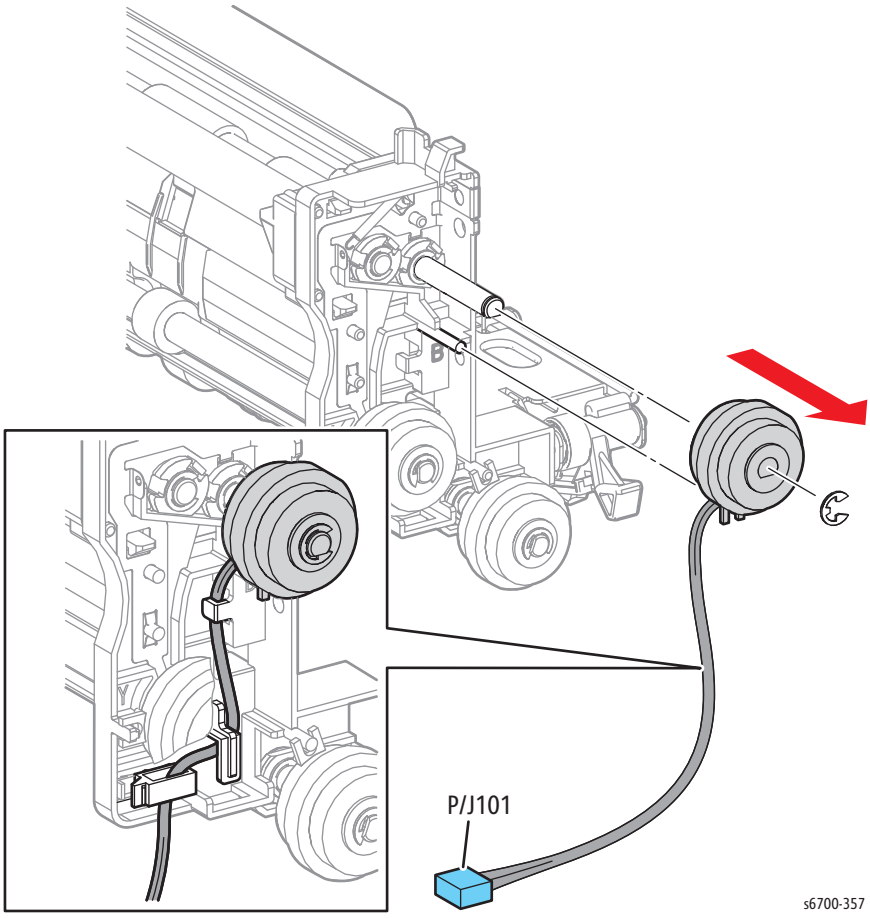
1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Feeder/Registration Assembly (page 8-41).
8. Remove the E-ring that secures the clutch to the take away roller, disconnect P/J103 and release the clutch harness from the clamp to remove the clutch.



## Registration Clutch

### PL3.3.1

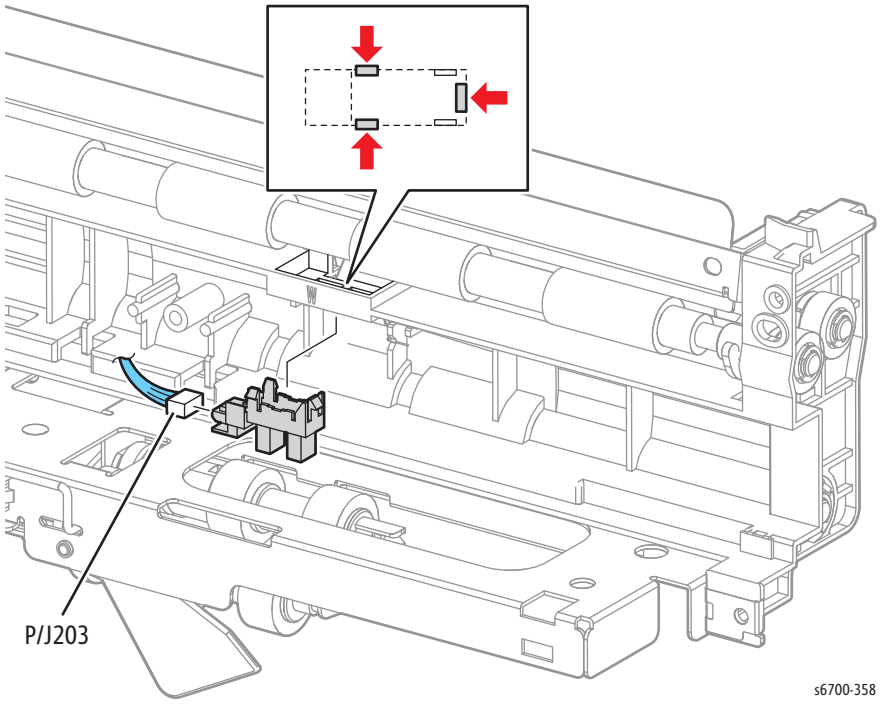
1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Feeder/Registration Assembly (page 8-41).
8. Remove the E-ring that secures the clutch to the roller shaft and release the clutch harness from the guides and clamp to remove the clutch.



## Registration Sensor

### PL3.3.22

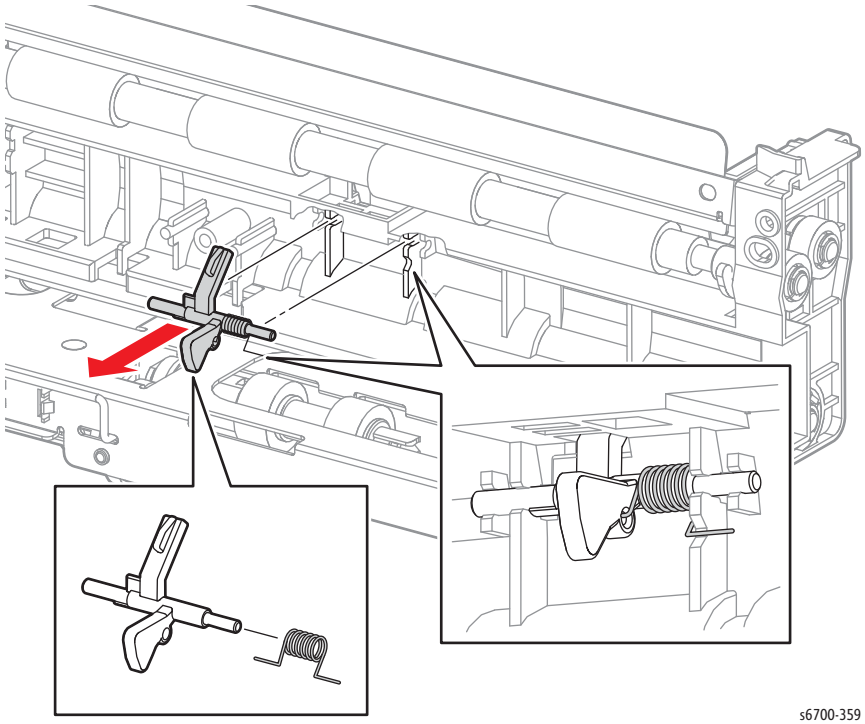
1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Feeder/Registration Assembly (page 8-41).
8. Release the 3 hooks that secure the sensor to the feeder.
9. Disconnect P/J203 and remove the sensor.



## Registration Sensor Actuator

### PL3.3.20

1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Feeder/Registration Assembly (page 8-41).
8. Remove the Registration Sensor (page 8-39)
9. Release the actuator shaft from the hooks on the feeder to remove the actuator.



s6700-359

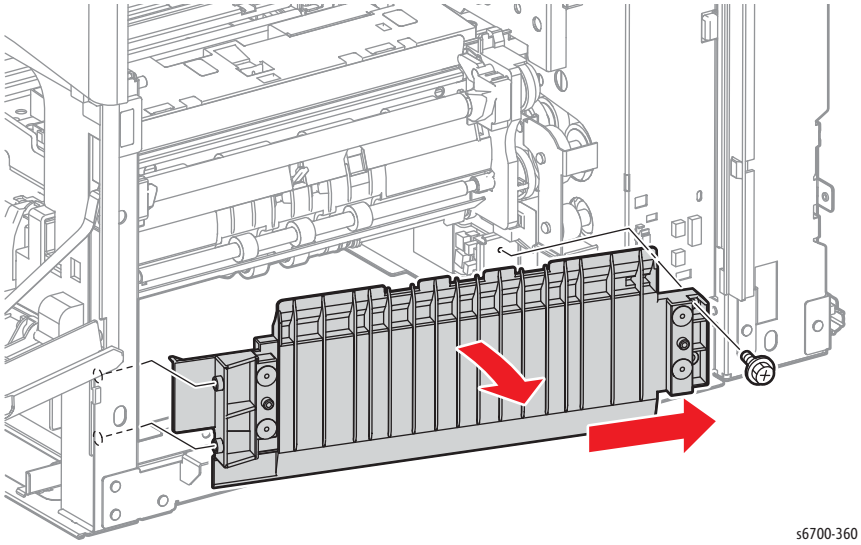
# Feeder/Registration Assembly

## PL3.2.1

**Caution**

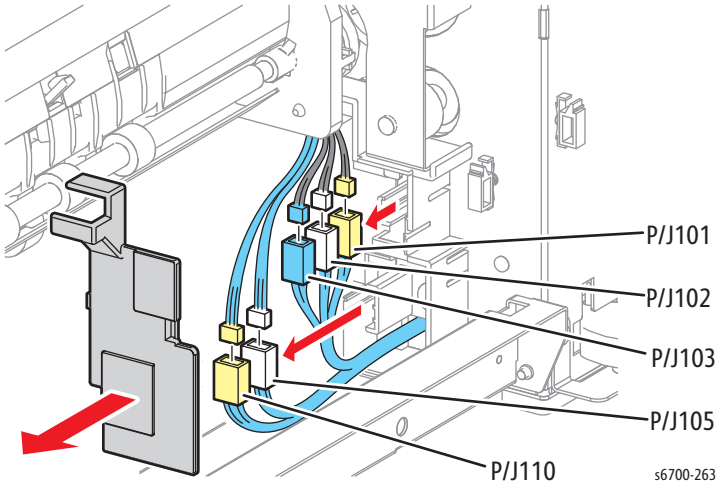
Cover the Imaging Units to prevent exposure to light.

1. Remove Tray 2.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Remove the Right Door Assembly. (page 8-46)
7. Remove the Tray 1 Separator Assy (page 8-33).
8. Remove 1 screw (silver, 6mm) that secures the tray guide to the chassis.
9. Release the boss on the rear side of the tray guide, and slide the tray guide backward to release the two bosses on the front side.

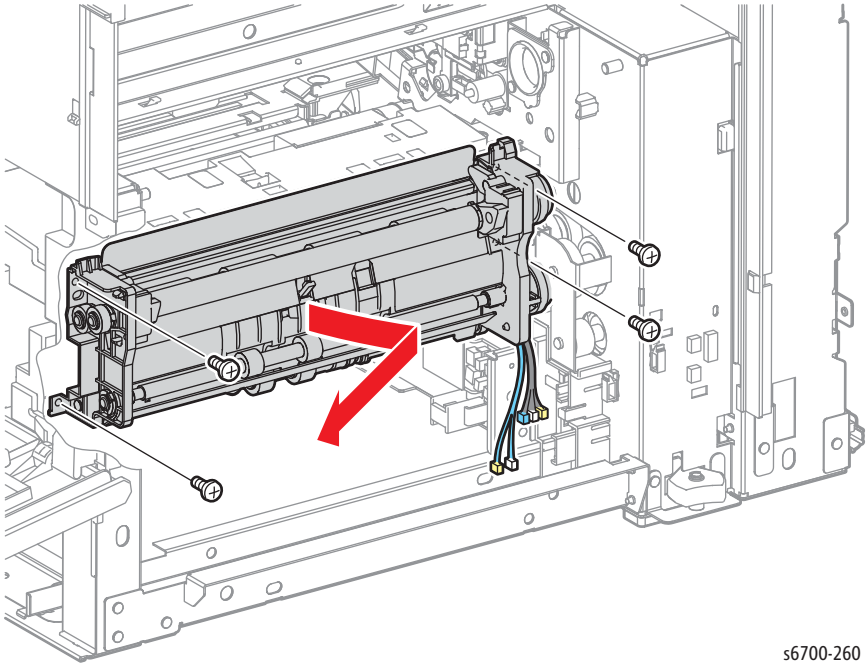


s6700-360

10. Remove the harness guide cover from the harness guide by releasing the hook.
11. Remove the harnesses and disconnect all connectors.




12. Remove 4 screws (silver, 6mm) that secure the feeder to the chassis.

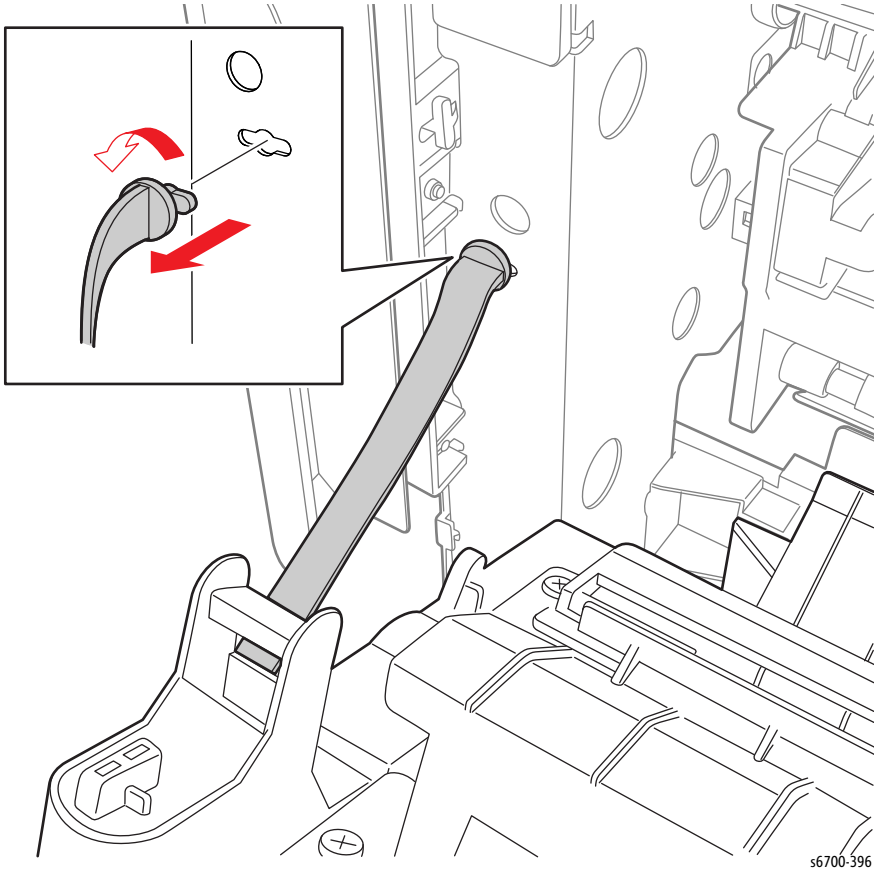


# Right Door

## Right Door Stopper Strap

### PL4.1.21

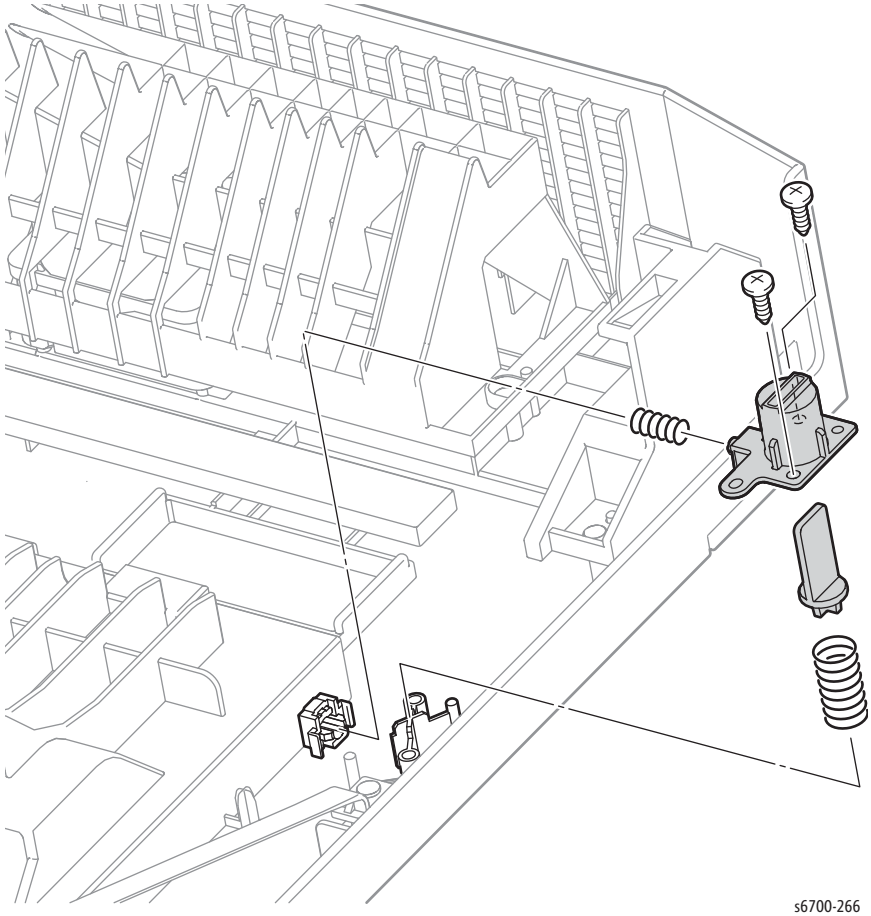
1. Open the Right Door.
2. Rotate the Stopper Strap to release the strap from the chassis.



## Right Door Interlock Actuator

### PL4.1.97

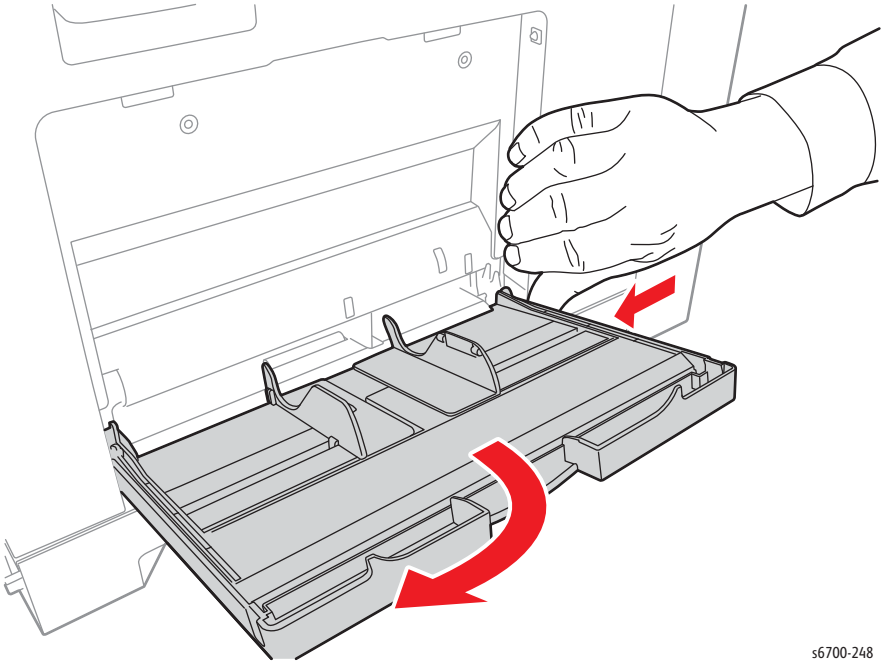
1. Open the Right Door.
2. Raise and latch the duplex unit.
3. Remove the spring from the stopper and the boss of the interlock holder.
4. Remove 2 screws (silver, tapping, 8mm) that secure the Interlock Actuator to the Right Door.



## Tray 1 Cover Assembly

### PL4.1.98

1. Open Tray 1.
2. Release the boss at each side to remove the Tray from the printer.



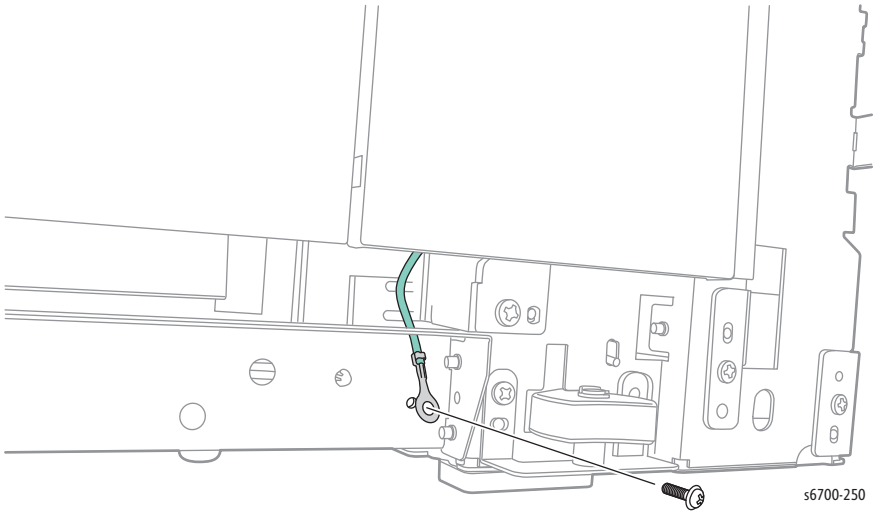
# Right Door Assembly

## PL4.1.99

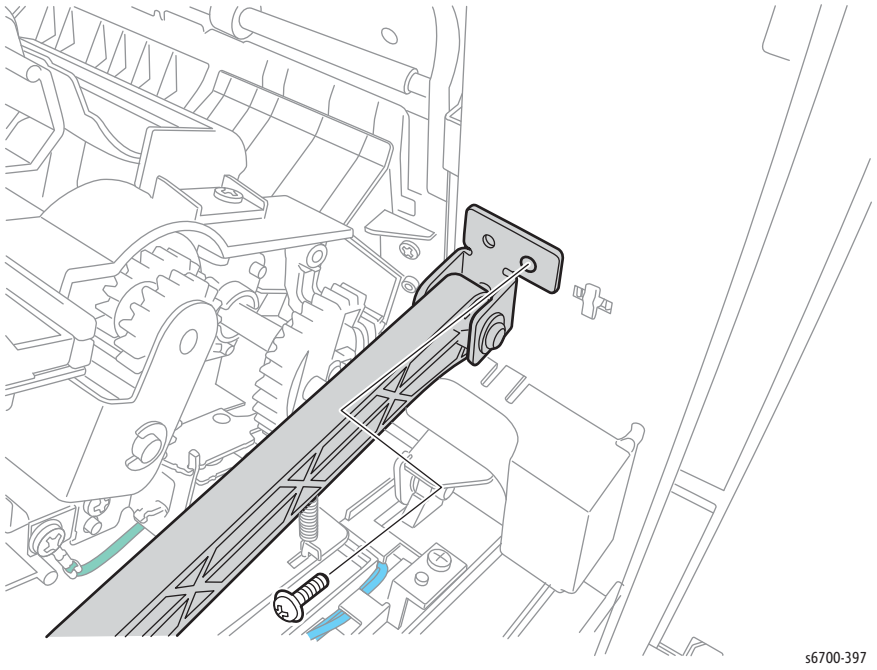
**Caution**

Cover the Imaging Units to prevent exposure to light.

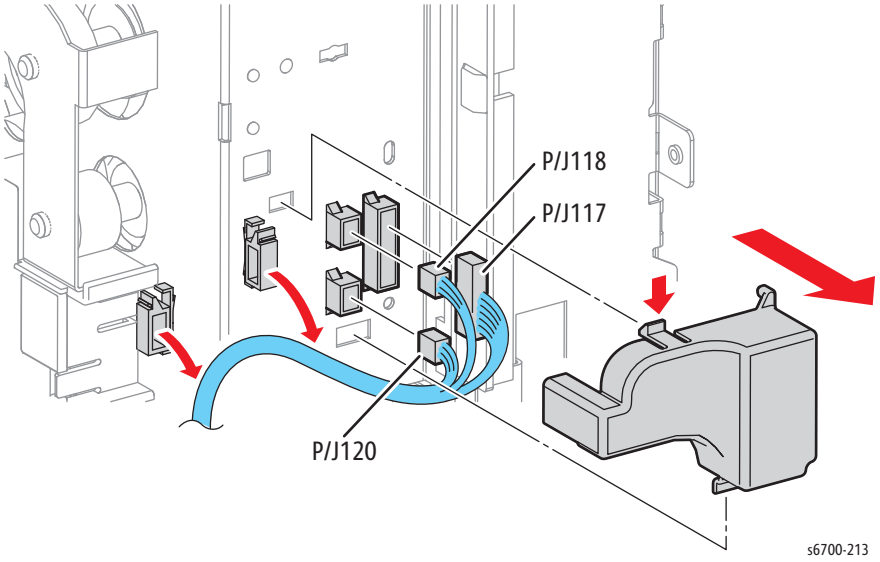
1. Remove the Tray.
2. Open the Front Cover.
3. Open the Right Door.
4. Remove the Rear Cover (page 8-31).
5. Remove the Lower Right Cover (page 8-23).
6. Raise the Right Door and remove 1 screw (silver, 6mm) that secures the grounding terminal. Route the ground wire through the hole in the chassis to the outside.



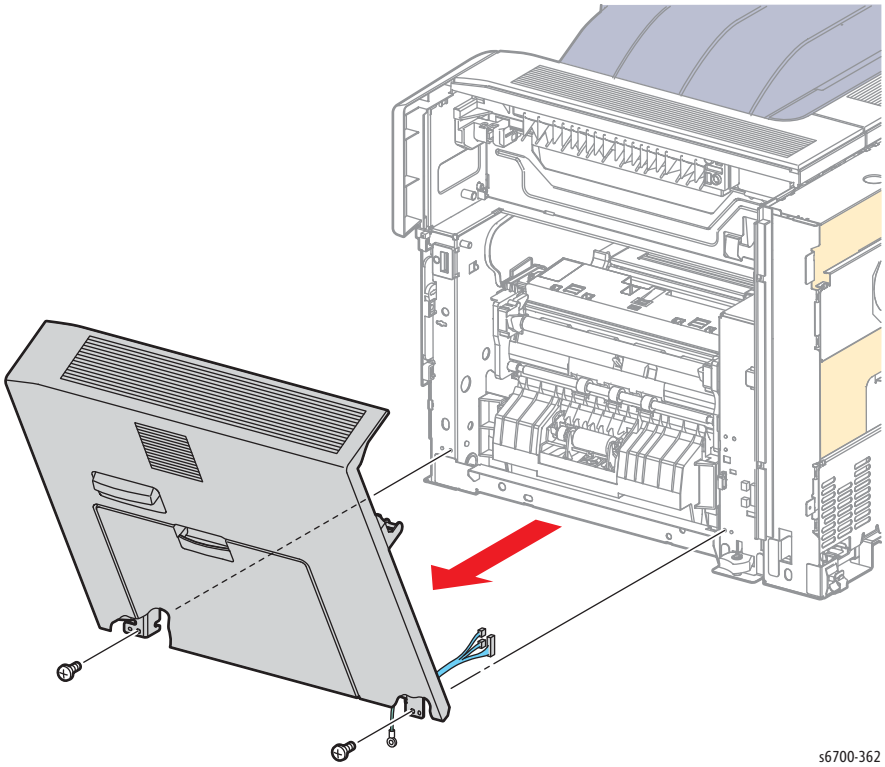
7. Remove 1 screw (silver, M4, 6mm) that secures the Link Assy to the printer.
8. Remove the right stopper strap by rotating the strap CCW 90 degrees to align the tab with the notch in the chassis.




9. Remove the connector cover by releasing 2 hooks.
10. Disconnect P/J117, P/J118, and P/J120 and release the harness from the two clamps.



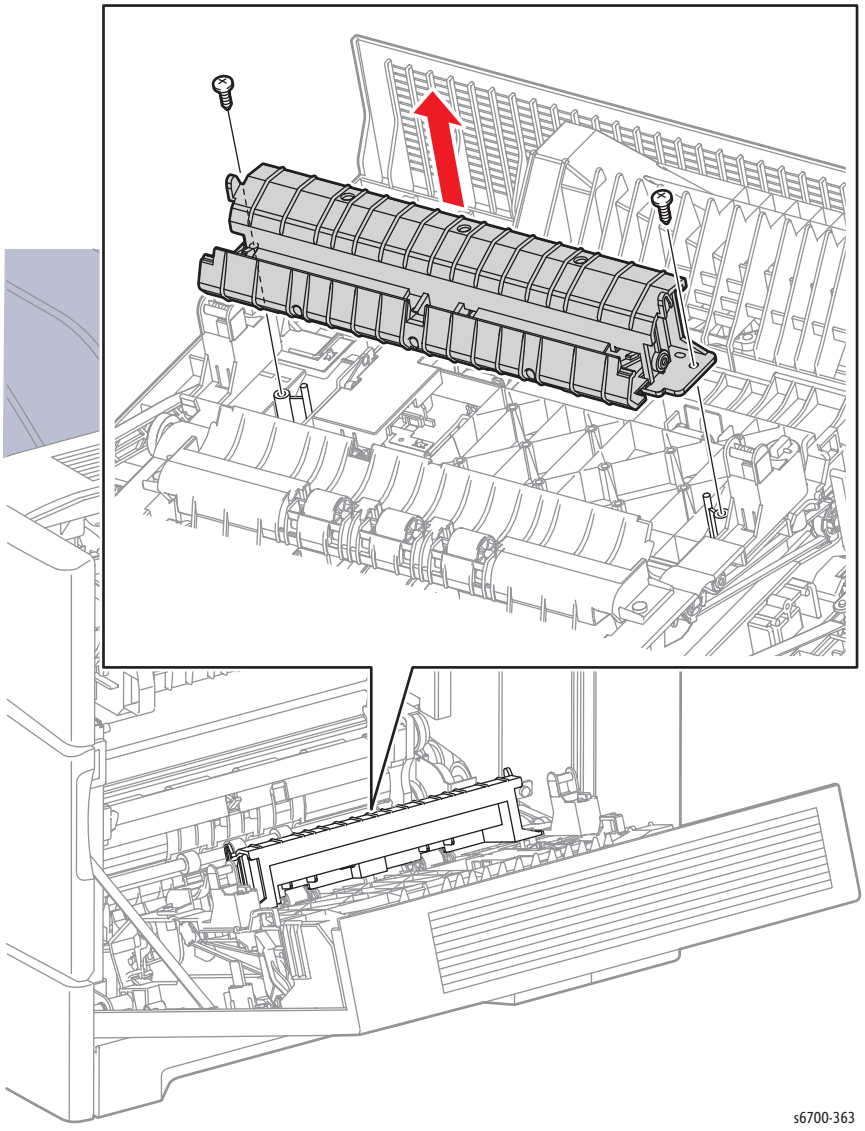
11. Remove 2 screws (silver, M4, 6mm) that secure the hinges to the chassis to remove the door.



## Registration Chute

### PL4.2.1

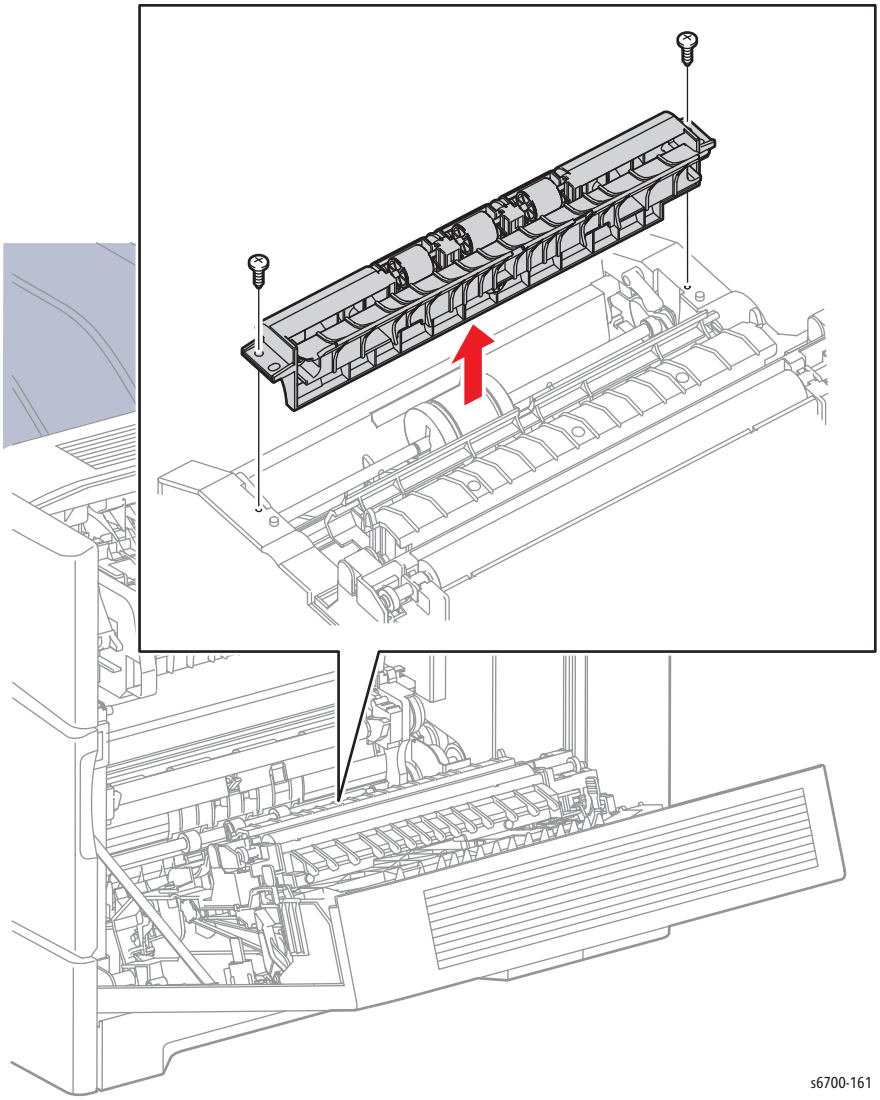
1. Open the Right Door.
2. Remove the Transfer Roller (page 8-11).
3. Remove 2 screws that secure the chute to the duplex unit.



## Tray 1 Chute Assembly

### PL4.2.5

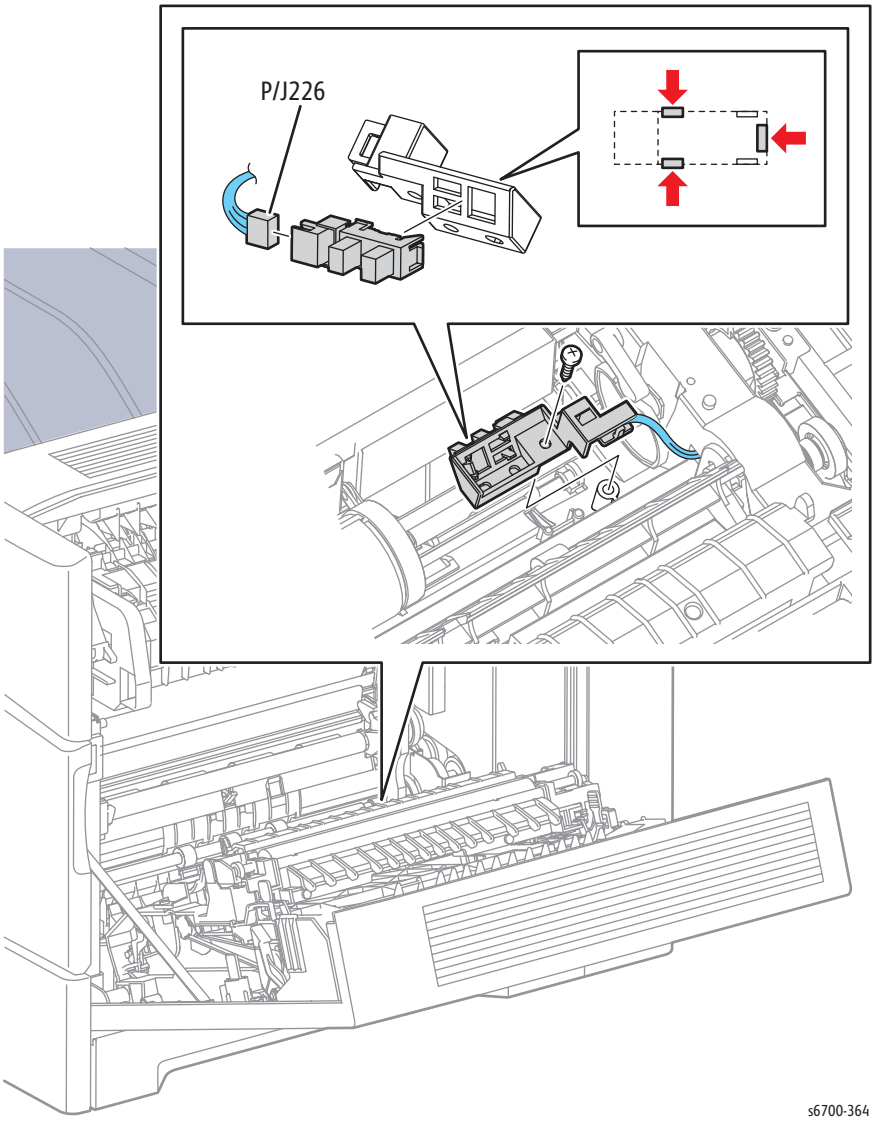
1. Open the Right Door.
2. Remove 2 screws that secure the chute to the duplex unit.



# Tray 1 No Paper Sensor

## PL4.2.14

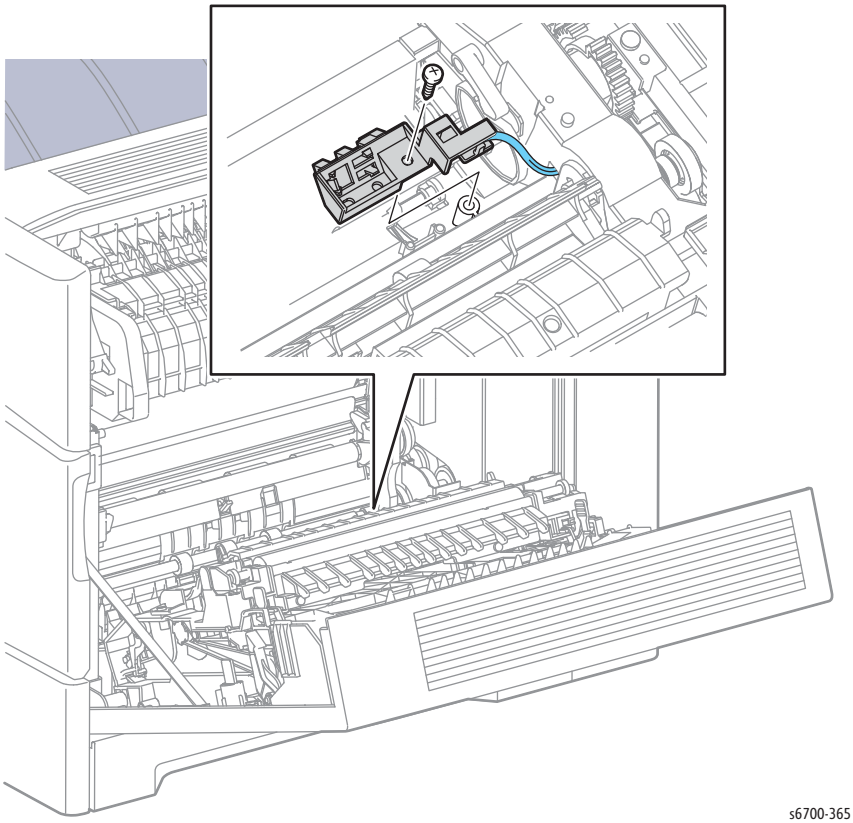
1. Open the Right Door.
2. Remove the Tray 1 Chute Assy (page 8-50).
3. Remove 1 screw that secures the sensor bracket to the duplex unit.
4. Disconnect P/J226 and remove the sensor from the bracket.



## Tray 1 No Paper Sensor Actuator

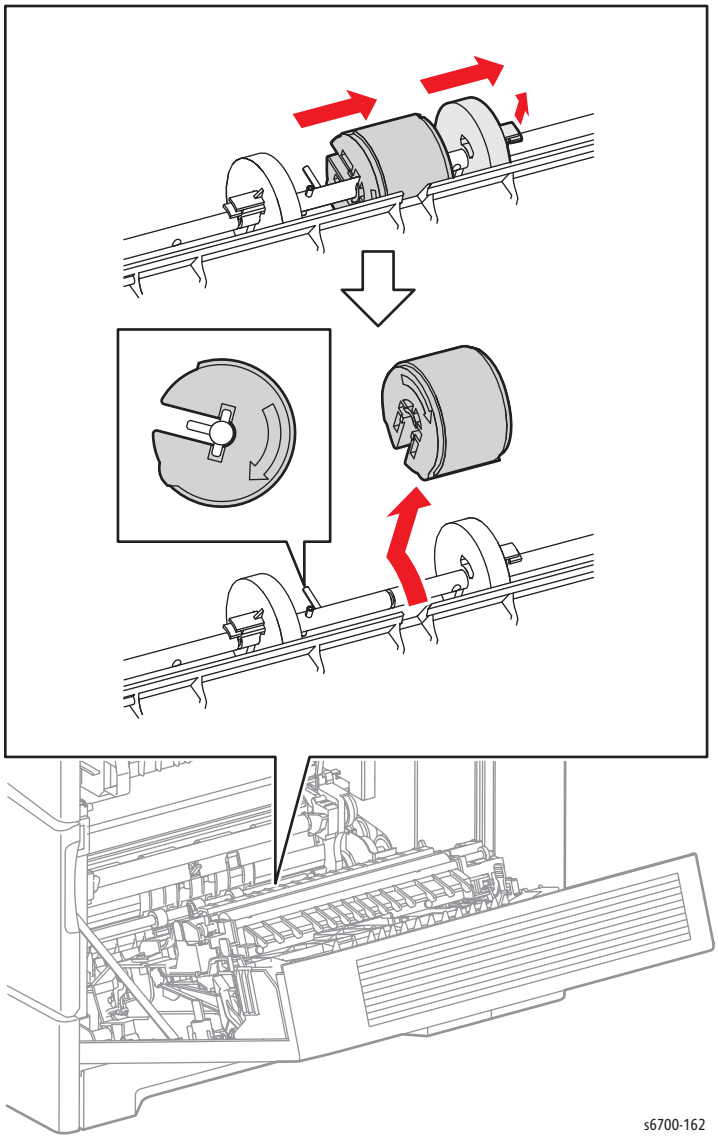
### PL4.2.26

1. Open the Right Door.
2. Remove the Tray 1 Chute Assy (page 8-50).
3. Remove 1 screw that secures the sensor bracket to the duplex unit.

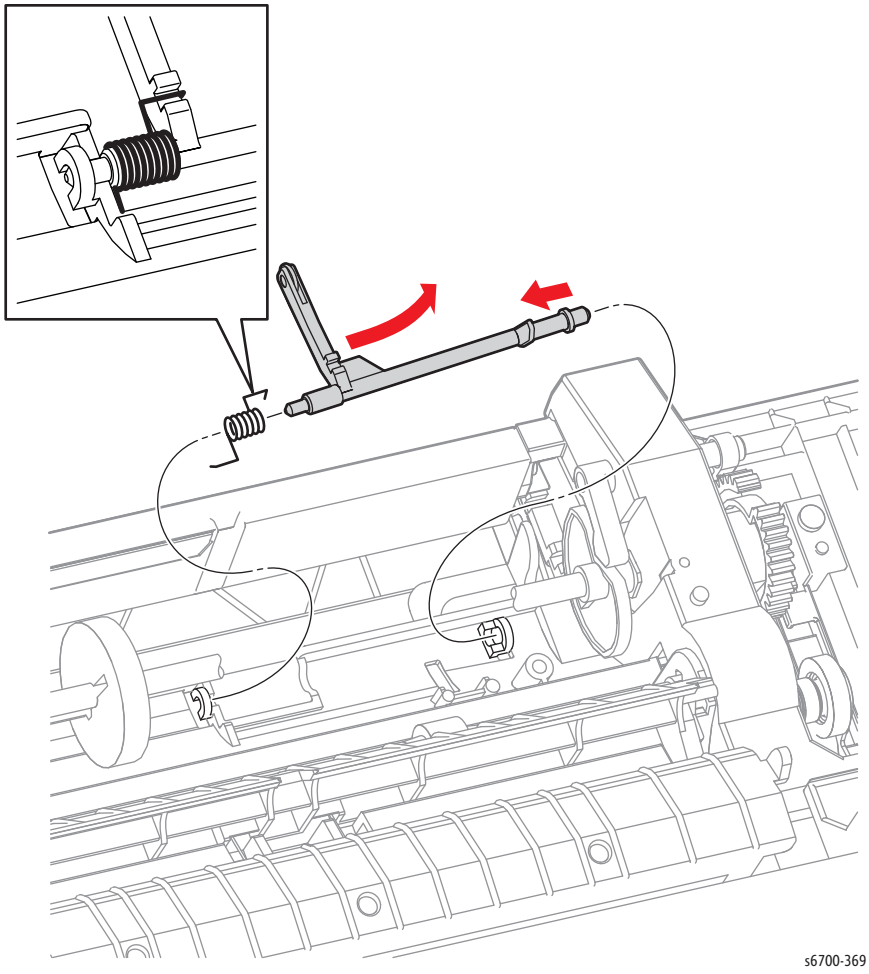


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4. Remove the Feed Roller (page 8-9).



5. Flex the actuator shaft to release the ends of the shaft from the duplex unit.



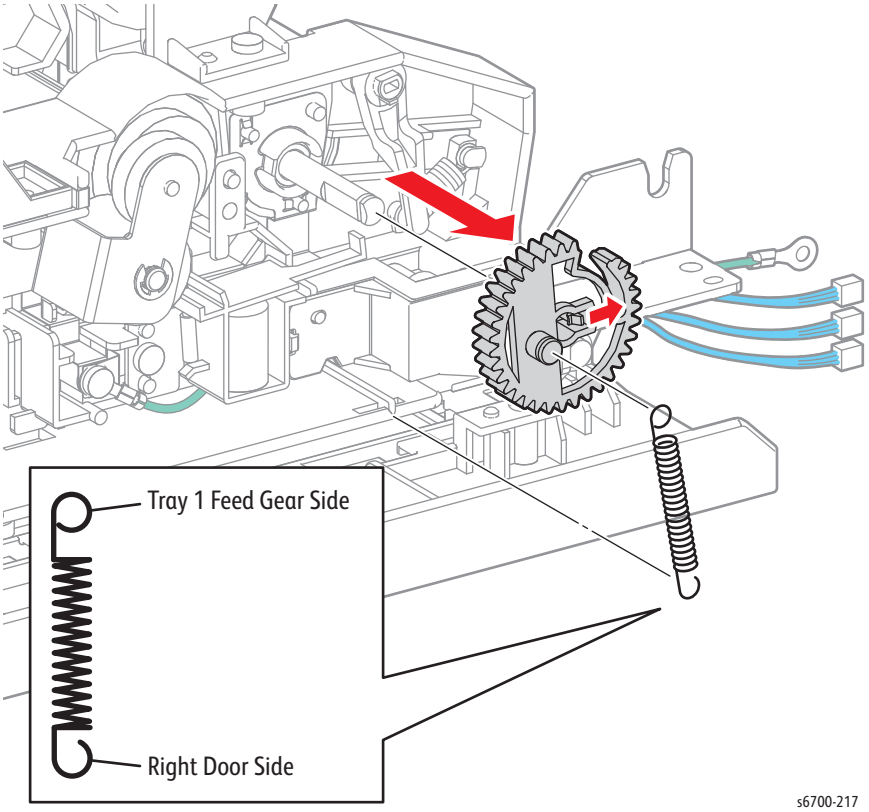
# Tray 1 Feed Solenoid, Gear & Clutch

## PL4.2.99

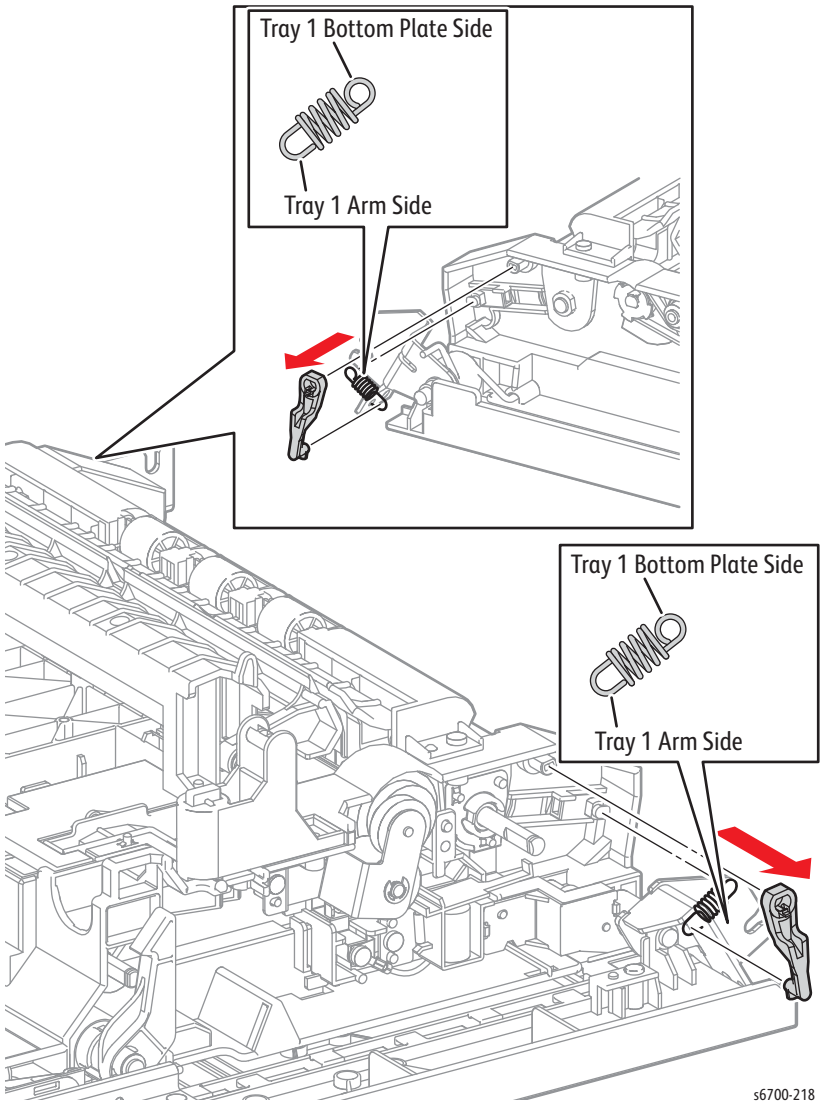
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove the Tray.
2. Open the Front Door.
3. Remove the Rear Cover (page 8-31).
4. Remove the Lower Right Cover (page 8-23).
5. Remove the Right Door (page 8-46).
6. Remove the Feed Spring from the Feed Gear and door.
7. Remove the Feed Gear from the shaft by releasing the hook of the Feed Gear.

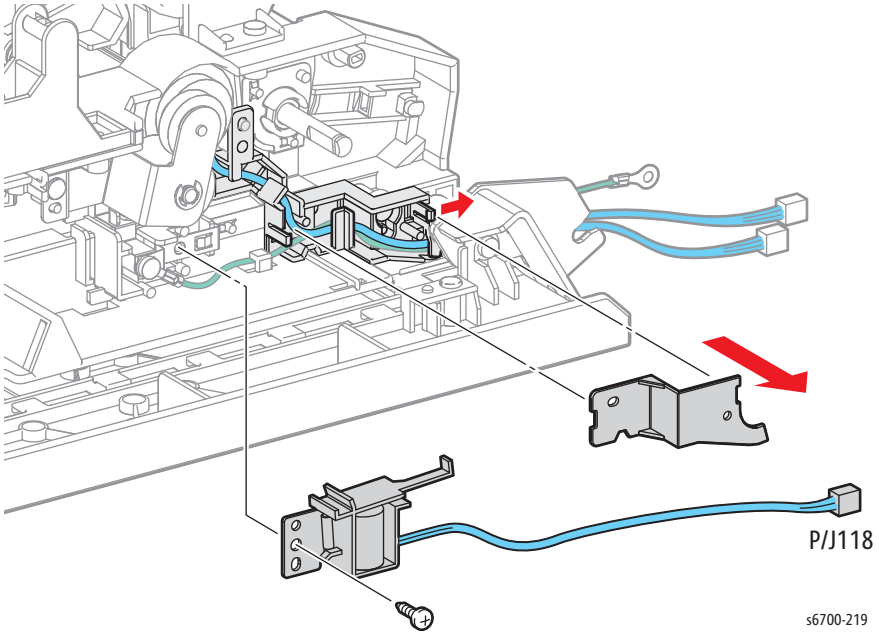


8. Remove the rear spring from the Tray 1 bottom plate.
9. Remove the rear arm from the rear follower by releasing the hook.
10. Remove the front spring from the front arm and Tray 1 bottom plate.
11. Remove the front arm from the follower by releasing the hook.

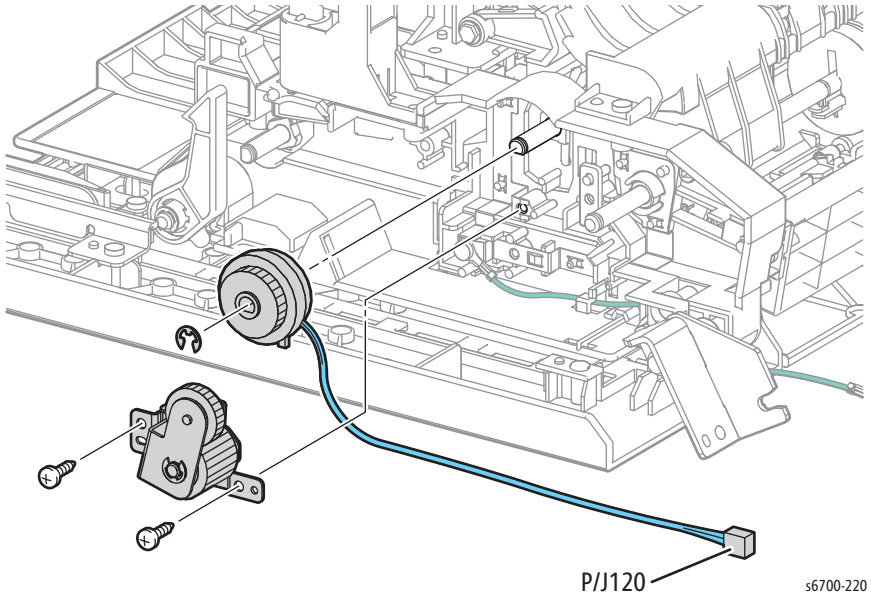



12. Remove the harness guide cover from the harness guide by releasing 2 hooks.
13. Open the duplex chute to release the solenoid and clutch harnesses from under the Right Door hinge pin.

14. Release the Tray 1 Feed Solenoid (P/J118) and Duplex Drive Clutch (P/J120) harnesses from the hooks of the harness guide.
15. Remove 1 screw (silver, tapping, 8mm) that secures the Tray 1 Feed Solenoid.




15. Remove 2 screws (silver, tapping, 8mm) that secure the Duplex Gear Assembly.
16. Remove the E-ring that secures the Duplex Drive Clutch to the Lower Duplex Roller.




**Replacement Note**

Attach the cam follower springs to the cam followers before installing the followers on the bottom plate shaft.

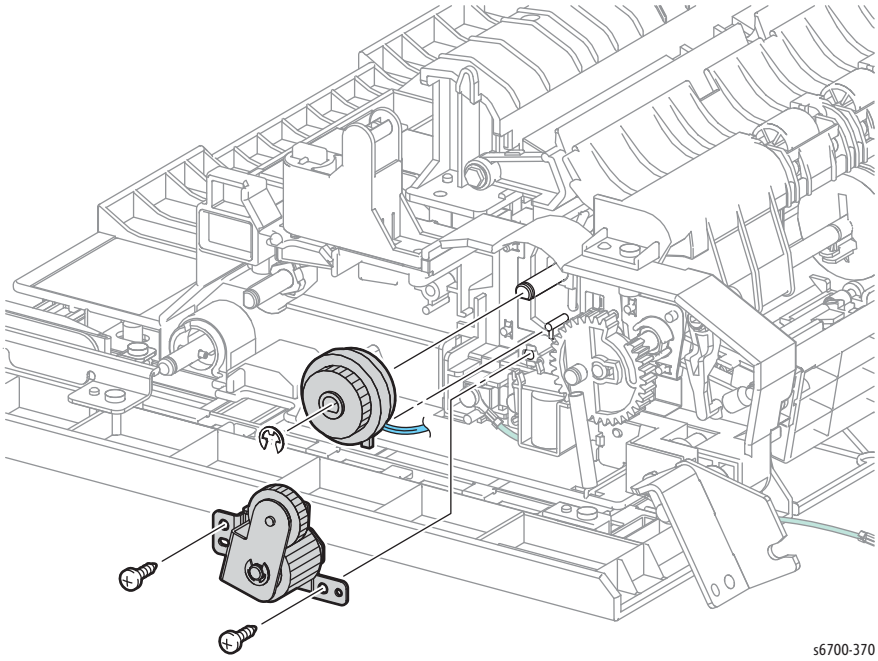
# Lower Duplex Roller

## PL4.3.10

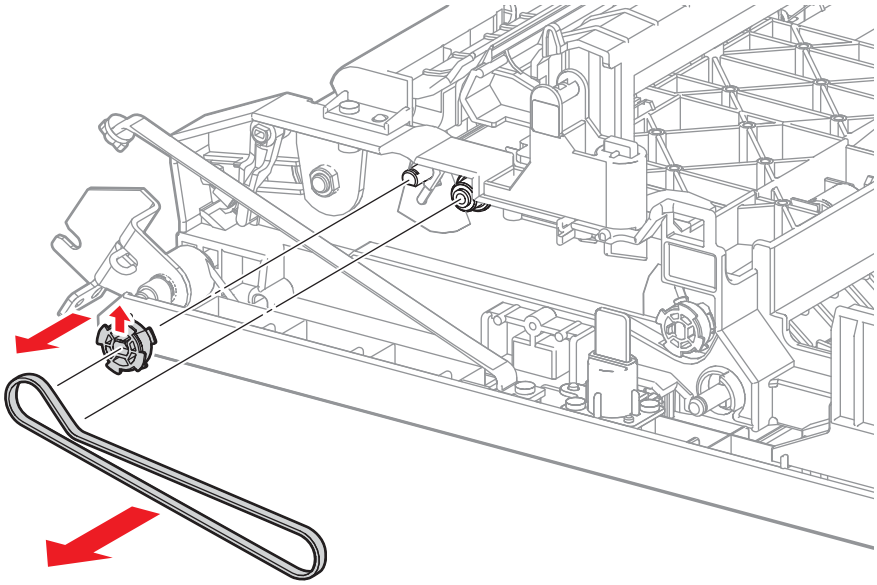
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove the Tray.
2. Open the Front Door.
3. Remove the Rear Cover (page 8-31).
4. Remove the Lower Right Cover (page 8-23).
5. Remove the Right Door (page 8-46).
6. Remove Tray 1 Chute Assy (page 8-50).
7. Remove 2 screws that secure the duplex gear assembly and the E-ring that secures the clutch to the Lower Duplex Roller shaft.

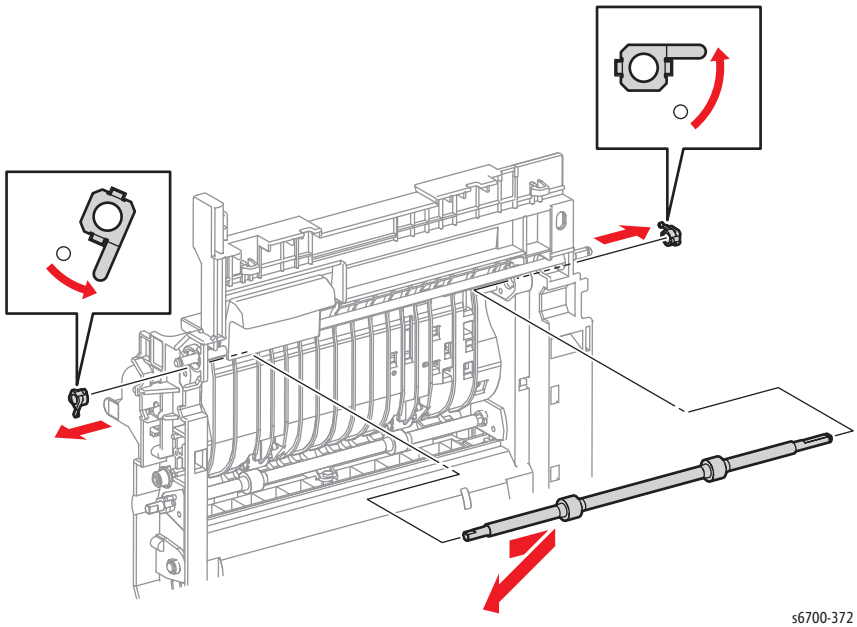


8. Release the hook that secures the pulley to the front end of the roller shaft.



s6700-371

9. Unlock the bearing at each end of the roller shaft and remove the roller from the duplex unit



s6700-372

**Replacement Note**

Press the center of the bearing to fully seat it on the shaft. Next, rotate the bearing lock into place.

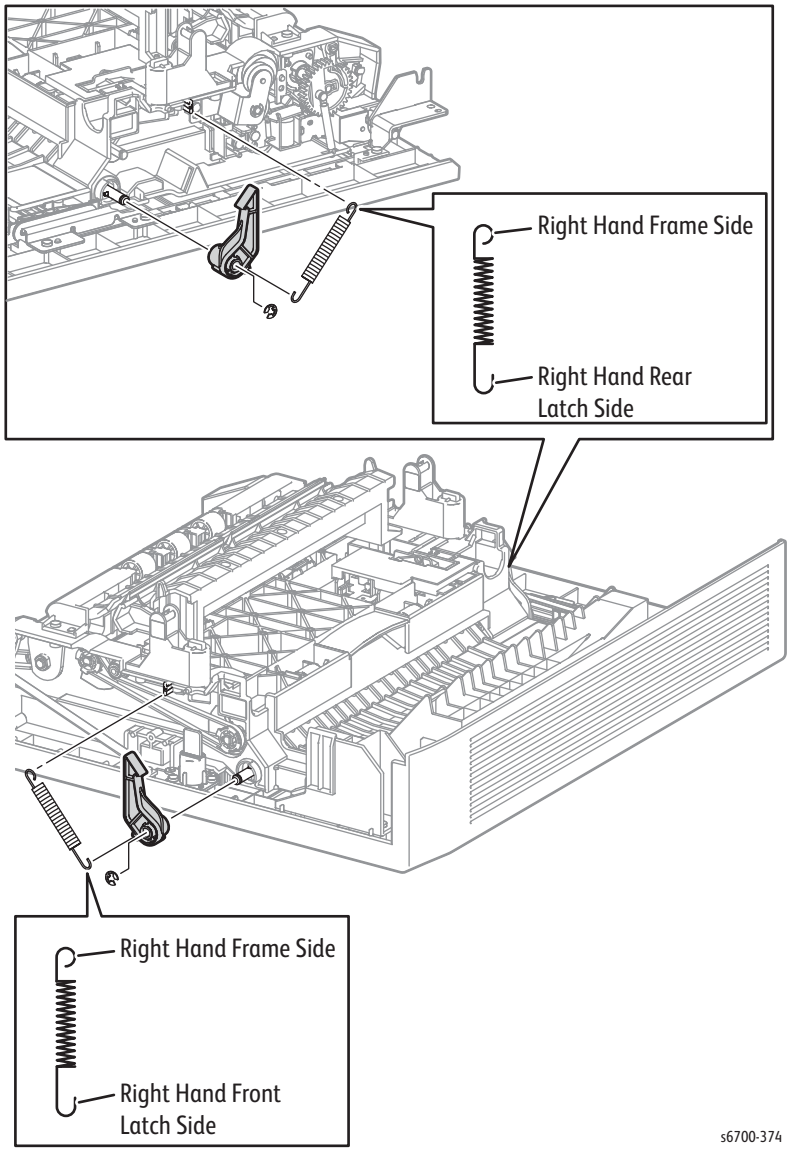
# Upper Duplex Roller

## PL4.3.10

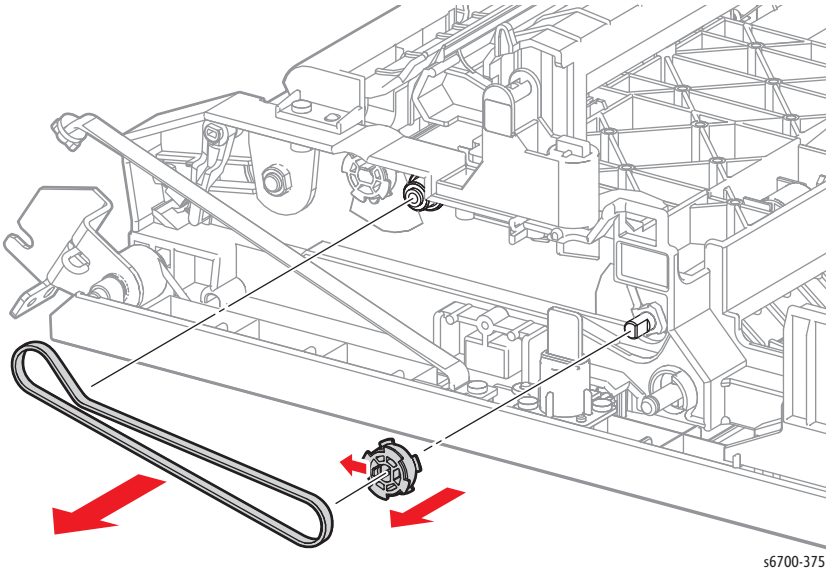
**Caution**

Cover the Imaging Units to prevent exposure to light.

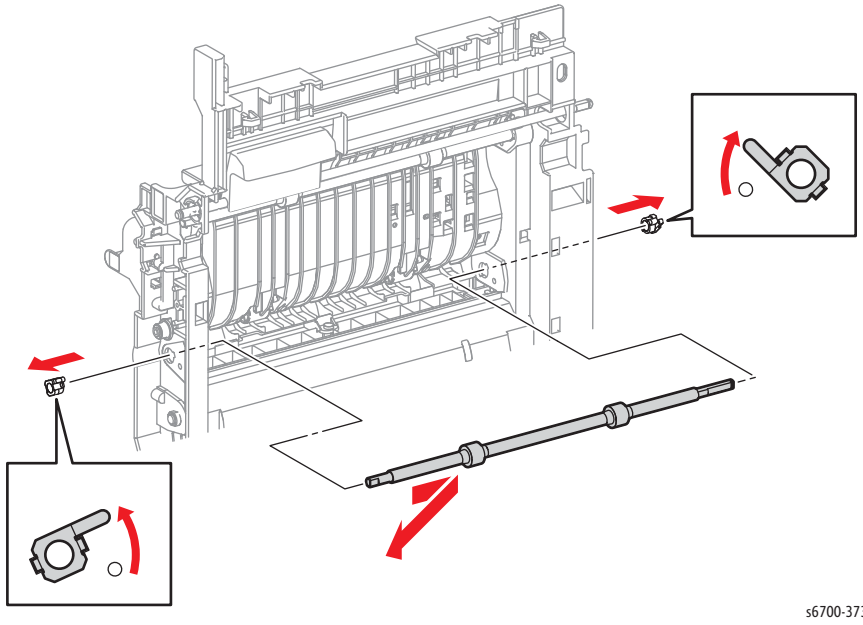
1. Open the Right Door.
2. Open the duplex chute.
3. Remove the front and rear latches and springs from the latch shaft.



4. Release the hook that secures the pulley to the front end of the roller shaft.




5. Unlock the bearing at each end of the roller shaft and remove the roller from the duplex unit



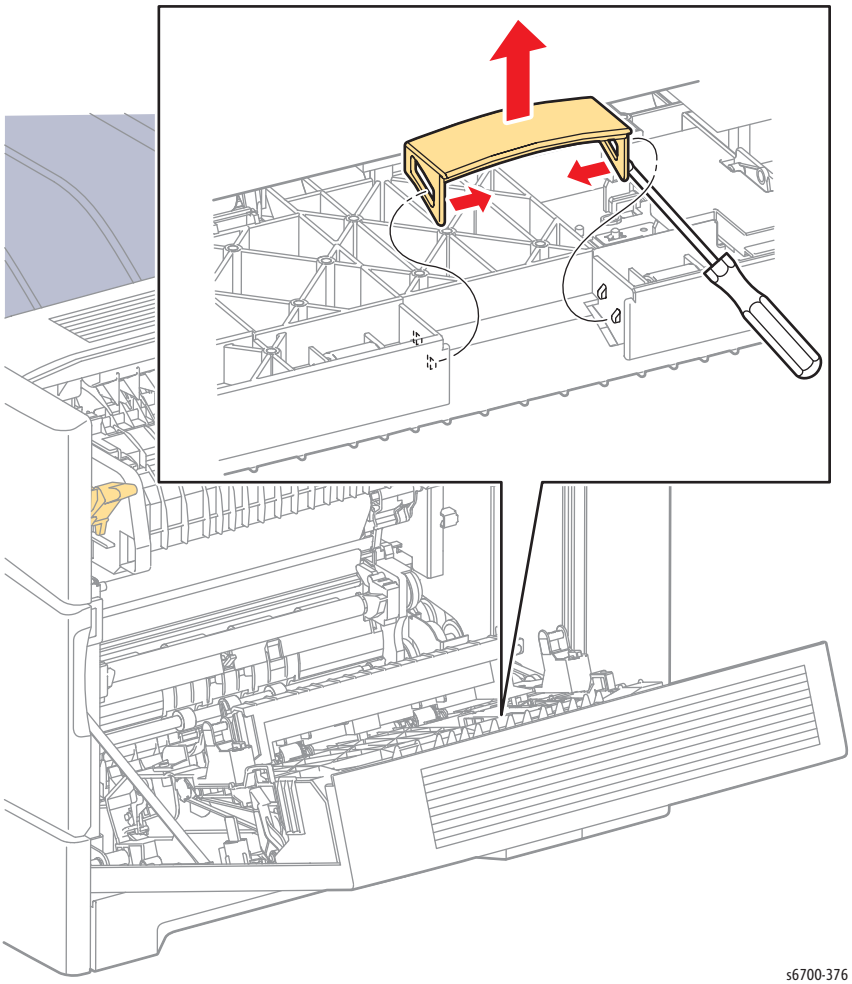

**Replacement Note**

Press the center of the bearing to fully seat it on the shaft. Next, rotate the bearing lock into place.

# Duplex Handle

## PL4.4.8

Raise one side and lift to remove the handle from the duplex unit.



s6700-376

# Print Engine Electrical

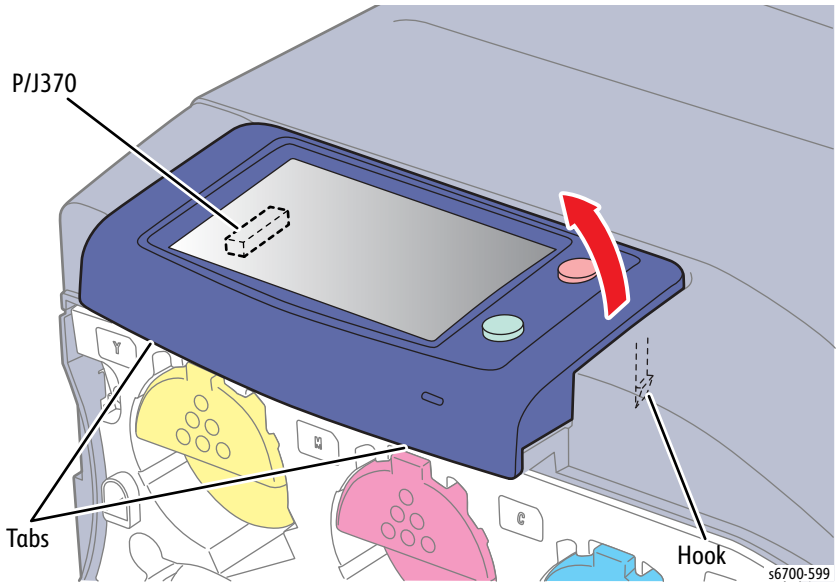
## Control Panel

**Note**

The Control Panel is considered a Customer Replaceable Unit (CRU).

### PL1.1.1

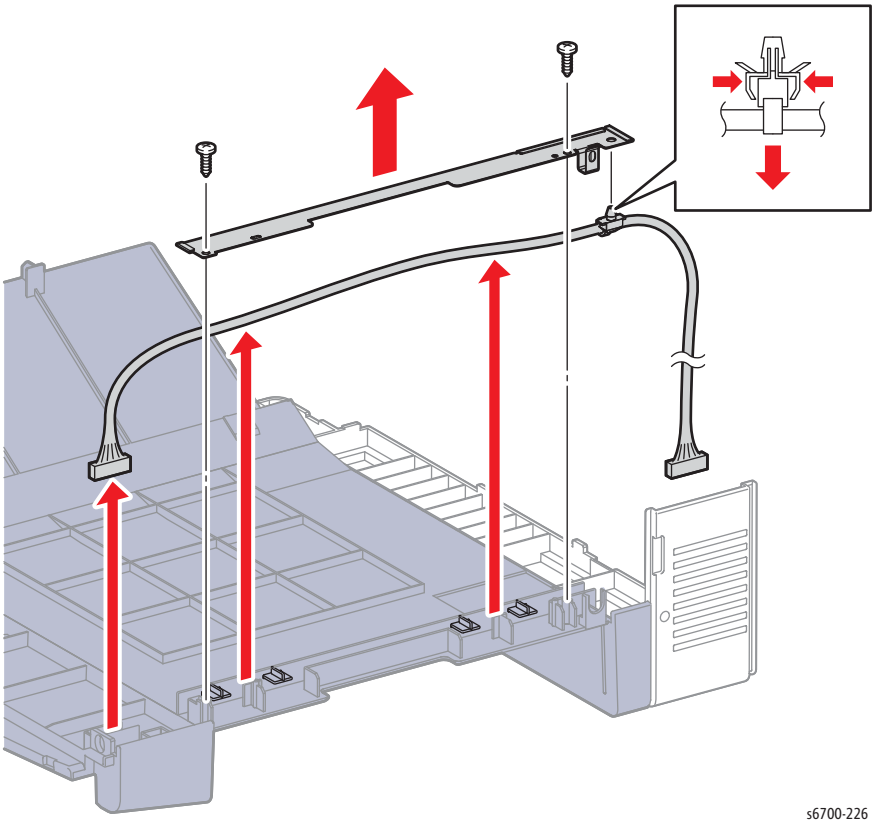
1. Open the Front Door.
2. Lift the front edge of the Control Panel cover to release 2 tabs and 2 hooks that secure the Control Panel cover to the Top Cover.
3. Disconnect P/J370 and remove the Control Panel.



## Control Panel Harness

### PL1.1.2

1. Open the Front Door.
2. Open the Right Cover.
3. Open the Inner Frame Assy.
4. Remove the Rear Cover (page 8-31).
5. Remove the Left Cover (page 8-28).
6. Remove the Output Tray (page 8-21).
7. Remove the Top Cover (page 8-19).
8. Route the harness along the left edge of the cover. Insert the cable tie in the harness cover and secure the harness cover to the Top Cover using 2 (silver, tapping, 8mm) screws.



s6700-226

# Front Door Interlock Switch

## PL1.2.1

**Warning**

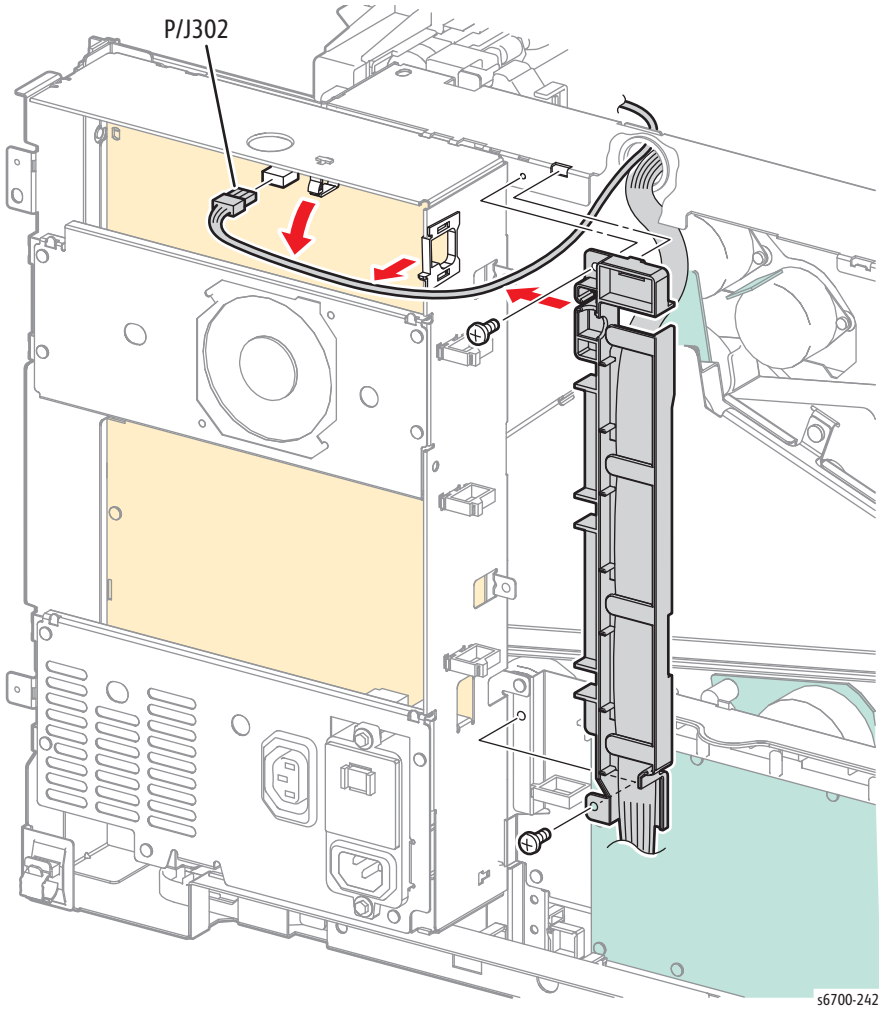
Allow the Fuser to cool before servicing the printer.

**Caution**

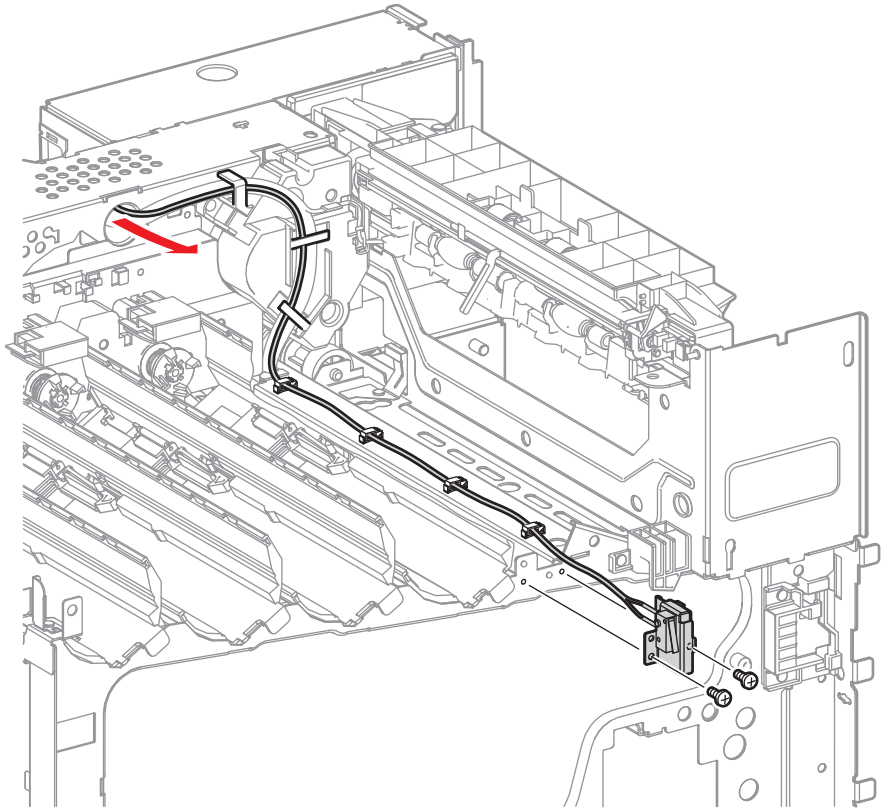
Cover the Imaging Units to prevent exposure to light.

1. Remove the Tray.
2. Remove the Front Door (page 8-26).
3. Remove the Toner Cartridges (page 8-18).
4. Remove the Waste Toner Cartridge (page 8-16)
5. Open the Right Door.
6. Remove the Transfer Belt (page 8-12).
7. Remove the Imaging Units (page 8-14).
8. Remove the Inner Frame Assy.
9. Remove the Fuser (page 8-17).
10. Remove the Rear Cover (page 8-31).
11. Remove the Exit Cover (page 8-22).
12. Remove the IP Cage (page 8-179).
13. Remove the Output Tray (page 8-21).
14. Remove the Top Cover (page 8-19).
15. Remove the Left Cover (page 8-28).
16. Remove the Upper Inner Front Cover (page 8-25).
17. Remove the Front Door Open Switch (page 8-68).

18. Disconnect P/J302 from the LVPS and release the interlock harness from 2 clamps.
19. Remove 2 screws (silver, 6mm) that secure the harness guide to the chassis.
20. Release the hook that secures the harness guide and slide the harness guide and harness together to access the harness.
21. Release the Front Interlock Harness from the guide.



22. Pull the Front Interlock Harness out through the hole of the frame.
23. Release the harness from the hooks on the Exit Motor and 4 clamps.
24. Remove 2 screws (silver, 6mm) that secure the interlock bracket to the chassis.
25. Remove the bracket and switch.

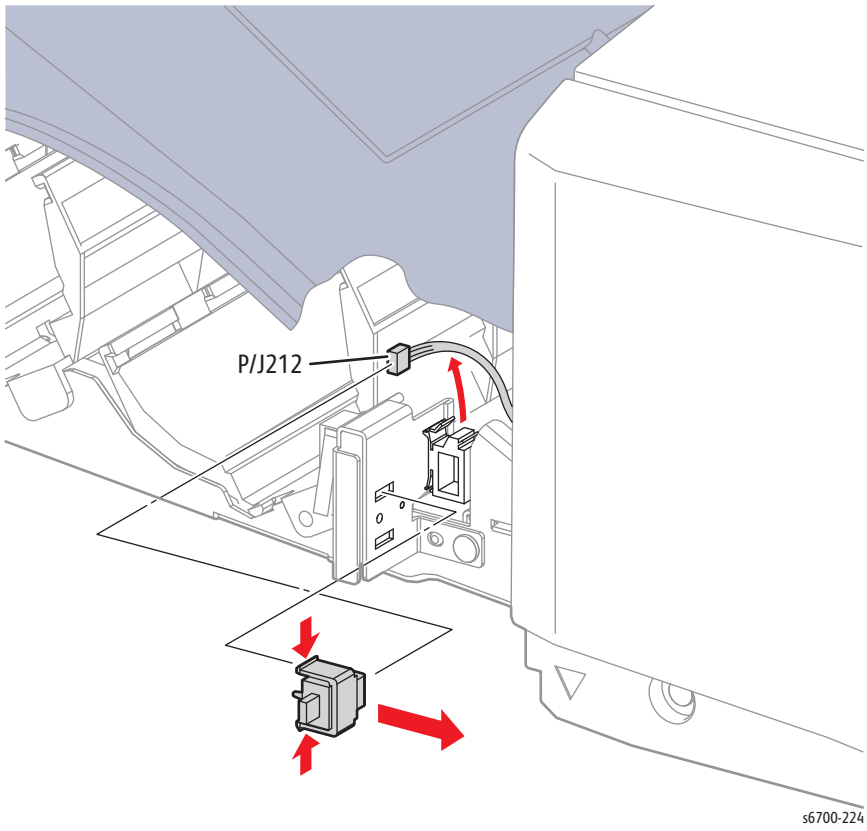


s6700-243

## Front Door Open Switch

### PL1.2.3

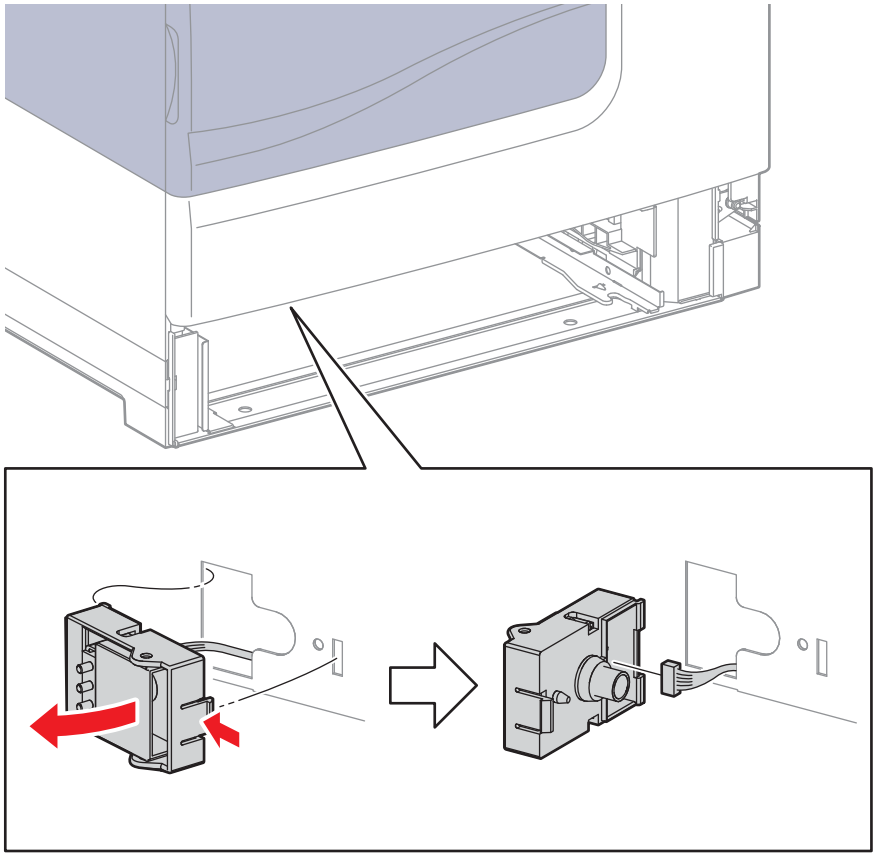
1. Open the Front Door.
2. Open the Inner Frame Assy.
3. Remove the Upper Inner Front Cover (page 8-25).
4. Disconnect P/J212 from the switch.
5. Release 2 hooks that secure the switch to the chassis.



## Size Switch

### PL3.1.1

1. Remove the Tray.
2. Release the hook that secures the Size Switch in the tray cavity.
3. Disconnect the connector to remove the switch.

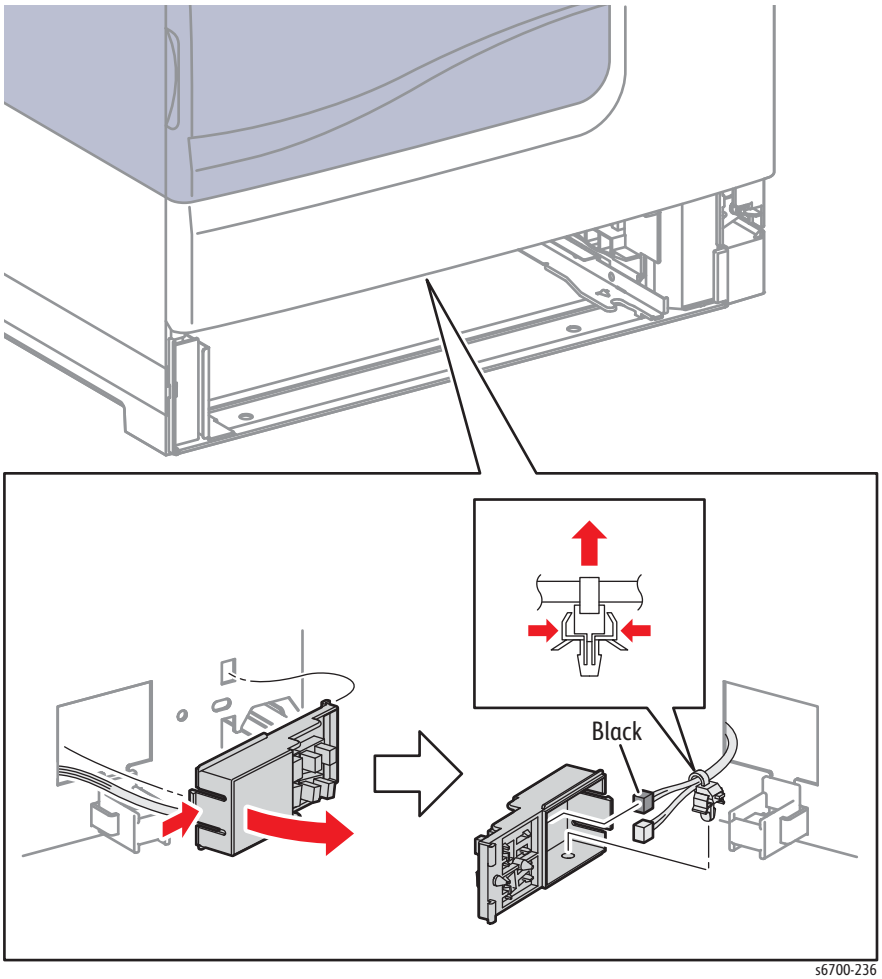


s6700-235

## Low Paper Sensors 1 and 2

### PL3.1.2

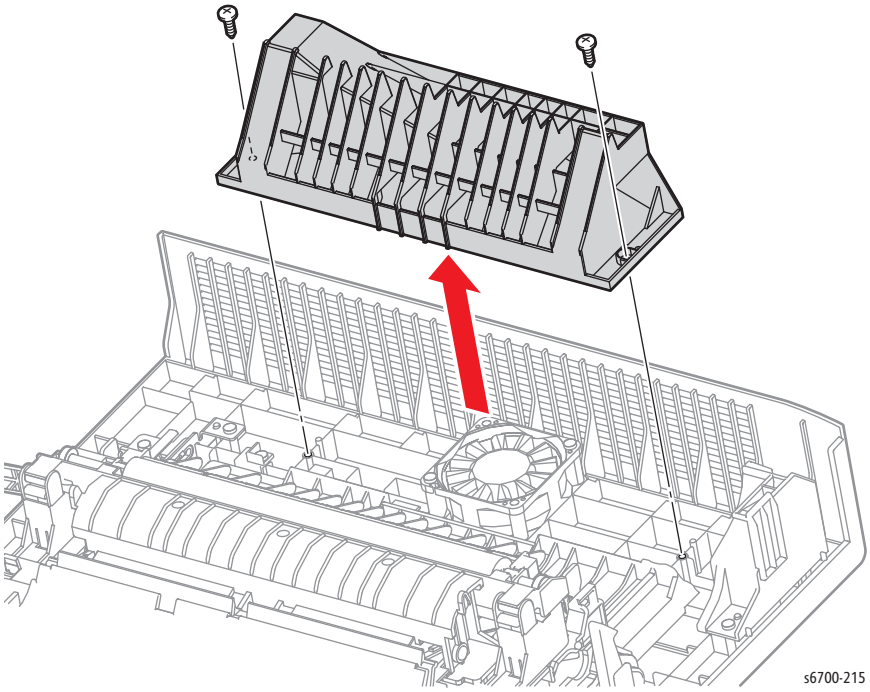
1. Remove the Tray.
2. Release the hook that secures the Low Paper Sensor holder in the tray cavity.
3. Release the clamp that secures the harness to the holder.
4. Disconnect 2 connectors from the Low Paper Sensors.



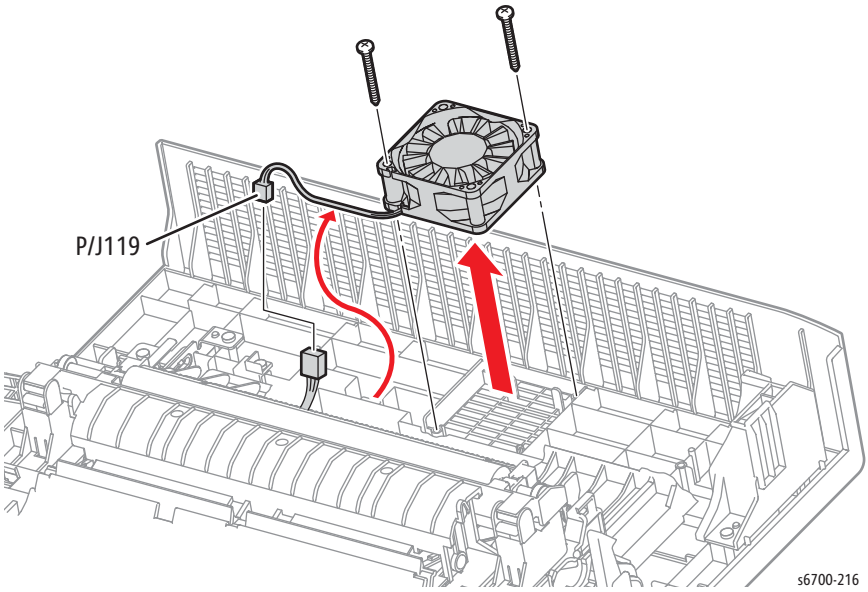
# Fuser Fan

## PL4.1.8

1. Open the Right Door.
2. Remove 2 screws (silver, tapping, 8mm) that secure the chute to the Right Door.



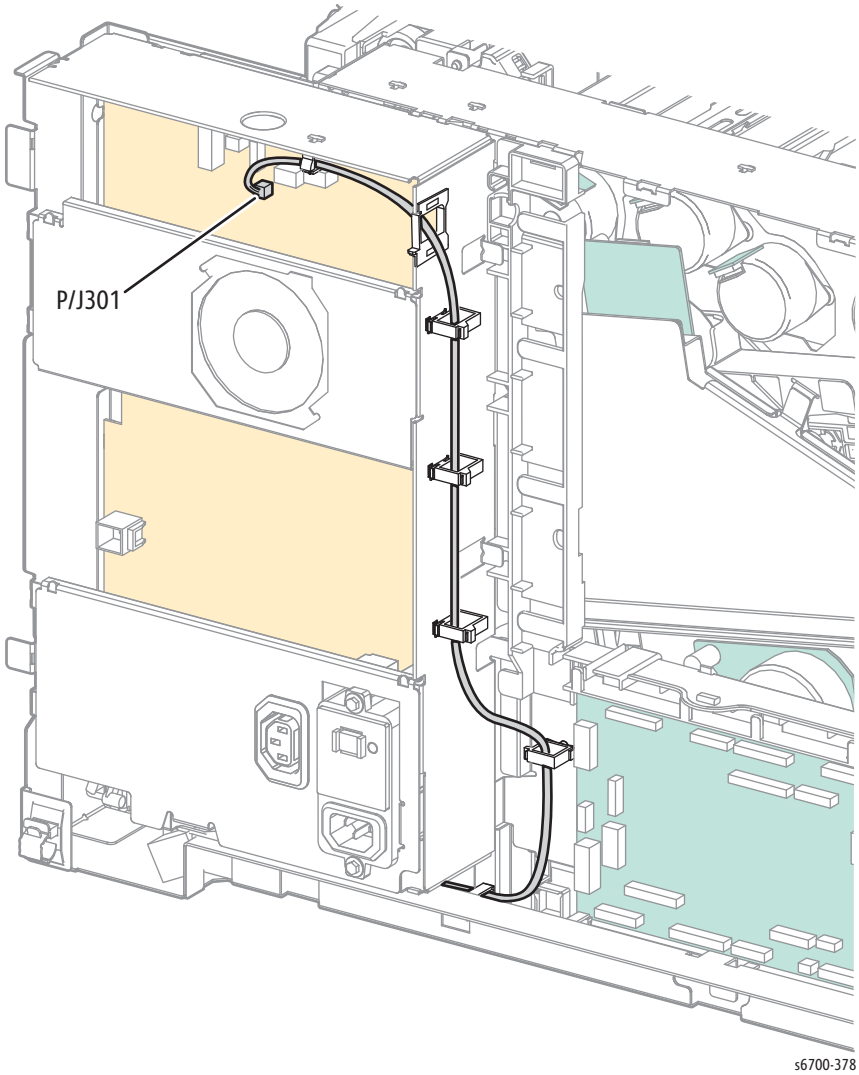

3. Disconnect P/J119, then release the harness from the hooks.
4. Remove 2 screws (silver, tapping, 34mm) that secure the Fan to the Right Door.



## Right Door Interlock Switch

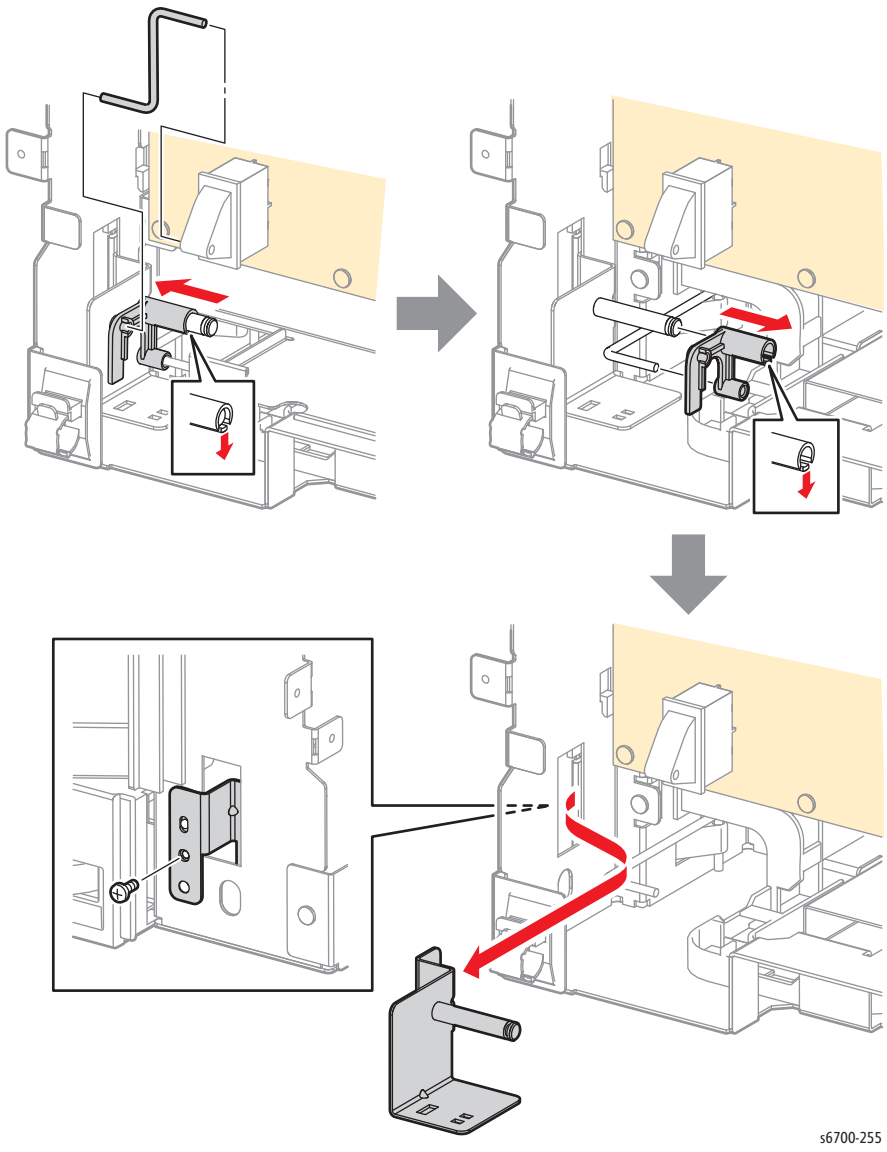
### PL4.1.96

1. Remove Tray 2
2. Remove the Front Door (page 8-26).
3. Remove the Lower Right Cover (page 8-23).
4. Remove the Right Door Assembly (page 8-46).
5. Disconnect P/J301 from the LVPS and release the 7 harness clamps

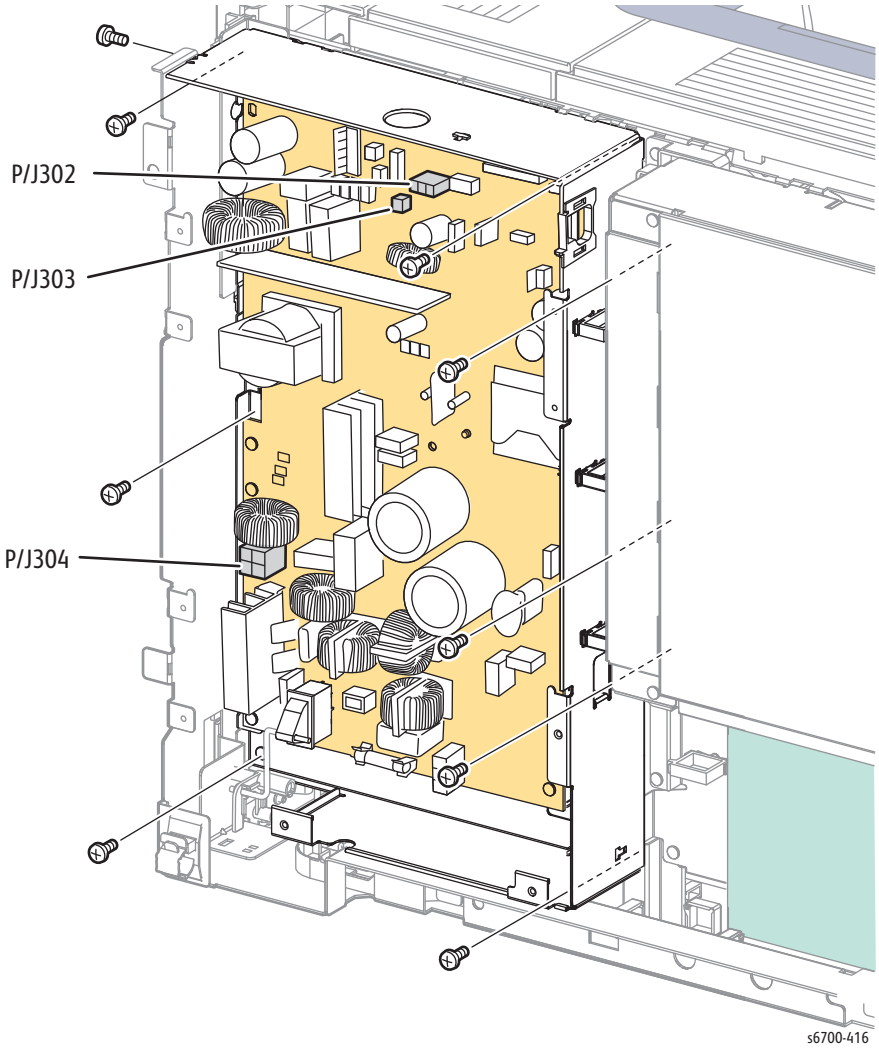



6. Remove the LVPS Fan (page 8-153).
7. Remove the Power Panel (page 8-154).

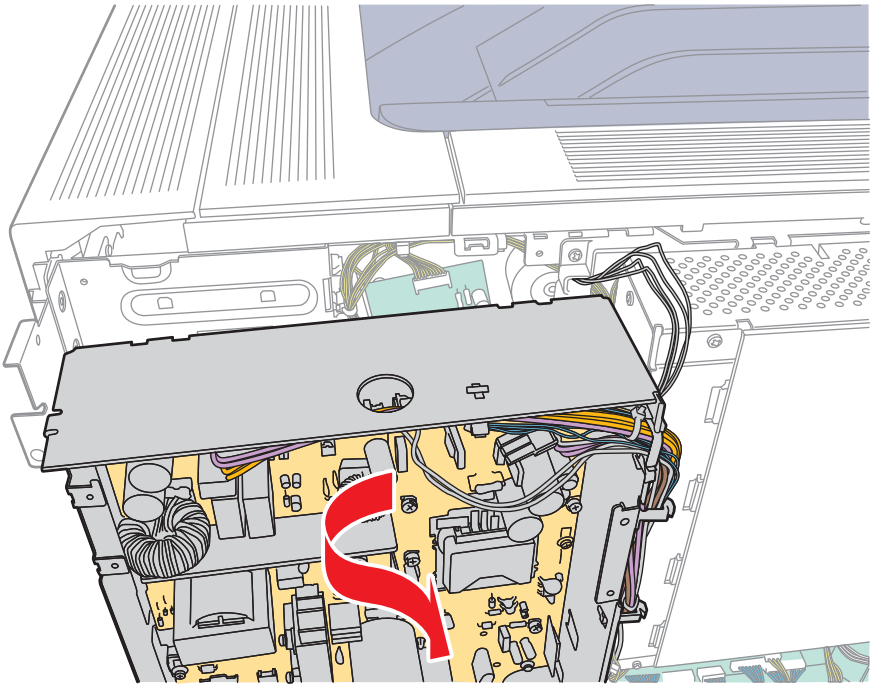
8. Remove the rear bracket and power switch link assembly.



9. Disconnect P/J302, 303, and 304 from the LVPS.
10. Release the harnesses from the clamp.
11. Remove 9 screws that secure the LVPS Cage to the chassis.

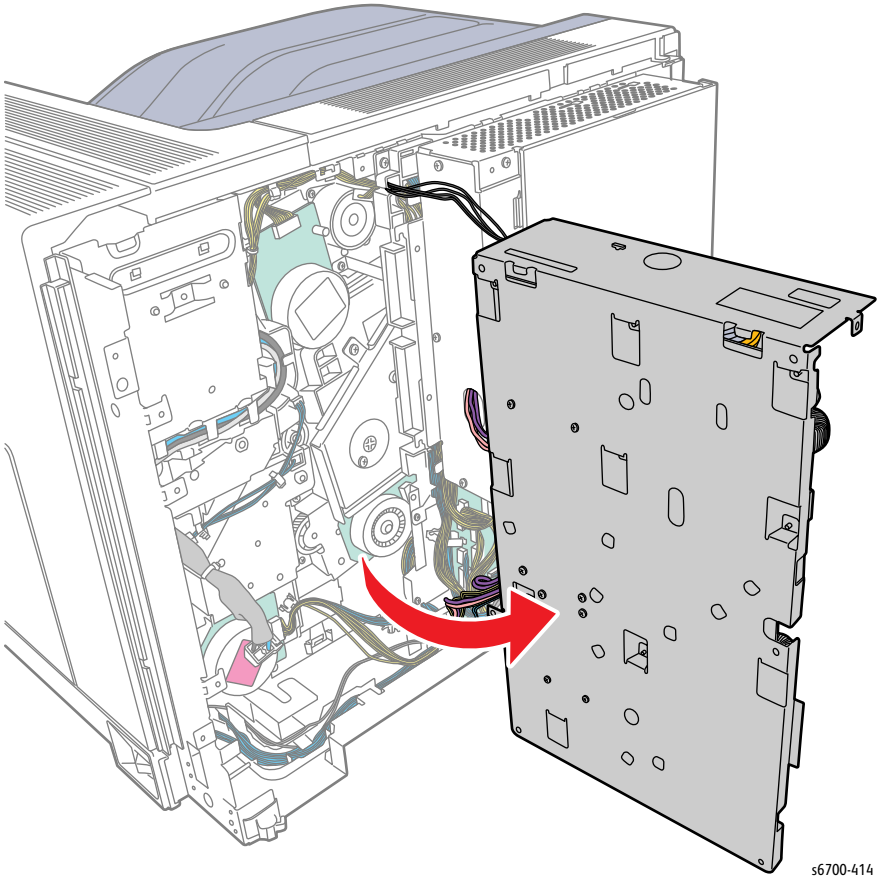


12. Remove but do not disconnect the LVPS Cage by first lifting the cage to release the upper and IP Board Cage hooks, then pull the right side outward and shift the LVPS Cage right to clear the tabs on the left.



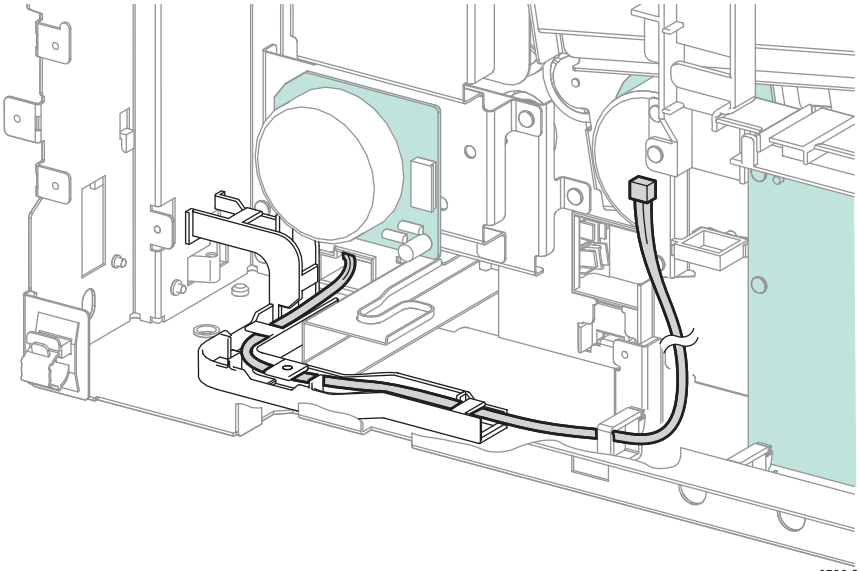
s6700-379

13. Stand the LVPS Cage on the work surface as shown,



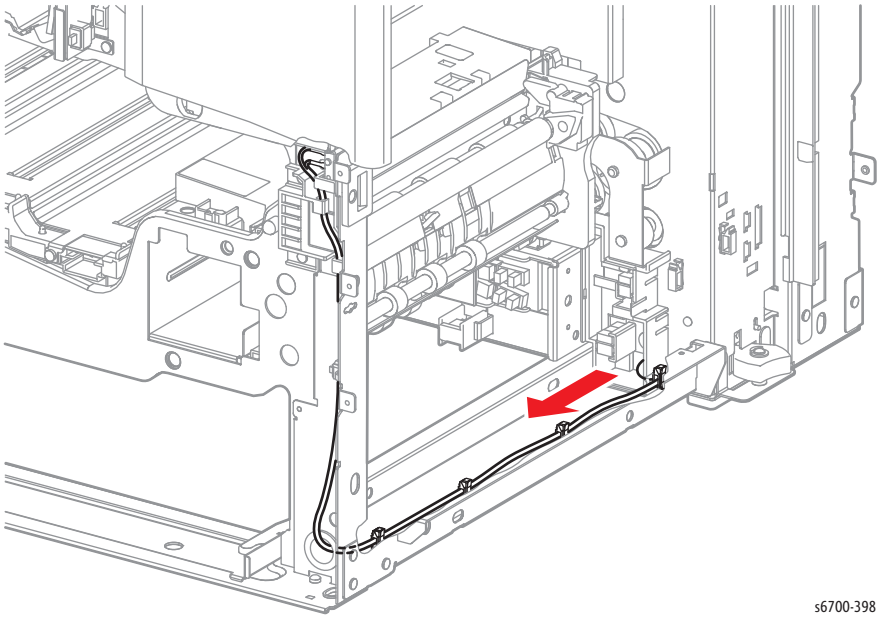
s6700-414

14. Release the interlock harness from the corner guide.



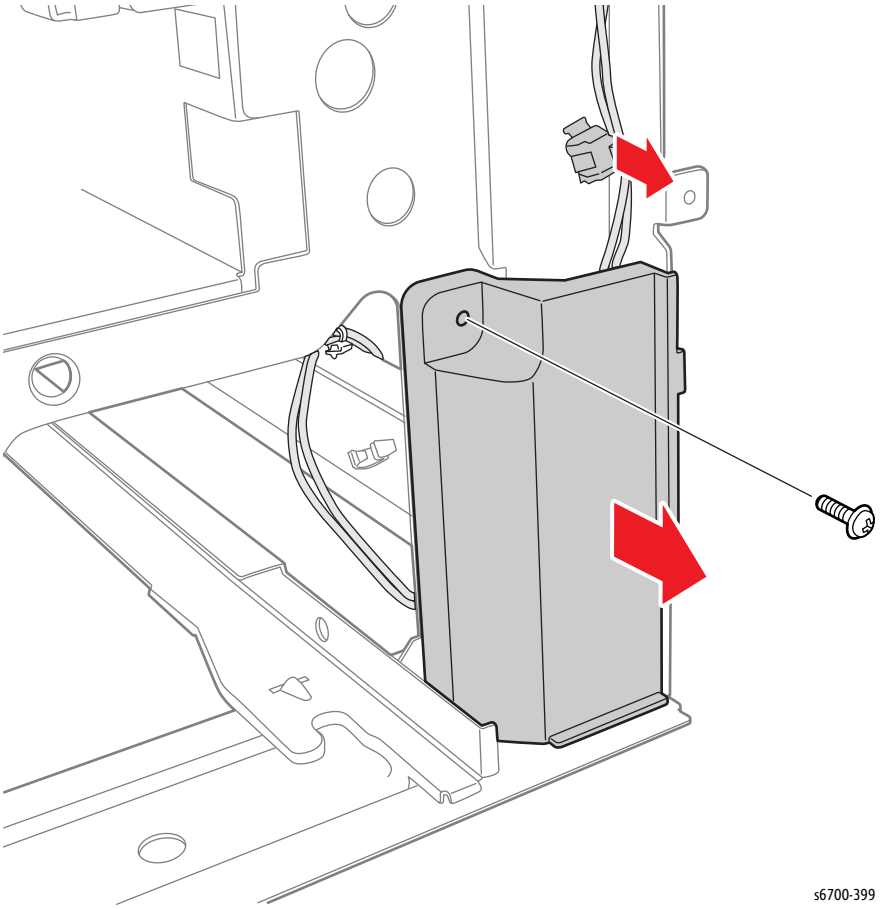
s6700-377

15. Pull the interlock harness through the harness guide and release 4 clamps.



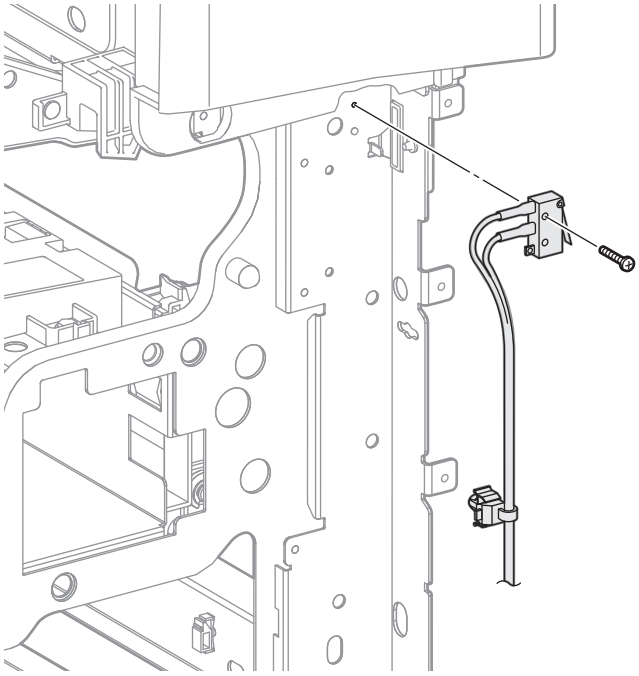
s6700-398

16. Remove 1 screw that secures the under cover and release the cable tie from the chassis.



s6700-399

17. Remove 1 screw that secures the switch to the chassis and remove the I/L harness.

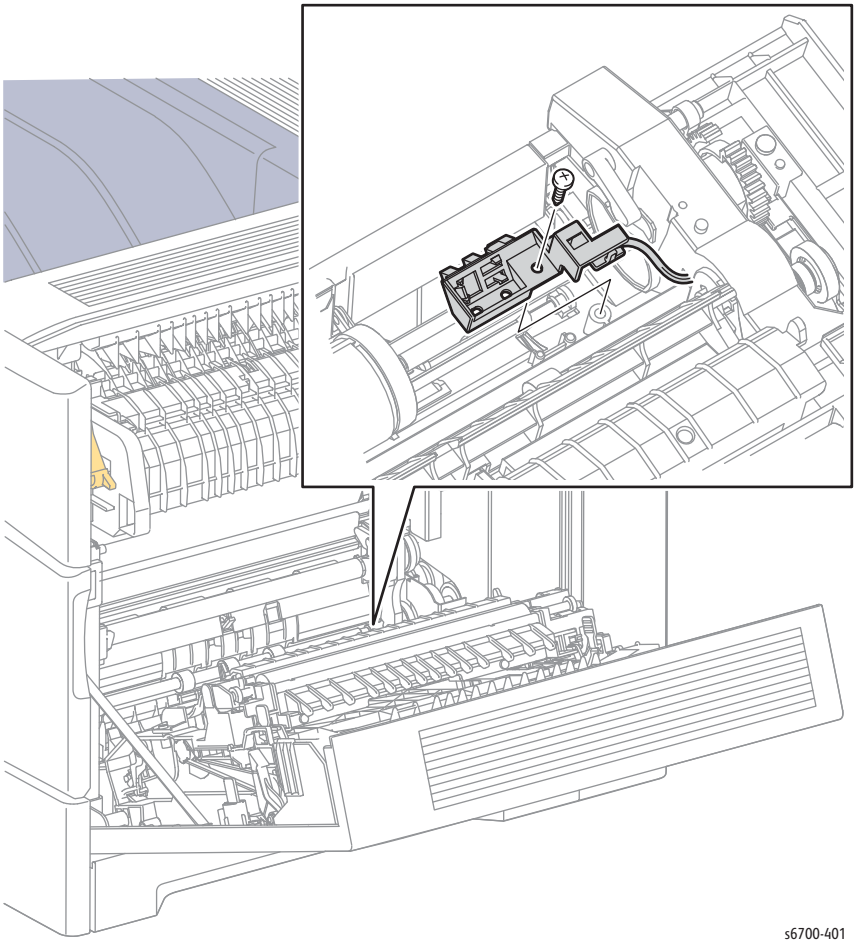


s6700-400

## Right Door Harness

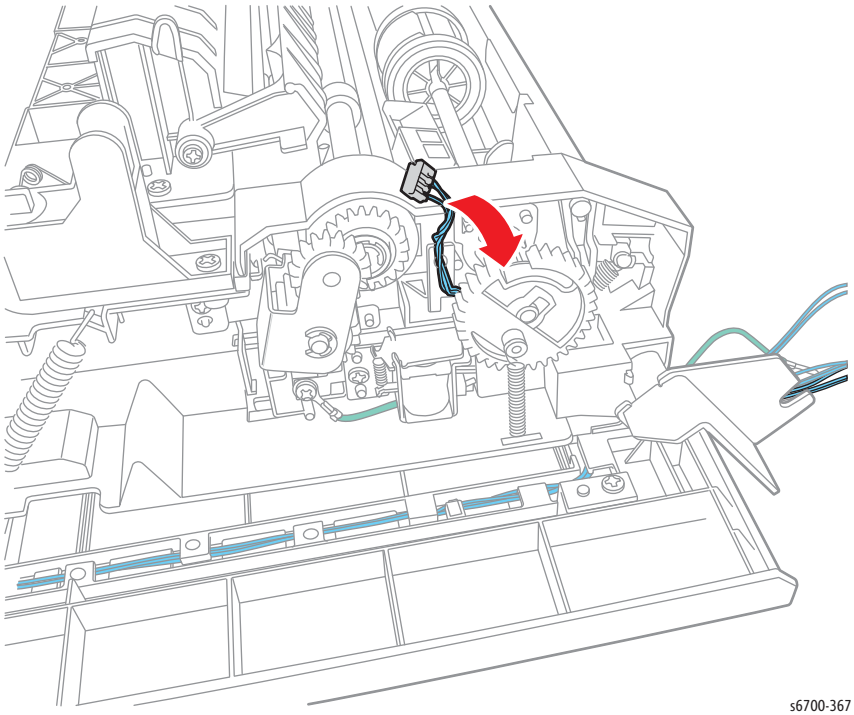
### PL4.3.16

1. Remove Tray 2.
2. Remove the Rear Cover (page 8-31).
3. Remove the Lower Right Cover (page 8-23).
4. Remove the Right Door Assembly (page 8-46).
5. Remove the Tray 1 Chute Assembly (page 8-50).
6. Remove the Tray 1 No Paper Sensor Bracket and disconnect P/J226



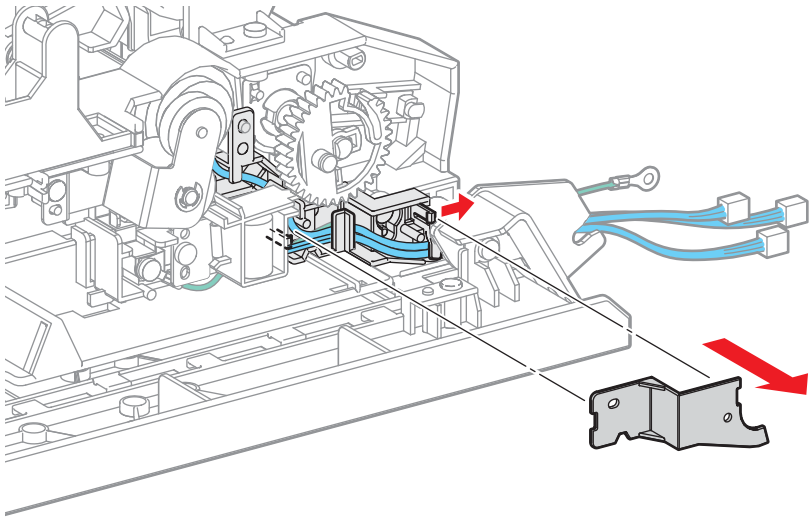
s6700-401

7. Remove the sensor harness from the feeder guides.



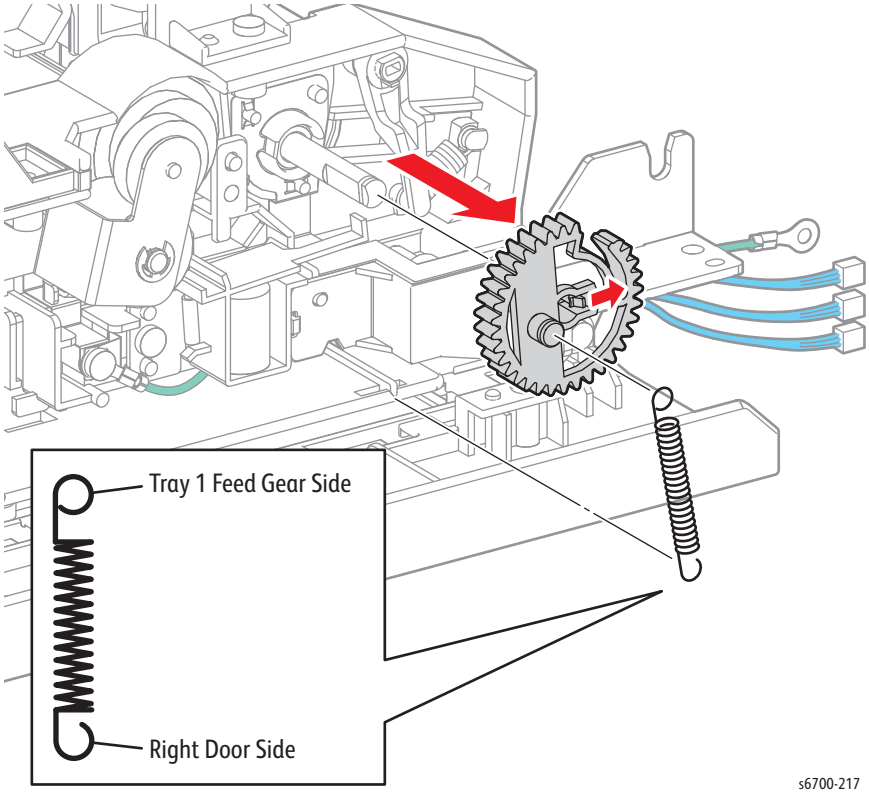
s6700-367

8. Remove the harness cover to release the harness from the feeder.

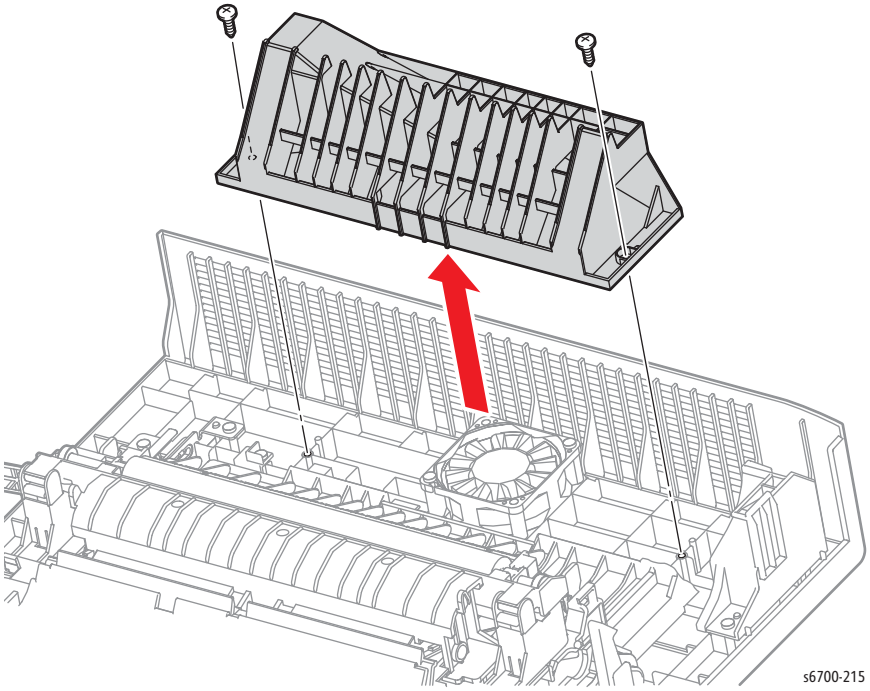


s6700-402

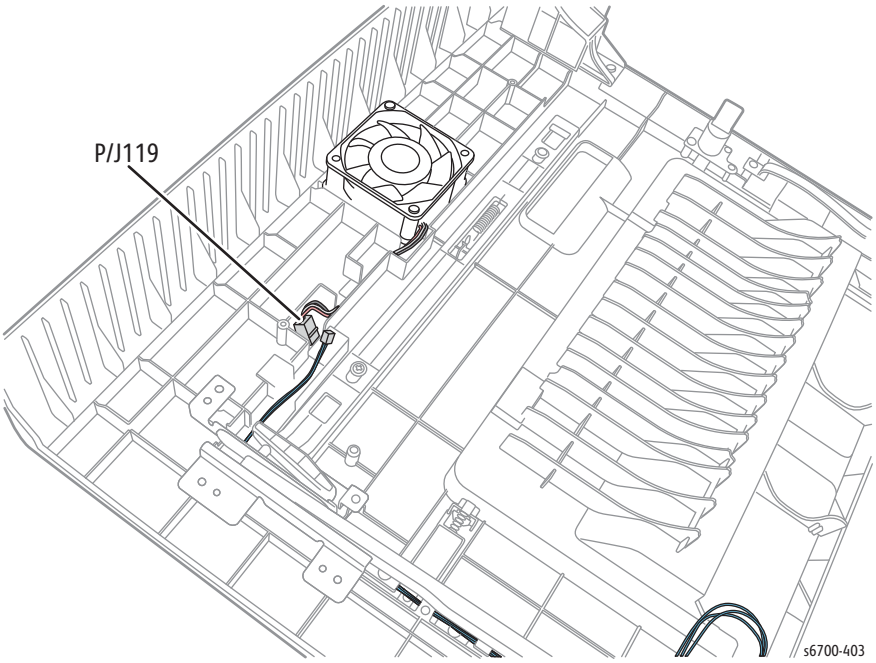
9. Remove the Feed Gear and Spring,



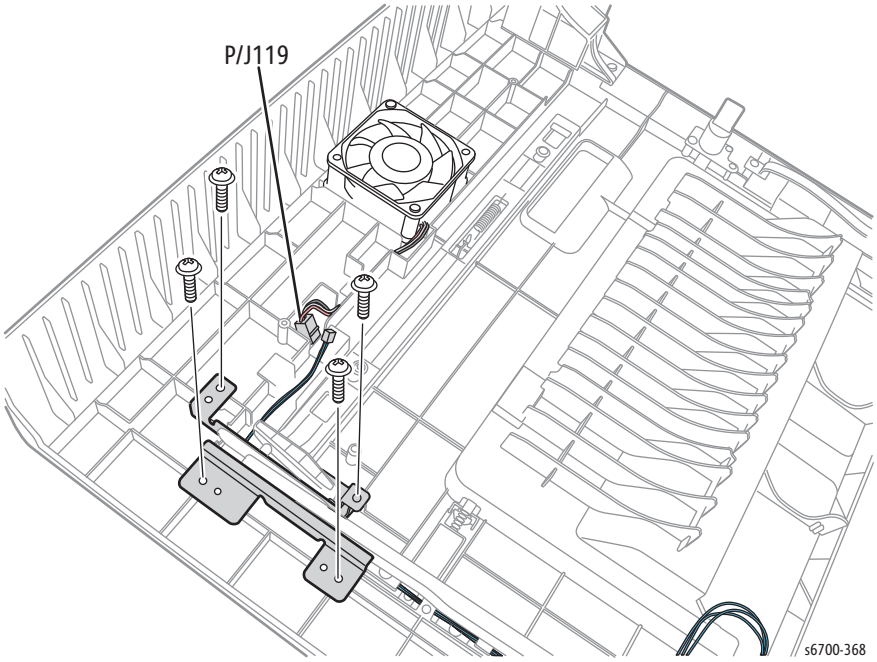

10. Release the harness from the Tray 1 Feeder guides.
11. Remove 2 screws that secure the Duplex Chute.



10. Disconnect the Fuser Fan P/J119.




10. Remove 4 screws that secure the Link Arm brackets.




11. Release the harness from the Right Door guides.

# Erase Lamp

## PL5.1.2

This procedure removes the Magenta Erase Lamp as an example. The procedure applies to all four lamps.

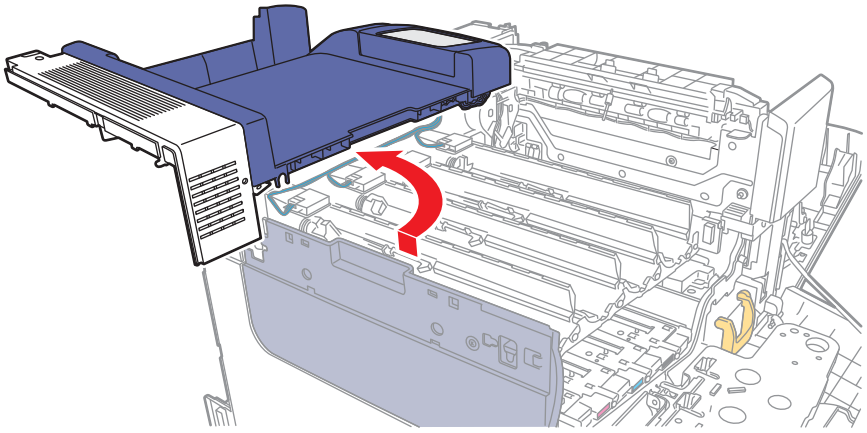
**Warning**

Allow the Fuser to cool before servicing the printer.

**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove Tray 2.
2. Open the Front Door.
3. Remove the Toner Cartridges (page 8-18).
4. Open the Right Door.
5. Open the Inner Frame Assembly.
6. Remove the Upper Inner Front Cover (page 8-25).
7. Remove the Transfer Belt (page 8-12).
8. Remove the Imaging Units (page 8-14).
9. Remove the Rear Cover (page 8-31).
10. Remove the Exit Cover (page 8-22).
11. Remove the Upper Finisher Docking Cover.
12. Remove the Output Tray (page 8-21).
13. Remove 4 screws that secure the Top Cover (page 8-19) and rotate the cover to rest on the back of the chassis,

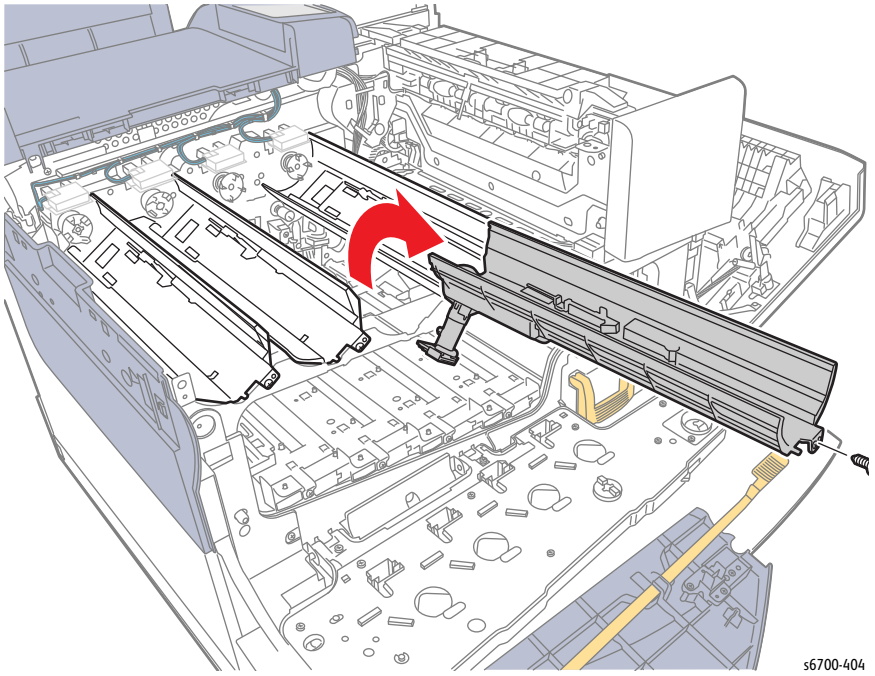


s6700-389

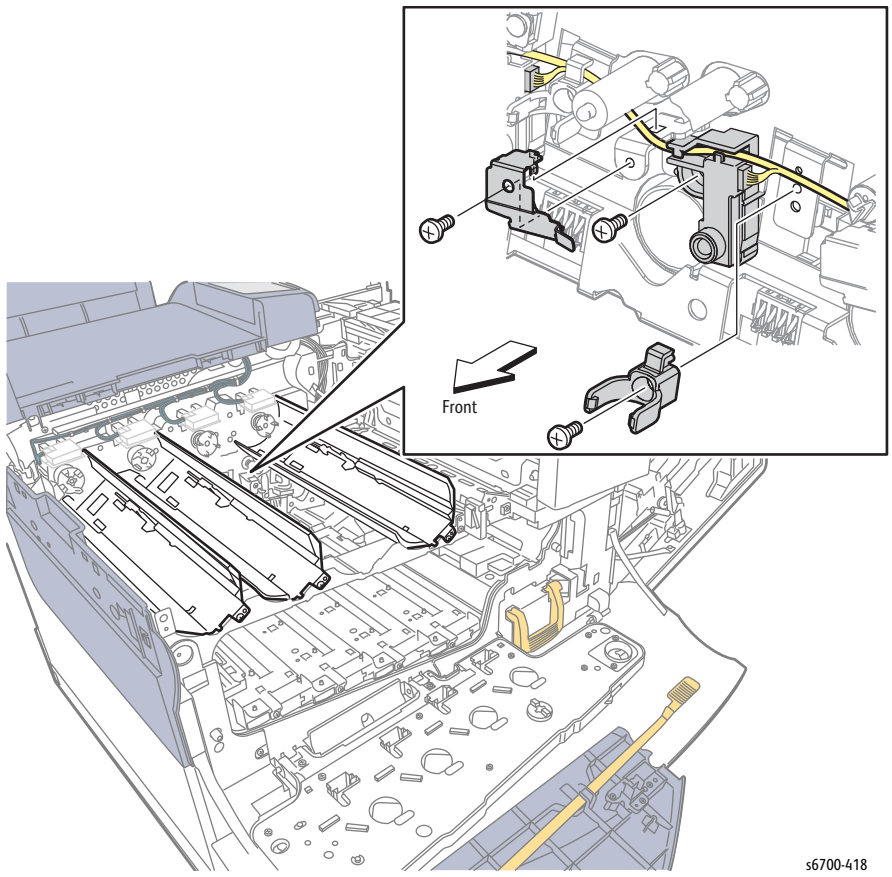
**Note**

The following step is not necessary for the Yellow Erase Lamp.

14. Remove the Cyan Toner Dispense Assembly (page 8-103).




15. Release the harness from the hooks of the Erase Lamp. Remove 1 screw (silver, 6mm) that secures the Erase Lamp. Disconnect the Erase Lamp from the harness.



# Bias Housing Assembly

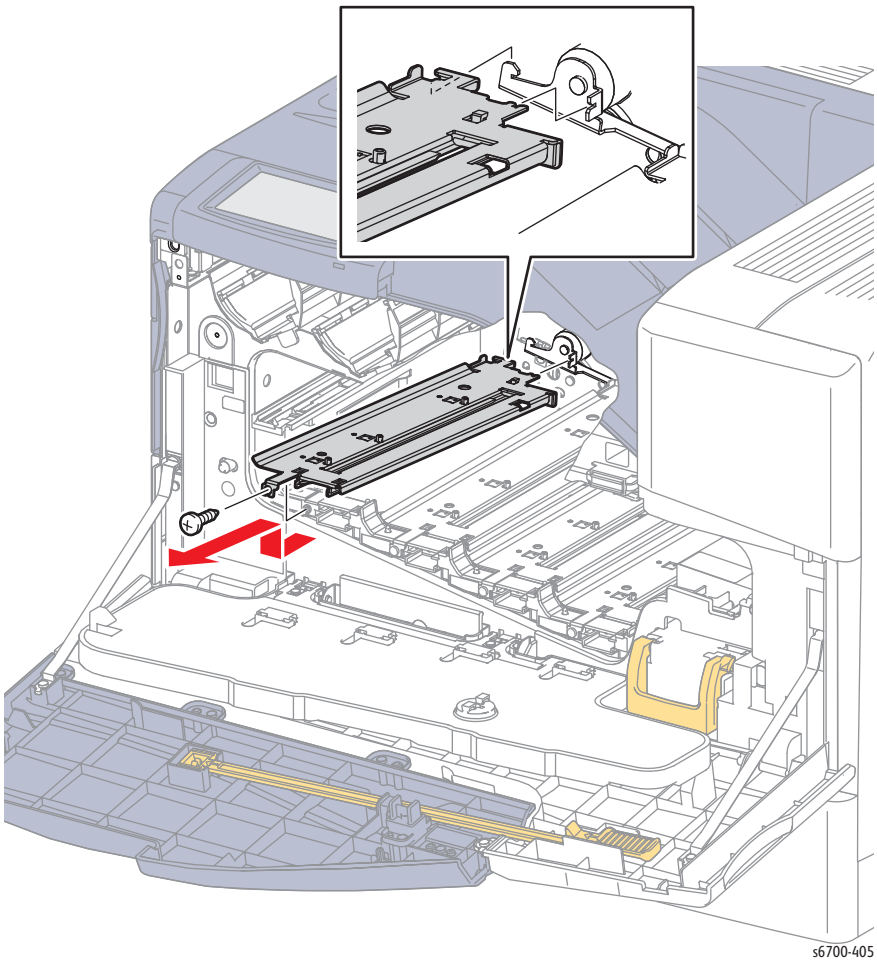
## PL5.2.2

**Caution**

Cover the Imaging Units to prevent exposure to light.

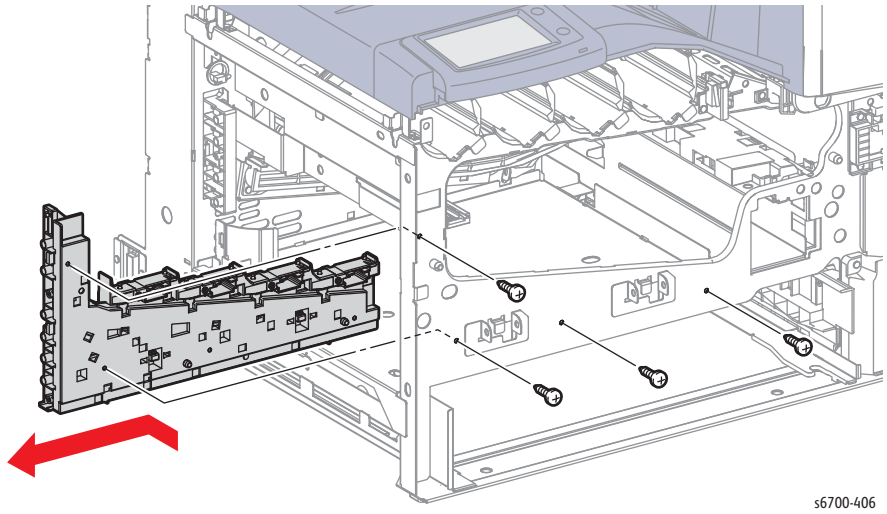
1. Remove the Front Door (page 8-26).
2. Remove the Waste Toner Cartridge (page 8-16).
3. Remove the Inner Frame Assembly (page 8-129).
4. Remove the Upper Inner Front Cover (page 8-25).
5. Remove the Lower Inner Front Cover (page 8-27).
6. Remove the Rear Cover (page 8-31).
7. Remove the Left Cover (page 8-28).
8. Remove the HVPS (page 8-86).
9. Remove the Laser Unit (page 8-93).
10. Remove 4 Imaging Unit Guides (page 8-128).

.



11. Remove 4 screws that secure the Bias Housing Assembly to the chassis and remove.

.



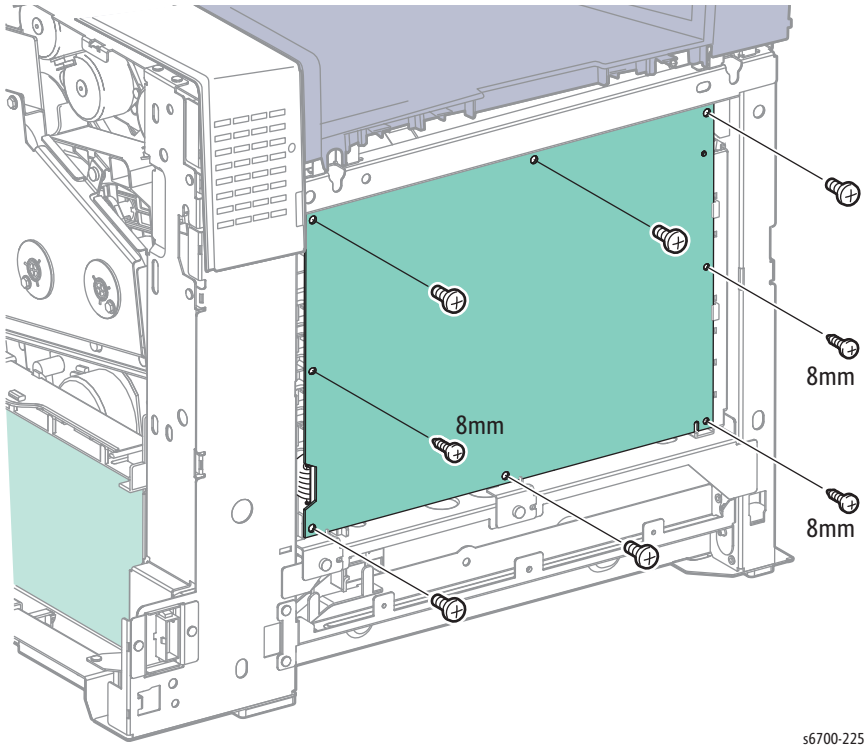
# HVPS

## PL5.2.3

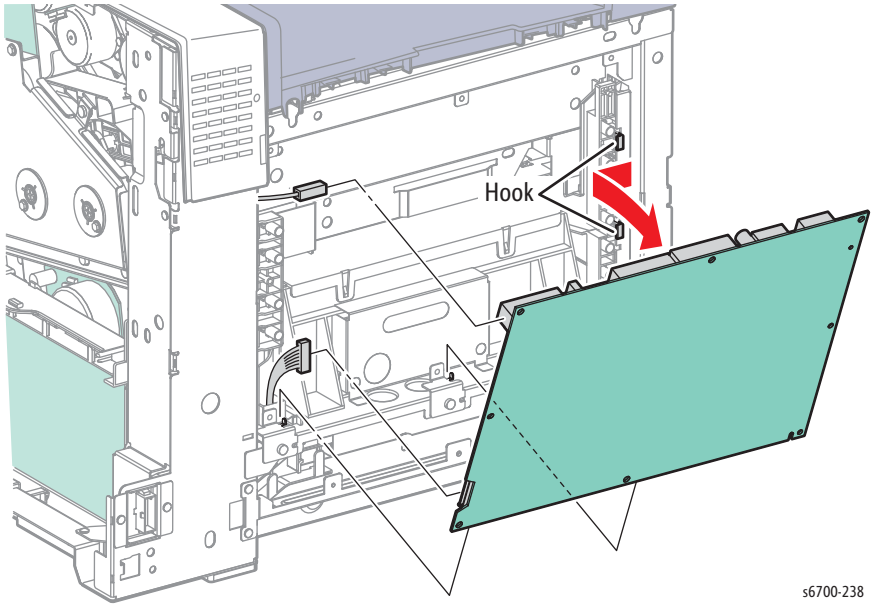
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove Tray 2.
2. Open the Front Door.
3. Open the Right Door.
4. Remove the Rear Cover (page 8-31).
5. Remove the Output Tray (page 8-21).
6. Remove the Left Cover (page 8-28).
7. Remove 5 screws (silver, M4, 6mm) and 3 screws (silver, tapping, 8mm) that secure the HVPS to the chassis.
8. Slide the HVPS left and then up to remove the board.



