

Phaser® 7800
Color Printer



Phaser® 7800 Service Manual

Xerox Internal-Use Only



Phaser 7800 Service Manual

Service Documentation

Phaser 7800 Service Manual

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About this Manual

The Phaser 7800 Service Manual is the primary document used for diagnosing, repairing, maintaining, and troubleshooting the printer. The Service Manual is the controlling publication for a service call. Information on using this document is found in the Introduction section. To ensure understanding of this product, complete the Xerox Service Training Program for this particular printer.

Service Manual Revision

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

Technical Support Information

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

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

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

Organization

The titles of the sections and a description of the information contained in each chapter are contained in the following paragraphs:

Introduction and General Information

This chapter contains documentation organization, symbology and nomenclature, translated warnings, safety symbols, regulatory requirements, and general information about the printer.

Chapter 1 Service Call Procedures

This chapter contains procedures to be taken during a service call and in what sequence they are to be completed. This is the entry level for all service calls.

Chapter 2 Status Indicator RAPs

This chapter contains descriptions of the diagnostic aids for troubleshooting that include Power On Self Test (POST), Fault Codes and Messages procedures.

Chapter 3 Image Quality

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

Chapter 4 Repairs/Adjustments

This chapter contains the removal, replacement, and adjustments procedures.

Repairs

Repairs include procedures for removal and replacement of spare parts listed in the Parts List. Use the repair procedures for the correct order of removal and replacement, for warnings, cautions, and notes.

Adjustments

Adjustments include procedures for adjusting the parts that must be within specification for the correct operation of the printer. Use the adjustment procedures for the correct sequence of operation for specifications, warnings, cautions and notes.

Chapter 5 Parts List

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

Chapter 6 General Troubleshooting

This chapter contains details of the embedded Service Diagnostics test suite, as well as troubleshooting procedures for printer problems not related to a specific fault code.

Chapter 7 Wiring Data

This chapter contains drawings, lists of plug/jack locations, and diagrams of the power distribution wire networks in the printer.

Chapter 8 Theory of Operation

This chapter contains detailed functional information on the print engine components.

How to Use this Manual

Always start with the Service Call Procedures in Chapter 1. Perform **Initial Actions** and verify the problem, then follow the directions provided.

Power Safety

Power Source

For 115 VAC printers, do not apply more than 135 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

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.

Service Safety Summary

General Safety

The printer and recommended supplies have been designed and tested to meet strict safety requirements. Attention to the following information will ensure the continued safe operation of the printer.

Electrical Safety

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

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

WARNING

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

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

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

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

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

WARNING

Do not switch on the electricity to the machine while a ground circuit is disconnected. Ground circuits ensure that the machine remains safe during a fault condition.

DANGER: Ne pas mettre la machine sous tension si un circuit de mise à la masse est déconnecté. Les circuits de mise à la masse permettent de garantir la sécurité de la machine lors d'un incident.

AVVERTENZA: Non accendere la macchina se uno dei conduttori di terra non è connesso. In caso di guasti elettrici, tali conduttori garantiscono la sicurezza del sistema.

VORSICHT: Stromzufuhr zum Gerät nicht einschalten, wenn keine Erdung gegeben ist.

AVISO: No encienda la máquina mientras esté desconectado algún circuito de tierra. Los circuitos de tierra mantienen la seguridad de la máquina en las situaciones de averías o errores.

Maintenance Safety

- Do not attempt any maintenance procedure that is not specifically described in the documentation supplied with the printer.
- Do not use aerosol cleaners. The use of supplies that are not approved may cause poor performance and could create a hazardous condition.
- Do not burn any consumables or routine maintenance items. For information on Xerox supplies recycling programs, go to www.xerox.com/gwa.

Operational Safety

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

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

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

WARNING

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

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

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

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

General Guidelines

For qualified service personnel only - Refer also to the preceding Power Safety Precautions.

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

Use care when servicing with power - Dangerous voltages may exist at several points in this printer. To avoid personal injury, do not touch exposed connections and components while power is on. Disconnect power before removing the power supply shield or replacing components.

Do not wear jewelry - Remove jewelry prior to servicing. Rings, necklaces and other metallic objects could come into contact with dangerous voltages and currents.

Warning Labels

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

Safety Interlocks

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

Moving the Printer

- Use the power switch to turn Off the printer, and unplug all cables and cords. Do not turn the printer Off by pulling the power cord or using a power-strip with an On/Off switch.
- The printer is heavy and must be lifted by three people.

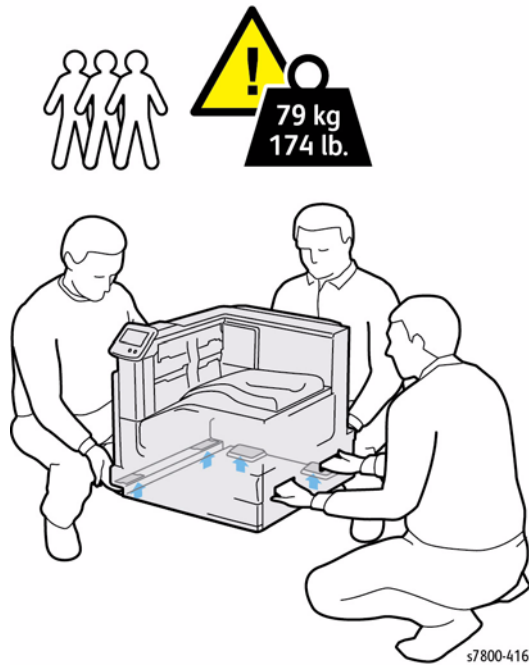


Figure 1 Printer Lifting Technique

Repacking the Printer

When shipping the printer, repack the printer using the original packing material and boxes or a Xerox packaging kit. Instructions for repacking the printer are included in the kit. If you do not have all the original packaging, or are unable to repackage the printer, contact your local Xerox service representative.

CAUTION

Failure to repackage the printer properly for shipment can result in damage to the printer. Damage to the printer caused by improper packaging is not covered by the Xerox warranty, service agreement, or Total Satisfaction Guarantee.

Repacking Procedure

1. Remove the Imaging Unit (Y/M/C/K) (REP 8.1).
2. Remove the Toner Cartridge (Y/M/C/K) (REP 5.1).
3. Remove the Waste Cartridge (REP 8.9).
4. Remove the IBT Belt Cleaner Assembly (REP 6.1).
5. Remove the Front Cover Assembly and Inner Cover Assembly (REP 19.1).
6. Remove the Top Cover (REP 19.2).
7. Cut card board to 4 pieces at approximately 1 x 1.5 inch for each piece.
8. Cover the toner ports with the card boards.

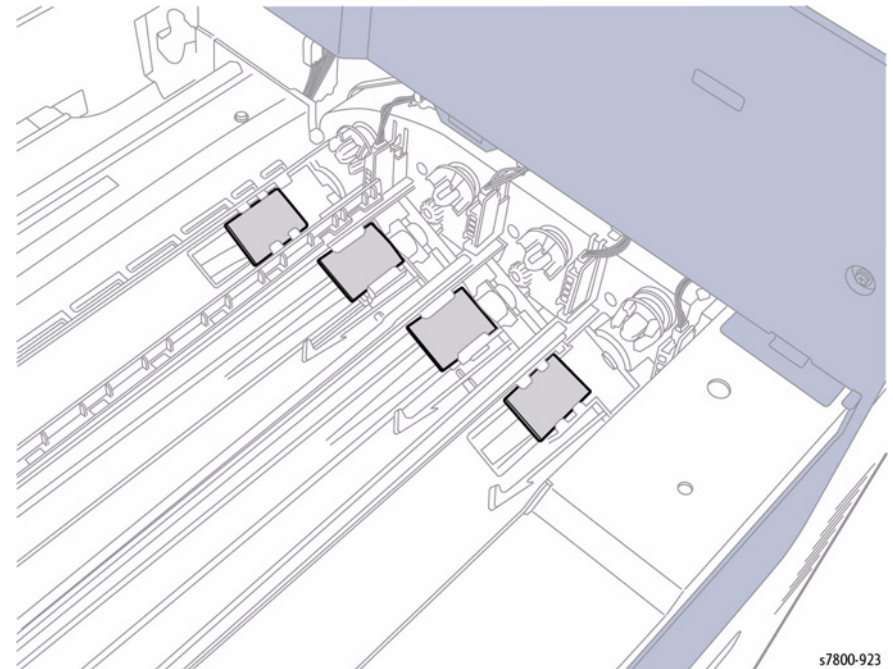


Figure 2 Covering the Toner Ports

- Use the tape from the Repack Kit and cut the tape to secure the Card Boards at the toner ports.

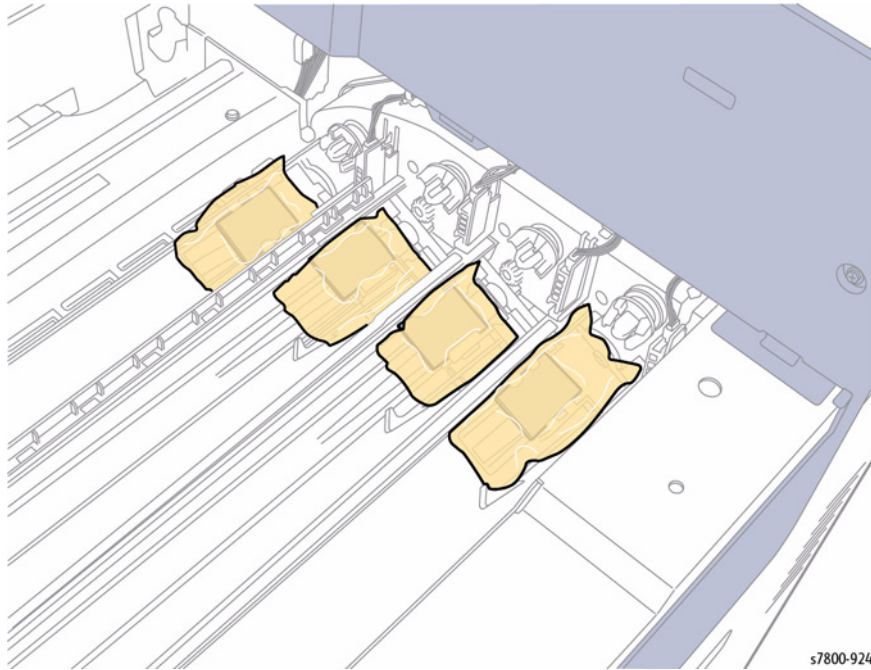


Figure 3 Securing the Card Boards

- Reassemble the printer and follow the instructions included with the repair kit.

Serial Number Format

Changes to Xerox products are made to accommodate improved components. As improvements are made, part numbers may change from those appearing in this section. To get the latest part, provide the following information when ordering:

- Component's part number
- Product type or configuration number
- Serial number of the printer

The nine-digit serial number has the following format:

- PPPRSSSSS**
- PPP** = Three digit alphanumeric product code
- R** = Single digit numeric revision digit, 0-9. To be rolled when a major product change occurs and initiated with a change request.

Table 1 Product Code

Product	Product Code
7800, 110V Engine	AT0
7800V, 220V Engine	AT1

NOTE: Not all of the serial number will be used. This is a buffer in case additional units are built by Fuji Xerox for each model of printer during pre-production.

Table 2 Serial Number

Product	Starting Serial Number	Ending Serial Number
7800_DN, 110V Engine	205601	224500
7800_YDN, 110V Engine	224501	225500
7800V_DN, 220V Engine	225601	250500

Serial numbers between 200601 - 205600 are reserved for XOG FIC sites if reserialization is needed. A serial number break or a new serial number range will be provided when a major product change occurs.

Examples

110V Engine

AT0220800

Product code for 110V printer = AT0

Serial number for 7800_DN = 220800

220V Engine

AT1227360

Product code for 220V printer = AT1

Serial number for 7800V_DN = 227360

Label Placement and Layout Example

The Serial Number Label will be applied inside the left door on the right side of the frame as shown in photo below:

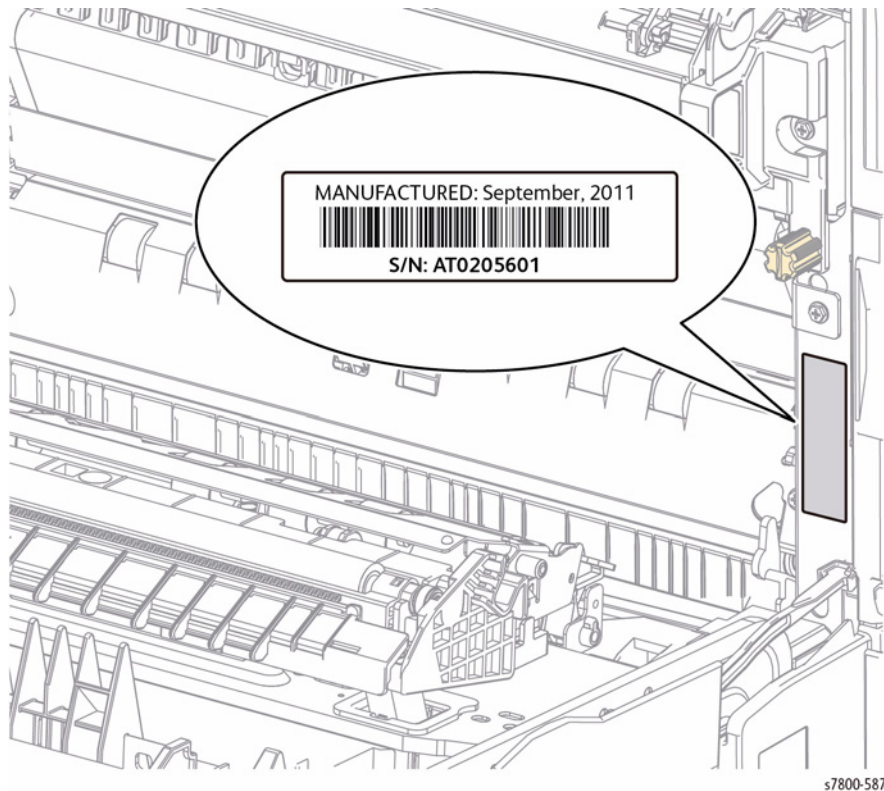


Figure 1 Serial Number Location

Symbols Used on the Printer

Warnings, Cautions, and Notes

Be aware of all symbols and terms when they are used, and always read Note, Caution, and Warning statements.

A translated version of all warnings is in [Translation of Warnings](#) section.

Warnings, Cautions, and Notes can be found throughout the service manual. The words WARNING or CAUTION may be listed on an illustration when the specific component associated with the potential hazard is pointed out; however, the message of the WARNING or CAUTION is always located in the text. Their definitions are as follows:

WARNING

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

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

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

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

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

CAUTION

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

NOTE: A Note is used whenever it is necessary to highlight an operating or maintenance procedure, practice, condition, or statement.

Printer Safety Icons

The following precautionary symbols may appear on the printer.

This symbol indicates hot surface on or in the printer. Use caution to avoid personal injury.



Figure 1 Hot Surface Symbol

Use caution (or draws attention to a particular component).



Figure 2 Use Caution Symbol

Danger, High Voltage



Figure 3 High Voltage Symbol

Fuser Temperature



Figure 4 Fuser Temperature

Static Caution



Figure 5 Static Caution Symbol

Do not touch the item.



Figure 6 Do Not Touch Item Symbol

Do not burn the item.



Figure 7 Do Not Burn Item Symbol

Recycle the item.



Figure 8 Recycling Item Symbol

Protective Ground (Earth) symbol.



Figure 9 Protective Ground (Earth) Symbol

Electrostatic Discharge Precautions

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

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

- Immediately before handling any semiconductor components assemblies, drain the electrostatic charge from your body. This can be accomplished by touching an earth ground source or by wearing a wrist strap device connected to an earth ground source. Wearing a wrist strap will also prevent accumulation of additional bodily static charges. Be sure to remove the wrist strap before applying power to the unit under test to avoid potential shock.
- After removing a static sensitive assembly from its anti-static bag, place it on a grounded conductive surface. If the anti-static bag is conductive, you may ground the bag and use it as a conductive surface.
- Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage some devices.
- Do not remove a replacement component or electrical sub-assembly from its protective package until you are ready to install it.
- Immediately before removing the protective material from the leads of a replacement device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
- Minimize body motions when handling unpacked replacement devices. Motion such as your clothes brushing together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an electro-statically sensitive device.
- Handle IC's and Erasable Programmable Read-Only Memories (EPROM's) carefully to avoid bending the pins.
- Pay attention to the direction of parts when mounting or inserting them on the Printed Circuit Boards (PCB's).

Regulatory Requirements

Xerox has tested this printer to electromagnetic emission and immunity standards. These standards are designed to mitigate interference caused or received by this printer 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 FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with these instructions, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

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

- Reorient or relocate the receiver.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/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:

Figure 1 CE Symbol

- December 12, 2006: Low Voltage Directive 2006/95/EC
- December 15, 2004: Electromagnetic Compatibility Directive 2004/108/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.

Ozone Release

During print operation, a small quantity of ozone is released. This amount is not large enough to harm anyone adversely. However, be sure the room where the printer is being used has adequate ventilation, especially if you are printing a high volume of materials, or if the printer is being used continuously over a long period.

Translation of Warnings

General Usage

WARNING

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

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

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

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

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

WARNING

Do not touch the fuser while it is hot.

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

AVVERTENZA: Non toccare il fonditore quando è caldo.

VORSICHT: Fixierbereich erst berühren, wenn dieser abgekühlt ist.

AVISO: No toque el fusor mientras está caliente.

WARNING

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

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

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

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

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

WARNING

USA and Canada. Do not install this printer in a hallway or exit route that does not have 1.12 m (44 inches) of space additional to the normal space requirements in front of the machine. To conform with fire regulations this additional 1.12 m (44 inches) of space is needed in front of the printer in hallway and exit routes.

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

AVVERTENZA: N/A

VORSICHT: N/A

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

Electrical

WARNING

Do not perform repair activities with the power on or electrical power supplied to the machine. The machine could activate and cause serious personal injury when the power is on or electrical power is supplied.

DANGER: Ne pas effectuer de dépannage avec le contact principal activé ou avec l'alimentation électrique appliquée à la machine: celle-ci pourrait démarrer et causer de graves blessures.

AVVERTENZA: Non effettuare alcuna riparazione con la macchina accesa o con l'alimentazione elettrica inserita. La macchina potrebbe avviarsi all'improvviso e causare gravi ferite.

VORSICHT: Es dürfen keine Reparaturarbeiten durchgeführt werden, solange das Gerät eingeschaltet oder mit der Stromquelle verbunden ist. Das Gerät kann u.U. in den Aktiv-Zustand übergehen und somit erhebliche körperliche Schäden verursachen.

AVISO: No realice reparaciones con la máquina encendida o conectada a la corriente. La máquina podría activarse y ocasionar daños personales graves.

WARNING

Use extreme care when working near this power supply. High voltage is present on the power supply when the machine is in standby mode. Contact with electrical components or high voltage cables represents a shock potential that could result in serious personal injury.

DANGER: Faire très attention en intervenant près de ce module d'alimentation. Une haute tension y est présente lorsque la machine est en mode d'attente. Tout contact avec les éléments électriques ou les câbles haute tension représente un risque de choc et de graves blessures.

AVVERTENZA: Fare estrema attenzione quando si lavora vicino a questo gruppo statico. Il gruppo statico è caricato ad alta tensione quando la macchina è in modalità standby. Il contatto con componenti sotto tensione o cavi elettrici comportano un serio pericolo di scossa elettrica e gravi ferite.

VORSICHT: Bei der Verwendung unterbrechungsfreier Stromversorgung benutzt äußerste Vorsicht. Während die Maschine sich im Energiespar-Modus befindet, steht es unter Hochspannung. Beim Umgang mit elektrischen Bauteilen und Hochspannungsleitungen erhöht sich das Unfallrisiko. Äußerste Vorsicht ist geboten.

AVISO: Tenga mucho cuidado al trabajar en las proximidades de la fuente de alimentación. Hay voltaje muy alto en la fuente de alimentación cuando la máquina se encuentra en el modo de espera. El contacto con componentes eléctricos o cables de alto voltaje representa peligro de descarga eléctrica que puede ocasionar daños personales graves.

Finisher

WARNING

Do not connect the finisher power cord directly to the AC wall outlet. The finisher cannot operate without the machine. The machine controls the distribution of electricity to the finisher for correct power on the power off sequencing.

DANGER: Ne pas connecter le cordon d'alimentation du module de finition directement sur la prise murale. Le module ne peut pas fonctionner sans la machine. Celle-ci contrôle la distribution d'électricité vers le module de finition lors des séquences de mises hors tension.

AVVERTENZA: non connettere il cavo elettrico della stazione di finitura direttamente a una presa a muro. La macchina non è in grado di funzionare indipendentemente dalla stampante, la quale ne gestisce totalmente i cicli di accensione e spegnimento.

VORSICHT: Netzstecker des Finisher nicht direkt an eine Netzsteckdose anschließen. Der Finisher kann nicht ohne das Document Centre betrieben werden. Die Stromversorgung zum Finisher zur richtigen Abschaltsequenz wird vom Document Centre gesteuert.

AVISO: No conecte el cable de alimentación de la acabadora directamente a la toma de corriente alterna. La acabadora no funciona sin la máquina. La máquina controla la distribución de energía eléctrica a la acabadora para la secuencia correcta de encendido y apagado.

Phaser 7800 Overview

The Phaser 7800 uses single-pass LED print heads with an electrophotographic four-color (YMCK) tandem architecture and intermediate transfer printing process. The Phaser 7800 delivers color and mono print speed at 45/45-ppm, and resolutions up to 1200 x 2400 dots-per-inch (dpi). The Phaser 7800 supports Adobe PostScript 3, PCL5, PCL6, USB 2.0, and 10/100/1000 Base-TX Ethernet. Additional features include a 4.3" touch screen display and a Hard Disk Drive. A Finisher with stacking, stapling, punching, and booklet making features is available with the Phaser 7800 per selected model.

Input trays can support up to 5 trays with 1500-Sheet High-Capacity Feeder or 2500-Sheet High-Capacity Feeder. Tray 1 supports up to 100 sheets of specialty paper, card stock, and envelopes. The standard paper input is 500 sheets and the maximum input with an optional Trays 3, 4, and 5 is 2500 sheets. Two output trays are included with the Phaser 7800; each output tray holds 250 sheets face down.

Printer Configurations

The Phaser 7800 is available in three configurations.

Table 1 Phaser 7800 Configurations

Features	7800 DN	7800 GX	7800 DX
Processor and Clock Speed	1.33 GHz	1.33 GHz	1.33 GHz
Memory Configuration*	2 GB	2 GB	2 GB
Print Speed	45/45	45/45	45/45
Adobe Postscript 3 Fonts	Standard	Standard	Standard
PCL5 Fonts	Standard	Standard	Standard
PCL6 Fonts	Standard	Standard	Standard
USB 2.0	Standard	Standard	Standard
Ethernet Interface	10/100/1000 Base-TX	10/100/1000 Base-TX	10/100/1000 Base-TX
Tray 1 (100 Sheet)	Standard	Standard	Standard
Tray 2 (500 Sheet)	Standard	Standard	Standard
Tray 3/4/5 1500-Sheet Feeder	Optional	Standard	N/A
Tray 3/4/5 2500-Sheet Feeder	Optional	N/A	Standard
Auto-Duplexer	Standard	Standard	Standard
Hard Disk Drive	160 GB	160 GB	160 GB
Advanced Finisher	N/A	Optional	Optional
Professional Finisher	N/A	Optional	Optional
Wireless LAN	Optional	Optional	Optional
Printer Resolution (dpi)			
• Standard	• 1200x600	• 1200x600	• 1200x600
• Enhanced	• 1200x1200	• 1200x1200	• 1200x1200
• Photo	• 2400x1200	• 2400x1200	• 2400x1200
* All configurations have one memory slot supporting 2 GB DDR2 DIMMs.			

Parts of Phaser 7800

Left Front View of 7800GX Printer (with 1500-Sheet Feeder)

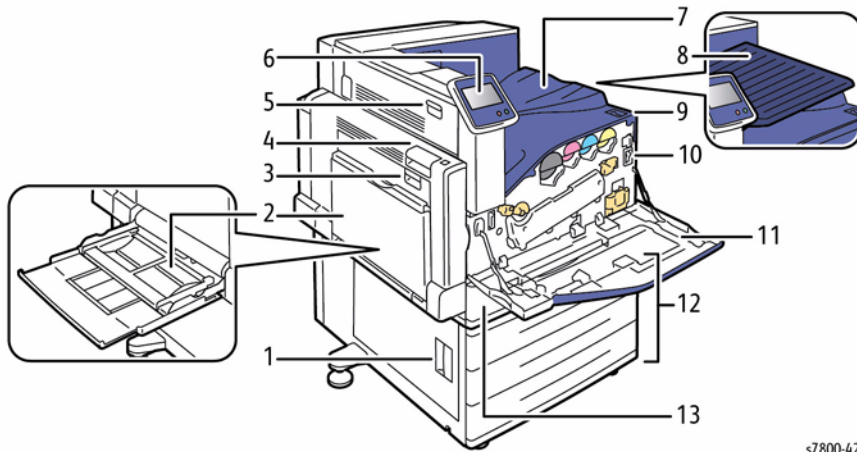


Figure 1 Left Front View with 1500-Sheet Feeder

1. Left Side Door C
2. Tray 1 with Extension Tray
3. Left Side Door B
4. Left Side Door A
5. Left Side Door D
6. Control Panel
7. Output Tray
8. Center Output Tray
9. Secondary Power Switch
10. Main Power Switch
11. Front Door
12. Tray 2
13. 1500-Sheet Feeder (Trays 3-5)

s7800-427

Left Front View of 7800DX Printer (with 2500-Sheet Feeder)

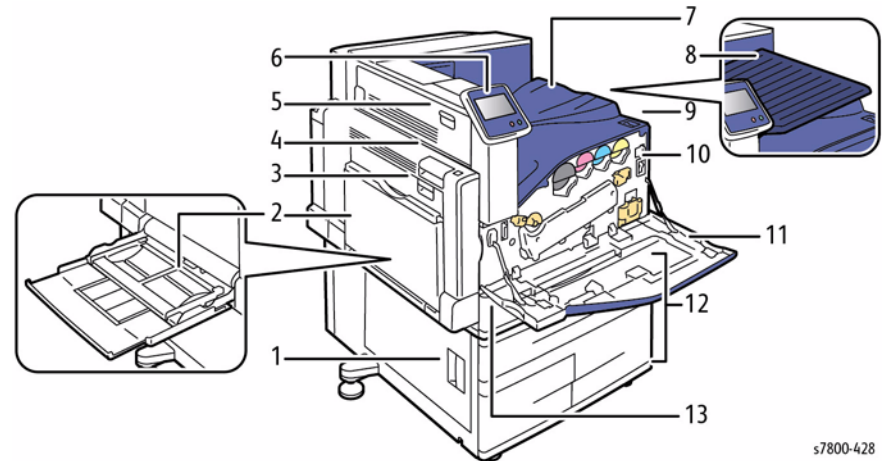


Figure 2 Left Front View with 2500-Sheet Feeder

1. Left Side Door C
2. Tray 1 with Extension Tray
3. Left Side Door B
4. Left Side Door A
5. Left Side Door D
6. Control Panel
7. Output Tray
8. Center Output Tray
9. Secondary Power Switch
10. Main Power Switch
11. Front Door
12. Tray 2
13. 2500-Sheet Feeder (Trays 3-5)

s7800-428

Left and Rear Views

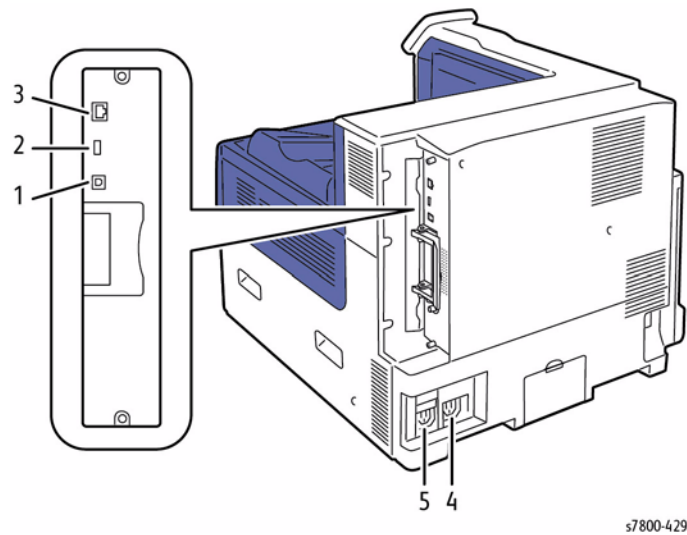


Figure 3 Left and Rear Views

1. USB Connection
2. USB Memory Port (for service only)
3. Ethernet Connection
4. Power Connector for Finisher
5. Power Connector for Printer

Hard Disk Drive

The Phaser 7800 supports an internal Hard Disk Drive. The Hard Disk Drive has a minimum 160 GB capacity. Features include:

- Secure Print
- Personal Print
- Personal or Shared Saved Print
- Disk Collation

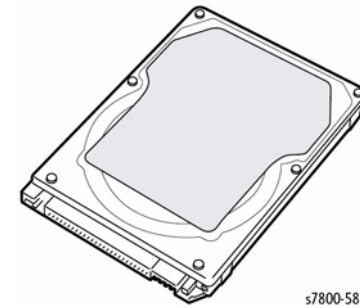


Figure 4 Hard Disk Drive

Phaser 7800 Options

The Phaser 7800 options include:

- Wireless Adapter
- Heavy Media Kit
- Optional 1500-Sheet Feeder (Trays 3, 4, 5)
- Optional 2500-Sheet Feeder (Trays 3, 4, 5)

Wireless Adapter

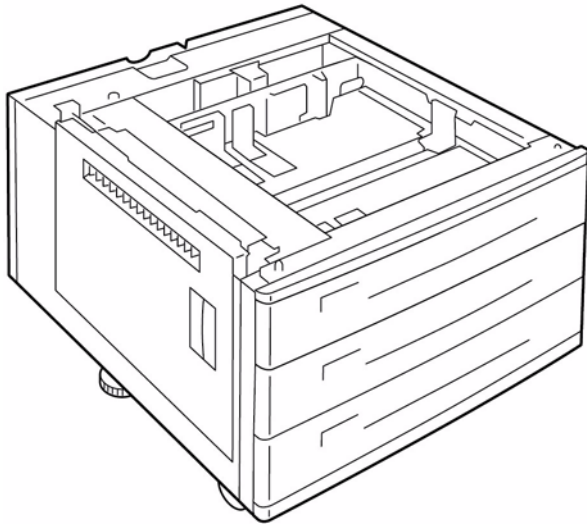
The Wireless Network Adapter enables the printer to connect to a wireless network.

Heavy Media Kit

The Heavy Media Kit allows the printer to feed media (duplex) up to 350gsm. Refer to Gate 1 Spring removal procedure ([REP 17.5](#)) for how to remove the Spring.

Optional 1500-Sheet Feeder (Trays 3, 4, 5)

The Optional 1500-Sheet Feeder increases the input capacity of the printer and can be attached to the printer underneath Tray 2. Each tray holds up to 500 sheets of media. The Optional 1500-Sheet Feeder is customer installable.

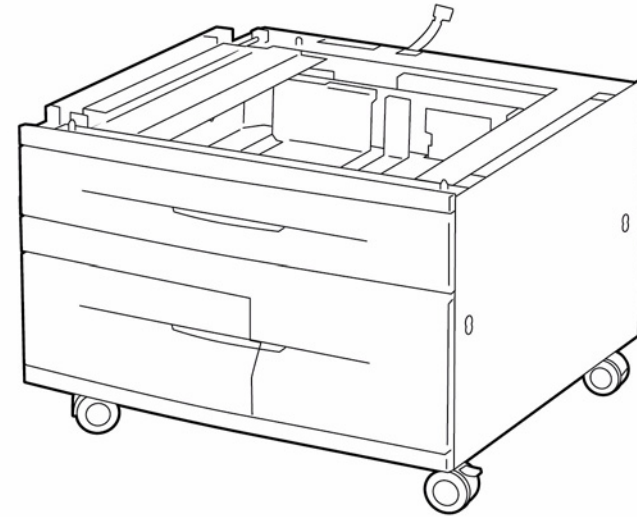


s8700-431

Figure 1 Optional 1500-Sheet Feeder

Optional 2500-Sheet Feeder (Trays 3, 4, 5)

The Optional 2500-Sheet Feeder increases the input capacity of the printer and can be attached to the printer underneath Tray 2. Tray 3 holds up to 500 sheets and Trays 4 and 5 hold up to 1,000 sheets each. The Optional 2500-Sheet Feeder is customer installable.



s7800-432

Figure 2 Optional 2500-Sheet Feeder

Finisher

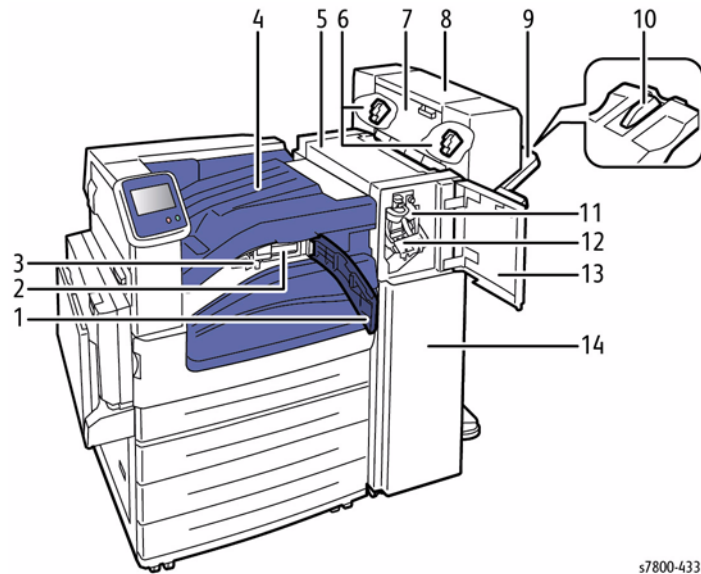
The Finisher is a customer install option and available in two models: Advanced and Professional.

Advanced Finisher

The Advanced Finisher consists of a Horizontal Transport and SB Finisher. The SB Finisher can collate, stack, staple, add a booklet crimp, saddle staple, and hole punch sets of prints.

The Advanced Finisher can stack up to 2000 sheets or 200 sets of 90 gsm or 20 lb letter/A4 size paper. For paper sizes greater than A4 LTR, the maximum number of sets is limited to 100.

The SB Finisher handles a variety of standard paper sizes, ranging from A4 SEF/ 8.5 x 11" up to A3/ 11 x 17". The Center Tray has a capacity of 200 sheets of A3/11 x 17" paper. The Stacker Tray has a capacity of 2000 sheets of A4/ 8.5 x 11" or 1000 sheets of A3/ 11 x 17" paper.



s7800-433

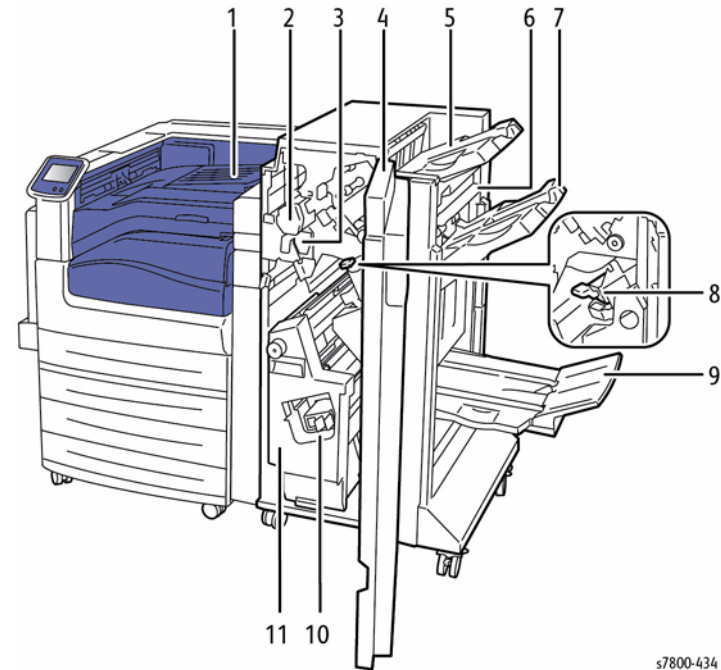
Figure 3 Advanced Finisher

- | | |
|---|--------------------------|
| 1. Front Transport Cover | 8. Booklet Maker |
| 2. 2/3 Hole Punch Kit or 2/4 Hole Punch Kit | 9. Right Tray |
| 3. Hole Punch Waste Container | 10. Right Tray Extension |
| 4. Horizontal Transport | 11. Creaser Unit |
| 5. Finisher Top Cover | 12. Staple Cartridge |
| 6. Booklet Staple Cartridge | 13. Finisher Front Door |
| 7. Side Cover for Booklet Unit | 14. Finisher Front Cover |

Professional Finisher

The Professional Finisher includes a Booklet Maker.

- Top Tray: 500 sheets
- Stacking Tray: Up to 3000 sheets
- Stapling:
 - Single (Front/ Rear), dual, and quadruple* (A A4/ Letter)
 - Auto stapling (50 sheets maximum) - 24 lb/90 gsm
 - Booklet stapling
 - Supports Letter, Legal, Tabloid, A3, A4, B4 and B5 size



s7800-434

Figure 4 Professional Finisher

- | | |
|-------------------------------|-----------------------------|
| 1. Center Tray | 7. Right Middle Tray |
| 2. Hole Punch Unit | 8. Staple Cartridge |
| 3. Hole Punch Waste Container | 9. Booklet Tray |
| 4. Finisher Front Door | 10. Booklet Staple Assembly |
| 5. Right Top Tray | 11. Booklet Maker |
| 6. Exit Cover | |

Control Panel Configurations

The Control Panel consists of one LED, one 4.3 inch Wide Video Graphics Array (WVGA) touch screen display, and 2 functional buttons. The touch screen is used to navigate the menu system, perform functions, and select modes of operation for the printer. The Control Panel contains various features include:

- Displays the current operating status of the printer.
- Provides access to print features.
- Provides access to reference materials.
- Provides access to Tools and Setup menus.
- Provides access to Troubleshooting menus and videos.
- Prompts user to load paper, replace supplies, and clear jams.
- Displays errors and warnings.
- Plays event-driven videos.

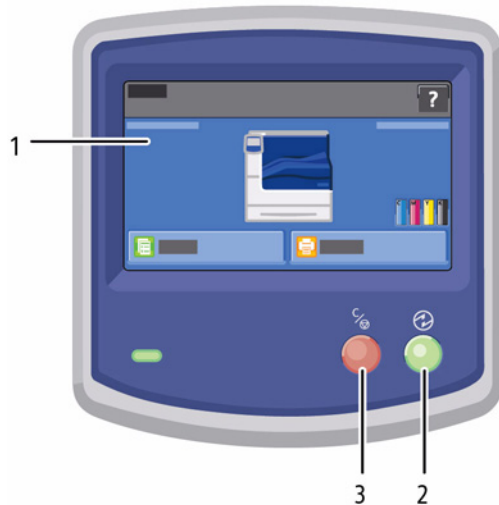


Figure 1 Phaser 7800 Control Panel

- | | |
|-----------------|---|
| 1. Touch Screen | Displays information and provides access to the printer functions |
| 2. Power Saver | Enters Sleep mode, and exists Low Power or Sleep mode. |
| 3. Cancel | Temporarily stops the current print job, allowing user to cancel or resume the job. |

Control Panel Special Functions

Table 1 Service Control Panel

Function	Buttons Presses
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 (GP 10 - Control Panel Troubleshooting).
Override locked Service Tools menu using Service credentials	At the login screen: User Name: !\$ecivreS Passcode: 2732
Resetting the System Admin (SA) Pass Code	<ol style="list-style-type: none"> 1. Obtain the printer serial number and page count. 2. Call the Welcome Center for a temporary pass code. 3. Enter reset (not case sensitive) and temporary pass code at the login screen. <p>NOTE: SA login credentials return to default values (ADMIN/1111) after 100 pages.</p>
Access Code	<ul style="list-style-type: none"> • From Control Panel <p>Printer > Tools > Setup > Service Tools > Service Diagnostics</p> <ul style="list-style-type: none"> • Enter code 6789

LED Indicators

Table 2 LED Indicators

LED State	Printer State
Flashing Green	If no error condition exists and print engine is busy or a job is being processed.
Green	No error or warning condition exists.
Red	An error condition exists.
Amber	No error condition exists and a warning condition exists.

LUI (Control Panel) Lock

- LUI Lock is stored on the SD Card.
- LUI Lock factory default for all items: Off.
- System Administrator (SA) user name and passcode are stored on the SD Card.
- System Administrator (SA) user name and passcode factory defaults: "admin", 1111.
- Service username and passcode: Available from Service.
- Service Access is stored on the SD Card.
- Service Access: Enabled.
- If LUI Lock is Off or Service and the SA are not logged in, all buttons are displayed with no key icon.
- If LUI Lock is On and neither Service nor the SA is logged in, the buttons of each lockable item is displayed with a key icon.
- The lockable items are:
 - Print Reference Materials
 - Tray Management
 - Language / Keyboard
 - Date / Time
 - System Timeout
 - Startup Page
 - Network & USB
 - Reprint Jammed Pages
 - Security
 - Output Settings
 - Energy Saver
 - PostScript
 - Service Tools
- If an LUI button has no key icon, selecting it displays the button's menu.
- If an LUI button has a key icon, selecting the button displays the passcode entry screen.
- If the SA user name and passcode are entered, the SA is logged in.
- If Service Access is Enabled and the Service user name and passcode are entered, Service is logged in.
- If either Service or the SA is logged in, the item is displayed.
- Service or the SA is logged out when the System Timeout expires or the Logout button is selected from the Home Page.

Interactions

If the user name "reset" is entered in the passcode entry screen, a passcode generated from the serial number and Total Impressions by a proprietary algorithm is valid until Total Impressions plus 100 is reached.

- The above allows service to help users who have forgotten or lost their SA user name and/or passcode. The customer can call for assistance and must provide the printer serial number and current Total Impressions, which uses a Xerox app to generate the passcode. This passcode works while the printer's Total Impressions are from up to and including Total Impressions + 99. Note that the "reset" user name and special passcode also work in CWIS.

Routine Maintenance Items

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

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

NOTE: Print life is based on "typical" office printing and 5% coverage per color on 24 lb. paper. The 1,500,000 life is not guaranteed and varies depending on usage habits.

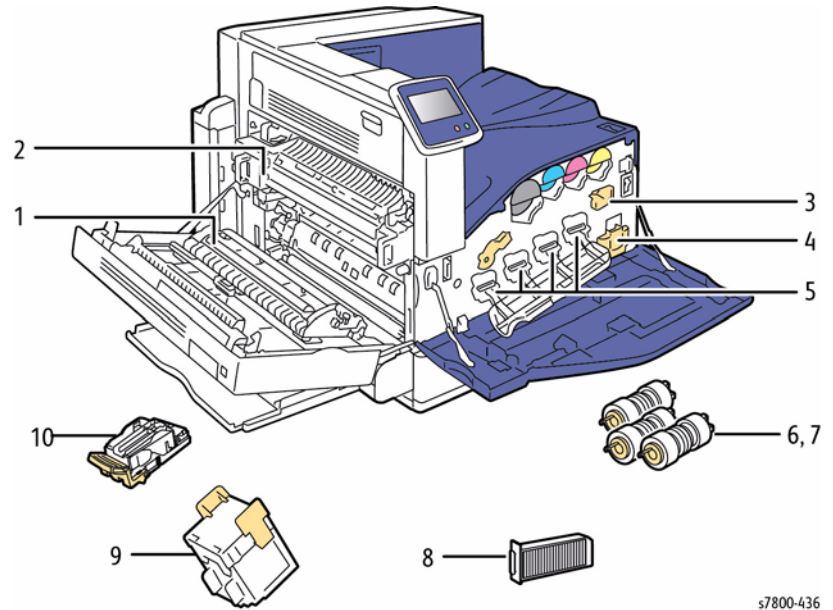


Figure 1 Routine Maintenance Items

Table 1 Phaser 7800 Maintenance Items

Item	Description	Print Life
1	Transfer Roller	200,000 pages
2	Fuser	360,000 pages
3	Transfer Belt Cleaner (IBT Cleaner)	160,000 pages
4	Waste Cartridge	20,000 pages
5	Imaging Units	<ul style="list-style-type: none"> • 5-page jobs: up to 145,000 pages • 3-page jobs: up to 115,000 pages • 1-page jobs: up to 64,000 pages
6	Tray 1 Feed Roller Kit	100,000 pages
7	Tray 2-5 Feed Roller Kit	300,000 pages per tray
8	Suction Filter	120,000 pages

Table 1 Phaser 7800 Maintenance Items

Item	Description	Print Life
9	Staple Cartridge (Booklet Maker, Advanced Finisher)	2,000 sets
	Staple Cartridge (Booklet Maker, Professional Finisher)	5,000 sets
10	Staple Cartridge (Advanced Finisher, Professional Finisher)	5,000 sets

Consumables

Consumable consist of 4 Toner Cartridges used in the printer.

Each Toner Cartridge has a CRUM (Customer Replaceable Unit Meter) to record new or used cartridge and usage information and identifies the type of Toner Cartridge (Standard or High capacity).

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

Internal counters track Consumables and Maintenance Items life usage.

Life ratings are based on A-size sheets at 5% coverage.

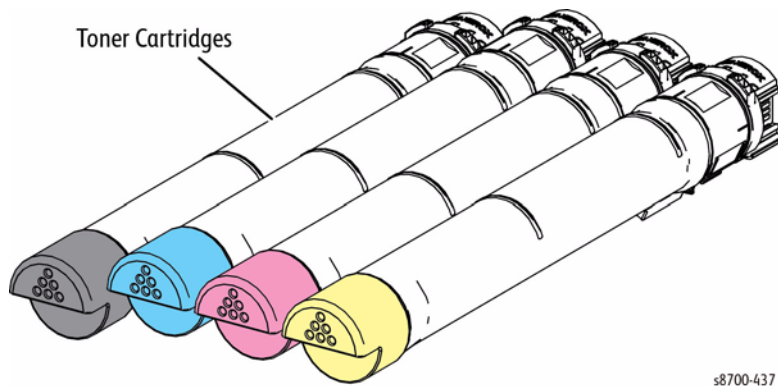


Figure 1 Consumables

Toner Cartridge	Print Life
Standard Capacity	CMY: 6,000 pages
High Capacity	CMY: 17,200 pages K: 24,000 pages

Specifications

Printer Specifications

Table 1 Printer Specifications

Characteristic	Specifications
Printing Technology	<p>Recording System: Electrophotographic method that uses OPC Drum and Intermediate Transfer Belt</p> <p>Charging System: Includes contact charge (BCR) and roll type cleaner</p> <p>Development System: Dry type two-component magnet roller method that uses EA-HG toner, 5.8 microns in diameter (C, M, Y, K)</p> <p>Exposure System: LED Print Head</p> <p>Transfer System: Roller method using both primary and secondary transfers</p> <p>Fusing System: Induction Heating (IH) Fusing method</p> <p>Cleaning Method:</p> <ul style="list-style-type: none"> Imaging Unit: Cleaning Blade IBT: Cleaning Blade
Printer Life	1,500,000 pages
Maximum Duty Cycle	Up to 175,000 pages/month*
Recommended AMPV	Up to 30,000 pages/month
Color Medium	Cyan, Magenta, Yellow, and Black Print Cartridges
Print-Quality Mode (dpi)	<ul style="list-style-type: none"> Standard: 1200 x 600 Enhanced: 1200 x 1200 Photo: 2400 x 1200
Average Image Coverage	<ul style="list-style-type: none"> Color: 5% each CMY Mono: 5%
Average Job Size	5 pages
Maximum Image Coverage	240% for all C, M, Y, K combined
First Page Output Time	As fast as 8 seconds
Operating System	<ul style="list-style-type: none"> Windows: Vista and Windows 7 Macintosh: OS 10.5 or higher, Intel Mac Linux <ul style="list-style-type: none"> Solaris 8, 9, 10 HPUX 11.0 and 11iv2 AIX 5I v5.3 Linux Fedora Cora 1 and 5 Redhat Enterprise Linux 4 Suse Linux 10.0 and 11.x
* Assumes a 30 day month of printing.	

Memory Specifications

Table 2 Memory Specifications

Characteristic	Specifications
Memory	2.0 GB
Supported RAM	Supports 2.0 GB of DDR2 DIMM with one memory slot.

Electrical Specifications

Table 3 Electrical Specifications

Characteristic	Specifications
Power Supply Voltage/ Frequency	
Line Voltage	<ul style="list-style-type: none"> 110 - 127 V \pm 10% 220 - 240 V \pm 10%
Frequency Range	50/60 Hz \pm 3 Hz0

Environmental Specifications

Table 4 Environmental Specifications

Characteristic	Specifications	
Temperature		
Operating	10° to 32° C (50° to 90° F)	
Storage	-20° to 48° C (-4° to 118° F)	
Humidity (% RH)		
Operating	15% to 85% RH	
Optimum	20% to 70% RH	
Altitude		
Operating	0 to 3,200 meters (10,500 feet)	
Acoustic Noise		
	Sound Power Level (Bels)	Sound Pressure (Decibels)
Operating (LWAd)	6.81 B(A)	52 dB(A)
Idle (LWAd)	3.8 B(A)	21 dB(A)

Energy Consumption

115 VAC, 60 Hz Operation

Table 5 Non-Printing Modes

Non-Printing Modes	Time (sec)	Lpeak (A)	Ppeak (W)	Watt Hours	BTUs	Watts/hour
Power Off	600	0.07	0.2	0.03	0.1	0.2
Warm Up through Start Page	181	10.4	1185.9	12.28	41.9	244.2
Ready/ Standby Mode	3600	4.0	459.4	85.95	293.3	86.0
Low Power Mode	3600	4.0	457.5	53.28	181.8	53.3
Sleep Mode	3600	0.1	5.4	5.33	18.2	5.3
1st Page from Ready Mode	7	10.0	1138.6	2.02	6.9	1038.9
1st Page from Low Power	9	10.0	1141.1	2.97	10.1	1188.0
1st Page from Sleep	61	10.2	1162.5	7.88	26.9	465.0

Table 6 Printing Modes

Printing Modes	Time (sec)	Images	ipm	Watt Hours	BTUs	BTUs/Image	Watts/hour
Printing Color Simplex	260	190	43.8	61.0	208.1	1.1	844.1
Printing Color Duplex	276	197	42.8	58.7	200.4	1.0	765.9
Printing Monochrome Simplex	206	150	43.7	39.6	135.0	0.9	691.2
Printing Monochrome Duplex	299	213	42.7	54.0	184.2	0.9	649.8

Table 7 Non-Printing Modes

Non-Printing Modes	Time (sec)	Lpeak (A)	Ppeak (W)	Watt Hours	BTUs	Watts/hour
Power Off	598	0	0.4	0.06	0.2	0.4
Warm Up through Start Page	150	5.2	1188.2	12.16	41.5	291.8
Ready/ Standby Mode	3600	2.1	482.6	85.51	291.8	85.5
Low Power Mode	3600	2.3	519.5	55.54	189.6	55.5
Sleep Mode	3600	0.2	17.5	6.32	21.6	6.3
1st Page from Ready Mode	8	5.2	1196.7	1.83	6.2	823.5
1st Page from Low Power	10	5.2	1192.6	3.26	11.1	1173.6
1st Page from Sleep	33	5.1	1162.4	6.08	20.8	663.3

Table 8 Printing Modes

Printing Modes	Time (sec)	Images	ipm	Watt Hours	BTUs	BTUs/Image	Watts/hour
Printing Color Simplex	299	210	42.1	63.1	215.5	1.0	760.1
Printing Color Duplex	298	188	37.9	58.4	199.2	1.1	705.0
Printing Monochrome Simplex	298	218	43.9	52.3	178.4	0.8	631.3
Printing Monochrome Duplex	299	211	42.3	51.6	176.2	0.8	621.8

Print Speed

Internal Tray

Table 9 Internal Tray

Continuous Print Speed					
Resolution	Color Mode	A4	A4 Duplex	A3	A3 Duplex
Bond Plain Recycled Plain Reload	Color	45	45	22	15
	B/W	45	45	22	15
Heavyweight 1* Coated 1 (*1) Labels (*1)	Color	32	32	17	13
	B/W	32	32	17	13
Heavyweight 2 (*1) Coated 2 (*1)	Color	22	22	13	9
	B/W	22	22	13	9
Transparency	Color	22	N/A	13	N/A
	B/W	22	N/A	13	N/A

- (*1) Auto Duplex not available for Plain Reload, Heavyweight 1/2 Reload, Coated 1/2 Reload, and Labels
- (*2) Tray 1 does not support paper of this size range. Trays 2 ~ 4 support up to 12x19" SEF or SRA3.

Tray 1

Table 10 Tray 1

Continuous Print Speed					
Resolution	Color Mode	A4	A4 Duplex	A3	A3 Duplex
Bond Plain Recycled Plain Reload (*1) Lightweight (*1)	Color	40	40	22	15
	B/W	40	40	22	15
Heavyweight 1 (*1) Coated 1 (*1) Labels (*1)	Color	32	32	17	13
	B/W	32	32	17	13
Heavyweight 2 (*1) Coated 2 (*1) Heavyweight 2 (*1) (*2)	Color	22	22	13	9
	B/W	22	22	13	9
Transparency	Color	22	N/A	13	N/A
	B/W	22	N/A	13	N/A

- (*1) Auto Duplex not available for Plain Reload, Lightweight, Heavyweight 1/2/3 Reload, and Labels
- (*2) Heavyweight 3 is recognized as Heavyweight 2A in IOT.

First Print Output Time

First Print Output Time (FPOT) is defined as the time from when the engine receives a Start signal in Ready state, until a single page is printed and delivered to the output tray.

The following conditions are applied:

- The Controller does not keep the print engine waiting.
- The printer prints at Simplex mode.
- The printer is at Standby mode (ROS Motor Off, Fuser Ready).
- Paper is A4 size Long-Edge Feed (LEF).

Table 11 First Print Output Time

Condition	FPOT (sec.)
Mono FPOT from Warm	9 sec.
Color FPOT from Warm	9 sec.
FPOT from Sleep	40 sec.
FPOT from power Off (cold)	100 sec.

Media and Tray Specifications

The following tables list the recommended Xerox paper for the Phaser 7800. Print the Paper Tips Page from the printer for more details.

See also: Recommended Media List at www.xerox.com/paper

Supported Media Size

Table 12 Media Size

Media Type	Size	Tray 1	Tray 2	3TM	TTM
				Trays 3, 4, 5	Trays 4, 5
Letter	8.5 x 11 in.	Yes	Yes	Yes	Yes
Legal	8.5 x 14 in.	Yes	Yes	Yes	Yes
Executive	7.25 x 10.5 in.	Yes	Yes	Yes	Yes
Statement	5.5 x 8.5 in.	Yes	Yes	Yes	Yes
A3	297 x 420 mm	Yes	Yes	Yes	Yes
A4	210 x 297 mm	Yes	Yes	Yes	Yes
A5	148 x 210 mm	Yes	Yes	Yes	Yes
B4 JIS	257 x 364 mm	Yes	Yes	Yes	Yes
B5 JIS	182 x 257 mm	Yes	Yes	Yes	Yes
B5 ISO	176 x 250 mm	Yes	Yes	Yes	Yes
US Folio	8.5 x 13 in.	Yes	Yes	Yes	Yes
Tabloid	11 x 17 in.	Yes	Yes	Yes	Yes
Tabloid Extra	12 x 18 in.	Yes	No	Yes	Yes
SRA3	320 x 450 mm	Yes	Yes	Yes	Yes
Custom	<ul style="list-style-type: none"> • Width: 140 x 297 mm (5.5~11.7 in.) • Length: 182 x 432 mm (7.2~17.0 in.) 	Yes	Yes	Yes	Yes
Banner	<ul style="list-style-type: none"> • Short Edge: 100 x 305 mm (3.94 x 12.00 in.) • Long Edge: 140 x 1219 mm (5.5 x 48.0 in.) 	Yes	No	No	No

NOTE: All trays support Custom sizes. Tray 1 supports a wider range of Custom size dimensions than trays 2 and 3.

Supported Media Types and Weights

Table 13 Media Types and Weights

				3TM	TTM	Auto-Duplex Support	
Media Type	Media Weight	Tray 1	Tray 2	Trays 3, 4, 5	Trays 4, 5	Extra Heavy Duty Media Kit	
Plain Paper	75-105g/m ² (20-28 lb. Bond)	Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Lightweight Cardstock	106-169 g/m ² (40-60 lb. Cover)	Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Card Stock	170-256 g/m ² (65-98 lb. Cover)	Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Heavy Card Stock	257-300 g/m ² (99-111 lb. Cover)	Yes	No	No	No	No Auto-Duplex	Auto-Duplex
Extra Heavy-weight Card Stock	301-350 g/m ² (112-134 lb. Cover)	Yes	No	No	No	No Auto-Duplex	No Auto-Duplex
Lightweight Glossy Cardstock	106-169 g/m ² (50-60 lb. Cover)	Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Glossy Cardstock	170-256 g/m ² (65-98 lb. Cover)	Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Heavyweight Glossy Cardstock	257-300 g/m ² (99-111 lb. Cover)	Yes	No	No	No	No Auto-Duplex	Auto-Duplex
Extra Heavy-weight Glossy Cardstock	301-350 g/m ² (100 lb. Cover)	Yes	No	No	No	No Auto-Duplex	No Auto-Duplex
Labels		Yes	Yes	Yes	Yes	No Auto-Duplex	No Auto-Duplex
Pre-printed		Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Hole Punched		Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Recycled		Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Transparency	Xerox Premium Transparency	Yes	Yes	No	No	No Auto-Duplex	No Auto-Duplex
Letterhead		Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Custom		Yes	Yes	Yes	Yes	Auto-Duplex	Auto-Duplex
Envelope	75-90 g/m ² (20-25 lb. Bond)	Yes	No	No	No	No Auto-Duplex	No Auto-Duplex

Supported Envelopes

Table 14 Envelopes

Type	Dimension	Tray 1	Trays 2, 3, 4, 5
#10 Commercial Envelope	4.12 x 9.5 in.	Yes	No
Monarch Envelope	3 7/8 x 7.5 in.	Yes	No
DL Envelope	110 x 220 mm	Yes	No
C5 Envelope	162 x 229 mm	Yes	No
C6 Envelope	114 x 162 mm	Yes	No
C4 Envelope	229 x 324 mm	Yes	No
Custom Envelope	Within range of min. - max standard media sizes	Yes	No

NOTE: Do not use envelopes with hot melt glue, windows, or metal clasps.

Physical Dimensions and Clearances

Printer Dimensions

Table 1 Print Engine

Print Engine	7800DN	7800 GX	7800 DX
Width	25.25 in. (641.4 mm)	25.25 in. (641.4 mm)	25.25 in. (641.4 mm)
Depth	27.5 in. (698.5 mm)	27.5 in. (698.5 mm)	27.5 in. (698.5 mm)
Height	22.75 in. (577.9 mm)	37.5 in. (952.5 mm)	37.5 in. (952.5 mm)
Weight	178.6 lb. (81.0 kg)	255.7 lb. (116.0 kg)	275.6 lb. (125.0 kg)

Table 2 Options

Options	
Optional 1500-Sheet Feeder (3TM)	
Width	22.0 in. (640.0 mm)
Depth	26.2 in. (665.0 mm)
Height	14.6 in. (371.0 mm)
Weight	77.0 lb. (35.0 kg)
Optional 2500-Sheet Feeder (TTM)	
Width	22.0 in. (640.0 mm)
Depth	26.2 in. (665.0 mm)
Height	14.6 in. (371.0 mm)
Weight	97.0 lb. (44.0 kg)

Clearance and Mounting Surface Specifications

These specifications apply to any printer used without a Lower Tray Assembly or Printer Stand.

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

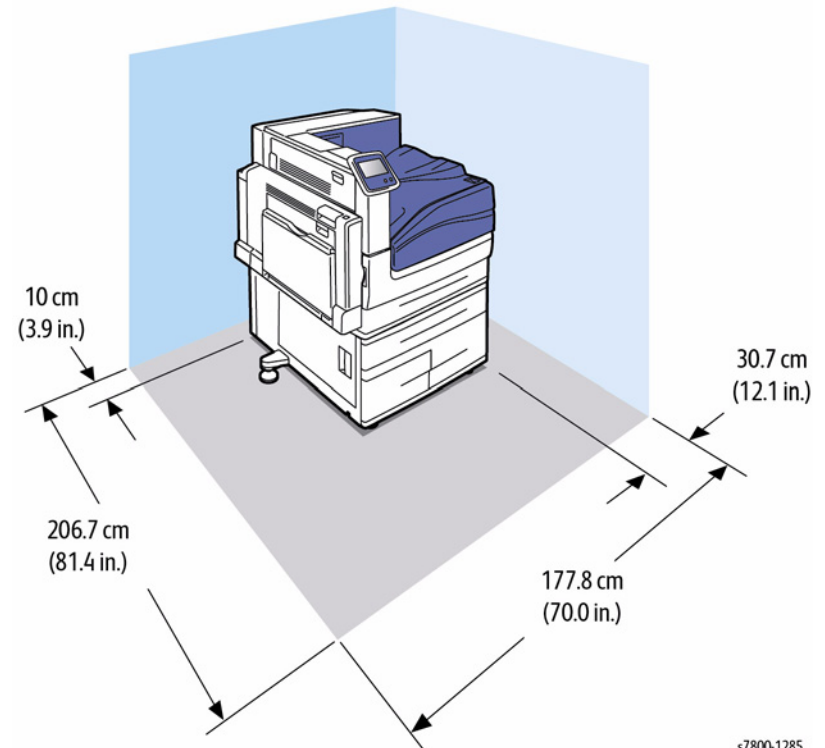


Figure 1 Clearance Specification for Printer

s7800-1285

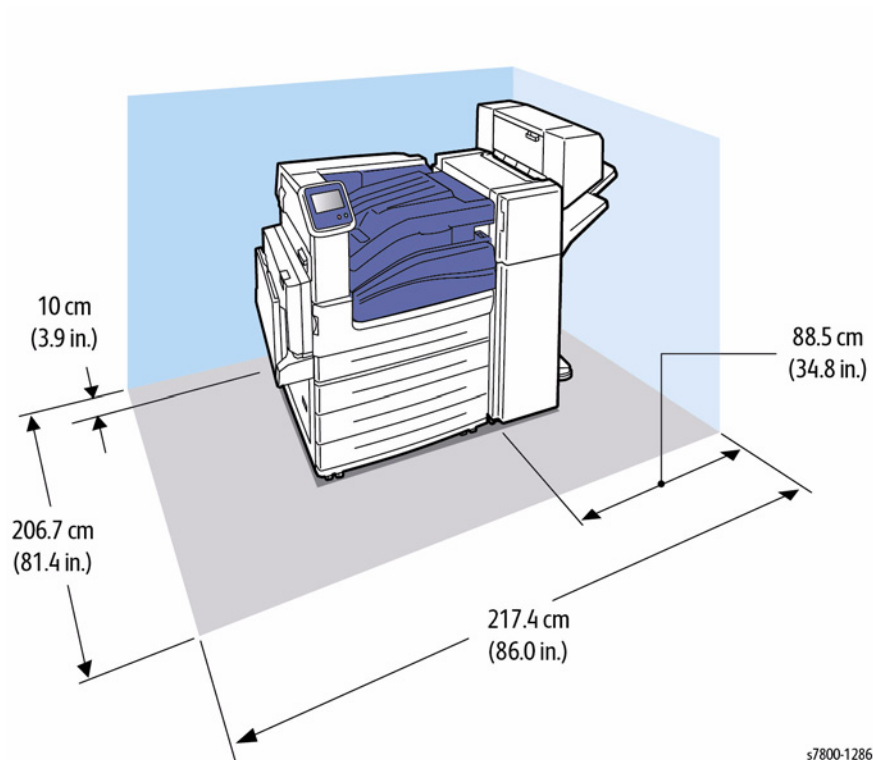


Figure 2 Clearance Specification for Advanced Printer with Booklet Maker

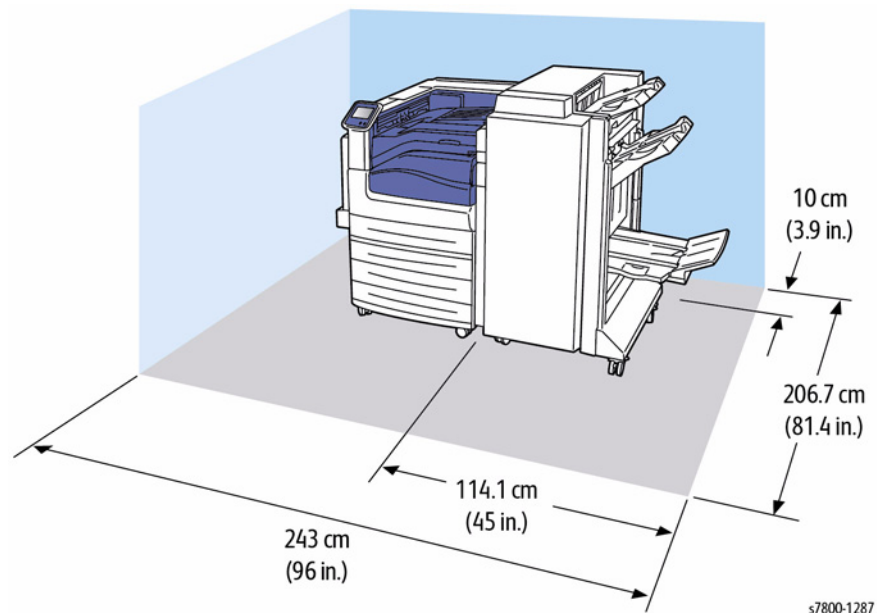


Figure 3 Clearance Specification for with Professional Finisher

2. Mounting surface flatness must be within the specified range. The printer must not be tipped or tilted more than .2 inches.

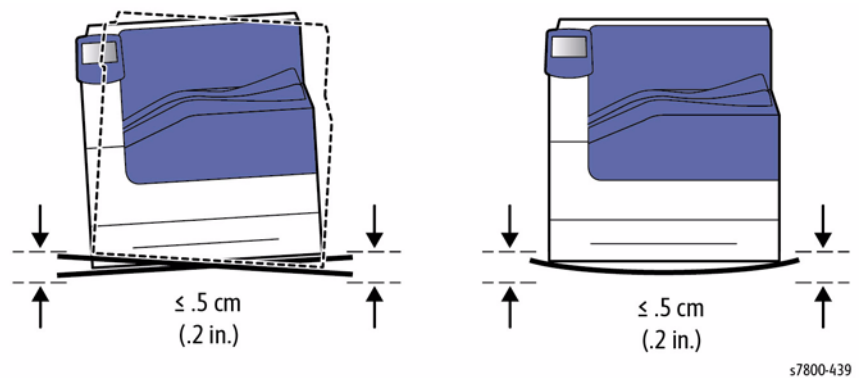


Figure 4 Tilting Specification

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

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

Toner Cartridge Life

Table 1 Toner Cartridge Life Information

Toner Cartridge	Control Panel Display		Functionality
	Life Warning Error	End of Life Error	
Xerox (Genuine Xerox)	X Toner Cartridge is low.	Tone empty. Replace X Toner Cartridge.	Can still print K if run black is enable.
Non-Xerox (compatible)	X Toner Cartridge is low.	Tone empty. Replace X Toner Cartridge.	Can still print K if run black is enable.
Non-Xerox (non-compatible)	Non-Xerox Black Toner in use. Non-Xerox Black Toner Cartridge X Toner is not genuine Xerox.	Replace X Toner Cartridge.	NOTE: <i>If it is non-Xerox Toner Cartridge is installed in the printer, estimated remaining pages will not be displayed. The gas gages are disabled.</i>

Maintenance Function

Firmware Update

The Image Processor Board firmware can be updated by customers and service technicians using Windows PC or Macintosh with dedicated utilities. Firmware updates are available at www.xerox.com/office/P7800support.

The Phaser 7800 updates Engine Controller, Network Controller (contained on the Hard Drives), and Finisher software.

Refer to [GP 21](#) Firmware Update in Chapter 6, General Troubleshooting.

Diagnostics

Two types of diagnostic functions are available:

1. Power On Self Test: The controller board is checked at every Power On. The CPU, ROM, and RAM are verified by the boot loader for integrity before the POST firmware can be loaded to verify the Controller Board, but other system components are not required for POST to run.
2. Service Diagnostics: Only qualified service personnel can perform manual diagnostics using [GP 3](#) (Service Diagnostics) in Chapter 6, General Troubleshooting.

Reference Pages and Troubleshooting Test Pages

The following Reference and Troubleshooting Test Pages are available in the Phaser 7800 printer. The pages can be accessed using the printer's Control Panel.

Reference Pages

Table 1 Reference Pages

Reference Page	Description
Configuration Report	Lists all information about the current configuration of the printer.
Connection Setup	Contains information about setting up the printer on a network, or connecting directly to a computer on a Windows or Macintosh.
Office Demo	Prints a page containing text.
Graphics Demo	Prints a page containing a graphic image.
2-Sided Demo	Prints two pages on one sheet containing a graphic image on one side, and text on the other side. Contains same images on Duplex sample, Office Sample and Graphics Sample.
Paper Tips	Lists supported paper and provides tips on setting up and loading paper trays.
PostScript Font List	Contains list of PostScript fonts available within the printer or installed on the printer's Hard Drive, if the optional Hard Drive is installed.
PCL Font List	Contains list of PCL fonts available internally within the printer or installed on the printer's Hard Drive, if the optional Hard Drive is installed.
CMYK Sampler	Prints spectrum of color rectangles with the values of each component color (Cyan, Magenta, Yellow, Black).
RGB Sampler	Prints spectrum of color rectangles with the values of each component color (Red, Green, Blue).
Spot Color Sampler	Prints 14 Pages of spot color samples.
Supplies Usage	Prints a page describing the status of the supplies used by the printer.
Usage Profile	Contains summary page of printer usage information.

Accessing the Reference Pages

1. From the printer's Control Panel, touch **Printer**.
2. Touch **Print Reference Materials**.
3. Select the appropriate reference page.
4. Touch **Print** to print the page(s).

Troubleshooting Test Pages

Table 2 Troubleshooting Test Pages

Test Pages	Description
Cyan 50% Fill Test Page	Prints 1 page consisting of 50% Cyan fills with alignment marks.
Magenta 50% Fill Test Page	Prints 1 page consisting of 50% Magenta fills with alignment marks.
Yellow 50% Fill Test Page	Prints 1 page consisting of 50% Yellow fills with alignment marks.
Black 50% Fill Test Page	
Red 50% Fill Test Page	Prints 1 page consisting of 50% Black fills with alignment marks.
Green 50% Fill Test Page	Prints 1 page consisting of 50% Green fills with alignment marks.
Blue 50% Fill Test Page	Prints 1 page consisting of 50% Blue fills with alignment marks.
Repeating Defects	Provides a measurement tool for using to match the spacing between repeated marks on the printed pages with the component that would cause such spacing to occur.

Accessing the Troubleshooting Pages

1. From the printer's Control Panel, touch **Printer**.
2. Touch **Tools**.
3. Touch **Troubleshooting**.
4. Touch **Test Pages**.
5. Select the appropriate test page to print.
6. Touch **Print** to print the page(s).

Acronyms and Abbreviations

Table 1 Acronyms and Abbreviations

Acronym	Description
3TM	Three Tray Module
A3	Paper size 297 millimeters (11.69 inches) x 420 millimeters (16.54 inches).
A4	Paper size 210 millimeters (8.27 inches) x 297 millimeters (11.69 inches).
A5	Paper size 148 millimeters (5.82 inches) x 210 millimeters (2.10 inches).
AC	Alternating Current is type of current available at power source for the printer
AD	Auto Duplex
A/D	Analog to Digital (refers to conversion of signal)
ADC	Automatic Density Control
ADJ	Adjustment Procedure
AMPV	Average Monthly Print Volume
AOC	Auto Offset Control, Automatic Offset Control
A/P	Advanced Professional (Finisher)
ASIC	Application Specific Integrated Circuit
ASSY	Assembly
ATC	Automatic Toner Concentration
ATM	Adobe Type Manager
ATVC	Auto Transfer Voltage Control
BCR	Bias Charge Roller
BP	Backplane
BSD	Block Schematic Diagram
BTM	Bottom
BTR	Bias Transfer Roller
BUR	Backup Roll
C	Degree Celsius
CAM	Cam Shaft
CCD	Charged Coupled Device (Photoelectric Converter)
CCPM	Color Pages Per Minute
CCW	Counterclock-Wise
CD	Circuit Diagram
CD	Compact Disc
CLT	Clutch
CM	Centimeter
CMYK	Toner colors for the printer: Y = yellow, C = cyan, M = magenta, K = black
CPU	Computer Processing Unit

Table 1 Acronyms and Abbreviations

Acronym	Description
CRD	(PostScript) Color Rendering Dictionary
CRU	Customer Replaceable Unit
CRUM	Customer Replaceable Unit Meter/Memory
CSE	Customer Service Engineer
CST	Cassette
CVT	Constant Velocity Transport
CW	Clockwise
CWIS	CentreWare Internet Services
dB	Decibel
DC	Direct Current is type of power for printer components. Printer converts AC power from power source to DC power.
DCN	Disconnect
DDNS	Dynamic Domain Name System
DDR2 DIMM	Double Data Rate Dual In-Line Memory Module
DEV	Developer
DHCP	Dynamic Host Configuration Protocol
DMM	Digital Multimeter is generic name for meter that measures voltage, current, or electrical resistance.
DMO	Developing Markets Organization
DMP	Damper
DNS	Domain Name System
DPI	Dot Per Inch
DRV	Drive
DUP	Duplex (2-sided printing)
EA-HG	Emulsion Aggregate High Glass
EC	European Community
ECM	Error Correction Mode
EDOC	Electronic Documentation
EEA	European Economic Area
EEC	European Economic Community
EEPROM	Electrically Erasable Programmable Read-Only Memory
EMI	Electro Magnetic Induction
EOL	End of Life
EOM	End of Message
EOP	End of Procedure
ER/ERR	Error
ESA	Electrostatic Attachment
ESD	Electrostatic Discharge. A transfer of charge between bodies at different electrostatic potential.

Table 1 Acronyms and Abbreviations

Acronym	Description
ESS	Printer Controller
F	Degrees Farenheit
FCC	Federal Communications Commission
FDR	Feeder
FE	Field Engineer
FFC	FFC Cable
FIC	Final Integration Center
FIFO	First In First Out
FPOT	First Print Output Time
FR/FRNT	Front
FRU	Field Replaceable Unit
FT	Foot
FTP	File Transfer Protocol
FUNC	Function
G	Gram
GB	Giga Byte
GND	Ground
GSM/gsm	Gram per Square Meter
GUI	Graphical User Interface
HARN	Harness
HCF	High Capacity Feeder
HDD	Hard Disk Drive
HFSI	High Frequency Service Item
HGEA	High-Grade Emulsion Aggregation (Toner)
HSG	Housing
HTML	Hyper Text Markup Language
HTTP	Hyper Text Transfer Protocol
HUM	Humidity
HVPS	High-Voltage Power Supply
Hz	Hertz (cycles per second)
HW	Hardware
IBT	Intermediate Belt Transfer
IC	Integrated Circuit
ICDC	Image Count Dispense Control
IDT	Intermediate Drum Transfer
IEC	International Electrotechnical Commission
I/F	Interface
IGBT	Insulated Gate Bipolar Transistor)
IH	Induction Heating
IOT	Image Output Terminal
IP	Image Processor

Table 1 Acronyms and Abbreviations

Acronym	Description
IP	Internet Protocol
IPA	Isopropyl Alcohol
IPM	Impression Per Minutes
IPP	Internet Present Provider
IPV4	Internet Protocol Version 4
IPV6	Internet Protocol Version 6
IPX	Internet Protocol eXchange
IPX	Internetwork Packet Exchange
IQ	Image Quality
IR	InfraRed
JBA	Job-based Accounting
KB	Kilo Byte
KG	Kilogram
LAN	Local Area Network
LBS	Pounds
LCD	Liquid Crystal Display
LE	Leading Edge
LED	Light Emitting Diode
LEF	Long-Edge Feed
L/H	Left Hand
LPH	LED Print Head
LTR	Letter Size Paper (8.5 x 11 inches)
LVPS	Low-Voltage Power Supply
mA	Mili-amp
MAC Address	Media Access Control Address
MB	Mega Byte
MCF	Message Confirmation
MCU	Printer Control Unit (Engine Control Board)
MD	Motor Drive
MHz	Mega Hertz
MIB	Management Information Base
MM	Millimeters
MOB	Mark On Belt
MOT	Motor
MP	Media Path
MPS	Multi-Page Signal
MPT	Multi-Purpose Tray
NA	North America
NCS	Non-Contact Sensor
NCU	Network Control Unit
NG	No Go

Table 1 Acronyms and Abbreviations

Acronym	Description
NIC	Network Interface Card
NOHAD	Noise Ozone Heat Altitude Dust
NPP	No Paper
NSF	Non-Standard Facilities
NSS	Non-Standard Set-up
NVM	Non-Volatile Memory
NVRAM	Non-Volatile Random Access Memory
OEM	Original Equipment Manufacturer
OHP	Overhead Print (Transparency)
OPC	Organic Photo Conductor
OPT	Optional
OS	Operating System
PB	Push Button
PBX	Private Branch Exchange
PC	Personal Computer
PC	Photo Conductor
PCB	Printed Circuit Board
PCDC	Pixel Count Dispense Control
PCL	Printer Command Language
PDL	Page Description Language
PH	Paper Handling
P/J	Plug Jack (electrical connections)
PJL	Printer Job Language
PL	Parts List
P/N	Part Number
PO	Part of (Assembly Name)
POP3	Post Office Protocol version 3
POPO	Power Off/ Power On
POST	Power On Self Test
PPD	PostScript Printer Description
PPM	Pages Per Minute
PPR	Partial Page Request
PPS	Pages
PPS	Pulses Per Second
PQ	Print Quality
PS	PostScript
PU	Print Unit
PVM	Print Volume Management
PWB	Printed Wiring Board
PWBA	Printed Wiring Board Assembly
PWS	Portable Work Station

Table 1 Acronyms and Abbreviations

Acronym	Description
RAM	Random Access Memory
RAP	Repair Analysis Procedure for diagnosis of printer status codes and abnormal conditions
REF	Refer to
RF	Radio Frequency (RF Protective Shield)
RegiCon	Registration Control
REP	Repair Procedure for disassembly and re-assembly of component on printer
RET	Retard
RGB	Three primary colors of light - Red Green Blue
RH	Relative Humidity
RLS	Release
RMS	Root Mean Square Voltage
ROM	Read-Only Memory
RTD	Retard
SA	System Administrator
SCP	Service Call Procedure
SCSI	Small Computer System Interface
SD	Secure Digital
SDTP	Standard Digital Test Pattern
SEF	Short-Edge Feed
SIMM	Single Inline Memory Module used to increase printing capacity.
Simplex	Single sided
SLED	New LED Print Head
SLP	Service Location Protocol
SNMP	Simple Network Management Protocol
SNR	Sensor
SOC	Service Order Code
SOL	Solenoid
sRGB	A standard RGB color space created cooperatively by HP and Microsoft in for use on monitors, printers and the Internet.
STM	Single Tray Module
STS	Soft Touch Sensor
SW	Software
SW	Software
SWOP	Specifications for Web Offset Publications
T/A	Takeaway
TAR	Takeaway Roller
TCP	Transmission Control Protocol
TDC	Toner Density Control
TE	Trailing Edge

Table 1 Acronyms and Abbreviations

Acronym	Description
TM	Tray Module
TNR	Toner
TP	Test Point
TRNS	Transport
UI	User Interface
UL	Underwriters Laboratories
UM	Unscheduled Maintenance
USB	Universal Serial Bus
VAC	Volts Alternating Current
VDC	Volts of Direct Current
VGA	Video Graphics Array
W	Watt
W/	With - indicates printer condition where specified condition is present
W/O	Without - indicates printer condition where specified condition is not present
XE	Xerox Europe
ZIF	Zero Insertion Force (ZIF connector)

1 Service Call Procedures

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Routine Maintenance Activities 1-6
Cleaning Procedures..... 1-7

Service Call Procedures

This chapter provides an overview of the steps a service technician should take to service the machine and attached options. The printer's diagnostic routines report problems using fault messages and codes displayed on the Control Panel, logged in the Service Usage Profile, or by flashing LEDs. These error indications serve as the entry point into the troubleshooting process. System problems not directly indicated by or associated with an error message or fault code are covered in Chapter 6, General Troubleshooting. Print-quality problems are covered in Chapter 3, Image Quality.

The steps listed here are a guide for performing any service on this printer. If you choose not to use these steps, it is recommended that you start at the appropriate troubleshooting procedure and proceed from there. When servicing the printer, follow the safety measures detailed in the Introduction chapter, [Service Safety Summary](#).

1. Identify the problem.
 - Verify the reported problem does exist.
 - Check for any fault codes and write them down.
 - Print normal customer prints and service test prints.
 - Make note of any print-quality problems in the test prints.
 - Make note of any mechanical or electrical abnormalities present.
 - Make note of any unusual noise or smell coming from the printer.
 - Print a Service Usage Profile, if the printer is able to print.
 - View the Engine Error and Jam Error Histories under the Service Tools menu.
 - Verify the AC input from the wall outlet is within specifications.
2. Inspect and clean the printer.
 - Follow the [Cleaning Procedures](#) in Chapter 1, Service Call Procedures.
 - Verify that the power cord is in serviceable condition.
 - Restart the printer to check if the error reoccurs.
3. Find the cause of the problem.
 - Use the troubleshooting procedures to find the root cause of the problem.
 - Use Service Diagnostics to check the printer and optional components.
 - Use the Wiring Diagrams and Plug/Jack Locator in Chapter 7, Wiring Data to locate test points.
 - Take voltage readings as instructed in the troubleshooting procedure.
4. Correct the problem.
 - Use the Parts List in Chapter 5 to locate a part number.
 - Use the Repair procedures in Chapter 4 to replace the part.
5. Final Checkout
 - Test the printer to verify the problem is corrected and no new problems arose.

Accessing Fault History

NOTE: Definitions of the codes that appear in the Fault History ([dc122 Fault History](#) - Chapter 6, General Troubleshooting).

There are three ways to access the Fault History:

- Through the Customer Menu
- Through Service Diagnostics Menu, under Service Information
- Through Service Diagnostics Menu, under Maintenance

Accessing through the Customer Menu

1. From the printer's Control Panel, touch Printer.
2. Touch **Tools**.
3. Touch **Troubleshooting**.
4. Touch **Fault History**.
5. The Fault History screen is displayed.



Item	Code	Count	Date	Time
1	371.105.00		05/17/2011	12:10:23 PM
2	371.105.00		05/17/2011	12:09:14 PM
3	371.105.00		05/17/2011	11:54:58 AM
4	371.105.00		05/17/2011	11:54:23 AM

Figure 1 Fault History through Customer Menu

Accessing through Service Diagnostics (Service Information)

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Service Information**.
3. Touch **dc122 Fault History**.
4. The dc122 Fault History screen is displayed.




Chain-Link	Description	Date & Time	
371.105.00	Tray 2 Jam	05/17/11 12:10:23	▲
371.105.00	Tray 2 Jam	05/17/11 12:09:14	$\frac{1}{2}$
371.105.00	Tray 2 Jam	05/17/11 11:54:58	▼

Figure 2 dc122 Fault History through Service Diagnostics (Service Information)

Accessing through Service Diagnostics (Maintenance)

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Maintenance**.
3. Touch **dc122 Fault History**.
4. The dc122 Fault History screen is displayed.



Chain-Link	Description	Date & Time	
371.105.00	Tray 2 Jam	05/17/11 12:10:23	▲
371.105.00	Tray 2 Jam	05/17/11 12:09:14	$\frac{1}{2}$
371.105.00	Tray 2 Jam	05/17/11 11:54:58	▼

Figure 3 dc122 Fault History through Service Diagnostics (Maintenance)

Recommended Tool Kit

Table 1 lists required recommended and optional tools to service this and other similar products.

Table 1 Service Tools

Description	Detail
Required Tools	
Nut Drivers	5.5 mm or 7/32"
Cleaners	Multipurpose surface cleaner and Alcohol
Driver Extension	
ESD Strap	
Ethernet Crossover Cable	Tech tool to connect the printer directly to a laptop or computer without a hub or router.
Flashlight	
Flathead Drivers	5.0 x 75 mm, 3.0 x 75 mm
Lint-Free Cloths	
Multimeter	Volts, Ohms, Current
Needle Nose Pliers	Tech
Phillips Drivers	Posi Drive #1
Serial Adapter Cable	600T80374
Small Channel Lock Pliers	
Torque Screw Driver	
Torx Driver Bits	
Wire Cutters	
Highly Recommended Tools	
Nut Driver	5.5 mm (magnetic) - P/N 600T2123
Serial Adaptor Cable	600T80374 To connect a computer's serial port to the printer's Service Only port to obtain BackChannel Trace information. Requires use of a RS-232 Null Modem cable.
RS-232 Serial Null Modem Cable	P/N 600T80375
Toner Vac	Toner and general cleaning
Optional Tools	
3 -Prong Claw Part-Retriever	
Thumb Drive and Training CD for Videos	
Canned Air	
Dental Mirror	
Electrical Tape	
Heat Shrink Tubing	
IC Chip Puller	
Jeweler's Screwdriver Kit	

Table 1 Service Tools

Description	Detail
Pointer with Magnetized Head	
Precision/ Hobby Tool Set	Phillips, flathead, pliers, small torx drivers
Screw Box	
Soldering Iron	
Tweezers	
Utility Knife	

Initial Actions

Purpose

Use the following procedure to determine the reason for the service call and to identify and organize the actions which must be performed.

Procedure

1. Gather the information about the service call and the condition of the printer.
 - Question the operator(s). Ask about the location of most recent paper jams. Ask about the image quality and the printer performance in general, including any unusual sounds or other indications.
 - After informing the customer that the printer will not be available for printing, disconnect the printer from the customer's network.
 - If a new installation, be sure all packing material is removed.
 - Check that the power cords are in good condition, directly plugged in to the power source, and free from defects. Repair or replace the power cords as required. Check that the circuit breaker, if present, is not tripped.
 - If the printer appears is inoperative, go to [AC Power RAP](#), [+5VDC Power RAP](#), or [+24VDC Power RAP](#) and repair the problem, then continue below.
 - Inspect any rejected copies. Inquire as to, or otherwise determine, the paper quality and weight. Print the **Paper Tips** page for specific media specifications. Look for any damage to the prints, oil marks, image quality defects, or other indications of an unreported problem.

NOTE: If a fault code is displayed while performing a diagnostics procedure, go to that fault code RAP and repair the fault. Return to Diagnostics and continue with the procedure that you were performing.

- Display and review the information in the Fault History, Jam History, and Service Usage Profile. Classify this information into categories:
 - Information that is related to the problem that caused the service call.
 - Information that is related to secondary problems.
 - Information that does not require action, such as a single occurrence of a problem.
2. Perform any required routine maintenance activities. Refer to the [Routine Maintenance Activities](#) section.
3. Try to duplicate the problem by running the same jobs that the customer ran once repairs are complete to verify repairs are effective.
4. Go to Chapter 6 - General Troubleshooting to further investigate the problem.

Routine Maintenance Activities

Procedure

1. Clean the Pick Rollers on every call.
2. Use the Control Panel to check maintenance item counters.
3. Compare the counter values to those listed in [Table 1](#).
4. Advise the customer of any routine maintenance items that are approaching or over the service limit.

Table 1 Phaser 7800 Maintenance Items

Item	Description	Print Life
1	Transfer Roller	200,000 pages
2	Fuser	360,000 pages
3	Transfer Belt Cleaner (IBT Cleaner)	160,000 pages
4	Waste Cartridge	20,000 pages
5	Imaging Units	CMYK: Up to 130,000 pages
6	Tray 1 Feed Roller Kit	100,000 pages
7	Tray 2-5 Feed Roller Kit	300,000 pages per tray
8	Suction Filter	120,000 pages
9	Staple Cartridge (Professional Finisher)	20,000 sets
10	Staple Cartridge (Advanced Finisher)	2,000 sets

Inspection

Rollers

Replace the Rollers when you see any of the following defects:

- Flat spots
- Out of roundness
- Cracked rubber
- Loss of traction (tackiness) causing pick or feed failures

Gears

Replace Gears that show any signs of wear or damage. Look for these problems:

- Thinned gear teeth
- Bent or missing gear teeth; check especially where a metal gear drives a plastic gear.
- Fractured or cracked Gears (oil or incorrect grease on a plastic Gear can cause the Gear to crack).

Cleaning Procedures

Cleaning is indicated if the printer is having print-quality or paper-feeding problems. Cleaning procedures, such as scrubbing the Paper Feed Rollers with a moistened lint-free wipe, must be done by the customers, but only if the Rollers are visibly dirty.

CAUTION

Never apply alcohol or other chemicals to any parts of the printer. Never use a damp cloth to clean up toner. If you remove the Toner Cartridges, place them in a light-protective bag or otherwise protect them as exposure to light can quickly degrade performance and result in early failure.

Perform the following general cleaning steps as indicated by the printer's operating environment.

1. Record number of sheets printed.
2. Print several sheets of paper to check for problems or defects.
3. Turn the printer power Off and disconnect the power cord.
4. Remove the following components before cleaning.
 - Toner Cartridges (REP 5.1).
 - Imaging Units (REP REP 8.1)
 - Waste Cartridge (REP 8.9)
 - Fuser Assembly (REP 7.1)
5. Clean the Fans to remove excess dust.
6. Ensure that all cover vents are clean and free of obstructions.
7. Remove any debris from the Fuser, Imaging Units, Toner Cartridges, Duplex 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.

Cleaning the Control Panel

CAUTION

Do not use any organic solvent, acid, or alkali solution.

1. Use a dry or soft cloth to wipe the Control Panel. Be sure there are no scratches on the Control Panel surface.

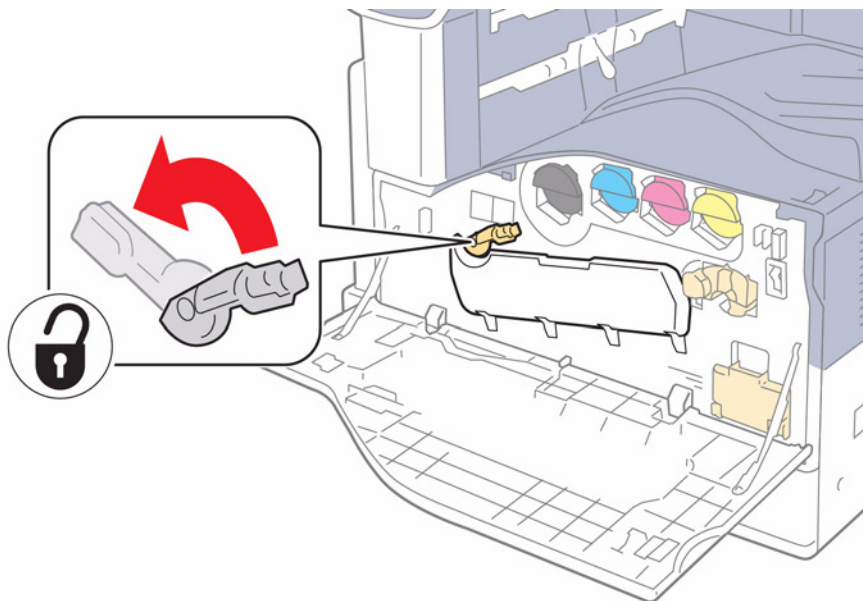


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Figure 1 Cleaning the Control Panel

Cleaning the LED Assembly Window

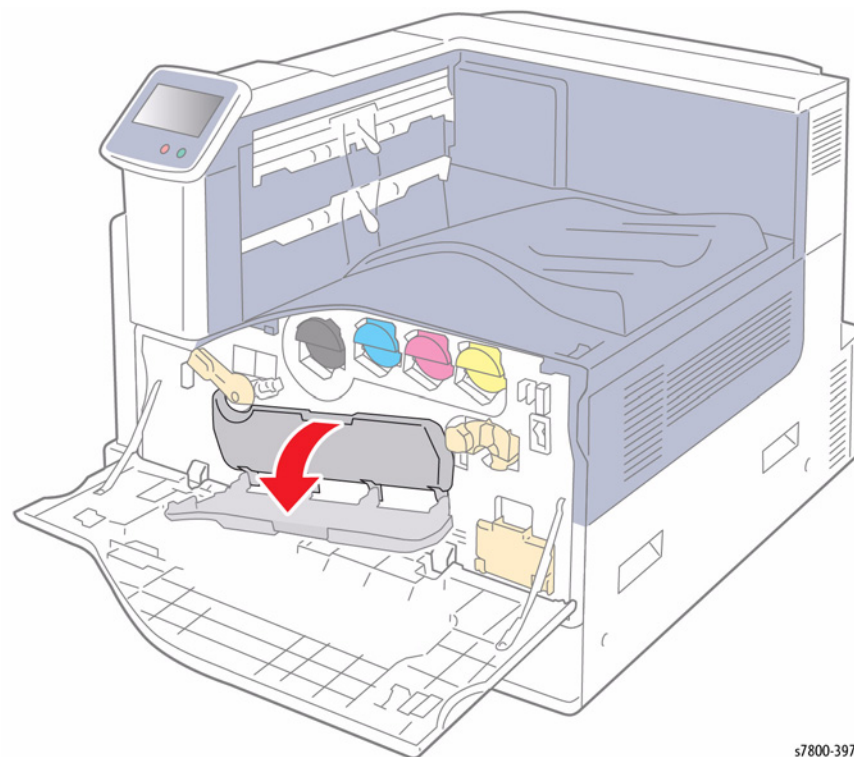
1. Open the Front Door.
2. Rotate the Lever on the front left side to unlock it.



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Figure 2 Rotating the Lever

3. Open the Imaging Unit cover.



s7800-397

Figure 3 Opening the Imaging Unit Cover

- Pull the Cleaning Rod from the lower right corner of the Imaging Unit slot.
NOTE: Be sure to pull the cleaning rod out as far as it can come out. Also push the cleaning rod in as far as it will go. Do not use excessive force when pulling the cleaning rod.
- Continue to pull the Cleaning Rod until it stops, and move it all the way in and out two to three times to clean the LED Scanner.
- Repeat this step for all four Image Units.

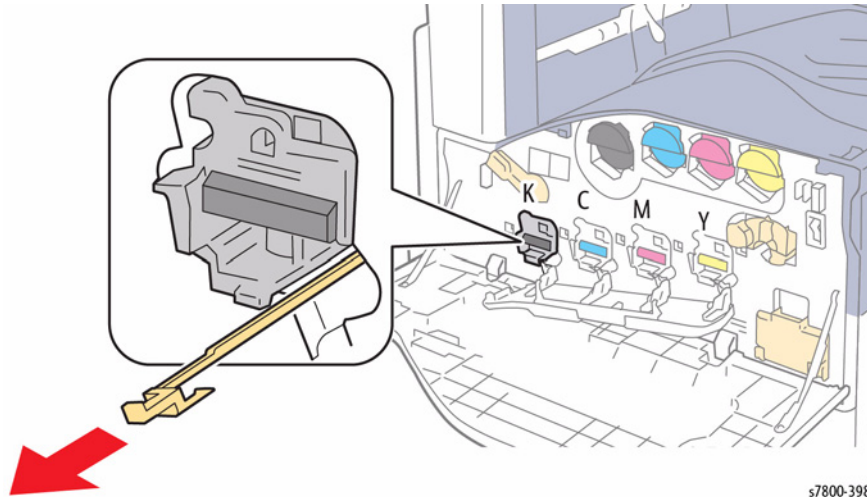


Figure 4 Cleaning the LED Assembly Window

- Close the Image Unit Cover.

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Introduction

This chapter describes error messages and numeric codes displayed on the Control Panel or listed on the Error History page. These error indications serve as the entry point into the troubleshooting process.

Troubleshooting of problems not directly indicated by or associated with an error message or Chain Link code is covered in Chapter 6 - General Troubleshooting. Print quality problems are covered in Chapter 3 - Image Quality.

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

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

309.006.00 2nd BTR Unit (Transfer Roller) End Warning

The 2nd BTR must be replaced.

Procedure

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

1. Replace the 2nd BTR Assembly (REP 14.2).
2. Reset the Transfer Roller (Printer Control Panel menu > **Printer** > **Tools** > **Setup** > **Service Tools** > **Reset HFSI Counters**.
3. Select Transfer Roller.
4. Touch **Reset Counter**.
5. After the reset is complete, the display returns to the previous screen with new life counter information for the reset component.
6. Touch the **Back Arrow** to return to the Service Tools menu.

309.607.00 IBT CLN Unit End Warning

The IBT Cleaner needs to be replaced soon.

Procedure

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

1. Replace the IBT Belt Cleaner Assembly (REP 6.1).
2. Reset the Transfer Roller (Printer Control Panel menu > **Printer** > **Tools** > **Setup** > **Service Tools** > **Reset HFSI Counters**.
3. Select Belt Cleaner.
4. Touch **Reset Counter**.
5. After the reset is complete, the display returns to the previous screen with new life counter information for the reset component.
6. Touch the **Back Arrow** to return to the Service Tools menu.

309.608 1/2/3/4 Yellow/ Magenta/ Cyan/ Black Developer Housing/ Developer Beads End of Life

The Yellow/ Magenta/ Cyan/ Black Developer Housing Developer Beads has reached the end of its life span.

Initial Actions

The rated life of the developer housing and beads is 480K prints. If this fault occurs at an unexpected time or if this fault does not occur at expected timing, check the following:

1. Check the HFSI counter for the developer or beads corresponding to the chain link displayed.
 - From the Control Menu menu, select **Printer > Tools > Setup > Service Tools > Service Diagnostics > Maintenance > dc135** (dc135 CRU/HFSI Status and Reset).
 - Select **Reset HFSI > Developer X Counters**.

If the message is premature, reset the Developer life counter, perform the following procedure.

Procedure

1. Replace the effected Developer (REP 5.7) and beads (REP 5.9). Reset the HFSI counter for the Developer(s) that was replaced in.
2. From the Control Menu, select **Printer > Tools > Setup > Service Tools > Service Diagnostics > Maintenance > dc135** (dc135 CRU/HFSI Status and Reset).

NOTE: Check the remaining life on the other Developers. If they are also near the end of their life, all developers and beads near end of life should be replaced on the same service call.

309.609 Tray 1 (MPT)/ 2/ 3/ 4/ 5 Feed/ Retard/ Nudge Roll

The Tray 1/ 2/ 3/ 4/ 5 Feed/ Retard/ Nudge Roll has reached the end of life.

Procedure

If this fault occurs at an unexpected time or if this fault does not occur at expected timing, check steps 4 and 5 in the notes.

1. Replace the Feed/ Retard/ Nudge Rollers following the appropriate REP:
 - 309-609-1: Tray 1(MPT) (REP 13.6)
 - 309-609-2: Tray 2 (REP 9.7)
 - 309-609-3: Tray 3, 3TM (REP 10.6), TTM (REP 11.7)
 - 309-609-4: Tray 4, 3TM (REP 10.6), TTM (REP 11.7)
 - 309-609-5: Tray 5, 3TM (REP 10.6), TTM (REP 11.8)
2. Reset the HFSI counter for the tray the rollers were replaced in. From the Control Panel menu, select **Printer > Tools > Setup > Service Tools > Reset HFSI > Feed Rollers X Counters**.
3. HFSI counters can be accessed through Service Diagnostics in **dc135 CRU/HFSI Status and Reset** to determine life remaining.

NOTE: 1. If the retard roller is being replaced for multi-pick failures and the failures continue with the new retard roller, replace the friction clutch PL 9.5 item 19 or, for Tray 1/MPT, PL13.4 item 5.

2. If the Tray 1/MPT Pick Roller is replaced for pick failures and the failures continue with the new Roller, replace the Oneway Clutch (PL 13.3 Item 14 & PL 13.3 Item 15).

3. The Tray 1/MPT Feed/ Retard/ Nudge Rollers are a different part than the Feed/ Retard/ Nudge Rollers for Trays 2, 3, 4, 5. The surface texture is different because the Tray1/MPT Rollers rotate in a direction opposite that of the other trays.

4. Feed Roller life for Tray 1/MPT is 100K feeds. If this fault occurs before 100K feeds, just reset the HFSI counter.

5. Feed Roller life for Trays 2, 3, 4, 5 is 300K feeds. If this fault occurs before 300K feeds, just reset the HFSI counter.

309.612.00 Fuser EOL

The Fuser has reached the end of life.

Procedure

The rated life of the fuser is 360K letter/A4 prints. If this fault occurs at an unexpected time or a replacement fuser does not reset the EOL message, check the following:

Condition 1 - Existing Fuser

1. If this fault occurs prematurely, check the HFSI counter for the fuser corresponding to the status chain link displayed.
 - From the Control Panel menu, select **Printer > Tools > Setup > Service Tools > Service Diagnostics > Maintenance > dc135 (dc135 CRU/HFSI Status and Reset)**.
 - Select **Reset HFSI > Fuser Counters**.

If the message is premature, reset the fuser life counter, otherwise perform the following procedure.

Condition 2 - New Fuser

The customer could be trying to use a Fuser that was installed briefly in the printer for troubleshooting purposes. If this is the case the new Fuser fuse would have been blown and the printer can't sense that the Fuser is a new replacement.

1. In this case the Fuser life can be reset: From the Control Panel menu, select **Printer > Tools > Setup > Service Tools > Service Diagnostics > Maintenance > dc135 (dc135 CRU/HFSI Status and Reset)**. Select **Reset HFSI > Fuser Counters**.

309.613.00 IBT Unit End Warning

The IBT Assembly must be replaced.

Procedure

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

1. Replace the IBT Assembly (REP 6.2).
2. Clear **dc135 CRU/HFSI Status and Reset** [954-820] (IBT Unit).

309.670.00 Suction Filter EOL

The Suction Filter has reached the end of life.

Procedure

1. Replace the Suction Filter (REP 4.11).

310.329 Fuser Cut Fail

BSD-ON: [BSD 10.5 Fusing Heat Control \(3 of 3\)](#)

After the fuser is replaced with new one, the fuse (fuse1) did not change to Open state in 1 sec.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and check whether the Fuser Assembly is installed properly ([REP 7.1](#)). Power back on and if the error has not cleared, follow the procedure.

Procedure

Remove the Fuser Assembly ([REP 7.1](#)) and check the resistance between pins A1 and A2 on the Fuser Assembly. **Is the reading ~0 ohms?**

Y N
Check the wiring between [DJ600-A10](#) and [J431-2](#) on the MCU PWB. **Is the resistance ~0 ohms?**
Y N
Repair the wiring.
Is the voltage between [DJ600 A11 \(+\)](#) and the GND (-) +3.3VDC?
Y N
Is the voltage between [J431-1 \(+\)](#) and the GND (-) +3.3VDC?
Y N
Repair the wiring
Replace the MCU PWB ([REP 18.5](#)).
Replace the MCU PWB ([REP 18.5](#)).
Replace the MCU PWB ([REP 18.5](#)).

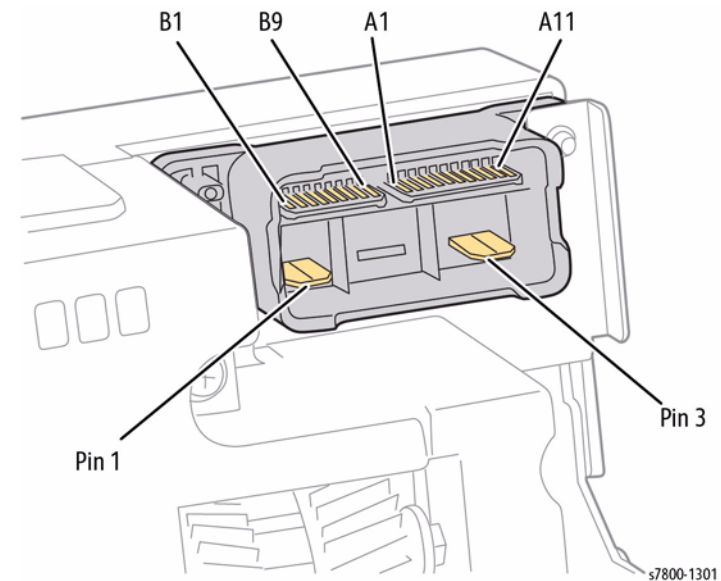


Figure 1 Fuser Connections

310.330 Fuser Motor Fault

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

BSD-ON: [BSD 9.29 1st BTR Contact Retract Control](#)

The Fuser Drive Motor revolution failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and check whether the Fuser Assembly is installed properly.
- With the Fuser in closed state, rotate the Roller manually to check for loading.

Procedure

Turn the power Off and remove the Rear Upper Cover ([REP 19.17](#)). Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly ([REP 18.1](#)).

Turn the power On and enter Service Diagnostics Menu ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [010-006] (Fuser Drive Motor).

Does the Fuser Drive Motor rotate?

Y N
Is the voltage between the Fuser Drive Motor [P/J242-1 \(+\)](#) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Is the voltage between the Fuser Drive Motor [P/J243-1 \(+\)](#) and the GND (-) +5VDC?

Y N
Go to [+5VDC Power](#).

Turn the power Off and check the connection between the MD PWB [P/J525](#) and the Fuser Drive Motor [P/J243](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Fuser Drive Motor ([REP 3.3](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the Stop button. Check the operation of [dc330 Component Control](#) [094-012] (1st BTR Contact) and [dc330 Component Control](#) [094-013] (1st BTR Retract) alternately. **Does the Fuser Drive Motor rotate?**

Y N
Turn the power Off and check the 1st BTR Contact/Retract Gear for blockage or damage.

Turn the power Off and check the connection between the Fuser Drive Motor [P/J243-8](#) and the MD PWB [P/J525-A1](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

310.360 IH Driver Input High Voltage Fault

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

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

The input voltage of the IH Driver is high voltage (150VAC or higher). (Status code 0x1 is received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off. Remove the Right Cover ([REP 19.15](#)) and remove the Front LVPS Fan ([REP 4.2](#)).

Turn the main power On (turn On the Main Power Switch).

Is the voltage between the Main LVPS [P/J6-1](#) and [J6-3](#) 100VAC?

Y N
Go to [AC Power RAP](#).

Turn the main power Off and replace the following parts in sequence:

- IH Drive PWB ([REP 18.9](#))
- MCU PWB ([REP 18.5](#))

310.361 IH Driver Input Low Voltage Fault

BSD-ON: **BSD 10.3 Fusing Heat Control (1 of 3)**

BSD-ON: **BSD 1.2 Main Power (2 of 2)**

The input voltage of the IH Driver is low voltage (80VAC or lower). (Status code 0x2 is received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off. Remove the Right Cover (REP 19.15) and remove the Front LVPS Fan (REP 4.2).

Turn the main power On (turn On the Main Power Switch).

Is the voltage between the Main LVPS P/J6-1 and P/J6-3 100VAC?

Y | **N**
| Go to AC Power RAP.

Turn the main power Off and replace the following parts in sequence:

- IH Driver PWB (REP 18.9)
- MCU PWB (REP 18.5)

310.362 IH Driver Surge Fault

BSD-ON: **BSD 10.3 Fusing Heat Control (1 of 3)**

The IH Driver detected surge. (Status code 0x3 is received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On. If the error does not clear, continue to step 2.
2. Check the voltage and voltage variation at customer's outlet.

If the problem was not resolved by turning the power Off then On and no problems were found after checking the voltage and voltage noise at the outlet, replace the IH Driver PWB (REP 18.9).

310.363 IGBT Temperature High Fault

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

The IGBT Temperature Sensor detected high temperature. (Status code 0x4 is received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover ([REP 19.17](#)). Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly ([REP 18.1](#)).

Turn the power On and enter the Service Diagnostics Menu ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-016] (IH Intake Fan). **Is the IH Intake Fan rotating?**

Y N
|
Proceed to the [342.332](#) RAP.

Is the IH Exhaust Fan rotating?

Y N
|
Proceed to the [342.330](#) RAP.

Press the **Stop** button.

Turn the power Off and check the connection between the IH Driver [P/J530](#) and the MCU PWB [P/J414](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- IH Driver PWB ([REP 18.9](#))
- MCU PWB ([REP 18.5](#))

310.364 IGBT Temperature Sensor Fault

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

An open circuit, short circuit, or abnormal change in Sensor value was detected at the IGBT Temperature Sensor. (Status code 0x5 is received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Caution/Action

1. Turn the power Off and On. If the error doesn't clear, go to step 2.
2. Turn the power Off and check the connection between the IH Driver [P/J530](#) and the MCU PWB [P/J414](#) for open circuit, short circuit, and poor contact.
3. If no problems are found, replace the following parts in sequence:
 - IH Driver PWB ([REP 18.9](#))
 - MCU PWB ([REP 18.5](#))

310.367 Input Low Current Fault

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

The input current was below the lower limit continuously for the specified time. (Status code 0x8 is received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

Turn the power Off and remove the Fuser Assembly ([REP 7.1](#)). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.

Procedure

Check the following:

- The relay connector [P/J634](#) for poor contact
- The connection between the IH Driver T60 and the Fuser Assembly [DJ600-1](#) for short circuit and poor contact
- The connection between the IH Driver T61 and the Fuser Assembly [DJ600-3](#) for short circuit and poor contact

If no problems are found, replace the following parts in sequence:

- IH Driver PWB ([REP 18.9](#))
- Fuser Assembly ([REP 7.1](#))
- MCU PWB ([REP 18.5](#))

310.368 Encoder Pulse Fault

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

The level change of the Belt Speed Sensor was in less than 1 second. (Status code 0x9 is received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and remove the Fuser Assembly ([REP 7.1](#)). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MCU PWB connector [P/J431](#) is connected properly.

Procedure

Check the following connections for short circuits and poor contacts.

- Between MCU PWB [P/J431-12](#) and Fuser Assembly [DJ600-B7](#)
- Between MCU PWB [P/J431-13](#) and Fuser Assembly [DJ600-B6](#)
- Between MCU PWB [P/J431-14](#) and Fuser Assembly [DJ600-B5](#)

If no problems are found, replace the following parts in sequence:

- Fuser Assembly ([REP 7.1](#))
- MCU PWB ([REP 18.5](#))

310.369 IH Driver Communication Fault

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

Communication error between the IH Driver and the MCU PWB has occurred. (Status code 0xC is received. Or, communication error between the DD and the IH was detected)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On. If the error doesn't clear, go to step 2.
2. Turn the power Off and check the connection between the MCU PWB [P/J414](#) and the IH Driver PWB [P/J530](#) for open circuit, short circuit, and poor contact.
3. If no problems are found, replace the following parts in sequence:
 - IH Driver PWB ([REP 18.9](#))
 - MCU PWB ([REP 18.5](#))

310.370 IH Driver Freeze Fault

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

The IH Driver Freeze port became Active (Low). (The CPU of the IH Driver has hanged.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On. If the error doesn't clear, go to step 2.
2. Turn the power Off and check the connection between the MCU PWB [P/J414](#) and the IH Driver PWB [P/J530](#) for open circuit, short circuit, and poor contact.
3. If no problems are found, replace the following parts in sequence:
 - IH Driver PWB ([REP 18.9](#))
 - MCU PWB ([REP 18.5](#))

310.371 Heat Belt STS Center Disconnection Fault

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

The open circuit AD value of the Center Thermistor was detected 3 times in a row.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and remove the Fuser Assembly ([REP 7.1](#)). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MCU PWB connector [P/J431](#) is connected properly.

Procedure

Measure the resistance between Fuser Assembly [P600-A7](#) and [P600-A8](#). **Is the resistance infinite?**

Y N

Check the following connections for open circuits, short circuits, and poor contacts.

- Between [DJ600-A5](#) and MCU PWB [P/J431-7](#)
- Between [DJ600-A4](#) and MCU PWB [P/J431-8](#)

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Replace the Fuser Assembly ([REP 7.1](#)).

310.372 Heat Roll STS Center Over Temperature Fault

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

The AD value of the Center Thermistor was detected to be higher than the defined value 4 times in a row.

NOTE: To clear this Fault, clear the history in NVM (744-001) and then turn the power Off and On. When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and remove the Fuser Assembly ([REP 7.1](#)). Check whether foreign substances or paper is wound around the Heat Roll.
- Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MCU PWB connector [P/J431](#) is connected properly.

Procedure

Check the following connections for short circuits and poor contacts.

- Between [DJ600-A5](#) and MCU PWB [P/J431-7](#)
- Between [DJ600-A4](#) and MCU PWB [P/J431-8](#)

If no problems are found, replace the following parts in sequence:

- Fuser Assembly ([REP 7.1](#))
- MCU PWB ([REP 18.5](#))

310.373 Heat Belt STS Rear Disconnection Fault

BSD-ON: **BSD 10.5 Fusing Heat Control (3 of 3)**

The open circuit AD value of the Rear Thermistor was detected 3 times in a row.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and remove the Fuser Assembly. Inspect the Drawer Connector between the Fuser Assembly and the Main Unit (**DJ600**) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MCU PWB connector **P/J431** is connected properly.

Procedure

Measure the resistance between Fuser Assembly **P600-A9** and **P600-A10**. **Is the resistance infinite?**

Y N

Check the following connections for open circuits, short circuits, and poor contacts.

- Between **DJ600-A3** and MCU PWB **P/J431-9**
- Between **DJ600-A2** and MCU PWB **P/J431-10**

If no problems are found, replace the MCU PWB (**REP 18.5**).

Replace the Fuser Assembly (**REP 7.1**).

310.374 Heat Belt STS Rear Over Temperature Fault

BSD-ON: **BSD 10.5 Fusing Heat Control (3 of 3)**

The AD value of the Rear Thermistor was detected to be higher than the defined value 4 times in a row.

NOTE: To clear this Fault, clear the history in NVM (744-001) and then turn the power Off and ON. When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and remove the Fuser Assembly. Check whether foreign substances or paper is wound around the Heat Roll.
- Inspect the Drawer Connector between the Fuser Assembly and the Main Unit (**DJ600**) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MCU PWB connector **P/J431** is connected properly.

Procedure

Check the following connections for short circuits and poor contacts.

- Between **DJ600-A3** and MCU PWB **P/J431-9**
- Between **DJ600-A2** and MCU PWB **P/J431-10**

If no problems are found, replace the following parts in sequence:

- Fuser Assembly (**REP 7.1**)
- MCU PWB (**REP 18.5**)

310.375 Heat Belt STS Center Warm Up Time Fault

BSD-ON: [BSD 10.5 Fusing Heat Control \(3 of 3\)](#)

When transitioning from the Wait state, the specified Temperature is not reached within the specified time.

NOTE: •This Fault may occur when the temperature in the installation environment is low (10° or lower)

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether IH Driver Input Low Voltage Fault has occurred.

Has Fault [310.361](#) occurred?

Y N

Turn the power Off and check the following:

- Remove the Fuser Assembly ([REP 7.1](#)). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- The connection between the [DJ600-A4/A5](#) and the MCU PWB [P/J431-8/7](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Fuser Assembly ([REP 7.1](#))
- MCU PWB ([REP 18.5](#))

Proceed to the [310.361](#) RAP.

310.376 Heat Belt STS Rear Warm Up Time Fault

BSD-ON: [BSD 10.5 Fusing Heat Control \(3 of 3\)](#)

When transitioning from the Wait state, the specified Temperature is not reached within the specified time.

NOTE: •This Fault may occur when the temperature in the installation environment is low (10° or lower)

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On. If the error does not clear, continue to step 2.
2. Turn the power Off and check the following:
 - Remove the Fuser Assembly ([REP 7.1](#)). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
 - The connection between the [DJ600-A2/A3](#) and the MCU PWB [P/J431-10/9](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Fuser Assembly ([REP 7.1](#))
- MCU PWB ([REP 18.5](#))

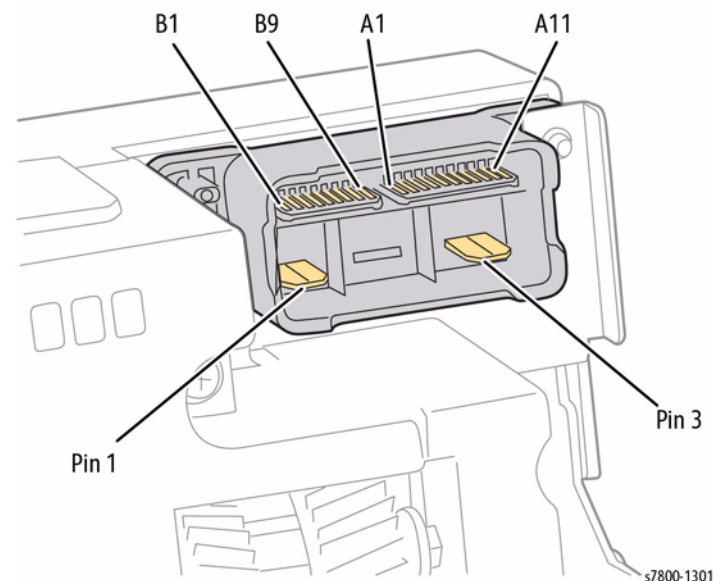


Figure 1 Fuser Connections

310.377 Fuser On Time Fault

BSD-ON: **BSD 10.5 Fusing Heat Control (3 of 3)**

When in Ready or Standby states, the temperature monitor value of the Rear Thermistor did not reach the specified temperature within the specified time after the IH power had turned On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the following:
 - Remove the Fuser Assembly (REP 7.1). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit (DJ600) for broken/bent pins, foreign substances, burns, and etc.
 - The connection between the DJ600-A2/A3 and the MCU PWB P/J431-10/9 for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Fuser Assembly (REP 7.1)
- MCU PWB (REP 18.5)

310.378 Heat Belt Rotation Fault

BSD-ON: **BSD 10.1 Fusing Unit Drive Control (1 of 2)**

The Belt Speed Sensor output has not changed for 500ms or longer after the Fuser Motor On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On. If the error does not clear, continue to step 2.
2. Turn the power Off and check the following:
 - Remove the Fuser Assembly (REP 7.1). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit (DJ600) for broken/bent pins, foreign substances, burns, and etc.
 - The connection between the DJ600-B7/B6/B5 and the MCU PWB P/J431-12/13/14 for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Fuser Assembly (REP 7.1)
- MCU PWB (REP 18.5)

310.379 Fuser Hot Not Ready Return Time Fault

BSD-ON: [BSD 10.5 Fusing Heat Control \(3 of 3\)](#)

The time taken to recover from High Temperature Not Ready state has exceeded the specified time.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On. If the error does not clear, continue to step 2.
2. Turn the power Off and check the following:
 - Remove the Fuser Assembly ([REP 7.1](#)). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
 - Inspect the connection between the Fuser Assembly [DJ600](#) and the MCU PWB [P/J431](#) for open circuit, short circuit, and poor contact.If no problems are found, replace the following parts in sequence:
 - Fuser Assembly ([REP 7.1](#))
 - MCU PWB ([REP 18.5](#))

310.380 P/Roll Latch Motor Fault

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

When in the P/Roll Contact/Retract operation, the Latch Position Sensor detected a Latch position error of the P/Roll.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and check whether the Fuser Assembly is installed properly.
- Remove the Fuser Assembly and check the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MCU PWB connector [P/J431](#) is connected properly.

Procedure

Turn the power Off and remove the Rear Upper Cover ([REP 19.17](#)). Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly ([REP 18.1](#)).

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [010-009] (P/Roll Latch On) and [DC330](#) [010-010] (P/Roll Latch Off) alternately. **Does the Latch Motor rotate?**

Y N

Is the voltage between the MD PWB [P/J520-9 \(+\)](#) and the GND +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Latch Motor wire wound resistance. Disconnect the Latch Motor [P/J254](#), then measure the following resistances.

- Between Latch Motor [P/J254](#) pin-2 and [P/J254](#) pin-6
- Between Latch Motor [P/J254](#) pin-1 and [P/J254](#) pin-5

Is the resistance approx. 5.7 Ohm for each? (At 25° C / 77° F)

Y N

Replace the Fuser Assembly ([REP 7.1](#)).

Measure the resistance between the disconnected connector [P/J254-1/2/5/6](#) and the Frame.

Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

A

A

Press the **Stop** button. Turn On **dc330 Component Control** [010-009] (P/Roll Latch On) and DC330 [010-202] (P/Roll Latch Sensor), as well as DC330 [010-010] (P/Roll Latch Off) and DC330 [010-202] (P/Roll Latch Sensor) alternately.

Does the display change between Low/High?

Y

N

Is the voltage between the MCU PWB P/J431-4 (+) and the GND +1.2VDC?

Y

N

Press the **Stop** button and turn the power Off.

Remove the Fuser Assembly (**REP 7.1**) and check the connection between the **DJ600-A8/A7** and the MCU PWB **P/J431-4/5** for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Fuser Assembly (**REP 7.1**)
- MCU PWB (**REP 18.5**)

Press the **Stop** button and turn the power Off.

Remove the Fuser Assembly and check the connection between the **DJ600-A6** and the MCU PWB **P/J431-6** for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Fuser Assembly (**REP 7.1**)
- MCU PWB (**REP 18.5**)

Turn the power Off and check the Latch Motor Gear for wear or damage. If no problems are found, replace the following parts in sequence:

- MCU PWB (**REP 18.5**)
- MD PWB (**REP 18.6**)

310.381 Fuser Assy Illegal Fault

BSD-ON: BSD 10.5 Fusing Heat Control (3 of 3)

A different type of Fuser Assembly (rapid heating/accumulative heating) was installed.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On. If the error does not clear, continue to step 2.
2. Turn the power Off and replace with the correct Fuser Assembly (**REP 7.1**).

310.382 Fuser Thermostat Fault

BSD-ON: [BSD 10.5 Fusing Heat Control \(3 of 3\)](#)

The Fuser Assembly Thermostat is broken.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Turn the power Off and remove the Fuser Assembly ([REP 7.1](#)). Inspect the Drawer Connector between the Fuser Assembly and the Main Unit ([DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MCU PWB connector [P/J431](#) is connected properly.

Procedure

Measure the resistance between [P600](#) pin-A11 and [P600](#) pin-B9. **Is the resistance infinite?**

Y N

Check the following connections for open circuits, short circuits, and poor contacts.

- Between [DJ600-A1](#) and MCU PWB [P/J431-11](#)
- Between [DJ600-B1](#) and MCU PWB [P/J431-18](#)

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Replace the Fuser Assembly ([REP 7.1](#)).

310.398 Fuser Fan Fault

BSD-ON: [BSD 10.7 Fusing](#)

The Fuser Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

Rotate the Fuser Fan manually to check for loading.

Procedure

Enter [dc122 Fault History](#). **Has 041-350 faults (MD PWB F7 Open) occurred?**

Y N

Enter Service Diagnostics menu ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection). **Is the Fuser Fan rotating and does the test return a fuser fan error?**

Y N

Turn the power Off and check the connection between the Fuser Fan [P/J230-4/3/1](#) and the MD PWB [P/J524-10/11/13](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Fuser Fan ([REP 4.1](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Replace the Fuser Fan ([REP 4.1](#)).

Press the **Stop** button and turn the power Off.

Check the connection between the Fuser Fan [P/J230-2](#) and the MD PWB [P/J524-12](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Go to the [341.350 RAP](#).

310.420 Fuser Assembly Near Life Warning

The Fuser Assembly is near the end of its life span.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Fuser Assembly (REP 7.1) with a new one and clear [dc135 CRU/HFSI Read & Reset](#) [954-850]. If the problem persists, replace the MCU PWB (REP 18.5).

310.421 Fuser Assembly Life Over Warning

BSD-ON:-

The Fuser Assembly has reached the end of its life span.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Fuser Assembly (REP 7.1) with a new one and clear [dc135 CRU/HFSI Read & Reset](#) [954-850]. If the problem persists, replace the MCU PWB (REP 18.5).

312.111 (SB) H-Transport Entrance Sensor Off Jam A

BSD-ON: [BSD 13.10 Horizontal Paper Transportation](#)

The H-Transport Entrance Sensor did not turn off within the specified time after it turned on.

Procedure

Check the H-Transport Drive Rolls ([PL 23.4](#)) and Pinch Rolls ([PL 23.3](#)) for wear or contamination. Check for obstructions or damage in the paper path. **The Paper Path is OK.**

Y N
Clean or replace as required.

Execute [dc330 Component Control](#) [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor ([PL 23.4](#)). **The display changes.**

Y N
Check the wire between [P/J8861](#) pin 2 and [J8897](#) pin 6 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [J8897](#), pins 4 and 5 on the Finisher PWB ([BSD 13.10 Horizontal Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8897](#), pin 6 on the Finisher PWB and GND ([BSD 13.10 Horizontal Paper Transportation](#)). Actuate the H-Transport Entrance Sensor. **The voltage changes.**

Y N
Replace the H-Transport Entrance Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Power Off the printer. Open the H-Transport Top Cover. Cheat the H-Transport Interlock Sensor. Power On the printer. **The H-Transport Belt rotates.**

Y N
Check the wires between [P/J8862](#) on the H-Transport Motor and [J8897](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N
Repair/reconnect as required.

Measure the resistance of the H-Transport Motor between each pin [P/J8862-1/2/5/6](#) ([BSD 13.10 Horizontal Paper Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N
Replace the H-Transport Motor ([REP 23.5](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem persists, replace the H-Transport Motor ([REP 23.5](#)).

Check the H-Transport Entrance Sensor and H-Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.112 (SB) H-Transport Entrance Sensor On Jam A

BSD-ON: [BSD 13.10 Horizontal Paper Transportation](#)

After the Fuser Exit Sensor turned on, the H-Transport Entrance Sensor did not turn on within the specified time.

Procedure

Check the H-Transport Drive Rolls ([PL 23.4](#)) and Pinch Rolls ([PL 23.3](#)) for wear or contamination. Check for obstructions or damage in the paper path. **The Paper Path is OK.**

Y N
Clean or replace as required.

Execute [dc330 Component Control](#) [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor ([PL 23.4](#)). **The display changes.**

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

Y N
Repair/reconnect as required.

Measure the voltage between [P8987](#), pins 4 and 5 on the Finisher PWB ([BSD 13.10 Horizontal Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P8987](#), pin 6 on the Finisher PWB and GND ([BSD 13.10 Horizontal Paper Transportation](#)). Actuate the H-Transport Entrance Sensor. **The voltage changes.**

Y N
Replace the H-Transport Entrance Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Power Off the printer. Open the H-Transport Top Cover. Cheat the H-Transport Interlock Sensor. Power On the printer. **The H-Transport Belt rotates.**

Y N
Check the wires between [P/J8862](#) on the H-Transport Motor and [P8987](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N
Repair/reconnect as required.

Measure the resistance of the H-Transport Motor between each pin [P/J8862-1/2/5/6](#) ([BSD 13.10 Horizontal Paper Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N
Replace the H-Transport Motor ([REP 23.5](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem persists, replace the H-Transport Motor ([REP 23.5](#)).

Check the H-Transport Entrance Sensor and H-Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.132 (SB) Finisher Entrance Sensor On Jam

BSD-ON: [BSD 13.20 Finisher Paper Transportation](#)

After the Fuser Exit Sensor turned On, the Finisher Entrance Sensor did not turn On within the specified time.

Procedure

Execute [dc330 Component Control](#) [012-100], Finisher Entrance Sensor. Actuate the Finisher Entrance Sensor (PL 23.14). **The display changes.**

Y N
Check the wire between [J8868](#) pin 2 and [P/J8988](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 3 and 1 on the Finisher PWB ([BSD 13.20 Finisher Paper Transportation](#)). **The voltage is approx. [P/J8988](#) +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8988](#), pin 2 on the Finisher PWB and GND ([BSD 13.20 Finisher Paper Transportation](#)). Actuate the Finisher Entrance Sensor. **The voltage changes.**

Y N
Replace the Finisher Entrance Sensor ([PL 23.14](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Execute [dc330 Component Control](#) [012-038], Transport Motor. **The Transport Motor rotates.**

Y N
Check the wires between [P/J8879](#) on the Transport Motor and [P/J8893](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N
Repair/reconnect as required.

Measure the resistance of the Transport Motor between each pin [J8879-1/2/5/6](#) ([BSD 13.20 Finisher Paper Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N
Replace the Transport Motor ([REP 23.30](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem persists, replace the Transport Motor ([REP 23.30](#)).

Check the Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination ([PL 23.13](#)).

Check the Finisher Entrance Sensor and Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.151 (SB) Compiler Exit Sensor Off Jam

BSD-ON: [BSD 13.20 Finisher Paper Transportation](#)

After the Compiler Exit Sensor turned On, the Compiler Exit Sensor did not turn Off within the specified time.

Procedure

Execute [dc330 Component Control](#) [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor (PL 23.14). **The display changes.**

Y N
Check the wire between [J8869](#) pin 2 and [P/J8988](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 6 and 4 on the Finisher PWB ([BSD 13.20 Finisher Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8988](#), pin 5 on the Finisher PWB and GND ([BSD 13.20 Finisher Paper Transportation](#)). Actuate the Compiler Exit Sensor. **The voltage changes.**

Y N
Replace the Compiler Exit Sensor ([PL 23.14](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Execute [dc330 Component Control](#) [012-038], Transport Motor. **The Transport Motor rotates.**

Y N
Check the wires between [P/J8879](#) on the Transport Motor and [P/J8893](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N
Repair/reconnect as required.

Measure the resistance of the Transport Motor between each pin [J8879-1/2/5/6](#) ([BSD 13.20 Finisher Paper Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N
Replace the Transport Motor ([REP 23.30](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem persists, replace the Transport Motor ([REP 23.30](#)).

Check the Exit Roller, Paddle Shaft and Eject Belt for wear, damage or contamination ([PL 23.13](#)).

Check the Compiler Exit Sensor and Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.152 (SB) Compiler Exit Sensor On Jam

BSD-ON: [BSD 13.20 Finisher Paper Transportation](#)

After the H-Transport Exit Sensor turned On, the Compiler Exit Sensor did not turn On within the specified time.

Initial Actions

- Power Off/On

Procedure

Execute [dc330 Component Control](#) [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor ([PL 23.14](#)). **The display changes.**

Y N
|
Check the wire between [J8869](#) pin 2 and [P/J8988](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**
Y N
|
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 6 and 4 on the Finisher PWB ([BSD 13.20 Finisher Paper Transportation](#)). **The voltage is approx. +5VDC.**
Y N
|
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8988](#), pin 5 on the Finisher PWB and GND ([BSD 13.20 Finisher Paper Transportation](#)). Actuate the Compiler Exit Sensor. **The voltage changes.**
Y N
|
Replace the Compiler Exit Sensor ([PL 23.14](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Execute [dc330 Component Control](#) [012-038], Transport Motor. **The Transport Motor rotates.**

Y N
|
Check the wires between [P/J8878](#) on the Transport Motor and [P/J8893](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**
Y N
|
Repair/reconnect as required.

Measure the resistance of the Transport Motor between each pin [P/J8879-1/2/5/6](#) ([BSD 13.20 Finisher Paper Transportation](#)). **The resistance is approx. 20 Ohm.**
Y N
|
Replace the Transport Motor ([REP 23.30](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem persists, replace the Transport Motor ([REP 23.30](#)).

Check the Exit Roller, Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination ([PL 23.13](#)).

Check the Compiler Exit Sensor and Transport Motor circuits for an intermittent condition.

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.161 (SB) Finisher Set Eject Jam

BSD-ON: [BSD 13.22 Tamping Control \(2 of 2\)](#)

BSD-ON: [BSD 13.25 Set Eject Control \(1 of 2\)](#)

After the Eject Motor turned On, the Compiler Tray No Paper Sensor did not turn Off within the specified time.

Procedure

Enter [dc330 Component Control](#) [012-151], Compiler Tray No Paper Sensor. Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes.**

Y N
|
Check the wire between [J8880](#) pin 2 and [J8894](#) pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**
Y N
|
Repair/reconnect as required.

Measure the voltage between [J8894](#) pins 3 and 1 on the Finisher PWB ([BSD 13.25 Set Eject Control \(1 of 2\)](#)). **The voltage is approx. +5VDC.**
Y N
|
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8894](#) pin 2 on the Finisher PWB and GND ([BSD 13.22 Tamping Control \(2 of 2\)](#)). Actuate the Compiler Tray No Paper Sensor. **The voltage changes.**
Y N
|
Replace the Compiler Tray No Paper Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-054 Eject Motor FORWARD LO] and [dc330 Component Control](#) [012-055 Eject Motor FORWARD HI]. **The Eject Motor starts up.**

Y N
|
Check the wires between [P/J8878](#) on the Eject Motor and [P/J8893](#) on the Finisher PWB ([BSD 13.25 Set Eject Control \(1 of 2\)](#)) for an open or short circuit, or a loose or damaged connector. **The wires are OK.**
Y N
|
Repair/reconnect as required.

Measure the resistance of the Eject Motor between each point of [P/J8878-1/3/4/6](#) ([BSD 13.25 Set Eject Control \(1 of 2\)](#)). **The resistance is approx. 20 Ohm.**
Y N
|
Replace the Eject Motor ([REP 23.24](#)).

Replace the Eject Motor ([REP 23.24](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Check the Exit Roller, Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination ([PL 23.13](#)). Check the Compiler Tray No Paper Sensor and Eject Motor circuits for an intermittent condition.

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.210 (SB) NVM Fail

BSD-ON: [BSD 13.5 PWBS Communication](#)

NVM error has occurred.

Procedure

Check any of the following cases. **Check the continuity from [J8889](#) pin 3 on the Finisher PWB to [P/J590](#) pin 9 on the MD PWB. Is there continuity?**

Y N
|
Repair or replace the wiring.

Replace the finisher PWB ([REP 23.34](#)).

312.211 (SB) Stacker Tray Fault

BSD-ON: [BSD 13.3 Finisher Interlock Switching](#)

BSD-ON: [BSD 13.27 Stacker Tray Control](#)

Stack Height Sensor 1 is not On within the specified time after stacker tray starts elevating. While Stacker Tray is elevating or lowering, the state of the Encoder Sensor does not change within the specified time.

Initial Actions

- Check for obstructions under the tray.
- Check the operation of the Stacker Height Sensor 1 actuator.
- Check the tray raise/lower mechanism for damage or contamination.

Procedure

Execute [dc330 Component Control](#) [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. **The display changes.**

Y N
|
Check the wire between [J8873](#) pin 2 and [P/J8988](#) pin 17 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
|
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 16 and 18 on the Finisher PWB ([BSD 13.27 Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

Y N
|
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8988](#), pin 17 on the Finisher PWB and GND ([BSD 13.27 Stacker Tray Control](#)). Actuate the Stacker Height Sensor 1. **The voltage changes.**

Y N
|
Replace the Stacker Height Sensor 1 ([REP 23.25](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Execute [dc330 Component Control](#) [012-263], Stacker Encoder Sensor. Manually rotate the Encoder ([PL 23.7](#)) to block and unblock the sensor. **The display changes.**

Y N
|
Check the wire between [J8874](#) pin 2 and [P/J8988](#) pin 23 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
|
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 22 and 24 on the Finisher PWB ([BSD 13.27 Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

Y N
|
Replace the Finisher PWB ([REP 23.34](#)).

A B

A B

Measure the voltage between P/J8988, pin 23 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Manually rotate the Encoder (PL 23.7) to block and unblock the Stacker Encoder Sensor. **The voltage changes.**

Y N

Replace the Stacker Encoder Sensor (PL 23.7).

Replace the Finisher PWB (REP 23.34).

Alternately execute dc330 Component Control [012-060], Stacker Motor Up, and [012-061], Stacker Motor Down. **The Stacker Motor (PL 23.7) Moves.**

Y N

There is +24 VDC from P/J8986 pin 12 to GND (BSD 13.27 Stacker Tray Control)

Y N

Go to BSD 13.3 Finisher Interlock Switching and check the circuit of the Option Switch (PL 23.9). Repair/reconnect as required.

Check the wires between P/J8986 pins 11 and 12, and the Stacker Motor for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair/reconnect as required.

Replace the Stacker Elevator Motor (REP 23.15). If the problem persists, replace the Finisher PWB (REP 23.34).

Replace the Finisher PWB (REP 23.34).

312.212 (SB) Stacker Tray Upper Limit Fault

BSD-ON: BSD 13.27 Stacker Tray Control

The stacker has continued to elevate after the defined period of time has passed since Stacker No Paper Sensor is ON during stacker elevation.

Initial Actions

- Check for obstructions under the tray.
- Check the operation of the Stacker Height Sensor actuators.
- Check the tray raise/lower mechanism for damage or contamination.

Procedure

Execute dc330 Component Control [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. **The display changes.**

Y N

Check the wire between J8873 pin 2 and P/J8988 pin 17 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 16 and 18 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB (REP 23.34).

Measure the voltage between P/J8988, pin 17 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Actuate the Stacker Height Sensor 1. **The voltage changes.**

Y N

Replace the Stacker Height Sensor 1 (REP 23.25).

Replace the Finisher PWB (REP 23.34).

Execute dc330 Component Control [012-265], Stacker Height Sensor 2. Block and unblock the Stacker Height Sensor 2. **The display changes.**

Y N

Check the wire between J8874 pin 2 and P/J8988 pin 20 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 19 and 21 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB (REP 23.34).

Measure the voltage between P/J8988, pin 20 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Actuate the Stacker Height Sensor 1. **The voltage changes.**

Y N

Replace the Stacker Height Sensor 2 (REP 23.25).

A B

A B
Replace the Finisher PWB (REP 23.34).

Execute dc330 Component Control [012-263], Stacker Encoder Sensor. Manually rotate the Encoder (PL 23.7) to block and unblock the sensor. **The display changes.**

Y N
Check the wire between J8875 pin 2 and P/J8988 pin 23 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between P/J8988, pins 22 and 24 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB (REP 23.34).

Measure the voltage between P/J8988, pin 3 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Manually rotate the Encoder (PL 23.7) to block and unblock the Stacker Encoder Sensor. **The voltage changes.**

Y N
Replace the Stacker Encoder Sensor (PL 23.7).

Replace the Finisher PWB (REP 23.34).

Execute dc330 Component Control [012-262], Stacker No Paper Sensor. Block and unblock the Sensor (PL 23.7). **The display changes.**

Y N
Check the wire between J8872 pin 2 and P/J8988 pin 14 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between P/J8988, pins 13 and 15 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB (REP 23.34).

Measure the voltage between P/J8988, pin 14 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Actuate the Stacker No Paper Sensor. **The voltage changes.**

Y N
Replace the Stacker No Paper Sensor (PL 23.7).

Replace the Finisher PWB (REP 23.34).

Replace the Finisher PWB (REP 23.34).

312.213 (SB) Stacker Tray Lower Limit Fault

BSD-ON: BSD 13.27 Stacker Tray Control

Stacker descended lower than normal levels, below low limit height.

Initial Actions

- Check for obstructions under the tray.
- Check the operation of the Stacker Height Sensor actuators.
- Check the tray raise/lower mechanism for damage or contamination.

Procedure

Execute dc330 Component Control [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. **The display changes.**

Y N
Check the wire between J8873 pin 2 and P/J8988 pin 17 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between P/J8988, pins 16 and 18 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB (REP 23.34).

Measure the voltage between P/J8988, pin 17 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Actuate the Stacker Height Sensor 1. **The voltage changes.**

Y N
Replace the Stacker Height Sensor 1 (PL 23.11).

Replace the Finisher PWB (REP 23.34).

Execute dc330 Component Control [012-265], Stacker Height Sensor 2. Block and unblock the Stacker Height Sensor 2. **The display changes.**

Y N
Check the wire between J8874 pin 2 and P/J8988 pin 20 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between P/J8988, pins 19 and 21 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB (REP 23.34).

Measure the voltage between P/J8988, pin 20 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Actuate the Stacker Height Sensor 1. **The voltage changes.**

Y N
Replace the Stacker Height Sensor 2 (PL 23.11).

A | **B**
Replace the Finisher PWB (REP 23.34).

Execute **dc330 Component Control** [012-263], Stacker Encoder Sensor. Manually rotate the Encoder (PL 23.7) to block and unblock the sensor. **The display changes.**

Y | **N**
Check the wire between **J8875** pin 2 and **P/J8988** pin 23 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y | **N**
Repair/reconnect as required.

Measure the voltage between **P/J8988**, pins 22 and 24 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y | **N**
Replace the Finisher PWB (REP 23.34).

Measure the voltage between **P/J8988**, pin 23 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Manually rotate the Encoder (PL 23.7) to block and unblock the Stacker Encoder Sensor. **The voltage changes.**

Y | **N**
Replace the Stacker Encoder Sensor (PL 23.7).

Replace the Finisher PWB (REP 23.34).

Execute **dc330 Component Control** [012-262], Stacker No Paper Sensor. Block and unblock the Sensor (PL 23.7). **The display changes.**

Y | **N**
Check the wire between **J8872** pin 2 and **P/J8988** pin 14 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y | **N**
Repair/reconnect as required.

Measure the voltage between **P/J8988**, pins 13 and 15 on the Finisher PWB (BSD 13.27 Stacker Tray Control). **The voltage is approx. +5VDC.**

Y | **N**
Replace the Finisher PWB (REP 23.34).

Measure the voltage between **P/J8988**, pin 14 on the Finisher PWB and GND (BSD 13.27 Stacker Tray Control). Actuate the Stacker No Paper Sensor. **The voltage changes.**

Y | **N**
Replace the Stacker No Paper Sensor (PL 23.7).

Replace the Finisher PWB (REP 23.34).

Replace the Finisher PWB (REP 23.34).

312.221 (SB) Front Tamper Home Sensor On Fault

BSD-ON: BSD 13.3 Finisher Interlock Switching

BSD-ON: BSD 13.21 Tamping Control (1 of 2)

BSD-ON: BSD 13.22 Tamping Control (2 of 2)

After the Front Tamper started moving to the home position, the Front Tamper Home Sensor did not turn On within 800ms.

Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y | **N**
Replace the parts that are interfering with operation.

Execute **dc330 Component Control** [012-220], Front Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y | **N**
Check the wire between **J8881** pin 2 and **J8984** pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y | **N**
Repair/reconnect as required.

Measure the voltage between **J8984**, pins 6 and 4 on the Finisher PWB (BSD 13.22 Tamping Control (2 of 2)). **The voltage is approx. +5VDC.**

Y | **N**
Replace the Finisher PWB (REP 23.34).

Measure the voltage between **J8984**, pin 5 on the Finisher PWB and GND (BSD 13.22 Tamping Control (2 of 2)). Manually operate the Tamper mechanism to block and unblock the Front Tamper Home Sensor. **The voltage changes.**

Y | **N**
Replace the Front Tamper Home Sensor (REP 23.28).

Replace the Finisher PWB (REP 23.34).

Alternately execute **dc330 Component Control** [012-020], Front Tamper Motor Front and [012-023], Front Tamper Motor Rear. **The Front Tamper Motor moves.**

Y | **N**
There is +24 VDC from **J8984** pin 19 on the Finisher PWB to GND

Y | **N**
There is +24 VDC from **J8982** pin 4 on the Finisher PWB to GND

Y | **N**
Go to **BSD 13.3 Finisher Interlock Switching** and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB (REP 23.34).

Check the wires between **J8984**, pins 18 ~ 22 on the Finisher PWB, and the Front Tamper Motor **J8984** for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

A

Y N

Repair/reconnect as required.

Replace the front Tamper Motor (REP 23.27). If the problem persists, replace the Finisher PWB (REP 23.34).

Replace the Finisher PWB (REP 23.34).

312.223 (SB) Front Tamper Home Sensor Off Fault

BSD-ON: [BSD 13.3 Finisher Interlock Switching](#)

BSD-ON: [BSD 13.21 Tamping Control \(1 of 2\)](#)

BSD-ON: [BSD 13.22 Tamping Control \(2 of 2\)](#)

After the Front Tamper started moving away from the home position, the Front Tamper Home Sensor did not turn Off within the specified time.

Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y N

Replace the parts that are interfering with operation.

Execute [dc330 Component Control](#) [012-220], Front Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y N

Check the wire between [J8881](#) pin 2 and [J8984](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [J8984](#), pins 6 and 4 on the Finisher PWB ([BSD 13.21 Tamping Control \(1 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8984](#), pin 5 on the Finisher PWB and GND ([BSD 13.21 Tamping Control \(1 of 2\)](#)). Manually operate the Tamper mechanism to block and unblock the Front Tamper Home Sensor. **The voltage changes.**

Y N

Replace the Front Tamper Home Sensor ([REP 23.28](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-020], Front Tamper Motor Front and [012-023], Front Tamper Motor Rear. **The Front Tamper Motor moves.**

Y N

There is +24 VDC from [J8984](#) pin 19 on the Finisher PWB to GND

Y N

There is +24 VDC from [J8984](#) pin 4 on the Finisher PWB to GND

Y N

Go to [BSD 13.3 Finisher Interlock Switching](#) and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB ([REP 23.34](#)).

Check the wires between [J8984](#), pins 18 ~ 22 on the Finisher PWB, and the Front Tamper Motor [J8984](#) for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

A

A

Y N

Repair/reconnect as required.

Replace the Front Tamper Motor (REP 23.27). If the problem persists, replace the Finisher PWB (REP 23.34).

Replace the Finisher PWB (REP 23.34).

312.224 (SB) Rear Tamper Home Sensor Off Fault

BSD-ON: [BSD 13.3 Finisher Interlock Switching](#)

BSD-ON: [BSD 13.21 Tamping Control \(1 of 2\)](#)

BSD-ON: [BSD 13.22 Tamping Control \(2 of 2\)](#)

After the Rear Tamper started moving away from the home position, the Rear Tamper Home Sensor did not turn Off within the specified time.

Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y N

Replace the parts that are interfering with operation.

Execute [dc330 Component Control](#) [012-221], Rear Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y N

Check the wire between [J8882](#) pin 2 and [J8984](#) pin 8 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [J8984](#), pins 9 and 7 on the Finisher PWB ([BSD 13.22 Tamping Control \(2 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8984](#), pin 8 on the Finisher PWB and GND ([BSD 13.22 Tamping Control \(2 of 2\)](#)). Manually operate the Tamper mechanism to block and unblock the Rear Tamper Home Sensor. **The voltage changes.**

Y N

Replace the Rear Tamper Home Sensor ([REP 23.28](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-026], Rear Tamper Motor Front and [012-029], Rear Tamper Motor Rear. **The Rear Tamper Motor moves.**

Y N

There is +24 VDC from [J8984](#) pin 19 on the Finisher PWB to GND

Y N

There is +24 VDC from [J8982](#) pin 4 on the Finisher PWB to GND

Y N

Go to [BSD 13.3 Finisher Interlock Switching](#) and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB ([REP 23.34](#)).

Check the wires between [J8984](#), pins 13 ~ 17 on the Finisher PWB, and the Rear Tamper Motor P/[J8883](#) for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

A

A

Y N

Repair/reconnect as required.

Replace the Rear Tamper Motor (REP 23.27). If the problem persists, replace the Finisher PWB (REP 23.34).

Replace the Finisher PWB (REP 23.34).

312.231 (SB) Punch Home Sensor On Fault

BSD-ON: BSD 13.11 Punch Control

The Punch Home Sensor did not turn ON within the specified time after the Punch Motor started running.

Initial Actions

Check the following:

- Punch Home Actuator for deformation
- Punch Home Sensor for proper installation
- Punch Home Sensor connectors
- Punch Motor for proper operation
- Punch Motor connectors

Procedure

Enter **dc330 Component Control** [12-074] and [12-078], Punch Motor (PL 23.5), alternately. Select **Start**. **The Punch Motor runs.**

Y N

Select **Stop**. Check circuit of the Punch Motor. Refer to (**dc330 Component Control**) to troubleshoot the Circuit.

Select **Stop**. Select [12-271], Punch Home Sensor (PL 23.5). Select Start. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Go to **dc330 Component Control**. Check circuit of the Punch Home Sensor.

Select Stop. If the problem continues, replace the Finisher PWB (REP 23.34).

312.243 (SB) Booklet Folder Home Sensor On Fault

BSD-ON: [BSD 13.33 Folder Control](#)

Folder Home Sensor is not turned on after the lapse of 500ms from Motor ON while Folder Knife is returning to Home.

Initial Actions

- The Folder Home Sensor for improper installation
- The Folder Home Sensor connectors for connection failure
- The Folder Knife Motor connectors for connection failure
- The Knife drive mechanism for a foreign substance

Procedure

Enter [dc330 Component Control](#) [013-022], Folder Knife Motor FWD and [013-023], Folder Knife Motor REV alternately. Select **Start**. **The Fold Knife Motor energizes.**

Y N
Select **Stop**. Refer to [BSD 13.33 Folder Control](#). Check continuity between the Booklet Folder Knife Motor ([P/J8905](#)) and the Finisher PWB ([J8985](#)), and between the Booklet PWB ([P/J8994](#)) and the Finisher PWB ([J8985](#)). **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet Folder Knife Motor ([PL 23.15 Item 15](#)). If the problem continues, replace the Booklet PWB ([REP 23.46](#)).

Select **Stop**. Enter [dc330 Component Control](#) [13-101], Folder Home Sensor. Select **Start**. Block/unblock the Folder Home Sensor. **The display changed.**

Y N
Check the wire between [J8904](#) pin 2 and [P/J8990](#) pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [P/J8990](#), pins 3 and 1 on the Finisher PWB ([BSD 13.33 Folder Control](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8990](#), pin 2 on the Finisher PWB and GND ([BSD 13.33 Folder Control](#)). Block/unblock the Folder Home Sensor. **The voltage changes.**

Y N
Replace the Folder Home Sensor ([PL 23.15 Item 16](#)).

Replace the Finisher PWB ([REP 23.34](#)).

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.249 (SB) Booklet Front Stapler Fault

BSD-ON: [BSD 13.3 Finisher Interlock Switching](#)

BSD-ON: [BSD 13.31 Booklet Staple Control \(1 of 2\)](#)

The Booklet Front Staple Home Switch is not On (does not return to home position) within the specified time after the Booklet Front Staple Motor starts to reverse.

Initial Actions

Check the Booklet Front Stapler for jammed staples or an incorrectly installed staple cartridge.

Procedure

Enter [dc330 Component Control](#) [12-024], Staple Motor FWD, and then [12-025], Staple Motor REV. **The Front Booklet Stapler cycles normally.**

Y N
There is +24 VDC from [P/J8993](#) pin 5 on the Booklet PWB to GND.

Y N
Check the circuit from the Booklet PWB to the Booklet Stapler Cover Switch ([BSD 13.3 Finisher Interlock Switching](#)). Repair/replace as required ([PL 23.21](#)).

Switch Off the power. Check the wires between [P/J8994](#) on the Booklet PWB and [P/J8994](#) on the Front Booklet Stapler ([BSD 13.31 Booklet Staple Control \(1 of 2\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Front Booklet Stapler Assembly ([REP 23.44](#)). If the problem remains, replace the Booklet Maker PWB ([REP 23.46](#)).

Switch Off the power. Check the wire between [P/J8995](#), pin 5 on the Booklet PWB and [J8894](#) pin 3 on the Front Booklet Stapler ([BSD 13.31 Booklet Staple Control \(1 of 2\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Front Booklet Stapler Assembly ([REP 23.44](#)). If the problem remains, replace the Booklet Maker PWB ([REP 23.46](#)).

312.260 (SB) Eject Clamp Home Sensor On Fault

BSD-ON: [BSD 13.25 Set Eject Control \(1 of 2\)](#)

After the Eject Clamp started ascending, the Eject Clamp Home Sensor did not turn On within 500ms.

Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Eject Clamp Home Sensor b for damage

Procedure

Execute [dc330 Component Control](#) [012-250], Eject Clamp Home Sensor. Block and unblock the Eject Clamp Home Sensor **The display changes.**

Y N
Check the wire between [J8870](#) pin 2 on the Eject Clamp Home Sensor and [P/J8988](#) pin 8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**

Y N
Repair/replace as required.

Measure the voltage between [P/J8988](#), pins 9 and 7 on the Finisher PWB. **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8988](#) pin 8 on the Finisher PWB and GND. Actuate the Eject Clamp Home Sensor. **The voltage changes.**

Y N
Replace the Eject Clamp Home Sensor ([REP 23.25](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor ([PL 23.11](#)) starts up.**

Y N
Check the wires between [P/J8878](#) pins 1~6 on the Eject Motor and [P/J8983](#) pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 13.25 Set Eject Control \(1 of 2\)](#)). **The wires are OK.**

Y N
Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of [P/J8878-1/3/4/6](#). **The resistance is approx. 20hm.**

Y N
Replace the Eject Motor ([REP 23.24](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem remains, replace the Eject Motor ([REP 23.24](#))

A

Go to [BSD 13.25 Set Eject Control \(1 of 2\)](#). Check for an intermittent circuit or intermittent mechanical problem. If the check is OK, replace the Finisher PWB ([REP 23.34](#)).

A

312.263 (SB) Rear Tamper Fault

BSD-ON: [BSD 13.3 Finisher Interlock Switching](#)

BSD-ON: [BSD 13.21 Tamping Control \(1 of 2\)](#)

BSD-ON: [BSD 13.22 Tamping Control \(2 of 2\)](#)

After the Rear Tamper started moving to the home position, the Rear Tamper Home Sensor did not turn On within 800ms.

Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y N
Replace the parts that are interfering with operation.

Execute [dc330 Component Control](#) [012-221], Rear Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y N
Check the wire between [J8882](#) pin 2 and [J8984](#) pin 8 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [J8984](#), pins 9 and 7 on the Finisher PWB ([BSD 13.22 Tamping Control \(2 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8984](#), pin 8 on the Finisher PWB and GNN ([BSD 13.22 Tamping Control \(2 of 2\)](#)). Manually operate the Tamper mechanism to block and unblock the Rear Tamper Home Sensor. **The voltage changes.**

Y N
Replace the Rear Tamper Home Sensor ([REP 23.28](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-026], Rear Tamper Motor Front and [012-029], Rear Tamper Motor Rear. **The Rear Tamper Motor moves.**

Y N
There is +24 VDC from [J8984](#) pin 19 on the Finisher PWB to GND

Y N
There is +24 VDC from [J8982](#) pin 4 on the Finisher PWB to GND

Y N
Go to [BSD 13.3 Finisher Interlock Switching](#) and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB ([REP 23.34](#)).

Check the wires between [J8984](#), pins 13 ~ 17 on the Finisher PWB, and the Rear Tamper Motor [P/J8883](#) for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

A

Y N
Repair/reconnect as required.

Replace the Rear Tamper Motor ([REP 23.28](#)). If the problem persists, replace the Finisher PWB ([REP 23.34](#)).

Replace the Finisher PWB ([REP 23.34](#)).

A

312.265 (SB) Booklet Folder Home Sensor Off Fault

BSD-ON: [BSD 13.33 Folder Control](#)

When the Booklet Home moves from Home position, the Folder Home Sensor did not turn OFF within the specified time.

Initial Actions

- The Folder Home Sensor for improper installation
- The Folder Home Sensor connectors for connection failure
- The Booklet Fold Knife Motor connectors for connection failure
- The Knife drive mechanism for a foreign substance

Procedure

Enter [dc330 Component Control](#) [013-022], Folder Knife Motor FWD and [013-023], Folder Knife Motor REV alternately. Select **Start**. **The Fold Knife Motor energizes.**

Y N
Select **Stop**. Refer to [BSD 13.33 Folder Control](#). Check continuity between the Folder Knife Motor ([P/J8905](#)) and the Finisher PWB ([P8985](#)), and between the Booklet PWB ([P/J8994](#)) and the Finisher PWB ([P8985](#)). **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Folder Knife Motor ([PL 23.15](#)). If the problem continues, replace the Booklet Maker PWB ([REP 23.46](#)).

Select **Stop**. Enter [dc330 Component Control](#) [13-101], Folder Home Sensor. Select **Start**. Block/unblock the Folder Home Sensor. **The display changed.**

Y N
Check the wire between [J8904](#) pin 2 and [P/J8990](#) pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [P/J8990](#), pins 3 and 1 on the Finisher PWB [BSD 13.33 Folder Control](#). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8990](#), pin 2 on the Finisher PWB and GND ([BSD 13.33 Folder Control](#)). Block/unblock the Folder Home Sensor. **The voltage changes.**

Y N
Replace the Folder Home Sensor ([PL 23.15 Item 16](#)).

Replace the Finisher PWB ([REP 23.34](#)).

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.268 (SB) Booklet Rear Stapler Fault

BSD-ON: [BSD 13.4 Booklet Interlock Switching](#)

BSD-ON: [BSD 13.32 Booklet Staple Control \(2 of 2\)](#)

The Booklet Rear Staple Home Switch is not On (does not return to home position) within the specified time after the Booklet Rear Staple Motor starts to reverse.

Initial Actions

Check the Booklet Rear Stapler for jammed staples or an incorrectly installed staple cartridge.

Procedure

Enter [dc330 Component Control](#) [12-026], Staple Motor FWD. and then [12-027], Staple Motor REV. **The Front Booklet Stapler cycles normally.**

Y N
There is +24 VDC from [P/J8993](#) pin 5 on the Booklet PWB to GND.

Y N
Check the circuit from the Booklet PWB to the Booklet Stapler Cover Switch ([BSD 13.4 Booklet Interlock Switching](#)). Repair/replace as required ([PL 23.21](#)).

Switch Off the power. Check the wires between [P/J8995](#) on the Booklet PWB and [J8895](#) on the Rear Booklet Stapler ([BSD 13.32 Booklet Staple Control \(2 of 2\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Rear Booklet Stapler Assembly ([REP 23.44](#)). If the problem remains, replace the Booklet PWB ([PL 23.21](#)).

Switch Off the power. Check the wire between [P/J8995](#), pin 12 on the Booklet PWB and [J8895](#) pin 3 on the Rear Booklet Stapler ([BSD 13.32 Booklet Staple Control \(2 of 2\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Rear Booklet Stapler Assembly ([REP 23.44](#)). If the problem remains, replace the Booklet Maker PWB ([REP 23.46](#)).

312.269 (SB) Booklet Sub-CPU Communications Fault

BSD-ON: [BSD 13.5 PWBS Communication](#)

Communications between the Finisher PWB and the Booklet PWB Failed

Initial Actions

- Check the connectors at the Finisher PWB and the Booklet PWB are connected or seated properly.
- Check the wiring between the Finisher PWB and the Booklet PWB for damage.

Procedure

Power Off and power On the printer. **The problem is resolved.**

Y N
Reload the software. **The problem is resolved.**
Y N
Replace the Finisher PWB ([REP 23.34](#)). If the problem continues, replace the Booklet Maker PWB ([REP 23.46](#)).
Rerun the job.
Rerun the job.

312.282 (SB) Eject Clamp Home Sensor Off Fault

BSD-ON: [BSD 13.25 Set Eject Control \(1 of 2\)](#)

After the Eject Clamp started descending, the Eject Clamp Home Sensor did not turn Off within 200ms.

Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the Actuator for the Eject Clamp Home Sensor for damage.

Procedure

Execute [dc330 Component Control](#) [012-250], Eject Clamp Home Sensor. Block and unblock the Eject Clamp Home Sensor **The display changes.**

Y N
Check the wire between [J8870](#) pin 2 on the Eject Clamp Home Sensor and [P/J8988](#) pin 8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**
Y N
Repair/replace as required.
Measure the voltage between [P/J8988](#), pins 9 and 7 on the Finisher PWB. **The voltage is approx. +5VDC.**
Y N
Replace the Finisher PWB ([REP 23.34](#)).
Measure the voltage between [P/J8988](#) pin 8 on the Finisher PWB and GND. Actuate the Eject Clamp Home Sensor. **The voltage changes.**
Y N
Replace the Eject Clamp Home Sensor ([PL 23.11 Item 34](#)).
Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor starts.**

Y N
Check the wires between [P/J8878](#) pins 1-6 on the Eject Motor and [P/J8893](#) pins 5-8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 13.25 Set Eject Control \(1 of 2\)](#)). **The wires are OK.**
Y N
Repair/replace as required.
Measure the resistance of the Eject Motor between each pin of [P/J8878-1/3/4/6](#). **The resistance is approx. 20hm.**
Y N
Replace the Eject Motor ([REP 23.24](#)).
Replace the Finisher PWB ([REP 23.34](#)). If the problem remains, replace the Eject Motor ([REP 23.24](#))

A

A

Go to [BSD 13.25 Set Eject Control \(1 of 2\)](#). Check for an intermittent circuit or intermittent mechanical problem. If the check is OK, replace the Finisher PWB ([REP 23.34](#)).

312.283 (SB) Set Clamp Home Sensor On Fault

BSD-ON: [BSD 13.25 Set Eject Control \(1 of 2\)](#)

BSD-ON: [BSD 13.26 Set Eject Control \(2 of 2\)](#)

After the Set Clamp started, the Set Clamp Home Sensor did not turn On within 200ms.

Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the Actuator for the Set Clamp Home Sensor for damage.

Procedure

Execute [dc330 Component Control](#) [012-251], Set Clamp Home Sensor. Actuate the Set Clamp Home Sensor. **The display changes.**

Y N

Check the wire between [J8871](#) pin 2 on the Set Clamp Home Sensor and [P/J8988](#) pin 11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors.

The wire is OK.

Y N

Repair/replace as required.

Measure the voltage between [J8871](#), pins 12 and 10 on the Finisher PWB. **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between the [P/J8988](#) pin 11 on the Finisher PWB and GND). Actuate the Eject Clamp Home Sensor. **The voltage changes.**

Y N

Replace the Eject Clamp Home Sensor ([PL 23.11 Item 34](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor starts.**

Y N

Check the wires between [P/J8878](#) pins 1-6 on the Eject Motor and [P/J8983](#) pins 5-8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 13.25 Set Eject Control \(1 of 2\)](#)). **The wires are OK.**

Y N

Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of [P/J8878](#)-1/3/4/6. **The resistance is approx. 2 Ohm.**

Y N

Replace the Eject Motor ([REP 23.24](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem remains, replace the Eject Motor ([REP 23.24](#)).

A

A

Execute **dc330 Component Control** [012-050 Set Clamp Clutch On]. **The Set Clamp Clutch energizes.**

Y N

Select **Stop**. Check the wires between **P/J8877** pins 1 and 2 on the Set Clamp Clutch and **P/J8983** pins 3 and 4 on the Finisher PWB for an open or short circuit, or loose or damaged connectors (**BSD 13.26 Set Eject Control (2 of 2)**). **The wires are OK.**

Y N

Repair/replace as required.

Measure the voltage between the Finisher PWB P8983-4 (+) and GND (-). **The voltage is approx. +24VDC.**

Y N

Replace the Set Clamp Clutch (**PL 23.11**). If the problem persists, replace the Finisher PWB (**REP 23.34**).

Replace the Finisher PWB (**REP 23.34**).

Replace the Finisher PWB (**REP 23.34**).

312.284 (SB) Set Clamp Home Sensor Off Fault

BSD-ON: **BSD 13.25 Set Eject Control (1 of 2)**

BSD-ON: **BSD 13.26 Set Eject Control (2 of 2)**

After the Set Clamp completed operation, the Set Clamp Home Sensor did not turn Off within the specified time.

Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the Actuator for the Set Clamp Home Sensor for damage.

Procedure

Execute **dc330 Component Control** [012-251], Set Clamp Home Sensor. Actuate the Set Clamp Home Sensor. **The display changes.**

Y N

Check the wire between **J8881** pin 2 on the Set Clamp Home Sensor and **P/J8988** pin 11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors.

The wire is OK.

Y N

Repair/replace as required.

Measure the voltage between **P/J8988**, pins 12 and 10 on the Finisher PWB. **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB (**REP 23.34**).

Measure the voltage between the pin 11 on the Finisher PWB and GND). Actuate the Eject Clamp Home Sensor. **The voltage changes.**

Y N

Replace the Eject Clamp Home Sensor (**PL 23.11 Item 34**).

Replace the Finisher PWB (**REP 23.34**).

Alternately execute **dc330 Component Control** [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor starts.**

Y N

Check the wires between **P/J8878** pins 1-6 on the Eject Motor and **P/J8983** pins 5-8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors (**BSD 13.25 Set Eject Control (1 of 2)**). **The wires are OK.**

Y N

Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of **P/J8878-1/3/4/6**. **The resistance is approx. 20hm.**

Y N

Replace the Eject Motor (**REP 23.24**).

Replace the Finisher PWB (**REP 23.34**). If the problem remains, replace the Eject Motor (**REP 23.24**).

A

A

Execute [dc330 Component Control](#) [012-050 Set Clamp Clutch ON]. **The Set Clamp Clutch energizes.**

Y N

Select **Stop**. Check the wires between [P/J8877](#) pins 1 and 2 on the Set Clamp Clutch and [P/J8983](#) pins 3 and 4 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 13.26 Set Eject Control \(2 of 2\)](#)). **The wires are OK.**

Y N

Repair/replace as required.

Measure the voltage between the Finisher PWB P8983-4 (+) and GND (-). **The voltage is approx. +24VDC.**

Y N

Replace the Set Clamp Clutch ([PL 23.11 Item 12](#)). If the problem persists, replace the Finisher PWB ([REP 23.34](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Replace the Finisher PWB ([REP 23.34](#)).

312.291 (SB) Stapler Fault

BSD-ON: [BSD 13.24 Staple Control](#)

- After the Stapler Motor turned On (Forward rotation), the Staple Head Home Sensor did not switch from Off to On within the specified time.
- After the Stapler Motor turned On (Reverse rotation), the Staple Head Home Sensor did not turn On within the specified time.

Initial Actions

Check the Stapler for jammed staples or an incorrectly installed staple cartridge.

Procedure

Execute [dc330 Component Control](#) [012-046], Staple Motor FWD, and [012-047], then Staple Motor REV. **The Stapler cycles.**

Y N

Check the wires between [J8887](#), pins 1-4 on the Stapler Assembly and [P/J8981](#) pins 9-11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. If the wires are OK, the Stapler Assembly ([REP 23.17](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

Select **Stop**. Execute [dc330 Component Control](#) [012-244], Staple Home Switch. **The display is "Low."**

Y N

There is +5 VDC from pin 5 to pin 1 of [J8886](#) on the Stapler Assembly.

Y N

Check the wires from [P/J8981](#), pins 4 and 8, to [J8886](#) pins 5 and 1 for an open circuit. If the wires are OK, replace the Finisher PWB ([REP 23.34](#)).

Check the wire from [J8886](#) pin 4 to [P/J8981](#) pin 5 for an open circuit. If the wire is OK, replace the Stapler Assembly ([PL 23.8](#)).

Go to [BSD 13.24 Staple Control](#). Check for an intermittent connection. If the check is good, replace the Stapler Assembly ([REP 23.17](#)). If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.295 (SB) Stapler Move Position Sensor On Fault

BSD-ON: [BSD 13.23 Staple Positioning](#)

- After the Stapler started moving to the staple position, the Stapler Move Position Sensor did not turn On within 2sec.
- After the Stapler completed moving to the Staple Position, the Stapler Move Position Sensor did not turn On.

Initial Actions

Check the Stapler, Base Frame, and Rail ([PL 23.8](#)) for freedom of movement.

Procedure

Execute [dc330 Component Control](#) [012-241], Stapler Move Position Sensor. Move the Stapler by hand from the Home position to the staple position and back. **The display changes.**

Y N
Check the wire between [J8885](#) pin 2 on the Stapler Move Position Sensor and [P/J8981](#) pin 2 on the Finisher PWB for an open or short circuit, or loose or damaged connectors.

The wire is OK.

Y N
Repair/replace as required.

Measure the voltage between [P/J8981](#), pins 3 and 1 on the Finisher PWB ([BSD 13.23 Staple Positioning](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8981](#) pin 2 on the Finisher PWB and GND ([BSD 13.23 Staple Positioning](#)). Move the Stapler by hand from the Home position to the staple position and back. **The voltage changes.**

Y N
Replace the Stapler Move Position Sensor ([PL 23.8 Item 8](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [012-43], Staple Move Motor Rear and [012-040], Staple Move Motor Front. **The Stapler Move Motor moves.**

Y N
Check the wires between [P/J8981](#) pins 13~16 on the Finisher PWB and [P/J8888](#) on the Stapler Move Motor ([BSD 13.23 Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

Y N
Repair/replace as required.

Replace the Staple Move Motor ([REP 23.18](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Go to [BSD 13.23 Staple Positioning](#). Check for an intermittent connection. If the check is good, replace the Stapler Assembly ([REP 23.17](#)). If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.296 (SB) Staple Move Sensor Off Fault

BSD-ON: [BSD 13.23 Staple Positioning](#)

- After the Stapler started moving to the Staple Position and the Staple Move Sensor turned Off, the Staple Move Sensor did not turn Off within 500ms.
- After the Staple Position had been fixed, the Staple Move Sensor turned Off.
- After the Staple Move Sensor turned On when paper passed through the Dual Staple 1 Position while moving to the Rear Staple Position, the Staple Move Sensor did not turn Off within 500ms.

Initial Actions

Check the Stapler, Base Frame, and Rail ([PL 23.8](#)) for freedom of movement.

Procedure

Execute [dc330 Component Control](#) [012-241], Stapler Move Position Sensor. Move the Stapler by hand from the Home position to the staple position and back. **The display changes.**

Y N
Check the wire between [J8885](#) pin 2 on the Stapler Move Position Sensor and [P/J8981](#) pin 2 on the Finisher PWB for an open or short circuit, or loose or damaged connectors.

The wire is OK.

Y N
Repair/replace as required.

Measure the voltage between [P/J8981](#), pins 3 and 1 on the Finisher PWB ([BSD 13.23 Staple Positioning](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8981](#) pin 2 on the Finisher PWB and GND ([BSD 13.23 Staple Positioning](#)). Move the Stapler by hand from the Home position to the staple position and back. **The voltage changes.**

Y N
Replace the Stapler Move Position Sensor ([PL 23.8 Item 8](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dc330 Component Control](#) [012-43], Staple Move Motor Rear and [012-040], Staple Move Motor Front. **The Stapler Move Motor moves.**

Y N
Check the wires between [P/J8981](#) pins 13~16 on the Finisher PWB and [P/J8888](#) on the Stapler Move Motor ([BSD 13.23 Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

Y N
Repair/replace as required.

Replace the Staple Move Motor ([REP 23.18](#)). If the problem persists, replace the Finisher PWB ([REP 23.34](#)).

A

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Go to [BSD 13.23 Staple Positioning](#). Check for an intermittent connection. If the check is good, replace the Stapler Assembly ([REP 23.17](#)). If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.300 (SB) Eject Cover Open

BSD-ON: [BSD 13.3 Finisher Interlock Switching](#)

Eject Cover Switch open was detected.

Initial Actions

- Ensure that the Eject Cover is down.
- Check Eject Cover Switch for improper installation.
- Check Eject Cover Switch connectors for connection failure.
- Check Actuator part for deformation.

Procedure

Enter [dc330 Component Control](#) [012-300], Eject Cover Switch ([PL 23.11 Item 37](#)). Select **Start**. Actuate the Eject Cover Switch. **The display changes**

Y N

Select **Stop**. Check continuity of the Eject Cover Switch ([J8889](#), pin 1 to pin 2). **The continuity check is OK.**

Y N

Replace the Eject Cover Switch ([PL 23.11 Item 37](#)).

Check continuity between the Eject Cover Switch and the Finisher PWB ([J8982](#) pin 1 to [J8889](#) pin 1, and [J8889](#) pin2 to [J8889](#) pin 7. If the check is OK, replace the Finisher PWB ([PL 23.16](#)).

Select **Stop**. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.302 (SB) Finisher Front Cover Open

BSD-ON: [BSD 13.3 Finisher Interlock Switching](#)

The Finisher Front Cover is open.

Initial Actions

- Check the installation of the H-Transport Open Sensor
- Opening/closing of the Finisher H-Transport Cover.

Procedure

Execute [dc330 Component Control](#) [012-302], Front Door Interlock Switch. Open/close the Finisher Front Cover. **The display changes.**

Y N
Open the Front Door and cheat the Front Door Interlock Switch **The display changes.**

Y N
Check the wires between [J8982](#) pin 3 and [J8891](#) pin 2B, and from [J8891](#) pin 2A to [J8982](#) pin 3 for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N
Repair/reconnect as required.

Remove the cheater. Measure the voltage between [J8891](#) pin 2A on the Front Door Interlock Switch and GND ([BSD 13.3 Finisher Interlock Switching](#)). **The voltage is approx. +5VDC.**

Y N
Check the wire from [J8891](#) pin 2A to [J8982](#) pin 3 for an open or short circuit, or a loose or damaged connector. If the wires are OK, replace the Finisher PWB ([REP 23.34](#)).

Cheat the Interlock Switch. **The voltage drops to 0 VDC.**

Y N
Replace the Front Door Interlock Switch ([PL 23.16](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Check the actuator for damage or misalignment

Check the Interlock circuit for an intermittent condition ([BSD 13.3 Finisher Interlock Switching](#)).
If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.303 (SB) Finisher H-Transport Cover Open

BSD-ON: [BSD 13.10 Horizontal Paper Transportation](#)

The Finisher H-Transport Cover is open.

Initial Actions

- Check the installation of the H-Transport Open Sensor.
- Opening/closing of the Finisher H-Transport Cover.

Procedure

Execute [dc330 Component Control](#) [012-303], H-Transport Open Sensor. Actuate the H-Transport Open Sensor ([PL 23.4](#)). **The display changes.**

Y N
Check the wire between [P/J8860](#) pin 2 and [J8987](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [J8987](#), pins 3 and 1 on the Finisher PWB ([BSD 13.10 Horizontal Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8987](#), pin 2 on the Finisher PWB and GND ([BSD 13.10 Horizontal Paper Transportation](#)). Actuate the H-Transport Open Sensor. **The voltage changes.**

Y N
Replace the H-Transport Open Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([REP 23.34](#)).

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.334 (SB) Download Mode Fault

Failure in previous download (abnormal termination during download); can only start in Download Mode upon turning power On.

Procedure

Download defective; check the following:

- Cable connection between Finisher and IOT is not connected or defective
- Finisher power cable is plugged in properly

312.700 (SB) Punch Box Nearly Full

BSD-ON: [BSD 13.11 Punch Control](#)

Punch Box nearly full.

Procedure

Empty the Punch Box ([PL 23.2 Item 11](#)) and re-insert. If the fault remains, check the circuit of the Punch Box Set Sensor ([BSD 13.11 Punch Control](#)).

312.901 (SB) H-Transport Entrance Sensor Static Jam

BSD-ON: [BSD 13.10 Horizontal Paper Transportation](#)

Paper remains on the H-Transport Entrance Sensor.

Initial Actions

Check the paper path. If no paper is found continue with this RAP.

Clean the Sensor.

Procedure

Execute [dc330 Component Control](#) [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor ([PL 23.4](#)). **The display changes.**

Y N
|
Check the wire between [P/J8861](#) pin 2 and [J8987](#) pin 6 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
|
Repair/reconnect as required.

Measure the voltage between [J8987](#), pins 4 and 5 on the Finisher PWB ([BSD 13.10 Horizontal Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N
|
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8987](#), pin 6 on the Finisher PWB and GND ([BSD 13.10 Horizontal Paper Transportation](#)). Actuate the H-Transport Entrance Sensor. **The voltage changes.**

Y N
|
Replace the H-Transport Entrance Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([REP 23.34](#)).

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.903 (SB) Paper Remains at Compiler Exit Sensor

BSD-ON: [BSD 13.20 Finisher Paper Transportation](#)

Paper remains on the Compiler Exit Sensor.

Initial Actions

Check the paper path. If no paper is found continue with this RAP.

Clean the Sensor.

Procedure

Execute [dc330 Component Control](#) [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor ([PL 23.14](#)). **The display changes.**

Y N
|
Check the wire between [J8869](#) pin 2 and [P/J8988](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
|
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 3 and 1 on the Finisher PWB ([BSD 13.20 Finisher Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N
|
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [P/J8988](#), pin 5 on the Finisher PWB and GND ([BSD 13.20 Finisher Paper Transportation](#)). Actuate the Compiler Exit Sensor. **The voltage changes.**

Y N
|
Replace the Compiler Exit Sensor ([PL 23.14](#)).

Replace the Finisher PWB ([REP 23.34](#)).

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.905 (SB) Compiler Tray No Paper Sensor Static Jam

BSD-ON: [BSD 13.22 Tamping Control \(2 of 2\)](#)

Paper remains on the Compiler Tray No Paper Sensor.

Initial Actions

Check the paper path. If no paper is found continue with this RAP.

Clean the Sensor.

Procedure

Enter [dc330 Component Control](#) [012-151], Compiler Tray No Paper Sensor. Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes.**

Y N

Check the wire between [J8880](#) pin 2 and [J8984](#) pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [J8984](#) pins 3 and 1 on the Finisher PWB ([BSD 13.22 Tamping Control \(2 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8984](#) pin 2 on the Finisher PWB and GND ([BSD 13.22 Tamping Control \(2 of 2\)](#)). Actuate the Compiler Tray No Paper Sensor. **The voltage changes.**

Y N

Replace the Compiler Tray No Paper Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([REP 23.34](#)).

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.911 (SB) Stacker Lower Safety Warning

The Height Alignment was not successful within 250msec when the Height Adjustment was performed for output paper to the Stacker Tray (Tray lowering down) in the middle of a job.

Procedure

Remove all paper from the Stacker. If the problem continues, go to RAP [312.213 \(SB\)](#).

312.914 (SB) Stacker Tray Stapled Set Over Count

The Staple Set Count of the Stacker Tray has exceeded 50 sets during the Staple Set Eject operation.

Procedure

Remove all paper from the Stacker. If the problem continues, go to the RAP [312.161 \(SB\)](#).

312.923 (SB) H-Transport Entrance Sensor Static Jam

BSD-ON: [BSD 13.20 Finisher Paper Transportation](#)

During standby, paper was detected by the H-Transport Entrance Sensor.

Initial Actions

Check the paper path. If no paper is found continue with this RAP.

Clean the Sensor.

Procedure

Execute [dc330 Component Control](#) [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor ([PL 23.4 Item 6](#)). **The display changes.**

Y N

Check the wire between [P/J8861](#) pin 2 and [J8987](#) pin 6 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [J8987](#), pins 4 and 5 on the Finisher PWB ([BSD 13.20 Finisher Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8987](#), pin 6 on the Finisher PWB and GND ([BSD 13.20 Finisher Paper Transportation](#)). Actuate the H-Transport Entrance Sensor. **The voltage changes.**

Y N

Replace the H-Transport Entrance Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([REP 23.34](#)).

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.935 (SB) Paper at Finisher Entrance Sensor

BSD-ON: [BSD 13.20 Finisher Paper Transportation](#)

Control logic reports paper at the Finisher Entrance Sensor.

Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is docked correctly to ensure proper Transport Gate operation.

Procedure

Enter [dc330 Component Control](#) [012-100], Finisher Entrance Sensor. Select **Start**. Actuate the Finisher Entrance Sensor. **The display changes.**

Y N
Check the wire between [J8868](#) pin 2 and [P/J8988](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**
Y N
Repair/reconnect as required.
Measure the voltage between [P/J8988](#) pins 3 and 1 on the Finisher PWB ([BSD 13.20 Finisher Paper Transportation](#)). **The voltage is approx. +5VDC.**
Y N
Replace the Finisher PWB ([REP 23.34](#)).
Measure the voltage between [P/J8988](#) pin 2 on the Finisher PWB and GND ([BSD 13.20 Finisher Paper Transportation](#)). Actuate the Finisher Entrance Sensor. **The voltage changes.**
Y N
Replace the Finisher Entrance Sensor ([PL 23.14 Item 10](#)).
Replace the Finisher PWB ([REP 23.34](#)).

Replace the Finisher PWB ([REP 23.34](#)).

312.949 (SB) Punch Box Missing

BSD-ON: [BSD 13.11 Punch Control](#)

Punch Box Set Sensor detected Punch Box to be missing.

Initial Actions

- Ensure that the Punch Box ([PL 23.2 Item 11](#)) is present and installed properly

Procedure

Enter [dc330 Component Control](#) [012-275], Punch Box Set Sensor ([PL 23.5 Item 5](#)). Select **Start**. Remove and insert the Punch Box manually. **The display changes.**

Y N
Select **Stop**. Check continuity between the Punch Box Set Sensor [J8866](#), [P8863](#), and the Finisher PWB [J8987](#). **The continuity check is OK.**
Y N
Repair the open circuit or short circuit.
Replace the Punch Box Set Sensor ([PL 23.5 Item 5](#)). If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

Check the Punch Box Set Sensor Actuator and Punch Box Guide for deformation. **The Punch Box can be removed and inserted properly.**

Y N
Repair or replace the Punch Box ([PL 23.2 Item 11](#)).

Select **Stop**. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.965 (SB) Stapler Near Empty

- Low Staple Sensor On is detected during power On and Interlock Close
- Low Staple Sensor On is detected right before the Staple Head Close operation

Procedure

Check the Staple Cartridge. If the Staples are NOT low, go to the [312.291 \(SB\)](#) RAP.

312.966 (SB) Scratch Sheet Compile

Paper was detected that was either out of specification, in poor condition (wrinkled, curled) and was ejected to the compiler.

NOTE: This Code is an operation message. If this fail code is frequently declared, perform the procedure below.

Initial Actions

- Check that the Top Cover can be opened and closed.
- Power Off/On.

Procedure

Check the specifications of paper. **The paper is in spec.**

Y N

Replace the paper with new paper that is in spec.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent (dog eared) or jam.**

Y N

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

Check for a Fault Code. **Another Fault Code is displayed.**

Y N

If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

Go to the appropriate Fault Code.

312.969 (SB) IOT Center Tray Full

BSD-ON: [BSD 13.10 Horizontal Paper Transportation](#)

The H-Transport Entrance Sensor is detected to be On for 10 successive seconds.

Procedure

Check the H-Transport Drive Rolls ([PL 23.4](#)) and Pinch Rolls ([PL 23.3 Item 8](#)) for wear or contamination. Check for obstructions or damage in the paper path. **The Rolls and Paper Path are OK.**

Y N
Clean or replace as required.

Execute [dc330 Component Control](#) [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor ([PL 23.4 Item 6](#)). **The display changes.**

Y N
Check the wire between [P/J8861](#) pin 2 and [J8987](#) pin 6 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [J8987](#), pins 4 and 5 on the Finisher PWB ([BSD 13.10 Horizontal Paper Transportation](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Finisher PWB ([REP 23.34](#)).

Measure the voltage between [J8987](#), pin 6 on the Finisher PWB and GND ([BSD 13.10 Horizontal Paper Transportation](#)). Actuate the H-Transport Entrance Sensor. **The voltage changes.**

Y N
Replace the H-Transport Entrance Sensor ([PL 23.4 Item 6](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Power Off. Open the H-Transport Top Cover. Check the H-Transport Interlock Sensor. Power On. **The H-Transport Belt rotates.**

Y N
Check the wires between [P/J8862](#) on the H-Transport Motor and [J8987](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N
Repair/reconnect as required.

Measure the resistance of the H-Transport Motor between each pin [J8862-1/2/5/6](#) ([BSD 13.10 Horizontal Paper Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N
Replace the H-Transport Motor ([REP 23.5](#)).

Replace the Finisher PWB ([REP 23.34](#)). If the problem persists, replace the H-Transport Motor ([REP 23.5](#)).

Check the H-Transport Entrance Sensor and H-Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

312.112 (C) H-Transport Entrance Sensor On Jam

BSD-ON: [BSD 14.5 Finisher H-Transport Drives](#)

BSD-ON: [BSD 14.6 Finisher Horizontal Transportation \(1 of 2\)](#)

H-Transport Entrance Sensor is not turned on within a specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check the H-Transport Motor Belt for wear or damage.
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation.

Procedure

Enter [dc330 Component Control](#) [012-190], H-Transport Entrance Sensor ([PL 24.4 Item 12](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Entrance Sensor. **The display changes.**

Y N

Go to [BSD 14.6 Finisher Horizontal Transportation \(1 of 2\)](#). Check the circuit of the H-Transport Entrance Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-090], H-Transport Motor ([PL 24.6 Item 22](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the H-Transport Motor. Refer to the [Transmissive Sensor](#) for troubleshooting procedure.

Select **Stop**. Close the H-Transport Cover. Select [012-086] or [012-087], Gate Solenoid ([PL 24.41 Item 37](#)). Select **Start**. **The Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the H-Transport Entrance Sensor ([PL 24.4 Item 12](#)).

If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.113 (C) Booklet In Sensor On Jam

BSD-ON: [BSD 14.10 Finisher Booklet/ Punch Transport](#)

BSD-ON: [BSD 14.14 Booklet Transportation](#)

The Booklet In Sensor did not turn on within the specified time after Punch Out Sensor On.

Initial Actions

- Check for obstructions in the paper path.
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.
- Check the Booklet In Sensor ([PL 24.57 Item 5](#)) for obstructions.
- Check for transportation failure of non-standard paper.
- Check the Booklet In Roll for wear or damage.

Procedure

Enter [dc330 Component Control](#) [013-135], Booklet In Sensor ([PL 24.57 Item 5](#)). Select **Start**. Actuate the Booklet In Sensor. **The display changes.**

Y N

Go to [BSD 14.14 Booklet Transportation](#). Check the circuit of the Booklet In Sensor. Refer to the [Transmissive Sensor](#) for troubleshooting procedure.

Select [013-068] and/or [013-069], Booklet Gate Solenoid ([PL 24.42 Item 9](#)). Select **Start**. **The Booklet Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.10 Finisher Booklet/ Punch Transport](#). Check the circuit of the Booklet Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor ([PL 24.41 Item 26](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the Finisher Transport Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment.
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment.

If the above checks are OK, then replace the Booklet In Sensor ([PL 24.57 Item 5](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.114 (C) Booklet In Sensor Off Jam

BSD-ON: [BSD 14.10 Finisher Booklet/ Punch Transport](#)

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.14 Booklet Transportation](#)

The Booklet In Sensor did not turn off within the specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.
- Check the Booklet In Sensor ([PL 24.57 Item 5](#)) for obstructions.
- Check for transportation failure of non-standard paper.
- Check the Booklet In Roll for wear or damage.

Procedure

Enter [dc330 Component Control](#) [013-135], Booklet In Sensor ([PL 24.57 Item 5](#)). Select **Start**. Actuate the Booklet In Sensor. **The display changes.**

Y N
Go to [BSD 14.14 Booklet Transportation](#). Check the circuit of the Booklet In Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [013-068] and/or [013-069], Booklet Gate Solenoid ([PL 24.42 Item 9](#)). Select **Start**. **The Booklet Gate Solenoid actuates.**

Y N
Select **Stop**. Go to [BSD 14.10 Finisher Booklet/ Punch Transport](#). Check the circuit of the Booklet Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor ([PL 24.58 Item 4](#)). Select **Start**. **The motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check the circuit of the Booklet Paper Path Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment.
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment.

If the above checks are OK, then replace the Booklet In Sensor ([PL 24.57 Item 5](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.115 (C) Booklet Folder Roll Exit Sensor On Jam

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.14 Booklet Transportation](#)

Booklet Folder Roll Exit Sensor is not turned off within a specified time.

Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.
- Check the Booklet Folder Roll Exit Sensor ([PL 24.57 Item 21](#)) for obstructions.
- Check for transportation failure of non-standard paper.
- Check the Booklet Folding Roll for wear or damage.
- Check the Booklet Eject Roll Drive rolls for wear or damage.

Procedure

Enter [dc330 Component Control](#) [013-103], Booklet Folder Roll Exit Sensor ([PL 24.57 Item 21](#)). Select **Start**. Actuate the Booklet Folder Roll Exit Sensor. **The display changes.**

Y N
Go to [BSD 14.14 Booklet Transportation](#). Check the circuit of the Booklet Folder Roll Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor ([PL 24.58 Item 4](#)). Select **Start**. **The motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check the circuit of the Booklet Paper Path Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [013-008], Booklet Folder Roll Motor ([PL 24.58 Item 2](#)). Select **Start**. **The motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check the circuit of the Booklet Folder Roll Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment.
- Check the Booklet Folder Roll Motor and its associated gears and belts for damage, contamination or alignment.

If the above checks are OK, then replace the Booklet Folder Roll Exit Sensor ([PL 24.57 Item 21](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.123 (C) H-Transport Exit Sensor On Jam

BSD-ON: [BSD 14.5 Finisher H-Transport Drives](#)

BSD-ON: [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#)

H-Transport Exit Sensor is not turned on within a specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.
- Check the H-Transport Motor Belt for wear or damage.
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation.

Procedure

Enter [dc330 Component Control](#) [012-191], H-Transport Exit Sensor ([PL 24.6 Item 8](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select [012-090], H-Transport Motor ([PL 24.6 Item 22](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the H-Transport Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Select **Stop**. Close the H-Transport Cover. Select [012-086] or [012-087], H-Transport Gate Solenoid ([PL 24.2](#)). Select **Start**. **The Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the Gate Solenoid. Refer to the [Set Gate Solenoid Open RAP](#) for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the H-Transport Exit Sensor ([PL 24.6 Item 8](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.124 (C) H-Transport Top Tray Exit Sensor Off Jam

BSD-ON: [BSD 14.5 Finisher H-Transport Drives](#)

BSD-ON: [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#)

H-Transport Top Tray Exit Sensor is not turned off within a specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.
- Check the H-Transport Motor Belt for wear or damage.
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation.

Procedure

Enter [dc330 Component Control](#) [012-191], H-Transport Exit Sensor ([PL 24.6 Item 8](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select **Stop**. Select [012-090], H-Transport Motor ([PL 24.6 Item 22](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the H-Transport Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Select **Stop**. Close the H-Transport Cover. Select [012-086] or [012-087], H-Transport Gate Solenoid ([PL 24.2](#)). Select **Start**. **The Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the Gate Solenoid. Refer to the [Set Gate Solenoid Open RAP](#) for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the H-Transport Exit Sensor ([PL 24.6 Item 8](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.125 (C) Gate Sensor On Jam

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

BSD-ON: [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#)

Gate Sensor is not turned on within a specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage.

Procedure

Enter [dc330 Component Control](#) [012-191], H-Transport Exit Sensor ([REP 24.12](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Enter [dc330 Component Control](#) [012-102], Gate Sensor ([PL 24.43 Item 19](#)). Select **Start**. Actuate the Gate Sensor. **The display changes.**

Y N

Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Gate Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor 1 Speed ([PL 24.41](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Finisher Transport Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Finisher is docked properly.
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the Gate Sensor ([REP 24.90](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.132 (C) Transport Entrance Sensor On Jam

BSD-ON: [BSD 14.9 Finisher Drives](#)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

Transport Entrance Sensor is not turned on within a specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.

Procedure

Enter [dc330 Component Control](#) [012-100], Transport Entrance Sensor ([PL 24.41 Item 19](#)). Select **Start**. Actuate the Transport Entrance Sensor. **The display changes.**

Y N

Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Transport Entrance Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor 1 Speed ([PL 24.41](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#). Check the circuit of the Finisher Transport Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment.
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment.

If the above checks are OK, then replace the Transport Entrance Sensor ([PL 24.41 Item 19](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.142 (C) Buffer Path Sensor On Jam

BSD-ON: [BSD 14.9 Finisher Drives](#)

BSD-ON: [BSD 14.12 Finisher Buffer Transport](#)

Buffer Path Sensor is not turned on within a specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check the Finisher Transport Motor Belt, Gears and Drive Rolls for wear or damage.

Procedure

Enter [dc330 Component Control](#) [012-101], Buffer Path Sensor ([PL 24.41 Item 10](#)). Select **Start**. Actuate the Buffer Path Sensor. **The display changes.**

Y N

Go to [BSD 14.12 Finisher Buffer Transport](#). Check the circuit of the Buffer Path Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor 1 Speed ([PL 24.41](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#). Check the circuit of the Finisher Transport Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] and/or [012-016], Buffer Gate Solenoid ([REP 24.84](#)). Select **Start**. **The Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.12 Finisher Buffer Transport](#). Check the circuit of the Buffer Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Buffer Rolls for obstructions.
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the Buffer Path Sensor ([PL 24.41 Item 10](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.151(C) Compiler Exit Sensor Off Jam

BSD-ON: [BSD 14.9 Finisher Drives](#)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

BSD-ON: [BSD 14.12 Finisher Buffer Transport](#)

BSD-ON: [BSD 14.24 Finisher Compiling](#)

The Compiler Exit Sensor did not turn Off within the specified time after Compiler Exit Sensor On.

Initial Actions

- Check the Buffer Reverse Roll for wear or damage.
- Check the Compile Exit Roll for wear or damage.
- Check for paper transportation failure due to a foreign substance/burr on the paper path.
- Check for transportation failure of non-standard paper.

Procedure

Enter [dc330 Component Control](#) [012-150], Compiler Exit Sensor ([PL 24.36 Item 3](#)). Select **Start**. Actuate the Compiler Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.24 Finisher Compiling](#). Check the circuit of the Compiler Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid ([PL 24.41 Item 37](#)), and Select **Start**. **The Transport Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] or [012-016], Buffer Gate Solenoid ([PL 24.41 Item 39](#)), and Select **Start**. **The Buffer Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.12 Finisher Buffer Transport](#). Check the circuit of the Buffer Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select [012-007], Exit Motor ([PL 24.43 Item 7](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

If the above checks are OK, then replace the Compiler Exit Sensor (REP 24.64). If the problem persists, replace the Finisher Main PWB (REP 24.92).

312.152 (C) Compiler Exit Sensor On Jam

BSD-ON: [BSD 14.9 Finisher Drives](#)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

BSD-ON: [BSD 14.12 Finisher Buffer Transport](#)

BSD-ON: [BSD 14.24 Finisher Compiling](#)

Not in the Punch mode: The Compiler Exit Sensor did not turn On within the specified time after Punch Out Sensor On.

In Punch mode: The Compiler Exit Sensor did not turn On within the specified time after the punching operation had begun.

Initial Actions

- Check the Buffer Roll for wear or damage.
- Check the Compile Exit Roll for wear or damage.
- Check for paper transportation failure due to a foreign substance/burr on the paper path.
- Check for transportation failure of non-standard paper.

Procedure

Enter [dc330 Component Control](#) [012-150], Compiler Exit Sensor ([PL 24.36 Item 3](#)). Select **Start**. Actuate the Compiler Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.24 Finisher Compiling](#). Check the circuit of the Compiler Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] or [012-016], Buffer Gate Solenoid ([PL 24.41 Item 39](#)), and Select **Start**. **The Buffer Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.12 Finisher Buffer Transport](#). Check the circuit of the Buffer Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid ([PL 24.41 Item 37](#)). Select **Start**. **The Transport Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select [012-007], Exit Motor ([PL 24.43 Item 7](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

If the above checks are OK, then replace the Compiler Exit Sensor (REP 24.64). If the problem persists, replace the Finisher Main PWB (REP 24.92).

312.161 (C) Set Eject Jam

BSD-ON: [BSD 14.9 Finisher Drives](#)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

BSD-ON: [BSD 14.24 Finisher Compiling](#)

The Compiler Exit Sensor did not turn off within the specified time after the Eject operation has begun.

Initial Actions

- Check the Buffer Reverse Roll for wear or damage.
- Check the Compile Exit Roll for wear or damage.
- Check for paper transportation failure due to a foreign substance/burr on the paper path.
- Check for transportation failure of non-standard paper.

Procedure

Enter [dc330 Component Control](#) [012-150], Compiler Exit Sensor ([PL 24.36 Item 3](#)). Select **Start**. Actuate the Compiler Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.24 Finisher Compiling](#) Check the circuit of the Compiler Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-007]

Exit Motor ([PL 24.43 Item 7](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid ([PL 24.41 Item 37](#)). Select **Start**. **The Transport Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension.

If the above checks are OK, then replace the Compiler Exit Sensor ([PL 24.36 Item 3](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.162 (C) H-Transport Exit Sensor On Jam

BSD-ON: [BSD 14.5 Finisher H-Transport Drives](#)

BSD-ON: [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#)

H-Transport Exit Sensor is not turned On within a specified time.

Initial Actions

- Check for obstructions in the paper path.
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.
- Check the H-Transport Motor Belt for wear or damage.
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation.
- Check the Fuser Exit Switch actuator for damage, installed properly, or actuator spring damaged or missing.

Procedure

Enter [dc330 Component Control](#) [012-191], H-Transport Exit Sensor ([PL 24.6 Item 8](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select [012-090], H-Transport Motor ([PL 24.6 Item 21](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the H-Transport Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the H-Transport Exit Sensor ([PL 24.6 Item 8](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.171 (C) Top Tray Exit Sensor On Jam

BSD-ON: [BSD 14.9 Finisher Drives](#)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

BSD-ON: [BSD 14.21 Finisher Top Tray Stacking](#)

Not in the Punch mode: The Top Tray Exit Sensor did not turn on within the specified time after Punch Out Sensor on.

In Punch mode: The Top Tray Exit Sensor did not turn on within the specified time after the punching operation had begun.

Initial Actions

- Check Top Tray Exit for operation failure.
- Check paper transportation failure due to a foreign substance/burr on the paper path.
- Check transportation failure of non-standard paper.

Procedure

Enter [dc330 Component Control](#) [012-115], Top Tray Exit Sensor ([PL 24.36 Item 3](#)). Select **Start**. Actuate the Top Tray Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.21 Finisher Top Tray Stacking](#) Check the circuit of the Top Tray Exit Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select [012-007], Exit Motor ([PL 24.43 Item 7](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#) Check the circuit of the Exit Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid ([PL 24.41 Item 37](#)). Select **Start**. **The Transport Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [Set Gate Solenoid Open RAP](#) for troubleshooting procedure.

Select [012-001], Finisher Transport Motor ([PL 24.41 Item 26](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#) Check the circuit of the Finisher Transport Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Exit Motor and its associated gears and belts for damage, contamination or misalignment.

- Exit Drive Shaft for wear and a revolution failure
- The Exit Pinch Rolls for wear and/or damage

If the above checks are OK, then replace the Top Tray Exit Sensor (REP 24.64). If the problem persists, replace the Finisher Main PWB (REP 24.92).

312.172 (C) Top Tray Exit Sensor Off Jam

BSD-ON: [BSD 14.9 Finisher Drives](#)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

BSD-ON: [BSD 14.5 Finisher H-Transport Drives](#)

Top Tray Exit Sensor Off was not detected at the rear edge of paper within the specified time after Punch Out Sensor detected at the leading edge of the same paper.

Top Tray Exit Sensor Off was not detected at the rear edge of paper within the specified time after the punching operation had begun.

Initial Actions

- Check Top Tray Exit for operation failure.
- Check paper transportation failure due to a foreign substance/burr on the paper path.
- Check transportation failure of non-standard paper.

Procedure

Enter [dc330 Component Control](#) [012-115], Top Tray Exit Sensor ([PL 24.36 Item 3](#)). Select **Start**. Actuate the Top Tray Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Top Tray Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-007], Exit Motor ([PL 24.43 Item 7](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.9 Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid ([PL 24.41 Item 37](#)). Select **Start**. **The Transport Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor ([PL 24.41 Item 26](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.5 Finisher H-Transport Drives](#). Check the circuit of the Finisher Transport Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.

- Check the Exit Motor and its associated gears and belts for damage, contamination or misalignment.
- Exit Drive Shaft for wear and a revolution failure
- The Exit Pinch Rolls for wear and/or damage

If the above checks are OK, then replace the top Tray Exit Sensor (REP 24.64). If the problem persists, replace the Finisher Main PWB (REP 24.92).

312.180 (C) Booklet Folder Roll Exit Sensor Off Jam

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.14 Booklet Transportation](#)

Booklet Folder Roll Exit Sensor is not turned off within a specified time.

Initial Actions

- Check for obstructions in the paper path
- Check the Booklet Folder Roll Exit Sensor (PL 24.57 Item 21) for obstructions.
- Check for transportation failure of non-standard paper.
- Check the Booklet Folding Roll for wear or damage.
- Check the Booklet Eject Roll Drive rolls for wear or damage.

Procedure

Enter [dc330 Component Control](#) [013-103], Booklet Folder Roll Exit Sensor (PL 24.57 Item 21). Select **Start**. Actuate the Booklet Folder Roll Exit Sensor. **The display changes.**

Y N

Go to [BSD 14.14 Booklet Transportation](#). Check the circuit of the Booklet Folder Roll Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor (PL 24.58 Item 4). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check the circuit of the Booklet Paper Path Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [013-008], Booklet Folder Roll Motor (PL 24.58 Item 4). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check the circuit of the Booklet Folder Roll Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment.
- Check the Booklet Folder Roll Motor and its associated gears and belts for damage, contamination or alignment.

If the above checks are OK, then replace the Booklet Folder Roll Exit Sensor (PL 24.57 Item 21). If the problem persists, replace the Finisher Main PWB (REP 24.92).

312.211(C) Stacker Tray Fault

BSD-ON: [BSD 14.30 Finisher Stacker Drive](#)

The Stack Height Sensor did not turn Off in 500msec after the Stacker Tray started to drive down.

The Tray Height Sensor Lower did not turn On in 5000msec after the Stacker Tray started lifting up.

Initial Actions

- The Stack Height Sensor for improper installation.
- The Stack Height Sensor connectors for connection failure.
- The Tray Height Sensor Lower for improper installation.
- The Tray Height Sensor Lower connectors for connection failure.
- The Elevator Motor for operation failure.
- The Elevator Motor connectors for connection failure.
- The Elevator Gear for deformation.

Procedure

Enter [dc330 Component Control](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor Up ([PL 24.31 Item 26](#)), alternately. Select **Start**. **The Elevator Motor runs.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.**
Y N
Repair the open circuit or short circuit.
Replace the Elevator Motor ([REP 24.34](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.212 (C) Stacker Upper Limit Fault

BSD-ON: [BSD 14.30 Finisher Stacker Drive](#)

When Stack Height Sensor 2 On was detected after the Stacker Tray had started lifting up.

Initial Actions

Check Items

- The Upper Limit SW for improper installation.
- The Upper Limit SW connectors for connection failure.
- The Elevator Motor for operation failure.
- The Elevator Motor connectors for connection failure.

Procedure

Enter [dc330 Component Control](#) [012-061] Elevator Motor Down and [012-060], Elevator Motor UP ([PL 24.31 Item 24](#)), alternately. Select **Start**. **The Elevator Motor runs.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.**
Y N
Repair the open circuit or short circuit.
Replace the Elevator Motor ([REP 24.34](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [012-262], Stacker No Paper Sensor ([PL 23.7 Item 32](#)). Select **Start**. Block/unblock the Stacker No Paper Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Stacker No Paper Sensor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.
Replace the Stacker No Paper Sensor ([PL 23.7 Item 32](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select [012-260], Upper Limit Sensor ([PL 24.31 Item 17](#)). Block/unblock the Upper Limit Sensor. Select **Start**. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Upper Limit Sensor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.
Replace the Upper Limit Sensor ([REP 24.33](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.213 (C) Stacker Lower Limit Fault

BSD-ON: [BSD 14.30 Finisher Stacker Drive](#)

When Lower Limit Sensor On was detected after the Stacker Tray had started driving down.

Initial Actions

Check the following:

- The Upper Limit SW for improper installation
- The Upper Limit SW connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor Up ([PL 24.31 Item 26](#)), alternately. Select **Start**. **The Elevator Motor runs.**

Y N

Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Elevator Motor ([REP 24.34](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.221 (C) Front Tamper Home Sensor On Fault

BSD-ON: [BSD 14.25 Finisher Tamper Control](#)

The Front Tamper Home Sensor did not turn On within the specified time after the Tamper Motor had started running.

Initial Actions

Check the following:

- The Front Tamper Actuator for deformation
- The Front Tamper Home Sensor for proper installation
- The Front Tamper Home Sensor connectors
- The Front Tamper Motor for proper operation
- The Front Tamper Motor connectors

Procedure

Enter [dc330 Component Control](#) [012-020] and [012-023], Front Tamper Motor ([PL 24.35 Item 6](#)), alternately. Select **Start**. **The Front Tamper Motor runs.**

Y N

Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Front Tamper Motor. Refer to [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-220], Front Tamper Home Sensor ([PL 24.35 Item 2](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Front Tamper Home Sensor. Refer to [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.223 (C) Front Tamper Home Sensor Off Fault

BSD-ON: [BSD 14.25 Finisher Tamper Control](#)

Front Tamper Home Sensor is not turned off within a specified time. Front Tamper Home Sensor is not turned off after the stop following Front Tamper Home Sensor Off.

Initial Actions

Check the following:

- The Front Tamper Actuator for deformation
- The Front Tamper Home Sensor for proper installation
- The Front Tamper Home Sensor connectors
- The Front Tamper Motor for proper operation
- The Front Tamper Motor connectors

Procedure

Enter [dc330 Component Control](#) [012-020] and [012-023], Front Tamper Motor ([PL 24.35 Item 6](#)), alternately. Select **Start**. **The Front Tamper Motor runs.**

Y N
Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Front Tamper Motor. Refer to [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select **Stop**. Select [012-220], Front Tamper Home Sensor ([PL 24.35 Item 2](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Front Tamper Home Sensor. Refer to [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.224 (C) Rear Tamper Home Sensor Off Fault

BSD-ON: [BSD 14.25 Finisher Tamper Control](#)

Rear Tamper Home Sensor is not turned off within a specified time. Rear Tamper Home Sensor is not turned off after the stop following Rear Tamper Home Sensor Off.

Initial Actions

Check the following:

- The Rear Tamper Actuator for deformation
- The Rear Tamper Home Sensor for proper installation
- The Rear Tamper Home Sensor connectors
- The Rear Tamper Motor for proper operation
- The Rear Tamper Motor connectors

Procedure

Enter [dc330 Component Control](#) [012-026] and [012-029], Rear Tamper Motor ([PL 24.35 Item 7](#)), alternately. Select **Start**. **The Rear Tamper Motor runs.**

Y N
Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Rear Tamper Motor. Refer to [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select **Stop**. Select [012-221], Rear Tamper Home Sensor ([PL 24.35 Item 2](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Rear Tamper Home Sensor. Refer to [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.225 (C) Booklet Tamper F Home Sensor On Fault

BSD-ON: [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON: [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#)

Tamper Home Sensor Front is not turned on within 1000msec from motor On while Booklet Tamper Front is returning to Home.

Initial Actions

Check the following:

- The Booklet Tamper Home Sensor Front for improper installation
- The Booklet Tamper Home Sensor Front connectors for connection failure
- The Booklet Tamper Motor Front connectors for connection failure
- The Booklet Tamper Motor Front for improper installation
- The gear part for wear or damage
- The Booklet Tamper Front for deformation

Procedure

Enter [dc330 Component Control](#) [013-048] Booklet Tamper Motor F Rear 1 and [dc330 Component Control](#) [013-052], Booklet Tamper Motor Front ([PL 24.55 Item 10](#)), alternately. Select **Start. The Booklet Tamper Motor Front energizes.**

Y N
Select **Stop**. Go to [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#). Check continuity between the Booklet Tamper Motor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Front ([PL 24.55 Item 10](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [013-134], Booklet Tamper Home Sensor Front ([PL 24.55 Item 7](#)). Select **Start. Block/unblock the Booklet Tamper Home Sensor Front. The display changes.**

Y N
Select **Stop**. Go to [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#). Check continuity between the Booklet Tamper Home Sensor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Front ([PL 24.55 Item 7](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select Stop. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.226 (C) Booklet Tamper F Home Sensor Off Fault

BSD-ON: [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON: [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#)

Even when Booklet tamper Front motor outputs 75pulse, Tamper Front Home Sensor is not turned off.

Initial Actions

Check the following:

- The Booklet Tamper Home Sensor Front for improper installation
- The Booklet Tamper Home Sensor Front connectors for connection failure
- The Booklet Tamper Motor Front connectors for connection failure
- The Booklet Tamper Motor Front for improper installation
- The gear part for wear or damage
- The Booklet Tamper Front for deformation

Procedure

Enter [dc330 Component Control](#) [013-048] Booklet Tamper Motor F Rear 1 and [dc330 Component Control](#) [013-052], Booklet Tamper Motor Front ([PL 24.55 Item 10](#)), alternately. Select **Start. The Booklet Tamper Motor Front energizes.**

Y N
Select **Stop**. Go to [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#). Check continuity between the Booklet Tamper Motor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Front ([PL 24.55 Item 10](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [013-134], Booklet Tamper Home Sensor Front ([PL 24.55 Item 7](#)). Select **Start. Block/unblock the Booklet Tamper Home Sensor Front. The display changes.**

Y N
Select **Stop**. Go to [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#). Check continuity between the Booklet Tamper Home Sensor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Front ([PL 24.55 Item 7](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select Stop. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.227 (C) Booklet End Guide Home Sensor Off Fault

BSD-ON: [BSD 14.19 Booklet End Guide Control](#)

Even when Booklet End Guide motor outputs 200 pulse after the start, Booklet End Guide Home Sensor is not turned off.

Initial Actions

Check the following:

- The Booklet End Guide Home Sensor for improper installation
- The Booklet End Guide Home Sensor connectors for connection failure
- The Booklet End Guide Motor connectors for connection failure
- The Guide for deformation
- The Guide for a foreign substance

Procedure

Enter [dc330 Component Control](#) [013-013] and [013-016], Booklet End Guide Motor ([PL 24.53 Item 2](#)), alternately. Select **Start**. **The Booklet End Guide Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.19 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet End Guide Motor ([PL 24.53 Item 2](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [013-137] Booklet End Guide Home Sensor. Block/unblock the Booklet End Guide Home Sensor to the light with paper strip. Select **Start**. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.19 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet End Guide Home Sensor ([PL 24.53 Item 7](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Check the following:

- The Booklet End Guide Motor for proper installation
- Booklet End Guide Belt for proper tension
- Booklet End Guide Belt for wear or damage

If the above checks are OK, replace the Finisher Main PWB ([REP 24.92](#)).

312.228 (C) Booklet End Guide Home Sensor On Fault

BSD-ON: [BSD 14.19 Booklet End Guide Control](#)

Booklet End Guide Home Sensor is not turned on within 2000ms from motor On while Booklet End Guide is returning to Home.

Initial Actions

Check the following:

- The Booklet End Guide Home Sensor for improper installation
- The Booklet End Guide Home Sensor connectors for connection failure
- The Booklet End Guide Motor connectors for connection failure
- The Guide for deformation
- The Guide for a foreign substance

Procedure

Enter [dc330 Component Control](#) [013-013] and [013-016], Booklet End Guide Motor ([PL 24.53 Item 2](#)), alternately. Select **Start**. **The Booklet End Guide Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.19 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet End Guide Motor ([PL 24.53 Item 2](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Enter [dc330 Component Control](#) [013-137] Booklet End Guide Home Sensor. Select **Start**. Block/unblock the Booklet End Guide Home Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.19 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet End Guide Home Sensor ([PL 24.53 Item 7](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Check the following:

- The Booklet End Guide Motor for proper installation
- Booklet End Guide Belt for proper tension
- Booklet End Guide Belt for wear or damage

If the above checks are OK, replace the Finisher Main PWB ([REP 24.92](#)).

312.229 (C) Booklet Tamper R Home Sensor On Fault

BSD-ON: [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON: [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#)

Tamper Home Sensor Rear is not turned on within 1000msec from motor On while Booklet Tamper Rear is returning to Home.

Initial Actions

Check the following:

- The Booklet Tamper Home Sensor Rear for improper installation
- The Booklet Tamper Home Sensor Rear connectors for connection failure
- The Booklet Tamper Motor Rear connectors for connection failure
- The Booklet Tamper Motor Rear for improper installation
- The gear part for wear or damage
- The Booklet Tamper Rear for deformation

Procedure

Enter [dc330 Component Control \[013-056\]](#) and [dc330 Component Control \[013-060\]](#), Booklet Rear Tamper Motor ([PL 24.55 Item 9](#)), alternately. Select **Start. The Booklet Tamper Motor Rear energizes.**

Y N

Select **Stop**. Go to [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#). Check continuity between the Booklet Rear Tamper Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Rear Tamper Motor ([PL 24.55 Item 9](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [013-136], Booklet Front Tamper Home Sensor ([PL 24.55 Item 10](#)). Select **Start**. Block/unblock the Booklet Tamper Home Sensor Front. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#). Check continuity between the Booklet Rear Tamper Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Rear ([PL 24.55 Item 7](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.230 (C) Booklet Tamper R Home Sensor Off Fault

BSD-ON: [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON: [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#)

Even when Booklet tamper Rear motor outputs 75pulse, Tamper Rear Home Sensor is not turned off.

Initial Actions

Check the following:

- The Booklet Tamper Home Sensor Rear for improper installation
- The Booklet Tamper Home Sensor Rear connectors for connection failure
- The Booklet Tamper Motor Rear connectors for connection failure
- The Booklet Tamper Motor Rear for improper installation
- The gear part for wear or damage
- The Booklet Tamper Rear for deformation

Procedure

Enter [dc330 Component Control \[013-056\]](#) and [013-060], Booklet Rear Tamper Motor ([PL 24.55 Item 9](#)), alternately. Select **Start. The Booklet Tamper Motor Rear energizes.**

Y N

Select **Stop**. Go to [BSD 14.15 Booklet Tamper Control \(1 of 2\)](#). Check continuity between the Booklet Rear Tamper Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Rear Tamper Motor ([PL 24.55 Item 9](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [013-136], Booklet Tamper Home Sensor ([PL 24.55 Item 10](#)). Select **Start**. Block/unblock the Booklet Front Tamper Home Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.16 Booklet Tamper Control \(2 of 2\)](#). Check continuity between the Booklet Rear Tamper Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Rear Tamper Home Sensor ([PL 24.55 Item 7](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.231 (C) Puncher Home Sensor On Fault

BSD-ON: [BSD 14 22 Finisher Punch Drive](#)

BSD-ON: [BSD 14.23 Finisher Punch Hole Control](#)

The Puncher Home Sensor did not turn On within the specified time after the Puncher Motor started running.

Initial Actions

Check the following:

- The Puncher Home Actuator for deformation
- The Puncher Home Sensor for proper installation
- The Puncher Home Sensor connectors
- The Puncher Motor for proper operation
- The Puncher Motor connectors

Procedure

Enter [dc330 Component Control](#) [012-078] and [012-075], Puncher Move Motor ([PL 24.32 Item 15](#)), alternately. **Select Start. The Puncher Motor runs.**

Y N

Select **Stop**. Go to [BSD 14 22 Finisher Punch Drive](#). Check circuit of the Punch Motor. Refer to [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-271], Puncher Move Home Sensor ([REP 24.39](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Go to [BSD 14.23 Finisher Punch Hole Control](#). Check circuit of the Puncher Home Sensor. Refer to [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.232 (C) Puncher Home Sensor Off Fault

BSD-ON: [BSD 14 22 Finisher Punch Drive](#)

BSD-ON: [BSD 14.23 Finisher Punch Hole Control](#)

The Puncher Home Sensor did not turn Off within 100 msec. after the Puncher Motor had started running.

Initial Actions

Check the following:

- The Puncher Home Actuator for deformation
- The Puncher Home Sensor for proper installation
- The Puncher Home Sensor connectors
- The Puncher Motor for proper operation
- The Puncher Motor connectors

Procedure

Enter [dc330 Component Control](#) [012-078] and [012-075], Puncher Move Motor ([PL 24.32 Item 15](#)), alternately. **Select Start. The Puncher Motor runs.**

Y N

Select **Stop**. Go to [BSD 14 22 Finisher Punch Drive](#). Check circuit of the Punch Motor. Refer to [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-271], Puncher Move Home Sensor ([REP 24.39](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.23 Finisher Punch Hole Control](#). Check circuit of the Puncher Home Sensor. Refer to [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.233 (C) Puncher Move Home Sensor On Fault

BSD-ON: [BSD 14 22 Finisher Punch Drive](#)

BSD-ON: [BSD 14.23 Finisher Punch Hole Control](#)

Puncher Move Home Sensor is not turned On after the lapse of 400(300*500**)msec from operation start. Puncher Move Home Sensor is not turned on after the stop following Puncher Move Home Sensor On.

Initial Actions

Check the following:

- The Actuator for deformation
- The Puncher Move Home Sensor for improper installation
- The Puncher Move Home Sensor connectors for connection failure
- The Puncher Move Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-071] and [012-073], Puncher Move Motor ([PL 24.32 Item 15](#)), alternately. Select **Start**. **The Puncher Move Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14 22 Finisher Punch Drive](#). Check continuity between the Puncher Move Motor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Puncher Move Motor ([PL 24.32 Item 15](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [012-270], Puncher Move Home Sensor ([REP 24.39](#)). Select **Start**. Block/unblock the Puncher Move Home Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.23 Finisher Punch Hole Control](#). Check continuity between the Puncher Move Home Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Puncher Move Home Sensor ([REP 24.39](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Check the following:

- Puncher Move Motor rack and gear for binding, wear, or damage

If the above check is OK, replace the Finisher Main PWB ([REP 24.92](#)).

312.234 (C) Puncher Move Home Sensor Off Fault

BSD-ON: [BSD 14 22 Finisher Punch Drive](#)

BSD-ON: [BSD 14.23 Finisher Punch Hole Control](#)

Puncher Move Home Sensor not turned Off after the lapse of 1000 (100*) msec from operation start. Puncher Move Home Sensor is not turned off after the Stop following Puncher Move Home Sensor Off.

Initial Actions

Check the following:

- The Actuator for deformation
- The Puncher Move Home Sensor for improper installation.
- The Puncher Move Home Sensor connectors for connection failure
- The Puncher Move Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-071] and [012-073], Puncher Move Motor ([PL 24.32 Item 15](#)), alternately. Select **Start**. **The Puncher Move Motor run.**

Y N
Select **Stop**. Go to [BSD 14 22 Finisher Punch Drive](#). Check continuity between the Puncher Move Motor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Puncher Move Motor ([PL 24.32 Item 15](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [012-270], Puncher Move Home Sensor ([REP 24.39](#)). Select **Start**. Block/unblock the Puncher Move Home Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.23 Finisher Punch Hole Control](#). Check continuity between the Puncher Move Home Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Puncher Move Home Sensor ([REP 24.39](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Check the following:

- The Puncher Move Motor Belt for improper tension
- The Puncher Move Motor Belt for disengagement

If the above checks are OK, replace the Finisher Main PWB ([REP 24.92](#)).

312.243 (C) Booklet Knife Home Sensor On Fault

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.17 Booklet Knife Control](#)

Knife Home Sensor is not turned on after the lapse of 500ms from Clutch On while Booklet Knife is returning to Home.

Initial Actions

Check the following:

- The Knife Home Sensor for improper installation
- The Knife Home Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Clutch connectors for connection failure
- The Knife Clutch for improper installation
- The Knife drive mechanism for a foreign substance

Procedure

Manually move the Booklet Tamper to both ends. Enter [dc330 Component Control](#) [013-008] and [013-009], Booklet Folder Roll Motor ([PL 24.58 Item 2](#)), alternately. Select **Start**. **The Booklet Folder Roll Motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor ([PL 24.58 Item 2](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [013-010], Knife Solenoid, ([PL 24.58 Item 10](#)). Select **Start**. **The Knife Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.17 Booklet Knife Control](#). Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Knife Solenoid ([PL 24.58 Item 10](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [013-101], Booklet Knife Home Sensor ([PL 24.54 Item 3](#)). Select **Start**. Block/unblock the Knife Home Sensor. **The display changed.**

Y N

Select **Stop**. Go to [BSD 14.17 Booklet Knife Control](#). Check continuity between the Knife Home Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Knife Home Sensor ([PL 24.54 Item 3](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.246 (C) Booklet Stapler Fault

BSD-ON: BSD 14.18 Booklet Staple Control

Error signal On and Ready signal Off output from the Booklet Stapler were detected after Booklet Stapling operation.

The Stapler Ready signal did not turn to 'Not Ready' within the specified time after Booklet Stapler Start signal On.

Error signal On and Ready signal Off output from the Booklet Stapler were detected after Stapler Power On check was performed at Power On or when the interlock was closed.

Error signal On was detected just before the Booklet Stapling operation.

Procedure

Check continuity between the Staple and Booklet PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Go to [Figure 1](#). Check continuity between the Booklet PWB and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Stapler (REP 24.95). The problem is resolved.

Y N
Replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

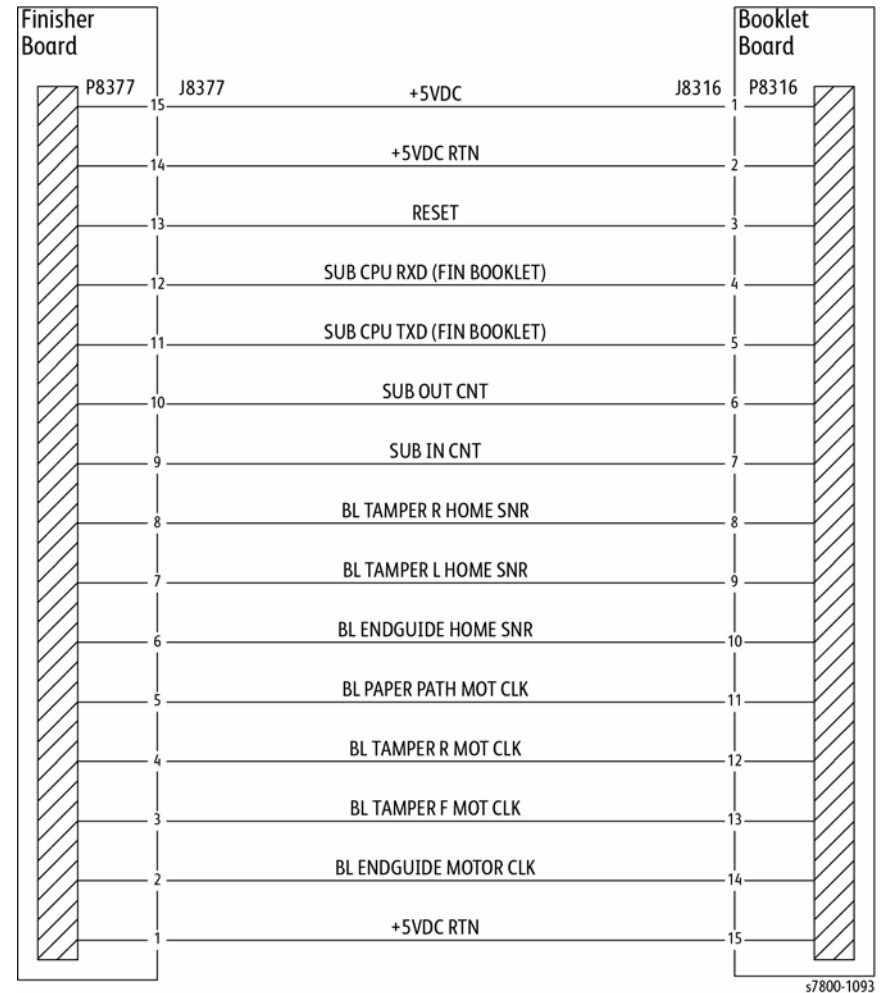


Figure 1 Finisher, Booklet PWBs

312.247 (C) Side Registration Sensor Off Fault

BSD-ON: [BSD 14.10 Finisher Booklet/ Punch Transport](#)

BSD-ON: [BSD 14 22 Finisher Punch Drive](#)

Side Registration Sensor not turned off after the lapse of 500msec from operation start. Side Registration Sensor is not turned off after the stop following Side Registration Sensor Off. Target Side Registration Sensor1 or Side Registration Sensor2 is not turned off at operation start.

Initial Actions

- The Actuator for deformation
- The Side Reg 1 and 2 Sensors for improper installation
- The Side Reg 1 and 2 Sensors connectors for connection failure
- The Puncher Move Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-071] and [012-073], Puncher Move Motor ([PL 24.32 Item 26](#)), alternately. Select **Start**. **The Puncher Move Motor run.**

Y N
Select **Stop**. Go to [BSD 14 22 Finisher Punch Drive](#). Check continuity between the Puncher Move Motor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Puncher Move Motor ([PL 24.32 Item 26](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [012-200], Side Registration 1 Sensor ([PL 24.32 Item 10](#)). Select **Start**. Block/unblock the Side Reg 1 Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.10 Finisher Booklet/ Punch Transport](#). Check continuity between the Side Reg 1 Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Side Reg 1 Sensor ([PL 24.32 Item 10](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select [012-201], Side Reg 2 Sensor ([PL 24.32 Item 10](#)). Select **Start**. Block/unblock the Side Reg 2 Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.10 Finisher Booklet/ Punch Transport](#). Check continuity between the Side Reg 2 Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Side Reg 2 Sensor ([PL 24.32 Item 10](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

A

Select **Stop**. Check the following:

- The Puncher Move Motor Belt for improper tension
- The Puncher Move Motor Belt for disengagement

If the above checks are OK, replace the Finisher Main PWB ([REP 24.92](#)).

A

312.260 (C) Eject Clamp Home Sensor On Fault

BSD-ON: [BSD 14.28 Finisher Eject Drive](#)

Eject Clamp Home Sensor is not turned On within a specified time.

Initial Actions

- Check for obstructions in the Clamp area

Procedure

Enter [dc330 Component Control](#) [012-250], Eject Clamp Home Sensor ([PL 24.34 Item 12](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.28 Finisher Eject Drive](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select [012-052], Eject Clamp Motor ([PL 24.34 Item 10](#)). Select **Start**. **The Eject Clamp moves up.**

Y N

The Eject Motor energized.

Y N

Select **Stop**. Go to [BSD 14.28 Finisher Eject Drive](#). Check the circuit of the Eject Clamp Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Check the Eject Clamp Motor ([REP 24.52](#)) and its associated gears, pulleys and belts for damage, contamination and misalignment.

Select **Stop**.

Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged.
- Ensure that the Eject Clamp Motor connectors are securely connected and that the wires are not damaged.

If the above checks are OK, replace the Eject Clamp Home Sensor ([REP 24.54](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.261 (C) Booklet Knife Folding Sensor Fault

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.17 Booklet Knife Control](#)

When the Booklet Knife performs folding operation, the Knife Folding Sensor did not turn On within 400 msec after Knife Solenoid On.

Initial Actions

- The Knife Folding Sensor for improper installation
- The Knife Folding Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Solenoid connectors for connection failure
- The Knife Solenoid for improper installation
- The Knife drive mechanism for a foreign substance

Procedure

Manually move the Booklet Tamper to both ends. Enter [dc330 Component Control](#) [013-008] and [013-009], Booklet Folder Roll Motor ([PL 24.58 Item 2](#)), alternately. Select **Start**. **The Booklet Folder Roll Motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor ([PL 24.58 Item 2](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [dc330 Component Control](#) [013-010], Knife Solenoid, ([PL 24.58 Item 10](#)). Select **Start**. **The Knife Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.17 Booklet Knife Control](#). Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Knife Solenoid ([PL 24.58 Item 10](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [dc330 Component Control](#) [013-101], Booklet Knife Home Sensor ([PL 24.54 Item 3](#)). Select **Start**. Block/unblock the Knife Home Sensor. **The display changed.**

Y N

Select **Stop**. Go to [BSD 14.17 Booklet Knife Control](#). Check continuity between the Knife Home Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Knife Home Sensor ([PL 24.54 Item 3](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.263 (C) Rear Tamper Home Sensor On Fault

BSD-ON: [BSD 14.25 Finisher Tamper Control](#)

The Rear Tamper Home Sensor did not turn On within the specified time after the Tamper Motor had started running.

Initial Actions

Check the following:

- Rear Tamper Actuator for deformation
- Rear Tamper Home Sensor for proper installation
- Rear Tamper Home Sensor connectors
- Rear Tamper Motor for proper operation
- Rear Tamper Motor connectors

Procedure

Enter [dc330 Component Control](#) [012-026] and [012-029], Rear Tamper Motor ([PL 24.55 Item 9](#)), alternately. **Select Start. The Rear Tamper Motor runs.**

Y N

Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Rear Tamper Motor. Refer to [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-221], Rear Tamper Home Sensor ([PL 24.55 Item 7](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.25 Finisher Tamper Control](#). Check circuit of the Rear Tamper Home Sensor. Refer to [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.264 (C) Booklet Drawer Broken Fault

BSD-ON: [BSD 14.13 Booklet Drive](#)

Booklet Drawer Set Sensor Open was detected when the Finisher Front Door Interlock was closed.

Initial Actions

- The Booklet Drawer Set Sensor for improper installation
- The Booklet Drawer Set Sensor connectors for connection failure
- The Booklet Drawer Actuator part for a foreign substance and deformation
- The Drawer mechanism for a foreign substance and deformation

Procedure

Enter [dc330 Component Control](#) [013-104], Booklet Drawer Set Sensor ([PL 24.51 Item 7](#)). Select **Start**. Remove and insert the Booklet Drawer manually. **The display changes.**

Y N

Go to [BSD 14.13 Booklet Drive](#). Check the circuit of the Booklet Drawer Set Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.265 (C) Booklet Knife Home Sensor Off Fault

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.17 Booklet Knife Control](#)

When the Booklet Knife moves from Home position, the Knife Home Sensor did not turn Off within the specified time after Knife Solenoid On.

Initial Actions

- The Knife Home Sensor for improper installation
- The Knife Home Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Solenoid connectors for connection failure
- The Knife Solenoid for improper installation
- The Knife drive mechanism for a foreign substance

Procedure

Manually move the Booklet Tamper to both ends. Enter [dc330 Component Control](#) [013-008] and [013-009], Booklet Folder Roll Motor ([PL 24.58 Item 2](#)), alternately. Select **Start**. **The Booklet Folder Roll Motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor ([PL 24.58 Item 2](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher PWB ([REP 24.92](#)).

Select **Stop**. Select [dc330 Component Control](#) [013-010], Booklet Knife Solenoid, ([PL 24.58 Item 10](#)). Select **Start**. **The Knife Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.17 Booklet Knife Control](#). Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Knife Solenoid ([PL 24.58 Item 10](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [dc330 Component Control](#) [013-140], Booklet Knife Folding Sensor ([PL 24.54 Item 3](#)). Select **Start**. Block/unblock the Knife Folding Sensor. **The display changed.**

Y N
Select **Stop**. Go to [BSD 14.17 Booklet Knife Control](#). Check continuity between the Knife Folding Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Knife Folding Sensor ([PL 24.54 Item 3](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.266 (C) Booklet Compiler No Paper Sensor Fault

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.24 Finisher Compiling](#)

The Booklet Compile No Paper Sensor did not turn On within the specified time.

Procedure

Enter [dc330 Component Control](#) [013-102], Booklet Compile No Paper Sensor ([PL 24.54 Item 18](#)). Select **Start**. Block/unblock the Booklet Compile No Paper Sensor. **The display changed.**

Y N
Select **Stop**. Go to [BSD 14.24 Finisher Compiling](#). Check continuity between the Booklet Compile No Paper and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet Compile No Paper Sensor ([PL 24.54 Item 18](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select [013-064], Booklet Paper Path Motor ([PL 24.58 Item 4](#)). Select **Start**. **The Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check continuity between the Booklet Paper Path Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Booklet Paper Path Motor ([PL 24.58 Item 4](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem persists, replace Finisher Main PWB ([REP 24.92](#)).

312.269 (C) Booklet Sub-CPU Communications Fault

BSD-ON: [BSD 14.4 Finisher PWB Communication](#)

Communications between the Finisher PWB and the Booklet PWB failed.

Initial Actions

- Check the connectors at the Finisher PWB and the Booklet PWB are connected or seated properly ([Figure 1](#)).
- Check the wiring between the Finisher PWB and the Booklet PWB for damage ([Figure 1](#)).

Procedure

Power Off and Power On the Printer. **The problem is resolved.**

- | | | |
|---|---|---|
| Y | N | |
| | | Reload the Software. The problem is resolved. |
| Y | N | |
| | | Replace the Finisher Main PWB (REP 24.92). If the problem continues, replace the Booklet PWB (PL 24.51 Item 1). |
| | | Rerun the job. |
| | | Rerun the job. |

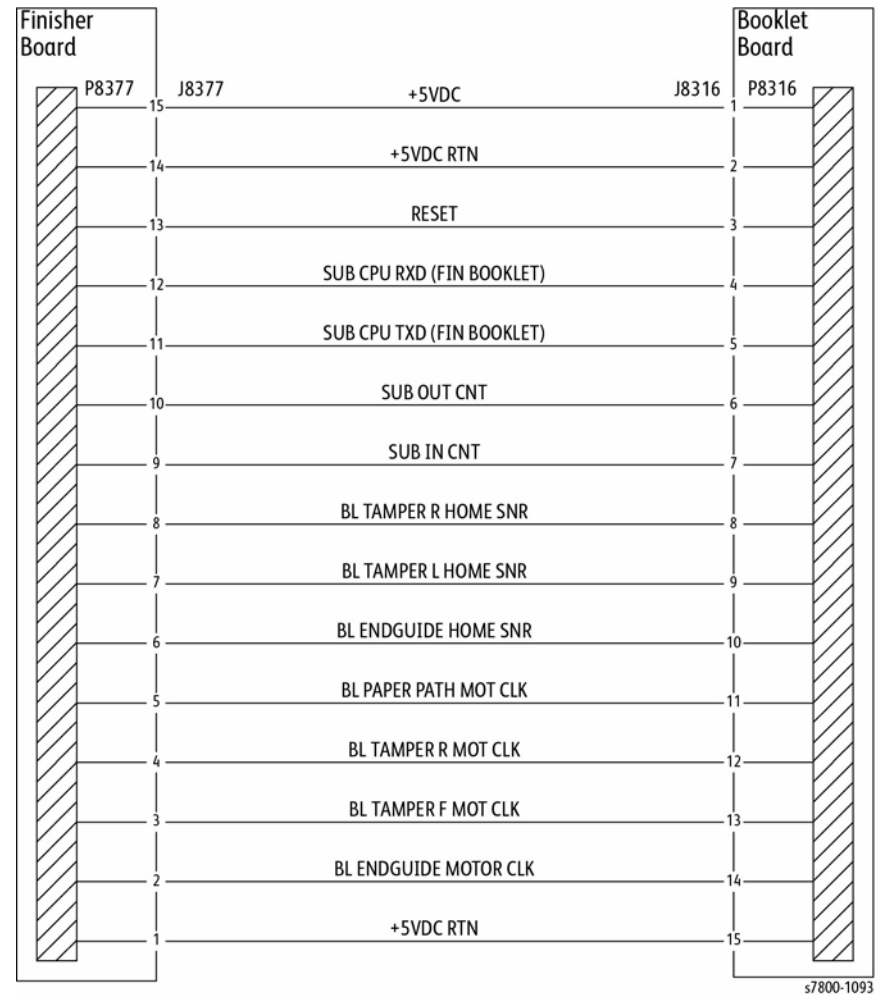


Figure 1 Finisher, Booklet PWBs

312.282 (C) Eject Clamp Home Sensor Off Fault

BSD-ON: [BSD 14.28 Finisher Eject Drive](#)

Eject Clamp Home Sensor is not turned Off within a specified time.

Initial Actions

- Check for obstructions in the Clamp area

Procedure

Enter [dc330 Component Control](#) [012-250], Eject Clamp Home Sensor ([PL 23.11 Item 16](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.28 Finisher Eject Drive](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select [012-052], Eject Clamp Motor ([PL 24.34 Item 10](#)). Select **Start**. **The Eject Clamp moves up.**

Y N
The Eject Motor energized.

Y N
Select **Stop**. Go to [BSD 14.28 Finisher Eject Drive](#). Check the circuit of the Eject Clamp Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Check the Eject Clamp Motor ([PL 24.34 Item 10](#)) and its associated gears, pulleys and belts for damage, contamination and misalignment.

Select **Stop**. Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged.
- Ensure that the Eject Clamp Motor connectors are securely connected and that the wires are not damaged.

If the above checks are OK, replace the Eject Clamp Home Sensor ([REP 24.54](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.283 (C) Set Clamp Home Sensor On Fault

BSD-ON: [BSD 14.28 Finisher Eject Drive](#)

BSD-ON: [BSD 14.29 Finisher Set Clamp Control](#)

Set Clamp Home Sensor is not turned On within a specified time.

Initial Actions

- Check for obstructions in the Clamp area

Procedure

Enter [dc330 Component Control](#) [012-250], Eject Clamp Home Sensor ([PL 24.34 Item 12](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.29 Finisher Set Clamp Control](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select [012-052], Eject Motor ([PL 24.35 Item 17](#)). Select **Start**. **The Eject moves up.**

Y N
The Eject Motor energized.

Y N
Select **Stop**. Go to [BSD 14.28 Finisher Eject Drive](#). Check the circuit of the Eject Motor. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Check the Eject Motor ([PL 24.35 Item 17](#)) and its associated gears, pulleys and belts for damage, contamination and misalignment.

Select **Stop**. The following codes will be stacked. Select [012-052], Eject Motor ([PL 24.35 Item 17](#)). Select **Start**. Select [012-050], Set Clamp Clutch ([PL 24.35 Item 15](#)). Select **Start**. **The Eject Roll Shaft rotates.**

Y N
The Set Clamp Clutch energized.

Y N
Select **Stop**. Go to [BSD 14.29 Finisher Set Clamp Control](#). Check the circuit of the Set Clamp Clutch. Refer to the [Multiple Wire Motor RAP](#) for troubleshooting procedure.

Check the Set Clamp Clutch ([PL 24.35 Item 15](#)) and its associated gears, pulleys and belts for damage, contamination and misalignment.

Select **Stop**. Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged.
- Ensure that the Eject Motor connectors are securely connected and that the wires are not damaged.

If the above checks are OK, replace the Eject Clamp Home Sensor ([REP 24.54](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.284 (C) Set Clamp Home Sensor Off Fault

BSD-ON: [BSD 14.28 Finisher Eject Drive](#)

BSD-ON: [BSD 14.29 Finisher Set Clamp Control](#)

Set Clamp Home Sensor is not turned Off within a specified time.

Initial Actions

- Check for obstructions in the Clamp area

Procedure

Enter [dc330 Component Control](#) [012-250], Eject Clamp Home Sensor ([PL 24.34 Item 12](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.29 Finisher Set Clamp Control](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-052], Eject Motor ([PL 24.35 Item 17](#)). Select **Start**. **The Eject moves up.**

Y N

The Eject Motor energized.

Y N

Select **Stop**. Go to [BSD 14.28 Finisher Eject Drive](#). Check the circuit of the Eject Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Check the Eject Motor and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 24.35 Item 17](#)).

Select **Stop**. Select [012-050], Set Clamp Clutch ([PL 24.35 Item 15](#)). Select **Start**. **The Eject Roll Shaft rotates.**

Y N

The Set Clamp Clutch energized.

Y N

Select **Stop**. Go to [BSD 14.29 Finisher Set Clamp Control](#). Check the circuit of the Set Clamp Clutch. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Check the Set Clamp Clutch ([PL 24.35 Item 15](#)) and its associated gears, pulleys and belts for damage, contamination and misalignment.

Select **Stop**. Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged.
- Ensure that the Eject Motor connectors are securely connected and that the wires are not damaged.

If the above checks are OK, replace the Eject Clamp Home Sensor ([REP 24.54](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.286 (C) Decurler Cam Home Sensor On Fault

BSD-ON: [BSD 14.8 Finisher Decurling](#)

Decurler Cam Home Sensor is not turned on after the lapse of 1000msec from the detection of Decurler Cam Home Sensor Off.

Initial Actions

- Check for obstructions in the Decurler area

Procedure

Enter [dc330 Component Control](#) [012-282], Decurler Cam Home Sensor ([PL 24.5 Item 4](#)). Select **Start**. Actuate the Decurler Cam Home Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.8 Finisher Decurling](#). Check the circuit of the Decurler Cam Home Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [012-099], Decurler Cam Clutch ([PL 24.5 Item 7](#)). Select **Start**. **The Decurler Roll Shaft rotates.**

Y N

The Decurler Cam Clutch energized.

Y N

Select **Stop**. Go to [BSD 14.8 Finisher Decurling](#). Check the circuit of the Decurler Cam Clutch. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Check the Decurler Cam Clutch ([PL 24.5 Item 7](#)) and its associated gears, pulleys and belts for damage, contamination and misalignment.

Select **Stop**. Check the following:

- Ensure that the Decurler Cam Home Sensor connectors are securely connected and that the wires are not damaged.
- Ensure that the Decurler Cam Clutch connectors are securely connected and that the wires are not damaged.
- H-Transport Motor Drive belt for wear, damage, or loose
- H-Transport Motor connections are securely connected and that the wires are not damaged.

If the above checks are OK, replace the Decurler Cam Home Sensor ([PL 24.5 Item 4](#)). If the problem continues, replace the H-Transport PWB ([PL 24.44 Item 19](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.287 (C) Decurler Cam Home Sensor Off Fault

BSD-ON: [BSD 14.8 Finisher Decurling](#)

Decurler Move Home Sensor is not turned off after the lapse of 1000msec from the detection of Decurler Cam Home Sensor On.

Initial Actions

- Check for obstructions in the Decurler area

Procedure

Enter [dc330 Component Control](#) [012-282], Decurler Cam Home Sensor ([PL 24.5 Item 4](#)). Select **Start**. Actuate the Decurler Cam Home Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.8 Finisher Decurling](#). Check the circuit of the Decurler Cam Home Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-099], Decurler Cam Clutch ([PL 24.5 Item 7](#)). Select **Start**. **The Decurler Roll Shaft rotates.**

Y N

The Decurler Cam Clutch energized.

Y N

Select **Stop**. Go to [BSD 14.8 Finisher Decurling](#). Check the circuit of the Decurler Cam Clutch. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Check the Decurler Cam Clutch ([PL 24.5 Item 7](#)) and its associated gears, pulleys and belts for damage, contamination and misalignment.

Select **Stop**. Check the following:

- Ensure that the Decurler Cam Home Sensor connectors are securely connected and that the wires are not damaged.
- Ensure that the Decurler Cam Clutch connectors are securely connected and that the wires are not damaged.
- H-Transport Motor Drive belt for wear, damage, or loose
- H-Transport Motor connections are securely connected and that the wires are not damaged.

If the above checks are OK, replace the Decurler Cam Home Sensor ([PL 24.5 Item 4](#)). If the problem continues, replace the H-Transport PWB ([PL 24.44 Item 19](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.291 (C) Stapler Fault

BSD-ON: [BSD 14.26 Finisher Stapler Control](#)

The Staple Home Sensor has not switched from Off to On within the specified time after the Staple Motor had started rotating forward.

The Staple Home Sensor did not turn On within the specified time after the Staple Motor had started rotating backward.

Initial Actions

- Check the Stapler Head for obstructions

Procedure

Enter [dc330 Component Control](#) [012-046] and [012-047], Staple Motor, ([PL 24.33 Item 9](#)), alternately. Select **Start**. **The Staple Motor runs.**

Y N

Select **Stop**. Go to [BSD 14.26 Finisher Stapler Control](#). Check continuity between the Stapler Head and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler Unit ([REP 24.48](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [012-244], Staple Home Sensor. Select [012-046] and [012-047], Staple Motor, ([PL 24.33 Item 9](#)), alternately. Select **Start**. **The display changes**

Y N

Select **Stop**. Go to [BSD 14.26 Finisher Stapler Control](#). Check continuity between the Stapler Home Sensor and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler Unit ([REP 24.48](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Check the following:

- The wire between the Staple Head and the Finisher PWB for damage
- If the above checks are OK, replace the Finisher Main PWB ([REP 24.92](#)).

312.295 (C) Stapler Move Position Sensor On Fault

BSD-ON: [BSD 14.27 Finisher Staple Positioning](#)

Stapler Move Position Sensor is not turned On within a specified time.

Stapler Move Position Sensor not turned On when home operation is completed.

Stapler Move Position Sensor is not turned On after the stop following Stapler Move Position Sensor On.

Initial Actions

- Check Actuator for deformation
- Check Stapler Move Position Sensor for improper installation
- Check Stapler Move Position Sensor connectors for connection failure
- Check Staple Move Motor connectors for connection failure
- Check Staple Guide for deformation

Procedure

Enter [dc330 Component Control](#) [012-046] and [012-047], Stapler Move Motor ([PL 24.33 Item 9](#)), alternately. Select **Start**. **The Staple Move Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.27 Finisher Staple Positioning](#). Check continuity between the Stapler Move Motor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Staple Move Motor ([PL 24.33 Item 9](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [dc330 Component Control](#) [012-241], Stapler Move Position Sensor ([PL 24.33 Item 5](#)). Select **Start**. Block/unblock the Stapler Move Position Sensor. **The display changed.**

Y N
Select **Stop**. Go to [BSD 14.27 Finisher Staple Positioning](#). Check continuity between the Stapler Move Position Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Stapler Move Position Sensor ([PL 24.33 Item 5](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Check the following:

- Obstructions on the Stapler Upper Rail
- Stapler Move Motor Gear

If the above checks are OK. replace the Finisher Main PWB ([REP 24.92](#)).

312.296 (C) Stapler Move Position Sensor Off Fault

BSD-ON: [BSD 14.27 Finisher Staple Positioning](#)

Stapler Move Position Sensor is not turned Off within a specified time

Stapler Move Position Sensor is not turned Off when home operation is completed.

Stapler Move Position Sensor is not turned Off after the stop following Stapler Move Position Sensor Off.

Initial Actions

- Check Actuator for deformation
- Check Stapler Move Position Sensor for improper installation
- Check Stapler Move Position Sensor connectors for connection failure
- Check Staple Move Motor connectors for connection failure
- Check Staple Guide for deformation

Procedure

Enter [dc330 Component Control](#) [012-046] and [012-047], Stapler Move Motor ([PL 24.33 Item 9](#)), alternately. Select **Start**. **The Staple Move Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.27 Finisher Staple Positioning](#). Check continuity between the Stapler Move Motor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Stapler Move Motor ([REP 24.46](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [dc330 Component Control](#) [012-241], Stapler Move Position Sensor ([PL 24.33 Item 5](#)). Select **Start**. Block/unblock the Stapler Move Position Sensor. **The display changed.**

Y N
Select **Stop**. Go to [BSD 14.27 Finisher Staple Positioning](#). Check continuity between the Stapler Move Position Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Stapler Move Position Sensor ([PL 24.33 Item 5](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Check the following:

- Obstructions on the Stapler Upper Rail
- Stapler Move Motor Gear

If the above checks are OK. replace the Finisher Main PWB ([REP 24.92](#)).

312.300 (C) Eject Cover Open

BSD-ON:BSD 14.2 Finisher Interlocks

Eject Cover Switch open was detected.

Initial Actions

- Ensure that the Eject Cover is down
- Check Eject Cover Switch for improper installation
- Check Eject Cover Switch connectors for connection failure
- Check Actuator part for deformation

Procedure

Enter [dc330 Component Control](#) [012-300], Eject Cover Switch ([PL 24.34 Item 21](#)). Select **Start**. Actuate the Eject Cover Switch. **The display changes**

Y N
Select **Stop**. Check continuity of the Eject Cover Switch. **The continuity check is OK.**

Y N
Replace the Eject Cover Switch ([REP 24.55](#)).

Go to [BSD 14.2 Finisher Interlocks](#). Check continuity between the Eject Cover Switch and the Finisher PWB. If the check is OK, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.302 (C) Finisher Front Door Interlock Open

BSD-ON:BSD 14.2 Finisher Interlocks

Finisher Front Door Switch Open was detected.

Initial Actions

Check the following:

- Finisher Front Door Switch for proper installation
- Finisher Front Door Switch connectors for connection failure
- Actuator part for deformation
- Ensure that the Eject Cover is in the closed/down position

Procedure

Enter [dc330 Component Control](#) [012-302], Front Door Interlock Switch ([PL 24.11 Item 2](#)). Select **Start**. Open and close the Front Door. **The display changes.**

Y N
Go to [BSD 14.2 Finisher Interlocks](#). Disconnect P8314 on the Finisher PWB. **+5 VDC is measured between the Finisher PWB P8314-2 and P8314-3.**

Y N
Replace the Finisher Main PWB ([REP 24.92](#)).

There is less than 5 ohms between P8314-3 and the finisher frame.

Y N
Replace the Finisher Main PWB ([REP 24.92](#)).

Go to [BSD 14.2 Finisher Interlocks](#). Check the wires between the Finisher PWB, the Eject Cover Switch and the Finisher Front Door Switch for an open circuit or poor contact. If the wires are good, replace the Front Door Interlock Switch ([REP 24.16](#)).

Select **Stop**. Check the following:

- Alignment between the Front Door and the Front Door Interlock Switch
- Front Door and Front Cover for proper installation
- Actuator for damage or bent
- Magnet for proper mounting

If the above checks are OK, replace the Finisher Main PWB ([REP 24.92](#)).

312.303 (C) H-Transport Cover Open

BSD-ON: [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#)

H-Transport Interlock Sensor-L. Open was detected.

Initial Actions

Check Items

- The H-Transport Interlock Sensor-L for improper installation
- Check for obstruction in between the H-Transport Cover and the H-Transport paper transport area
- The H-Transport Cover Interlock Sensor connectors for connection failure
- The Actuator for deformation

Procedure

Enter [dc330 Component Control](#) [012-303], H-Transport Interlock Sensor ([PL 24.4 Item 10](#)). Select **Start**. Block and unblock the H-Transport Interlock Sensor-L. **The display changes.**

Y N
+5 VDC is measured between the H-Transport Interlock Sensor [P/J8445--1](#) and -3.
Y N
Go to [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#). Disconnect J8310 on Finisher PWB. +5 VDC is measured between H Transport Interlock Sensor [P/ P/J8445-1](#) and -3.
Y N
Replace the H-Transport PWB ([PL 24.44 Item 19](#)).
Check for an open circuit between H-Transport PWB [P/J8396-3](#) and -1 and H-Transport Interlock Sensor [P/J8445-1](#) and -3.
+5 VDC is measured between Finisher PWB J8310-20 and ground.
Y N
Replace the Finisher Main PWB ([REP 24.92](#))
+5 VDC is measured at the H-Transport Interlock Sensor J8445-2 and ground.
Y N
Check for an open circuit between H-Transport Interlock Switch [P/J8445-1](#) and H-Transport Interlock Sensor [P/J8445-2](#).
Replace the H-Transport Interlock Sensor ([REP 24.9](#)).

Select **Stop**. Check the following:

- Alignment between the H-Transport Cover and the H-Transport Interlock Sensor
- The H-Transport Cover for proper installation
- The Actuator for bending or alignment
- The Magnets for proper mounting

312.307 (C) Booklet Drawer Set Fault

BSD-ON:[BSD 14.13 Booklet Drive](#)

Booklet Drawer Set Sensor Open was detected.

Initial Actions

- The Booklet Drawer Set Sensor for improper installation
- The Booklet Drawer Set Sensor connectors for connection failure
- The Actuator part for deformation

Procedure

Enter [dc330 Component Control](#) [013-104], Booklet Drawer Set Sensor ([PL 24.51 Item 7](#)). Select **Start**. Remove and insert the Booklet Drawer manually. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check continuity between the Booklet Drawer Set Sensor and Finisher PWB. **The continuity check is OK.**
Y N
Repair the open circuit or short circuit.
Replace the Booklet Drawer Set Sensor ([PL 24.51 Item 7](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.334 (C) Download Mode Failure

Failure in previous download (abnormal termination during download); can only start in Download Mode upon turning power on.

Procedure

Download defective; check the following:

- Cable connection between Finisher and IOT is not connected or defective.
- The Finisher power cable is plugged in properly.

312.350 (C) Finisher Communication

BSD-ON: BSD 14.3 Finisher Detection & Communication

Communication is not established between the MD PWB and the Finisher PWB in A/P Finisher.

Procedure

Switch the machine power Off and On. **The 012-350 is still present.**

Y N

Return to Service Call Procedures.

Check P/J8300 on the Finisher PWB and J590 on the MD PWB for a secure connection (BSD 14.3 Finisher Detection & Communication). Check the condition of the wires. Check the connections between the A/P Finisher and the IOT. If the connectors were recently disconnected and reconnected check for damaged pins.

Check for less than 1 VDC at P/J590-1 on the MD PWB. **Less than 1 VDC is measured.**

Y N

Check the wire between P/J590-1 on the MD PWB and J8300-11 on the Finisher PWB for damage or a break. Repair as required. If the wire is good, replace the MD PWB (REP 18.6).

Replace the Finisher Main PWB (REP 24.92).

312.900 (C) Paper at Buffer Path Sensor

BSD-ON: [BSD 14.12 Finisher Buffer Transport](#)

Control logic reports paper at the Buffer Path Sensor.

Initial Actions

Check the following:

- Paper on the Buffer Path Sensor
- Obstructions in the paper path

Procedure

Enter [dc330 Component Control](#) [012-101], Buffer Path Sensor ([PL 24.41 Item 10](#)). Select **Start**. Actuate the Buffer Path Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.12 Finisher Buffer Transport](#). Check the circuit of the Buffer Path Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Finisher for a docking failure

If the above checks are OK, then replace the Buffer Path Sensor ([REP 24.75](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.901 (C) Paper at H-Transport Entrance Sensor

BSD-ON: [BSD 14.6 Finisher Horizontal Transportation \(1 of 2\)](#)

Control logic reports paper at the H-Transport Entrance Sensor.

Initial Actions

Check the following:

- Paper on the H-Transport Entrance Sensor
- Obstructions in the paper path
- H-Transport Motor Belt for wear or damage
- Guides on the H-Transport Cover for damage, wear or faulty installation

Procedure

Enter [dc330 Component Control](#) [012-190], H-Transport Entrance Sensor ([PL 24.4 Item 12](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Entrance Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.6 Finisher Horizontal Transportation \(1 of 2\)](#). Check the circuit of the H-Transport Entrance Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- H-Transport and Finisher for a docking failure
- H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Entrance Sensor ([PL 24.4 Item 12](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.902 (C) Paper at H-Transport Exit Sensor

BSD-ON: [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#)

Control logic reports paper at the H-Transport Exit Sensor.

Initial Actions

Check the following:

- Paper on the H-Transport Exit Sensor
- Obstructions in the paper path
- H-Transport Motor Belt for wear or damage
- Guides on the H-Transport Cover for damage, wear or faulty installation

Procedure

Enter [dc330 Component Control](#) [012-191], H-Transport Exit Sensor ([PL 24.6 Item 8](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- H-Transport and Finisher for a docking failure
- H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Exit Sensor ([REP 24.12](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.903 (C) Paper at Compiler Exit Sensor

BSD-ON: [BSD 14.24 Finisher Compiling](#)

Control logic reports paper at the Compiler Exit Sensor.

Initial Actions

- Paper on the Compiler Exit Sensor
- Obstructions in the paper path

Procedure

Enter [dc330 Component Control](#) [012-150], Compiler Exit Sensor ([PL 24.36 Item 3](#)). Select **Start**. Open the H-Transport Cover and actuate the Compiler Exit Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.24 Finisher Compiling](#). Check the circuit of the Compiler Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Pinch Rollers 1 and 2 for damage
- Lower Exit Roller for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Compiler Exit Sensor ([REP 24.64](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.905 (C) Paper at Compiler Tray No Paper Sensor

BSD-ON: [BSD 14.24 Finisher Compiling](#)

Control logic reports paper at the Compiler Tray No Paper Sensor.

Initial Actions

- Paper on the Compiler Tray Paper Sensor
- Obstructions in the paper path

Procedure

Enter [dc330 Component Control](#) [012-151], Compiler Tray No Paper Sensor ([PL 24.35 Item 3](#)). Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.24 Finisher Compiling](#) Check the circuit of the Compiler Tray No Paper Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Pinch Rollers 1 and 2 for damage
- Lower Exit Roller for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Compiler Tray No Paper Sensor ([REP 24.58](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.906 (C) Paper at H-Transport Exit Sensor

BSD-ON: [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#)

Control logic reports paper at the H-Transport Exit Sensor.

Initial Actions

Check the following:

- Paper on the H-Transport Exit Sensor
- Obstructions in the paper path
- H-Transport Motor Belt for wear or damage
- Guides on the H-Transport Cover for damage, wear or faulty installation

Procedure

Enter [dc330 Component Control](#) [012-191], H-Transport Exit Sensor ([REP 24.12](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Entrance Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.7 Finisher Horizontal Transportation \(2 of 2\)](#). Check the circuit of the H-Transport Entrance Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- H-Transport and Finisher for a docking failure
- H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Entrance Sensor ([PL 24.4 Item 12](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.907 (C) Paper at Top Tray Exit Sensor

BSD-ON: [BSD 14.21 Finisher Top Tray Stacking](#)

Control logic reports paper at the Top Tray Exit Sensor.

Initial Actions

- Paper on the Top Tray Exit Sensor
- Obstructions in the paper path

Procedure

Enter [dc330 Component Control](#) [012-115], Top Tray Exit Sensor ([PL 24.38 Item 11](#)). Select **Start**. Actuate the Top Tray Exit Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.21 Finisher Top Tray Stacking](#). Check the circuit of the Top Tray Exit Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Drive Shaft Rolls for wear or damage
- Exit Pinch Rollers for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Top Tray Exit Sensor ([REP 24.70](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.910 (C) Staple Ready Sensor Fault

BSD-ON: [BSD 14.26 Finisher Stapler Control](#)

Staple Ready Sensor is turned off at stapling start.

Procedure

Enter [dc330 Component Control](#) [012-243], Stapler Ready Sensor, (part of Stapler Assembly) ([PL 24.33 Item 2](#)). Select **Start**. Block/unblock the Stapler Ready Sensor. **The display changed.**

Y N

Select **Stop**. Go to [BSD 14.26 Finisher Stapler Control](#). Check continuity between the Stapler Ready Sensor and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler ([PL 24.33 Item 2](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Check the following:

- Wiring between the Stapler and the Finisher PWB
- Obstructions on the Stapler Upper Rail
- Stapler Move Motor Gear

If the above checks are OK, replace the Finisher Main PWB ([REP 24.92](#)).

312.916 (C) Stapler NG

BSD-ON: [BSD 14.26 Finisher Stapler Control](#)

The Staple Home Sensor has not switched from Off to On within the specified time after the Staple Motor started rotating forward.

The Staple Head Home Sensor turned On within xxx msec. after the Staple Motor reversed.

Initial Actions

- The Actuator for deformation
- The Staple Home Sensor for improper installation
- The Staple Home Sensor connectors for connection failure
- The Staple Guide for a foreign substance and deformation
- The Staple Motor for operation failure
- The Staple Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-046] and [012-047], Staple Motor ([PL 24.33 Item 9](#)), alternately. Select **Start**. **The Staple Motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.26 Finisher Stapler Control](#). Check continuity between the Stapler Assembly and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler Assembly ([REP 24.45](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Select [012-244], Staple Home Sensor, (part of Stapler Assembly) ([PL 24.33](#)). Select [012-046] and [012-047], Staple Motor ([PL 24.33](#)), alternately. Select **Start**. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.26 Finisher Stapler Control](#). Check continuity between the Stapler and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler Assembly ([REP 24.45](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.920 (C) Paper at Gate Sensor (Top Tray Job)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

Control logic reports paper at the Gate Sensor.

Initial Actions

- Check for obstructions in the paper path
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage

Procedure

Enter [dc330 Component Control](#) [012-102], Gate Sensor ([PL 24.43 Item 19](#)). Select **Start**. Actuate the Gate Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Gate Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Finisher is docked properly
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the Gate Sensor ([REP 24.90](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.921 (C) Paper at Gate Sensor (Compiler Path Job)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

Control logic reports paper at the Gate Sensor.

Initial Actions

- Check for obstructions in the paper path
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage

Procedure

Enter [dc330 Component Control](#) [012-102], Gate Sensor ([PL 24.43 Item 19](#)). Select **Start**. Actuate the Gate Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#) Check the circuit of the Gate Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Finisher is docked properly
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the Gate Sensor ([REP 24.90](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.922 (C) Paper at Gate Sensor (Buffer Path Job)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

Control logic reports paper at the Gate Sensor.

Initial Actions

- Check for obstructions in the paper path
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage

Procedure

Enter [dc330 Component Control](#) [012-102], Gate Sensor ([PL 24.43 Item 19](#)). Select **Start**. Actuate the Gate Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Gate Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Finisher is docked properly
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the Gate Sensor ([REP 24.90](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.925 (C) Stacker Lower Safety Warning

BSD-ON: [BSD 14.31 Finisher Stack Height Detection](#)

Stack Height Sensor 1 Off is not detected 500ms after the stacker starts going down and this occurs three times.

Procedure

Check for obstacles in the under the Stacker Tray. **The problem is resolved.**

Y **N**
Enter [dc330 Component Control](#) [012-264] Stacker Height Sensor 1. Select **Start**. Move the Stacker Tray manually. **The display changes.**

Y **N**
Go to [BSD 14.31 Finisher Stack Height Detection](#). Check the circuit of Stack Height Sensor 1 ([PL 24.31 Item 13](#)). If the Sensor and wiring are OK, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Replace the Finisher Main PWB ([REP 24.92](#)).

If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.932 (C) Paper Remain at Gate Sensor (Compiler Path Job)

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

Control logic reports paper at the Gate Sensor.

Initial Actions

- Check for obstructions in the paper path.
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage.

Procedure

Enter [dc330 Component Control](#) [012-102], Gate Sensor ([PL 24.43 Item 19](#)). Select **Start**. Actuate the Gate Sensor.

The display changes.

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Gate Sensor. Refer to the [Transmissive Sensor RAP](#) for troubleshooting procedure. Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the Finisher is docked properly.
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the Gate Sensor ([REP 24.90](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.935 (C) Paper at Transport Entrance Sensor

BSD-ON: [BSD 14.11 Finisher Transport, Top Tray Gating](#)

Control logic reports paper at the Transport Entrance Sensor.

Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is docked correctly to ensure proper Transport Gate operation

Procedure

Enter [dc330 Component Control](#) [012-100], Transport Entrance Sensor ([PL 24.41 Item 19](#)). Select **Start**. Actuate the Transport Entrance Sensor. **The display changes.**

Y N

Select **Stop**. Go to [BSD 14.11 Finisher Transport, Top Tray Gating](#). Check the circuit of the Transport Entrance Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select **Stop**. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment.
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment.

If the above checks are OK, then replace the Transport Entrance Sensor ([REP 24.80](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.936 (C) Paper Remain In Booklet Sensor

BSD-ON: [BSD 14.10 Finisher Booklet/ Punch Transport](#)

BSD-ON: [BSD 14.13 Booklet Drive](#)

BSD-ON: [BSD 14.14 Booklet Transportation](#)

The Booklet In Sensor detects paper present.

Initial Actions

- Check for obstructions in the paper path.
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation.
- Check the Booklet In Sensor ([PL 24.57 Item 5](#)) for obstructions.
- Check for transportation failure of non-standard paper.
- Check the Booklet In Roll for wear or damage.

Procedure

Enter [dc330 Component Control](#) [013-135], Booklet In Sensor ([PL 24.57 Item 5](#)). Select **Start**. Actuate the Booklet In Sensor. **The display changes.**

Y N

Go to [BSD 14.14 Booklet Transportation](#). Check the circuit of the Booklet In Sensor. Refer to the [Transmissive Sensor](#) RAP for troubleshooting procedure.

Select [013-068] and/or [013-069], Booklet Gate Solenoid ([PL 24.42 Item 9](#)). Select **Start**. **The Booklet Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 14.10 Finisher Booklet/ Punch Transport](#). Check the circuit of the Booklet Gate Solenoid. Refer to the [Set Gate Solenoid Open](#) RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor ([PL 24.58 Item 4](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 14.13 Booklet Drive](#). Check the circuit of the Booklet Paper Path Motor. Refer to the [Multiple Wire Motor](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment.
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment.

If the above checks are OK, then replace the Booklet In Sensor ([PL 24.57 Item 5](#)). If the problem persists, replace the Finisher Main PWB ([REP 24.92](#)).

312.944 (C) Stacker Set Over Full

The Staple Set Count exceeded the maximum number of sheets on the Stacker Tray during the Staple Set Eject operation.

Procedure

Remove all paper from the Stacker. Perform the job again. **The problem is resolved**

Y N
| Replace the Finisher Main PWB (REP 24.92).

Check the following:

- Eject Motor Gears for wear or damage.
- Paddle Shaft and Paddles for wear or damage.

312.945 (C) Low Staples

BSD-ON: BSD 14.26 Finisher Stapler Control

The Low Staple Sensor turned On just before the Staple Motor started running.

Initial Actions

- Stapler Head connectors for connection failure
- Staple remaining amount

Procedure

Enter **dc330 Component Control** [012-242], Low Staple Sensor. Select **Start. 'LOW' (staples available) is displayed.**

Y N
| Select **Stop**. Go to **BSD 14.26 Finisher Stapler Control**. Check continuity between the Stapler Head and Finisher PWB. **The continuity check is OK.**

Y N
| Repair the open circuit or short circuit.

Replace the Stapler Assembly (REP 24.45). If the problem continues, replace the Finisher Main PWB (REP 24.92).

If the problem continues, replace the Finisher Main PWB (REP 24.92).

312.946 (C) Top Tray Full

BSD-ON: [BSD 14.21 Finisher Top Tray Stacking](#)

The Top Tray Full Sensor was turned On for 10sec continuously.

Initial Actions

- The Top Tray Full Sensor for improper installation
- The Top Tray Full Sensor connectors for connection failure
- The Top Tray Full Sensor Actuator for deformation and operation failure

Procedure

Enter [dc330 Component Control](#) [012-215], Top Tray Full Sensor, ([PL 24.38 Item 9](#)). Select **Start**. Actuate the Top Tray Full Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.21 Finisher Top Tray Stacking](#) Check continuity between the Top Tray Full Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Top Tray Full Sensor ([REP 24.69](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.948 (C) Puncher Waste Bin Nearly Full

BSD-ON: [BSD 14.10 Finisher Booklet/ Punch Transport](#)

Cumulative punching count reached the specified times (2-hole punching: 5000 times, 4-hole punching: 2500 times).

Procedure

Remove the Puncher Waste Bin ([PL 24.32 Item 29](#)) and discard its dust. Install the Puncher Waste Bin. **The problem is resolved.**

Y N
Enter [dc330 Component Control](#) [012-275], Puncher Set Sensor ([PL 24.32 Item 6](#)). Select **Start**. Remove and insert the Puncher Waste Bin. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.10 Finisher Booklet/ Punch Transport](#). Check continuity between the Puncher Box Set Sensor and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Puncher Box Set Sensor ([REP 24.43](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Replace the Finisher Main PWB ([REP 24.92](#)).

Ensure the Puncher Waste Bin is installed properly.

312.949 (C) Puncher Waste Bin Open

BSD-ON: [BSD 14.10 Finisher Booklet/ Punch Transport](#)

The Puncher Waste Bin Set Sensor detected Off (No Puncher Waste Bin).

Initial Actions

- The Puncher Waste Bin Set Sensor for improper installation
- The Puncher Waste Bin Set Sensor connectors for connection failure
- The Puncher Waste Bin Actuator part for deformation and damage
- The Guide for deformation
- The Guide for a foreign substance

Procedure

Enter [dc330 Component Control](#) [012-275], Puncher Box Set Sensor ([PL 24.32 Item 6](#)). Select **Start**. Remove and insert the Puncher Waste Bin ([PL 24.32 Item 29](#)) manually. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.10 Finisher Booklet/ Punch Transport](#). Check continuity between the Puncher Box Set Sensor and Finisher PWB. **The continuity check is OK.**
Y N
Repair the open circuit or short circuit.

Replace the Puncher Box Set Sensor ([REP 24.43](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Check the Puncher Waste Box Actuator and Guide for deformation. **The Puncher Waste Bin can be removed and inserted properly.**

Y N
Repair or replace the Puncher Waste Bin ([PL 24.32 Item 29](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.959 (C) Full Stack Detected

BSD-ON: [BSD 14.30 Finisher Stacker Drive](#)

BSD-ON: [BSD 14.31 Finisher Stack Height Detection](#)

Stacker No Paper Sensor On was detected during the Stacker Tray height adjusting operation.

Initial Actions

- The Stacker No Paper Sensor for improper installation
- The Stacker No Paper Sensor connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor UP ([PL 24.31](#)), alternately. Select **Start**. **The Elevator Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.

Replace the Elevator Motor ([PL 24.31 Item 26](#)). If the problem continues, replace the Finisher PWB

Select **Stop**. Select [012-262], Stacker No Paper Sensor ([PL 24.31 Item 32](#)). Select **Start**. Block/unblock the Stacker No Paper Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Stacker No Paper Sensor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.

Replace the Stacker No Paper Sensor ([REP 24.33](#)). If the problem continues, replace the Finisher PWB

Select [012-263], Stacker Encoder Sensor ([PL 24.31 Item 32](#)). Select **Start**. Block/unblock the Stacker Encoder Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#) Check continuity between the Stacker Encoder Sensor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.

Replace the Stacker Encoder Sensor ([REP 24.36](#)). If the problem continues, replace the Finisher PWB

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.960 (C) Full Stack Detected

BSD-ON: [BSD 14.30 Finisher Stacker Drive](#)

Stacker No Paper Sensor On was detected during the Stacker Tray height adjusting operation.

Initial Actions

- The Stacker No Paper Sensor for improper installation
- The Stacker No Paper Sensor connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor Up ([PL 24.31 Item 26](#)), alternately. Select **Start**. **The Elevator Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.
Replace the Elevator Motor ([PL 24.31 Item 26](#)). If the problem continues, replace the Finisher PWB

Select [012-263], Stacker Encoder Sensor ([PL 24.31 Item 32](#)). Select **Start**. Block/unblock the Stacker Encoder Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#) Check continuity between the Stacker Encoder Sensor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.
Replace the Stacker Encoder Sensor ([REP 24.36](#)). If the problem continues, replace the Finisher PWB

Select **Stop**. Select [012-262], Stacker No Paper Sensor ([PL 24.31 Item 32](#)). Select **Start**. Block/unblock the Stacker No Paper Sensor. **The display changes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#) Check continuity between the Stacker No Paper Sensor and Finisher PWB. **The continuity check is OK,**
Y N
Repair the open circuit or short circuit.
Replace the Stacker No Paper Sensor ([REP 24.33](#)). If the problem continues, replace the Finisher PWB

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.961 (C) Mix Stack Detected

BSD-ON: [BSD 14.30 Finisher Stacker Drive](#)

Mix Stack Sensor On was detected during Mix Job.