9. Release 2 hooks on the housing and tilt the HVPS outward.
10. Disconnect P/J331 and P/J332 to remove the HVPS.




**Replacement Note**

To ensure proper connection with the Bias Housing Assembly, align the plastic pins on the chassis with the holes in the HVPS.

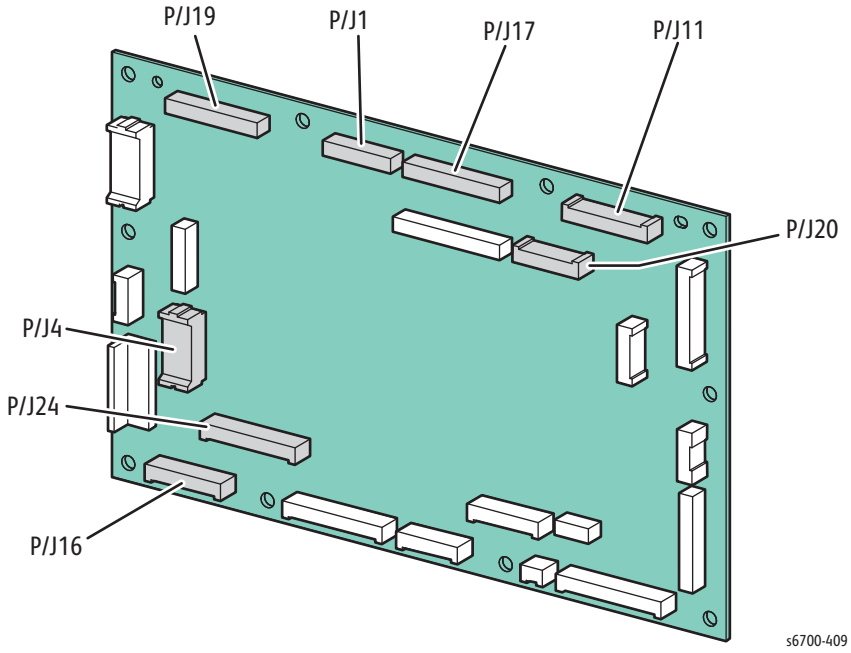
# Imaging Unit CRUM Connector

## PL5.2.4

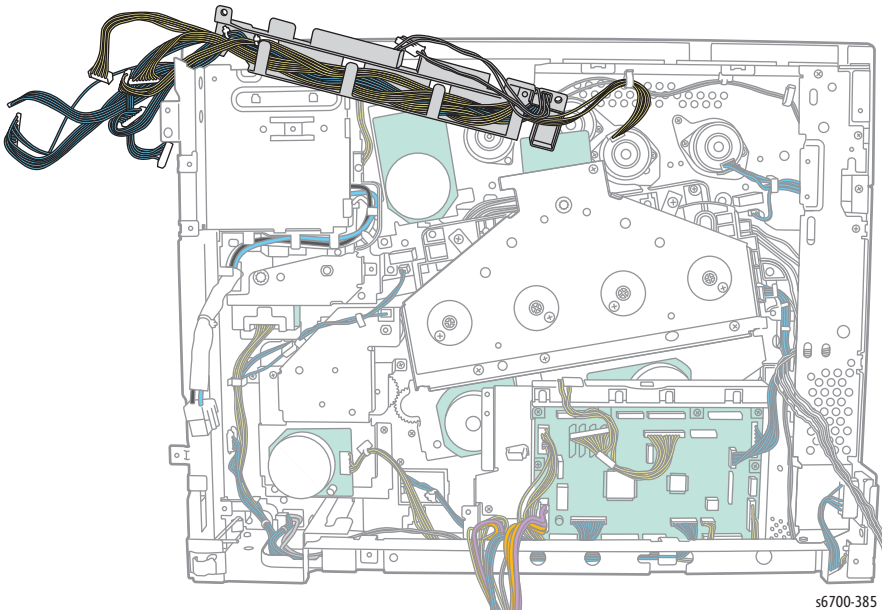
**Caution**

Use care when handling CRUM Connectors. The boards and attached contacts separate easily.

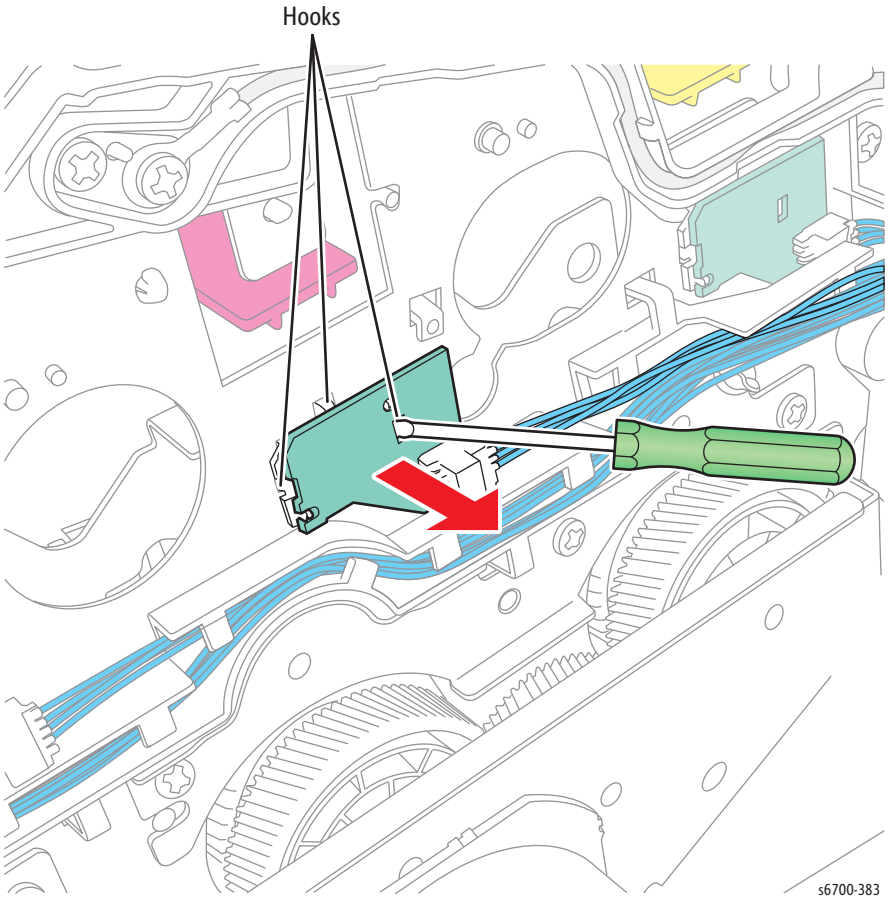
1. Remove the Rear Cover (page 8-31).
2. Remove the IP Board Cage (page 8-179).
3. Remove the LVPS Cage (page 8-182).
4. Disconnect P/J1, 4, 19, 17, 20, 11, 16 from the MCU Board.




5. Remove 2 screws that secure the center harness guide and lift the lower end up as shown.



6. Remove the Imaging Unit Link Drive Kit (page 8-175).
7. Disconnect the affected CRUM Connector and release 2 hooks that secure to the chassis.



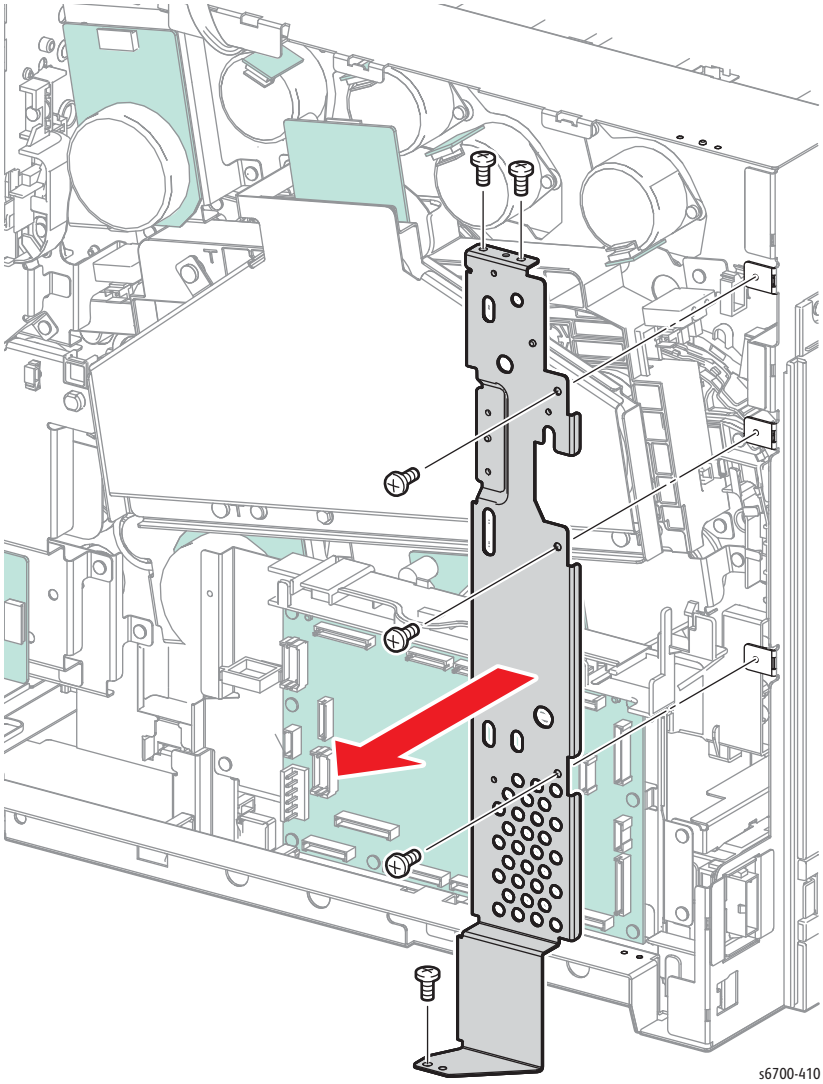

**Replacement Note**

Seat the CRUM Connector hooks securely in the chassis. Check hook engagement by viewing the CRUM connectors from the front of the printer.

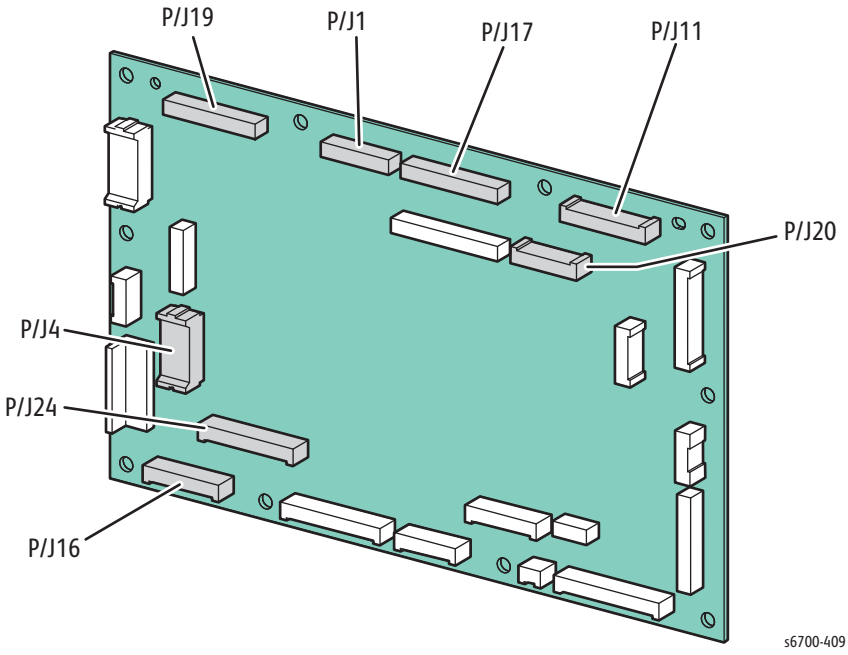
# Transfer Belt Bias Assembly

## PL5.2.6

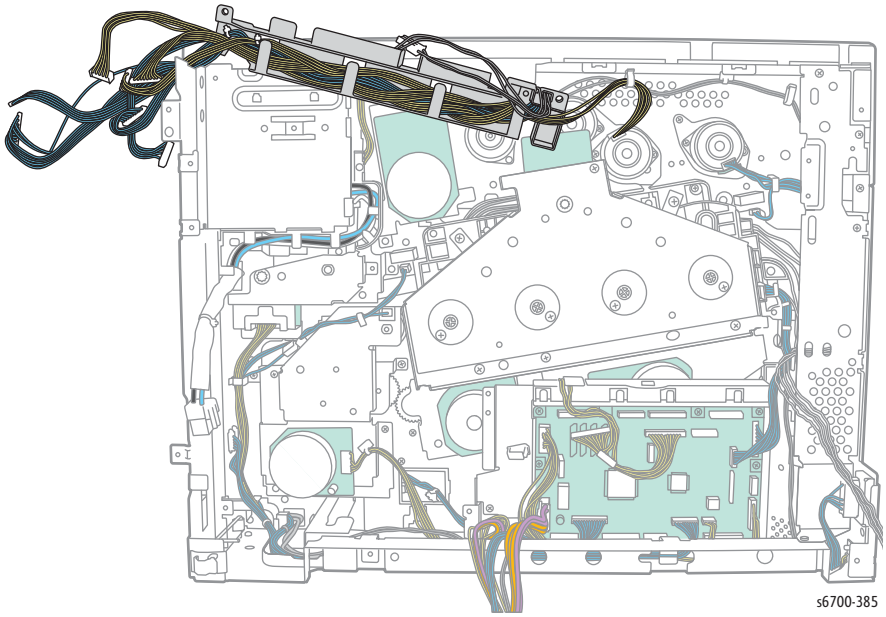
1. Open the Front Door.
2. Remove the Rear Cover (page 8-31).
3. Remove the Left Cover (page 8-28).
4. Remove the HVPS (page 8-86).
5. Remove the IP Board Cage (page 8-179).
6. Remove the LVPS Cage (page 8-182).
7. Remove the Fuser Drive Assembly (page 8-130).
8. Remove 6 screws (silver, 6mm) that secure the IP Board Cage support bracket to the chassis.



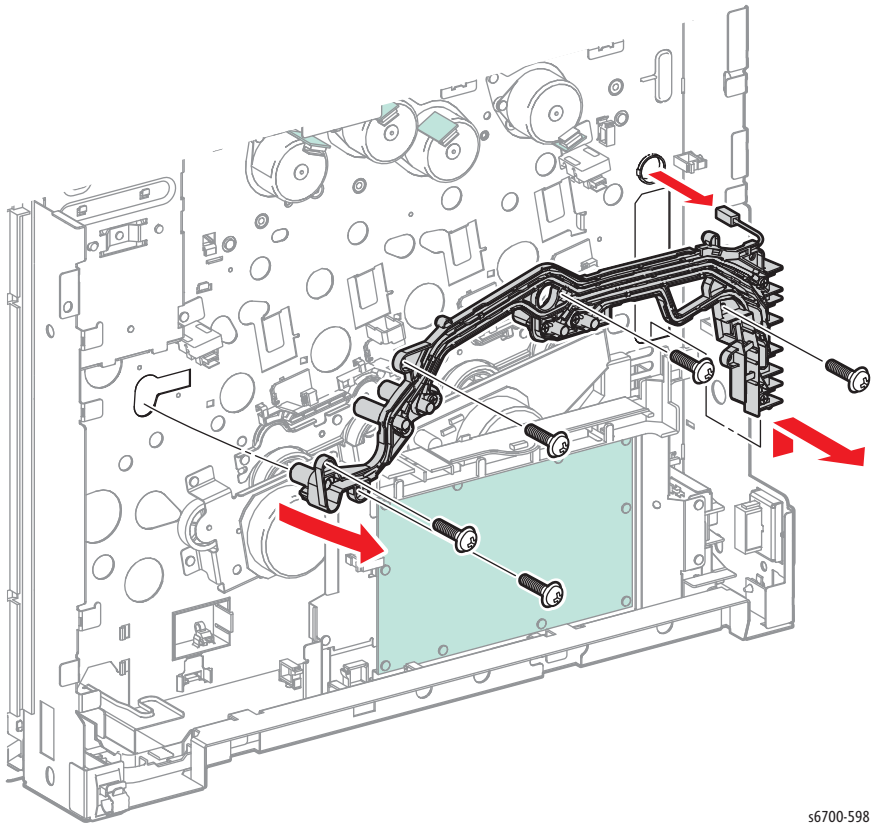
9. Remove, but do not disconnect the Transfer Belt Drive Assembly (page 8-135).
10. Disconnect P/J1, 4, 19, 17, 20, 11, 16 from the MCU Board.




11. Remove the 2 screws that secure the center harness guide and lift the lower end up as shown.



12. Remove the Imaging Unit Link Drive Kit (page 8-175).
13. Release the Imaging Unit CRUM harness from the guides on the Transfer Belt Bias Assembly.
14. Remove 5 screws (silver, 6mm) that secure the Transfer Belt Bias Assembly to the chassis.




**Replacement Note**

Insert the left end of the assembly first. Flex the assembly slightly to clear the sensors and springs.

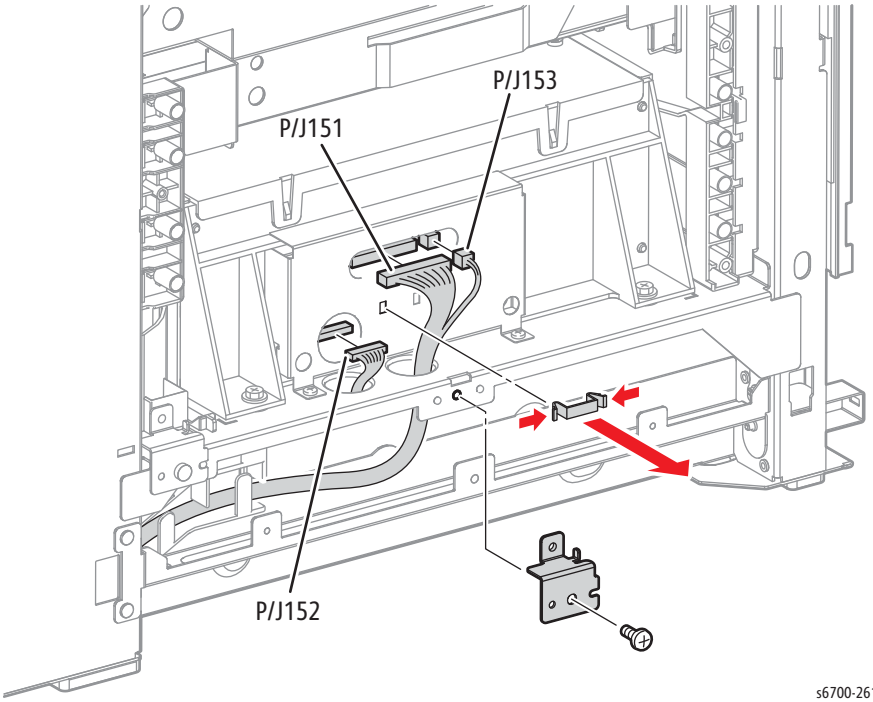
# Laser Unit

## PL5.2.99

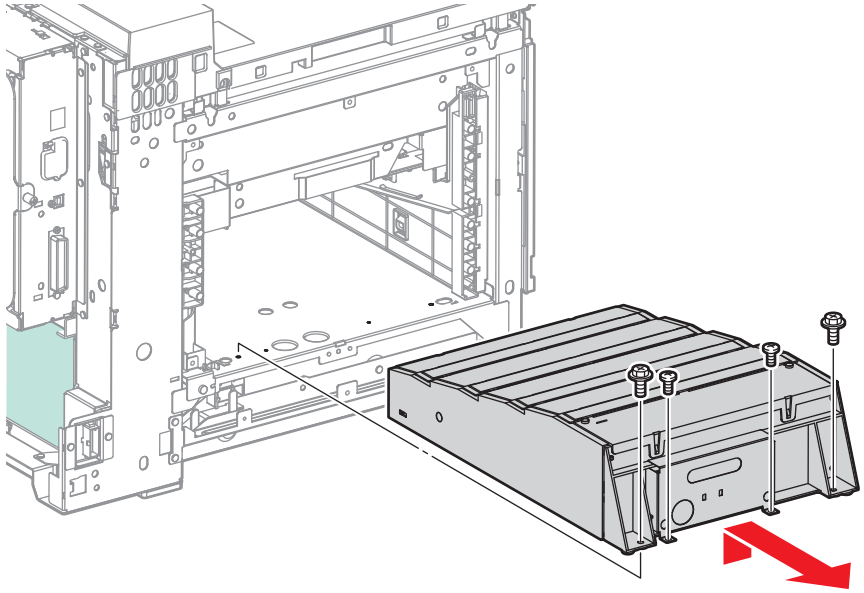
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove Tray 2.
2. Open the Front Door.
3. Open the Right Door.
4. Remove the Rear Cover (page 8-31).
5. Remove the Output Tray (page 8-21).
6. Remove the Left Cover (page 8-28).
7. Remove the HVPS (page 8-86).
8. Remove 1 screw (silver, M4, 6mm) that secures the HVPS bracket.
9. Release 2 hooks that secure the clamp to the Laser Unit.
10. Disconnect P/J151, P/J152, and P/J153 from the Laser Unit and feed the harnesses through the holes.



11. Remove 2 screws (silver, flanged, M4, 8mm) and 2 screws (silver, 6mm) that secure the Laser Unit.
12. Release 2 bosses from the holes by slightly lifting the Laser Unit and remove the Laser Unit.



s6700-258

# Procon Assembly

## PL5.3.1

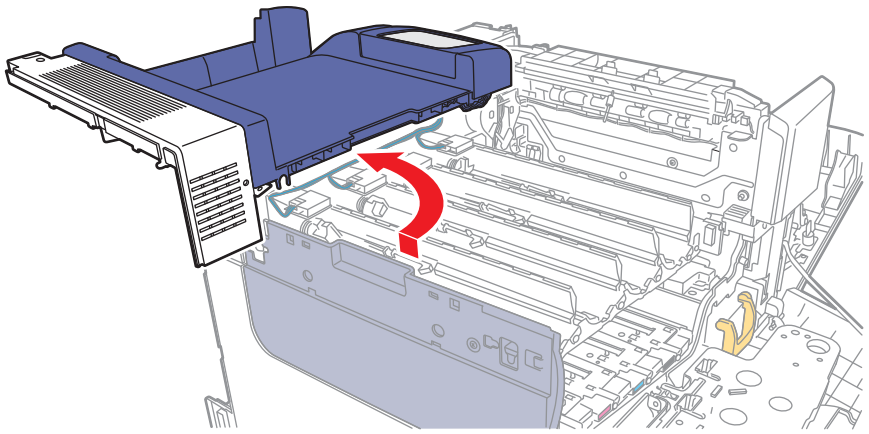
**Warning**

Allow the Fuser to cool before servicing the printer.

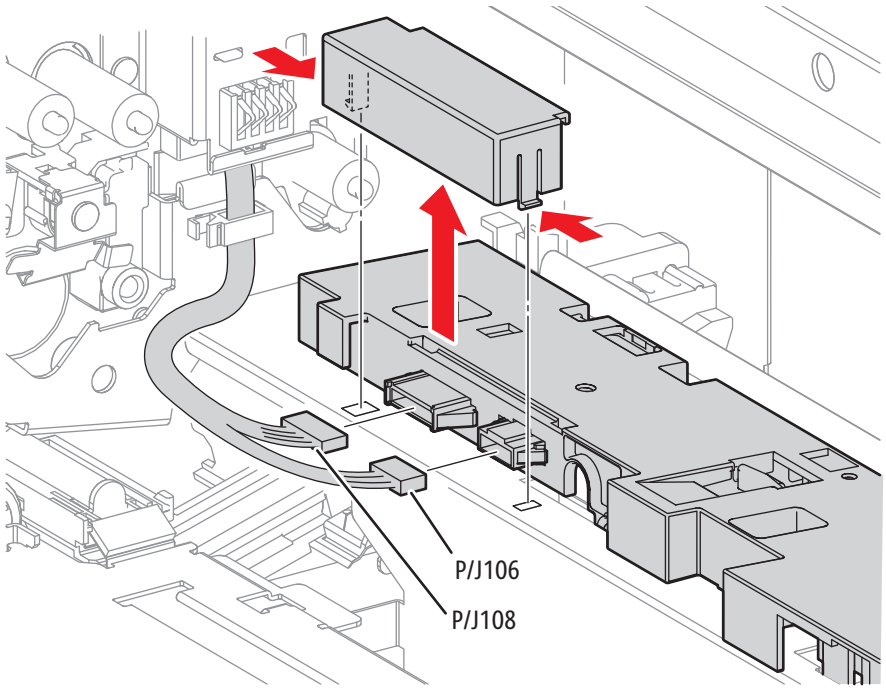
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Upper Inner Frame Cover (page 8-25).
7. Remove the Rear Cover (page 8-31).
8. Remove the Exit Cover (page 8-22).
9. Remove the Upper Finisher Docking Cover.
10. Remove the Output Tray (page 8-21).
11. Remove 4 screws that secure the Top Cover (page 8-19) and move the cover to the rear.

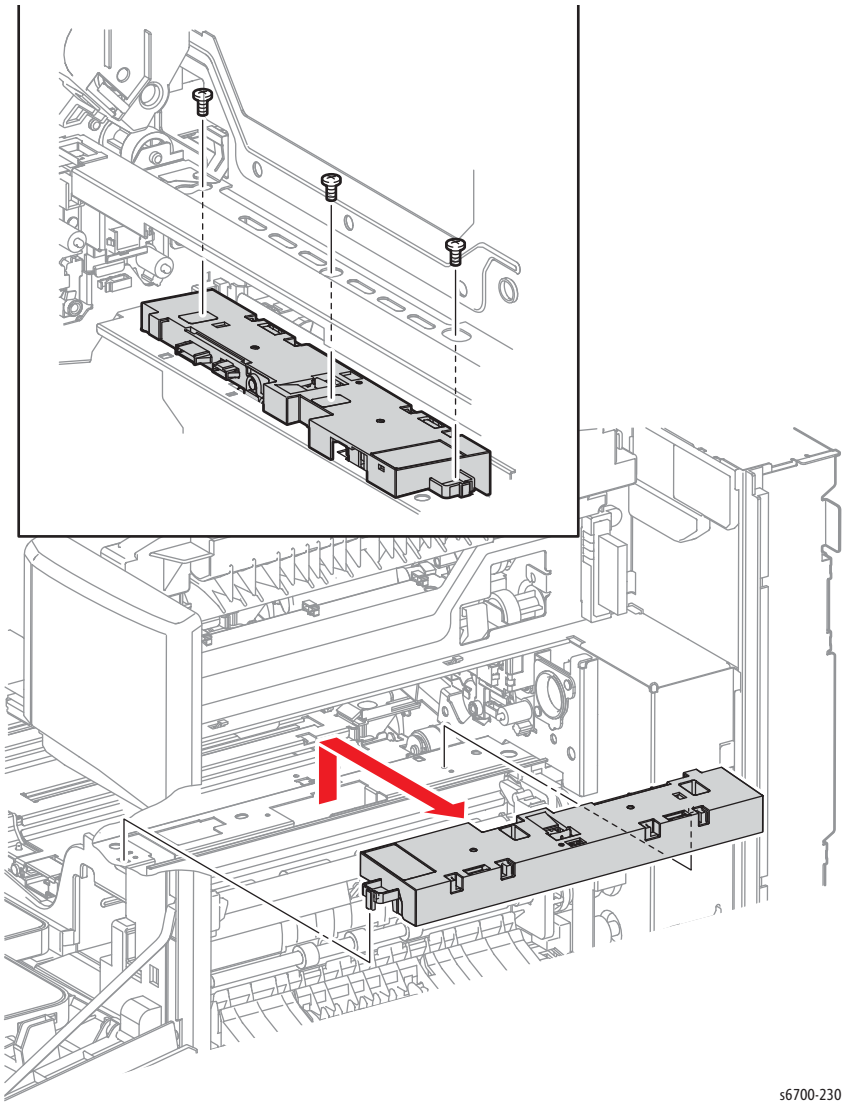


12. Release 2 hooks that secure the connector cover and remove the cover.
13. Disconnect P/J106, P/J108 and release the harness from the hook.




s6700-229

14. Using the access holes in the chassis, remove 3 screws (silver, 6mm) that secure the Procon Assy.



s6700-230

## ADC Sensors

### PL5.3.5

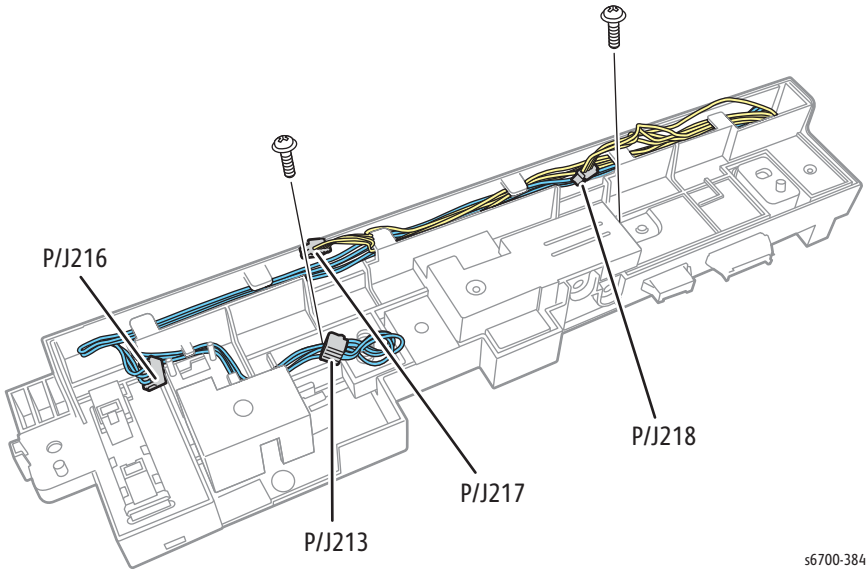
**Warning**

Allow the Fuser to cool before servicing the printer.

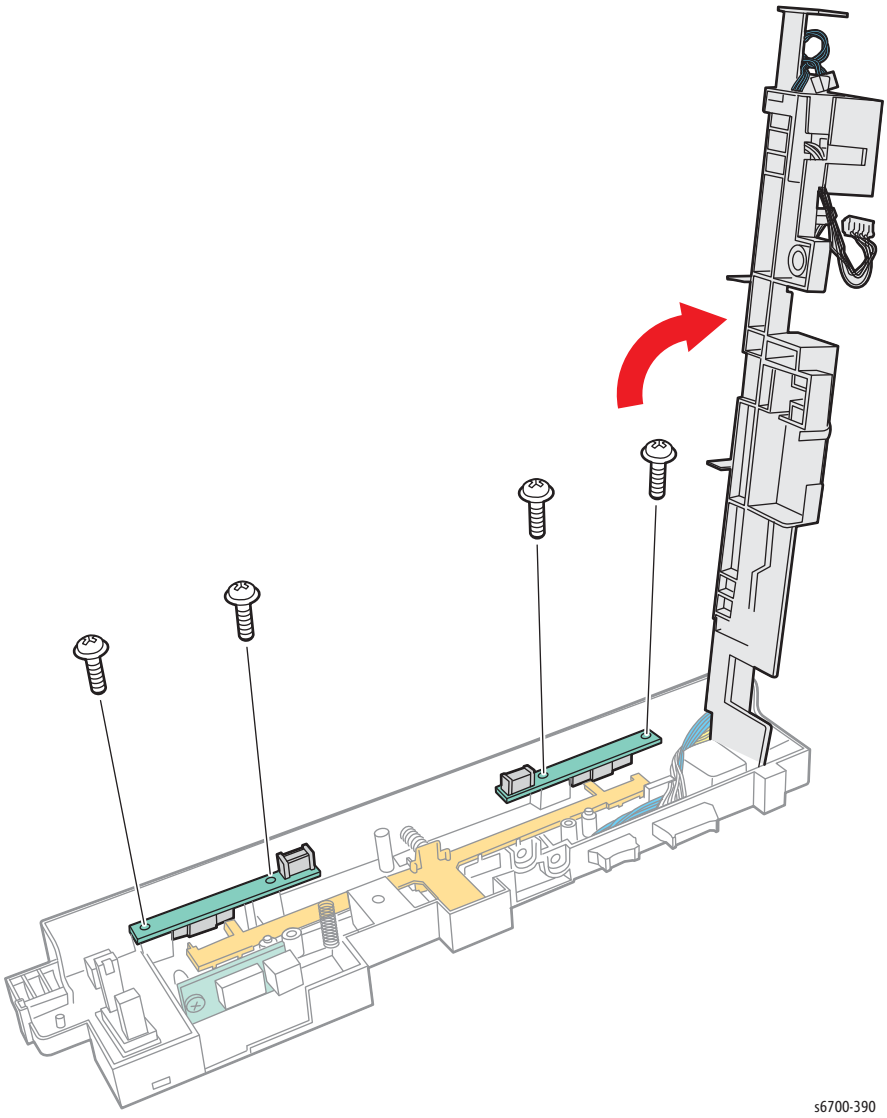
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Upper Inner Front Cover (page 8-25).
7. Remove the Rear Cover (page 8-31).
8. Remove the Exit Cover (page 8-22).
9. Remove the Upper Finisher Docking Cover.
10. Remove the Output Tray (page 8-21).
11. Remove the Procon Assembly (page 8-95).
12. Turn the assembly over and disconnect P/J213, 216, 217, and 218.
13. Remove 2 screws that secure the cover to the assembly.



14. Lift the cover and remove 2 screws that secure each ADC Sensor



s6700-390

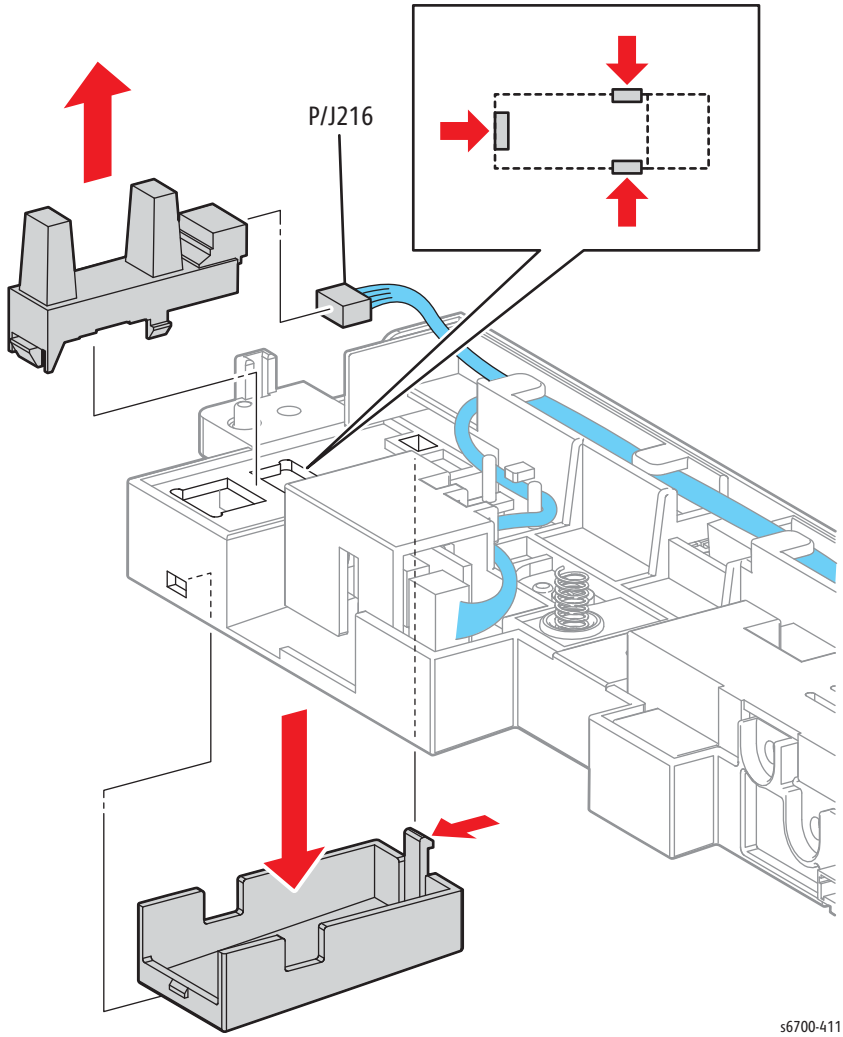
# Waste Toner Full Sensor

## PL5.3.13

**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Upper Inner Front Cover (page 8-25).
7. Remove the Rear Cover (page 8-31).
8. Remove the Exit Cover (page 8-22).
9. Remove the Upper Finisher Docking Cover.
10. Remove the Output Tray (page 8-21).
11. Remove the Procon Assembly (page 8-95).
12. Turn the Procon Assembly over and disconnect P/J216.
13. Remove the sensor cover and release 3 hooks to remove the sensor.



# Environmental Sensor

## PL5.3.5

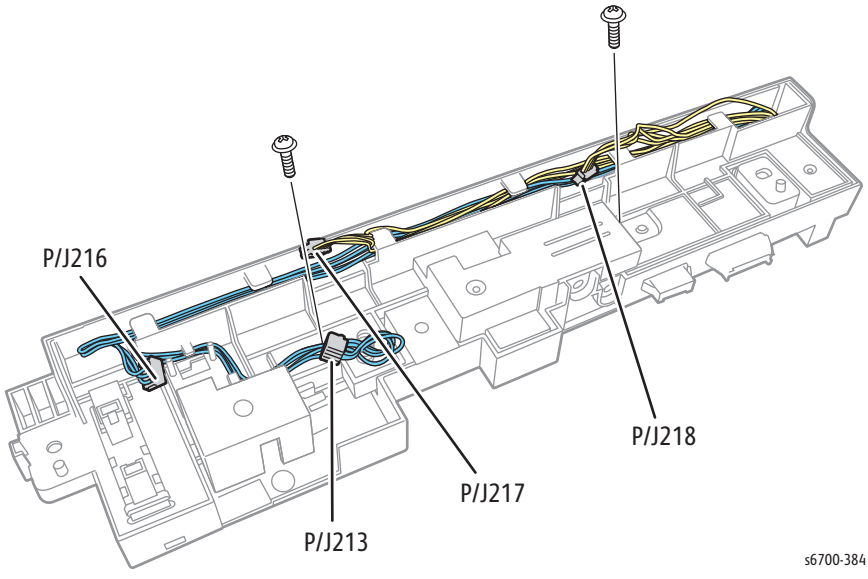
**Warning**

Allow the Fuser to cool before servicing the printer.

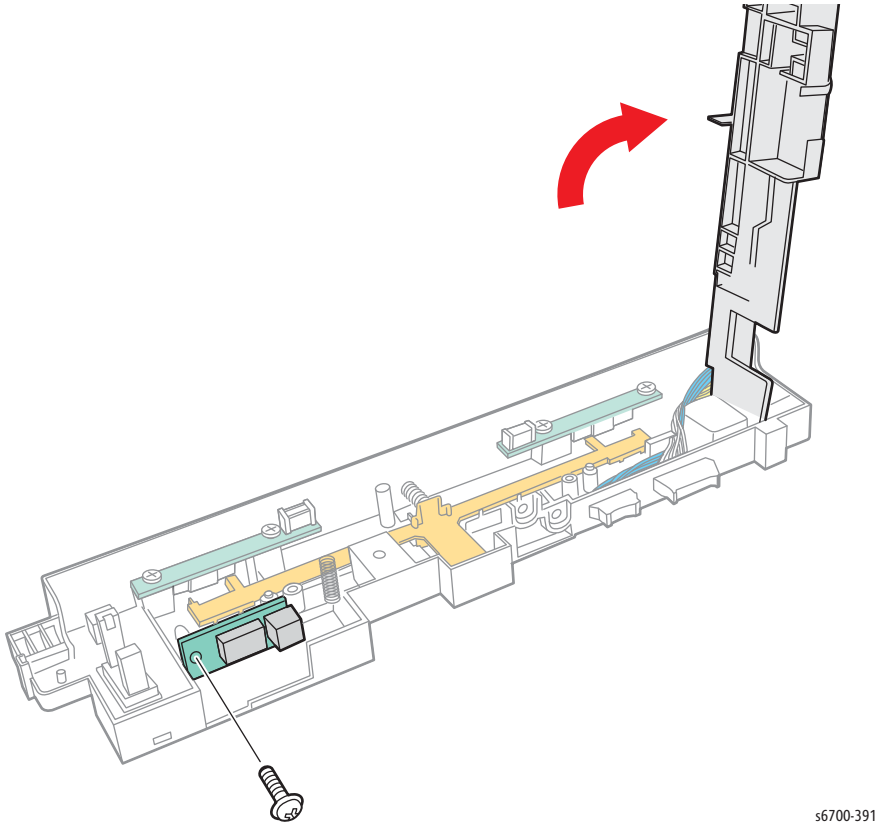
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Upper Inner Front Cover (page 8-25).
7. Remove the Rear Cover (page 8-31).
8. Remove the Exit Cover (page 8-22).
9. Remove the Upper Finisher Docking Cover.
10. Remove the Output Tray (page 8-21).
11. Remove the Procon Assembly (page 8-95).
12. Turn the assembly over and disconnect P/J213, 216, 217, and 218.
13. Remove 2 screws that secure the cover to the assembly.



14. Lift the cover and remove 1 screws that secures the Environmental Sensor



# Dispense Assemblies

## PL6.1.5 ~ 6.1.8

**Warning**

Allow the Fuser to cool before servicing the printer.

**Caution**

Cover the Imaging Units to prevent exposure to light.

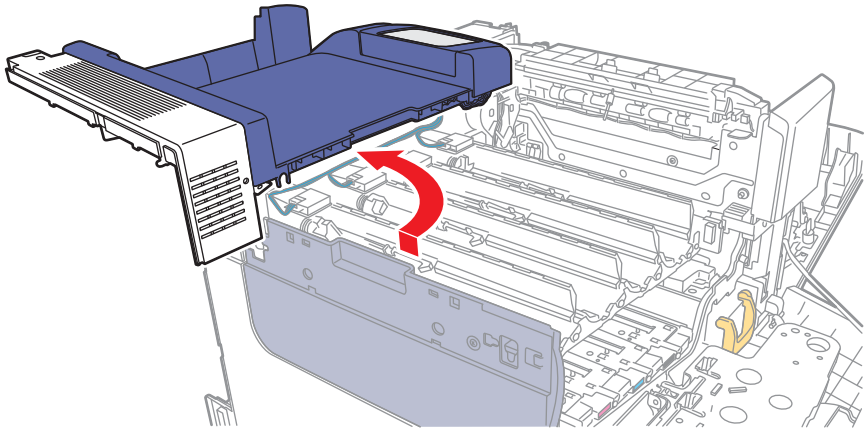
**Note**

Toner can leak from the dispense assemblies. Protect the work area.

**Note**

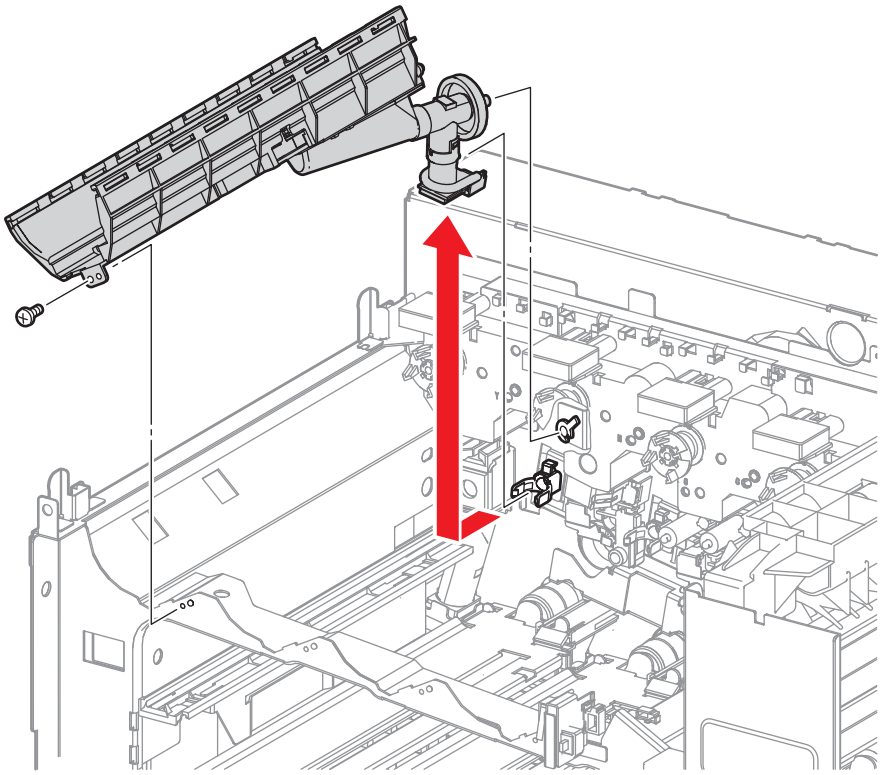
Toner Dispense Assemblies are not interchangeable.

1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Upper Inner Front Cover (page 8-25).
7. Remove the Rear Cover (page 8-31).
8. Remove the Exit Cover (page 8-22).
9. Remove the Upper Finisher Docking Cover.
10. Remove the Output Tray (page 8-21).
11. Remove 4 screws that secure the Top Cover (page 8-19) and move the cover to the rear.



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12. Remove the screw (silver, 6mm) that secures the assembly to the chassis.



s6700-252

# Toner Dispense Assembly

## PL6.1.9

**Warning**

Allow the Fuser to cool before servicing the printer.

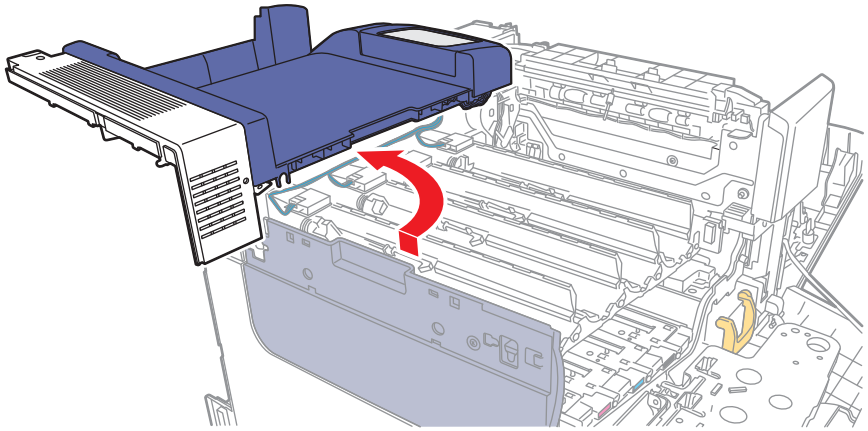
**Caution**

Cover the Imaging Units to prevent exposure to light.

**Note**

Toner can leak from the dispense assemblies. Protect the work area.

1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Upper Inner Front Cover (page 8-25).
7. Remove the Rear Cover (page 8-31).
8. Remove the Exit Cover (page 8-22).
9. Remove the Upper Finisher Docking Cover.
10. Remove the Output Tray (page 8-21).
11. Remove 4 screws that secure the Top Cover (page 8-19) and move the cover to the rear.

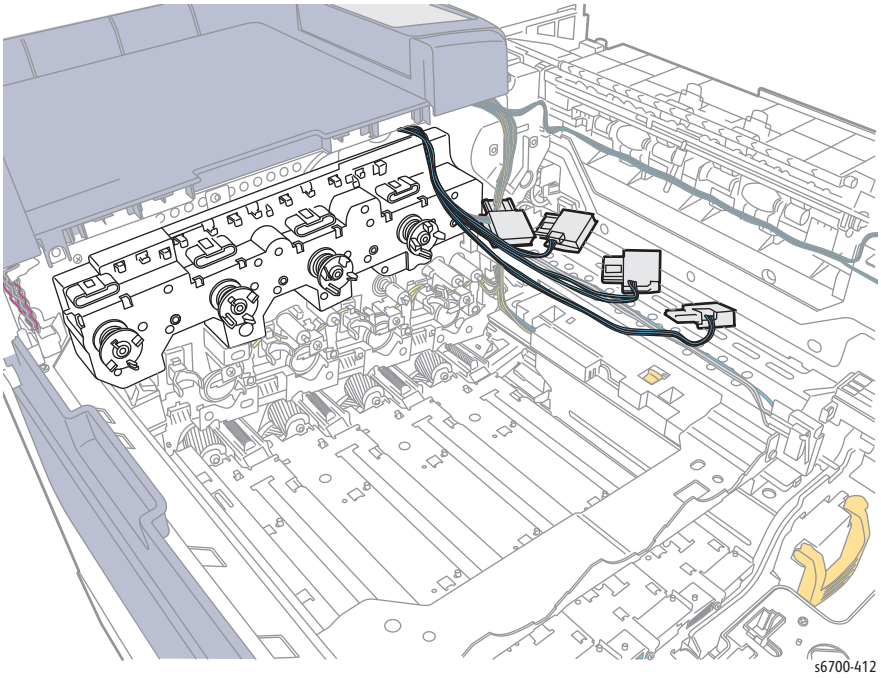


s6700-389

12. Remove the 4 Dispense Assemblies (page 8-103).
13. Release the 4 hooks that secure the Toner Cartridge CRUM Connectors to the Toner Dispense Assembly.

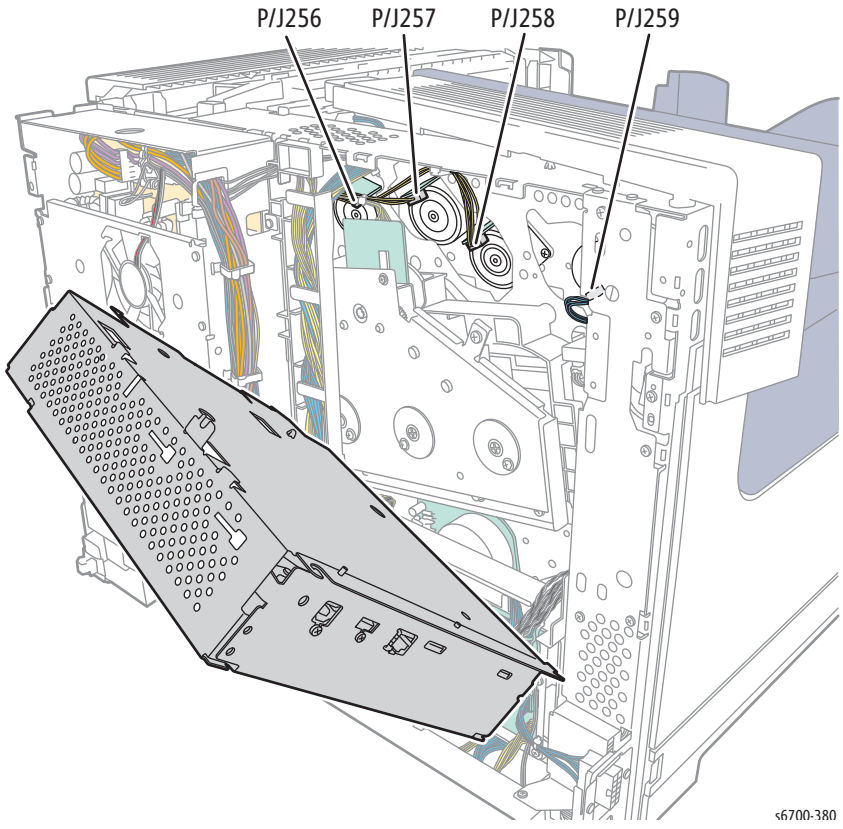
14. Release the CRUM harness from the hooks on the Toner Dispense Assembly.

.



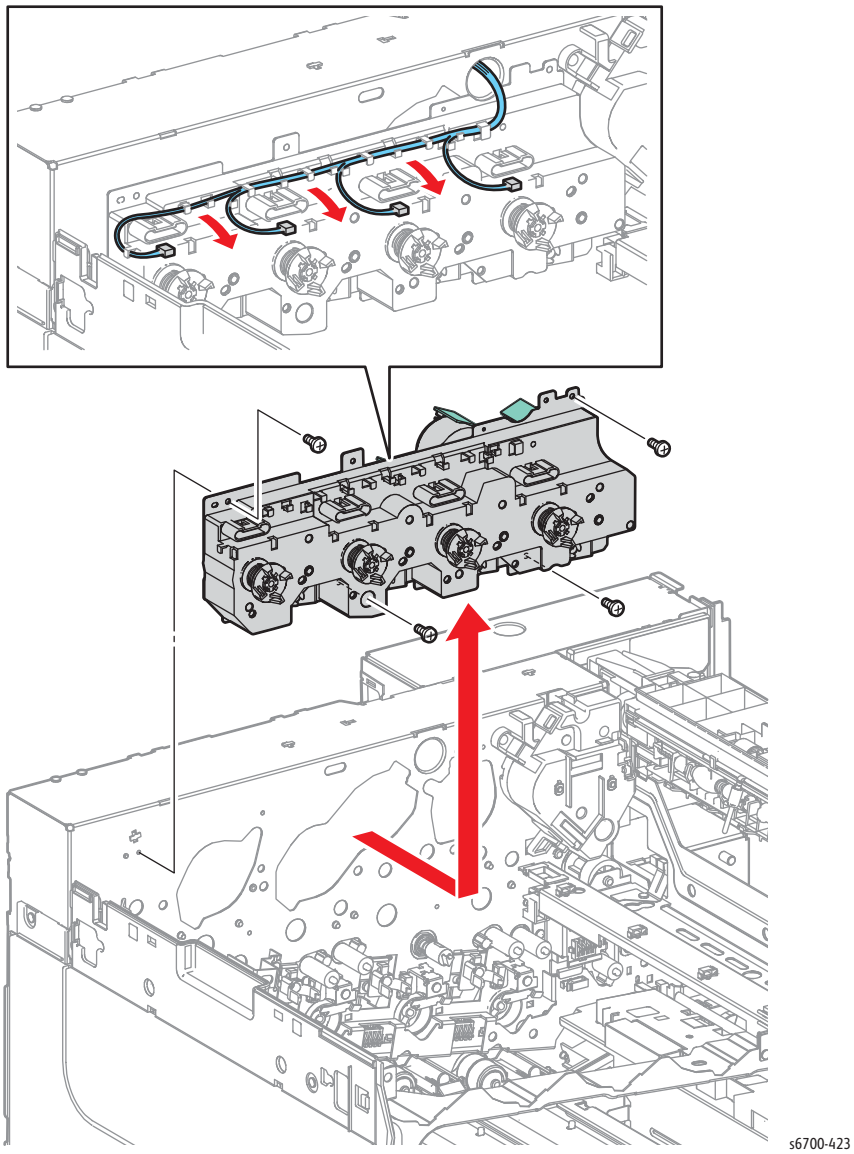

15. Reposition the Top Cover and loosen 4 screws and remove 1 screw that secure the IP Board Cage to the chassis.
16. Lift the cage to release the hooks and disconnect the 4 toner motors from the harness

.



17. Remove the 4 screws that secure the Toner Dispense Assembly to the chassis.

.



# Toner Cartridge CRUM Reader Board

## PL6.1.10

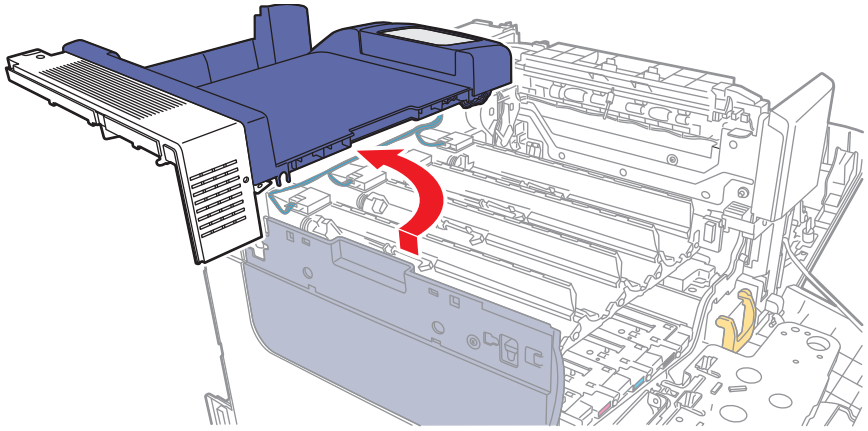
**Warning**

Allow the Fuser to cool before servicing the printer.

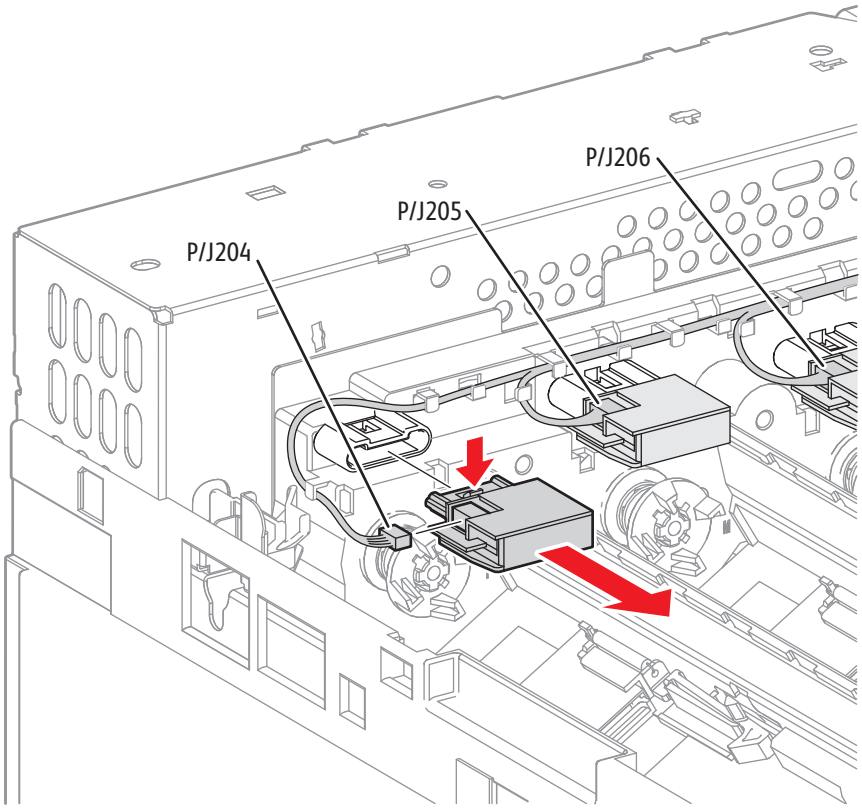
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Upper Inner Front Cover (page 8-25).
7. Remove the Rear Cover (page 8-31).
8. Remove the Exit Cover (page 8-22).
9. Remove the Upper Finisher Docking Cover.
10. Remove the Output Tray (page 8-21).
11. Remove 4 screws that secure the Top Cover (page 8-19) and move the cover to the rear.



12. Release the hook and disconnect the harness from the affected connector.



# Waste Auger

## PL6.1.12

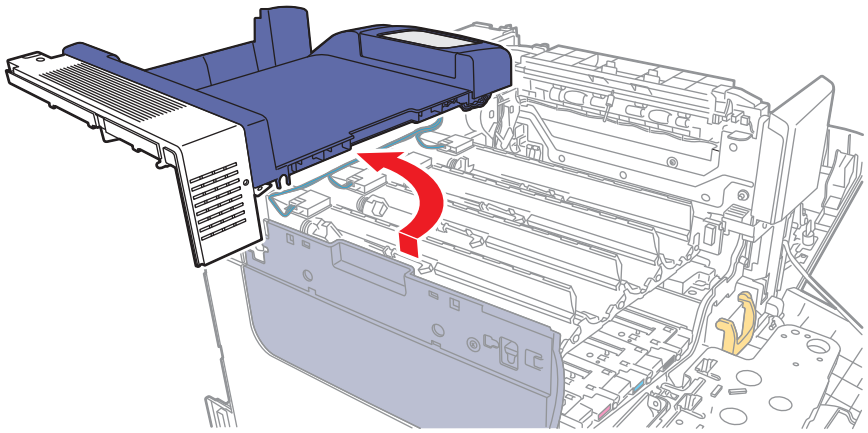
**Caution**

Cover the Imaging Units to prevent exposure to light.

**Caution**

Toner is present in the Waste Auger. Protect the work area.

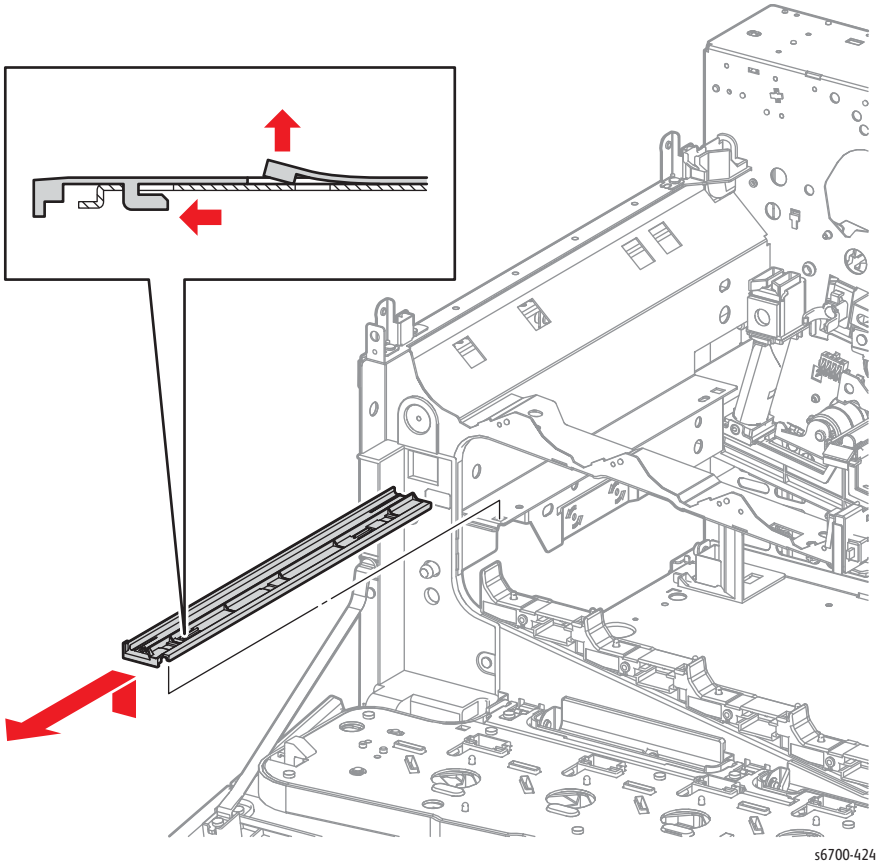
1. Open the Front Door.
2. Open the Right Door.
3. Open the Inner Frame Assy.
4. Remove the Transfer Belt (page 8-12).
5. Remove the Imaging Units (page 8-14).
6. Remove the Waste Toner Cartridge (page 8-16).
7. Remove the Upper Inner Front Cover (page 8-25).
8. Remove the Rear Cover (page 8-31).
9. Remove the Exit Cover (page 8-22).
10. Remove the Upper Finisher Docking Cover.
11. Remove the Output Tray (page 8-21).
12. Remove 4 screws that secure the Top Cover (page 8-19) and move the cover to the rear.



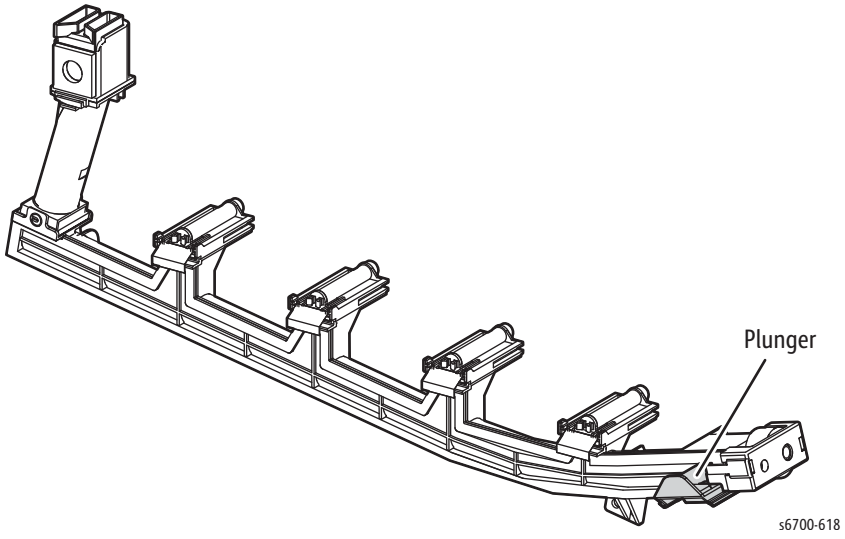
s6700-389

12. Remove the Lower Finisher Docking Cover.
13. Remove the Left Cover (page 8-28).
14. Remove the HVPS (page 8-86).
15. Remove the Laser Unit (page 8-93).
16. Remove 4 Imaging Unit Guides (page 8-128).

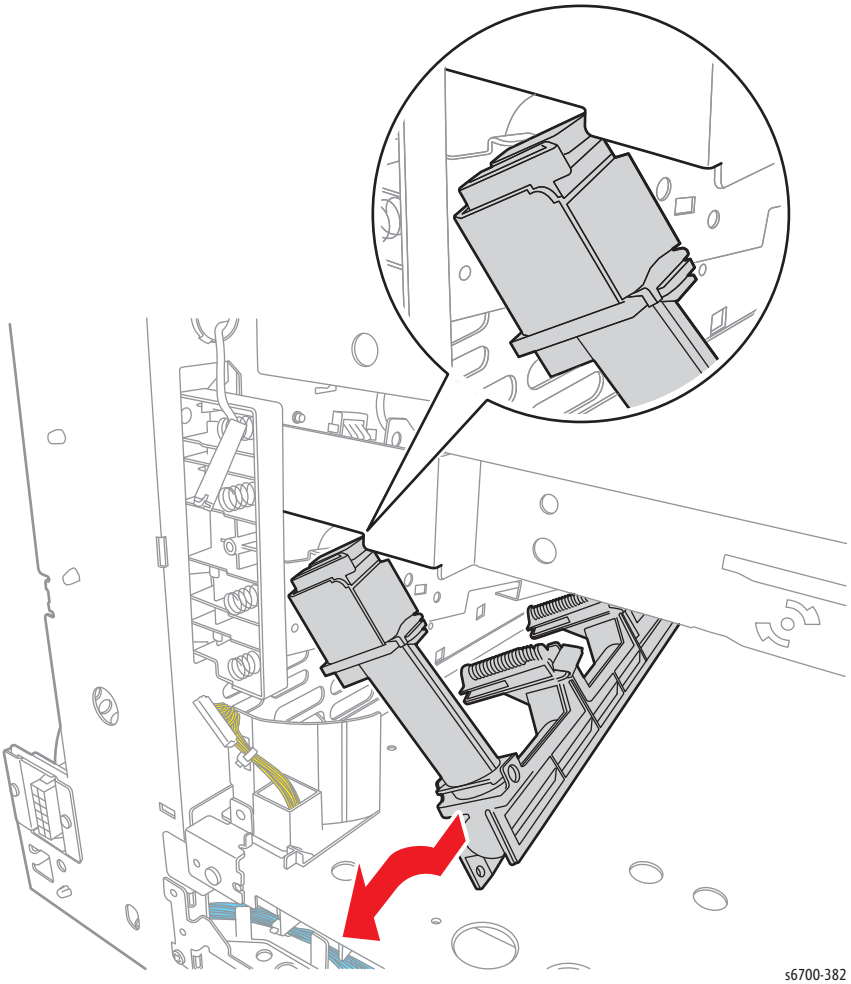
17. Remove the left belt guide.




18. Remove the 2 screws that secure the Waste Auger to the chassis.
19. Working from the left side, depress the plunger on the right end of the Waste Auger.



20. Move the left end forward and downward while rotating the assembly CCW.Clearance is provided in the chassis to remove the assembly from the Laser Unit cavity,



# Exit Dive Assembly

## PL7.1.1

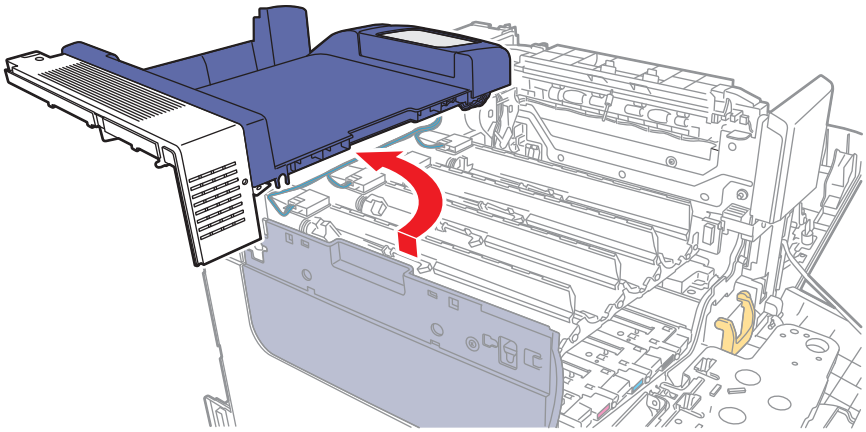
**Warning**

Allow the Fuser to cool before servicing the printer.

**Caution**

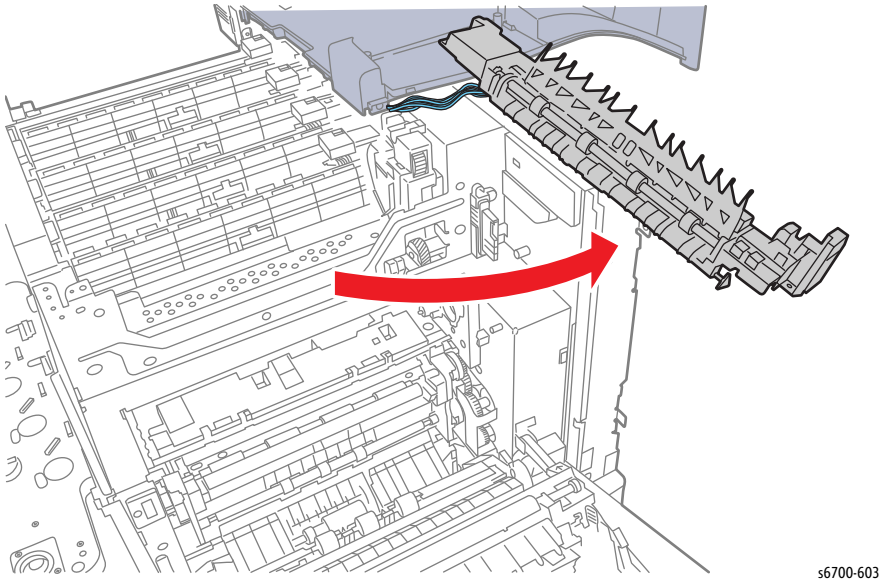
Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Right Door.
3. Remove the Fuser (page 8-17).
4. Open the Inner Frame Assy.
5. Remove the Transfer Belt (page 8-12).
6. Remove the Imaging Units (page 8-14).
7. Remove the Waste Toner Cartridge (page 8-16).
8. Remove the Upper Inner Front Cover (page 8-25).
9. Remove the Rear Cover (page 8-31).
10. Remove the Exit Cover (page 8-22).
11. Remove the Upper Finisher Docking Cover.
12. Remove the Output Tray (page 8-21).
13. Remove 4 screws that secure the Top Cover (page 8-19) and move the cover to the rear.

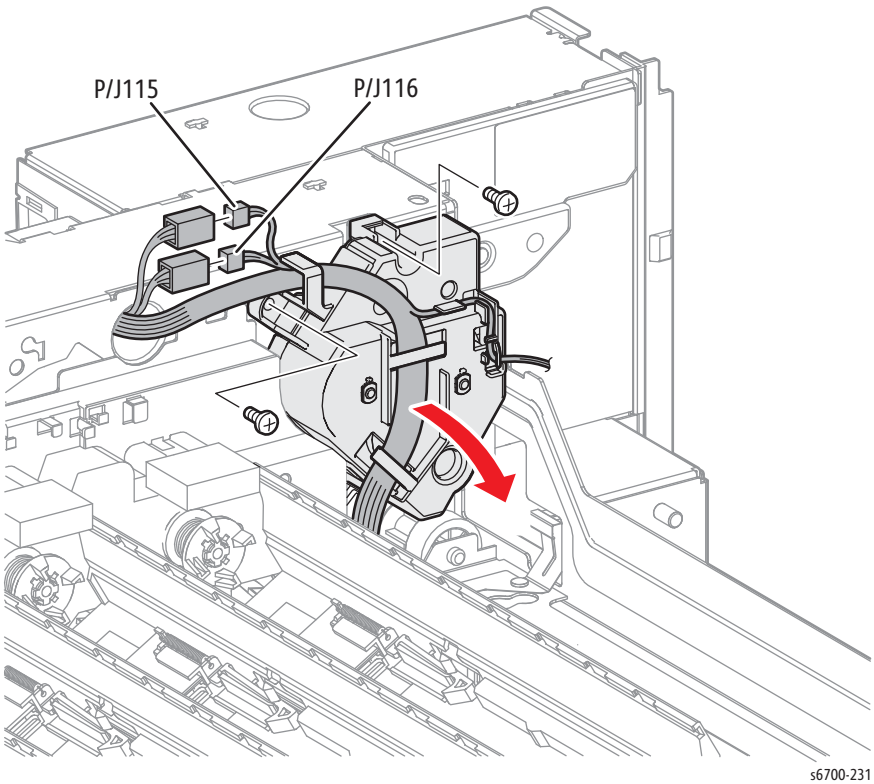



14. Remove the Invert Chute Assembly (page 8-125).

15. Remove the 2 screws that secure the Exit Chute Assembly and move it to the side.




15. Remove 2 screws (silver, 6mm) that secure the Exit Drive Assembly to the chassis.
16. Release the two bosses on the rear from the holes in the frame with the Exit Drive Assembly slightly tilted toward the front
17. Disconnect P/J115 and P/J116 and release the harness from the Exit Drive Assembly hooks.



# Fuser Harness

## PL7.1.4A ~4B

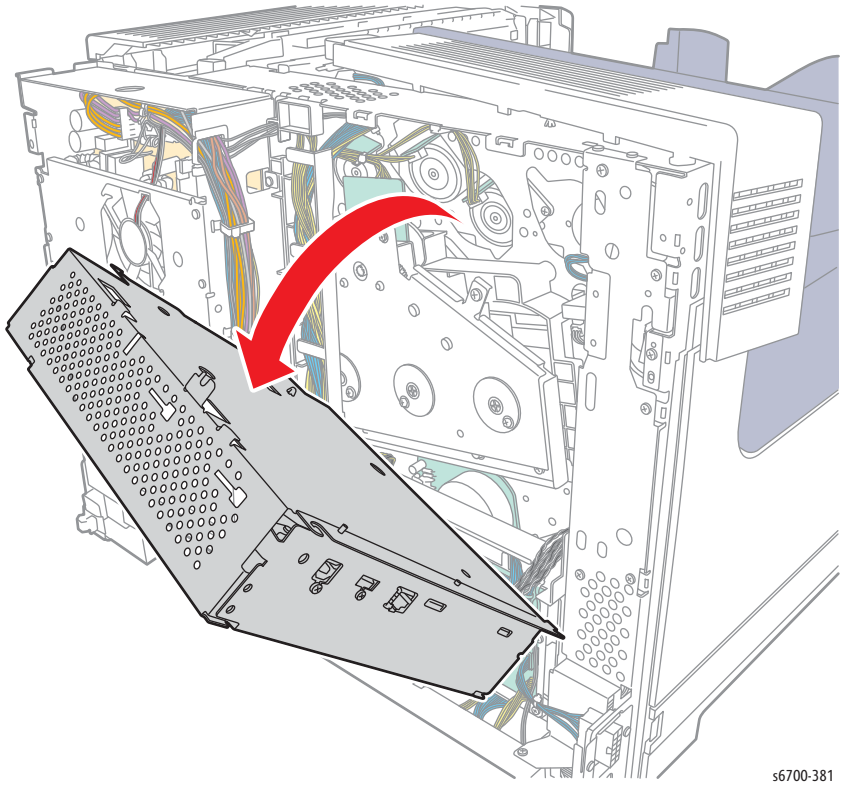
**Warning**

Allow the Fuser to cool before servicing the printer.

**Caution**

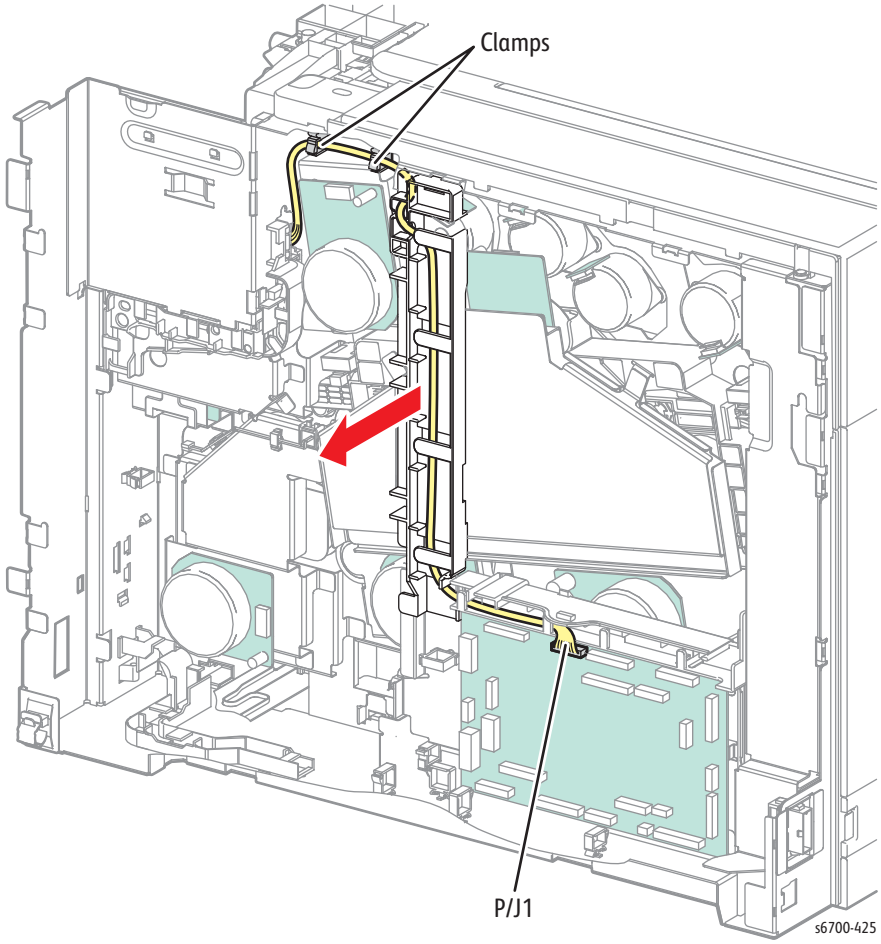
Cover the Imaging Units to prevent exposure to light.

1. Remove the Fuser (page 8-17).
2. Remove the Rear Cover (page 8-31).
3. Disconnect P/J1 from the MCU Board.
4. Loosen, but do not remove 4 screws and remove 1 screw that secure the IP Board Cage to the chassis. Allow the IP Cage to rest against the work surface.

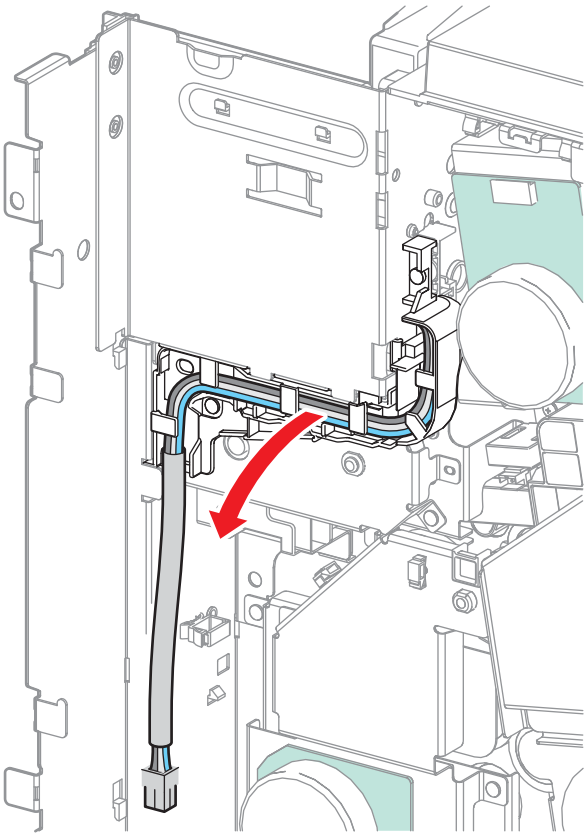



5. Remove the Power Panel (page 8-154).
6. Remove the LVPS Cage (page 8-182).

7. Release the Fuser Harness from the center and top guides.

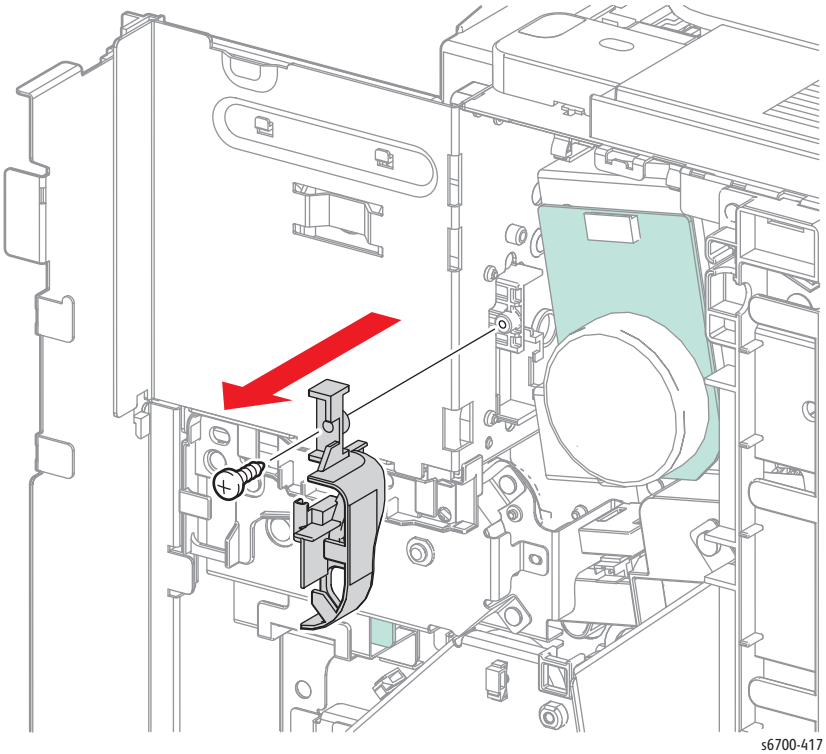


8. Remove Fuser Harness from right guide



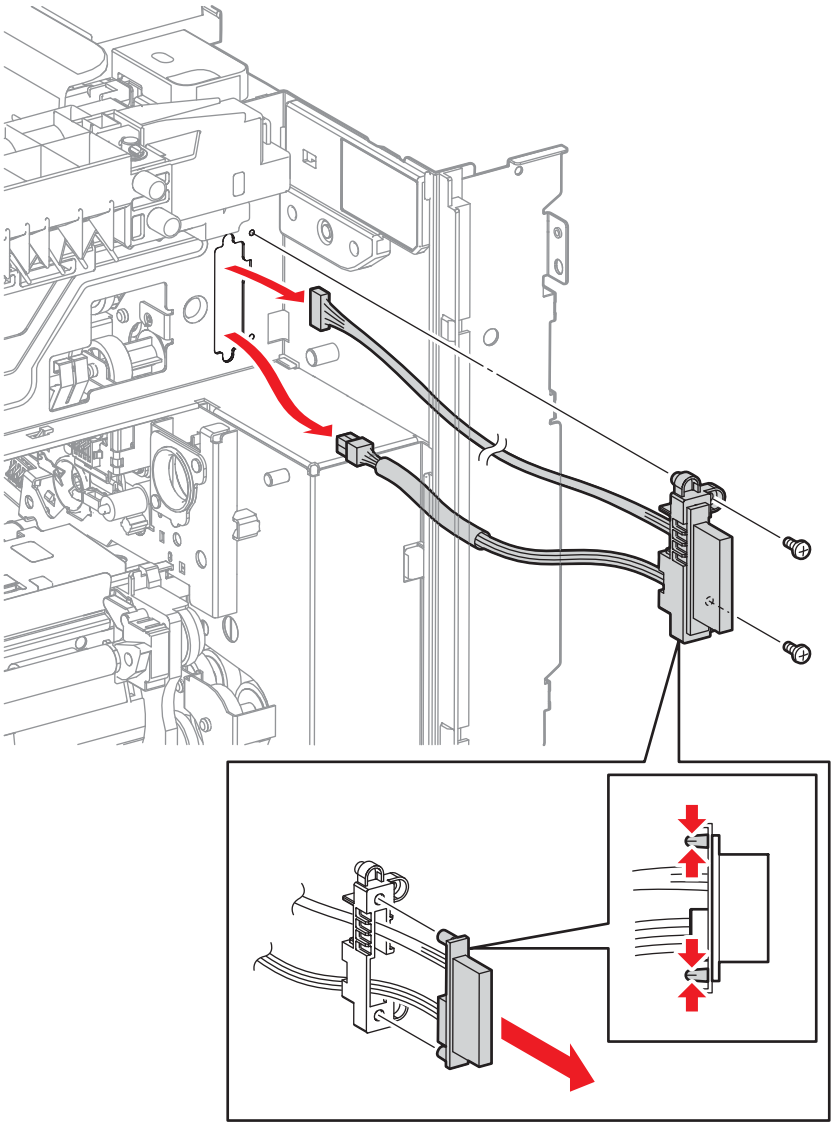
s6700-275

9. Remove 1 screw that secures the corner guide to the Fuser connector and release the Fuser Harness from the guide.



s6700-417

10. Remove 2 screws that secure the Fuser connector to the chassis, then remove the harness from the connector.



s6700-426

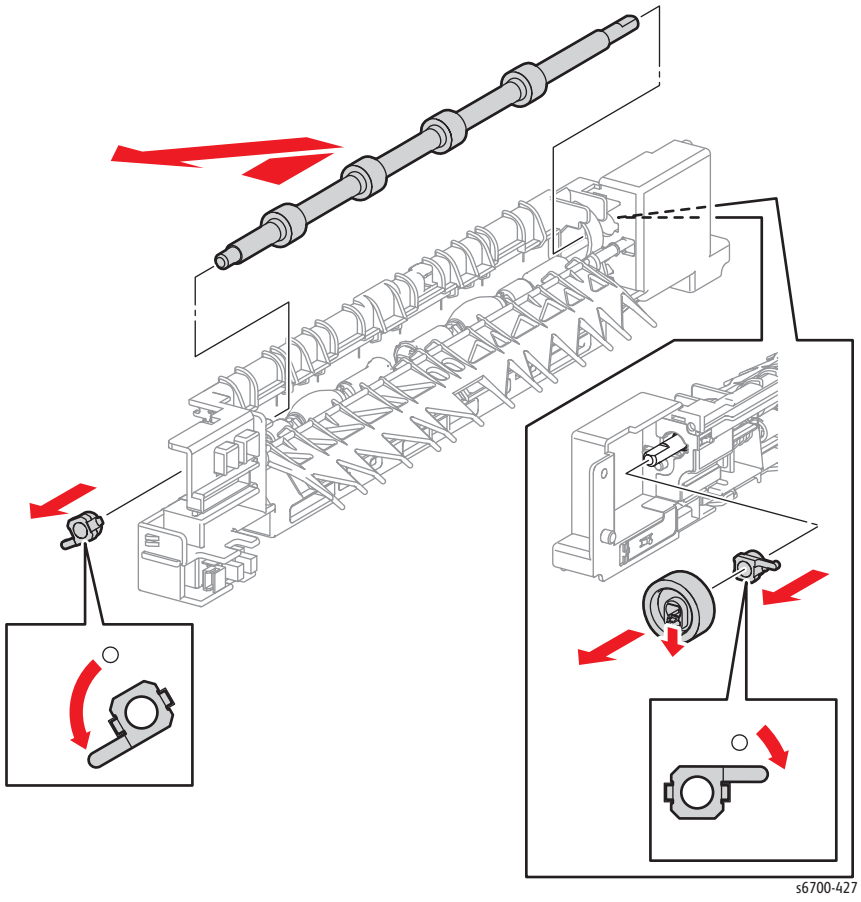
# Exit Roller

## PL7.2.2

**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Remove the Fuser (page 8-17).
3. Remove the Rear Cover (page 8-31).
4. Remove the Exit Cover (page 8-22).
5. Remove the Invert Chute Assembly (page 8-125).
6. Remove but do not disconnect the Exit Chute Assembly (page 8-123).
7. Release 1 hook that secures the gear to the Exit Roller.
8. Release 2 bearings, then remove the Exit Roller from the Exit Chute.



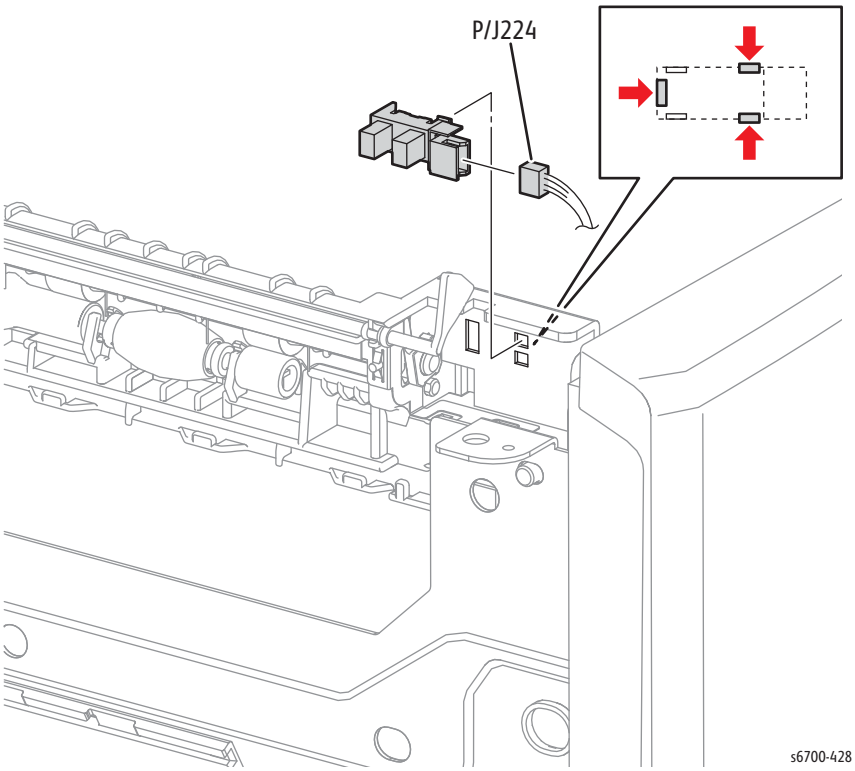
## Full Stack Sensor

### PL7.2.10

**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Remove the Fuser (page 8-17).
3. Remove the Rear Cover (page 8-31).
4. Remove the Exit Cover (page 8-22).
5. Remove the Invert Chute Assembly (page 8-125).
6. Release the 3 hooks that secure the sensor to the Exit Chute Assembly.
7. Disconnect P/J224 to remove the sensor.



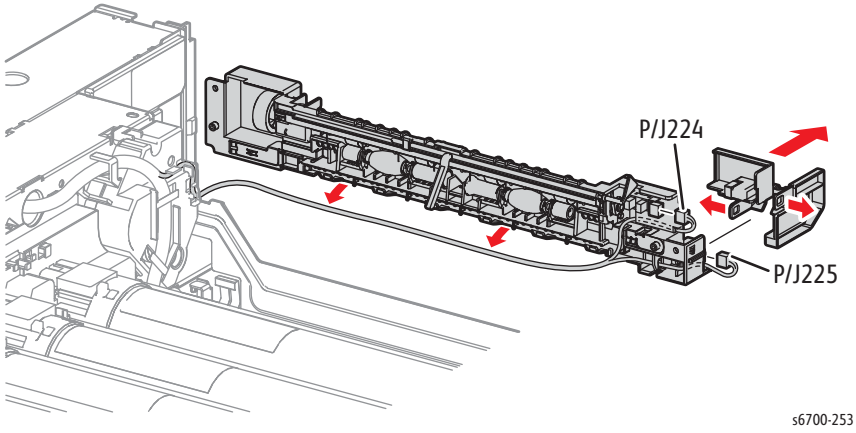
## Envelope Mode Detection Sensor

### PL7.2.10

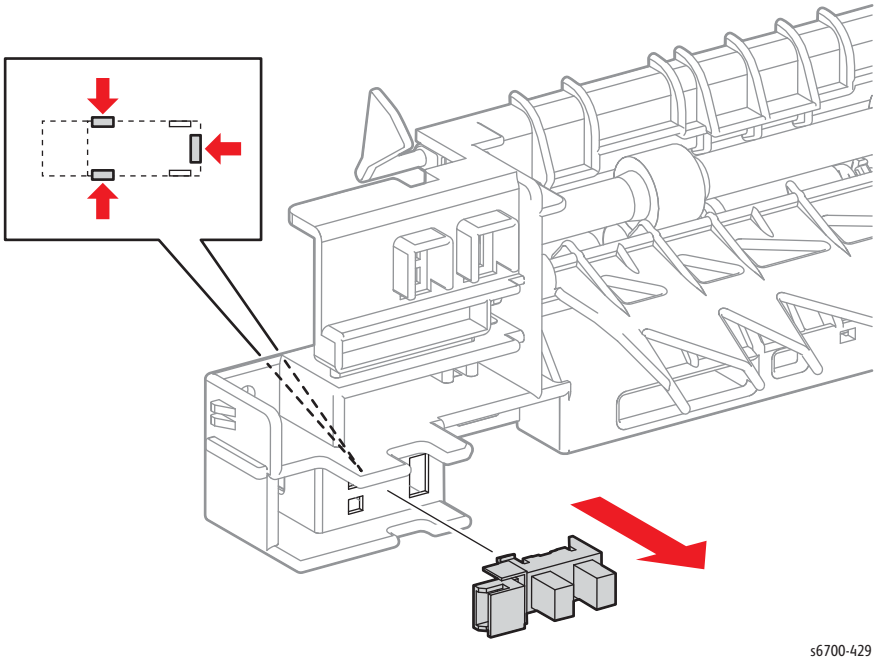
**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Remove the Fuser (page 8-17).
3. Remove the Rear Cover (page 8-31).
4. Remove the Exit Cover (page 8-22).
5. Remove the Invert Chute Assembly (page 8-125).
6. Release the 2 hooks that secure the sensor cover to the Exit Chute Assembly.




8. Disconnect P/J225 to remove the sensor.
9. Release the 3 hooks that secure the sensor to the Exit Chute Assembly.



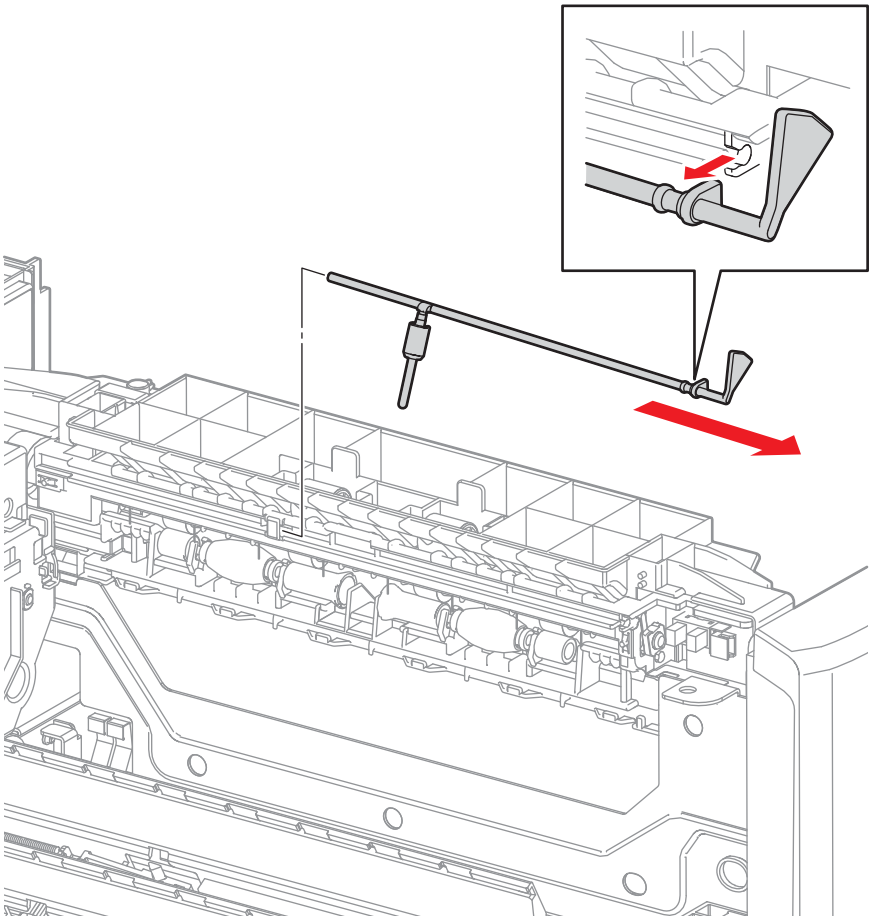
# Full Stack Actuator

## PL7.2.13

**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Remove the Rear Cover (page 8-31).
3. Remove the Exit Cover (page 8-22).
4. Release the front end of the actuator shaft from the hook, then move the shaft forward to remove the actuator.



s6700-430

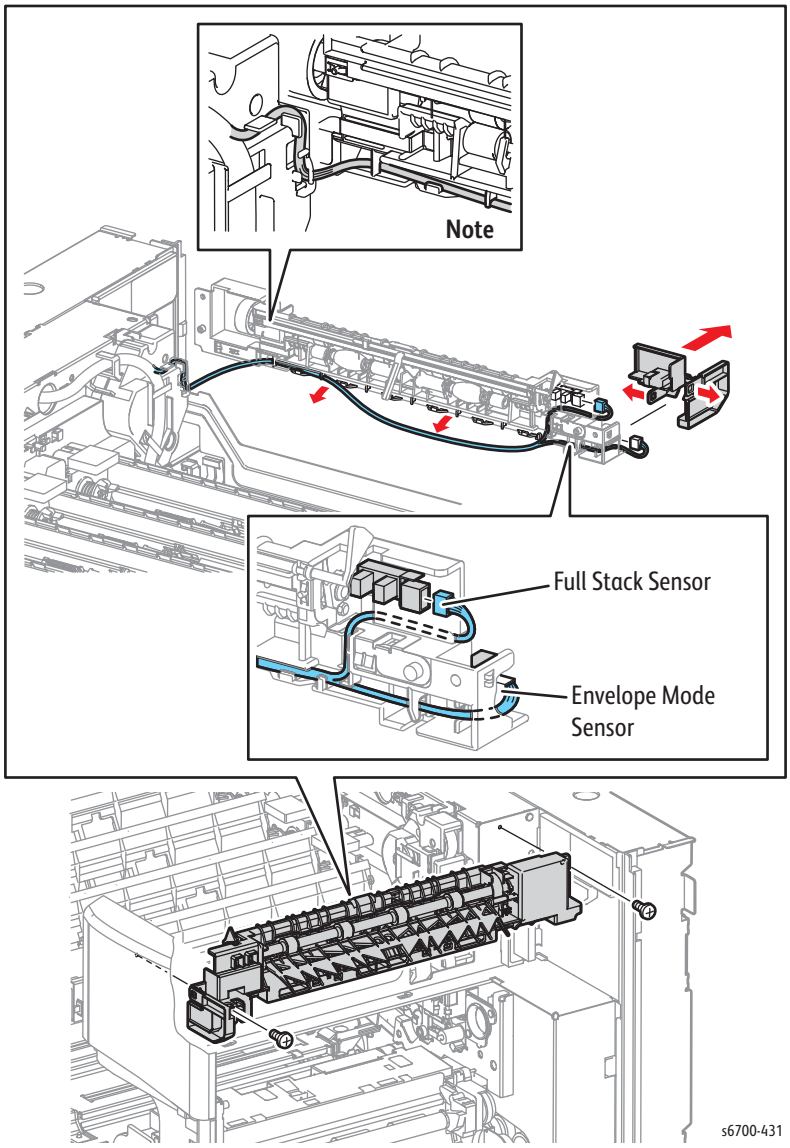
# Exit Chute Assembly

## PL7.2.99

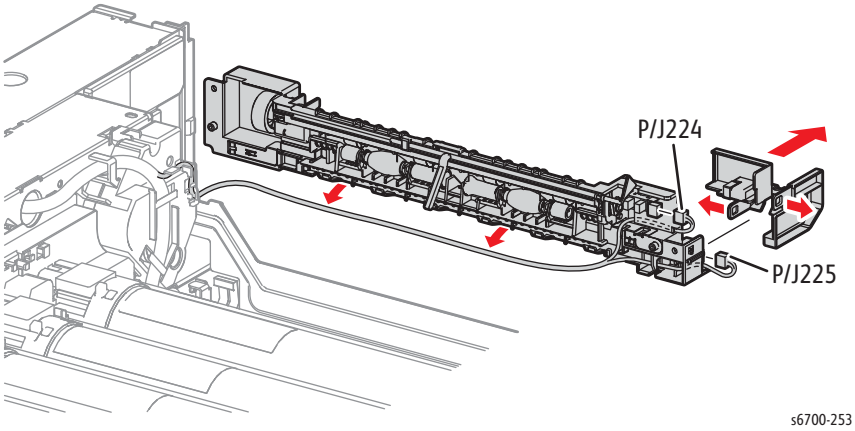
**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Remove the Fuser (page 8-17).
3. Remove the Rear Cover (page 8-31).
4. Remove the Exit Cover (page 8-22).
5. Remove the Invert Chute Assembly (page 8-125).
6. Remove 2 screws that secure the Exit Chute to the chassis.



7. Release the 2 hooks that secure the sensor cover to the Exit Chute Assembly.




8. Disconnect P/J224 and 225 from the sensors and release the harness from the guides.

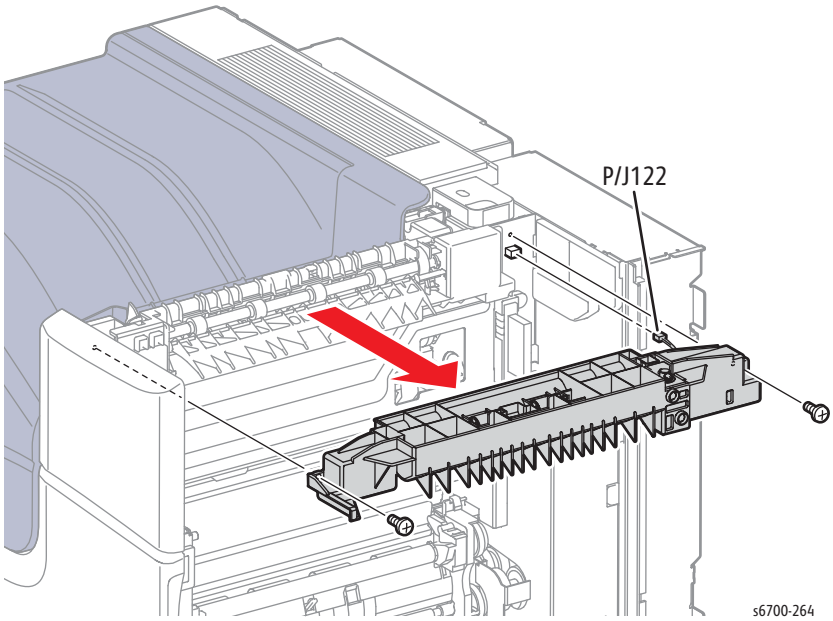
# Inverter Chute Assembly

## PL7.3.1

**Warning**

Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Remove the Fuser (page 8-17).
3. Remove the Rear Cover (page 8-31).
4. Remove the Exit Cover (page 8-22).
5. Remove 2 screws (sliver, 6mm) that secure the Inverter Chute to the chassis.
6. Disconnect P/J122 to remove the chute.



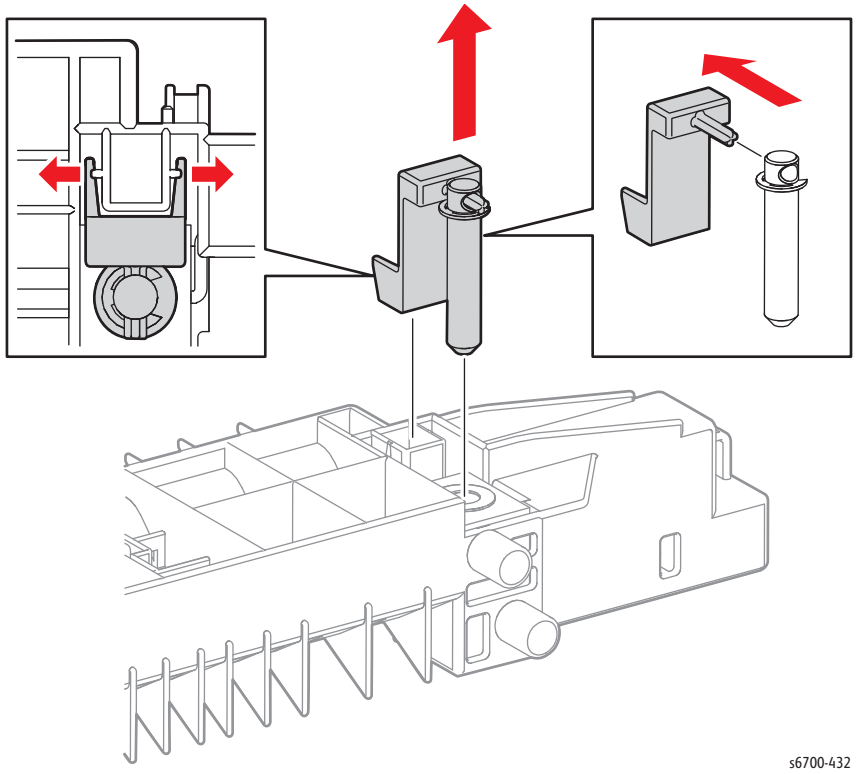
# Exit Inverter Solenoid

## PL7.3.3

**Warning**

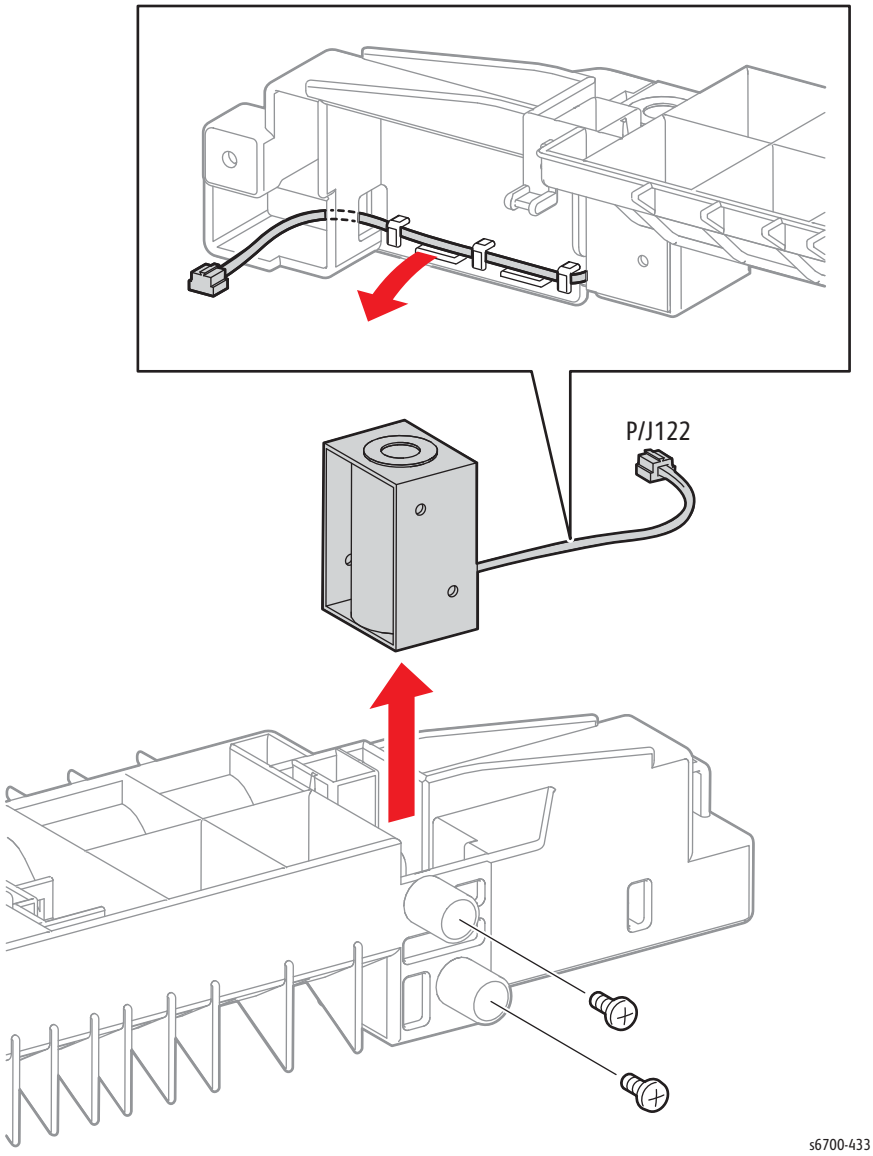
Allow the Fuser to cool before servicing the printer.

1. Open the Right Door.
2. Remove the Fuser (page 8-17).
3. Remove the Rear Cover (page 8-31).
4. Remove the Exit Cover (page 8-22).
5. Remove the Invert Chute Assembly (page 8-125).
6. Spread the invert actuator stops to remove the actuator and solenoid plunger from the chute.
7. Remove the invert actuator from the plunger.



s6700-432

8. Release the solenoid harness from the guides on the chute.
9. Remove 2 screws (silver, 4mm) that secure the solenoid in the chute.



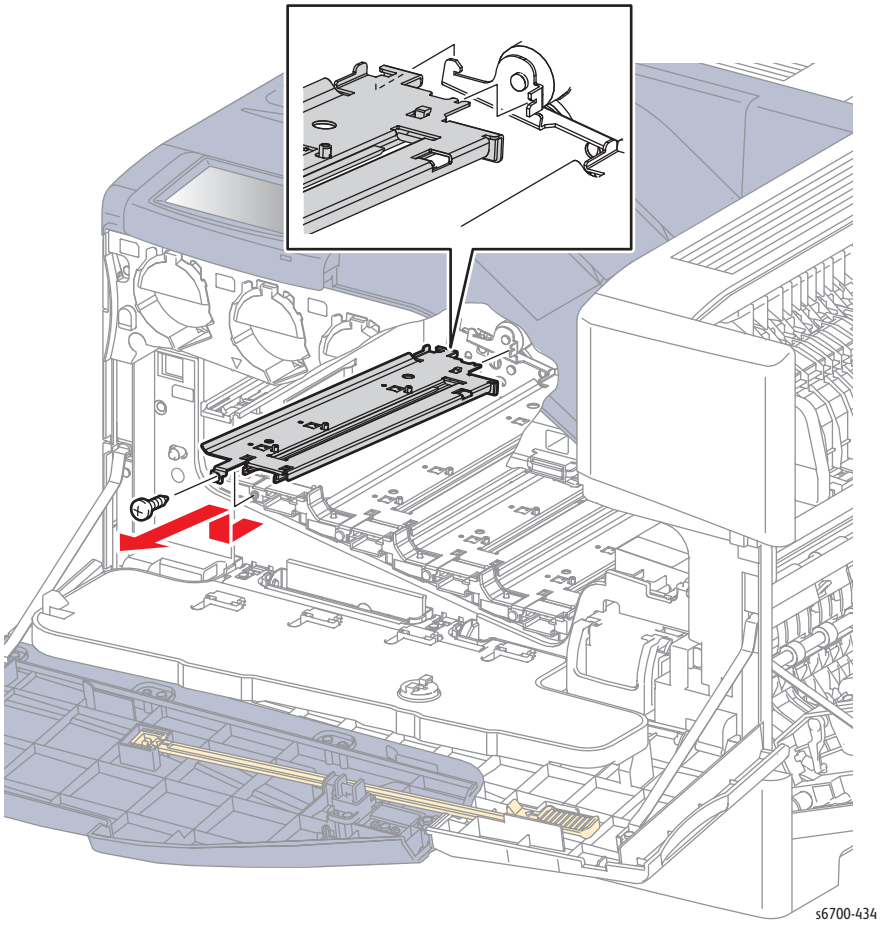
# Imaging Unit Guides

## PL8.1.1

**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Open the Front Door.
2. Open the Inner Frame Assembly.
3. Remove the Transfer Belt (page 8-12).
4. Remove the Imaging Units (page 8-14).
5. Remove 1 screw that secures each guide to the chassis.



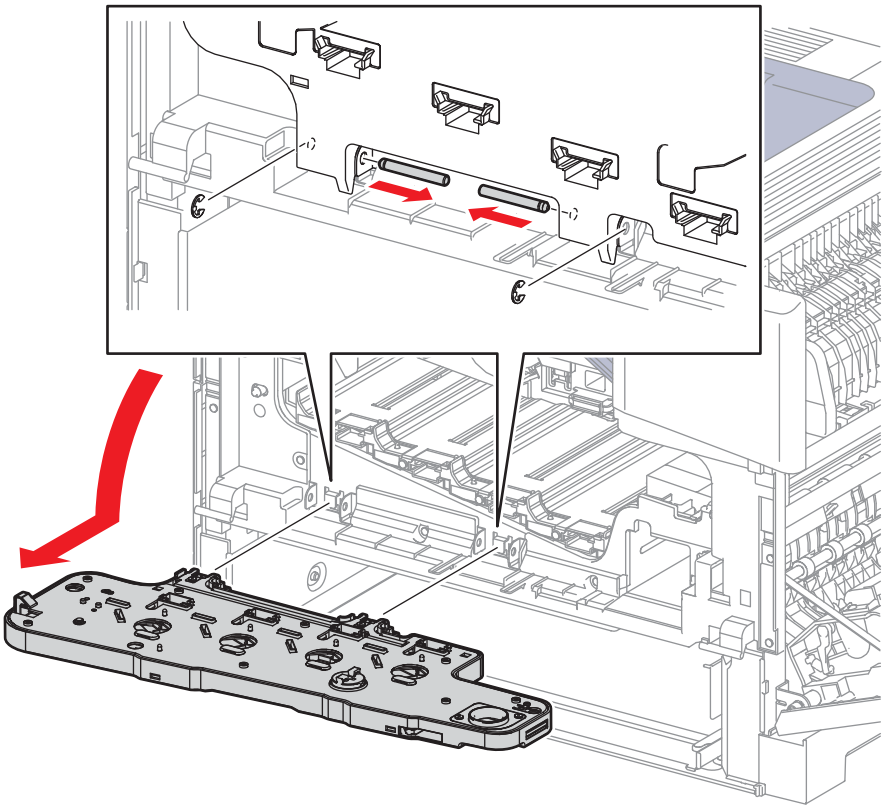

**Replacement Note**

Check for proper alignment and engagement with the chassis.

# Inner Frame Assembly

## PL8.1.9

1. Open the Front Door.
2. Open the Inner Frame Assembly.
3. Remove 2 E-clips and 2 pins that secure the Inner Frame Assembly to the chassis.

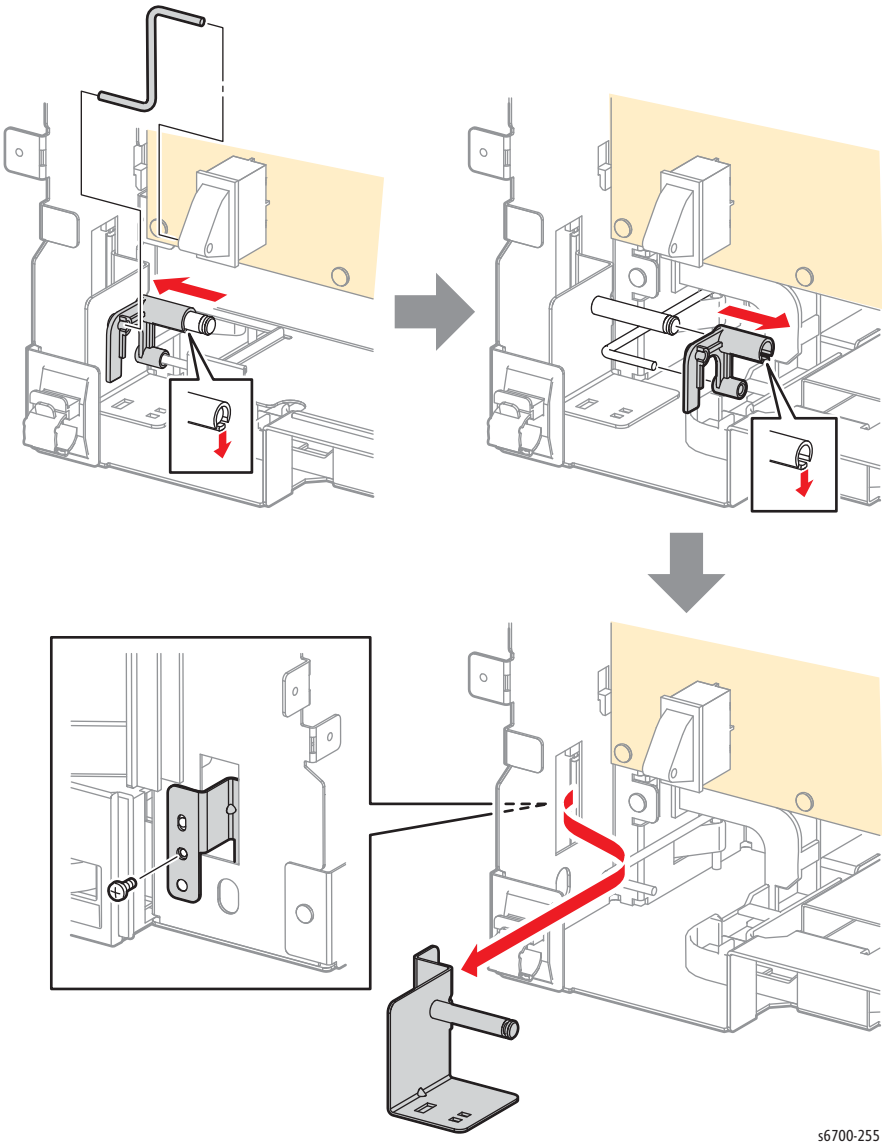


s6700-435

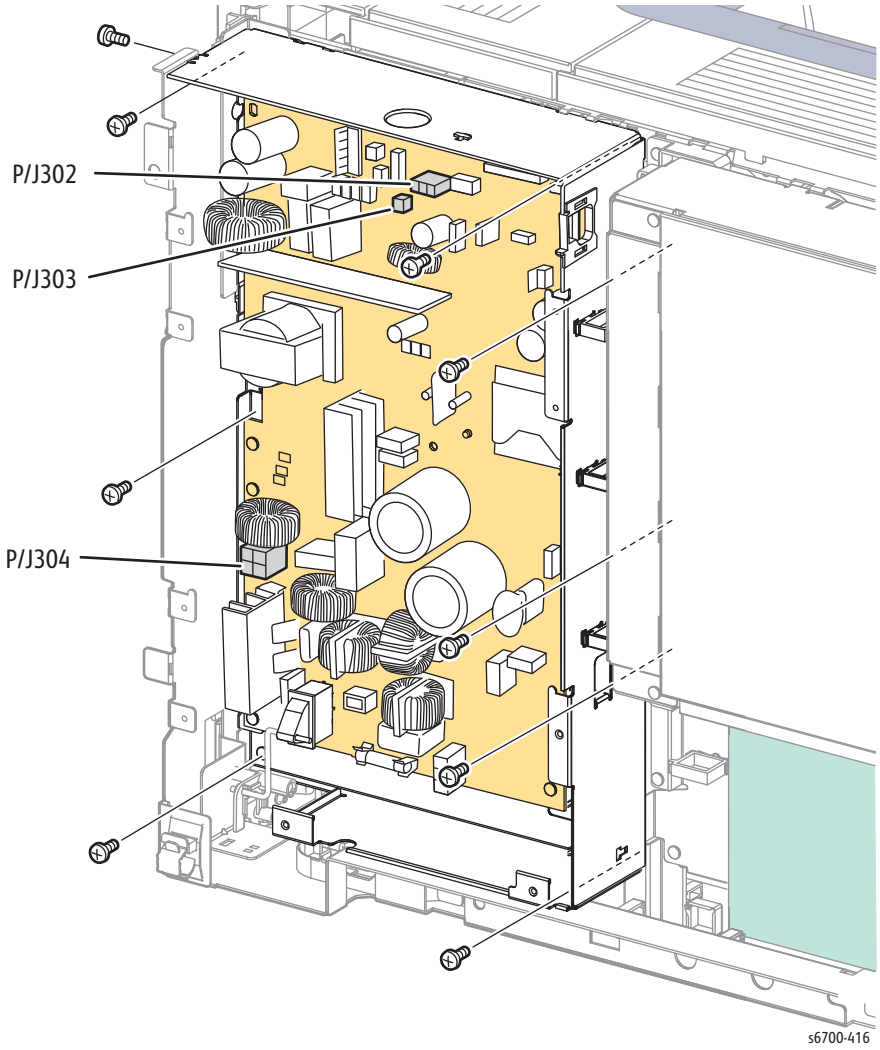
## Fuser Drive Assembly

### PL9.1.1

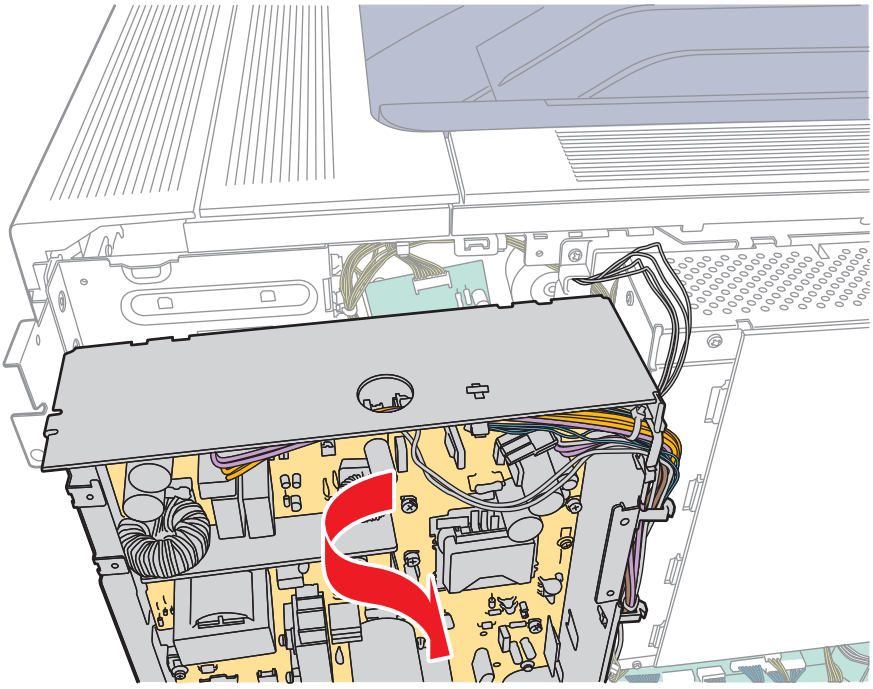
1. Remove the Rear Cover (page 8-31).
2. Remove the Power Panel (page 8-154).
3. Remove the LVPS Fan (page 8-153).
4. Remove the rear bracket and power switch link assembly.



5. Disconnect P/J302, 303, and 304 from the LVPS.
6. Release the harnesses from the clamp.
7. Remove 9 screws that secure the LVPS Cage to the chassis.

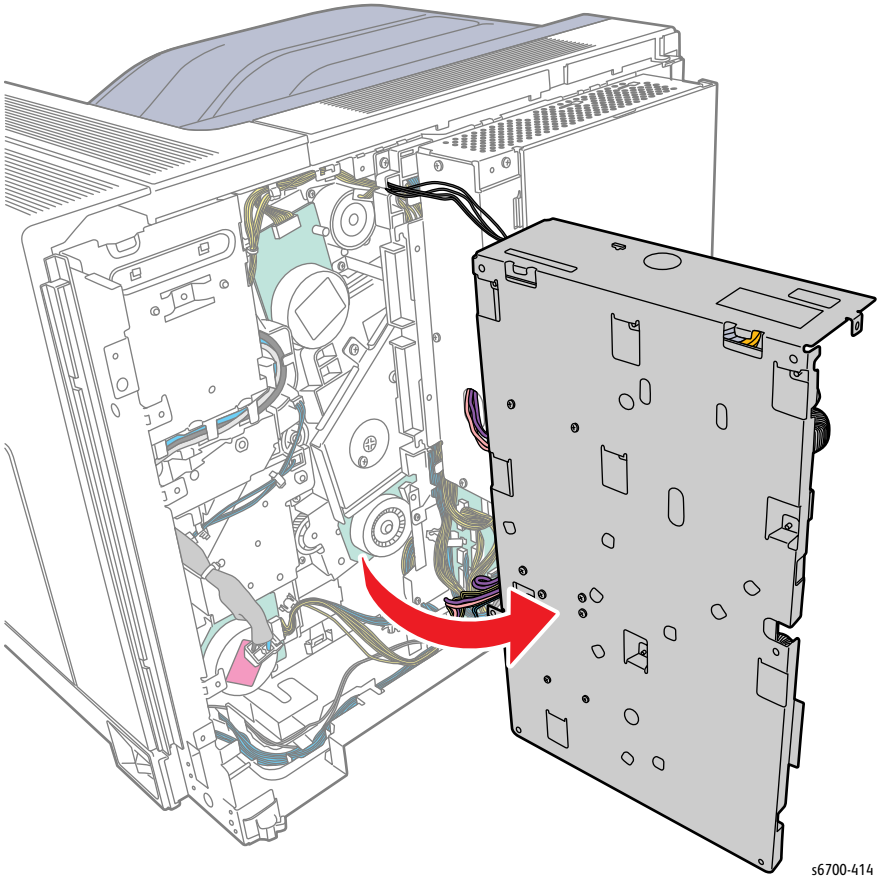


8. Remove but do not disconnect the LVPS Cage by first lifting the cage to release the upper and IP Board Cage hooks, then pull the right side outward and shift the LVPS Cage right to clear the tabs on the left.



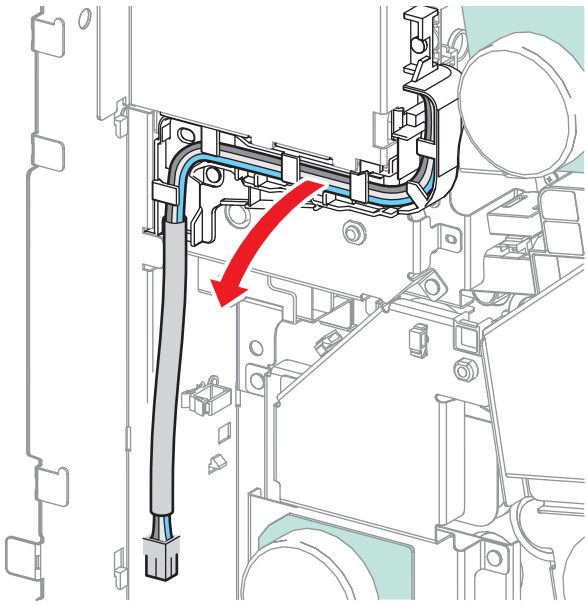
s6700-379

9. Stand the LVPS Cage on the work surface as shown,



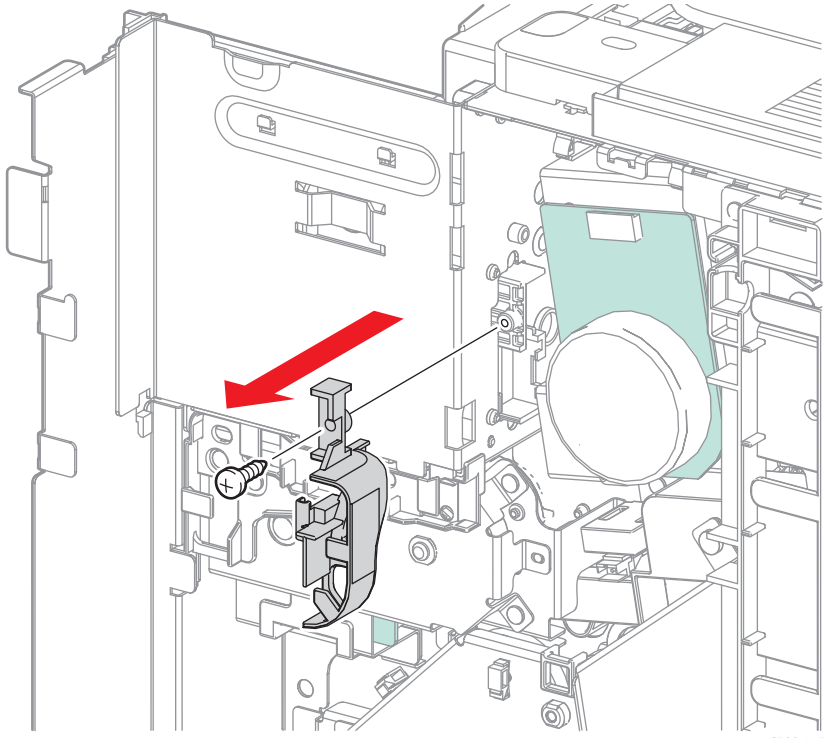
s6700-414

10. Release the Fuser Harness from the guide and harness bracket.



s6700-275

11. Remove 1 screw (silver, tapping, 8mm) that secures the bracket to the chassis.

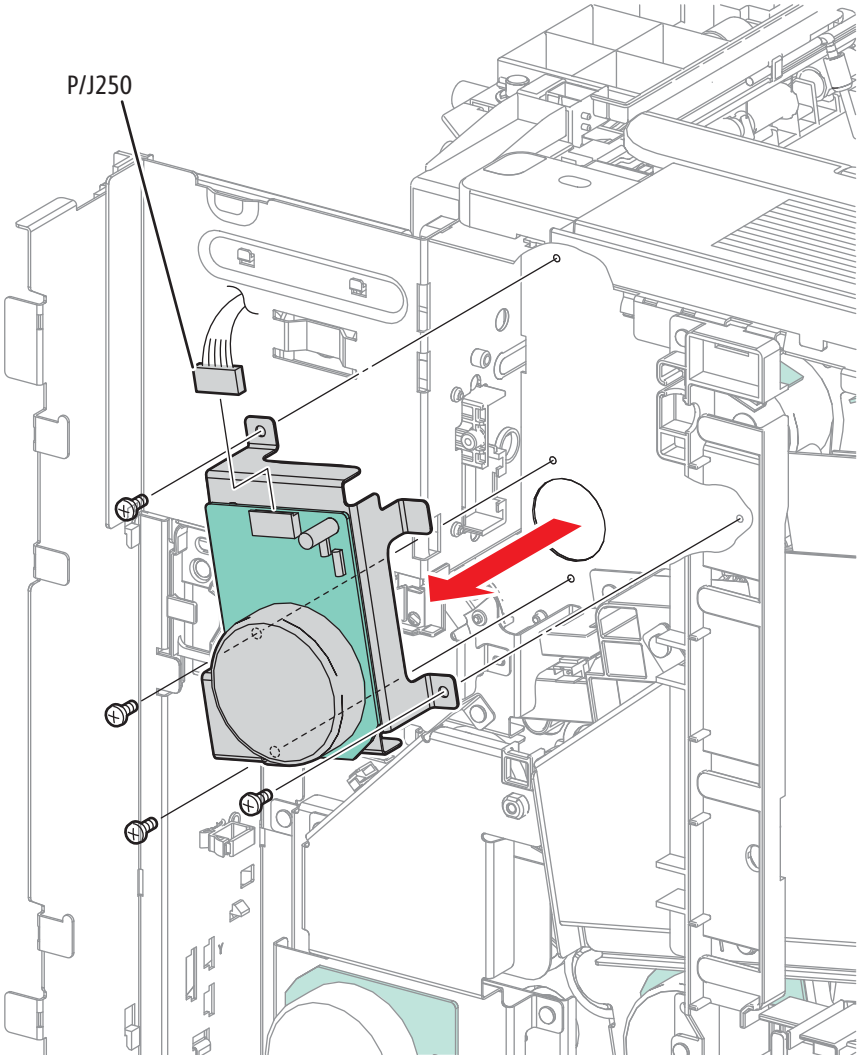


s6700-417

17. Disconnect P/J250 from the Fuser Drive Assy.
18. Remove 4 screws (silver, 6mm) that secure the Fuser Drive Assy.

**Note**

The drive gears are not captive to the shafts and may remain in the chassis after removal. Retrieve all gears before replacing the assembly.

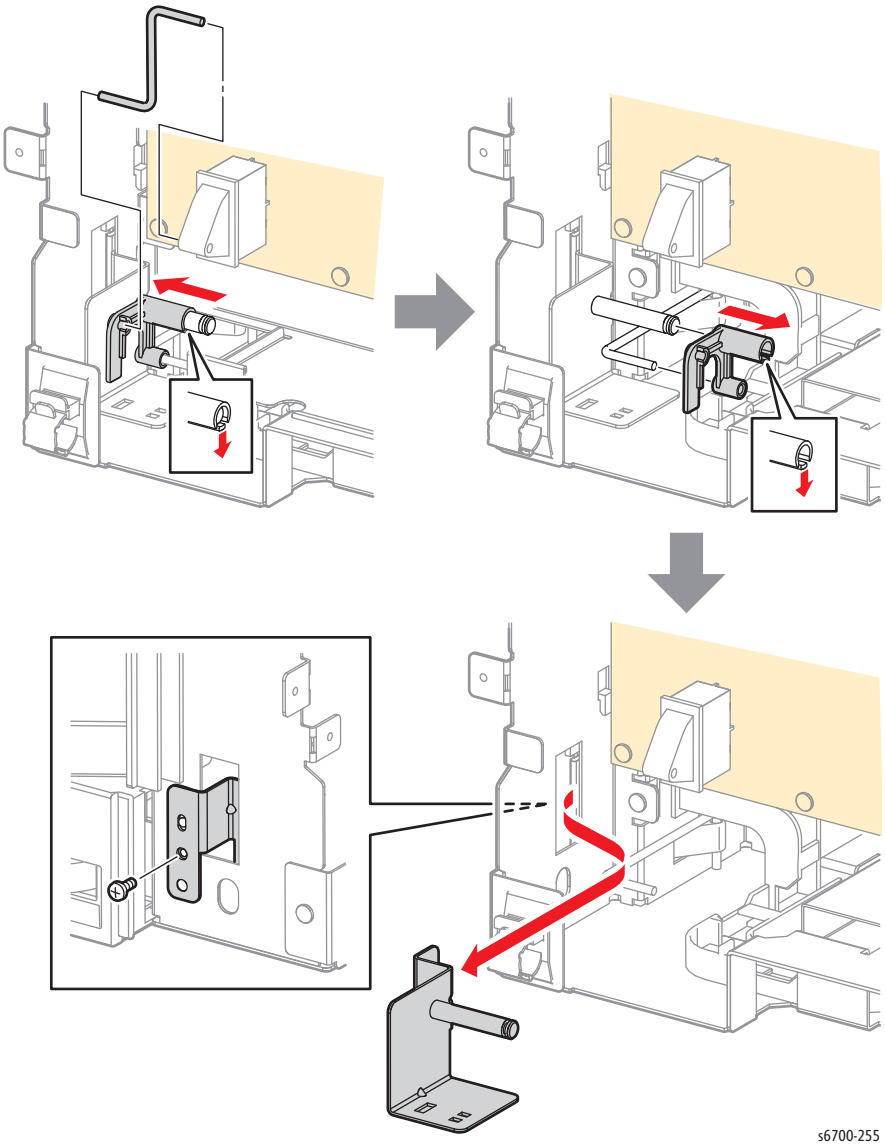



s6700-436

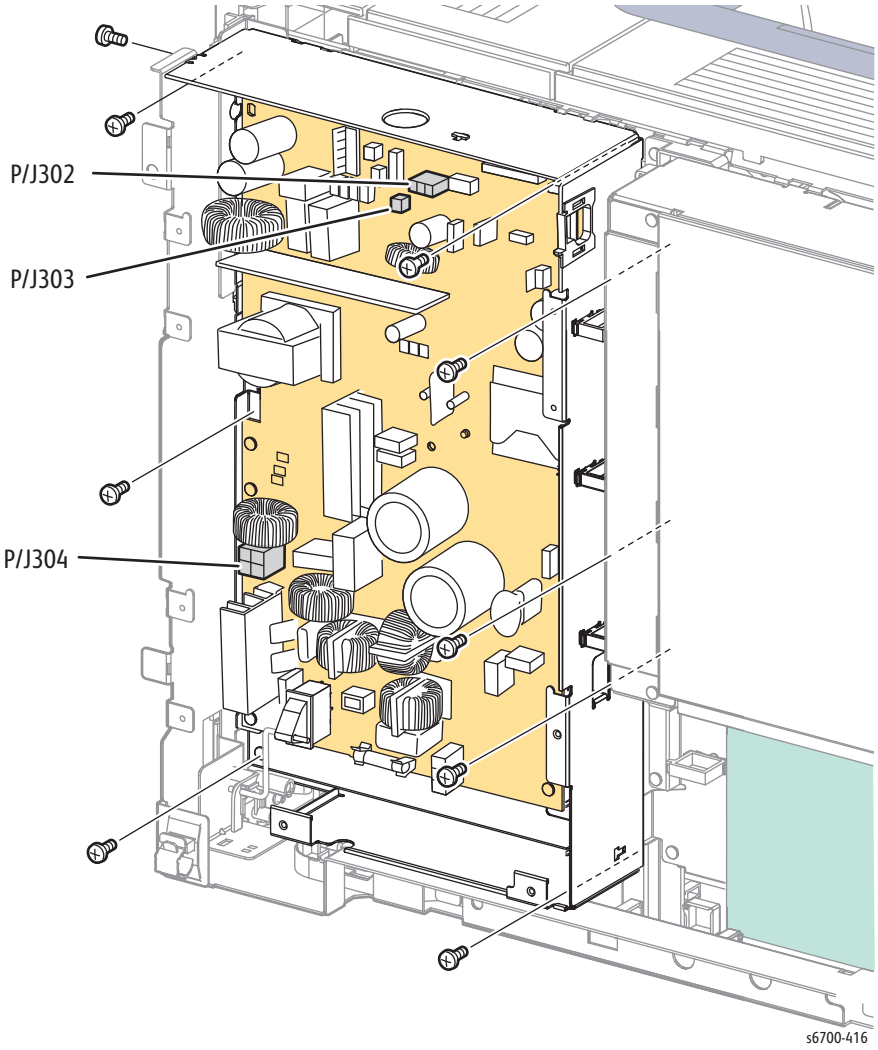
## Transfer Belt Drive Assembly

### PL9.1.3

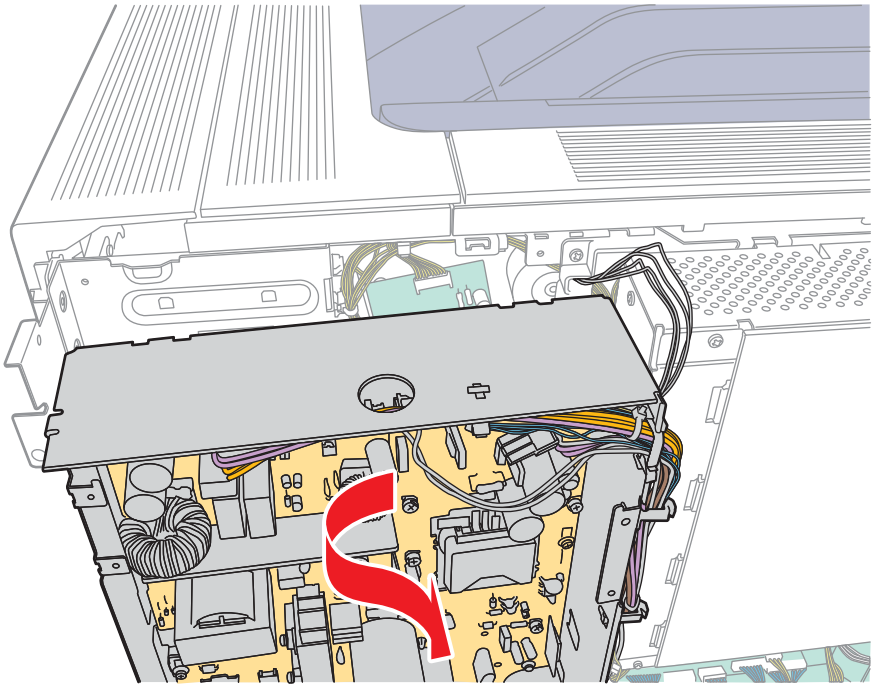
1. Remove the Rear Cover (page 8-31).
2. Remove the Power Panel (page 8-154).
3. Remove the LVPS Fan (page 8-153).
4. Remove the rear bracket and power switch link assembly.



5. Disconnect P/J302, 303, and 304 from the LVPS.
6. Release the harnesses from the clamp.
7. Remove 9 screws that secure the LVPS Cage to the chassis.

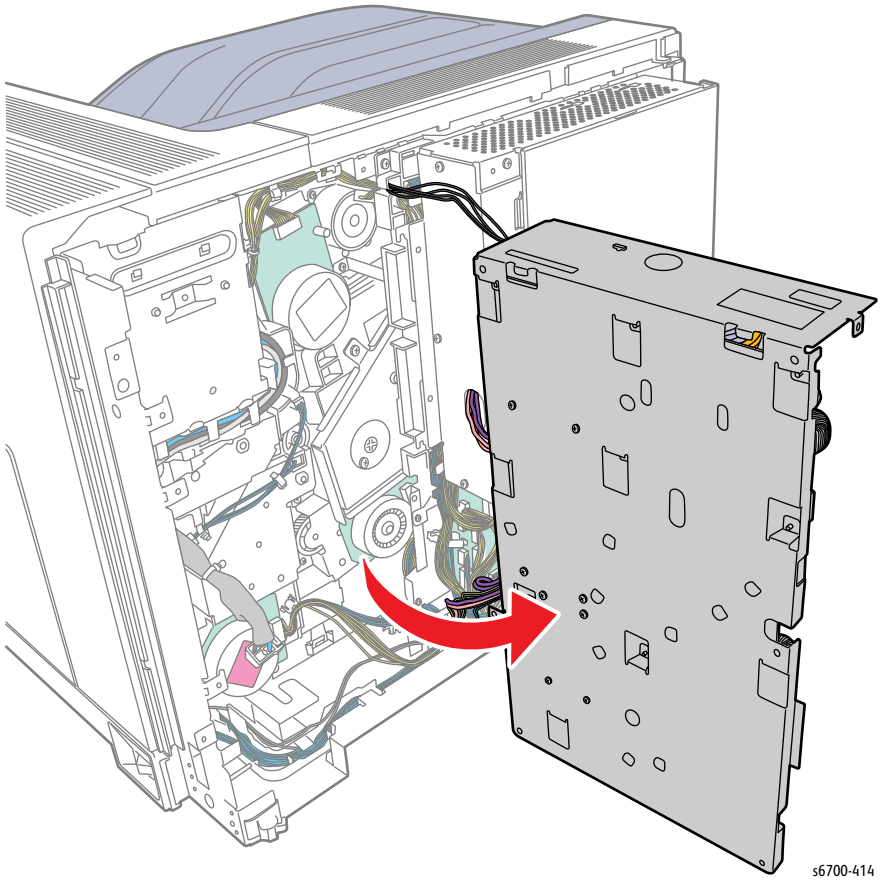


8. Remove but do not disconnect the LVPS Cage by first lifting the cage to release the upper and IP Board Cage hooks, then pull the right side outward and shift the LVPS Cage right to clear the tabs on the left.