Initial Actions

- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

Procedure

Enter [dc330 Component Control](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor Up ([PL 24.31 Item 26](#)), alternately. Select **Start**. **The Elevator Motor energizes.**

Y N
Select **Stop**. Go to [BSD 14.30 Finisher Stacker Drive](#). **Check continuity between the Elevator Motor and Finisher PWB. The continuity check is OK.**
Y N
Repair the open circuit or short circuit.
Replace the Elevator Motor ([PL 24.31 Item 26](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.978 (C) Booklet Stapler NG

BSD-ON: [BSD 14.26 Finisher Stapler Control](#)

Error signal On and Ready signal On output from the Staple were detected after Booklet Stapling operation.

Procedure

Go to [Figure 1](#). Check continuity between the Booklet PWB and Finisher PWB. **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Staple ([REP 24.45](#)). The problem resolved.

Y N
Replace the Booklet PWB ([PL 24.51 Item 1](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

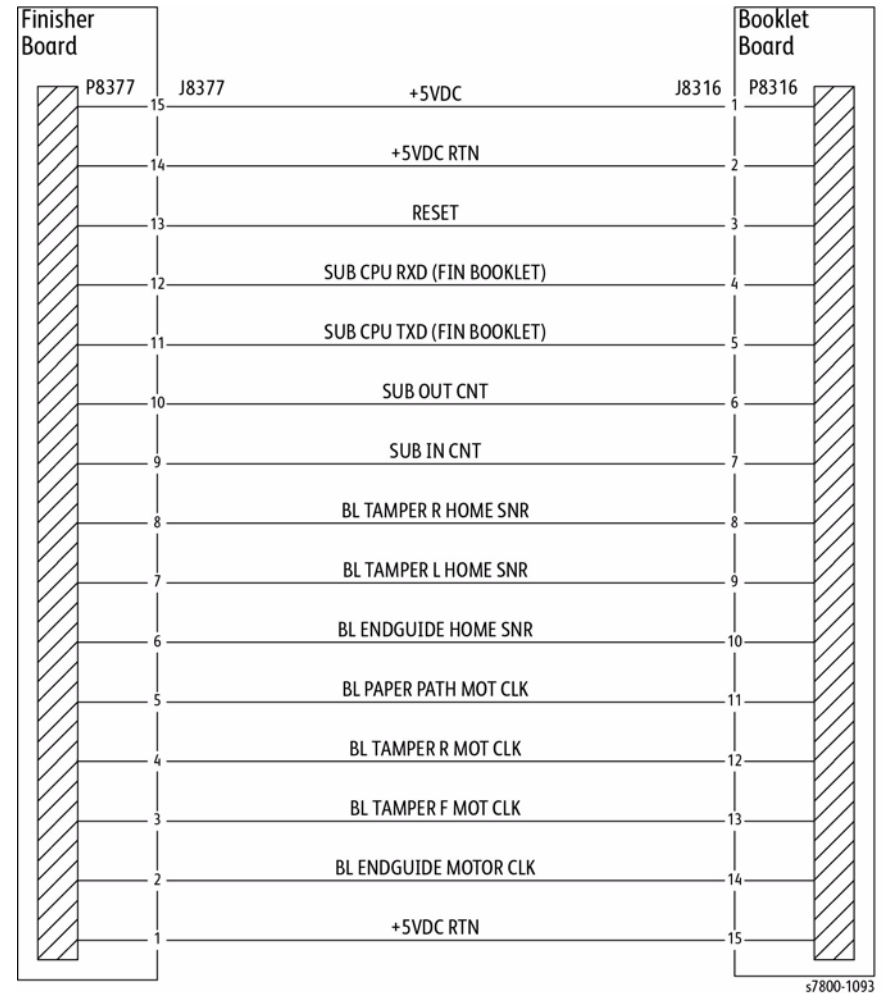


Figure 1 Finisher, Booklet PWBs

312.983 (C) Booklet Tray Full was Detected

BSD-ON: [BSD 14.20 Booklet Tray Control](#)

Booklet Tray Full was detected.

Procedure

Remove all sets. Perform the job again. **The problem is resolved.**

Y N

Replace the Finisher Main PWB ([REP 24.92](#)).

If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

312.984 (C) Booklet Low Staple F

BSD-ON: [BSD 14.18 Booklet Staple Control](#)

Booklet Stapler Low Staple Front signal was detected just before Stapling operation.

Booklet Stapler Low Staple Front signal was detected at Power On, at initialization, or when the interlock was closed.

Procedure

Supply the staples. **The problem is resolved.**

Y N

Enter [dc330 Component Control](#) [013-107], Booklet Low Staple Front. Select **Start**. **'LOW' (staples available) is displayed**

Y N

Select **Stop**. Go to [BSD 14.18 Booklet Staple Control](#). Check continuity between the Staple and Booklet PWB, and between the Booklet PWB and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Stapler Low Staple Front ([PL 24.52](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Replace the Finisher Main PWB ([REP 24.92](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)).

If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)). If the problem persists, replace the Booklet PWB ([PL 24.51 Item 1](#)).

312.989 (C) Booklet Low Staple R

BSD-ON: [BSD 14.18 Booklet Staple Control](#)

Booklet Stapler Low Staple Rear signal was detected just before Stapling operation.

Booklet Stapler Low Staple Rear signal was detected at Power On, at initialization, or when the interlock was closed.

Procedure

Supply the staples. **The problem is resolved.**

Y N

Enter [dc330 Component Control](#) [013-108], Booklet Low Staple Rear. Select **Start**.
'LOW' (staples available) is displayed

Y N

Select **Stop**. Go to [BSD 14.18 Booklet Staple Control](#). Check continuity between the Staple and Booklet PWB, and between the Booklet PWB and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Stapler Low Staple Rear ([PL 24.52](#)). If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)).

Select **Stop**. Replace the Finisher Main PWB ([REP 24.92](#)). If the problem continues, replace the Booklet PWB ([PL 24.51 Item 1](#)).

If the problem continues, replace the Finisher Main PWB ([REP 24.92](#)). If the problem persists, replace the Booklet PWB ([PL 24.51 Item 1](#)).

313.210 (SB) Booklet Staple Move Home Sensor On

BSD-ON: [BSD 13.30 Booklet Staple Positioning](#)

Booklet Staple Move Home Sensor does not turn On within designated time period

Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

Procedure

Execute [dc330 Component Control](#) [013-143], Booklet Staple Move Home Sensor. Move the Booklet Staplers to block and unblock the Sensor ([PL 23.18 Item 13](#)). **The display changes.**

Y N
Check the wire between [J8897](#) pin 2 and [P/J8991](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [P/J8991](#), pins 3 and 1 on the Booklet PWB ([BSD 13.30 Booklet Staple Positioning](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Booklet PWB ([REP 23.16](#)).

Measure the voltage between [P/J8991](#) pin 2 on the Booklet PWB and GND ([BSD 13.30 Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Home Sensor. **The voltage changes.**

Y N
Replace the Booklet Staple Move Home Sensor ([PL 23.18 Item 13](#)).

Replace the Booklet PWB ([REP 23.16](#)).

Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

Y N
Check the wires between [P/J8992](#) pins 1~6 on the Booklet PWB and [P/J8906](#) on the Booklet Stapler Move Motor [BSD 13.30 Booklet Staple Positioning](#) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

Y N
Repair/replace as required.

Monitor the voltage at [P/J8994](#), pin 3 ([BSD 13.30 Booklet Staple Positioning](#)). Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected.**

Y N
Check the wire between [P/J8994](#), pin 3 and [P/J8995](#) pin 4. If the wire is OK, replace the Finisher PWB ([REP 23.34](#)).

Replace the Booklet Stapler Move Motor ([REP 23.42](#)). If the problem persists, replace the Booklet PWB ([REP 23.16](#)).

A

Go to [BSD 13.30 Booklet Staple Positioning](#) and check for an intermittent circuit.

A

313.211 (SB) Booklet Staple Move Home Sensor Off

BSD-ON: [BSD 13.30 Booklet Staple Positioning](#)

Booklet Staple Move Home Sensor does not turn Off within designated time period

Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

Procedure

Execute [dc330 Component Control](#) [013-143], Booklet Staple Move Home Sensor. Move the Booklet Staplers to block and unblock the Sensor ([PL 23.18 Item 13](#)). **The display changes.**

Y N
Check the wire between [J8897](#) pin 2 and [P/J8991](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N
Repair/reconnect as required.

Measure the voltage between [P/J8991](#), pins 3 and 1 on the Booklet PWB ([BSD 13.30 Booklet Staple Positioning](#)). **The voltage is approx. +5VDC.**

Y N
Replace the Booklet PWB ([REP 23.16](#)).

Measure the voltage between [P/J8991](#) pin 2 on the Booklet PWB and GND ([BSD 13.30 Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Home Sensor. **The voltage changes.**

Y N
Replace the Booklet Staple Move Home Sensor ([PL 23.18 Item 13](#)).

Replace the Booklet PWB ([REP 23.16](#)).

Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

Y N
Check the wires between [P/J8992](#) pins 1~6 on the Booklet PWB and [P/J8906](#) on the Booklet Stapler Move Motor ([BSD 13.30 Booklet Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

Y N
Repair/replace as required.

Monitor the voltage at [P/J8994](#), pin 3 ([BSD 13.30 Booklet Staple Positioning](#)). Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected.**

Y N
Check the wire between [P/J8994](#), pin 3 and [P/J8995](#) pin 4. If the wire is OK, replace the Finisher PWB ([REP 23.34](#)).

Replace the Booklet Stapler Move Motor ([REP 23.42](#)). If the problem persists, replace the Booklet PWB ([REP 23.16](#)).

A

Go to [BSD 13.30 Booklet Staple Positioning](#) and check for an intermittent circuit.

A

313.212 (SB) Booklet Staple Move Position Sensor On Fault

BSD-ON: BSD 13.30 Booklet Staple Positioning

Booklet Staple Move Position Sensor does not turn on within designated time period

Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

Procedure

Execute [dc330 Component Control](#) [013-144], Booklet Staple Move Position Sensor. Move the Booklet Stapler to block and unblock the Sensor ([PL 23.18 Item 13](#)). **The display changes.**

Y N

Check the wire between [J8898](#) pin 2 and [P/J8991](#) pin 5; and the wire between [J8894](#), pin 5 and [P/J8995](#) pin 5 for an open or short circuit, or a loose or damaged connector.

The wires are OK.

Y N

Repair/reconnect as required.

Measure the voltage between [P/J8991](#), pins 6 and 4 on the Booklet PWB ([BSD 13.30 Booklet Staple Positioning](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Booklet PWB ([REP 23.16](#)).

Measure the voltage between [P/J8991](#) pin 5 on the Booklet PWB and GND ([BSD 13.30 Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

Y N

Replace the Booklet Staple Move Position Sensor ([PL 23.18 Item 13](#)).

Measure the voltage between [J8985](#) pin 5 on the Finisher PWB and GND ([BSD 13.30 Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

Y N

Replace the Booklet PWB ([REP 23.16](#)). If the problem persists, replace the Finisher PWB ([REP 23.34](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

Y N

Check the wires between [P/J8992](#) pins 1~6 on the Booklet PWB and [P/J8906](#) on the Booklet Stapler Move Motor ([BSD 13.30 Booklet Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

Y N

Repair/replace as required.

A

B

Monitor the voltage at [J8894](#), pin 3 ([BSD 13.30 Booklet Staple Positioning](#)). Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected.**

Y N

Check the wire between [J8894](#), pin 3 and [P/J8995](#) pin 4. If the wire is OK, replace the Finisher PWB ([REP 23.34](#)).

Replace the Booklet Stapler Move Motor ([REP 23.42](#)). If the problem persists, replace the Booklet PWB ([REP 23.16](#)).

Go to [BSD 13.30 Booklet Staple Positioning](#) and check for an intermittent circuit.

A B

313.213 (SB) Booklet Staple Move Position Sensor Off Fault

BSD-ON: [BSD 13.30 Booklet Staple Positioning](#)

Booklet Staple Move Position Sensor does not turn off within designated time period

Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

Procedure

Execute [dc330 Component Control](#) [013-144], Booklet Staple Move Position Sensor. Move the Booklet Stapler to block and unblock the Sensor ([PL 23.18 Item 13](#)). **The display changes.**

Y N

Check the wire between [J8898](#) pin 2 and [P/J8991](#) pin 5; and the wire between [P/J8994](#), pin 5 and [J8985](#) pin 5 for an open or short circuit, or a loose or damaged connector.

The wires are OK.

Y N

Repair/reconnect as required.

Measure the voltage between [P/J8991](#), pins 6 and 4 on the Booklet PWB ([BSD 13.30 Booklet Staple Positioning](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Booklet PWB ([REP 23.16](#)).

Measure the voltage between [P/J8991](#) pin 5 on the Booklet PWB and GND ([BSD 13.30 Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

Y N

Replace the Booklet Staple Move Position Sensor ([PL 23.18 Item 13](#)).

Measure the voltage between [P8985](#) pin 5 on the Finisher PWB and GND ([BSD 13.30 Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

Y N

Replace the Booklet PWB ([REP 23.16](#)). If the problem persists, replace the Finisher PWB ([REP 23.34](#)).

Replace the Finisher PWB ([REP 23.34](#)).

Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

Y N

Check the wires between [P/J8992](#) pins 1~6 on the Booklet PWB and [P/J8906](#) on the Booklet Stapler Move Motor ([BSD 13.30 Booklet Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

Y N

Repair/replace as required.

A

B

Monitor the voltage at [J8894](#), pin 3 ([BSD 13.30 Booklet Staple Positioning](#)). Alternately execute [dc330 Component Control](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected.**

Y N

Check the wire between [J8894](#), pin 3 and [P8985](#) pin 4. If the wire is OK, replace the Finisher PWB ([REP 23.34](#)).

Replace the Booklet Stapler Move Motor ([REP 23.42](#)). If the problem persists, replace the Booklet PWB ([REP 23.16](#)).

Go to [BSD 13.30 Booklet Staple Positioning](#) and check for an intermittent circuit.

A B

313.220 (SB) Booklet Creaser Detect Fault

BSD-ON: [BSD 13.33 Folder Control](#)

Control logic cannot detect the Creaser Assembly.

Procedure

Execute [dc330 Component Control](#) [013-160], Creaser Detected. The display is 'Low.'

Y N

There is less than 1 VDC at [P/J8990](#) pin 4.

Y N

Check the wires between [P/J8990](#) pins 4 and 5. Make sure that [P/J8903](#) is securely fastened.

Replace the Finisher PWB ([REP 23.34](#)).

Go to [BSD 13.33 Folder Control](#) and check for an intermittent circuit.

313.306 (SB) Booklet Safety Switches Open

BSD-ON: [BSD 13.4 Booklet Interlock Switching](#)

Control logic senses that one or more Booklet Safety Switch is open.

Initial Actions

Check for 013-307 Faults.

Procedure

There is +24 VDC between [P/J8993](#) pin 3 on the Booklet PWB and GND.

Y N

There is +24 VDC between [P/J8993](#) pin 6 on the Booklet PWB and GND.

Y N

Go to the [313.307 \(SB\) RAP](#).

Go to [BSD 13.4 Booklet Interlock Switching](#) and check the circuit through the Booklet Safety Switches ([PL 23.21](#)).

Replace the Booklet PWB ([REP 23.16](#)).

313.307 (SB) Booklet Cover Open

BSD-ON: [BSD 13.4 Booklet Interlock Switching](#)

Control logic senses that the Booklet Cover is open.

Initial Actions

Ensure the Cover is closed.

Procedure

There is +24 VDC between [P/J8993](#) pin 5 on the Booklet PWB and GND.

Y N

Go to [BSD 13.4 Booklet Interlock Switching](#) and check the circuit from [P/J8993](#) to and from [J8899](#) on the Booklet Stapler Cover Switch ([PL 23.21](#)).

Replace the Booklet PWB ([REP 23.16](#)).

313.902 (C) Paper Remains at Booklet Compiler No Paper Sensor

Paper remains at the Booklet Compile No Paper Sensor.

Procedure

Go to [312.266 \(C\)](#) to troubleshoot the fault.

313.903 (C) Paper Remains at Booklet Folder Roll Exit Sensor

Paper remains at the Booklet Folder Roll Exit Sensor.

Procedure

Go to [312.115 \(C\)](#) and/or [312.180 \(C\)](#) to troubleshoot the Fault.

324.916 (SB) Mix Stack Full

BSD-ON: [BSD 13.27 Stacker Tray Control](#)

Procedure

The following conditions may cause this error to be generated.

- The size (SEF and LEF) of the last sheet that was output in the previous job is "unknown."
- The specified capacity of sheets/sets is loaded in the stacker tray in Booklet Staple job.
- The specified capacity of sheets/sets is loaded in the stacker tray in Booklet Non-Staple job.
- When one Booklet Staple/Non-Staple job is completed.
- When a Booklet Staple/Non-Staple job is started while mixed-size sheets are stacked in the stacker tray.
- When a Booklet Staple/Non-Staple job, after which mixed-size sheets are stacked in the stacker tray, is started.

If this chain link code is generated in error, check the following:

- Check for obstructions in the paper path.
- Defective stacker no paper sensor. ([BSD 13.27 Stacker Tray Control](#))
- Stacker Encoder SNR defective. ([BSD 13.27 Stacker Tray Control](#))
- Stacker Motor or drive system action defective. ([BSD 13.27 Stacker Tray Control](#))
- "Defective Finisher PWB. ([BSD 13.27 Stacker Tray Control](#))

324.917 (SB) Stacker Tray Staple Set Over Limit

BSD-ON: [BSD 13.5 PWBS Communication](#)

BSD-ON: [BSD 13.27 Stacker Tray Control](#)

Procedure

During detection of staple sheet count, if over 50 sheets are detected (Stapling limit), this error will be generated. If this chain link code is generated in error, check the following:

- Check for a defective stacker no paper sensor. See [BSD 13.27 Stacker Tray Control](#). Execute [dc330 Component Control](#) [012-262], Stacker No Paper Sensor and repair or replace as necessary.
- Defective wiring, Check the continuity of the wiring as shown in [BSD 13.5 PWBS Communication](#) from [J8989](#) on the Finisher PWB to [P/J590](#) on the MD PWB.
- Defective Finisher PWB.

324.926 (SB) Punch Box Set Fail

BSD-ON: [BSD 13.11 Punch Control](#)

Punch Box Set Sensor detected Punch Box to be missing.

Initial Actions

- Ensure that the Punch Box is present and installed properly.

Procedure

Enter [dc330 Component Control](#) [012-275], Punch Box Set Sensor ([PL 23.5 Item 5](#)). Select **Start**. Remove and insert the Punch Box manually. **The display changes**

Y N
Select **Stop**. Check continuity between the Punch Box Set Sensor [J8866](#), [J8863](#), and the Finisher PWB [P8987](#). **The continuity check is OK.**

Y N
Repair the open circuit or short circuit.

Replace the Punch Box Set Sensor ([PL 23.5 Item 5](#)). If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

Check the Punch Box Set Sensor Actuator and Punch Box Guide for deformation. **The Punch Box can be removed and inserted properly.**

Y N
Repair or replace the Punch Box ([PL 23.2 Item 11](#)).

Select **Stop**. If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

324.928 (SB) Scratch Sheet Compile

Paper was detected that was either out of spec, in poor condition (wrinkled, curled) and was ejected to the compiler.

NOTE: *This Code is an operation message. If this fail code is frequently declared, perform the procedure below.*

Initial Actions

- Check that the Top Cover can be opened and closed.
- Power Off/On.

Procedure

Check the specifications of paper. **The paper is in specification.**

Y N
Replace the paper with new paper that is in the specification.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent (dog eared) or jam.**

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

Check for a Fault Code. **Another Fault Code is displayed.**

Y N
If the problem continues, replace the Finisher PWB ([REP 23.34](#)).

Go to the appropriate Fault Code.

324.963 (SB) Punch Dust Box Full

BSD-ON: [BSD 13.11 Punch Control](#)

Punch Box nearly full.

Procedure

Empty the Punch Box ([PL 23.2 Item 11](#)) and re-insert. If the fault remains, check the circuit of the Punch Box Set Sensor ([BSD 13.11 Punch Control](#)).

324.976 (SB) Staple NG

Procedure

Check the following:

1. Lack of stapler penetration force when media outside the spec is used.
2. Staple jam (staple remains in the staple cartridge).
3. Whether foreign matter is around the Stapler in the Compile Tray.
4. Stapler unit failure.
5. Harness or PWBA failure.

NOTE: *When the penetration force is not enough for the media desired, the maximum number of sheets in a set to be stapled can be reduced with NVM. (763-630)*

324.977 (SB) Stapler Feed Ready Fail

After a new cartridge is inserted, the stapler will make 13 attempts to feed staples before generating this error.

Procedure

Check the following:

1. Whether a staple cartridge is mis-installed.
2. Stapler pin jam (staple pin remains in the staple cartridge).
3. Whether foreign matter is in the transport area of staple pins in the Stapler Unit.
4. Whether a staple cartridge is deformed or damaged.
5. Stapler Unit failure.
6. Harness or PWBA failure.

324.978 (SB) Booklet Front Stapler or Rear Stapler NG

Procedure

Check the followings:

1. Lack of penetration force of Booklet Stapler when media outside the spec is used.
2. The position of Booklet Front or Rear Stapler (upper) and that of Clincher (lower) do not match each other due to the deformation of Booklet Unit.
3. Staple pin jam (staple pin remains in the staple cartridge).
4. Whether foreign matter is around the Booklet Front or Rear Stapler in the Booklet Unit.
5. Booklet Front or Rear Stapler Unit failure.
6. Harness or PWBA failure.

NOTE: When the penetration force is not enough, the maximum number of sheets in a set to be stapled should be reduced with NVM. (763-710)

324.979 (SB) Stapler Near Empty

- Low Staple Sensor On is detected during power On and Interlock Close
- Low Staple Sensor On is detected right before the Staple Head Close operation

Procedure

Check the Staple Cartridge. If the Staples are NOT low, go to RAP [312.291 \(SB\)](#).

324.980 (SB) Stacker Tray Full Stack

Procedure

Check any of the following cases:

1. At power-on, Stacker Height SNR detects stacking height and full-stack position. An erroneous detection could be the cause, see RAP [312.212 \(SB\)](#) for troubleshooting procedure.
2. During height adjustment of stacker tray while printing (lowering) for small-size paper output, the full-stack position is detected.
3. During height adjustment of stacker tray while printing (lowering) for large-size paper output, the half-stack position (full-stack position for large-size paper) is detected.
4. When the half-stack position (full-stack position for large-size paper) has been already detected during printing with small size paper, paper with half-stack limitation (large-size paper) is attempted to be outputted.

324.982 (SB) Stacker Lower Safety Warning

BSD-ON: **BSD 13.27 Stacker Tray Control**

During the job, if the height of paper output to stacker tray cannot be adjusted (lowered) within the specified time within three tries, this error will be generated.

Procedure

Check any of the following causes:

1. Whether an obstacle is under the Stacker Tray.
2. Whether excessive load is applied on the Stacker Tray since the obstacle is in contact with the Stacker Tray.
3. Whether excessive load is applied on the Stacker Tray since the obstacle is in contact with the Stacker Tray.
4. Whether Stacker Motor or its drive parts fail to operate normally.
5. Harness or PWBA failure.

324.984 (SB) Booklet Low Staple F

BSD-ON: **BSD 13.31 Booklet Staple Control (1 of 2)**

When booklet cover is opened / closed, Booklet Low Staple Switch F detect whether staples are present or not.

Procedure

If this fault occurs at an unexpected time or if this fault does not occur at expected timing, check the following:

1. Failure of Booklet Low Staple SW F in the Booklet Front Stapler Unit.
2. Whether a staple cartridge is deformed or damaged.
3. Whether a staple cartridge is deformed or damaged.
4. Harness or PWBA failure.

324.989 (SB) Booklet Low Staple R

BSD-ON: **BSD 13.32 Booklet Staple Control (2 of 2)**

When booklet cover is opened/ closed, Booklet Low Staple Switch F detect whether staples are present or not.

Procedure

If this fault occurs at an unexpected time or if this fault does not occur at expected timing, check the following:

1. Failure of Booklet Low Staple SW R in the Booklet Rear Stapler Unit.
2. Whether a staple cartridge is deformed or damaged.
3. Whether the storage area of staple cartridge in the Booklet Rear Stapler is deformed or damaged.
4. Harness or PWBA failure.

341.310 IM Logic Fault

BSD-ON: [BSD 3.1 PWB Communication \(1 of 4\)](#)

The IM software control error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Verify the current version and check for any updates.
3. Install the correct version of the IOT firmware.
4. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB ([REP 18.5](#)).

341.316 IH Driver Interface Fault

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

Interface error between the MCU PWB and the IH Driver has occurred (at the IH Driver).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and check the connection between the IH Driver [P/J530](#) and the MCU PWB [P/J414](#) for open circuit, short circuit, and poor contact.
If no problems are found, replace the following parts in sequence:
 - IH Driver PWB ([REP 18.9](#))
 - MCU PWB ([REP 18.5](#))

341.317 MCU IH Interface Fault

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

Interface error between the MCU PWB and the IH Driver has occurred (at the MCU).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and check the connection between the MCU PWB [P/J414](#) and the IH Driver [P/J530](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MCU PWB ([REP 18.5](#))
- IH Driver PWB ([REP 18.9](#))

341.325/ 341.330 MCU PWB F2 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 2 on the MCU PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MCU PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Suction Fan ([REP 18.4](#))
 - Bottom Fan ([REP 4.8](#))
 - M Fan ([REP 4.9](#))
 - 1st BTR Contact Retract Clutch ([PL 3.2 Item 12](#))
2. Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

341.326/ 341.331 MCU PWB F3 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 3 on the MCU PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MCU PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - IH Exhaust Fan ([REP 4.10](#))
 - Process 2 Fan ([REP 4.5](#))
 - Erase Lamp Unit (C, M, Y, K) ([REP 8.2](#), [REP 8.3](#))
 - MOB ADC Assembly ([REP 18.13](#))
2. Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

341.327/ 341.332 MCU PWB F4 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 4 on the MCU PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MCU PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the C Fan circuits for overcurrent and overvoltage, and then replace the faulty part or repair the circuits ([REP 4.4](#)).
2. Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

341.328/ 341.333 MCU PWB F5 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 5 on the MCU PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MCU PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - HVPS (1st/2nd/DTC) ([REP 6.3](#))
 - HVPS (BCR) ([REP 18.16](#))
 - HVPS (Dev) ([REP 5.11](#))
2. Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

341.340 MCU NVM (EEPROM) Data Fault

BSD-ON: [BSD 3.1 PWB Communication \(1 of 4\)](#)

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

BSD-ON: [BSD 3.6 PWB Communication \(3 of 4\)](#)

BSD-ON: [BSD 3.7 PWB Communication \(4 of 4\)](#)

The specific values of the NVM (EEPROM) data are not in their specified addresses.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB ([REP 18.5](#)).

341.341 MCU NVM (EEPROM) Access Fault

BSD-ON: [BSD 3.1 PWB Communication \(1 of 4\)](#)

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

BSD-ON: [BSD 3.6 PWB Communication \(3 of 4\)](#)

BSD-ON: [BSD 3.7 PWB Communication \(4 of 4\)](#)

NVM (EEPROM) access error (The read values are different from those that were written, or there is I2C communication error).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and check whether there is poor connection between the EEPROM and the MCU PWB.

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

341.342 MCU NVM (EEPROM) Buffer Fault

BSD-ON: [BSD 3.1 PWB Communication \(1 of 4\)](#)

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

BSD-ON: [BSD 3.6 PWB Communication \(3 of 4\)](#)

BSD-ON: [BSD 3.7 PWB Communication \(4 of 4\)](#)

NVM (EEPROM) buffer Fault (The write buffer has overflowed).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and check whether there is poor connection between the EEPROM and the MCU PWB.

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

341.345 MD PWB F2 Open

BSD-ON: [BSD 1.5 DC Power Generation \(2 of 4\)](#)

Fuse 2 on the MD PWB has blown.

NOTE: • Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - LPH Unit (Y, M, C, K) ([REP 2.2](#))
 - LPH Rear PWB (Y, M, C, K) ([REP 2.6](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.346 MD PWB F3 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 3 on the MD PWB has blown.

NOTE: • Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power-Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Tray Module PWB ([PL 10.9 Item 1](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.347 Serial I/O Fault

BSD-ON: [BSD 3.1 PWB Communication \(1 of 4\)](#)

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

BSD-ON: [BSD 3.6 PWB Communication \(3 of 4\)](#)

BSD-ON: [BSD 3.7 PWB Communication \(4 of 4\)](#)

The Serial I/O control clock is not input into the MD PWB.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and check the connector ([P/J452](#)) between the MD PWB and the MCU PWB for poor connection.

If no problems are found, replace the following parts in sequence:

- MCU PWB ([REP 18.5](#))
- MD PWB ([REP 18.6](#))

341.348 MD PWB F4 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 4 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following Tray Module PWB ([REP 10.8](#)) parts circuits for overcurrent and over-voltage, and then replace the faulty part or repair the circuits.
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.349 MD PWB F6 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 6 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Take Away Motor ([REP 15.2](#))
 - Tray 2 Feed/Lift Up Motor ([PL 9.4 Item 3](#))
 - P/R Latch Motor ([PL 7.1 Item 4](#))
 - Agitator Motor ([REP 8.6](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.350 MD PWB F7 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 7 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Fuser Fan ([REP 4.1](#))
 - Front LVPS Fan ([REP 4.2](#))
 - IH Intake Fan ([REP 4.3](#))
 - C Exit Fan ([REP 4.12](#))
 - Process 1 Fan ([REP 4.7](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.351 MD Detect Fault

BSD-ON: [BSD 3.8 PWBS Detection](#)

The MD PWB is not installed.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and check the connector ([P/J452](#)) between the MD PWB and the MCU PWB for poor connection.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

341.352 MD PWB F5 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 5 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the Finisher circuit for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.353 MD PWB F8 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 8 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Tray 1 Feed/Nudger Motor ([PL 13.2 Item 6](#))
 - Exit 2 Drive Motor ([PL 17.4 Item 5](#))
 - Duplex Motor ([REP 14.14](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.354 MD PWB F9 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 9 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Toner Dispense Motor (Y, M, C, K) ([PL 5.1 Item 7](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.355 MD PWB F10 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 10 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - 2nd BTR Contact Retract Motor ([REP 14.10](#))
 - DC Heater ([PL 14.3 Item 23](#))
 - LH Fan PWB ([REP 14.6](#)) or LH Fan 1/2/3 ([REP 14.5](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.356 MD PWB F11 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 11 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Fuser Drive Motor ([PL 3.1 Item 10](#))
 - Main Drive Motor ([PL 3.2 Item 26](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.357 MD PWB F12 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 12 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Drum/Dev Drive Motor (K) ([REP 3.9](#))
 - IBT Drive Motor Assembly ([PL 3.3 Item 4](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.358 MD PWB F13 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 13 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Drum Drive Motor (Y, M, C) ([REP 3.11](#))
 - Dev Drive Motor (Y, M, C) ([REP 3.12](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.359 MD PWB F14 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 14 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Face Up Gate Solenoid ([PL 17.5 Item 2](#))
 - Exit 1 OCT Motor ([PL 17.2 Item 4](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.360 MD PWB F15 Open

BSD-ON: [BSD 1.11 Power Interlock Switching \(2 of 2\)](#)

Fuse 15 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Exit 2 Gate Solenoid ([PL 17.5 Item 10](#))
 - Exit 2 OCT Motor ([PL 17.5 Item 11](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.361 MD PWB F16 Open

BSD-ON: [BSD 1.6 DC Power Generation \(3 of 4\)](#)

Fuse 16 on the MD PWB has blown.

NOTE: •Remove the cause of Fuse meltdown before replacing the MD PWB.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Check the following parts circuits for overcurrent and overvoltage, and then replace the faulty parts or repair the circuits.
 - Registration Clutch ([REP 15.3](#))
2. Turn the power Off and replace the MD PWB ([REP 18.6](#)).

341.368 MCU-SW Firmware Mismatch

BSD-ON: [BSD 3.8 PWBS Detection](#)

The MCU software for the Phaser 7800 model is installed in the 7525/30/35 model. Or, the MCU software for the 7525/30/35 model is installed in the Phaser 7800 model.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB ([REP 18.5](#)).

341.369 MD Type Mismatch

BSD-ON: **BSD 3.8 PWBS Detection**

The MD PWD for the Phaser 7800 model is installed in the 7525/30/35 model. Or, the MD PWD for the 7525/30/35 model is installed in the Phaser 7800 model.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and replace with the correct MD PWB (**REP 18.6**).

342.320 Drum Y, M, C Motor Fail

BSD-ON: [BSD 9.2 Drum Drive Control \(Y, M, C\)](#)

The Drum Drive Motor (Y, M, C) revolution failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and open the Front Cover. Remove the Drum (Y, M, C) and close the Front Cover.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [091-027] (Drum Drive Motor Y, M, C). **Does the Drum Drive Motor (Y, M, C) rotate?**

Y	N
Turn the power Off and remove the Rear Upper Cover. Turn the power ON.	
Is the voltage between the MD PWB P/J526-3 (+) and the GND (-) +24VDC?	
Y	N
Go to +24VDC Power RAP .	
Is the voltage between the MD PWB P/J527-A16 (+) and the GND (-) +5VDC?	
Y	N
Go to +5VDC Power RAP .	

Turn the power Off and check the connections between the MD PWB [P/J526](#) and the Drum Drive Motor (Y, M, C) [P/J246](#), as well as between the MD PWB [P/J527](#) and the Drum Drive Motor (Y, M, C) [P/J247](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- Drum Drive Motor (Y, M, C) ([REP 3.11](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and open the Front Cover. Install the Drum (Y, M, C) and close the Front Cover.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [091-027] (Drum Drive Motor Y, M, C). **Does the Drum Drive Motor (Y, M, C) rotate?**

Y	N
Check the Drum (Y, M, C) for loading.	

Press the **Stop** button and turn the power Off. Check the connection between the Drum Drive Motor (Y, M, C) [P/J247-8](#) and the MD PWB [P/J527-A9](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

342.323 Drum K Motor Fail

BSD-ON: [BSD 9.4 Drum/Deve Drive Control \(K\)](#)

The Drum/Developer Drive Motor (K) revolution failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Front Cover. Remove the Drum (K) and the Developer (K) and cheat the Front Cover Interlock Switch.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [091-033] (Drum/Developer Drive Motor K). **Does the Drum/Developer Drive Motor (K) rotate?**

Y	N
Turn the power Off and remove the Rear Upper Cover. Turn the power ON.	
Is the voltage between the MD PWB P/J526-1 (+) and the GND (-) +24VDC?	
Y	N
Go to +24VDC Power RAP .	
Is the voltage between the MD PWB P/J527-A8 (+) and the GND (-) +5VDC?	
Y	N
Go to +5VDC Power RAP .	

Turn the power Off and check the connections between the MD PWB [P/J526](#) and the Drum/Developer Drive Motor (K) [P/J240](#), as well as between the MD PWB [P/J527](#) and the Drum/Developer Drive Motor (K) [P/J241](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- Drum/Developer Drive Motor (K) ([REP 3.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and turn the power Off. Install the Drum (K), the Developer (K), and the Front Cover.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [091-033] (Drum/Developer Drive Motor K). **Does the Drum/Developer Drive Motor (K) rotate?**

Y	N
Check the Drum (K) and the Developer (K) for loading	

Press the **Stop** button and turn the power Off. Check the connection between the Drum/Developer Drive Motor (K) [P/J241-8](#) and the MD PWB [P/J527-A1](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

342.324 IBT Motor Fail

BSD-ON: [BSD 9.28 IBT Drive Control](#)

The IBT Drive Motor revolution failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off. Remove the IBT Unit and cheat the L/H Cover Interlock Switch.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [094-006] (IBT Drive Motor).

Does the IBT Drive Motor rotate?

Y N
Turn the power Off and remove the Rear Upper Cover. Turn the power On.
Is the voltage between the MD PWB [P/J526-5 \(+\)](#) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Is the voltage between the MD PWB [P/J527-B8 \(+\)](#) and the GND (-) +5VDC?

Y N
Go to [+5VDC Power RAP](#).

Turn the power Off and check the connections between the MD PWB [P/J526](#) and the IBT Drive Motor [P/J248](#), as well as between the MD PWB [P/J527](#) and the IBT Drive Motor [P/J249](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- IBT Drive Motor ([REP 3.10](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and turn the power Off. Install the IBT Unit and close the L/H Cover.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [094-006] (IBT Drive Motor).

Does the IBT Drive Motor rotate?

Y N
Check the IBT Drive for loading. Also, check the IBT for loading due to blockage in the IBT Waste Toner Collection Auger

Press the **Stop** button and turn the power Off. Check the connection between the IBT Drive Motor [P/J249-8](#) and the MD PWB [P/J527-B1](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the MD PWB ([REP 18.6](#)).

342.325 Main Motor Fail

BSD-ON: [BSD 4.1 Main Drive Control](#)

BSD-ON: [BSD 8.1 Tray 2 and Tray 1 Paper Transportation](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3 of 4\) \(TTM\)](#)

The Main Drive Motor revolution failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off. Remove the IBT Unit and cheat the L/H Cover Interlock Switch.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-002] (Main Drive Motor).

Does the Main Drive Motor rotate?

Y N
Turn the power Off and remove the Rear Upper Cover. Turn the power On.
Is the voltage between the MD PWB [P/J535-1 \(+\)](#) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Is the voltage between the MD PWB [P/J525-A16 \(+\)](#) and the GND (-) +5VDC?

Y N
Go to [+5VDC Power RAP](#).

Turn the power Off and check the connections between the MD PWB [P/J535](#) and the Main Drive Motor [P/J244](#), as well as between the MD PWB [P/J525](#) and the Main Drive Motor [P/J245](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- Main Drive Motor ([REP 3.6](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and turn the power Off. Install the IBT Unit and close the L/H Cover.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-002] (Main Drive Motor).

Does the Main Drive Motor rotate?

Y N
Check the 2nd BTR for loading and the Drive Gear for revolution failure or damage

Press the **Stop** button.

Turn On [dc330 Component Control](#) [042-002] (Main Drive Motor), then turn On [dc330 Component Control](#) [077-001] (Takeaway Clutch).

Turn On DC330 [042-002] (Main Drive Motor), then turn On DC330 [077-050] (Takeaway Motor).

Does the Main Drive Motor rotate?

Y N
Check the Tray 1 Takeaway Roll and the Tray 1 Takeaway Roll for loading and the Drive Gear for revolution failure or damage

A

A

Press the **Stop** button. Turn On **dc330 Component Control** [042-002] (Main Drive Motor), then turn On DC330 [077-002] (Registration Clutch). **Does the Main Drive Motor rotate?**

Y N

Check the Registration Roll for loading and the Drive Gear for revolution failure or damage

Press the **Stop** button and turn the power Off. Check the connection between the Main Drive Motor **P/J245-8** and the MD PWB **P/J525-A9** for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- MD PWB (REP 18.6)
- MCU PWB (REP 18.5)

342.330 IH Exhaust Fan Fail

BSD-ON: **BSD 10.3 Fusing Heat Control (1 of 3)**

The IH Exhaust Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Has **341.326/ 341.331 faults (MCU PWB F3 Open) occurred?**

Y N

Turn the power Off and remove the Rear Upper Cover. Disconnect the connector **P592** of the MD PWB and open the Chassis Assembly. Rotate the IH Exhaust Fan manually to check for loading.

Turn the power On and enter Service Diagnostics (**Entering Service Diagnostics**). Turn On **dc330 Component Control** [042-025] (NOHAD FAN Failure Detection).

Is the IH Exhaust Fan rotating and does the test return an IH Exhaust Fan error?

Y N

When the Diag is turned On, is the voltage between the MCU PWB **P/J414-B1 (+) and the GND (-) +24VDC?**

Y N

Turn the power Off and replace the MCU PWB (REP 18.5).

Turn the power Off and check the connection between the IH Exhaust Fan **P/J225** and the MCU PWB **P/J414** for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- IH Exhaust Fan (REP 4.10)
- MCU PWB (REP 18.5)

Replace the IH Exhaust Fan (REP 4.10).

Press the **Stop** button and turn the power Off. Check the connection between the IH Exhaust Fan **P/J225-3** and the MCU PWB **P/J414-B3** for open circuit, short circuit, and poor contact. If no problems are found, replace the MCU PWB (REP 18.5).

Go to the **341.326/ 341.331** RAP.

342.332 IH Intake Fan Fail

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

The IH Intake Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.350 faults \(MD PWB F7 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly.

Rotate the IH Intake Fan manually to check for loading.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection).

Is the IH Intake Fan rotating and does the test return a IH Intake Fan error?

Y N

When the Diag is turned On, is the voltage between the MD PWB [P/J529-B9 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MD PWB ([REP 18.6](#)).

Turn the power Off and check the connection between the IH Intake Fan [P/J226](#) and the MD PWB [P/J529](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- IH Intake Fan ([PL 4.1](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Replace the IH Intake Fan ([REP 4.1](#)).

Press the **Stop** button and turn the power Off. Check the connection between the IH Intake Fan J226-2 and the MD PWB [P/J529-B11](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MD PWB ([REP 18.6](#)).

Go to the [341.350](#) RAP.

342.334 IBT Fan Fail

BSD-ON: [BSD 9.44 C Fan Control](#)

The IBT Fan 1, 2 error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.327/ 341.332 faults \(MCU PWB F4 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-019] (IBT Fan). **Does the IBT Fan1, 2 rotate?**

Y N

When the Diag is turned On, is the voltage between the MCU PWB [P/J416-3/7 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

Turn the power Off and check the connection between the IBT Fan 1 J232 and the MCU PWB [P/J416](#), as well as between the IBT Fan 2 [P/J236](#) and the MCU PWB [P/J416](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- IBT Fan 1
- IBT Fan 2
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and turn the power Off. Check the connection between the IBT Fan 1 J232-2 and the MCU PWB [P/J416-5](#), as well as between the IBT Fan 2 [P/J236-2](#) and the MCU PWB [P/J416-9](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Go to the [341.327/ 341.332](#) RAP.

342.335 Process 1 Fan Fail

BSD-ON: [BSD 9.43 Process Fan Control](#)

The Process 1 Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.350 faults \(MD PWB F7 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection).

Is the Process 1 Fan rotating and does the test return a Process 1 Fan error?

Y N

When the Diag is turned On, is the voltage between the MD PWB [P/J537-1 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MD PWB ([REP 18.6](#)).

Turn the power Off and check the connection between the Process 1 Fan [P/J228](#) and the MD PWB [P/J537](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Process 1 Fan ([REP 4.7](#))
- MD PWB ([REP 18.6](#))

Replace the Process 1 Fan ([REP 4.7](#)).

Press the **Stop** button and turn the power Off. Check the connection between the Process 1 Fan [P/J228-2](#) and the MD PWB [P/J537-3](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MD PWB ([REP 18.6](#)).

Go to the [341.350](#) RAP.

342.336 Process 2 Fan Fail

BSD-ON: [BSD 9.43 Process Fan Control](#)

The Process 2 Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.326/ 341.331 faults \(MCU PWB F3 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection).

Is the Process 2 Fan rotating and does the test return a Process 2 Fan error?

Y N

When the Diag is turned On, is the voltage between the MCU PWB [P/J416-11 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

Turn the power Off and check the connection between the Process 2 Fan [P/J238](#) and the MCU PWB [P/J416](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Process 2 Fan ([REP 4.5](#))
- MCU PWB ([REP 18.5](#))

Replace the Process 2 Fan ([REP 4.5](#)).

Press the **Stop** button and turn the power OFF. Check the connection between the Process 2 Fan [P/J238-2](#) and the MCU PWB [P/J416-13](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Go to the [341.326/ 341.331](#) RAP.

342.338 LVPS Front Fan Fail

BSD-ON: [BSD 1.3 LVPS Control](#)

An abnormality was detected in the LVPS Front Fan.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.350 faults \(MD PWB F7 Open\)](#) occurred?

Y N

Turn the power Off and remove the Right Cover and Rear Upper Cover. Disconnect and reconnect [P/J239](#). Rotate the Front LVPS Fan manually to check for loading.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection).

Is the Front LVPS Fan rotating and does the test return a LVPS Front Fan error?

Y N

When the Diag is turned On, is the voltage between the MD PWB [P/J529-A13 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MD PWB ([REP 18.6](#)).

Turn the power Off and check the connection between the Front LVPS Fan [P/J239](#) and the MD PWB [P/J529](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Front LVPS Fan ([REP 4.2](#))
- MD PWB ([REP 18.6](#))

Replace the Front LVPS Fan ([REP 4.2](#)).

Press the **Stop** button and turn the power Off. Check the connection between the Front LVPS Fan [P/J239-2](#) and the MD PWB [P/J529-A14](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MD PWB ([REP 18.6](#)).

Go to the [341.350](#) RAP.

342.340 Cartridge Fan Fail

BSD-ON: [BSD 9.44 C Fan Control](#)

The Cartridge Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.327/ 341.332 faults \(MCU PWB F4 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection). Is the Cartridge Fan rotating and does the test return a Cartridge Fan error?

Y N

When the Diag is turned On, is the voltage between the MCU PWB [P/J416-7 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

Turn the power Off and check the connection between the Cartridge Fan [P/J619](#) and the MCU PWB [P/J416](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Cartridge Fan ([REP 4.4](#))
- MCU PWB ([REP 18.5](#))

Replace the Cartridge Fan ([REP 4.4](#)).

Press the **Stop** button and turn the power Off. Check the connection between the Cartridge Fan [P/J619-2](#) and the MCU PWB [P/J416-9](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Go to the [341.327/ 341.332](#) RAP.

342.341 M HVPS Fan Fail

BSD-ON: [BSD 9.45 Suction/ M/ Bottom Fan Control](#)

The M Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.325/ 341.330 faults \(MCU PWB F2 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection). **Is the HVPS Fan or the M Fan rotating and does the test return a M HVPS Fan error?**

Y N

When the Diag is turned On, is the voltage between the MCU PWB [P/J417-A10 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

Turn the power Off and check the connection between the HVPS/M Fan [P/J235](#) and the MCU PWB [P/J417](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- M HVPS Fan ([REP 4.9](#))
- MCU PWB ([REP 18.5](#))

Replace the H HVPS Fan ([REP 4.9](#)).

Press the **Stop** button and turn the power Off.

Check the connection between the HVPS/M Fan [P/J235-3](#) and the MCU PWB [P/J417-A12](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Go to the [341.325/ 341.330 RAP](#).

342.342 Suction Fan Fail

BSD-ON: [BSD 9.45 Suction/ M/ Bottom Fan Control](#)

The Suction Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.325/ 341.330 faults \(MCU PWB F2 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly. Rotate the Suction Fan manually to check for loading.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection).

Is the Suction Fan rotating and does the test return a Suction Fan error?

Y N

When the Diag is turned On, is the voltage between the MCU PWB [P/J417-A1 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

Turn the power Off and check the connection between the Suction Fan [P/J231](#) and the MCU PWB [P/J417](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Suction Fan ([REP 18.4](#))
- MCU PWB ([REP 18.5](#))

Replace the Suction Fan ([REP 18.4](#)).

Press the **Stop** button and turn the power Off. Check the connection between the Suction Fan [P/J231-2](#) and the MCU PWB [P/J417-A3](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Go to the [341.325/ 341.330 RAP](#).

342.343 Rear Bottom Fan Fail

BSD-ON: [BSD 9.45 Suction/ M/ Bottom Fan Control](#)

The Bottom Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.325/ 341.330 faults \(MCU PWB F2 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly. Rotate the Bottom Fan manually to check for loading.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042-025] (NOHAD FAN Failure Detection).

Is the Bottom Fan rotating and does the test return a Rear Bottom Fan error?

Y N

When the Diag is turned On, is the voltage between the MCU PWB [P/J417-B11 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MCU PWB ([REP 18.5](#)).

Turn the power Off and check the connection between the Bottom Fan [P/J234](#) and the MCU PWB [P/J417](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Bottom Fan ([REP 4.8](#))
- MCU PWB ([REP 18.5](#))

Replace the Bottom Fan ([REP 4.8](#)).

Press the **Stop** button and turn the power Off. Check the connection between the Bottom Fan [P/J234-2](#) and the MCU PWB [P/J417-B13](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MCU PWB ([REP 18.5](#)).

Go to the [341.325/ 341.330 RAP](#).

342.344 C Exit Fan Fail

BSD-ON: [BSD 9.44 C Fan Control](#)

The C Exit Fan error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Has [341.350 faults \(MD PWB F7 Open\)](#) occurred?

Y N

Turn the power Off and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MD PWB and open the Chassis Assembly.

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [042--025] (NOHAD FAN Failure Detection).

Is the C Exit Fan rotating and does the test return a C Exit Fan error?

Y N

When the Diag is turned On, is the voltage between the MD PWB [P/J529-B13 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power Off and replace the MD PWB ([REP 18.6](#)).

Turn the power Off and check the connection between the C Exit Fan [P/J227](#) and the MD PWB [P/J529](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- C Exit Fan ([REP 4.12](#))
- MD PWB ([REP 18.6](#))

Replace the C Exit Fan ([REP 4.12](#)).

Press the **Stop** button and turn the power Off. Check the connection between the C Exit Fan [P/J227-2](#) and the MD PWB [P/J529-B15](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MD PWB ([REP 18.6](#)).

Go to the [341.350 RAP](#).

342.400 Deodorant Filter Life End

The Deodorant Filter must be replaced.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Deodorant Filter and clear the [dc135 CRU/HFSI Read & Reset](#) [954-860].

342.604 NOHAD Temperature Sensor Fail

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The NOHAD Thermistor error was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Turn the power Off and check the connection between the NOHAD Thermistor [P/J130](#) and the MCU PWB [P/J414](#) for open circuit, short circuit, and poor contact. Also check whether there is poor connection or foreign substances at the detection section of the NOHAD Thermistor.

If no problems are found, replace the following parts in sequence:

- NOHAD Thermistor ([REP 4.13](#))
- MCU PWB ([REP 18.5](#))

342.609 LH Fan Fail

BSD-ON: BSD 9.46 LH Fan Control

The LH Fan 1-3 error was detected.

NOTE: •The LH Fan is an option Fan to prevent paper blocking. If the LH Fan is installed, set NVM (741-140) to "1".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Has **041-355 faults (MD PWB F10 Open) occurred?**

Y N

Turn the power Off. Open the L/H Cover and cheat the L/H Cover Interlock Switch.

Disconnect and reconnect the LH Fan PWB **P/J453**, **P/J454**, LH Fan 2 **P/J217**, and LH Fan 3 **P/J218**. Rotate the LH Fan 1-3 manually to check for loading.

Turn the power On and enter Service Diagnostics (**Entering Service Diagnostics**). Turn On **dc330 Component Control** [042-025] (NOHAD FAN Failure Detection).

Are the LH Fan 1-3 rotating and does the test return a LH 1, 2, 3 Fan error?

Y N

Press the **Stop** button. **Is the voltage between the LH Fan PWB J450-5 (+) and the GND (-) +24VDC?**

Y N

Remove the Rear Upper Cover. **Is the voltage between the MD PWB J523-B13 (+) and the GND (-) +24VDC?**

Y N

Turn the power Off and replace the MD PWB (**REP 18.6**).

Turn the power Off and check the connection between the MD PWB **P/J523** and the LH Fan PWB **P/J450** for open circuit, short circuit, and poor contact.

Turn On **dc330 Component Control** [042-026] (LH Fan) and measure the following voltages:

- Between the LH Fan PWB **P/J453-1 (+)** and the GND (-) (LH Fan 1)
- Between the LH Fan PWB **P/J454-1 (+)** and the GND (-) (LH Fan 2)
- Between the LH Fan PWB **P/J454-5 (+)** and the GND (-) (LH Fan 3)

Is the voltage +24VDC?

Y N

Turn the power Off and check the connection between the MD PWB **P/J523** and the LH Fan PWB **P/J450** for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- LH Fan PWB (**REP 14.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

Press the **Stop** button and turn the power Off Check the following connectors for open circuits, short circuits, and poor contacts.

- Between the LH Fan PWB **P/J454** and the LH Fan 2 **P/J217**
- Between the LH Fan PWB **P/J454** and the LH Fan 3 **P/J218**

A B

If no problems are found, replace the appropriate LH Fan (1-3) (**REP 14.5**).

Replace the LH Fan (**REP 14.5**).

Press the **Stop** button. Turn the power Off and check the following:

- Check the connection between the LH Fan 2 **P/J217-3** and the LH Fan PWB **P/J454-3** for open circuit, short circuit, and poor contact.
- Check the connection between the LH Fan 3 **P/J218-3** and the LH Fan PWB **P/J4544-7** for open circuit, short circuit, and poor contact.
- Check the connection between the LH Fan PWB **P/J450-2** and the MD PWB **P/J523-B16** for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- LH Fan PWB (**REP 14.6**)
- MD PWB (**REP 18.5**)

Go to the **341.355 RAP**.

A B

345.310 Image Ready NG

BSD-ON: Chain 3 Machine Run Control

The Controller image preparation failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check whether there is poor connection or foreign substances at the following connectors.
 - Between BP PWB and MCU PWB P/J451
 - Between BP PWB J335 and I/P PWB P335
 - Between BP PWB J309 and I/P PWB P309

If no problems are found, replace the following parts in sequence:

- BP PWB (REP 18.6)
- MCU PWB (REP 18.5)

345.311 Controller Communication Fault

BSD-ON: Chain 3 Machine Run Control

Communication error between I/P PWB and MCU PWB was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check whether there is poor connection or foreign substances at the following connectors.
 - Between BP PWB and MCU PWB P/J451
 - Between BP PWB J335 and I/P PWB P335
 - Between BP PWB J309 and I/P PWB P309

If no problems are found, replace the following parts in sequence:

- BP PWB (REP 18.6)
- MCU PWB (REP 18.5)

345.312 Drive Logic Fault

A fatal error was detected in Drive control.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.313 ENG_LOGIC_FAIL

Engine internal mismatch (control logic mismatch)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.321 MK_Panel_NG

BSD-ON: **Chain 3 Machine Run Control**

Communication error between IM and MK (when receiving Pitch Check, the corresponding Panel Build is not received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.322 MK_Pitch_NG

BSD-ON: **Chain 3 Machine Run Control**

Communication error between IM and MK (when receiving Pitch Notify, the corresponding Pitch Check is not received)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.331 MK_MKIF_MSG_Reject

Communication error between IM and MK (the received message was rejected).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.332 MK_MMIF_MSG_Reject

Communication error between MM and Sub Module (the received message was rejected).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.350 MK_Emergency_Over_Wait

MK internal mismatch (panel creation is obstructed continuously over the predetermined time).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.351 MK_Emergency_No_Timer

MK internal mismatch (Call Back Timer has ran out and can't be controlled).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.352 MK_Emergency_Enforced_Stop

MK internal mismatch (the MM has performed a forced stop process).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM). If the problem persists, replace the MCU PWB (REP 18.5).

345.370 LPH Power On Fault Multi

BSD-ON: BSD 6.8 LPH Control (Y)

BSD-ON: BSD 6.9 LPH Control (M)

BSD-ON: BSD 6.10 LPH Control (C)

BSD-ON: BSD 6.11 LPH Control (K)

Power source error during LPH batch download complete verification or MCU error.
(Fail has occurred in multiple LPHs.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover. Turn the power On.

Is the voltage between the MD PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

Y N
Go to +5VDC Power RAP.

Is the voltage between the MD PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N
Turn the power Off and disconnect the MD PWB connector P/J532.
Measure the resistance between the MD PWB P/J532-2/6/10/14 and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MD PWB (REP 18.6).

Turn the power Off and check the following connectors for open circuit, short circuit, and poor connection.

- Between MCU PWB P/J557 and LPH Rear PWB P/J561
- Between MCU PWB P/J556 and LPH Rear PWB P/J560
- Between MCU PWB P/J555 and LPH Rear PWB P/J559
- Between MCU PWB P/J554 and LPH Rear PWB P/J558

If no problems are found, replace the MCU PWB (REP 18.5).

If the problem persists, refer to dc131 NVM Read/Write [749-001] (LPH Fail Color) to go to the appropriate RAP.

(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361.350 RAP
- M color: 361.351 RAP
- C color: 361.352 RAP
- K color: 361.353 RAP

345.371 LPH Download Data Fault Multi

BSD-ON: **BSD 6.8 LPH Control (Y)**

BSD-ON: **BSD 6.9 LPH Control (M)**

BSD-ON: **BSD 6.10 LPH Control (C)**

BSD-ON: **BSD 6.11 LPH Control (K)**

DELSOL register error during the LPH batch download complete verification or connector error. (Fail has occurred in multiple LPHs.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MD PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?**

Y N
Go to **+5VDC Power RAP**.

Is the voltage between the MD PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N
Turn the power Off and disconnect the MD PWB connector **P/J532**.
Measure the resistance between the MD PWB **P/J532-2/6/10/14** and the Frame.
Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MD PWB (**REP 18.6**).

Turn the power Off and check the following connectors for open circuit, short circuit, and poor connection.

- Between MCU PWB **P/J557** and LPH Rear PWB **P/J561**
- Between MCU PWB **P/J556** and LPH Rear PWB **P/J560**
- Between MCU PWB **P/J555** and LPH Rear PWB **P/J559**
- Between MCU PWB **P/J554** and LPH Rear PWB **P/J558**

If no problems are found, replace the MCU PWB (**REP 18.5**).

If the problem persists, refer to **dc131 NVM Read/Write [749-001]** (LPH Fail Color) to go to the appropriate RAP.

(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: **361.354 RAP**
- M color: **361.355 RAP**
- C color: **361.356 RAP**
- K color: **361.357 RAP**

345.372 LPH Mismatch Fault Multi

BSD-ON: **BSD 6.8 LPH Control (Y)**

BSD-ON: **BSD 6.9 LPH Control (M)**

BSD-ON: **BSD 6.10 LPH Control (C)**

BSD-ON: **BSD 6.11 LPH Control (K)**

The model numbers of multiple LPH Units do not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover. Turn the power On. **Is the voltage between the MD PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?**

Y N
Go to **+5VDC Power RAP**.

Is the voltage between the MD PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N
Turn the power Off and disconnect the MD PWB connector **P/J532**.
Measure the resistance between the MD PWB **P/J532-2/6/10/14** and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MD PWB (**REP 18.6**).

Check that the values in **dc131 NVM Read/Write [749-152 to 160]** (LPH Specific Code) do not contain corruption, etc. If no problems are found, replace the following parts in sequence:

- MCU PWB (**REP 18.5**)
- LPH Unit (Y, M, C, K) (**REP 2.2**)

345.373 LPH Read Fault Multi

BSD-ON: [BSD 6.8 LPH Control \(Y\)](#)

BSD-ON: [BSD 6.9 LPH Control \(M\)](#)

BSD-ON: [BSD 6.10 LPH Control \(C\)](#)

BSD-ON: [BSD 6.11 LPH Control \(K\)](#)

Communication error between MCU and LPH Units (data read error from multiple LPHs).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover. Turn the power On.

Is the voltage between the MD PWB [P/J532-4/8/12/16 \(+\)](#) and the GND (-) +5VDC?

Y N
Go to [+5VDC Power RAP](#).

Is the voltage between the MD PWB [P/J532-2/6/10/14 \(+\)](#) and the GND (-) +1.8VDC?

Y N
Turn the power Off and disconnect the MD PWB connector [P/J532](#).
Measure the resistance between the MD PWB [P/J532-2/6/10/14](#) and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MD PWB ([REP 18.6](#)).

Turn the power Off and check the following connectors for open circuit, short circuit, and poor connection.

- Between MCU PWB [P/J557](#) and LPH Rear PWB [P/J561](#)
- Between MCU PWB [P/J556](#) and LPH Rear PWB [P/J560](#)
- Between MCU PWB [P/J555](#) and LPH Rear PWB [P/J559](#)
- Between MCU PWB [P/J554](#) and LPH Rear PWB [P/J558](#)

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

If the problem persists, refer to [dc131 NVM Read/Write \[749-001\]](#) (LPH Fail Color) to go to the appropriate RAP.

(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: [361.362 RAP](#)
- M color: [361.363 RAP](#)
- C color: [361.364 RAP](#)
- K color: [361.365 RAP](#)

345.374 LPH Write Fault Multi

BSD-ON: [BSD 6.8 LPH Control \(Y\)](#)

BSD-ON: [BSD 6.9 LPH Control \(M\)](#)

BSD-ON: [BSD 6.10 LPH Control \(C\)](#)

BSD-ON: [BSD 6.11 LPH Control \(K\)](#)

Communication error between MCU and LPH Units (data write error to multiple LPHs).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover. Turn the power On.

Is the voltage between the MD PWB [P/J532-4/8/12/16 \(+\)](#) and the GND (-) +5VDC?

Y N
Go to [+5VDC Power RAP](#).

Is the voltage between the MD PWB [P/J532-2/6/10/14 \(+\)](#) and the GND (-) +1.8VDC?

Y N
Turn the power Off and disconnect the MD PWB connector [P/J532](#).
Measure the resistance between the MD PWB [P/J532-2/6/10/14](#) and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MD PWB ([REP 18.6](#)).

Turn the power Off and check the following connectors for open circuit, short circuit, and poor connection.

- Between MCU PWB [P/J557](#) and LPH Rear PWB [P/J561](#)
- Between MCU PWB [P/J556](#) and LPH Rear PWB [P/J560](#)
- Between MCU PWB [P/J555](#) and LPH Rear PWB [P/J559](#)
- Between MCU PWB [P/J554](#) and LPH Rear PWB [P/J558](#)

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

If the problem persists, refer to [dc131 NVM Read/Write \[749-001\]](#) (LPH Fail Color) to go to the appropriate RAP.

(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: [361.366 RAP](#)
- M color: [361.367 RAP](#)
- C color: [361.368 RAP](#)
- K color: [361.369 RAP](#)

345.375 LPH Act Fault Multi

BSD-ON: **BSD 6.8 LPH Control (Y)**

BSD-ON: **BSD 6.9 LPH Control (M)**

BSD-ON: **BSD 6.10 LPH Control (C)**

BSD-ON: **BSD 6.11 LPH Control (K)**

Communication error between MCU and multiple LPH Units (error in the communication IC or cable).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover. Turn the power On.

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned ON?**

Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum (Y, M, C, K) for improper installation

Is the voltage between the MD PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

Y N

Go to **+5VDC Power RAP**.

Is the voltage between the MD PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N

Turn the power Off and disconnect the MD PWB connector **P/J532**.
Measure the resistance between the MD PWB **P/J532-2/6/10/14** and the Frame.

Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MD PWB (**REP 18.6**).

Turn the power Off and check the following connectors for open circuit, short circuit, and poor connection.

- Between MCU PWB **P/J557** and LPH Rear PWB **P/J561**
- Between MCU PWB **P/J556** and LPH Rear PWB **P/J560**
- Between MCU PWB **P/J555** and LPH Rear PWB **P/J559**
- Between MCU PWB **P/J554** and LPH Rear PWB **P/J558**

If no problems are found, replace the MCU PWB (**REP 18.5**).

If the problem persists, refer to **dc131 NVM Read/Write [749-001]** (LPH Fail Color) to go to the appropriate RAP.

(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: **361.370 RAP**

- M color: **361.371 RAP**
- C color: **361.372 RAP**
- K color: **361.373 RAP**

345.376 LPH PLL Lock Fault Multi

BSD-ON: BSD 6.8 LPH Control (Y)

BSD-ON: BSD 6.9 LPH Control (M)

BSD-ON: BSD 6.10 LPH Control (C)

BSD-ON: BSD 6.11 LPH Control (K)

LPH PLL lock mechanism failure (clock failures in multiple LPHs).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Rear Upper Cover. Turn the power ON.

Is the voltage between the MD PWB P/J532 -4/8/12/16 (+) and the GND (-) +5VDC?

Y N
Go to +5VDC Power RAP.

Is the voltage between the MD PWB P/J532 -2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N
Turn the power Off and disconnect the MD PWB connector P/J532.
Measure the resistance between the MD PWB P/J532 -2/6/10/14 and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MD PWB (REP 18.6).

Turn the power Off and check the following connectors for open circuit, short circuit, and poor connection.

- Between MCU PWB P/J557 and LPH Rear PWB P/J561
- Between MCU PWB P/J556 and LPH Rear PWB P/J560
- Between MCU PWB P/J555 and LPH Rear PWB P/J559
- Between MCU PWB P/J554 and LPH Rear PWB P/J558

If no problems are found, replace the MCU PWB (REP 18.5).

If the problem persists, refer to dc131 NVM Read/Write [749-001] (LPH Fail Color) to go to the appropriate RAP.

(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361.386 RAP
- M color: 361.387 RAP
- C color: 361.388 RAP
- K color: 361.389 RAP

347.211 Exit 1 OCT Home Fault

BSD-ON: [BSD 10.8 Fused Paper Exit 1](#)

After the Exit 1 OCT Motor has ran for the specified operation time, the Exit 1 OCT Home Position Sensor does not turn On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Check the Exit 1 OCT Home Position Sensor for improper installation, contamination, and etc.
- Check the Shielding Board, which blocks the detection section of the Exit 1 OCT Home Position Sensor, for damage and check the OCT Chute for improper installation.

Procedure

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)).

Turn On [dc330 Component Control](#) [077-109]. Move the OCT Chute manually to block/clear the light path to the Exit 1 OCT Home Position Sensor. **Does the display change between High/Low?**

Y N

Use [Reflective Sensor](#) RAP to check the Exit 1 OCT Home Position Sensor.

Press the **Stop** button. Turn On [dc330 Component Control](#) [077-040] and [dc330 Component Control](#) [077-041] alternately.

Does the OCT 1 Chute move forward and backward?

Y N

Is the voltage between the MD PWB [P/J524-3/4 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power](#) RAP.

Turn the power Off and check the Exit 1 OCT Motor Gear for blockage and the OCT Chute for damage. Also, check the connection between the MD PWB [P/J524](#) and the Exit 1 OCT Motor [P/J271](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Exit 1 OCT Motor ([PL 17.2 Item 4](#))
- MD PWB ([REP 18.6](#))

Press the **Stop** button and turn the power Off. Replace the MD PWB ([REP 18.6](#)).

347.212 Exit 2 OCT Home Fault

BSD-ON: [BSD 10.10 Fused Paper Exit 2 \(2 of 4\)](#)

After the Exit 2 OCT Motor has ran for the specified operation time, the Exit 2 OCT Home Position Sensor does not turn On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

- Check the Exit 2 OCT Home Position Sensor for improper installation, contamination, and etc.
- Check the Shielding Board, which blocks the detection section of the Exit 2 OCT Home Position Sensor, for damage and check the OCT 2 Chute for improper installation.

Procedure

Turn the power On and enter Service Diagnostics ([Entering Service Diagnostics](#)).

Turn On [dc330 Component Control](#) [077-110]. Move the OCT 2 Chute manually to block/clear the light path to the Exit 2 OCT Home Position Sensor. **Does the display change between High/Low?**

Y N

Use [Transmissive Sensor](#) RAP to check the Exit 2 OCT Home Position Sensor.

Press the **Stop** button. Turn On [dc330 Component Control](#) [077-045] and [dc330 Component Control](#) [077-046] alternately.

Does the OCT 2 Chute move forward and backward?

Y N

Is the voltage between the MD PWB [P/J522-A3/A4 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power](#) RAP.

Turn the power Off and check the Exit 2 OCT Motor Gear for blockage and the OCT 2 Chute for damage. Also, check the connection between the MD PWB [P/J522](#) and the Exit 2 OCT Motor [P/J266](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Exit 2 OCT Motor ([PL 17.5 Item 11](#))
- MD PWB ([REP 18.6](#))

Press the **Stop** button and turn the power Off. Replace the MD PWB ([REP 18.6](#)).

347.213 Finisher Kind Mismatch

BSD-ON: [BSD 3.6 PWB Communication \(3 of 4\)](#)

A Finisher other than the specified one is connected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and connect a Finisher that is supported by this machine.

347.216 Finisher Communication Fault

BSD-ON: [BSD 3.6 PWB Communication \(3 of 4\)](#)

BSD-ON: [BSD 1.9 Option DC Power Distribution](#)

Communication failure between the Finisher and the IOT was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the connection between the MD PWB [P/J590](#) and the Finisher PWB [P/J591](#) for open circuit, short circuit, and poor contact. Also, check the power supply at the Finisher.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

347.320 ALL Destination Tray Broken

All Trays connected to the IOT have become unusable.

Cause/Action

Enter [dc122 Fault History](#). Go to the RAP of the affected Output Tray.

361.350 LPH Power On Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (Y) **P/J553** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (Y) **P/J565** and the LPH (Y) **P/J573** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The Flat Cable between the MCU PWB **P/J557** and the LPH Rear PWB (Y) **P/J561** for open circuits, short circuits, and poor contacts (especially for short circuits between MCU PWB **P/J557** pins-28/27 and LPH Rear PWB (Y) **P/J561** pins-1/2)
- The Flat Cable between the LPH H PWB (Y) **P/J569** and the LPH (Y) **P/J577** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J581** between the LPH Rear PWB (Y) and the LPH H PWB (Y) for damage and foreign substances
- The LPH Unit (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (Y) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.351 LPH Power On Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (M) **P/J552** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (M) **P/J564** and the LPH (M) **P/J572** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The Flat Cable between the MCU PWB **P/J556** and the LPH Rear PWB (M) **P/J560** for open circuits, short circuits, and poor contacts (especially for short circuits between MCU PWB **P/J556** pins-28/27 and LPH Rear PWB (M) **P/J560** pins-1/2)
- The Flat Cable between the LPH H PWB (M) **P/J568** and the LPH (M) **P/J576** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J580** between the LPH Rear PWB (M) and the LPH H PWB (M) for damage and foreign substances
- The LPH Unit (M) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (M) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.352 LPH Power On Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (C) **P/J551** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (C) **P/J563** and the LPH (C) **P/J571** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The Flat Cable between the MCU PWB **P/J555** and the LPH Rear PWB (C) **P/J559** for open circuits, short circuits, and poor contacts (especially for short circuits between MCU PWB **P/J555** pins-28/27 and LPH Rear PWB (C) **P/J559** pins-1/2)
- The Flat Cable between the LPH H PWB (C) **P/J567** and the LPH (C) **P/J575** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J579** between the LPH Rear PWB (C) and the LPH H PWB (C) for damage and foreign substances
- The LPH Unit (C) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.353 LPH Power On Fault K

BSD-ON: **BSD 6.10 LPH Control (C)**

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (K) **P/J550** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (K) **P/J562** and the LPH (K) **P/J570** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The Flat Cable between the MCU PWB **P/J554** and the LPH Rear PWB (K) **P/J558** for open circuits, short circuits, and poor contacts (especially for short circuits between MCU PWB **P/J554** pins-28/27 and LPH Rear PWB (K) **P/J558** pins-1/2)
- The Flat Cable between the LPH H PWB (K) **P/J566** and the LPH (K) **P/J574** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J578** between the LPH Rear PWB (K) and the LPH H PWB (K) for damage and foreign substances
- The LPH Unit (K) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.354 LPH Download Data Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB **P/J557** and the LPH Rear PWB (Y) **P/J561** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (Y) **P/J569** and the LPH (Y) **P/J577** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J581** between the LPH Rear PWB (Y) and the LPH H PWB (Y) for damage and foreign substances
- The LPH Unit (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (Y) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.355 LPH Download Data Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB **P/J556** and the LPH Rear PWB (M) **P/J560** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (M) **P/J568** and the LPH (M) **P/J576** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J580** between the LPH Rear PWB (M) and the LPH H PWB (M) for damage and foreign substances
- The LPH Unit (M) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (M) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.356 LPH Download Data Fault C

BSD-ON: [BSD 6.10 LPH Control \(C\)](#)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (C) [P/J567](#) and the LPH (C) [P/J575](#) for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector [P/J579](#) between the LPH Rear PWB (C) and the LPH H PWB (C) for damage and foreign substances
- The LPH Unit (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Use Software Versions ([dc108 Software Versions](#)) to verify the most current software is installed.
 - If a software upgrade is necessary go to [GP 21](#).
- LPH Unit (C) ([REP 2.2](#))
- LPH Cable Assembly ([REP 2.5](#))
- LPH Rear PWB (C) ([REP 2.6](#))
- MCU PWB ([REP 18.5](#))

361.357 LPH Download Data Fault K

BSD-ON: [BSD 6.11 LPH Control \(K\)](#)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (K) [P/J566](#) and the LPH (K) [P/J574](#) for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector [P/J578](#) between the LPH Rear PWB (K) and the LPH H PWB (K) for damage and foreign substances
- The LPH Unit (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Use Software Versions ([dc108 Software Versions](#)) to verify the most current software is installed.
 - If a software upgrade is necessary go to [GP 21](#).
- LPH Unit (K) ([REP 2.2](#))
- LPH Cable Assembly ([REP 2.5](#))
- LPH Rear PWB (K) ([REP 2.6](#))
- MCU PWB ([REP 18.5](#))

361.358 LPH Mismatch Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

The model number of the LPH Unit (Y) does not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Check that the values in **dc131 NVM Read/Write** [749-157] (LPH Specific Code 4Y) do not contain corruption, etc.
- Use Software Versions (**dc108 Software Versions**) to verify the most current software is installed.
 - If a software upgrade is necessary go to **GP 21**.

If no problems are found, replace the LPH Unit (Y) (**REP 2.2**).

361.359 LPH Mismatch Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

The model number of the LPH Unit (M) does not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Check that the values in **dc108 Software Versions** [749-158] (LPH Specific Code 4M) do not contain corruption, etc.
- Use Software Versions (**dc108 Software Versions**) to verify the most current software is installed.
 - If a software upgrade is necessary go to **GP 21**.

If no problems are found, replace the LPH Unit (M) (**REP 2.2**).

361.360 LPH Mismatch Fault C

BSD-ON: [BSD 6.10 LPH Control \(C\)](#)

The model number of the LPH Unit (C) does not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Check that the values in [dc131 NVM Read/Write \[749-159\]](#) (LPH Specific Code 4C) do not contain corruption, etc.
- Use Software Versions ([dc108 Software Versions](#)) to verify the most current software is installed.
 - If a software upgrade is necessary go to [GP 21](#).

If no problems are found, replace the LPH Unit (C) ([REP 2.2](#)).

361.361 LPH Mismatch Fault K

BSD-ON: [BSD 6.11 LPH Control \(K\)](#)

The model number of the LPH Unit (K) does not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Check that the values in [dc131 NVM Read/Write \[749-160\]](#) (LPH Specific Code 4K) do not contain corruption, etc.
- Use Software Versions ([dc108 Software Versions](#)) to verify the most current software is installed.
 - If a software upgrade is necessary go to [GP 21](#).

If no problems are found, replace the LPH Unit (K) ([REP 2.2](#)).

361.362 LPH Read Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

Communication error between MCU and LPH Unit (Y) (data read error from LPH)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (Y) P/J569 and the LPH (Y) P/J577 for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector P/J581 between the LPH Rear PWB (Y) and the LPH H PWB (Y) for damage and foreign substances
- The LPH Unit (Y) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (REP 2.2)
- LPH Cable Assembly (REP 2.5)
- LPH Rear PWB (Y) (REP 2.6)
- MCU PWB (REP 18.5)

361.363 LPH Read Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

Communication error between MCU and LPH Unit (M) (data read error from LPH)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (M) P/J568 and the LPH (M) P/J576 for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector P/J580 between the LPH Rear PWB (M) and the LPH H PWB (M) for damage and foreign substances
- The LPH Unit (M) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (REP 2.2)
- LPH Cable Assembly (REP 2.5)
- LPH Rear PWB (M) (REP 2.6)
- MCU PWB (REP 18.5)

361.364 LPH Read Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

Communication error between MCU and LPH Unit (C) (data read error from LPH)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB P/J555 and the LPH Rear PWB (C) P/J559 for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (C) P/J567 and the LPH (C) P/J575 for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector P/J579 between the LPH Rear PWB (C) and the LPH H PWB (C) for damage and foreign substances
- The LPH Unit (C) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) (REP 2.2)
- LPH Cable Assembly (REP 2.5)
- LPH Rear PWB (C) (REP 2.6)
- MCU PWB (REP 18.5)

361.365 LPH Read Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

Communication error between MCU and LPH Unit (K) (data read error from LPH)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB P/J554 and the LPH Rear PWB (K) P/J558 for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (K) P/J566 and the LPH (K) P/J574 for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector P/J578 between the LPH Rear PWB (K) and the LPH H PWB (K) for damage and foreign substances
- The LPH Unit (K) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) (REP 2.2)
- LPH Cable Assembly (REP 2.5)
- LPH Rear PWB (K) (REP 2.6)
- MCU PWB (REP 18.5)

361.366 LPH Write Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

Communication error between MCU and LPH Unit (Y) (data write error to LPH).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Refer to **dc131 NVM Read/Write [749-046] (Write Retry Data Y)**. **Is the value of dc131 NVM Read/Write [749-046] (Write Retry Data Y) "0"?**

Y N

Check the following:

- The Flat Cable between the MCU PWB **P/J557** and the LPH Rear PWB (Y) **P/J561** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (Y) **P/J569** and the LPH (Y) **P/J577** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J581** between the LPH Rear PWB (Y) and the LPH H PWB (Y) for damage and foreign substances
- The LPH Unit (Y) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)
- The NVM value for corruption

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (Y) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (Y) **P/J553** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (Y) **P/J565** and the LPH (Y) **P/J573** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector **P/J581** between the LPH Rear PWB (Y) and the LPH H PWB (Y) for damage and foreign substances
- The LPH Unit (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (Y) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.367 LPH Write Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

Communication error between MCU and LPH Unit (M) (data write error to LPH).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Refer to **dc131 NVM Read/Write [749-047] (Write Retry Data M)**. **Is the value of dc131 NVM Read/Write [749-047] (Write Retry Data M) "0"?**

Y N

Check the following:

- The Flat Cable between the MCU PWB **P/J556** and the LPH Rear PWB (M) **P/J560** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (M) **P/J568** and the LPH (M) **P/J576** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J580** between the LPH Rear PWB (M) and the LPH H PWB (M) for damage and foreign substances
- The LPH Unit (M) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)
- The NVM value for corruption

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (M) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (M) **P/J552** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (M) **P/J564** and the LPH (M) **P/J572** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector **P/J580** between the LPH Rear PWB (M) and the LPH H PWB (M) for damage and foreign substances
- The LPH Unit (M) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (M) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.368 LPH Write Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

Communication error between MCU and LPH Unit (C) (data write error to LPH).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Refer to **dc131 NVM Read/Write [749-048] (Write Retry Data C)**. **Is the value of dc131 NVM Read/Write [749-048] (Write Retry Data C) "0"?**

Y N

Check the following:

- The Flat Cable between the MCU PWB **P/J555** and the LPH Rear PWB (C) **P/J559** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (C) **P/J567** and the LPH (C) **P/J575** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J579** between the LPH Rear PWB (C) and the LPH H PWB (C) for damage and foreign substances
- The LPH Unit (C) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)
- The NVM value for corruption

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (C) **P/J551** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (C) **P/J563** and the LPH (C) **P/J571** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector **P/J579** between the LPH Rear PWB (C) and the LPH H PWB (C) for damage and foreign substances
- The LPH Unit (C) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.369 LPH Write Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

Communication error between MCU and LPH Unit (K) (data write error to LPH).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Refer to **dc131 NVM Read/Write [749-049] (Write Retry Data K)**. **Is the value of dc131 NVM Read/Write [749-049] (Write Retry Data K) "0"?**

Y N

Check the following:

- The Flat Cable between the MCU PWB **P/J554** and the LPH Rear PWB (K) **P/J558** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (K) **P/J566** and the LPH (K) **P/J574** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J578** between the LPH Rear PWB (K) and the LPH H PWB (K) for damage and foreign substances
- The LPH Unit (K) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)
- The NVM value for corruption

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Check the following:

- The connection between the MD PWB **P/J532** and the LPH Rear PWB (K) **P/J550** for open circuit, short circuit, and poor contact
- The connection between the LPH H PWB (K) **P/J562** and the LPH (K) **P/J570** for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector **P/J578** between the LPH Rear PWB (K) and the LPH H PWB (K) for damage and foreign substances
- The LPH Unit (K) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

361.370 LPH Act Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

Communication error between MCU and LPH Unit (Y) (error in the communication IC or cable).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned On?**

Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum (Y, M, C, K) for improper installation.

Check the following:

- The Flat Cable between the MCU PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (Y) P/J569 and the LPH (Y) P/J577 for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector P/J581 between the LPH Rear PWB (Y) and the LPH H PWB (Y) for damage and foreign substances
- The LPH Unit (Y) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (REP 2.2)
- LPH Cable Assembly (REP 2.5)
- LPH Rear PWB (Y) (REP 2.6)
- MCU PWB (REP 18.5)

361.371 LPH Act Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

Communication error between MCU and LPH Unit (M) (error in the communication IC or cable).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned On?**

Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum (Y, M, C, K) for improper installation.

Check the following:

- The Flat Cable between the MCU PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (M) P/J568 and the LPH (M) P/J576 for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector P/J580 between the LPH Rear PWB (M) and the LPH H PWB (M) for damage and foreign substances
- The LPH Unit (M) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (REP 2.2)
- LPH Cable Assembly (REP 2.5)
- LPH Rear PWB (M) (REP 2.6)
- MCU PWB (REP 18.5)

361.372 LPH Act Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

Communication error between MCU and LPH Unit (C) (error in the communication IC or cable).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned On?**

Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the MCU PWB **P/J555** and the LPH Rear PWB (C) **P/J559** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (C) **P/J567** and the LPH (C) **P/J575** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J579** between the LPH Rear PWB (C) and the LPH H PWB (C) for damage and foreign substances
- The LPH Unit (C) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.373 LPH Act Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

Communication error between MCU and LPH Unit (K) (error in the communication IC or cable).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned On?**

Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the MCU PWB **P/J554** and the LPH Rear PWB (K) **P/J558** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (K) **P/J566** and the LPH (K) **P/J574** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J578** between the LPH Rear PWB (K) and the LPH H PWB (K) for damage and foreign substances
- The LPH Unit (K) for improper installation
- The Drum/Dev Drive Motor (Y, M, C) for improper installation (affected by the noises caused by improper installation)

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.374 LPH Chip Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

Open circuit detected in LPH Unit (Y) (open circuit between DELSOL and SLED).

NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power Off and On.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether any Fail related to connection failure of the Flat Cable between the MCU PWB **P/J557** and the LPH Rear PWB (Y) **P/J561** has occurred.

Has any Chain No. 361 Fail (other than LPH Chip Fail) occurred?

Y **N**
|
Replace the LPH Unit (Y) (**REP 2.2**).

Go to the appropriate RAP

361.375 LPH Chip Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

Open circuit detected in LPH Unit (M) (open circuit between DELSOL and SLED).

NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power Off and On.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether any Fail related to connection failure of the Flat Cable between the MCU PWB **P/J556** and the LPH Rear PWB (M) **P/J560** has occurred.

Has any Chain No. 361 Fail (other than LPH Chip Fail) occurred?

Y **N**
|
Replace the LPH Unit (M) (**REP 2.2**).

Go to the appropriate RAP

361.376 LPH Chip Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

Open circuit detected in LPH Unit (C) (open circuit between DELSOL and SLED).

NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power Off and On.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether any Fail related to connection failure of the Flat Cable between the MCU PWB **P/J555** and the LPH Rear PWB (C) **P/J559** has occurred.

Has any Chain No. 361 Fail (other than LPH Chip Fail) occurred?

Y N
| Replace the LPH Unit (C) (**REP 2.2**).

Go to the appropriate RAP.

361.377 LPH Chip Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

Open circuit detected in LPH Unit (K) (open circuit between DELSOL and SLED).

NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power Off and On.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether any Fail related to connection failure of the Flat Cable between the MCU PWB **P/J554** and the LPH Rear PWB (K) **P/J558** has occurred.

Has any Chain No. 361 Fail (other than LPH Chip Fail) occurred?

Y N
| Replace the LPH Unit (K) (**REP 2.2**).

Go to the appropriate RAP.

361.378 LPH Ltrg Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

The Ltrg signal (image synchronization signal) failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB **P/J557** and the LPH Rear PWB (Y) **P/J561** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (Y) **P/J569** and the LPH (Y) **P/J577** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J581** between the LPH Rear PWB (Y) and the LPH H PWB (Y) for damage and foreign substances
- The LPH Unit (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (Y) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.379 LPH Ltrg Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

The Ltrg signal (image synchronization signal) failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB **P/J556** and the LPH Rear PWB (M) **P/J560** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (M) **P/J568** and the LPH (M) **P/J576** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J580** between the LPH Rear PWB (M) and the LPH H PWB (M) for damage and foreign substances
- The LPH Unit (M) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (M) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.384 LPH Ltrg Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

The Ltrg signal (image synchronization signal) failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB **P/J555** and the LPH Rear PWB (C) **P/J559** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (C) **P/J567** and the LPH (C) **P/J575** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J579** between the LPH Rear PWB (C) and the LPH H PWB (C) for damage and foreign substances
- The LPH Unit (C) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.385 LPH Ltrg Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

The Ltrg signal (image synchronization signal) failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Flat Cable between the MCU PWB **P/J554** and the LPH Rear PWB (K) **P/J558** for open circuits, short circuits, and poor contacts
- The Flat Cable between the LPH H PWB (K) **P/J566** and the LPH (K) **P/J574** for open circuits, short circuits, and poor contacts (connection within the LPH Unit)
- The connector **P/J578** between the LPH Rear PWB (K) and the LPH H PWB (K) for damage and foreign substances
- The LPH Unit (K) for improper installation

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

361.386 LPH PLL Lock Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

LPH PLL lock mechanism failure (LPH clock failure).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether [361.354](#) LPH Download Fail Y has occurred.

Has Fail [361.354](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (Y) ([REP 2.2](#))
- LPH Cable Assembly ([REP 2.5](#))
- LPH Rear PWB (Y) ([REP 2.6](#))
- MCU PWB ([REP 18.5](#))

Proceed to RAP [361.354](#).

361.387 LPH PLL Lock Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

LPH PLL lock mechanism failure (LPH clock failure).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether [361.355](#) LPH Download Fail M has occurred.

Has Fail [361.355](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (M) ([REP 2.2](#))
- LPH Cable Assembly ([REP 2.5](#))
- LPH Rear PWB (M) ([REP 2.6](#))
- MCU PWB ([REP 18.5](#))

Proceed to RAP [361.355](#).

361.388 LPH PLL Lock Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

LPH PLL lock mechanism failure (LPH clock failure).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.356** LPH Download Fail C has occurred.

Has Fail 361.356 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.356**.

361.389 LPH PLL Lock Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

LPH PLL lock mechanism failure (LPH clock failure).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.357** LPH Download Fail K has occurred.

Has Fail 361.357 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.357**.

361.390 LPH FFC Connect Posi Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

The image data (Y) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.374** LPH Chip Fail Y has occurred.

Has Fail 361.374 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (Y) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (Y) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.374**.

361.391 LPH FFC Connect Posi Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

The image data (M) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.375** LPH Chip Fail M has occurred.

Has Fail 361.375 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (M) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (M) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.375**.

361.392 LPH FFC Connect Posi Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

The image data (C) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.376** LPH Chip Fail C has occurred.

Has Fail 361.376 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.376**.

361.393 LPH FFC Connect Posi Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

The image data (K) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.377** LPH Chip Fail K has occurred.

Has Fail 361.377 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.377**.

361.394 LPH FFC Connect Nega Fault Y

BSD-ON: **BSD 6.8 LPH Control (Y)**

The image data (Y) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.374** LPH Chip Fail Y has occurred.

Has Fail 361.374 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (Y) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (Y) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.374**.

361.395 LPH FFC Connect Nega Fault M

BSD-ON: **BSD 6.9 LPH Control (M)**

The image data (M) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.375** LPH Chip Fail M has occurred.

Has Fail 361.375 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (M) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (M) (**REP 2.6**)
- MCU PWB (7545/56) (**REP 18.5**)

Proceed to RAP **361.375**.

361.396 LPH FFC Connect Nega Fault C

BSD-ON: **BSD 6.10 LPH Control (C)**

The image data (C) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.376** LPH Chip Fail C has occurred.

Has Fail 361.376 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (C) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (C) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.376**.

361.397 LPH FFC Connect Nega Fault K

BSD-ON: **BSD 6.11 LPH Control (K)**

The image data (K) cannot be received normally from the MCU.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter **dc122 Fault History**. Check whether **361.377** LPH Chip Fail K has occurred.

Has Fail 361.377 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (K) (**REP 2.2**)
- LPH Cable Assembly (**REP 2.5**)
- LPH Rear PWB (K) (**REP 2.6**)
- MCU PWB (**REP 18.5**)

Proceed to RAP **361.377**.

361.398 BITZ1 Initialize Fault

The Bitz1 initialization error was detected. This is an error where the CPU is unable to access the memory and the register of the ASIC BITZ (image processing chip for Y and M) that is installed on the MCU PWB.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether an LPH-related Fail has occurred.

Has any Chain No. 361 Fail occurred?

- | | |
|--|---|
| Y | N |
| Replace the following parts in sequence: | |
| • LPH Cable Assembly (REP 2.5) | |
| • MCU PWB (REP 18.5) | |

Go to the appropriate RAP.

361.399 BITZ2 Initialize Fault

The Bitz2 initialization error was detected. This is an error where the CPU is unable to access the memory and the register of the ASIC BITZ (image processing chip for C and K) that is installed on the MCU PWB.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether an LPH-related Fail has occurred.

Has any Chain No. 361 Fail occurred?

- | | |
|--|---|
| Y | N |
| Replace the following parts in sequence: | |
| • LPH Cable Assembly (REP 2.5) | |
| • MCU PWB (REP 18.5) | |

Go to the appropriate RAP.

361.610 Bitz1 CONTIF Fault

An irregularity was detected in the Valid signal for Y or M color. The Valid signal, which is sent from the Controller to indicate the valid range of the fast scan, does not turn On at the given timing or turns On at an unscheduled timing. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check whether there is poor connection or foreign substances at the following connectors.
 - Between BP PWB and MCU PWB [P/J451](#)
 - Between BP PWB [J335](#) and I/P PWB [P335](#)
 - Between BP PWB [J309](#) and I/P PWB [P309](#)

If no problems are found, replace the following parts in sequence:

- BP PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

361.611 Bitz2 CONTIF Fault

An irregularity was detected in the Valid signal for C or K color. The Valid signal, which is sent from the Controller to indicate the valid range of the fast scan, does not turn On at the given timing or turns On at an unscheduled timing. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check whether there is poor connection or foreign substances at the following connectors.
 - Between BP PWB and MCU PWB [P/J451](#)
 - Between BP PWB [J335](#) and I/P PWB [P335](#)
 - Between BP PWB [J309](#) and I/P PWB [P309](#)

If no problems are found, replace the following parts in sequence:

- BP PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

371.105 Reg Sensor On Jam (Tray2/3/4/5)

BSD-ON: [BSD 8.2 Tray Module Paper Transportation \(1 of 4\) \(TTM\)](#)

BSD-ON: [BSD 7.1 Tray 2 Paper Size Sensing](#)

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(2 of 4\) \(TTM\)](#)

The Reg Sensor does not turn On within the specified time after the Reg Clutch On after the Feed from the Tray has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Tray 2 Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure (when the jam has occurred during Feed from Tray 2)
- Each Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to [Media and Tray Specifications](#)).
- The Reg Sensor for contamination, improper installation, and Actuator operation failure
- The Reg Sensor for failure: [dc330 Component Control \[077-103\] \(PL 15.2\)](#)
- The connection between the Reg Sensor [P/J160](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact
- The Main Drive Motor for revolution failure: [dc330 Component Control \[042-002\] \(PL 3.2\)](#)
- The Tray 2 Feed/Lift Up Motor for revolution failure: [dc330 Component Control \[071-001\] \(PL 9.4\)](#) (when the jam has occurred during Feed from Tray 5)
- The Takeaway Motor for revolution failure: [dc330 Component Control \[077-050\] \(PL 15.1\)](#)
- The TM Takeaway Motor for revolution failure: [dc330 Component Control \[077-035\] \(PL 10.9\)](#)
- The TM Takeaway Motor 2 for revolution failure): [dc330 Component Control \[077-037\] \(PL 10.9\)](#)

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

371.210 Tray 2 Lift Up Fault

BSD-ON: [BSD 7.1 Tray 2 Paper Size Sensing](#)

Tray 2 Lift Up NG has occurred 3 times in a row.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Remove Tray 2. Turn the power On and enter the Diag mode. Turn On [dc330 Component Control \[071-001\]](#) (Tray 2 Feed/Lift Up Motor). **Does the Tray 1 Feed/Lift Up Motor rotate?**

Y N

Is the voltage between the MD PWB [P/J520-9 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 5 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances.

- Between the MD PWB [P/J528-B1](#) and the [P/J528-B2](#)
- Between the MD PWB [P/J528-B3](#) and the [P/J528-B4](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N

Check the connection between the MD PWB [P/J528](#) and the Tray 2 Feed/Lift Up Motor [P/J268](#) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 2 Feed/Lift Up Motor ([PL 9.4](#)).

Measure the resistance between the MD PWB [P/J528-B1/B2/B3/B4](#) and the Frame.

Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button. Turn On [dc330 Component Control \[071-102\]](#) (Tray 2 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 2 Nudger Level Sensor. **Does the display change between High/Low?**

Y N

Use Permeable Sensor Failure RAP to check the Tray 1 Nudger Level Sensor.

Press the **Stop** button and turn the power Off.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

371.212 Tray 2 Paper Size Sensor Broken

BSD-ON: [Chain 7 Paper Supplying](#)

Abnormal Analog voltage to Digital value from Tray 2 Size Sensor was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 2 Paper Size Sensor for failure: [dc140 Analog Monitor](#) [071-200], [dc330 Component Control](#) [071-104] ([PL 9.1](#))
- The connection between the Tray 2 Paper Size Sensor [P/J174](#) and the MCU PWB [P/J417](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

371.940 Tray 5 Lift Up NG

BSD-ON: [BSD 7.6 Tray 5 Paper Size Sensing \(TTM\)](#)

After the Tray 5 Lift Up has started, the Tray 5 Nudger Level Sensor did not turn On within the specified time.

Cause/Action

1. Pull out and reinsert Tray 5 and check for improper loading of paper.
2. Enter [dc122 Fault History](#). If this failure occurs frequently, go to [RAP 371.210](#).

372.101 Tray 3 Miss Feed

BSD-ON: [BSD 7.2 Paper Size Sensing \(3TM, TM\)](#)

BSD-ON: [BSD 8.2 Tray Module Paper Transportation \(1 of 4\) \(TTM\)](#)

The Tray 3 Feed Out Sensor does not turn On within the specified time after the Feed from Tray 2 has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

Procedure

Turn the power On and enter the Diag mode ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [072-001] (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?**

Y N
Is the voltage between the Tray Module PWB [P/J541-10](#) (+) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following.

- Between the Tray Module PWB [P/J550-1](#) and [P/J550-2](#)
- Between the Tray Module PWB [P/J550-3](#) and [P/J550-4](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N
Check the connection between the Tray Module PWB [P/J550](#) and the Tray 3 Feed/Lift Up Motor [P/J221](#) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor ([PL 10.3 Item 3](#)).

Measure the resistance between the Tray Module PWB [P/J550-1/2/3/4](#) and the Frame. **Is the resistance infinite for all?**

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button.

Turn On [dc330 Component Control](#) [077-035] (TM Takeaway Motor). **Does the TM Takeaway Motor rotate?**

Y N
Is the voltage between the TM Takeaway Motor [P/J224-2/5](#) (+) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Turn the power Off, disconnect the TM Takeaway Motor connector [P/J224](#). Measure the TM Takeaway Motor wire wound resistance.

- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-1](#)
- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-3](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-4](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-6](#)

Is the resistance approx. 0.85 Ohm for each? (At 25° C / 77° F)

Y N
Replace the TM Takeaway Motor ([REP 10.10](#)).

Measure the resistance between the disconnected TM Takeaway Motor connectors [P/J224-1/3/4/6](#) and the Frame. **Is the resistance infinite for all?**

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB [P/J551](#) and the TM Takeaway Motor [P/J224](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and open the L/H Cover. Turn On [DC330](#) [072-103] (Tray 3 Feed Out Sensor).

Move the Actuator manually to block/clear the light path to the Tray 3 Feed Out Sensor.

Does the display change between High/Low?

Y N
Use [Transmissive Sensor RAP](#) to check the Tray 3 Feed Out Sensor.

Press the Stop button and turn the power Off. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#))

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

372.102 Feed Out Sensor 3 On Jam (Tray 3/4)

BSD-ON: [BSD 8.2 Tray Module Paper Transportation \(1 of 4\) \(TTM\)](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3 of 4\) \(TTM\)](#)

The Tray 3/4 Feed Out Sensor does not turn On within the specified time after the Feed from Tray 3 or Tray 4 has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)
- The Tray 3/4 Feed Out Sensor for contamination, improper installation, and Actuator operation failure
- The Tray 3/4 Feed Out Sensor for failure: [dc330 Component Control \[072-103\] \(PL 10.12\)](#)
- The connection between the Tray 3 Feed Out Sensor [P/J108](#) and the Tray Module PWB [P/549](#) for open circuit, short circuit, and poor contact
- The TM Takeaway Motor for revolution failure: [dc330 Component Control \[077-035\] \(PL 10.9\)](#)
- The connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

372.210 Tray 3 Lift Up Fault

BSD-ON: [BSD 7.9 Tray 3 Paper Stacking \(3TM, TTM\)](#)

Tray 3 Lift Up NG has occurred 3 times in a row.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Remove Tray 3. Turn the power On and enter the Service Diag mode ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control \[072-001\]](#) (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?**

Y N

Is the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances.

- Between the Tray Module PWB [P/J550-1](#) and [P/J550-2](#)
- Between the Tray Module PWB [P/J550-3](#) and [P/J550-4](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N

Check the connection between the Tray Module PWB [P/J550](#) and the Tray 3 Feed/Lift Up Motor [P/J221](#) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor ([PL 10.3](#)).

Measure the resistance between the Tray Module PWB [P/J550-1/2/3/4](#) and the Frame.

Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button. Turn On [DC330 \[072-102\]](#) (Tray 3 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 3 Nudger Level Sensor. **Does the display change between High/Low?**

Y N

Use [Transmissive Sensor RAP](#) to check the Tray 3 Nudger Level Sensor.

Press the **Stop** button and turn the power Off. Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))

- MCU PWB (REP 18.5)

372.212 Tray 3 Paper Size Sensor Broken

BSD-ON: [BSD 7.2 Paper Size Sensing \(3TM, TM\)](#)

Abnormal Analog voltage to Digital value from Tray 3 Size Sensor was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 3 Paper Size Sensor for failure: [dc140 Analog Monitor](#) [072-200], [dc330 Component Control](#) [072-104] ([PL 10.1 Item 8](#))
- Check the connection between the Tray 3 Paper Size Sensor [P/J101](#) and the Tray Module PWB [P/549](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

372.900 Tray 3 Feed Out Sensor Static Jam

BSD-ON: [BSD 8.2 Tray Module Paper Transportation \(1 of 4\) \(TTM\)](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 3 Feed Out Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Tray 3 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 3 Feed Out Sensor for failure: [dc330 Component Control \[072-103\] \(PL 10.12\)](#)
- The connection between the Tray 3 Feed Out Sensor [P/J108-1](#) and the Tray Module PWB [P/549-A3](#) for short circuit
- The connection between the MD PWB [P592-A6](#) and the Tray Module PWB [P/J541-6](#) for short circuit

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

372.940 Tray 3 Lift Up NG

BSD-ON: [BSD 7.9 Tray 3 Paper Stacking \(3TM, TTM\)](#)

After the Tray 3 Lift Up has started, the Tray 3 Nudger Level Sensor did not turn On within the specified time.

Cause/Action

1. Pull out and reinsert Tray 3 and check for improper loading of paper.
2. Enter [dc122 Fault History](#). If this failure occurs frequently, go to [RAP 372.210](#).

373.101 Tray 4 Miss Feed

BSD-ON: BSD 8.3 Tray Module Paper Transportation (2 of 4) (TTM)

BSD-ON: BSD 7.10 Tray 4 Paper Stacking (3TM)

BSD-ON: BSD 8.4 Tray Module Paper Transportation (3 of 4) (TTM)

The Tray 4 Feed Out Sensor does not turn On within the specified time after the Feed from Tray 3 has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MD PWB [J592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

Procedure

Turn the power On and enter the Diag mode. Turn On [dc330 Component Control](#) [073-001] (Tray 4 Feed/Lift Up Motor). **Does the Tray 4 Feed/Lift Up Motor rotate?**

Y N

Is the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following.

- Between the Tray Module PWB [P/J550-5](#) and [P/J550-6](#)
- Between the Tray Module PWB [P/J550-7](#) and [P/J550-8](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N

Check the connection between the Tray Module PWB [P/J550](#) and the Tray 4 Feed/Lift Up Motor [P/J222](#) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor ([PL 10.3 Item 3](#)).

Measure the resistance between the Tray Module PWB [P/J550-5/6/7/8](#) and the Frame.

Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button. Turn On DC330 [077-037] (TM Takeaway Motor 2).

Does the TM Takeaway Motor 2 rotate?

Y N

Is the voltage between the TM Takeaway Motor 2 [P/J226-2/5 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Turn the power Off, disconnect the TM Takeaway Motor 2 connector [P/J226](#).

Measure the TM Takeaway Motor 2 wire wound resistance.

- Between the TM Takeaway Motor 2 [P/J226-2](#) and [P/J226-1](#)
- Between the TM Takeaway Motor 2 [P/J226-2](#) and [P/J226-3](#)
- Between the TM Takeaway Motor 2 [P/J226-5](#) and [P/J226-4](#)
- Between the TM Takeaway Motor 2 [P/J226-5](#) and [P/J226-6](#)

Is the resistance approx. 0.85 Ohm for each? (At 25° C / 77° F)

Y N

Replace the TM Takeaway Motor 2 ([PL 10.9](#)).

Measure the resistance between the disconnected TM Takeaway Motor 2 connectors [P/J226-1/3/4/6](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB [P/J552](#) and the TM Takeaway Motor 2 [P/J226](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and open the L/H Cover. Turn On DC330 [073-103] (Tray 4 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 3 Feed Out Sensor.

Does the display change between High/Low?

Y N

Use [Transmissive Sensor RAP](#) to check the Tray 4 Feed Out Sensor.

Press the **Stop** button and turn the power Off. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#))

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

373.102 Feed Out Sensor 3 On Jam (Tray 4)

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(2 of 4\) \(TTM\)](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3 of 4\) \(TTM\)](#)

The Tray 4 Feed Out Sensor does not turn On within the specified time after the Feed from Tray 4 has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to [Media and Tray Specifications](#)).
- The Tray 4 Feed Out Sensor for contamination, improper installation, and Actuator operation failure
- The Tray 4 Feed Out Sensor for failure: [dc330 Component Control \[073-103\] \(PL 10.12\)](#)
- The connection between the Tray 4 Feed Out Sensor [P/J112](#) and the Tray Module PWB [P/J548](#) for open circuit, short circuit, and poor contact
- The TM Takeaway Motor 2 for revolution failure: [dc330 Component Control \[077-037\] \(PL 10.9\)](#)
- The connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

373.210 Tray 4 Lift Up Fault

BSD-ON: [BSD 7.10 Tray 4 Paper Stacking \(3TM\)](#)

Tray 4 Lift Up NG has occurred 3 times in a row.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Remove Tray 4. Turn the power On and enter the Service Diag mode ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control \[073-001\]](#) (Tray 4 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?**

Y N

Is the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances.

- Between the Tray Module PWB [P/J550-5](#) and [P/J550-6](#)
- Between the Tray Module PWB [P/J550-7](#) and [P/J550-8](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N

Check the connection between the Tray Module PWB [P/J550](#) and the Tray 4 Feed/Lift Up Motor [P/J222](#) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor ([PL 10.3 Item 3](#)).

Measure the resistance between the Tray Module PWB [P/J550-5/6/7/8](#) and the Frame.

Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button. Turn On DC330 [073-102] (Tray 4 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 4 Nudger Level Sensor.

Does the display change between High/Low?

Y N

Use [Transmissive Sensor RAP](#) to check the Tray 4 Nudger Level Sensor.

Press the **Stop** button and turn the power Off.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load.

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))

- MD PWB (REP 18.6)
- MCU PWB (REP 18.5)

373.212 Tray 4 Paper Size Sensor Broken

BSD-ON: [BSD 7.3 Tray 4 Paper Size Sensing \(3TM\)](#)

Abnormal Analog voltage to Digital value from Tray 4 Size Sensor was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 4 Paper Size Sensor for failure: [dc330 Component Control \[073-104\] \(PL 10.1\)](#)
- The connection between the Tray 4 Paper Size Sensor [P/J102](#) and the Tray Module PWB [P/549](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

373.900 Tray 4 Feed Out Sensor Static Jam

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(2 of 4\) \(TTM\)](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 4 Feed Out Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Tray 4 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 4 Feed Out Sensor for failure: [dc330 Component Control \[073-103\] \(PL 10.12\)](#)
- The connection between the Tray 4 Feed Out Sensor [P/J112-2](#) and the Tray Module PWB [P/J548-11](#) for short circuit
- The connection between the MD PWB [J592-A7](#) and the Tray Module PWB [P/J541-7](#) for short circuit

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

373.940 Tray 4 Lift Up NG

BSD-ON: [BSD 7.10 Tray 4 Paper Stacking \(3TM\)](#)

After the Tray 4 Lift Up has started, the Tray 4 Nudger Level Sensor did not turn On within the specified time.

Cause/Action

1. Pull out and reinsert Tray 4 and check for improper loading of paper.
2. Enter [dc122 Fault History](#). If this failure occurs frequently, go to [RAP 372.210](#).

374.101 Tray 5 Miss Feed

BSD-ON: [BSD 7.11 Tray 5 Paper Stacking \(3TM\)](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3 of 4\) \(TTM\)](#)

BSD-ON: [BSD 8.5 Tray Module Paper Transportation \(4 of 4\) \(TTM\)](#)

The Tray 5 Feed Out Sensor does not turn On within the specified time after the Feed from Tray 4 has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

Procedure

Turn the power On and enter Service Diag mode ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [074-001] (Tray 5 Feed/Lift Up Motor). **Does the Tray 5 Feed/Lift Up Motor rotate?**

Y N
Is the voltage between the Tray Module PWB [P/J541-10](#) (+) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 5 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following.

- Between the Tray Module PWB [P/J550-9](#) and [P/J550-10](#)
- Between the Tray Module PWB [P/J550-11](#) and [P/J550-12](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N
Check the connection between the Tray Module PWB [P/J550](#) and the Tray 5 Feed/Lift Up Motor [P/J223](#) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 5 Feed/Lift Up Motor ([PL 10.3](#)).

Measure the resistance between the Tray Module PWB [P/J550-9/10/11/12](#) and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

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Press the **Stop** button. Turn On DC330 [077-037] (TM Takeaway Motor 2).

Does the TM Takeaway Motor 2 rotate?

Y N
Is the voltage between the TM Takeaway Motor 2 [P/J226-2/5](#) (+) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Turn the power Off, disconnect the TM Takeaway Motor 2 connector [P/J226](#).

Measure the TM Takeaway Motor 2 wire wound resistance.

- Between the TM Takeaway Motor 2 [P/J226-2](#) and [P/J226-1](#)
- Between the TM Takeaway Motor 2 [P/J226-2](#) and [P/J226-3](#)
- Between the TM Takeaway Motor 2 [P/J226-5](#) and [P/J226-4](#)
- Between the TM Takeaway Motor 2 [P/J226-5](#) and [P/J226-6](#)

Is the resistance approx. 0.85 Ohm for each? (At 25° C / 77° F)

Y N
Replace the TM Takeaway Motor 2 ([PL 10.9](#)).

Measure the resistance between the disconnected TM Takeaway Motor 2 connectors [P/J226-1/3/4/6](#) and the Frame. **Is the resistance infinite for all?**

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB [P/J552](#) and the TM Takeaway Motor 2 [P/J226](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the Stop button and open the L/H Cover. Turn On DC330 [074-103] (Tray 5 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 5 Feed Out Sensor.

Does the display change between High/Low?

Y N
Use [Transmissive Sensor RAP](#) to check the Tray 5 Feed Out Sensor.

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#))

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))

A

374.210 Tray 5 (3TM) Lift Up Fault

BSD-ON: BSD 7.11 Tray 5 Paper Stacking (3TM)

Tray 5 Lift Up NG has occurred 3 times in a row.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Remove Tray 5. Turn the power On and enter the Diag mode (Entering Service Diagnostics). Turn On **dc330 Component Control** [074-001] (Tray 5 Feed/Lift Up Motor). **Does the Tray 5 Feed/Lift Up Motor rotate?**

Y N
Is the voltage between the Tray Module PWB **P/J541-10 (+)** and the GND (-) **+24VDC?**

Y N
Go to **+24VDC Power RAP**.

Turn the power Off, then measure the Tray 5 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following.

- Between the Tray Module PWB **P/J550-9** and **P/J550-10**
- Between the Tray Module PWB **P/J550-11** and **P/J550-12**

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N
Check the connection between the Tray Module PWB **P/J550** and the Tray 5 Feed/Lift Up Motor **P/J223** for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 5 Feed/Lift Up Motor (**PL 10.3**).

Measure the resistance between the Tray Module PWB **P/J550-9/10/11/12** and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB (**PL 10.9**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

Press the Stop button. Turn On DC330 [074-102] (Tray 5 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 5 Nudger Level Sensor.

Does the display change between High/Low?

Y N
Use **Transmissive Sensor RAP** to check the Tray 5 Nudger Level Sensor.

Press the **Stop** button and turn the power Off.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- Tray Module PWB (**PL 10.9**)

- MD PWB (REP 18.6)
- MCU PWB (REP 18.5)

374.212 Tray 5 Paper Size Sensor Broken

BSD-ON: BSD 7.6 Tray 5 Paper Size Sensing (TTM)

Abnormal output AD value from Tray 5 Size Sensor was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 5 Paper Size Sensor for failure: dc140 Analog Monitor [072-200], dc330 Component Control [072-104] (PL 10.1)
- The connection between the Tray 5 Paper Size Sensor P/J103 and the Tray Module PWB P/J549 for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB (REP 10.8)
- MD PWB (REP 18.6)
- MCU PWB (REP 18.5)

374.900 Tray 5 Feed Out Sensor Static Jam

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(2 of 4\) \(TTM\)](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 5 Feed Out Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Tray 5 Feed Out Sensor ([PL 11.5 Item 6](#)) for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 5 Feed Out Sensor for failure: [dc330 Component Control](#) [074-103]
- The connection between the Tray 5 Feed Out Sensor [P/J116-2](#) and the Tray Module PWB [P/J548-2](#) for short circuit
- The connection between the MD PWB [J592-B7](#) and the Tray Module PWB [P/J541-8](#) for short circuit

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

374.940 Tray 5 Lift Up NG

BSD-ON: [BSD 7.11 Tray 5 Paper Stacking \(3TM\)](#)

After the Tray 5 Lift Up has started, the Tray 5 Nudger Level Sensor did not turn On within the specified time.

Cause/Action

1. Pull out and reinsert Tray 5 and check for improper loading of paper.
2. Enter [dc122 Fault History](#). If this failure occurs frequently, go to the [374.210 RAP](#).

375.100 Tray 1 Miss Feed

BSD-ON: [BSD 7.14 Tray 1 Paper Stacking](#)

BSD-ON: [BSD 8.1 Tray 2 and Tray 1 Paper Transportation](#)

The Tray 1 Feed Out Sensor does not turn On within the specified time after the Feed from Tray 5 has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power On and enter the Service Diag mode ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [075-001] (Tray 1 Feed/Nudger Motor). **Does the Tray 1 Feed/Nudger Motor rotate?**

Y N

Is the voltage between the MD PWB [P/J520-1 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 1 Feed/Nudger Motor wire wound resistance. Check the resistance of the following.

- Between the MD PWB [P/J525-B10](#) and the [P/J525-B11](#)
- Between the MD PWB [P/J525-B12](#) and the [P/J525-B13](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N

Check the connection between the MD PWB [P/J525](#) and Tray 1 Feed/Nudger Motor [P/J269](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the Tray 1 Feed/Nudger Motor ([PL 13.2](#)).

Measure the resistance between the MD PWB [P/J525-B10/B11/B12/B13](#) and the Frame.

Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button. Turn On DC330 [077-104] (Tray 1 Feed Out Sensor). Activate the Actuator by using a sheet of paper, etc. to block/clear the light path to the Tray 1 Feed Out Sensor.

Does the display change between High/Low?

Y N

Use [Transmissive Sensor RAP](#) to check the Tray 1 Feed Out Sensor.

Press the Stop button and turn the power Off. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Front Chute Floating Snap for disengagement

- The Tray 1 Nudger Roll and Retard Spring for deformation and snags
- The Tray 1 Feed Roll and Nudger Roll for contamination, wear, and revolution failure
- The Tray 1 Feed Roll and Nudger Roll Drive Gears for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

375.103 Tray 1 Feed Out Sensor Off Jam

BSD-ON: [BSD 4.1 Main Drive Control](#)

BSD-ON: [BSD 8.1 Tray 2 and Tray 1 Paper Transportation](#)

BSD-ON: [BSD 9.34 2nd BTR Contact Retract Control](#)

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

The Tray 1 Feed Out Sensor does not turn Off within the specified time after the Reg Clutch On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to foreign substances/burrs on the paper path and deformed paper guides
- The Tray 1 Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Reg Roll and Pinch Roll for contamination, wear, and revolution failure
- The 2nd BTR for contamination, wear, and revolution failure
- The Tray 1 Takeaway Roll Drive Gear for wear and damage
- The Reg Roll Drive Gear for wear and damage
- The 2nd BTR Contact Retract Drive Gear for wear or damage
- The Fuser Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Tray 1 Feed Out Sensor for contamination, improper installation, and Actuator operation failure
- The Tray 1 Feed Out Sensor for failure: [dc330 Component Control \[077-104\] \(PL 13.4\)](#)
- The connection between the Tray 1 Feed Out Sensor [P/J179](#) and the MD PWB [P/J525](#) for open circuit, short circuit, and poor contact
- The Main Drive Motor for revolution failure: DC330 [042-002] ([PL 3.2](#))
- The 2nd BTR Contact Retract Motor for revolution failure: DC330 [094-003] (Contact), DC330 [094-004] (Retract) ([PL 14.4](#))
- The Fuser Drive Motor for revolution failure: DC330 [010-006] ([PL 3.1](#))
- The Takeaway Motor for revolution failure: DC330 [077-050] ([PL 15.1](#))
- The Reg Clutch for failure: DC330 [077-002] ([PL 15.2](#))

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

375.135 Reg Sensor On Jam (Tray 1)

BSD-ON: [BSD 8.6 Registration](#)

BSD-ON: [Chain 4 Start Print Power](#)

BSD-ON: [Chain 8 Paper Transportation](#)

The Reg Sensor does not turn On within the specified time after the Reg Clutch On after the Feed from the Tray 1 has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Tray 1 Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Tray 1 Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)
- The Reg Sensor for contamination, improper installation, and Actuator operation failure
- The Reg Sensor for failure: [dc330 Component Control \[077-103\] \(PL 15.2\)](#)
- The connection between the Reg Sensor [P/J160](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact
- The Main Drive Motor for revolution failure: DC330 [042-002] ([PL 3.2](#))
- The Takeaway Motor for revolution failure: DC330 [077-050] ([PL 15.1](#))

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

375.212 Tray 1 Nudger Up Down Fault

BSD-ON: [BSD 7.7 Tray 1 Paper Size Sensing](#)

The Tray 1 Nudger Position Sensor does not change within the specified time after the Tray 1 Nudger Up or Down operation has started.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power On and enter Service Diag mode ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [075-002] (Tray 1 Feed/Nudger Motor). **Does the Tray 5 Feed/Nudger Motor rotate?**

Y N
Is the voltage between the MD PWB [P/J520-1 \(+\)](#) and the GND (-) +24VDC?

Y N
Go to [+24VDC Power RAP](#).

Turn the power Off, then measure the Tray 1 Feed/Nudger Motor wire wound resistance. Check the resistance of the following.

- Between the MD PWB [P/J525-B10](#) and the [P/J525-B11](#)
- Between the MD PWB [P/J525-B12](#) and the [P/J525-B13](#)

Is the resistance approx. 4.0 Ohm for each? (At 25° C / 77° F)

Y N
Check the connection between the MD PWB [P/J525](#) and Tray 1 Feed/Nudger Motor [P/J269](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the Tray 1 Feed/Nudger Motor ([PL 13.2 Item 6](#)).

Measure the resistance between the MD PWB [P/J525-B10/B11/B12/B13](#) and the Frame.

Is the resistance infinite for all?

Y N
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button. Turn On DC330 [075-102] (Tray 1 Nudger Position Sensor). Move the Shielding Board to block/clear the light path to the Tray 1 Nudger Position Sensor.

Does the display change between High/Low?

Y N
Use [Transmissive Sensor RAP](#) to check the Tray 1 Nudger Position Sensor.

Press the **Stop** button and turn the power Off.

Check the Tray 1 Nudger Roll Up/Down mechanism for mechanical loading, the springs for deformation or snags. If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.101 Reg Sensor Off Jam

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3 of 4\) \(TTM\)](#)

BSD-ON: [BSD 8.6 Registration](#)

BSD-ON: [BSD 4.1 Main Drive Control](#)

BSD-ON: [BSD 8.1 Tray 2 and Tray 1 Paper Transportation](#)

BSD-ON: [BSD 9.34 2nd BTR Contact Retract Control](#)

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

The Reg Sensor does not turn Off within the specified time after the Reg Clutch On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- Each Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Reg Roll and Pinch Roll for contamination, wear, and revolution failure
- The 2nd BTR for contamination, wear, and revolution failure
- Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Takeaway Roll Drive Gear for wear and damage
- The Reg Roll Drive Gear for wear and damage
- The 2nd BTR Contact Retract Drive Gear for wear or damage
- The Fuser Drive Gear for wear and damage
- Each Exit Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Reg Sensor for contamination, improper installation, and Actuator operation failure
- The Reg Sensor for failure: [dc330 Component Control \[077-103\] \(PL 15.2\)](#)
- The connection between the Reg Sensor [P/J160](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact
- The Main Drive Motor for revolution failure: DC330 [042-002] ([PL 3.2](#))
- The 2nd BTR Contact Retract Motor for revolution failure: DC330 [094-003] (Contact), DC330 [094-004] (Retract) ([PL 14.4](#))
- The Fuser Drive Motor for revolution failure: DC330 [010-006] ([PL 3.1](#))
- The Takeaway Motor for revolution failure: DC330 [077-050] ([PL 15.1](#))
- The Reg Clutch for failure: DC330 [077-002] ([PL 15.2](#))

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.103 Exit Sensor 1 Off Jam

BSD-ON: [BSD 10.7 Fusing](#)

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

BSD-ON: [BSD 10.11 Fused Paper Exit 2 \(3 of 4\)](#)

BSD-ON: [BSD 10.12 Fused Paper Exit 2 \(4 of 4\)](#)

After the Fuser Exit Sensor turned On, the Fuser Exit Sensor did not turn Off within the specified time.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Fuser for wound up, stuck paper
- Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Exit Roll Drive Gear for wear and damage
- The Exit 1 Gate for operation failure
- The Exit 2 Gate for operation failure
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Fuser Exit Sensor for contamination, improper installation, and Actuator operation failure
- The Fuser Exit Sensor for failure: [dc330 Component Control \[077-101\] \(PL 7.1\)](#)
- The connection between the Fuser Assembly [DJ600](#) and the MCU PWB [P/J431](#) for open circuit, short circuit, and poor contact
- The Fuser Drive Motor for revolution failure: DC330 [010-006] ([PL 3.1](#))
- The Exit 2 Drive Motor for revolution failure: DC330 [077-060] ([PL 17.4](#))
- The Exit 2 Gate Solenoid for failure: DC330 [077-003] ([PL 17.5](#))
- The Face Up Gate Solenoid for failure: DC330 [077-004] ([PL 17.5](#))

If no problems are found, replace the following parts in sequence:

- MCU PWB ([REP 18.5](#))
- MD PWB ([REP 18.6](#))

377.104 Exit Sensor 1 Off Jam (Too Short)

BSD-ON: [BSD 10.7 Fusing](#)

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

BSD-ON: [BSD 10.11 Fused Paper Exit 2 \(3 of 4\)](#)

BSD-ON: [BSD 10.12 Fused Paper Exit 2 \(4 of 4\)](#)

After the Fuser Exit Sensor turned On, the Fuser Exit Sensor turned Off before the specified time has passed.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Fuser for wound up, stuck paper
- Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Exit Roll Drive Gear for wear and damage
- The Exit 1 Gate for operation failure
- The Exit 2 Gate for operation failure
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Fuser Exit Sensor for contamination, improper installation, and Actuator operation failure
- The Fuser Exit Sensor for failure: [dc330 Component Control \[077-101\] \(PL 7.1\)](#)
- The connection between the Fuser Assembly [DJ600](#) and the MCU PWB [P/J431](#) for open circuit, short circuit, and poor contact
- The Fuser Drive Motor for revolution failure: [DC330 \[010-006\] \(PL 3.1\)](#)
- The Exit 2 Drive Motor for revolution failure: [DC330 \[077-060\] \(PL 17.4\)](#)
- The Exit 2 Gate Solenoid for failure: [DC330 \[077-003\] \(PL 17.5\)](#)
- The Face Up Gate Solenoid for failure: [DC330 \[077-004\] \(PL 17.5\)](#)

If no problems are found, replace the following parts in sequence:

- MCU PWB ([REP 18.5](#))
- MD PWB ([REP 18.6](#))

377.105 Exit Sensor 2 Off Jam

BSD-ON: [BSD 10.10 Fused Paper Exit 2 \(2 of 4\)](#)

BSD-ON: [BSD 10.11 Fused Paper Exit 2 \(3 of 4\)](#)

BSD-ON: [BSD 10.12 Fused Paper Exit 2 \(4 of 4\)](#)

After the Exit 2 Sensor turned On, the Exit 2 Sensor did not turn Off within the specified time.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Exit 2 Roll and Pinch Roll for contamination, wear, and revolution failure
- The Face Up Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- The Exit 2 Roll Drive Gear for wear and damage
- The Exit 2 Gate for operation failure
- The Face Up Exit Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Exit 2 Sensor for contamination, improper installation, and Actuator operation failure
- The Exit 2 Sensor for failure: [dc330 Component Control \[077-100\] \(PL 17.4\)](#)
- The connection between the Exit 2 Sensor [P/J164](#) and the MD PWB [P/J522](#) for open circuit, short circuit, and poor contact
- The Exit 2 Drive Motor for revolution failure: [DC330 \[077-060\] \(PL 17.4\)](#)
- The Face Up Gate Solenoid for failure: [DC330 \[077-004\] \(PL 17.5\)](#)

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.106 Exit Sensor 1 On Jam

BSD-ON: [BSD 10.7 Fusing](#)

BSD-ON: [BSD 4.1 Main Drive Control](#)

BSD-ON: [BSD 8.1 Tray 2 and Tray 1 Paper Transportation](#)

BSD-ON: [BSD 8.6 Registration](#)

BSD-ON: [BSD 9.34 2nd BTR Contact Retract Control](#)

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

The Fuser Exit Sensor does not turn On within the specified time after the Reg Clutch On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- Each Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Reg Roll and Pinch Roll for contamination, wear, and revolution failure
- The 2nd BTR for contamination, wear, and revolution failure
- The Fuser for wound up, stuck paper
- Each Takeaway Roll Drive Gear for wear and damage
- The Reg Roll Drive Gear for wear and damage
- The 2nd BTR Contact Retract Drive Gear for wear or damage
- The Fuser Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Fuser Exit Sensor for contamination, improper installation, and Actuator operation failure
- The Fuser Exit Sensor for failure: [dc330 Component Control](#) [077-101] ([PL 7.1](#))
- The connection between the Fuser Assembly [DJ600](#) and the MCU PWB [P/J431](#) for open circuit, short circuit, and poor contact
- The Main Drive Motor for revolution failure: DC330 [042-002] ([PL 3.2](#))
- The 2nd BTR Contact Retract Motor for revolution failure: DC330 [094-003] (Contact), DC330 [094-004] (Retract) ([PL 14.4](#))
- The Fuser Drive Motor for revolution failure: DC330 [010-006] ([PL 3.1](#))
- The Takeaway Motor for revolution failure: DC330 [077-050] ([PL 15.1](#))
- The Reg Clutch for failure: DC330 [077-002] ([PL 15.2](#))

If no problems are found, replace the following parts in sequence:

- MCU PWB ([REP 18.5](#))
- MD PWB ([REP 18.6](#))

377.109 Exit Sensor 2 On Jam

BSD-ON: [BSD 10.10 Fused Paper Exit 2 \(2 of 4\)](#)

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

BSD-ON: [BSD 10.11 Fused Paper Exit 2 \(3 of 4\)](#)

BSD-ON: [BSD 10.12 Fused Paper Exit 2 \(4 of 4\)](#)

After the Fuser Exit Sensor turned On, the Exit 2 Sensor did not turn ON within the specified time.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- The Fuser for wound up, stuck paper
- Each Exit Roll Drive Gear for wear and damage
- The Exit 2 Gate for operation failure
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Exit 2 Sensor for contamination, improper installation, and Actuator operation failure
- The Exit 2 Sensor for failure: [dc330 Component Control](#) [077-100] ([PL 17.4](#))
- The connection between the Exit 2 Sensor [P/J164](#) and the MD PWB [P/J522](#) for open circuit, short circuit, and poor contact
- The Fuser Drive Motor for revolution failure: DC330 [010-006] ([PL 3.1](#))
- The Exit 2 Drive Motor for revolution failure: DC330 [077-060] ([PL 17.4](#))
- The Exit 2 Gate Solenoid for failure: DC330 [077-003] ([PL 17.5](#))

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.110 POB Sensor On Jam

BSD-ON: [BSD 9.36 Stripping](#)

BSD-ON: [BSD 4.1 Main Drive Control](#)

BSD-ON: [BSD 8.1 Tray 2 and Tray 1 Paper Transportation](#)

BSD-ON: [BSD 8.6 Registration](#)

BSD-ON: [BSD 9.34 2nd BTR Contact Retract Control](#)

The POB Sensor does not turn On within the specified time after the Reg Clutch On.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- Each Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Reg Roll and Pinch Roll for contamination, wear, and revolution failure
- The 2nd BTR for contamination, wear, and revolution failure
- The Transfer Belt for wound up, stuck paper
- Each Takeaway Roll Drive Gear for wear and damage
- The Reg Roll Drive Gear for wear and damage
- The 2nd BTR Contact Retract Drive Gear for wear or damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The POB Sensor for contamination and improper installation
- The POB Sensor for failure: [dc330 Component Control](#) [077-102] ([PL 14.4](#))
- The connection between the POB Sensor [P/J180](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact
- The Main Drive Motor for revolution failure: DC330 [042-002] ([PL 3.2](#))
- The 2nd BTR Contact Retract Motor for revolution failure: DC330 [094-003] (Contact), DC330 [094-004] (Retract) ([PL 14.4](#))
- The Takeaway Motor for revolution failure): DC330 [077-050] ([PL 15.1](#))
- The Regret Clutch for failure: DC330 [077-002] ([PL 15.2](#))

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.130 Reg Sensor On Jam (Duplex Direct)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(3 of 4\) \(TTM\)](#)

BSD-ON: [BSD 10.14 Duplex Transportation \(2 of 2\)](#)

The Reg Sensor does not turn On within the specified time after the Reg Clutch On after the Feed has started in Duplex Direct mode.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- Each Duplex Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Duplex Roll Drive Gear for wear and damage
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Reg Sensor for contamination, improper installation, and Actuator operation failure
- The Reg Sensor for failure: [dc330 Component Control](#) [077-103] ([PL 15.2](#))
- The connection between the Reg Sensor [P/J160](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact
- The Duplex Motor for revolution failure: DC330 [077-073] ([PL 14.5](#))

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.131 Duplex Wait Sensor On Jam

BSD-ON: [BSD 10.13 Duplex Transportation \(1 of 2\)](#)

BSD-ON: [BSD 10.11 Fused Paper Exit 2 \(3 of 4\)](#)

BSD-ON: [BSD 10.12 Fused Paper Exit 2 \(4 of 4\)](#)

BSD-ON: [BSD 10.14 Duplex Transportation \(2 of 2\)](#)

The Duplex Wait Sensor does not turn On within the specified time after the Exit 2 Drive Motor has started rotating in the Duplex intake direction.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- Each Duplex Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Duplex Roll Drive Gear for wear and damage
- Each Exit Roll Drive Gear for wear and damage
- The Exit 2 Gate for operation failure
- Use of paper out of spec (refer to the [Media and Tray Specifications](#)).
- The Duplex Wait Sensor for contamination, improper installation, and Actuator operation failure
- The Duplex Wait Sensor for failure: [dc330 Component Control \[077-108\] \(PL 14.5\)](#)
- The connection between the Duplex Wait Sensor [P/J175](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact
- The Duplex Motor for revolution failure: [DC330 \[077-073\] \(PL 14.5\)](#)
- The Exit 2 Drive Motor for revolution failure: [DC330 \[077-062\] \(PL 17.4\)](#)
- The Exit 2 Gate Solenoid for failure: [DC330 \[077-003\] \(PL 17.5\)](#)

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.211 Tray Module Kind Mismatch

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

A different type of Tray Module is connected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the following:
 - The DIP Switch settings on the Tray Module PWB

Table 1 DIP Switch Settings

Tray Type	SW1	SW2	SW3	SW4
3TM	ON	OFF	OFF	ON
TTM	OFF	ON	ON	ON

- The connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.212 Tray Module Reset Fault

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

BSD-ON: [BSD 1.9 Option DC Power Distribution](#)

The Tray Module reset was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check whether the voltage between the Tray Module PWB [P/J541-12 \(+\)](#) and the GND (-) is +5VDC and whether the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) is +24VDC.
3. Turn the power Off and check the connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.214 Tray Module Logic Fault

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

I/F mismatch between the IOT and the Tray Module was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.215 Tray Module Communication Fault

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

Communication error between Tray Module PWB and MCU PWB was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the connection between the MD PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.300 Front Cover Interlock Open

BSD-ON: [BSD 1.10 Power Interlock Switching \(1 of 2\)](#)

The Front Cover is open.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Front Cover for damage or mismatch.
- The Front Cover Interlock Switch for failure: [dc330 Component Control \[077-303\] \(PL 18.5\)](#)
- The connection between the Front Cover Interlock Switch [P/J101](#) and the MD PWB [P/J521](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.301 L/H Cover Interlock Open

BSD-ON: [BSD 1.10 Power Interlock Switching \(1 of 2\)](#)

The L/H Cover is open.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The L/H Cover Unit for damage or mismatch
- The L/H Cover Interlock Switch for failure: [dc330 Component Control \[077-300\] \(PL 14.1\)](#)
- The connection between the L/H Cover Interlock Switch [P/J100](#) and the MD PWB [P/J534](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.305 Tray Module L/H Cover Open

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(2 of 4\) \(TTM\)](#)

The Tray Module L/H Cover is open.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check the following:

- The Tray Module L/H Cover for damage or mismatch
- The Tray Module L/H Cover Switch for failure: [dc330 Component Control \[077-306\] \(PL 10.12\)](#)
- The connection between the Tray Module L/H Cover Switch [P/J104](#) and the Tray Module PWB [P/J549](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the Tray Module PWB ([REP 10.8](#)).

377.307 Duplex Cover Open

BSD-ON: [BSD 10.13 Duplex Transportation \(1 of 2\)](#)

The Duplex Cover is open.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Duplex Cover for damage or mismatch.
- The Duplex Cover Switch for failure: [dc330 Component Control \[077-305\] \(PL 14.5\)](#)
- The connection between the Duplex Cover Switch [P/J176](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.308 L/H High Cover Open

BSD-ON: [BSD 10.9 Fused Paper Exit 2 \(1 of 4\)](#)

The L/H High Cover is open.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The L/H High Cover Assembly for damage or mismatch
- The L/H High Cover Switch for failure: [dc330 Component Control \[077-302\] \(PL 17.4\)](#)
- The connection between the L/H High Cover Switch [P/J168](#) and the MD PWB [P/J522](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.314 P/H Module Logic Fault

BSD-ON: [BSD 3.2 PWB Communication \(2 of 4\)](#)

A fatal error was detected in the Tray Module.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the connection between the MD PWB [P/J542](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.320 All Feed Tray Broken

All the Feed Trays that are connected to the IOT were detected to have malfunctioned.

Cause/Action

Enter [dc122 Fault History](#). Go to the RAP of the affected Paper Tray.

377.602 Transparency Sensor Fault

BSD-ON: [BSD 8.6 Registration](#)

An abnormal value was detected from the Transparency Sensor. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Transparency Sensor and Reflective Prism for contamination and improper installation
- Use of Transparency out of spec (refer to the [Media and Tray Specifications](#)).
- The Transparency Sensor for failure: [dc140 Analog Monitor](#) [077-200] ([PL 15.2](#))
- The connection between the Transparency Sensor [P/J161](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact
- The connector ([P/J452](#)) between the MD PWB and the MCU PWB for poor connection

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.900 Reg Sensor Static Jam

BSD-ON: [BSD 8.6 Registration](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Reg Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Reg Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Reg Sensor for failure: [dc330 Component Control](#) [077-103] ([PL 15.2](#))
- The connection between the Reg Sensor [P/J160](#) and the MD PWB [P/J523](#) for short circuit

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.901 Exit Sensor 1 Static Jam

BSD-ON: [BSD 10.7 Fusing](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Fuser Exit Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Fuser Exit Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Fuser Exit Sensor for failure: [dc330 Component Control \[077-101\] \(PL 7.1\)](#)
- The connection between the Fuser Assembly [DJ600](#) and the MCU PWB [P/J431](#) for short circuit

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

377.902 Exit Sensor 2 Static Jam

BSD-ON: [BSD 10.10 Fused Paper Exit 2 \(2 of 4\)](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Exit 2 Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Exit 2 Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Exit 2 Sensor for failure: [dc330 Component Control \[077-100\] \(PL 17.4\)](#)
- The connection between the Exit 2 Sensor [P/J164](#) and the MD PWB [P/J522](#) for short circuit
- The L/H High Cover Assembly for damage or mismatch

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.903 POB Sensor Static Jam

BSD-ON: [BSD 9.36 Stripping](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the POB Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The POB Sensor for remaining paper, contamination, or improper installation
- The POB Sensor for failure: [dc330 Component Control](#) [077-102] ([PL 14.4](#))
- The connection between the POB Sensor [P/J180](#) and the MD PWB [P/J523](#) for short circuit

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

377.907 Duplex Wait Sensor Static Jam

BSD-ON: [BSD 10.13 Duplex Transportation \(1 of 2\)](#)

When the power was turned On, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Duplex Wait Sensor detected paper.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Duplex Wait Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Duplex Wait Sensor for failure: [dc330 Component Control](#) [077-108] ([PL 14.5](#))
- The connection between the Duplex Wait Sensor [P/J175](#) and the MD PWB [P/J523](#) for short circuit

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

378.210 Tray 4 (TTM) Lift Failure

BSD-ON: [BSD 1.9 Option DC Power Distribution](#)

BSD-ON: [BSD 7.12 Tray 4 Paper Stacking \(TTM\)](#)

After the Tray 4 Lift/Feed Motor turned on, the Tray 4 Level Sensor did not turn on within the specified time.

Initial Actions

- Reload paper in the tray correctly.
- Remove foreign substances in the tray.
- Power Off/On

Procedure

Execute [dc330 Component Control](#) [073-004] Tray 4 Lift/Feed Motor On. **The Tray 3 Lift/Feed Motor can be heard.**

Y N

There is +24 VDC from [P/J541](#) pin 10 on the Tray Module PWB to GND.

Y N

Refer to [BSD 1.9 Option DC Power Distribution](#) and the +24 VDC-4 Wirenet to troubleshoot the 24 VDC circuit.

Turn Off the power. Remove the Tray 4 Lift/Feed Motor, then measure the following resistances.

- Between [P/J222](#) pin-1 and [P/J222](#) pin-2
- Between [P/J222](#) pin-3 and [P/J222](#) pin-4

All resistances are approx. 4 Ohms at 25° C / 77° F.

Y N

Replace the Tray 4 Lift/Feed Motor ([PL 11.9 Item 4](#)).

Check the wires between [P/J222](#) on the Tray 4 Lift/Feed Motor and [P/J550](#) on the Tray Module PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Replace the Tray 4 Feed/Lift Motor ([PL 11.9 Item 4](#)). If the problem continues, replace the following in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Check the installation of the Tray 4 Level Sensor ([PL 11.9 Item 7](#)) and the operation of the actuator. **The Level Sensor is installed correctly and the actuator works.**

Y N

Reinstall the Tray 4 Level Sensor ([PL 11.9 Item 7](#)).

Execute DC330 [073-102], Tray 4 Level Sensor. Manually activate the Tray 4 Level Sensor ([PL 11.9 Item 7](#)). **The display changes.**

Y N

Check the wires between [P/J111](#) on the Tray 4 Level Sensor and [P/J548](#) on the Tray Module PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Disconnect [P/J548](#) on the Tray Module PWB. **There is approx. +5VDC from P 548 pin 13 to GND.**

Y N

Replace the Tray Module PWB ([REP 10.8](#)).

Reconnect [P/J548](#). Monitor the voltage between [P/J548-15 \(+\)](#) and GND (-) while you activate the actuator of the Tray 4 Level Sensor. **The voltage changes.**

Y N

Replace the Tray 4 Level Sensor ([PL 11.9 Item 7](#)).

Replace the following in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Check the mechanical components of the lift mechanism for dirty or damaged gears, broken or out-of-place cables. If a problem is found replace the Tray 4 Assembly ([REP 11.2](#)). If the check is good, replace the following in sequence:

- Tray Module PWB ([REP 10.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

378.211 Tray 5 (TTM) Lift Failure

BSD-ON: BSD 1.9 Option DC Power Distribution

BSD-ON: BSD 7.13 Tray 5 Paper Stacking (TTM)

After the Tray 5 Lift/Feed Motor turned on, the Tray 5 Level Sensor did not turn on within the specified time.

Initial Actions

- Reload paper in the tray correctly.
- Remove foreign substances in the tray.
- Power Off/On

Procedure

Execute **dc330 Component Control** [074-004] Tray 5 Lift/Feed Motor On. **The Tray 4 Lift/Feed Motor can be heard.**

Y N

There is +24 VDC from - P/J541 pin 10 on the Tray Module PWB to GND.

Y N

Refer to **BSD 1.9 Option DC Power Distribution** and the +24 VDC-4 Wirenet to troubleshoot the 24 VDC circuit.

Turn Off the power. Remove the Tray 5 Lift/Feed Motor, then measure the following resistances.

- Between P/J223 pin-1 and P/J223 pin-2
- Between P/J223 pin-3 and P/J223 pin-4

All resistances are approx. 4 Ohms at 25° C / 77° F.

Y N

Replace the Tray 5 Lift/Feed Motor (**PL 11.11 Item 4**).

Check the wires between P/J223 on the Tray 5 Lift/Feed Motor and P/J550 on the Tray Module PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Replace the Tray 5 Feed/Lift Motor (**PL 11.11 Item 4**). If the problem continues, replace the following in sequence:

- Tray Module PWB (**REP 10.8**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

Check the installation of the Tray 5 Level Sensor (**PL 11.11 Item 7**) and the operation of the actuator. **The Level Sensor is installed correctly and the actuator works.**

Y N

Reinstall the Tray 5 Level Sensor (**PL 11.11 Item 7**).

Execute DC330 [074-102], Tray 5 Level Sensor. Manually activate the Tray 5 Level Sensor (**PL 11.11 Item 7**). **The display changes.**

Y N

Check the wires between P/J115 on the Tray 5 Level Sensor and P/J548 on the Tray Module PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Disconnect P/J548 on the Tray Module PWB. **There is approx. +5VDC from P 548 pin 4 to GND.**

Y N

Replace the Tray Module PWB (**PL 11.7**).

Reconnect P/J548. Monitor the voltage between P/J548-6 (+) and GND (-) while you activate the actuator of the Tray 5 Level Sensor. **The voltage changes.**

Y N

Replace the Tray 5 Level Sensor (**PL 11.11 Item 7**).

Replace the following in sequence:

- Tray Module PWB (**REP 10.8**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

Check the mechanical components of the lift mechanism for dirty or damaged gears, broken or out-of-place cables. If a problem is found replace the Tray 5 Assembly (**REP 11.1**). If the check is good, replace the following in sequence:

- Tray Module PWB (**PL 11.7**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

378.945 TTM Tray 4 Lift NG

There is a problem with the TTM Tray 4 Lift.

Procedure

Go to the [389.617](#) RAP.

378.946 TTM Tray 5 Lift NG

There is a problem with the TTM Tray 5 Lift.

Procedure

Go to the [389.617](#) RAP.

389.600 RC Sample Lateral Fail-A1

BSD-ON: [BSD 6.12 Color Registration Control](#)

There is an error with the Cyan fast scan position that is used as a reference during A1 (fine adjustment pattern) and C patch detection. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in [Table 1](#). Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389.617](#) is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the installation status of the IBT Assembly. **Is the IBT Assembly installed properly?**

Y N
| Install the IBT Assembly properly.

Replace the IBT Assembly ([REP 6.2](#))

389.601 RC Sample Block Fail-A1-In

BSD-ON: [BSD 6.12 Color Registration Control](#)

During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 003 in [dc612 Print Test Patterns](#) and check the print-out of the fine adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of [dc131 NVM Read/Write \[870-207\]](#) to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in [Table 1](#). Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389.617](#) is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Cause/Action

1. Check the detection section of the MOB Sensor for contamination, the connectors for disconnection, and the connections for open circuit, short circuit, and poor contact. If no problems are found, replace the MOB ADC Assembly ([REP 18.13](#)).

389.603 RC Sample Block Fail-A1-Out

BSD-ON: [BSD 6.12 Color Registration Control](#)

During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 003 in [dc612 Print Test Patterns](#) and check the print-out of the fine adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of [dc131 NVM Read/Write \[870-207\]](#) to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in [Table 1](#). Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389.617](#) is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Cause/Action

1. Check the detection section of the MOB Sensor for contamination, the connectors for disconnection, and the connections for open circuit, short circuit, and poor contact. If no problems are found, replace the MOB ADC Assembly ([REP 18.13](#)).

389.604 RC Sample Block Fail-B-#1-In

BSD-ON: [BSD 6.12 Color Registration Control](#)

During the B (rough adjustment pattern) patch detection, the #1 (Yellow) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in [dc612 Print Test Patterns](#) and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of [dc131 NVM Read/Write \[870-207\]](#) to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389.617](#) is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of Y color. **Is the density of Y color normal?**

Y N

Adjust to correct the density of Y color.

Check the connection between the MOB Sensor In [P/J150](#) and the MCU PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the MOB Sensor In [P/J150](#) to the MCU PWB [P/J415](#) properly.

Check the Y Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N

Replace the Developer (Y) ([PL 5.2 Item 9](#)).

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N
Replace the IBT Assembly (REP 6.2).

Check the Y Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N
Replace the Imaging Unit (Y) (REP 8.1)

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.606 RC Sample Block Fail-B-#1-Out

BSD-ON: BSD 6.12 Color Registration Control

During the B (rough adjustment pattern) patch detection, the #1 (Yellow) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in *dc612 Print Test Patterns* and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of *dc131 NVM Read/Write [870-207]* to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389.617 is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of Y color. **Is the density of Y color normal?**

Y N
Adjust to correct the density of Y color.

Check the connection between the MOB Sensor Out P/J151 and the MCU PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N
Connect the MOB Sensor Out P/J151 to the MCU PWB P/J415 properly.

Check the Y Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N
Replace the Developer (Y) (PL 5.2 Item 9).

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N
Replace the IBT Assembly (REP 6.2).

Check the Y Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N
Replace the Imaging Unit (Y) (REP 8.1).

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.607 RC Sample Block Fail-B-#2-In

BSD-ON: BSD 6.12 Color Registration Control

During the B (rough adjustment pattern) patch detection, the #2 (Magenta) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in *dc612 Print Test Patterns* and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of *dc131 NVM Read/Write [870-207]* to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389.617 is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of M color. **Is the density of M color normal?**

Y N
Adjust to correct the density of M color.

Check the connection between the MOB Sensor In P/J150 and the MCU PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N
Connect the MOB Sensor In P/J150 to the MCU PWB P/J415 properly.

Check the M Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N
Replace the Developer (M) (PL 5.2 Item 8).

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N
Replace the IBT Assembly(REP 6.2)

Check the M Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N
Replace the Imaging Unit (M) (REP 8.1)

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.609 RC Sample Block Fail-B-#2-Out

BSD-ON: BSD 6.12 Color Registration Control

During the B (rough adjustment pattern) patch detection, the #2 (Magenta) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in *dc612 Print Test Patterns* and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of *dc131 NVM Read/Write [870-207]* to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in [Table 1](#). Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389.617](#) is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of M color. **Is the density of M color normal?**

Y N
Adjust to correct the density of M color.

Check the connection between the MOB Sensor In [P/J151](#) and the MCU PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N
Connect the MOB Sensor Out [P/J151](#) to the MCU PWB [P/J415](#) properly.

Check the M Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N
Replace the Developer (M) ([PL 5.2 Item 8](#)).

A

A

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N

Replace the IBT Assembly (REP 6.2).

Check the M Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N

Replace the Imaging Unit (M) (REP 8.1)

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.610 RC Sample Block Fail-B-#3-In

BSD-ON: BSD 6.12 Color Registration Control

During the B (rough adjustment pattern) patch detection, the #3 (Cyan) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in *dc612 Print Test Patterns* and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of *dc131 NVM Read/Write [870-207]* to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in Table 1. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389.617 is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of C color. **Is the density of C color normal?**

Y N

Adjust to correct the density of C color.

Check the connection between the MOB Sensor In P/J150 and the MCU PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the MOB Sensor In P/J150 to the MCU PWB P/J415 properly.

Check the C Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N

Replace the Developer (C) (PL 5.2 Item 7).

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N
Replace the IBT Assembly(REP 6.2)

Check the C Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N
Replace Imaging Unit (C). (REP 8.1)

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.612 RC Sample Block Fail-B-#3-Out

BSD-ON: BSD 6.12 Color Registration Control

During the B (rough adjustment pattern) patch detection, the #3 (Cyan) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in *dc612 Print Test Patterns* and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of *dc131 NVM Read/Write [870-207]* to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in **Table 1**. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, **389.617** is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of C color. **Is the density of C color normal?**

Y N
Adjust to correct the density of C color.

Check the connection between the MOB Sensor Out **P/J151** and the MCU PWB **P/J415** for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N
Connect the MOB Sensor Out **P/J151** to the MCU PWB **P/J415** properly.

Check the C Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N
Replace the Developer (C) (**PL 5.2 Item 7**).

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N
Replace the IBT Assembly (REP 6.2).

Check the C Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N
Replace Imaging Unit (C). (REP 8.1)

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.613 RC Sample Block Fail-B-#4-In

BSD-ON: BSD 6.12 Color Registration Control

During the B (rough adjustment pattern) patch detection, the #4 (Black) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in *dc612 Print Test Patterns* and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of *dc131 NVM Read/Write [870-207]* to "7".

- When turning the power Off turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389.617 is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of K color. **Is the density of K color normal?**

Y N
Adjust to correct the density of K color.

Check the connection between the MOB Sensor In P/J150 and the MCU PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N
Connect the MOB Sensor In P/J150 to the MCU PWB P/J415 properly.

Check the K Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N
Replace the Developer (K) (PL 5.2 Item 6).

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N
Replace the IBT Assembly (REP 6.2).

Check the K Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N
Replace the Imaging Unit (K) (REP 8.1)

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.615 RC Sample Block Fail-B-#4-Out

BSD-ON: BSD 6.12 Color Registration Control

During the B (rough adjustment pattern) patch detection, the #4 (Black) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: •When this Fail occurs, select No. 004 in *dc612 Print Test Patterns* and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of *dc131 NVM Read/Write [870-207]* to "7".

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in [Table 1](#). Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389.617](#) is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check the density of K color. **Is the density of K color normal?**

Y N
Adjust to correct the density of K color.

Check the connection between the MOB Sensor Out [P/J151](#) and the MCU PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N
Connect the MOB Sensor Out [P/J151](#) to the MCU PWB [P/J415](#) properly.

Check the K Magnet Roll for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

Y N
Replace the Developer (K) ([PL 5.2 Item 6](#)).

Check the Transfer Belt for contamination, scratches, and distortion. **Is the Transfer Belt normal?**

Y N
 Replace the IBT Assembly(PL 6.1)

Check the K Imaging Unit for contamination, scratches, and distortion. **Is the Imaging Unit normal?**

Y N
 Replace the Imaging Unit (K) (REP 8.1).

Replace the MOB ADC Assembly (REP 18.13). If the problem persists, replace the MCU PWB (REP 18.5).

389.616 RC Data Over Flow Fail

BSD-ON: BSD 6.12 Color Registration Control

The correction setting value of calculation result has exceeded the settable range. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in Table 1. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389.617 is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check which item has reached the maximum adjustment amount shown in the following table.

Table 2 Max Adjustment

Correction item	Adjustment Range	
	MIN	MAX
Fast Scan Margin	-90	+90
Slow Scan Margin	-4720	+4720
Skew	-800	+800

Is the item that has reached the adjustment range (MIN or MAX), "Fast Scan Margin" or "Slow Scan Margin"?

Y N
 Check the following:

- Check that the value of dc131 NVM Read/Write [760-024] is "0".
- The Imaging Unit (Y, M, C, K) for improper installation.

If no problems are found, replace the following parts in sequence:

- Imaging Unit (Y, M, C, K) (REP 8.1)
- LPH Unit (Y, M, C, K) (REP 2.2)

A

A

- Rear Holder Assembly (REP 2.1)

Is the item that has reached the adjustment range (MIN or MAX) "Slow Scan Margin"?

Y N

Raise/lower the LPH (Y, M, C, K) 2 to 3 times to check the LPH lift up/down mechanism. If the problem persists, replace the LPH Unit (Y, M, C, K) (REP 2.2).

Replace the MCU PWB (REP 18.5).

389.617 RC Lead Regi Over Range Fail

BSD-ON: Chain 3 Machine Run Control

The result from adding the offset value to the color registration correction value has exceeded the settable range. (This is a hidden failure. The Alignment Lead Regi or Skew might have exceeded the adjustable range and Data is only recorded in history.)

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389.617 is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Cause/Action

1. Check that the value of dc131 NVM Read/Write [760-063] is "0". (Because this Fail occurs only when the NVM write data is incorrect or the NVM is corrupted, if the setting value is not "0", reset it to "0".)
2. Check that the value of DC131 [760-082] is between the values of DC131 [760-084] and DC131 [760-085]. (If it is not, set the value of DC131 [760-082] to be between the values of DC131 [760-084] and DC131 [760-085].)
3. Check that the value of DC131 [760-083] is between the values of DC131 [760-084] and DC131 [760-085]. (If it is not, set the value of DC131 [760-083] to be between the values of DC131 [760-084] and DC131 [760-085].)

389.625 RC Data Linearity Fail Y

BSD-ON: **BSD 6.12 Color Registration Control**

The result from adding the skew/bow correction value to the Y color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, **389.617** is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check that the value stored in LPH (Y) EEPROM is correct. **Has any Y color related Chain No. 061 Fail occurred?**

Y N

Check the following:

- Check that the value of **dc131 NVM Read/Write** [760-024] is "0".
- The Imaging Unit (Y) for improper installation.

If no problems are found, replace the following parts in sequence:

- Imaging Unit (Y) (**REP 8.1**)
- LPH Unit (Y) (**REP 2.2**)
- Rear Holder Assembly (Y) (**REP 2.1**)

Replace the LPH Unit (Y) (**REP 2.2**). If the problem persists, replace the MCU PWB (**REP 18.5**).

389.626 RC Data Linearity Fail M

BSD-ON: **BSD 6.12 Color Registration Control**

The result from adding the skew/bow correction value to the M color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, **389.617** is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check that the value stored in LPH (M) EEPROM is correct. **Has any M color related Chain No. 061 Fail occurred?**

Y N

Check the following:

- Check that the value of **dc131 NVM Read/Write** [760-024] is "0".
- The Imaging Unit (M) for improper installation.

If no problems are found, replace the following parts in sequence:

- Imaging (M) (**REP 8.1**)
- LPH Unit (M) (**REP 2.2**)
- Rear Holder Assembly (M) (**REP 2.1**)

Replace the LPH Unit (M) (**REP 2.2**). If the problem persists, replace the MCU PWB (**REP 18.5**).

389.627 RC Data Linearity Fail C

BSD-ON: **BSD 6.12 Color Registration Control**

The result from adding the skew/bow correction value to the C color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, **389.617** is also detected during power On.)

Table 1 Chain No. 389Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check that the value stored in LPH (C) EEPROM is correct. **Has any C color related Chain No. 061 Fail occurred?**

Y N

Check the following:

- Check that the value of **dc131 NVM Read/Write** [760-024] is "0".
- The Imaging Unit (C) for improper installation.

If no problems are found, replace the following parts in sequence:

- Imaging Unit (C) (**REP 8.1**)
- LPH Unit (C) (**REP 2.2**)
- Rear Holder Assembly (C) (**REP 2.1**)

Replace the LPH Unit (C) (**REP 2.2**). If the problem persists, replace the MCU PWB (**REP 18.5**).

389.628 RC Data Linearity Fail K

BSD-ON: **BSD 6.12 Color Registration Control**

The result from adding the skew/bow correction value to the K color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, **389.617** is also detected during power On.)

Table 1 Chain No. 389

Priority	Chain Link	Fail Item
1 (High)	389.616	RC Data Over Flow Fail
2	389.604, 389.606, 389.607, 389.609, 389.610, 389.612, 389.613, 389.615	RC SampleBlock Fail-B
3	389.601, 389.603	RC SampleBlock Fail-A1
4	389.600	RC SampleLateral Fail-A1
5	389.617	RC Lead Regi Over Range Fail
6 (Low)	389.625, 389.626, 389.627, 389.628	RC Data Linearity Fail

Procedure

Check that the value stored in LPH (K) EEPROM is correct. **Has any K color related Chain No. 061 Fail occurred?**

Y N

Check the following:

- Check that the value of **dc131 NVM Read/Write** [760-024] is "0".
- The Imaging Unit (K) for improper installation.

If no problems are found, replace the following parts in sequence:

- Imaging Unit (K) (**REP 8.1**)
- LPH Unit (K) (**REP 2.2**)
- Rear Holder Assembly (K) (**REP 2.1**)

Replace the LPH Unit (K) (**REP 2.2**). If the problem persists, replace the MCU PWB (**REP 18.5**).

391.313 CRUM ASIC Communication Fault

Communication error between CPU of the MCU PWB and ASIC was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power OFF and replace the MCU PWB (REP 18.5).

391.400 Waste Toner Bottle Near Full

BSD-ON: BSD 9.40 Waste Toner Disposal

The Waste Toner Bottle Full Sensor detected Near Full state.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

The Waste Toner Bottle needs to be replaced soon. Replace the Waste Toner Bottle (PL 8.2) as required. If the problem persists, check the Waste Toner Bottle Full Sensor. Turn the power On and enter the Diag mode. Turn On dc330 Component Control [091-201]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Full Sensor.

Does the display change between High/Low?

Y N

Use Transmissive Sensor RAP to check the Waste Toner Bottle Full Sensor.

Press the Stop button and turn the power Off.

Replace the MCU PWB (REP 18.5).

391.401 Drum Cartridge K Near Life

BSD-ON: [BSD 9.6 Drum Life Control \(C, K\)](#)

It was detected that the replacement timing for the Imaging Unit (K) is closer than Pre Near.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

The Imaging Unit (K) needs to be replaced soon. Replace the Imaging Unit (K) ([REP 8.1](#)) as required.

391.402 Drum Cartridge K Life Over

BSD-ON: [BSD 9.6 Drum Life Control \(C, K\)](#)

Imaging Unit (K) has reached the end of its life span.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Imaging Unit (K) ([REP 8.1](#)).

391.411 Drum Cartridge Y Near Life

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

It was detected that the replacement timing for the Imaging Unit (Y) is closer than Pre Near.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

The Imaging Unit (Y) needs to be replaced soon. Replace the Imaging Unit (Y) (**REP 8.1**) as required.

391.421 Drum Cartridge M Near Life

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

It was detected that the replacement timing for the Imaging Unit (M) is closer than Pre Near.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

The Imaging Unit (M) needs to be replaced soon. Replace the Imaging Unit (M) (**REP 8.1**) as required.

391.431 Drum Cartridge C Near Life

BSD-ON: **BSD 9.6 Drum Life Control (C, K)**

It was detected that the replacement timing for the Imaging Unit (C) is closer than Pre Near.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

The Imaging Unit (C) needs to be replaced soon. Replace the Imaging Unit (C) (**REP 8.1**) as required.

391.480 Drum Cartridge Y Life Over

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

Imaging Unit (Y) has reached the end of its life span.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Imaging Unit (Y) (**REP 8.1**).

391.481 Drum Cartridge M Life Over

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

Imaging Unit (M) has reached the end of its life span.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Imaging Unit (M) (**REP 8.1**).

391.482 Drum Cartridge C Life Over

BSD-ON: **BSD 9.6 Drum Life Control (C, K)**

Imaging Unit (C) has reached the end of its life span.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Imaging Unit (C) (**REP 8.1**).

391.910 Waste Toner Bottle Not In Position

BSD-ON: [BSD 9.40 Waste Toner Disposal](#)

The Waste Toner Bottle is not in the proper position.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check that the Bottle Guide Assembly at the machine side and the Waste Toner Bottle does not have any deformation or foreign substances, and that they are installed properly.

Is the Waste Toner Bottle installed properly?

Y N

Install the Waste Toner Bottle properly. If there is any deformation, replace the Waste Toner Bottle ([PL 8.2](#)) and Bottle Guide Assembly ([PL 8.2 Item 1](#)).

Check the Waste Toner Bottle Position Sensor.

Turn the power On and enter Service Diag mode ([Entering Service Diagnostics](#)). Enter [dc330 Component Control](#) [091-200]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Position Sensor.

Does the display change between High/Low?

Y N

Use [Transmissive Sensor](#) RAP to check the Waste Toner Bottle Position Sensor.

Press the **Stop** button and turn the power Off. Replace the MCU PWB ([REP 18.5](#)).

391.911 Waste Toner Bottle Full

BSD-ON: [BSD 9.40 Waste Toner Disposal](#)

After the Waste Toner Bottle Near Full has occurred, the PV exceeds the threshold value.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Replace the Waste Toner Bottle ([PL 8.2](#)). If the problem persists, check the Waste Toner Bottle Full Sensor. Enter [dc330 Component Control](#) [091-201]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Full Sensor.

Does the display change between High/Low?

Y N

Use [Transmissive Sensor](#) RAP to check the Waste Toner Bottle Full Sensor.

Press the **Stop** button and turn the power Off. Replace the MCU PWB ([REP 18.5](#)).

391.913 Drum Cartridge K Life End

BSD-ON: [BSD 9.6 Drum Life Control \(C, K\)](#)

Imaging Unit (K) has reached the end of its life span.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the Imaging Unit (K) ([REP 8.1](#)).

391.914 Drum CRUM K Communication Fault

BSD-ON: [BSD 9.6 Drum Life Control \(C, K\)](#)

Communication failure with the Imaging Unit (K) CRUM was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the following:
 - The connection between the MD PWB [P/J528](#) and the Imaging Unit CRUM Coupler Assembly (K) [P/J115](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (K) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (K) CRUM for damage and foreign substances
 - The Imaging Unit (K) CRUM PWB for contamination or disengagement
 - The Imaging Unit (K) for improper installationIf no problems are found, replace the following parts in sequence:
 - Imaging Unit (K) ([REP 8.1](#))
 - Imaging Unit CRUM Coupler Assembly (K) ([PL 8.1](#))
 - MD PWB ([REP 18.6](#))
 - MCU PWB ([REP 18.5](#))

391.915 Drum CRUM K Data Broken

BSD-ON: [BSD 9.6 Drum Life Control \(C, K\)](#)

The system detected that the data written to the Imaging Unit (K) CRUM and the data read from the Imaging Unit (K) CRUM do not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Remove and reinstall the Imaging Unit (K) and check for improper installation. If no problems are found, replace the Imaging Unit (K) ([REP 8.1](#)).

391.916 Drum CRUM K Data Mismatch

BSD-ON: [BSD 9.6 Drum Life Control \(C, K\)](#)

Incorrect authentication area data was detected in Imaging Unit (K) CRUM.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Remove and reinstall the Imaging Unit (K) and check for improper installation. If no problems are found, replace it with the correct the Imaging Unit (K) ([REP 8.1](#)).

391.917 Drum CRUM Y Communication Fault

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

Communication failure with the Imaging Unit (Y) CRUM was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the following:
 - The connection between the MD PWB **P/J528** and the Imaging Unit CRUM Coupler Assembly (Y) **P/J112** for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (Y) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
 - The Imaging Unit (Y) CRUM PWB for contamination or disengagement
 - The Imaging Unit (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- Imaging Unit (Y) (**REP 8.1**)
- Imaging Unit CRUM Coupler Assembly (Y) (**PL 8.1**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

391.918 Drum CRUM M Communication Fault

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

Communication failure with Imaging Unit (M) CRUM was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the following:
 - The connection between the MD PWB **P/J528** and the Imaging Unit CRUM Coupler Assembly (M) **P/J113** for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (M) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (M) CRUM for damage and foreign substances
 - The Imaging Unit (M) CRUM PWB for contamination or disengagement
 - The Imaging Unit (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Imaging Unit (M) (**REP 8.1**)
- Imaging Unit CRUM Coupler Assembly (M) (**PL 8.1**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

391.919 Drum CRUM C Communication Fault

BSD-ON: **BSD 9.6 Drum Life Control (C, K)**

Communication failure with Imaging Unit (C) CRUM was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Turn the power Off and check the following:
 - The connection between the MD PWB **P/J528** and the Imaging Unit CRUM Coupler Assembly (C) **P/J114** for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (C) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (C) CRUM for damage and foreign substances
 - The Imaging Unit (C) CRUM PWB for contamination or disengagement
 - The Imaging Unit (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Imaging Unit (C) (**REP 8.1**)
- Imaging Unit CRUM Coupler Assembly (C) (**PL 8.1**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

391.921 Drum CRUM K Not In Position

BSD-ON: **BSD 9.6 Drum Life Control (C, K)**

The Imaging Unit (K) CRUM is not in the proper position (loose CRUM).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Remove and reinstall the Imaging Unit (K) (**REP 8.1**).
2. Polish the connection terminals between the Imaging Unit (K) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Imaging Unit cleaner, etc.)
3. Check the following:
 - The connection between the MD PWB **P/J528** and the Imaging Unit CRUM Coupler Assembly (K) **P/J115** for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (K) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (K) CRUM for damage and foreign substances
 - The Imaging Unit (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Imaging Unit (K) (**REP 8.1**)
- Imaging Unit CRUM Coupler Assembly (K) (**PL 8.1**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

391.927 Drum CRUM Y Not In Position

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

The Imaging Unit (Y) CRUM is not in the proper position (loose CRUM).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Remove and reinstall the Imaging Unit (Y) (**REP 8.1**).
2. Polish the connection terminals between the Imaging Unit (Y) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Imaging Unit cleaner, etc.)
3. Check the following:
 - The connection between the MD PWB **P/J528** and the Imaging Unit CRUM Coupler Assembly (Y) **P/J112** for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (Y) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
 - The Imaging Unit (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- Imaging Unit (Y) (**REP 8.1**)
- Imaging Unit CRUM Coupler Assembly (Y) (**PL 8.1**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

391.928 Drum CRUM M Not In Position

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

The Imaging Unit (M) CRUM is not in the proper position (loose CRUM).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Remove and reinstall the Imaging Unit (M) (**REP 8.1**).
2. Polish the connection terminals between the Imaging Unit (M) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Imaging Unit cleaner, etc.)
3. Check the following:
 - The connection between the MD PWB **P/J528** and the Imaging Unit CRUM Coupler Assembly (M) **P/J113** for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (M) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (M) CRUM for damage and foreign substances
 - The Imaging Unit (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Imaging Unit (M) (**REP 8.1**)
- Imaging Unit CRUM Coupler Assembly (M) (**PL 8.1**)
- MD PWB (**REP 18.6**)
- MCU PWB (**REP 18.5**)

391.929 Drum CRUM C Not In Position

BSD-ON: **BSD 9.6 Drum Life Control (C, K)**

The Imaging Unit (C) CRUM is not in the proper position (loose CRUM).

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Remove and reinstall the Imaging Unit (C) (REP 8.1).
2. Polish the connection terminals between the Imaging Unit (C) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Imaging Unit cleaner, etc.)
3. Check the following:
 - The connection between the MD PWB P/J528 and the Imaging Unit CRUM Coupler Assembly (C) P/J14 for open circuit, short circuit, and poor contact
 - The connection terminals between the Imaging Unit (C) CRUM PWB and the Imaging Unit CRUM Coupler Assembly (C) CRUM for damage and foreign substances
 - The Imaging Unit (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Imaging Unit (C) (REP 8.1)
- Imaging Unit CRUM Coupler Assembly (C) (PL 8.1)
- MD PWB (REP 18.6)
- MCU PWB (REP 18.5)

391.940 Drum CRUM Y Data Broken

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

The system detected that the data written to the Drum (Y) CRUM and the data read from the Imaging Unit (Y) CRUM do not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Remove and reinstall the Imaging Unit (Y) and check for improper installation. If no problems are found, replace the Imaging Unit (Y) (REP 8.1).

391.941 Drum CRUM C Data Broken

BSD-ON: **BSD 9.5 Drum Life Control (Y, M)**

The system detected that the data written to the Imaging Unit (M) CRUM and the data read from the Imaging Unit (M) CRUM do not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Remove and reinstall the Imaging Unit (M) and check for improper installation. If no problems are found, replace the Drum (M) (**REP 8.1**).

391.942 Drum CRUM C Data Broken

BSD-ON: **BSD 9.6 Drum Life Control (C, K)**

The system detected that the data written to the Imaging Unit (C) CRUM and the data read from the Imaging Unit (C) CRUM do not match.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Remove and reinstall the Imaging Unit (C) and check for improper installation. If no problems are found, replace the Imaging Unit (C) (**REP 8.1**).

391.943 Drum CRUM Y Data Mismatch

BSD-ON: [BSD 9.5 Drum Life Control \(Y, M\)](#)

Incorrect authentication area data was detected in the Imaging Unit (Y) CRUM.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Remove and reinstall the Imaging Unit (Y) and check for improper installation. If no problems are found, replace it with the correct Imaging Unit (Y) ([REP 8.1](#)).

391.944 Drum CRUM M Data Mismatch

BSD-ON: [BSD 9.5 Drum Life Control \(Y, M\)](#)

Incorrect authentication area data was detected in the Imaging Unit (M) CRUM.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Remove and reinstall the Imaging Unit (M) and check for improper installation. If no problems are found, replace it with the correct Imaging Unit (M) ([REP 8.1](#)).

391.945 Drum CRUM C Data Mismatch

BSD-ON: **BSD 9.6 Drum Life Control (C, K)**

Incorrect authentication area data was detected in the Imaging Unit (C) CRUM.

NOTE: *When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.*

Cause/Action

Remove and reinstall the Imaging Unit (C) and check for improper installation. If no problems are found, replace it with the correct Imaging Unit (C) (**REP 8.1**).

392.312 ATC Fault [Y]

BSD-ON: [BSD 9.16 Development \(Y\)](#)

The frequency at which the ATC Average Fail [Y] or the ATC Amplitude Fail [Y] has been occurring has exceeded the threshold value.

NOTE: •Although this Fail can be cleared by turning the power Off and On and it will be possible to output a few sheets of printouts, when this Fail has occurred a certain number of times, it will no longer be clearable by turning the power Off and On. To clear it, Reset faults in **Printer > Tools > Setup > Service Tools > Reset Faults**. If the printer is not reset back to normal status, this Fail will occur again during the operation.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB [P/J124](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) ([PL 5.1](#)) for revolution failure: [dc330 Component Control \[093-001\]](#)
- The Drum Drive Motor (Y, M, C) ([PL 3.3](#)) for revolution failure: DC330 [091-027]
- The Dev Drive Motor (Y, M, C) ([PL 3.3](#)) for revolution failure: DC330 [093-022]
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (Y) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.313 ATC Fault [M]

BSD-ON: [BSD 9.18 Development \(M\)](#)

The frequency at which the ATC Average Fail [M] or the ATC Amplitude Fail [M] has been occurring has exceeded the threshold value.

NOTE: •Although this Fail can be cleared by turning the power Off and On and it will be possible to output a few sheets of printouts, when this Fail has occurred a certain number of times, it will no longer be clearable by turning the power Off and On. To clear it, Reset faults in **Printer > Tools > Setup > Service Tools > Reset Faults**. If the printer is not reset back to normal status, this Fail will occur again during the operation.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB [P/J125](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) ([PL 5.1](#)) for revolution failure: [dc330 Component Control \[093-006\]](#)
- The Drum Drive Motor (Y, M, C) ([PL 3.3](#)) for revolution failure: DC330 [091-027]
- The Dev Drive Motor (Y, M, C) ([PL 3.3](#)) for revolution failure: DC330 [093-022]
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (M) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.314 ATC Fault [C]

BSD-ON: [BSD 9.20 Development \(C\)](#)

The frequency at which the ATC Average Fail [C] or the ATC Amplitude Fail [C] has been occurring has exceeded the threshold value.

NOTE: •Although this Fail can be cleared by turning the power Off and On and it will be possible to output a few sheets of printouts, when this Fail has occurred a certain number of times, it will no longer be clearable by turning the power Off and On. To clear it, Reset faults in **Printer > Tools > Setup > Service Tools > Reset Faults**. If the printer is not reset back to normal status, this Fail will occur again during the operation.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB [P/J126](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) ([PL 5.1](#)) for revolution failure: [dc330 Component Control \[093-011\]](#)
- The Drum Drive Motor (Y, M, C) ([PL 3.3](#)) for revolution failure: DC330 [091-027]
- The Dev Drive Motor (Y, M, C) ([PL 3.3](#)) for revolution failure: DC330 [093-022]
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (C) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.315 ATC Fault [K]

BSD-ON: [BSD 9.22 Development \(K\)](#)

The frequency at which the ATC Average Fail [K] or the ATC Amplitude Fail [K] has been occurring has exceeded the threshold value.

NOTE: •Although this Fail can be cleared by turning the power Off and On and it will be possible to output a few sheets of printouts, when this Fail has occurred a certain number of times, it will no longer be clearable by turning the power Off and On. To clear it, Reset faults in **Printer > Tools > Setup > Service Tools > Reset Faults**. If the printer is not repaired back to normal status, this Fail will occur again during the operation.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB [P/J127](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) ([PL 5.1](#)) for revolution failure: [dc330 Component Control \[093-016\]](#)
- The Drum/Dev Drive Motor (K) ([PL 3.3](#)) for revolution failure): DC330 [091-033]
- The path from Toner Cartridge (K) ([PL 3.3](#)) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (K) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.649 ADC Shutter Open Fault

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The ADC Sensor shutters is open (cannot be closed). (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly) [P/J153](#) and the MCU PWB [P/J415](#) for open circuit, short circuit, and poor contact. Also check whether there is opening/closing failure due to foreign substances/burrs, etc. at the shutter section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([REP 18.13](#))
- MCU PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.650 ADC Shutter Close Fault

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The ADC Sensor shutters is closed (cannot be opened). (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly) [P/J153](#) and the MCU PWB [P/J415](#) for open circuit, short circuit, and poor contact. Also check whether there is opening/closing failure due to foreign substances/burrs, etc. at the shutter section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([REP 18.13](#))
- MCU PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.651 ADC Sensor Fault

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The ADC Sensor read value of the density reference patch is abnormal. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly) [P/J153](#) and the MCU PWB [P/J415](#) for open circuit, short circuit, and poor contact. Also check whether there is poor connection or foreign substances at the detection section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([REP 18.13](#))
- IBT Assembly ([REP 6.2](#))
- MCU PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.657 ATC Amplitude Fault [Y]

BSD-ON: [BSD 9.16 Development \(Y\)](#)

The difference between the maximum and minimum values in the ATC Sensor (Y) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB [P/J124](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) for revolution failure: [dc330 Component Control \[093-001\] \(PL 5.1\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure: [DC330 \[091-027\] \(PL 3.3\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure: [DC330 \[093-022\] \(PL 3.3\)](#)
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (Y) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.658 ATC Amplitude Fault [M]

BSD-ON: [BSD 9.18 Development \(M\)](#)

The difference between the maximum and minimum values in the ATC Sensor (M) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB [P/J125](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) for revolution failure: [dc330 Component Control0](#) [093-006] ([PL 5.1](#))
- The Drum Drive Motor (Y, M, C) for revolution failure: [DC330](#) [091-027] ([PL 3.3](#))
- The Dev Drive Motor (Y, M, C) for revolution failure: [DC330](#) [093-022] ([PL 3.3](#))
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (M) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.659 ATC Amplitude Fault [C]

BSD-ON: [BSD 9.20 Development \(C\)](#)

The difference between the maximum and minimum values in the ATC Sensor (C) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB [P/J126](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) for revolution failure: [dc330 Component Control](#) [093-011] ([PL 5.1](#))
- The Drum Drive Motor (Y, M, C) for revolution failure: [DC330](#) [091-027] ([PL 3.3](#))
- The Dev Drive Motor (Y, M, C) for revolution failure: [DC330](#) [093-022] ([PL 3.3](#))
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (C) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.660 ATC Amplitude Fault [K]

BSD-ON: [BSD 9.22 Development \(K\)](#)

The difference between the maximum and minimum values in the ATC Sensor (K) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB [P/J127](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) for revolution failure: [dc330 Component Control \[093-016\] \(PL 5.1\)](#)
- The Drum/Dev Drive Motor (K) for revolution failure: [DC330 \[091-033\] \(PL 3.3\)](#)
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (K) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.661 Temperature Sensor Fault

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

Abnormal value was detected by the Environment Sensor (Temperature). (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the connection between the Environment Sensor (MOB ADC Assembly) [P/J154](#) and the MCU PWB [P/J415](#) for open circuit, short circuit, and poor contact. Also check whether there is poor connection or foreign substances at the detection section of the Environment Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([REP 18.13](#))
- MCU PWB ([REP 18.5](#))

392.662 Humidity Sensor Fault

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

Abnormal value was detected by the Environment Sensor (Humidity). (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the connection between the Environment Sensor (MOB ADC Assembly) [P/J154](#) and the MCU PWB [P/J415](#) for open circuit, short circuit, and poor contact. Also check whether there is poor connection or foreign substances at the detection section of the Environment Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([REP 18.13](#))
- MCU PWB ([REP 18.5](#))

392.665 ATC Average Fault [Y]

BSD-ON: [BSD 9.16 Development \(Y\)](#)

The average measured value of ATC Sensor (Y) is out of the range of appropriate values. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB [P/J124](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) for revolution failure: [dc330 Component Control \[093-001\] \(PL 5.1\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure: [DC330 \[091-027\] \(PL 3.3\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure: [DC330 \[093-022\] \(PL 3.3\)](#)
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (Y) ([PL 5.2 Item 4](#))
- ATC PWB ([REP 5.8](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

392.666 ATC Average Fault [M]

BSD-ON: [BSD 9.18 Development \(M\)](#)

The average measured value of ATC Sensor (M) is out of the range of appropriate values. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB [P/J125](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) for revolution failure: [dc330 Component Control \[093-006\] \(PL 5.1\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure: DC330 [091-027] [\(PL 3.3\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure: DC330 [093-022] [\(PL 3.3\)](#)
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (M) [\(PL 5.2 Item 4\)](#)
- ATC PWB [\(REP 5.8\)](#)
- MD PWB [\(REP 18.6\)](#)
- MCU PWB [\(REP 18.5\)](#)

392.667 ATC Average Fault [C]

BSD-ON: [BSD 9.20 Development \(C\)](#)

The average measured value of ATC Sensor (C) is out of the range of appropriate values. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB [P/J126](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) for revolution failure: [dc330 Component Control \[093-011\] \(PL 5.1\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure: DC330 [091-027] [\(PL 3.3\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure: DC330 [093-022] [\(PL 3.3\)](#)
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (C) [\(PL 5.2 Item 4\)](#)
- ATC PWB [\(REP 5.8\)](#)
- MD PWB [\(REP 18.6\)](#)
- MCU PWB [\(REP 18.5\)](#)

392.668 ATC Average Fault [K]

BSD-ON: [BSD 9.22 Development \(K\)](#)

The average measured value of ATC Sensor (K) is out of the range of appropriate values. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off turn Off the Power Switch first and then the Main Power Switch.

Procedure

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB [P/J127](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MD PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) for revolution failure: [dc330 Component Control \[093-016\] \(PL 5.1\)](#)
- The Drum/Dev Drive Motor (K) for revolution failure: DC330 [091-033] [\(PL 3.3\)](#)
- The Drum/Dev Drive Motor (K) for revolution failure: DC330 [091-033] [\(PL 3.3\)](#)
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (K) [\(PL 5.2 Item 4\)](#)
- ATC PWB [\(REP 5.8\)](#)
- MD PWB [\(REP 18.6\)](#)
- MCU PWB [\(REP 18.5\)](#)

392.670 ADC Patch Fault [Y]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The ADC patch of Y color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [Y] has occurred.

Has Fail [392.651](#) or [392.312](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (Y) for contamination
- The LPH (Y) for contamination
- The 1st BTR (Y) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (Y) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (Y) [\(REP 8.1\)](#)
- LPH Assembly (Y) [\(REP 2.2\)](#)
- HVPS (Dev) [\(REP 5.11\)](#)
- HVPS (1st/2nd/DTC) [\(REP 6.3\)](#)
- MCU PWB [\(REP 18.5\)](#)

Go to the appropriate RAP.

392.671 ADC Patch Fault [M]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The ADC patch of M color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [M] has occurred.

Has Fail [392.651](#) or [392.313](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (M) for contamination
- The LPH (M) for contamination
- The 1st BTR (M) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (M) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (M) ([REP 8.1](#))
- LPH Assembly (M) ([REP 2.2](#))
- HVPS (Dev) ([REP 5.11](#))
- HVPS (1st/2nd/DTC) ([REP 6.3](#))
- MCU PWB ([REP 18.5](#))

Go to the appropriate RAP.

392.672 ADC Patch Fault [C]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The ADC patch of C color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [C] has occurred.

Has Fail [392.651](#) or [392.314](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (C) for contamination
- The LPH (C) for contamination
- The 1st BTR (C) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (C) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (C) ([REP 8.1](#))
- LPH Assembly (C) ([REP 2.2](#))
- HVPS (Dev) ([REP 5.11](#))
- HVPS (1st/2nd/DTC) ([REP 6.3](#))
- MCU PWB ([REP 18.5](#))

Go to the appropriate RAP.

392.673 ADC Patch Fault [K]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The ADC patch of K color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [K] has occurred.

Has Fail [392.651](#) or [392.315](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (K) for contamination
- The LPH (K) for contamination
- The 1st BTR (K) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (K) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (K) ([REP 8.1](#))
- LPH Assembly (K) ([REP 2.2](#))
- HVPS (Dev) ([REP 5.11](#))
- HVPS (1st/2nd/DTC) ([REP 6.3](#))
- MCU PWB ([REP 18.5](#))

Go to the appropriate RAP.

392.675 ADC Mini Setup Fault [Y]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The difference in densities among the ADC patches of Y color is abnormal. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [Y] has occurred.

Has Fail [392.651](#) or [392.312](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (Y) for contamination
- The 1st BTR (Y) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (Y) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (BCR) and the BCR (Y) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (Y) ([REP 8.1](#))
- HVPS (BCR) ([REP 18.16](#))
- HVPS (Dev) ([REP 5.11](#))
- HVPS (1st/2nd/DTC) ([REP 6.3](#))
- MCU PWB ([REP 18.5](#))

Go to the appropriate RAP.

392.676 ADC Mini Setup Fault [M]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The difference in densities among the ADC patches of M color is abnormal. (This is a hidden failure. (Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [M] has occurred.

Has Fail [392.651](#) or [392.313](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (M) for contamination
- The 1st BTR (M) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (M) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (BCR) and the BCR (M) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (M) ([REP 8.1](#))
- HVPS (BCR) ([REP 18.16](#))
- HVPS (Dev) ([REP 5.11](#))
- HVPS (1st/2nd/DTC) ([REP 6.3](#))
- MCU PWB ([REP 18.5](#))

Go to the appropriate RAP.

392.677 ADC Mini Setup Fault [C]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The difference in densities among the ADC patches of C color is abnormal. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [C] has occurred.

Has Fail [392.651](#) or [392.314](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (C) for contamination
- The 1st BTR (C) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (C) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (BCR) and the BCR (C) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (C) ([REP 8.1](#))
- HVPS (BCR) ([REP 18.16](#))
- HVPS (Dev) ([REP 5.11](#))
- HVPS (1st/2nd/DTC) ([REP 6.3](#))
- MCU PWB ([REP 18.5](#))

Go to the appropriate RAP.

392.678 ADC Mini Setup Fault [K]

BSD-ON: [BSD 9.27 ADC and Environment Sensing](#)

The difference in densities among the ADC patches of K color is abnormal. (This is a hidden failure. Data is only recorded in history.)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Enter [dc122 Fault History](#). Check whether ADC Sensor Fail or ATC Fail [K] has occurred.

Has Fail [392.651](#) or [392.315](#) occurred?

Y N

Turn the power Off and check the following:

- The Drum (K) for contamination
- The 1st BTR (K) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (K) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (BCR) and the BCR (K) for open circuits, short circuits, and poor contacts
- The connection and board springs between the HVPS (Dev) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Imaging Unit (K) ([REP 8.1](#))
- HVPS (BCR) ([REP 18.16](#))
- HVPS (Dev) ([REP 5.11](#))
- HVPS (1st/2nd/DTC) ([REP 6.3](#))
- MCU PWB ([REP 18.5](#))

Go to the appropriate RAP

393.314 Y Disp Motor Fault

BSD-ON: **BSD 9.23 Toner Cartridge Life Control (Y, M)**

Regardless of low usage of toner from Y Toner Cartridge, it was detected to be empty.

NOTE: •If the Fail occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this Fail.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Replace the Toner Cartridge (Y) (REP 5.1).

If the problem persists, check the following:

- The connectors of the MCU PWB P/J411 and the Toner CRUM Coupler (Y) P/J120 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MCU PWB P/J411 and the Toner CRUM Coupler (Y) P/J120 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) (PL 5.1): **dc330 Component Control** [093-001]
- The drive transmission path in the Dispense Assembly
- The MCU PWB for failure (REP 18.5).

393.315 M Disp Motor Fault

BSD-ON: **BSD 9.23 Toner Cartridge Life Control (Y, M)**

Regardless of low usage of toner from M Toner Cartridge, it was detected to be empty.

NOTE: •If the Fail occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this Fail.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Replace the Toner Cartridge (M) (REP 5.1).

If the problem persists, check the following:

- The connectors of the MCU PWB P/J411 and the Toner CRUM Coupler (M) P/J121 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MCU PWB P/J411 and the Toner CRUM Coupler (M) P/J121 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) (PL 5.1): **dc330 Component Control** [093-006]
- The drive transmission path in the Dispense Assembly
- The MCU PWB for failure (REP 18.5).

393.316 C Disp Motor Fault

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

Regardless of low usage of toner from C Toner Cartridge, it was detected to be empty.

NOTE: •If the Fail occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this Fail.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Replace the Toner Cartridge (C) ([REP 5.1](#)).

If the problem persists, check the following:

- The connectors of the MCU PWB [P/J411](#) and the Toner CRUM Coupler (C) [P/J122](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler (C) [P/J122](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) (PL 5.1): [dc330 Component Control](#) [093-011]
- The drive transmission path in the Dispense Assembly
- The MCU PWB for failure ([REP 18.5](#)).

393.317 K Disp Motor Fault

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

Regardless of low usage of toner from K Toner Cartridge, it was detected to be empty.

NOTE: •If the Fail occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this Fail.

- When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Replace the Toner Cartridge (K) ([REP 5.1](#)).

If the problem persists, check the following:

- The connectors of the MCU PWB [P/J411](#) and the Toner CRUM Coupler (K) [P/J123](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler (K) [P/J123](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) (PL 5.1): [dc330 Component Control](#) [093-016]
- The drive transmission path in the Dispense Assembly
- The MCU PWB for failure ([REP 18.5](#)).

393.324 Dev Y, M, C Motor Fault

BSD-ON: [BSD 9.3 Deve Drive Control \(Y, M, C\)](#)

The Dev Motor (Y, M, C) revolution failure was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power Off and remove the Front Cover. Remove the Imaging Unit (Y, M, C) ([REP 8.1](#)) and the Developer (Y, M, C) ([REP 5.7](#)) and cheat the Front Cover Interlock Switch.

Turn the power On and enter Service Diag mode ([Entering Service Diagnostics](#)). Turn On [dc330 Component Control](#) [093-022] (Dev Drive Motor Y, M, C). **Does the Dev Drive Motor (Y, M, C) rotate?**

Y N

Turn the power Off and remove the Rear Upper Cover ([REP 19.17](#)). Turn the power On.

Is the voltage between the MD PWB [P/J526-7 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP](#).

Is the voltage between the MD PWB [P/J527-B16 \(+\)](#) and the GND (-) +5VDC?

Y N

Go to [+5VDC Power RAP](#).

Turn the power Off and check the connections between the MD PWB [P/J526](#) and the Dev Drive Motor (Y, M, C) [P/J251](#), as well as between the MD PWB [P/J527](#) and the Dev Drive Motor (Y, M, C) [P/J252](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- Dev Drive Motor (Y, M, C) ([PL 3.3](#))
- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

Press the **Stop** button and turn the power Off. Install the Drum (Y, M, C), the Developer (Y, M, C), and the Front Cover.

Turn the power On and enter Service Diag mode. Turn On [dc330 Component Control](#) [093-022] (Dev Drive Motor Y, M, C). **Does the Dev Drive Motor (Y, M, C) rotate?**

Y N

Check the Developer (Y, M, C) for loading.

Press the **Stop** button and turn the power Off. Check the connection between the Dev Drive Motor (Y, M, C) [P/J252-8](#) and the MD PWB [P/J527-B9](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

393.400 Y Toner Cartridge Near Empty

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

It was detected that the replacement timing for Toner Cartridge (Y) is closer than Pre Near.

Procedure

The Toner Cartridge (Y) needs to be replaced soon. Replace the Toner Cartridge (Y) ([REP 5.1](#)) as required.

393.423 M Toner Cartridge Near Empty

BSD-ON: **BSD 9.23 Toner Cartridge Life Control (Y, M)**

It was detected that the replacement timing for Toner Cartridge (M) is closer than Pre Near.

Procedure

The Toner Cartridge (M) needs to be replaced soon. Replace the Toner Cartridge (M) (**REP 5.1**) as required.

393.424 C Toner Cartridge Near Empty

BSD-ON: **BSD 9.24 Toner Cartridge Life Control (C, K)**

It was detected that the replacement timing for Toner Cartridge (C) is closer than Pre Near.

Procedure

The Toner Cartridge (C) needs to be replaced soon. Replace the Toner Cartridge (C) (**REP 5.1**) as required.

393.425 K Toner Cartridge Near Empty

BSD-ON: **BSD 9.24 Toner Cartridge Life Control (C, K)**

It was detected that the replacement timing for Toner Cartridge (K) is closer than Pre Near.

Procedure

The Toner Cartridge (K) needs to be replaced soon. Replace the Toner Cartridge (K) (**REP 5.1**) as required.

393.912 K Toner Cartridge Empty

BSD-ON: **BSD 9.24 Toner Cartridge Life Control (C, K)**

The K Toner Cartridge Empty state was detected.

Procedure

Replace the Toner Cartridge (K) (**REP 5.1**). No special action necessary.

393.916 Toner K CRUM Not In Position

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

The Toner CRUM (K) is not in the proper position.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

NOTE: The Phaser 7800 printer is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the printer are installed, the machine is set to Worldwide Neutral configuration.

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured printer.

Cause/Action

1. Remove and reinstall the Toner Cartridge (K) ([REP 5.1](#)).
2. Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (K) [P/J123](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
 - The Toner Cartridge (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (K) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (K) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.926](#) Toner K CRUM Data Mismatch Fault.

393.924 Toner K CRUM Communication Fault

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

Communication failure with Toner CRUM (K) was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check the connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (K) [P/J123](#) for open circuit, short circuit, and poor contact. Also, remove and reinstall the Toner Cartridge (K) and check for improper installation.

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (K) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (K) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.926](#) Toner K CRUM Data Mismatch Fault

393.925 Toner K CRUM Data Broken Fault

BSD-ON: BSD 9.24 Toner Cartridge Life Control (C, K)

The system detected that the data written to the Toner CRUM (K) and the data read from the Toner CRUM (K) do not match.

NOTE: The Phaser 7800 printer is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured printer.

Initial Actions

Remove and reinstall the Toner Cartridge (K) (REP 5.1).

Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Black Toner Cartridge and check for improper installation. **The problem continues**

Y N
| End

Check the NVM locations in [Table 1](#).

Table 1 CRUM Data NVM

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

The NVM values match the expected customer configuration.

Y N
| Determine correct Contract Type from customer. Contact Technical Support Center or your NTS for the CRUM conversion procedure.

- Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- Check the following:

- The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (K) [P/J123](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
 - The Toner Cartridge (K) for improper installation
- If no problems are found, replace the following parts in sequence:
- Toner Cartridge (M) ([REP 5.1](#))
 - Toner CRUM Coupler Assembly (M) ([PL 5.1](#))
 - MCU PWB ([REP 18.5](#))

393.926 Toner K CRUM Data Mismatch Fault

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

Incorrect authentication area data was detected in the Black Toner CRUM. This fault is displayed if different type of Toner cartridge is installed than what the printer is currently set to accept. The types of toner are: NA/XE, DMO, FX and Metered.

NOTE: *The Phaser 7800 printer is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.*

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed by sending a secure snippet to reset the region to neutral.

One or more Toner Cartridges are of the wrong type (i.e., a "NA/XE/Sold" cartridge installed in a "DMO" configured printer.

Initial Actions

Remove and reinstall the Toner Cartridge (K) ([REP 5.1](#)).

Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Black Toner Cartridge and check for improper installation. **The problem continues**

Y N
| End

Contact second level support to obtain a secure snippet to reset the printer to the neutral configuration. You will need the printer's serial number and current print count. The snippet will be effective if installed within 500 prints of the current print count. After sending the snippet, the next toner cartridge installed will set the region code so make sure that the cartridge installed is the correct one for the region. **Is the issue still present after sending the secure snippet?**

Y N
| End.

1. Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (K) [P/J123](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
 - The Toner Cartridge (K) for improper installationIf no problems are found, replace the following parts in sequence:
 - Toner Cartridge (M) ([REP 5.1](#))
 - Toner CRUM Coupler Assembly (M) ([PL 5.1](#))

- [MCU PWB \(REP 18.5\)](#)

393.927 Toner Y CRUM Communication Fault

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

Communication failure with Toner CRUM (Y) was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check the connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (Y) [P/J120](#) for open circuit, short circuit, and poor contact. Also, remove and reinstall the Toner Cartridge (Y) and check for improper installation.

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (Y) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (Y) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.960](#) Toner Y CRUM Data Mismatch Fault

393.941 Toner M CRUM Communication Fault

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

Communication failure with Toner CRUM (M) was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check the connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (M) [P/J121](#) for open circuit, short circuit, and poor contact. Also, remove and reinstall the Toner Cartridge (M) and check for improper installation.

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (M) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (M) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.961](#) Toner M CRUM Data Mismatch Fault

393.942 Toner C CRUM Communication Fault

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

Communication failure with Toner CRUM (C) was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check the connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (C) [P/J122](#) for open circuit, short circuit, and poor contact. Also, remove and reinstall the Toner Cartridge (C) and check for improper installation.

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (C) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (C) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.962](#) Toner C CRUM Data Mismatch Fault

393.943 Toner Y CRUM Communication Fault

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

Communication failure with Toner CRUM (Y) was detected.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

1. Turn the power Off and On.
2. Check the connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (Y) [P/J120](#) for open circuit, short circuit, and poor contact. Also, remove and reinstall the Toner Cartridge (Y) and check for improper installation.

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (Y) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (Y) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.960](#) Toner Y CRUM Data Mismatch Fault

393.950 Toner Y CRUM Data Broken Fault

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

The system detected that the data written to the Toner CRUM (Y) and the data read from the Toner CRUM (Y) do not match.

NOTE: *The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.*

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured printer.

Cause/Action

Remove and reinstall the Toner Cartridge (Y) and check for improper installation. If no problems are found, replace the Toner Cartridge (Y) ([REP 5.1](#)).

Go to [393.960](#) Toner Y CRUM Data Mismatch Fault.

393.951 Toner M CRUM Data Broken Fault

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

The system detected that the data written to the Toner CRUM (M) and the data read from the Toner CRUM (M) do not match.

NOTE: *The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the machine is set to Worldwide Neutral configuration.*

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured printer.

Cause/Action

Remove and reinstall the Toner Cartridge (M) and check for improper installation. If no problems are found, replace the Toner Cartridge (M) ([REP 5.1](#)).

Go to [393.961](#) Toner M CRUM Data Mismatch Fault

393.952 Toner C CRUM Data Broken Fault

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

The system detected that the data written to the Toner CRUM (C) and the data read from the Toner CRUM (C) do not match.

NOTE: The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured printer.

Cause/Action

Remove and reinstall the Toner Cartridge (C) and check for improper installation. If no problems are found, replace the Toner Cartridge (C) ([REP 5.1](#)).

Go to [393.962 Toner C CRUM Data Mismatch Fault](#)

393.960 Toner Y CRUM Data Mismatch Fail

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

Incorrect authentication area data was detected in the Yellow Toner CRUM. This fault is displayed if a different type of Toner cartridge is installed than what the printer is currently set to accept. The types of toner are: NA/XE, DMO, FX and Metered.

NOTE: The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed by sending a secure snippet to reset the region to neutral.

One or more Toner Cartridges are of the wrong type (i.e., a “NA/XE Sold” cartridge installed in a “DMO” configured printer.

Initial Actions

Remove and reinstall the Toner Cartridge (Y).

Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Yellow Toner Cartridge and check for improper installation. **The problem continues.**

Y N
| End

Contact second level support to obtain a secure snippet to reset the printer to the neutral configuration. You will need the printer's serial number and current print count. The snippet will be effective if installed within 500 prints of the current print count. After sending the snippet, the next toner cartridge installed will set the region code so make sure that the cartridge installed is the correct one for the region. **Is the issue still present after sending the secure snippet?**

Y N
| End.

1. Polish the connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (Y) [P/J120](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
 - The Toner Cartridge (Y) for improper installationIf no problems are found, replace the following parts in sequence:
 - Toner Cartridge (M) ([REP 5.1](#))
 - Toner CRUM Coupler Assembly (M) ([PL 5.1](#))

- MCU PWB (REP 18.5)

393.961 Toner M CRUM Data Mismatch Fail

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

Incorrect authentication area data was detected in the Yellow Toner CRUM. This fault is displayed if a different type of Toner cartridge is installed than what the printer is currently set to accept. The types of toner are: NA/XE, DMO, FX and Metered.

NOTE: *The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.*

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed by sending a secure snippet to reset the region to neutral.

One or more Toner Cartridges are of the wrong type (i.e., a “NA/XE Sold” cartridge installed in a “DMO” configured printer.

Initial Actions

Remove and reinstall the Toner Cartridge (M).

Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Magenta Toner Cartridge and check for improper installation. **The problem continues.**

Y N
| End

Contact second level support to obtain a secure snippet to reset the printer to the neutral configuration. You will need the printer's serial number and current print count. The snippet will be effective if installed within 500 prints of the current print count. After sending the snippet, the next toner cartridge installed will set the region code so make sure that the cartridge installed is the correct one for the region. **Is the issue still present after sending the secure snippet?**

Y N
| End.

1. Polish the connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (M) [P/J121](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM for damage and foreign substances
 - The Toner Cartridge (M) for improper installationIf no problems are found, replace the following parts in sequence:
 - Toner Cartridge (M) ([REP 5.1](#))
 - Toner CRUM Coupler Assembly (M) ([PL 5.1](#))

- MCU PWB (REP 18.5)

393.962 Toner C CRUM Data Mismatch Fail

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

Incorrect authentication area data was detected in the Yellow Toner CRUM. This fault is displayed if a different type of Toner cartridge is installed than what the printer is currently set to accept. The types of toner are: NA/XE, DMO, FX and Metered.

NOTE: *The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.*

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed by sending a secure snippet to reset the region to neutral.

One or more Toner Cartridges are of the wrong type (i.e., a “NA/XE Sold” cartridge installed in a “DMO” configured printer.

Initial Actions

Remove and reinstall the Toner Cartridge (C).

Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Cyan Toner Cartridge and check for improper installation. **The problem continues**

Y N
| End

Contact second level support to obtain a secure snippet to reset the printer to the neutral configuration. You will need the printer's serial number and current print count. The snippet will be effective if installed within 500 prints of the current print count. After sending the snippet, the next toner cartridge installed will set the region code so make sure that the cartridge installed is the correct one for the region. **Is the issue still present after sending the secure snippet?**

Y N
| End.

1. Polish the connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (C) [P/J122](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM for damage and foreign substances
 - The Toner Cartridge (C) for improper installationIf no problems are found, replace the following parts in sequence:
 - Toner Cartridge (M) ([REP 5.1](#))
 - Toner CRUM Coupler Assembly (M) ([PL 5.1](#))

- MCU PWB (REP 18.5)

393.970 Toner Y CRUM Not In Position

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

The Toner CRUM (Y) is not in the proper position.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

NOTE: The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured printer.

Cause/Action

1. Remove and reinstall the Toner Cartridge (Y).
2. Polish the connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (Y) [P/J120](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
 - The Toner Cartridge (Y) for improper installationIf no problems are found, replace the following parts in sequence:
 - Toner Cartridge (Y) ([REP 5.1](#))
 - Toner CRUM Coupler Assembly (Y) ([PL 5.1](#))
 - MCU PWB ([REP 18.5](#))
 - Go to [393.960 Toner Y CRUM Data Mismatch Fail](#)

393.971 Toner M CRUM Not In Position

BSD-ON: [BSD 9.23 Toner Cartridge Life Control \(Y, M\)](#)

The Toner CRUM (M) is not in the proper position.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

NOTE: The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured printer.

Cause/Action

1. Remove and reinstall the Toner Cartridge (M).
2. Polish the connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (M) [P/J121](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM for damage and foreign substances
 - The Toner Cartridge (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (M) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (M) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.961](#) Toner M CRUM Data Mismatch Fail

393.972 Toner C CRUM Not In Position

BSD-ON: [BSD 9.24 Toner Cartridge Life Control \(C, K\)](#)

The Toner CRUM (C) is not in the proper position.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

NOTE: The Phaser 7800 printer is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the printer are installed, the printer is set to Worldwide Neutral configuration.

When the first toner cartridge (any color) is replaced in the printer, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the printer toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured printer.

Cause/Action

1. Remove and reinstall the Toner Cartridge (C).
2. Polish the connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
 - The connection between the MCU PWB [P/J411](#) and the Toner CRUM Coupler Assembly (C) [P/J122](#) for open circuit, short circuit, and poor contact
 - The connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM for damage and foreign substances
 - The Toner Cartridge (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (C) ([REP 5.1](#))
- Toner CRUM Coupler Assembly (C) ([PL 5.1](#))
- MCU PWB ([REP 18.5](#))
- Go to [393.962](#) Toner C CRUM Data Mismatch Fail

394.300 IBT Front Cover Open

BSD-ON: [BSD 1.10 Power Interlock Switching \(1 of 2\)](#)

The Front Cover Open was detected by the IBT Front Cover Switch.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Check the following:

- The Front Cover for damage or mismatch.
- The IBT Front Cover Switch for failure: [dc330 Component Control \[077-307\] \(PL 18.5 Item 10\)](#)
- The connection between the IBT Front Cover Switch [P/J272](#) and the MCU PWB [P/J416](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the MCU PWB ([REP 18.5](#)).

394.320 1st BTR Contact/Retract Fault

BSD-ON: [BSD 9.29 1st BTR Contact Retract Control](#)

After the 1st BTR Contact/Retract operation has started, it does not complete within the specified time.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Remove the 1st BTR Contact Retract Sensor Bracket. Turn the power On and enter Service Diag mode ([Entering Service Diagnostics](#)).

Turn On [dc330 Component Control \[094-200\]](#). Use a sheet of paper, etc. to block/clear the light path to the 1st BTR Contact Retract Sensor.

Does the display change between High/Low?

Y N

Use [Transmissive Sensor RAP](#) to fix the 1st BTR Contact Retract Sensor.

Press the Stop button and turn the power Off. Install the 1st BTR Contact Retract Sensor Bracket.

Turn the power ON and enter Service Diag mode. Turn On [dc330 Component Control \[094-012\]](#) (Contact) and [DC330 \[094-013\]](#) (Retract) alternately. **Does it contact/retract?**

Y N

Remove the IBT and check the following:

- The IBT Assembly for mechanical loading or damage
- The 1st BTR Contact Retract Gear for wear, damage, and operation failure
- The 1st BTR Contact Retract Clutch for improper installation
- The 1st BTR Contact Retract Sensor for improper installation
- The connection between the 1st BTR Contact Retract Clutch [P/J250](#) and the MCU PWB [P/J417](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the 1st BTR Contact Retract Clutch ([PL 3.2](#)).

Press the **Stop** button and turn the power Off. Replace the MCU PWB ([REP 18.5](#)).

394.323 2nd BTR Contact/Retract Fault

BSD-ON: [BSD 9.34 2nd BTR Contact Retract Control](#)

After the 2nd BTR Contact/Retract operation has started, it does not complete within the specified time.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power On and enter the Diag mode. Turn On [dc330 Component Control](#) [094-201]. Move the Shielding Board of the 2nd BTR Contact Retract Sensor manually to block/clear the light path to the 2nd BTR Contact Retract Sensor. **Does the display change between High/Low?**

Y N

Use [Transmissive Sensor](#) to fix the 2nd BTR Contact Retract Sensor.

Press the **Stop** button. Turn On DC330 [094-003] (Contact) and DC330 [094-004] (Retract) alternately. **Does it contact/retract?**

Y N

Remove the IBT and check the following:

- The 2nd BTR Contact Retract Gear for wear, damage, and revolution failure
- The 2nd BTR Contact Retract Motor for improper installation
- The 2nd BTR Contact Retract Sensor for improper installation
- The connection between the 2nd BTR Contact Retract Motor [P/J280](#) and the MD PWB [P/J523](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the 2nd BTR Contact Retract Motor ([PL 14.4](#)).

Press the **Stop** button and turn the power Off.

Replace the following parts in sequence:

- MD PWB ([REP 18.6](#))
- MCU PWB ([REP 18.5](#))

394.324 Belt Home Fail Too Long

One of two conditions can cause this error:

1. The engine senses that the IBT Belt Drive Motor is not turning.
2. Or, the MOB Sensor does not see RegiCon chevrons on the IBT Belt.

NOTE: Although this Fail can be cleared up to 2 times by turning the power Off and On, when this failure occurs for the 3rd time, a "tech rep fault" will be generated and the error can no longer be cleared by turning the power Off and On even if the reason for failure has already been corrected. Perform Clear Tech Rep Faults (**Printer > Tools > Setup > Service Tools > Reset Faults**). If the printer is not reset back to normal status, this fail will occur again during the operation.

Initial Actions

- Power cycle the printer.
- If the problem persists, follow the procedure below.

Procedure

1. Perform the following steps:
 - Check the IBT Belt Cleaner blade. If the blade is not adequately lubricated it can cause drag on the IBT Belt. The blade edge can be lubricated with waste toner from the Belt Cleaner assembly.
 - Check the IBT Belt Unit for mechanical loading and damage.
 - Perform the IBT Belt Motor test in Diagnostics.
 - If the belt is turning, perform a stall test while the printer is initializing and see if the RegiCon chevrons are printing on the belt. If the chevrons are printing and the IBT belt is moving. Examine the MOB Sensor for obstructions.
 - If the IBT Belt does not turn when the IBT Belt Motor test is performed in diagnostics, remove the IBT Belt Assembly and run the IBT Belt Motor test again in diagnostics. If the Motor does not turn, replace the following parts in sequence:
 - IBT Drive Motor Assembly ([REP 3.10](#))
 - Motor Drive PWB ([REP 18.6](#))
 - If the IBT Belt Motor runs when the IBT Belt Motor test is performed in diagnostics with the IBT Belt Assembly removed, diagnose and repair condition causing the belt assembly to bind.
 - Test the MOB shutter open/closed in diagnostics. If the shutter open/ closed test fails, replace the MOB ADC Assembly ([REP 18.13](#)).
- NOTE:** A temporary repair to allow the customer to use the printer if a MOB Sensor is not available and the shutter is not functioning correctly, is to remove the shutter from the MOB Assembly until a replacement assembly can be installed.
2. If no problems are found, replace the following parts in sequence:
 - IBT Belt Unit ([REP 6.2](#))
 - MCU PWB ([REP 18.5](#))

394.417 IBT Unit Near End Warning

The IBT Assembly needs to be replaced soon.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the IBT Assembly and clear **dc135 CRU/HFSI Read & Reset** [954-820] (IBT Unit).

394.418 IBT CLN Unit Near End Warning

The IBT Cleaner needs to be replaced soon.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the IBT Cleaner and clear **dc135 CRU/HFSI Read & Reset** [954-822] (IBT CLN Unit).

394.419 2nd BTR Unit Near End Warning

The 2nd BTR needs to be replaced soon.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the 2nd BTR and clear **dc135 CRU/HFSI Read & Reset** [954-821] (2nd BTR Unit).

394.420 IBT Unit End Warning

The IBT Assembly must be replaced.

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Cause/Action

Replace the IBT Assembly and clear **dc135 CRU/HFSI Read & Reset** [954-820] (IBT Unit).

AC Power

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

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

Procedure

NOTE: Ensure the printer is plugged directly into a known grounded outlet capable of supplying the full power needed by the printer. Refer to [Electrical Specifications](#) for details.

Did the GFI Breaker trip?

Y N
Reset the GFI Breaker. **Does the Breaker trip again?**
Y N
Troubleshooting complete.
Check AC for a short circuit.

Is line voltage available at GFI Breaker terminals 1 and 2?

Y N
Disconnect the Power Cord. **Is line voltage present at the wall outlet?**
Y N
Advise the customer.
Check the Power Cord. **Is the Power Cord undamaged?**
Y N
Replace the Power Cord.
Replace the GFI ([REP 18.11](#)).

Unplug the Power Cord and disconnect [P/J1](#) on the Main LVPS. Check these connections.

- GFI Breaker [J10](#) <=> Main LVPS [P/J1-1](#)
- GFI Breaker [J11](#) <=> Main LVPS [P/J1-3](#)

Are the circuits secure?

Y N
Repair the wiring harness.

Turn the power On. **Is the voltage between the Main LVPS [P/J4-1](#) and [P/J4-3](#) 110V/220V?**

Y N
Repair the wiring between the GFI and Main LVPS.

With the Main Power Switch turned On is line voltage present between pins J4-4 and J4-6 on the Main LVPS?

Y N
Replace the Main Power Switch ([PL 18.5 Item 1](#)).

Is the voltage present at the Finisher outlet on the rear of the printer?

Y N
Replace the Main LVPS ([REP 18.15](#)).

Finisher AC power is OK.

STBY +5VDC Power

NOTE: When turning the power Off turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power On (turn On the Main Power Switch then turn On the Power Switch).

Are the voltages between the Main LVPS [P/J501-1/2/3 \(+\)](#) and the GND (-) +5V?

Y N
Is the voltage between the Main LVPS [P/J4-1](#) and [P/J4-3](#) equal to line voltage?

Y N
Go to the [AC Power RAP](#).

Turn the power Off and disconnect the Main LVPS [P/J501](#) and [P/J502](#). Turn On the machine 15sec later. **Are the voltages between the Main LVPS [P/J501-1/2/3 \(+\)](#) and the GND (-) +5V?**

Y N
Replace the Main LVPS ([REP 18.15](#)).

Check the +5VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

Is the voltage between the Main LVPS [P/J502-1 \(+\)](#) and the GND (-) +5VDC?

Y N
Replace the Main LVPS ([REP 18.15](#)).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

+5VDC Power

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power On (turn On the Main Power Switch then turn On the Power Switch).

Are the voltages between the Main LVPS P/J501-4/5 (+) and the GND (-) +5V?

Y N

Is the voltage between the Main LVPS P/J4-1 and P/J4-3 line voltage?

Y N

Go to AC Power RAP.

Turn the power Off and disconnect the Main LVPS P/J501 and P/J501. Turn ON the machine 15sec later. **Are the voltages between the Main LVPS P/J501-4/5 (+) and the GND (-) +5V?**

Y N

Replace the Main LVPS (REP 18.15).

Check the +5VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

Are the voltages between the Main LVPS P/J501-1/2 (+) and the GND (-) +5V?

Y N

Replace the Main LVPS (REP 18.15).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

+24VDC Power

BSD-ON: BSD 1.2 Main Power (2 of 2)

BSD-ON: BSD 1.6 DC Power Generation (3 of 4)

BSD-ON: BSD 1.7 DC Power Generation (4 of 4)

NOTE: When turning the power Off, turn Off the Power Switch first and then the Main Power Switch.

Procedure

Turn the power On (turn On the Main Power Switch then turn On the Power Switch).

Is the voltage between the Main LVPS P/J510-3 (+) (BSD 1.6 DC Power Generation (3 of 4)) and the GND (-) +24VDC?

Y N

Is the voltage between the Main LVPS P/J4-1 and P/J4-3 (BSD 1.2 Main Power (2 of 2)) Line Voltage?

Y N

Go to AC Power RAP.

Is the voltage between the Main LVPS P/J6-2 and P/J6-4 (BSD 1.2 Main Power (2 of 2)) Line Voltage?

Y N

Replace the Main LVPS (REP 18.15).

Turn the power Off and disconnect the Main LVPS P/J501, P/J502, and P/J510. Turn On the printer. **After 15 seconds, is the voltage between the Main LVPS P/J510-3 (+) (BSD 1.6 DC Power Generation (3 of 4)) and the GND (-) +24VDC?**

Y N

Replace the Main LVPS (REP 18.15).

Plug connectors P/J501, P/J502, and P/J510 back into the LVPS one at a time. Troubleshoot the circuit associated with whichever connector is grounding the +24VDC circuit by referring to Chapter 7 Wiring Data.

Is the voltage between the Main LVPS P/J501-6 (+) and the GND (-) +24VDC?

Y N

Replace the Main LVPS (REP 18.15).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

RAM Errors

Image Processor Board RAM memory has failed or is not installed. A minimum of 2 GB of RAM must be installed for proper printer operation. The printer supports DDR2, 200-pin DIMMs.

Initial Actions

Check that the RAM devices are making positive contact with their connectors.

1. Power Off the printer.
2. Remove and re-install the memory after verifying it meets the Xerox specifications. See [Memory Specifications](#) in the Introduction Chapter. If the problem persists, use the following procedure to correct it.

Errors

Error on the Startup Page

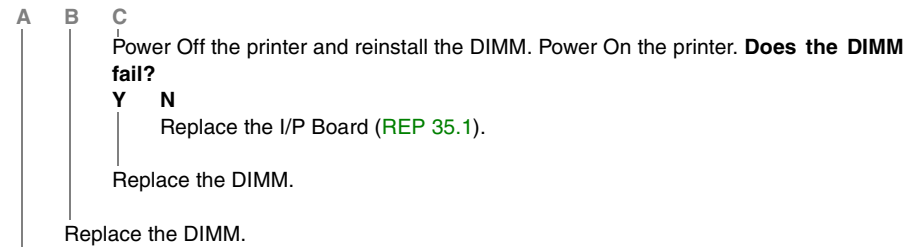
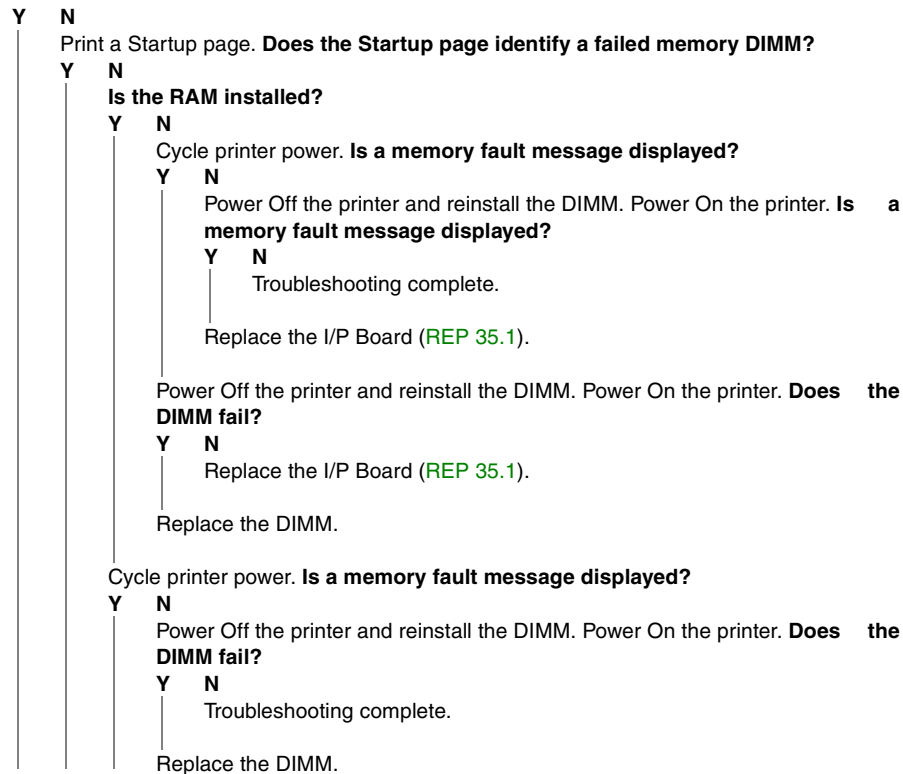
- Min RAM Limit

Error on the Control

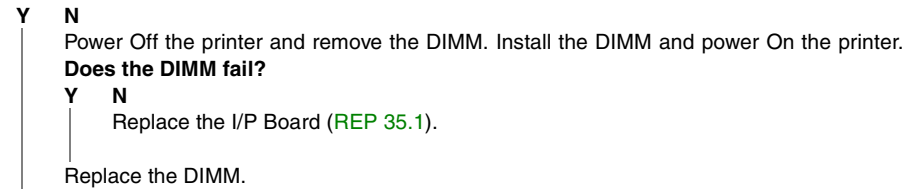
- Power On Self Test Error 16: Minimum RAM Limit

Procedure

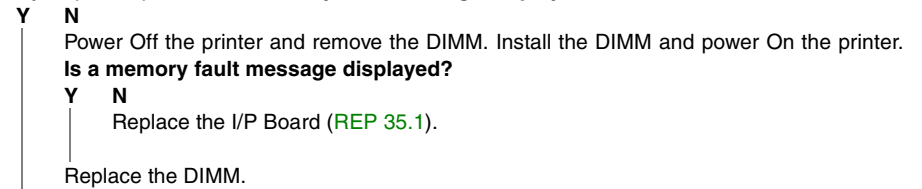
Check the RAM limit display on the printer. **Is 16: Min RAM Limit displayed on the Control Panel?**



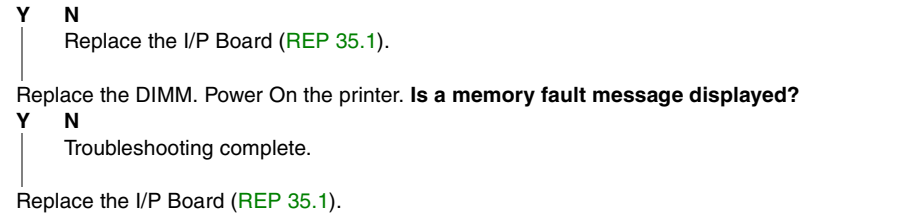
Is the RAM installed?



Cycle printer power. Is a memory fault message displayed?



Power Off the printer and reinstall the DIMM. Power On the printer. Does the DIMM fail?



A B C

LVPS Troubleshooting

BSD-ON: [BSD 1.3 LVPS Control](#)

BSD-ON: [BSD 1.5 DC Power Generation \(2 of 4\)](#)

Procedure

1. With the printer plugged in, check for +5 vdc on [P/J501](#) pins 1, 2 & 3. If 5 vdc is present, the power supply is generating power OK.
2. When the main Power Switch is turned On, there should be line voltage at the Finisher outlet. If line voltage is not present, go to [AC Power RAP](#).
3. When the secondary Power Switch (the one on top of the printer) is turned On, the display should light up as the printer goes through POST and 3.3 vdc is present on [P/J401](#) pin 9 on the MCU Board. If the display does not light up, go to [BSD 1.5 DC Power Generation \(2 of 4\)](#) and check to see if the Image Processor Board is getting + 5 vdc through [P/J501](#).
4. If 5vdc is shorted through any component or wiring being grounded, all 5 vdc except STBY + 5 vdc is cut off. Once the short circuit is diagnosed and fixed, +5 vdc should come back on.
5. After POST completes, the LVPS fan comes on and stays on. Phaser 7800 is on the display. The printer should then display the home screen.
6. If the printer hangs displaying the Phaser 7800 logo, go to [BSD 1.5 DC Power Generation \(2 of 4\)](#) and verify that 5, 3.3 and 2.5 vdc is being generated by the MCU Board through [P/J452](#).

Table 1 LVPS Static Check

Pins	P1	P4	P5	P6	P501	P503	P510
1	120 vac	120 vac	120 vac	120 vac	5 vdc	3.2 vdc	5 vdc
2					5 vdc		5 vdc
3	0	0	0	0	5 vdc	0	24 vdc
4		120 vac			5 vdc		24 vdc
5					5 vdc		24 vdc
6		0			24 vdc		0 vdc
7					0 vdc		0 vdc
8					0 vdc		0 vdc
9					0 vdc		0 vdc
10					0 vdc		0 vdc
11					0 vdc		
12					0 vdc		

Wire Color	
Black	120 vac supply
White	120 vac neutral
Gray	5 vdc
Orange	24 vdc
Purple	logic return

Reflective Sensor

Sensors consist of a light-emitting diode and a photo transistor. When energized, the light from the LED causes the photo transistor to conduct, drawing current through a pull-up resistor. The voltage drop across the resistor causes the input signal to the control logic to change from a high to a low.

Reflective sensors operate by light from the LED being reflected off the paper to the photo transistor, causing the output of the sensor to go to the low (L) state.

Initial Actions

Ensure that the sensor is not actuated.

Procedure

Enter the component control code indicated in the Procedure and/or Circuit Diagram of the RAP that sent you here. Actuate the sensor using a sheet of paper. **The display changes with each actuation.**

Y N

Clean the sensor and then block and unblock it. **The display changes with each actuation.**

Y N

Access to some sensors in this machine is difficult. Follow the **Y** leg if you can access the sensor connector. Follow the **N** leg if access is not possible. **The sensor connector is accessible.**

Y N

Check the voltage at the output of the PWB or power supply (refer to the Circuit Diagram). In the example for this generic procedure, voltage is provided from J533 on the I/F (MDD) PWB. Check for pull-up voltage for the output signal. This voltage will be either +5 VDC or +3.3 VDC depending on the circuit (refer to the Circuit Diagram for the correct voltage). **The voltage corresponds with the voltage shown in the Circuit Diagram.**

Y N

Check for short circuit(s) that may be loading down the line. Check the power input to the PWB(s). If this does not resolve the problem, replace the PWB.

Refer to the Circuit Diagram. Check the wires from the PWB to the sensor for opens, shorts, or loose contacts. If the wires are OK, replace the sensor. If this does not resolve the problem, replace the PWB.

The display indicates a constant L.

Y N

Check for +5VDC to the sensor (typically pins 1 and 3 on a 3 pin connector). +5 VDC is present.

Y N

Use the circuit diagram and/or the wirenets in Section 7 to trace the problem.

Disconnect the sensor. Use a jumper wire to connect the output wire from the sensor (typically pin 2 on a 3 pin connector) to DC COM or GND. **The display changes from H to L.**

A B C

A B C

Y N

There is either an open circuit or a failed PWB. Use the Circuit Diagram to trace the output wire to the PWB. If the wire is OK, replace the PWB.

Replace the sensor.

Disconnect the sensor. **The display indicates H.**

Y N

When sensors are unplugged, the input at the PWB should always be high if there is no harness short or PWB failure. Check the output wire from the sensor (typically pin 2 on a 3 pin connector) to the PWB for a short circuit. If the wire is good, replace the PWB. Figure 1 represents a typical sensor for this machine.

The sensor is shorted. Replace the sensor.

Look for unusual sources of contamination.

The sensor and the circuit appear to operate normally. Check the adjustment of the sensor. Clean the sensor. Check for intermittent connections, shorted, or open wires. If the problem continues, replace the sensor.

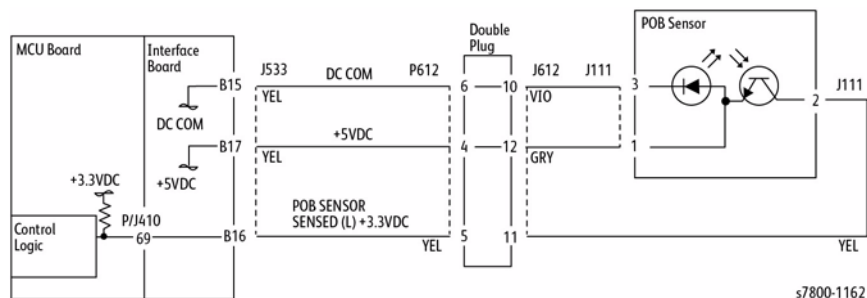


Figure 1 Typical Reflective Sensor Circuit Diagram

Transmissive Sensor

Sensors consist of a light-emitting diode and a photo transistor. When energized, the light from the LED causes the photo transistor to conduct, drawing current through a pull-up resistor. The voltage drop across the resistor causes the input signal to the control logic to change from a high to a low.

Transmissive sensors have a flag or actuator that is pushed into the space between the LED and transistor, blocking the light beam and causing the output of the sensor to go to the high (H) state. This actuation may be caused by a sheet of paper striking a pivoting flag, or a rotating actuator on a shaft or roll.

Some sensors have built-in inverters and the outputs will go to the low (L) state when the sensors are blocked. In other situations, the processing of the signal in control logic may cause the logic level displayed on the UI or the PWS to be the opposite of the actual voltage output by the sensor. The specific RAP and/or Circuit Diagram will indicate if this is the case. Figure 1 is an example of a typical sensor circuit for this machine

Procedure

Enter the component control code indicated in the specific RAP and/or Circuit Diagram. Block and unblock the sensor. **The display changes with each actuation.**

Y N

Clean the sensor and then block and unblock it. **The display changes with each actuation.**

Y N

Access to some sensors in this machine is difficult. Follow the Y leg if you can access the sensor connector. Follow the N leg if access is not possible. **The sensor connector is accessible.**

Y N

Check for +5VDC at the output of the PWB or power supply. Refer to the Circuit Diagram. In the example for this generic procedure, voltage is provided from J533 on the I/F (MDD) PWB. Check for pull-up voltage for the output signal. This voltage will be either +5 VDC or +3.3 VDC, depending on the circuit. Refer to the circuit diagram for the correct voltage.

Y N

Check for short circuit(s) that may be loading down the line. Check the power input to the PWB(s). If this does not resolve the problem, replace the PWB.

Refer to the Circuit Diagram. Check the wires from the PWB to the sensor for opens, shorts, or loose contacts. If the wires are OK, replace the sensor. If this does not resolve the problem, replace the PWB.

The display indicates a constant L

Y N

Check for +5VDC to the sensor (typically pins 1 and 3 on a 3 pin connector). +5 VDC is present.

Y N

Use the circuit diagram and /or the wirenets in Section 7 to trace the problem.

A B C D

A | **B** | **C** | **D**

Disconnect the sensor. Use a jumper wire to connect the output wire from the sensor (typically pin 2 on a 3 pin connector) to DC COM or GND. **The display changes from H to L.**

Y N
 There is either an open circuit or a failed PWB. Use the Circuit Diagram to trace the output wire to the PWB. If the wire is OK, replace the PWB.

Replace the sensor.

Disconnect the sensor. **The display indicates H.**

Y N
 When sensors are unplugged, the input at the PWB should always be high if there is no harness short or PWB failure. Check the output wire from the sensor (typically pin 2 on a 3 pin connector) to the PWB for a short circuit. If the wire is good, replace the PWB. **Figure 1** represents a typical sensor for this machine

The sensor is shorted. Replace the sensor.

Look for unusual sources of contamination.

The sensor and the circuit appear to operate normally. Check the adjustment of the sensor. Clean the sensor. Check the sensor actuator/flag for proper operation. Check for intermittent connections, shorted, or open wires. If the problem continues, replace the sensor.

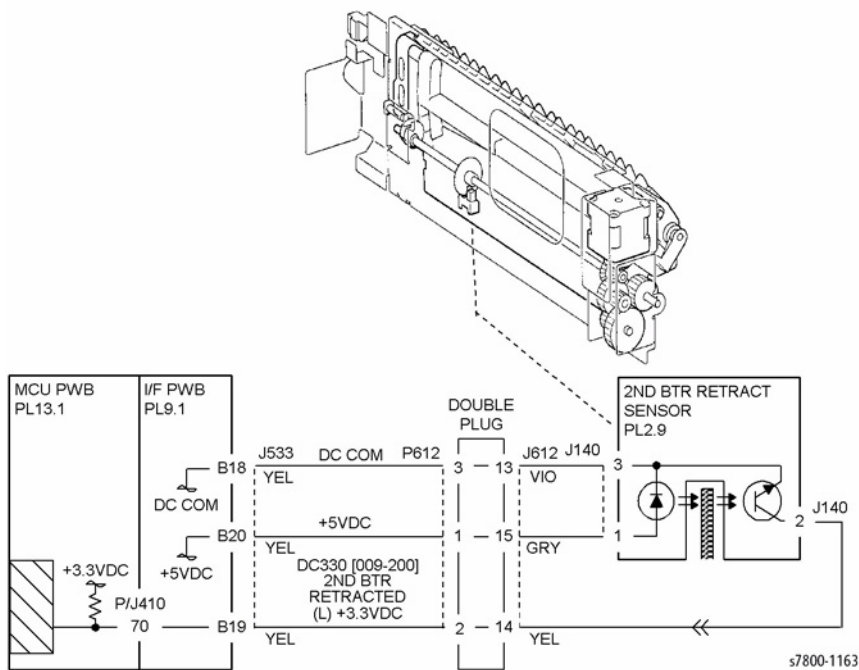


Figure 1 Typical Transmissive Sensor Circuit Diagram

Switch Procedure

Enter **dc330 Component Control** [XXX-XXX]. Actuate the Switch. **The display changed.**

Y N
 There is +3.5 / 5VDC measured between Pin 2(+) of the Switch and GND(-).
Y N
 Check the wire between the switch Pin 2 and the PWB Pin 3 for an open circuit and poor contact. If the check is OK, replace the PWB.

There is +3.5 / 5VDC measured between Pin 1(+) of the Switch and GND(-).
Y N
 Replace the Switch.

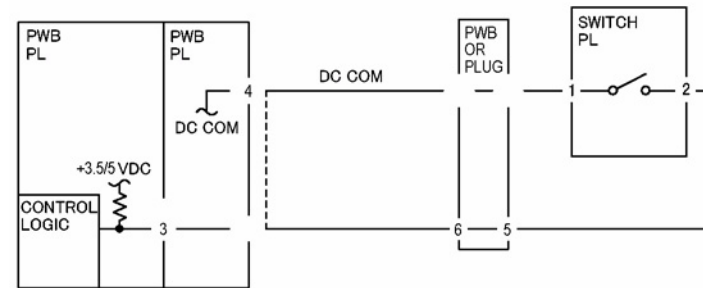
Check the wire between the PWB Pin 4 and the Switch Pin 1 for an open circuit and poor contact. If the check is OK, replace the PWB.

De-actuate the switch. **The display changed.**

Y N
 Disconnect the connector on the Switch. **The display changed.**
Y N
 Check for a short between the Switch Pin 2 and the PWB Pin 3. If the check is OK, replace the PWB.

Replace the switch.

Replace the switch.



s7800-1164

Figure 1 Switch Diagram

Generic Solenoid/ Clutch

Solenoids and electric clutches are essentially electromagnets. Typically, a positive voltage is applied to one end of a coil, and a current driver is connected to the other end. Control Logic switches this driver to GND potential, actuating the magnet. Bi-directional solenoids have a bipolar driver connected to each end. One leg is switched to 24 VDC and the other to GND.

Figure 1 is a circuit diagram of a typical solenoid.

Initial Actions

Ensure that there is no damage or binding in the solenoid or in any mechanical linkage. If there is an Adjustment for the clutch or solenoid, make sure that the procedure was performed correctly

Procedure

The clutch/solenoid is always energized.

Y N
Enter the component control code (**dc330 Component Control**) given in the RAP or the Circuit Diagram. Press the **Start** button **The Clutch or solenoid energizes.**

Y N
Press the **Stop** button **There is +24 VDC between the switched leg (J407 pin A6 in the example, Figure 1) of the control PWB and GND.**

Y N
There is +24 VDC between the powered leg (J407 pin A7 in the example, Figure 1) of the control PWB and GND.

Y N
Disconnect the connector (J407 in the example, Figure 1). **There is +24 VDC between the powered leg of the control PWB and GND.**

Y N
Refer to the 24 VDC wirenets. check the input power to the control PWB. **+24 VDC is present.**

Y N
Use the 24 VDC wirenets to troubleshoot the problem.

Replace the control PWB.

Check the wire in the powered leg of the circuit, (J407 pin A7 in the example, Figure 1) for a short circuit to GND. If the wire is OK, replace the clutch or solenoid.

Disconnect the connector (J407 in the example, Figure 1). Check continuity through the two wires and the clutch or solenoid. **There is less than 100 ohms between the two legs of the circuit.**

Y N
Disconnect the clutch or solenoid. Check continuity through the two wires and the clutch or solenoid. **There is less than 100 ohms across the clutch or solenoid.**

Y N
Replace the clutch or solenoid.

A B C D E

A B C D E
One of the two wires between the control PWB and the clutch or solenoid is open. Repair or replace the wiring as required.
Replace the control PWB.
Press the **Start** button. **There is less than 1 VDC between the switched leg of the control PWB and GND.**
Y N
Replace the PWB.
Replace the Clutch or Solenoid.
The clutch or solenoid appears to be functioning correctly. Refer to the Circuit Diagram for the RAP that sent you here. Check the wires for loose connections or damage that may cause intermittent operation. Perform any required adjustments.

There is a short circuit on the switched leg (J407 pin A6 in the example) from the solenoid or clutch. Check the wire for a short circuit to GND. If the wire is OK, replace the solenoid. If the problem persists, replace the controlling PWB.

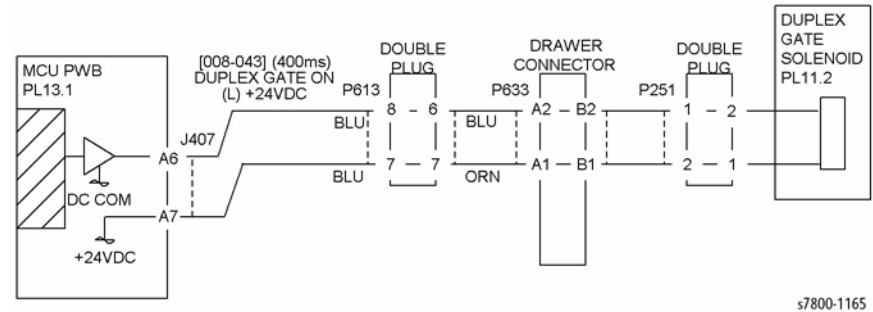


Figure 1 Typical Solenoid/Clutch Circuit Diagram

s7800-1165

Wire Motor Open

Procedure

NOTE: Before performing this RAP, ensure that the motor is free to rotate.

Enter the **dc330 Component Control** [XXX-XXX].

There is +24VDC measured between Pin 3(+) of the PWB and GND(-).

Y N
 |
 There is +24VDC measured between the Motor Pin 2(+) of the Motor and GND(-).
 Y N
 |
 There is +24VDC measured between the Motor Pin 1(+) of the Motor and GND(-).
 Y N
 |
 There is +24VDC measured between the PWB Pin 4(+) of the PWB and GND(-).
 Y N
 |
 Replace the PWB.
 |
 Check the wire between the PWB Pin 4 and the Motor Pin 1 for an open circuit or poor contact.
 |
 Replace the motor.
 |
 Check the wire between the PWB Pin 3 and the Motor Pin 2 for an open circuit or poor contact.
 |
 Replace the PWB.

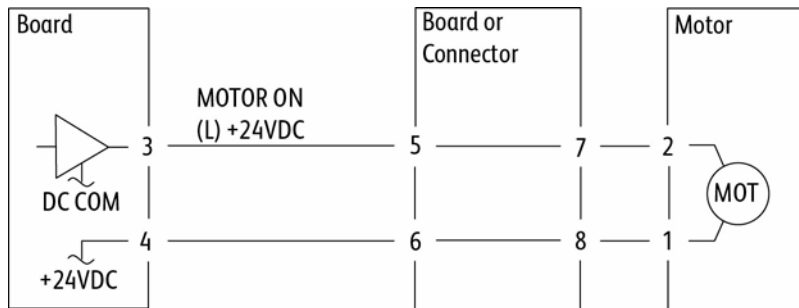


Figure 1 Motor CD

s7800-1166

Wire Motor On

Procedure

Turn Off the power. Remove the PWB connector. **There is 10 Ohm's or less measured between the connector Pin 3 and the frame.**

Y N
 |
 Replace the PWB.

Check the wire between the connector Pin 3 and the motor Pin 2 for a short circuit. If the check is OK, replace the motor.

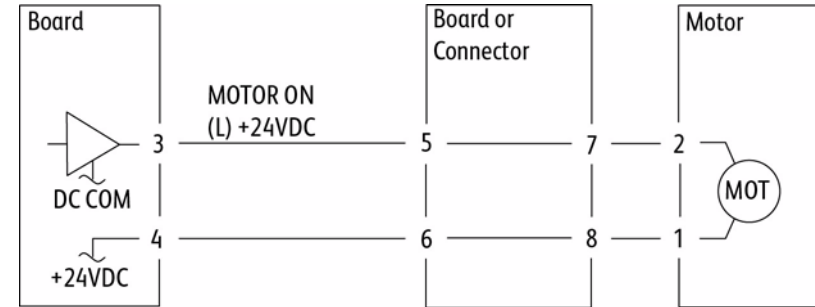


Figure 1 Motor CD

s7800-1166

LH Door (A) Open

BSD-ON: BSD 1.10 Power Interlock Switching (1 of 2)

"LH Door Open" message can appear under two different conditions:

1. A problem with the interlock circuit.
2. A failure of the LVPS Fan.

Procedure

- Remove the Right Cover (REP 19.5) and observe the LVPS Fan. The Fan should come On during the boot up sequence after the screen with Phaser 7800XX appears and about the same time the Main Drive and 2nd BTR Motors turn On. The Fan should stay running after this. If the Fan does not turn On and the close LH Door error message appears, replace the Main LVPS (REP 18.5).
- Look for any physical damage such as a broken Switch or Actuator (PL 14.1 Item 4 and PL 14.3 Item 20). Test the LH door interlock circuit in Diagnostics by actuating and de-actuating the LH Cover Interlock Switch.
- Test the LH Door interlock circuit in diagnostics by actuating and de-actuating the LH Cover Interlock Switch. If the switch does not activate and de-activate correctly in Diagnostics, troubleshoot using the BSD 1.10 Power Interlock Switching (1 of 2).

Set Gate Solenoid Open

Procedure

There is +24VDC measured between the Nip/Release Solenoid Pin 1 (+) and GND (-).

Y N

There is +24VDC measured between the PWB Pin 5 (+) and GND(-).

Y N

Check +24VDC inputs on the PWB. If the check is OK, replace the PWB.

Check the wire between the PWB Pin 5 and the Nip/Release Solenoid Pin 1 for an open circuit or poor contact.

Enter **dc330 Component Control** [XXX-XXX]. There is +24VDC measured between the PWB Pin 4 (+) and GND(-).

Y N

There is +24VDC measured between the Nip/Release Solenoid Pin 3 (+) and GND (-).

Y N

Replace the Nip/Release Solenoid.

Check the wire between the PWB Pin 4 and the Nip/Release Solenoid Pin 3 for an open circuit and poor contact.

Follow the following when the release caused a problem.

Go to the **dc330 Component Control** [XXX-XXX]. There is +24VDC measured between the PWB Pin 6 (+) and GND(-).

Y N

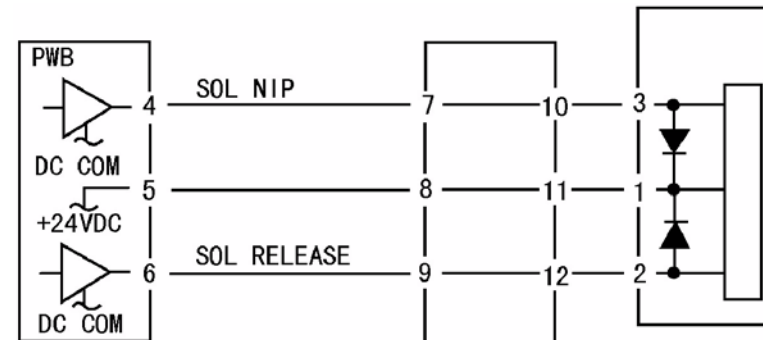
There is +24VDC measured between the Nip/Release Solenoid Pin 2 (+) and GND (-).

Y N

Replace the Nip/Release Solenoid.

Check the wire between the PWB Pin 6 and the Nip/Release Solenoid Pin 2 for an open circuit or poor contact.

Replace the PWB.



s7800-1167

Figure 1 Nip Solenoid CD

Multiple Wire Motor

For use on DC motors that:

- have 1 or 2 DC power inputs
- are controlled by 2 or more drivers
- have no DC COM connections for return power
- have no specific feedback circuits

Procedure

Connect black meter lead to ground. Measure voltage at each pin of J2 (example only, refer to the actual Circuit Diagram for the correct voltage and connector designation). **+24 VDC is measured at each pin.**

- Y N**
 Disconnect J2. Measure voltage at P2-1 and P2-6. **+24 VDC is measured.**
- Y N**
 Switch the printer Off then On. Measure voltage at P2-1 and P2-6. **+24 VDC is measured.**
- Y N**
 If an interlock circuit is present, check the interlock circuit. Repair as required. If the interlock circuit is good, replace the PWB.
- Check the motor wires for a short circuit. If the wires are good, replace the Motor.
- Check the motor wires for obvious damage. If the wires are good, replace the Motor.
- Replace the PWB.

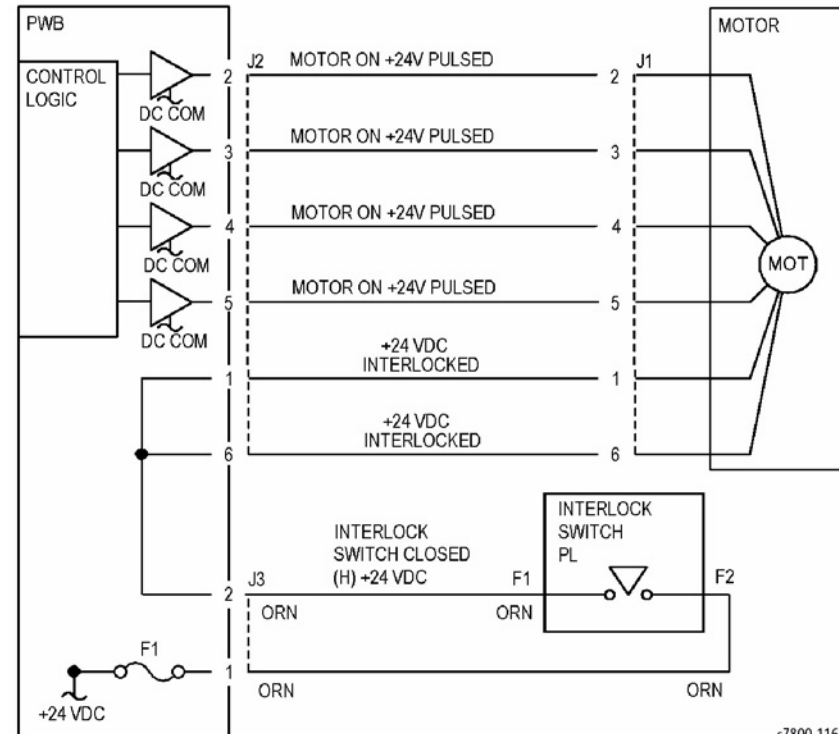


Figure 1 Motor CD

s7800-1168

3 Image Quality

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Print-Quality Problems Overview

Print-quality defects can be attributed to printer components, consumables, paper, internal software, external software applications, and environmental conditions. To successfully troubleshoot print-quality problems, eliminate as many variables as possible. The first step is to generate prints using information pages embedded in the printer on laser paper from the Recommended Media List (RML). Refer to [Media and Tray Specifications](#) in the Introduction Chapter for supported and specialty paper that have been tested and approved for use in the Phaser 7800. Use paper from a fresh ream that is acclimated to room temperature and humidity.

If the print-quality defect is still present when printing on approved paper from an unopened ream of paper, then investigate software applications and environmental conditions in addition to any printer components that could be defective.

Print the Configuration page to determine the temperature and humidity under which the printer is operating. Compare this to the [Environmental Specifications](#) in the Introduction Chapter. Extreme temperature and humidity can adversely affect the xerographic and fusing characteristics of the printer.

When analyzing a print-quality defect, first determine if the defect occurs in all colors or only one color and if it is repeating or random occurrence. Continuous defects in the process direction, such as Voids and Lines, are the most difficult to diagnose. Inspect the visible surfaces of all Rollers for obvious defect. If no defects are found, replace the Imaging Unit, Fuser Assembly, Transfer Roller, and Transfer Belt one at a time until the defect is eliminated.

Y,M,C,K-color BCR DC Current Monitor: The HVPS sends a monitored value signal to the MCU PWB that detects the level of DC current on the surface of the photoconductor. The level of DC current changes as the surface layer of the photoreceptor wears. A/D value is normal in the output range of 170 to 927. Abnormal values: 0 to 169 and 928 to 1023. Abnormal values can cause a print to be too dark or too light in one or all colors. These values can be displayed in dc140.

Print-Quality Defect Definitions and Procedure

After determining the source of the image quality problem, examine the image and select the relevant corrective procedure from [Table 1](#).

Table 1 Print-Quality Definitions

RAP	Defect	Description
IQ1	White Streaks in Sub Scan Direction (Dirt, Scratches)	At Cin50% and Cin30%, the lines in the process direction have reversed black and white colors. Width is approx. 1mm.
IQ2	1mm Stripes	At 50% and 30% densities, the lines in the process direction of a single color have reversed black and white.
IQ3	Image Shift in Process Direction	The image is shifted in the process direction.
IQ4	White Stripes	White stripes appear in the process direction for all densities of a single color.

Table 1 Print-Quality Definitions

RAP	Defect	Description
IQ5	SLED Transfer Cycle Stripes	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.
IQ6	In/ Out Density Difference	The densities between the IN and OUT (front and rear) sides are different.
IQ7	Video Data/ Crosstalk	An image with different color overlaps another.
IQ8	Image Shift in Process	The image lands on the blank area and gets dragged in the FS direction.
IQ9	Edge-less Image (No Margins)	An image is printed on the edges.
IQ10	Contamination Stripes	There are blank areas. Their size is proportional to the size of contaminants.
IQ11	Chip/ Half Chip Blanks	Blank areas in sizes of 2.7mm or 5.4mm in a single color.
IQ12	SLED Transfer Failure	Stripes and blank areas (stripes) in an individual color appear repeatedly in sizes of 2.7 mm. They appear by half chip units.
IQ13	Tapes Not Peeled from LED Assembly	The highlight portions are too obvious. The whole paper seems to be filled with stripes.
IQ14	Charging Roll Pitch White Stripes - 1	If the BCR is deformed at the BCR and Photoreceptor NIP sections, the trace may appear as thin white stripes in the FS direction on the highlight portion at the Charging Roll Pitch.
IQ15	Charging Roll Pitch White Stripes - 2	If the substances contained in the CLN-Roll get stuck to the BCR on the BCR and CLN-Roll NIP sections, the resistance on the BCR gets reduced and may cause the appearance of white stripes in the FS direction.
IQ16	Photoreceptor Pitch Color Stripes	Vibrations during the Drum CRU transportation may cause scrapes and friction in the BCR and the Photoreceptor, resulting in leftover electrostatic memory on the Photoreceptor that generates thin white streaks in the FS direction on the highlight portion at the Photoreceptor Pitch.
IQ17	Background on Glossy Media	Compared to Plain Paper, background is more visible on Glossy media.
IQ18	Toner Image Detection Color Stripes	At Pre Near or Near Empty state, if a customer had removed the Cartridge and knocked on it to collect the toner towards the exit in attempt to use the very last bit of toner, it may cause color stripe deterioration.
IQ19	Toner Droplet Contamination	A contamination consisting of random spatters of toner in sizes of a few millimeters.
IQ20	Smear on Heavyweight	When the lead edge of paper reaches the Secondary Transfer, it immediately increases the Secondary Transfer section load and causes the IBT Drive Roll speed to change (decrease in speed).

Table 1 Print-Quality Definitions

RAP	Defect	Description
IQ21	Rough Black	On paper that is not flat or has poor hue, the toner may not have been transferred properly due to the irregular paper surface, creating a rough transferred image.
IQ22	Moist Paper Transfer Failure	The resistance is lowered because the paper is moist.
IQ23	Toner Contamination at Lead/ Trail Edge	Lead Edge: Paper lead edge contacts the Belt when it is transported from REG1 to Transfer. Tail Edge: The tail edge of Paper that loops between the Transfer-Fusing sections, at the release of the Secondary Transfer NIP, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the Belt.
IQ24	Side 2 Transfer Failure	Paper that has had its Side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. Since the resistance in the Secondary Transfer section also increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment).
IQ25	Trail Edge Transfer Failure	The paper tail edge, after the Secondary Transfer NIP has been released, bounded up due to the fusing stroke effect and retransferred to the Intermediate Transfer Belt.
IQ26	MWS (Side 2) (Micro White Spots)	When the resistance in the Secondary Transfer section is high, e.g. in the early mornings (low humidity environment), the transfer latitude between multi color and mono color is narrow and the setting voltage favors multi color.
IQ27	Color Stripes	Presence of paper dust in between the Intermediate Transfer Belt and the CLN Blade causes poor cleaning.
IQ28	Transfer Blank Areas (Partially Moist Paper)	Ripples in partially moist paper becomes wrinkles in the Transfer section, causing blank areas to appear.
IQ29	Nip Marks	When using transparencies, slight lines may appear at the Fuser Heat Roll Pitch.
IQ30	Wetting	Distorted image may appear on one side or both sides of the paper tail edge when printing halftone fill.
IQ31	Condensation	If condensation occurs in the printer, an image with water marking may be printed.
IQ32	Moist Paper Wrinkles (Fuser)	When moisture gets into vertical grained paper, paper waves occurs at the tip of short edge side. If the paper enters the Fuser Nip in this condition, the Fuser Nip cannot feed the paper properly, resulting in wrinkles.
IQ33	Lines on Coated Paper (EXIT)	Lines are generated on Side 1 in 2 Sided mode.
IQ34	Caterpillar Mark (Transfer)	This is caused by low electric charge in toner.

Table 1 Print-Quality Definitions

RAP	Defect	Description
IQ35	White Streaks Due to Trimmer Jam (DEVE)	When foreign substances such as dirt, dust, toner aggregate (including the case of heated one) exist in the Toner Cartridge, on the Toner Supply Path, or in the Developer Housing Assembly and they reach the section between the Developer Roll and the Trimmer, it could obstruct the formation of developer layer.
IQ36	Heat Haze/ Mock Heat Haze	The heat haze/mock heat haze is generated in various places and in different ways.
IQ37	Unevenness Correction Within Image Area (IOT Image Quality)	The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

NOTE: Do not replace components without consideration in the troubleshooting procedures means that other parts of the printer as a whole should be considered before replacing the noted parts. The other parts of the system could include the Image Processor Board, Memory modules, a customer's network or software applications being used by the customer. A troubleshooting approach to test and identify components in isolation of each other should be attempted before replacing the parts listed under "applicable parts".

Defects Associated with Specific Printer Components

Some print-quality problems can be associated with specific assemblies; the most common problems and the associated assemblies are listed in this section. Refer to the specific print-quality troubleshooting procedure for detail information.

Toner Cartridge

- IQ18 Toner Image Detection Color Stripes

LED Print Head

- IQ2 1mm Stripes
- IQ3 Image Shift in Process Direction
- IQ4 White Stripes
- IQ5 SLED Transfer Cycle Stripes
- IQ6 In/ Out Density Difference
- IQ7 Video Data/ Crosstalk
- IQ8 Image Shift in Process
- IQ9 Edge-less Image (No Margins)

Initial Actions Before Troubleshooting

Checking the Printer Condition

Toner

Low toner can cause print-quality problems, such as Fading, Streaking, White Lines, or Drop-outs. Print a small document from different software applications to replicate the problem and check the amount of toner available. Use the CentreWare Internet Services (CWIS) to check the supplies status. To access the CentreWare IS:

1. Open your web browser.
2. In the Address field, enter the printer's IP address.
3. Click the **Supplies** button.
4. The Consumables page is displayed.

If the toner is low, you can extend the Toner Cartridge life by removing the Toner Cartridge (REP 5.1) from the printer, and gently shaking the Toner Cartridge from side-to-side.

Cleaning

Paper, toner, and dust particles can accumulate inside the printer and cause print quality problems such as Smearing or Toner Specks. Clean the inside of the printer to prevent these problems.

Repeating Defects

Repeating Defect Measurement

When horizontal lines and/or spot occur periodically, it is possibly caused by a particular roller. Measure the trouble interval on the test print, and check the relation to the Roller in the table. The interval does not necessary match circumference of the Roller.

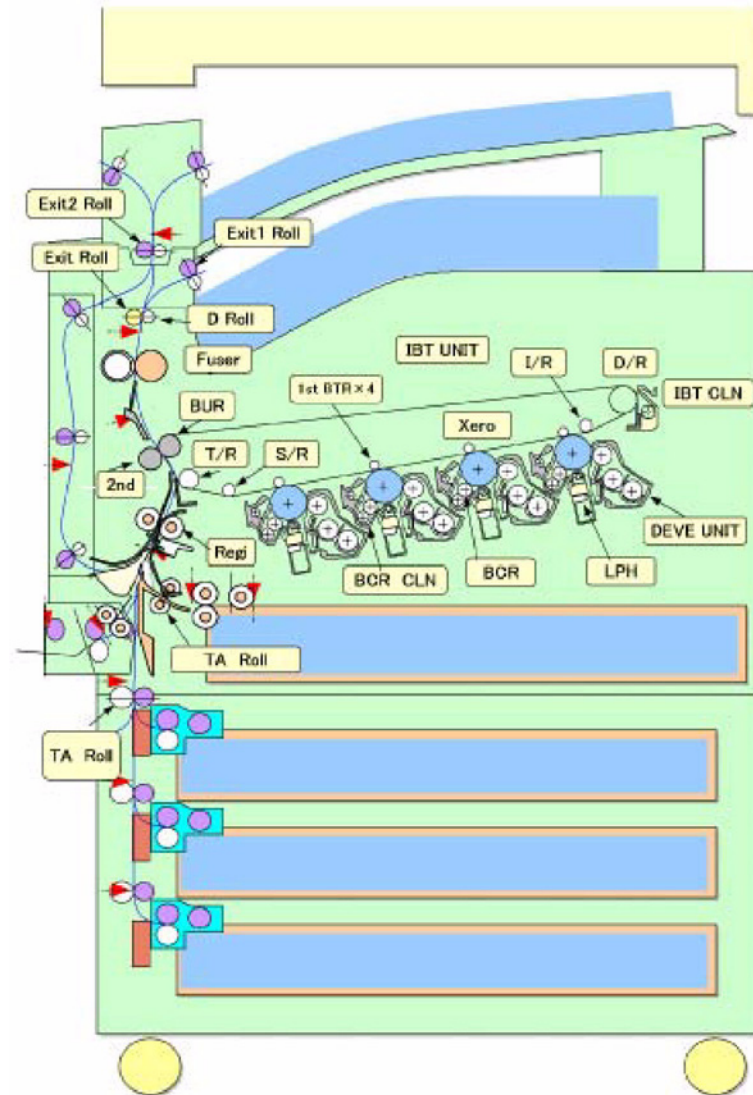
Table 1 Horizontal Line and Spot Trouble Measurement

Maintenance Item	Distance Between Defects	Replacement	Part List
Fuser	25 mm (0.99 in.) 83 mm (3.27 in.) 95 mm (3.74 in.)	Fuser	PL 7.1 Item 1
Imaging Unit	95 mm (3.74 in.) 38 mm (1.50 in.)	Imaging Unit	PL 8.1 Item 4
Transfer Roller	54 mm (2.13 in.)	Transfer Roller	PL 14.2 Item 1
Developer Roller	29 mm (1.14 in.)	Developer Housing Assembly	PL 5.2 Item 2

Distance between Transfer ~ Regi ~ FSR

Table 2 Distance between Transfer ~ Regi ~ FSR

Item	Longest		Shortest		Difference	Reference
	Distance (mm)	Total (mm)	Distance (mm)	Total (mm)		
Registration Roll	-	-	-	-	-	Starting from the center of the Registration Roll Nip
IBT Belt	56.85	56.85	56.85	56.85	0.00	The paper Lead Edge contacts the IBT Belt.
2nd BTR Nip Start	10.24	67.09	10.24	67.09	0.00	
2nd BTR Nip Center	2.89	69.98	2.89	69.98	0.00	Secondary Transfer Point
2nd BTR Nip End	2.84	72.82	2.84	72.82	0.00	
DTS Lead Edge	8.72	81.55	7.33	80.15	1.39	
POB Sensor	35.84	117.39	35.19	115.35	2.04	POB Sensor detects the paper Lead Edge
Fuser Inlet Chute	9.62	127.00	35.19	115.35	-	Position at which the paper Lead Edge contacts the Chute
Fuser Nip Start	22.31	149.31	30.17	145.51	3.80	
Fuser Nip Center	2.99	152.30	2.99	148.50	3.80	Between Transfer and Fuser (80.82mm)



s7800-951

Figure 1 Distance between Transfer ~ Regi ~ FSR

Repeating Defects Page

The Repeating Defects Page provides a measurement tool that allows you to match the spacing between repeated marks on the printed pages with the component that would cause such spacing to occur. Instructions for using the Repeating Defects Page are printed on the page.

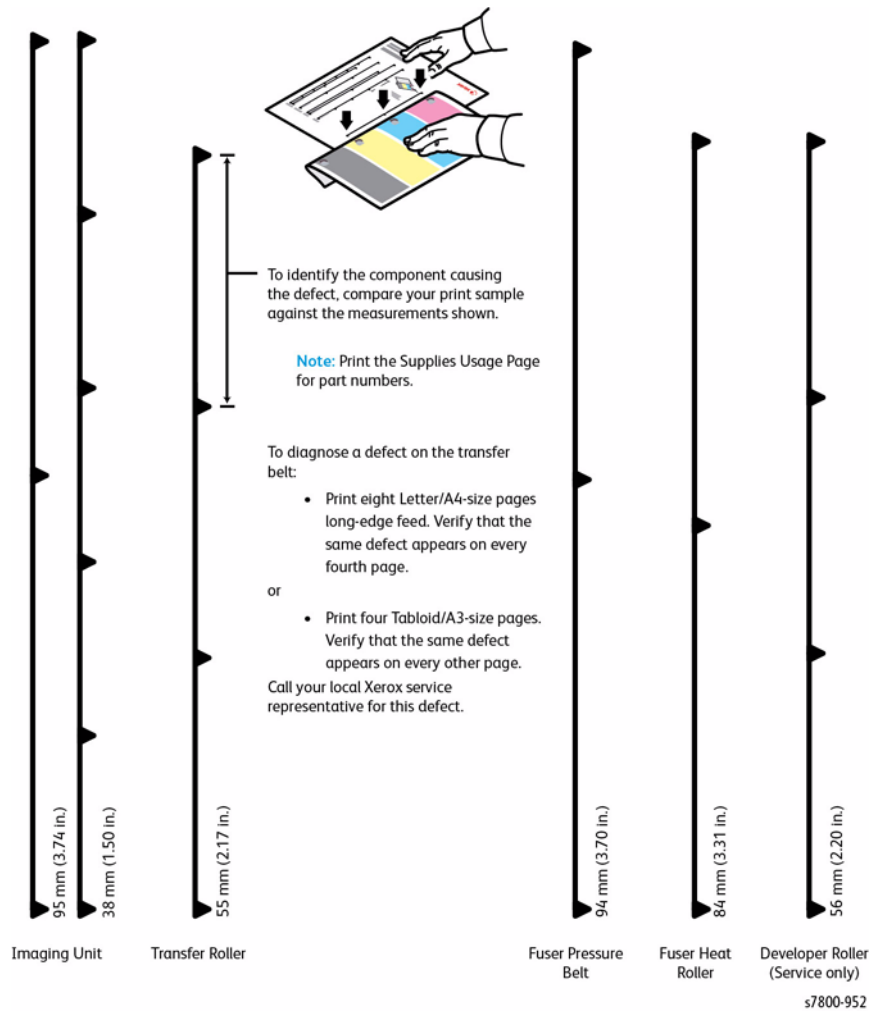


Figure 2 Repeating Defects

Print-Quality Troubleshooting Pages

A variety of test prints are available from the Control Panel's Troubleshooting menu to aid in determining the quality output from the printer and to assist in troubleshooting the problems.

Troubleshoot Print Quality

The Troubleshoot Print Quality contains instructions for identifying and resolving print-quality problems. Troubleshooting print-quality problems include:

- Smears, Smudges, and Streaks
- Repeating Spots or Lines
- Colors Too Light or Too Dark
- Colors Look Wrong
- Page Margins are Inconsistent
- Sides 1 & 2 are Not Sufficiently Aligned
- Vertical White Lines or Streaks - One Color
- Toner Missing or Easy to Rub Off
- Offset Image
- Mottled, Blotchy, or Black Areas Appear Blue
- Paper Jams Frequently

Accessing Troubleshoot Print Quality

1. From the printer's Control Panel, touch **Printer**.
2. Touch **Tools**.
3. Touch **Troubleshooting**.
4. Touch **Troubleshoot Print Quality**.
5. Touch **Print**.
6. Select the appropriate problem to be corrected.
7. Follow the on-screen instructions.

Test Pages

The Troubleshooting Test Pages contain various pages for identifying different color test pages.

- Cyan 50% Fill Test Page
- Magenta 50% Fill Test Page
- Yellow 50% Fill Test Page
- Black 50% Fill Test Page
- Red 50% Fill Test Page
- Green 50% Fill Test Page
- Blue 50% Fill Test Page
- Repeating Defects

Accessing the Test Pages

1. From the printer's Control Panel, touch **Printer**.
2. Touch **Tools**.
3. Touch **Troubleshooting**.
4. Touch **Test Pages**.
5. Select the appropriate test page.
6. Touch **Print** to print the test page

Cyan 50% Fill Page

The 50% Cyan Fill Test page contains 50% Cyan fills with alignment marks.

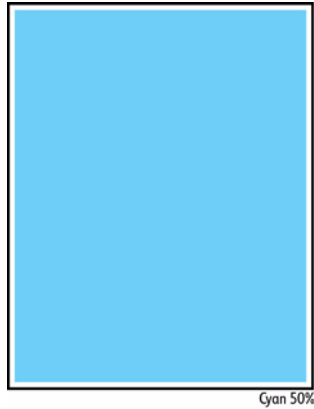


Figure 1 Cyan 50% Fill Page

Magenta 50% Fill Page

The 50% Magenta Fill Test page contains 50% Magenta fills with alignment marks.

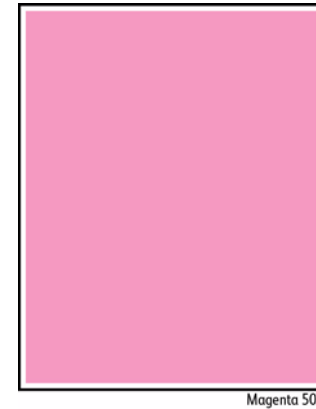


Figure 2 Magenta 50% Fill Page

Yellow 50% Fill page

The 50% Yellow Fill Test page contains 50% Yellow fills with alignment marks.



Figure 3 Yellow 50% Fill Page

Black 50% Fill Page

The 50% Black Fill Test page contains 50% Black fills with alignment marks.

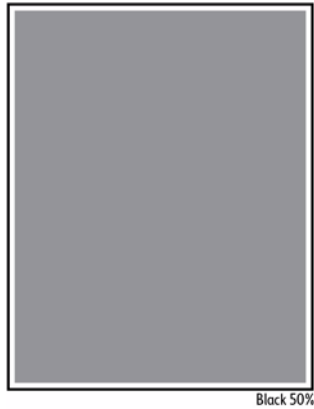


Figure 4 Black 50% Fill Page

Green 50% Fill Page

The 50% Green Fill Test page contains 50% Green fills with alignment marks.

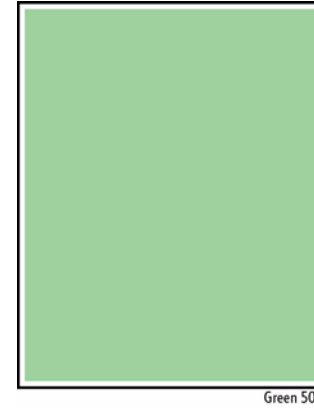


Figure 6 Green 50% Fill Page

Red 50% Fill Page

The 50% Red Fill Test page contains 50% Red fills with alignment marks.

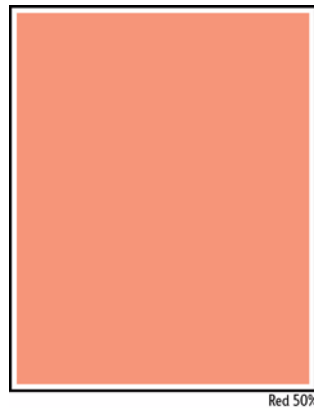


Figure 5 Red 50% Fill Page

Blue 50% Fill Page

The 50% Blue Fill Test page contains 50% Blue fills with alignment marks.



Figure 7 Blue 50% Fill Page

Print Test Patterns (dc612)

Test prints are available from the Control Panel's Troubleshooting menu to aid in determining the quality output from the printer and to assist in troubleshooting the problems.

Print Test patterns print test patterns stored in the engine firmware or IP Board controller PS software. The patterns will be used by the service personnel to identify, repair and validate the operability of printer xerographic and paper handling from all paper sources, options and output sources. Test Print diagnostics will allow for the following routines. Two Test Prints are available for the Phaser 7800:

- Engine Test Prints
- Controller Test Prints

Engine Test Prints

The Engine Test Prints include the following patterns:

- 90 Degree Grid
- B Patch
- Drum Pitch Halftone

Accessing Engine Test Prints

1. From the printer's Control Menu, touch **Printer**.
2. Touch **Tools**.
3. Touch **Setup**.
4. Touch **Service Tools**.
5. Touch **Service Diagnostics**.
6. In the passcode field, enter **6789**.
7. Touch **OK**.
8. Select **Service Information**.
9. Scroll down the Service Information menu.
10. Touch **dc612 Test Patterns**.
11. Touch **Engine Test Prints**.

12. Select the desired test pattern.

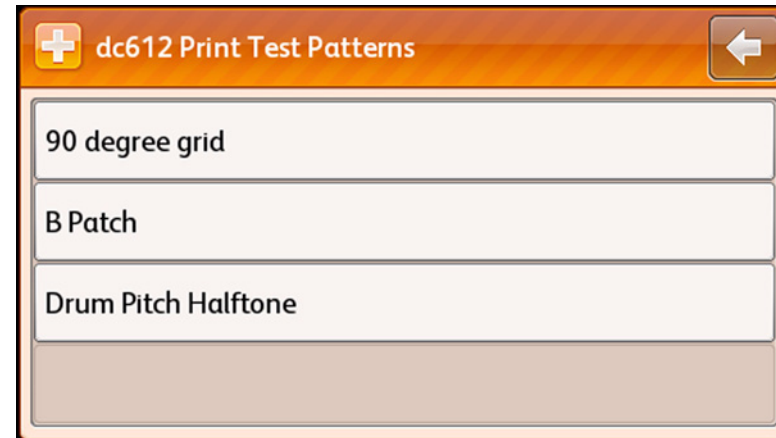


Figure 1 Engine Test Prints

13. Touch **Start** to print the test pattern.
14. A progress window appears showing the status.
15. Touch **X** to exit.

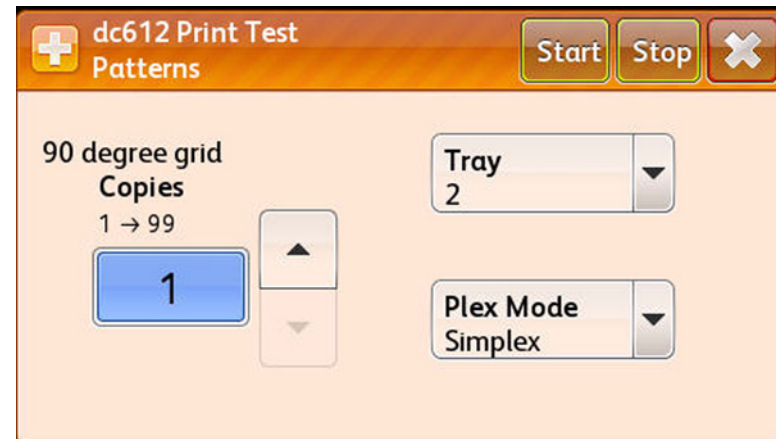


Figure 2 Printing and Exiting Engine Test Prints

16. Touch the **Back Arrow** to exit the Engine Test Prints.
17. Touch the **Back Arrow** one more time to return to the Service Information menu.

90 Degree Grid

The 90 Degree Grid displays the 4 colors aligned on a grid and prints a square grid over the complete sheet of paper. The square should be uniform and the vertical and horizontal lines should be straight and of uniform thickness, if not, the problem should be diagnosed and corrected. All colors should align within < 125 μm.

The 90 Degree Grid is used to verify RegiCon is within specifications.

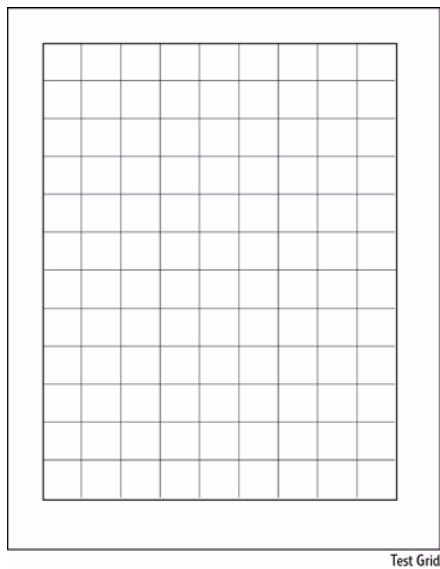


Figure 3 90 Degree Grid

B Patch

The B Patch consists of YMCK Chevrons and composite patches and prints chevron pattern. B Patch is used for per defects in the chevron printing area.

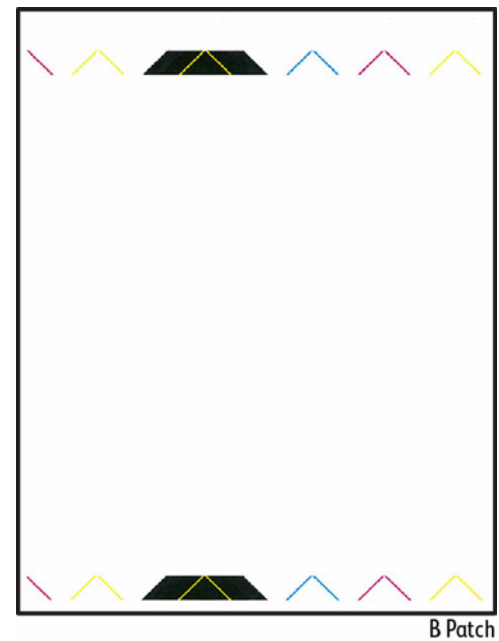


Figure 4 B Patch

Drum Pitch Halftone

The Drum Pitch Halftone consists of C,K,G,M pattern. The Non-scaled print is intended for B size media.

NOTE: This does not scale down for A sized pages. K is solid fill, CM & G are random On/Off pixels.



Figure 5 Drum Pitch Halftone

Controller Test Prints

The Controller Test Prints include the following patterns:

- 50% CMKRGB Fill Pages
- A3 Total
- A4 Total
- Letter Total
- Yellow Line Freq
- Magenta Line Freq
- Cyan Line Freq
- Black Line Freq
- Red Line Freq
- Green Line Freq
- Blue Line Freq

Accessing Controller Test Prints

1. From the printer's Control Menu, touch **Printer**.
2. Touch **Tools**.
3. Touch **Setup**.
4. Touch **Service Tools**.
5. Touch **Service Diagnostics**.
6. In the passcode field, enter **6789**.
7. Touch **OK**.
8. Select **Service Information**.
9. Scroll down the Service Information menu.
10. Select **dc612 Test Patterns**.
11. Touch **Controller Test Prints**.
12. Select the desired test pattern.