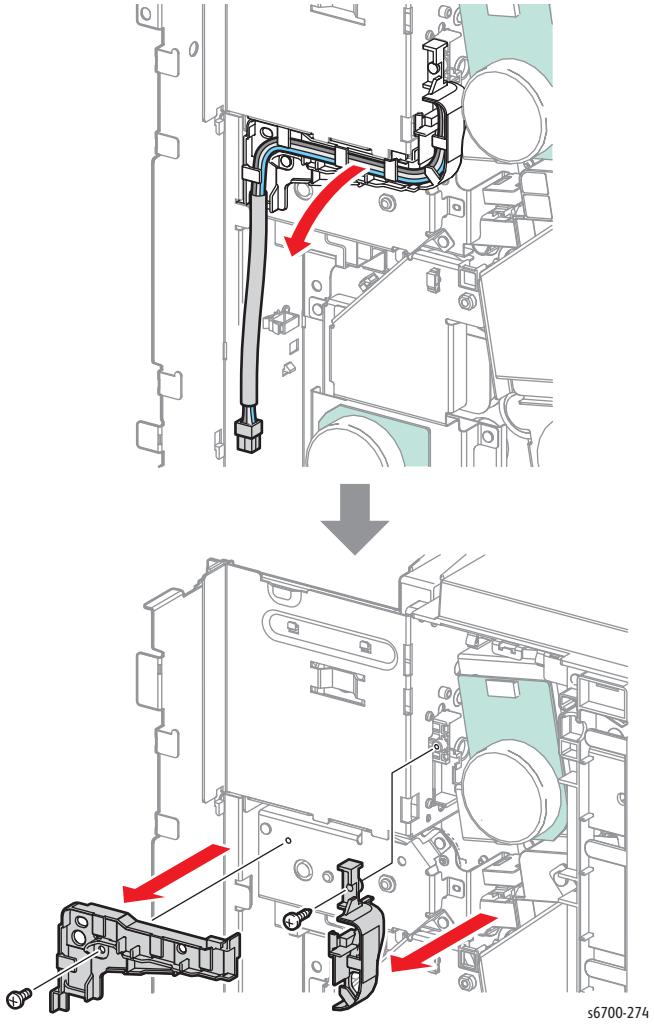
s6700-379

9. Stand the LVPS Cage on the work surface as shown,

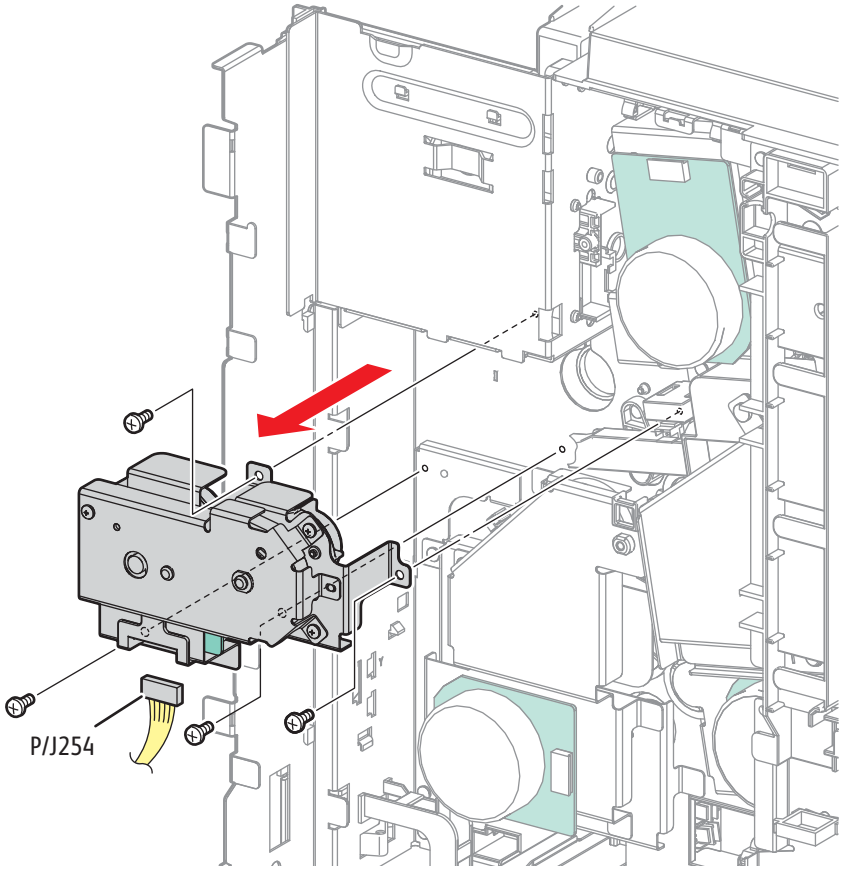


s6700-414

10. Release the Fuser Harness from the guide and harness bracket.
11. Remove 1 screws (silver, 6mm) and 1 screw (silver, tapping, 8mm) that secure the bracket and harness guide to the chassis.



12. Remove 4 screws (silver, 6mm) that secure the Transfer Belt Drive Assy.

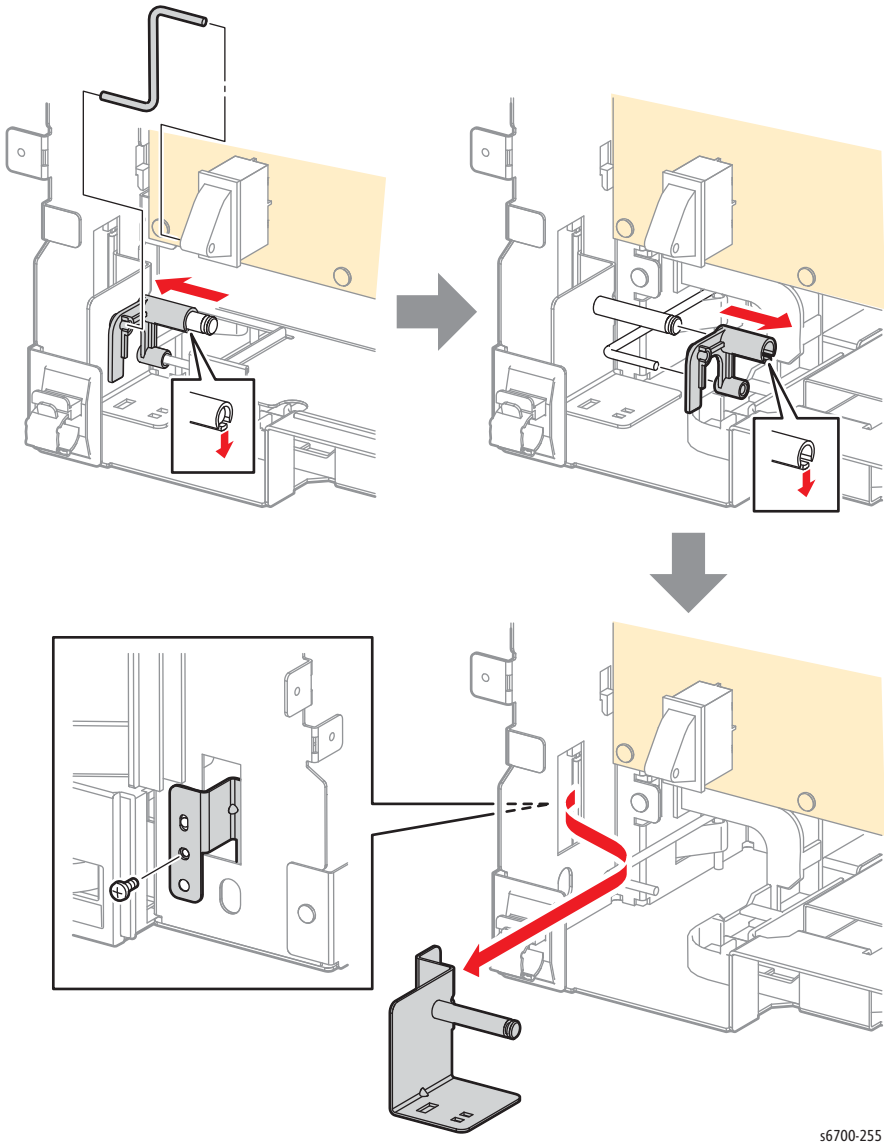



13. Disconnect P/J254 from the Transfer Belt Drive Assy.

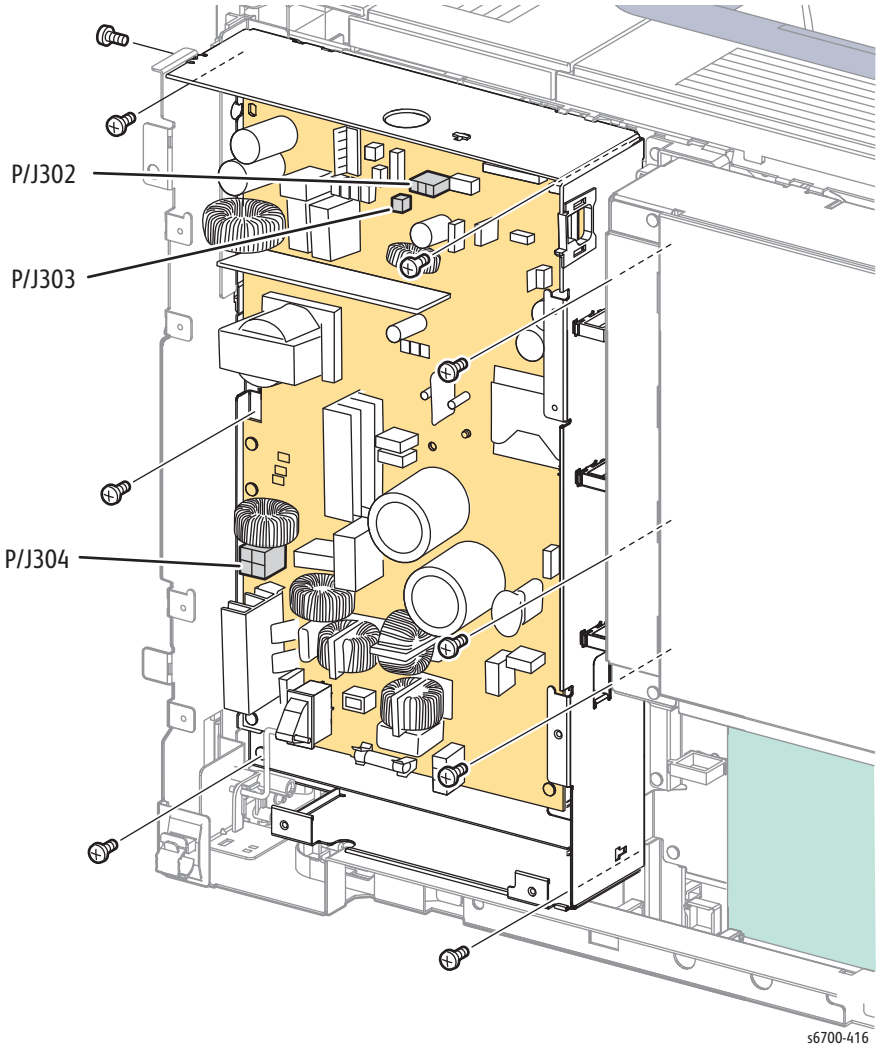
## Feed Drive Assembly

### PL9.1.4

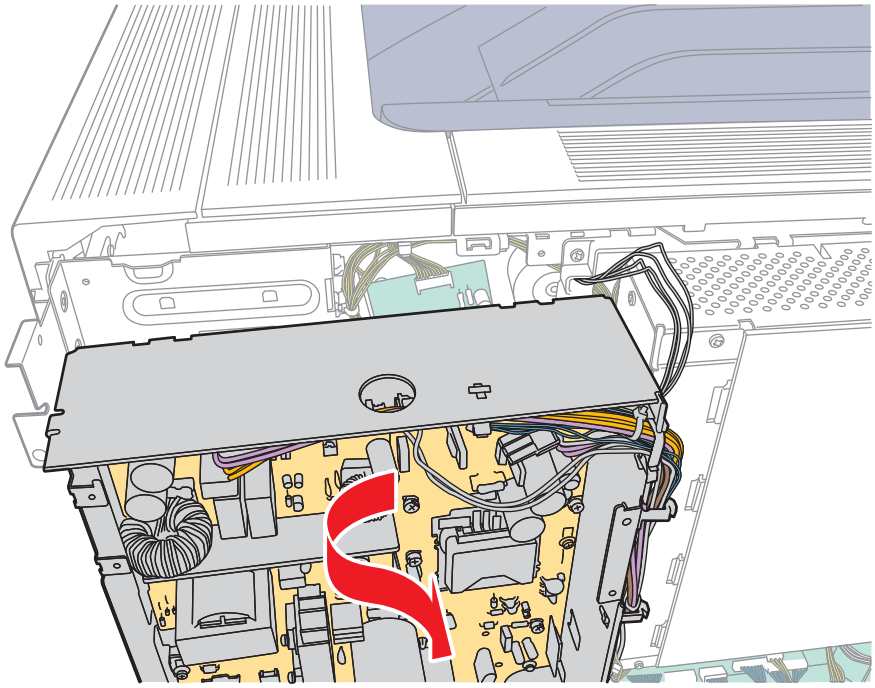
1. Remove the Rear Cover (page 8-31).
2. Remove the Power Panel (page 8-154).
3. Remove the LVPS Fan (page 8-153).
4. Remove the rear bracket and power switch link assembly.



5. Disconnect P/J302, 303, and 304 from the LVPS.
6. Release the harnesses from the clamp.
7. Remove 9 screws that secure the LVPS Cage to the chassis.

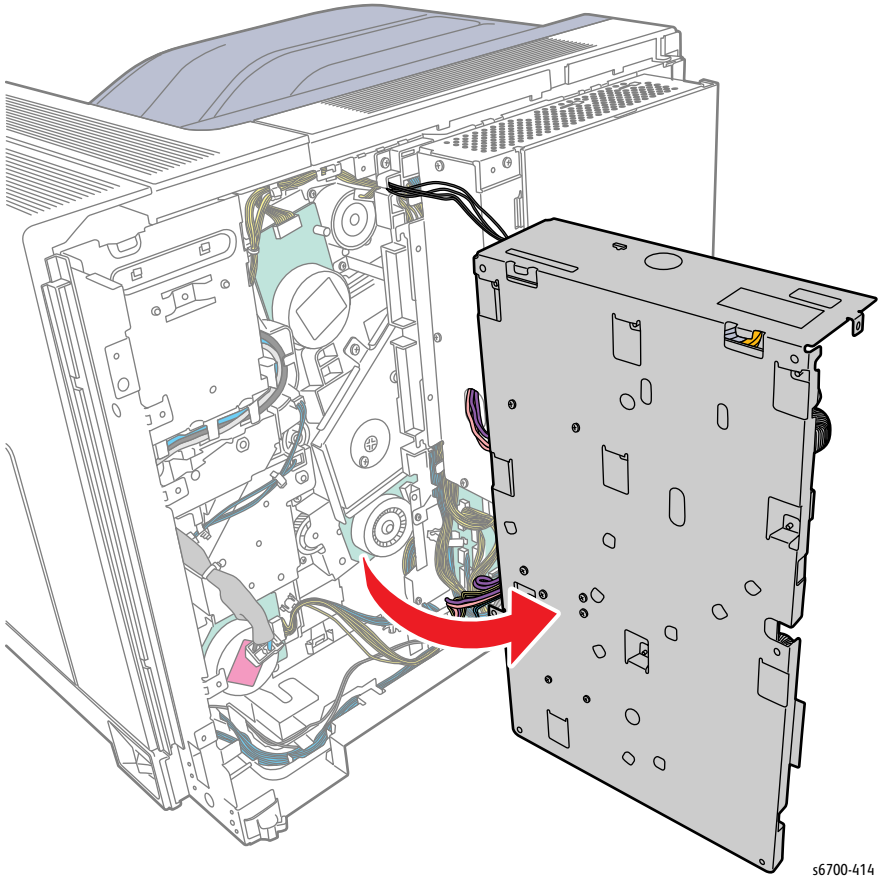


8. Remove but do not disconnect the LVPS Cage by first lifting the cage to release the upper and IP Board Cage hooks, then pull the right side outward and shift the LVPS Cage right to clear the tabs on the left.



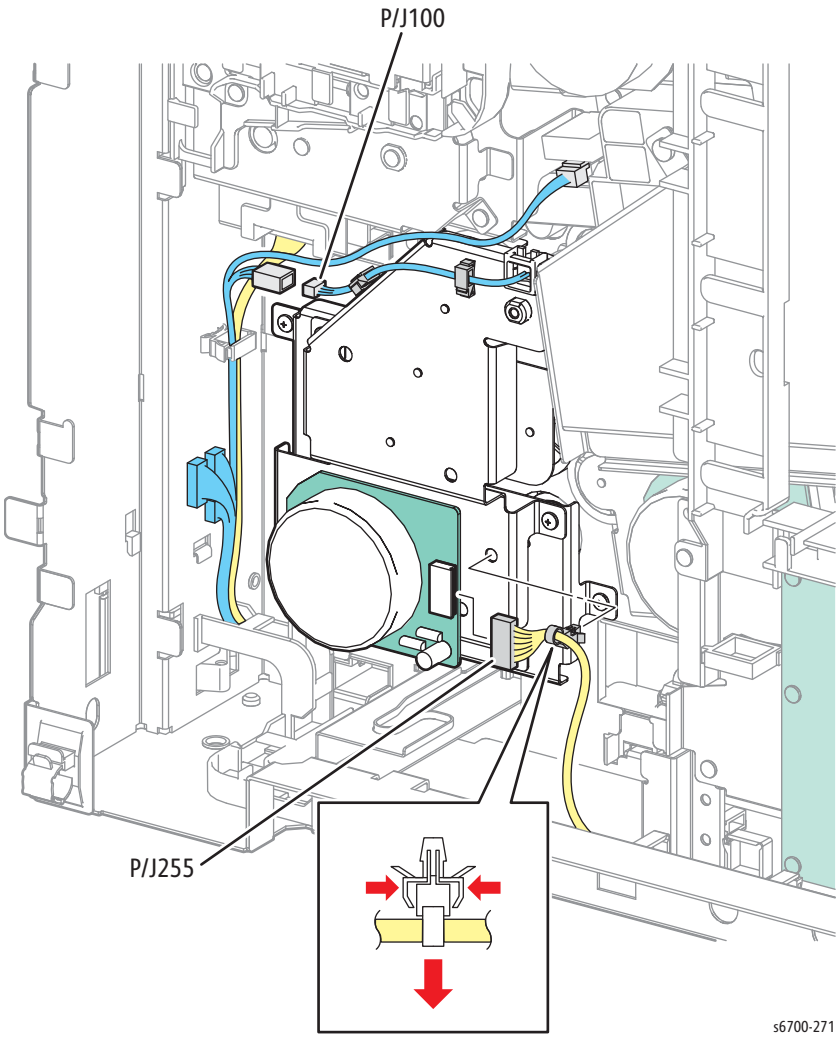
s6700-379

9. Stand the LVPS Cage on the work surface as shown,



s6700-414

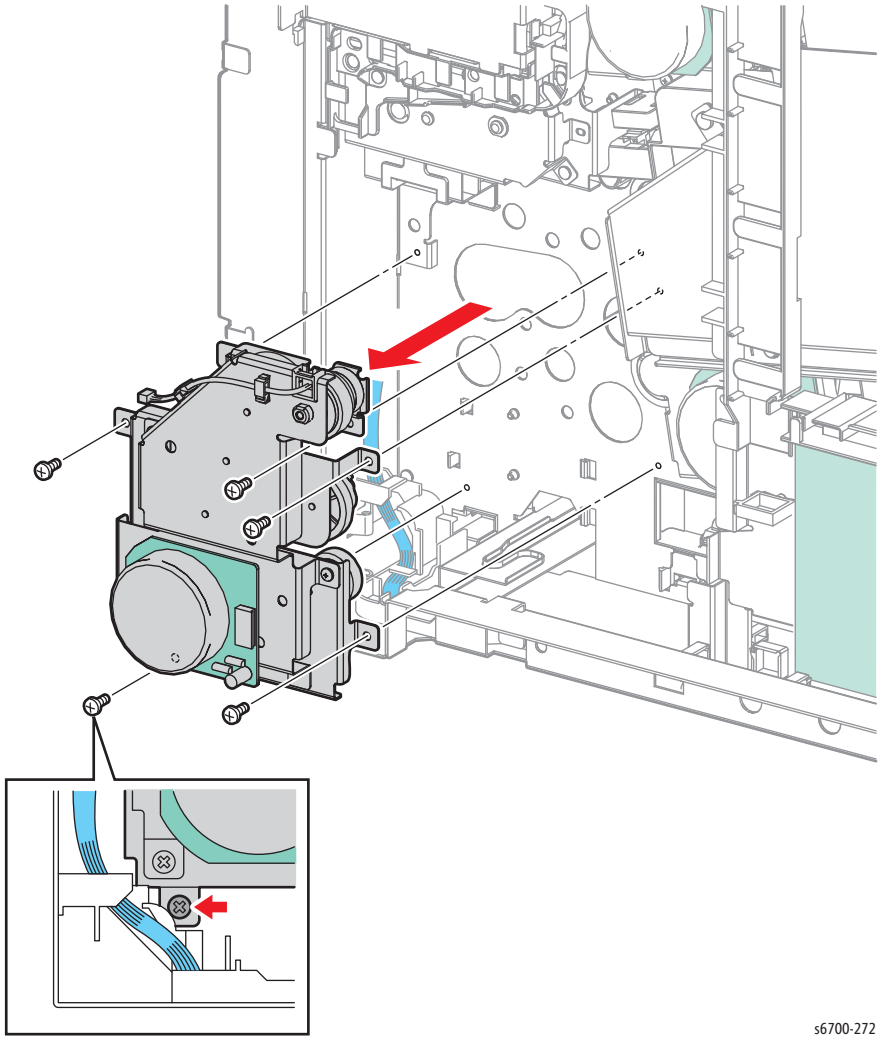
10. Disconnect P/J100 from the Switching Clutch and release the Black Switching Sensor harness from the 2 clamps.
11. Disconnect P/J255 from the Feed Drive Assy and release the clamp that secures the harness.



12. Release the connect harness guide boss from the hole and slide the guide clear.
13. Remove 5 screws (silver, 6mm) that secure the Feed Drive Assy and remove the motor.

**Note**

The drive gears are not captive to the shafts and may remain in the chassis after removal. Retrieve all gears before replacing the assembly.

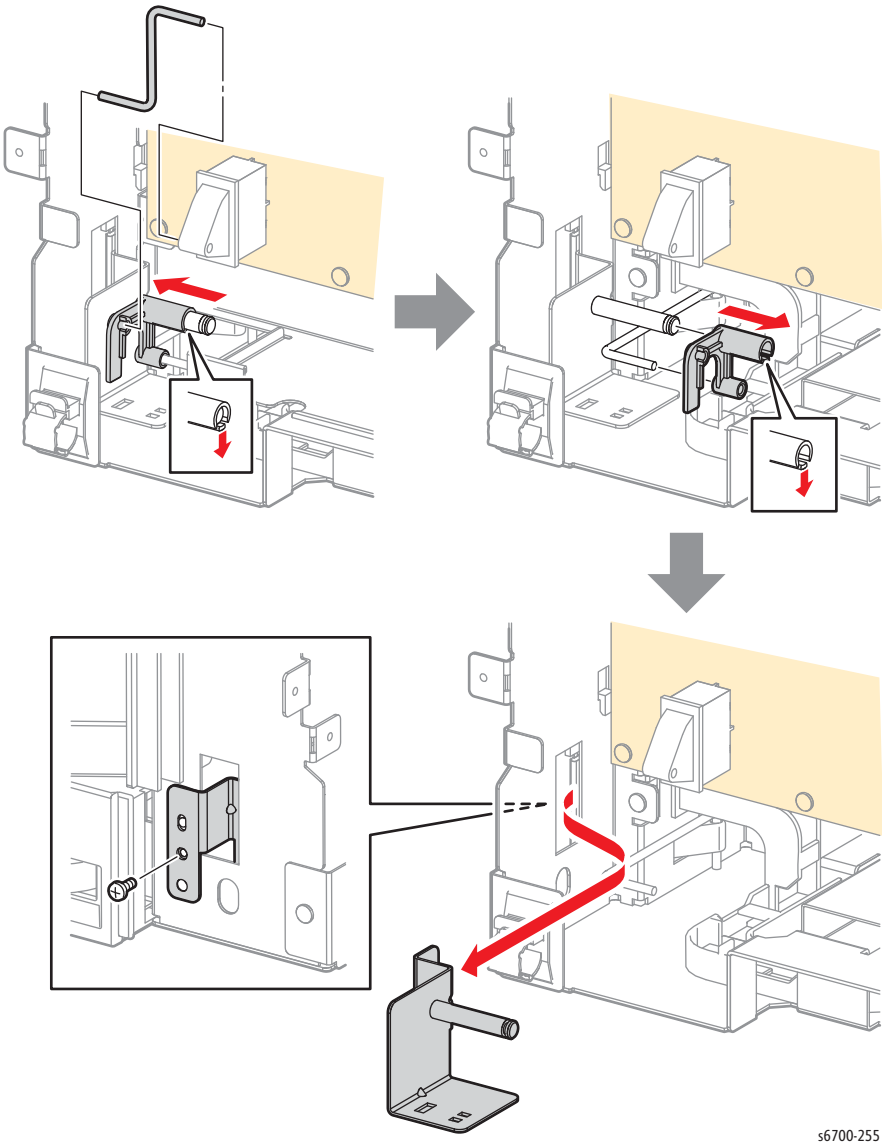


s6700-272

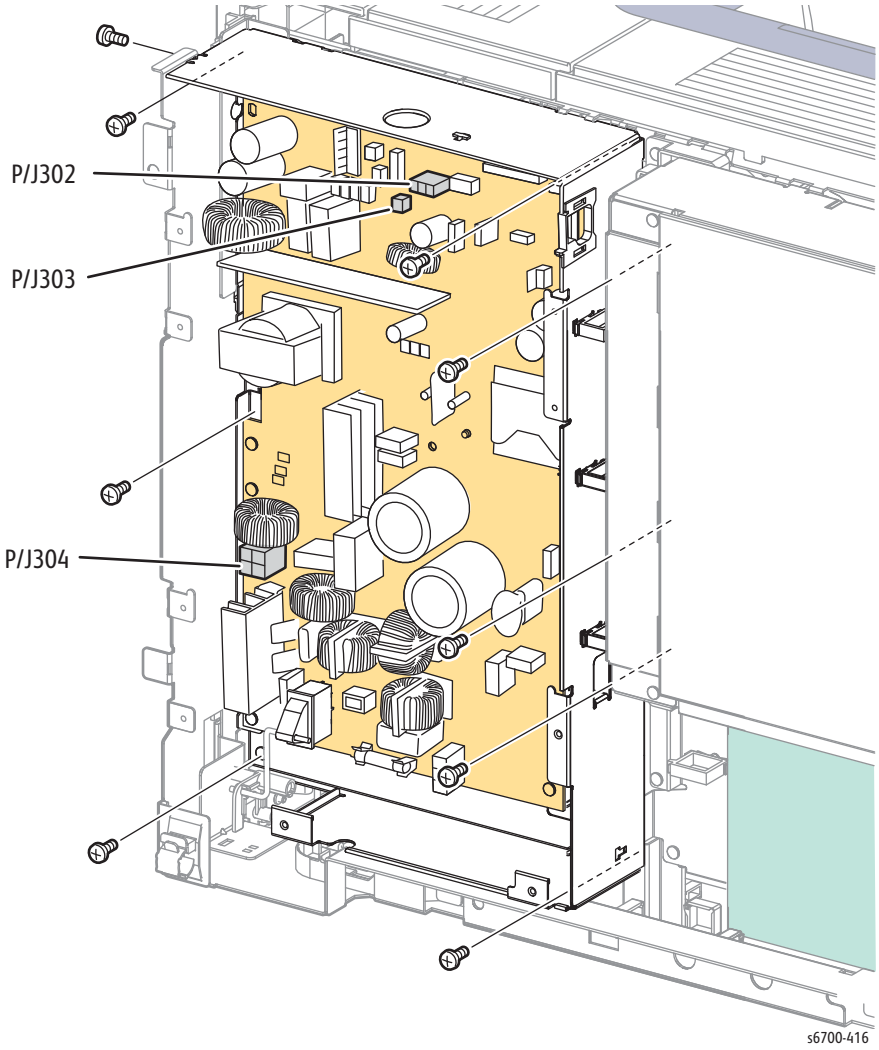
## Black Switching Sensor Assembly

### PL9.2.1

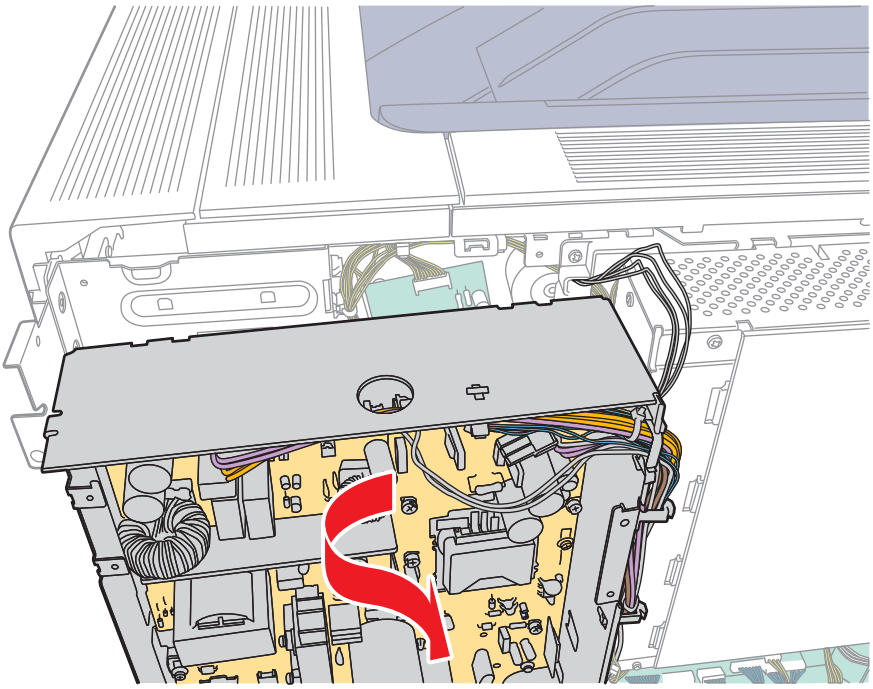
1. Remove the Rear Cover (page 8-31).
2. Remove the Power Panel (page 8-154).
3. Remove the LVPS Fan (page 8-153).
4. Remove the rear bracket and power switch link assembly.



5. Disconnect P/J302, 303, and 304 from the LVPS.
6. Release the harnesses from the clamp.
7. Remove 9 screws that secure the LVPS Cage to the chassis.

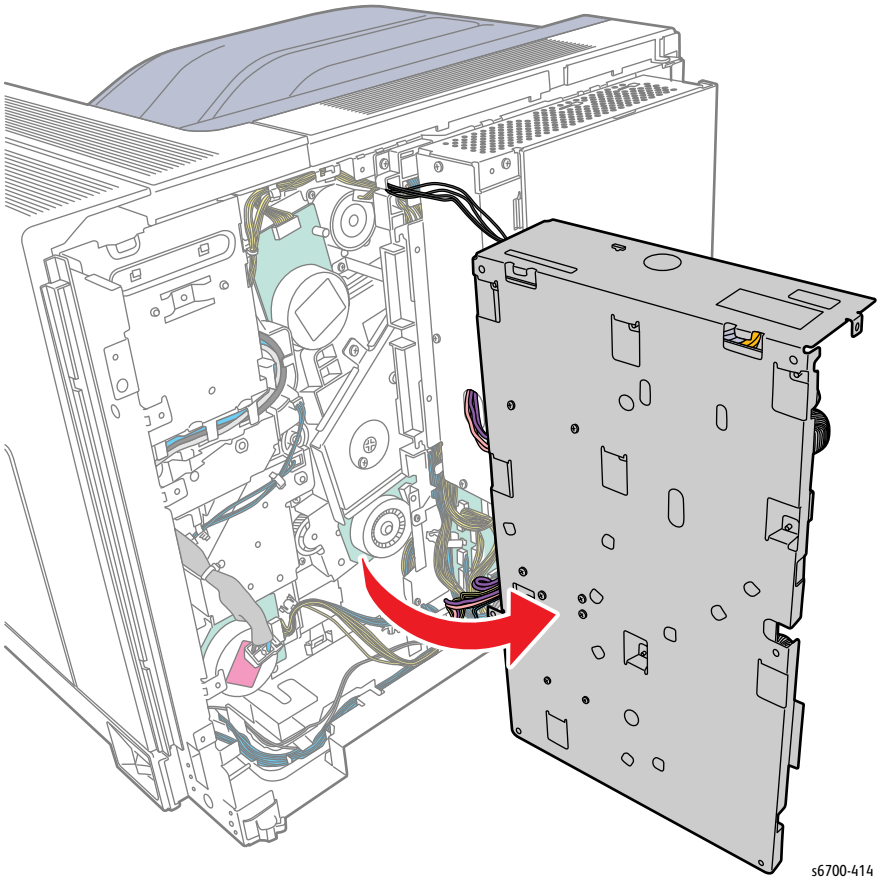


8. Remove but do not disconnect the LVPS Cage by first lifting the cage to release the upper and IP Board Cage hooks, then pull the right side outward and shift the LVPS Cage right to clear the tabs on the left.



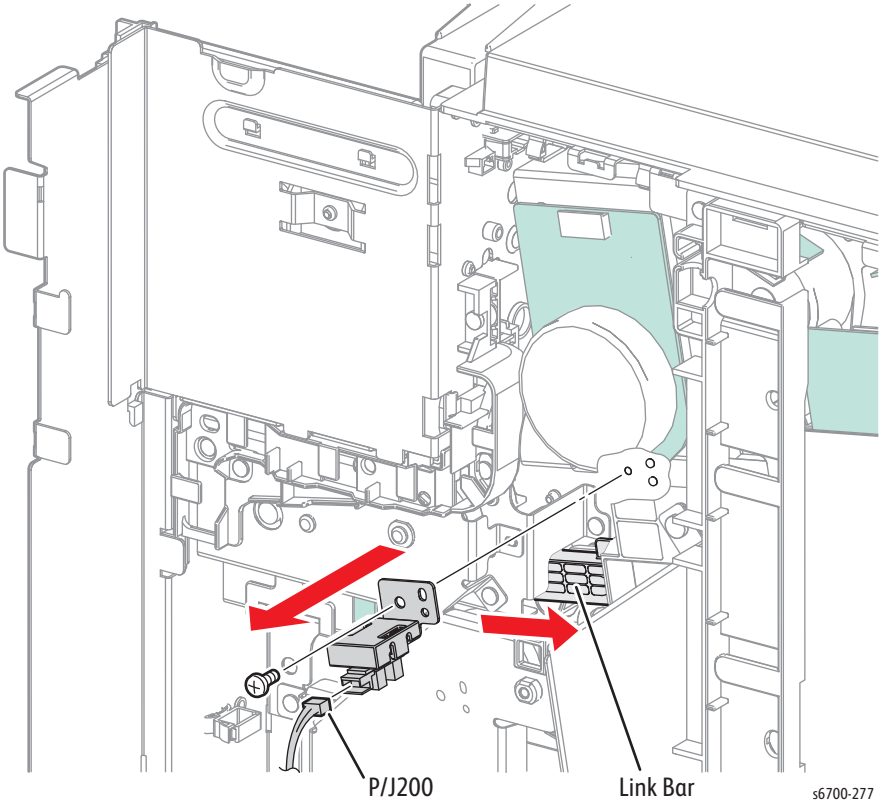
s6700-379

9. Stand the LVPS Cage on the work surface as shown,



s6700-414

10. Disconnect P/J200 from the Black Switching Sensor.
11. Remove 1 screw (silver, 6mm) that secures the bracket to the chassis.
12. Slide the link bar actuator away from the sensor and remove the Black Switching Sensor Bracket.



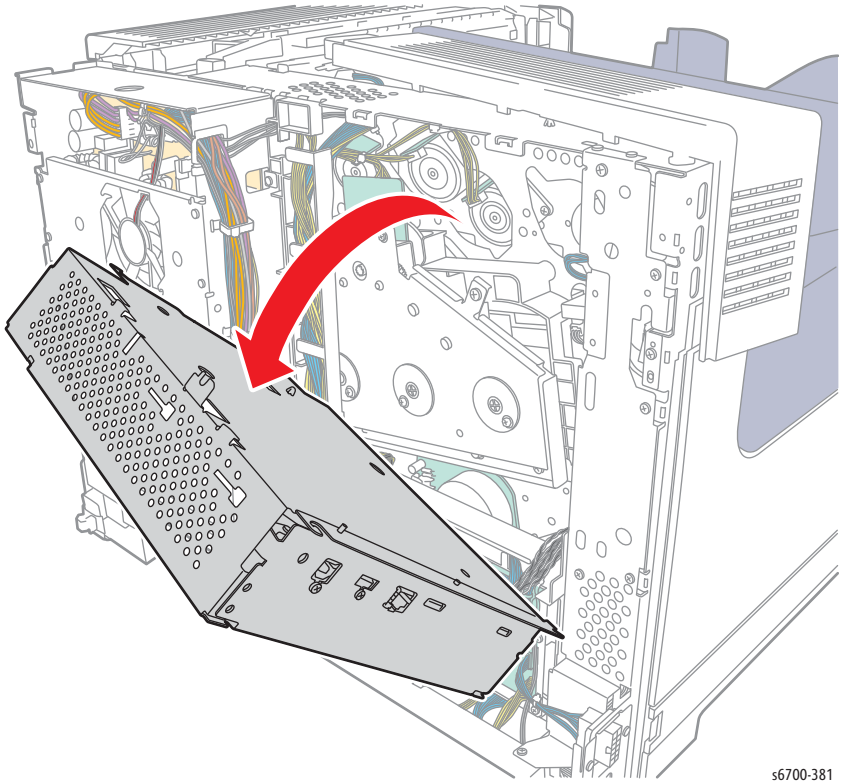

**Replacement Note**

Align the 2 chassis bosses to the sensor bracket.

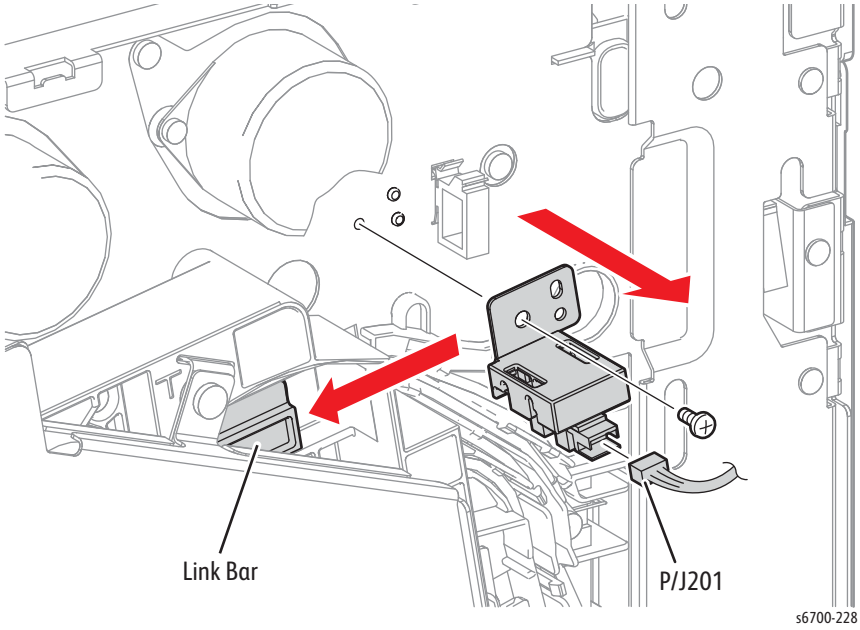
## Color Switching Sensor Assembly

### PL9.2.1

1. Remove the Rear Cover (page 8-31).
2. Loosen 4 screws and remove 1 screw but do not disconnect the IP Board Cage.
3. Rest the IP Board Cage on the work surface.



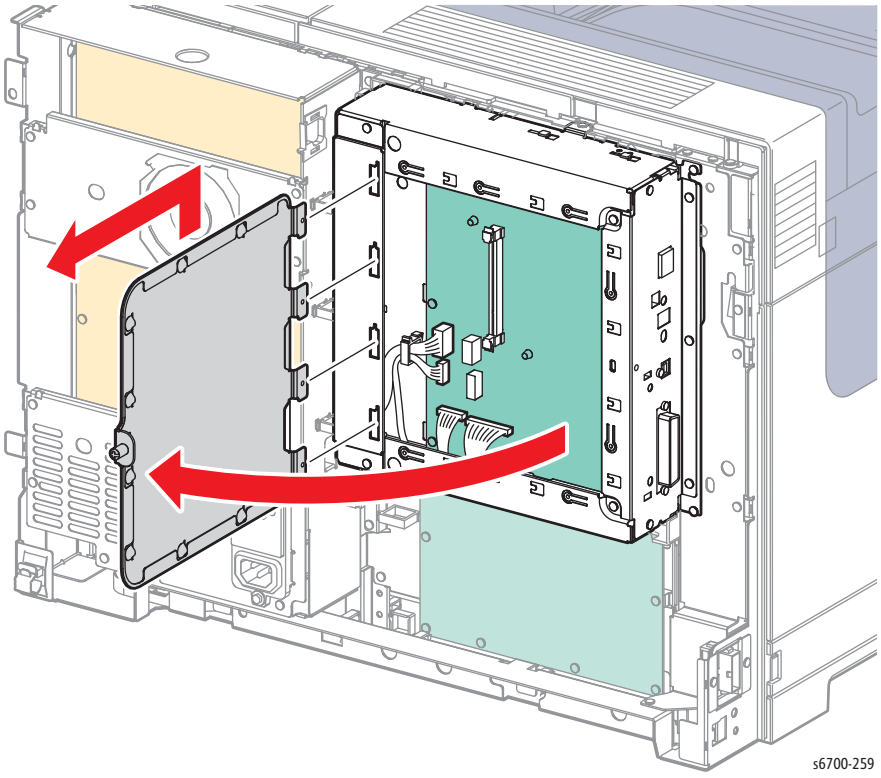

4. Slide the link bar actuator away from the sensor and remove the Color Switching Sensor Bracket.



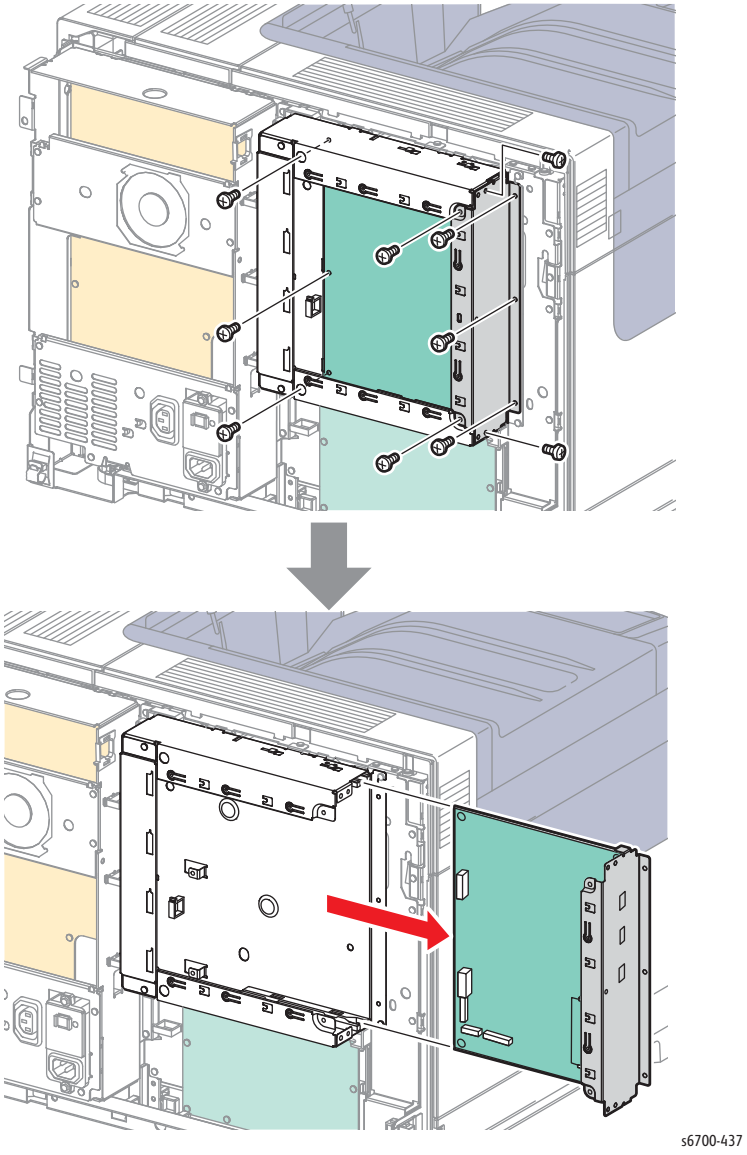
# IP Board

## PL10.1.5

1. Remove the Rear Cover (page 8-31).
2. Loosen the knurled screw and open the IP cage cover.
3. Lift the IP cage cover slightly to release 4 tabs from holes in the IP Cage.
4. Disconnect all IP Board connections.



5. Remove 10 screws (silver, 6mm) that secure the IP Board and rear panel to the chassis.
6. Pull the rear panel and attached IP Board out of the printer.



s6700-437

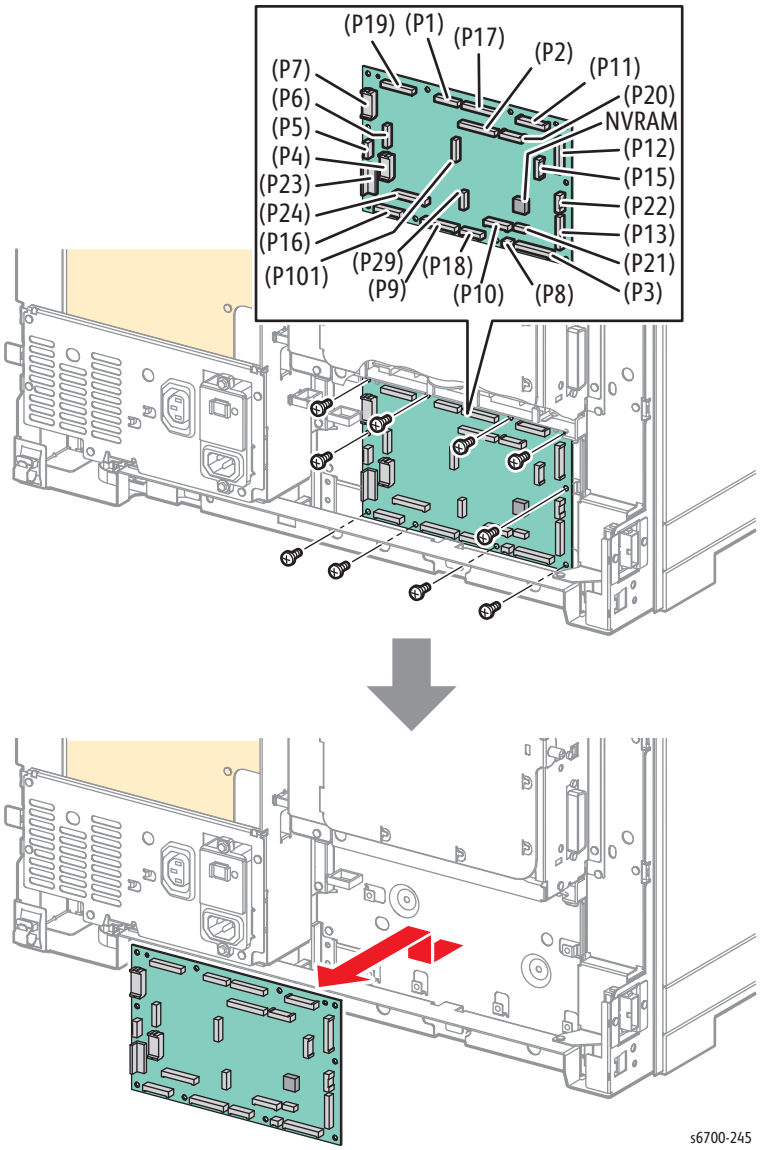
**Replacement Note**

Transfer the SD Card, EEPROM, RAM and Hard Drive to the replacement IP Board before installation.

# MCU Board

## PL10.2.18

1. Use dc361 to save Machine NVM to the SD Card.
2. Remove the Power Cord from the wall outlet.
3. Remove the Rear Cover (page 8-31).
4. Disconnect all MCU Board connections.
5. Move NVRAM (U630) to the replacement board.
6. Remove 10 screws (silver, 6mm) that secure the MCU Board to the chassis.



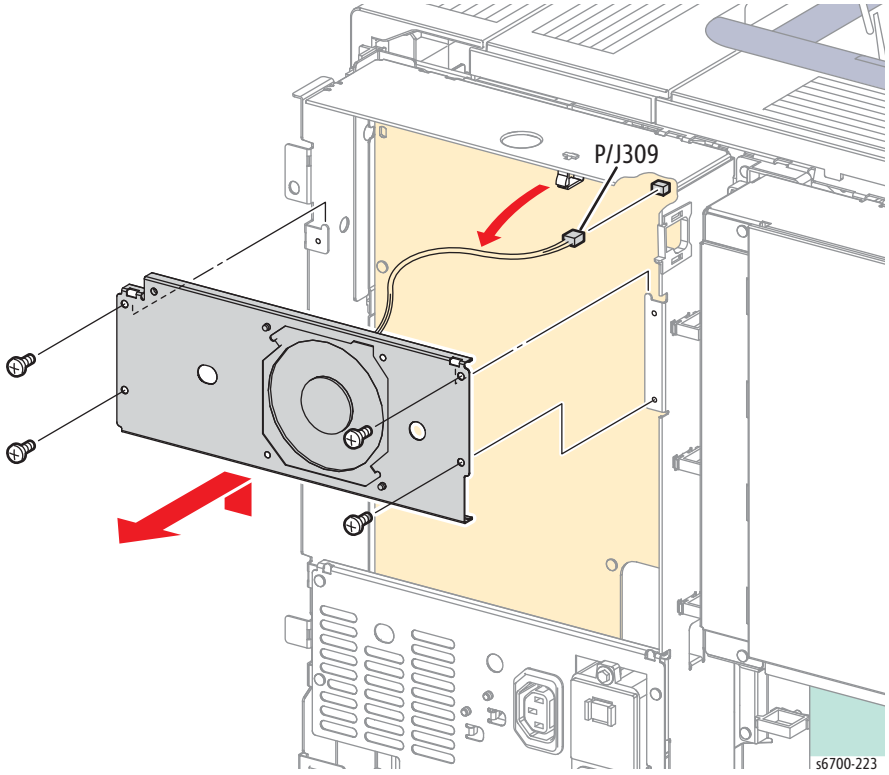

**Replacement Note**

Align pins on black wiring harness guide with the holes in the MCU Board to correctly orient the board in the chassis. MCU Board connections P8, P29 and P101 are not used.

## LVPS Fan

### PL10.1.9

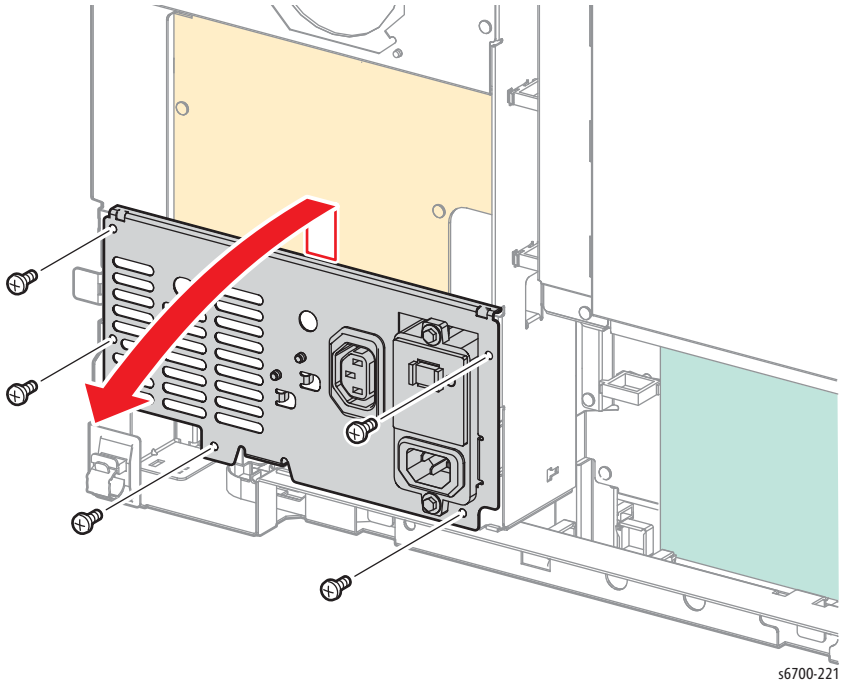
1. Remove the Rear Cover (page 8-31).
2. Disconnect P/J309 from the LVPS.
3. Remove 4 screws (silver, 6mm) that secure the fan to the chassis.
4. Lift the Fan slightly to release the two holes in the fan from the tabs.



# Power Panel

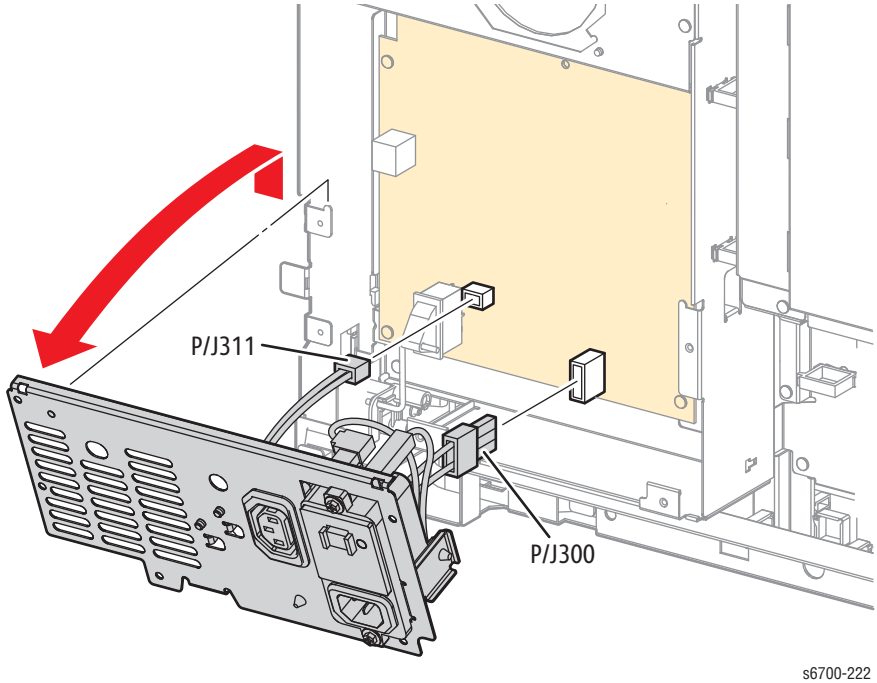
## PL10.1.12

1. Remove the Rear Cover (page 8-31).
2. Remove 4 screws (silver, 6mm) that secure the Power Panel to the chassis.



s6700-221

3. Release the two holes in the Power Panel from the tabs of the printer and tilt the Power Panel toward you.
4. Disconnect P/J300 and P/J311 from the LVPS, and remove the Power Panel from the chassis.




s6700-222

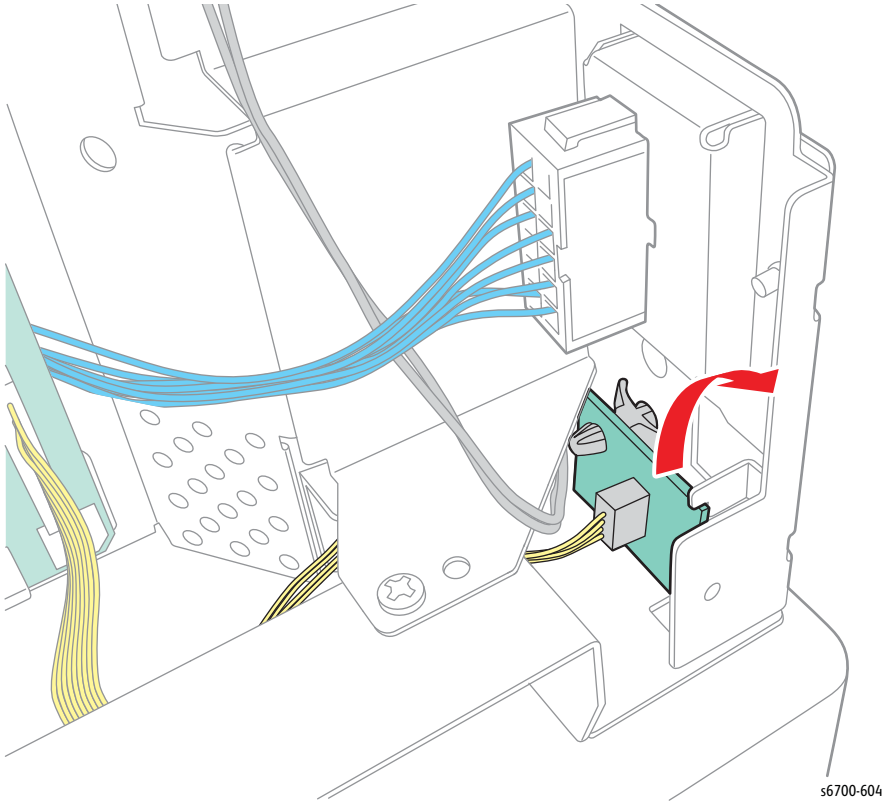
# EEPROM Board

## PL10.1.22

**Caution**

The MCU Board writes device-specific NVM parameters to the EEPROM Board making it unusable in any other printer.

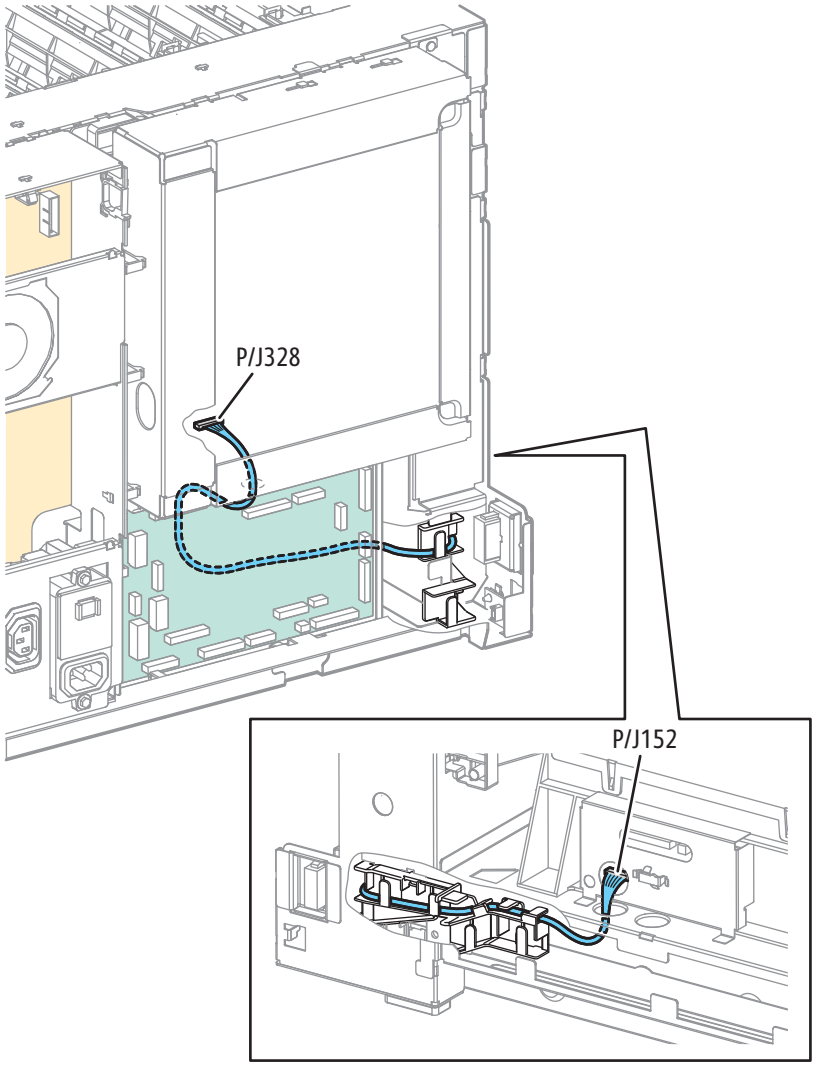
1. Remove the Rear Cover (page 8-31).
2. Disconnect P/J214 from the EEPROM Board.
3. Release the support that secures the board to the chassis.



## Video Harness

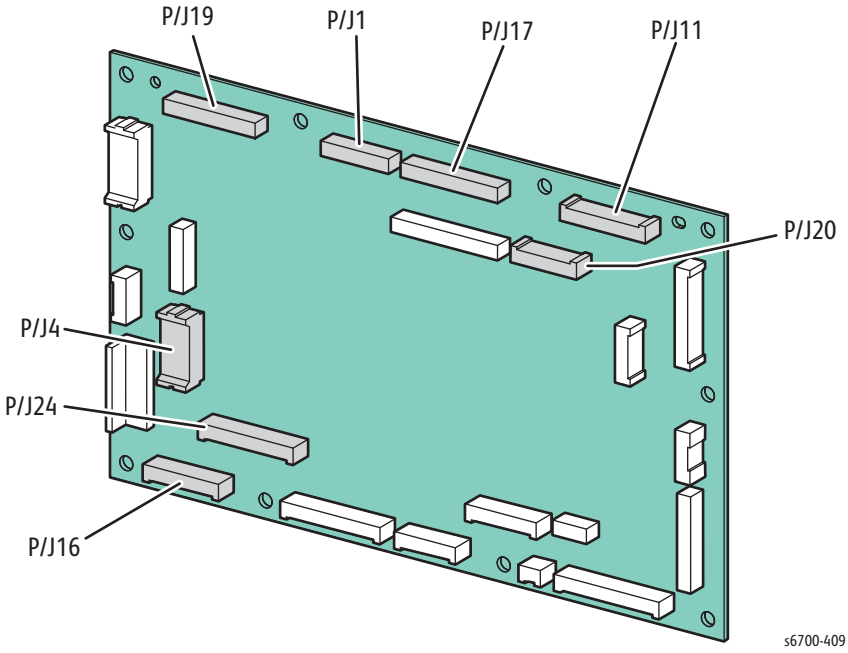
### PL11.1.4

1. Remove the Rear Cover (page 8-31).
2. Remove the Upper and Lower Finisher Docking Covers.
3. Remove the Left Cover (page 8-28).
4. Remove the HVPS (page 8-86).
5. Disconnect P/J152 from the Laser Unit and release the harness from the guides.

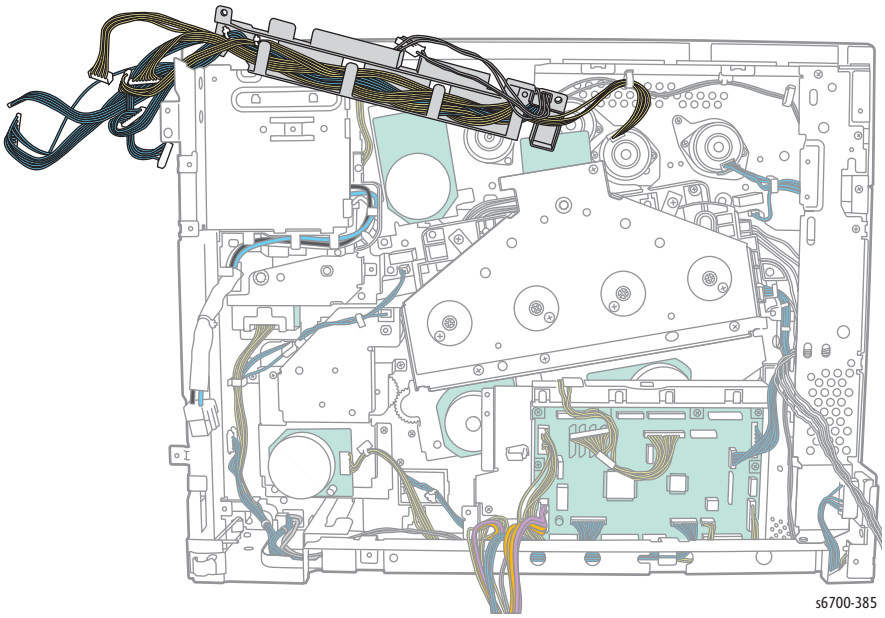



s6700-438

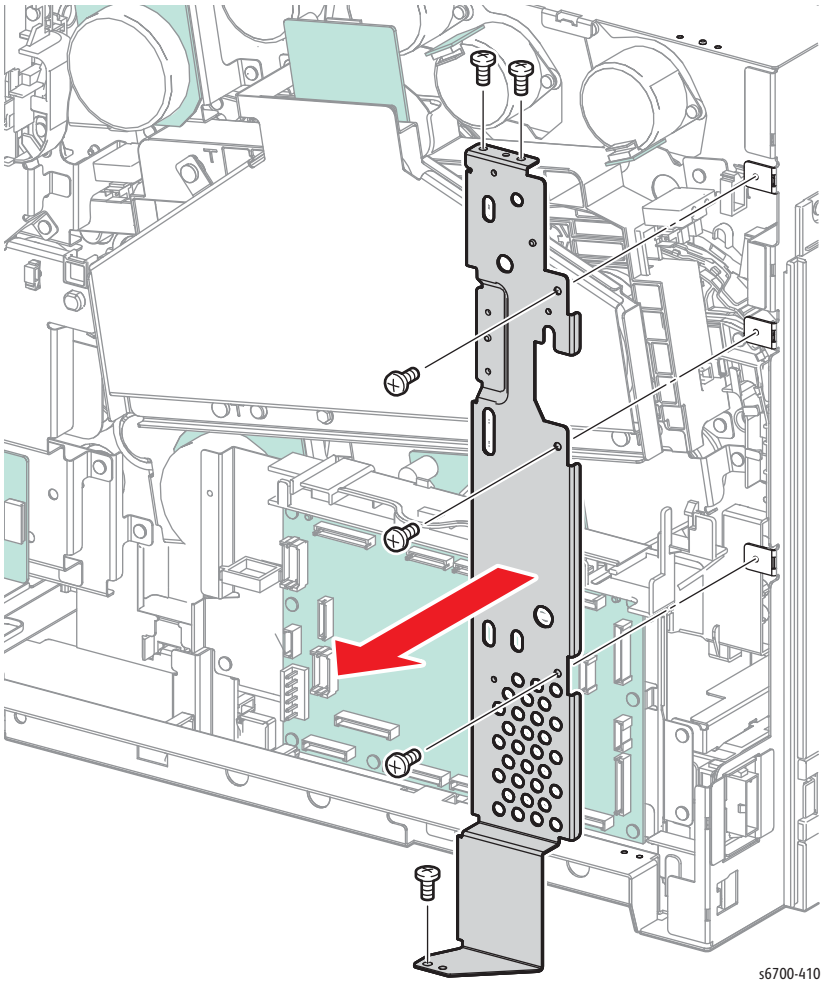
6. Remove the IP Board Cage (page 8-179).
7. Disconnect P/J1, 4, 19, 17, 20, 11, 16 from the MCU Board.



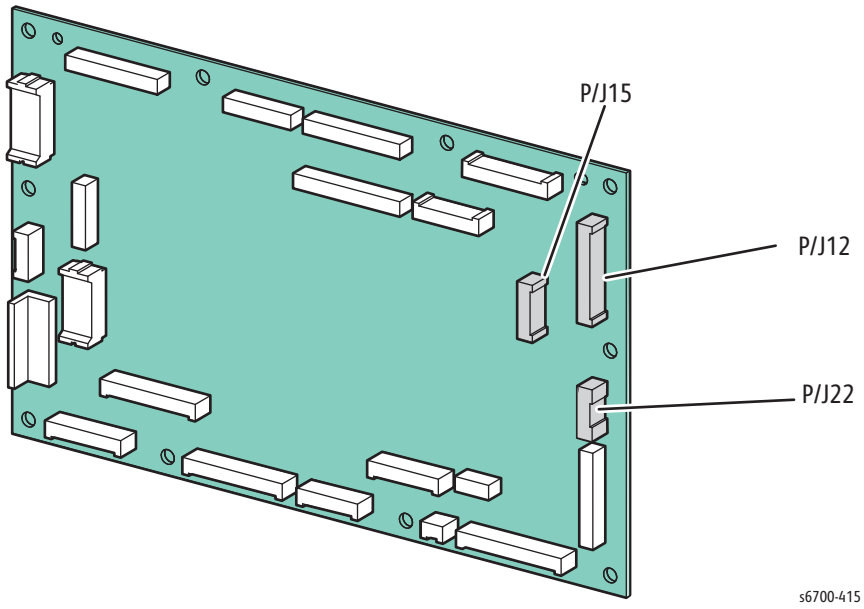

8. Remove the 2 screws that secure the center harness guide and lift the lower end up as shown.



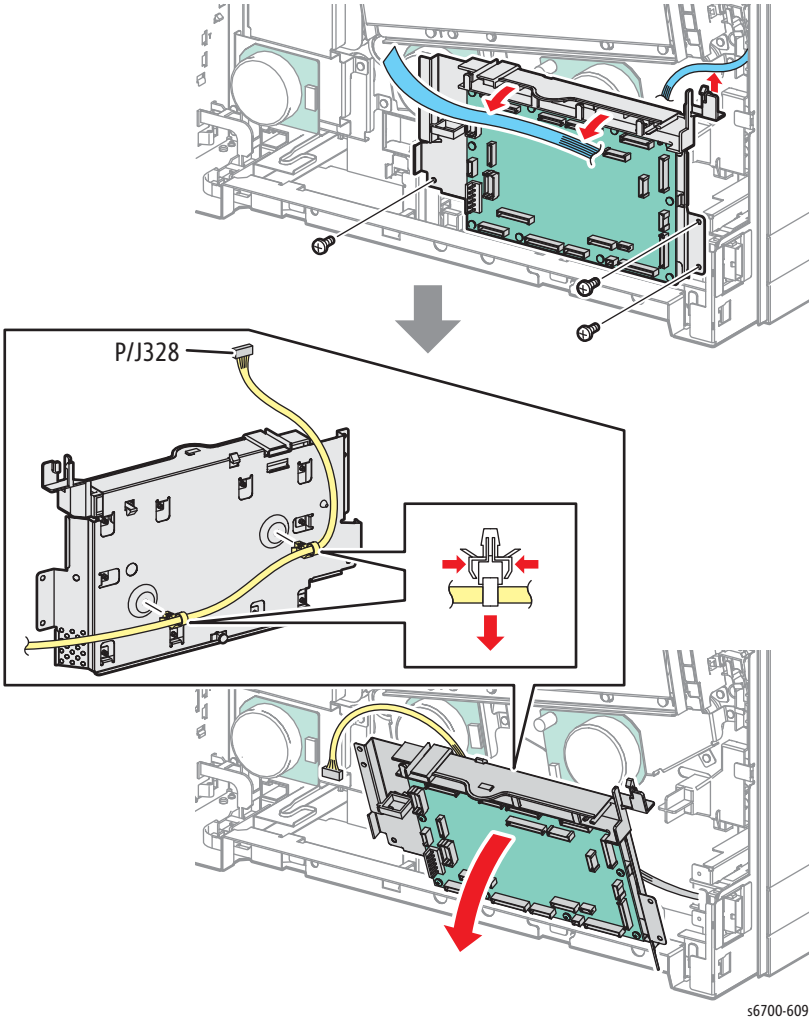
9. Remove 6 screws (silver, 6mm) that secure the IP Board Cage support bracket to the chassis.



10. Disconnect P/J12, 15 and 22 from the MCU Board and release the CRUM/ Dispense and Rear Cover Interlock Harnesses from the MCU Board Cage guide.



11. Open 2 harness clamps at the bottom of the MCU Board and release the harnesses from the clamps.
12. Remove 3 screws (silver, 6mm) that secure the MCU Board Cage to the chassis and tilt the cage forward to remove 2 ties to remove the Video Harness.



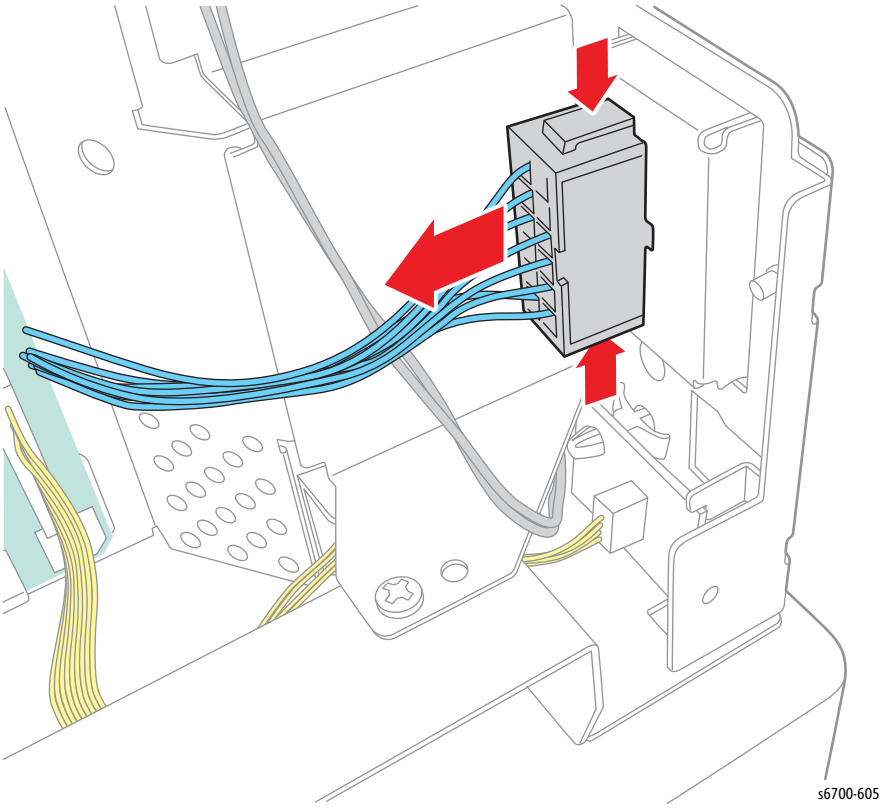
# Rear Cover Interlock Switch

**Note**

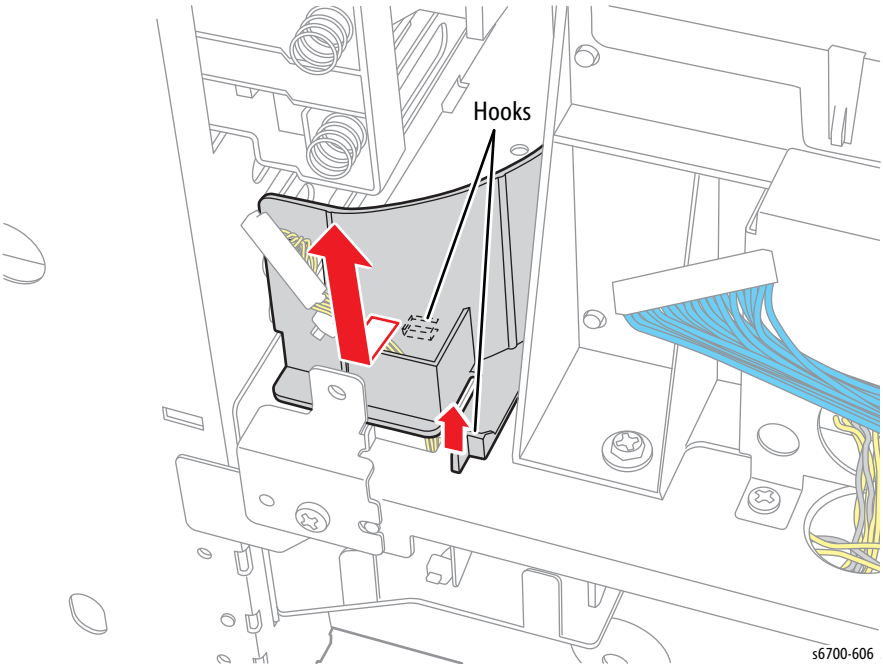
An open Rear Cover Interlock Switch results in a Laser Failure error message on power up.

## PL11.2.2

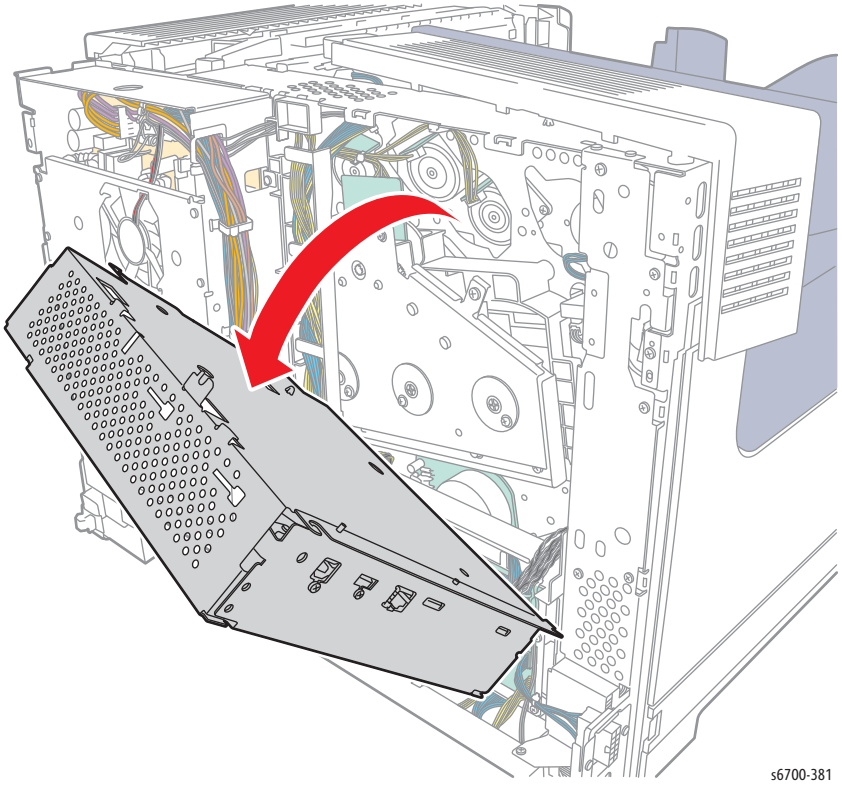
1. Remove the Rear Cover (page 8-31).
2. Remove the Upper and Lower Finisher Docking Covers.
3. Remove the Left Cover (page 8-28).
4. Remove the HVPS (page 8-86).
5. Remove the Finisher Port connector from the chassis.



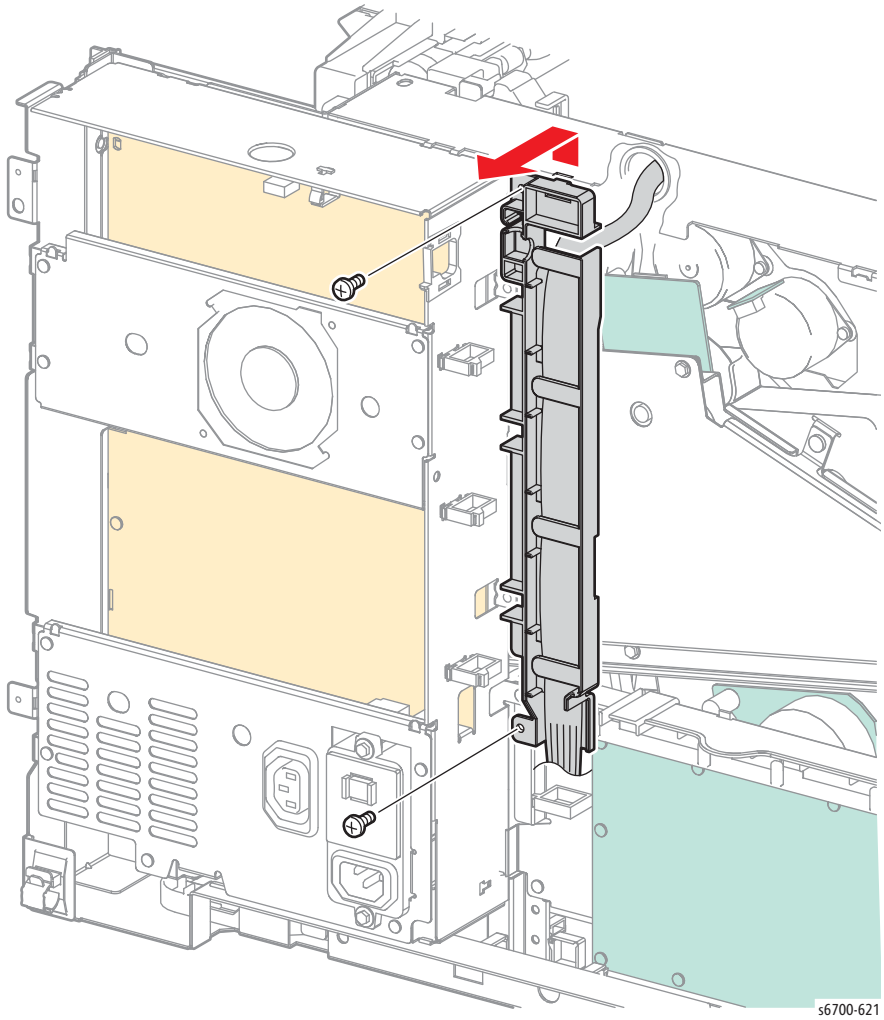
6. Release 2 hooks that secure the Rear Air Guide to the chassis.



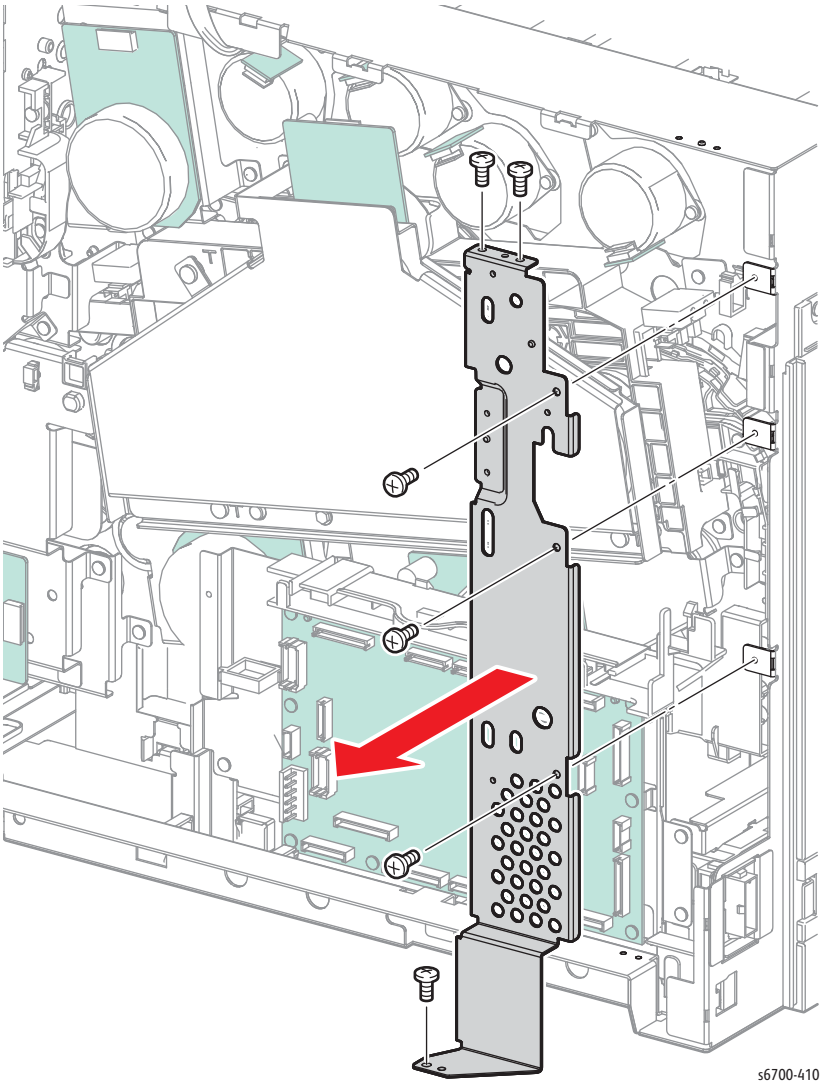

7. Loosen 4 screws and remove 1 screw but do not disconnect the IP Board Cage.
8. Rest the IP Board Cage on the work surface.



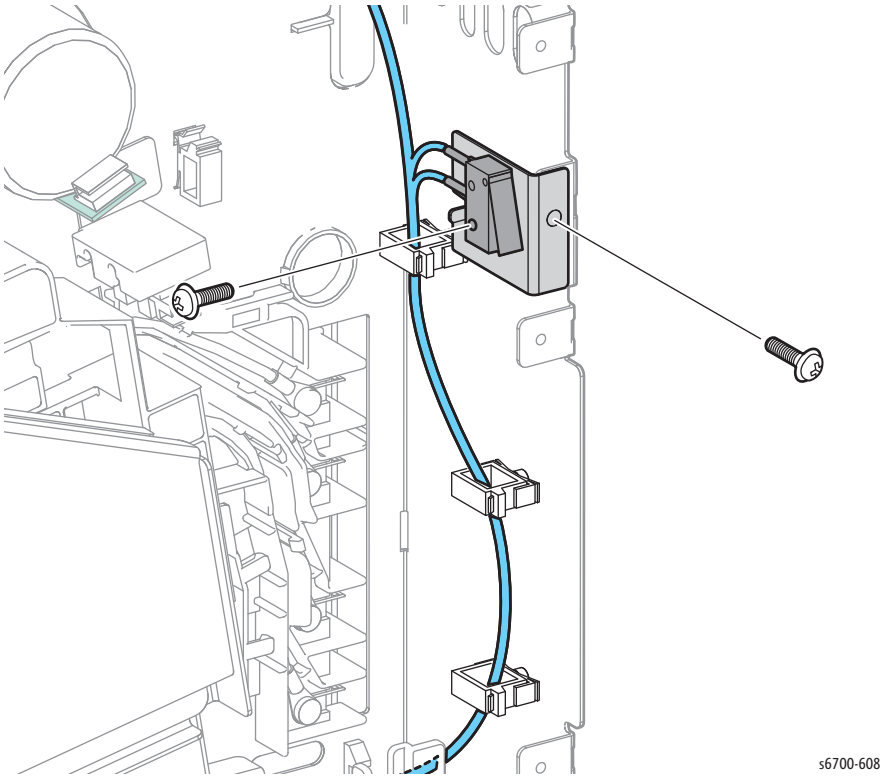
9. Disconnect P/J303 from the LVPS.
10. Remove 2 screws that secure the center harness guide to the chassis and lift to release the hook
11. Release the Rear Cover Interlock harness from the center harness guide, clamps.



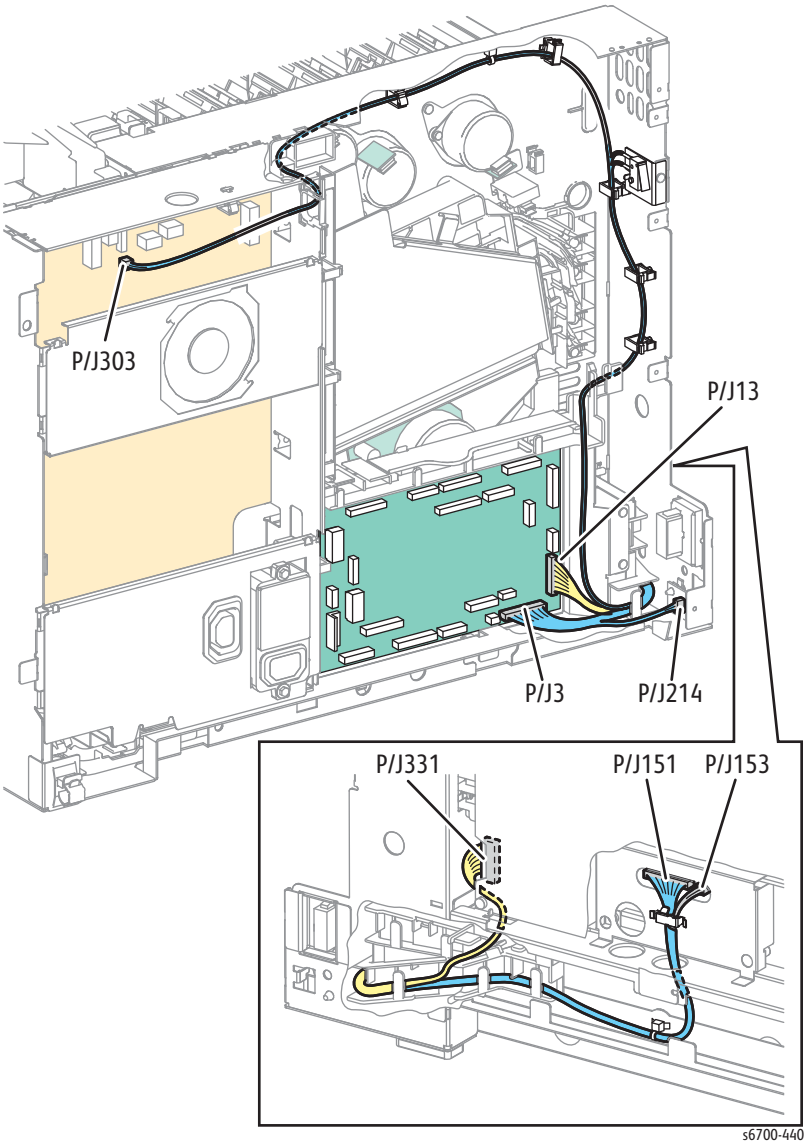
12. Remove 6 screws (silver, 6mm) that secure the IP Board Cage support bracket to the chassis.



13. Remove 1 screw that secures the switch to the bracket.



14. Disconnect P/J151 and 153 from the Laser Unit and release the harness from the clamp and tie.
15. Disconnect P/J3 and 13 from the MCU Board and P/J 214 from the EEPROM Board.
16. Release the interlock harness from tie and guide that route the harness through the chassis.




**Replacement Note**

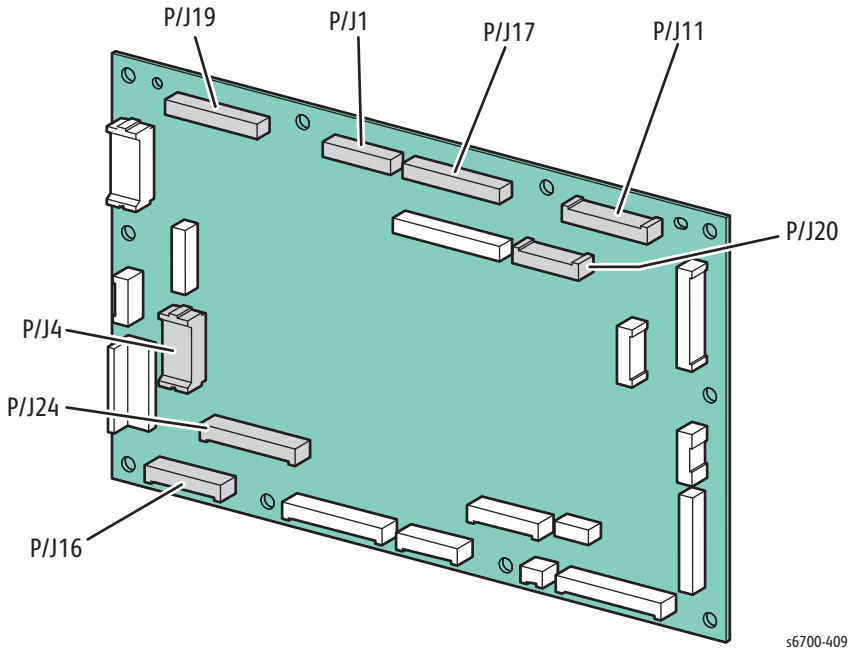
Route the HVPS connection through the hole provided in the chassis and rear air guide.

# Print Engine Drive

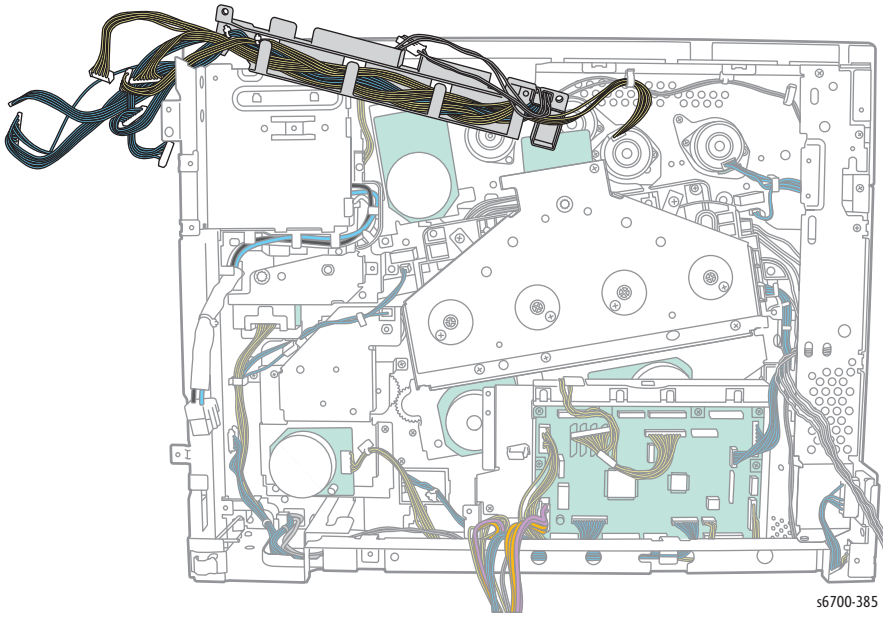
## YMC Developer Drive Assembly

### PL9.2.9

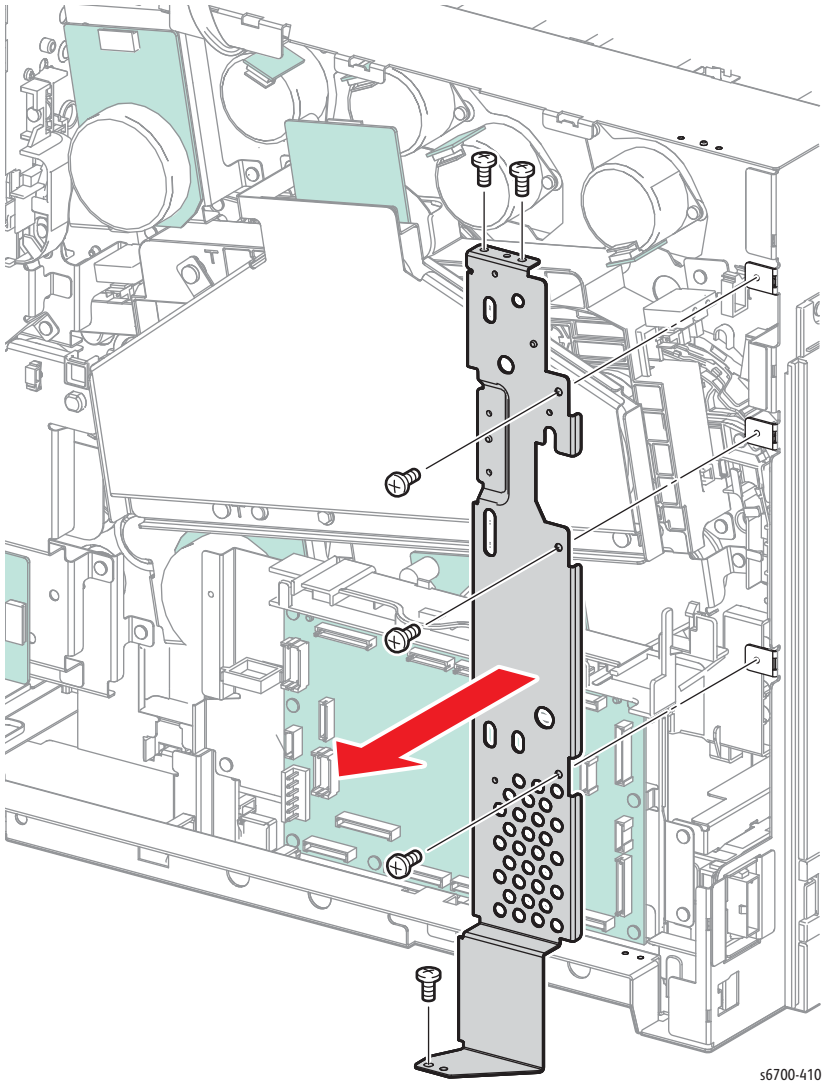
1. Remove the Rear Cover (page 8-31).
2. Remove the IP Board Cage (page 8-179).
3. Remove the LVPS Cage (page 8-182).
4. Disconnect P/J1, 4, 19, 17, 20, 11, 16 from the MCU Board.



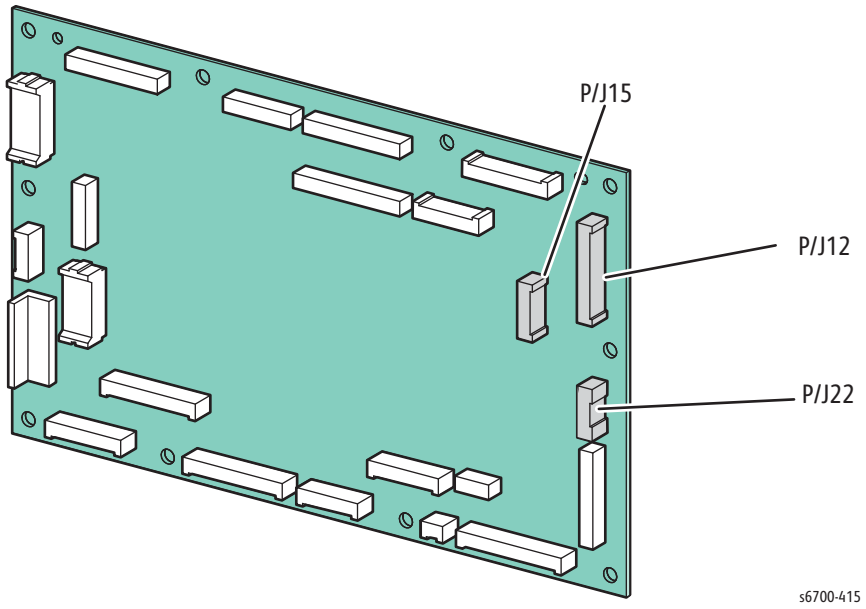

5. Remove the 2 screws that secure the center harness guide and lift the lower end up as shown.



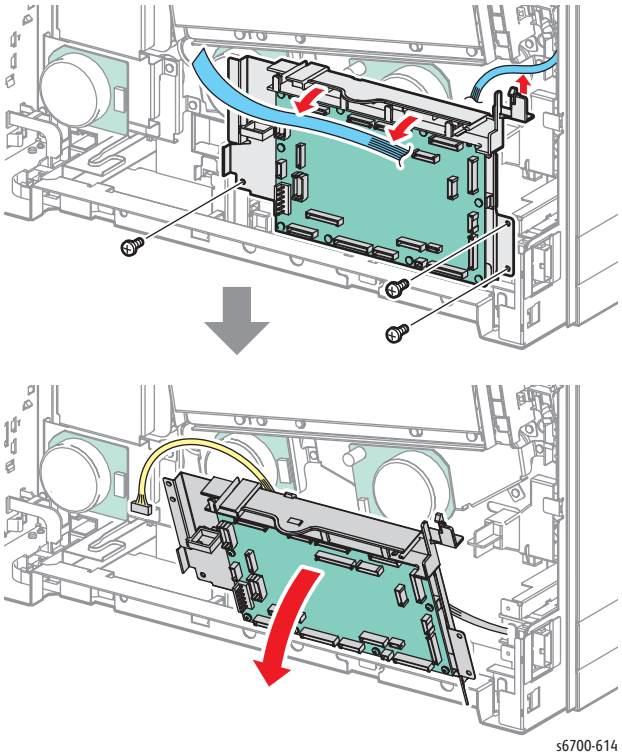
6. Remove 6 screws (silver, 6mm) that secure the IP Board Cage support bracket to the chassis.



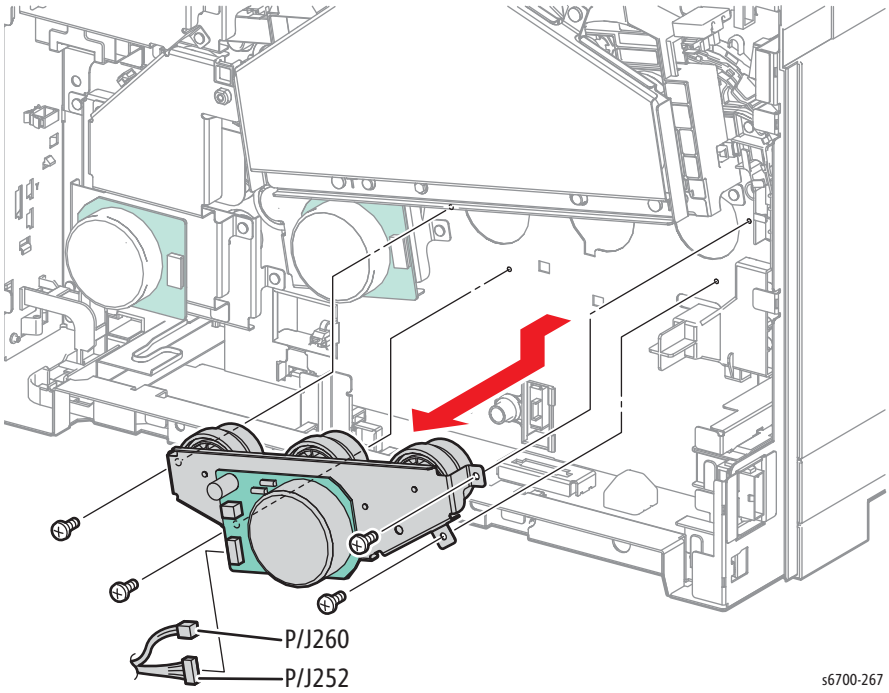
7. Disconnect P/J12, 15 and 22 from the MCU Board and release the CRUM/ Dispense and Rear Cover Interlock Harnesses from the MCU Board Cage guide.
8. Open 2 harness clamps at the bottom of the MCU Board and release the harnesses from the clamps.




8. Remove 3 screws (silver, 6mm) that secure the MCU Board Cage to the chassis and tilt the cage forward.



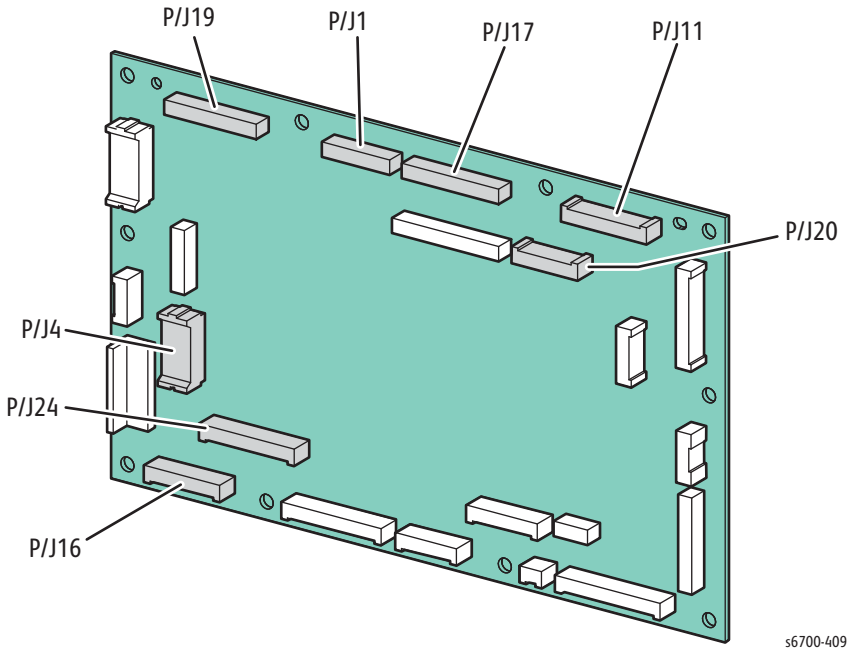
9. Disconnect P/J252 and 260 from the YMC Developer Drive.
10. Remove 4 screws that secure the assembly to the chassis.



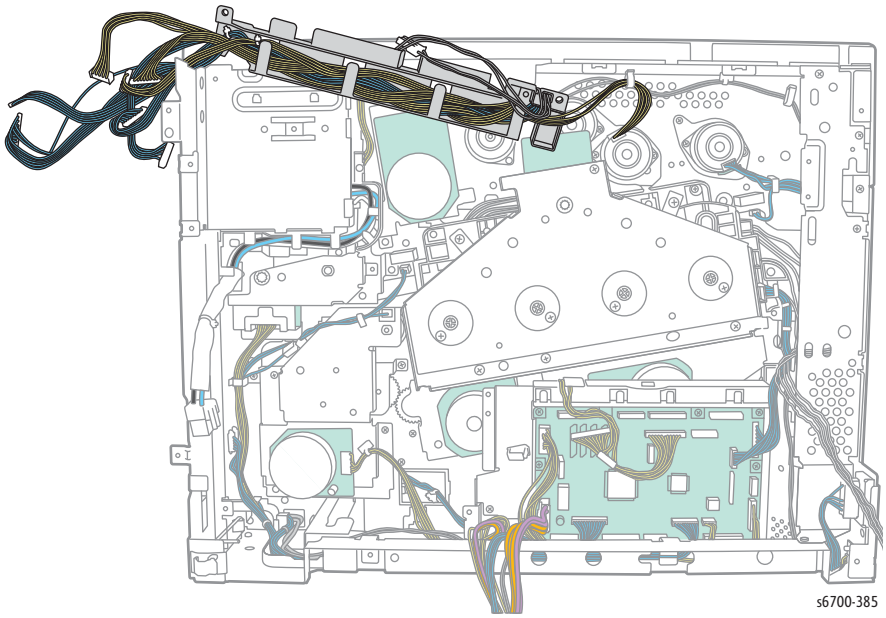
# K Developer Drive Assembly

## PL9.2.10

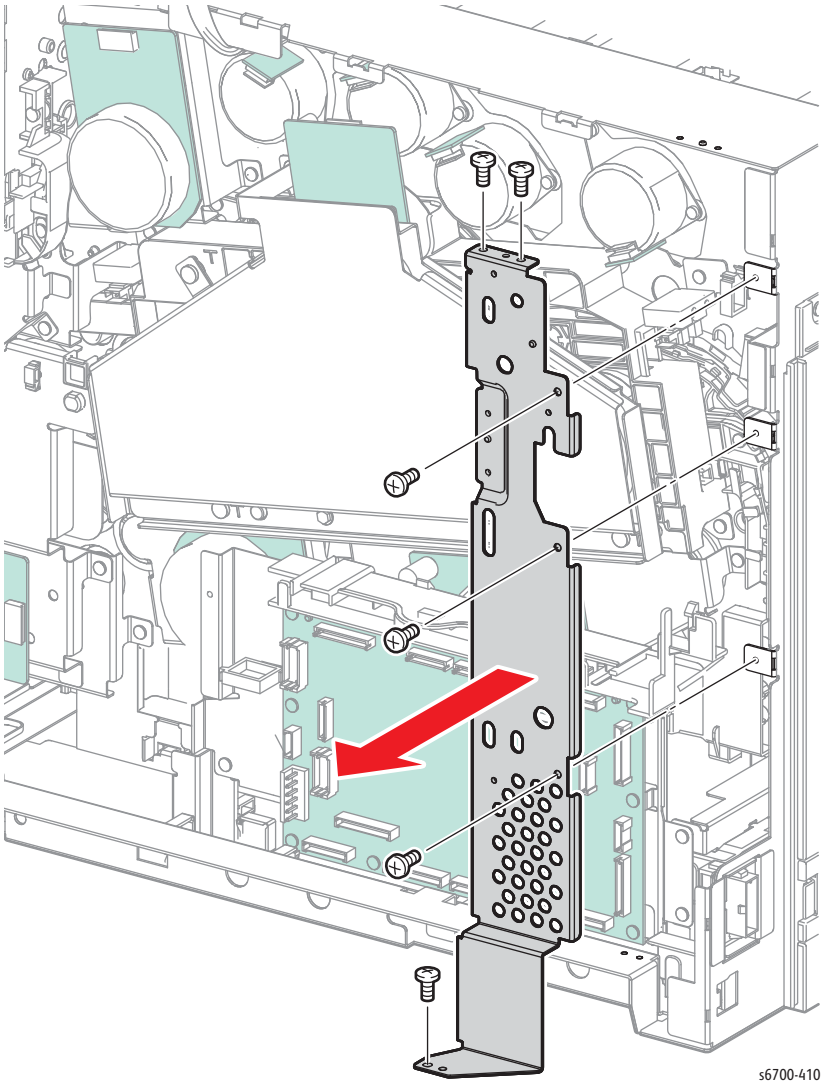
1. Remove the Rear Cover (page 8-31).
2. Remove the IP Board Cage (page 8-179).
3. Remove the LVPS Cage (page 8-182).
4. Disconnect P/J1, 4, 19, 17, 20, 11, 16, and 24 from the MCU Board.



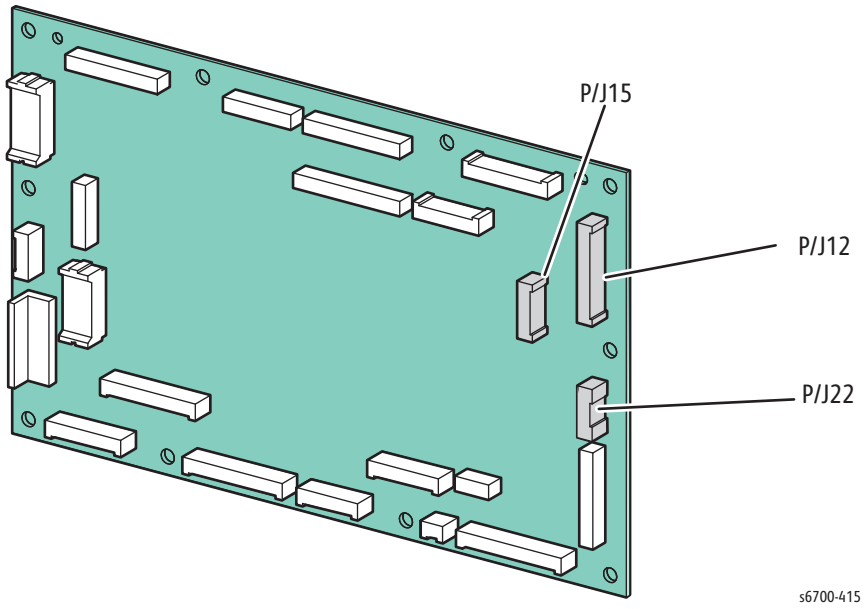

5. Remove the 2 screws that secure the center harness guide and lift the lower end up as shown.



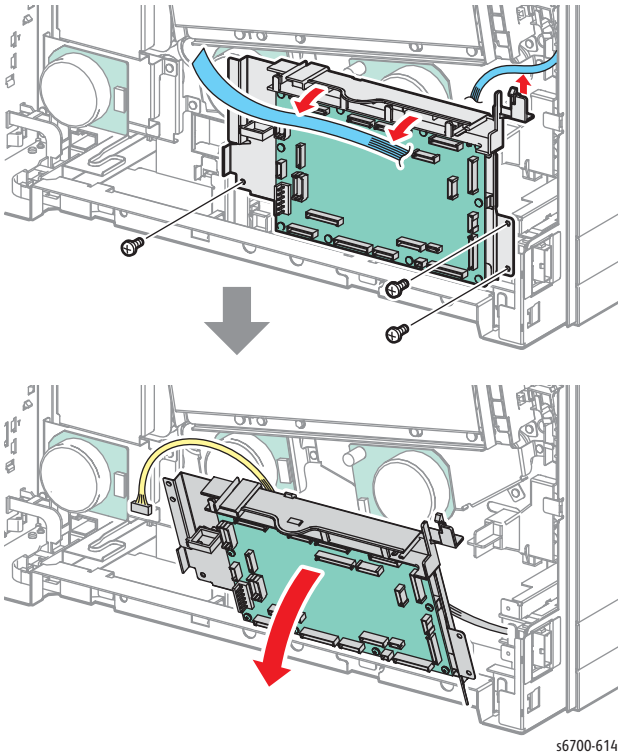
6. Remove 6 screws (silver, 6mm) that secure the IP Board Cage support bracket to the chassis.



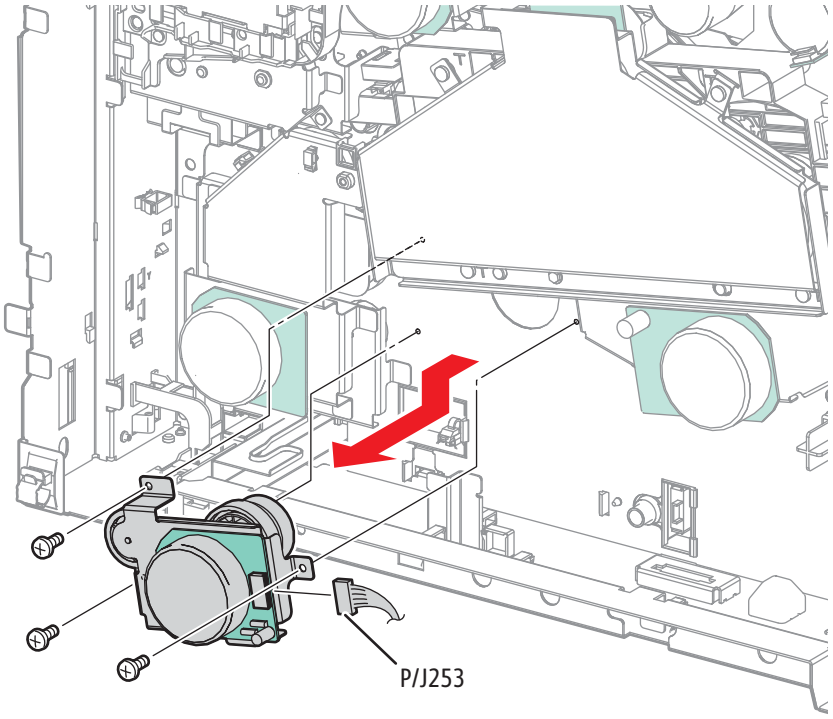
7. Disconnect P/J12, 15 and 22 from the MCU Board and release the CRUM/ Dispense and Rear Cover Interlock Harnesses from the MCU Board Cage guide.
8. Open 2 harness clamps at the bottom of the MCU Board and release the harnesses from the clamps.




9. Remove 3 screws (silver, 6mm) that secure the MCU Board Cage to the chassis and tilt the cage forward



10. Disconnect P/J253 from the K Developer Drive.
11. Remove 3 screws that secure the assembly to the chassis.

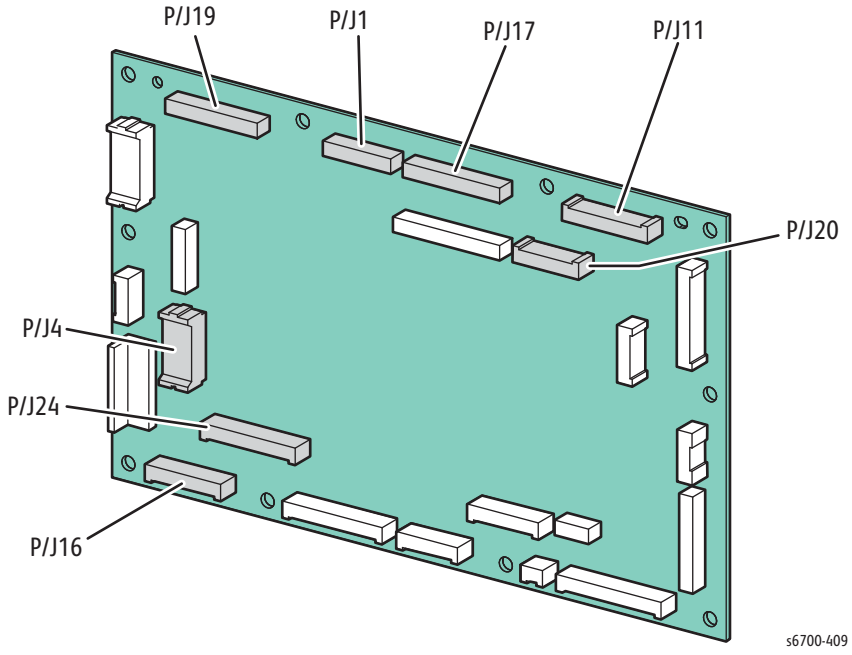



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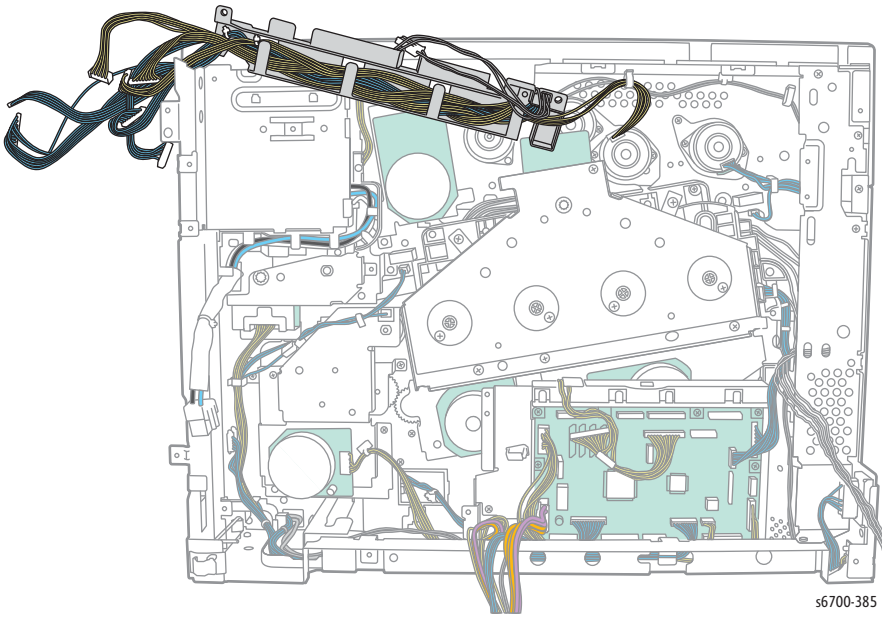
## Imaging Unit Link Drive Kit

### PL9.2.98

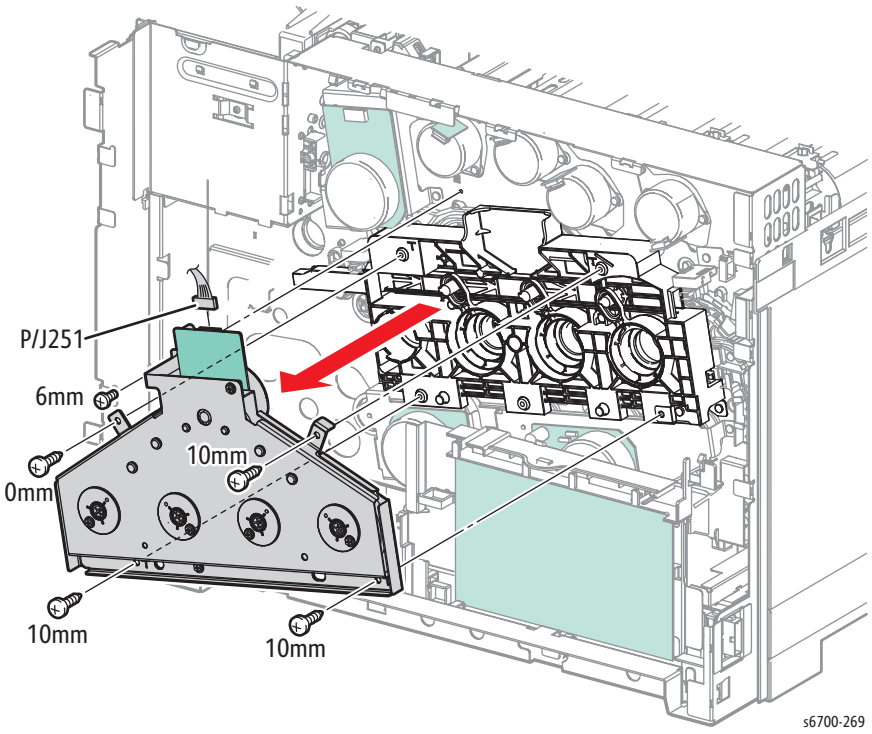
1. Remove the Rear Cover (page 8-31).
2. Remove the IP Board Cage (page 8-179).
3. Remove the LVPS Cage (page 8-182).
4. Disconnect P/J1, 4, 19, 17, 20, 11, 16 and 24 from the MCU Board.



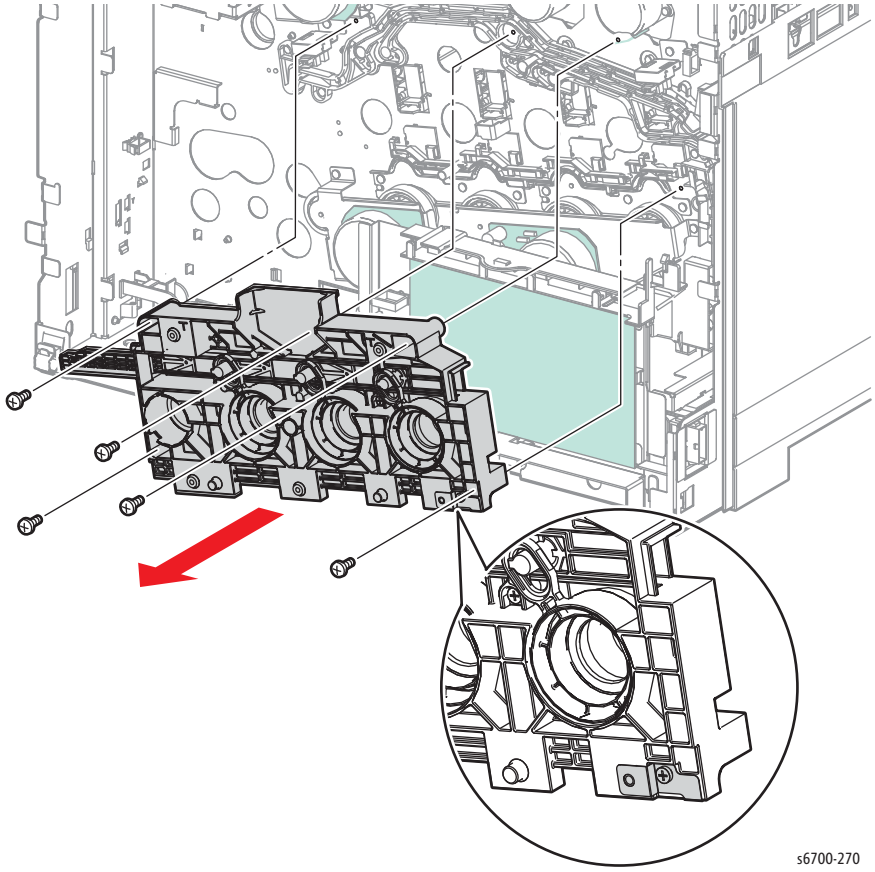

5. Remove the 2 screws that secure the center harness guide and lift the lower end up as shown.



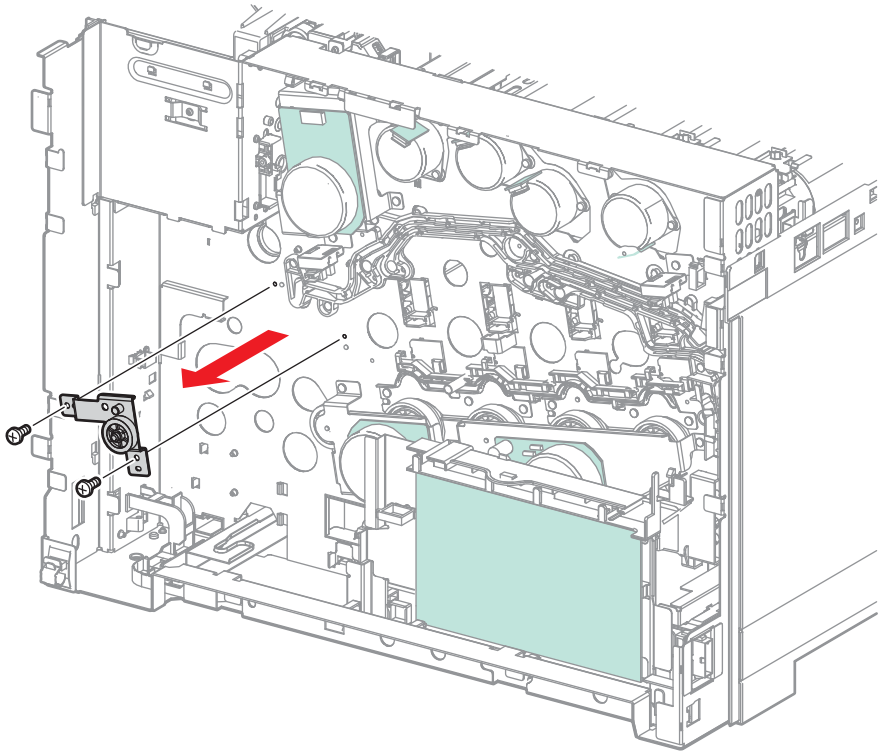
6. Remove 4 (silver, 10mm) and 1 (silver, 6mm) screws that secure the Imaging Unit Drive Assembly to the Link Guide.
7. Disconnect P/J251 to remove the Imaging Unit Drive Assembly.




8. Remove 5 screws (silver 6mm) that secure the Link Assembly to the chassis.



9. Remove, but do not disconnect the Transfer Belt Drive Assembly (page 8-135).
10. Remove 2 screws (silver, 6mm) that secure the rack drive to the chassis.



s6700-622

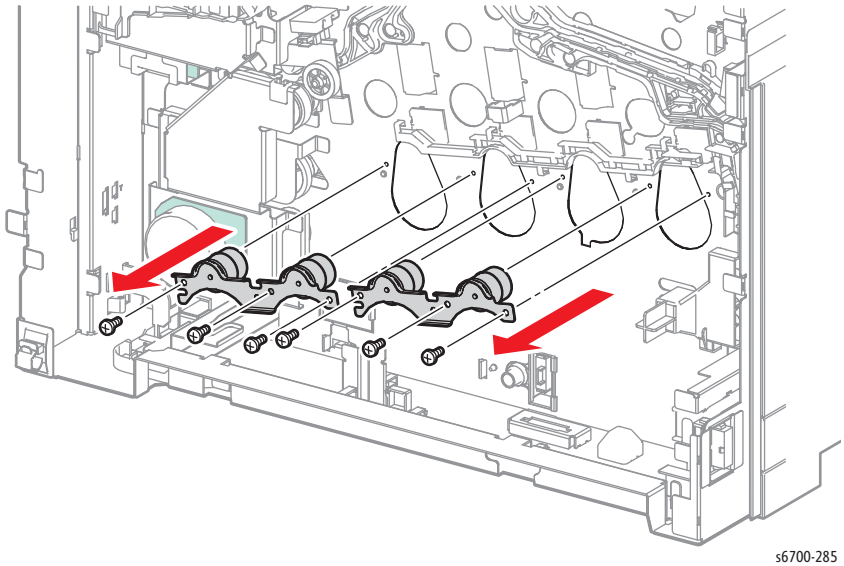
**Replacement Note**

Check the Link Assembly ground strap is captured by the screw in the lower right corner.

## Drive Gear Kit

### PL9.2.99

1. Remove Rear Cover (page 8-31).
2. Remove the IP Board Cage (page 8-179).
3. Remove the LVPS Cage (page 8-182).
4. Remove the CMY Developer Drive Assembly (page 8-167).
5. Remove the K Developer Drive Assembly (page 8-171).
6. Remove the Imaging Unit Link Drive Kit (page 8-175).
7. Remove 6 Screws (silver, 6mm) that secure the 2 Drive Gears to the chassis.



s6700-285

# Print Engine Chassis

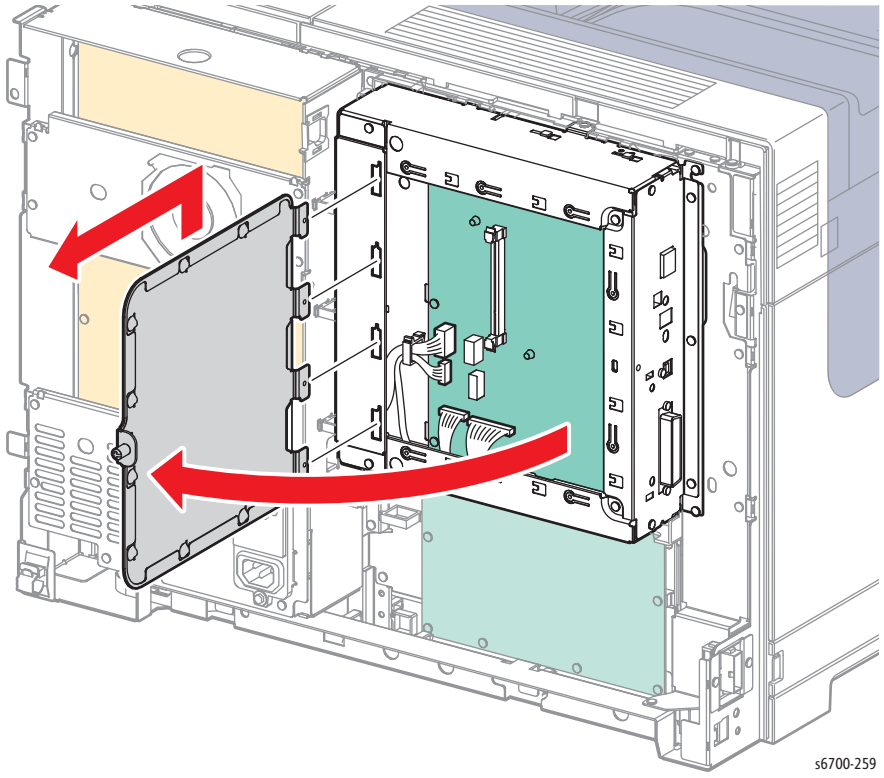
## IP Cage

### PL10.1.1

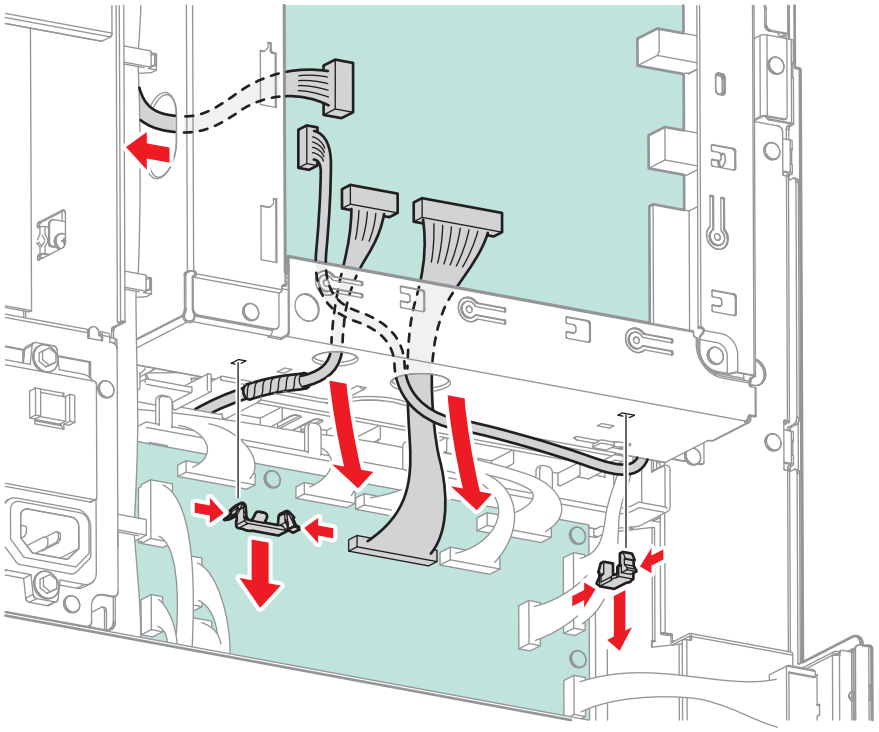
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove the Rear Cover (page 8-31).
2. Loosen the knurled screw, and open the IP cage cover.
3. Lift the IP cage cover slightly to release the 4 tabs and remove the cover.
4. Disconnect all IP Board connections.

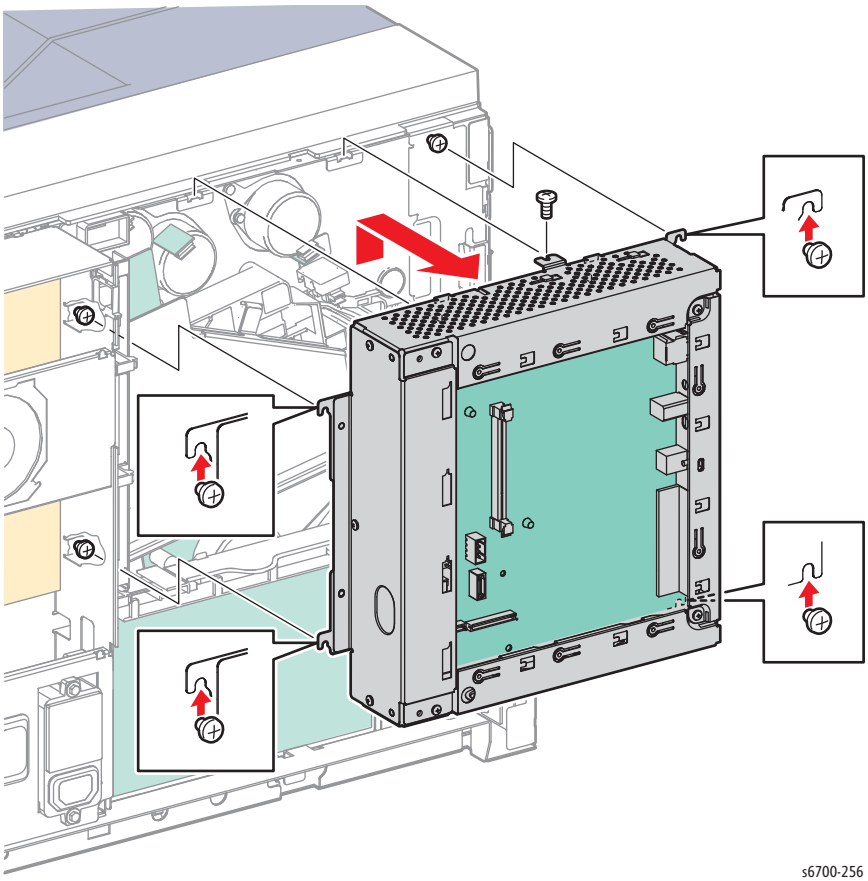


5. Release the Control Panel and ESS PWR Harnesses from the clamp.
6. Release the hooks that secure the clamps and remove the clamps.
7. Release the Control Panel Harness from the clamp.
8. Route all the harnesses through the hole in the IP Cage to the outside.



s6700-257

9. Remove 1 and loosen 4 screws (silver, 6mm) that secure the IP Cage to the chassis.
10. Lift the cage slightly to release 2 hooks and remove the IP Cage.



s6700-256

# LVPS Cage

## PL10.2.1

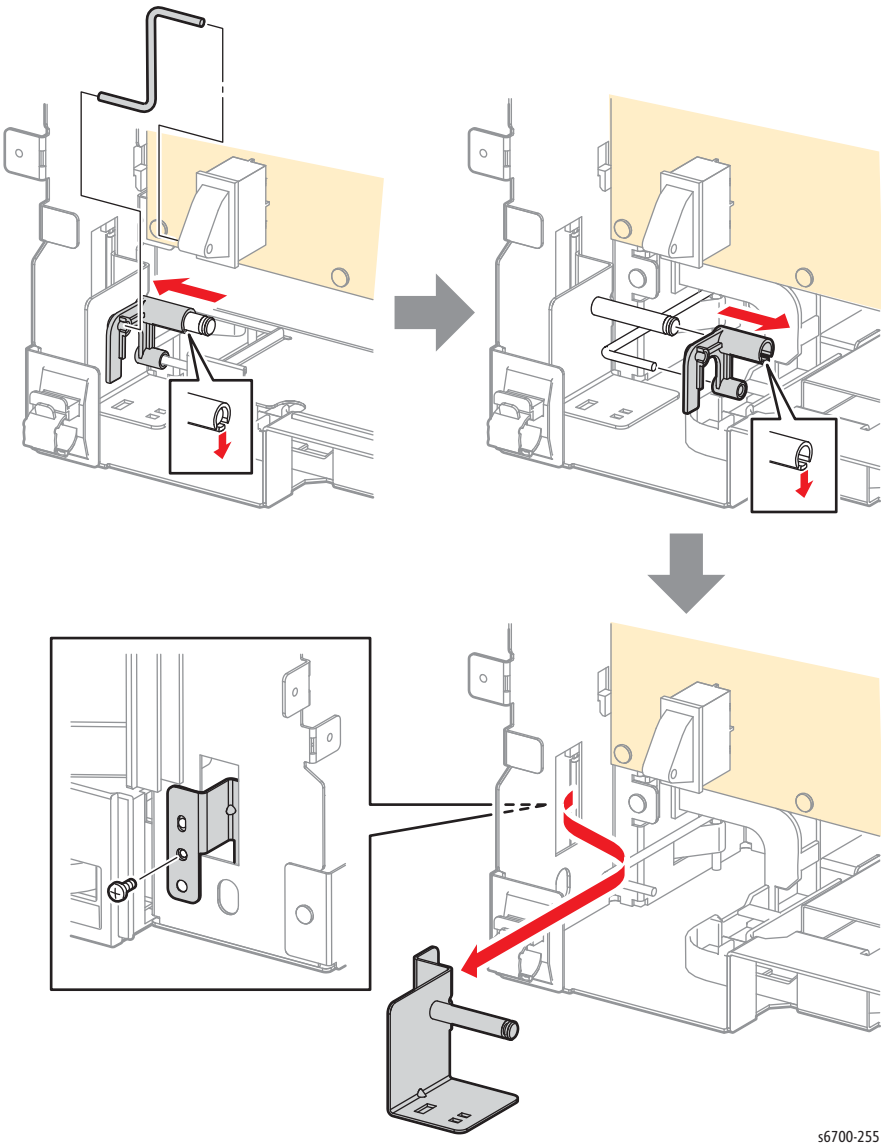
**Warning**

Allow the Fuser to cool before servicing the printer.

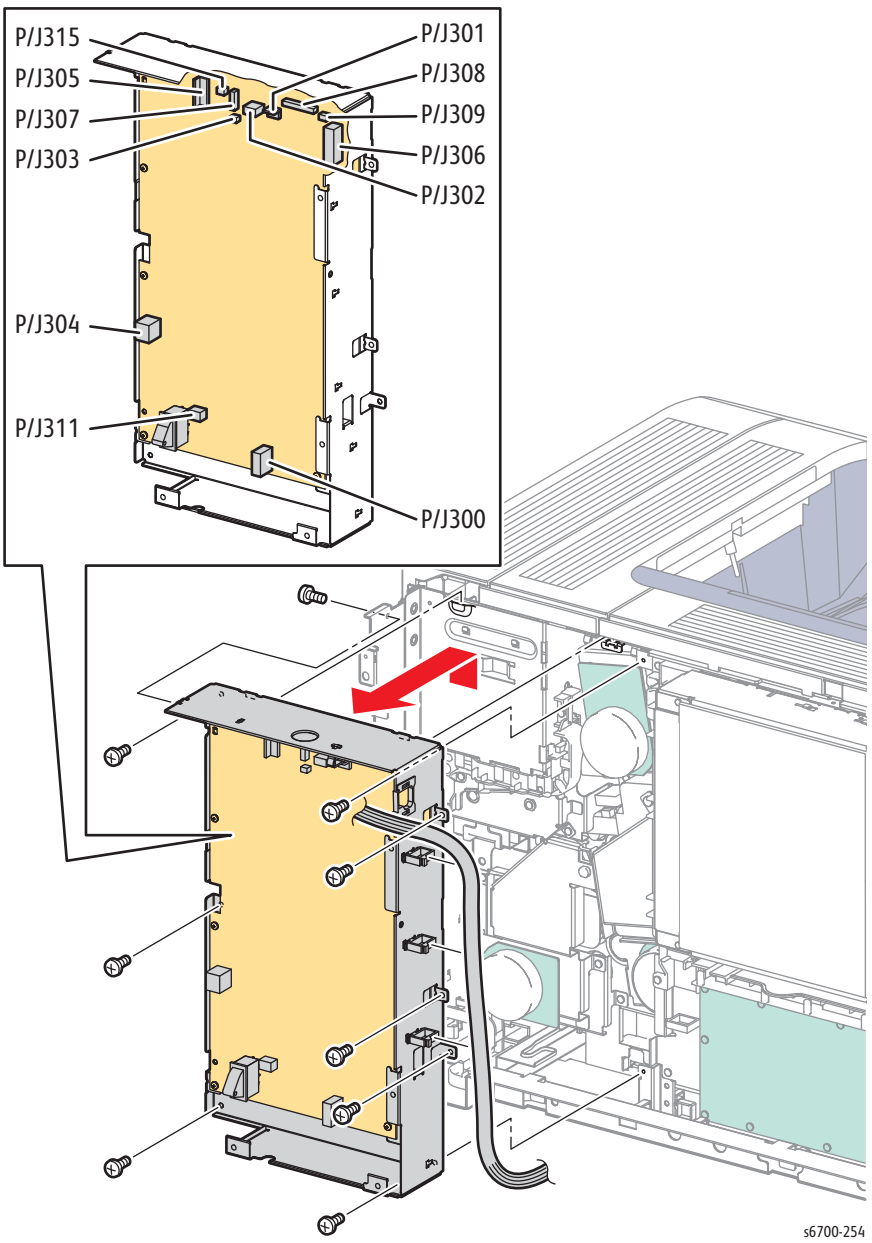
**Caution**

Cover the Imaging Units to prevent exposure to light.

1. Remove the Rear Cover (page 8-31).
2. Remove the LVPS Fan (page 8-153)
3. Remove the Power Panel (page 8-154).
4. Remove the rear bracket and power switch link assembly.



6. Disconnect all LVPS connections and release all harnesses from all clamps in the LVPS Cage.
7. Remove 9 screws (silver, 6mm) that secure the LVPS Cage to the chassis.
8. Lift the cage slightly to release 2 hooks and remove the cage.



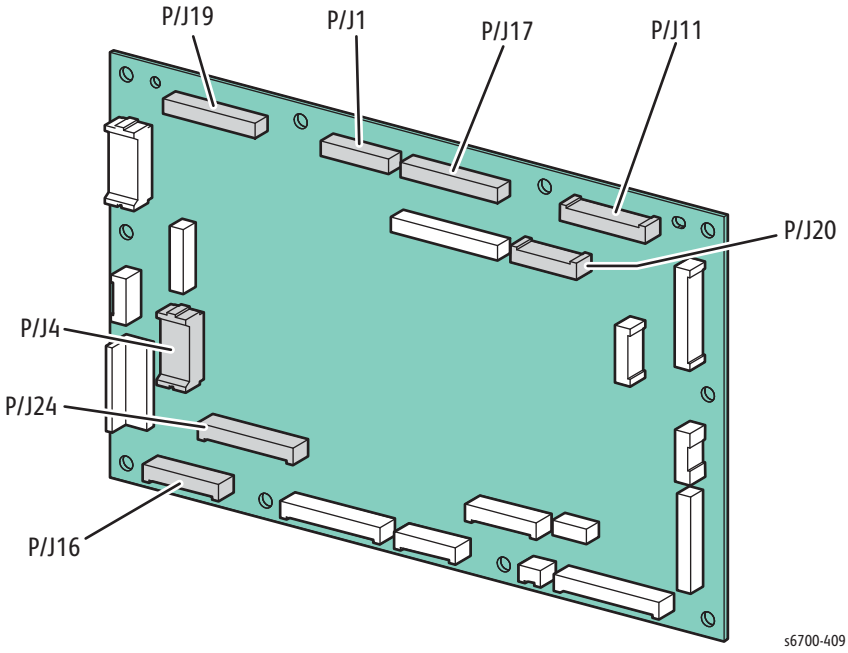
# MCU Bracket

## PL10.2.15

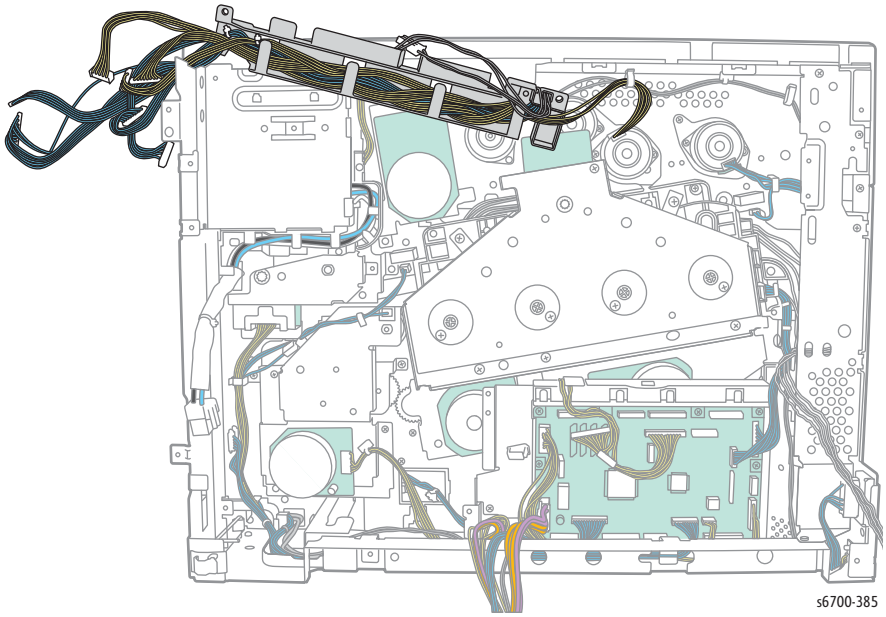
**Warning**

Allow the Fuser to cool before servicing the printer.