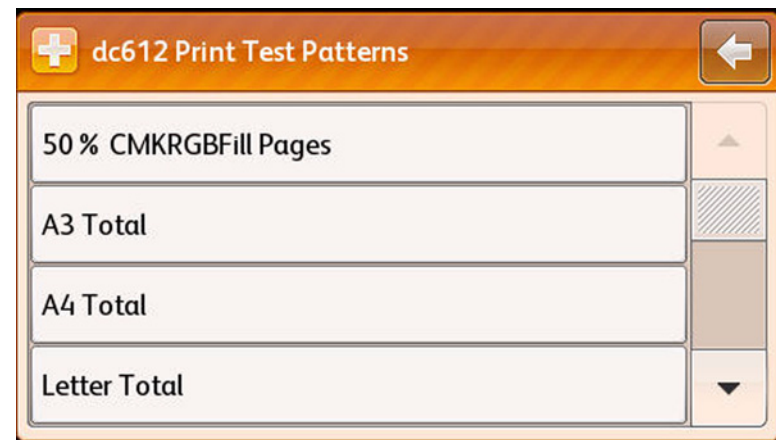


Figure 6 Controller Test Prints

13. Touch **Start** to print the test pattern.
14. A progress window appears showing the status.
15. Touch **X** to exit.

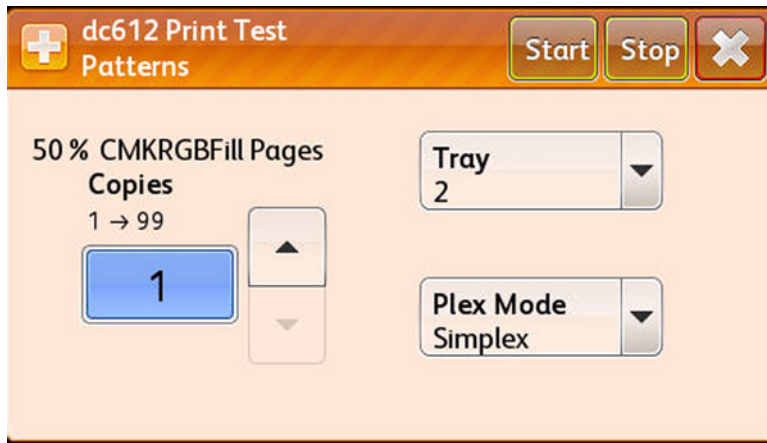


Figure 7 Printing and Exiting Controller Test Prints

16. Touch the **Back Arrow** to exit the Controller Test Prints.
17. Touch the **Back Arrow** one more time to return to the Service Information menu.

50% CMKRGB Fill Pages

The 50% CMKRGB Fill consists of 6 pages of 50% CMKRGB fills with alignment marks.

Things to look for:

- Repeating defects or banding
- Missing Color(s)
- Streaks
- Voids

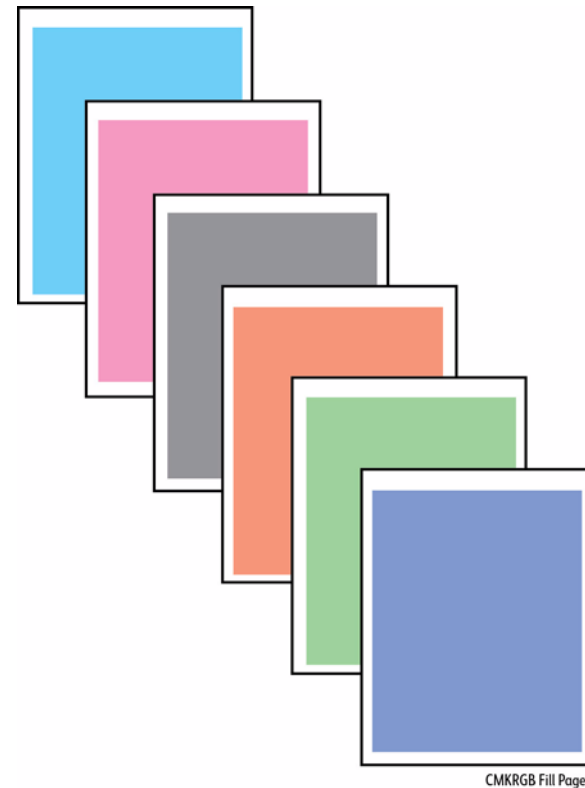


Figure 8 50% CMKRGB Fill Pages

A3 Total

The A3 Total page consists of patterns for evaluating image quality. The print can be printed on B-size media or scaled on 8.5 x 11 size media.



Figure 9 A3 Total

A4 Total

The A4 Total page consists of patterns for evaluating image quality.



Figure 10 A4 Total

Letter Total

The Letter Total page consists of patterns for evaluating image quality.



Figure 11 Letter Total

Yellow Line Freq

The Yellow Line Freq contains yellow in graduated fills of decreasing density.

Things to look for:

- Repeating defects or banding
- Inconsistent variations in density
- Streaks
- Voids

Each color should be consistent across the page with no voids.

No separation or misconvergence where each bar meets its neighbor. Each bar is separated by a thin black line.

Look for thin white lines that would indicate a dirty LED lens or a scratched Imaging Unit.

Look for dark lines that would indicate a dirty or damaged Imaging Unit.

Look for complete fusing. Cold or hot offset fusing could indicate the incorrect paper weight has been selected.

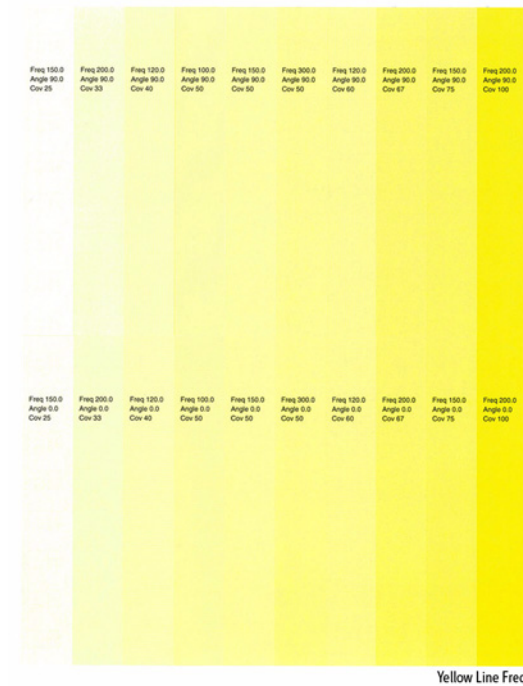


Figure 12 Yellow Line Freq

Magenta Line Freq

The Magenta Line Freq page contains magenta in graduated fills of decreasing density.

Things to look for:

- Repeating defects or banding
- Inconsistent variations in density
- Streaks
- Voids

Each color should be consistent across the page with no voids.

No separation or misconvergence where each bar meets its neighbor. Each bar is separated by a thin black line.

Look for thin white lines that would indicate a dirty LED lens or a scratched Imaging Unit.

Look for dark lines that would indicate a dirty or damaged Imaging Unit.

Look for complete fusing. Cold or hot offset fusing could indicate the incorrect paper weight has been selected.

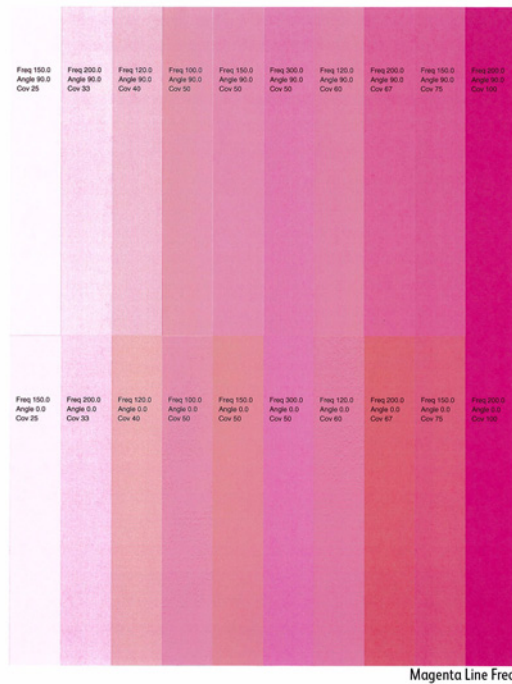


Figure 13 Magenta Line Freq

Cyan Line Freq

The Cyan Line Freq page contains cyan in graduated fills of decreasing density.

Things to look for:

- Repeating defects or banding
- Inconsistent variations in density
- Streaks
- Voids

Each color should be consistent across the page with no voids.

No separation or misconvergence where each bar meets its neighbor. Each bar is separated by a thin black line.

Look for thin white lines that would indicate a dirty LED lens or a scratched Imaging Unit.

Look for dark lines that would indicate a dirty or damaged Imaging Unit.

Look for complete fusing. Cold or hot offset fusing could indicate the incorrect paper weight has been selected.

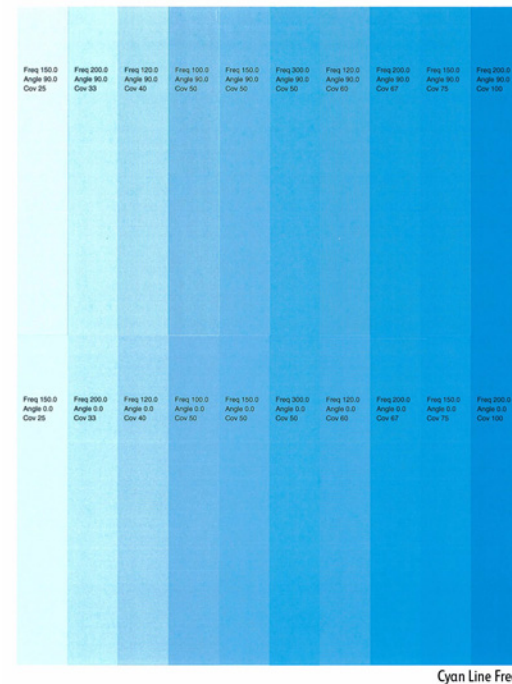


Figure 14 Cyan Line Freq

Black Line Freq

The Black Line Freq page contains black in graduated fills of decreasing density.

Things to look for:

- Repeating defects or banding
- Inconsistent variations in density
- Streaks
- Voids

Each color should be consistent across the page with no voids.

No separation or misconvergence where each bar meets its neighbor. Each bar is separated by a thin black line.

Look for thin white lines that would indicate a dirty LED lens or a scratched Imaging Unit.

Look for dark lines that would indicate a dirty or damaged Imaging Unit.

Look for complete fusing. Cold or hot offset fusing could indicate the incorrect paper weight has been selected.

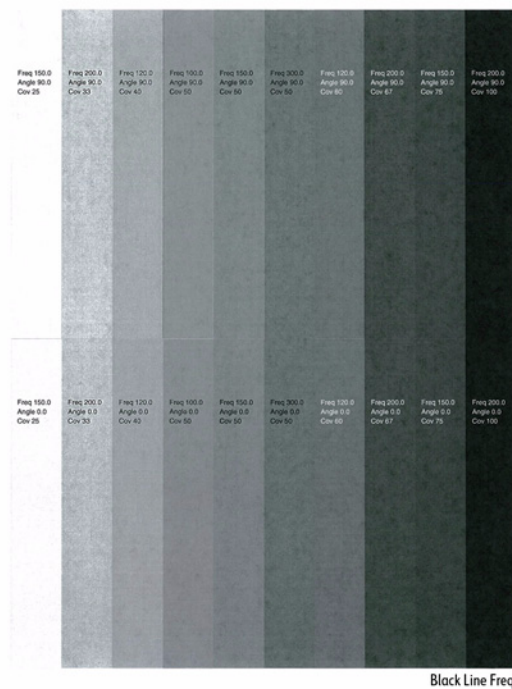


Figure 15 Black Line Freq

Red Line Freq

The Red Line Freq page contains red in graduated fills of decreasing density.

Things to look for:

- Repeating defects or banding
- Inconsistent variations in density
- Streaks
- Voids

Each color should be consistent across the page with no voids.

No separation or misconvergence where each bar meets its neighbor. Each bar is separated by a thin black line.

Look for thin white lines that would indicate a dirty LED lens or a scratched Imaging Unit.

Look for dark lines that would indicate a dirty or damaged Imaging Unit.

Look for complete fusing. Cold or hot offset fusing could indicate the incorrect paper weight has been selected.

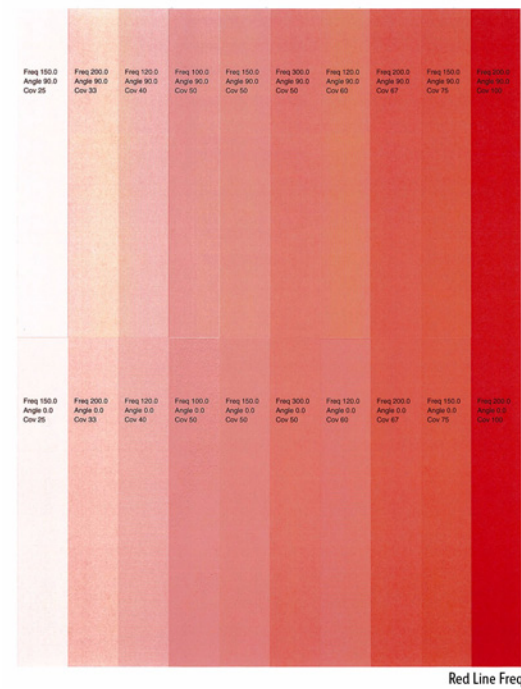


Figure 16 Red Line Freq

Green Line Freq

The Green Line Freq page contains green in graduated fills of decreasing density.

Things to look for:

- Repeating defects or banding
- Inconsistent variations in density
- Streaks
- Voids

Each color should be consistent across the page with no voids.

No separation or misconvergence where each bar meets its neighbor. Each bar is separated by a thin black line.

Look for thin white lines that would indicate a dirty LED lens or a scratched Imaging Unit.

Look for dark lines that would indicate a dirty or damaged Imaging Unit.

Look for complete fusing. Cold or hot offset fusing could indicate the incorrect paper weight has been selected.

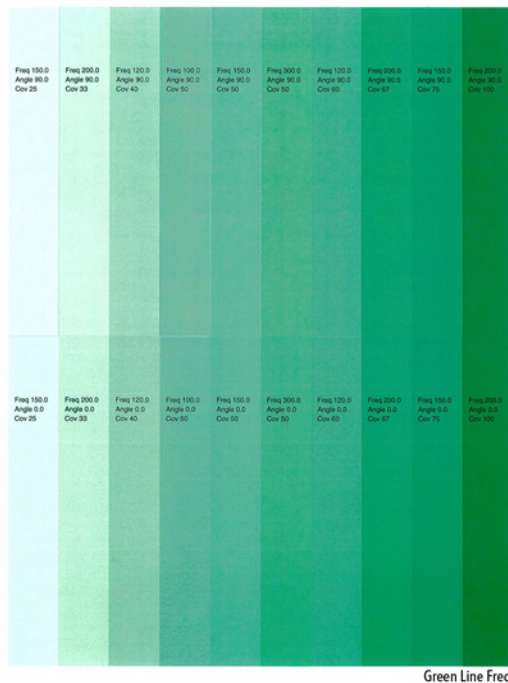


Figure 17 Green Line Freq

Blue Line Freq

The Blue Line Freq page contains blue in graduated fills of decreasing density.

Things to look for:

- Repeating defects or banding
- Inconsistent variations in density
- Streaks
- Voids

Each color should be consistent across the page with no voids.

No separation or misconvergence where each bar meets its neighbor. Each bar is separated by a thin black line.

Look for thin white lines that would indicate a dirty LED lens or a scratched Imaging Unit.

Look for dark lines that would indicate a dirty or damaged Imaging Unit.

Look for complete fusing. Cold or hot offset fusing could indicate the incorrect paper weight has been selected.

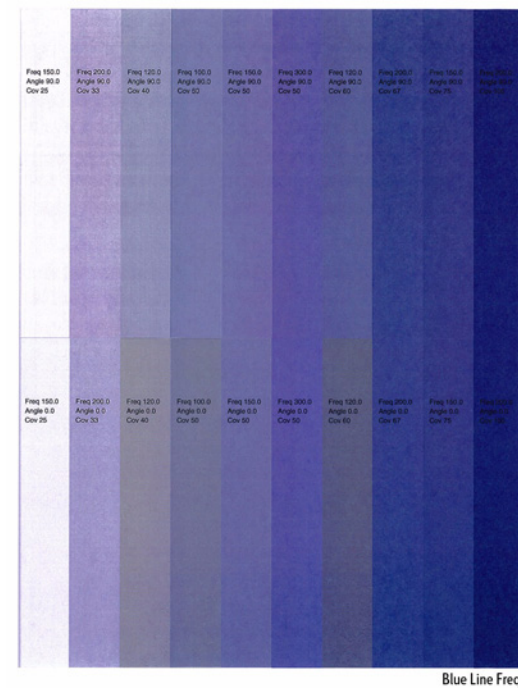


Figure 18 Blue Line Freq

IQ1 White Streaks in Sub Scan Direction (Dirt, Scratches)

At Cin50% and Cin30%, the lines in the process direction have reversed black and white colors. Width is approx. 1mm.



Figure 1 White Streaks in Sub Scan Direction

Primary Causes

This is caused by dirt or scratches.

Initial Actions

- Clean the SLA surface.

Procedure

NOTE: This must be separated from Deve trimmer jam. Do not replace the LPH without consideration.

Replace the LED Print Head (REP 2.2).

IQ2 1mm Stripes

At 50% and 30% densities, the lines in the process direction of a single color have reversed black & white. The width is approximately 1mm.



Figure 1 1mm Stripes

Primary Causes

Parts failure or contamination on the SLA surface.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

NOTE: This must be separated from Deve trimmer jam. Do not replace the LED Print Head without examining the Developer.

Clean the SLA surface. **Does the error still occur?**

Y **N**
| Troubleshooting complete.

Replace the LED Print Head (REP 2.2).

NOTE: 50% and 30% half tones can be printed by using Step Prints in the Troubleshooting menu.

Because the phenomenon is similar to IQ27 (Color Stripes) as well.

IQ3 Image Shift in Process Direction

The image is shifted in the process direction.

Primary Causes

The LPH EEPROM data is corrupt.

Initial Actions

- Check the paper transfer path.
- Verify the paper used is supported by the printer.

Procedure

Verify that the problem does not occur on the Diagnostic Test Print. **Does the error still occur?**

Y **N**
| Troubleshooting complete.

Replace the LED Print Head ([REP 2.2](#)).

IQ4 White Stripes

White stripes appear in the process direction for all densities of a single color.

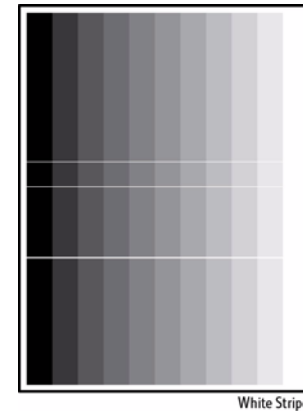


Figure 1 White Stripes

Primary Causes

- Contamination on the SLA surface.
- Scratches on the LED Print Head Self Focusing Lens surface.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

Clean the SLA surface. **Does the error still occur?**

Y **N**
| Replace the LED Print Head ([REP 2.2](#)).

Check the Cleaning Rod to ensure it's working.

IQ5 SLED Transfer Cycle Stripes

Cyclical matte stripes or black stripes appear in the process direction. The pitch changes depending on the process speed.

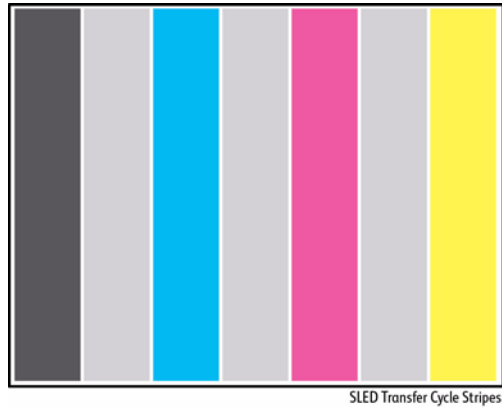


Figure 1 SLED Transfer Cycle Stripes

Primary Causes

Poor connection of Flat Cable between the MCU and the LPH.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

Verify that the problem does not occur in Step Pattern prints. **Does error occur?**

Y N

Check for connection mistake and scratches/ damages on the FFC Cable. **Is the connection damaged?**

Y N

Replace the MCU PWB (REP 18.5).

Replace the FCC Cable (PL 2.2.1).

Replace the LED Print Head (REP 2.2).

IQ6 In/ Out Density Difference

The densities between the IN and OUT (front and rear) sides are different.

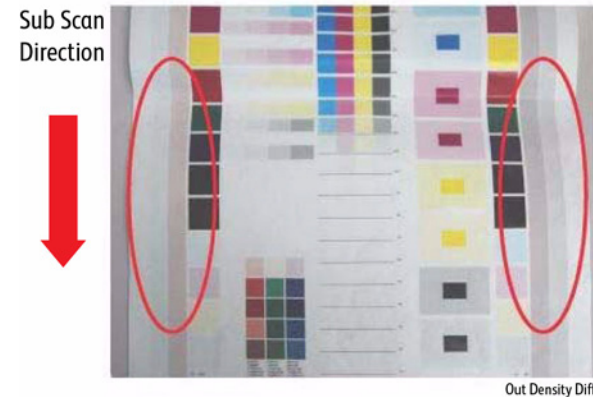


Figure 1 In/ Out Density Difference

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Cause (1st)

- The LED Print Head Z direction positioning pin is not in contact with the Photoreceptor.
- Failure in the retract mechanism.
- The positioning plate cannot fit in.
- The LED Print Head positioning pin is bent.
- The tip of the pin is contaminated.

Procedure

Replace the Imaging Unit (REP 8.1). **Does the error still occur?**

Y N

Troubleshooting complete.

Replace the LED Print Head (REP 2.2).

Cause (2nd)

- The LED Print Head round-tip pin is not in contact with the Imaging Unit ball bearing.
- The gap between the Photoreceptor and the Developer is different at In and Out.

Procedure

Check whether the Imaging Unit In/Out direction positioning is set correctly. **Does the error still occur?**

Y N
| Troubleshooting complete.

Check for any debris such as bits of paper between the LED Print Head and the Imaging Unit. **Does the error still occur?**

Y N
| Troubleshooting complete.

Remove the Imaging Unit to check if any debris are stuck to the ball bearing surface (In/Out). **Are there any debris to the ball bearing surface?**

Y N
| Troubleshooting complete.

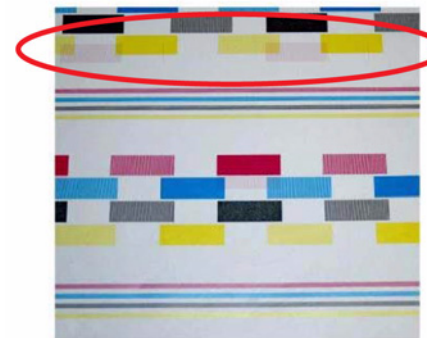
Check if any debris are stuck to the tip of the LED Print Head round-tip pin (Out). **Does the error still occur?**

Y N
| Troubleshooting complete.

Remove the LED Print Head Unit to check if any debris are stuck to the tip of the LED Print Head round-tip pin (In/Out).

IQ7 Video Data/ Crosstalk

An image with different color overlaps another shown below as faint magenta image overlapping yellow.



Video Data Crosstalk

Figure 1 Video Data/ Crosstalk

Primary Causes

- Poor connection of Flat Cable between the MCU and the LED Print Head.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

NOTE: If this problem does not occur in Engine Test Prints. Therefore, do not replace the LED Print Head without consideration.

Verify that the problem does not occur on the Engine Test Prints from within Diagnostics.

Does the error still occur?

Y N
| Check connection of Cables and check the LED Print Head Cable for scratches and damages.

Replace the LED Print Head (REP 2.2). **Does the error still occur?**

Y N
| Replace the LED Print Head Cable (PL 2.2 Item 1).

Replace the MCU PWB (REP 18.5).

IQ8 Image Shift in Process

The image shifts in the process direction.

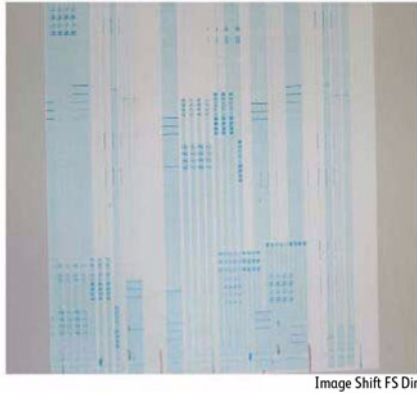


Figure 1 Image Shift in Process

Primary Causes

Poor connection of Flat Cable between the MCU and the LED Print Head.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

NOTE: This problem does not occur in the Engine Test Prints from Diagnostics. Therefore, do not replace the LED Print Head without consideration.

Verify that the problem does not occur on the **Engine Test Prints** from Service Diagnostics.

Does the error still occur?

Y | **N**
|
| Check the connection between the MCU PWB (REP 18.5) and the LED Print Head. Reconnect the wiring harness connectors. **Does the error still occur?**

Y | **N**
|
| Troubleshooting complete.

Replace the MCU PWB (REP 18.5).

Replace the LED Print Head (REP 2.2).

IQ9 Edge-less Image (No Margins)

An image is printed outside the margins.

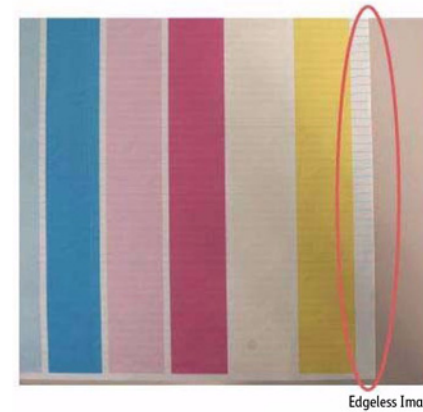


Figure 1 Edge-less Image (No Margins)

Primary Causes

Poor connection of Flat Cable between the MCU and the LED Print Head.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

NOTE: If this problem does not occur in Engine Test Prints from Diagnostics. Therefore, do not replace the LED Print Head without consideration.

Verify that the problem does not occur on the **Engine Test Prints** from Service Diagnostics.

Does the error still occur?

Y | **N**
|
| Check connection of Cables and check the FFC Cable for scratches and damages. **Are the connectors damaged?**

Y | **N**
|
| Replace the MCU PWB (REP 18.5).

Replace the FFC Cable (PL 2.2 Item 1)

Replace the LED Print Head (REP 2.2).

IQ10 Contamination Stripes

There are blank areas. Their size is proportional to the size of contaminants.

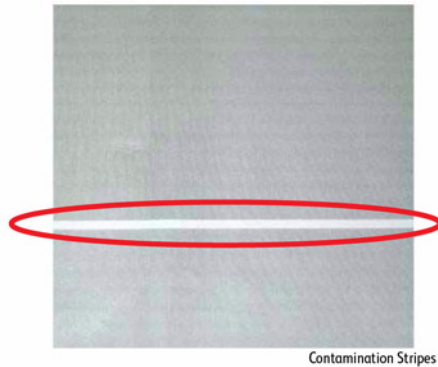


Figure 1 Contamination Stripes

Primary Causes

Contamination exists on the Chip (inside the LED Print Head).

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

NOTE: Be careful because this phenomenon is very similar to that of the Deve trimmer jam.

Clean the SLA surface. **Does the error still occur?**

Y **N**
| Troubleshooting complete.

Replace the LED Print Head (REP 2.2).

IQ11 Chip/ Half Chip Blanks

Blank areas in sizes of 2.7 mm or 5.4 mm in a single color.

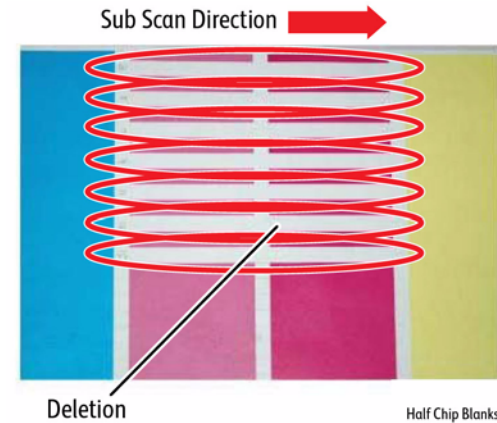


Figure 1 Chip/ Half Chip Blanks

Primary Causes

- Poor contact within the LED Print Head.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

Replace the LED Print Head (REP 2.2) of the corresponding color.

IQ12 SLED Transfer Failure

Stripes and blank areas (stripes) in an individual color appear repeatedly in sizes of 2.7 mm. They appear by half chip units.

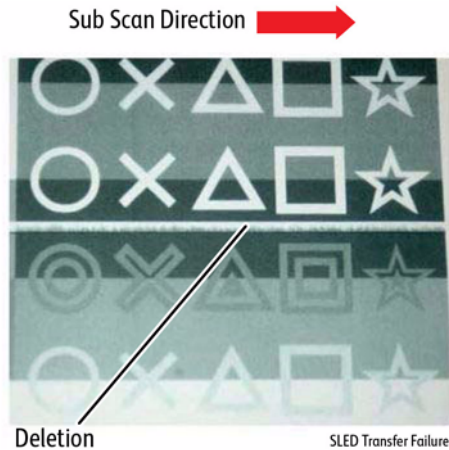


Figure 1 SLED Transfer Failure

Primary Causes

+ 5 vdc failure. LED Chip failure.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

Check the power source.

- Pin 518 A4 for Yellow
- Pin 518 A8 for Magenta
- Pin 518 B5 for Cyan
- Pin 518 B1 for Black

Is 5V output from the Motor Drive PWB?

Y N

Is +5 VDC present at P/J 401 pin 5?

Y N

Replace the Main LVPS (REP 18.15).

Replace the Motor Drive PWB (REP 18.6).

A

Check the continuity of the cable between the Motor Drive MCU and LED Print Head of the effected color. **Is the continuity between the Motor Drive PWB and the LED Print Head normal?**

Y N

Replace the cable.

Replace the LED Print Head (REP 2.2).

IQ13 Tapes Not Peeled

The highlight portions are too obvious. The whole paper seems to be filled with stripes.

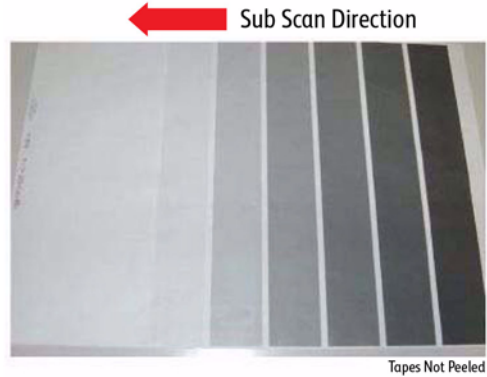


Figure 1 Tapes Not Peeled

Primary Causes

The SLA surface protective tape is not peeled off.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

Inspect the LED Print Head and check whether any protective tape remains on the SLA. **Is there tape remaining on the SLA?**

Y N
| Troubleshooting complete.

Remove the tape.

NOTE: Do not forget to check for and peel off any tape when replacing the LED Print Head (spare part).

IQ14 Charging Roll Pitch White Stripes - 1

If the BCR is deformed at the BCR and Photoreceptor NIP sections, the trace may appear as thin white stripes in the FS direction on the highlight portion at the Charging Roll Pitch.

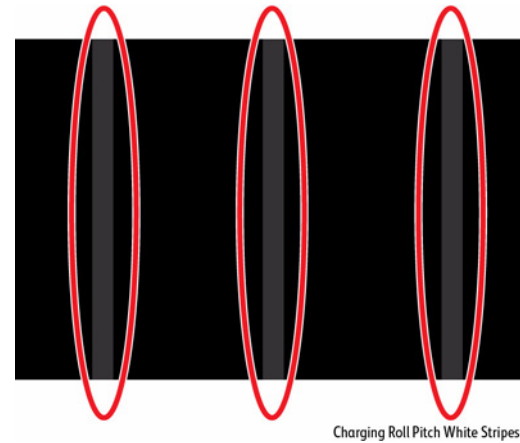


Figure 1 Charging Roll Pitch White Stripes 1

Primary Causes

- This problem may occur with New Imaging Unit that has been stored for a long time.
- It also occurs when the MC has rested in a high temperature environment for a long time. (Halftone image)

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

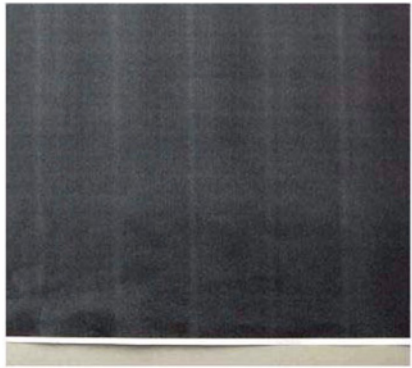
On a halftone image, check that lines with 38 mm pitch appear in the FS direction. **Are there lines with 38 mm appear in the FS direction?**

Y N
| Troubleshooting complete.

Make approximately 10 to 30 printouts.

IQ15 Charging Roll Pitch White Stripes - 2

If the substances contained in the CLN-Roll get stuck to the BCR at the BCR and CLN-Roll NIP sections, the resistance on the BCR gets reduced and may cause the appearance of white stripes in the FS direction.



Charging Roll Pitch White Stripes 2

Figure 1 Charging Roll Pitch White Stripes 2

Primary Causes

- This may occur when the MC has been resting for a long time or in the early mornings. (Halftone image).

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

On a halftone image, check that lines with 38 mm pitch appear in the FS direction. **Are there lines with 38 mm appear in the FS direction?**

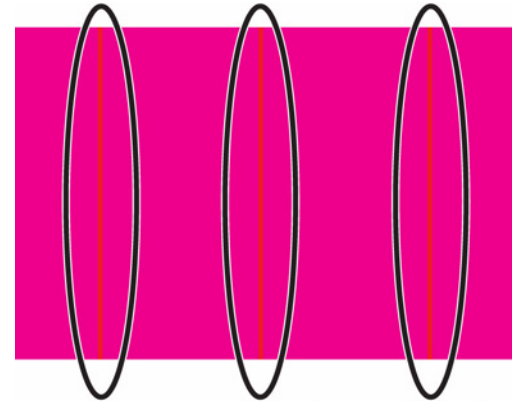
Y **N**
|
Troubleshooting complete.

Make approximately 10 to 30 printouts. This disappears over time.

NOTE: If the fault lies with the Y, M, or C Drum, print full-color images. If it is with the K Drum, print either full-color or black & white images.

IQ16 Photoreceptor Pitch Color Stripes

Vibrations during the Imaging Unit CRU transportation may cause scrapes and friction in the BCR and the Photoreceptor, resulting in leftover electrostatic memory on the Photoreceptor that generates thin white streaks in the FS direction on the highlight portion at the Photoreceptor Pitch.



Photoreceptor Pitch Color Stripes

Figure 1 Photoreceptor Pitch Color Stripes

Primary Causes

This problem may occur right after the replacement of Imaging CRU (occurs at Halftone image quality).

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

On a halftone image, check that lines with 94 mm pitch appear in the FS direction. **Are there lines with 94 mm appear in the FS direction?**

Y **N**
|
Troubleshooting complete.

Make approximately 10 to 30 printouts.

- If the fault lies with the Y, M, or C Drum, print full-color images.
- If it is with the K Drum, print either full-color or black & white images.

IQ17 Background on Glossy Media

Compared to Plain Paper, background is more visible on Glossy media.

Primary Causes

- Paper types with better transfer ability (uncoated) and better toner absorption ability will have less background.

Initial Actions

- Print on media from the RML.
- Check the paper transfer path then perform Calibrate for Paper.
- Ensure there are no debris in the transfer path.

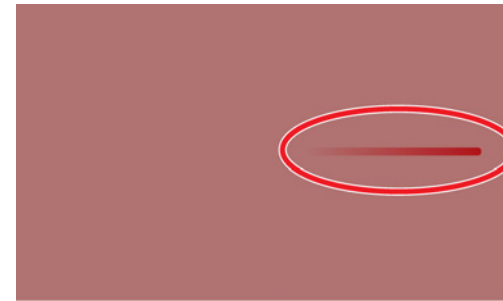
Procedure

1. Verify that the background level is acceptable on plain paper listed in the RML, usually Xerox Color Xpressions.
2. If a measurement is required, a sample print will need to be compared against a factory sample.

IQ18 Toner Image Detection Color Stripes

At Near Empty state, if a customer had removed the Cartridge and knocked on it to collect the toner towards the exit in attempt to use the very last bit of toner, it may cause color stripe deterioration.

This can also be caused by a toner cartridge that is exposed to a temperature exceeding 127° F (53° C) for a short period of time.



Toner Image Detection Color Stripes

Figure 1 Toner Image Detection Color Stripes

Primary Causes

- This error occurs when soft block shaped (clumped) toner is being supplied to the Developer. The lines are more visible when printing high density images.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

Use a new Toner Cartridge (PL 5.1) and check whether the problem disappears by itself. The problem should disappear by itself after running enough Solid Fill prints to purge the toner supply system.

IQ19 Toner Droplet Contamination

A contamination consisting of random spatters of toner in sizes of a few millimeters.

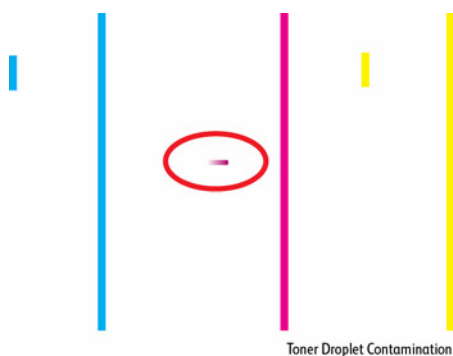


Figure 1 Toner Droplet Contamination

Primary Causes

- Printing a document with relatively higher-density image (5% or more) after continuously printing low-density (extremely low toner consumption) images thousands of times. This problem is more likely to occur for K and M colors.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path.

Procedure

Clean the Upper Cover and Trimmer Cover of the Developer Housing.

IQ20 Smear on Heavyweight

When the lead edge of paper reaches the Secondary Transfer, it increases the Secondary Transfer section load and can cause the IBT Drive Roll speed to change (decrease in speed). This change in speed changes the difference in relative speed between the Photoreceptor and the IBT Belt surface in the K-color Primary Transfer section, hence creating a smear (distorted image).

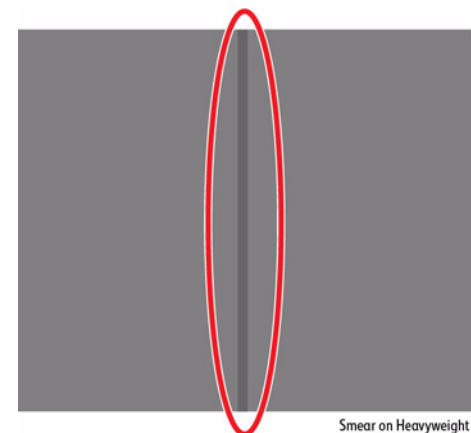


Figure 1 Smear on Heavyweight

Primary Causes

- This occurs in the black & white mode for Heavyweight Paper.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path
- Change to Full Color mode (Optimize for Speed vs. Optimize for Economy)
 1. Access CWIS by entering the printer's IP address.
 2. From the menu, select **Properties**.
 3. On the left side, select **Services > Printing > General**
 4. Under Printing Optimization, select the appropriate Optimize for Speed or Optimize for Economy.

Procedure

Check that a 1 mm wide line in SS direction appears at the position 130 mm away from the paper lead edge.

Change mode from Optimize for Economy to Optimize for Speed.

NOTE: This can be easily checked by printing a black halftone image that evenly covers the whole sheet in black & white mode.

IQ21 Rough Black

On paper that is not flat or has poor hue, the toner may not have been transferred properly due to the irregular paper surface, creating a rough transferred image.

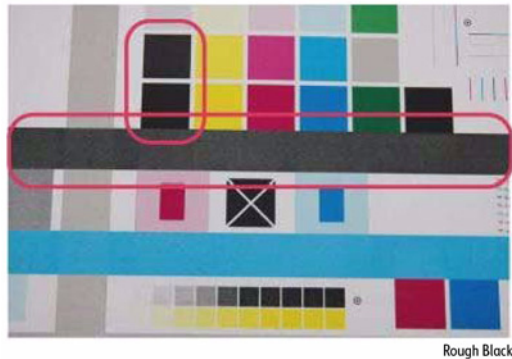


Figure 1 Rough Black

Primary Causes

- This occurs in modes other than Transparencies.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

1. Change the Secondary Transfer voltage setting up or down (Calibrate for Paper), then compare the hue to the paper with defective image.
2. Use media from the Recommended Media List (RML).

IQ22 Moist Paper Transfer Failure

The resistance is lowered because the paper is moist. The K color contains carbon that causes it to have larger dielectric loss, and hence it requires a different electrical field from the other colors. There is no latitude because the difference in required electrical field between multi color and K color is larger than the difference between paper resistance and toner resistance.

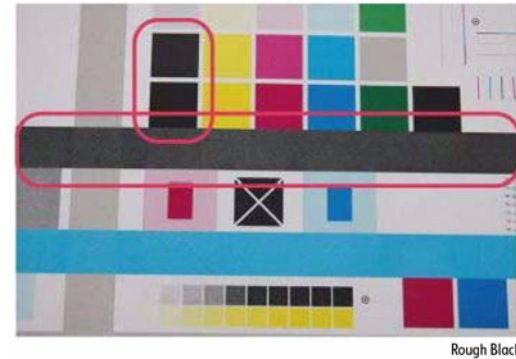


Figure 1 Moist Paper Transfer Failure

Primary Causes

- This occurs when the paper that has been kept in a high humidity environment (moist paper) is fed.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

Print using freshly unpacked paper of the same type as the defective paper, then compare the roughness and blank areas for K color and single color. **Does the error still occur?**

Y N
| Troubleshooting complete.

Install a dehumidifier.

IQ23 Toner Contamination at Lead/ Trail Edge

Lead Edge: Paper lead edge contacts the Belt when it is transported from REG1 to Transfer.

Trail Edge: The trail edge of paper that loops between the Transfer Fusing sections, at the release of the Secondary Transfer NIP, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the Belt.



Toner Contamination at Lead/Trail Edge

Figure 1 Toner Contamination at Lead/ Trail Edge

Primary Causes

- Toner contamination suddenly appears on the 2nd BTR or Belt (background).

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

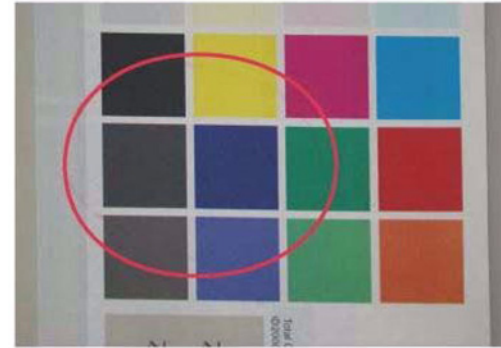
Run 1-sided print to check on which side (transfer side or side 2). **Does the contamination exist?**

Y **N**
| |
| | Troubleshooting complete.

Increase the margin.

IQ24 Side 2 Transfer Failure

Paper that has had its Side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. Since the resistance in the Secondary Transfer section also increases by lower humidity or over time, the required electrical field may not be able to be attained, especially in the early mornings (low humidity environment).



Side 2 Transfer Failure

Figure 1 Side 2 Transfer Fail

Primary Causes

- Occurs on Side 2 in a low temperature and low humidity environment.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

1. Verify that the hue on Side 2 becomes lighter when printing a high density image in a low temperature and low humidity environment.
2. Change the Secondary Transfer voltage setting Up or Down by performing Calibrate for Paper.

IQ25 Trail Edge Transfer Failure

The paper trail edge, after the Secondary Transfer NIP has been released, bounded up due to the fusing stroke effect and re-transfers to the Intermediate Transfer Belt.

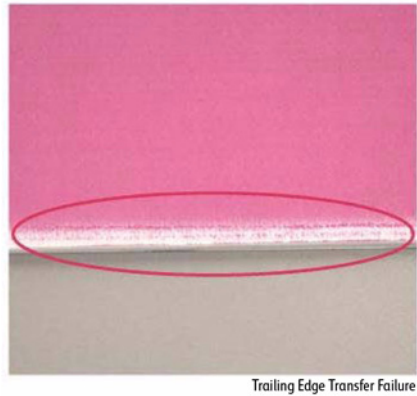


Figure 1 Trail Edge Transfer Failure

Primary Causes

- This problem can occur in any environment.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

1. Rough image or blank area (in SS direction) occurs for images within 10 mm (including margins) from the paper trail edge.
2. Increase the trail edge margin on the print.

IQ26 MWS (Side 2) (Micro White Spots)

When the resistance in the Secondary Transfer section is high, e.g. in the early mornings (low humidity environment), the transfer latitude between multi color and mono color is narrow and the setting voltage favors multi color. In other words, the voltage is a little high for mono color, and this causes the Transfer NIP discharge phenomenon that creates the white spots.

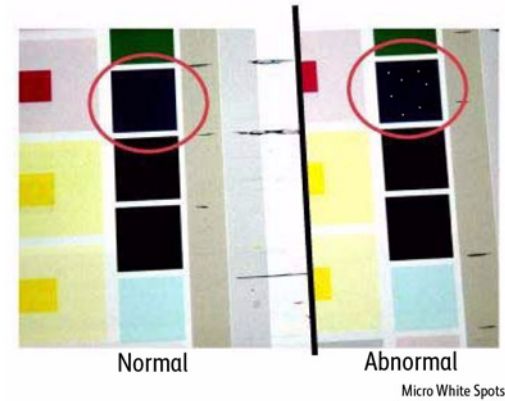


Figure 1 Micro White Spots

Primary Causes

- Occurs on Side 2 in a low humidity environment.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

1. Verify that the micro white spots appear on Side 2 in a low humidity environment.
2. Perform Calibrate for Paper procedure.

IQ27 Color Stripes

Presence of paper dust in between the Intermediate Transfer Belt and the CLN Blade causes poor cleaning.

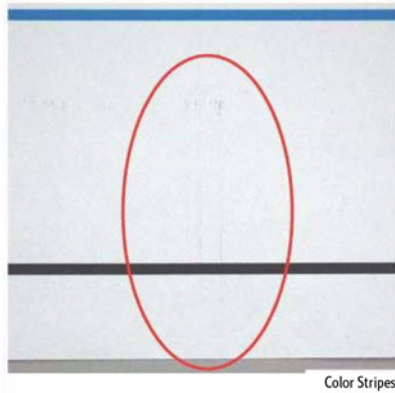


Figure 1 Color Stripes

Primary Causes

- This occurs when a paper that is prone to flaking is used.
- This is likely to occur at high humidity.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

Remove the IBT Belt Cleaner Assembly (REP 6.1) to check if debris exist at the tip of the Blade. **Are there debris at the tip of the Blade?**

Y | **N**
|
| Replace the IBT Belt Cleaner Assembly (REP 6.1).

Clean the Blade.

IQ28 Transfer Blank Areas (Partially Moist Paper)

Ripples in partially moist paper becomes wrinkles in the Transfer section, causing blank areas to appear.

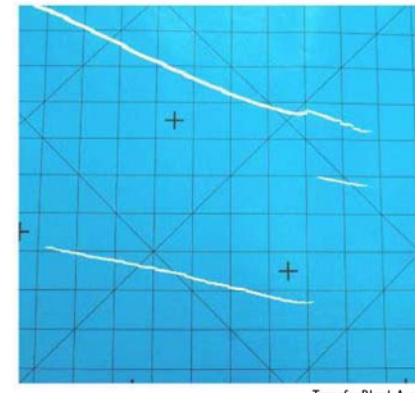


Figure 1 Transfer Blank Areas

Primary Causes

- This occurs with paper that has uneven moisture content.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

Replace the paper with freshly unpacked paper from the RML. **Does the problem go away?**

Y | **N**
|
| Replace the Fuser Assembly (REP 7.1).

Troubleshooting complete.

IQ29 Nip Marks

When using transparencies, slight lines may appear at the Fuser Heat Roll Pitch.

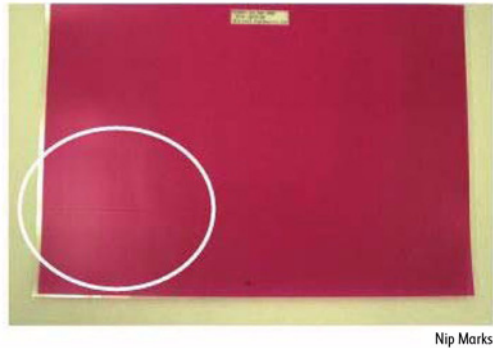


Figure 1 Nip Marks

Primary Causes

- This occurs when the first thing that is printed on a printer that has been left idle for a few days without heating up is a Transparency.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

Check if the pitch of the streaks is 83 to 84 mm on the Heat Roll Pitch. **Does the problem go away after a few prints?**

Y N

Replace the Fuser Assembly (REP 7.1).

Troubleshooting complete.

IQ30 Wetting

Distorted image may appear at one side or both sides of the paper tail edge when printing half-tone fill.



Figure 1 Wetting

Primary Causes

- This minor problem may occur with uniform images, such as halftone fill. It is more likely to occur in the early mornings, in a high temperature and high humidity environment, or when moist paper is used.

Initial Actions

- Check the paper transfer path.
- Ensure there are no debris on the transfer path

Procedure

1. Compare with the image sample.
2. Try to bring temperature and humidity within optimal range.

NOTE: Ask the customer to use fresh paper whenever possible.

IQ31 Condensation

If condensation occurs in the printer, an image with water marking may be printed.

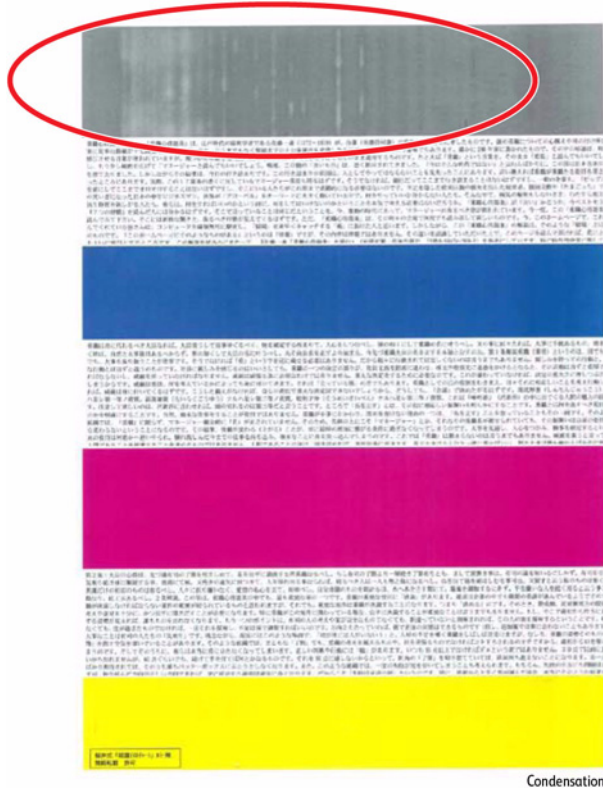


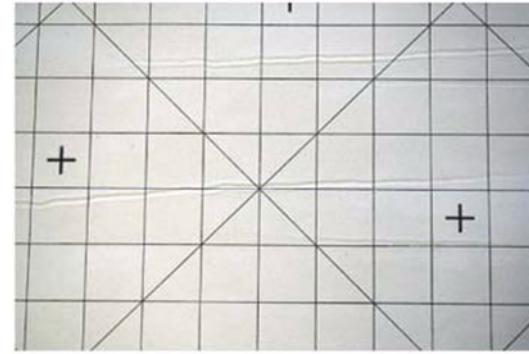
Figure 1 Condensation

Procedure

1. Do not turn the printer Off during high humidity conditions.
2. Leave the printer power On and set the Sleep mode to lower power consumption when the printer is not being used.

IQ32 Moist Paper Wrinkles (Fuser)

When moisture gets into vertical grained paper, paper waves occurs at the tip of short edge side. If the paper enters the Fuser Nip in this condition, the Fuser Nip cannot feed the paper properly, resulting in wrinkles.



Moist Paper Wrinkles

Figure 1 Moist Paper Wrinkles

Initial Actions

- Check the paper in the Tray for moistness and presence of waves at the lead edge in the Paper Feed direction.

Procedure

- Use fresh paper.
- Change the Paper Feed direction (LEF).
- Use horizontal grained paper.

IQ33 Lines on Coated Paper (EXIT)

Lines are generated on Side 1 in 2 Sided mode.

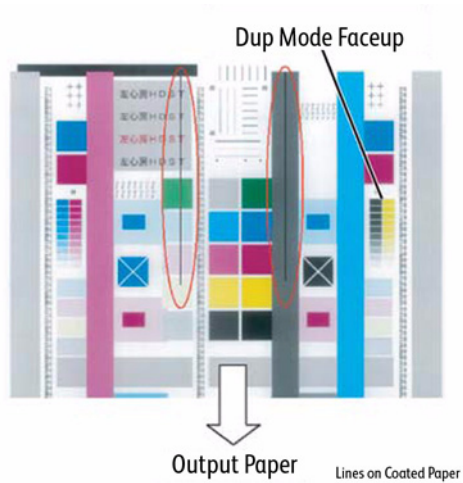


Figure 1 Lines on Coated Paper

Primary Causes

- When HW Gloss paper is output to Exit 1 using the 2 Sided mode in high temperature/high humidity environment, its Side 1 gets rubbed against the Exit Gate, resulting in lines.

Initial Actions

- Check whether both sides are output to Exit 1.
- During Side 2 output, check whether the Side 1 output direction is at the Tail Edge. If the above two conditions are met, this defect is likely to occur.

Procedure

Change the output tray to the Exit 2 Tray or the Side Tray.

NOTE: When paper is output to Exit 1 in 2 Sided mode, the convex part of the paper that bowed due to the corrugation of the Exit section makes contact with the Exit Gate, which generates brushed lines from the middle to the Tail Edge on the upper side (Side 1) of the exiting paper.

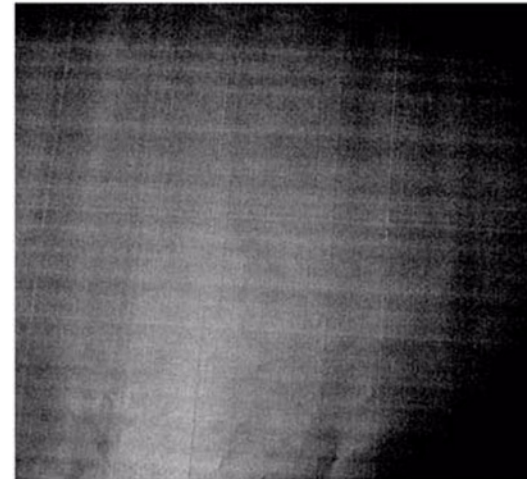
This happens when the paper area that bowed due to corrugation makes contact with the Exit Gate.

- Exit Gate
- Output to Exit 1
- Paper output direction
- Upper side of the exiting paper in 2 Sided mode

IQ34 Caterpillar Mark (Transfer)

This is caused by low electric charge in toner.

A bit of changed electricity remains at Side 1 Tail Edge of lightweight paper in the C-Zone (stress condition: DTS HSG warpage upper limit + higher side of the TC).



Caterpillar Mark

Figure 1 Caterpillar Mark

Initial Actions

- Compare with the image sample.

Procedure

1. Lower the TC and increase the primary (same as the heat haze/mock heat haze counter-measure).
2. Because this may get worse during condensation, go through a few dozens of full image 2 Sided sheets to handle it.

IQ35 White Streaks Due to Trimmer Jam (DEVE)

When debris such as dirt, dust, toner aggregate (including the case of heated one) exist in the Toner Cartridge, on the Toner Supply Path, or in the Developer Housing Assembly and they reach the section between the Developer Roll and the Trimmer, it could obstruct the formation of developer layer.

Initial Actions

- Clean the LED Print Head.

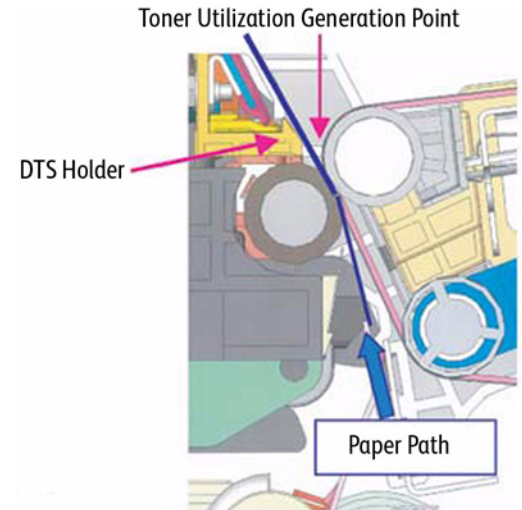
Procedure

1. Scoop and remove debris by inserting a sheet of paper into the gap between the Developer Roll and the Trimmer.
2. In most cases, the above procedure will not be able to remove the foreign substances. The assured method is to replace the Developer Housing Assembly.

IQ36 Heat Haze/ Mock Heat Haze

The heat haze/mock heat haze is generated in various places and in different ways.

The heat haze occurs at the place where paper is peeled off from the IBT Belt as shown in Figure 1 and Figure 2. The toner scatters in small clouds around the Solid Patch.



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Figure 1 Heat Haze/ Mock Heat Haze Locations

Heat Haze

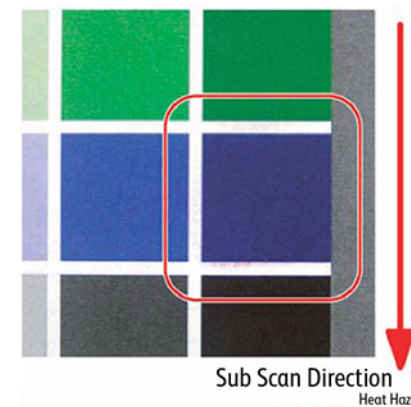


Figure 2 Heat Haze

Mock Heat Haze

The mock heat haze occurs when the transported paper rubs against the Holder DTS (Chute at the Transfer EXIT) as shown in the figure1,3, which charges it electrically and causes the toner to scatter at the Lead and Tail edges of the Solid section. This might form streaks in some parts.

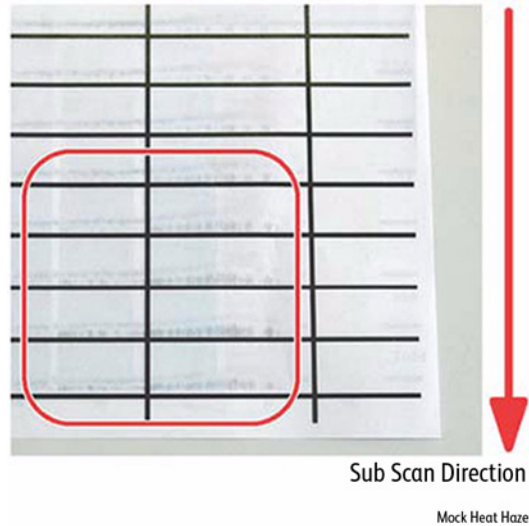


Figure 3 Mock Heat Haze

Initial Actions

- Obtain the Chart for Secondary Transfer Voltage Offset Mode to check whether the defect occurs for single K color or multi colors and whether it changes at the secondary voltage.

CAUTION

Perform paper (Tray) selection and paper type selection.

- Adjust Toner Density. Perform checking. If the TC is higher after the installation, lower the TC.

Procedure

- When a heat haze or mock heat haze occurs during installation, print 25 sheets of test chart, etc. on A3.
- Add Calibrate for paper procedure...

CAUTION

Occurrence of both heat haze and mock heat haze are easily influenced by the paper orientation. As final step, copy an image which have solid portions located at various positions to check for them. Especially for the secondary voltage offset chart, only one patch in the area is useful because the Secondary Transfer voltage changes between Lead and Tail edges.

IQ37 Unevenness Correction Within Image Area (IOT Image Quality)

The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

The LPH Exposure Amount Adjustment can be performed as negative correction within the range of 0 to -20 (%).

Correction Area

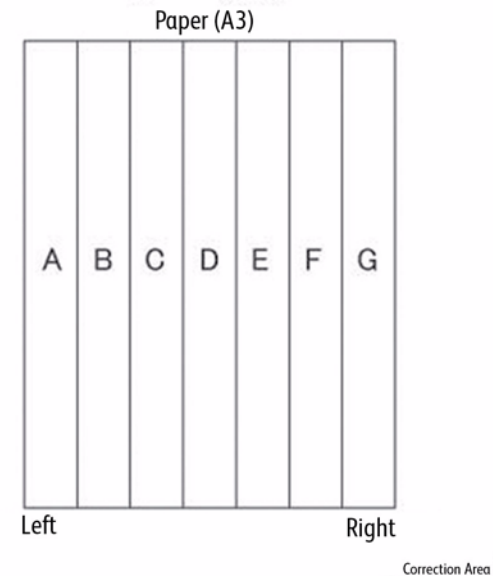


Figure 1 Correction Area

Table 1 Correction Area

	A	B	C	D	E	F	G
Distance from the left of image (mm)	0	52	103	154	206	257	308.9

As shown in the Figure 1, the LPH zone is divided into 7 areas by setting the 6 points - from A (leftmost edge) to G (rightmost edge).

Adjustment is performed at each area to lower the LPH exposure amount until the density is even.

*There are cases where point A or G will lie beyond the image zone. Furthermore, the 154mm mark is the center of the image.

NOTE: As an overly large adjustment might cause jumps in gradation, make the adjustments as small as possible.

The adjustment amount (%) is not = amount of change in density.

The actual exposure level includes a process that converts the brightness of ADC Sensor Position to 100%.

Procedure

1. LPH Exposure Amount Fine Adjustment On/Off Switch Selector
To enable the LPH Exposure Amount Fine Adjustment function, set the following NVM to ON.

Table 2 NVM Adjustment

NVM Names	NVM Address	Contents	Initial Value	Adjustment Range
Smile Correction Switch	749-005	0: OFF 1: ON	0	0 or 1

2. Selection of Correction Method

The LPH Exposure Amount Fine Adjustment can be done by:

- a. Correcting the density skew in the IN-OUT direction.
- b. Selecting a pre-prepared pattern to perform the correction.
- c. Using custom correction to manually correct the adjustment amount for each area.

A combination of the various correction methods can be used. However, the correction cannot go beyond the 0 to -20 (%) range.

- a. IN/OUT Density Correction

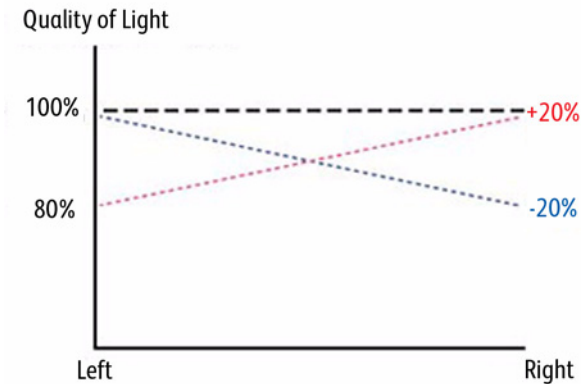
Corrects the IN-OUT density skew in the axis direction of the photoreceptor.

When there is density skew from the left to the right of the image, the adjustment amount to correct that has to be set for each color.

Setting Range is -20 to 20 (%)

Table 3 NVM Information

NVM Names	NVM Address	Color	Initial Value	Adjustment Range
In Out Tendency (IN/OUT correction)	749-191	Y	0	-20 ~ 20
	749-192	M	0	-20 ~ 20
	749-193	C	0	-20 ~ 20
	749-194	K	0	-20 ~ 20



Density Correction

Figure 2 Density Correction

* Although there is also an adjustment range at the positive side, it only involves reducing the brightness at the IN side or the OUT side and therefore will not have any correction that goes above 100%.

Print-Quality Specifications

The Print-Quality specifications are provided as follows.

Environmental Condition

- Temperature: 10° C - 32° C (50° F - 89.6° F)
- Humidity: 10% RH - 85% RH (85% RH at 28° C) (82.4° F)

NOTE: Defects may occur due to condensation after around 30 minutes if the printer is turned On in a critical environment such as 85% at 10° C (50° F).

Quality Paper

The print-quality is best when quality paper is fed from the tray. The print quality is evaluated on the maximum size of each centerline media.

- Color Print Quality: Xerox-brand X-Pression paper
- Black and White Quality: Xerox-brand 4200 paper

Paper Condition

Paper should be fresh and stored in the operating environment for 12 hours before use for printing.

Printer Condition

The specified print quality is guaranteed with the printer in specified normal environmental condition.

Print Alignment

Table 1 Print Alignment Specifications

Item	Trays 2, 3, 4, 5	Tray 1
Lead Registration	<ul style="list-style-type: none"> • Tray 2~5: ± 1.5 mm • Duplex Side 2: ± 1.9 mm 	± 2.2 mm
Side Registration	<ul style="list-style-type: none"> • Tray 2~5: ± 2.0 mm • Duplex Side 2: ± 2.4 mm 	± 3.0 mm
Lead Skew (200 mm)	<ul style="list-style-type: none"> • Tray 2~5: ± 1.5 mm • Duplex Side 2: ± 2.0 mm 	± 2.0 mm
Side Skew (400 mm)	<ul style="list-style-type: none"> • Tray 2~5: ± 3.0 mm • Duplex Side 2: ± 4.0 mm 	± 4.0 mm
Horizontal magnification (whole area) @ 100% magnification	<ul style="list-style-type: none"> • +/- 0.6% • +/- 0.6% 	N/A
Vertical magnification (whole area) @ 100% magnification	<ul style="list-style-type: none"> • +/- 0.6% • +/- 0.6% 	N/A
Linearity (V)	<ul style="list-style-type: none"> • 0.8 mm • 0.8 mm 	N/A
Linearity (H)	<ul style="list-style-type: none"> • 0.8 mm • 0.8 mm 	N/A

Table 1 Print Alignment Specifications

Item	Trays 2, 3, 4, 5	Tray 1
Linearity (slant)	<ul style="list-style-type: none"> • 0.8 mm • 0.8 mm 	N/A
Perpendicularity (400 mm)	<ul style="list-style-type: none"> • +/- 1.7 mm • +/- 1.7 mm 	N/A
Parallelism (400 mm)	<ul style="list-style-type: none"> • +/- 2.0 mm • +/- 2.0 mm 	N/A
Image loss (lead edge/trail edge/side)	<ul style="list-style-type: none"> • 4.0 mm / 2.0 mm / 2.0 mm • 4.0 mm / 2.0 mm / 2.0 mm 	N/A

NOTE: The Above alignment requirements for Tray 1 are applicable when Tray 1 Side Guides are properly adjusted against paper.

Image Specifications

Guaranteed Printable Area

- Maximum Printable Area: 305 mm x 1192 mm
- Guaranteed Printable Area: 297 mm x 477 mm

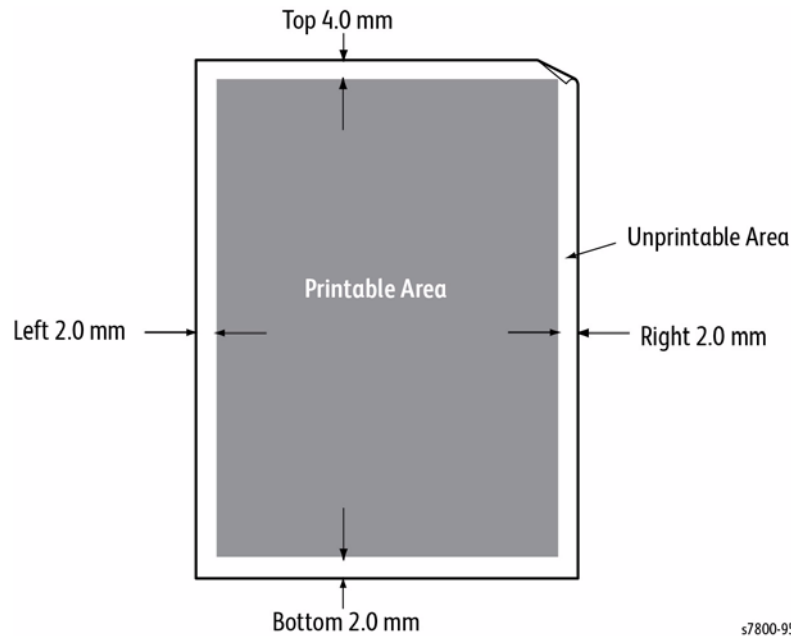


Figure 1 Guaranteed Printable Area

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Image Quality Restrictions

Table 1 Restrictions

	Image Quality Problem Name	SUB	Cause
1	Moist Paper Wrinkles	Fuser	When moisture gets into vertical grained paper, paper waves occurs at the tip of short edge side. If the paper enters the Fuser Nip in this condition, the Fuser Nip cannot feed the paper properly, resulting in wrinkles.
2	Wetting	Fuser	Interaction between the Regi ~ Transfer ~ Fuser disturbs the paper input orientation and causes the paper to contact the Belt before entering the Nip, resulting in distorted image (wetting). (This problem occurs at the paper edges)
3	Roll Marks on Coated Paper	Fuser/Exit	When Lightweight Coated Paper (JD Gloss, J Gloss, OS Gloss 127gsm) is copied, the gloss at the Fuser Decurler Drive Roll is lowered, which generates Roll marks. (4 locations, Roll width: 2 at center: 14mm, 2 at edges: 10mm) Regi shift of paper or backlash of the Roll causes a 2 to 3mm shift.
			<p>The diagram shows a horizontal line representing a paper roll. Four registration marks are shown as gray rectangles. A vertical dashed line is labeled 'Registration'. A horizontal dimension of 108.5 is shown between the center of the first and third marks. A horizontal dimension of 45.5 is shown between the center of the second and fourth marks. The first mark is labeled '[Outbreak Position]'. The bottom edge is labeled 'Image Leading Edge'.</p>
			<p>Regi shift of paper or backlash of the Roll causes a 2 to 3mm shift.</p>
4	Skid Marks on Side 1 during 2 Sided Print	Fuser	When printing Heavyweight paper in 2 Sided, its Side 1 contacts the Skid of the Decurler Chute, which generates skid marks. The Skid is installed to prevent rib streaks. (6 locations, Skid width: 3mm)

Figure 1 Roll Width

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Table 1 Restrictions

Image Quality Problem Name	SUB	Cause
<p>Figure 2 Skid Width</p> <p>The Relation between Document Background Density and Suppression Process</p> <ul style="list-style-type: none"> When the density is lower than spec, the background will be suppressed to be blank. When the density is higher than spec, the background will not be suppressed so that the images on the document can be kept. <p>The Area for Background Detection and the Area where Suppression Amount is Held</p> <ul style="list-style-type: none"> The area for background detection is the lead edge of a document. Background detection is not done on "The area where suppression amount is held". Instead, suppression process is done there, based on the background level detected on "the area for detection." <p>Skid Width</p>		
5 Furrows	Fuser	Sometimes, small asperity on the surface of the release layer (PFA), which are generated when the Fusing Belt is manufactured, appears on an image.
6 Charging Roll Pitch White Streaks	XERO/CLN	If the substances contained in the CLN-Roll materials get stuck to the BCR at the BCR and CLN-Roll NIP sections, the resistance of the BCR gets reduced partially and may cause the appearance of white streaks in the FS direction on halftone images.
7 Charging Roll Pitch White Spots	XERO/CLN	Tiny foreign substances on the surface of the BCR may cause BCR pitch white spots (up to 0.3mm in diameter) to appear on halftone images.
8 Photoreceptor Pitch Color Streaks	XERO/CLN	Directly after replacement of CRU, vibrations during the CRU transportation may cause the BCR or Blade to scrape against the Photoreceptor, resulting in leftover electrostatic memory on the Photoreceptor due to the friction, which generates thin colored streaks in the FS direction on the halftone portion at the Photoreceptor Pitch.
9 White Streaks in Process Direction/Dropping Density → Deletion during Continuous High Coverage	XERO/CLN	When a high area coverage image (roughly 60% or more/mono color) is printed continuously, the lubricant agent contained in the developer becomes over-supplied, which reduces the density of the halftone portion at the IN side of the image and generates white streaks after 200 sheets are printed.

Table 1 Restrictions

Image Quality Problem Name	SUB	Cause
10 Background on Coated Paper	Developer	Background level on Coated Paper is higher than that on Plain.
11 Color Streaks due to Toner	Developer	When continuously printing documents that contain relatively dark (near 50% of gradation), large, and uniform halftone images, shooting stars-like color stripes might appear due to clumped up toner.
12 Toner Droplet Contamination	Developer	A contamination consisting of random spatters of toner in sizes of a few millimeters may appear. This is more likely to happen when toner had accumulated at the tip of Upper Cover or the back side of the Trimmer Cover.
13 White Streaks due to Trimmer Jam	Developer	Streaks of blanks may occur in the Process direction. This is caused by foreign substances getting pinched between the Developer Roll and the Trimmer. (This is very similar to contamination on the LPH and light emission failure)
14 Lines on Coated Paper	EXIT	When HW Gloss paper A3 SEF is output to Exit 1 using the 2 Sided mode, its Side 1 might get rubbed against the Exit Gate, resulting in lines.
15 Corrugation Stripes	Transfer	When HW Gloss paper is being transported, corrugation marks may be generated.
16 Smear	Transfer	When the lead edge of paper reaches the Secondary Transfer, it immediately increases the Secondary Transfer section load and causes the IBT Drive Roll speed to change (decrease in speed). This change in speed changes the difference in relative speed between the Photoreceptor and the IBT Belt surface in the K-color Primary Transfer section, hence creating a smear (distorted image).
17 Rough Black	Transfer	On paper that is not flat or has poor hue, the toner may not have been transferred properly due to the irregular paper surface, creating a rough transferred image.
18 Moist Paper Transfer Failure	Transfer	The resistance is lowered because the paper is moist. The K color contains carbon that causes it to have larger dielectric loss, and hence it requires a different electrical field from the other colors. There is no latitude because the difference in required electrical field between multi color and K color is larger than the difference between paper resistance and toner resistance.
19 Toner Contamination at Lead/ Tail Edge	Transfer	The tail edge of Paper that loops between the Transfer-Fusing sections, at the release of the Secondary Transfer NIP, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the Belt.

Table 1 Restrictions

	Image Quality Problem Name	SUB	Cause
20	Multi Color Transfer Failure	Transfer	<ol style="list-style-type: none"> 1. Paper that has had its Side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. Since the resistance in the Secondary Transfer section also increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment). This is because the setting is to keep the MWS within the limit. 2. When the resistance in the Secondary Transfer section is high, e.g. in the early mornings (low humidity environment), the transfer latitude between multi color and mono color is narrow and the setting voltage favors multi color. However, this still causes a transfer failure of multi color.
21	Tail Edge Transfer Failure	Transfer	The paper tail edge, after the Secondary Transfer NIP has been released, bounded up due to the fusing stroke effect and re-transfers to the Intermediate Transfer Belt.
22	MWS (Side 2) (Micro White Spots)	Transfer	When the resistance in the Secondary Transfer section is high, e.g. in the early mornings (low humidity environment), the transfer latitude between multi color and mono color is narrow and the setting voltage favors multi color. In other words, the voltage is a little high for mono color, and this causes the Transfer NIP discharge phenomenon that creates the white spots.
23	Color Stripes	Transfer	Presence of paper dust in between the Intermediate Transfer Belt and the CLN Blade causes poor cleaning.

4 Repairs and Adjustments

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Disassembly Overview

This chapter contains the removal procedures for field-replaceable parts listed in Chapter 5, Parts List. In most cases, the replacement procedure is simply the reverse of the removal procedure. In some instances, additional steps are necessary and are provided for replacement of the parts.

WARNING

Unplug the AC power cord from the wall outlet before servicing the printer.

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. **Figure 1** identifies the Front, Rear, Left, and Right sides of the printer.

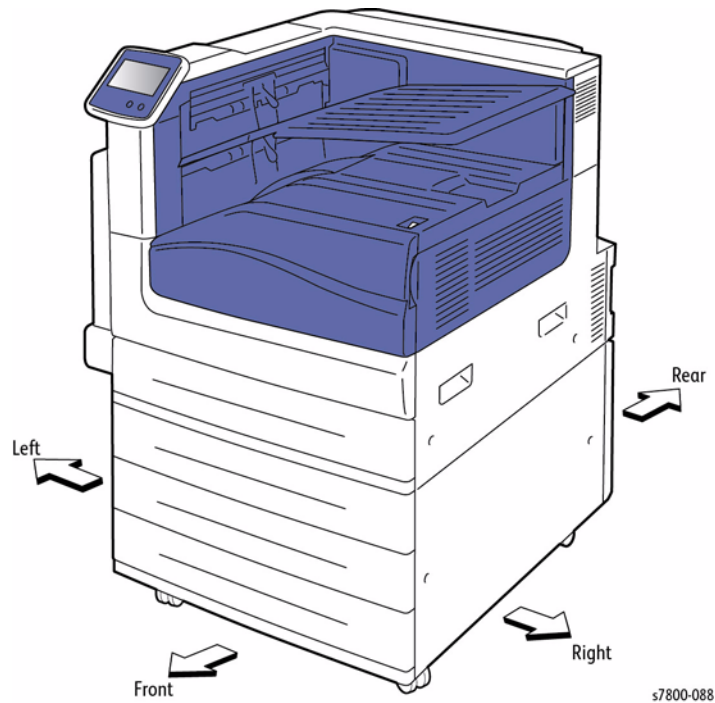


Figure 1 Printer Orientation

Notations in the Disassembly Text

- The notation “(REP X.X.X)” points to a prerequisite procedure in the current disassembly procedure being performed.
- The notation “PLX.X.X” indicates that this component is listed in the Parts List.
- The notation “XX in.-lbs. is the torque specification for the subject fastener.
- Bold arrows in an illustration show direction of movement when removing or replacing a component.
- The notation “(plastic 10mm)” or “(metal, 6mm)” refer to the type of screw being removed. Plastic refers to a metal, self-tapping screw used to secure parts onto plastic. Metal refers to metal, fine-threaded screws used to secure parts onto metal.

NOTE: Provides information specific to the replacement of parts or assemblies.

Preparation

Before you begin any removal procedure:

1. Switch Off the printer power and disconnect the power cord from the wall outlet.
2. Disconnect all computer interface cables from the printer.
3. Wear an electrostatic discharge wrist strap to help prevent damage to the sensitive electronics of the printer circuit boards.
4. Allow adequate time for the printer to cool.

NOTE: Names of parts that appear in the removal and replacement procedures may not match the names that appear in the Parts List. For example, a part called the Registration Chute Assembly in a removal procedure may appear on the Parts List as Assembly, Chute REGI.

CAUTION

Many parts are secured by plastic tabs. Do not over flex or force these parts. Do not over torque the screws threaded into plastic parts.

WARNING

Unplug the AC power cord from the wall outlet before removing any printer part.

Fastener Types

CAUTION

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. Failure to properly align or over tighten 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.

The following table lists the primary types of Posi-Drive screws used to assemble the printer. The procedures provide dimensional specifications for screws being removed.

Table 1 Posi-Drive Screw Types used in the Printer

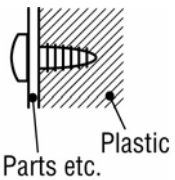
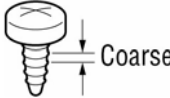
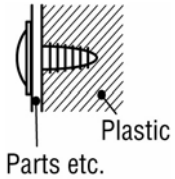
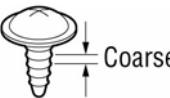
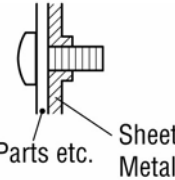
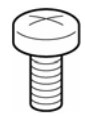
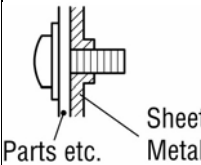

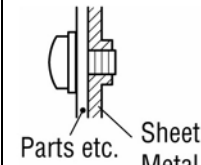

Type	Application	Shape	Characteristics
Self tapping, plastic	 Parts etc. Plastic	 Coarse	<ol style="list-style-type: none"> 1. Silver colored. 2. Screw thread is coarse compared to metal screw. 3. Screw tip is thin.
Self tapping, plastic, with flange	 Parts etc. Plastic	 Coarse	<ol style="list-style-type: none"> 1. Black colored. 2. Screw thread is coarse compared to metal screw. 3. Screw has a flange. 4. Screw tip is thin.
Sheet Metal, silver	 Parts etc. Sheet Metal		<ol style="list-style-type: none"> 1. Silver colored. 2. Diameter is uniform.

Table 1 Posi-Drive Screw Types used in the Printer

Type	Application	Shape	Characteristics
Sheet Metal, with flange	 Parts etc. Sheet Metal		<ol style="list-style-type: none"> 1. Silver colored. 2. Screw has a flange. 3. Diameter is uniform.
Sheet Metal, silver with lock washer	 Parts etc. Sheet Metal		<ol style="list-style-type: none"> 1. Silver colored. 2. Includes a toothed washer. 3. Diameter is uniform. 4. Used for grounding terminals.

Recommended Tools Kit

Refer to [Recommended Tool Kit](#) in the Service Call Procedures Chapter.

REP 2.1 Rear Holder Assembly

Parts List on PL 2.1 Item 1

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

CAUTION

Do not touch the IBT Belt surface.

1. Remove the Fuser Assembly (REP 7.1).
2. Remove the Imaging Unit (REP 8.1).
3. Remove the Toner Cartridge (REP 5.1).
4. Remove the Waste Cartridge (REP 8.9).
5. Remove the IBT Belt Cleaner Assembly (REP 6.1).
6. Remove the Tension Lever (REP 6.2).
7. Remove the Imaging Unit Cover (REP 2.4).
8. Remove the IBT Belt Assembly (REP 6.2).
9. Remove the Front Cover Assembly and the Inner Cover Assembly (REP 19.1).
10. Remove the Process Fan 1 and Duct (REP 4.7).
11. Remove the POB Sensor (REP 14.11).
12. Remove the ATC PWB (REP 5.8).
13. Remove the Waste Toner Pipe Assembly (REP 8.5).
14. Remove the Erase Lamp K (REP 8.2).
15. Remove the Deve Plate Assembly (REP 5.6).
16. Remove the Developer Housing Assembly (K) (REP 5.7).
17. Remove the LED Printhead (REP 2.2).
18. Remove the Rear Upper Cover (REP 19.17).
19. Remove the Rear Lower Cover (REP 19.16).
20. Open the PWB Chassis (REP 18.1).
21. Remove the HVPS (Deve) (REP 5.11).
22. Remove the HVPS (1st/ 2nd/ DTC) (REP 6.3).
23. Remove the Drum/ Deve Drive Assembly (REP 3.8).

24. Remove 1 screw that secures the Rear Holder Assembly.

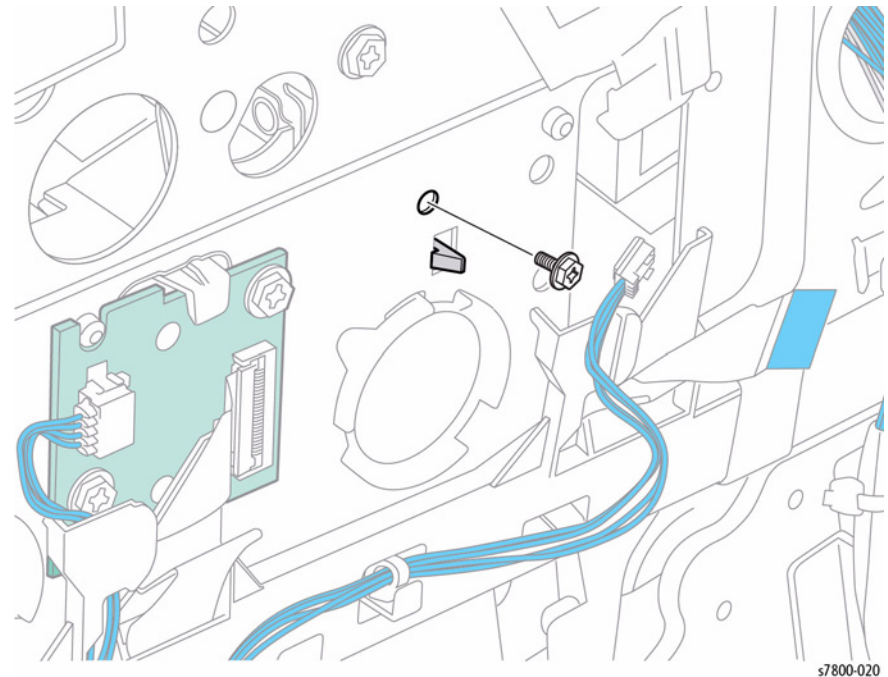


Figure 1 Removing screw

25. Remove the Rear Holder Assembly.

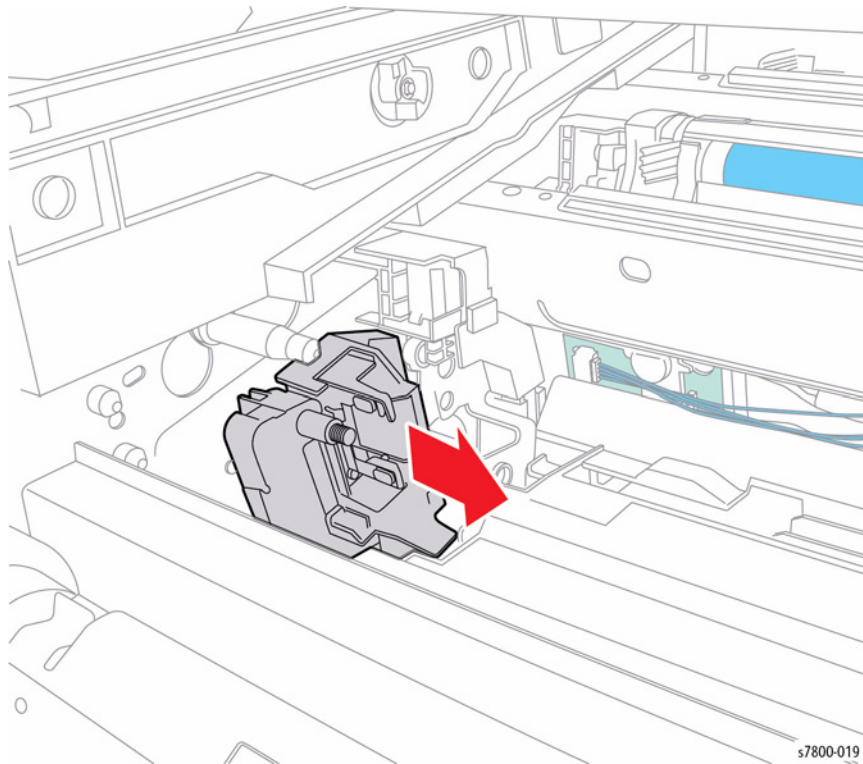


Figure 2 Removing the Rear Holder Assembly

s7800-019

REP 2.2 LED Print Head (LPH) Unit (Y/M/C/K)

Parts List on [PL 2.1 Item 2](#)

Removal

WARNING

Turn Off the main power switch and unplug the power plug.

NOTE: When removing the Imaging Unit, cover it with a black sheet, etc. to prevent light fatigue. Do not touch the Imaging Unit surface with your hands.

NOTE: Place paper under the Developer Housing Assembly (Y/M/C/K) and on the floor so that the toner, etc. do not dirty the floor and the printer during servicing.

1. Remove the Waste Cartridge ([REP 8.9](#)).
2. Remove the Front Cover Assembly and the Inner Cover Assembly ([REP 19.1](#)).
3. Remove the Process Fan 1 ([REP 4.7](#)).
4. Remove the ATC PWB ([REP 5.8](#)).
5. Remove the Waste Toner Pipe Assembly ([REP 8.5](#)).
6. Remove the Deve Plate Assembly ([REP 5.6](#)).
7. Remove the Developer Housing Assembly (K) ([REP 5.7](#)).

NOTE: Do not apply force to the LPH positioning pin.

8. Remove the screw (silver, 6mm) that secures the LPH Unit (K).
9. Pull and raise the LPH Unit (K) to remove.

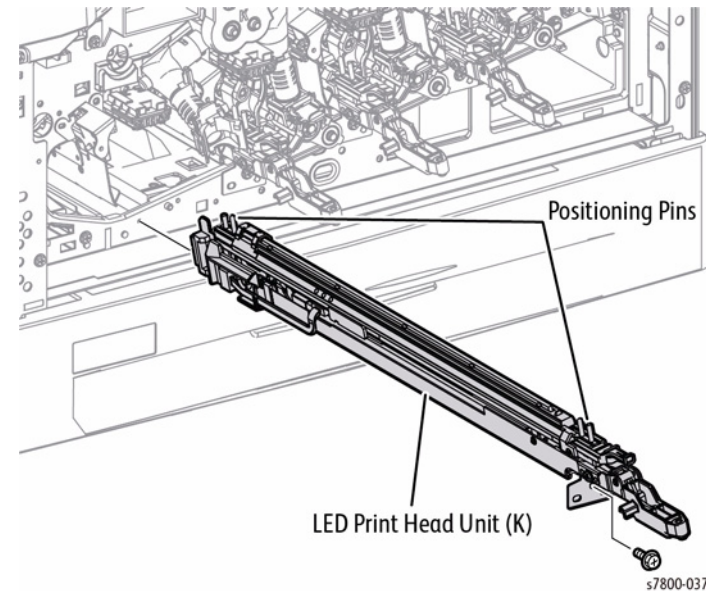


Figure 1 Removing the LED Printhead

s7800-037

Replacement

When installing the LPH Unit, insert the lever horizontally.

If the lever is not horizontal when inserted, it may not be able to go all the way in or even end up being inserted incorrectly.

When replacing the LPH Unit, make sure to remove the protective cover (tape) before installing.

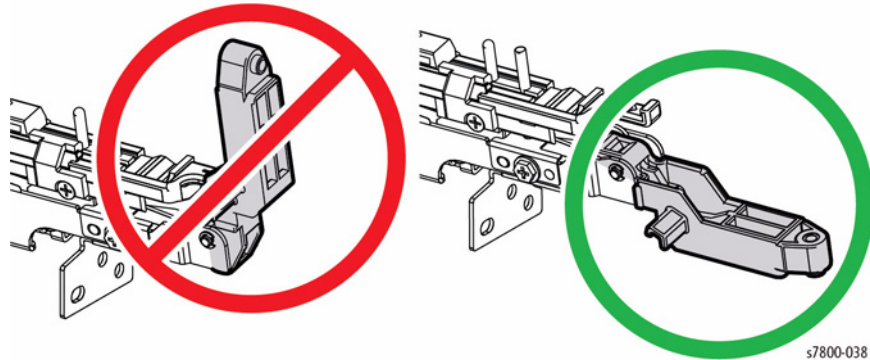


Figure 2 Installing the LED Print Head

REP 2.3 LPH Cleaner

Parts List on [PL 2.1 Item 4](#)

Removal

1. Remove the LPH Unit (C/M/Y/K) ([REP 2.1](#)).
2. Remove 1 screw (silver, 6mm) that secures the LPH Cleaner Guide to the LPH Unit.
3. Release the LPH Cleaner tab that is hooked onto the inner side of the LPH Unit and remove the LPH Cleaner.
4. Release the Guide tab that is hooked onto the LPH Cleaner and remove the LPH Cleaner.

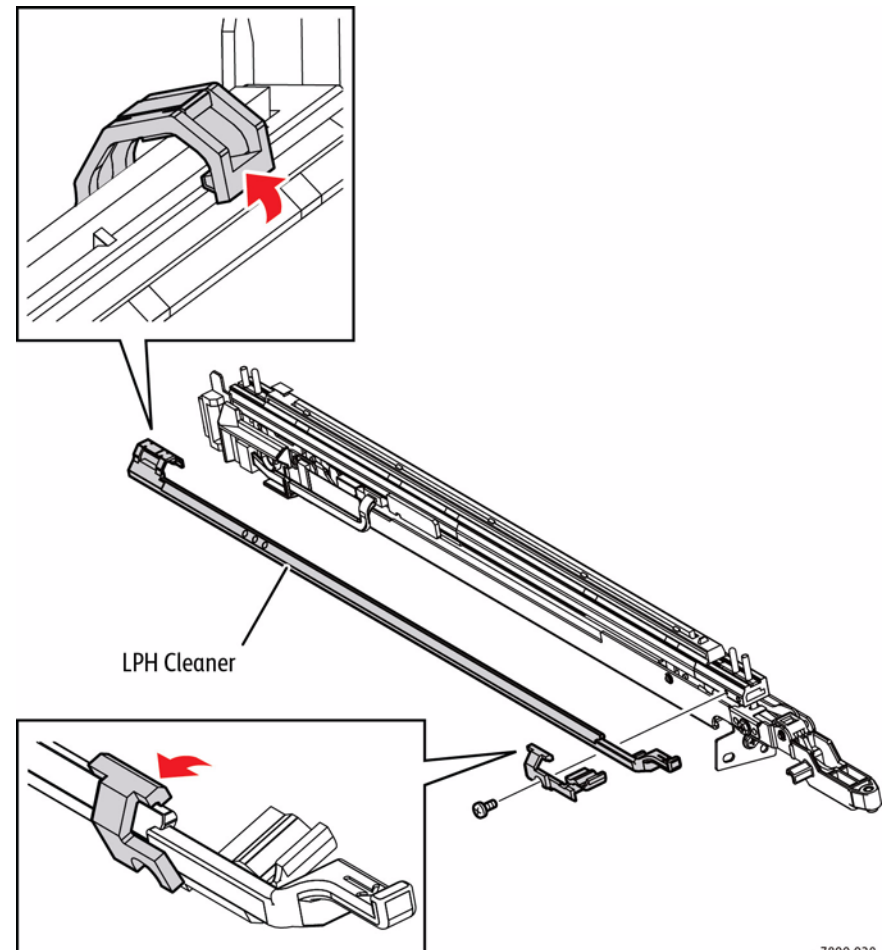


Figure 1 Removing the LPH Cleaner

REP 2.4 Imaging Unit Cover

Parts List on [PL 2.1 Item 6](#)

Removal

1. Open the Front Door.
2. Turn the Tension Lever to the left.
3. Remove 2 screws (silver, 8mm) that secure the Imaging Unit Cover.
4. Open the Imaging Unit Cover to the first detent and pull it towards the front to remove.

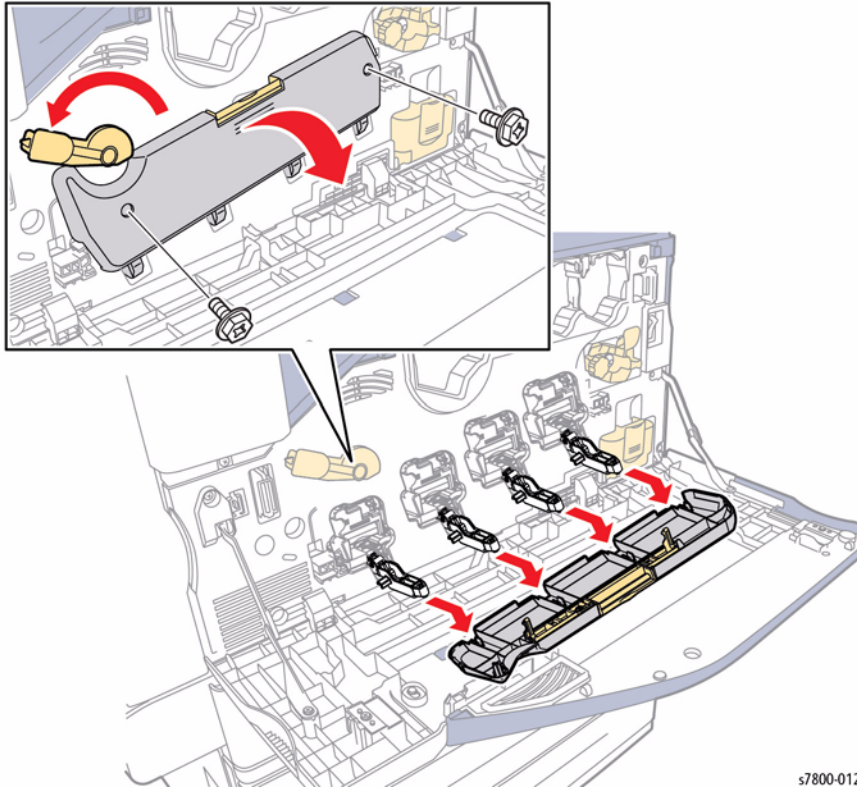


Figure 1 Removing the Imaging Unit Cover

REP 2.5 LPH Cable Assembly

Parts List on [PL 2.2 Item 1](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

NOTE: Be sure the lower power cable is disconnected.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Rear Upper Cover ([REP 19.17](#)).
3. Remove the Rear the Lower Cover ([REP 19.16](#)).
4. Release the LPH Cables from the cable holders.

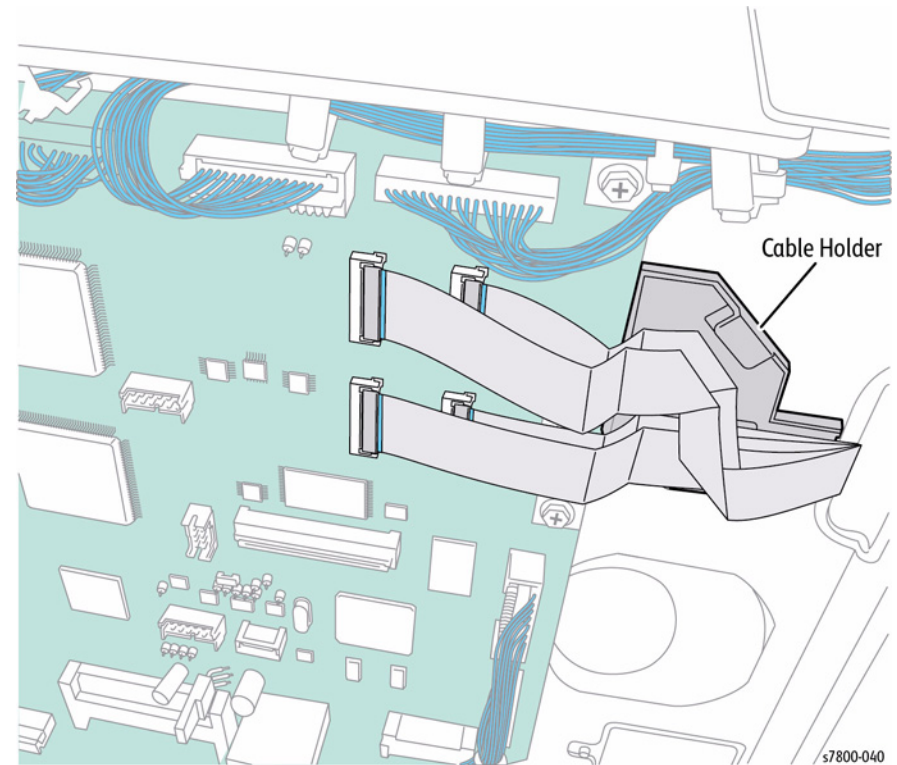


Figure 1 Releasing the Cables

CAUTION

Be sure to unlock the ZIF connector to release the ribbon cable. Be careful when disconnecting the ribbon cable to prevent damaging the cable. DO NOT pull on the cable until you have released the locks.

5. Disconnect the 4 LPH Cable connectors P/J554, P/J555, P/J556, and P/J557 from the MCU PWB.

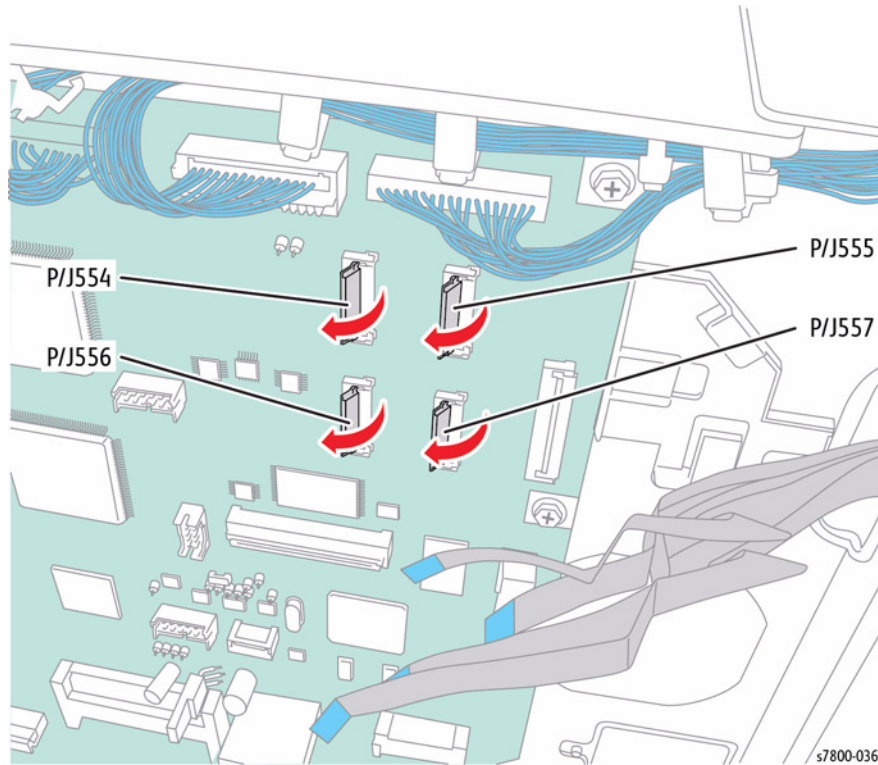


Figure 2 Disconnecting and releasing the Cables

6. Open the PWB Chassis (REP 18.1).
7. Remove the HVPS (1st/ 2nd/ DTC) (REP 6.3).
8. Remove the HVPS Deve (REP 5.11)
9. Remove the Drum/ Deve Drive Assembly (REP 3.8).

CAUTION

Be sure to unlock the ZIF connector to release the ribbon cable. Be careful when disconnecting the ribbon cable to prevent damaging the cable. DO NOT pull on the cable until you have released the locks.

10. Disconnect the 8 wiring harness connectors that are connected to the LPH Rear PWB.
11. Remove the wiring harnesses from the Cable Holder of the LPH Cable Assembly.

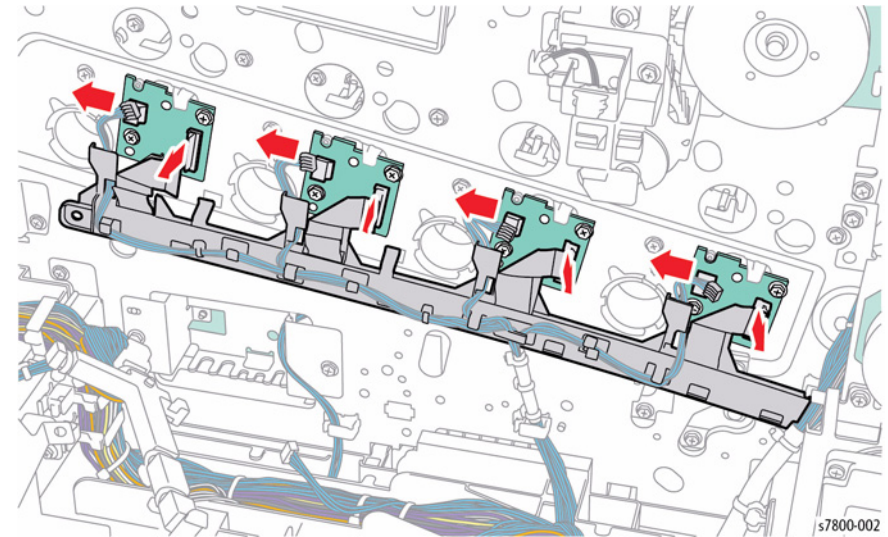


Figure 3 Disconnecting the wiring harness connectors

12. Remove the Takeaway Motor (REP 15.2).
13. Remove the Gear and Shaft.

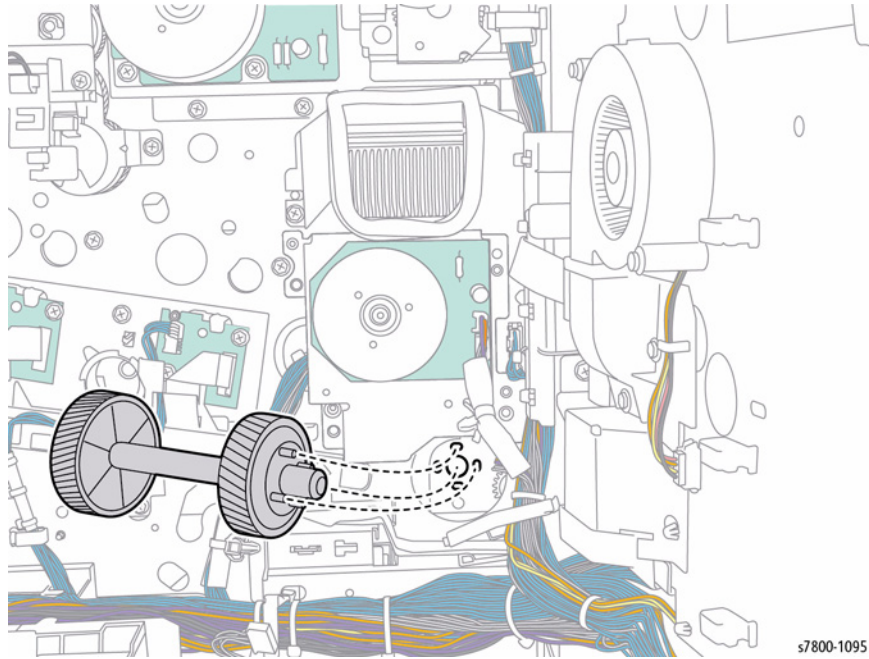


Figure 4 Removing the Gear and Shaft

14. Press the front and of the clip, release and remove the Cable Holder.
15. Press the clip toward the rear and lift it to remove as shown in Figure 5.
16. Release the wiring harness from the Clamp and the cable Clip from the frame.

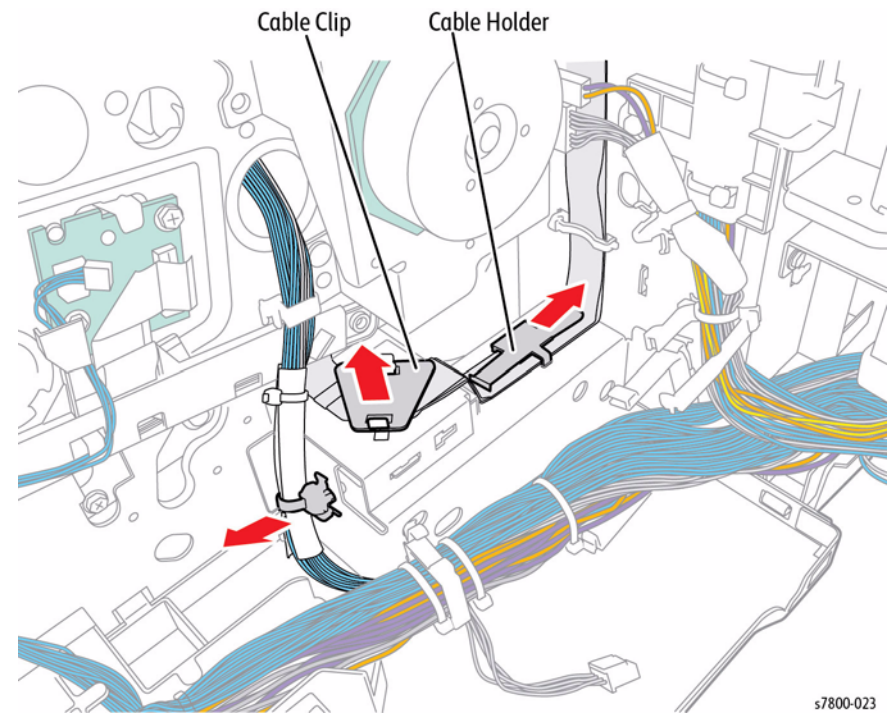


Figure 5 Removing and releasing the Cable Clamp and Clip

17. Remove the Main Drive Assembly (REP 3.6).
18. Disconnect the wiring harness connector P/J632.
19. Release the LPH Cable from the 3 clamps and cable holder.

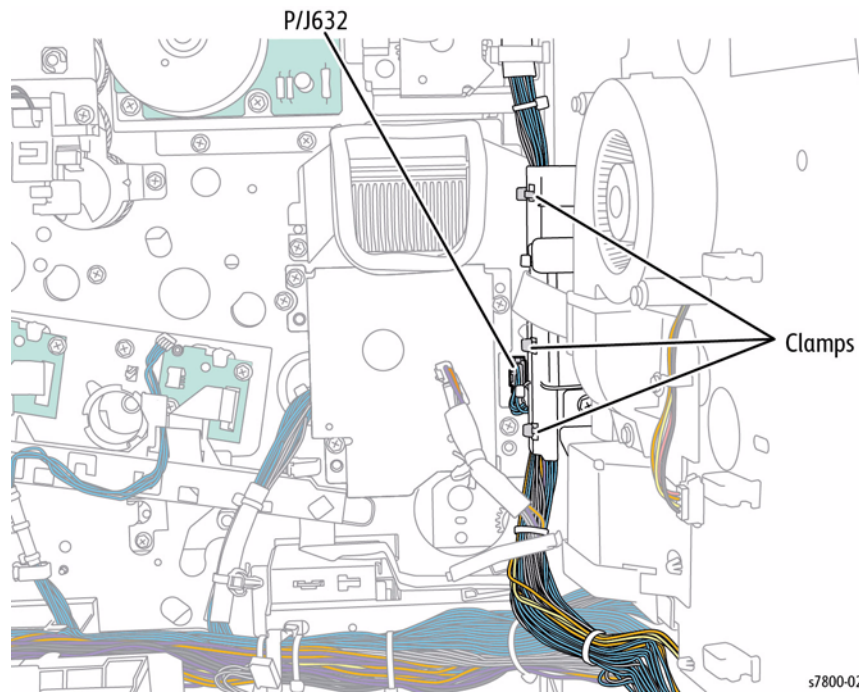


Figure 6 Disconnecting and releasing the LPH Cable

20. Remove 1 screw (silver, 8mm) that secures the LPH Cable Assembly.
21. Release the 2 hooks and remove the LPH Cable Assembly in the direction of the arrow.

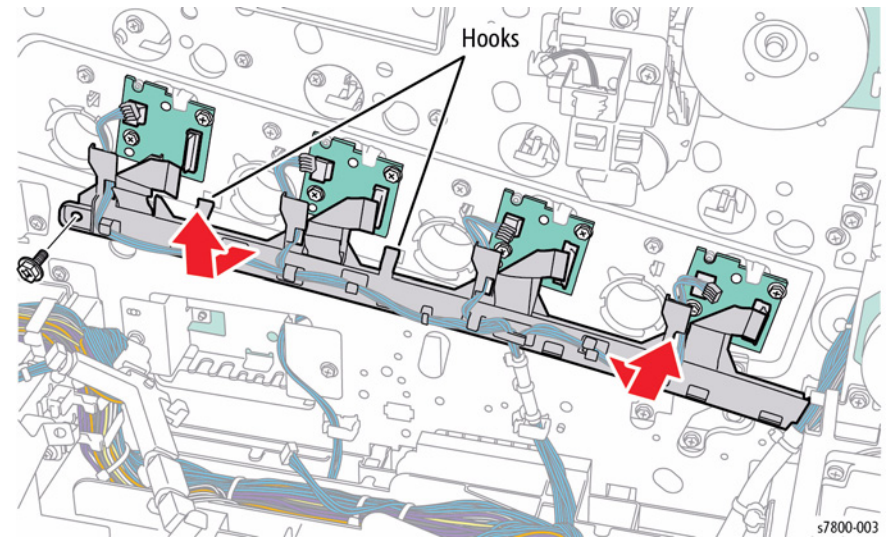


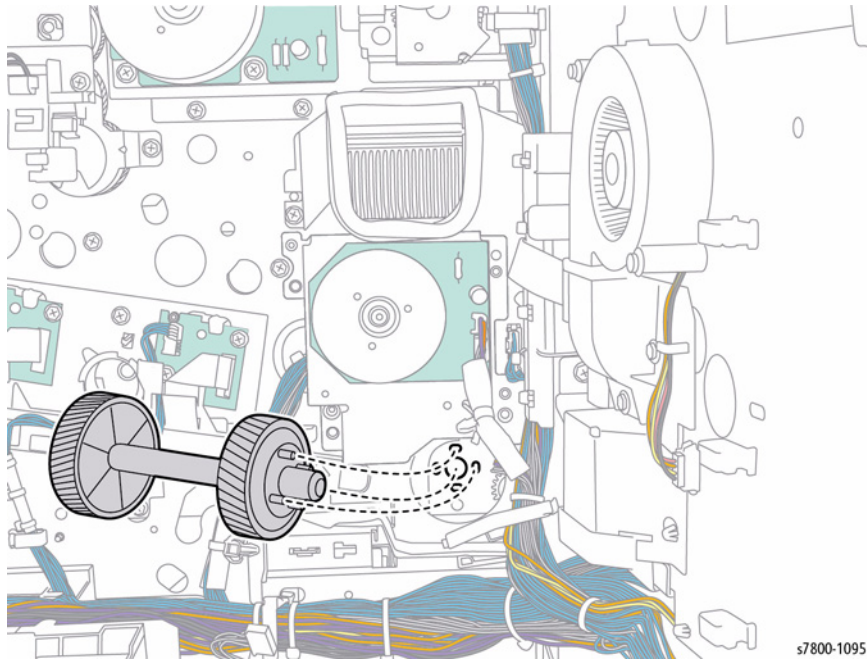
Figure 7 Removing the LPH Cable Assembly

Replacement

While installing the Gear, pull it back a little while rotating it in order to align the 4 bosses to the installation holes.

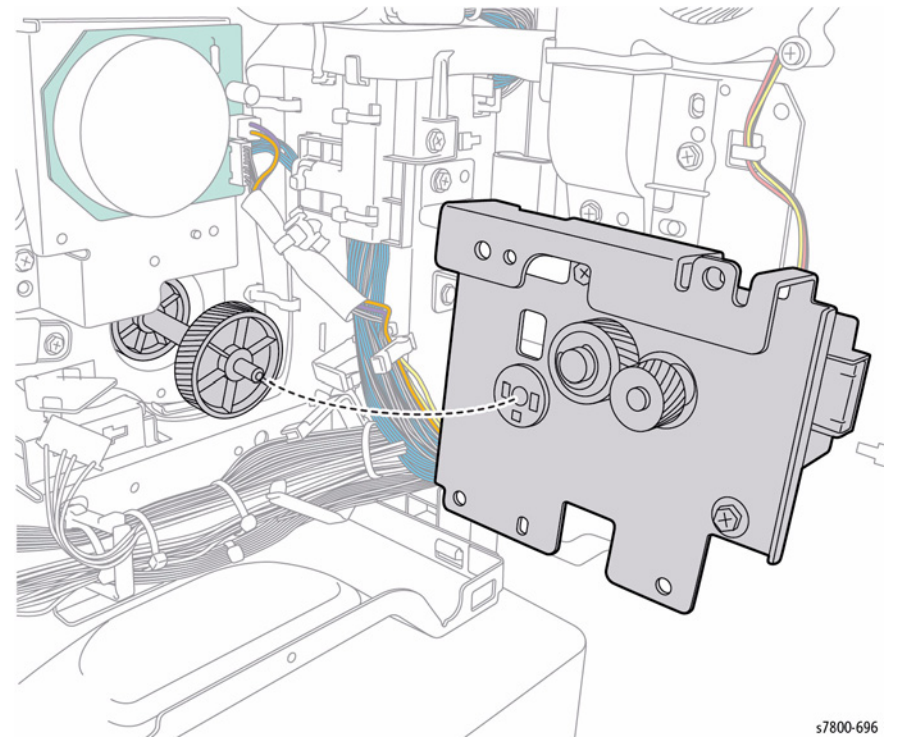
NOTE: Be sure the white and black Gears are flushed.

When installing the Takeaway Motor, align the shaft to the hole of the bearing.



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Figure 8 Aligning the bosses



s7800-696

Figure 9 Installing the Takeaway Motor

REP 2.6 LPH Rear PWB

Parts List on PL 2.2 Item 5

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit (REP 8.1).
2. Remove the Rear Upper Cover (REP 19.17).
3. Remove the Rear Lower Cover (REP 19.16).
4. Open the PWB Chassis (REP 18.1).
5. Remove the HVPS (Deve) (REP 5.11).
6. Remove the HVPS (1st/ 2nd/ DTC) (REP 6.3).
7. Remove the Drum/ Deve Drive Assembly (REP 3.8).

CAUTION

Be sure to unlock the ZIF connector to release the ribbon cable. Be careful when disconnecting the ribbon cable to prevent damaging the cable. DO NOT pull on the cable until you have released the locks.

8. Disconnect the 8 wiring harness connector that are connected to the LPH Rear PWB.
9. Remove the wiring harnesses from the Cable Holder of the LPH Cable Assembly.
10. Remove 1 screw (silver, 8mm) that secures the LPH Cable Assembly.

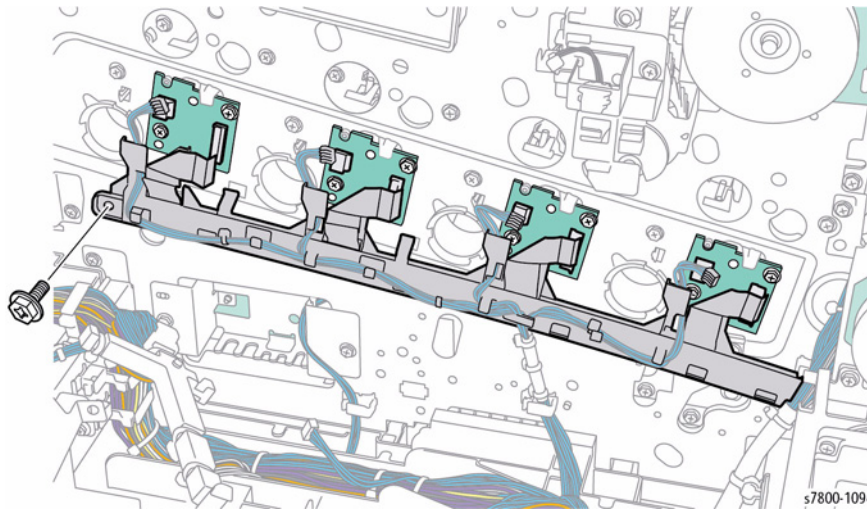


Figure 1 Disconnecting the wiring harness connectors

11. Release the 2 hooks and remove the LPH Cable Assembly in the direction of the arrow as shown in Figure 2.
12. Remove 2 screws (silver, 6mm/14mm) that secure the LPH PWB.
13. Pull down the LPH Rear PWB to remove.

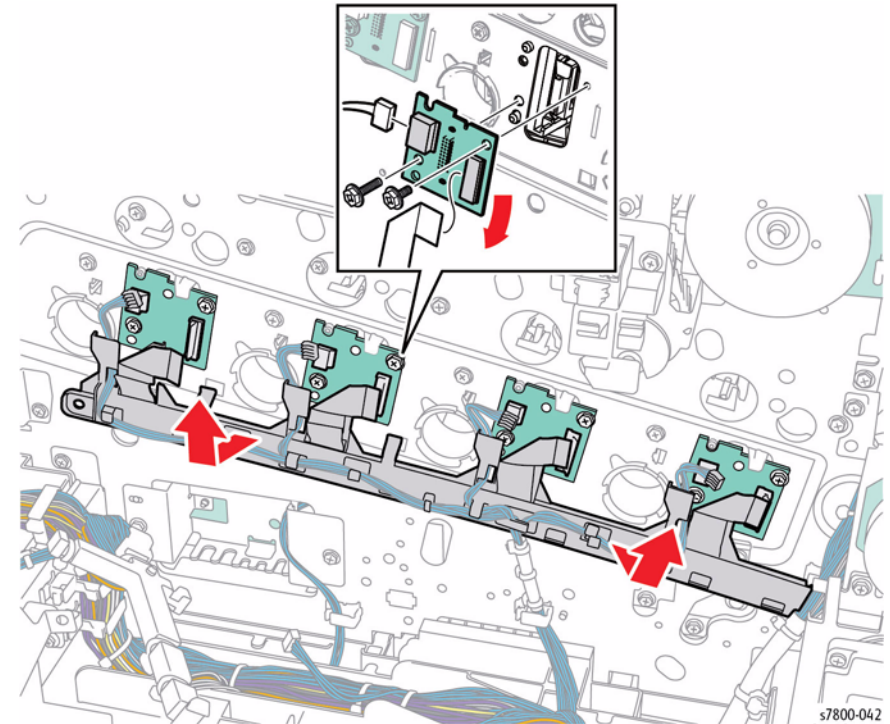


Figure 2 Removing the LPH Cable Assembly and LPH PWB

REP 3.1 Fuser Input Bracket Assembly

Parts List on [PL 3.1 Item 1](#)

Removal

WARNING

The Fuser may be hot. Turn the printer power Off and allow adequate time for the Fuser to cool before removing the Fuser.

1. Tilt the Exit 2 Tray towards the front of the printer while releasing the latch to remove the Exit 2 Tray.

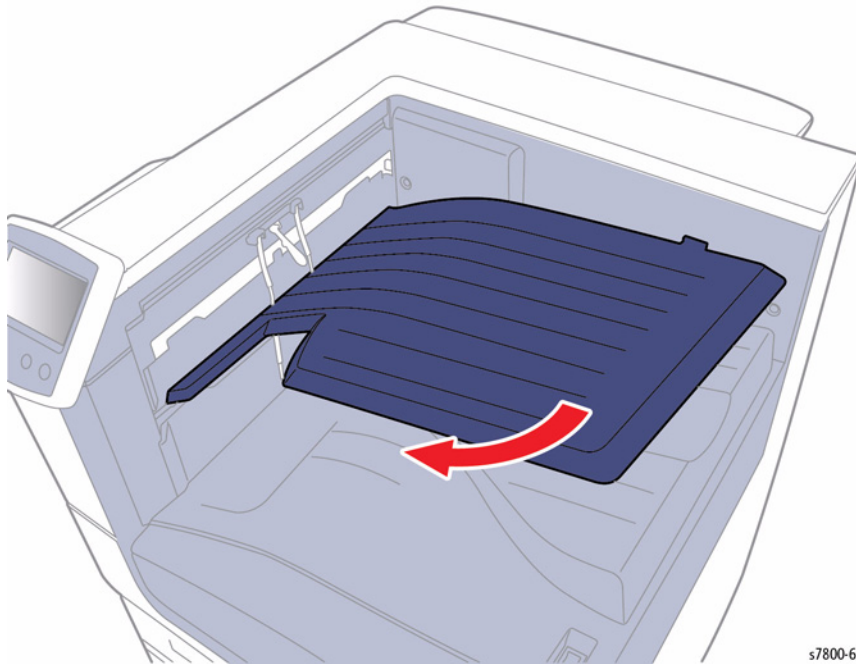


Figure 1 Removing the Exit 2 Tray

2. Remove the Fuser Assembly ([REP 7.1](#)).
3. Remove the Imaging Unit (Y/M/C/K) ([REP 8.1](#)).
4. Remove the Toner Cartridge (Y/M/C/K) ([REP 5.1](#)).
5. Remove the Waste Cartridge ([REP 8.9](#)).
6. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
7. Remove the Front Cover Assembly and the Inner Cover Assembly ([REP 19.1](#)).

8. Remove 1 screw that secures the Front Left Cover ([PL 19.2 Item 12](#)).
9. Remove the Front Left Cover.
10. Remove the Exit Front Cover ([PL 19.2 Item 9](#)).

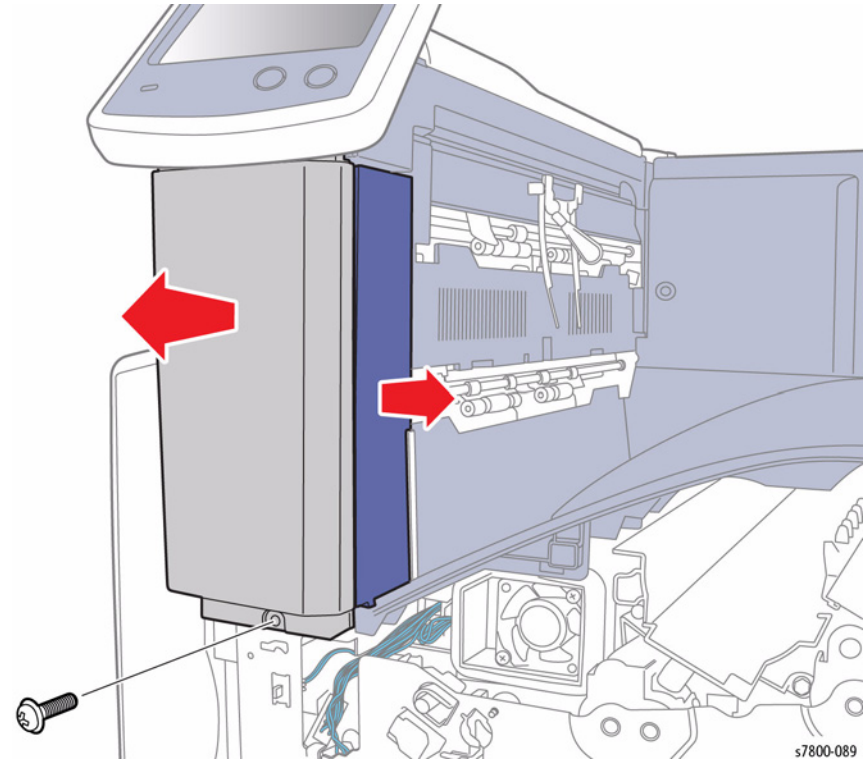


Figure 2 Removing the Front Left Cover and Exit Front Cover

11. Remove 1 screw that secures the Top Cover Assembly.
12. Lift the front of the Top Cover Assembly at an angle to remove.

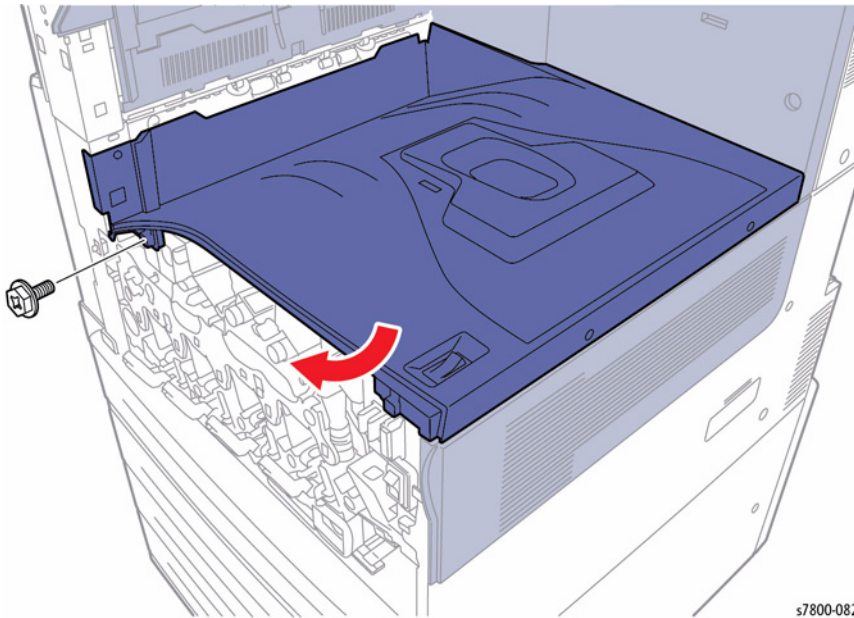


Figure 3 Removing the Top Cover

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13. Remove the Spring from the Fuser Input Bracket Assembly.
14. Remove the E-ring that secures the Fuser Input Bracket Assembly.
15. Remove the Fuser Input Bracket Assembly while pushing it upward.
16. Slide the Fuser Input Bracket Assembly out.

NOTE: Be careful not to drop the Gear, Spring, or E-Ring.

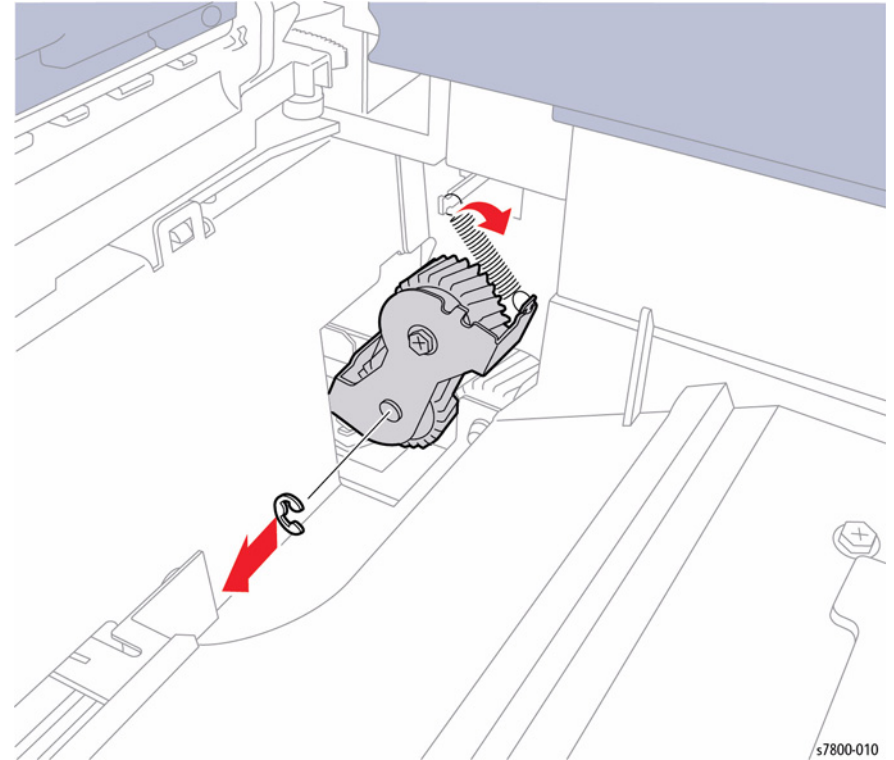


Figure 4 Removing the Fuser Input Bracket Assembly

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Replacement

Be sure to have the Gears in correct places prior to installing the Fuser Input Bracket Assembly.

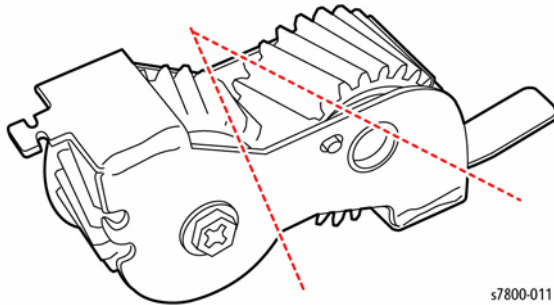


Figure 5 Gears Location

REP 3.2 Fuser Link, Spring

Parts List on [PL 3.1 Item 7](#), [PL 3.1 Item 8](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Tilt the Exit 2 Tray towards the front of the printer while releasing the latch to remove the Exit 2 Tray.

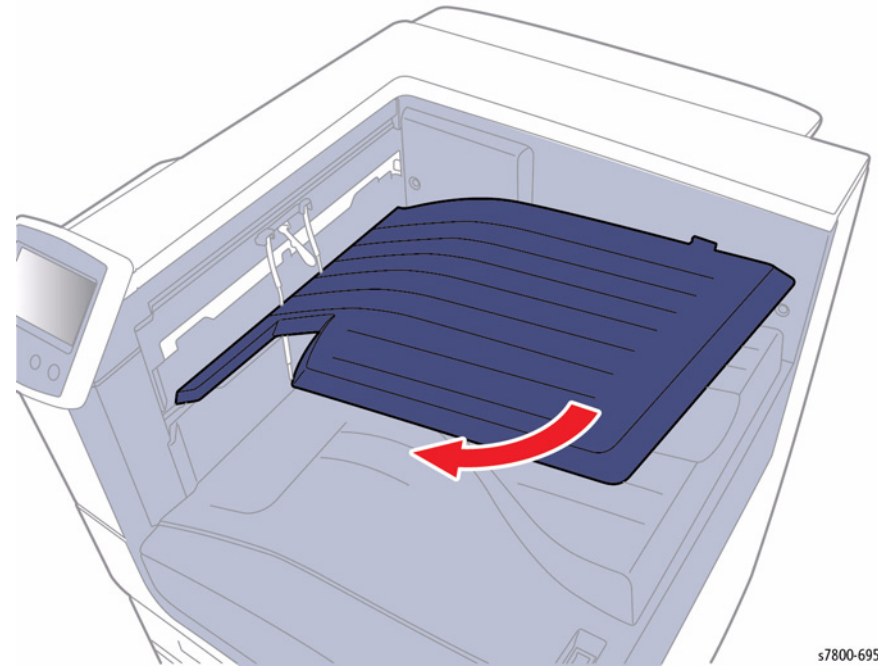


Figure 1 Removing the Exit 2 Tray

2. Remove the Fuser Assembly ([REP 7.1](#)).
3. Remove the Imaging Unit (Y/M/C/K) ([REP 8.1](#)).
4. Remove the Toner Cartridge (Y/M/C/K) ([REP 5.1](#)).
5. Remove the Waste Cartridge ([REP 8.9](#)).
6. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
7. Remove the Front Cover Assembly and the Inner Cover Assembly ([REP 19.1](#)).

8. Remove 1 screw that secures the Front Left Cover (PL 19.2 Item 12).
9. Remove the Front Left Cover.
10. Remove the Exit Front Cover (PL 19.2 Item 9).

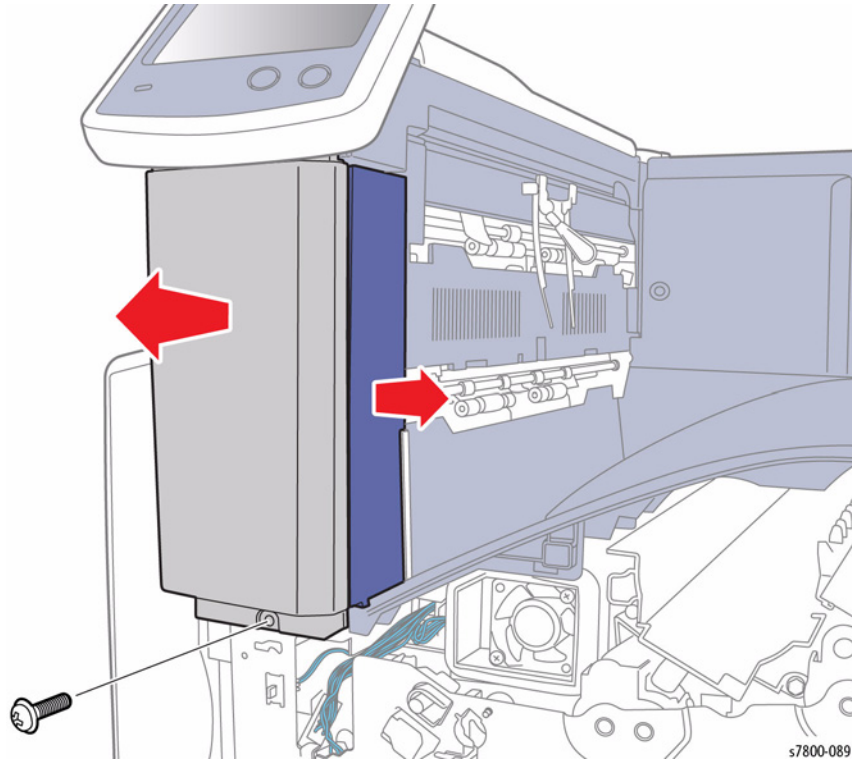


Figure 2 Removing the Front Left Cover and Exit Front Cover

s7800-089

11. Remove 1 screw that secures the Top Cover Assembly.
12. Lift the front of the Top Cover Assembly at an angle to remove.

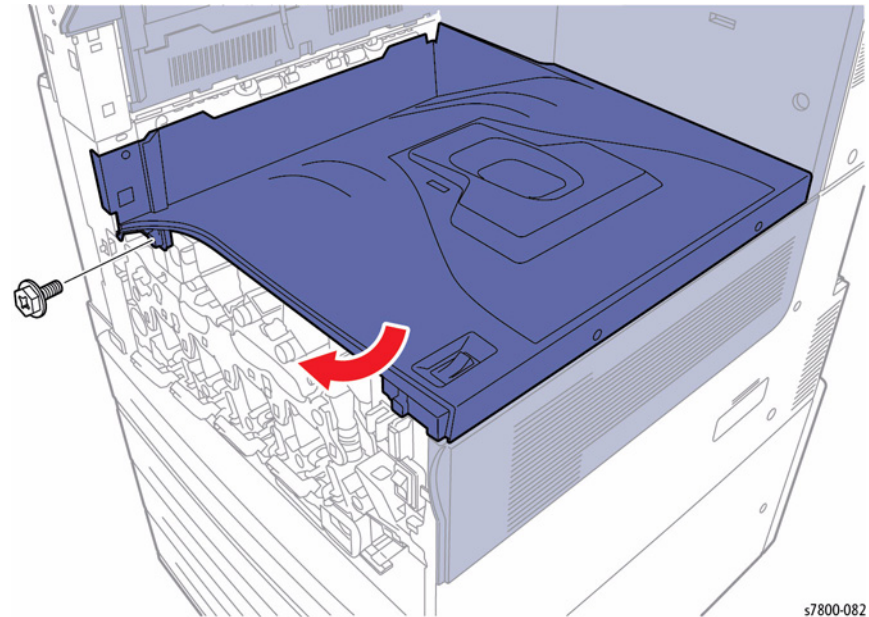


Figure 3 Removing the Top Cover

s7800-082

13. Remove the C-Clip and move the Fuser Input Bracket Assembly 1/4 inch toward the front of the printer (refer to [REP 3.1](#)).
14. Remove the Spring from the Fuser Link.
15. Remove the 2 E-rings that secure the Fuser Link.
16. Rotate the Fuser Link 90° counter-clock wise and remove the Fuser Link.

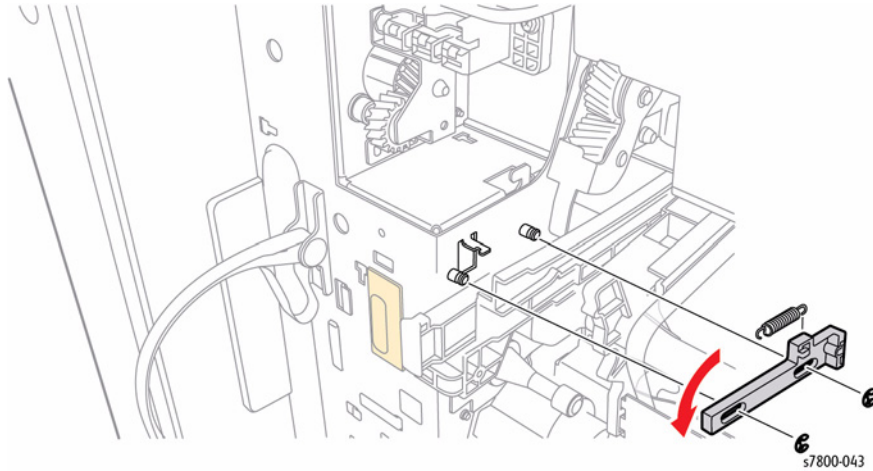


Figure 4 Removing the Fuser Link and Spring

REP 3.3 Fuser Drive Motor Assembly

Parts List on [PL 3.1 Item 9](#)

Removal

1. Remove the Right Cover ([REP 19.15](#)).
2. Remove the Rear Upper Cover ([REP 19.17](#)).
3. Remove the Rear Lower Cover ([REP 19.16](#)).
4. Open the PWB Chassis Unit ([REP 18.1](#)).
5. Disconnect the 2 wiring harness connectors [P/J242](#) and [P/J243](#) that are connected to the Fuser Drive Motor Assembly.
6. Remove 4 screws (silver, 6mm) that secure the Fuser Drive Motor and remove the Fuser Drive Motor Assembly.

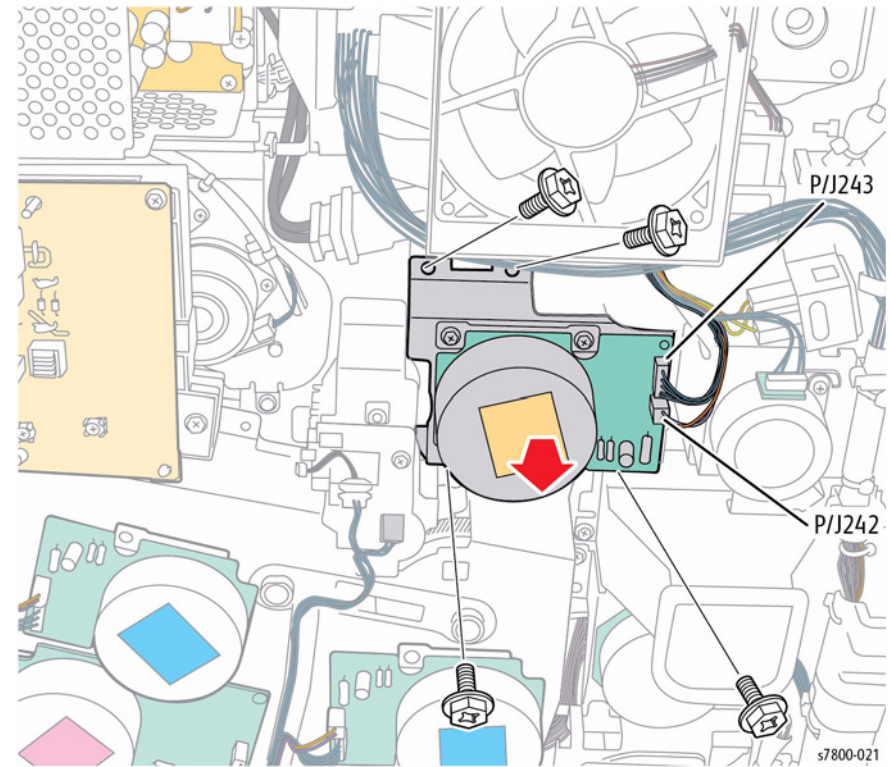


Figure 1 Removing the Fuser Drive Motor Assembly

REP 3.4 Retract Drive Assembly

Parts List on [PL 3.2 Item 4](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Remove the Right Cover ([REP 19.15](#)).
4. Open the PWB Chassis Unit ([REP 18.1](#)).
5. Disconnect the 2 wiring harness connectors [P/J144](#) and [P/J250](#) that are connected to the Retract Drive Assembly and release the harness from the Harness Guide.
6. Remove 3 screws (silver, 6mm) that secure the Retract Drive Assembly.
7. Remove the Retract Drive Assembly.

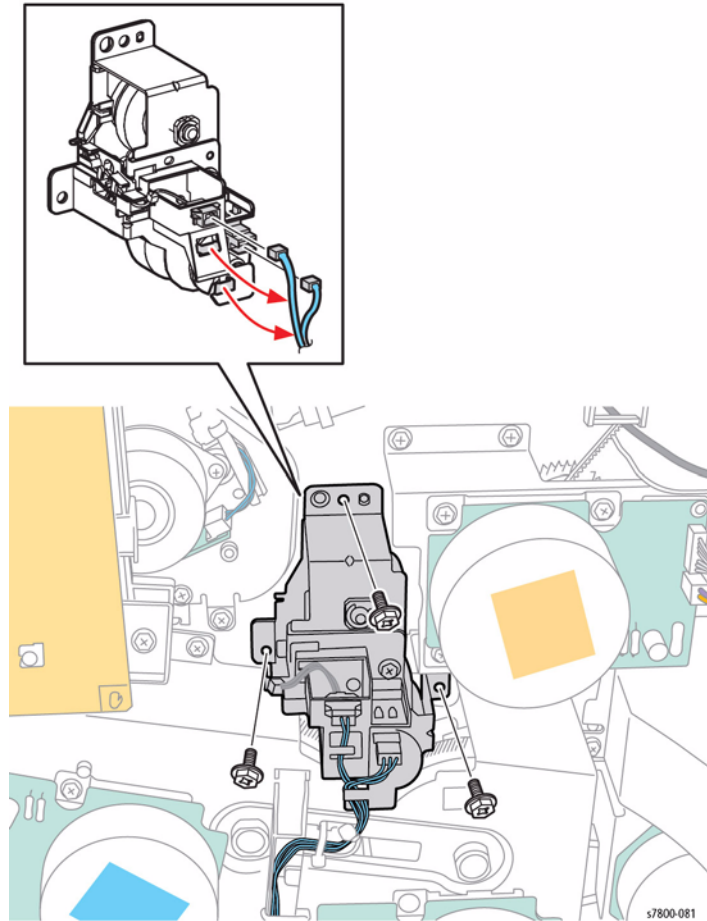


Figure 1 Removing the Retract Drive Assembly

REP 3.5 1st BTR Contact Retract Sensor

Parts List on [PL 3.2 Item 17](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Remove the Right Cover ([REP 19.15](#)).
4. Open the PWB Chassis Unit ([REP 18.1](#)).
5. Disconnect the 2 wiring harness connectors [P/J144](#) and [P/J250](#) that are connected to the Retract Drive Assembly and release the harness from the Harness Guide.
6. Remove 1 screw (silver, 6mm) that secures the Harness Holder and remove the Harness Holder.
7. Release the hooks that secure the 1st BTR Contact Retract Sensor and remove the 1st BTR Contact Retract Sensor from the Harness Holder.

NOTE: It is not necessary to remove the PWB Chassis. It is required to remove the Fan/Duct to access the Sensor.

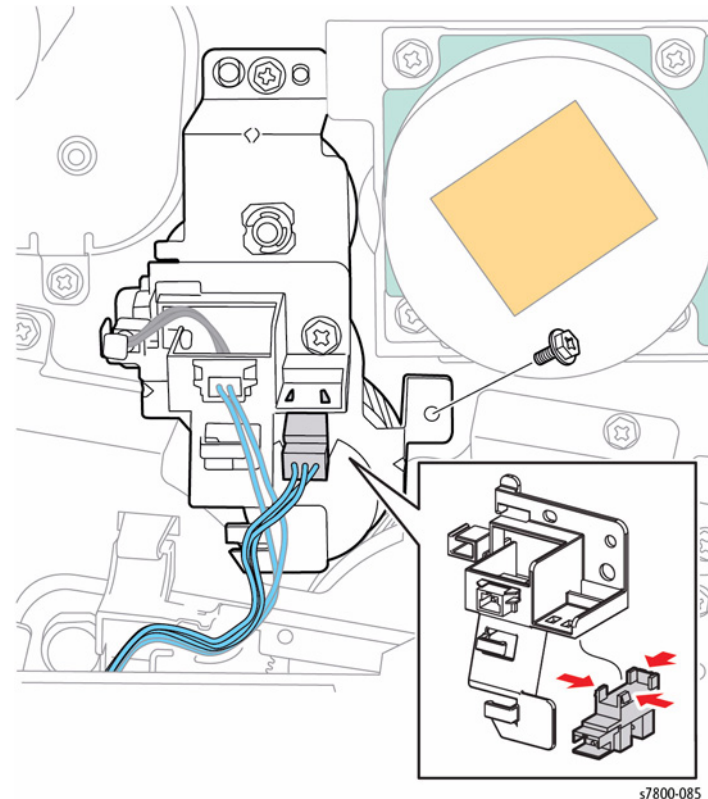


Figure 1 Removing the BTR Contact Retract Sensor

REP 3.6 Main Drive Assembly

Parts List on [PL 3.2 Item 23](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Remove the Takeaway Motor ([REP 15.2](#)).
5. Remove the Gear and Shaft.

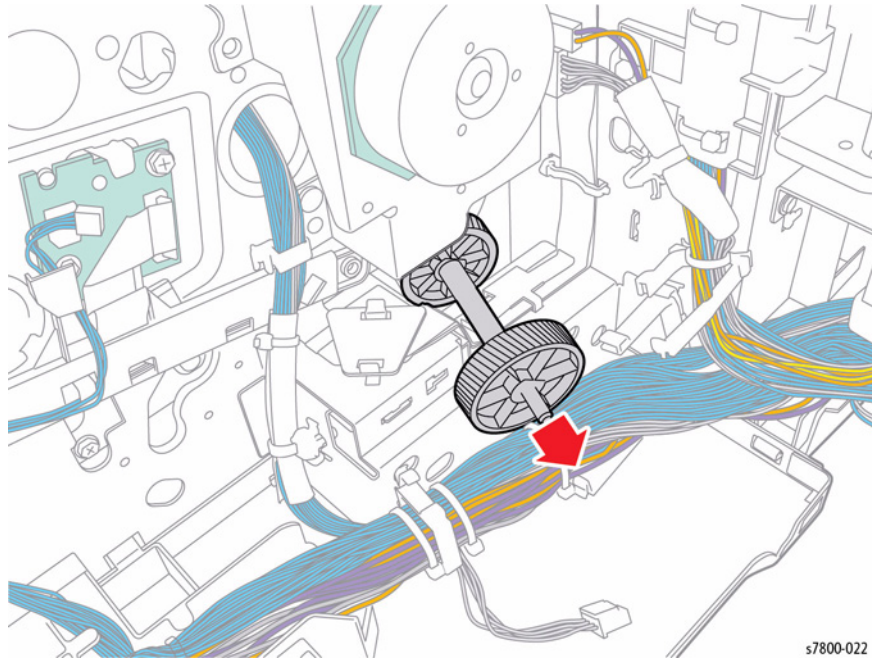
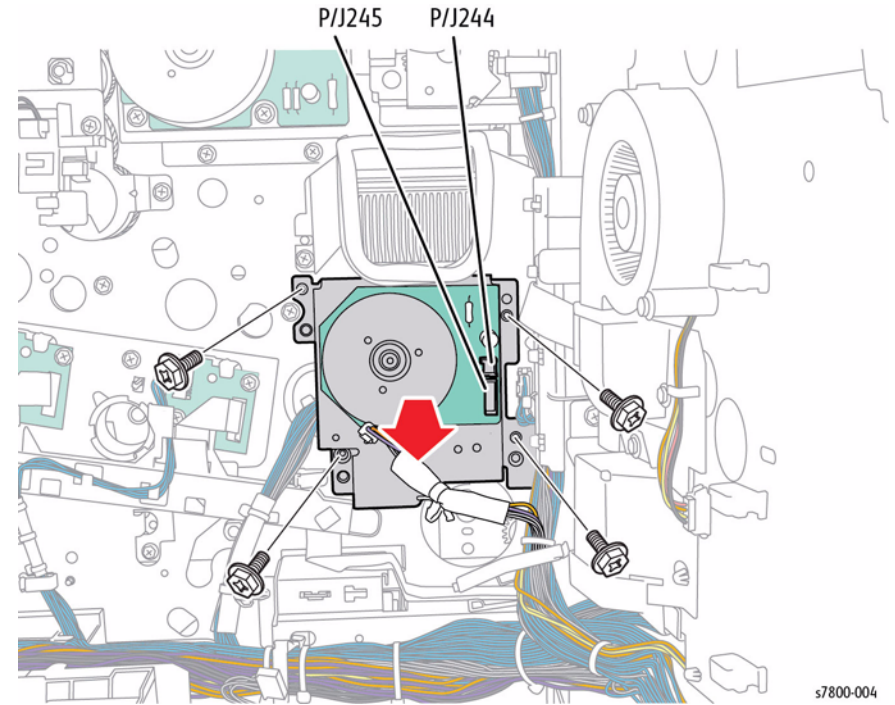


Figure 1 Removing the Gear and Shaft

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6. Disconnect the 2 wiring harness connectors [P/J244](#) and [P/J245](#).
7. Remove 4 screws that secure the Main Drive Assembly.
8. Remove the Main Drive Assembly.



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Figure 2 Removing the Main Drive Assembly

Replacement

When installing the Gear, pull it back a little while rotating it in order to align the 4 bosses to the installation holes.

NOTE: Be sure the white and black Gears are flush.

When installing the Takeaway Motor, align the shaft to the hole of the bearing.

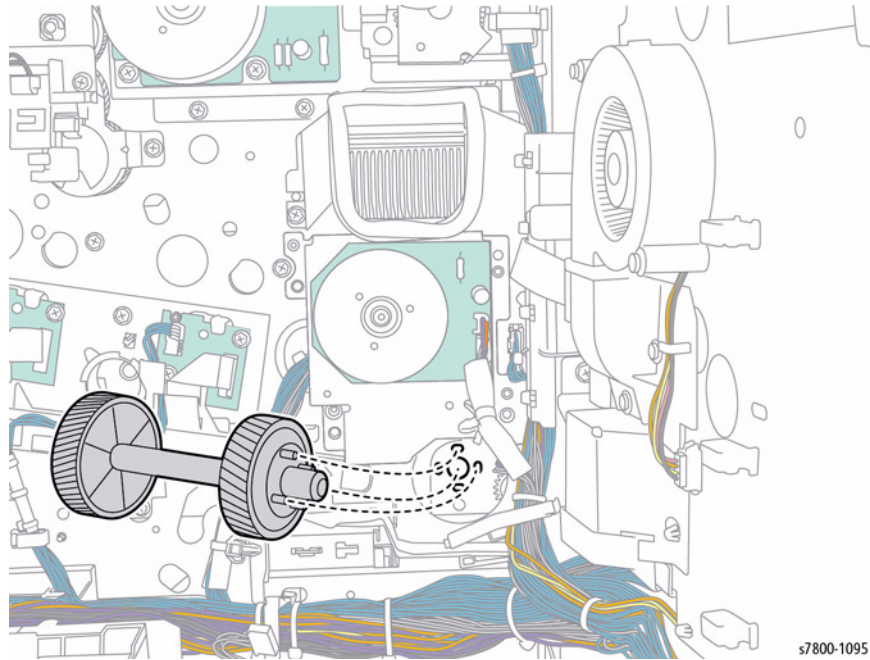


Figure 3 Aligning the bosses

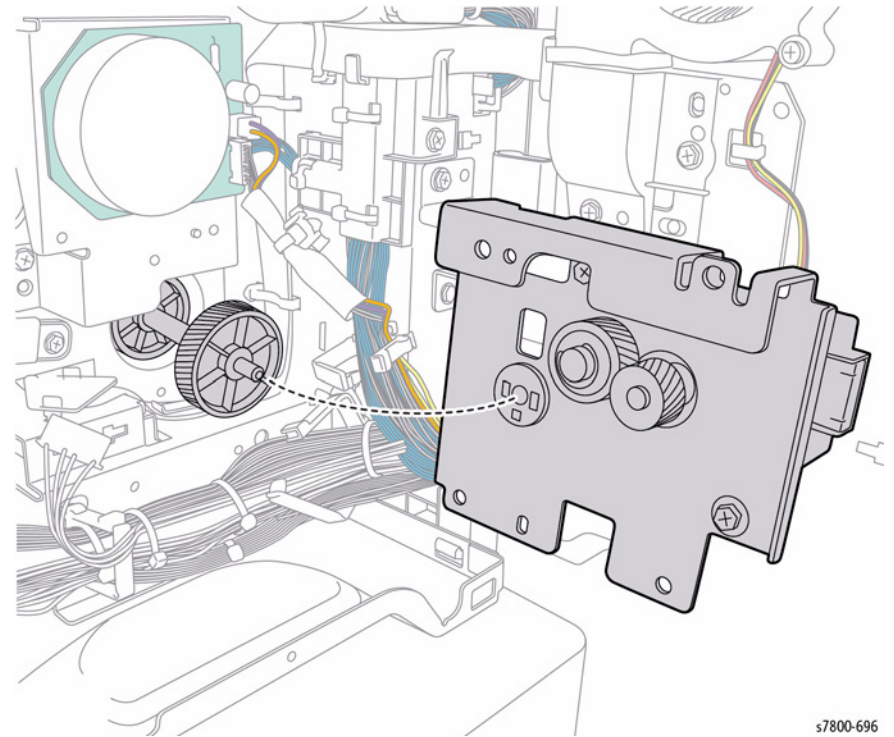


Figure 4 Installing the Takeaway Motor

REP 3.7 Main Drive Motor

Parts List on [PL 3.2 Item 26](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Disconnect the 2 wiring harness connectors [P/J244](#) and [P/J245](#).
5. Remove 1 screw that secures the Main Drive Motor and remove the Motor.
6. Remove the Main Drive Motor.

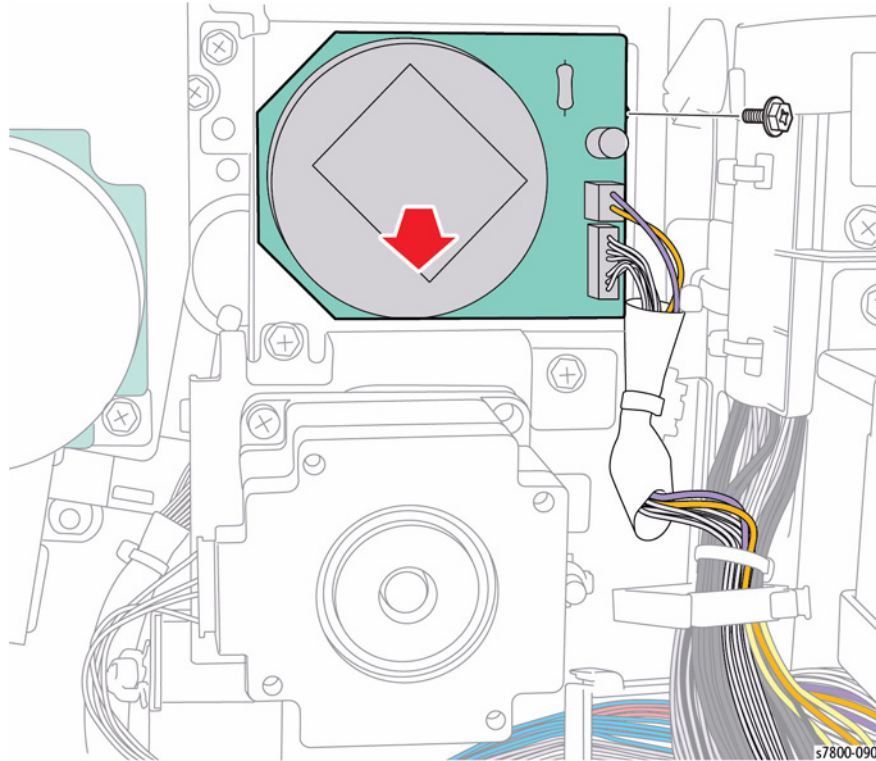


Figure 1 Removing the Main Drive Motor

REP 3.8 Drum Deve/ Drive Assembly

Parts List on [PL 3.3 Item 1](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Remove the HVPS (Deve) ([REP 5.11](#)).
5. Remove the HVPS (1st/ 2nd/ DTC) ([REP 6.3](#)).
6. Disconnect the 4 wiring harness connectors [P/J246](#), [P/J247](#), [P/J248](#) and [P/J249](#).
7. Release the hook and move the Harness Holder.

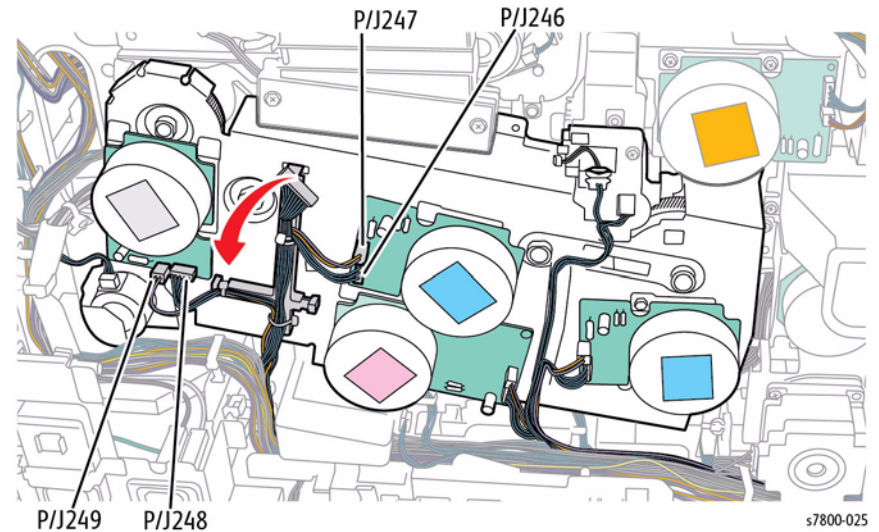


Figure 1 Disconnecting wiring harness connectors and releasing harness Holder

8. Release the wire harness from the Harness Holder.
9. Disconnect the 6 wiring harness connectors P/J144, P/J240, P/J241, P/J244, P/J245 and P/J250.
10. Release the hook and move the Harness Holder.

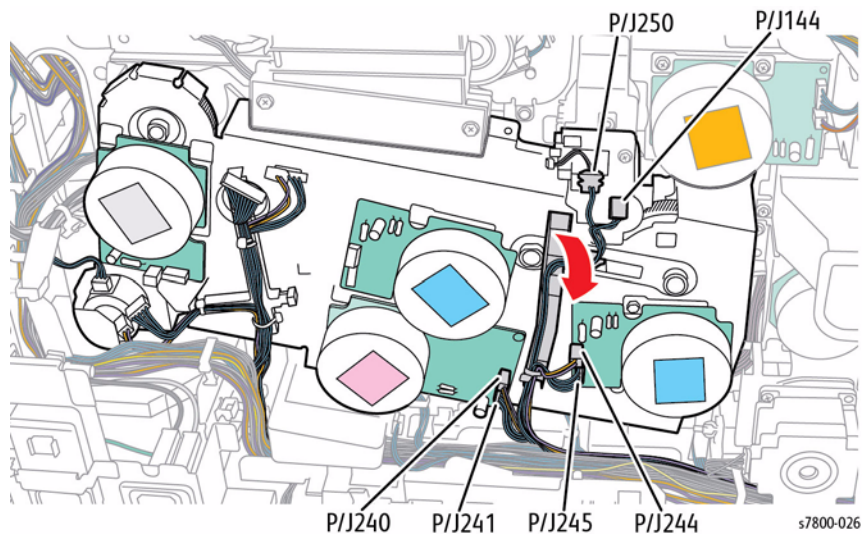


Figure 2 Disconnecting and releasing wiring harness

11. Disconnect the Bottom Fan wiring harness connector P/J234.
12. Remove 2 screws that secure the Bottom Fan Duct.
13. Pull the Bottom Fan and Duct out to remove.

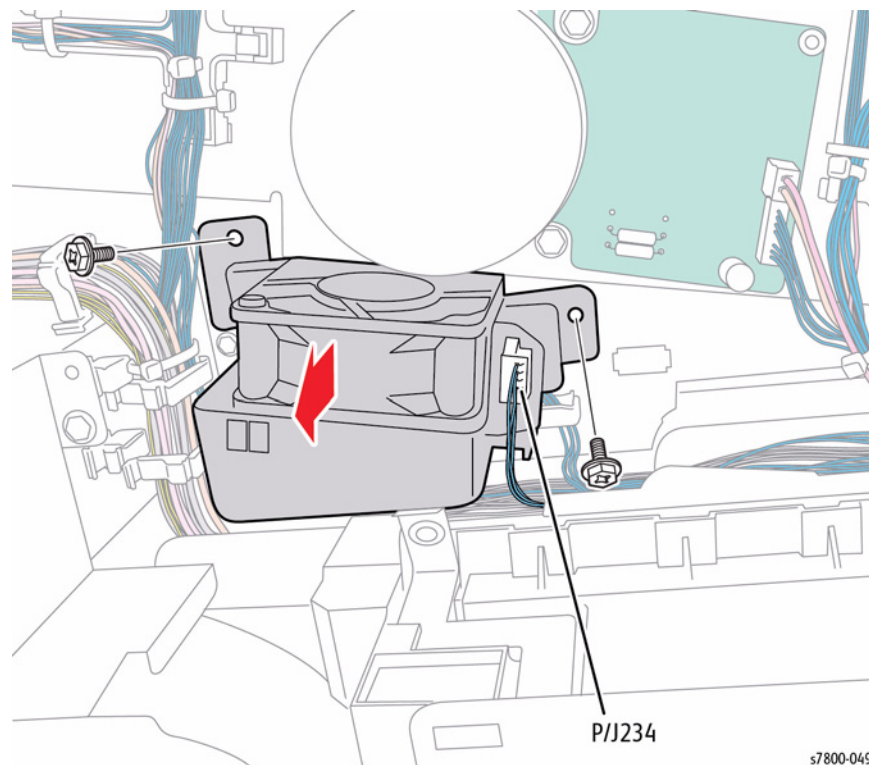


Figure 3 Removing the Bottom Fan and Duct

14. Remove 6 screws that secure the Drum/Deve Drive Assembly.
15. Remove the Drum/Deve Drive Assembly.

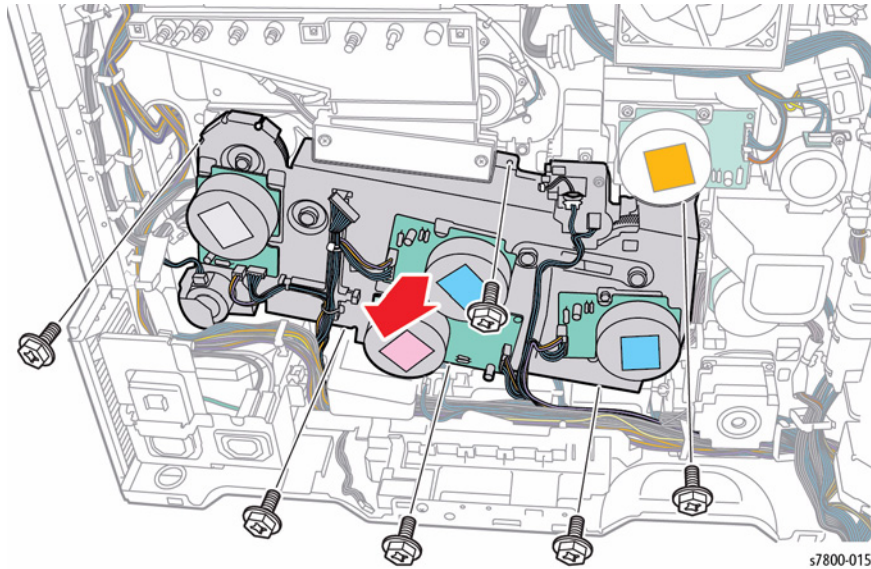


Figure 4 Removing the Drum/Deve Drive Assembly

NOTE: When placing the Drum/Drive Assembly on the floor, place it with the Motor section facing downward as shown in Figure 5.

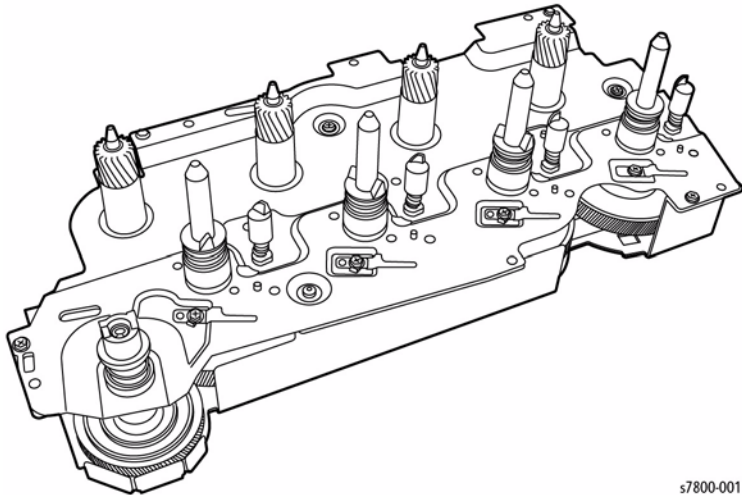


Figure 5 Drum/Deve Drive Assembly Placement

REP 3.9 Drum/ Deve Drive Motor (K)

Parts List on [PL 3.3 Item 3](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Remove the HVPS (Deve) ([REP 5.11](#)).
5. Disconnect the 2 wiring harness connectors [P/J240](#) and [P/J241](#) that are connected to the Drum/Deve Drive Motor (K).
6. Remove 3 screws (silver, 6mm) that secure the Drum/ Deve Drive Motor (K).
7. Remove the Drum/ Deve Drive Motor (K).

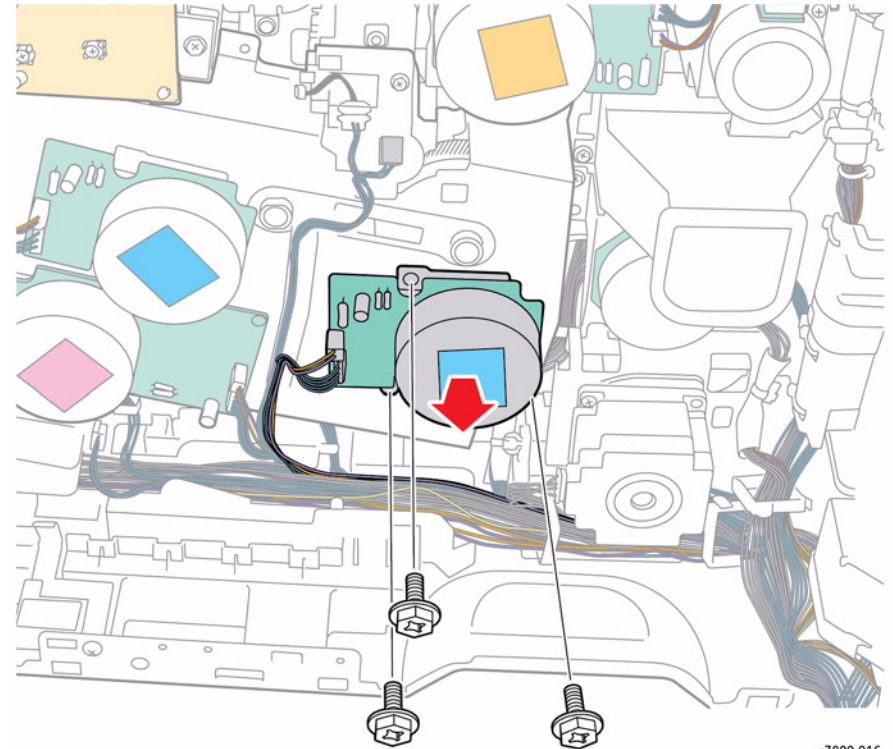


Figure 1 Removing the Drum/ Deve Drive Motor (K)

REP 3.10 IBT Drive Motor

Parts List on [PL 3.3 Item 4](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Remove the HVPS (Deve) ([REP 5.11](#)).
5. Disconnect the 2 wiring harness connectors [P/J248](#) and [P/J249](#) that are connected to the IBT Drive Motor Assembly.
6. Remove 4 screws (silver, 6mm) that secure the IBT Drive Motor.
7. Remove the IBT Drive Motor.

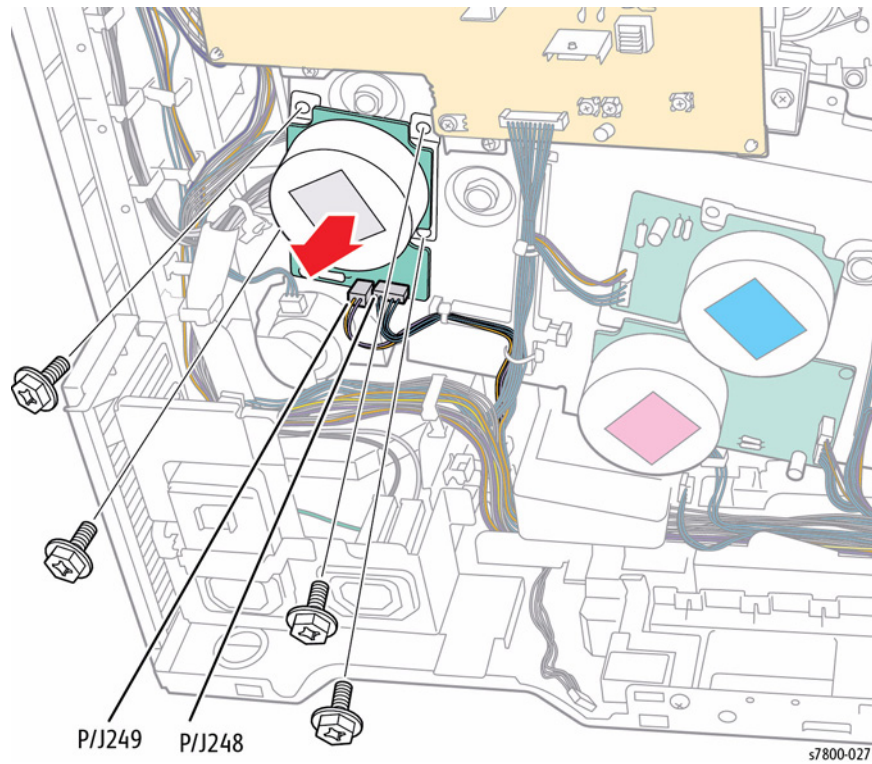


Figure 1 Removing the IBT Drive Motor

REP 3.11 Drum Drive Motor (Y/M/C)

Parts List on [PL 3.3 Item 5](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([PL 18.1.1](#)).
4. Remove the HVPS (Deve) ([REP 5.11](#)).
5. Disconnect the 2 wiring harness connectors [P/J246](#) and [P/J247](#) that are connected to the Drum Drive Motor (Y/M/C).
6. Remove 3 screw (silver, 6mm) that secure the Drum Drive Motor (Y/M/C) and remove the Drum/ Drive Motor (Y/M/C).

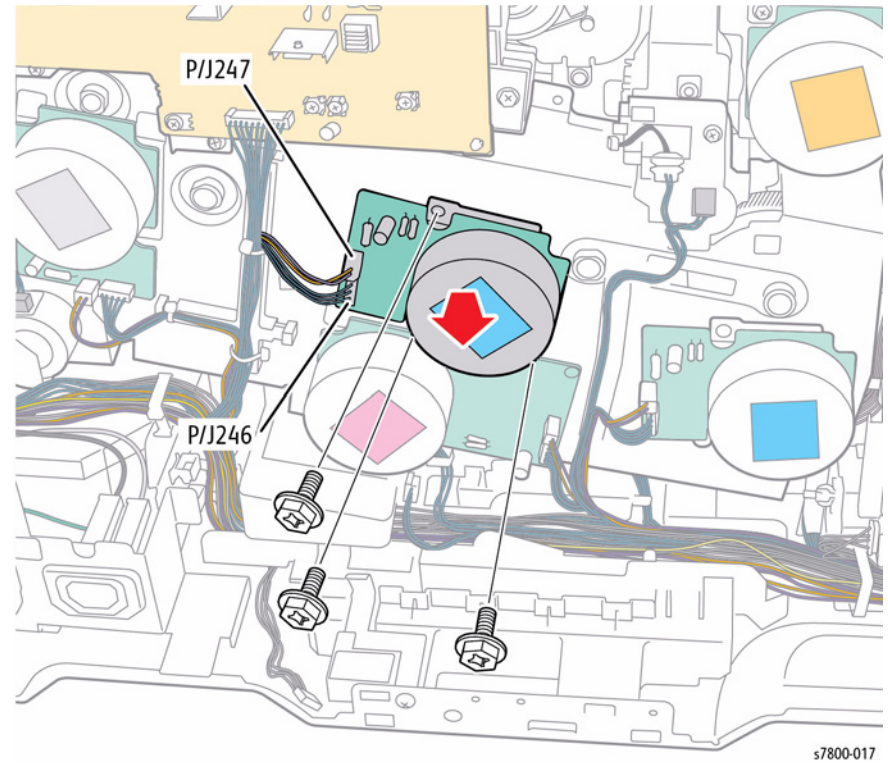


Figure 1 Removing the Drum Drive Motor

REP 3.12 Deve Drive Motor (Y/M/C)

Parts List on PL 3.3 Item 6

Removal

1. Remove the Rear Upper Cover (REP 19.17).
2. Remove the Rear Lower Cover (REP 19.16).
3. Open the PWB Chassis Unit (PL 18.1.1).
4. Remove the HVPS (Deve) (REP 5.11).
5. Disconnect the 2 wiring harness connectors P/J251 and P/J252 that are connected to the Deve Drive Motor (Y/M/C).
6. Remove 4 screw (silver, 6mm) that secure the Drum Drive Motor (Y/M/C) and remove the Drum/ Drive Motor (Y/M/C).

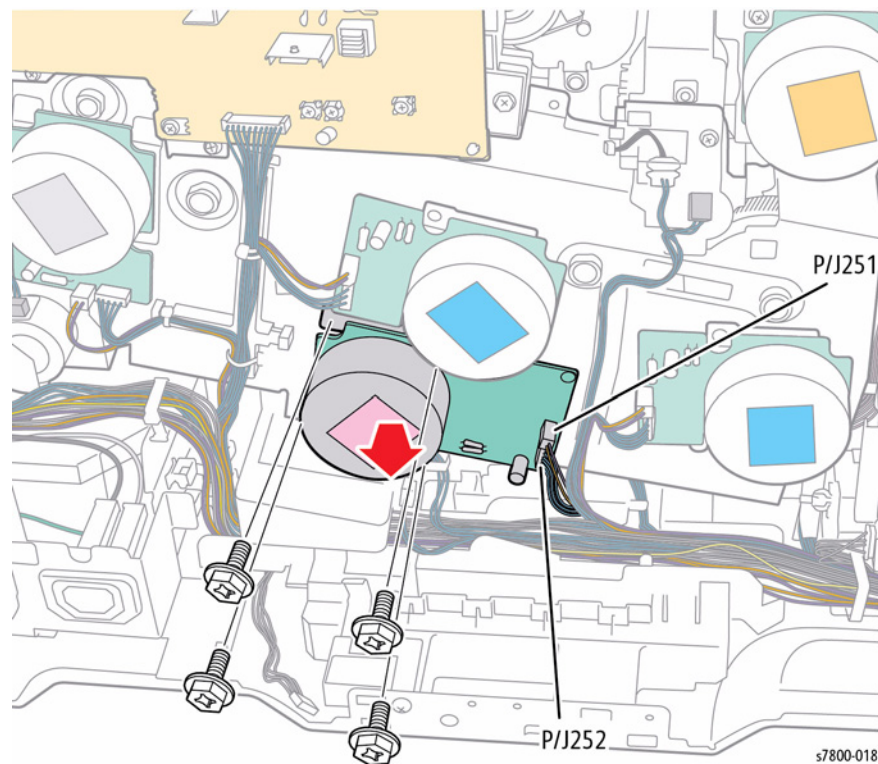


Figure 1 Removing the Deve Drive Motor

REP 4.1 Fuser Fan and Duct

Parts List on [PL 4.1 Item 1](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Disconnect the front wiring harness connector.
3. Release the rear wiring harness connector [P/J230](#) from the Fan Duct.
4. Release the 2 latches that secure the Fuser Fan and remove the Fan.

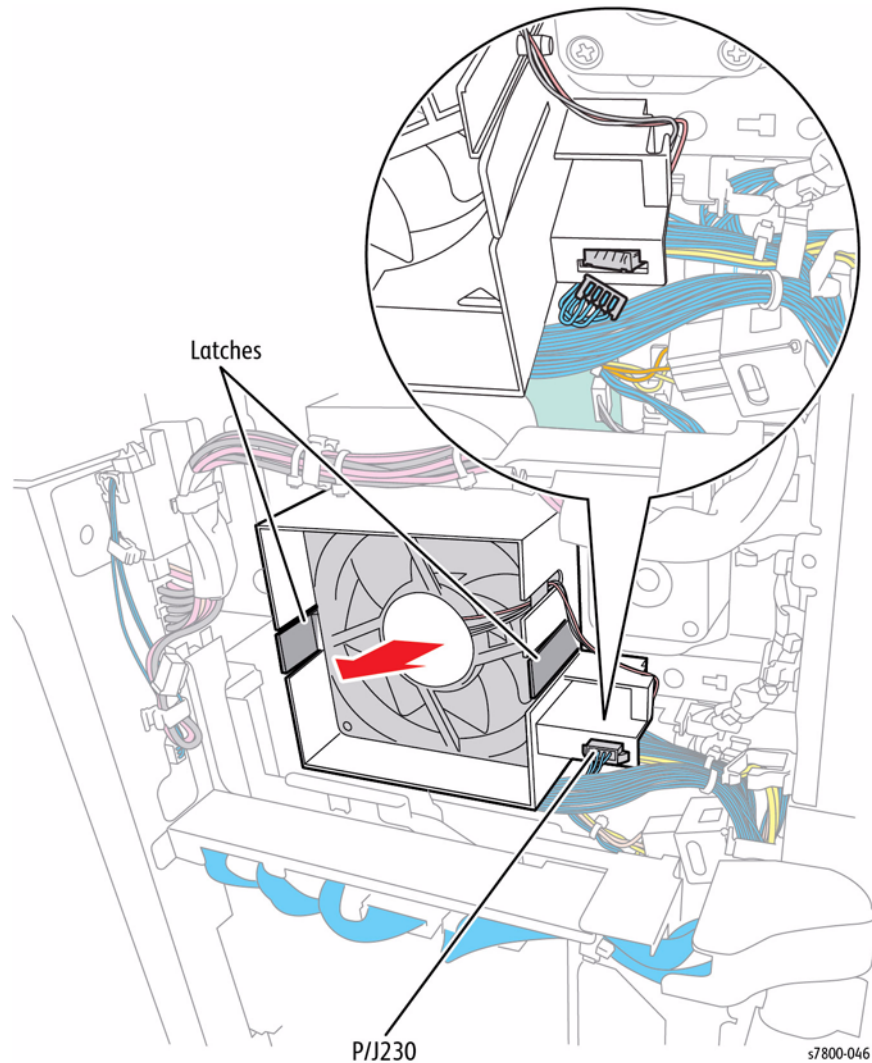


Figure 1 Removing the Fuser Fan

REP 4.2 Front LVPS Fan

Parts List on [PL 4.1 Item 7](#)

Removal

1. Remove the Right Cover ([REP 19.15](#)).
2. Disconnect the wiring harness connector [P/J239](#) on the rear of the Front LVPS Fan.
3. Remove 2 screws that secure the Bracket and Front LVPS Fan.
4. Remove the Front LVPS Fan and Bracket.

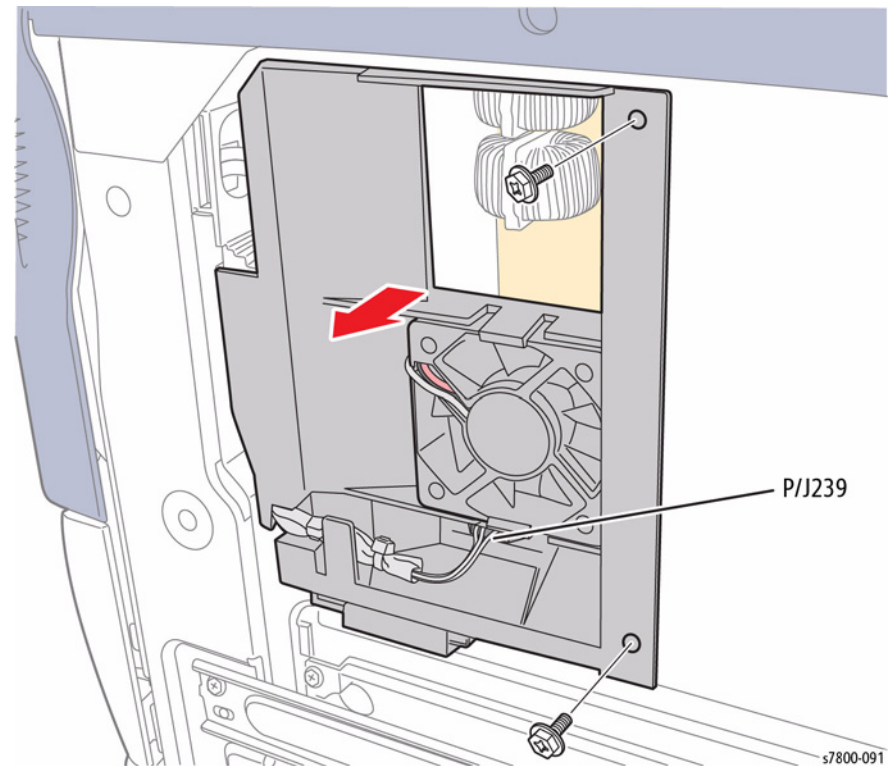


Figure 1 Removing screws

5. Release the Front LVPS Fan from the Bracket.

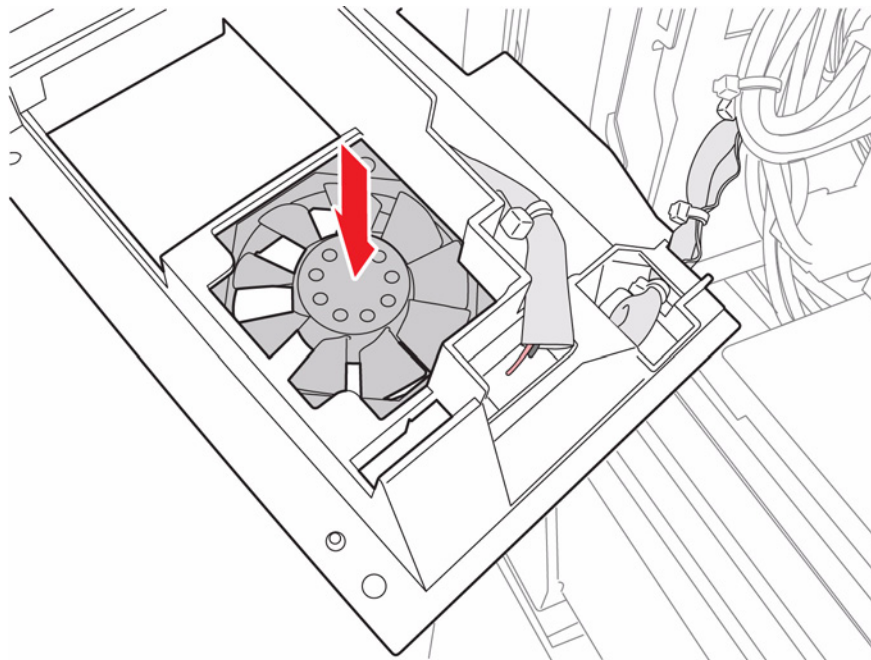


Figure 2 Removing the Front LVPS Fan

REP 4.3 IH Intake Fan and Duct

Parts List on [PL 4.1 Item 12](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis ([REP 18.1](#)).
4. Disconnect 1 wiring harness connector [P/J233](#) from the IH Intake Fan.
5. Remove 2 screws that secure the IH Intake Fan Duct.
6. Pull the Duct out and release the Fan from the Duct.

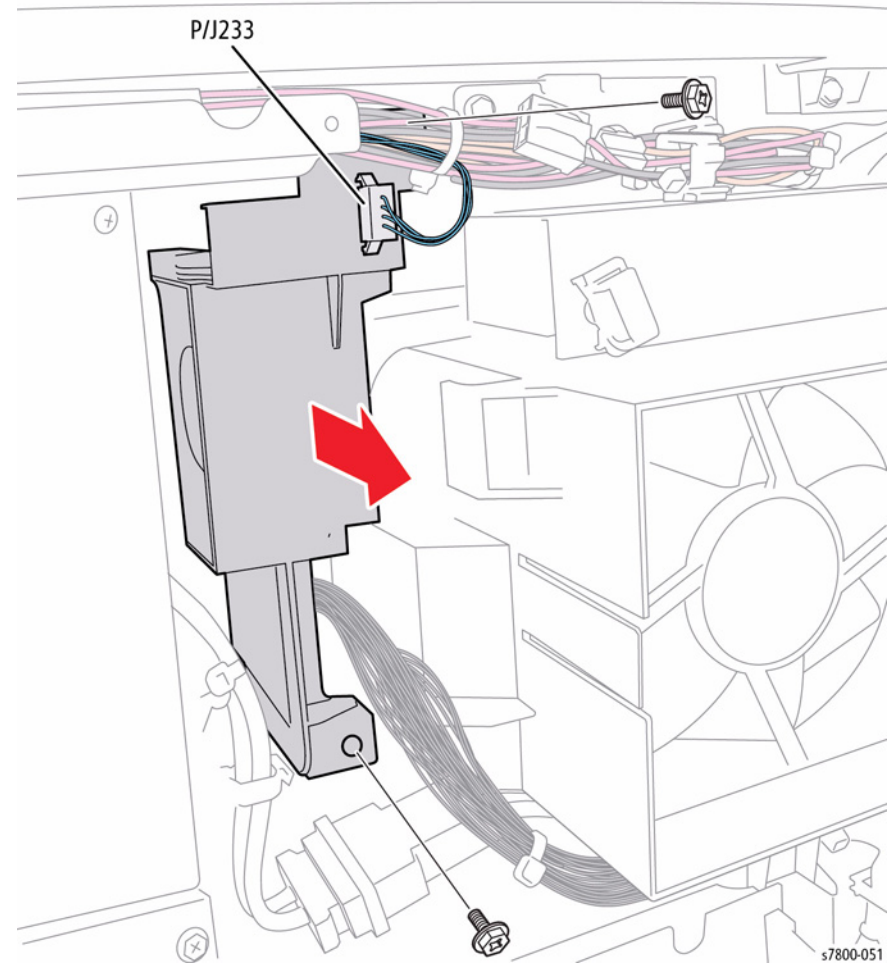


Figure 1 Removing the IH Intake Fan

REP 4.4 C Fan and Duct

Parts List on PL 4.2 Item 2

Removal

1. Remove the Imaging Unit (Y/M/C/K) (REP 8.1).
2. Remove the Toner Cartridge (Y/M/C/K) (REP 5.1).
3. Remove the Waste Cartridge (REP 8.9).
4. Remove the IBT Belt Cleaner Assembly (REP 6.1).
5. Remove the Imaging Unit Cover (REP 2.4).
6. Remove the Front Cover and Inner Cover (REP 19.1).
7. Remove the Top Cover (REP 19.2).
8. Disconnect the wiring harness connector P/J619.

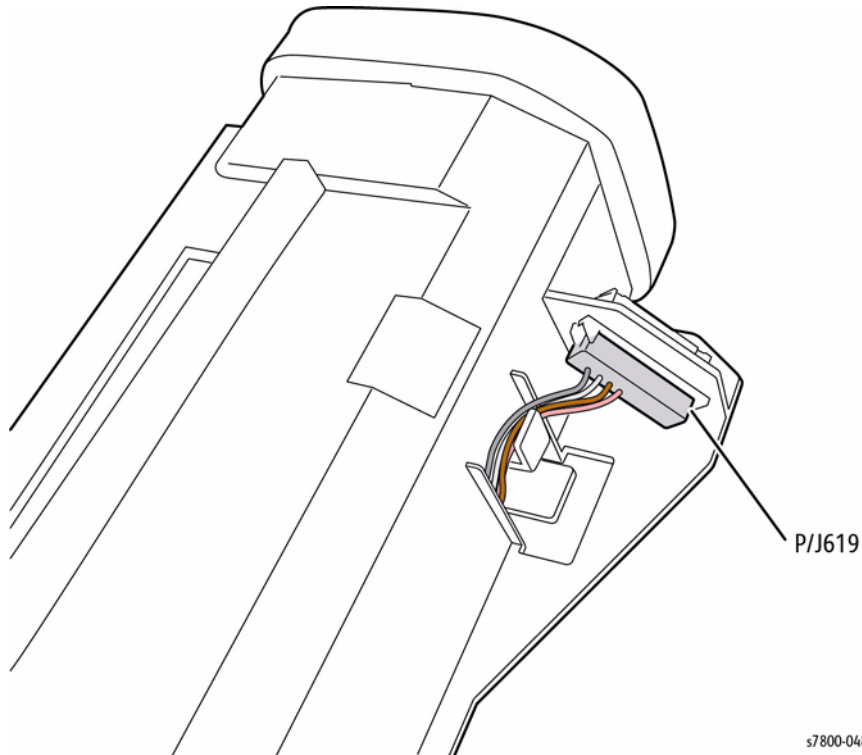


Figure 1 Disconnecting wiring harness connector

9. Remove 1 screw that secures the C Fan Duct.
10. Remove the C Fan Duct.

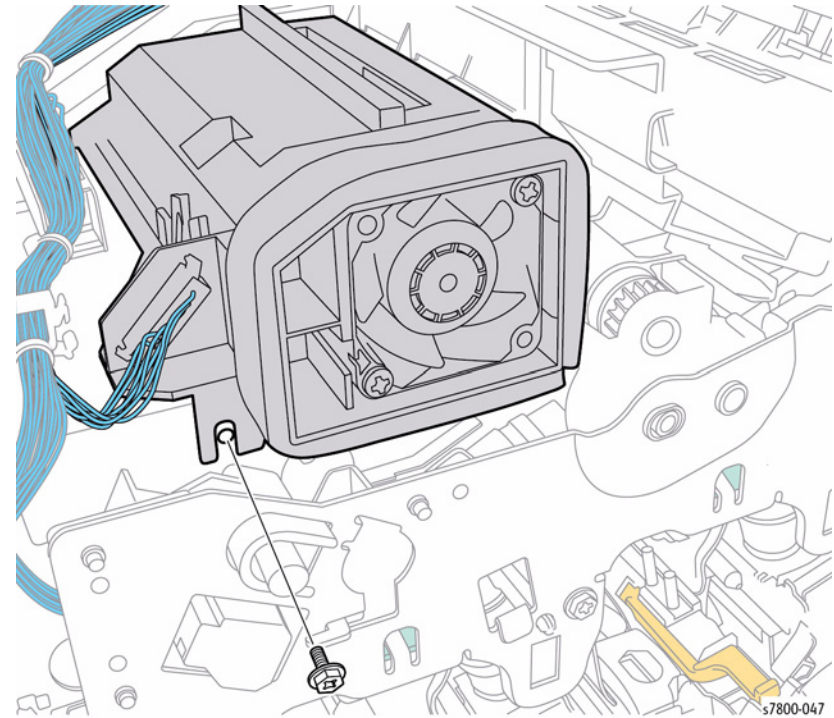


Figure 2 Removing the C Fan Duct

REP 4.5 Process 2 Fan and Duct

Parts List on PL 4.2 Item 8

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit (REP 8.1).
2. Remove the Toner Cartridge (REP 5.1).
3. Remove the Waste Cartridge (REP 8.9).
4. Remove the IBT Belt Cleaner Assembly (REP 6.1).
5. Remove the Tension Lever (REP 6.2).
6. Remove the Imaging Unit Cover (REP 2.4).
7. Open the Left Hand Cover Unit.
8. Remove the Front Cover and Inner Cover (REP 19.1).
9. Remove 6 screws that secure the Plate (PL 8.1 Item 7).
10. Remove the Plate.

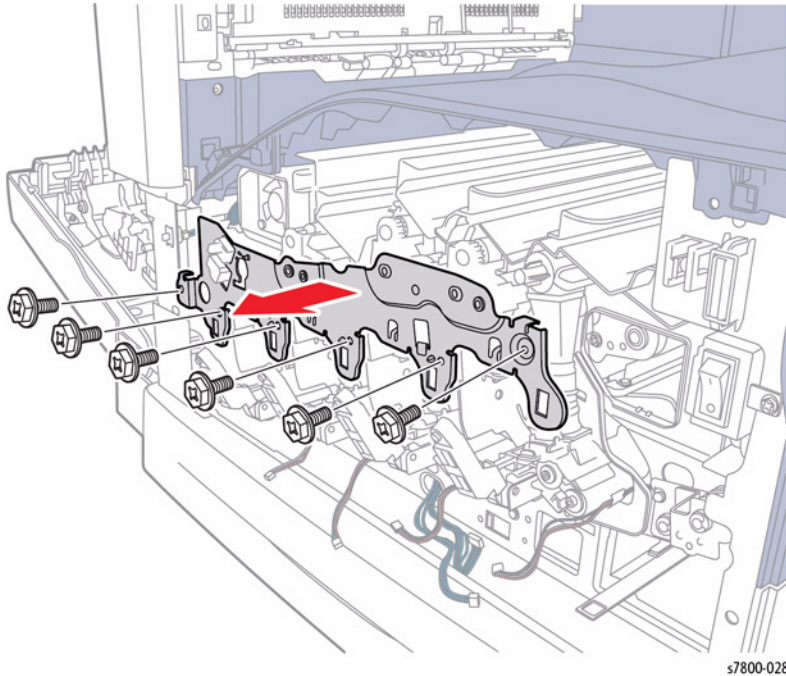


Figure 1 Removing screws and the Plate

11. Release the 2 hooks and remove the Plate.

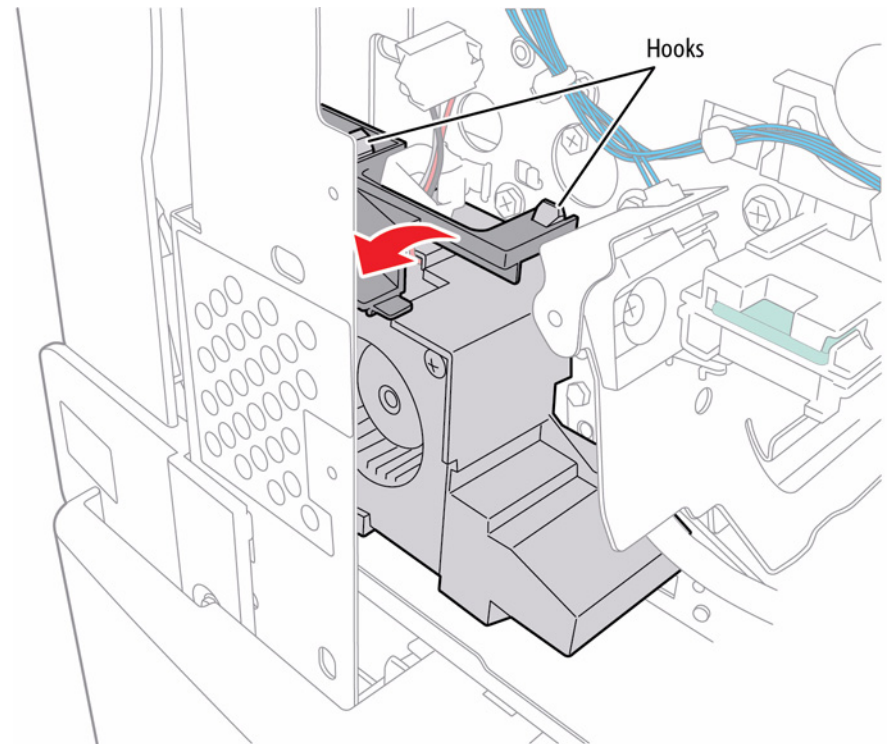


Figure 2 Removing the Plate

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12. Release the wiring harness from the clamp.
13. Disconnect the wiring harness connector P/J238.
14. Remove 1 screw that secures the Process 2 Fan and Duct.
15. Slide the Process 2 Fan and Duct at an angle to remove.

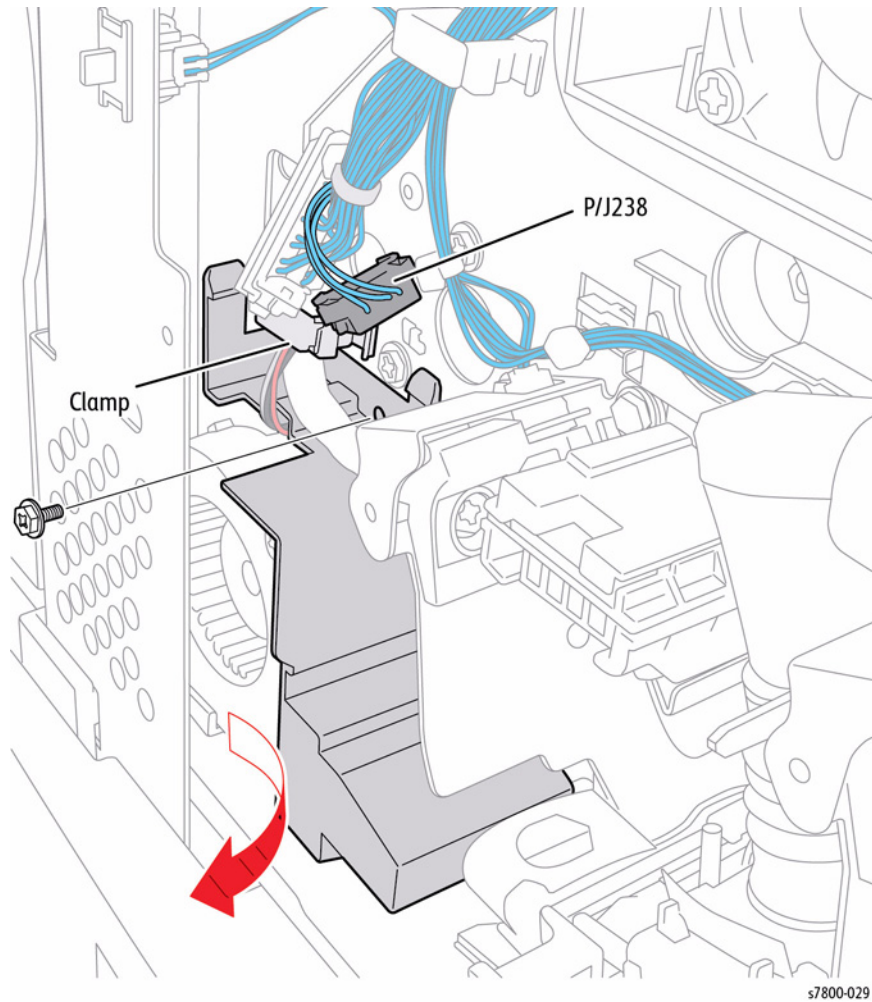


Figure 3 Removing the Process 2 Fan and Duct

REP 4.6 Fan Plate

Parts List on [PL 4.2 Item 13](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Cover Unit.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Remove 6 screws that secure the Plate ([PL 8.1 Item 7](#)).
10. Remove the Plate.

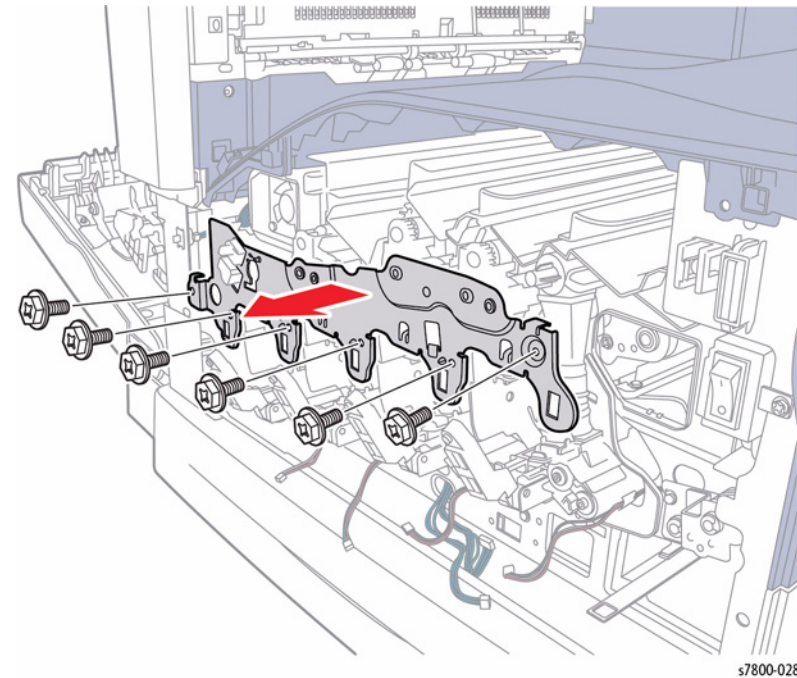


Figure 1 Removing screws and the Plate

11. Release the 2 hooks and remove the Fan Plate.

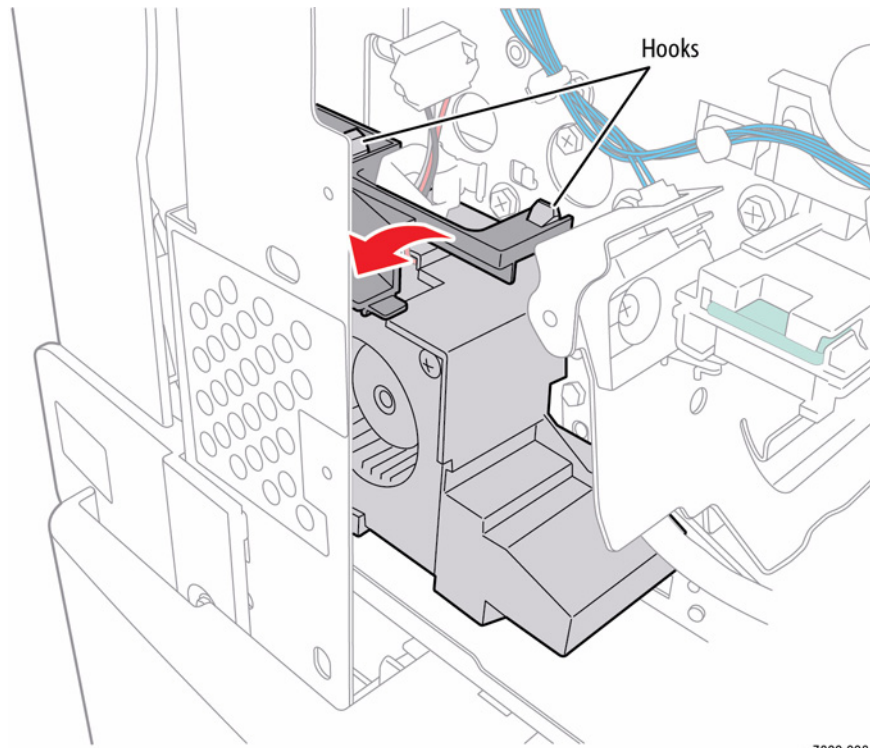


Figure 2 Removing the Fan Plate

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REP 4.7 Process 1 Fan and Duct

Parts List on [PL 4.2 Item 14](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Cover Unit.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Disconnect the wiring harness connector [P/J228](#).
10. Remove 1 screw that secures the Process 1 Fan and Duct.
11. Pull out the Process 1 Fan and Duct.

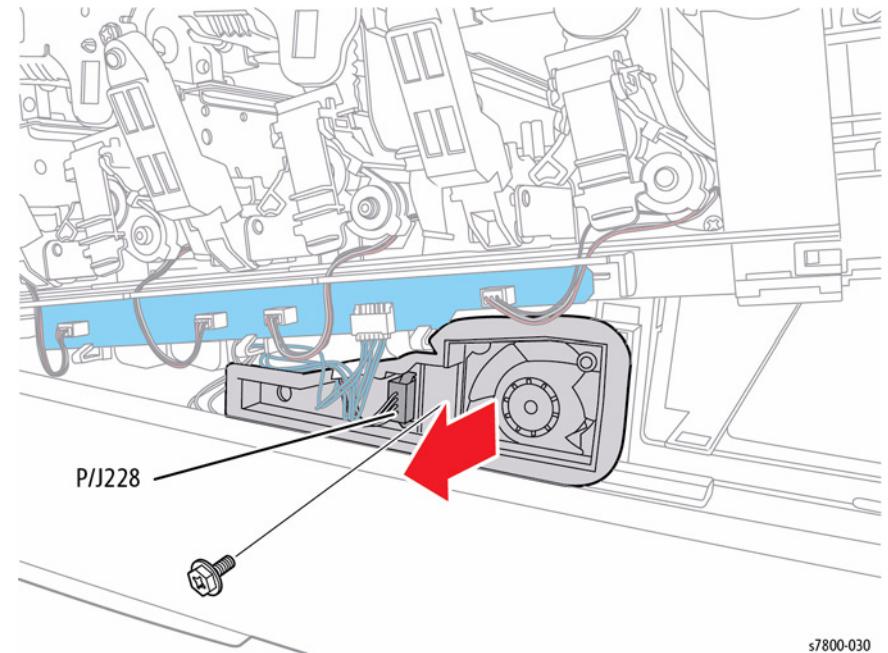


Figure 1 Removing the Process 1 Fan and Duct

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REP 4.8 Bottom Fan

Parts List on PL 4.3 Item 3

Removal

1. Remove the Rear Upper Cover (REP 19.17).
2. Remove the Rear Lower Cover (REP 19.16).
3. Open the PWB Chassis (REP 18.1).
4. Remove the HVPS (Deve) (REP 5.11).
5. Disconnect the wiring harness connector P/J234.
6. Remove 2 screws that secure the Duct.
7. Pull the Duct with the Bottom Fan out.

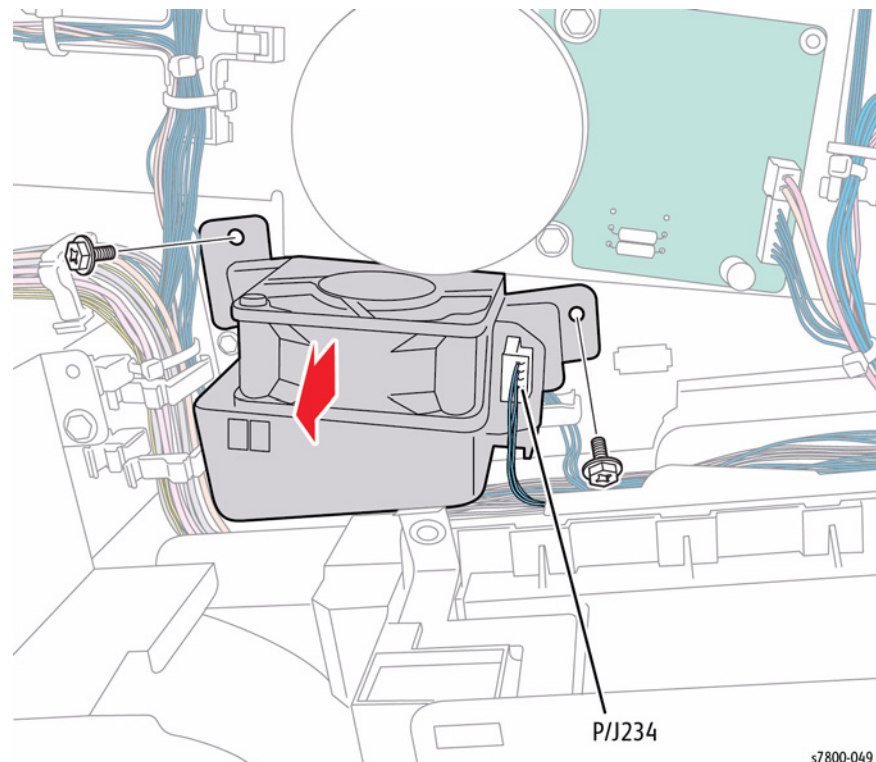


Figure 1 Removing the Bottom Fan and Duct

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8. Disconnect the wiring harness connector.
9. Remove 2 screws that secure the Bottom Fan.
10. Release and remove the Bottom Fan from the Duct.

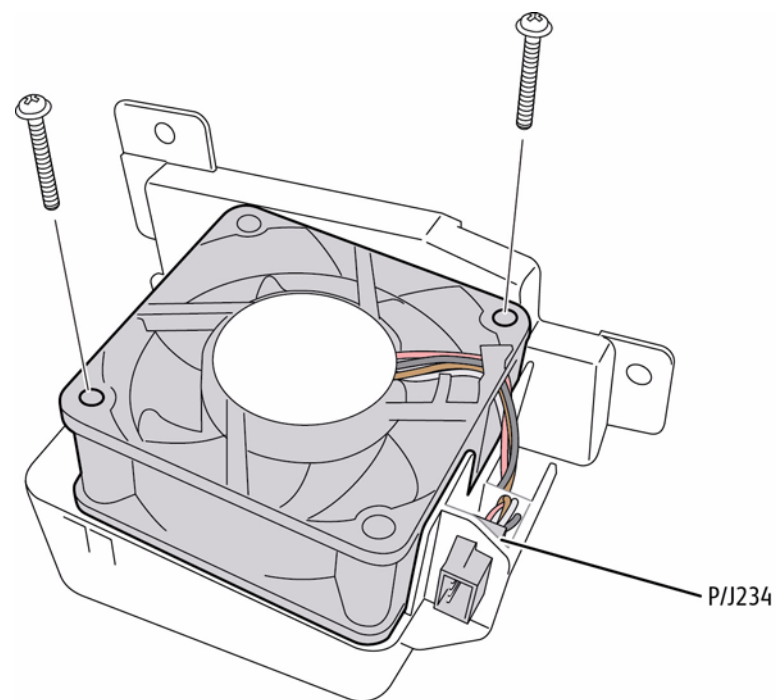


Figure 2 Removing the Bottom Fan

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REP 4.9 M Fan and Duct

Parts List on PL 4.3 Item 6

Removal

1. Remove the Rear Upper Cover (REP 19.17).
2. Remove the Rear Lower Cover (REP 19.16).
3. Open the PWB Chassis (REP 18.1).
4. Remove the GFI Assembly (REP 18.8).
5. Disconnect the upper wiring harness connector P/J235.
6. Remove 1 screw that secures the M Fan Duct.
7. Pull the M Fan and Duct out at an angle to remove.

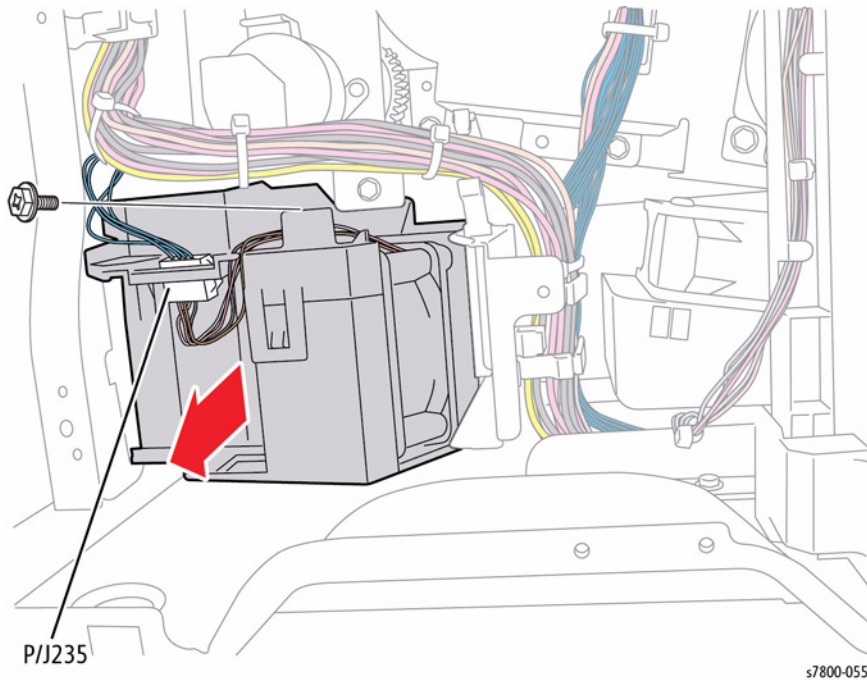


Figure 1 Removing M Fan and Duct

Replacement

Be sure the metal bracket is positioned in between the 2 tabs of the Duct.

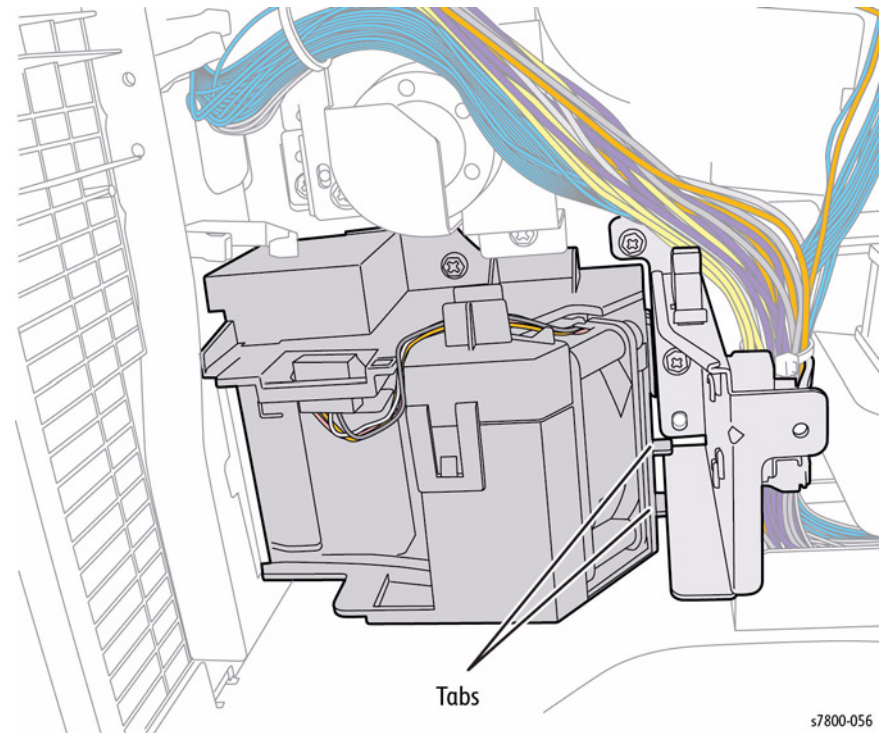


Figure 2 Installing the M Fan and Duct

REP 4.10 IH Exhaust Fan

Parts List on [PL 4.3 Item 12](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis ([REP 18.1](#)).
4. Disconnect 1 wiring harness connector [P/J225](#).
5. Release the wiring harness from the Clamps.
6. Slide the IH Exhaust Fan out to remove.

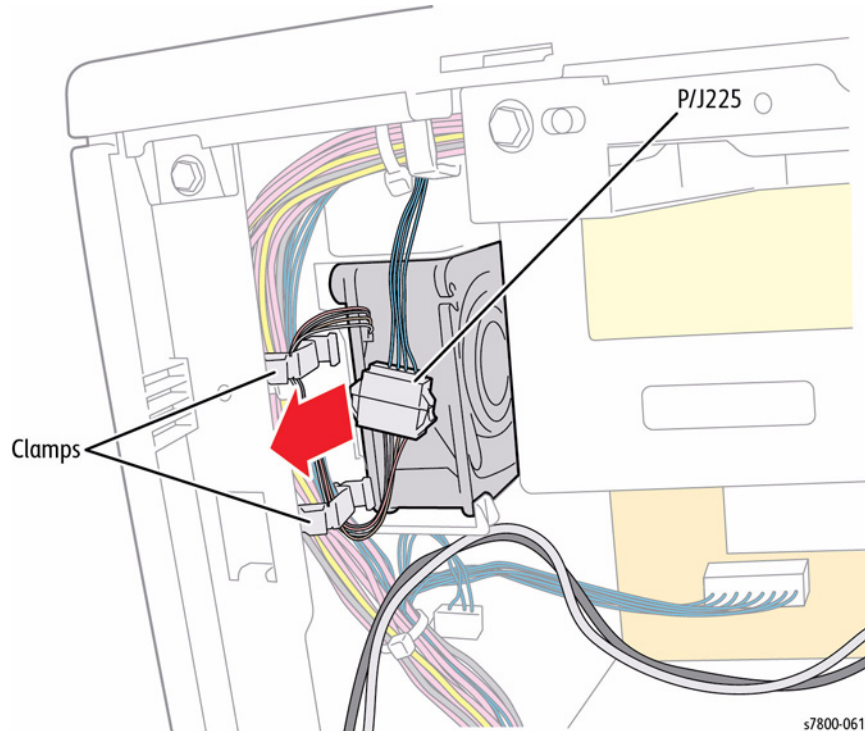


Figure 1 Removing the IH Exhaust Fan

REP 4.11 Suction Filter

Parts List on [PL 4.3 Item 16](#)

Removal

1. Open the Left Hand Door A.
2. Pull the Suction Filter out to remove.

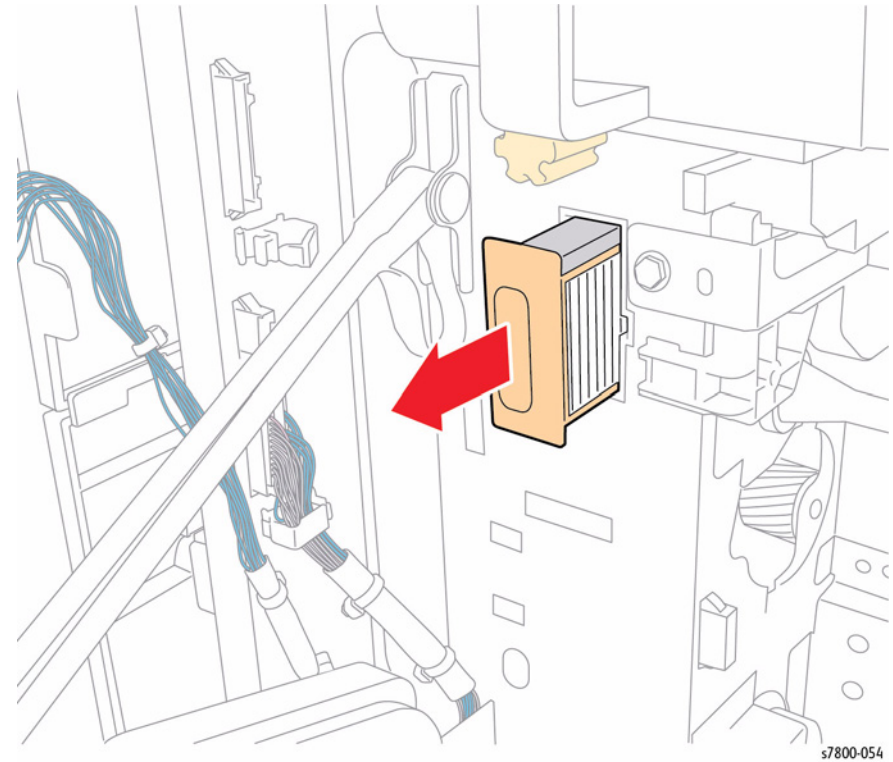


Figure 1 Removing the Suction Filter

REP 4.12 C Exit Fan and Duct

Parts List on PL 4.3 Item 18

Removal

1. Remove the Rear Upper Cover (REP 19.17).
2. Remove the Rear Lower Cover (REP 19.16).
3. Open the PWB Chassis (REP 18.1).
4. Disconnect 2 wiring harness connectors (1 from the IH Driver PWB P/J530, 1 from the Fan P/J227).
5. Release the wiring harnesses from the 4 Clamps and move the harnesses out of the way.

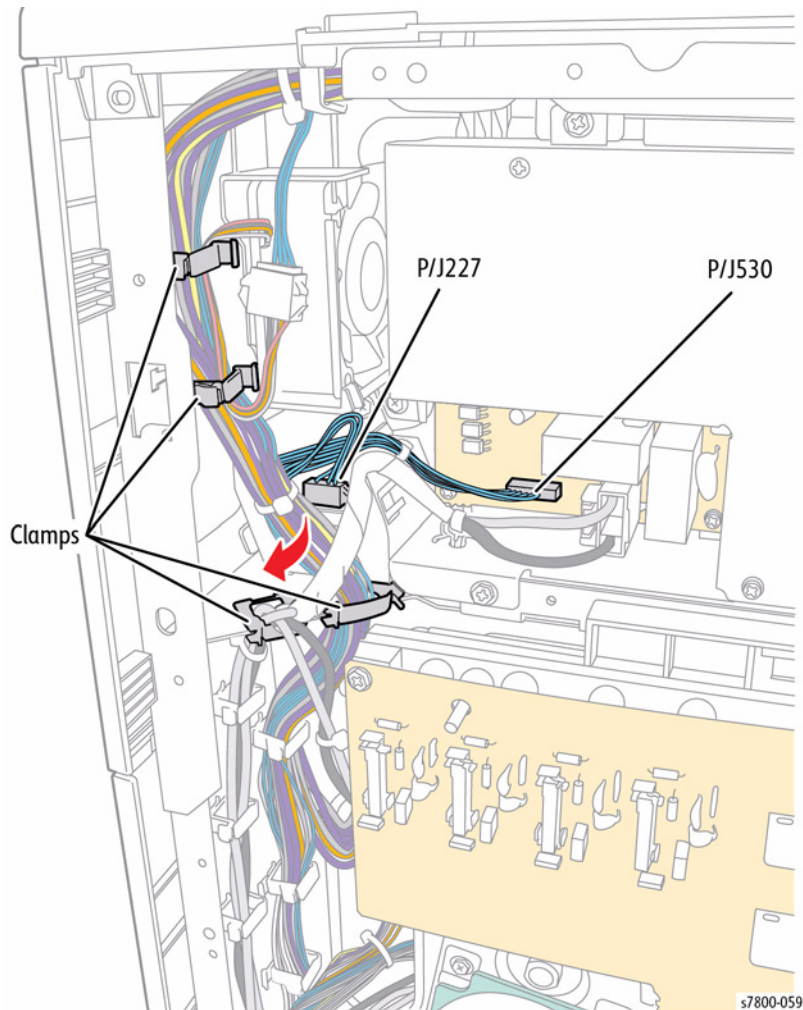


Figure 1 Disconnecting wiring harness connectors

6. Release the clips that secure the Duct and remove the Duct and Fan.

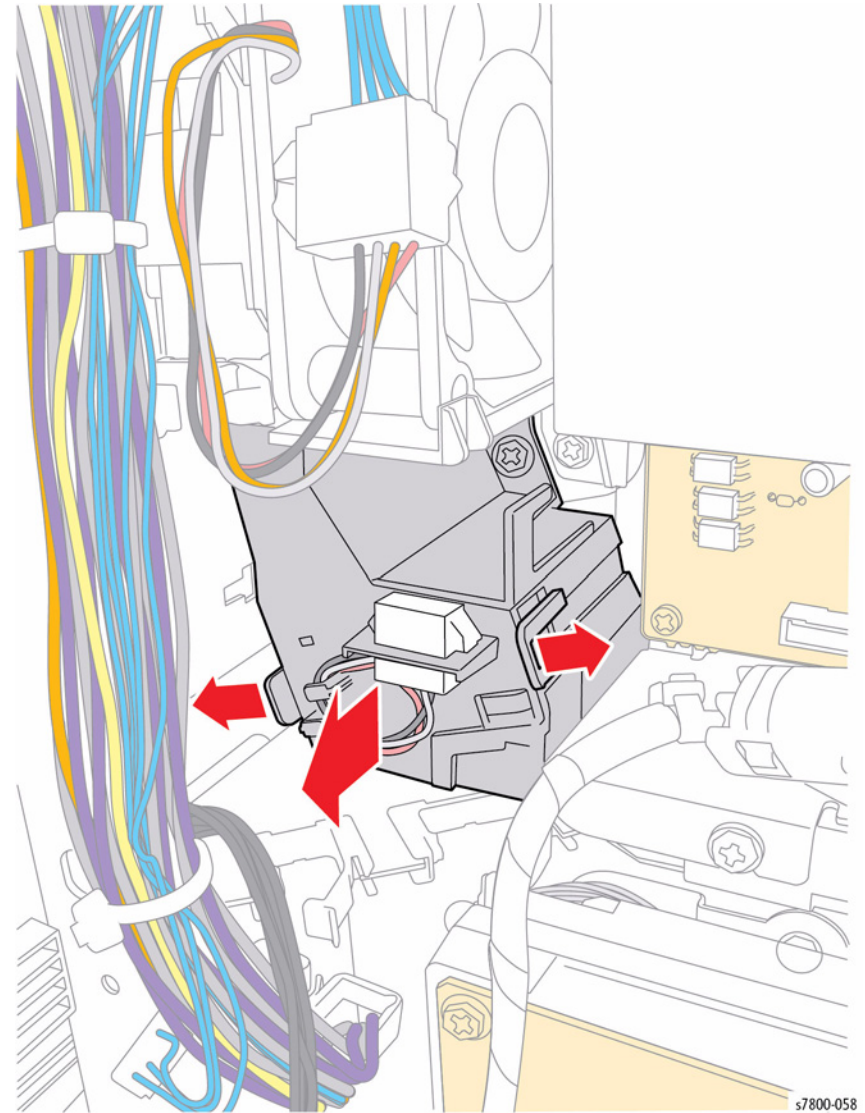


Figure 2 Removing the C Exit Fan and Duct

REP 4.13 NOHAD Thermistor and Bracket

Parts List on PL 4.4 Item 7

Removal

1. Remove the Waste Cartridge (REP 8.9).
2. Remove the Right Cover (REP 19.15).
3. Remove the Bottle Guide and Sensor (REP 8.10).
4. Remove the Front LVPS Fan (REP 4.2).
5. Remove the Main LVPS (REP 18.15).
6. Remove the HVPS (BCR) (REP 18.16).
7. Release the wiring harnesses from the 3 harness clips.

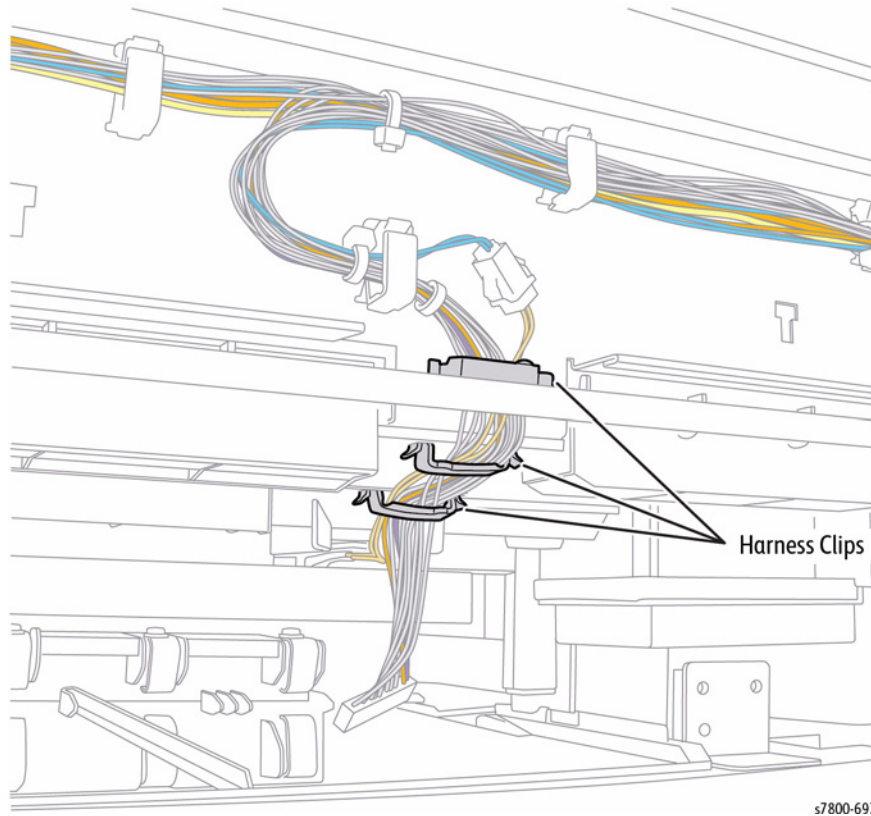


Figure 1 Releasing the wiring harnesses

8. Press on the NOHAD Thermistor and Bracket upward while pulling it out.
9. Disconnect the wiring harness connector P/J130.

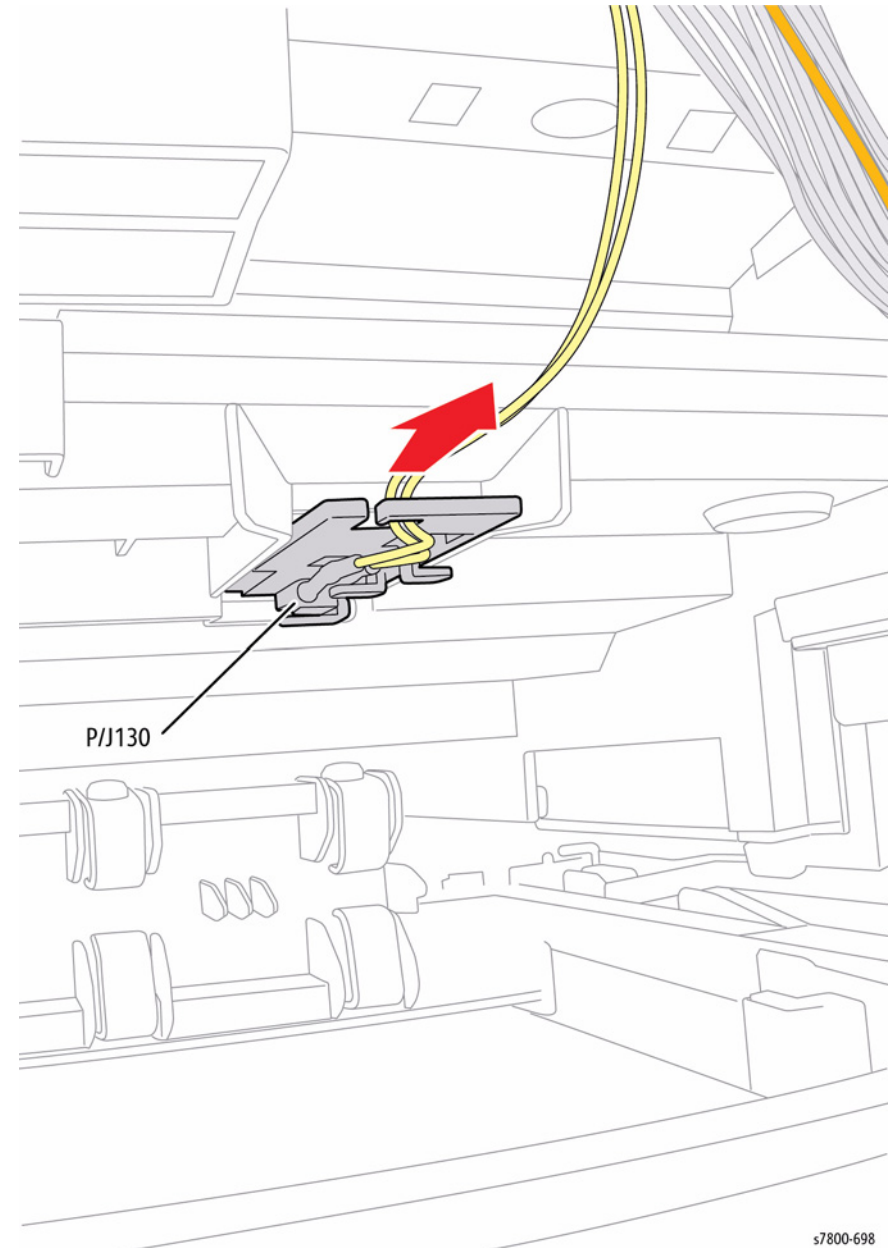


Figure 2 Removing the NOHAD Thermistor and Bracket

REP 5.1 Toner Cartridge (Y/M/C/K)

Parts List on [PL 5.1 Item 1](#), [PL 5.1 Item 2](#) [PL 5.1 Item 3](#), [PL 5.1 Item 4](#)

Removal

1. Open the Front Door.
2. Pull the Toner Cartridge toward you to remove it.

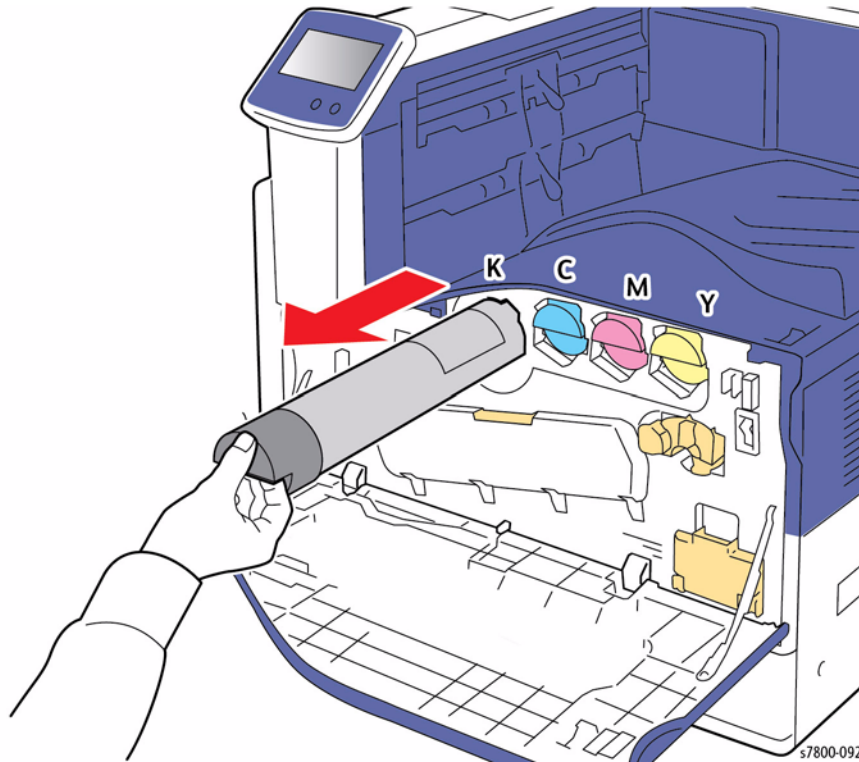


Figure 1 Removing the Toner Cartridge (Y/M/C/K)

REP 5.2 Toner Dispenser Motor Assembly

Parts List on [PL 5.1 Item 5](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Cover Unit.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Remove 1 screw that secures the Front Left Cover ([PL 19.2 Item 12](#)).
10. Remove the Front Left Cover.
11. Remove the Exit Front Cover ([PL 19.2 Item 9](#)).

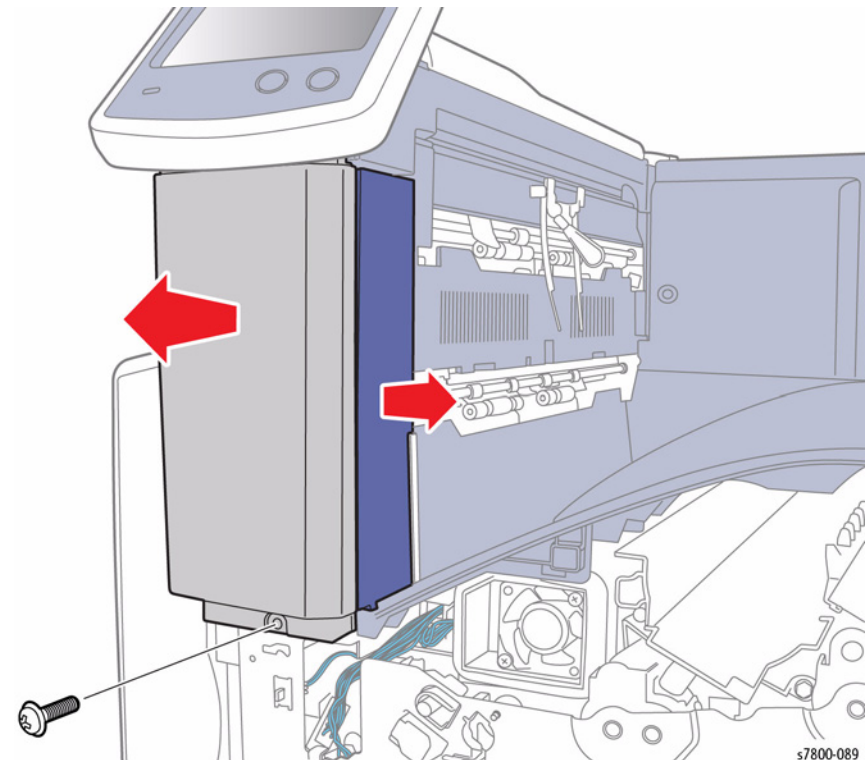


Figure 1 Removing the Front Left Cover and Exit Front Cover

12. Remove the Top Cover (REP 19.2).
13. Remove 2 screws that secure the Deflector Shield (PL 19.2 Item 11).
14. Slide the Deflector Shield downward to remove.

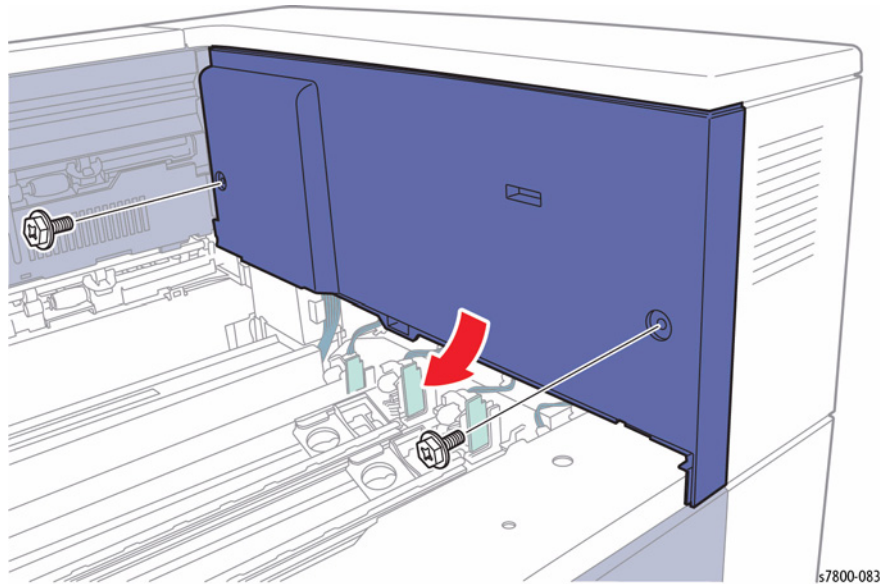


Figure 2 Removing the Deflector Shield

15. Remove the Rear Upper Cover (REP 19.17).
16. Remove the Rear Lower Cover (REP 19.16).
17. Open the PWB Chassis Unit (REP 18.1).
18. Remove the HVPS (1st/2nd/DTC) (REP 6.3).
19. Remove 3 screws that secure the Conductor Housing Assembly (PL 6.2 Item 8).
20. Remove the Conduct Housing Assembly.

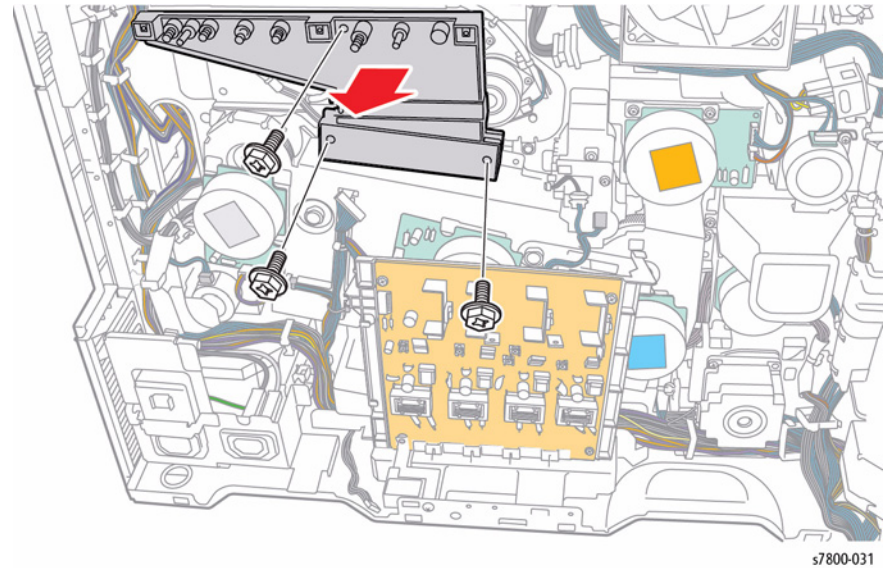


Figure 3 Removing the Conductor Housing Assembly

21. Release the 4 Clamps P/J120, P/J121, P/J122, and P/J123.
22. While holding the CRUM Reader Board (to prevent damaging the CRUM Reader Board latches), disconnect the 4 wiring harness connectors.

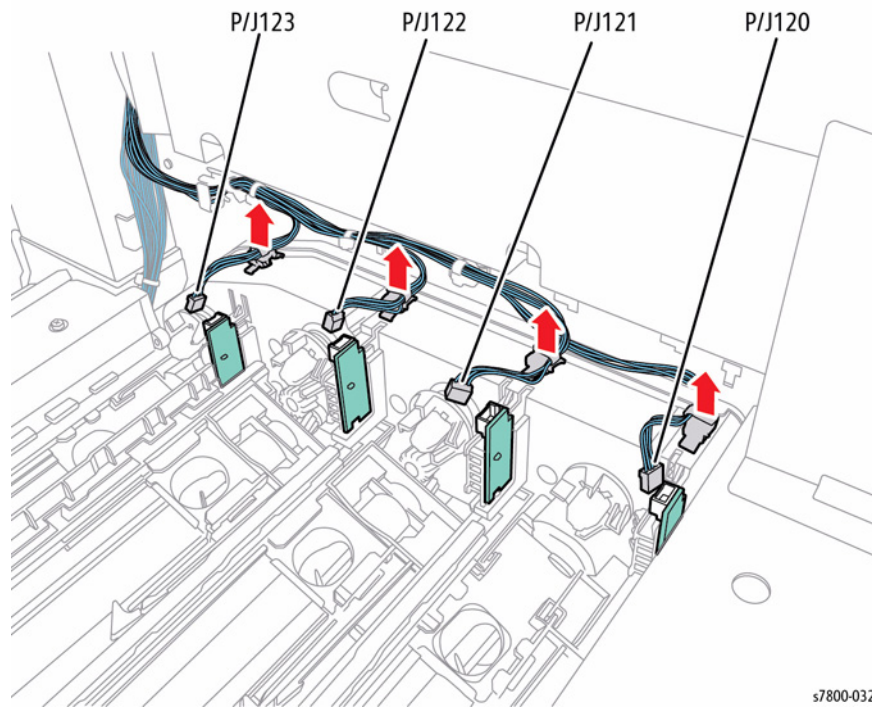


Figure 4 Disconnecting and releasing the wiring harness

23. Release the 4 clamps from the frame and disconnect the 4 wiring harness connectors P/J220, P/J221, P/J222, and P/J223.

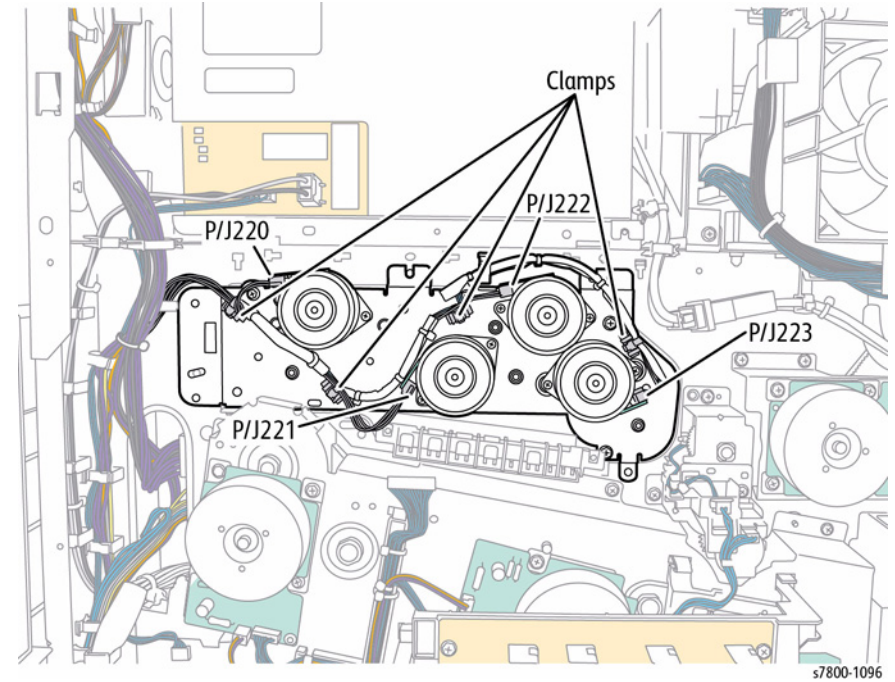


Figure 5 Disconnecting and releasing the wiring harness

24. Remove 5 screws that secure the Toner Dispense Motor Assembly.
25. Pull the Toner Dispense Motor Assembly back and lift the Assembly until it clears the screw hole area (on the right side) and slide it out.

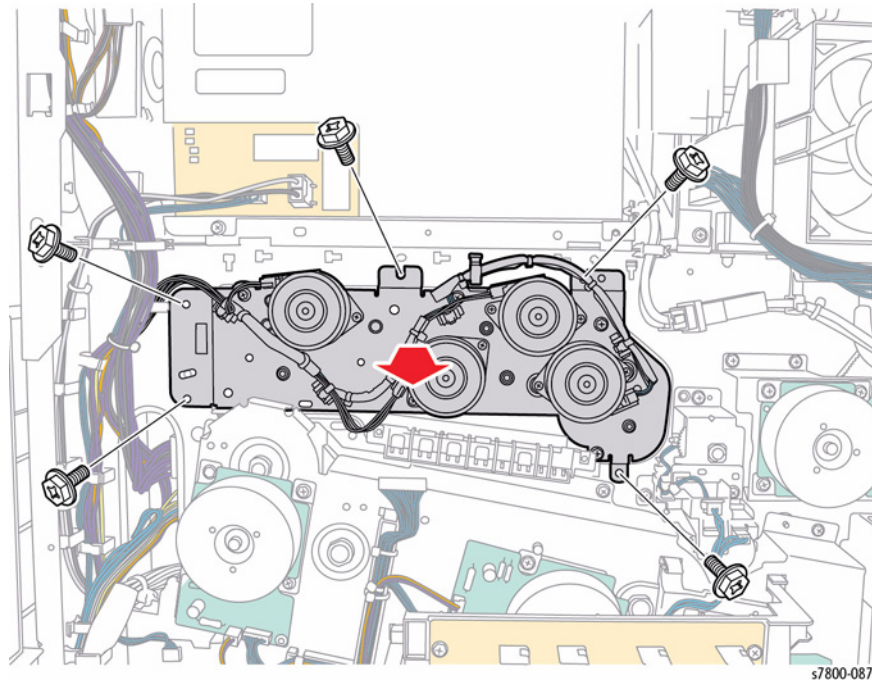


Figure 6 Removing the Toner Dispense Motor Assembly

Replacement

If any of the Toner Dispense Motors (Y, M, C, K) was removed, align the connector sections to the arrows when installing.

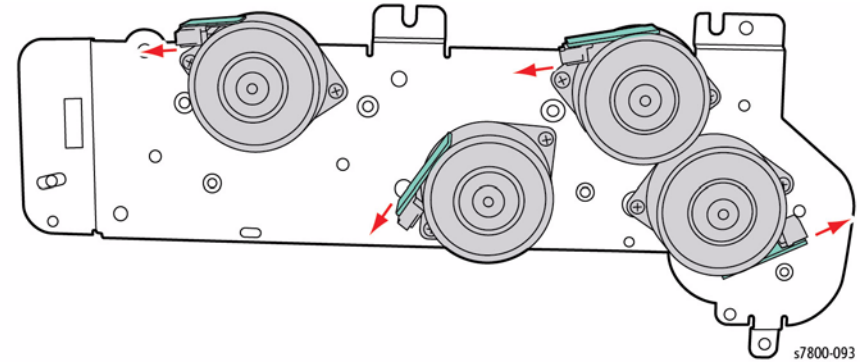


Figure 7 Aligning the connectors

REP 5.3 Toner Dispenser Motor (Y/M/C/K)

Parts List on PL 5.1 Item 7

Removal

1. Remove the Rear Upper Cover (REP 19.17).
2. Remove the Rear Lower Cover (REP 19.16).
3. Open the PWB Chassis (REP 18.1).
4. Remove the HVPS (1st/2nd/DTC) (REP 6.3).
5. Remove 3 screws that secure the Conductor Housing Assembly.
6. Remove the Conduct Housing Assembly.

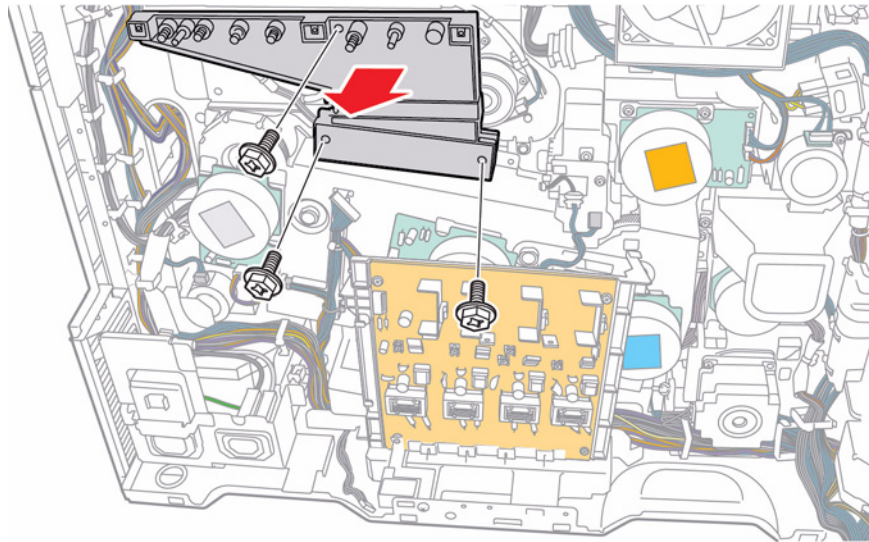


Figure 1 Removing the Conductor Housing Assembly

7. Disconnect the wiring harness connector (Y - P/J220, M - P/J221, C - P/J222, K - P/J223) that is connected to the Toner Dispense Motor (C/M/Y/K).
8. Remove 2 screws (silver, 6mm) that secure the Toner Dispense Motor (C/ M/Y/K) and remove the Toner Dispense Motor (C/M/Y/K).

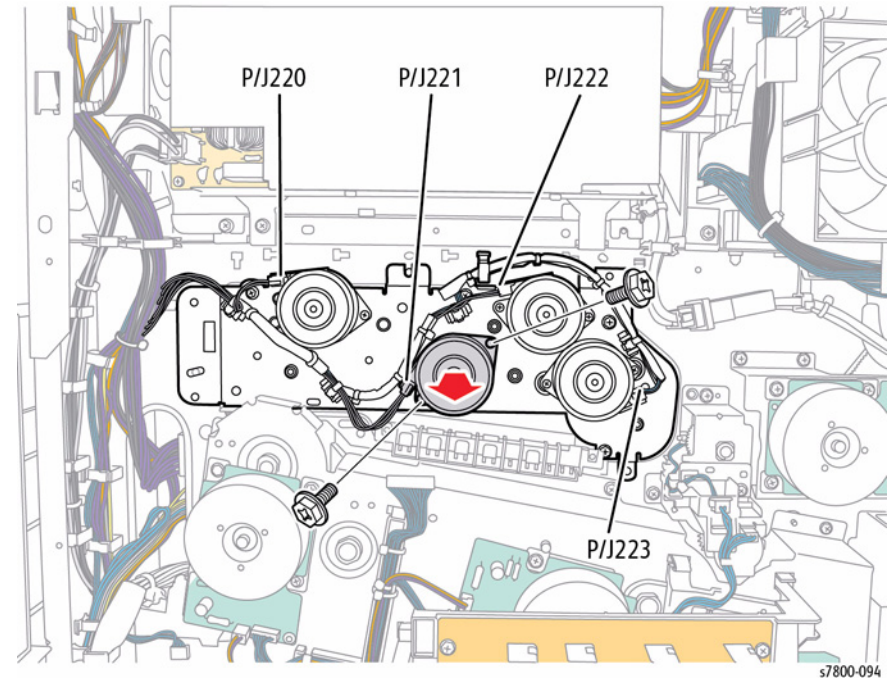


Figure 2 Removing the Toner Dispenser Motor

REP 5.4 Dispenser Pipe Assembly (Y/M/C/K)

Parts List on [PL 5.1 Item 9](#), [PL 5.1 Item 16](#)

Removal

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Unit Cover.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Remove the Top Cover Assembly ([REP 19.2](#)).
10. Remove the Deve Plate Assembly ([REP 5.6](#)).
11. Raise the shutter by 90° and push it in, then close the shutters (4).
For Y Dispenser Pipe - rotate CCW approximately 30°.
12. Pull the joint section between the Developer Housing Assembly (Y/M/C/K) and the Dispenser Pipe (Y/M/C/K) towards you and raise it up.

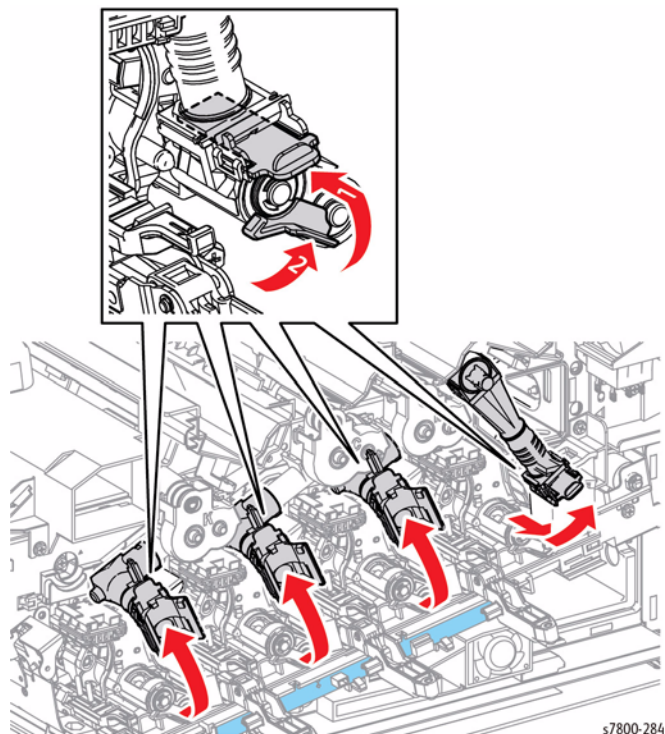


Figure 1 Closing the Shutter

13. Remove 3 screws (silver, 6mm) that secure the Dispenser Pipe Assembly (C/M/Y/K) and remove the Dispenser Pipe Assembly (C/M/Y/K).

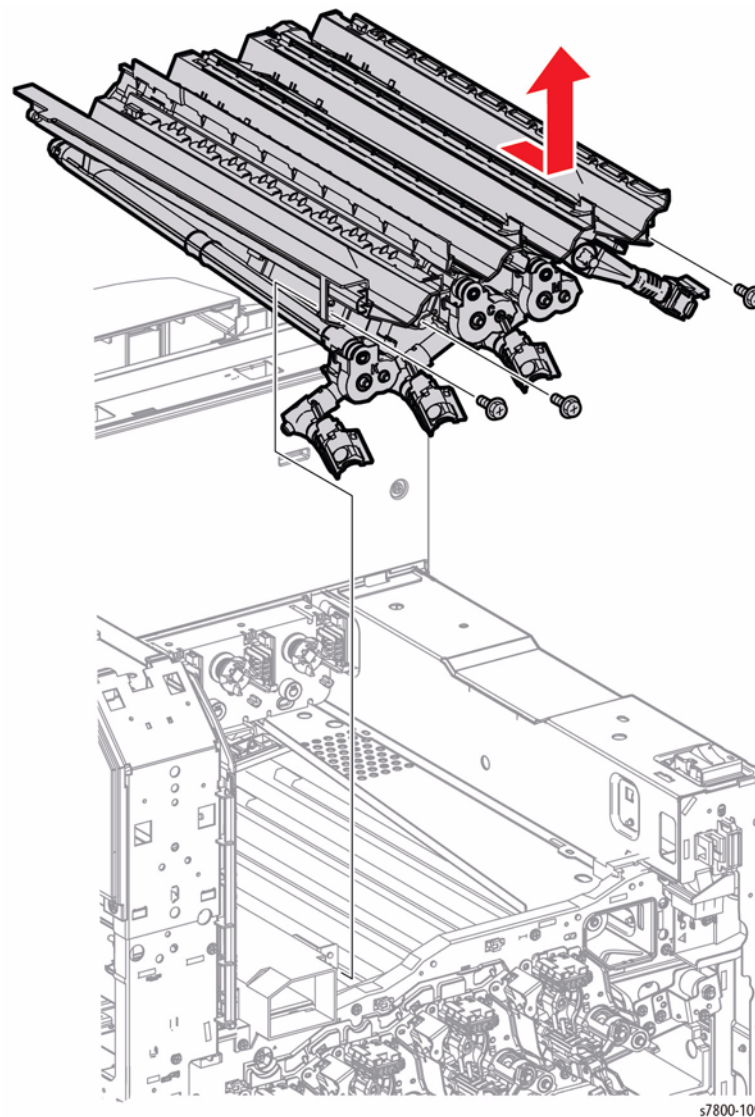


Figure 2 Removing the Dispenser Pipe Assembly

- Separate Dispenser Pipe Assembly (C/M/Y) from Dispenser Pipe Assembly (K).

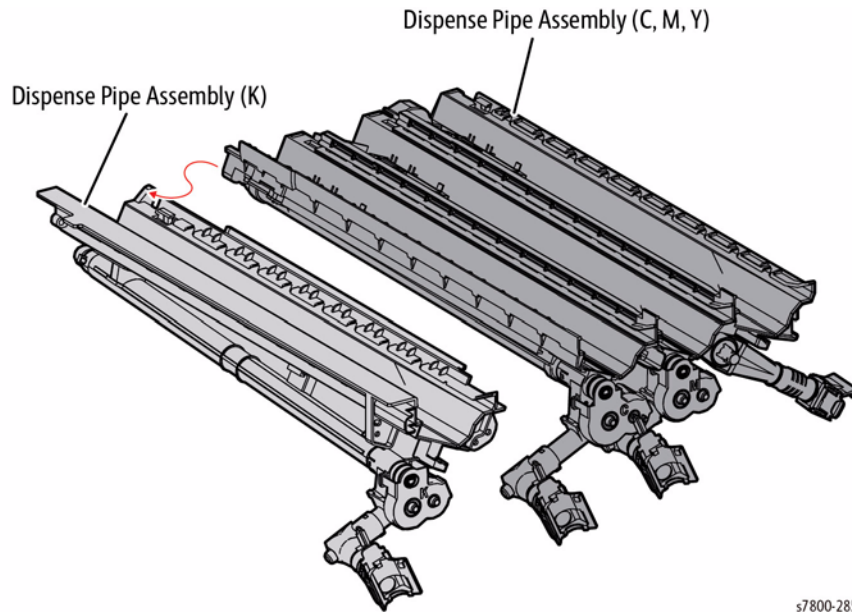


Figure 3 Separating the Dispenser Pipe Assembly K

Replacement

Make sure the Shutter and Lever are returned to the original position.

REP 5.5 Dispenser Pipe (Y/M/C/K)

Parts List on [PL 5.1 Item 13](#), [PL 5.1 Item 14](#), [PL 5.1 Item 15](#), [PL 5.1 Item 18](#)

Removal

- Remove the Imaging Unit ([REP 8.1](#)).
- Remove the Toner Cartridge ([REP 5.1](#)).
- Remove the Waste Cartridge ([REP 8.9](#)).
- Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
- Remove the Tension Lever ([REP 6.2](#)).
- Remove the Imaging Unit Cover ([REP 2.4](#)).
- Remove the Front Cover Assembly and the Inner Cover Assembly ([REP 19.1](#)).
- Remove the Deve Plate Assembly ([REP 5.6](#)).
- Raise the shutter by 90° and push it in, then close the shutter.
- Turn the Lever counterclockwise and close the shutter.
- Pull the joint section between the Developer Housing Assembly (Y/M/C/K) and the Dispenser Pipe (Y/M/C/K) towards you and raise it up.

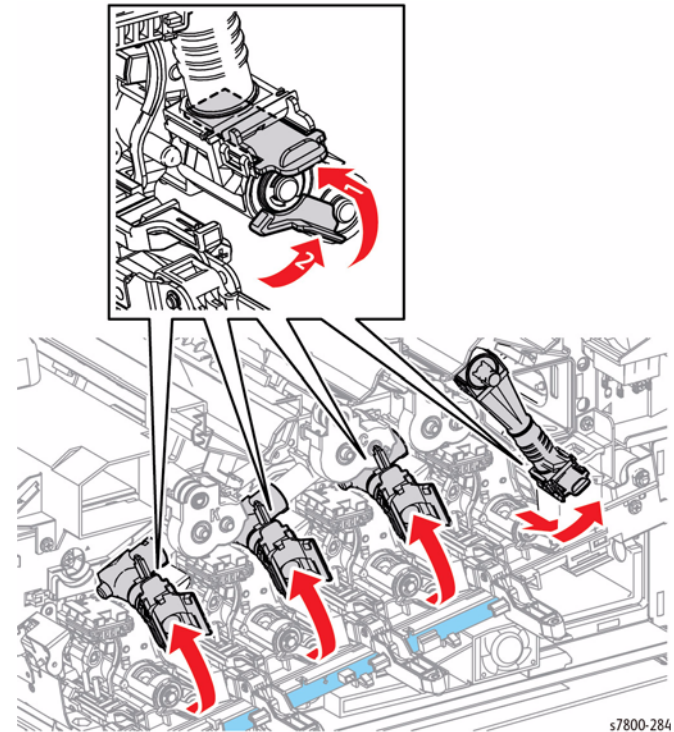


Figure 1 Closing the Shutter

12. Release the hooks of the Dispenser Pipe (Y/M/C/K) and remove the Dispenser Pipe (Y/M/C/K).

NOTE: The Yellow Dispenser Pipe has a longer wire hanging down into the tube.

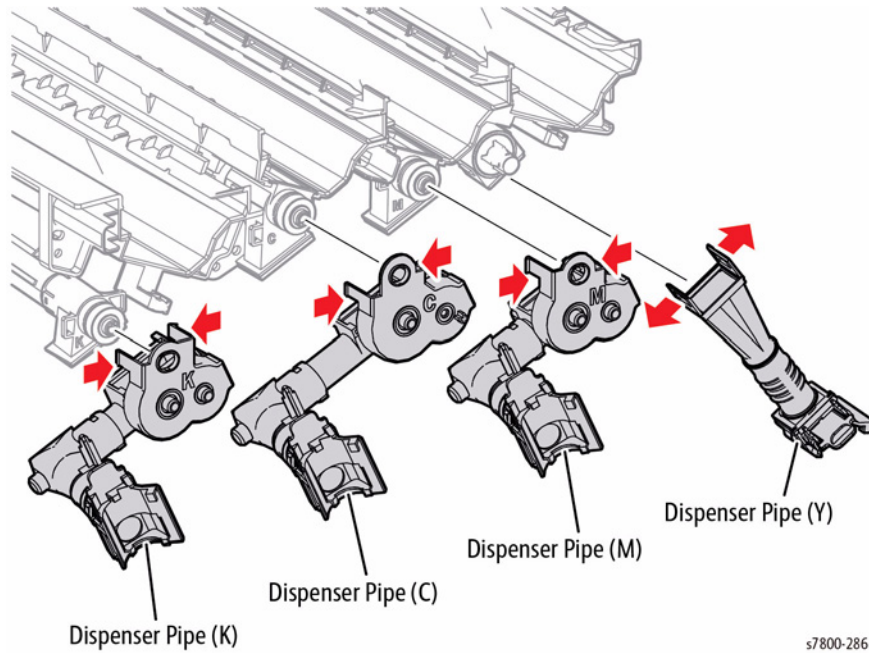


Figure 2 Removing the Dispenser Pipe

Replacement

Make sure to turn the Lever clockwise.

REP 5.6 Deve Plate Assembly

Parts List on [PL 5.2 Item 1](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Cover.
8. Remove the Front Cover Assembly and the Inner Cover Assembly ([REP 19.1](#)).
9. Remove the Process Fan 1 and Duct ([REP 4.7](#)).
10. Remove the ATC PWB ([REP 5.8](#)).
11. Remove 6 screws that secure the Plate.
12. Remove the Plate.

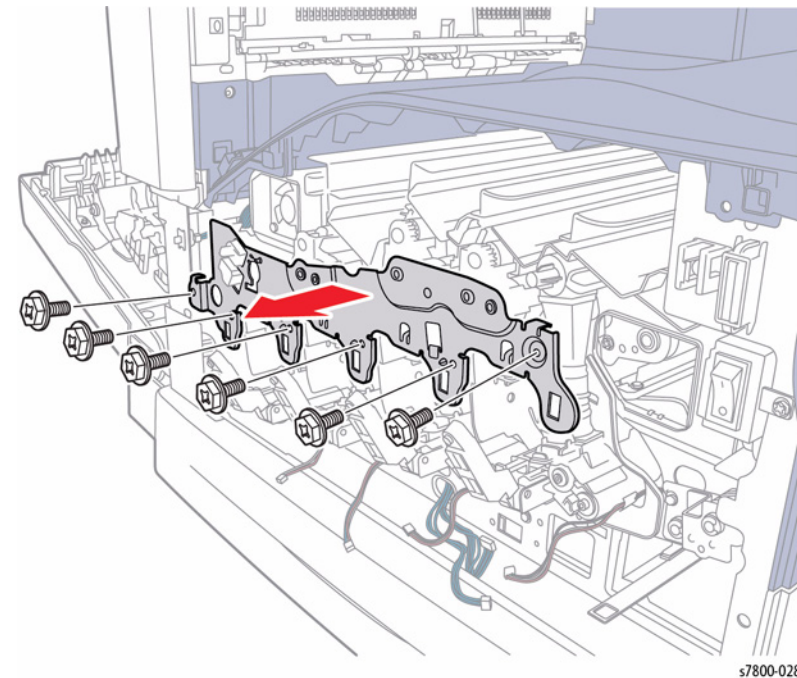


Figure 1 Removing screws and the Plate

13. Lift the shutters (4) by 90° and push them in, then close the shutters.
14. Remove Waste Toner Pipe Assembly (REP 8.5).

NOTE: Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing.