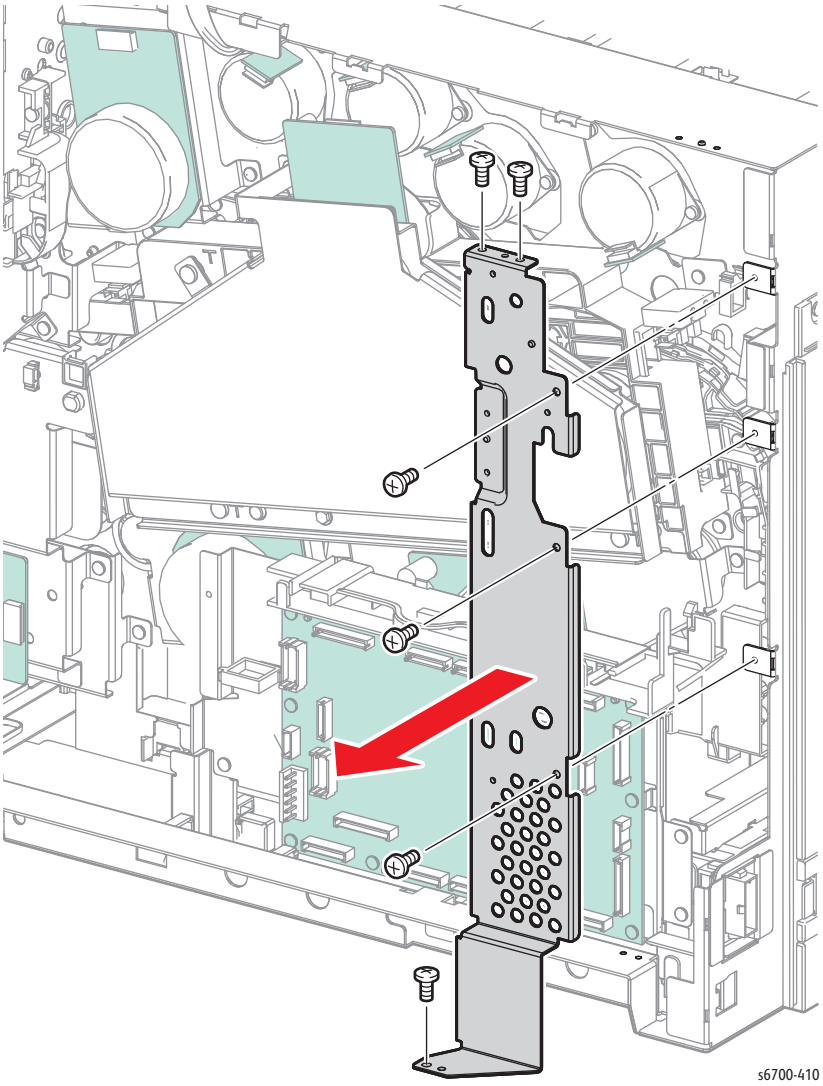
1. Remove the Rear Cover (page 8-31).
2. Remove the IP Cage (page 8-179).
3. Disconnect P/J1, 4, 19, 17, 20, 11, and 16 from the MCU Board.



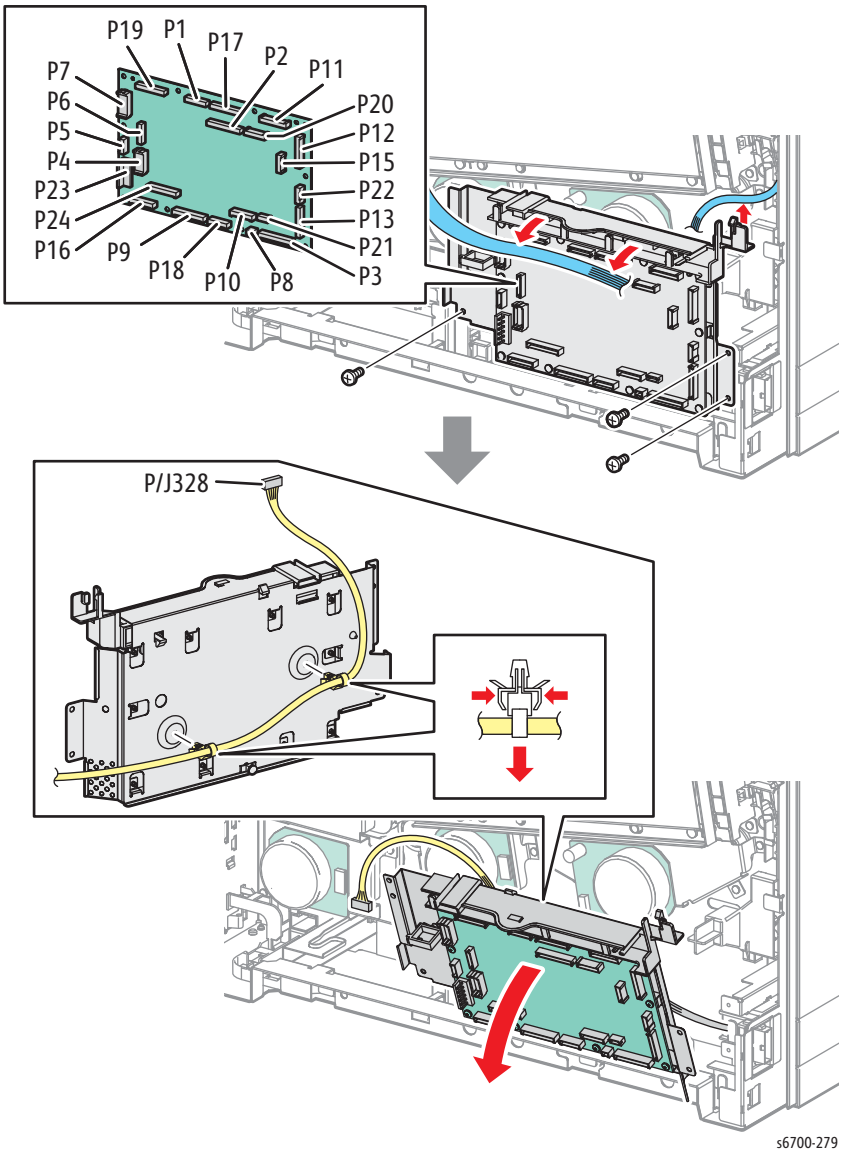

4. Remove the 2 screws that secure the center harness guide and lift the lower end up as shown.



5. Remove 6 screws (silver, 6mm) that secure the IP Board Cage support bracket to the chassis.



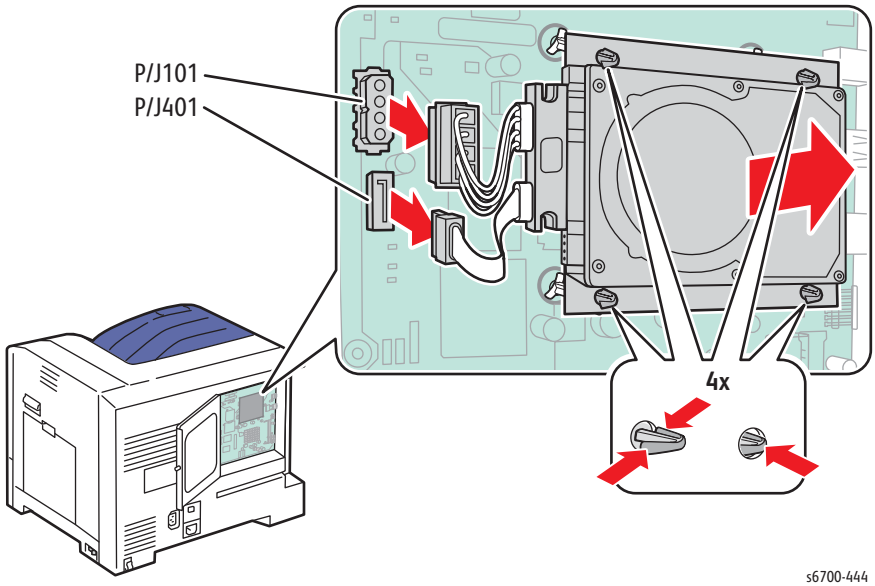
6. Disconnect all connections to the MCU Board and release all harnesses from the clamps and MCU harness guides.
7. Remove 3 screws (silver, 6mm) that secure the MCU Cage to the chassis.
8. Remove 2 clamps that secure the video harness from the backside of the MCU Cage to remove the cage from the printer.



## Hard Drive

### PL10.1.23

1. Loosen the knurled screw and open the IP Cage Cover.
2. Disconnect P/J11 and P/J12 from the IP Board.
3. Release the pins that secure the Hard Drive to the IP Board Cage.

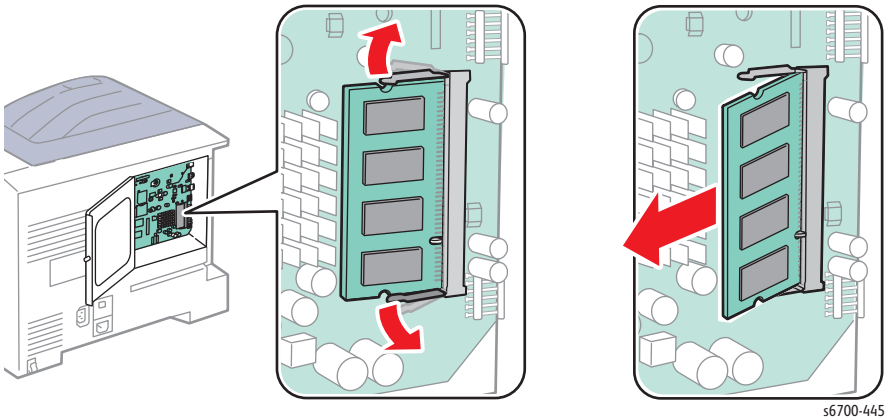



s6700-444

## RAM Memory

### PL10.1.24

1. Loosen the knurled screw and open the IP Cage Cover.
2. Push the release latches of the socket to release the RAM Memory and remove.



s6700-445

# 550-Sheet Feeder

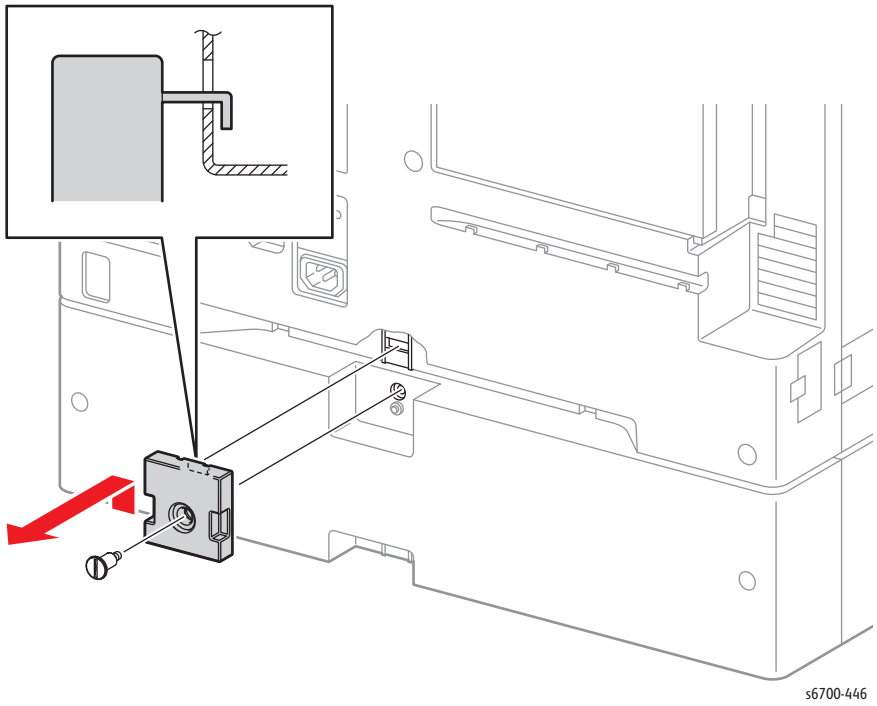
## 550-Sheet Feeder Assembly

### PL12.1.2

**Warning**

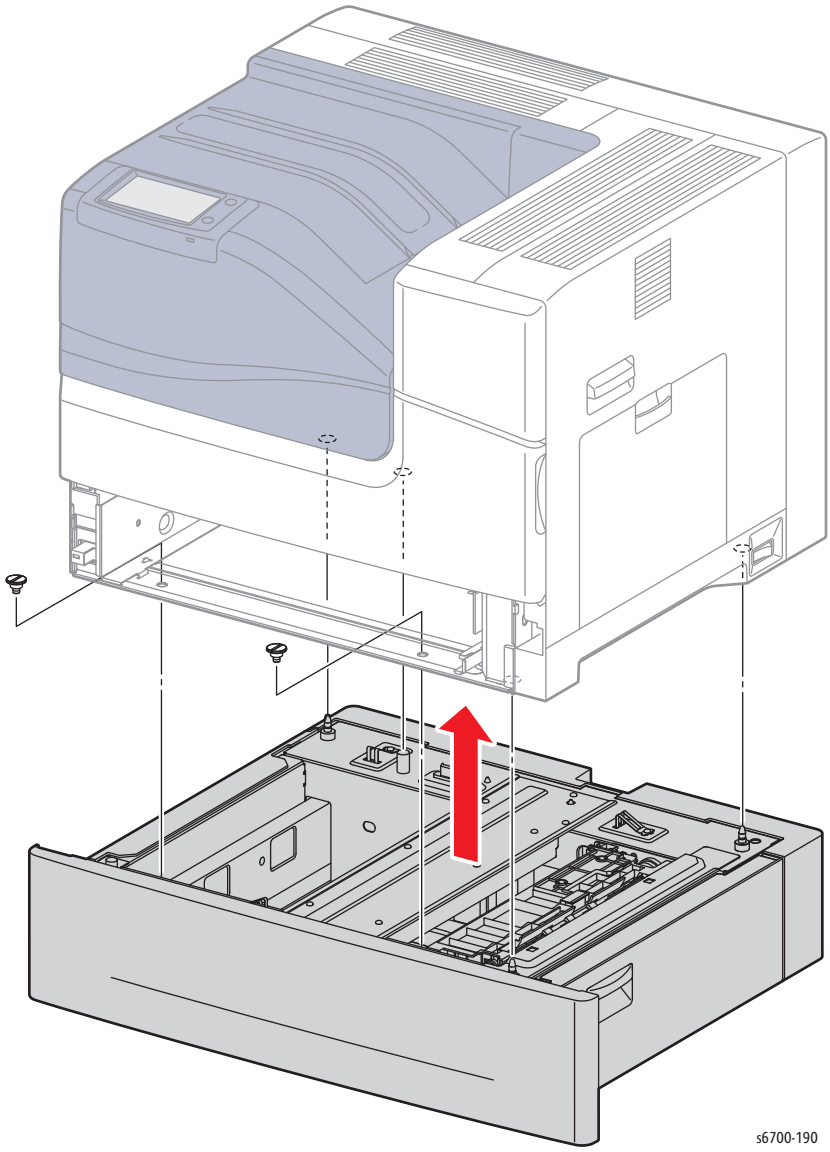
Lifting the printer from the Feeder requires 3 people.

1. Remove the Tray.
2. Remove the rear lock screw that secures the lock plate to the Feeder.
3. Release the hook from the hole and remove the lock plate from the Feeder.



s6700-446

4. Remove the two locking screws that secure the Feeder to the printer.
5. Lift the printer to separate it from the Feeder.



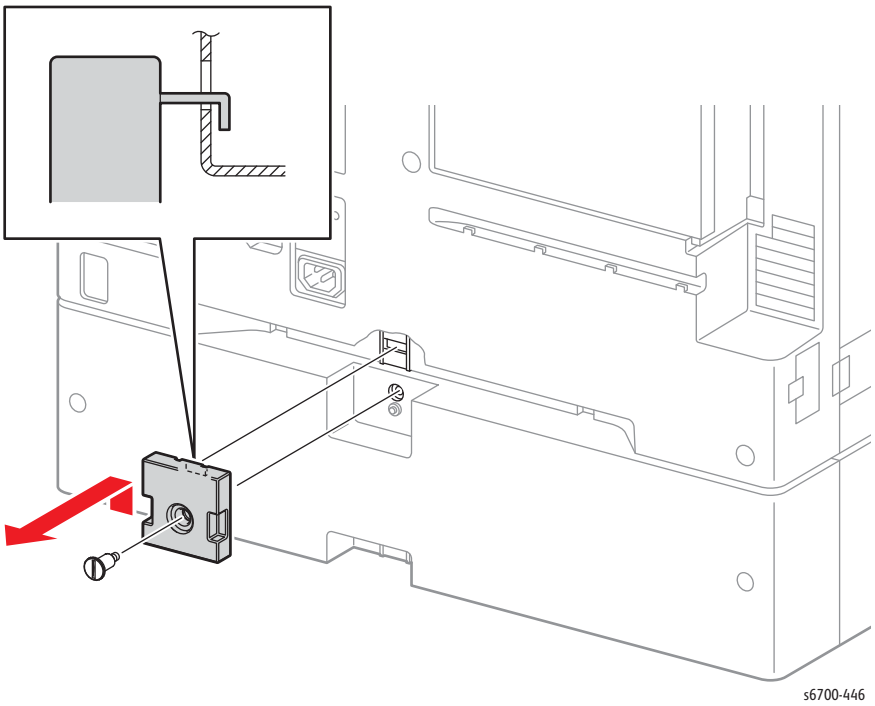

**Replacement Note**

Align the option connections before releasing the printer onto the Option Feeder Assembly.

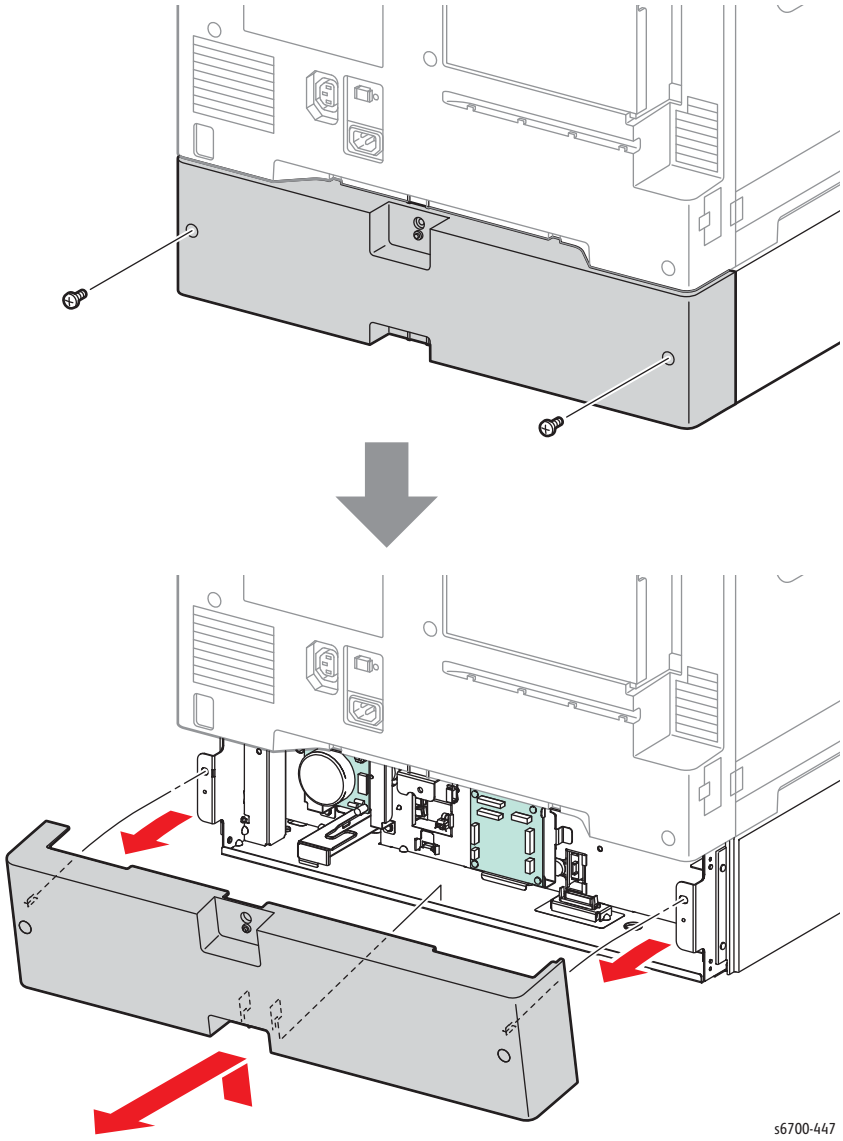
## Rear Cover

### PL12.1.4

1. Remove the rear lock screw that secures the lock plate to the Feeder.
2. Release the hook from the hole and remove the lock plate from the Feeder.



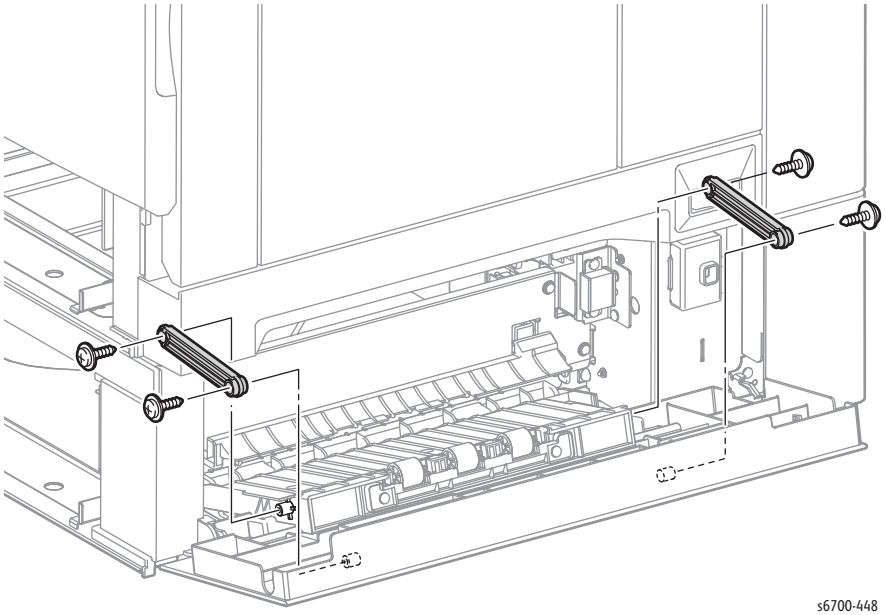
3. Remove 2 screws (silver, 6mm and release 2 hooks that secure the rear cover to the Feeder Assy.



## Feed Chute Assembly

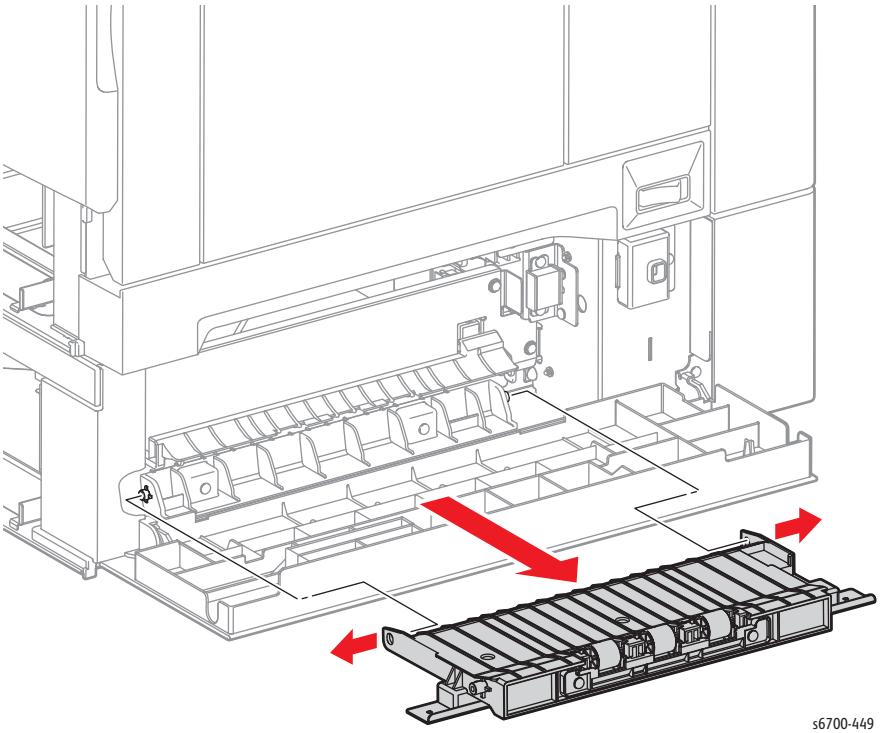
### PL12.1.7

1. Open the Right Door.
2. Remove 4 screws (silver, tapping, flanged, 8mm) that secure the chute arms.



s6700-448

3. Release the 2 bosses and remove the Upper Chute Assy from the Feeder.

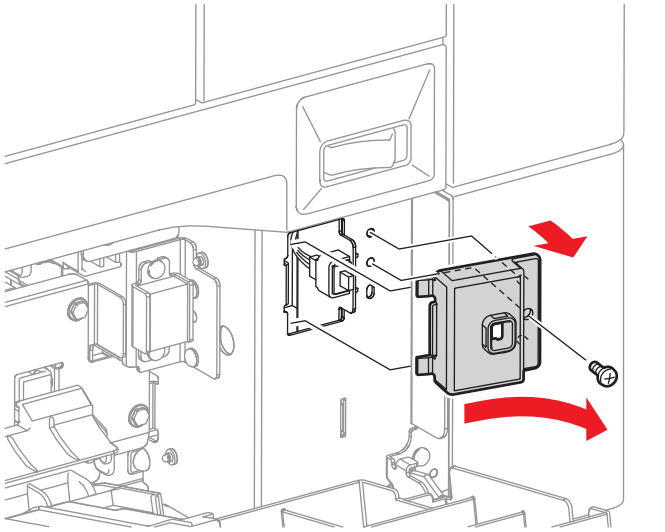


s6700-449

## Right Door Open Switch

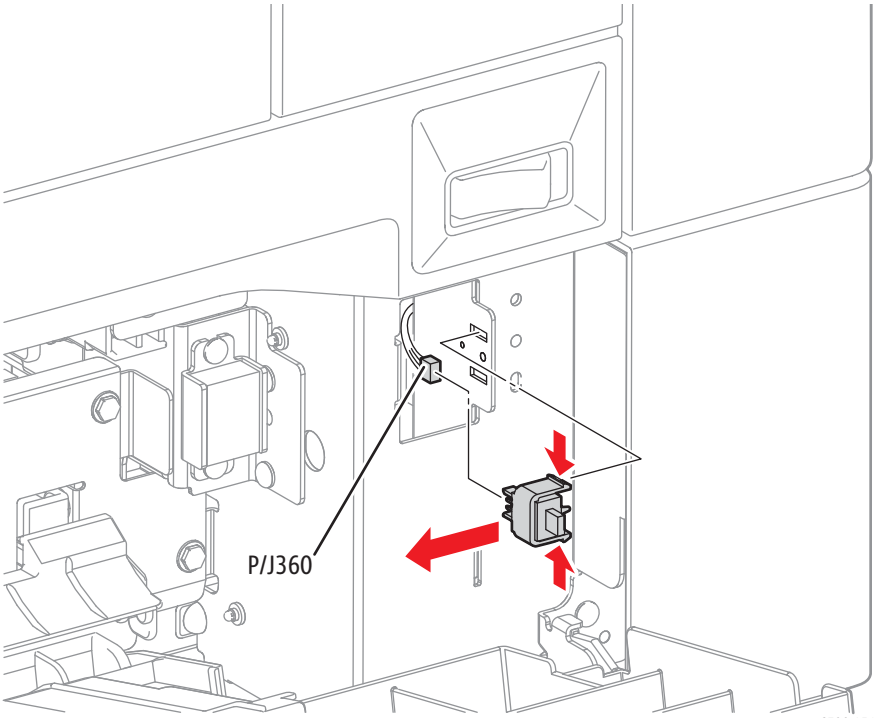
### PL12.2.2

1. Open the right door.
2. Remove 1 screw (silver, 6mm) that secures the bracket to the Option Feeder.
3. Release 2 bosses and the hook to remove the bracket.



s6700-450

4. Remove the switch by releasing 2 hooks and disconnect P/J360.

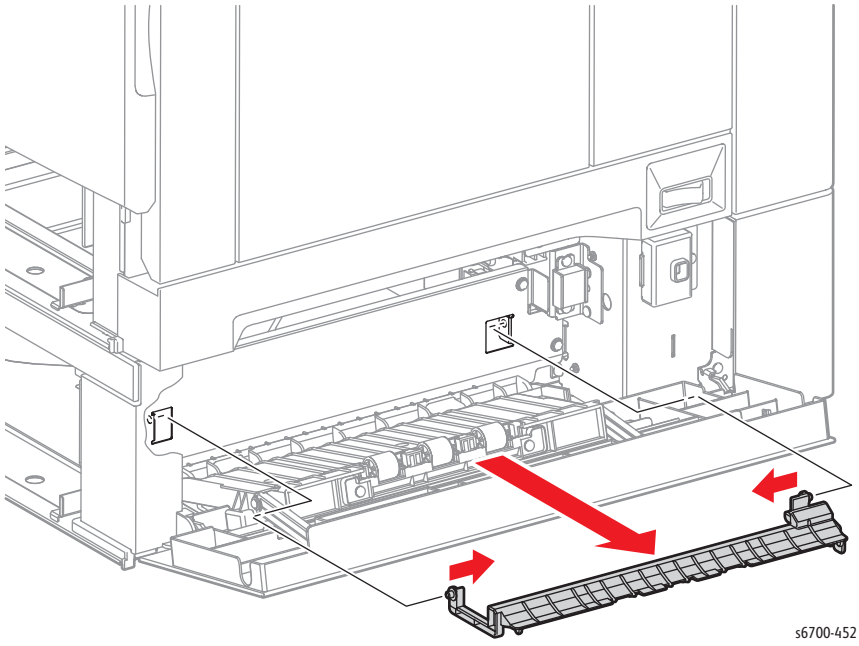



s6700-451

## Turn Chute

### PL12.2.5

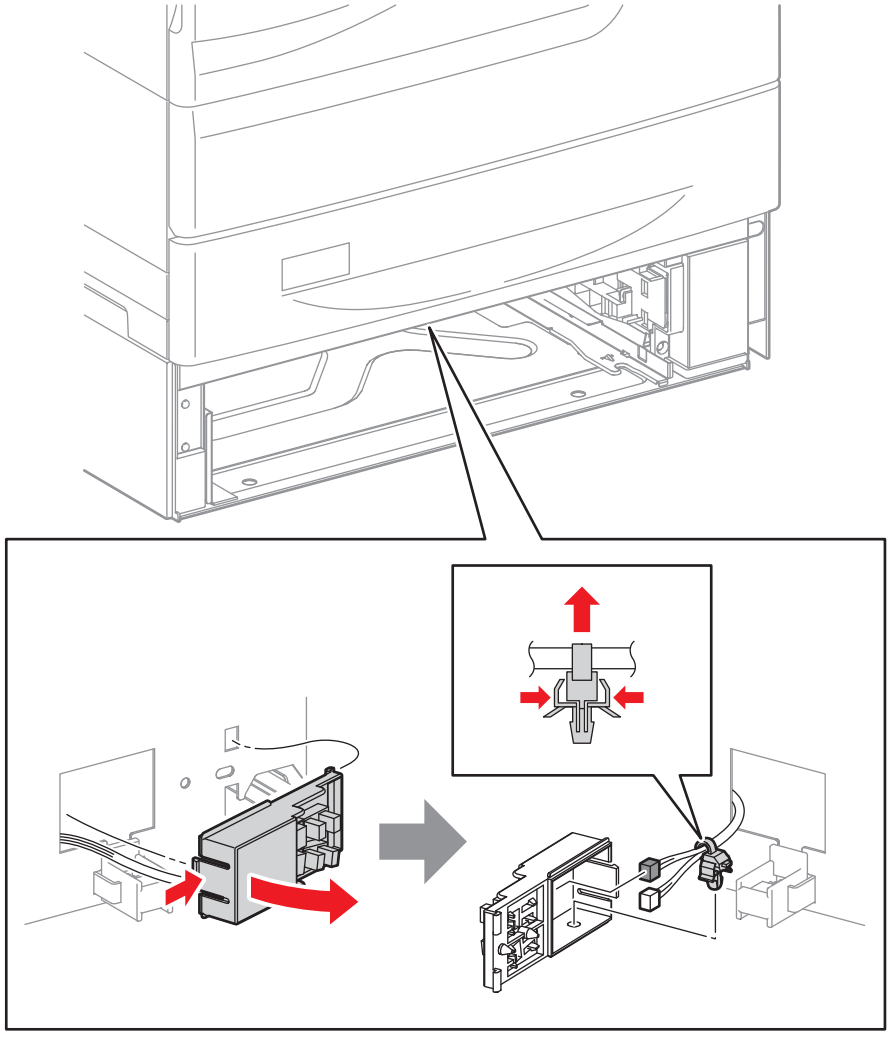
1. Remove the Tray.
2. Open the Right Door.
3. Release 2 bosses to remove the Turn Chute from Feeder.



## Low Paper Sensors 1 and 2

### PL12.2.10

1. Remove the Tray.
2. Release 2 hooks that secure the Low Paper Sensor holder in the Tray cavity.
3. Release 3 hooks that each sensor in the holder.

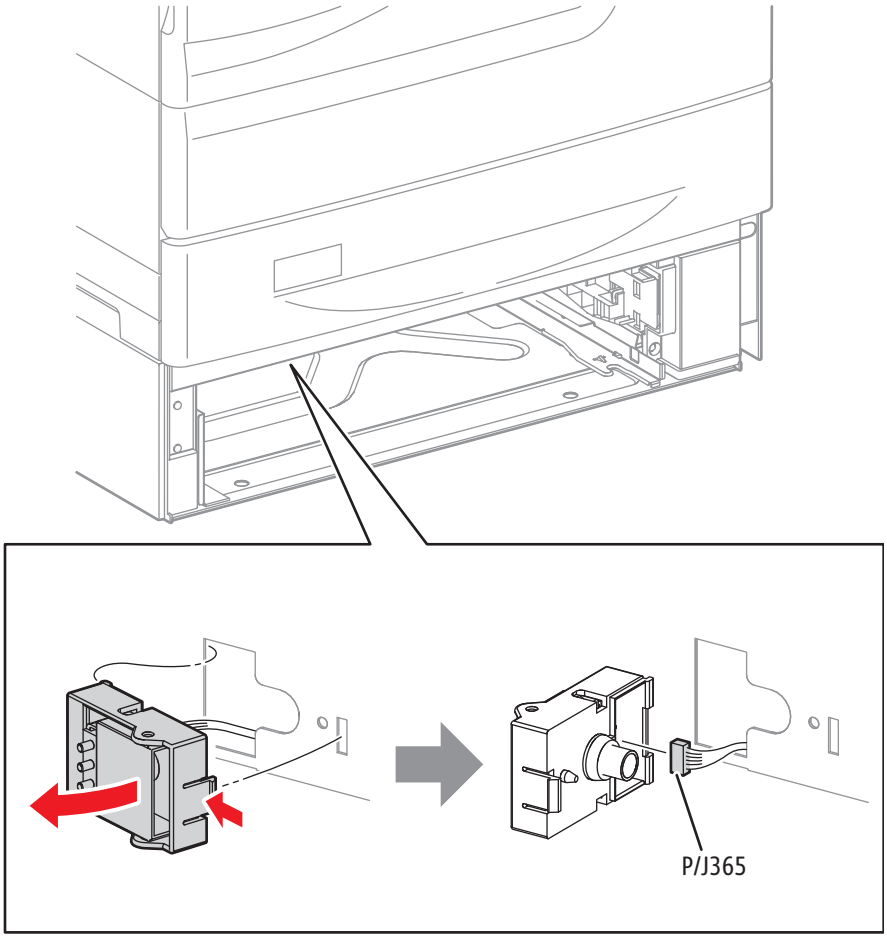


s6700-453

## Size Switch

### PL12.2.12

1. Remove the Tray.
2. Release the hook that secures the Size Switch in the Tray cavity.
3. Disconnect P/J365 to remove the switch.




s6700-454

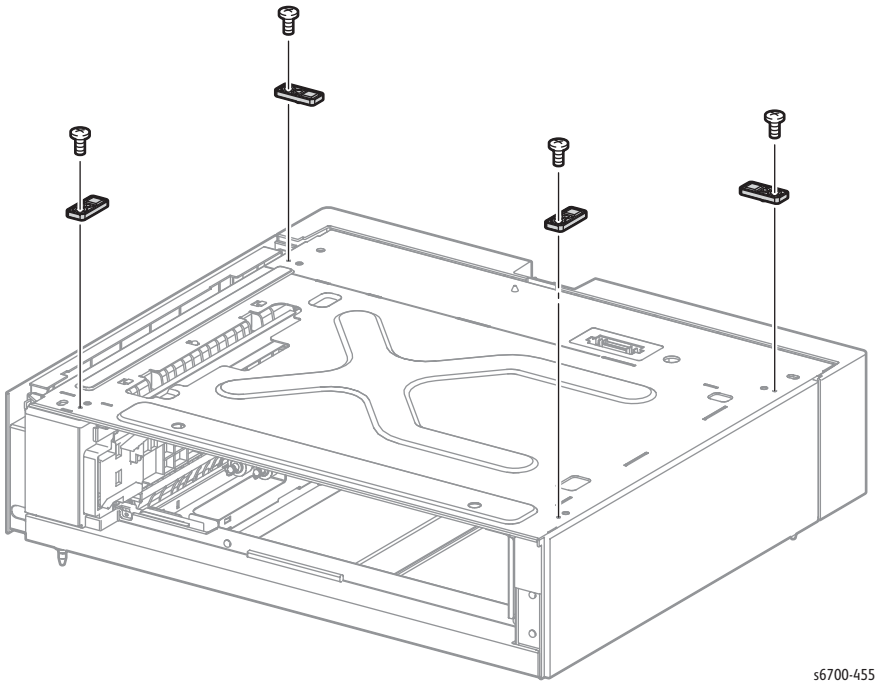
# Foot Assembly

## PL12.2.13

**Warning**

Lifting the printer from the Feeder requires 3 people.

1. Remove the Option Feeder (page 8-188).
2. Turn the Feeder over.
3. Remove 4 screws (silver, 6mm) that secure 4 feet to the Feeder.



s6700-455

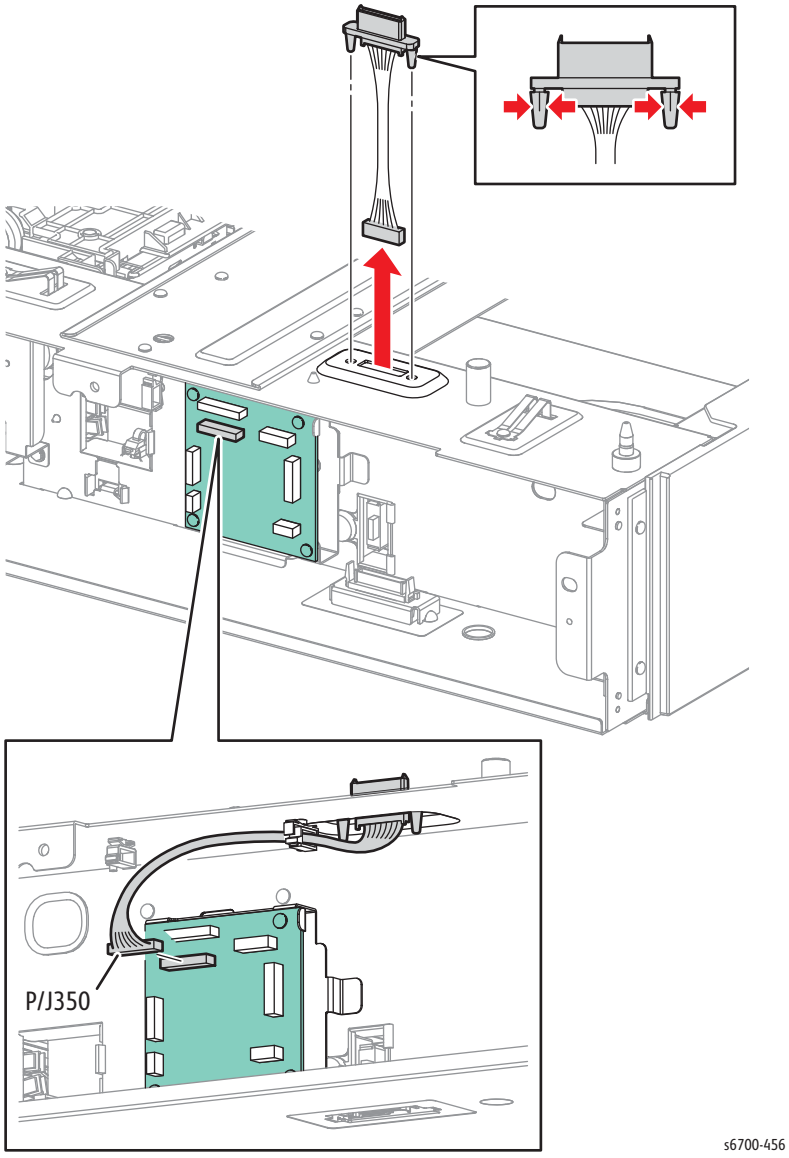
# Upper Option Harness

## 12.3.1

**Warning**

Lifting the printer from the Feeder requires 3 people.

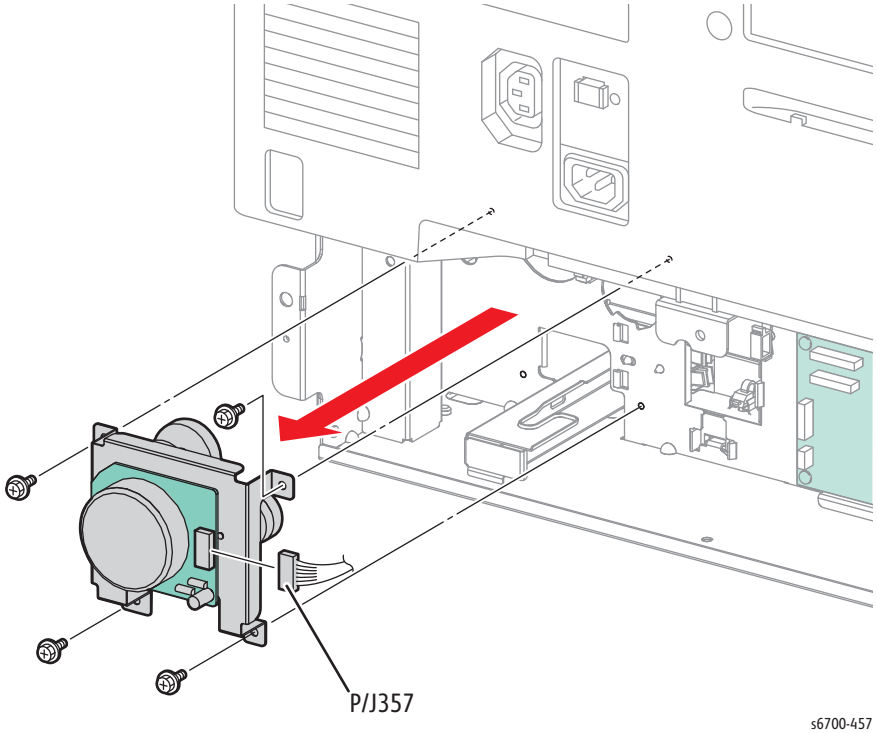
1. Remove the Option Feeder (page 8-188).
2. Remove the rear cover (page 8-190).
3. Disconnect P/J350 from the Feeder Board and release the harness from the clamp.
4. Release 2 hooks on the connector and pull the harness and connector through the hole on the Feeder.



# Feed Drive Assembly

## PL12.3.2

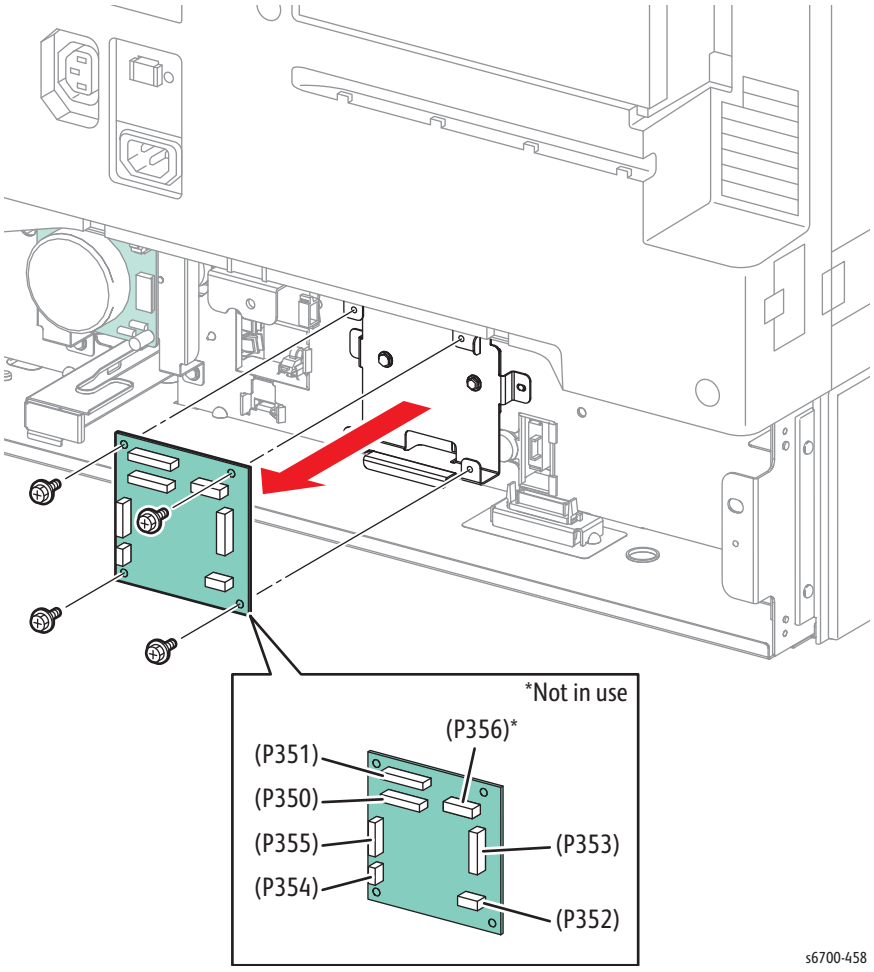
1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Disconnect P/J357 on the Feed Drive Assy.
4. Remove 4 screws (silver, flanged, 6mm) to remove the drive.



## Feeder Board

### PL12.3.4

1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Disconnect 6 connectors from the Feeder Board.
4. Remove 4 screws (silver, 6mm) to remove the board from the Feeder.



## Lower Option Harness

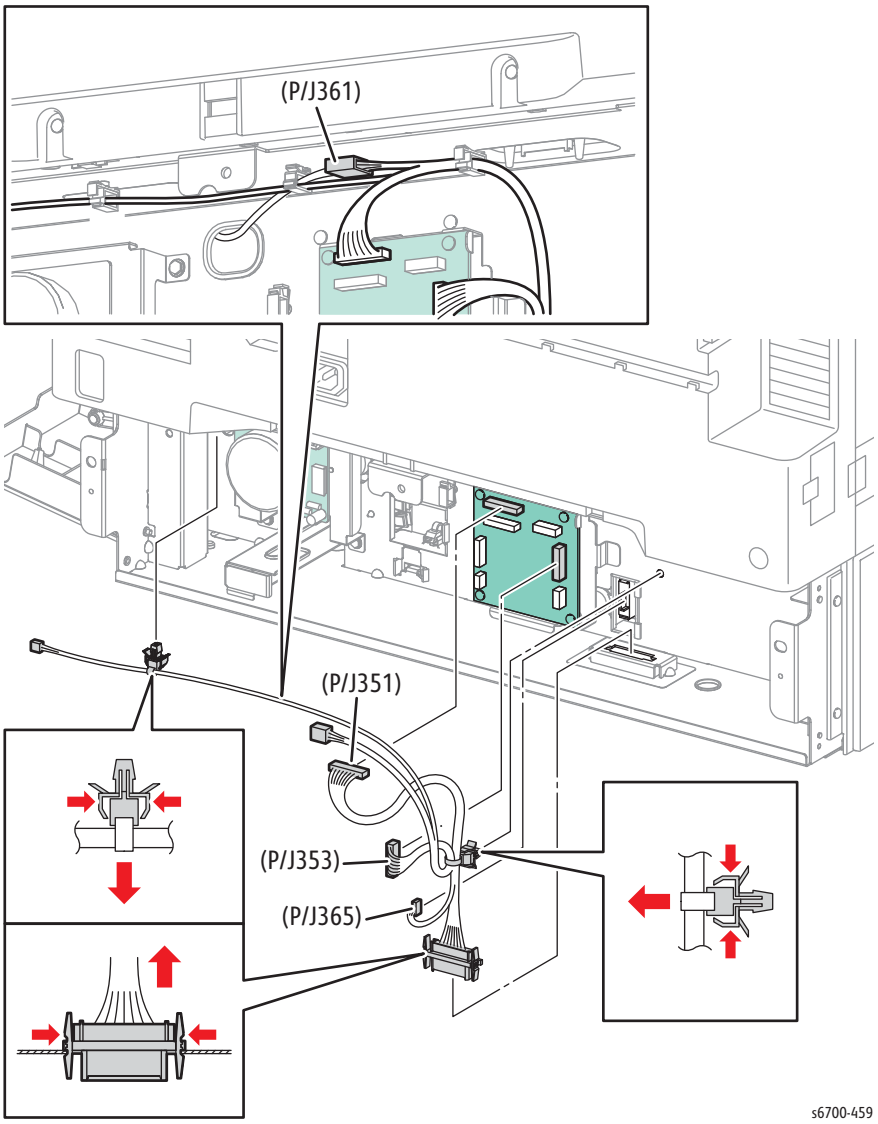
### PL12.3.11

1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Remove the Right Door Open Switch (page 8-193).
4. Release the harness from 3 clamps.
5. Remove 2 ties that secure the harness to the Feeder.

**Note**

When performing the following step, leave the relay connector on the harness.

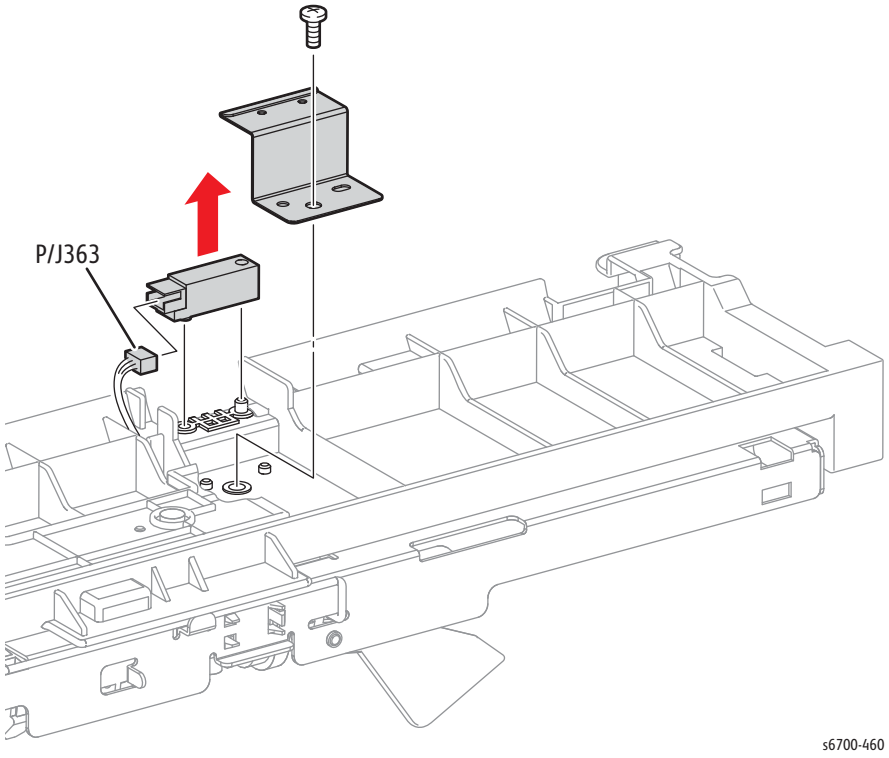
6. Disconnect P/J361 from the Feeder.
7. Disconnect P/J365 from the Size Switch.
8. Disconnect P/J351 and P/J353 from the Feeder Board.
9. Release 2 hooks on the option connector to remove the harness from the Feeder.



## Take Away Sensor

### PL12.4.3

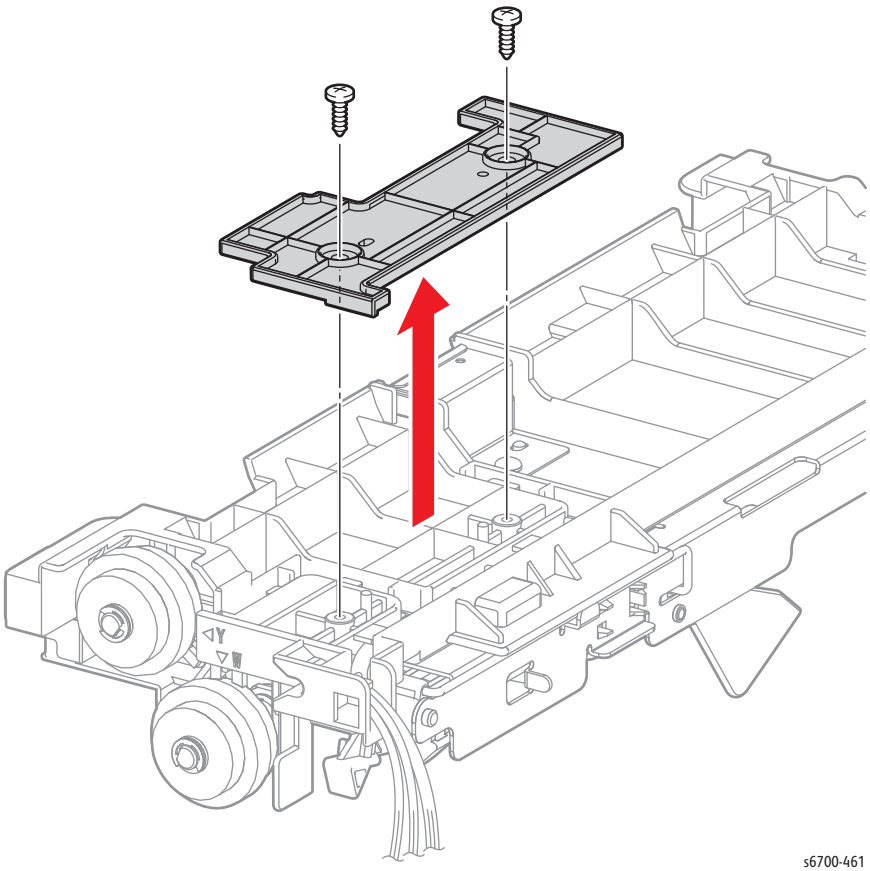
1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Remove the Feeder Assembly (page 8-209).
4. Remove 1 screw (silver, 8mm) that secures the sensor plate to the Feeder Assy.
5. Disconnect P/J363 and remove the sensor.



# Take Away Clutch

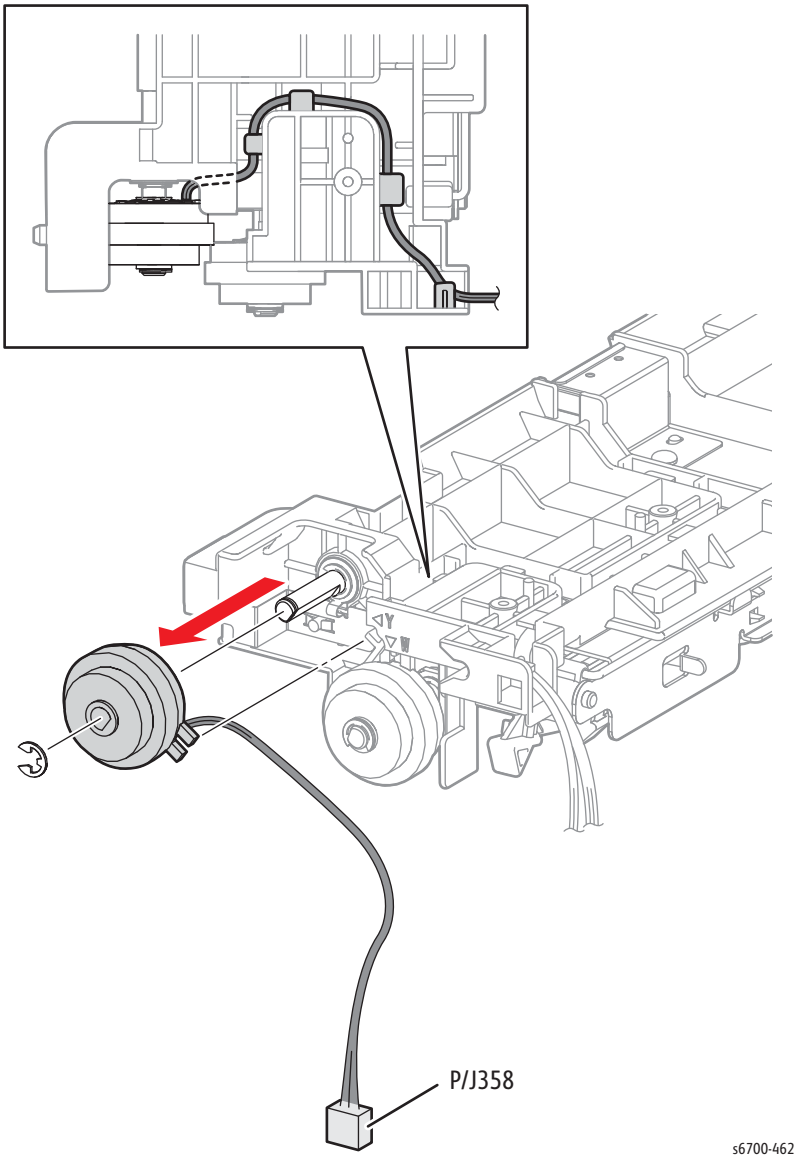
## PL12.4.5

1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Remove the Feeder Assembly (page 8-209).
4. Remove 2 screws (silver, tapping, 8mm) that secure the cover to the Feeder Assy.



s6700-461

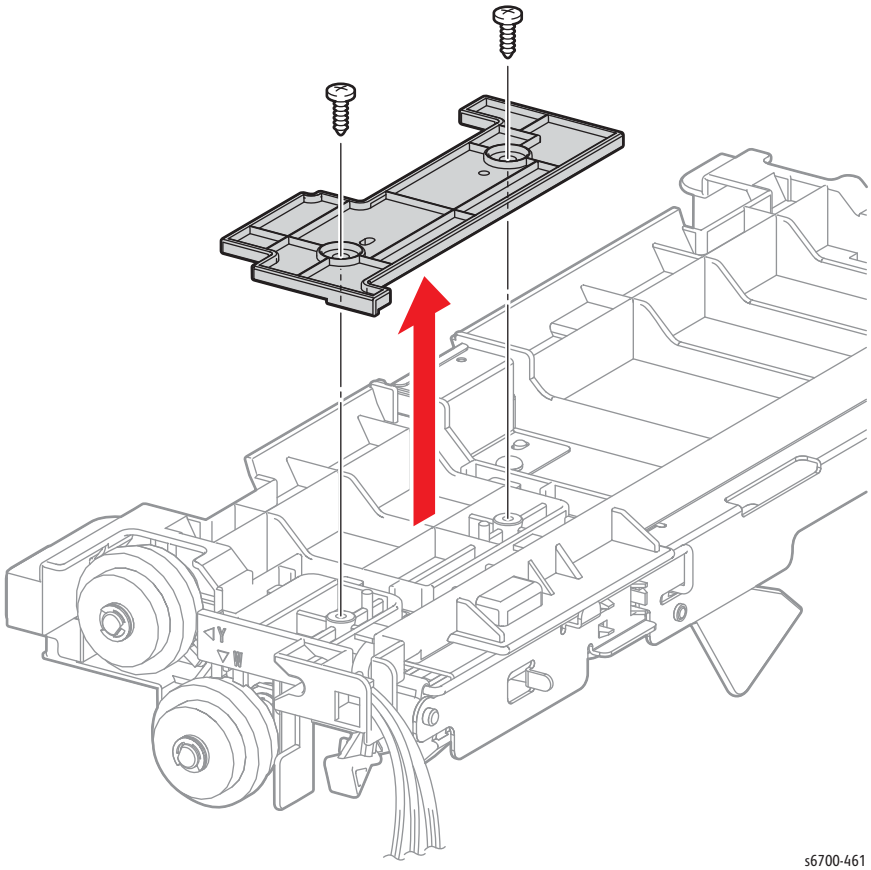
5. Remove the E-ring that secures the clutch to the take away roller and release the harness to remove the clutch.



# Feed Clutch

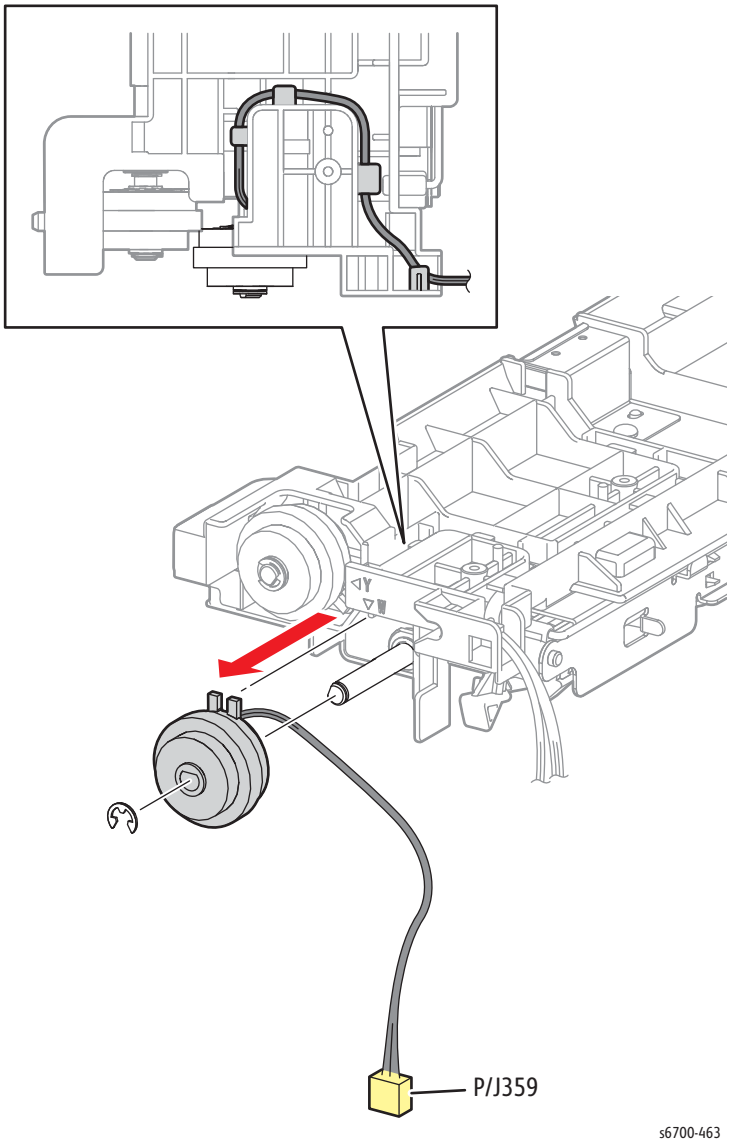
## PL12.4.9

1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Remove the Feeder Assembly (page 8-209).
4. Remove 2 screws (silver, tapping, 8mm) that secure the cover to the Feeder Assy.



s6700-461

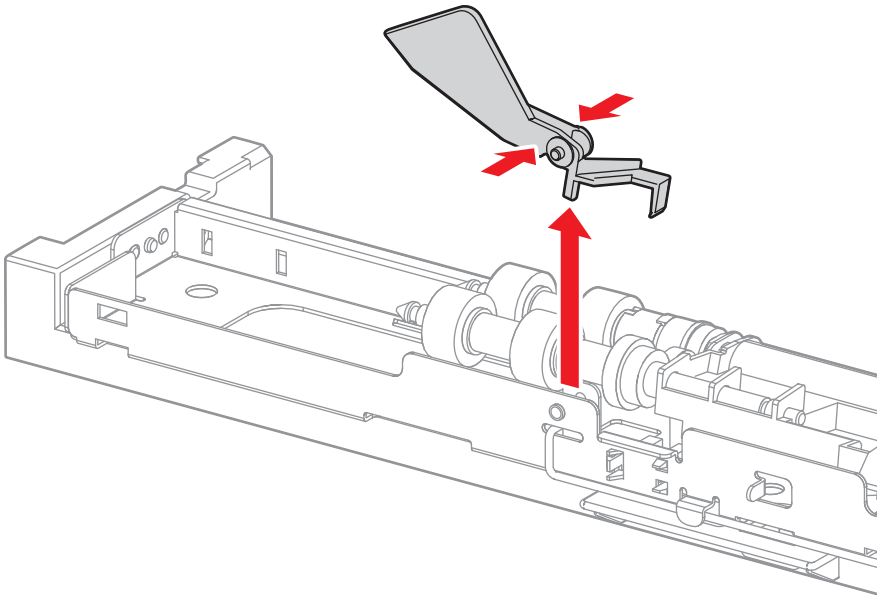
5. Remove the E-ring that secures the clutch to the Feed Rollers and release the harness to remove the clutch.



## No Paper Sensor Actuator

### PL12.4.17

1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Remove the Feeder Assembly (page 8-209).
4. Release the two bosses of the actuator from the holes in the Feeder Assy.

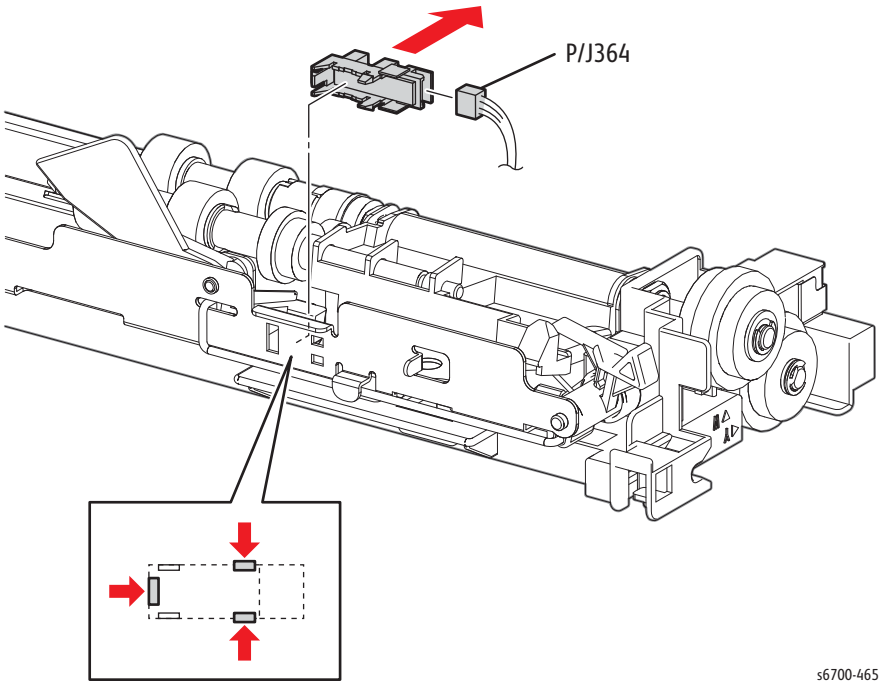


s6700-464

## No Paper Sensor

### PL12.4.18

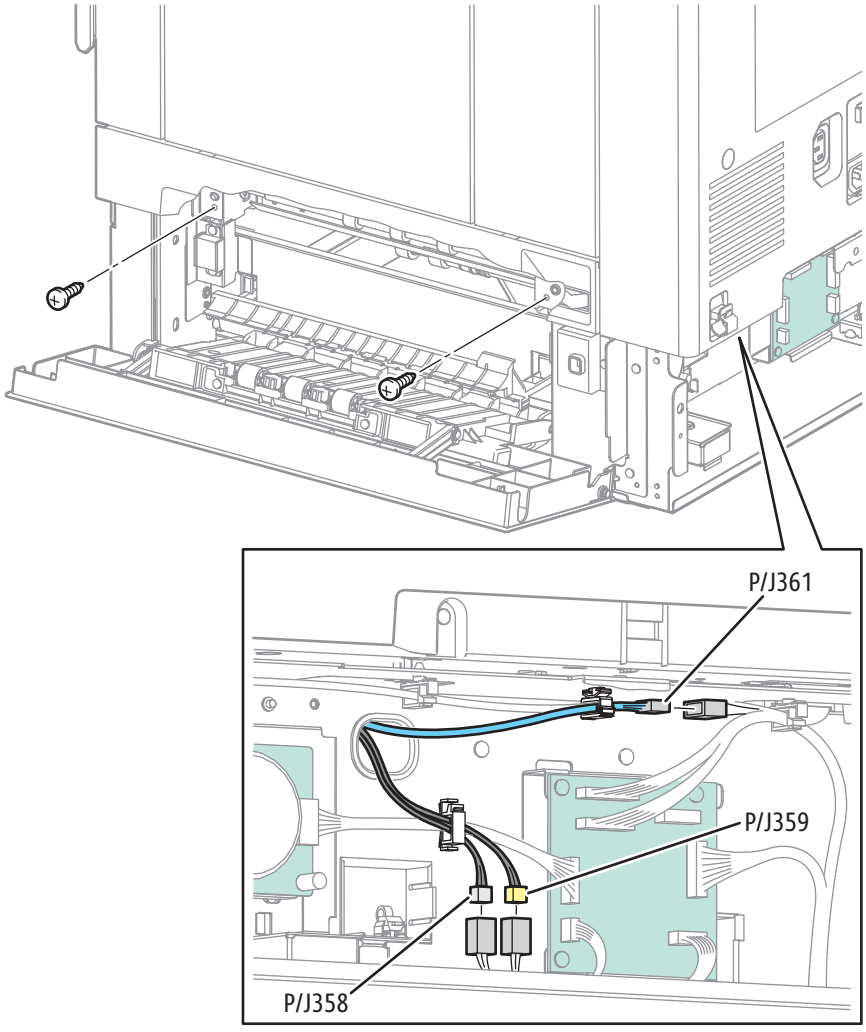
1. Remove the Tray.
2. Remove the rear cover (page 8-190).
3. Remove the Feeder Assembly (page 8-209).
4. Release 3 hooks that secure the No Paper Sensor to the Feeder Assy.
5. Disconnect P/J364 to remove the sensor.



## Feeder Assembly

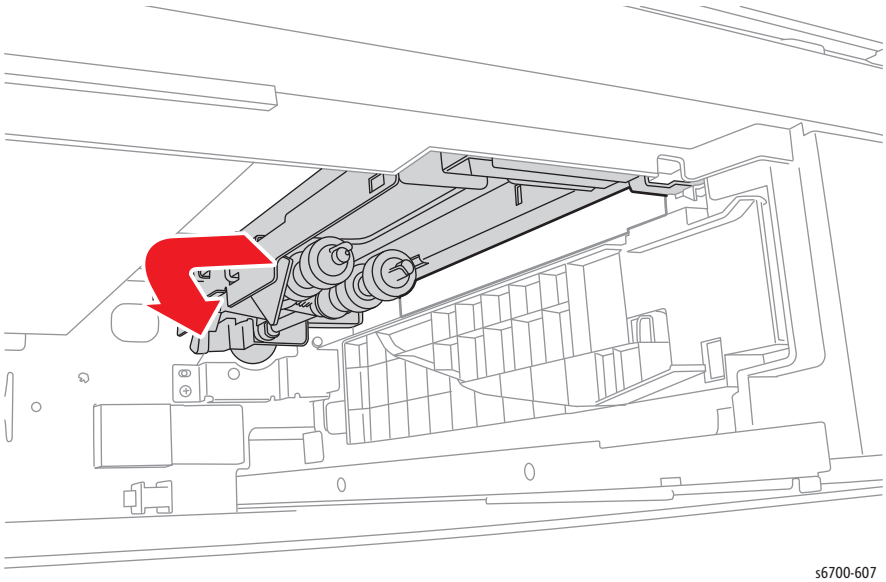
### PL12.4.29

1. Remove the Tray.
2. Open the right door.
3. Remove the rear cover (page 8-190).
4. Release the harness of the Lower Option Harness from the two clamps.
5. Remove 2 screws (silver, tapping, 8mm) that secure the Feeder Assy to the Option Feeder.
4. Disconnect P/J358, 359, 361 from the Feeder Assy.




s6700-466

5. Slide the Feeder Assy left to release 2 bosses from the holes in the Option Feeder and remove the Feeder Assy.



s6700-607

# 1100-Sheet Feeder

## 1100-Sheet Feeder Assembly

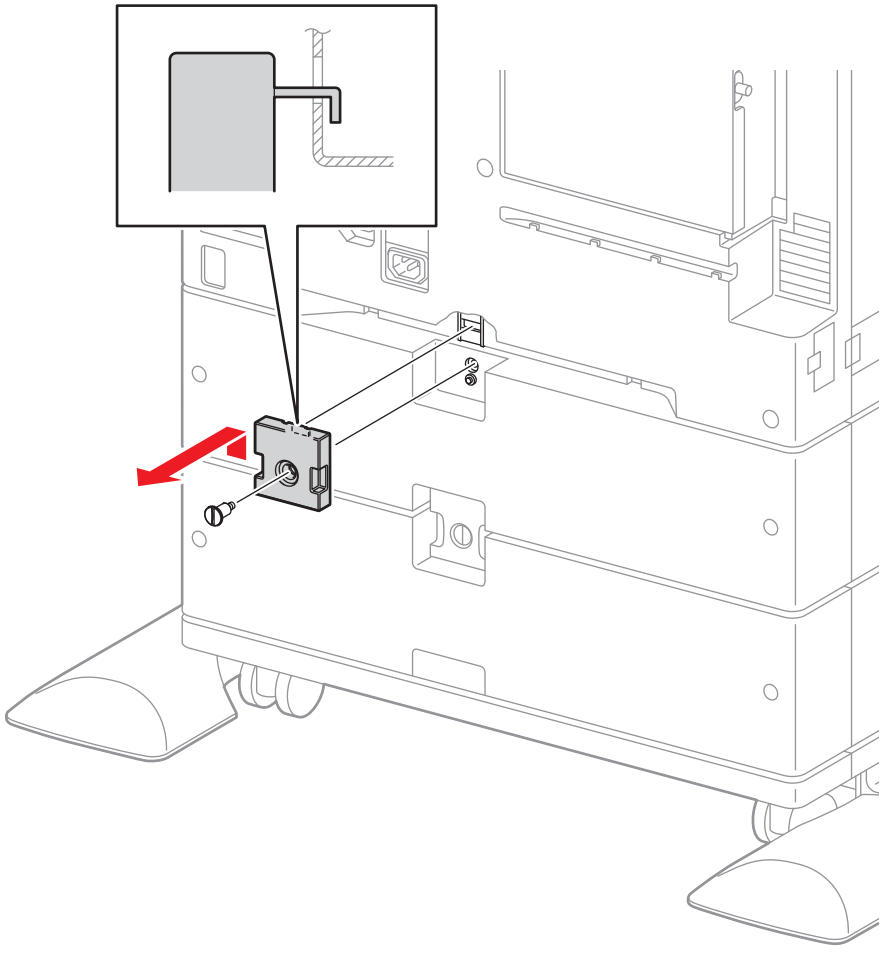
The 1100-sheet Feeder Assembly is two 550-sheet Feeders stacked together with the additional of a metal plate, stabilization feet and casters. Removal procedures for most 1100-sheet Feeder Assy parts are identical to those for the 550-sheet Feeder Assy. Replacement procedures unique to the 1100-sheet Feeder Assy are included in this section.

### PL13.1.1

**Warning**

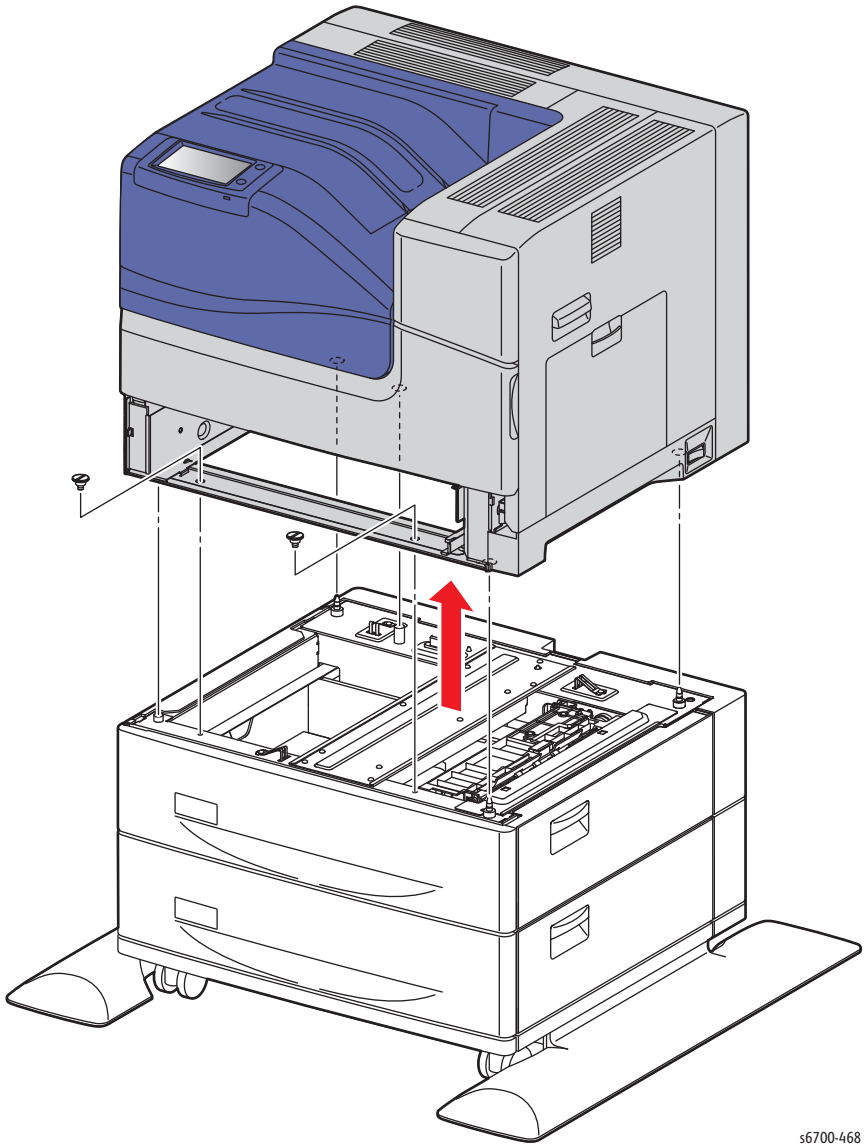
Lifting the printer from the Feeder requires 3 people.

1. Remove the Trays.
2. Remove the rear lock screw that secures the lock plate to the Feeder.
3. Release the hook from the hole and remove the lock plate from the Feeder.



s6700-467

4. Remove the two locking screws that secure the Feeder to the printer.
5. Lift the printer to separate it from the Feeder.

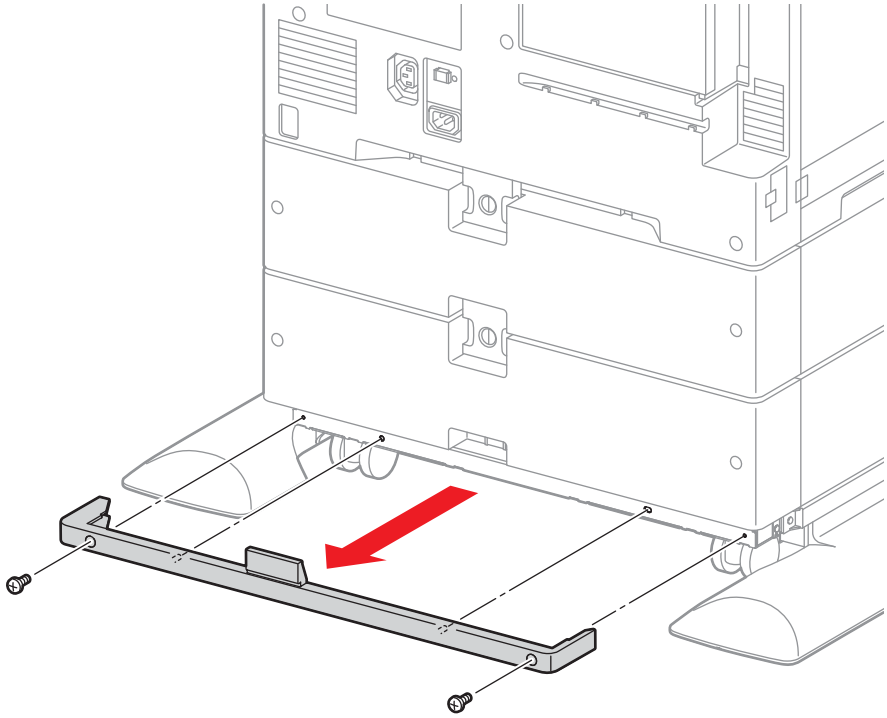


s6700-468

## Lower Rear Cover

### PL13.1.3

1. Remove 2 screws (silver, 6mm) that secure the lower right cover to the Feeder Assy.
2. Slide the cover to the rear and release 2 hooks to remove the cover.

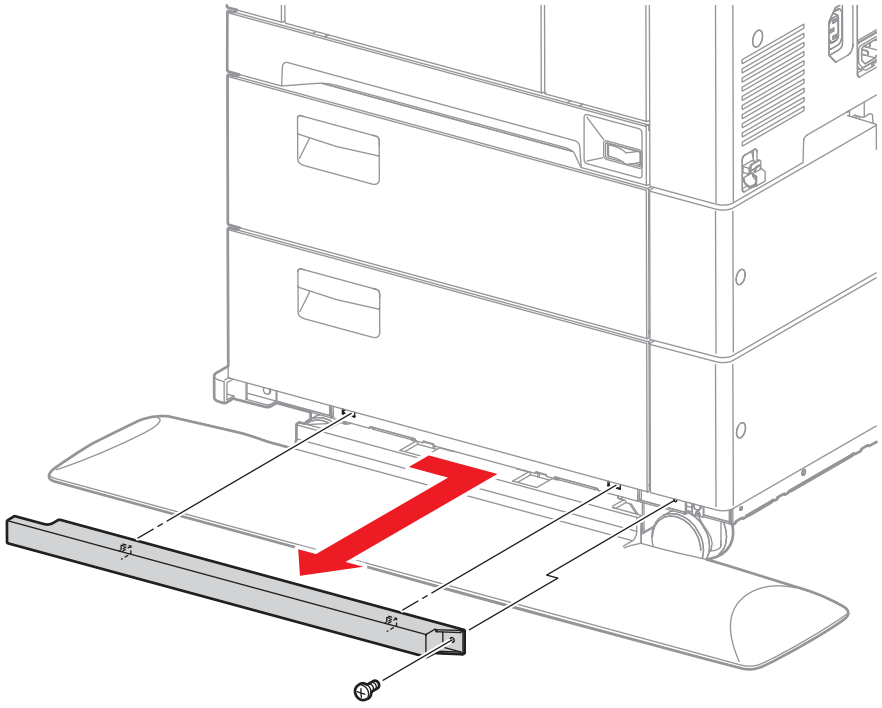


s6700-469

## Lower Right Cover

### PL13.1.4

1. Remove the lower rear cover (page 8-213).
2. Remove 1 screw (silver, 6mm) that secures the lower right cover to the Feeder Assy.
3. Slide the cover to the rear and release 2 hooks to remove the cover.

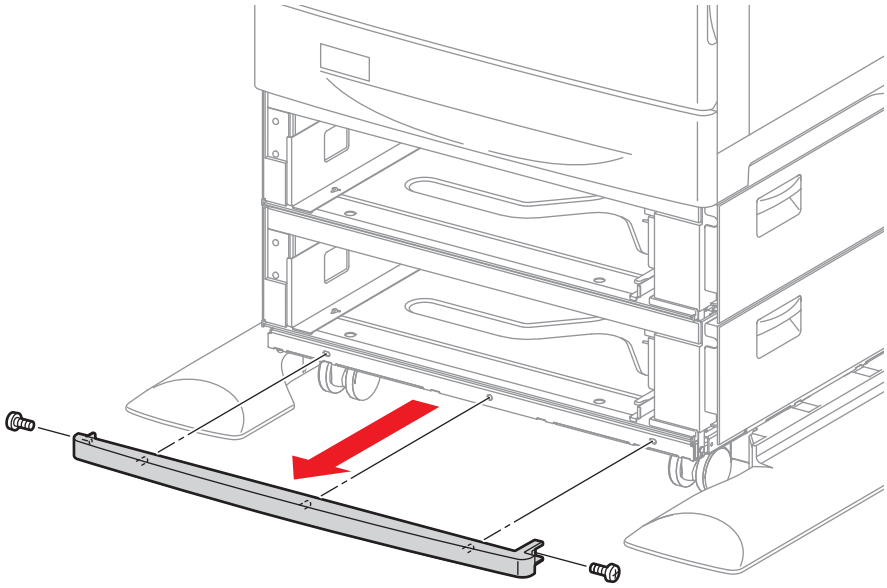


s6700-470

## Lower Front Cover

### PL13.1.5

1. Remove the lower rear cover (page 8-213).
2. Remove the lower right cover (page 8-214).
3. Remove the lower left cover (page 8-216).
4. Remove 2 screws (silver, 6mm) and slide the cover to the rear to release 2 hooks.

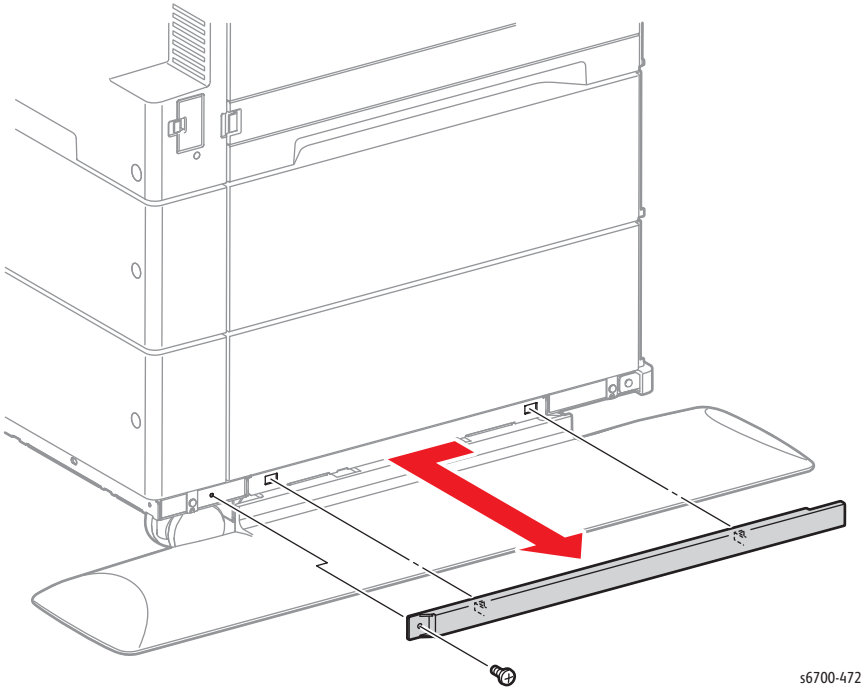


s6700-471

## Lower Left Cover

### PL13.1.6

1. Remove the lower rear cover (page 8-213).
2. Remove 1 screw (silver, 6mm) that secures the lower left cover to the Feeder Assy.
3. Slide the cover to the rear to release 2 hooks to remove the cover.



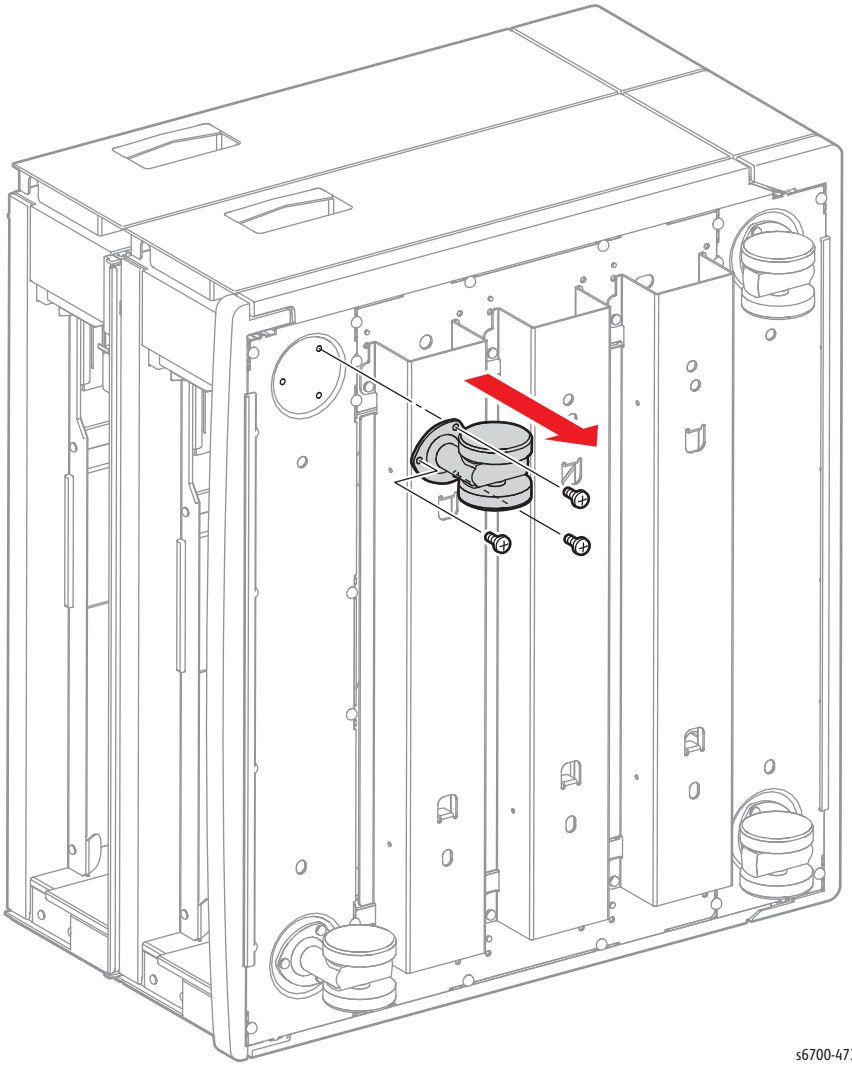
## Front and Rear Casters

### PL13.1.7, 13.1.8

**Warning**

Lifting the printer from the Feeder requires 3 people.

1. Remove the Trays.
2. Remove the 1100-Sheet Feeder Assembly (page 8-211).
3. Remove the Feet (page 8-218).
4. Turn the Feeder Assy over.
5. Remove 3 screws (silver, M4, 6mm) that secure each Caster to the Feeder Assy.

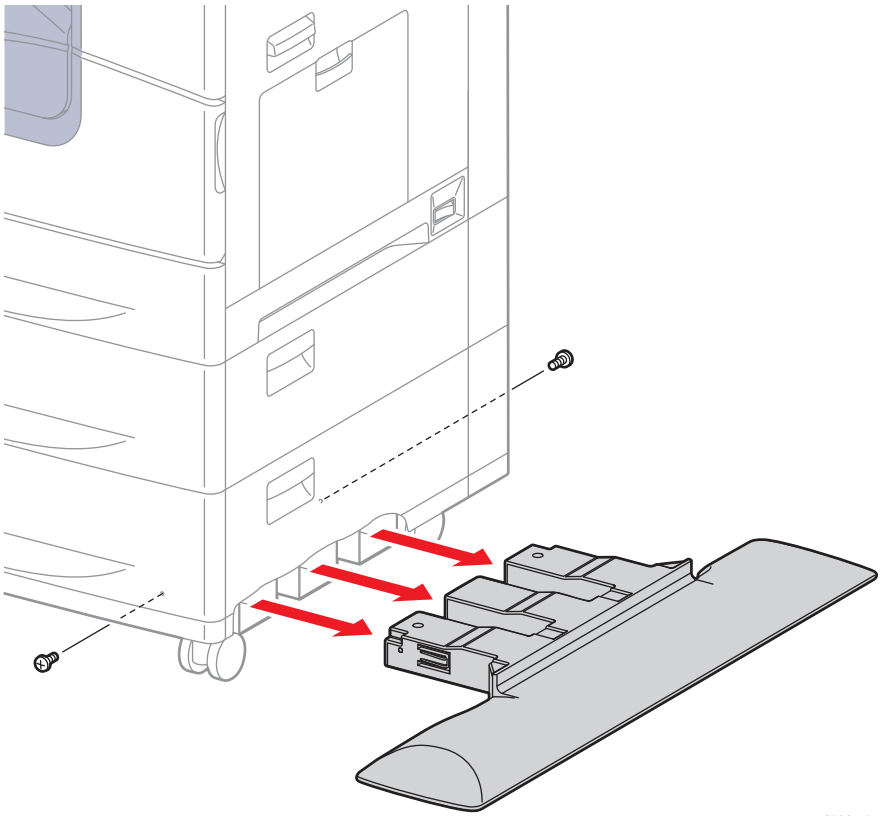


s6700-473

## Feet

### PL13.1.9

1. Remove 2 screws (silver, 6mm) that secure each Foot to the Feeder Assy.
2. Pull the Foot from the Feeder Assy.



s6700-474

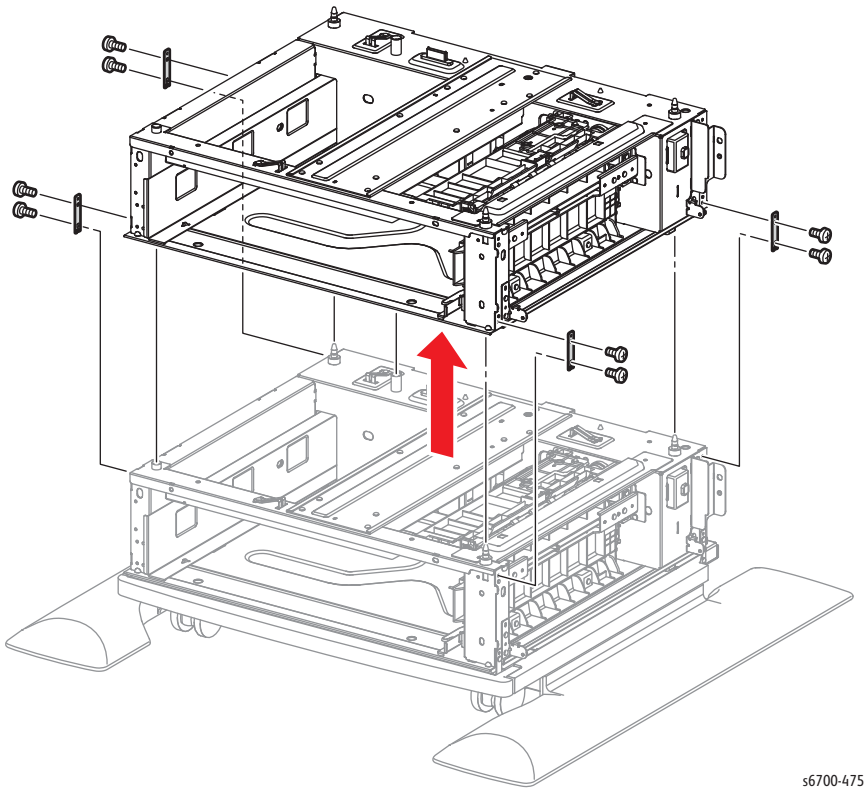
# Upper Feeder Section

## PL3.2.1

**Warning**

Lifting the printer from the Feeder requires 3 people.

1. Remove the Trays.
2. Remove the 1100-Sheet Feeder Assy (page 8-211).
3. Remove the lower rear cover (page 8-213).
4. Remove the upper and lower rear covers (page 8-220)
5. Remove the upper and lower left covers (page 8-227)
6. Remove the upper and lower right doors (page 8-223).
7. Remove the upper and lower front covers (page 8-226).
8. Remove the upper and lower right covers (page 8-225).
9. Remove 8 screws that secure the 550-Sheet Feeder Assemblies together.
10. Lift the upper Feeder Assy to separate it from the lower Feeder Assy.

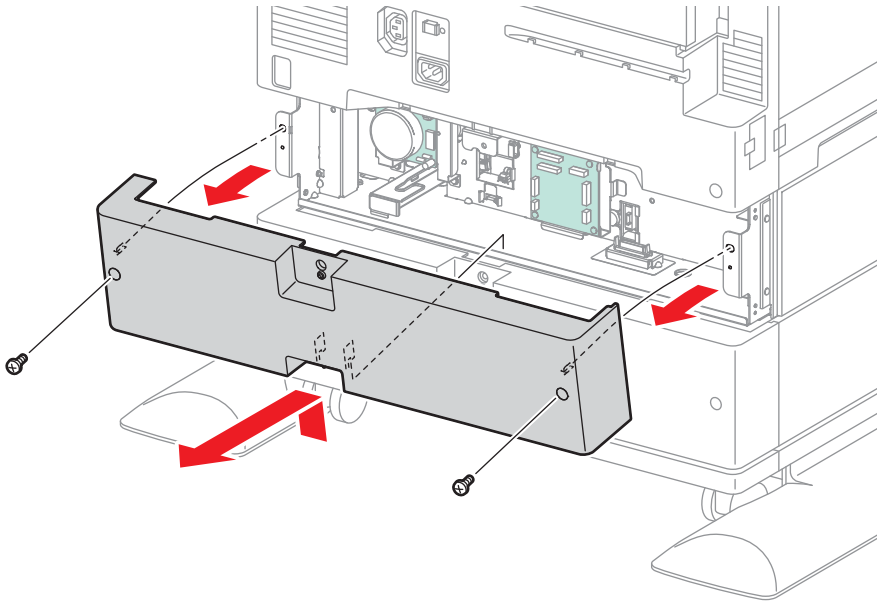


s6700-475

## Rear Cover

### PL13.2.2

1. Remove 1 screw that secures the rear lock plate to the Feeder Assy.
2. Release the hook on the rear lock plate from the hole in the printer.
3. Remove 2 screws (silver, 6mm) that secure the rear cover.
4. Release 2 hooks that hold the rear cover to the frame.

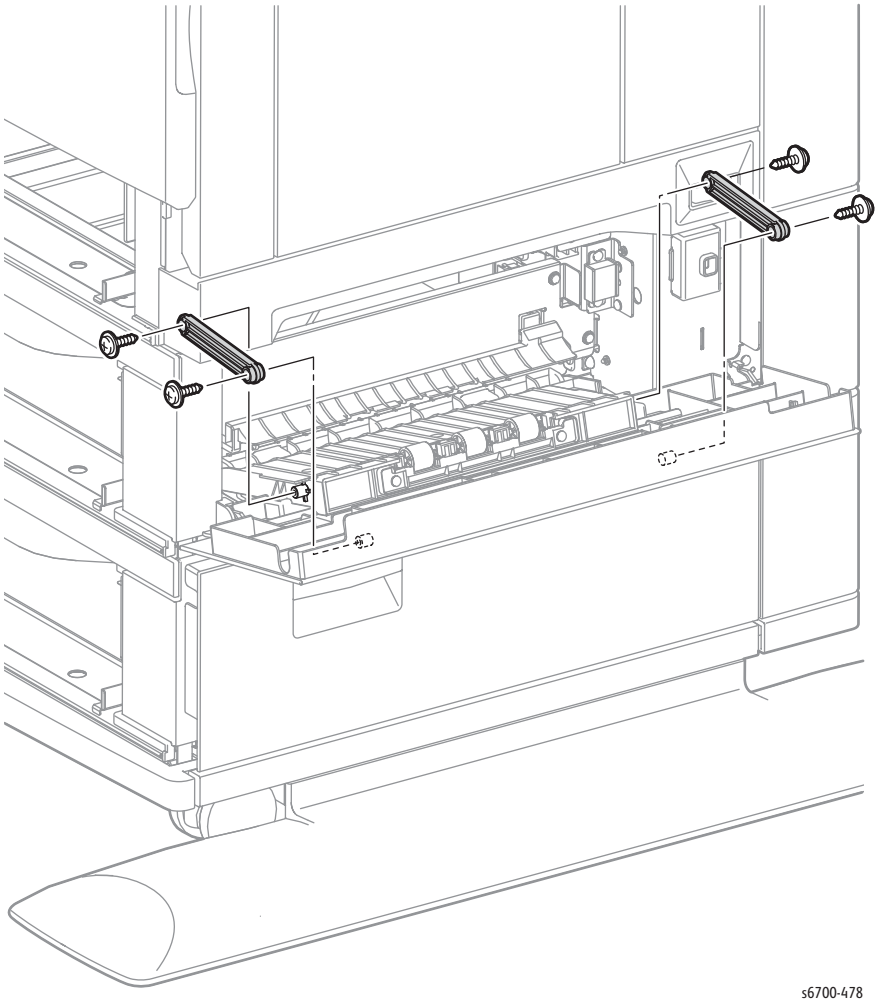


s6700-477

## Upper Feed Chute Assembly

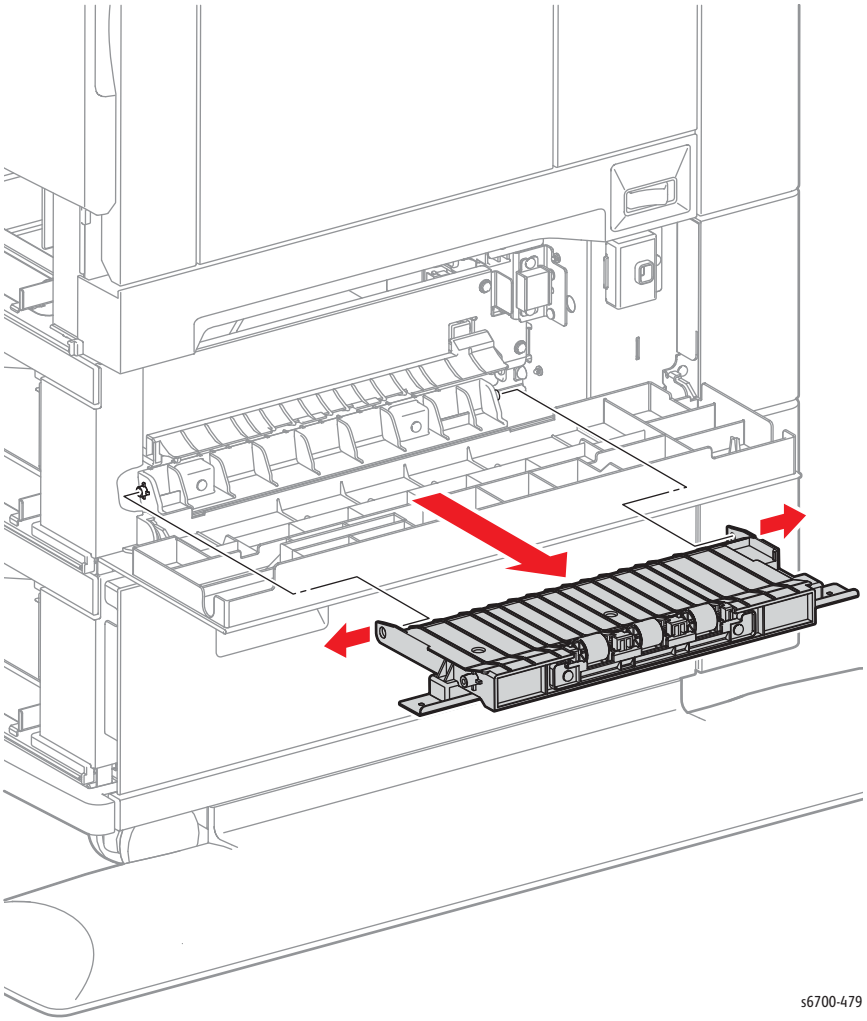
### PL13.2.5

1. Open the Right Door.
2. Remove 4 screws (silver, tapping, flanged, 8mm) that secure the chute arms.



s6700-478

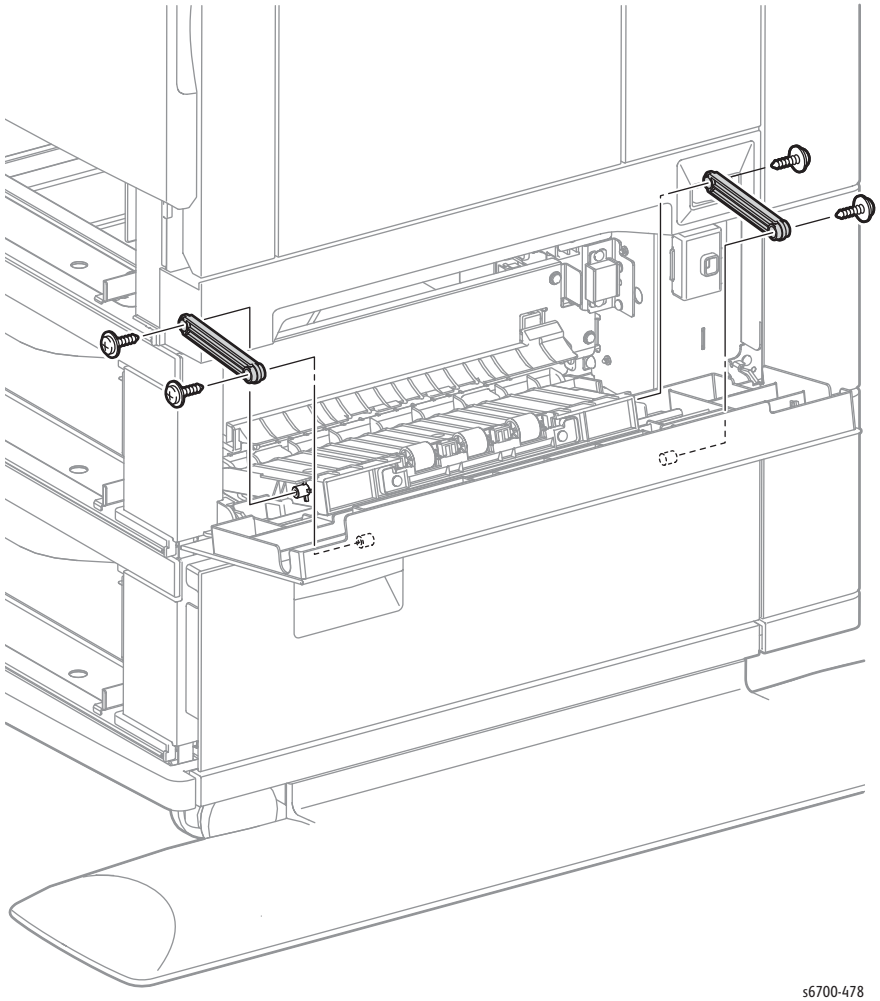
3. Release the 2 bosses and remove the Upper Chute Assy from the Feeder.



## Right Door

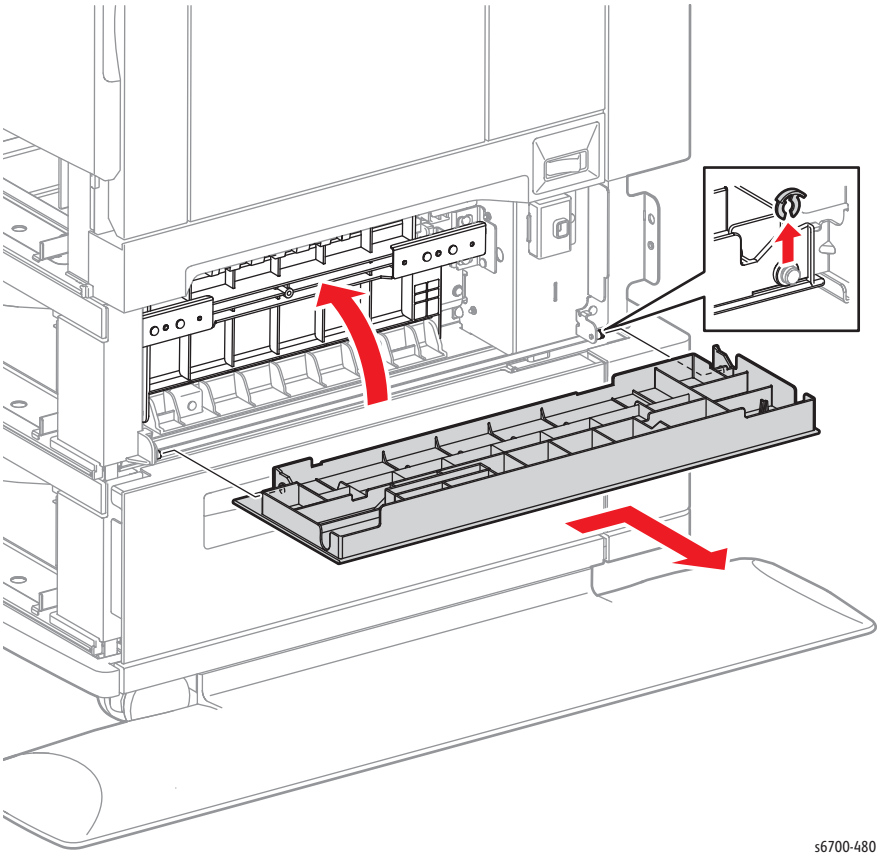
### PL13.2.12

1. Remove the Trays.
2. Remove the rear cover (page 8-220).
3. Open the right door.
4. Remove 4 screws (silver, flanged, tapping, 8mm) that secure the front and rear chute arms.



s6700-478

5. Close the Feed Chute Assy.
6. Remove the KL-ring that secures the right door to the Feeder Assy.
7. Remove the door by sliding it rearward until the front and rear sides are released from the studs on the Feeder Assy.

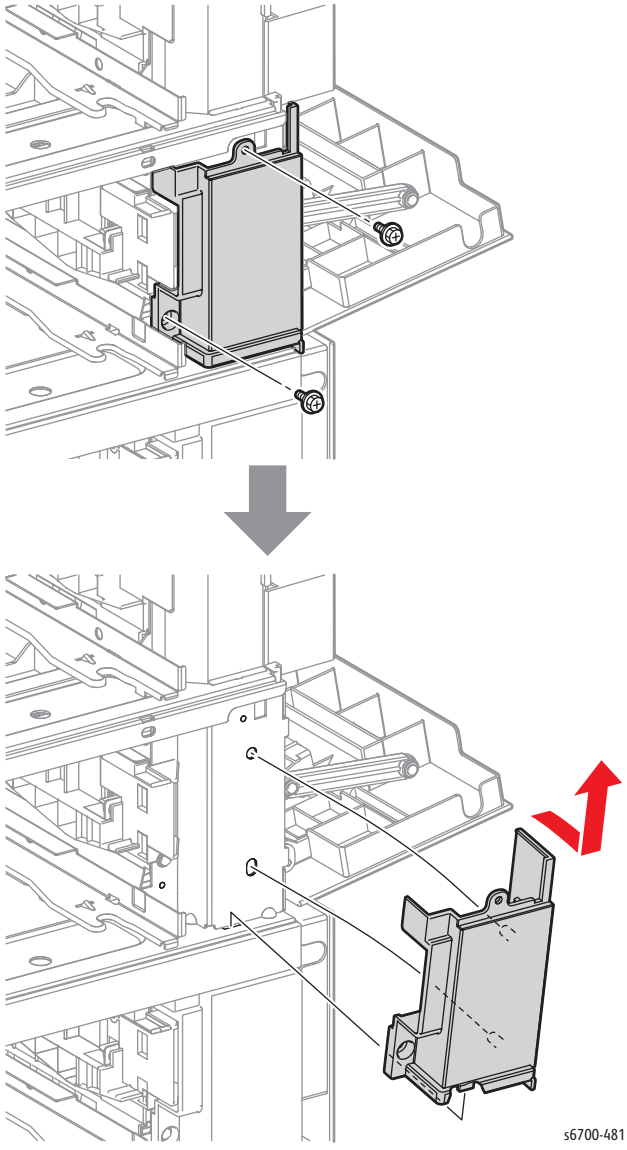


s6700-480

# Right Cover

## PL13.2.14

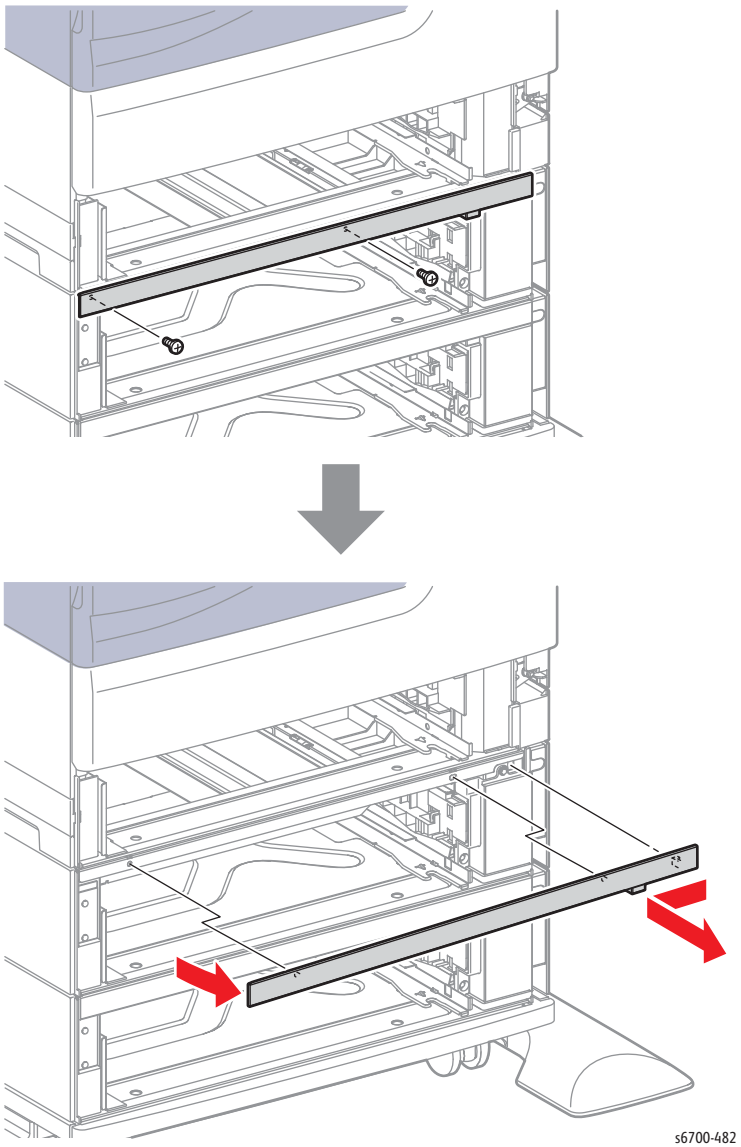
1. Remove the Trays.
2. Open the right door.
3. Remove the left cover (page 8-227).
4. Remove 2 screws (silver, flanged, 6mm) that secure the right cover.
5. Remove the right cover by tilting it forward to release 2 bosses, then release the tab from the hole on the Feeder Assy.



# Front Cover

## PL13.2.15

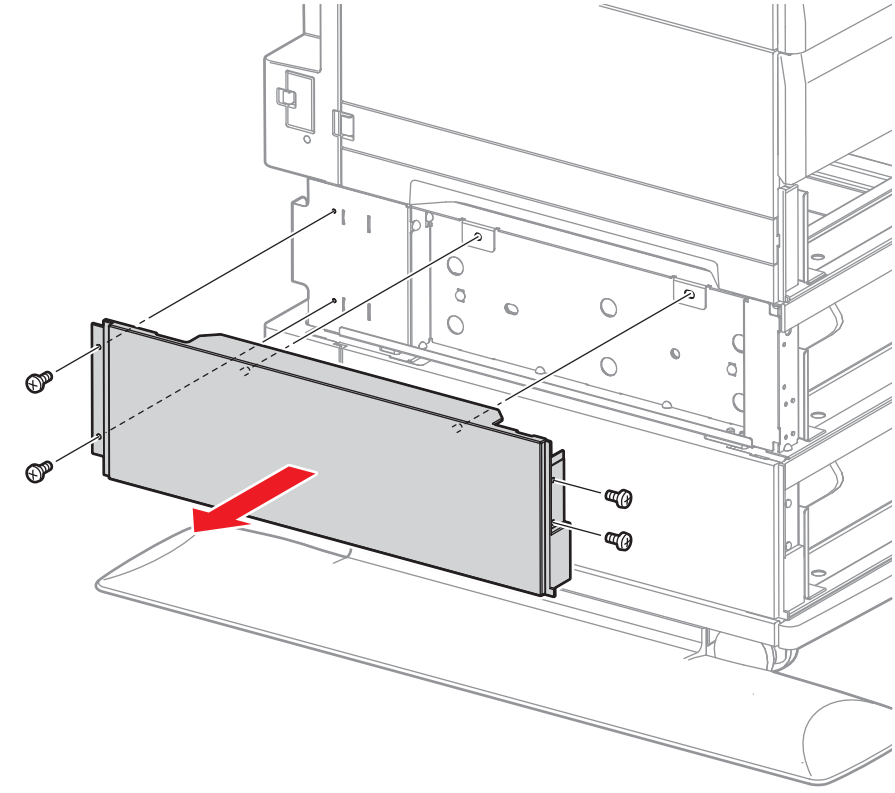
1. Remove the Trays.
2. Remove 2 screws (silver, 6mm) that secure the front cover to the Feeder Assy.
3. Slide the cover forward to release 2 bosses, then slide the cover left until the hook is released from the Feeder Assy.



## Left Cover

### PL13.2.16

1. Remove the Trays.
2. Remove the rear cover (page 8-220).
3. Remove 4 four screws (silver, 6mm) that secure the cover to the Feeder Assy.

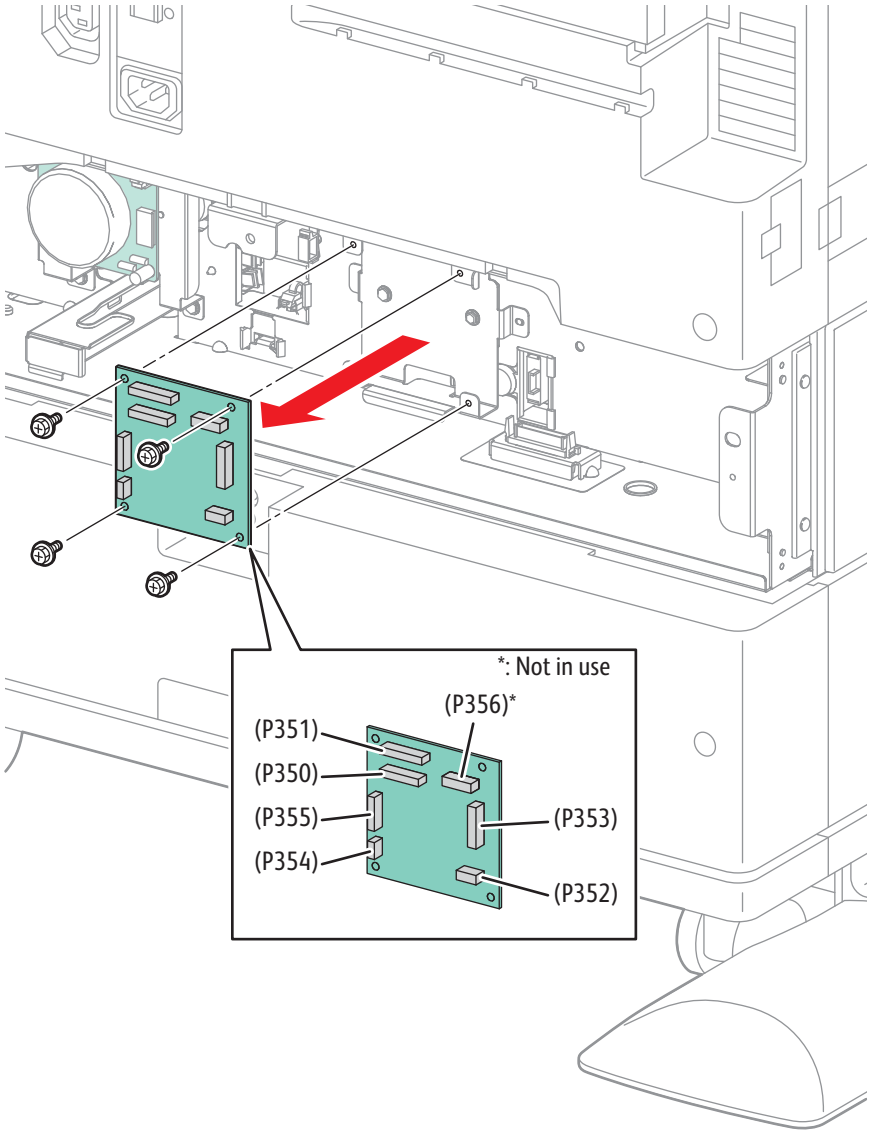


s6700-483

# 1100-Sheet Feeder Board

## PL13.4.5

1. Remove the Tray.
2. Remove the rear cover (page 8-220).
3. Disconnect 6 connectors from the Feeder Board.
4. Remove 4 screws (silver, 6mm) to remove the board from the Feeder.

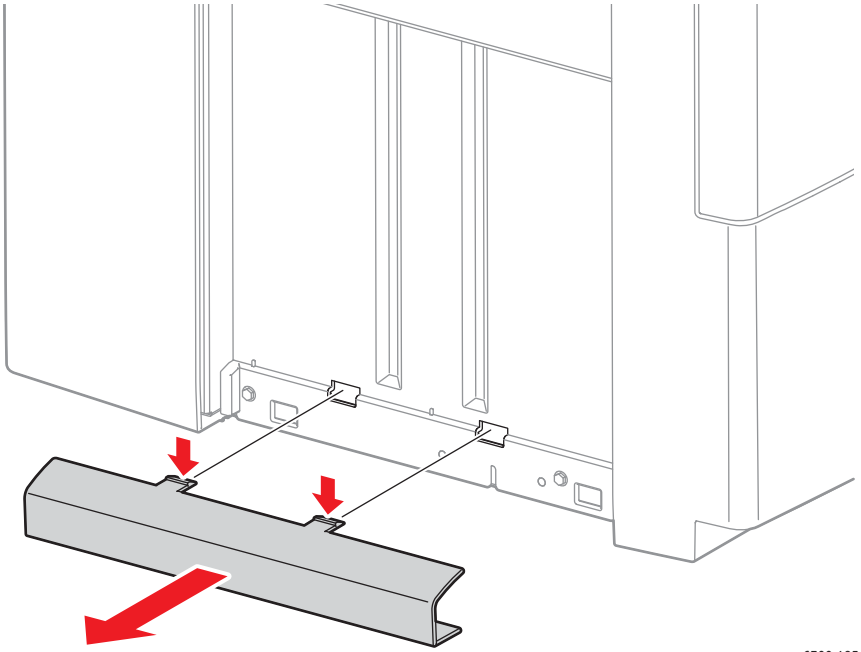


# Finisher

## Finisher

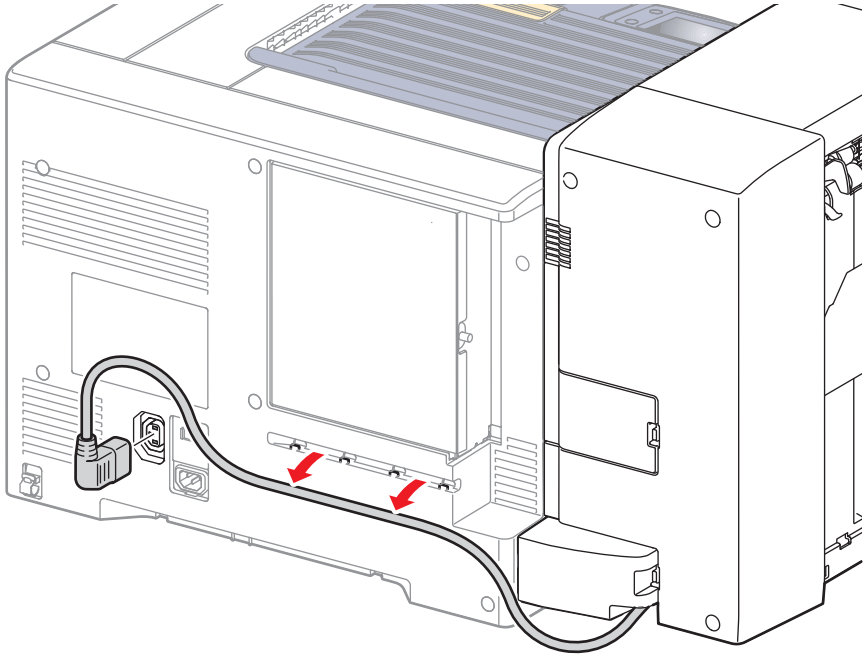
### PL14.1.1

1. Remove the Stacker Tray (page 8-232).
2. Release 2 hooks on the tray guide cover to remove the cover from the Finisher.



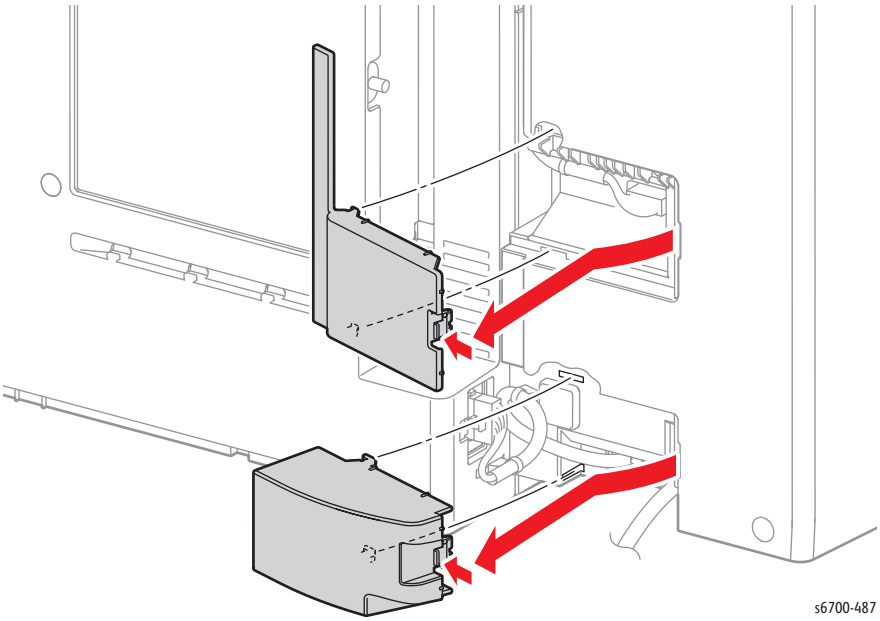
s6700-485

1. Disconnect the Finisher power cable from the Power Panel and release the cable from the harness clamp on the printer.

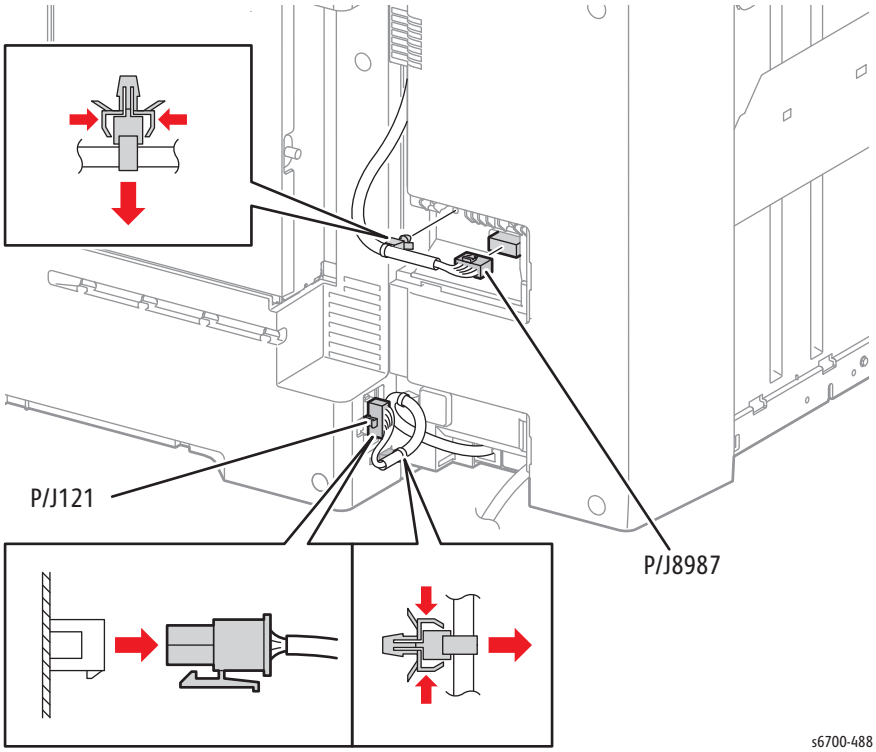


s6700-486

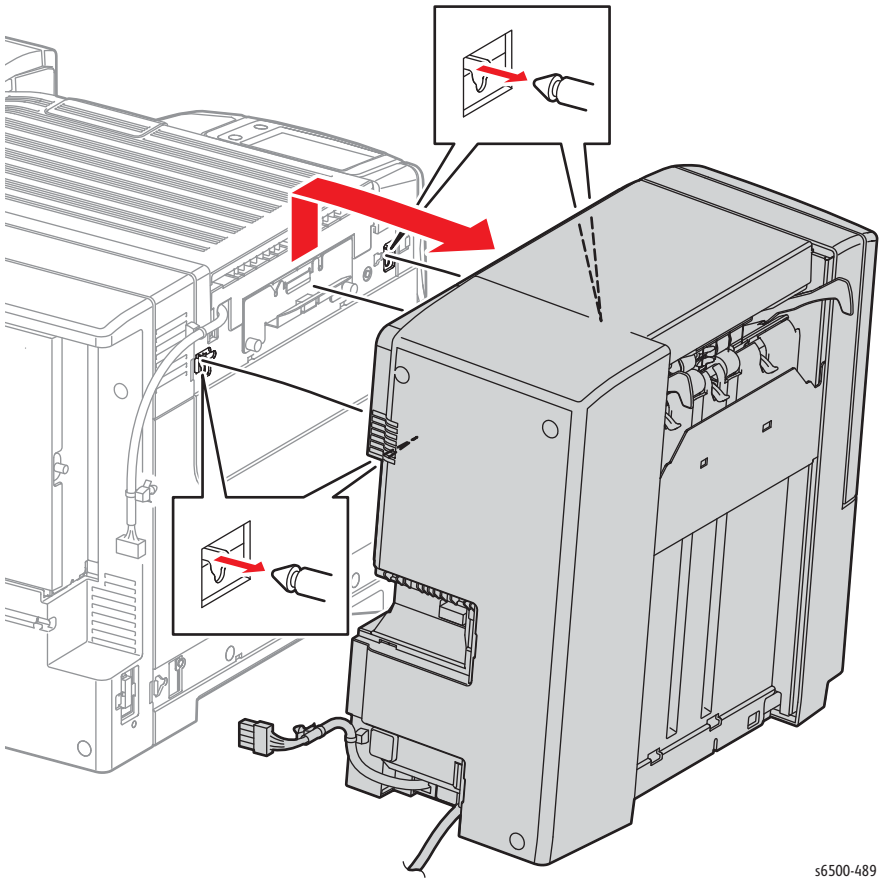
4. Release the hook that secures each connector cover to the Finisher.




5. Release 2 ties that secure the harnesses to the Finisher and disconnect P/J8987 and P121 from the Finisher.



6. Lift the Finisher slightly with one hand on the bottom of the Front Cover and the other on the handle.



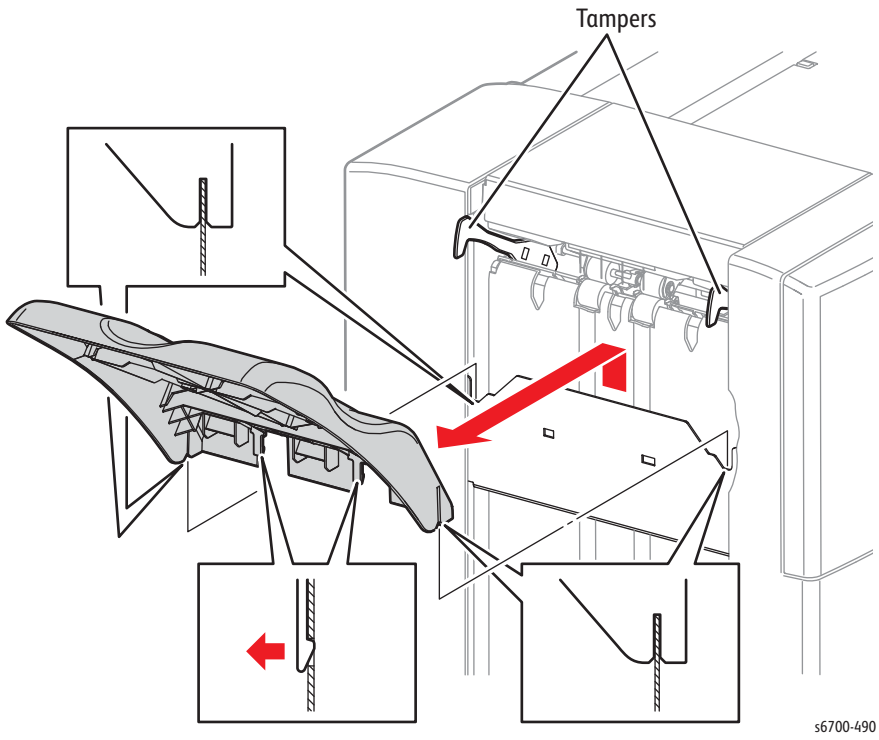
# Stacker Tray

## PL14.1.2

**Note**

When performing the following step, use care not to damage the Set Clamp Shaft holders or Tampers.

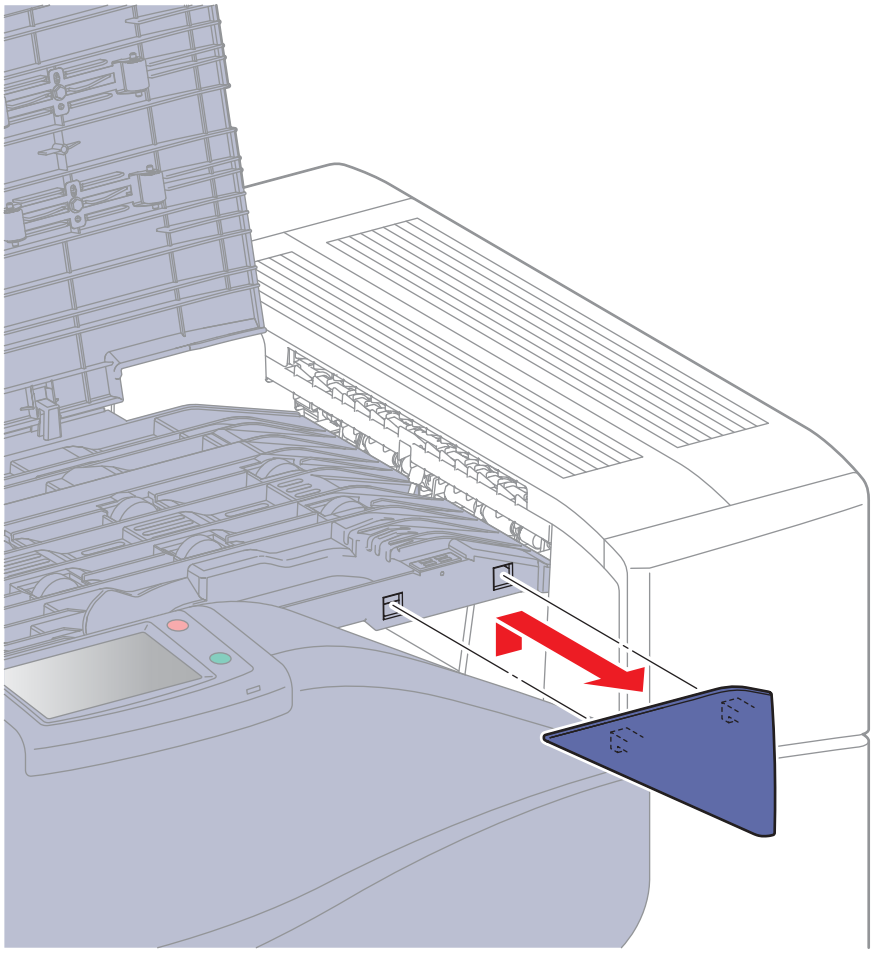
Release 2 hooks that secure the Stacker Tray to the Finisher.



## Horizontal Transport

### PL14.2.1

1. Remove the Finisher (page 8-229).
2. Open the Horizontal Transport Top Cover.
3. Release 2 hooks that secure the cover to the Horizontal Transport.



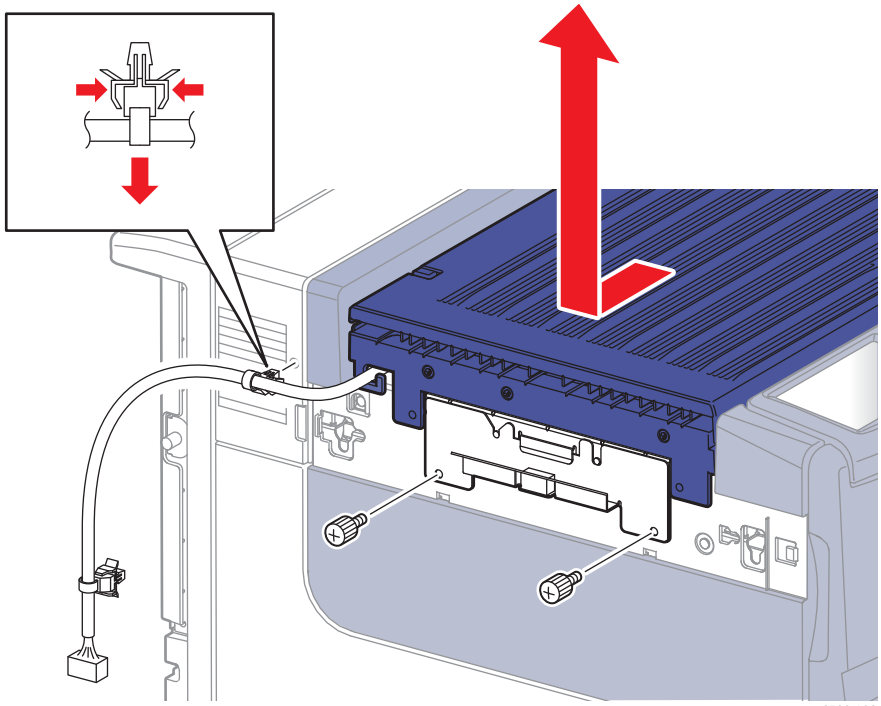
s6700-491

4. Close the Horizontal Transport Top Cover.

**Note**

When performing the following step, use caution not to damage the Stack Full Actuator.

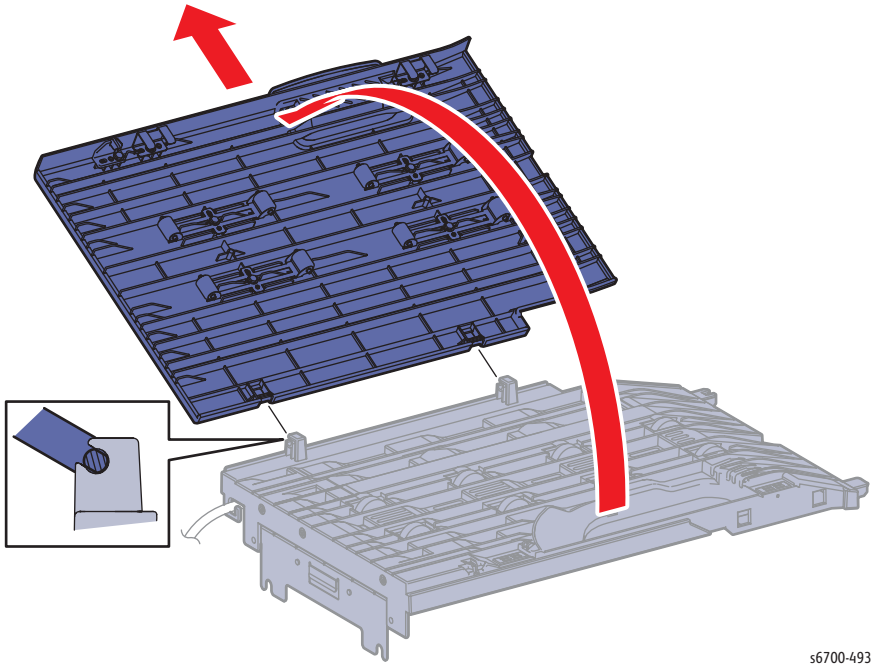
5. Remove the tie that secures the Horizontal Transport harness to the printer.
6. Remove 2 screws (M4, steel) that secure the Horizontal Transport to the printer.
7. Remove the guide bracket.
8. Slide the Horizontal Transport to the Left until 2 tabs on the Horizontal Transport disengage from the printer, then lift to remove from the printer.



# Horizontal Transport Top Cover

## PL14.2.3

1. Remove the Horizontal Transport (page 8-233).
2. Raise the Top Cover until the flat surfaces on the pivots are parallel with the U-shaped notches on the Lower Chute.
3. Remove the Top Cover diagonally upward from the Lower Chute.

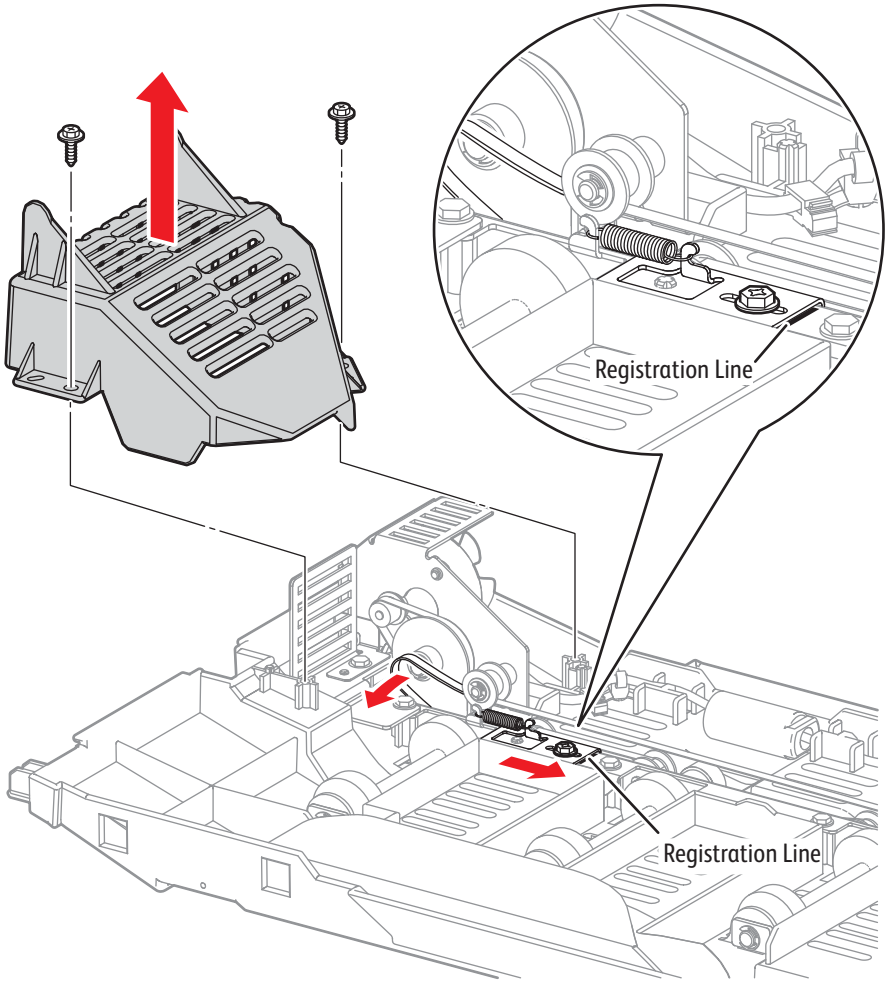


s6700-493

## Horizontal Transport Drive Assembly

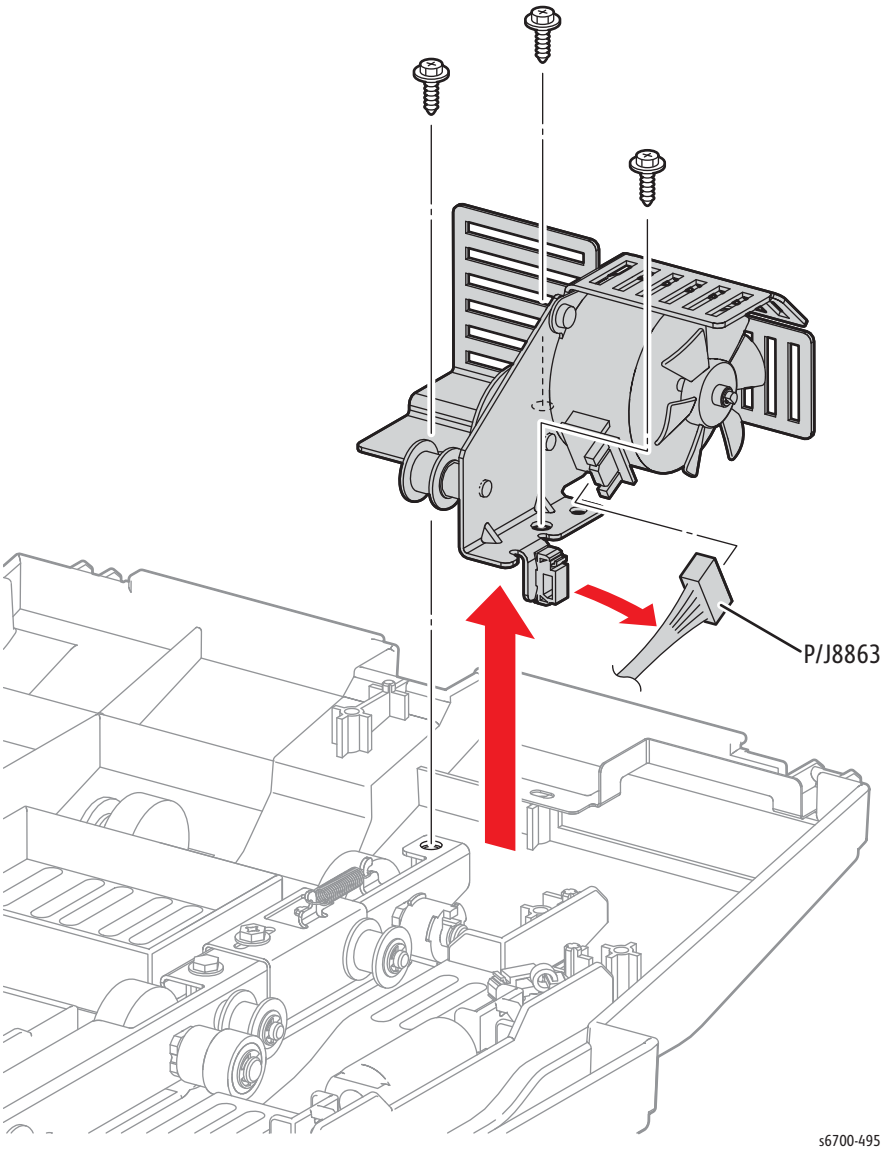
### PL14.2.14

1. Remove the Horizontal Transport (page 8-233).
2. Turn the Horizontal Transport over and remove 2 screws (silver, tapping, flanged, 8mm) that secure the motor cover to the Lower Chute Assy and remove the cover.
3. Draw or scribe a line along the edges of the tension bracket to make it's current position.
4. Loosen 1 screw (silver, flanged, 6mm) that secures the tension bracket and slide the bracket to remove the transport belt.




s6700-494

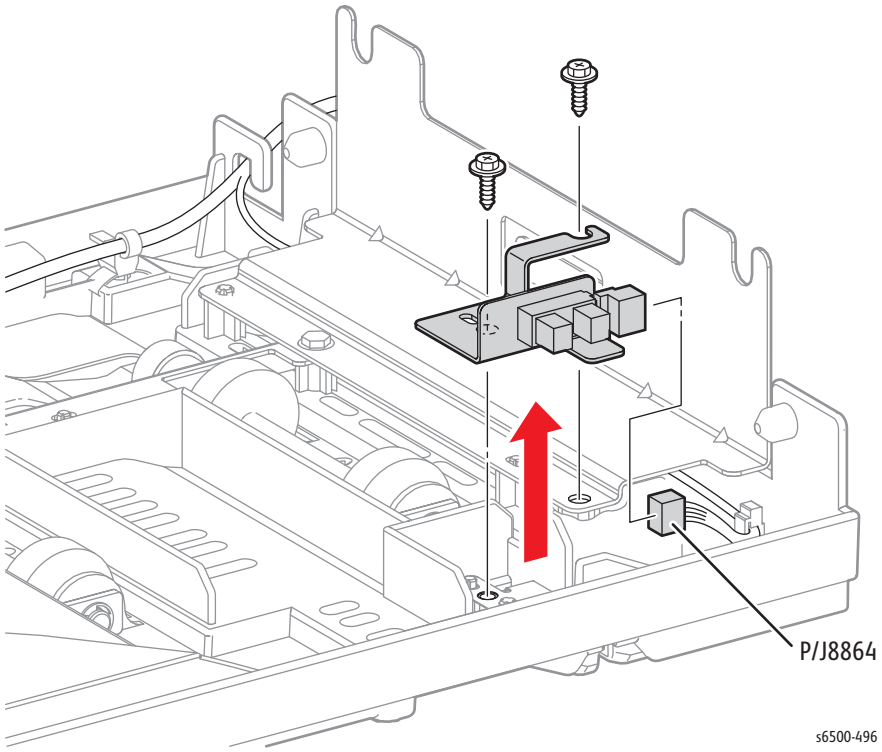
5. Remove 3 screws (silver, tapping, flanged, 8mm) that secure the Horizontal Transport Drive Assembly to the Lower Chute Assembly.
6. Release the harness from the clamp and disconnect P/J8863 to remove the Horizontal Transport Drive Assembly.



# Horizontal Transport Cover Open Sensor

## PL14.2.35

1. Remove the Horizontal Transport (page 8-233).
2. Turn the Horizontal Transport over and remove 2 screws (silver, tapping, flanged, 8mm) and disconnect P/J8864 that secure the sensor bracket and spring to the Lower Chute Assy.



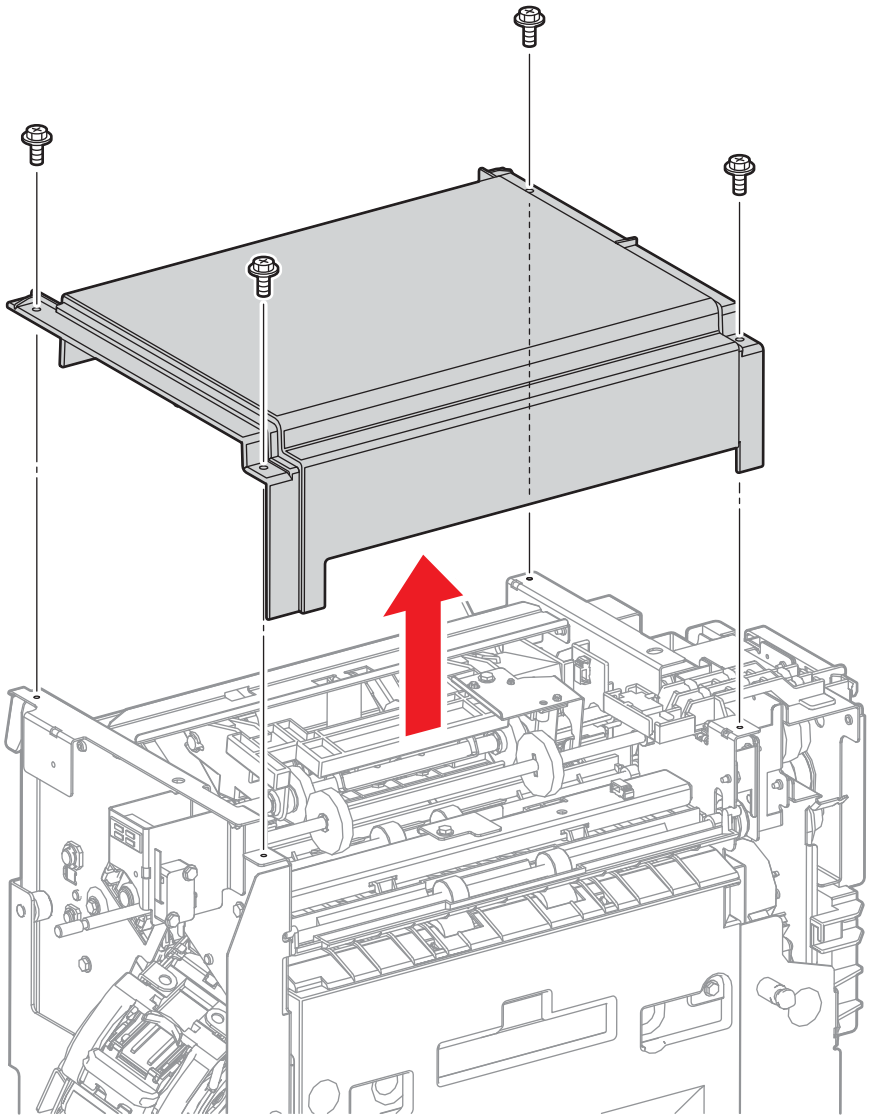

**Replacement Note**

Install the actuator spring on the bosses of the Lower Chute Assy first.

# Top Cover

## PL14.3.2

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove 4 screws (silver, flanged, 8mm) that secure the top cover to the Finisher.

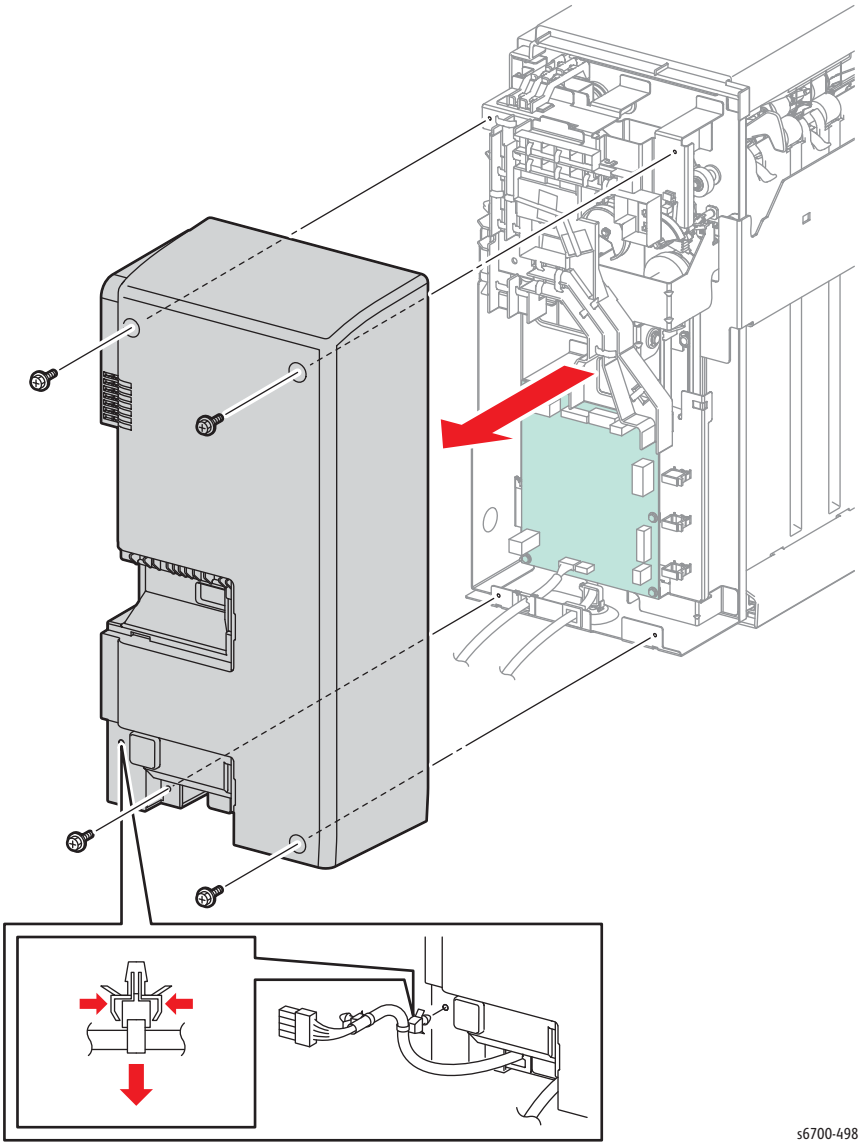


s6700-497

## Rear Cover

### PL14.3.3

1. Remove the Finisher (page 8-229).
2. Remove 4 screws (silver, flanged, 8mm) that secure the rear cover to the Finisher and remove the cover.

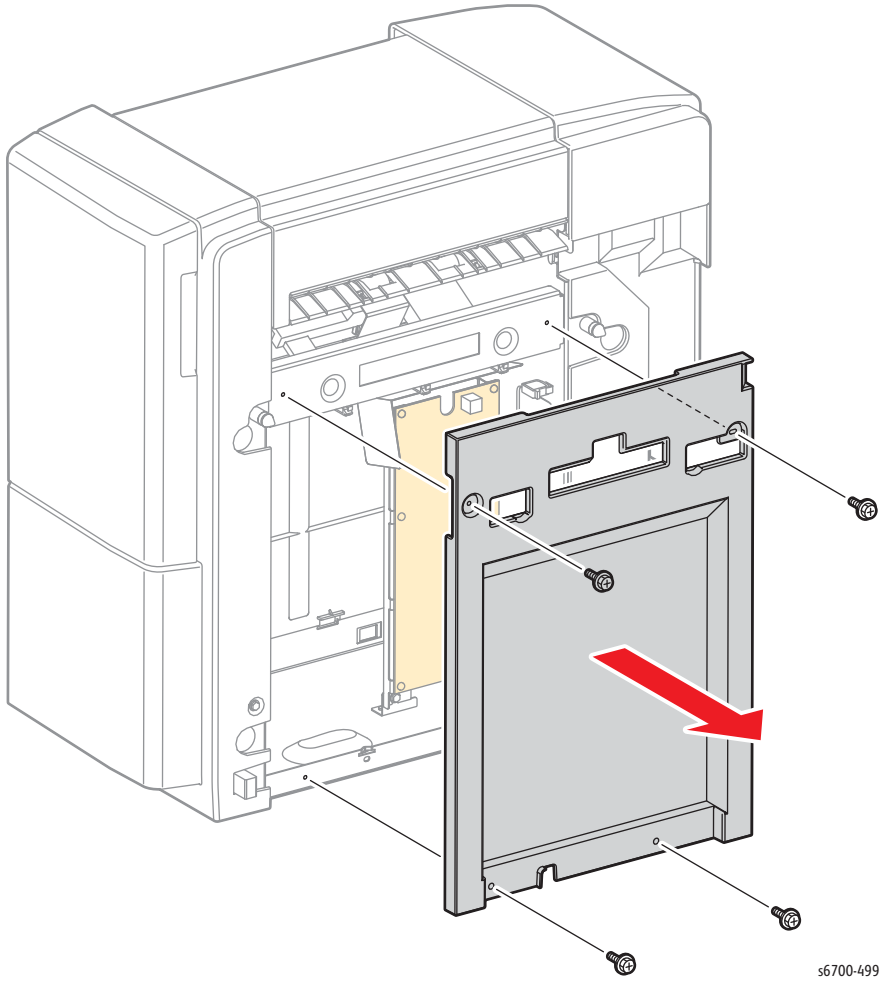


s6700-498

## Right Cover

### PL14.3.4

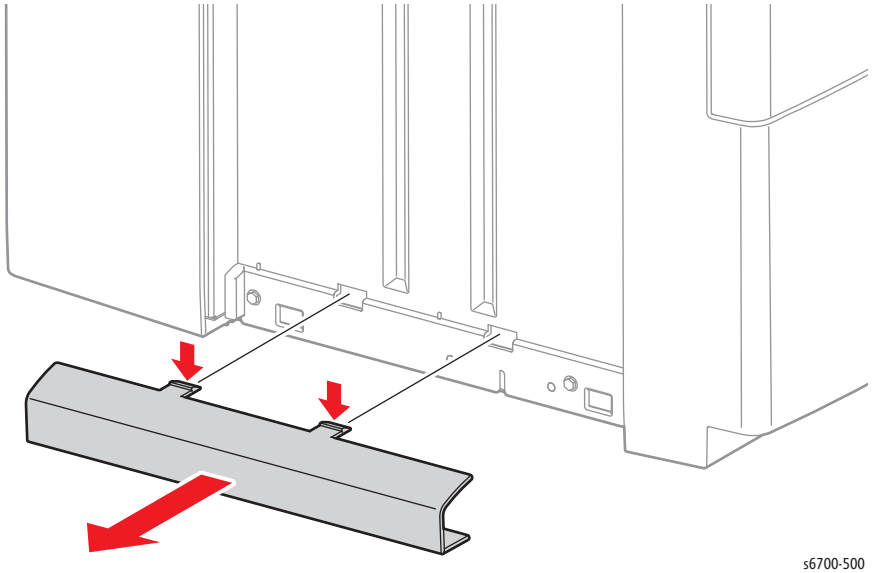
1. Remove the Finisher (page 8-229).
2. Remove the Front Cover (page 8-242).
3. Remove 4 screws (silver, flanged, 8mm) that secure the right cover to the Finisher and remove the cover.



## Stacker Tray Guide Cover

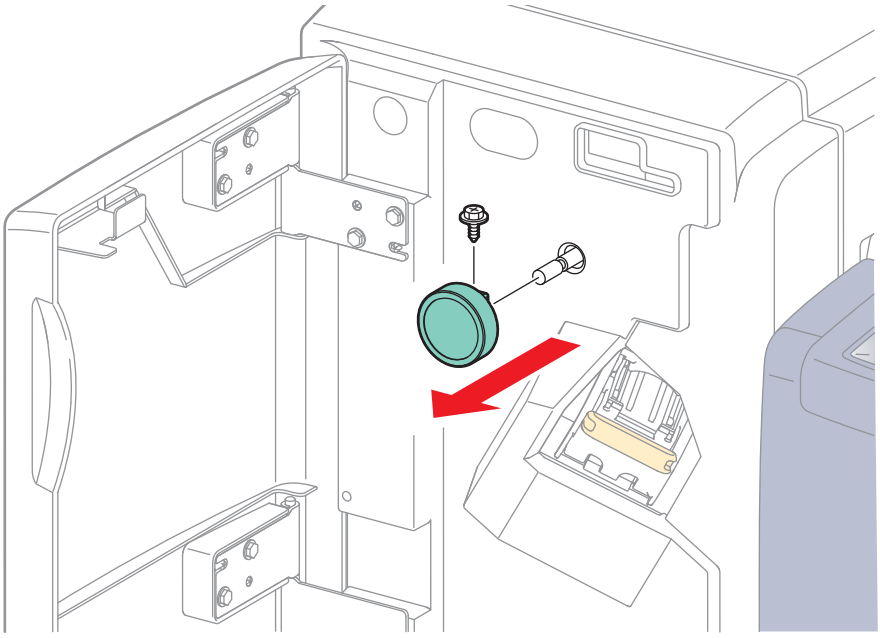
### PL14.3.5

1. Remove the Finisher (page 8-229).
2. Release 4 hooks that secure the guide cover to the Finisher and remove the cover.



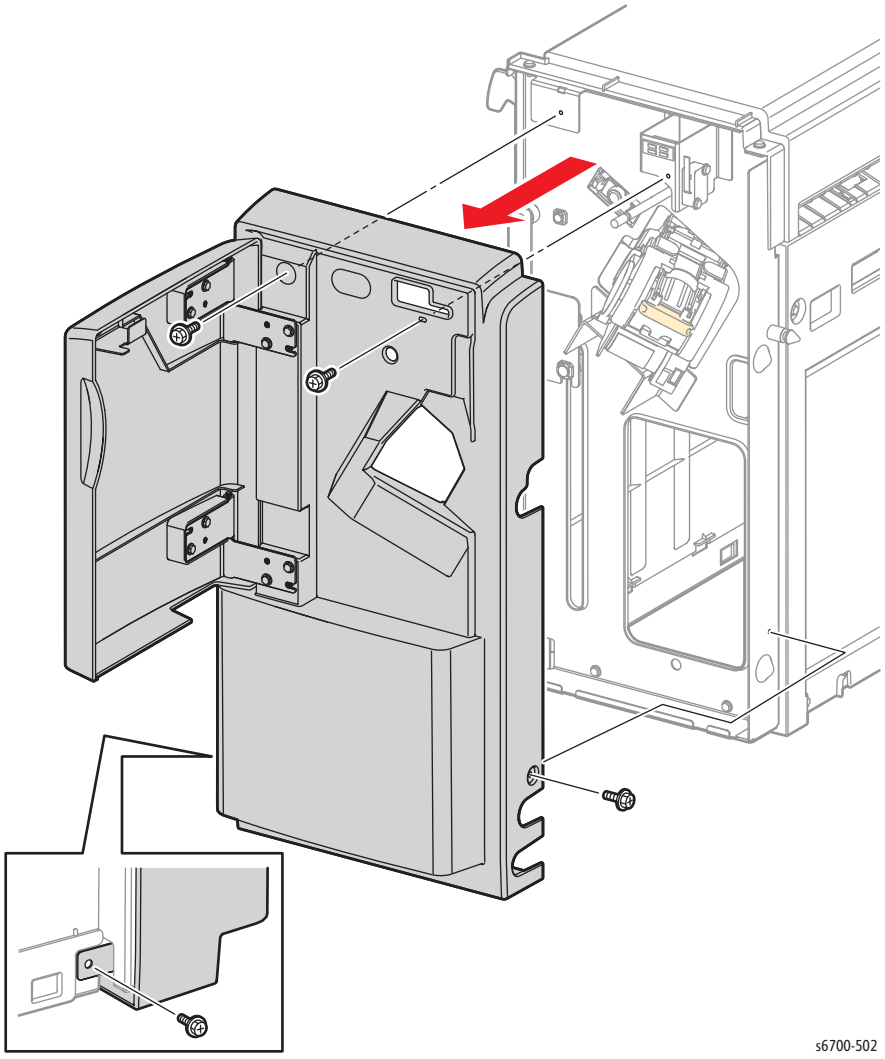
s6700-500

4. Open the Front Door.
5. Remove 1 screw (sliver, flanged, tapping, 6mm) that secures the Exit Knob to the Exit Drive Roll.



s6700-501

6. Remove 4 screws (silver, flanged, 8mm) that secure the Front Cover to the Finisher.



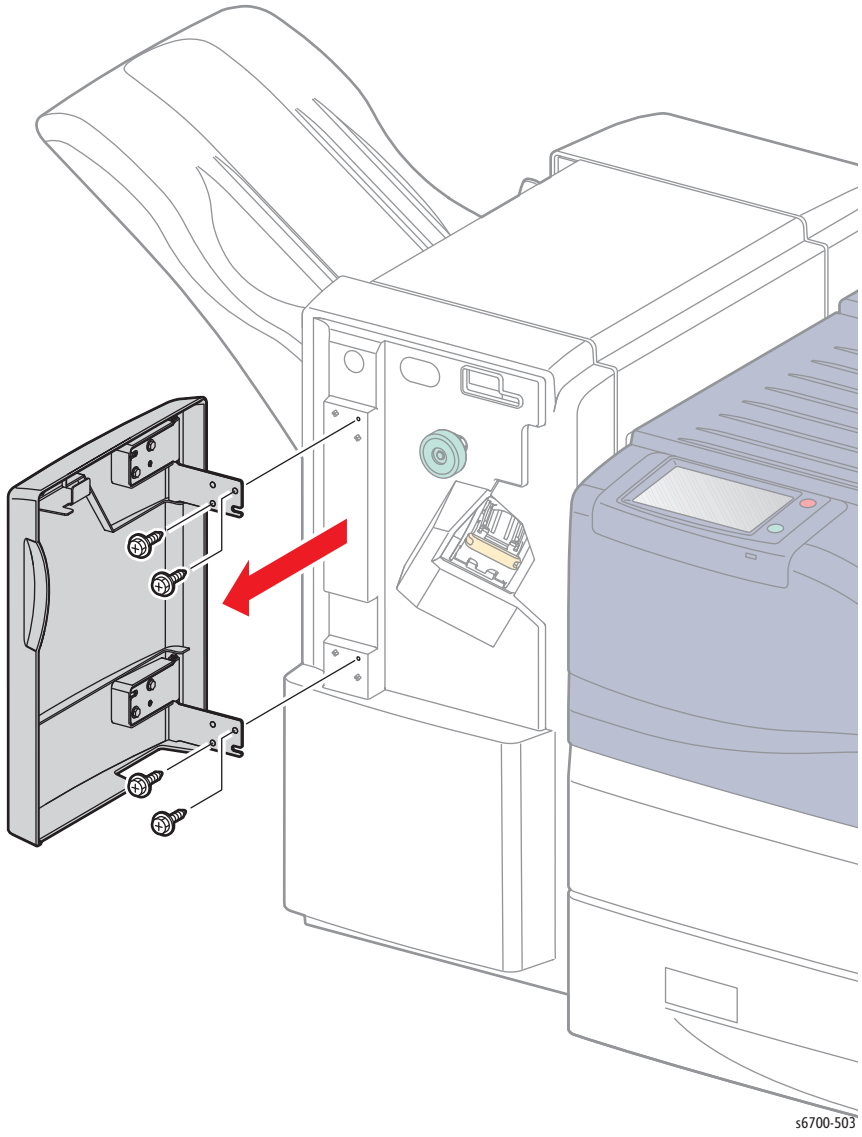

**Replacement Note**

Do not over tighten the Exit knob set screw.

## Front Door

### PL14.3.6

Remove 4 screws (silver, flanged, tapping, 8mm) that secure the front door to the Front Cover.



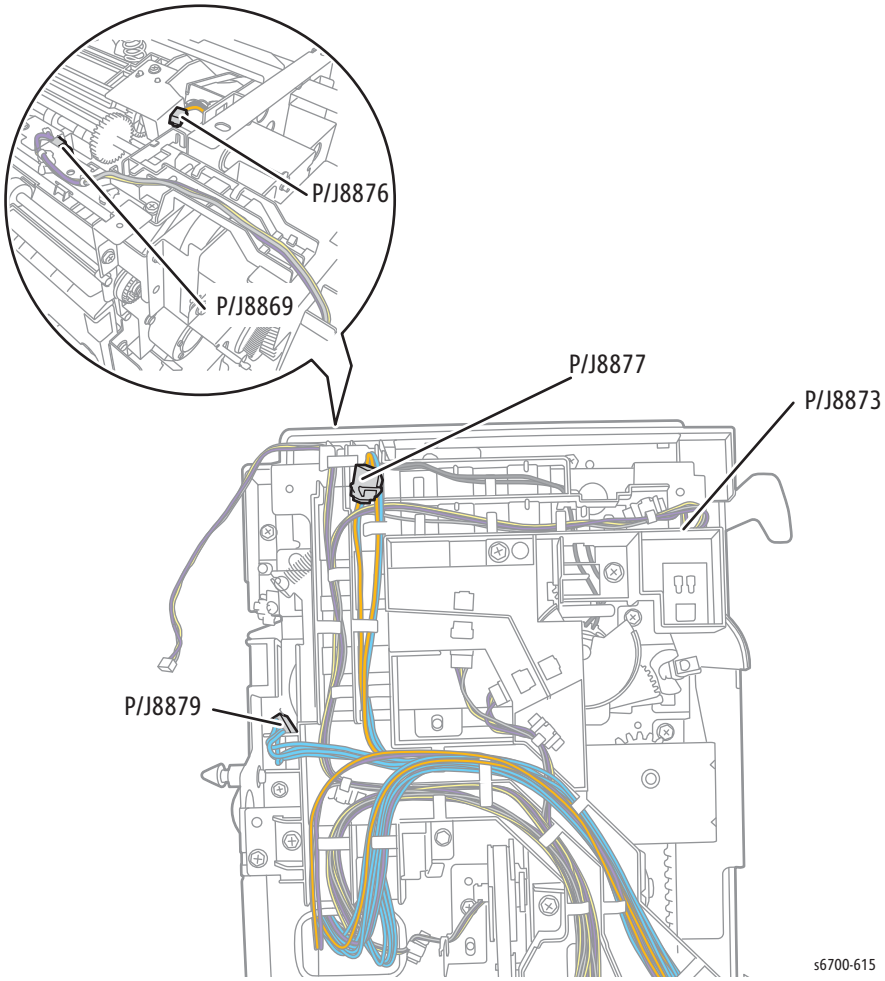
# Harness Guide 1

## PL14.4.1

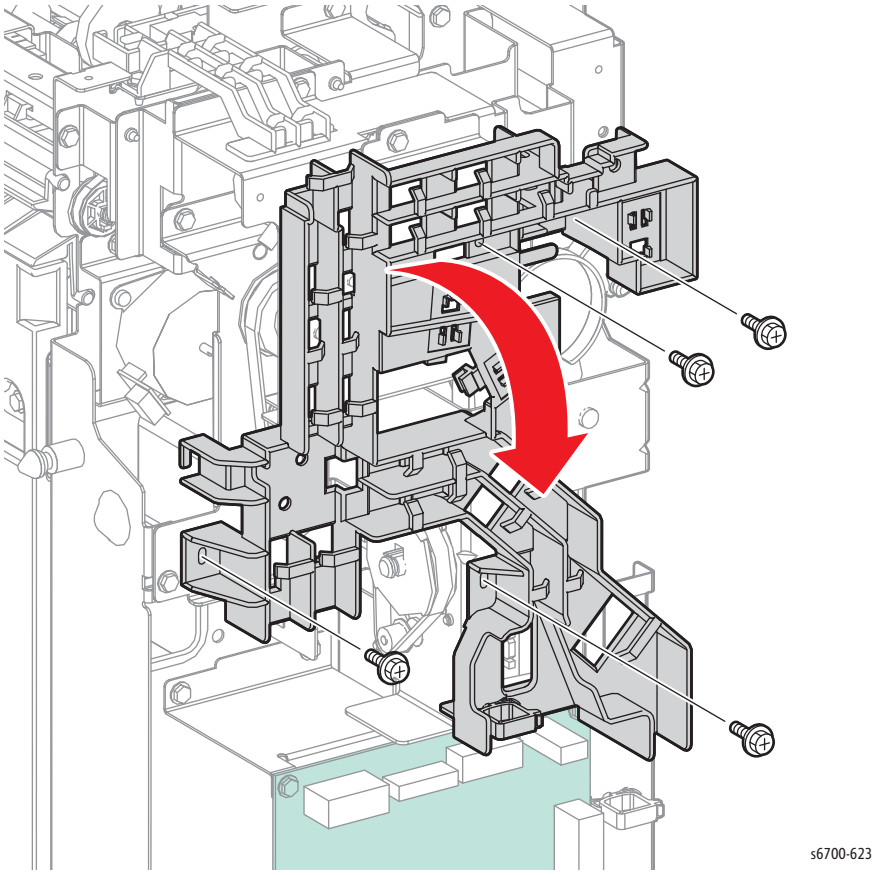
**Note**

This procedure releases the harness guide from the chassis to provide access for the replacement of obstructed parts. Complete removal of the harness guide is not required.

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Disconnect the Solenoid Assy (P/J8876) and remove the harness from harness guide 3.
6. Disconnect the Compile Exit Sensor (P/J8869) and release 1 tie and 1 clamp to remove the harness from harness guide 3.
7. Disconnect the Set Clamp Clutch (P/J8877) and remove the harness from harness guide 1.
8. Disconnect Stack Height Sensor 1 (P/J8873).
9. Disconnect the Transport Drive Assembly (P/J8879).



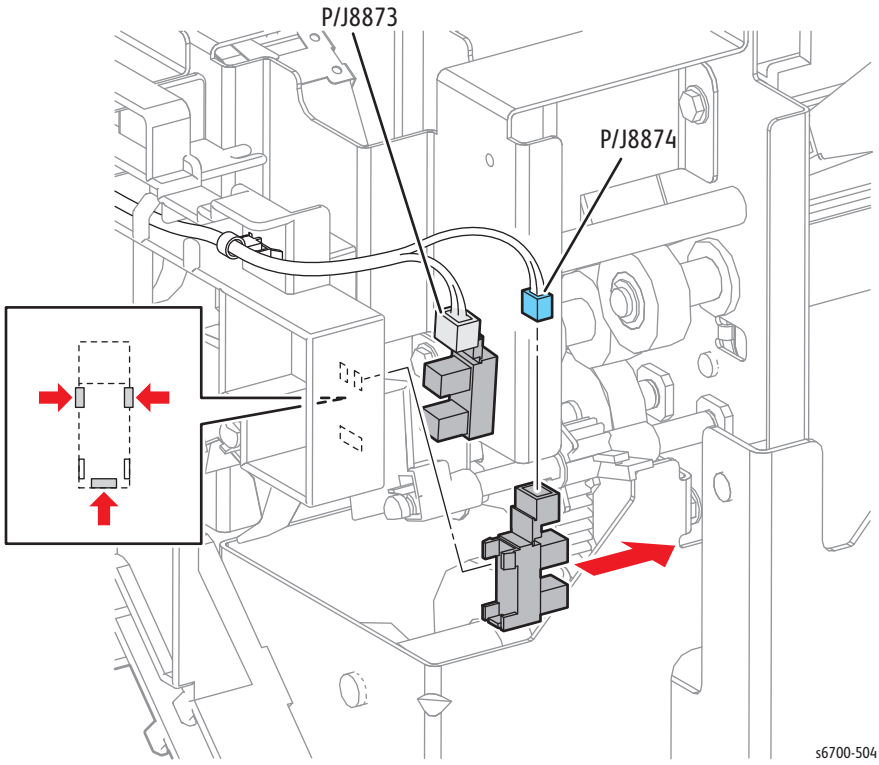
10. Remove 4 screws that secure harness guide 1 and lower the guide.



# Stack Height Sensors 1 and 2

## PL14.4.3

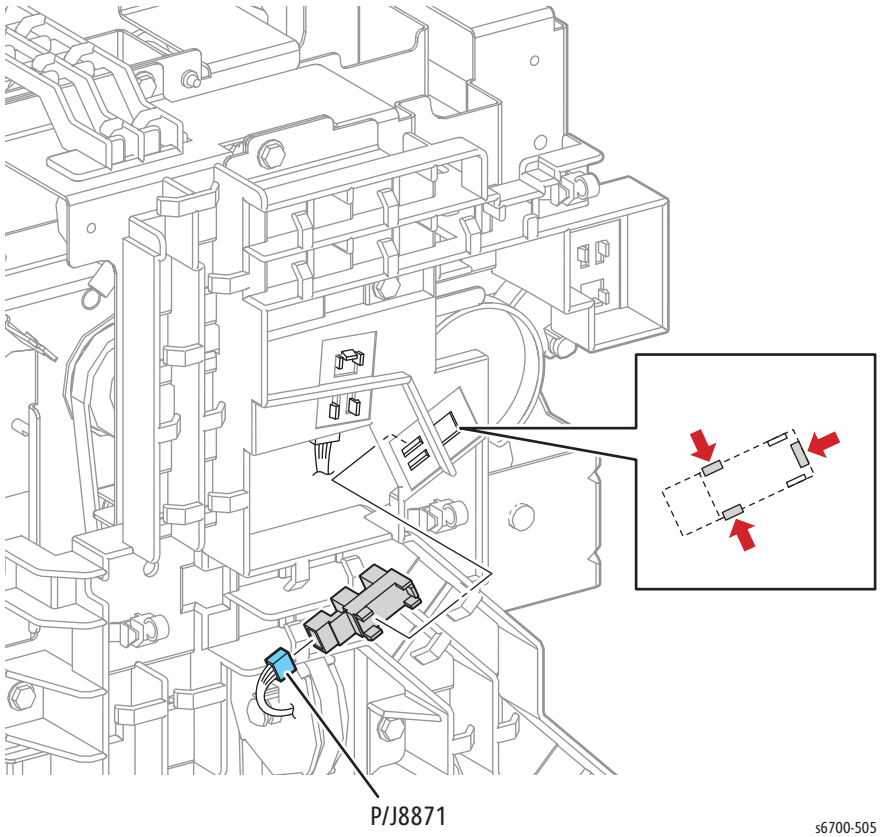
1. Remove the rear cover (page 8-240).
2. Release 3 hooks that secure each StacK Height Sensor to the Finisher.
3. Disconnect P/J8873 Stack Height Sensor 1 (White) and P/J8874 Stack Height Sensor 2 (Blue) to remove the sensor.



## Set Clamp Home Sensor

### PL14.4.3

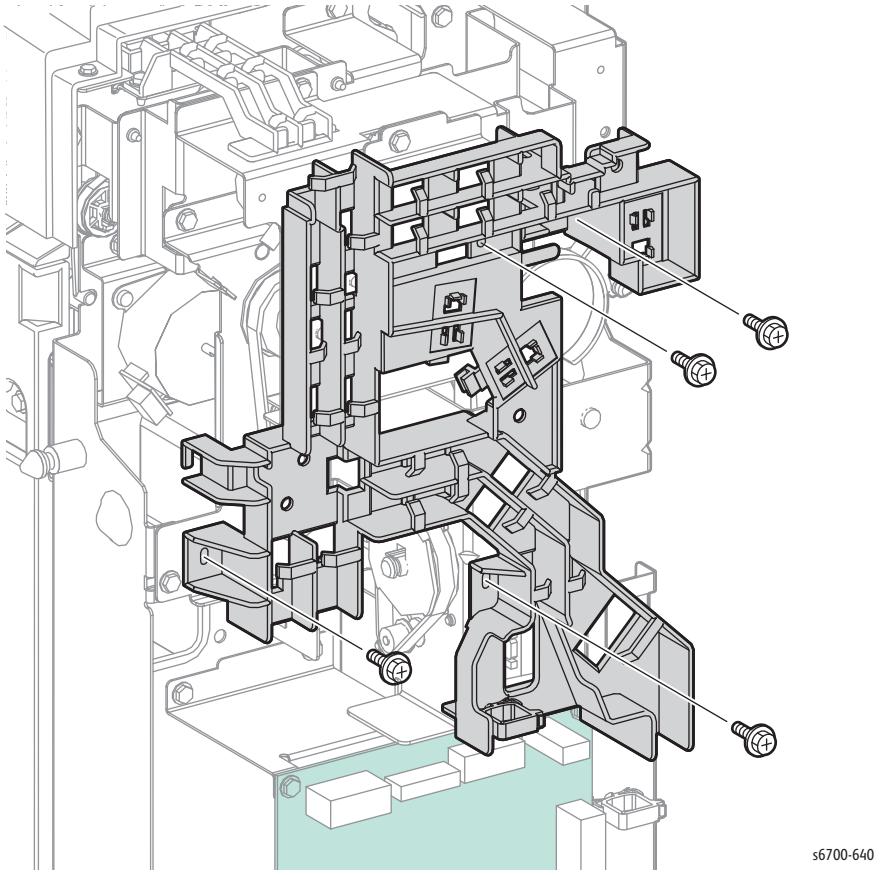
1. Remove the rear cover (page 8-240).
2. Release 3 hooks that secure the Set Clamp Home Sensor to the Finisher.
3. Disconnect P/J8871 (Blue) to remove the sensor.



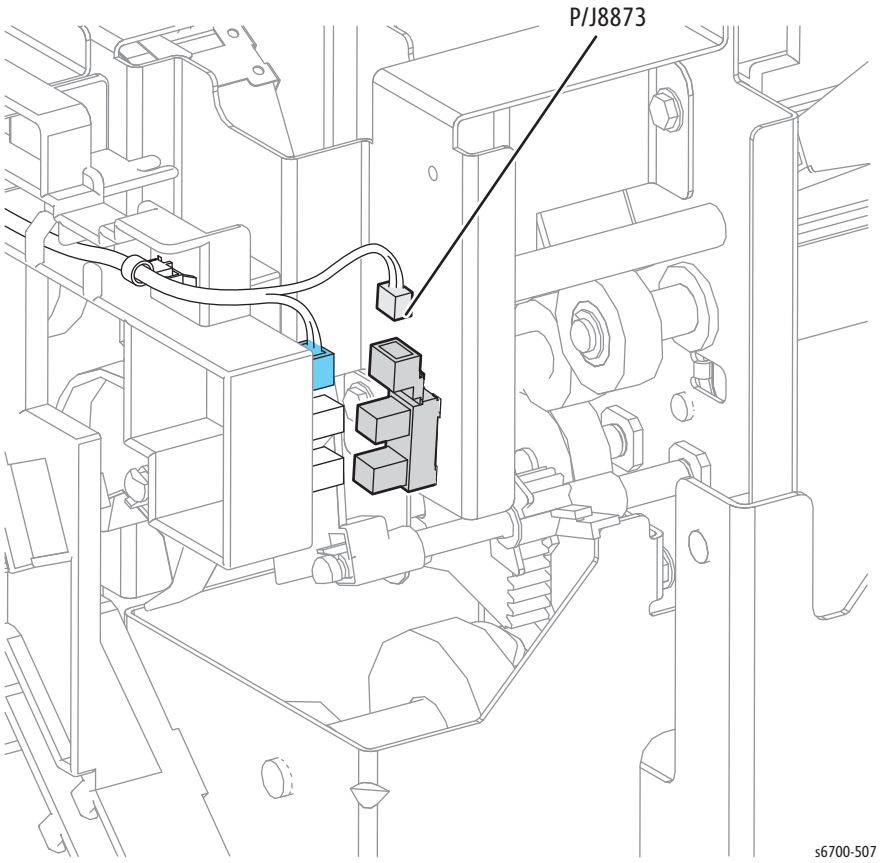
# Eject Clamp Home Sensor

## PL14.4.3

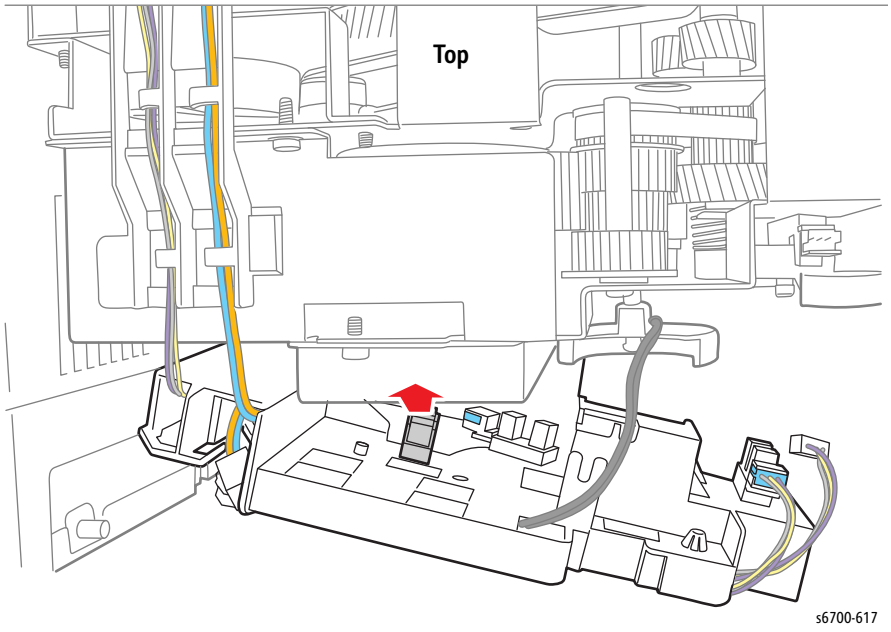
1. Remove the rear cover (page 8-240).
2. Remove 4 screws that secure harness guide 1 to the Finisher.



3. Disconnect P/J8873 (White, Stack Height Sensor 1) and pull the harness guide away from the chassis to access the Eject Clamp Home Sensor.




4. Release 3 hooks that secure the Eject Clamp Home Sensor to the Finisher.
5. Disconnect P/J8871 (Blue) to remove the sensor.



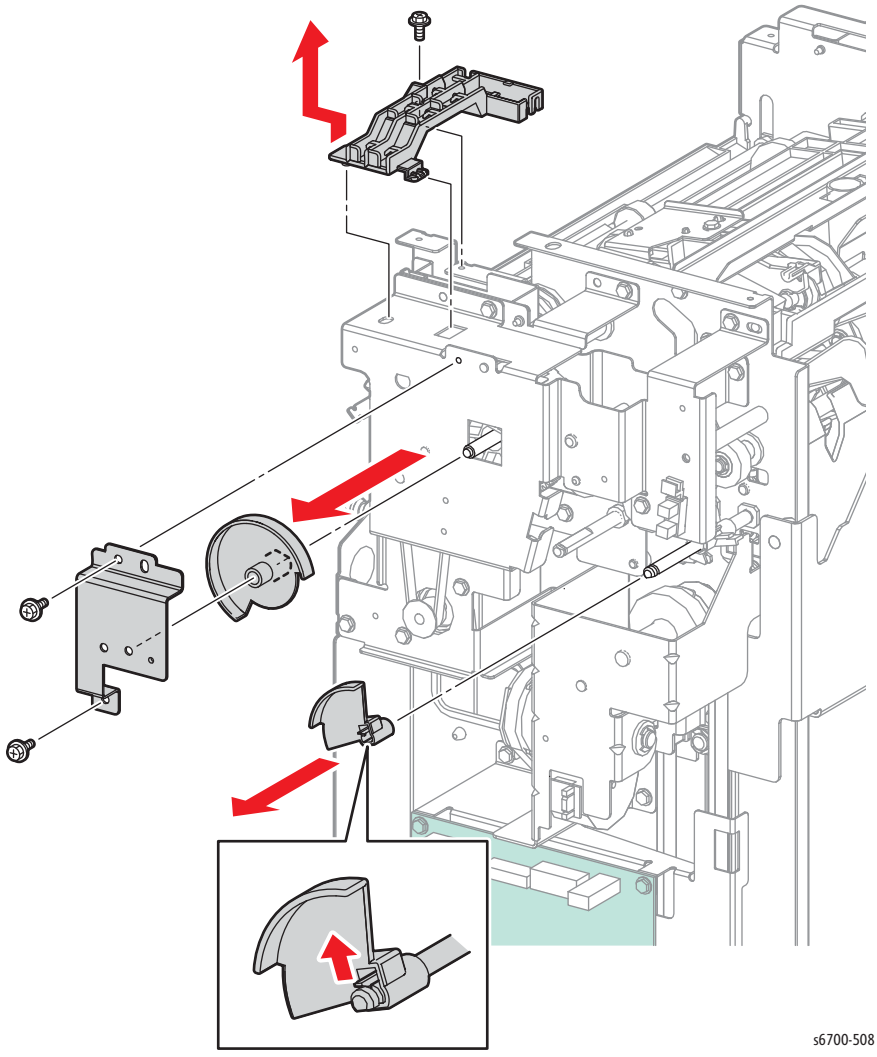
# Height Sensor Bracket

## PL14.4.8

**Note**

This procedure is provided to simplify other procedures where removal of the height sensor bracket is necessary to access obstructed spare parts. The height sensor bracket is not spared separately.

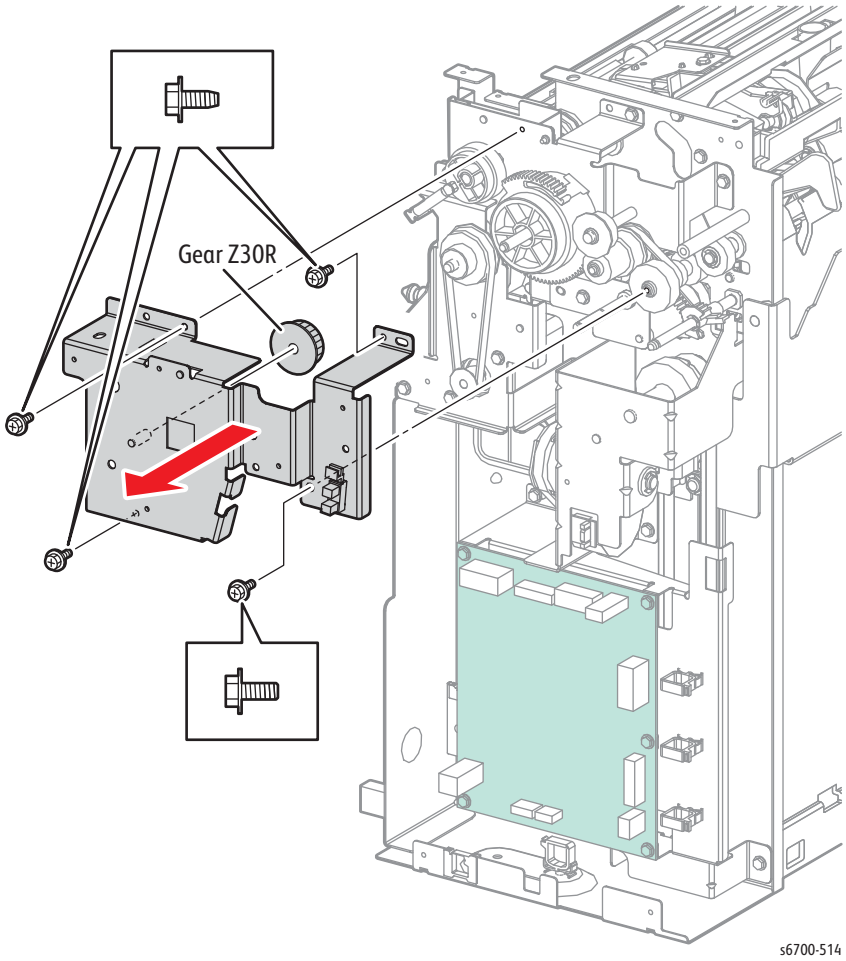
1. Remove 1 screw that secures harness guide 3 and remove the guide.
2. Remove the set clamp and stack height actuators.



3. Remove 4 screws (3 silver sheet metal, 6mm, 1 machine) that secure the height sensor bracket assy .

**Note**

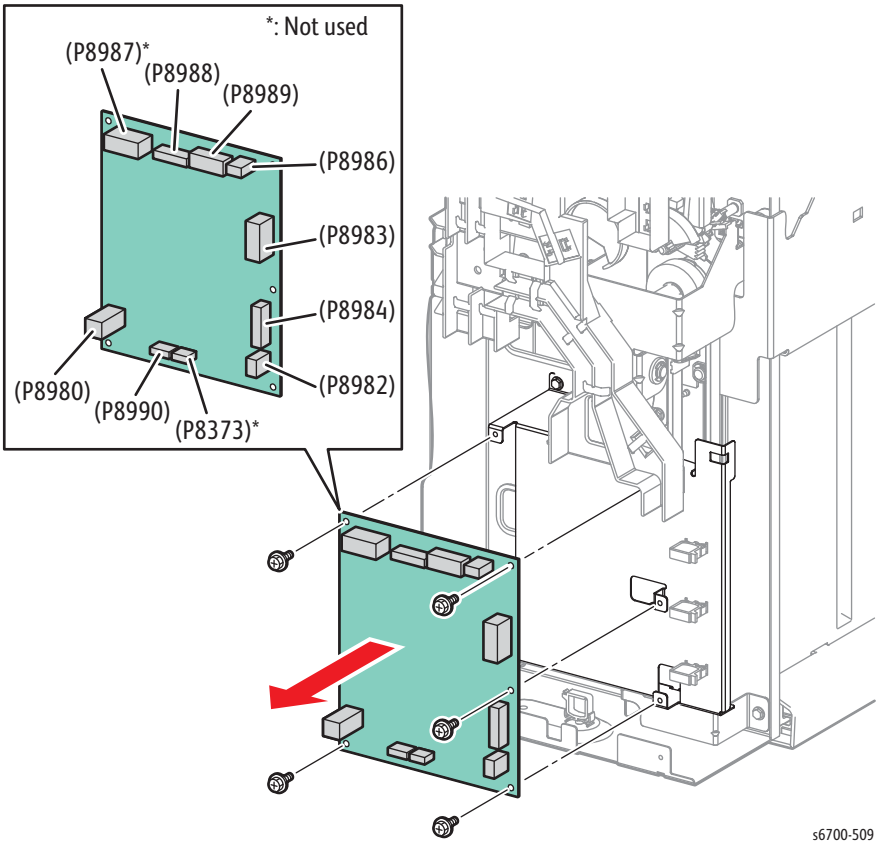
Gear Z30R is not captive to the height sensor bracket and may fall from the bracket when removed.



# Main Board

## PL14.4.12

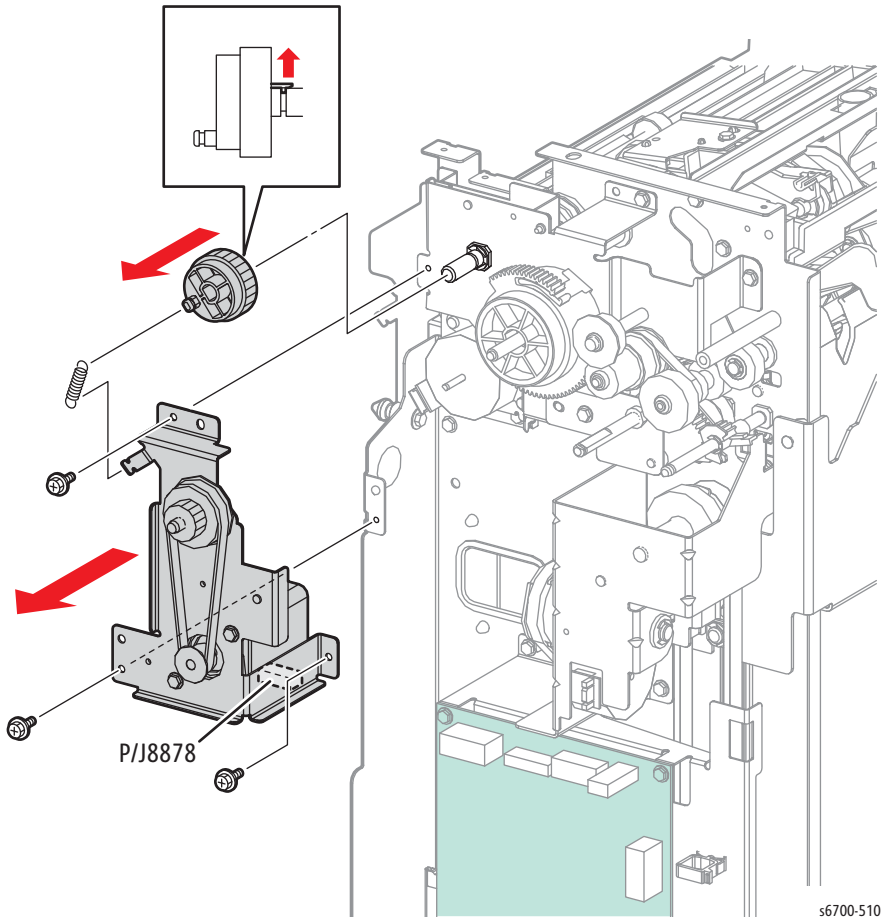
1. Remove the rear cover (page 8-240).
2. Disconnect all connections to the Main Board.
3. Remove 5 screws (silver, flanged, 6mm) that secure the Main Board to the Finisher and remove the board.



# Eject Drive Assembly

## PL14.5.1

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Release harness guide 1 (page 8-245).
6. Remove height sensor bracket (page 8-251).
7. Remove the spring from the Gear Z38 and Eject Drive Assembly.
8. Remove 3 screws (silver, flanged, 6mm) that secure the Eject Drive Assembly to the Finisher.
9. Disconnect P/J8878 from the Eject Drive Assembly to remove the drive.



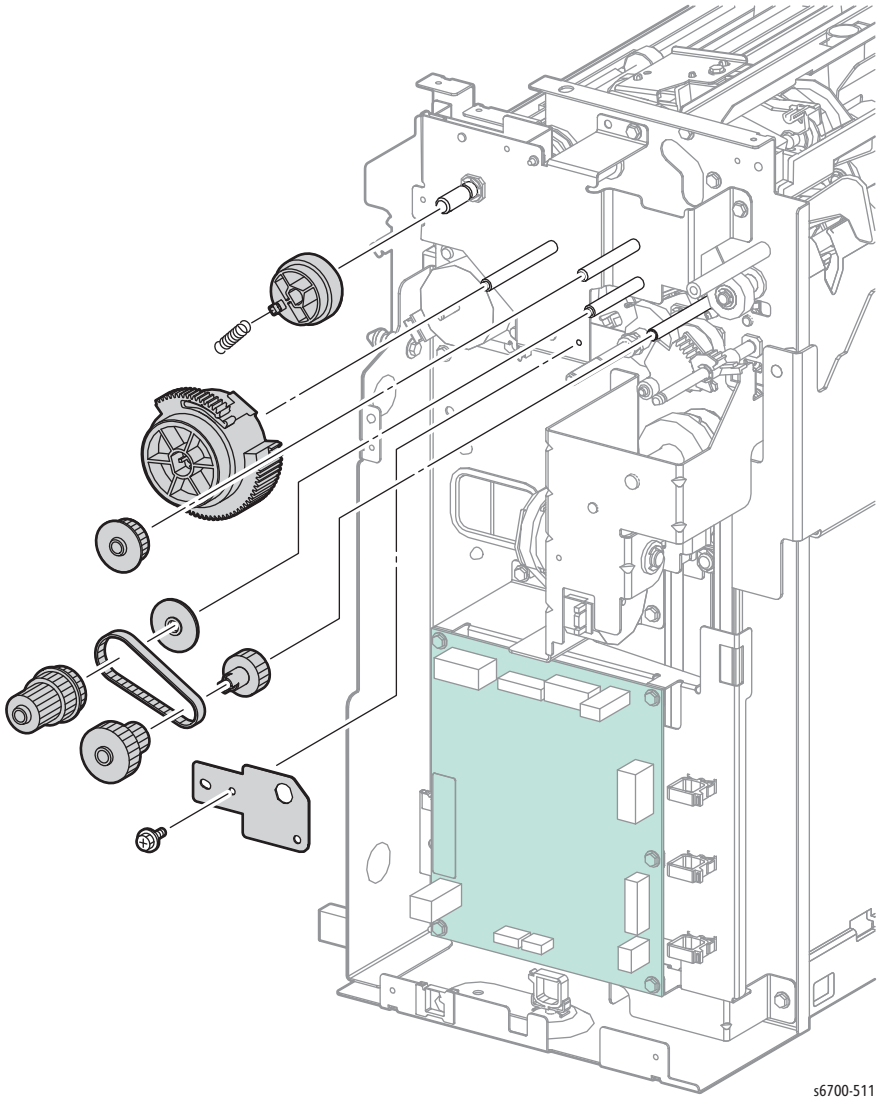

**Replacement Note**

Connect P/J8878 before securing the Eject Drive Assembly to the chassis.

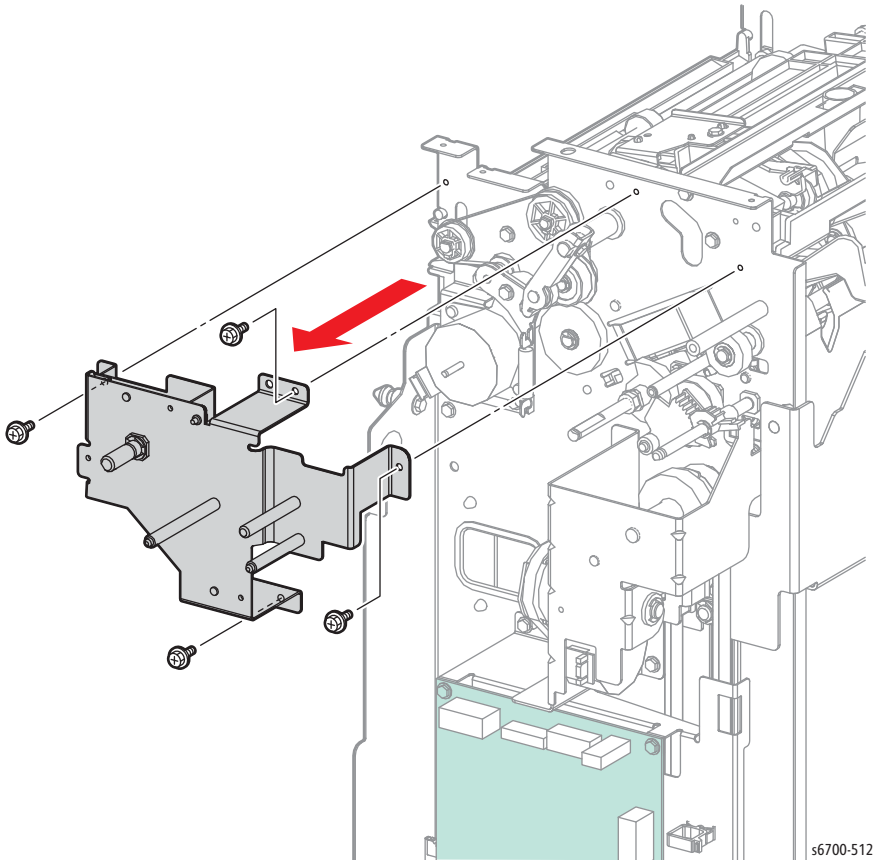
## Eject Drive Bracket Assembly

### PL14.5.10

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove the Eject Drive Assembly (page 8-254).
6. Remove the Set Clamp Clutch (page 8-257).
7. Release the hook and spring that secures gear Z38 S to the shaft of the Eject Drive Bracket Assy and remove the gear.
8. Remove gear Z25 S and sector gear from the Eject Drive Bracket Assy.
9. Remove the gear Z28 Z22 T38, belt, flange drive EJ, pulley Z32L T25 and gear Z23L from the Eject Drive Bracket Assy and the stud of the Finisher.
10. Remove 1 screw (silver, flanged, 6mm) that secures the clutch bracket to the Finisher.



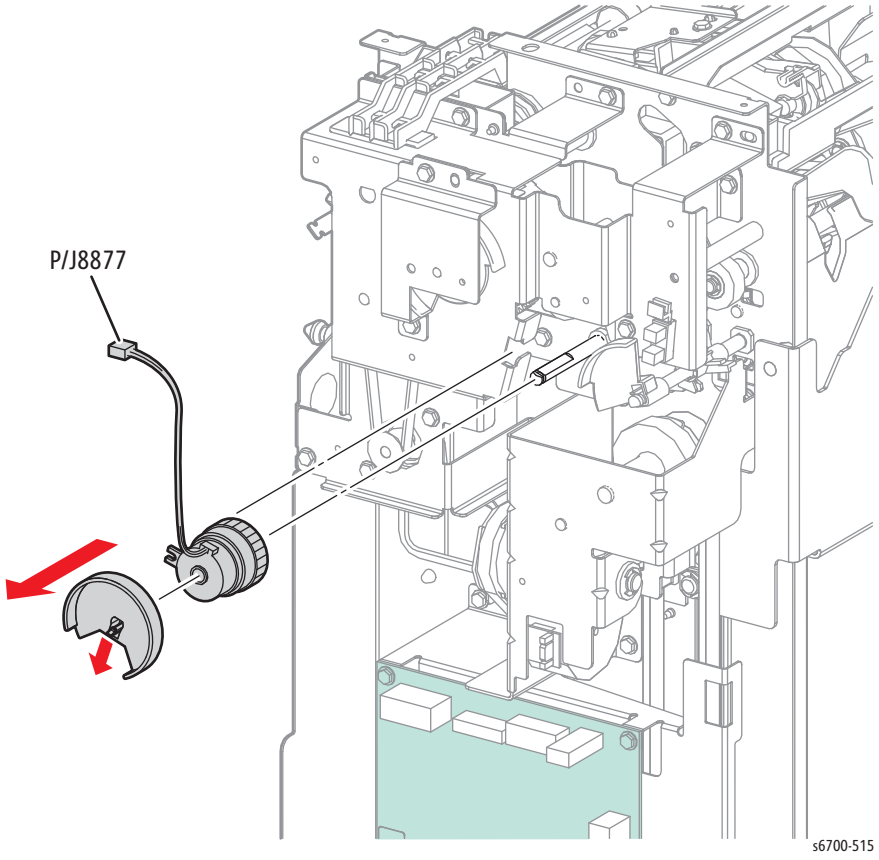
11. Remove 4 screws (silver, flanged, 6mm) that secure the Eject Drive Bracket Assy to the Finisher.



# Set Clamp Clutch

## PL14.5.25

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Release harness guide 1 (page 8-245)
6. Release the hook that secures the set clamp actuator to the shaft and remove the actuator.
7. Remove the clutch from the set clamp drive shaft.

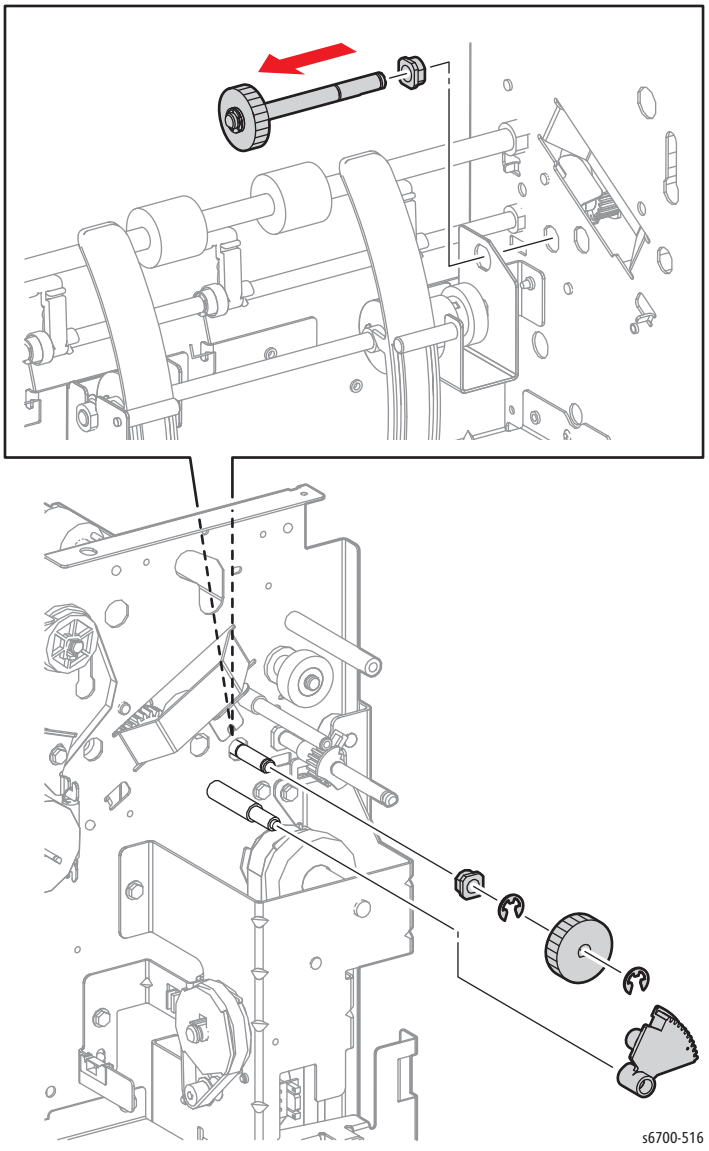


## Paper Guide 240

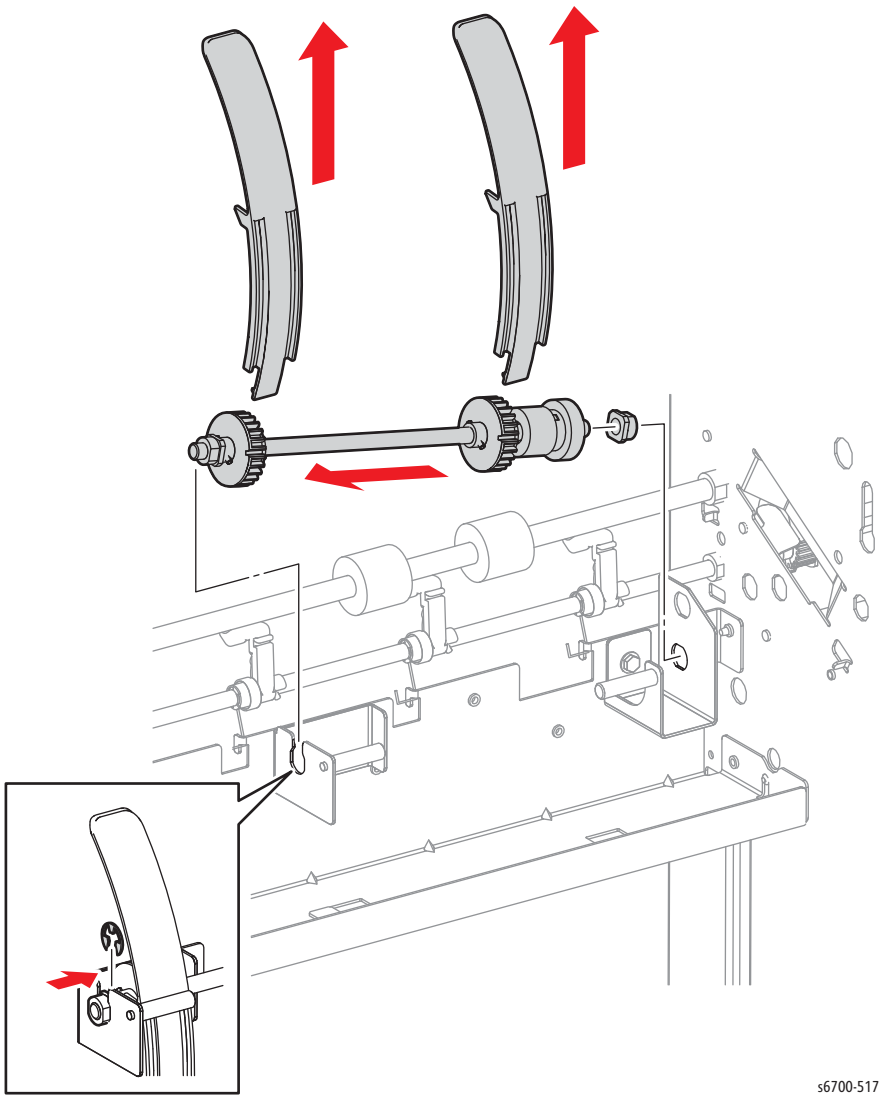
### PL14.5.38

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the right cover (page 8-241).
4. Remove the Front Cover (page 8-242).
5. Remove the top cover (page 8-239).
6. Release harness guide 1 (page 8-245).
7. Remove the height sensor bracket (page 8-251).
8. Remove the Set Clamp Clutch (page 8-257).
9. Remove the Eject Drive Assembly (page 8-254).
10. Remove the Eject Drive Bracket Assembly (page 8-255).
11. Remove the Eject Chute Assembly (page 8-267).
12. Remove the Eject Roller Assembly (page 8-261).
13. Remove the Stapler Holder (page 8-284).
14. Remove the Compile Exit Sensor (page 8-271).
15. Remove the entry drive roller (page 8-272).
16. Remove the exit drive roller (page 8-273).
17. Remove the main paddle shaft (page 8-274).
18. Remove the Lower Chute Assembly (page 8-269).
19. Remove the Compile Tray Assembly (page 8-277).
20. Remove the sector gear Z72 from the stud of the Finisher.

21. Remove the E-ring that secures the gear Z31 R to the paper guide shaft M and remove the gear.
22. Remove the E-ring that secures the bearing to the paper guide shaft M and remove the bearing.



23. Remove the paper guide shaft M from the inside of the frame along with the gear Z26 R and bearing.
24. Remove the E-ring that secures the bearing to the paper guide shaft and slide the bearing inward so the front of the paper guide shaft is released from the bracket.
25. Remove the paper Guide 240 along with the paper guide shaft, gear Z25 L, and clutch TL400.

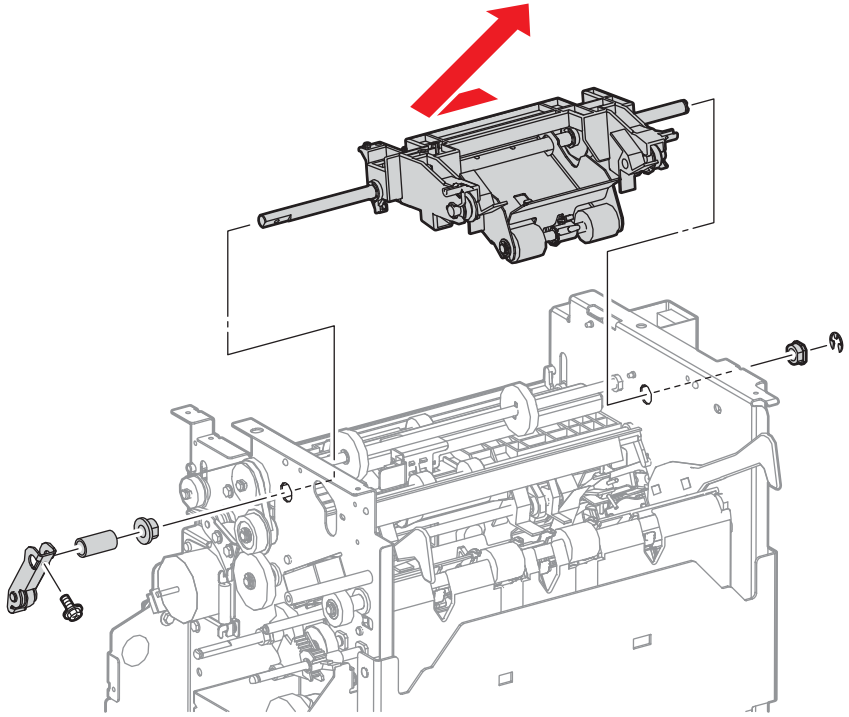


s6700-517

# Eject Roller Assembly

## PL14.6.3

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove the Eject Drive Assembly (page 8-254).
6. Remove the Set Clamp Clutch (page 8-257).
7. Remove the Eject Drive Bracket Assembly (page 8-255).
8. Remove the Exit Chute Assembly (page 8-267).
9. Remove 1 screw (silver, flanged, 6mm) that secures the clamp arm to the Eject Roller shaft.
10. Remove the spacer and bearing from the Eject Roller shaft.
11. Remove the E-ring that secures the bearing Eject Roller shaft, and then remove the bearing.
12. Remove the Eject Roller Assy from the Finisher.

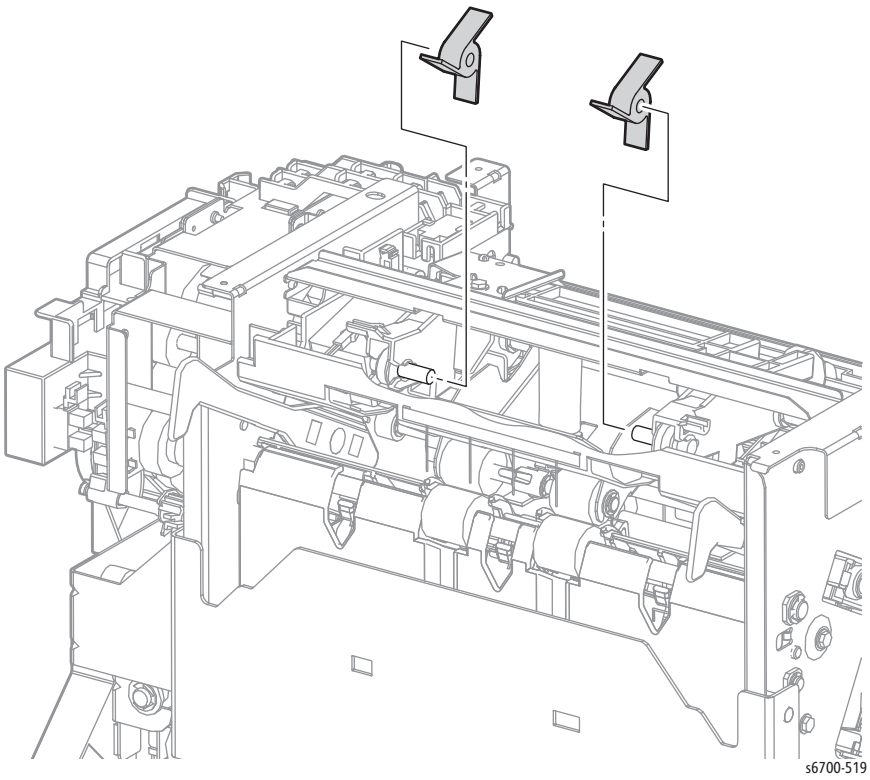


s6700-518

## Sub Paddle

### 14.6.8

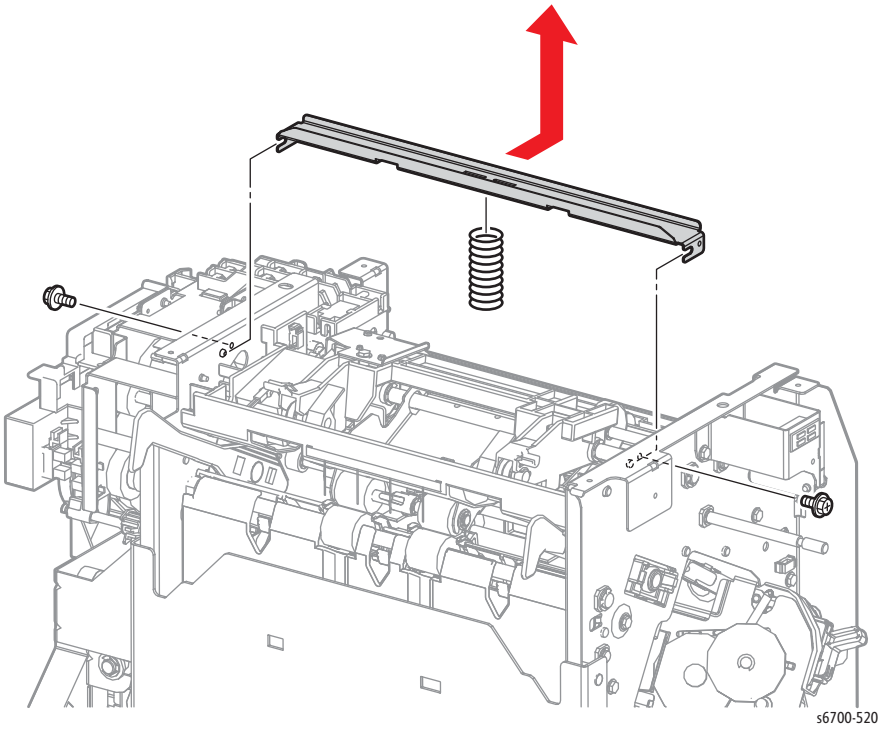
1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove the Sub Paddle from the Eject Roller Assembly.



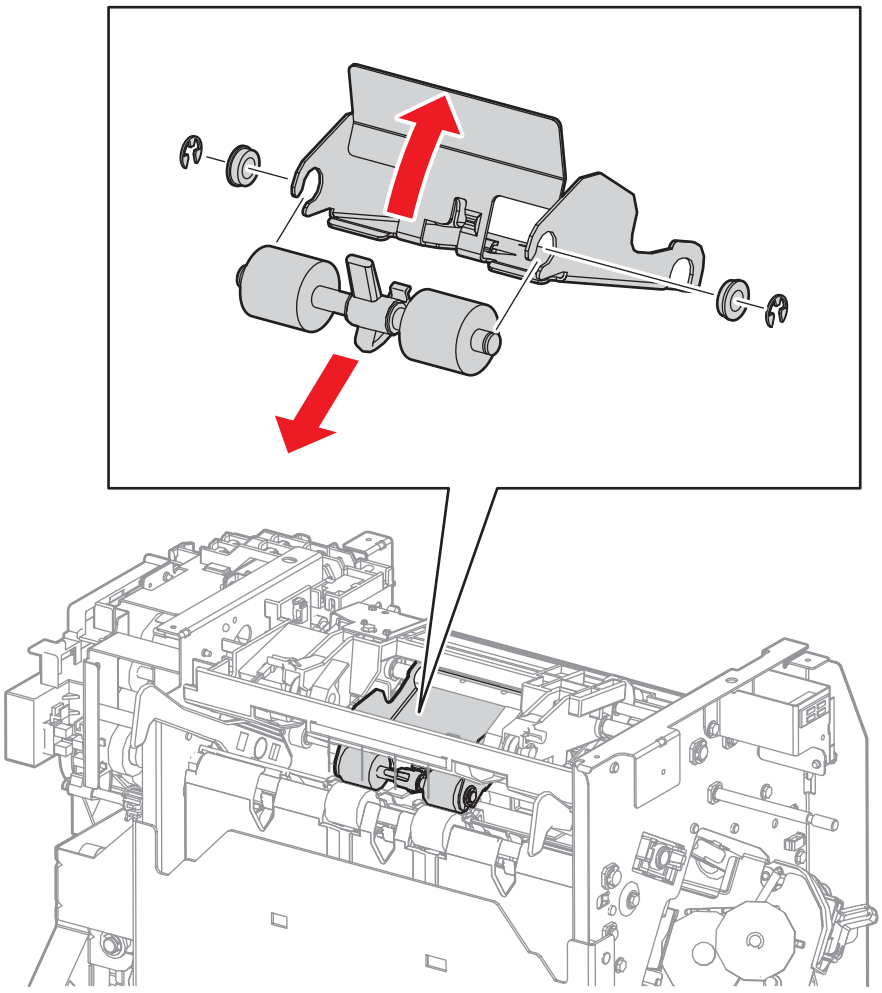
# Eject Pinch Roller

## PL14.6.16

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove 2 screws (silver, flanged, 6mm) and release 2 bosses that secure the plate tie eject pinch to the Finisher.



6. Remove 2 E-rings that secure bearings at each end of the to the Eject Pinch Roller shaft.
7. Remove 2 bearings and remove the Eject Pinch Roller from the eject pinch bracket.

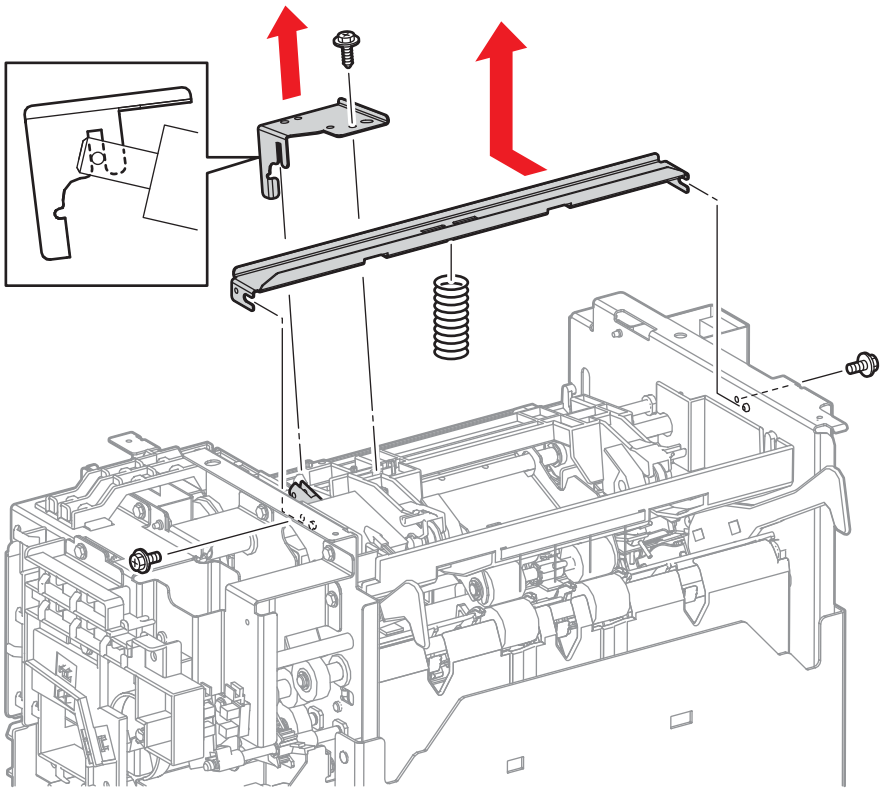


s6700-521

## Sub Paddle Solenoid

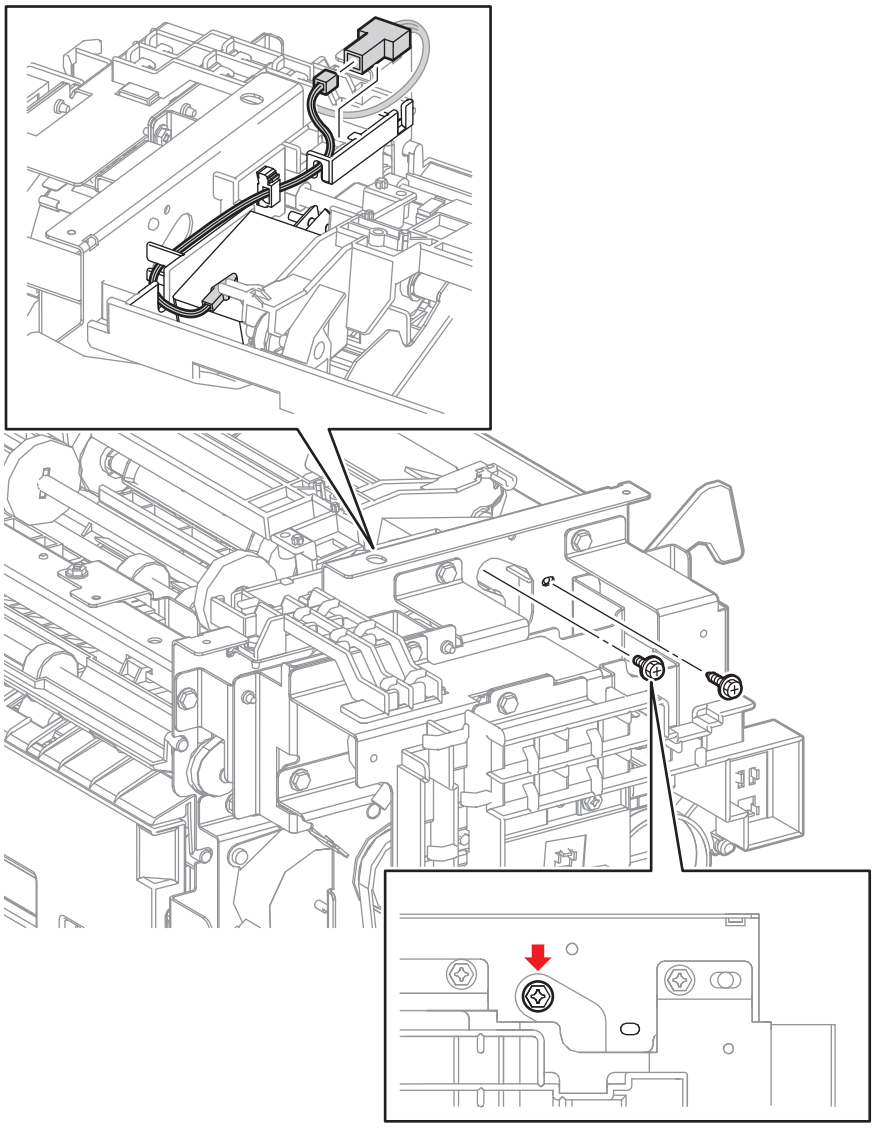
### PL14.6.20

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove 2 screws (silver, flanged, 6mm) and release 2 bosses that secure the plate tie eject pinch to the Finisher.
6. Remove 1 screw (silver, tapping, flanged, 8mm) that secures the support arm to the Eject Roller Assy.



s6700-522

7. Disconnect P/J8876 from the harness and release the harness from the clamp and notch of the Eject Chute Assy.
8. Remove 2 screws (silver, flanged, 5mm) that secures the solenoid to the Eject Chute Assy.

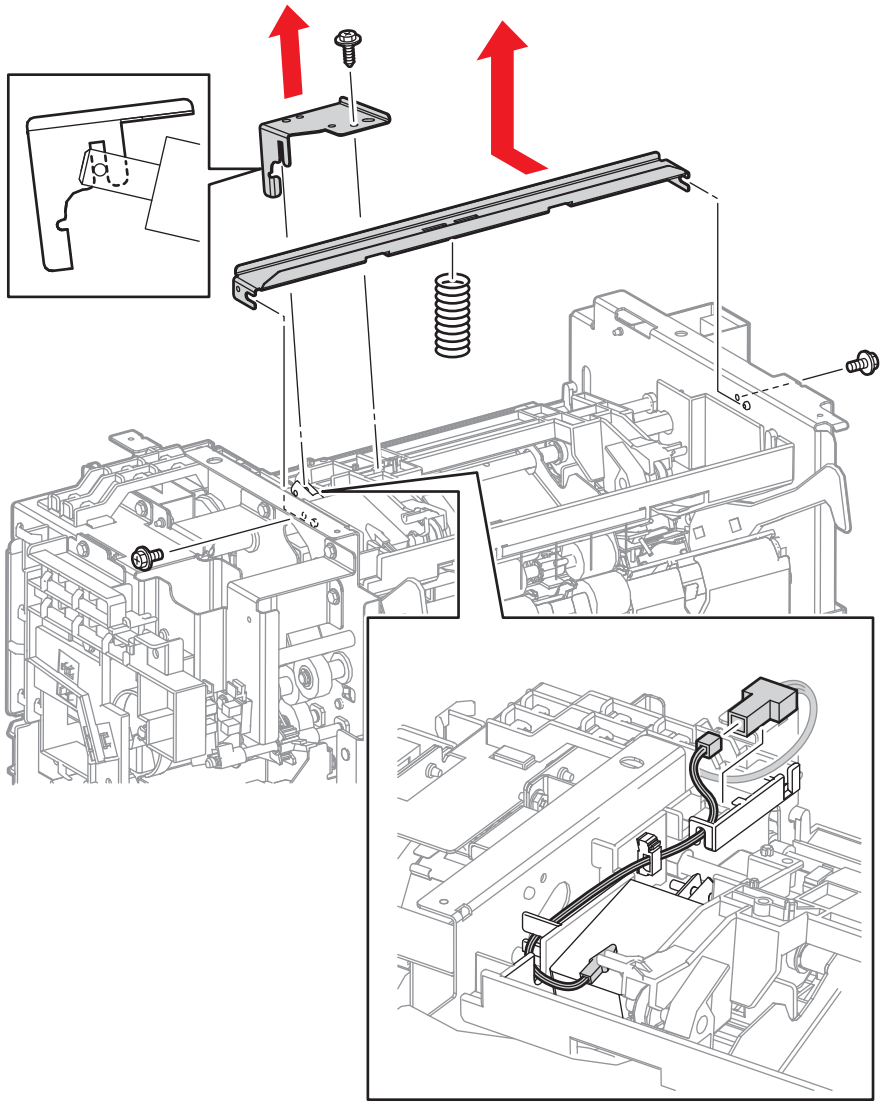


s6700-523

# Eject Chute Assembly

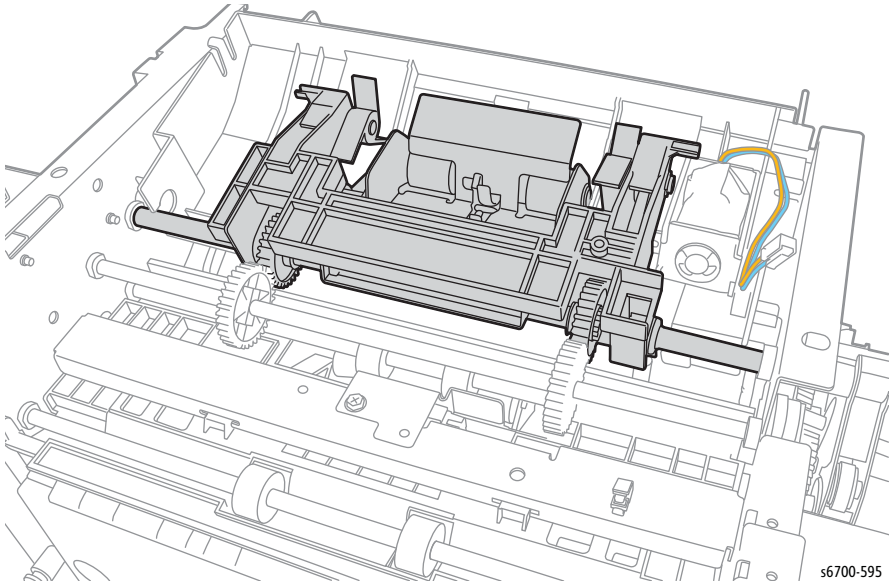
## PL14.6.24

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove 2 screws (silver, flanged, 6mm) and release 2 bosses that secure the plate tie eject pinch to the Finisher.
6. Remove the support arm from the Eject Roller Assy by removing1 screw (silver, tapping, flanged, 8mm).
7. Remove the Sub Paddle Solenoid piston from the solenoid.
8. Disconnect the Sub Paddle Solenoid (P/J8876) and release the harness from the Eject Chute Assembly.



s6700-524

9. Rotate the Eject Roller Assy upward to release the sub paddle spring from the hooks on the Eject Roller Assy and on the Eject Chute Assy.
10. Remove 1 screw (silver, tapping, flanged, 8mm) that secures the Eject Chute Assy to the Finisher.
11. Release the bosses on the Eject Chute Assy from the holes on the Finisher.
12. Flex the front and rear notches on the Eject Chute Assy wider so that they are released from the bearings on the Eject Roller Assy, then pull out the Eject Chute Assy from the Finisher.

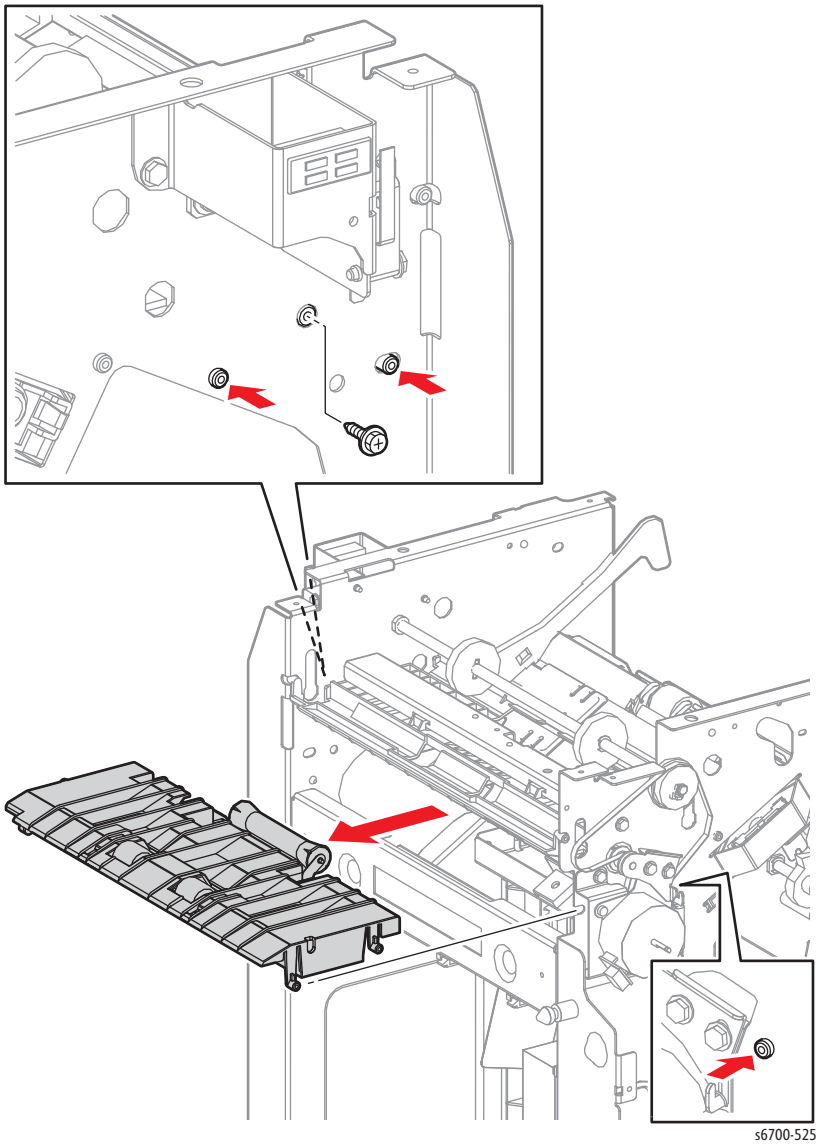


## Lower Chute Assembly

### PL14.7.2

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the right cover (page 8-241).
4. Remove the Front Cover (page 8-242).
5. Remove the top cover (page 8-239).
6. Release harness guide 1 (page 8-245).
7. Remove the height sensor bracket (page 8-251).
9. Remove the Set Clamp Clutch (page 8-257).
10. Remove the Eject Drive Assembly (page 8-254).
11. Remove the Eject Drive Bracket Assembly (page 8-255).
12. Remove the Eject Chute Assembly (page 8-267).
13. Remove the Eject Roller Assembly (page 8-261).
14. Remove the Stapler Holder (page 8-284).
15. Remove the Compile Tray Exit Sensor (page 8-271).
16. Remove the entry drive roller (page 8-272).
17. Remove the exit drive roller (page 8-273).
18. Remove the main paddle shaft (page 8-274).

19. Remove 1 screw (silver, tapping, flanged, 8mm) that secures the Lower Chute Assy to the Finisher.
20. Remove the Lower Chute Assy by releasing 4 bosses from holes in the Finisher.

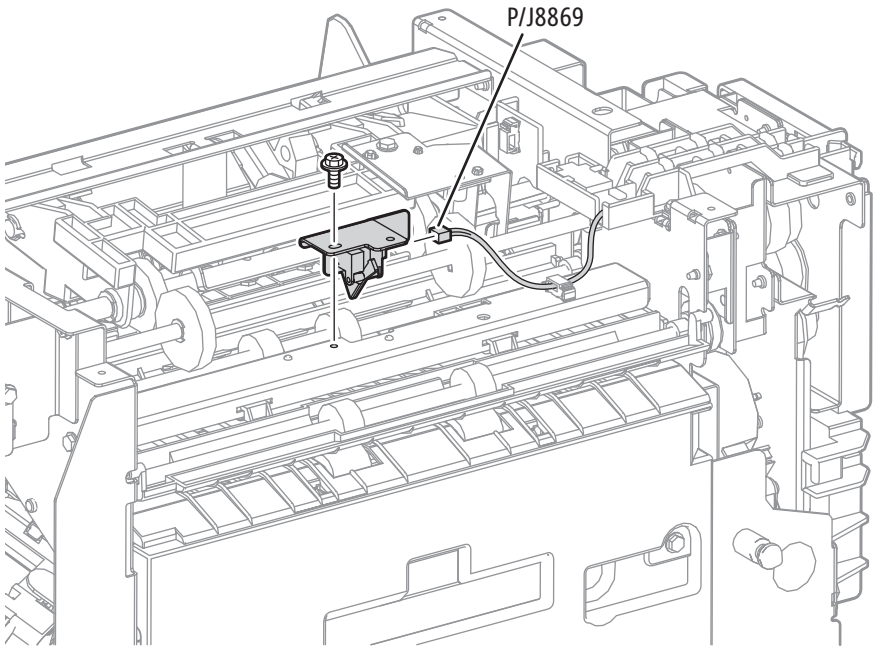


s6700-525

## Compile Tray Exit Sensor

### PL14.7.9

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove 1 screw (silver, flanged, 6mm) that secures the sensor bracket to the Finisher and disconnect P/J8869 to remove the sensor.

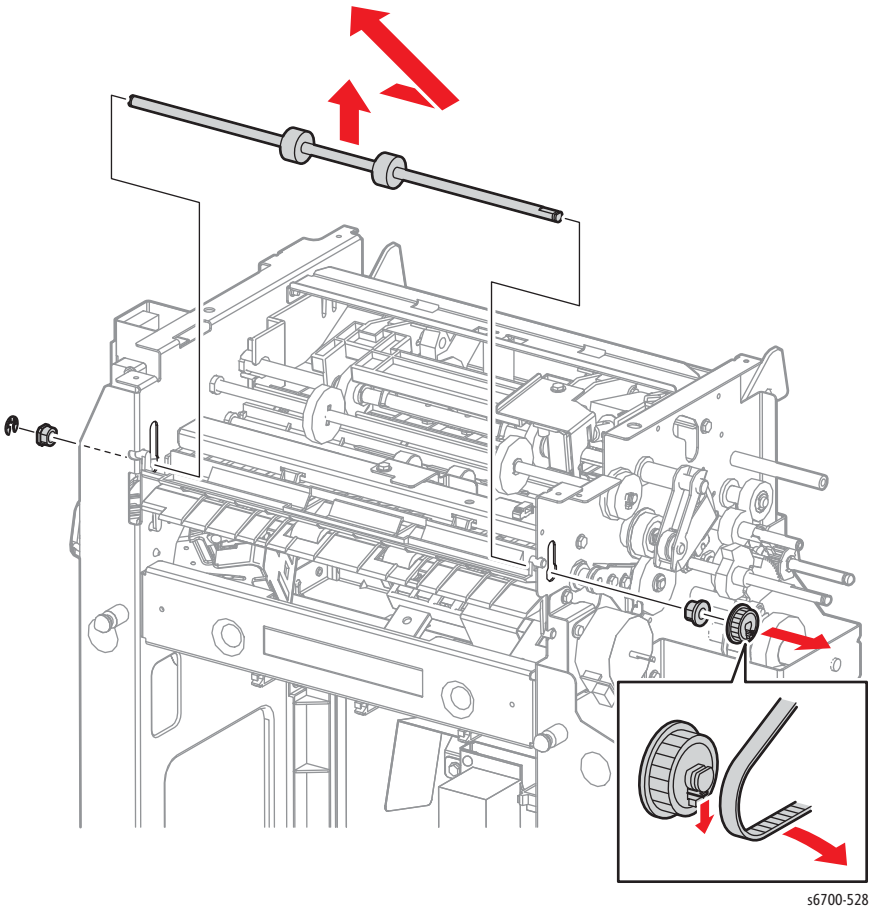



s6700-526

## Entry Drive Roller Assembly

### PL14.7.11

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Release harness guide 1 (page 8-245).
6. Remove the height sensor bracket (page 8-251).
9. Remove the Set Clamp Clutch (page 8-257).
10. Remove the Eject Drive Assembly (page 8-254).
11. Remove the Eject Drive Bracket Assembly (page 8-255).
12. Release the belt from the pulley T30.
13. Remove the pulley T30 from the entry drive roller by releasing the hook of the pulley T30.
14. Remove the bearing from the entry drive roller.
15. Remove the E-ring that fixes the bearing to the entry drive roller, and then remove the bearing.

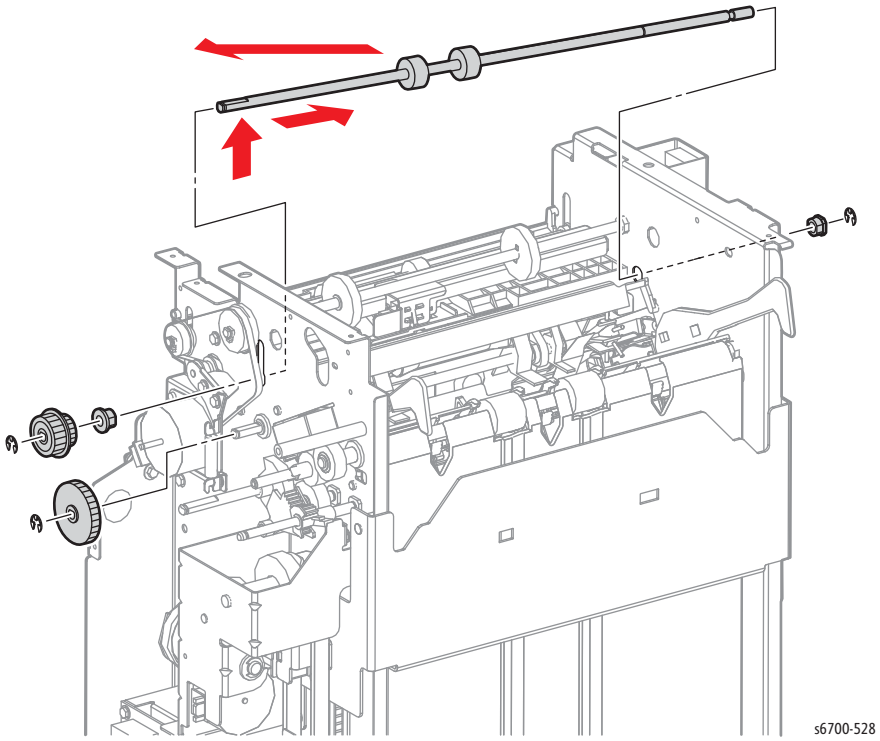


s6700-528

## Exit Drive Roller Assembly

### PL14.7.12

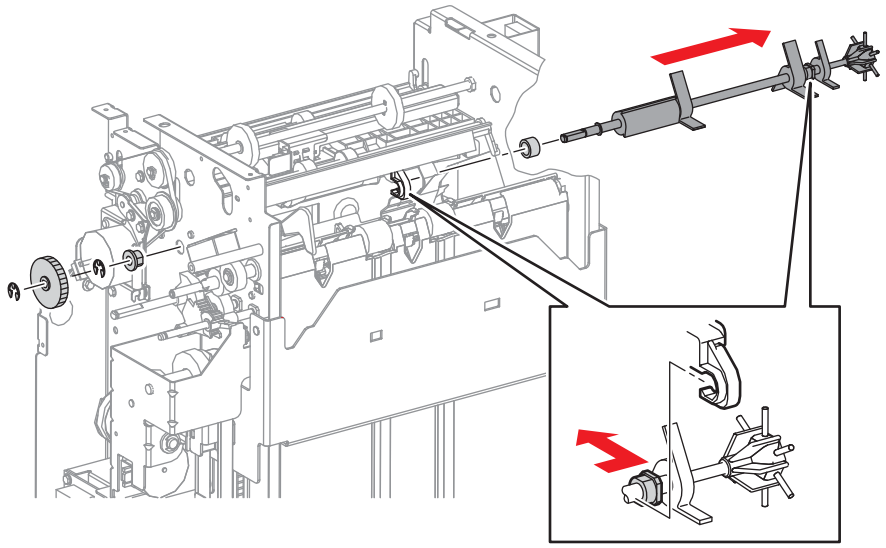
1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Release harness guide 1 (page 8-245).
6. Remove the height sensor bracket.
7. Remove the set clamp and stack height actuators.
9. Remove the Set Clamp Clutch (page 8-257).
10. Remove the Eject Drive Assembly (page 8-254).
11. Remove the Eject Drive Bracket Assembly (page 8-255).
12. Remove the Eject Chute Assembly (page 8-267).
13. Remove the Eject Roller Assembly (page 8-261).
14. Remove the E-ring that secures the gear Z42 L to the Main Paddle Shaft and remove the gear.
15. Remove the E-ring that secures the gear pulley Z27 T30 to the exit drive roller, and remove the gear pulley Z27 T30.
16. Remove the bearing from the exit drive roller.
17. Remove the E-ring that secures the bearing sleeve to the exit drive roller, and remove the bearing sleeve.
18. Remove the exit drive roller from the Finisher.



## Main Paddle Shaft Assembly

### PL14.7.13

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Release harness guide 1 (page 8-245).
6. Remove the height sensor bracket (page 8-251).
9. Remove the Set Clamp Clutch (page 8-257).
10. Remove the Eject Drive Assembly (page 8-254).
11. Remove the Eject Drive Bracket Assembly (page 8-255).
12. Remove the Eject Chute Assembly (page 8-267).
13. Remove the Eject Roller Assembly (page 8-261).
14. Remove the Stapler Holder (page 8-284).
15. Remove the E-ring that secures gear Z42 L to the main paddle shaft and remove the gear.
16. Remove the E-ring that fixes the bearing powdered (PL14.7.20) to the main paddle shaft, and then remove the bearing powdered.
17. Slide the main paddle shaft forward to release the bearing o from the Lower Chute Assy, and remove the main paddle shaft along with the cap bearing from the Finisher.
18. Remove the cap bearing from the main paddle shaft.

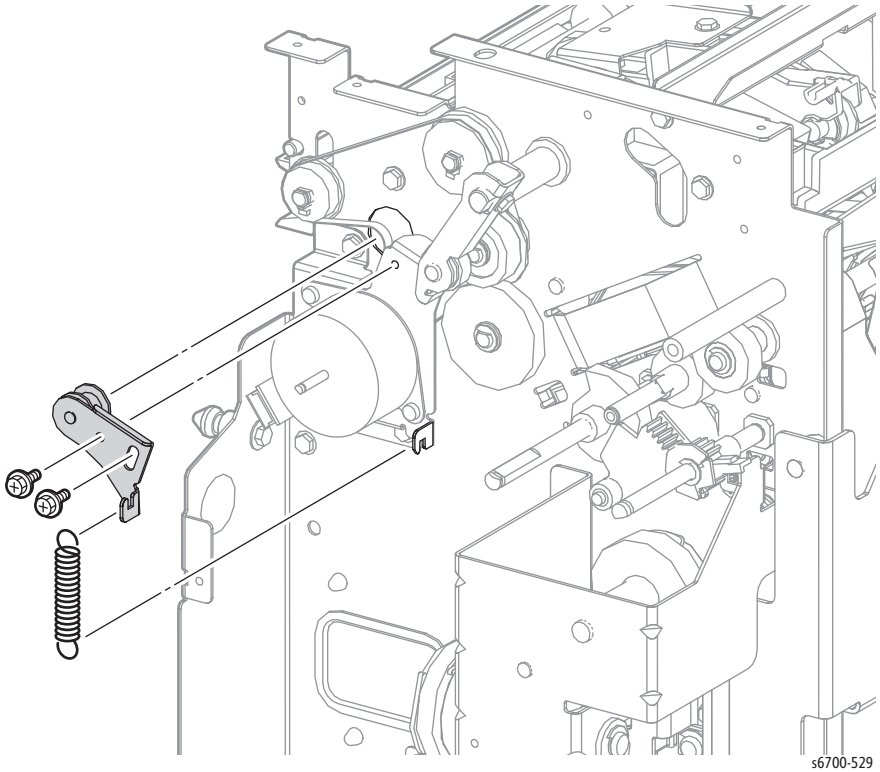


s6700-636

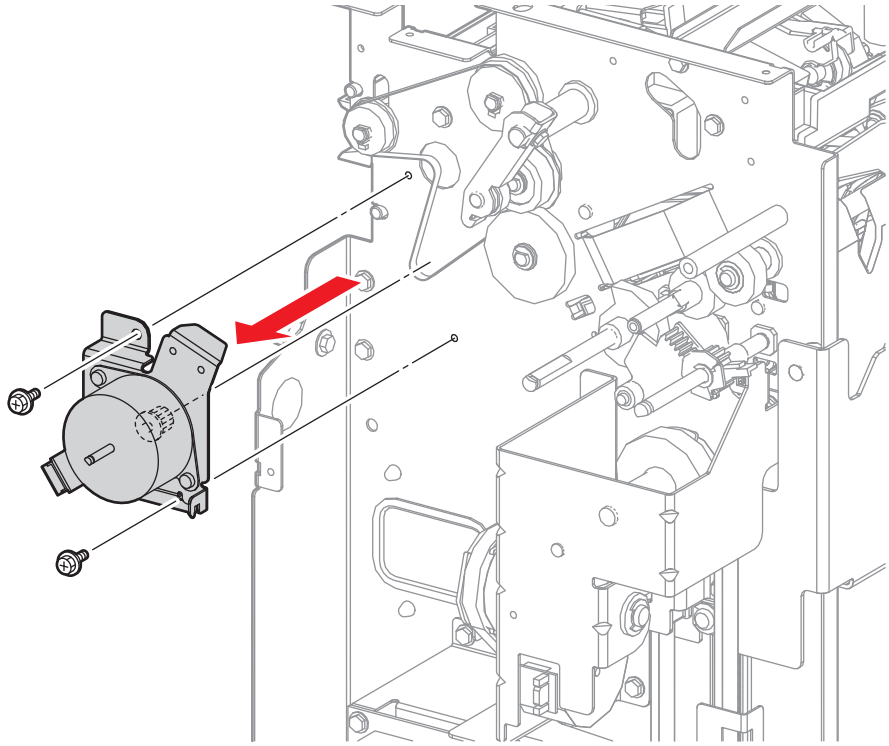
## Transport Drive Assembly

### PL14.7.16

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Remove the Eject Drive Assembly (page 8-254).
6. Remove the Eject Drive Bracket Assembly (page 8-255).
7. Remove the tension spring from the tension bracket and Transport Drive Assy.
8. Remove 2 screws (silver, flanged, 6mm) to remove the tension bracket from the Transport Drive Assy.

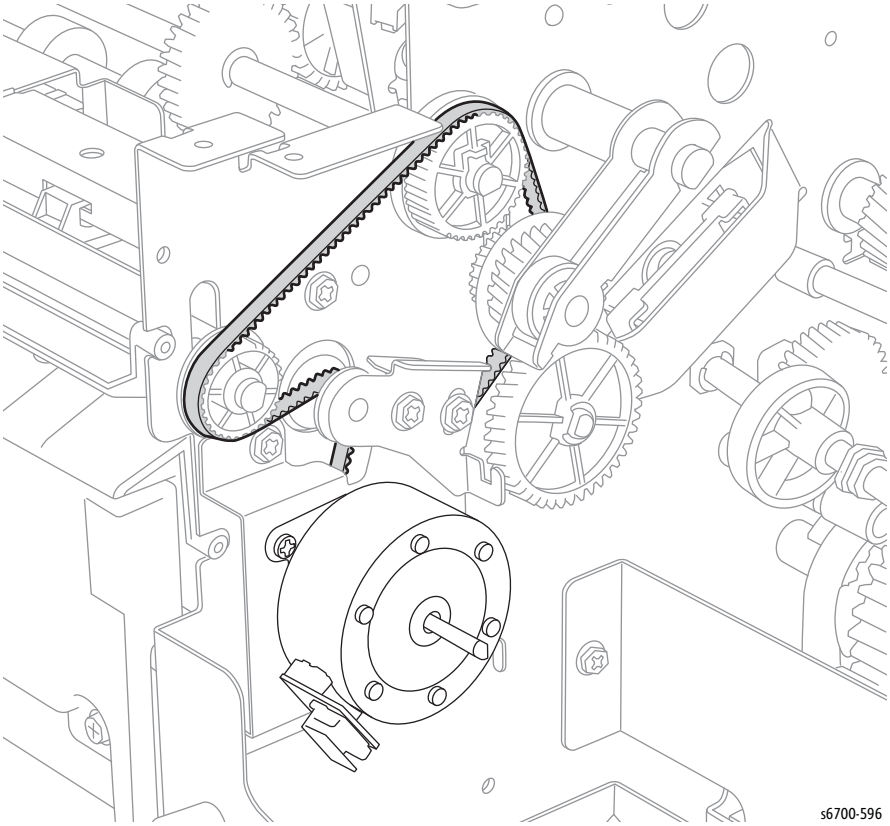


9. Remove 2 screws (silver, flanged, 6mm) that secure the Transport Drive Assy to the Finisher to remove the drive.




**Replacement Note**

Route the belt above the Transport Drive Assembly as shown.



# Compile Tray Assembly

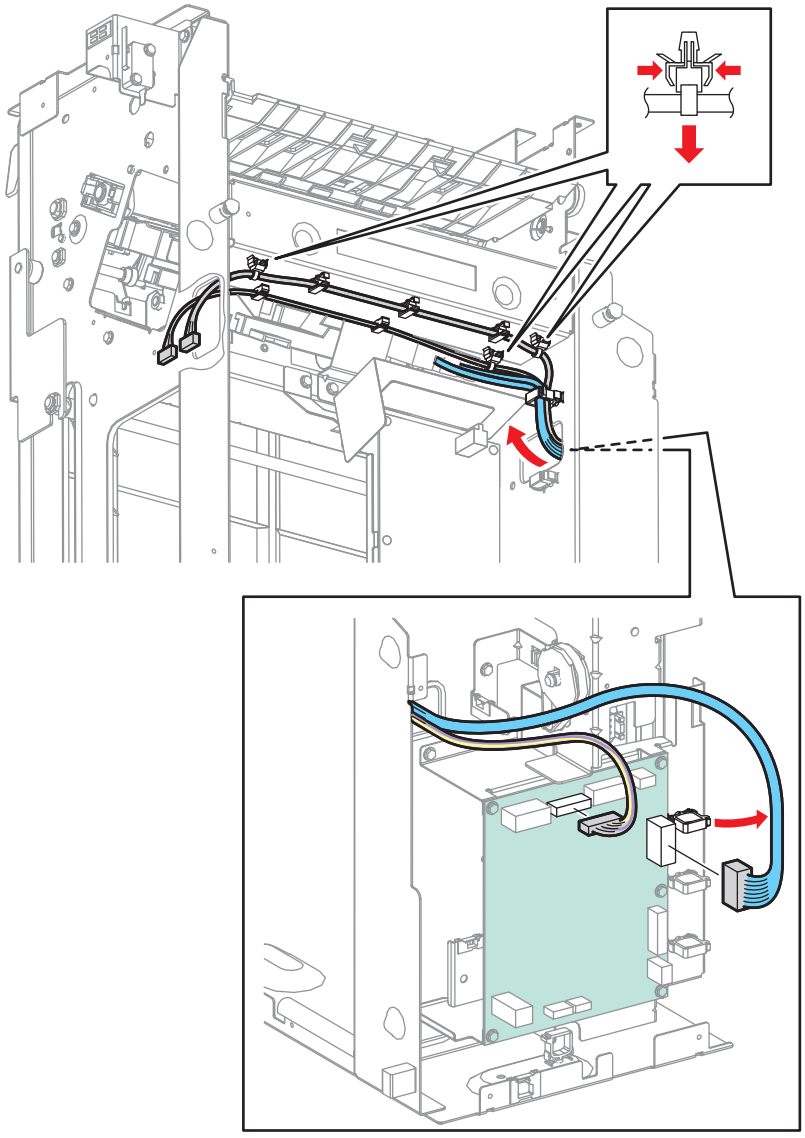
## PL14.8.1

**Caution**

Never loosen the Red screw on the Compile Tray.

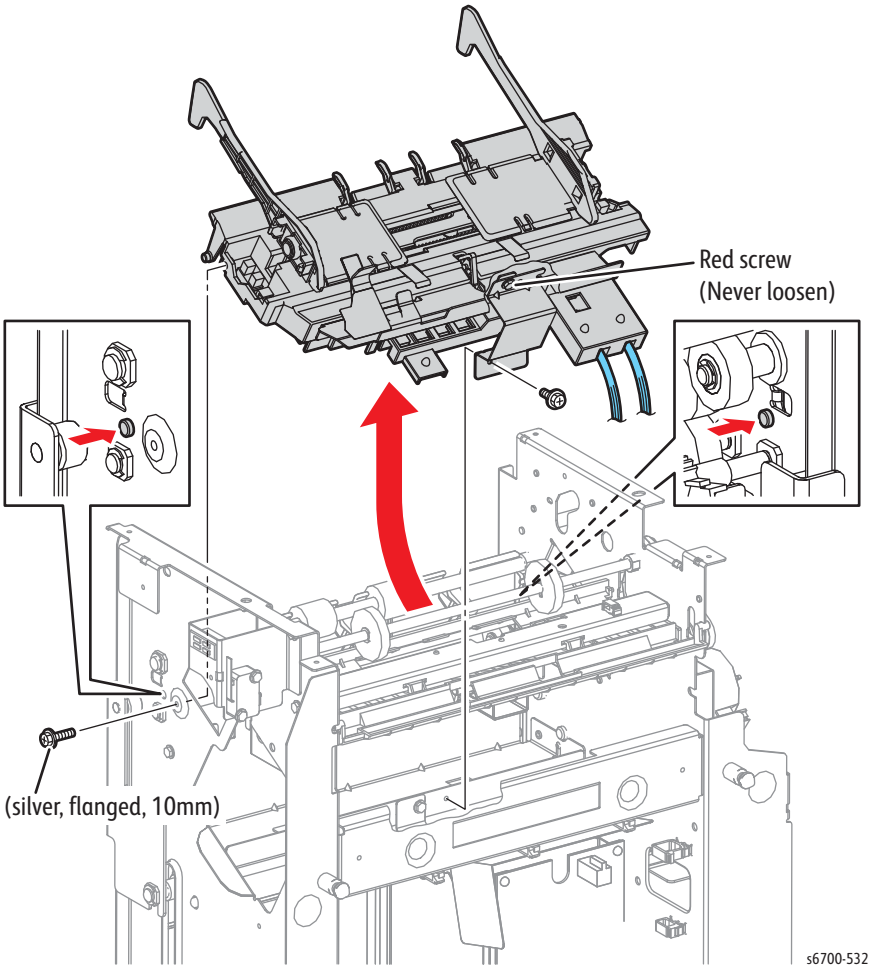
1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the right cover (page 8-241).
4. Remove the Front Cover (page 8-242).
5. Remove the top cover (page 8-239).
6. Release harness guide 1 (page 8-245).
7. Remove the height sensor bracket (page 8-251).
8. Remove the Set Clamp Clutch (page 8-257).
9. Remove the Eject Drive Assembly (page 8-254).
10. Remove the Eject Drive Bracket Assembly (page 8-255).
11. Remove the Eject Chute Assembly (page 8-267).
12. Remove the Eject Roller Assembly (page 8-261).
13. Remove the Stapler Holder (page 8-284).
14. Remove the Compile Exit Sensor (page 8-271).
15. Remove the entry drive roller (page 8-272).
16. Remove the exit drive roller (page 8-273).
17. Remove the main paddle shaft (page 8-274).
18. Remove the Lower Chute Assembly (page 8-269).
19. Disconnect the motor harness at P/J8983 from the Main Board and remove the harness from the clamp.
20. Disconnect the sensor harness at P/J8988 from the Main Board .
21. Remove both harnesses from harness guide 1.

22. Release 2 ties and 4 clamps that secure the motor harness to the Finisher and pull the harness into the frame through the holes.
23. Release 1 tie and 3 clamps that secure the sensor harness to the Finisher and pull the harness into the frame through the hole.



s6700-531

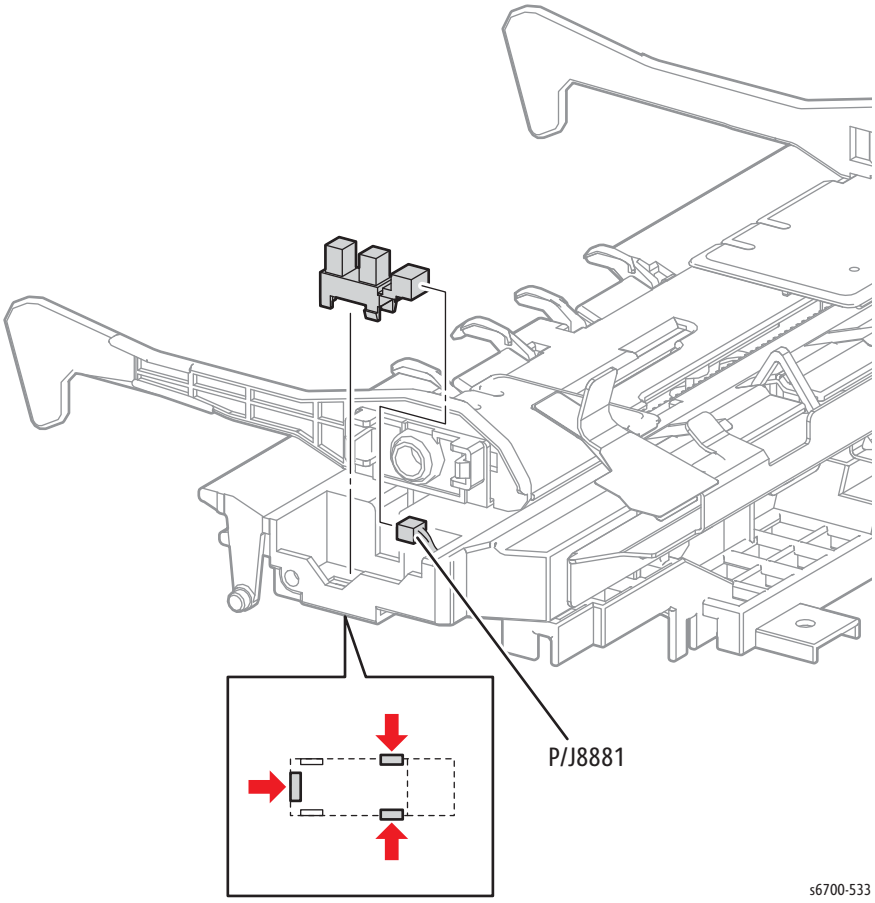
24. Remove 1 screw (silver, flanged, 6mm) and 1 screw (silver, flanged, 10mm) that secure the Compile Tray to the Finisher.
25. Release 2 bosses on the Compile Tray from the holes on the Finisher, and remove the Compile Tray, motor and sensor harnesses from the Finisher.



## Front Tamper Home Sensor

### PL14.8.9

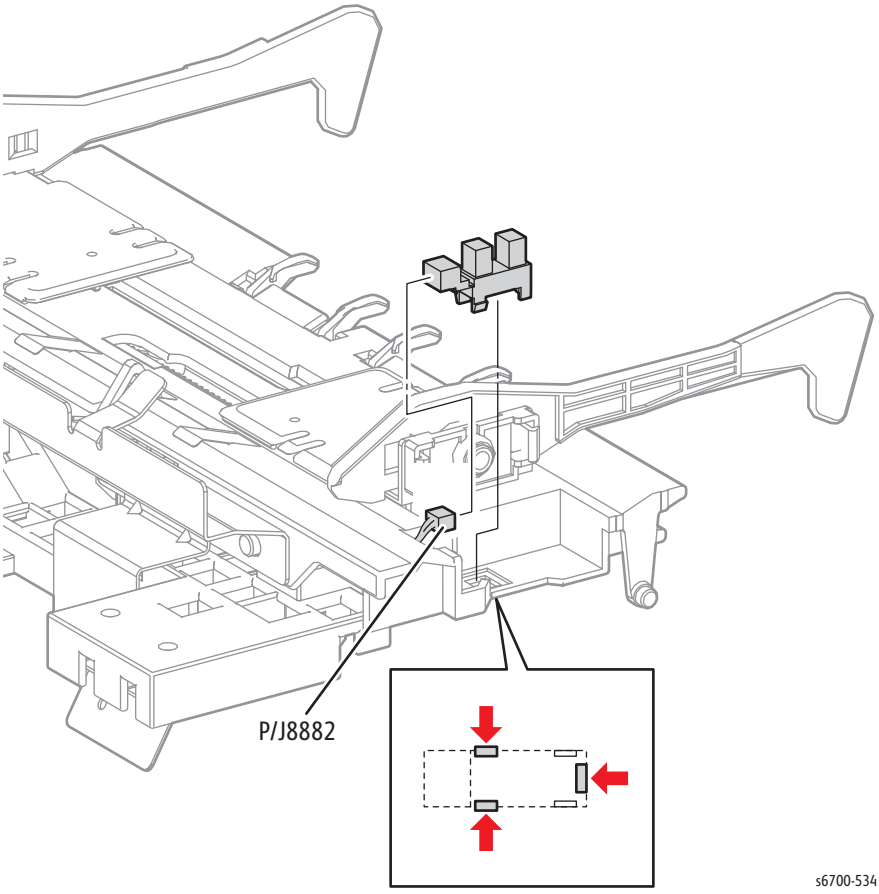
1. Remove the Finisher (page 8-229).
2. Remove the Compile Tray Assy (page 8-277).
3. Release 3 hooks that secure the sensor to the Compile Tray.
4. Disconnect P/J8881 to remove the sensor.



## Rear Tamper Home Sensor

### PL14.8.9

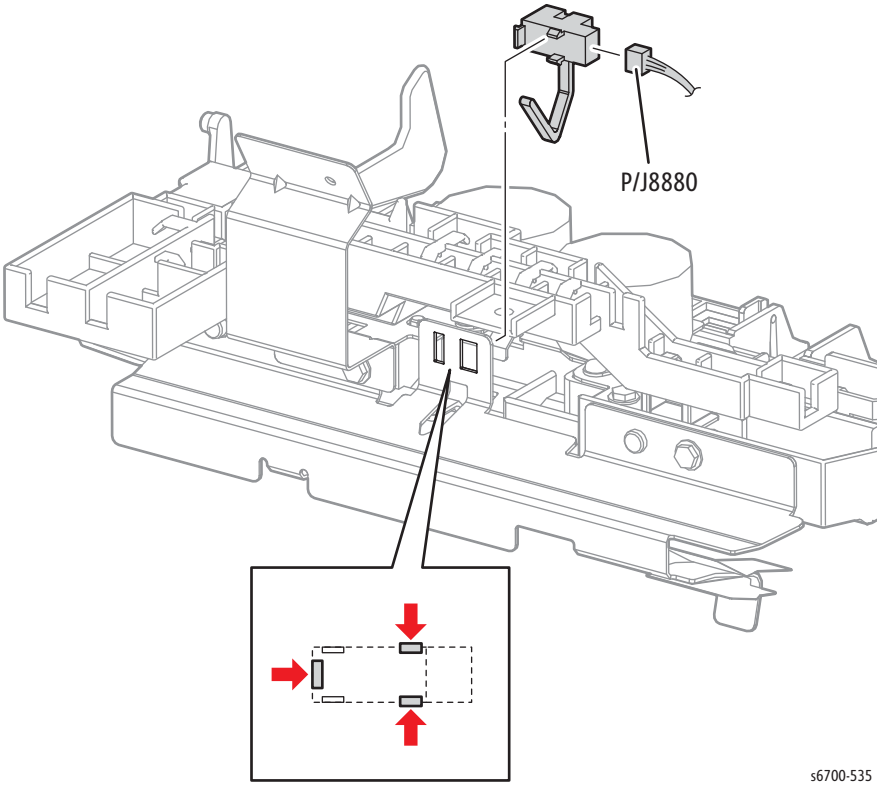
1. Remove the Finisher (page 8-229).
2. Remove the Compile Tray Assy (page 8-277).
3. Release 3 hooks that secure the sensor to the Compile Tray.
4. Disconnect P/J8882 to remove the sensor.



## Compile Tray No Paper Sensor

### PL14.8.13

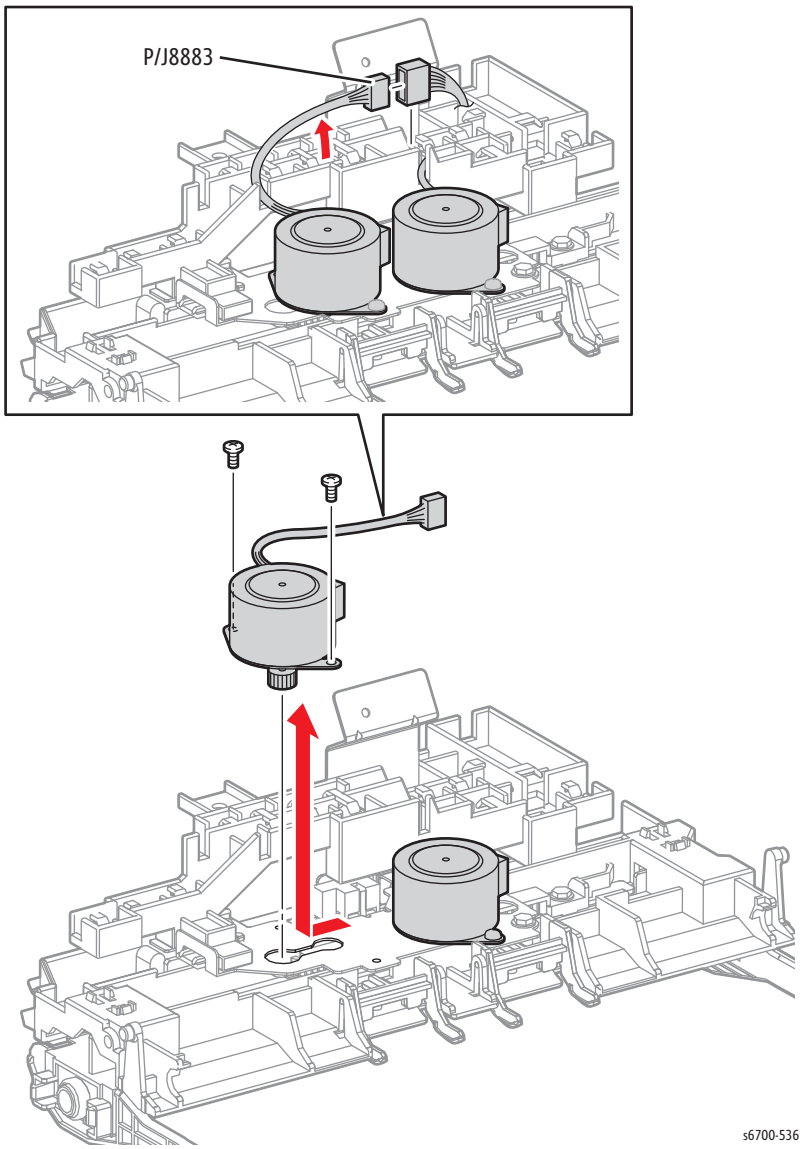
1. Remove the Finisher (page 8-229).
2. Remove the Compile Tray Assy (page 8-277).
3. Release 3 hooks that secure the sensor to the Compile Tray.
4. Disconnect P/J8880 to remove the sensor.



# Tamper Motor

## PL14.8.18

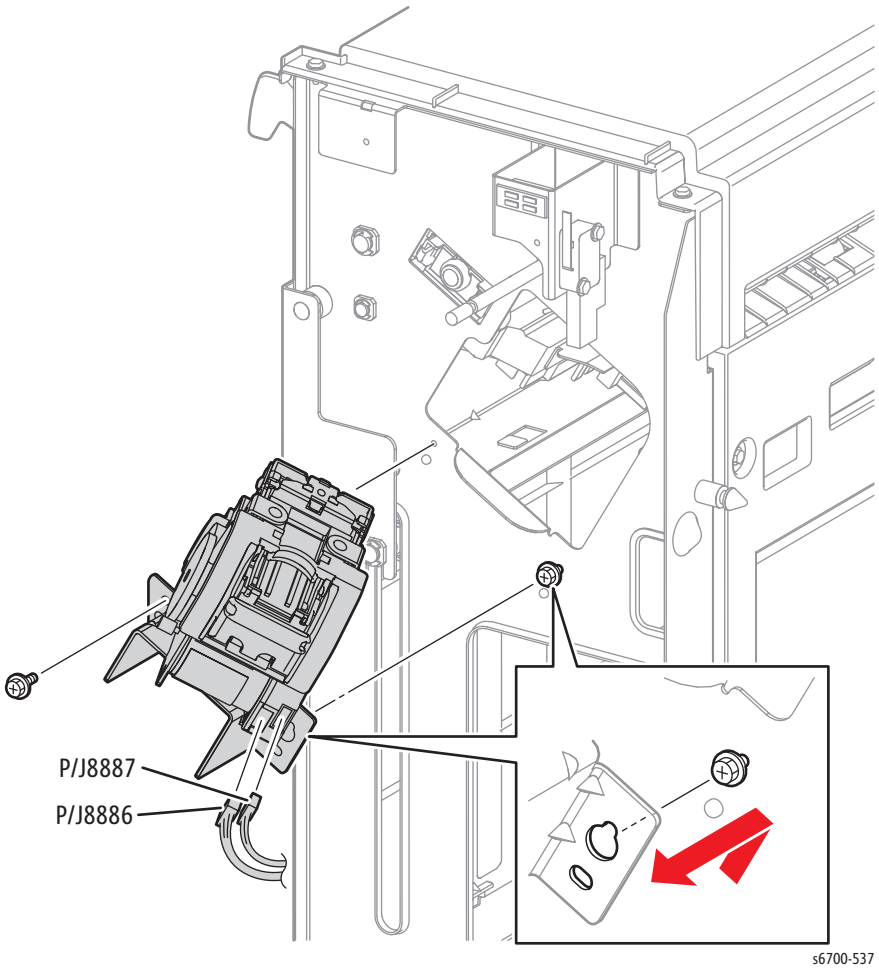
1. Remove the Finisher (page 8-229).
2. Remove the Compile Tray Assy (page 8-277).
3. Slide the tamper guides outward to the stops.
4. Disconnect the affected Tamper Motor (front P/J8883, rear P/J8884) from the Compile Tray harness.
5. Release the tamper motor harness from the guide.
6. Remove 2 screws (silver, 4mm) that secure the Tamper Motor to the Compile Tray.
7. Slide the Tamper Motor outward until its gears release from the tamper rack and remove the motor.



## Stapler Assembly

### PL14.8.19

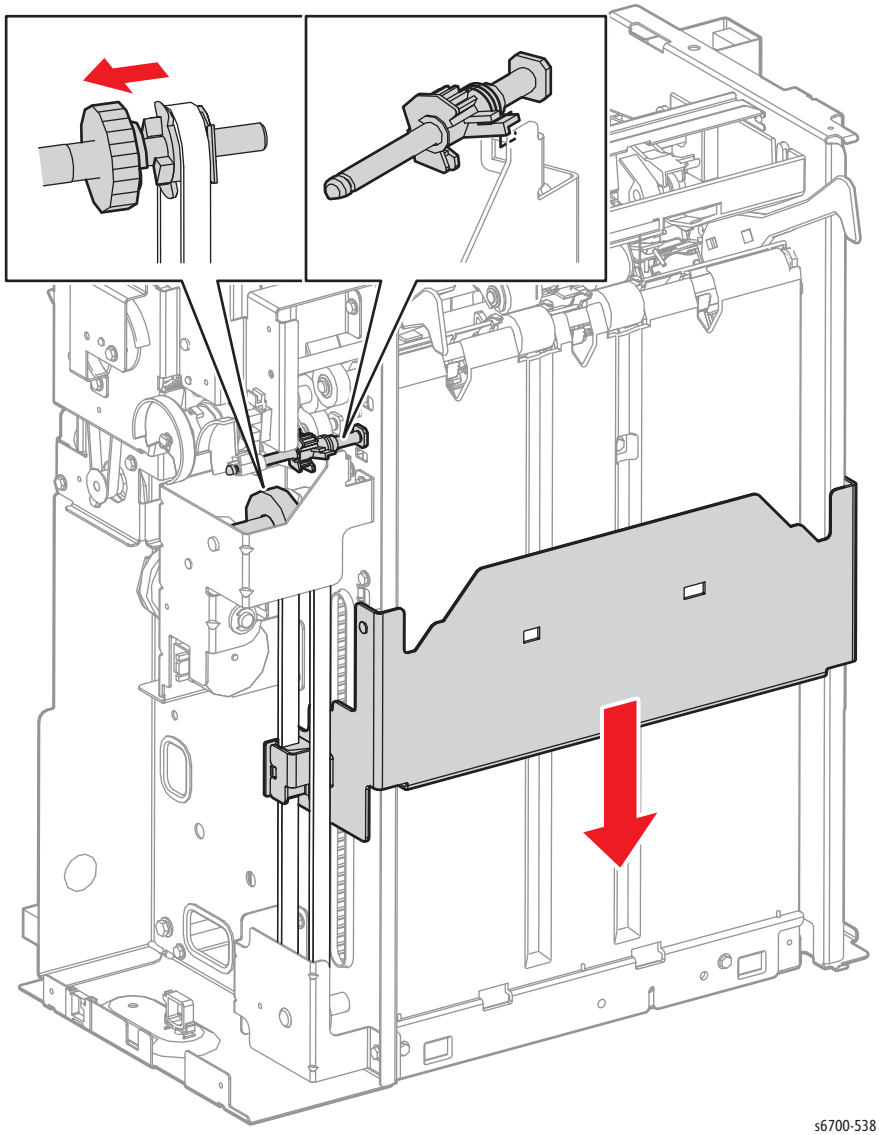
1. Remove the Finisher (page 8-229).
2. Remove the Front Cover (page 8-242).
3. Disconnect P/J8886 and P/J8887 from the Stapler Assembly.
4. Remove 1 screw and loosen 1 screws (silver, flanged, 6mm) that secure the Stapler Assembly to the Finisher.
5. Lift the holder to release the Stapler Assembly bracket from the loose screws and remove the holder.



## Stacker Dive Assembly

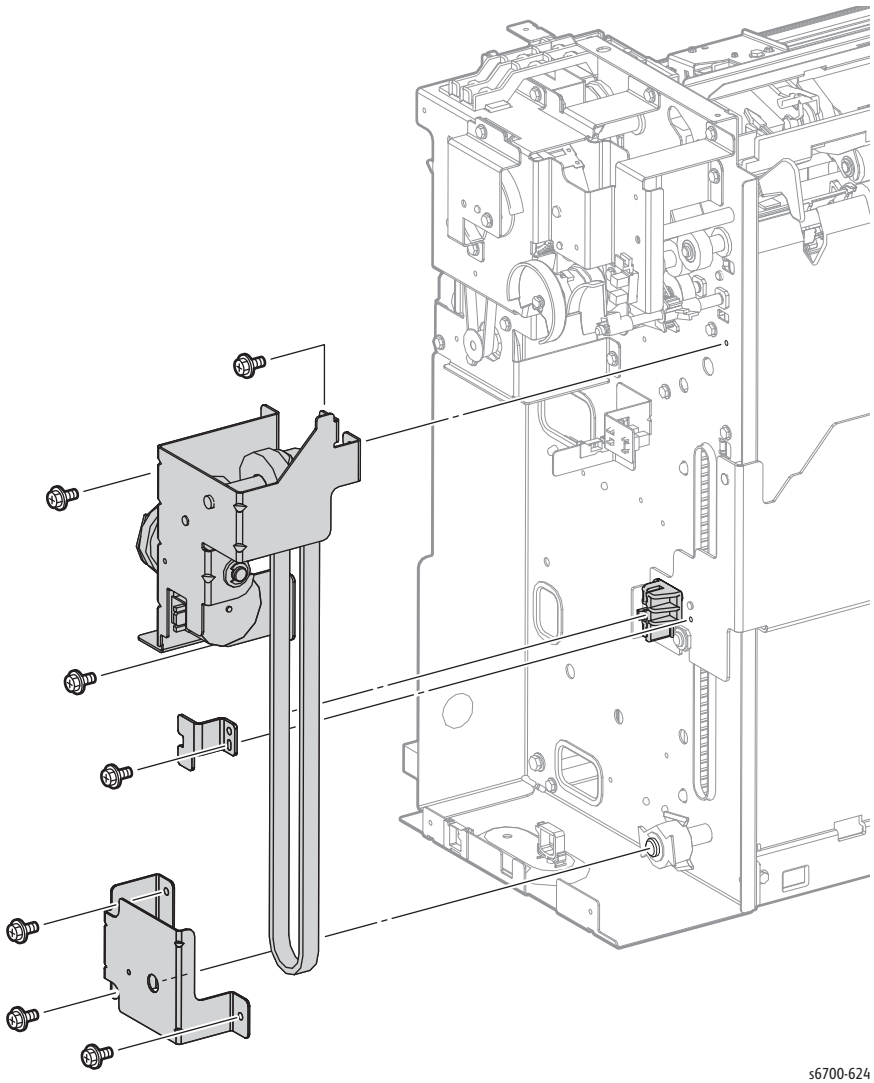
### PL14.9.1

1. Remove the Finisher (page 8-229).
2. Remove the rear cover (page 8-240).
3. Remove the Front Cover (page 8-242).
4. Remove the top cover (page 8-239).
5. Release harness guide 1 (page 8-245).
6. Disconnect P/J8885 from the stacker motor.
7. Release the set link spring from the Stacker Drive Assy.



s6700-538

8. Remove 3 screws (silver, flanged, 6mm) that secure the Stacker Drive Assembly to the Finisher.

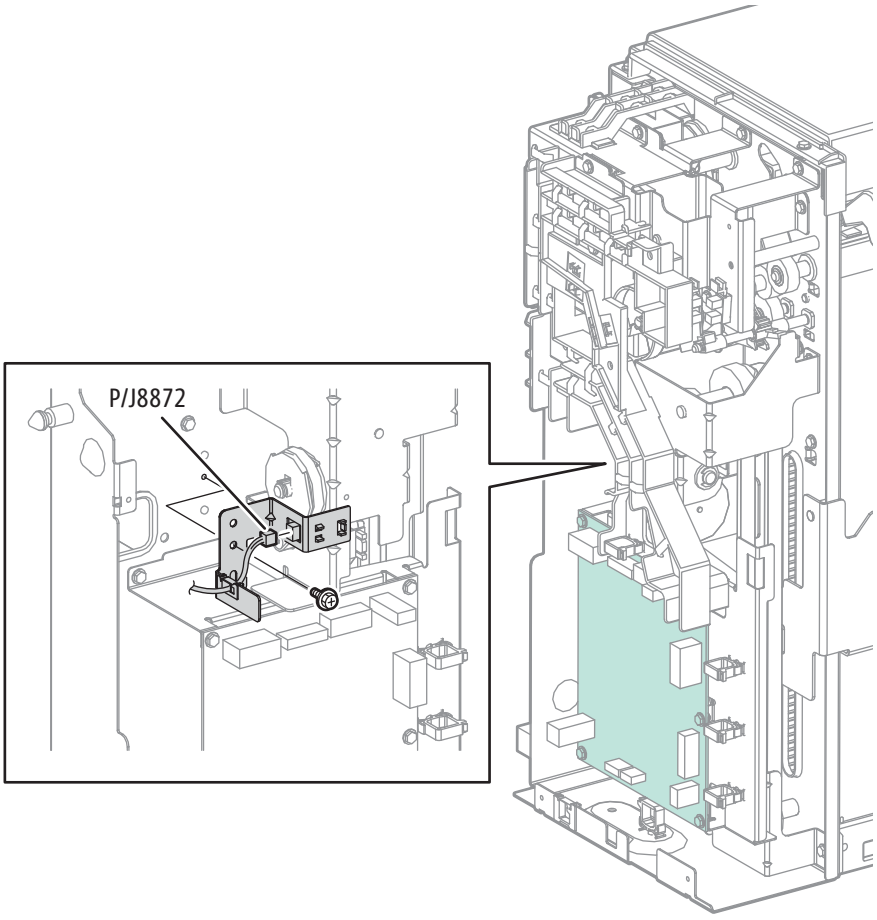


s6700-624

## Stacker No Paper Sensor

### PL14.9.26

1. Remove the rear cover (page 8-240).
2. Disconnect P/J8872 from the sensor and release the sensor harness from the clamp.
3. Remove 1 screw (silver, 6mm) that secures the sensor bracket to the Finisher.
4. Release 3 hooks that secure the Stacker No Paper Sensor to the bracket.