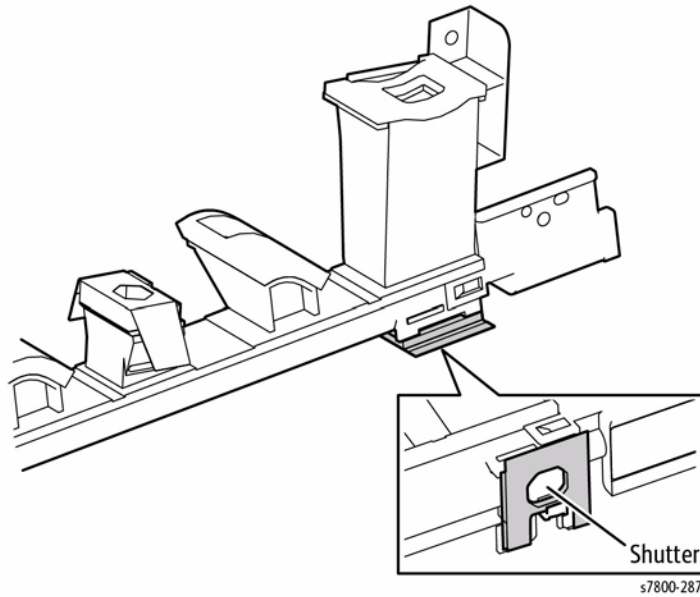


Figure 2 Verifying closing the Shutter

15. Pull the joint section between the Dispenser Pipe (K) and the Developer Housing Assembly (K) in the direction of the arrow.
16. Open the Dispenser Pipe (K) upwards.

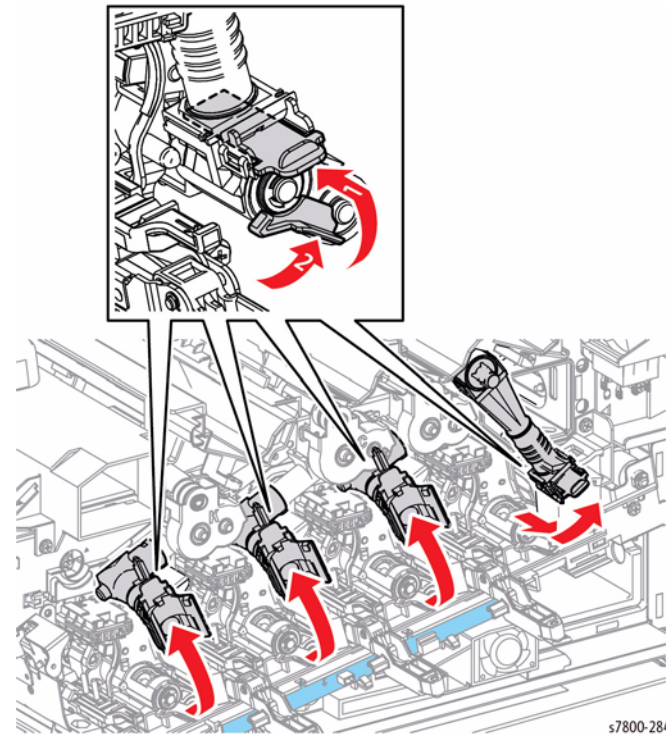
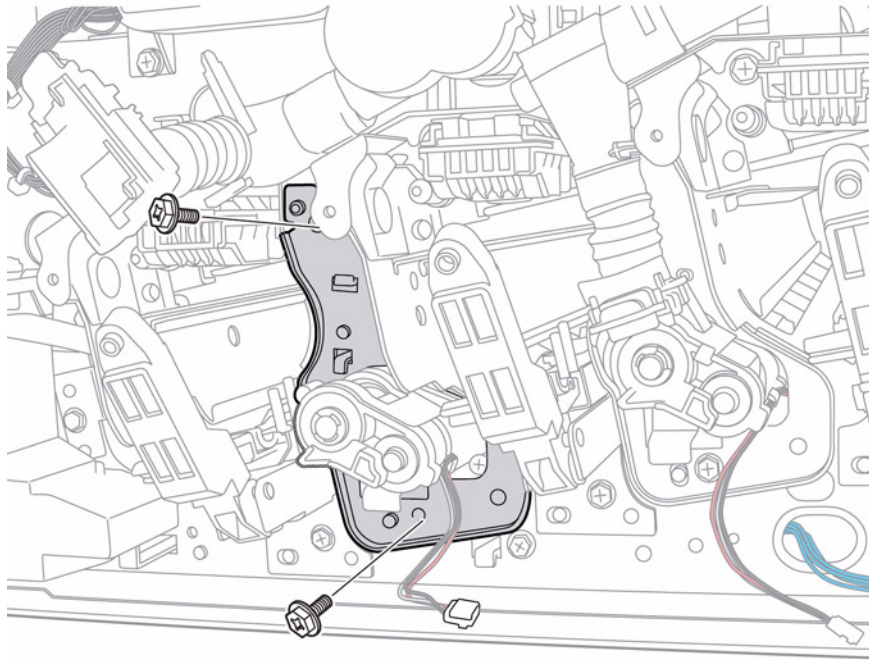


Figure 3 Opening the Dispenser Pipe (K)

17. Remove 2 screws that secure the Deve Plate Assembly.
18. Remove the Deve Plate Assembly.



s7800-699

Figure 4 Removing the Deve Plate Assembly

REP 5.7 Developer Housing Assembly (Y/M/C/K)

Parts List on [PL 5.2 Item 2](#)

Removal

CAUTION

When removing the Deve. Housing, pay attention to the following:

- *Foreign substances in the Deve. Housing.*
- *Foreign substances on the surface of the Deve. Housing, especially on the Developer Material Roll and Lower Seal.*
- *Toner sticking to the gear of the Developer Housing Assembly.*
- *Toner sticking to the MOB ADC Assembly.*

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Cover.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Remove the Process Fan 1 and Duct ([REP 4.7](#)).
10. Remove the ATC PWB ([REP 5.8](#)).
11. Remove the Deve Plate Assembly ([REP 5.6](#)).

12. Pull out Tray 2 and place a sheet of tabloid paper in the tray to catch any toner that spills.
13. Remove the Developer Housing Assembly (K).

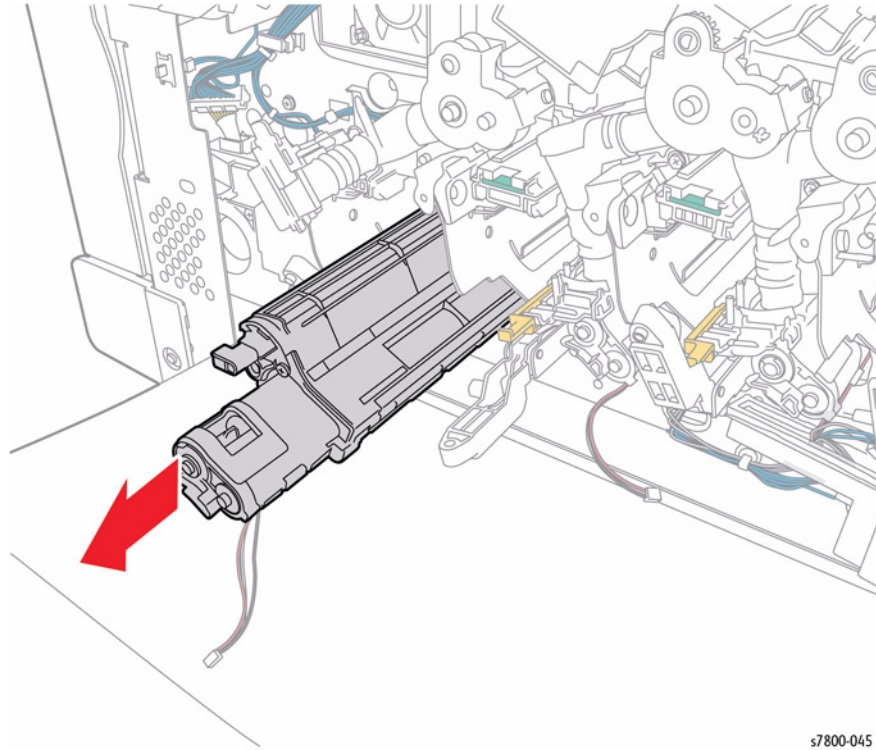


Figure 1 Removing the Developing Housing Assembly

s7800-045

Replacement

Be sure have the LED latch upward in order to align the pin on the Developer Housing with the frame.

REP 5.8 ATC PWB

Parts List on [PL 5.2 Item 11](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Door A.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Remove the Process Fan 1 and Duct ([REP 4.7](#)).
10. Disconnect the 5 wiring harness connectors ([P/J124](#), [P/J125](#), [P/J126](#), [P/J127](#), [P/J633](#)) and release the PWB from the 3 hooks.

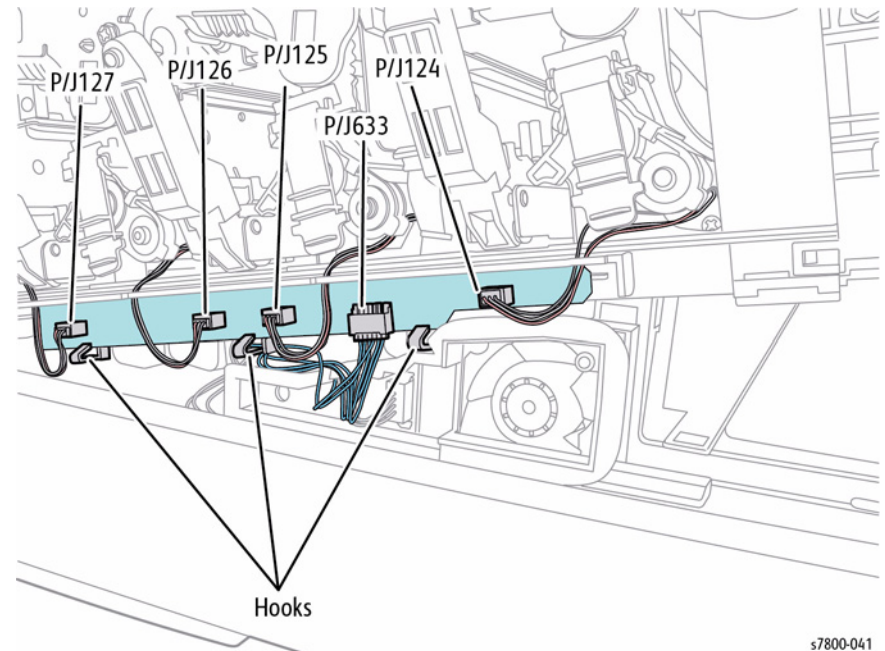


Figure 1 Disconnecting the wiring harness connectors

s7800-041

11. Remove 2 screws that secure the ATC PWB Bracket.
12. Remove the ATC PWB and Bracket.
13. Release and remove the ATC PWB from the Bracket.

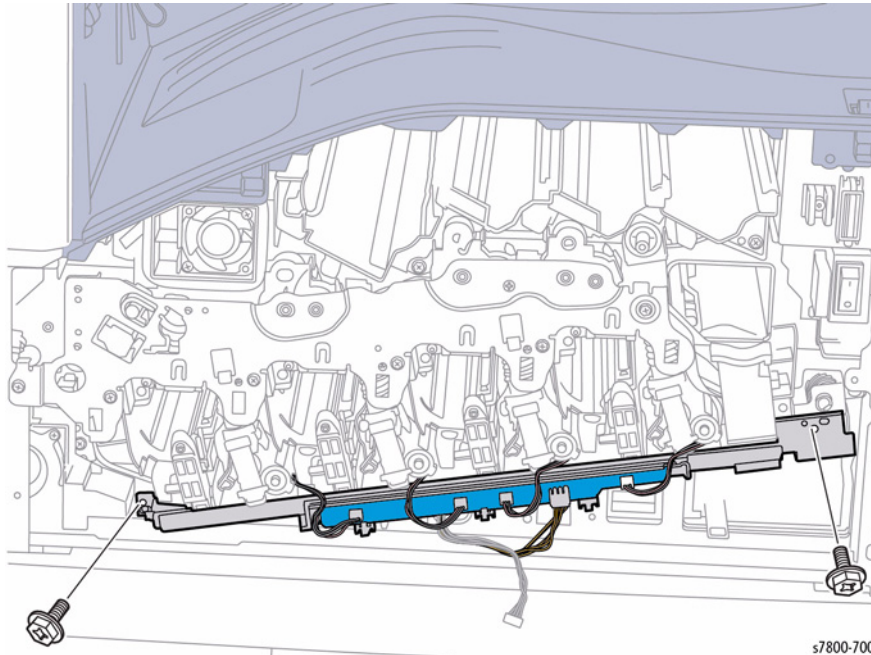


Figure 2 Removing the ATC PWB

s7800-700

REP 5.9 Developer Beads

Removal

CAUTION

When removing the Developer Housing Assembly, be careful not to contaminate the Developer Housing Assembly.

1. Remove the Developer Housing Assembly (REP 5.7).
2. Release the Front and Rear Latches of the Developer Cover.
3. Remove the Upper Cover.

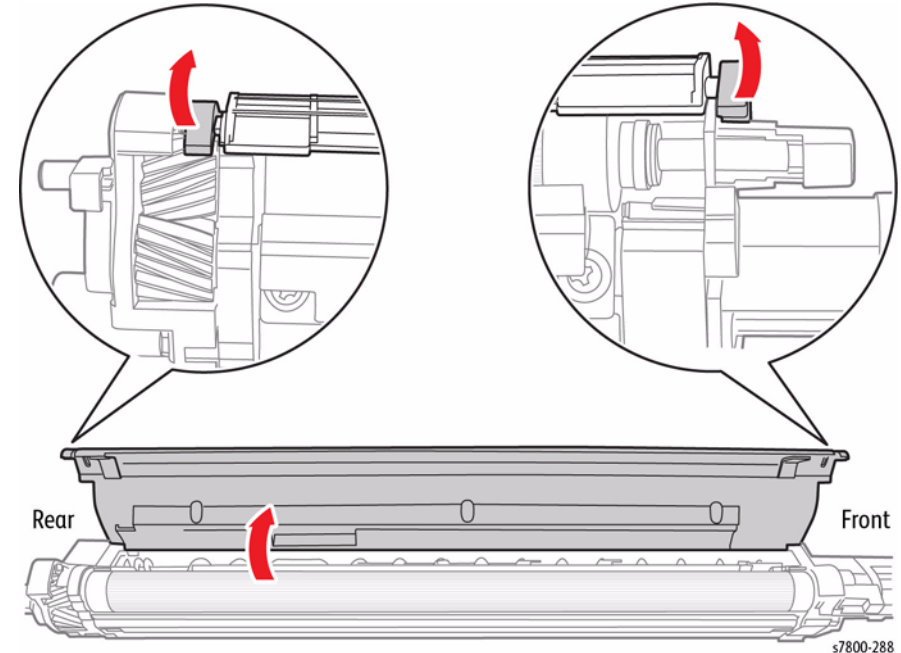


Figure 1 Removing the Upper Cover

s7800-288

4. Installing the Developer Beads into the Developer.
 - a. Place the Developer Assembly on a drop cloth or a few sheets of paper to catch any spills.
 - b. Agitate the package of the developer mix and then cut it open.
 - c. While keeping the Developer Housing Assembly level, carefully pour the entire contents of the developer mix package as evenly as possible over the two augers. Do Not let the developer mix accumulate heavily on the magnetic roller.
 - d. Re-install the Upper Cover by inserting the four tabs on the Cover into the corresponding slots of the Developer Housing and then press directly on the latches until each latches in place. Press firmly until you hear a positive 'snap' sound for each tab indicating the tab is latched.

5. Tear off the loose half of the ATC Sensor perforated tag. Leave the other half of the ATC Sensor Label on the Developer Housing. Peel off the protective backing and adhere the label to the Plate (PL 8.1 Item 7), above the corresponding Developer.
6. Install the Developer and perform the ATC Sensor Setup in Diagnostics. Enter the value from the tag removed from the replacement Developer. Follow procedure [dc950 ATC Sensor Setup](#) in Chapter 6, General Troubleshooting.

REP 5.10 HVPS Housing

Parts List on [PL 5.3 Item 1](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Remove the HVPS (Deve) ([REP 5.11](#)).
5. Remove the HVPS (1st/ 2nd/ DTC) ([REP 6.3](#)).
6. Remove the Drum Deve/Drive Assembly ([REP 3.8](#)).
7. Release the wiring harnesses from the 5 clips.

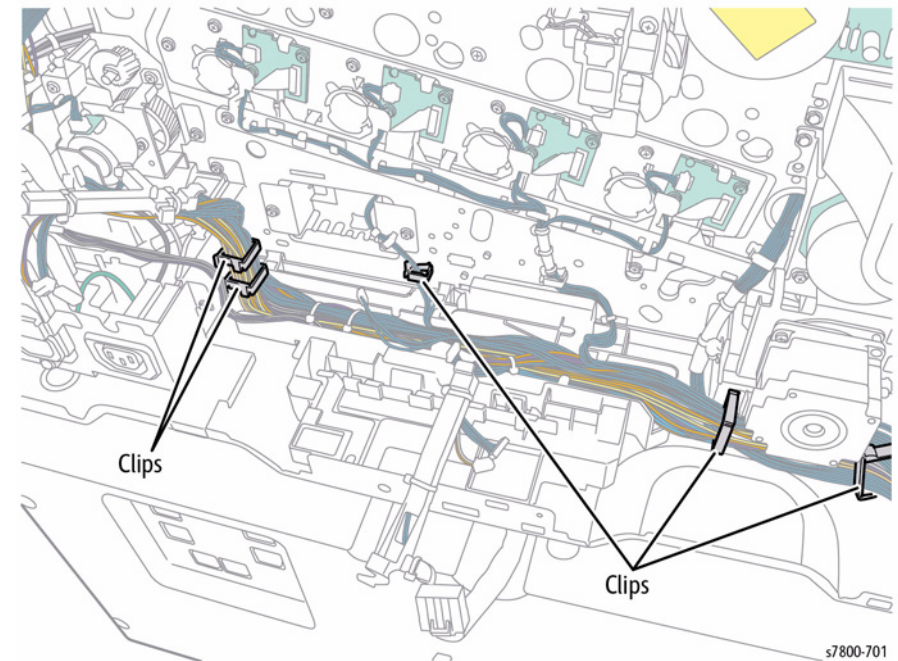


Figure 1 Releasing the wiring harnesses

8. Move the wiring harness bundle out of the way.
9. Remove 2 screws that secure the Harness Guide (PL 18.3 Item 1).
10. Wiggle and lift the Harness Guide to remove.

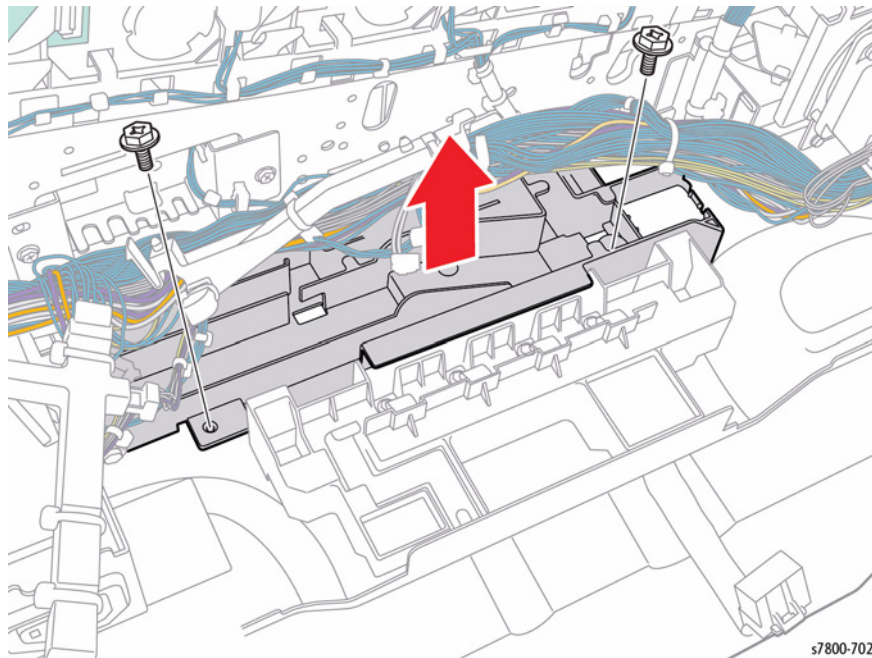


Figure 2 Removing the Harness Guide

11. Lift and remove the HVPS Housing.

NOTE: Be careful not to lose the Springs (4).

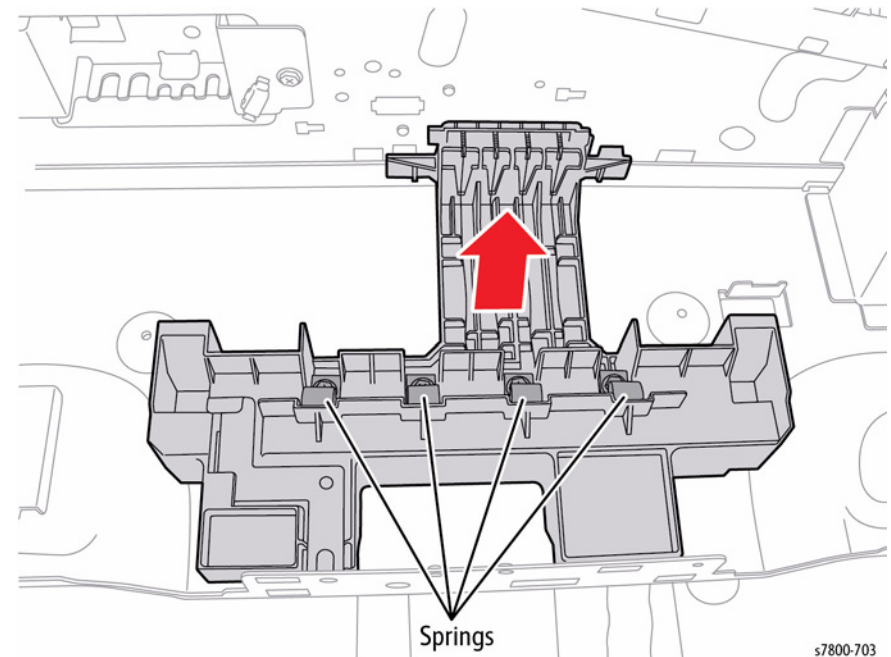


Figure 3 Removing the HVPS Housing

REP 5.11 HVPS (Deve)

Parts List on PL 5.3 Item 3

Removal

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the Rear Upper Cover (REP 19.17).
2. Remove the Rear Lower Cover (REP 19.16).
3. Open the PWB Chassis Unit (REP 18.1).
4. Disconnect the wiring harness connector P/J514 and release wiring harness from the Harness Guide.
5. Remove 1 screw that secures the HVPS.
6. Release the 2 hooks and lift the HVPS to remove.

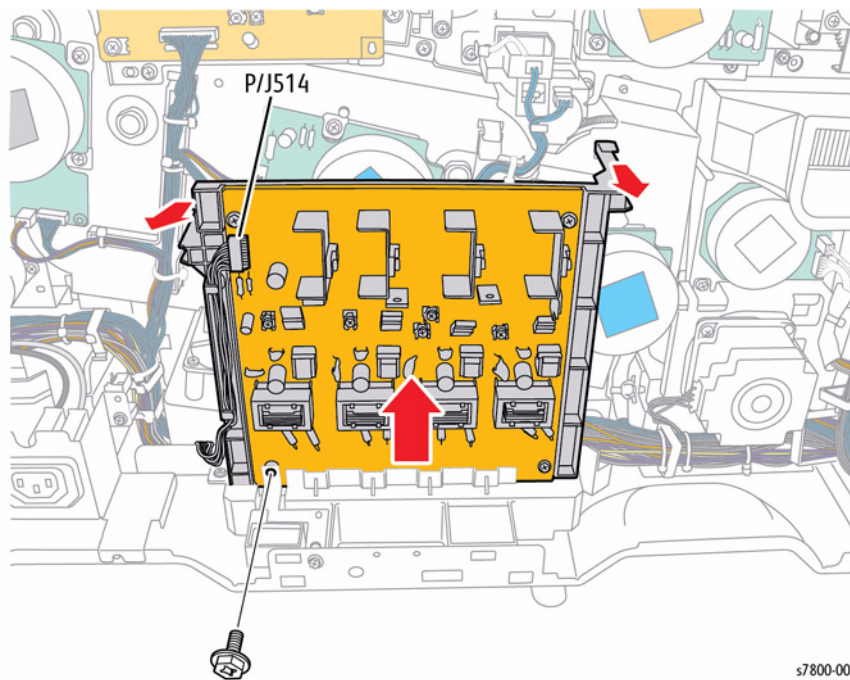


Figure 1 Removing the HVPS (Deve)

REP 6.1 IBT Belt Cleaner Assembly

Parts List on [PL 6.1 Item 4](#)

Removal

1. Turn the Lever of the IBT Belt Cleaner Assembly clockwise.
2. Turn the Knob counterclockwise until it is free.
3. Pull the IBT Belt Cleaner Assembly towards the front to remove.

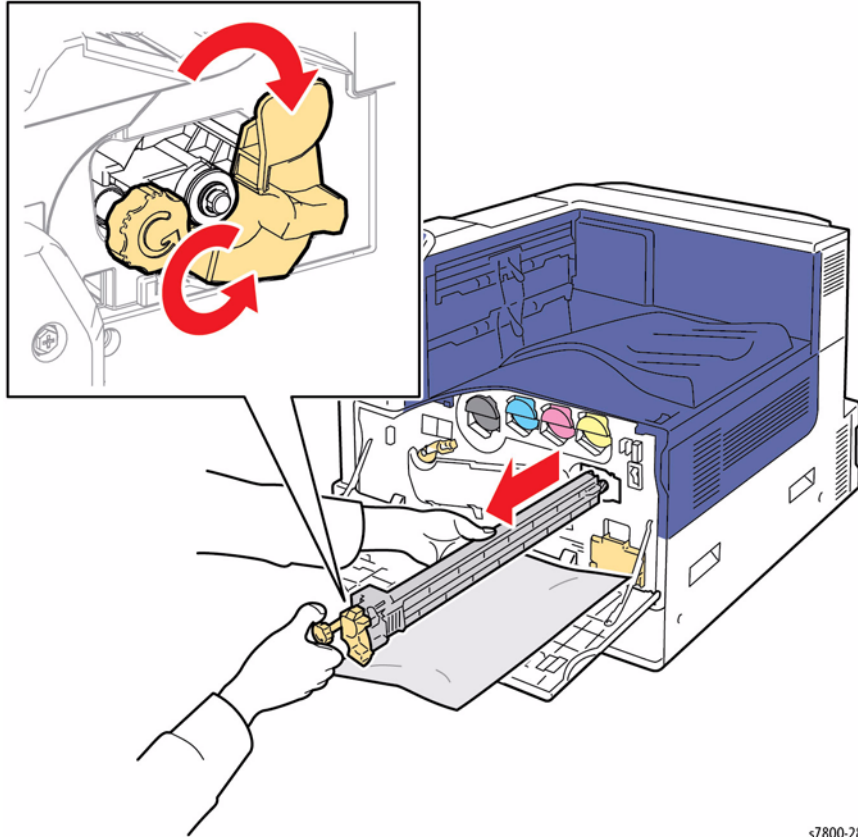


Figure 1 Removing the IBT Belt Cleaner Assembly

s7800-289

REP 6.2 IBT Belt Assembly, Front/ Rear Lock Bracket, Tension Lever

Parts List on [PL 6.1 Item 1](#), [PL 6.1 Item 2](#), [PL 6.1 Item 3](#), [PL 6.1 Item 10](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

CAUTION

Do not touch the IBT Belt surface.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
3. Turn the Tension Lever counterclockwise.
4. Remove 1 screw that secures the Tension Lever.
5. Remove the Tension Lever.

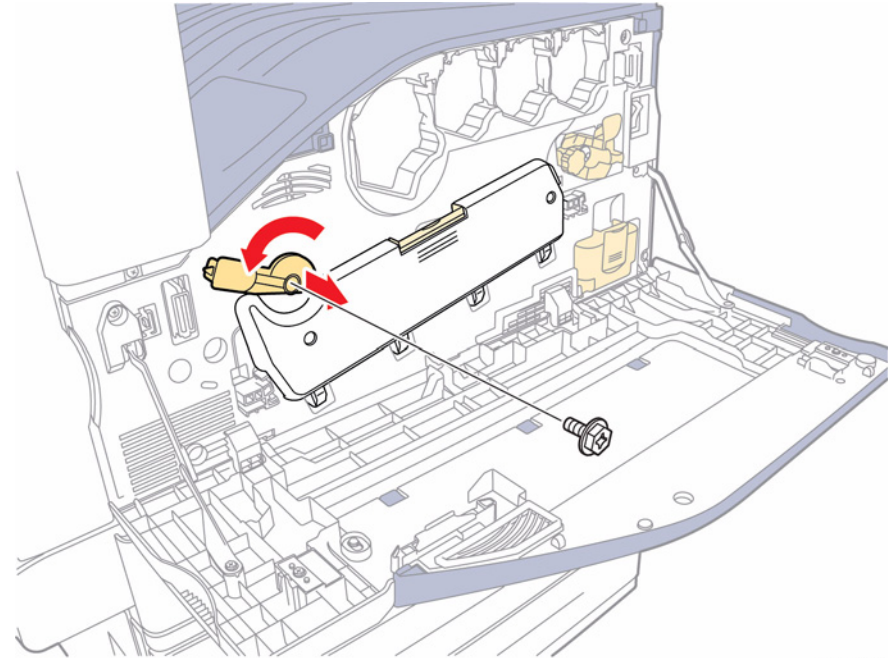
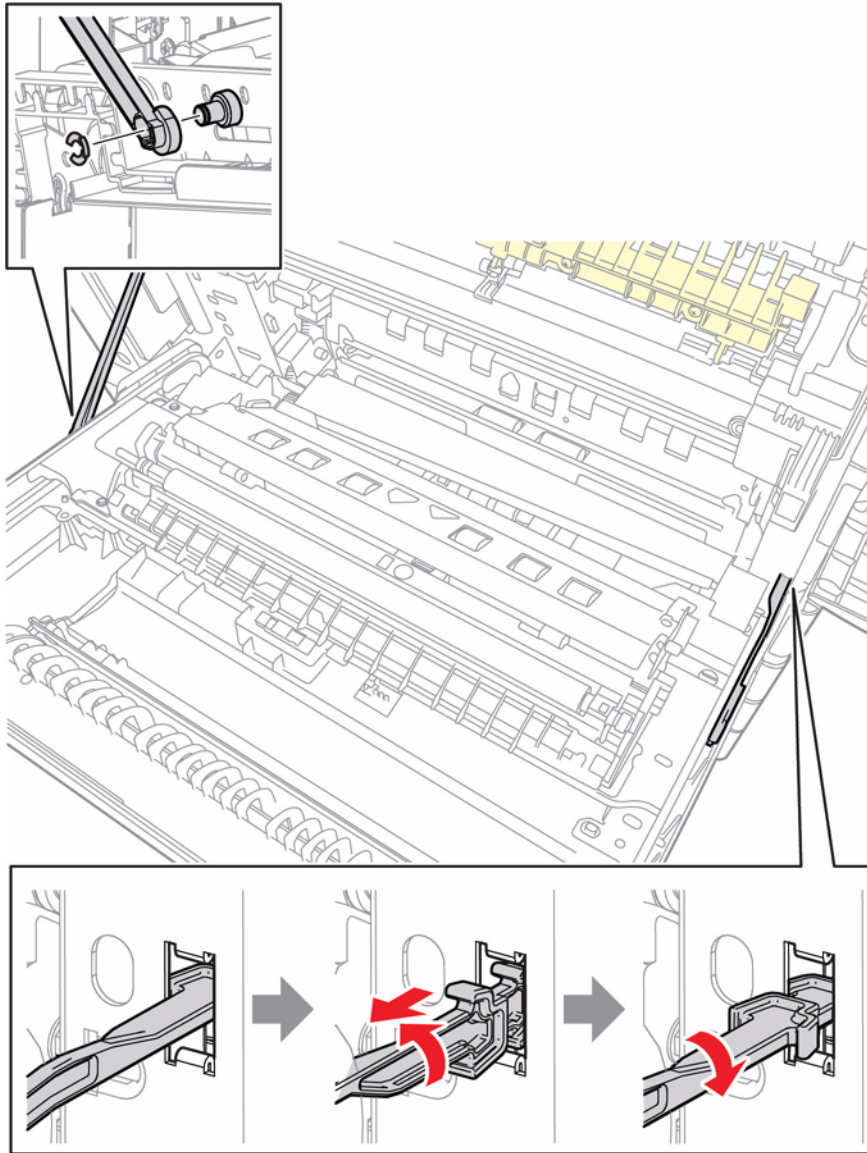


Figure 1 Removing the Tension Lever

s7800-033

6. Remove the Fuser Assembly ([REP 7.1](#)).
7. Open the Left Hand Door A.
8. Remove the KL Clip that secures the Rear Strap at the rear, and remove the Rear Strap from the L/H Cover Assembly.

9. Use a needle-nose plier to turn the Left Hand Door Support strap at the front counter-clockwise by 90° and pull it towards you. Turn it back at the inner stopper position, then incline the L/H Cover Assembly horizontally until it stops.



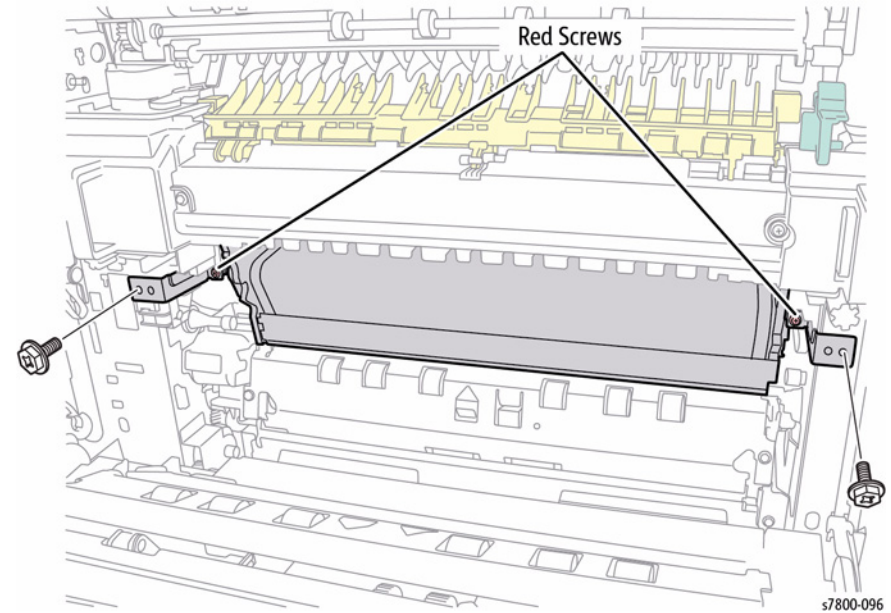
s7800-095

Figure 2 Removing the KL Clip and Rear Strap

CAUTION

Do not remove the red screws. Red screws are factory adjustment.

10. Remove 1 screw that secures the Front Lock Bracket and remove the Front Lock Bracket.
11. Remove 1 screw that secures the Rear Lock Bracket and remove the Rear Lock Bracket.



s7800-096

Figure 3 Removing the Front and Rear Lock Brackets

12. Pull the Stopper Lever Latch.

CAUTION

Do not move the IBT Belt Unit out too far to prevent from dropping the IBT Belt Unit.

13. Pull out the IBT Belt Unit by holding onto the indicated section (A) until the Handle at the front/rear become accessible.
14. Lift the IBT Belt Unit upward using the Handles at the front/rear and slide the IBT Belt Unit toward you to remove it.

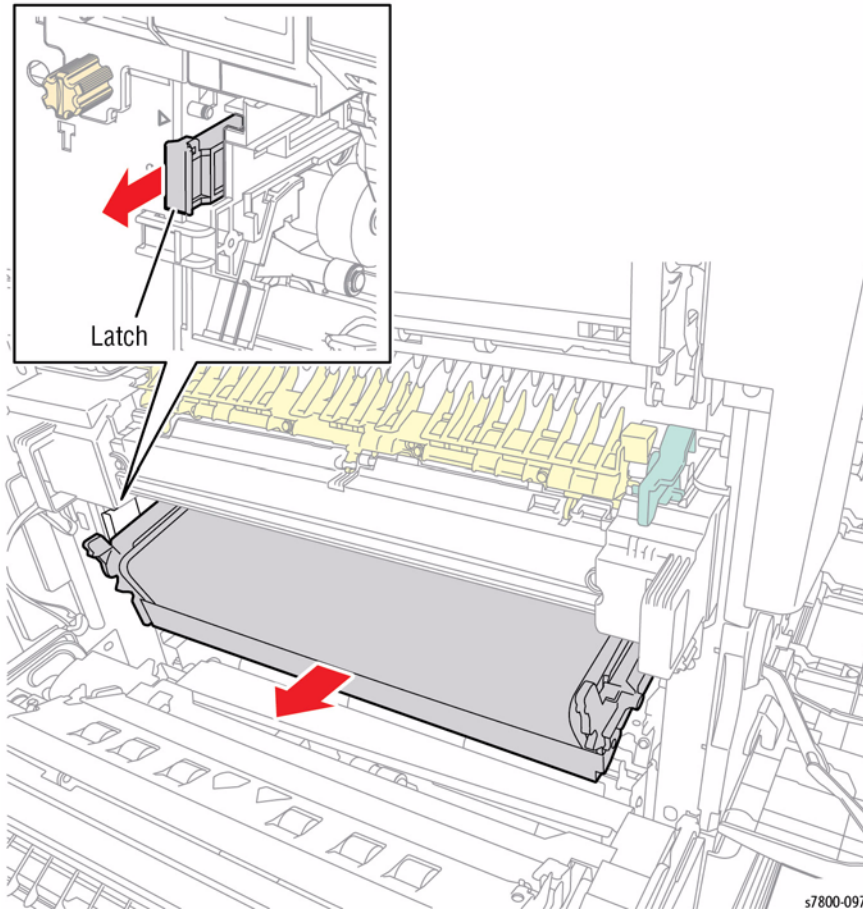


Figure 4 Removing the IBT Belt Assembly

Replacement

Be sure the Rear and Front Lock Brackets face in the correct position.

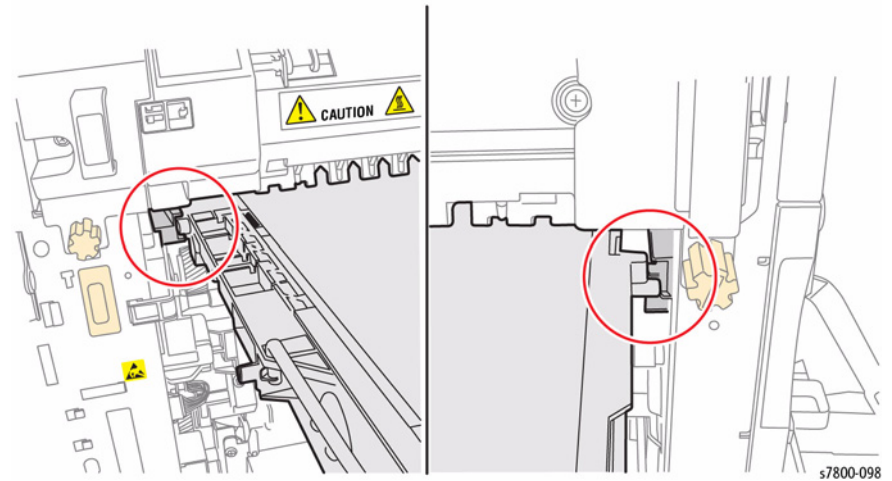


Figure 5 Front and Rear Lock Brackets Placement

NOTE: When replacing the IBT Belt Unit, be sure to remove the Belt tension.

REP 6.2.1 IBT Belt

Parts List on [PL 6.3 Item 5](#)

Removal

CAUTION

Be sure to hold the IBT Belt Assembly while removing and installing the Handle to prevent the IBT Belt Assembly from falling and breaking the IBT frame.

1. Remove the KL Clips (x2) from the Handle at the rear of the IBT Belt Unit and remove the Handle.
2. Install the removed Handle in the position shown in the illustration, and place the IBT Belt Unit upright with the Handle at the bottom.

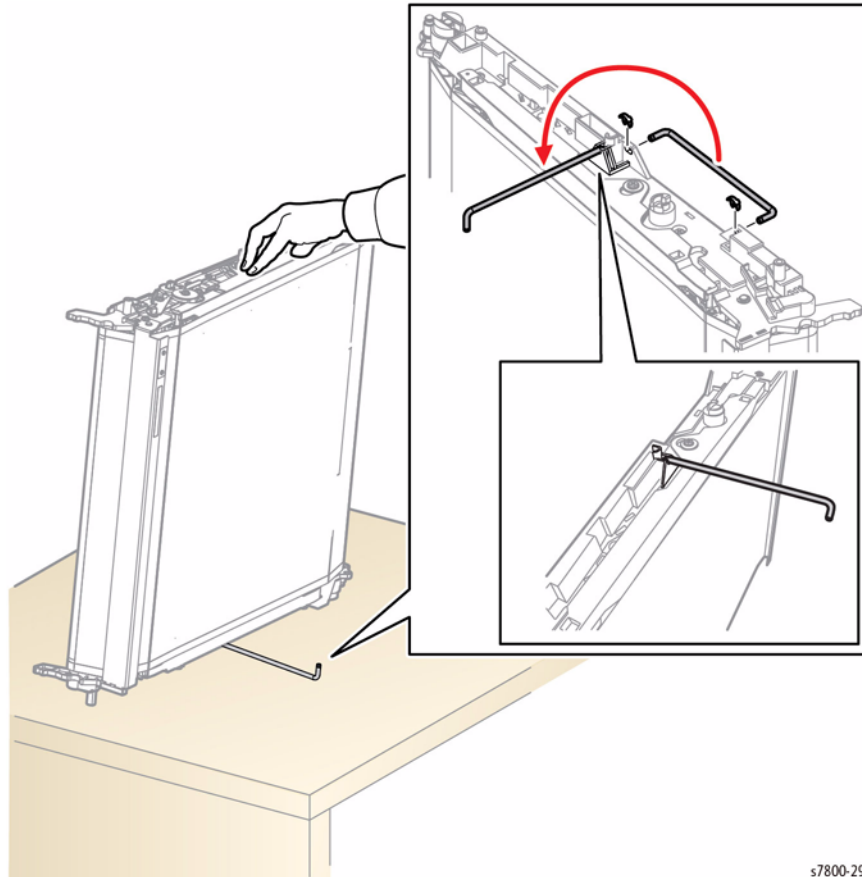


Figure 1 Installing the Handle

s7800-290

3. Remove 1 screw (silver, Tapped, 8mm) that secures the Lock Tension Plate to the IBT Belt Unit.
4. Remove the Lock Tension Plate.

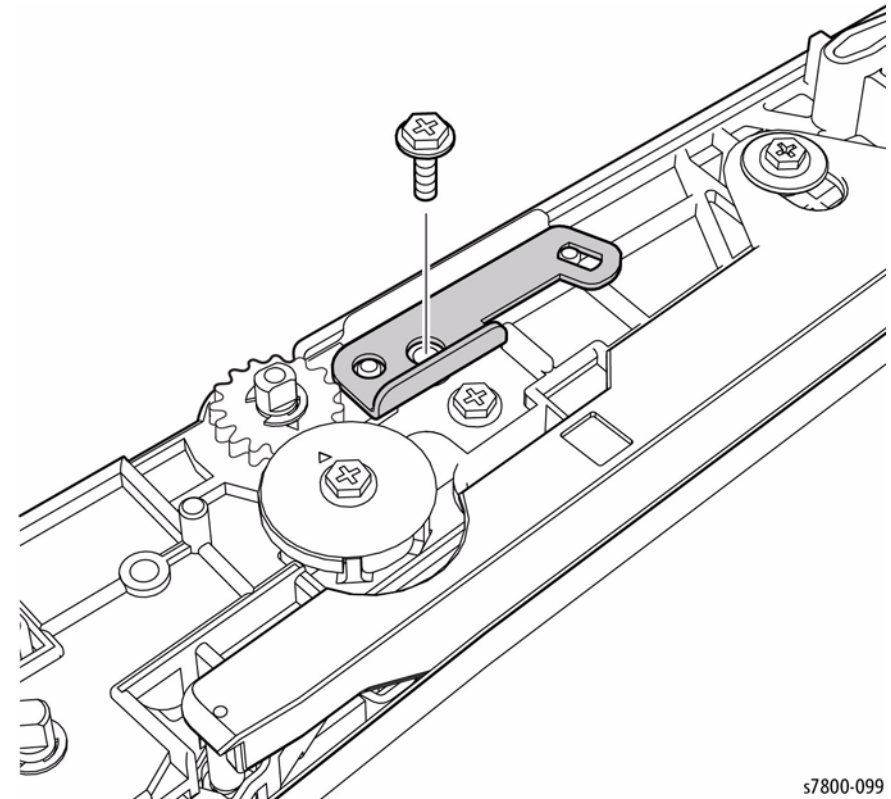


Figure 2 Removing the Lock Tension Plate

s7800-099

5. Install the Lock Tension Plate at the given position on the IBT Belt Unit.
6. Tighten the screw.

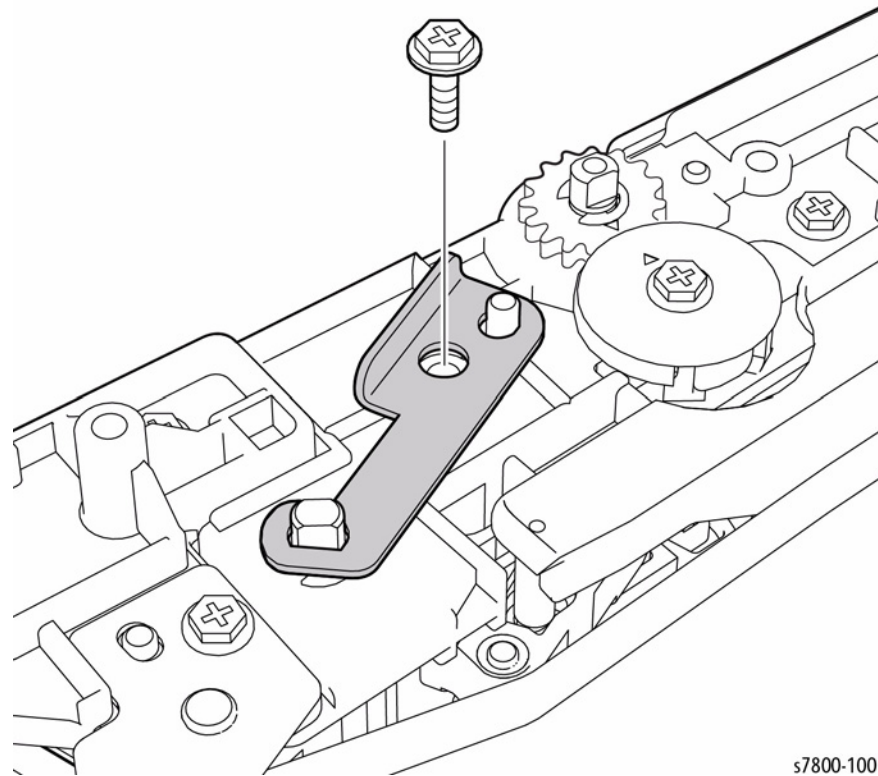


Figure 3 Installing the Lock Tension Plate

s7800-100

7. Remove 1 screw that secures the Inlet Chute and remove the Inlet Chute (PL 6.3 Item 2).

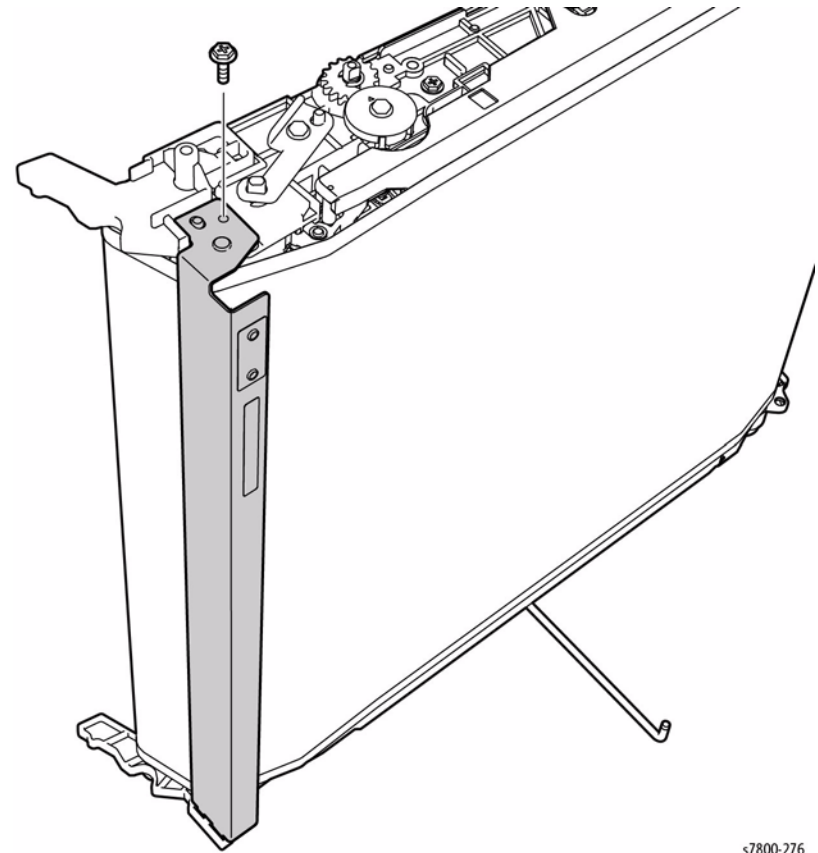


Figure 4 Removing the Inlet Chute

s7800-276

8. Remove 1 screw that secures the BUR Front Frame (PL 6.3 Item 3) and remove the BUR Front Frame.

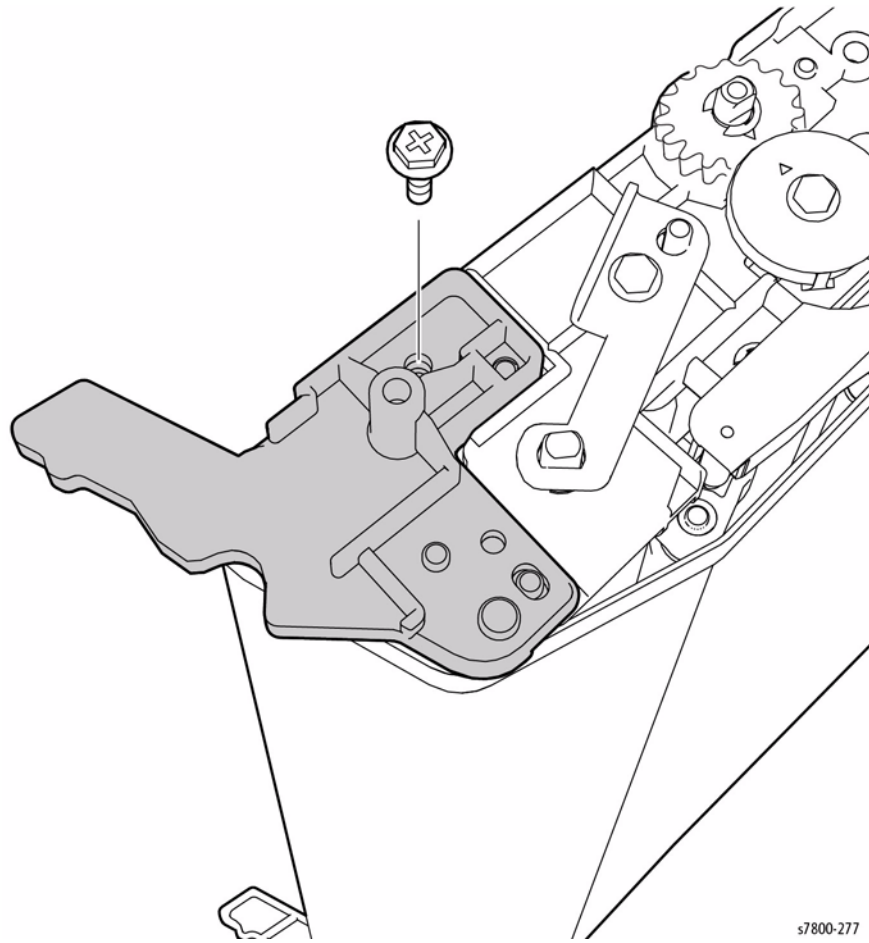


Figure 5 Removing the BUR Front Frame

9. Remove the Backup Roller Assembly (PL 6.3 Item 4).

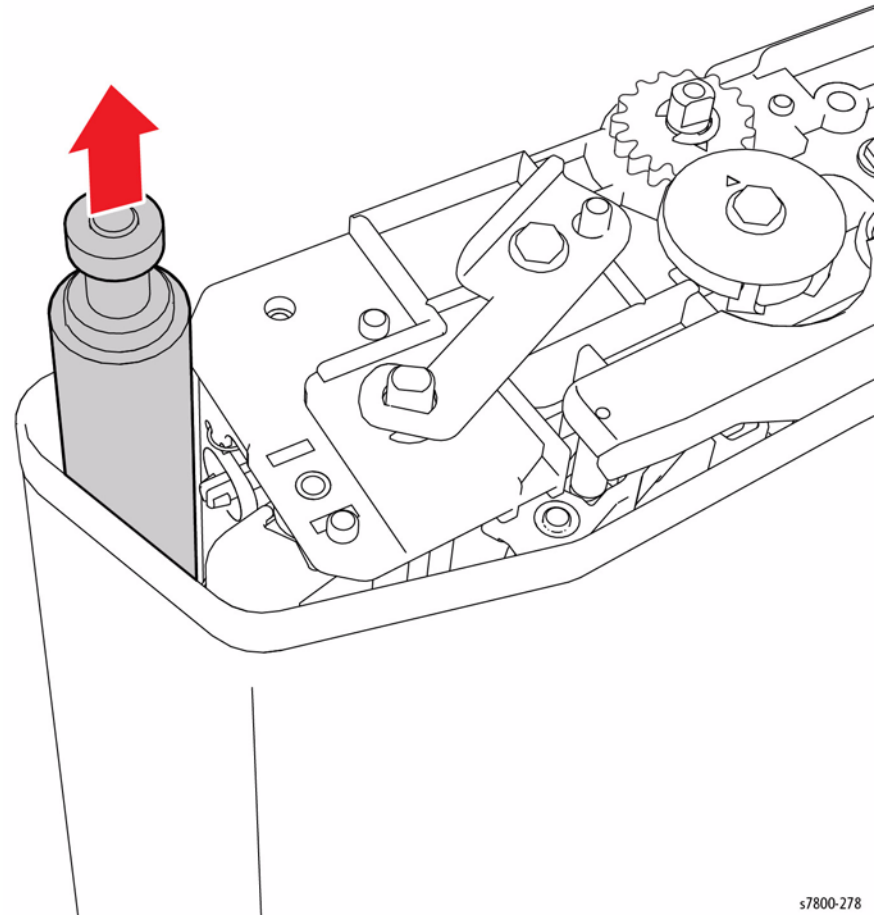


Figure 6 Removing the Backup Roll

10. Remove the IBT Belt (PL 6.3 Item 5).
11. Install the new IBT Belt on the assembly. Make sure the reflective patch (PL 6.3 Item 7) is positioned on the rear of the assembly.

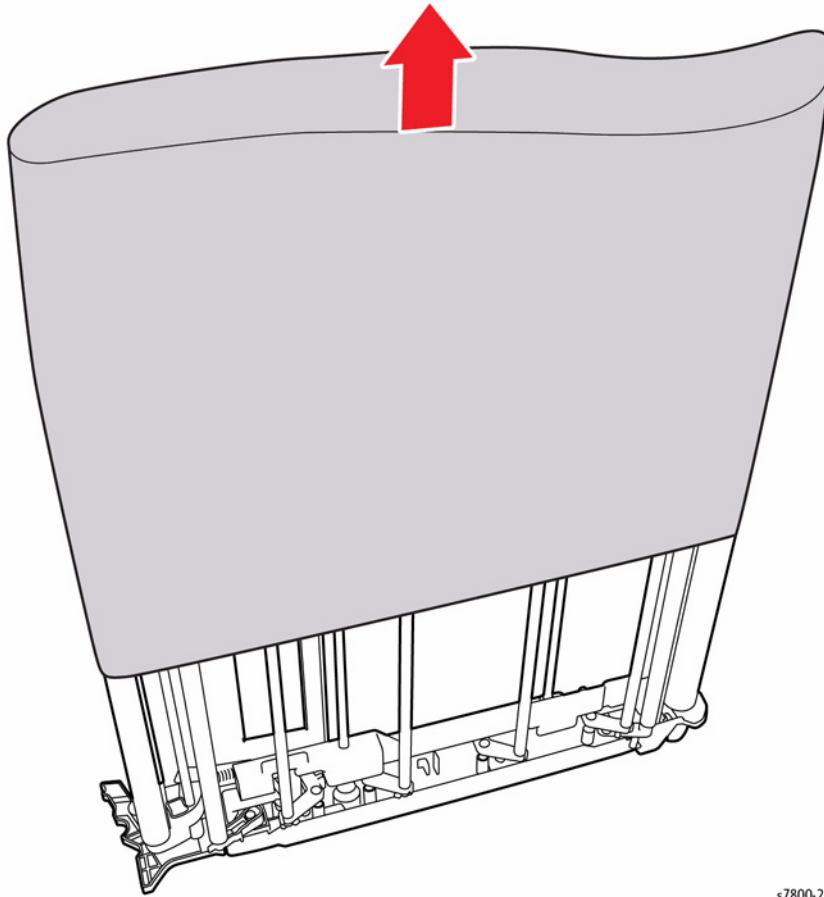


Figure 7 Removing the IBT Belt

12. Follow steps 8 to 11 in reverse order.

REP 6.3 HVPS (1st/ 2nd/ DTC)

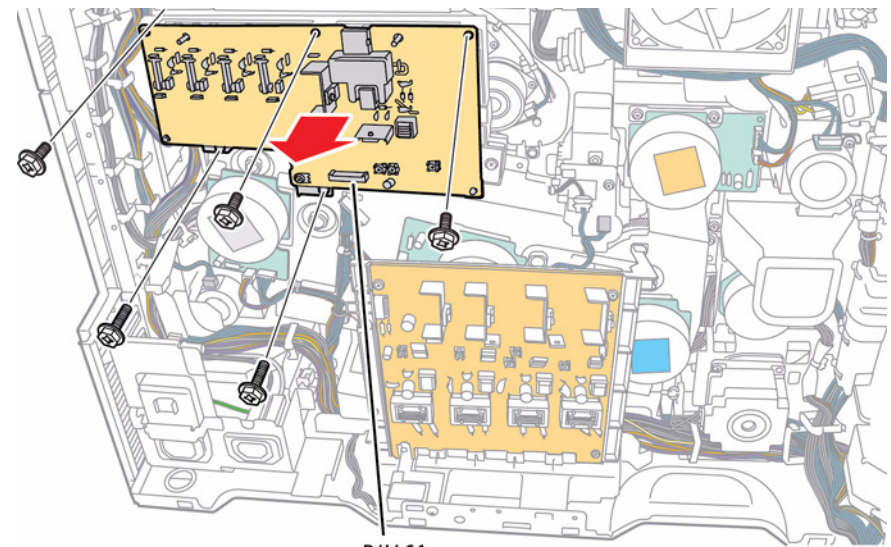
Parts List on PL 6.2 Item 9

Removal

CAUTION

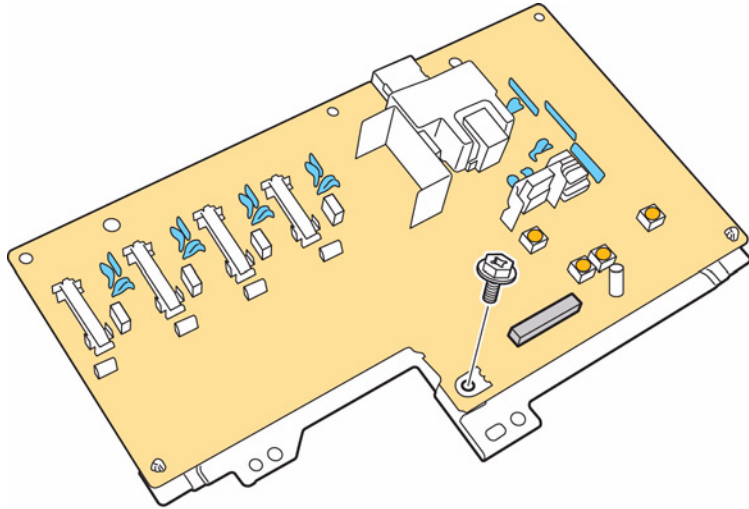
PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the Rear Upper Cover (REP 19.17).
2. Remove the Rear Lower Cover (REP 19.16).
3. Open the PWB Chassis Unit (REP 18.1).
4. Disconnect the wiring harness connector P/J461 that is connected to the HVPS (1st/ 2nd/ DTC).
5. Remove 5 screws (silver, x2 - 8mm, x3 -6mm) that secure the HVPS.
6. Lower the right side of the HVPS (1st/ 2nd/ DTC) to release it from the spring that is attached to the conductor, and slip off the HVPS (1st/ 2nd/ DTS) holes from the conductor shafts to remove the HVPS (1st/ 2nd/ DTC).



P/J461
Figure 1 Removing the HVPS Assembly

7. Remove 1 screw that secures the Bracket.
8. Slide the PWB 2 supports from the holes to remove the HVPS (1st/ 2nd/ DTC).



s7800-034

Figure 2 Removing the HVPS

REP 7.1 Fuser Assembly

Parts List on [PL 7.1 Item 1](#)

Removal

WARNING

The Fuser may be hot. Turn the printer power Off and allow at least 5 minutes for the Fuser to cool before removing the Fuser.

CAUTION

The Fuser is heavy; be careful when handling the Fuser.

1. Open the Left Hand Door A.
2. Loosen 2 screws that secure the Fuser Assembly to the printer.
3. Lift and pull the Fuser Assembly out to remove.

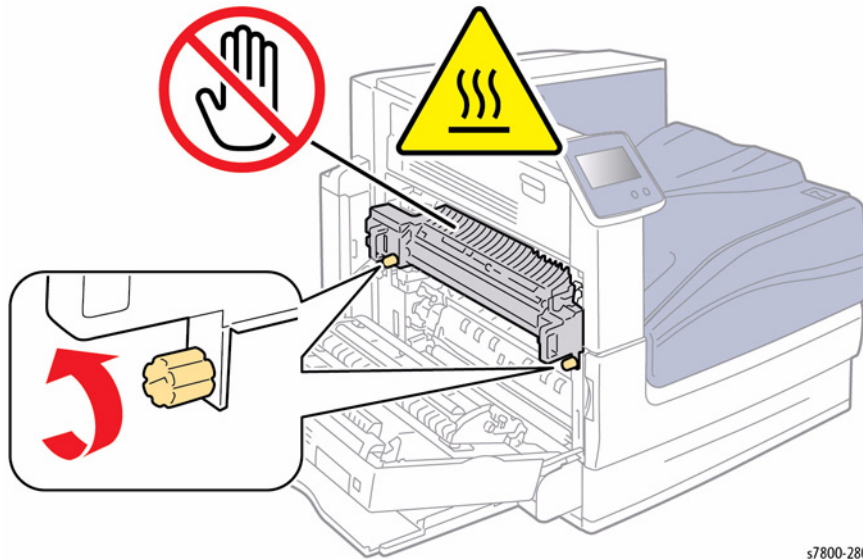


Figure 1 Removing the Fuser Assembly

s7800-280

REP 7.2 Retract Motor and Bracket

Parts List on [PL 7.1 Item 2](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Remove the wiring harness from the clips to the Fuser Drive Motor.
5. Disconnect 1 wiring harness connector [P/J254](#).
6. Remove 3 screws that secure the Retract Motor and Bracket.
7. Remove the Retract Motor and Bracket.

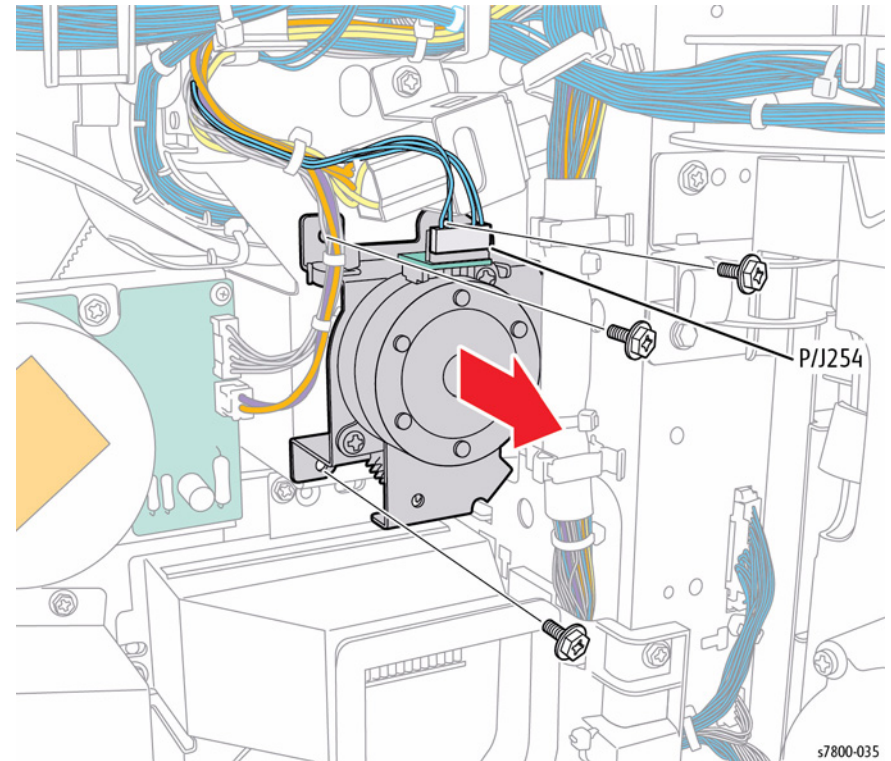


Figure 1 Removing the Retract Motor and Bracket

s7800-035

REP 8.1 Imaging Unit (Y/M/C/K)

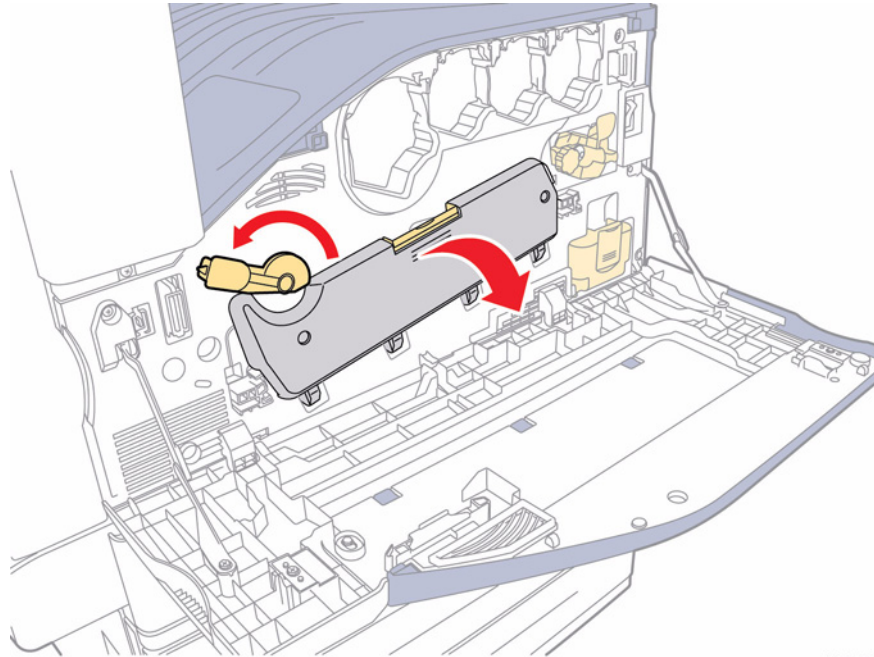
Parts List on [PL 8.1 Item 4](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

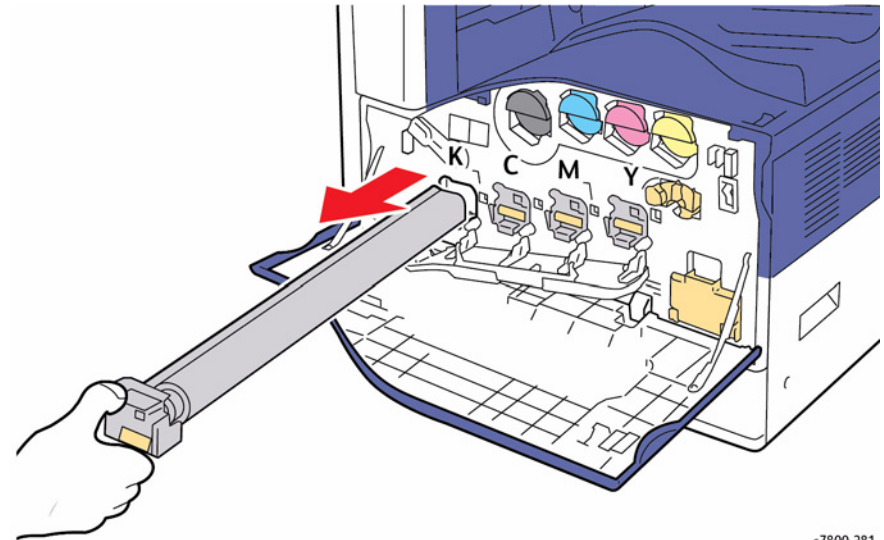
1. Open the Front Door.
2. Turn the Imaging Unit Cover latch clock-wise to unlock the Imaging Unit Cover.
3. Open the Imaging Unit Cover.



s7800-282

Figure 1 Opening the Imaging Unit Cover

4. Lift the amber Latch while pulling the Imaging Unit out towards the front of the printer to remove the
5. Pull the Imaging Unit out toward the front of the printer and remove the Imaging Unit.



s7800-281

Figure 2 Removing the Imaging Unit

REP 8.2 Erase Lamp Unit (K)

Parts List on PL 8.1 Item 5

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit (REP 8.1).
2. Remove the Toner Cartridge (REP 5.1).
3. Remove the Waste Cartridge (REP 8.9).
4. Remove the IBT Belt Cleaner Assembly (REP 6.1).
5. Remove the IBT Belt Assembly (REP 6.2).
6. Remove the Imaging Unit Cover (REP 2.4).
7. Open the Left Hand Cover.
8. Remove the Front Cover and Inner Cover (REP 19.1).
9. Remove the Process Fan 1 and Duct (REP 4.7).
10. Remove the ATC PWB (REP 5.8).

CAUTION

Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing.

11. Remove the Waste Toner Pipe Assembly (REP 8.5).

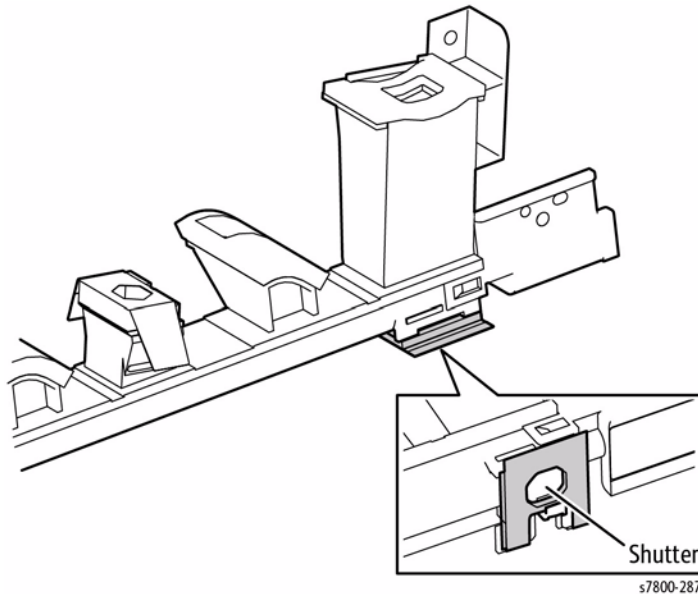


Figure 1 Verifying closing the Shutter

12. Remove 6 screws that secure the Plate and remove the Plate.

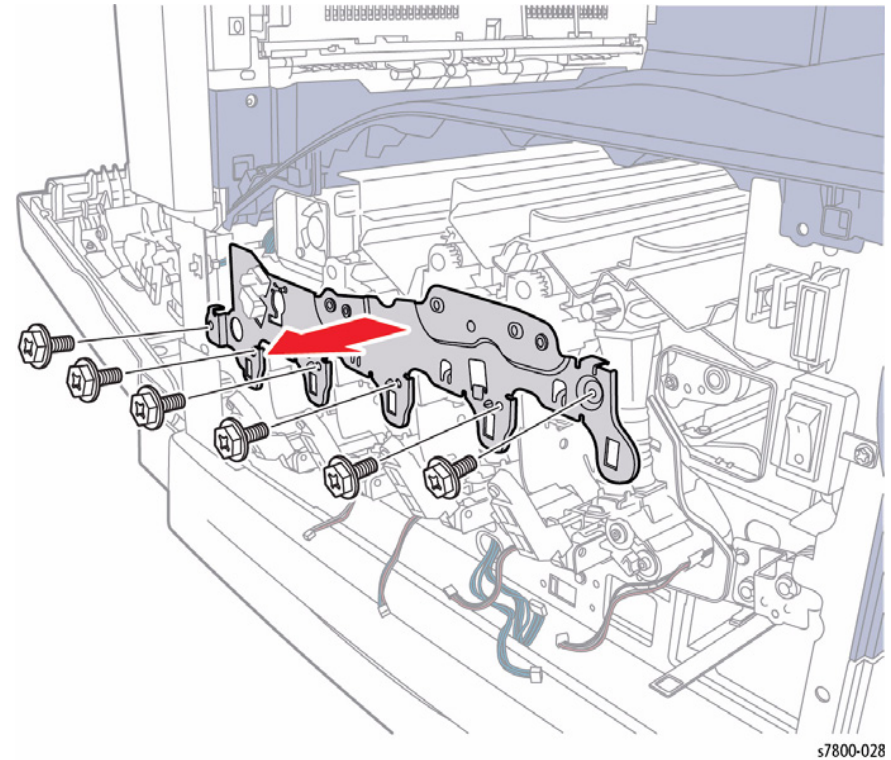


Figure 2 Removing screws and the Plate

13. Remove the Process Fan 2 and Duct (REP 4.5).
14. Remove the MOB ADC Assembly (REP 18.13).
15. Remove the Rear Upper Cover (REP 19.17).
16. Remove the Rear Lower Cover (REP 19.16).
17. Open the PWB Chassis Unit (REP 18.1).
18. Remove the HVPS (Deve) (REP 5.11).
19. Remove the HVPS (1st/ 2nd/ DTC) (REP 6.3).
20. Remove the Drum/Deve Drive Assembly (REP 3.8).

21. Remove 1 screw in the rear that secures the Erase Lamp Unit (K).

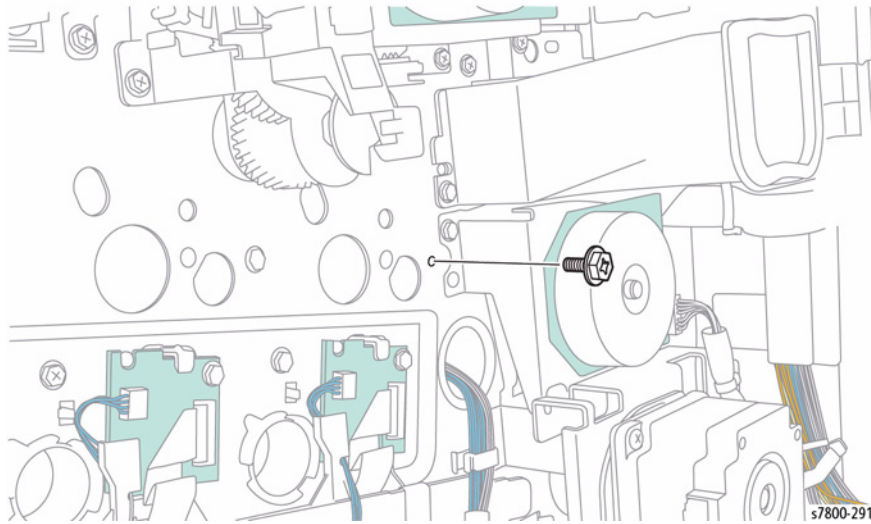


Figure 3 Removing the screw

- 22. Disconnect the wiring harness connector **P/J213**.
- 23. Remove 2 screws that secure the Erase Lamp Unit (K).
- 24. Remove the Erase Lamp Unit (K).

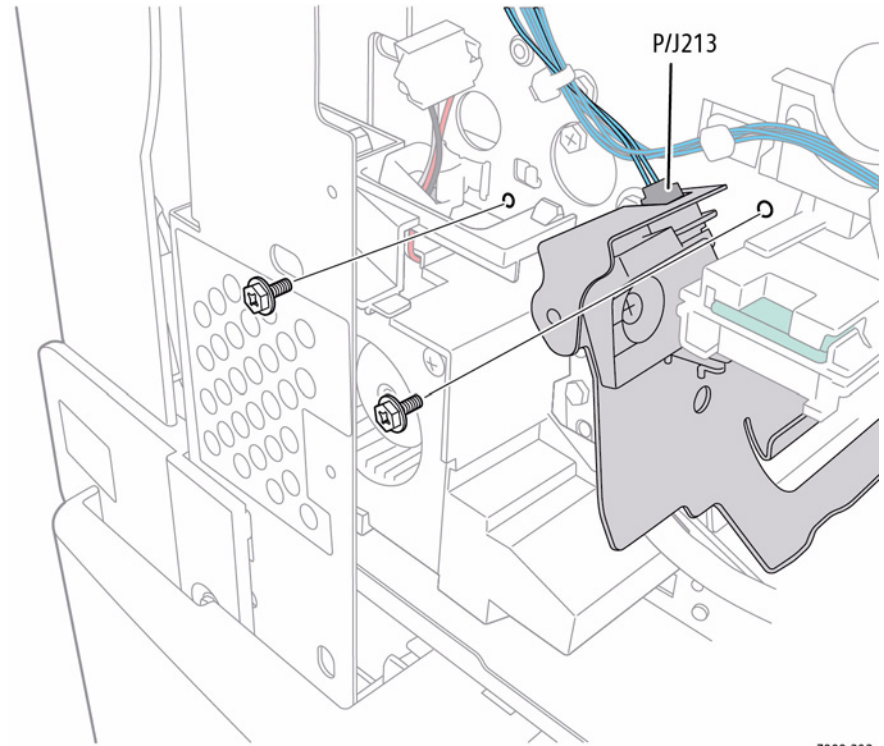


Figure 4 Removing the Erase Lamp Unit (K)

Replacement

Be sure to align the hole on the Erase Lamp Rail with the pins on the inside of the printer.

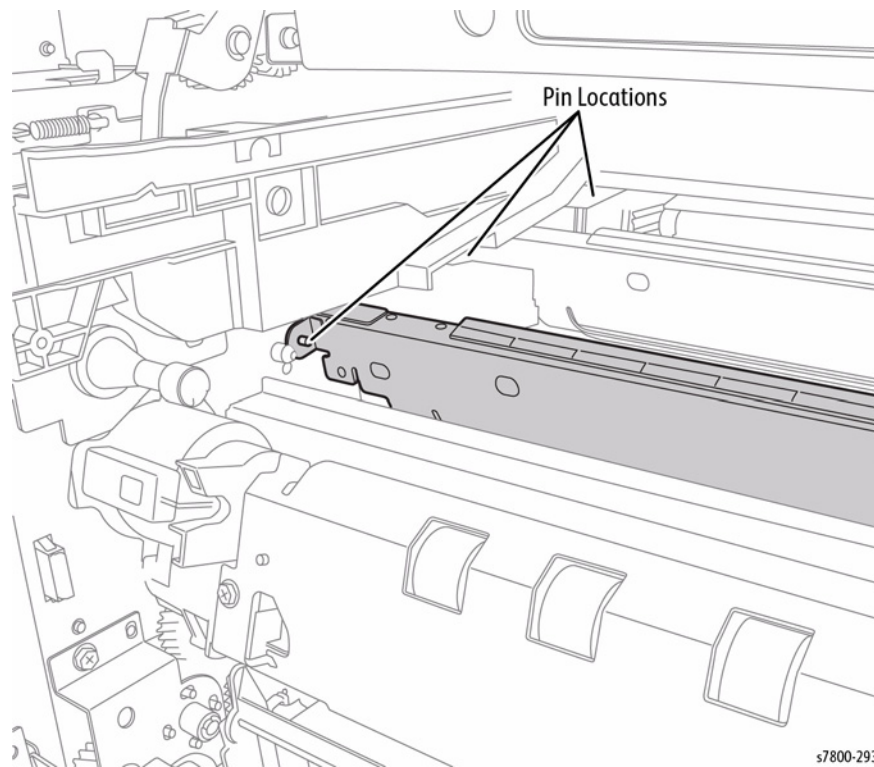


Figure 5 Aligning the hole on the Erase Lamp Rail

REP 8.3 Erase Lamp Unit (Y/M/C)

Parts List on [PL 8.1 Item 5](#)

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the IBT Belt Assembly ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Door A.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Remove the Process Fan 1 and Duct ([REP 4.7](#)).
10. Remove the ATC PWB ([REP 5.8](#)).

CAUTION

Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing.

11. Remove the Waste Toner Pipe Assembly ([REP 8.5](#)).

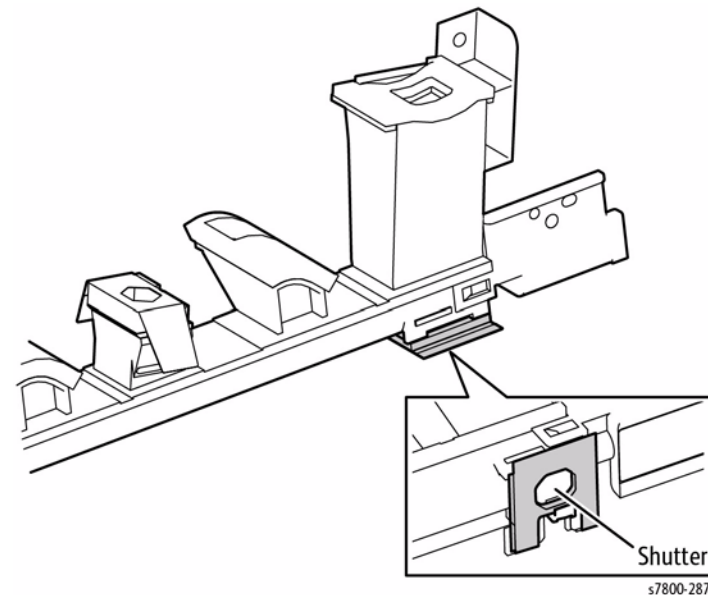


Figure 1 Verifying closing the Shutter

12. Remove 6 screws that secure the Plate and remove the Plate.

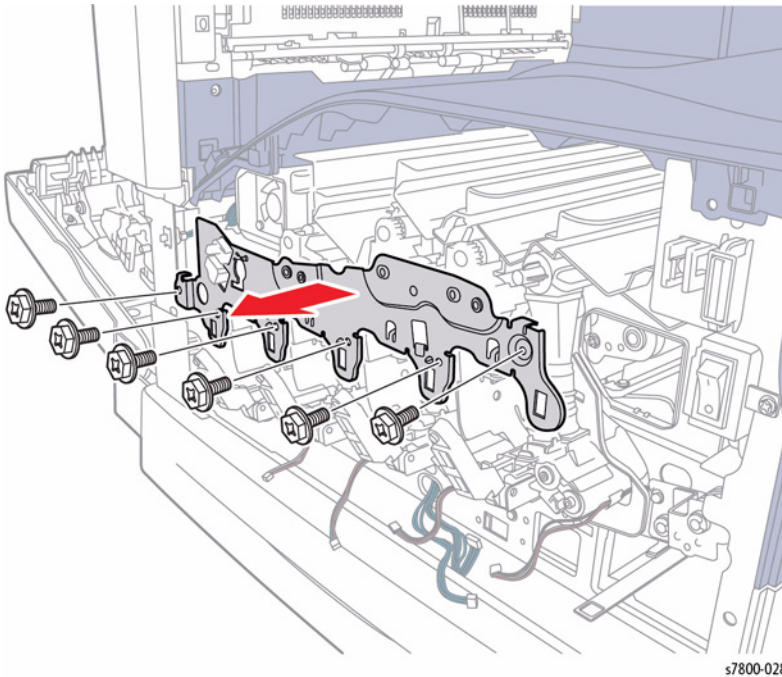


Figure 2 Removing screws and the Plate

13. Remove the Rear Upper Cover (REP 19.17).
14. Remove the Rear Lower Cover (REP 19.16).
15. Open the PWB Chassis Unit (REP 18.1).
16. Remove the HVPS (Deve) (REP 5.11).
17. Remove the HVPS (1st/ 2nd/ DTC) (REP 6.3).
18. Remove the Drum/Deve Drive Assembly (REP 3.8).
19. Pull the joint section between the Dispenser Pipe (K) and the Guide Assembly (K) towards you.
20. Remove the Developer and Dispenser Pipe.
21. Rotate the Erase Lamp Unit clockwise to remove.
22. Remove the Dispenser Pipe (K) (REP 5.4).

23. Release the hooks (x2) and remove the Dispenser Pipe (K).

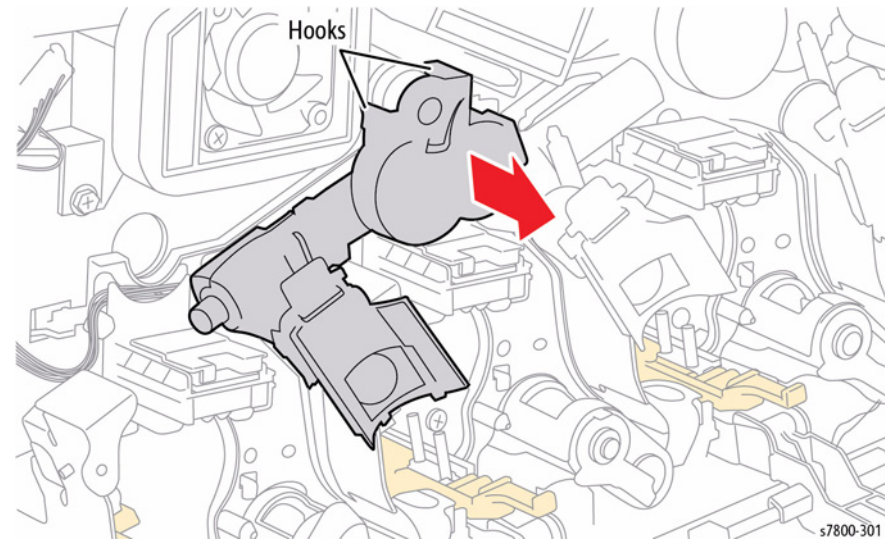


Figure 3 Removing the Dispenser Pipe (K)

24. Remove 1 screw that secures the Erase Lamp Unit (Y/M/C) in the rear of the printer.

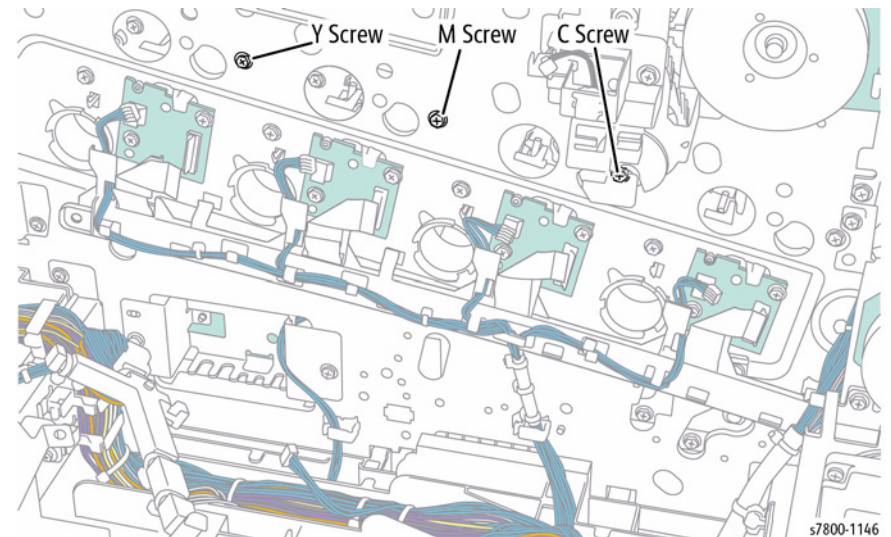


Figure 4 Removing screw

25. Disconnect the wiring harness connector (Y - P/J210, M - P/J211, C - P/J212).
26. Remove 2 screws that secure the Erase Lamp Unit (Y/M/C).
27. Remove the Erase Lamp Unit (Y/M/C).

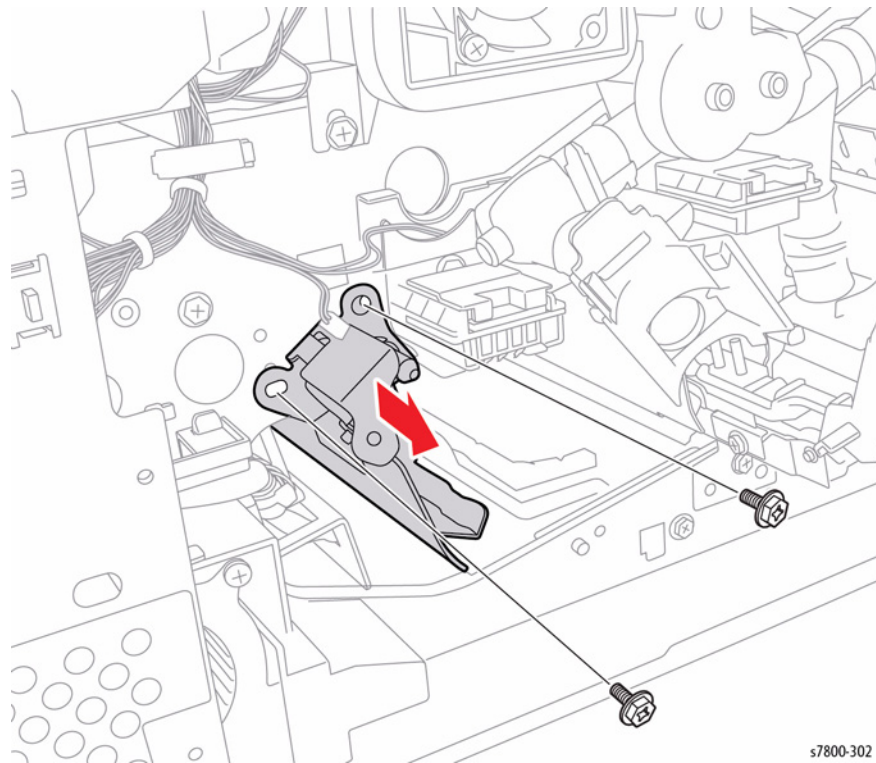


Figure 5 Removing the Erase Lamp Unit (Y/M/C)

s7800-302

REP 8.4 Waste Toner Bottle Full Sensor, Waste Toner Bottle Position Sensor, Sensor and Bracket

Parts List on [PL 8.2 Item 3](#), [PL 8.2 Item 4](#), [PL 8.2 Item 15](#)

Removal

1. Remove the Right Cover ([REP 19.15](#)).
2. Remove 2 screws that secure the Sensor Bracket.

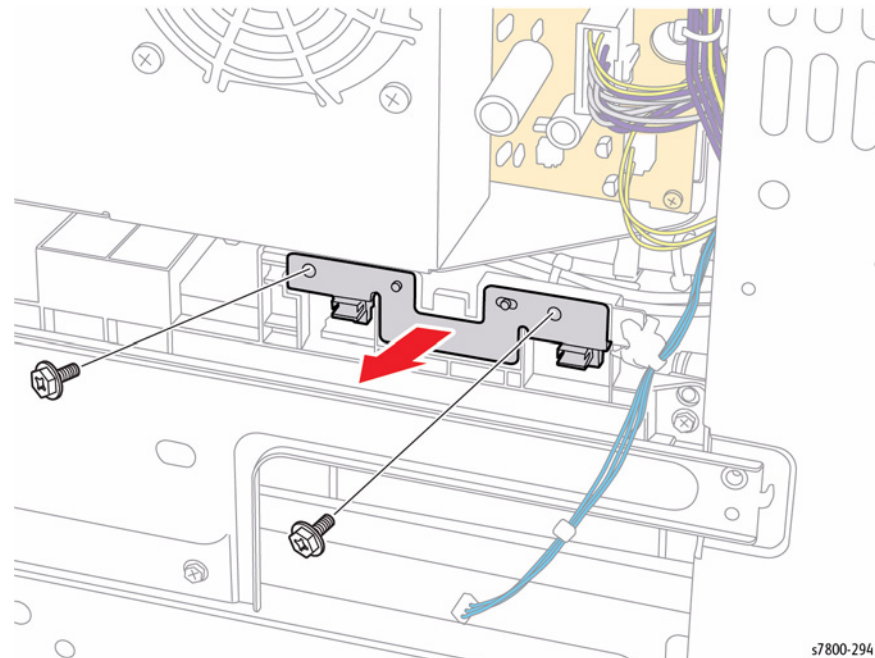


Figure 1 Removing the screws

s7800-294

3. Disconnect the wiring harness connectors P/J110 and P/J111.
4. Remove the Bracket with the Sensors.
5. Remove the Waste Toner Bottle Full Sensor/ Waste Toner Bottle Position Sensor.

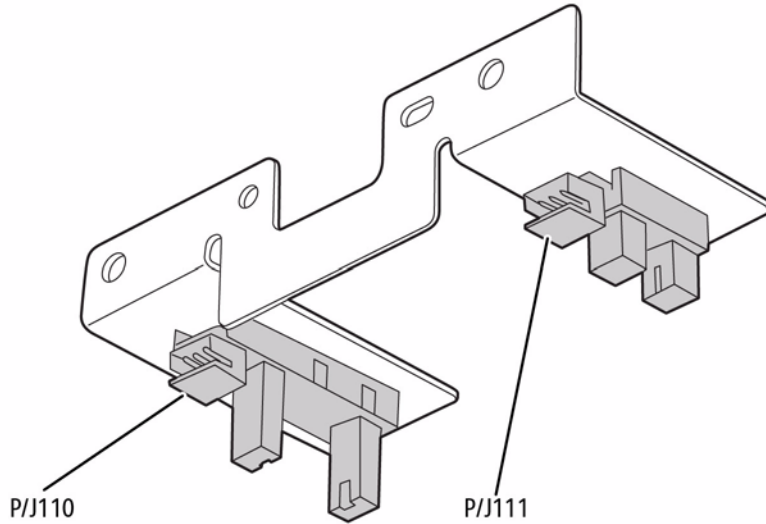


Figure 2 Removing the Sensor

s7800-295

REP 8.5 Waste Toner Pipe Assembly

Parts List on [PL 8.2 Item 5](#)

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Open the Left Hand Cover Unit.
8. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
9. Remove the Process Fan 1 and Duct ([REP 4.7](#)).
10. Remove the ATC PWB ([REP 5.8](#)).

11. Lift the shutters (4) by 90° and push them in, then close the shutters.
12. Turn the Lever counterclockwise and close the shutter.

CAUTION

The Waste Toner Pipe Assembly is fragile. Be careful when installing the L.H screw.

13. Remove 3 screws (silver, 6mm) that secure the Waste Toner Pipe Assembly and remove the Waste Toner Pipe Assembly.

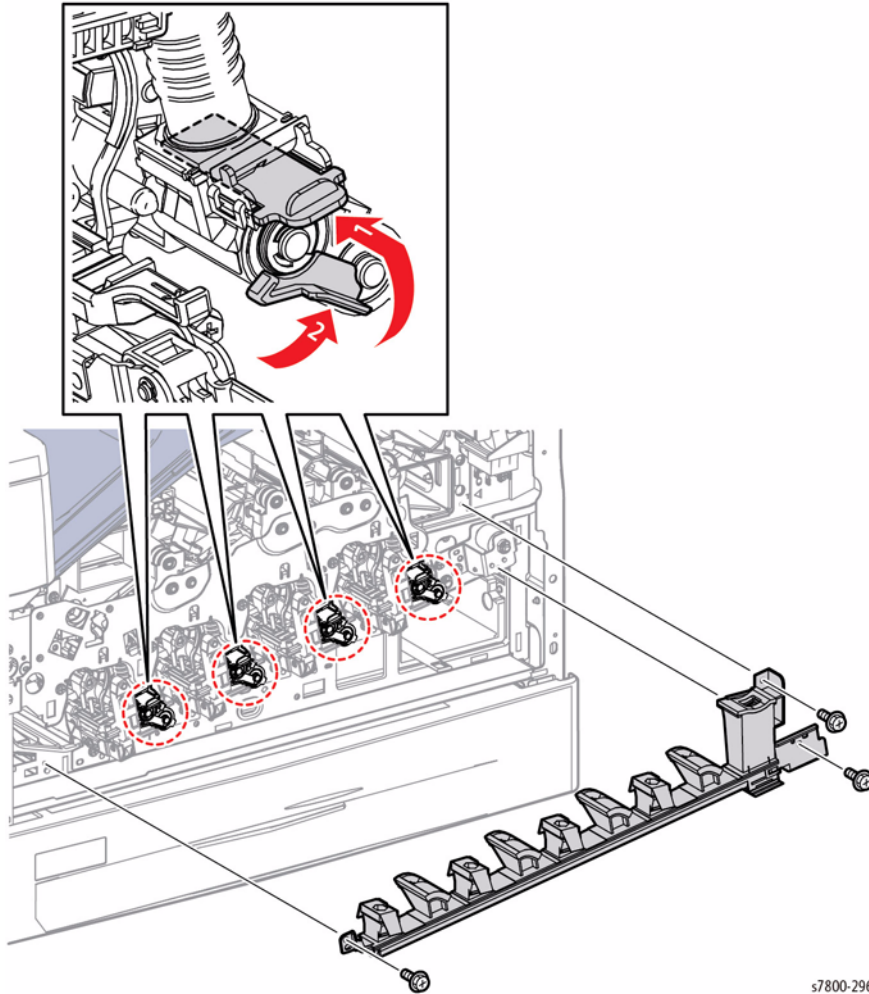


Figure 1 Removing the Waste Toner Pipe Assembly

s7800-296

REP 8.6 Agitator Motor Assembly

Parts List on [PL 8.2 Item 6](#)

Removal

WARNING

Take care, a hazardous voltage is present at the Power connector. Electricity can cause death or injury. Disconnect the power cord from the customer supply while performing tasks that do not need electricity.

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Rear Lower Cover ([REP 19.16](#)).
2. Remove the Right Cover ([REP 19.15](#)).
3. Release the wiring harness from the clamp.
4. Remove 4 screws that secure the GFI Chassis Assembly.
5. Slide the GFI Chassis Assembly out to remove.

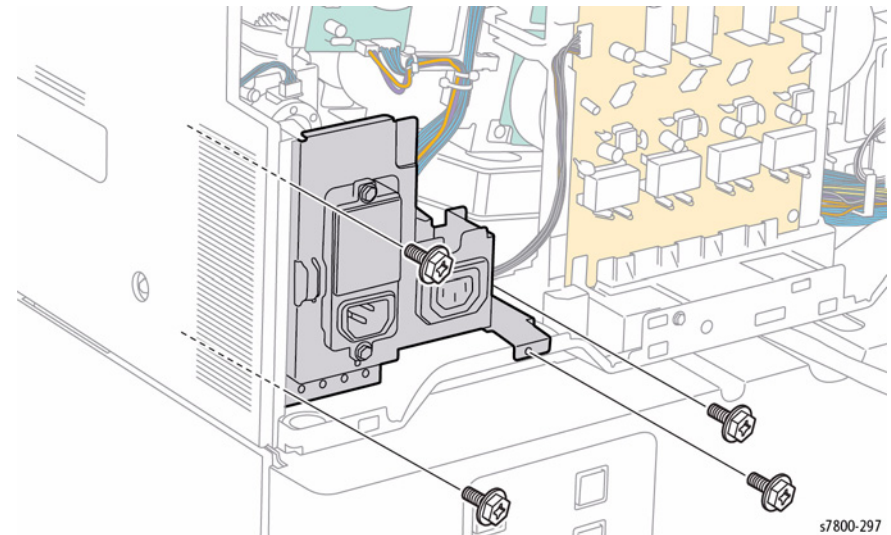


Figure 1 Removing the GFI Chassis Assembly

s7800-297

6. Disconnect the wiring harness connector **P/J215** and release the connector from the hook.
7. Remove the clamp.
8. Remove 2 screws that secure the Harness Holder.
9. Remove the Harness Holder.

10. Rotate the Gear with half circle facing the left side.

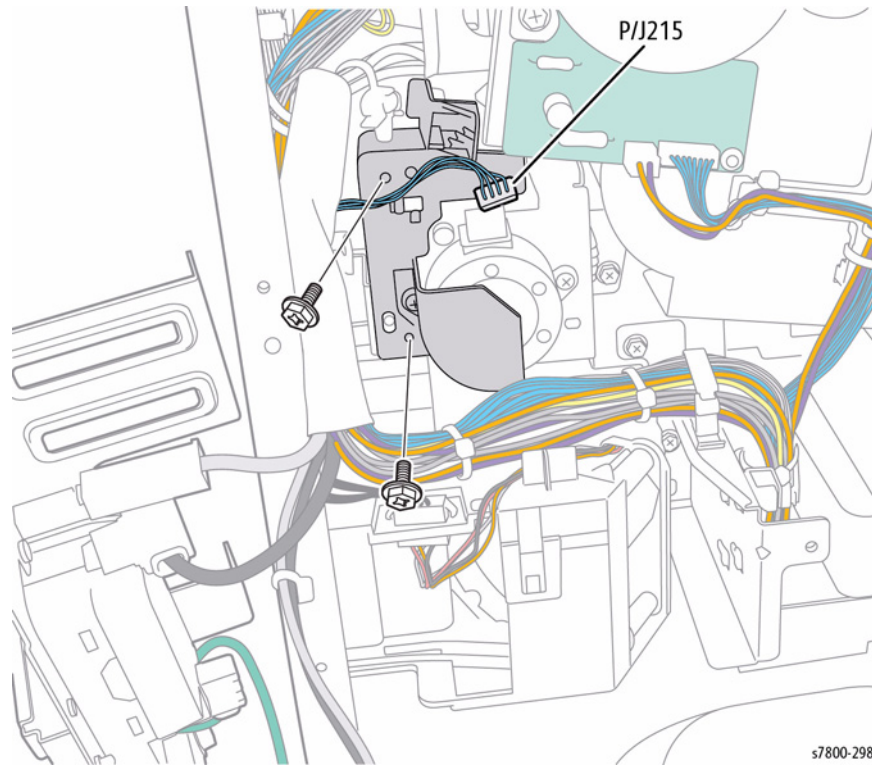


Figure 2 Removing the Harness Holder

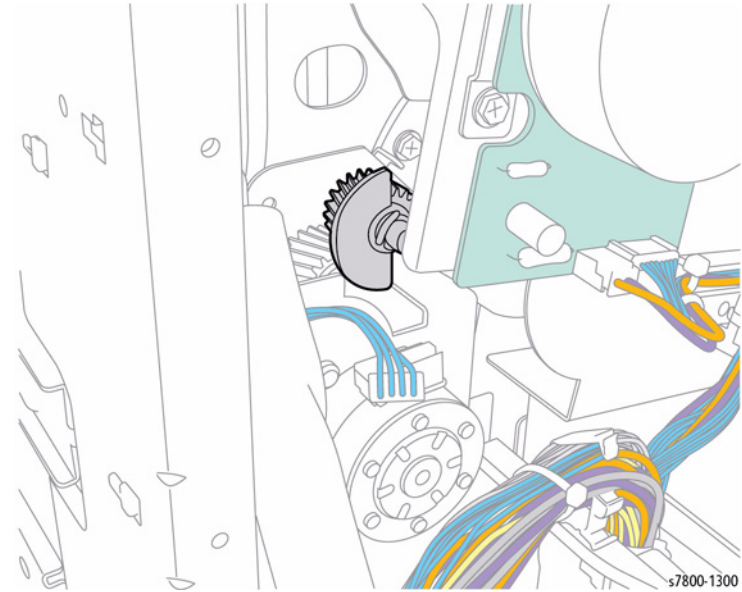


Figure 3 Rotating the Gear

11. Remove 3 screws that secure the Agitator Motor Assembly.
12. Remove the Agitator Motor Assembly and Bracket.

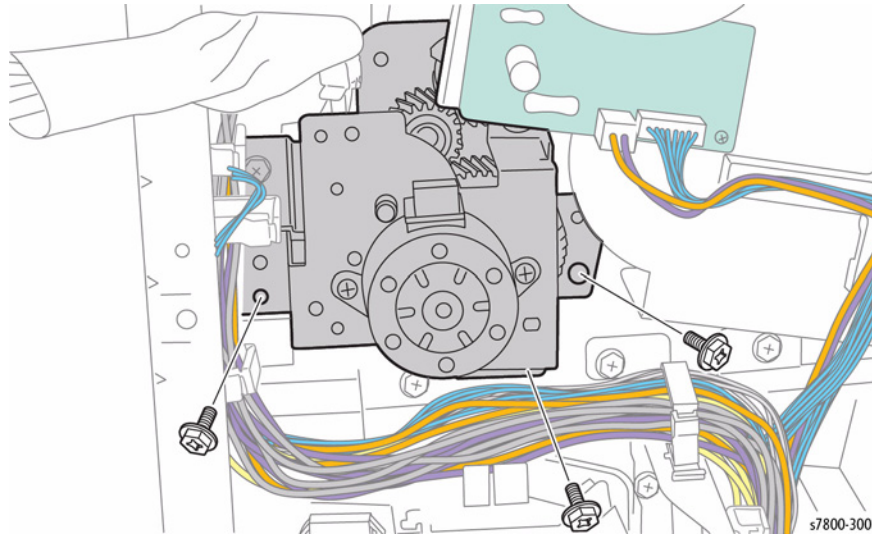


Figure 4 Removing the Agitator Motor Assembly

REP 8.7 Gear Bracket Assembly

Parts List on [PL 8.2 Item 7](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Open the Left Door A.
7. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
8. Remove the Right Cover ([REP 19.15](#)).
9. Remove the Bottle Guide and Sensor ([REP 8.10](#)).
10. Remove the Waste Toner Pipe Assembly ([REP 8.5](#)).
11. Remove the Main LVPS ([REP 18.15](#)).
12. Release the one hook of the Harness Holder and rotate the Holder clockwise to remove it.

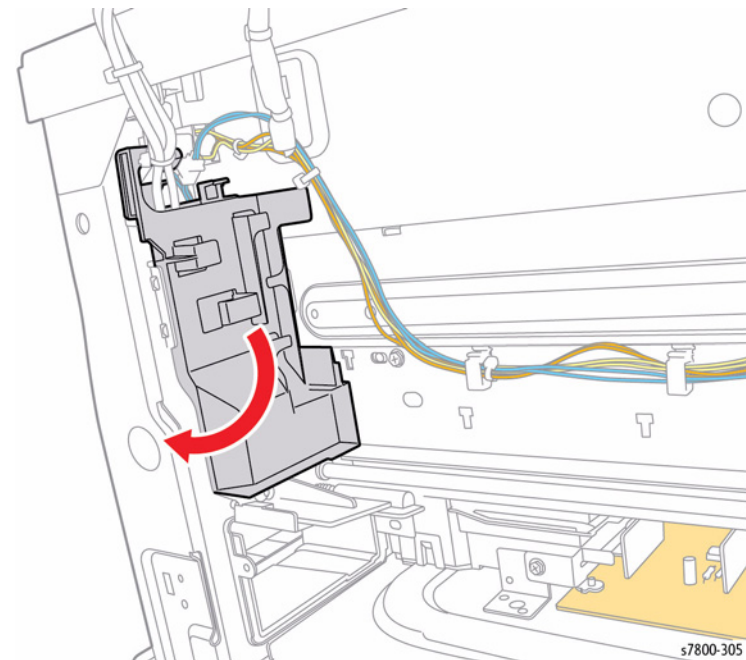


Figure 1 Releasing the Harness Holder

13. Remove the K-Clip at the rear of the Gear Bracket Assembly and the C-Clip that secures the Gear.
14. Remove the 2 Gears from the rear.

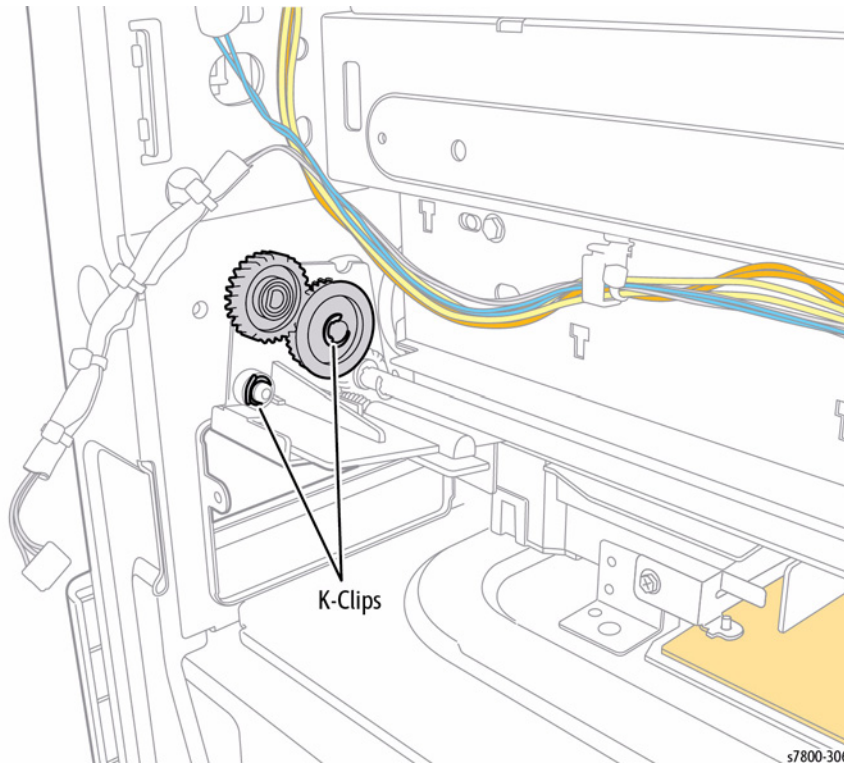


Figure 2 Removing the K-Clips and Gears

15. Remove 1 C-Clip from the front of the printer.
16. Remove 3 screws (silver, 6mm) that secure the Gear Bracket Assembly.
17. Remove the Gear Bracket Assembly

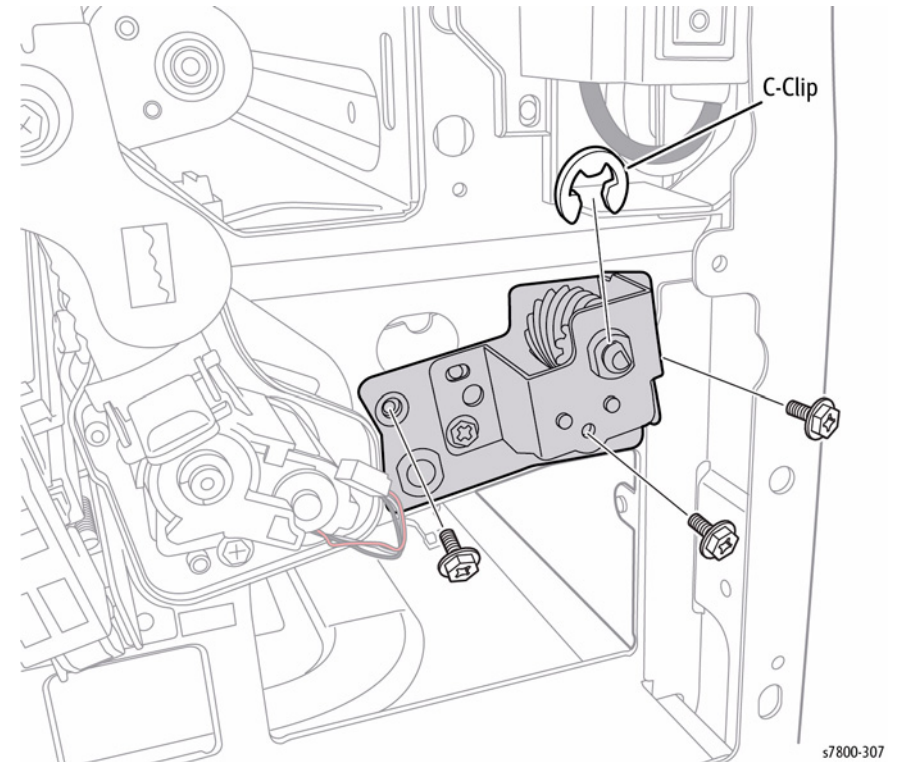


Figure 3 Removing screws and Gear Bracket Assembly

Replacement

NOTE: The HVPS cable is positioned behind the Shaft.

REP 8.8 Drive Shaft Assembly

Parts List on **PL 8.2 Item 10**

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (REP 8.1).
2. Remove the Toner Cartridge (REP 5.1).
3. Remove the Waste Cartridge (REP 8.9).
4. Remove the IBT Belt Cleaner Assembly (REP 6.1).
5. Remove the Tension Lever (REP 6.2).
6. Open the Left Hand Cover Unit.
7. Remove the Front Cover and Inner Cover (REP 19.1).
8. Remove the ATC Sensor PWB (REP 5.8).
9. Remove the Waste Toner Pipe Assembly (REP 8.5).
10. Remove the Bottle Guide and Sensor (REP 8.10).
11. Remove the Front LVPS Fan (REP 4.2), steps 1-3.
12. Let the LVPS Fan Assembly hang next to the printer.
13. Remove the Main LVPS (REP 18.15).
14. Remove the Gear Bracket Assembly (REP 8.7).
15. Remove the KL Clip that secures the Gear and remove the Gear.
16. Remove the Sleeve Bearing.

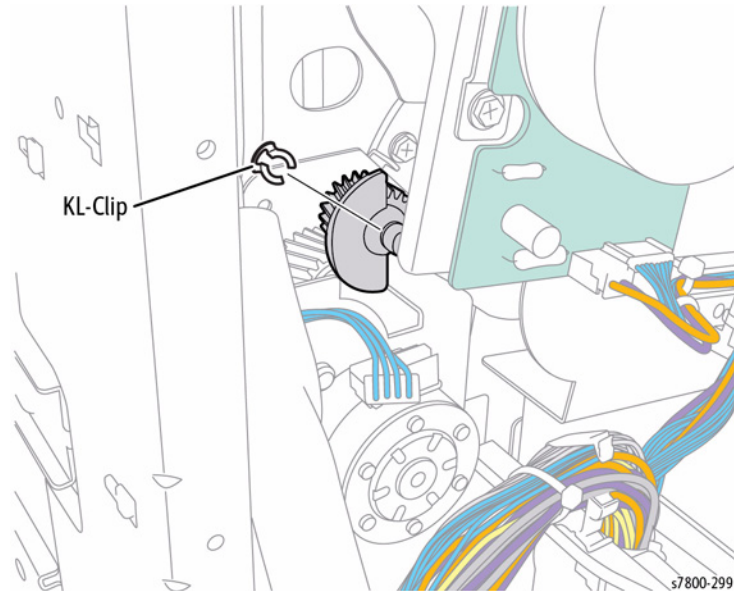


Figure 1 Removing the KL Clip and Gear

17. Shift the Drive Shaft Assembly to the rear temporarily, and remove the Drive Shaft Assembly from the side of the printer.

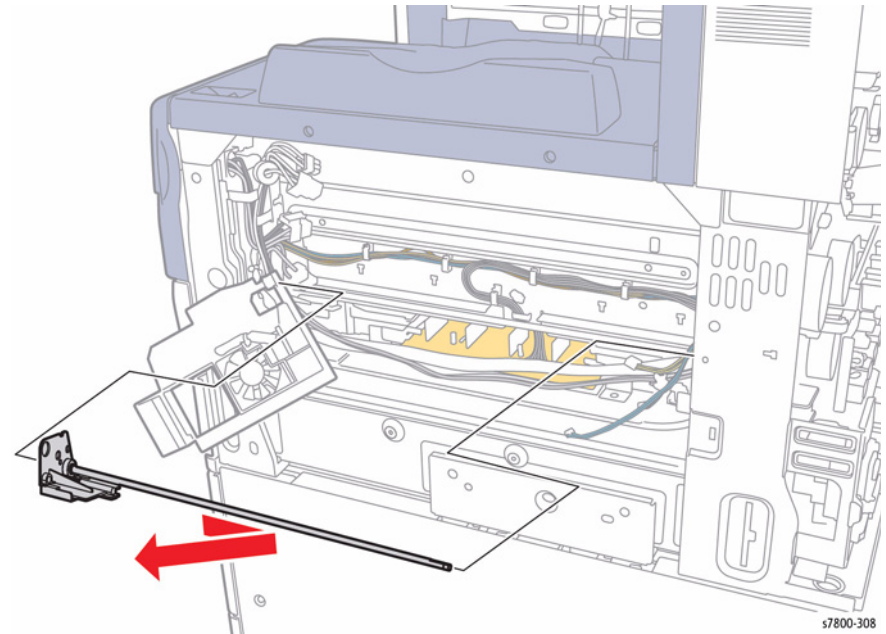


Figure 2 Removing the Drive Shaft Assembly

REP 8.9 Waste Cartridge

Parts List on [PL 8.2 Item 14](#)

Removal

1. Open the Front Door.
2. Pull the Waste Cartridge latch toward you to unlock the Waste Cartridge.

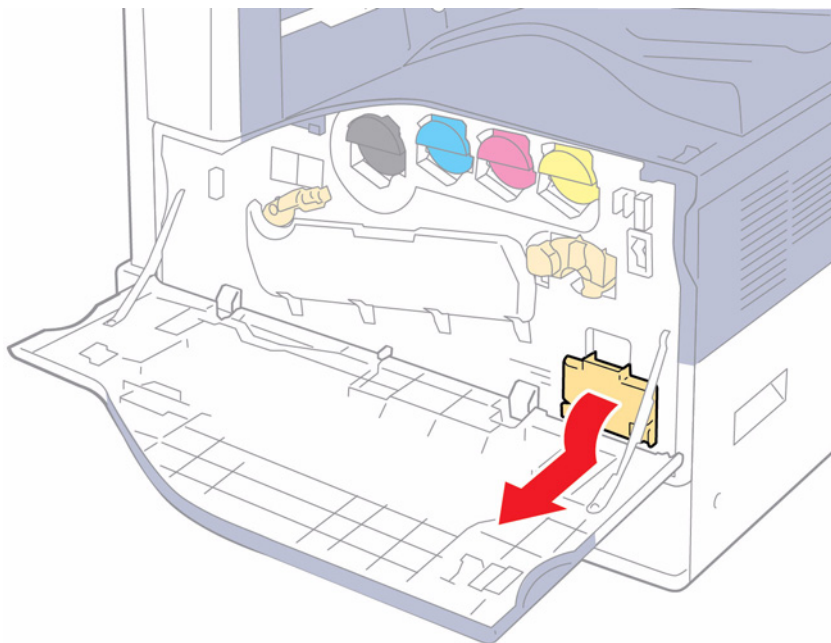


Figure 1 Unlocking the Waste Cartridge

s7800-309

3. Pull the Waste Cartridge out to remove.

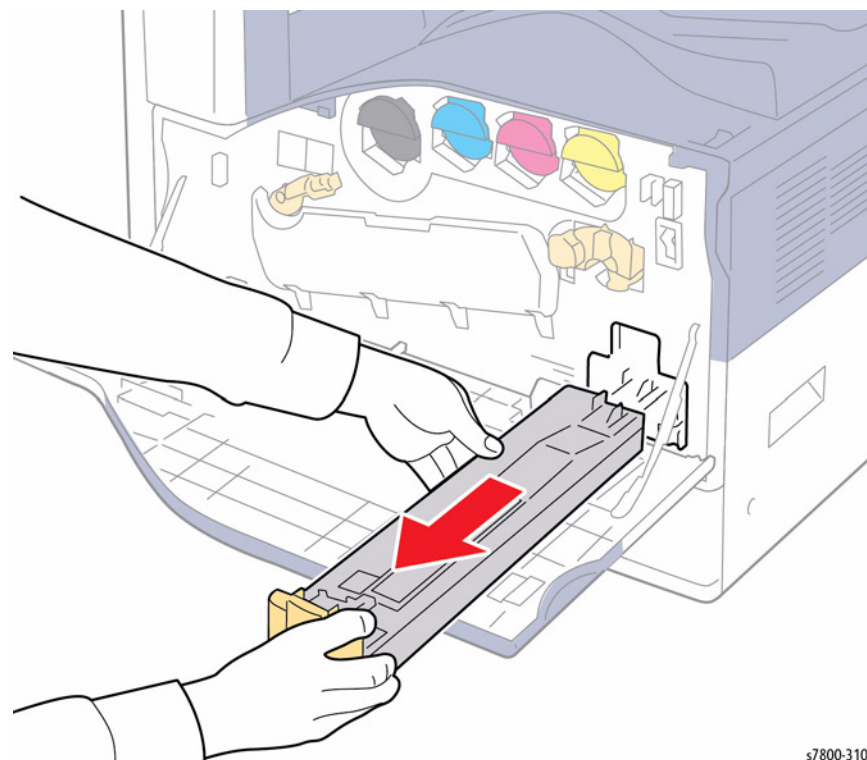


Figure 2 Removing the Waste Cartridge

s7800-310

REP 8.10 Bottle Guide and Sensor

Parts List on [PL 8.2 Item 16](#)

Removal

1. Remove the Waste Cartridge ([REP 8.9](#)).
2. Remove the Right Cover ([REP 19.15](#)).
3. Remove 4 screws (silver, 6mm) that secure the T-shaped Frame.
4. Remove the T-shaped Frame.

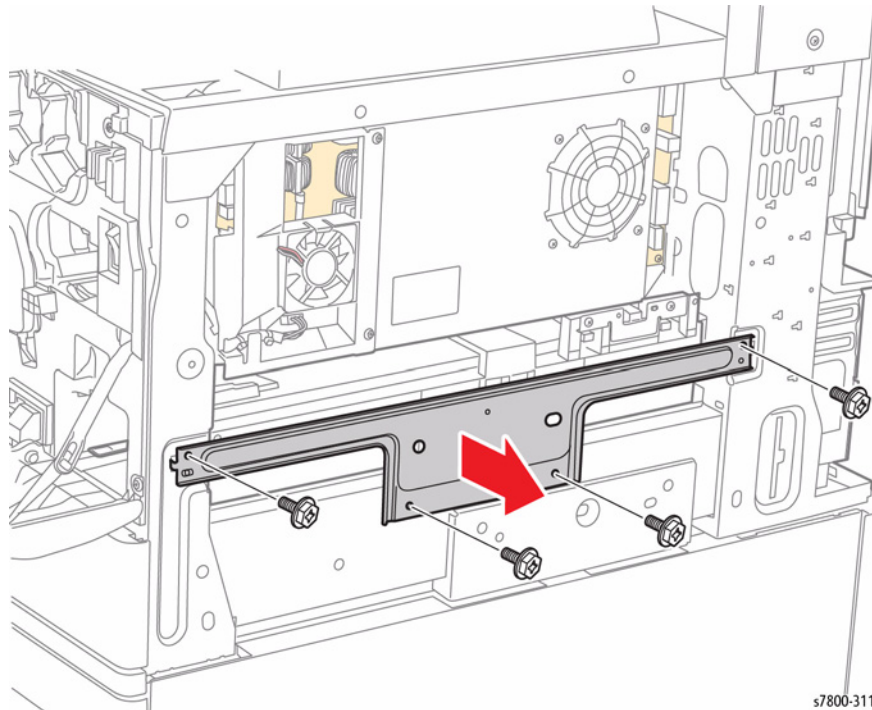


Figure 1 Removing the T-shaped Frame

5. Release the harness Clamp and disconnect the wiring harness connectors [P/J150](#) and [P/J182](#) that are connected to the 2 Sensors and remove the cable.
6. Remove 4 screws (silver, 6mm) that secure the Bottle Guide Assembly.
7. Remove the Bottle Guide Assembly.

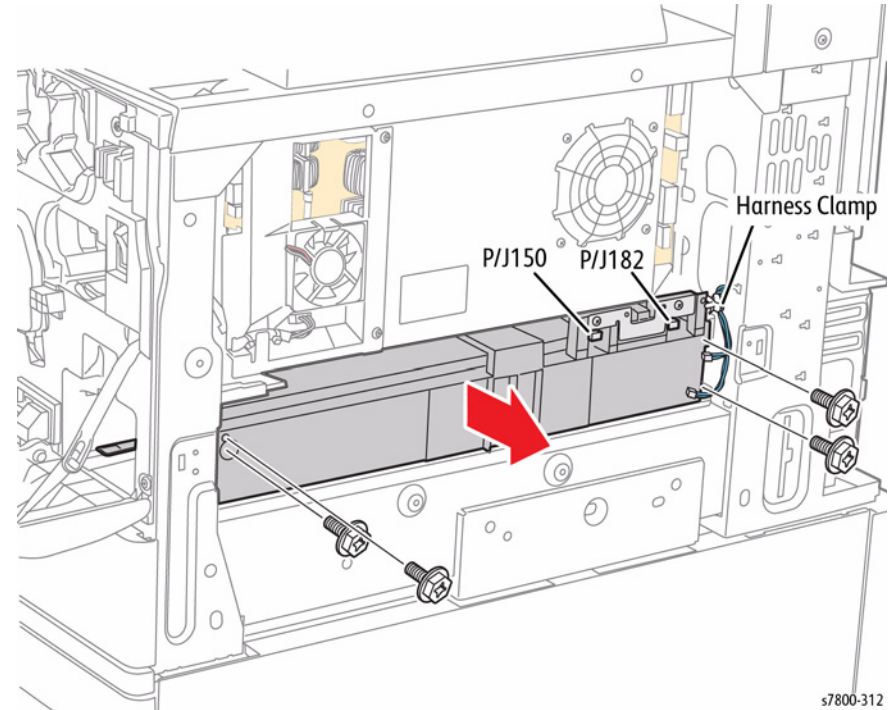


Figure 2 Removing the Bottle Guide Assembly

REP 9.1 Tray 2 Assembly

Parts List on [PL 9.1 Item 5](#)

Removal

1. Pull out the Tray Assembly until it stops, then raise it slightly to remove.

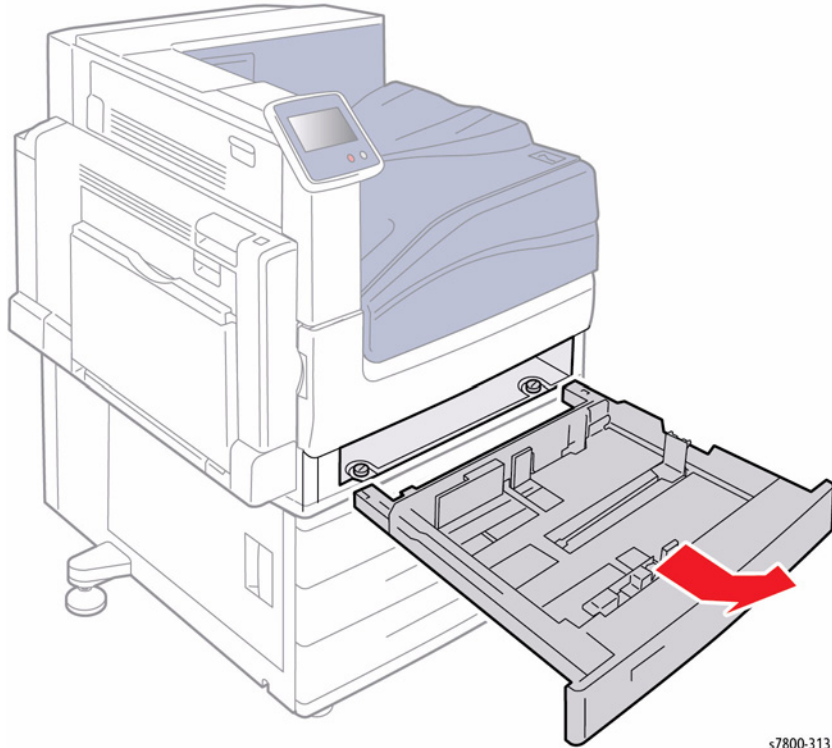


Figure 1 Removing Tray 2

s7800-313

REP 9.2 Tray 2 Paper Size Sensor

Parts List on [PL 9.1 Item 6](#)

Removal

1. Remove the Tray Assembly.
2. Disconnect the wiring harness connector [P/J101](#) that is connected to the Tray Paper Size Sensor.
3. Remove 1 screw (silver, 8mm) that secures the Tray 2 Paper Size Sensor to the printer.
4. Remove the Tray 2 Paper Size Sensor from the hook.

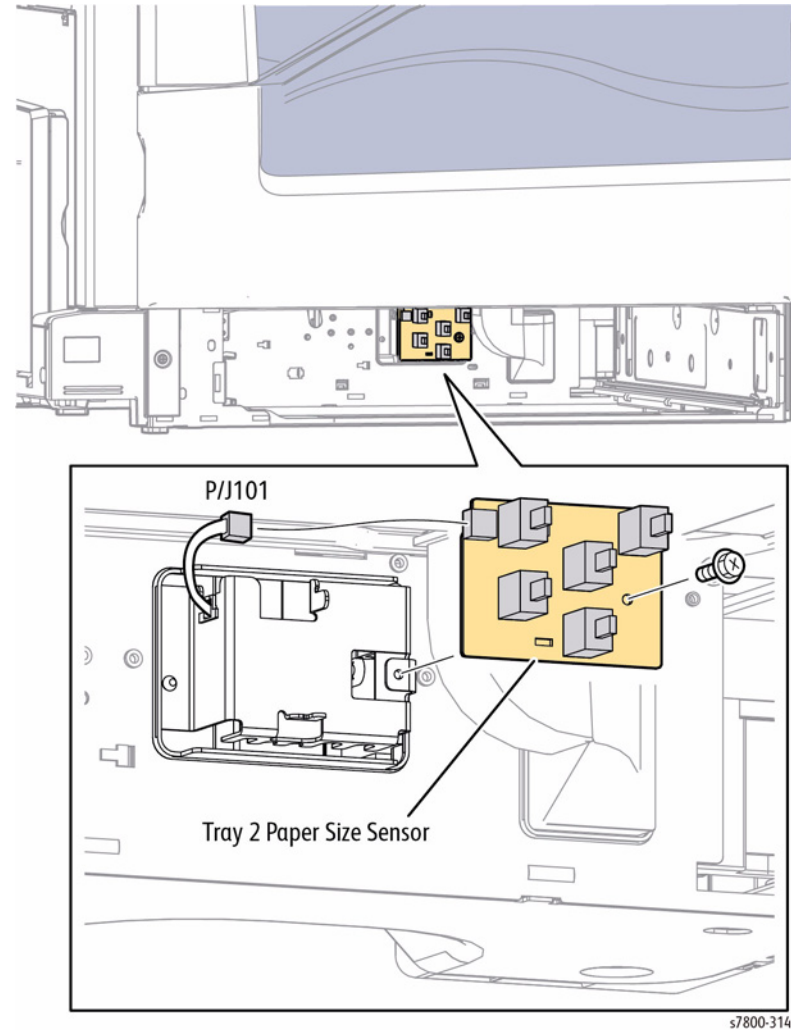


Figure 1 Removing the Tray 2 Paper Size Sensor

REP 9.3 Tray 2 Feeder Assembly

Parts List on [PL 9.3 Item 1](#)

Removal

1. Remove Tray 2.
2. Remove the Tray 1 ([REP 13.1](#)).
3. Remove the Left Hand Door A ([REP 14.3](#)).
4. Remove the Registration Transport Assembly ([REP 15.1](#)).
5. Remove the Left Rear Lower Cover ([REP 19.4](#)).
6. Remove the Chute Assembly ([REP 9.4](#)).
7. Release the Wire Harness from the clamps (x2).
8. Disconnect the wiring harness connectors [P/J611](#) and [P/J618](#).
9. Remove 2 screws that secure the Tray 2 Feeder Assembly.
10. Slide the Tray 2 Feeder Assembly out at an angle to remove.

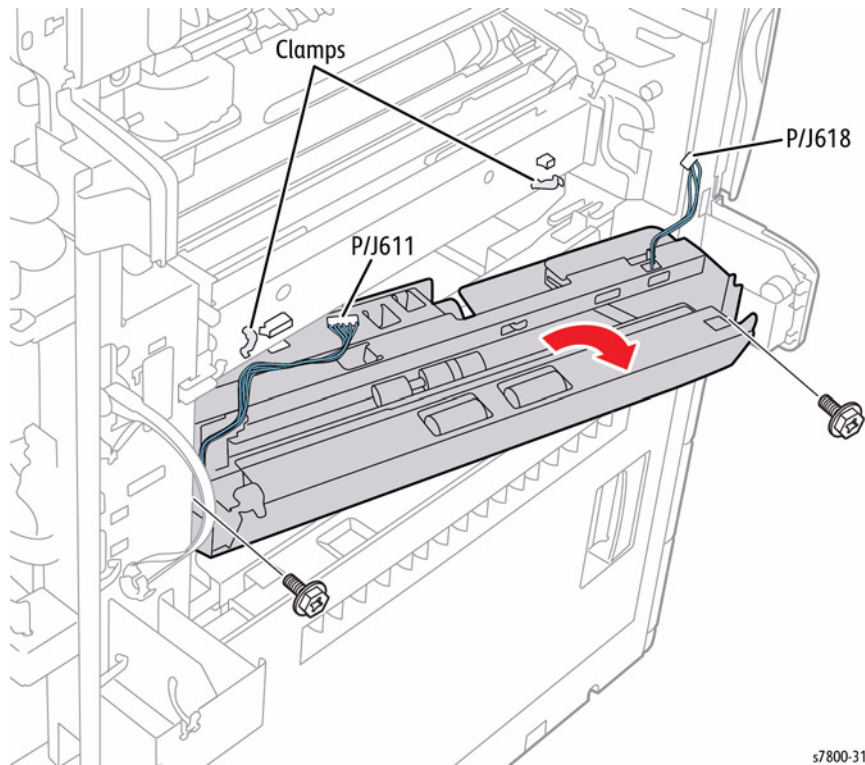


Figure 1 Removing the Tray 1 Feeder Assembly

s7800-315

REP 9.4 Chute Assembly

Parts List on [PL 9.3 Item 2](#)

Removal

1. Remove the Left Hand Door A ([REP 14.3](#)).
2. Remove the Registration Transport Assembly ([REP 15.1](#)).
3. Remove the Left Rear Lower Cover ([REP 19.4](#)).
4. Remove the Stopper screw (long screw).
5. Remove the Chute Assembly in the direction of the arrow as shown in [Figure 1](#).

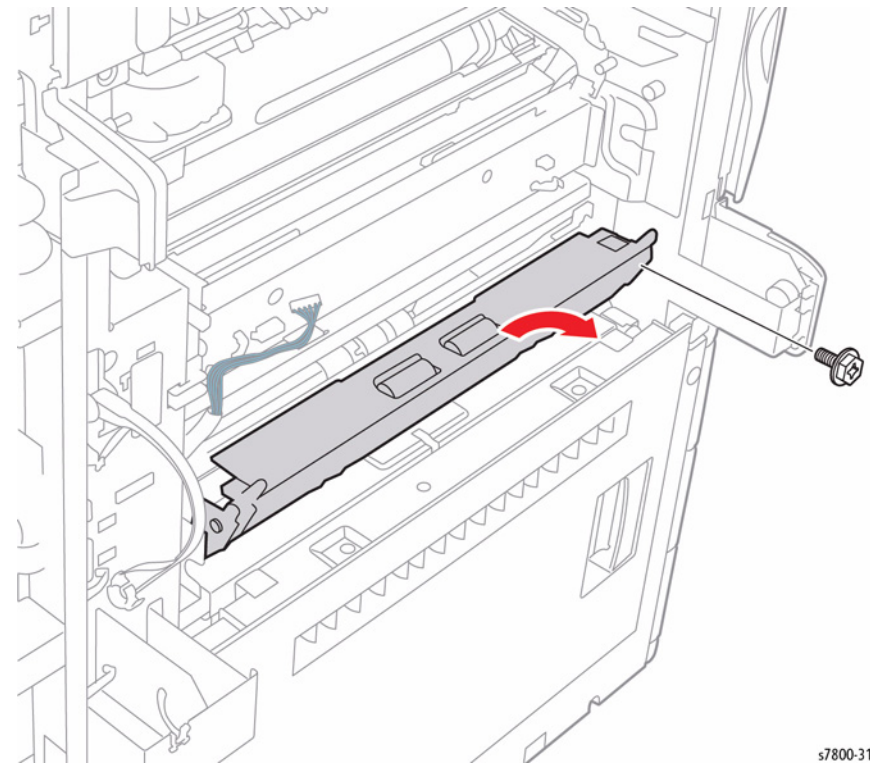


Figure 1 Removing the Chute Assembly

s7800-316

REP 9.5 Tray 2 Nudger Level Sensor/ No Paper Sensor

Parts List on [PL 9.4 Item 6](#)

Removal

1. Remove the Tray 2 Feeder Assembly ([REP 9.3](#)).
2. Release the 3 hooks that secure the Tray 2 Nudger Level Sensor to the Tray 2 Feeder Assembly.
3. Remove the Tray 2 Nudger Level Sensor.
4. Disconnect the wiring harness connector [P/J107](#) that is connected to the Tray Nudger Level Sensor.
5. Release the 3 hooks that secure the Tray 2 No Paper Sensor to the Tray 2 Feeder Assembly.
6. Remove the Tray 2 No Paper Sensor.
7. Disconnect the wiring harness connector [P/J106](#) that is connected to the Tray No Paper Sensor.

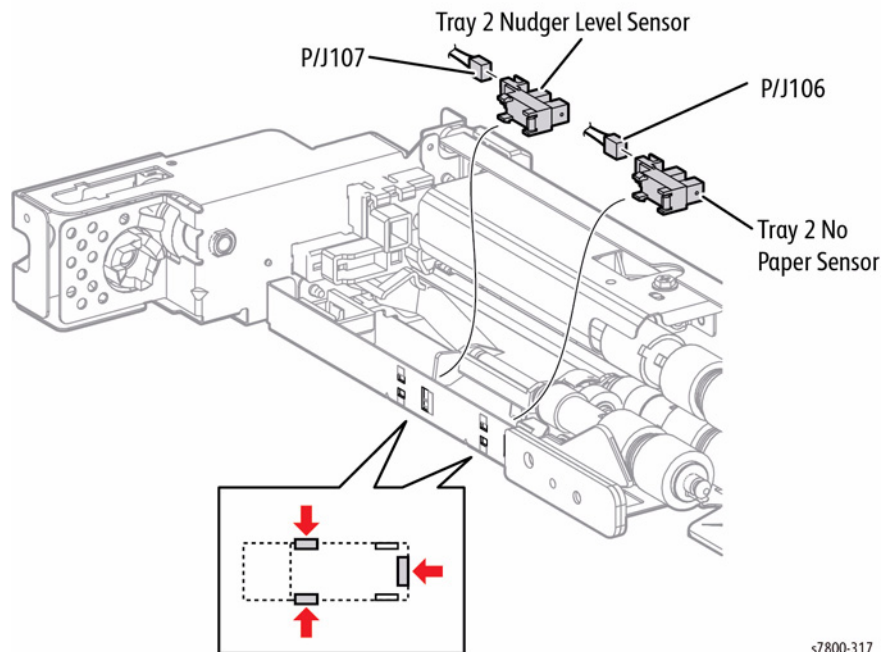


Figure 1 Removing the Nudger Level Sensor/ No Paper Sensor

REP 9.6 Actuator

Parts List on [PL 9.4 Item 7](#)

Removal

1. Remove Tray 2.
2. Remove Tray 1 ([REP 13.1](#)).
3. Remove the Registration Transport Assembly ([REP 15.1](#)).
4. Remove the Left Rear Lower Cover ([REP 19.4](#)).
5. Remove the Chute Assembly ([REP 9.4](#)).
6. Remove the Tray 2 Feeder Assembly ([REP 9.3](#)).
7. Press on both sides of the Actuator towards the inside to release the pins from the Feeder Assembly to remove.

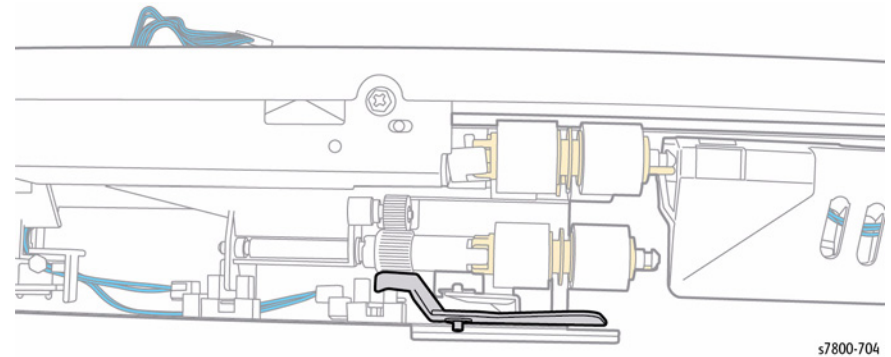


Figure 1 Removing the Actuator

REP 9.7 Tray 2 Feed/ Nudger/ Retard Roll

Parts List on [PL 9.5 Item 26](#)

Removal

1. Remove the Tray 2 Assembly ([REP 9.1](#)).
2. Slide the inner upper Chute (looking from the Tray Assembly insertion opening) towards you until it stops.
3. Release the hook of the Feed/ Retard/ Nudger Roll and pull out the Roll from the Shaft to remove.

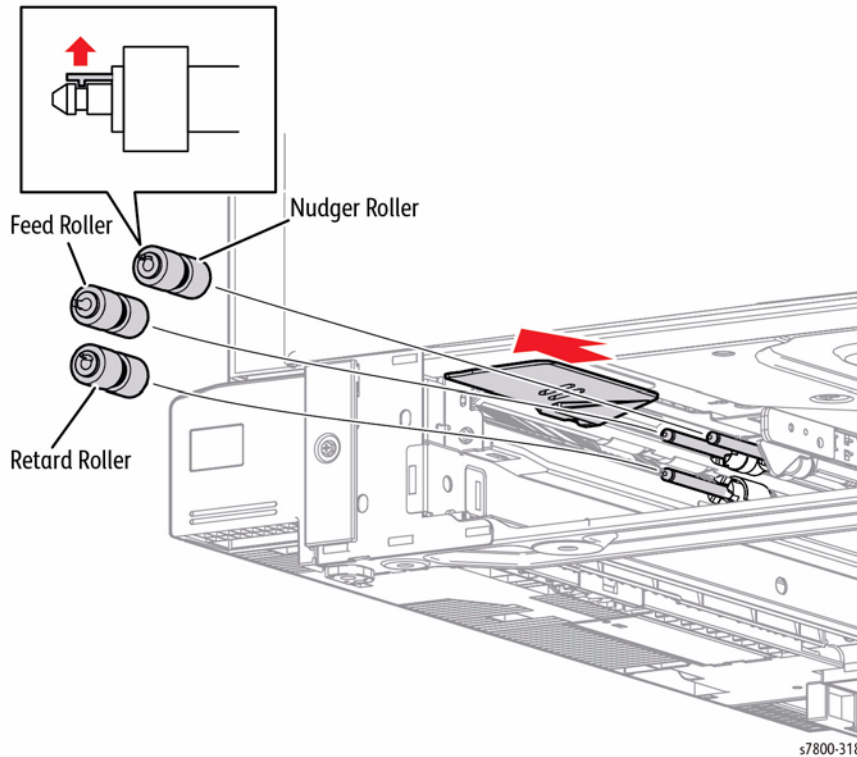


Figure 1 Removing the Tray 2 Feed Roll/ Nudger Roll/ Retard Roll

Replacement

If you find it difficult to reassemble the parts at the base of each Roll, remove the Tray 2 Feeder Assembly to perform the reassembly.

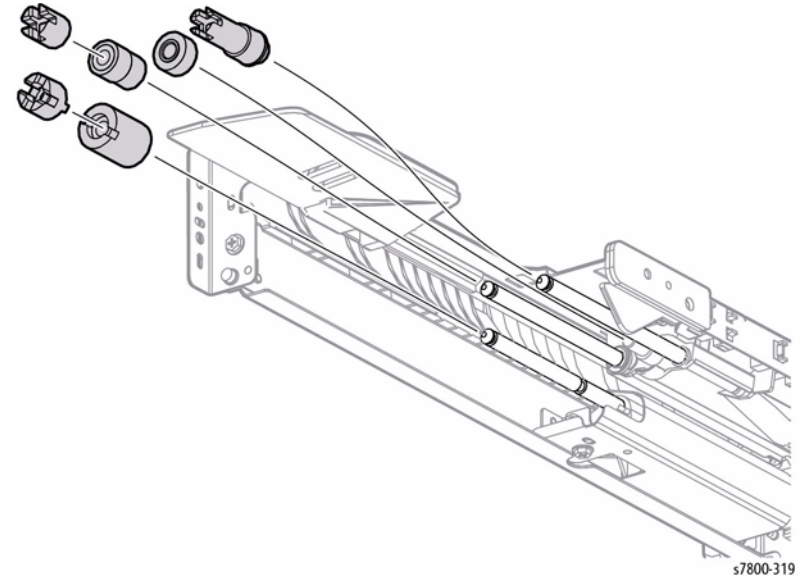


Figure 2 Installing Tray 2 Feed Roll/ Nudger Roll/ Retard Roll

REP 9.8 One Way Clutch/ Clutch Assembly (25T)/ Friction Clutch

Parts List on [PL 9.5 Item 14](#), [PL 9.5 Item 15](#), [PL 9.5 Item 19](#)

Removal

1. Remove the Tray 2 Feed/ Nudger/ Retard Roll ([REP 9.7](#)).
2. Pull off each Clutch to remove.

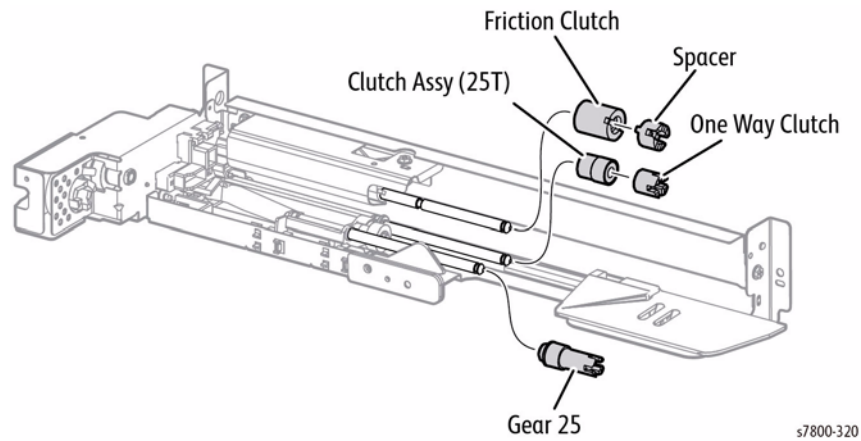


Figure 1 Removing the Clutch Assembly/ One Way Clutch/ Friction Clutch

REP 10.1 Tray 3 Feeder Assembly/ Feed Out Chute

Parts List on [PL 10.1 Item 1](#), [PL 10.1 Item 3](#)

Removal

1. Remove Tray 3.
2. Open the Left Hand Cover Assembly.

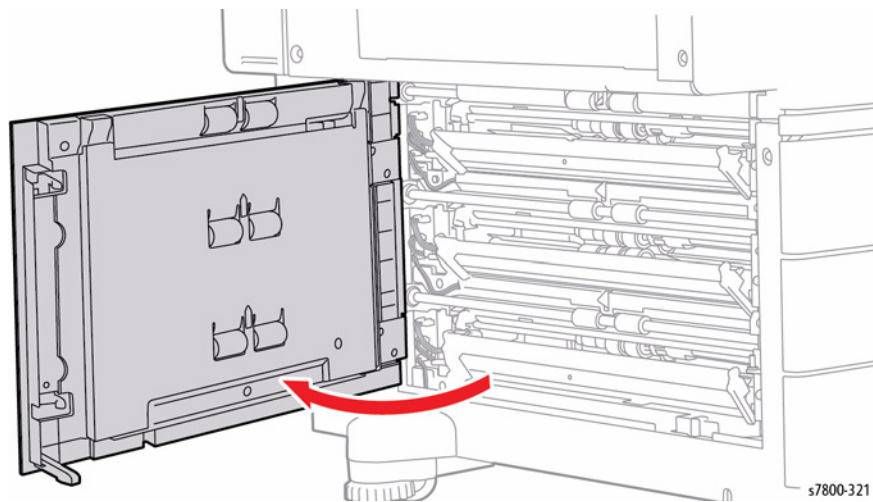


Figure 1 Opening the Left Hand Cover Assembly

3. While pressing the right and left Arms on the Feed Out Chute, remove the boss from the installation hole to remove the Feed Out Chute.

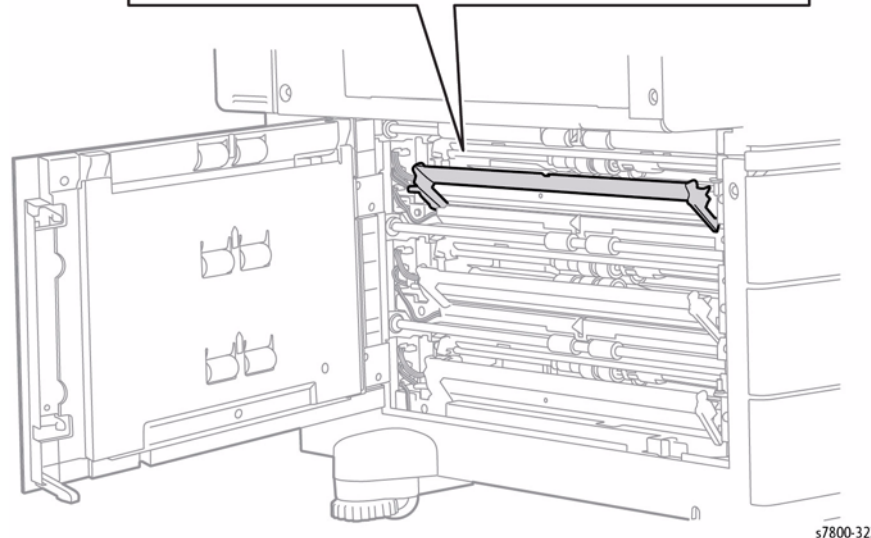
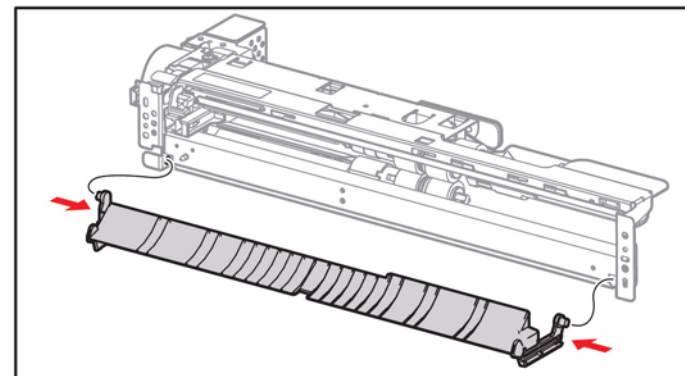


Figure 2 Removing the Feed Out Chute

4. Remove 1 screw that secures the Bracket Assembly.
5. Remove the Bracket Assembly.

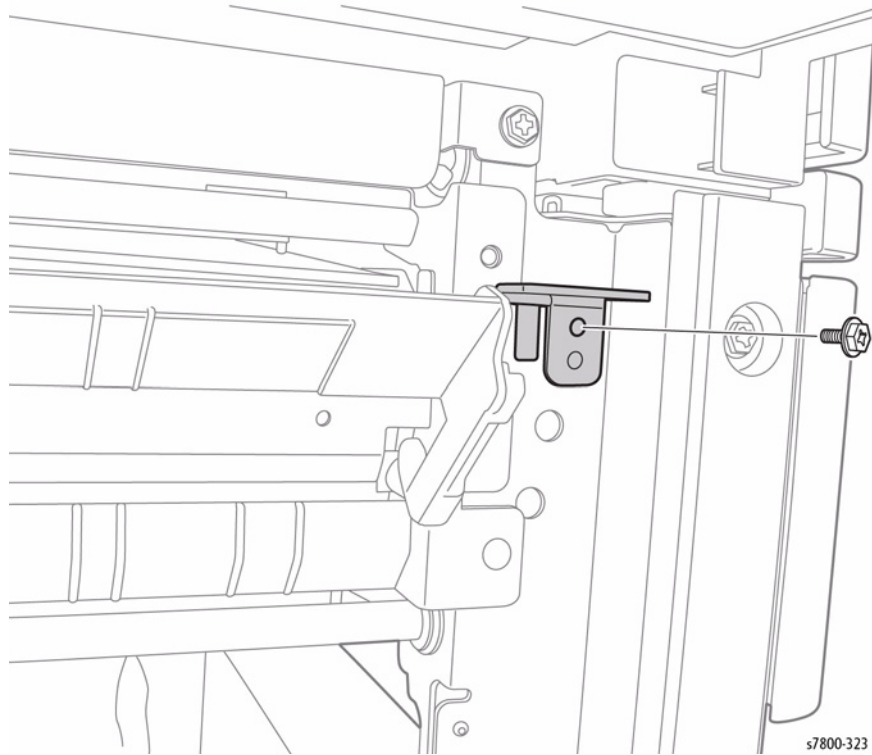


Figure 3 Removing the Bracket Assembly

6. Release the wiring harness from the clamps (x2).
7. Disconnect the wiring harness connectors P/J661 and P/J669.

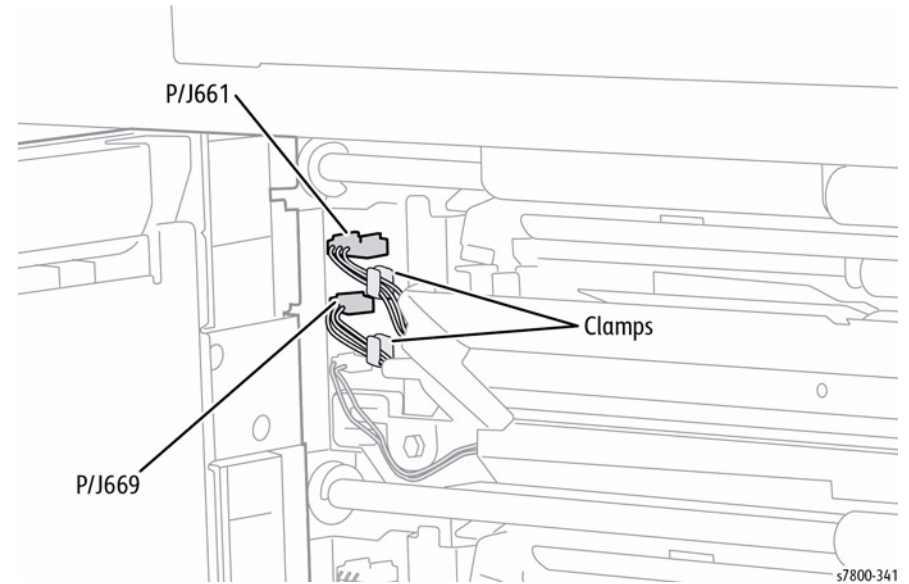


Figure 4 Releasing and disconnecting wiring harnesses

8. Remove 2 screws that secure the Tray 3 Feeder Assembly.
9. Remove the Tray 3 Feeder Assembly.

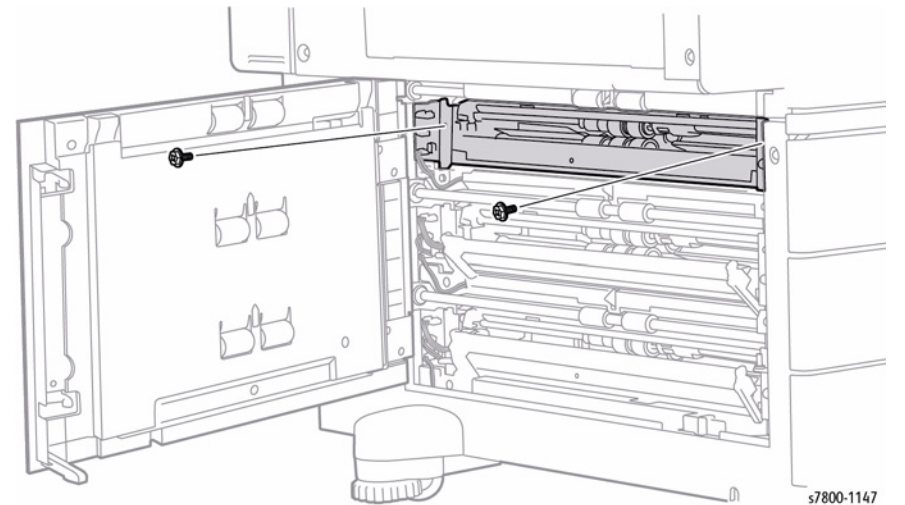


Figure 5 Removing the Tray 3 Feeder Assembly

REP 10.2 Tray 4 Feeder Assembly/ Feed Out Chute

Parts List on [PL 10.1 Item 1](#), [PL 10.1 Item 3](#)

Removal

1. Remove Tray 4.
2. Open the Left Hand Cover Assembly.

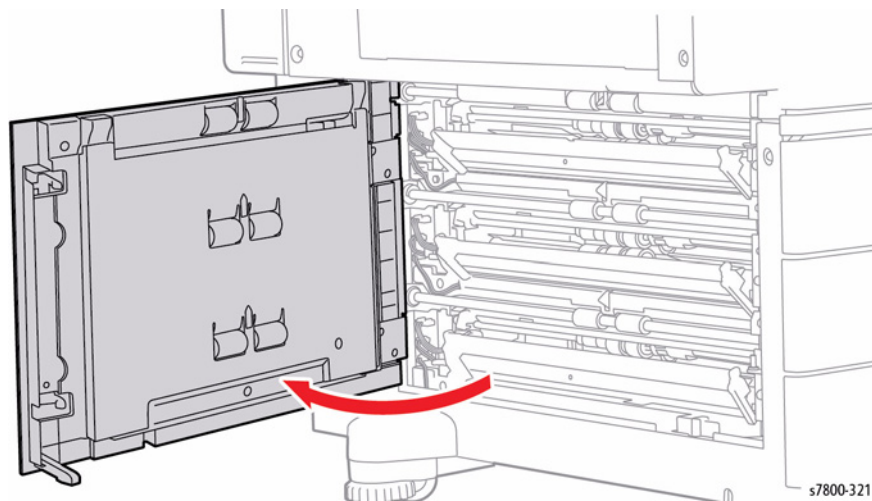


Figure 1 Opening the Left Hand Cover Assembly

3. While pressing the right and left Arms on the Feed Out Chute, remove the boss from the installation hole to remove the Feed Out Chute.

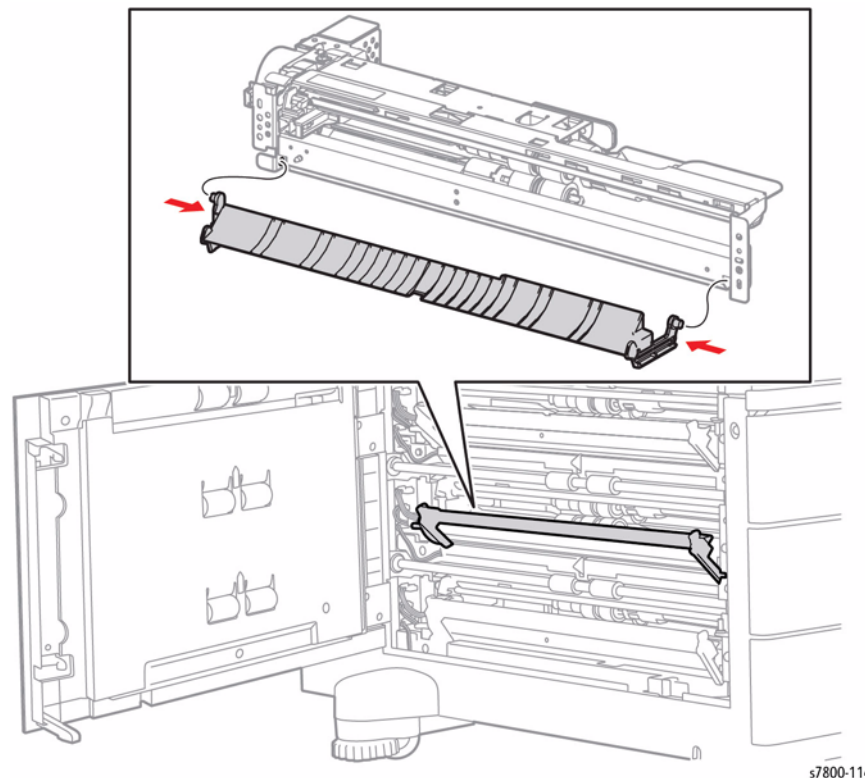


Figure 2 Removing the Feed Out Chute

4. Release the wiring harness from the clamps (x2).
5. Disconnect the wiring harness connectors P/J671 and P/J674.

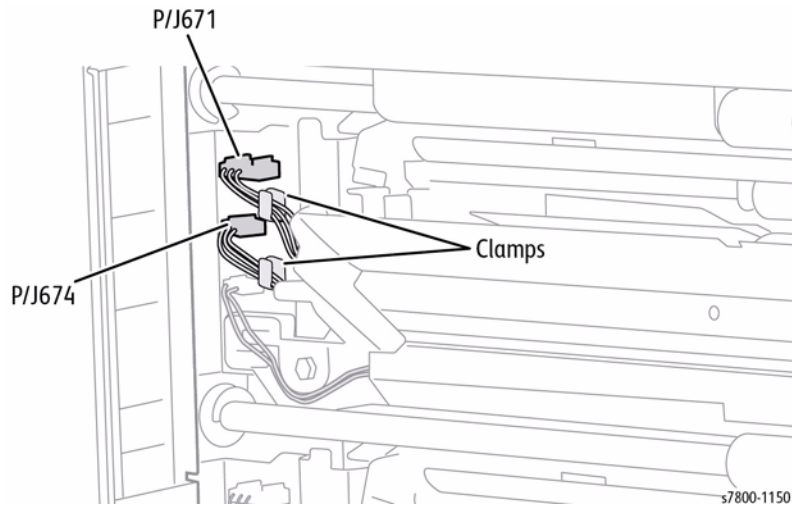


Figure 3 Releasing and disconnecting wiring harnesses

6. Remove 2 screws that secure the Tray 4 Feeder Assembly.
7. Remove the Tray 4 Feeder Assembly.

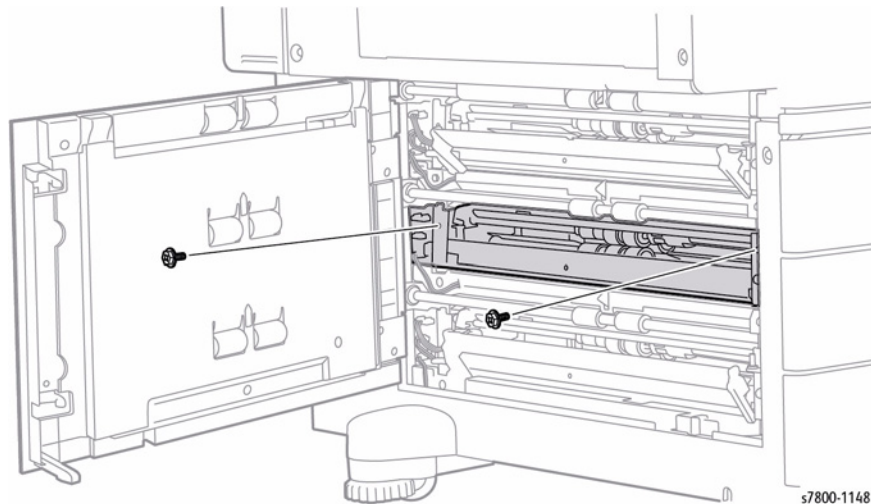


Figure 4 Removing the Tray 4 Feeder Assembly

REP 10.3 Tray 5 Feeder Assembly/ Feed Out Chute

Parts List on [PL 10.1 Item 1](#), [PL 10.1 Item 3](#)

Removal

1. Remove Tray 5.
2. Open the Left Hand Cover Assembly.

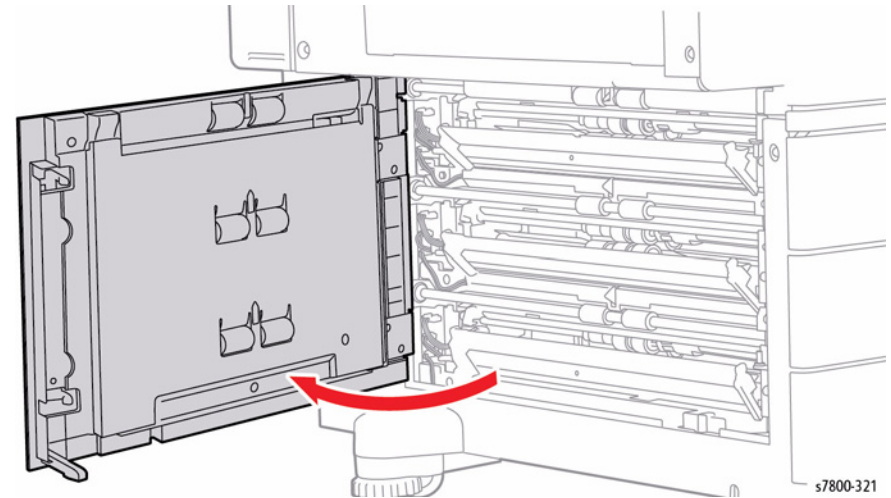


Figure 1 Opening the Left Hand Cover Assembly

3. While pressing the right and left Arms on the Feed Out Chute, remove the boss from the installation hole to remove the Feed Out Chute.

4. Remove 1 screw that secures the Bracket Assembly.
5. Remove the Bracket Assembly.

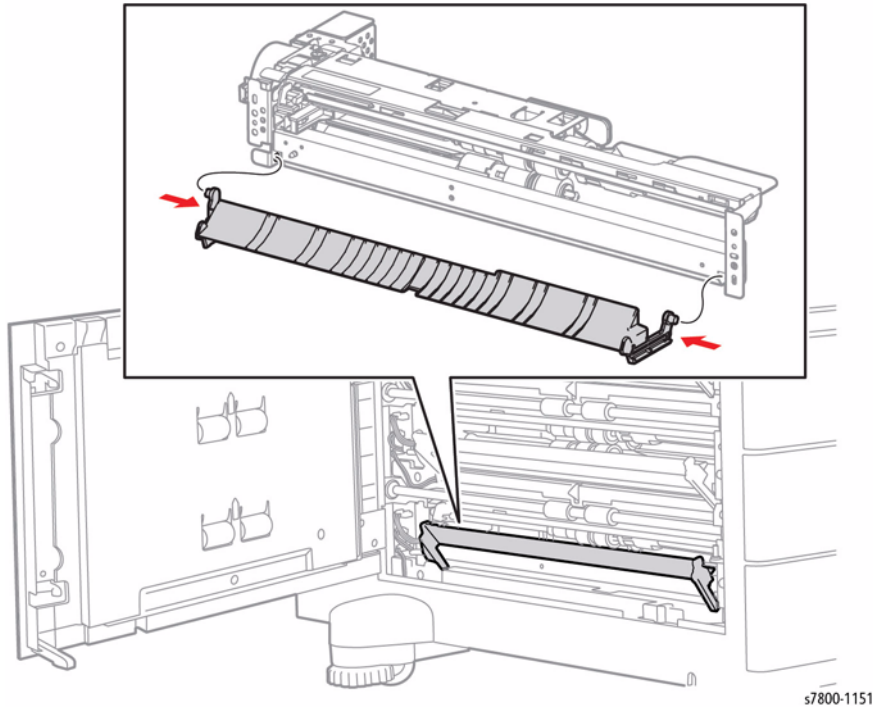


Figure 2 Removing the Feed Out Chute

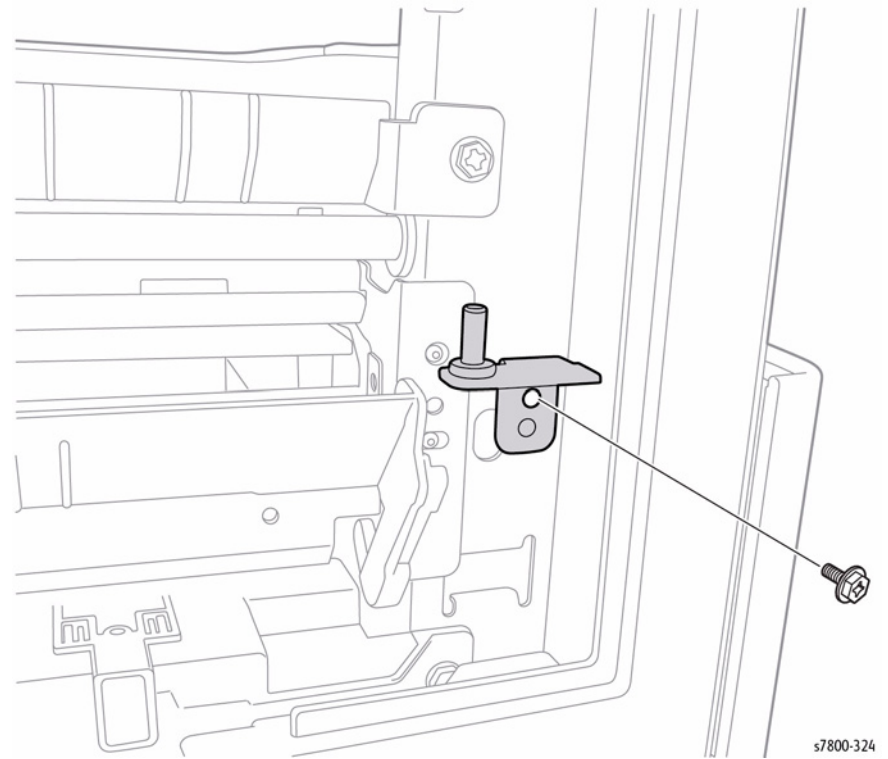


Figure 3 Removing the Bracket Assembly

6. Release the wiring harness from the Clamps (x2).
7. Disconnect the wiring harness connectors P/J668 and P/J673.

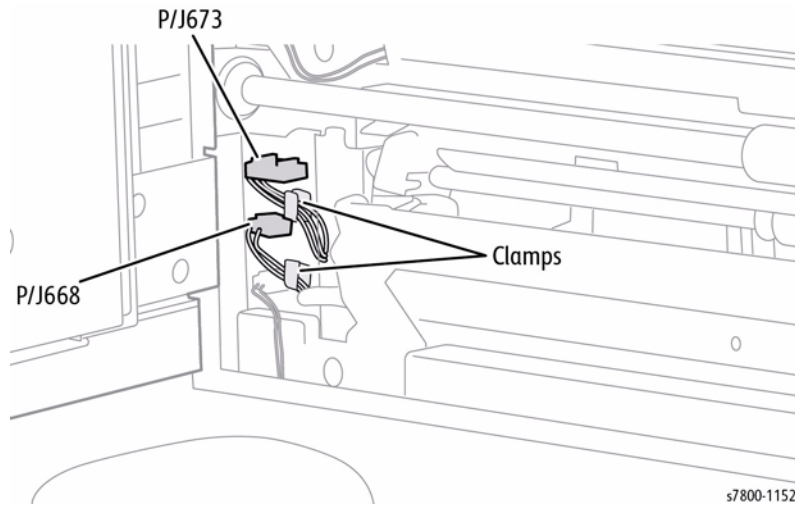


Figure 4 Releasing and disconnecting wiring harnesses

8. Remove 2 screws that secure the Tray 5 Feeder Assembly.
9. Remove the Tray 5 Feeder Assembly.

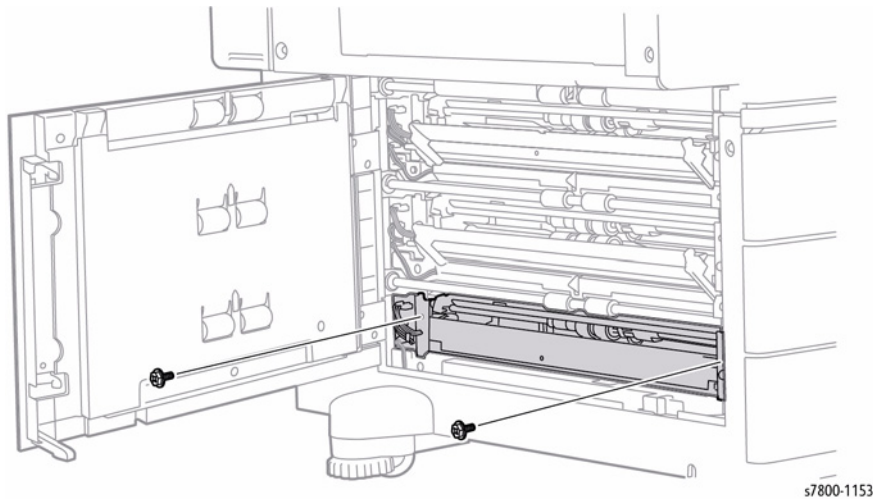


Figure 5 Removing the Tray 5 Feeder Assembly

REP 10.4 Tray 3/ 4/ 5 Paper Size Sensor

Parts List on PL 10.1 Item 8

Removal

1. Remove the Tray Assembly from the Tray Module (3T).
2. Disconnect the wiring harness connector (Tray 3 - P/J101, Tray 4 - P/J102, Tray 5 - P/J103) that is connected to the Paper Size Sensor.
3. Remove 1 screw (silver, 8mm) that secures the Paper Size Sensor to the Tray Module (3T).
4. Remove the Paper Size Sensor from the hooks.

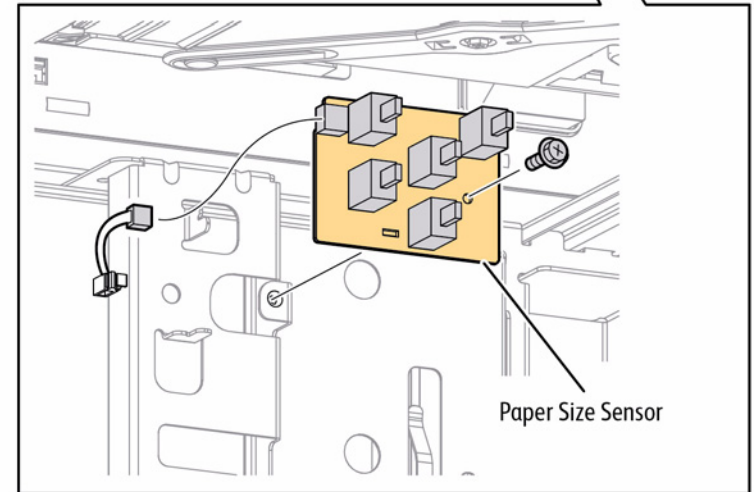
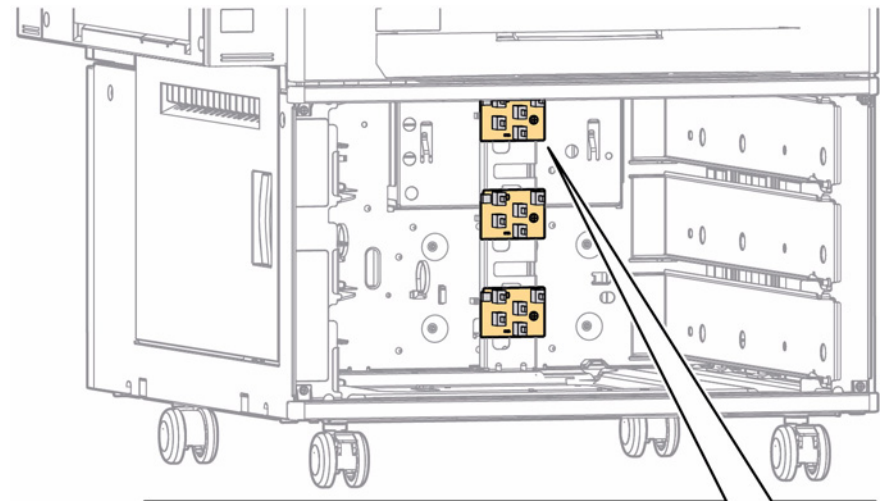


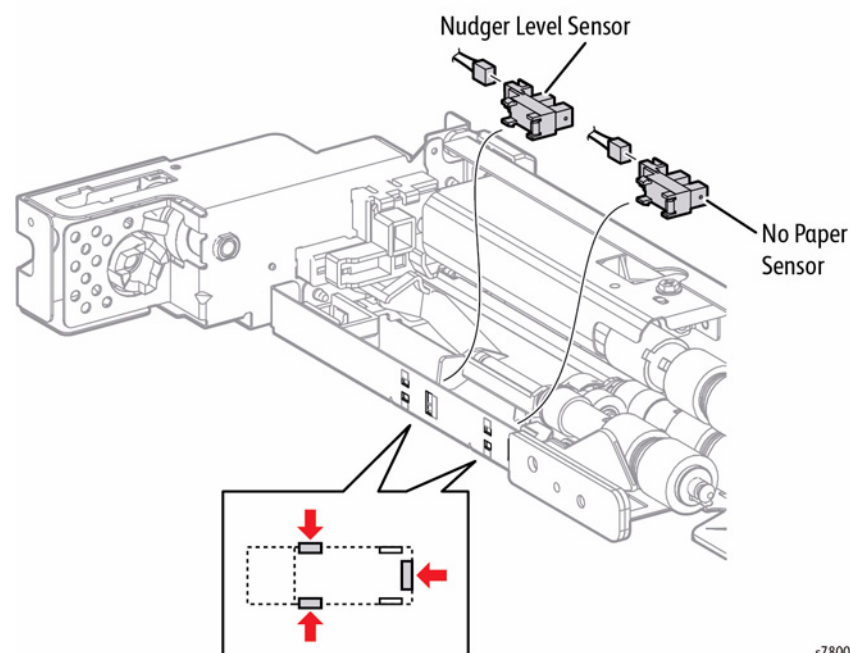
Figure 1 Removing the Tray 3/ 4/ 5 Paper Size Sensor

REP 10.5 Tray 3/ 4/ 5 Nudger Level Sensor/ No Paper Sensor

Parts List on [PL 10.3 Item 6](#)

Removal

1. Remove the Tray Assembly from the 1500-Sheet Feeder.
2. Remove the Feeder Assembly (Tray 3 - [REP 10.1](#), Tray 4 - [REP 10.2](#), Tray 5 - [REP 10.3](#)).
3. Release the 3 hooks that secure the Nudger Level Sensor to the Feeder Assembly and remove the Nudger Level Sensor.
4. Disconnect the wiring harness connector [P/J107](#) that is connected to the Nudger Level Sensor.
5. Release the 3 hooks that secure the No Paper Sensor to the Feeder Assembly and remove the No Paper Sensor.
6. Disconnect the wiring harness connector [P/J106](#) that is connected to the No Paper Sensor.



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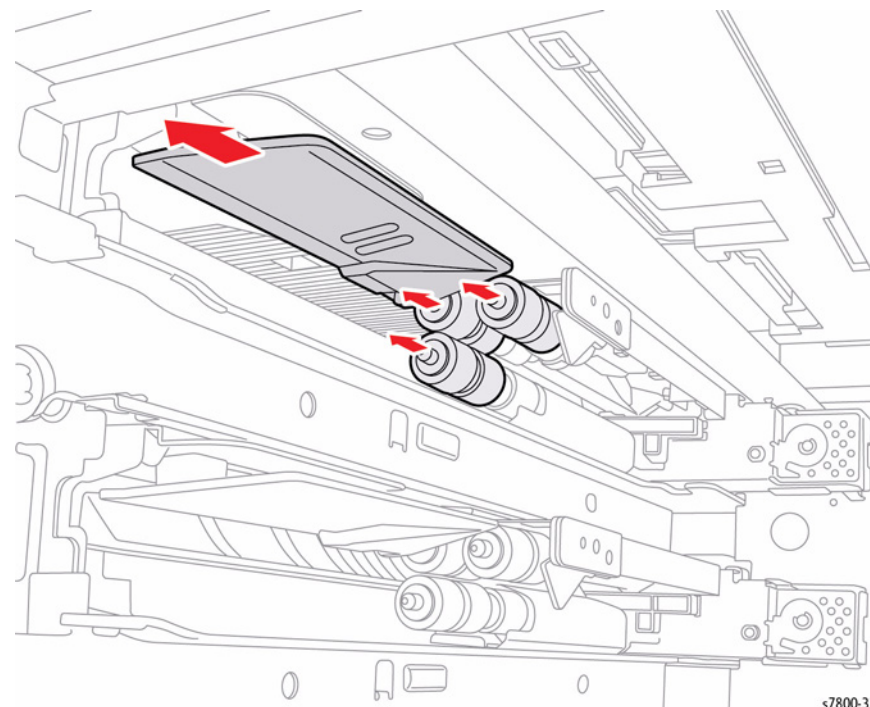
Figure 1 Removing the Tray 3/ 4/ 5 Nudger Level Sensor, Tray 3/ 4/ 5 No Paper Sensor

REP 10.6 Tray 3/ 4/ 5 Feed/ Retard/ Nudger Roll

Parts List on [PL 10.4 Item 26](#)

Removal

1. Remove Tray 3/4/5.
2. Slide the inner upper Chute (when seen from the Tray Assembly insertion opening) towards you until it stops.
3. Release the hook of the Feed/ Retard/ Nudger Roll, pull out the Roll from the Shaft and remove it.



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Figure 1 Removing the Tray 3/4/5 Feed/ Retard/ Nudger Roll

Replacement

Be sure to reassemble the Rollers as shown in [Figure 2](#). If you find it difficult to reassemble the parts at the base of each Roll, remove the Feeder Assembly to perform the reassembly (refer to Feeder Assembly (Tray 5 - [REP 10.3](#))).

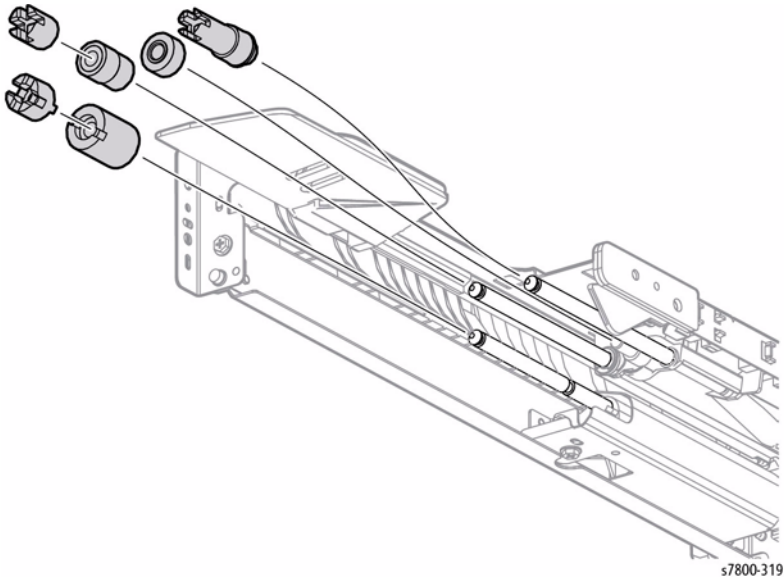


Figure 2 Installing Feed/ Retard/ Nudger Roll

REP 10.7 Tray 3/ 4/ 5 Clutch Assembly (25T)/ One-way Clutch/ Friction Clutch

Parts List on [PL 10.4 Item 14](#), [PL 10.4 Item 15](#), [PL 10.4 Item 19](#)

Removal

1. Remove the Tray Assembly from the 1500-Sheet Feeder.
2. Remove the Feed/ Retard/ Nudger Roll (Tray 3/4 - [REP 10.6](#)).
3. Pull off each Clutch to remove.

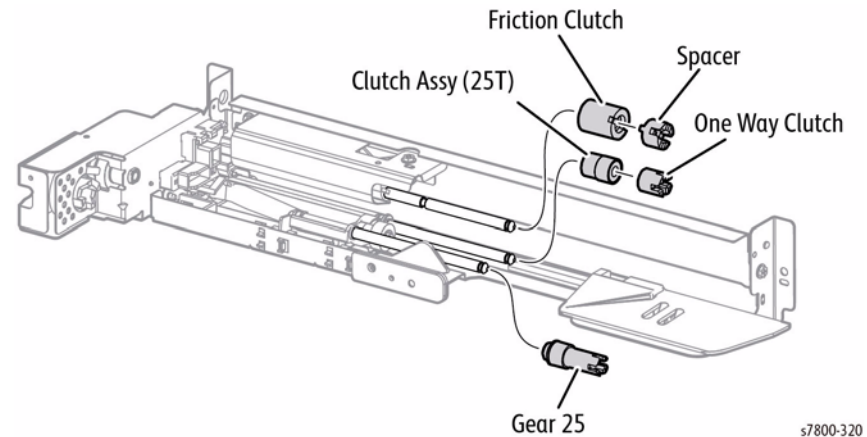


Figure 1 Removing the Tray 3/ 4/ 5 Clutch Assembly/ One-way Clutch/ Friction Clutch

REP 10.8 Tray Module PWB

Parts List on [PL 10.9 Item 1](#)

Removal

1. Remove 5 screws that secure the Rear Cover Assembly to the Tray Module (3T).
2. Remove the Rear Cover Assembly.

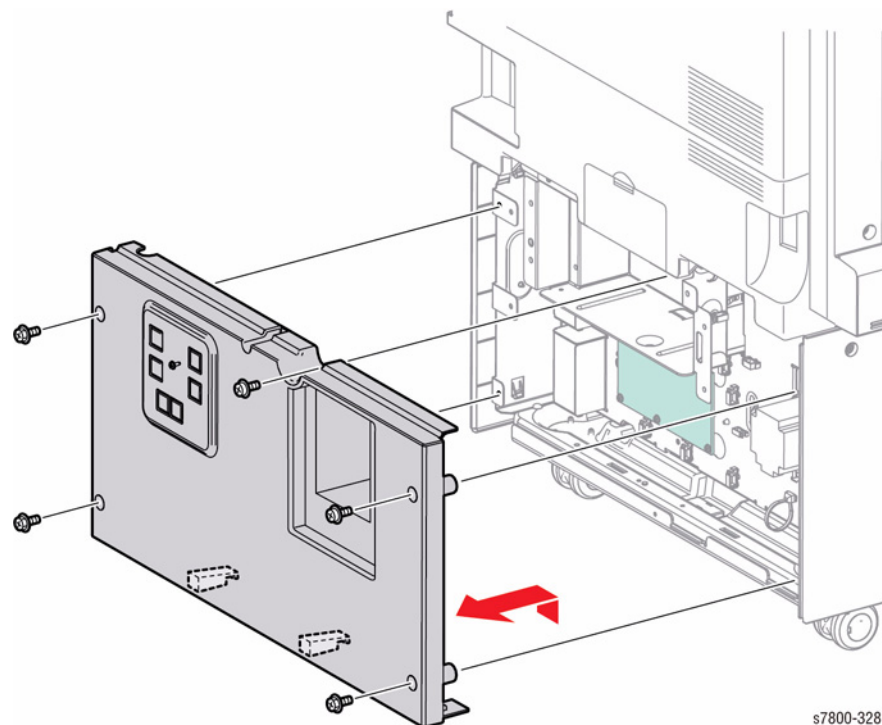


Figure 1 Removing the Rear Cover Assembly

s7800-328

3. Disconnect 8 wiring harness connectors [P/J541](#), [P/J542](#), [P/J545](#), [P/J548](#), [P/549](#), [P/J550](#), [P/J551](#), and [P/J552](#).
4. Remove 6 screws that secure the Tray Module PWB to the Tray Module (3T).
5. Remove the Tray Module PWB.

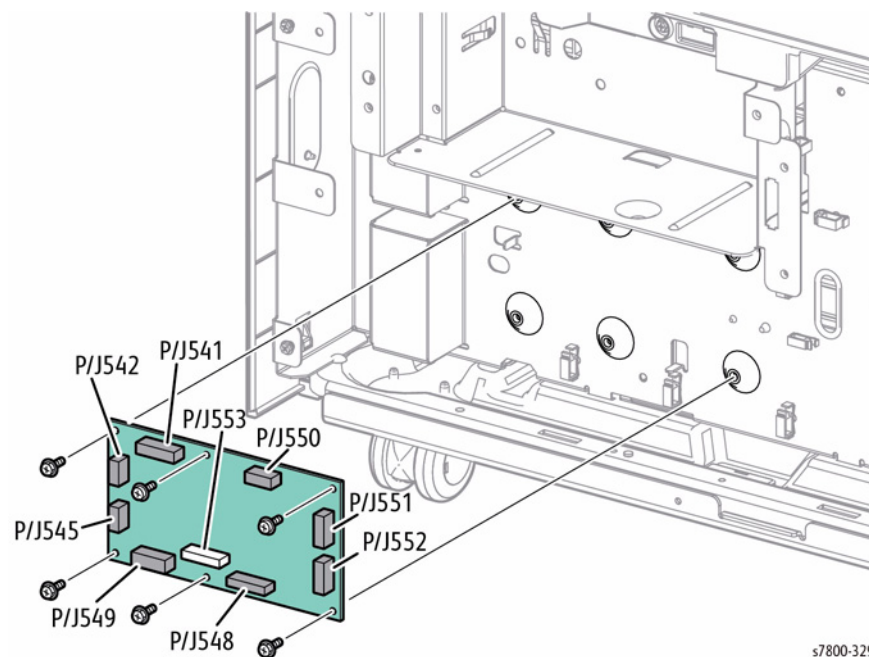


Figure 2 Removing the Tray Module PWB

s7800-329

REP 10.9 Gear (34T)/ (39T)

Parts List on [PL 10.9 Item 2](#), [PL 10.9 Item 3](#)

Removal

1. Remove 5 screws that secure the Rear Cover Assembly to the Tray Module (3T).
2. Remove the Rear Cover Assembly.

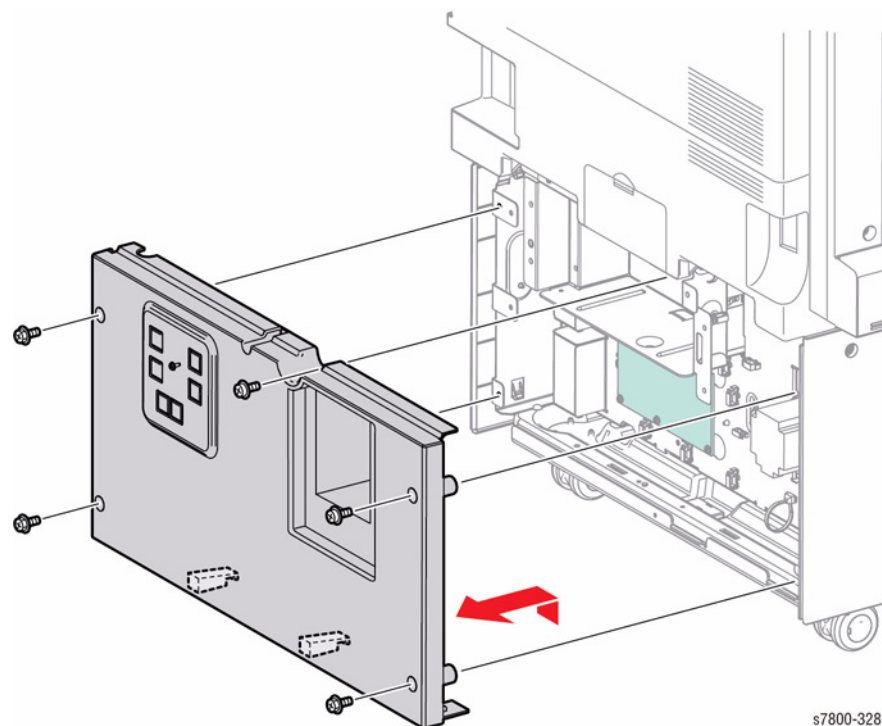


Figure 1 Removing the Rear Cover Assembly

3. Remove the Take Away Motor.
 - For Gear 34T, remove the Take Away Motor 2 ([REP 10.11](#)).
 - For Gear 39T, remove the Take Away Motor ([REP 10.10](#)).
4. Remove the Gear.
 - Gear 34T - Slide the Gear 34T out to remove.

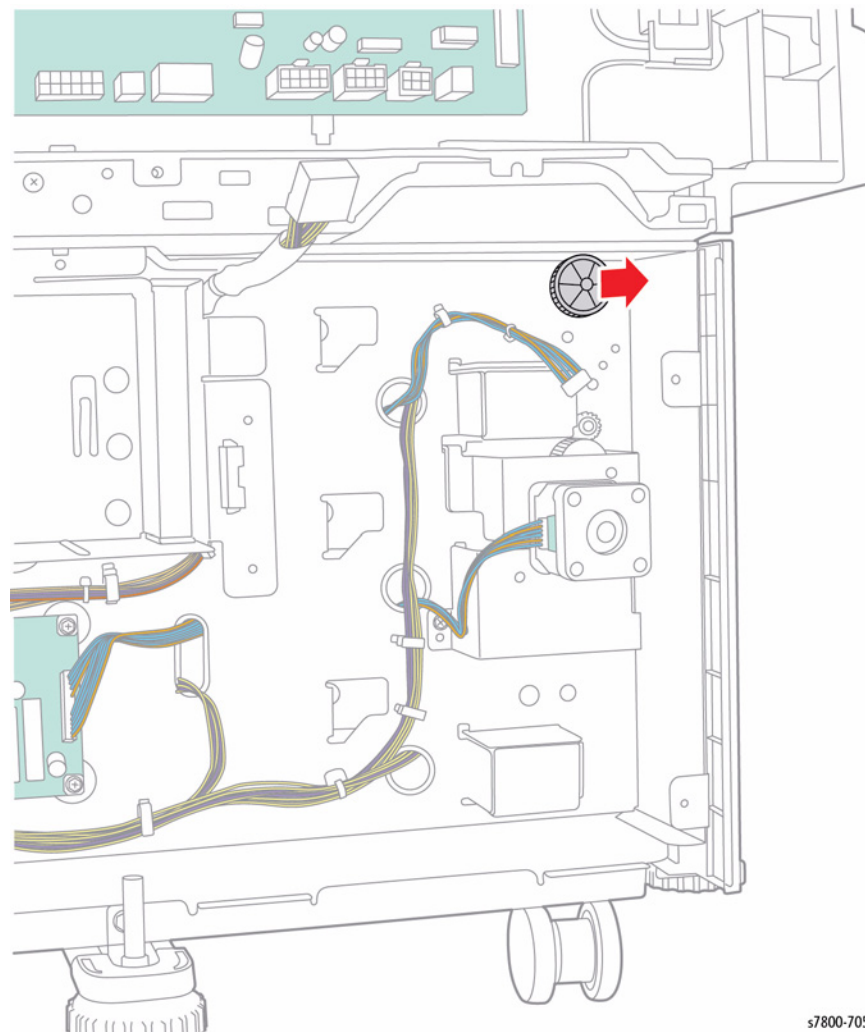


Figure 2 Removing Gear 34T

- Gear 39T - Slide the Gear 39T out to remove.

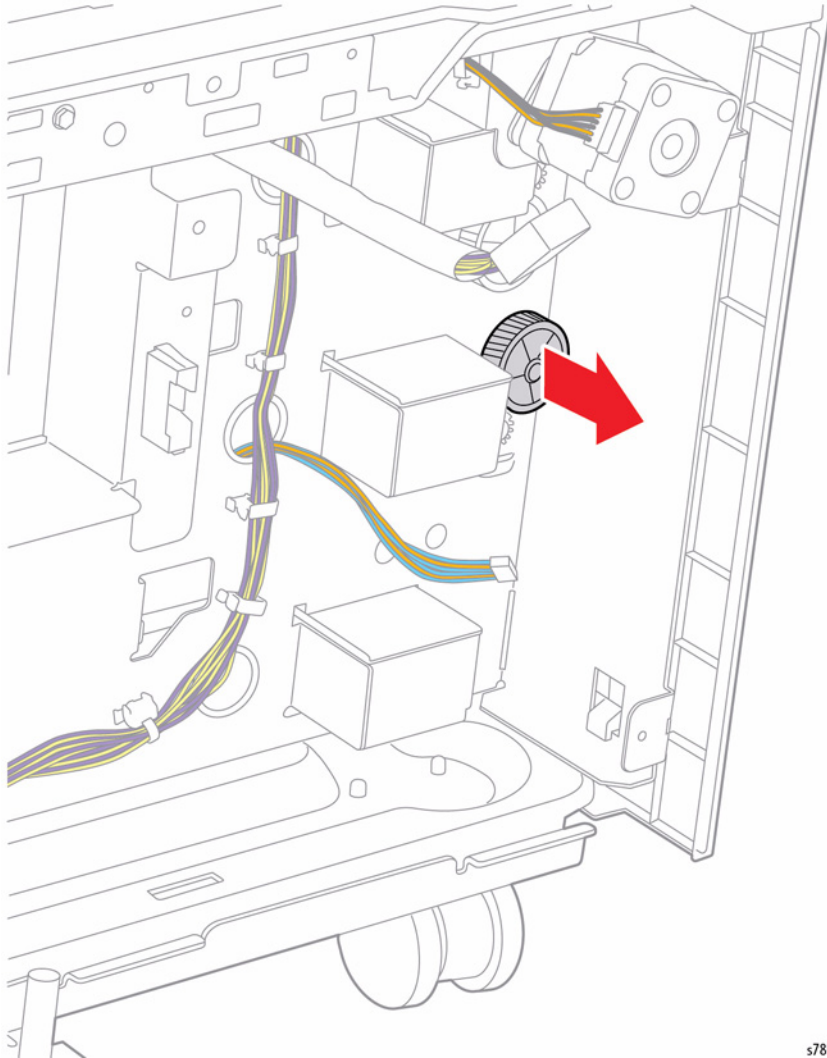


Figure 3 Removing Gear 39T

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REP 10.10 3TM Take Away Motor (bottom Motor)

Parts List on [PL 10.9 Item 4](#)

Removal

1. Remove 5 screws that secure the Rear Cover Assembly to the Tray Module (3T).
2. Remove the Rear Cover Assembly.

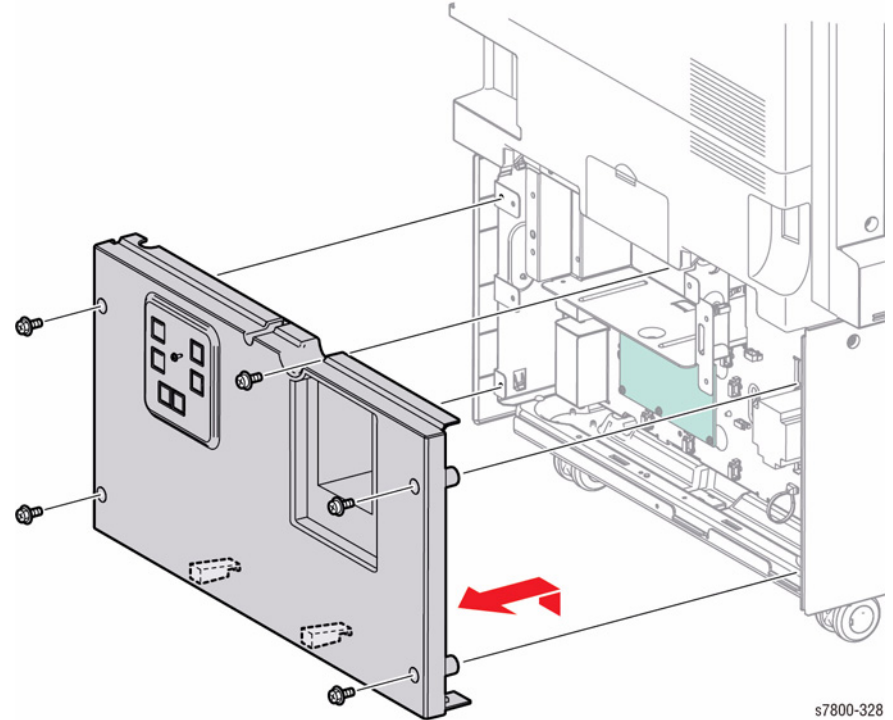


Figure 1 Removing the Rear Cover Assembly

s7800-328

3. Release the wiring harness from the clip.
4. Disconnect 1 wiring harness connector **P/J224** from the Motor.
5. Remove 4 screws that secure the Motor.
6. Remove the Take Away Motor.

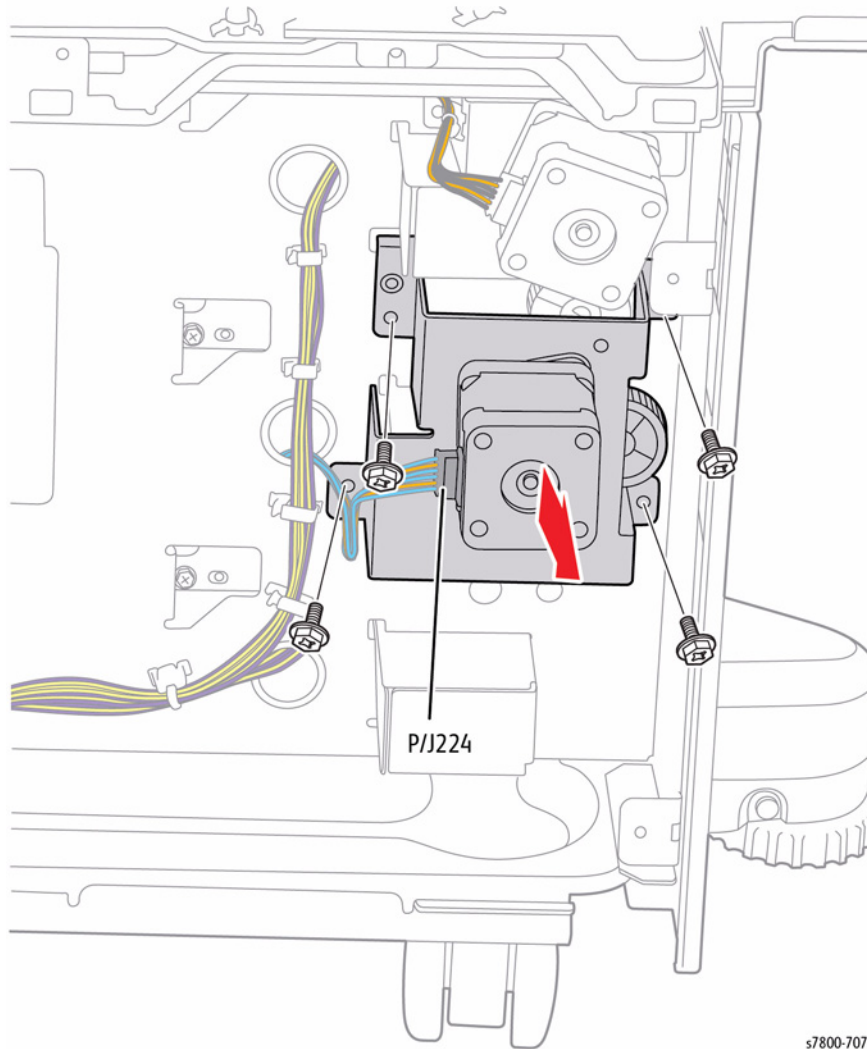


Figure 2 Removing the Take Away Motor

REP 10.11 TM Take Away Motor 2 (top Motor)

Parts List on **PL 10.9 Item 16**

Removal

1. Remove 5 screws that secure the Rear Cover Assembly to the Tray Module (3T).
2. Remove the Rear Cover Assembly.

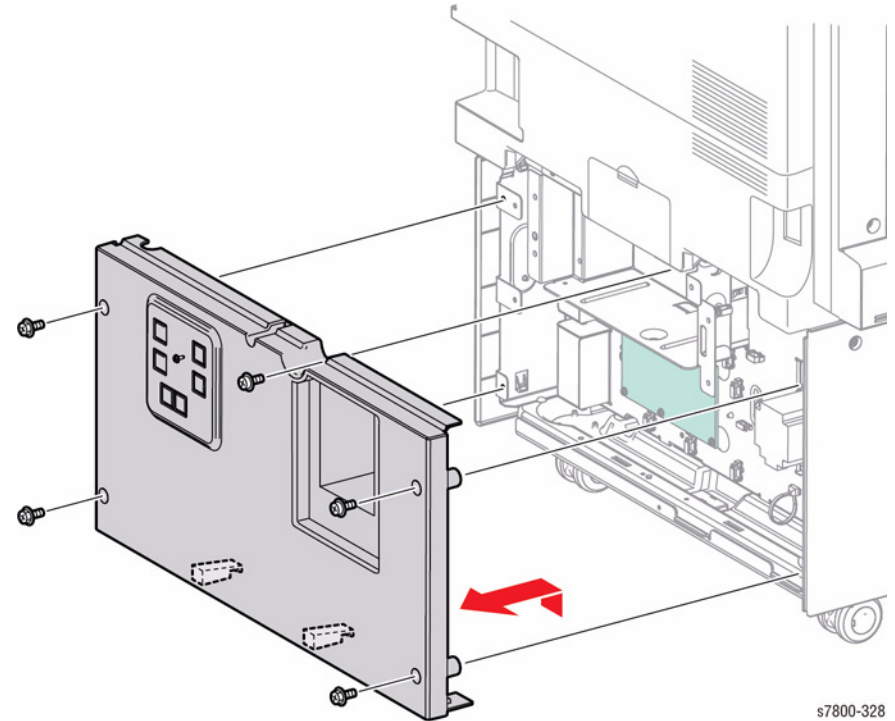


Figure 1 Removing the Rear Cover Assembly

3. Release the wiring harness from the clip.
4. Disconnect 1 wiring harness connector **P/J226** from the Motor.
5. Remove 2 screws that secure the Motor.
6. Remove the Take Away Motor 2.

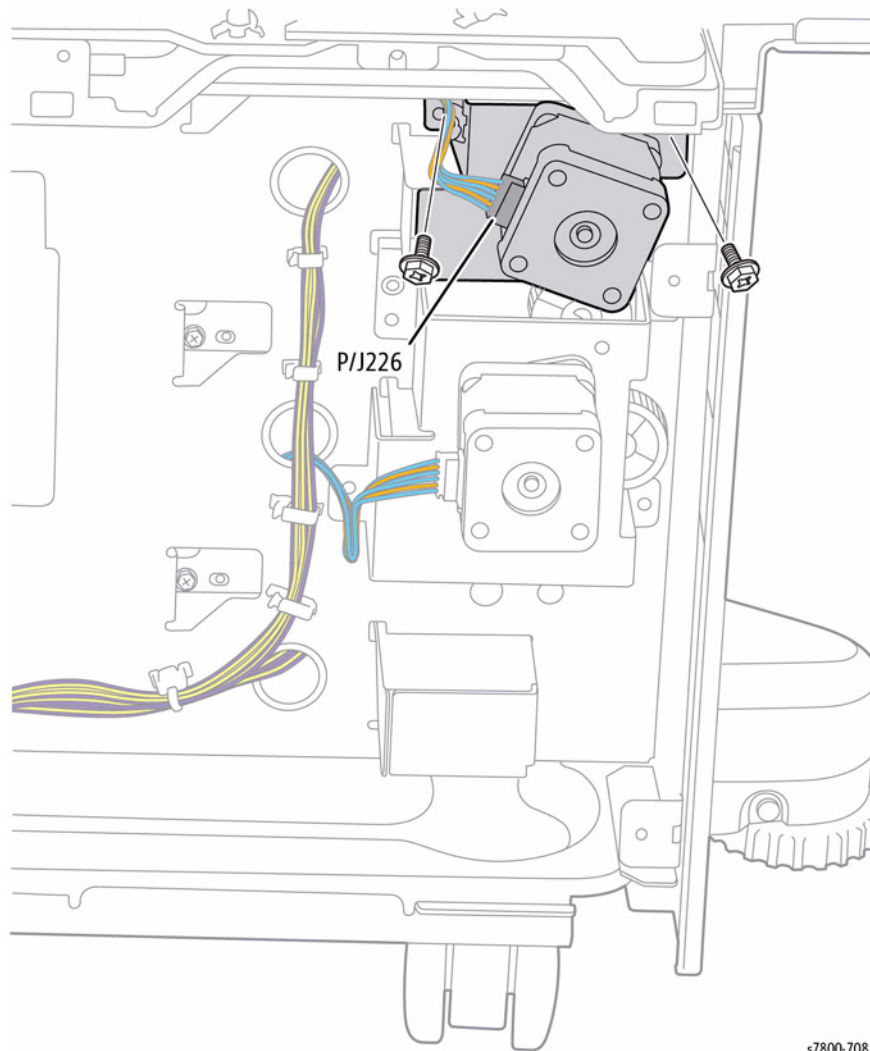


Figure 2 Removing the Take Away Motor 2

REP 10.12 3TM Left Hand Cover Switch

Parts List on **PL 10.12 Item 2**

Removal

1. Remove the Left Hand Cover Assembly (**REP 10.16**).
2. Remove 2 screws that secure the Left Cover to the Tray Module (3T).
3. Release the 4 hooks of the Left Cover and remove it from the Tray Module (3T).

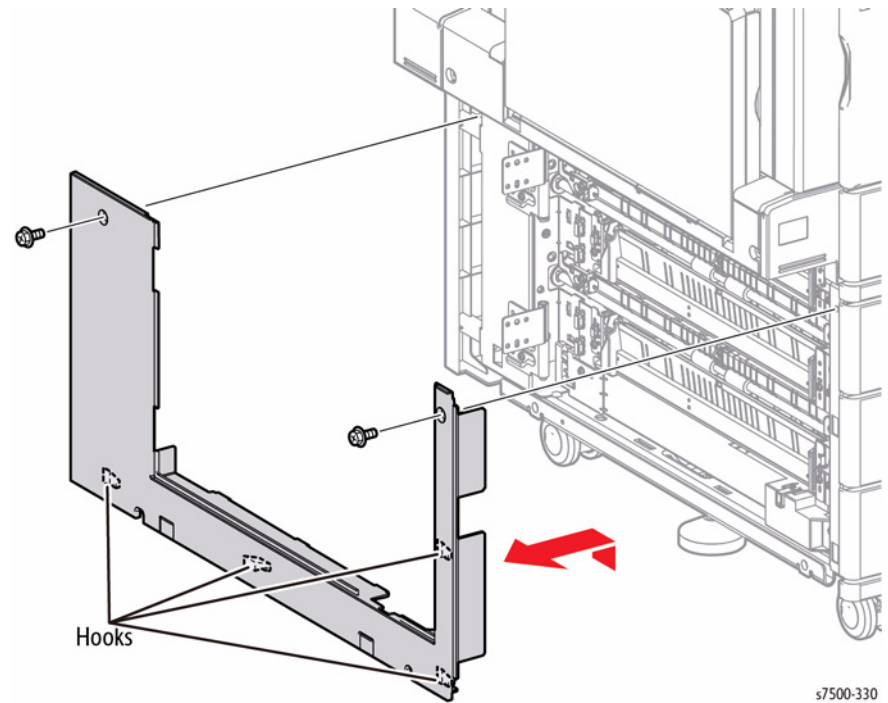


Figure 1 Removing the Left Cover

4. Disconnect the wiring harness connector **P/J668** that connects the Cover to the Tray Module (3T).
5. Remove 2 screws that secure the Cover to the Tray Module (3T) and remove the Cover.
6. Disconnect the wiring harness connector **P/J104** that is connected to the Tray Module L/H Cover Switch.
7. Release the 2 hooks that secure the Tray Module L/H Cover Switch to the Cover and remove the Tray Module Left Hand Cover Switch.

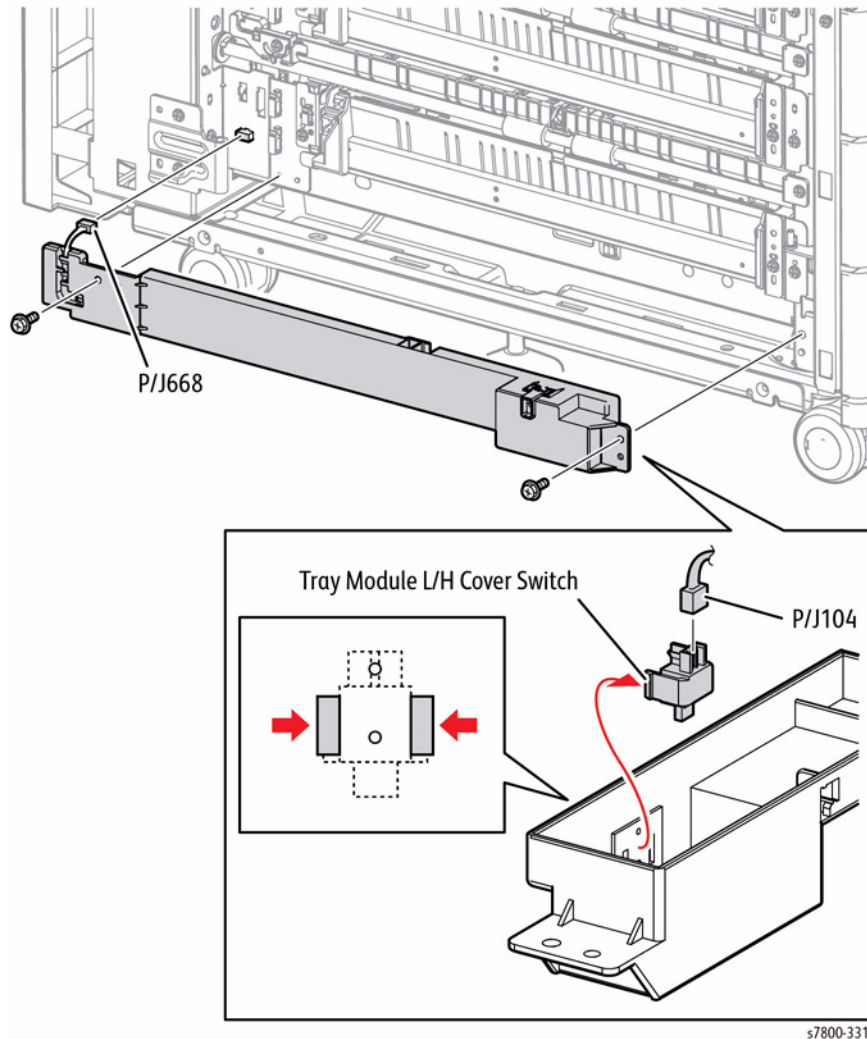


Figure 2 Removing the Tray Module Left Hand Cover Switch

REP 10.13 Chute Assembly/ Tray 4/5 Feed Out Sensor

Parts List on **PL 10.12 Item 4**, **PL 10.12 Item 6**

Removal

1. Disconnect the wiring harness connector **P/J672** that connects the Chute Assembly to the Tray Module (3T).
2. Remove 2 screws (silver, 8mm) that secure the Chute Assembly to the Tray Module (3T) and remove the Chute Assembly.
3. Disconnect the wiring harness connector **P/J112** that is connected to the Feed Out Sensor.
4. Release the 3 hooks that secure the Feed Out Sensor to the Chute Assembly and remove the Feed Out Sensor.
5. Unhook the spring that is attached to the Chute Assembly.
6. Open the 2 installation sections that secure the Actuator to the Chute and remove the Actuator.
7. Remove the Spring from the Actuator.

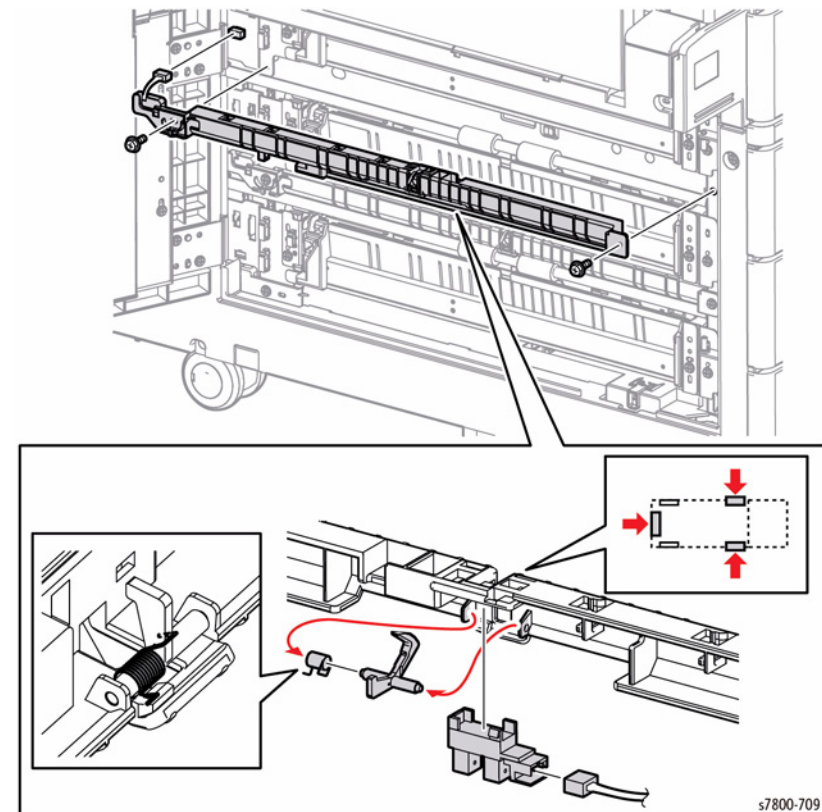


Figure 1 Removing the Chute Assembly/ Tray 4/5 Feed Out Sensor

REP 10.14 Tray 3 Feed Out Sensor

Parts List on [PL 10.12 Item 11](#)

Removal

1. Remove the Take Away Roll 4/5 ([REP 10.15](#)).
2. Disconnect the wiring harness connector [P/J108](#) that is connected to the Feed Out Sensor.
3. Remove 1 screw that secures the Sensor Guide to the Tray Module (3T) and remove the Sensor Guide.
4. Release the 4 hooks that secure the Feed Out Sensor to the Sensor Guide and remove the Feed Out Sensor.

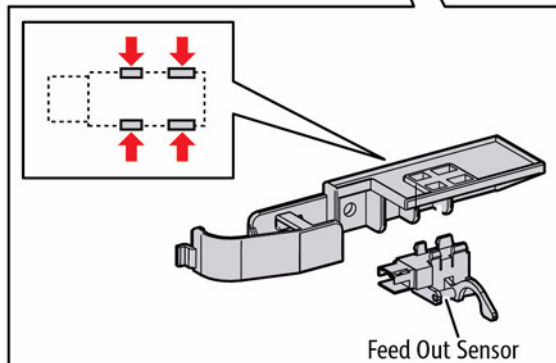
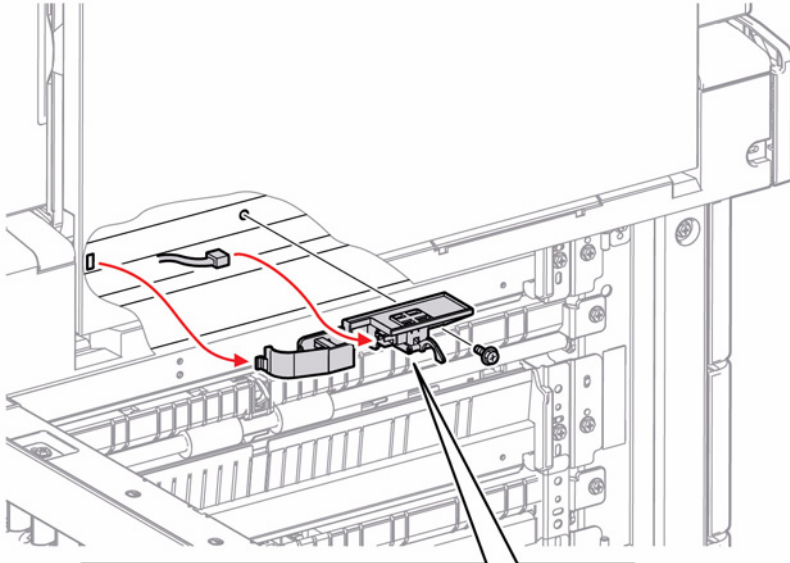


Figure 1 Removing the Tray 3 Feed Out Sensor

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REP 10.15 Take Away Roller 3/ 4/ 5

Parts List on [PL 10.12 Item 13](#)

Removal

1. Open the Left Hand Cover Assembly.

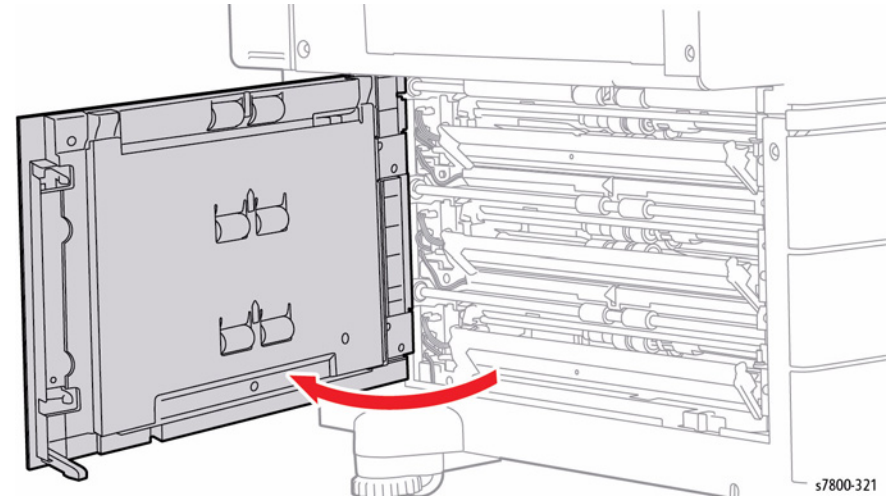


Figure 1 Opening the Left Hand Cover Assembly

2. Remove 2 screws that secure the Chute to the Tray Module (3T) and remove the Chute.
3. Remove the KL Clip that secures the T/A Roll Rear Bearing in place.

NOTE: Be careful not to drop the Bearings when performing the following step.

4. Slide the Take Away Roll to the rear to remove the front Bearing from the hole, and then tilt the front side of the Take Away Roll towards you to remove Roll.

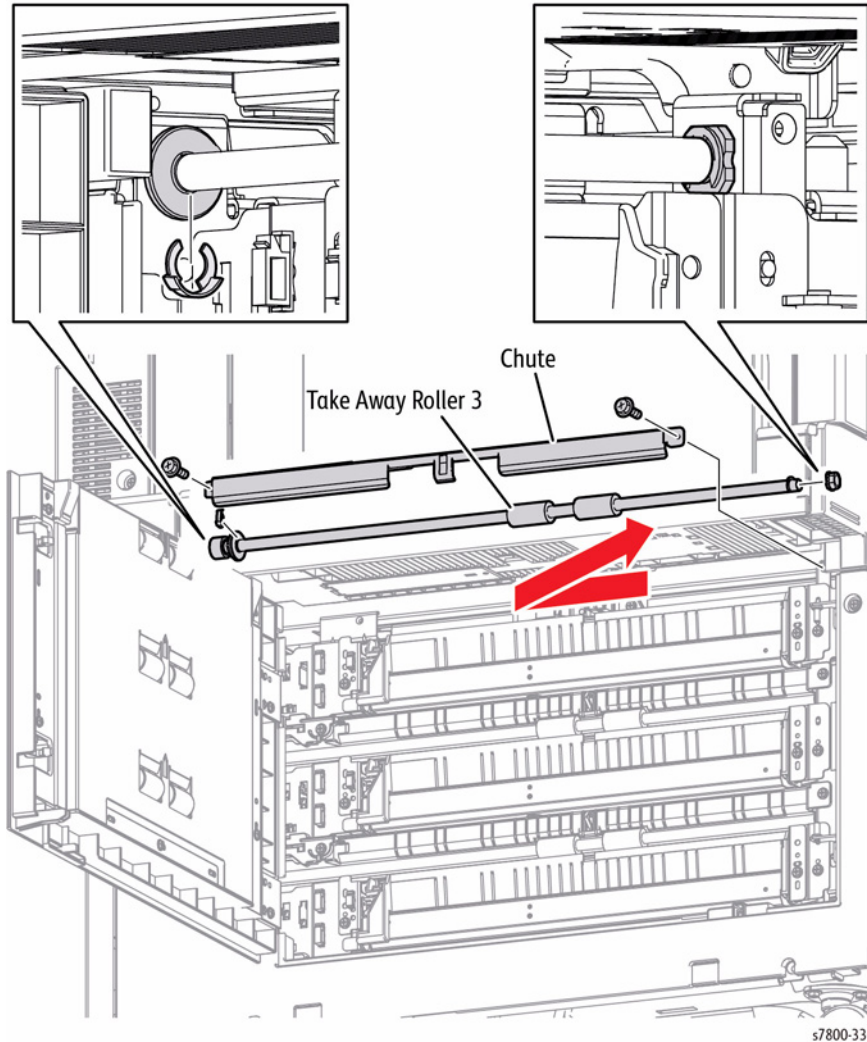


Figure 2 Removing the Take Away Roll 3/ 4/ 5

REP 10.16 Left Hand Cover Assembly

Parts List on [PL 10.13 Item 1](#)

Removal

1. Open the Left Hand Cover Assembly.

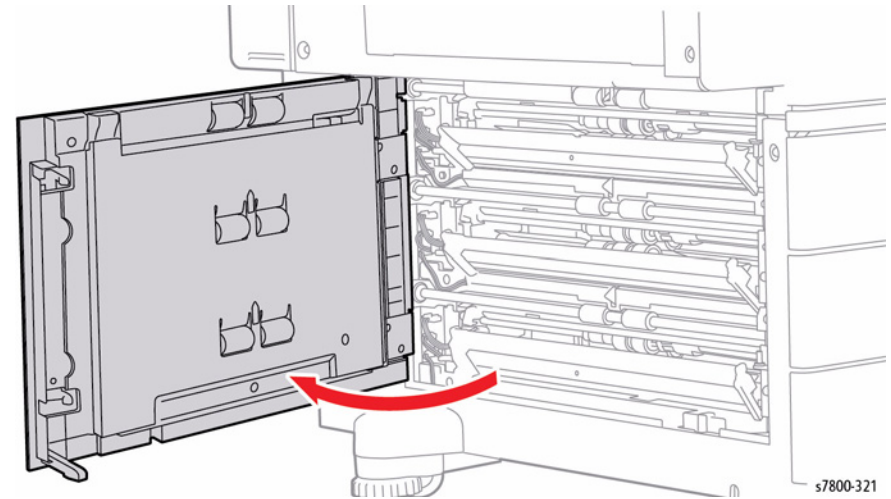


Figure 1 Opening the Left Hand Cover Assembly

2. Remove 4 screws that secure the Left Hand Cover Assembly to the Bracket Assembly (x2 locations).
3. Remove the Left Hand Cover Assembly.

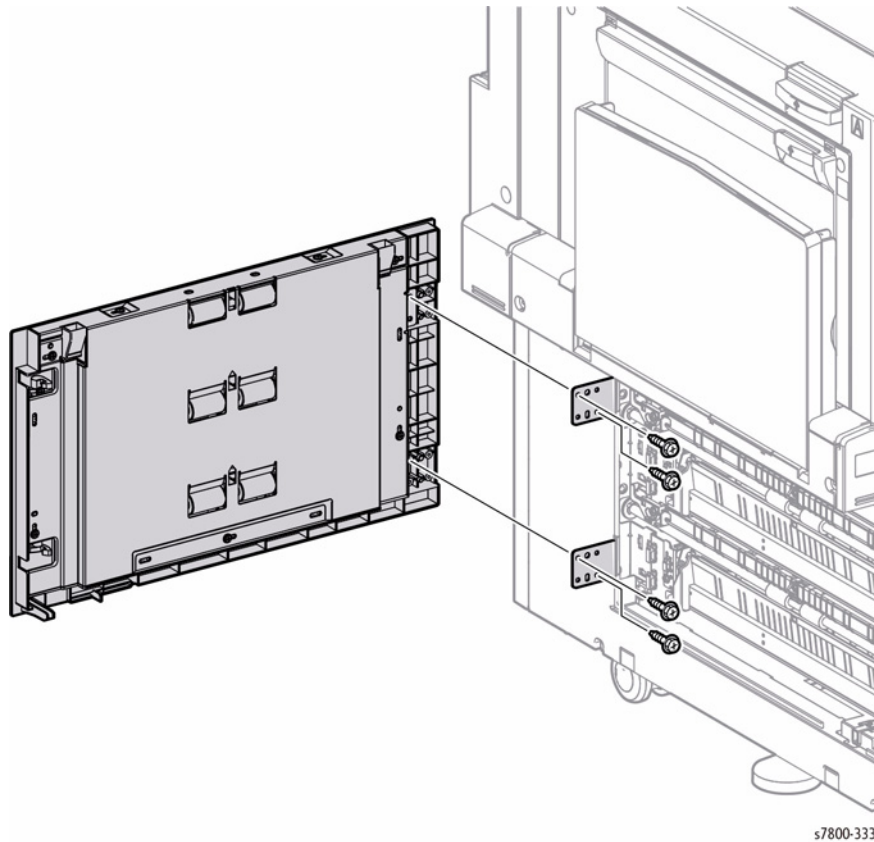


Figure 2 Removing the Left Hand Cover Assembly

REP 10.17 Tray Module (3T) (1500-Sheet Feeder)

Parts List on [PL 10.1](#)

Removal

WARNING

The printer is heavy and should be lifted by three people. Use safety lifting and handling techniques when moving the printer (refer to [Moving the Printer](#) in the Introduction Chapter.)

1. Remove the Tray Assembly from the printer.
2. Remove the 1500-Sheet Feeder Bracket Cover.

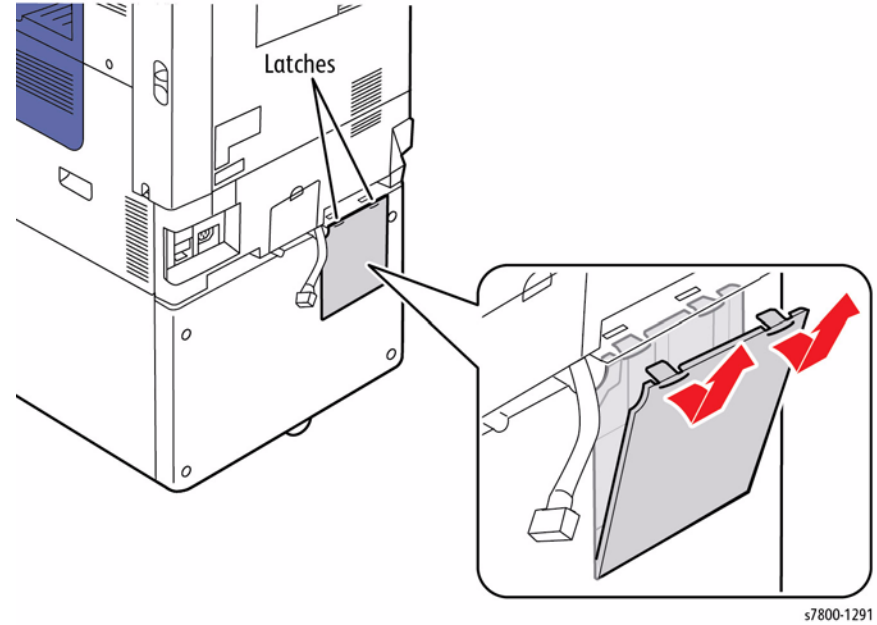


Figure 1 Removing the Bracket Cover

3. Remove 1 screw that secures the Bracket.
4. Slightly lift the Bracket and remove it from the 1500-Sheet Feeder.

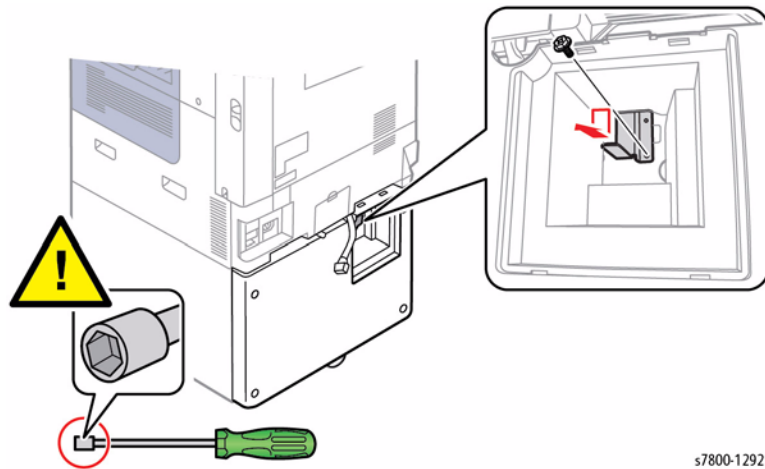


Figure 2 Removing the Bracket

5. Remove the harness Cover.
6. Release the clamp and remove the harness.
7. Disconnect the wiring harness connector J592 that connects the Tray Module (3T) to the printer.

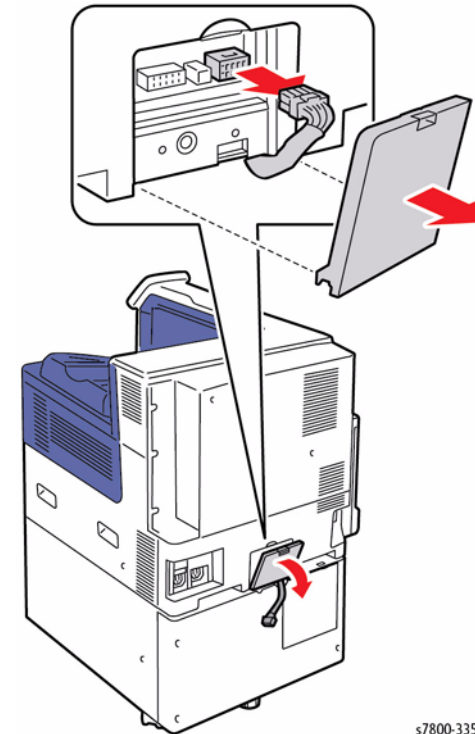


Figure 3 Disconnecting the wiring harness connector

8. Remove the 2 Docking screws at the front that connect the Tray Module (3T) to the printer,
9. Lift the printer and remove the Tray Module (3T).

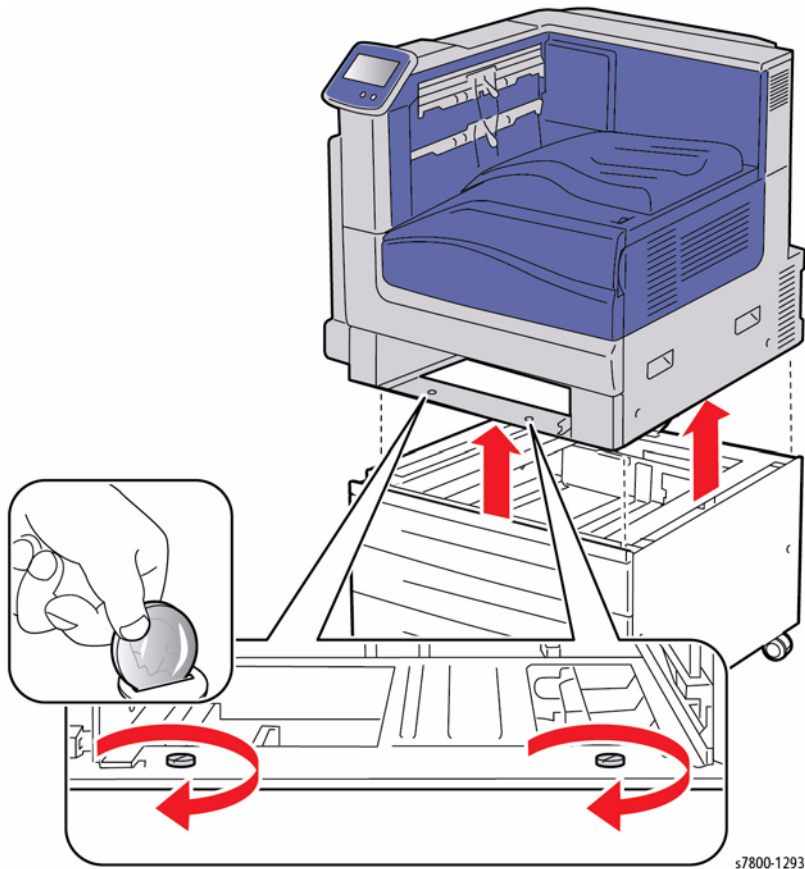


Figure 4 Removing the Screws and Tray Module (3T)

s7800-1293

REP 11.1 Tray 5 Assembly

Parts List on [PL 11.1 Item 1](#)

Removal

1. Pull out Tray 5.
2. Remove paper from Tray 5.
3. Remove 1 screw that secures the Bracket.
4. Remove the Stopper.

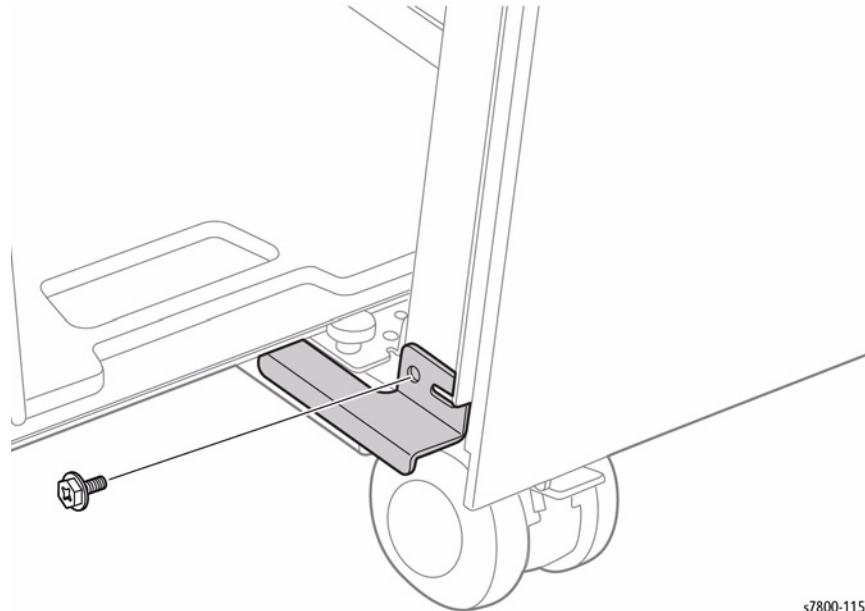


Figure 1 Removing the Stopper

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5. Remove 2 screws that secure the Tray 5 Transport Assembly.
6. Store the Tray 5 Transport Assembly.
7. Remove Tray 5 Assembly.

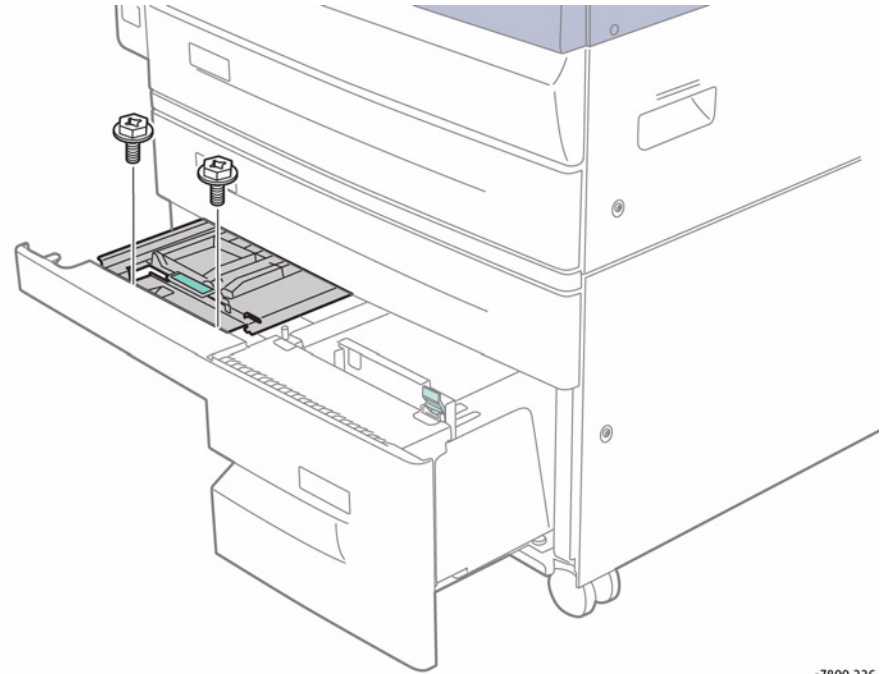


Figure 2 Removing Tray 5 Assembly

s7800-336

REP 11.2 Tray 4 Assembly

Parts List on [PL 11.1 Item 15](#)

Removal

1. Pull out Tray 4.
2. Remove paper from Tray 4.
3. Remove 1 screw that secures the Bracket.
4. Remove the Stopper.
5. Remove Tray 4 Assembly.

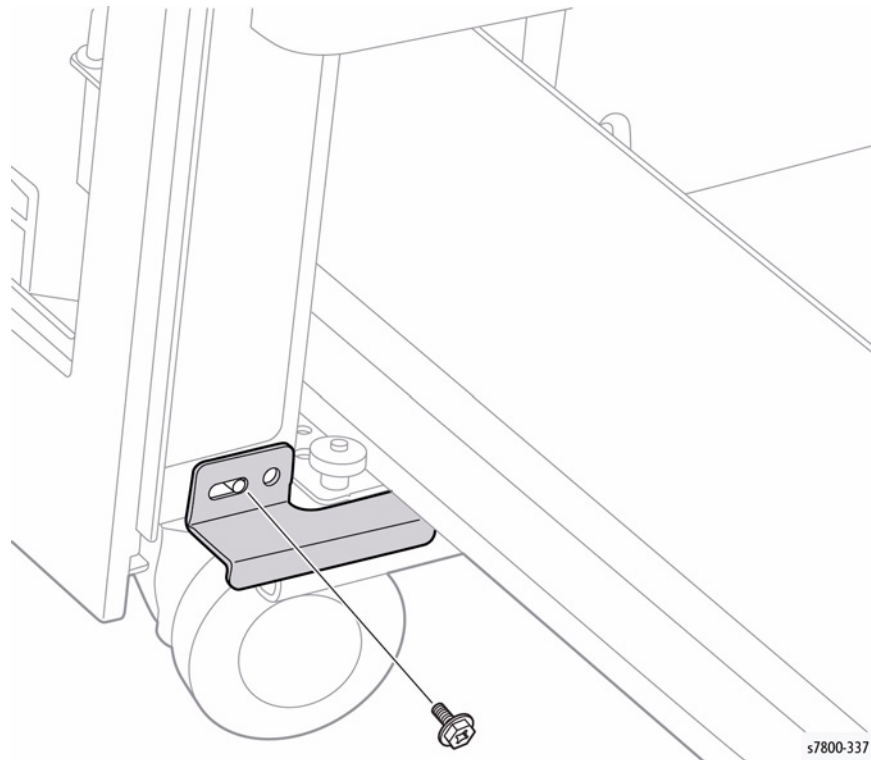


Figure 1 Removing Tray 4 Assembly

REP 11.3 Tray 5 Feeder Assembly

Parts List on [PL 11.5 Item 1](#)

Removal

1. Remove Tray 2 and Tray 3.
2. Disconnect the wiring harness connectors [J675](#) and [J676](#).



Figure 1 Disconnecting wiring harness connectors

3. Pull out Tray 4/5.
4. Remove 1 screw that secures the Stud Bracket.
5. Remove the Stud Bracket.

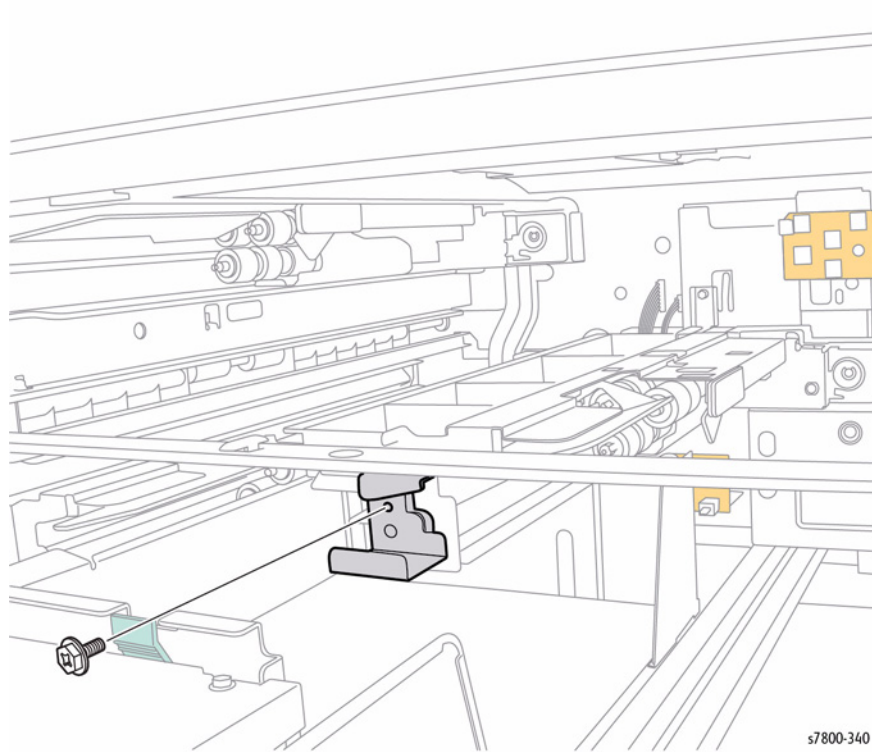


Figure 2 Removing the Stud Bracket

6. Remove 2 screws that secure the Tray 5 Feeder Assembly.
7. Lift the Lower Chute in the direction of the arrow as shown in Figure 3.
8. Move the Tray 5 Feeder Assembly in the direction of the arrow as shown in Figure 3 to remove.

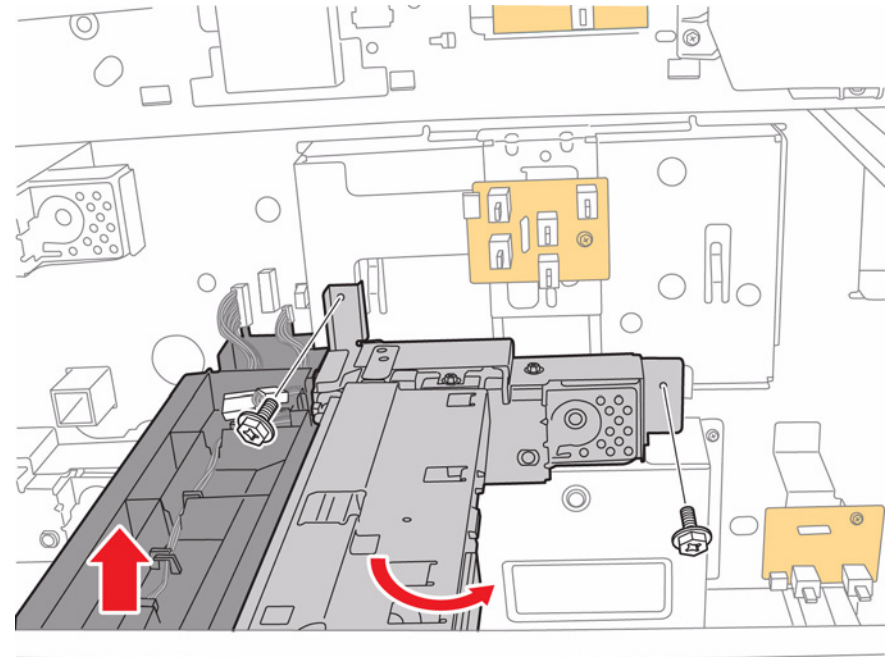


Figure 3 Removing screws

9. Remove the wiring harnesses (x2) from the hooks (x2).
10. Disconnect the wiring harness connectors P/J663 and P/J673.

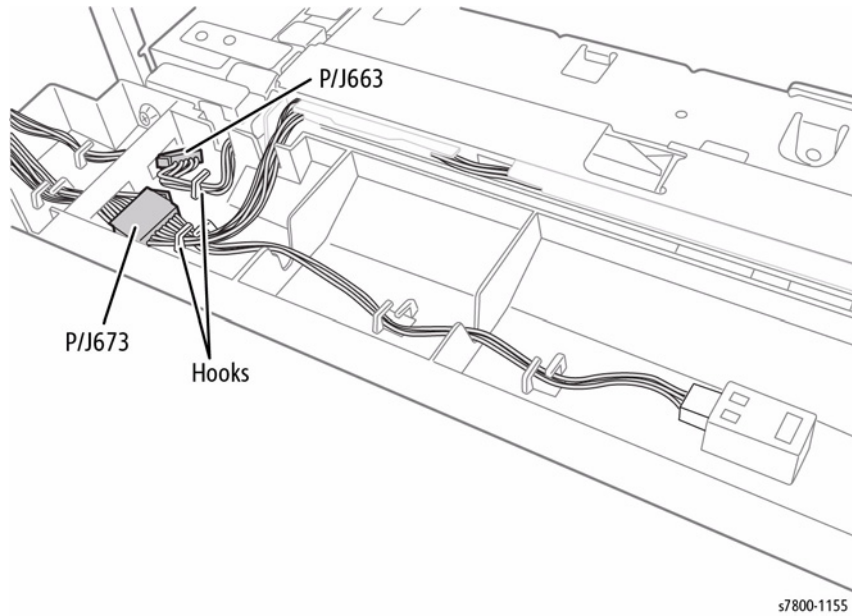


Figure 4 Releasing and disconnecting wiring harnesses

11. Remove 2 screws that secure the Upper Chute.
12. Remove the Upper Chute.

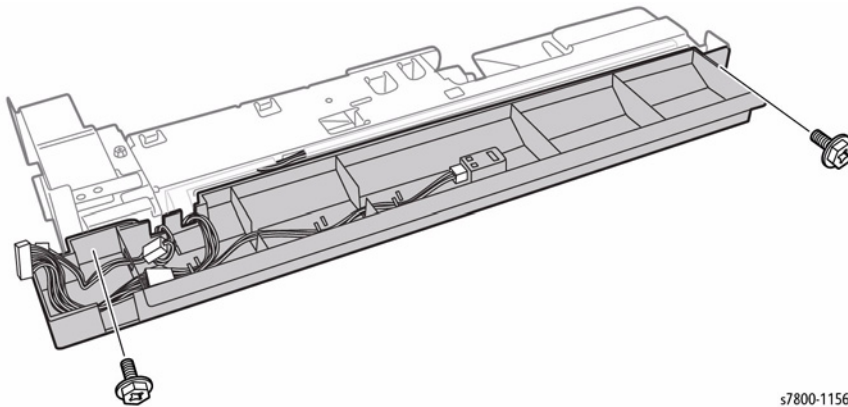


Figure 5 Removing the Upper Chute

13. Remove 2 screws that secure the Lower Chute.
14. Remove the Lower Chute.

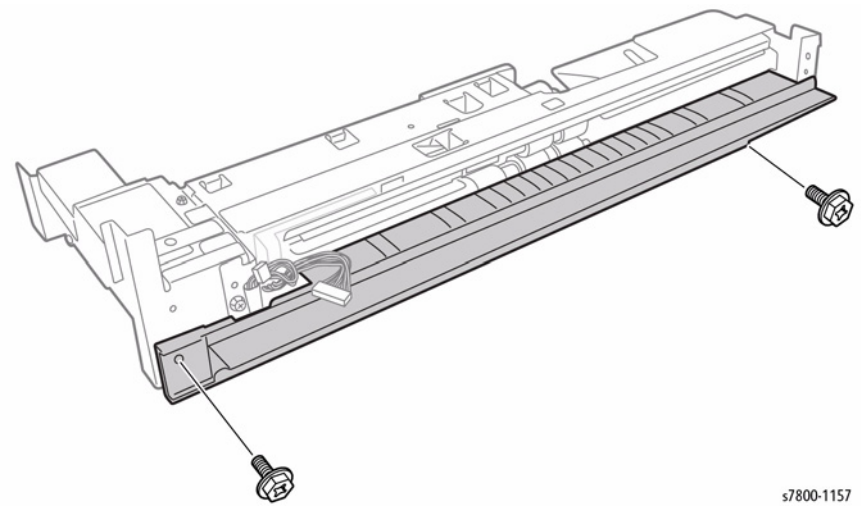


Figure 6 Removing the Lower Chute

15. Remove 4 screws that secure the Brackets.
16. Remove the Brackets.

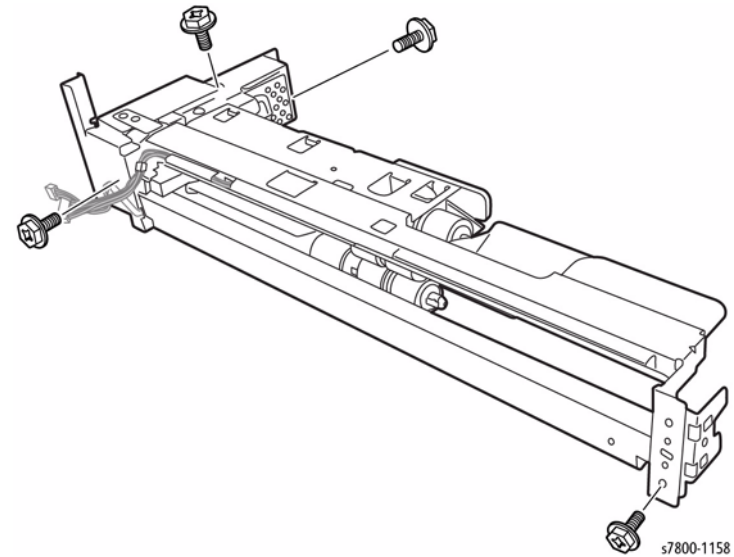


Figure 7 Removing the Brackets

REP 11.4 Tray 5 Transport Assembly

Parts List on [PL 11.5 Item 11](#)

Removal

1. Pull out Tray 5.
2. Remove 2 screws that secure the Tray 5 Transport Assembly.
3. Remove the Tray 5 Transport Assembly.

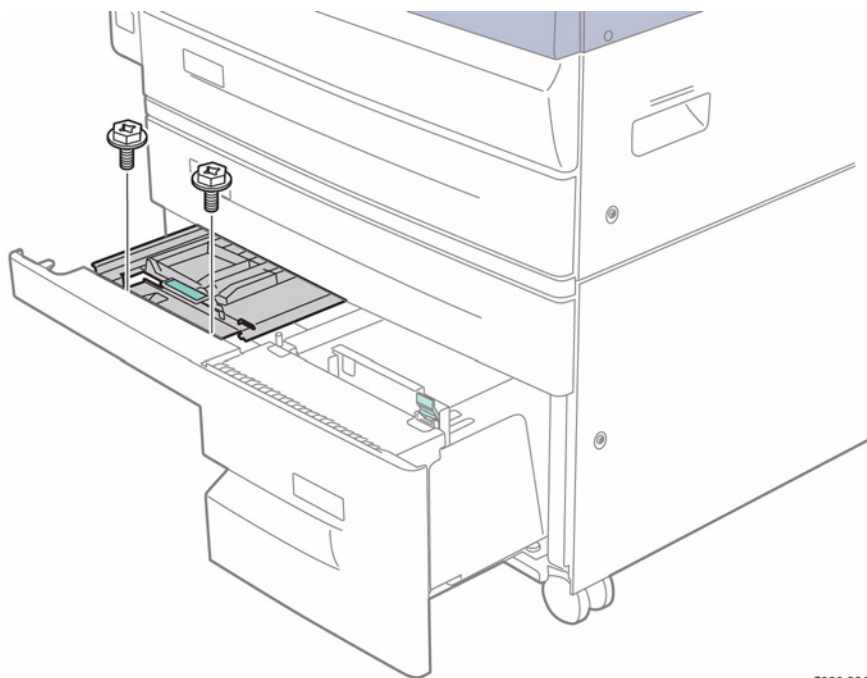


Figure 1 Removing Tray 5 Transport Assembly

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REP 11.5 Tray 3 Feeder Assembly

Parts List on [PL 11.6 Item 10](#)

Removal

1. Pull out Tray 3
2. Open the Left Hand Cover Assembly.

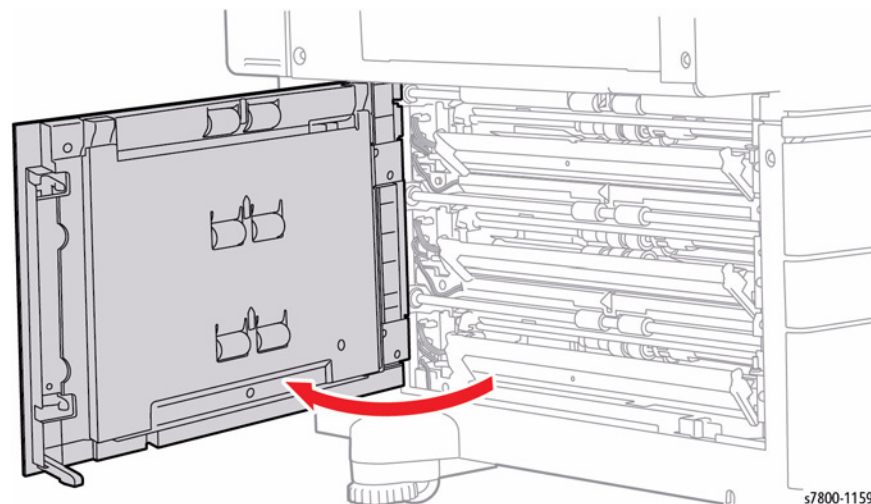


Figure 1 Opening the Left Hand Cover Assembly

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3. Remove the Feed Out Chute (PL 11.6 Item 14).

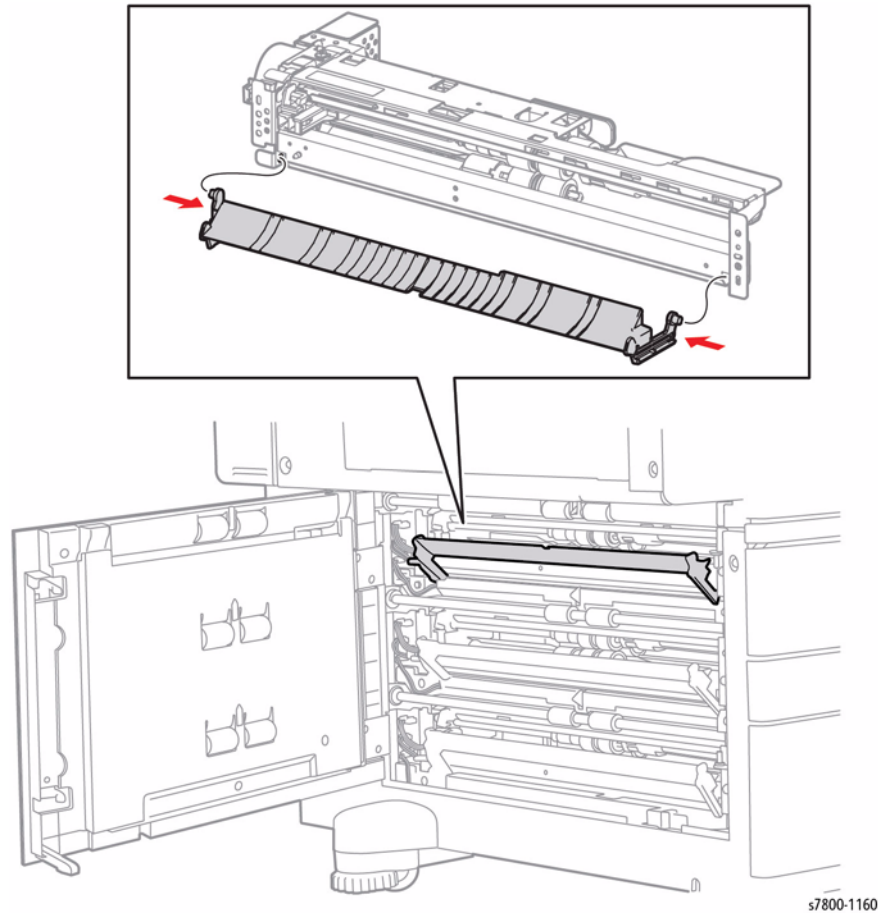


Figure 2 Removing the Feed Out Chute

4. Remove 1 screw that secures the Bracket.
5. Remove the Bracket.

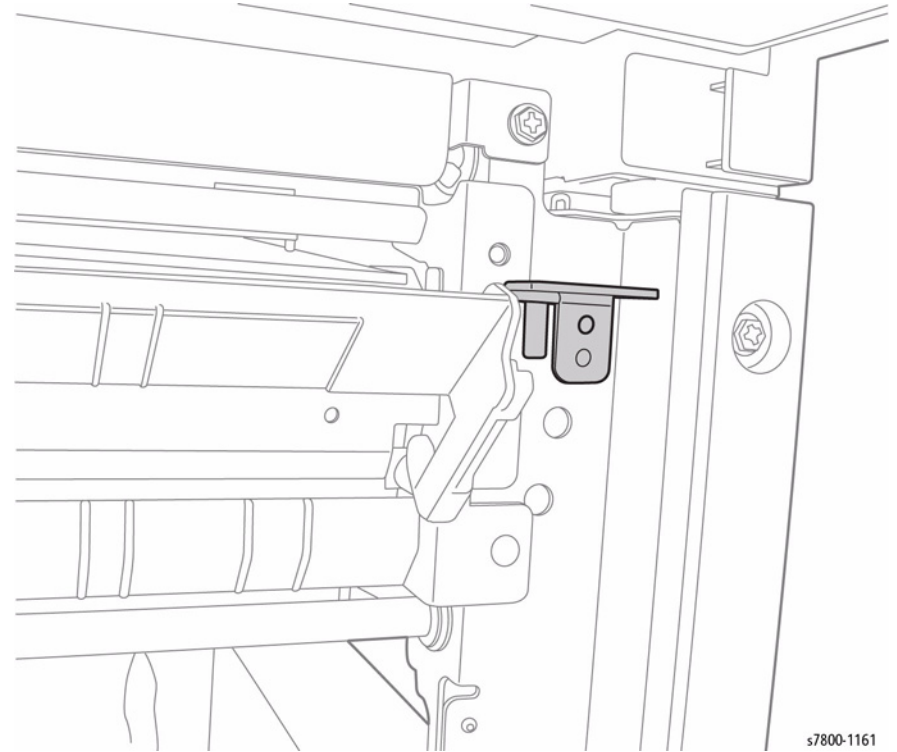


Figure 3 Removing the Bracket

6. Release the wiring harnesses (x2) from the Clamps (x2).
7. Disconnect the wiring harness connectors (x2) P/J661 and P/J669.

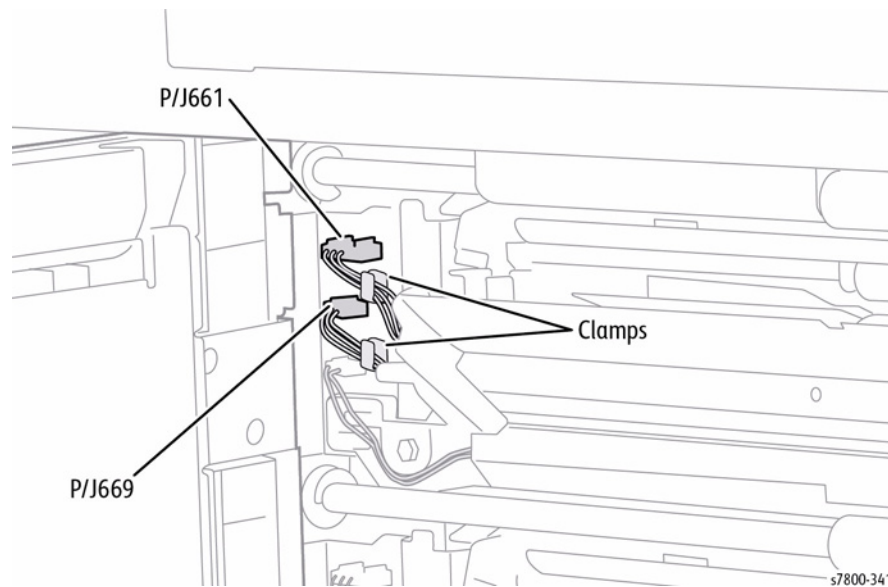


Figure 4 Releasing and disconnecting wiring harnesses

8. Remove 2 screws that secure the Tray 3 Feeder.
9. Remove the Tray 3 Feeder.

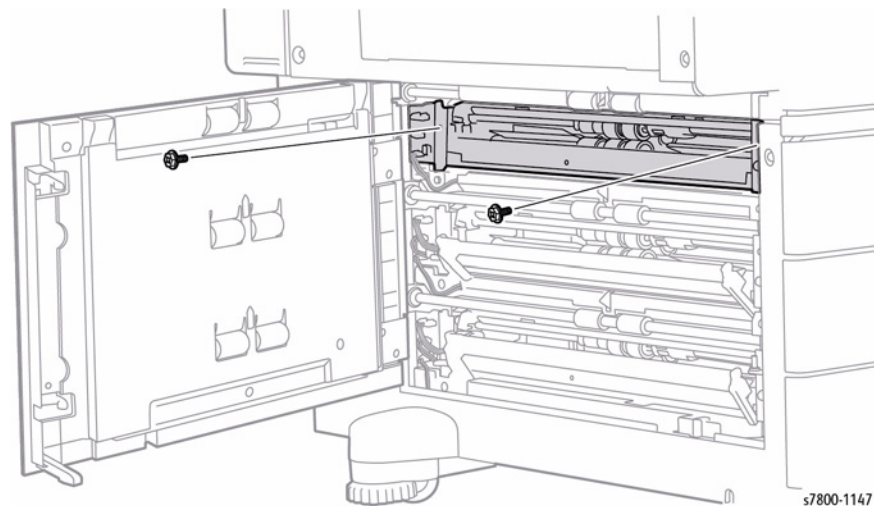


Figure 5 Removing the Tray 3 Feeder

REP 11.6 Tray 4 Feeder Assembly

Parts List on **PL 11.6 Item 13**

Removal

1. Remove Tray 3.
2. Pull out Tray 4 and Tray 5.
3. Open the Left Hand Cover Assembly.

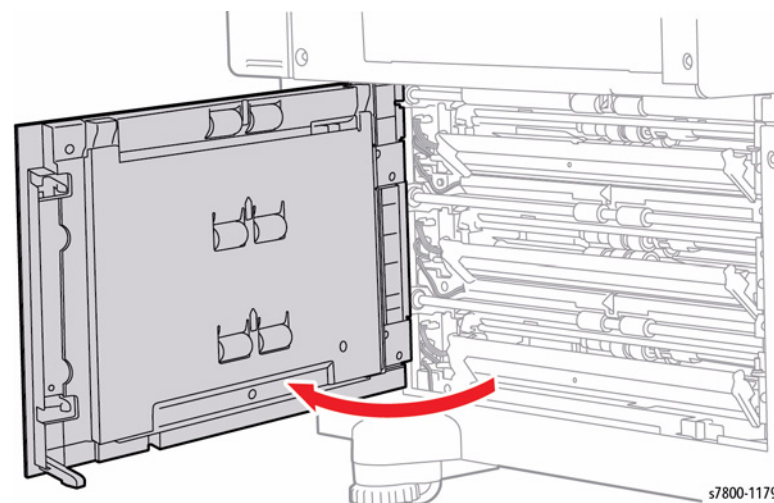


Figure 1 Opening the Left Hand Cover Assembly

4. Remove the Lower Chute (PL 11.6 Item 16).
5. Remove the Feed Out Chute (PL 11.6 Item 14).

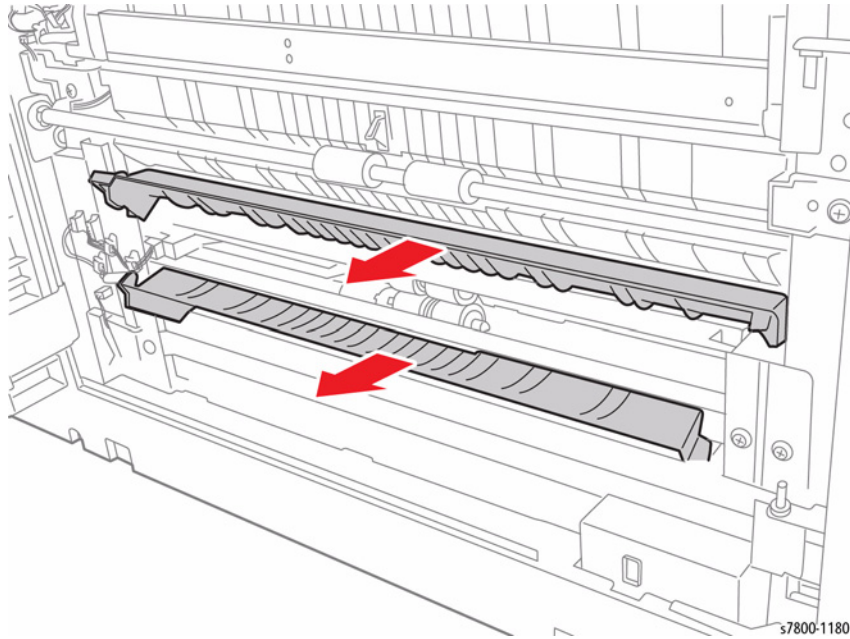


Figure 2 Removing the Lower Chute and Feed Out Chute

6. Release the wiring harnesses (x2) from the Clamps (x2).
7. Disconnect the wiring harness connectors (x2) P/J662 and P/J671.