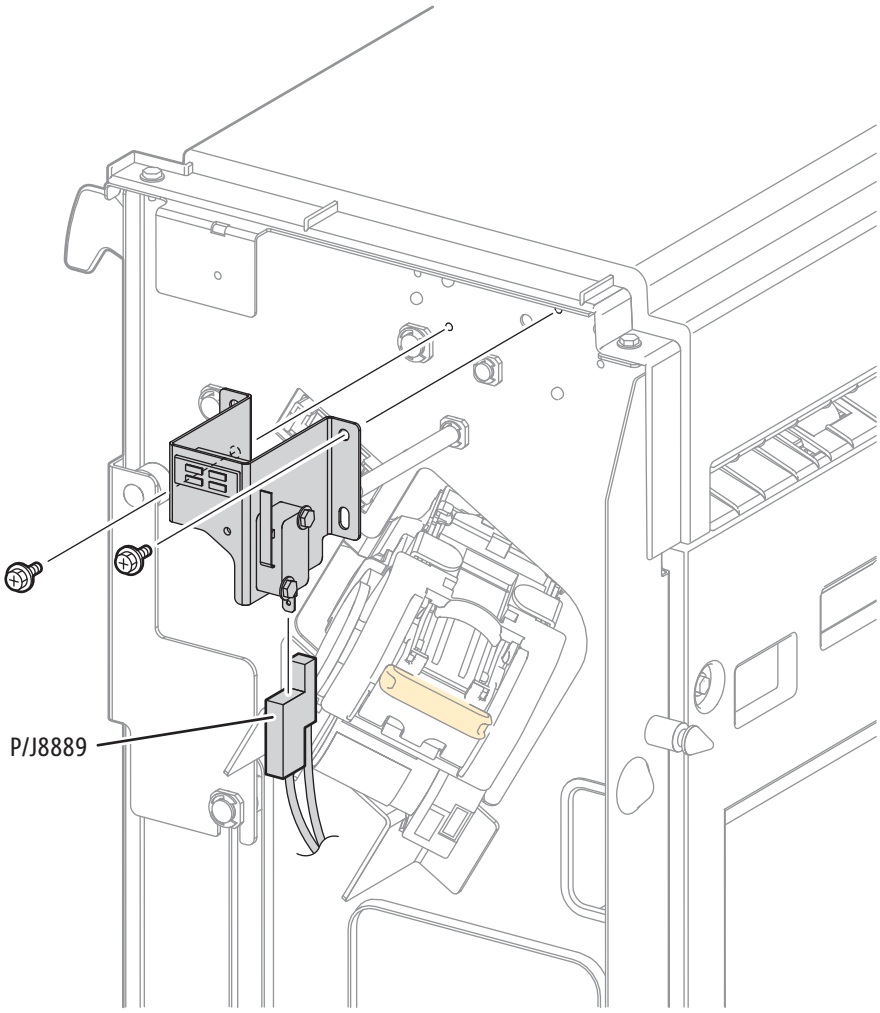



s6700-539

## Front Door Interlock Switch

### PL14.10.1

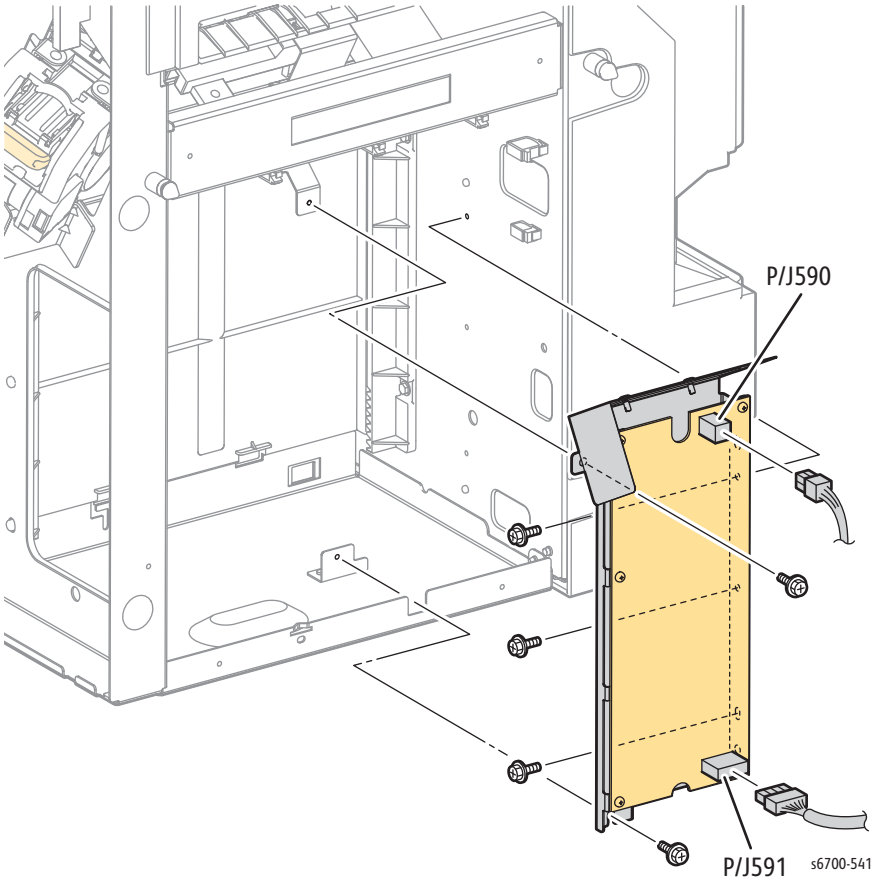
1. Remove the Stacker Tray (page 8-232).
2. Remove the Finisher (page 8-229).
3. Remove the Front Cover (page 8-242).
4. Disconnect P/J8889 from the Interlock Switch.
5. Remove 2 screws (silver, flanged, 6mm) that secure the bracket to the Finisher and remove the bracket.



## LVPS Assembly

### PL14.10.10

1. Remove the Stacker Tray (page 8-232).
2. Remove the Finisher (page 8-229).
3. Remove the Front Cover (page 8-242).
4. Remove the right cover (page 8-241).
5. Disconnect P/J590 and P/J591 from the LVPS ASSY.
6. Remove 4 screws (silver, flanged, 6mm) that secure the LVPS to the Finisher and remove.



# Parts List

## In this chapter...

- Serial Number Format
- Using the Parts List
- Print Engine Parts
- Feeder Parts Lists
- Finisher Parts
- Xerox Supplies and Accessories
- Service Kits

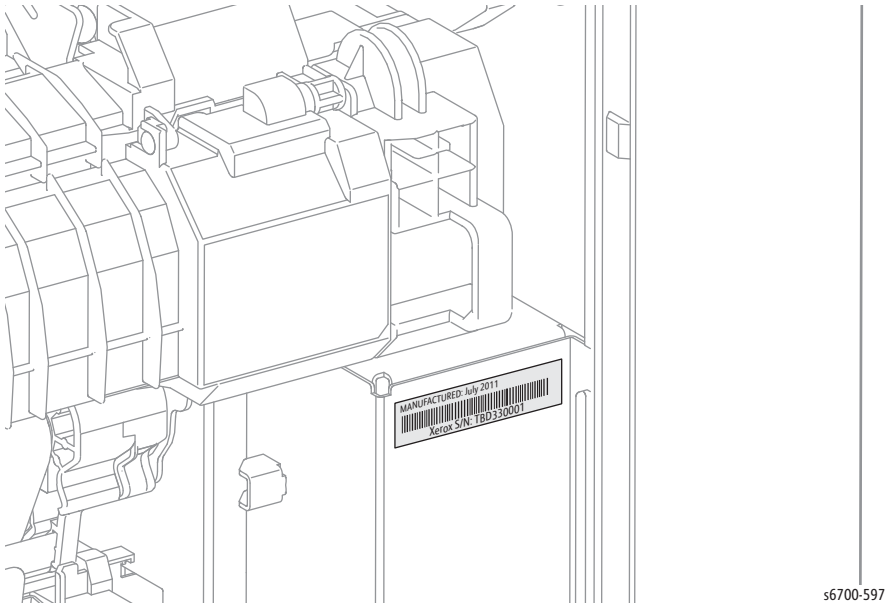
Chapter 9

# Serial Number Format

Changes to Xerox products are made to accommodate improved components as they become available. When ordering parts, include this information:

- Component's part number
- Product type or model number
- Serial Number of the printer

The serial number is located on the chassis near the Fuser. Open the Right Door to view the serial number label. Serial number format is dependent on input voltage.




For 110V models, a nine-digit serial number uses this format **PPPSSSSSS**.

- **PPP** = Three-digit alphanumeric product code

| Product Code | Product |
|---|---|
| AB9 | 6700, 110 V Engine |

- **SSSSSS** = Six-digit numeric serial number based on the following table. The serial numbers are reset only when the ending number is reached or when the revision number is rolled.

| Product | Starting Serial Number | Ending Serial Number |
|---|---|---|
| 6700_N, 110V Engine<br>6700_DN, 110V Engine | 770502 | 860000 |
| 6700_YDN, 110V Engine | 573501 | 673500 |

For 220V models, a ten-digit serial number uses this format MMMSSSSSSc.

- **MMM** = Three digit alphanumeric manufacturing location code

| Product Code | Product | Location |
|---|---|---|
| AC0 | 6700V, 220 V Engine | 317 |

- **SSSSSS** = Six digit numeric serial number based on the following table. The serial numbers are reset only when the ending number is reached or when the revision number is rolled

  c = Check digit.

| Product | Starting Serial Number | Ending Serial Number |
|---|---|---|
| 6700V_DN, 220V Engine | 001001 | 100500 |

### Examples

Xerox Serial Number = AB9774072
Product code for 110V printer = AB9
Serial number for 6700_N or 6700_DN = 774072

Xerox Serial Number = 3170057367
Manufacturing location code for 220V printer = 317
Serial number for 6700V_DN = 005736
Check digit = 7

## Using the Parts List

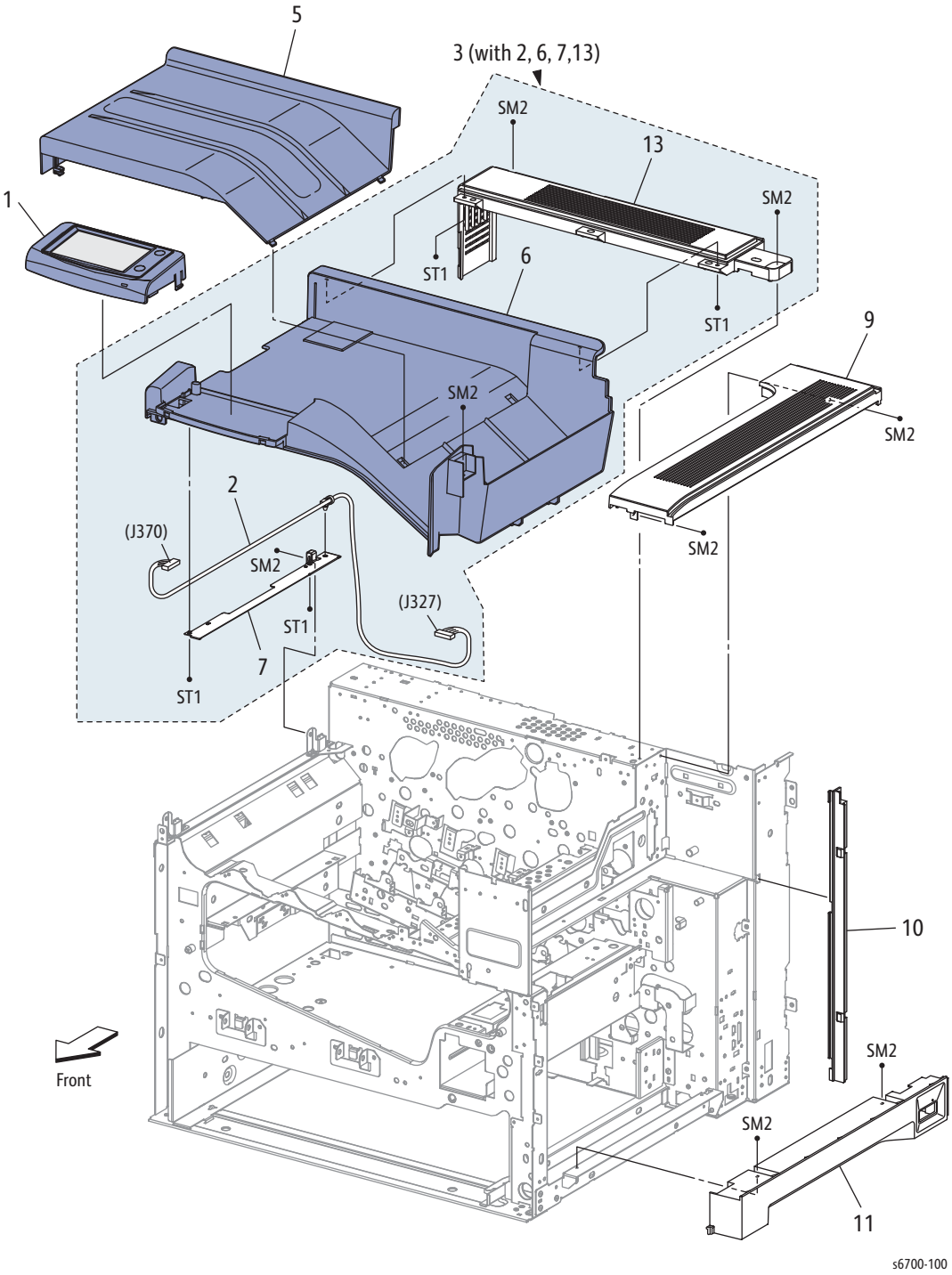
**Note**

Parts with part numbers are available for order. Parts without part numbers are only available with the parent assembly.

- **Item:** The item number in the parts diagram.
- **Name/Description:** Part nomenclature and number of parts per order.
- **Part Number:** The part number to order that specific part.
- Parts 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 the parts diagram 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 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.
- An asterisk (*) after a part indicates the page contains a note about this part.
- The notation "**J1<>J2 and P2**" is attached to a wire harness. It indicates connector Jack 1 is attached to one end of the harness and connector J2 is attached to the other end plugged into P2.
- Fastener location and type are indicated using designators. Refer to "Fastener Types" on page 8-5 for a complete list of fasteners used, and "Hardware Kit - 604K56670" on page 9-102 for fasteners available in the Hardware Kit.

| Designator | Fastener Type |
|---|---|
| E | E-ring |
| KL | K-clip |
| ST | Screw, self-tapping |
| SM | Screw, sheet metal |

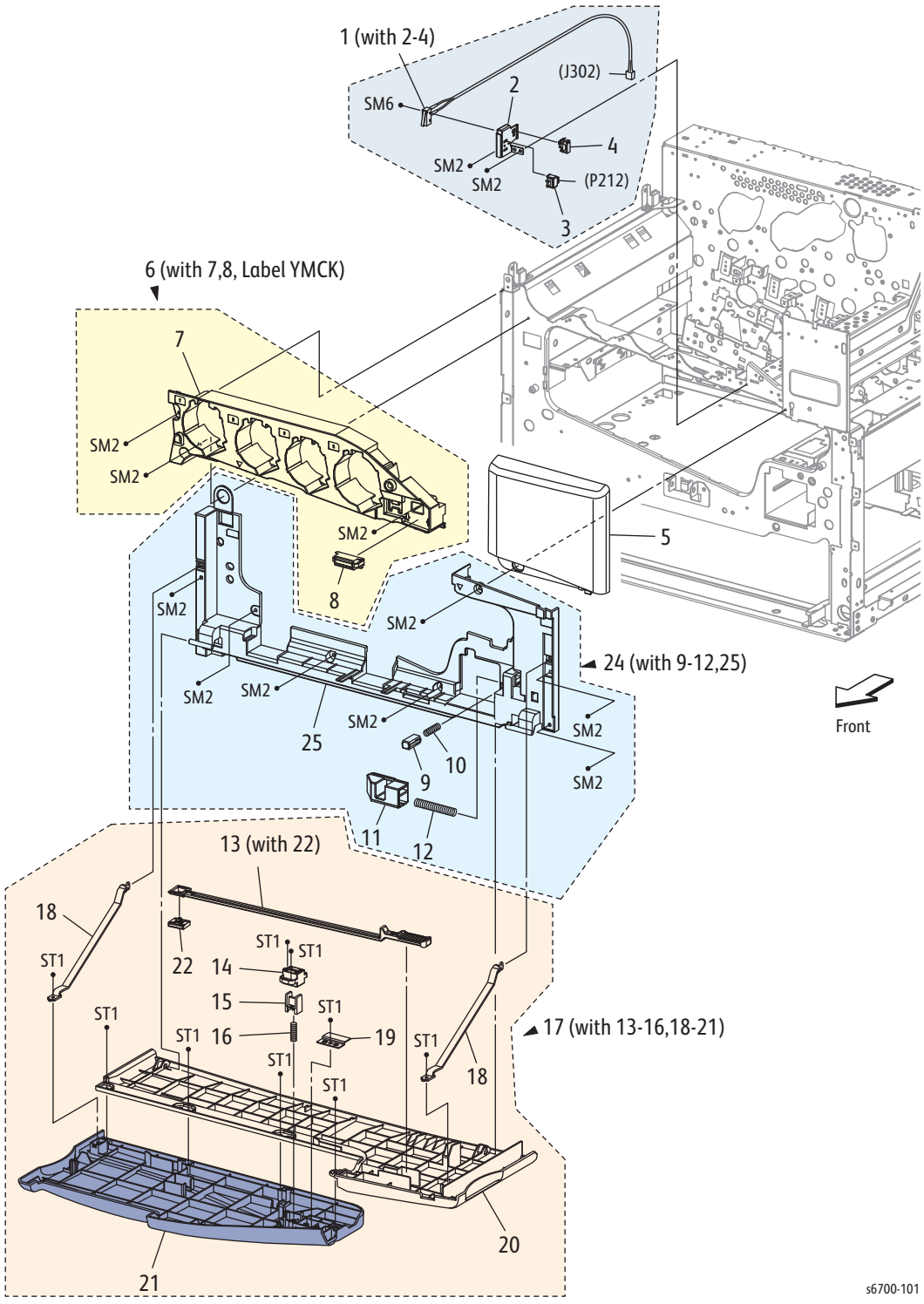
## Parts List 1.1 Covers (1/3)



**Part List 1.1 Covers (1/3)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Console Assy Panel 110V (Control Panel)<br>Console Assy Panel 220V | 848E84850 |
| 2 | Harness Opepane (J327-J370) (Control Panel Harness) | 962K84820 |
| 3 | Top Cover Assy (with 2, 6, 7, 13) | 848K52492 |
| 4 | | |
| 5 | Top Cover Add Tray (Output Tray) | 848E53951 |
| 6 | Top Cover | |
| 7 | Guide Harness UI | |
| 8 | | |
| 9 | Exit Cover | 848K52500 |
| 10 | Guide RH Rib | |
| 11 | Cover RH Under (lower right cover) | |
| 12 | | |
| 13 | Cover Top Rear | |
| 99 | Kit Control Panel & Harness (with 1, 2) | |

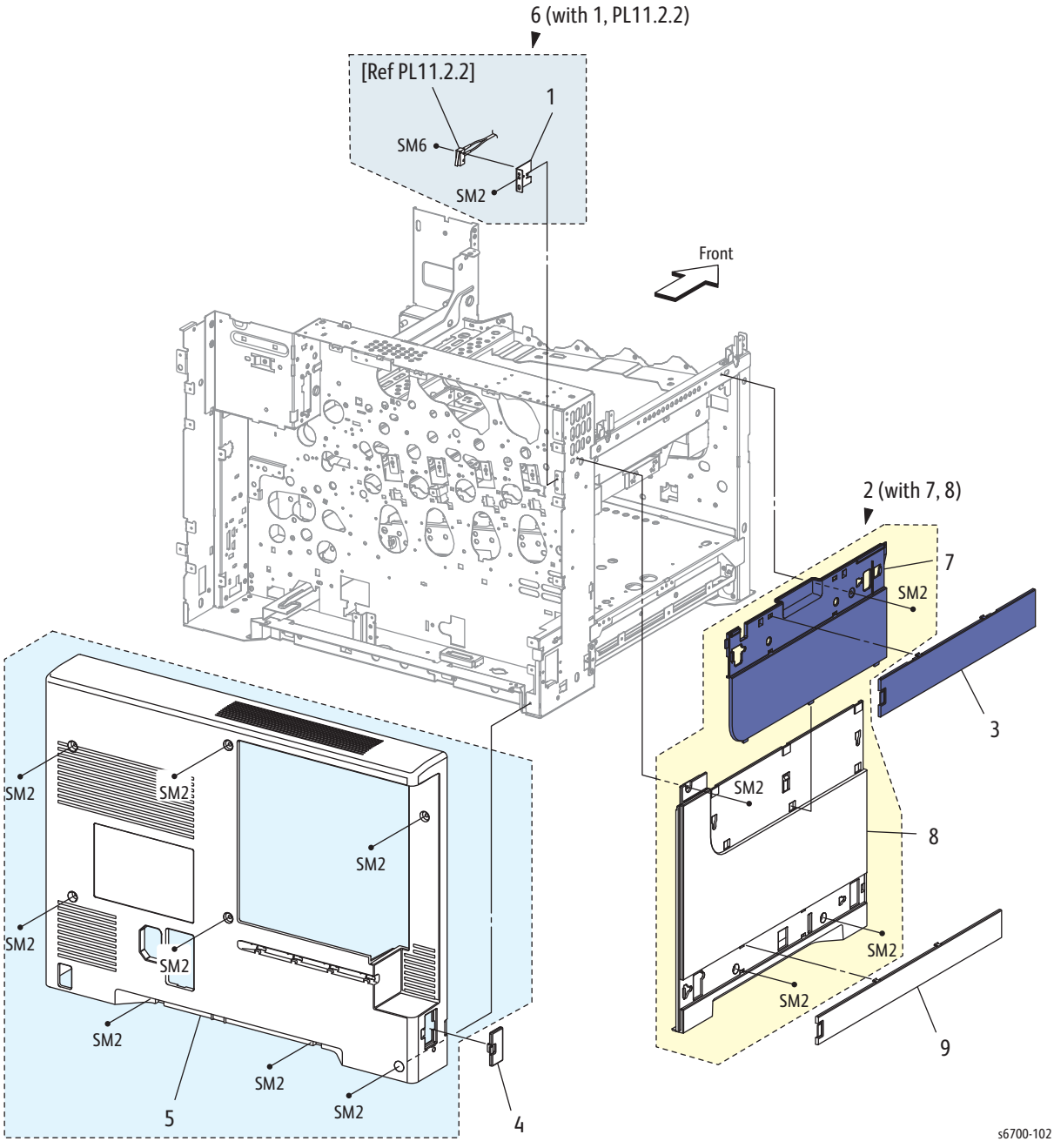
## Parts List 1.2 Print Engine Covers (2/3)



**Part List 1.2 Covers (2/3)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Front Door Interlock Switch (I/L SW-J302) (with 2~4) | 110K16170 |
| 2 | Bracket Interlock Front | |
| 3 | Front Door Open Switch | 110E11580 |
| 4 | Clamp Locking | |
| 5 | Cover Front RH (upper front cover) | |
| 6 | Cover Assy Inner Upper (with 7, 8, Label YMCK) | 848K52470 |
| 7 | Cover Inner Upper | |
| 8 | Magnet Catch | |
| 9 | Holder Spring Box | |
| 10 | Spring Waste | |
| 11 | Latch Waste Box | |
| 12 | Spring Waste Box | |
| 13 | Laser Lens Cleaning Tool (with 22) | 042K94080 |
| 14 | Holder Inter Lock Front | |
| 15 | Actuator Inter Front | |
| 16 | Spring Inter Lock Front | |
| 17 | Front Door (with 13~16,18~21) (includes Xerox logo) | 848K52463 |
| 18 | Strap Cover Front | 868E25990 |
| 19 | Bracket Mag | |
| 20 | Cover Front Lower | |
| 21 | Cover Front Upper | |
| 22 | Cleaning Pad | |
| 23 | | |
| 24 | Cover Assy Inner Lower (with 9~12, 25) | 848K52481 |
| 25 | Cover Inner Lower | |

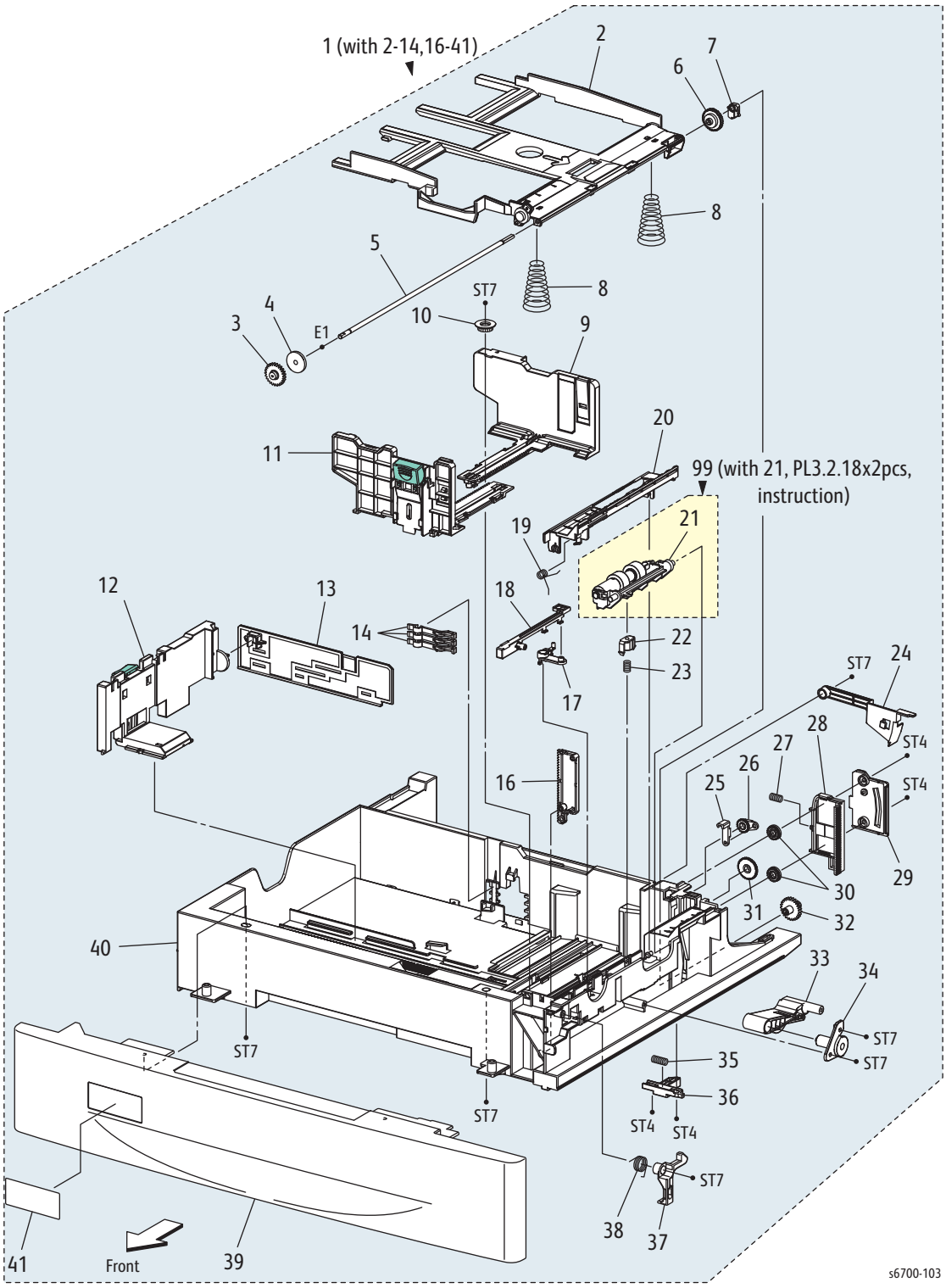
## Parts List 1.3 Print Engine Covers (3/3)



**Part List 1.3 Covers (3/3)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Bracket I/L Rear | |
| 2 | Cover LH (with 7, 8) | 848K52511 |
| 3 | Cover LH Finisher Upper (Upper Finisher Docking Cover) | 848E 54010 |
| 4 | Cover Rear LH (Finisher Port Cover) | 848E54040 |
| 5 | Cover Assy Rear | 848E54031 |
| 6 | SW Assy I/L Rear (with 1, PL11.2.2) | 110K16160 |
| 7 | Cover LH Outer | |
| 8 | Cover LH | |
| 9 | Cover LH Finisher Lower (Lower Finisher Docking Cover) | 848E 54020 |

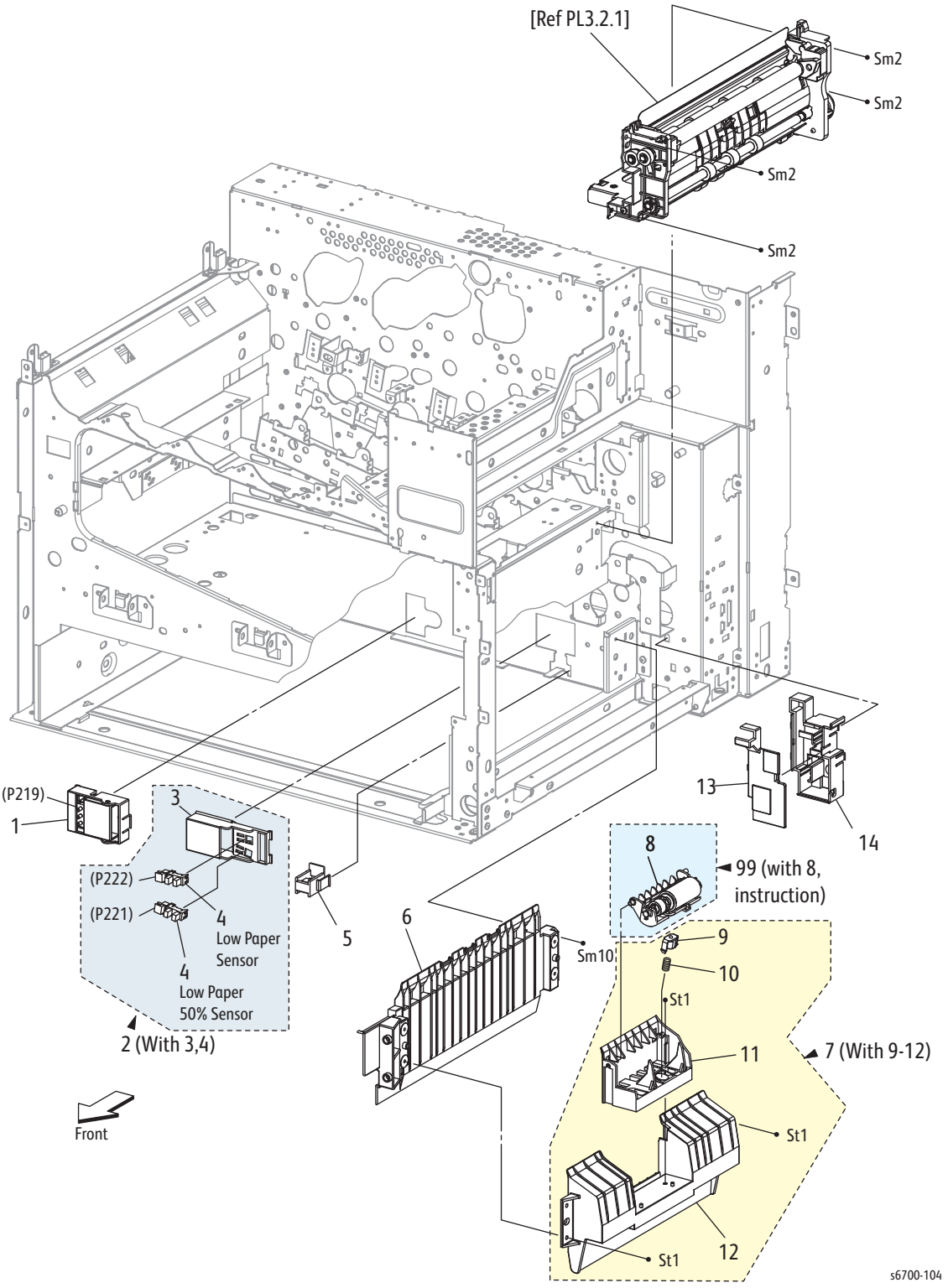
## Parts List 2.1 Tray 2



**Part List 2.1 Tray 2**

| Item | Description | Part Number |
|---|---|---|
| 1 | Tray 2 Assy (with 2~14,16~41) | 050K65702 |
| 2 | Plate Assy Bottom | |
| 3 | Gear PB Front | |
| 4 | Gear BTM Dmp Oneway | |
| 5 | Shaft PB A4 | |
| 6 | Gear BTM Lock Oneway | |
| 7 | Stopper PB | |
| 8 | Spring BTM Up 550 A4 | |
| 9 | Guide Assy Side R | |
| 10 | Gear Pinion | |
| 11 | Guide Assy Side F | |
| 12 | Guide Assy End (With 13) | |
| 13 | Actuator Guide End | |
| 14 | Actuator Size | |
| 15 | - - | |
| 16 | Plate Gear Lock | |
| 17 | Lever Separator | |
| 18 | Lever Latch | |
| 19 | Spring Cover Separator | |
| 20 | Cover Separator | |
| 21 | Holder Assy Separator | |
| 22 | Holder Spring Separator | 019E76290 |
| 23 | Spring Separator | 809E85020 |
| 24 | Actuator Low Paper | |
| 25 | Lever BTM Lock | |
| 26 | Gear Lever BTM Lock | |
| 27 | Spring BTM Lock | |
| 28 | Rack BTM Lock | |
| 29 | Cover BTM Up | |
| 30 | Gear BTM Lock Pinion | |
| 31 | Gear 40 Btm Lock | |
| 32 | Gear PB Rear | |
| 33 | Link PB | |
| 34 | Cover Link | |
| 35 | Spring Stopper Gear | |
| 36 | Actuator PLS PB | |
| 37 | Latch Tray | |
| 38 | Spring Latch | |
| 39 | Cover Tray | |
| 40 | Housing Base | |
| 41 | Label Kit | |
| 99 | Feed & Separator Roll Kit (with 21, PL3.2.18 x 2pcs) | 604K65030 |

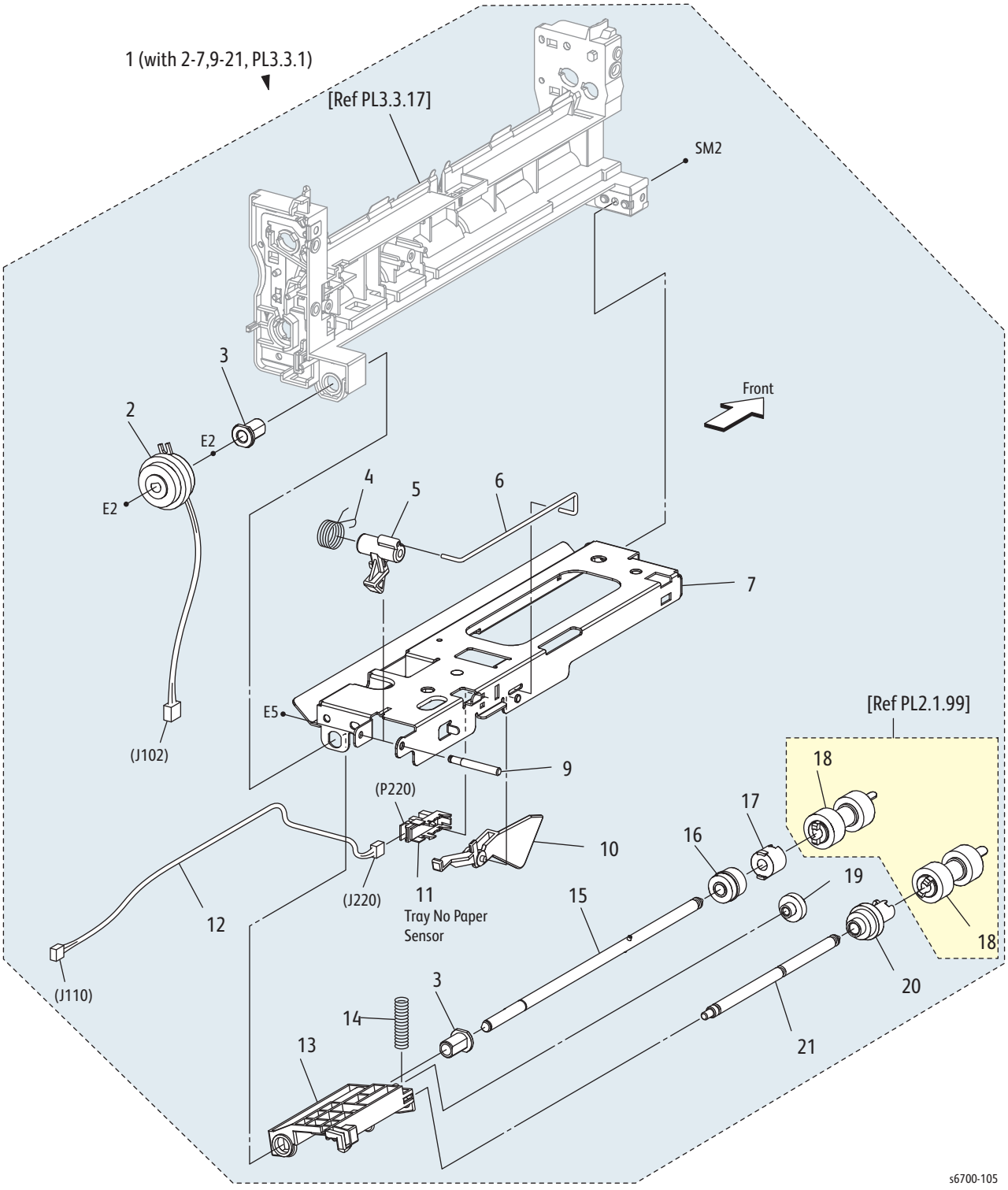
## Parts List 3.1 Feeder/Registration Assembly (1/3)



**Part List 3.1 Feeder/Registration Assembly (1/3)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Switch Assy Size (Size Switch) | 110K15830 |
| 2 | Holder Assy Sensor Low (with 3,4) | 019K10650 |
| 3 | Holder Sensor | |
| 4 | Sensor Photo (Low Paper Sensor 1 and 2) | 930W00123 |
| 5 | Block Release | 014E64090 |
| 6 | Guide Tray | |
| 7 | Tray 1 Separator Assy (with 9~12) | 054K42171 |
| 8 | Holder Assy Separator MSI | |
| 9 | Holder Spring Separator | |
| 10 | Spring Separator MSI | |
| 11 | Bracket Separator | |
| 12 | Chute Base Separator | |
| 13 | Cover Guide Harness | |
| 14 | Guide Harness | |
| 99 | Kit Tray 1 Separator Roller (with 8) | 604K65040 |

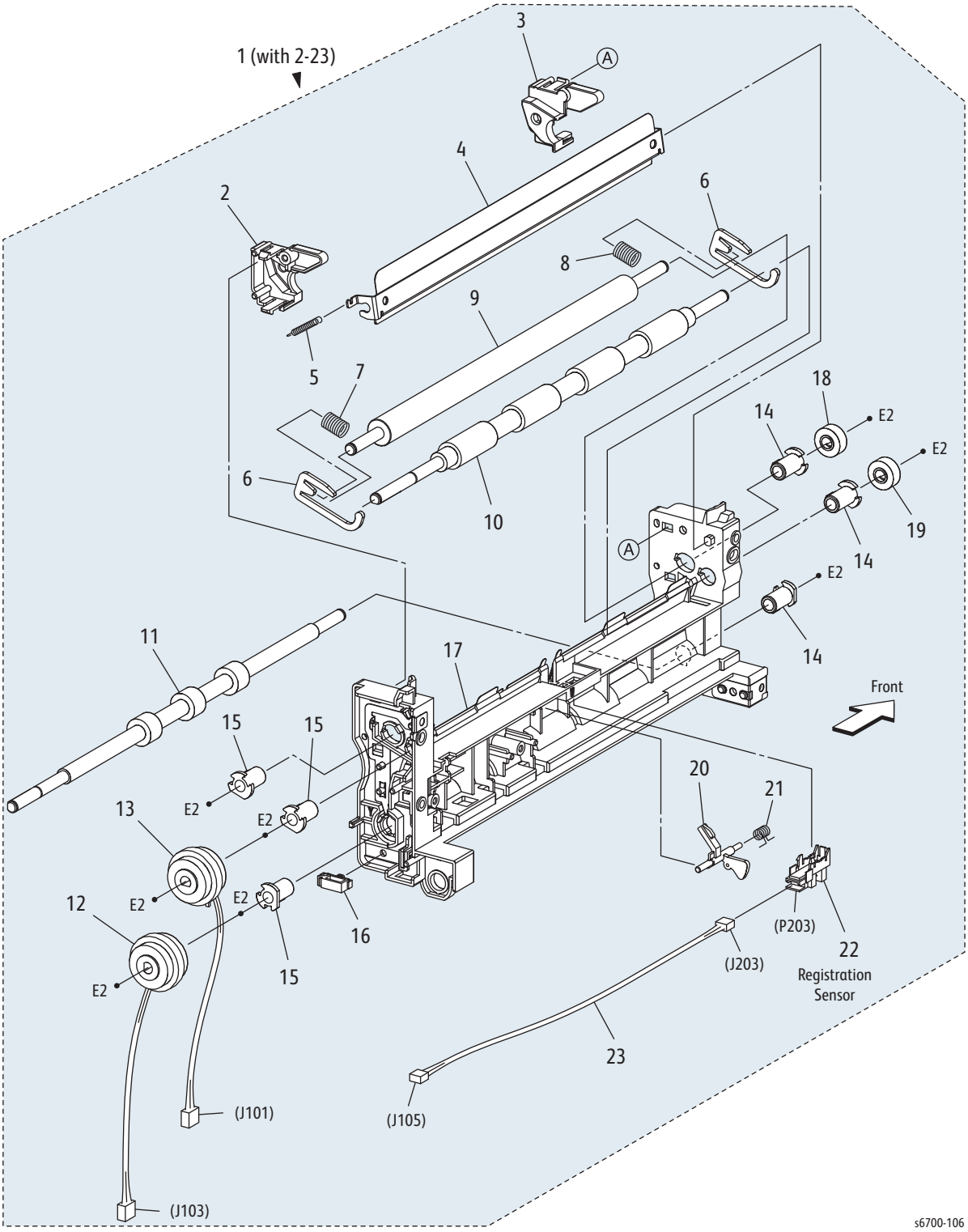
## Parts List 3.2 Feeder/Registration Assembly (2/3)



**Part List 3.2 Feeder/Registration Assembly (2/3)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Feeder Assy (with 2~7, 9~21, PL3.3.1) | 054K43721 |
| 2 | Clutch Assy Feed (Feed Clutch) | 121K43561 |
| 3 | Bearing Nudger | |
| 4 | Spring Lever Nudger | |
| 5 | Lever Nudger | |
| 6 | Link Actuator | |
| 7 | Chute Frame Top | |
| 8 | - - | |
| 9 | Shaft Lever Nudger | |
| 10 | Actuator No Paper | 120E31541 |
| 11 | Sensor Photo (No Paper Sensor) | 930W00123 |
| 12 | Harness Assy No Paper Sensor (J110-J220) | |
| 13 | Support Nudger | |
| 14 | Spring Nudger | |
| 15 | Shaft Assy Feed | |
| 16 | Gear Feed | |
| 17 | Clutch Assy Oneway Feed | |
| 18 | Roll Assy Feed | |
| 19 | Gear Idler Nudger | |
| 20 | Roll Assy Gear Nudger | |
| 21 | Shaft Nudger | |

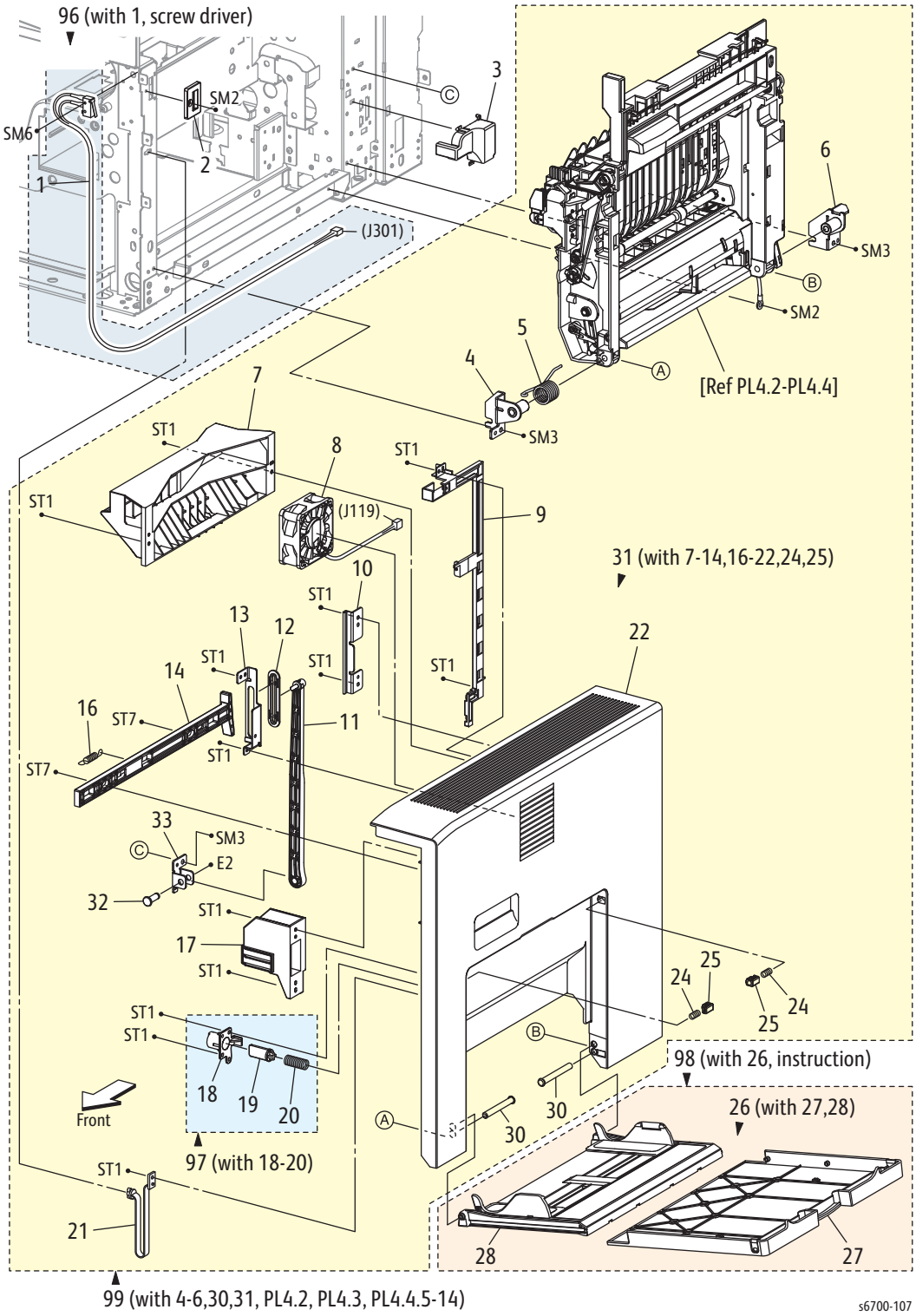
## Parts List 3.3 Feeder/Registration Assembly (3/3)



**Part List 3.3 Feeder/Registration Assembly (3/3)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Chute Assy Regi (With 2-23) | |
| 2 | Cover Spring Rear | |
| 3 | Cover Spring Front | |
| 4 | Chute Assy Upper Regi | |
| 5 | Spring Chute Upper | |
| 6 | Bracket Nip | |
| 7 | Spring Regi R | |
| 8 | Spring Regi F | |
| 9 | Roll Regi Metal | |
| 10 | Roll Assy Regi Rubber | |
| 11 | Roll Assy Take Away | |
| 12 | Clutch Assy Take Away (Take Away Clutch) | 121K43551 |
| 13 | Clutch Assy Regi (Registration Clutch) | 121K43541 |
| 14 | Bearing Regi | |
| 15 | Bearing Regi Earth | |
| 16 | Clamp Locking | |
| 17 | Chute Regi | |
| 18 | Gear Regi Metal | |
| 19 | Gear Regi Rubber | |
| 20 | Actuator Regi SNR (Registration Sensor Actuator) | 120E31603 |
| 21 | Spring Sensor Regi | |
| 22 | Sensor Photo (Registration Sensor) | 930W00123 |
| 23 | Harness Assy Regi SNR (J105-J203) | |

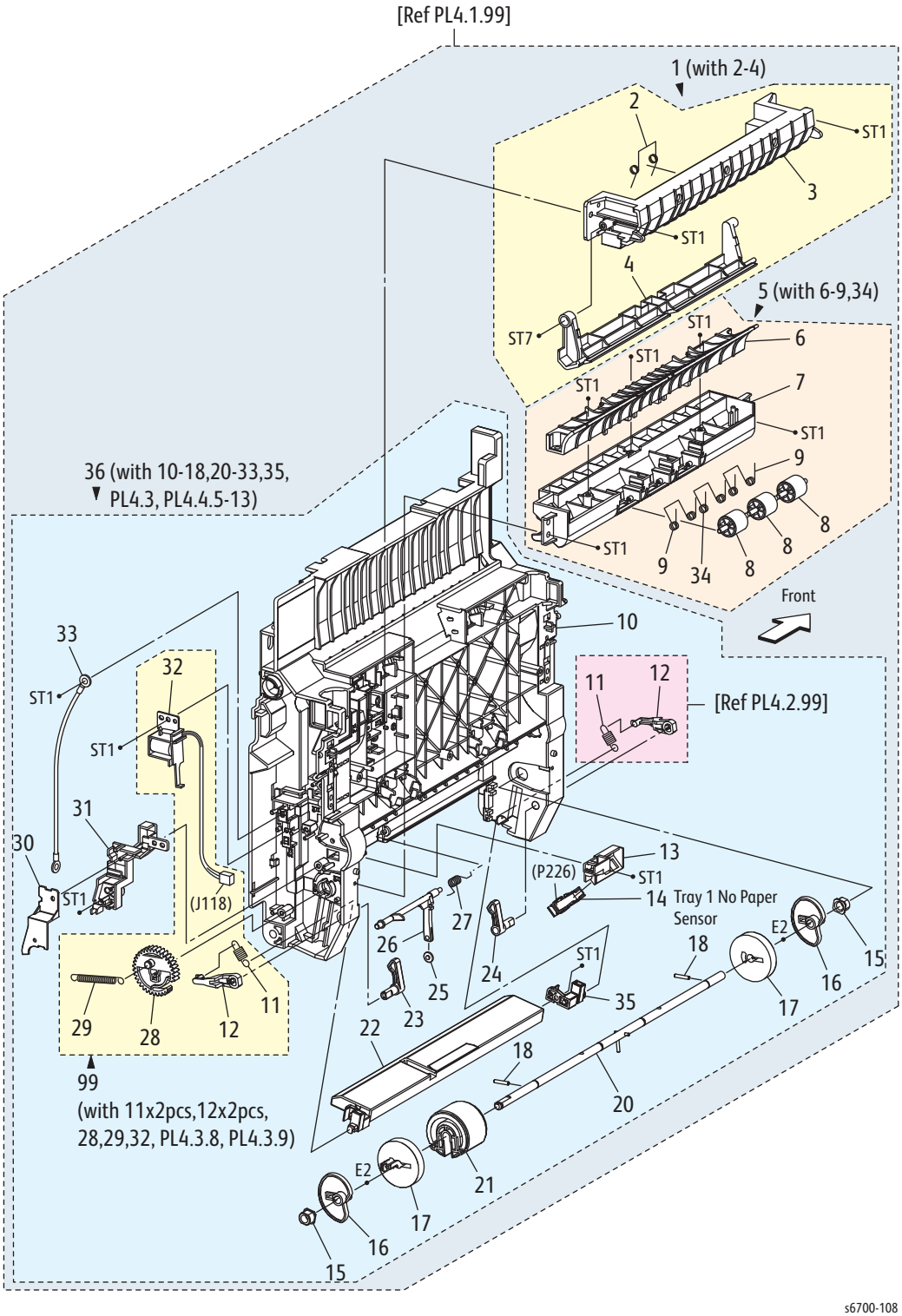
## Parts List 4.1 Right Door and Frame Assembly



**Parts List 4.1 Right Cover and Frame**

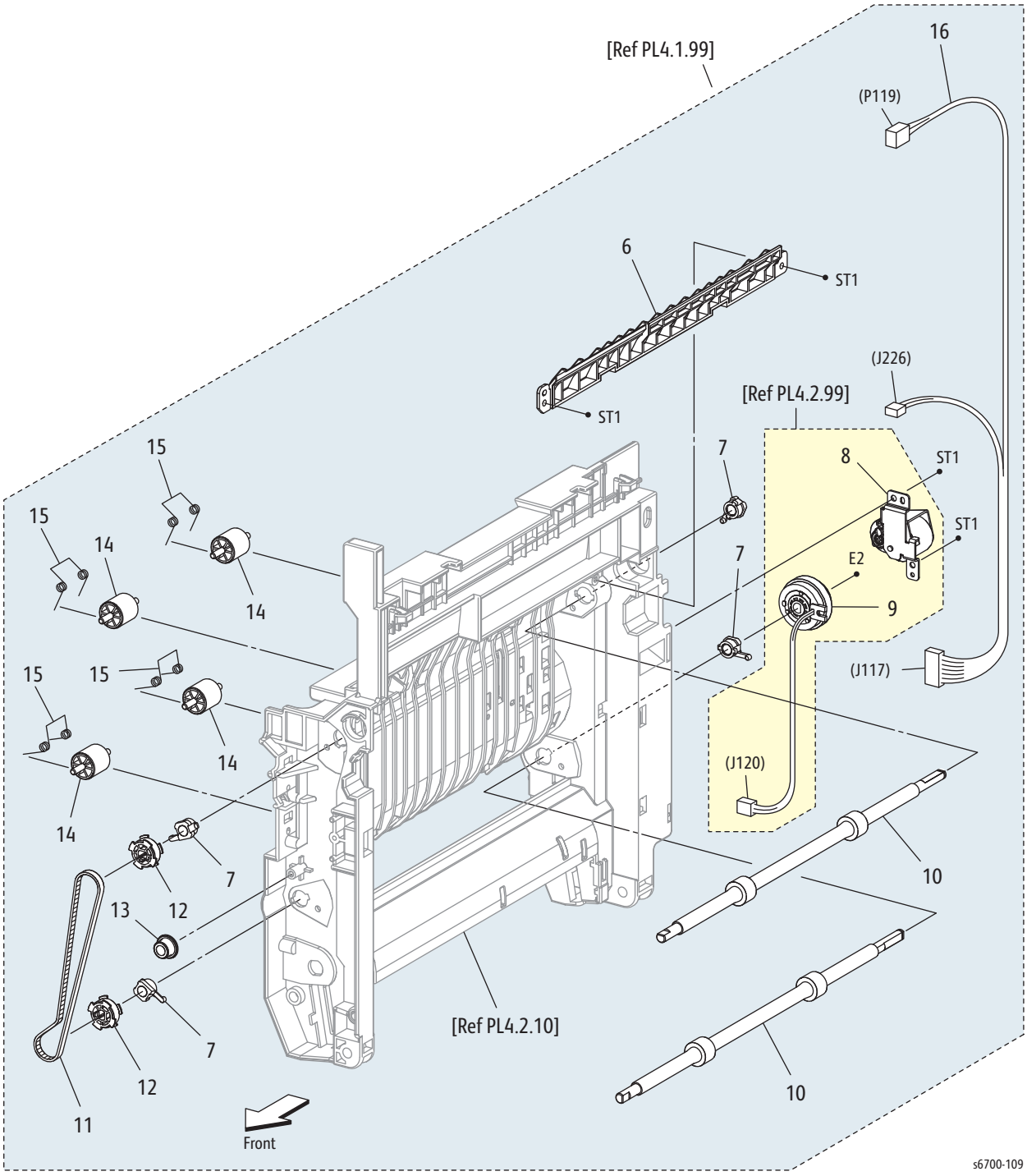
| Item | Description | Part Number |
|---|---|---|
| 1 | Harness Assy I/L RH (I/L SW-J301) | |
| 2 | Cover Intlk | |
| 3 | Cover Connector | |
| 4 | Bracket Assy Pivot Front | |
| 5 | Spring RH Frame | |
| 6 | Bracket Assy Pivot Rear | |
| 7 | Chute Dup RH | |
| 8 | Fuser Fan | 127E85810 |
| 9 | Guide Harness RH Fan | |
| 10 | Guide Slide Latch | |
| 11 | Link Assy | |
| 12 | Guide Support Link | |
| 13 | Guide Plate Latch | |
| 14 | Latch Cover RH | |
| 15 | - - | |
| 16 | Spring Latch Cover | |
| 17 | Guide Fuser RH | 032E32010 |
| 18 | Holder Intlk RH | |
| 19 | Actuator Intlk RH | |
| 20 | Spring Intlk RH | |
| 21 | Strap RH (Right Door Stopper Strap) | 868E26010 |
| 22 | Cover RH | |
| 23 | | |
| 24 | Spring Stopper MSI | |
| 25 | Stopper MSI | |
| 26 | Cover Assy MSI (with 27, 28) | |
| 27 | Cover MSI | |
| 28 | Tray Assy MSI | |
| 29 | - - | |
| 30 | Shaft Pivot | |
| 31 | Cover Assy RH (with 7~14,16~22, 24, 25) | |
| 96 | Kit Interlock Switch RH (with 1, screw driver) | 604K57040 |
| 97 | Kit Actuator Intlk RH (with 18-20) (Right Door Interlock Actuator) | 604K56450 |
| 98 | Kit Cover Assy Tray 1 (with 26) | 604K64951 |
| 99 | Kit RH Cover & Frame Assy (with 4~6, 30~31, PL4.2, PL4.3, PL4.4.2~14) | 604K64962 |

## Parts List 4.2 Tray 1 Feed



**Parts List 4.2 Tray 1 Feed**

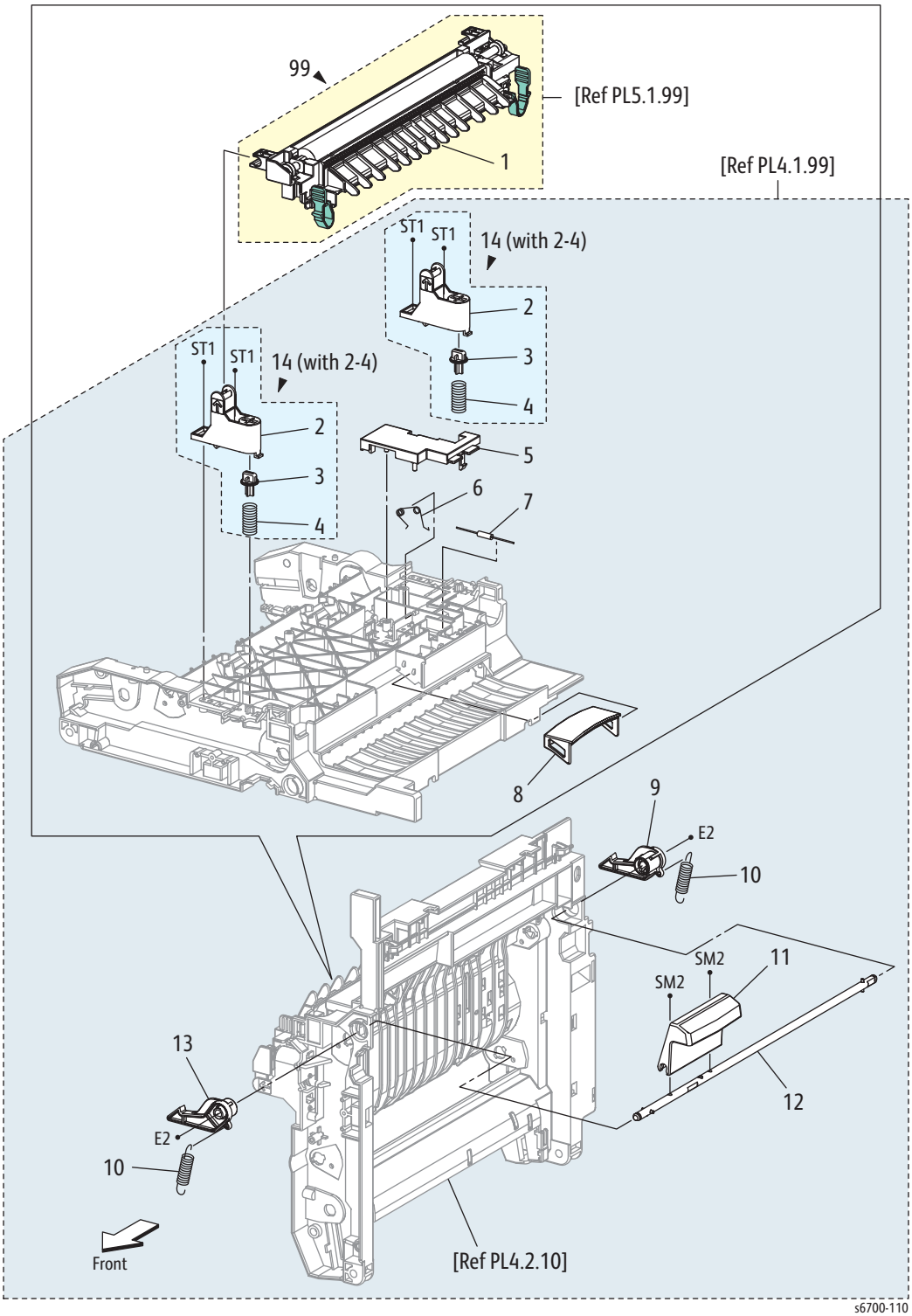
| Item | Description | Part Number |
|---|---|---|
| 1 | Chute Assy Pinch Regi (with 2~4) (Registration Chute) | 054K40800 |
| 2 | Spring Chute Swing | |
| 3 | Chute Regi Pinch | |
| 4 | Chute Regi Swing | |
| 5 | Chute Assy MSI (with 6~9, 34) (Tray 1 Chute Assy) | 054K42151 |
| 6 | Chute Loop MSI | |
| 7 | Chute Feed Upper | |
| 8 | Roll Pinch TA | |
| 9 | Spring Pinch TA | |
| 10 | Frame RH | |
| 11 | Spring Nf MSI | |
| 12 | Arm MSI | |
| 13 | Bracket Sensor | |
| 14 | Tray 1 No Paper Sensor | 930W00123 |
| 15 | Bearing Earth | |
| 16 | Cam MSI | |
| 17 | Roll Core MSI | |
| 18 | Pin MSI | |
| 19 | - - | |
| 20 | Shaft Assy MSI | |
| 21 | Roll Assy Feed (Feed Roller) | 059K50731 |
| 22 | Plate Assy Bottom MSI | |
| 23 | Follower Rear | |
| 24 | Follower Front | |
| 25 | Roll Actuator No Paper | |
| 26 | Actuator No Paper (Tray 1 No Paper Sensor Actuator) | 120E31580 |
| 27 | Spring No Paper MSI (No Paper Sensor Actuator Spring) | 809E89850 |
| 28 | Gear Feed MSI | |
| 29 | Spring Feed MSI | |
| 30 | Cover Harn Guide RH | |
| 31 | Guide Harness RH | |
| 32 | Solenoid Feed MSI (Tray 1 Feed Solenoid) | |
| 33 | Wire Assy Earth | |
| 34 | Spring Pinch TA Ctr | |
| 35 | Holder MSI Front | |
| 36 | Frame Assy RH (with 10~18,20~33, 35, Pl4.3, Pl4.4.5~13) | |
| 99 | Kit RH Solenoid, Gear, Duplex Drive Clutch (with 11x2, 12x2, 28, 29, 32, PL4.3.8, PL4.3.9) | 604K56510 |


[Ref PL4.1.99]
16
(P119)
6
ST1
ST1
(J226)
[Ref PL4.2.99]
15
15
14
14
7
8
ST1
ST1
7
E2
9
(J117)
15
15
14
14
(J120)
7
13
12
10
[Ref PL4.2.10]
7
12
10
11
Front
s6700-109

**Parts List 4.3 Duplex**

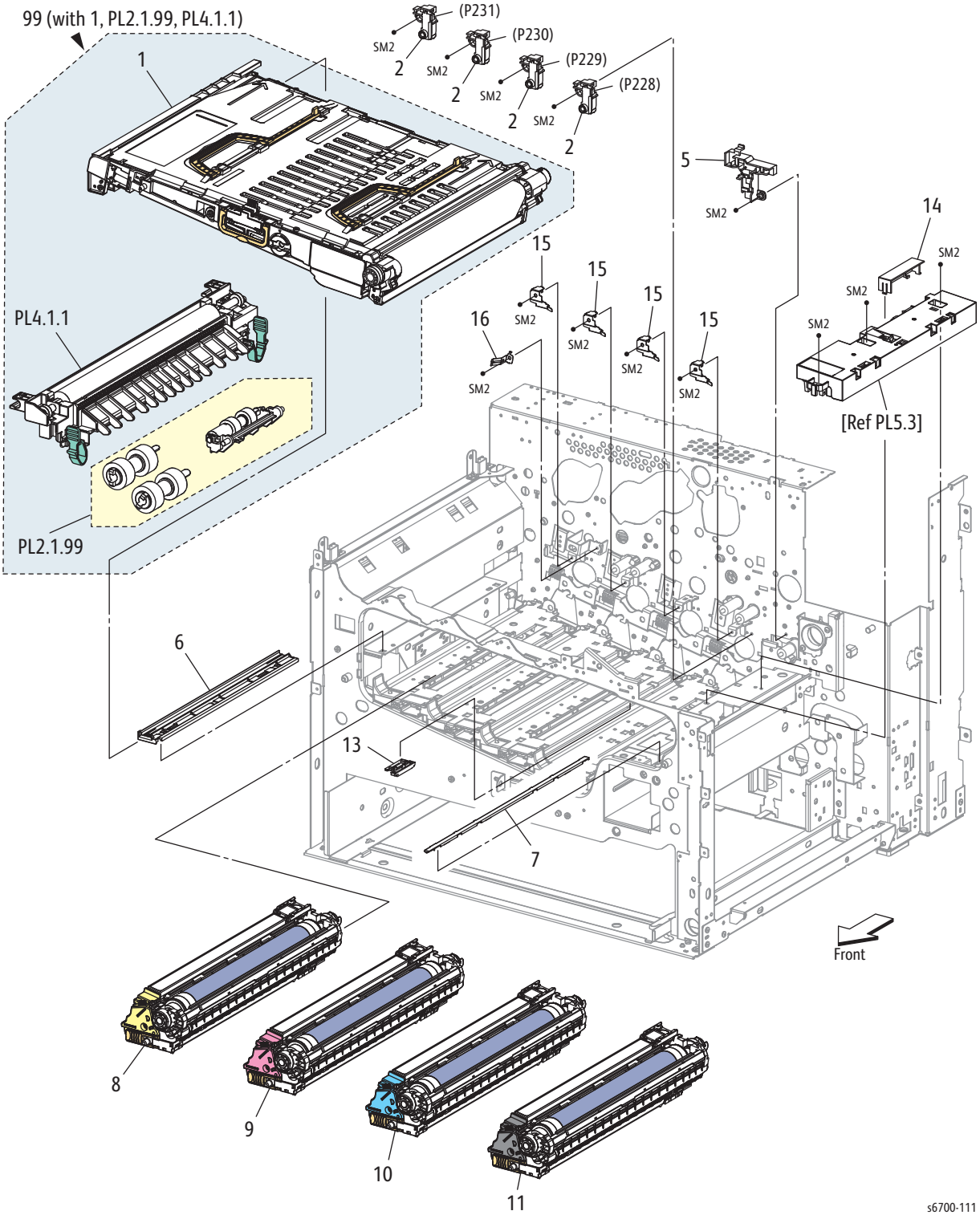
| Item | Description | Part Number |
|---|---|---|
| 1 | - - | |
| 2 | - - | |
| 3 | - - | |
| 4 | - - | |
| 5 | - - | |
| 6 | Chute Dup Out | |
| 7 | Bearing Exit | |
| 8 | Gear Assy Dup | |
| 9 | Clutch Assy Dup | |
| 10 | Roll Assy Dup (Upper And Lower Duplex Roller) | 059K62270 |
| 11 | Belt Dup | |
| 12 | Pulley Dup | |
| 13 | Roller Belt Guide | |
| 14 | Roll Pinch TA | |
| 15 | Spring Pinch Dup | |
| 16 | Harness Assy RH Cover (J117-P119, J226) | 962K74500 |

## Parts List 4.4 Transfer Roller



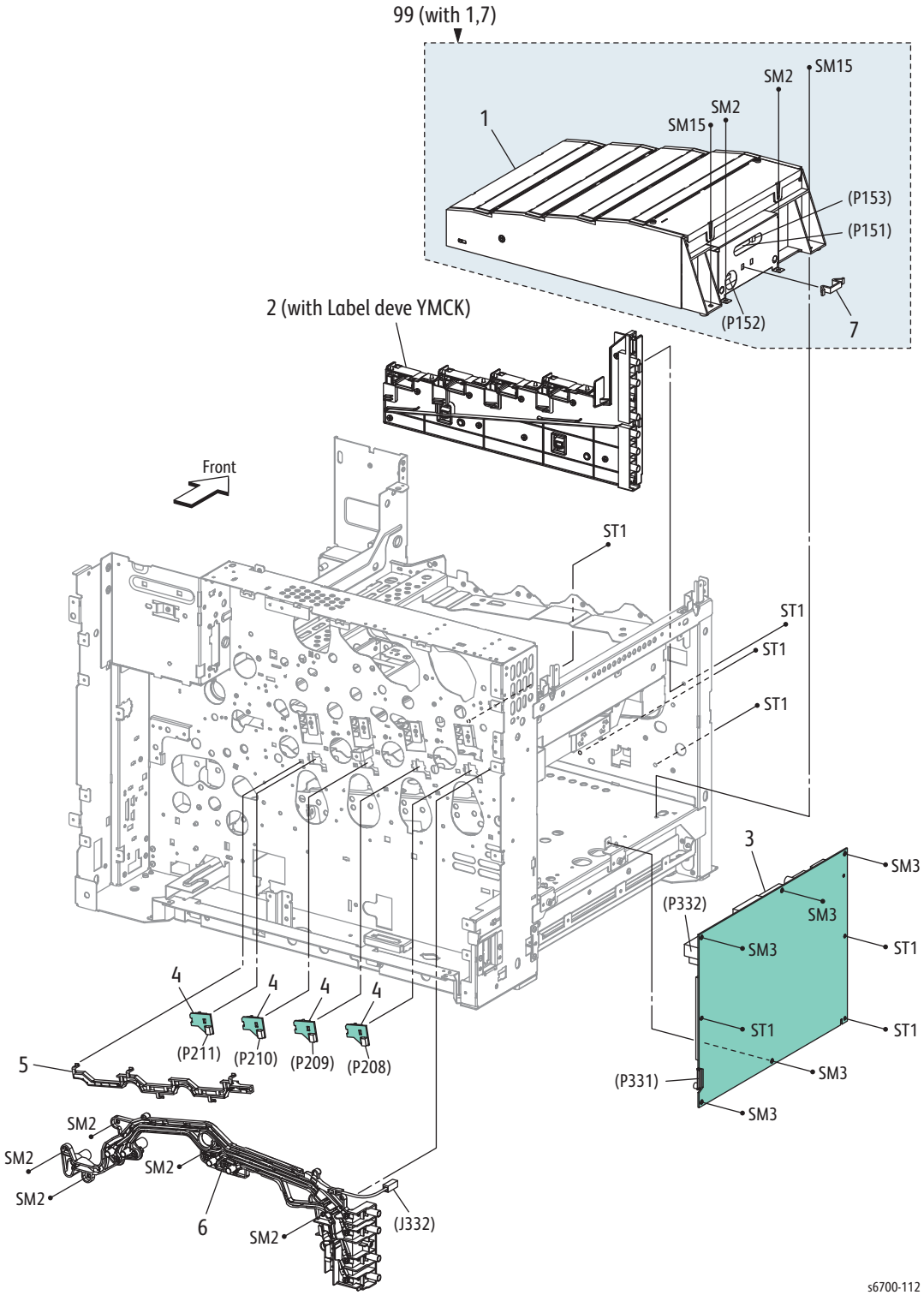
**Parts List 4.4 Transfer Roller**

| Item | Description | Part Number |
|---|---|---|
| 1 | Transfer Roller | |
| 2 | Bracket 2nd BTR | |
| 3 | Cap Spring 2nd BTR | |
| 4 | Spring 2nd BTR | |
| 5 | Cover Resistor | |
| 6 | Spring Earth | |
| 7 | Resistor | |
| 8 | Handle RH (Duplex Handle) | 803E05880 |
| 9 | Latch Rear RH | |
| 10 | Spring Latch | |
| 11 | Handle Latch | |
| 12 | Shaft Assy Latch | |
| 13 | Latch Front RH | |
| 14 | Bracket Assy 2nd (with 2~4) | |
| 99 | Transfer Roller (with PL4.4.1, instructions) | 604K64970 |


99 (with 1, PL2.1.99, PL4.1.1)
1
PL4.1.1
PL2.1.99
(P231)
(P230)
(P229)
(P228)
SM2
2
5
14
15
16
[Ref PL5.3]
6
7
8
9
10
11
13
Front
s6700-111

**Parts List 5.1 Xerographics**

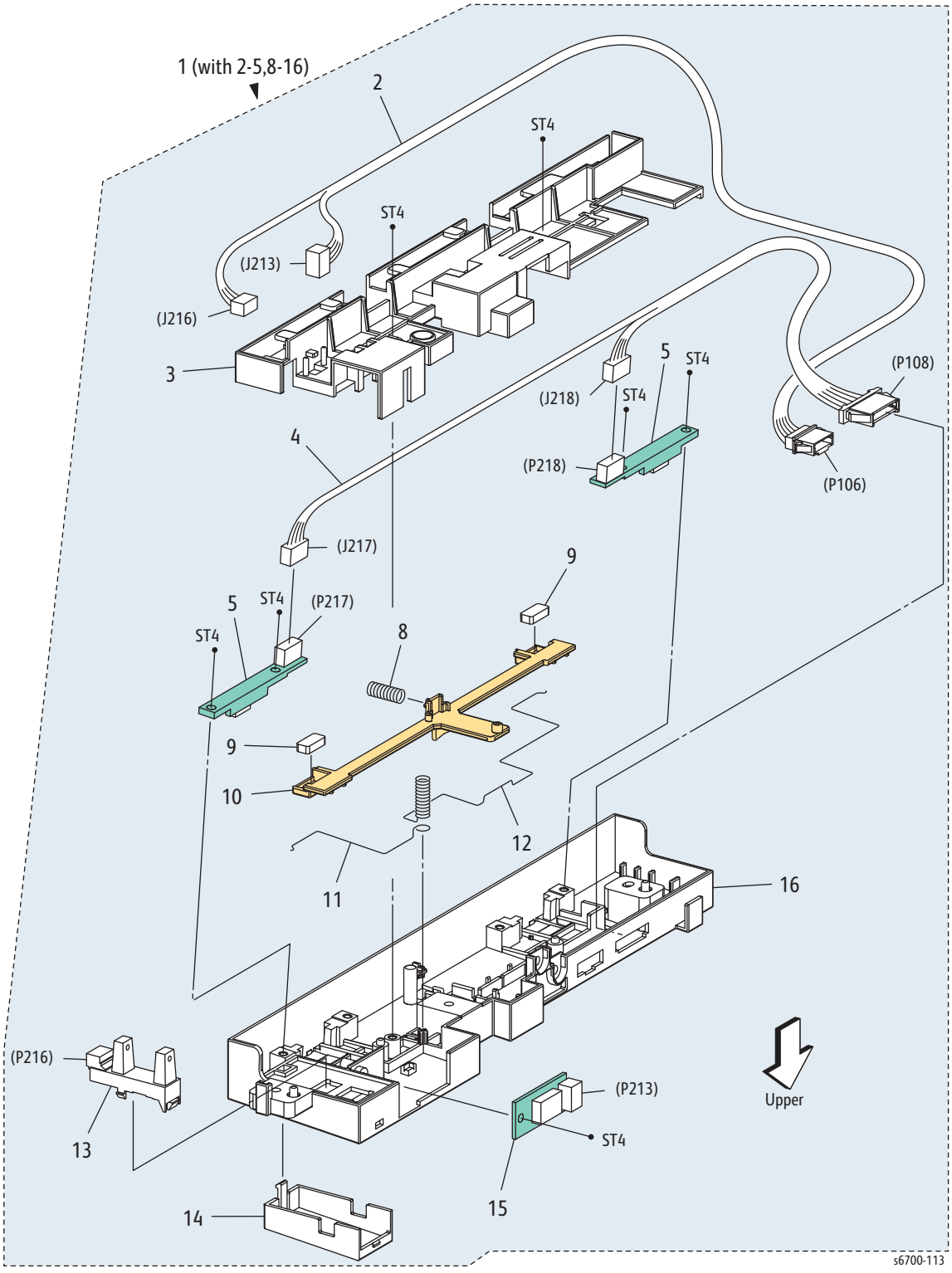
| Item | Description | Part Number |
|---|---|---|
| 1 | Transfer Belt | |
| 2 | Lamp Assy Erase (Erase Lamp) | 122K94260 |
| 3 | | |
| 4 | | |
| 5 | Guide Erase ADC | |
| 6 | Guide Belt L | |
| 7 | Guide Belt R | |
| 8 | Imaging Unit Y (with 1.2.22 x 1) | 108R00973 |
| 9 | Imaging Unit M (with 1.2.22 x 1) | 108R00972 |
| 10 | Imaging Unit C (with 1.2.22 x 1) | 108R00971 |
| 11 | Imaging Unit K (with 1.2.22 x 1) | 108R00974 |
| 12 | | |
| 13 | Guide Handle | |
| 14 | Cover Connector | 848E45650 |
| 15 | Plate Spring CRU | |
| 16 | Plate Earth Ibt | |
| 99 | Maintenance Kit (with Transfer Belt, Transfer Roller, Feed Rollers, instructions) | 604K73140 |


99 (with 1,7)
1
SM15
SM2
SM2
SM15
(P153)
(P151)
(P152)
7
2 (with Label deve YMCK)
Front
ST1
ST1
ST1
ST1
3
SM3
(P332)
SM3
SM3
ST1
ST1
ST1
(P331)
SM3
SM3
4
4
4
4
(P211)
(P210)
(P209)
(P208)
5
SM2
SM2
SM2
SM2
6
SM2
(J332)
s6700-112

**Part List 5.2 Laser Unit**

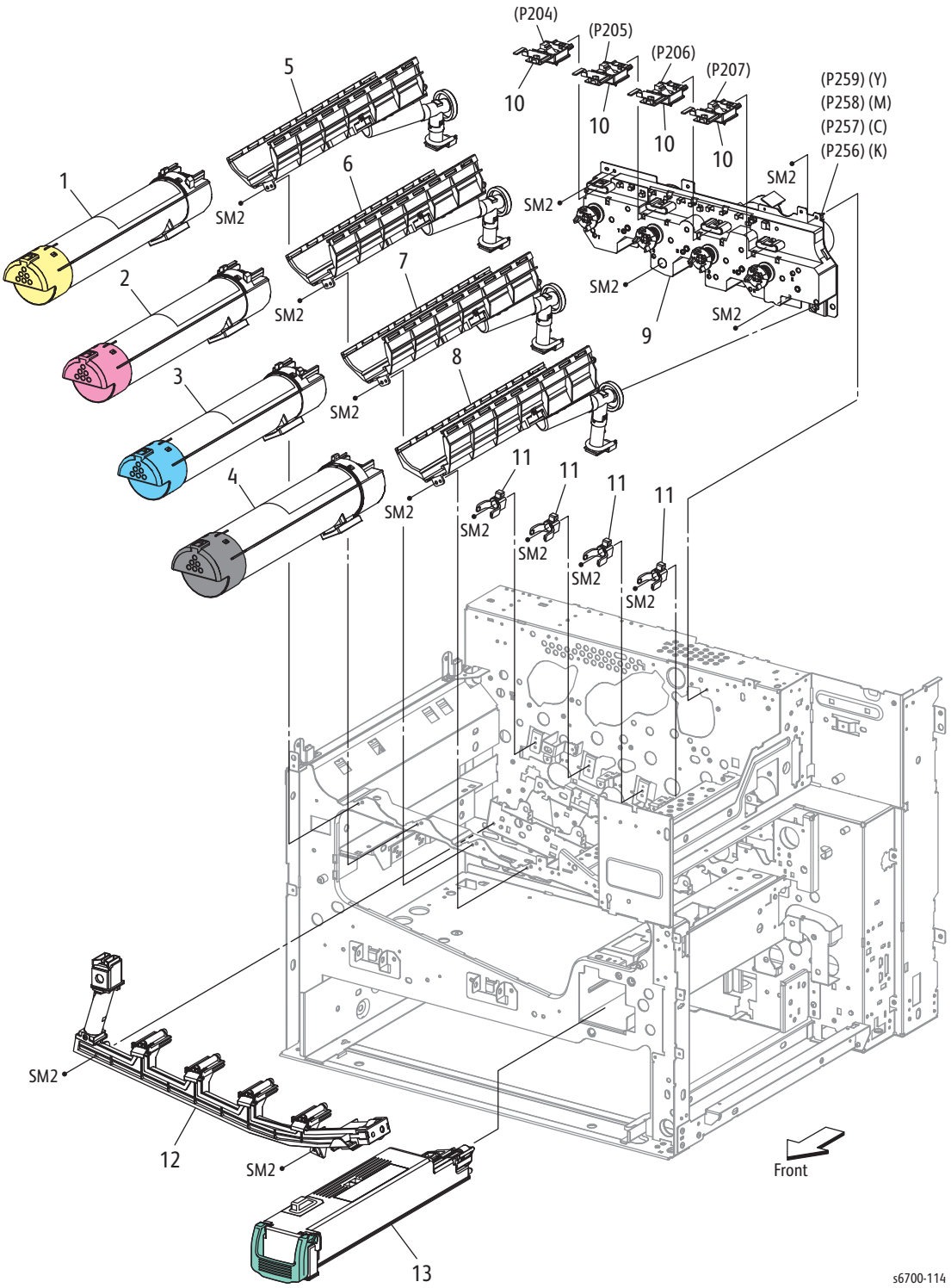
| Item | Description | Part Number |
|---|---|---|
| 1 | ROS Assy (Laser Unit) | |
| 2 | Housing Assy CR (Bias Housing Assy) | 848K20400 |
| 3 | PWBA HVPS (HVPS) | 105K23573 |
| 4 | Connector Assy Imaging Unit CRUM | 113K83420 |
| 5 | Guide CRUM CRU | 032E31840 |
| 6 | Housing Assy BTR (Transfer Belt Bias Assy) | 848K20390 |
| 7 | Clamp Press Rec-14 | |
| 99 | Laser Unit Kit (with 1, 7) | 604K64980 |

## Parts List 5.3 Procon Assembly



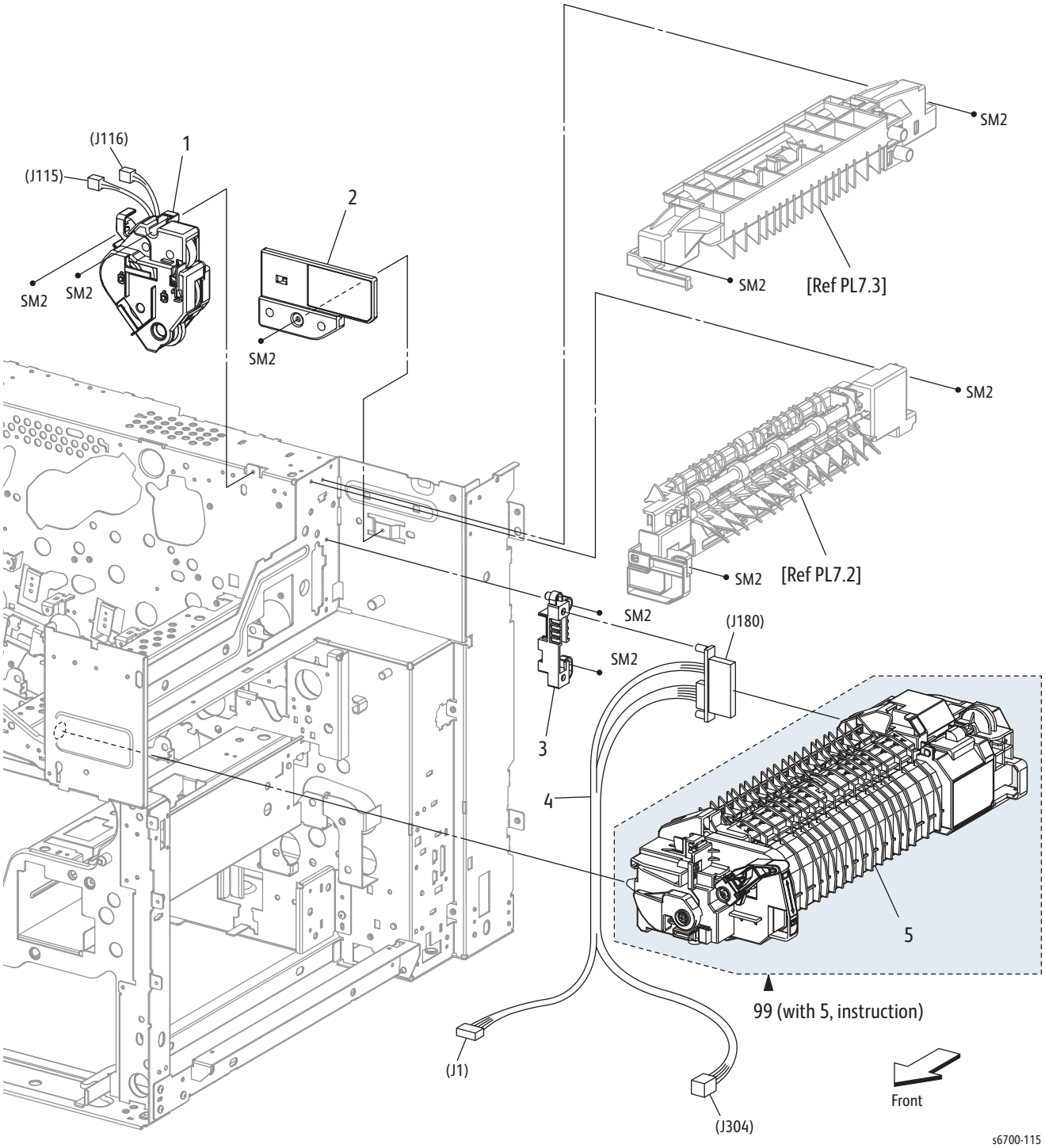
**Parts List 5.3 Procon Assembly**

| Item | Description | Part Number |
|---|---|---|
| 1 | Procon Assy (with 2~5, 8~16) | 130K76890 |
| 2 | Harness Assy CTD/HUM (P106, J213,J216) | |
| 3 | Cover ADC | |
| 4 | Harness Assy CTD SNR (P108-J217,J218) | |
| 5 | Color Density (ADC) Sensor | 130E98170 |
| 6 | - - | |
| 7 | - - | |
| 8 | Spring Shutter | |
| 9 | Pad ADC | |
| 10 | Shutter ADC | |
| 11 | Conductor Gnd F | |
| 12 | Conductor Gnd R | |
| 13 | Waste Toner Full Sensor | 130E87512 |
| 14 | Cover Sensor | |
| 15 | Environmental (Temp/Hum) Sensor | 130E93460 |
| 16 | Housing ADC | |


(P204)
(P205)
(P206)
(P207)
(P259) (Y)
(P258) (M)
(P257) (C)
(P256) (K)
10
10
10
10
1
2
3
4
5
6
7
8
9
11
11
11
11
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
12
13
Front
s6700-114

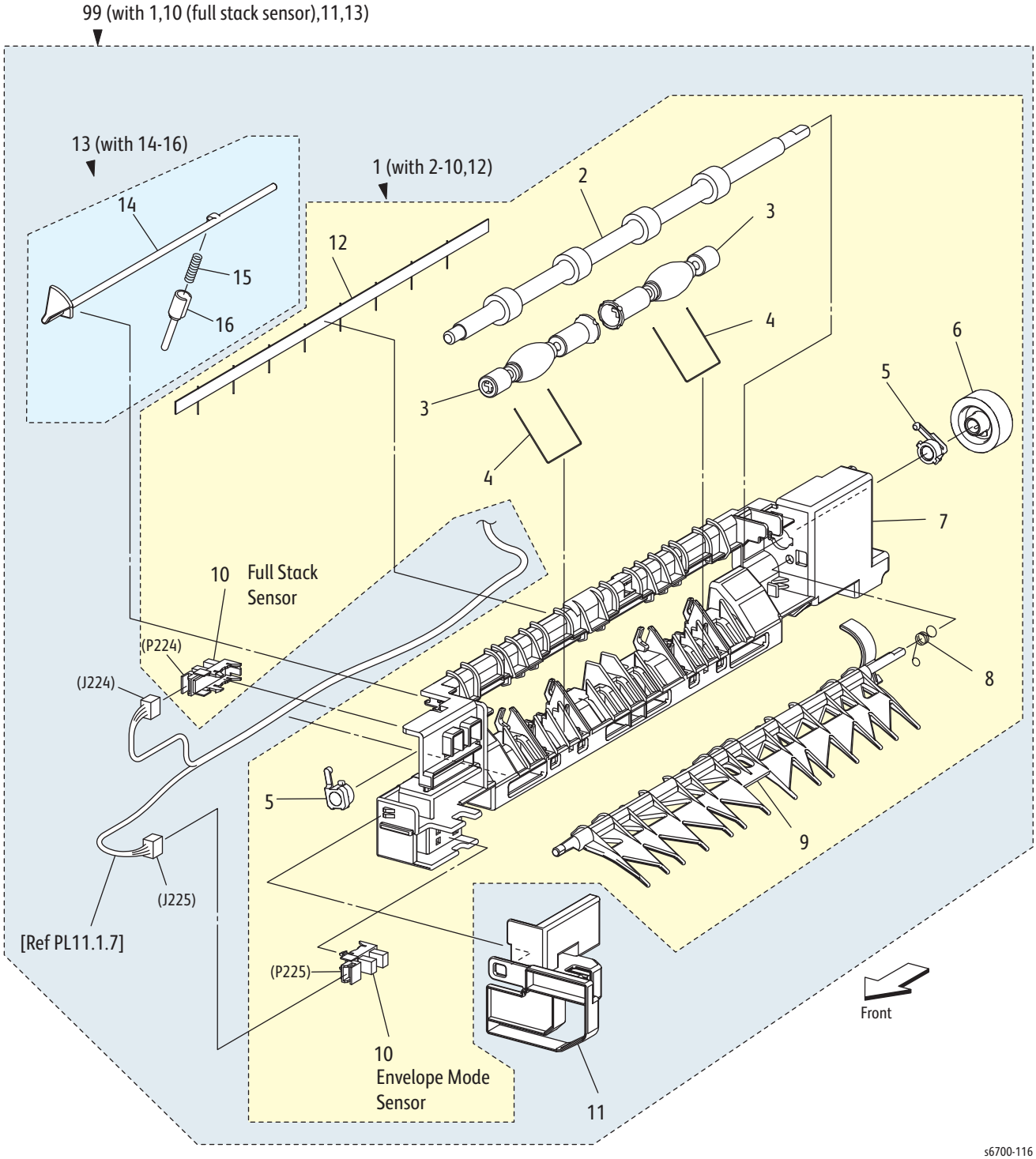
**Parts List 6.1 Toner Dispense and Recovery**

| Item | Description | Part Number |
|---|---|---|
| 1 | Toner Cartridge (Y) | Refer to “Routine Maintenance and Service Items” on page 9-101. |
| 2 | Toner Cartridge (M) | |
| 3 | Toner Cartridge (C) | |
| 4 | Toner Cartridge (K) | |
| 5 | CRUM Dispense Assy (Y) | 094K92535 |
| 6 | CRUM Dispense Assy (M) | 094K92545 |
| 7 | CRUM Dispense Assy (C) | 094K92555 |
| 8 | CRUM Dispense Assy (K) | 094K92525 |
| 9 | Toner Dispense Assy | 127K59310 |
| 10 | Connector Assy CRUM (CRUM Reader Board) | 019K11160 |
| 11 | Clamp Pipe Disp | |
| 12 | Pipe Assy (Waste Auger) | 052K97813 |
| 13 | Waste Toner Cartridge | 108R00975 |


(J116)
1
(J115)
SM2
SM2
2
SM2
SM2
[Ref PL7.3]
SM2
SM2
[Ref PL7.2]
SM2
(J180)
SM2
3
4
5
99 (with 5, instruction)
(J1)
(J304)
Front
s6700-115

**Parts List 7.1 Fuser and Exit Motor**

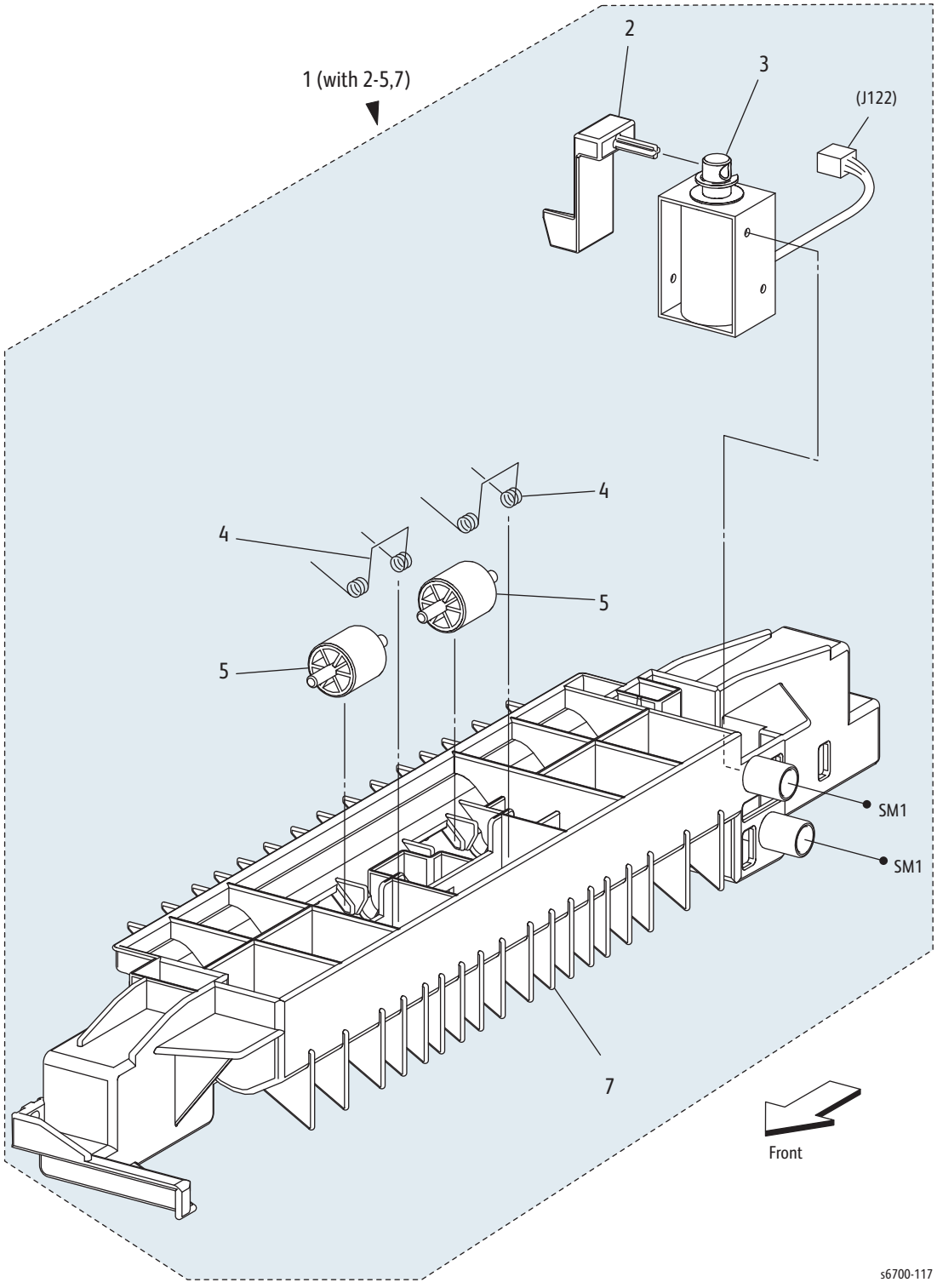
| Item | Description | Part Number |
|---|---|---|
| 1 | Exit Drive Assy | 007K15331 |
| 2 | Guide Invert | |
| 3 | Bracket Drawer Fuser | |
| 4 | Harness Assy FSR (J180-J1,J304) 110V<br>Harness Assy FSR (J180-J1,J304) 220V | 962K73590<br>962K73860 |
| 5 | Fuser | |
| 99 | Fuser 110V (with 5, instructions)<br>Fuser 220V (with 5, instructions) | 126K32220<br>126K32230 |


99 (with 1,10 (full stack sensor),11,13)
13 (with 14-16)
1 (with 2-10,12)
14
15
16
12
2
3
4
3
4
6
5
7
10 Full Stack Sensor
(P224)
(J224)
8
5
9
(J225)
[Ref PL11.1.7]
(P225)
10 Envelope Mode Sensor
11
Front
s6700-116

**Parts List 7.2 Exit**

| Item | Description | Part Number |
|---|---|---|
| 1 | Chute Assy Exit (with 2~10, 12) | |
| 2 | Roll Assy Exit | |
| 3 | Roll Pinch Exit | |
| 4 | Spring Pinch Exit | |
| 5 | Bearing Exit | |
| 6 | Gear Exit Roll | |
| 7 | Chute Lower Exit | |
| 8 | Spring Path Change | |
| 9 | Chute Path Change Exit (Duplex Gate) | |
| 10 | Sensor Photo (Full Stack, Envelope Mode) | 930W00123 |
| 11 | Cover Snr Exit | |
| 12 | Eliminator Exit | |
| 13 | Actuator Full Stack (with 14~16) | 120K92710 |
| 99 | Kit Chute Assy Exit (with 1, 11, 13) | 054K47220 |

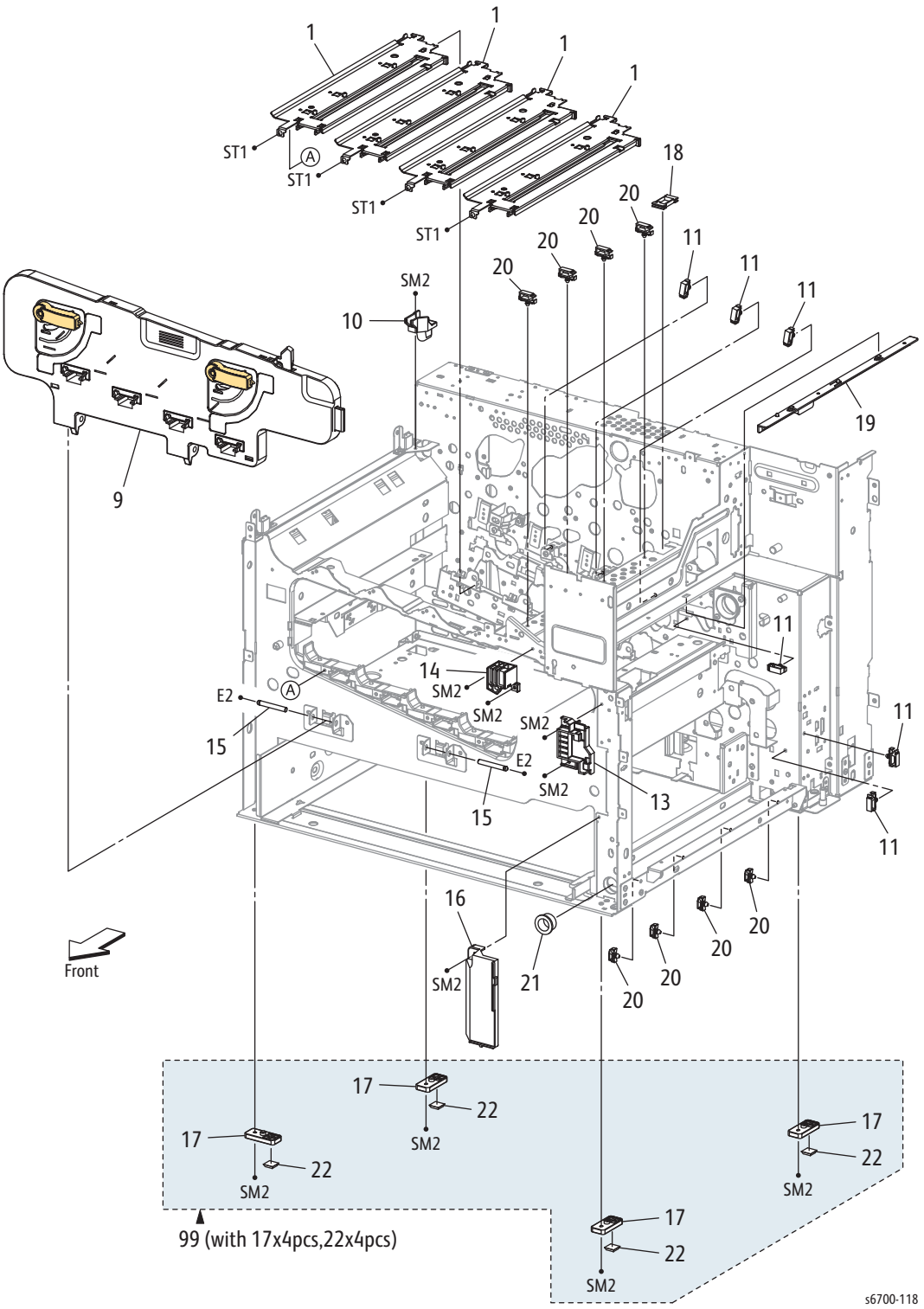
## Parts List 7.3 Invert Chute



**Parts List 7.3 Inverter Chute**

| Item | Description | Part Number |
|---|---|---|
| 1 | Chute Assy Inverter (with 2~5, 7) | 054K40577 |
| 2 | Act Path Change | |
| 3 | Exit Inverter Solenoid | 121K43520 |
| 4 | Spring Pinch Dup | |
| 5 | Roll Pinch TA | |
| 6 | - - | |
| 7 | Chute Invert | |
| 8 | - - | |

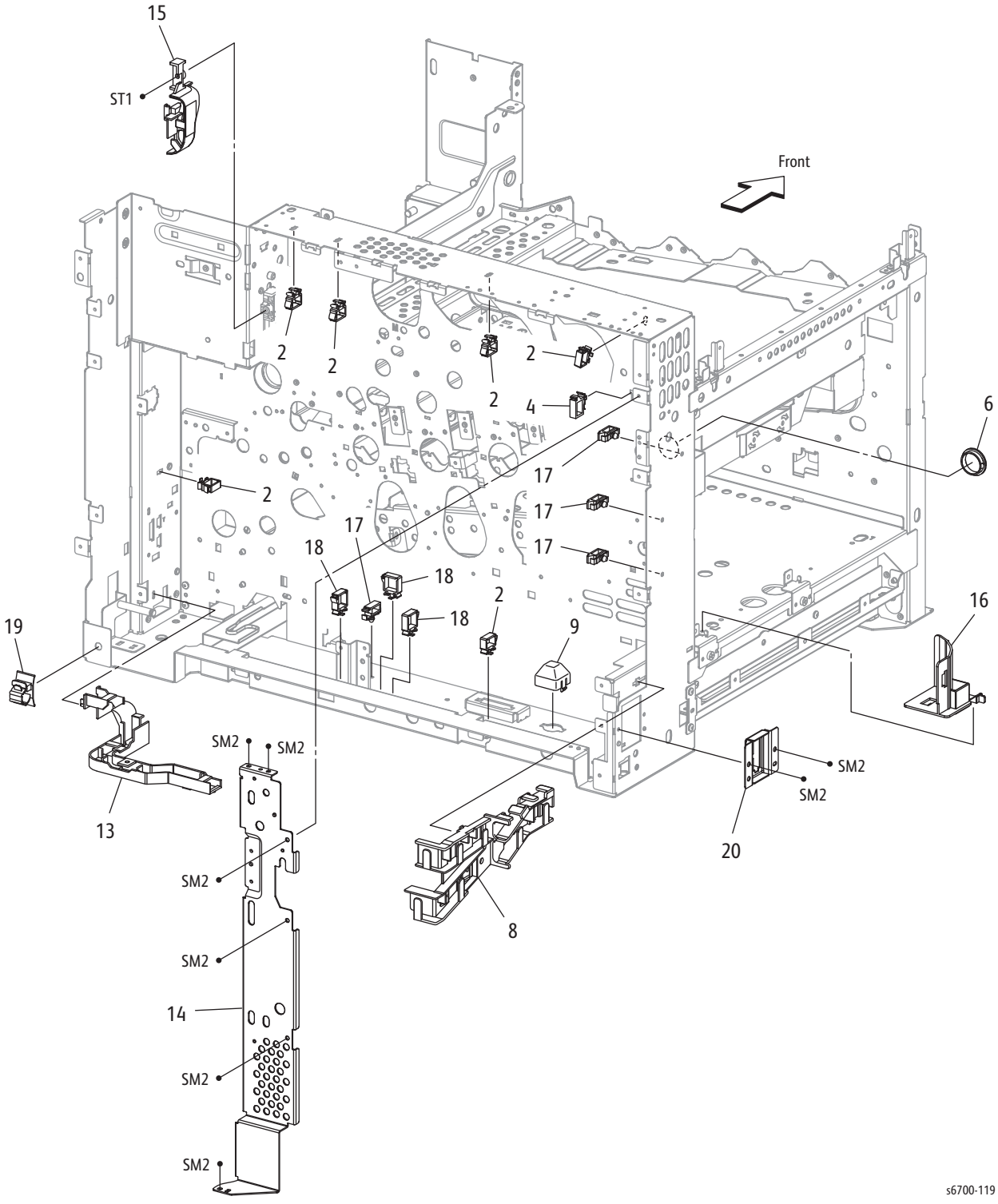
## Parts List 8.1 Frame (1/2)



**Parts List 8.1 Frame (1/2)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Guide Assy CRU (Imaging Unit Guide) | 032K05793 |
| 2 | - - | |
| 3 | - - | |
| 4 | - - | |
| 5 | - - | |
| 6 | - - | |
| 7 | - - | |
| 8 | - - | |
| 9 | Frame Assy 2nd (Inner Frame Assy) | 801K44481 |
| 10 | Guide Harness OP Panel | |
| 11 | Clamp Locking | |
| 12 | - - | |
| 13 | Guide Frame Lock H | |
| 14 | Guide Frame Lock V | |
| 15 | Shaft Pivot Frame 2nd | 806E28030 |
| 16 | Cover FR Under | |
| 17 | Foot | |
| 18 | Bush | |
| 19 | Guide Air Trans | |
| 20 | Clamp Locking | |
| 21 | Bush Close-type | |
| 22 | Foot Rubber | |
| 99 | Kit Foot Assy (with17x4 pcs, 22x4 pcs) | 604K64990 |

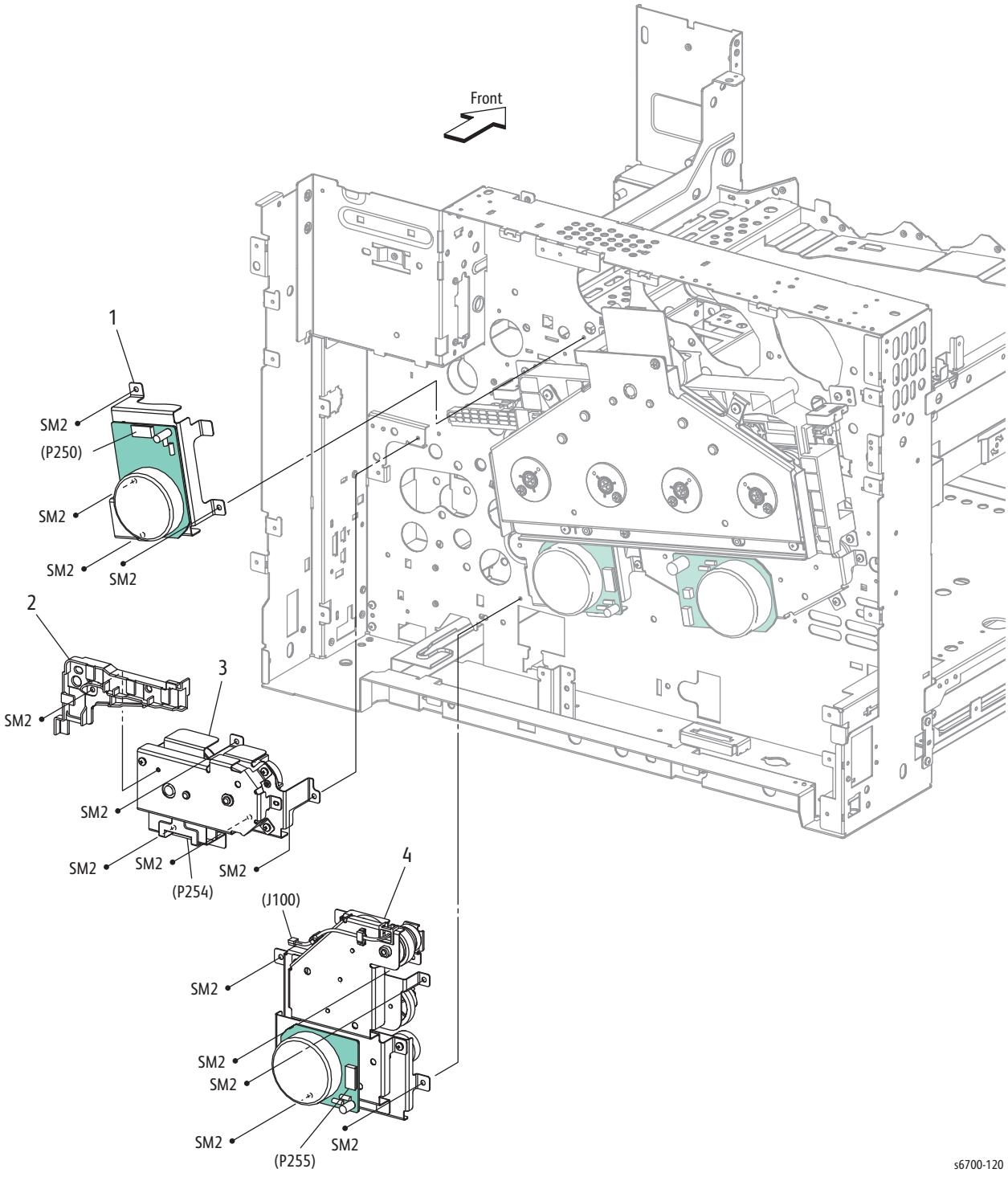
## Parts List 8.2 Frame Clamps and Guides (2/2)



**Parts List 8.2 Frame Clamps and Guides (2/2)**

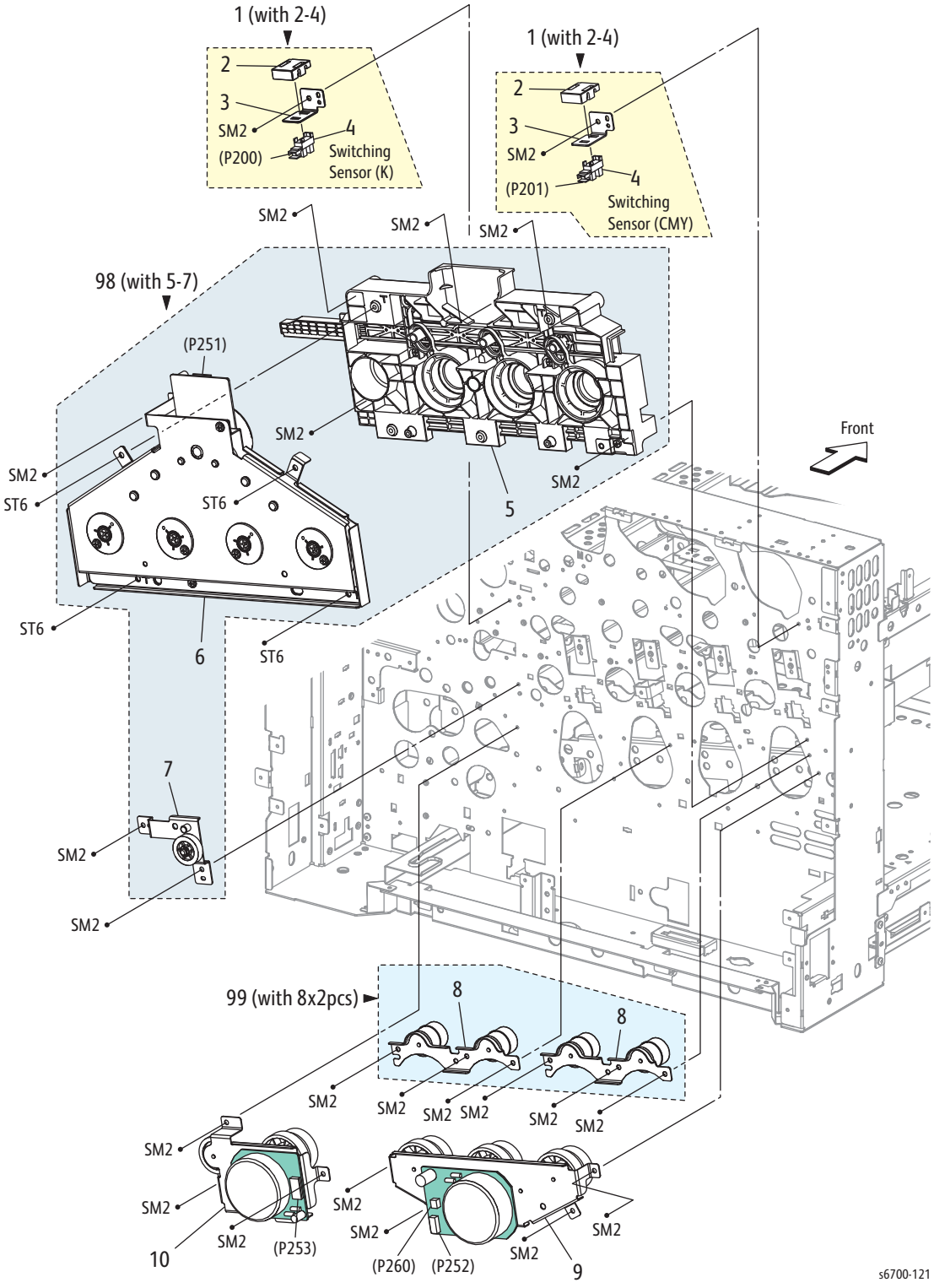
| Item | Description | Part Number |
|---|---|---|
| 1 | - - | |
| 2 | Clamp Rlwt-2V0 | |
| 3 | - - | |
| 4 | Clamp Locking | |
| 5 | - - | |
| 6 | Bush Close-type | |
| 7 | - - | |
| 8 | Guide Harness Rear | |
| 9 | Cover Pin | |
| 10 | - - | |
| 11 | - - | |
| 12 | - - | |
| 13 | Guide Harness Connect | |
| 14 | Plate Support EM | |
| 15 | Bracket Fuser HNS | |
| 16 | Guide Air Rear | |
| 17 | Clamp Locking | |
| 18 | Clamp | |
| 19 | Clamp CKS BK | 120E32030 |
| 20 | Bracket FIN CONT | |

## Parts List 9.1 Drive (1/2)



**Parts List 9.1 Drive (1/2)**

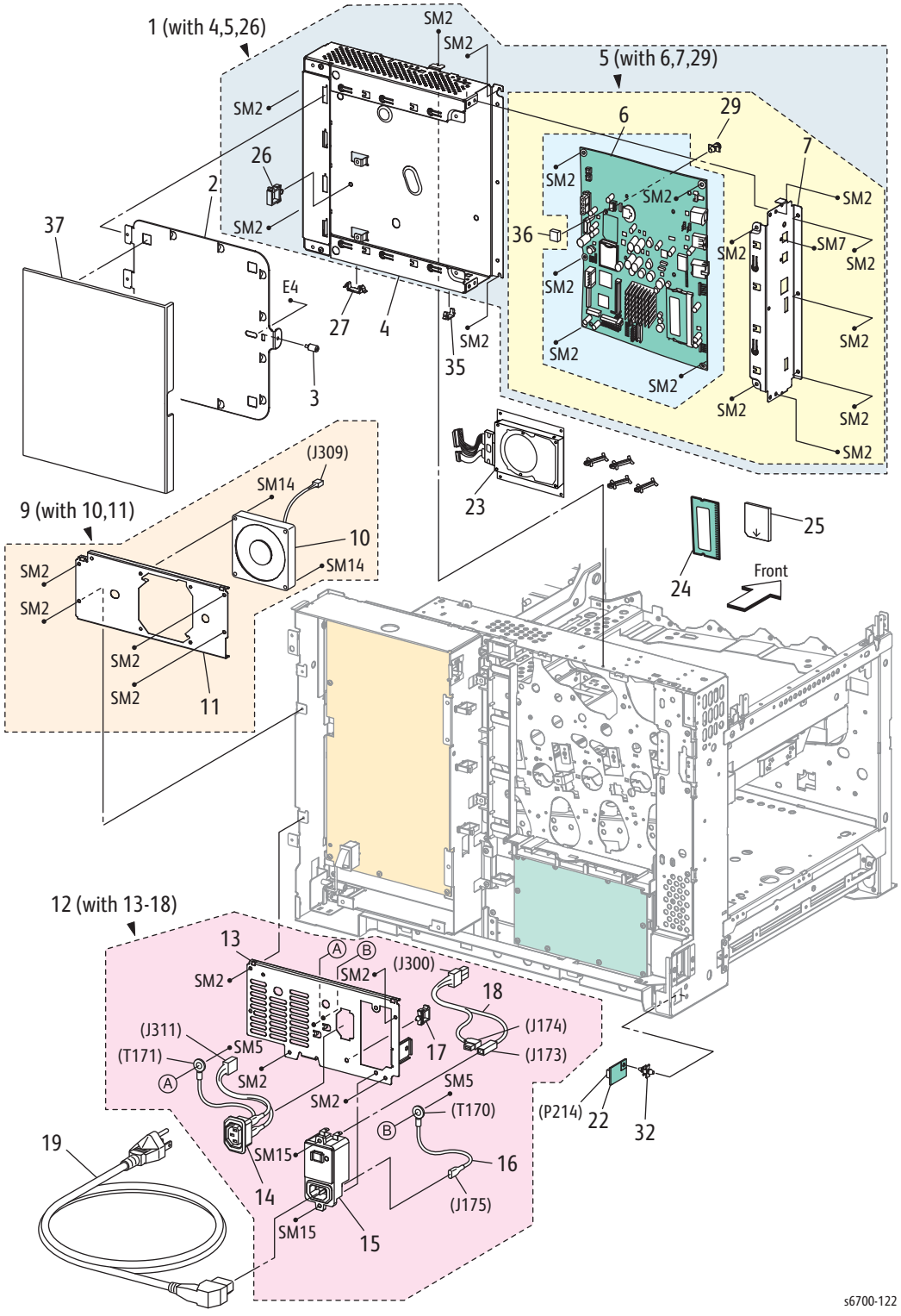
| Item | Description | Part Number |
|---|---|---|
| 1 | Fuser Drive Assy | 007K15360 |
| 2 | Guide | |
| 3 | Transfer Belt Drive Assy | 007K15392 |
| 4 | Feed Drive Assy | 007K15350 |


1 (with 2-4)
2
3
SM2
(P200)
4
Switching Sensor (K)
1 (with 2-4)
2
3
SM2
(P201)
4
Switching Sensor (CMY)
SM2
SM2
SM2
98 (with 5-7)
(P251)
SM2
SM2
ST6
ST6
ST6
ST6
5
6
Front
7
SM2
SM2
99 (with 8x2pcs)
8
8
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
SM2
10
(P253)
(P260)
(P252)
9
s6700-121

**Parts List 9.2 Drive (2/2)**

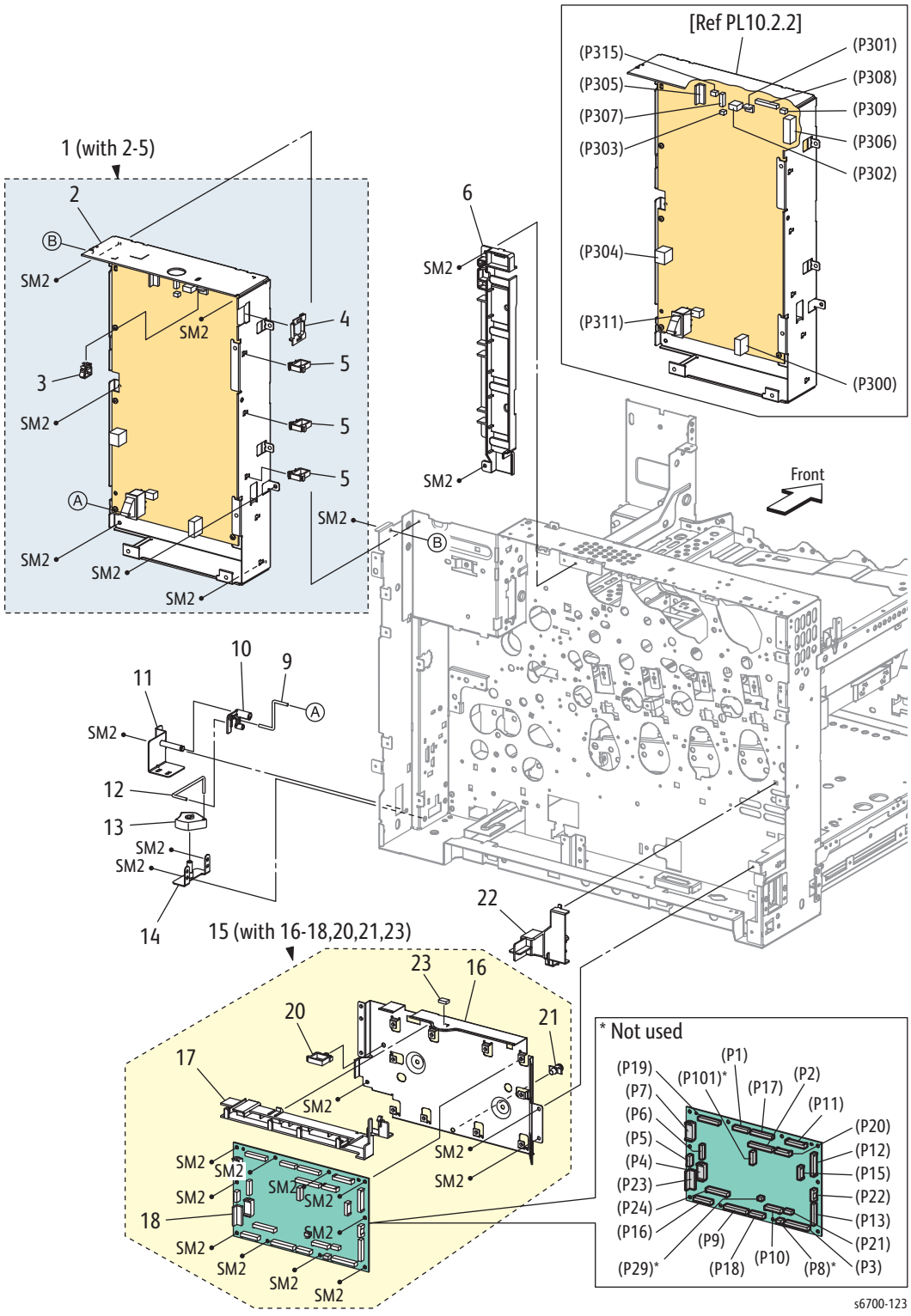
| Item | Description | Part Number |
|---|---|---|
| 1 | Drive Assy SNS (with 2~4) (Switching Sensor) | 007K15410 |
| 2 | Guide SNS | |
| 3 | Plate SNS | |
| 4 | Sensor Photo (Color or Black Switching Sensor) | 930W00123 |
| 5 | Guide Assy Link | |
| 6 | Drive Assy Xero (Imaging Unit Drum Drive Assy) | |
| 7 | Drive Assy Rack | |
| 8 | Drive Assy M Out | |
| 9 | YMC Developer Drive Assy | 007K15370 |
| 10 | K Developer Drive Assy | 007K15380 |
| 98 | Imaging Unit Link Drive (with 5~7) | 604K56290 |
| 99 | Kit Drive Gear (with 8x2 pcs) | 604K56300 |

## Parts List 10.1 Electrical (1/2)



**Parts List 10.1 Electrical (1/2)**

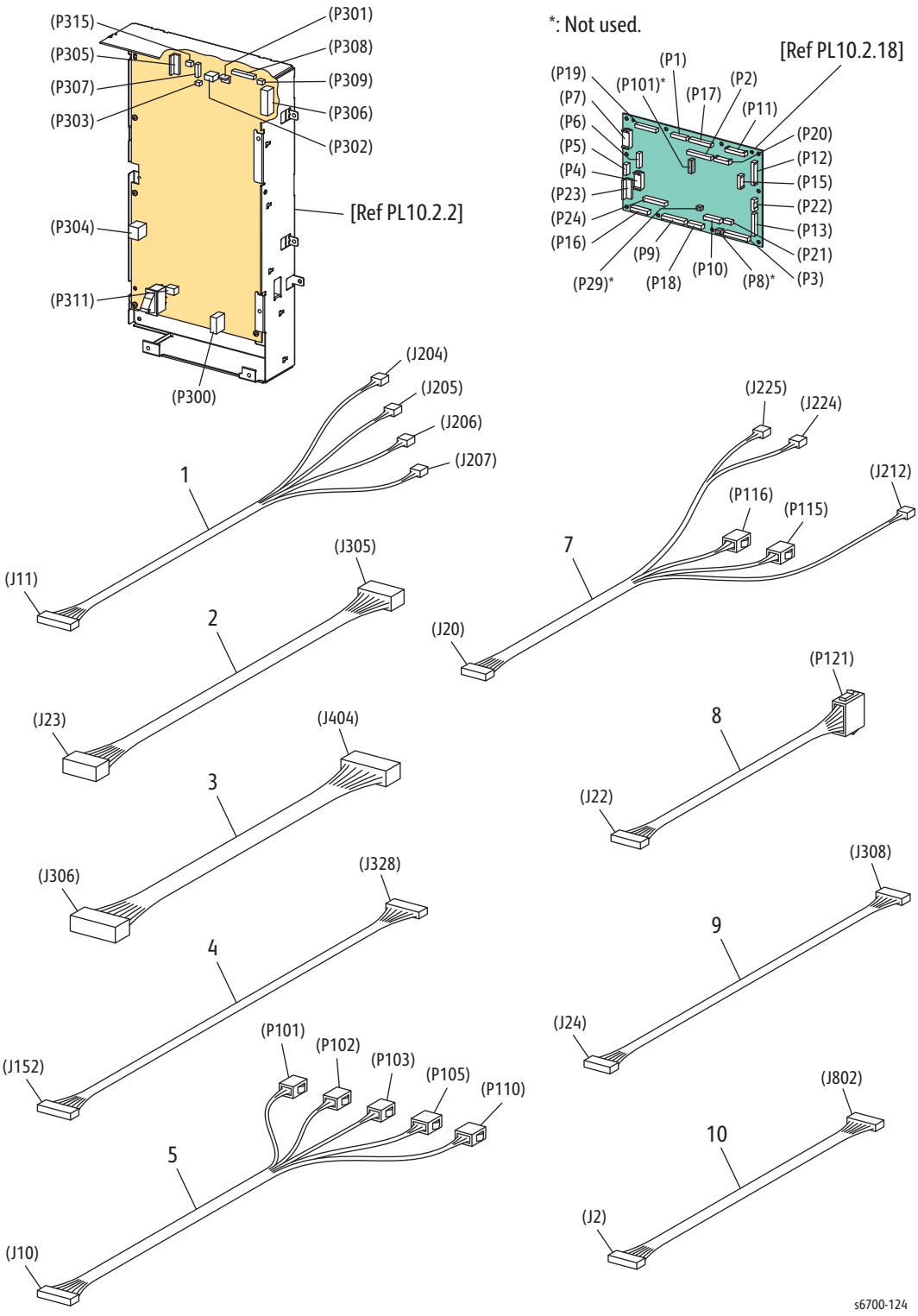
| Item | Description | Part Number |
|---|---|---|
| 1 | Box Assy ESS PWB (with 4, 5, 26, 28) (IP Cage) | |
| 2 | Plate Window ESS | |
| 3 | Screw Knurling | |
| 4 | Box Assy Base | |
| 5 | Image Processor Board (with rear panel, No NVRAM, No SD Card, No RAM) (with 6, 7, 29) | 960K65211 |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | LVPS Fan Assy (with 10, 11) | 101K58770 |
| 10 | LVPS Fan | |
| 11 | Plate LVPS Fan | |
| 12 | Plate Assy LVPS Power (with 13-18) (Power Panel) | 101K58761 |
| 13 | Plate LVPS Power | |
| 14 | Harness Assy Fin Pwr (OUTLET-J311,T171) | |
| 15 | Breaker GFI Inlet | |
| 16 | Wire Assy GFI Earth (J175-T170) | |
| 17 | Clamp Locking | |
| 18 | Harness Assy AC (J300-J173,J174) | |
| 19 | Power Cord | Refer to “Power Cords” on page 9-101. |
| 20 | - - | |
| 21 | - - | |
| 22 | PWBA EEPROM (EEPROM Board) | 960K47800 |
| 23 | Hard Drive | 121K51060 |
| 24 | RAM Memory 1GB<br>RAM Memory 2GB | 237E25730<br>237E26060 |
| 25 | SD Card (with system software) | 237E26720 |
| 26 | Clamp Locking | |
| 27 | Clamp Press Rec-16 | |
| 28 | - - | |
| 29 | Support | |
| 30 | | |
| 31 | | |
| 32 | Support | |
| 33 | | |
| 34 | Clamp | |
| 35 | Clamp | |
| 36 | NVRAM (IP Board NVRAM IC) | 960K66600 |
| 37 | Cover Rear ESS | |


[Ref PL10.2.2]
(P315)
(P305)
(P307)
(P303)
(P301)
(P308)
(P309)
(P306)
(P302)
(P304)
(P311)
(P300)
1 (with 2-5)
2
B
SM2
SM2
3
SM2
4
5
5
5
A
SM2
SM2
SM2
6
SM2
SM2
B
Front
10
9
11
A
SM2
12
13
SM2
SM2
14
22
15 (with 16-18,20,21,23)
23
16
20
21
17
SM2
SM2
SM2
SM2
SM2
SM2
SM2
18
SM2
SM2
SM2
SM2
SM2
* Not used
(P19)
(P7)
(P6)
(P5)
(P4)
(P23)
(P24)
(P16)
(P29)*
(P1)
(P101)*
(P17)
(P2)
(P11)
(P20)
(P12)
(P15)
(P22)
(P13)
(P21)
(P3)
(P8)*
(P10)
(P18)
(P9)
s6700-123

**Parts List 10.2 Electrical (2/2)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Box Assy LVPS (with 2~5) 100/120V (LVPS Cage)<br>Box Assy LVPS (with 2~5) 230V (LVPS Cage) | 101K62200<br>101K62210 |
| 2 | LVPS | |
| 3 | Clamp Rlwt-2V0 | |
| 4 | Bush | |
| 5 | Clamp Locking | |
| 6 | Guide Harness Rear CTR | |
| 7 | - - | |
| 8 | - - | |
| 9 | Wire Short | |
| 10 | Link Rear | |
| 11 | Bracket Assy Rear | |
| 12 | Wire Long | |
| 13 | Knob Main Switch | |
| 14 | Bracket Assy Front | |
| 15 | Box Assy MCU (with 16~18, 20, 21, 23) | |
| 16 | Box MCU | |
| 17 | Guide Harness MCU Upr | |
| 18 | MCU Board | 960K56300 |
| 19 | - - | |
| 20 | Clamp Locking | |
| 21 | Support | |
| 22 | Holder Box MCU | |
| 23 | Gasket Shield | |

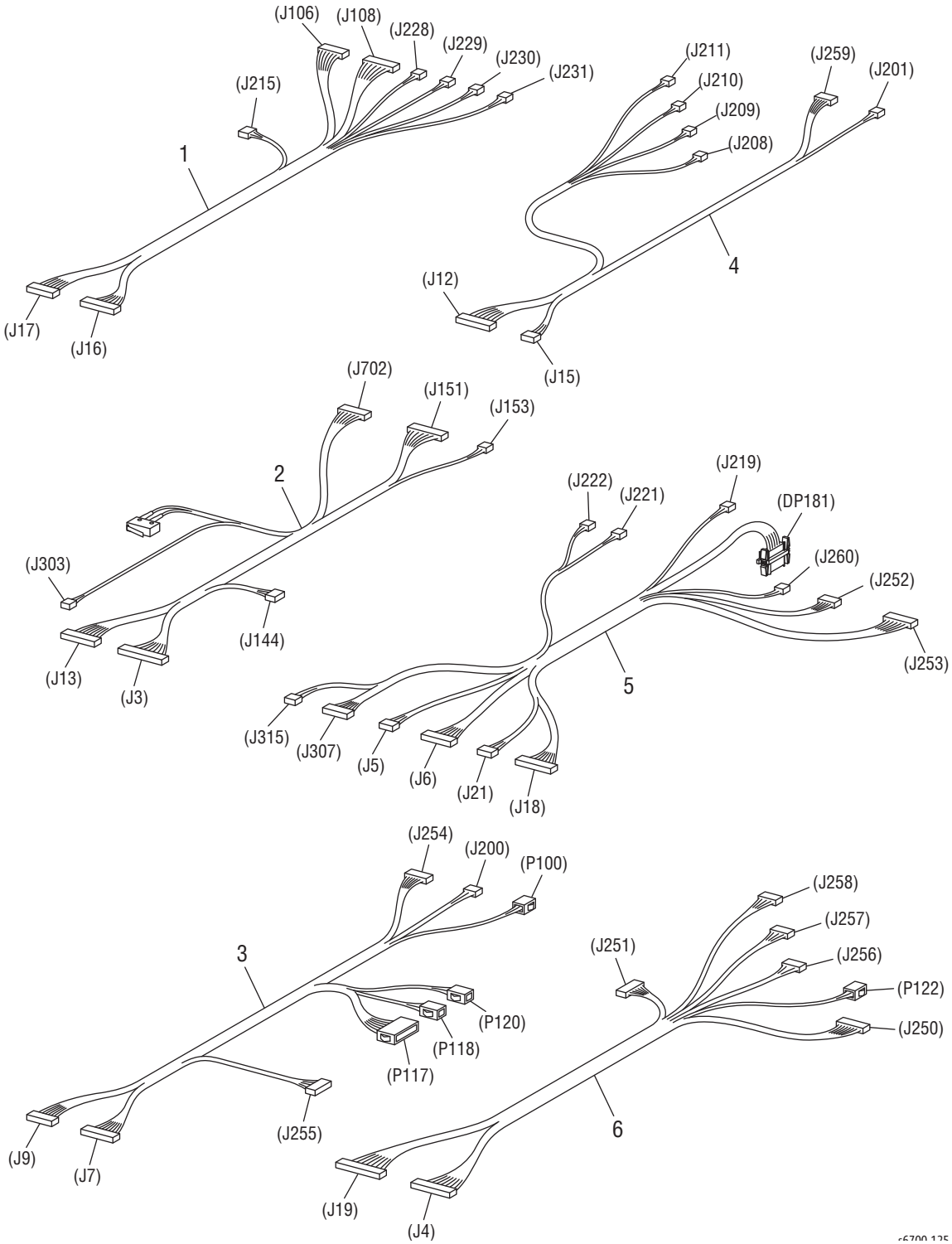
## Parts List 11.1 Harness (1/2)



**Parts List 11.1 Electrical (1/2)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Harness Assy TN CRUM (J11-J204,J205,206,J207) | 962K73600 |
| 2 | Harness Assy LV PWR (J23-J305) (LVPS Power Harness) | 962K73650 |
| 3 | Harness Assy ESS PWR (J306-J404) | 962K73700 |
| 4 | Harness Assy Video (J152-J328) | 962K73850 |
| 5 | Harness Assy REGI (J10-P101 ,P102, P103, P105, P110) | 962K74380 |
| 6 | - - | |
| 7 | Exit Harness (J20-P115,P116,J212,J224,J225) | 962K74461 |
| 8 | Harness Assy FIN (J22-P121) | 962K74481 |
| 9 | Harness Assy LVPS (J24-J308) (LVPS Harness) | 962K74490 |
| 10 | Harness Assy ESS (J2-J802) | 962K73640 |

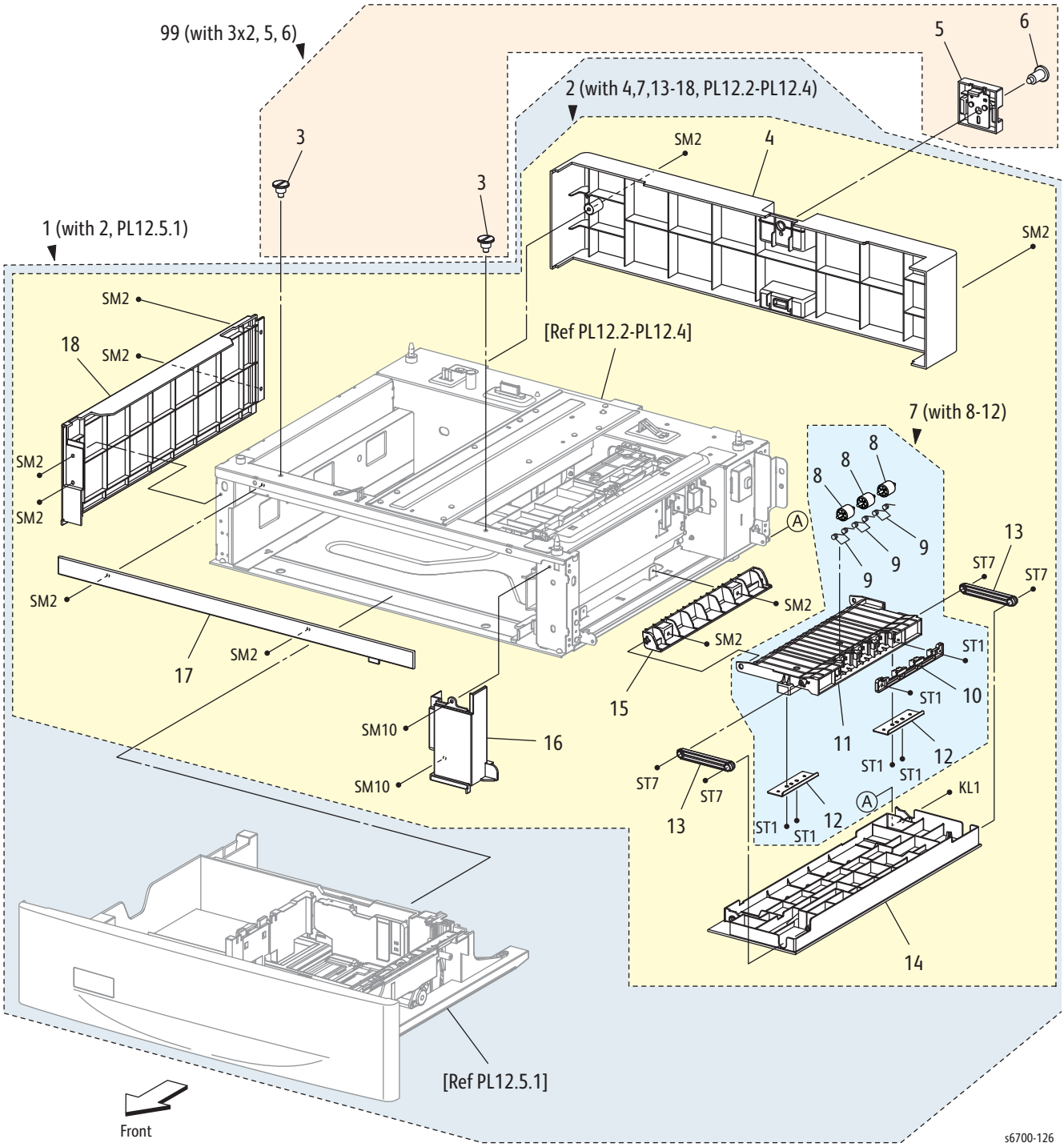
## Parts List 11.2 Harness (2/2)



**Parts List 11.2 Harnesses (2/2)**

| Item | Description | Part Number |
|---|---|---|
| 1 | Harness Assy Erase/Exit (J16,J17-J106, J108, J215, J228, J229, J230, J231) | 962K78800 |
| 2 | Harness Assy ROS/HV (J3, J13, PL1.3.6 Rear I/L SW, J151, J153, J144, J303, J702) | 962K74580 |
| 3 | Harness Assy RH/MOT (J7,J9-P100, P117, P118, P120, J200, J254, J255) | 962K74590 |
| 4 | Harness Assy CRUM/DISP (J12,J15-J201, J208, J209, J210, J211, J259) | 962K74600 |
| 5 | Harness Assy LPP/MOT (J5,J6,J18,J21-DP181, J219, J221, J222, J252, J253, J260, J307, J315) | 962K74610 |
| 6 | Harness Assy DISP/FSR (J4,J19-P122, J250, J251, J256, J257, J258) | 962K77370 |

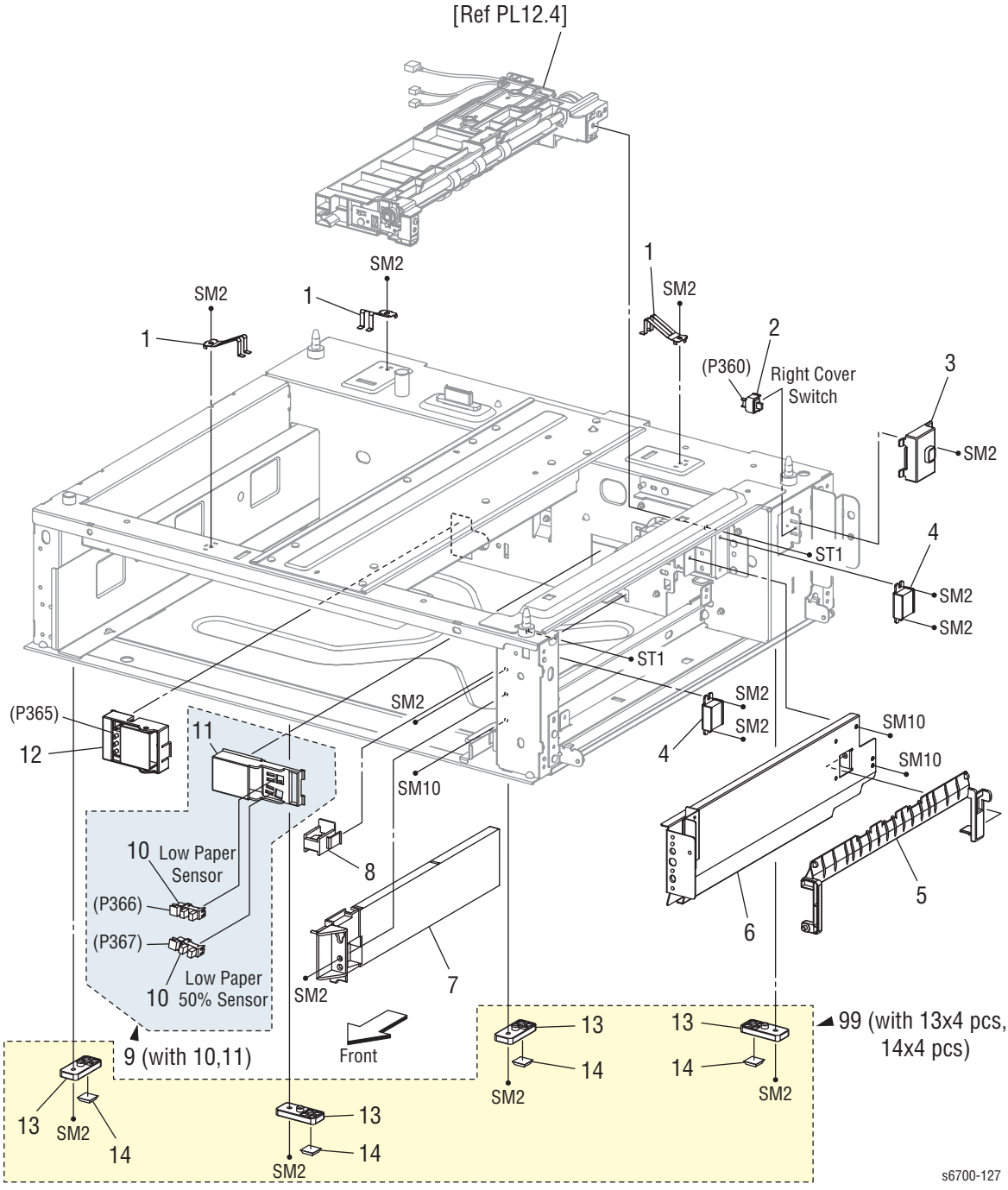
## Parts List 12.1 550-Sheet Feeder



**Part List 12.1 550-Sheet Feeder (1/5)**

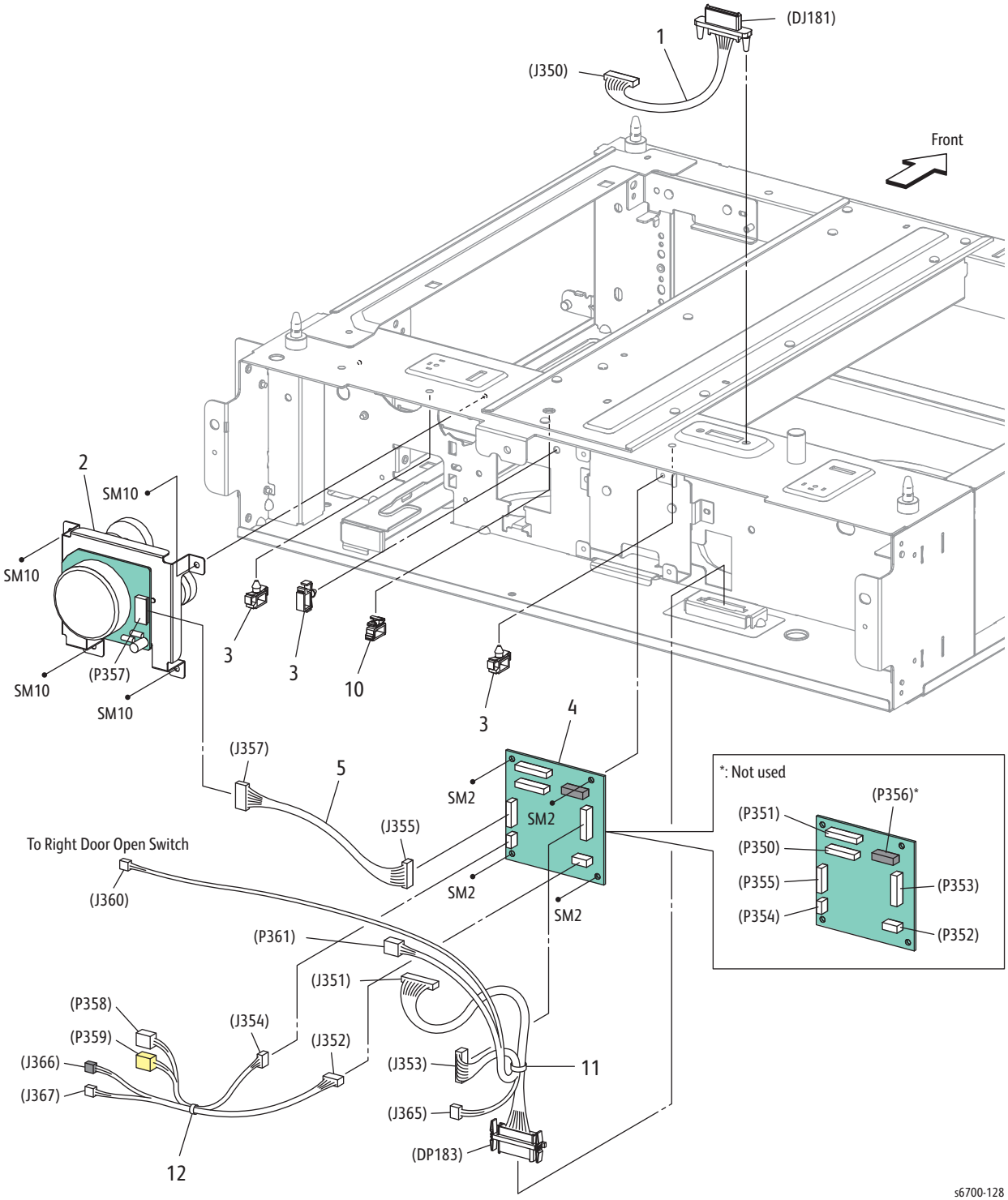
| Item | Description | Part Number |
|---|---|---|
| 1 | 550 Option Feeder (with 2, PL12.5.1, instructions) | 059K77370 |
| 2 | Feeder Assy 550 (with 4, 7, 13~18,PL12.2~PL12.4) | |
| 3 | Screw Lock | |
| 4 | Cover Rear | |
| 5 | Plate Lock Rear Assy | |
| 6 | Screw Lock Rear | |
| 7 | Chute Upper Assy (with 8~12) | 054K39101 |
| 8 | Roll Pinch Ta | |
| 9 | Spring Pinch Ta | |
| 10 | Chute Upper Top | |
| 11 | Chute Upper | |
| 12 | Plate Magnet | |
| 13 | Arm Chute | |
| 14 | Cover RH Opt (right side door) | |
| 15 | Chute Under | |
| 16 | Cover Right | |
| 17 | Cover Front | |
| 18 | Cover Left | |
| 99 | Optional Feeder Mounting Kit (with 3x2pcs, 5, 6) | 604K65010 |

## Parts List 12.2 Media Detect



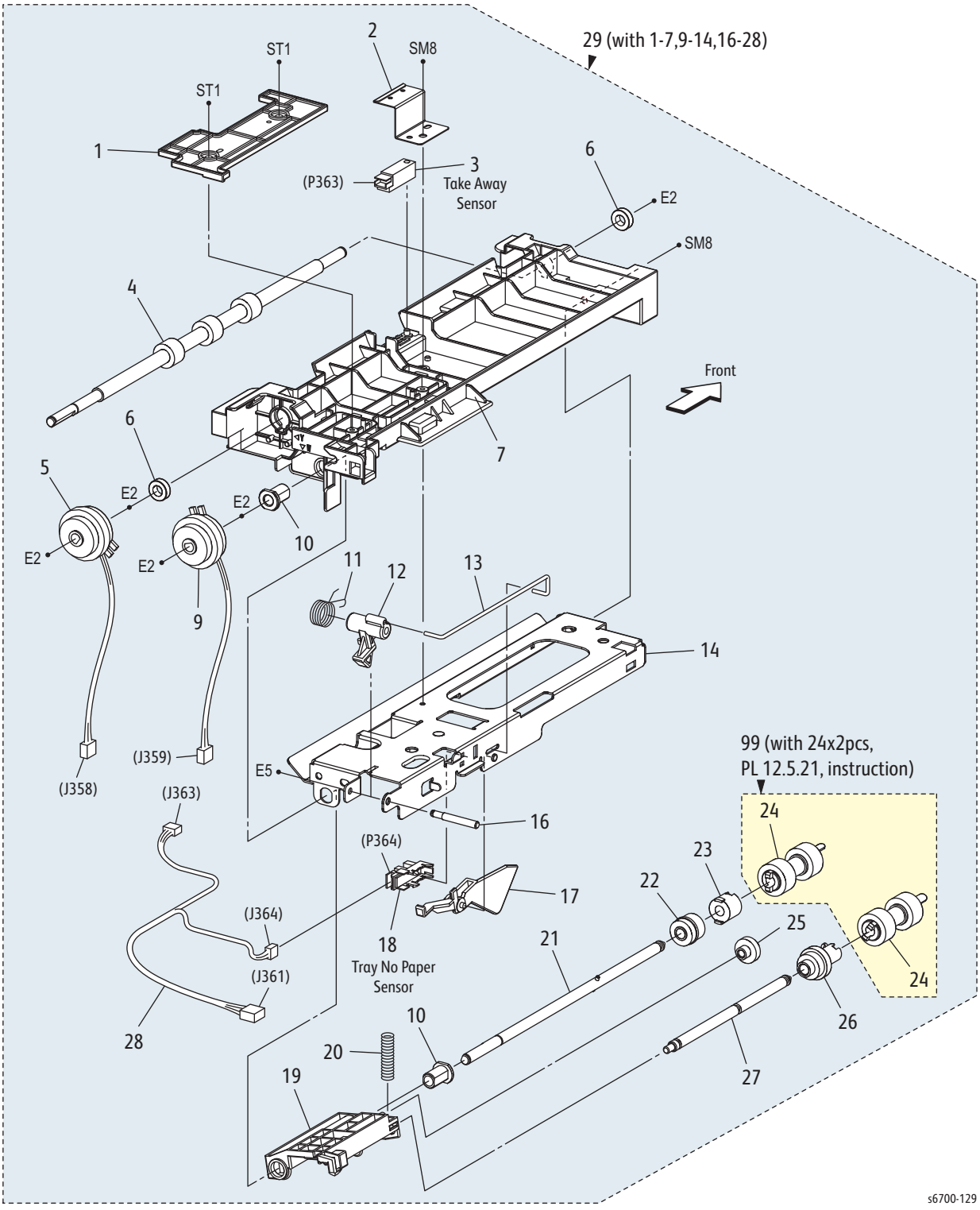
**Parts List 12.2 Media Detect**

| Item | Description | Part Number |
|---|---|---|
| 1 | Earth Spring | |
| 2 | Right Side Door Switch | 110E11580 |
| 3 | Bracket Sensor | |
| 4 | Magnet | |
| 5 | Chute Feed (Turn Chute) | 054E40280 |
| 6 | Chute Assy Lower | |
| 7 | Guide Tray Opt | |
| 8 | Block Release | 014E64090 |
| 9 | Holder Assy Sensor Low (with 10,11) | 019K10650 |
| 10 | Sensor Photo (Low Paper Sensor 1 and 2) | 930W00123 |
| 11 | Holder Sensor | |
| 12 | Switch Assy Size (Size Switch) | 110K15830 |
| 13 | Foot Assy | |
| 14 | Foot Rubber | |
| 99 | Kit Foot Assy (with 13x4 pcs, 14x4 pcs) | 604K64990 |


(DJ181)
1
(J350)
Front
2
SM10
SM10
SM10
(P357)
SM10
3
3
10
3
4
(J357)
5
SM2
SM2
(J355)
SM2
SM2
To Right Door Open Switch
(J360)
(P361)
(J351)
(P358)
(P359)
(J366)
(J367)
(J354)
(J352)
(J353)
11
(J365)
(DP183)
12
*: Not used
(P356)*
(P351)
(P350)
(P355)
(P354)
(P353)
(P352)
s6700-128

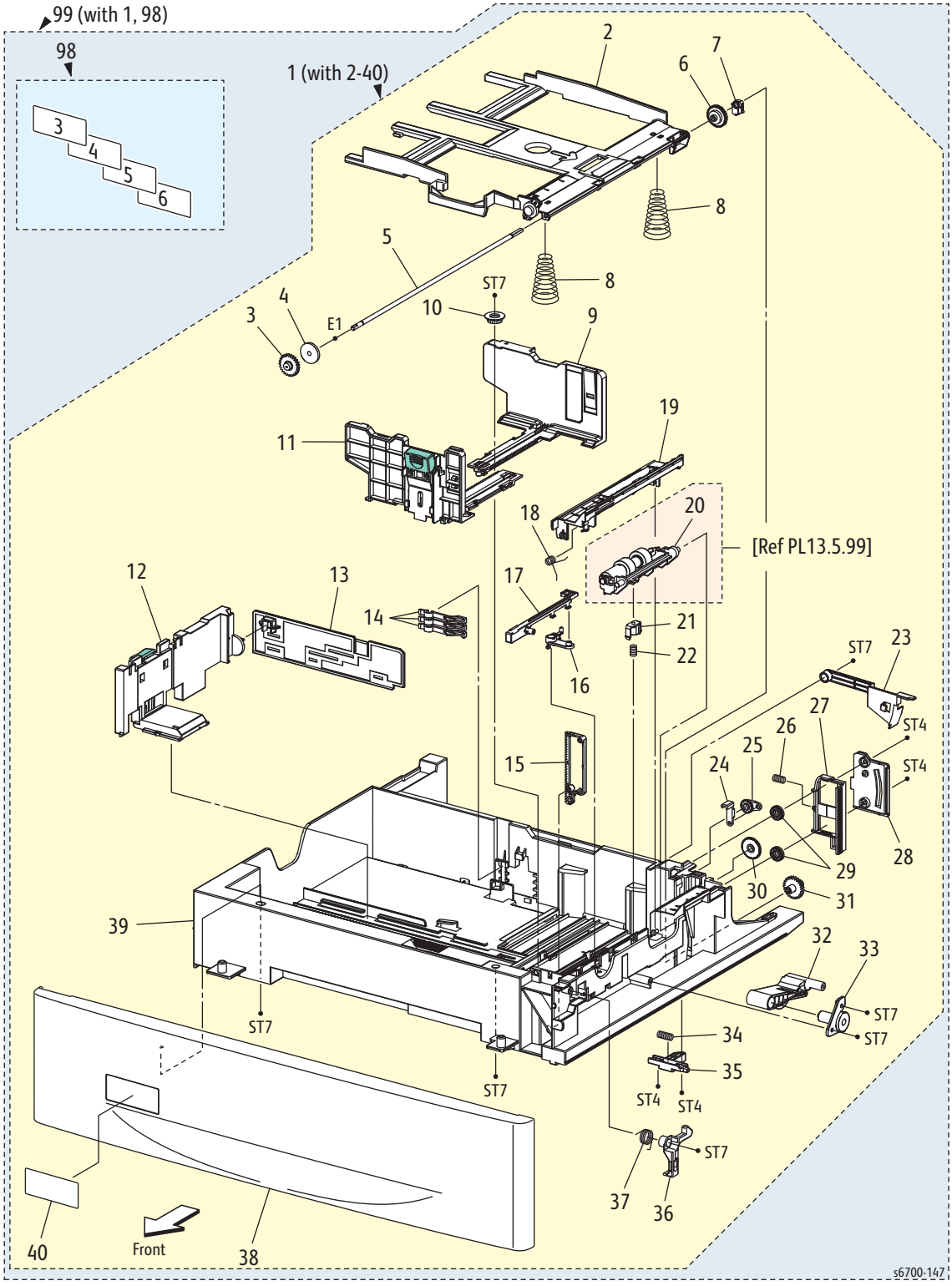
**Parts List 12.3 Electrical**

| Item | Description | Part Number |
|---|---|---|
| 1 | Harness Assy Opt Top (J350-DJ181) (Upper Option Harness) | 962K73730 |
| 2 | Drive Assy Opt (Feed Drive Assy) | 007K15440 |
| 3 | Clamp Locking | |
| 4 | PWBA OPT FDR (Feeder Board) | 960K56330 |
| 5 | Harness Assy Opt Mot (J355-J357) | |
| 6 | - - | |
| 7 | - - | |
| 8 | - - | |
| 9 | - - | |
| 10 | Clamp | |
| 11 | Harness Assy Opt SW (J351, J353-J360, P361, J365, DP183) (Lower Option Harness) | 962K78950 |
| 12 | Harness Assy Opt CL (J352,J354-P358, P359, J366, J367) | |


29 (with 1-7,9-14,16-28)
ST1
ST1
2
SM8
1
(P363)
3
Take Away
Sensor
6
E2
SM8
4
Front
7
6
E2
5
E2
E2
10
E2
E2
9
11
12
13
14
(J358)
(J359)
E5
99 (with 24x2pcs,
PL 12.5.21, instruction)
(J363)
16
24
(P364)
23
22
17
(J364)
18
Tray No Paper
Sensor
21
25
(J361)
24
28
10
26
20
27
19
s6700-129

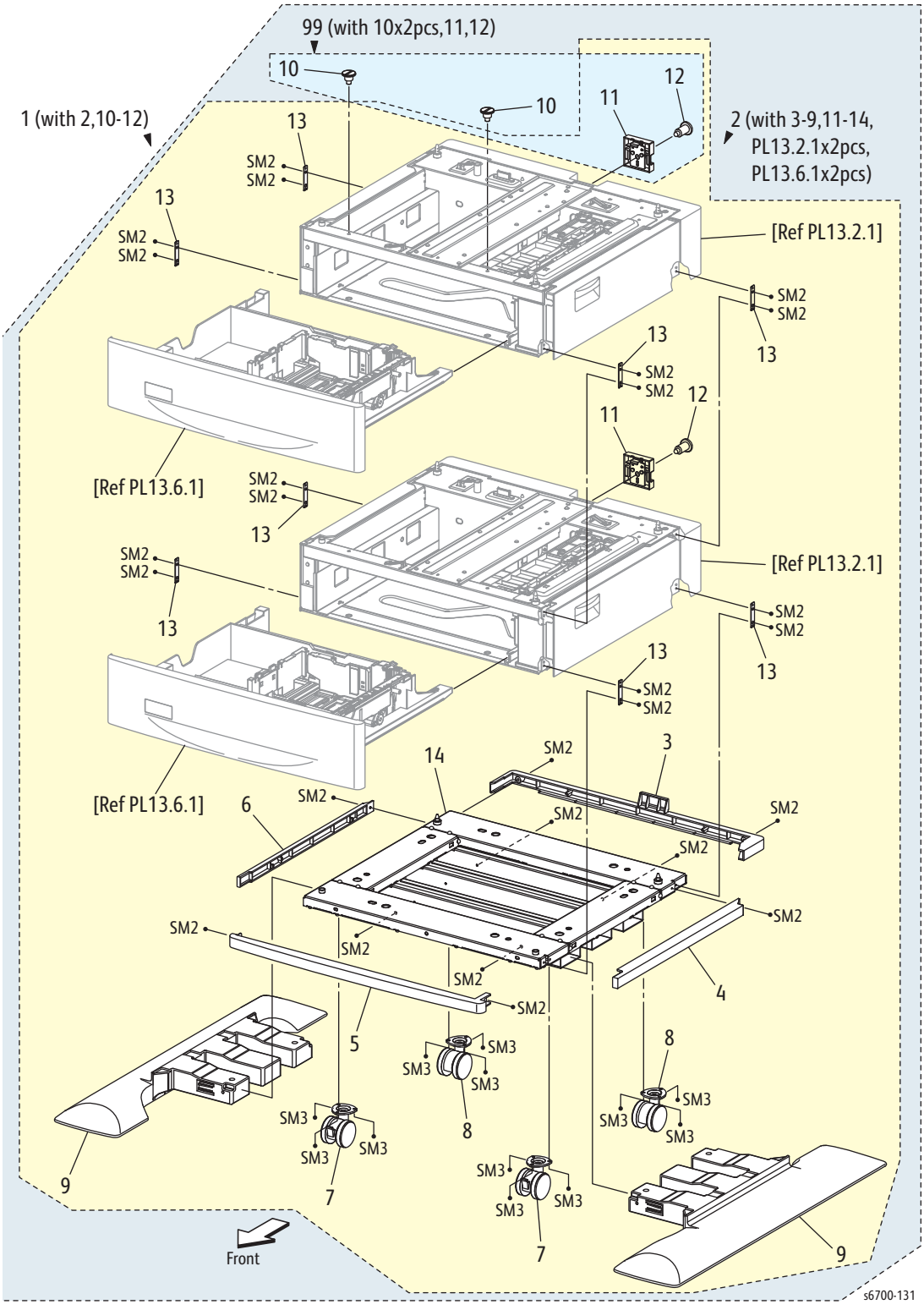
**Parts List 12.4 Feeder**

| Item | Description | Part Number |
|---|---|---|
| 1 | Cover Fdr Opt | |
| 2 | Plate Sensor | |
| 3 | Sensor (Take Away Sensor) | 930W00123 |
| 4 | Roll Assy Take Away | |
| 5 | Clutch Assy Take Away | |
| 6 | Bearing Ball | |
| 7 | Chute Fdr Opt | |
| 8 | - - | |
| 9 | Clutch Assy Feed (Feed Clutch) | 121K43561 |
| 10 | Bearing Nudger | |
| 11 | Spring Lever Nudger | |
| 12 | Lever Nudger | |
| 13 | Link Actuator | |
| 14 | Chute Frame Top | |
| 15 | - - | |
| 16 | Shaft Lever Nudger | |
| 17 | Actuator No Paper | 120E31541 |
| 18 | Sensor Photo (No Paper Sensor) | 930W00123 |
| 19 | Support Nudger | |
| 20 | Spring Nudger | |
| 21 | Shaft Assy Feed | |
| 22 | Gear Feed | |
| 23 | Clutch Oneway Feed | |
| 24 | Roll Assy Feed | |
| 25 | Gear Idler Nudger | |
| 26 | Roll Assy Gear Nudger | |
| 27 | Shaft Nudger | |
| 28 | Harness Assy Opt Path (J361-J363,J364) | |
| 29 | Feeder Assy Sub Opt (with 1~7 ,9~14,16~28) | 022K76860 |
| 99 | Feed & Separator Roll Kit (with 24x2pcs, PL12.5.21) | 604K65030 |


99 (with 1, 98)
98
3
4
5
6
1 (with 2-40)
2
7
6
8
5
ST7
8
4
3
E1
10
9
11
19
18
20
[Ref PL13.5.99]
12
13
14
17
21
22
16
ST7
23
27
ST4
26
25
24
ST4
15
28
29
30
31
39
32
33
ST7
ST7
ST7
34
35
ST4
ST4
ST7
37
36
40
Front
38
s6700-147

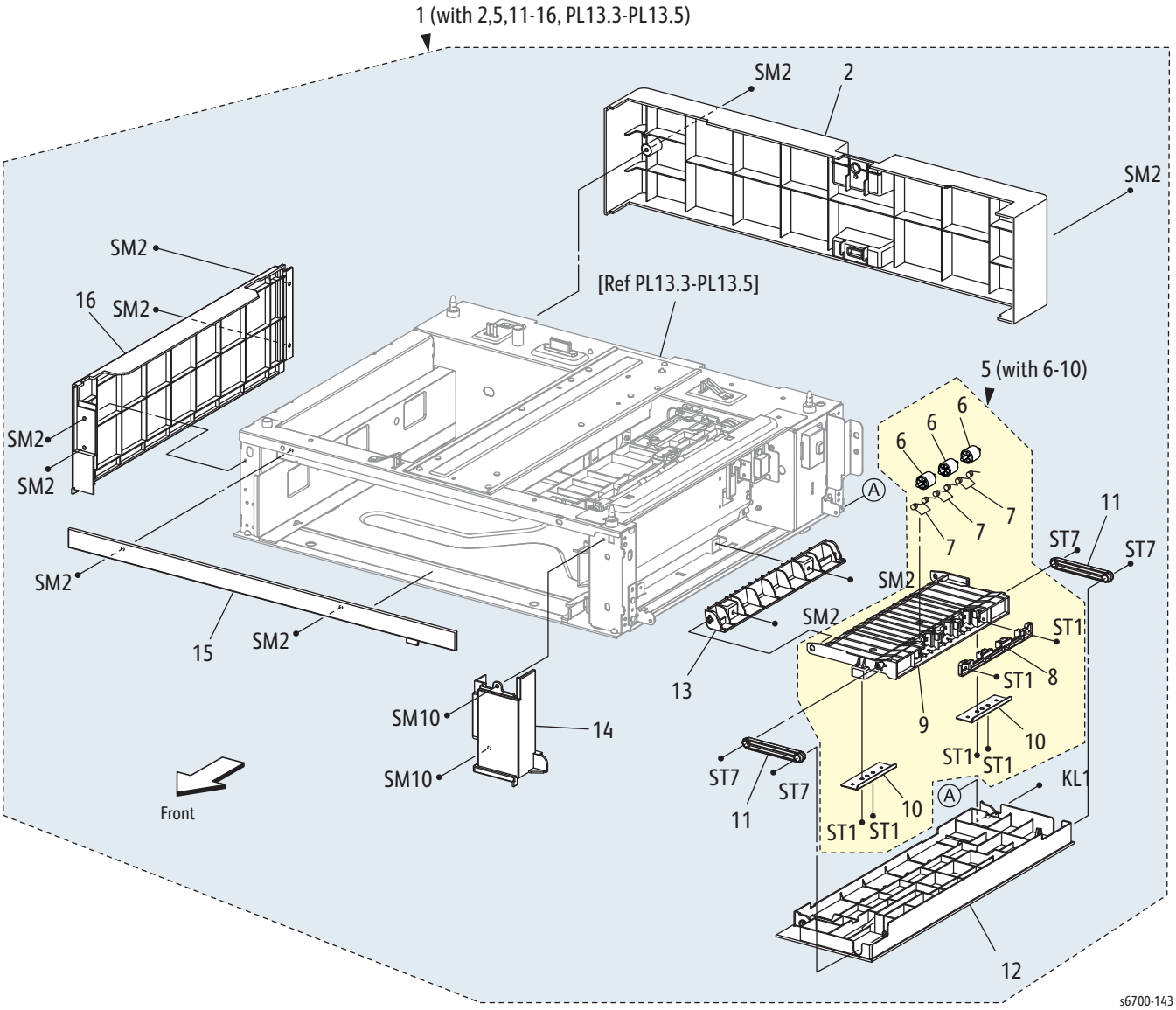
**Parts List 12.5 Universal Tray**

| Item | Description | Part Number |
|---|---|---|
| 1 | Tray Assy Option (with 2~40) | |
| 2 | Plate Assy Bottom | |
| 3 | Gear Pb Front | |
| 4 | Gear Btm Dmp Oneway | |
| 5 | Shaft Pb A4 | |
| 6 | Gear Btm Lock Oneway | |
| 7 | Stopper Pb | |
| 8 | Spring Btm Up 550 A4 | |
| 9 | Guide Assy Side R | |
| 10 | Gear Pinion | |
| 11 | Guide Assy Side F | |
| 12 | Guide Assy End (With 13) | |
| 13 | Actuator Guide End | |
| 14 | Actuator Size | |
| 15 | - - | |
| 16 | Plate Gear Lock | |
| 17 | Lever Separator | |
| 18 | Lever Latch | |
| 19 | Spring Cover Separator | |
| 20 | Cover Separator | |
| 21 | Holder Assy Separator | |
| 22 | Holder Spring Separator | 019E76290 |
| 23 | Spring Separator | 809E85020 |
| 24 | Actuator Low Paper | |
| 25 | Lever Btm Lock | |
| 26 | Gear Lever Btm Lock | |
| 27 | Spring Btm Lock | |
| 28 | Rack Btm Lock | |
| 29 | Cover Btm Up | |
| 30 | Gear Btm Lock Pinion | |
| 31 | Gear 40 Btm Lock | |
| 32 | Gear Pb Rear | |
| 33 | Link Pb | |
| 34 | Cover Link | |
| 35 | Spring Stopper Gear | |
| 36 | Actuator Pls Pb | |
| 37 | Latch Tray | |
| 38 | Spring Latch | |
| 39 | Cover Tray Opt | |
| 40 | Housing Base | |
| 41 | Tray Label | |
| 98 | Kit Tray label (numbers 3~6) | 897E65190 |
| 99 | Kit Tray Assy Option (with 1, 98) | 604K65000 |


99 (with 10x2pcs,11,12)
1 (with 2,10-12)
2 (with 3-9,11-14, PL13.2.1x2pcs, PL13.6.1x2pcs)
[Ref PL13.2.1]
[Ref PL13.6.1]
[Ref PL13.2.1]
[Ref PL13.6.1]
Front
s6700-131

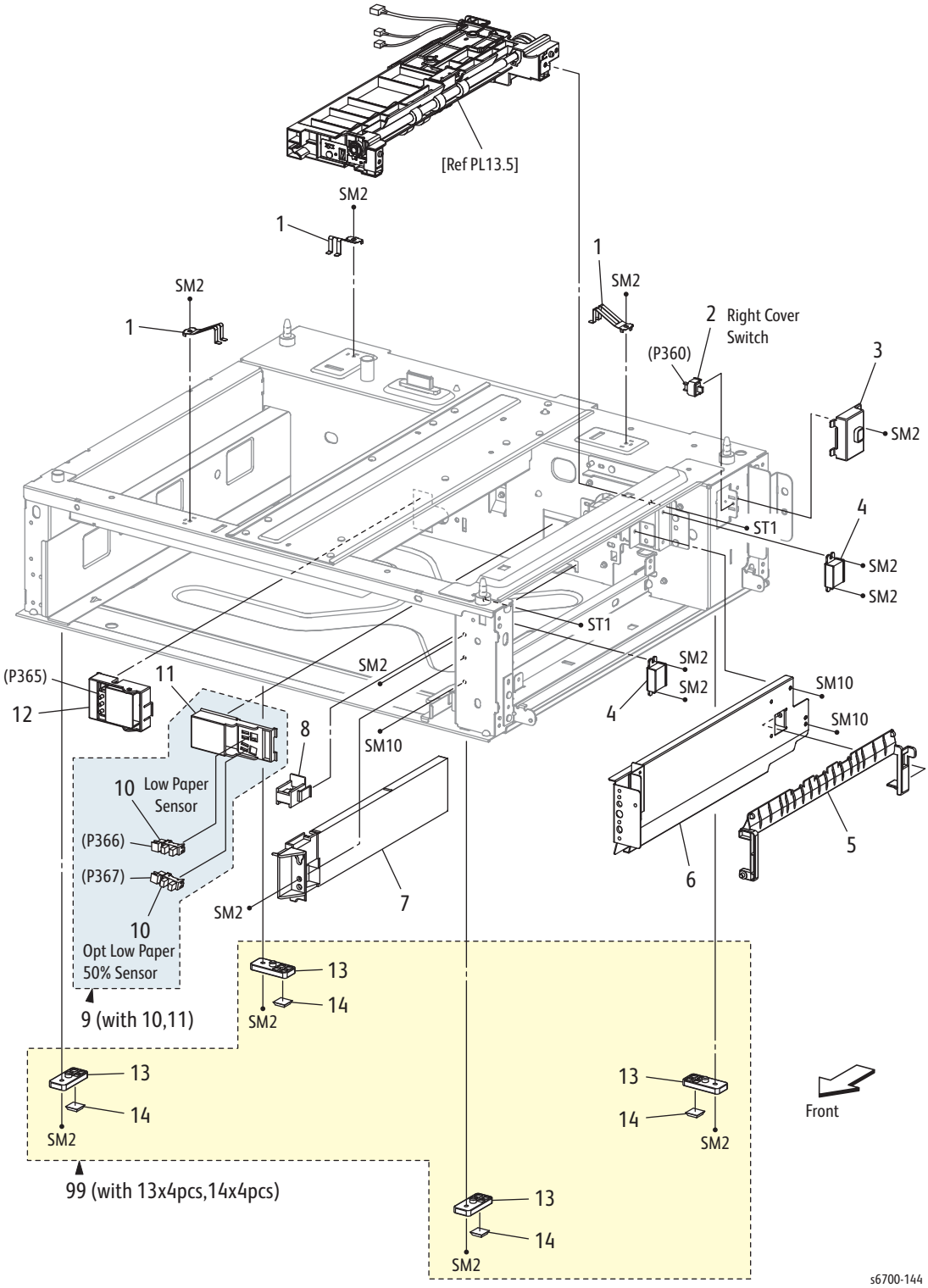
**Parts List 13.1 1100-Sheet Feeder**

| Item | Description | Part Number |
|---|---|---|
| 1 | 1100 Option Feeder (with 2, 10-12) | 059K77380 |
| 2 | Feeder Assy 1100 (with 3~9,11~14, PL13.2.1x2pcs, PL13.6.1x2pcs) | |
| 3 | Cover Rear C | |
| 4 | Cover Right C | |
| 5 | Cover Front C | |
| 6 | Cover Left C | |
| 7 | Caster Front | 417W41349 |
| 8 | Caster Rear | 417W41449 |
| 9 | Foot | 017E12741 |
| 10 | Screw Lock | |
| 11 | Plate Lock Rear Assy | |
| 12 | Screw Lock Rear | |
| 13 | Plate Lock Opt F | |
| 14 | Frame Assy Caster | |
| 99 | Optional Feeder Mounting Kit (with 10x2, 11-12) | 604K65010 |


1 (with 2,5,11-16, PL13.3-PL13.5)
SM2
2
SM2
SM2
16
SM2
[Ref PL13.3-PL13.5]
5 (with 6-10)
SM2
SM2
SM2
SM2
15
SM2
13
SM10
14
SM10
Front
6
6
6
7
7
7
11
ST7
ST7
SM2
SM2
ST1
ST1
8
9
10
ST1
ST1
ST7
11
ST7
10
ST1
ST1
KL1
12
s6700-143

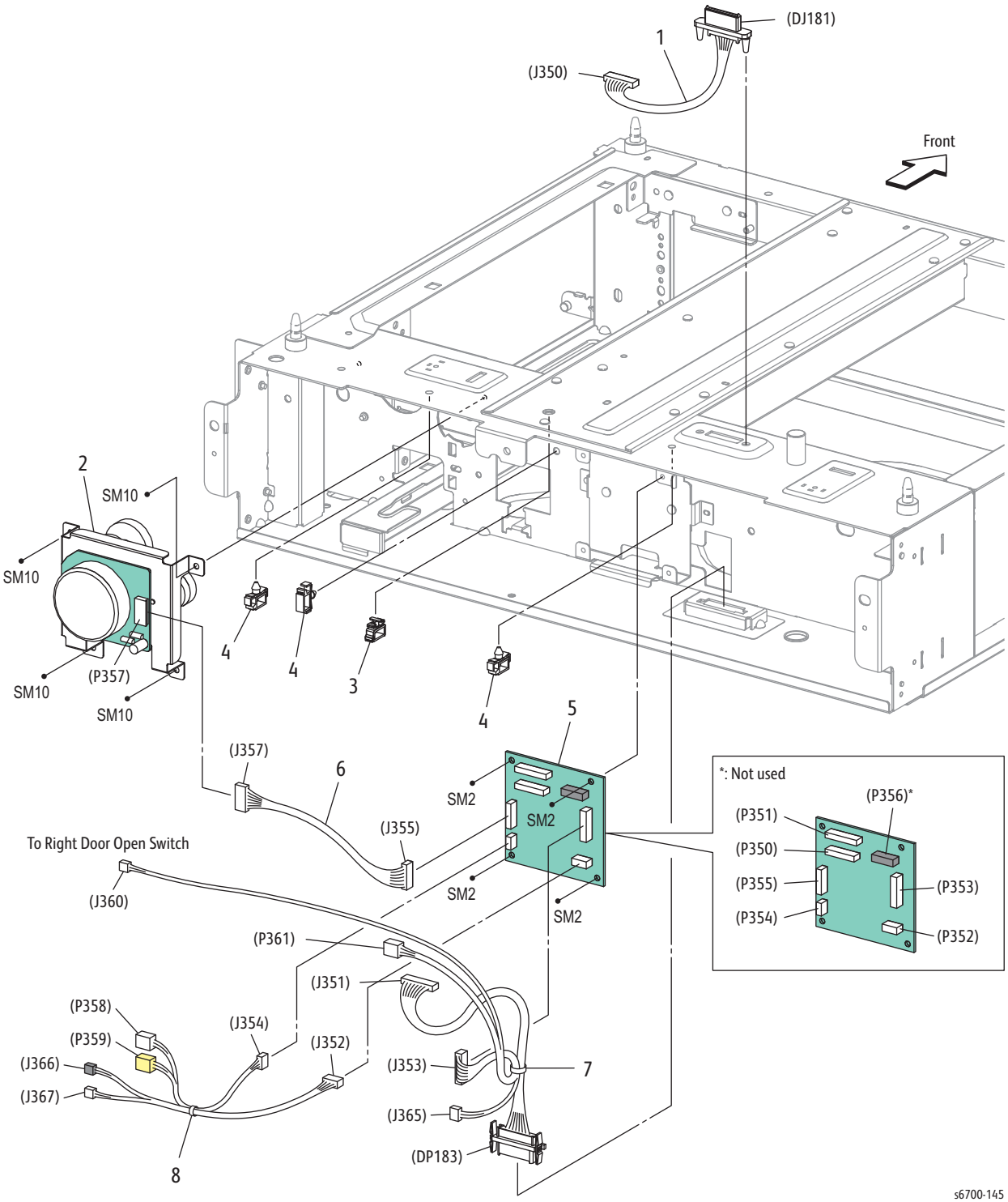
**Parts List 13.2 Covers**

| Item | Description | Part Number |
|---|---|---|
| 1 | Feeder Assy 550 (with 2, 5, 11~16, PL13.3~PL13.5) | |
| 2 | Cover Rear | |
| 3 | - - | |
| 4 | - - | |
| 5 | Chute Upper Assy (with 6~10) | 054K39101 |
| 6 | Roll Pinch TA | |
| 7 | Spring Pinch TA | |
| 8 | Chute Upper Top | |
| 9 | Chute Upper | |
| 10 | Plate Magnet | |
| 11 | Arm Chute | |
| 12 | Cover RH Opt | |
| 13 | Chute Under | |
| 14 | Cover Right | |
| 15 | Cover Front | |
| 16 | Cover Left | |


[Ref PL13.5]
SM2
1
2 Right Cover Switch
(P360)
3
4
ST1
(P365)
11
12
8
10 Low Paper Sensor
(P366)
(P367)
10 Opt Low Paper 50% Sensor
9 (with 10,11)
SM10
7
6
5
13
14
99 (with 13x4pcs,14x4pcs)
Front
s6700-144

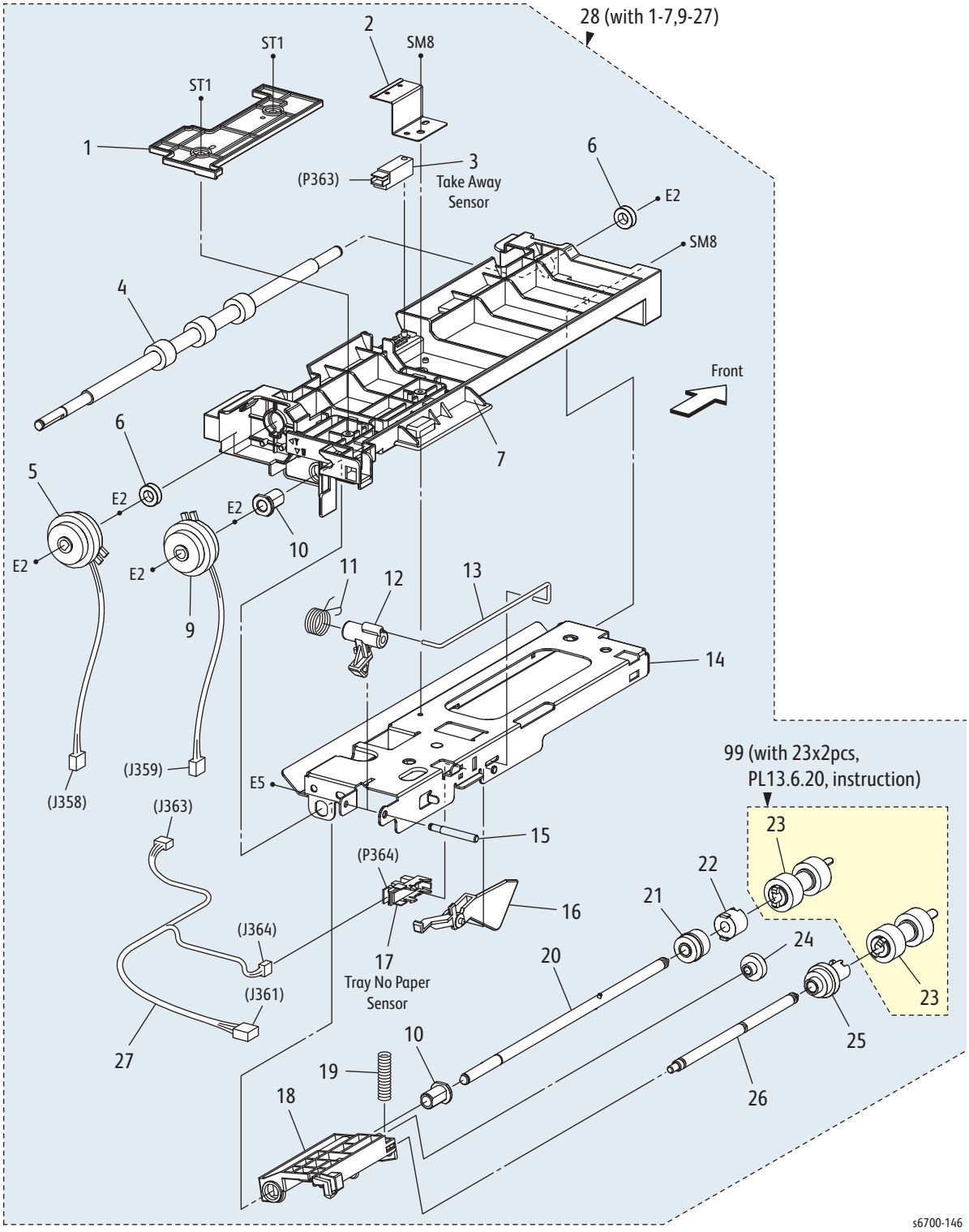
**Part List 13.3 Media Detect**

| Item | Description | Part Number |
|---|---|---|
| 1 | Earth Spring | |
| 2 | Right Side Door Open Switch | 110E11580 |
| 3 | Bracket Sensor | |
| 4 | Magnet | |
| 5 | Chute Feed (Turn Chute) | 054E40280 |
| 6 | Chute Assy Lower | |
| 7 | Guide Tray Opt | |
| 8 | Block Release | 014E64090 |
| 9 | Holder Assy Sensor Low (with 10, 11) | 019K10650 |
| 10 | Sensor Photo (Low Paper Sensor 1 and 2) | 930W00123 |
| 11 | Holder Sensor | |
| 12 | Switch Assy Size (Size Switch) | 110K15830 |
| 13 | Foot | |
| 14 | Foot Rubber | |
| 99 | Kit Foot Assy (with 13x4 pcs, 14x4 pcs) | 604K64990 |


(DJ181)
1
(J350)
Front
2
SM10
SM10
SM10
(P357)
SM10
4
4
3
4
5
(J357)
6
SM2
SM2
(J355)
SM2
SM2
To Right Door Open Switch
(J360)
(P361)
(J351)
(P358)
(P359)
(J366)
(J367)
(J354)
(J352)
(J353)
7
(J365)
(DP183)
8
*: Not used
(P356)*
(P351)
(P350)
(P355)
(P354)
(P353)
(P352)
s6700-145

**Parts List 13.4 Electrical**

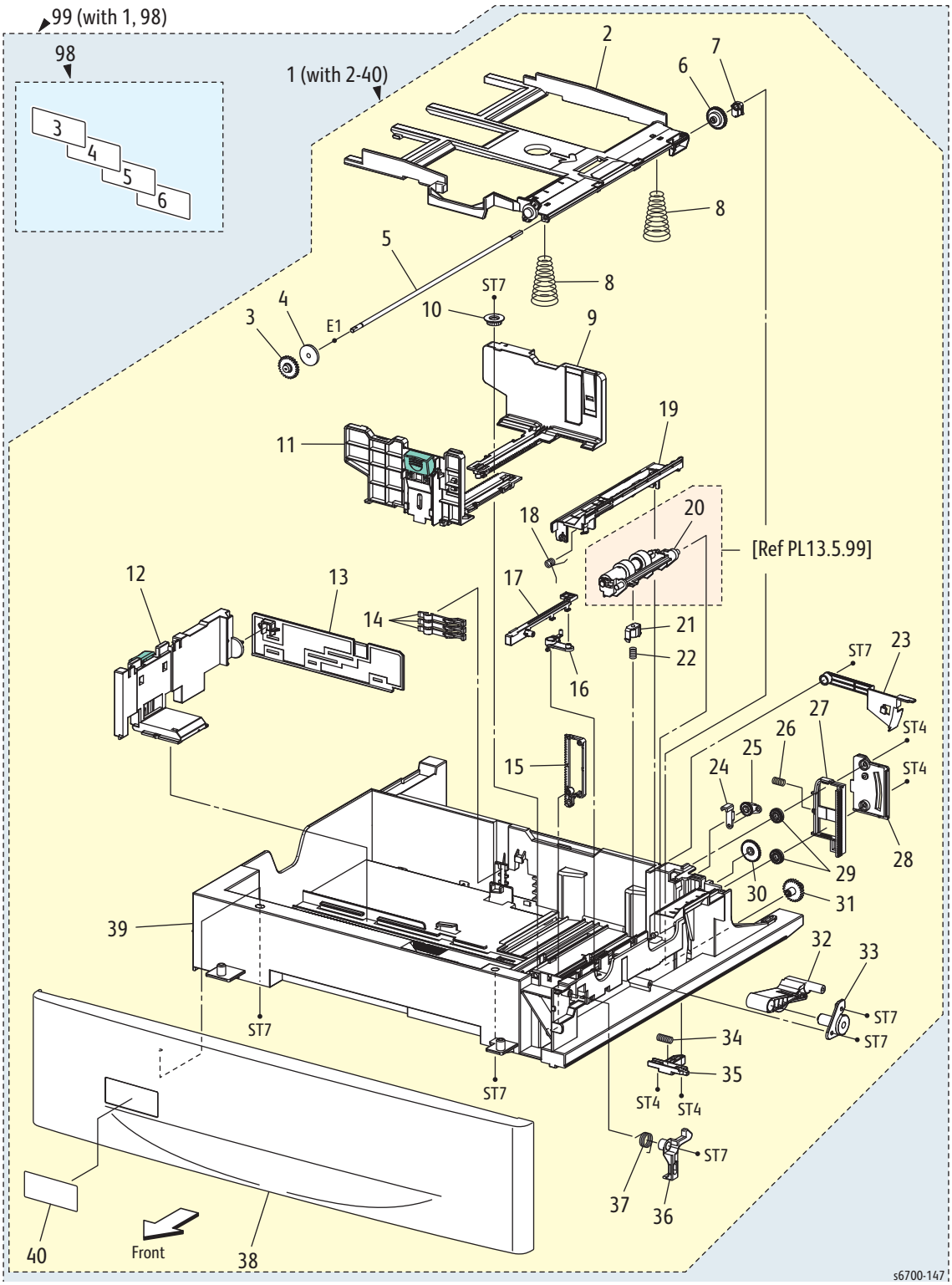
| Item | Description | Part Number |
|---|---|---|
| 1 | Harness Assy Opt Top (J350-DJ181) | 962K73730 |
| 2 | Drive Assy Opt (Feed Drive Assy) | 007K15440 |
| 3 | Clamp | |
| 4 | Clamp Locking | |
| 5 | PWBA Opt Fdr (Feeder Board) | 960K56340 |
| 6 | Harness Assy Opt Mot (J355-J357) | |
| 7 | Harness Assy Opt SW (J351, J353-J360, P361, J365, DP183) | 962K78950 |
| 8 | Harness Assy Opt CL (J352, J354-P358, P359, J366, J367) | |


28 (with 1-7,9-27)
ST1
ST1
2
SM8
1
(P363)
3
Take Away
Sensor
6
E2
SM8
4
Front
7
6
E2
5
E2
E2
10
E2
E2
9
11
12
13
14
(J358)
(J359)
E5
99 (with 23x2pcs,
PL13.6.20, instruction)
(J363)
15
(P364)
23
22
21
16
(J364)
17
Tray No Paper
Sensor
20
24
23
(J361)
25
27
10
19
18
26
s6700-146

**Parts List 13.5 Feeder**

| Item | Description | Part Number |
|---|---|---|
| 1 | Cover Fdr Opt | |
| 2 | Plate Sensor | |
| 3 | Take Away Sensor | 930W00123 |
| 4 | Roll Assy Take Away | |
| 5 | Clutch Assy Take Away | |
| 6 | Bearing Ball | |
| 7 | Chute Fdr Opt | |
| 8 | - - | |
| 9 | Clutch Assy Feed | 121K43561 |
| 10 | Bearing Nudger | |
| 11 | Spring Lever Nudger | |
| 12 | Lever Nudger | |
| 13 | Link Actuator | |
| 14 | Chute Frame Top | |
| 15 | Shaft Lever Nudger | |
| 16 | Actuator No Paper | 120E31541 |
| 17 | Sensor Photo (No Paper Sensor) | 930W00123 |
| 18 | Support Nudger | |
| 19 | Spring Nudger | |
| 20 | Shaft Assy Feed | |
| 21 | Gear Feed | |
| 22 | Clutch Oneway Feed | |
| 23 | Roll Assy Feed | |
| 24 | Gear Idler Nudger | |
| 25 | Roll Assy Gear Nudger | |
| 26 | Shaft Nudger | |
| 27 | Harness Assy Opt Path (J361-J363,J364) | |
| 28 | Feeder Assy Sub Opt (with 1~7, 9~27) | 022K76860 |
| 99 | Kit Feed Roll & Separator Roll (with 23x2pcs, Pl13.6.20) | 604K65030 |

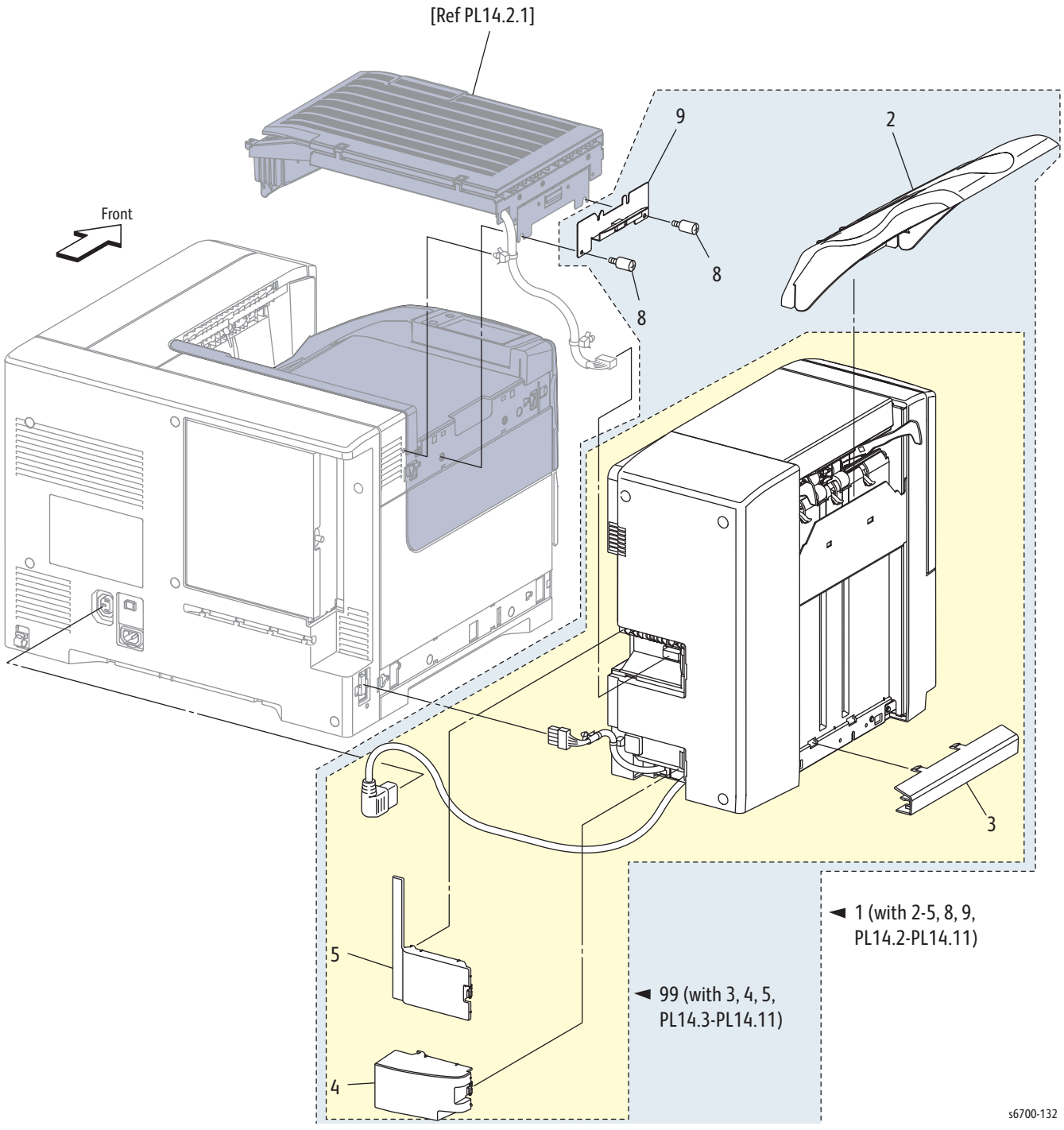
## Parts List 13.6 Universal Tray



**Parts List 13.6 Universal Tray**

| Item | Description | Part Number |
|---|---|---|
| 1 | Tray Assy Option (with 2~40) | |
| 2 | Plate Assy Bottom | |
| 3 | Gear PB Front | |
| 4 | Gear BTM Dmp Oneway | |
| 5 | Shaft PB A4 | |
| 6 | Gear BTM Lock Oneway | |
| 7 | Stopper PB | |
| 8 | Spring BTM Up 550 A4 | |
| 9 | Guide Assy Side R | |
| 10 | Gear Pinion | |
| 11 | Guide Assy Side F | |
| 12 | Guide Assy End | |
| 13 | Actuator Guide End | |
| 14 | Actuator Size | |
| 15 | Plate Gear Lock | |
| 16 | Lever Separator | |
| 17 | Lever Latch | |
| 18 | Spring Cover Separator | |
| 19 | Cover Separator | |
| 20 | Holder Assy Separator | |
| 21 | Holder Spring Separator | 019E76290 |
| 22 | Spring Separator | 809E85020 |
| 23 | Actuator Low Paper | |
| 24 | Lever BTM Lock | |
| 25 | Gear Lever BTM Lock | |
| 26 | Spring BTM Lock | |
| 27 | Rack BTM Lock | |
| 28 | Cover BTM Up | |
| 29 | Gear BTM Lock Pinion | |
| 30 | Gear 40 BTM Lock | |
| 31 | Gear PB Rear | |
| 32 | Link PB | |
| 33 | Cover Link | |
| 34 | Spring Stopper Gear | |
| 35 | Actuator PLS PB | |
| 36 | Latch Tray | |
| 37 | Spring Latch | |
| 38 | Cover Tray Opt | |
| 39 | Housing Base | |
| 40 | Tray Label | |
| 98 | Kit, Tray Label (numbers 3~6) | 897E65190 |
| 99 | Kit Tray Assy (with 1, 98) | 604K65002 |

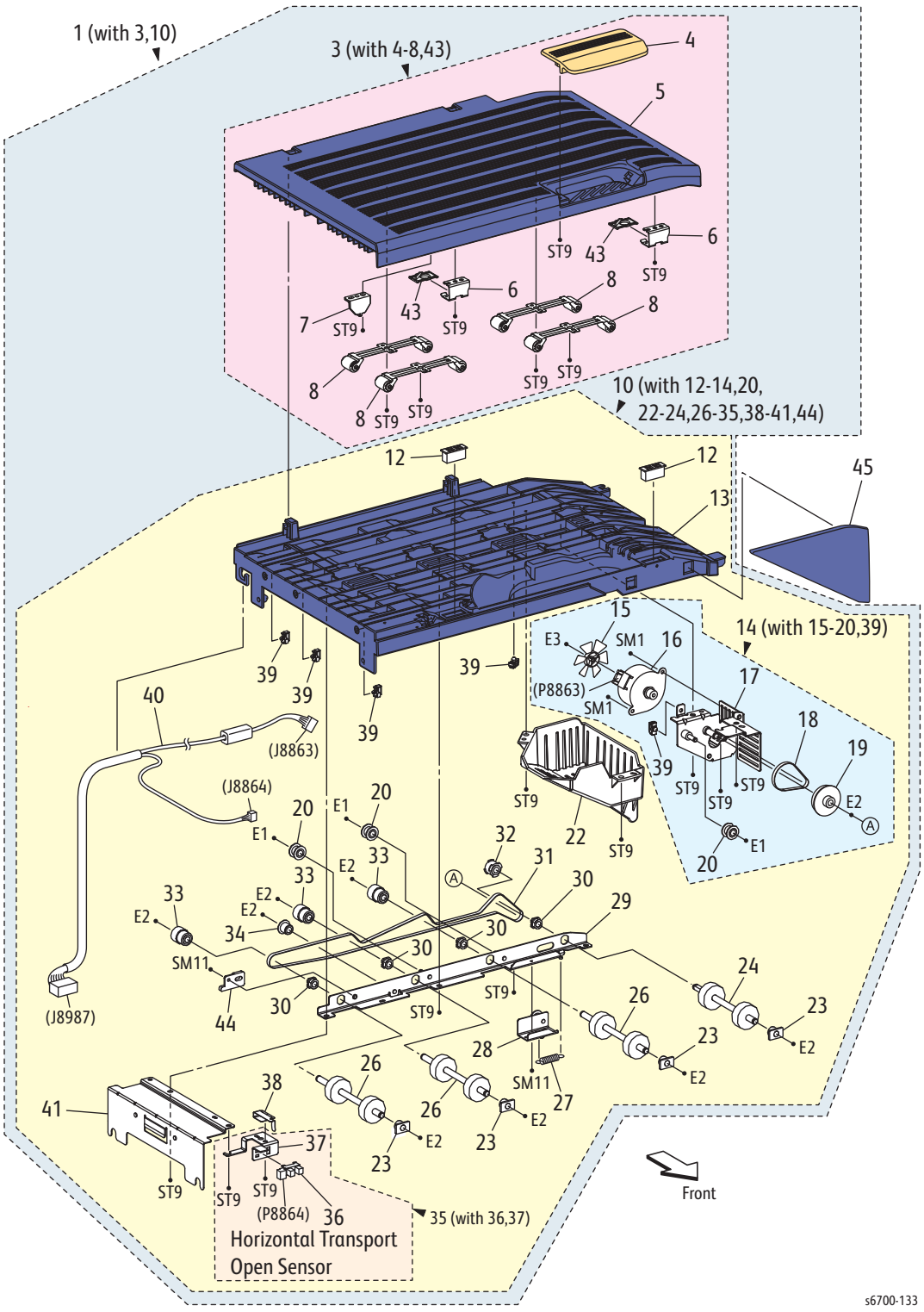
## Parts List 14.1 Finisher



**Parts List 14.1 Finisher**

| Item | Description | Part Number |
|---|---|---|
| 1 | Finisher (with 2~5, 8, 9, PL14.3~PL14.11) | 059K78170 |
| 2 | Tray Stacker | 675K86860 |
| 3 | Cover Guide Tray | |
| 4 | Cover Connector2 | |
| 5 | Cover Connector | |
| 6 | - - | |
| 7 | - - | |
| 8 | Screw M4 Steel | 826E28960 |
| 9 | Bracket Assy Guide Add | |
| 99 | Kit Finisher Assy (with 3, 4, 5, PL14.3-PL14.11) | 604K65020 |

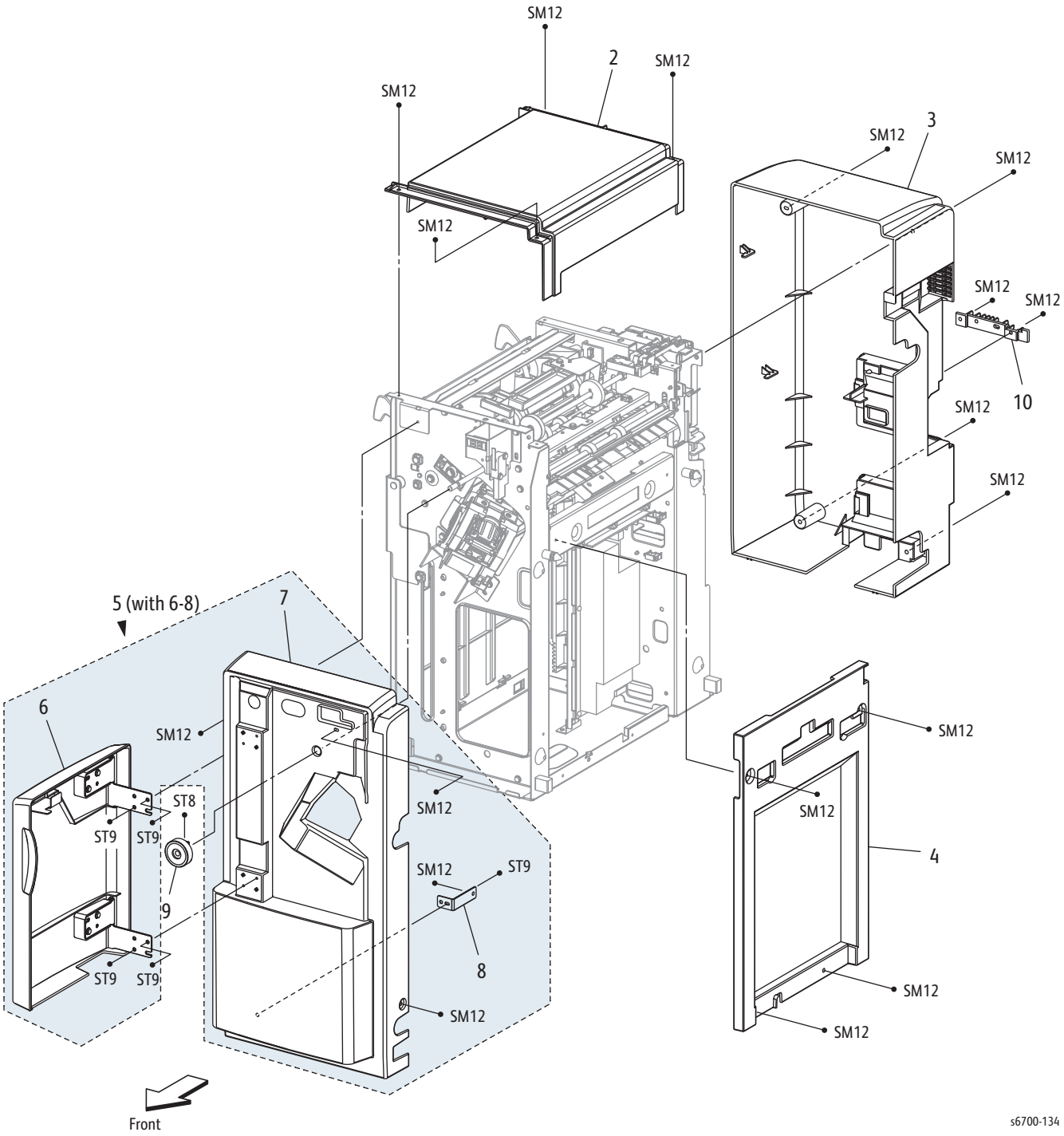
## Parts List 14.2 Horizontal Transport



**Parts List 14.2 Horizontal Transport**

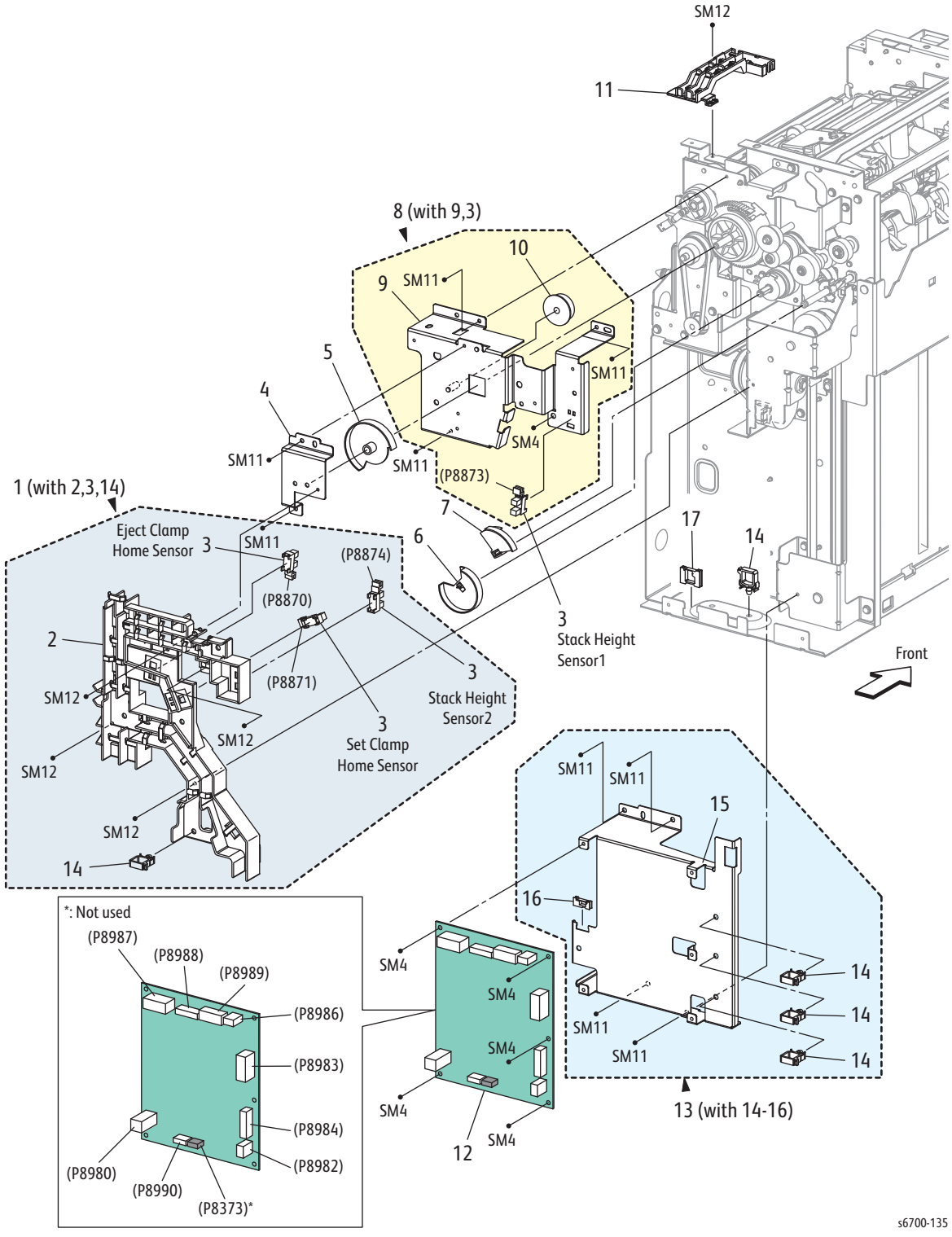
| Item | Description | Part Number |
|---|---|---|
| 1 | Horizontal Transport Assy (with 3,10) | 022K76640 |
| 2 | - - | |
| 3 | Cover Assy Top H-TRA (with 4~8, 43) | 848K39440 |
| 4 | Cover Handle | |
| 5 | Cover Top H-TRA | |
| 6 | Bracket Magnet A4 | |
| 7 | Actuator Sensor | |
| 8 | Roll Assy Pinch H-TRA | |
| 9 | - - | |
| 10 | Chute Assy Lower H-TRA (with 12~14, 20, 22~24, 26~35, 38~41,44) | |
| 11 | - - | |
| 12 | Magnet | |
| 13 | Chute Low H-TRA | |
| 14 | Drive H-TRA (with 15~20, 39) (Horizontal Transport Drive Assy) | 068K64230 |
| 15 | Fan A4 | |
| 16 | Motor Assy Pm Htu | |
| 17 | Bracket Assy Motor | |
| 18 | Belt Motor | |
| 19 | Pulley Idler | |
| 20 | Pulley Tension | |
| 21 | - - | |
| 22 | Cover Motor | |
| 23 | Bearing Htu A4 | |
| 24 | Roll Assy Ent | |
| 25 | - - | |
| 26 | Roll Assy Exit | |
| 27 | Spring Extension | |
| 28 | Bracket Assy Tension | |
| 29 | Bracket Assy Drive | |
| 30 | Bearing E Cond | |
| 31 | Belt Transport | |
| 32 | Pulley 22t | |
| 33 | Pulley Assy Oneway | |
| 34 | Pulley T17 | |
| 35 | Bracket Assy Sensor (with 36,37) | 068K64120 |
| 36 | Sensor Photo | |
| 37 | Bracket Sensor | |
| 38 | Spring Sensor | |
| 39 | Clamp Locking | |
| 40 | Harness Assy HTU A4fin (J8987-j8863,j8864) | |
| 41 | Bracket Guide | |
| 42 | - - | |
| 43 | Cover Bracket | |
| 44 | Spacer Htu | |
| 45 | Cover Add | |

## Parts List 14.3 Covers



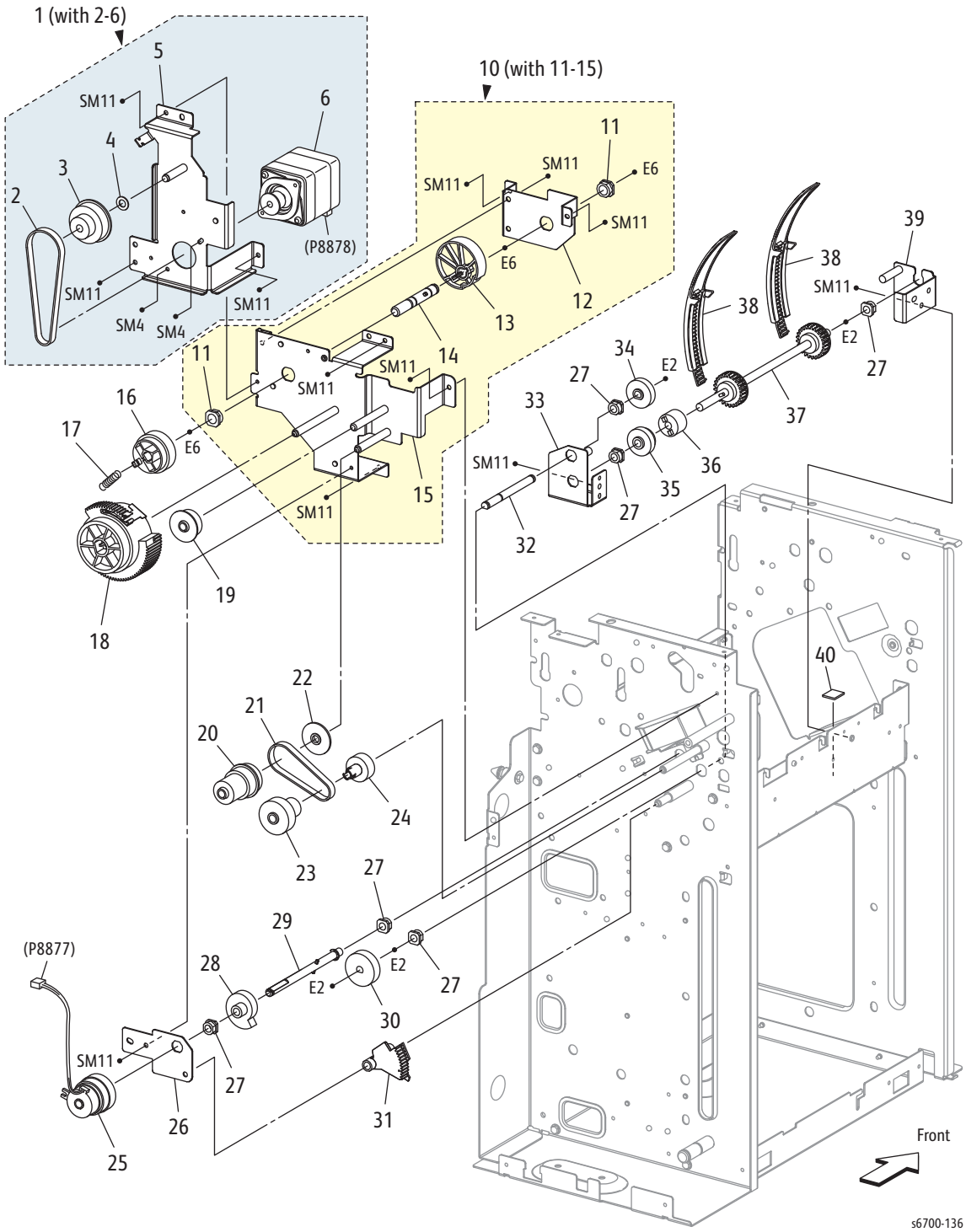
**Parts List 14.3 Covers**

| Item | Description | Part Number |
|---|---|---|
| 1 | - - | |
| 2 | Cover Top | |
| 3 | Cover Rear | |
| 4 | Cover RH | |
| 5 | Cover Assy Front (with 6~8) | 848K39450 |
| 6 | Cover Assy Front Door | |
| 7 | Cover Front | |
| 8 | Bracket Cover Front | |
| 9 | Knob Assy Exit | 003K87701 |
| 10 | Handle | |


SM12
11
8 (with 9,3)
10
9
SM11
5
4
SM11
SM11
SM4
SM11
(P8873)
7
6
17
14
3
Stack Height
Sensor1
Front
1 (with 2,3,14)
Eject Clamp
Home Sensor
3
SM11
(P8874)
(P8870)
2
(P8871)
3
Stack Height
Sensor2
SM12
SM12
SM12
3
Set Clamp
Home Sensor
SM12
14
SM11
SM11
15
16
14
14
14
SM11
SM11
13 (with 14-16)
*: Not used
(P8987)
(P8988)
(P8989)
(P8986)
(P8983)
(P8984)
(P8982)
(P8980)
(P8990)
(P8373)*
SM4
SM4
SM4
SM4
SM4
12
s6700-135

**Parts List 14.4 Main Board**

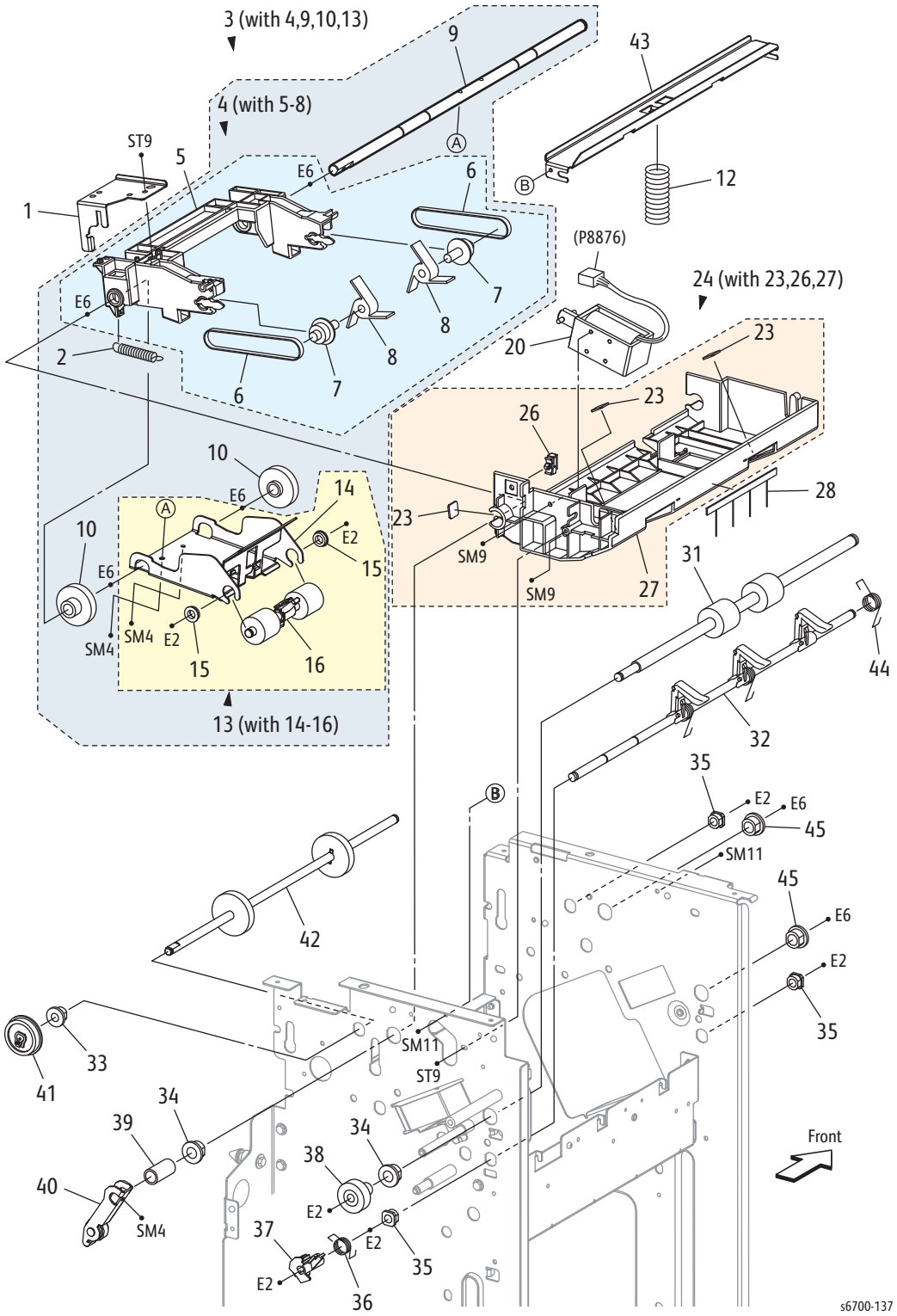
| Item | Description | Part Number |
|---|---|---|
| 1 | Guide Assy Harness (with 2,3, 14) | |
| 2 | Guide Harness 1 | |
| 3 | Sensor Photo (Stack Height, Set and Eject Clamp Home) | 930W00111 |
| 4 | Support Stud | |
| 5 | Actuator Gear Sect | |
| 6 | Actuator Set Clamp Cam | |
| 7 | Actuator Hight | |
| 8 | Bracket Assy Sensor Height (with 9,3) | |
| 9 | Bracket Assy Sensor | |
| 10 | Gear Z30 R | |
| 11 | Guide Harness 3 | |
| 12 | PWBA Main A4fin (Main Board) | 960K54034 |
| 13 | Bracket Assy Pwba (with 14~16) | |
| 14 | Clamp Locking | |
| 15 | Bracket PWBA | |
| 16 | Bushing Saddle | |
| 17 | Bushing Saddle | |


1 (with 2-6)
10 (with 11-15)
SM11
E6
E2
SM4
(P8878)
(P8877)
Front
s6700-136

**Parts List 14.5 Eject**

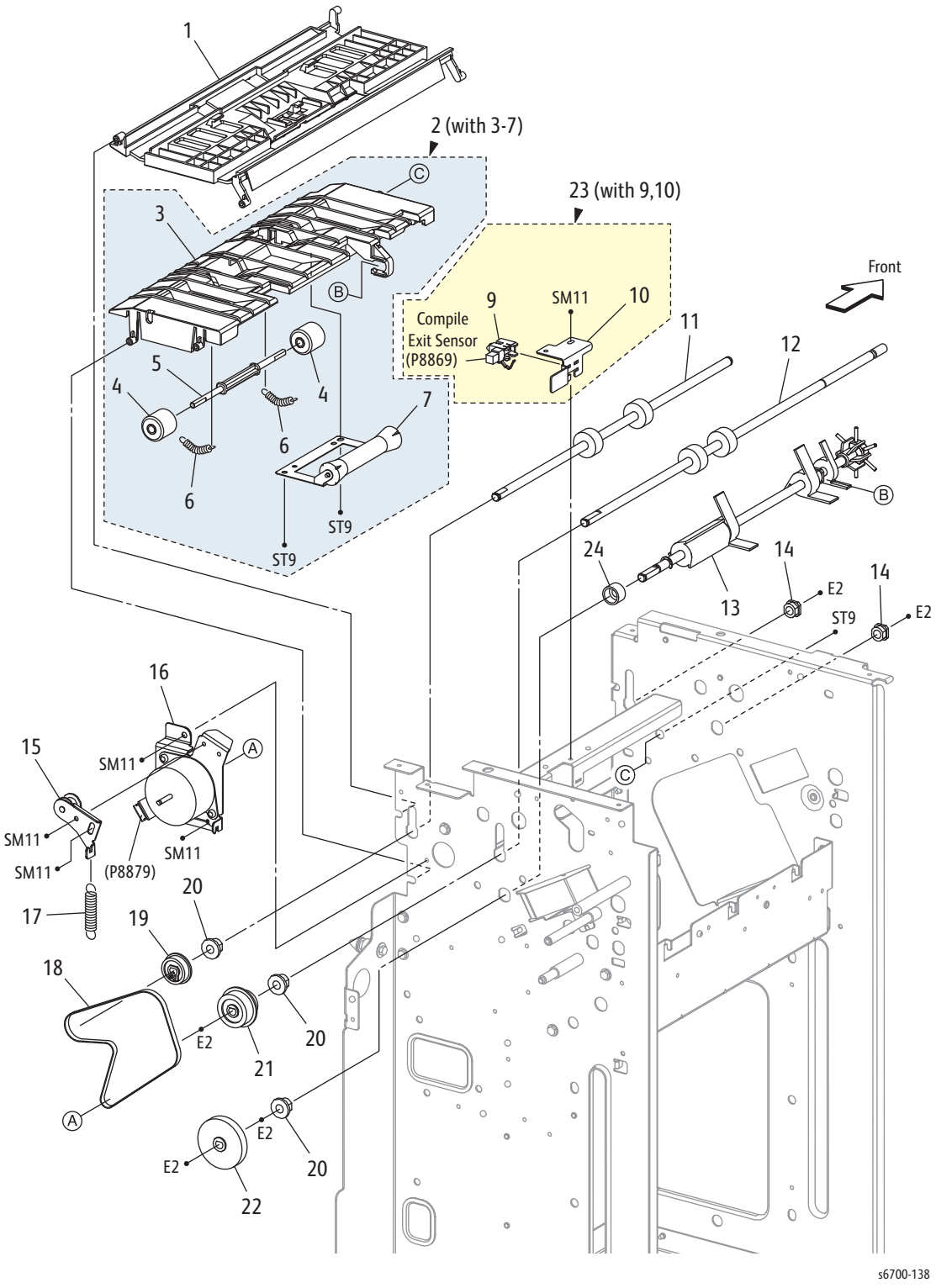
| Item | Description | Part Number |
|---|---|---|
| 1 | Motor Assy Eject Drive (with 2~6) | 127K59630 |
| 2 | Belt | |
| 3 | Gear Pulley Z20 T49 | |
| 4 | Washer | |
| 5 | Bracket Assy Motor | |
| 6 | Motor Assy Eject | |
| 7 | - - | |
| 8 | - - | |
| 9 | - - | |
| 10 | Bracket Assy Eject Drive (with 11-15) | 068K64060 |
| 11 | Bearing Sleeve | |
| 12 | Bracket Cam | |
| 13 | Cam Eject Clamp | |
| 14 | Shaft Assy Cam | |
| 15 | Bracket Assy Drive Ej | |
| 16 | Gear Z38 S | |
| 17 | Spring Clamp Cam | |
| 18 | Gear Assy Sector A4 | |
| 19 | Gear Z25 S | |
| 20 | Gear Z28 Z22 T38 | |
| 21 | Belt | |
| 22 | Flange Drive Ej | |
| 23 | Gear Pulley Z32l T25 | |
| 24 | Gear Z23l | |
| 25 | Clutch Z34 (Set Clamp Clutch) | 121K34631 |
| 26 | Bracket Cl | |
| 27 | Bearing Sleeve | |
| 28 | Cam Set Clamp Move | |
| 29 | Shaft Assy Set Drive | |
| 30 | Gear Z31 R | |
| 31 | Gear Z72 Sector | |
| 32 | Shaft Guide Paper M | |
| 33 | Bracket Assy Shelf R | |
| 34 | Gear Z26 R | |
| 35 | Gear Z25 L | |
| 36 | Clutch Tl400 | |
| 37 | Shaft Assy Guide Paper | |
| 38 | Guide Paper 240 | 032E32800 |
| 39 | Bracket Assy Shelf F | |
| 40 | Damper Solenoid | |

## Parts List 14.6 Eject Chute



**Parts List 14.6 Eject Chute**

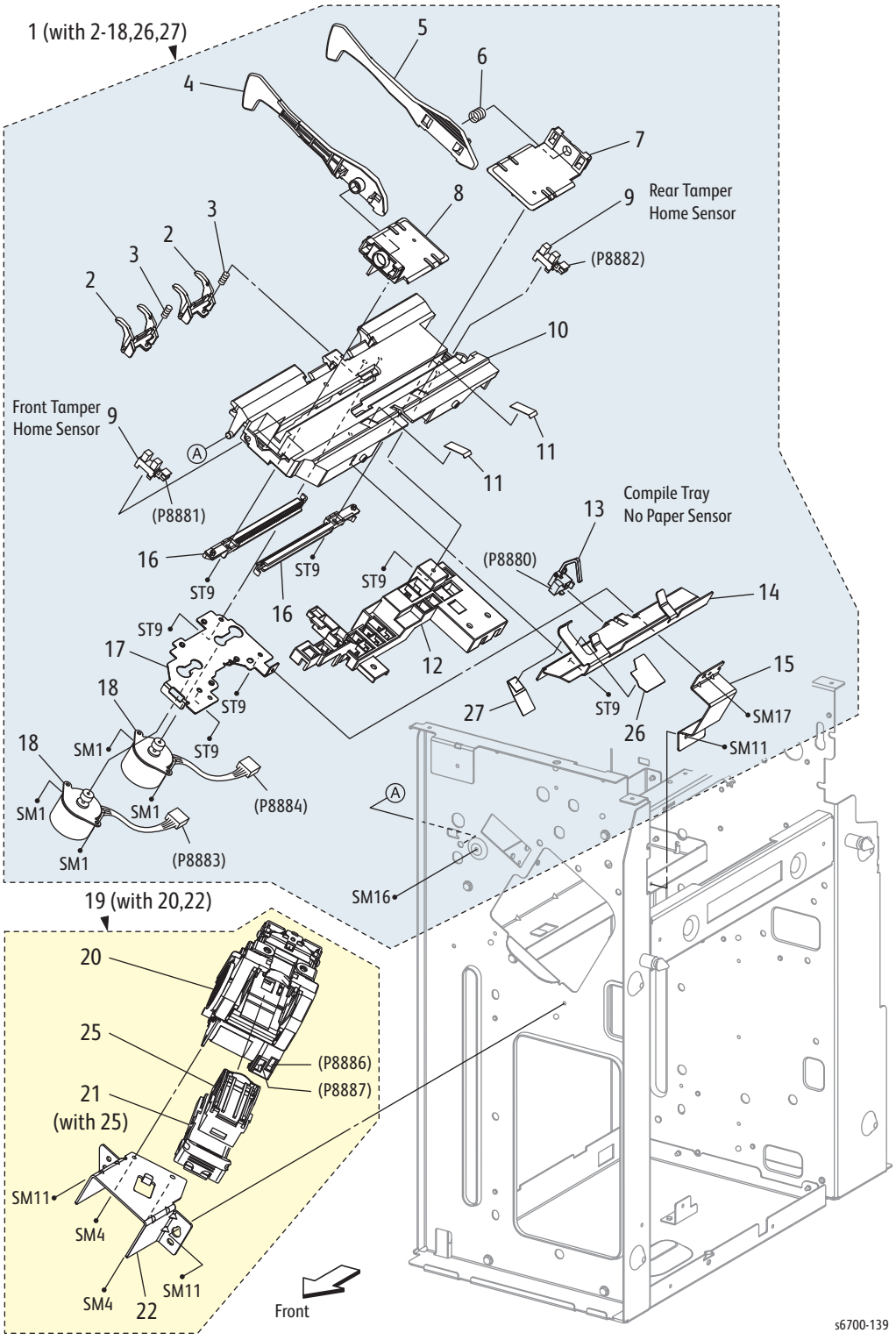
| Item | Description | Part Number |
|---|---|---|
| 1 | Support Arm | |
| 2 | Spring Sub Paddle | |
| 3 | Roller Assy Eject A4 (with 4, 9, 10, 13) | 059K61890 |
| 4 | Arm Assy Paddle (with 5~8) | |
| 5 | Arm Sub Paddle | |
| 6 | Belt | |
| 7 | Pulley T22 | |
| 8 | Paddle Sub | 033E93330 |
| 9 | Shaft Eject Clamp | |
| 10 | Gear Pulley Z31 T20 | |
| 11 | - - | |
| 12 | Spring Pinch | |
| 13 | Roller Assy Eject Pinch (with 14~16) | |
| 14 | Bracket Eject Pinch | |
| 15 | Bearing | |
| 16 | Roller Eject Pinch | 059K61911 |
| 20 | Sub Paddle Solenoid Assy | 121K43900 |
| 23 | Damper | |
| 24 | Chute Assy Eject (with 23, 26, 27) | |
| 25 | - - | |
| 26 | Clamp Locking | |
| 27 | Chute Eject | |
| 28 | Eliminator Eject RH | 105E19080 |
| 29 | - - | |
| 30 | - - | |
| 31 | Roller Assy Eject | |
| 32 | Shaft Assy Set Clamp | |
| 33 | Bearing Powdered | |
| 34 | Bearing Powdered | |
| 35 | Bearing Sleeve | |
| 36 | Spring Set Link | |
| 37 | Gear Z18 | |
| 38 | Gear Assy Z25 R Oneway | |
| 39 | Spacer Eject Clamp | |
| 40 | Arm Assy Clamp | |
| 41 | Pulley T41 | |
| 42 | Shaft Assy Drive Eject | |
| 43 | Plate Tie Eject Pinch | |
| 44 | Spring Set Clamp | |
| 45 | Bearing Sleeve | |


1
2 (with 3-7)
23 (with 9,10)
3
Compile
Exit Sensor
(P8869)
9
SM11
10
11
12
Front
5
4
4
7
6
6
ST9
ST9
24
14
E2
13
ST9
14
E2
16
15
SM11
SM11
SM11
(P8879)
SM11
17
19
20
18
E2
21
20
E2
E2
20
22
s6700-138

**Parts List 14.7 Finisher Transport**

| Item | Description | Part Number |
|---|---|---|
| 1 | Chute Assy Upper | |
| 2 | Chute Assy Lower (with 3~7) | 054K40183 |
| 3 | Chute Fin Lower | |
| 4 | Roll Pinch Ent | |
| 5 | Shaft Pinch Ent | |
| 6 | Spring Pinch Ent | |
| 7 | Roll Assy Pinch Exit | |
| 8 | - - | |
| 9 | Sensor Assy | |
| 10 | Bracket Sensor Exit | |
| 11 | Roll Assy Drive Ent | |
| 12 | Roll Assy Drive Exit | |
| 13 | Shaft Assy Main Paddle | |
| 14 | Bearing Sleeve | |
| 15 | Bracket Assy Tension2 | |
| 16 | Drive Assy Trans (Transport Drive Assy) | 068K64172 |
| 17 | Spring Tension | |
| 18 | Belt | |
| 19 | Pulley T30 | |
| 20 | Bearing Powdered | |
| 21 | Gear Pulley Z27 T30 | |
| 22 | Gear Z42 L | |
| 23 | Sensor Assy Exit (with 9,10) (Compile Tray Exit Sensor) | 068K67780 |
| 24 | Cap Bearing | |

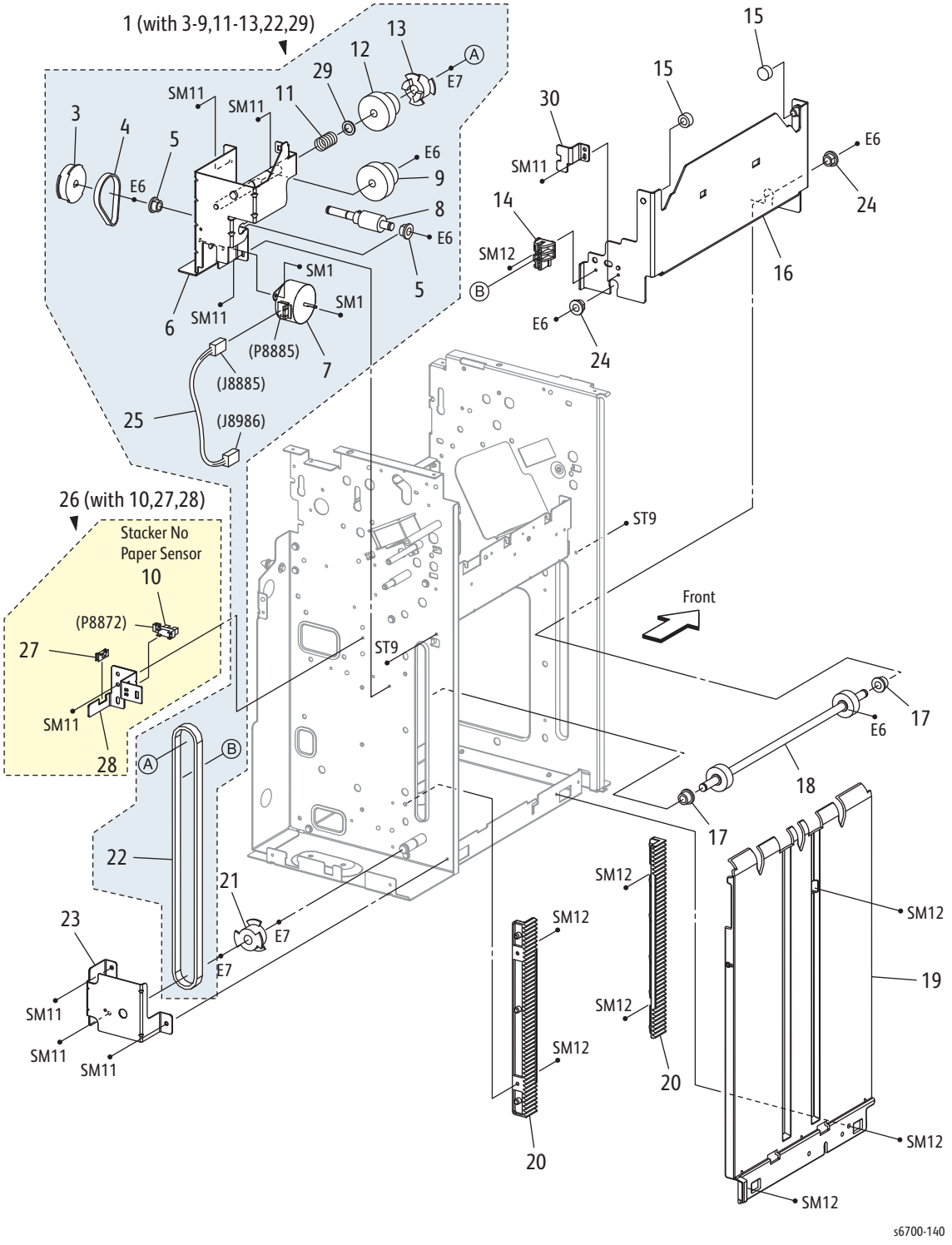
## Parts List 14.8 Compile Tray



**Parts List 14.8 Compile Tray**

| Item | Description | Part Number |
|---|---|---|
| 1 | Tray Assy Compile (with 2~18, 26, 27) | 050K63700 |
| 2 | Guide Paper Tray | |
| 3 | Spring Guide Paper | |
| 4 | Guide Tamper Front A4 | |
| 5 | Guide Tamper Rear A4 | |
| 6 | Spring Tamper Rear | |
| 7 | Base Tamper Rear A4 | |
| 8 | Base Tamper Front A4 | |
| 9 | Sensor Photo (Front/Rear Tamper Home Sensor) | 930W00111 |
| 10 | Tray Compile | |
| 11 | Guide Paper Paddle | |
| 12 | Guide Harness Compile Center | |
| 13 | Compile Tray No Paper Sensor Assy | |
| 14 | Guide Paper Compile Center | |
| 15 | Bracket Compile | |
| 16 | Rack Tamper | |
| 17 | Bracket Motor Tamper | |
| 18 | Motor Assy Tamper | 127K58040 |
| 19 | Holder Assy Stapler A4 (with 20,22) | 019K10370 |
| 20 | Stapler Assy (with 21) | |
| 21 | Holder Cartridge (with 25) | 050K51250 |
| 22 | Bracket Stapler Low | |
| 23 | - - | |
| 24 | - - | |
| 25 | Cartridge Staple | |
| 26 | Guide Paper Staple | |
| 27 | Guide Paper End Front A4 Fin | |

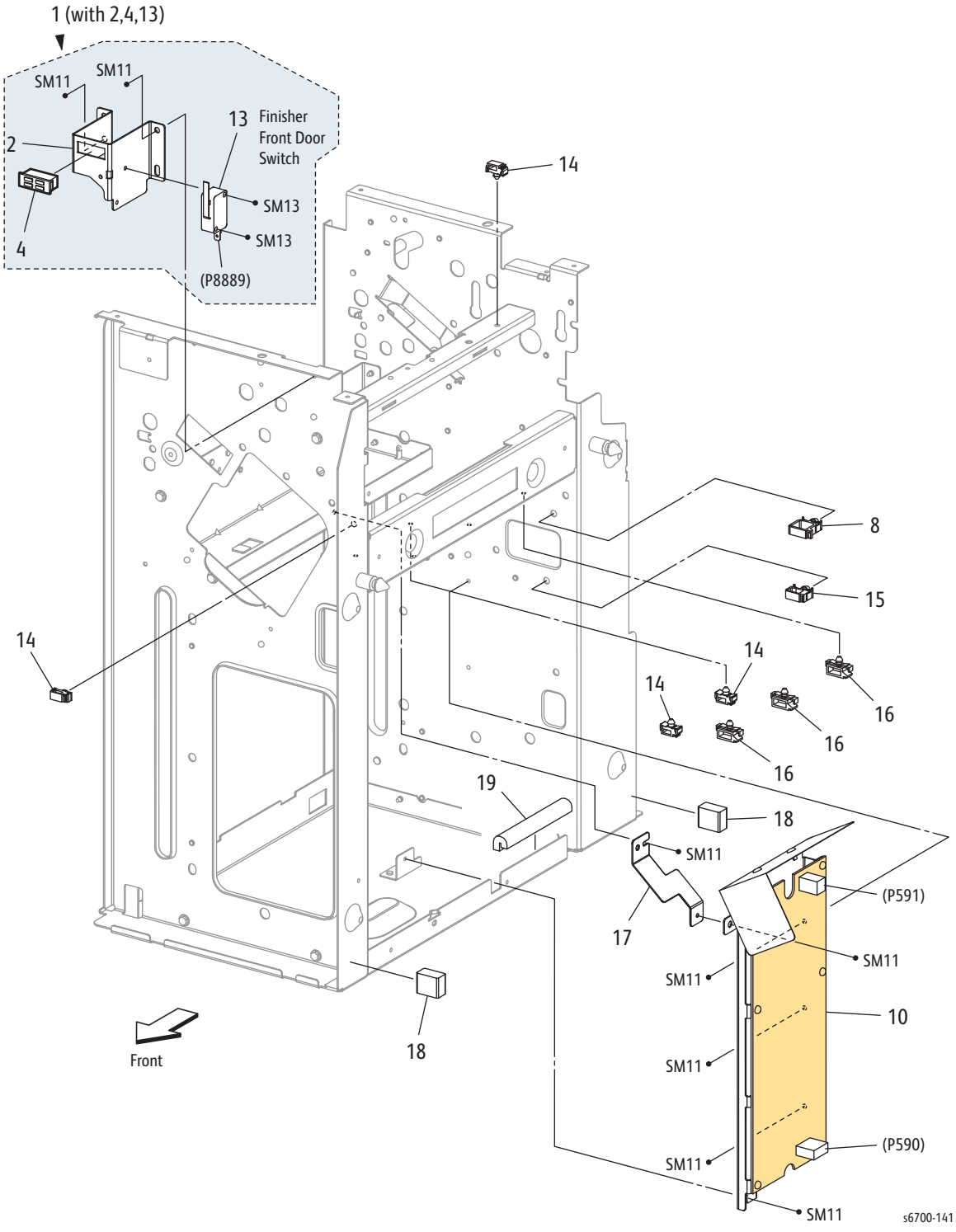
## Parts List 14.9 Stacker



**Parts List 14.9 Stacker**

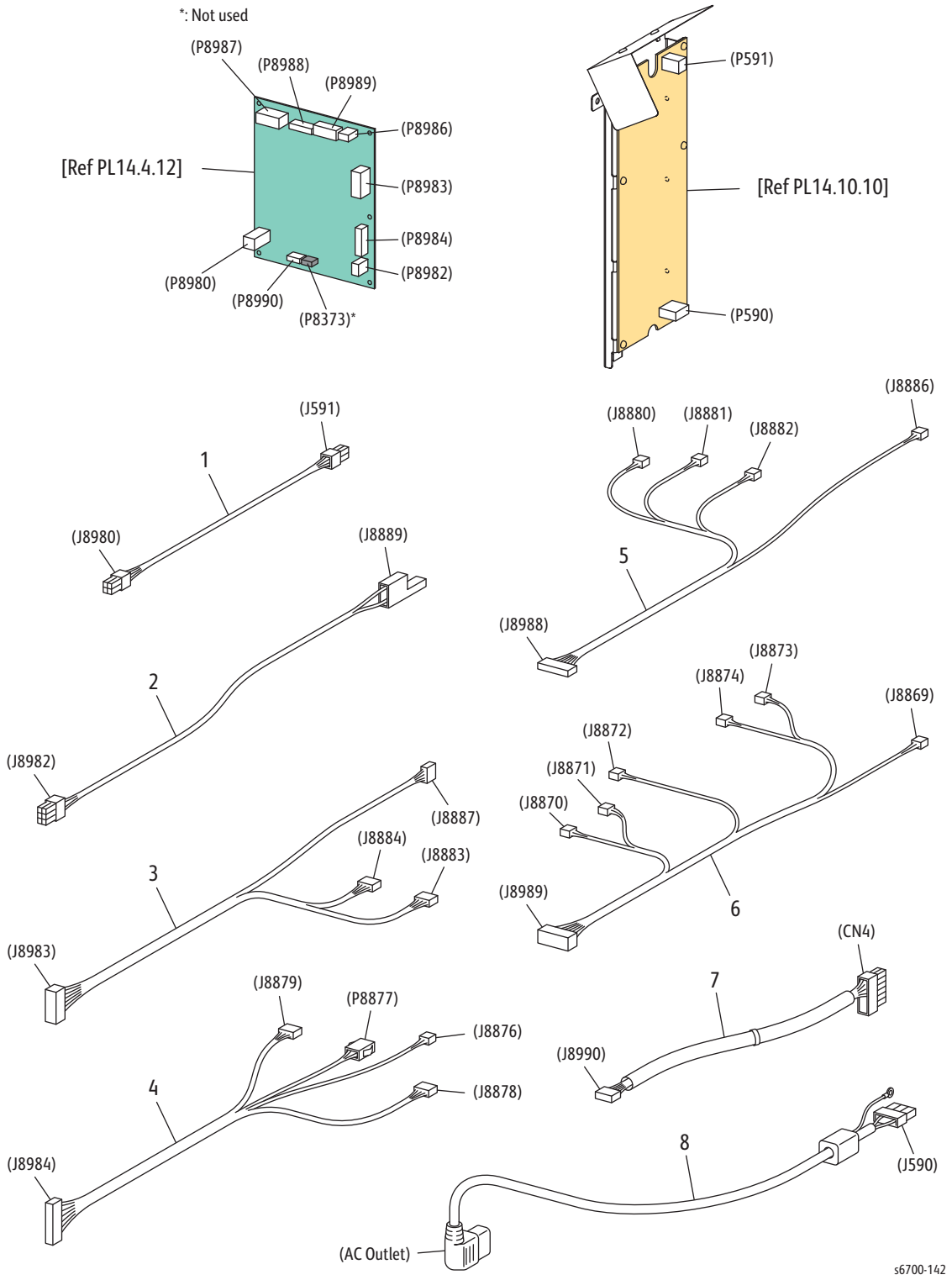
| Item | Description | Part Number |
|---|---|---|
| 1 | Drive Assy Stacker (with 3-9,11-13, 22, 29) | 068K64010 |
| 2 | - - | |
| 3 | Pulley T60 | |
| 4 | Belt | |
| 5 | Bearing Powdered | |
| 6 | Bracket Assy Elev | |
| 7 | Motor Assy Stacker | |
| 8 | Shaft Assy Worm | |
| 9 | Gear Z15 Z37 | |
| 10 | Sensor Photo (Stacker No Paper Sensor) | 930W00111 |
| 11 | Spring Doc | |
| 12 | Gear Doc Clutch B | |
| 13 | Pulley Doc Clutch B | |
| 14 | Clamp Belt | |
| 15 | Bearing Carriage | |
| 16 | Carriage Assy | |
| 17 | Bearing Powdered | |
| 18 | Shaft Assy Stacker | |
| 19 | Guide Tray | |
| 20 | Rack A4 | |
| 21 | Pulley T18 | |
| 22 | Belt Stacker | |
| 23 | Bracket Stud | |
| 24 | Bearing Sleeve | |
| 25 | Harness Assy MOT3 (J8885-J8986) | |
| 26 | Sensor Assy No Paper (with 10, 27, 28) | 068K64461 |
| 27 | Bushing Saddle | |
| 28 | Bracket Sensor No Paper | |
| 29 | Washer Nylon | |
| 30 | Bracket Clamp | |

## Parts List 14.10 Finisher LVPS



**Parts List 14.10 Finisher LVPS**

| Item | Description | Part Number |
|---|---|---|
| 1 | Bracket Assy Interlock (with 2,4,13) (Front Door Interlock Switch) | 068K64620 |
| 2 | Bracket Interlock | |
| 3 | - - | |
| 4 | Magnet | |
| 5 | - - | |
| 6 | - - | |
| 7 | - - | |
| 8 | Clamp Locking | |
| 9 | - - | |
| 10 | LVPS Assy | 105K24210 |
| 11 | - - | |
| 12 | - - | |
| 13 | Switch | |
| 14 | Clamp Locking | |
| 15 | Clamp Locking | |
| 16 | Clamp Locking | |
| 17 | Bracket EME | |
| 18 | Gasket | |
| 19 | Guide Edge | |


*: Not used
(P8987)
(P8988)
(P8989)
(P8986)
[Ref PL14.4.12]
(P8983)
(P8984)
(P8980)
(P8982)
(P8990)
(P8373)*
(P591)
[Ref PL14.10.10]
(P590)
(J591)
1
(J8980)
(J8889)
2
(J8982)
(J8887)
3
(J8884)
(J8883)
(J8983)
(J8879)
(P8877)
(J8876)
4
(J8878)
(J8984)
(J8886)
(J8880)
(J8881)
(J8882)
5
(J8988)
(J8873)
(J8874)
(J8869)
(J8872)
(J8871)
(J8870)
(J8989)
6
(CN4)
7
(J8990)
8
(J590)
(AC Outlet)
s6700-142

**Parts List 14.11 Finisher Harnesses**

| Item | Description | Part Number |
|---|---|---|
| 1 | Harness Assy LVPS (J8980-J591) | 962K73190 |
| 2 | Harness Assy Intl SW (J8982-J8889) | |
| 3 | Harness Assy Mot1 (J8983-J8887, P8891) | |
| 4 | Harness Assy Mot2 (J8984-J8876, P8877, J8878, J8879) | |
| 5 | Harness Assy SNR1 (J8988-J8886, P8890) | |
| 6 | Harness Assy SNR2 (J8989-J8869, J8870, J8871, J8872, J8873, J8874) | |
| 7 | Harness Assy IF (J8990-CN4) | 962K73131 |
| 8 | Power Cable (J590-AC Outlet) | 962K73221 |

Toner Cartridges are available in metered or regional versions. Printers are shipped from the factory with neutral cartridges that are set for metered use at power up or adopt the region when the first non-neutral cartridge is installed. Two regional variants, North America / Xerox Europe (NA/XE) and Developing Markets Operations (DMO) are available.The table lists Toner Cartridge part numbers for metered or regional versions. Neutral appears as the cartridge type until metered toner is enabled or a regional (NA/XE or DMO) cartridge is inserted.

**Note**

Toner level in the cartridge is determined by auger turns and sensors. Toner level is set to 100 % when a new cartridge is installed. Toner Cartridge life (A/A4 pages at 5 % coverage) is 12K for CMY, 18K for K for hi-cap, 15K for CMY, 21K for K for metered, and 5K for CMY, 7.1K for K for standard and neutral.

**Toner Cartridge Types**

| Region/Type | Description | Capacity |
|---|---|---|
| NA/XE/DMO | Cyan Standard Capacity | 5,000 |
| | Magenta Standard Capacity | 5,000 |
| | Yellow Standard Capacity | 5,000 |
| | Black Standard Capacity | 7,100 |
| | Cyan High Capacity | 12,000 |
| | Magenta High Capacity | 12,000 |
| | Yellow High Capacity | 12,000 |
| | Black High Capacity | 18,000 |
| Metered | Cyan Metered | 15,000 |
| | Magenta Metered | 15,000 |
| | Yellow Metered | 15,000 |
| | Black Metered | 21,000 |

**Note**

Imaging Unit life is determined by number of prints, cycles (rotation time) and pixel count (dispense time). Life is 50K pages with 4 page per job average and < 15 % coverage.

Waste Toner status is determined by a sensor for almost full and a page count after that for full. Life should be about 25 K A/A4 pages at 5 % coverage per toner, 20 % cumulative, to almost full and another 3600 pages to full.

The Maintenance Kit life is determined by page count. Life is 150K A/A4 pages to a near end of life warning, approximately 180K A/A4 pages to end of life error hard stop.

### Routine Maintenance and Service Items

| Description | Part Number |
|---|---|
| Fuser 110V<br>Fuser 220V | 126K32220<br>126K32230 |
| Black Imaging Unit<br>Cyan Imaging Unit<br>Magenta Imaging Unit<br>Yellow Imaging Unit | 108R00974<br>108R00971<br>108R00972<br>108R00973 |
| Standard Capacity Black Toner Cartridge for NA/XE<br>Standard Capacity Cyan Toner Cartridge for NA/XE<br>Standard Capacity Magenta Toner Cartridge for NA/XE<br>Standard Capacity Yellow Toner Cartridge for NA/XE | 106R01506<br>106R01503<br>106R01504<br>106R01505 |
| High Capacity Black Toner Cartridge for NA/XE<br>High Capacity Cyan Toner Cartridge for NA/XE<br>High Capacity Magenta Toner Cartridge for NA/XE<br>High Capacity Yellow Toner Cartridge for NA/XE | 106R01510<br>106R01507<br>106R01508<br>106R01509 |
| Standard Capacity Black Toner Cartridge for DMO<br>Standard Capacity Cyan Toner Cartridge for DMO<br>Standard Capacity Magenta Toner Cartridge for DMO<br>Standard Capacity Yellow Toner Cartridge for DMO | 106R01514<br>106R01511<br>106R01512<br>106R01513 |
| High Capacity Black Toner Cartridge for DMO<br>High Capacity Cyan Toner Cartridge for DMO<br>High Capacity Magenta Toner Cartridge for DMO<br>High Capacity Yellow Toner Cartridge for DMO | 106R01526<br>106R01523<br>106R01524<br>106R01525 |
| Metered Black Toner Cartridge<br>Metered Cyan Toner Cartridge<br>Metered Magenta Toner Cartridge<br>Metered Yellow Toner Cartridge | 106R01522<br>106R01519<br>106R01520<br>106R01521 |
| Waste Toner Cartridge | 108R00975 |
| Maintenance Kit (Transfer Belt and Transfer Roller) | 604K73140 |
| Staple Cartridge (3 cartridges of 5K staples) | 008R12941 |

### Power Cords

| Description | Part Number |
|---|---|
| Power Cord, North America (NEMA 5-15), 125 V, 15A | 117E29520 |
| Power Cord, Cable Assy, EUR, 240 V | 152S06413 |
| Power Cord, Cable Assy, UK, 240 V | 152S06414 |
| Power Cord, Denmark, 230V | 152S06415 |
| Power Cord, Australia, 230V | 117E29490 |
| Power Cord, China, 220V | 117E35030 |
| Power Cord, Argentina, 220V | 117E35040 |
| Power Cord, Switzerland, 230V | 152S06416 |

**Options/Accessories**

| Description | Part Number |
|---|---|
| 550-Sheet Feeder | 097S04150 |
| 1100-Sheet Feeder | 097S04151 |
| Finisher, 1000-Sheet Stacker, Stapler | 097S04152 |
| 2GB RAM DIMM | 097S04396 |
| Hard Drive Productivity Kit, 160GB | 097S04179 |
| Printer Stand | 097S04245 |

# Service Kits

## Maintenance Kit - 604K73140

**Customer-Replaceable Maintenance Kit**

| Item | Procedure |
|---|---|
| Transfer Roller[a] | "Transfer Roller" on page 8-11 |
| Transfer Belt | "Transfer Belt" on page 8-12 |
| Separator Roller[b] | "Tray Feed and Separator Roller Kit" on page 8-6 |
| Feed Rollers | "Feed Roller" on page 8-9 |

a. Also available as an individually spared part (604K64970).
b. Also available as an individually spared part (604K65030).

## Hardware Kit - 604K56670

**Hardware Kit**

| Fastener Type | Size | Parts List Designator | Quantity |
|---|---|---|---|
| Screw for plastic, Silver, self-tapping | M4 x 10mm | ST6 | 2 |
| Screw for plastic, Silver, self-tapping | M3 x 8mm | ST7 | 2 |
| Sheet metal screw, Silver | M3 x 4mm<br>M3 x 6mm | SM1<br>SM2 | 2<br>2 |
| Sheet metal screw, Silver, with flange | M3 x 6mm<br>M3 x 8mm | SM11<br>SM12 | 2<br>2 |
| E-Ring, 3 mm (1) | D3<br>D4 | E1<br>E2 | 2<br>2 |

### USB Drive with Firmware - 237E25960

USB AltBoot Thumb Drive loaded with firmware. See “Firmware Restore Using AltBoot” on page A-5.

### Repack Kit- 695K28490

A repack kit is available to package and transport or ship the print engine.

## World Kits

World Kits provide localized software and documentation.

**World Kit**

| World Kit Type | Part Number |
|---|---|
| 110V World Kit | 650K33090 |
| 220V World Kit | 650K33100 |

# Wiring

## In this chapter...


- Printer Plug/Jack Designations
- Printer Plug/Jack Locator Diagrams
- Feeder Plug/Jack Designators
- Feeder Plug/Jack Locator Diagrams
- Finisher Plug/Jack Designators
- Finisher Plug/Jack Locator Diagrams
- Wiring Diagrams
- Printer Wiring
- Feeder Wiring
- Finisher Wiring


Chapter 10

# Printer Plug/Jack Designations

This chapter contains the plug/jack designators, locator diagrams, and wiring diagrams. The Plug/Jack Locator diagrams show the P/J locations within the printer. Use these illustrations to locate connections called out in the troubleshooting procedures presented in Sections 3, 4, and 5.

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 by its P/J designation number.
4. The Remarks column provides a brief description of each connection.

**Printer Plug/Jack Designators**

| P/J | Map | Coordinates | Remarks |
|---|---|---|---|
| 1 | 5 | B-172 | Connects MCU Board and Fuser Harness |
| 2 | 5 | C-172 | Connects MCU Board and ESS Harness |
| 3 | 5 | C-174 | Connects MCU Board and ROS/HV Harness |
| 4 | 5 | A-173 | Connects MCU Board and DISP/FSR Harness |
| 5 | 5 | A-173 | Connects MCU Board and LPP/MOT Harness |
| 6 | 5 | A-172 | Connects MCU Board and LPP/MOT Harness |
| 7 | 5 | A-172 | Connects MCU Board and LPP/MOT Harness |
| 8 | 5 | C-174 | No Connection |
| 9 | 5 | B-173 | Connects MCU Board and RH/MOT Harness |
| 10 | 5 | C-173 | Connects MCU Board and Registration Harness |
| 11 | 4 | F-154 | Connects IP Board and Hard Drive |
| 11 | 5 | C-172 | Connects MCU Board and TN CRUM Harness |
| 12 | 4 | F-154 | Connects IP Board and Hard Drive |
| 12 | 5 | D-173 | Connects MCU Board and CRUM/DISP Harness |
| 13 | 5 | D-173 | Connects MCU Board and ROS/HV Harness |
| 15 | 5 | C-173 | Connects MCU Board and CRUM/DISP Harness |
| 16 | 5 | A-173 | Connects MCU Board and ERASE/EXIT Harness |
| 17 | 5 | C-172 | Connects MCU Board and ERASE/EXIT Harness |
| 18 | 5 | B-173 | Connects MCU Board and LPP/MOT Harness |
| 19 | 5 | A-172 | Connects MCU Board and DISP/FSR Harness |
| 20 | 5 | C-172 | Connects MCU Board and EXIT Harness |
| 21 | 5 | C-173 | Connects MCU Board and LPP/MOT Harness |
| 22 | 5 | D-173 | Connects MCU Board and FIN Harness |
| 23 | 5 | A-173 | Connects MCU Board and LV PWR Harness |
| 24 | 5 | B-173 | Connects MCU Board and LVPS Harness |
| 100 | 6 | C-183 | Connects Feed Drive Assy (Switching Clutch) and RH/MOT Harness |
| 101 | 2 | H-125 | Connects Registration Clutch and Registration Harness |
| 101 | 5 | B-172 | No Connection |
| 102 | 2 | H-125 | Connects Feed Clutch and Registration Harness |

**Printer Plug/Jack Designators (Continued)**

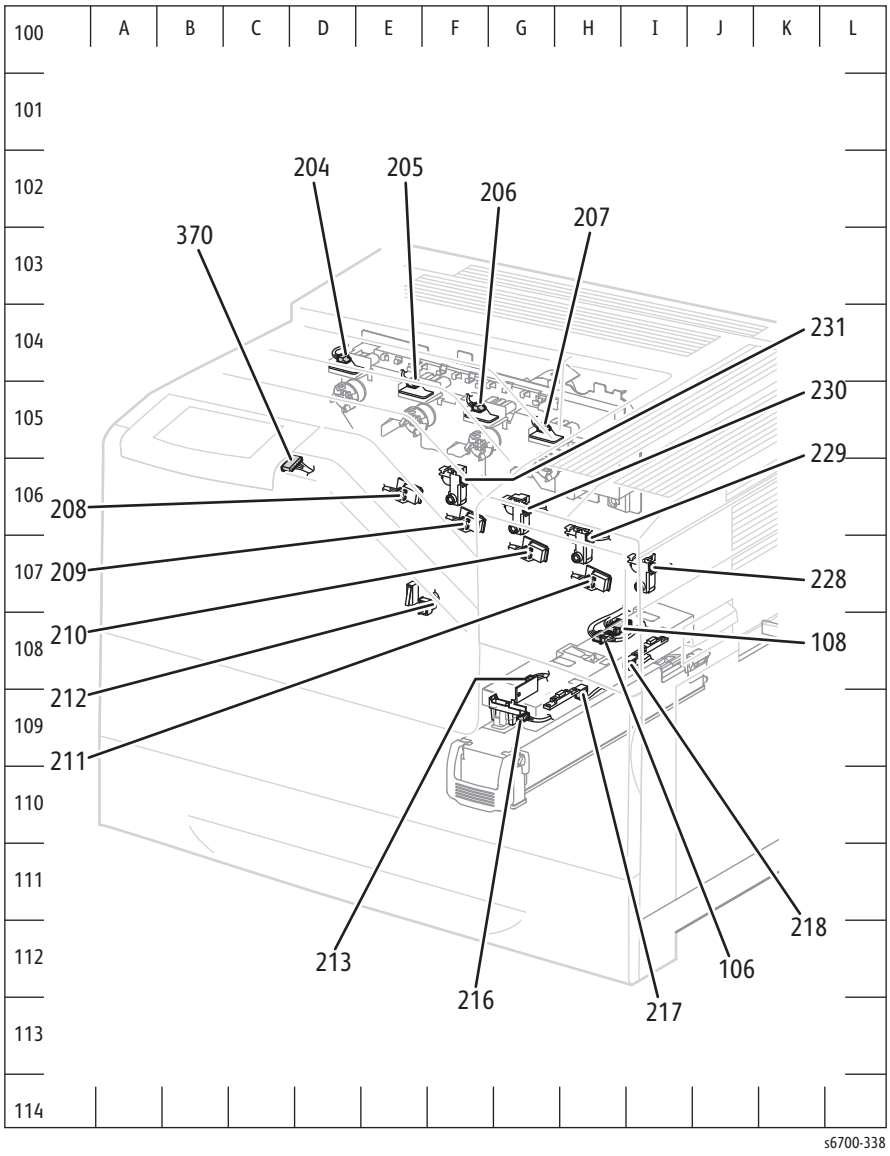
| P/J | Map | Coordinates | Remarks |
|---|---|---|---|
| 103 | 2 | H-125 | Connects Take Away Clutch and Registration Harness |
| 105 | 2 | H-125 | Connects Registration Sensor and Registration Harness |
| 106 | 1 | H-108 | Connects Procon Assy and ERASE/EXIT Harness |
| 108 | 1 | H-108 | Connects Procon Assy and ERASE/EXIT Harness |
| 110 | 2 | H-125 | Connects REGI Unit and Registration Harness |
| 115 | 2 | F-119 | Connects Exit Drive Assy and Exit Harness |
| 116 | 2 | F-120 | Connects Exit Clutch and Exit Harness |
| 117 | 3 | F-141 | Connects RH COVER Harness and RH/MOT Harness |
| 118 | 3 | F-141 | Connects Tray 1 Feed Solenoid and RH/MOT Harness |
| 119 | 3 | E-136 | Connects Fuser Fan and Harness Assy RH COVER |
| 120 | 3 | F-141 | Connects RH Cover and RH/MOT Harness |
| 121 | 5 | F-169 | Connects Printer and Finisher |
| 122 | 2 | H-120 | Connects Invert Solenoid and DISP/FSR Harness |
| 151 | 5 | H-167 | Connects Laser Unit and Assy ROS/HV Harness |
| 152 | 5 | H-168 | Connects Laser Unit and VIDEO Harness |
| 153 | 5 | H-167 | Connects Laser Unit and ROS/HV Harness |
| 173 | 4 | D-154 | Connects GFI Breaker and AC Harness |
| 174 | 4 | D-154 | Connects GFI Breaker and AC Harness |
| 175 | 4 | D-155 | Connects GFI Breaker and GFI EARTH |
| 180 | 2 | H-121 | Connects Fuser and Fuser Harness |
| 181 | 4 | G-156 | Connects LPP/MOT Harness and Feeder |
| 200 | 6 | D-183 | Connects Switching Sensor (K) and RH/MOT Harness |
| 201 | 6 | I-183 | Connects Color Switching Sensor and CRUM/DISP Harness |
| 203 | 2 | F-124 | Connects Registration Sensor and Registration SNR Harness |
| 204 | 1 | D-105 | Connects Y CRUM and TN CRUM Harness |
| 205 | 1 | E-105 | Connects M CRUM and TN CRUM Harness |
| 206 | 1 | F-106 | Connects C CRUM and TN CRUM Harness |
| 207 | 1 | G-106 | Connects K CRUM and TN CRUM Harness |
| 208 | 1 | E-107 | Connects Y CRUM and CRUM/DISP Harness |
| 209 | 1 | F-107 | Connects M CRUM and CRUM/DISP Harness |
| 210 | 1 | G-107 | Connects C CRUM and CRUM/DISP Harness |
| 211 | 1 | H-108 | Connects K CRUM and CRUM/DISP Harness |
| 212 | 1 | F-108 | Connects Front Interlock Switch and Exit Harness |
| 213 | 1 | G-109 | Connects HUM Sensor and CTD/HUM Harness |
| 214 | 5 | F-170 | Connects EEPROM Board and ROS/HV Harness |
| 216 | 1 | G-109 | Connects Waste Toner Box Full Sensor and CTD/HUM |
| 217 | 1 | H-109 | Connects Front ADC Sensor and CTD SNR Harness |
| 218 | 1 | I-109 | Connects Rear ADC Sensor and CTD SNR Harness |
| 219 | 2 | D-125 | Connects Size Switch and LPP/MOT Harness |
| 220 | 2 | F-124 | Connects No Paper Sensor and NPP SNR Harness |

**Printer Plug/Jack Designators (Continued)**

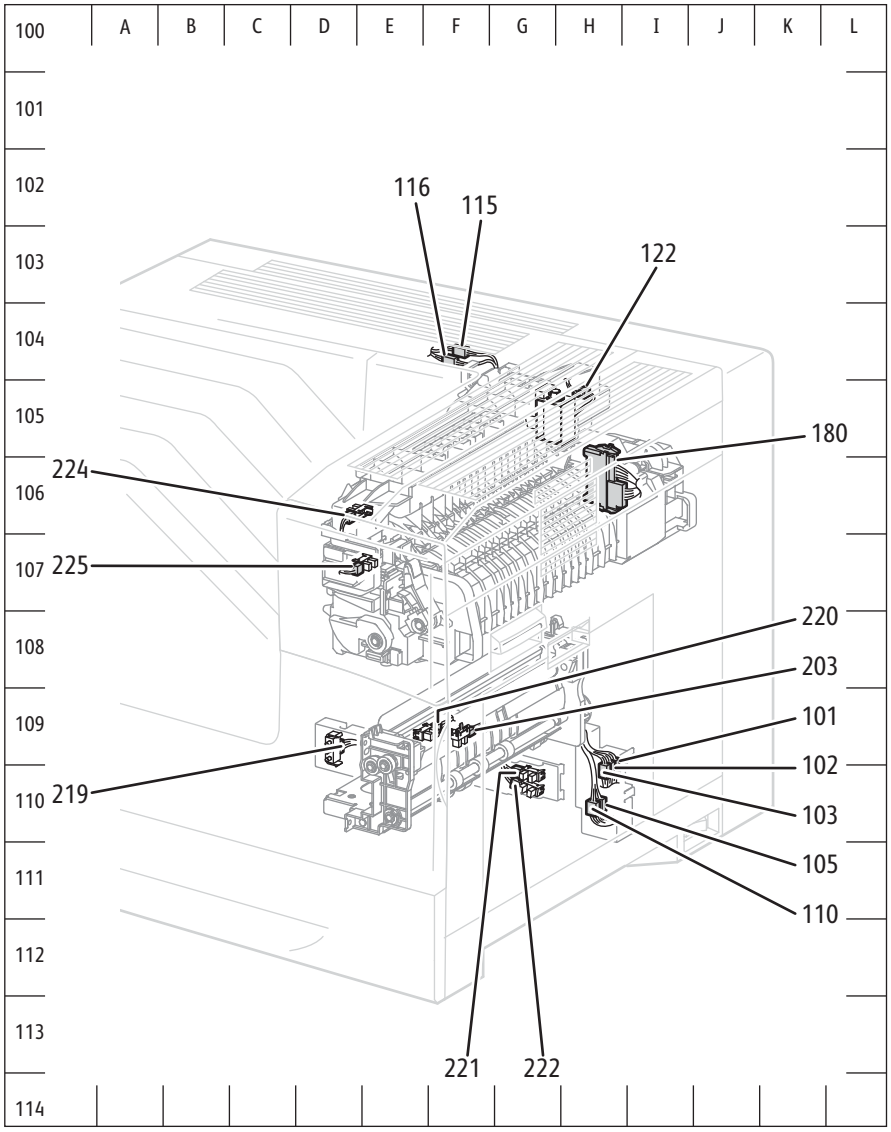
| P/J | Map | Coordinates | Remarks |
|---|---|---|---|
| 221 | 2 | G-125 | Connects Low Paper Sensor and LPP/MOT Harness |
| 222 | 2 | G-125 | Connects Low Paper 50 % Sensor and LPP/MOT Harness |
| 224 | 2 | D-122 | Connects Full Stack Sensor and EXIT Harness |
| 225 | 2 | D-122 | Connects Envelope Mode Sensor and EXIT Harness |
| 226 | 3 | E-140 | Connects Tray 1 No Paper Sensor and RH COVER Harness |
| 228 | 1 | I-108 | Connects Erase Lamp K and ERASE/EXIT Harness |
| 229 | 1 | H-107 | Connects Erase Lamp C and ERASE/EXIT Harness |
| 230 | 1 | G-107 | Connects Erase Lamp M and ERASE/EXIT Harness |
| 231 | 1 | F-106 | Connects Erase Lamp Y and ERASE/EXIT Harness |
| 250 | 6 | D-181 | Connects Fuser Motor and DISP/FSR Harness |
| 251 | 6 | F-181 | Connects Xero Drive Assy and DISP/FSR Harness |
| 252 | 6 | G-185 | Connects Color Developer Motor and LPP/MOT Harness |
| 253 | 6 | F-185 | Connects Black Developer Motor and LPP/MOT Harness |
| 254 | 6 | C-183 | Connects Transfer Belt Motor and RH/MOT Harness |
| 255 | 6 | D-185 | Connects Feed Drive Assy and RH/MOT Harness |
| 256 | 6 | E-181 | Connects Toner Motor K and DISP/FSR Harness |
| 257 | 6 | F-181 | Connects Toner Motor C and DISP/FSR Harness |
| 258 | 6 | G-182 | Connects Toner Motor M and DISP/FSR Harness |
| 259 | 6 | H-182 | Connects Toner Motor Y and CRUM/DISP Harness |
| 260 | 6 | G-185 | Connects Developer Drive and LPP/MOT Harness |
| 300 | 4 | C-155 | Connects LVPS and AC Harness |
| 301 | 4 | D-151 | Connects LVPS and I/L RH Harness |
| 302 | 4 | C-151 | Connects LVPS and I/L FRT Harness |
| 303 | 4 | C-151 | Connects LVPS and ROS/HV Harness |
| 304 | 4 | B-154 | Connects LVPS and Fuser Harness |
| 305 | 4 | C-151 | Connects LVPS and LV PWR Harness |
| 306 | 4 | D-151 | Connects LVPS and ESS PWR Harness |
| 307 | 4 | C-151 | Connects LVPS and LPP/MOT Harness |
| 308 | 4 | D-151 | Connects LVPS and LVPS Harness |
| 309 | 4 | D-151 | Connects LVPS and LVPS Fan |
| 311 | 4 | C-155 | Connects LVPS and FIN PWR Harness |
| 315 | 4 | C-151 | Connects LVPS and LPP/MOT Harness |
| 320 | 4 | F-154 | Connects IP Board and ESS Harness |
| 321 | 4 | F-154 | Connects IP Board and ESS PWR Harness |
| 327 | 4 | F-154 | Connects IP Board and Control Panel Harness |
| 328 | 4 | F-154 | Connects IP Board and VIDEO Harness |
| 331 | 4 | J-155 | Connects HVPS and ROS/HV Harness |
| 332 | 4 | J-153 | Connects HVPS and Bias Housing Assy |
| 370 | 1 | D-106 | Connects Control Panel and Control Panel Harness |

# Printer Plug/Jack Locator Diagrams

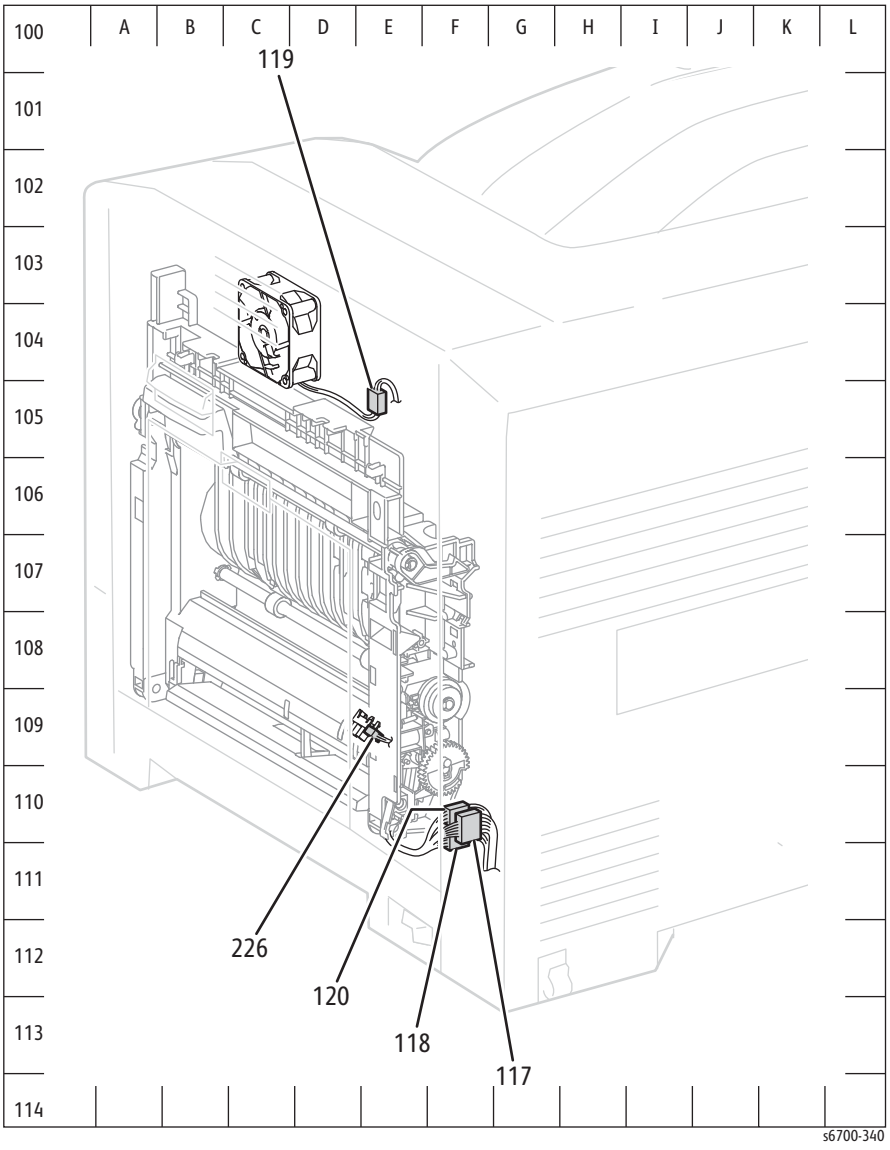
## Map 1 - CRU Detection



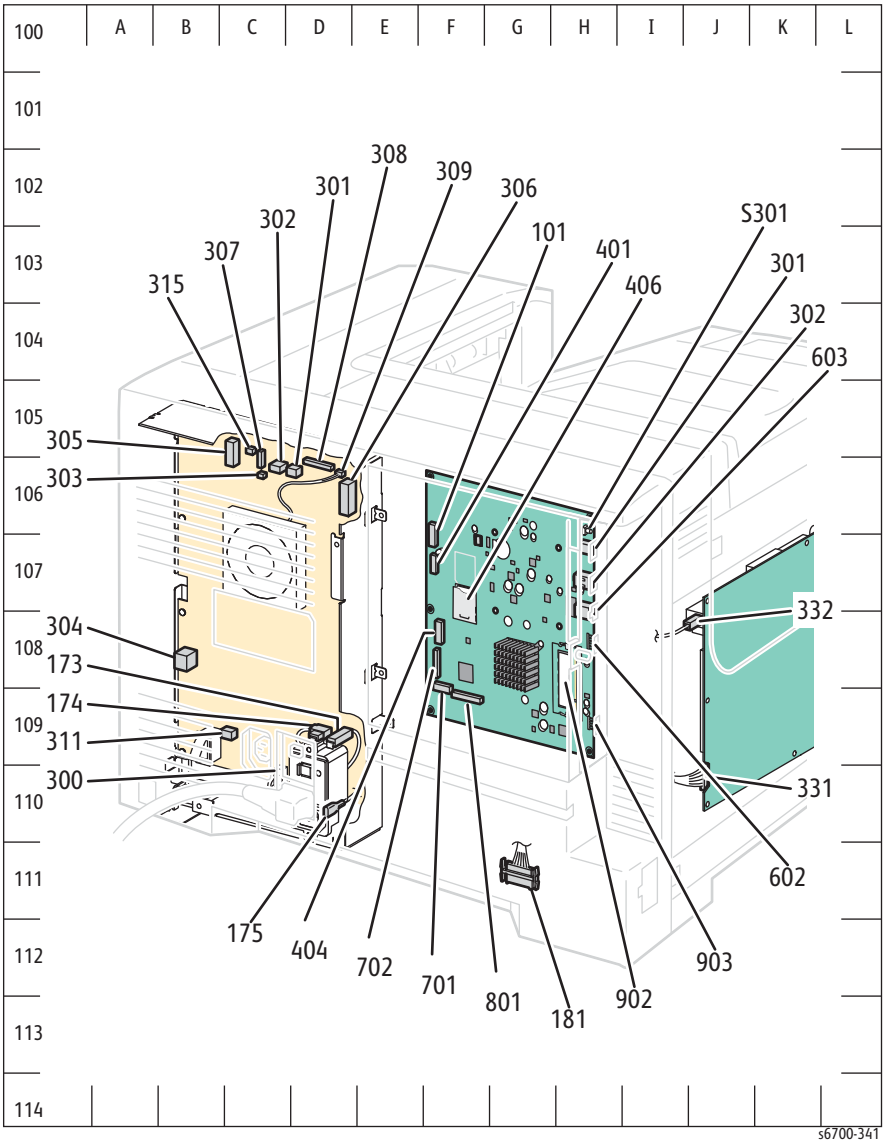
## Map 2 - Fuser and Feeder



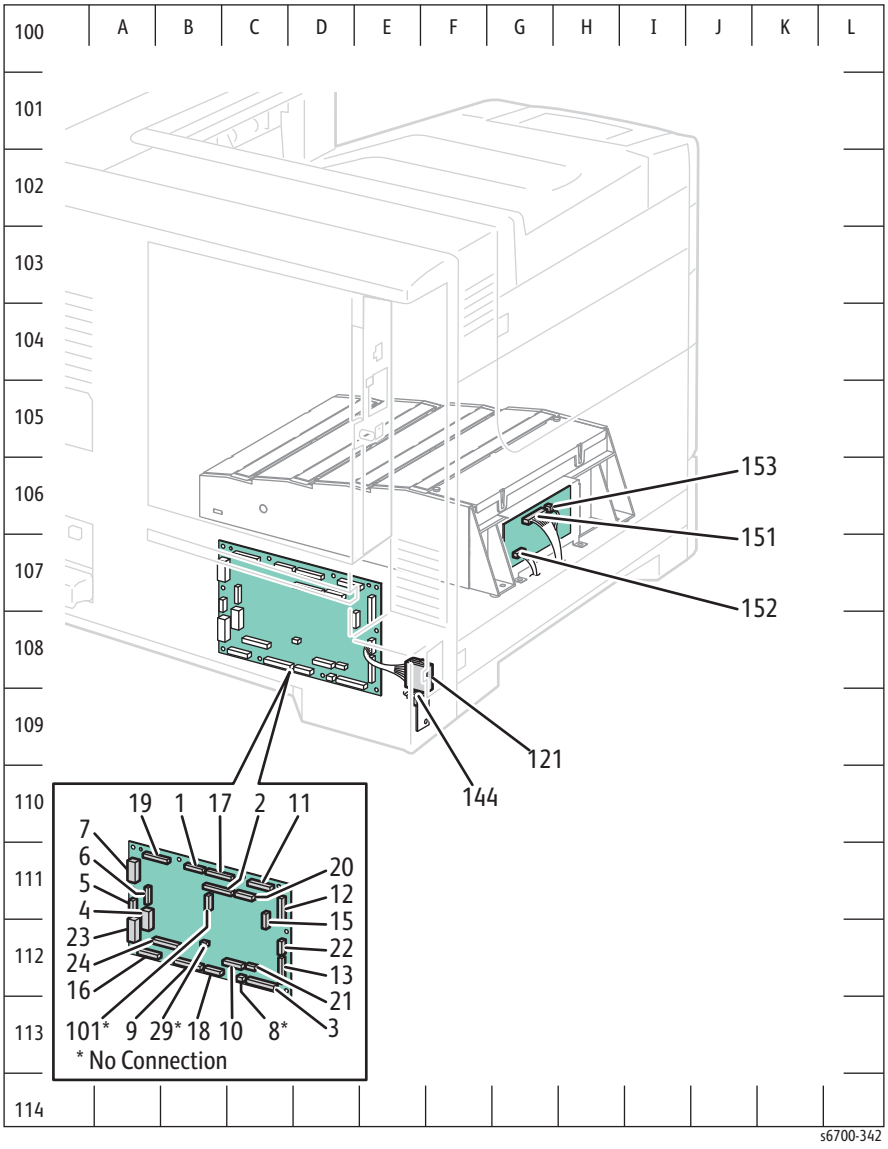
## Map 3 - Right Door



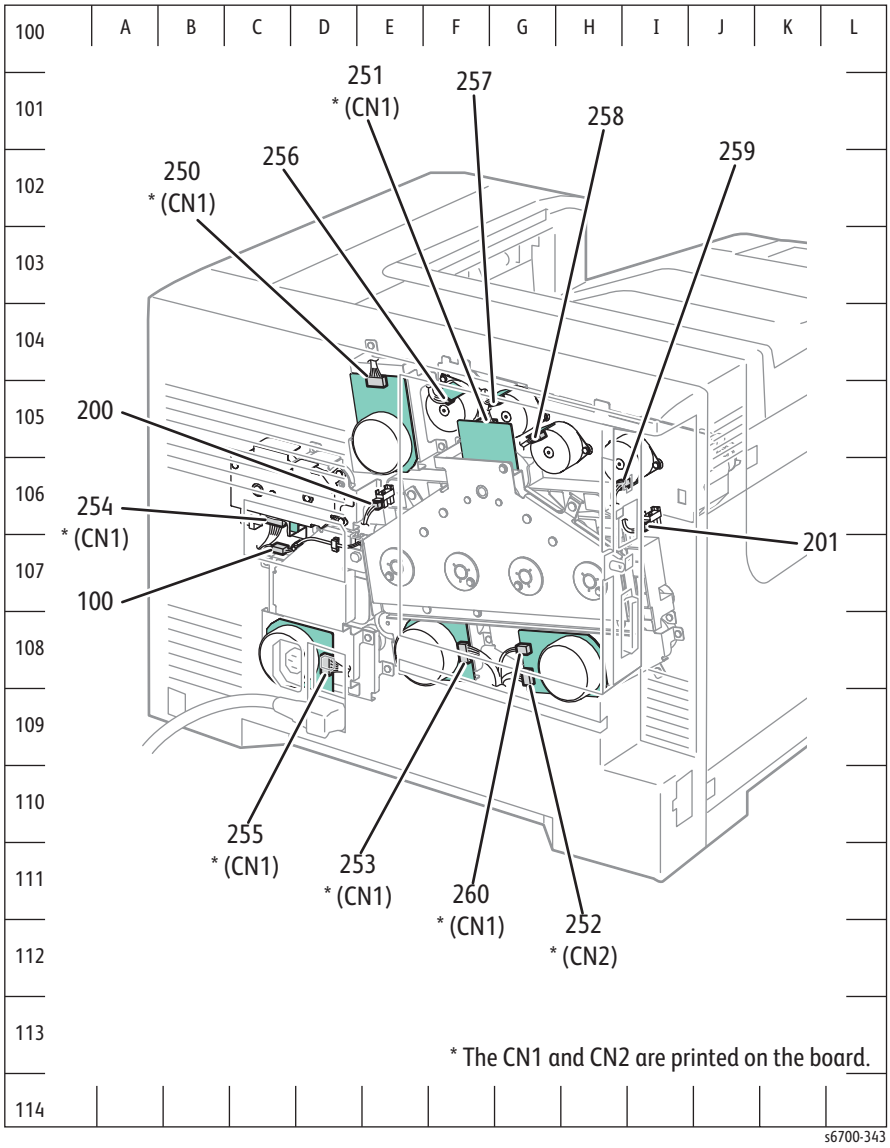
## Map 4 - LVPS and IP Board



## Map 5 - MCU Board and Laser Unit



## Map 6 - Drive


100
A
B
C
D
E
F
G
H
I
J
K
L
101
102
103
104
105
106
107
108
109
110
111
112
113
114
251
* (CN1)
257
258
259
256
250
* (CN1)
200
254
* (CN1)
100
201
255
* (CN1)
253
* (CN1)
260
* (CN1)
252
* (CN2)
* The CN1 and CN2 are printed on the board.
s6700-343

# Feeder Plug/Jack Designators

## 550-Sheet Feeder Plug/Jack Designators

**550-Sheet Feeder Plug/Jack Designator**

| P/J | Map | Coordinates | Remarks |
|---|---|---|---|
| 181 | 7 | F-199 | Connects OPT TOP Harness and LPP/MOT Harness |
| 183 | 7 | G-195 | Connects OPT SW Harness and OPT TOP Harness |
| 350 | 7 | F-194 | Connects Feeder Board and OPT TOP Harness |
| 351 | 7 | F-194 | Connects Feeder Board and OPT SW Harness |
| 352 | 7 | F-195 | Connects Feeder Board and OPT CL Harness |
| 353 | 7 | F-194 | Connects Feeder Board and OPT SW Harness |
| 354 | 7 | E-194 | Connects Feeder Board and OPT CL Harness |
| 355 | 7 | E-194 | Connects Feeder Board and OPT MOT Harness |
| 356 | 7 | F-194 | No Connection |
| 357 | 7 | C-193 | Connects Feed Motor and OPT MOT Harness |
| 358 | 7 | E-194 | Connects Take Away Clutch and OPT CL Harness |
| 359 | 7 | E-194 | Connects Feed Clutch and OPT CL Harness |
| 360 | 7 | J-200 | Connects RH Cover Switch and OPT SW Harness |
| 361 | 7 | F-193 | Connects OPT PATH Harness and OPT SW Harness |
| 363 | 7 | H-200 | Connects Take Away Sensor and OPT PATH Harness |
| 364 | 7 | G-200 | Connects No Paper Sensor and OPT PATH Harness |
| 365 | 7 | F-200 | Connects Size Switch and LPP/MOT Harness |
| 366 | 7 | H-201 | Connects Low Paper Sensor and OPT CL Harness |
| 367 | 7 | H-201 | Connects Low Paper 50 % Sensor and OPT CL Harness |

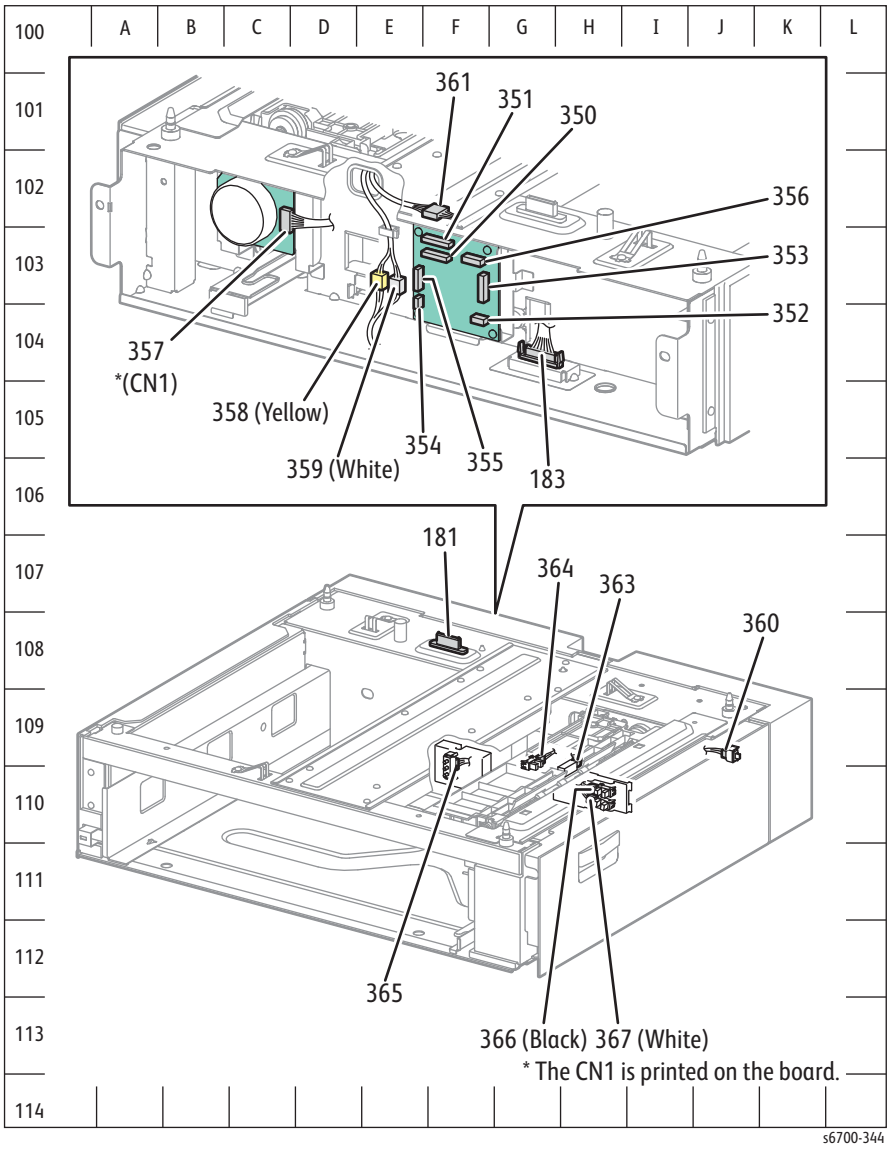
## 1100-Sheet Feeder Plug/Jack Designators

**1100-Sheet Feeder Plug/Jack Designators**

| P/J | Map | Coordinates | Remarks |
|---|---|---|---|
| 181 | 8 | F-213 | Connects OPT TOP Harness and LPP/MOT Harness |
| 183 | 8 | G-210 | Connects OPT SW Harness and OPT TOP Harness |
| 350 | 8 | F-208 | Connects Feeder Board and OPT TOP Harness |
| 351 | 8 | F-208 | Connects Feeder Board and OPT SW Harness |
| 352 | 8 | F-209 | Connects Feeder Board and OPT CL Harness |
| 353 | 8 | F-209 | Connects Feeder Board and OPT SW Harness |
| 354 | 8 | F-209 | Connects Feeder Board and OPT CL Harness |
| 355 | 8 | F-209 | Connects Feeder Board and OPT MOT Harness |
| 356 | 8 | F-208 | No Connection |
| 357 | 8 | C-208 | Connects Feed Motor and OPT MOT Harness |
| 358 | 8 | E-209 | Connects Take Away Clutch and OPT CL Harness |
| 359 | 8 | E-209 | Connects Feed Clutch and OPT CL Harness |
| 360 | 8 | J-215 | Connects RH Cover Switch and OPT SW Harness |
| 361 | 8 | F-208 | Connects OPT PATH Harness and OPT SW Harness |
| 363 | 8 | H-215 | Connects Take Away Sensor and OPT PATH Harness |
| 364 | 8 | G-215 | Connects No Paper Sensor and OPT PATH Harness |
| 365 | 8 | F-225 | Connects Size Switch and LPP/MOT Harness |
| 366 | 7 | H-201 | Connects Low Paper Sensor and OPT CL Harness |
| 367 | 7 | H-201 | Connects Low Paper 50 % Sensor and OPT CL Harness |

# Feeder Plug/Jack Locator Diagrams

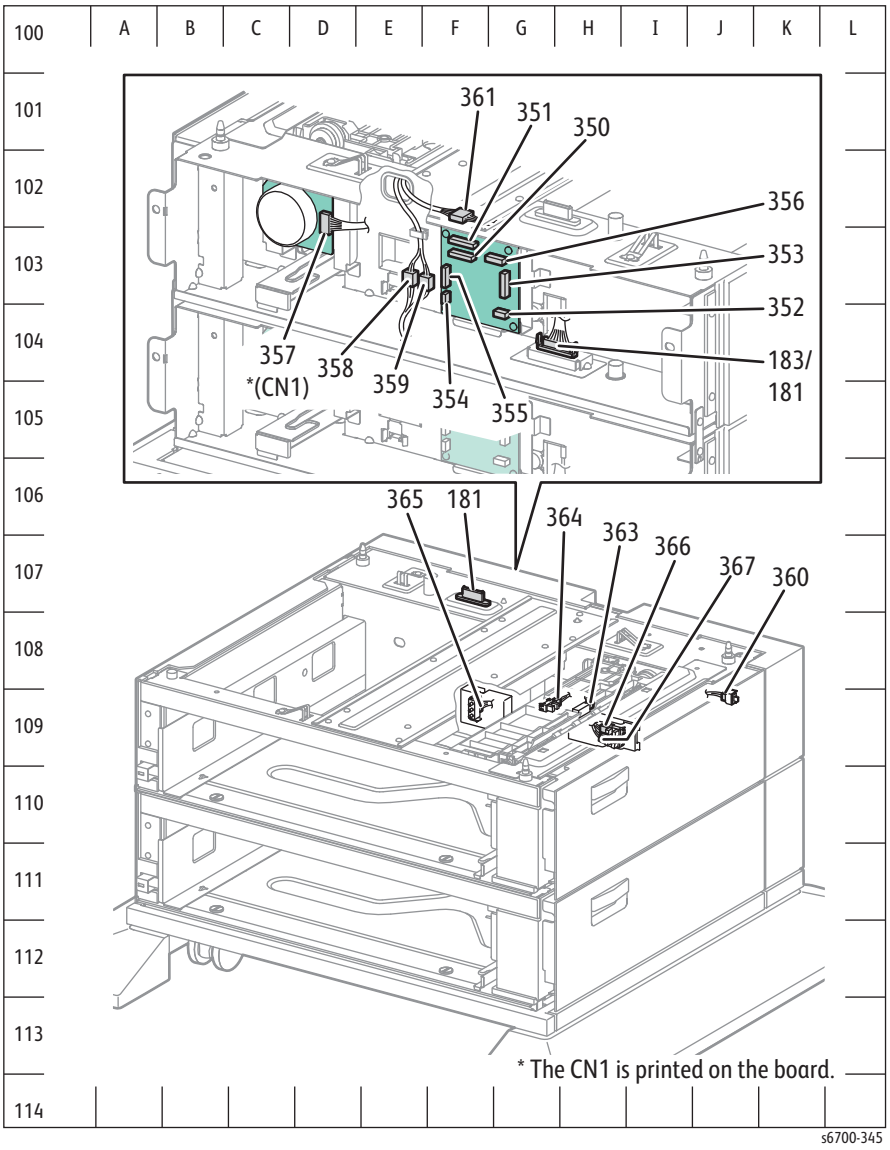
## Map 7 - 550-Sheet Feeder



## Map 8 - 1100-Sheet Feeder

**Note**

The P/J layout of the HCF is common among the upper and lower sections.