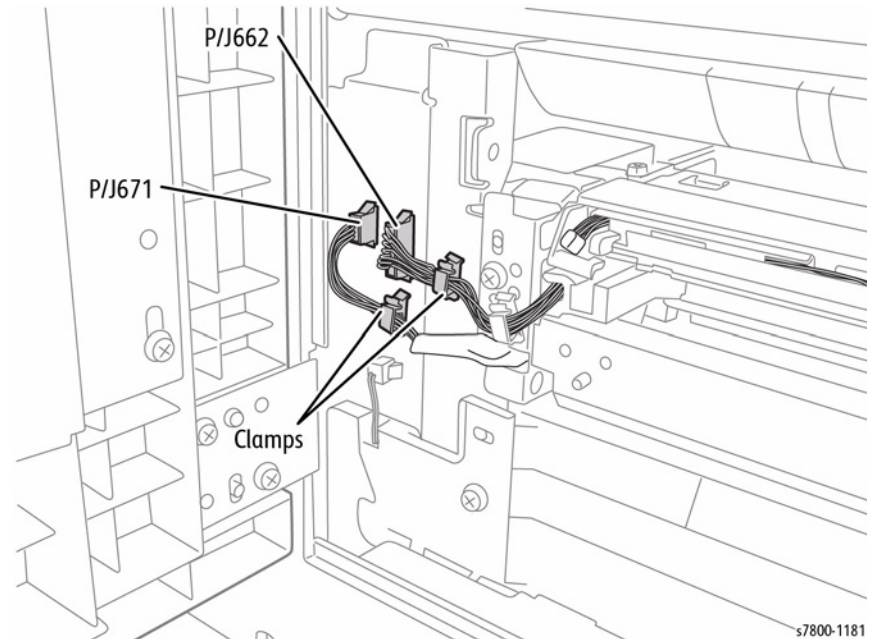


Figure 3 Releasing the disconnecting wiring harnesses

8. Remove 1 screw that secures the Tray 4 Feeder Assembly.

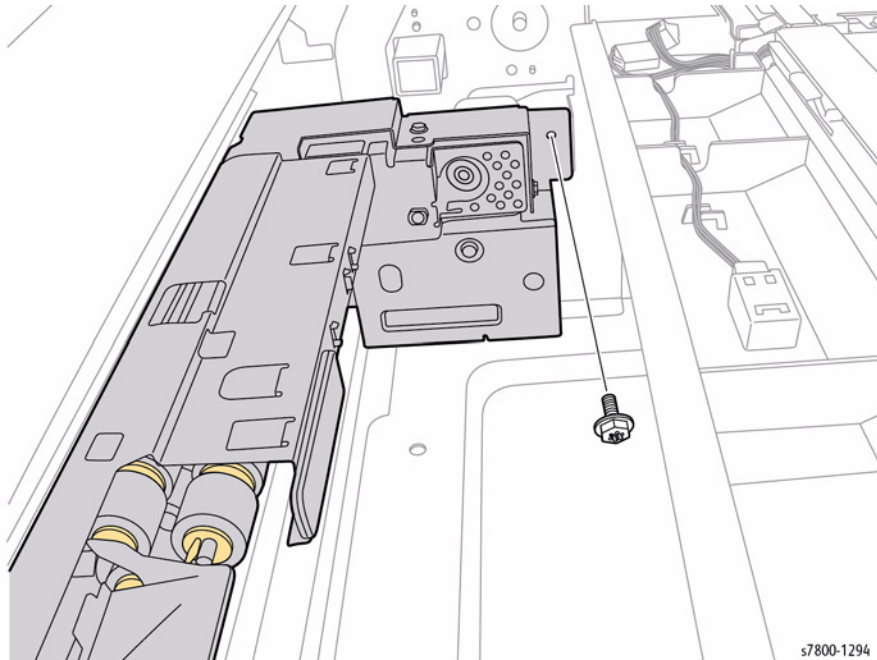


Figure 4 Removing screw

9. Remove 2 screws that secure the Tray 4 Feeder Assembly.

10. Remove the Tray 4 Feeder Assembly.

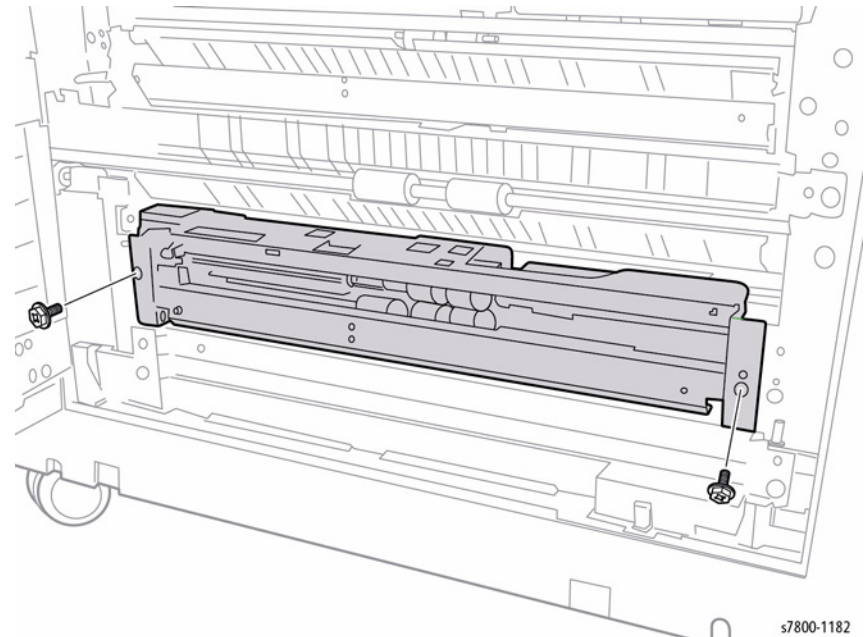


Figure 5 Removing the Tray 4 Feeder Assembly

11. Remove 2 screws that secure the Bracket.
12. Remove the Bracket.

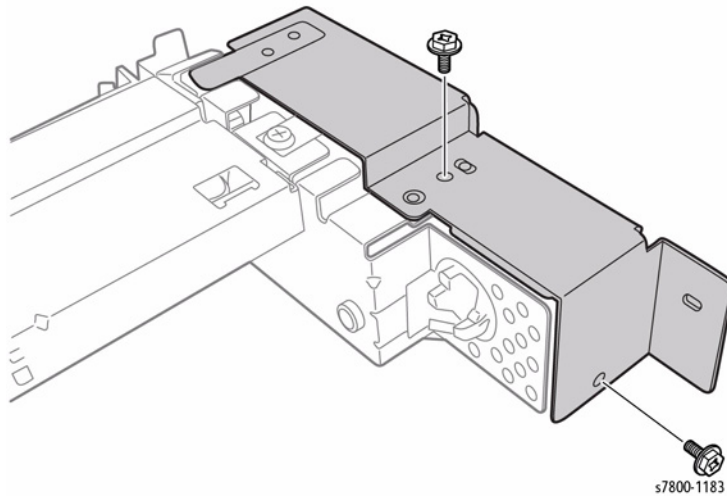


Figure 6 Removing the Bracket

REP 11.7 Tray 3/ 4 Feed/ Retard/ Nudger Roll

Parts List on [PL 11.8 Item 26](#), [PL 11.10 Item 23](#)

Removal

1. Remove Tray 3.
2. Slide the Front Chute towards you.
3. Remove the Retard Roll.
4. Remove the Nudger Roll.
5. Remove the Feed Roll.

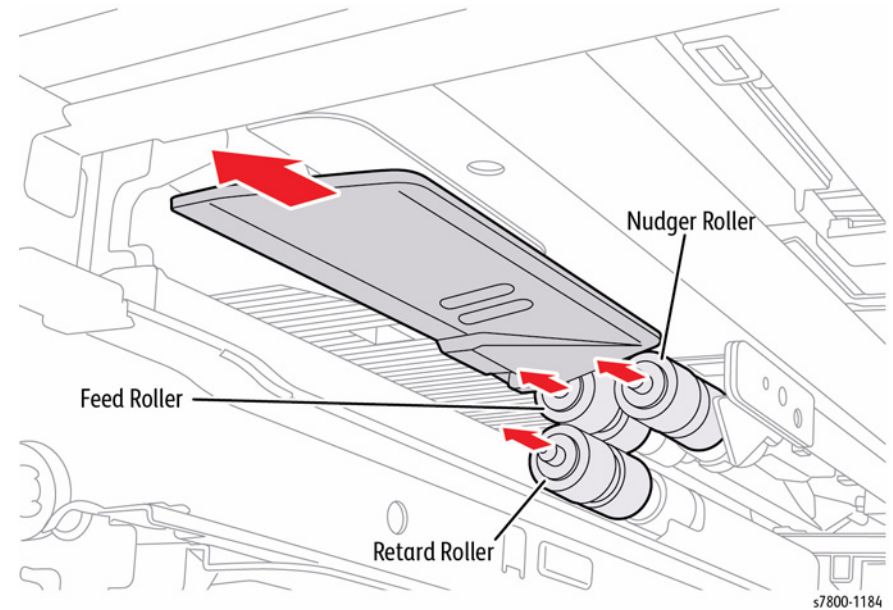


Figure 1 Removing the Tray 3/ 4 Feed/ Retard/ Nudger Roll

REP 11.8 Tray 5 Feed/ Retard/ Nudger Roll

Parts List on [PL 11.12 Item 2](#), [PL 11.12 Item 3](#), [PL 11.12 Item 4](#)

Removal

1. Remove Tray 3.
2. Pull out Tray 5.
3. Slide the Front Chute towards you.
4. Remove the Retard Roll.
5. Remove the Nudger Roll.
6. Remove the Feed Roll.

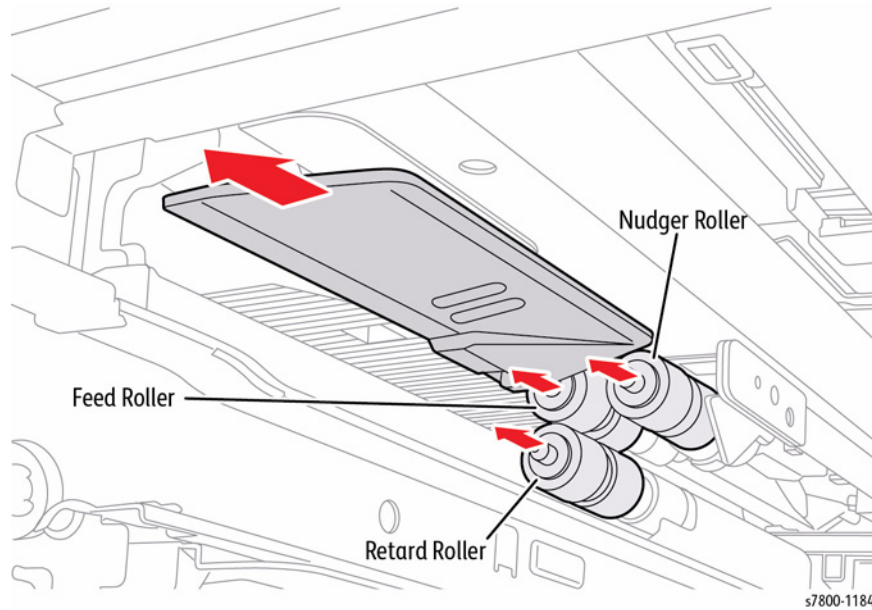


Figure 1 Removing the Tray 5 Feed/ Retard/ Nudger Roll

REP 11.9 Left Cover

Parts List on [PL 11.13 Item 7](#)

Removal

1. Remove the Left Hand Cover Assembly ([REP 10.16](#)).
2. Remove 7 screws (silver, Tapped, 8mm) that secure the Left Hand Chute and remove the Left Hand Chute from the Left Hand Cover.

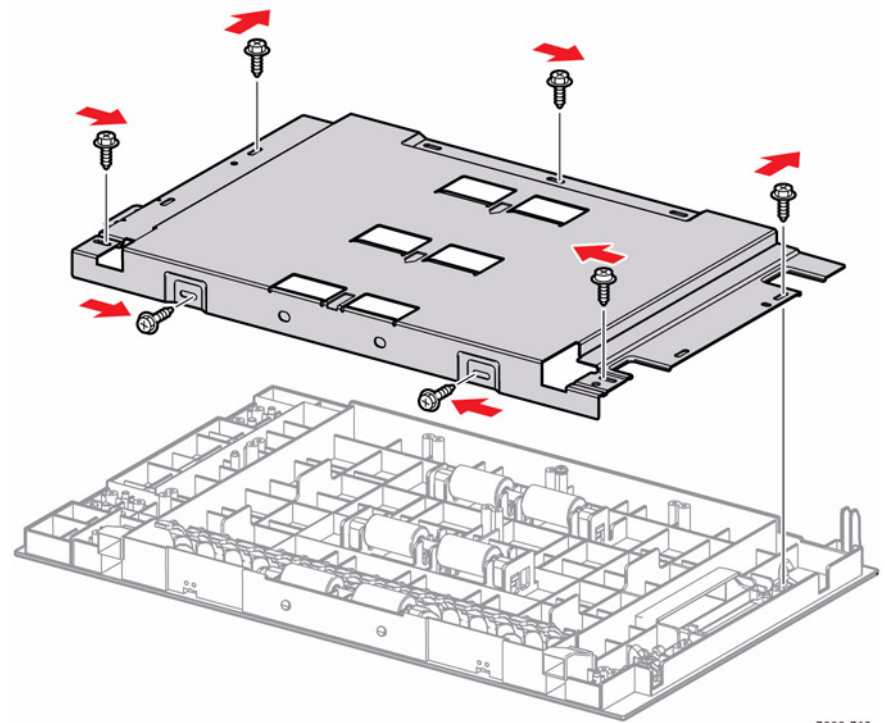


Figure 1 Removing the Left Cover

REP 11.11 TTM Take Away Motor 2 (bottom Motor)

Parts List on [PL 11.16 Item 13](#)

Removal

1. Remove 5 screws that secure the Rear Cover Assembly to the Tray Module (3T).
2. Remove the Rear Cover Assembly.

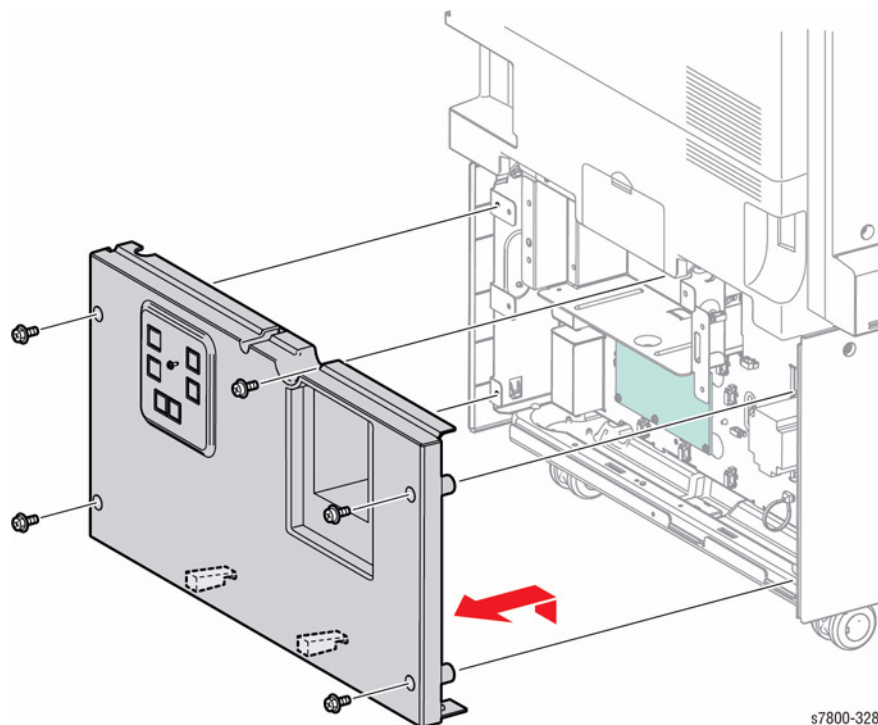


Figure 1 Removing the Rear Cover Assembly

3. Release the wiring harness from the clip.
4. Disconnect 1 wiring harness connector [P/J226](#) from the Motor.
5. Remove 2 screws that secure the Motor.
6. Remove the Take Away Motor 2.

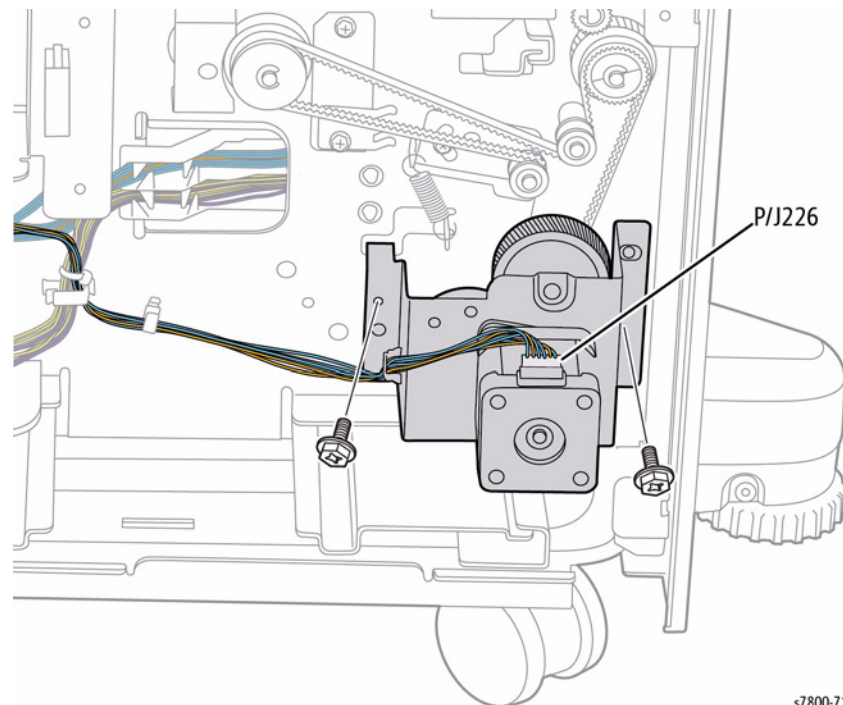


Figure 2 Removing the Take Away Motor 2

REP 11.12 TTM Take Away Motor (top Motor)

Parts List on [PL 11.16 Item 18](#)

Removal

1. Remove 5 screws that secure the Rear Cover Assembly to the Tray Module (3T).
2. Remove the Rear Cover Assembly.

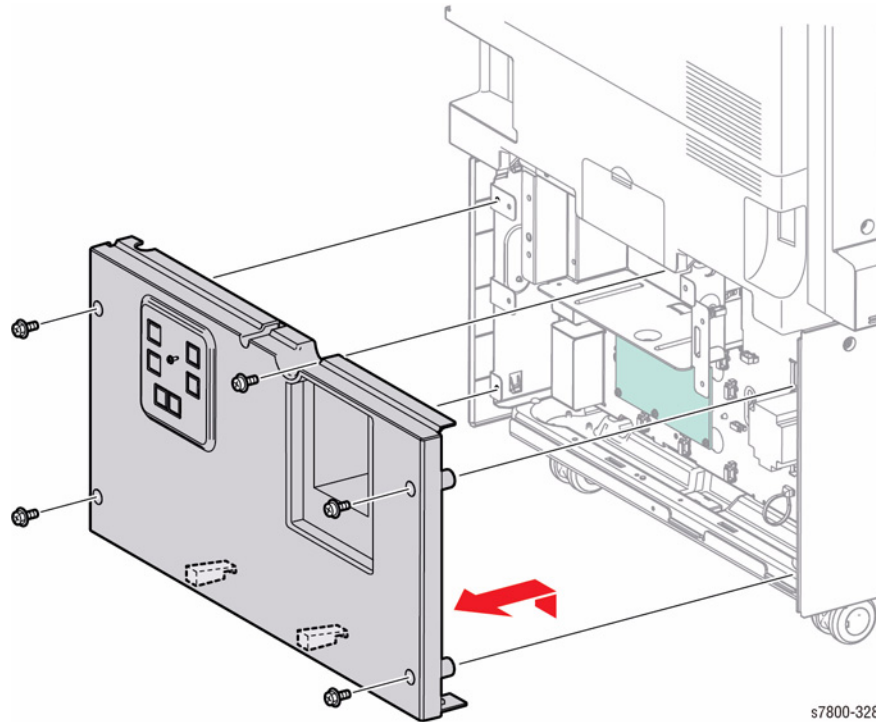


Figure 1 Removing the Rear Cover Assembly

3. Release the wiring harness from the clip.
4. Disconnect 1 wiring harness connector **P/J224** from the Motor.
5. Remove 2 screws that secure the Motor.
6. Remove the Take Away Motor.

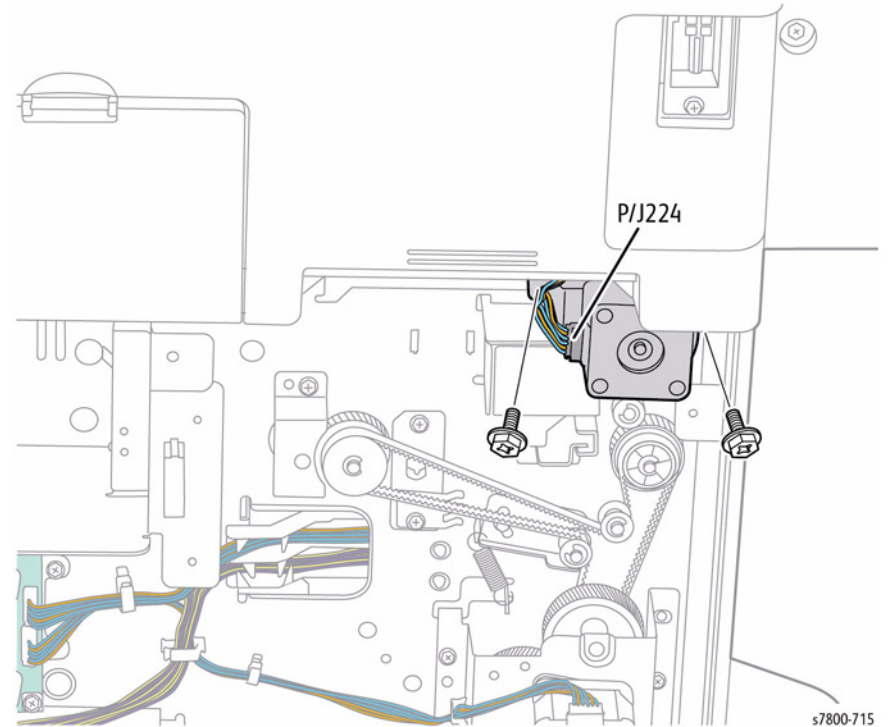


Figure 2 Removing the Take Away Motor

REP 11.13 Rear Cover Assembly

Parts List on [PL 11.18 Item 8](#)

Removal

1. Remove 5 screws that secure the Rear Cover.
2. Lift the Rear Cover Assembly and remove it from the Tray Module.

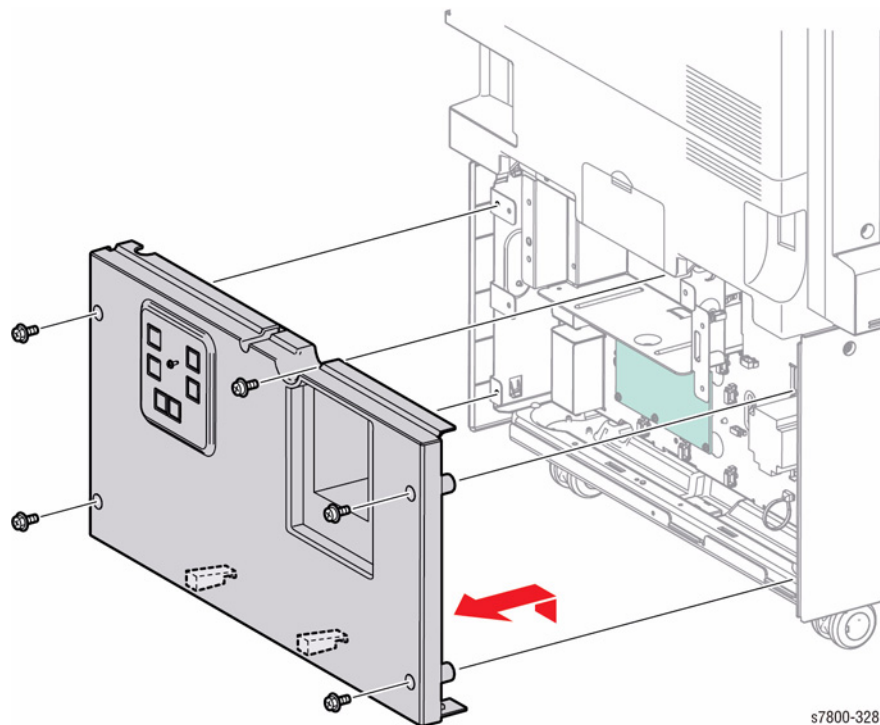


Figure 1 Removing the Rear Cover Assembly

REP 13.1 Tray 1/ Tray 1 Feeder Assembly

Parts List on [PL 13.1 Item 1](#), [PL 13.1 Item 2](#)

Removal

1. Remove the Left Rear Lower Cover ([REP 19.4](#)).
2. Open the Left Hand Door A.
3. Release the wiring harness from the Clamps (x5).
4. Disconnect the wiring harness connector [P/J616](#).

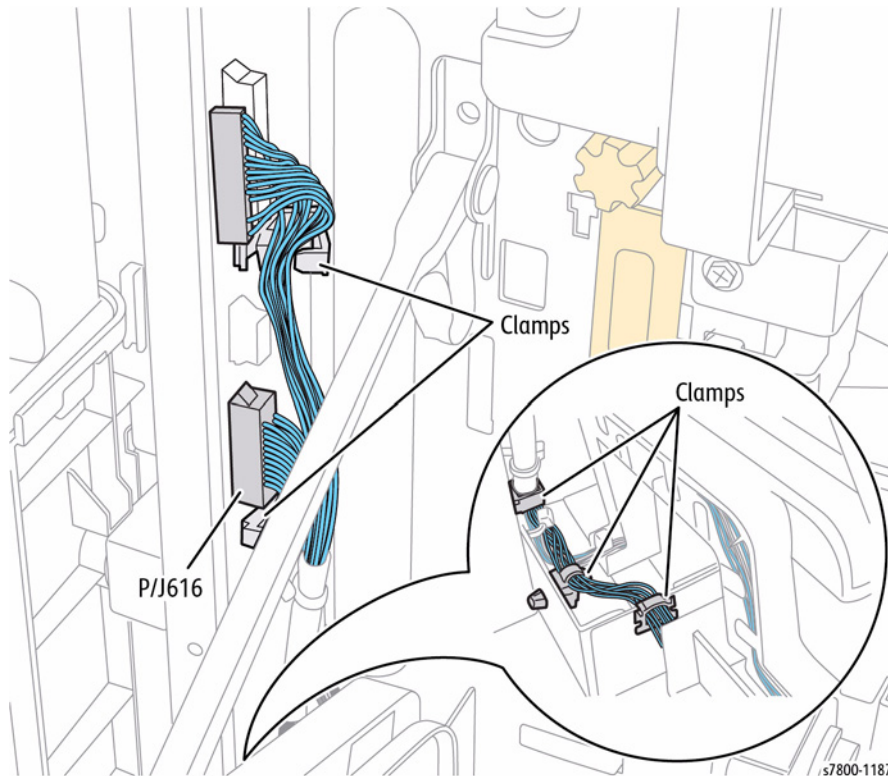


Figure 1 Releasing the disconnecting wiring harness

5. Close the Left Hand Door A.
6. Remove 2 screws that secure the Tray 1.
7. Remove Tray 1 (MPT).

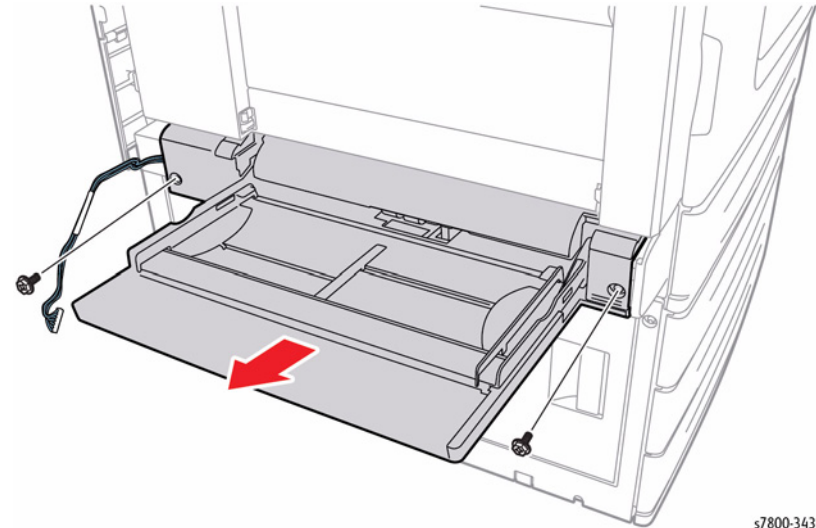


Figure 2 Removing the Tray 1

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REP 13.2 Top Cover

Parts List on [PL 13.1 Item 6](#)

Removal

1. Insert a flat head screwdriver through the gap between the edges of the Top Cover (arrow locations in [Figure 1](#)) to release the hook,

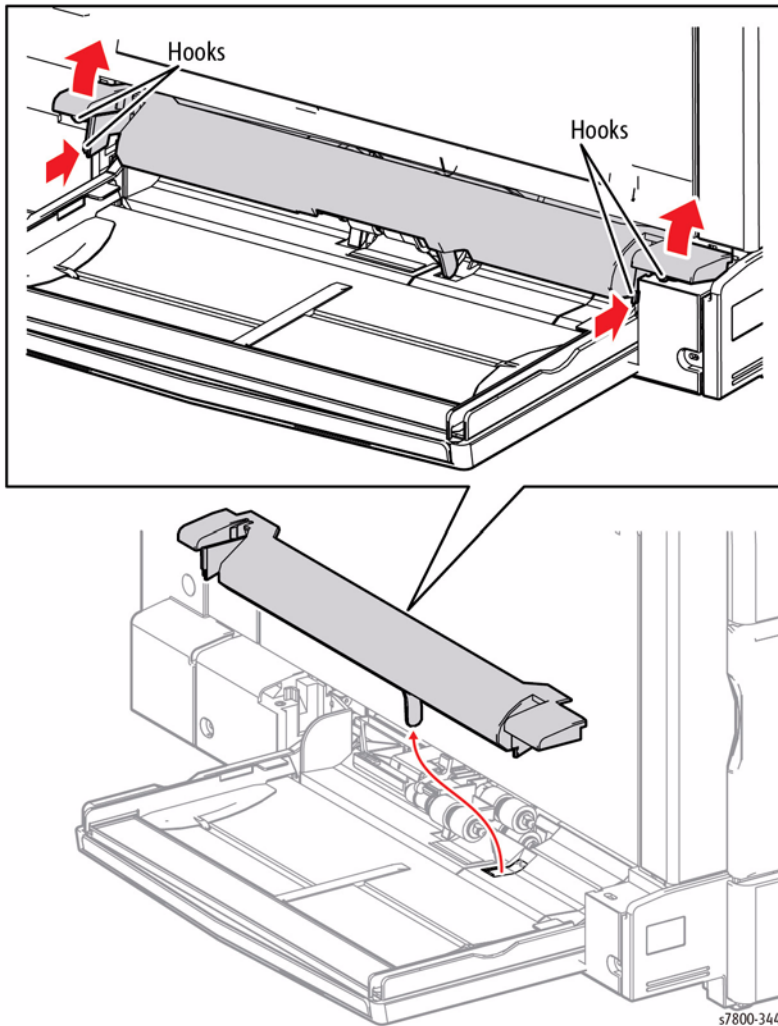


Figure 1 Removing the Top Cover

Replacement

Be sure to push the Actuator into the slot.

REP 13.3 Upper Frame Assembly

Parts List on [PL 13.2 Item 1](#)

Removal

1. Remove the Left Hand Door A ([REP 14.3](#)).
2. Remove the Registration Transport Assembly ([REP 15.1](#)).
3. Remove the Left Rear Lower Cover ([REP 19.4](#)).
4. Remove the Chute Assembly ([REP 9.4](#)).
5. Remove the Tray 1 Feeder Assembly ([REP 13.1](#)).
6. Remove the Tray 1 Nudger Position Sensor ([REP 13.5](#)).
7. Disconnect the wiring harness connector [P/J617](#) that is connected to the Tray 1 Feed/ Nudger Motor.

NOTE: When removing the Tray 1 Feed/ Nudger Motor Assembly in the following step, be careful not to drop the Gear (29T/19T) and Gear (31T/15T) may drop.

8. Remove 3 screws (silver, 6mm, and Silver, Plastic Tapped, 8mm) that secure the Tray 1 Feed/ Nudger Motor Assembly to the Tray 1 Feeder Assembly together with the Ground Wire.
9. Remove the Tray 1 Feed/ Nudger Motor Assembly.
10. Remove the Gear (29T/19T) ([PL 13.2 Item 4](#)) and Gear (31T/15T) ([PL 13.2 Item 5](#)).

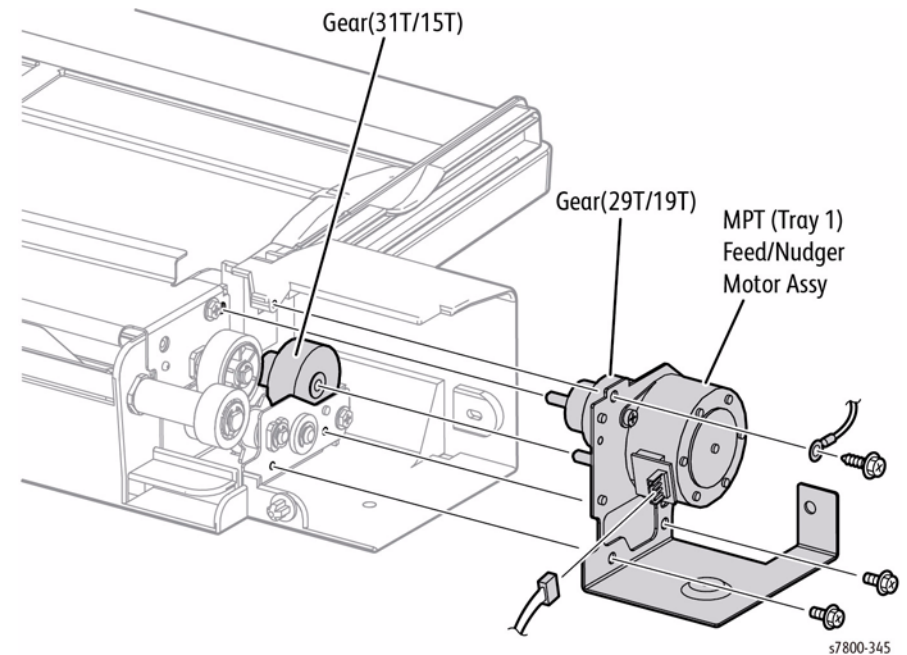


Figure 1 Removing the Tray 1 Feed/Nudger Motor Assembly and Gears

11. Remove 2 screws (silver, Tapped, 8mm) that secure the Upper Frame Assembly to the Tray 1 Feeder Assembly.
12. Remove the Upper Frame Assembly.

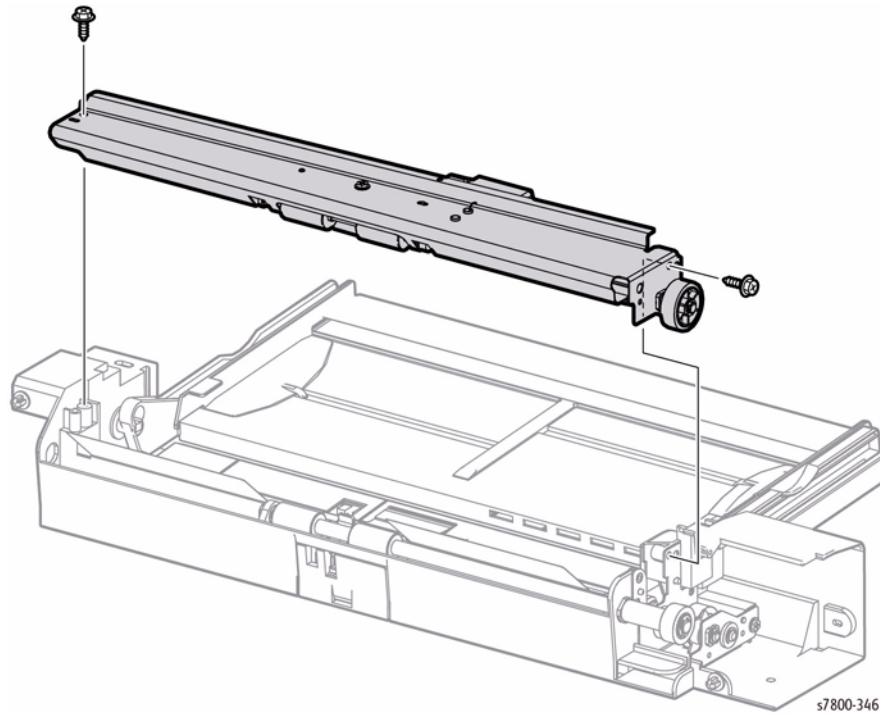


Figure 2 Removing the Upper Frame Assembly

Replacement

When installing the Upper Frame Assembly to the Tray 1 Feeder Assembly, raise the Nudger Support such that the portion of the Lock Stopper is positioned at the inner side of the Frame.

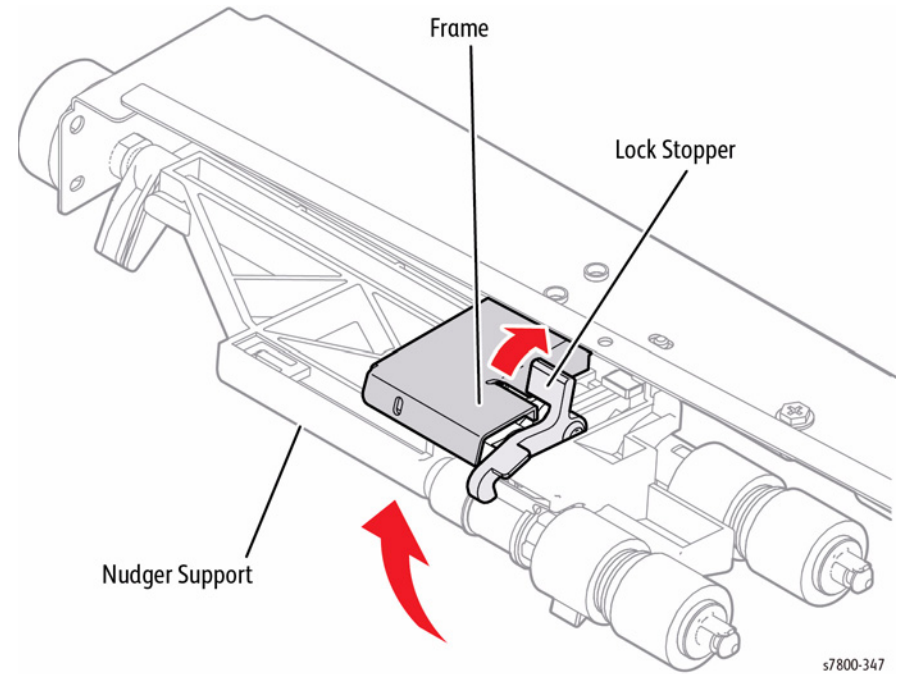


Figure 3 Positioning the Lock Stopper

REP 13.4 Drive Bracket Assembly

Parts List on [PL 13.2 Item 3](#)

Removal

1. Remove the Left Hand Door A ([REP 14.3](#)).
2. Remove the Registration Transport Assembly ([REP 15.1](#)).
3. Remove the Left Rear Lower Cover ([REP 19.4](#)).
4. Remove the Chute Assembly ([REP 9.4](#)).
5. Remove the Tray 1 Feeder Assembly ([REP 13.1](#)).
6. Remove the Tray 1 Nudger Position Sensor ([REP 13.5](#)).
7. Remove the Upper Frame Assembly ([REP 13.3](#)).
8. Remove 1 screw (silver, Tapped, 8mm) that secures the Drive Bracket Assembly to the Tray 1 Feeder Assembly.
9. Remove the Drive Bracket Assembly.

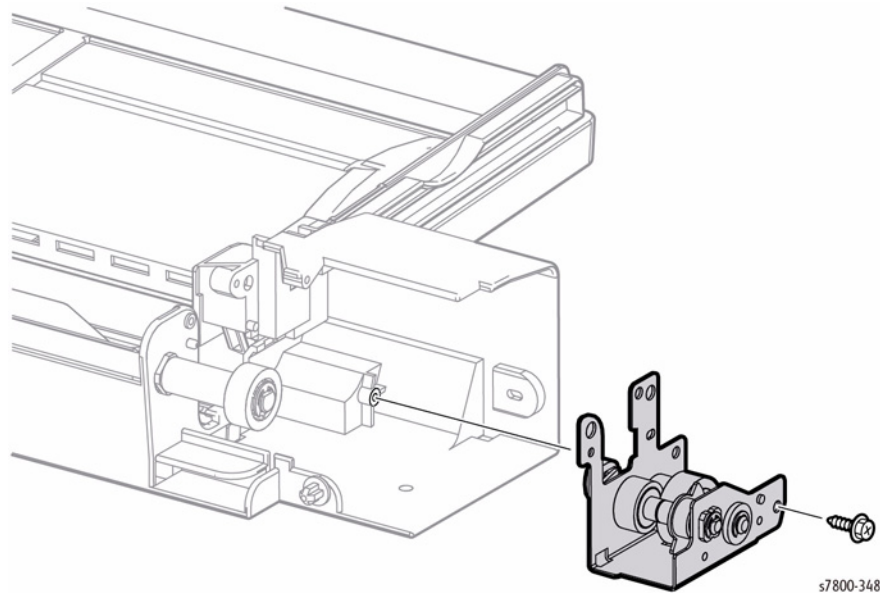


Figure 1 Removing the Drive Bracket Assembly

REP 13.5 Tray 1 Nudger Position Sensor

Parts List on [PL 13.2 Item 8](#)

Removal

1. Remove the Left Hand Door A ([REP 14.3](#)).
 2. Remove the Registration Transport Assembly ([REP 15.1](#)).
 3. Remove the Left Rear Lower Cover ([REP 19.4](#)).
 4. Remove the Chute Assembly ([REP 9.4](#)).
 5. Remove the Tray 1 Feeder Assembly ([REP 13.3](#)).
 6. Remove 1 screw (silver, Plastic Tapped, 8mm) that secures the Harness Holder.
 7. Slide the Harness Holder towards you to remove.
 8. Remove 1 screw (silver, Plastic Tapped, 8mm), and 1 screw (silver, 6mm) that secure the Sensor Bracket Assembly.
 9. Remove the Sensor Bracket Assembly.
- NOTE:** You may have to rotate the gear to move the flag out of the sensor.
10. Disconnect the wiring harness connector [P/J183](#) that is connected to the Tray 1 Nudger Position Sensor.
 11. Release the 3 hooks that secure the Tray 1 Nudger Position Sensor.
 12. Remove the Tray 1 Nudger Position Sensor.

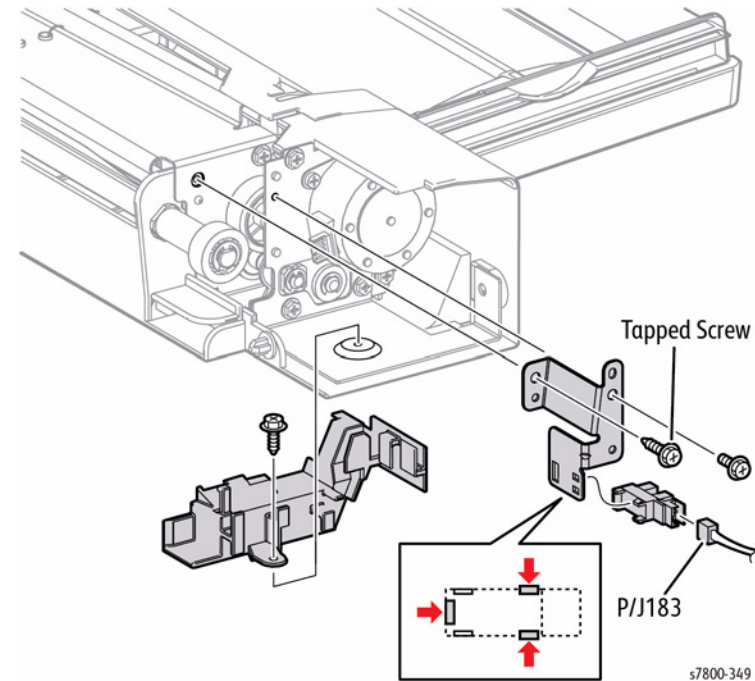


Figure 1 Removing the Tray 1 Nudger Position Sensor

REP 13.6 Tray 1 Feed/ Nudger/ Retard Roll

Parts List on [PL 13.3 Item 17](#), [PL 13.4 Item 7](#)

Removal

1. Remove the Top Cover ([REP 13.2](#)).
2. Lift the latch and remove the Nudger Roll.

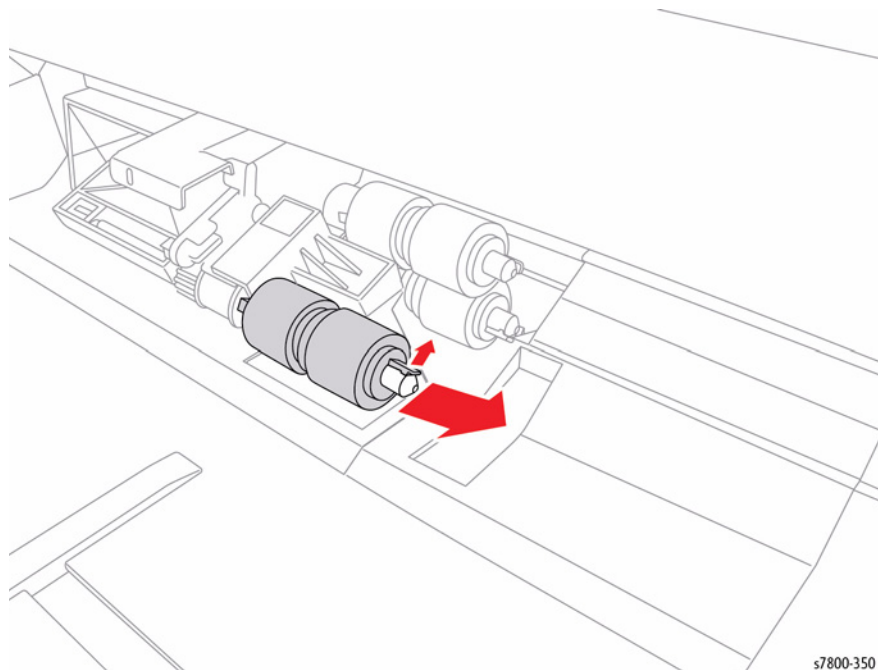


Figure 1 Removing the Tray 1 Nudger Roll

3. Lift the Front Chute to remove from the Tray 1.

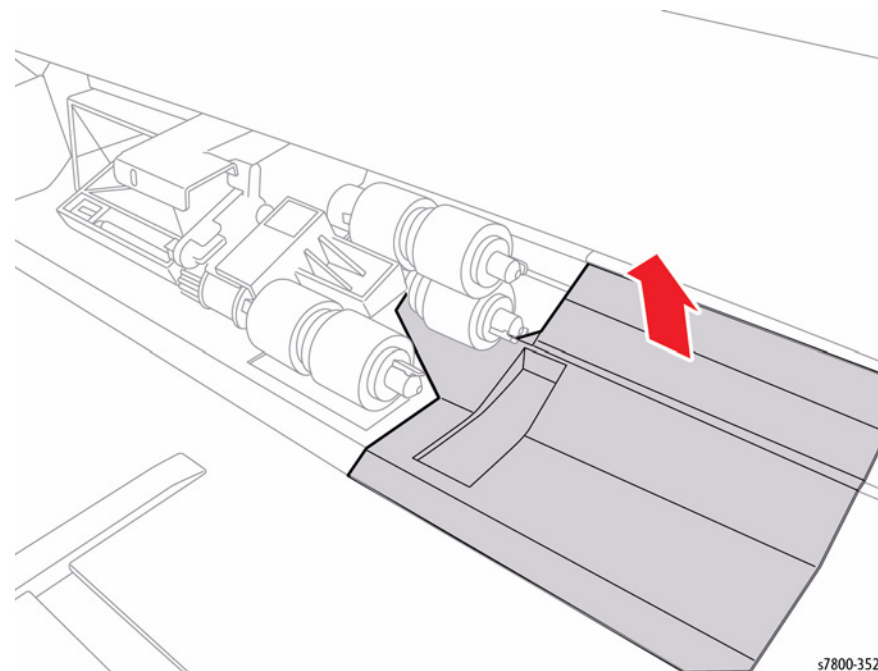


Figure 2 Removing the Front Chute

4. Lift the latch and remove the Tray 1 Feed Roll.
5. Lift the latch and remove the Tray 1 Retard Roll.

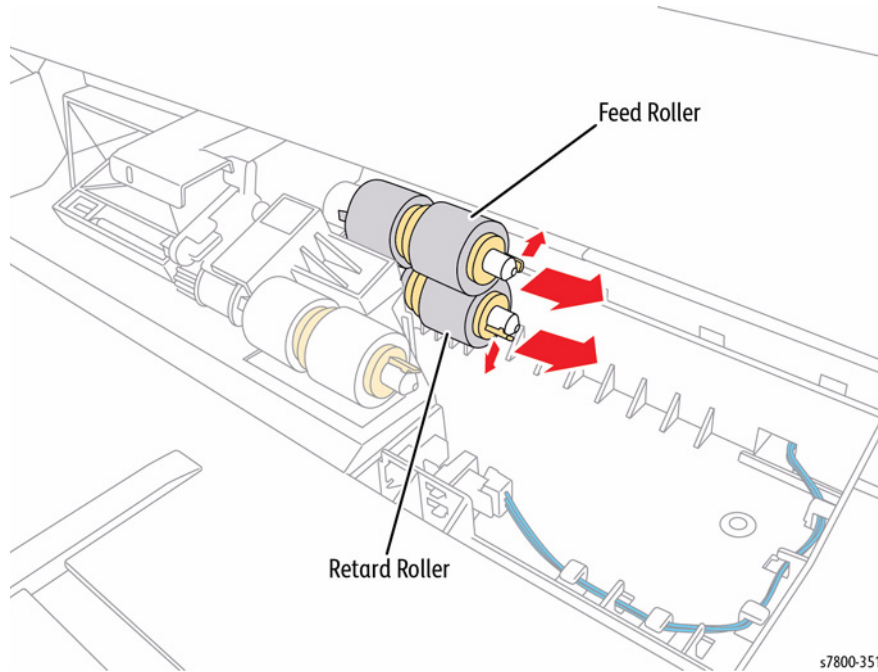


Figure 3 Removing the Tray 1 Feed/ Retard Roll

REP 13.7 One Way Clutch (on Feed Roller)

Parts List on [PL 13.3 Item 14](#)

Removal

1. Remove the Feed Roller (REP 9.7).
2. Slide the One Way Clutch out to remove.

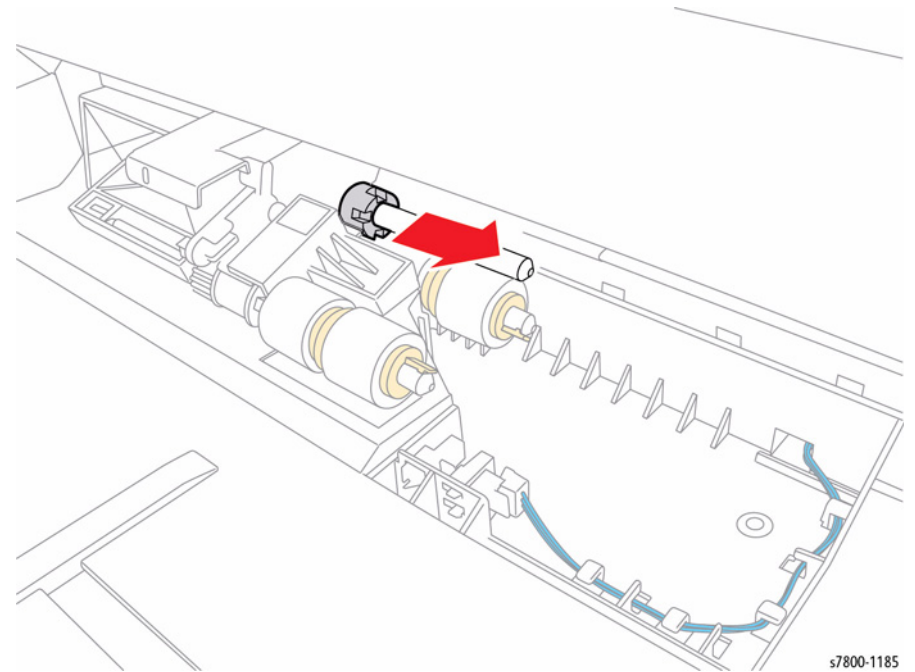


Figure 1 Removing the One Way Clutch

REP 13.8 Friction Clutch (on Retard Roller)

Parts List on [PL 13.4 Item 5](#)

Removal

1. Remove the Feed Roller ([REP 9.7](#)).
2. Remove the Retard Roller ([REP 9.7](#)).
3. Slide the Friction Clutch out to remove.

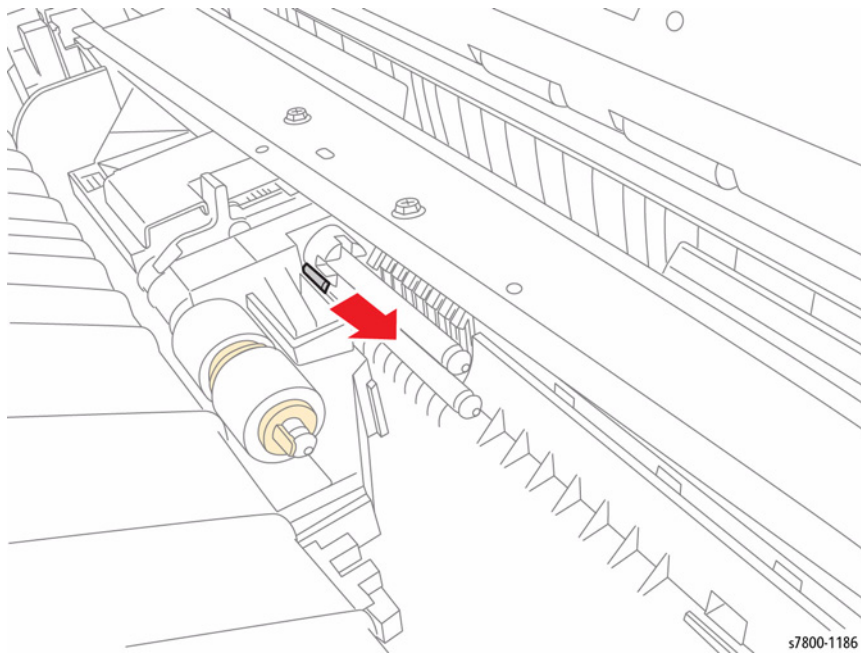


Figure 1 Removing the Friction Clutch

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REP 13.9 Tray 1 Feed Out Sensor

Parts List on [PL 13.4 Item 16](#)

Removal

1. Remove the Tray 1/Tray 1 Feeder Assembly ([REP 13.1](#)).
2. Use a flat tip screwdriver to release the hook of the Sensor Plate that is located under the Tray 1 Feeder Assembly, and remove the Sensor Plate.
3. Disconnect the wiring harness connector [P/J179](#) that is connected to the Tray 1 Feed Out Sensor.
4. Release the 3 hooks that secure the Tray 1 Feed Out Sensor and remove the Tray 1 Feed Out Sensor.

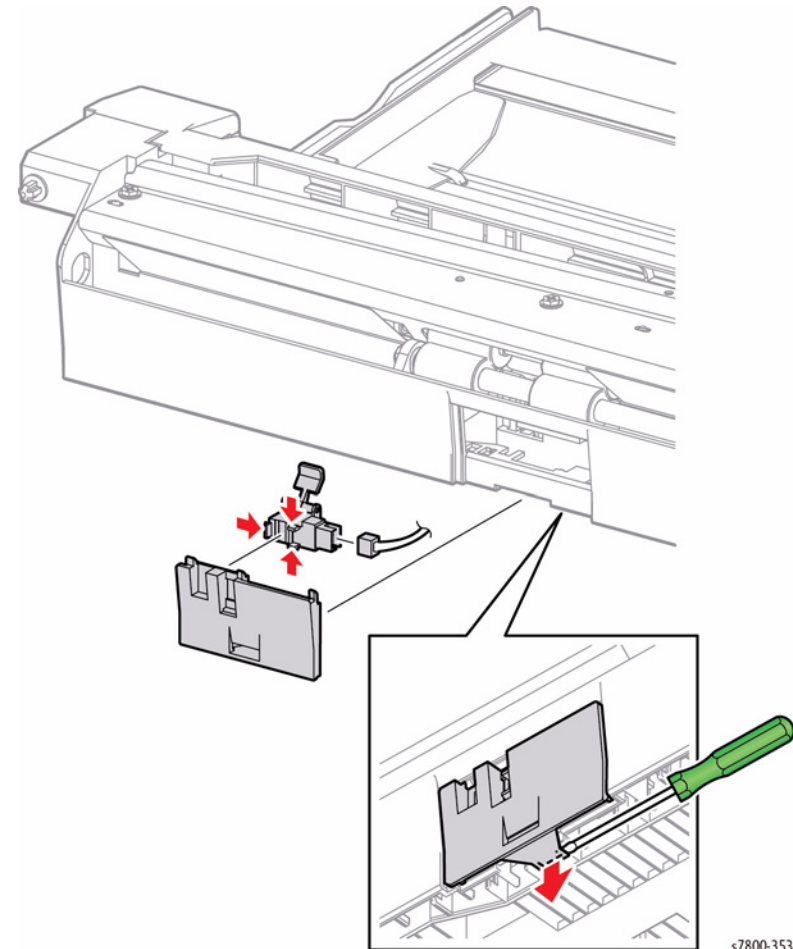


Figure 1 Removing the Tray 1 Feed Out Sensor

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REP 13.10 Tray 1 No Paper Sensor

Parts List on [PL 13.4 Item 17](#)

Removal

1. Remove the Tray 1/Tray 1 Feeder Assembly ([REP 13.1](#)).
2. Remove 1 screw (silver, Plastic Tapped, 8mm) that secures the Harness Holder and slide the Harness Holder towards you to remove.
3. Remove 1 screw (silver, Plastic Tapped, 8mm), and 1 screw (silver, 6mm) that secure the Sensor Bracket Assembly and remove the Sensor Bracket Assembly.

NOTE: You may have to rotate the Gear to move the flag out of the Sensor.

4. Disconnect the wiring harness connector [P/J183](#) that is connected to the Tray 1 Nudger Position Sensor.
5. Release the 3 hooks that secure the Tray 1 Nudger Position Sensor and remove the Tray 1 Nudger Position Sensor.

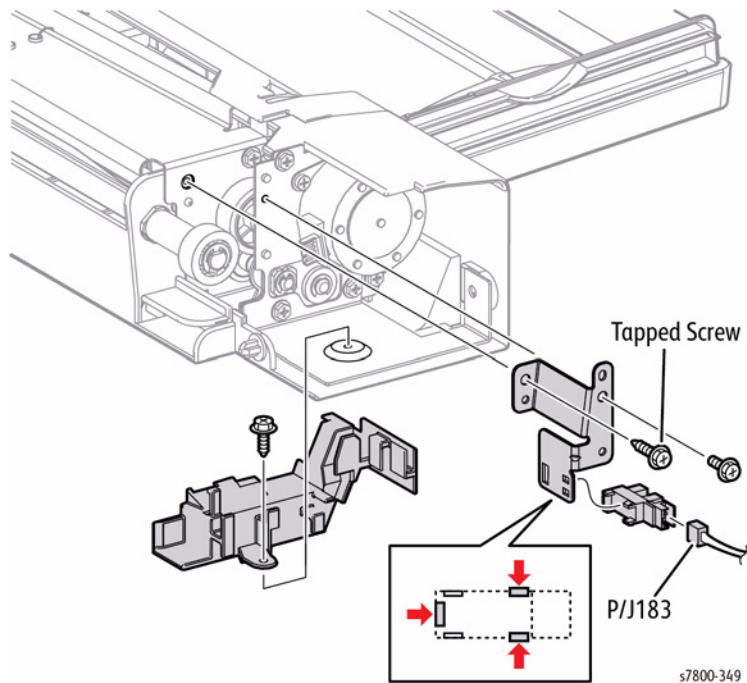


Figure 1 Removing the Tray 1 No Paper Sensor

REP 13.11 Tray 1 Paper Size Sensor

Parts List on [PL 13.5 Item 4](#)

Removal

1. Remove the Extension Tray (L1) together with the Extension Tray (L2) ([REP 13.12](#)).
2. Remove 3 screws (silver, Tapped, 5mm) that secure the Plate, together with the Ground Wire.
3. Raise the right side of the Plate and remove it from the 3 hooks at the front.
4. Remove the Pinion Gear.
5. Remove 3 screws (silver, Plastic Tapped, 5mm) that secure the Tray 1 Paper Size Sensor.
6. Remove the Tray 1 Paper Size Sensor.
7. Release the wiring harness from the Harness Guide and disconnect the wiring harness connector [P/J173](#) that is connected to the Tray 1 Paper Size Sensor.

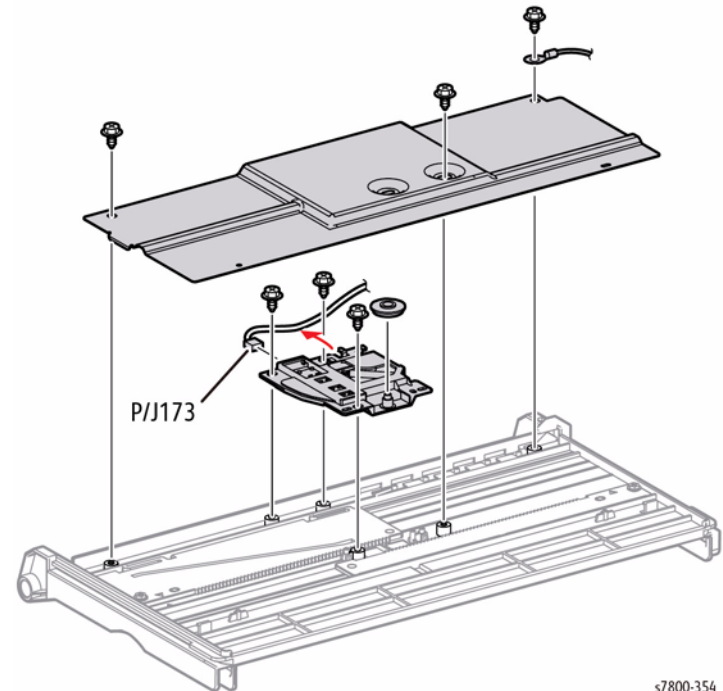


Figure 1 Removing the Tray 1 Paper Size Sensor

Replacement

When installing the Pinion Gear, align the triangular marks of the Front/ Rear Rack to the triangular marks on the Frame.

Push the Front and Rear Guide towards the center about 1/4 inch, enough to clear the metal tab on the Plate.

Make sure the black tip of the variable resistor is in the slanted slot.

Note

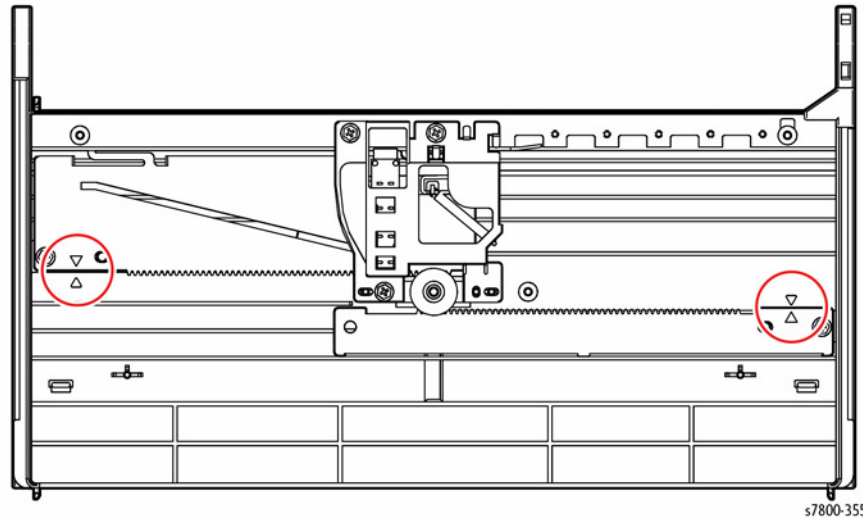


Figure 2 Installing the Pinion Gear

REP 13.12 Extension Tray L1/L2

Parts List on [PL 13.5 Item 11](#), [PL 13.5 Item 12](#)

Removal

1. Open the Tray 1 Assembly.
2. Pull out the Extension Tray (L1) until it can go no further, remove the Rail at one side followed by the Rail at the other side, and remove the Extension Tray (L1).
3. Bend the center section of the Extension Tray (L2), remove the Rail at the rear followed by the Rail at the other side, and remove the Extension Tray (L2).

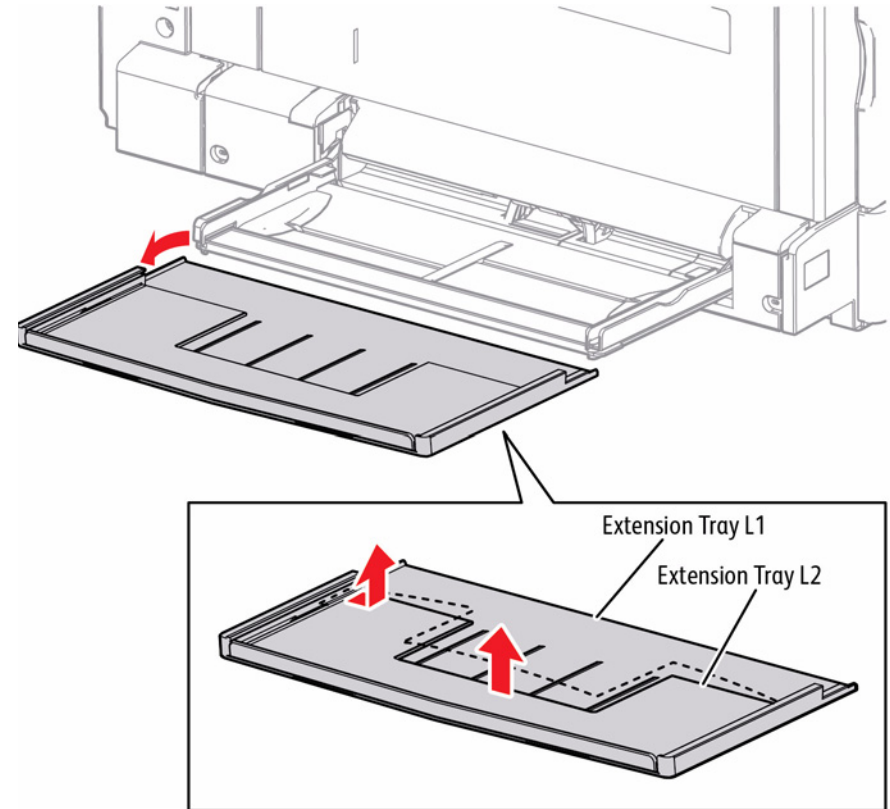


Figure 1 Removing the Extension Tray L1/L2

REP 14.1 Left Hand Cover Interlock Switch

Parts List on [PL 14.1 Item 4](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove 1 screw (silver, 6mm) that secures the Bracket and remove the Bracket.
3. Disconnect the wiring harness connector [P/J100](#) that is connected to the L/H Cover Interlock Switch.
4. Release the hooks that secure the L/H Cover Interlock Switch and remove the L/H Cover Interlock Switch.

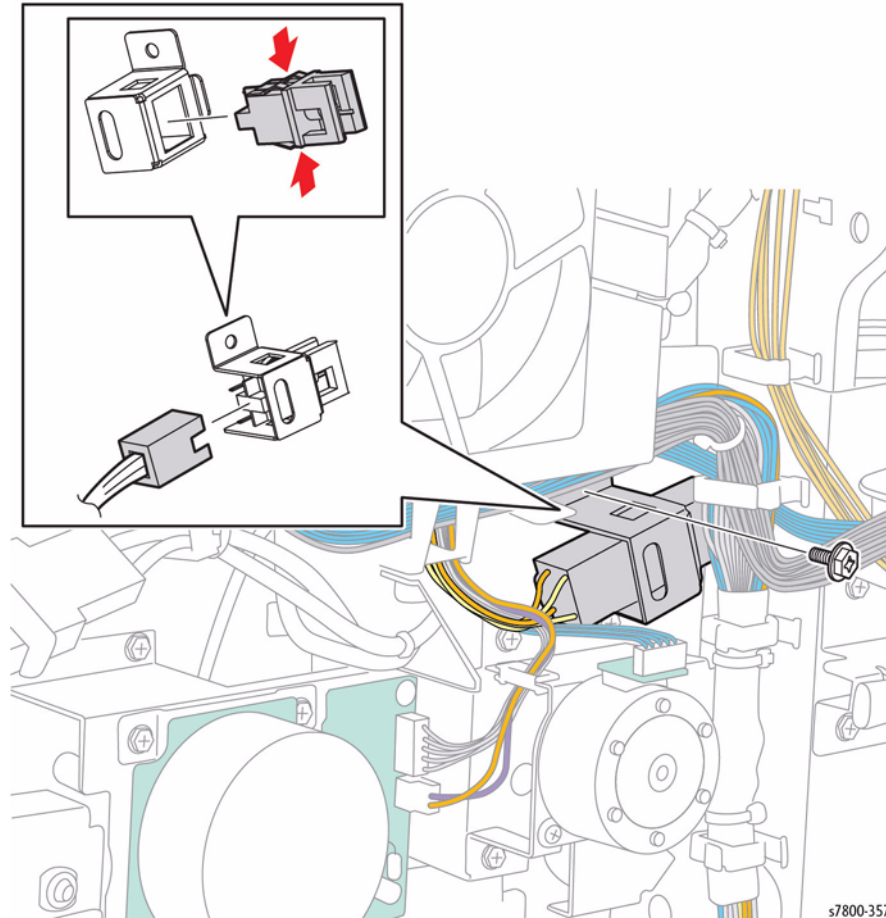


Figure 1 Removing the Left Hand Cover Interlock Switch

s7800-357

REP 14.2 Transfer Roller (2nd BTR Assembly)

Parts List on [PL 14.2 Item 1](#)

Removal

CAUTION

Do not touch the 2nd BTR Roll surface with your hands.

1. Open the Left Hand Door A.
2. Press the Lever in the direction of the arrow to release the 2nd BTR Assembly.
3. Lift and remove the 2nd BTR Assembly.

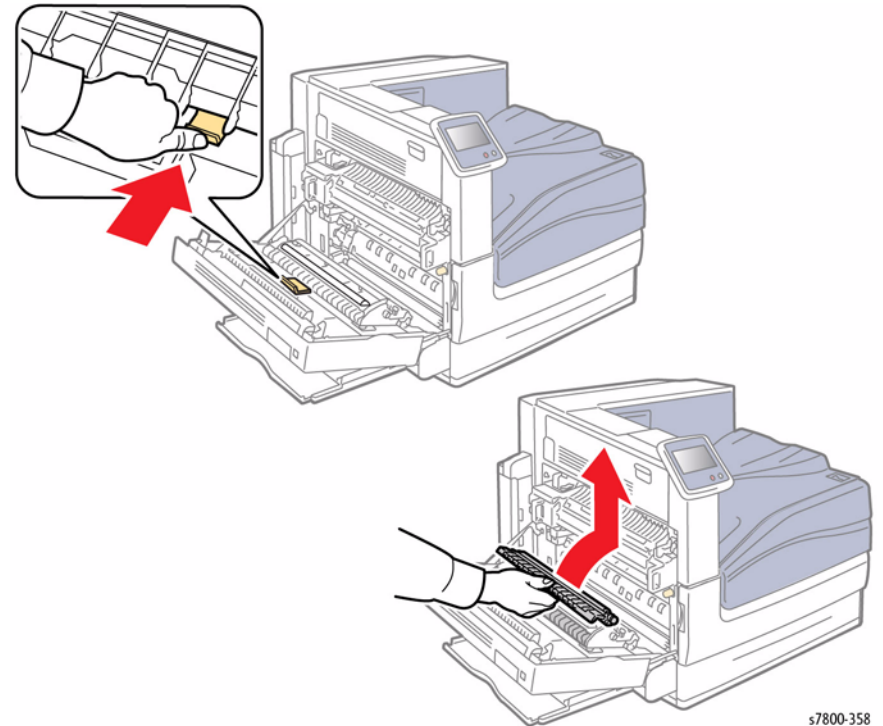


Figure 1 Removing the 2nd BTR Assembly

s7800-358

REP 14.3 Left Hand Cover Assembly (Door A)

Parts List on [PL 14.2 Item 2](#)

Removal

1. Remove the Left Rear Lower Cover ([REP 19.4](#)).
2. Open the Left Hand Door A.
3. Release the wiring harness from the Clamps (x2).
4. Disconnect the wiring harness connectors [P/J612](#) and [P/J616](#).

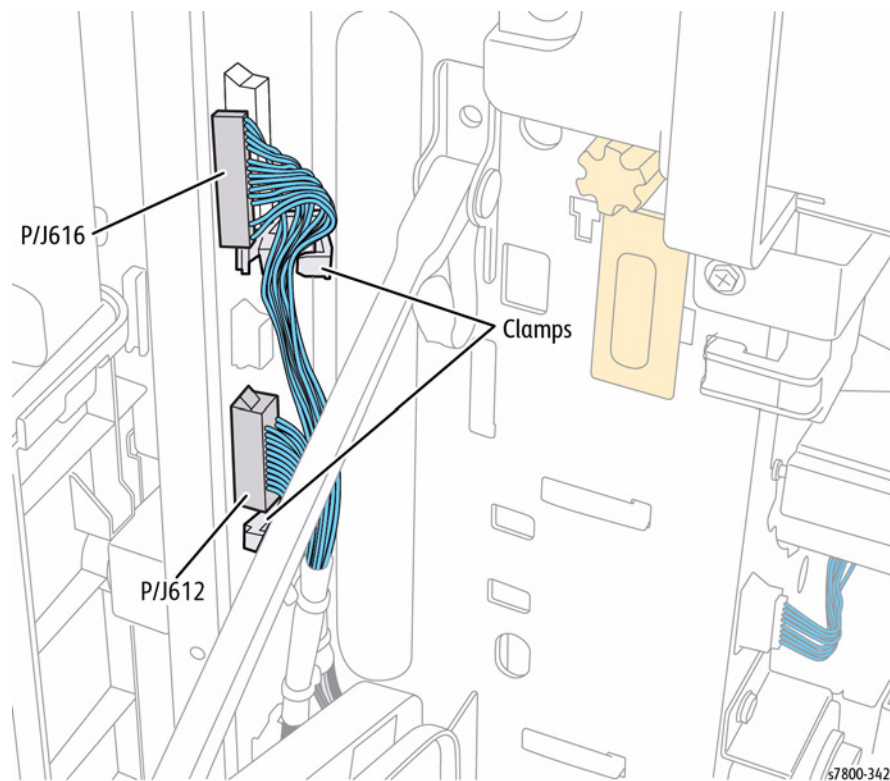


Figure 1 Disconnecting and releasing wiring harness connectors

5. Rotate the Front Support 90° counterclockwise and remove it from the hole of the Frame.

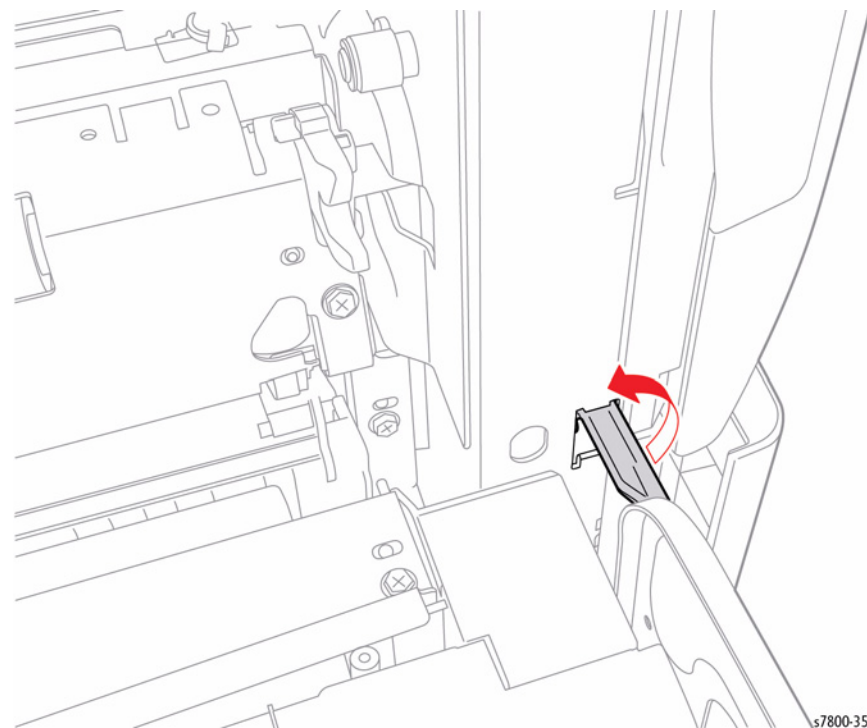


Figure 2 Rotating the Front Support

6. Remove the KL-Clip.
7. Remove the Rear Support.

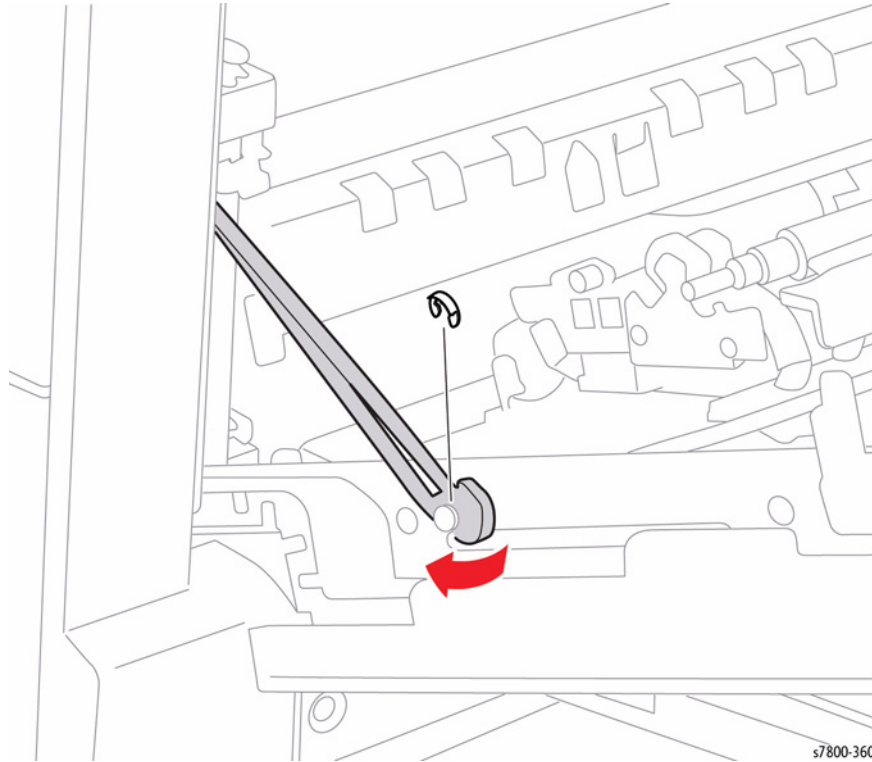


Figure 3 Removing the Rear Support

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8. Lift and remove the Left Hand Door A from the studs (x2) of the hinge.

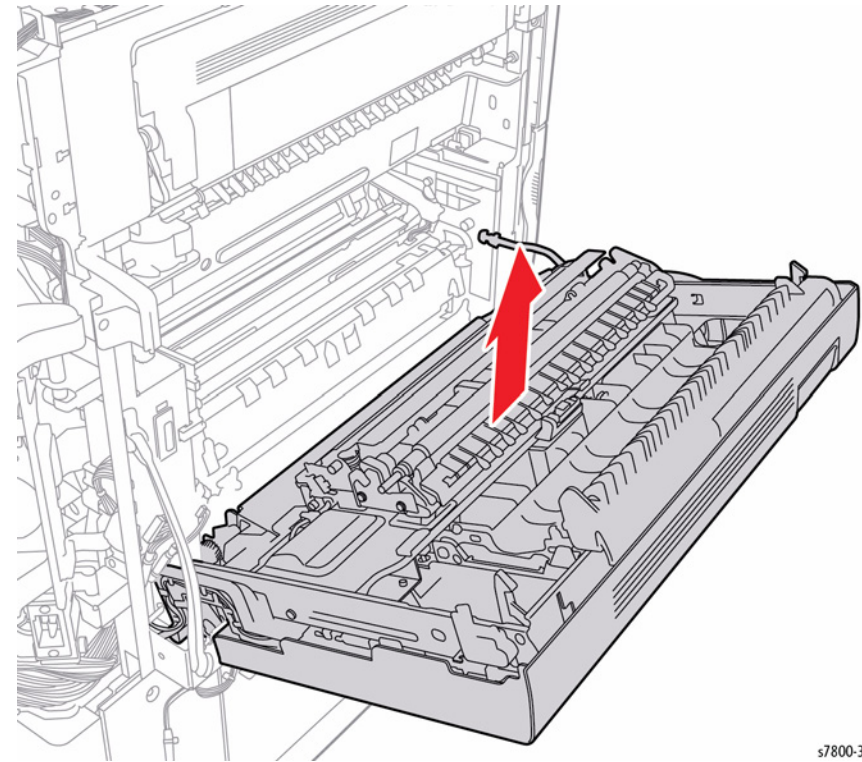


Figure 4 Removing the Left Hand Door A

s7800-361

REP 14.4 Duplex Assembly

Parts List on [PL 14.2 Item 3](#)

Removal

CAUTION

Do not touch the 2nd BTR Roll surface with your hands.

1. Open the Left Hand Door A.
2. Remove 4 screws that secure the Chute.
3. Remove 2 tapping screws.
4. Rotate and remove the Chute.

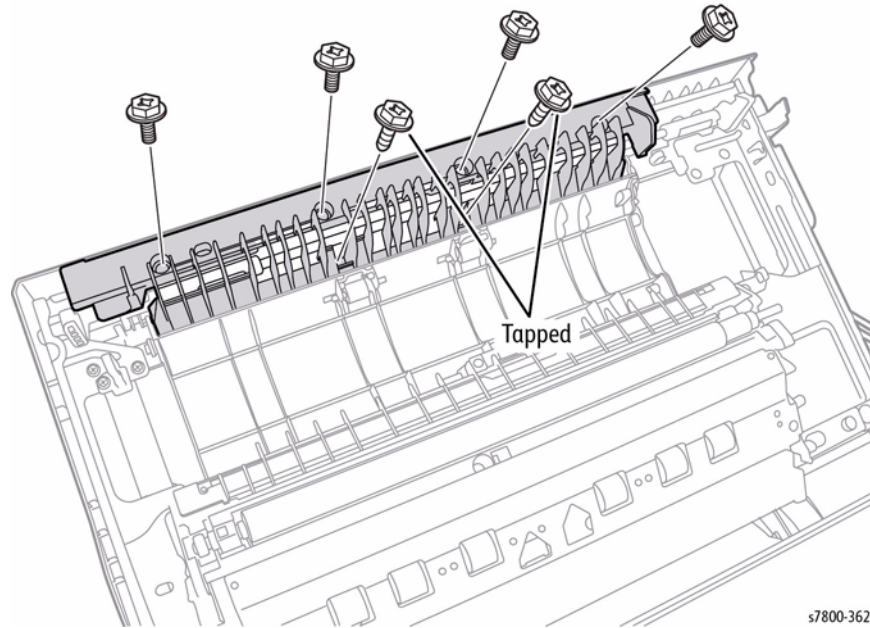


Figure 1 Removing the Chute

5. Remove 5 tapping screws that secure the Left Hand Cover.
6. Release the latch handle area to release the Left Hand Cover and remove the Left Hand Cover.

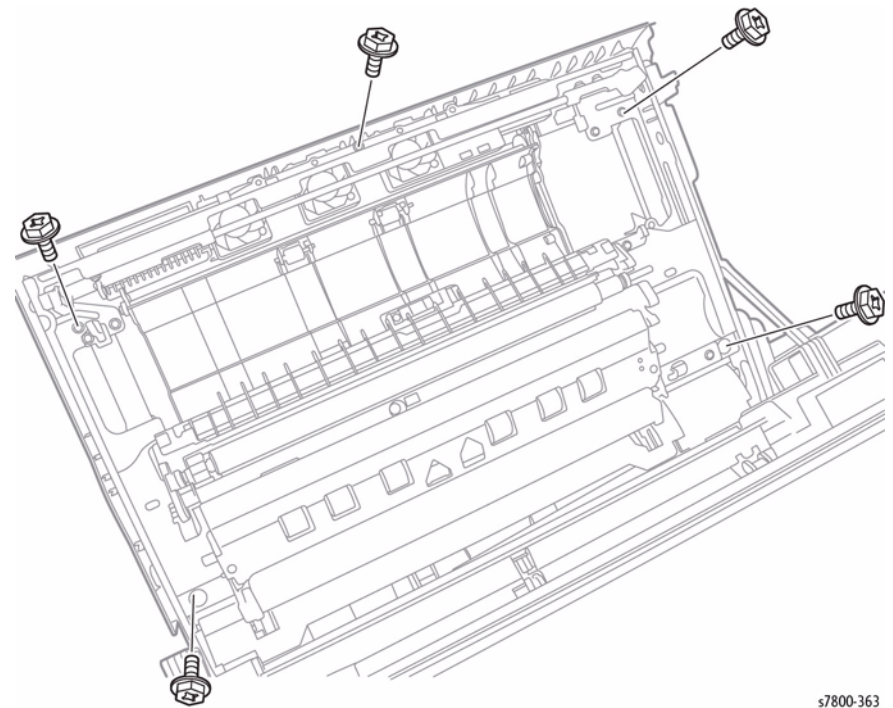


Figure 2 Removing the Left Hand Cover

7. Release the wiring harness from the Clamp.
8. Disconnect the 3 wiring harness connectors P/J176, P/J275, and P/J624.

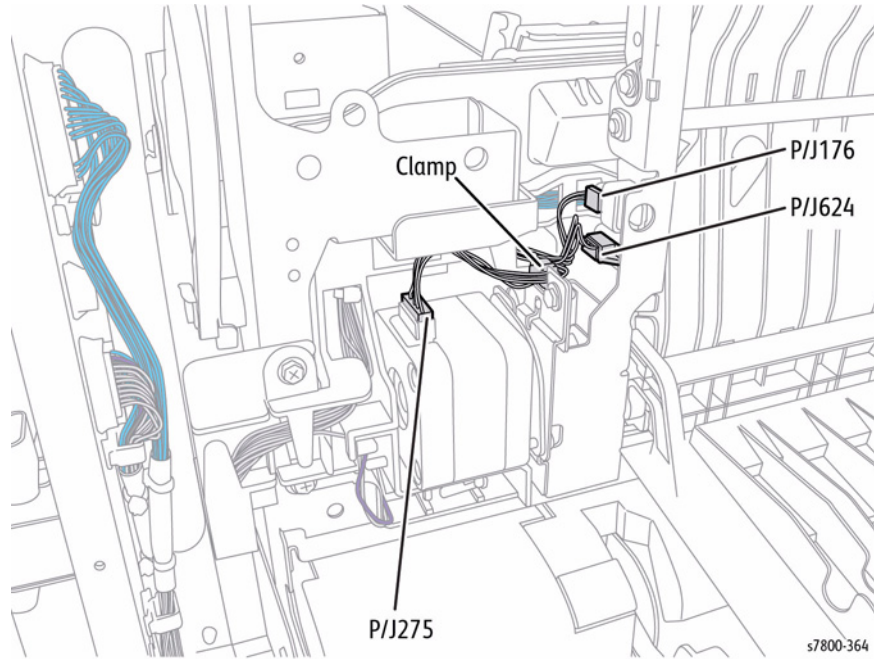


Figure 3 Disconnecting and releasing wiring harness connectors

9. Remove 3 screws that secure the Duplex Assembly.
10. Remove the Duplex Assembly.

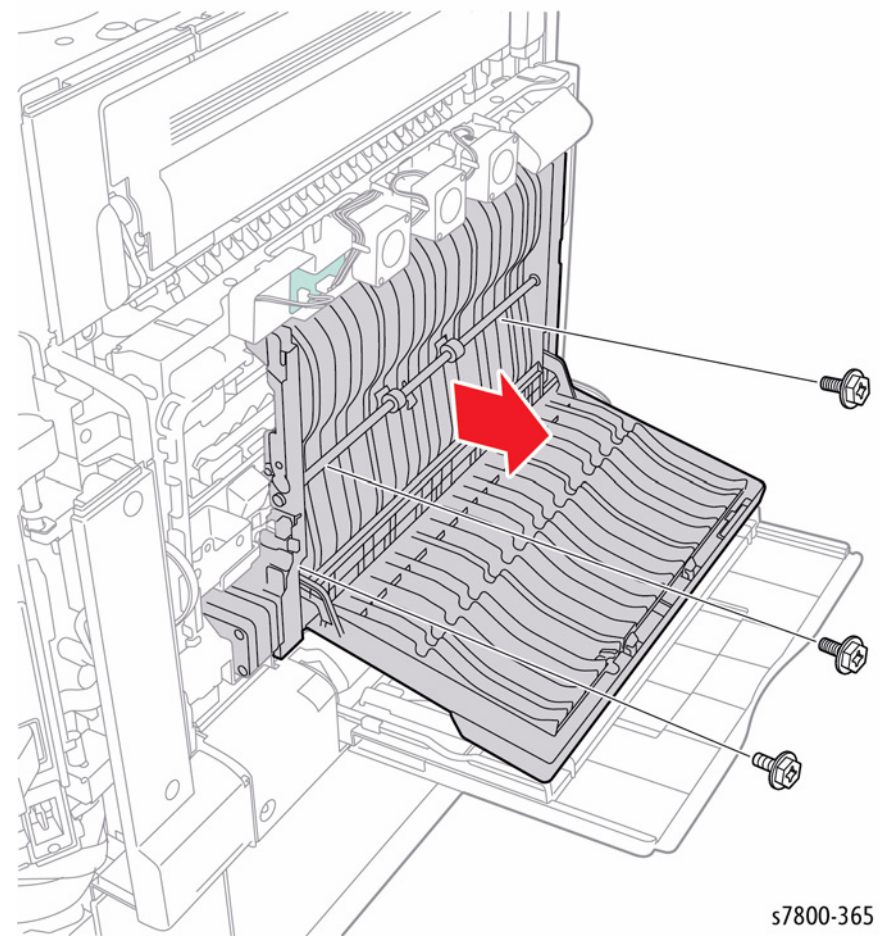


Figure 4 Removing the Duplex Assembly

Replacement

Be sure the Cover fits into 2 locating pins and 2 tabs.

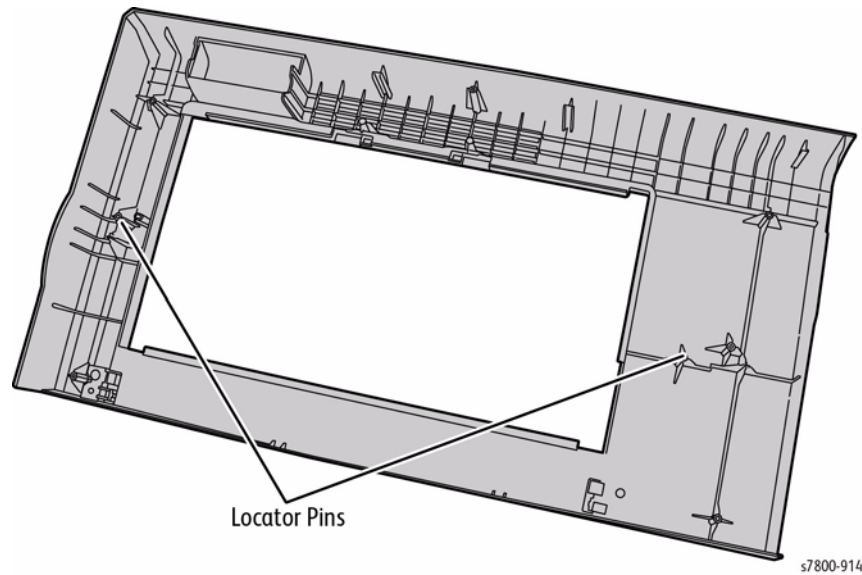


Figure 5 Locating Pins and Tabs

REP 14.5 Left Hand Fan 1/ Fan 2/ Fan 3

Parts List on [PL 14.2 Item 12](#), [PL 14.2 Item 13](#), [PL 14.2 Item 14](#)

Removal

1. Open the Left Hand Door A.
2. Remove 4 screws that secure the Chute.
3. Remove 2 tapping screws.
4. Rotate and remove the Chute

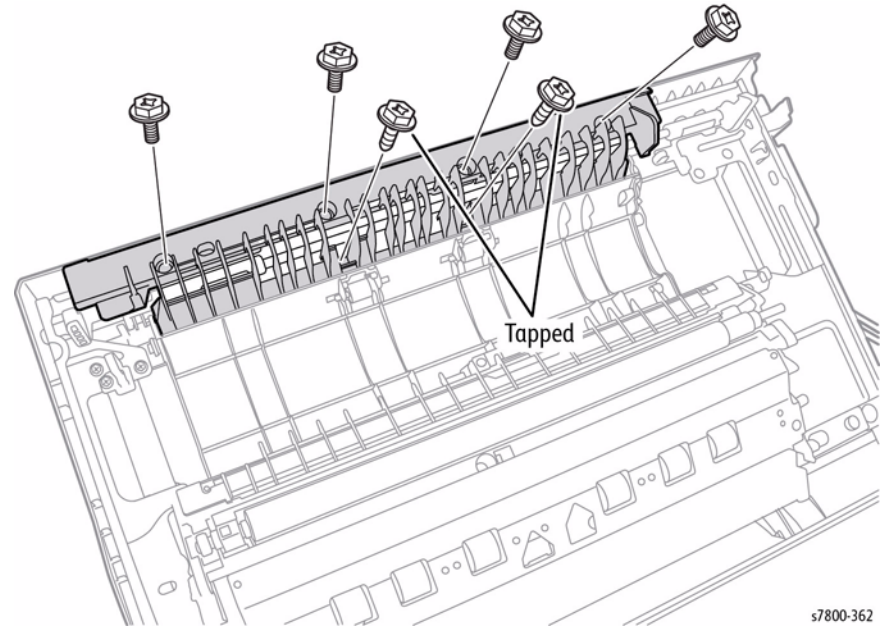


Figure 1 Removing the Chute

5. Remove 5 tapping screws that secure the Left Hand Cover.
6. Flex the latch handle area to release the Left Hand Cover and remove the Left Hand Cover.

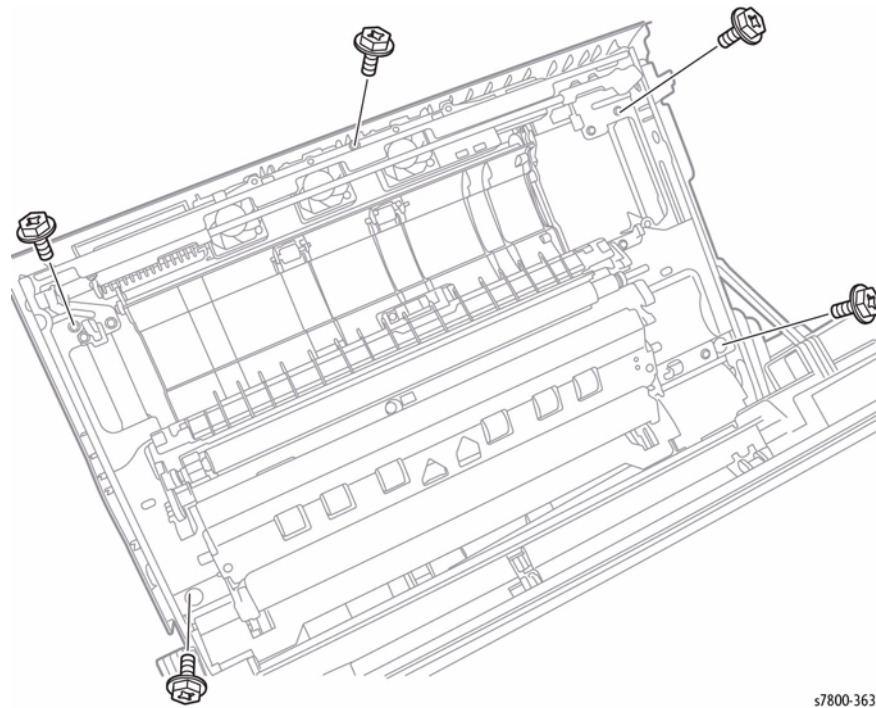


Figure 2 Removing the Left Hand Cover

s7800-363

7. Close the Left Hand Cover Assembly.
8. Disconnect the wiring harness connector P/J454 (Left Hand Fan 2).
9. Remove 2 screws that secure the Left Hand Fan.
10. Remove the Left Hand Fan.

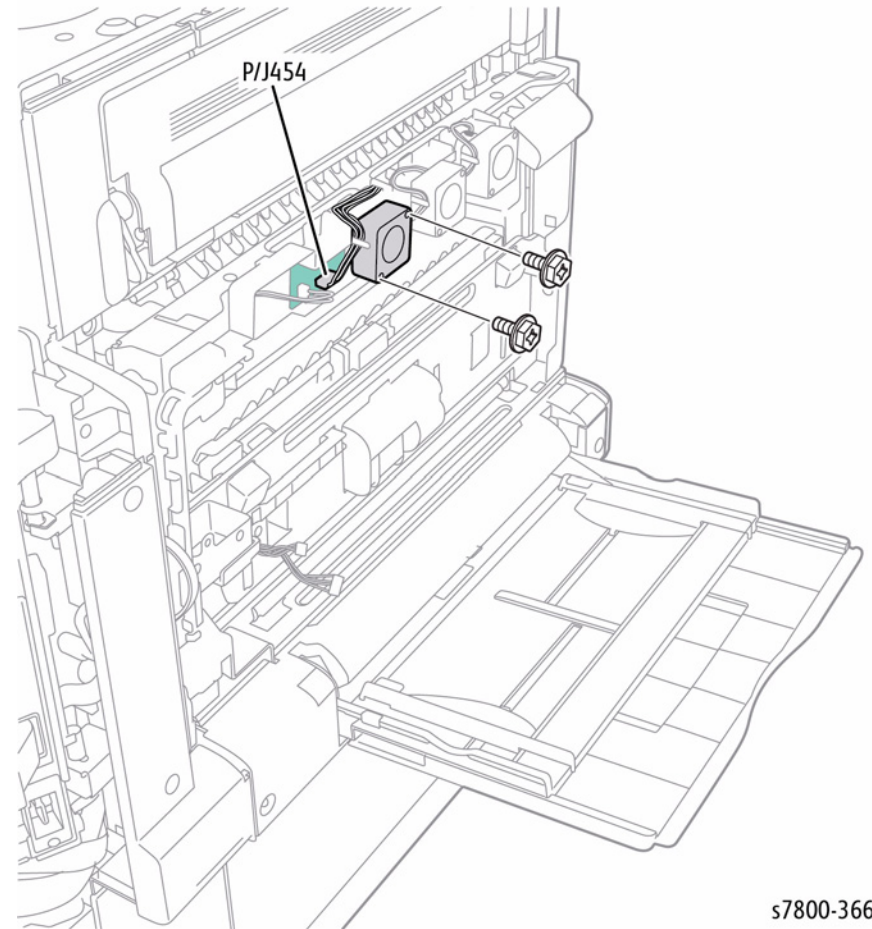


Figure 3 Removing the Left Hand Fan

s7800-366

REP 14.6 Left Hand Fan PWB

Parts List on [PL 14.2 Item 16](#)

Removal

1. Remove the Left Hand Fan 1, 2, 3 ([REP 14.5](#)).
2. Open the Left Hand Door A.
3. Remove 4 screws that secure the Chute.
4. Remove 2 tapping screws.
5. Rotate and remove the Chute

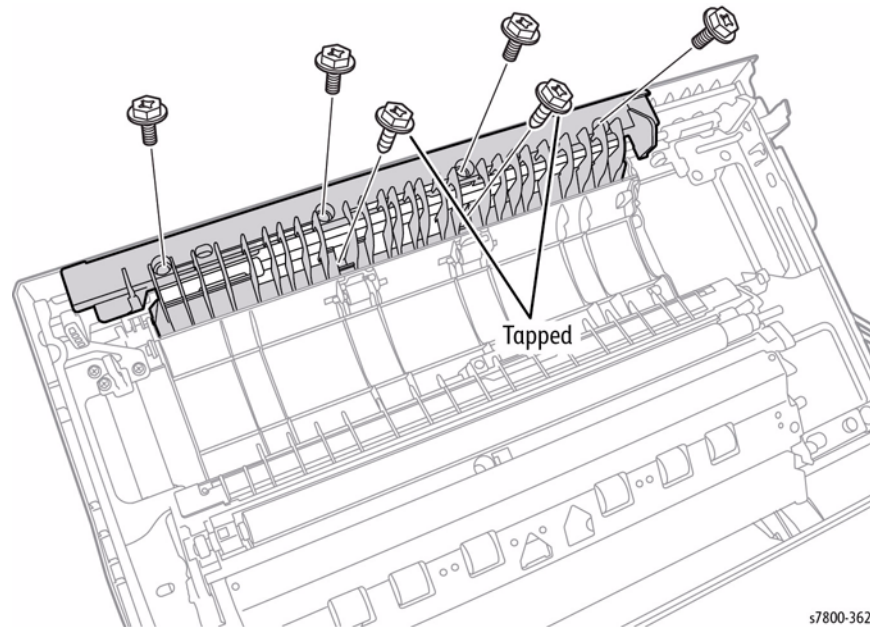


Figure 1 Removing the Chute

s7800-362

6. Remove 5 tapping screws that secure the Left Hand Cover.
7. Flex the latch handle area to release the Left Hand Cover and remove the Left Hand Cover.

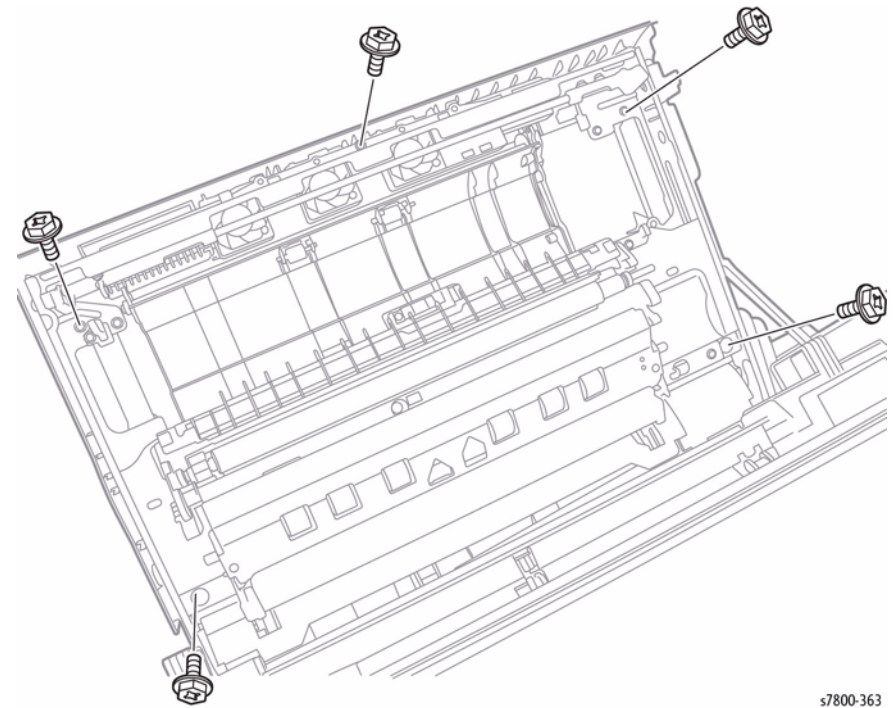


Figure 2 Removing the Left Hand Cover

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8. Close the Left Hand Cover Assembly.
9. Disconnect 3 wiring harness connectors P/J450, P/J453, and P/J454.
10. Remove 1 screw that secures the Left Hand Fan PWB.
11. Remove the Left Hand Fan PWB.

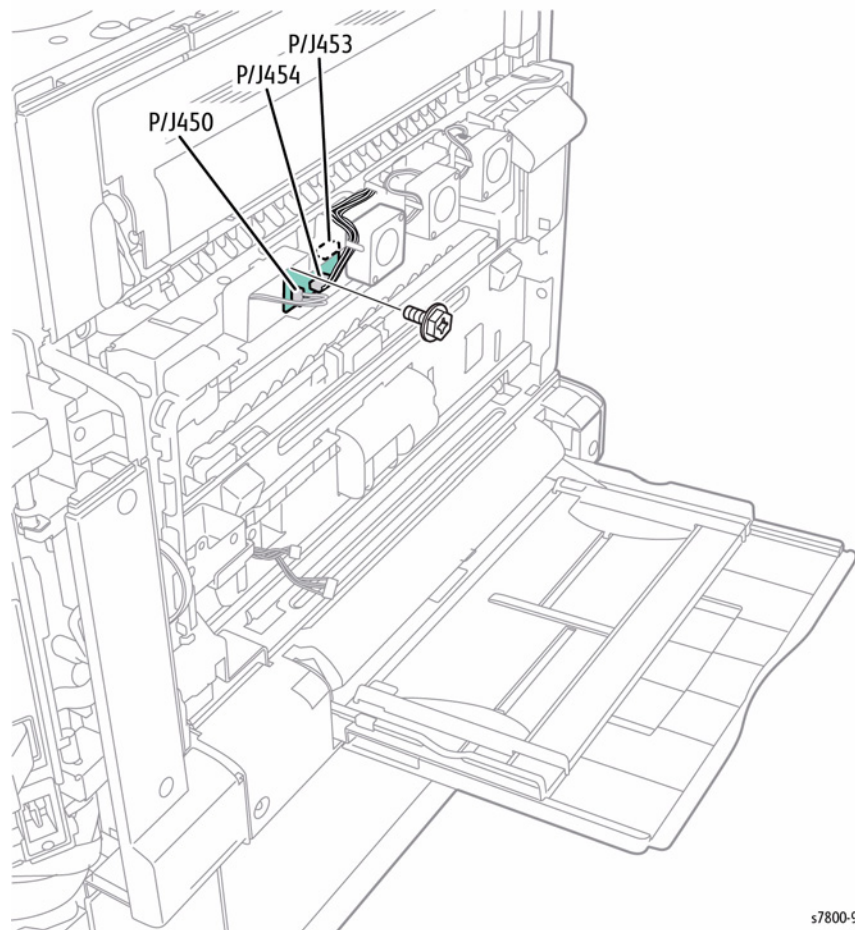


Figure 3 Removing the Left Hand Fan PWB

s7800-915

REP 14.7 Pinch Chute Assembly

Parts List on PL 14.3 Item 3

Removal

CAUTION

Do not touch the Roll surface of the 2nd BTR Assembly.

NOTE: When removing the Pinch Chute Assembly, be careful not to drop the spring.

1. Open the Left Hand Door A.
2. Remove 1 screw that secures the Harness Guide (PL 14.4 Item 16).

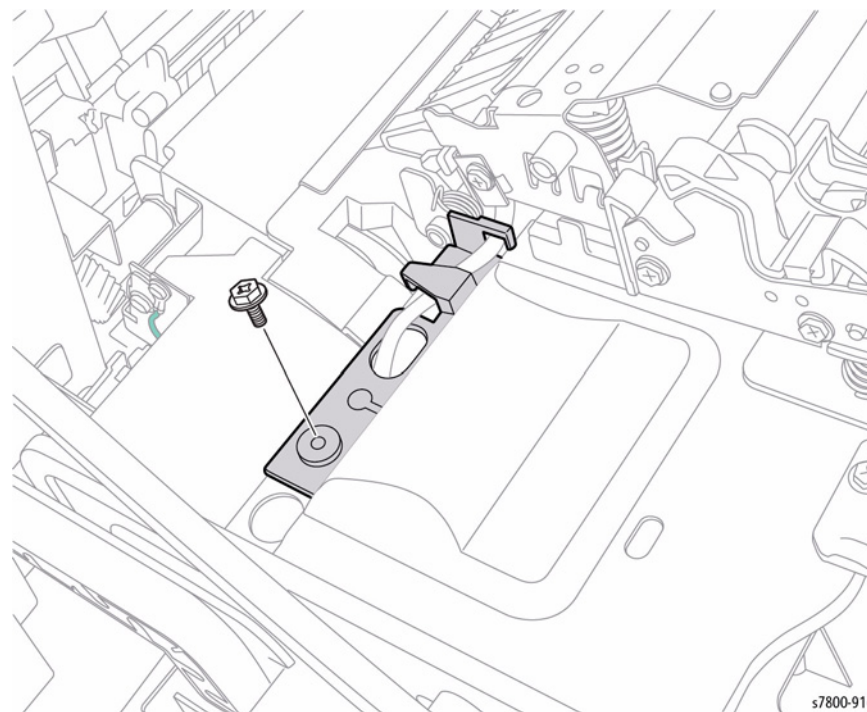


Figure 1 Removing the screw

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3. Disconnect 1 wiring harness connector P/J170.

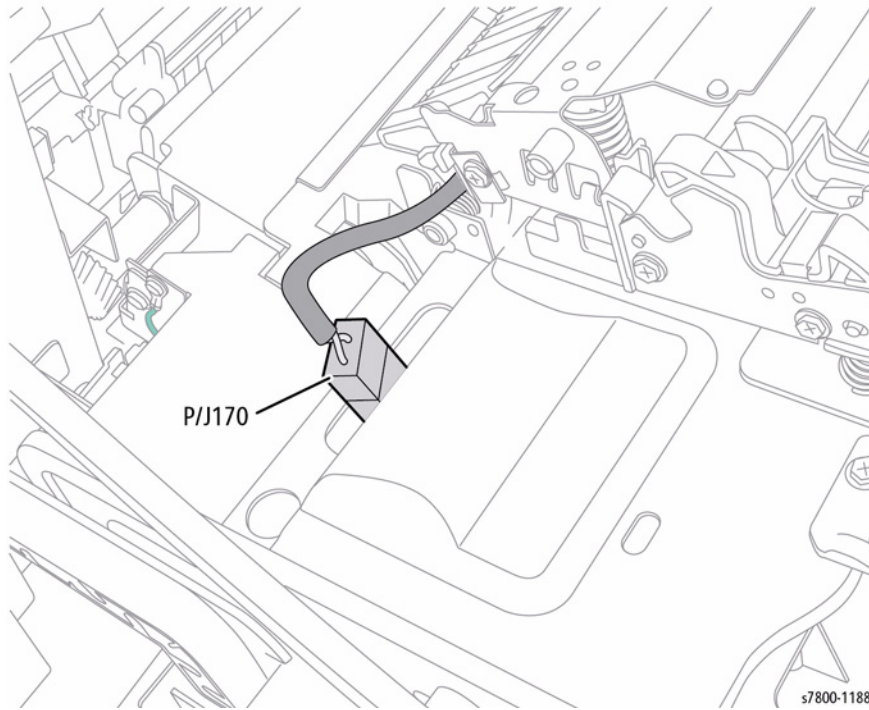


Figure 2 Disconnecting the wiring harness connector

4. Push the Chute Assembly down (towards the Cover).
5. Use a flat tip screwdriver to press the latches inwards to release the hooks of the Pinch Chute Assembly.
6. Repeat step 5 for the other side of the Pinch Chute Assembly.
7. Remove the Pinch Chute Assembly.

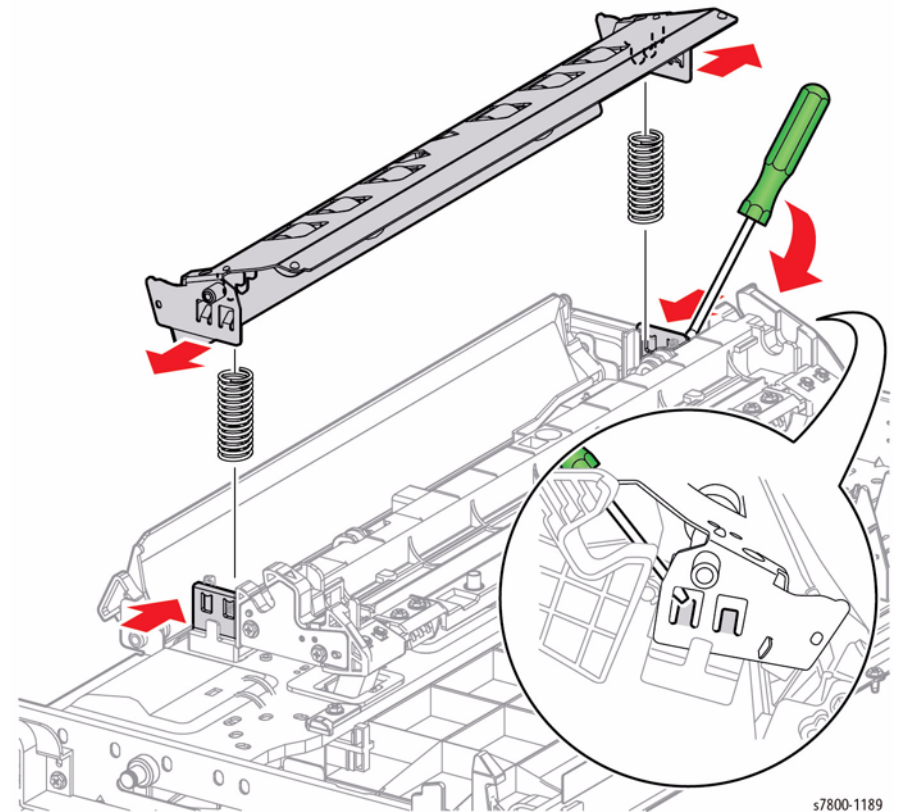


Figure 3 Removing the Pinch Chute Assembly

REP 14.8 Duplex Chute Assembly

Parts List on [PL 14.3 Item 13](#)

Removal

1. Unhook the spring at the rear of the Duplex Chute Assembly.

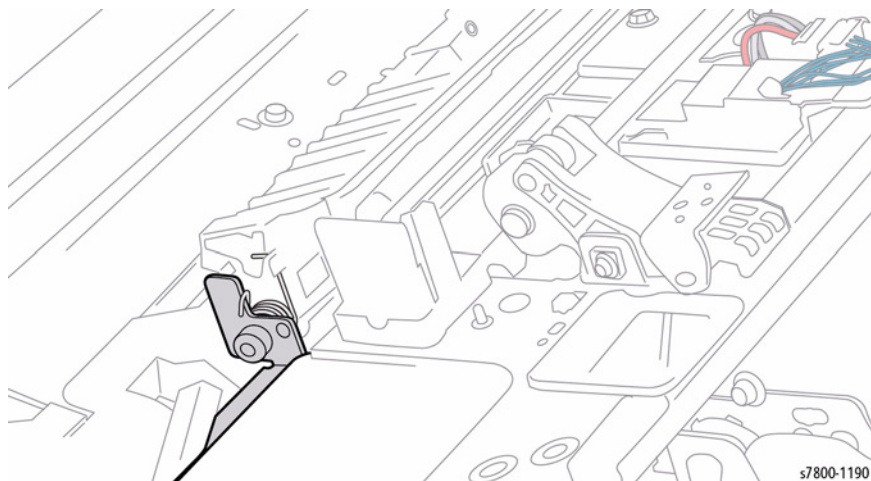


Figure 1 Releasing the Spring

2. Unscrew 1 screw (silver, 8 mm) at the front of the Duplex Chute Assembly.

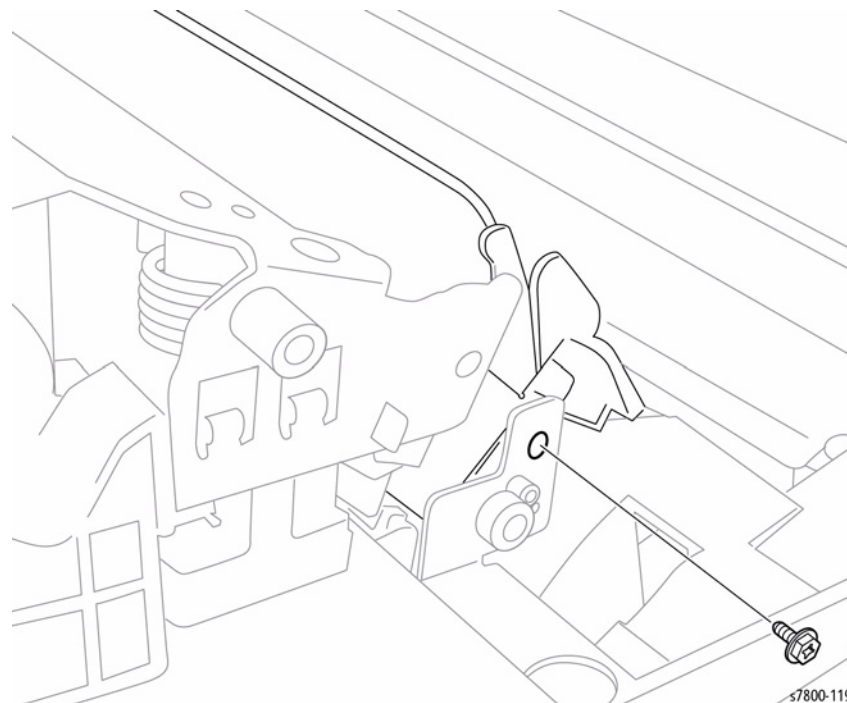


Figure 2 Loosening the screw

3. Rotate the Duplex Chute Assembly, align the boss at its front to the notch, and remove the Duplex Chute Assembly.

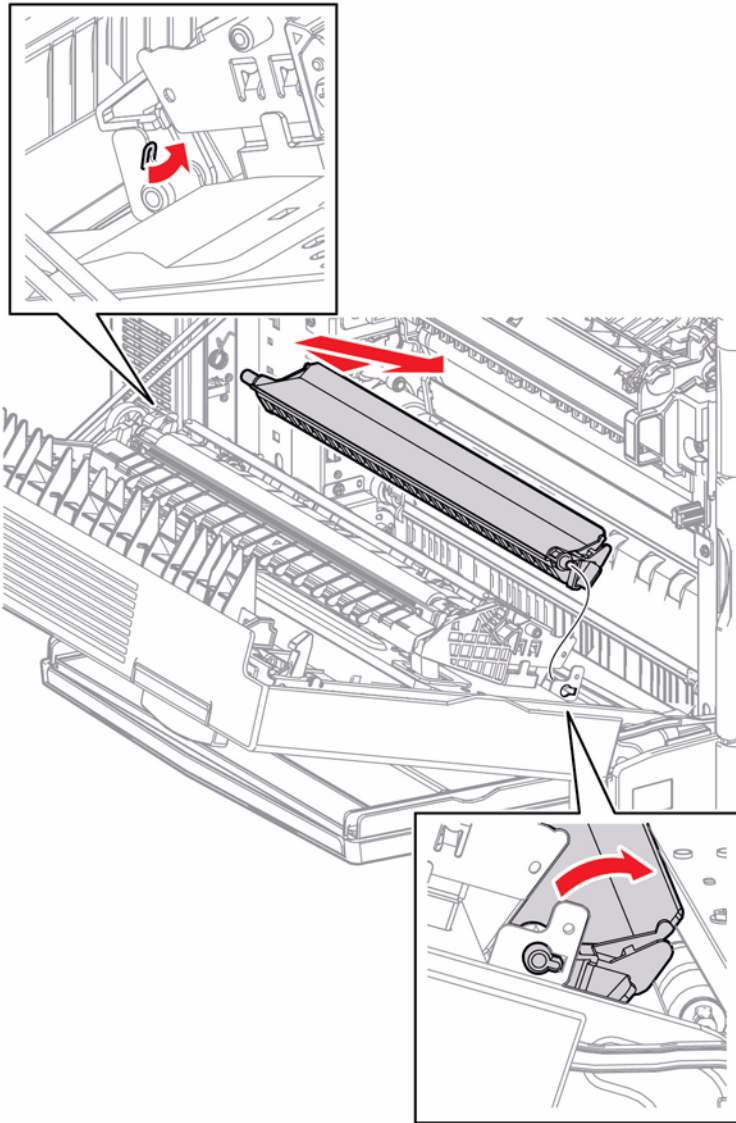


Figure 3 Removing the Duplex Chute Assembly

REP 14.9 Retract Shaft Assembly

Parts List on [PL 14.4 Item 4](#)

Removal

CAUTION

Do not touch the Roll surface of the 2nd BTR Assembly.

1. Remove the 2nd BTR Assembly ([REP 14.2](#)).
2. Remove the Pinch Chute Assembly ([REP 14.7](#)).

NOTE: When removing the screws in the following step, be careful not to loose the spring.

3. Remove 2 screws (silver, 6mm) that secure the Front Bracket to the Left Hand Cover Assembly and remove the 2 Brackets together with the 2nd BTR Housing Assembly.
4. Remove 4 screws (silver, 4mm) that secure the 2nd BTR Housing Assembly to the 2nd Link Assembly.

NOTE: Be sure to press and hold the 2nd BTR Housing Assembly to prevent the Springs come loose.

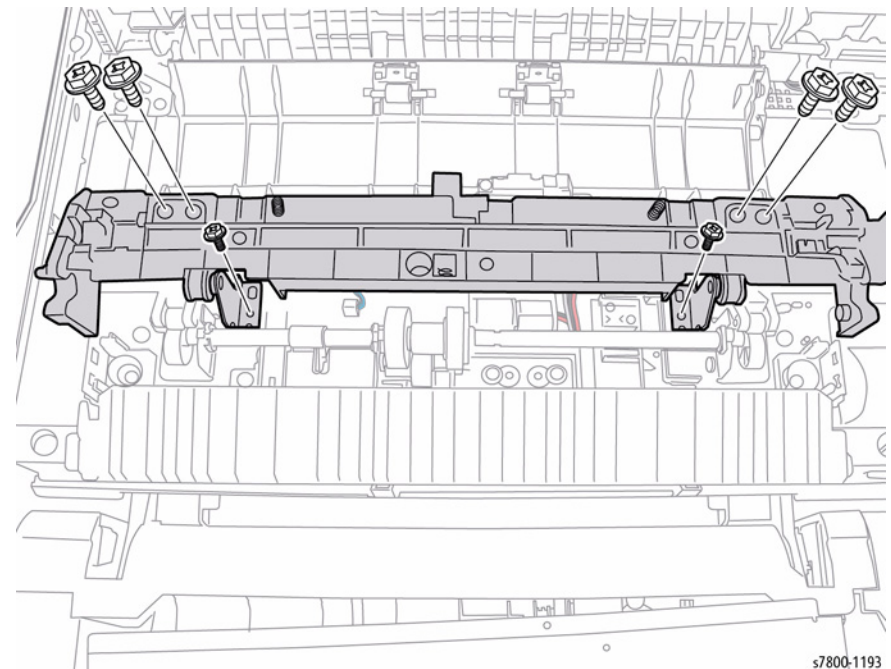


Figure 1 Removing the Rear Bracket

5. Remove the Front E-rings that secure the Retract Shaft Assembly.
6. Shift the 3 Sleeve Bearings to remove the Retract Shaft Assembly.

NOTE: Rotate the Flag to get it out of the Sensor.

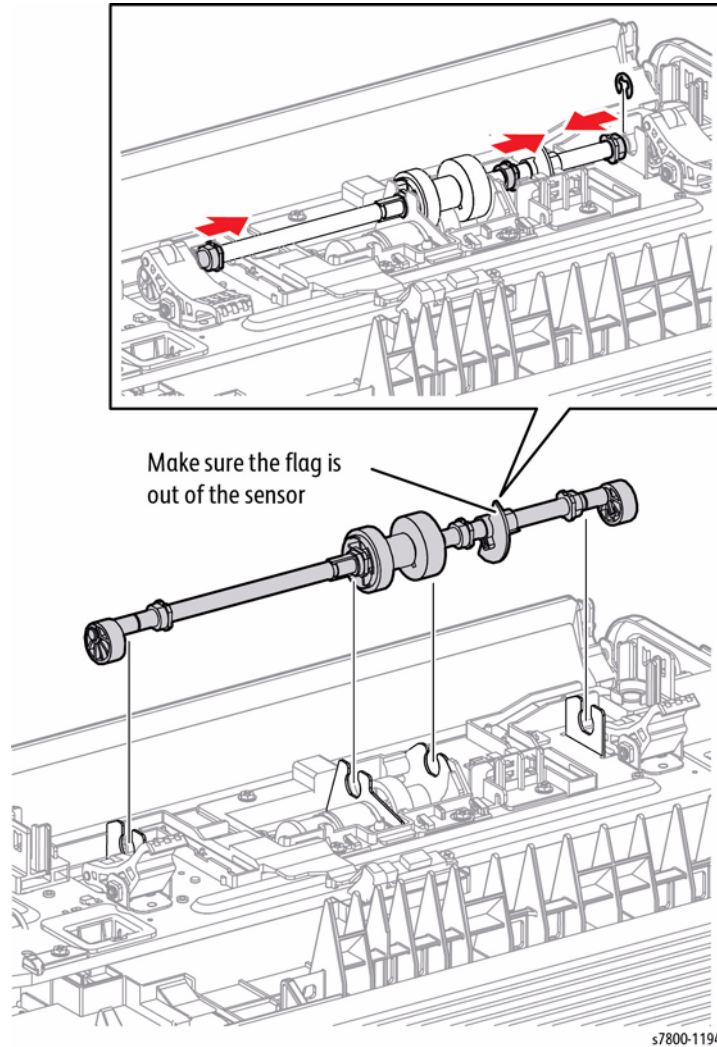


Figure 2 Removing the Retract Shaft Assembly

Replacement

When installing the Retract Shaft Assembly, take note of the following.

- Install it such that the 2 Cams are pressing on the Arm as tightly as possible.
- If the Cams were not installed as specified above, the Left Hand Cover Assembly may get locked when closed and cannot be opened any more. In such cases, it is possible to recover by turn On the power, wait until the printer comes to ready, and then turn Off the power.
- When installing the 2nd BTR Housing Assembly, make sure that each spring is attached at the appropriate position.

Note

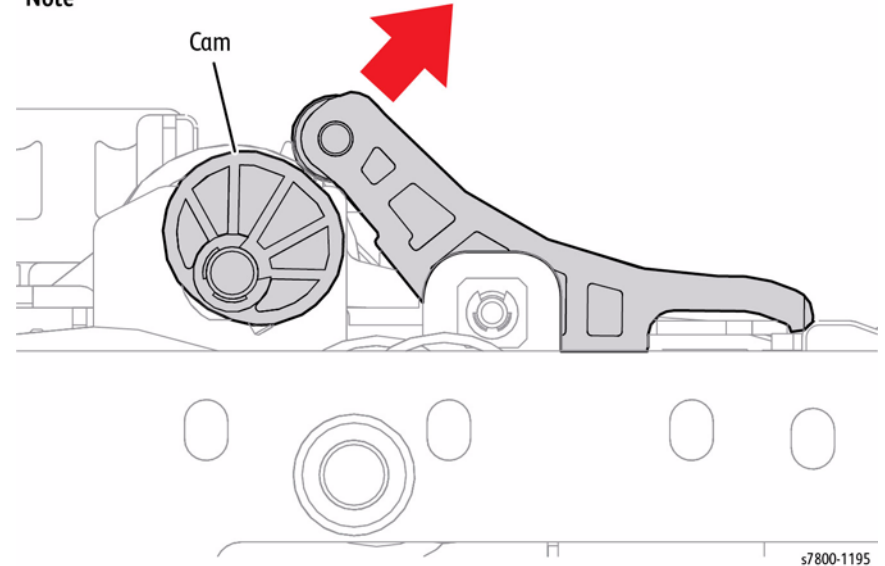


Figure 3 Installing the Retract Shaft Assembly

- Be sure to install both Brackets before installing the screws.

REP 14.10 2nd BTR Contact Retract Motor Assembly

Parts List on [PL 14.4 Item 8](#)

Removal

CAUTION

Do not touch the Roll surface of the 2nd BTR Assembly.

1. Remove the 2nd BTR Assembly ([REP 14.2](#)).
2. Remove the Pinch Chute Assembly ([REP 14.7](#)).
3. Remove the Retract Shaft Assembly ([REP 14.9](#)).
4. Remove the wiring harness from the Harness Guide.
5. Remove 4 screws (silver, 6mm) that secure the 2nd BTR Contact Retract Motor Assembly to the Left Hand Cover Assembly.
6. Remove the 2nd BTR Contact Retract Motor Assembly.
7. Disconnect the wiring harness connector that is connected to the 2nd BTR Contact Retract Motor Assembly.

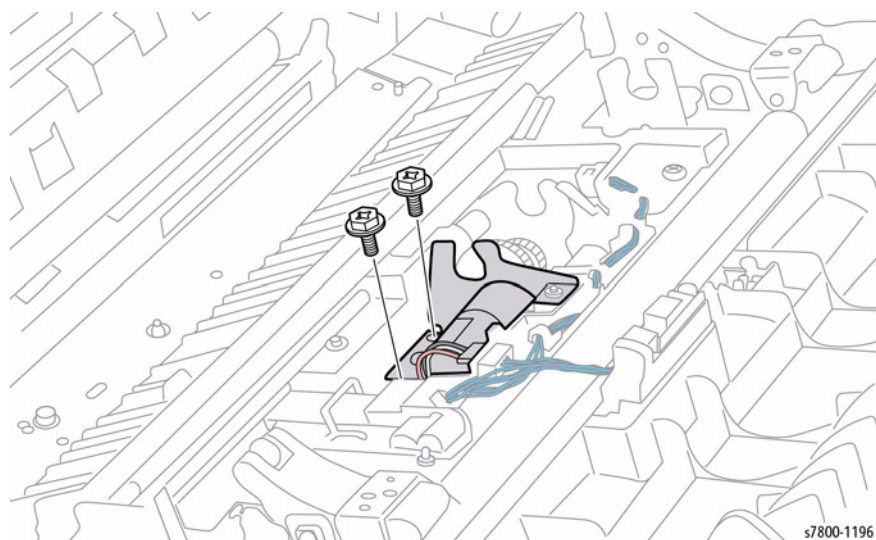


Figure 1 Removing the 2nd BTR Contact Retract Motor Assembly

REP 14.11 POB Sensor

Parts List on [PL 14.4 Item 10](#)

Removal

1. Open the Left Hand Cover Assembly.
2. Remove 1 screw (silver, Tapped, 8mm) that secures the POB Sensor and remove the POB Sensor.
3. Disconnect the wiring harness connector [P/J180](#) that is connected to the POB Sensor.

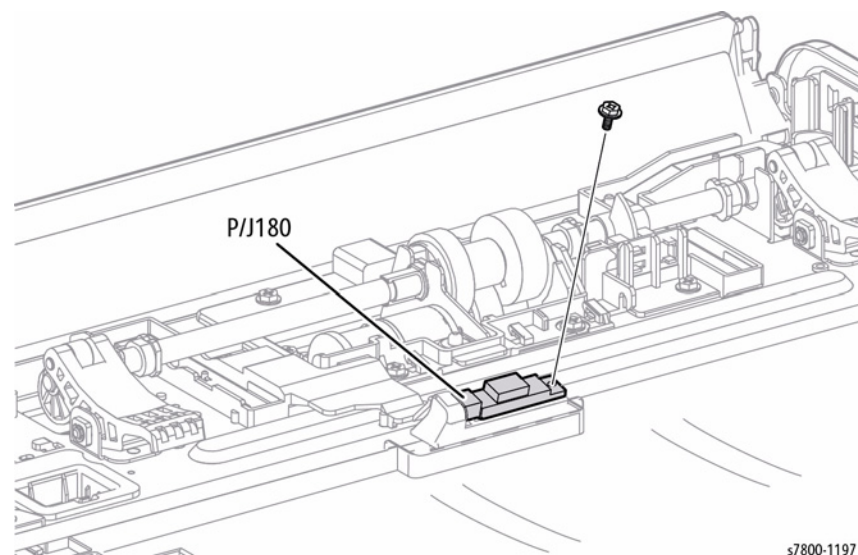


Figure 1 Removing the POB Sensor

REP 14.12 Retract Actuator

Parts List on [PL 14.4 Item 20](#)

Removal

1. Remove the Retract Shaft Assembly ([REP 14.9](#)).
2. Remove the E-Ring.
3. Remove the Retract Cam ([PL 14.4 Item 18](#)).
4. Remove the Pin ([PL 14.4 Item 19](#)).
5. Slide the Bearing ([PL 14.4 Item 21](#)) out to remove.
6. Release the Actuator from the Pin to remove.

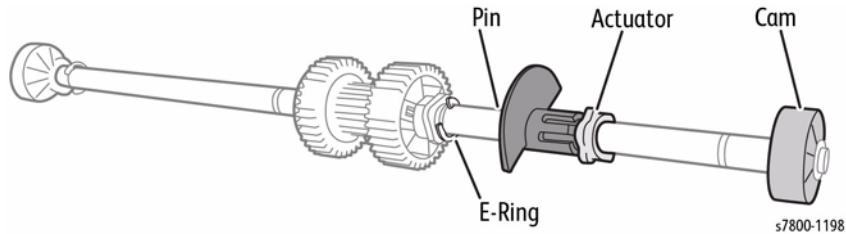


Figure 1 Removing the Retract Actuator

Replacement

Be sure the Bearing sits in correct orientation.

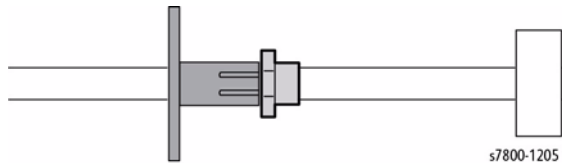


Figure 2 Bearing Orientation

REP 14.13 Duplex Lever

Parts List on [PL 14.5 Item 2](#)

Removal

1. Remove the Duplex Assembly ([REP 14.4](#)).
2. Remove 4 screws (tapped) that secure the Latch Cover.
3. Use a flat tip screwdriver to release the 2 tabs from the Lever Cover.

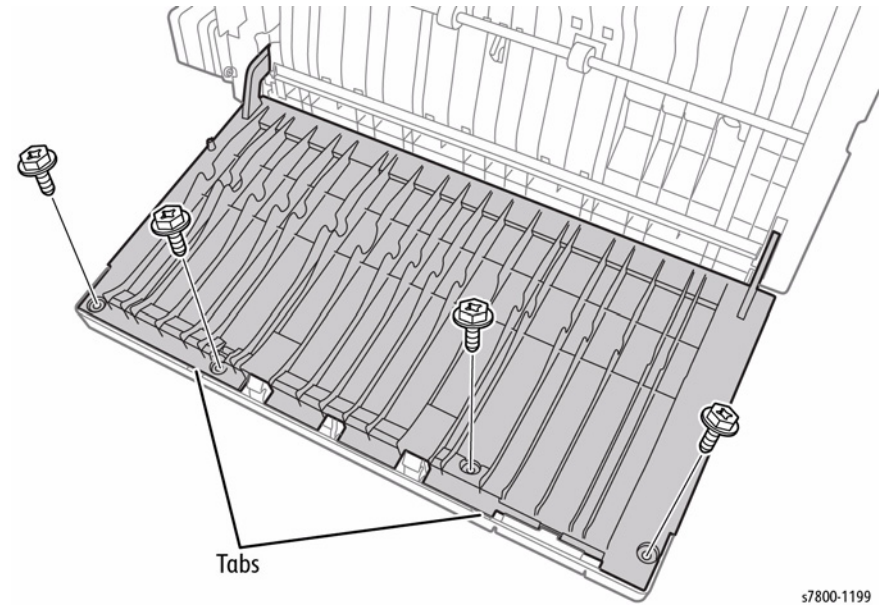


Figure 1 Removing the screws

NOTE: When removing the Lever in the following step, be careful not to drop the Spring.

4. Lift and remove the Duplex Lever.

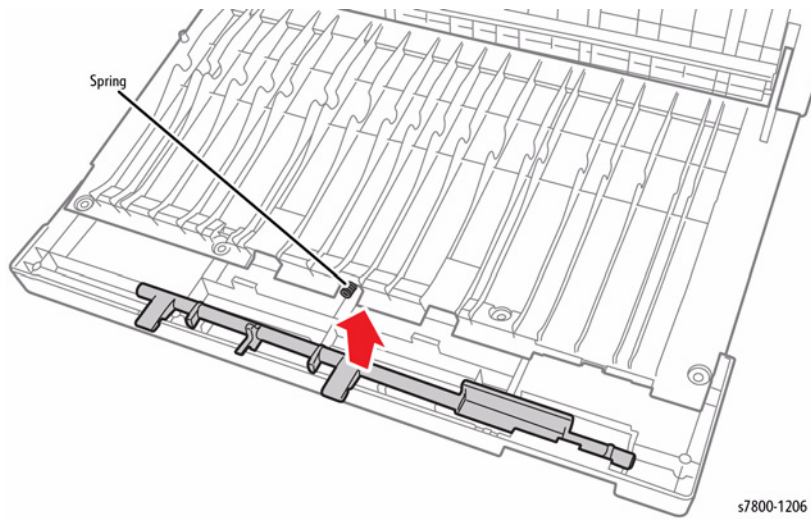


Figure 2 Removing the Duplex Lever

REP 14.14 Duplex Drive Motor

Parts List on [PL 14.5 Item 6](#)

Removal

1. Remove the Duplex Assembly ([REP 14.4](#)).
2. Remove 2 screws that secure the Duplex Drive Motor.
3. Remove the Duplex Drive Motor.

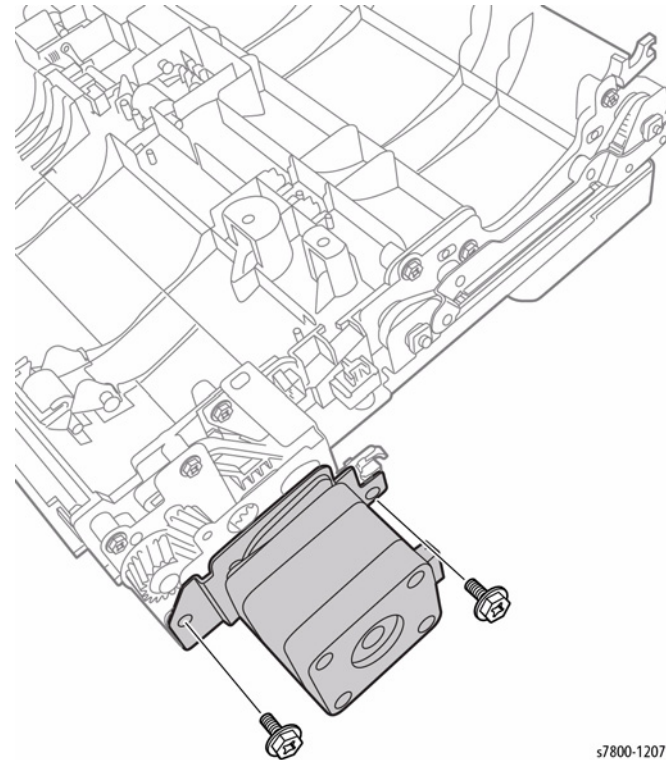


Figure 1 Removing the Duplex Drive Motor

REP 14.15 Duplex Roller 1 (top Roller)

Parts List on [PL 14.6 Item 6](#)

Removal

1. Remove the Duplex Assembly ([REP 14.4](#)).
2. Remove 2 screws that secure the Tension Bracket ([PL 14.6 Item 22](#)).
3. Remove the Tension Bracket.

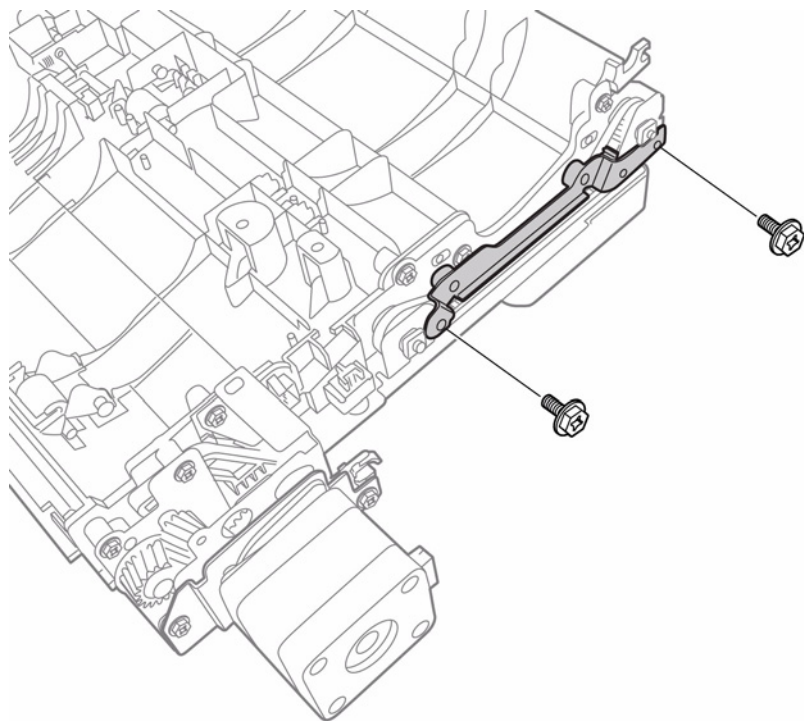


Figure 1 Removing the Tension Bracket

s7800-1208

4. Remove 2 E-Clips and 2 Bearings.

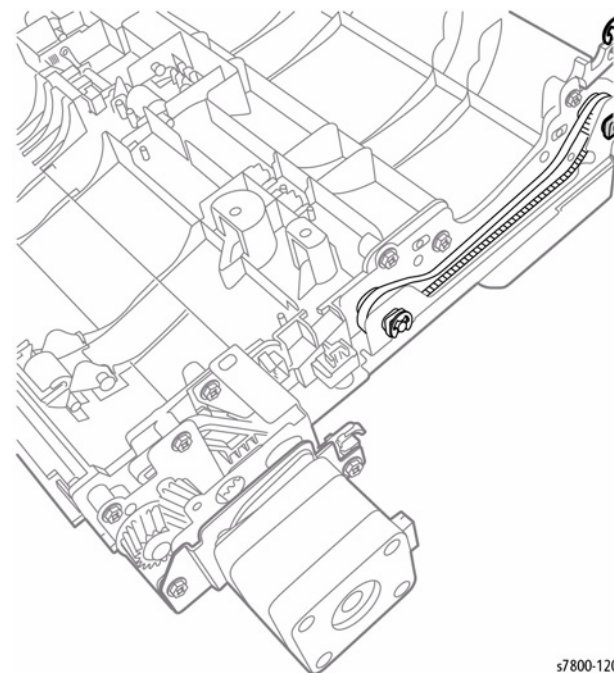


Figure 2 Removing the E-Clip and Bearing

s7800-1209

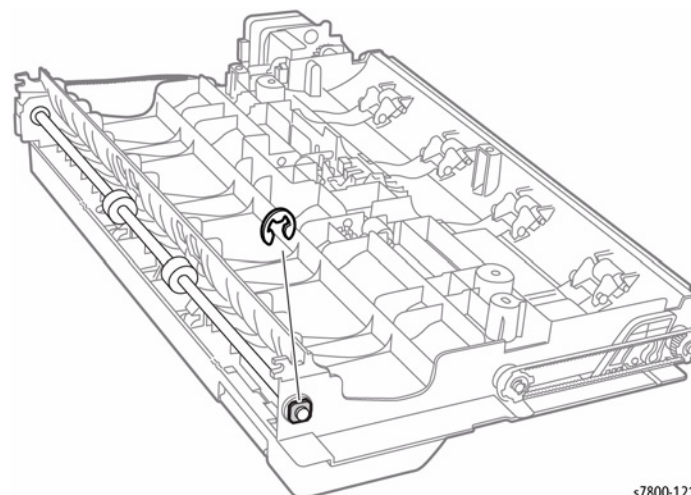


Figure 3 Removing the E-Clip and Bearing

s7800-1211

- Slide the Duplex Roller 1 out to remove.

NOTE: Be careful not to lose the Gear when removing the Duplex Roller 1.

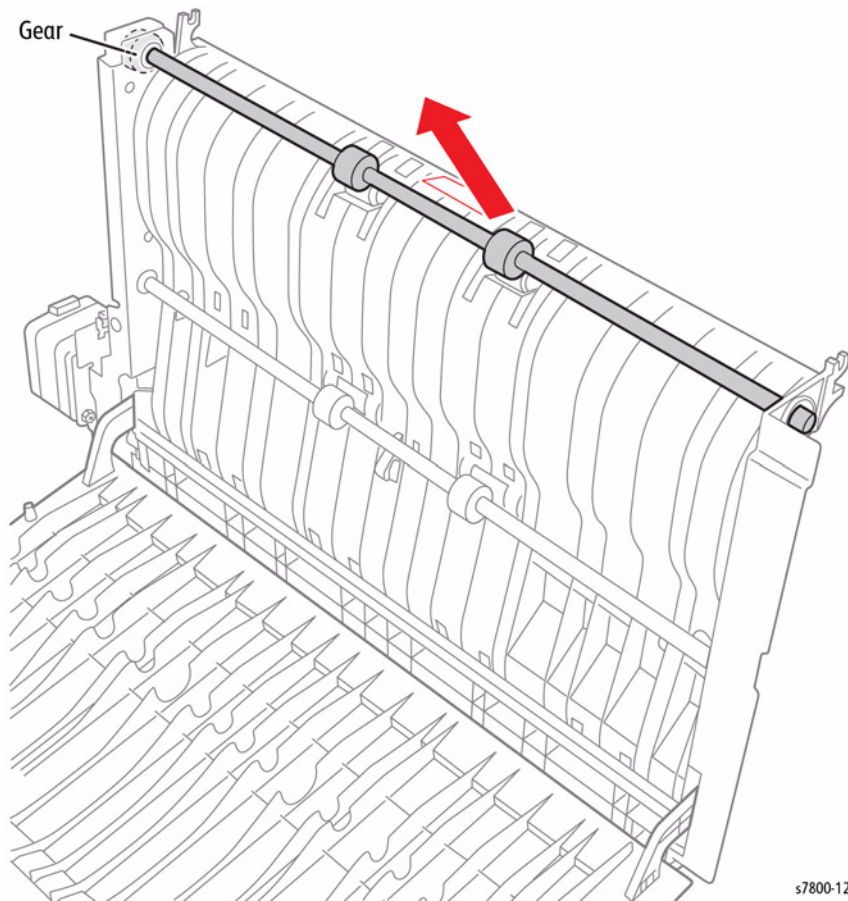


Figure 4 Removing the Duplex Roller 1

s7800-1214

REP 14.16 Duplex Roller 2 (middle Roller)

Parts List on [PL 14.6 Item 7](#)

Removal

- Remove the Duplex Assembly ([REP 14.4](#)).
- Remove 2 screws that secure the Tension Bracket ([PL 14.6 Item 22](#)).
- Remove the Tension Bracket.

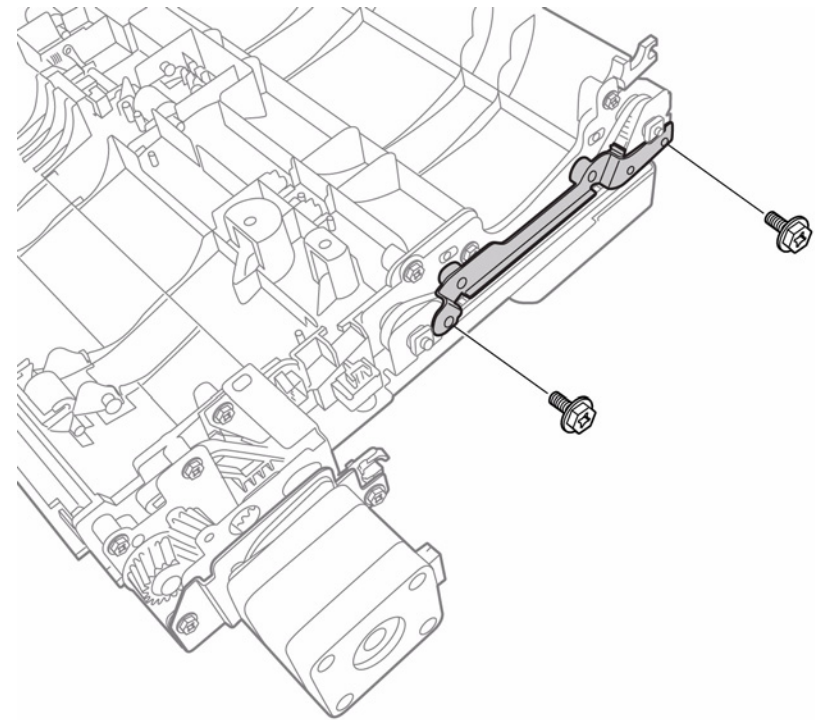
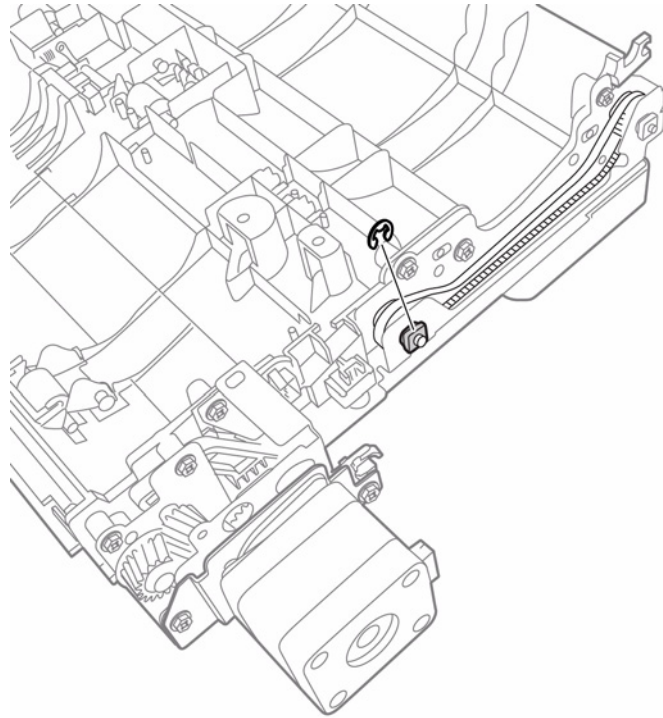


Figure 1 Removing the Tension Bracket

s7800-1208

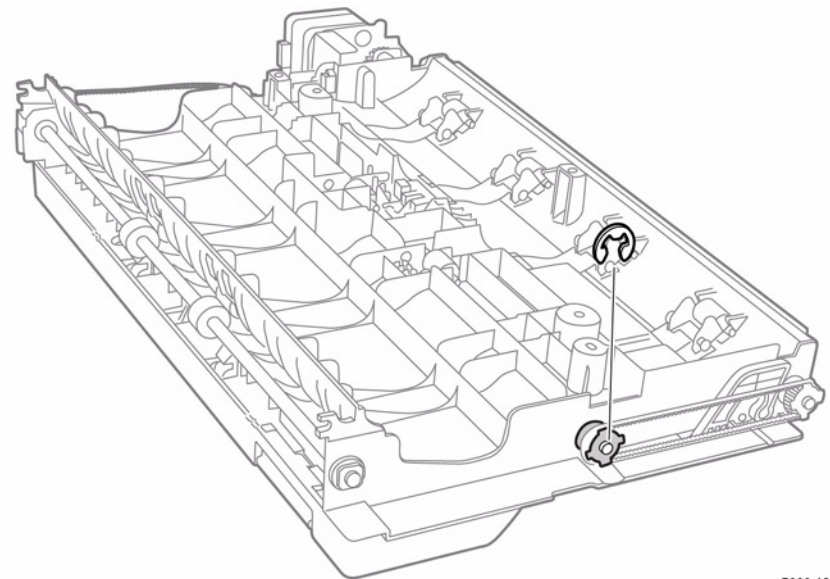
4. Remove the E-Clip, Gear, and Bearing.



s7800-1210

Figure 2 Removing the E-Clip, Gear, and Bearing

5. Remove the E-Clip and Bearing.



s7800-1212

Figure 3 Removing the E-Clip and Bearing

- Slide the Duplex Roller 2 out to remove.

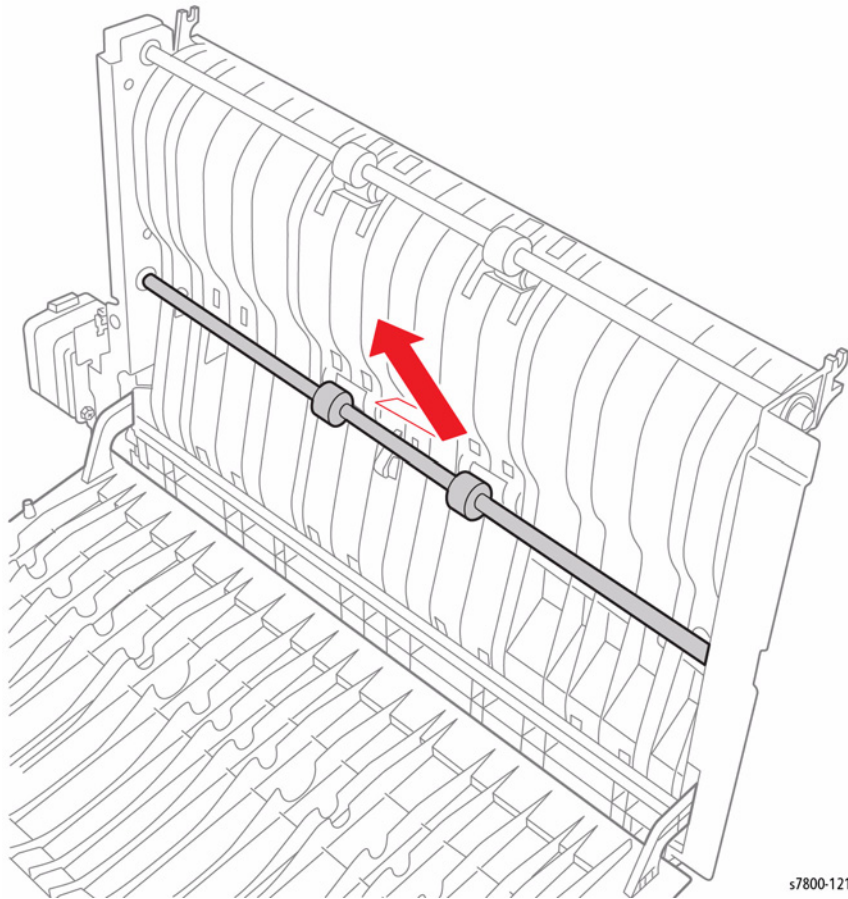
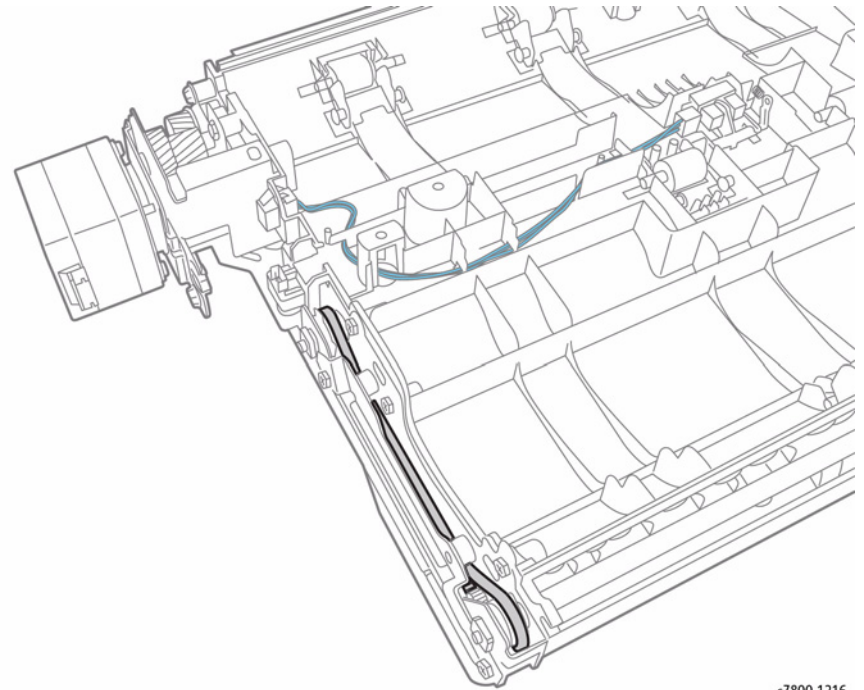


Figure 4 Removing the Duplex Roller 2

s7800-1215

Replacement

Be sure the Belt is installed in the correct place.



s7800-1216

Figure 5 Belt Installation

REP 14.17 Duplex Roller 3

Parts List on [PL 14.6 Item 8](#)

Removal

1. Remove the Duplex Assembly ([REP 14.4](#)).
2. Remove the E-Clip, Gear, and Bearing.

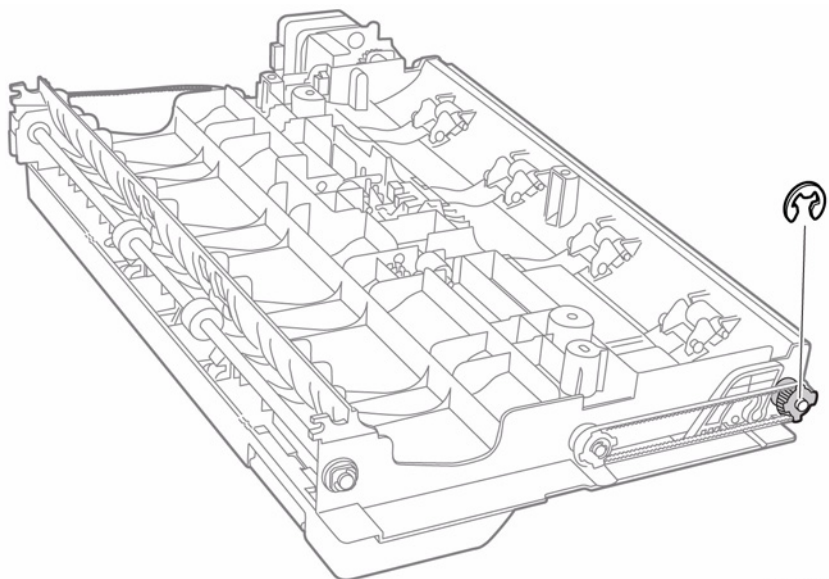


Figure 1 Removing the E-Clip, Gear, and Bearing

s7800-1213

3. Remove 1 screw that secures the Lower Chute ([PL 14.6 Item 5](#)).
4. Remove the Lower Chute.

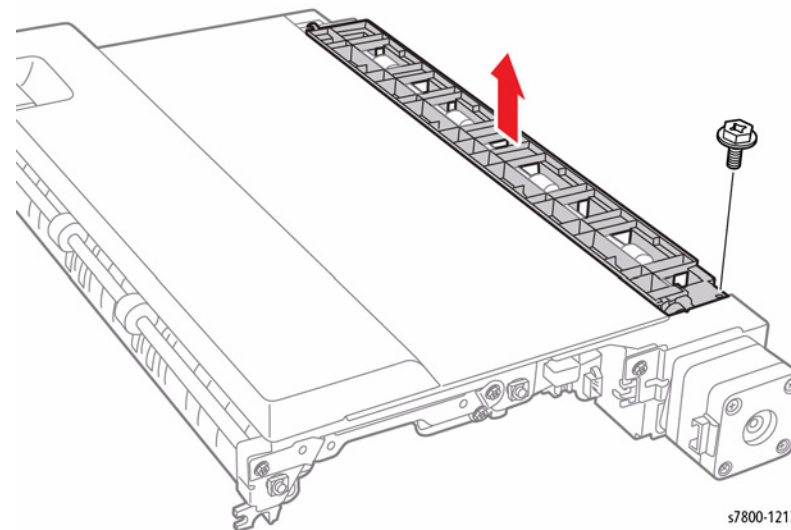


Figure 2 Removing the Lower Chute

s7800-1217

5. Remove the E-Clip, Gear, and Bearing.
6. Slide the Duplex Roller 3 out to remove.

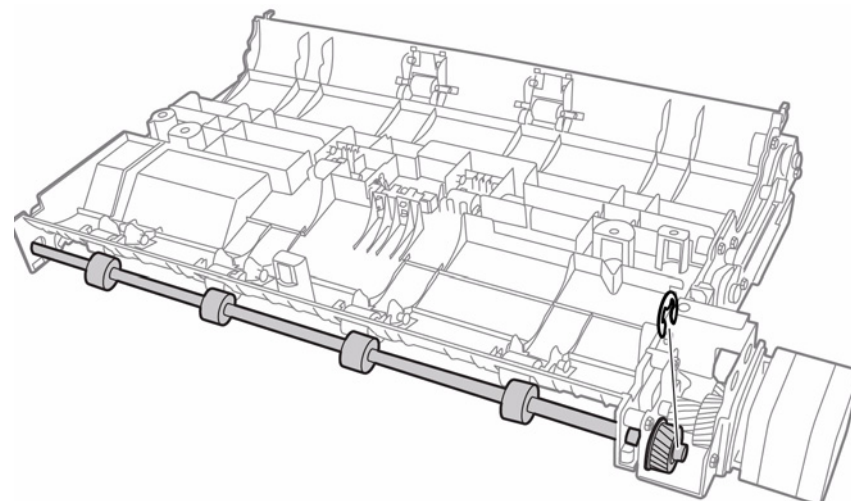


Figure 3 Removing the Duplex Roller 3

s7800-1218

REP 15.1 Registration Transport Assembly

Parts List on [PL 15.1 Item 8](#)

Removal

1. Remove the Tray 1 (MPT) ([REP 13.1](#)).
2. Remove the Left Hand Door A ([REP 14.3](#)).
3. Disconnect the wiring harness connector [P/J632](#).
4. Remove 2 screws that secure the Registration Transport Assembly.
5. Remove the Registration Transport Assembly.

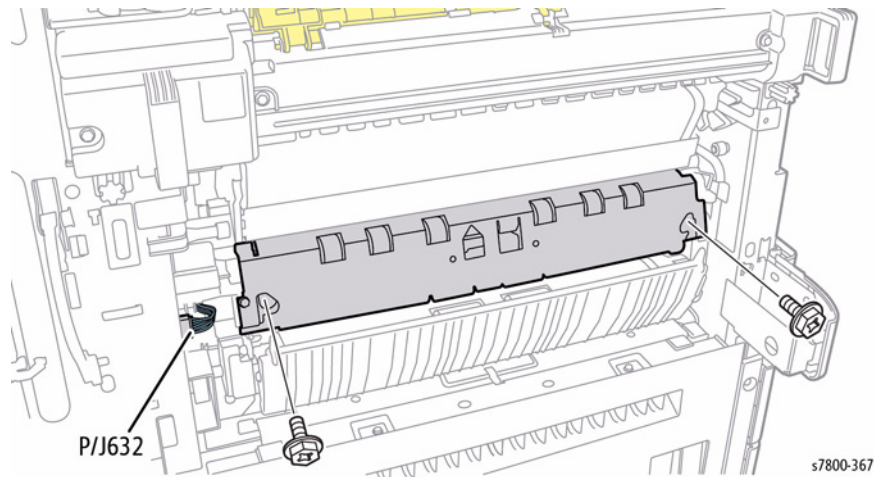


Figure 1 Removing the Registration Transport Assembly

REP 15.2 Take Away Motor

Parts List on [PL 15.1 Item 9](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis Unit ([REP 18.1](#)).
4. Disconnect the wiring harness connector [P/J224](#).
5. Release the cable from the clip.
6. Release the Clamp.
7. Remove 4 screws that secure the Motor Assembly.
8. Move the wiring harness in the direction of the arrow to make room for the Motor.
9. Remove the Takeaway Motor Assembly.

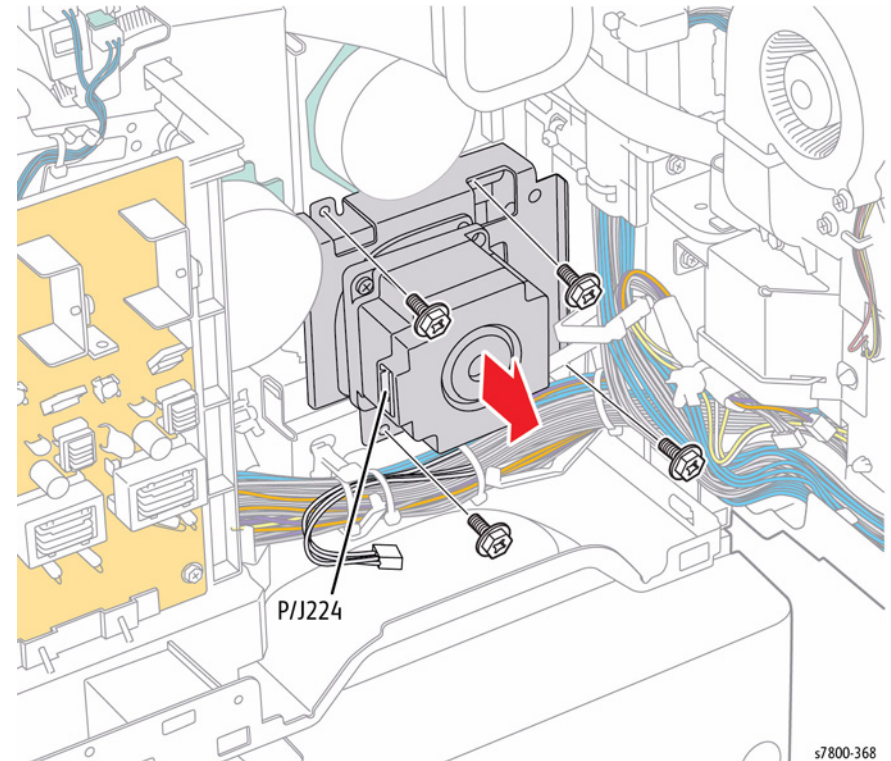


Figure 1 Removing the Takeaway Motor Assembly

10. Remove 2 screws that secure the Take Away Motor.
11. Remove the Take Away Motor.

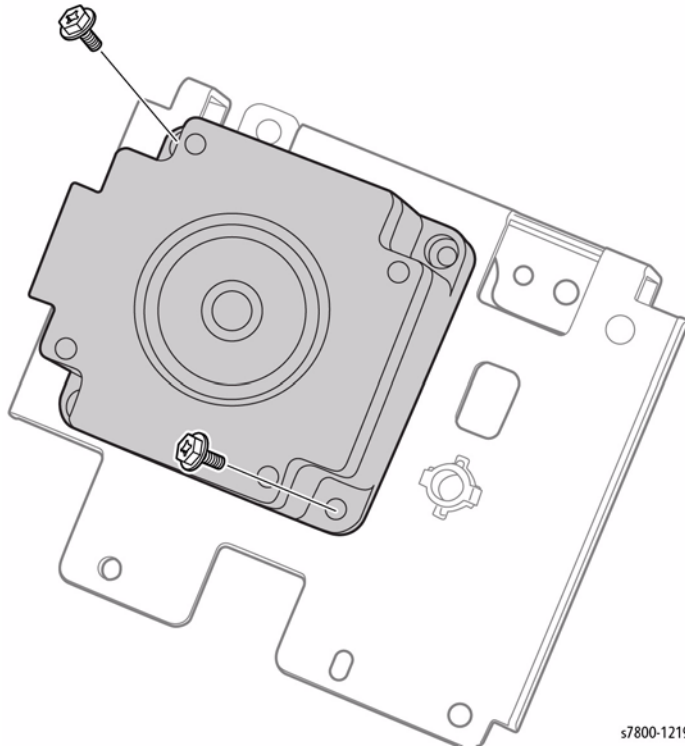


Figure 2 Removing the Take Away Motor

s7800-1219

REP 15.3 Registration Clutch

Parts List on [PL 15.2 Item 4](#)

Removal

1. Remove the Tray 1 (MPT) ([REP 13.1](#)).
2. Remove the Left Hand Door A ([REP 14.3](#)).
3. Remove the Registration Transport Assembly ([REP 15.1](#)).
4. Disconnect the wiring harness connector [P/J260](#) on the harness that is connected to the Regi Clutch, and remove the harness from the Harness Guide.
5. Remove the E-ring that secures the Registration Clutch.
6. Remove the Registration Clutch.

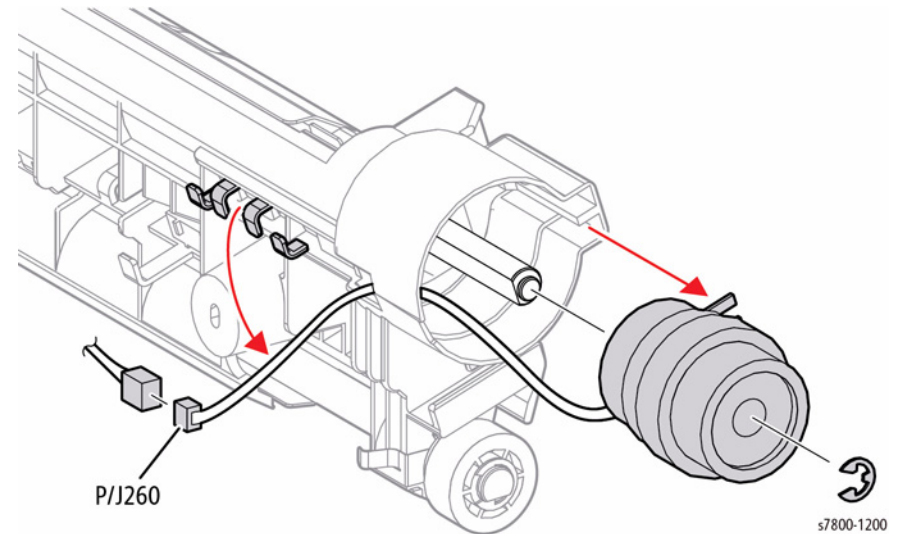


Figure 1 Removing the Registration Clutch

s7800-1200

REP 17.1 Exit 2 Assembly

Parts List on PL 17.1 Item 8

Removal

NOTE: If the Extra Heavy Duty Media Kit has been installed, be sure to remove the red Spring from the old Exit 2 Assembly and install it on the new Exit 2 Assembly.

CAUTION

Failure to transfer the red Spring from the old Exit 2 Assembly to the new Exit 2 Assembly will cause the printer to jam when duplexing paper heavier than 256 gsm.

1. Remove the Fuser (REP 7.1).
2. Open the Exit 2 Assembly.
3. Remove 1 screws that secures the Left Rear Upper Cover (PL 19.2 Item 5).
4. Remove the Left Rear Upper Cover.

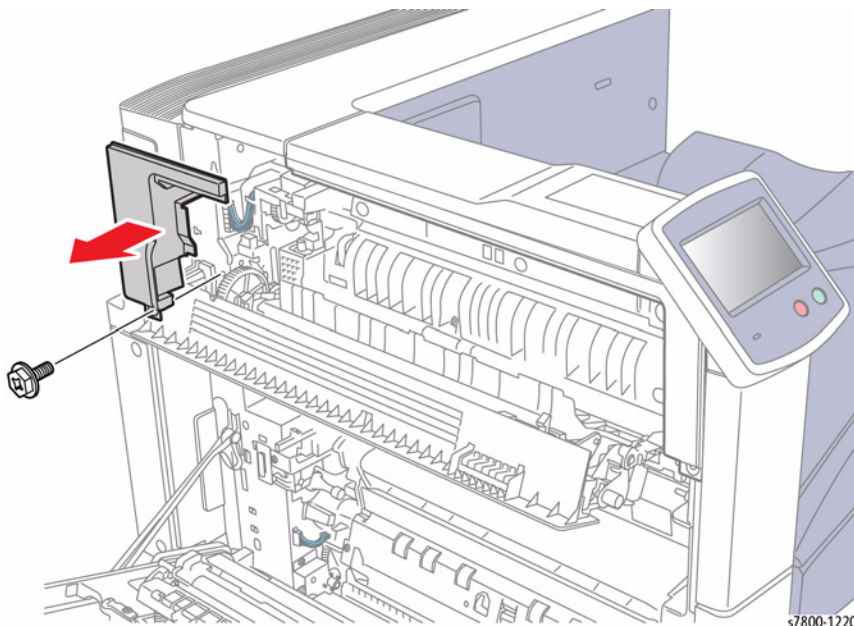


Figure 1 Removing the Left Upper Cover

5. Remove 1 screw that secures the Left Upper Cover (PL 19.2 Item 8).
6. Slide the Left Upper Cover towards the left of the printer to remove.

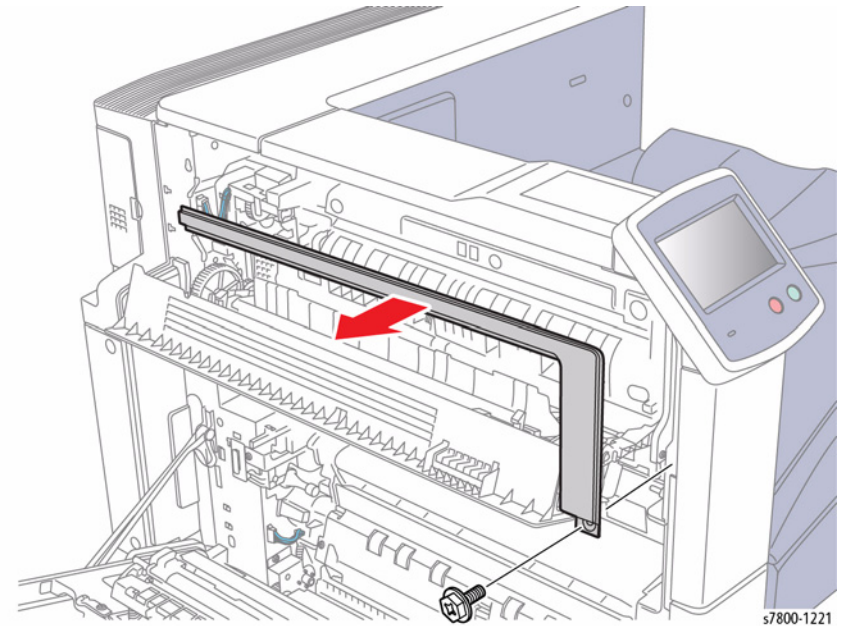


Figure 2 Removing the Left Upper Cover

7. Disconnect the wiring harness connector P/J631A/ P/J631B.

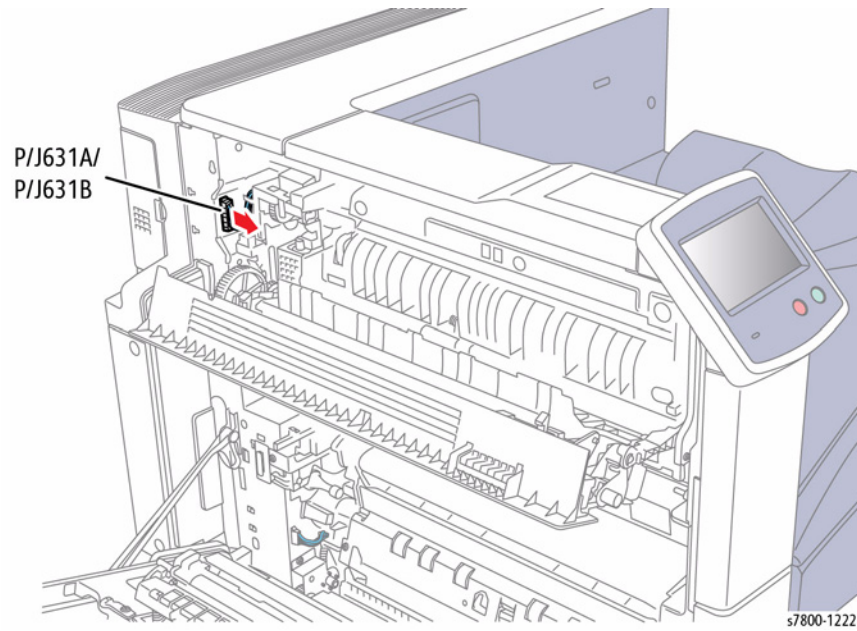


Figure 3 Disconnecting wiring harness connector

8. Remove 2 front screws that secure the Exit 2 Assembly.

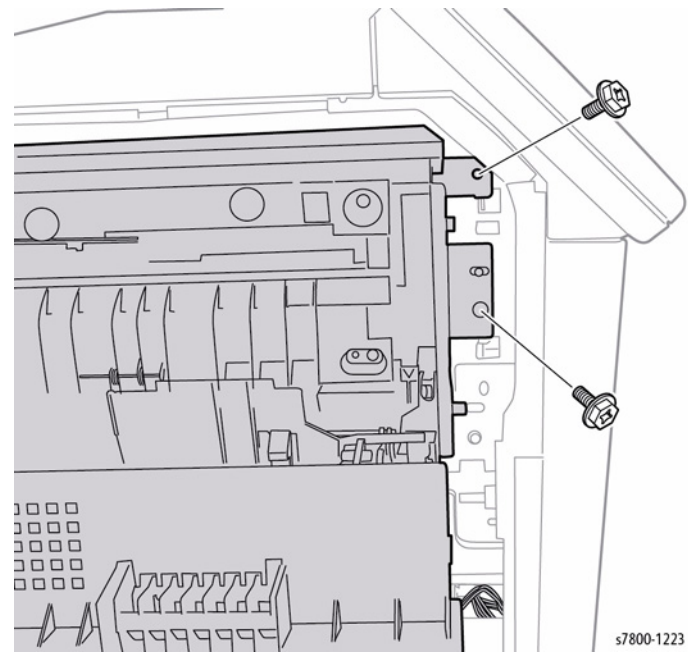


Figure 4 Removing the screws

9. Remove 2 rear screws that secure the Exit 2 Assembly.

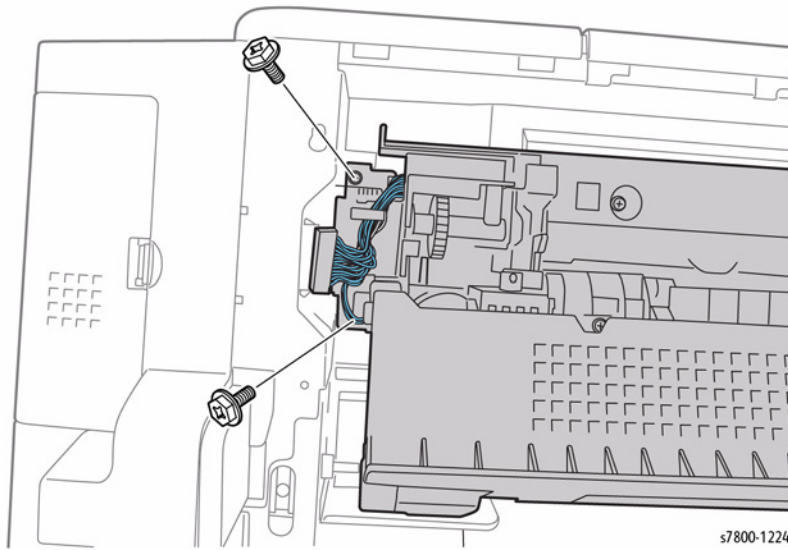


Figure 5 Removing the screws

s7800-1224

10. Slide the Exit 2 Assembly at an angle to remove.

NOTE: Be careful not to damage the Tamper/ Exit Sensor (on top area of the printer) when removing the Exit 2 Assembly.

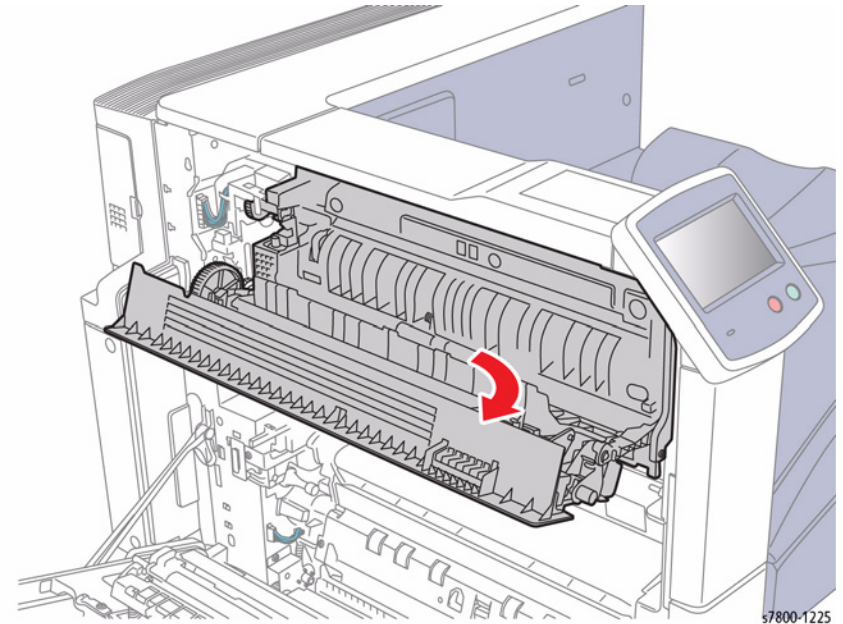


Figure 6 Removing the Exit 2 Assembly

s7800-1225

REP 17.2 Exit 1 Base Assembly

Parts List on [PL 17.2 Item 1](#)

Removal

1. Remove the Exit 2 Assembly ([REP 17.1](#)).
2. Remove the Exit 1 Assembly ([REP 17.3](#)).
3. Remove the E-Clip.
4. Slide the white Gear out to remove.
5. Remove the black Gear.

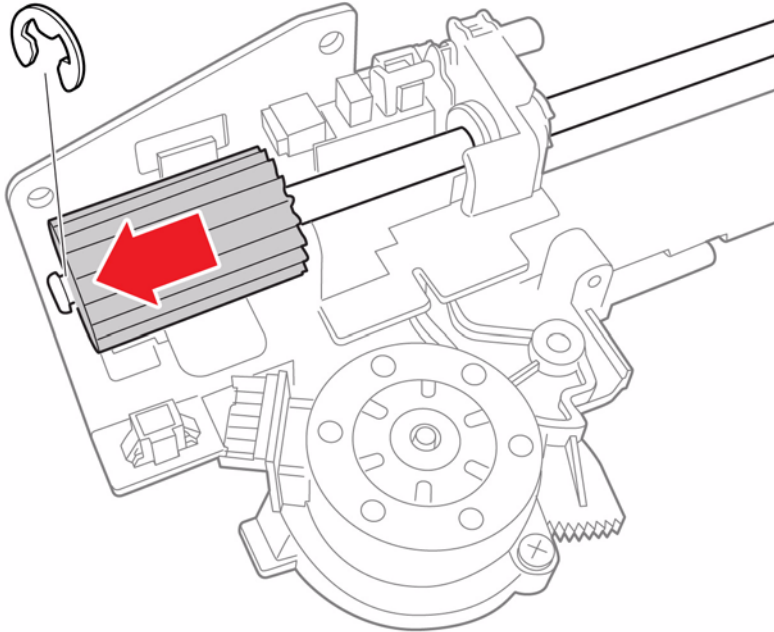
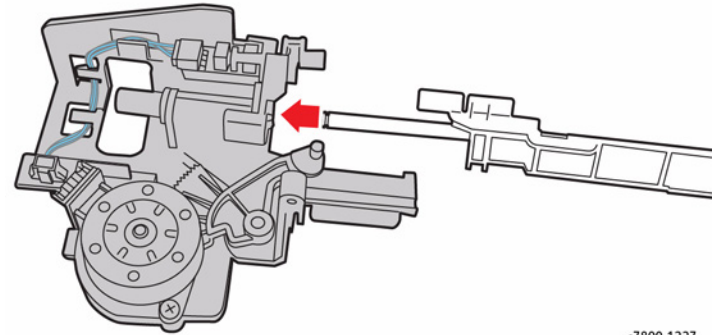


Figure 1 Removing the Gears

s7800-1226

6. Slide the Exit 1 Assembly while rotating it upward to remove.



s7800-1227

Figure 2 Removing the Exit 1 Base Assembly

REP 17.3 Exit/ OCT 1 Assembly

Parts List on PL 17.2 Item 13

Removal

1. Remove the Exit 2 Assembly (REP 17.1).
2. Release the wiring harness from the hooks (x3)
3. Disconnect the wiring harness connector P/J162.
4. Remove 1 screw (tapping) that secures the Motor Cover.

CAUTION

Be careful not to drop the Washer.

5. Remove the Motor Cover.
6. Disconnect 2 wiring harness connectors P/J271 and P/J640.
7. Slide and remove the Belt.
8. Remove 2 screws.

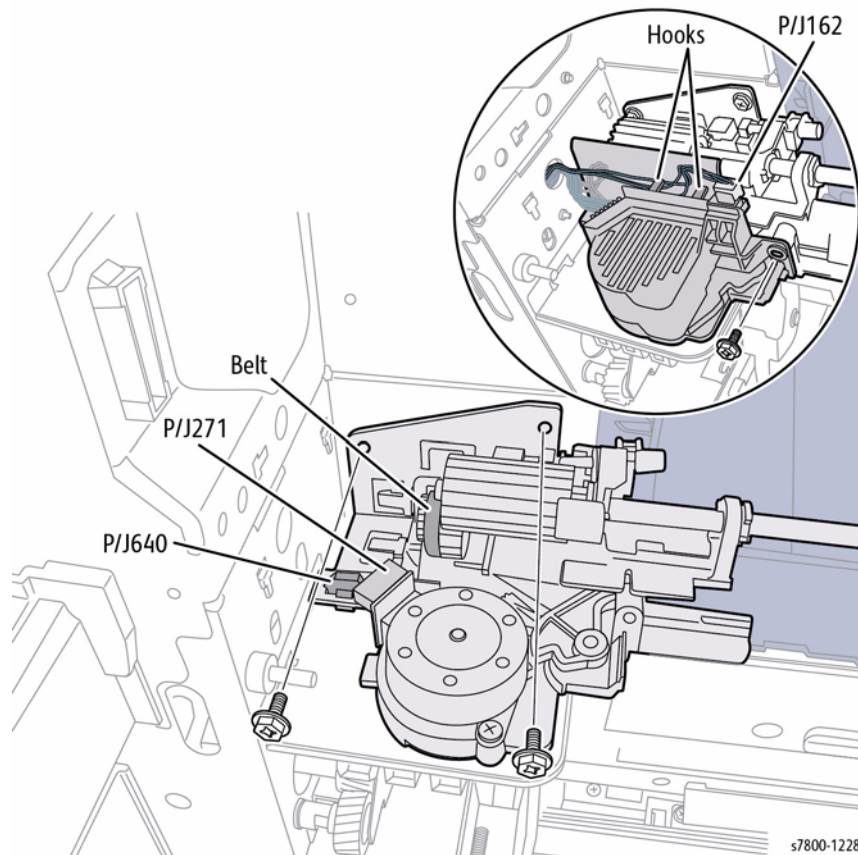


Figure 1 Removing the Belt and screws

9. Remove the Bearing by unlocking and sliding the Shaft 1:00 o'clock position.
10. Remove the Exit/ OCT 1 Assembly.

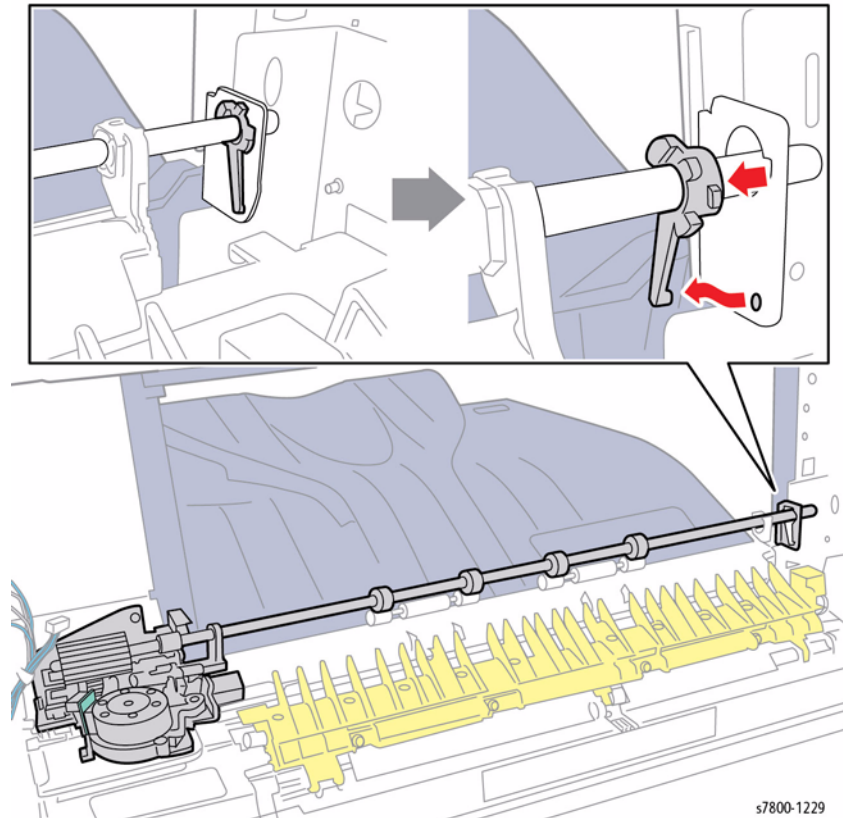


Figure 2 Removing the Exit/ OCT Assembly

Replacement

- Be sure to align the edge of the Exit/ OCT 1 Assembly along the edge of the frame.

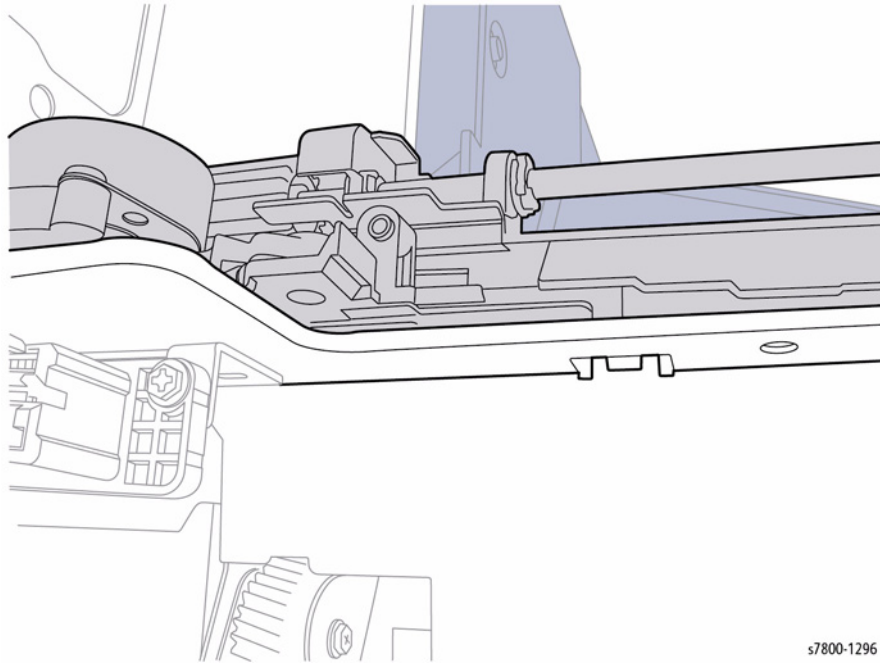


Figure 3 Aligning the Rail

- Be sure the Belt is secured to the Gear to prevent paper jam in the Fuser area.

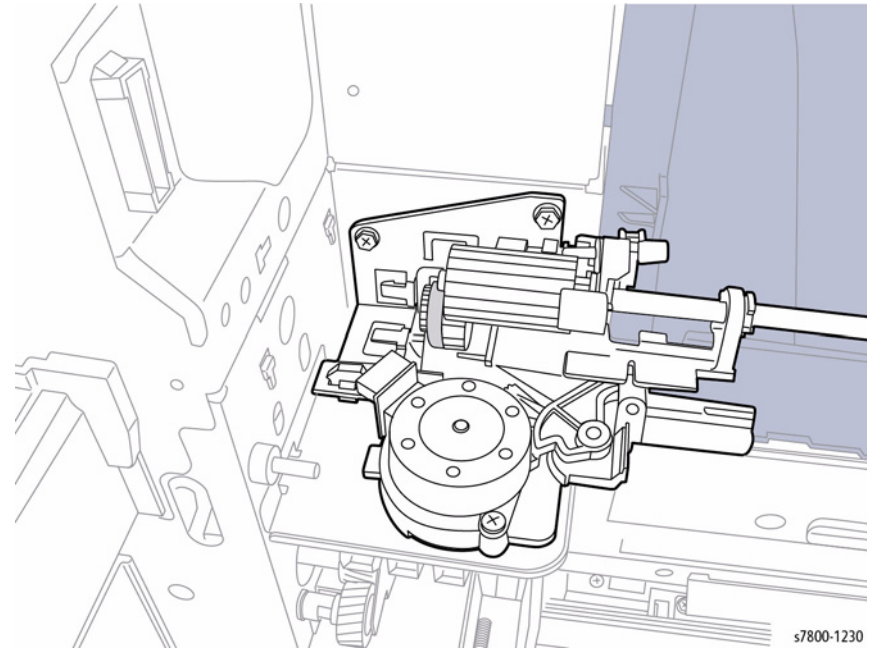


Figure 4 Belt Installation

- Be sure the rail of the frame is positioned between the long and short pins of the Motor Cover.

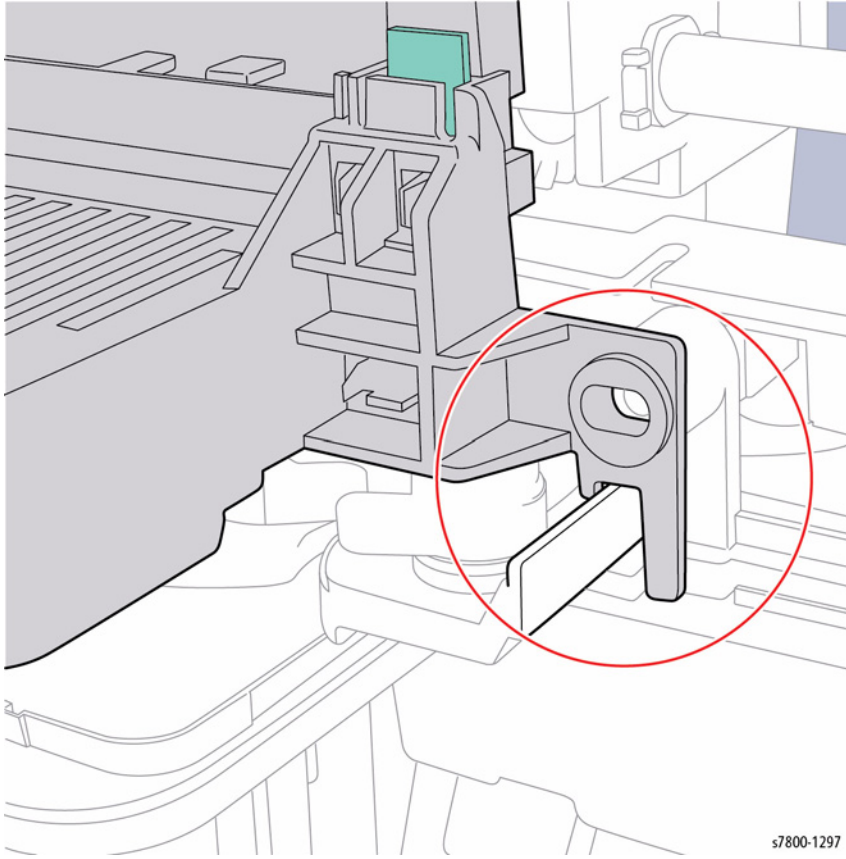


Figure 5 Positioning the Motor Cover

s7800-1297

REP 17.4 Exit 2 Guide Assembly

Parts List on [PL 17.3 Item 21](#)

Removal

1. Remove the Exit 2 Assembly ([REP 17.1](#)).
2. Remove the E-Clip.
3. Release the Stopper from the Left Hand High Chute ([PL 17.3 Item 4](#)).
4. Open the Left Hand High Chute and lift the left side to release the Left Hand High Chute from the Exit 2 Front Stopper.
5. Rotate and release the strap from the frame.
6. Remove the Left Hand Chute.

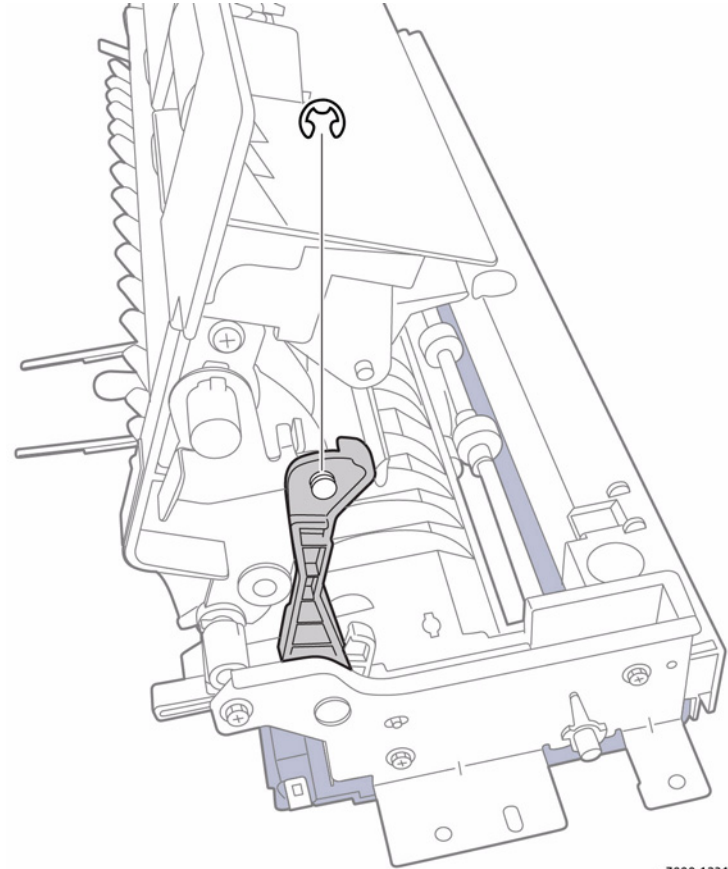


Figure 1 Removing the Left Hand High Chute

s7800-1231

7. Remove 6 screws that secure the Exit 2 Guide Assembly.

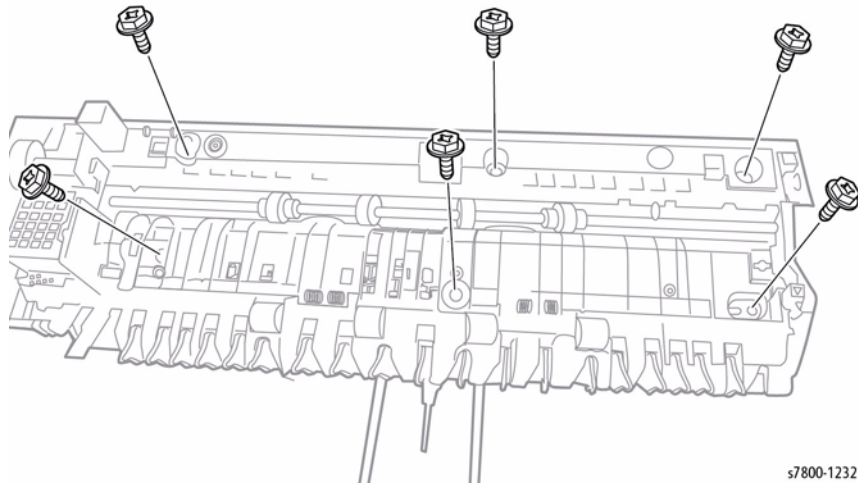


Figure 2 Removing the screws

8. Turn the Exit 2 Guide Assembly over.
9. Slide the Exit 2 Guide Assembly out to remove.

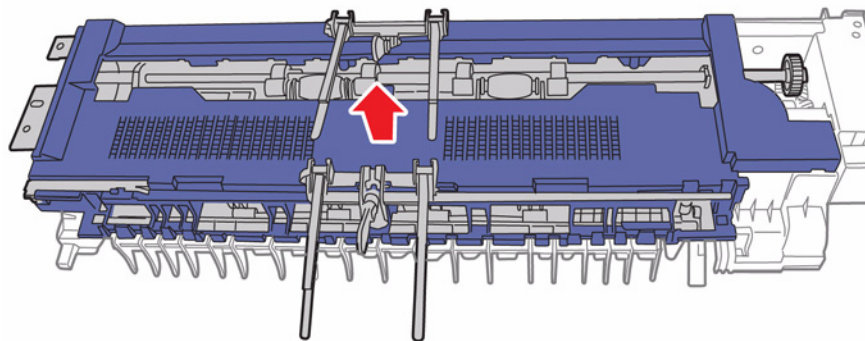


Figure 3 Removing the Exit 2 Guide Assembly

Replacement

Be sure the Exit 2 Guards faces upward to prevent media jam.

REP 17.5 Gate 1 Spring

Parts List on [PL 17.3 Item 11](#)

Removal

1. Remove the Exit 2 Assembly ([REP 17.1](#)).
2. Release the Spring from the Exit 2 to remove.

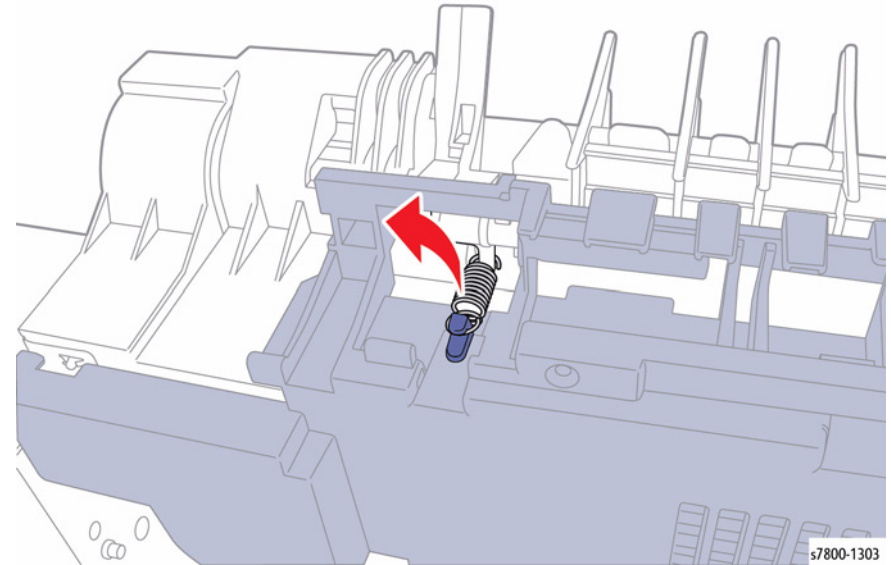


Figure 1 Removing the Gate 1 Spring

REP 18.1 PWB Chassis Unit (Opening/Closing)

Parts List on [PL 18.1 Item 1](#)

Removal

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Release the wiring harness from the 2 clamps.
4. Remove 8 screws and open the PWB Chassis Unit.

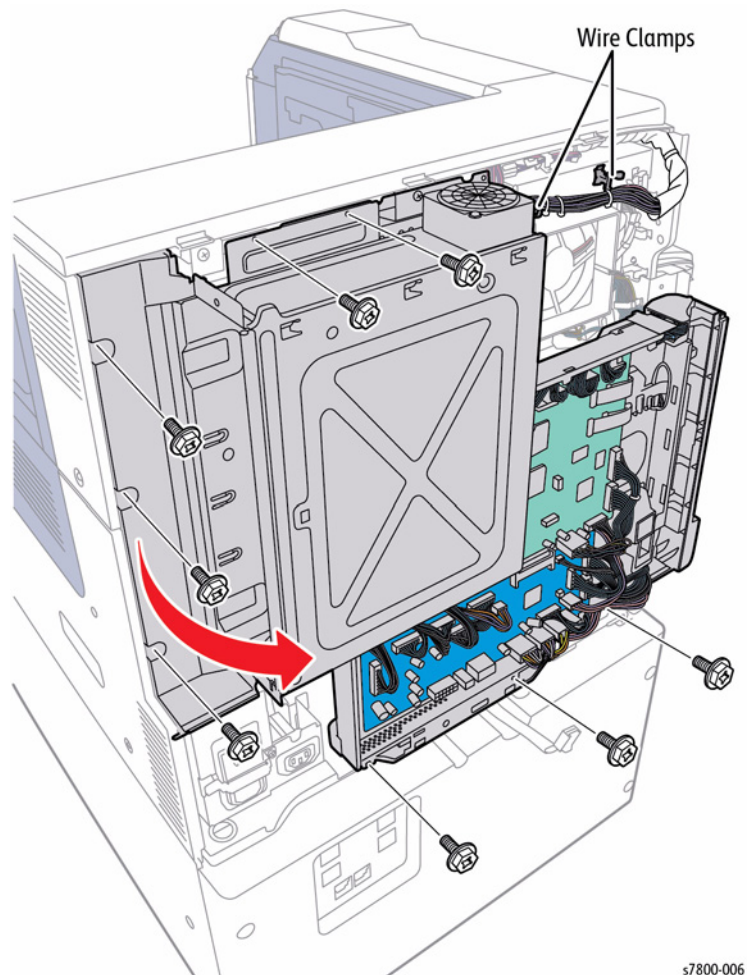


Figure 1 Removing the screws and opening the PWB Chassis

REP 18.2 Backplane PWB

Parts List on [PL 18.2 Item 1](#)

Removal

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Disconnect all cables connected to the I/P Board.
2. Loosen the 3 Thumb screws.

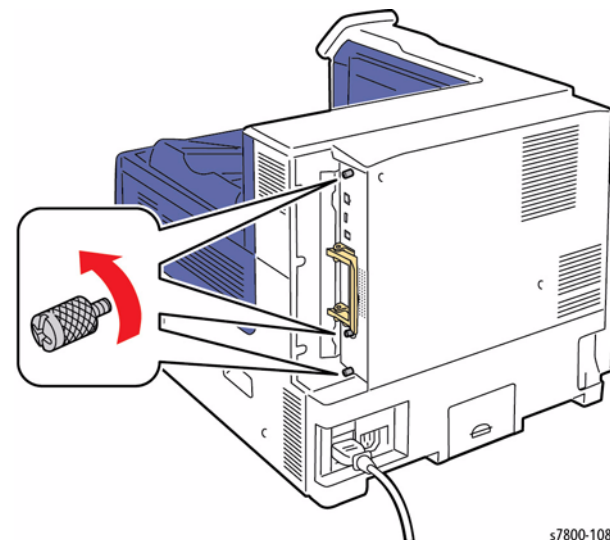


Figure 1 Loosening the screws

3. Pull the I/P Board out from the printer.

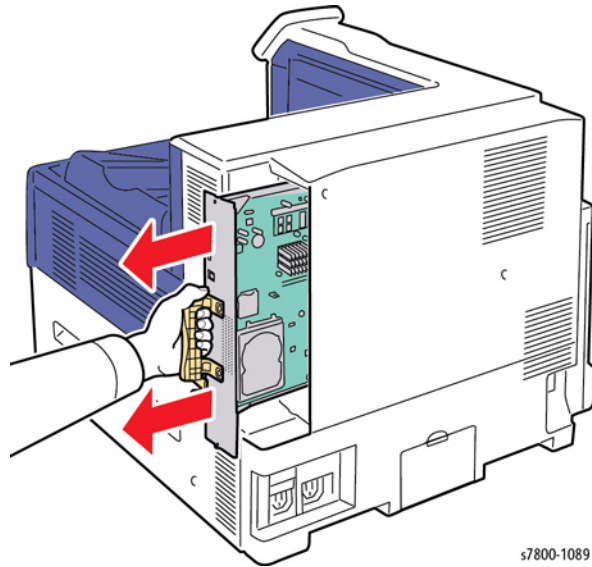


Figure 2 Removing the I/P Board

s7800-1089

4. Remove the Rear Upper Cover (REP 19.17).
5. Remove the Rear Lower Cover (REP 19.16).
6. Open the PWB Chassis Unit (REP 18.1).
7. Disconnect 1 wiring harness connector P/J313.

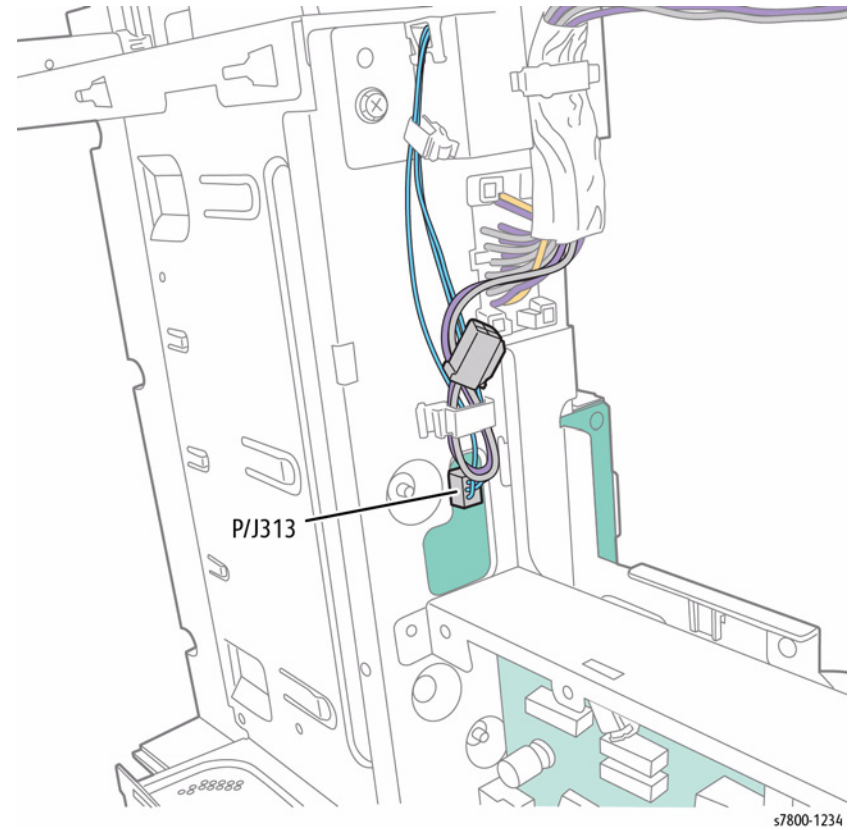


Figure 3 Disconnecting wiring harness connector

s7800-1234

8. Loosen the 2 screws that secure the Shield.
9. Remove the Shield in the direction of the arrow as shown in Figure 4.

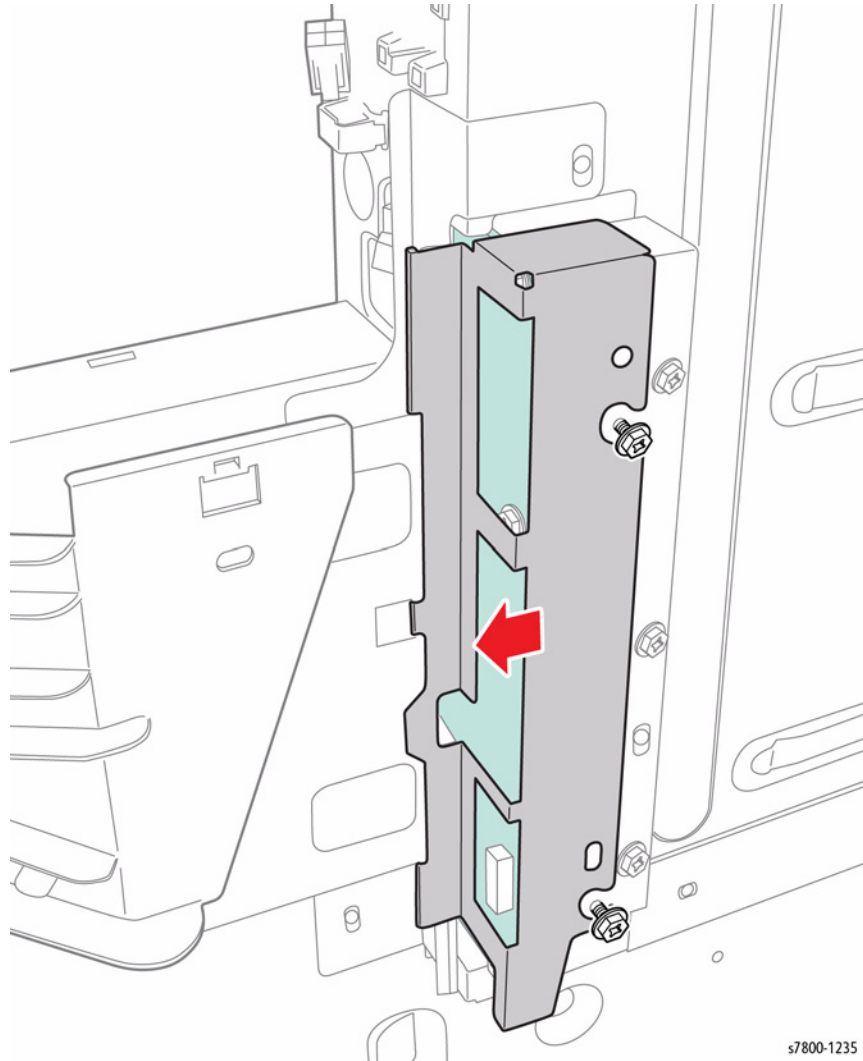


Figure 4 Removing the Shield

s7800-1235

10. Remove 6 screws that secure the Bracket.

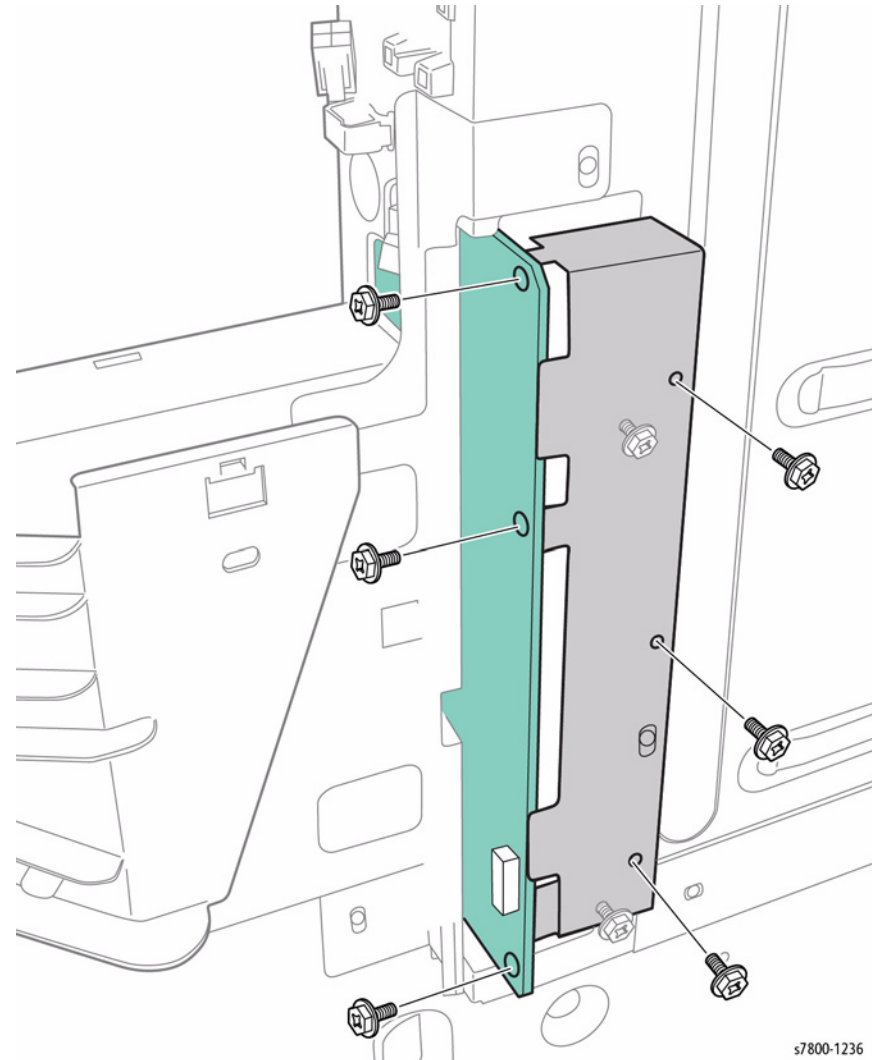


Figure 5 Removing the screws

s7800-1236

11. Remove 3 screws that secure the Backplane PWB.
12. Remove the Backplane PWB and Bracket.

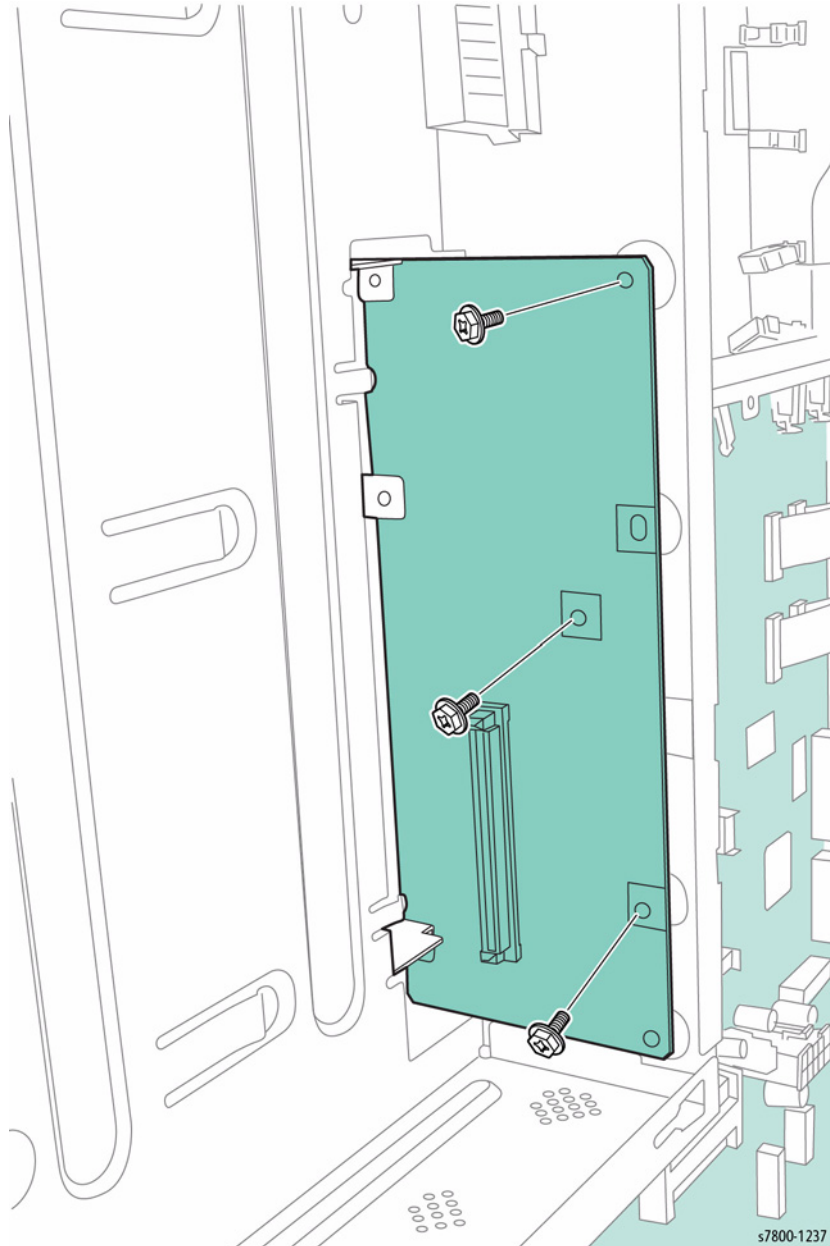


Figure 6 Removing the Backplane PWB and Bracket

REP 18.3 ESS Fan

Parts List on [PL 18.2 Item 5](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Disconnect the interim wiring harness connector.
3. Remove 2 screws that secure the ESS Fan.
4. Remove the ESS Fan.

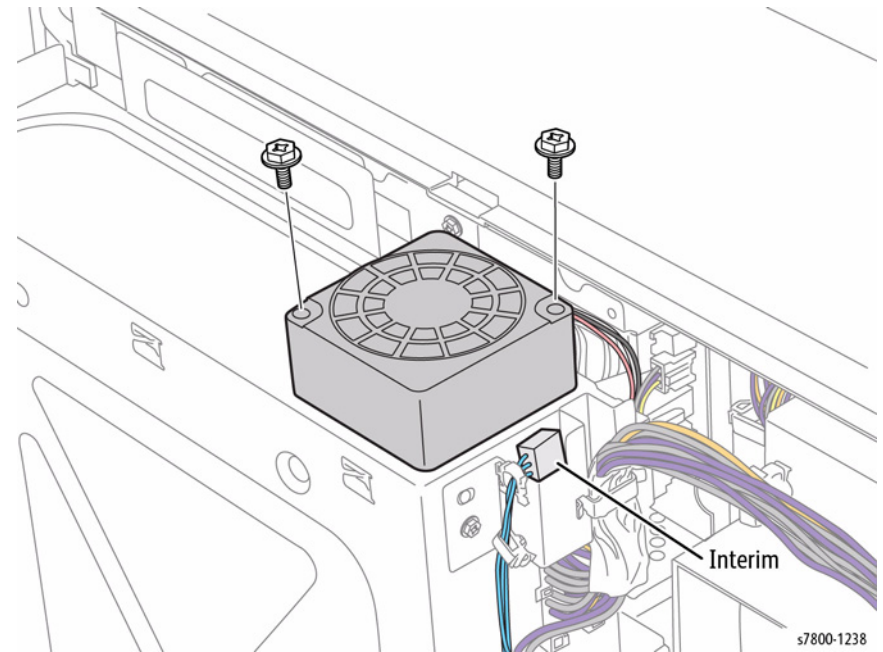


Figure 1 Removing the ESS Fan

REP 18.4 Suction Fan

Parts List on [PL 18.2 Item 6](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis ([REP 18.1](#)).
4. Disconnect the wiring harness connector [P/J231](#).
5. Remove 2 screws (23 mm) that secure the Suction Fan.
6. Remove the Suction Fan.

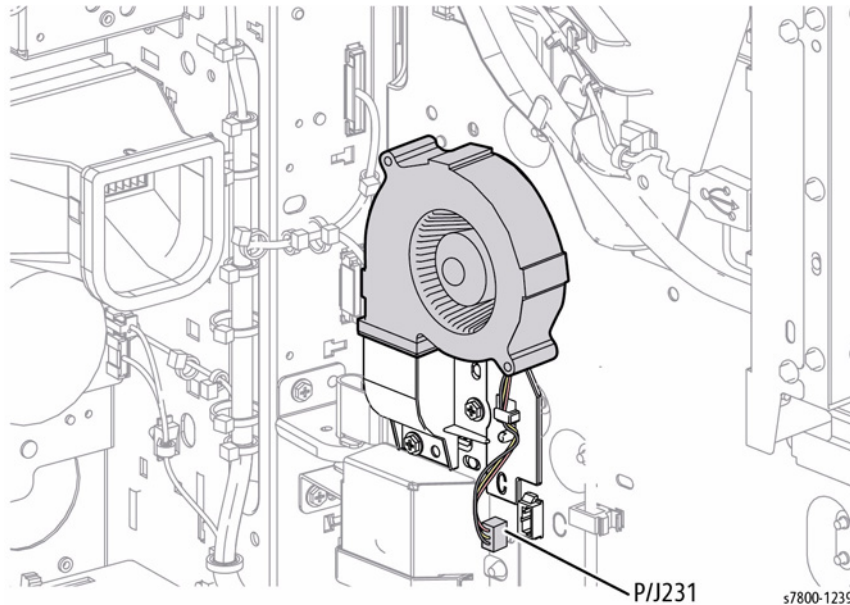


Figure 1 Removing the Suction Fan

REP 18.5 MCU PWB

Parts List on [PL 18.2 Item 18](#)

Removal

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Remove 8 screws from the Motor Drive PWB.
4. Pull the MD Board away from the MCU Board.

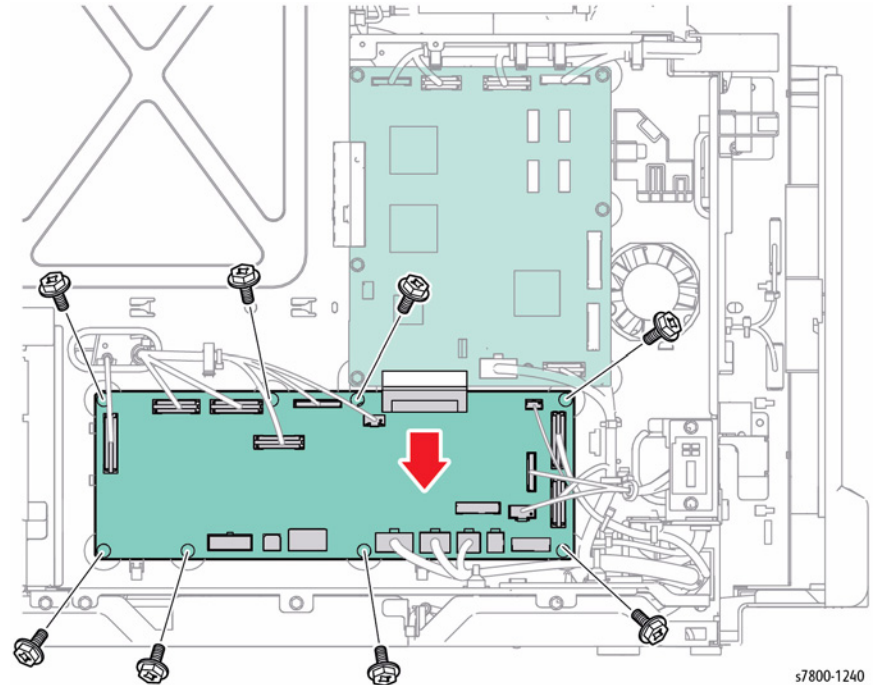


Figure 1 Removing the Motor Drive PWB

CAUTION

Be sure to unlock the ZIF connector to release the ribbon cable. Be careful when disconnecting the ribbon cable to prevent damaging the cable. DO NOT pull on the cable until you have released the locks.

5. Unlatch and disconnect 4 the Flexible Print Cables.

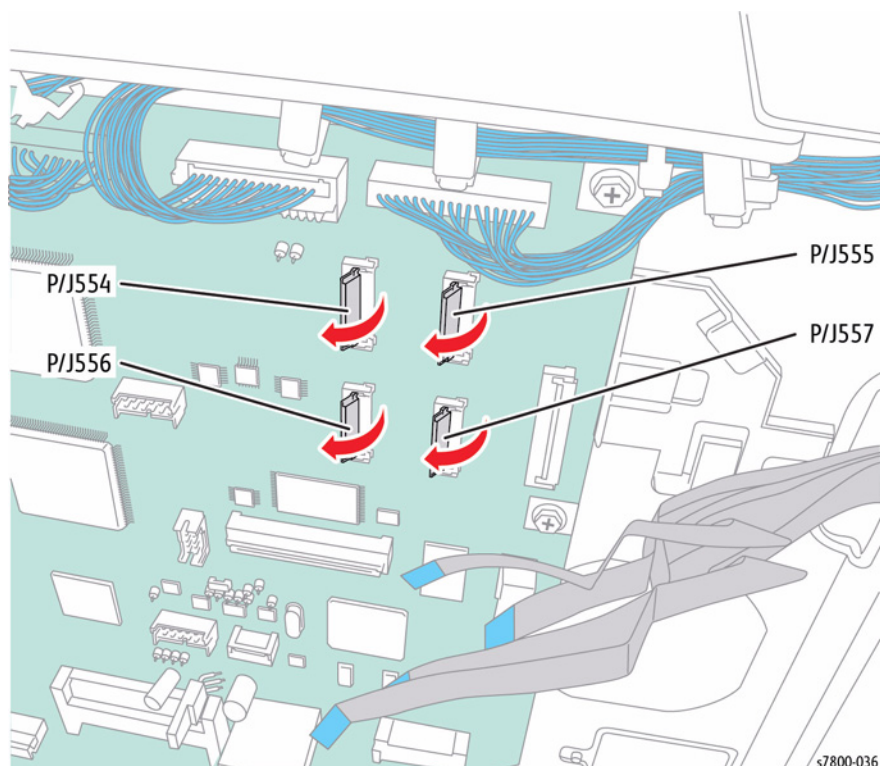
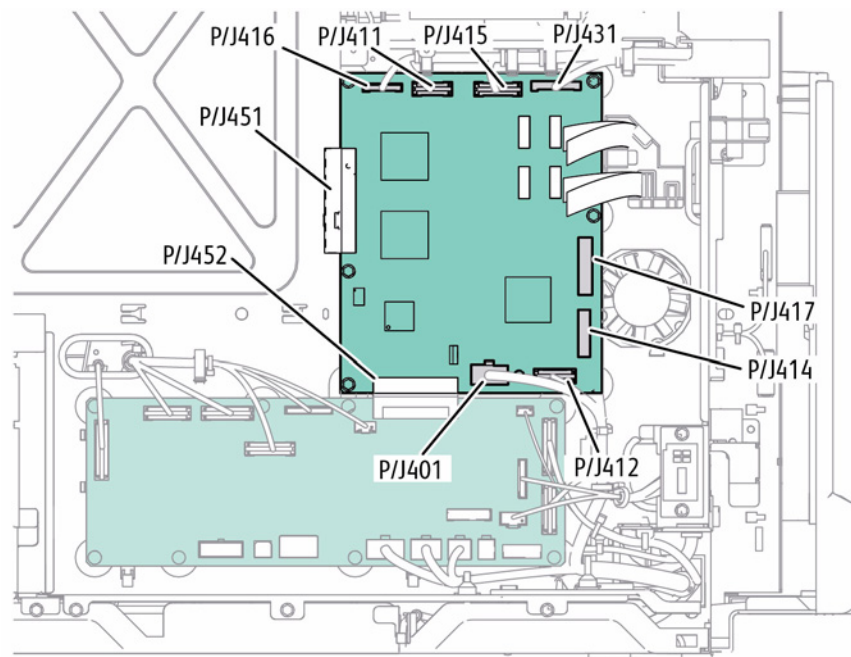


Figure 2 Disconnecting the Print Cables

6. Disconnect the 8 wiring harness connectors P/J401, P/J411, P/J412, P/J414, P/J415, P/J416, P/J417, and P/J431.



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Figure 3 Disconnect wiring harness connectors

7. Remove 6 screws that secure the MCU PWB.
8. Pull the MCU Board away from the Back Plane PWB to remove.

NOTE: Be sure to push the MCU PWB upward to release from the connector that connects to the Motor Drive PWB. (verify with I/P Board installed)

May have to loosen the screws on the Motor Drive PWB in order to remove the MCU Board.

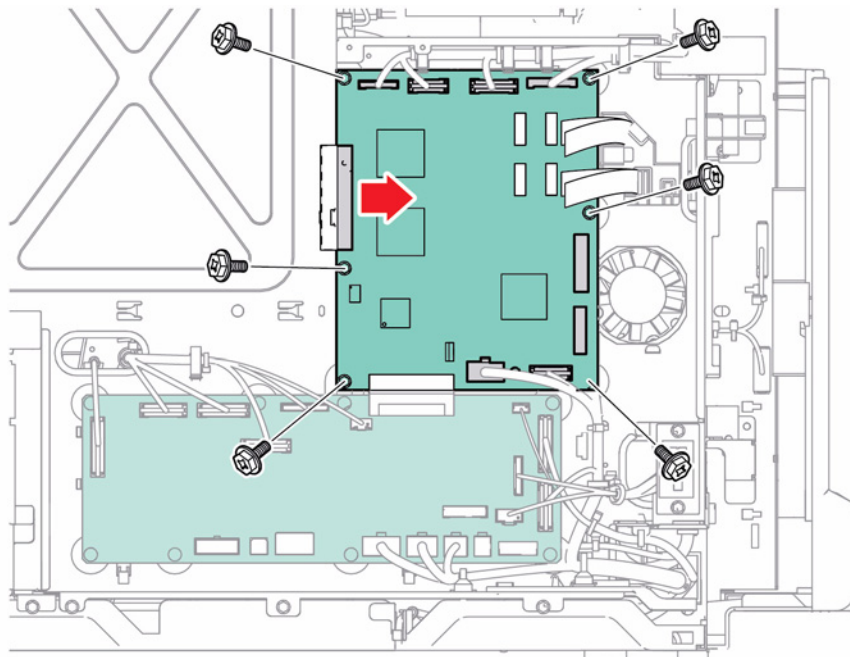


Figure 4 Removing the MCU PWB

Replacement

When replacing the MCU PWB, remove the EEPROM from the old MCU PWB and install it onto the new MCU PWB.

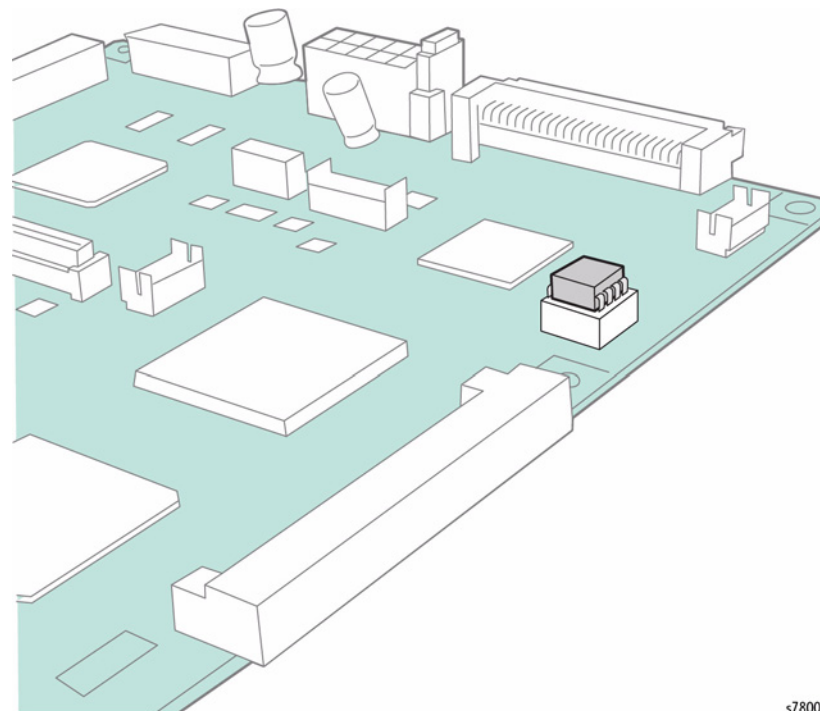


Figure 5 Installing EEPROM

NOTE: If the printer does not function correctly with the old EEPROM, reinstall the new EEPROM from the replacement MCU Board. Run *dc361 NVM Save/Restore* (refer to Chapter 6, General Troubleshooting) to restore the original MCU parameters.

REP 18.6 Motor Drive (MD) PWB

Parts List on [PL 18.2 Item 19](#)

Removal

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the Rear Upper Cover ([REP 19.17/PL 19.3.4](#)).
2. Remove the Rear Lower Cover ([REP 19.16/PL 19.3.3](#)).
3. Disconnect the 17 wiring harness connectors P/J520, P/J521, P/J522, P/J523, P/J524, P/J525, P/J526, P/J527, P/J528, P/J529, P/J532, P/J534, P/J535, P/J536, P/J537, P/J593, and P/J594 from the Motor Drive PWB.

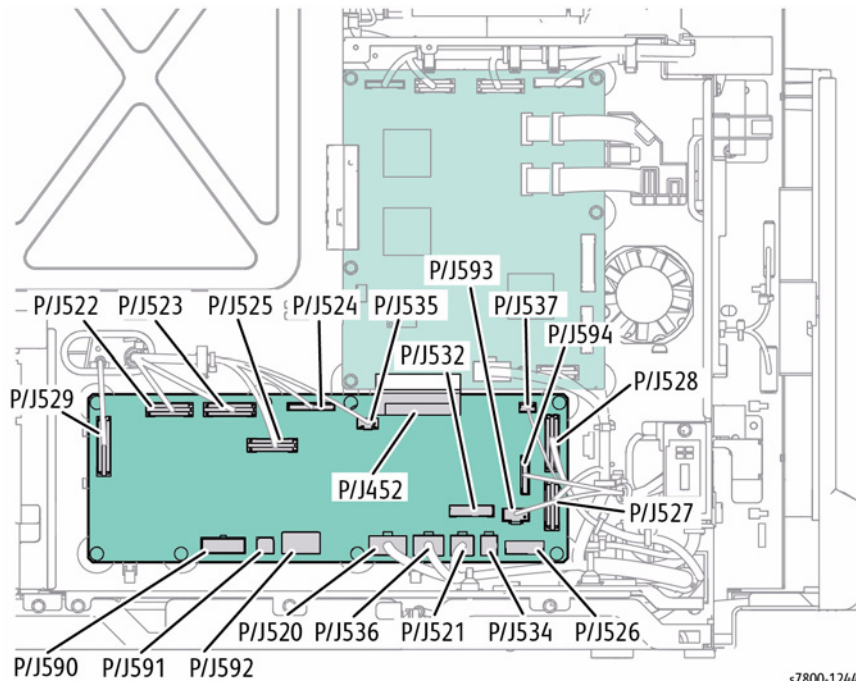


Figure 1 Disconnecting the wiring harness connectors

4. Remove 8 screws that secure the Motor Drive PWB.
5. Pull the MD Board away from the MCU Board and remove the MD PWB.

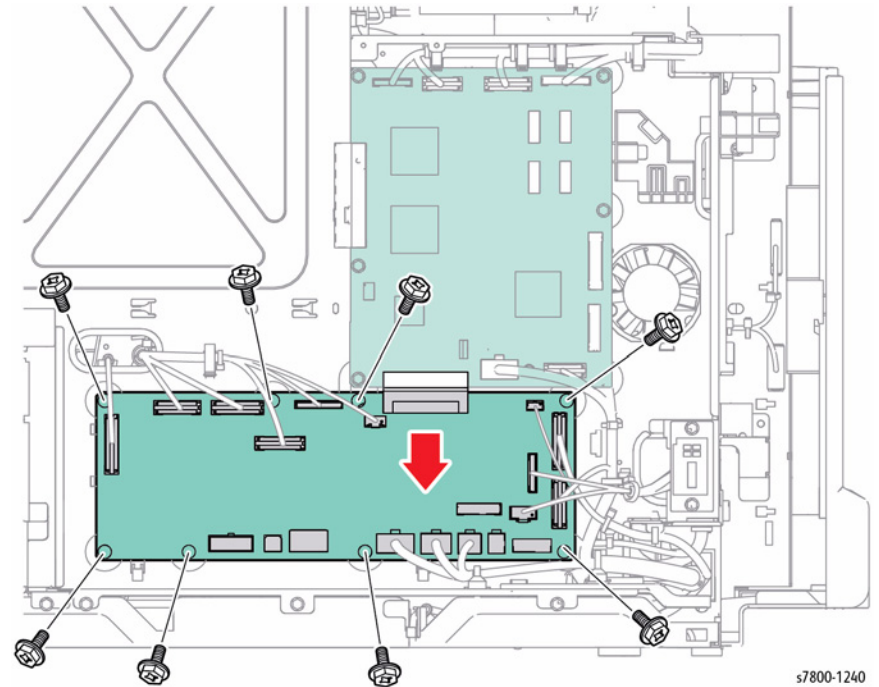


Figure 2 Removing the Motor Drive PWB

REP 18.8 GFI Chassis Assembly

Parts List on [PL 18.3 Item 3](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis ([REP 18.1](#)).
4. Remove 4 screws that secure the GFI Chassis Assembly.

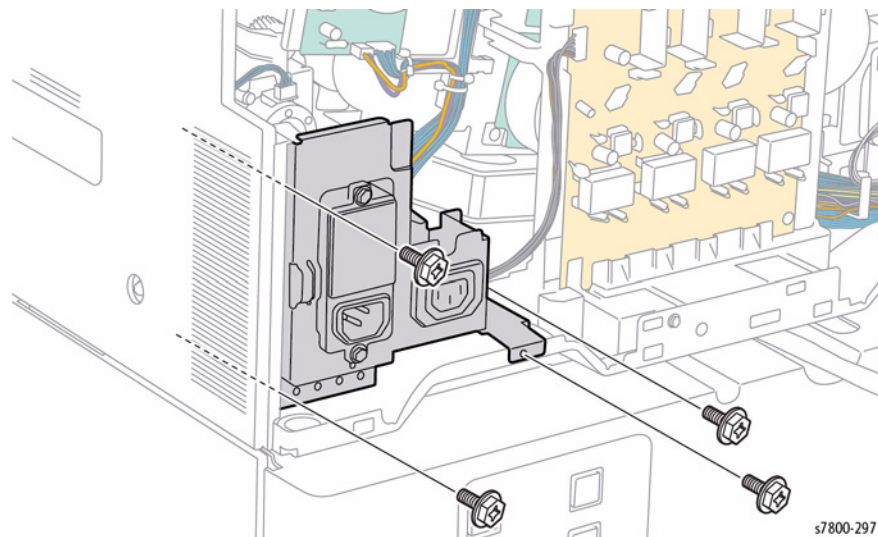


Figure 1 Removing screws

5. Disconnect the 4 wiring harness connectors [P81](#), [P82](#), [P86](#), and [P87](#) and remove the GFI Assembly.

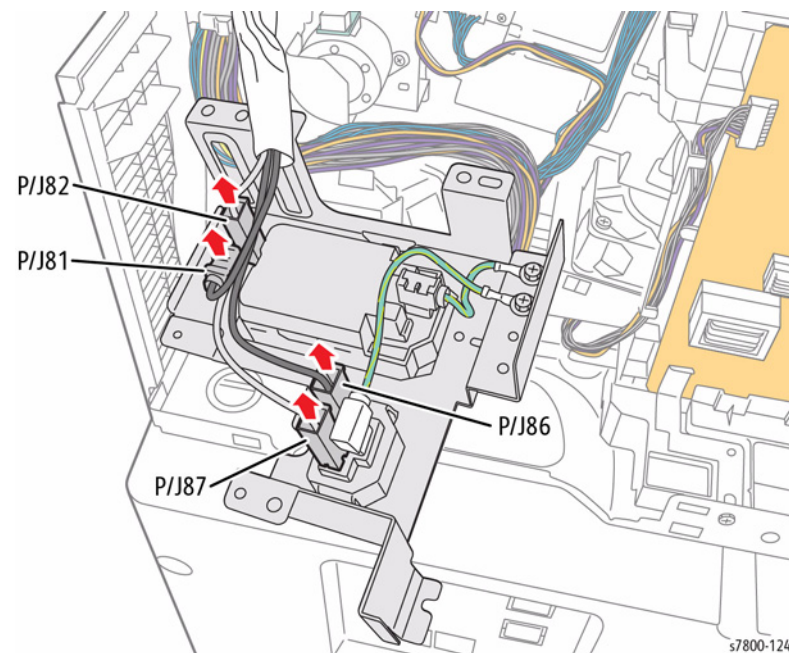


Figure 2 Removing the GFI Assembly

REP 18.9 IH Driver PWB

Parts List on [PL 18.3 Item 4](#)

Removal

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Open the PWB Chassis Unit ([REP 18.1](#)).
2. Release the clamp from the frame and 2 wiring harness connectors.
3. Disconnect the 2 wiring harness connectors [P/J30](#) and [P/J530](#).

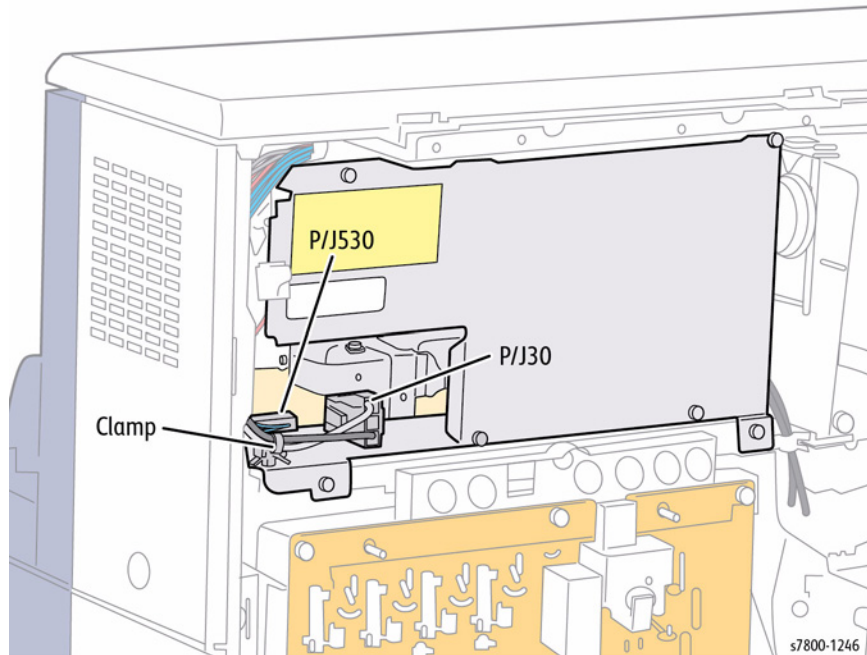


Figure 1 Disconnecting wiring harness connectors

4. Disconnect the wiring harness connector [P/J250](#) of the Fuser Drawer Harness and release the wiring harness from the clamp.

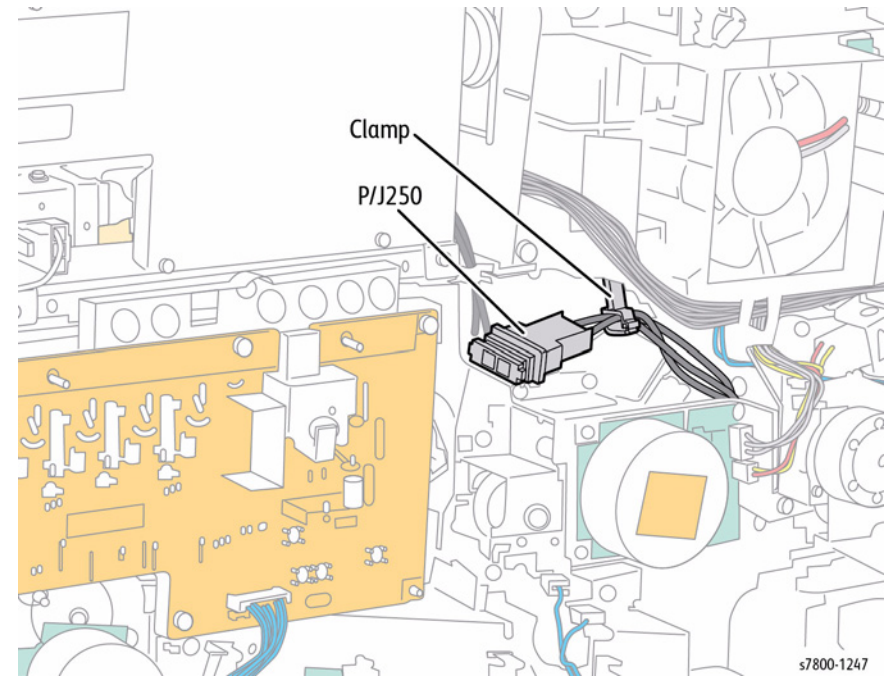


Figure 2 Disconnecting and releasing wiring harness connector

5. Remove 4 screws that secure the IH Driver PWB.
6. Remove the IH Driver PWB.

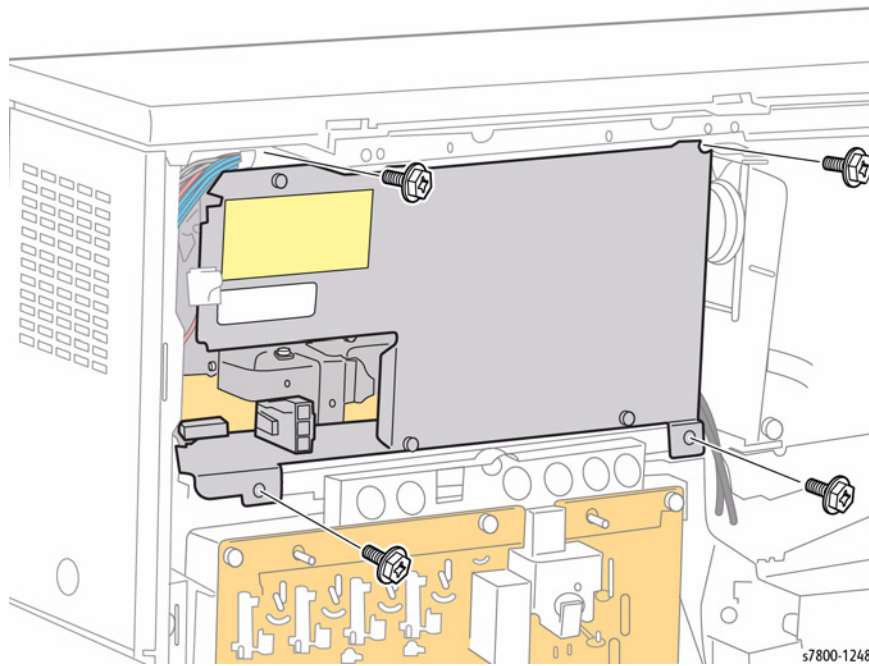


Figure 3 Removing the IH Driver PWB

REP 18.11 GFI

Parts List on [PL 18.4 Item 1](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Remove the GFI Chassis Assembly ([REP 18.8](#)).
4. Remove 1 screw that secures the Bracket ([PL 18.4 Item 8](#)).
5. Remove the Bracket.

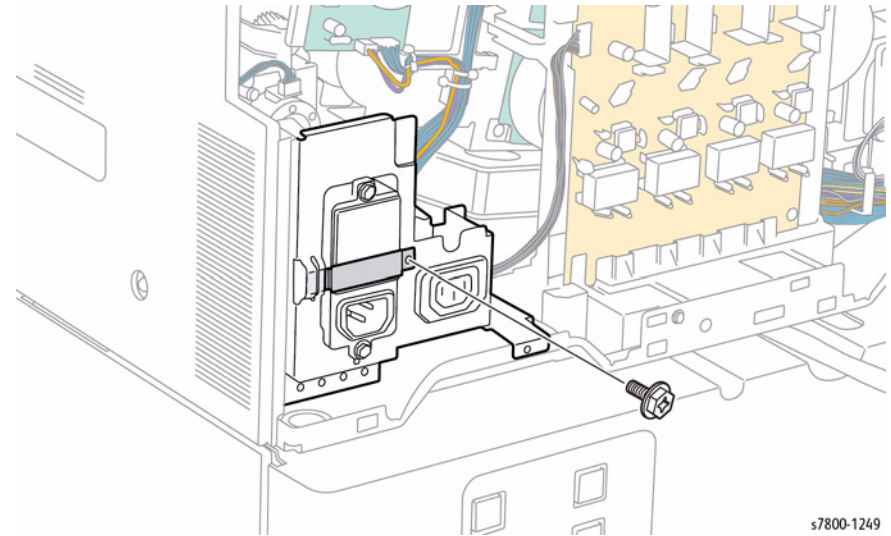


Figure 1 Removing the Bracket

6. Remove 2 screws that secure the GFI.

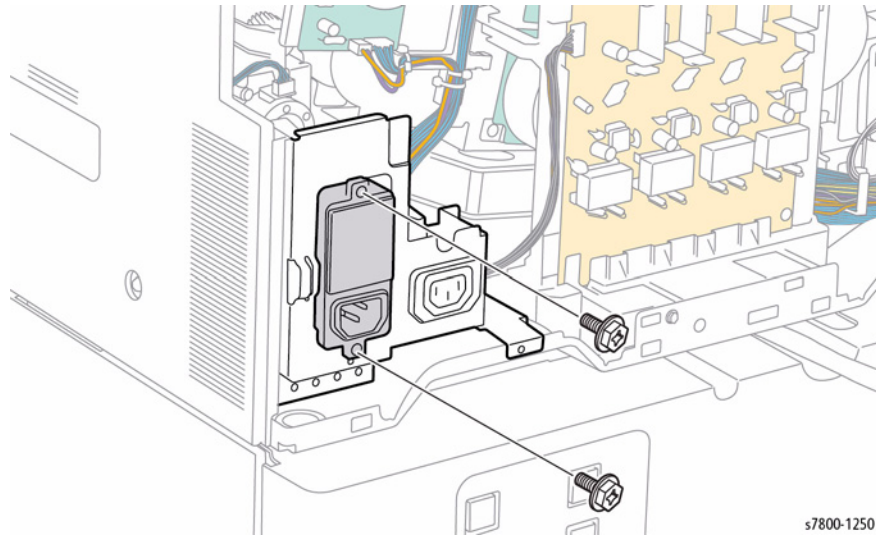


Figure 2 Removing the screws

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7. Disconnect the 2 connectors from the top rear of the GFI.
8. Pull the GFI out from the frame.
9. Disconnect 1 wiring harness connector P83.

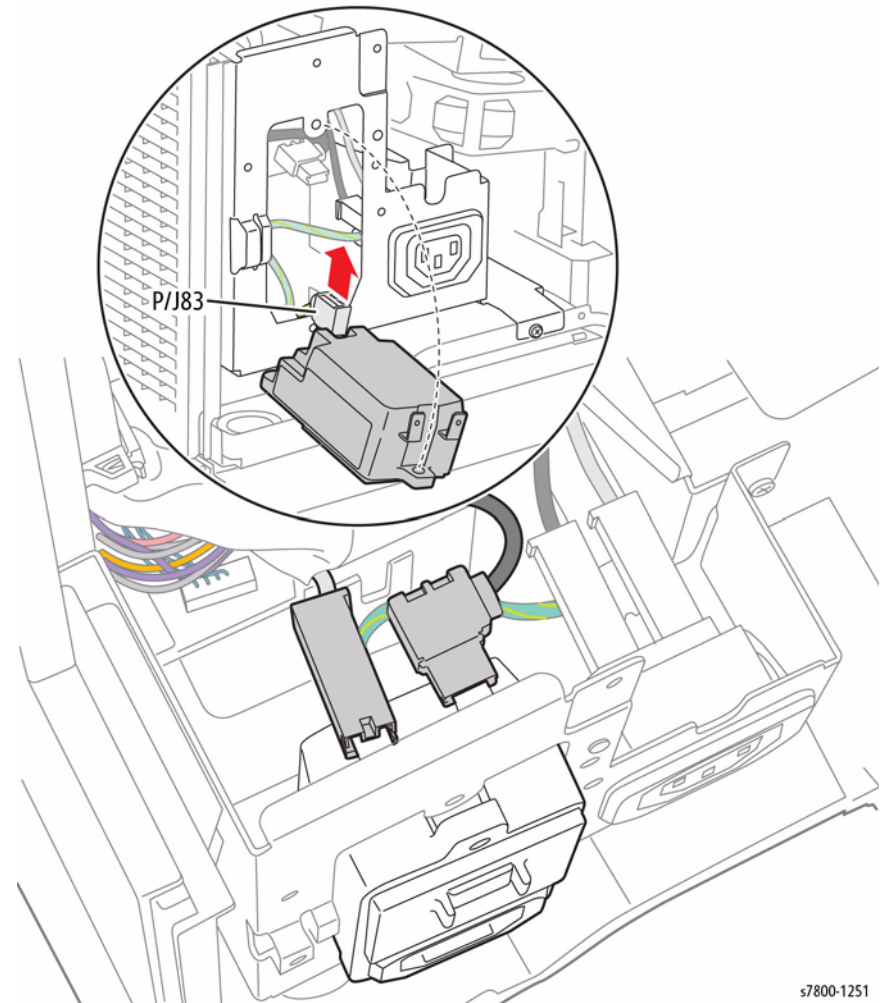


Figure 3 Removing the GFI

s7800-1251

REP 18.12 Front Cover Interlock Switch

Parts List on [PL 18.5 Item 7](#)

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/M/C/K) ([REP 8.1](#)).
2. Remove the Toner Cartridge (Y/M/C/K) ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Tension Lever ([REP 6.2](#)).
6. Remove the Imaging Unit Cover ([REP 2.4](#)).
7. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
8. Remove the Right Cover ([REP 19.15](#)).
9. Disconnect the wiring harness connector [P/J101](#) that is connected to the Front Cover Interlock Switch.

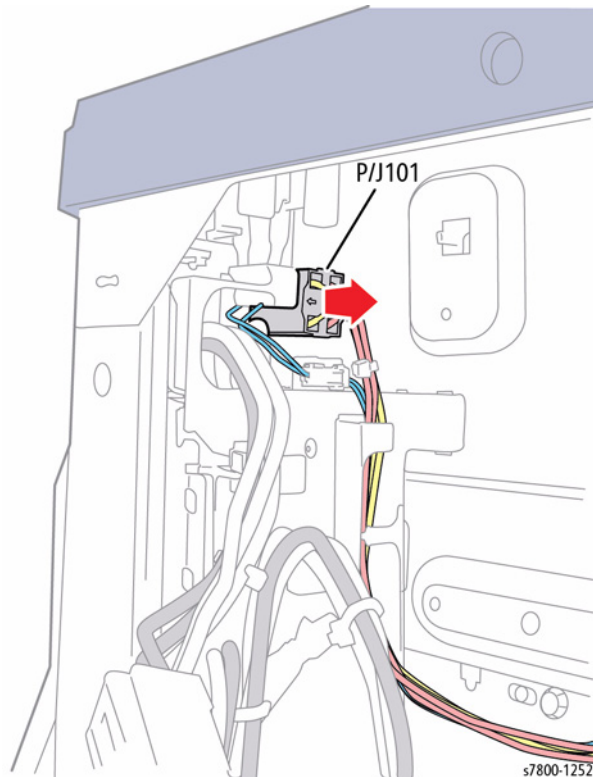


Figure 1 Disconnecting wiring harness connector

10. Release the hooks that secure the Front Cover Interlock Switch and remove the Front Cover Interlock Switch.

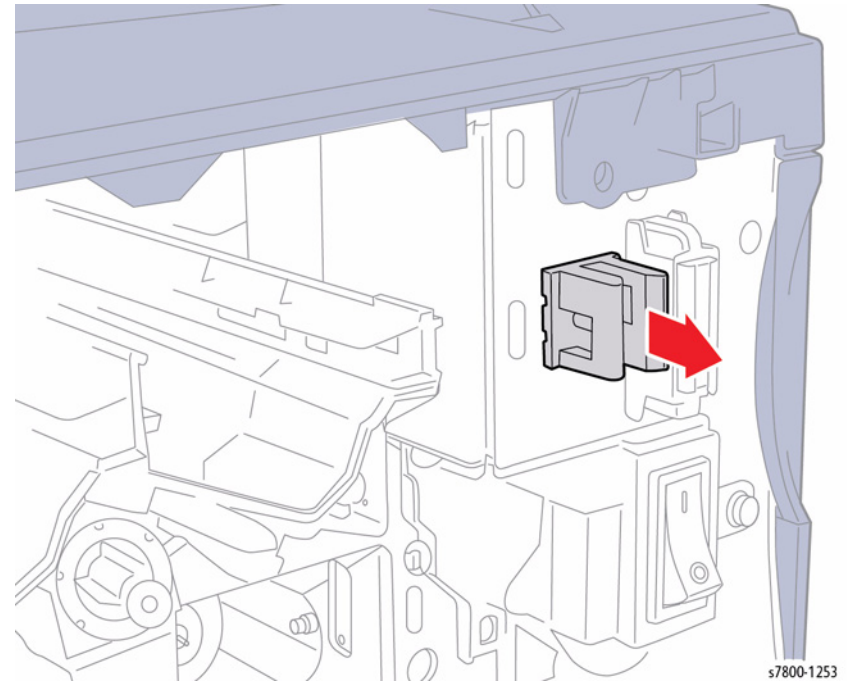


Figure 2 Removing the Front Cover Interlock Switch

REP 18.13 MOB ADC Assembly

Parts List on [PL 18.5 Item 8](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit (Y/M/C/K) (REP 8.1).
2. Remove the Toner Cartridge (Y/M/C/K) (REP 5.1).
3. Remove the Waste Cartridge (REP 8.9).
4. Remove the IBT Belt Cleaner Assembly (REP 6.1).
5. Remove the Tension Lever (REP 6.2).
6. Remove the Imaging Unit Cover (REP 2.4).
7. Remove the Front Cover and Inner Cover (REP 19.1).
8. Remove the Process 2 Fan (REP 4.5).
9. Remove the Process Fan 2 and Duct (REP 4.5).
10. Disconnect the wiring harness connector P/J610.
11. Remove 1 screw that secures the MOB ADC Assembly.
12. Pull out the MOB ADC Assembly.

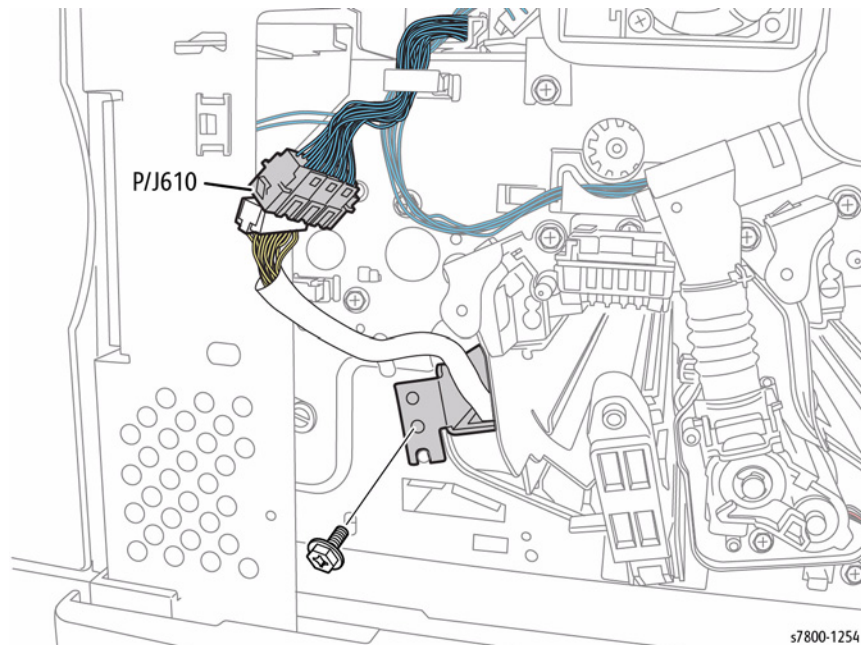


Figure 1 Removing the MOB ADC Assembly

REP 18.14 IBT Front Cover Switch

Parts List on [PL 18.5 Item 10](#)

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/M/C/K) (REP 8.1).
2. Remove the Toner Cartridge (Y/M/C/K) (REP 5.1).
3. Remove the Waste Cartridge (REP 8.9).
4. Remove the IBT Belt Cleaner Assembly (REP 6.1).
5. Remove the Tension Lever (REP 6.2).
6. Remove the Imaging Unit Cover (REP 2.4).
7. Remove the Front Cover and Inner Cover (REP 19.1).
8. Release the hooks that secure the IBT Front Cover Switch and remove the IBT Front Cover Switch.
9. Disconnect the wiring harness connector P/J272 that is connected to the IBT Front Cover Switch.

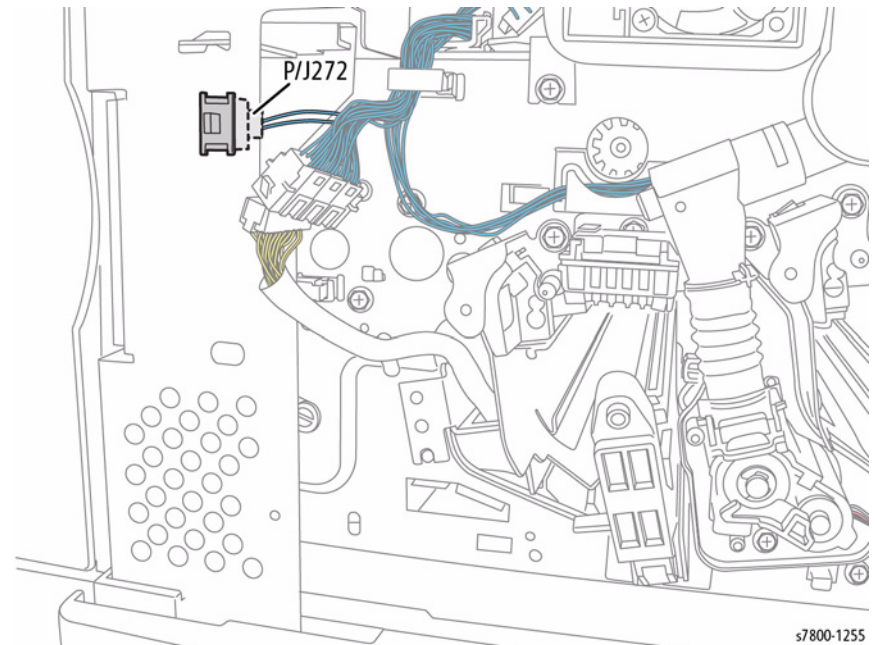


Figure 1 Removing the IBT Front Cover Switch

REP 18.15 Main LVPS

Parts List on [PL 18.5 Item 11](#)

Removal

WARNING

To prevent electric shock, turn Off the power and unplug the power plug from the electrical outlet.

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

Removal

1. Remove the Waste Cartridge ([REP 8.9](#)).
2. Remove the Right Cover ([REP 19.15](#)).
3. Disconnect the wiring harness connector [P/J239](#).
4. Remove 2 screws that secure the Bracket and Front LVPS Fan.
5. Remove the Bracket and Front LVSP Fan.

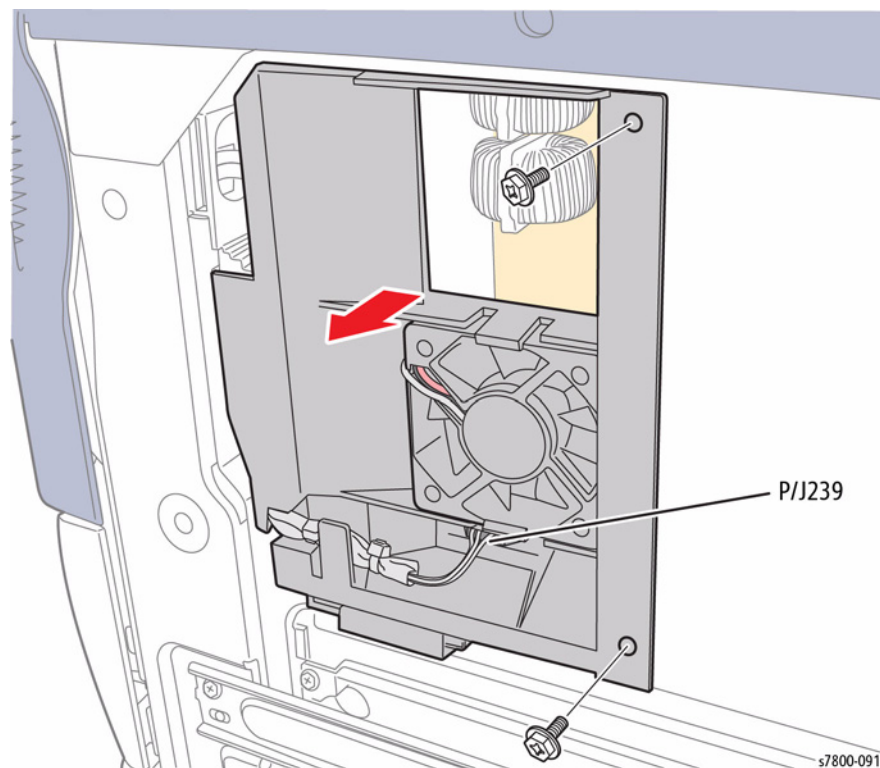


Figure 1 Removing the Bracket and Front LVPS Fan

6. Remove the Bottle Guide and Sensor ([REP 8.10](#)).

7. Remove the wiring harness from the 5 clamps under the Main LVPS.

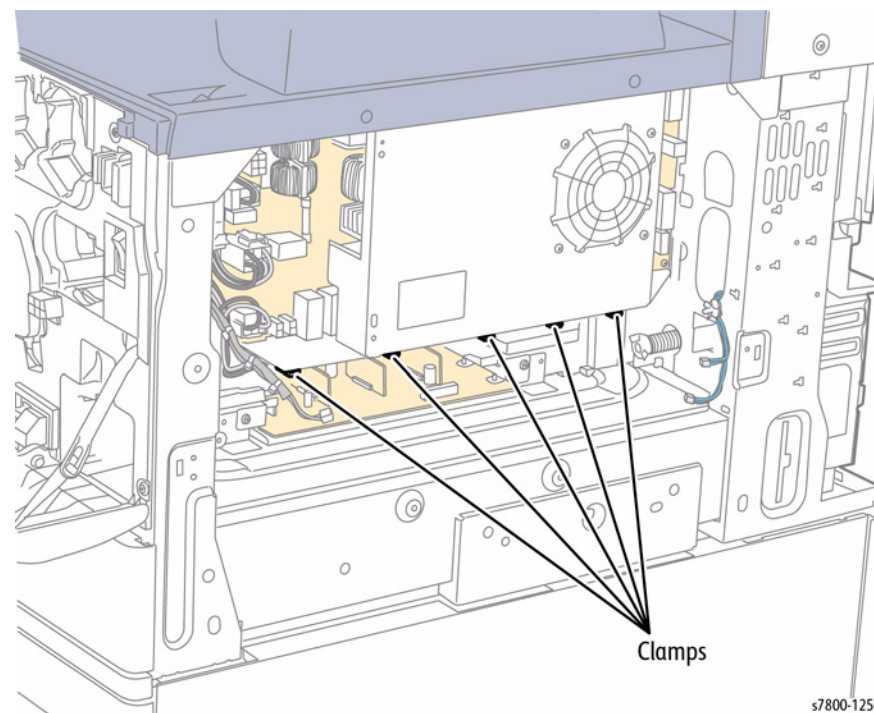


Figure 2 Removing the wiring harness

8. Disconnect the wiring harness connectors P/J501, P/J502, P/J503, and P/J510 that are connected to the Main LVPS.
9. Remove 2 screws (front) that secure the Main LVPS.
10. Disconnect the 3 wiring harness connectors P/J1, P/J4, and P/J6 that are connected to the Main LVPS.
11. Remove 2 screws (back) that secure the Main LVPS.
12. Remove the Main LVPS.