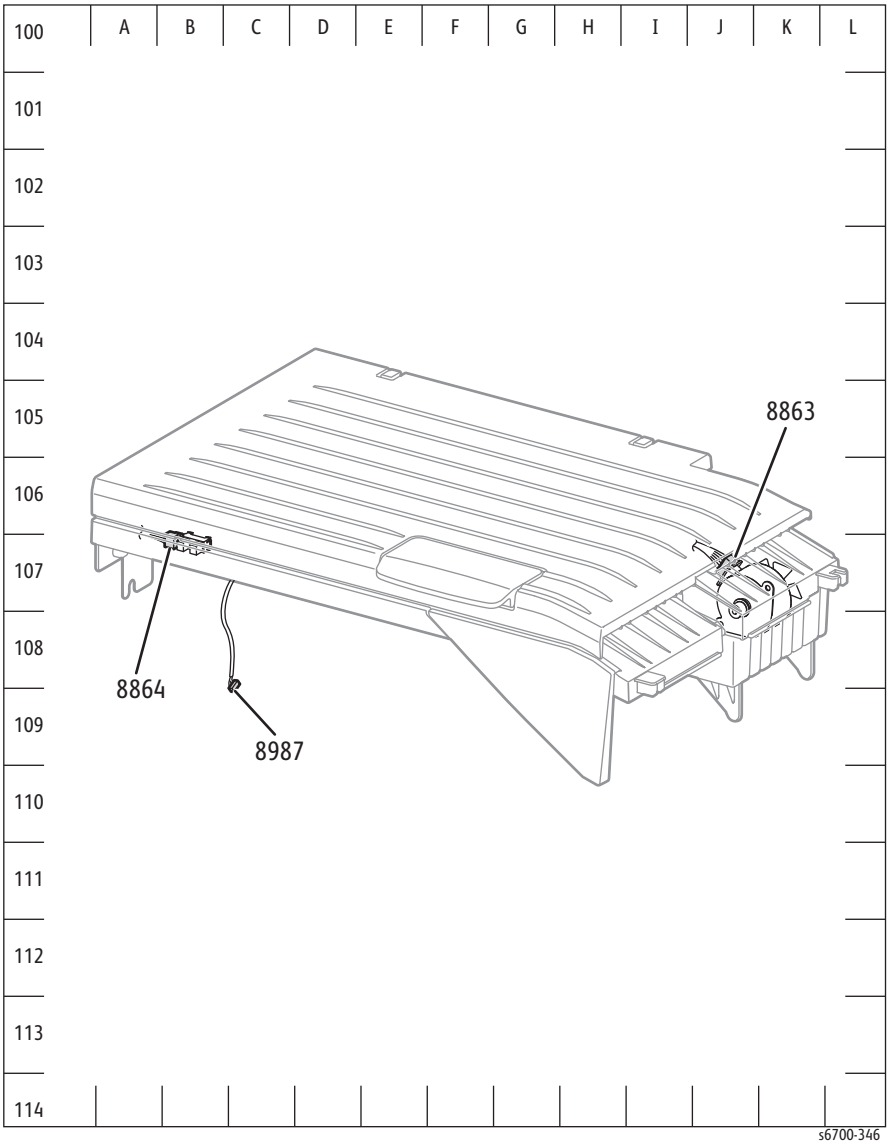
# Finisher Plug/Jack Designators

**Finisher Plug/Jack Designators**

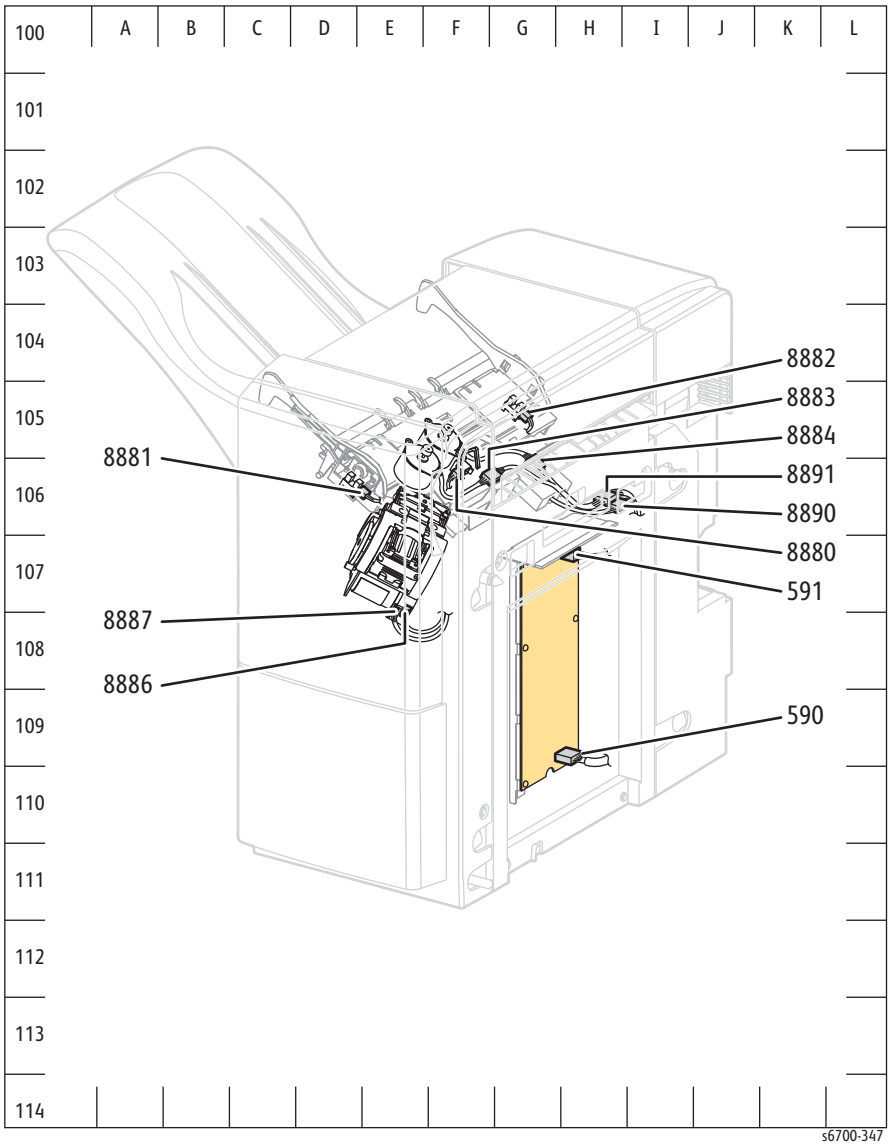
| P/J | Map | Coordinates | Remarks |
|---|---|---|---|
| 590 | 10 | G-126 | Connects LVPS and POWER Harness |
| 591 | 10 | G-123 | Connects LVPS and LVPS Harness |
| 8373 | 11 | I-144 | No Connection |
| 8863 | 9 | I-108 | Connects Horizontal Transport Motor and HTU Harness |
| 8864 | 9 | B-108 | Connects Top Cover Open Sensor and HTU Harness |
| 8869 | 11 | E-133 | Connects Compile Exit Sensor and SNR2 Harness |
| 8870 | 11 | D-135 | Connects Eject Clamp Home Sensor and SNR2 Harness |
| 8871 | 11 | D-135 | Connects Set Clamp Home Sensor and SNR2 Harness |
| 8872 | 11 | E-136 | Connects Stacker No Paper Sensor and SNR2 Harness |
| 8873 | 11 | E-135 | Connects Stack Height Sensor1 and SNR2 Harness |
| 8874 | 11 | E-135 | Connects Stack Height Sensor2 and SNR2 Harness |
| 8876 | 11 | D-133 | Connects Sub Paddle Solenoid and MOT2 Harness |
| 8877 | 11 | C-134 | Connects Set Clamp Clutch and MOT2 Harness |
| 8878 | 11 | D-136 | Connects Eject Motor and MOT2 Harness |
| 8879 | 11 | C-135 | Connects Transport Motor and MOT2 Harness |
| 8880 | 10 | E-122 | Connects Compile Tray No Paper Sensor and COMP1 Harness |
| 8881 | 10 | D-122 | Connects Front Tamper Home Sensor and COMP1 Harness |
| 8882 | 10 | G-121 | Connects Rear Tamper Home Sensor and COMP1 Harness |
| 8883 | 10 | F-122 | Connects Rear Tamper Motor and COMP2 Harness |
| 8884 | 10 | G-122 | Connects Front Tamper Motor and COMP2 Harness |
| 8885 | 11 | E-137 | Connects Stacker Motor and MOT3 Harness |
| 8886 | 10 | E-124 | Connects Stapler and SNR1 Harness |
| 8887 | 10 | D-124 | Connects Stapler and MOT1 Harness |
| 8889 | 11 | G-132 | Connects Front Door Switch and I/L SW Harness |
| 8890 | 10 | H-122 | Connects Compile Tray Harness and SNR1 Harness |
| 8891 | 10 | H-122 | Connects Compile Tray Harness and MOT1 Harness |
| 8980 | 11 | H-143 | Connects Main Board and LVPS Harness |
| 8982 | 11 | J-144 | Connects Main Board and Interlock Switch Harness |
| 8983 | 11 | J-143 | Connects Main Board and MOT1 Harness |
| 8984 | 11 | J-143 | Connects Main Board and MOT2 Harness |
| 8986 | 11 | I-142 | Connects Main Board and MOT3 Harness |
| 8987 | 11 | H-142 | Connects Main Board and Horizontal Transport Harness |
| 8988 | 11 | I-142 | Connects Main Board and SNR1 Harness |
| 8989 | 11 | I-142 | Connects Main Board and SNR2 Harness |
| 8990 | 11 | H-144 | Connects Main Board and Interface Harness |
| AC | 11 | A-141 | Connects AC Power Cable and Printer |
| CN4 | 11 | A-139 | Connects Interface Harness and Printer |

# Finisher Plug/Jack Locator Diagrams

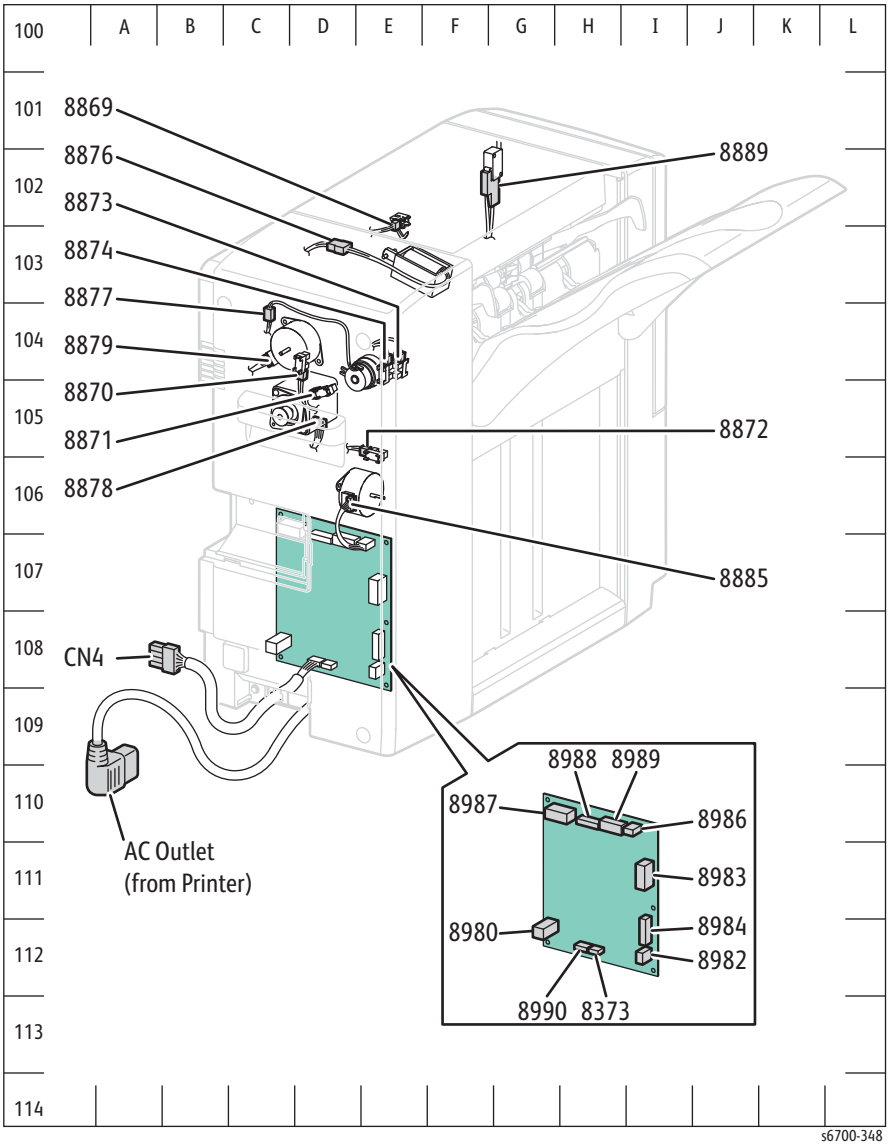
## Map 9 - Horizontal Transport



## Map 10 - Compile Tray



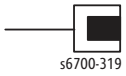
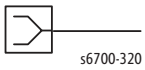
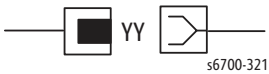
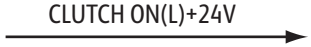
## Map 11 - Drive and Main Board

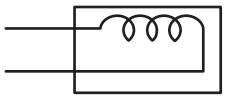
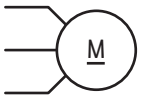
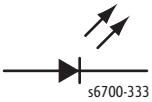
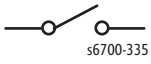
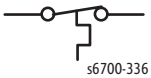


# Wiring Diagrams

## Notations Used in the Wiring Diagrams

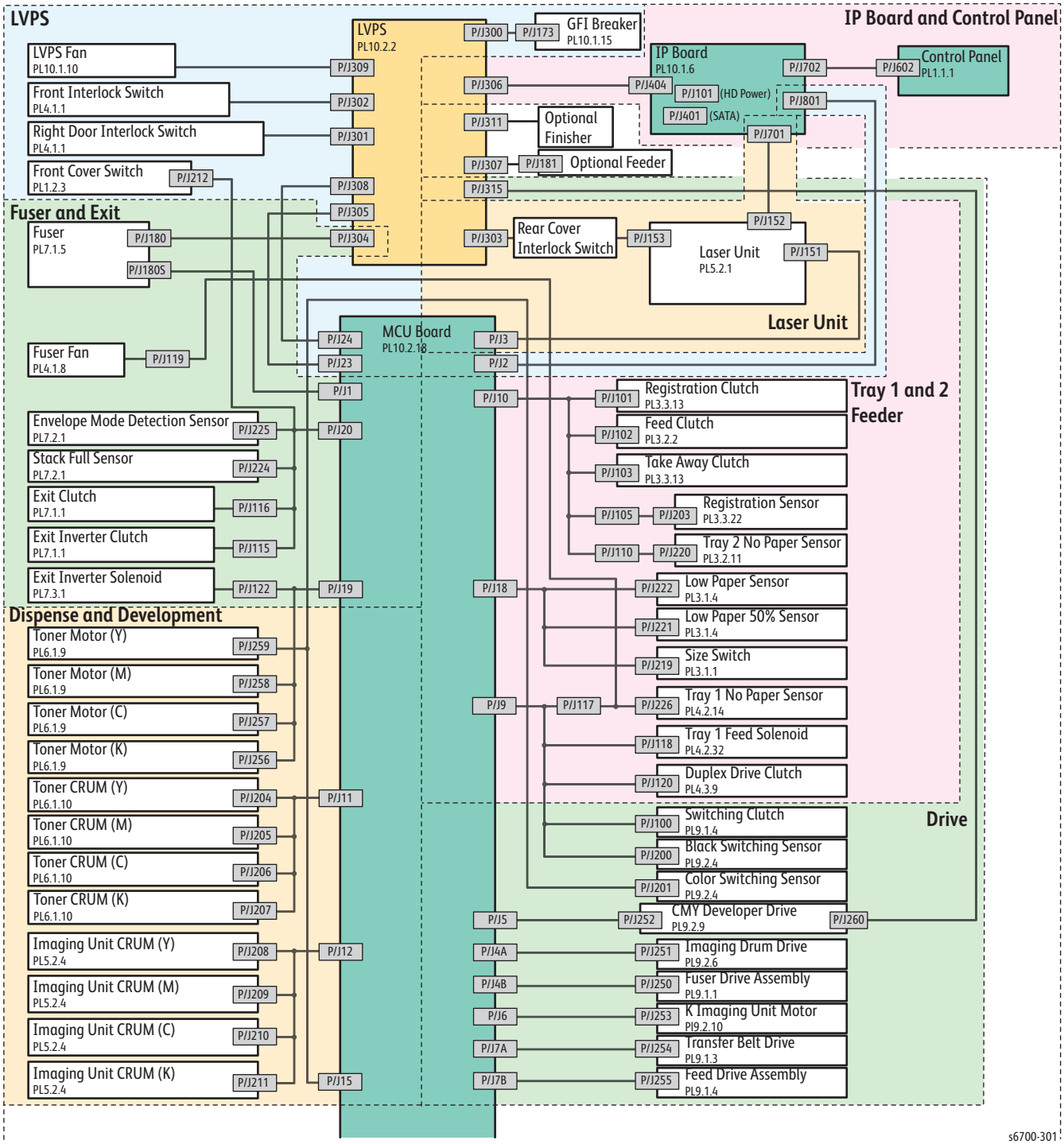
The following table lists the symbols used in the wiring diagrams.

| Symbol | Description |
|---|---|
|  s6700-319 | Denotes a Plug. |
|  s6700-320 | Denotes a Jack. |
| P/Jxx  YY s6700-321 | Denotes Pin yy and Jack yy of the connector Pxx and Jxx. |
| JPxxx  s6700-322 | Denotes a Jumper Point (JPxxx/xxx). Each end of the Jumper connection has a numeric designation. |
|   s6700-323 | Denotes the parts.<br>PL X.Y.Z implies the item “Z” of plate (PL) “X.Y” in Parts List. |
|   s6700-324 | Denotes functional parts attached with functional parts name. |
|   s6700-325 | Denotes the control and its outline in the Board. |
| DEVE_A  s6700-326 | Denotes a connection between parts with harness or wires, attached with signal name/ contents. |
| CLUTCH ON(L)+24V  s6700-327 | Denotes function, and logic value of the signal to operate the function (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal. |

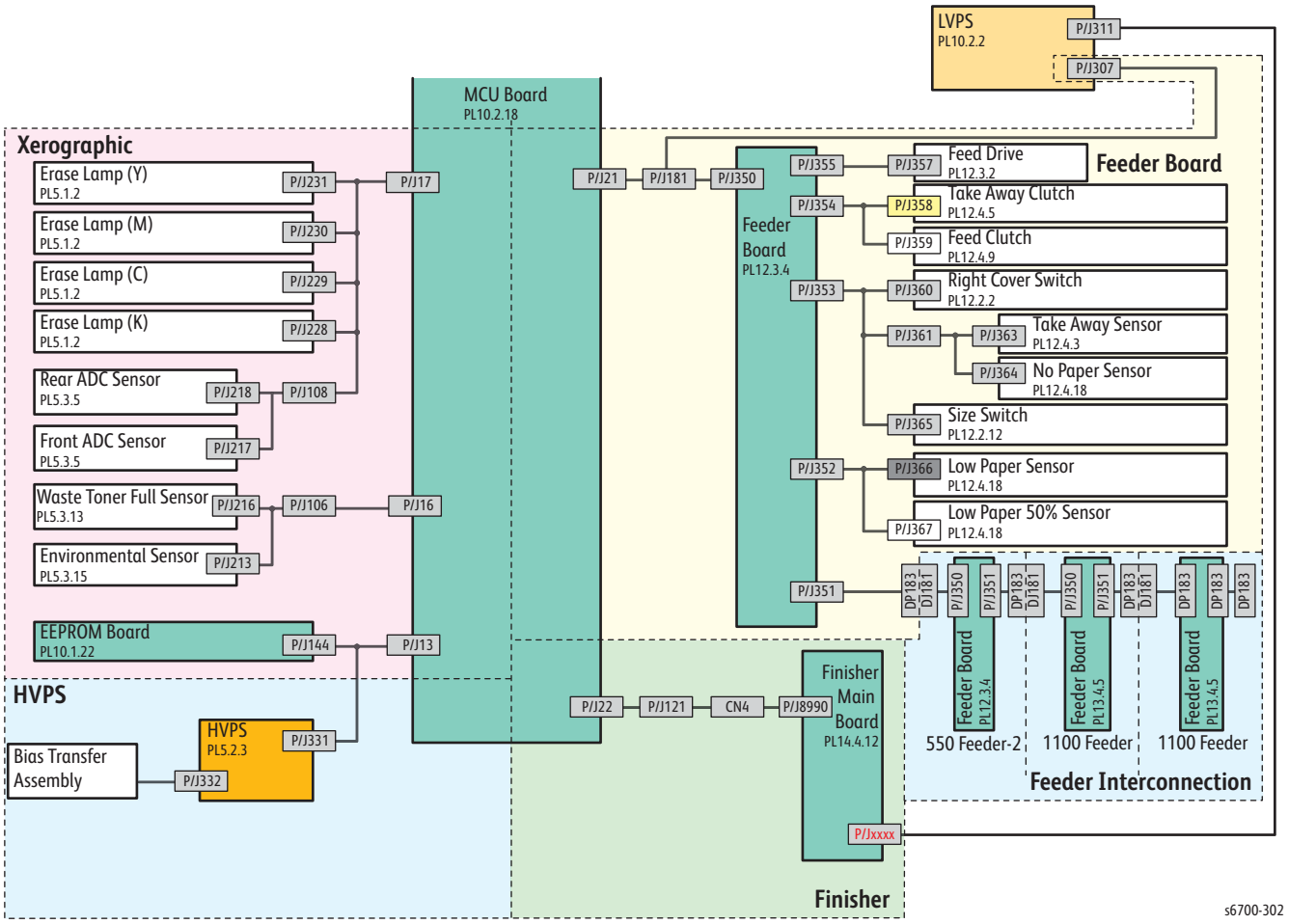
| Symbol | Description |
|---|---|
|  s6700-328 | Denotes function, and logic value of the signal when the function operated (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal. |
|  s6700-329 | Denotes a connection between wires. |
|  s6700-330 | Denotes a Clutch or Solenoid. |
|  s6700-331 | Denotes a Motor. |
|  s6700-332 | Denotes a Photo Sensor. |
|  s6700-333 | Denotes an LED. |
|  s6700-334 | Denotes a Safety Interlock Switch. |
|  s6700-335 | Denotes an On-Off Switch (single-pole, single-throw switch). |
|  s6700-336 | Denotes an On-Off Switch (Temperature - normally close). |
|  s6700-337 | Denotes an NPN Photo-transistor. |
| I/L +24 VDC | Denotes DC voltage when the Interlock Switch in MCU Board turns On. |
| +5 VDC<br>+3.3 VDC | Denotes DC voltage. |
| SG | Denotes signal ground. |
| AG | Denotes analog ground. |
| RTN | Denotes return. |

# Printer Wiring

## System Connections 1/2



## System Connections 2/2



## Printer Wire Route List

The following table lists printer wire routing shown in the diagrams on the following pages.

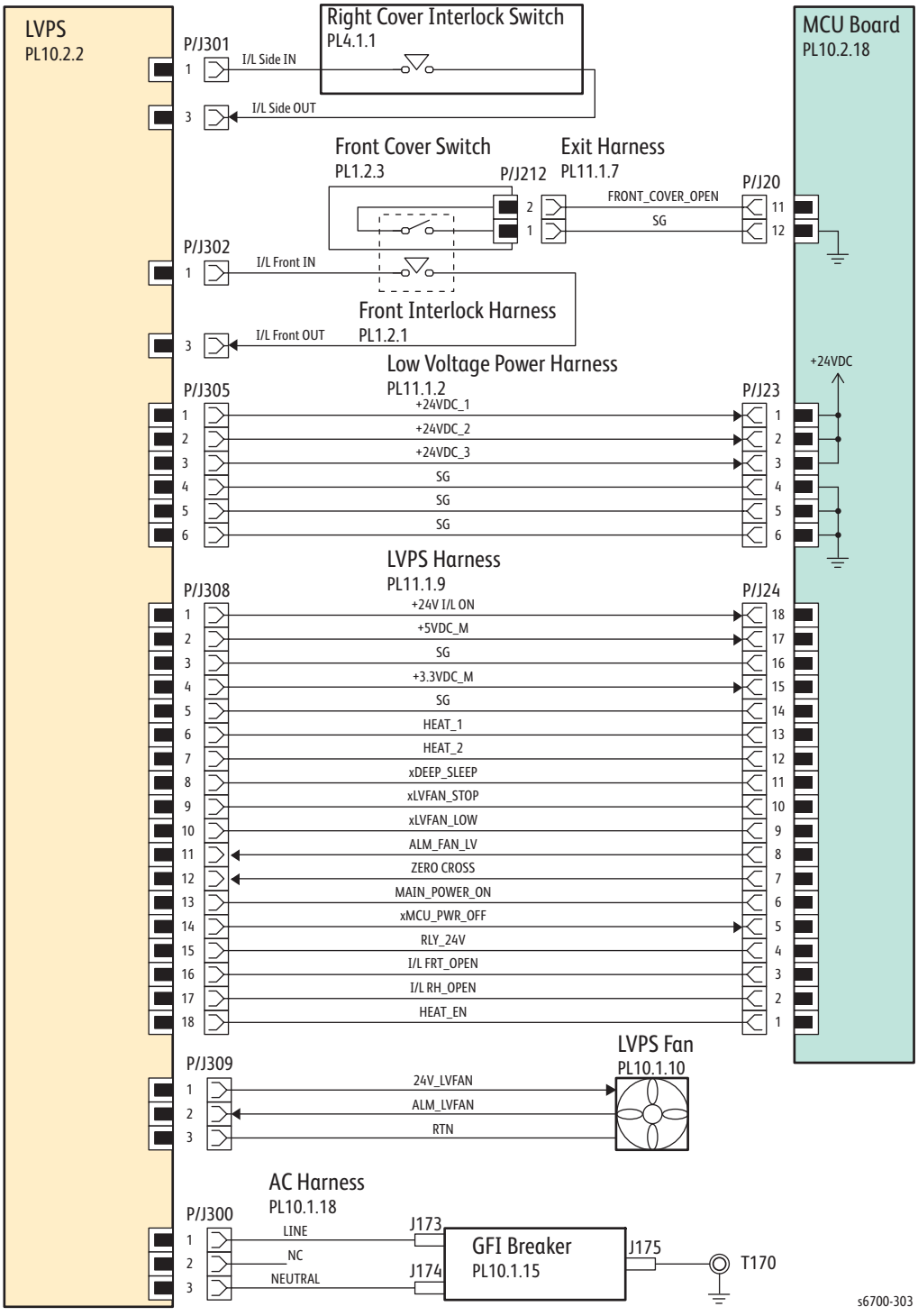
**Printer Wire Route List**

| Wiring Diagram | Description |
|---|---|
| **LVPS** | Connects the LVPS and MCU Board. |
| | Connects the GFI Breaker and LVPS. |
| | Connects the LVPS Fan and LVPS. |
| | Connects the HARNESS ASSY I/L RH and LVPS. |
| | Connects the HARNESS ASSY I/L FRT and LVPS. |
| | Connects the Front Cover Interlock and MCU Board. |
| **Feeders** | Connects the Registration Clutch and MCU Board. |
| | Connects the Feed Clutch and MCU Board. |
| | Connects the Take Away Clutch and MCU Board. |
| | Connects the Registration Sensor and MCU Board. |
| | Connects the Tray 2 No Paper Sensor and MCU Board. |
| | Connects the Tray 1 No Paper Sensor and MCU Board. |
| | Connects the Tray 1 Feed Solenoid and MCU Board. |
| | Connects the Exit Inverter Clutch and MCU Board. |
| | Connects the Low Paper Sensor and MCU Board. |
| | Connects the Low Paper Sensor (50%) and MCU. |
| | Connects the Size Switch and MCU Board. |
| **Drive** | Connects the CMY Developer Drive Assy and MCU Board. |
| | Connects the CMY Developer Drive Assy and LVPS ASSY. |
| | Connects the Imaging Drum Drive Assy and MCU Board. |
| | Connects the Fuser Drive Assy and MCU Board. |
| | Connects the K Developer Drive Assy and MCU Board. |
| | Connects the Transfer Belt Drive Assy and MCU Board. |
| | Connects the Feed Motor and MCU Board. |
| | Connects the Switching Clutch and MCU Board. |
| | Connects the Black Switching Sensor and MCU Board. |
| | Connects the Color Switching Sensor and MCU Board. |
| **Laser Unit** | Connects the Laser Unit and MCU Board. |
| **Xerographic** | Connects the Erase LED (Y) and MCU Board. |
| | Connects the Erase LED (M) and MCU Board. |
| | Connects the Erase LED (C) and MCU Board. |
| | Connects the Erase LED (K) and MCU Board. |
| | Connects the Rear ADC Sensor and MCU Board. |
| | Connects the Front ADC Sensor and MCU Board. |
| | Connects the Waste Box Full Sensor and MCU Board. |
| | Connects the Humidity Sensor and MCU Board. |
| | Connects the EEPROM Board and MCU Board. |

**Printer Wire Route List**

| Wiring Diagram | Description |
|---|---|
| **HVPS** | Connects the HVPS and MCU Board. |
| **Developer** | Connects the Toner Motor (Y) and MCU Board. |
| | Connects the Toner Motor (M) and MCU Board. |
| | Connects the Toner Motor (C) and MCU Board. |
| | Connects the Toner Motor (K) and MCU Board. |
| | Connects the Developer CRUM (Y) and MCU Board. |
| | Connects the Developer CRUM (M) and MCU Board. |
| | Connects the Developer CRUM (C) and MCU Board. |
| | Connects the Developer CRUM (K) and MCU Board. |
| | Connects the Toner Cartridge CRUM (Y) and MCU Board. |
| | Connects the Toner Cartridge CRUM (M) and MCU Board. |
| | Connects the Toner Cartridge CRUM (C) and MCU Board. |
| | Connects the Toner Cartridge CRUM (K) and MCU Board. |
| **Fuser and Exit** | Connects the Fuser Fan and MCU Board. |
| | Connects the DRIVE ASSY EXIT and MCU Board. |
| | Connects the CHUTE ASSY EXIT and MCU Board. |
| | Connects the CHUTE ASSY INVERT and MCU Board. |
| | Connects the Fuser and MCU Board. |
| | Connects the Fuser and LVPS. |
| **IP Board** | Connects the IP Board and MCU Board. |
| | Connects the Control Panel and IP Board. |
| | Connects the LVPS and IP Board |

## LVPS

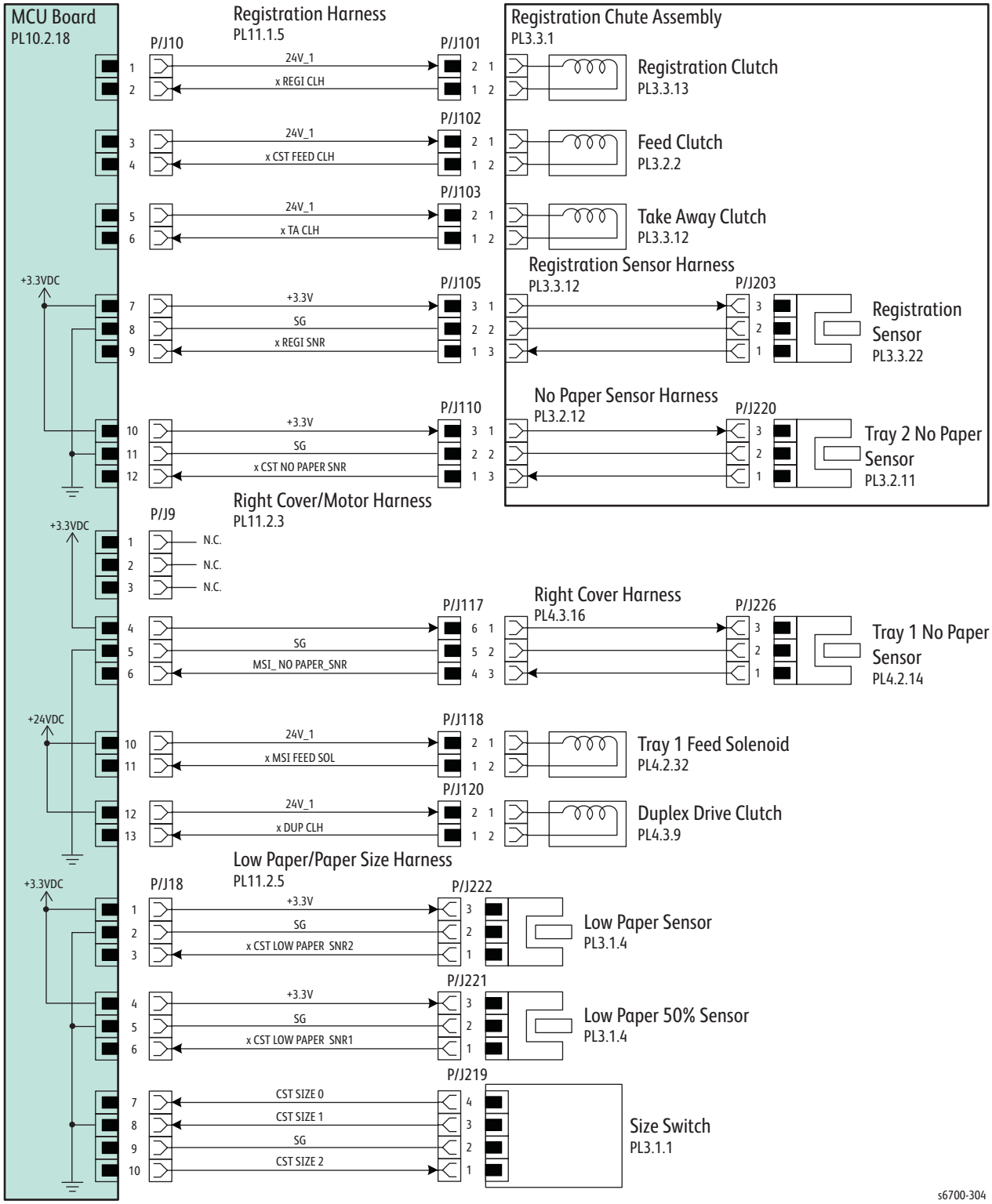

LVPS
PL10.2.2
MCU Board
PL10.2.18
Right Cover Interlock Switch
PL4.1.1
P/J301
1
I/L Side IN
3
I/L Side OUT
Front Cover Switch
PL1.2.3
P/J212
Exit Harness
PL11.1.7
P/J20
FRONT_COVER_OPEN
SG
2
1
11
12
P/J302
1
I/L Front IN
Front Interlock Harness
PL1.2.1
3
I/L Front OUT
Low Voltage Power Harness
PL11.1.2
+24VDC
P/J305
P/J23
+24VDC_1
+24VDC_2
+24VDC_3
SG
SG
SG
LVPS Harness
PL11.1.9
P/J308
P/J24
+24V I/L ON
+5VDC_M
SG
+3.3VDC_M
SG
HEAT_1
HEAT_2
xDEEP_SLEEP
xLVFAN_STOP
xLVFAN_LOW
ALM_FAN_LV
ZERO CROSS
MAIN_POWER_ON
xMCU_PWR_OFF
RLY_24V
I/L FRT_OPEN
I/L RH_OPEN
HEAT_EN
LVPS Fan
PL10.1.10
P/J309
24V_LVFAN
ALM_LVFAN
RTN
AC Harness
PL10.1.18
P/J300
LINE
NC
NEUTRAL
J173
J174
GFI Breaker
PL10.1.15
J175
T170
s6700-303

## LVPS Signals

**LVPS Signal Names and Function**

| Signal Name | Description |
|---|---|
| +24V I/L ON, +5VDC M, +3.3VDC M<br>HEAT 1~3, HEAT EN<br>I/L FRT OPEN,<br>I/L RH OPEN<br>DEEP SLEEP<br>ZERO CROSS<br>MAIN POWER ON<br>MCU PWR OFF<br>RLY 24V | LVPS control signals |
| LVFAN STOP<br>LVFAN LOW<br>ALM FAN LV | Fan control signals |

## Tray 1 and 2 Feeder

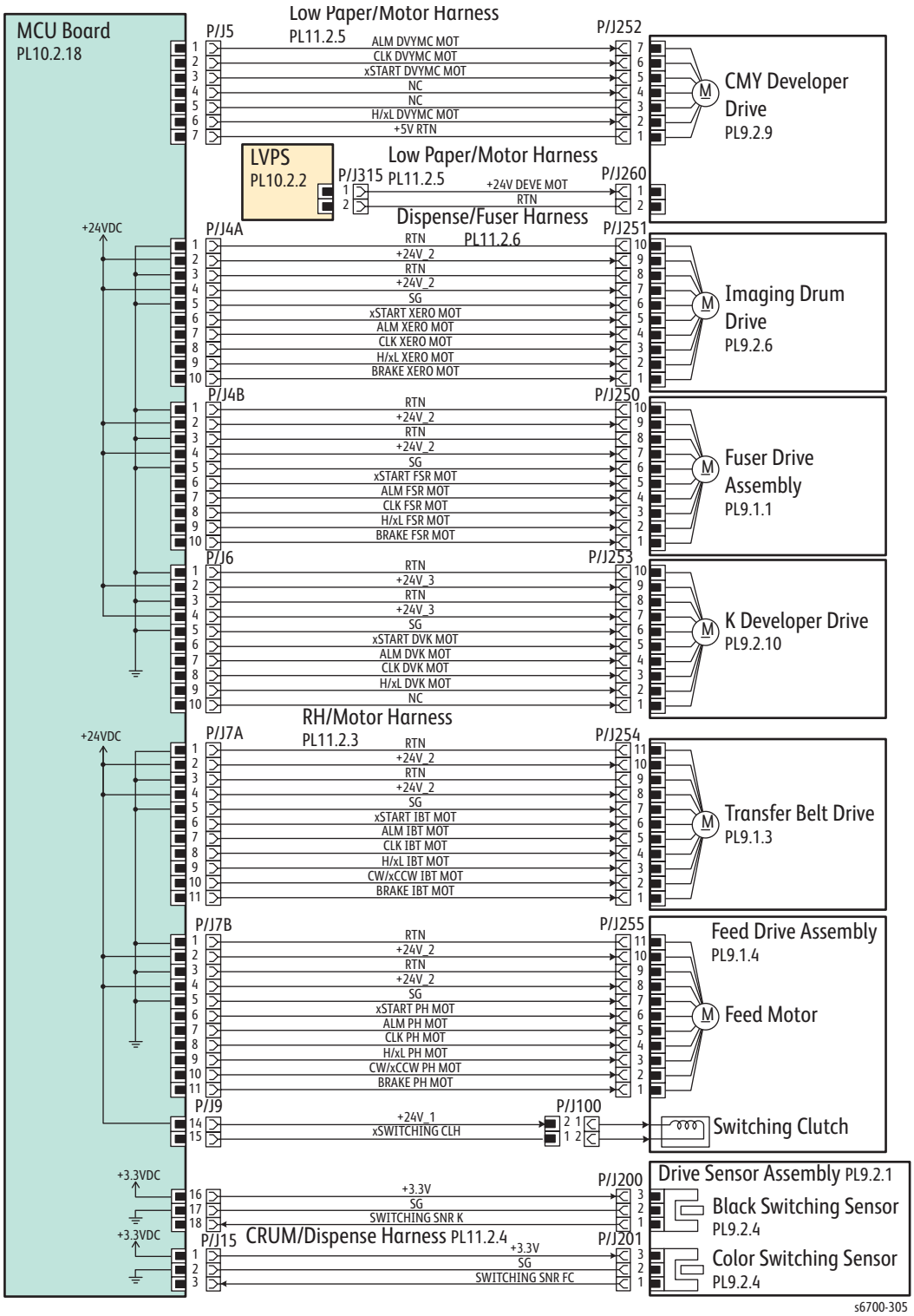


## Tray 1 and 2 Feeder Signals

**Tray 1 and 2 Feeder Signal Names and Function**

| Signal Name | Description |
|---|---|
| REGI CLH | Registration Clutch On/Off signal |
| CST FEED CLH | Tray 2 Feed Clutch On/Off signal |
| TA CLH | Take Away Clutch On/Off signal |
| REGI SNR | Registration Sensor media edge detect signal |
| CST NO PAPER SNR | Tray 2 media detect signal |
| MSI NO PAPER SNR | Tray 1 media detect signal |
| MSI FEED SOL | Tray 1 Feed Solenoid On/Off signal |
| DUP CLH | Exit Inverter Clutch On/Off signal |
| CST LOW PAPER SNR2 | Tray 2 Low Paper detect signal |
| CST LOW PAPER SNR1 | Tray 2 Low Paper detect signal at 50 % |
| CST SIZE 0<br>CST SIZE 1<br>CST SIZE 2 | Size Switch signals |

## Drive

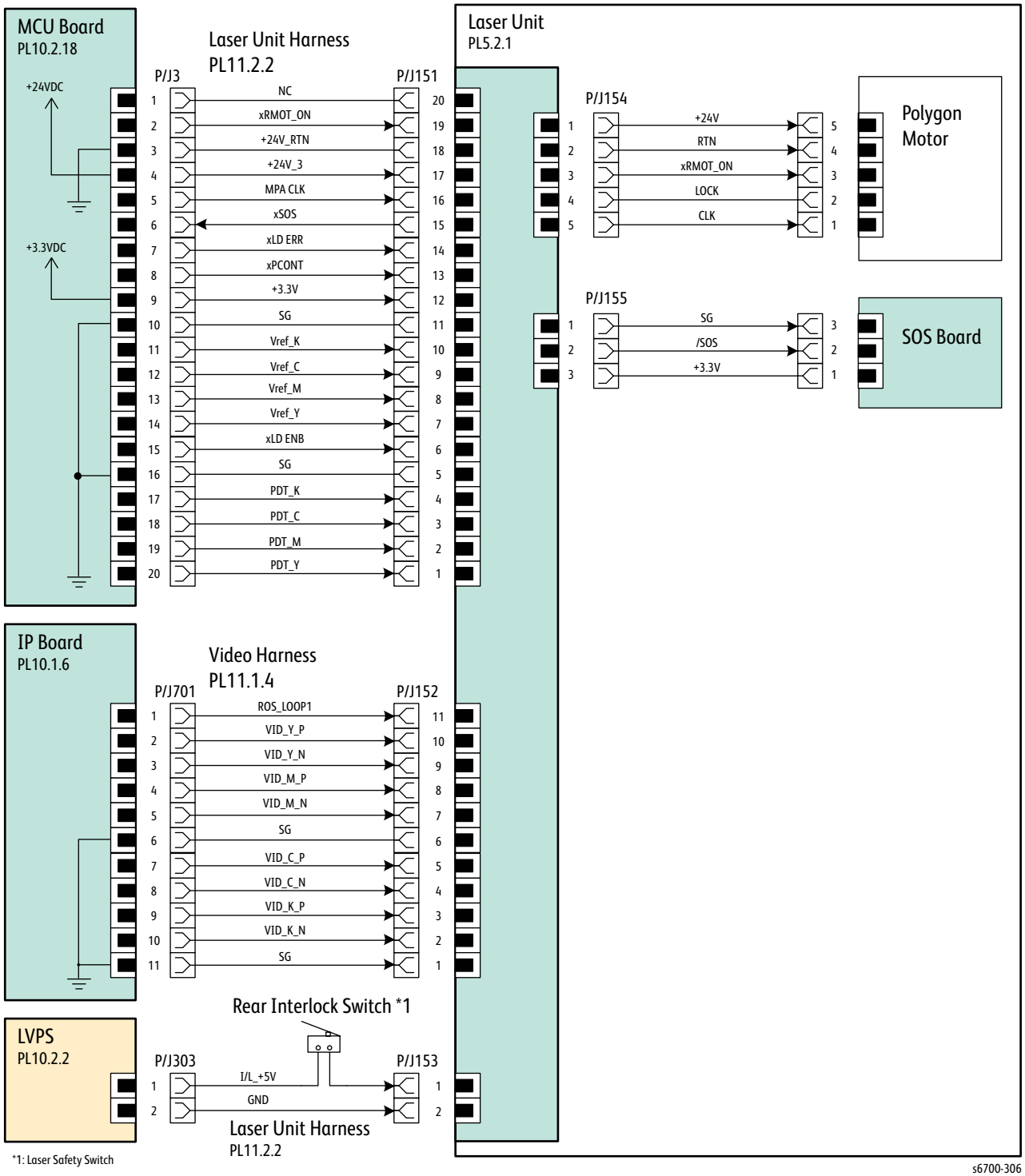

MCU Board
PL10.2.18
Low Paper/Motor Harness
PL11.2.5
P/J5
P/J252
ALM DVYMC MOT
CLK DVYMC MOT
xSTART DVYMC MOT
NC
NC
H/xL DVYMC MOT
+5V RTN
CMY Developer Drive
PL9.2.9
LVPS
PL10.2.2
Low Paper/Motor Harness
P/J315
PL11.2.5
P/J260
+24V DEVE MOT
RTN
Dispense/Fuser Harness
PL11.2.6
+24VDC
P/J4A
P/J251
RTN
+24V_2
RTN
+24V_2
SG
xSTART XERO MOT
ALM XERO MOT
CLK XERO MOT
H/xL XERO MOT
BRAKE XERO MOT
Imaging Drum Drive
PL9.2.6
P/J4B
P/J250
RTN
+24V_2
RTN
+24V_2
SG
xSTART FSR MOT
ALM FSR MOT
CLK FSR MOT
H/xL FSR MOT
BRAKE FSR MOT
Fuser Drive Assembly
PL9.1.1
P/J6
P/J253
RTN
+24V_3
RTN
+24V_3
SG
xSTART DVK MOT
ALM DVK MOT
CLK DVK MOT
H/xL DVK MOT
NC
K Developer Drive
PL9.2.10
RH/Motor Harness
PL11.2.3
+24VDC
P/J7A
P/J254
RTN
+24V_2
RTN
+24V_2
SG
xSTART IBT MOT
ALM IBT MOT
CLK IBT MOT
H/xL IBT MOT
CW/xCCW IBT MOT
BRAKE IBT MOT
Transfer Belt Drive
PL9.1.3
P/J7B
P/J255
RTN
+24V_2
RTN
+24V_2
SG
xSTART PH MOT
ALM PH MOT
CLK PH MOT
H/xL PH MOT
CW/xCCW PH MOT
BRAKE PH MOT
Feed Drive Assembly
PL9.1.4
Feed Motor
P/J9
P/J100
+24V_1
xSWITCHING CLH
Switching Clutch
+3.3VDC
+3.3VDC
P/J200
Drive Sensor Assembly PL9.2.1
+3.3V
SG
SWITCHING SNR K
Black Switching Sensor
PL9.2.4
P/J15
CRUM/Dispense Harness PL11.2.4
P/J201
+3.3V
SG
SWITCHING SNR FC
Color Switching Sensor
PL9.2.4
s6700-305

## Drive Signals

**Drive Signal Names and Function**

| Signal Name | Description |
|---|---|
| ALM DVYMC MOT<br>CLK DVYMC MOT<br>START DVYMC MOT<br>H/xL DVYMC MOT | Developer (YMC) drive control signals |
| START XERO MOT<br>ALM XERO MOT<br>CLK XERO MOT<br>H/xL XERO MOT<br>BRAKE XERO MOT | XERO MOTOR drive control signals |
| START FSR MOT<br>ALM FSR MOT<br>CLK FSR MOT<br>H/xL FSR MOT<br>BRAKE FSR MOT | Fuser Motor drive control signals |
| START DVK MOT<br>ALM DVK MOT<br>CLK DVK MOT<br>H/xL DVK MOT | Developer Motor (K) drive control signals |
| START IBT MOT<br>ALM IBT MOT<br>CLK IBT MOT<br>H/xL IBT MOT<br>CW/xCCW IBT MOT<br>BRAKE IBT MOT | Transfer Belt Motor drive control signals |
| START PH MOT<br>ALM PH MOT<br>CLK PH MOT<br>H/xL PH MOT<br>CW/xCCW PH MOT<br>BRAKE PH MOT | Drive control signal of the PH MOTOR |
| SWITCHING CLH | Color Mode Switching Clutch On/Off signal |
| SWITCHING SNR K | Color Mode Switching Sensor K detect signal of the Feed Motor |
| SWITCHING SNR FC | Color Mode Switching Sensor Color mode detect signal |

## Laser Unit

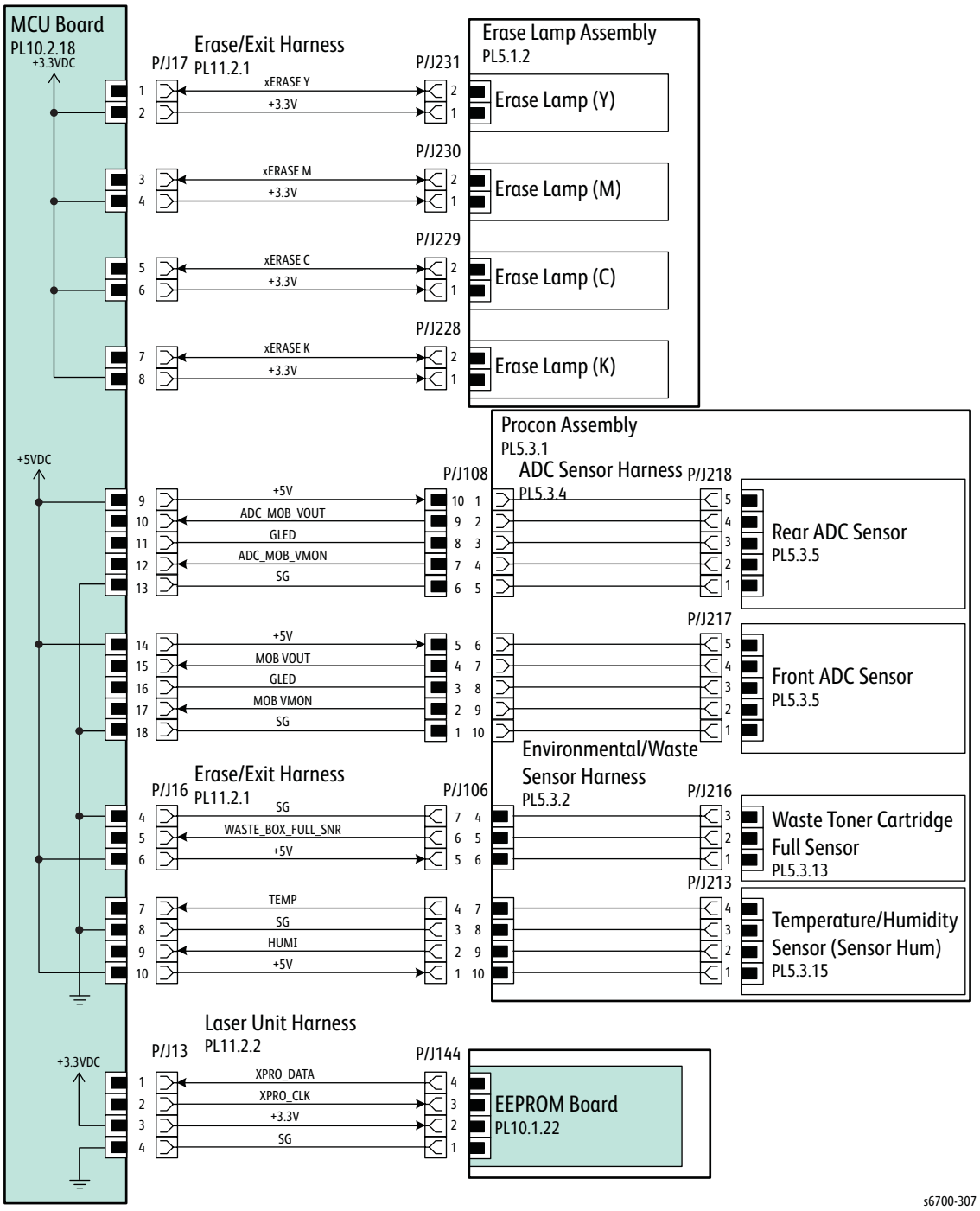

MCU Board
PL10.2.18
+24VDC
+3.3VDC
Laser Unit Harness
PL11.2.2
P/J3
P/J151
NC
xRMOT_ON
+24V_RTN
+24V_3
MPA CLK
xSOS
xLD ERR
xPCONT
+3.3V
SG
Vref_K
Vref_C
Vref_M
Vref_Y
xLD ENB
SG
PDT_K
PDT_C
PDT_M
PDT_Y
Laser Unit
PL5.2.1
P/J154
+24V
RTN
xRMOT_ON
LOCK
CLK
Polygon Motor
P/J155
SG
/SOS
+3.3V
SOS Board
IP Board
PL10.1.6
Video Harness
PL11.1.4
P/J701
P/J152
ROS_LOOP1
VID_Y_P
VID_Y_N
VID_M_P
VID_M_N
SG
VID_C_P
VID_C_N
VID_K_P
VID_K_N
SG
Rear Interlock Switch *1
LVPS
PL10.2.2
P/J303
P/J153
I/L_+5V
GND
Laser Unit Harness
PL11.2.2
*1: Laser Safety Switch
s6700-306

## Laser Unit Signals

**Laser Unit Signal Names and Function**

| Signal Name | Description |
|---|---|
| RMOT ON<br>MPA CLK | Polygon motor drive control signal |
| SOS | Reference signal for scan start |
| Vref K, C, M, Y | Emission control signal of the laser diode |
| LD ERR | Laser diode error signal |
| PCONT | Power control signal of the laser diode |
| PDT K, C, M, Y | Laser Unit video signals |
| ROS_LOOP1 | |
| VID K, C, M, Y P/N | Laser Unit video signals |
| SG | Signal Ground |

## Xerographic

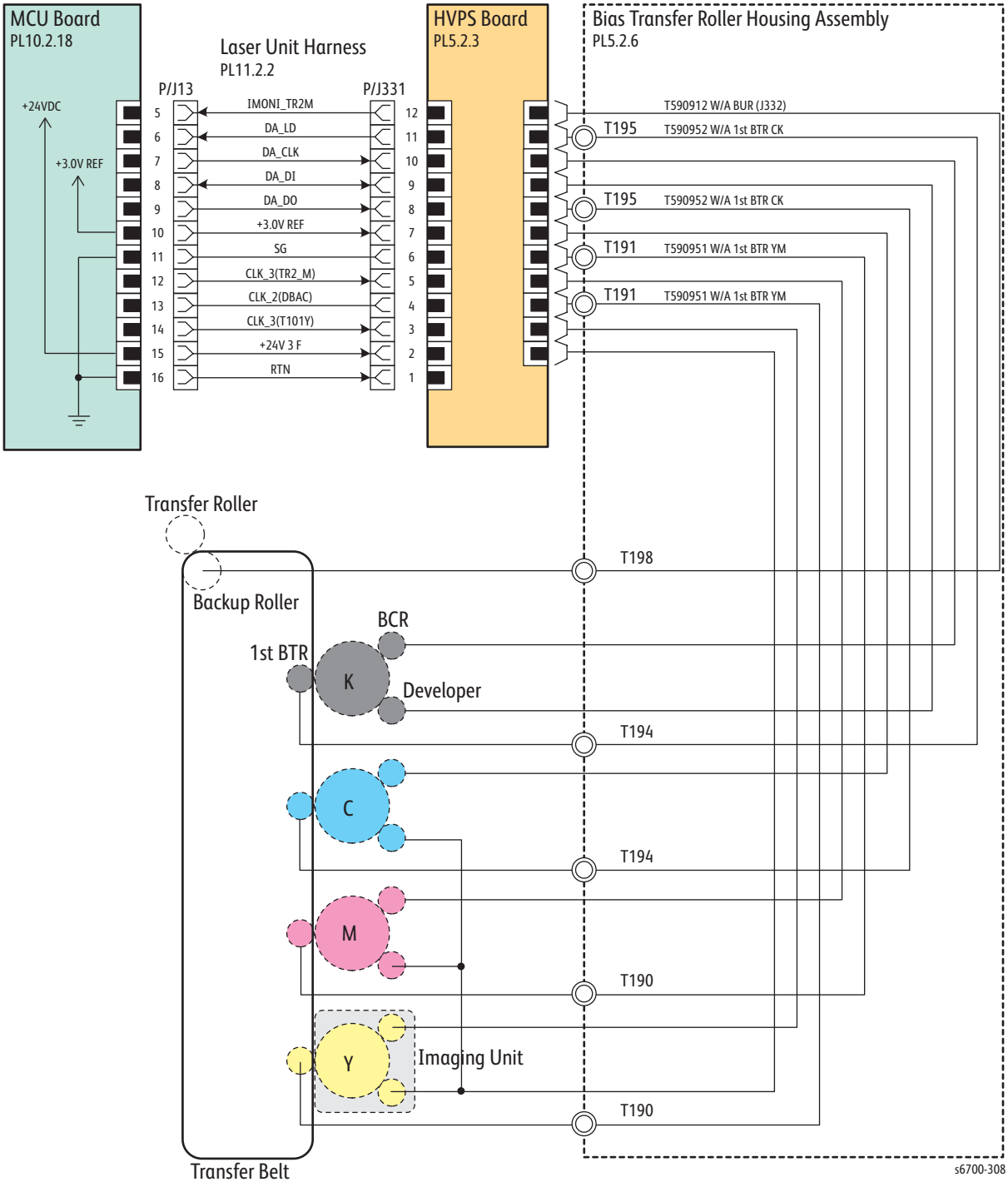


## Xerographic Signals

**Xerographic Signal Names and Function**

| Signal Name | Description |
|---|---|
| ERASE Y | Yellow erase LED On/Off signal |
| ERASE M | Mageneta erase LED On/Off signal |
| ERASE C | Cyan erase LED On/Off signal |
| ERASE K | Black erase LED On/Off signal |
| ADC MOB VOUT | Rear ADC Sensor density data |
| GLED | Rear ADC Sensor remote signal of the LED |
| ADC MOB VMON | Rear ADC Sensor control signal |
| MOB VOUT | Front ADC Sensor density data |
| GLED | Front ADC Sensor remote signal of the LED |
| MOB VMON | Front ADC Sensor control signal |
| WASTE BOX FULL SNR | Waste Box Full Sensor detect signal |
| TEMP | Humidity Sensor temperature data (Analog) |
| HUMI | Humidity Sensor humidity data (Analog) |
| XPRO DATA<br>XPRO CLK | EEPROM Board control signals |

## HVPS

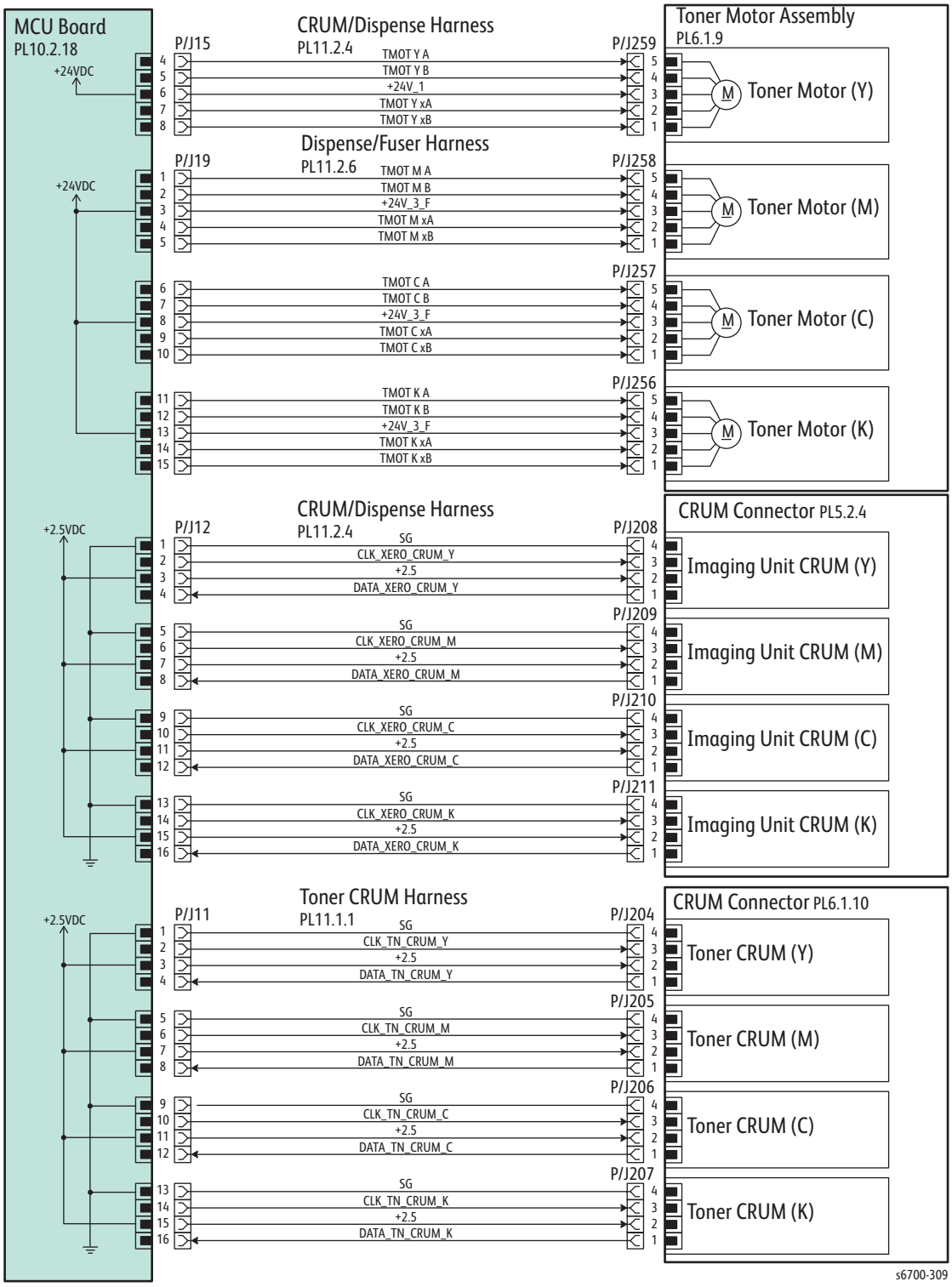

MCU Board
PL10.2.18
+24VDC
+3.0V REF
Laser Unit Harness
PL11.2.2
P/J13
P/J331
IMONI_TR2M
DA_LD
DA_CLK
DA_DI
DA_DO
+3.0V REF
SG
CLK_3(TR2_M)
CLK_2(DBAC)
CLK_3(T101Y)
+24V 3 F
RTN
HVPS Board
PL5.2.3
Bias Transfer Roller Housing Assembly
PL5.2.6
T590912 W/A BUR (J332)
T195
T590952 W/A 1st BTR CK
T195
T590952 W/A 1st BTR CK
T191
T590951 W/A 1st BTR YM
T191
T590951 W/A 1st BTR YM
Transfer Roller
T198
Backup Roller
BCR
1st BTR
K
Developer
T194
C
T194
M
T190
Y
Imaging Unit
T190
Transfer Belt
s6700-308

## HVPS Signals

**HVPS Signal Names and Function**

| Signal Name | Description |
|---|---|
| IMONI TR2M | HVPS control signals |
| DA LD | |
| DA CLK | |
| DA DI | |
| DA DO | |
| CLK 3(TR2_M) | |
| CLK 2(DBAC) | |
| CLK 3(T101Y) | |

## Dispense and Development

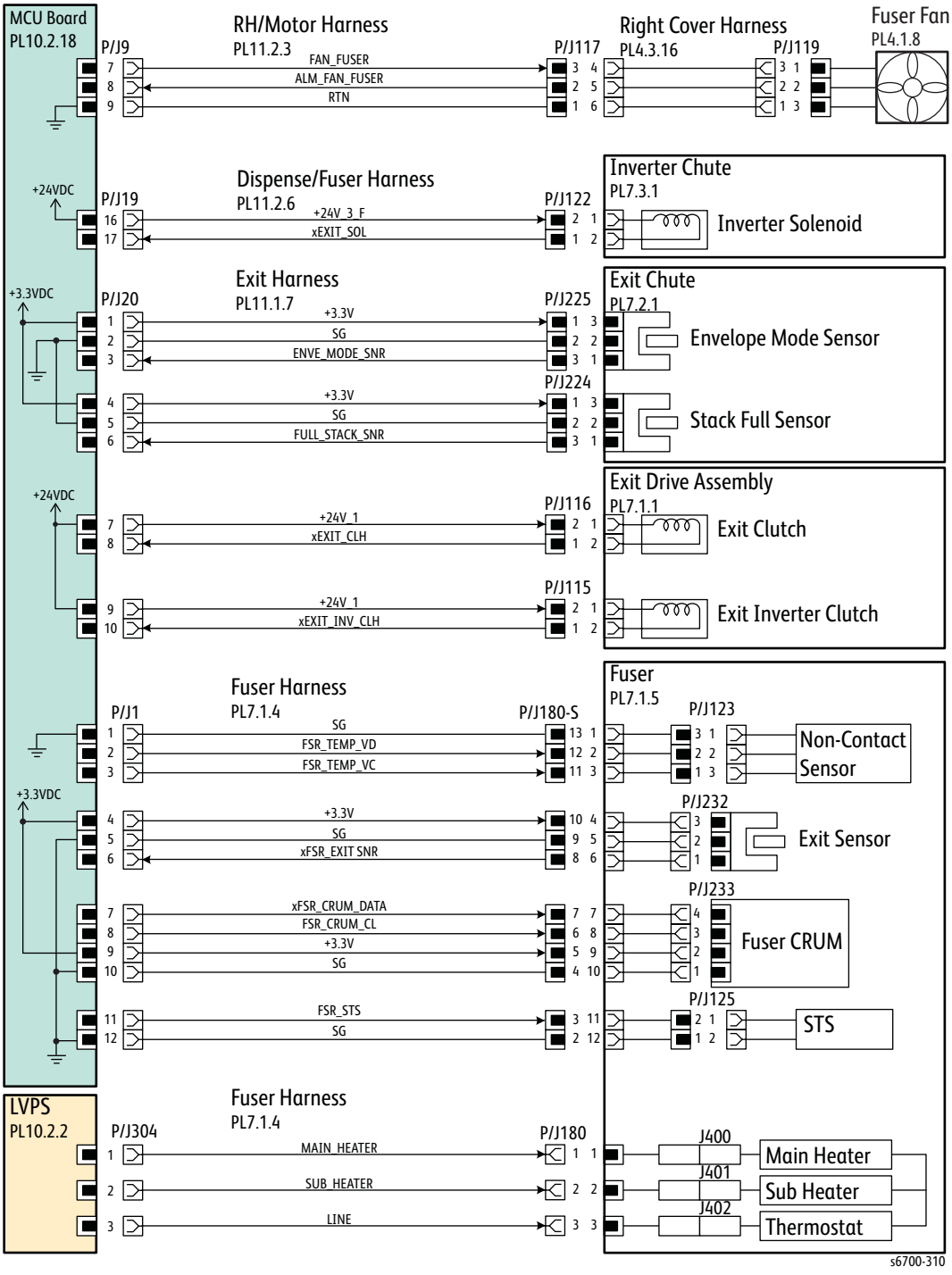


## Dispense and Development Signals

**Developer Signal Names and Function**

| Signal Name | Description |
|---|---|
| TMOT Y A<br>TMOT Y B<br>TMOT Y xA<br>TMOT Y xB | Yellow Toner Motor control signals |
| TMOT M A<br>TMOT MB<br>TMOT M xA<br>TMOT M xB | Magenta Toner Motor control signals |
| TMOT C A<br>TMOT C B<br>TMOT C xA<br>TMOT C xB | Cyan Toner Motor control signals |
| TMOT K A<br>TMOT K B<br>TMOT K xA<br>TMOT K xB | Black Toner Motor control signals |
| CLK XERO CRUM Y<br>DATA XERO CRUM Y | Yellow Developer detection signals |
| CLK XERO CRUM M<br>DATA XERO CRUM M | Magenta Developer detection signals |
| CLK XERO CRUM C<br>DATA XERO CRUM_C | Cyan Developer detection signals |
| CLK XERO CRUM K<br>DATA XERO CRUM K | Black Developer detection signals |
| CLK TN CRUM Y<br>DATA TN CRUM Y | Yellow Toner Cartridge detection signals |
| CLK TN CRUM M<br>DATA TN CRUM M | Magenta Toner Cartridge detection signals |
| CLK TN CRUM C<br>DATA TN CRUM C | Cyan Toner Cartridge detection signals |
| CLK TN CRUM K<br>DATA TN CRUM K | Black Toner Cartridge detection signals |

## Fuser and Exit

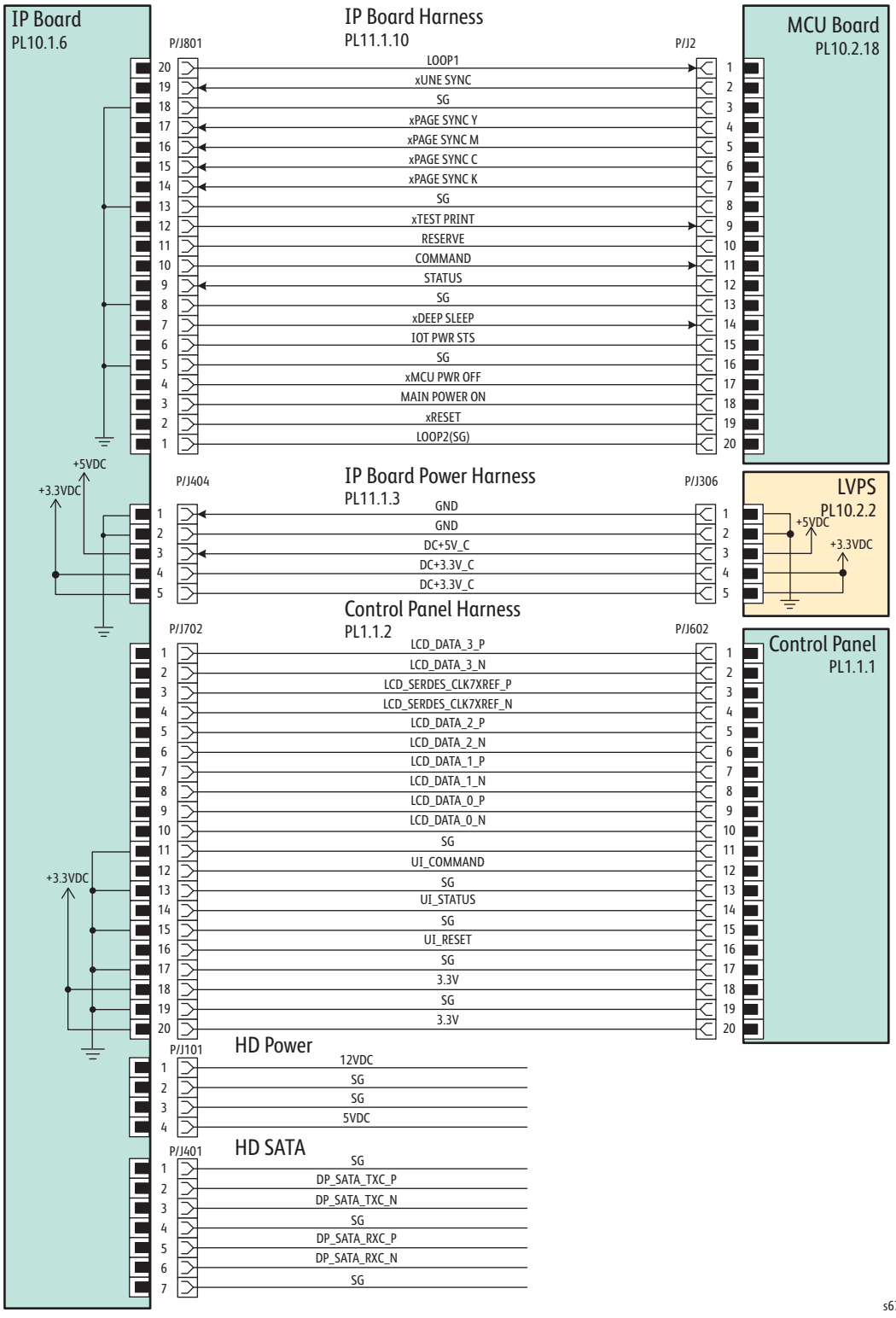


## Fuser and Exit Signals

**Fuser and Exit Signal Names and Function**

| Signal Name | Description |
|---|---|
| FAN FUSER<br>ALM FAN FUSER | Fuser Fan control signals |
| EXIT SOL | Exit Solenoid On/Off signal |
| ENVE MODE SNR | Envelope Mode Sensor detect signal |
| FULL STACK SNR | Full Stack Sensor detect signal |
| EXIT CLH | Exit Clutch On/Off signal |
| EXIT INV CLH | Exit Inv Clutch On/Off signal |
| FSR TEMP VD<br>FSR TEMP VC | Fuser temperature data (Analog) |
| FSR EXIT SNR | Exit Sensor media detect signal |
| FSR CRUM DATA<br>FSR CRUM CL | Fuser CRUM control signals |
| FSR STS | Fuser heat roll surface temperature data (Analog) |

# IP Board and Control Panel



## IP Board and Control Panel Signals

**IP Board and Control Panel Signal Names and Function**

| Signal name | Description |
|---|---|
| UNE SYNC | Signal for data |
| PAGE SYNC Y<br>PAGE SYNC M<br>PAGE SYNC C<br>PAGE SYNC K | Registration position signal of each of image |
| TEST PRINT | Test Print control signal |
| COMMAND | IP Board command signal |
| STATUS | MCU Board Status signal |
| DEEP SLEEP | Deep Sleep control signal |
| LCD_DATA<br>LCD_SERDES<br>SG<br>3.3V<br>UI_COMMAND<br>UI_STATUS<br>UI_RESET | LCD video signals<br>Panel clock<br>Signal ground<br>Panel power<br>Panel control signals |

# Feeder Wiring

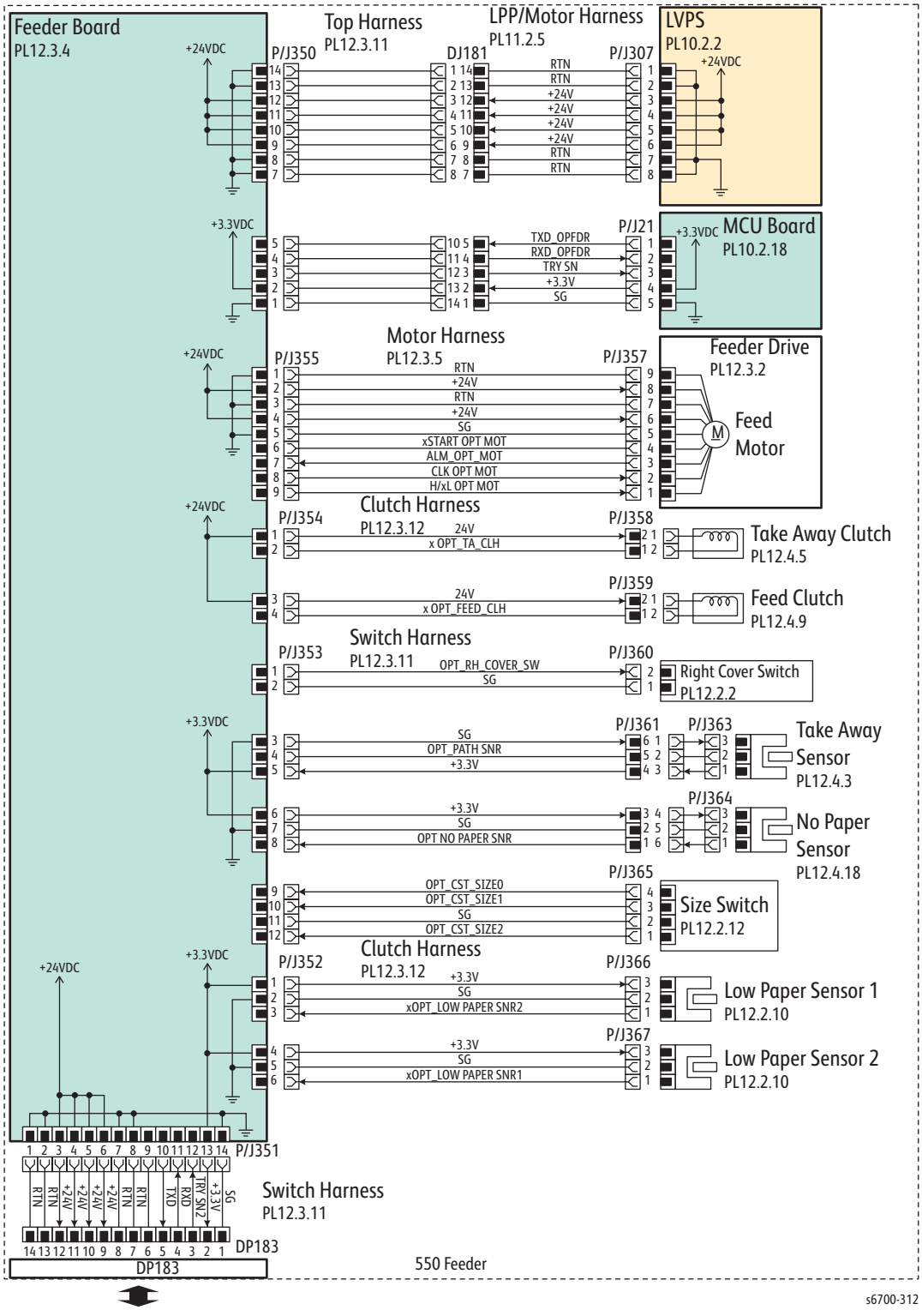
## Feeder Wire Route List

The following describes the legend of the wiring diagrams between parts shown on the following pages.

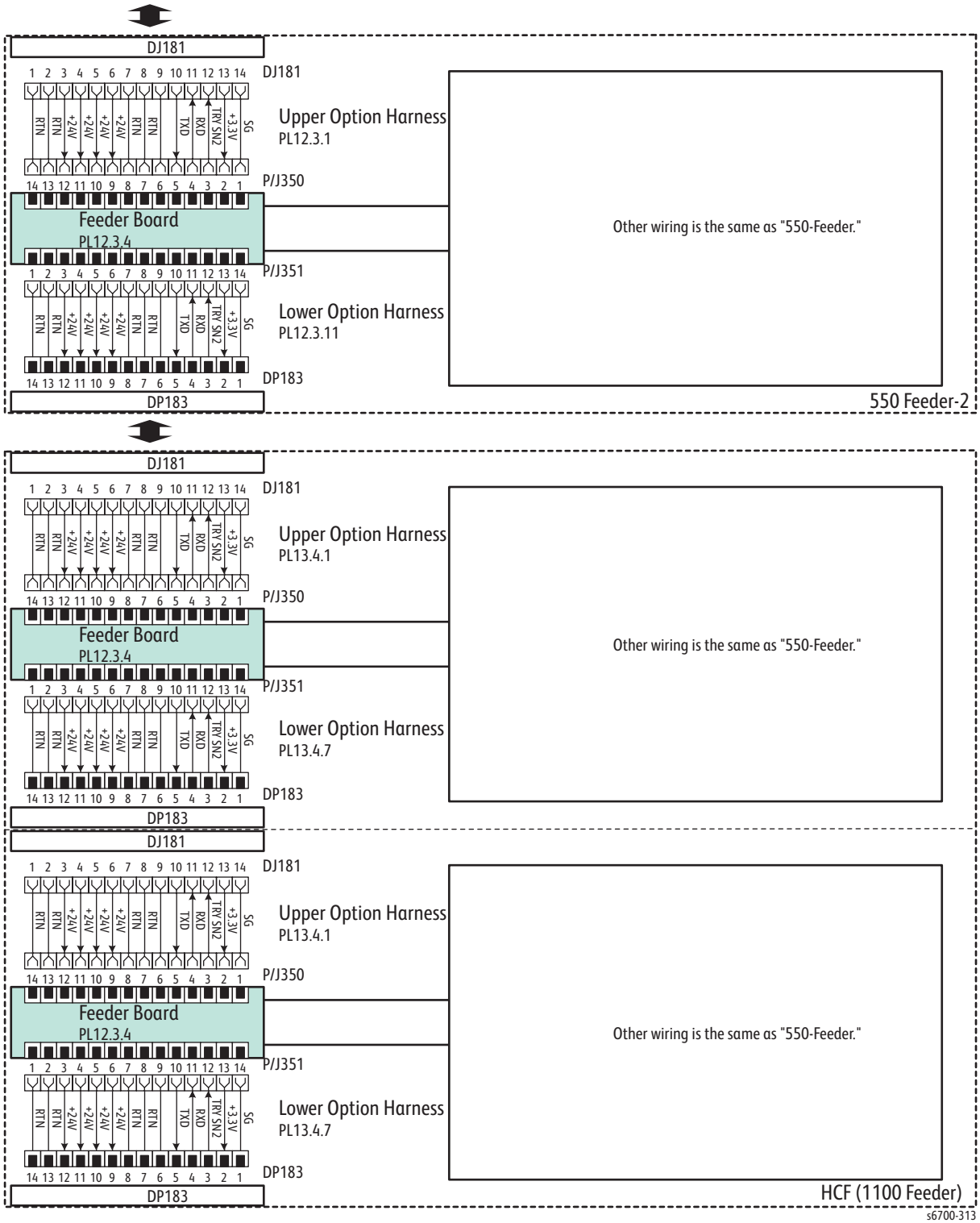
**Feeder Wire Route List**

| Wiring Diagram | Description |
|---|---|
| **Option Feeders** | Connects the Feeder Board and MCU Board. |
| | Connects the Feeder Board and LVPS. |
| | Connects the Feed Motor and Feeder Board. |
| | Connects the Take Away Clutch and Feeder Board. |
| | Connects the Feed Clutch and Feeder Board. |
| | Connects the RH Cover Switch and Feeder Board. |
| | Connects the Paper Path Sensor and Feeder Board. |
| | Connects the No Paper Sensor and Feeder Board. |
| | Connects the Size Switch and Feeder Board. |
| | Connects the Low Paper Sensor and Feeder Board. |
| | Connects the Low Paper Sensor (50%) and Feeder Board. |

## Feeder Board



## Feeder Interconnection



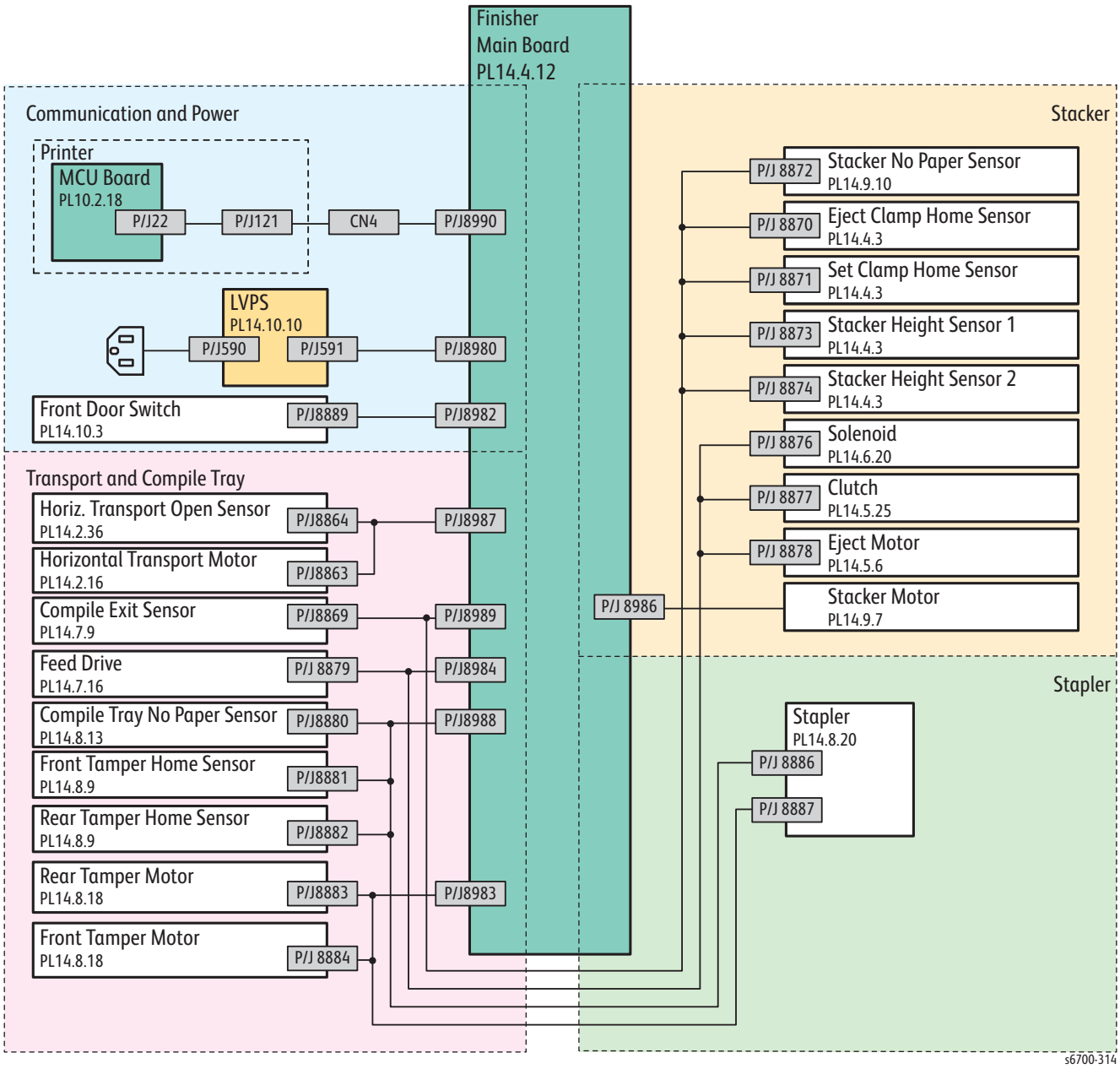
## Feeder Signals

**Optional Feeder Signal Names and Function**

| Signal Name | Description |
|---|---|
| TXD OPFDR<br>RXD OPFDR<br>TRY SN | Optional Feeder Board control signals |
| START OPT MOT<br>ALM OPT MOT<br>CLK OPT MOT<br>H/L OPT MOT | Feed Motor control signals |
| TAKE AWAY CLUTCH | Take Away Clutch On/Off signal |
| CLUTCH ASSY FEED OPT | Feed Clutch On/Off signal |
| OPT NO PAPER SNR | No Paper Sensor detect signal |
| OPT CST SIZE 0<br>OPT CST SIZE 1<br>OPT CST SIZE 2 | Size Switch On/Off signals. See “Media Size Detection” on page 2-22. |
| OPT LOW PAPER SNR2 | Option Tray Low Paper detect signal |
| OPT LOW PAPER SNR1 | Option Tray Low Paper detect signal at 50 % |

# Finisher Wiring

## Finisher Connections

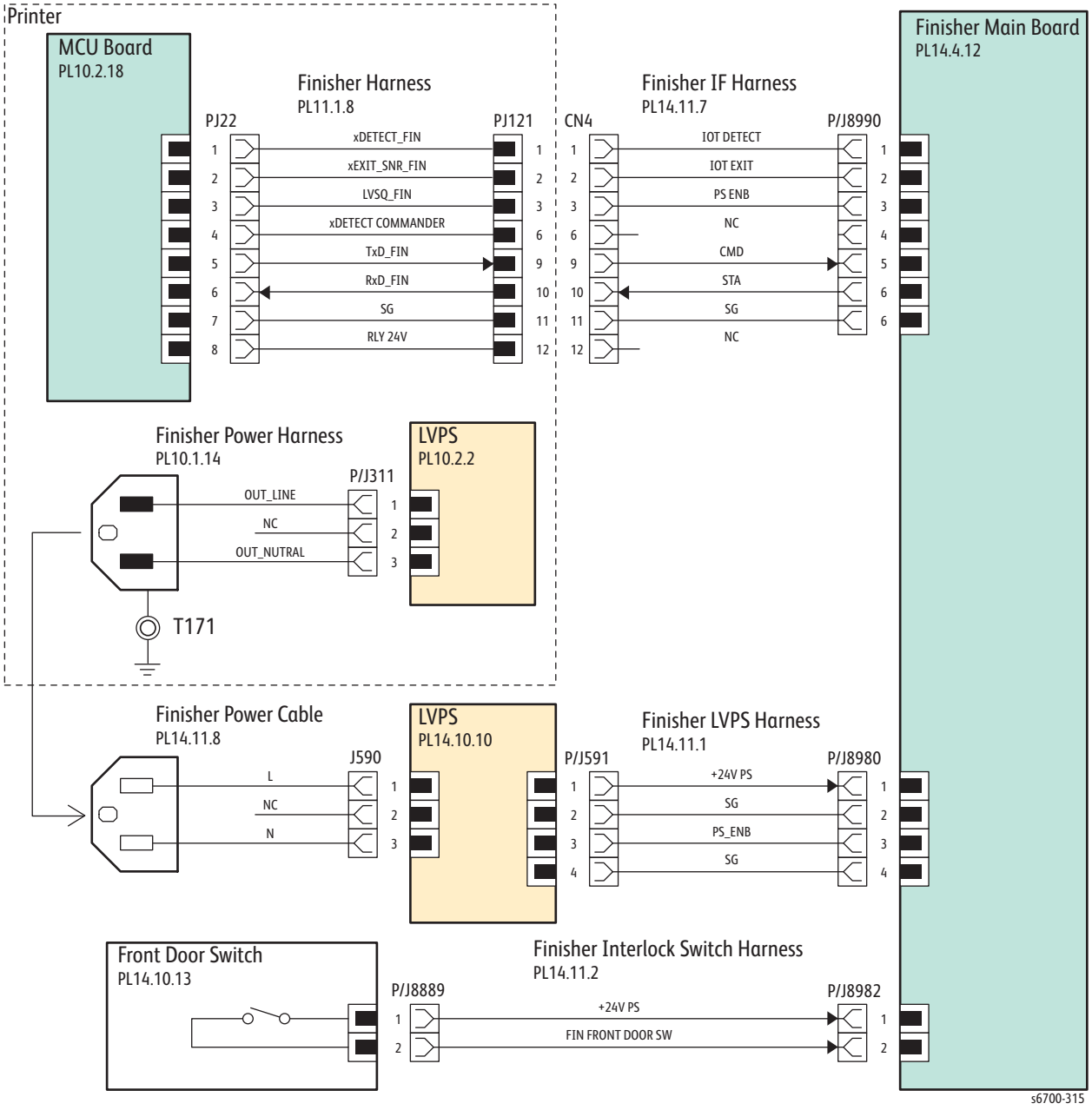


## Finisher Wire Route List

**Finisher Wire Route List**

| Wiring Diagram | Description |
|---|---|
| **LVPS** | Connects the Printer and Main Board. |
| | Connects the LVPS ASSY and Main Board. |
| | Connects the SWITCH and Main Board. |
| **Transport** | Connects the HTU-HXPORT OPEN SENSOR and Main Board. |
| | Connects the Horizontal Transport Motor and Main Board. |
| | Connects the Compile Exit Sensor and Main Board. |
| | Connects the DRIVE ASSY TRANS and Main Board. |
| | Connects the Compile Tray No Paper Sensor and Main Board. |
| | Connects the Front Tamper Home Sensor and Main Board. |
| | Connects the Rear Tamper Home Sensor and Main Board. |
| | Connects the Rear Tamper Motor and Main Board. |
| | Connects the Front Tamper Motor and Main Board. |
| **Stacker** | Connects the Stacker No Paper Sensor and Main Board. |
| | Connects the Eject Clamp Home Sensor and Main Board. |
| | Connects the Set Clamp Home Sensor and Main Board. |
| | Connects the Stacker Height Sensor1 and Main Board. |
| | Connects the Stacker Height Sensor2 and Main Board. |
| | Connects the SOLENOID ASSY and Main Board. |
| | Connects the CLUTCH Z34 and Main Board. |
| | Connects the Eject Motor and Main Board. |
| | Connects the Stacker Motor and Main Board. |
| **Stapler** | Connects the STAPLER ASSY and Main Board. |

## Communication and Power

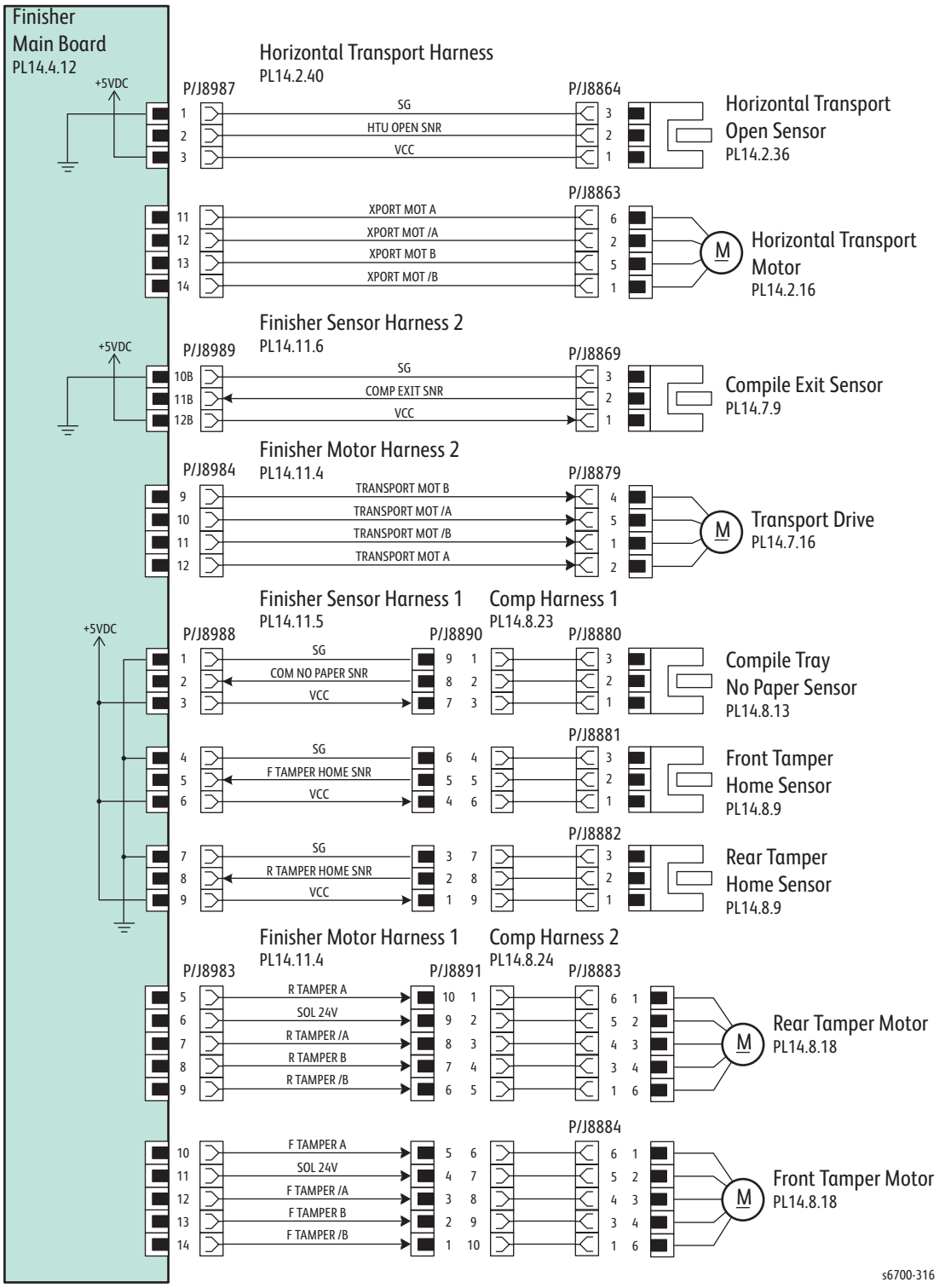


## Communication and Power Signals

**Finisher Communication and Power Signal Names and Function**

| Signal Name | Description |
|---|---|
| xDETECT_FIN<br>xEXIT_SNR_FIN<br>LVSQ_FIN<br>xDETECT<br>COMMANDER<br>TxD FIN<br>RxD FIN | Communication signals between MCU Board and main Board. |
| PS_ENB | LVPS control signal |
| FIN FRONT DOOR SW | Front Door Open Switch signal |

## Transport and Compile Tray

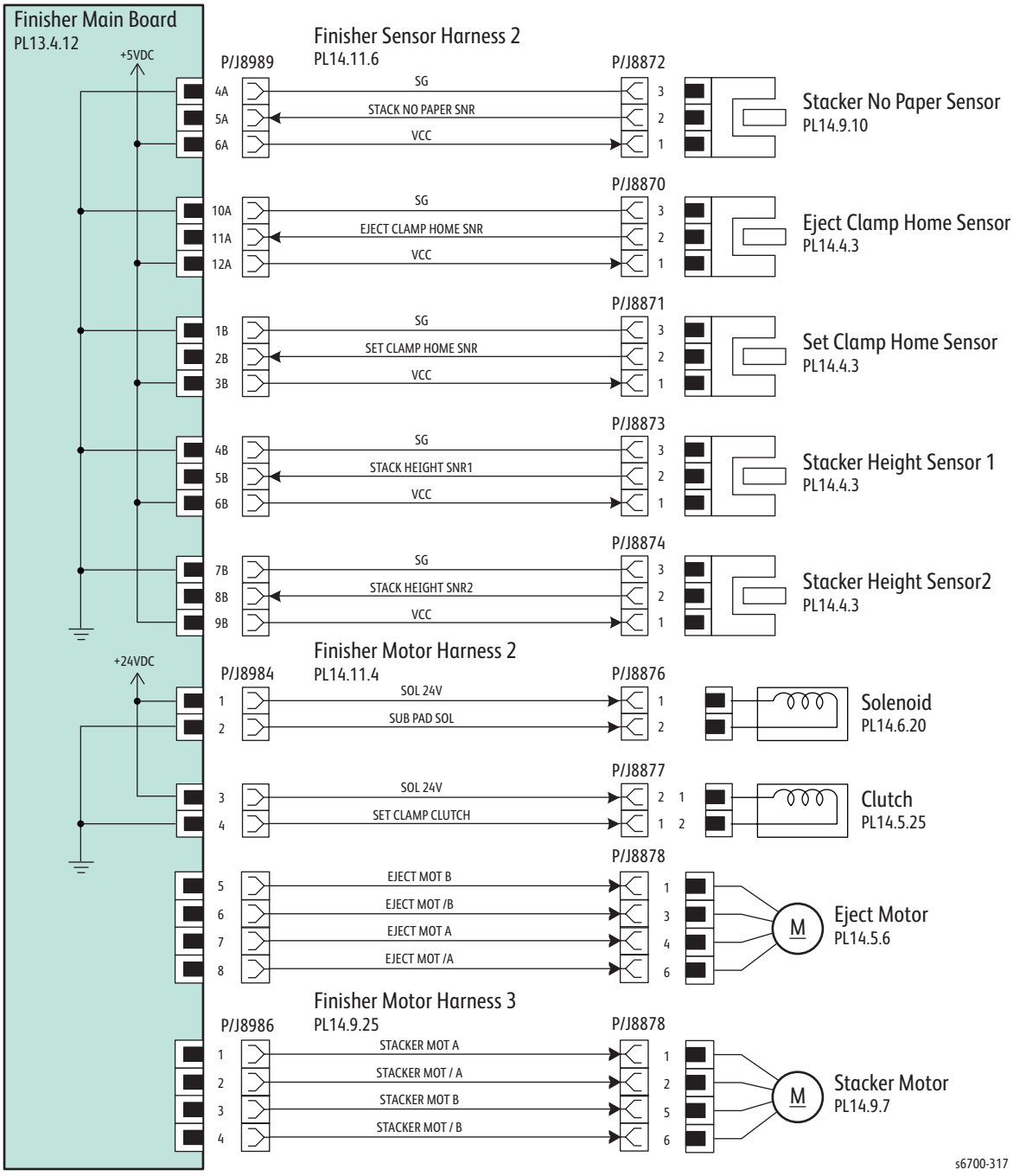


## Transport and Compile Tray Signals

**Transport and Compile Tray Signal Names and Function**

| Signal Name | Description |
|---|---|
| HTU OPEN SNR | Horizontal Transport Interlock detection signal |
| XPORT MOT A<br>XPORT MOT /A<br>XPORT MOT B<br>XPORT MOT /B | Horizontal Transport Motor control signals |
| COMP EXIT SNR | Compile Exit Sensor media detection signal |
| TRANSPORT MOT A<br>TRANSPORT MOT /A<br>TRANSPORT MOT B<br>TRANSPORT MOT /B | Drive control signal of the DRIVE ASSY TRANS. |
| COM NO PAPER SNR | Compile Tray No Paper Sensor detection signal |
| F TAMPER HOME SNR | Front Tamper Home Sensor home position signal |
| R TAMPER HOME SNR | Rear Tamper Home Sensor home position signal |
| R TAMPER A<br>R TAMPER /A<br>R TAMPER B<br>R TAMPER /B | Rear Tamper motor control signals. |
| F TAMPER A<br>F TAMPER /A<br>F TAMPER B<br>F TAMPER /B | Front Tamper motor control signals |

## Stacker

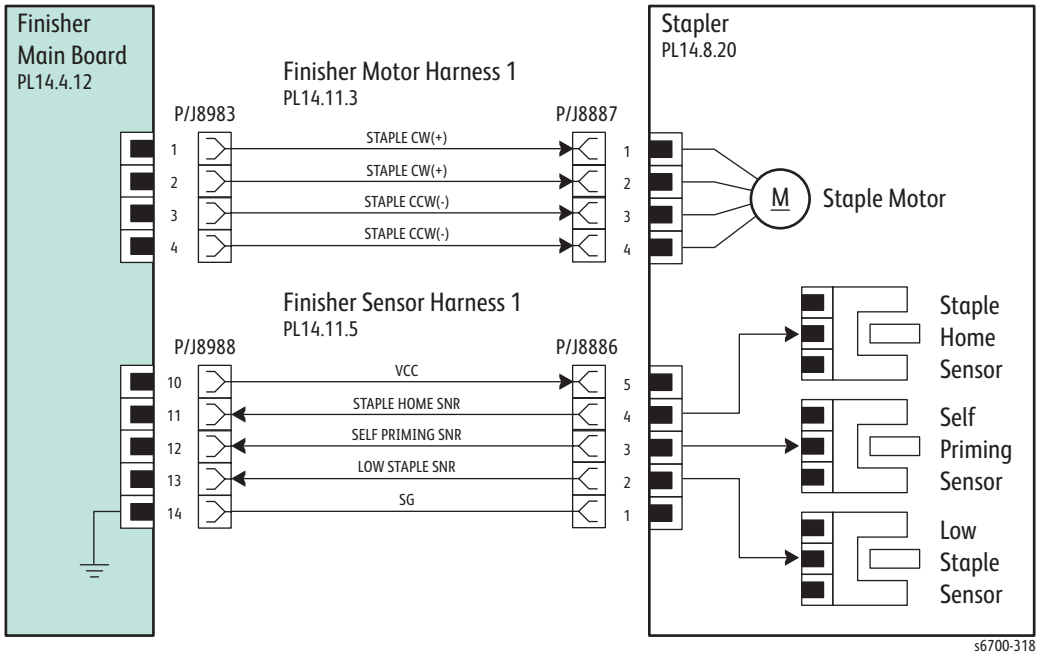

Finisher Main Board
PL13.4.12
+5VDC
+24VDC
Finisher Sensor Harness 2
PL14.11.6
P/J8989
P/J8872
4A
5A
6A
SG
STACK NO PAPER SNR
VCC
Stacker No Paper Sensor
PL14.9.10
P/J8870
10A
11A
12A
EJECT CLAMP HOME SNR
Eject Clamp Home Sensor
PL14.4.3
P/J8871
1B
2B
3B
SET CLAMP HOME SNR
Set Clamp Home Sensor
PL14.4.3
P/J8873
4B
5B
6B
STACK HEIGHT SNR1
Stacker Height Sensor 1
PL14.4.3
P/J8874
7B
8B
9B
STACK HEIGHT SNR2
Stacker Height Sensor2
PL14.4.3
Finisher Motor Harness 2
PL14.11.4
P/J8984
P/J8876
SOL 24V
SUB PAD SOL
Solenoid
PL14.6.20
P/J8877
SET CLAMP CLUTCH
Clutch
PL14.5.25
P/J8878
EJECT MOT B
EJECT MOT /B
EJECT MOT A
EJECT MOT /A
M
Eject Motor
PL14.5.6
Finisher Motor Harness 3
PL14.9.25
P/J8986
STACKER MOT A
STACKER MOT / A
STACKER MOT B
STACKER MOT / B
Stacker Motor
PL14.9.7
s6700-317

## Stacker Signals

**Stacker Signal Names and Function**

| Signal Name | Description |
|---|---|
| STACK NO PAPER SNR | Stacker No Paper Sensor detection signal |
| EJECT CLAMP HOME SNR | Eject Clamp Home Sensor home position detection signal |
| SET CLAMP HOME SNR | Set Clamp Home Sensor home position detection signal |
| STACK HEIGHT SNR1 | Stacker Height Sensor1 detection signal |
| STACK HEIGHT SNR2 | Stacker Height Sensor2 detection signal |
| SUB PAD SOL | Sub Paddle Solenoid On/Off control signal |
| SET CLAMP CLUTCH | Set Clamp Clutch On/Off control signal |
| EJECT MOT A<br>EJECT MOT /A<br>EJECT MOT B<br>EJECT MOT /B | Eject Motor control signals |
| STACKER MOT A<br>STACKER MOT /A<br>STACKER MOT B<br>STACKER MOT /B | Stacker Motor control signals |

## Stapler




## Stapler Signals

**Stapler Signal Names and Function**

| Signal name | Description |
|---|---|
| STAPLE CW(+)<br>STAPLE CCW(-) | Staple Motor control signals |
| STAPLE HOME SNR | Staple Home Sensor home position detection signal |
| LOW STAPLE SNR | Low Staple Sensor detection signal. |

# Reference

## In this chapter...


- Media Guidelines
- Firmware Update
- Service Diagnostics Summary
- NVM Parametric Values
- Obtaining Serial Back Channel Traces
- Mode Select Port
- CRU End of Life Behavior
- Acronyms and Abbreviations


# Appendix A

# 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 section 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 6700 Recommended Media List (RML) for media approved for use in this product. Print the Paper Tips page for information about supported media types and general guidelines for media handling.

## 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

# Firmware Update

**Note**

When performing an upgrade, clone customer configuration settings before upgrading the firmware.

## Cloning Printer Configuration with CWIS

Cloning stores system configuration data in a .dlm file. The .dlm file is used to duplicate one system's configuration onto another printer or restore configuration data after a service procedure. All printers sharing a clone file must have the same software version. Select all default information when creating the clone file.

To create a clone file:

1. In a web browser, enter the printer IP address.
2. In the upper right corner, click login.
3. From the top menu, click Properties.
4. Under the Configuration Overview > Cloning page, click View,
5. Verify all boxes on the Cloning page are checked.
6. Click the Clone button.
7. A progress bar is displayed on the bottom of the page.
8. Right-click the Cloning.dlm link to save the file to appropriate location.

## Firmware Update Using CWIS

**Note**

Download the correct firmware file from the Xerox support web site.

1. Enter the printer's IP address in your browser's address box.
2. From the top menu, click the Properties button.
3. From the Properties menu on the left, expand General Setup.
4. Under Machine Software, select Manual Upgrade.
5. Click the Browse button to locate the .dlm file.
6. Click the Open button.
7. Click the Install Software button to download the firmware to the printer.
12. A progress bar appears on the bottom of the web browser.
13. A File has been submitted window appears on screen.
14. The Control Panel displays the Software Upgrade screen to indicate subsystem update progress.
15. When the firmware update process is complete, the printer will reboot.

## Firmware Restore Using AltBoot

AltBoot restores system firmware. Use this procedure when the printer has corrupted software, hangs during power up or continually reboots. AltBoot resets system configuration to its default values. Restore customer settings after the system returns to Ready To Print.

**Caution**

Do not attempt AltBoot restoration on printers equipped with a Hard Drive using data encryption without first consulting with the Customer on the need to temporarily disable data encryption to preserve Hard Drive data. Data encryption stores the decryption key on the SD Card. During AltBoot, the decryption key is overwritten on the SD Card.

If printer function prevents decryption of Hard Drive data, loss of the decryption key following an AltBoot renders all Hard Drive data inaccessible. Replace the SD Card and Hard Drive to restore printer functionality.

**Caution**

Do not reboot or turn Off the printer during the restore process. The printer automatically reboots when the process is complete.

To prepare the USB thumb drive for an AltBoot restore, create an ALTBOOT folder, in the root directory. The folder name must be all uppercase. Next, using Notepad or similar utility, create a zero-length file in the ALTBOOT folder called FORCED_UPGRADE with no extension. Again, this file must reside in the ALTBOOT folder and be named exactly as shown. Finally, copy the latest firmware file (*.dlm) to the ALTBOOT folder.

1. Turn the printer Off.
2. Insert the prepared USB thumb drive in the USB Port on the printer's rear panel.
3. Turn the printer On. The printer reads the USB port and begins the restore process.
   a. The splash screen displays the ENERGY STAR logo while the printer reads the thumb drive.
   b. The restore process begins with Check Firmware Version being displayed.
   c. Next, the Software Upgrade screen is displayed. Depending on the system configuration (Trays, Finisher) the process can require approximately 20 minutes. The Software Upgrade screen changes to reflect the current subsystem being restored.
   d. After the firmware update process is complete, the AltBoot Complete screen is displayed instructing you to remove the USB thumb drive.
4. Remove the USB thumb drive from the printer's USB Port.
5. Wait for the printer to reboot and print a software upgrade report and Configuration page indicating the process is complete.

# Service Diagnostics Summary

The Services Diagnostics menu provides access to these diagnostic routines.

**Service Diagnostic Routines**

| Test | Control Panel Display | Test Description |
|---|---|---|
| **General Info** | Lists key system and network information | |
| | ■ Product Code<br>■ Serial Number<br>■ Total Images<br>■ IPv4 Address<br>■ IPv6 Address<br>■ System Software Version | |
| **Service Info** | Provides information required during the servicing of the system. | |
| dc104 Usage Counters | ■ Serial Number<br>■ Color Impressions<br>■ Black Impressions<br>■ Total Impressions<br>■ Maintenance Impressions<br>■ Black Maintenance Impressions<br>■ Color Maintenance Impressions<br>■ Sheets (total)<br>■ 2-sided Sheets | Provides usage counts for the listed items. |
| **dc108 Software Version** | ■ System Software Version<br>■ SW Upgrade<br>■ NC (Network Controller)<br>■ NC OS<br>■ LUI<br>■ Marking Engine<br>■ Finisher (if installed)<br>■ Option Trays (if installed) | Provides software version information for installed modules. |
| dc122 Fault History | Chain Link<br>Description<br>Date & Time | Lists the last 60 faults. |
| dc135 CRU/ HFSI | Name of CRU<br>% Remaining<br>Reset HFSI | Provides access to each CRU/ HFSI and displays remaining life information. Non-CRUM life counters can be reset:<br>Maintenance Kit<br>■ Transfer Belt<br>■ Transfer Roller<br>■ Feed Rollers |
| dc612 Print Test Pattern | Test Pattern List. Each print:<br>■ Number of Copies (1 - 99)<br>■ Source Tray<br>■ Print Mode (simplex/duplex) | Provides test patterns for the service provider to use while troubleshooting print-quality problems. |

**Service Diagnostic Routines (Continued)**

| Test | Control Panel Display | Test Description |
|---|---|---|
| **Diagnostics** | Provides access to specific component controls and test patterns. | |
| **dc140 Analog Monitor** | Component Name<br>Status<br>Range<br>Value | Provides the ability to monitor analog inputs for diagnostic troubleshooting. |
| dc330 Component Control | Chain-Link, I/O, Description<br>Chain (of target component) | Test listed components. |
| dc711 Roller Tests | ■ Exit Roller<br>■ Duplex Roller<br>■ Registration Roller<br>■ Tray 2 ~ 6 Feed Rollers<br>■ Tray 2 ~ 6 Take Away Rollers | Tests the operation of multiple transport components operating together. |
| dc741 Paper Size Switch | Tray 2 ~ 6 Paper Size Switch Test | Monitors Size Switch outputs SW0, SW1, SW2. |
| **Adjustments** | Used modify or change a NVM parameter. | |
| dc131 NVM Read/Write | Enter NVM ID, then Read<br>NVM ID, Description, Value, Default<br>Edit value, then Write. | Review and modify parameters stored in NVM. Refer to “NVM Parametric Values” on page A-9. |
| dc 301 NVM Initialization | Domain: Controller, Engine, Finisher<br>NVM Data: Usr, System. All | Allows the user to reset to factory defaults all applicable NVM within a specified domain. |
| dc361 NVM Save and Restore | Location<br>Serial Number<br>Date<br>Platform | Saves or restores NVM parameters to their previous values following replacement of the SD Card, IP Board EEPROM or MCU Board EEPROM. |
| dc701 Fuser Temp Setup | Standard, Photo<br>Select media type<br>Adjust +/- 6 and Write to NVM. | Calibrates Fusing temperature to match engine speed and media type. |
| dc909 Calibrate for Paper Type | Select media type<br>Adjust +/- 6 and Write to NVM. | Adjust the Transfer Roller bias voltage to compensate for thick or specialty media. |
| dc960 Altitude Adjustment | Standard Altitude<br>Medium Altitude<br>High Altitude<br>Write | Adjust the Transfer Roller bias voltage to compensate for locations where the altitude exceeds 1500 meters. |

**Service Diagnostic Routines (Continued)**

| Test | Control Panel Display | Test Description |
|---|---|---|
| **Maintenance** | Provides maintenance routines, CRU/HFSI usage and Fault logs. | |
| dc122 Fault History | Chain Link<br>Description<br>Date & Time | Provides the most recent (last 60) Faults including:<br>Chain Link<br>Description<br>Last Occurrence |
| dc135 CRU/ HFSI Status and Reset | Type<br>Name<br>% Remaining<br>Reset HFSI | Provides access to each CRU/ HFSI and displays remaining life. Non-CRUM items counters can be reset:<br>Maintenance Kit<br>■ Transfer Belt<br>■ Transfer Roller<br>■ Feed Rollers |
| dc137 PagePack | Disable<br>Enable<br>PagePack Pass code | Enables or disables PagePack feature. |
| **Call Closeout** | Provides the ability to exit Diagnostics and clear specific counters. | |
| **Call Closeout** | Reset Counters<br>Exit Only<br>Exit and Reboot | Exits the Service Diagnostics menu. |

# NVM Parametric Values

The table below lists several characteristics of system NVM parameters. Use dc131 to adjust NVM parameters as directed by a service procedure or observed system behavior.

**Caution**

Adjustments to NVM parameters not listed is not recommend and could significantly impact the functionality of the printer.

**Note**

Enter the NVM ID as two numbers in the two numeric input fields of the dc131 NVM Read/Write screen. As an example, enter NVM ID 742-006 as 742 in one field and 6 in the other. Omit leading zeros.

**NVM Parametric Values**

| NVM ID | Component Description | Default | Range | Units | Notes | Initialize Y/N |
|---|---|---|---|---|---|---|
| 742-006 | Lead Registration User Correction Value | 0 | -15~15 | 4 lines | Up/ Down Margin Adjust<br>One step = 4 lines<br>Max Adjustment = ±2.5mm | N |
| 742-500 | Feed Counter T1 | 0 | NA | PV | Counter | N |
| 742-504 | Feed Counter T2 | 0 | NA | PV | Counter | N |
| 742-508 | Duplex Feed Counter | 0 | NA | PV | Counter | N |
| 742-512 | Frequency of Exit Jam | 0 | NA | | Counter | N |
| 742-516 | M/C PV Counter (FC) | 0 | NA | PV | Counter | N |
| 742-520 | M/C PV Counter (Total) | 0 | NA | PV | Counter | N |
| 742-524 | JAM History (1:After JAM occurrence) | 0 | 0~1 | | Counter | N |
| 742-525 | Side Reg Adj Value Side 1 T1 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust<br>One step = 4 Dots<br>Max Adjustment = ±5.5mm | N |
| 742-526 | Side Reg Adj Value Side 1 T2 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-527 | Side Reg Adj Value Side 1 T3 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-528 | Side Reg Adj Value Side 1 T4 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-529 | Side Reg Adj Value Side 1 T5 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-530 | Side Reg Adj Value Side 1 T6 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-531 | Side Reg Adj Value Side 2 T1 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-532 | Side Reg Adj Value Side 2 T2 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-533 | Side Reg Adj Value Side 2 T3 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-534 | Side Reg Adj Value Side 2 T4 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-535 | Side Reg Adj Value Side 2 T5 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-536 | Side Reg Adj Value Side 2 T6 | 0 | -32~32 | 4 dots | Side to Side Margin Adjust | N |
| 742-537 | OHP SNR SW | 0 | 0~1 | On/Off | Not used on 6700 | N |
| 742-538 | Full Stack SNR SW | 1 | 0~1 | On/Off | | N |
| 742-539 | Regi Loop T1 Media1 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-540 | Regi Loop T1 Media1 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |

**NVM Parametric Values**

| NVM ID | Component Description | Default | Range | Units | Notes | Initialize Y/N |
|---|---|---|---|---|---|---|
| 742-541 | Regi Loop T1 Media1 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-542 | Regi Loop T1 Media2 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-543 | Regi Loop T1 Media2 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-544 | Regi Loop T1 Media2 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-545 | Regi Loop T1 Media3 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-546 | Regi Loop T1 Media3 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-547 | Regi Loop T1 Media3 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-548 | Regi Loop Tray2 Media1 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-549 | Regi Loop Tray2 Media1 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-550 | Regi Loop Tray2 Media1 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-551 | Regi Loop Tray2 Media2 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-552 | Regi Loop Tray2 Media2 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-553 | Regi Loop Tray2 Media2 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-554 | Regi Loop Tray2 Media3 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-555 | Regi Loop Tray2 Media3 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-556 | Regi Loop Tray2 Media3 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-557 | Regi Loop Tray3 - 6 Media1 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-558 | Regi Loop Tray3 - 6 Media1 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-559 | Regi Loop Tray3 - 6 Media1 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-560 | Regi Loop Tray3 - 6 Media2 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-561 | Regi Loop Tray3 - 6 Media2 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-562 | Regi Loop Tray3 - 6 Media2 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-563 | Regi Loop Tray3 - 6 Media3 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-564 | Regi Loop Tray3 - 6 Media3 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-565 | Regi Loop Tray3 - 6 Media3 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-566 | Regi Loop Dup Media1 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-567 | Regi Loop Dup Media1 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-568 | Regi Loop Dup Media1 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-569 | Regi Loop Dup Media2 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-570 | Regi Loop Dup Media2 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-571 | Regi Loop Dup Media2 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-572 | Regi Loop Dup Media3 Full speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-573 | Regi Loop Dup Media3 1/2 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-574 | Regi Loop Dup Media3 1/3 speed | 0 | -50~50 | 1ms | Regi Loop | N |
| 742-575 | Low Paper Sw | 1 | 0~1 | On/Off | | N |
| 742-578 | T3 Feed PV Counter | 0 | NA | PV | Counter | N |
| 742-582 | T4 Feed PV Counter | 0 | NA | PV | Counter | N |
| 742-586 | T5 Feed PV Counter | 0 | NA | PV | Counter | N |
| 742-590 | T6 Feed PV Counter | 0 | NA | PV | Counter | N |

**NVM Parametric Values**

| NVM ID | Component Description | Default | Range | Units | Notes | Initialize Y/N |
|---|---|---|---|---|---|---|
| 746-002 | ROS LD Fixed Value Y | 106 | 0~255 | | LD Power | Y |
| 746-003 | ROS LD Fixed Value M | 106 | 0~255 | | LD Power | Y |
| 746-004 | ROS LD Fixed Value C | 106 | 0~255 | | LD Power | Y |
| 746-005 | ROS LD Fixed Value K | 114 | 0~255 | | LD Power | Y |
| 746-015 | 2BTR Counter Reset (0:No 1:Yes (Default) | 1 | 0~1 | Count | | Y |
| 746-059 | 1st BTR Fixed Current Full speed YMC | 141 | 0~255 | uA | | Y |
| 746-060 | 1st BTR Fixed Current Full speed K | 151 | 0~255 | uA | | Y |
| 746-061 | 1st BTR Fixed Current Full speed single K | 151 | 0~255 | uA | | Y |
| 746-062 | 1st BTR Fixed Current 1/2 speed YMC | 72 | 0~255 | uA | | Y |
| 746-063 | 1st BTR Fixed Current 1/2 speed K | 85 | 0~255 | uA | | Y |
| 746-064 | 1st BTR Fixed Current 1/2 speed single K | 85 | 0~255 | uA | | Y |
| 746-065 | 1st BTR Fixed Current 1/3 speed YMC | 53 | 0~255 | uA | | Y |
| 746-066 | 1st BTR Fixed Current 1/3 speed K | 68 | 0~255 | uA | | Y |
| 746-067 | 1st BTR Fixed Current 1/3 speed single K | 68 | 0~255 | uA | | Y |
| 746-508 | High Alt Mode | 0 | 0~8 | | 0 = No correction | Y |
| 746-509 | High Alt Mode 01 | 8 | | V | 500m | Y |
| 746-510 | High Alt Mode 02 | 16 | | V | 1000m | Y |
| 746-511 | High Alt Mode 03 | 23 | | V | 1500m | Y |
| 746-512 | High Alt Mode 04 | 31 | | V | "2000m (Medium Altitude) | Y |
| 746-513 | High Alt Mode 05 | 39 | | V | 2500m | Y |
| 746-514 | High Alt Mode 06 | 47 | | V | "3000m (High Altitude) | Y |
| 746-515 | High Alt Mode 07 | 55 | | V | 3500m | Y |
| 746-516 | High Alt Mode 08 | 62 | | V | 4000m | Y |
| 746-517 | 2BTR Offset Adj Plain-L | 0 | -6~6 | V | Not used | N |
| 746-518 | 2BTR Offset Adj Plain-H | 0 | -6~6 | V | Plain Paper | N |
| 746-519 | 2BTR Offset Adj Thicker | 0 | -6~6 | V | "Heavyweight,Letterhead | N |
| 746-520 | 2BTR Offset Adj Recycled | 0 | -6~6 | V | Recycled Paper | N |
| 746-521 | 2BTR Offset Adj Heavier L | 0 | -6~6 | V | Cardstock | N |
| 746-522 | 2BTR Offset Adj Heavier H | 0 | -6~6 | V | Heavyweight Cardstock | N |
| 746-523 | 2BTR Offset Adj Label-L | 0 | -6~6 | V | Not used | N |
| 746-524 | 2BTR Offset Adj Label-H | 0 | -6~6 | V | Labels | N |
| 746-525 | 2BTR Offset Adj OHP | 0 | -6~6 | V | Transparency | N |
| 746-526 | 2BTR Offset Adj Envelope | 0 | -6~6 | V | Envelopes | N |
| 746-527 | 2BTR Offset Adj Postcard | 0 | -6~6 | V | Not used | N |
| 746-528 | 2BTR Offset Adj Coated-L | 0 | -6~6 | V | Not used | N |
| 746-529 | 2BTR Offset Adj Coated-M | 0 | -6~6 | V | Glossy Cardstock | N |
| 746-530 | 2BTR Offset Adj Coated-H | 0 | -6~6 | V | "Heavy Glossy Cardstock | N |
| 746-531 | 2BTR Offset Adj Custom-1 | 0 | -6~6 | V | Custom 1 | N |
| 746-532 | 2BTR Offset Adj Custom-2 | 0 | -6~6 | V | Custom 2 | N |

**NVM Parametric Values**

| NVM ID | Component Description | Default | Range | Units | Notes | Initialize Y/N |
|---|---|---|---|---|---|---|
| 746-533 | 2BTR Offset Adj Custom-3 | 0 | -6~6 | V | Custom 3 | N |
| 746-534 | 2BTR Offset Adj Custom-4 | 0 | -6~6 | V | Custom 4 | N |
| 746-535 | Approx Media Selection - 2BTR Custom1 | 0 | 0~13 | V | | N |
| 746-536 | Approx Media Selection - 2BTR Custom2 | 0 | 0~13 | V | | N |
| 746-537 | Approx Media Selection - 2BTR Custom3 | 0 | 0~13 | V | | N |
| 746-538 | 2BTR High Alt Adj Mode 01 | 0 | -15~15 | | 0~500m | Y |
| 746-539 | 2BTR High Alt Adj Mode 02 | 0 | -15~15 | | 501~1000m | Y |
| 746-540 | 2BTR High Alt Adj Mode 03 | -1 | -15~15 | | 1001~1500m | Y |
| 746-541 | 2BTR High Alt Adj Mode 04 | -2 | -15~15 | | 1501~2000m | Y |
| 746-542 | 2BTR High Alt Adj Mode 05 | -3 | -15~15 | | 2001~2500m | Y |
| 746-543 | 2BTR High Alt Adj Mode 06 | -4 | -15~15 | | 2501~3000m | Y |
| 746-544 | 2BTR High Alt Adj Mode 07 | -5 | -15~15 | | 3001~3500m | Y |
| 746-545 | 2BTR High Alt Adj Mode 08 | -6 | -15~15 | | 3501~4000m | Y |
| 752-824 | Skew K1 Y | 16 | 0~255 | | | Y |
| 752-825 | Skew K1 Y | 16 | 0~255 | | | Y |
| 752-826 | Skew K1 M | 16 | 0~255 | | | Y |
| 752-827 | Skew K1 M | 16 | 0~255 | | | Y |
| 752-828 | Skew K1 C | 16 | 0~255 | | | Y |
| 752-829 | Skew K1 C | 16 | 0~255 | | | Y |
| 752-830 | Skew K1 K | 16 | 0~255 | | | Y |
| 752-831 | Skew K1 K | 16 | 0~255 | | | Y |
| 752-832 | Skew K2 Y | 8 | 0~255 | | | Y |
| 752-833 | Skew K2 Y | 8 | 0~255 | | | Y |
| 752-834 | Skew K2 M | 8 | 0~255 | | | Y |
| 752-835 | Skew K2 M | 8 | 0~255 | | | Y |
| 752-836 | Skew K2 C | 8 | 0~255 | | | Y |
| 752-837 | Skew K2 C | 8 | 0~255 | | | Y |
| 752-838 | Skew K2 K | 8 | 0~255 | | | Y |
| 752-839 | Skew K2 K | 8 | 0~255 | | | Y |

# Obtaining Serial Back Channel Traces

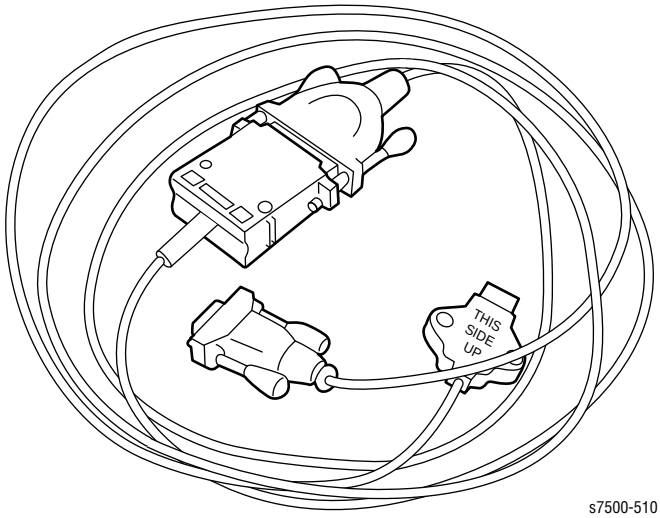
In rare cases the printer may exhibit unusual behavior that is difficult to troubleshoot. In such cases, if feasible, it can be useful to obtain a back channel trace from the printer's Serial Debug Port. The back channel trace, lists step-by-step what the printer is doing during the boot up phase up to the point that an error occurs or the printer enters the ready to print state. The trace may offer clues to help troubleshoot the problem. If the printer is experiencing erratic, intermittent or other problems that defy the normal troubleshooting procedures outlined in this manual you may be requested by engineering to capture a back channel trace for analysis.

Required equipment:

- Computer with a serial port
- Serial Cable, part number: 600T80374
- Level Adaptor, part number: 600T80375

To obtain a trace:

1. Turn Off the printer.
2. Connect the Serial Cable and Level Adaptor, then connect the Serial Cable to your PC. Serial port settings are COM1, 115200 Bits per second, 8 Data bits, no Parity, 1 stop bit, and Xon/ Xoff Flow control.
3. Connect the Level Adaptor to the Serial Port (J903 on the IP Board), accessible from the Rear Panel, with adapter's THIS SIDE UP label facing out from the printer's Rear Panel.




s7500-510

4. Start up a terminal program such as in Window's HyperTerminal (usually located in Programs -> Accessories -> Communications -> HyperTerminal). Verify the serial port settings are correct.
5. Turn On the printer.
6. The trace should appear in the terminal window. Examine the trace to troubleshoot the problem. Save the trace as a file, if necessary.

**Note**

If your PC has a Windows 7 operating system, HyperTerminal is not preloaded. An alternative software is TeraTerm 2.3

# Mode Select Port

The Mode Select Port (J602 on the IP Board), accessible from the Rear Panel, is a 6-pin header used to place the printer in different operational modes or reset the IP Board.

These modes are set by connecting one or more pins to ground. The six pins are arranged in numeric order with Pin 1 at the top of the connector. Pins 1 and 6 are tied to a common ground with the Rear Panel. Pins 2 through 5, when grounded, set the printer to the mode indicated in the following table.

**Caution**

To reset the IP Board, momentarily short pins 5 and 6, then immediately re-open the connection. Shorting pins 5 and 6 for more than a few seconds could damage the IP Board.

Mode Select Port Settings

| Mode | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Printer Reset | GND | | | | X | GND |
| Customer | GND | X | | | | GND |

- Reset is a hardware reset of the Image Processor Board resulting in a system reboot.
- Customer Mode is the normal mode for printing. The Serial Debug Port is receiving PostScript back channel information.

# CRU End of Life Behavior

The printer is equipped with CRUMs that read and write data into MCU and IP Board NVRAM. CRUMs reside within Toner Cartridges, Imaging Units and Fuser. The toner CRUM identifies the type of Toner Cartridge (Standard, Meter or High Capacity). The CRUMs contain an OTP part to record new or used cartridge. Rotation count, pixel count and page count are stored in the Toner Cartridge CRUM.

**Customer Replaceable Unit Life Behavior**

| | Control Panel Message | New CRU detect | Low | Hard Stop | Count Reset to 0 | Life data stored in | Life data also stored |
|---|---|---|---|---|---|---|---|
| Toner Cartridge | Low / Out | CRUM ADC SNR | 80 % estimated pages remaining | Yes /by controller[a] | New Toner Cartridge | MCU Board NVRAM | CRUM |
| Imaging Unit (pages) | Low / Out | CRUM | 80 % | Yes (120 % ) / by controller | New Imaging Unit | MCU Board NVRAM | CRUM |
| Transfer Belt (pages) | No | No | 80 % | 133 % / controller stop | On Control Panel | MCU Board NVRAM | - |
| Fuser (pages) | No | CRUM | 80 % | 125 % / controller stop | New Fuser | MCU Board NVRAM | CRUM |
| Transfer Roller | Yes | No | 80 % | 133 % / controller stop | On Control Panel | MCU Board NVRAM | - |
| Waste Toner Cartridge | Yes | No | 90 % by Waste Toner Sensor | Controller stops considering remaining pages[b] at end of life | New cartridge (and some pages printed) | MCU Board NVRAM | - |
| Pick Roller | No | No | No | No | None | None | - |
| Stapler Cartridge | Out | No | | No | New cartridge | None | - |

a. Able to continue printing B/W if CMY are empty
b. Max pixels and pages are 17,302.92 x 106 pixels (1200 x 1200 dpi) or 3,600 pages

# Acronyms and Abbreviations

| Acronym | Description |
|---|---|
| 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 |
| APC | Auto Power Control |
| ASSY | Assembly |
| ATM | Adobe Type Manager |
| BCR | Bias Charge Roller |
| BOOTP | Boot Parameter Protocol |
| BTR | Bias Transfer Roller |
| CCD | Charge Coupled Device (Photoelectric Converter) |
| CCW | Counter-Clock Wise |
| CMYK | Toner colors for the printer:<br>Y=yellow, C=cyan, M=magenta, K=black |
| CRU | Customer Replaceable Unit |
| CRUM | Customer Replaceable Unit Meter/Memory |
| CST | Cassette |
| dB | Decibel |
| DC | Direct Current |
| DDNS | Dynamic Domain Name System |
| DDR2 DIMM | Double Data Rate Dual In-Line Memory Module |
| DEV | Developer |
| DHCP | Dynamic Host Configuration Protocol |
| DPI | Dots Per Inch |
| DRV | Drive |
| DUP | Duplex |
| Duplex | 2-sided printing |
| EA | Emulsion Aggregation (Toner) |
| EEPROM | Electrically Erasable Programmable Read-Only Memory |

| Acronym | Description |
|---|---|
| ESD | Electrostatic Discharge. A transfer of charge between bodies at different electrostactic potential. |
| ESS | Image process controller |
| FCC | Federal Communications Commission |
| FDR | Feeder |
| FPOT | First Print Output Time |
| FRU | Field Replaceable Unit |
| GB | Giga Byte |
| GDI | Graphics Device Interface |
| GND | Ground |
| HARN | Harness |
| HCF | High-Capacity Feeder |
| HDD | Hard Disk Drive |
| HUM | Humidity |
| HV | High Voltage |
| HVPS | High-Voltage Power Supply |
| Hz | Hertz (cycles per second) |
| IDT | Intermediate Drum Transfer |
| IEC | International Electrotechnical Commission |
| I/F | Interface |
| IIT | Image Input Terminal - ADF, Scanner |
| IOT | Image Output Terminal - the printer |
| IP | Image Processor |
| KB | Kilo Byte |
| LAN | Local Area Network |
| LCD | Liquid Crystal Display |
| LD | Laser Diode |
| LED | Light Emitting Diode |
| LEF | Long-Edge Feed |
| LPD | Line Printer Daemon |
| LPR | Line Printer Remote |
| LTR | Letter Size Paper (8.5 x 11 inches) |
| LVPS | Low-Voltage Power Supply |
| MB | Mega Byte |
| MCU | Machine Control Unit (Engine Control Board) |
| MHz | Mega Hertz |
| MIB | Management Information Base |

| Acronym | Description |
|---|---|
| MM | Millimeters |
| MOT | Motor |
| MPT | Multi-Purpose Tray |
| NCS | Non-Contact Sensor |
| NVM | Non-Volatile Memory |
| NVRAM | Non-Volatile Random Access Memory |
| OHP | Overhead Paper (Transparency) |
| OPT | Optional |
| OS | Operating System |
| PCB | Printed Circuit Board |
| PCL | Printer Command Language |
| PDL | Page Description Language |
| P/J | Plug Jack (electrical connections) |
| PJL | Printer Job Language |
| PL | Parts List |
| POP3 | Post Office Protocol version 3 |
| PPD | PostScript Printer Description |
| PPM | Pages Per Minute |
| PWBA | Printed Wiring Board Assembly |
| RAM | Random Access Memory |
| RH | Relative Humidity |
| RMS | Root Mean Square Voltage |
| ROM | Read-Only Memory |
| ROS | Raster Output Scanner - Laser Unit |
| SEF | Short-Edge Feed |
| SMB | Server Message Block |
| SNMP | Simple Network Management Protocol |
| SNR | Sensor |
| SOL | Solenoid |
| SOS | Start of Scan |
| TDC | Toner Density Control |
| TNR | Toner |
| UI | User Interface |
| USB | Universal Serial Bus |
| WINS | Wireless Integrated Network Sensor |

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