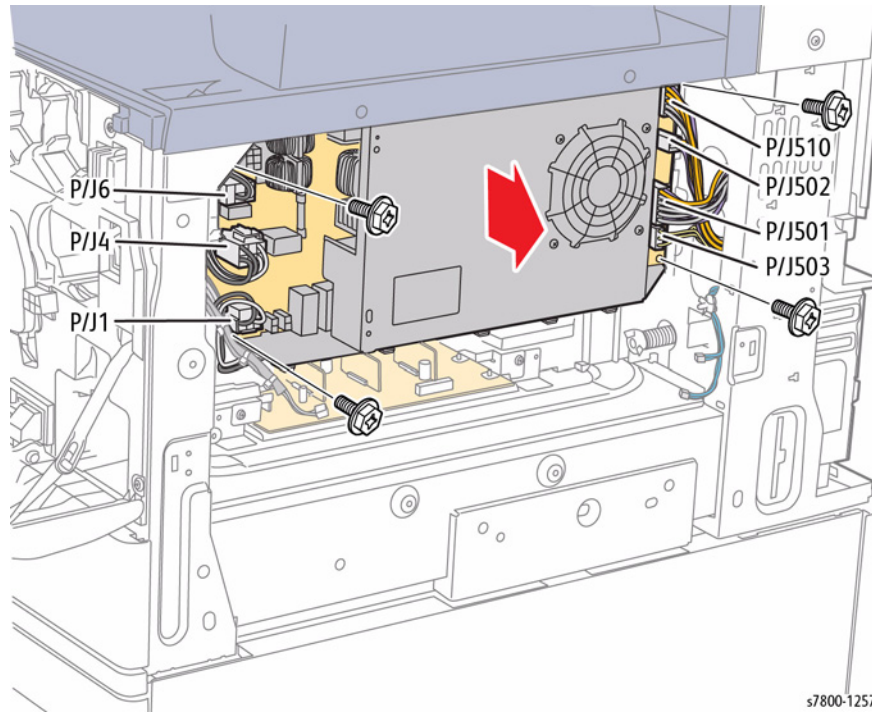


Figure 3 Removing the LVPS

Replacement

Be sure to align the 2 hooks on the printer frame with the hole on the LVPS Frame when installing the Main LVPS.

REP 18.16 HVPS (BCR)

Parts List on PL 18.6 Item 3

Removal

CAUTION

PWB's can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove the Waste Cartridge (REP 8.9).
2. Remove the Right Cover (REP 19.15).
3. Remove 4 screws (silver, 6mm) that secure the T-shaped Frame.
4. Remove the T-shaped Frame.

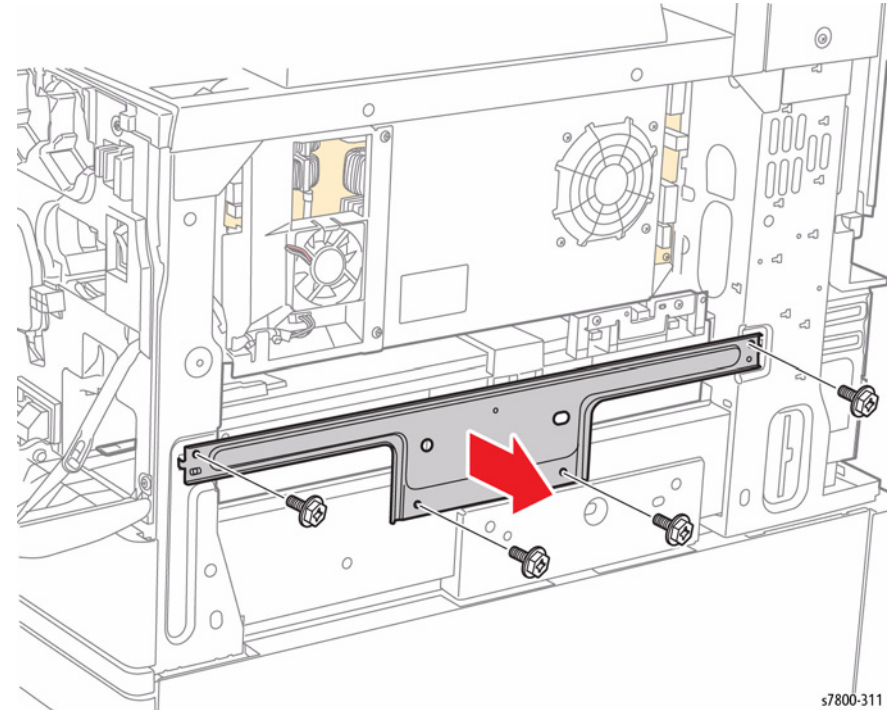


Figure 1 Removing the T-shaped Frame

5. Release the harness Clamp and disconnect the wiring harness connectors **P/J150** and **P/J182** that are connected to the 2 Sensors.
6. Remove 4 screws (silver, 6mm) that secure the Bottle Guide Assembly to the printer.
7. Remove the Bottle Guide Assembly.

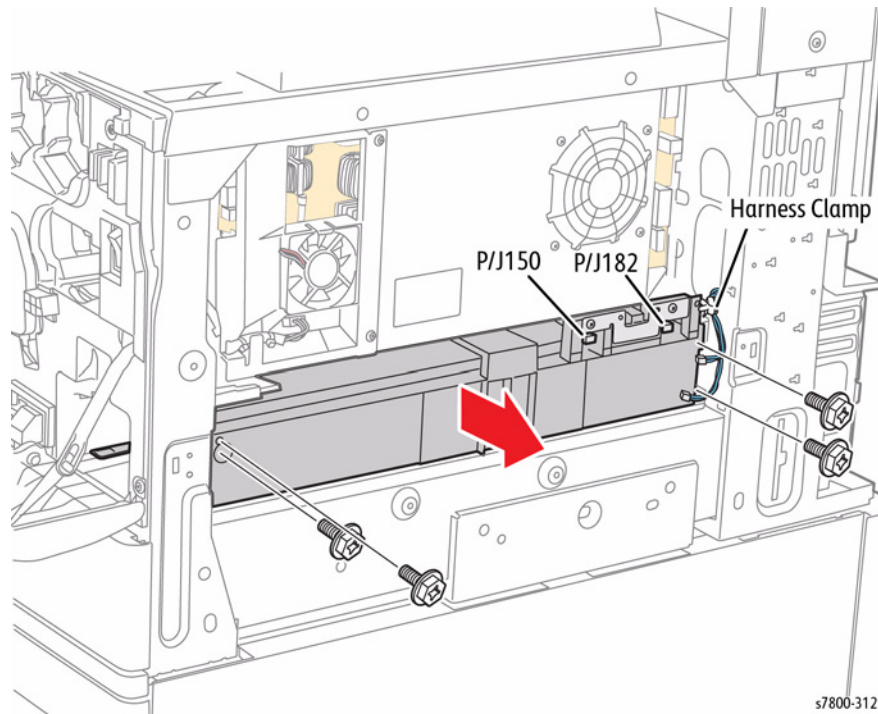


Figure 2 Removing the Bottle Guide Assembly

8. Disconnect the wiring harness connector **P/J460**.
9. Remove 2 screws that secure the HVPS.
10. Pull and remove the HVPS (BCR).

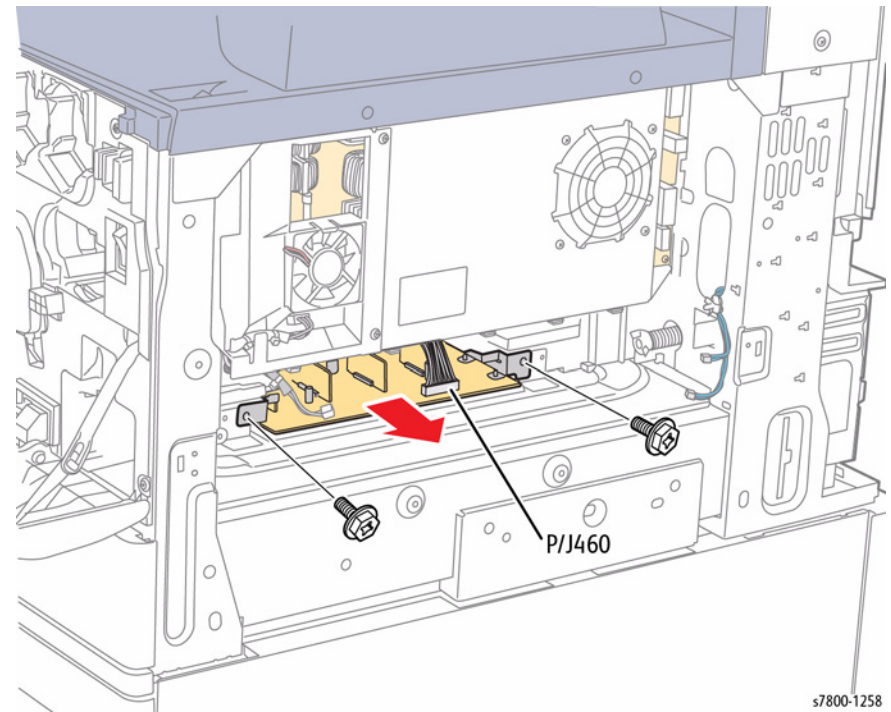


Figure 3 Removing the HVPS (BCR)

REP 19.1 Front Cover and Inner Cover

Parts List on [PL 19.1 Item 7](#), [PL 19.1 Item 10](#)

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

NOTE: When removing the Deve or Dispenser inside the printer, remove the Front Cover Assembly and the Inner Cover Assembly at the same time.

1. Remove the Imaging Unit (Y/M/C/K) ([REP 8.1](#)).
2. Remove the Toner Cartridge (Y/M/C/K) ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove 2 screws that secure the Imaging Unit Cover.
6. Open the Imaging Unit Cover to the first detent and pull it towards the front to remove it.

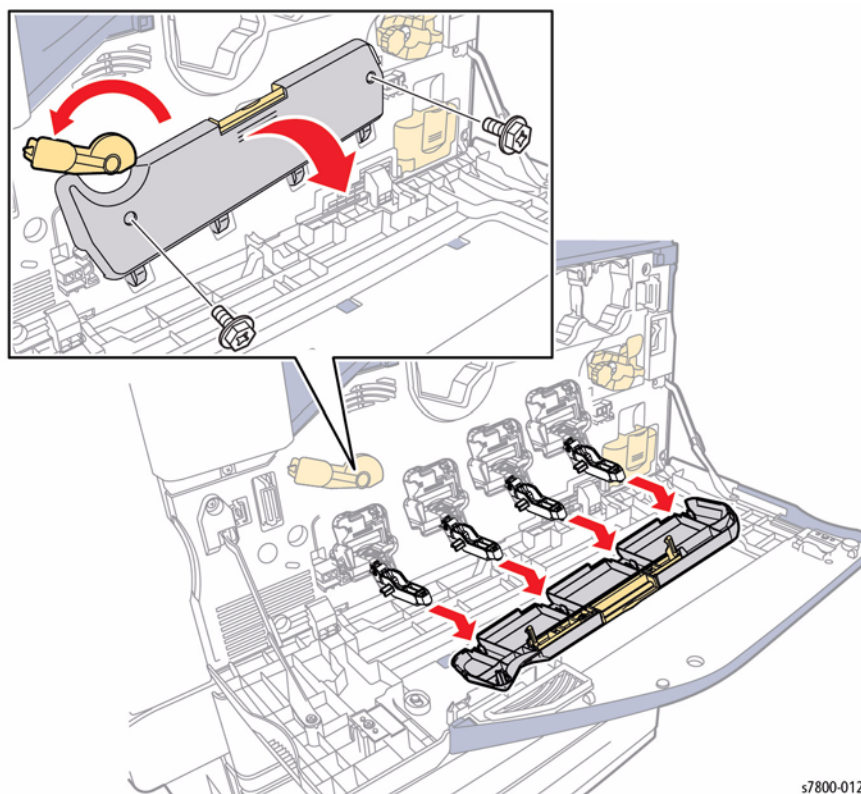


Figure 1 Removing the Imaging Unit Cover

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7. Turn the Tension Lever counterclockwise.
8. Remove 1 screw that secures the Tension Lever and remove the Tension Lever.

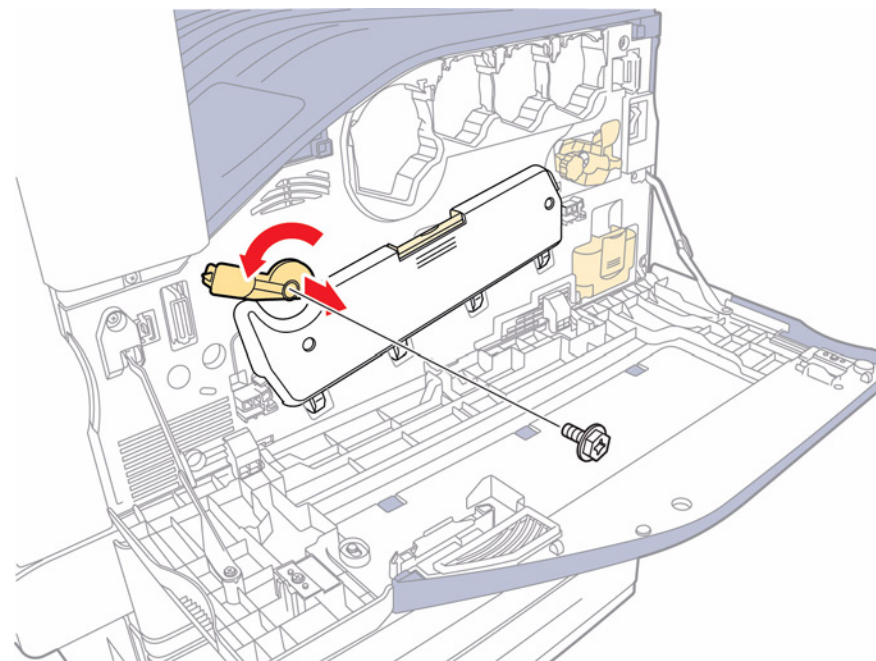


Figure 2 Removing the Tension Lever

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9. Open the Front Cover.
10. Remove 6 screws that secure the Inner Cover Assembly to the printer.
11. Pull the Inner Cover downward to release the latches and remove the Front Cover Assembly and the Inner Cover Assembly at the same time.

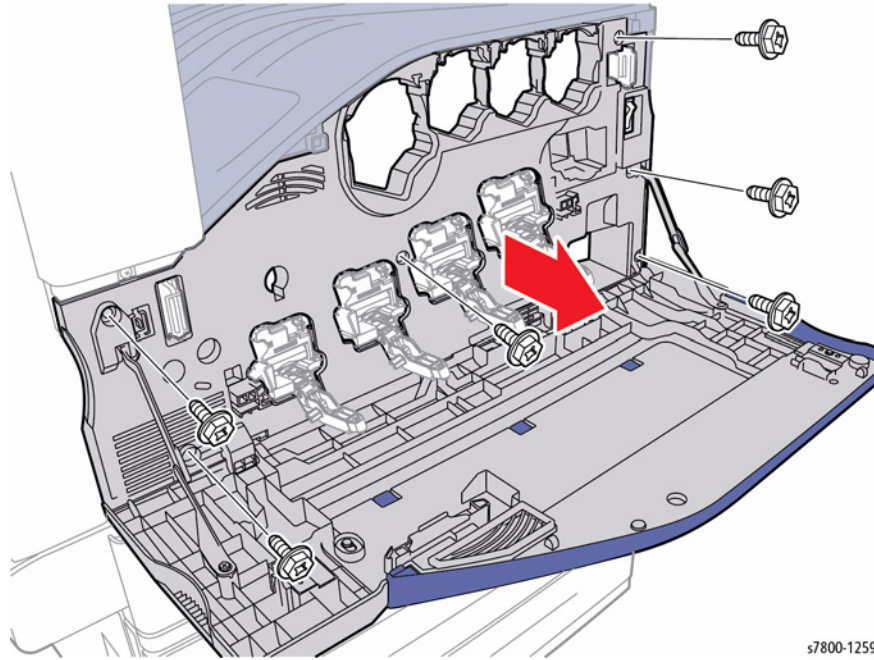


Figure 3 Removing the Front Cover and Inner Cover

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Front Cover Assembly

1. Remove Tray 2.
2. Open the Front Cover Assembly by 45°.
3. Shift Strip (B), which is inserted in the long hole of Strip (A) at the right and left, upwards and separate them.
4. Bend the center of the Front Cover Assembly downwards to release it from the bump of the Inner Cover Assembly, and then slide the Front Cover Assembly to the right to remove it.
5. Remove 1 screw (silver, Tapped, 8mm) that secures the Guide Assembly (PL 19.1 Item 11) to the Front Cover Assembly and remove the Guide Assembly.

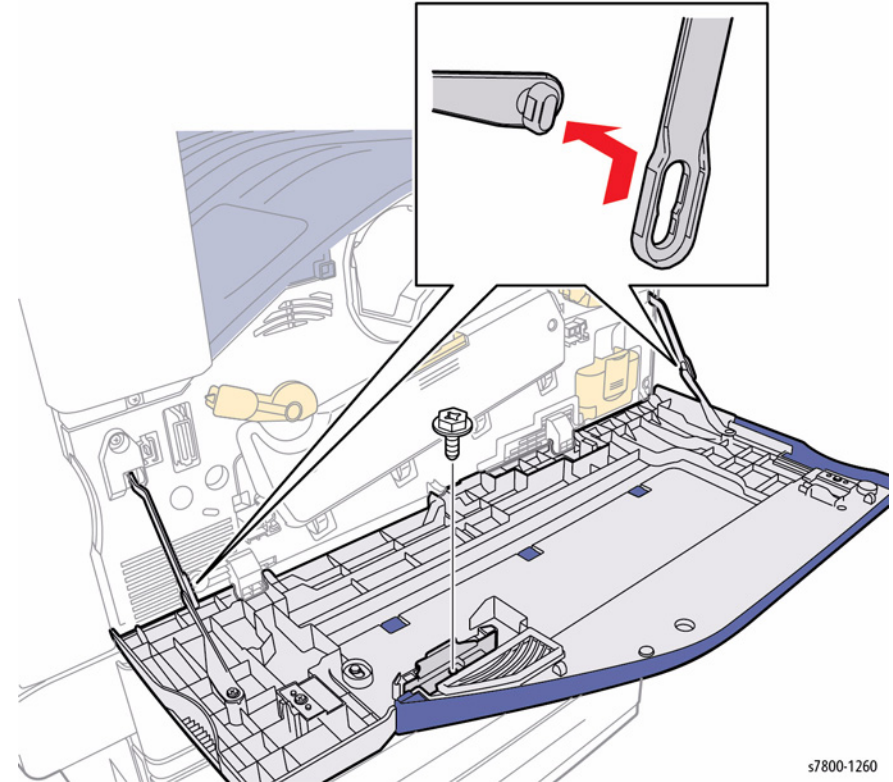


Figure 4 Removing the Front Cover Assembly

s7800-1260

REP 19.2 Top Cover

Parts List on [PL 19.2 Item 3](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Remove the Imaging Unit ([REP 8.1](#)).
2. Remove the Toner Cartridge (Y/M/C/K) ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Front Cover Assembly and the Inner Cover Assembly ([REP 19.1](#)).
6. Remove 1 screw that secures the Front Left Cover ([PL 19.2 Item 12](#)).
7. Remove the Front Left Cover.
8. Remove the Exit Front Cover ([PL 19.2 Item 9](#)).

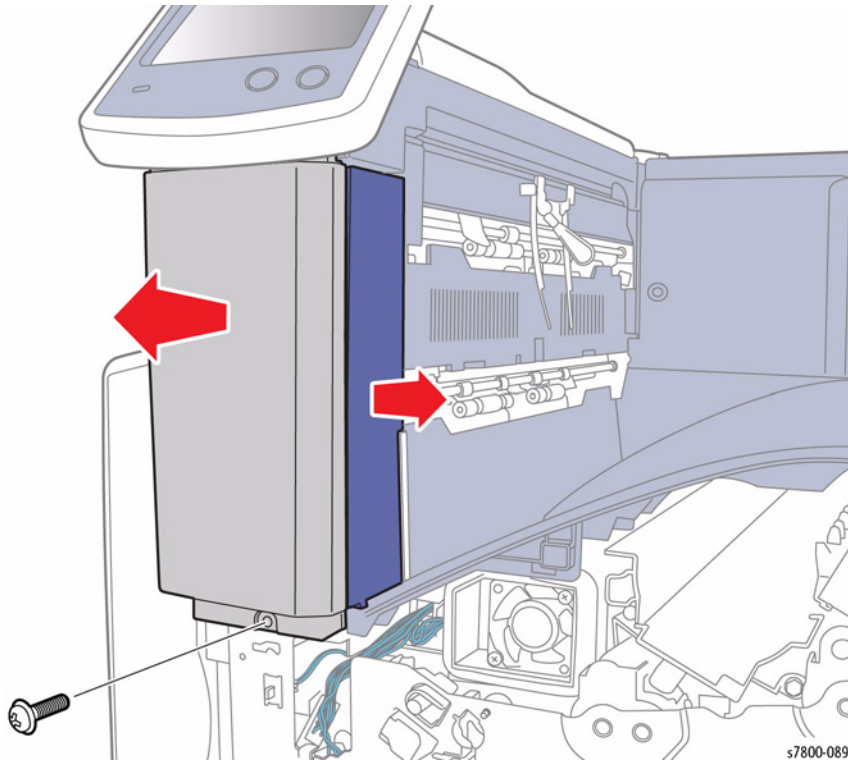


Figure 1 Removing the Front UI Bracket Base and Exit Front Cover

9. Remove 1 screw that secures the Top Cover.
10. Lift the front of the Top Cover Assembly at an angle to remove.

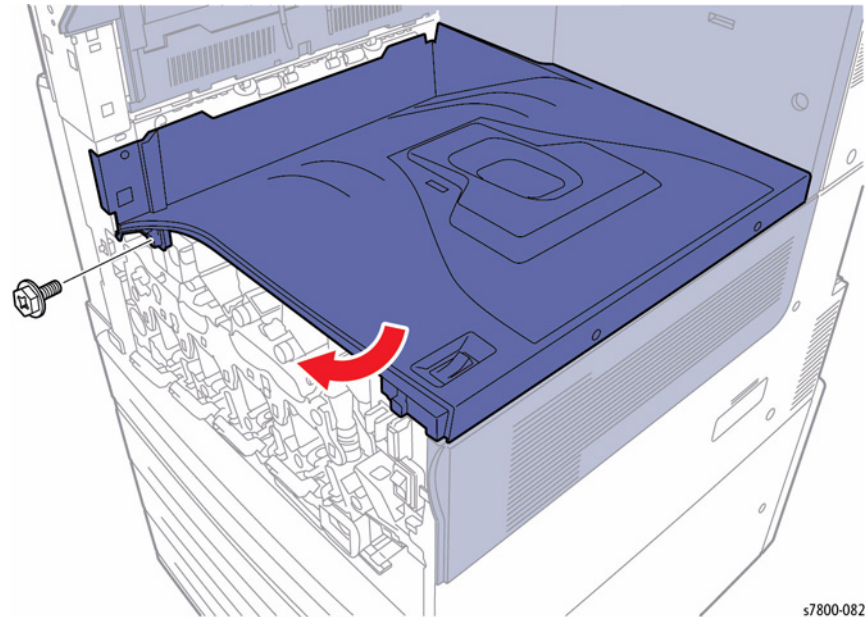


Figure 2 Removing the Top Cover

REP 19.3 Tray 1 Front Cover

Parts List on [PL 19.2 Item 4](#)

Removal

1. Pull out Tray 2.
2. Remove 1 screw at the front of the Tray 1 Feeder Assembly.
3. Remove 1 screw that secures the Tray 1 Front Cover.
4. Slightly open the front side of the Tray 1 Feeder Assembly towards you and remove the Tray 1 Front Cover.

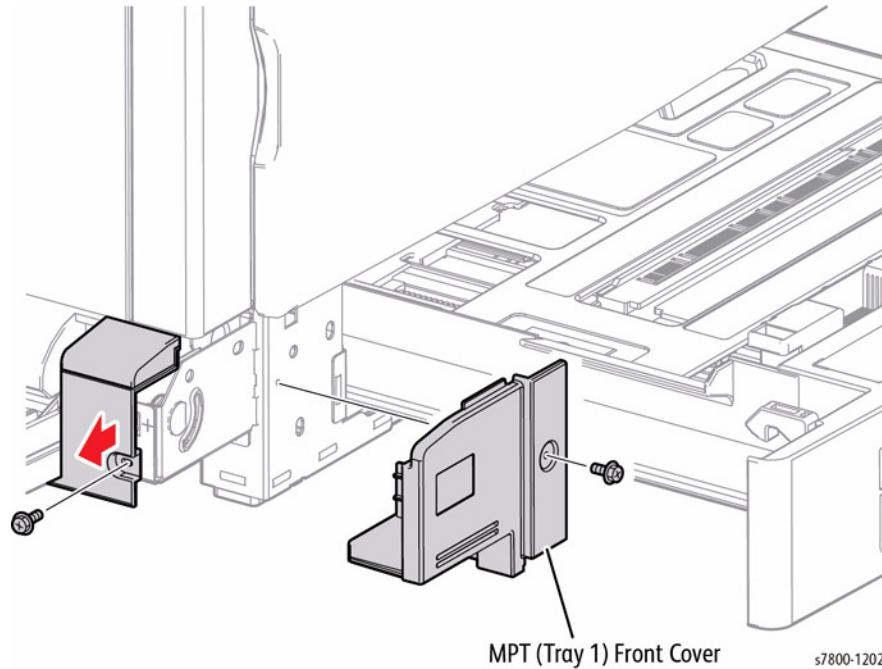


Figure 1 Removing the Tray 1 Front Cover

REP 19.4 Left Rear Lower Cover

Parts List on [PL 19.2 Item 7](#)

Removal

1. Open the Left Hand Door A.
2. Remove 2 screws that secure the Left Rear Lower Cover.
3. Pull the Left Rear Lower Cover downward in order to release the 3 hooks on the inner side of the Cover and remove the Cover.

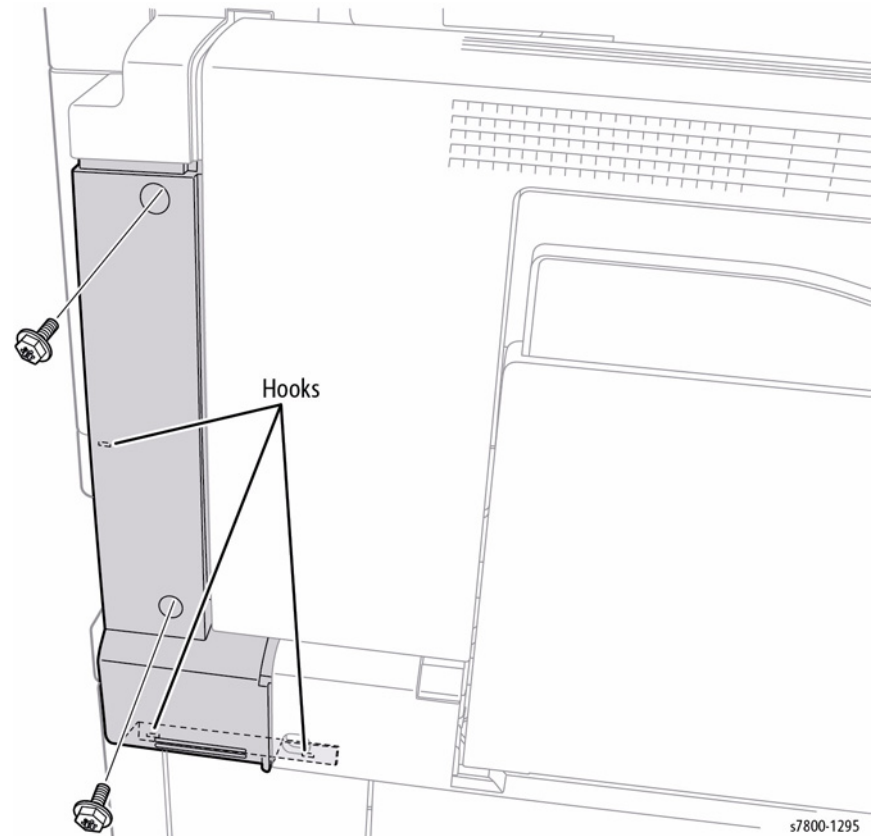


Figure 1 Removing the Left Rear Lower Cover

REP 19.5 Left Upper Cover

Parts List on [PL 19.2 Item 8](#)

Removal

1. Open the Left Door A.
2. Remove 1 screws that secures the Left Upper Cover.
3. Remove the Left Upper Cover.

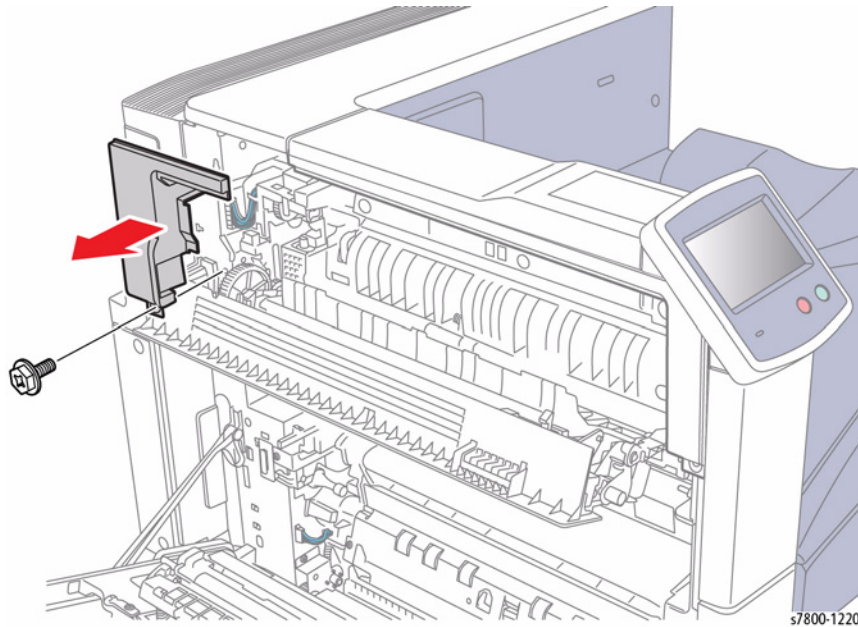


Figure 1 Removing the Left Upper Cover

REP 19.6 Exit Front Cover

Parts List on [PL 19.2 Item 9](#)

Removal

1. Open the Front Cover.
2. Remove 1 screw (silver, 8mm) that secures the Front Left Cover ([PL 19.2 Item 12](#)).
3. Remove the Front Left Cover.
4. Remove the Exit Front Cover ([PL 19.2 Item 9](#)).

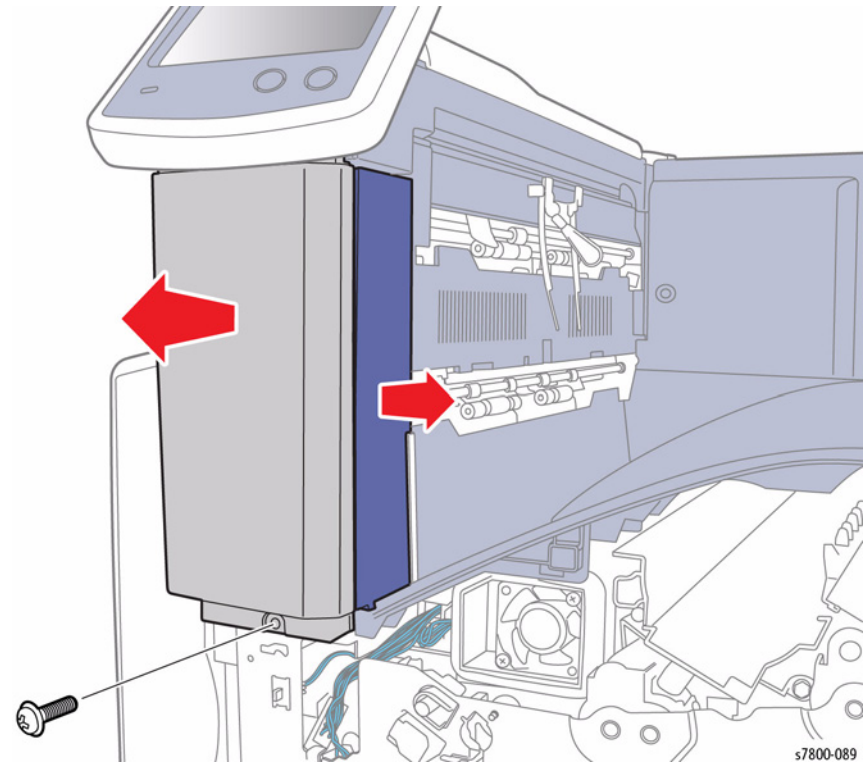


Figure 1 Removing the Front UI Bracket Base and Exit Front Cover

REP 19.7 Exit Upper Cover

Parts List on [PL 19.2 Item 10](#)

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/M/C/K) ([REP 8.1](#)).
2. Remove the Toner Cartridge (Y/M/C/K) ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
6. Remove the Top Cover ([REP 19.2](#)).
7. Remove the Deflector Shield ([REP 19.8](#)).
8. Remove the Exit Upper Cover.

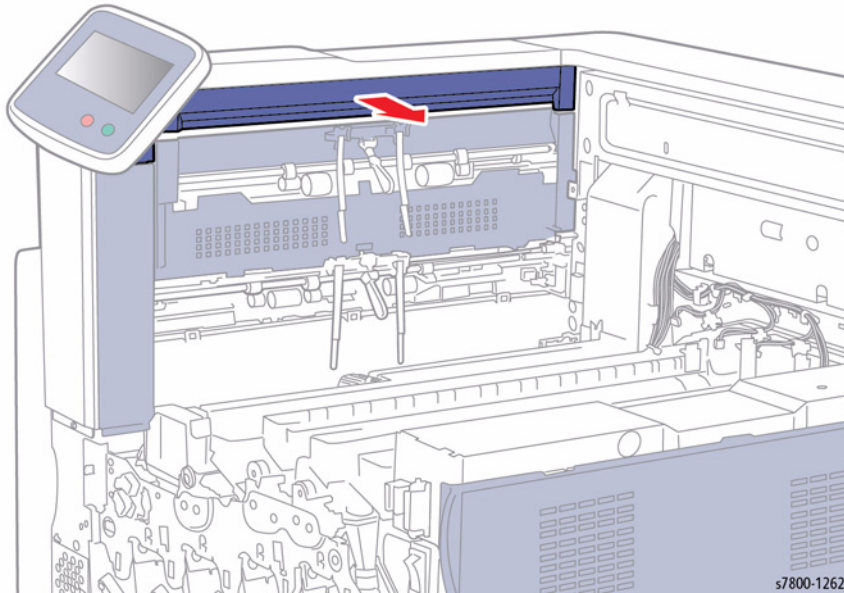


Figure 1 Removing the Exit Upper Cover

REP 19.8 Deflector Shield

Parts List on [PL 19.2 Item 11](#)

Removal

CAUTION

Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage. Do not touch the surface of the Imaging Unit.

1. Remove the Imaging Unit (Y/M/C/K) ([REP 8.1](#)).
2. Remove the Toner Cartridge (Y/M/C/K) ([REP 5.1](#)).
3. Remove the Waste Cartridge ([REP 8.9](#)).
4. Remove the IBT Belt Cleaner Assembly ([REP 6.1](#)).
5. Remove the Front Cover and Inner Cover ([REP 19.1](#)).
6. Remove the Top Cover ([REP 19.2](#)).
7. Remove 2 screws that secure the Deflector Shield.
8. Slide the Deflector Shield downward to remove.

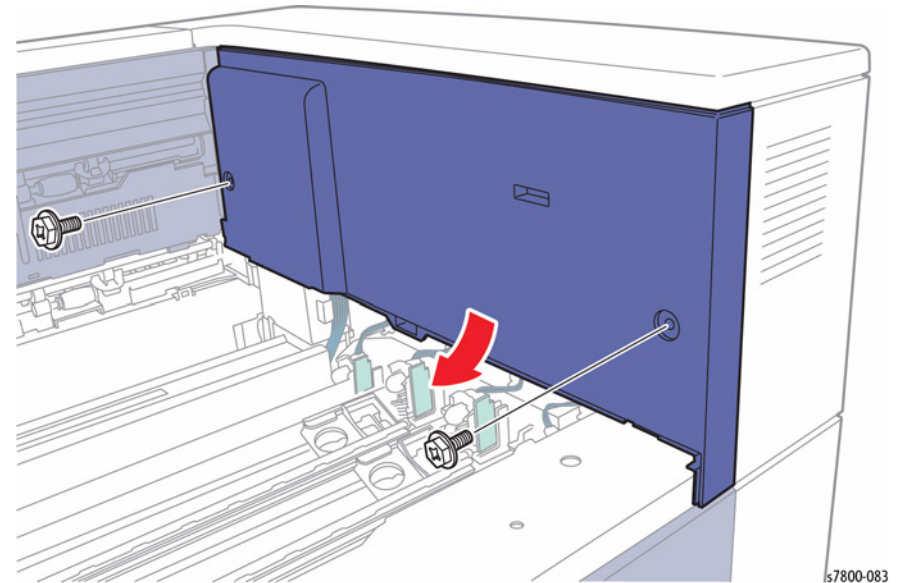


Figure 1 Removing the Deflector Shield

REP 19.9 Front Left Cover

Parts List on [PL 19.2 Item 12](#)

Removal

CAUTION

Do not touch the surface of the Imaging Unit. Do not expose the Imaging Unit to light for more than 5 minutes. Cover the Imaging Unit to avoid damage.

1. Open the Front Door.
2. Remove 1 screw that secures the Front Left Cover.
3. Remove the Front Left Cover.

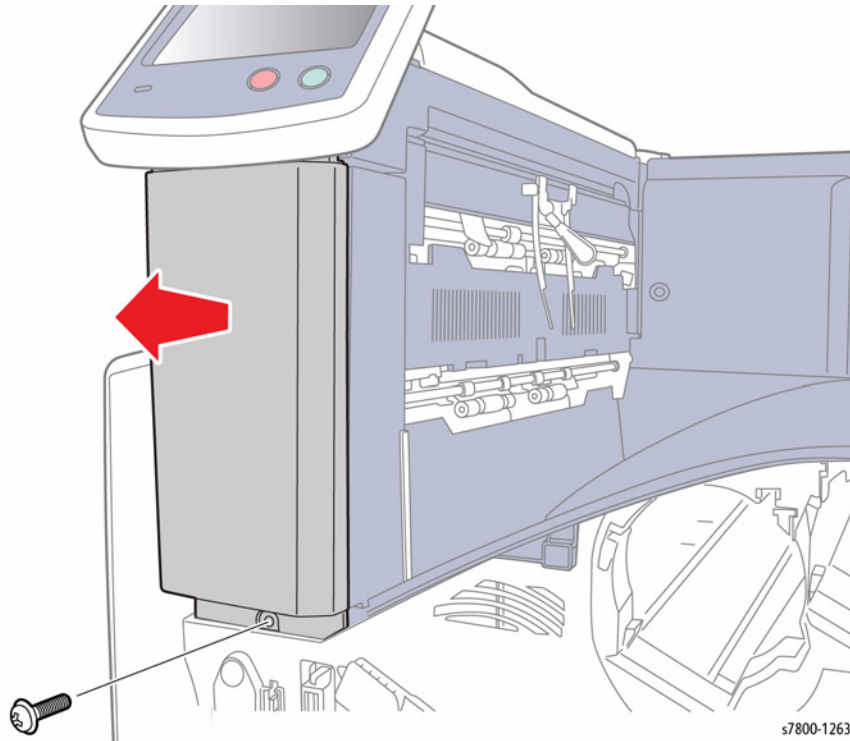


Figure 1 Removing the Front Left Cover

s7800-1263

REP 19.10 Control Panel

Parts List on [PL 19.2 Item 15](#)

Removal

1. Open the Front Door.
2. Remove the Front Left Cover (REP 19.9).
3. Remove 2 screws that secure the Control Panel.

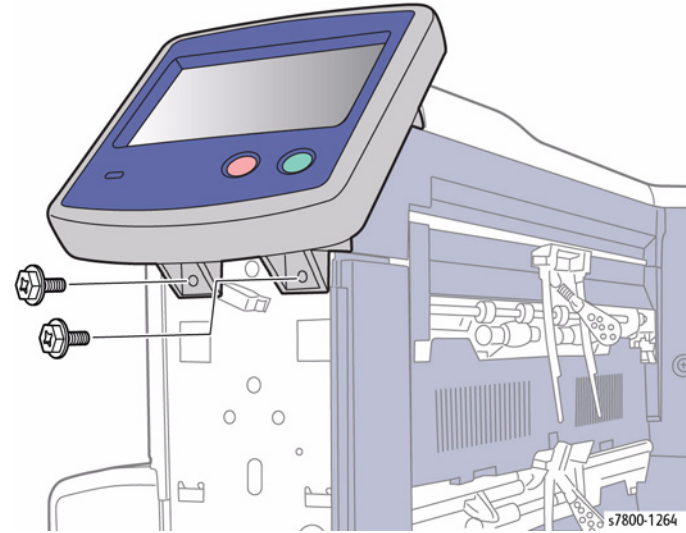


Figure 1 Removing the screws

s7800-1264

4. Disconnect the wiring harness connector P/J710 and remove the Control Panel.

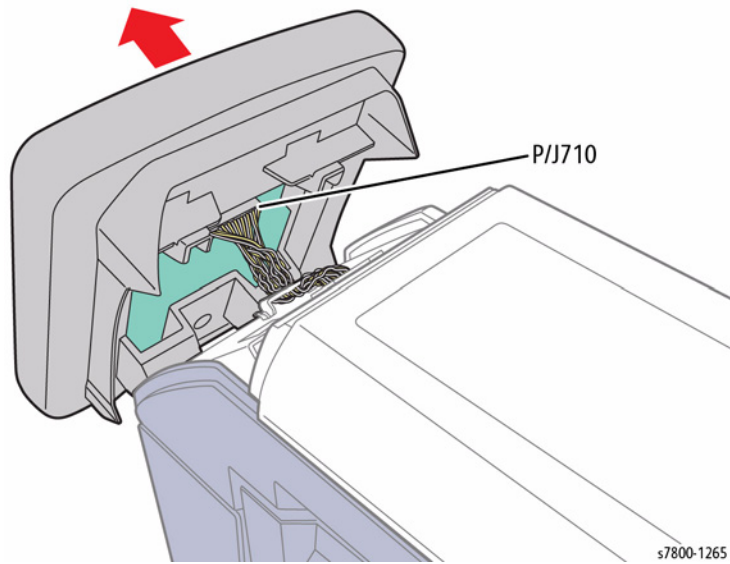


Figure 2 Removing the Control Panel

s7800-1265

REP 19.11 Left Top Cover

Parts List on [PL 19.2 Item 16](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis ([REP 18.1](#)).
4. Remove the Front Left Cover ([REP 19.9](#)).
5. Remove the Control Panel ([REP 19.10](#)).
6. Remove the Rear Top Cover ([REP 19.12](#)).
7. Remove 1 screws that secures the Left Top Cover.
8. Remove the Left Top Cover.

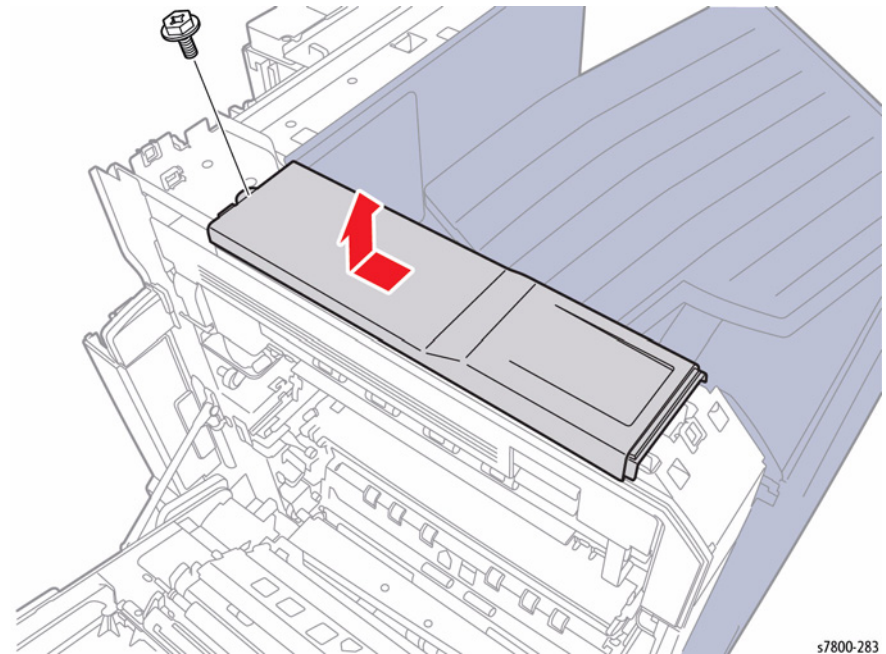


Figure 1 Removing the Left Top Cover

s7800-283

REP 19.12 Rear Top Cover

Parts List on [PL 19.2 Item 17](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Rear Lower Cover ([REP 19.16](#)).
3. Open the PWB Chassis ([REP 18.1](#)).
4. Release the hooks and release the wiring harness.
5. Remove 2 screws that secure the Top Rear Top Cover.
6. Lift and remove the Rear Top Cover.

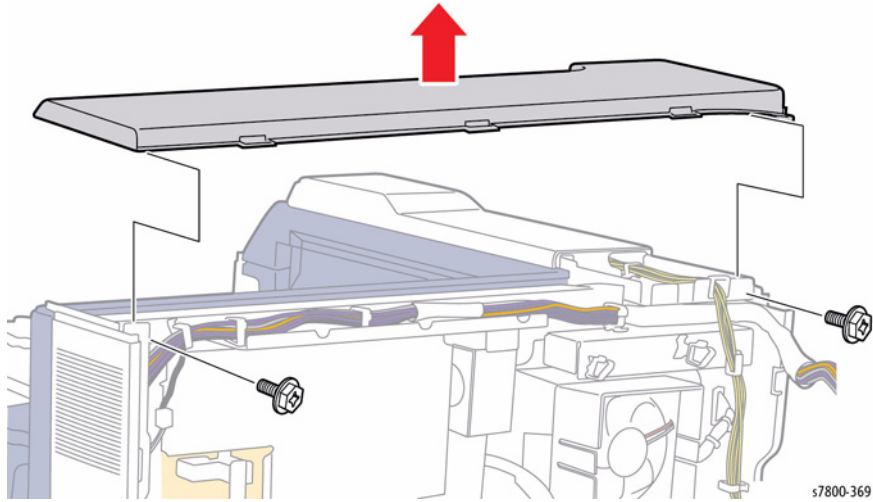


Figure 1 Removing the Rear Top Cover

REP 19.13 Left Front Cover

Parts List on [PL 19.2 Item 18](#)

Removal

1. Open the Left Door A.
2. Remove the Left Top Cover ([REP 19.11](#)).
3. Remove 1 screw that secures the Left Front Cover.
4. Slide the Left Upper Cover towards the left of the printer to remove.

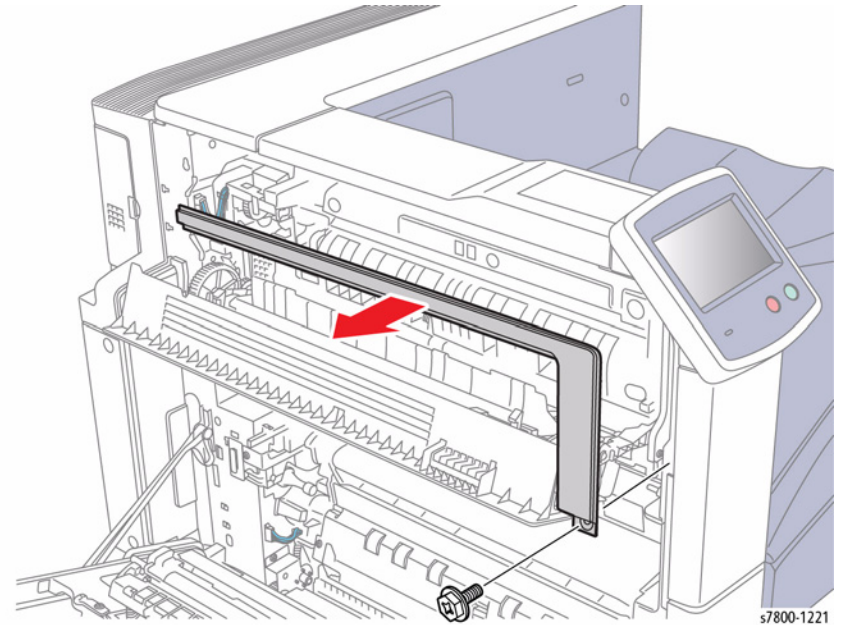


Figure 1 Removing the Left Upper Cover

REP 19.14 Left Inner Cover

Parts List on [PL 19.2 Item 19](#)

Removal

1. Open the Left Hand Door A.
2. Remove the Rear Upper Cover ([REP 19.17](#)).
3. Remove 1 screw that secures the Left Inner Cover.
4. Remove the Tray 1 Left Inner Cover.

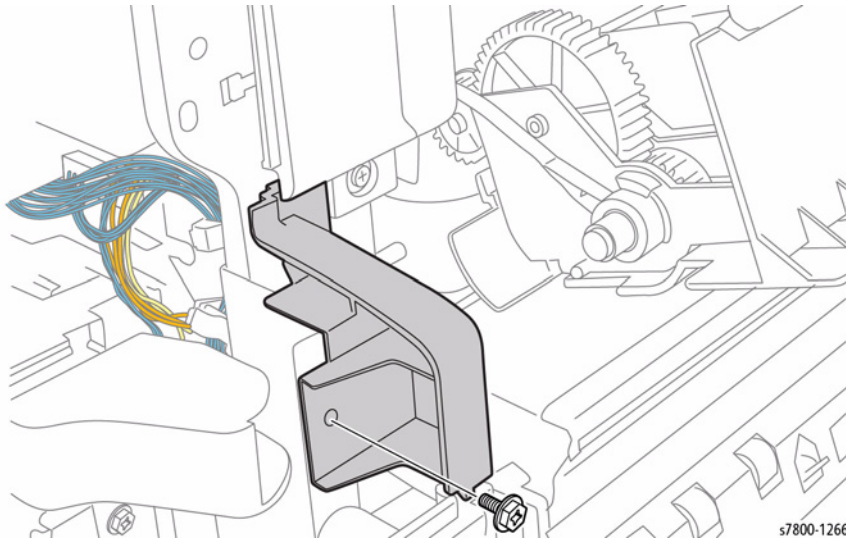


Figure 1 Removing the Left Inner Cover

s7800-1266

REP 19.15 Right Cover

Parts List on [PL 19.3 Item 1](#)

Removal

WARNING

There are potentially dangerous AC voltages present on the aluminum heat sink. Be careful not to touch.

1. Remove 2 screws that secure the Right Cover.
2. Pull down on the Cover to release the tabs.
3. Remove the Right Cover.

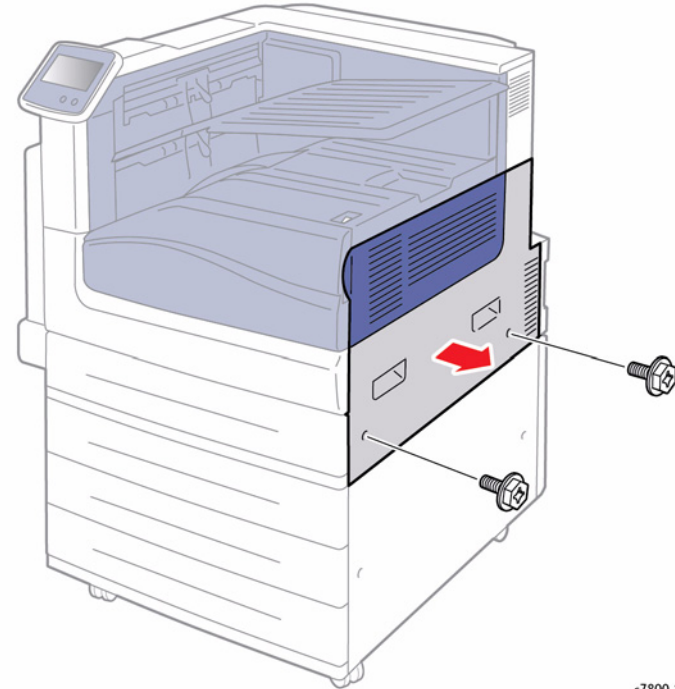


Figure 1 Removing the Right Cover

s7800-1267

REP 19.16 Rear Lower Cover

Parts List on [PL 19.3 Item 3](#)

Removal

1. Remove the Rear Upper Cover ([REP 19.17](#)).
2. Remove the Option Connector Cover ([PL 19.3 Item 7](#)).

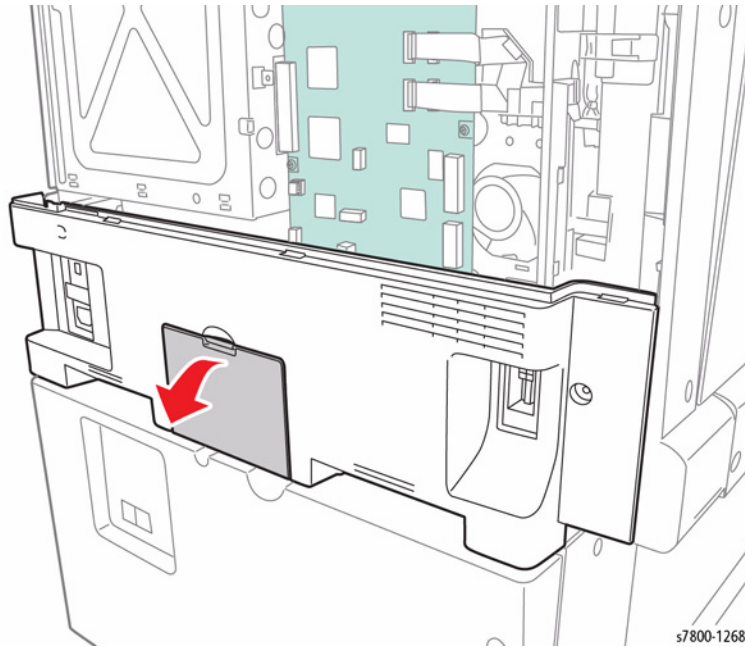


Figure 1 Removing the MCU Cover

3. Remove 3 screws that secure the Rear Lower Cover.
4. Remove the Rear Lower Cover.

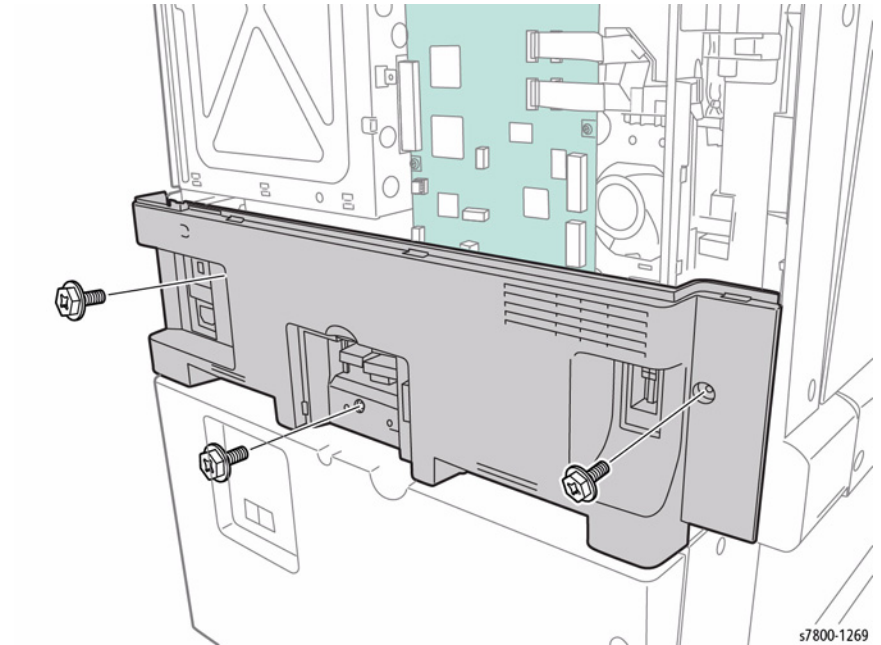


Figure 2 Removing screws and Rear Lower Cover

Replacement

Tilt the Rear Lower Cover in order to secure the 4 hooks when installing the Rear Lower Cover.

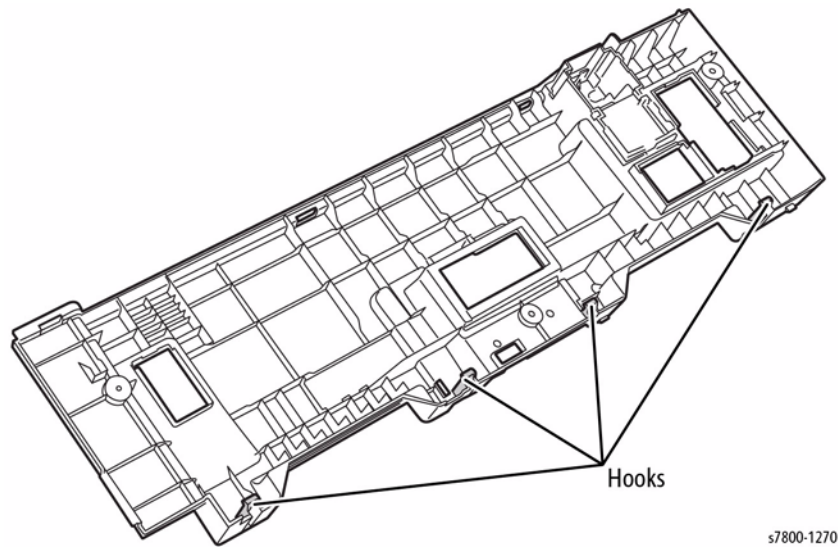


Figure 3 Hook Locations

REP 19.17 Rear Upper Cover

Parts List on [PL 19.3 Item 4](#)

Removal

1. Remove the Cover ([PL 19.3 Item 6](#)).

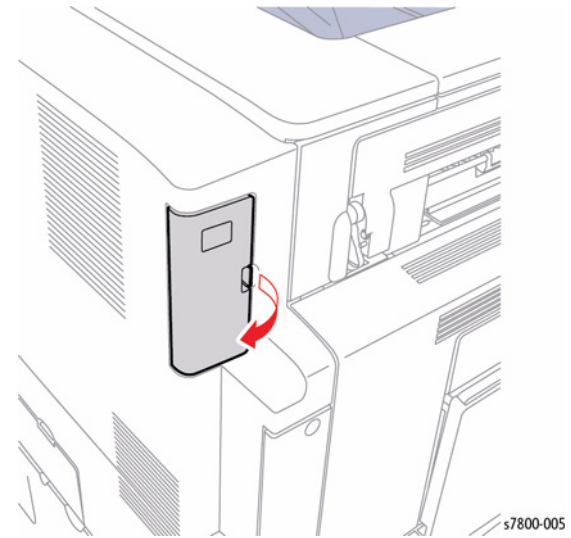


Figure 1 Removing the Ozone Filter Cover

2. Remove 2 screws that secure the Rear Upper Cover.
3. Remove the Rear Upper Cover.

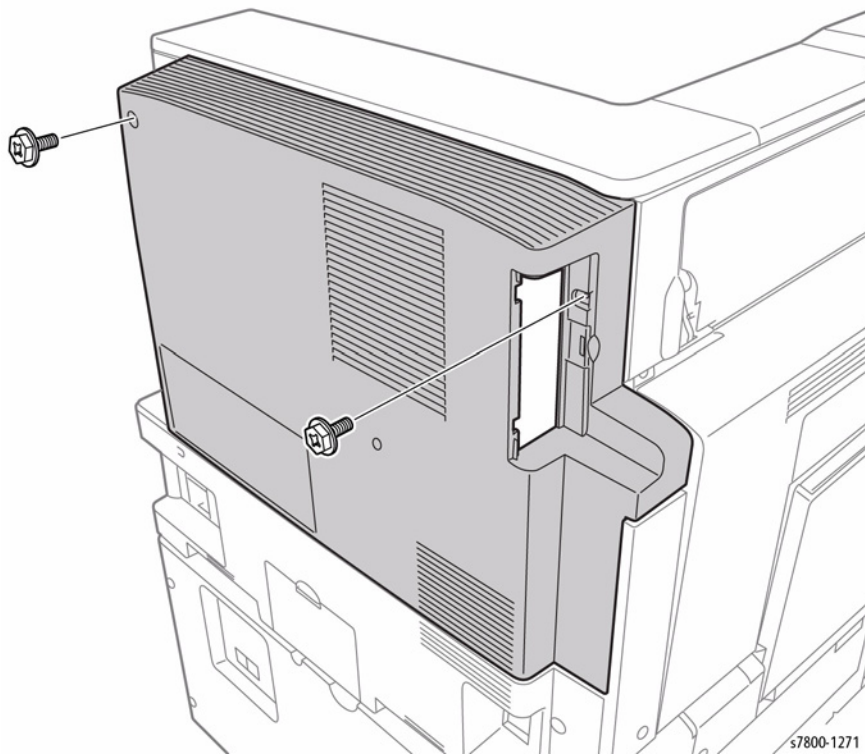


Figure 2 Removing the Rear Upper Cover

REP 23.1 H-Transport Assembly

Parts List on [PL 23.1 Item 1](#)

Removal

1. Detach the Finisher ([REP 23.2](#)).
2. Remove 2 screws that secure the Docking Plate.
3. Remove the Docking Plate ([PL 23.1 Item 3](#)).
4. Remove the H-Transport Assembly.

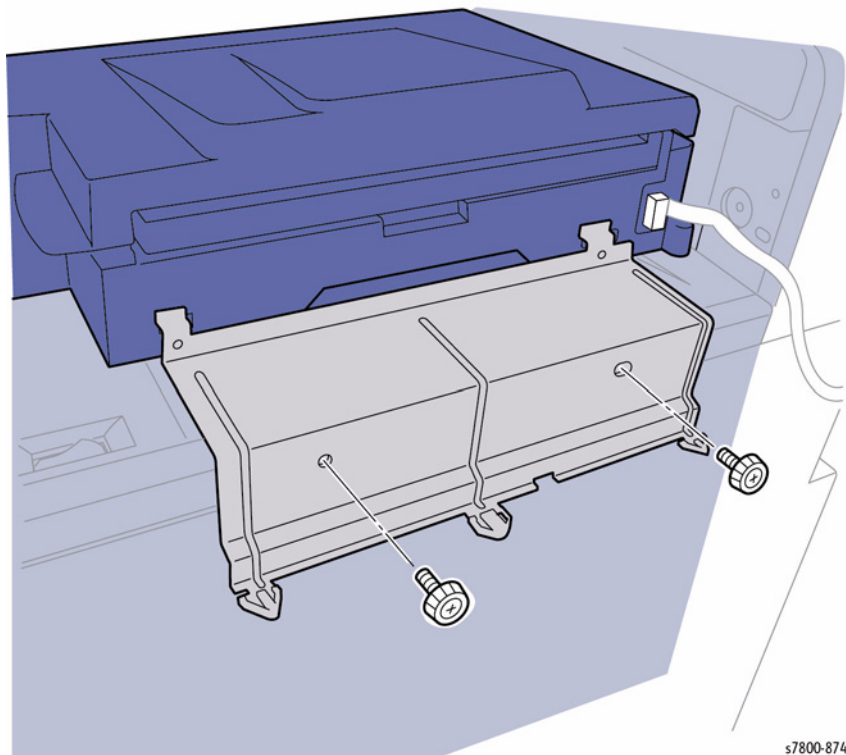


Figure 1 Removing the H-Transport Assembly

REP 23.2 Advanced Finisher

Parts List on [PL 23.1 Item 9](#)

Removal

NOTE: Be sure to lower the 2 feet to keep the Finisher balance.

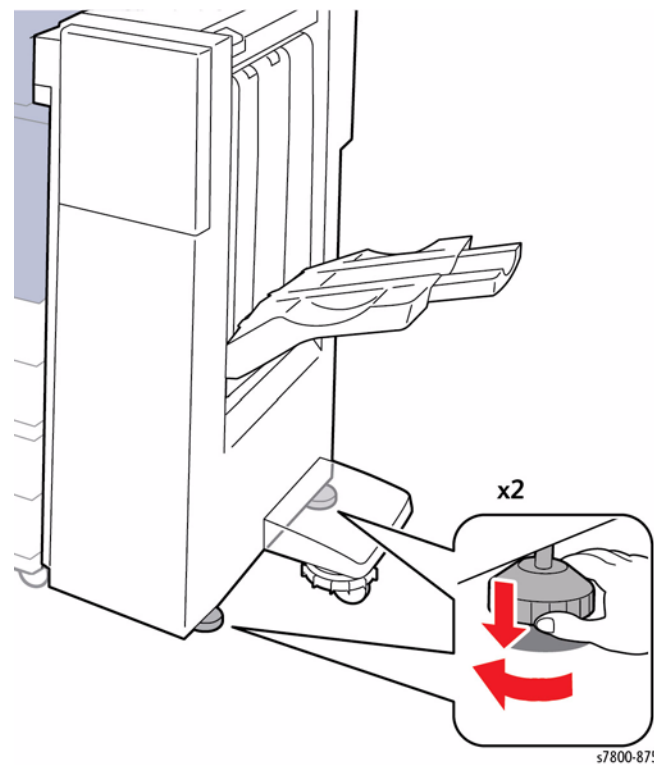


Figure 1 Lowering the Feet

1. Remove the Connector Cover.
2. Release the Clamp.
3. Disconnect the wiring harness connector P/J590.
4. Disconnect the Power Cable of the SB Finisher.

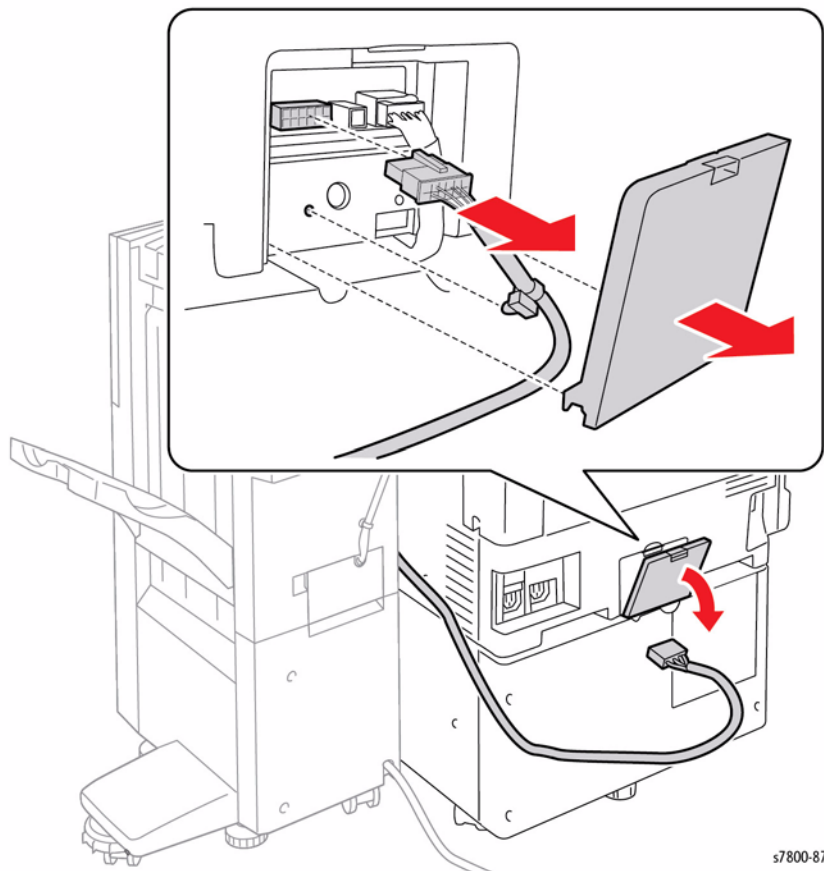


Figure 2 Disconnecting the Cables

s7800-876

5. Remove the Connector Cover.
6. Disconnect the power connector.
7. Release the 4 Clamps.

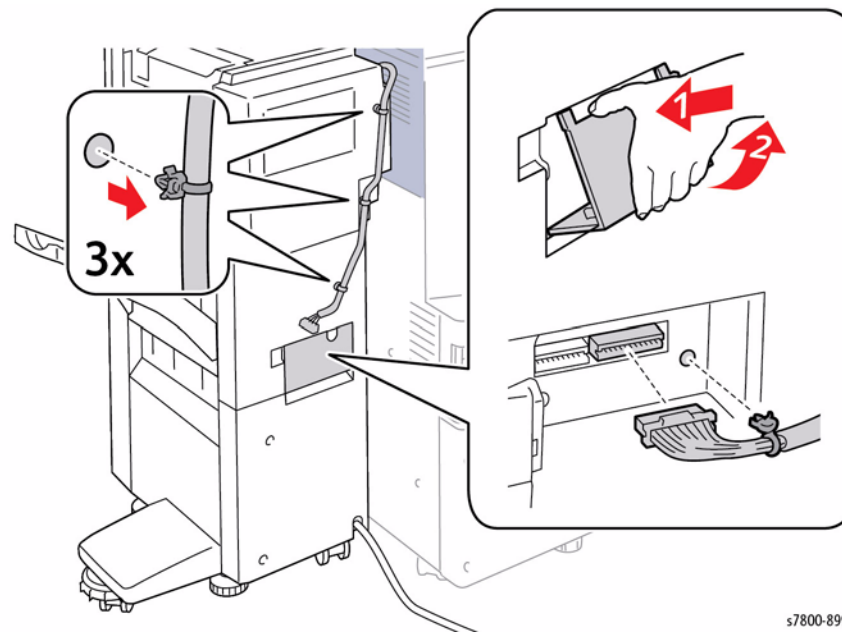


Figure 3 Removing the Connector Cover and releasing the Clamps

s7800-899

8. Open the Finisher Front Door.
9. Remove the Thumb Screw.
10. Pull the Docking Plate Lever towards you.

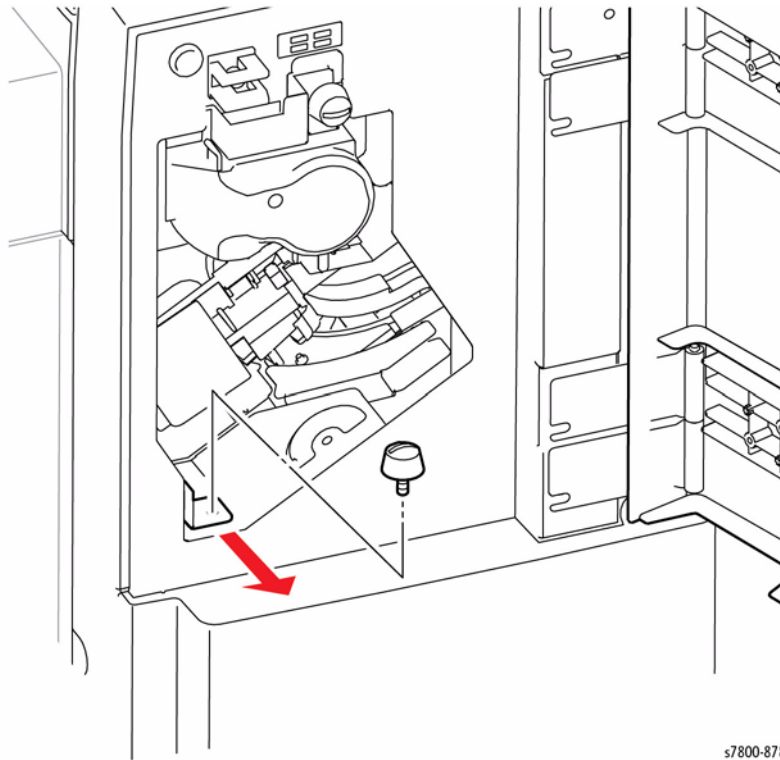


Figure 4 Removing the screw

NOTE: Be sure the power cable is placed on top of the printer to prevent damaging the cable.

11. Slide the Advanced Finisher away from the printer.

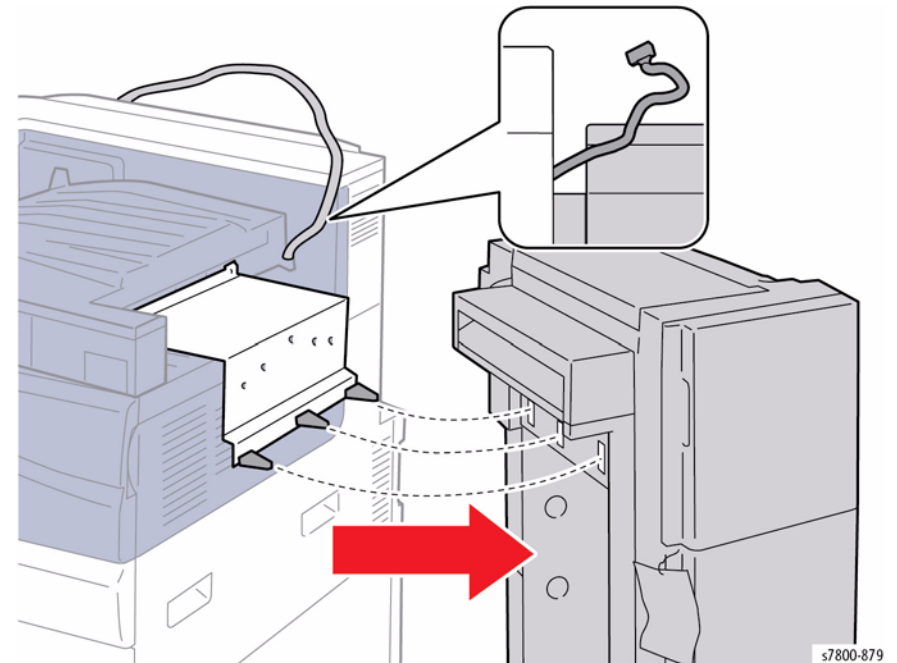


Figure 5 Detaching the Advanced Finisher

REP 23.3 Punch Assembly (2/3 Hole, 2/4 Hole)

Parts List on [PL 23.2 Item 10](#)

Removal

1. Open the H-Transport Top Cover.
2. Open the H-Transport Front Cover.
3. Remove and empty the Punch Waste Bin.

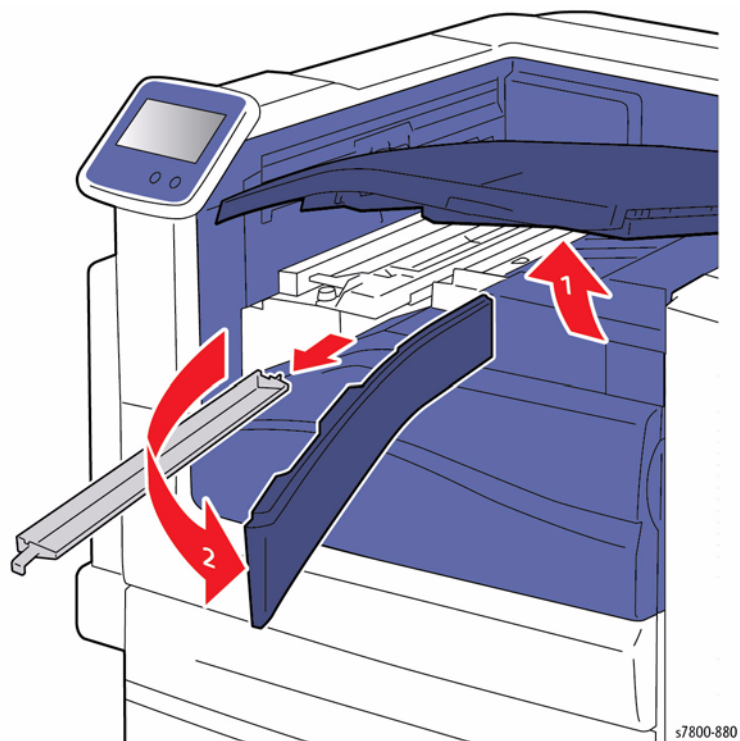


Figure 1 Opening the Top Cover and Front Cover

4. Remove the cable Clamp.
5. Remove the Connector Cover and disconnect the wiring harness connector.
6. Remove the Thumb Screw.
7. Pull the Hole Punch Assembly out to remove.

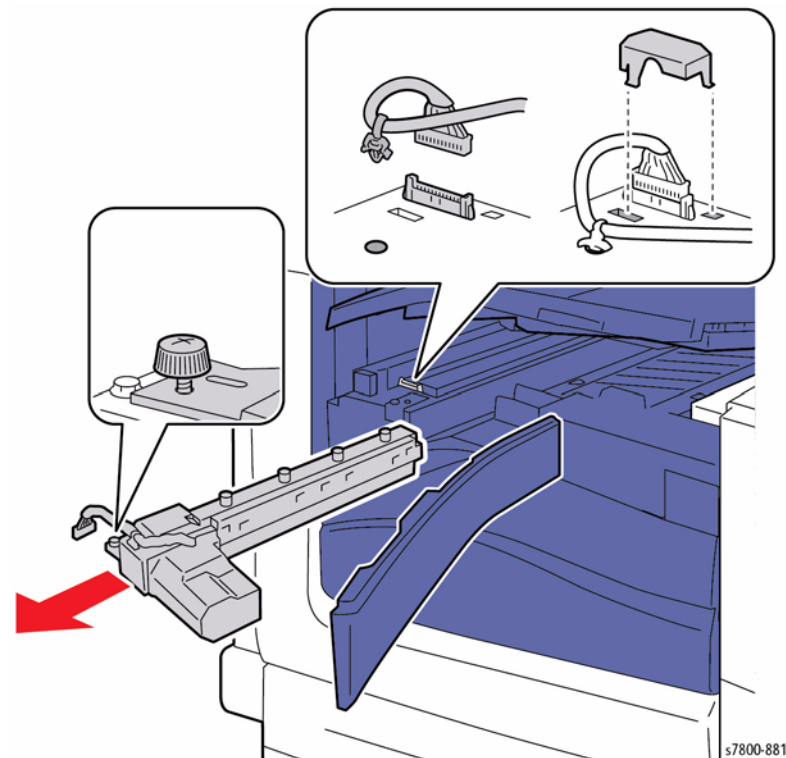


Figure 2 Removing the Punch Assembly

REP 23.4 H-Transport Counter Balance (Left), H-Transport Counter Balance (Right)

Parts List on [PL 23.3 Item 11](#)

Removal

1. Empty the Punch Waste Bin.
2. Remove the H-Transport Assembly ([REP 23.1](#)).
3. Remove 2 screws that secure the Rear Cover.
4. Remove the Rear Cover ([PL 23.2 Item 9](#)).

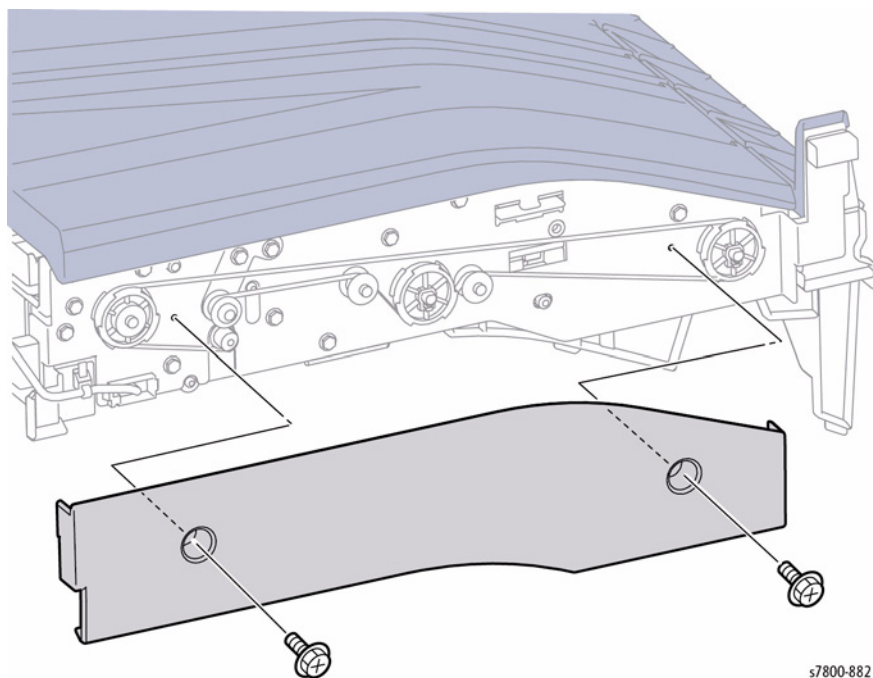


Figure 1 Removing the Rear Cover

5. Open the Top Cover.
6. Release the Chain that secure the Lower Chute Assembly.
7. Release the Hooks (x2) and remove the Upper Chute.

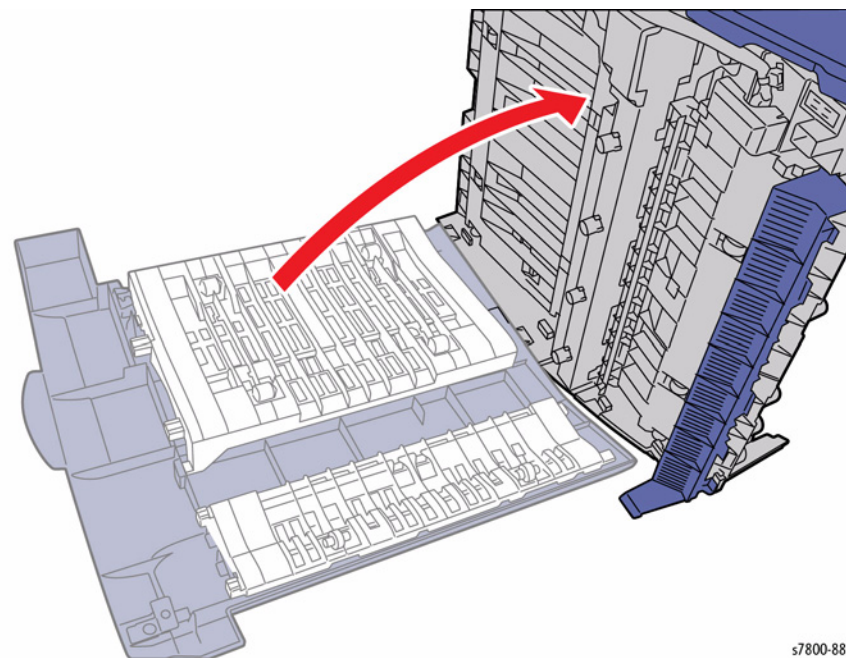


Figure 2 Releasing the Hooks

8. Open the Lower Chute.
9. Remove the Springs (x4).

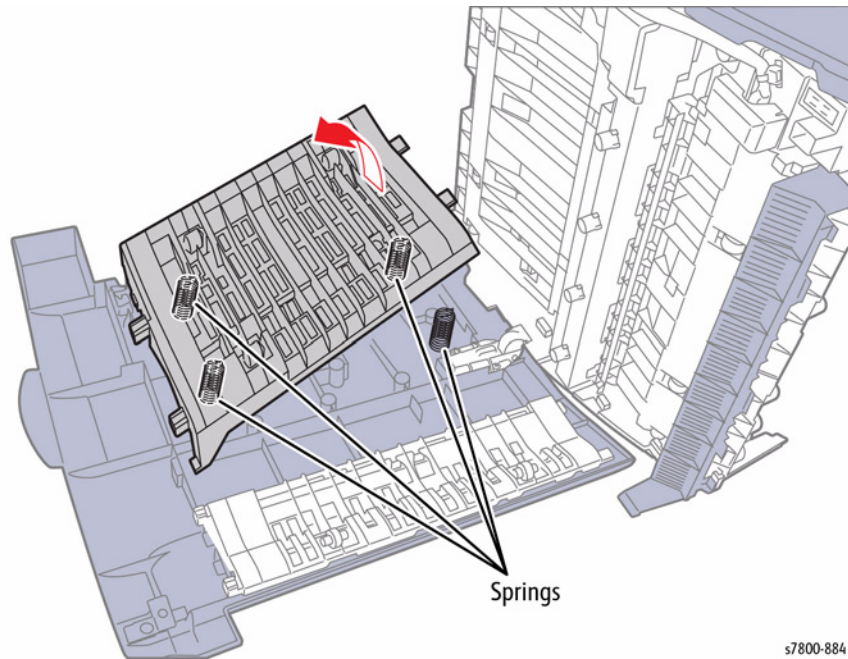


Figure 3 Removing the Springs

10. Remove 4 tapping screws that secure the Lower Chute Assembly.
11. Remove the Lower Chute Assembly.

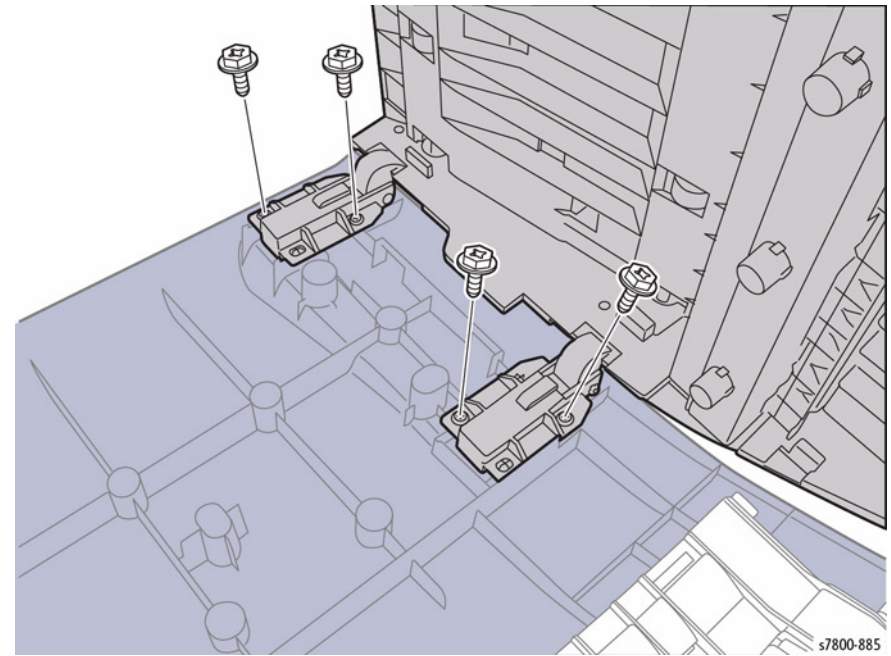
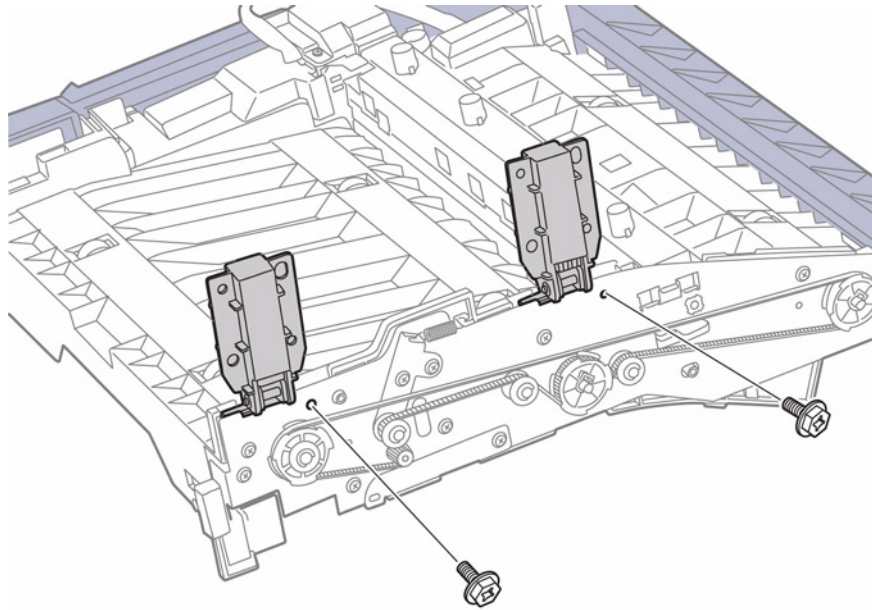


Figure 4 Removing the Lower Chute Assembly

12. Remove 1 screw that secures the Right Counter Balance.
13. Remove the Right Counter Balance.
14. Remove 1 screw that secures Left Counter Balance.
15. Remove the Left Counter Balance.



s7800-886

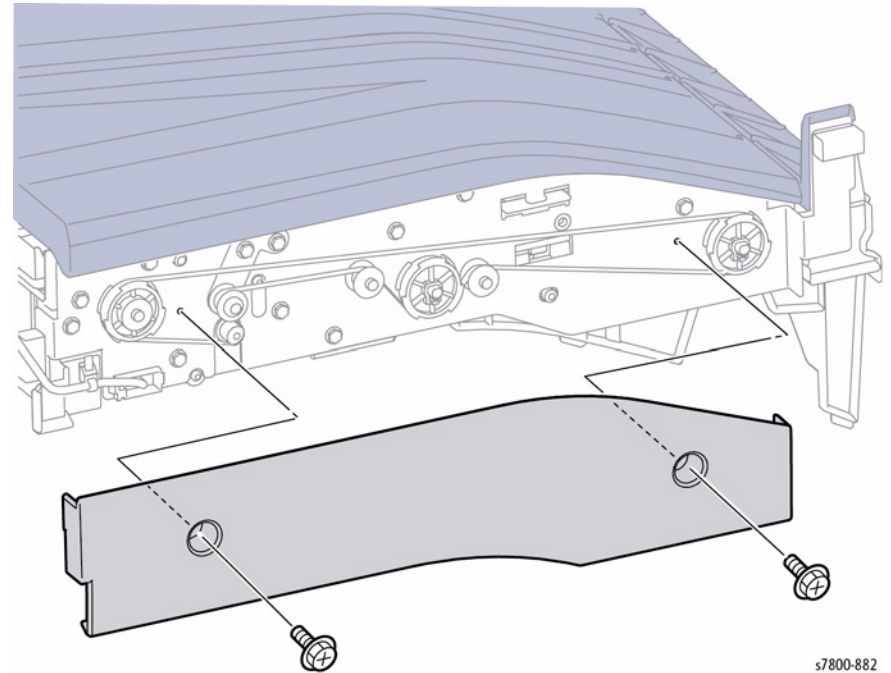
Figure 5 Removing the Right and Left Counter Balances

REP 23.5 H-Transport Motor

Parts List on [PL 23.4 Item 13](#)

Removal

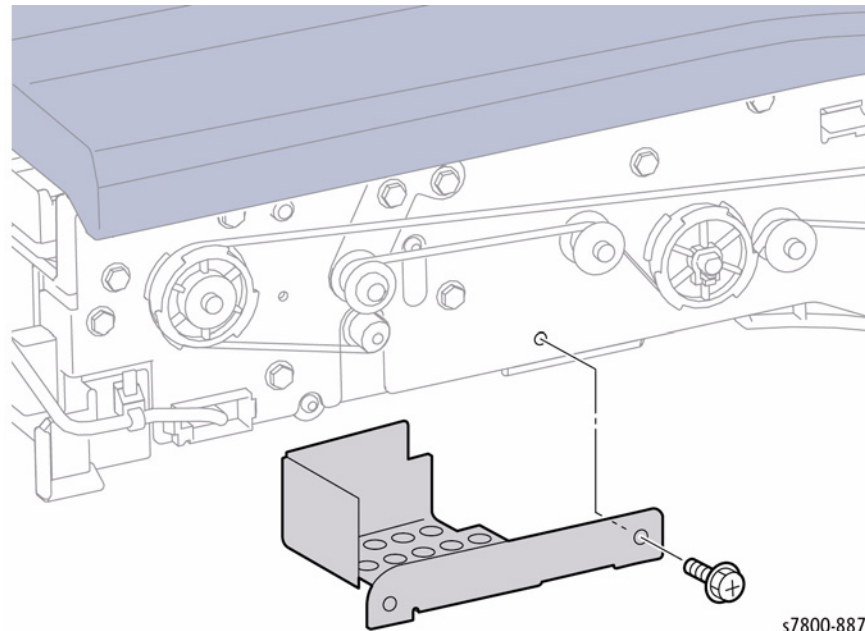
1. Remove the H-Transport Assembly ([REP 23.1](#)).
2. Remove 2 screws that secure the Rear Cover.
3. Remove the Rear Cover ([PL 23.2 Item 9](#)).



s7800-882

Figure 1 Removing the Rear Cover

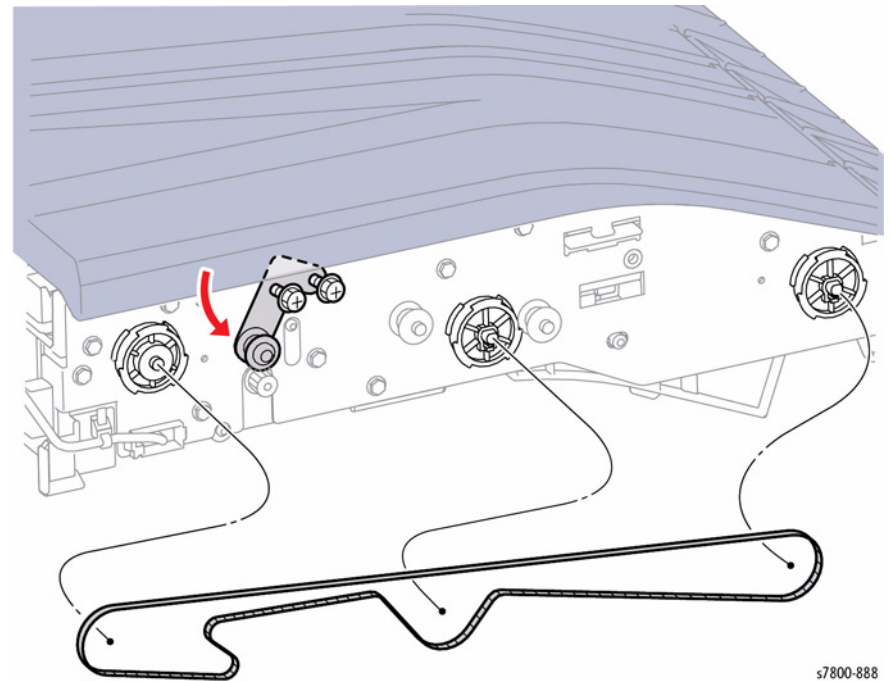
4. Remove 1 screw that secures the Motor Cover Bracket.
5. Remove the Motor Cover Bracket.



s7800-887

Figure 2 Removing the Motor Cover Bracket

6. Loosen 2 screws and push the Tension Belt in the direction of the arrow as shown in Figure 3.
7. Remove the Belt.



s7800-888

Figure 3 Removing the Belt

8. Disconnect the wiring harness connector [P/J8862](#).

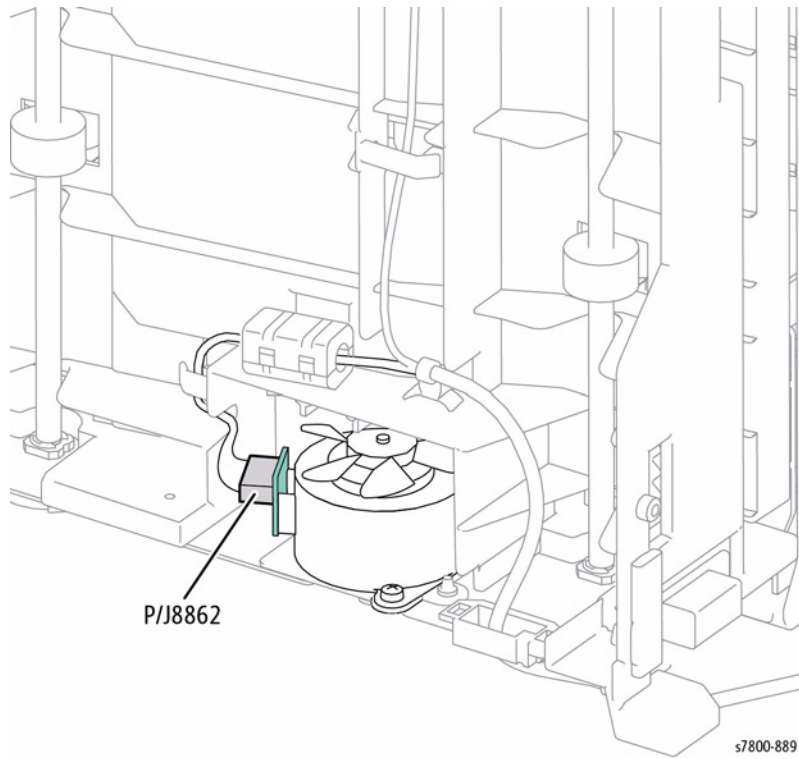


Figure 4 Disconnecting the wiring harness connector

9. Remove 2 screws that secure the Motor Bracket Assembly.
10. Remove the Motor Bracket Assembly.

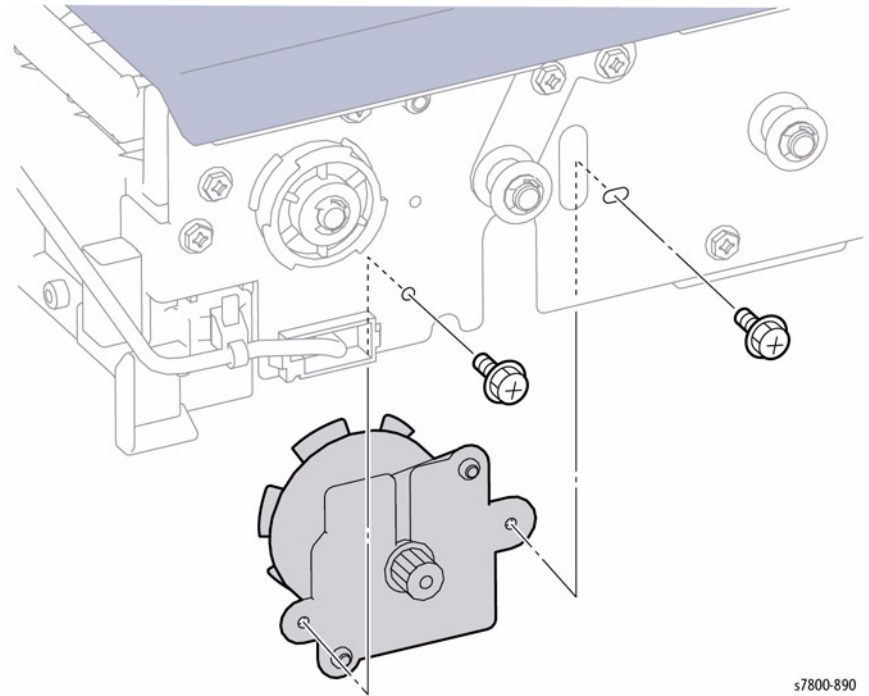


Figure 5 Removing the Motor Bracket Assembly

11. Remove the E-Clip.
12. Remove the Motor Fan.
13. Remove 2 screws that secure the H-Transport Motor.
14. Remove the H-Transport Motor.

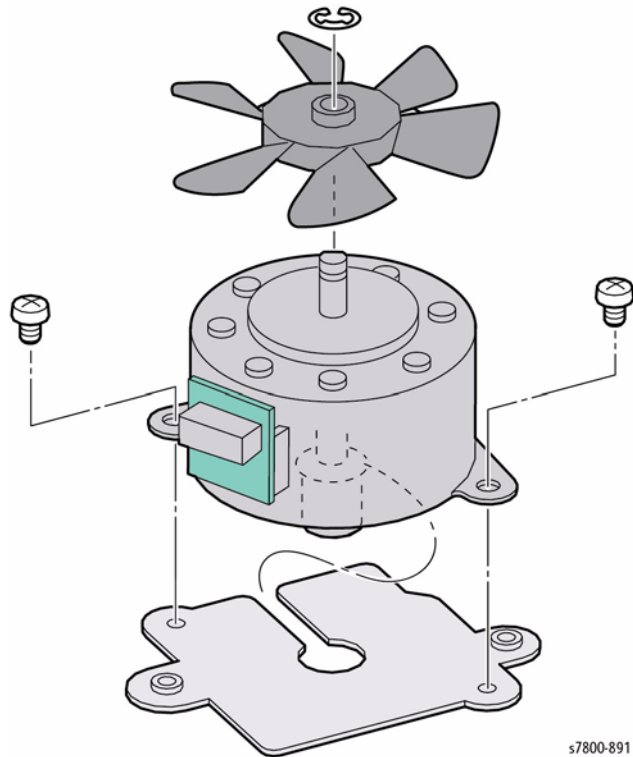


Figure 6 Removing the H-Transport Motor

Replacement

When re-installing the Belt, in order to eliminate slack at the belt, use your hand to press the Tension Bracket in the direction that increases the belt tension and secure it.

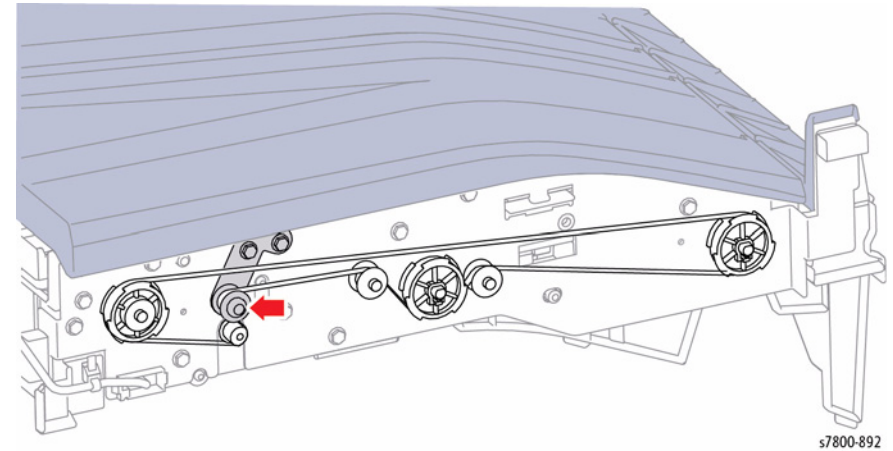


Figure 7 Replacing the Belt

REP 23.6 H-Transport Belt

Parts List on [PL 23.4 Item 22](#)

Removal

1. Remove the H-Transport Assembly ([REP 23.1](#)).
2. Remove 2 screws that secure the Rear Cover.
3. Remove the Rear Cover ([PL 23.2 Item 9](#)).

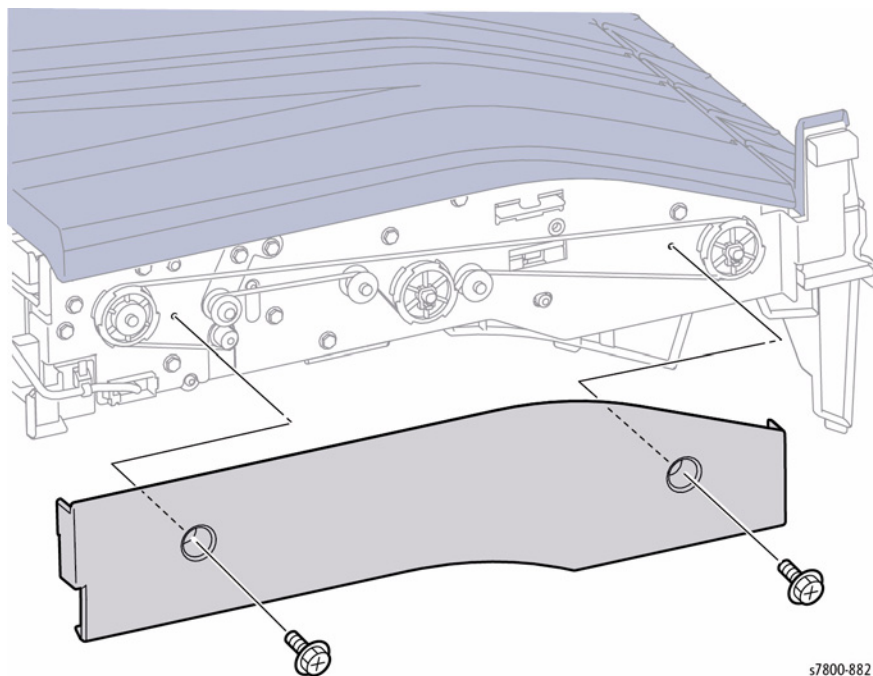


Figure 1 Removing the Rear Cover

4. Loosen 2 screws and push the Tension Belt in the direction of the arrow as shown in [Figure 2](#).
5. Remove the Belt.

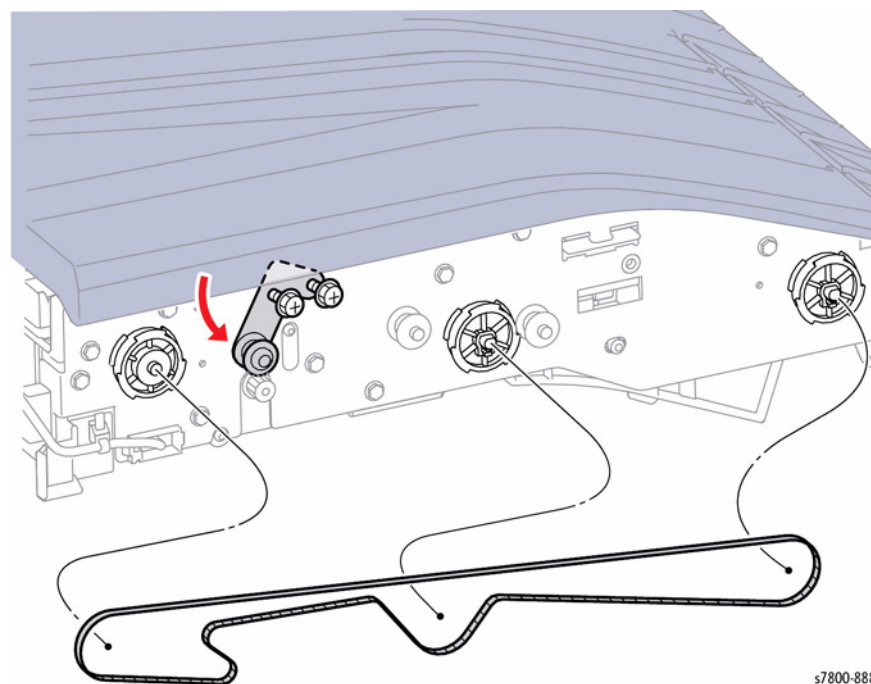


Figure 2 Removing the Belt

Replacement

When re-installing the belt, in order to eliminate slack at the belt, press the Tension Bracket in the direction that increases the belt tension and secure it.

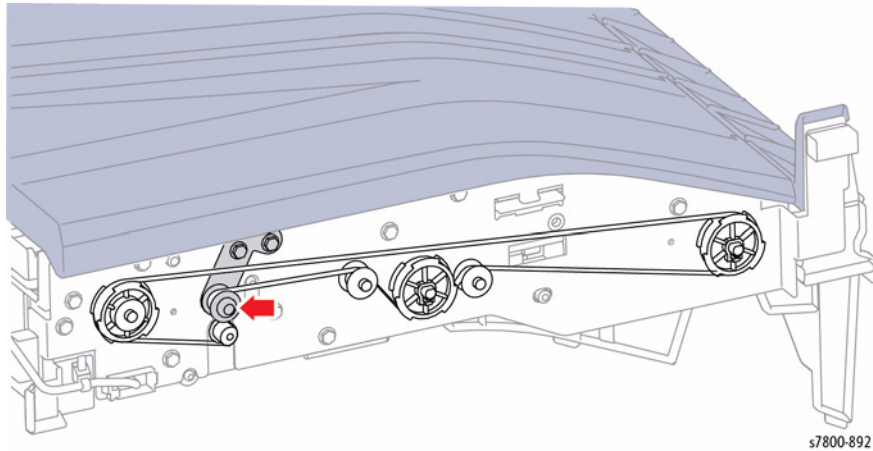


Figure 3 Installing the Belt

REP 23.7 Front Cover Assembly

Parts List on [PL 23.6 Item 4](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Open the Finisher upper Front Door.
4. Remove 3 screws that secure the Front Cover Assembly.

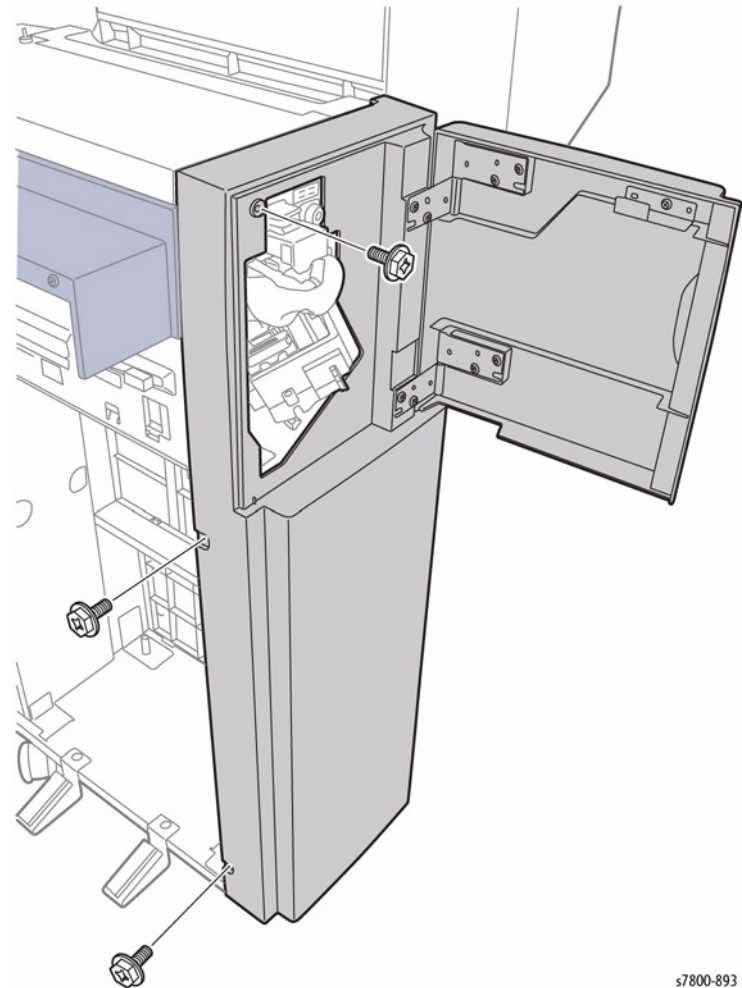


Figure 1 Removing the screws

5. Remove 2 screws that secure the Front Cover Assembly.
6. Remove the Front Cover Assembly.

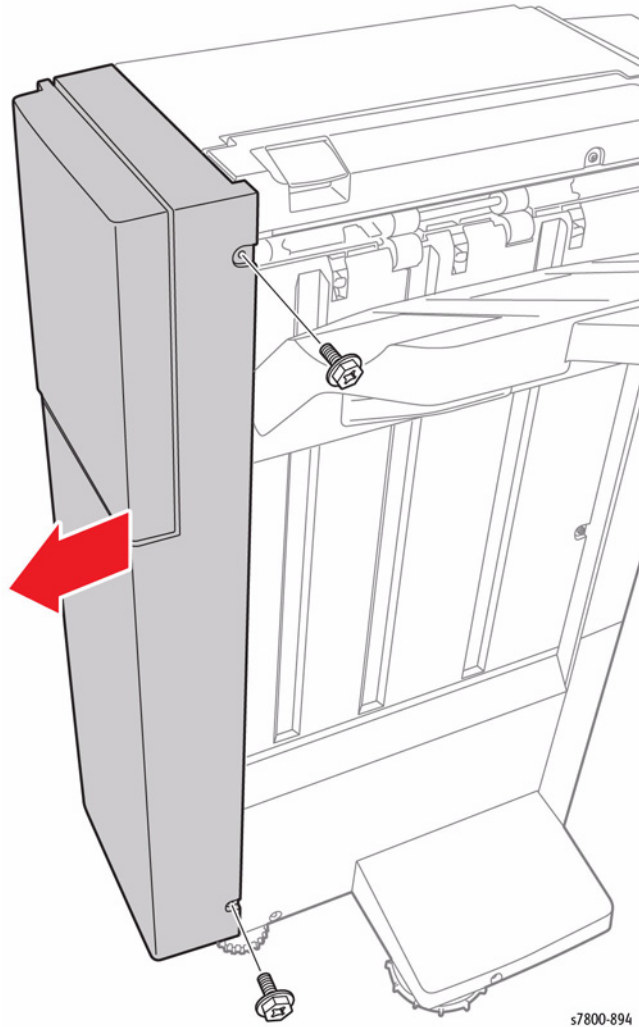


Figure 2 Removing the Screws and Front Cover Assembly

REP 23.8 Rear Lower Cover

Parts List on [PL 23.6 Item 8](#)

Removal

1. Detach the Finisher ([REP 23.2](#)).
2. Remove 3 screws that secure the Rear Lower Cover.
3. Remove the Rear Lower Cover.

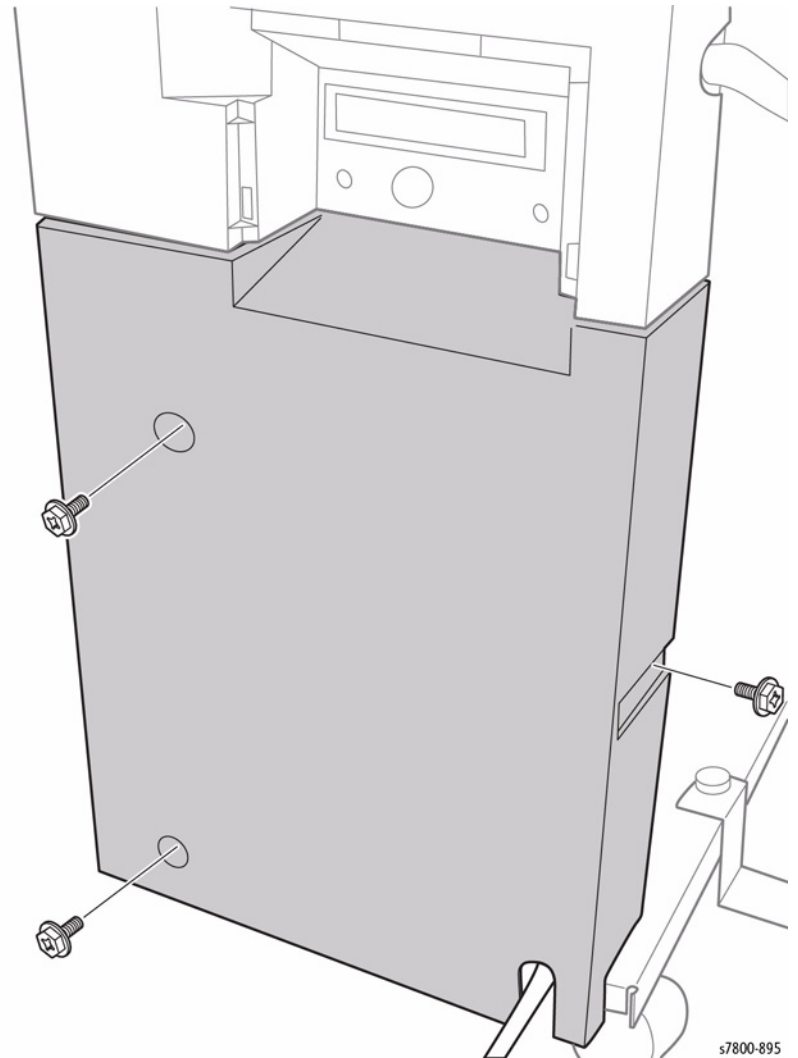


Figure 1 Removing the Rear Lower Cover

REP 23.9 Rear Upper Cover

Parts List on [PL 23.6 Item 9](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove 4 screws that secure the Rear Upper Cover.
4. Remove the Rear Upper Cover.

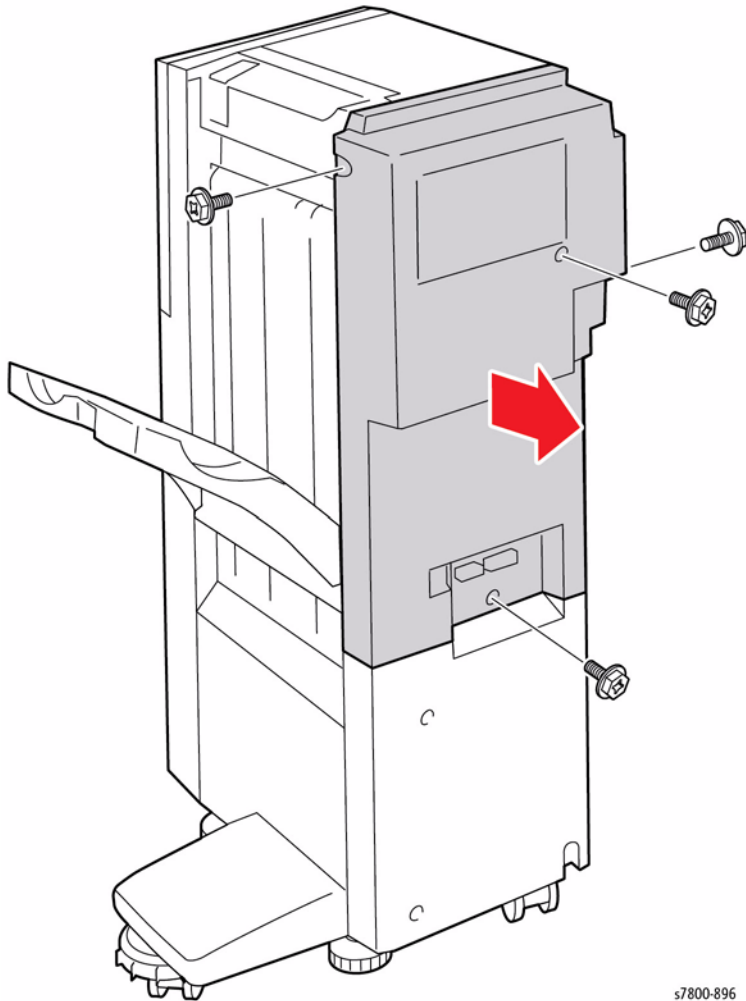


Figure 1 Removing the Rear Upper Cover

s7800-896

REP 23.10 Stacker Lower Cover

Parts List on [PL 23.6 Item 11](#)

Removal

1. Remove the Foot Cover ([REP 23.11](#)).
2. Remove 2 screws that secure the Stacker Lower Cover.
3. Remove the Stacker Lower Cover.

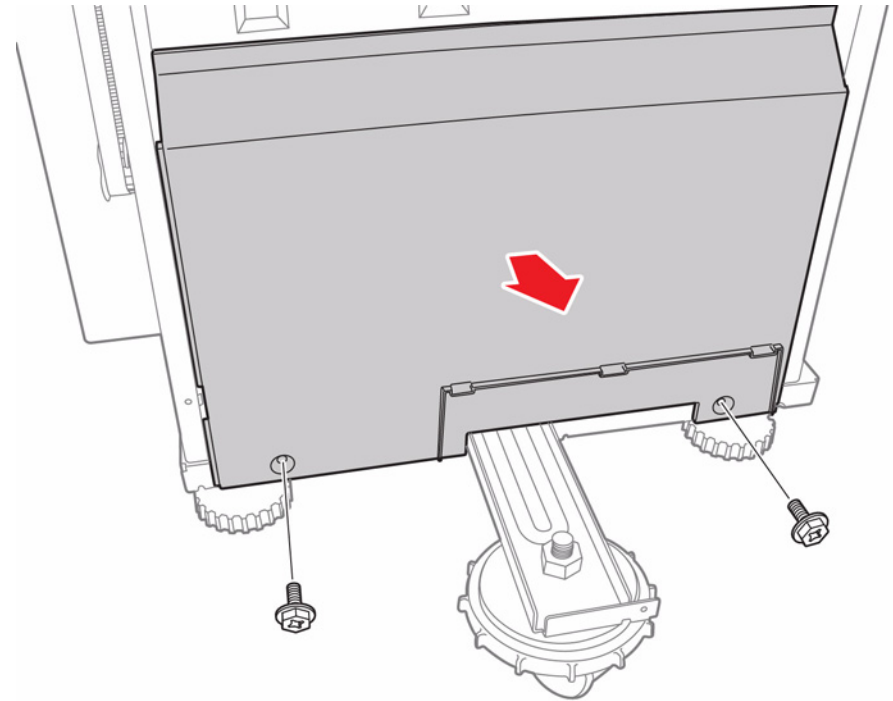


Figure 1 Removing the Stacker Lower Cover

s7800-897

REP 23.11 Foot Cover

Parts List on [PL 23.6 Item 15](#)

Removal

1. Remove 1 screw that secures the Foot Cover.
2. Remove the Foot Cover.

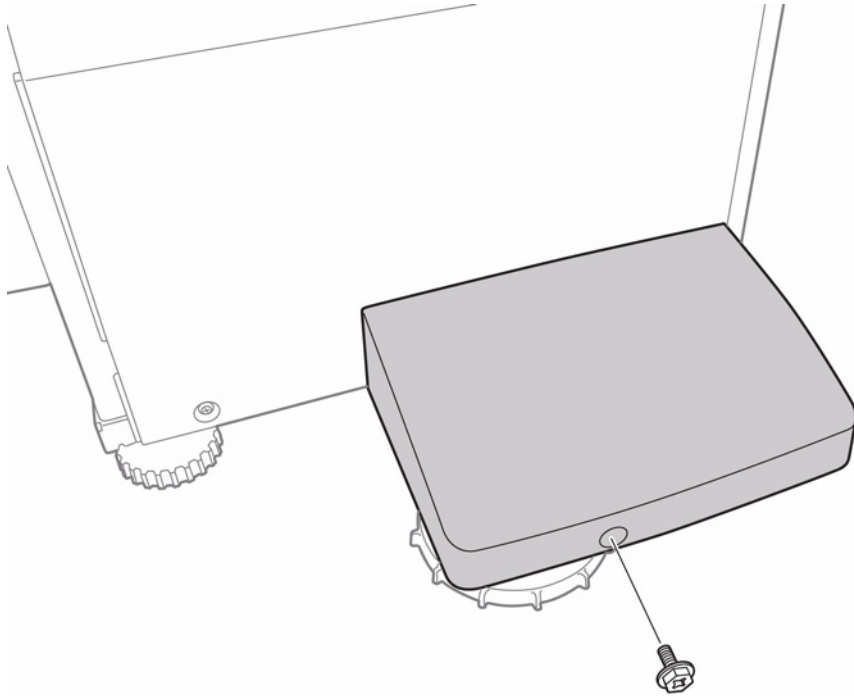


Figure 1 Removing the Foot Cover

s7800-898

REP 23.12 Booklet Maker Assembly

Parts List on [PL 23.6 Item 16](#)

Removal

1. Remove the Cover.
2. Release the 4 Clamps.
3. Disconnect the wiring harness connector and free the wiring harness.

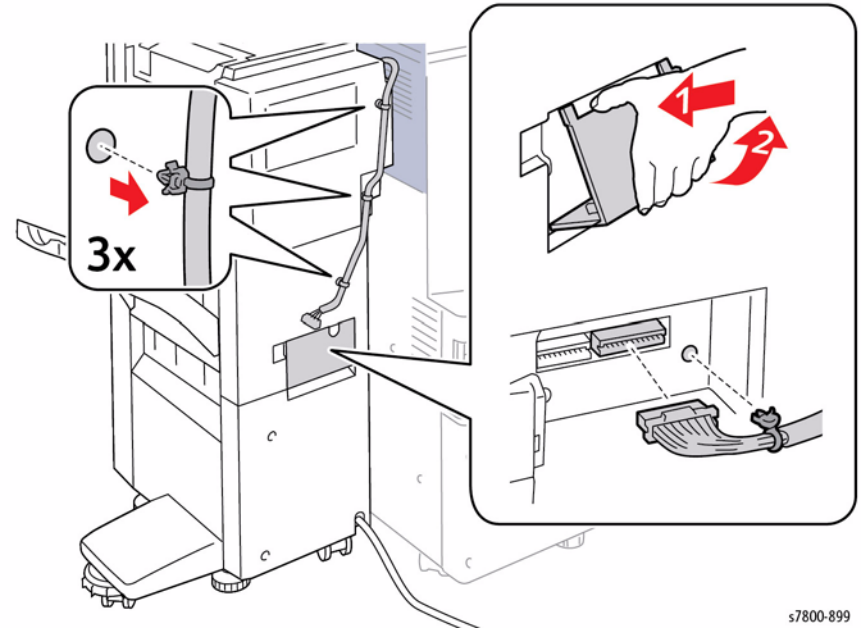


Figure 1 Removing the Connector Cover and releasing the Clamps

s7800-899

4. Open the Top Cover.
5. Remove 2 Thumb Screws.
6. Lift and remove the Booklet Maker Assembly.

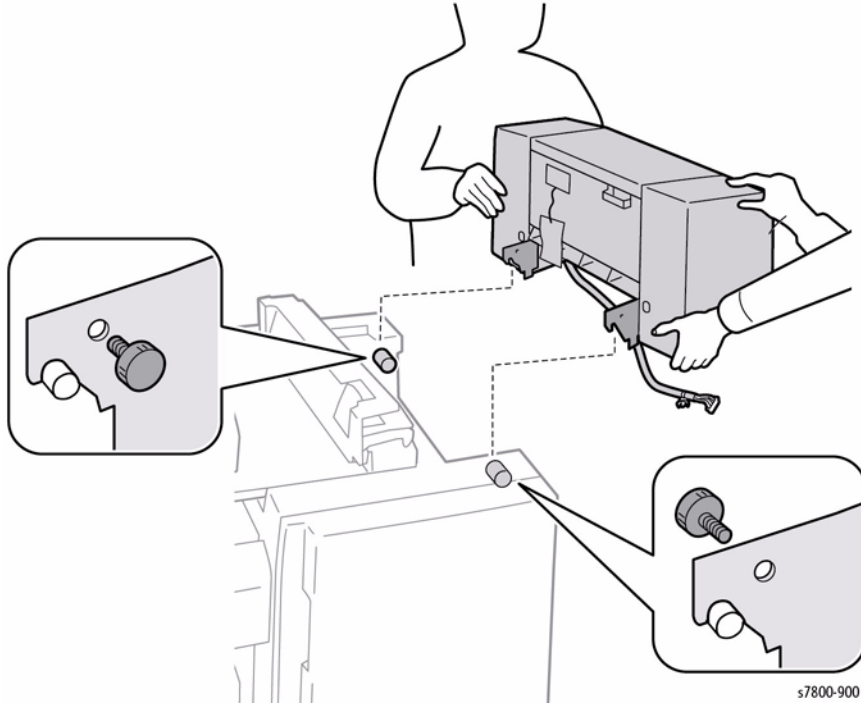


Figure 2 Removing the Booklet Maker Assembly

s7800-900

REP 23.13 Front Carriage Assembly/ Rear Carriage Assembly

Parts List on [PL 23.7 Item 1](#), [PL 23.7 Item 7](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Front Cover Assembly ([REP 23.7](#)).
4. Remove the Rear Upper Cover ([REP 23.9](#)).

CAUTION

Be careful not to press on the perforated indented wheel.

5. Move the gear in the direction of the arrow as shown in [Figure 1](#).
6. Lower the Carriage Tray to its bottom limit.

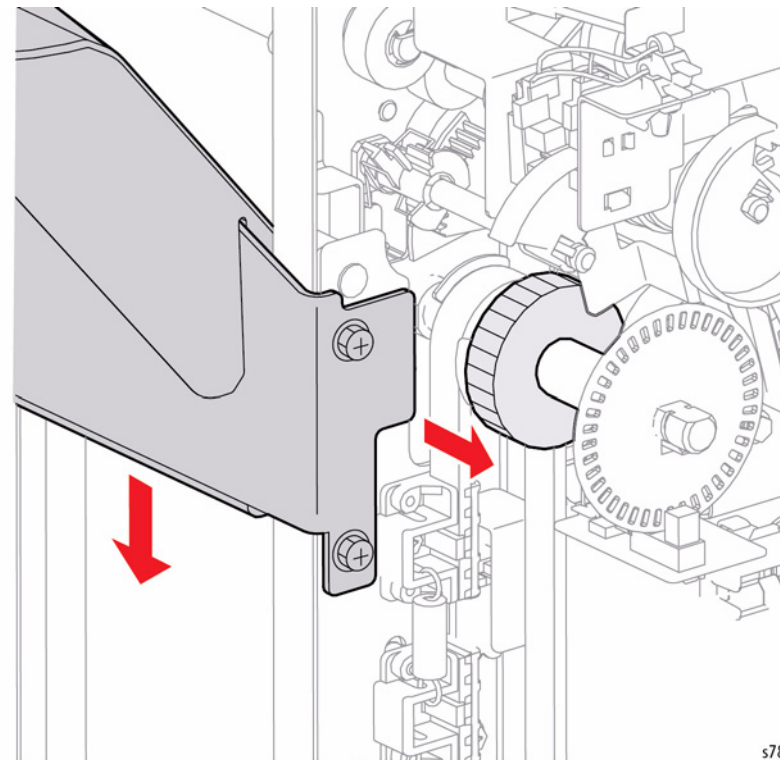


Figure 1 Moving the Gear and Lowering the Carriage Tray

s7800-901

7. Release the 2 tabs, lift and remove the Stacker Tray Assembly (PL 23.7 Item 15) from the Carriage Tray.
8. Remove 4 screws (flange) that secure the Carriage Tray (PL 23.7 Item 14).
9. Remove the Carriage Tray.

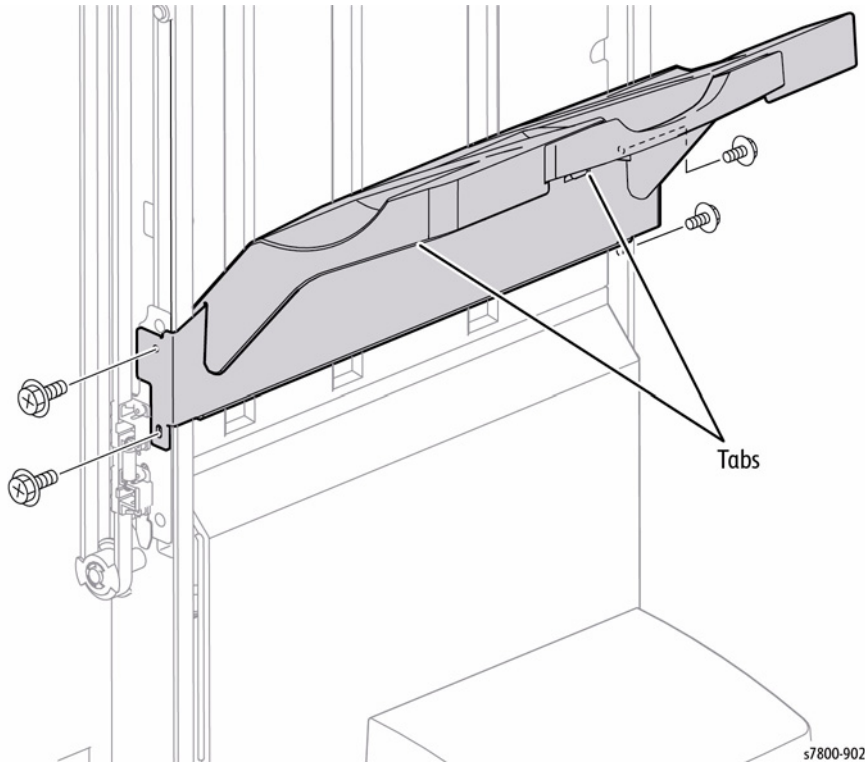


Figure 2 Removing the Carriage Tray

10. Loosen 1 screw that secures the Stopper.
11. Remove the Stopper and Spring.
12. Remove 1 screw that secures the Upper Belt Clamp.
13. Remove the Upper Belt Clamp.
14. Remove the Front Carriage Assembly.

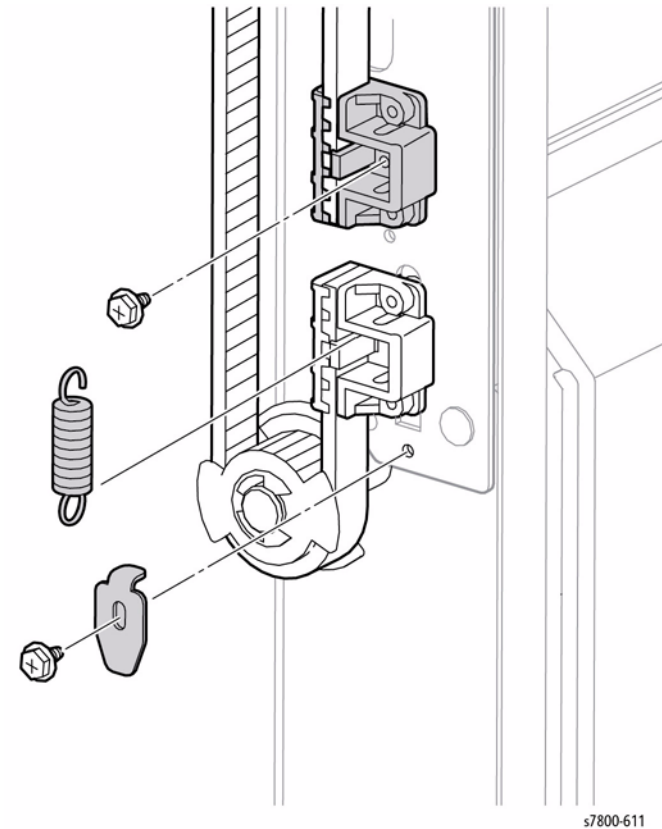


Figure 3 Removing the Front Carriage Assembly

Replacement

After installing the Front Carriage Assembly and Rear Carriage Assembly, check that the Carriage Tray is moving smoothly. After checking that, move the Actuator of the Carriage Tray to the position as shown in [Figure 4](#) (to block the Sensor) and leave it there.

Move the Gear in the direction of the arrow as shown in [Figure 4](#).

After checking the Carriage Tray is moving smoothly, move the Actuator of the Rear Carriage Assembly to the position as indicated in [Figure 4](#).

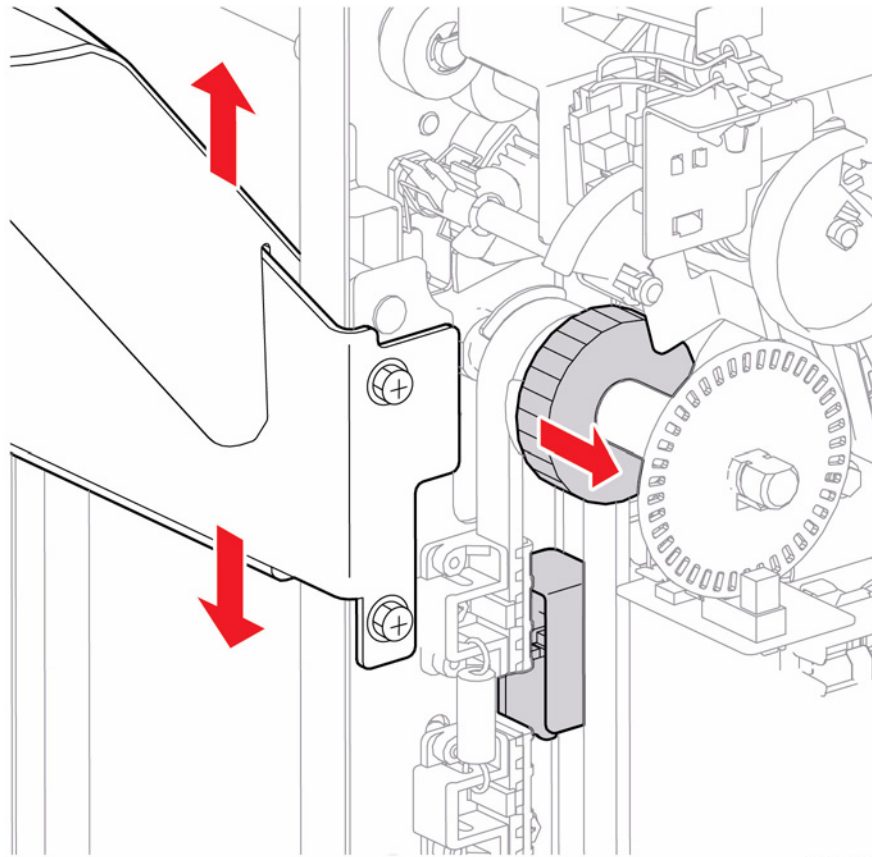


Figure 4 Checking the Carriage Tray and moving the Actuator

Move the Carriage Tray towards the bottom before installing the Carriage Assembly. Align the Carriage Assemblies and Carriage Tray on the bottom.

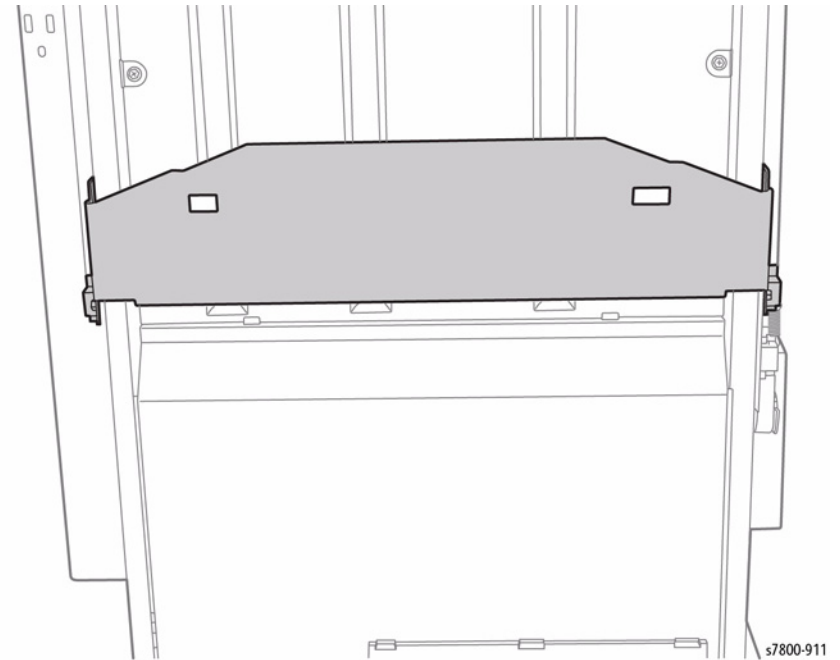


Figure 5 Aligning the Carriage Tray

REP 23.14 Stacker Tray Assembly

Parts List on [PL 23.7 Item 15](#)

Removal

1. Release the 2 tabs, lift and remove the Stacker Tray Assembly from the Carriage Tray.

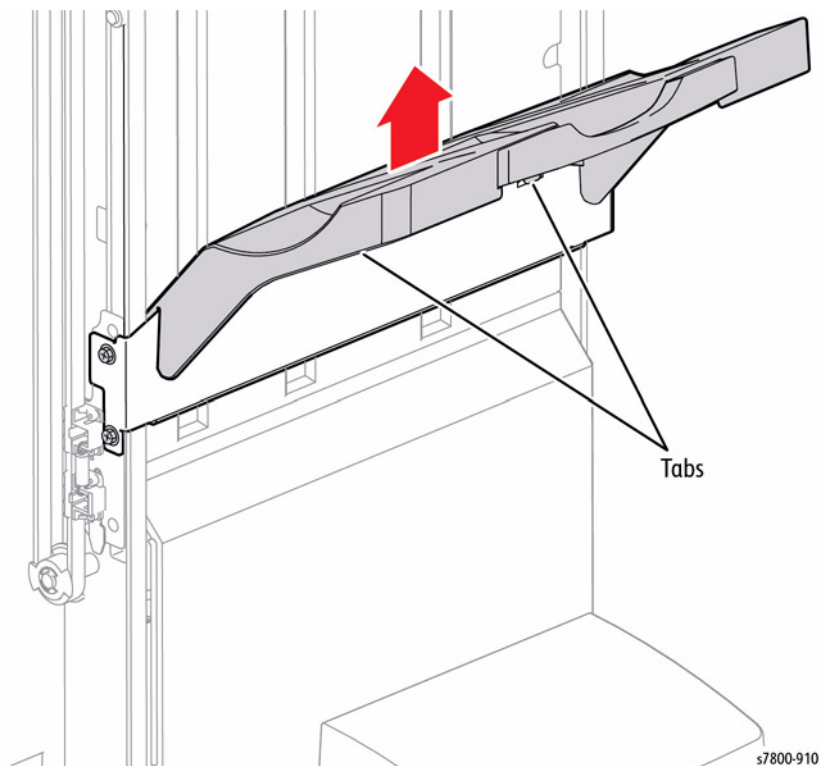


Figure 1 Removing the Stacker Tray Assembly

REP 23.15 Stacker Elevator Motor Assembly

Parts List on [PL 23.7 Item 22](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Rear Upper Cover ([REP 23.9](#)).
4. Move the gear in the direction of the arrow as shown in [Figure 1](#).
5. Lower the Carriage Tray until it can go no lower.

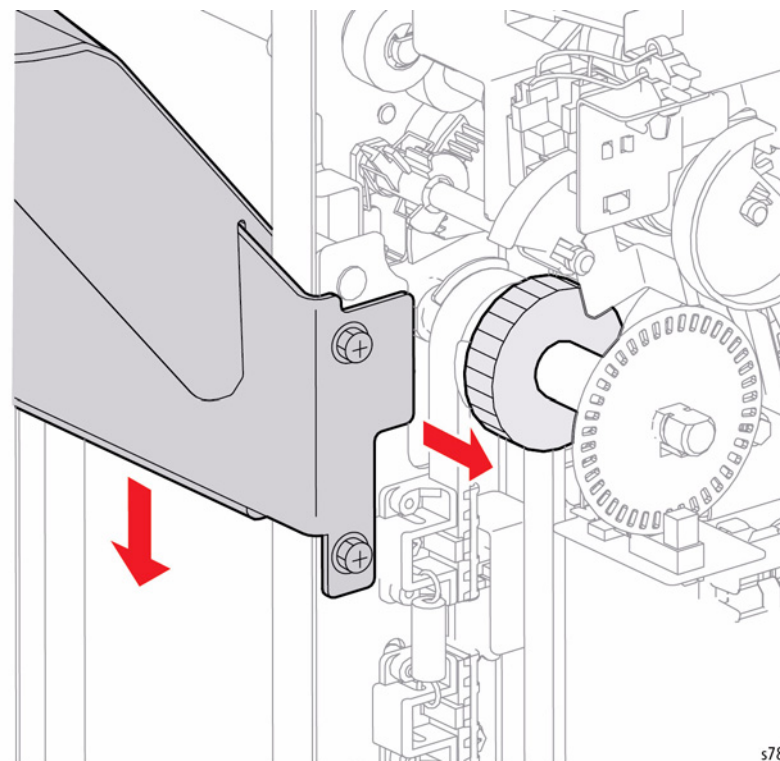


Figure 1 Moving the Gear and lowering the Carriage Tray

6. Disconnect the wiring harness connectors **J8889** and **J8890**.
7. Remove the clamp.
8. Disconnect the wiring harness connectors **J8873** and **J8874**.
9. Remove 1 screw that secures the Harness Guide.
10. Remove the Harness Guide.

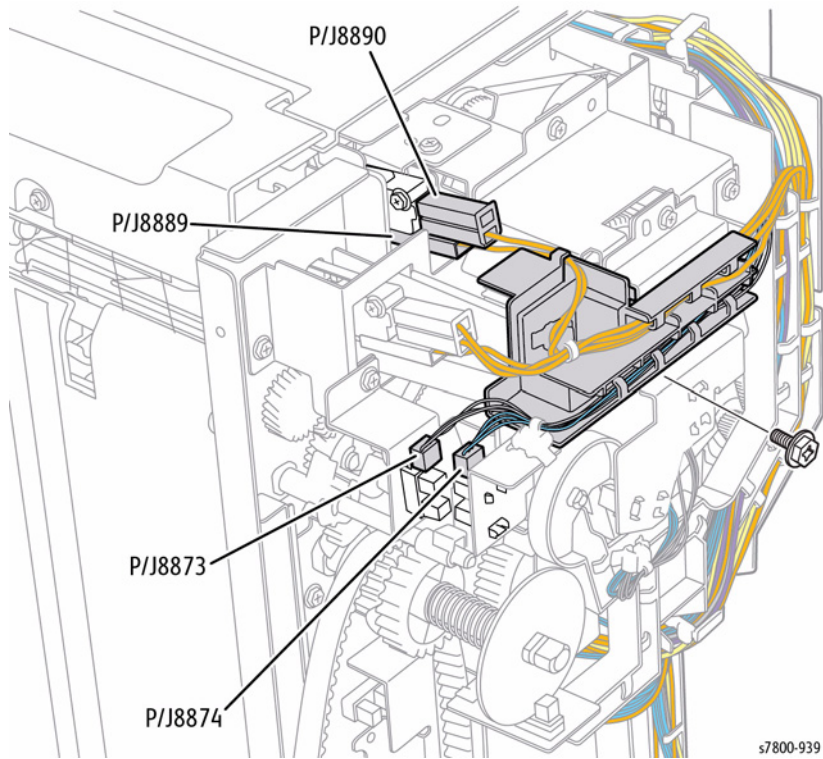


Figure 2 Removing the Harness Guide

s7800-939

11. Disconnect the wiring harness connectors **J8871** and **J8875**.
12. Remove the clamp.
13. Remove 2 screws that secure the Bracket.
14. Remove the Bracket.

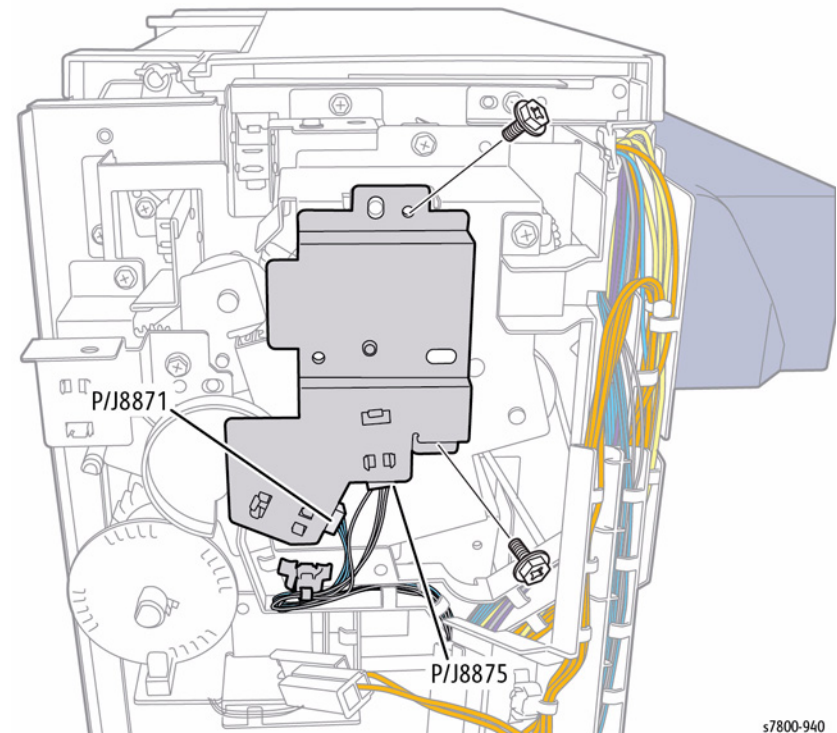


Figure 3 Removing the Bracket

s7800-940

15. Remove 1 screw that secures the Stacker Encoder Sensor.
16. Remove the Stacker Encoder Sensor together with its bracket.
17. Release the wiring harness from the Harness Guide.

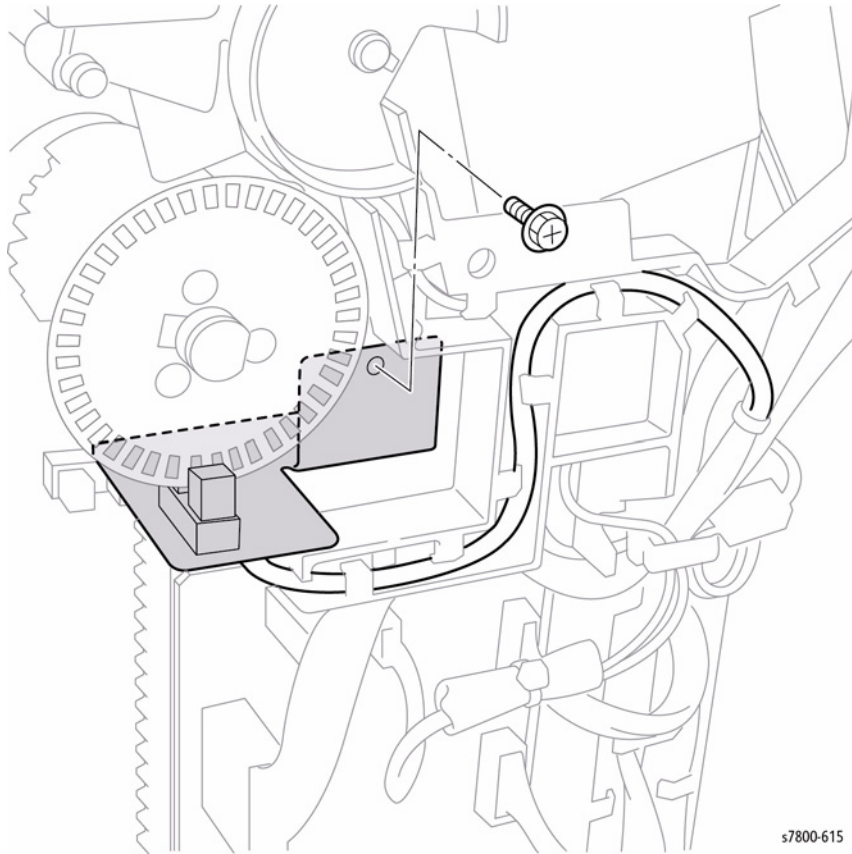


Figure 4 Removing the Stacker Encoder Sensor and Bracket

18. Release the clamp.
19. Disconnect the wiring harness connector **P/J8877**.
20. Release the wiring harness from the Harness Guide.

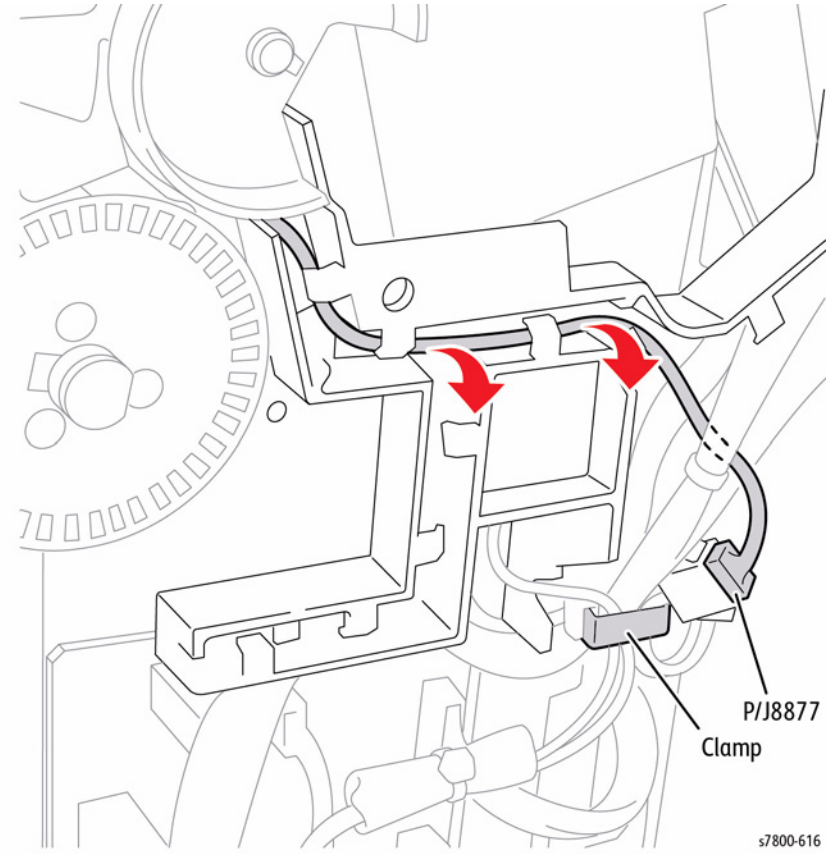


Figure 5 Releasing and disconnecting the wiring harness

21. Disconnect the wiring harness connector P/J8879.
22. Remove the Clamp.

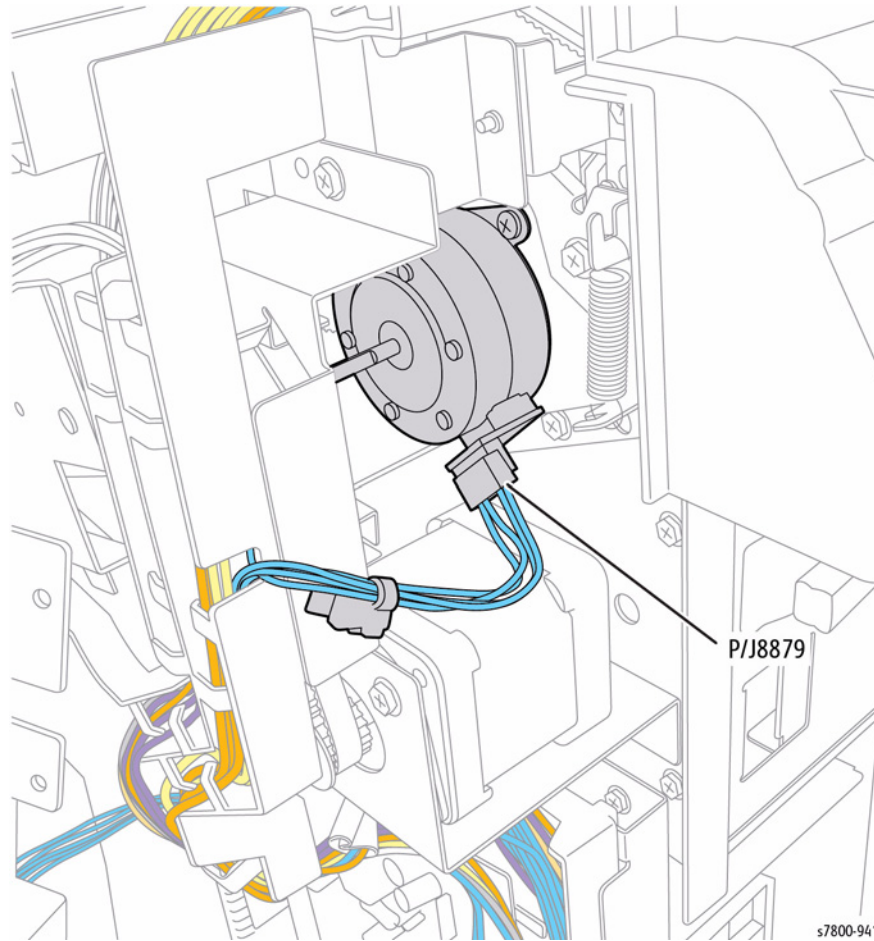


Figure 6 Disconnecting the harness connector

23. Remove the Actuator.
24. Release the wiring harness from the Harness Guide.
25. Remove 2 screws that secure the Harness Guide.
26. Remove the Harness Guide.

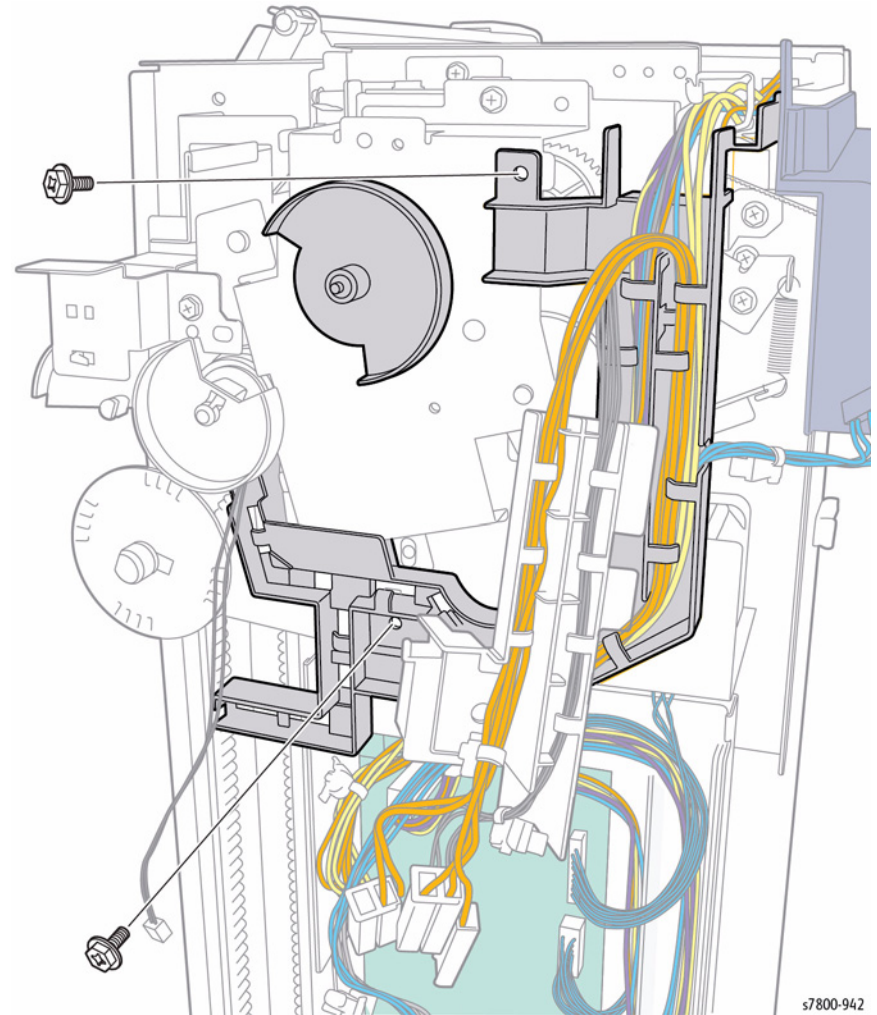


Figure 7 Removing the Actuator and Harness Guide

27. Remove 1 screw that secures the Stacker Height Sensor 2.
28. Remove the Stacker Height Sensor 2 together with its bracket.

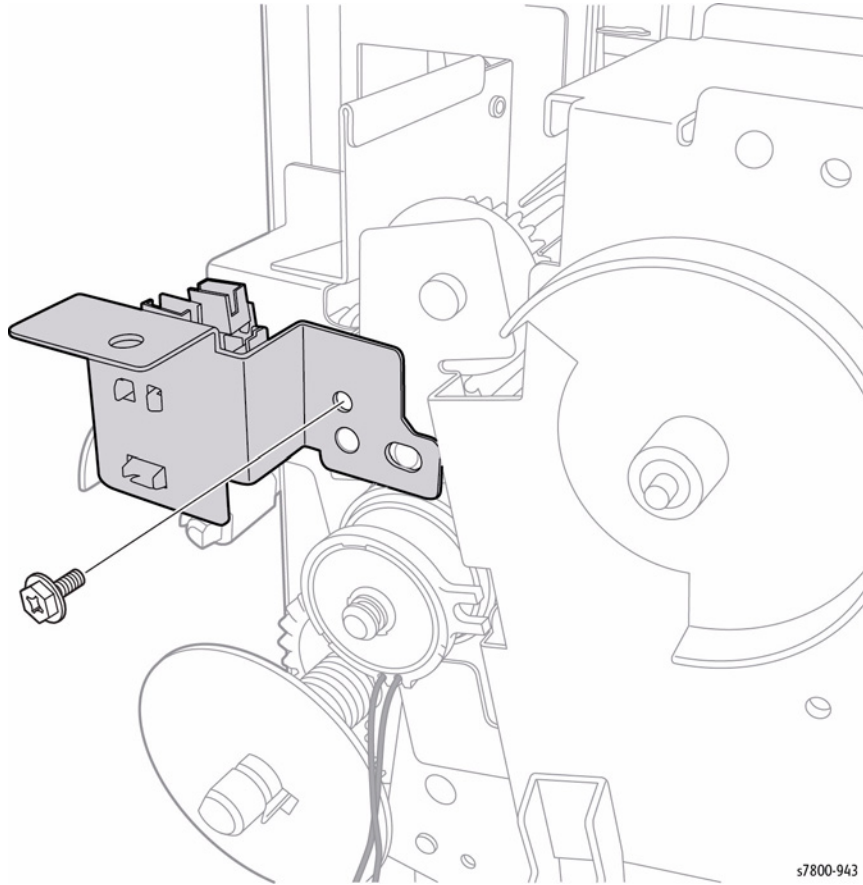


Figure 8 Removing the Stacker Height Sensor with Bracket

s7800-943

29. Remove the Actuators.

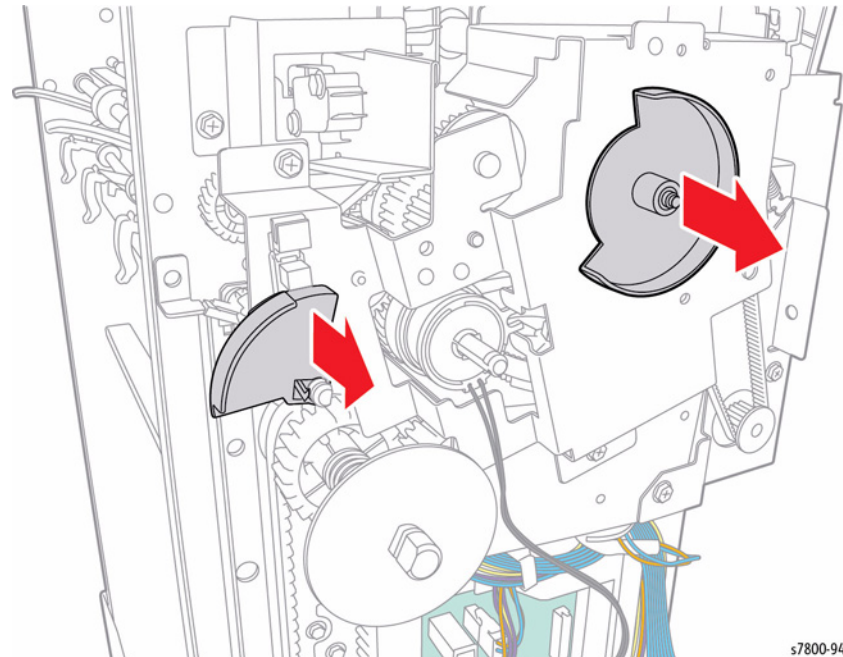


Figure 9 Removing the Actuators

s7800-948

30. Remove 3 screws that secure the Bracket.

NOTE: When removing the Bracket, be careful as the Gear behind the Bracket can easily drop and get lost.

31. Remove the Bracket.

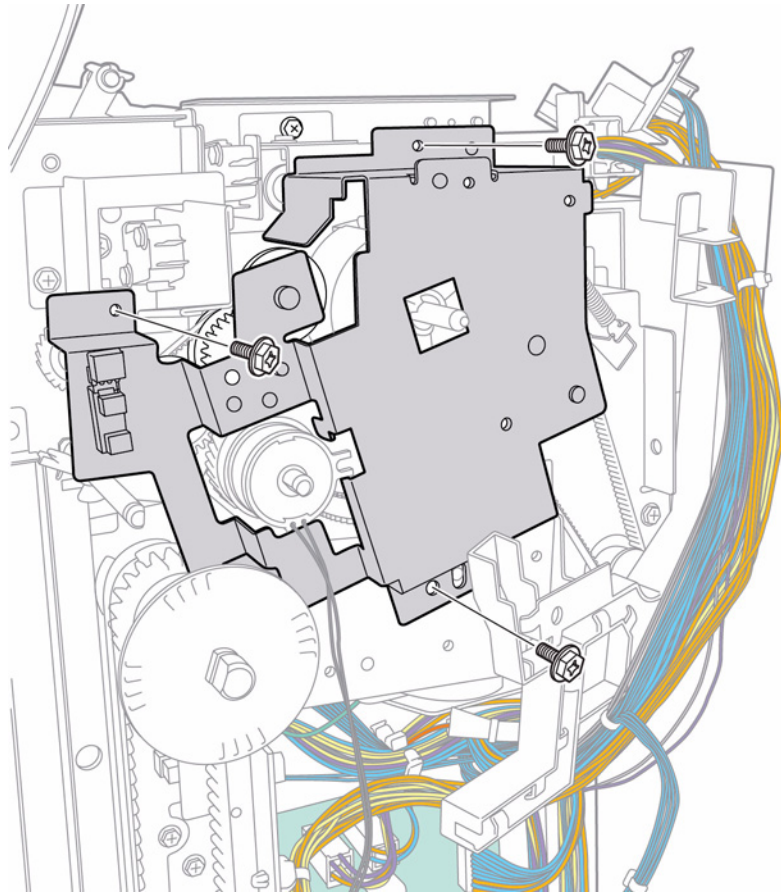


Figure 10 Removing the Bracket

s7800-541

32. Remove the Spring.

33. Remove 2 screws that secure the Eject Motor Assembly.

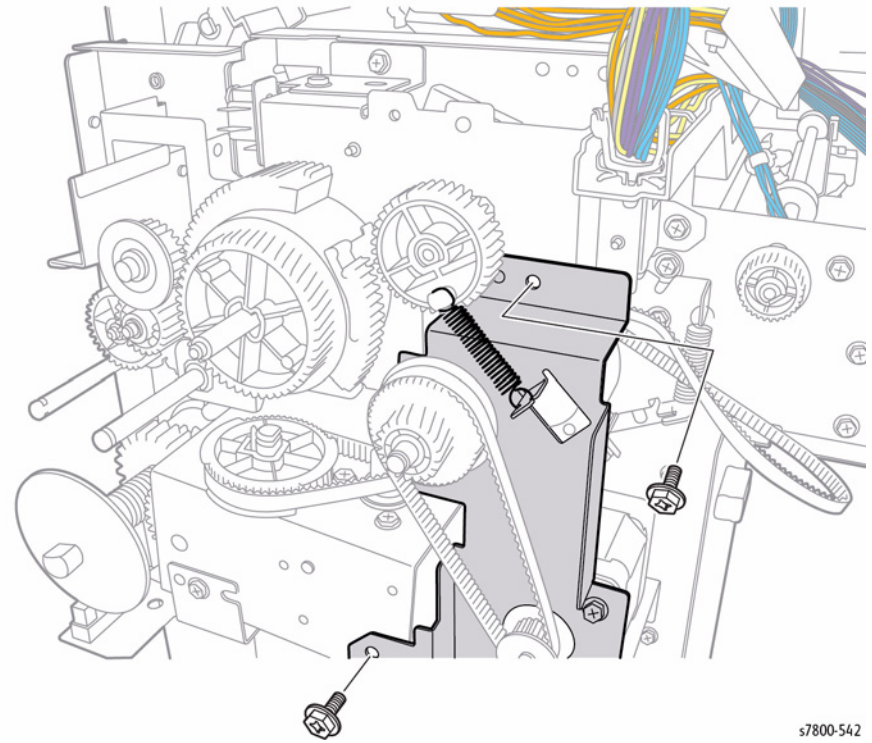


Figure 11 Removing the Spring and screws

s7800-542

34. Disconnect the wiring harness connector **P/J8878**.
35. Remove 1 screw that secure the Eject Motor Assembly.
36. Remove the Eject Motor Assembly.

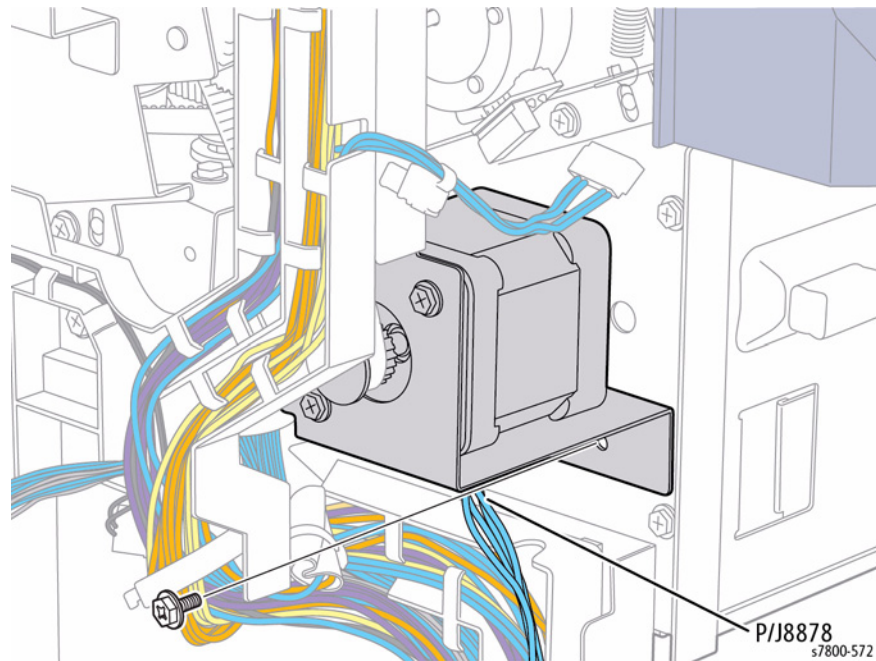


Figure 12 Removing the Eject Motor Assembly

37. Disconnect the wiring harness connector **J8872**.
38. Remove 3 screws that secure the Stacker Elevator Motor Assembly.
39. Remove the Stacker Elevator Motor Assembly.

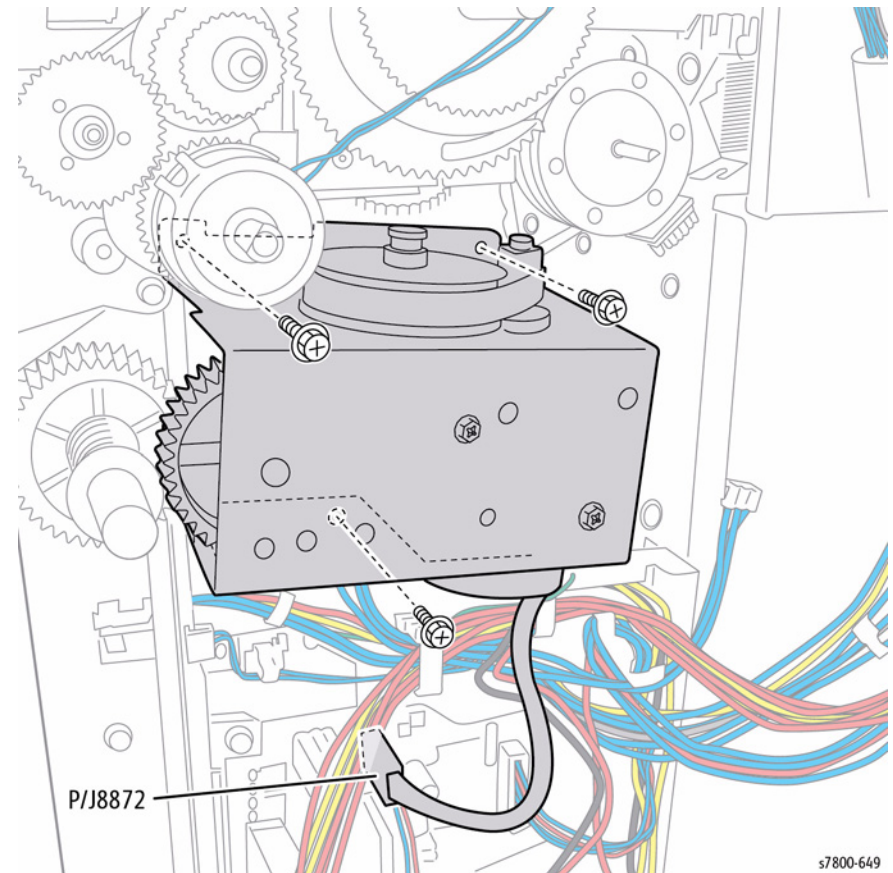


Figure 13 Removing the Stacker Elevator Motor Assembly

40. Remove the Belt and Pulley.

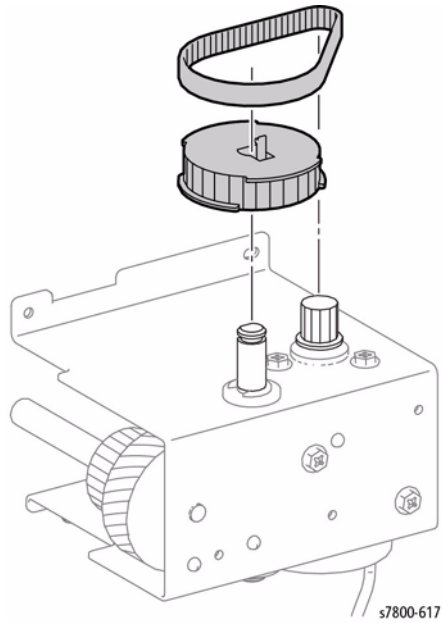


Figure 14 Removing the Belt and Pulley

Replacement

When installing the Bracket, affix the tab of the Set Clamp Clutch to the position.

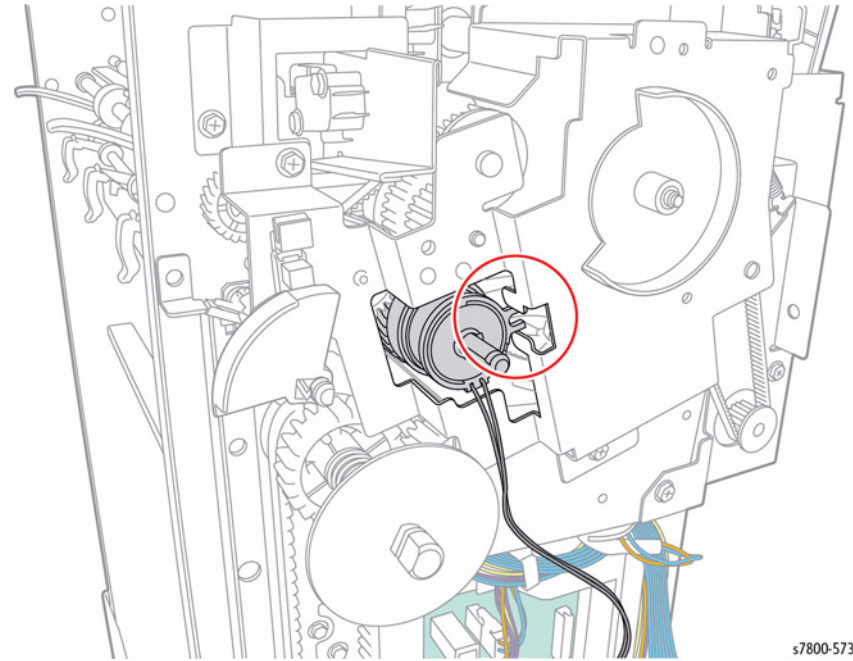


Figure 15 Positioning the tab

Be sure to connect the Blue (J8874) and Gray (J8873) wiring harness connectors correctly.

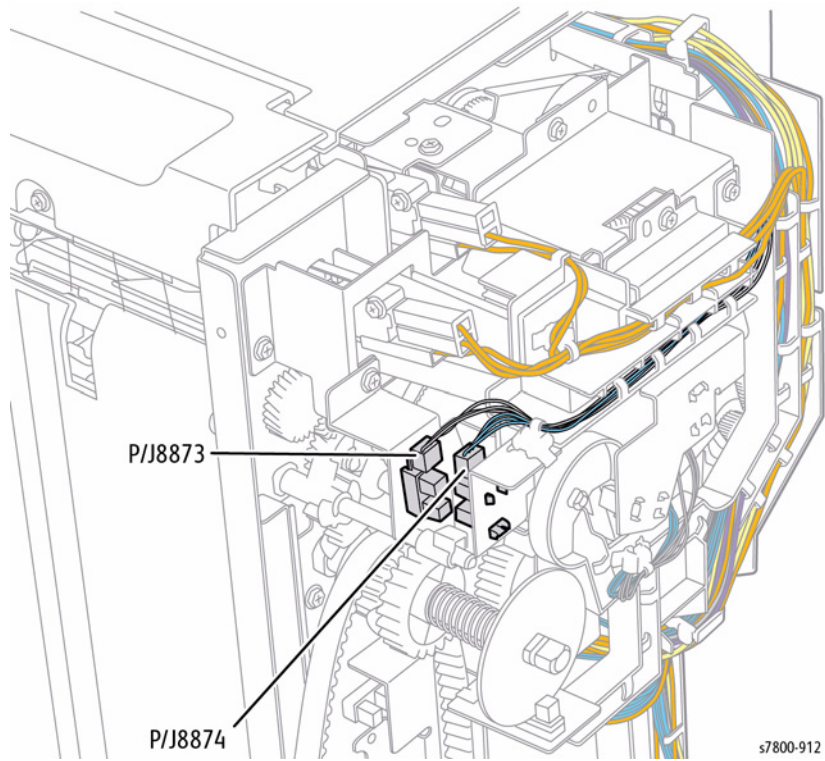


Figure 16 Connecting the wiring harness connectors

REP 23.16 Stacker Upper Cover

Parts List on [PL 23.7 Item 33](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Front Cover Assembly ([REP 23.7](#)).
4. Remove the Rear Upper Cover ([REP 23.9](#)).
5. Lower the Stacker Tray Assembly ([PL 23.7 Item 15](#)).
6. Move the Gear out while lowering the Tray.
7. Release the 2 tabs, lift and remove the Stacker Tray Assembly from the Carriage Tray.

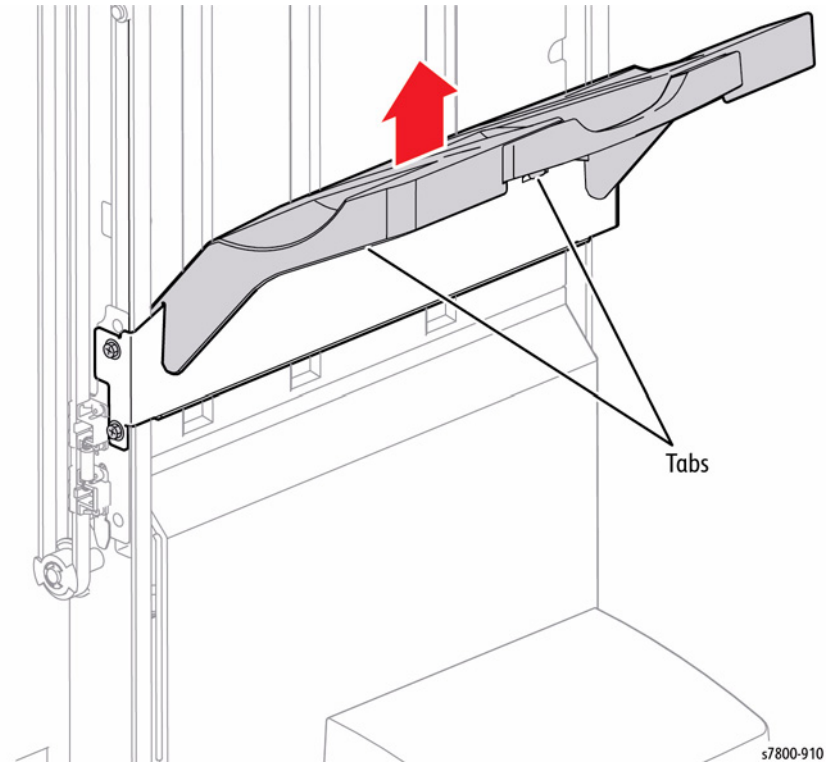


Figure 1 Removing the Carriage Tray

8. Remove 5 screws that secure the Stacker Upper Cover.
9. Lift and remove the Stacker Upper Cover.

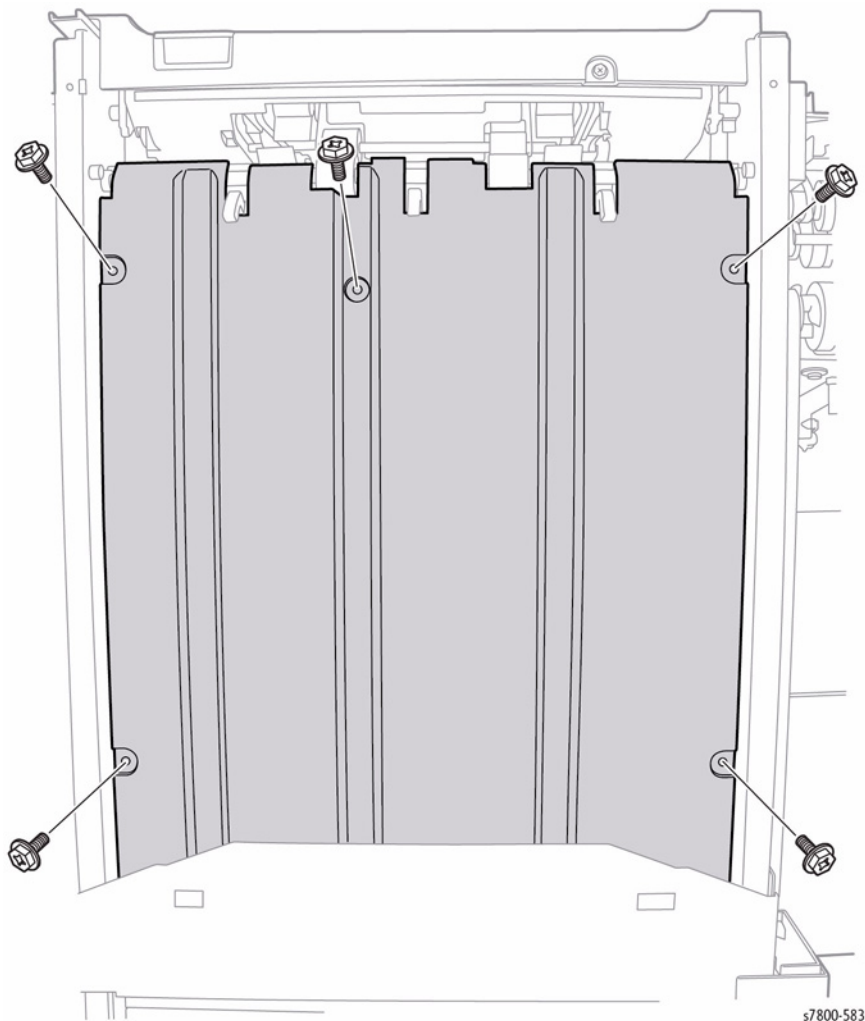


Figure 2 Removing the Stacker Upper Cover

REP 23.17 Stapler Assembly

Parts List on [PL 23.8 Item 4](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Folder Assembly ([REP 23.33](#)).
4. Remove the Front Cover Assembly ([REP 23.7](#)).
5. Move the Stapler Assembly to the front.
6. Remove 1 screw that secures the Stapler Cover.
7. Remove the Stapler Cover.

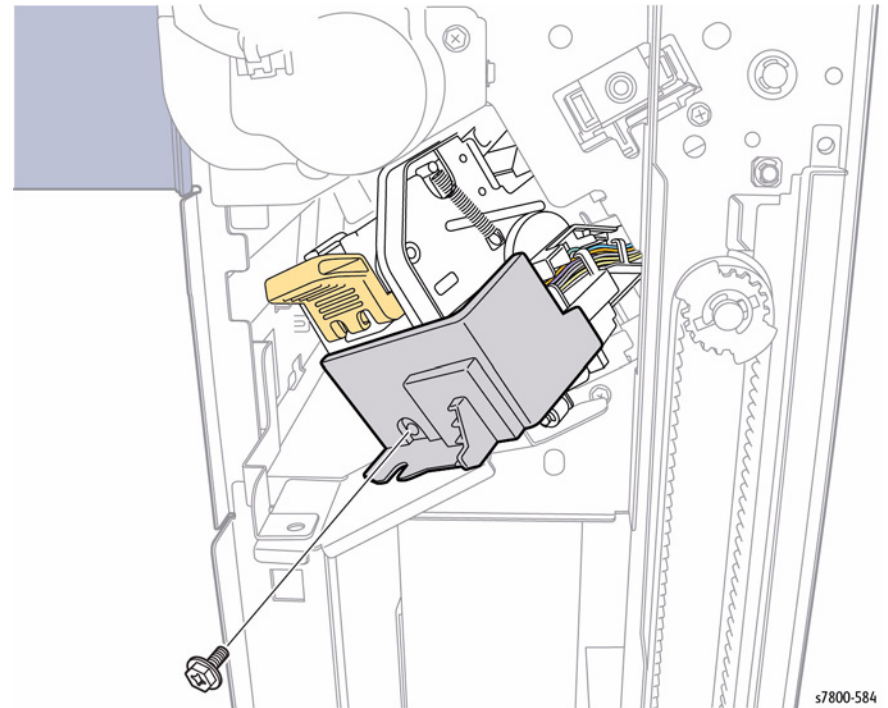


Figure 1 Removing the Stapler Cover

8. Disconnect the wiring harness connectors P/J8354, P/J8356, and P/J8357.

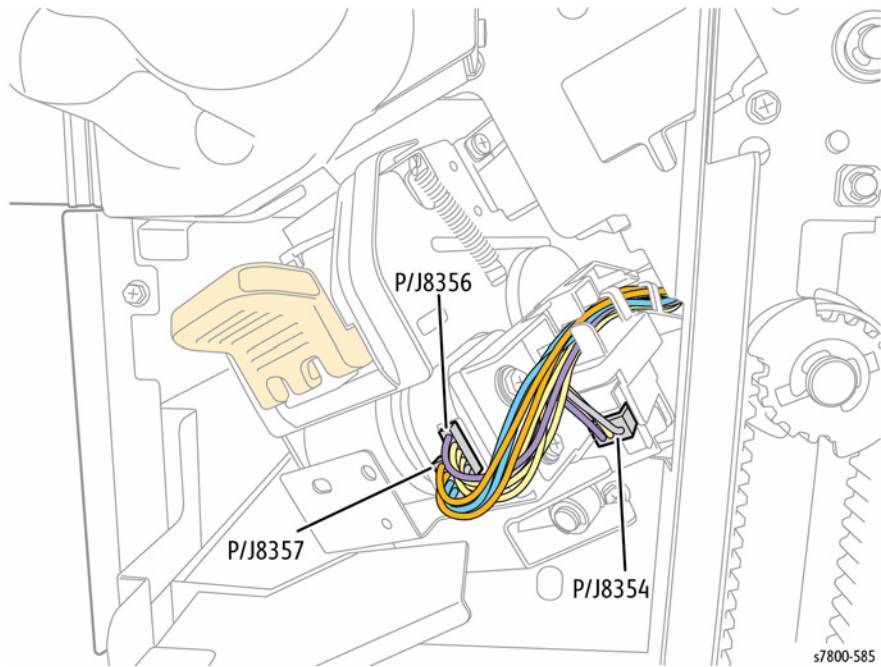


Figure 2 Disconnecting wiring harness connectors

9. Release the harness from the Harness Guide.
10. Remove 1 screw that secures the Harness Guide.
11. Remove 1 screw with the Ground Wire.
12. Remove the Harness Guide.

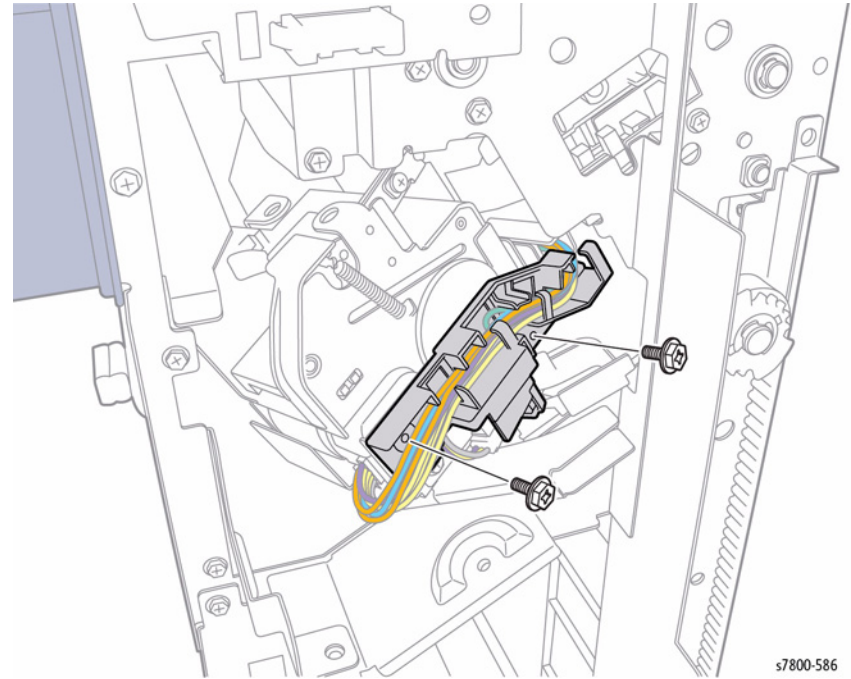


Figure 3 Removing the Harness Guide

13. Remove 1 screw that secures the Stapler Assembly.
14. Incline the Stapler Assembly in the direction of the arrow as shown in [Figure 4](#).
15. Pull the Stapler Assembly towards you to remove.

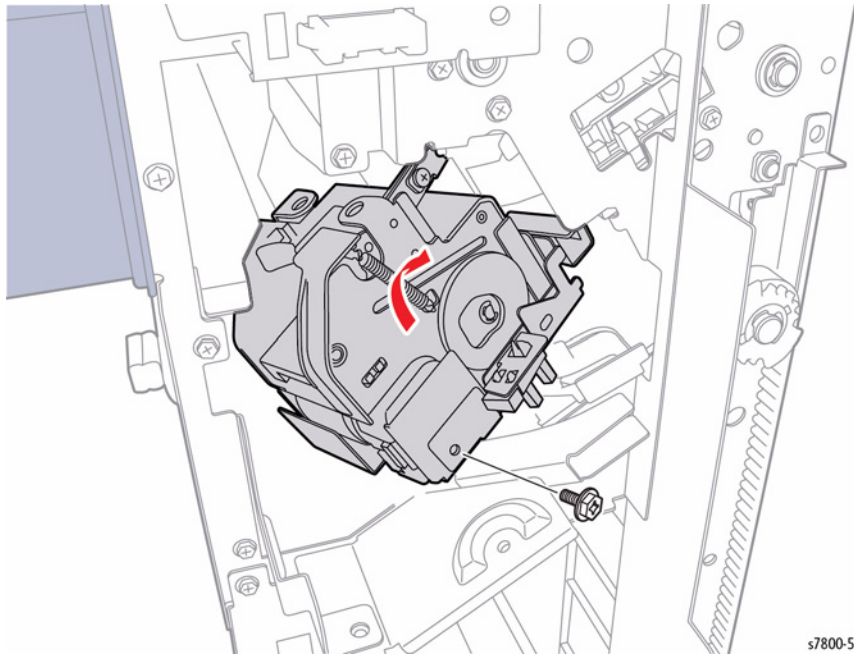


Figure 4 Removing the Stapler Assembly

Replacement

When installing the Stapler Assembly, insert the tab properly into the hole of the Frame.

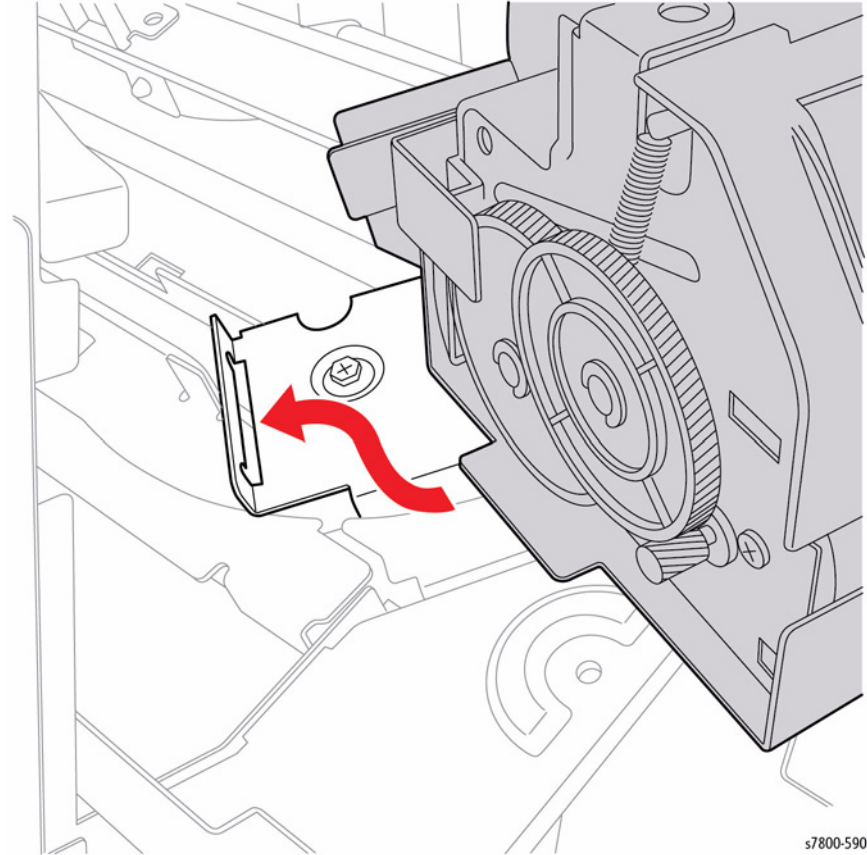


Figure 5 Installing the Stapler Assembly

REP 23.18 Stapler Move Motor Assembly

Parts List on [PL 23.8 Item 9](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Folder Assembly ([REP 23.33](#)).
4. Remove the Front Cover Assembly ([REP 23.7](#)).
5. Remove the Rear Upper Cover ([REP 23.9](#)).
6. Remove the Stapler Assembly ([REP 23.17](#)).
7. Remove the Stacker Upper Cover ([REP 23.16](#)).
8. Remove 2 screws that secure the Bracket.

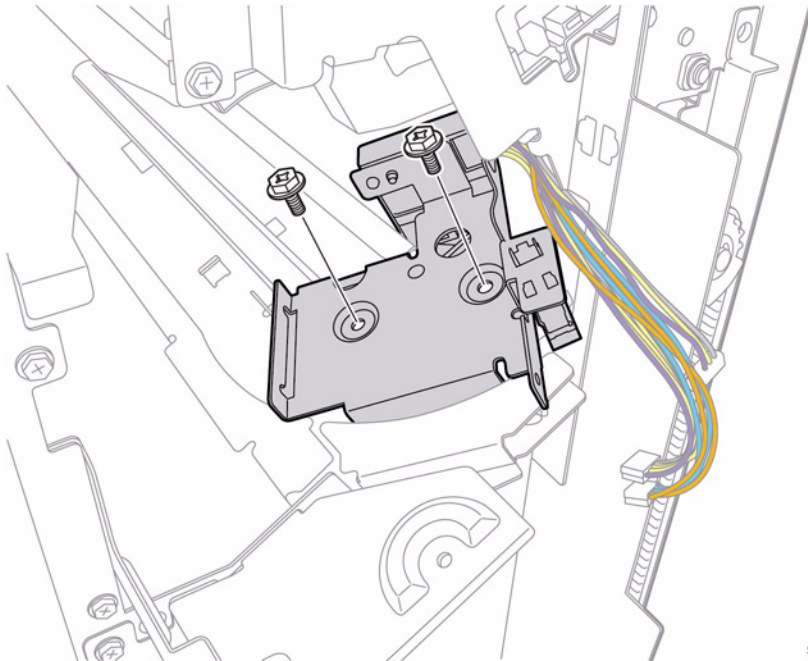


Figure 1 Removing the screws

9. Remove 1 screw that secures the Wire Guide.
10. Remove the Wire Guide.

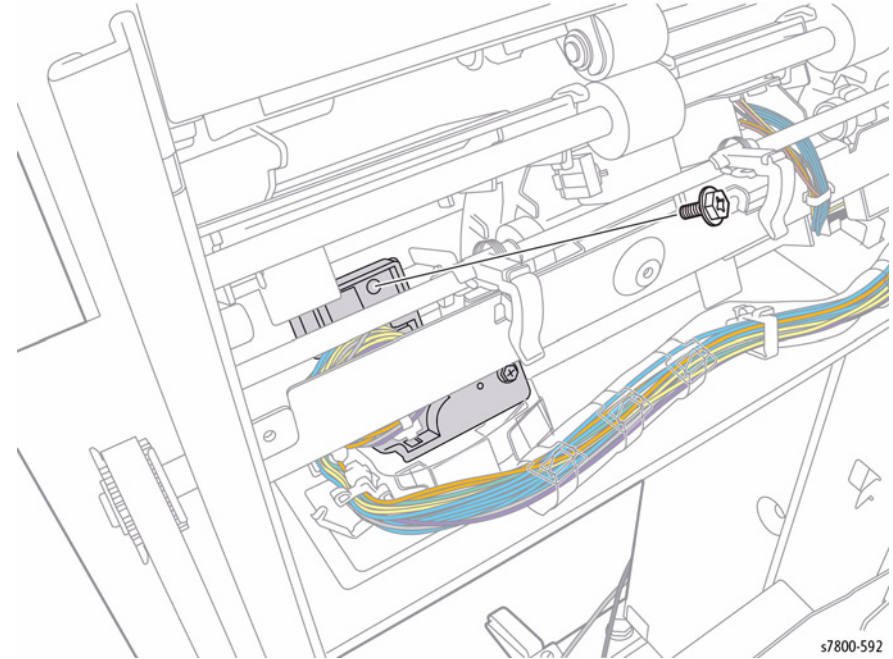


Figure 2 Removing the Wire Guide

11. Disconnect the wiring harness connector P/J8888 from the Motor.
12. Remove 2 screws that secure the Stapler Motor.
13. Remove the Stapler Move Motor.

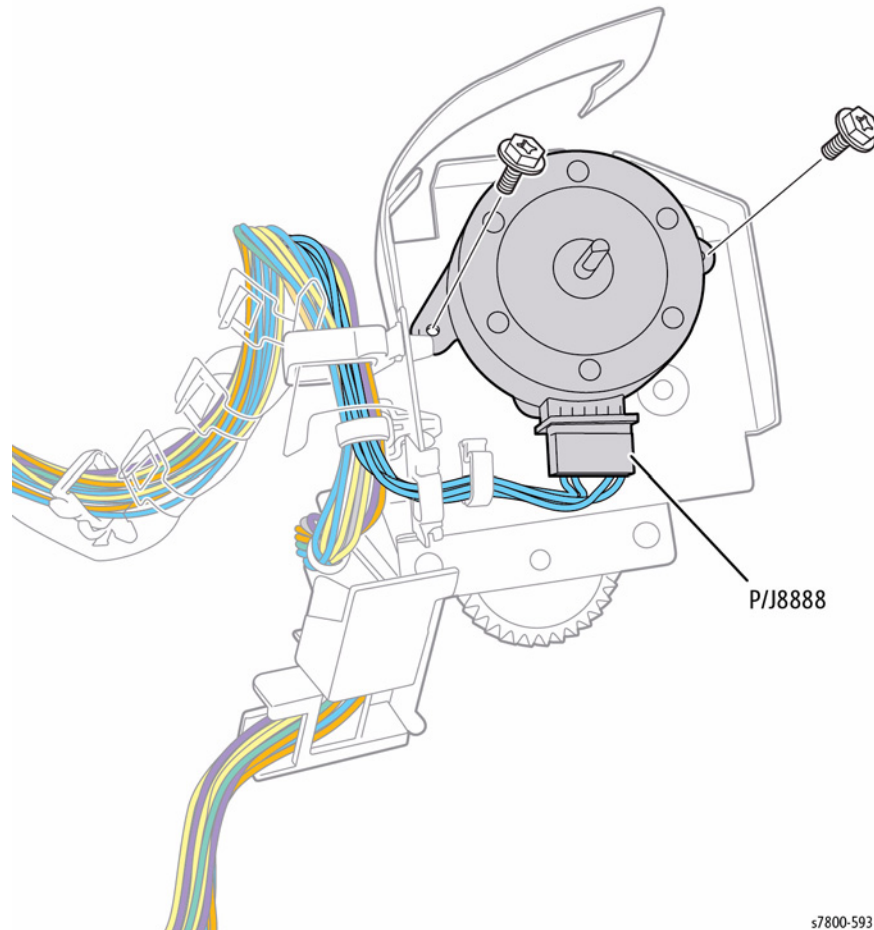


Figure 3 Removing the Stapler Motor

REP 23.19 Eject Cover Assembly

Parts List on [PL 23.9 Item 1](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Rear Upper Cover ([REP 23.9](#)).
4. Remove the Eject Cover ([REP 23.22](#)).
5. Remove 1 screw that secures the Interlock Switch Mounting Bracket.
6. Remove the Interlock Switch Mounting Bracket.

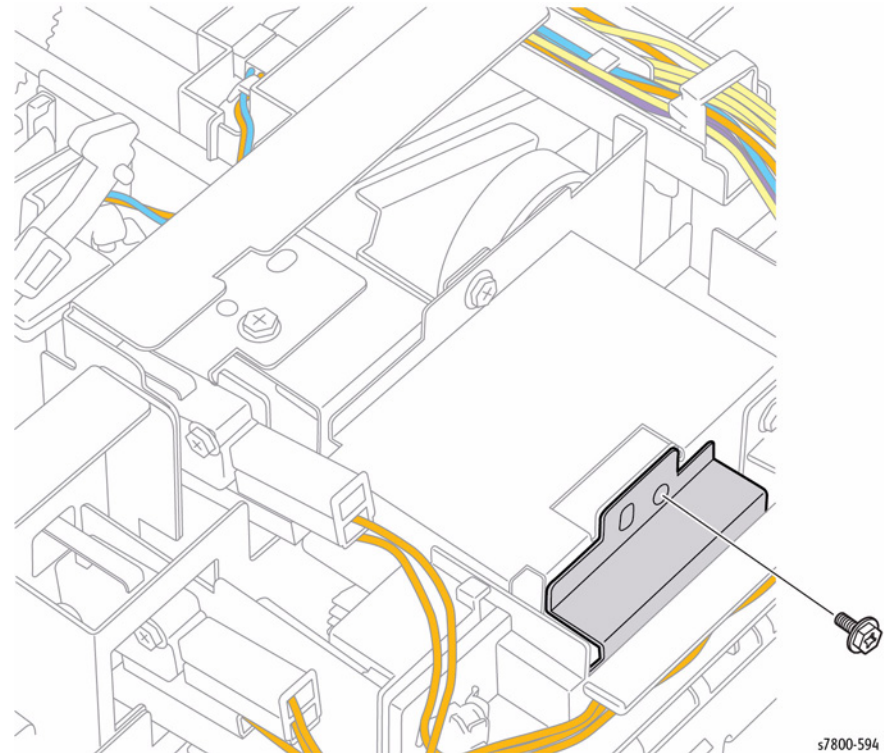


Figure 1 Removing the Interlock Switch Mounting Bracket

7. Remove the 2 C-Clips from the Shaft.

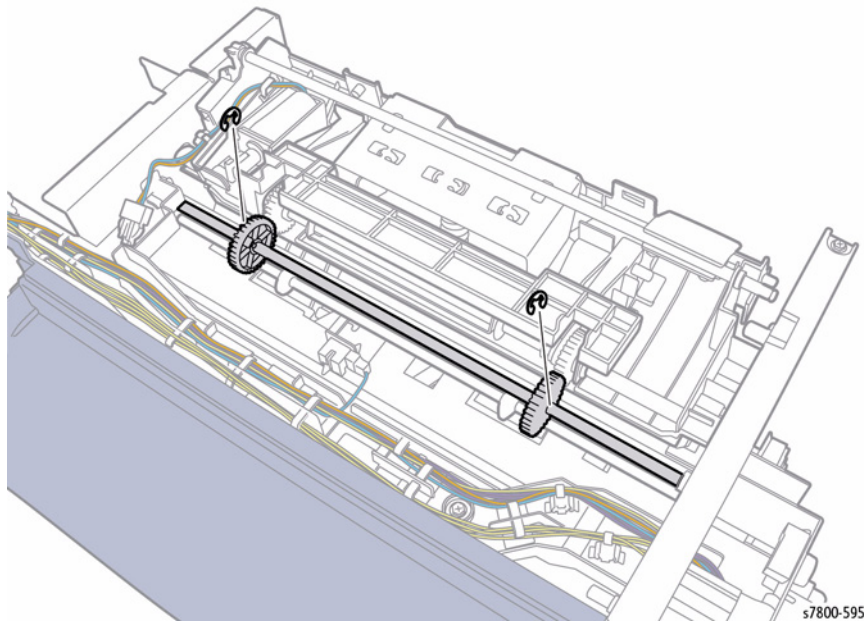


Figure 2 Removing the C-Clips

8. Open the Open Cover.
9. Remove 2 screws that secure the Eject Pinch Roller Mounting Bracket (PL 23.10 Item 23).

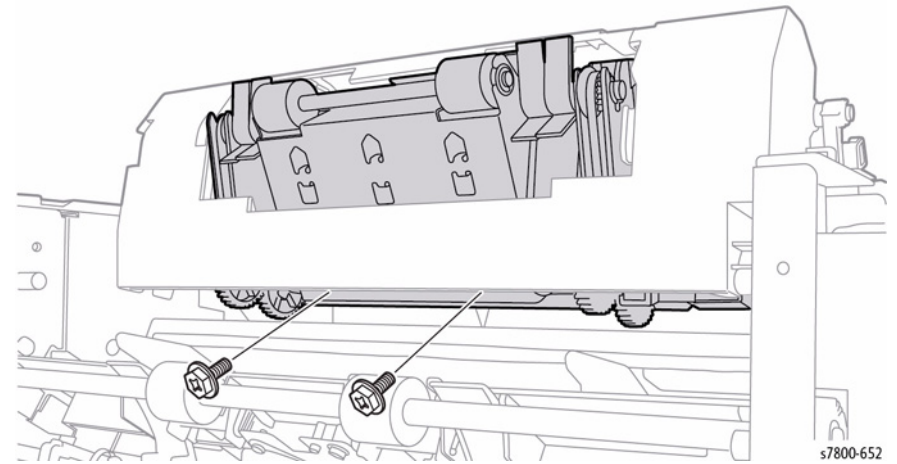


Figure 3 Removing the screws

10. Remove 1 screw that secures the Clamp Arm (PL 23.9 Item 32).
11. Slide the Clamp Arm out.
12. Move the Eject Roller Assembly Shaft towards the front side of the Finisher.
13. Remove the Clamp Arm and Bearing (PL 23.9 Item 31).
14. Remove the E-Clip and Bearing from the front of the Shaft.

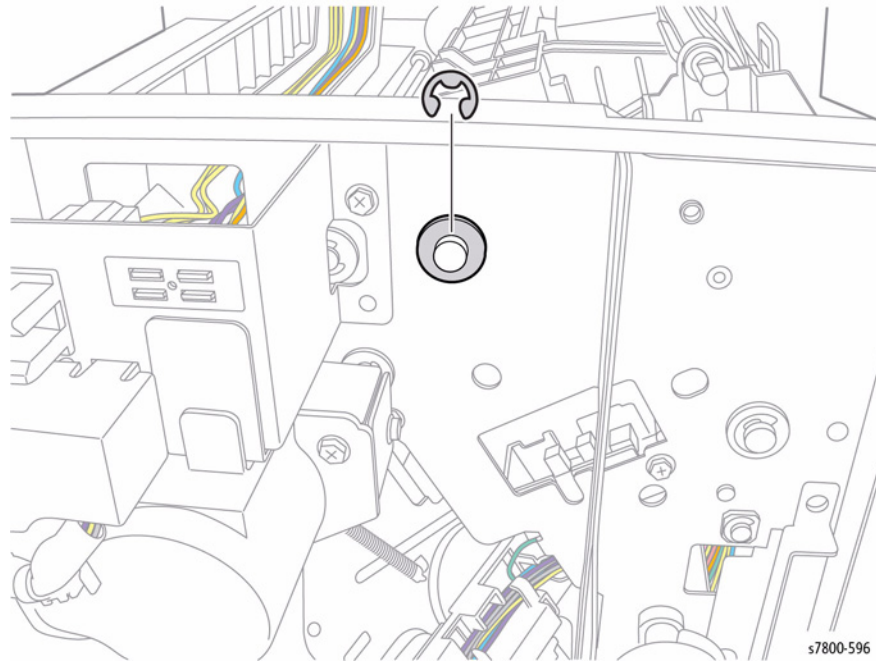


Figure 4 Removing the E-Clip and Bearing

15. Disconnect the wiring harness connector P/J8876.

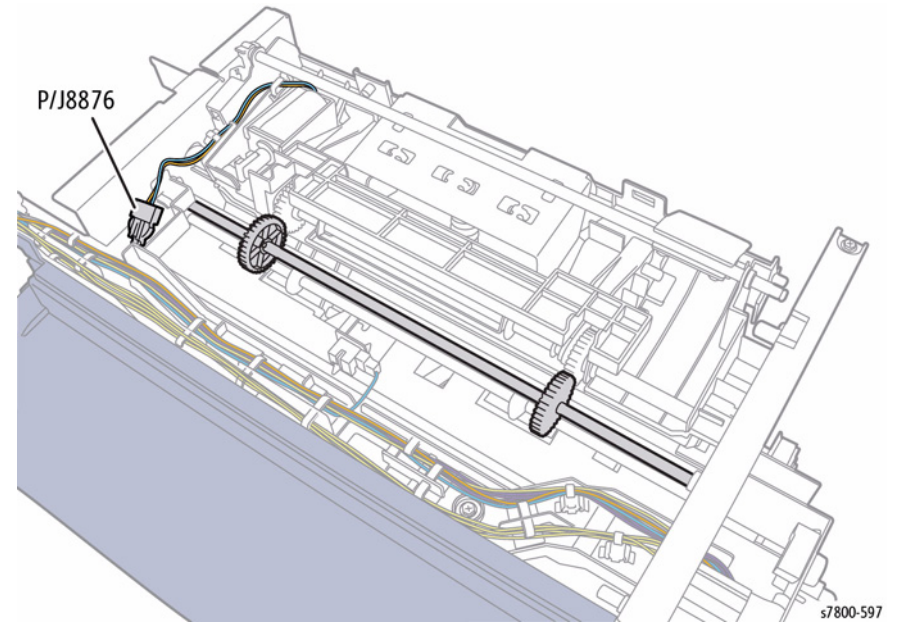


Figure 5 Disconnecting the wiring harness connector

16. Pull the Shaft towards the front until it clears the rear frame.
17. Lift the Eject Chute Assembly towards the rear to remove.

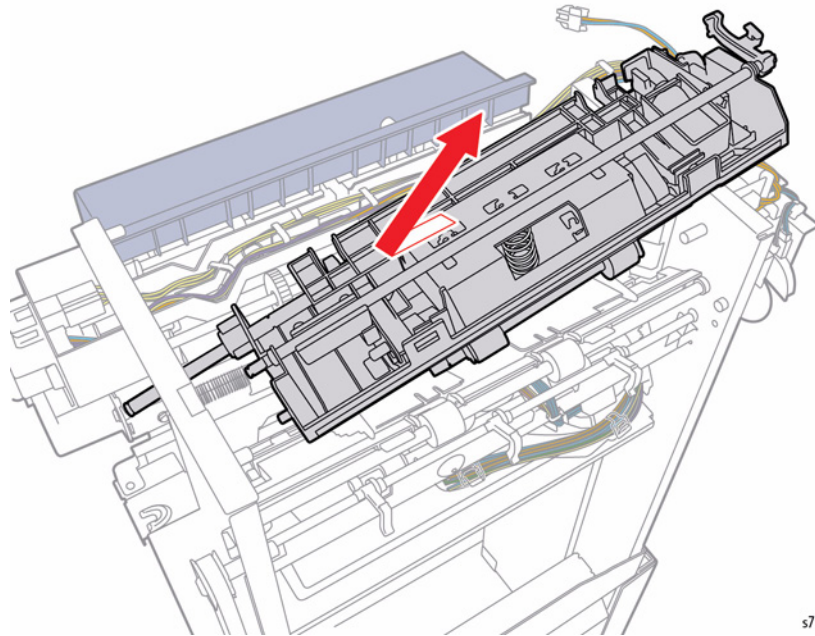


Figure 6 Removing the Eject Chute Assembly

s7800-598

Replacement

When attaching the spring to the Eject Cover, attach it as shown in Figure 7.

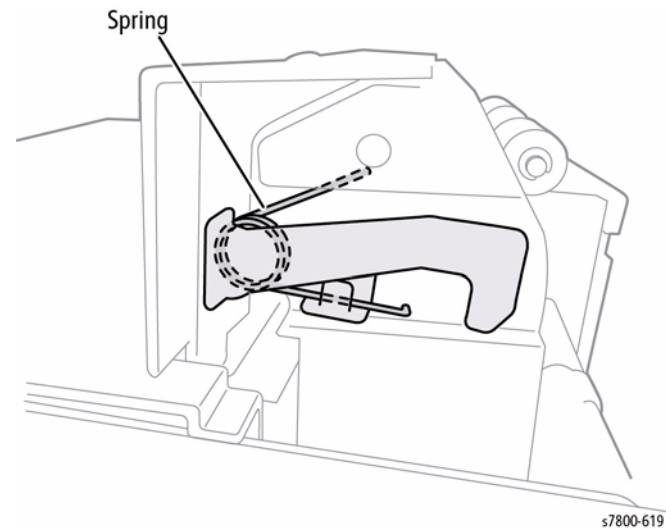
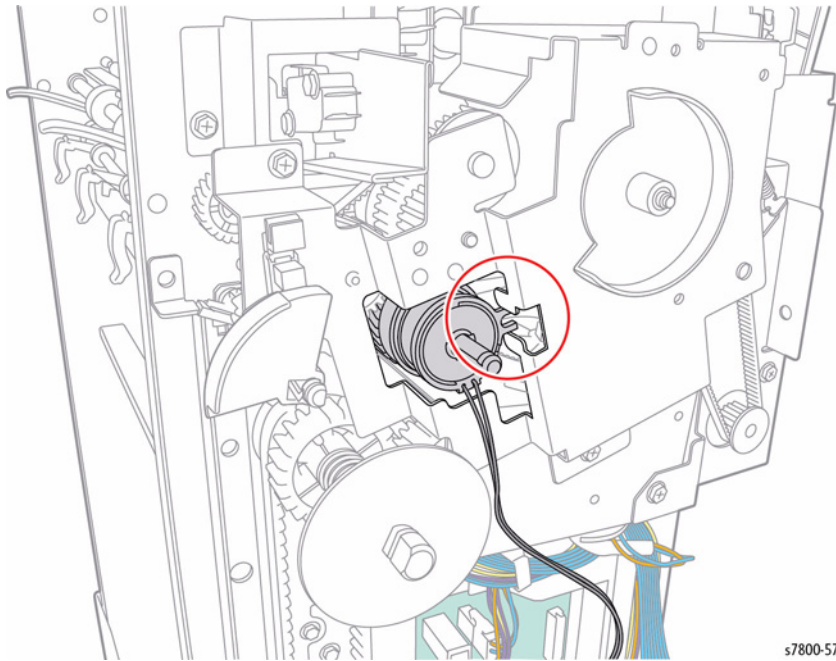


Figure 7 Attaching the Spring

s7800-619

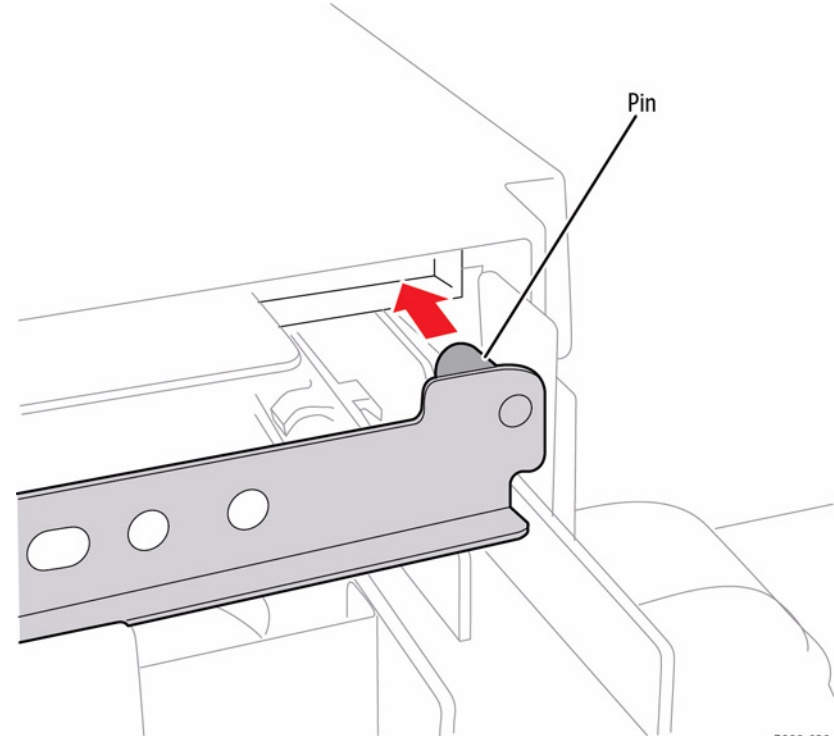
Before installing the Actuator, verify that the 2 prongs are seated and aligned between the gap of the Bracket.

When installing the Stopper to the Eject Cover, make sure that the pin of the stopper is inserted properly into the groove of the Eject Cover.



s7800-573

Figure 8 Aligning the prongs



s7800-620

Figure 9 Installing the Stopper

NOTE: Be careful to not cross thread the Pinch Roller Mounting Bracket screws.

REP 23.20 Set Clamp Shaft Assembly

Parts List on [PL 23.9 Item 9](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Rear Upper Cover ([REP 23.9](#)).
4. Remove the Front Cover ([REP 23.7](#)).
5. Remove the Stacker Upper Cover ([REP 23.16](#)).
6. Unhook the Springs (x3).

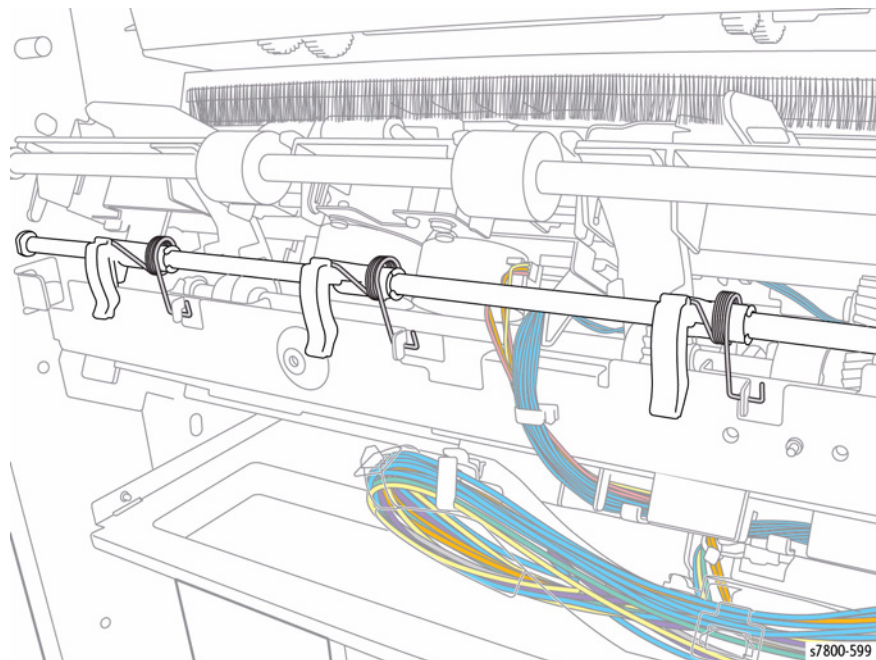


Figure 1 Removing the Springs

7. Remove the E-Clip and Bearing from the front of the Shaft.

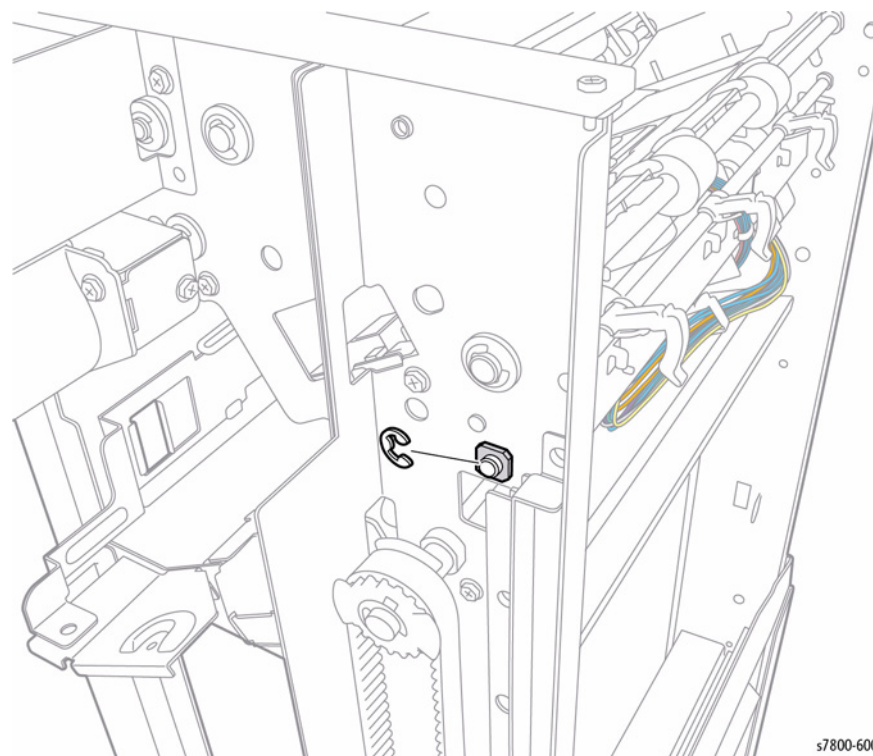


Figure 2 Removing the E-Clip and Bearing

8. Remove 1 screw that secures the Stacker Height Sensor 2.
9. Remove the Stacker Height Sensor 2 together with its bracket.

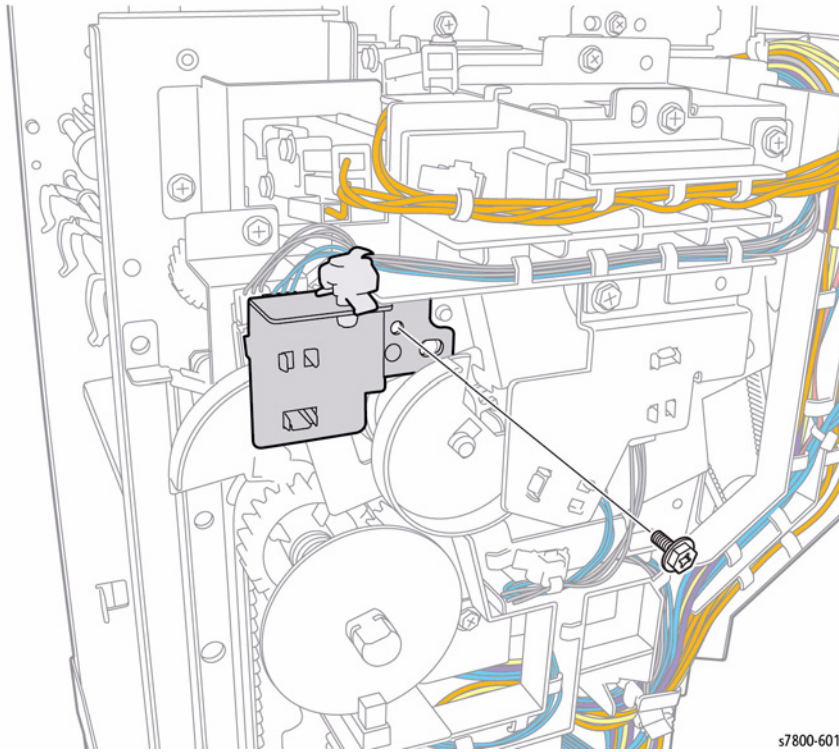


Figure 3 Removing the Stacker Height Sensor 2 with Bracket

10. Remove the Actuator.
11. Remove the E-Clip.
12. Unhook the Spring.
13. Slide the Spring, Gear, and Bearing to the rear.

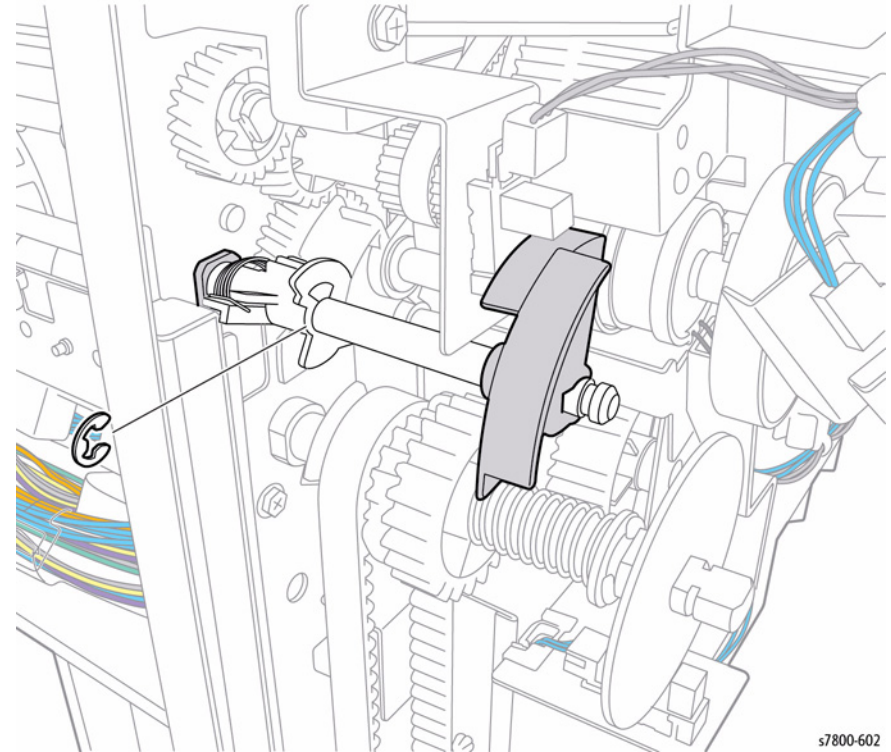


Figure 4 Removing the Actuator, E-Clip, Spring, Gear, and Bearing

14. Shift the Shaft temporarily to the rear.
15. Move the Shaft from the hole of the Front Frame, in the direction of the arrow.
16. Remove the Shaft towards the front. Be sure not to drop the Gear, Spring, and Bearing.

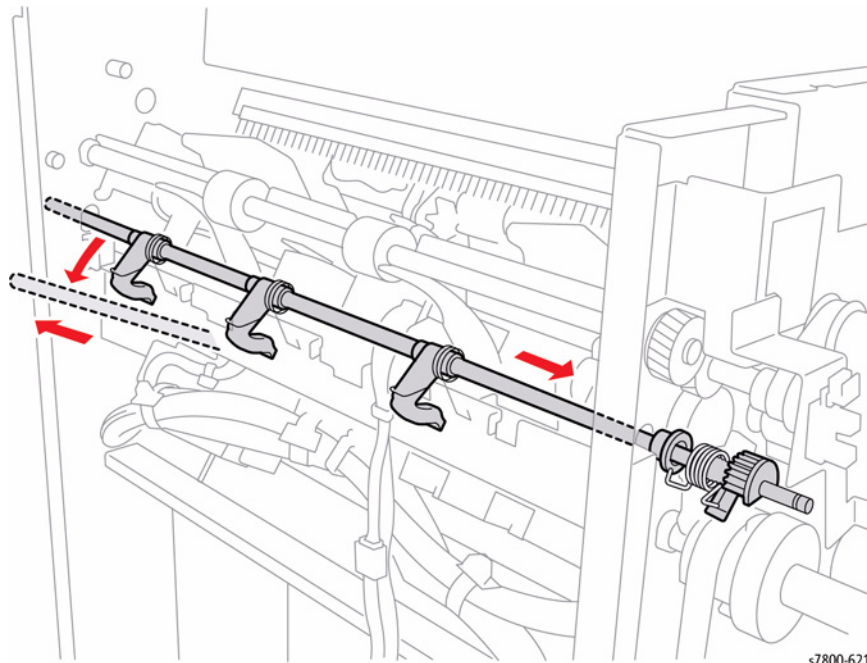


Figure 5 Removing the Shaft

s7800-621

Replacement

When installing the Spring, hook the Spring to the Frame and the Gear as shown in Figure 6. Then, when installing the Gear, install it at a position where the center tooth of the gear is aligned to the mark.

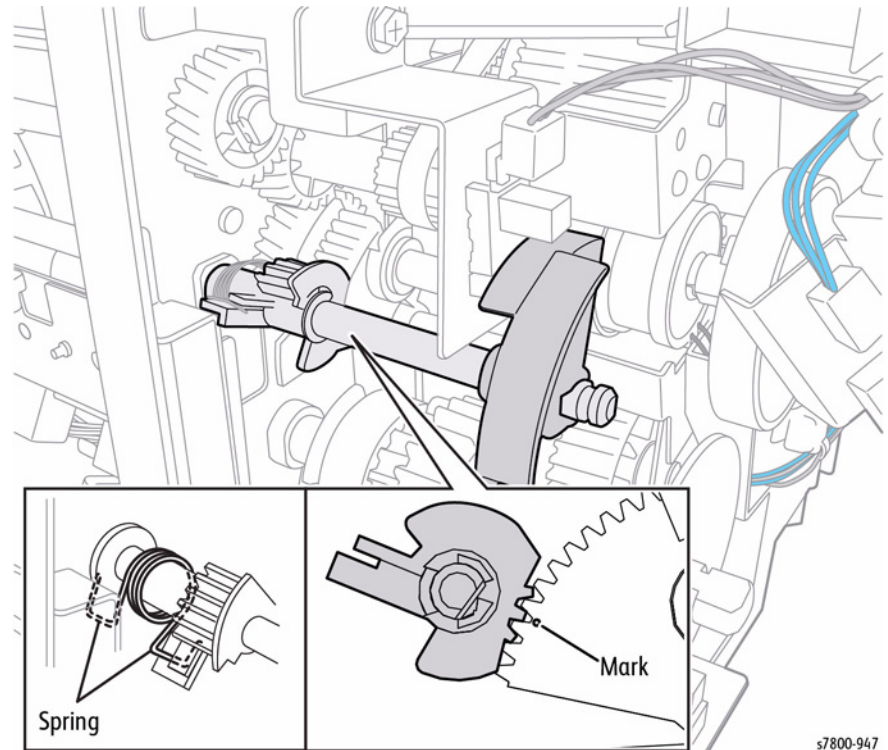


Figure 6 Installing the Spring

s7800-947

REP 23.21 Paper Guide (Left/ Right)

Parts List on [PL 23.9 Item 21](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Compiler Tray Assembly ([REP 23.26](#)).
4. Remove 1 screw that secures the Stopper.
5. Remove the Stopper.

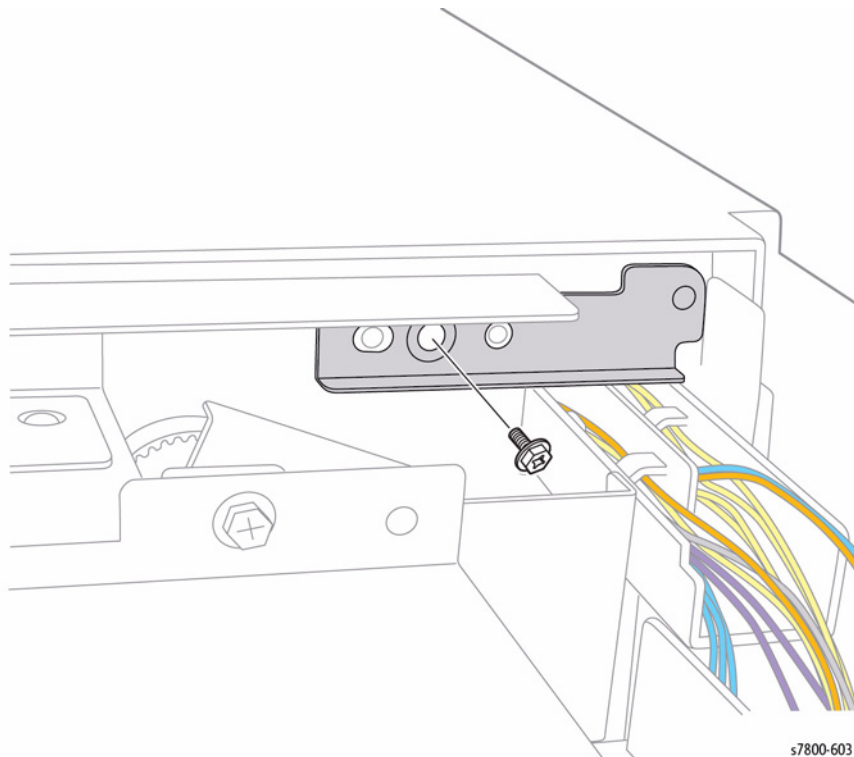


Figure 1 Removing the Stopper

6. Remove the E-Clip, Gear, and Bearing.

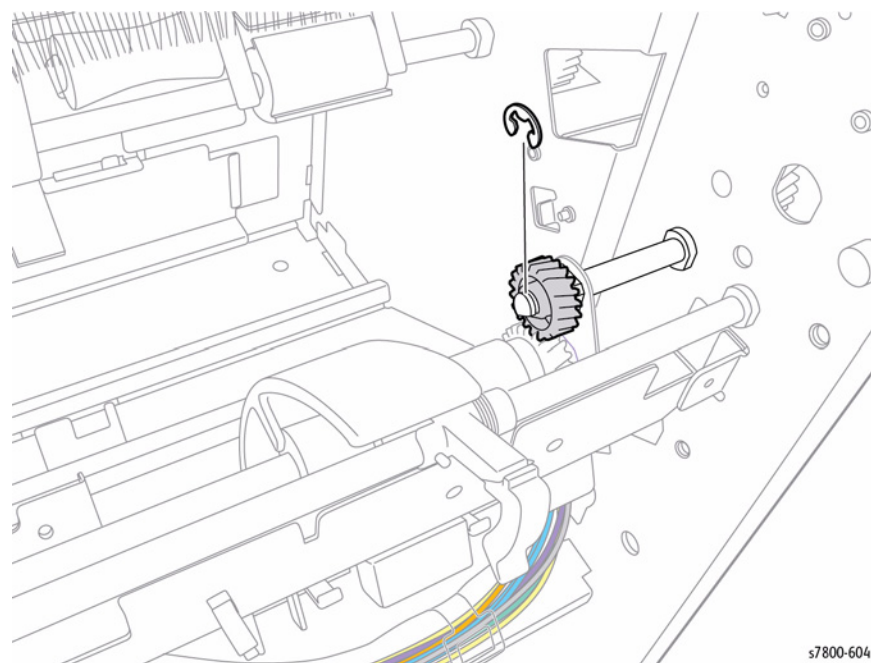


Figure 2 Removing the E-Clip, Gear, and Bearing

7. Move the Stopper Assembly towards the middle to access the screws.
8. Remove 2 screws that secure the front and rear Brackets. (identify screws)

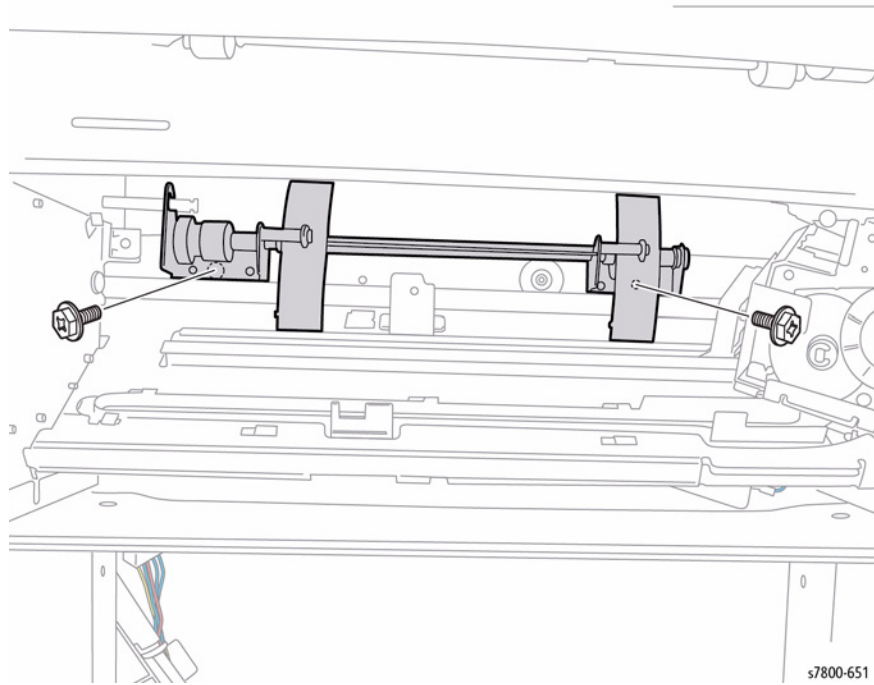


Figure 3 Removing the Screws

9. Remove the Eject Shaft from the front and rear Brackets.
10. Slide the Eject Shaft forward until the rear Bearing is off the Bracket.
11. Remove the Left and Right Paper Guides.

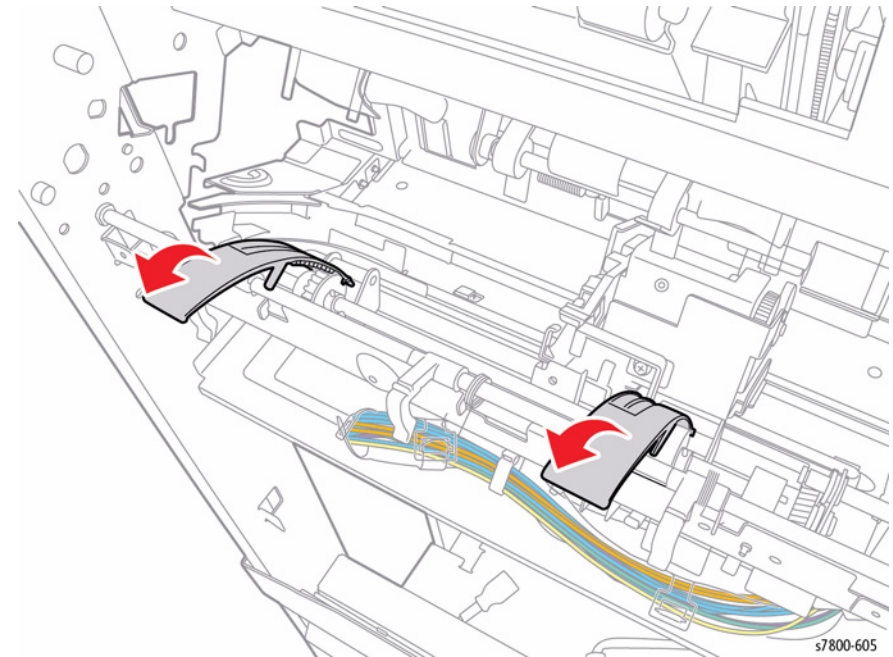
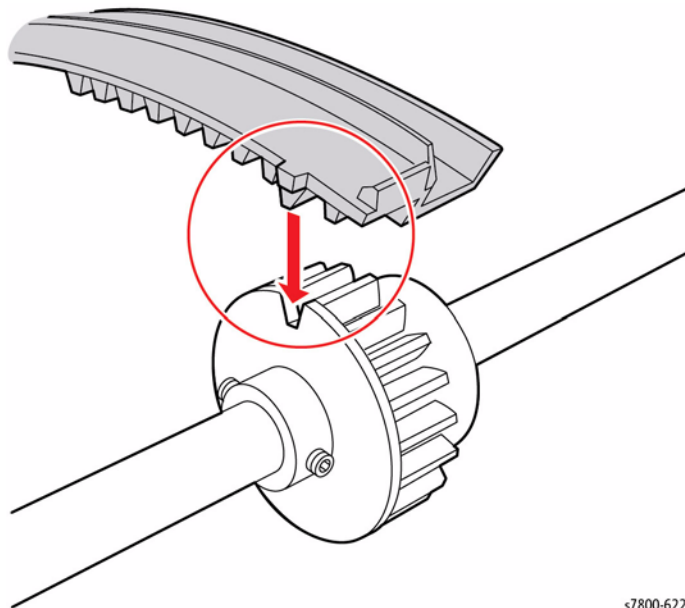


Figure 4 Removing the Guides

Replacement

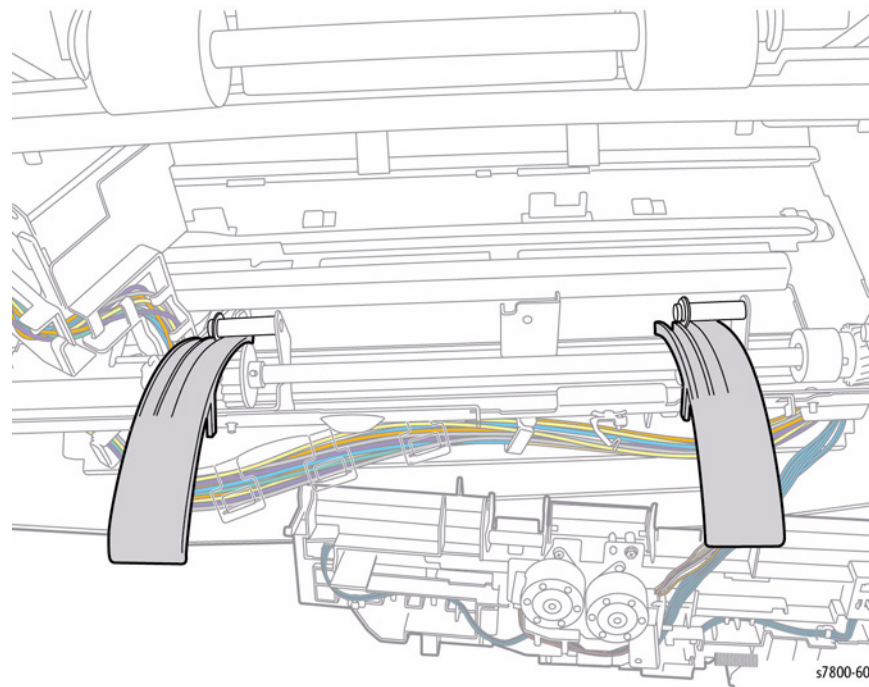
When installing the Paper Guide, place the Guide with the protrusion of the Guide aligned to the groove of the Gear.



s7800-622

Figure 5 Installing the Paper Guide

Be sure the black washer sits in the groove of the back of the Paper Guide.



s7800-606

Figure 6 Black Washer Location

REP 23.22 Eject Cover

Parts List on [PL 23.10 Item 6](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Rear Upper Cover ([REP 23.9](#)).
4. Remove 1 screw that secures the Stopper.
5. Remove the Stopper.

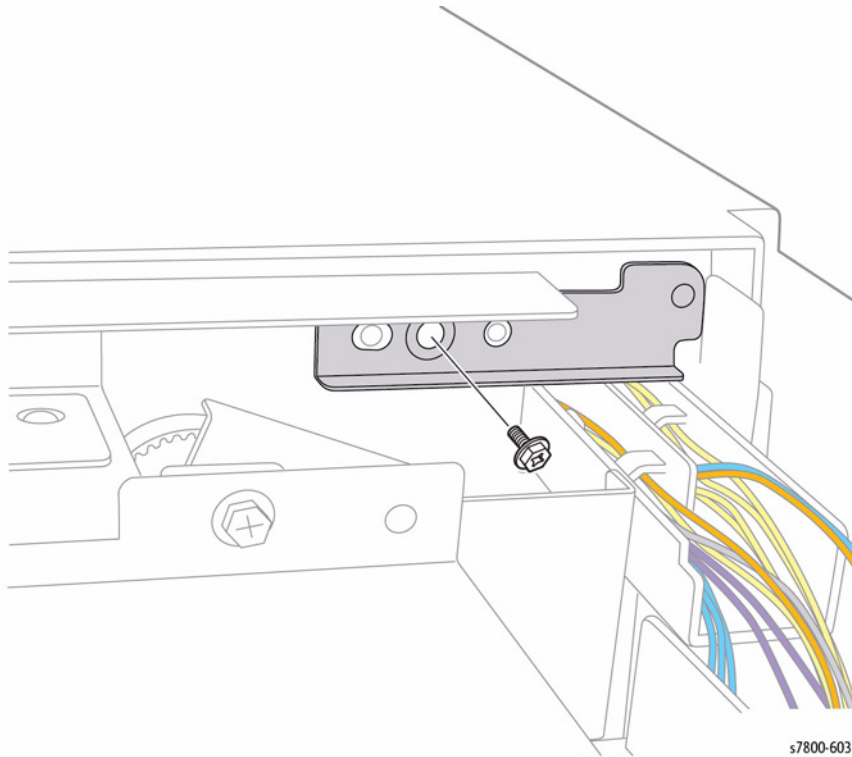


Figure 1 Removing the Stopper

6. Open the Top Cover.
7. Remove the E-Clip.
8. Unhook the Spring.
9. Remove the Latch together with the Spring.

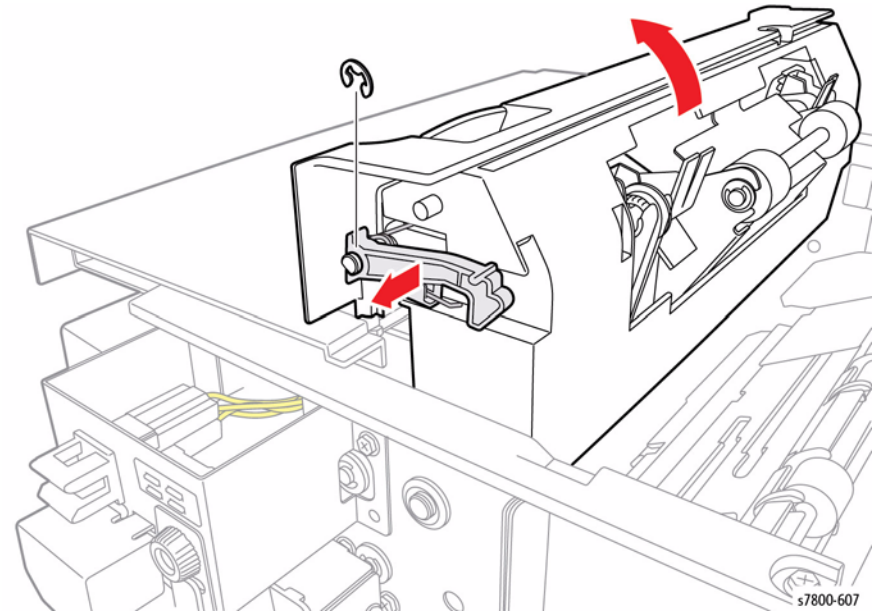


Figure 2 Removing the E-Clip, Latch and Spring

10. Remove 1 screw (tapped) that secures the Eject Cover.
11. Remove the Eject Cover.

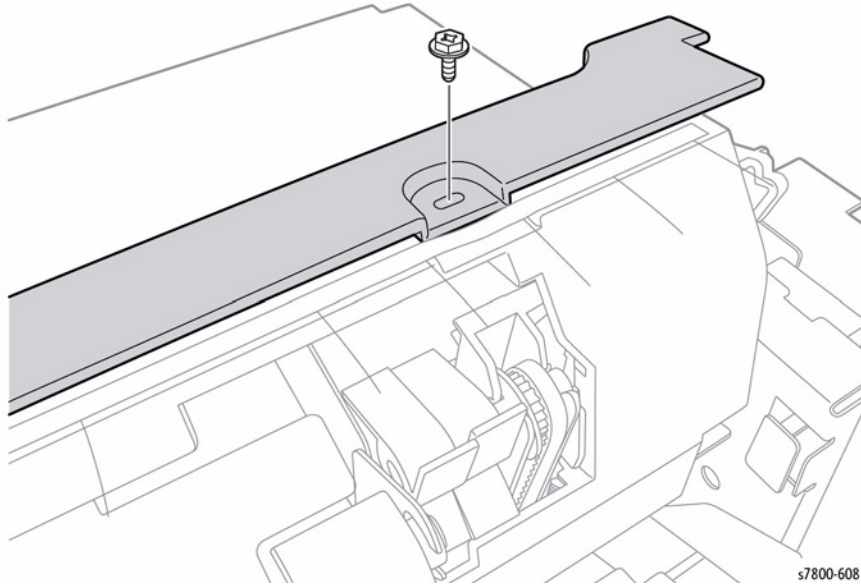


Figure 3 Removing the Eject Cover

Replacement

When attaching the Spring to the Eject Cover, attach it as shown in [Figure 4](#).

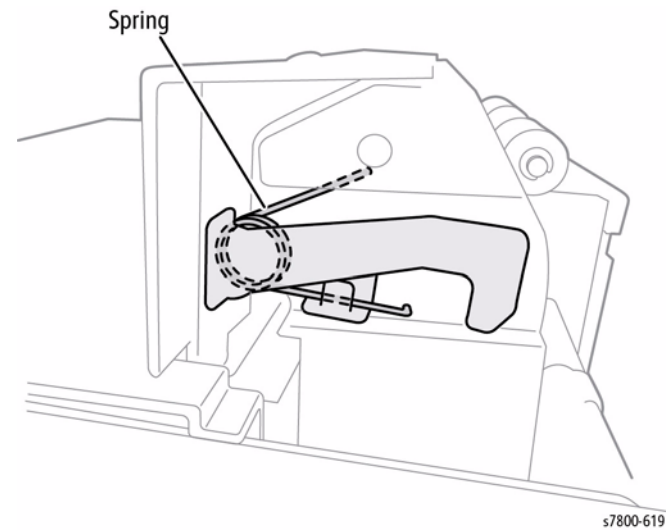


Figure 4 Attaching the Spring

When installing the Stopper to the Eject Cover, make sure that the pin of the Stopper is inserted properly into the groove of the Eject Cover.

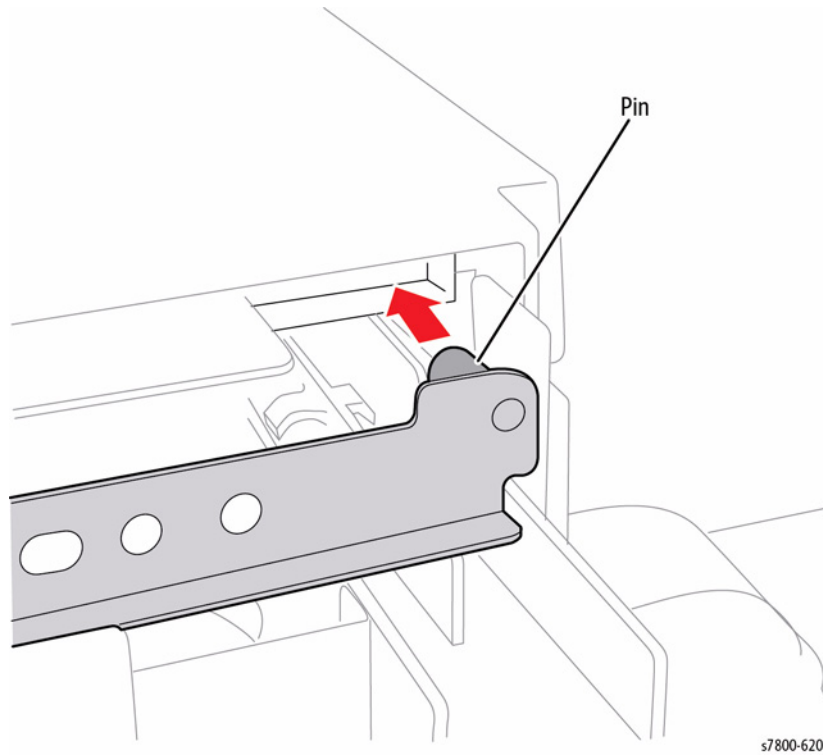


Figure 5 Installing the Stopper

s7800-620

REP 23.23 Sub Paddle Solenoid Assembly

Parts List on [PL 23.10 Item 8](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Rear Upper Cover ([REP 23.9](#)).
4. Remove the Eject Cover ([REP 23.22](#)).
5. Disconnect the wiring harness connector [P/J8876](#).
6. Release the wiring harness from the Clamp.
7. Remove 1 screw that secures the Sub Paddle Solenoid Assembly.
8. Remove the Sub Paddle Solenoid Assembly.

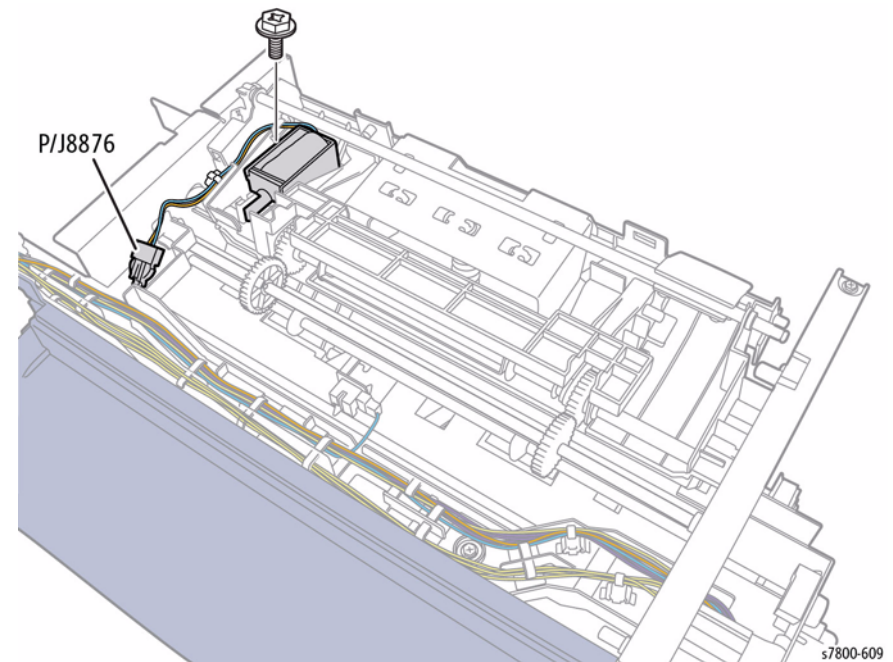


Figure 1 Removing the Sub Paddle Solenoid Assembly

s7800-609

REP 23.24 Eject Motor

Parts List on [PL 23.11 Item 4](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove 2 screws that secure the Left Hand Cover.
4. Remove the Left Hand Cover ([PL 23.6 Item 12](#)).

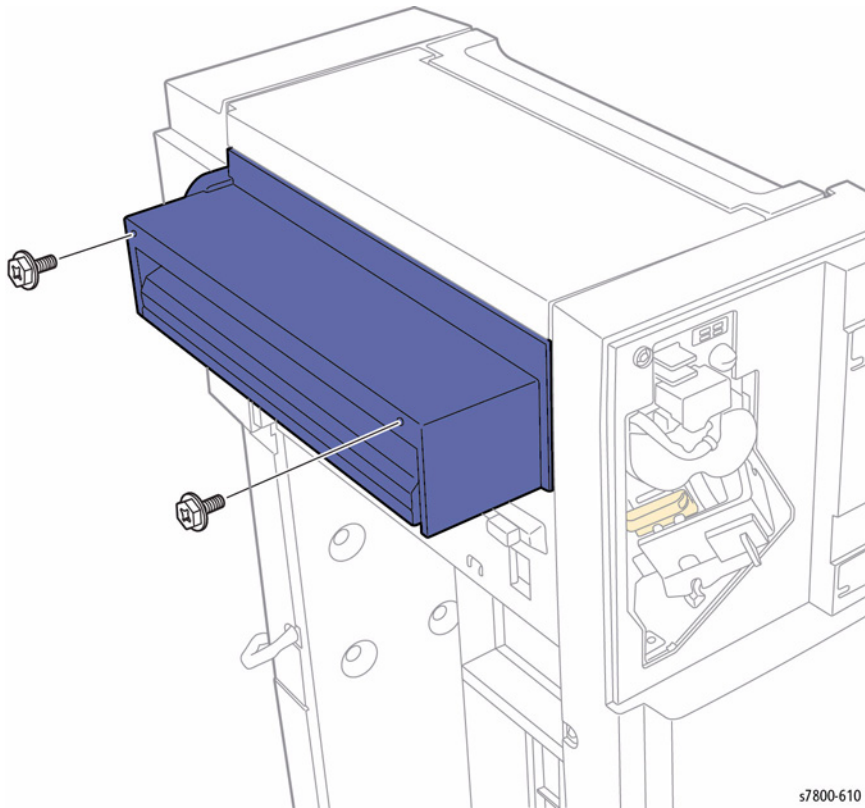


Figure 1 Removing the Left Hand Cover

s7800-610

5. Remove the Rear Upper Cover ([REP 23.9](#)).
6. Disconnect the wiring harness connectors [J8889](#) and [J8890](#).
7. Release the Clamp.
8. Disconnect the wiring harness connectors [J8873](#) and [J8874](#).
9. Remove 1 screw that secures the Harness Guide.
10. Remove the Harness Guide.

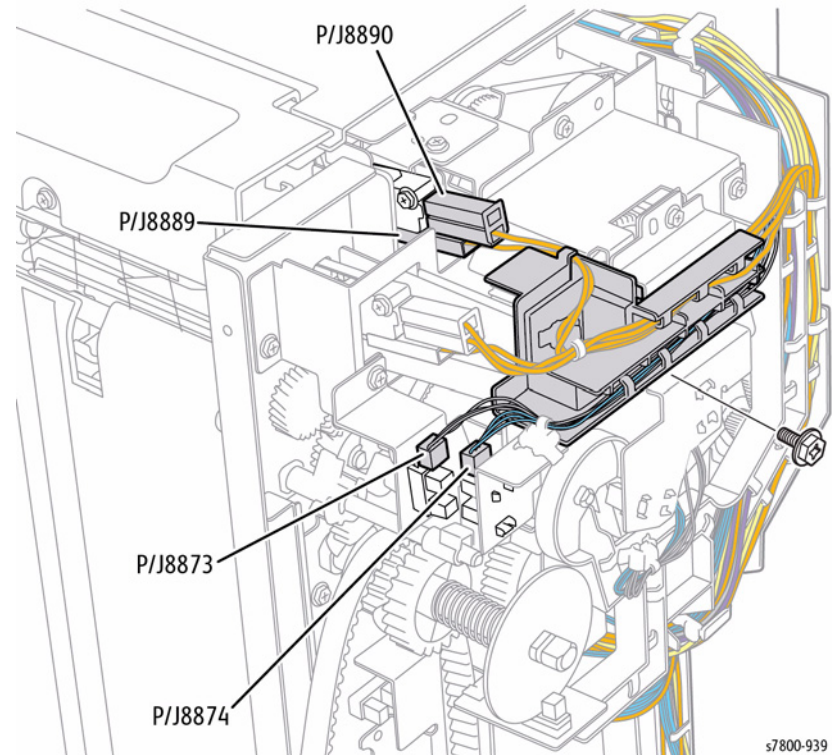


Figure 2 Removing the Harness Guide

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11. Disconnect the wiring harness connectors **J8871** and **J8875**.
12. Remove the Clamp.
13. Remove 2 screws that secure the Bracket.
14. Remove the Bracket.

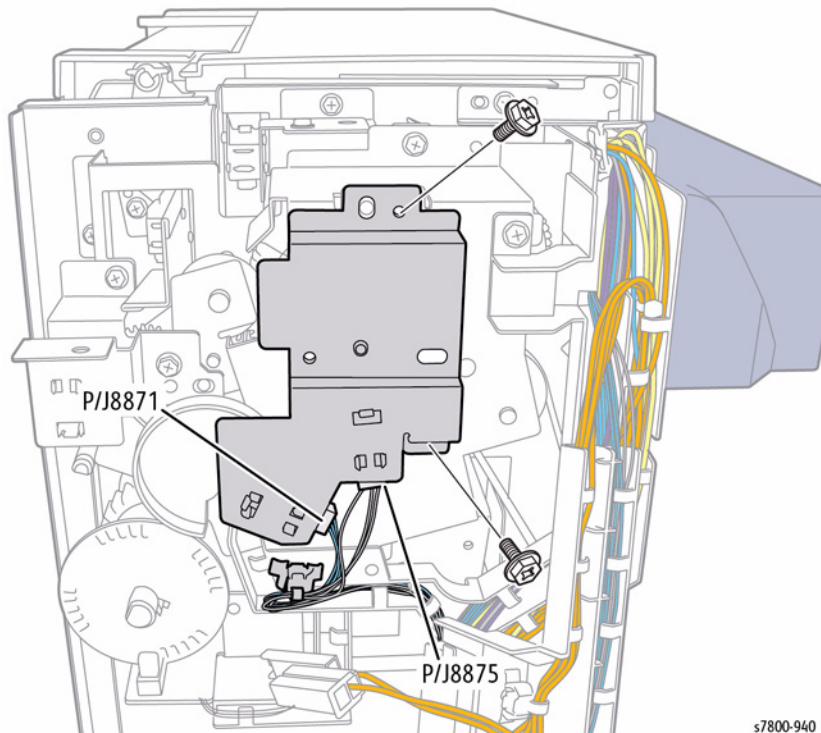


Figure 3 Removing the Bracket

15. Remove 1 screw that secures the Stacker Encoder Sensor.
16. Remove the Stacker Encoder Sensor together with its Bracket.
17. Release the wiring harness from the Harness Guide.

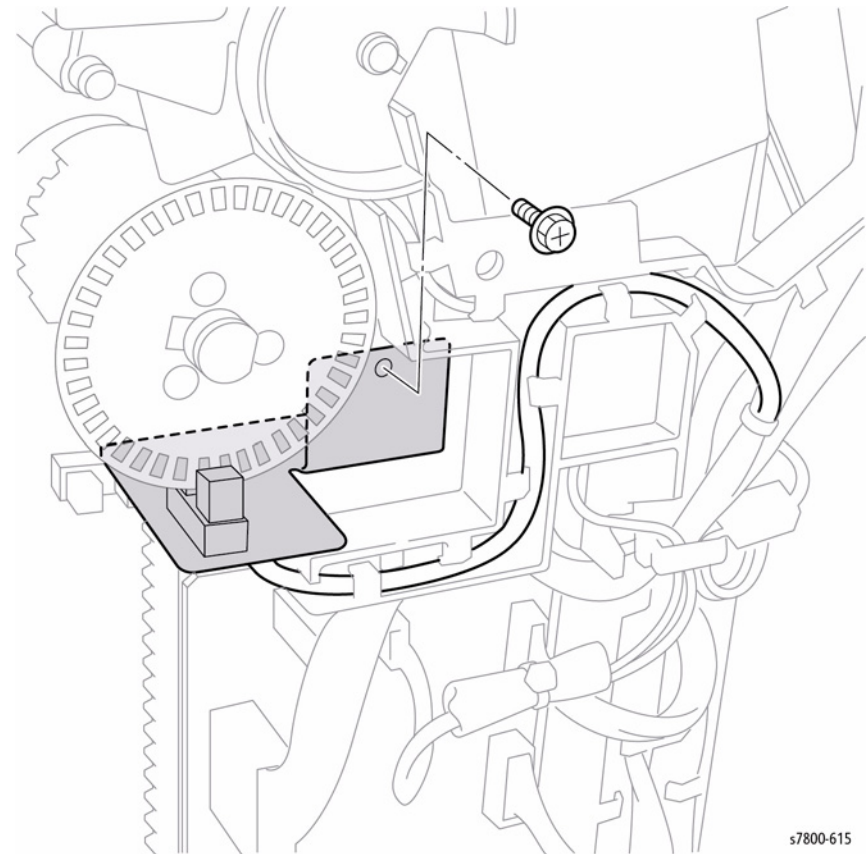


Figure 4 Removing the Stacker Encoder Sensor and Bracket

18. Release the Clamp.
19. Disconnect the wiring harness connector P/J8877.
20. Release the wiring harness from the Harness Guide.

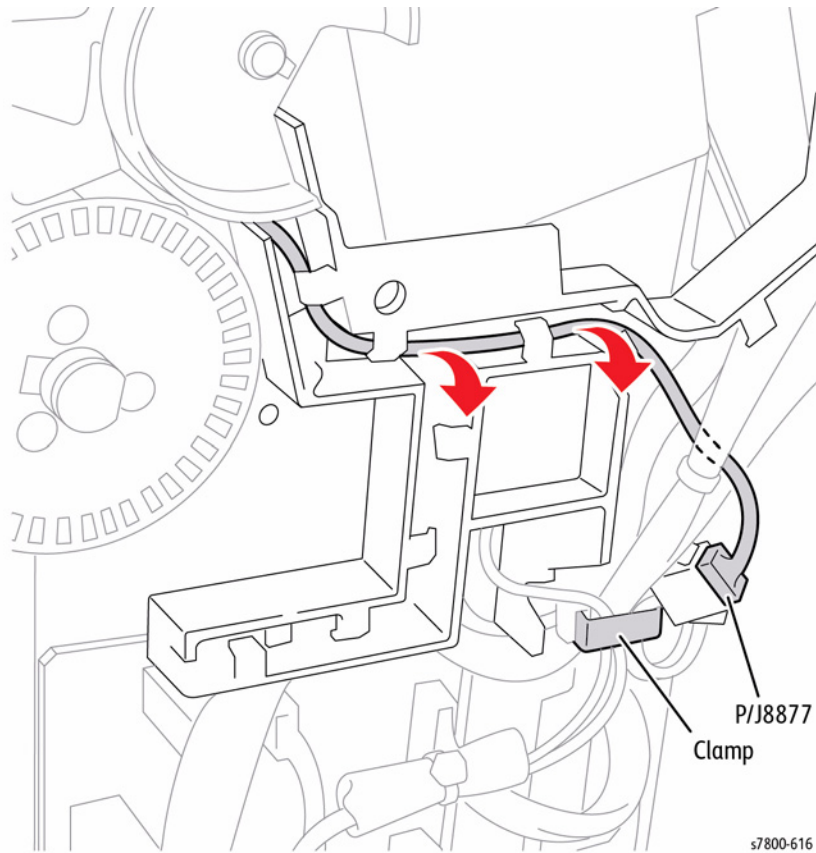


Figure 5 Releasing and disconnecting the wiring harness

21. Disconnect the wiring harness connector P/J8879.
22. Remove the Clamp.

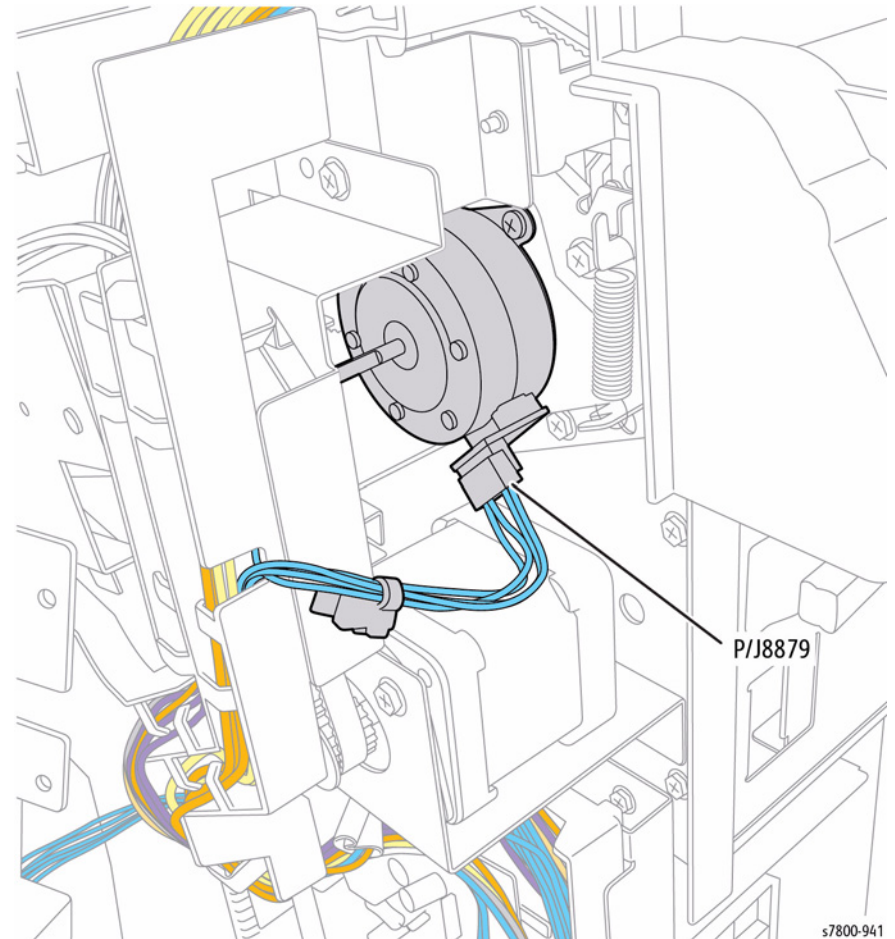


Figure 6 Releasing the wiring harness connector and Clamp

23. Remove the Actuator.
24. Release the wiring harness from the Harness Guide.
25. Remove 2 screws that secure the Harness Guide.
26. Remove the Harness Guide.

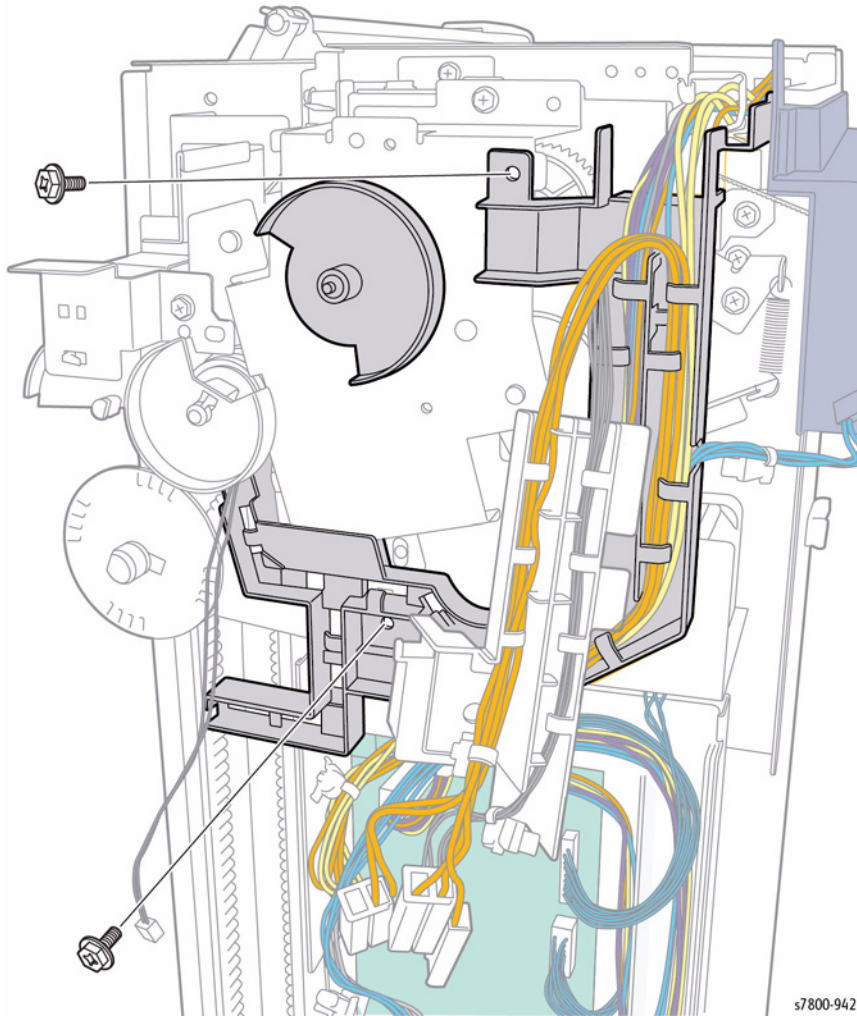


Figure 7 Removing the Actuator and Harness Guide

27. Remove 1 screw that secures the Stacker Height Sensor 2.
28. Remove the Stacker Height Sensor 2 together with its Bracket.

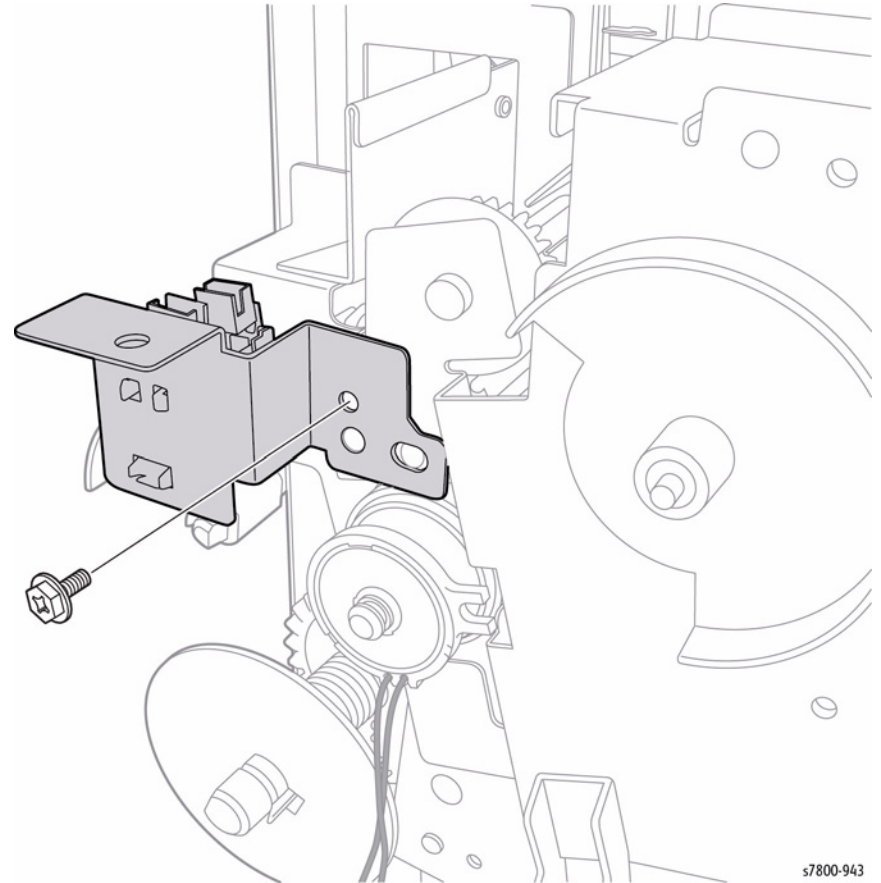


Figure 8 Removing the Stacker Height Sensor with Bracket

29. Remove the Actuators (x2).

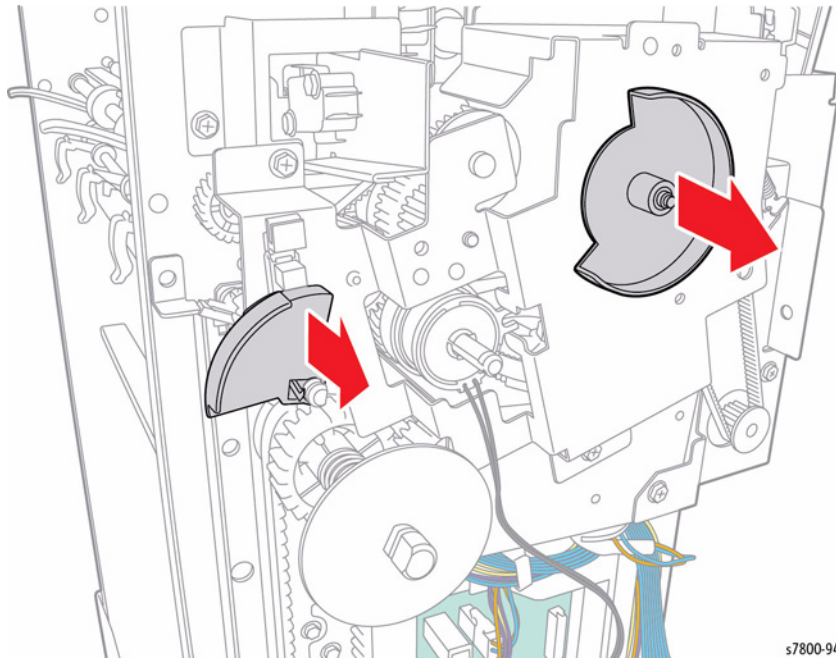


Figure 9 Removing the Actuators

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30. Remove 3 screws that secure the Bracket.

NOTE: When removing the Bracket, be careful as the Gear in the back of the Bracket can easily drop and get lost.

31. Remove the Bracket.

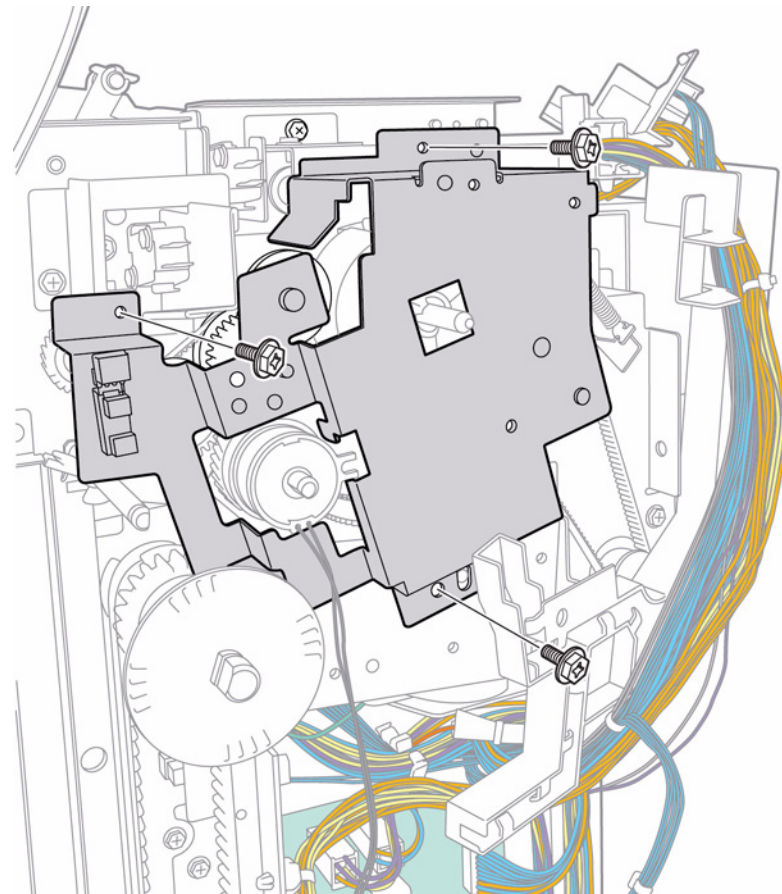


Figure 10 Removing the Bracket

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32. Remove the Spring.
33. Remove 2 screws that secure the Eject Motor Assembly.

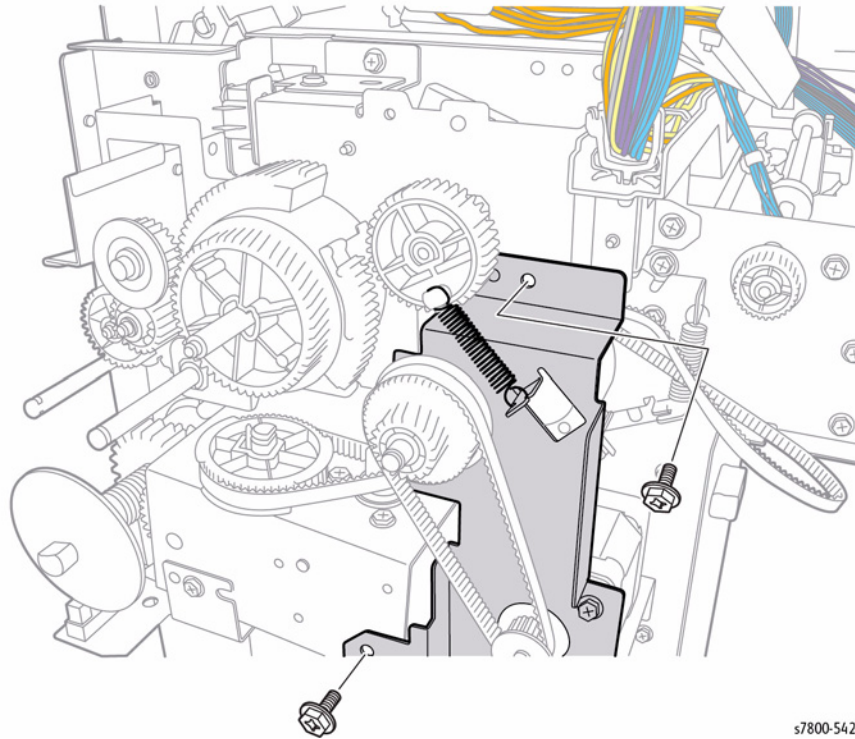


Figure 11 Removing the Spring and screws

34. Disconnect the wiring harness connector **P/J8878**.
35. Remove 1 screw that secure the Eject Motor Assembly.
36. Remove the Eject Motor Assembly.

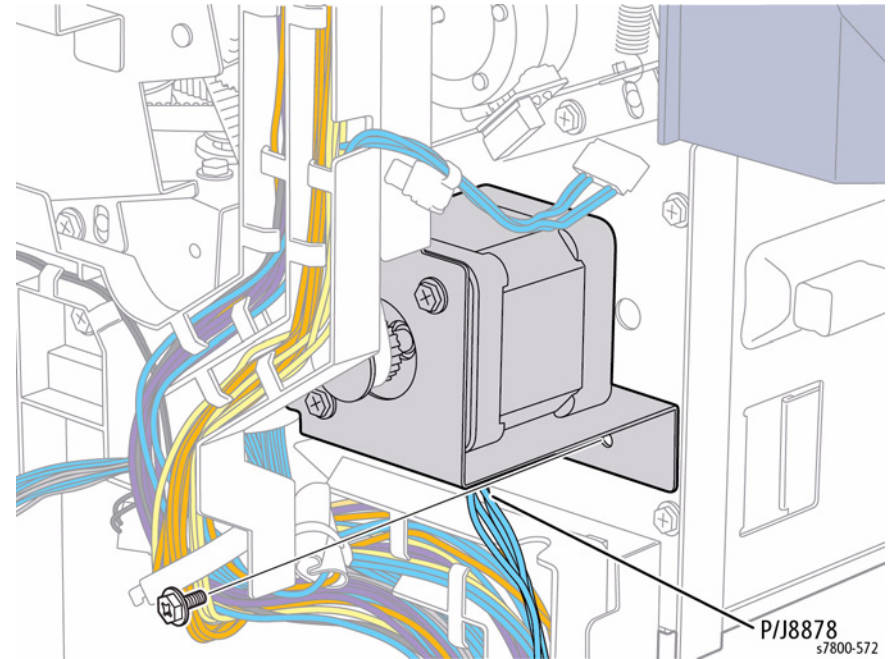


Figure 12 Removing the Eject Motor Assembly

REP 23.25 Stacker Height Sensor 1 Assembly, Stacker Height Sensor 2 Assembly

Parts List on [PL 23.11 Item 14](#), [PL 23.11 Item 17](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Rear Upper Cover ([REP 23.9](#)).
4. Disconnect the wiring harness connector [J8873/ J8874](#).
5. Remove the Stacker Height Sensor.

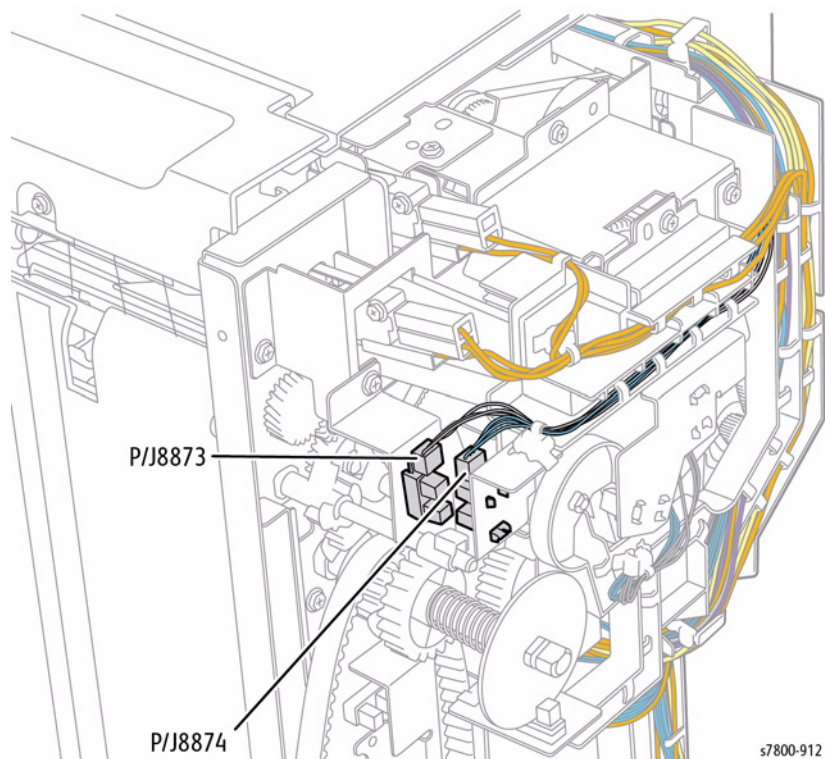


Figure 1 Removing the Stacker Height Sensors 1 and 2

REP 23.26 Compile Tray Assembly

Parts List on [PL 23.12 Item 1](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Front Cover Assembly ([REP 23.7](#)).
4. Remove the Rear Upper Cover ([REP 23.9](#)).
5. Remove the Stacker Upper Cover ([REP 23.16](#)).
6. Move the Stapler Assembly to the front.
7. Disconnect the wiring harness connector [J8894](#).
8. Release the harness from the Harness Guide.
9. Release the Clamp and the harness.

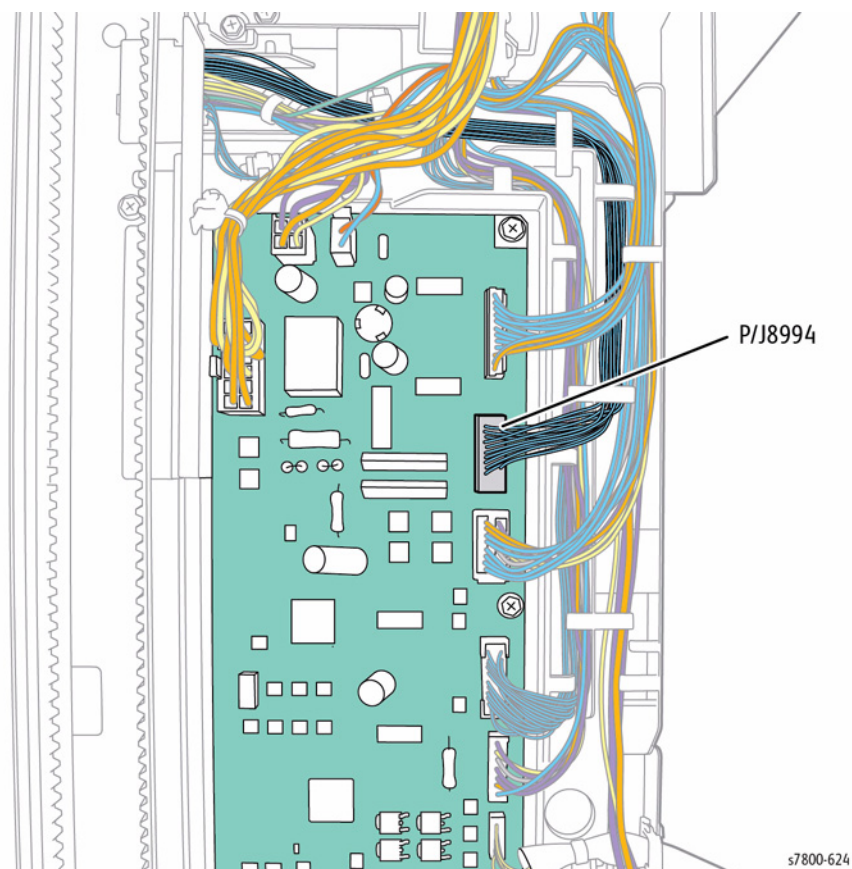


Figure 1 Disconnecting and releasing the wiring harness

10. Release the Clamp.
11. Release the harness from the Harness Guide.
12. Pull out the connector and harness that was disconnected previously though the hole of the Frame.

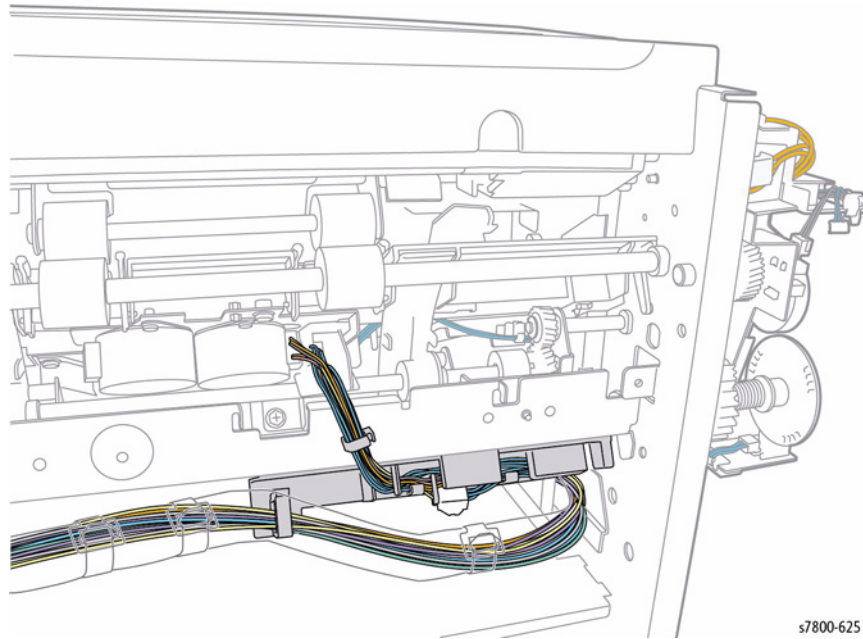


Figure 2 Releasing the Clamp and harness

13. Open the Open Cover.
14. Remove 1 screw from the front side.
15. Remove the E-Clip and the Bearing at the front.

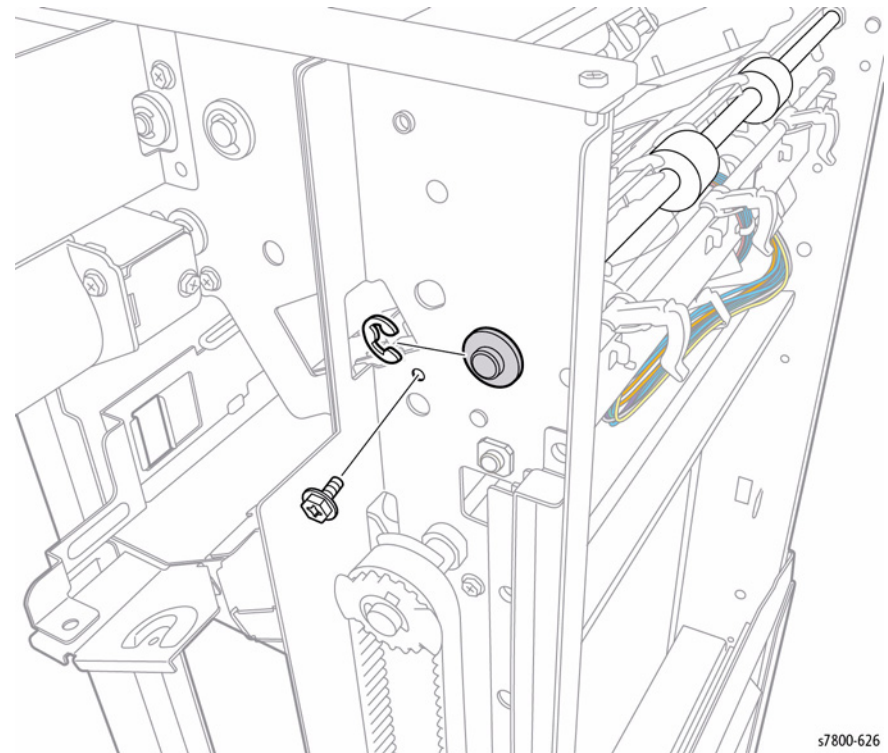


Figure 3 Removing the Front E-Clip, Bearing, and Screw

16. Remove the E-Clip at the rear.

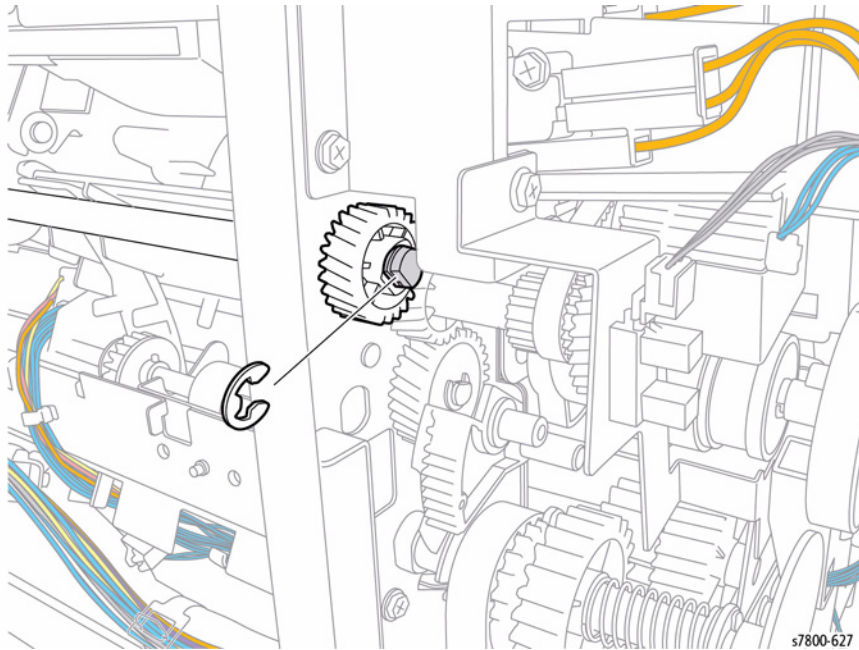


Figure 4 Removing the Rear E-Clip

17. Remove 1 screw.

18. Move the Front Tamper and Rear Tamper to the center position.

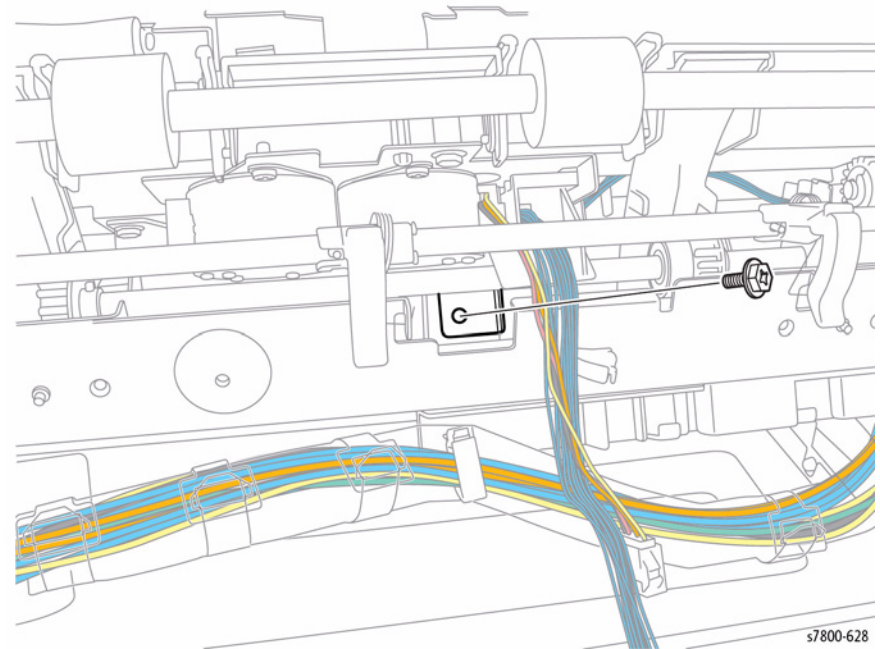


Figure 5 Removing the screw and moving the Tampers

19. Release the pin from the hole of the front side of the Frame.

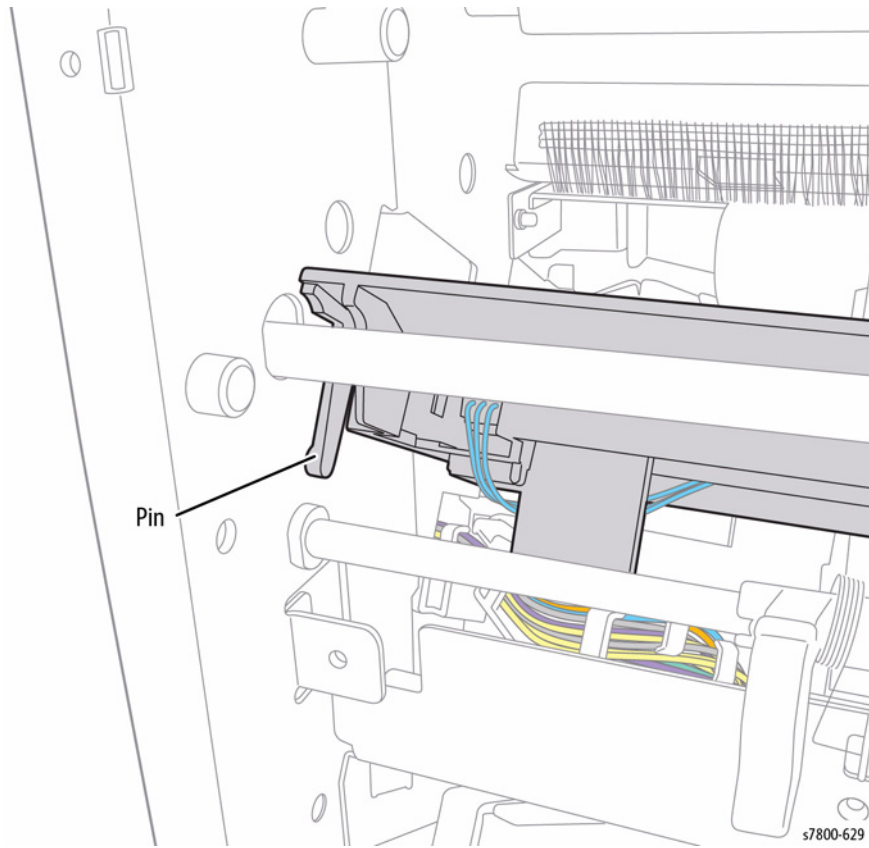


Figure 6 Releasing the Pin (front side)

20. Release the pin from the hole of the rear side of the Frame.

21. Lift up the Compiler Tray Assembly slightly.

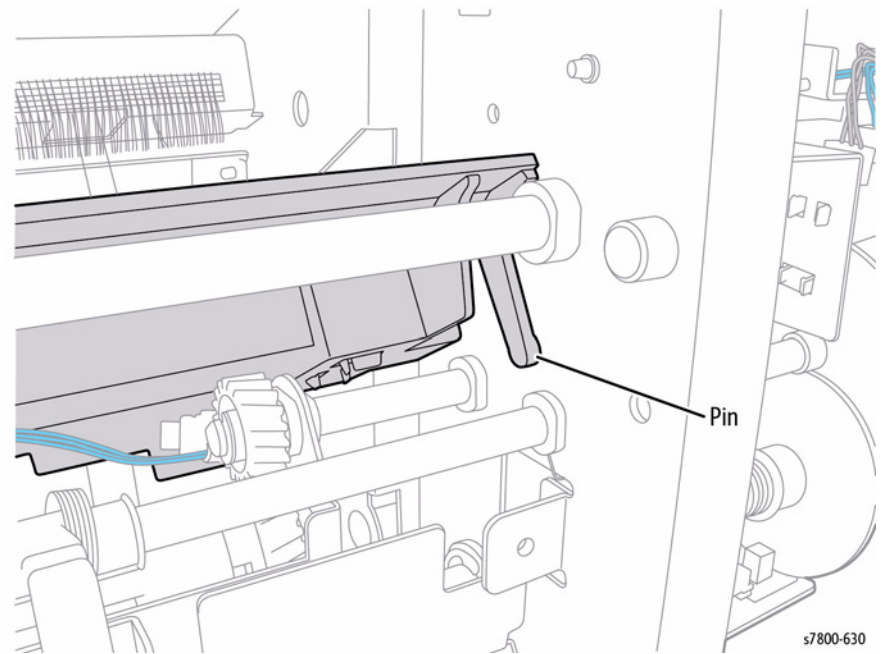


Figure 7 Releasing the Pin (front side)

22. Move the Eject Roller towards the front. At this time, as the Gear, Spring, and Bearing at the rear will drop.
23. Remove the Eject Roller from the hole of the Rear Frame.

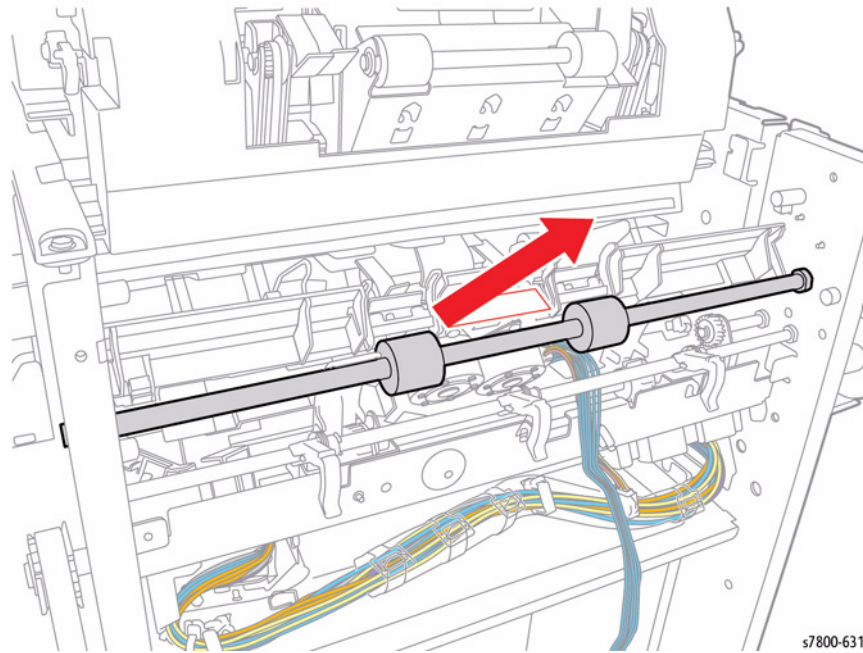


Figure 8 Removing the Eject Roller

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CAUTION

When removing the Compiler Tray Assembly, do it carefully so as not to affect the surrounding parts.

24. Loosen 1 screw enough to have it flush with the frame.
25. Rotate the Compiler Tray Assembly upward to remove.

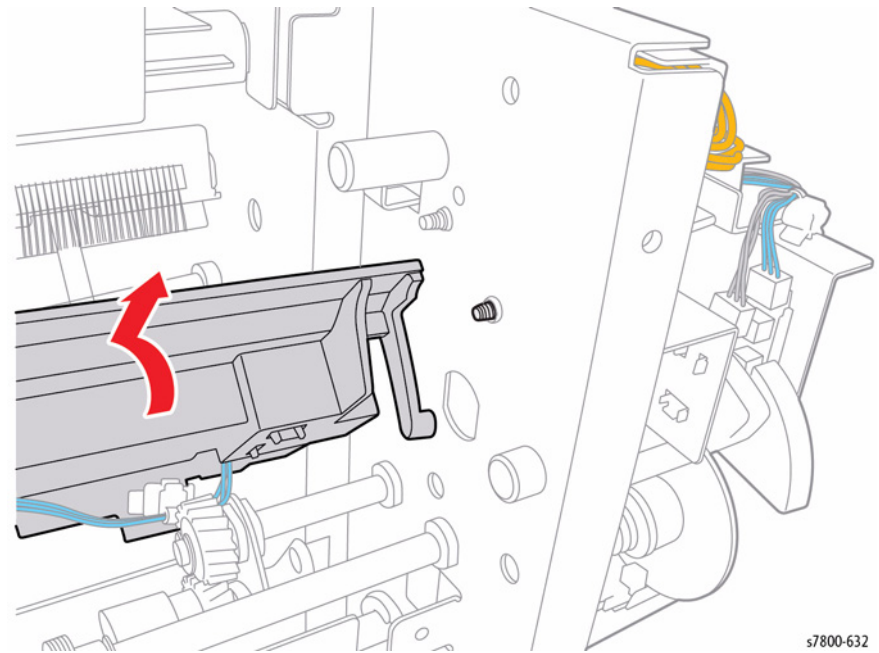


Figure 9 Removing the Compiler Tray Assembly

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Replacement

Be sure the flat side of the Roller goes on the rear side of the Finisher.

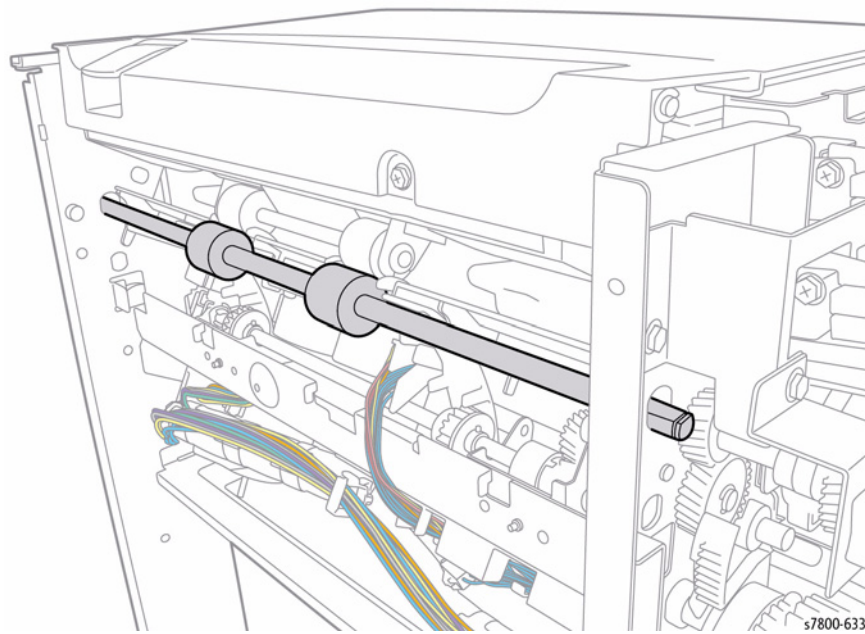


Figure 10 Positioning the Roller

Be sure the Gear aligns with the Roller with protrusion facing outward.

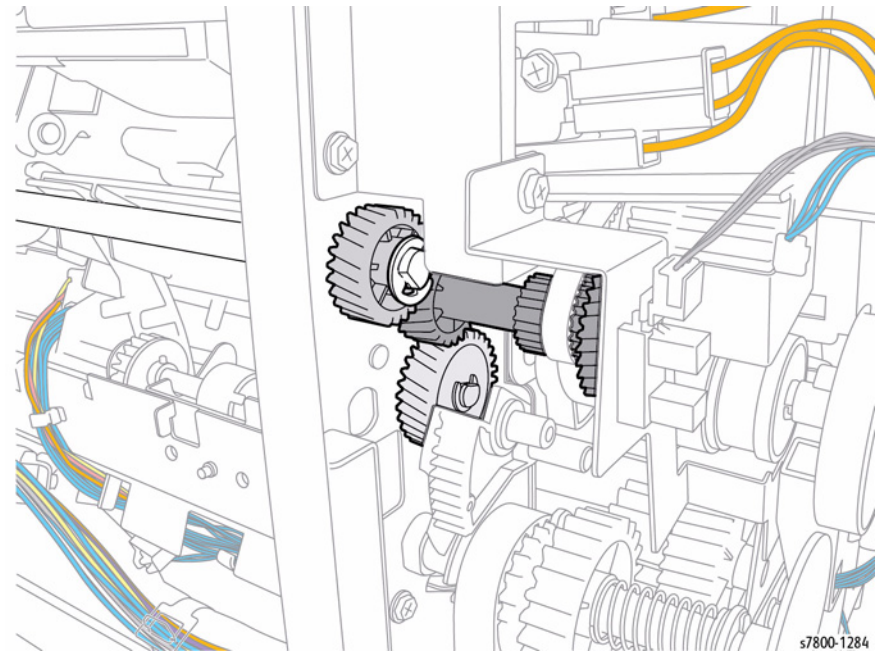


Figure 11 Aligning the Gear

REP 23.27 Front/ Rear Tamper Motor

Parts List on [PL 23.12 Item 6](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Front Cover Assembly ([REP 23.7](#)).
4. Remove the Rear Upper Cover ([REP 23.9](#)).
5. Remove the Stacker Upper Cover ([REP 23.16](#)).
6. Remove the Compiler Tray Assembly ([REP 23.26](#)).
7. Turn the Compiler Tray over.
8. Release the wires from the Wire Guide.
9. Remove 1 screw that secures the Wire Guide.
10. Remove the Wire Guide.
11. Disconnect the Tamper Motor wiring harness connectors [P/J8883](#) and [P/J8884](#).
12. Remove 2 screws that secure the Tamper Motor.
13. Remove the Tamper Motor.

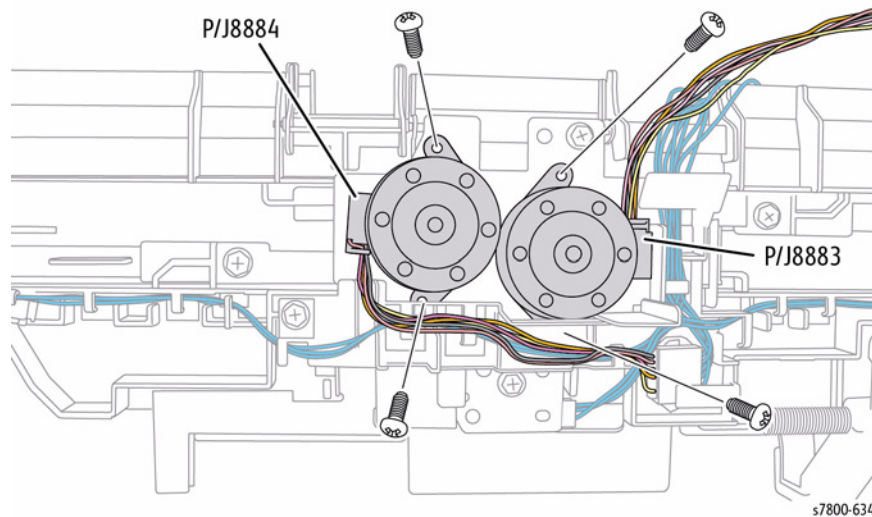


Figure 1 Removing the Tamper Motor

REP 23.28 Front Tamper Home Sensor/ Rear Tamper Home Sensor

Parts List on [PL 23.12 Item 8](#)

Removal

1. If a Booklet Maker Assembly is installed, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Front Cover Assembly ([REP 23.7](#)).
4. Remove the Rear Upper Cover ([REP 23.9](#)).
5. Remove the Stacker Upper Cover ([REP 23.16](#)).
6. Disconnect the wiring harness connector [J8881](#).
7. Release and remove the Rear Tamper Home Sensor.

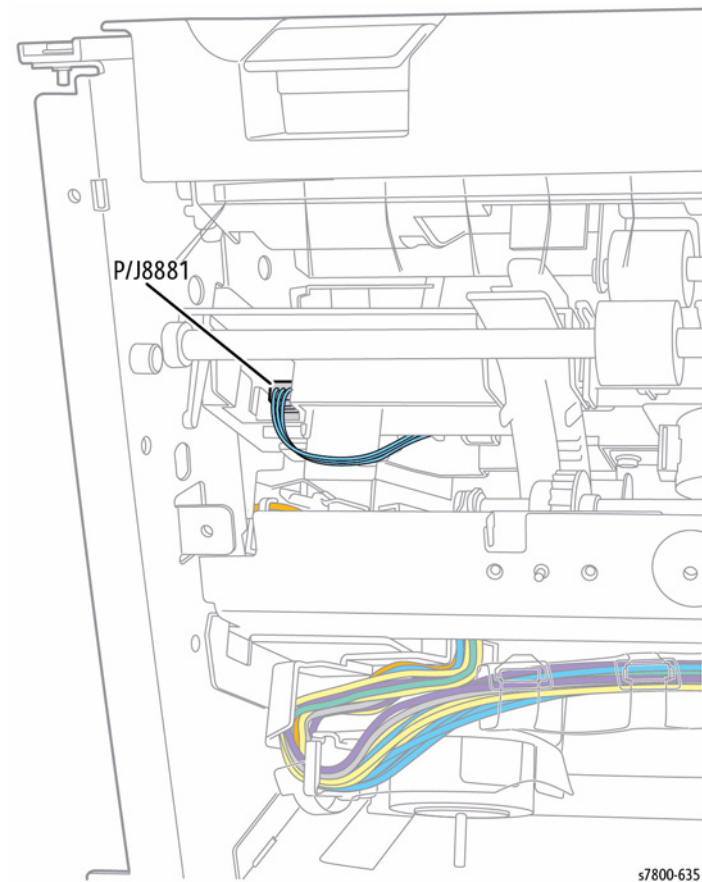


Figure 1 Removing the Tamper Home Sensor

REP 23.29 Compiler Tray No Paper Sensor

Parts List on [PL 23.12 Item 9](#)

Removal

1. Push the Stapler towards the rear.
2. Remove 1 screws that secure the Bracket.

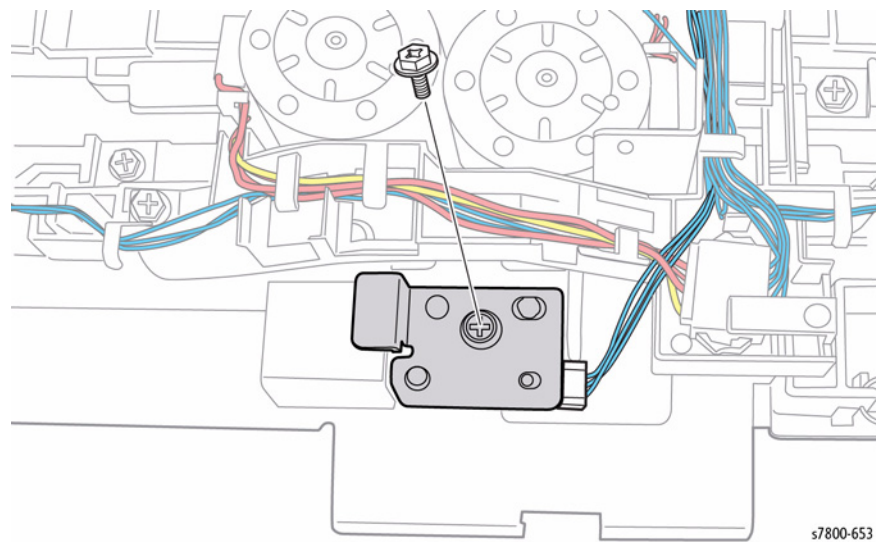


Figure 1 Removing screw

3. Disconnect the wiring harness connector [J8880](#).
4. Remove the Compiler Tray No Paper Sensor.

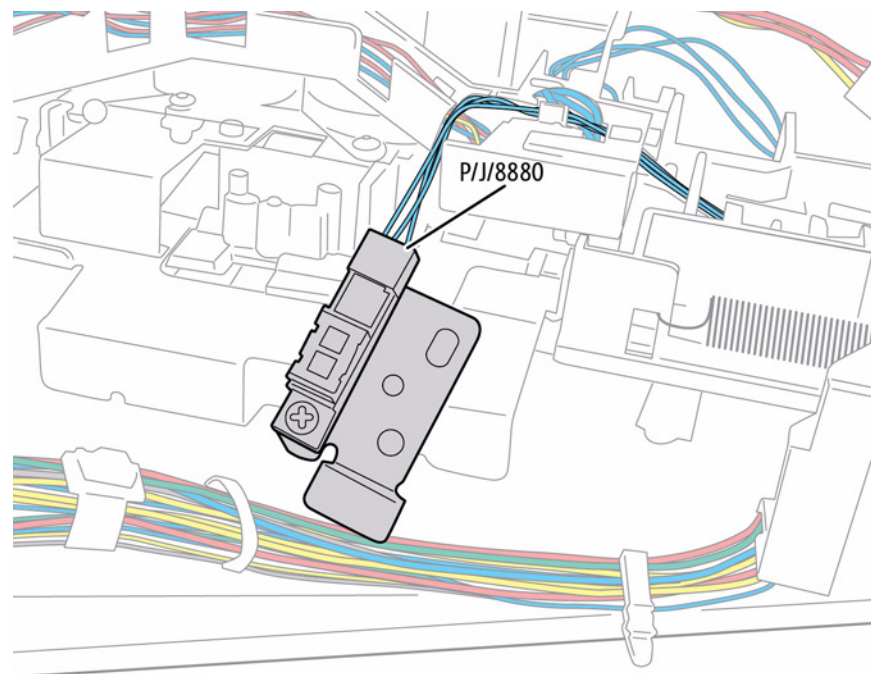


Figure 2 Removing the Compiler Tray No Paper Sensor

REP 23.30 Transport Motor

Parts List on [PL 23.13 Item 1](#)

Removal

1. If the printer has a Booklet Maker Assembly, remove the Booklet Maker Assembly ([REP 23.12](#)).
2. Detach the Finisher ([REP 23.2](#)).
3. Remove the Rear Upper Cover ([REP 23.9](#)).
4. Remove the Eject Motor Assembly ([REP 23.24](#)).
5. Remove the Gears.
6. Remove the Set Clamp Clutch.
7. Remove the Gears/Pulleys.
8. Remove the Belt.

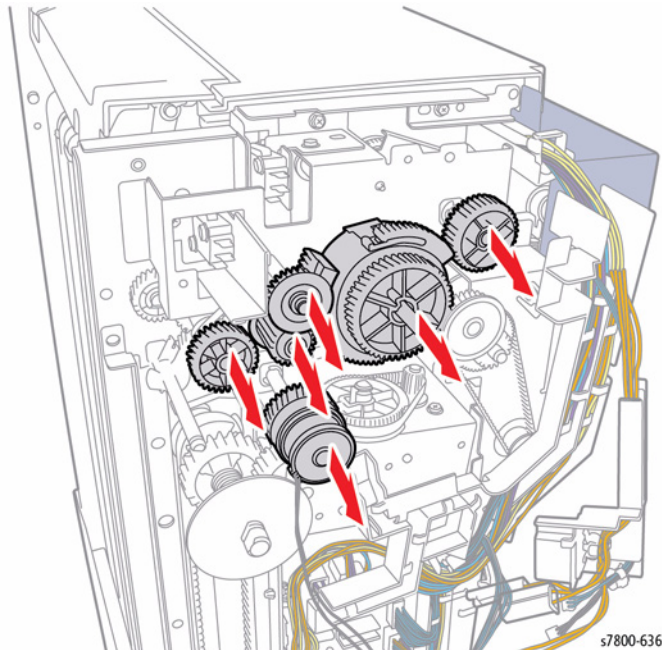


Figure 1 Removing the Gears and Belt

9. Open the Top Cover.
10. Remove 4 screws that secure Bracket.
11. Remove the Bracket.

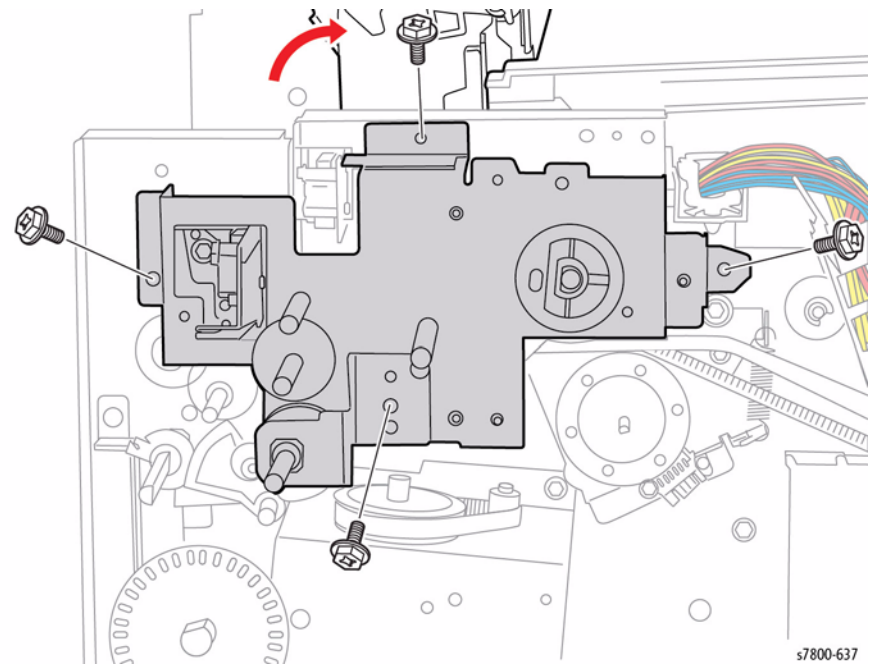


Figure 2 Removing the Bracket

12. Loosen the 2 screws.
13. Remove the Spring.
14. Remove 2 screws that secure the Tension Roller Assembly.
15. Remove the Tension Roller Assembly.

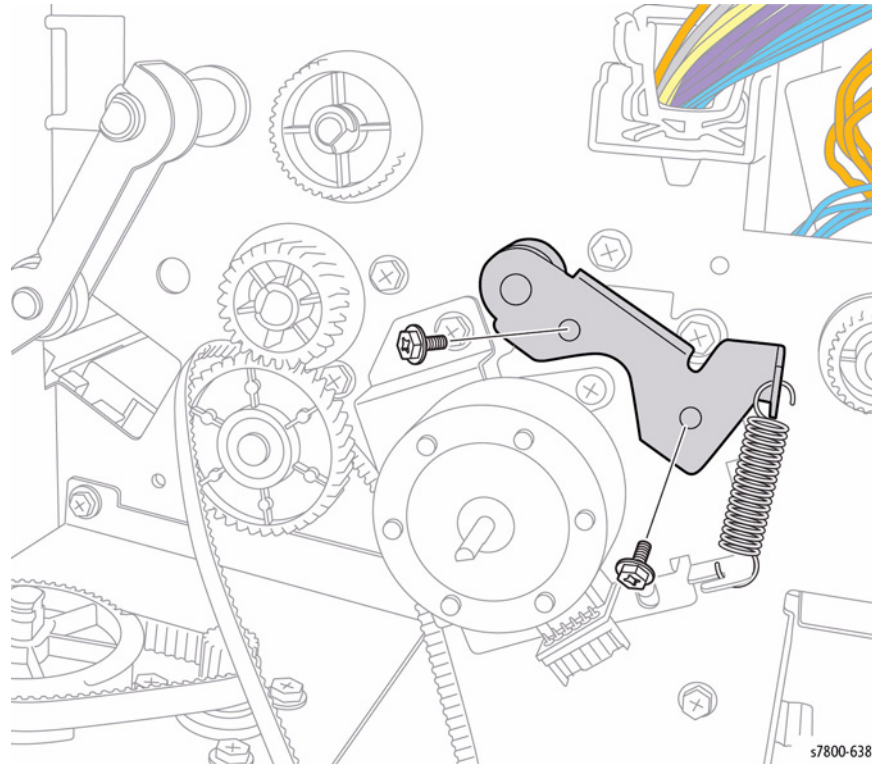


Figure 3 Removing the Tension Roller Assembly

16. Remove 2 screws that secure the Transport Motor.
17. Remove the Transport Motor.

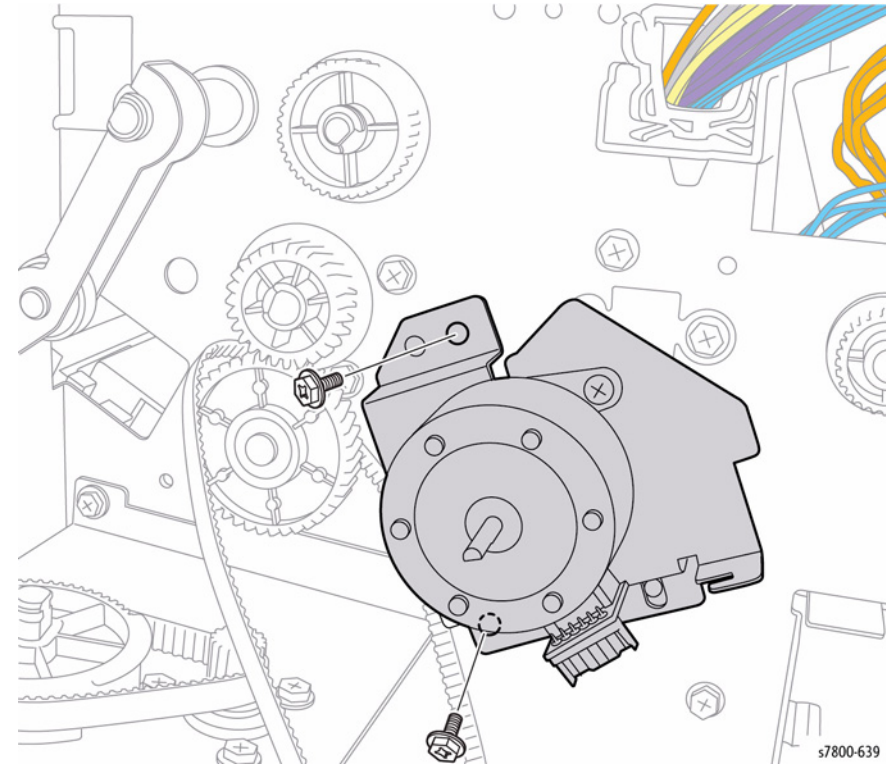


Figure 4 Removing the Transport Motor

Replacement

When installing the Transport Belt, install it as shown in [Figure 5](#).

- Loosely attach the Tension Roller Assembly.
- Attach the Belt, wind the Belt in the direction of the arrow and then secure the Tension Roller Assembly.

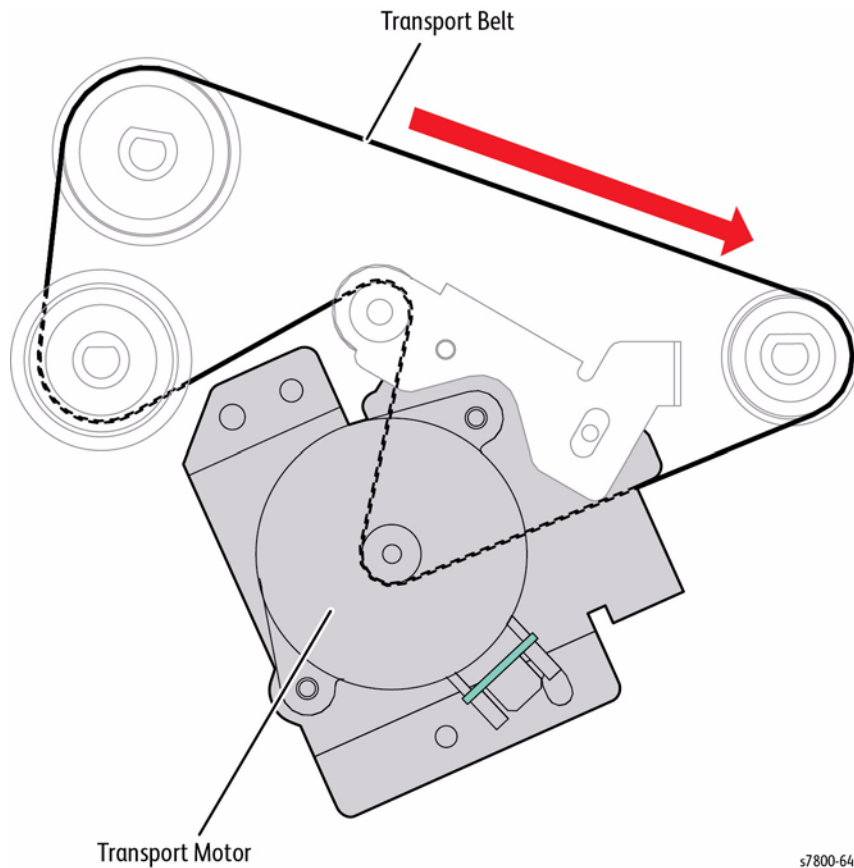


Figure 5 Attaching the Belt

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When installing the Bracket, affix the tab of the Set Clamp Clutch to the position as shown in [Figure 6](#).

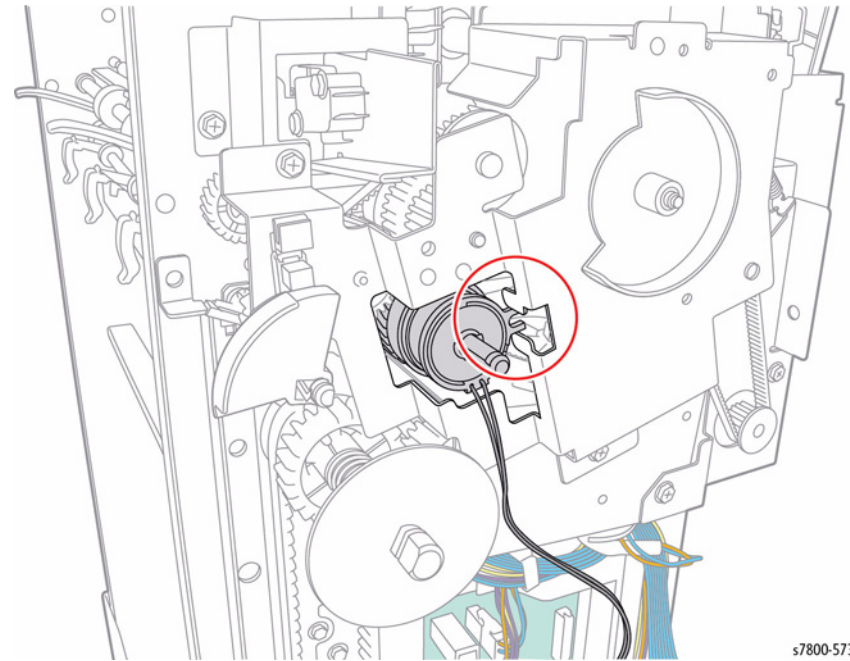


Figure 6 Installing the Bracket

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REP 23.31 Transport Belt

Parts List on [PL 23.13 Item 10](#)

Removal

1. Detach the Finisher ([REP 23.2](#)).
2. Remove the Transport Motor ([REP 23.30](#)).
3. Remove the E-Ring and Gear.
4. Remove the Transport Belt.

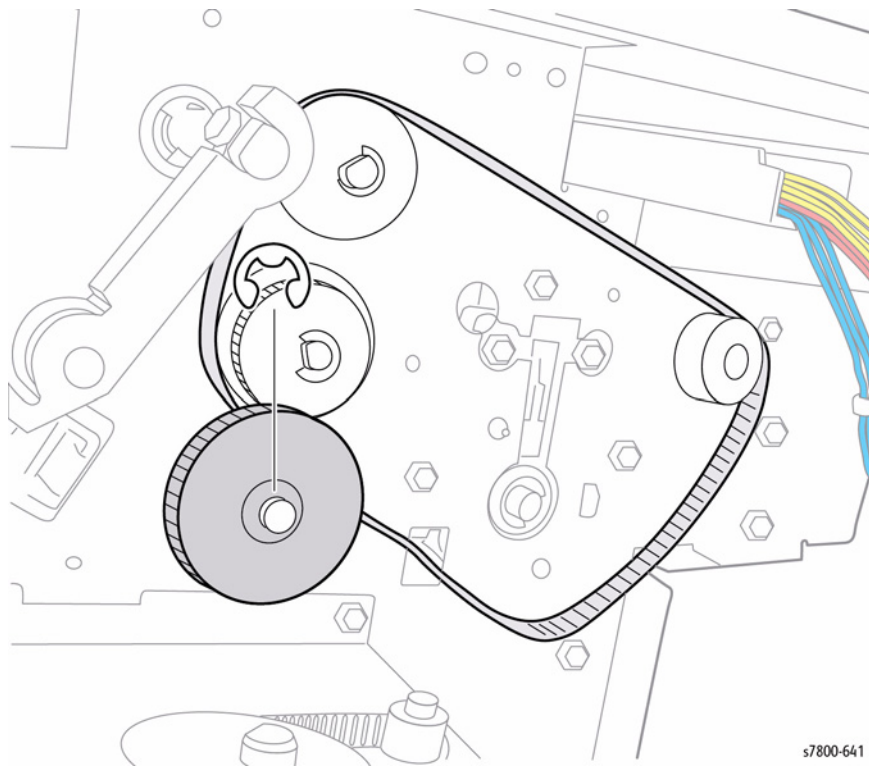


Figure 1 Removing the Transport Belt

Replacement

When installing the Transport Belt, install it as shown in [Figure 2](#).

- Loosely attach the Tension Roller Assembly.
- Attach the Belt, wind the Belt in the direction of the arrow and then secure the Tension Roller Assembly.

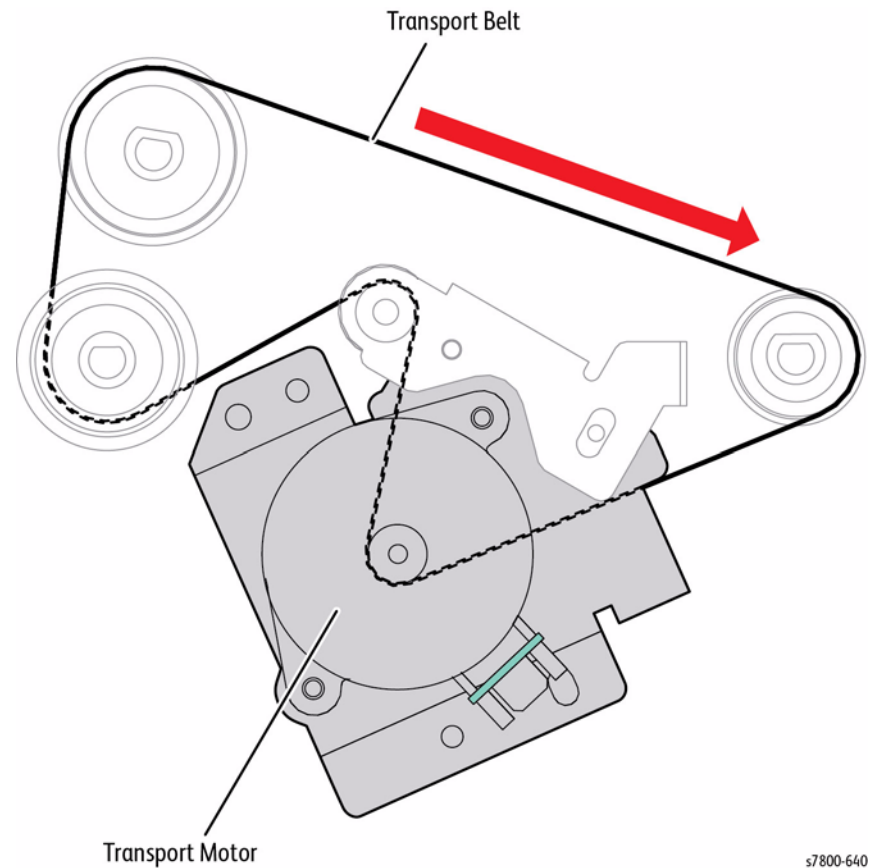
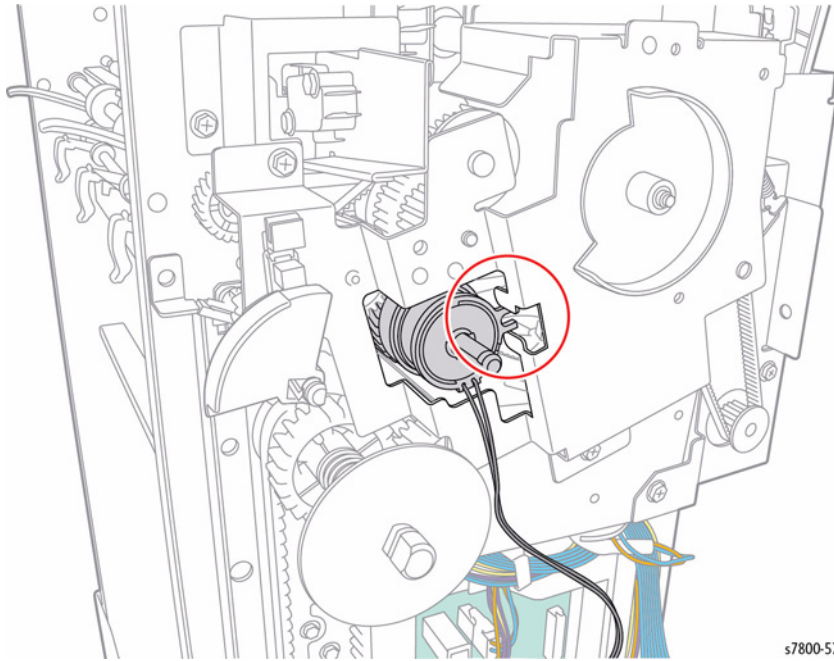


Figure 2 Attaching the Belt

When installing the Bracket, affix the tab of the Set Clamp Clutch to the position as shown in Figure 3.



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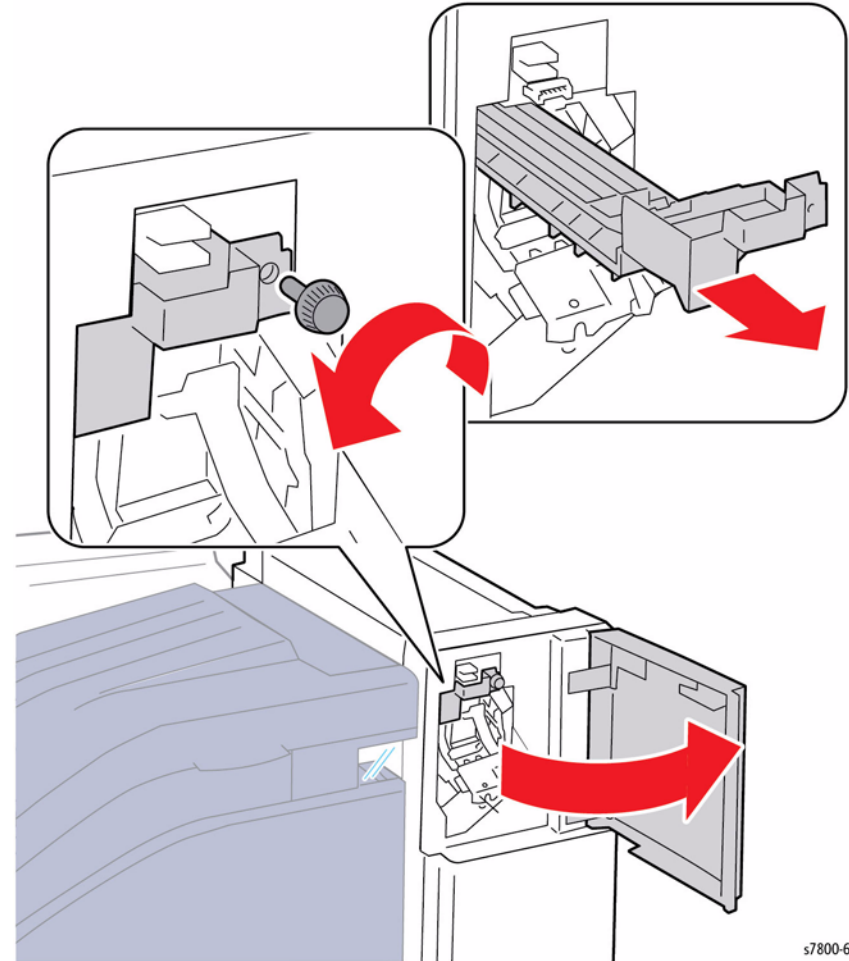
Figure 3 Installing the Bracket

REP 23.32 Chute Assembly

Parts List on [PL 23.14 Item 16](#)

Removal

1. Open the Finisher Front Door.
2. Remove the Thumb Screw.
3. Pull the Chute Assembly out to remove.



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Figure 1 Removing the Chute Assembly

REP 23.33 Crease Assembly

Parts List on [PL 23.14 Item 21](#)

Removal

1. Open the Finisher Front Door.
2. Remove the Connector Cover.
3. Disconnect the wiring harness connector [P/J8903](#).
4. Remove the Thumb Screw.

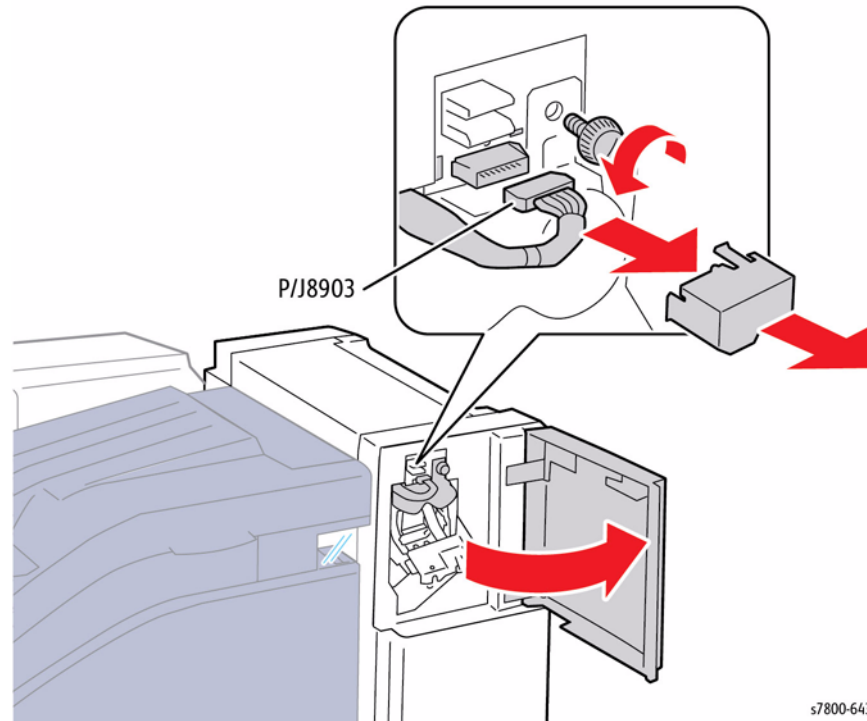


Figure 1 Removing the Connector Cover, and Thumb Screw

5. Pull the Folder Assembly out to remove.

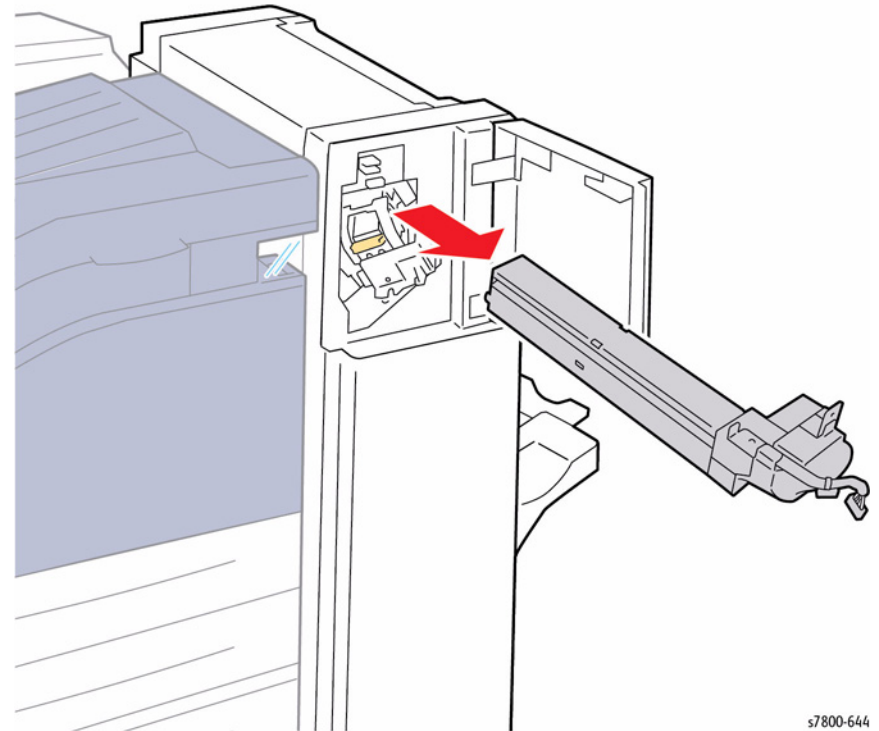


Figure 2 Removing the Folder Assembly

REP 23.34 Finisher Main PWB

Parts List on [PL 23.16 Item 2](#)

Removal

1. Remove the Rear Upper Cover ([REP 23.9](#)).
2. Disconnect the 9 wiring harness connectors (P/J#).
3. Remove 5 screws that secure the Finisher Main PWB.
4. Remove the Finisher Main PWB.

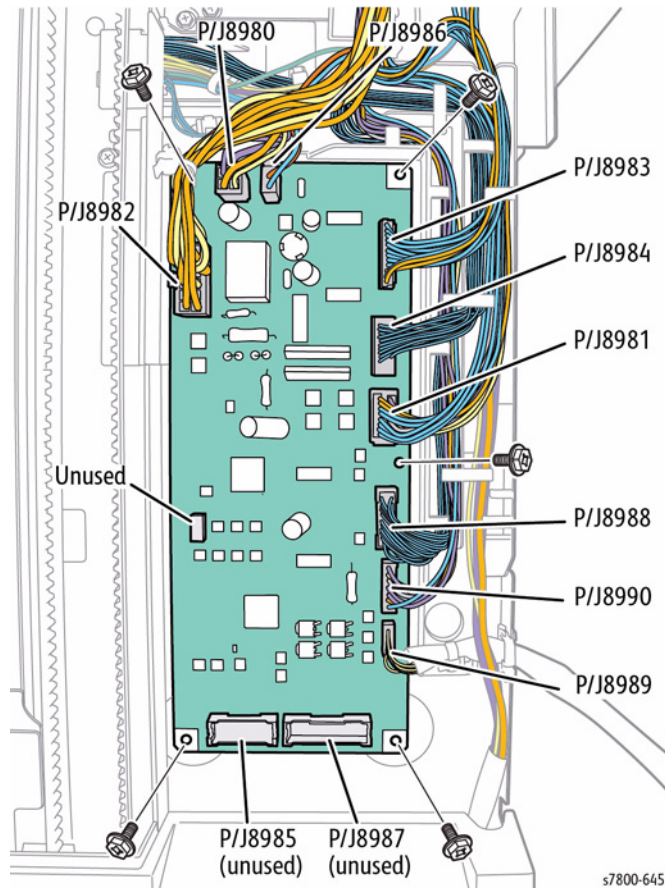


Figure 1 Removing the Finisher Main PWB

REP 23.35 Finisher LVPS

Parts List on [PL 23.16 Item 17](#)

Removal

1. Remove the Rear Lower Cover ([REP 23.8](#)).
2. Disconnect the 2 wiring harness connectors [P/J590](#) and [P/J591](#).
3. Loosen 1 screw that secures the Finisher LVPS Bracket.
4. Remove 1 screw that secures the Finisher LVPS Bracket.
5. Slide the LVPS Bracket together with the LVPS upward to remove.

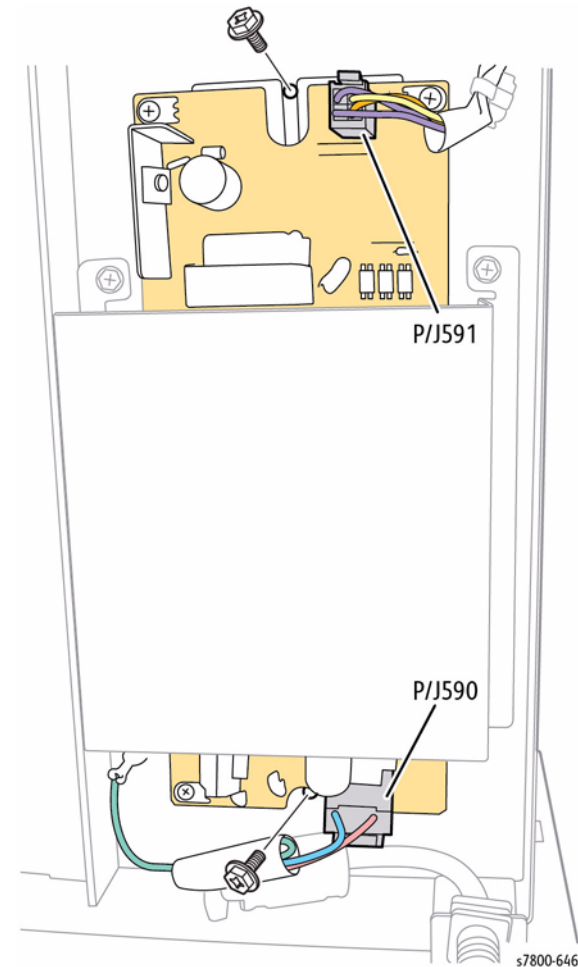


Figure 1 Removing the Finisher LVPS and Bracket

6. Remove 4 screws that secure the Finisher LVPS.
7. Remove the Finisher LVPS.

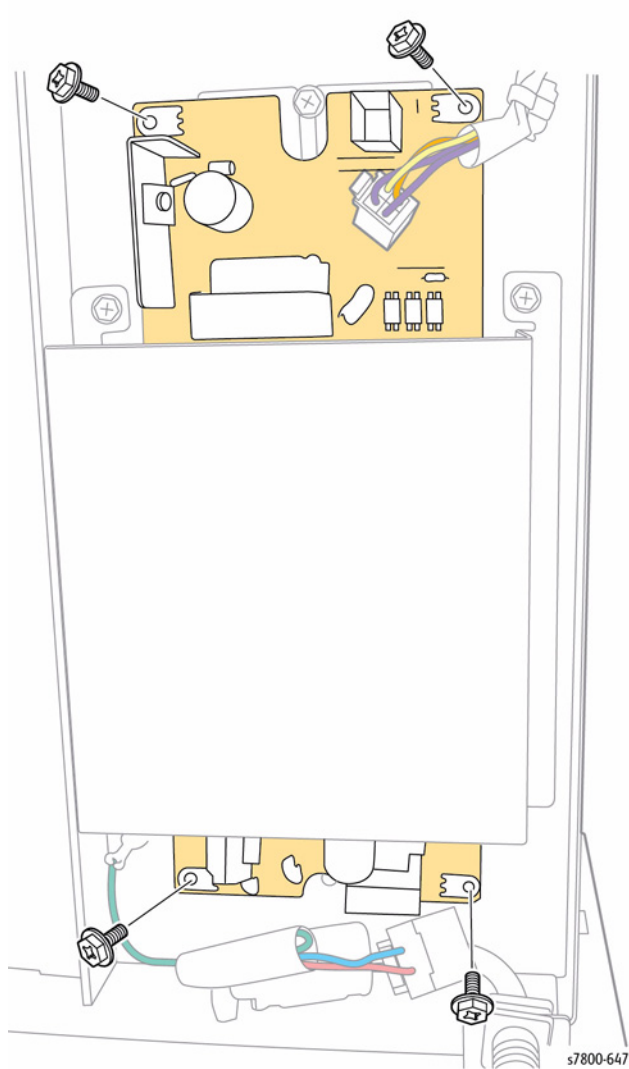


Figure 2 Removing the Finisher LVPS

REP 23.36 Booklet Maker Front Cover

Parts List on [PL 23.17 Item 3](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Remove 1 screw that secures the Booklet Maker Front Cover on the left side.
3. Remove 2 screws that secure the Booklet Maker Front Cover on the right side.
4. Slide the Booklet Maker Front Cover to remove.

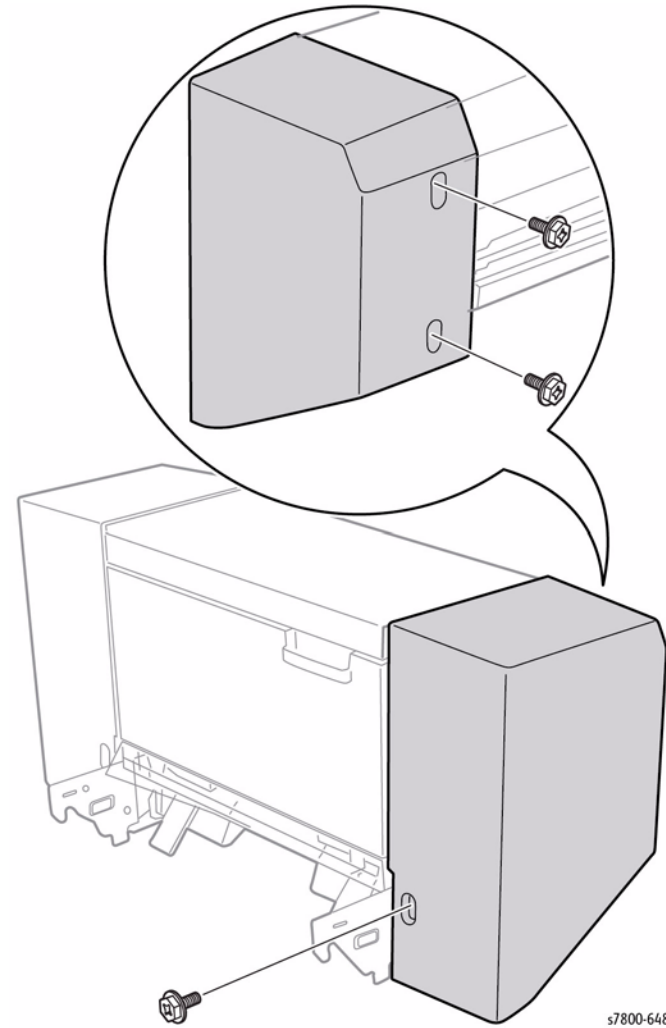


Figure 1 Removing the Booklet Maker Front Cover

REP 23.37 Booklet Maker Rear Cover

Parts List on [PL 23.17 Item 4](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Remove 2 screws (tapped) that secure the Booklet Maker Rear Inner Side Cover.
3. Remove the Booklet Maker Side Cover.

4. Remove the Booklet Maker PWB Cover ([REP 23.40](#)).
5. Remove 1 screw that secures the Booklet Maker Rear Cover.
6. Slide the Booklet Maker Rear Cover to remove.

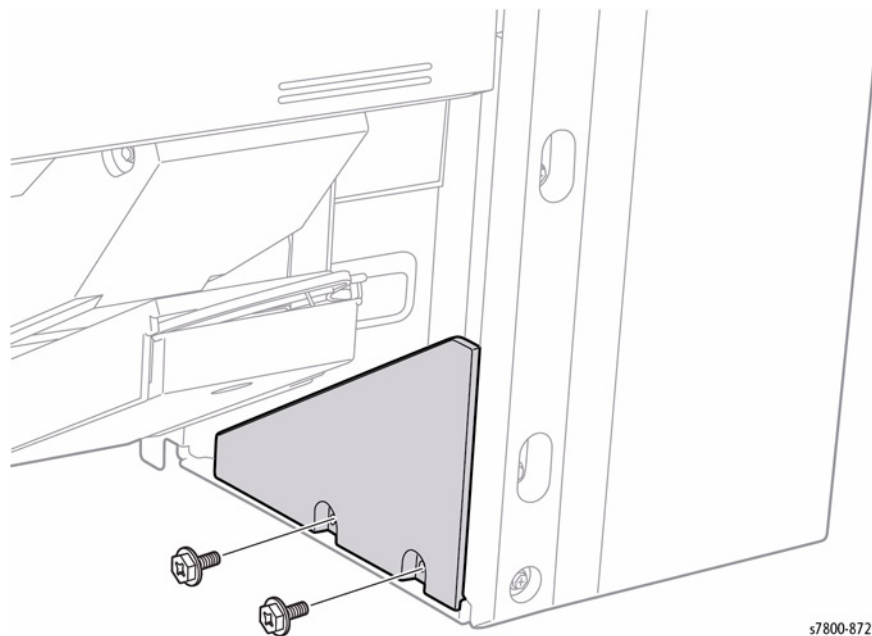


Figure 1 Removing the Booklet Maker Side Cover

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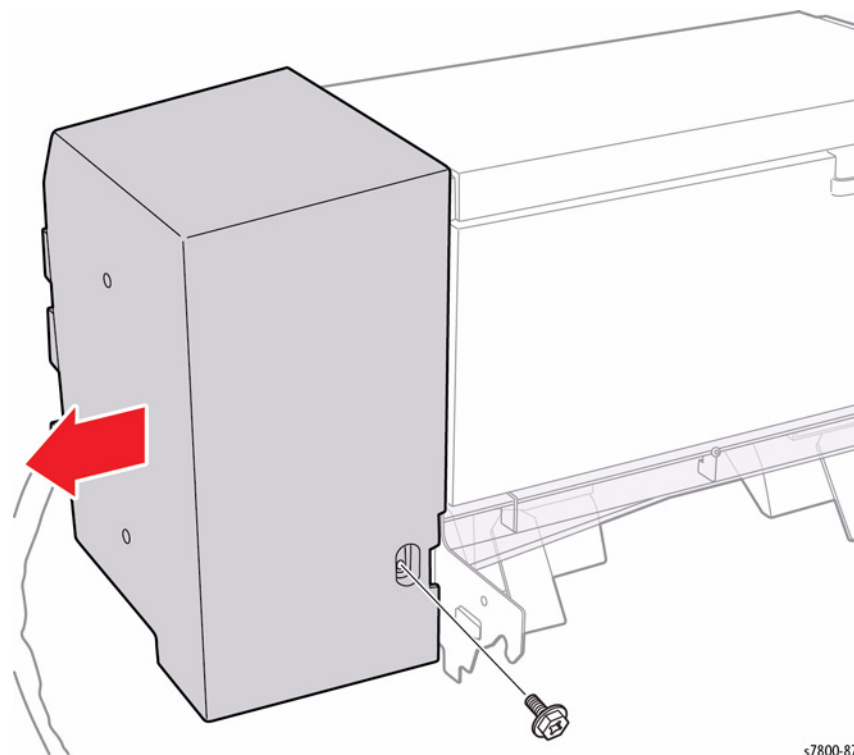


Figure 2 Removing the Booklet Maker Rear Cover

s7800-873

REP 23.38 Booklet Maker Top Cover

Parts List on [PL 23.17 Item 5](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Remove the Booklet Maker Front Cover ([REP 23.36](#)).
3. Remove the Booklet Maker Rear Cover ([REP 23.37](#)).
4. Reattach the Booklet Maker to the Finisher.
5. Remove 4 screws that secure the Booklet Maker Top Cover.
6. Lift the Booklet Maker Top Cover to remove.

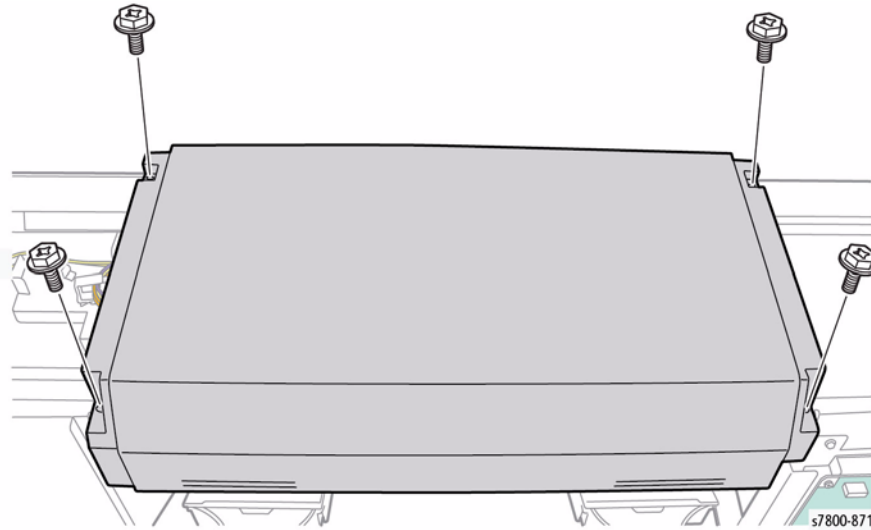


Figure 1 Removing the Booklet Maker Top Cover

REP 23.39 Booklet Maker Side Cover

Parts List on [PL 23.17 Item 6](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Remove 2 screws (tapped) that secure the Booklet Maker Rear Inner Side Cover.
3. Remove the Booklet Maker Side Cover.

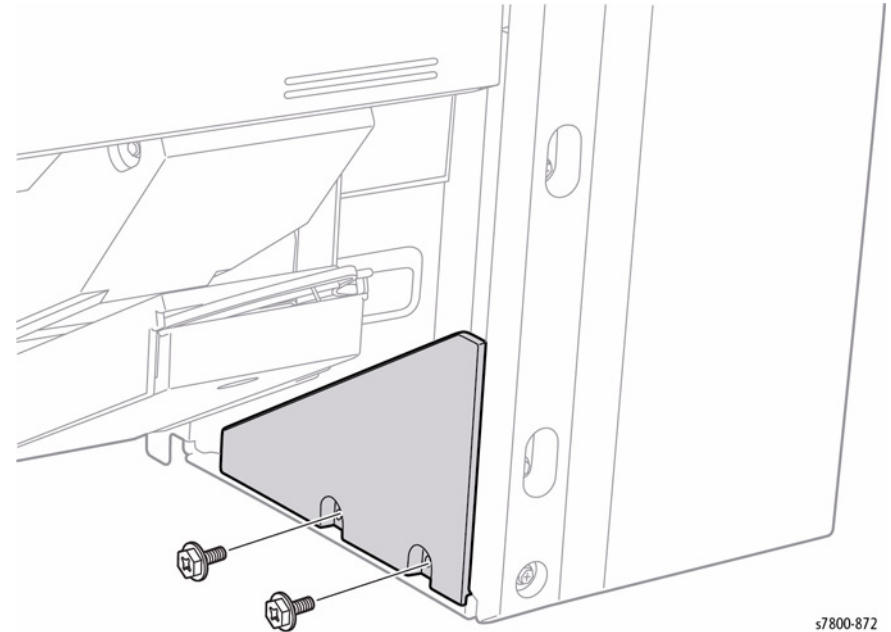


Figure 1 Removing the Booklet Maker Side Cover

REP 23.40 Booklet Maker Rear PWB Cover

Parts List on [PL 23.17 Item 7](#)

Removal

1. Remove 2 screws (tapped) and 2 screws that secure the Booklet Maker PWB Cover.
2. Slide the Booklet Maker Rear PWB Cover to remove.

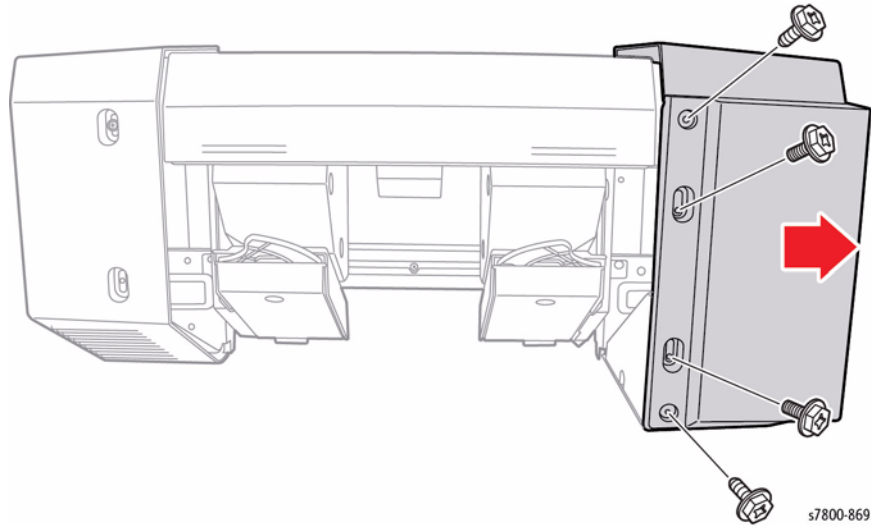


Figure 1 Removing the Booklet Maker Rear PWB Cover

REP 23.41 Booklet Maker Left Cover

Parts List on [PL 23.17 Item 8](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Open the Booklet Maker Left Cover.
3. Slide the Booklet Maker Left Cover out to remove.

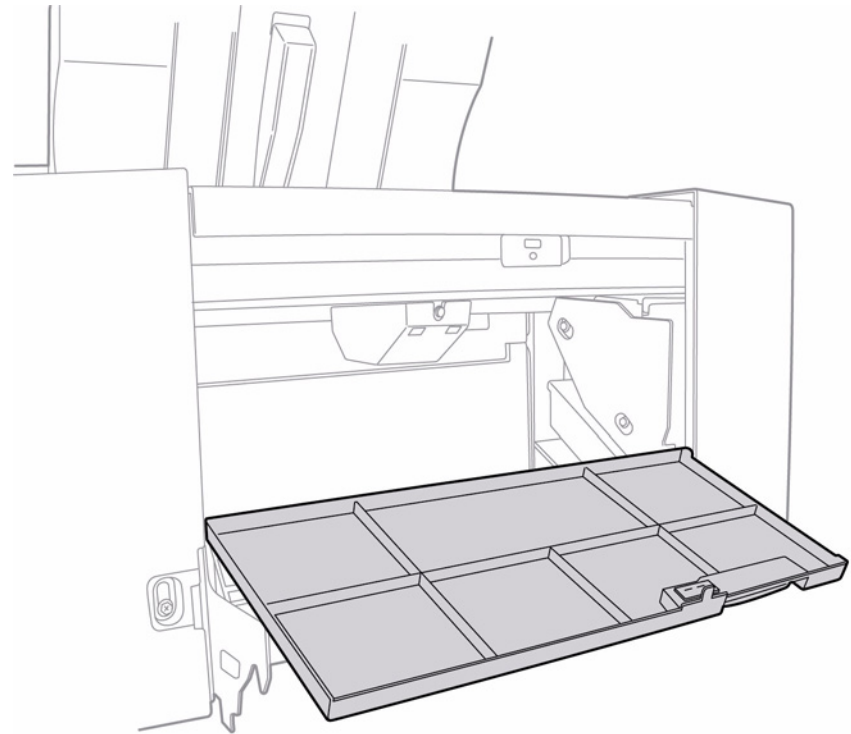


Figure 1 Removing the Booklet Maker Left Cover

REP 23.42 Booklet Stapler Move Motor Assembly

Parts List on [PL 23.18 Item 4](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Remove the Booklet Maker Front Cover ([REP 23.36](#)).
3. Remove the Booklet Maker PWB Cover ([REP 23.29](#)).
4. Remove the Booklet Maker Rear Cover ([REP 23.37](#)).
5. Remove the Booklet Maker Top Cover ([REP 23.38](#)).
6. Remove the Harness Assembly ([REP 23.46](#)).
7. Remove the E-Clip and Gear.

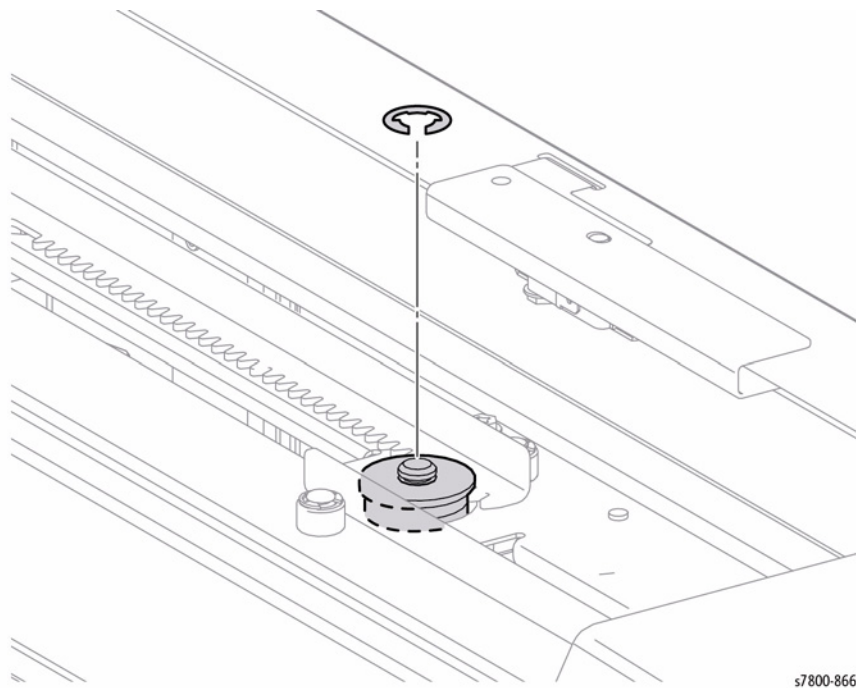


Figure 1 Removing the E-Clip and Gear

8. Remove 1 screw that secures the Motor Cover.
9. Slide the Motor Cover to remove.

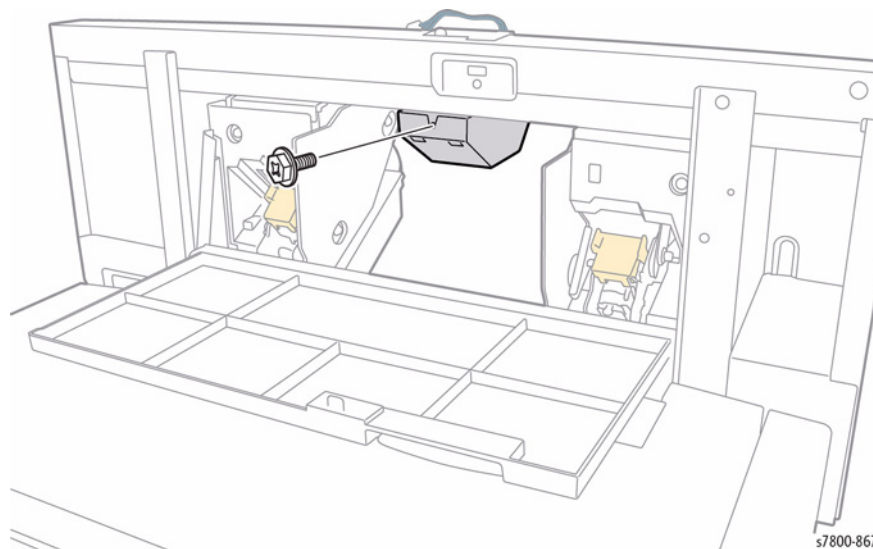


Figure 2 Removing the Motor Cover

10. Remove 3 screws that secure the Booklet Stapler Move Motor Assembly.
11. Remove the Booklet Stapler Move Motor Assembly

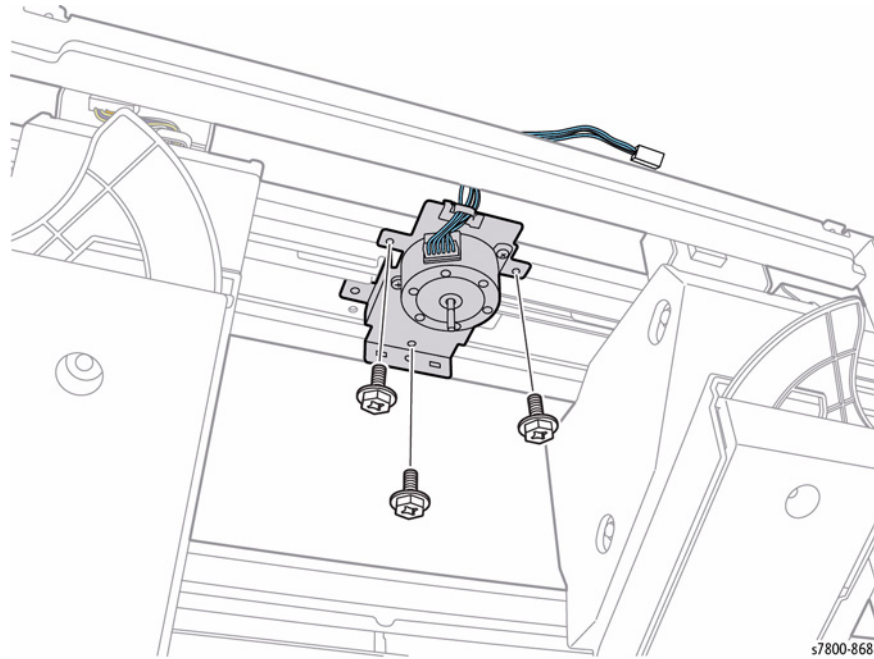


Figure 3 Removing the Booklet Maker Stapler Motor Assembly

Replacement

When securing the Front Rack Gear and the Rear Rack Gear, align the edges of the Front Rack Gear and the Rear Rack Gear to the Marks, then make sure that the Marks are at the positions indicated in Figure 4 before tightening the screws (x4) (Figure 5).

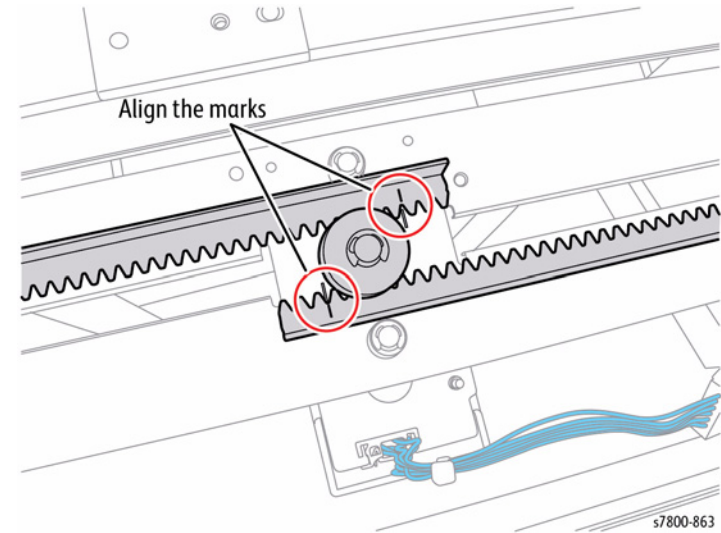


Figure 4 Aligning the Gears

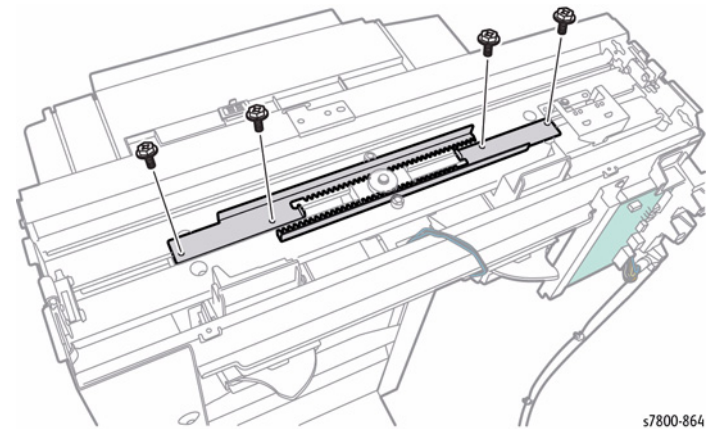


Figure 5 Screw Locations

Be sure the prongs sit in the slots of the seam.

REP 23.43 Left Rear Rack, Right Rear Rack

Parts List on [PL 23.18 Item 19](#), [PL 23.18 Item 26](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Remove the Booklet Maker Front Cover ([REP 23.36](#)).
3. Remove the Booklet Maker PWB Cover ([REP 23.29](#)).
4. Remove the Booklet Maker Rear Cover ([REP 23.37](#)).
5. Remove the Booklet Maker Top Cover ([REP 23.38](#)).
6. Remove the Harness Assembly ([REP 23.42](#)).
7. Remove the E-Clip and Gear.
8. Remove 2 screws that secure the Front Rack Gear.
9. Remove the Left Rear Rack.

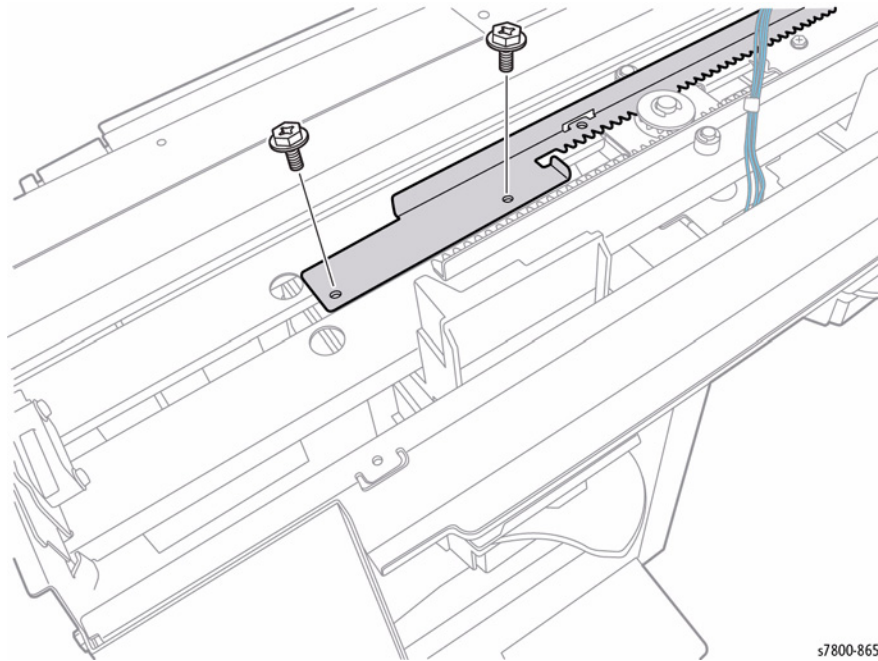


Figure 1 Removing the Left Rear Rack

10. Move the Left Rear Rack towards the left.
11. Remove 2 screws that secure the Right Rear Rack.
12. Remove the Right Rear Rack.

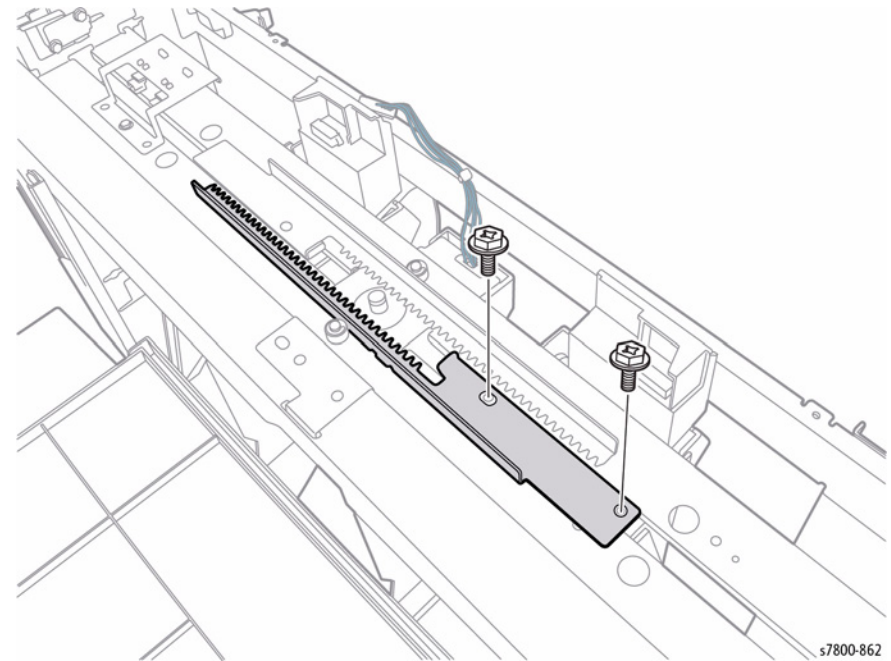


Figure 2 Removing the Right Rear Rack

Replacement

When securing the Front Rack Gear and the Rear Rack Gear, align the edges of the Left Rear Rack and the Right Rear Rack to the Marks, then make sure that the Marks are at the positions indicated in [Figure 3](#) before tightening the screws (x4) ([Figure 4](#)).

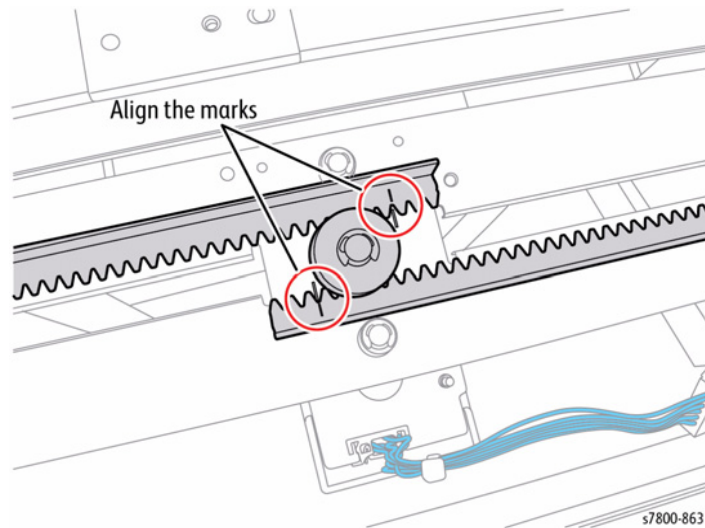


Figure 3 Aligning the Gears

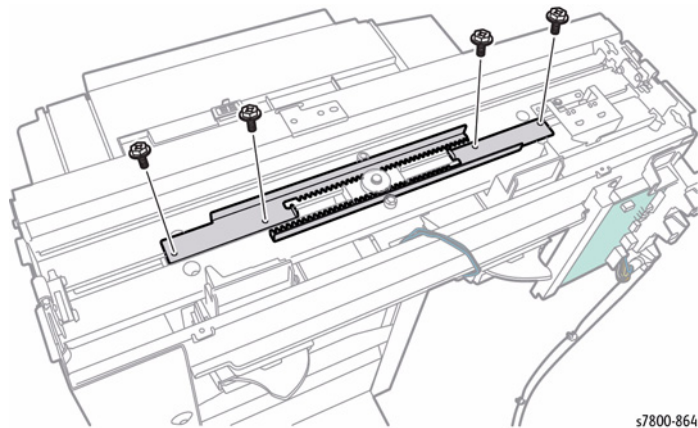


Figure 4 Screw Locations

Be sure the prongs sit in the slots of the seam.

REP 23.44 Booklet Front Stapler Assembly/ Booklet Rear Stapler Assembly

Parts List on [PL 23.19 Item 1](#), [PL 23.20 Item 1](#)

Removal

1. Remove the Left Rear Rack and the Right Rear Rack (REP 23.43).
2. Move the screws that secure the Booklet Front Stapler Assembly until they are positioned under the holes of the Frame as shown in [Figure 1](#) and [Figure 2](#).
3. Remove 4 screws that secure the Booklet Front Stapler Assembly.

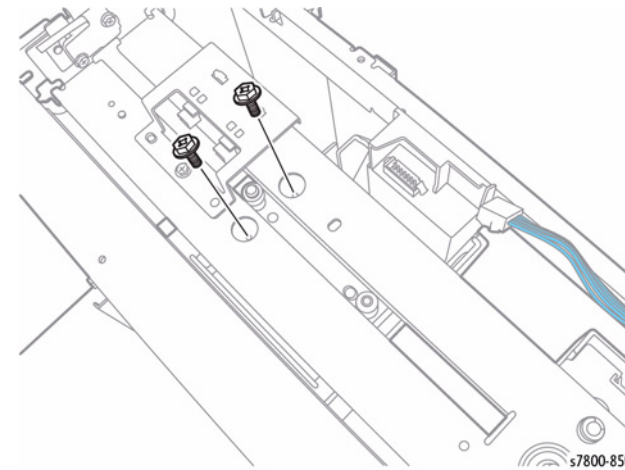


Figure 1 Removing screws

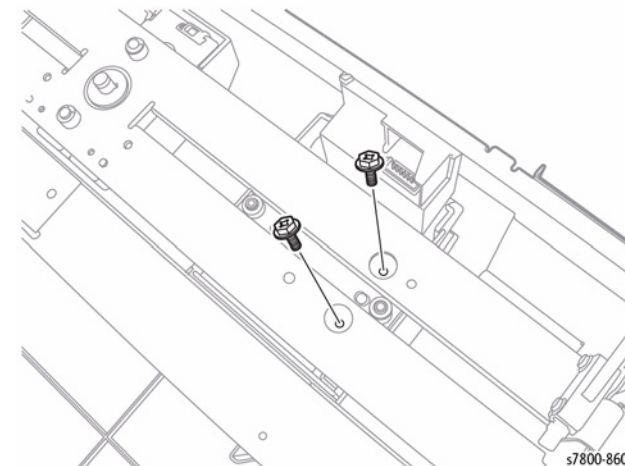


Figure 2 Removing screws

4. Remove the Booklet Front Stapler Assembly.

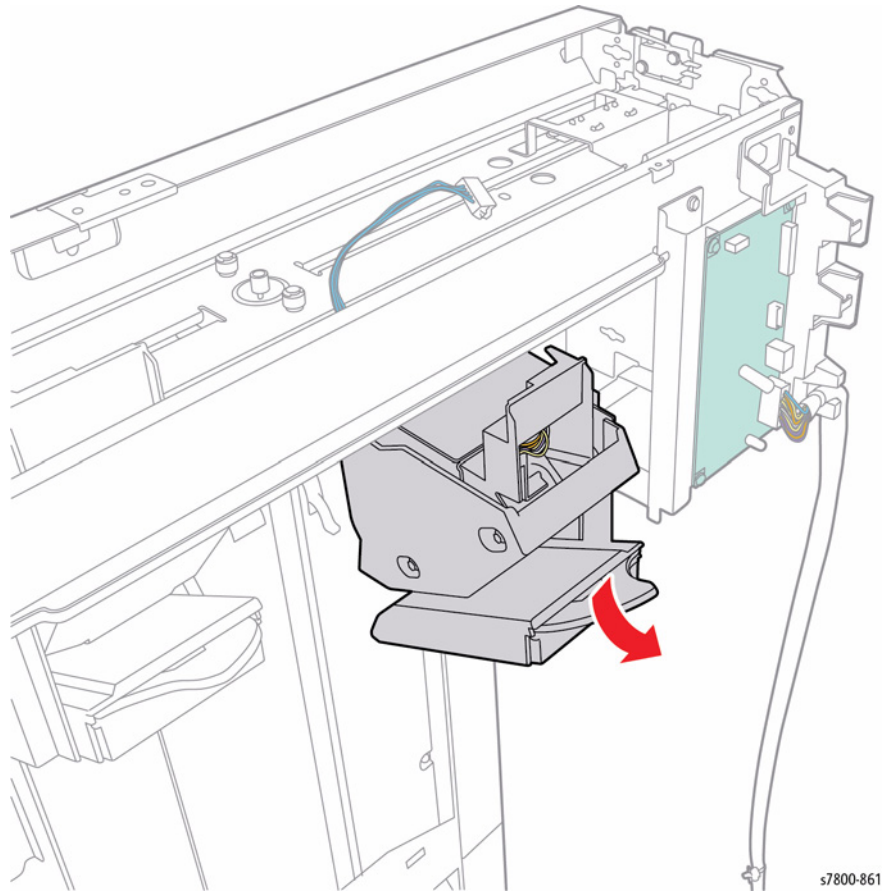


Figure 3 Removing the Booklet Stapler Assembly (Front/Rear)

REP 23.45 Harness Assembly

Parts List on [PL 23.21](#)

Removal

1. Remove the Booklet Maker Assembly from the Finisher ([REP 23.12](#)).
2. Remove the Booklet Maker Front Cover ([REP 23.36](#))
3. Remove the Booklet Maker PWB Cover ([REP 23.40](#)).
4. Remove the Booklet Maker Rear Cover ([REP 23.37](#)).
5. Remove the Booklet Maker Top Cover ([REP 23.38](#)).
6. Disconnect the wiring harness connectors (x4) [J8982](#), [P/J8983](#), [J8984](#), and [P8985](#) from the Booklet PWB Assembly.
7. Release the wiring harness from the Harness Guide.

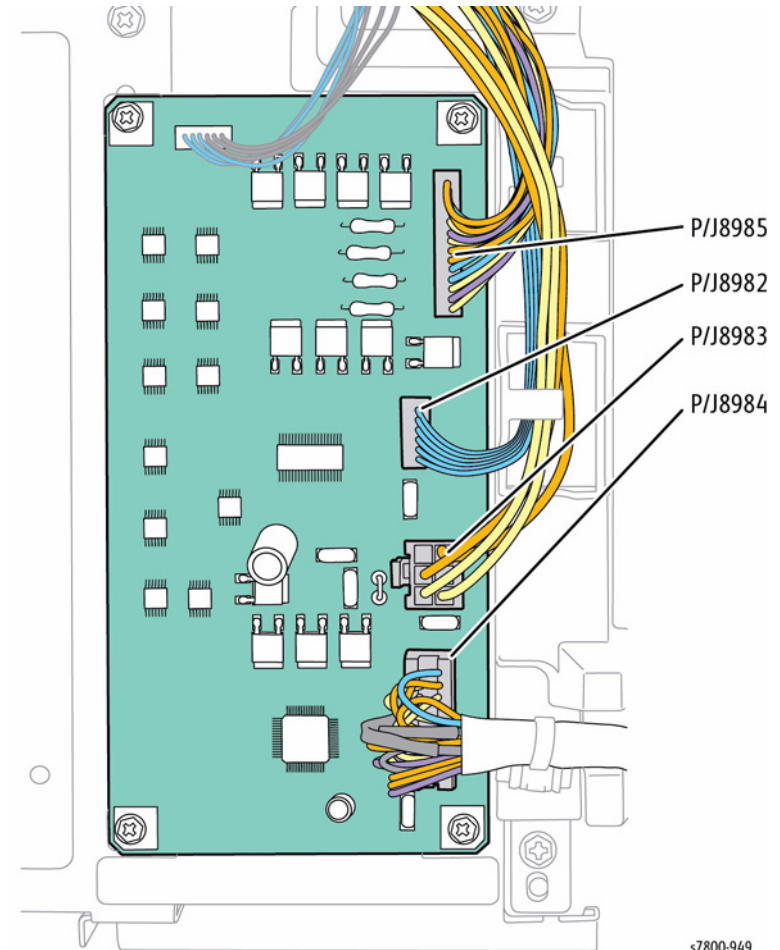


Figure 1 Disconnecting wiring harness connectors

8. Remove 1 screw that secures the Booklet Stapler Front Safety Switch.
9. Remove the Booklet Stapler Front Safety Switch.

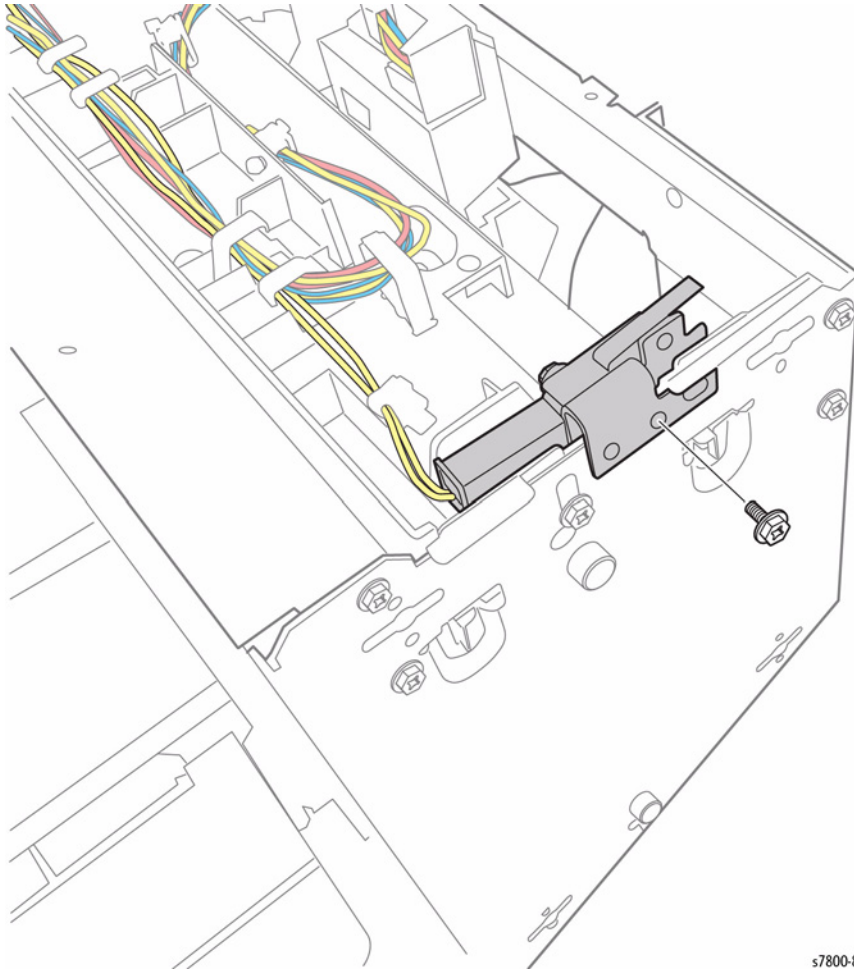


Figure 2 Removing the Booklet Stapler Front Safety Switch

10. Remove 1 screw that secures the Booklet Stapler Rear Safety Switch.
11. Remove the Booklet Stapler Rear Safety Switch.

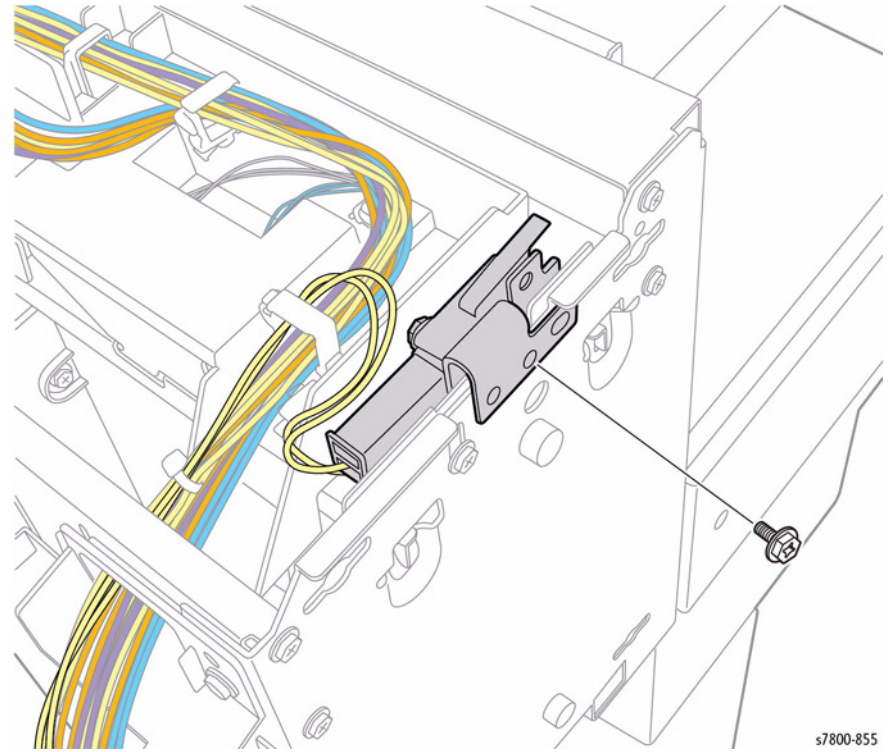


Figure 3 Removing the Booklet Stapler Rear Safety Switch

12. Disconnect the wiring harness connectors P/J8892 and P/J8893.
13. Remove the Clamps and Harness Guides.

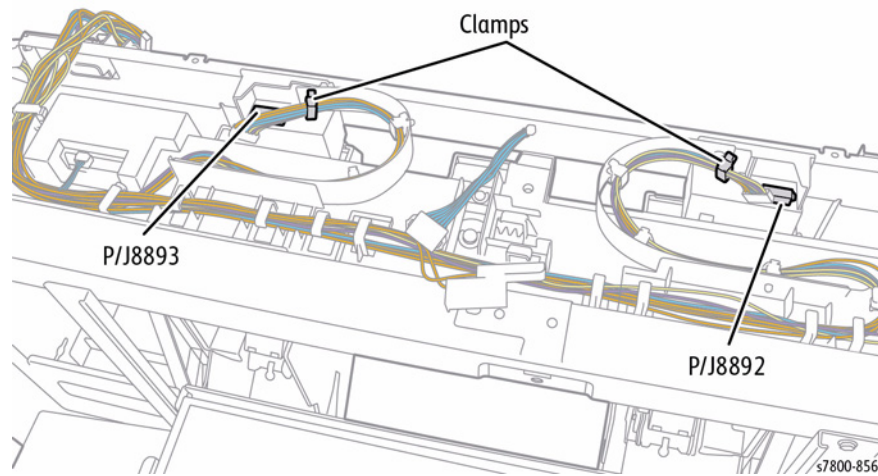


Figure 4 Removing the Clamps and Harness Guides

14. Remove 1 screw that secures the Booklet Maker Stapler Cover Interlock Switch.
15. Remove the Booklet Maker Stapler Cover Interlock Switch.
16. Disconnect the wiring harness connector J8899.
17. Release the harness from the Harness Guide.
18. Free the Clamp and release the harness.

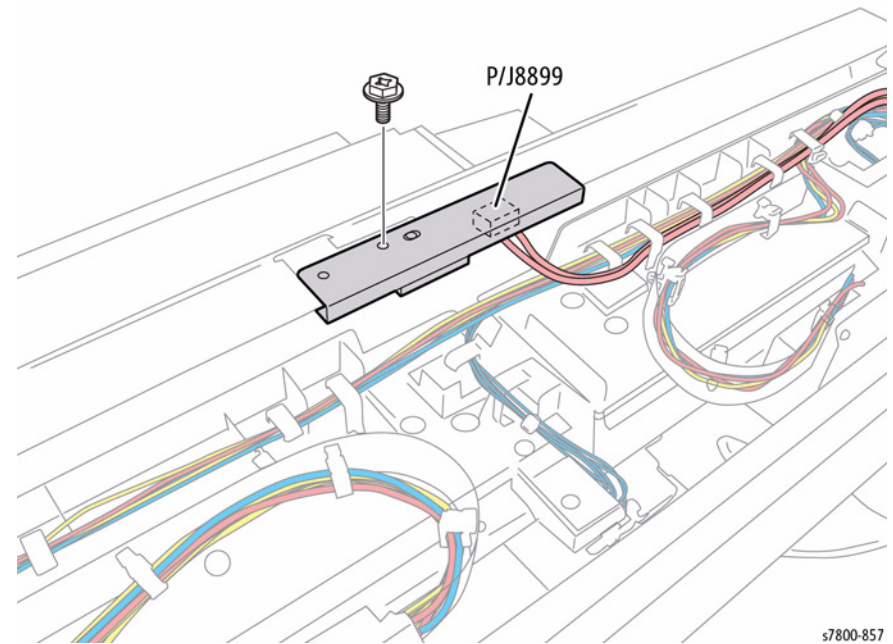


Figure 5 Removing the Booklet Stapler Cover Interlock Switch and releasing the harness

19. Remove 2 screws that secure the Front Harness Guide.
20. Remove 2 screws that secure the Rear Harness Guide.
21. Pass the harness through the hole and simultaneously remove the Front Harness Guide and Rear Harness Guide.

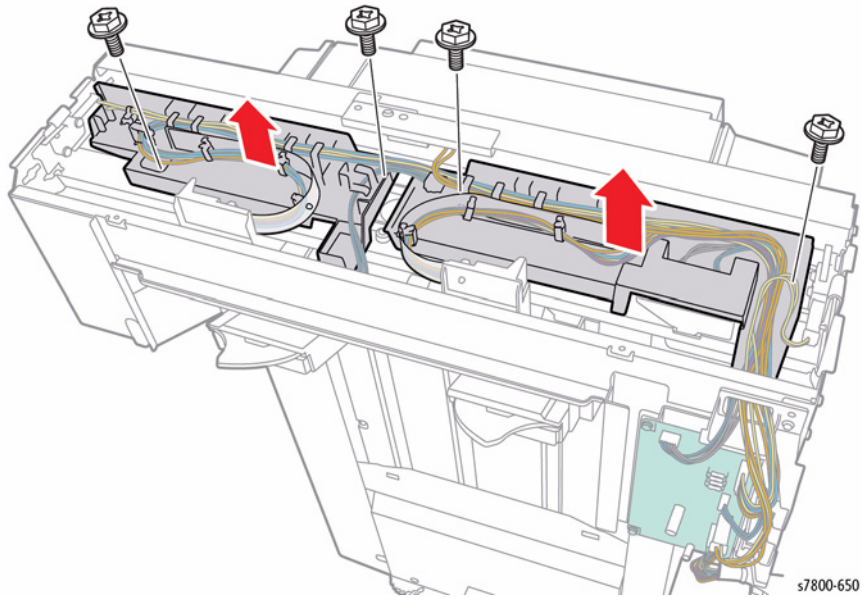


Figure 6 Removing the Front and Rear Harness Guides

REP 23.46 Booklet Maker PWB

Parts List on [PL 23.21 Item 4](#)

Removal

1. Remove the Booklet Maker PWB Cover (REP 23.40).
2. Disconnect the wiring harness connectors (x4) J8982, P/J8983, J8984, and P8985 from the Booklet Maker PWB.
3. Remove 4 screws that secure the Booklet Maker PWB.
4. Remove the Booklet Maker PWB.

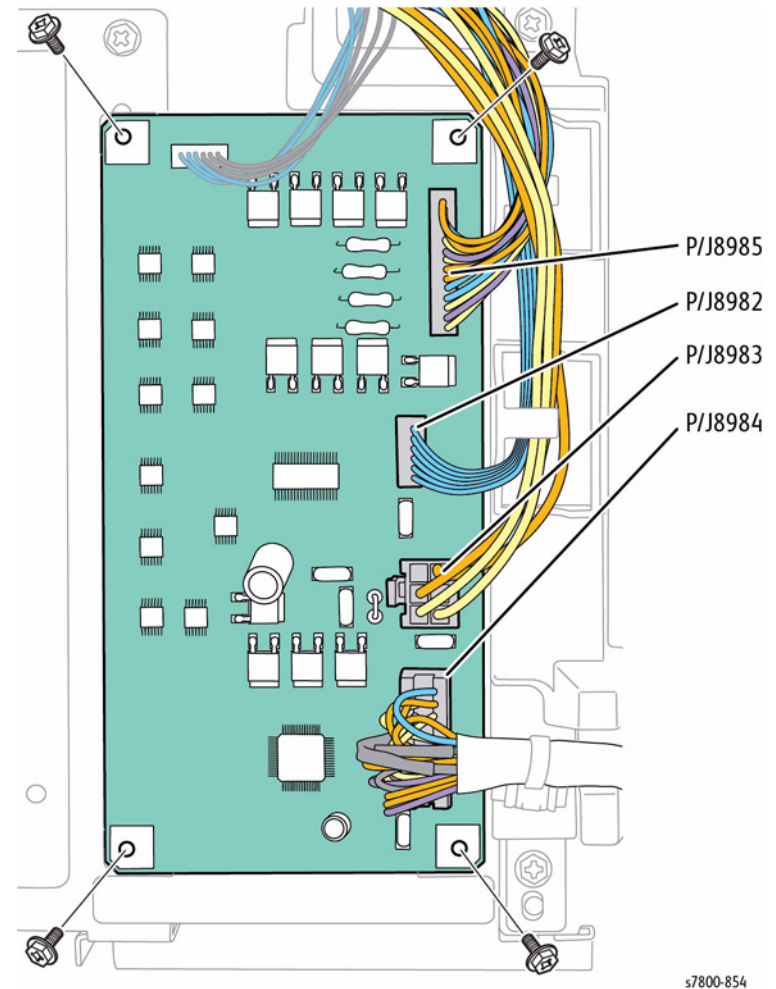


Figure 1 Removing the Booklet Maker PWB

REP 24.1 Horizontal Transport Assembly

Parts List on [PL 24.2 Item 1](#)

Removal

1. Remove the Connector Cover.
2. Release the wiring harness from the Finisher.
3. Disconnect the wiring harness connector [J8444](#) from the Finisher [P8444](#).

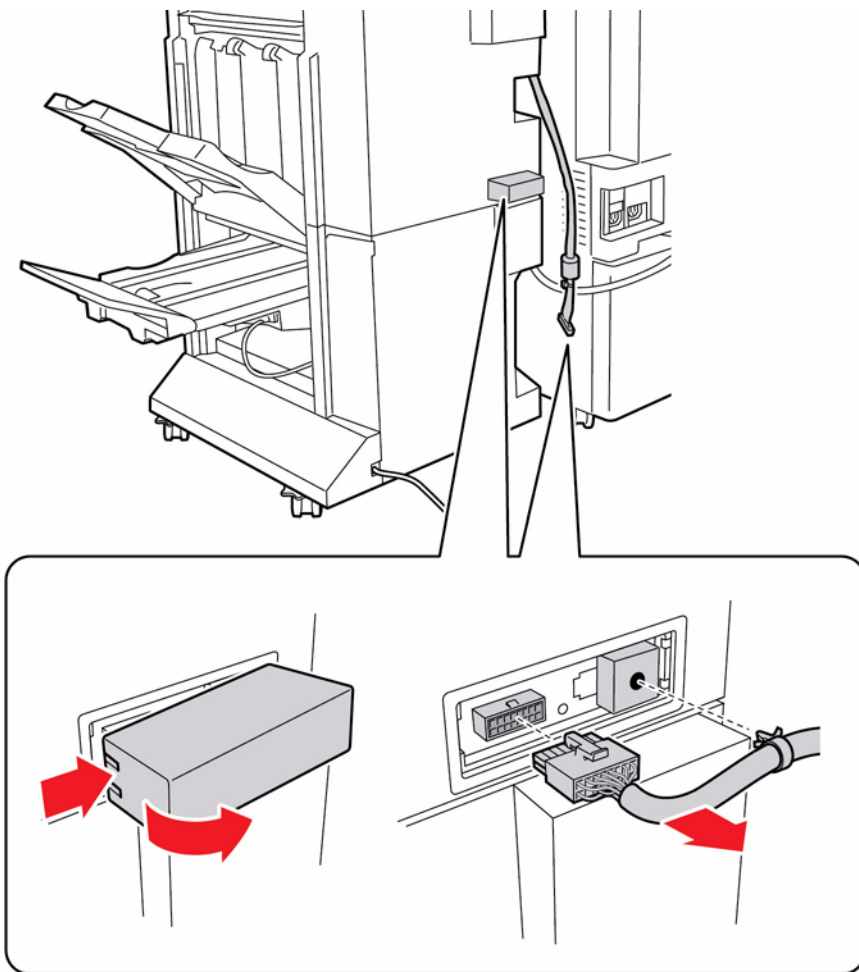


Figure 1 Removing the Connector Cover

4. Remove the Finisher ([REP 24.14](#))

5. Remove 2 screws that secure the H-Transport Assembly.

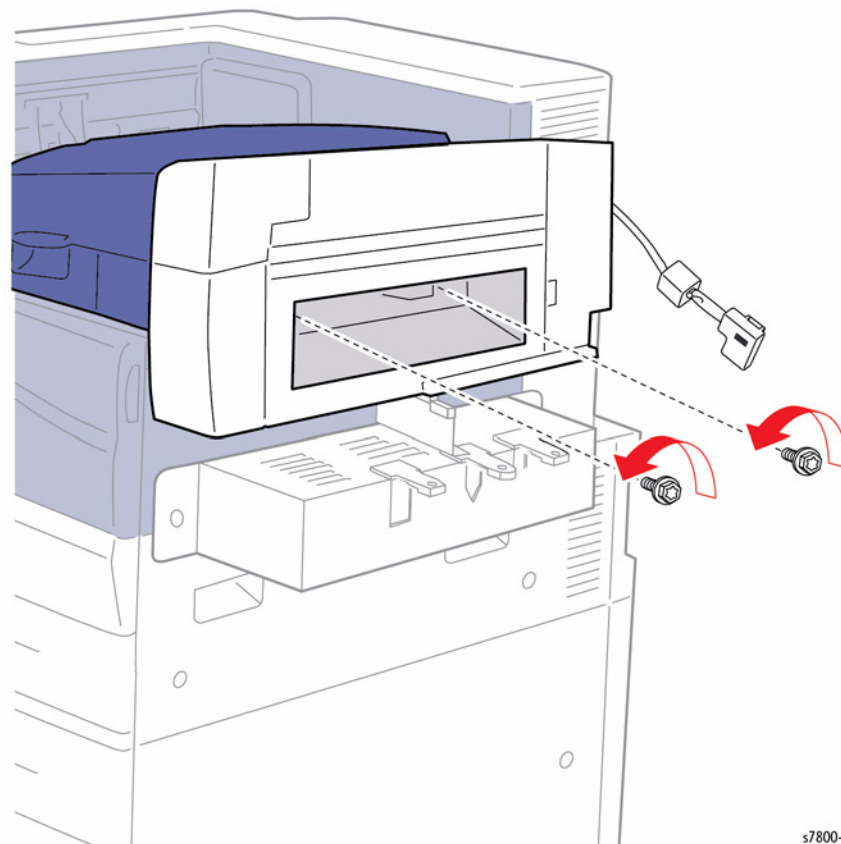


Figure 2 Removing the screws

- Lift the Horizontal Transport to remove it from the printer.

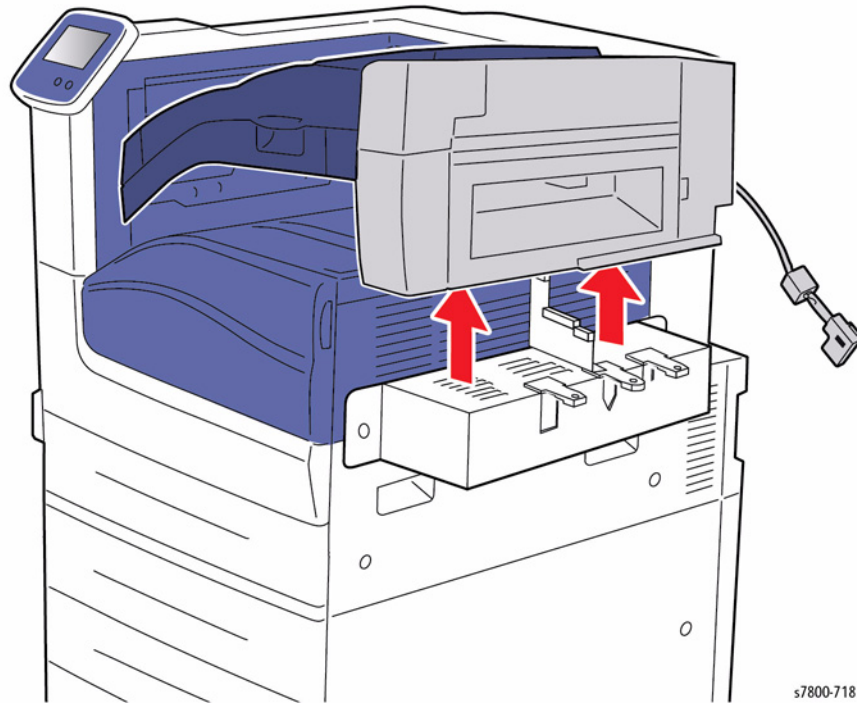


Figure 3 Removing the Horizontal Transport Assembly

REP 24.2 Decurler Front Cover

Parts List on [PL 24.2 Item 9](#)

Removal

- Remove the Horizontal Transport Assembly ([REP 24.1](#)).
- Open the Top Cover Assembly.
- Remove 2 screws that secure the Decurler Front Cover.
- Slide the Decurler Front Cover out to remove.

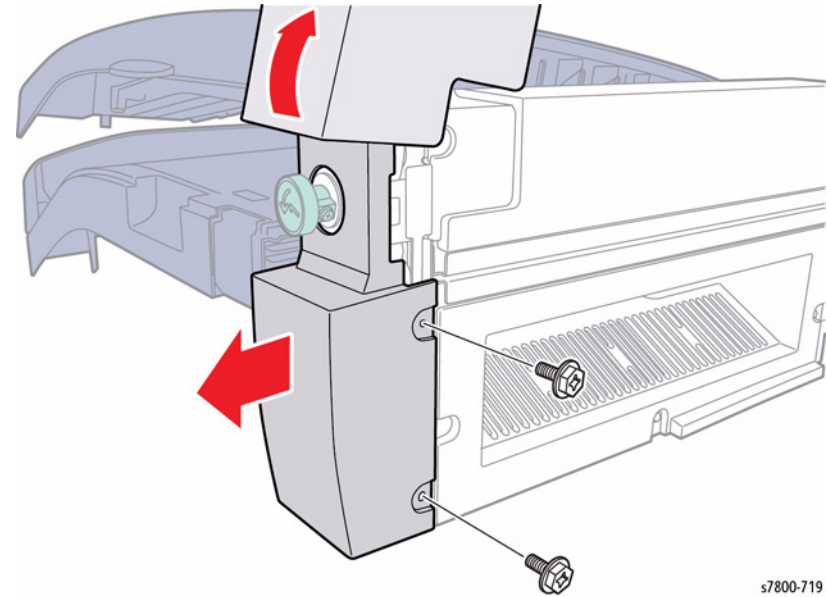


Figure 1 Removing the Decurler Front Cover

REP 24.3 H-Transport Rear Cover

Parts List on [PL 24.2 Item 10](#)

Removal

1. Remove the Horizontal Transport Assembly ([REP 24.1](#)).
2. Remove 2 screws that secure the H-Transport Rear Cover.
3. Remove the H-Transport Rear Cover.

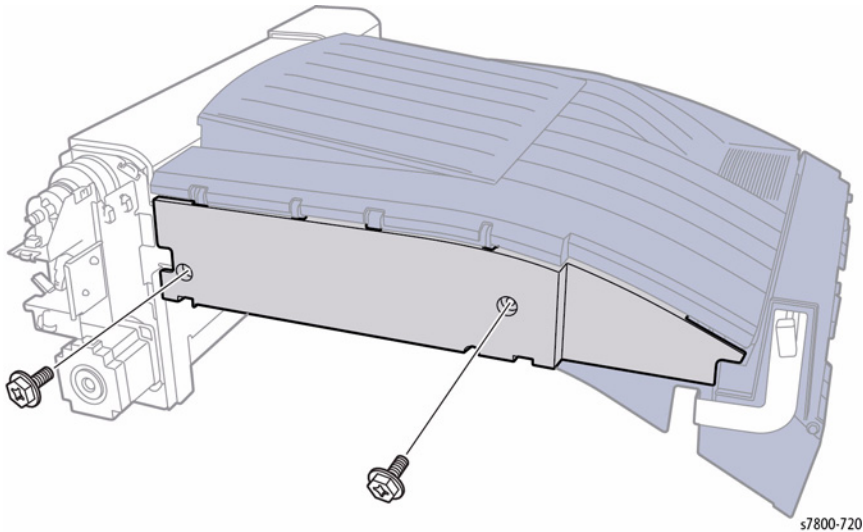


Figure 1 Removing the screws and H-Transport Rear Cover

REP 24.4 Decurler Rear Cover

Parts List on [PL 24.2 Item 11](#)

Removal

1. Remove the Horizontal Transport Assembly ([REP 24.1](#)).
2. Remove 2 screws (left side) that secure the Decurler Rear Cover.
3. Remove 1 screw that secures the Decurler Rear Cover (right side).
4. Slide the Decurler Rear Cover out to remove.

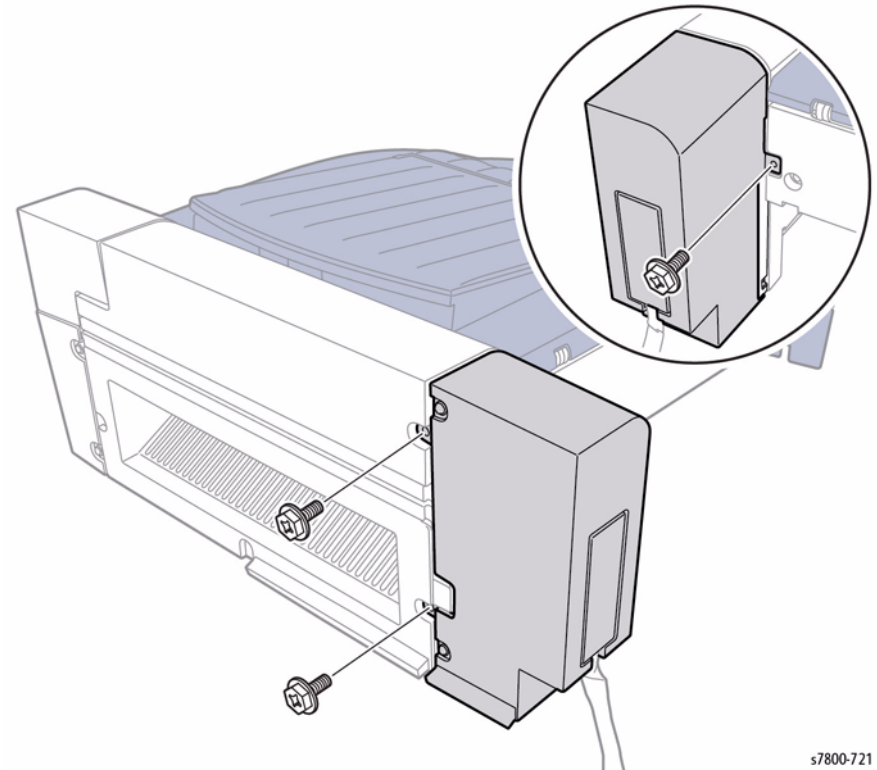


Figure 1 Removing the Decurler Rear Cover

REP 24.5 Decurler Right Hand Cover

Parts List on [PL 24.2 Item 12](#)

Removal

1. Remove the Horizontal Transport Assembly ([REP 24.1](#)).
2. Remove the Decurler Rear Cover ([REP 24.4](#)).
3. Remove the Decurler Top Cover ([REP 24.6](#)).
4. Remove the Decurler Front Cover ([REP 24.2](#)).
5. Remove 3 screws that secure the Decurler Right Hand Cover.
6. Remove the Decurler Right Hand Cover.

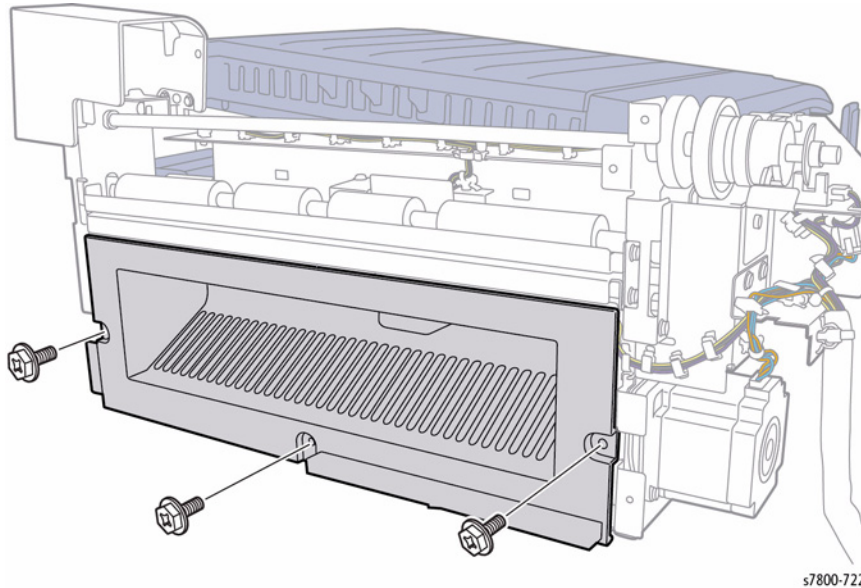


Figure 1 Removing the Decurler Right Hand Cover

REP 24.6 Decurler Top Cover

Parts List on [PL 24.2 Item 13](#)

Removal

1. Remove the Horizontal Transport Assembly ([REP 24.1](#)).
2. Remove the Decurler Rear Cover ([REP 24.4](#)).
3. Open the Top Cover Assembly.
4. Remove 2 screws that secure the Decurler Top Cover.
5. Slide the Decurler Top Cover out to remove.

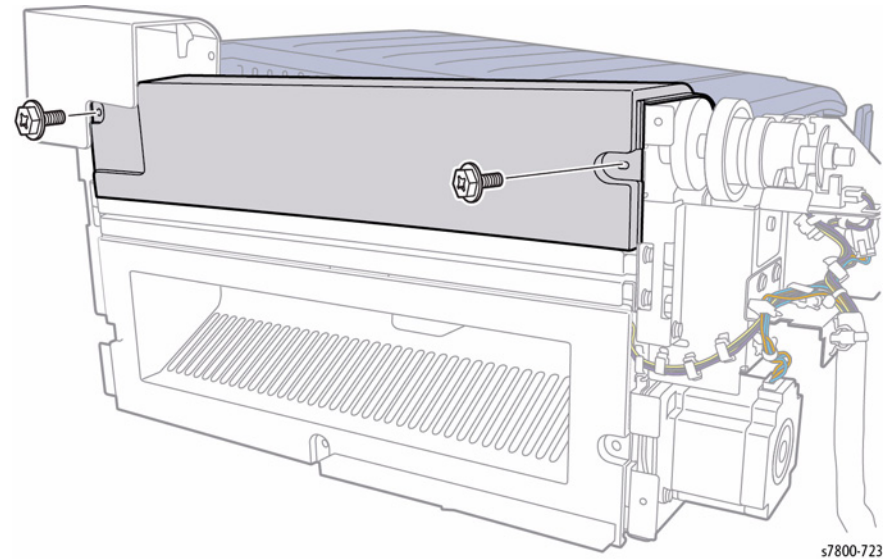


Figure 1 Removing the Decurler Top Cover

REP 24.7 H-Transport Top Cover Assembly (Upper Chute)

Parts List on [PL 24.2 Item 14](#)

Removal

1. Remove the Horizontal Transport Assembly ([REP 24.1](#)).
2. Remove 8 screws that secure the H-Transport Top Cover Assembly.
3. Lift the Top Cover to remove.

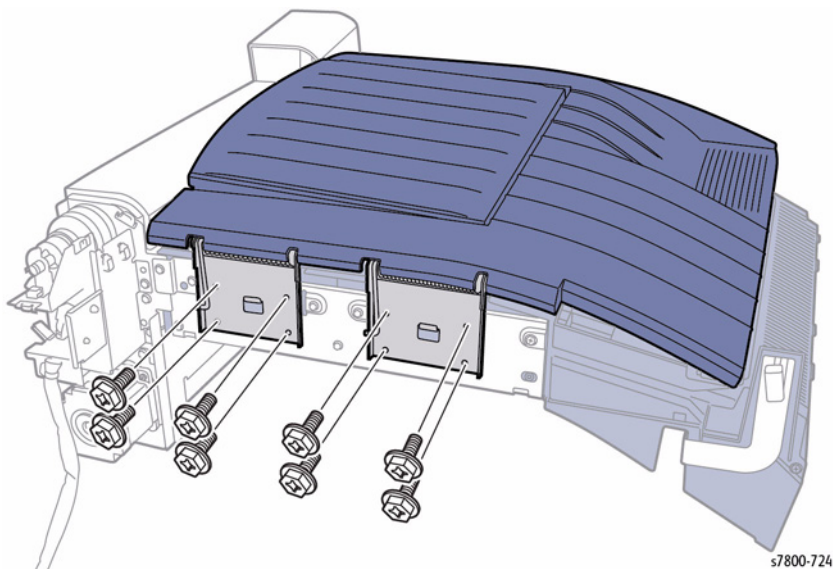


Figure 1 Removing the screws and H-Transport Top Cover Assembly

REP 24.8 Roll Assembly

Parts List on [PL 24.4 Item 8](#)

Removal

1. Remove the Horizontal Transport Assembly ([REP 24.1](#)).
2. Turn the Horizontal Transport Assembly over.
3. Release K-Clip.

NOTE: Be careful not to drop the Bearing.

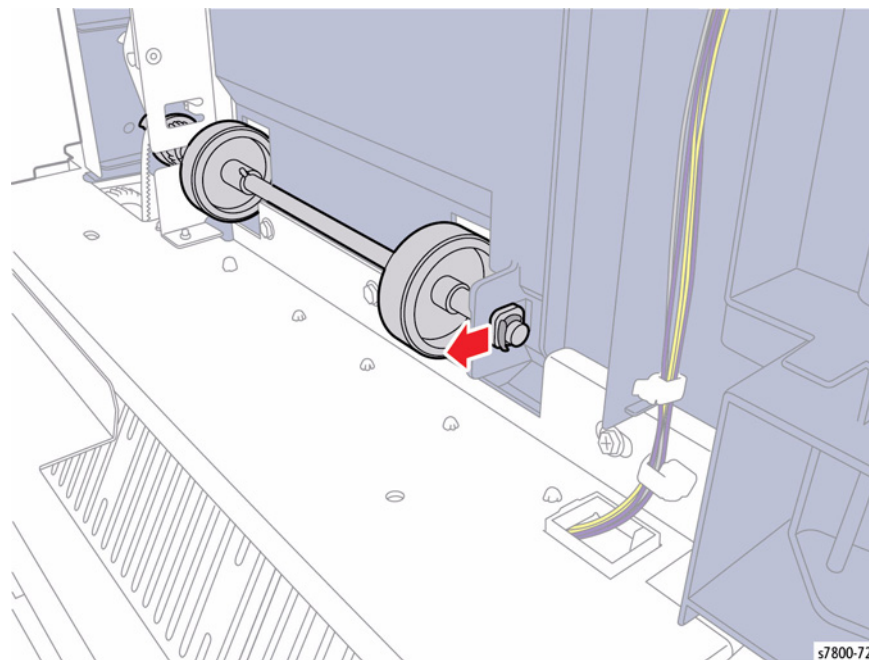


Figure 1 Removing the K-Clip

4. Release the Belt from the Gear.
5. Slide the Roll Shaft Assembly towards the left at an angle to remove.
6. Remove the C-Clip and Gears.
7. Remove the Roll Assembly.

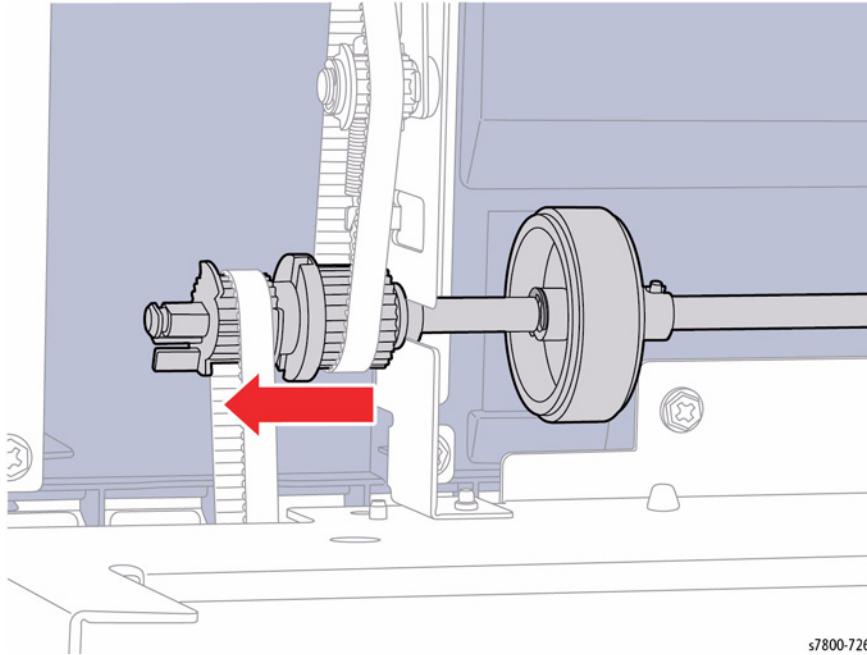


Figure 2 Removing the Roll Assembly

s7800-726

REP 24.9 H-Transport Interlock Switch/ Decurler Front Cover Interlock Sensor

Parts List on [PL 24.4 Item 10](#), [PL 24.5 Item 17](#)

H-Transport Interlock Switch

Removal

1. Remove the H-Transport Assembly ([REP 24.1](#)).
2. Turn the H-Transport over to its side.
3. Disconnect the wiring harness connector [P/J8445](#).
4. Remove 1 screw that secures the Sensor Bracket ([PL 24.4 Item 11](#)) and remove the Bracket.
5. Remove the H-Transport Interlock Switch.

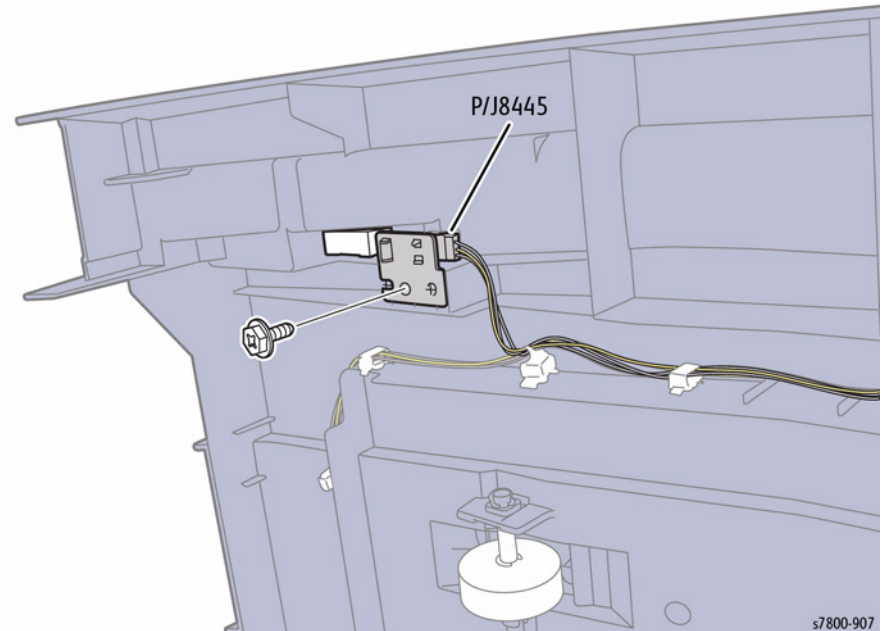


Figure 1 Removing the H-Transport Interlock Switch

s7800-907

Decurler Front Cover Interlock Sensor

Removal

1. Remove the H-Transport Assembly (REP 24.1).
2. Remove the Decurler Rear Cover (REP 24.4).
3. Remove the Decurler Top Cover (REP 24.6).
4. Disconnect the wiring harness connector P/J8448 and release the Sensor.

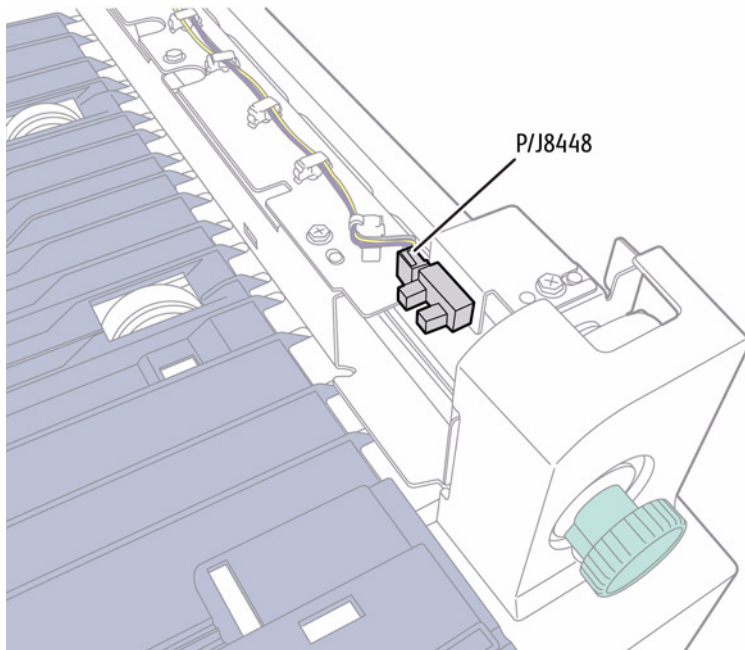


Figure 2 Removing the H-Transport Exit Sensor

s7800-655

REP 24.10 H-Transport Drive Belt

Parts List on PL 24.4 Item 21

Removal

1. Remove the Horizontal Transport Assembly (REP 24.1).
2. Turn the Horizontal Transport Assembly over.
3. Use the Tension Bracket Assembly to release initial tension from the belt.
4. Slide the Belt off the two pulleys.

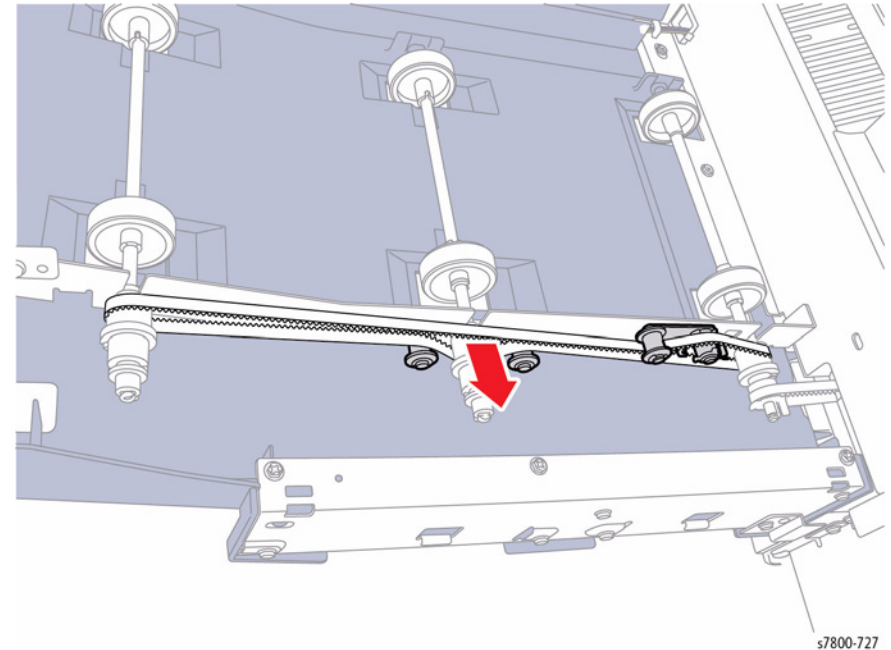


Figure 1 Releasing Belt tension and removing the Belt

NOTE: Note the position of the Drive belt in relationship to the Gears and Pulleys for correct reinstallation.

5. Remove the Clip from the Roll Shaft Assembly.
6. Lift up on the belt side of the Roll Shaft Assembly then remove the smaller Belt (PL 24.2 Item 6) from the Pulley.
7. Remove the Drive Belt.

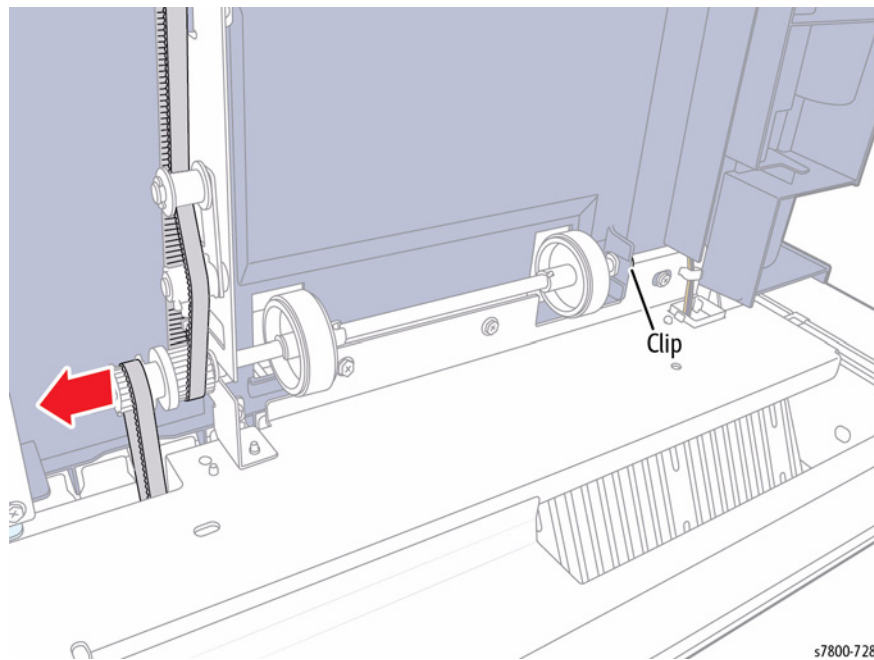


Figure 2 Removing the Drive Belt

REP 24.11 Decurler Cam Clutch

Parts List on PL 24.5 Item 7

Removal

1. Remove the H-Transport Assembly (REP 24.1).
2. Remove the Decurler Rear Cover (REP 24.4).
3. Slide the Actuator (PL 24.5 Item 6) out to remove.
4. Disconnect the wiring harness connector P/J8449 and remove the Decurler Cam Home Sensor (PL 24.5 Item 4).

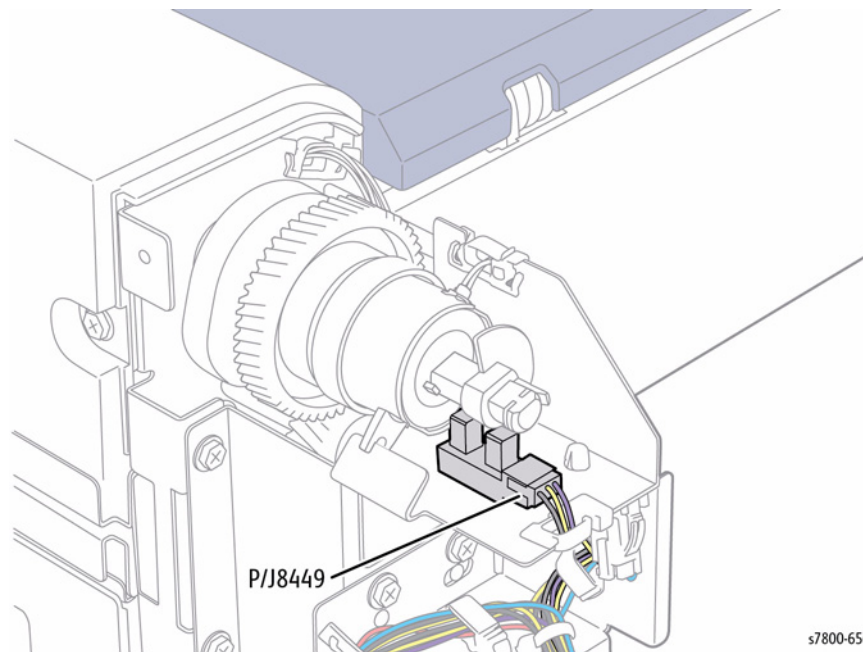


Figure 1 Removing the Actuator and Sensor

5. Release the wiring harness clip from the Bracket (on the rear).
6. Release the wiring harness from the top clip.
7. Disconnect the Decurler Cam Clutch wiring harness connector P/J8450.

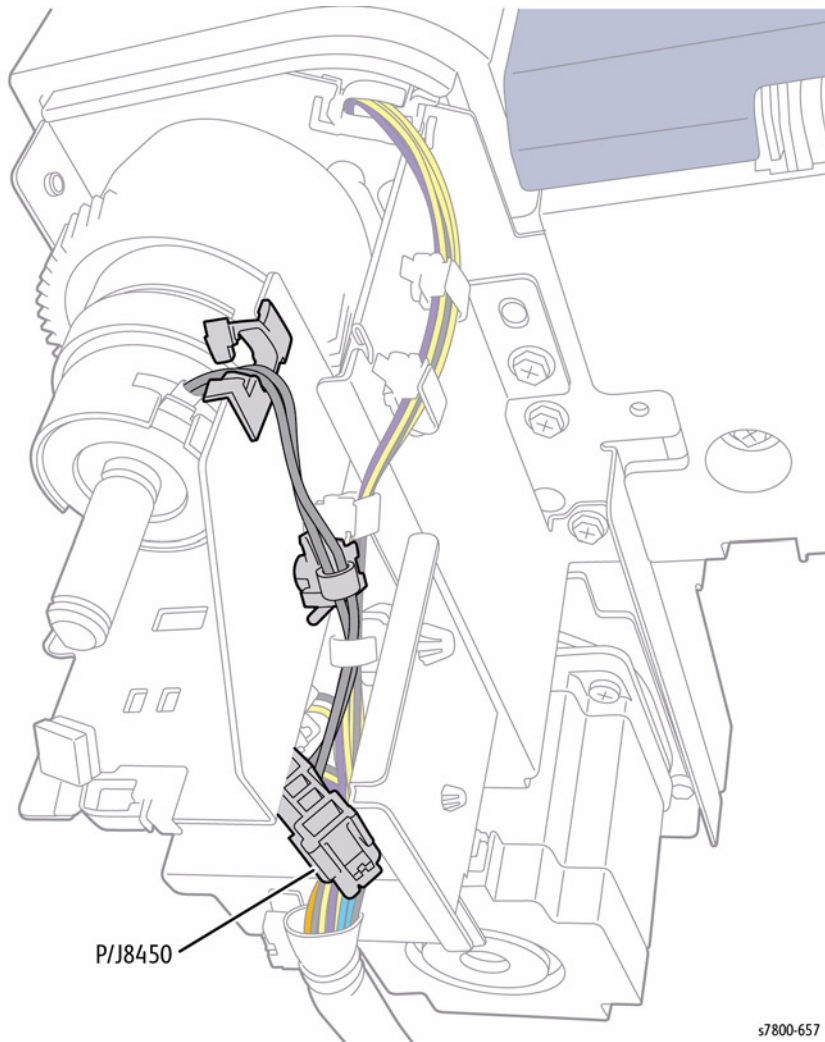


Figure 2 Releasing the wiring harness clip

8. Remove 1 screw that secure the Bracket.
9. Lift (front of the Clutch) while sliding the Clutch out.

NOTE: You may need to release the latch from the 2nd notch on the Shaft in order to remove the Clutch.

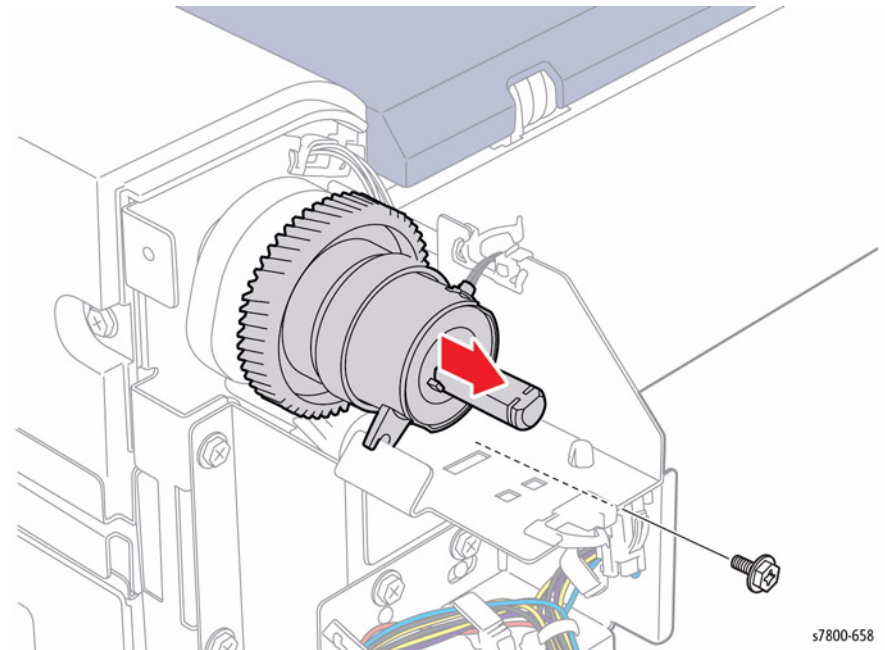


Figure 3 Removing the Decurler Cam Clutch

REP 24.12 H-Transport Exit Sensor

Parts List on [PL 24.6 Item 8](#)

Removal

1. Remove the H-Transport Assembly ([REP 24.1](#)).
2. Remove the Decurler Rear Cover ([REP 24.4](#)).
3. Remove the Decurler Top Cover ([REP 24.6](#)).
4. Release the wiring harness clip and loosen the wiring harness.
5. Remove 1 screw that secures the Bracket.

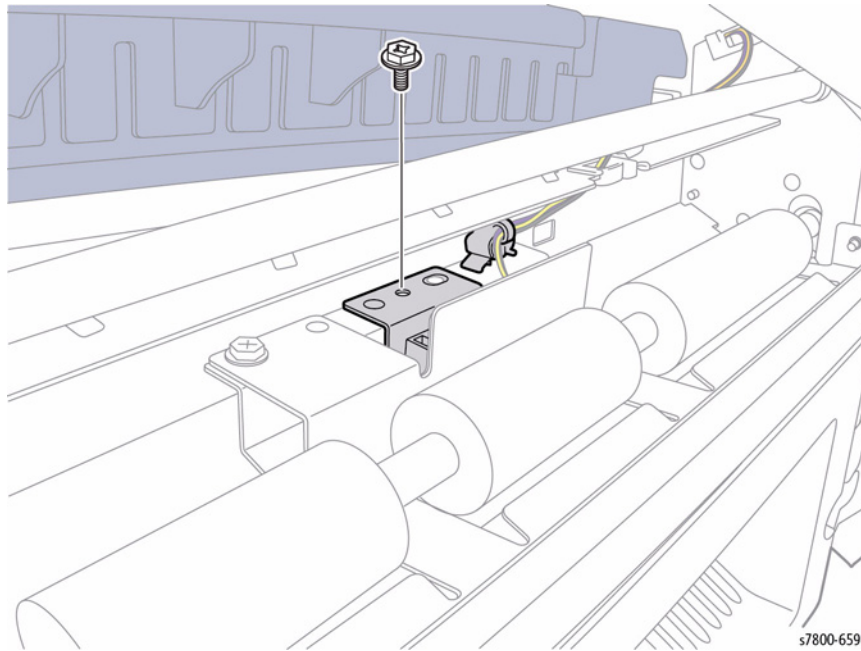


Figure 1 Removing screw and releasing wiring harness clip

6. Remove 1 screw that secures the Sensor.
7. Disconnect the wiring harness connector [P/J8446](#) and remove the Sensor.

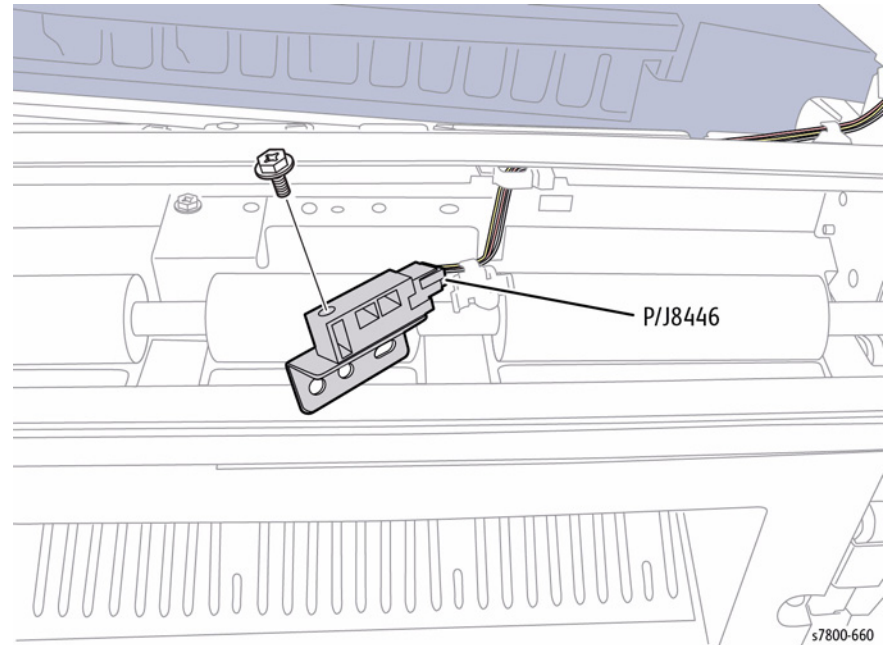


Figure 2 Removing the H-Transport Sensor

REP 24.13 H-Transport Motor Assembly

Parts List on [PL 24.6 Item 21](#)

Removal

1. Remove the Horizontal Transport Assembly ([REP 24.1](#)).
2. Remove the Decurler Rear Cover ([REP 24.4](#)).
3. Remove the Decurler Top Cover ([REP 24.6](#)).
4. Remove the Decurler Front Cover ([REP 24.2](#)).
5. Remove the Decurler Right Hand Cover ([REP 24.5](#)).
6. Release the Belt from the rear of the Motor Assembly.

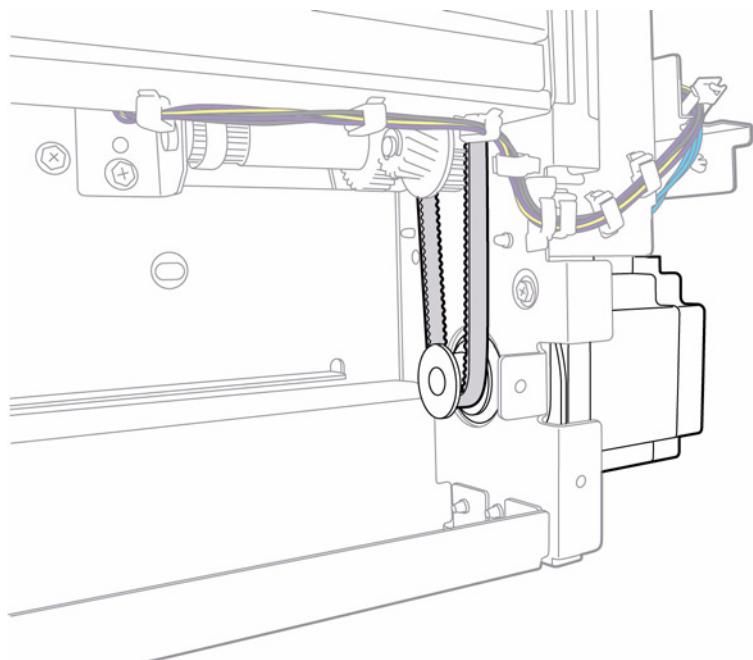
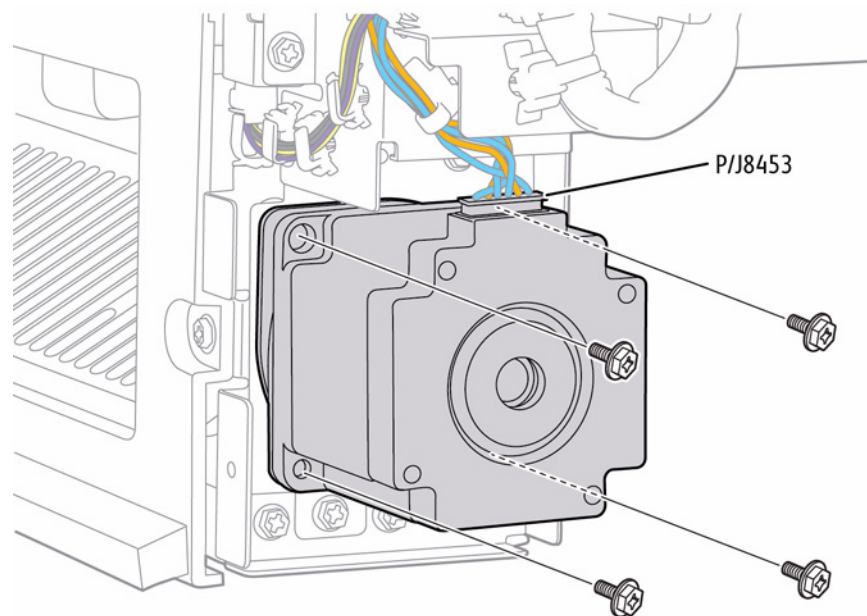


Figure 1 Releasing the Belt

s7800-729

7. Disconnect the Motor Assembly wiring harness connector [P/J8453](#).
8. Remove 4 screws that secure the Motor Assembly.



s7800-730

Figure 2 Removing the Motor Assembly

REP 24.14 Finisher Assembly

Parts List on [PL 24.11](#)

Removal

1. Remove the H-Transport Connector Cover ([PL 24.2 Item 7](#)).
2. Remove the MCU Cover.
3. Disconnect the Finisher connector from the printer.

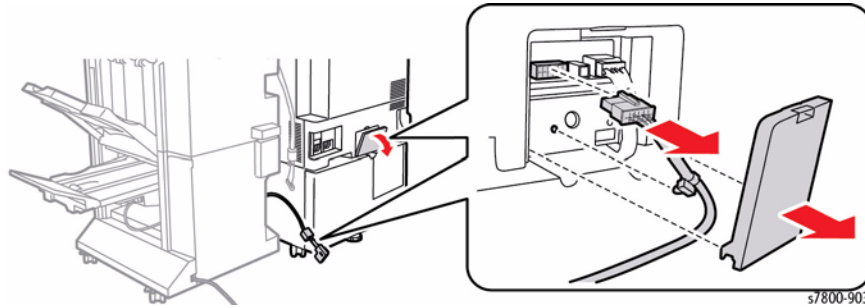


Figure 1 Disconnecting the Finisher Connector

4. Remove the H-Transport Connector Cover ([PL 24.2 Item 7](#)).
5. Disconnect the H-Transport connector.

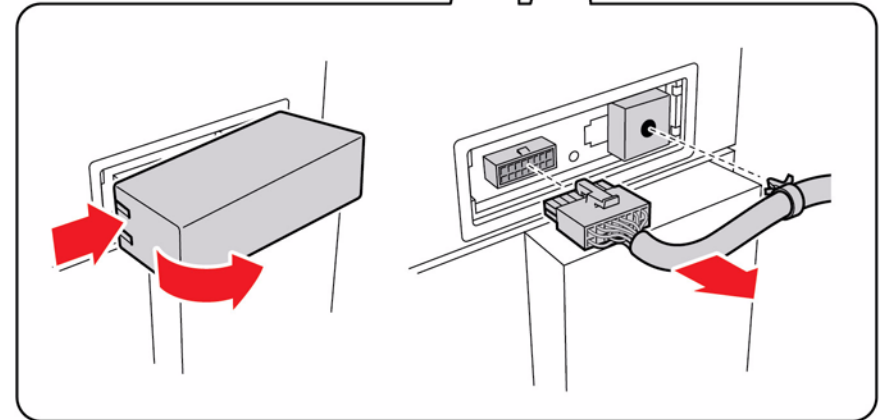
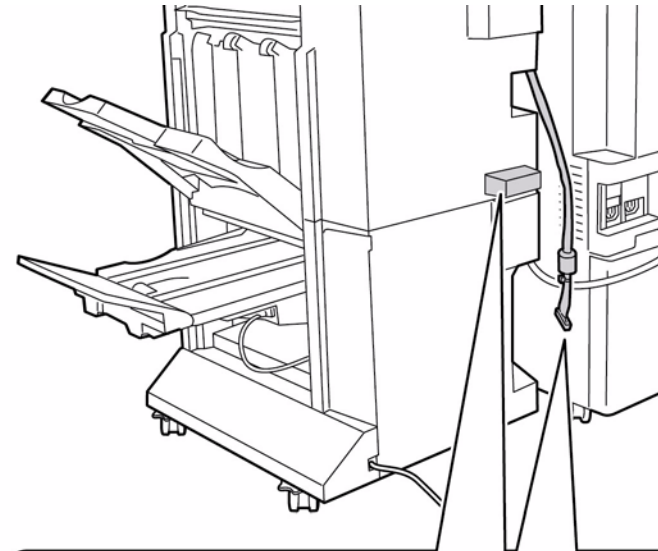


Figure 2 Disconnecting the H-Transport Connector

6. Disconnect the Finisher Power Cable.

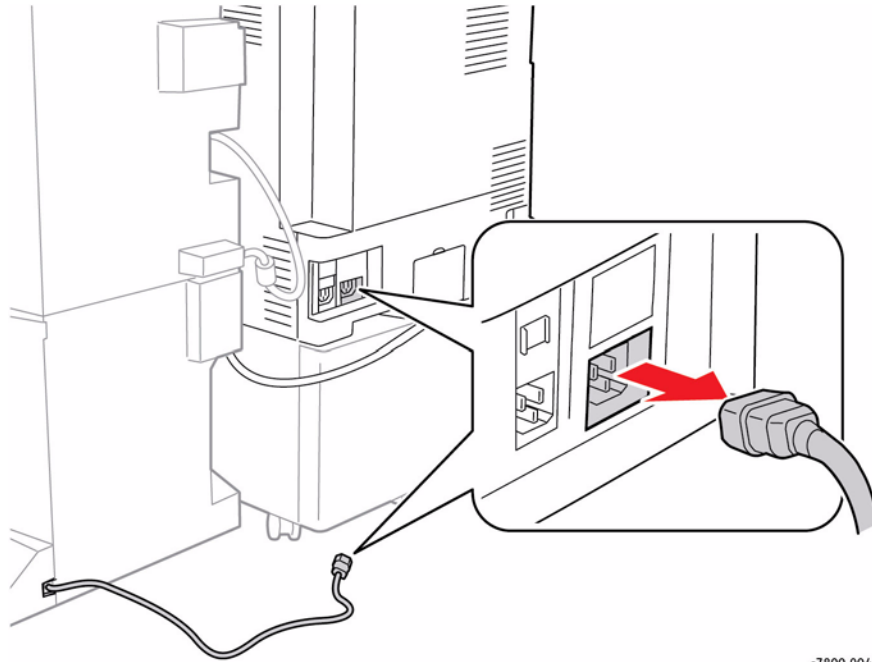


Figure 3 Disconnecting the Finisher Power Cable

7. Open the Front Door (Door G).

8. Pull the Docking Plate forward to release it from the Finisher.

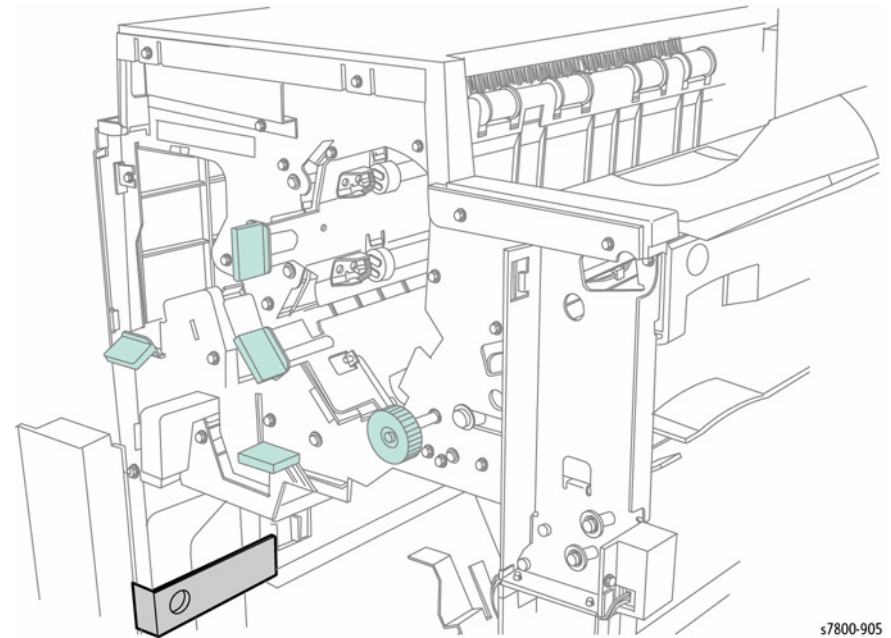


Figure 4 Releasing the Docking Plate

9. Separate the Finisher from the printer.

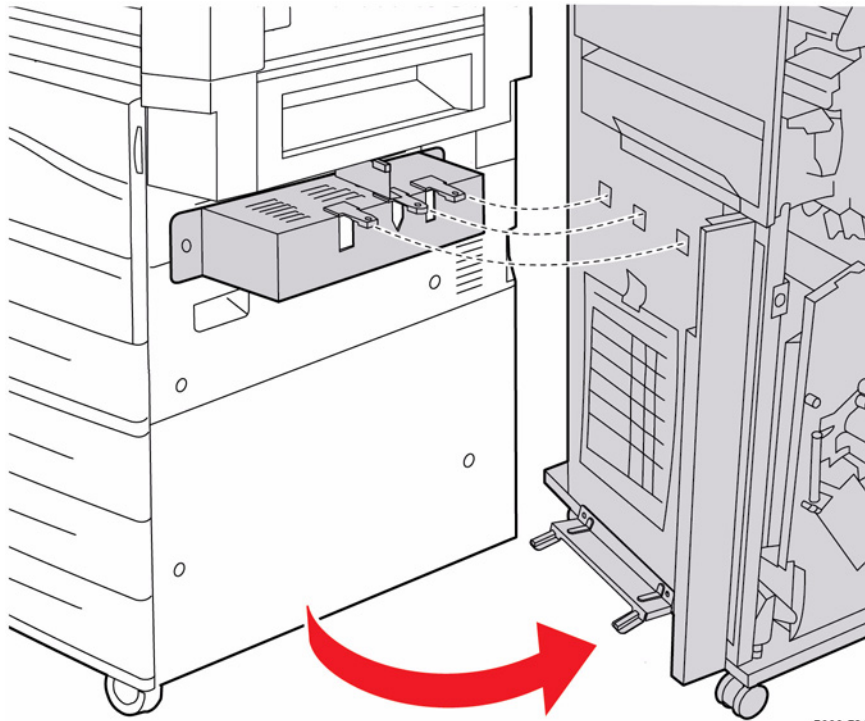


Figure 5 Separating the Finisher

REP 24.15 Front Top Cover

Parts List on [PL 24.11 Item 1](#)

Removal

1. Remove the Front Door (Door G) ([REP 24.19](#)).
2. Remove the Top Tray ([REP 24.21](#)).
3. Remove the Finisher Top Cover ([REP 24.20](#)).
4. Remove the two screws securing the Top Front Cover to the Finisher.
5. Remove the Finisher Front Top Cover.

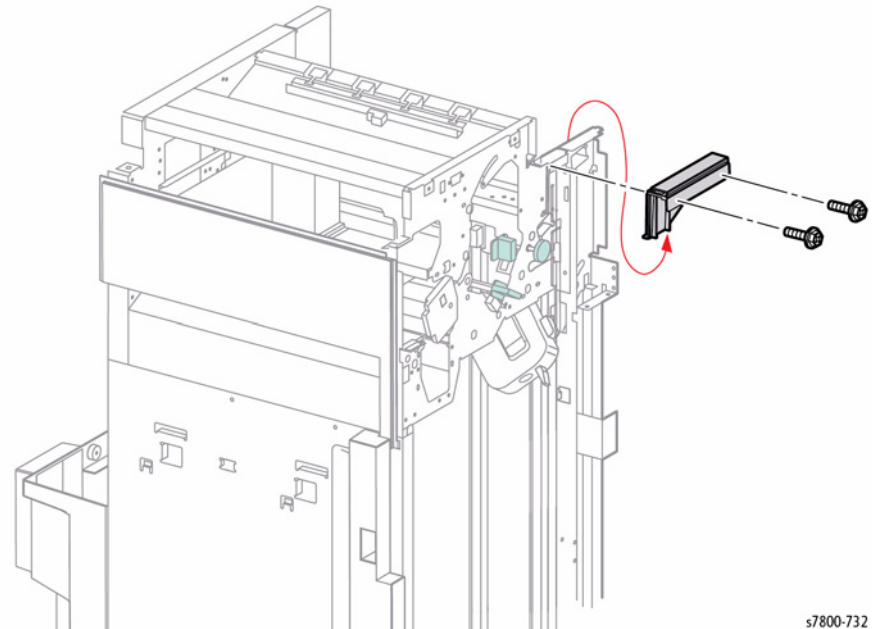


Figure 1 Removing the Front Top Cover

Replacement

Make sure that after replacing the Front Top Cover, the Stacker Top Tray moves smoothly when pushed down once and then released by hand.

REP 24.16 Finisher Front Door (Door G) Interlock Switch

Parts List on [PL 24.11 Item 2](#)

Removal

1. Open the Front Door (Door G).
2. Pull the Punch Box toward the front and remove it from the Finisher.
3. Remove 3 screws on the front side and 2 screws on the rear that secure the Dust Box Chute to the Finisher.
4. Remove the Chute.
5. Disconnect the connector from the Door G Interlock Switch.
6. Release the hooks of the switch by using two fingers to press down the two hooks on either side of the switch and push the switch towards the front to remove it from the frame.

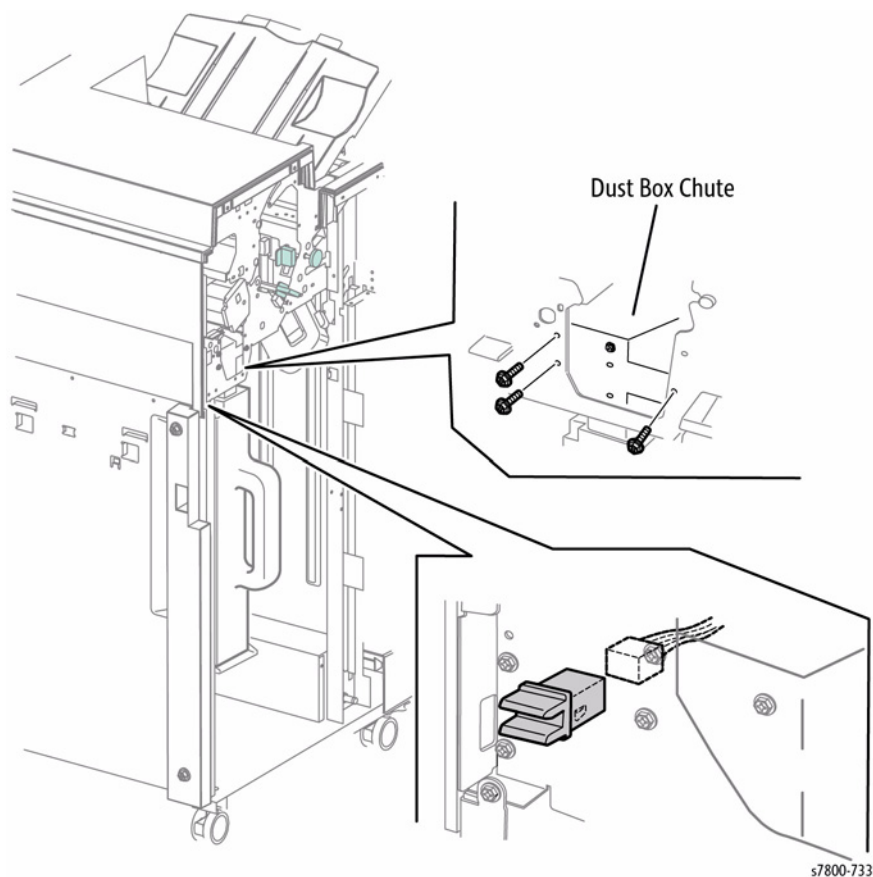


Figure 1 Removing the Finisher Front Door Interlock Switch

REP 24.17 Front Right (Inner) Cover

Parts List on [PL 24.11 Item 5](#)

Removal

1. Remove the Front Door (Door G) ([REP 24.19](#)).
2. Remove the four screws securing the inner Cover to Front Door.
3. Remove the Front Right Cover.

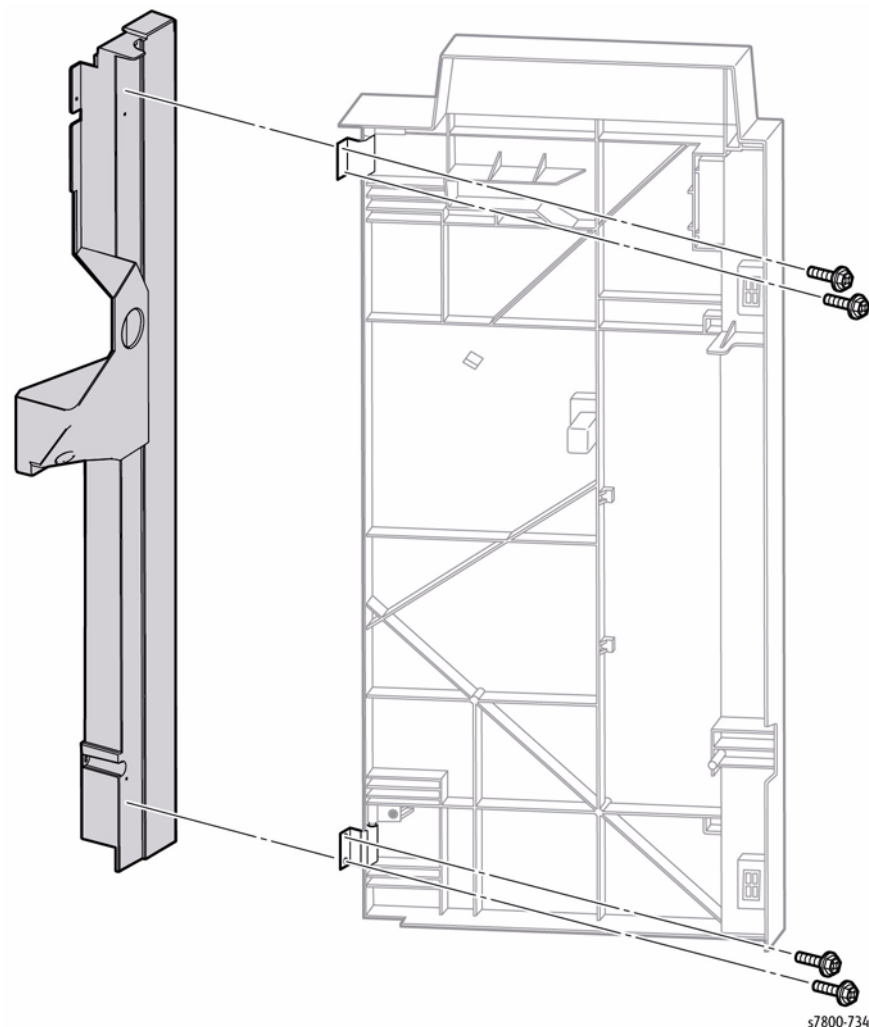


Figure 1 Removing the Front Right (Inner) Cover

REP 24.18 Docking Plate

Parts List on [PL 24.11 Item 31](#)

Removal

1. Disconnect the Finisher power cord and connection cable from the printer.
2. Disconnect the Horizontal Transport cable of the from the Finisher.
3. Open the Front Door (Door G).

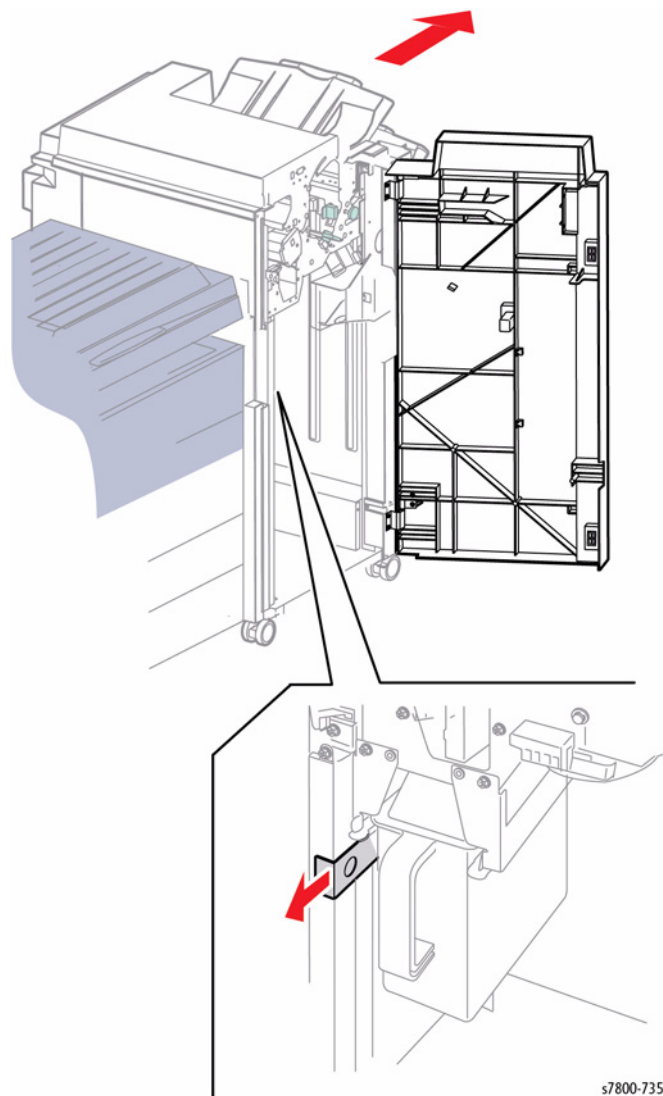


Figure 1 Removing the Finisher Docking Plate

4. Move the Finisher to the right while pulling the Docking Plate toward you.
5. Close Door G.

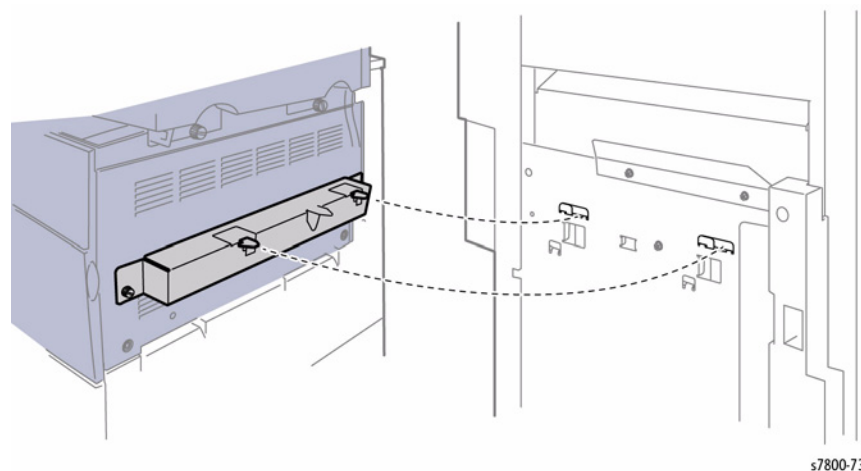


Figure 2 Removing the Finisher Docking Plate

REP 24.19 Front Door (Door G)

Parts List on [PL 24.11 Item 34](#)

Removal

1. Open the Front Door (Door G).
2. Remove 3 screws that secure the Inner Cover.
3. Move the Door to the right and remove the Door.

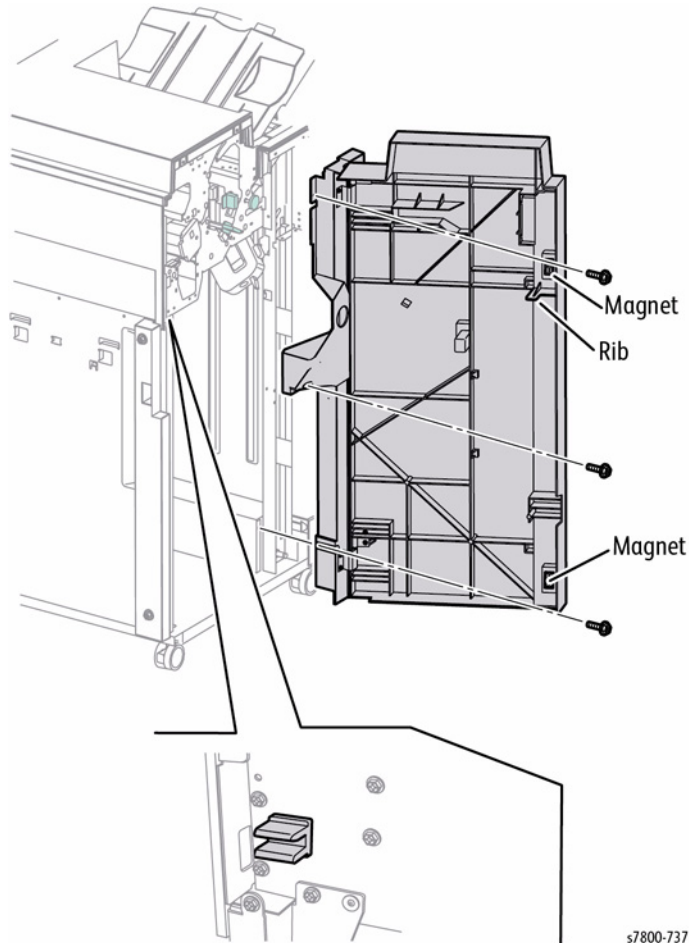


Figure 1 Removing the Front Door (Door G)

Replacement

Make sure that the rib of Door G engages the Interlock Switch. Also, verify that the two magnets on Door G contact the Finisher.

REP 24.20 Top Cover

Parts List on [PL 24.12 Item 1](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover (REP 24.26).
3. Remove the Top Tray (REP 24.21).
4. Remove the 4 screws that secure the Top Cover to the Finisher.
5. Remove the Finisher Top Cover.

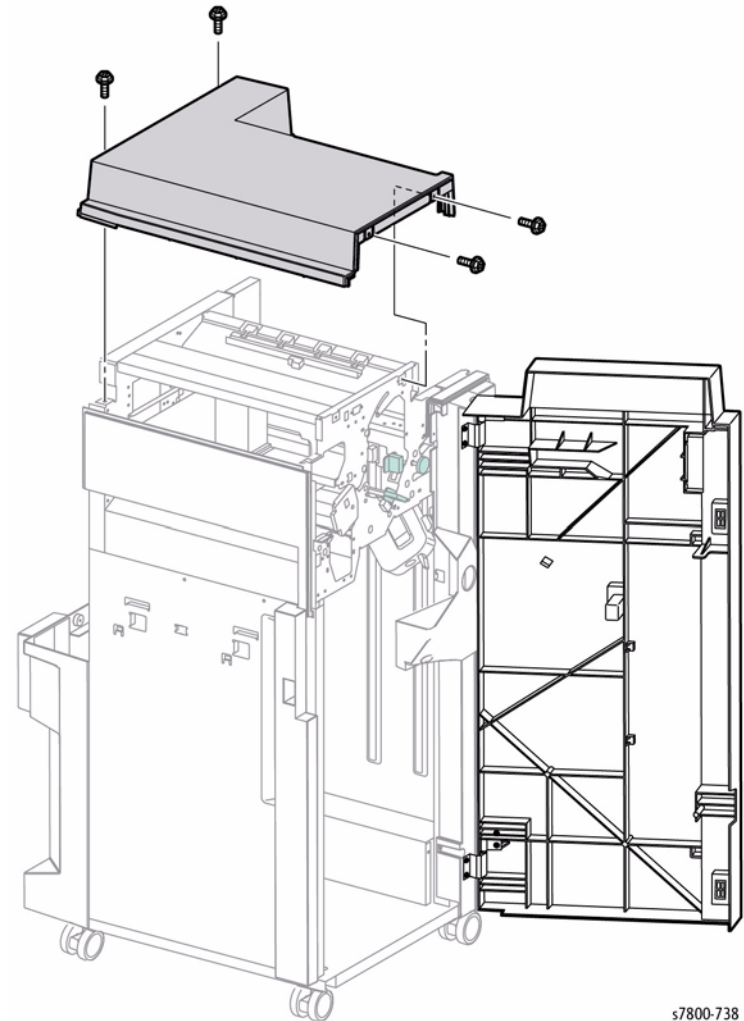


Figure 1 Removing the Top Cover

REP 24.21 Top Tray

Parts List on [PL 24.12 Item 3](#)

Removal

1. Remove 2 screws that secure the Top Tray to the Finisher.
2. While compressing the tray to collapse the Springs, lift the tray in the direction of the arrow to remove it from the Finisher.

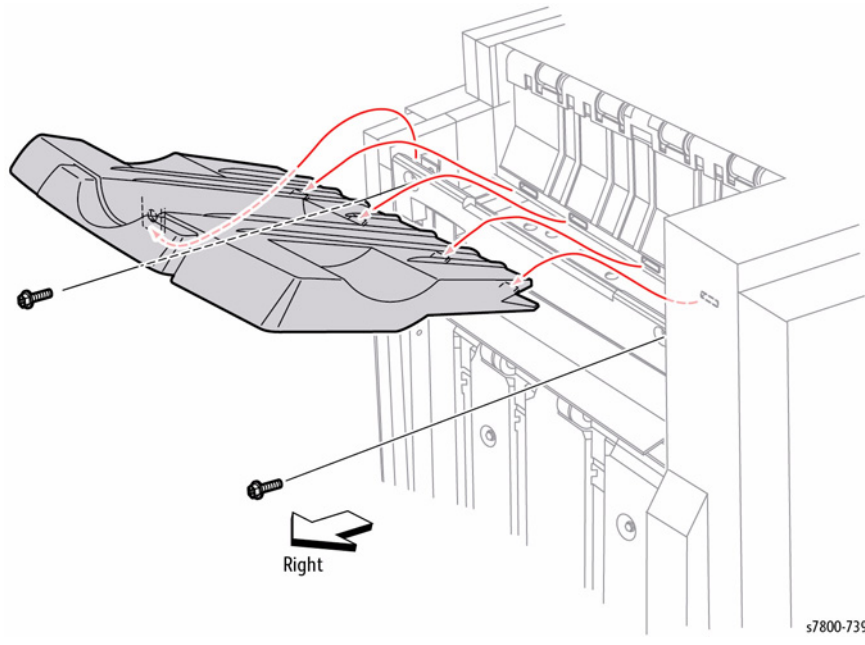


Figure 1 Removing the Finisher Top Tray

Replacement

After installation, make sure that the tray moves up and down smoothly.

REP 24.22 Eject Cover

Parts List on [PL 24.12 Item 4](#)

Removal

1. Remove the Front Door (Door G) ([REP 24.19](#)).
2. Remove the Top Tray ([REP 24.21](#)).
3. Remove the Rear Upper Cover ([REP 24.26](#)).
4. Remove 2 screws that secure the Eject Cover to the Finisher.
5. Remove the Eject Cover.

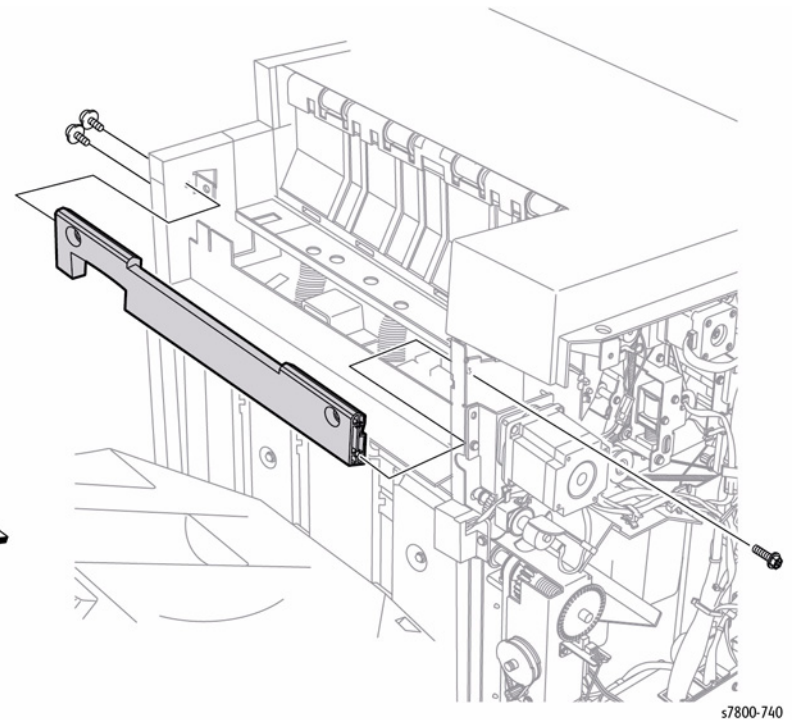


Figure 1 Removing the Finisher Eject Cover

REP 24.23 Stacker Lower Tray

Parts List on [PL 24.12 Item 5](#)

Removal

1. Lower the tray approximately 2 inches by rotating the drive pulley.
2. Release the hooks left and right on the lower part of the Stacker Lower Tray by gently pulling the tabs and lifting the tray.
3. Lift the Stacker Lower Tray up to remove it from the Tray Carriage.

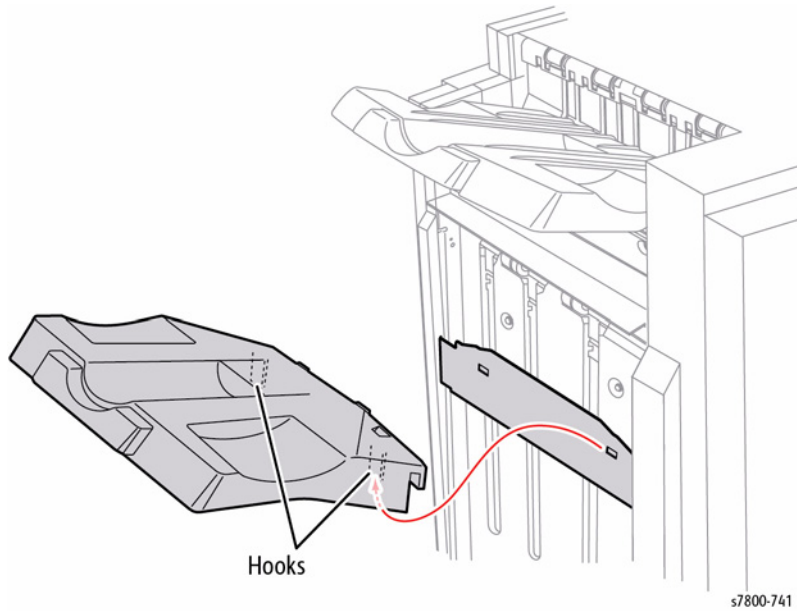


Figure 1 Removing the Finisher Stacker Lower Tray

Replacement

Make sure that the two hooks on the Stacker Lower engage the square holes on the Tray Carriage.

REP 24.24 Stacker Tray Position

Parts List on [PL 24.12 Item 5](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).

NOTE: In the next step, while disengaging the Elevator Pulley, hold the Stacker Tray with one hand.

2. Disengage the Elevator Pulley by pulling the Gear towards the rear of the Finisher.
OR
Use a screwdriver to turn the Motor Pulley to move the Stacker Tray Bracket up or down.

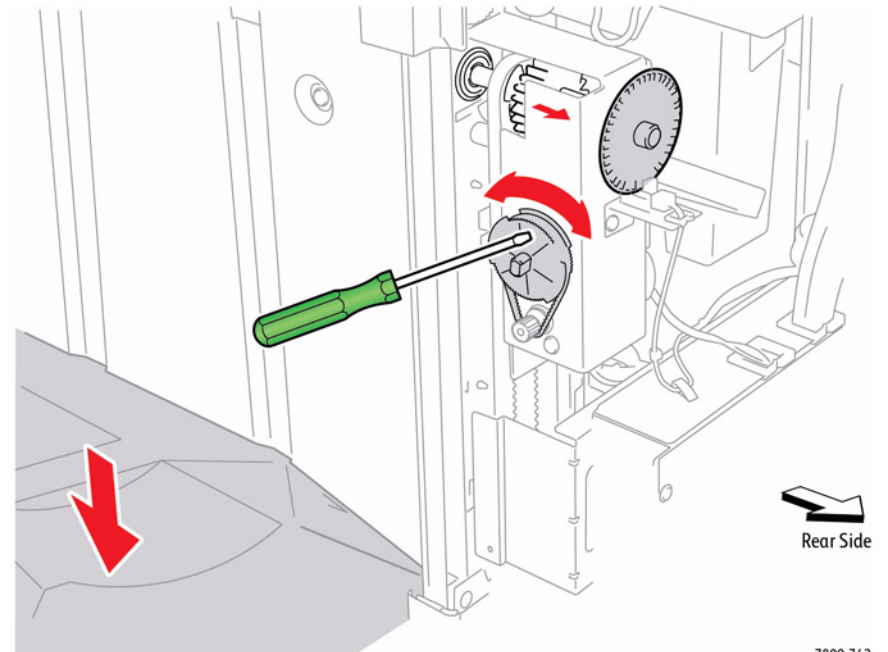


Figure 1 Disengaging Elevator Pulley

REP 24.25 Rear Lower Cover

Parts List on [PL 24.12 Item 9](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove 4 screws that secure the Rear Lower Cover to the Finisher.
3. Remove the Finisher Rear Lower Cover.

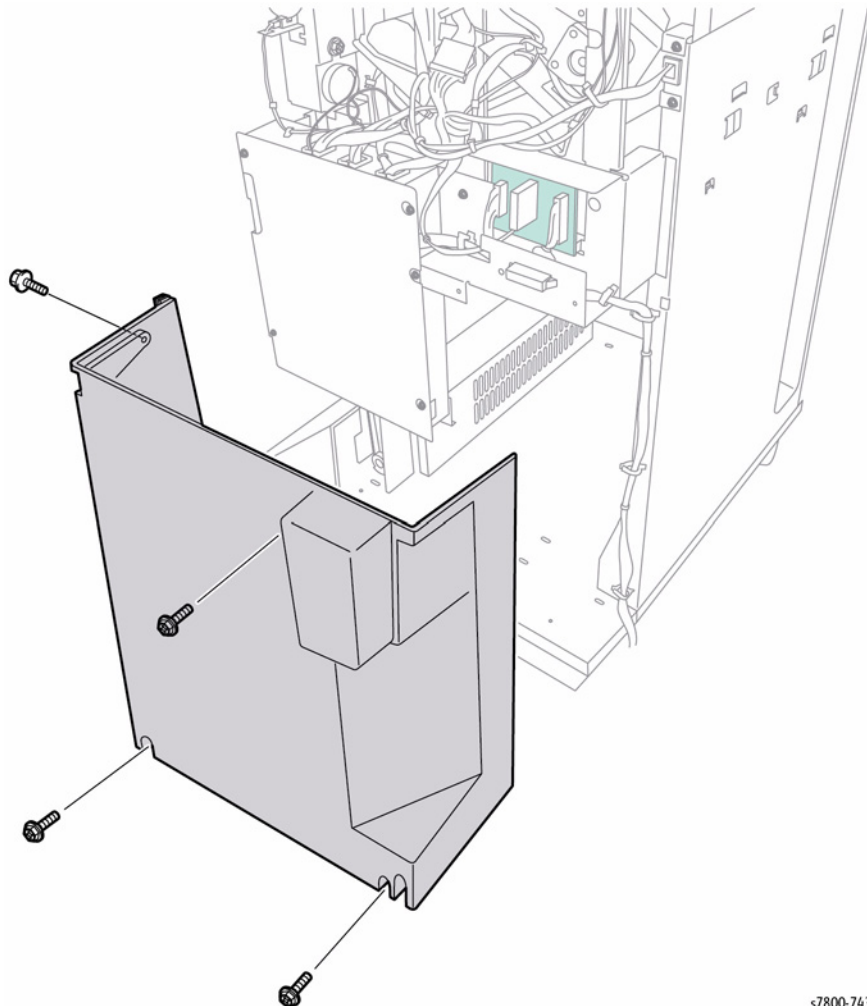


Figure 1 Removing the Finisher Rear Lower Cover

s7800-743

REP 24.26 Rear Upper Cover

Parts List on [PL 24.12 Item 11](#)

Removal

1. Remove the Connector Cover by pushing at point A to release the lock.
2. Disconnect the Horizontal Transport cable from the Finisher.
3. Remove the four screws securing the Upper Rear Cover to the Finisher.
4. Remove the Finisher Rear Upper Cover.

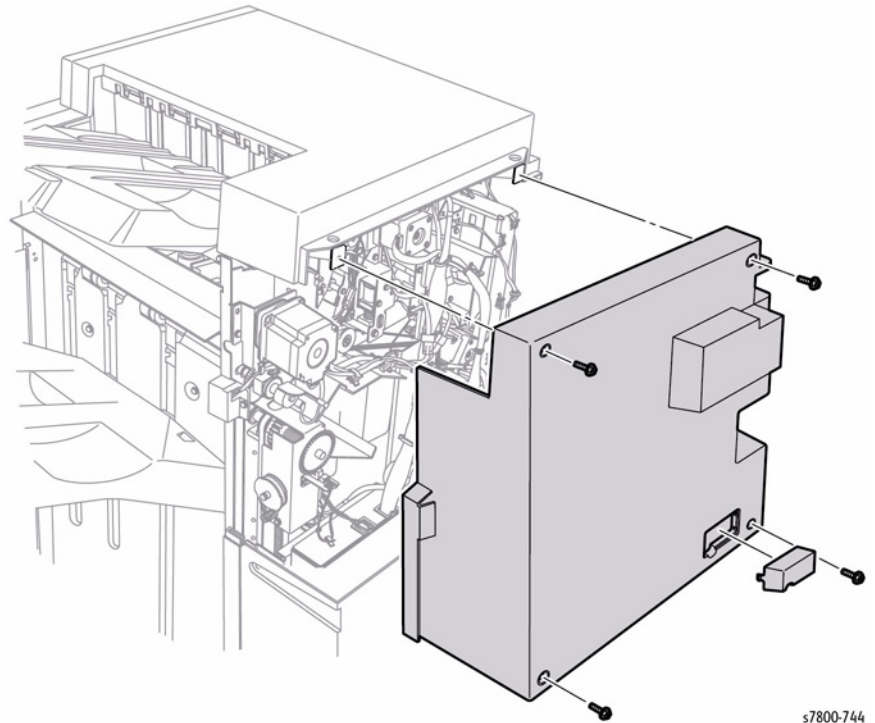


Figure 1 Removing the Finisher Rear Upper Cover

s7800-744

REP 24.27 Left Top Cover

Parts List on [PL 24.12 Item 14](#)

Removal

1. Remove the Front Door (Door G) ([REP 24.19](#)).
2. Remove 2 screws that secure the Top L/H Cover to the Finisher.
3. Move the Left Top Cover to the front to release the tabs from the frame.

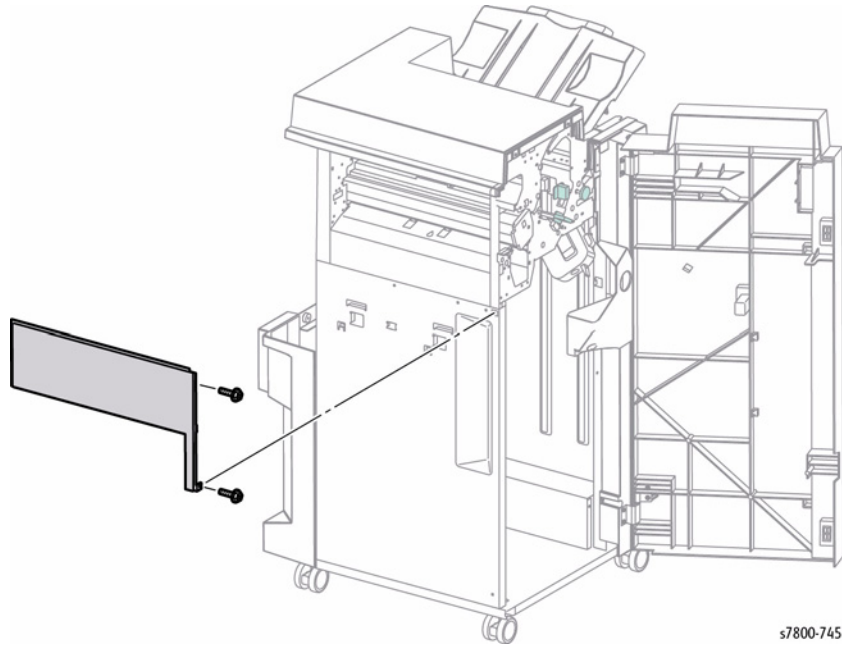


Figure 1 Removing the Finisher Left Top Cover

s7800-745

REP 24.28 Carriage Assembly (Left/ Right)

Parts List on [PL 24.31 Item 2](#), [PL 24.31 Item 8](#)

Removal

NOTE: Do not remove the Left and Right Carriage Assemblies at the same time. If both are removed at the same time, the phase of the Stacker Tray Assembly ([PL 24.12](#)) will shift.

NOTE: As the removal procedure for both the Left and Right Carriage Assemblies is the same, only the removal procedure for the Left Carriage Assembly is described here.

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Front Door Assembly ([REP 24.19](#)).
3. Pull the gear manually in the direction of the arrow.
4. Move the Stacker Tray Assembly to the very bottom.

NOTE: Never touch the Encoder when servicing ([Figure 1](#)).

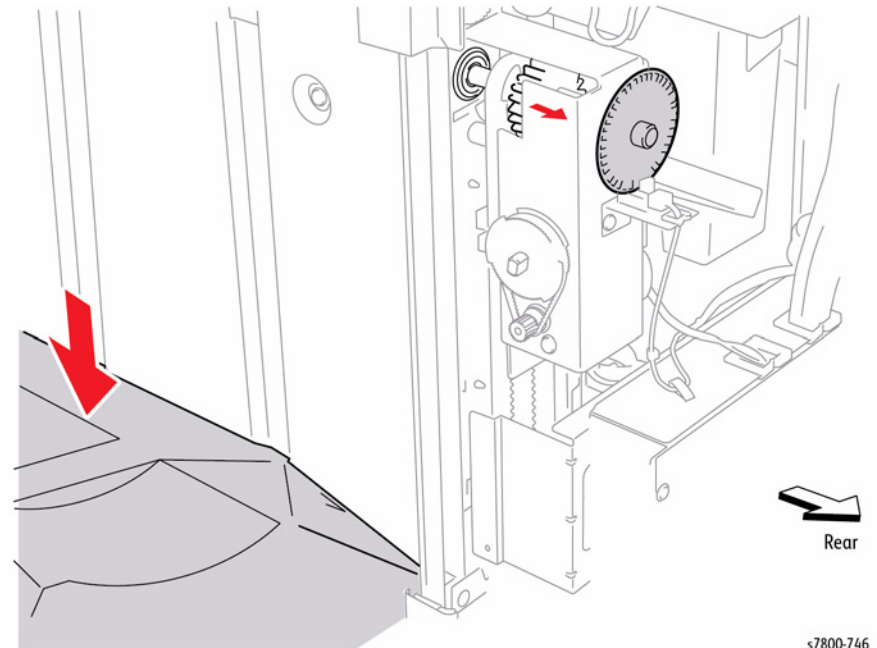


Figure 1 Moving the Tray

s7800-746

5. Remove the screws (x2) and remove the Carriage Tray.
6. Remove the Spring.
7. Remove the screw and remove the clamp on top.
8. Remove the Carriage Assembly (Left).

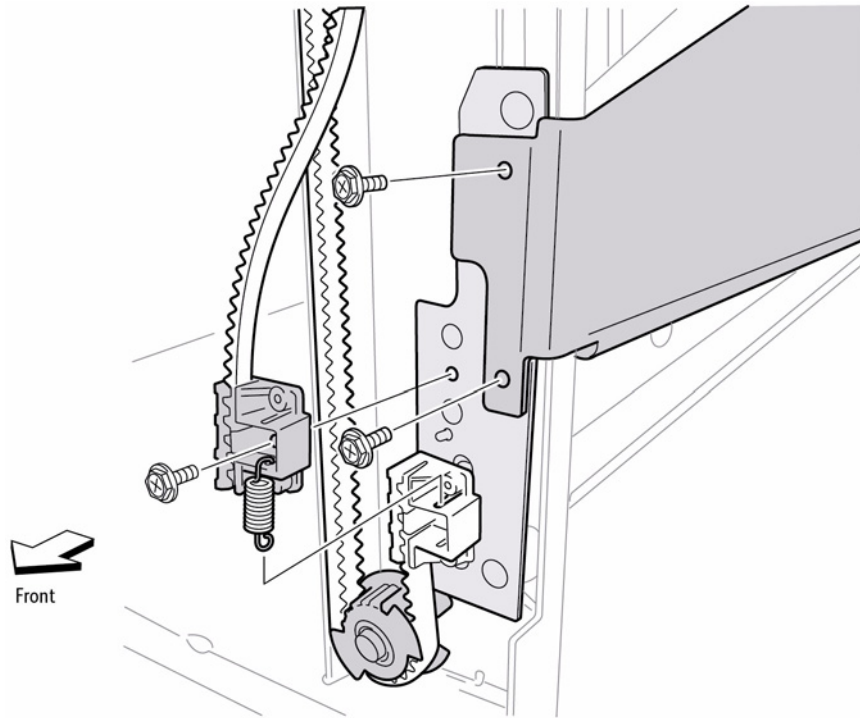


Figure 2 Removing the Carriage Assembly (Left)

s7800-747

REP 24.29 Stacker Left Drive Belt

Parts List on [PL 24.31 Item 3](#)

Removal

NOTE: Do not to remove both Carriage Assemblies (Front/Rear). When removing them, work on one at a time. After repairing one, work on the other. If both are removed together, a misalignment could occur binding the Stacker Tray.

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Front Door (Door G) ([REP 24.19](#)).
3. Without touching the Encoder, slide the Gear in the direction of the arrow and away from the Pulley Doc Clutch. Move the Stacker Lower Tray to its lowest position.

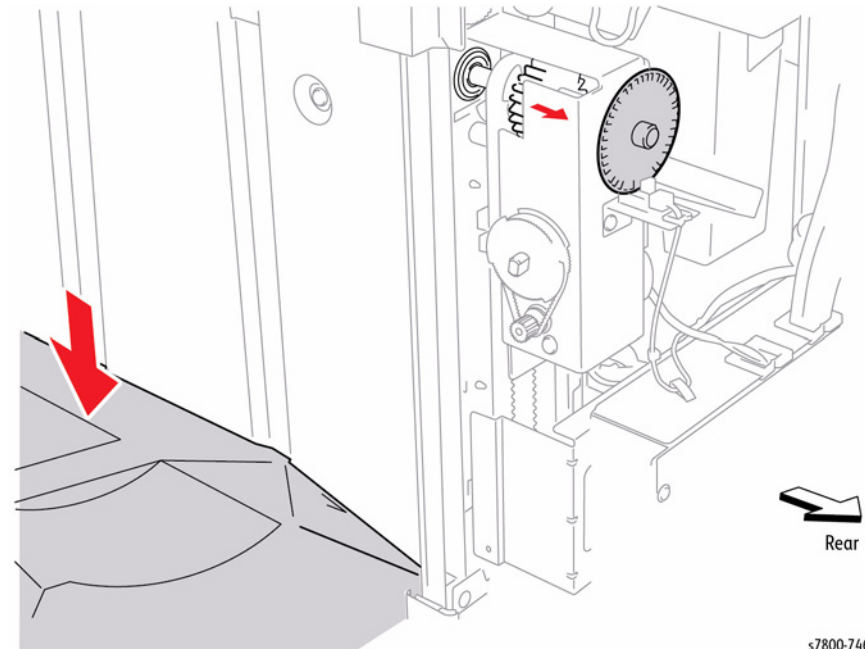


Figure 1 Sliding the Gear

s7800-746

4. Remove 2 screws that secure the Tray Carriage.
5. Remove the Spring.
6. Remove 1 screw that secures the upper side of the Belt Clamp.
7. Remove the upper side of the Belt Clamp.
8. Detach the Front Carriage with the Stacker Belt from the Finisher.

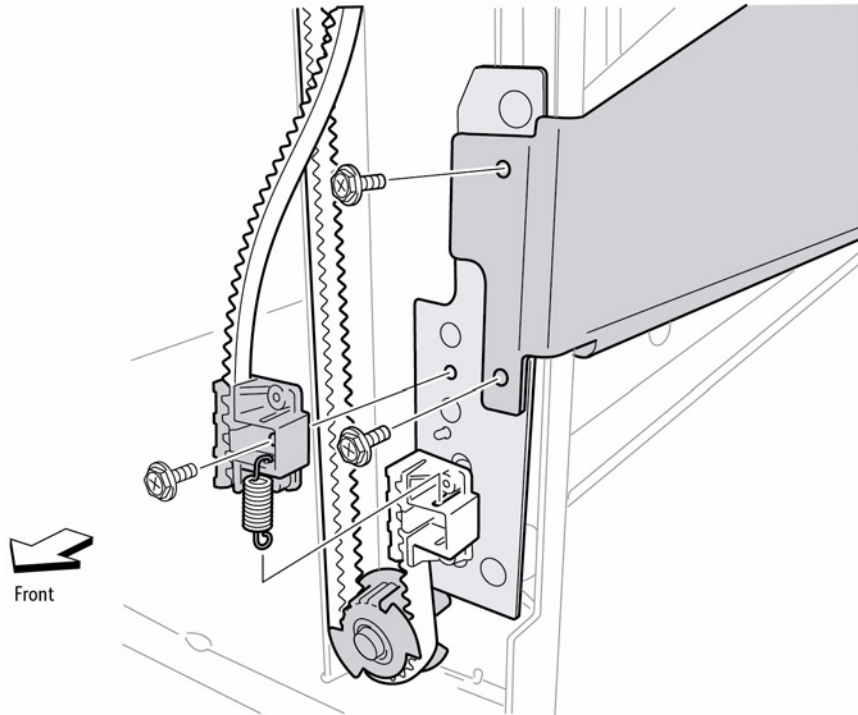


Figure 2 Removing the Stacker Left Drive Belt

Replacement

Put the boss on the back of the Belt Clamp into the hole on the Carriage. Also check that the Stacker Lower Tray moves smoothly up and down.

REP 24.30 Stacker Right Drive Belt

Parts List on [PL 24.31 Item 9](#)

Removal

NOTE: Do not to remove both Carriage Assemblies (Front/Rear). When removing them, work on one at a time. After repairing one, work on the other. If both are removed together, a misalignment could occur binding the Stacker Tray.

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Front Door (Door G) ([REP 24.19](#)).
3. Without touching the Encoder, slide the Gear in the direction of the arrow and away from the Pulley Doc Clutch. Move the Stacker Lower Tray to its lowest position.

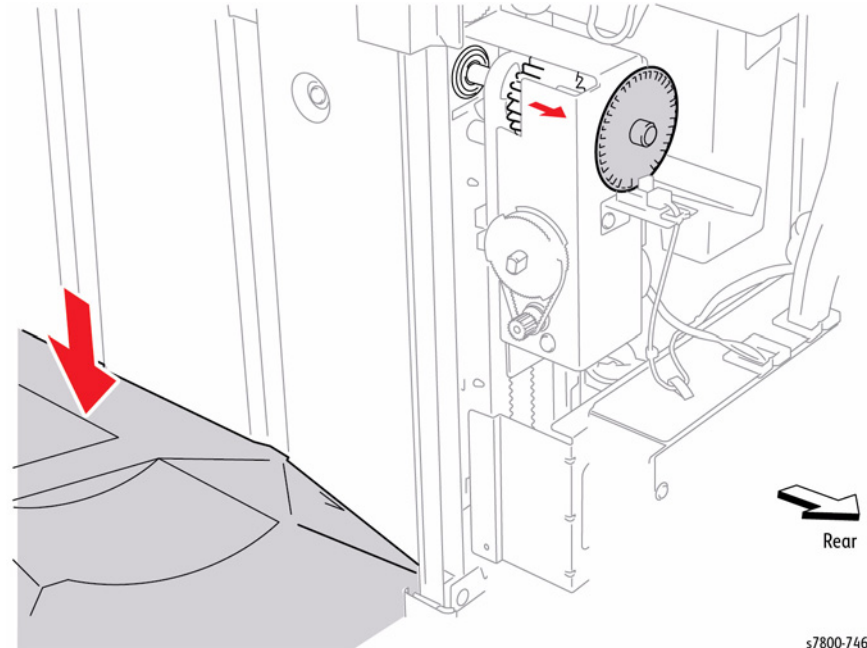


Figure 1 Sliding the Gear

4. Remove the Rear Lower Cover ([REP 24.25](#)).
5. Remove the Stacker Bracket Assembly ([REP 24.35](#)).

6. Remove 2 screws that secure the Tray Carriage.
7. Remove the Spring on the Carriage.
8. Remove 1 screw that secures the upper side of the Belt Clamp.
9. Remove the upper belt Clamp.
10. Remove the Rear Carriage and Stacker Belt from the Finisher.

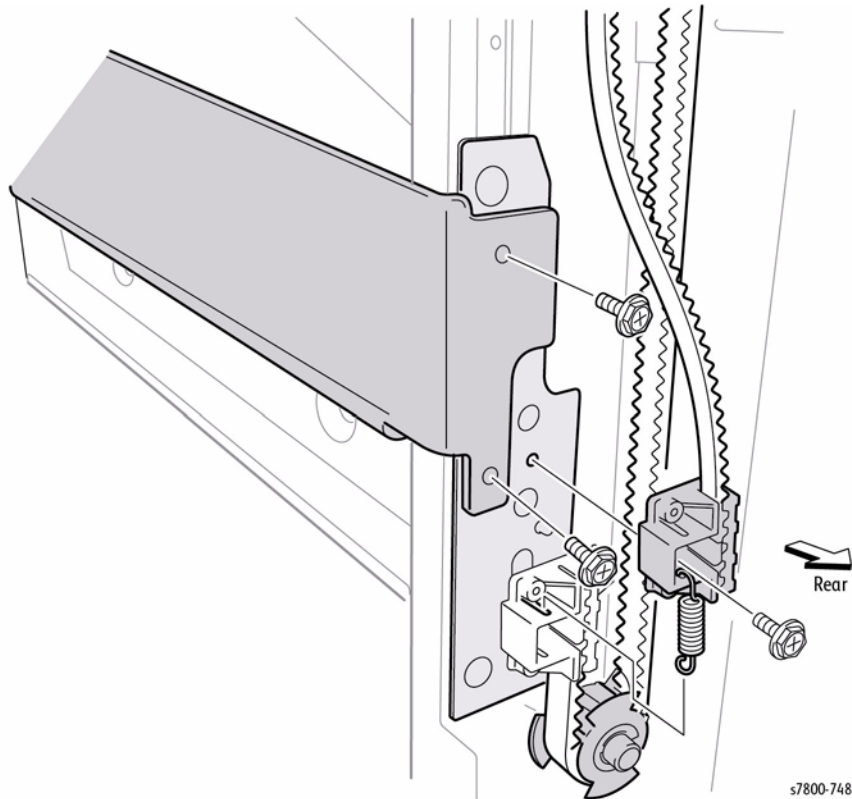


Figure 2 Removing the Finisher Stacker Right Drive Belt

Replacement

Put the boss on the back of the Belt Clamp into the hole on the Carriage. Also check that the Stacker Lower Tray moves smoothly up and down.

REP 24.31 Stack Height Sensor 1

Parts List on [PL 24.31 Item 13](#)

Removal

1. Remove the Front Door (Door G) ([REP 24.19](#)).
2. Remove 1 screw that secures the Stack Height Sensor 1.
3. Remove the Sensor.
4. Disconnect the wiring harness connector [P/J8331](#) from the Stack Height Sensor 1.

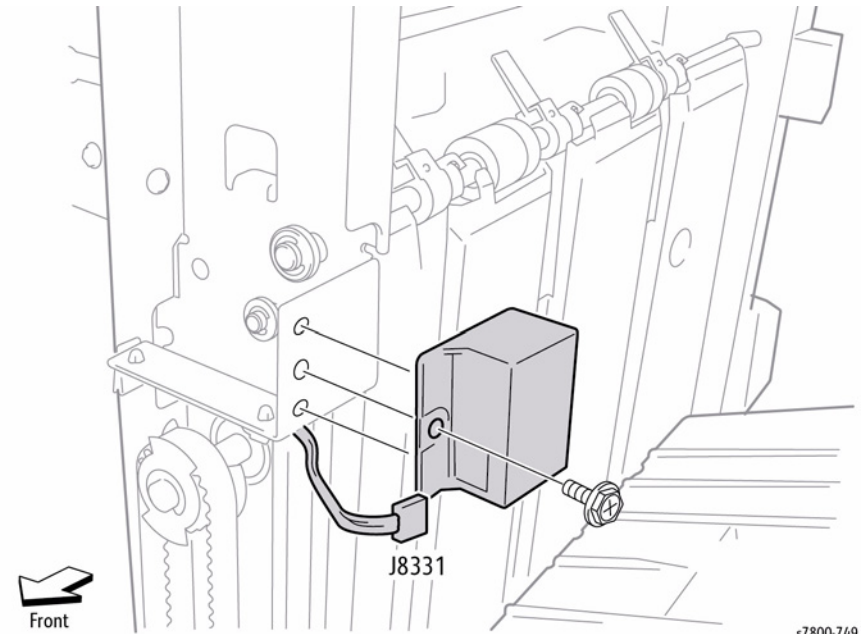


Figure 1 Removing the Stack Height Sensor 1

Replacement

Put the two bosses on the Stack Height Sensor 1 into the two holes on the Finisher frame before tightening screw.

REP 24.32 Stack Height Sensor 2

Parts List on [PL 24.31 Item 13](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove 1 screw that secures the Stack Height Sensor 2 and remove the Sensor.
3. Disconnect the wiring harness connector [P/J8330](#) from the Stack Height Sensor 2.

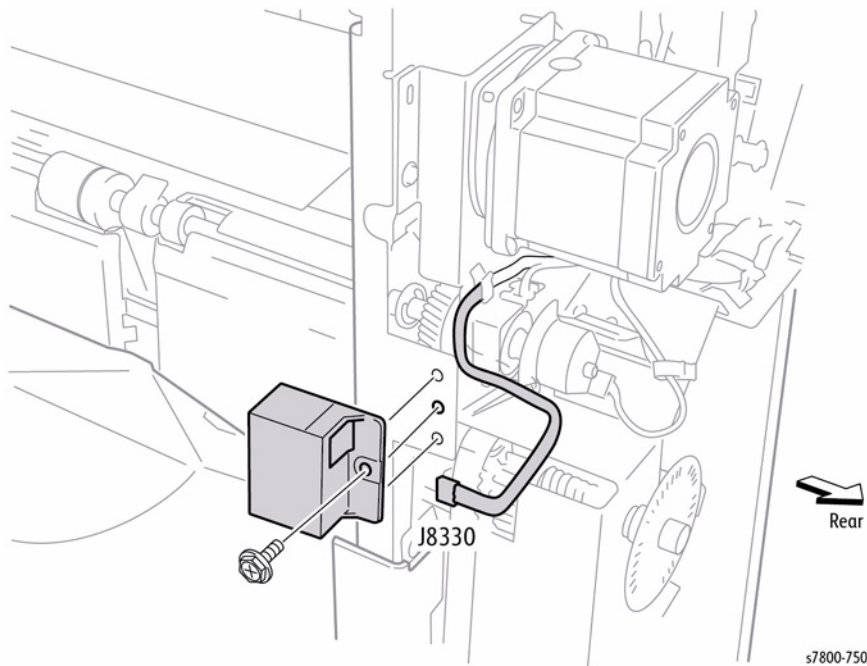


Figure 1 Removing the Stack Height Sensor 2

Replacement

Put the two bosses on the Stack Height Sensor 2 into the two holes on the Finisher frame before tightening the screw.

REP 24.33 Lower Tray Upper Limit and No Paper Sensors

Parts List on [PL 24.31 Item 17](#), [PL 24.31 Item 32](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Stacker Bracket Assembly ([REP 24.35](#)).
3. Disconnect the wiring harness connector [P/J8327](#) or [P/J8326](#) from the Upper Limit Sensor or No Paper Sensor.
4. Release the hooks of the Sensor to remove.

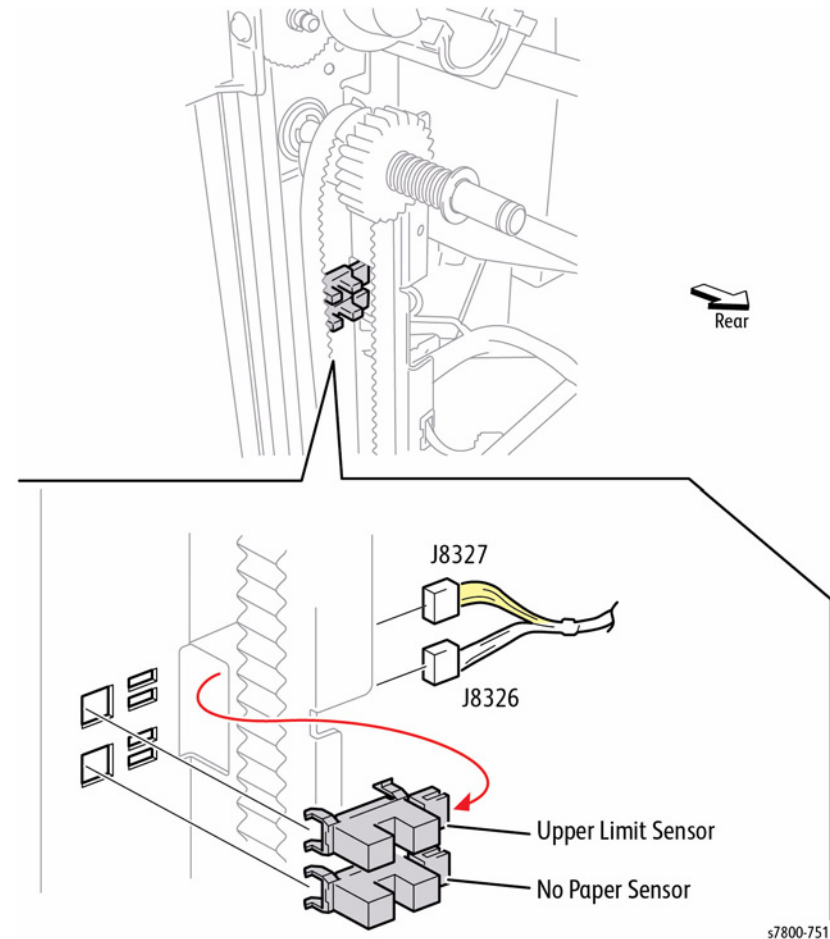


Figure 1 Removing the Lower Tray Upper Limit and No Paper Sensors

Replacement

Connect the yellow wiring harness connector [P/J8327](#) to the Lower Tray Upper Limit Sensor.

REP 24.34 Elevator Motor

Parts List on [PL 24.31 Item 24](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Rear Lower Cover ([REP 24.25](#)).
3. Perform Steps 1~4 in [REP 24.92](#) (Finisher Main PWB).
4. Disconnect the Elevator Motor from the Finisher Main PWB.
5. Remove 2 screws that secure the Elevator Motor to the Stacker Bracket.
6. Remove the Elevator Motor in the direction of the arrow while removing the Belt.

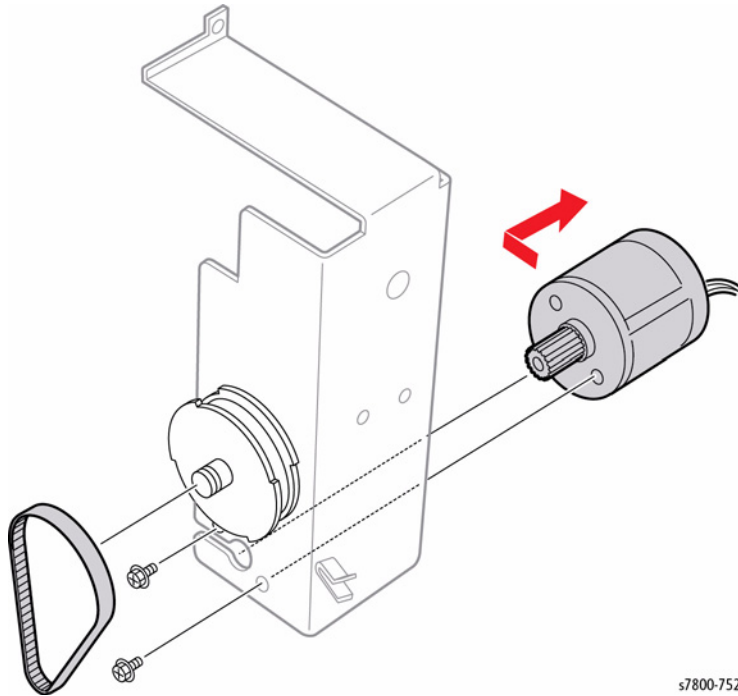


Figure 1 Removing the Elevator Motor

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REP 24.35 Stacker Bracket Assembly

Parts List on [PL 24.31 Item 27](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Rear Lower Cover ([REP 24.25](#)).
3. Perform Steps 1~4 in [REP 24.92](#) (Finisher Main PWB).
4. Without touching the Encoder, slide the Gear in the direction of the arrow and away from the Pulley Doc Clutch. Move the Stacker Lower Tray to its lowest position.

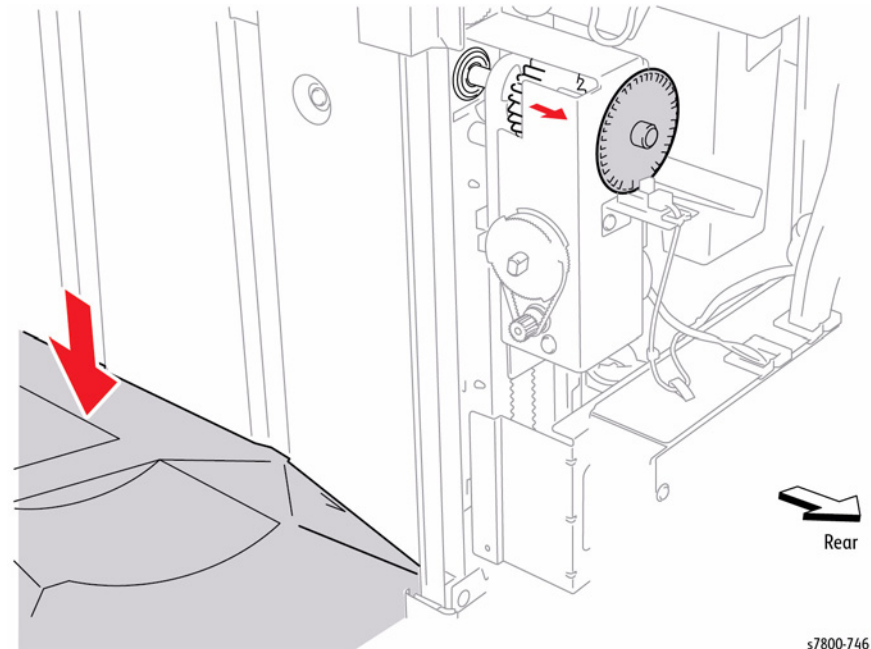


Figure 1 Removing the Gear

s7800-746

5. Release the harness from the cable restraint clamps.
6. Disconnect the wiring harness connector **P/J8328** from the Stacker Encoder Sensor.

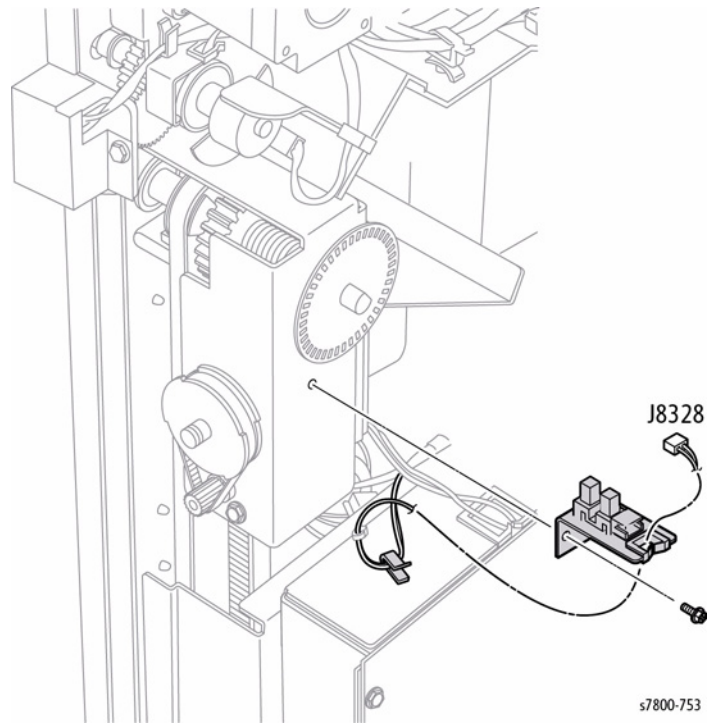


Figure 2 Releasing and disconnecting wiring harness connector

7. Disconnect the wiring harness connector **P/J8305** on the Finisher Main PWB.

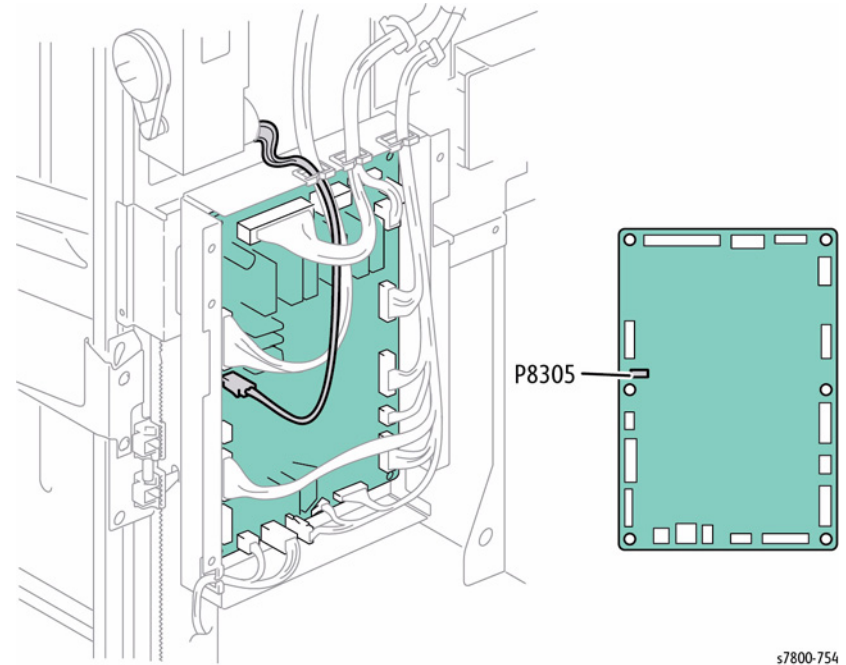
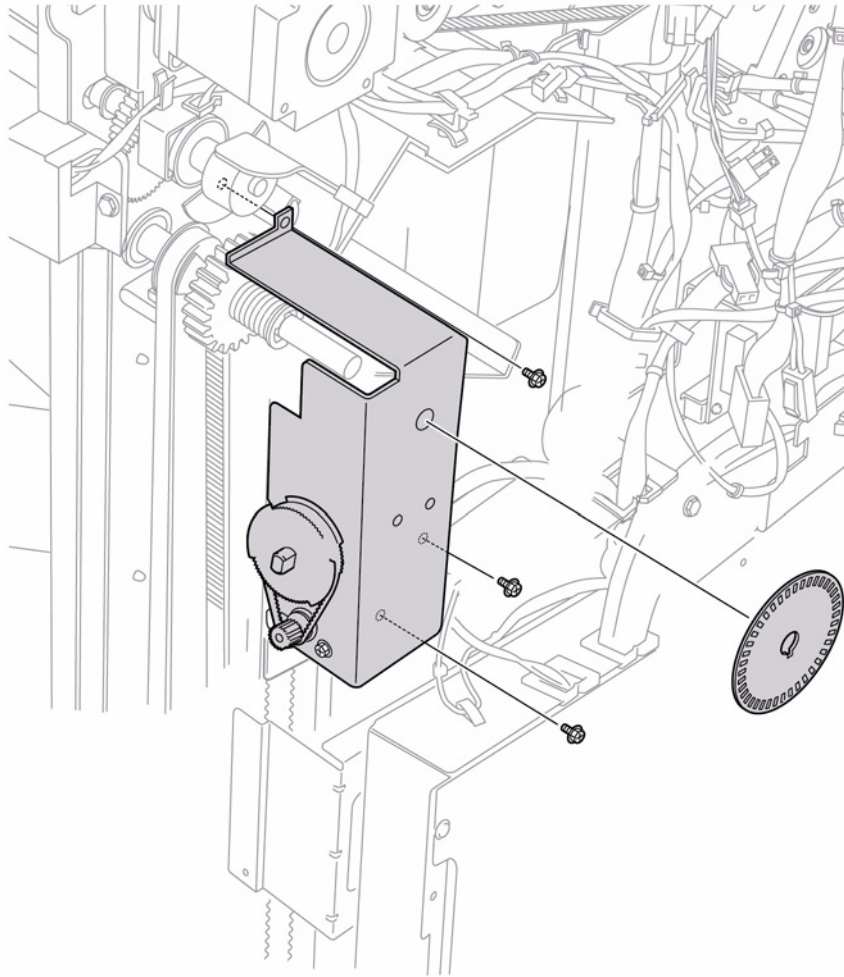


Figure 3 Disconnecting the wiring harness connector

8. Remove 1 screw that secures the Sensor Bracket and remove it from the Stacker Bracket.



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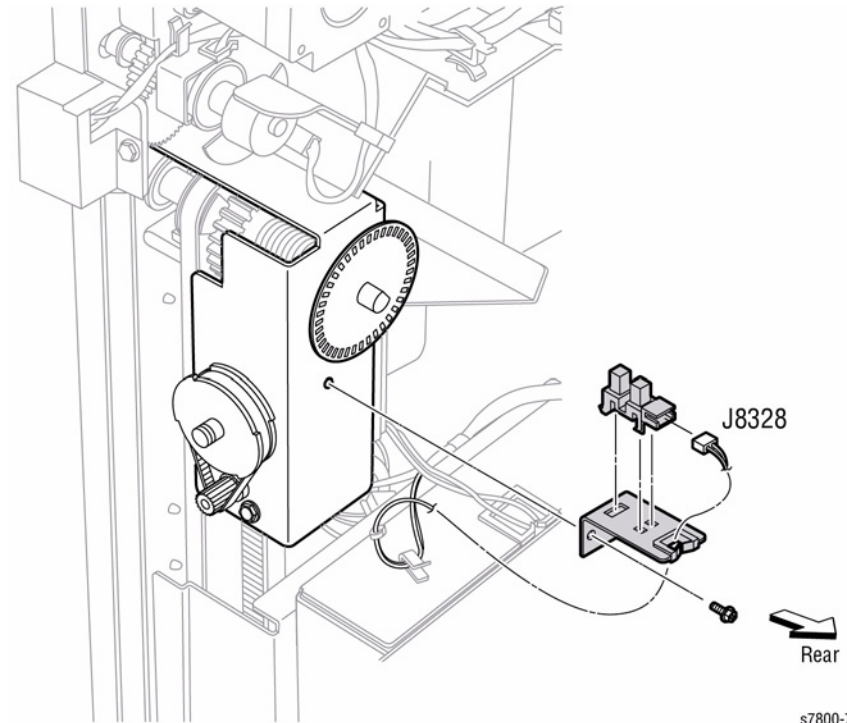
Figure 4 Removing the Stacker Bracket Assembly

REP 24.36 Stacker Encoder Sensor with Bracket

Parts List on [PL 24.31 Item 32](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove 1 screw that secures the Sensor Bracket.
3. Release the harness from the harness Clamp.
4. Disconnect the wiring harness connector [P/J8328](#) from the Stacker Encoder Sensor.
5. Release the hooks of the sensor to remove it from the Sensor Bracket.



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Figure 1 Removing the Stacker Encoder Sensor

REP 24.37 Inner Cover

Parts List on [PL 24.31 Item 35](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Without touching the Encoder, slide the Gear in the direction of the arrow and away from the Pulley Doc Clutch. Move the Stacker Lower Tray to its lowest position.

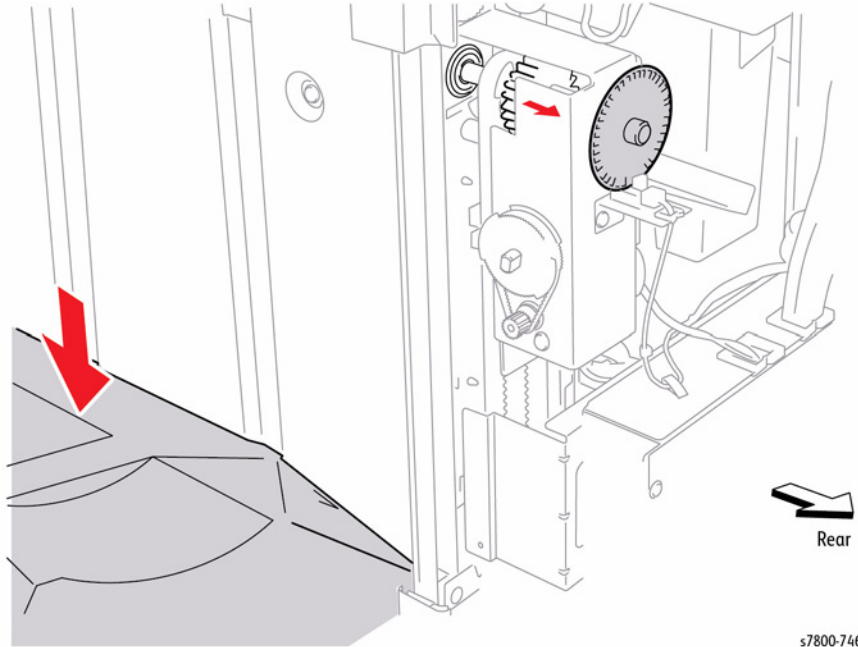


Figure 1 Lowering the Stacker Lower Tray

3. Remove the Stacker Lower Tray ([REP 24.23](#)).

4. Remove 4 screws that secure the cover to the Finisher.
5. Lift the cover slightly and remove from the Finisher.

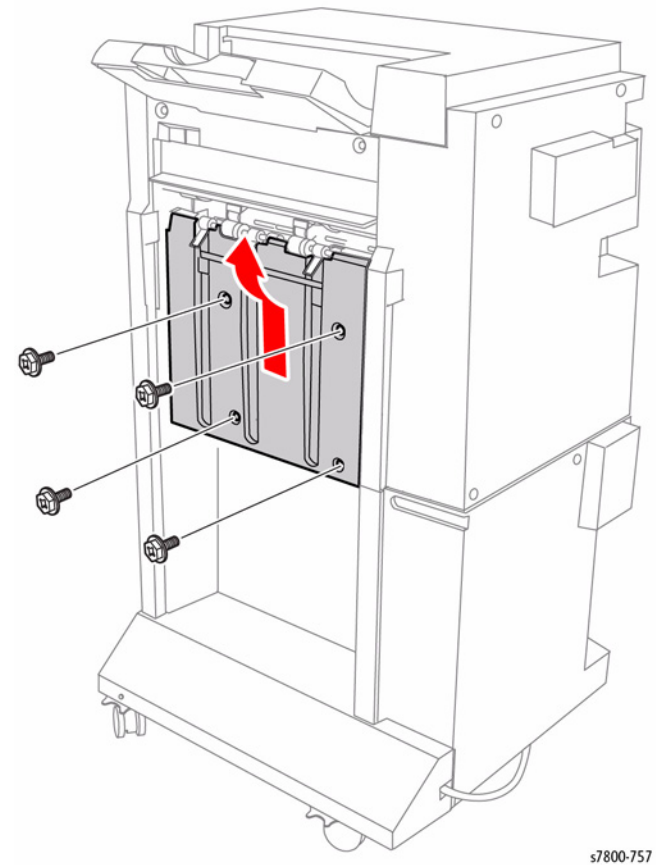


Figure 2 Removing the Finisher Inner Cover

REP 24.38 Puncher Frame Assembly

Parts List on [PL 24.32 Item 1](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove 2 screws that secure the Punch Frame Assembly from the front of the Finisher.

NOTE: In order to prevent damaging the Registration Motor Drive Belt during the next step, use caution when removing the Punch Frame Assembly from the Finisher.

4. Remove 3 screws that secure the Front Punch Bracket.
5. Remove the Front Punch Bracket from the frame.

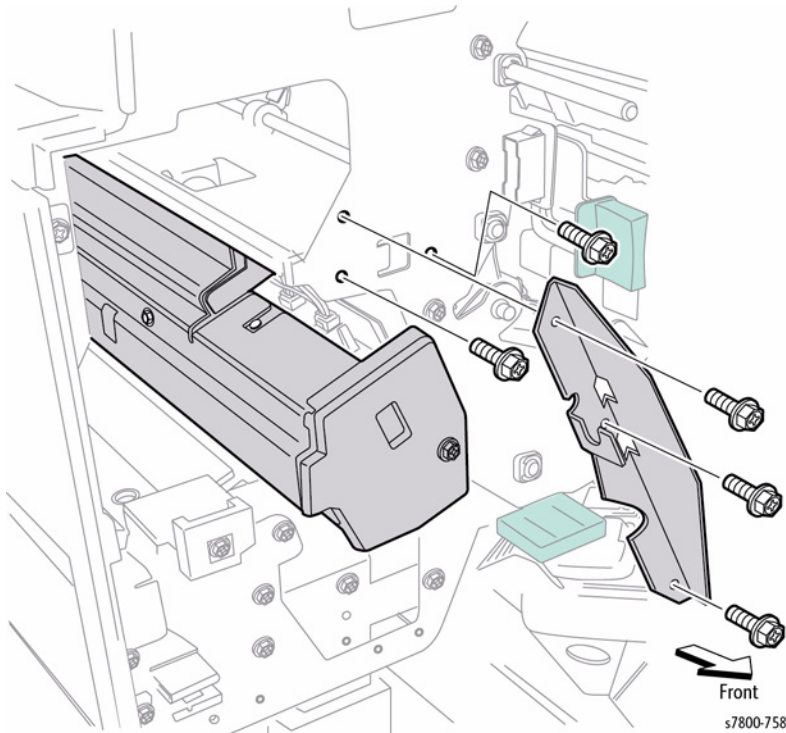


Figure 1 Removing the Finisher Punch

6. Disconnect the wiring harness connector [P/J8344](#). Open the Harness Clip and move the wiring harness to the side.
7. Disconnect the wiring harness connector [P/J8352](#) and release the cable-tie.
8. Disconnect the wiring harnesses connectors [P/J8332](#), [P/J8333](#), and [P/J8334](#).
9. Open the 3 harness clips and release the cable-tie.
10. Remove 2 screws that secure the Punch Frame Assembly.

11. Remove the Punch Frame Assembly from the rear side of the Finisher.

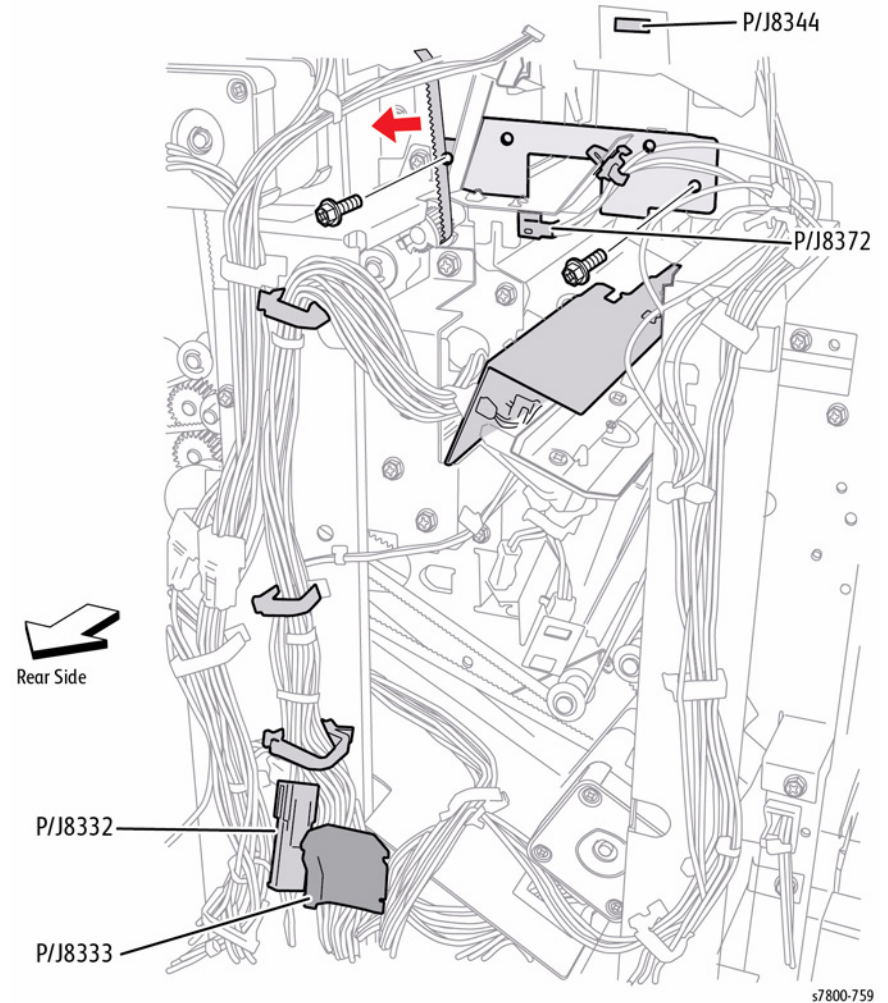


Figure 2 Removing the Punch Frame Assembly (Rear Side of Finisher)

REP 24.39 Punch Move Home Sensor

Parts List on [PL 24.32 Item 6](#)

Removal

1. Remove the Top Cover ([REP 24.20](#)).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove 2 screws that secure the Rear Punch Bracket.
4. Remove the Bracket.
5. Remove 1 screw that secures the Sensor Bracket.
6. Disconnect the wiring harness connector [P/J8352](#) from the Punch Unit Move Home Sensor.
7. Release the hooks of the sensor to remove the Sensor from the bracket.

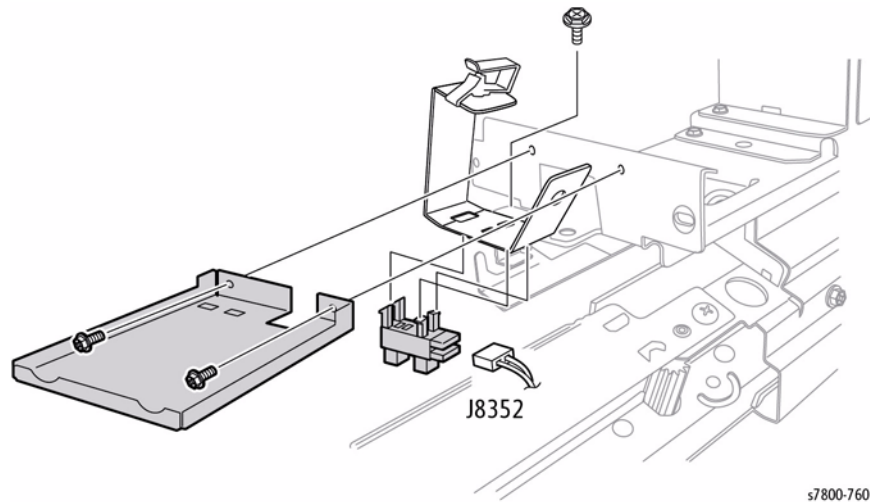


Figure 1 Removing the Punch Move Home Sensor

REP 24.40 Punch Bracket Assembly

Parts List on [PL 24.32 Item 7](#)

Removal

NOTE: There are five settings for the Finisher Punch: 2-/3-hole, 2-/4-hole, 3-hole, 2-hole and, no punch. Although the following removal procedures are for the 2-/3-hole version, the procedures apply to all punch-equipped Finishers.

1. Remove the Puncher Frame Assembly ([REP 24.38](#)).
2. Remove 1 screw that secures the Punch Front Cover and remove the Cover.
3. Remove 2 screws that secure the Sensor Bracket and remove the Bracket.
4. Remove 2 screws that secure the Punch Left Cover.
5. Remove three screws that secure the Holder Frame to the Punch Bracket and remove the Holder Frame.

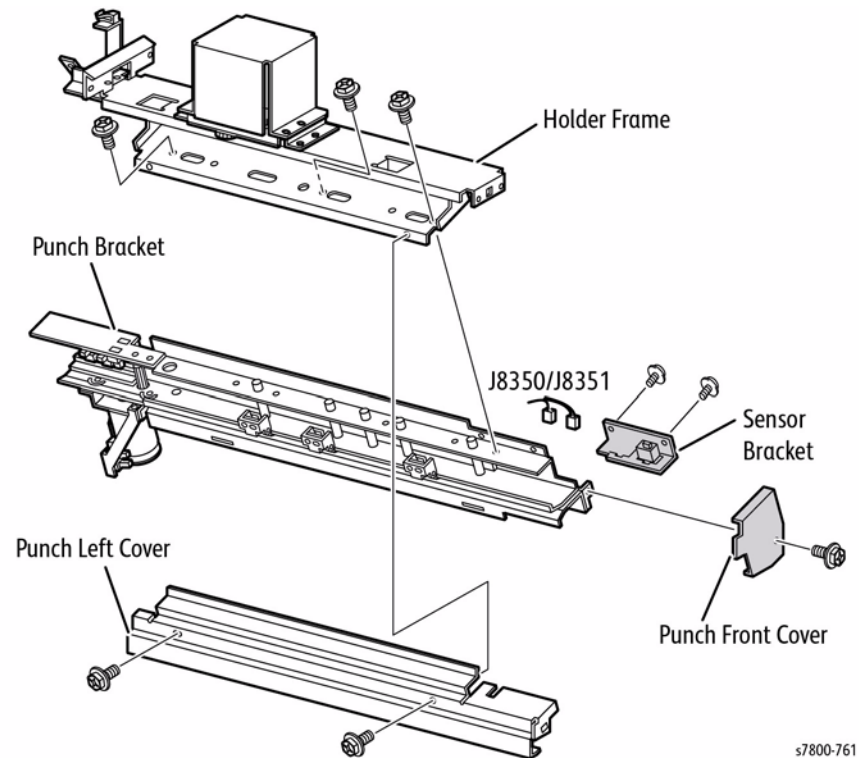


Figure 1 Removing the Punch Bracket Assembly

REP 24.41 Punch Side Registration Sensors 1 & 2

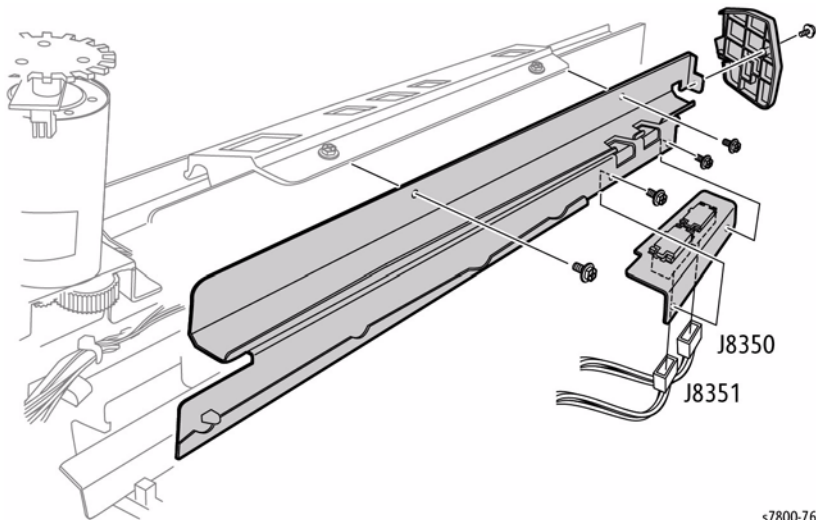
Parts List on [PL 24.32 Item 10](#), [PL 24.32 Item 11](#)

Removal

1. Remove the Puncher Frame Assembly ([REP 24.38](#)).
2. Remove 1 screw that secures the Punch Front Cover.
3. Remove 2 screws that secure the Side Registration Chute to the Punch Frame.

NOTE: A harness connects the Side Registration Chute and the Punch Frame. The chute does not detach from the Punch Frame.

4. Remove 2 screws that secure the Sensor Bracket to the Side Registration Chute.
5. Disconnect the wiring harness connectors from the sensors.
 - Side Regi Sensor 1 - [P/J8350](#)
 - Side Regi Sensor 2 - [P/J8351](#)



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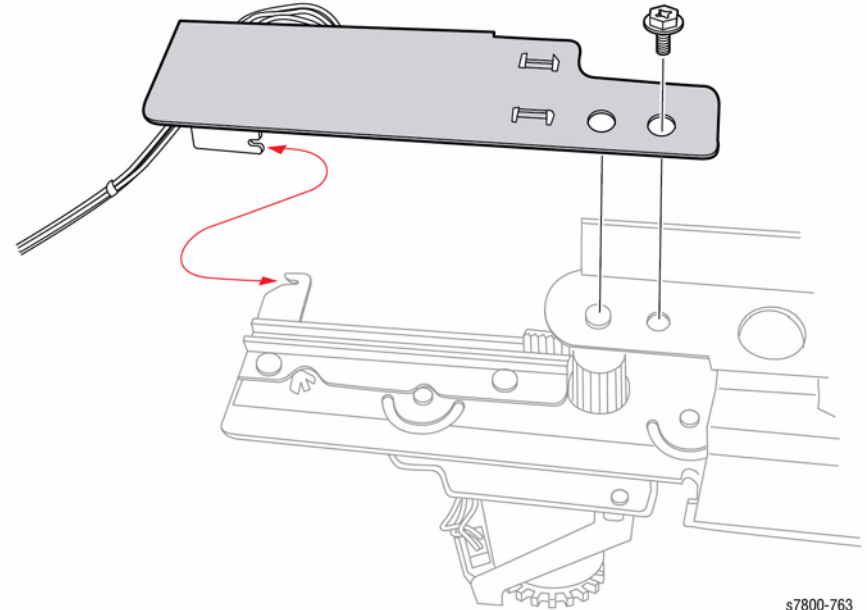
Figure 1 Removing the Finisher Punch Side Registration Sensors 1 & 2

REP 24.42 Hole Select Punch, Front Punch and Home Punch Sensors

Parts List on [PL 24.32 Item 19](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Slide the Punch to the rear.
3. Remove the Phillips-head screw that secures the bracket.



s7800-763

Figure 1 Removing the screw

4. Disconnect the wiring harness connectors:
 - Punch Hole Select Sensor - P/J8346
 - Puncher Front Sensor - P/J8347
 - Puncher Home Sensor - P/J8348
5. Release the hooks of the sensor to remove the Sensor from the bracket.

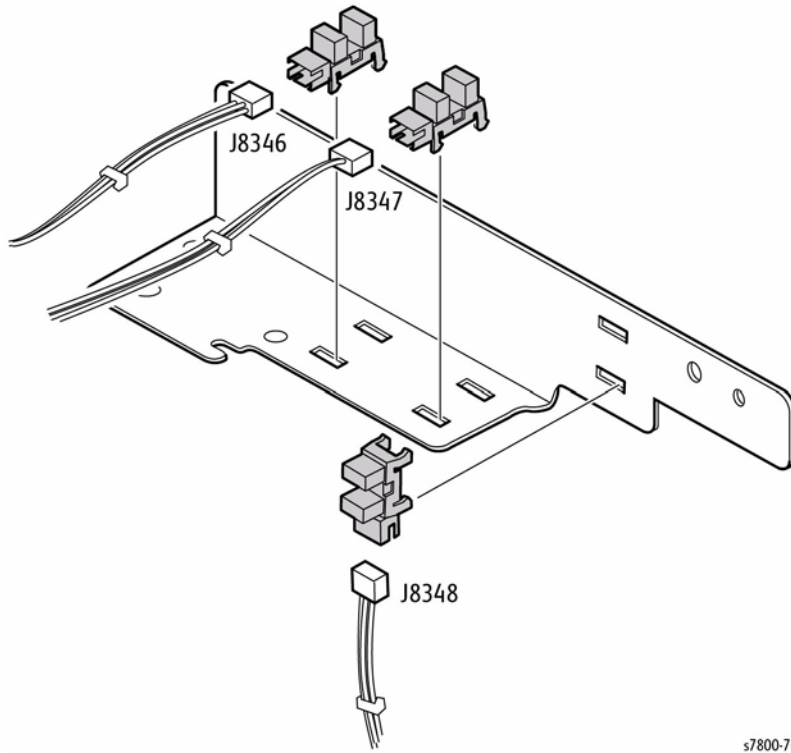


Figure 2 Removing the Hole Select Punch, Front Punch, and Home Punch Sensors

Replacement

When installing the bracket, engage each notch of the bracket and the Punch Frame. Then tighten the screw while pushing the bracket toward the set screw.

REP 24.43 Punch Box Set Sensor

Parts List on [PL 24.32 Item 6](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Punch Waste Bin ([PL 24.32 Item 29](#)).
3. Reach in through the front and release the hooks to remove the Sensor.
4. Disconnect the wiring harness from the Sensor and remove it from the Finisher.

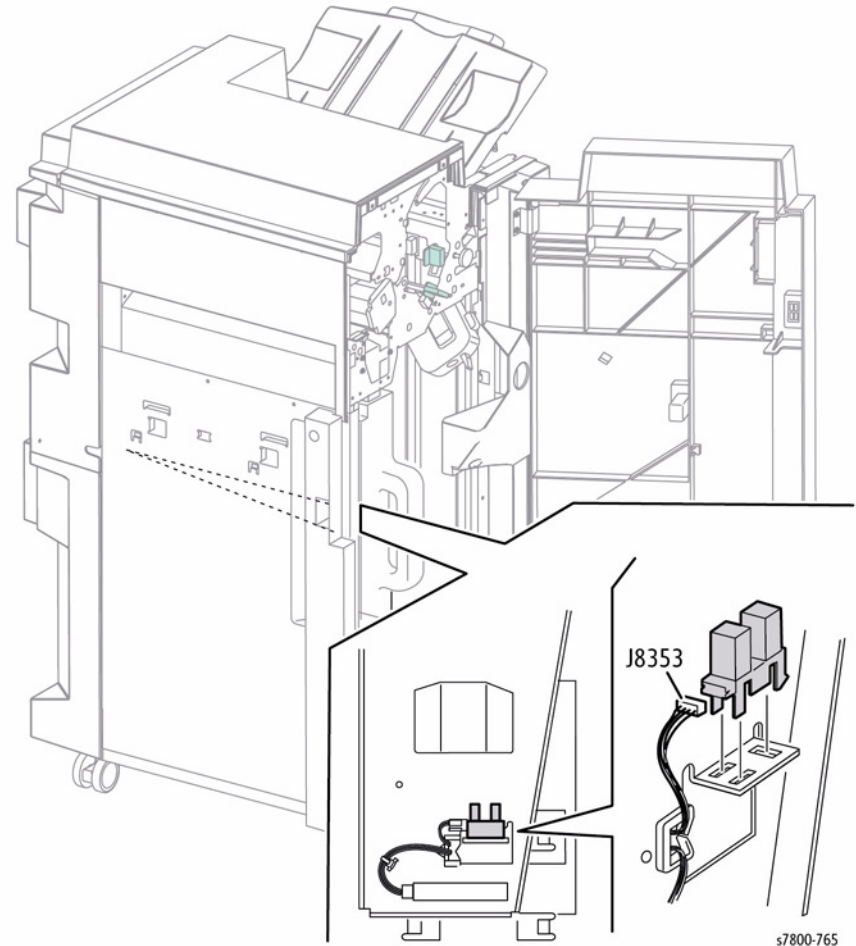


Figure 1 Removing the Punch Box Set Sensor

REP 24.45 Stapler Assembly

Parts List on [PL 24.33 Item 2](#)

Removal

1. Open the Front Door (Door G).
2. Move the Staple Head to the front.
3. Remove the Staple Cartridge.
4. Remove 1 screw that secures the Stapler Cover and remove the Cover.
5. Disconnect the 2 wiring harness connectors.
 - Staple Head - [P/J8356](#) and [P/J8357](#)
 - Staple Move Position Sensor - [P/J8354](#)

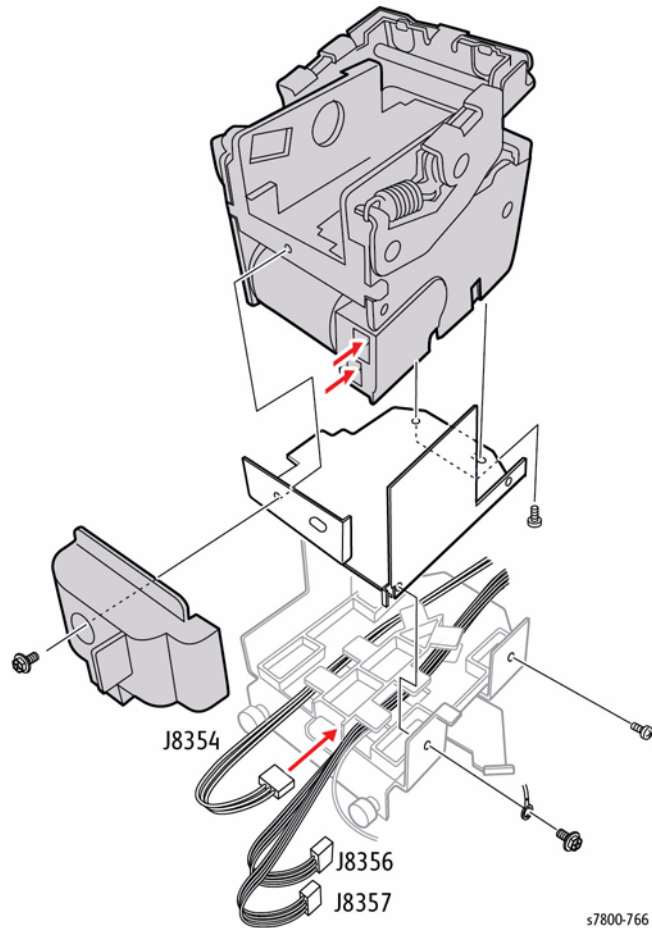


Figure 1 Removing the Stapler Assembly

REP 24.46 Stapler Move Motor

Parts List on [PL 24.33 Item 9](#)

Removal

1. Remove the Booklet Tray ([PL 24.12 Item 3](#)).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Stacker Lower Tray ([REP 24.23](#)).
4. Remove the Inner Cover ([REP 24.37](#)).
5. Remove 2 screws that secure the Motor to the Upper Slider ([PL 24.33 Item 8](#)).
6. Remove the Bracket.

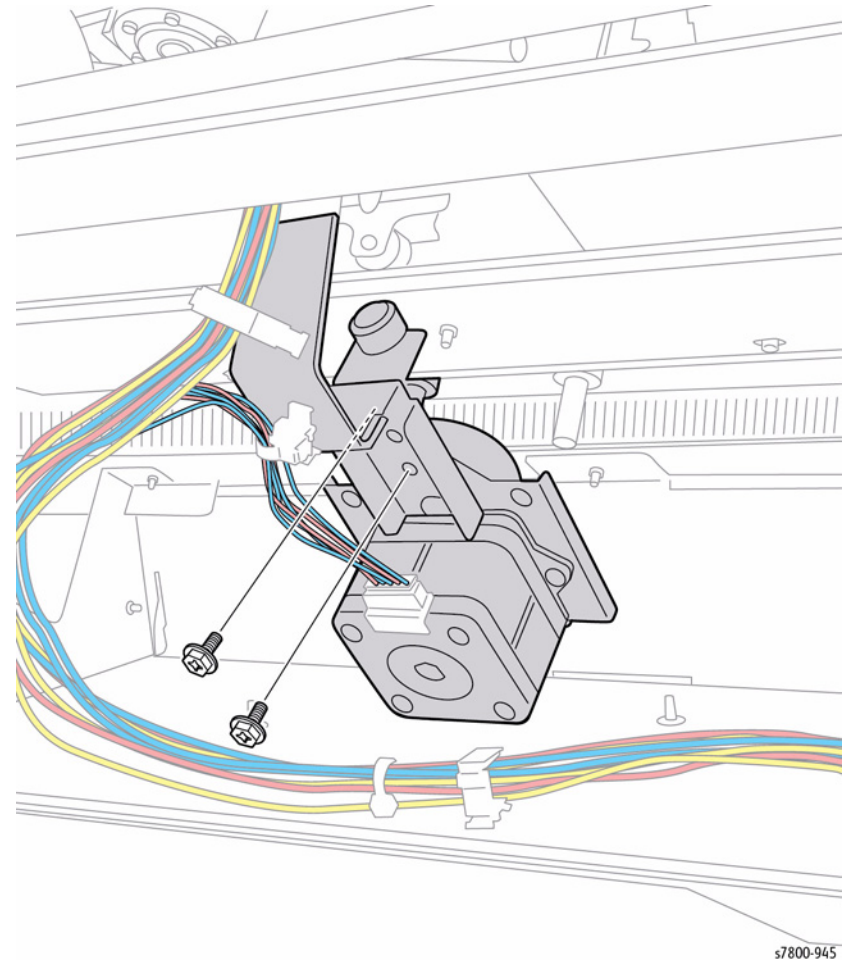


Figure 1 Removing the Bracket

7. Remove 2 screws that secure the harness Bracket Motor to the Base Rail (PL 24.33 Item 12).
8. Remove the Motor with Bracket.

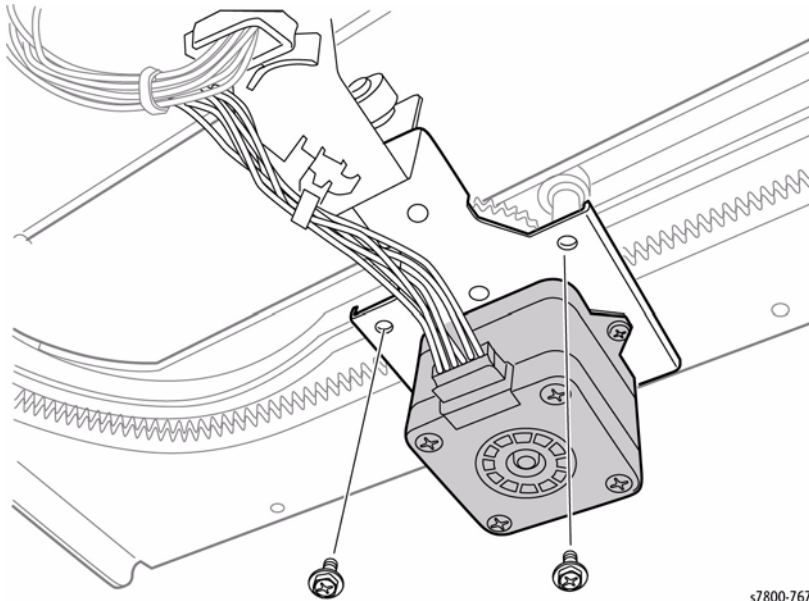


Figure 2 Removing the screws

9. Remove 2 screws that secure the Stapler Motor.
10. Remove the Stapler Move Motor.

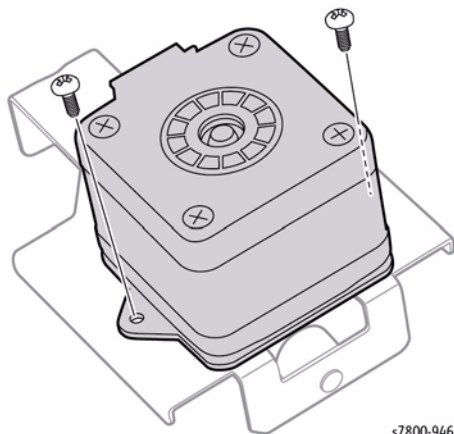


Figure 3 Removing the Stapler Move Motor

REP 24.47 Stapler Rail

Parts List on PL 24.33 Item 10

Removal

1. Remove the Stapler Assembly (REP 24.45).
2. Remove the Inner Cover (REP 24.37).

NOTE: Underneath the Rail Assembly, ensure to use a stubby screwdriver or wrench.

3. Remove the 2 screws that secure the Stapler Move Motor.
4. Lift the Stapler Carriage out of the way.

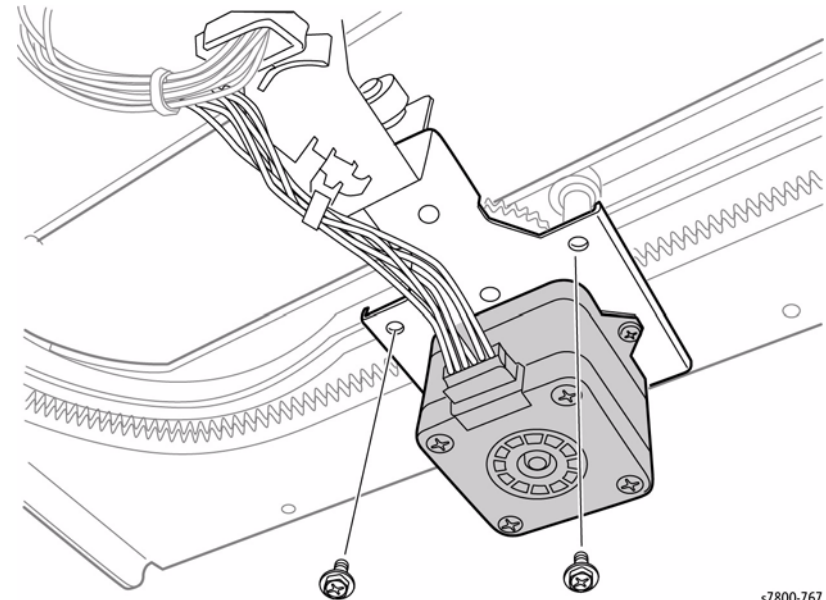


Figure 1 Removing the screws

5. Remove 6 screws that secure the Stapler Rail.
6. Remove the Finisher Stapler Rail.

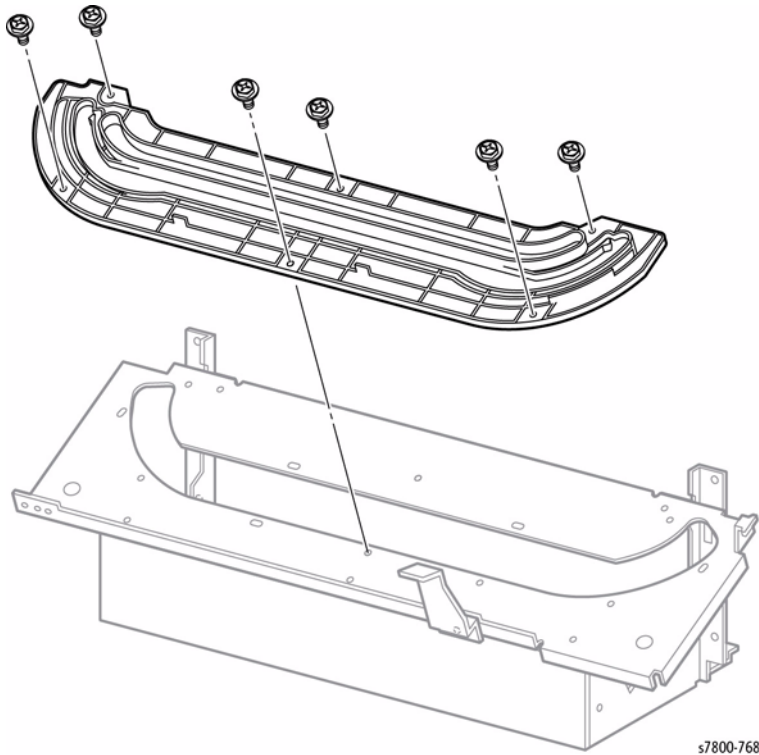


Figure 2 Removing the Finisher Stapler Rail

s7800-768

REP 24.48 Stapler Unit

Parts List on [PL 24.33 Item 18](#)

Removal

1. Remove the Front Door (Door G) ([REP 24.19](#)).
2. Remove the Stapler Cartridge from the Stapler Unit ([PL 24.33 Item 1](#)).

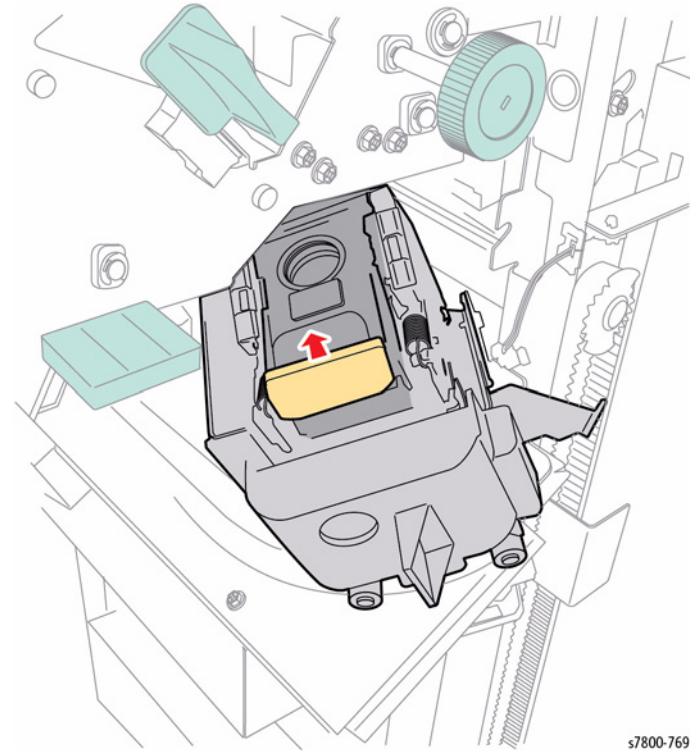


Figure 1 Removing the Stapler Cartridge

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3. Remove the Rear Upper Cover (REP 24.26).
4. Remove the Rear Lower Cover (REP 24.25).
5. Loosen the four screws securing the Finisher Main PWB Cover and remove it in the direction of the arrow.

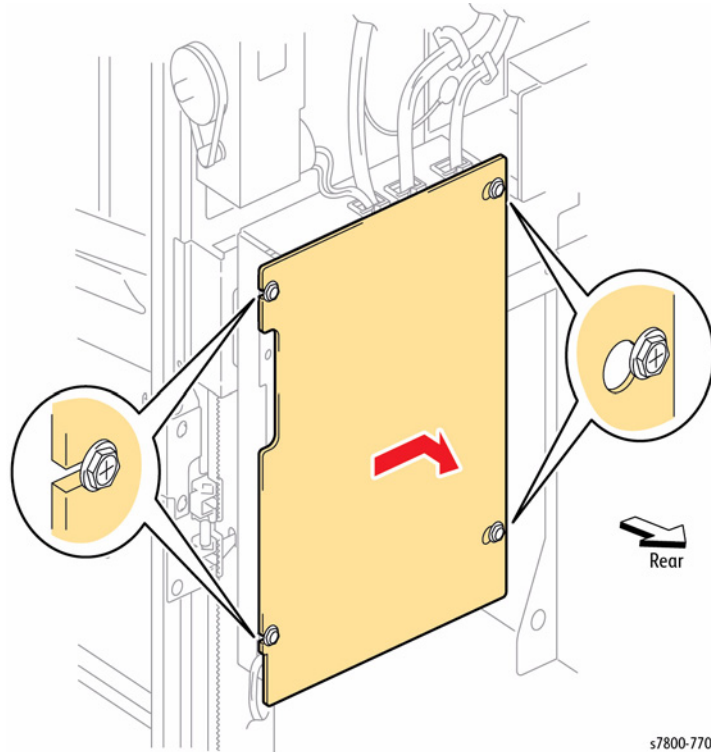


Figure 2 Removing the screws and the Finisher Main PWB Cover

6. Disconnect the wiring harness connector P/J8308 from the Finisher Main PWB.
7. Remove 1 screw that secures the ground wire of the Staple Harness.

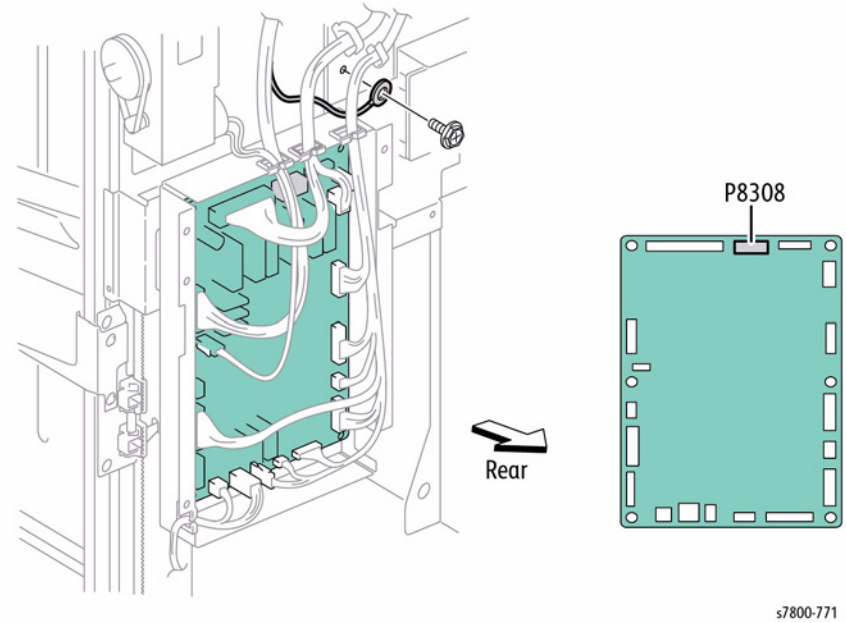


Figure 3 Disconnecting the connector and removing the screw

8. Release the harness from the Clamp.
9. Disconnect the wiring harness connectors **P/J8327** and **P/J8326** from the Upper Limit and No Paper Sensors.
10. Release the harness from the Clamp on the underside of the Stapler Unit.
11. Remove 2 screws each on the front and rear that secure the Stapler Unit.
12. Move the Stapler in the direction of the arrow to disengage the hooks from the frame and remove the Stapler from the front.

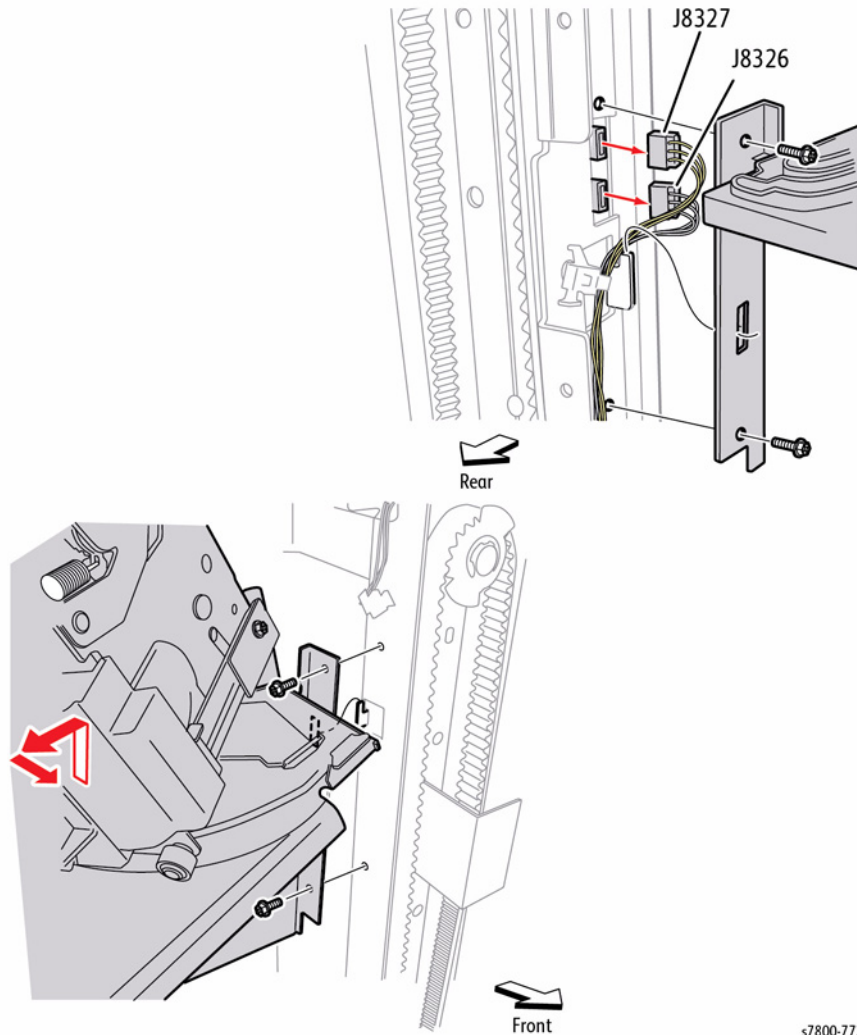


Figure 4 Removing the Finisher Stapler Unit

s7800-772

REP 24.49 Eject Chute Assembly

Parts List on **PL 24.34 Item 1**

Removal

1. Remove the Eject Clamp Bracket (**REP 24.53**).
2. Disconnect the Sub Paddle Solenoid wiring harness connector **P/J8340** from the Main Drive Harness.
3. Release the harness of the Sub Paddle Solenoid from the two Clamps.

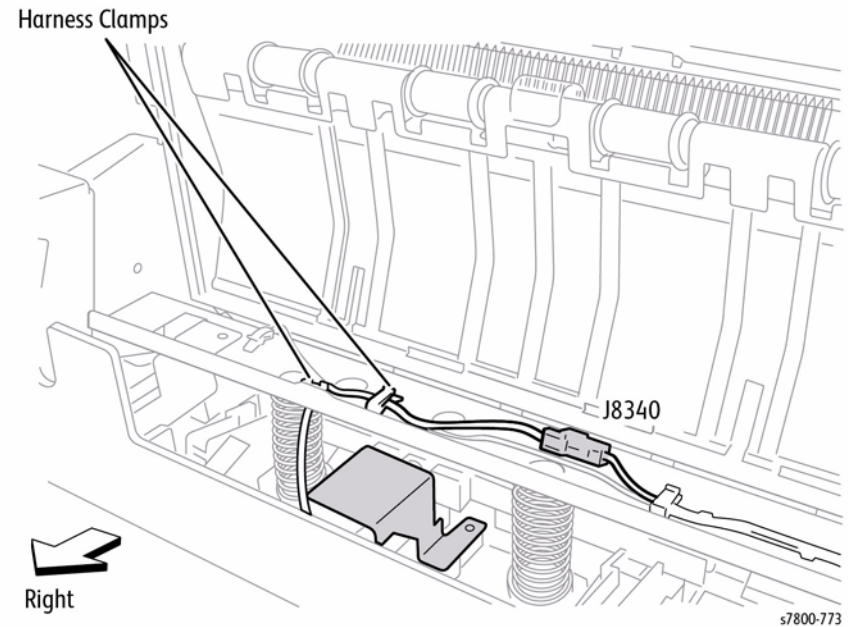


Figure 1 Disconnecting the connector and releasing the harness

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4. While pushing the Lever in the direction of the arrow, remove the screw that secures the Eject Cam Follower to the Eject Pinch Shaft to remove the Lever.
5. Remove the E-ring that secures the Eject Pinch Shaft on the rear of the Finisher.
6. Remove the Bearing on the rear side.

7. Remove the E-ring that secures the Eject Pinch Shaft on the front of the Finisher.
8. Remove the Bearing on the front side.

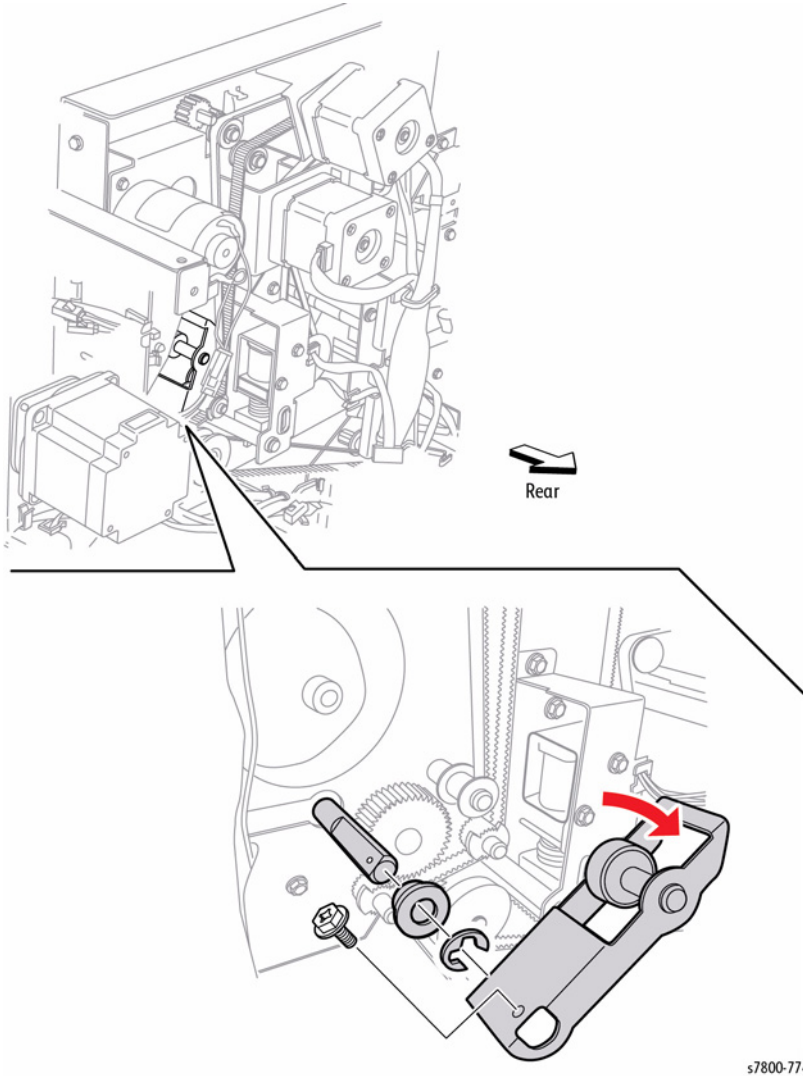


Figure 2 Removing the E-ring and Bearing (Rear Side)

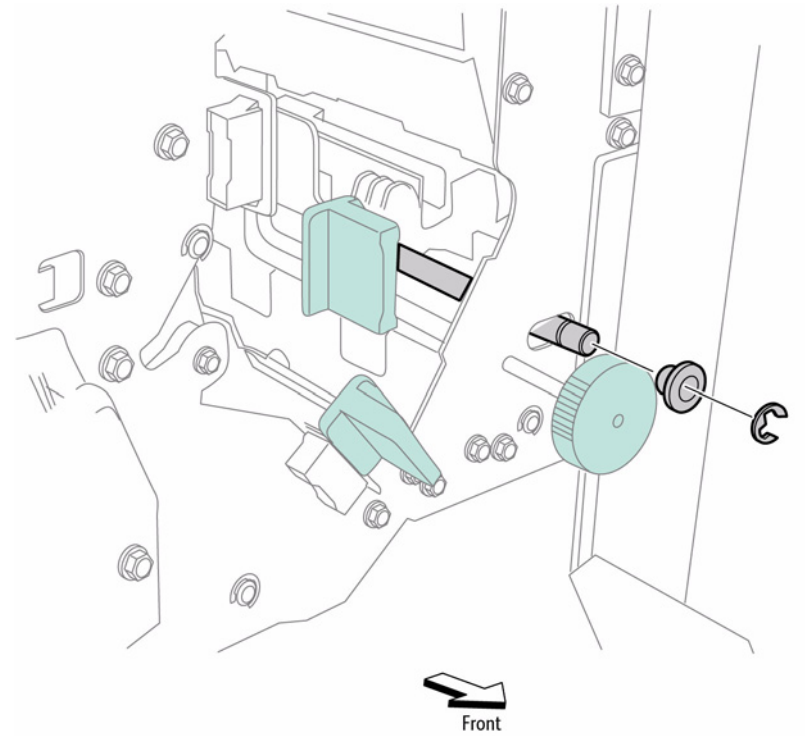


Figure 3 Removing the E-ring and Bearing (Front Side)

9. While pulling the Eject Chute toward you from the right side of the Finisher, tilt it slightly to remove the front end of the Eject Pinch Shaft from the hole in the front of the frame. Pull the Eject Pinch Shaft from the rear enough to allow the Eject Chute to clear the frame.
10. Remove the Eject Chute from the Finisher.

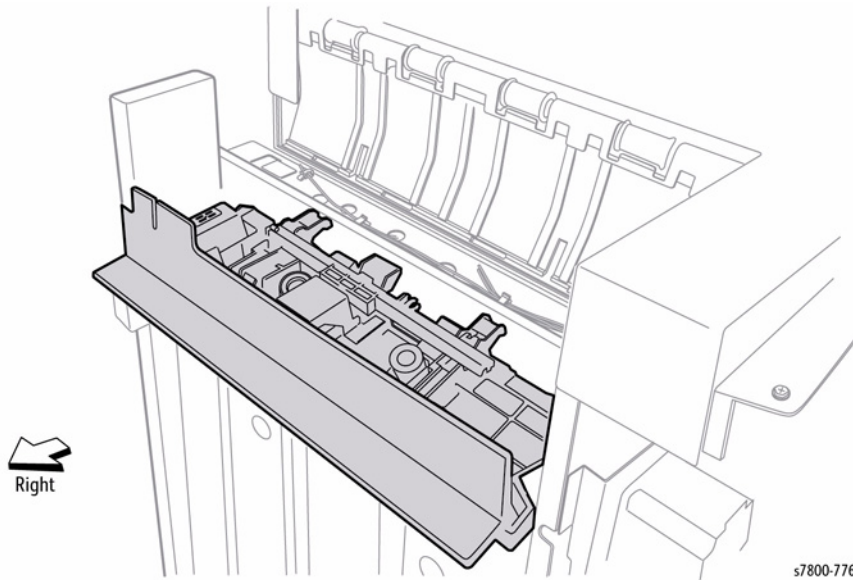


Figure 4 Removing the Eject Chute

11. Remove the Sub Paddle Solenoid (REP 24.50 - steps 4 and 5).
12. Remove the Spring.
13. Lift the Eject Pinch Shaft from the Eject Chute.

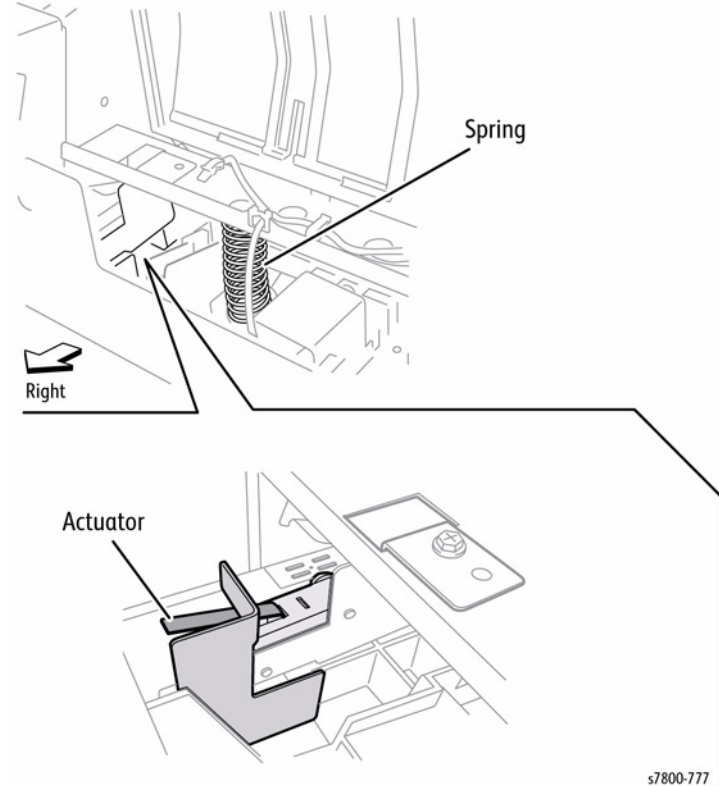


Figure 5 Removing the Finisher Eject Chute Assembly

Replacement

Make sure the Door H Interlock Switch Actuator (Figure 5) is placed under the bracket on the Eject Chute.

REP 24.50 Sub Paddle Solenoid

Parts List on [PL 24.34 Item 3](#)

Removal

1. Remove the Top Tray ([REP 24.21](#)).
2. Disconnect the wiring harness connector [P/J8340](#) of the Sub Paddle Solenoid from the Main Drive harness.
3. Release the harness of the Sub Paddle Solenoid from the two harness Clamps.
4. Remove 3 screws that secure the Solenoid Bracket to the Eject Chute and remove it in the direction of the arrow.

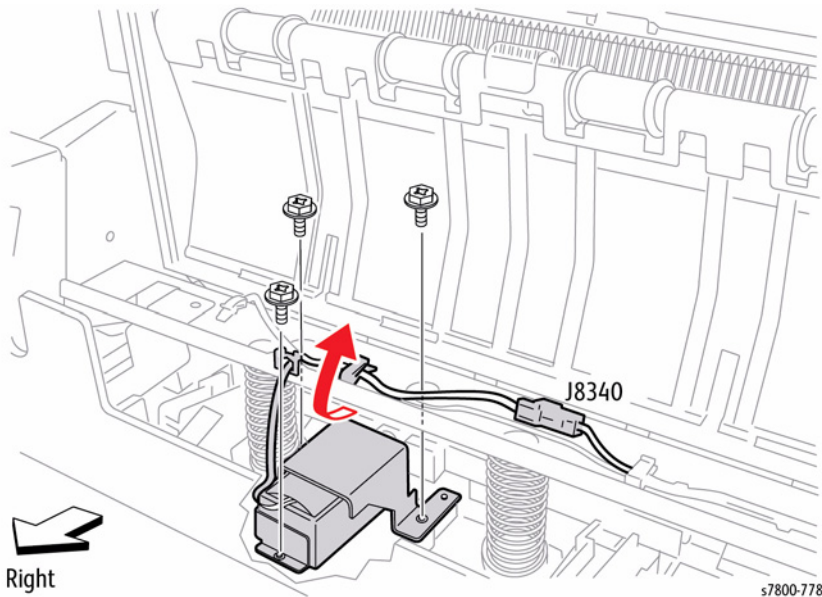


Figure 1 Disconnecting the connector and releasing the harness

5. Remove 2 screws that secure the Solenoid to the Bracket.
6. Remove the Sub Paddle Solenoid.

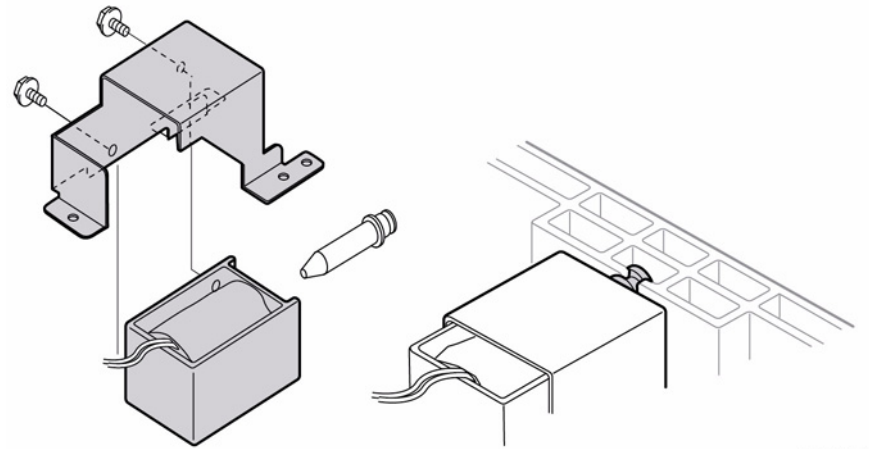


Figure 2 Removing the Sub Paddle Solenoid

REP 24.51 Paddle Shaft Assembly

Parts List on [PL 24.34 Item 9](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Top Tray ([REP 24.21](#)).
3. Open the Front Door (Door G).
4. Loosen the set screw securing the Knob 2C on the shaft.
5. Pull the Knob 2C off the Cyclone Paddle Drive Shaft.
6. Remove 2 E-rings that secure the Cyclone Paddle Drive Shaft on the front.
7. Remove the Bearing.

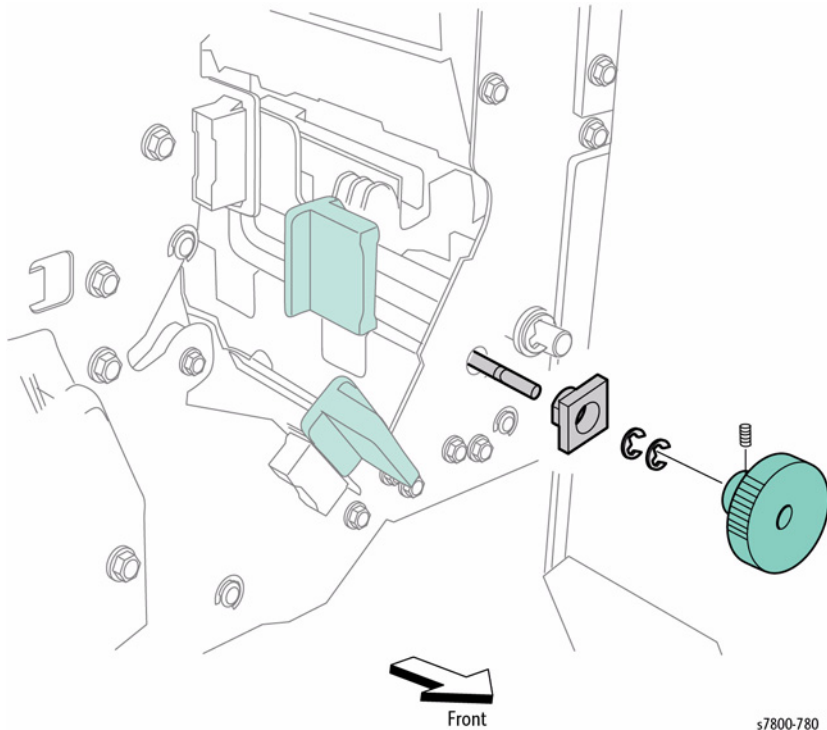


Figure 1 Removing the E-ring and Bearing

8. Loosen 2 screws that secure the Tension Bracket on the rear.
9. Move the Tension Bracket in the direction of the arrow so the Belt tension decreases and remove the Belt from the pulleys.

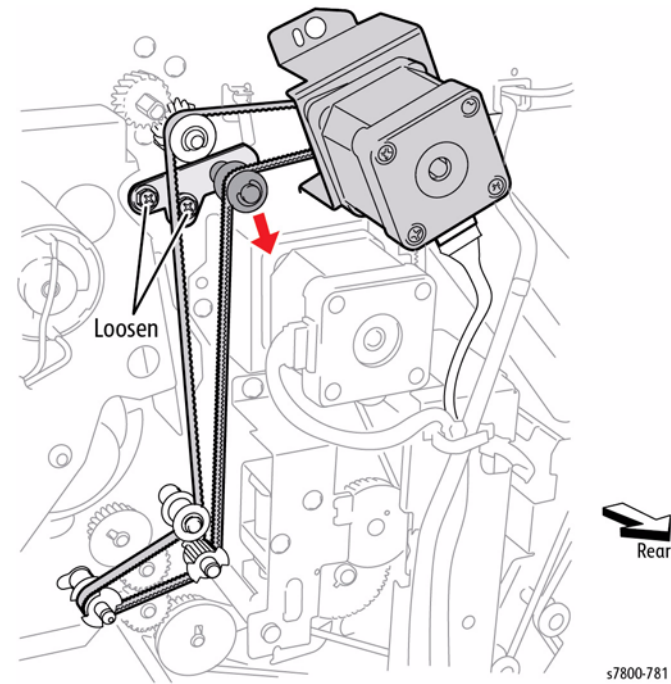


Figure 2 Loosening the screws and moving the Tension Bracket

10. Release the hook of Gear Z23 attached to the Paddle Shaft and remove.
11. Remove the E-clip.
12. Remove the Bearing.
13. Move the Cyclone Paddle Drive Shaft to the rear to remove the front of the Paddle Shaft from the hole in the frame, then remove the Cyclone Paddle Drive Shaft from the Finisher.

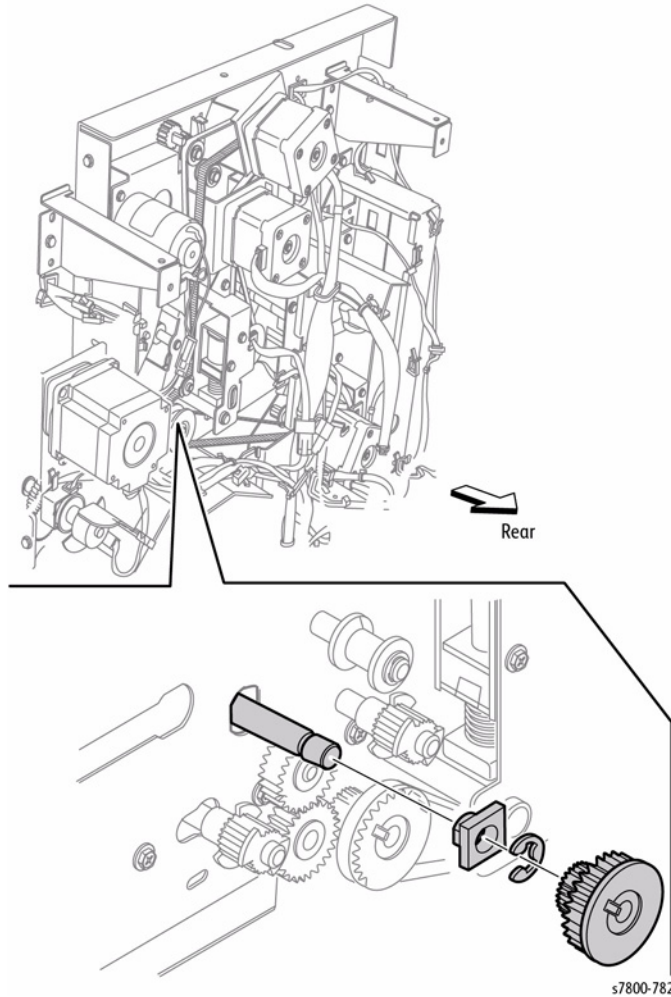


Figure 3 Removing the Paddle Shaft Assembly

Replacement

Belt tension is automatically adjusted by the force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, do not move the Tension Bracket.

REP 24.52 Eject Clamp Motor

Parts List on [PL 24.34 Item 10](#)

Removal

1. Remove the Eject Clamp Bracket ([REP 24.53](#)).
2. Remove 2 screws that secure the Eject Clamp Motor to the Eject Clamp Bracket.
3. Remove the Eject Clamp Motor.

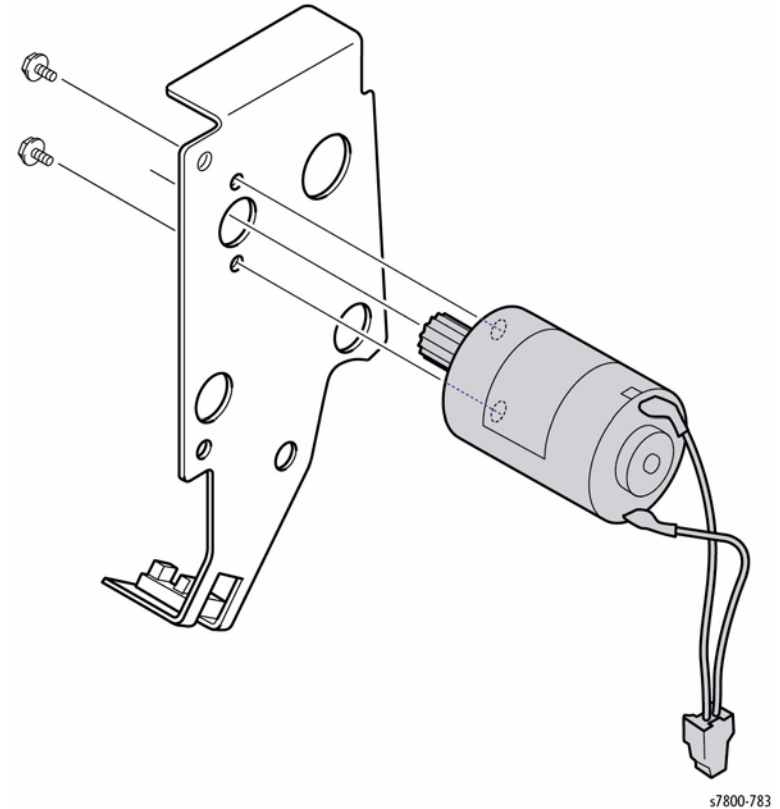


Figure 1 Removing the Eject Clamp Motor

REP 24.53 Eject Clamp Bracket

Parts List on [PL 24.34 Item 11](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Disconnect the Eject Clamp Motor wiring harness connector [P/J8339](#) from the harness.
3. Disconnect the Eject Clamp Home Sensor wiring harness connector [P/J8324](#).
4. Remove 3 screws that secure the Eject Clamp Bracket to the Finisher. If necessary, release the cable Clamp from the frame to access the screws.
5. Remove the Eject Clamp Bracket by rotating the Gear-Cam Z70 so the Actuator on the Eject Clamp Bracket is retracted from the recess of the Eject Clamp Home Sensor.

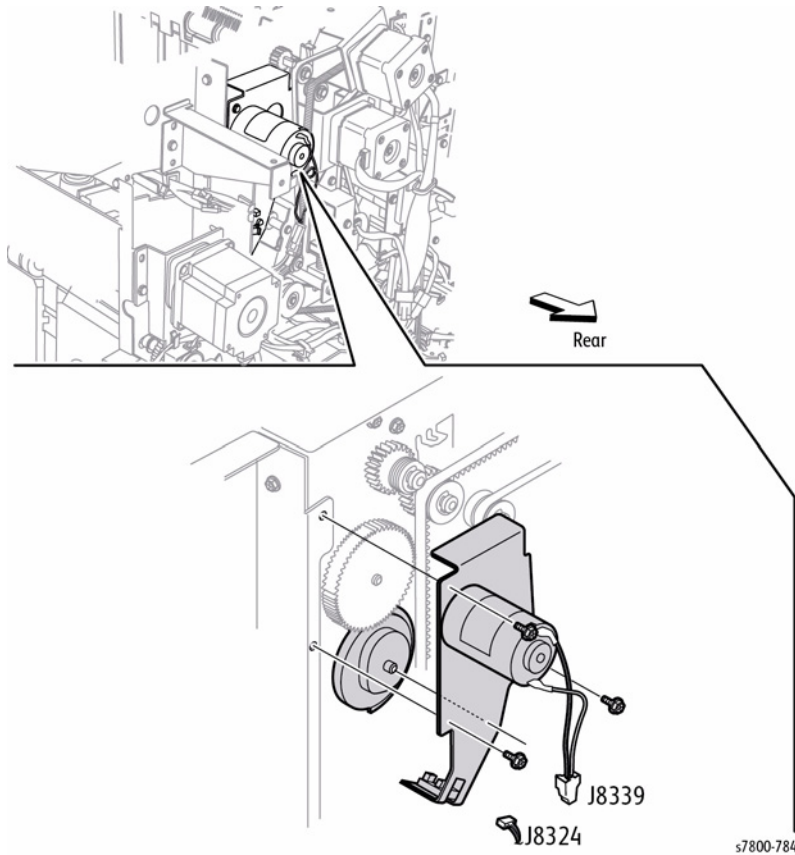


Figure 1 Removing the Eject Clamp Bracket

Replacement

When installing the Eject Clamp Bracket, rotate the Gear-Cam Z70 so the actuator on the Eject Clamp Bracket is retracted from the recess of the Eject Clamp Home Sensor.

REP 24.54 Eject Clamp Home Sensor

Parts List on [PL 24.34 Item 12](#)

Removal

1. Remove the Eject Clamp Bracket ([REP 24.53](#)).
2. Release the hooks of the Eject Clamp Home Sensor to remove it from the Eject Clamp Bracket.

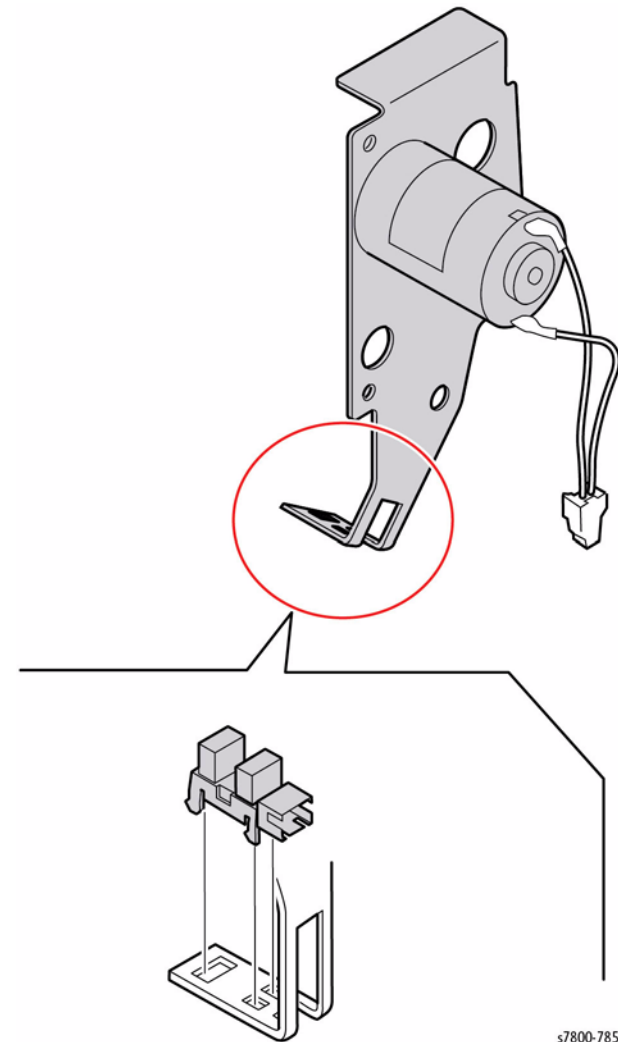


Figure 1 Removing the Eject Clamp Home Sensor

REP 24.55 Eject Cover Switch (Door H Interlock)

Parts List on [PL 24.34 Item 21](#)

Removal

1. Remove the Top Tray ([REP 24.21](#)).
2. Disconnect the Door H Interlock wiring harness connector [J8364](#) from the harness.
3. Remove 1 screw that secures the Switch Bracket to the Tie Plate.
4. Remove the Switch Bracket from the square hole on the Tie Plate.
5. Remove 2 screws that secure the Door H Interlock to the Bracket.

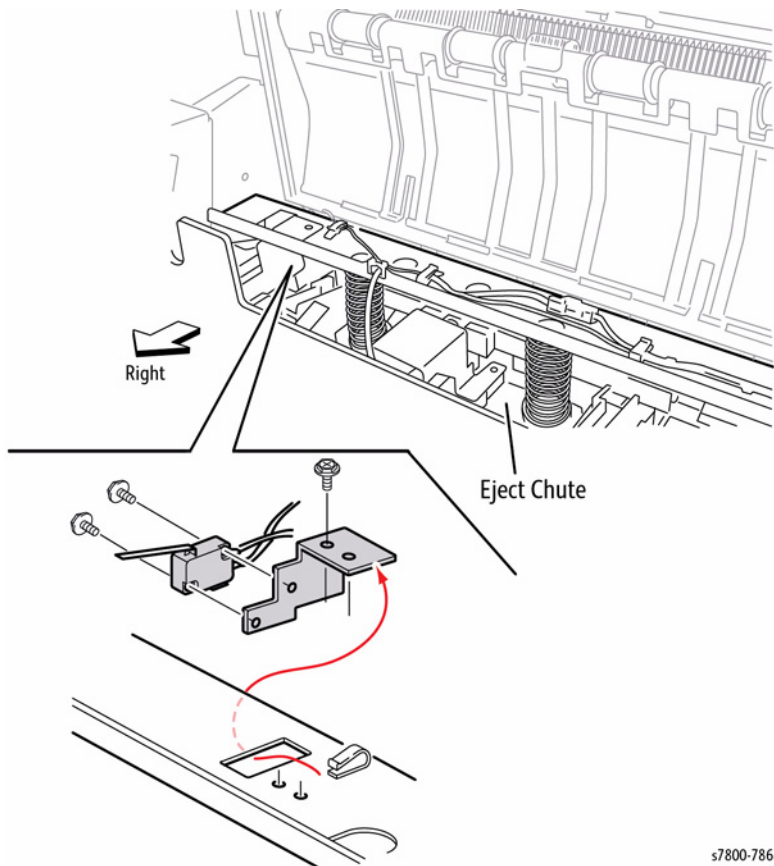


Figure 1 Removing the Eject Cover Switch (Door H Interlock)

Replacement

Install the Door H Interlock so the Actuator is placed under the Interlock Bracket on the Eject Chute.

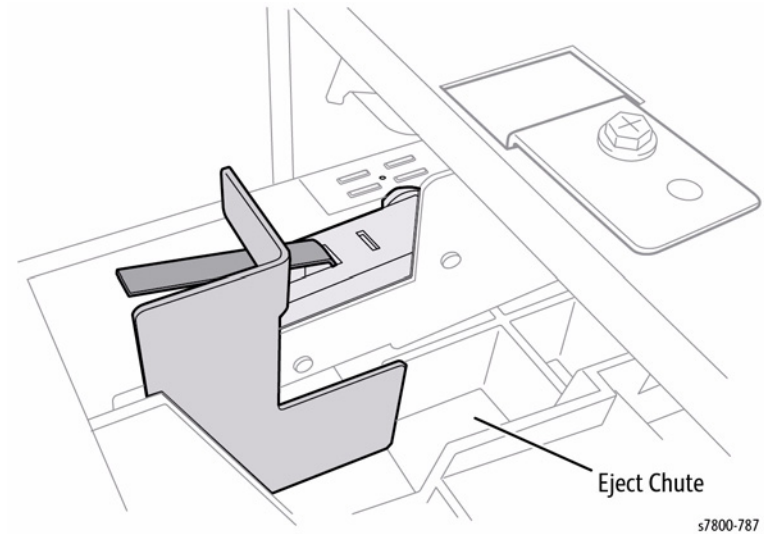


Figure 2 Installing the Door H Interlock

REP 24.56 Compiler Tray

Parts List on [PL 24.35 Item 1](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Top Tray ([REP 24.21](#)).
4. Remove the Eject Cover ([REP 24.22](#)).
5. Remove the Stapler Unit ([REP 24.48](#)).
6. Remove the Eject Chute Assembly ([REP 24.49](#)).
7. Remove the Eject Motor Bracket Assembly ([REP 24.63](#)).

NOTE: There is an inline connector in the Compiler Tray harness located inside the Finisher at the rear. If you disconnect this connector, skip Steps 10 and 11.

8. Remove the Inner Cover ([REP 24.37](#)).
9. Release the Compiler harness from the clamp and disconnect connector [P/J8349](#).

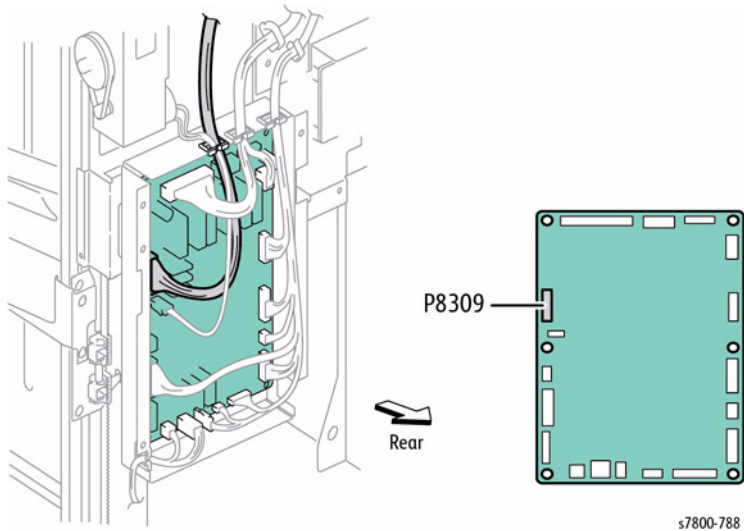


Figure 1 Disconnecting the connector and releasing the harness

10. Remove 1 screw, located inside the Finisher, that secures the center of the Compiler Tray to the frame.

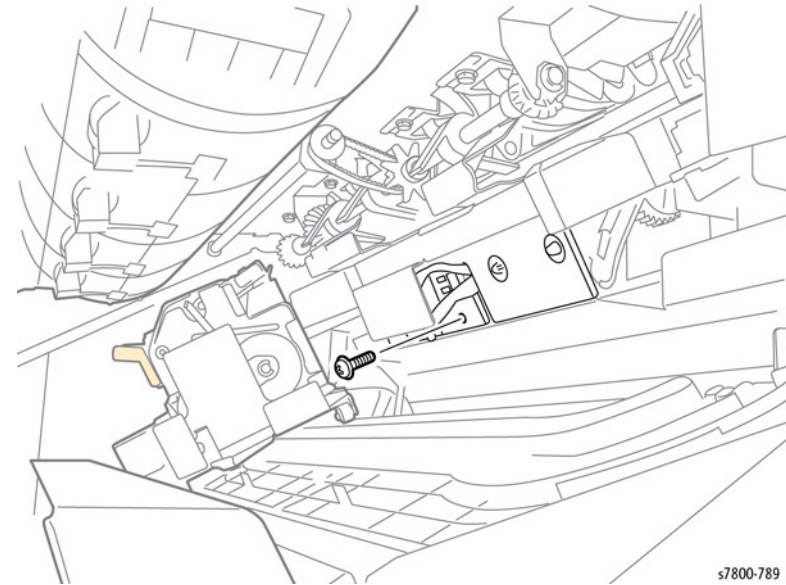


Figure 2 Removing the screw

11. Remove the copper Ground Spring.
12. Release the Compiler Tray locks by pushing the bosses on the front and rear toward the inside of the Finisher and remove the Compiler Tray in the direction of the arrow.

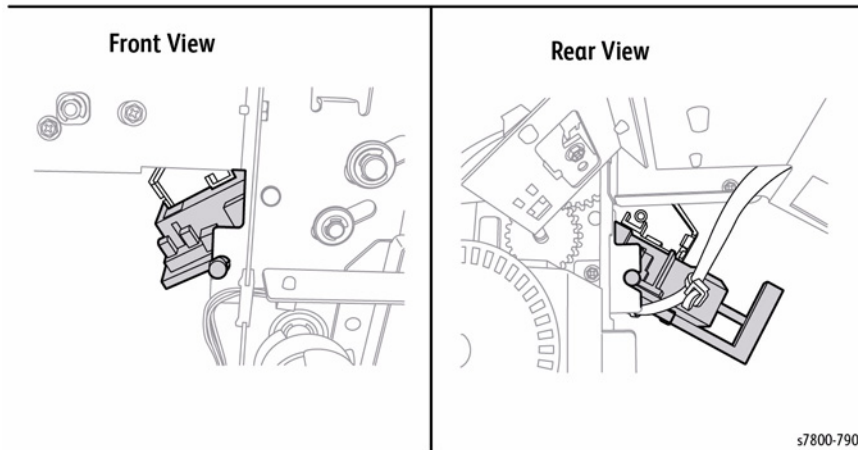
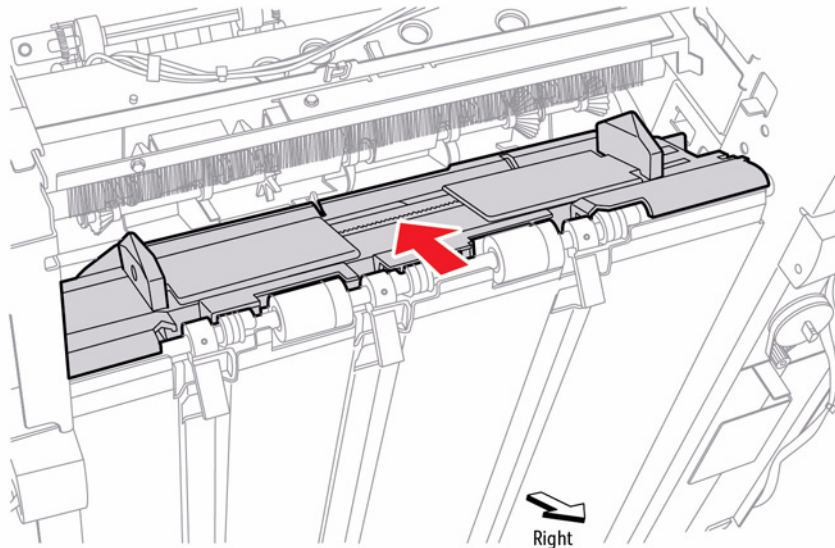


Figure 3 Removing the Finisher Compiler Tray

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REP 24.57 Front/ Rear Tamper Home Sensor

Parts List on [PL 24.35 Item 2](#)

Removal

NOTE: The removal procedures for both Tamper Home Sensors are identical. The removal procedure for the Front Tamper Home Sensor is described here.

1. Remove the Inner Cover ([REP 24.37](#)).
2. Disconnect the Sensor wiring harness connectors.
 - Front Tamper Home Sensor - [P/J8360](#)
 - Rear Tamper Home Sensor - [P/J8361](#)
3. Release the hooks of the Sensor to remove the Sensor from the Compiler Tray.

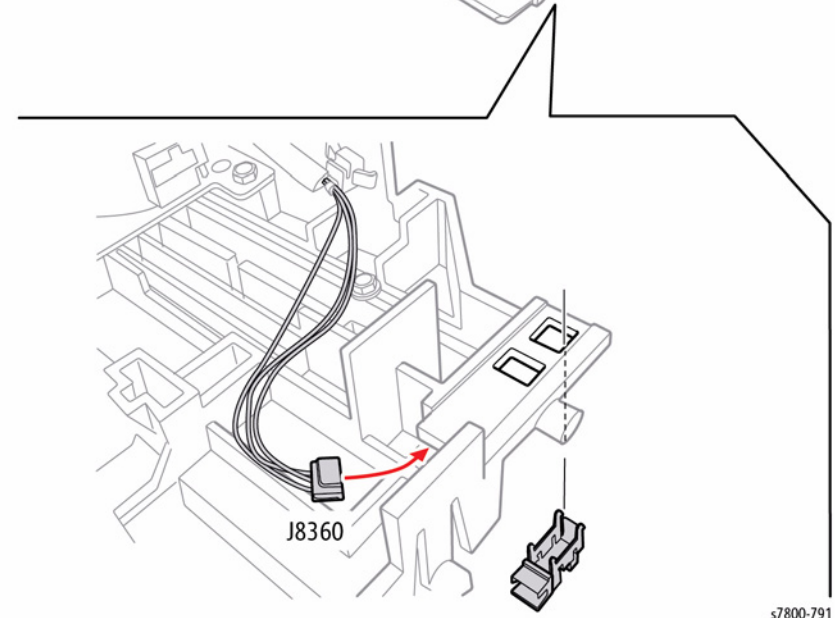
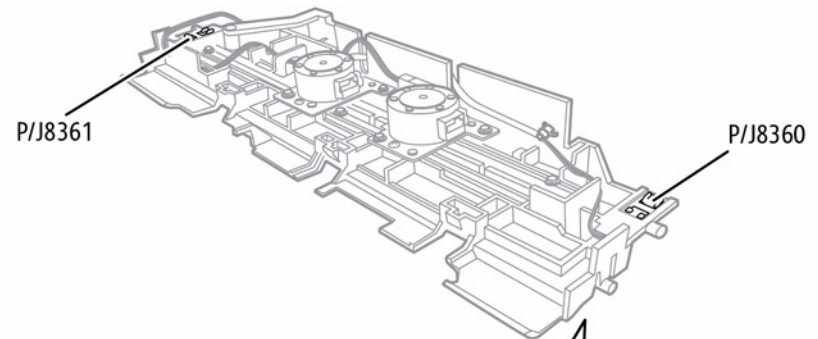


Figure 1 Removing the Front/ Rear Tamper Home Sensors

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REP 24.58 Compiler Tray No Paper Sensor

Parts List on [PL 24.35 Item 3](#)

Removal

1. Remove the Compiler Tray ([REP 24.56](#)).
2. Disconnect the Compiler Tray No Paper Sensor wiring harness connector [P/J8359](#).
3. Release the hooks of the Compiler Tray No Paper Sensor to remove the Sensor from the Compiler Tray.
4. Remove the Actuator in the direction of the arrow.

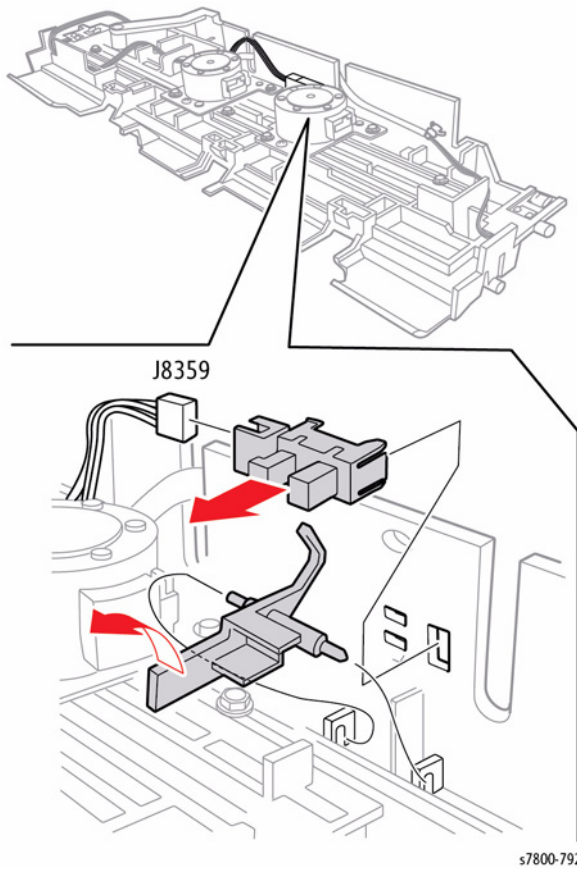


Figure 1 Removing the Compiler Tray No Paper Sensor

REP 24.59 Eject Roll Shaft Assembly

Parts List on [PL 24.35 Item 9](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Top Tray ([REP 24.21](#)).
4. Remove the Eject Clamp Bracket ([REP 24.53](#)).
5. Remove the Eject Motor Bracket Assembly ([REP 24.63](#)).
6. Release the hook of the Gear to remove it from the Shaft.
7. Remove the Bearings.
8. Remove the E-ring on the rear.
9. Remove the Bearings.

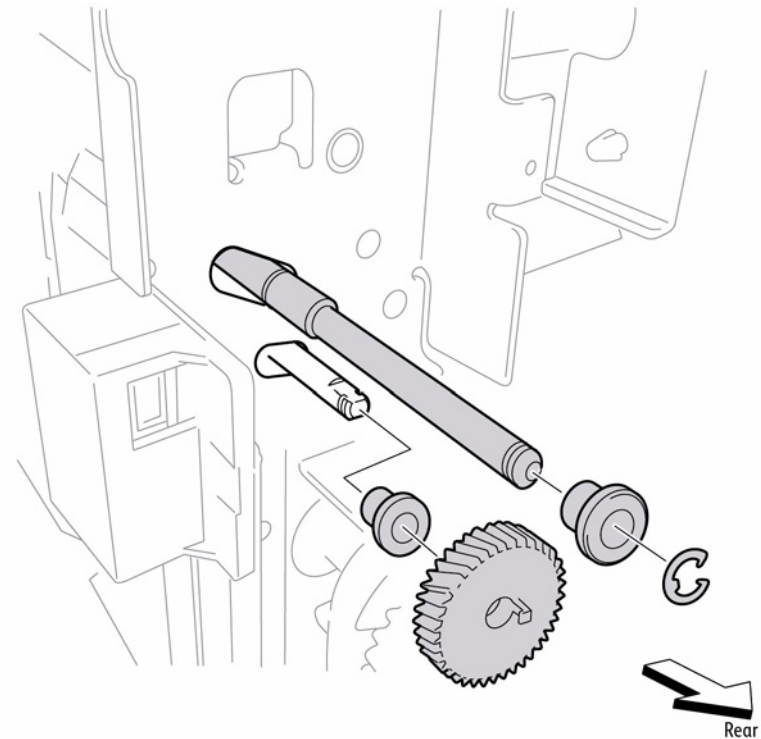


Figure 1 Removing the E-ring and Bearings (Rear Side)

10. Remove two E-rings on the front that secure the Eject Roller Shaft.
11. Remove the two Bearings.

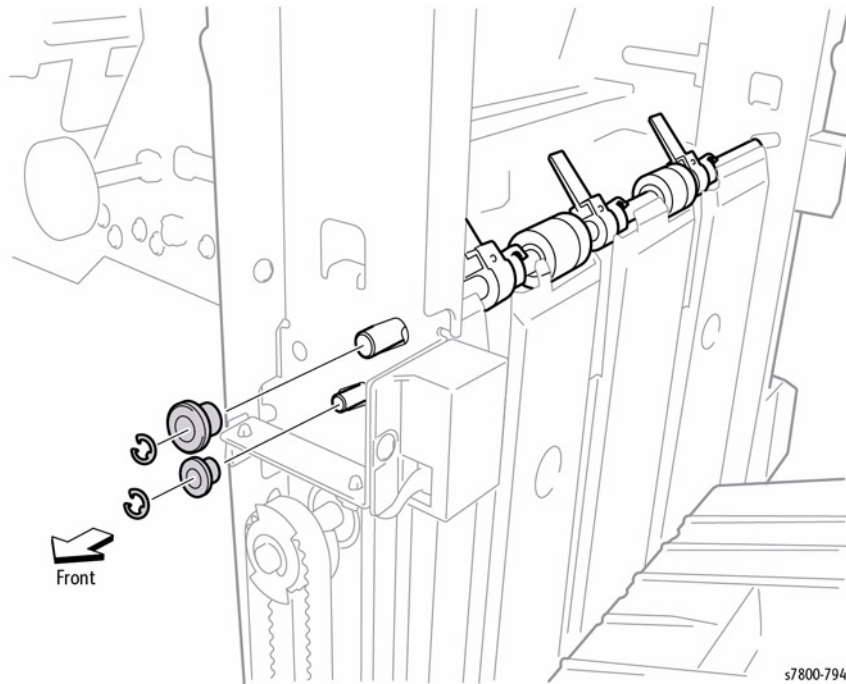


Figure 2 Removing the E-rings and Bearings (Front Side)

12. Remove the Inner Cover (REP 24.37).
13. Move the Eject Roller Shaft to the rear, then remove the front end of the two Shafts from the two holes in the frame. Next, move the Eject Roller Shaft in the direction of the arrow to remove the two Shafts from the rear holes and the Finisher.

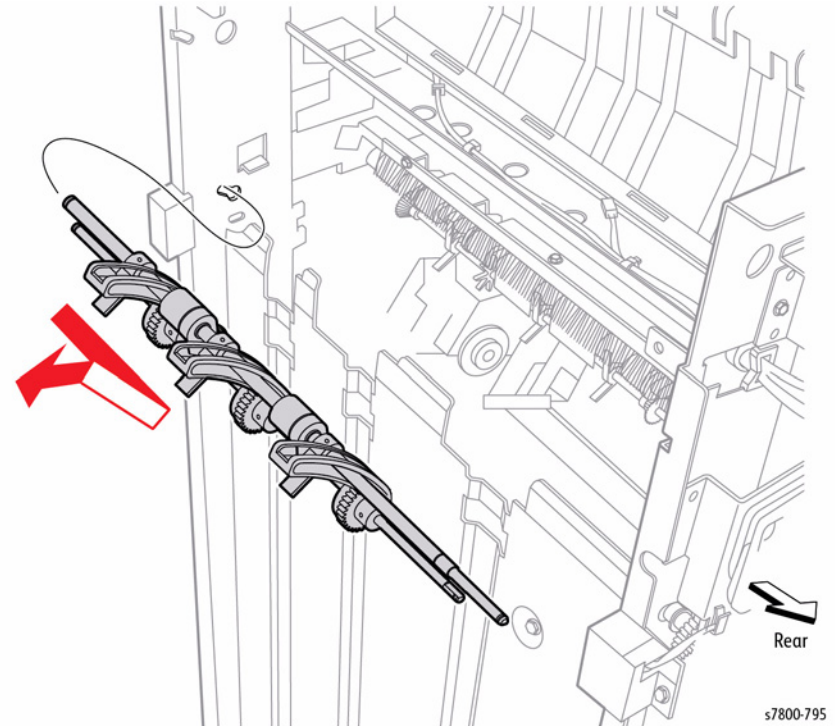


Figure 3 Removing the Eject Roller Shaft

REP 24.60 Set Clamp Clutch

Parts List on [PL 24.35 Item 15](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Disconnect the Eject Motor wiring harness connector [P/J8336](#).
3. Disconnect the Set Clamp Home Sensor wiring harness connector [P/J8325](#).
4. Release the harness from the Clamp.
5. Disconnect the Set Clamp Clutch (Z34) wiring harness connector [P/J8338](#).
6. Release the clutch harness from the Clamp.
7. Remove 1 screw that secures the Set Clamp Spring.
8. Turn the Set Clamp Actuator to clear the Sensor and remove the Actuator from the Shaft by releasing the hook.

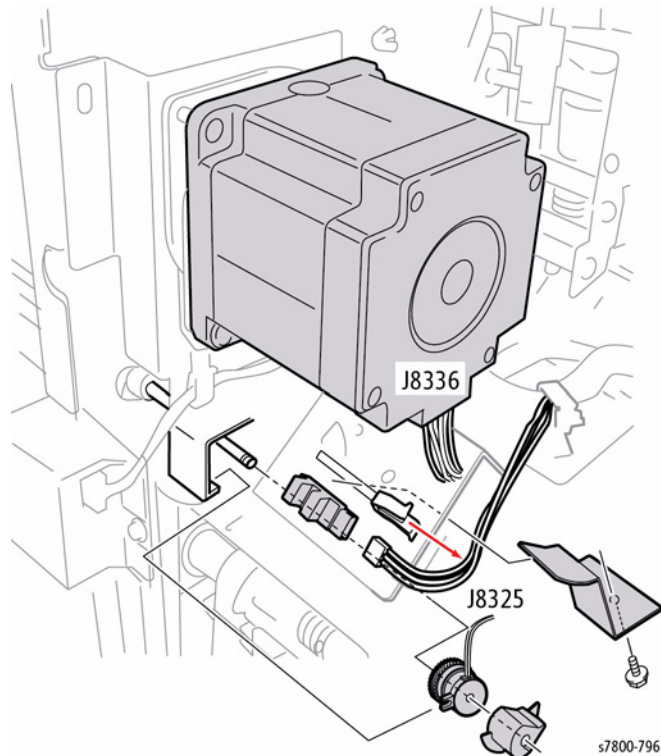


Figure 1 Removing the Set Clamp Clutch

Replacement

Fit the clutch stop into the notch of the Eject Bracket at the 12:00 position.

REP 24.61 Set Clamp Home Sensor

Parts List on [PL 24.35 Item 3](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Disconnect the Set Clamp Home Sensor wiring harness connector [P/J8325](#).
3. Rotate the Actuator by hand so the Actuator retracts from the recess of the Sensor.
4. Release the hooks of the Set Clamp Home Sensor to remove it from the Eject Bracket.

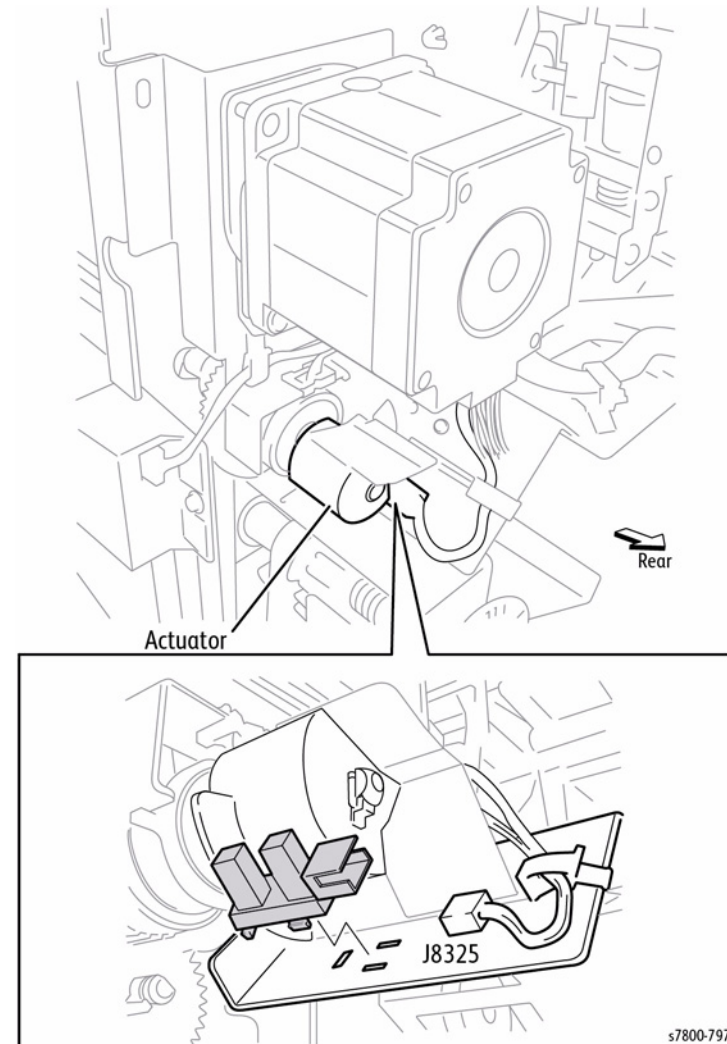


Figure 1 Removing the Set Clamp Home Sensor

REP 24.62 Eject Motor Assembly

Parts List on [PL 24.35 Item 17](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Set Clamp Clutch (Clutch Z34) ([REP 24.60](#)).
3. Disconnect the Eject Motor wiring harness connector.
4. Remove the 4 screws that secure the Eject Motor.
5. Remove the Eject Motor.

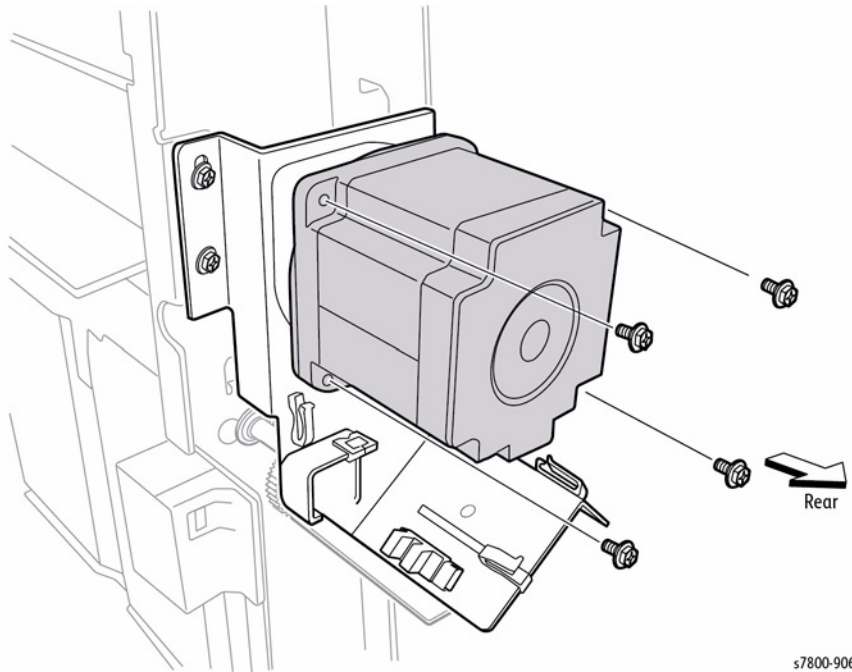


Figure 1 Removing the Eject Motor Bracket Assembly

Replacement

Fit the notch of the Set Clamp Clutch onto the Eject Bracket.

REP 24.63 Eject Motor Bracket Assembly

Parts List on [PL 24.35 Item 24](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Set Clamp Clutch (Clutch Z34) ([REP 24.60](#)).
3. Remove, then disconnect the Rear Upper Limit Sensor and remove the harness from the Clamps on the Eject Bracket.
4. Remove 3 screws that secure the Eject Bracket.
5. Remove the Eject Motor Bracket.

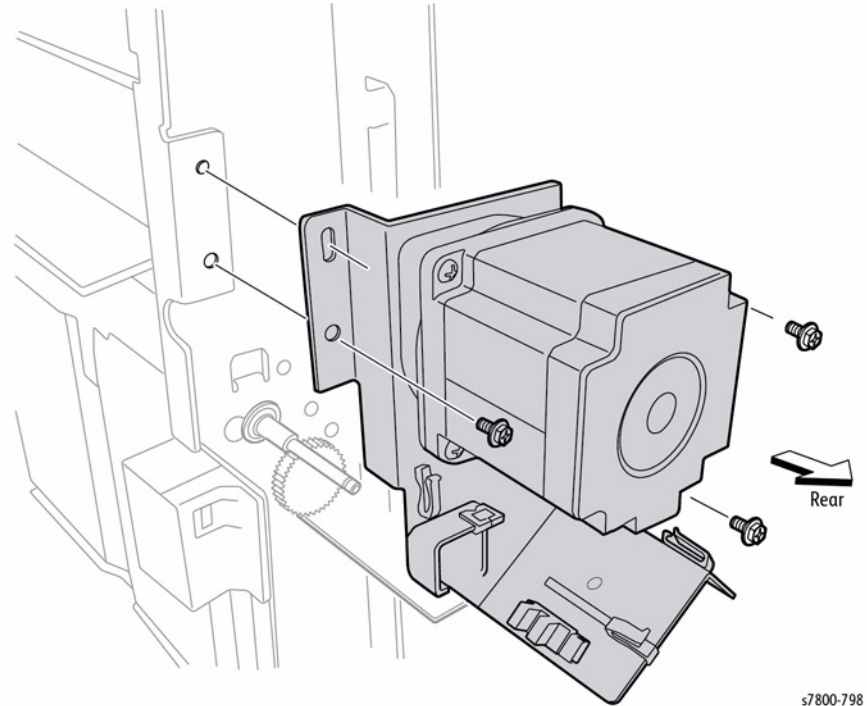


Figure 1 Removing the Eject Motor Bracket Assembly

Replacement

Fit the notch of the Set Clamp Clutch onto the Eject Bracket.

REP 24.64 Compile Exit Sensor

Parts List on [PL 24.36 Item 3](#)

Removal

1. Open the Front Door (Door G).
2. Remove Rear Lower Cover ([REP 24.25](#)).
3. Remove the Top Tray ([REP 24.21](#)).
4. Remove the Eject Cover ([REP 24.22](#)).
5. Remove the Stapler Unit ([REP 24.48](#)).
6. Remove the Eject Clamp Bracket ([REP 24.53](#)).
7. Remove the Eject Chute ([REP 24.49](#)).
8. Remove the Eject Motor Bracket ([REP 24.63](#)).
9. Remove the Compiler Tray ([REP 24.56](#)).
10. Remove the Eject Roller Shaft ([REP 24.59](#)).
11. Remove the Lower Chute, Exit R ([REP 24.72](#)).
12. Loosen the two screws that secure the Exit Motor Belt Tension Bracket.

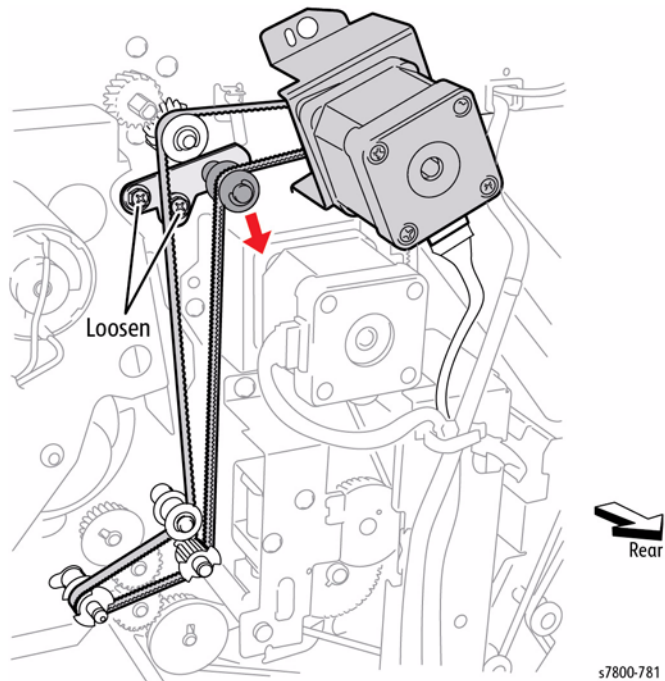


Figure 1 Loosening the screws

13. Move the Tension Bracket in the direction of the arrow to relieve belt tension and remove the Belt from the pulleys.
14. Remove the two screws each on the front and rear securing the Upper Exit Chute.

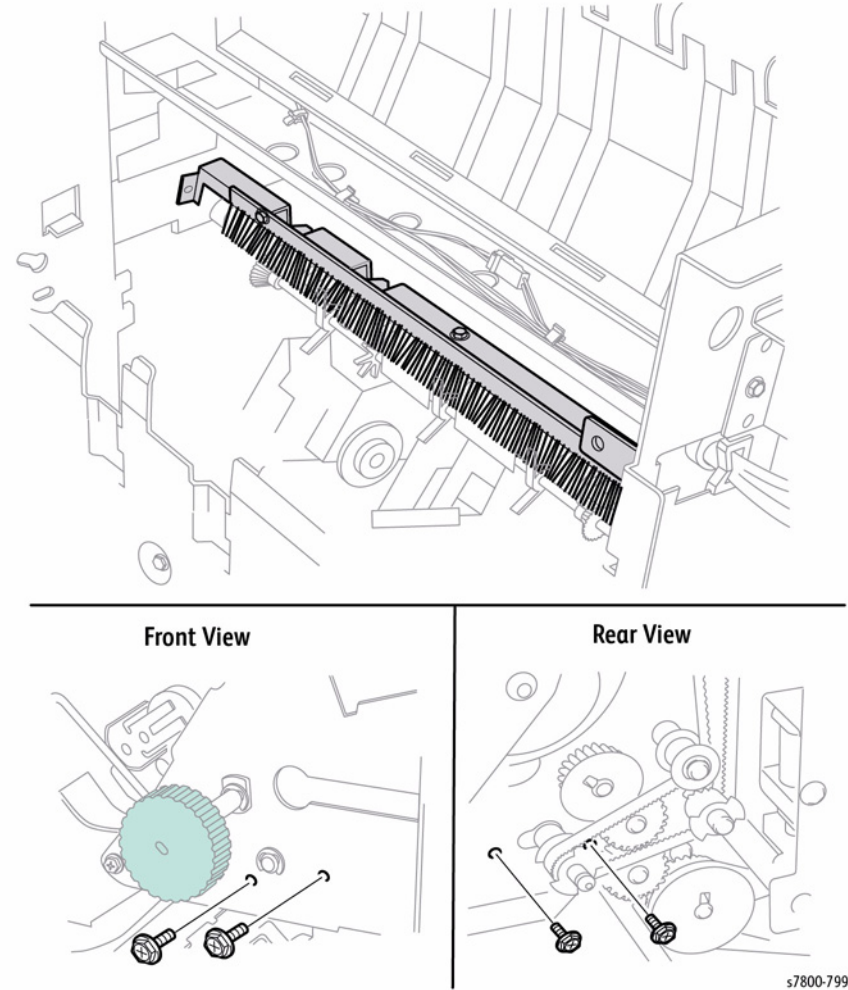


Figure 2 Removing the screws

15. Disconnect the connector from the Compile Exit Sensor.
16. Remove the Upper Exit Chute.
17. Release the hooks of the Compile Exit Sensor to remove the sensor from the Bracket.

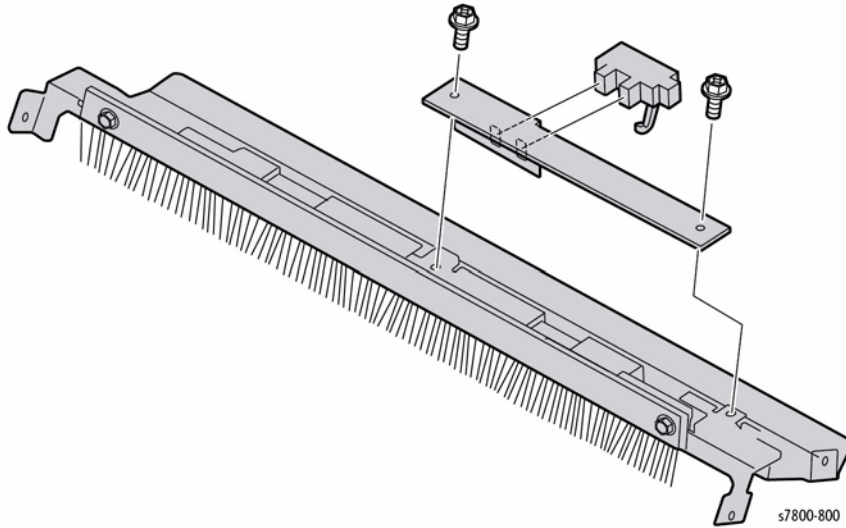


Figure 3 Removing the Compile Exit Sensor

Replacement

Belt tension is automatically adjusted by the force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, be careful not to move the Tension Bracket.

REP 24.65 Pinch Roll

Parts List on [PL 24.36 Item 8](#), [PL 24.36 Item 9](#)

Removal

NOTE: Remove the other three Top Exit Pinch Rollers using this same procedure.

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Top Cover ([REP 24.20](#)).
4. Remove 1 screw that secures the Exit Pinch Roller to the Top Exit Upper Chute.

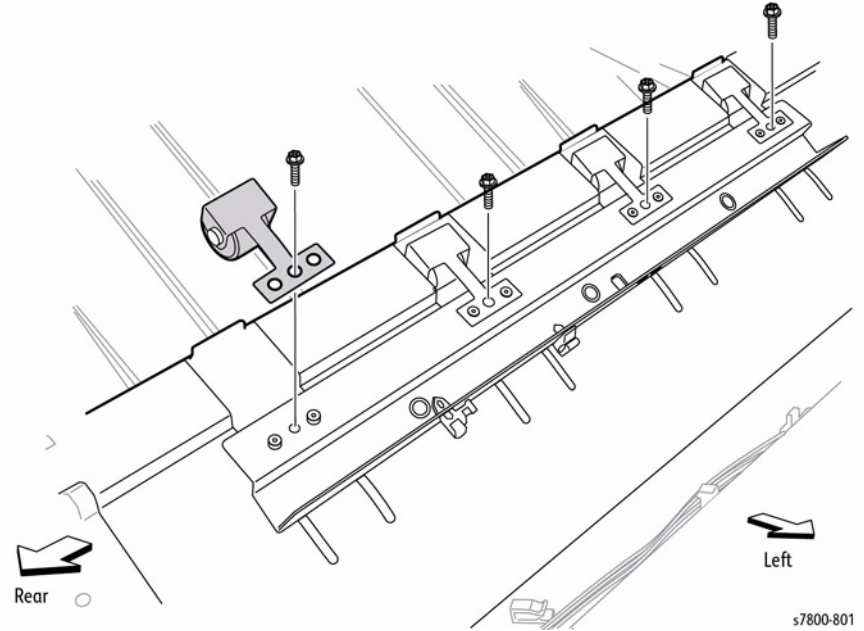


Figure 1 Removing the Pinch Roll

Replacement

Put the two bosses of the Top Exit Upper Chute into the holes on the Exit Pinch Roller.

REP 24.66 Paddle Shaft Assembly

Parts List on [PL 24.36 Item 10](#)

Removal

1. Open the Front Door (Door G).
2. Manually move the Stapler Assembly towards the rear of the Finisher.
3. Remove the Rear Upper Cover ([REP 24.26](#)).
4. Remove 1 E-Clip and 1 Bushing from the front of the Paddle Shaft.
5. Press the Bracket down and remove the Paddle Shaft. Move the Shaft to the rear until the rear Bushing comes out.
6. Disengage the Tab on the Synchronous Belt Pulley and remove the Pulley.

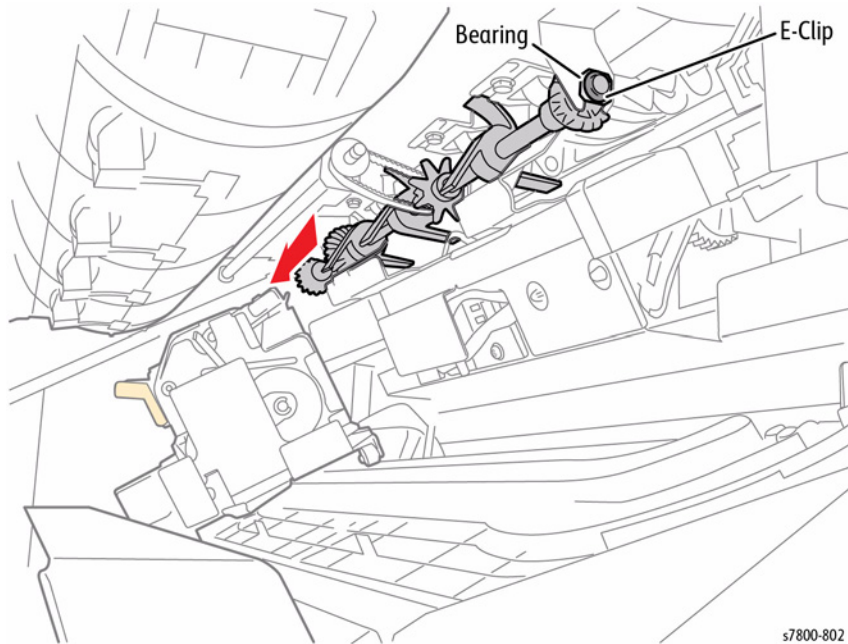


Figure 1 Removing Paddle Shaft

Replacement

Reinstall the components in the reverse order of the removal procedure.

REP 24.67 Lower Exit Roller Assembly

Parts List on [PL 24.36 Item 14](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove Rear Lower Cover ([REP 24.25](#)).
4. Remove the Top Tray ([REP 24.21](#)).
5. Remove the Eject Cover ([REP 24.22](#)).
6. Remove the Stapler Unit ([REP 24.48](#)).
7. Remove the Eject Clamp Bracket ([REP 24.53](#)).
8. Remove the Eject Chute Assembly ([REP 24.49](#)).
9. Remove the Eject Motor Bracket Assembly ([REP 24.63](#)).
10. Remove the Compiler Tray ([REP 24.56](#)).
11. Remove the Eject Roll Shaft Assembly ([REP 24.59](#)).
12. Remove the Lower Exit Chute (R) ([REP 24.72](#)).
13. Loosen 2 screws that secure the Exit Motor Belt Tension Bracket.
14. Move the Belt Tension Bracket in the direction of the arrow to reduce belt tension and remove the belt from each pulley.
15. Disconnect the Compile Exit Sensor.

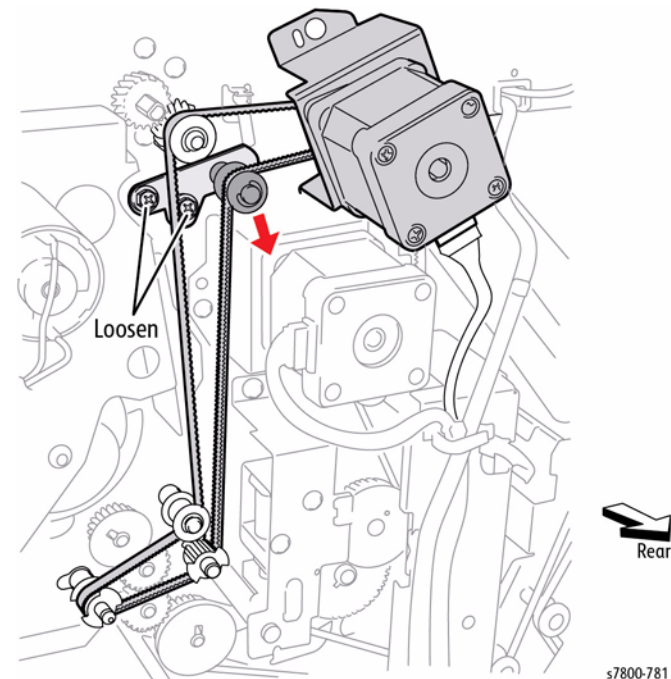


Figure 1 Loosening the screws and moving the Belt Tension Bracket

16. Remove 2 screws each on the front and rear securing the Upper Exit Chute.
17. Remove the Upper Exit Chute.

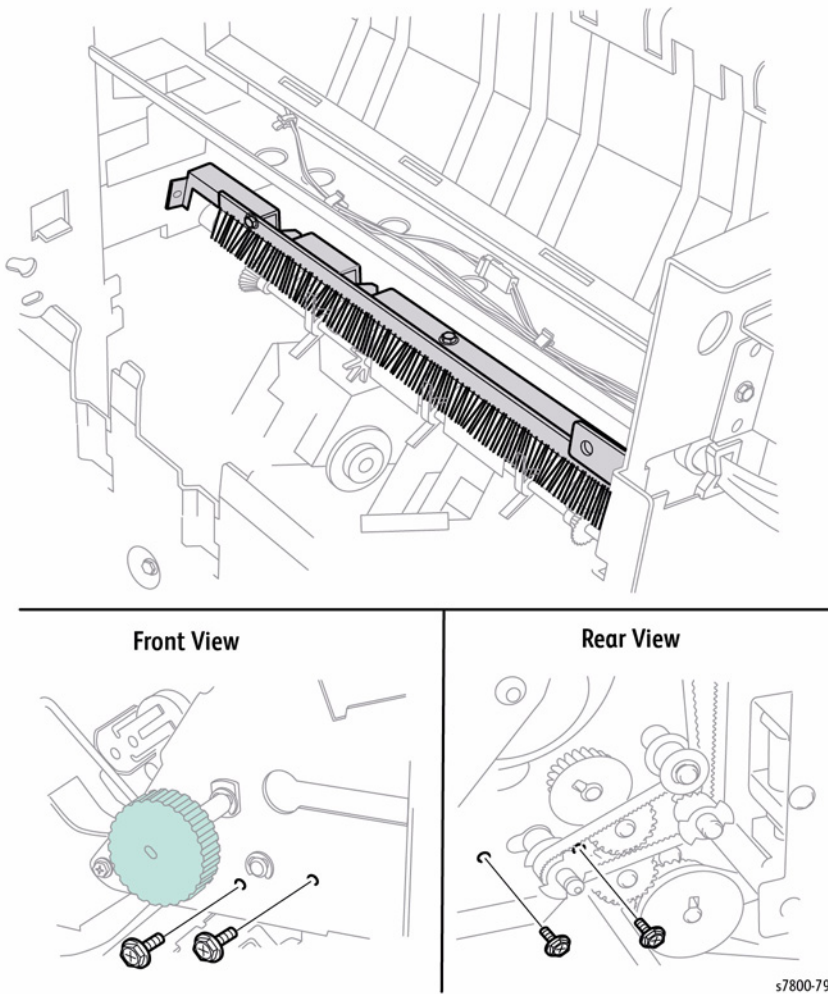


Figure 2 Removing the Upper Exit Chute

18. Release the hook of Pulley T20 attached to the Lower Exit Roller Shaft and remove the Pulley.
19. Remove the Bearing.

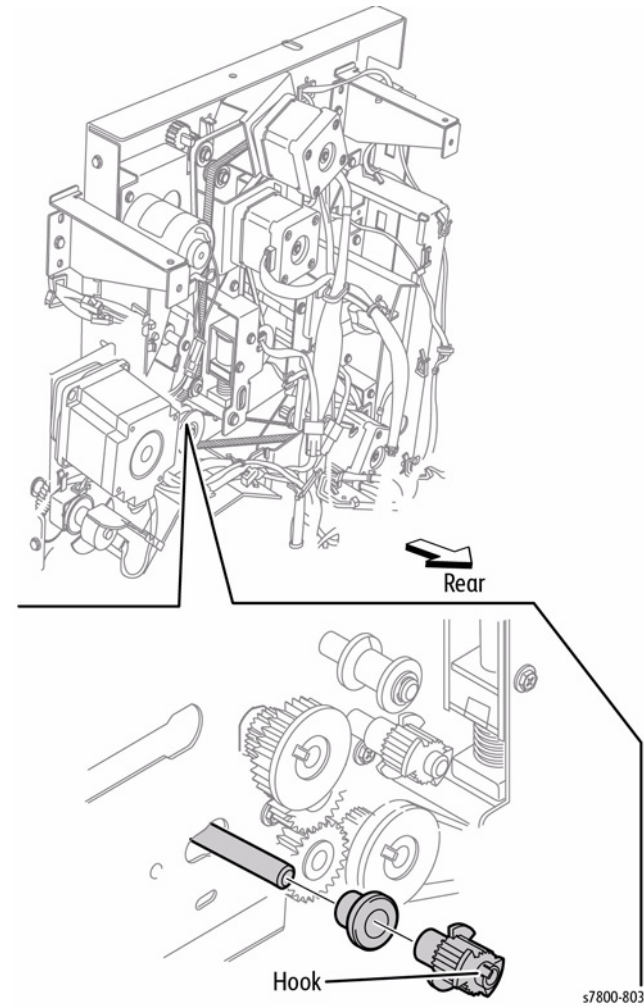


Figure 3 Releasing the hook and removing the Bearing

20. Remove the E-ring that secures the Lower Exit Roller shaft on the front.
21. Remove the Bearing.

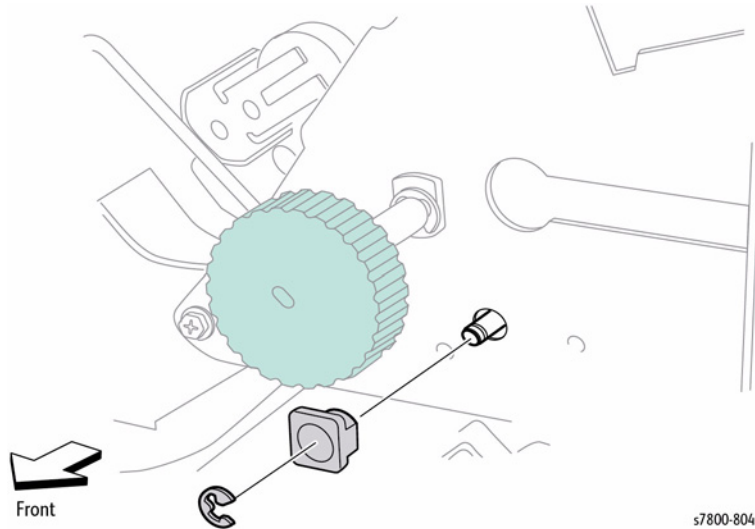


Figure 4 Removing the E-ring and the Bearing

22. Move the Lower Exit Roller shaft to the rear to remove the front end of the shaft from the hole in the frame and remove it from the Finisher.

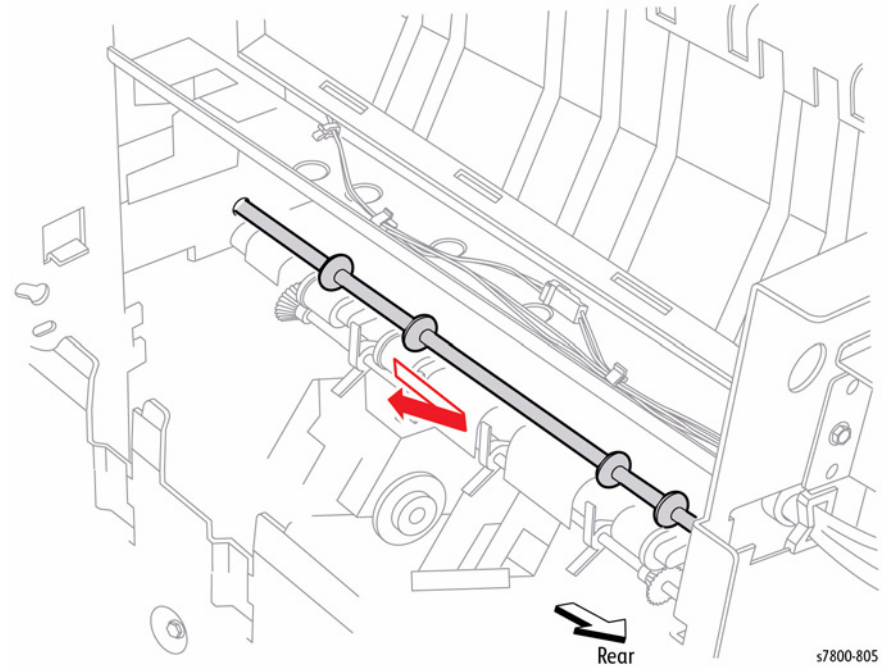


Figure 5 Removing the Lower Exit Roller

Replacement

Belt tension is automatically adjusted by force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, be careful not to move the Tension Bracket.

REP 24.68 Top Exit Roll Assembly

Parts List on [PL 24.38 Item 6](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Top Cover ([REP 24.20](#)).
4. Remove the Exit Motor ([REP 24.88](#)).
5. Disconnect the Upper Tray Exit Sensor wiring harness connector ([P/J8321](#)).
6. Release the harness from the harness Clamps.

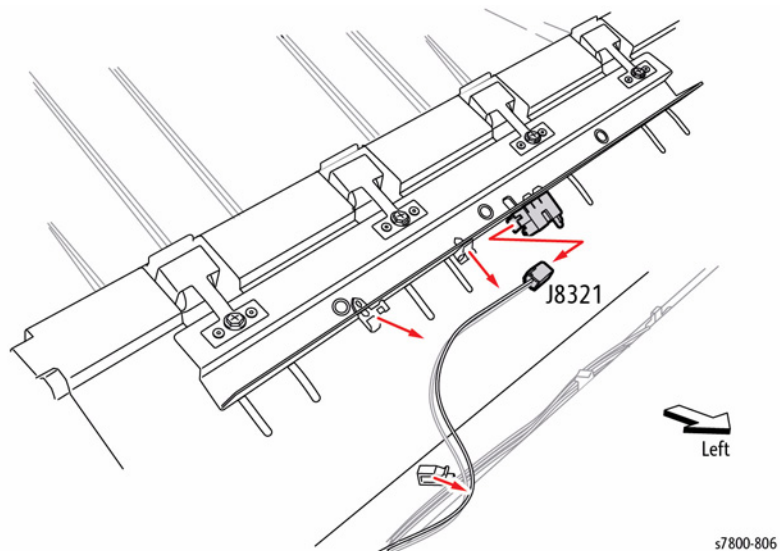


Figure 1 Disconnecting the connector

7. Remove 2 screws each on the front and rear that secure the Top Exit Upper Chute to the Finisher.

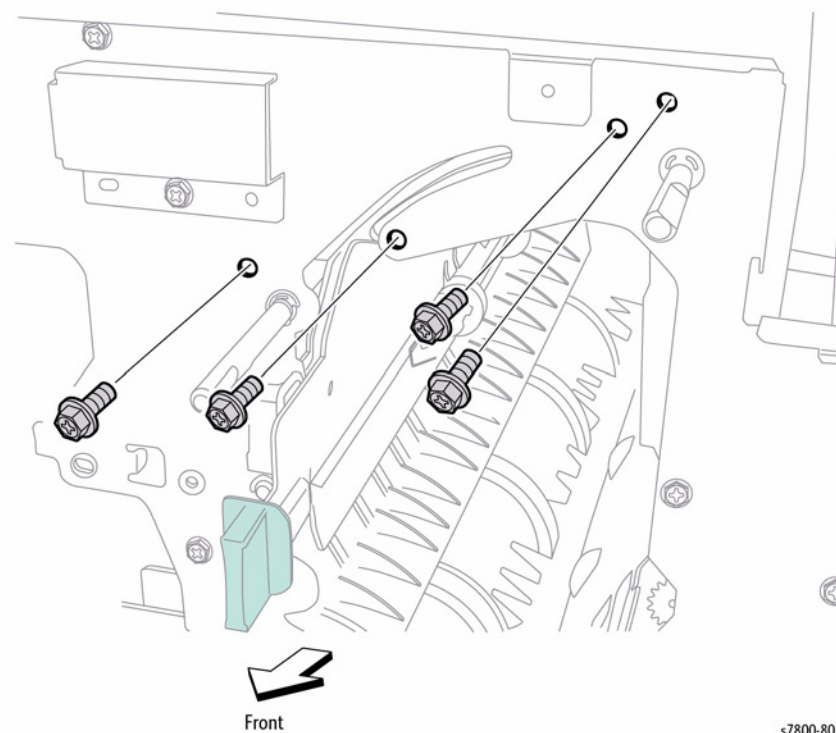
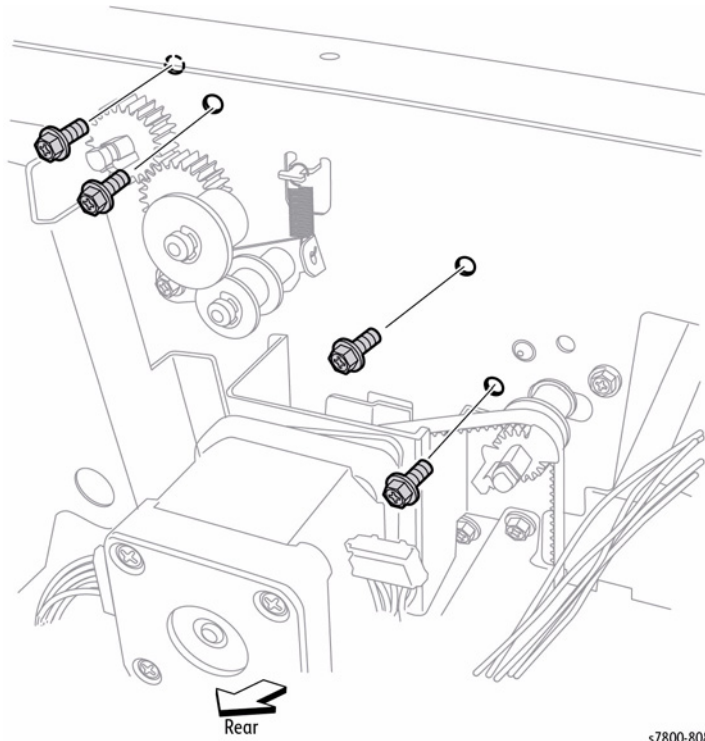


Figure 2 Removing the screws on the Top Exit Upper Chute

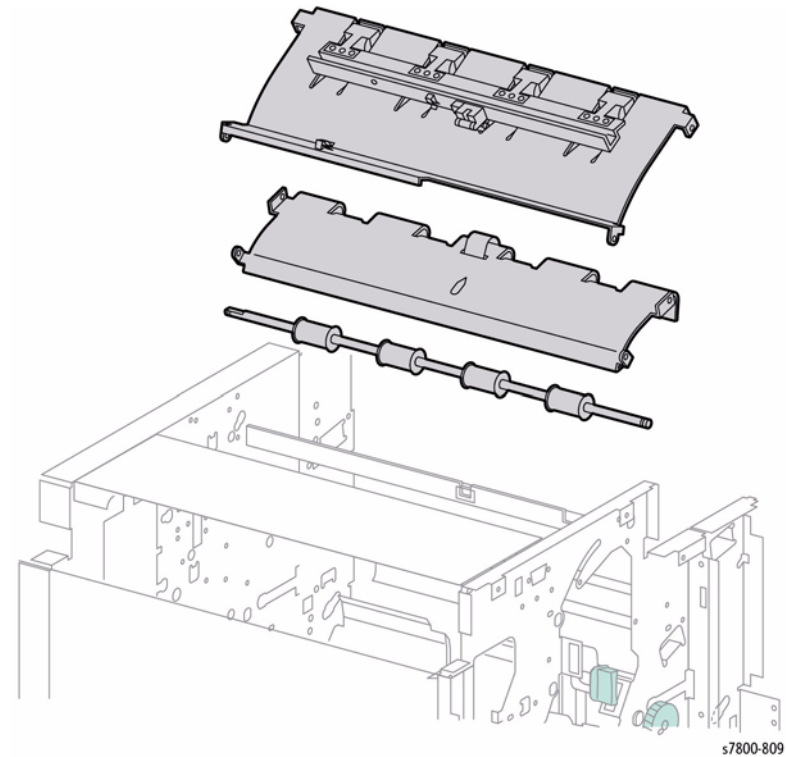
- Remove 2 screws each on the front and rear that secure the Top Exit Lower Chute to the Finisher.



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Figure 3 Removing the screws on the Top Exit Lower Chute

- Open the Upper Exit Chute (2a).
- Remove the Top Exit Upper Chute and the Top Exit Lower Chute.



s7800-809

Figure 4 Removing the Top Exit Upper Chute and Top Exit Lower Chute

11. Release the hook to remove the Gear from the Top Exit Roller Shaft.
12. Remove the Bearing.

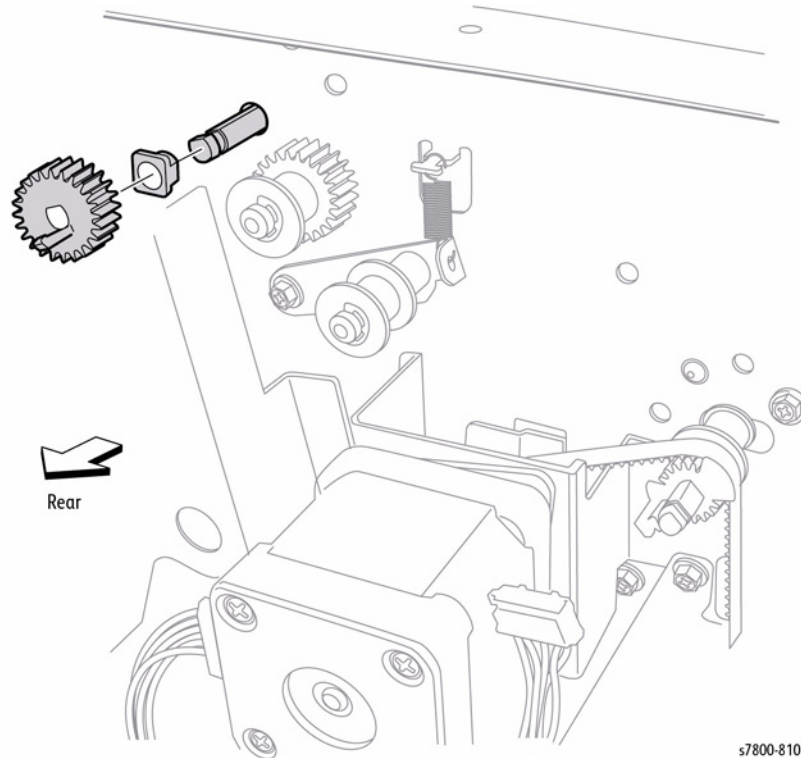


Figure 5 Removing the Bearing

s7800-810

13. Remove the E-ring that secures the Top Exit Roller shaft on the front.
14. Remove the Bearing.
15. Move the Top Exit Roller Shaft to the front and remove the rear of the Shaft from the hole in the Finisher frame.

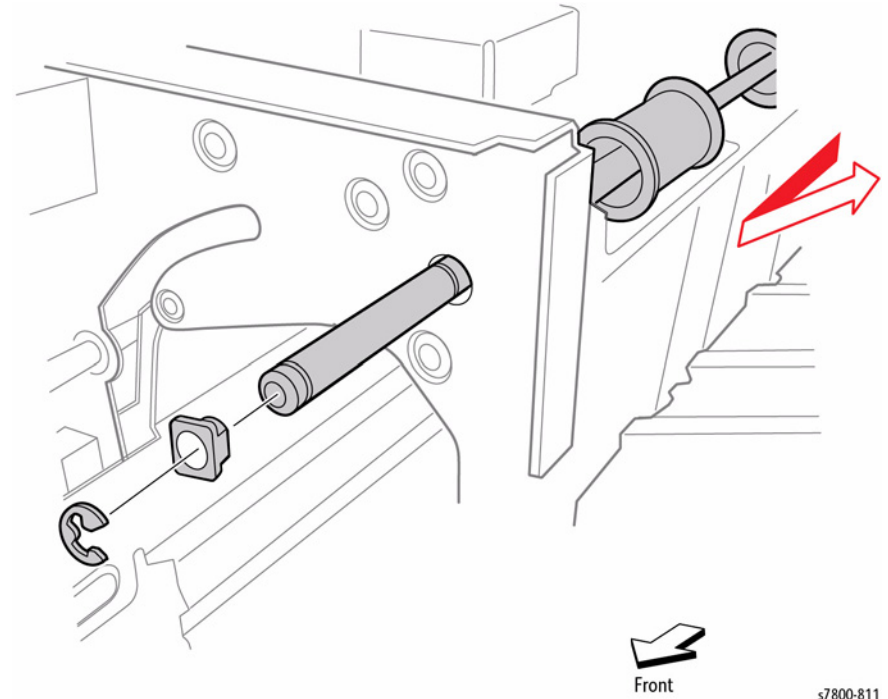


Figure 6 Removing the Top Exit Roll Assembly

s7800-811

Replacement

Install the Top Exit Roller Shaft with its one end with the flat surface facing the rear.

REP 24.69 Top Tray Full Sensor

Parts List on [PL 24.38 Item 9](#)

Removal

1. Remove the Top Exit Roll Assembly ([REP 24.68](#)).
2. Disconnect the Upper Tray Full Sensor wiring harness connector [P/J8322](#).
3. Remove 1 screw that secures the Upper Tray Full Sensor.

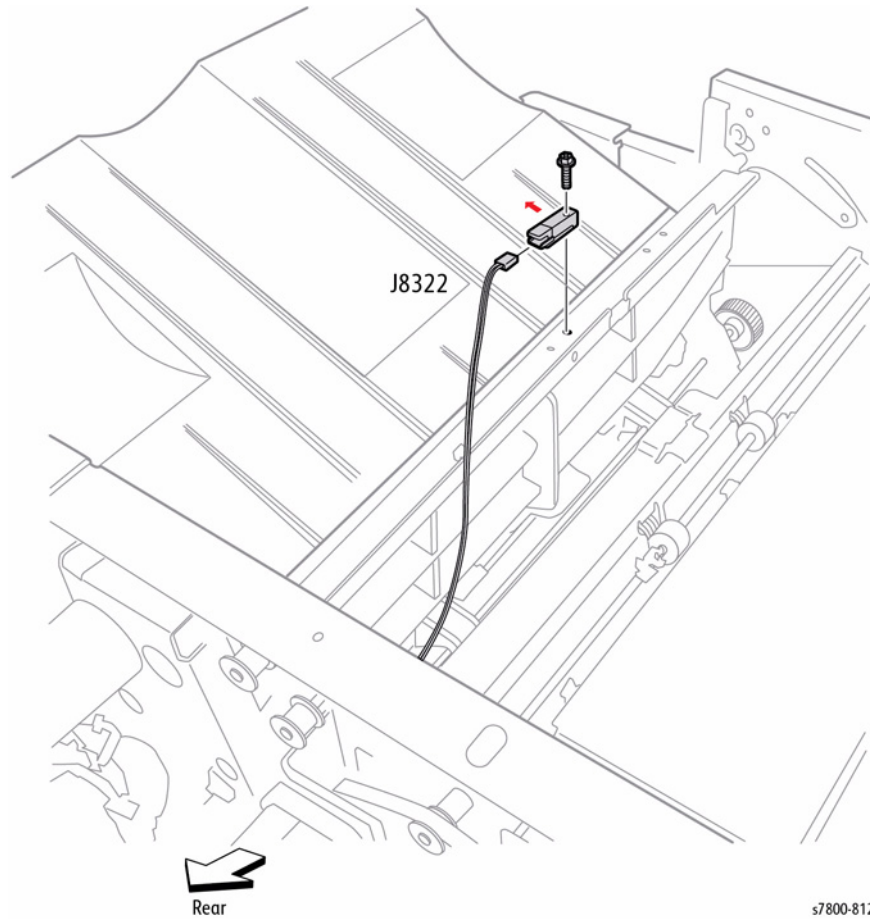


Figure 1 Removing the Stacker Upper Tray Full Stack Sensor

REP 24.70 Stacker Top Tray Exit Sensor

Parts List on [PL 24.38 Item 11](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Top Cover ([REP 24.20](#)).
4. Disconnect the Stacker Upper Tray Exit Sensor wiring harness connector [P/J8321](#).
5. Release the sensor hooks to remove the Sensor from the Top Exit Upper Chute.

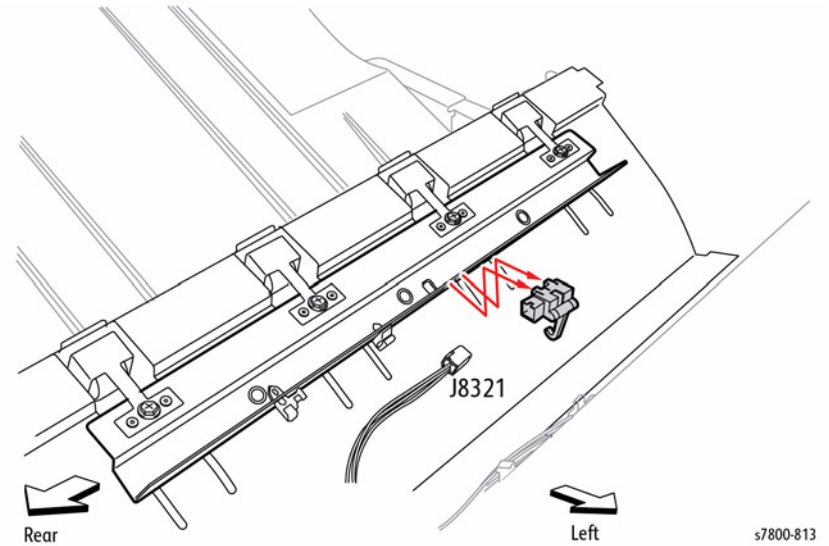


Figure 1 Removing the Stacker Upper Tray Exit Sensor

REP 24.71 Left/ Right Exit Pinch Rolls

Parts List on [PL 24.38 Item 15](#), [PL 24.38 Item 16](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Top Cover ([REP 24.20](#)).
4. Remove 1 screw that secures the Exit Pinch Roller to the Top Exit Upper Chute.

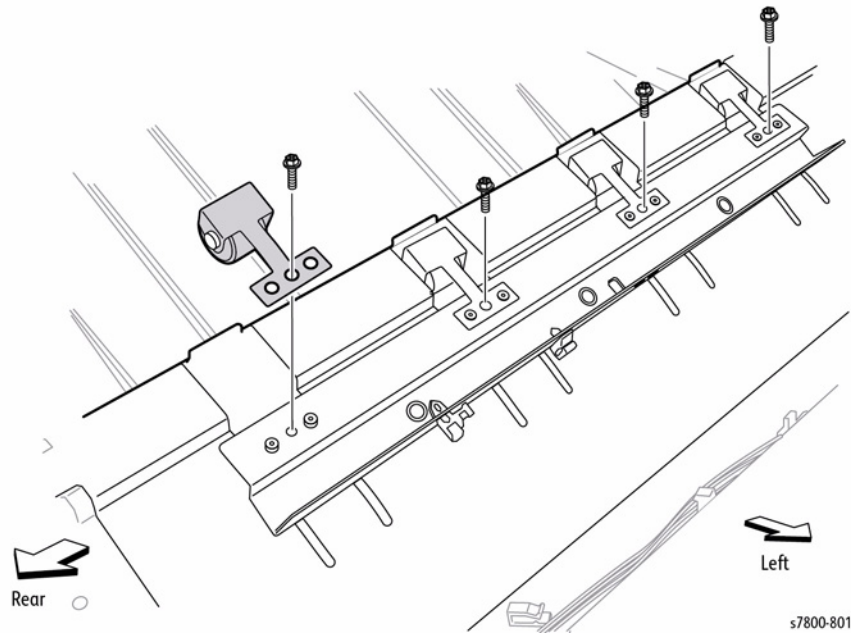


Figure 1 Removing the Top Exit Pinch Rollers

Replacement

Put the two bosses of the Top Exit Upper Chute into the holes on the Exit Pinch Roller.

REP 24.72 Lower Exit Chute (R)

Parts List on [PL 24.41 Item 1](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Top Tray ([REP 24.21](#)).
3. Remove the Stapler Unit ([REP 24.48](#)).
4. Loosen 2 screws that secure the Exit Motor Belt Tension Bracket.
5. Move the Belt Tension Bracket in the direction of the arrow to reduce Belt tension and remove the Belt from the pulleys.

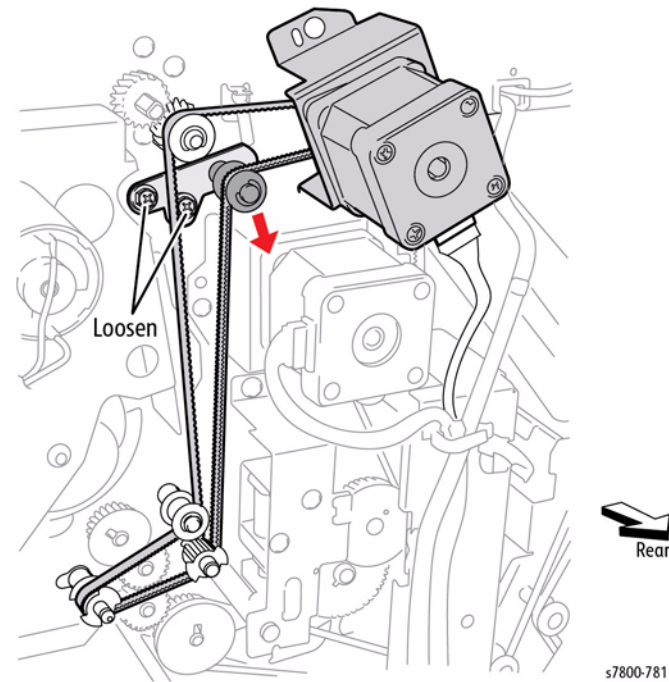


Figure 1 Loosening the screws and moving the Belt Tension Bracket

6. Loosen 2 screws that secure the Finisher Transport Motor Belt Tension Bracket.
7. Move the Tension Bracket in the direction of the arrow to reduce Belt tension and remove the belt from the pulleys.

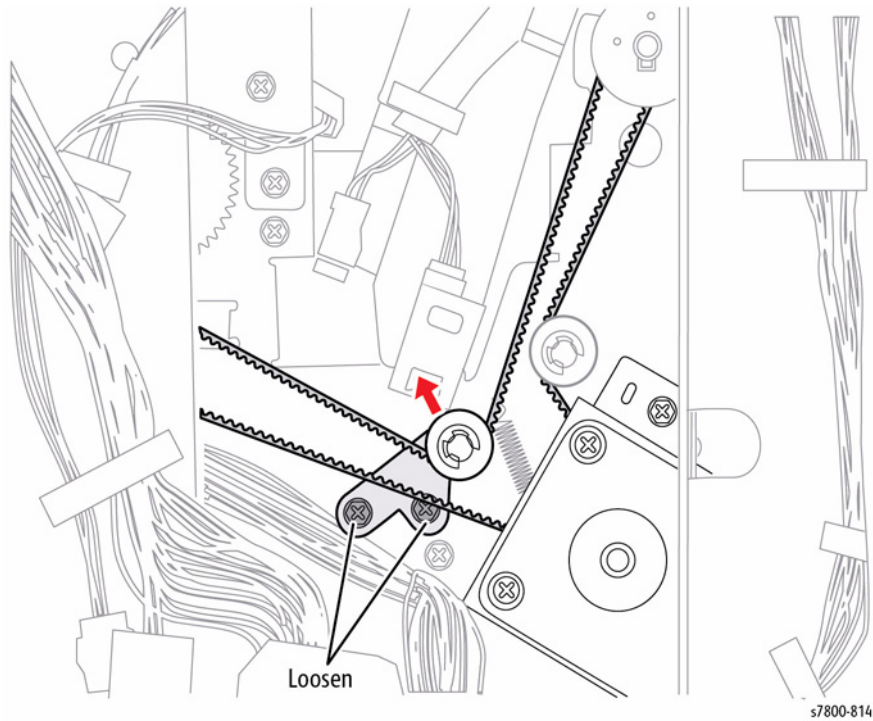


Figure 2 Loosening the screws and moving the Belt Tension Bracket

8. Release the hook of the Pulley T17 and remove the pulley from the Paddle Shaft. This also frees the Paddle Shaft Drive Belt.
9. Remove the Paddle Shaft Drive Belt from the Paddle Shaft.
10. Remove the Paddle Shaft Bearing.

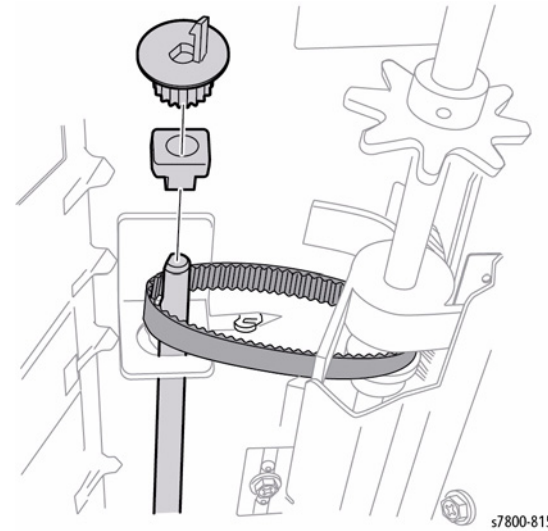


Figure 3 Removing the Paddle Shaft Drive Belt and Paddle Shaft Bearing

11. Release the hook of the Pulley 20T and remove from the Paddle Shaft.
12. Pull out the Paddle Shaft.
13. Remove the Bearing from the Paddle Shaft.
14. Remove the Gear 23T.

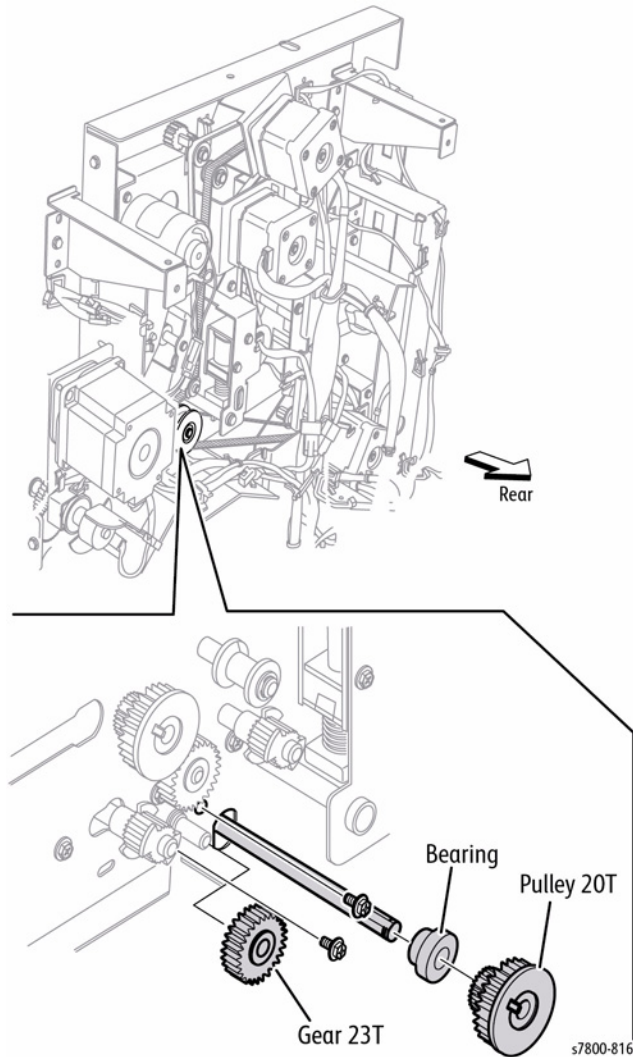


Figure 4 Removing the Bearing and Gear

15. Remove 2 screws and springs that secure the metal paper guide to the Compiler Tray.
16. Remove the two screws each on the front and rear securing the Lower Exit Chute R to the Finisher.

17. Move the rear side of the Lower Exit Chute R downward to remove it from the Finisher frame. Push out from the back of the chute and remove from the front as indicated.

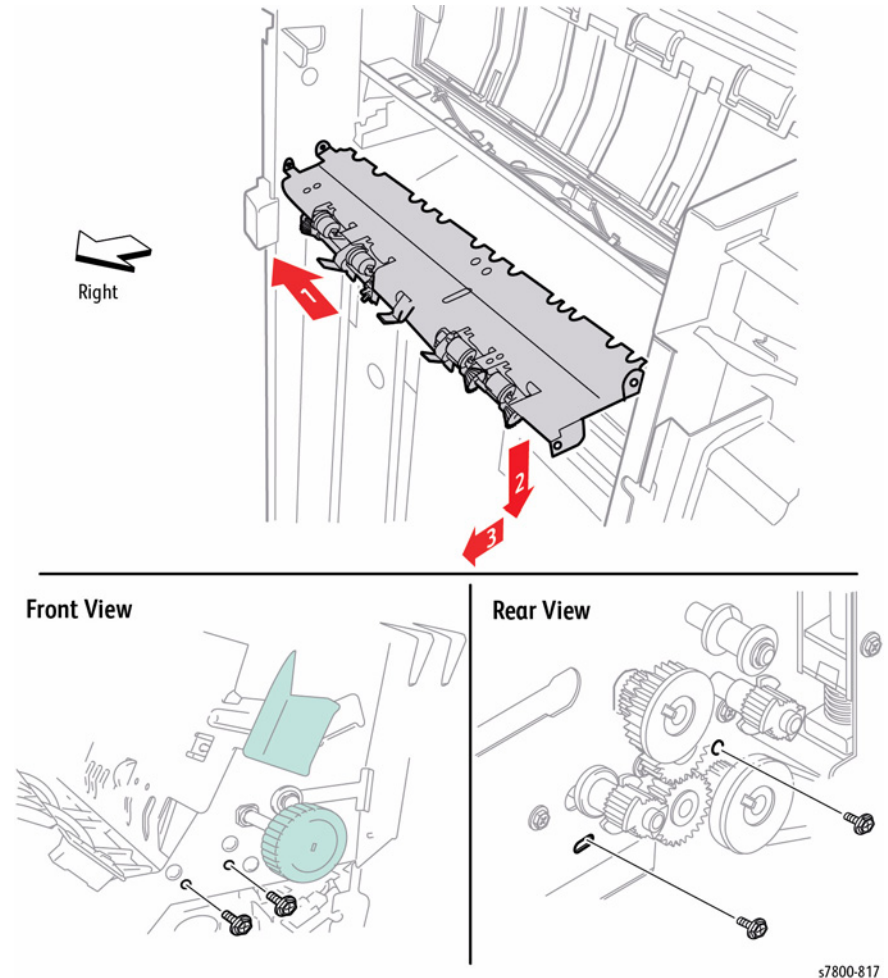


Figure 5 Removing the Lower Exit Chute R

Replacement

Belt tension is automatically adjusted by the force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, be careful not to move the Tension Bracket.

REP 24.73 Lower Exit Chute (2b)

Parts List on [PL 24.41 Item 2](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Open the Front Door (Door G).
3. Open the Lower Exit Chute to the right.
4. Remove 1 screw on the front that secures the Lower Exit Chute to the frame.
5. Remove the Lower Exit Chute Open from the front.

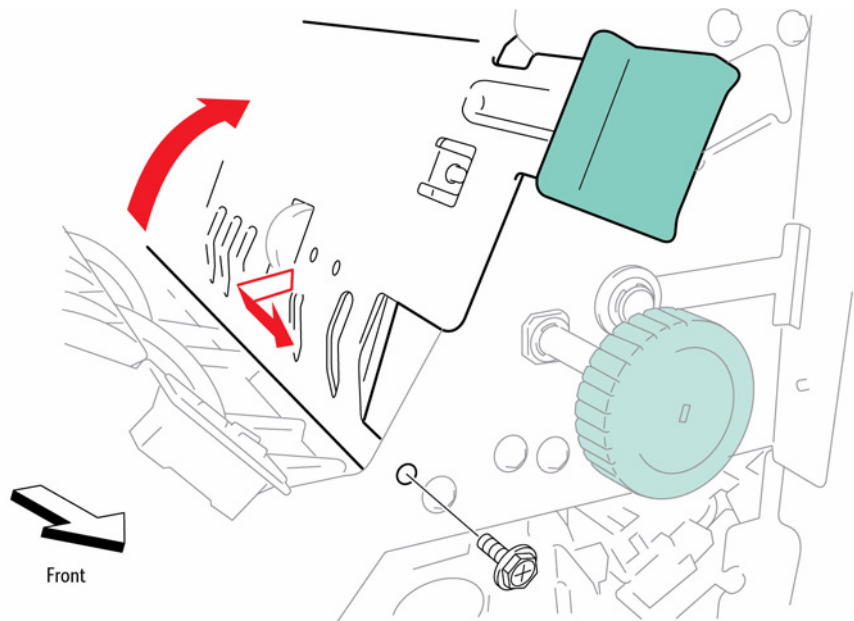


Figure 1 Removing the Lower Exit Chute

REP 24.75 Buffer Path Sensor

Parts List on [PL 24.41 Item 10](#)

Removal

1. Remove the Top Cover ([REP 24.20](#)).
2. Remove 2 screws that secure the L/H Front Cover to the Finisher.
3. Remove the Left Hand Front Cover.

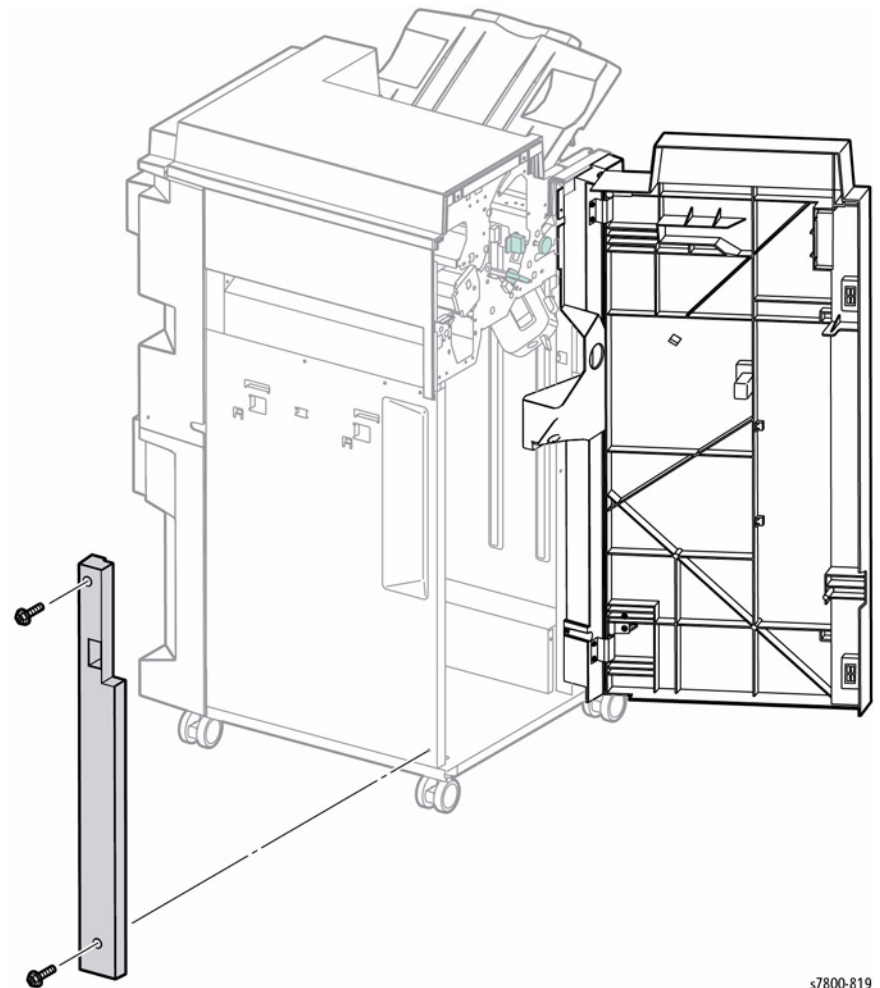


Figure 1 Removing the Left Hand Front Cover

4. Remove the Left Top Cover ([REP 24.27](#)).
5. Remove the Puncher Frame Assembly ([REP 24.38](#)).

6. Disconnect the Buffer Path Sensor wiring harness connector **P/J8392** from the harness.
7. Remove 1 screw that secures the Sensor Bracket to the Top Buffer Chute.
8. Remove the Sensor Bracket.
9. Release the four hooks that secure the Buffer Path Sensor to the Sensor Bracket and remove the Sensor.

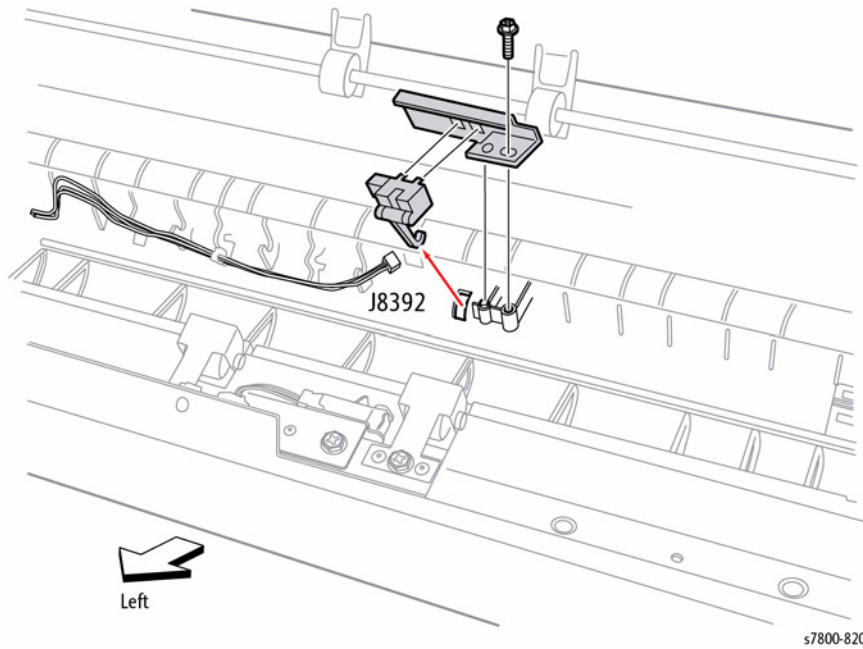


Figure 2 Removing the Buffer Path Sensor

Replacement

When installing the Sensor Bracket, be sure to put the Actuator of the Buffer Path Sensor into the hole of the Top Buffer Chute. Put the boss on the Top Buffer Chute into the hole of the Sensor Bracket.

REP 24.76 Buffer Roll

Parts List on **PL 24.41 Item 11**

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover (**REP 24.26**).
3. Remove the outer Bracket with cables.
4. Remove the 2 screws and remove the Transport Gate Solenoid Bracket.
5. Remove the Bracket.

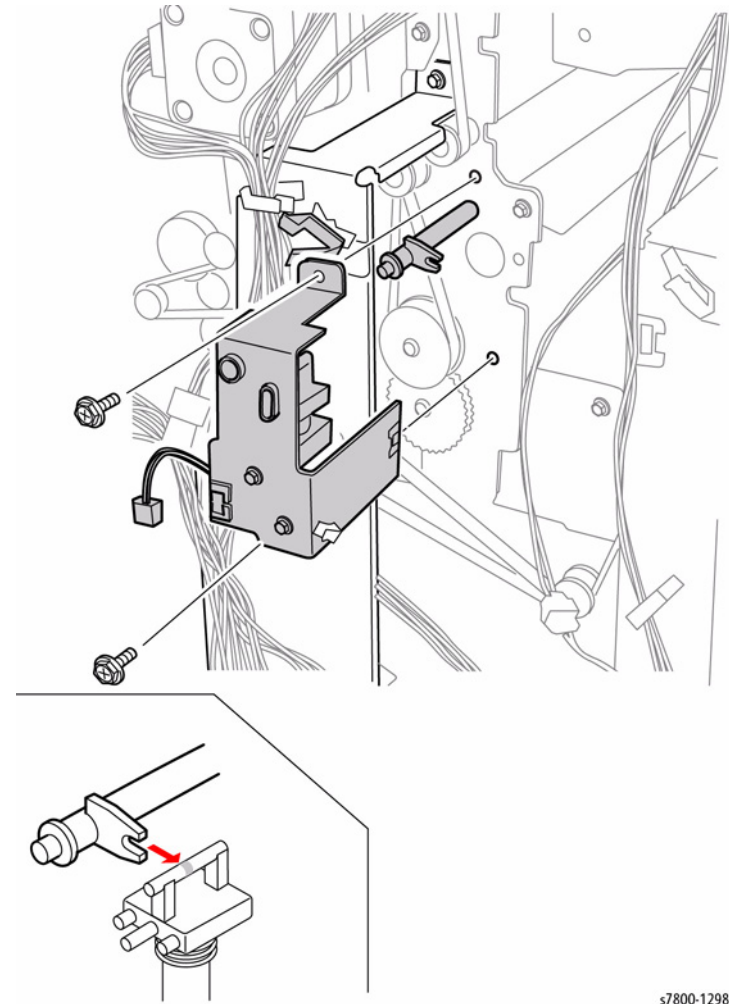


Figure 1 Removing the Bracket

6. Release tab on the Gear. Pull the Buffer Roll to the front of the Finisher.
7. Remove the Pulley and Gear.

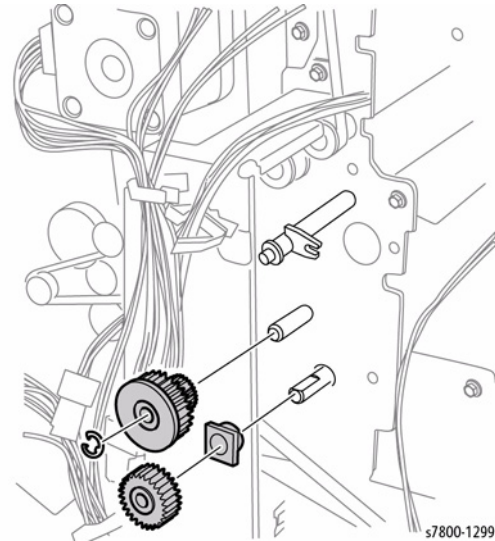


Figure 2 Removing the Pulley and Gear

8. Open the Lower Exit Chute.
9. Lift the Buffer Gate if necessary as shown in Figure 3.
10. Lower the Bottom Buffer Chute handle downward.

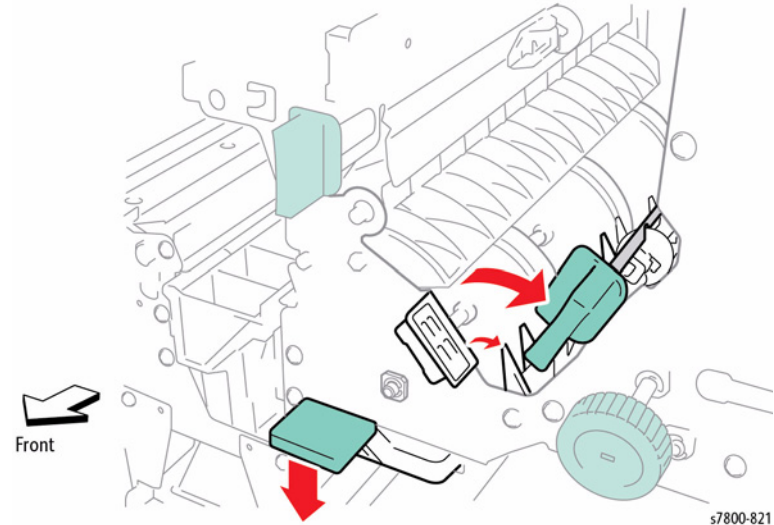


Figure 3 Opening the Lower Exit Chute and the Bottom Buffer Chute

11. Remove the E-ring that secures the front of the Buffer Roller Shaft.
12. Remove the Bearing.

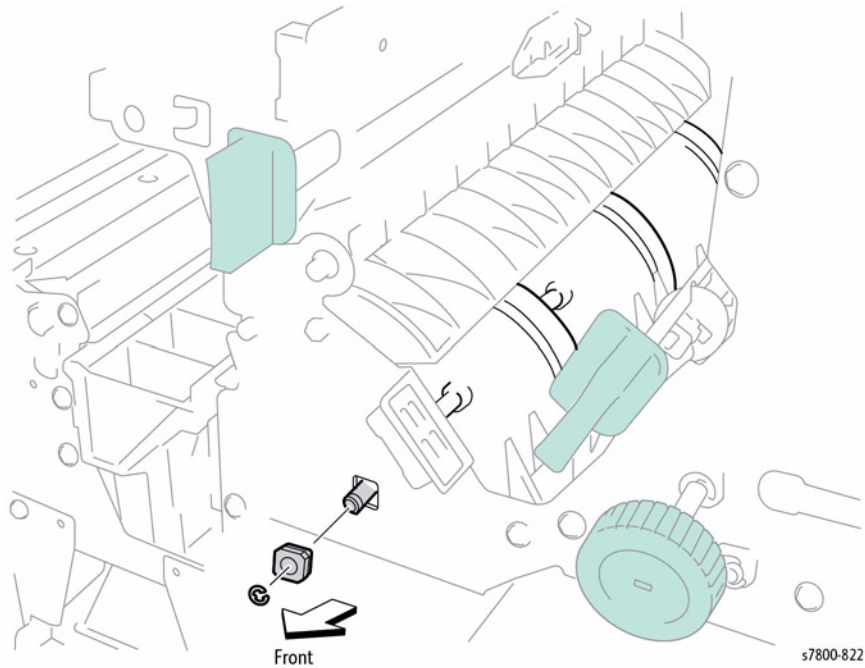


Figure 4 Removing the E-Ring

13. Move the Buffer Roller Shaft to the rear and remove the front end from the frame.
14. Move the Buffer Roller Shaft downward first, then remove it from the Finisher.

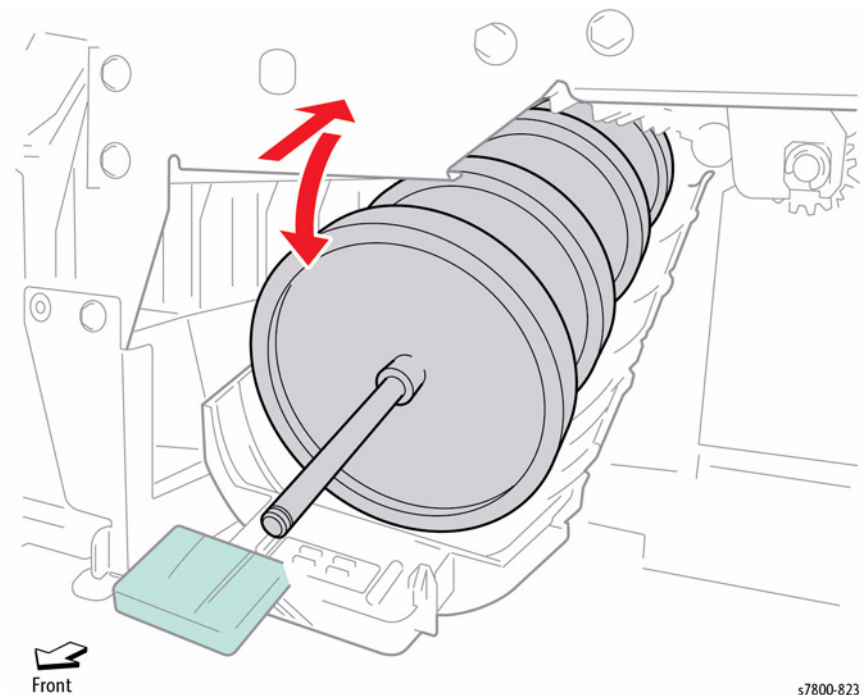


Figure 5 Removing the Buffer Roller

Replacement

Begin installing the Buffer Roller Shaft with the end having the flat surface towards the rear. Feed the Shaft through the rear frame, then slide the Bearing over the Shaft and work into place. Install the front Bearing, followed by the Gear Z46 at the rear. Finish the replacement by installing the E-clip on the front of the Shaft.

REP 24.77 Bottom Buffer Chute

Parts List on [PL 24.41 Item 13](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Buffer Roller ([REP 24.76](#)).
3. Disconnect the wiring harness connectors [P/J8327](#) and [P/J8326](#) from the Upper Limit and No Paper Sensors.
4. Remove 2 screws each on the front and rear securing the Stapler Unit.
5. Move the Stapler in the direction of the arrow to disengage the hooks from the frame and remove the Stapler from the front.

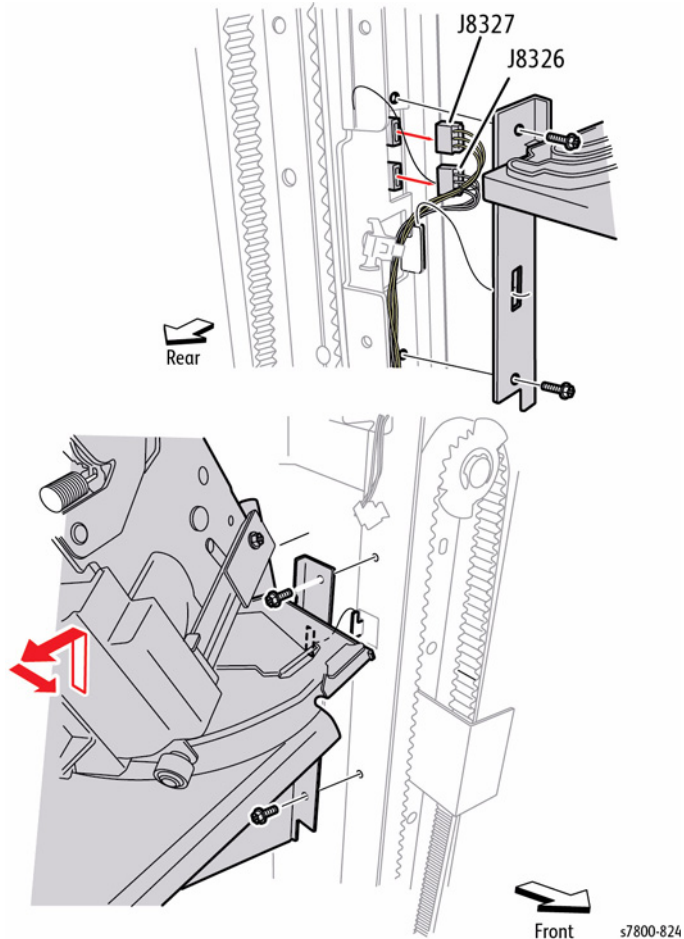


Figure 1 Removing the Finisher Stapler Unit

6. Remove the two bosses on the rear of the Bottom Buffer Chute from the two holes on the rear frame. Rotate chute down approximately 70°, then push towards the right to remove.

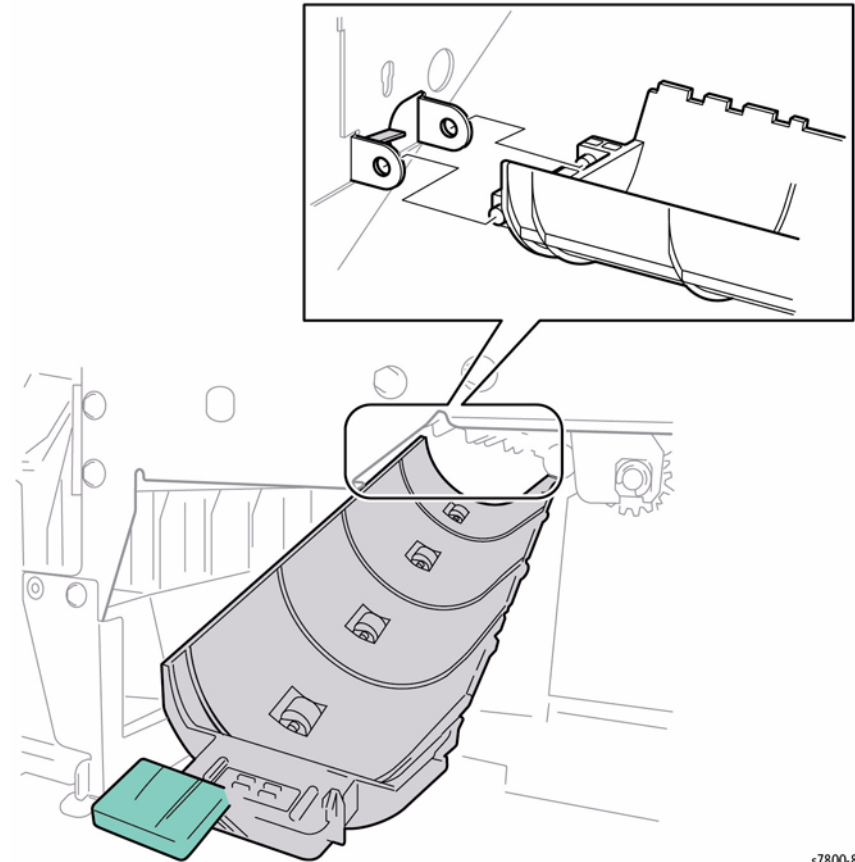


Figure 2 Removing the Bottom Buffer Chute (3)

Replacement

When installing the Bottom Buffer Chute, start the bosses into the holes of the retaining tab by applying slight pressure to the left, while raising the Buffer Gate until the bosses fully seat. Close the chute completely to verify correct installation.

REP 24.78 Upper Chute Assembly

Parts List on [PL 24.41 Item 15](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove 2 screws that secure the Left Hand Front Cover to the Finisher.
3. Remove the Left Hand Front Cover.

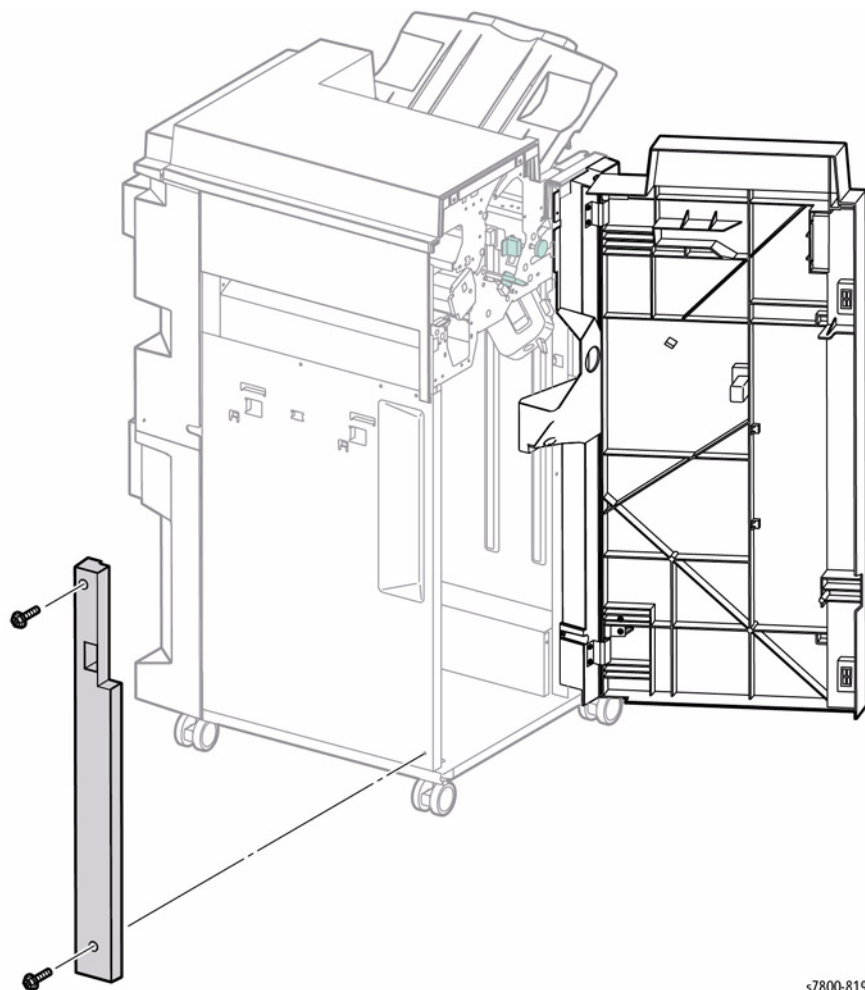


Figure 1 Removing the Left Hand Front Cover

4. Remove the Left Top Cover ([REP 24.27](#)).
5. Release the harness from the Sensor Bracket Clamp.

6. Disconnect the Transport Entrance Sensor wiring harness connector [P/J8319](#).

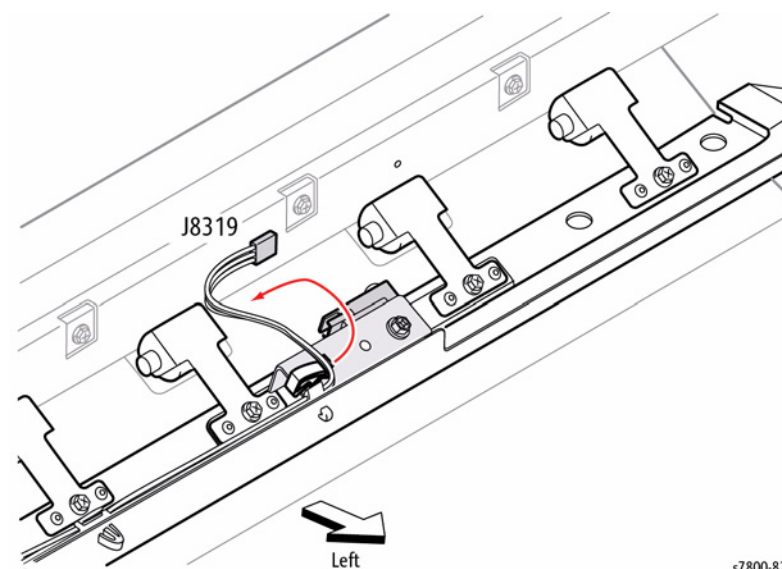


Figure 2 Disconnecting the wiring harness connector

7. Remove 3 screws that secure the Upper Entrance Chute and remove the hinge from the square hole on the rear frame.
8. Remove the Upper Entrance Chute from the front.

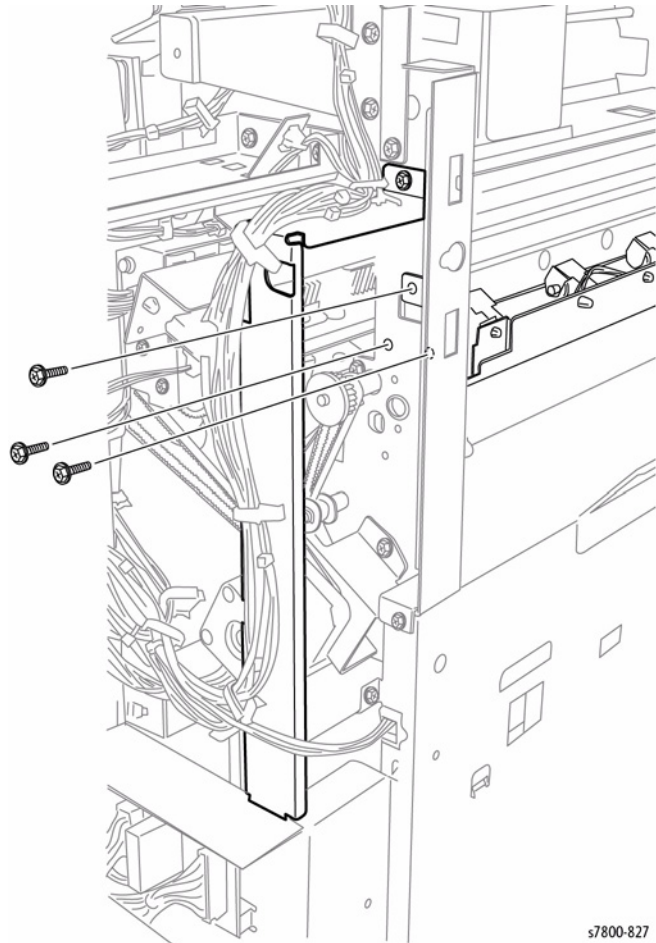


Figure 3 Removing the Upper Entrance Chute

s7800-827

REP 24.79 Entrance Pinch Roller

Parts List on [PL 24.41 Item 17](#)

Removal

NOTE: The Upper Entrance Chute has four Pinch Rollers. Remove any of these Rollers with this procedure.

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Open the Front Door (Door G).
3. Remove 2 screws that secure the Left Hand Front Cover to the Finisher.
4. Remove the Left Hand Front Cover.

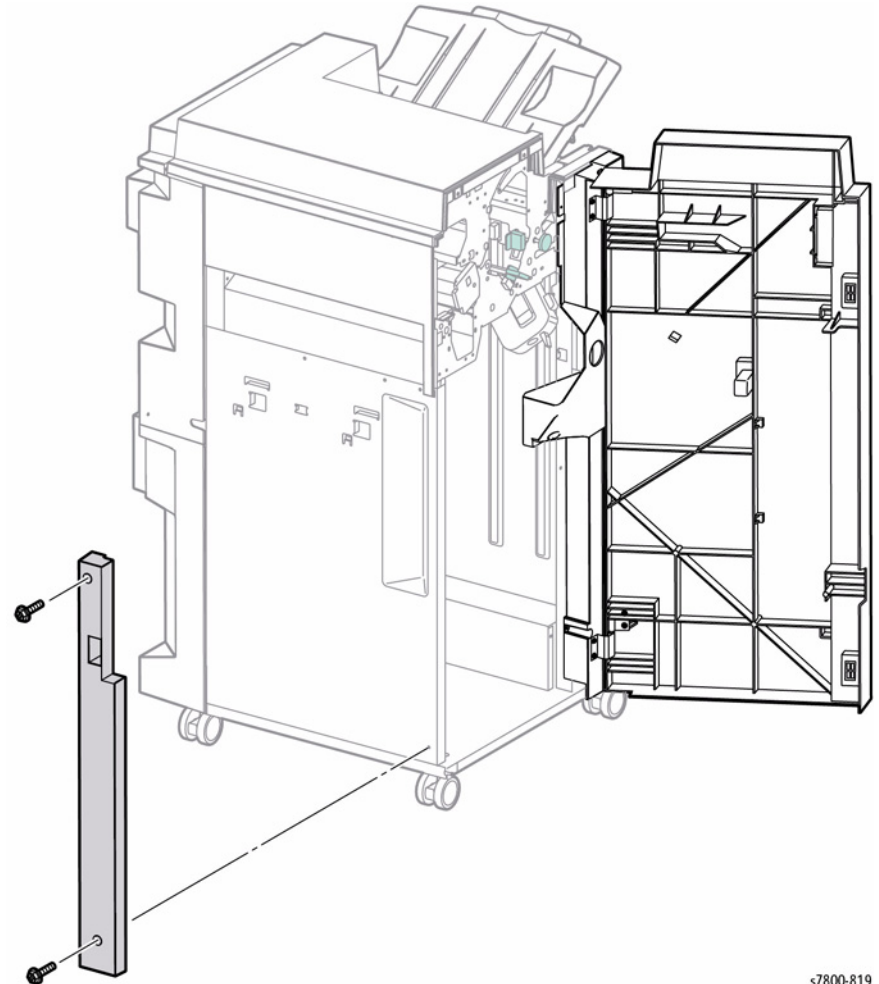


Figure 1 Removing the Left Hand Front Cover

s7800-819

5. Remove the Left Top Cover (REP 24.27).
6. Remove 1 screw that secures the Pinch Roller to the Upper Entrance Chute.

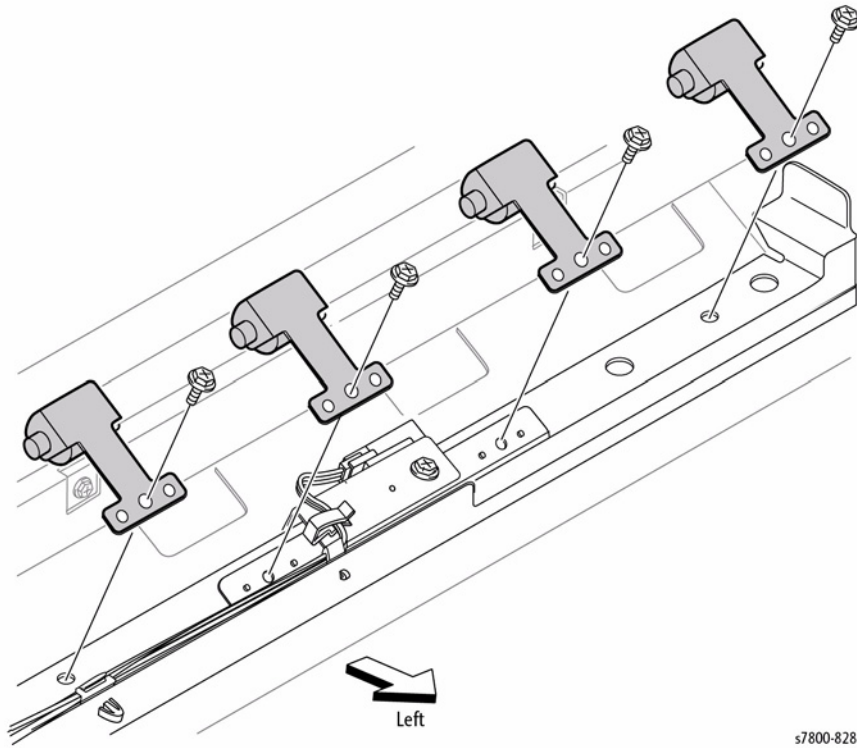


Figure 2 Removing the Upper Entrance Chute Pinch Rollers

REP 24.80 Transport Entrance Sensor

Parts List on **PL 24.41 Item 19**

Removal

1. Remove the Rear Upper Cover (REP 24.26).
2. Open the Front Door (Door G).
3. Remove 2 screws that secure the Left Hand Front Cover to the Finisher.
4. Remove the Left Hand Front Cover.

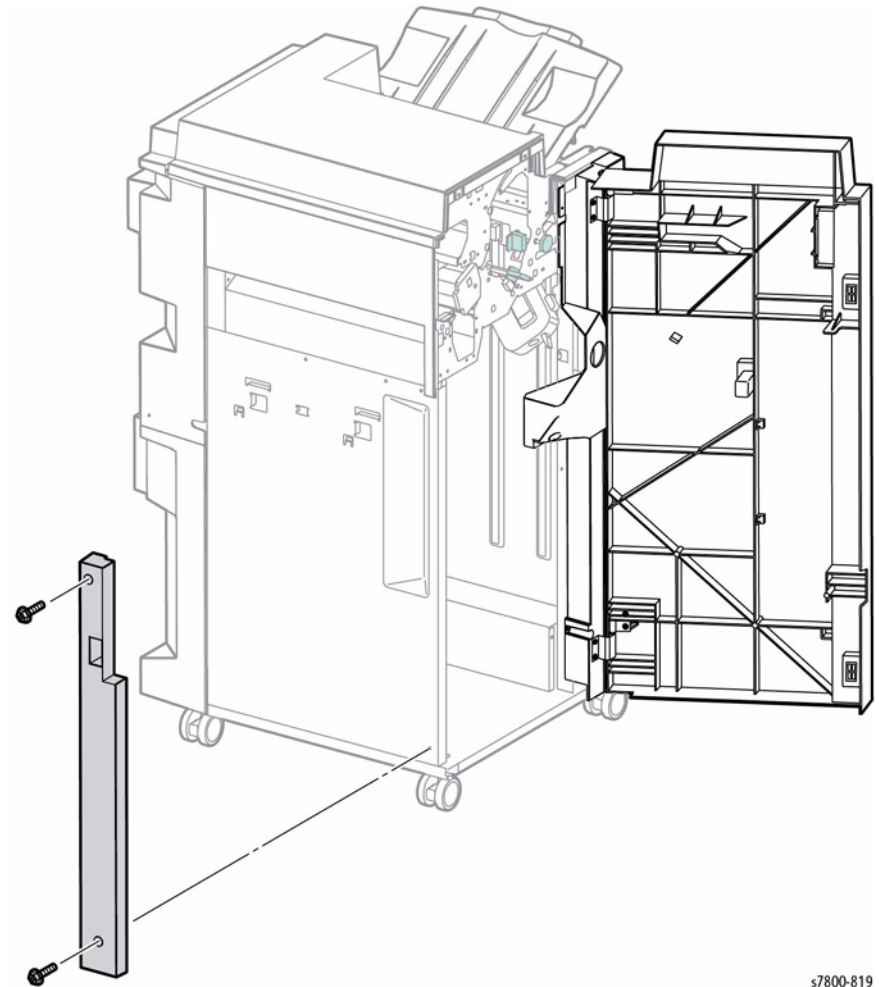


Figure 1 Removing the Left Hand Front Cover

5. Remove the Left Top Cover (REP 24.27).

6. Release the harness from the Sensor Bracket Clamp.
7. Disconnect the Transport Entrance Sensor wiring harness connector P/J8319.
8. Remove 1 screw that secures the Sensor Bracket to the Upper Entrance Chute and remove the Bracket.
9. Remove 1 screw that secures the Transport Entrance Sensor to the Sensor Bracket and remove the Sensor.

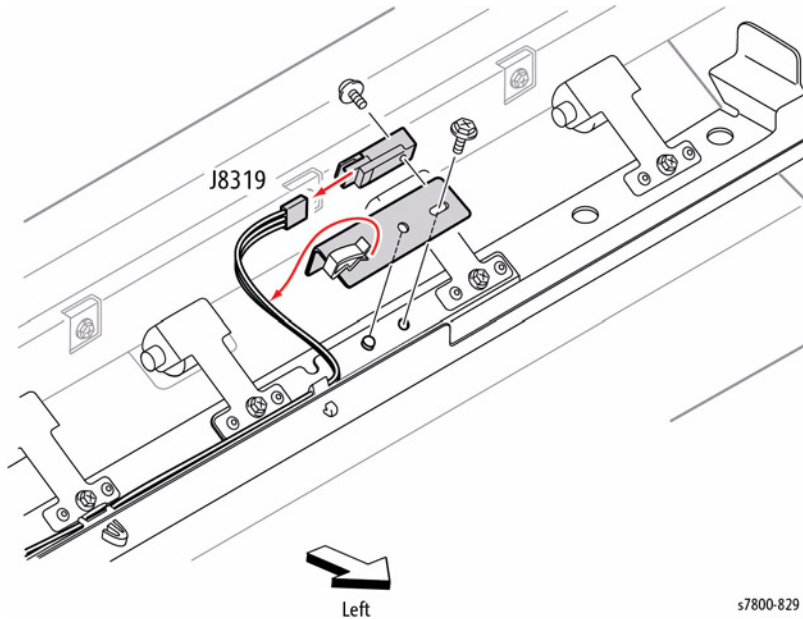


Figure 2 Removing the Transport Entrance Sensor

Replacement

Install the Sensor in the direction as shown in Figure 1.

REP 24.81 Entrance Roll

Parts List on PL 24.41 Item 25

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover (REP 24.26).
3. Remove 2 screws that secure the Left Hand Front Cover to the Finisher.
4. Remove the Left Hand Front Cover.

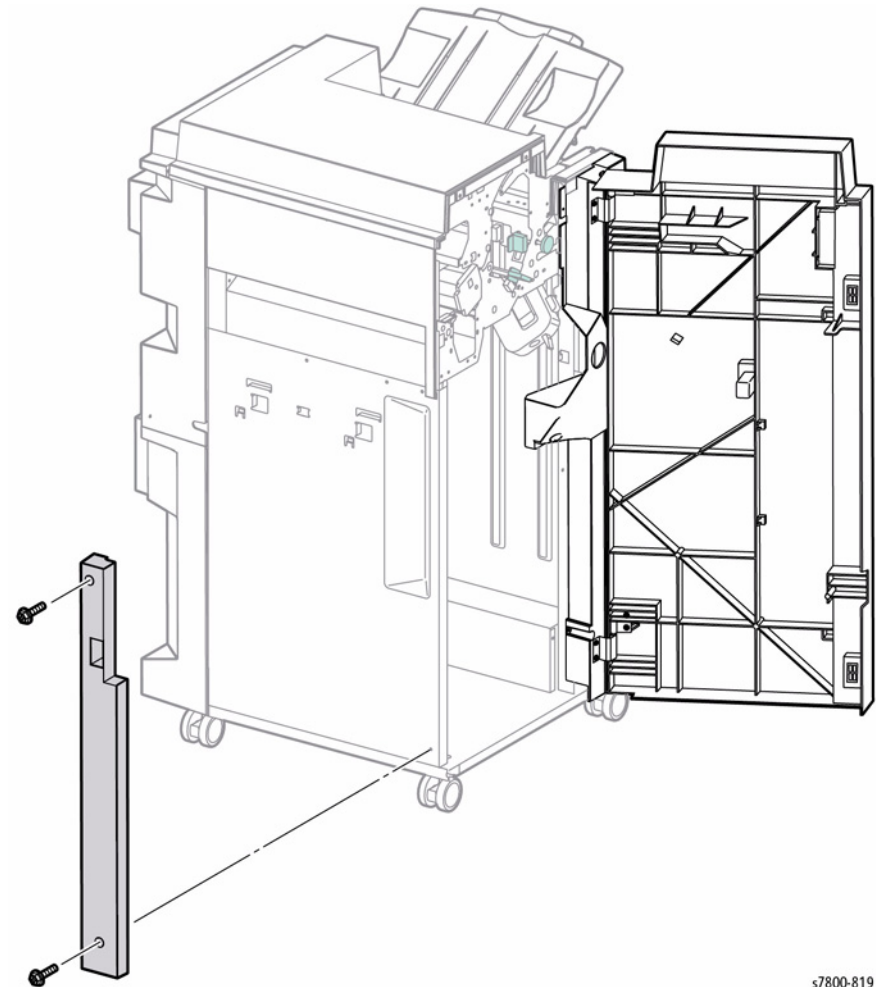


Figure 1 Removing the Left Hand Front Cover

5. Remove the Left Top Cover (REP 24.27).

6. Remove 1 screw that secures the Knob to the Upper Entrance Chute.
7. Open the Upper Entrance Chute.
8. Remove the Punch Box.

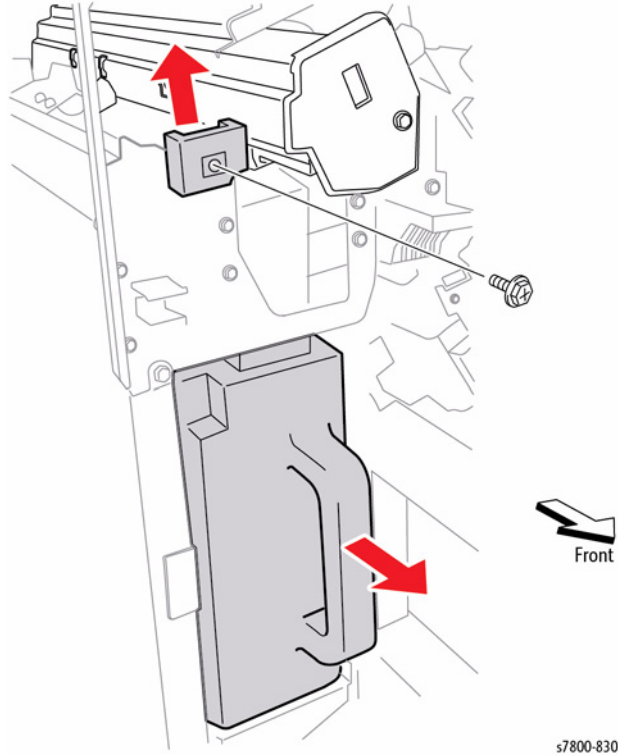


Figure 2 Removing the Punch Box and screw

9. Loosen 2 screws that secure the Transport Motor Belt Tension Bracket.
10. Move the Tension Bracket in the direction of the arrow to reduce belt tension and remove the Belt from the pulleys. This is best accomplished by removing the Belt from the stationary pulley first, then remove the Belt from the tension pulley.

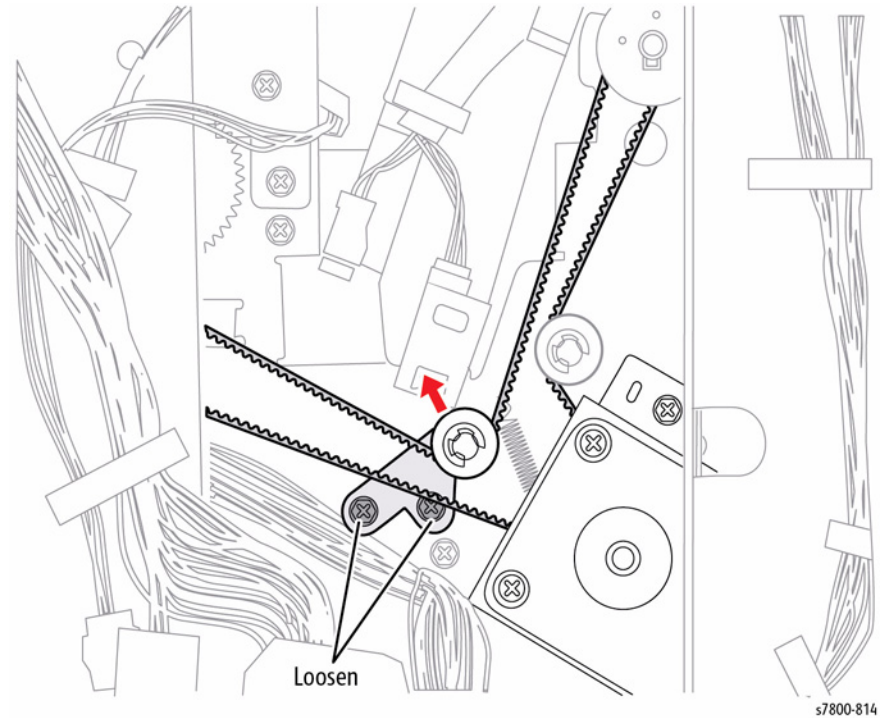


Figure 3 Loosening the screws and moving the Tension Bracket

11. Release the hook of the Gear 46T on the rear attached to the Entrance Roller Shaft and remove the Gear 46T.
12. Remove the Pulley 20T.
13. Remove the Bearing.

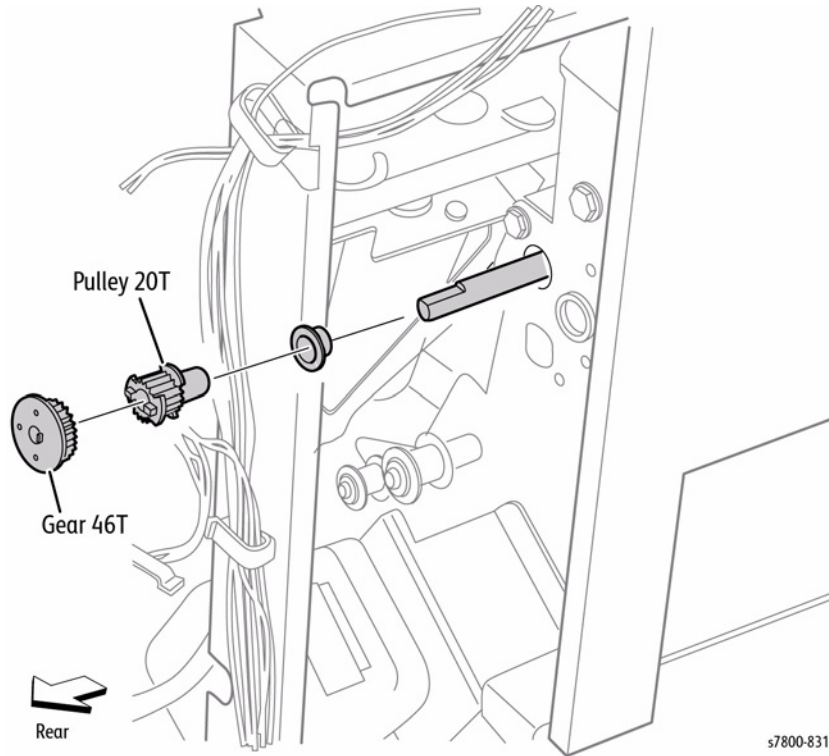


Figure 4 Removing the Pulley and Bearing

14. Remove the E-ring that secures the Entrance Roller Shaft on the front.
15. Remove the Bearing.
16. Push the Entrance Roller Shaft to the rear to remove the front end of the Entrance Roller Shaft from the frame first.
17. Move the Entrance Roller Shaft upward to remove it from the front.

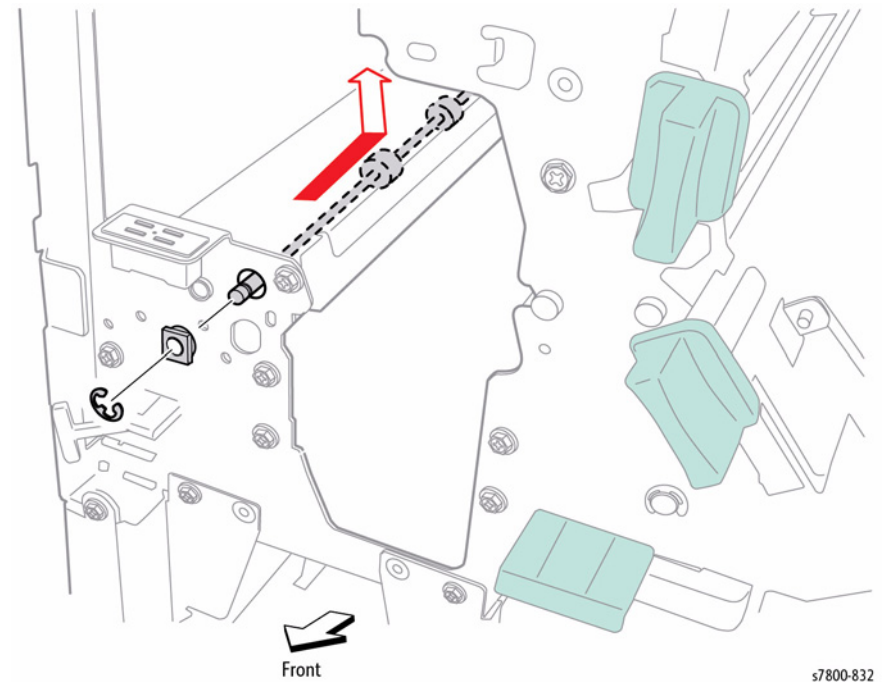


Figure 5 Removing the Entrance Roller

Replacement

Belt tension is automatically adjusted by the force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, be careful not to move the Tension Bracket.

REP 24.82 Finisher Transport Motor

Parts List on [PL 24.41 Item 26](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Loosen 2 screws that secure the Transport Motor Belt Tension Bracket.
3. Move the Tension Bracket in the direction of the arrow to reduce belt tension and remove the Belt from each pulley.

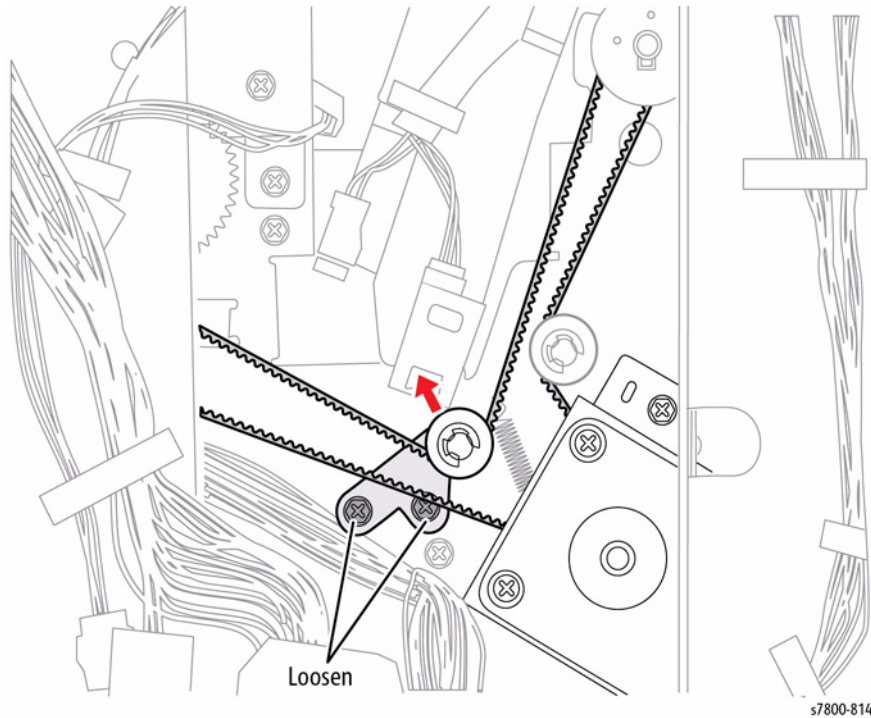


Figure 1 Loosening the screw and moving the Tension Bracket

4. Disconnect the Transport Motor wiring harness connector [P/J8342](#) from the harness.
5. Remove 2 screws that secure the Finisher Transport Motor Bracket.
6. Remove 2 screws that secure the Finisher Transport Motor to the Bracket.

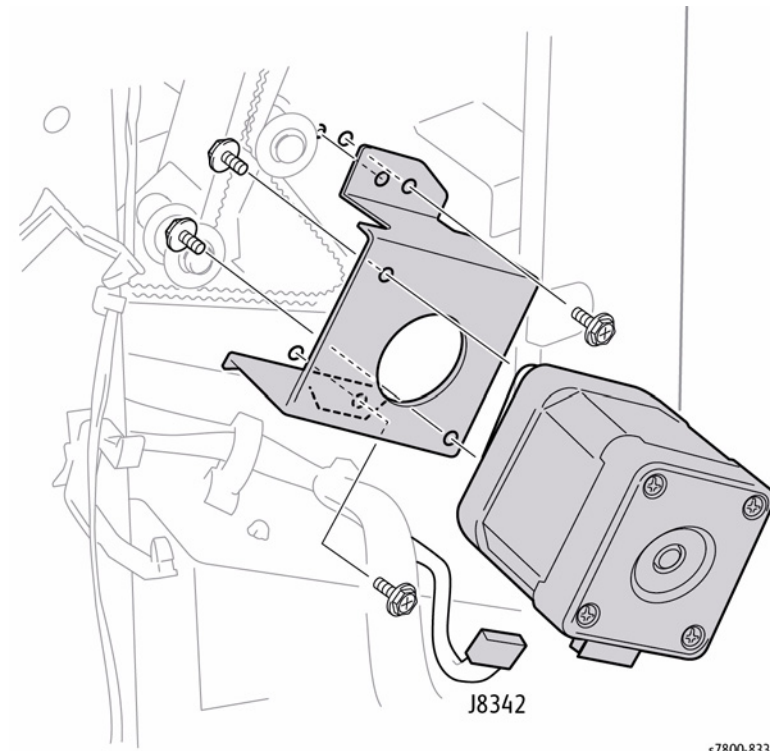


Figure 2 Removing the Transport Motor

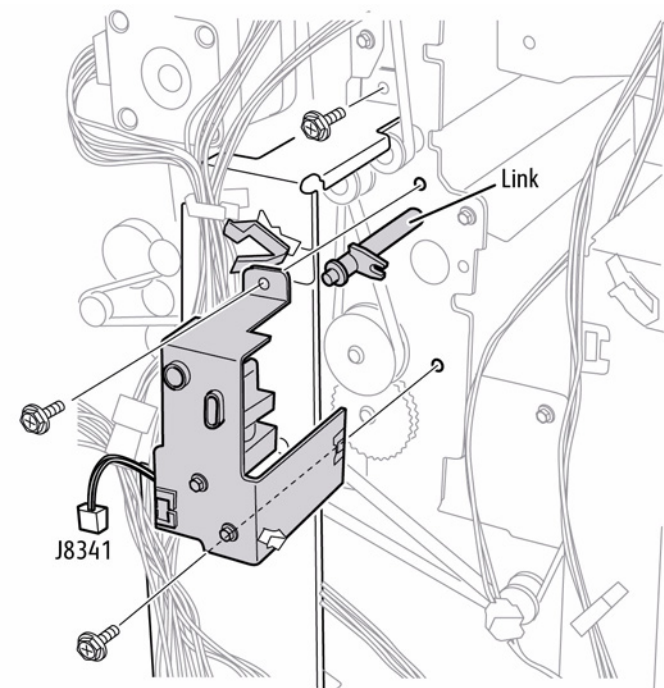
REP 24.83 Transfer Gate Solenoid

Parts List on [PL 24.41 Item 37](#)

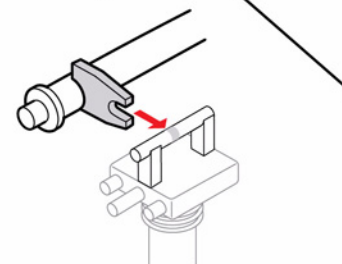
Removal

NOTE: In this procedure, do not remove the Harness Bracket from the Finisher. Remove the 2 screws that secure the Harness Bracket to facilitate removal of the Transfer Gate Solenoid. Also, when removing the Transfer Gate Solenoid, remove the Link as well. When the Link is removed, the Transfer Gate might detach inside the Finisher. If the Transport Gate becomes detached, use the Transport Gate removal procedure ([REP 24.85](#)) to replace it.

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Disconnect the Transfer Gate Solenoid wiring harness connector [P/J8341](#).
4. Release the harness of the Transfer Gate Solenoid from the Clamp.
5. Remove 2 screws that secure the Harness Bracket.
6. Remove 2 screws that secure the Transfer Gate Solenoid Bracket.
7. Remove the Link.



When Assembling



s7800-834

Figure 1 Removing the Transfer Gate Solenoid

Replacement

Reinsert the Solenoid Guide into the Link Notch. Be sure the Transfer Gate pivot is in place at the front when reinstalling the Solenoid.

REP 24.84 Buffer Gate Solenoid

Parts List on [PL 24.41 Item 39](#)

Removal

NOTE: When removing the Buffer Gate Solenoid, remove the Link as well. When the Link is removed, the Gate might detach inside the Finisher. If the Gate becomes detached, use the Transport Gate removal procedure ([REP 24.85](#)) to replace it.

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Disconnect the Buffer Gate Solenoid wiring harness connector [P/J8394](#).
4. Disconnect the sensor wire (purple and yellow).
5. Remove 2 screws that secure the Buffer Gate Solenoid Bracket to the Finisher and remove the Bracket.

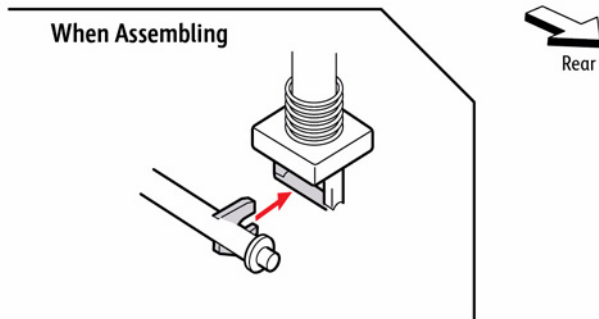
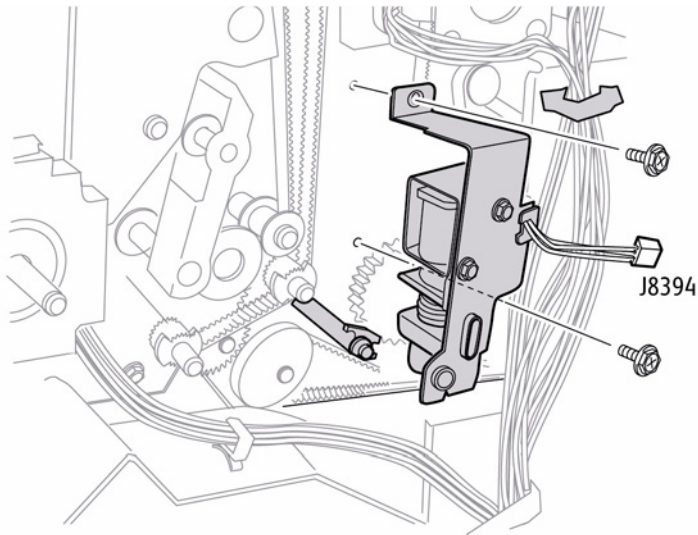


Figure 1 Removing the Buffer Gate Solenoid

s7800-835

REP 24.85 Transport Gate

Parts List on [PL 24.41 Item 40](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Open the Lower Exit Chute (2b) to the right.

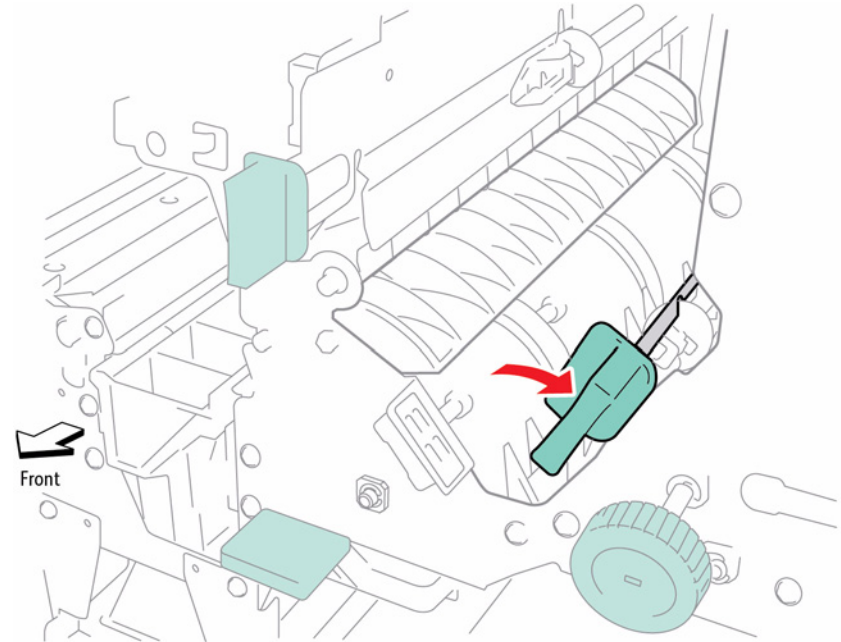


Figure 1 Opening the Lower Chute

s7800-836

4. Remove the Transfer Gate Solenoid on the rear (REP 24.83).
5. Move the Gate in the direction of the arrow to remove from the front.

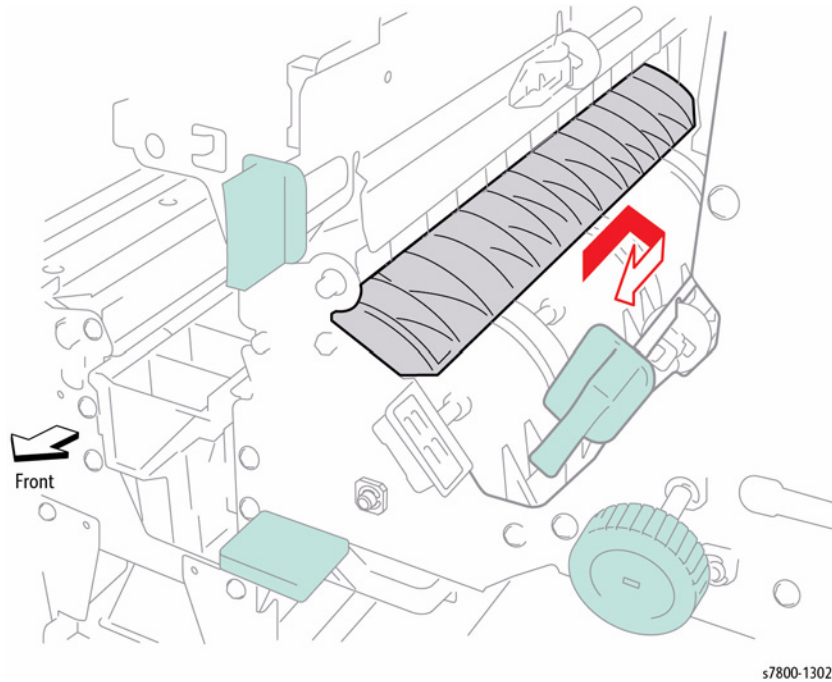


Figure 2 Removing the Transfer Gate

s7800-1302

Replacement

Install the Gate with the hole facing the rear.

REP 24.86 Buffer Gate

Parts List on PL 24.41 Item 41

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover (REP 24.26).
3. Remove the Buffer Gate Solenoid on the rear (REP 24.84).
4. Remove the Buffer Link.

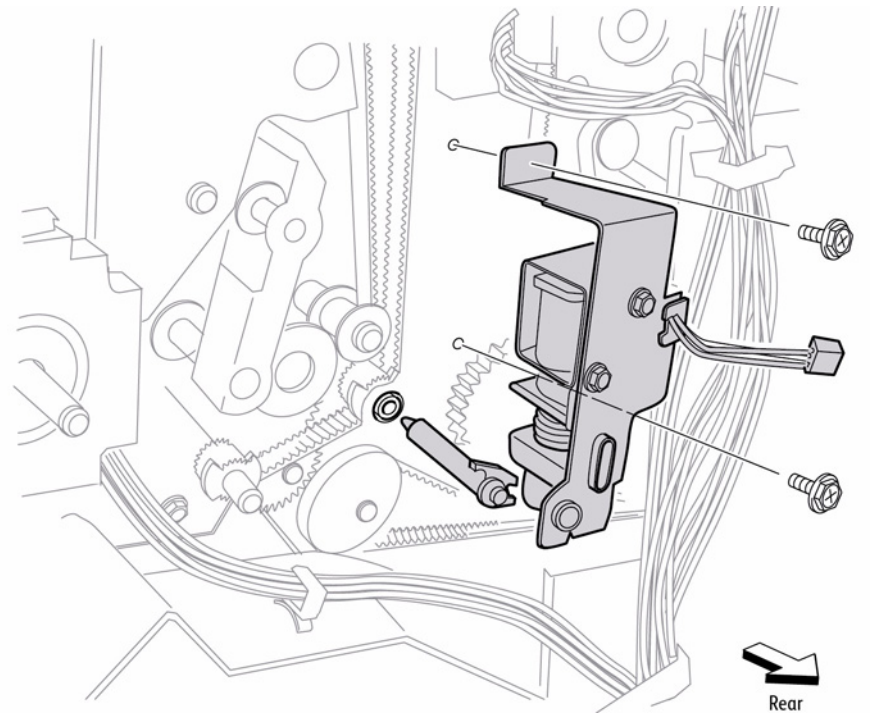


Figure 1 Removing the Buffer Link

s7800-838

5. Open the Lower Exit Chute (2b) to the right.
6. Remove the Buffer Gate in the direction of the arrows as shown in Figure 2.

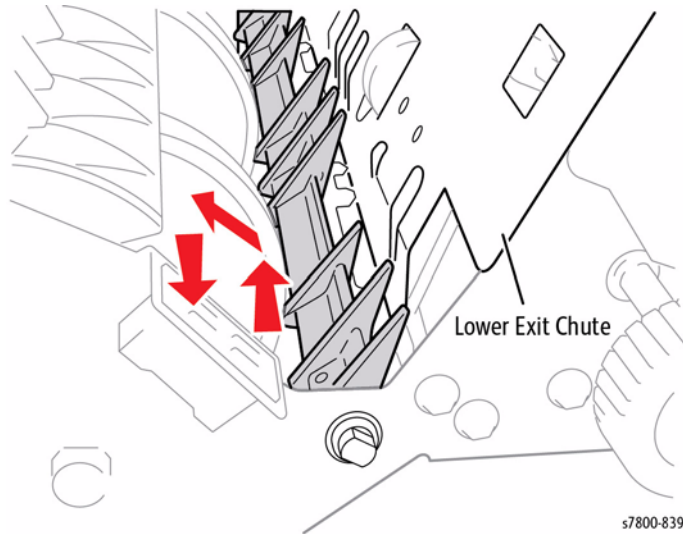


Figure 2 Removing the Buffer Gate

Replacement

Install the Buffer Gate with the hole facing the rear.

REP 24.87 Registration Motor and Belt

Parts List on [PL 24.43 Item 4](#), [PL 24.43 Item 7](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove 2 screws that secure the Harness Bracket. Remove only the two screws to facilitate removal of the Gear. Do not to remove the Harness Bracket from the Finisher.
3. Loosen 2 screws that secure the Registration Motor Belt Tension Bracket.

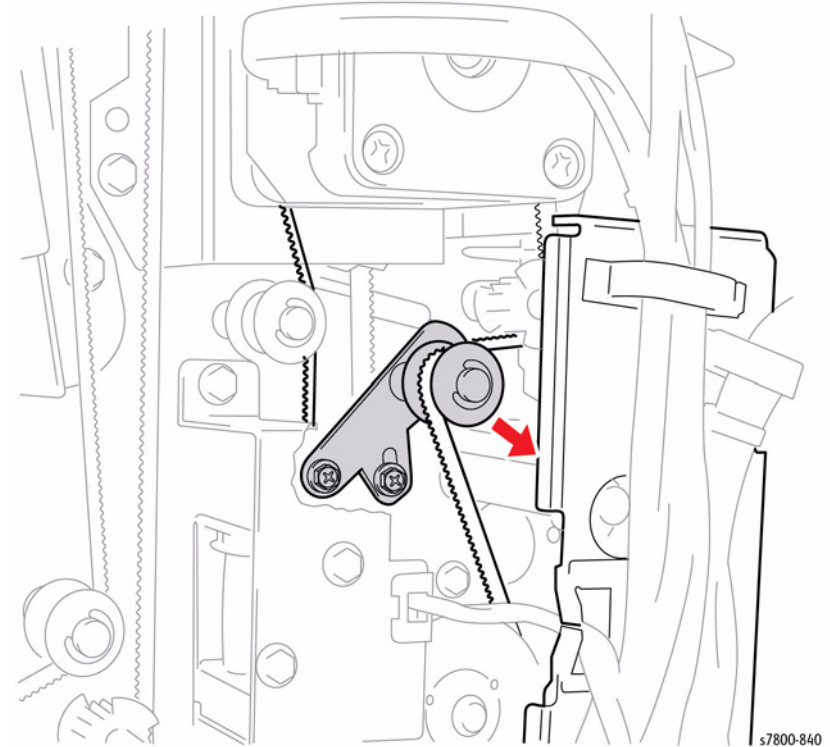


Figure 1 Loosening the screws and moving the Tension Bracket

4. Disconnect the Registration Motor wiring harness connector [P/J8335](#).
5. Remove 2 screws that secure the Registration Motor Bracket.
6. Remove 2 screws that secure the Registration Motor to the Bracket.

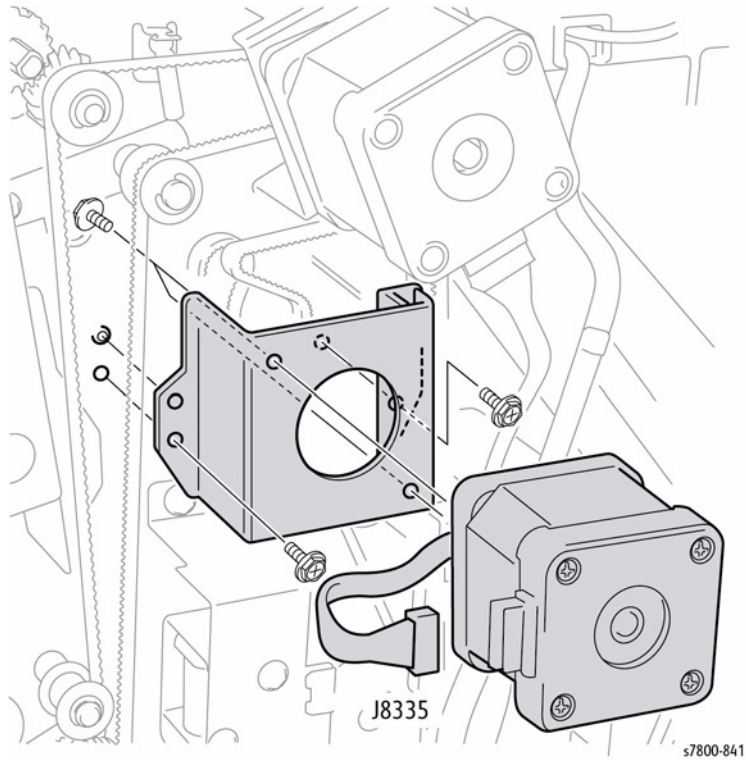


Figure 2 Removing the Registration Motor and Belt

Replacement

Put the two bosses into the two holes on the Motor Bracket. Also, belt tension is automatically adjusted by the force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, be careful not to move the Tension Bracket.

REP 24.88 Exit Motor and Belt

Parts List on [PL 24.43 Item 5](#), [PL 24.43 Item 7](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Loosen 2 screws that secure the Exit Motor Belt Tension Bracket.
3. Move the Tension Bracket in the direction of the arrow to reduce belt tension and remove the Belt from the pulleys.

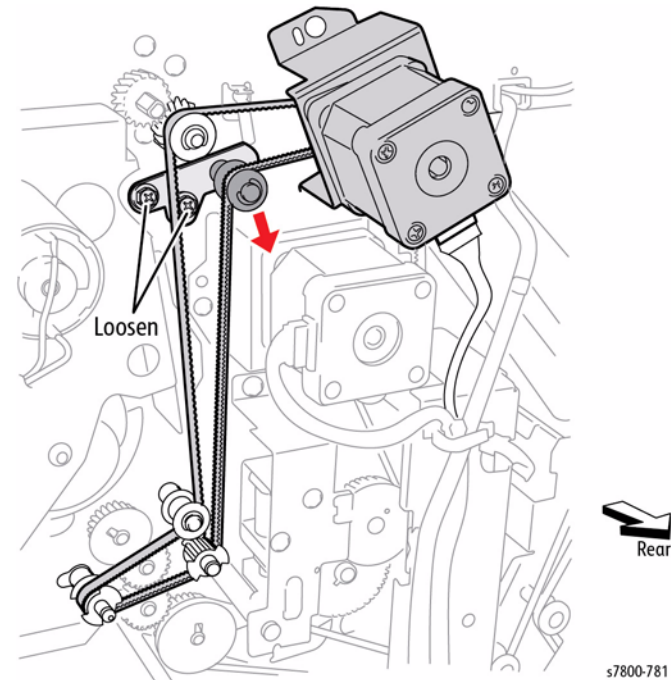


Figure 1 Loosening the screws and moving the Tension Bracket

4. Disconnect the Exit Motor wiring harness connector P/J8334.
5. Remove 2 screws that secure the Exit Motor Bracket.
6. Remove 2 screws that secure the Exit Motor to the bracket.

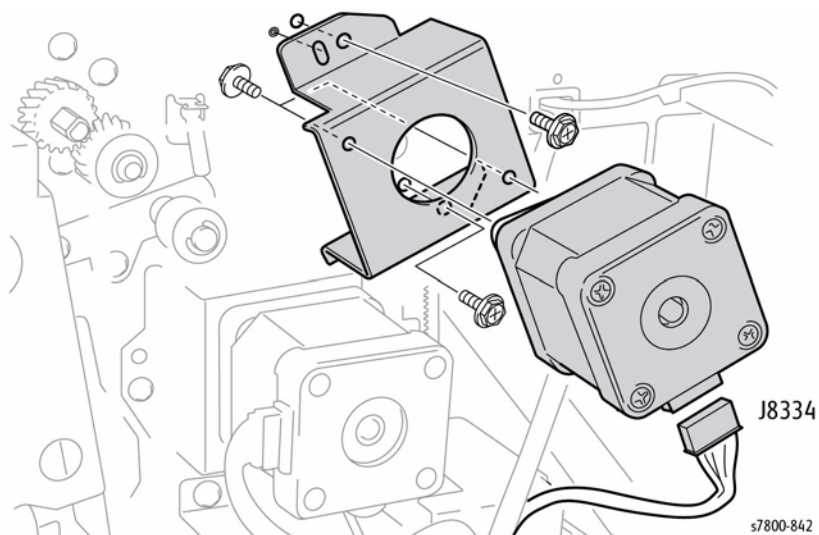


Figure 2 Removing the Finisher Exit Motor and Belt

Replacement

Belt tension is automatically adjusted by the force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, be careful not to move the Tension Bracket.

Put the two bosses of chassis into the two holes on the Exit Motor Bracket.

REP 24.89 Upper Exit Chute Assembly

Parts List on PL 24.43 Item 12

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover (REP 24.26).
3. Remove the Registration Motor (REP 24.87).
4. Remove 3 screws that secure the hinge of the Upper Exit Chute on the rear.

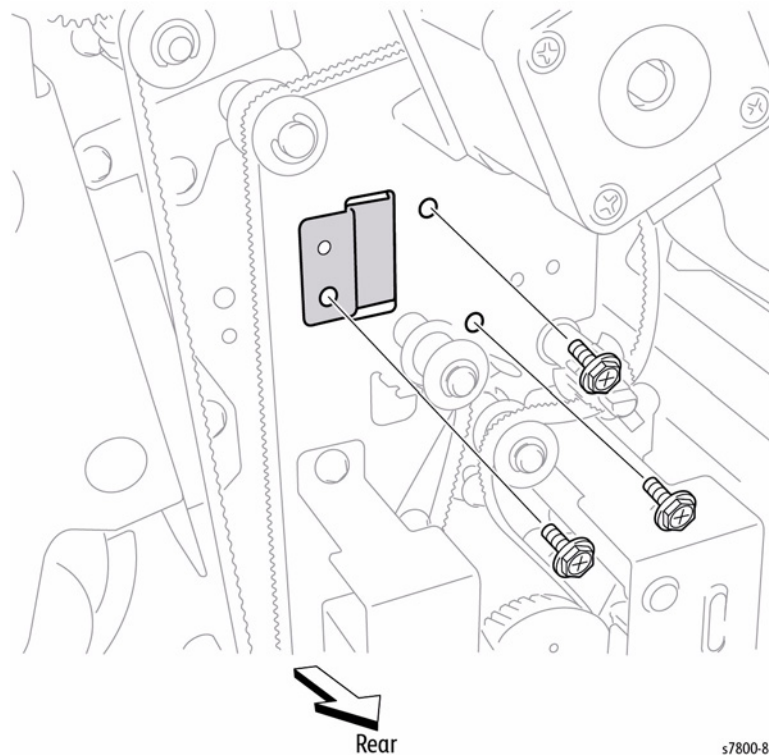


Figure 1 Removing the screws

5. Remove the Upper Exit Chute from the Finisher by removing the hinge from the square hole on the rear frame.

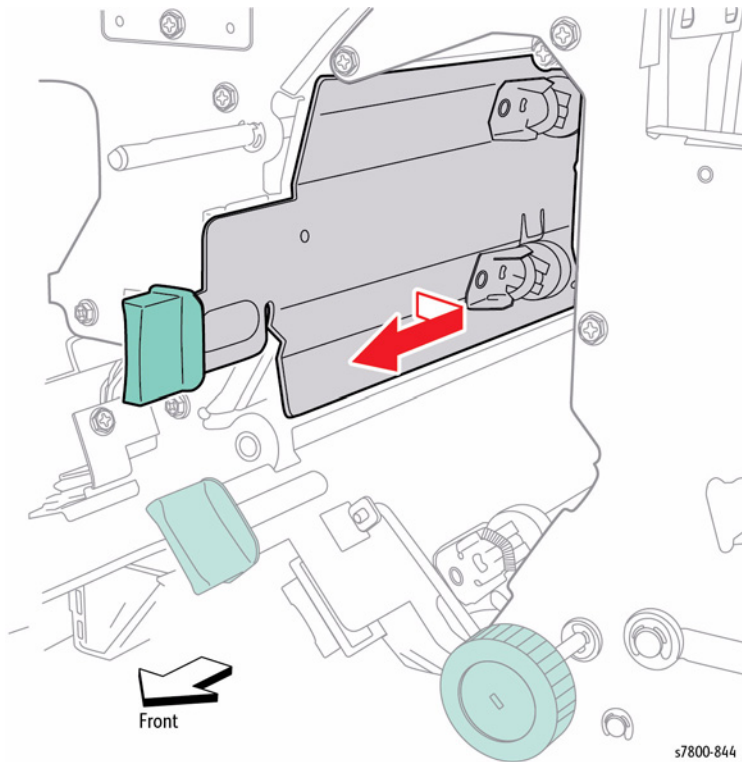


Figure 2 Removing the Upper Exit Chute

REP 24.90 Transport Gate Sensor

Parts List on [PL 24.43 Item 19](#)

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover ([REP 24.26](#)).
3. Remove the Top Cover ([REP 24.20](#)).
4. Remove 2 screws that secure the Left Hand Front Cover to the Finisher.
5. Remove the Left Hand Front Cover.

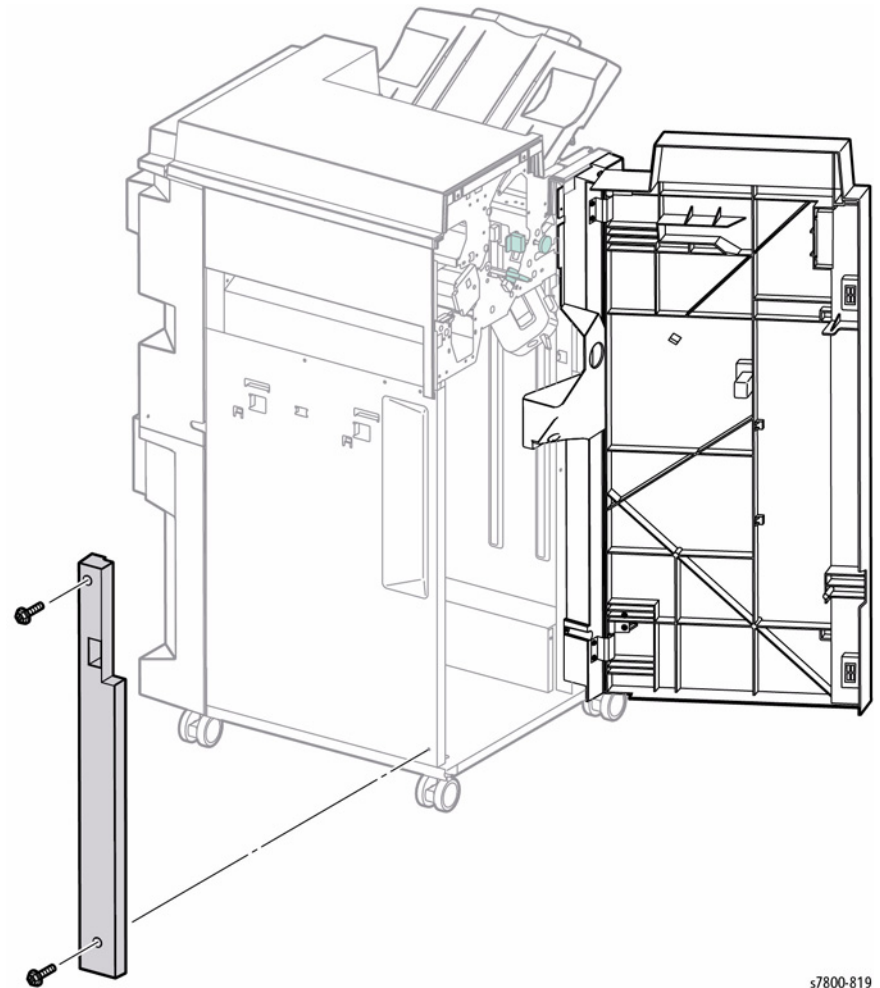


Figure 1 Removing the Finisher L/H Front Cover

6. Remove the Left Top Cover (REP 24.27).
7. Remove the Finisher Punch (REP 24.38).
8. Remove 3 screws that secure the Gate Sensor Bracket to the Upper Top Left Exit Chute.
9. Disconnect the Gate Sensor connector.
10. Remove 1 screw that secures the Gate Sensor to the Bracket.

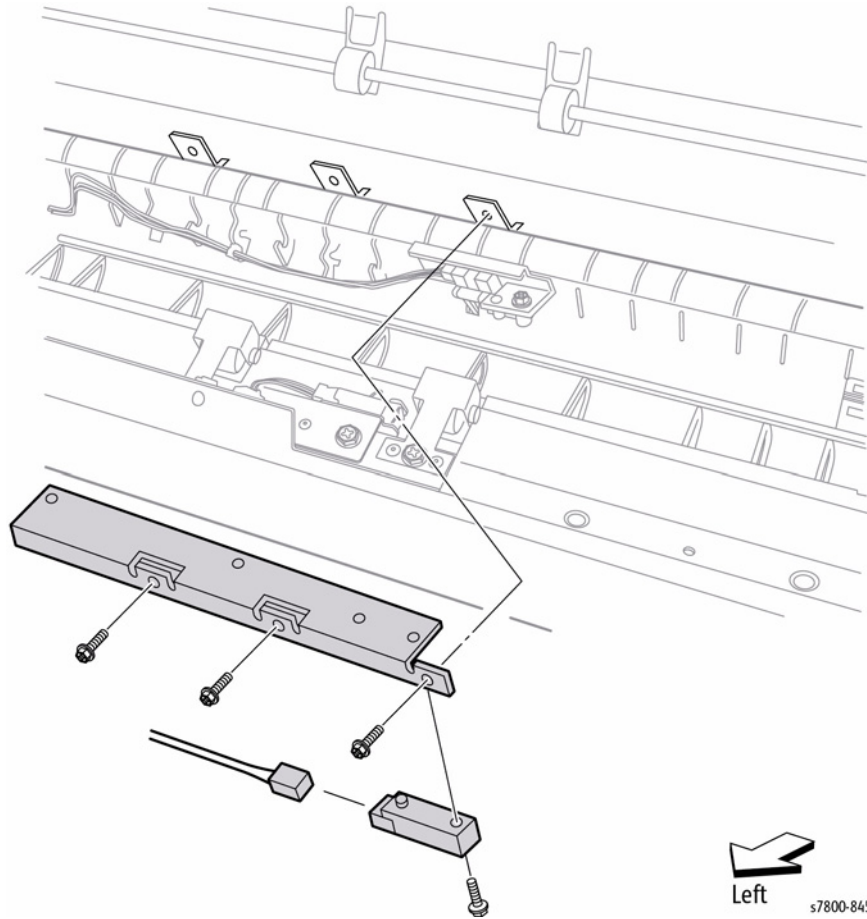


Figure 2 Removing the Gate Sensor

REP 24.91 Transport Rolls

Parts List on PL 24.43 Item 22

Removal

1. Open the Front Door (Door G).
2. Remove the Rear Upper Cover (REP 24.26).
3. Remove the Top Cover (REP 24.20).
4. Remove 2 screws that secure the Left Hand Front Cover to the Finisher.
5. Remove the Left Hand Front Cover.

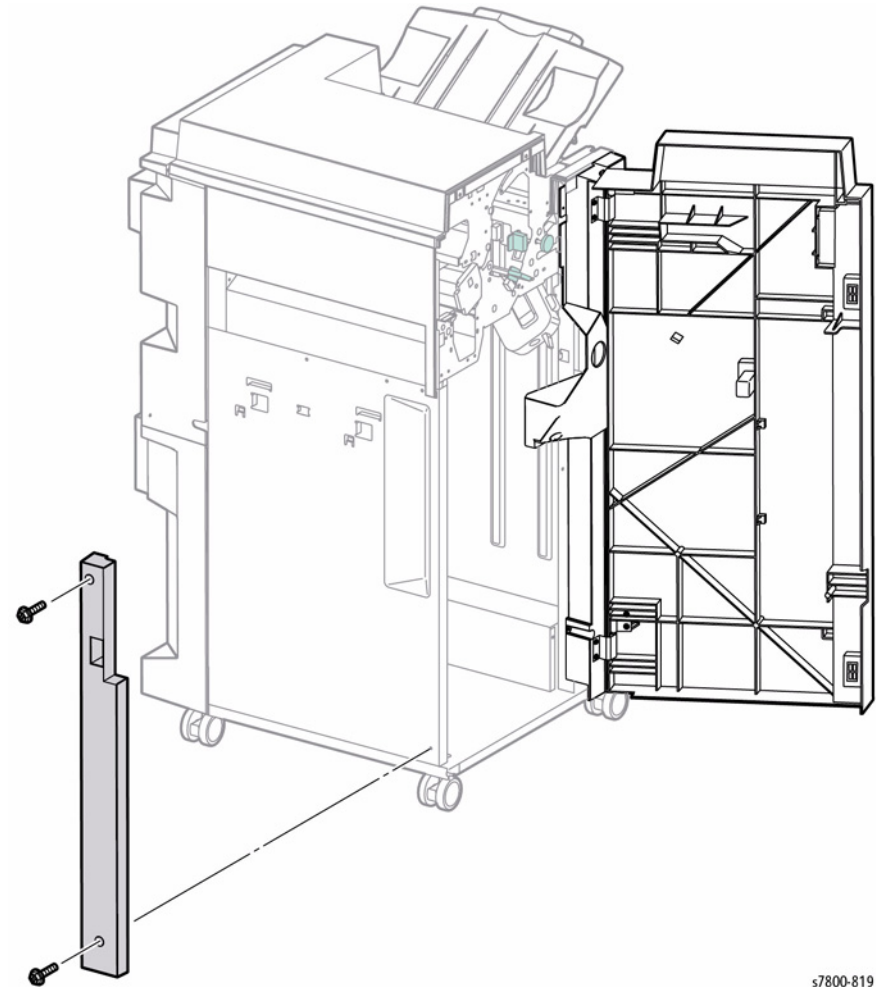


Figure 1 Removing the Finisher L/H Front Cover

6. Remove the Left Top Cover (REP 24.27).
7. Remove the Punch Motor (PL 24.32 Item 15).
8. Open the Upper Exit Chute.

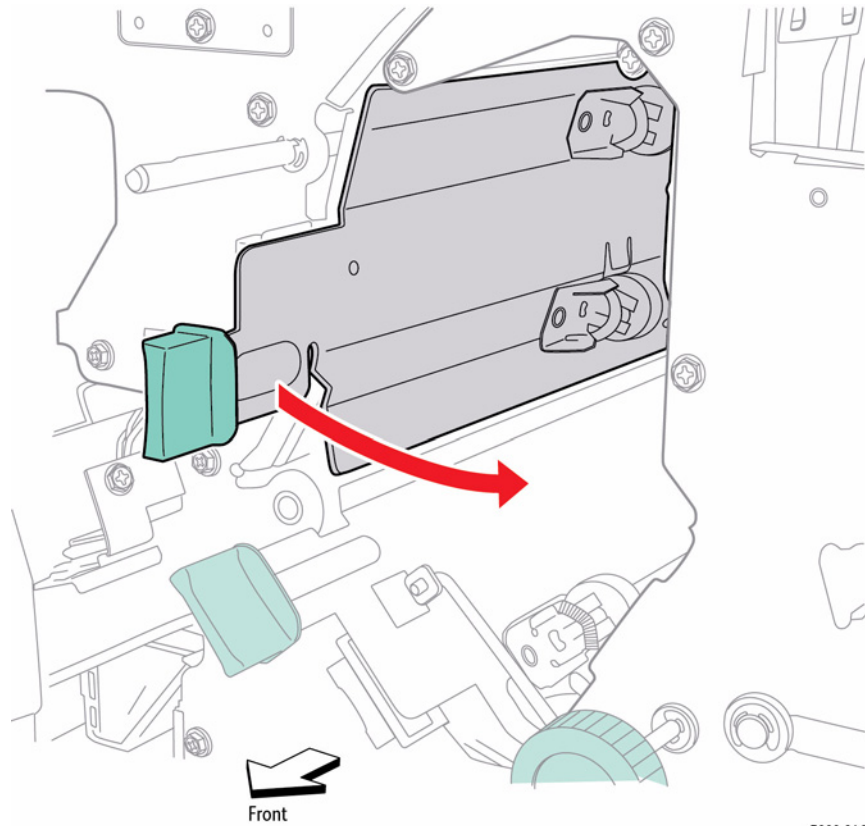


Figure 2 Opening the Upper Exit Chute

9. Loosen 2 screws that secure the Registration Motor Belt Tension Bracket.
10. Move the Tension Bracket in the direction of the arrow to reduce belt tension and remove the Belt from the pulleys.

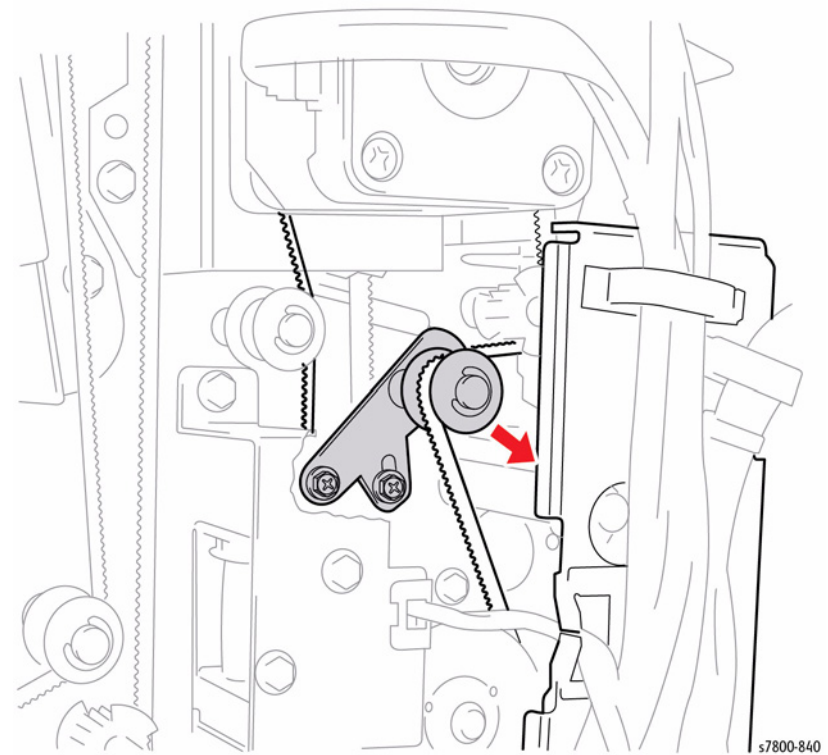


Figure 3 Loosening the screws and moving the Tension Bracket

11. Remove the Gear attached to the Transport Roller Shaft on the rear.
12. Remove the Bearing.

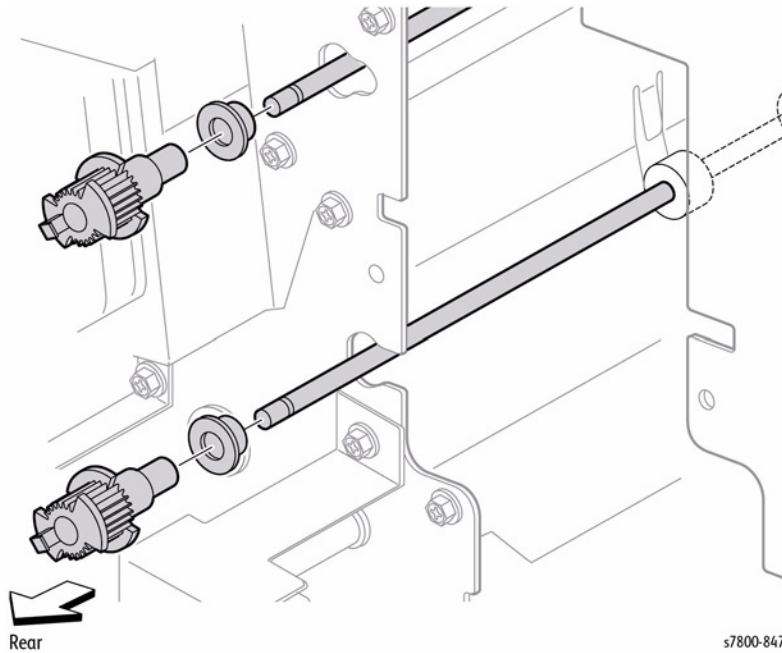


Figure 4 Removing the Gear and Bearing

13. Remove the E-ring that secures the Transport Roller shaft on the front.
14. Remove the Bearing.
15. Move the Transport Roller Shaft to the front to remove the rear end of the Shaft from the hole in the rear frame.
16. Remove the Shaft from the Finisher.

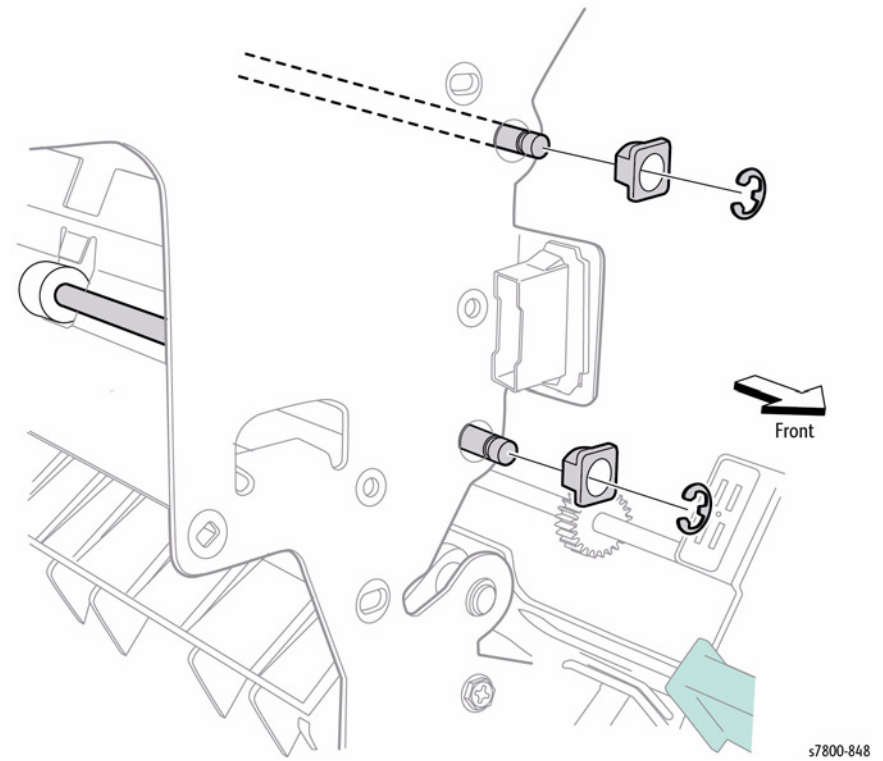


Figure 5 Removing the Transport Rollers

Replacement

Belt tension is automatically adjusted by the force of the Tension Spring attached to the Tension Bracket. When tightening the two screws, be careful not to move the Tension Bracket.

REP 24.92 Main PWB

Parts List on [PL 24.44 Item 3](#)

Removal

1. Remove the Rear Upper Cover ([REP 24.26](#)).
2. Remove the Rear Lower Cover ([REP 24.25](#)).
3. Loosen 4 screws that secure the Finisher Main PWB Cover.
4. Move the Main PWB Cover in the direction of the arrow to remove as shown in [Figure 1](#).

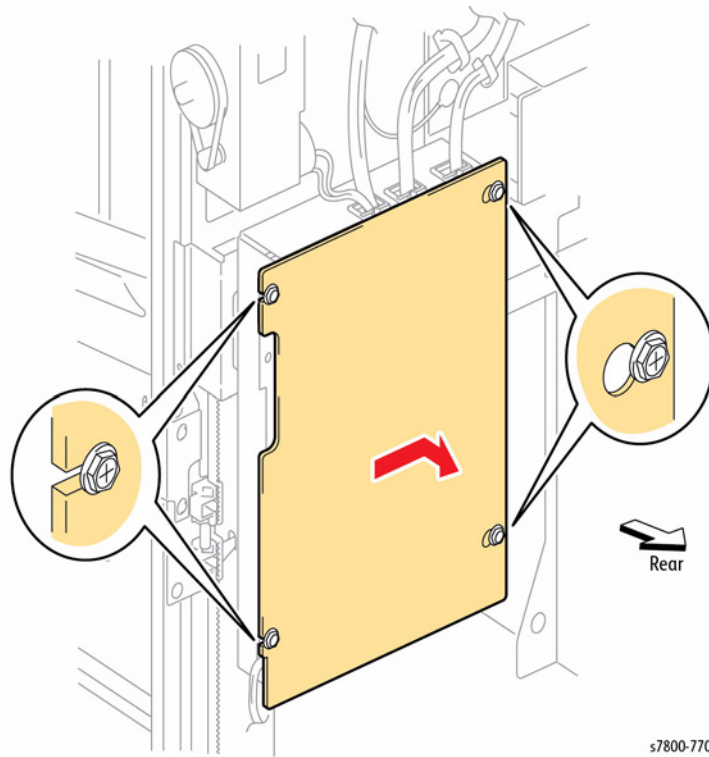


Figure 1 Removing the Main PWB Cover

5. Mark and disconnect all the wiring harness connectors on the Main PWB.
6. Remove 6 screws that secure the Main PWB.

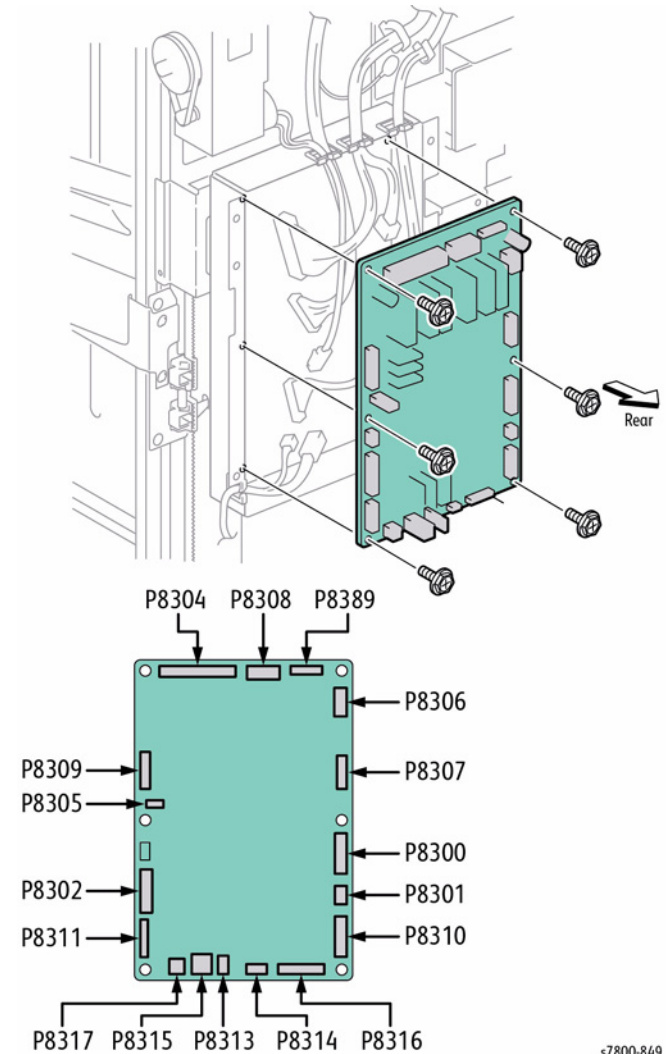


Figure 2 Removing the Main PWB

REP 24.93 LVPS

Parts List on [PL 24.44 Item 7](#)

Removal

1. Remove 2 screws that secure the Bottom Cover to the Finisher.
2. Remove the Finisher Bottom Cover.

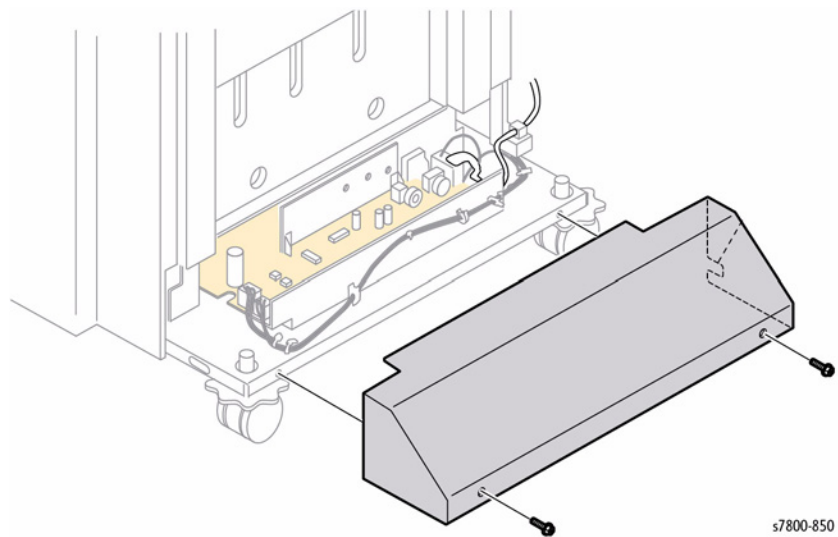


Figure 1 Removing the Finisher Bottom Cover

3. Disconnect 3 connectors on the LVPS.
4. Remove 2 screws that secure the LVPS to the Finisher and remove the LVPS.

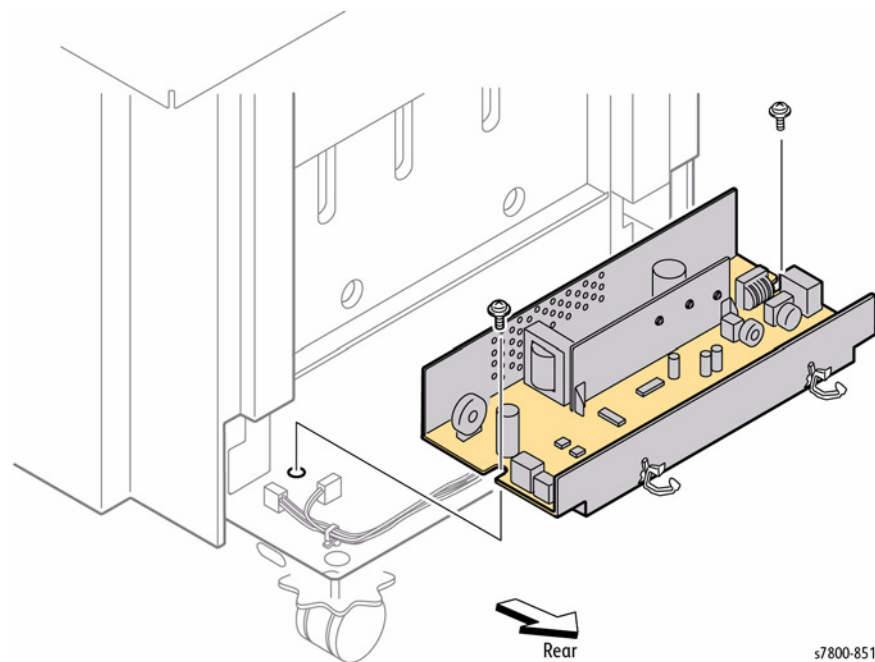


Figure 2 Removing the LVPS

REP 24.94 Booklet Maker

Parts List on [PL 24.51 Item 12](#)

Removal

1. Open the Front Door (Door G).
2. Pull out the Booklet Maker Unit until it stops.
3. Loosen 1 screw that secures the Booklet Maker Stopper
4. Push in the Stopper on the right Rail and pull the Booklet Maker Unit out until it stops.
5. Push in the Stopper on the Left Rail.
6. Pull the Booklet Maker out to remove it from the Finisher.

NOTE: Rails bind easily. Ensure to support weight of the Booklet Maker.

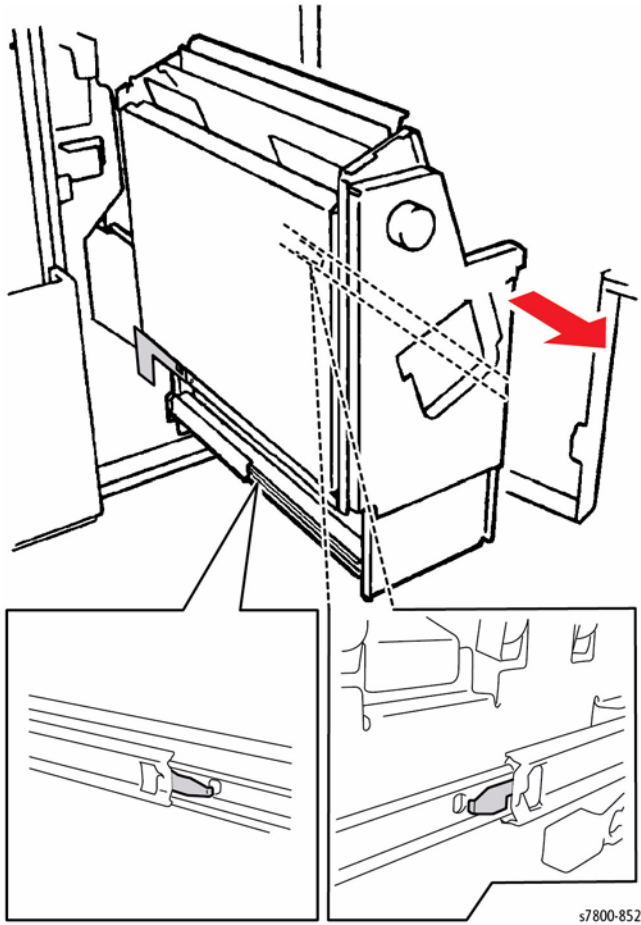


Figure 1 Removing Booklet Maker

Replacement

1. Perform the installation in the reverse order of the removal procedure, starting with attaching the left Rail then the right Rail.
2. Ensure to push back the release on the Rail Slide of the Rear Rail in order to push back into the printer.
3. Use about 2/3 reams of paper to support the bottom of the Booklet Maker and prop up to align the Rails.

REP 24.95 Booklet Stapler

Parts List on [PL 24.52 Item 20](#)

Removal

1. If the Booklet Maker Unit has been removed from the Finisher ([REP 24.94](#)), go to step 4.
2. Open the Front Door (Door G).
3. Pull out the Booklet Maker Unit.
4. Pull out the Booklet Stapler.
5. Remove the 2 screws on the left Rail.
6. Push in the Stopper on the right Rail.
7. Remove the Booklet Stapler.

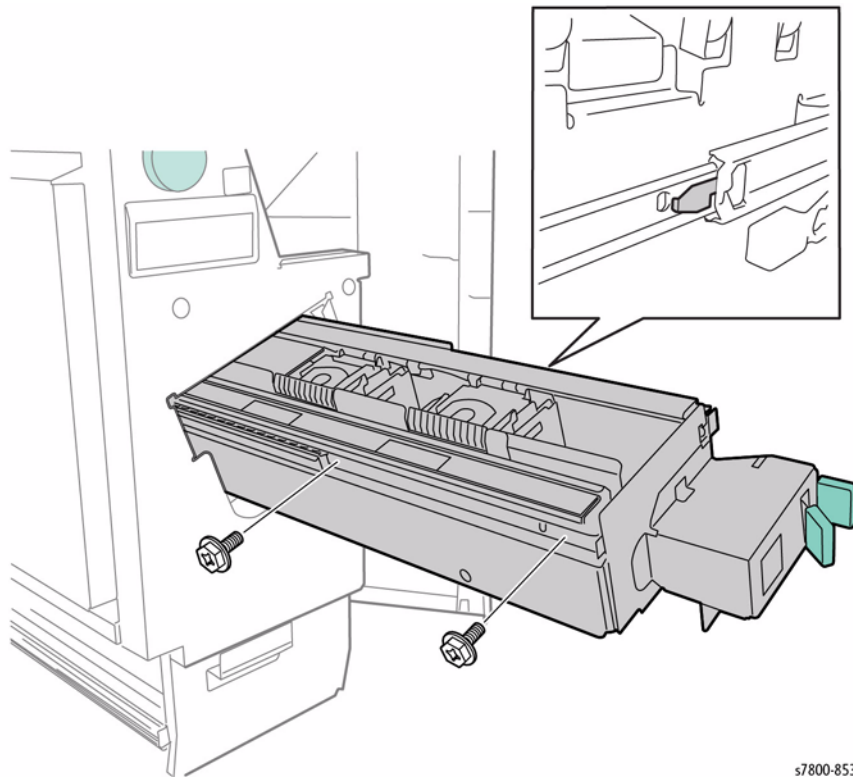


Figure 1 Removing the Booklet Stapler

REP 35.1 Image Processor Board

Parts List on [PL 35.1 Item 1](#)

Removal

1. Disconnect all connectors from the I/P Board.
2. Loosen 3 Thumb screws that secure the I/P Board.

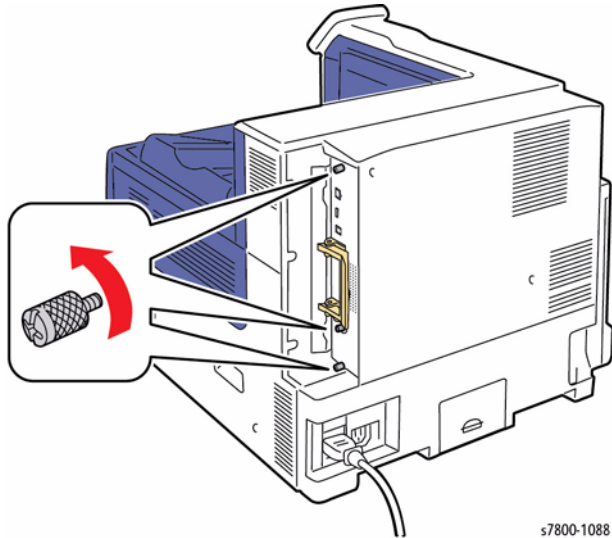


Figure 1 Loosening the screws

s7800-1088

3. Pull the I/P Board out from the printer to remove.

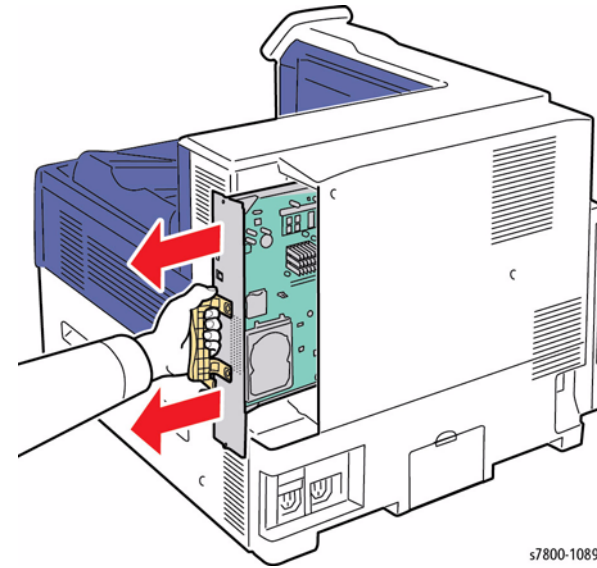


Figure 2 Removing the I/P Board

s7800-1089

REP 35.2 Hard Disk Drive

Parts List on [PL 35.2 Item 14](#)

Removal

1. Remove the I/P Board ([REP 35.1](#)).
2. Place the I/P Board on a flat surface and turn it over.
3. Remove 4 screws that secure the Hard Disk Drive.

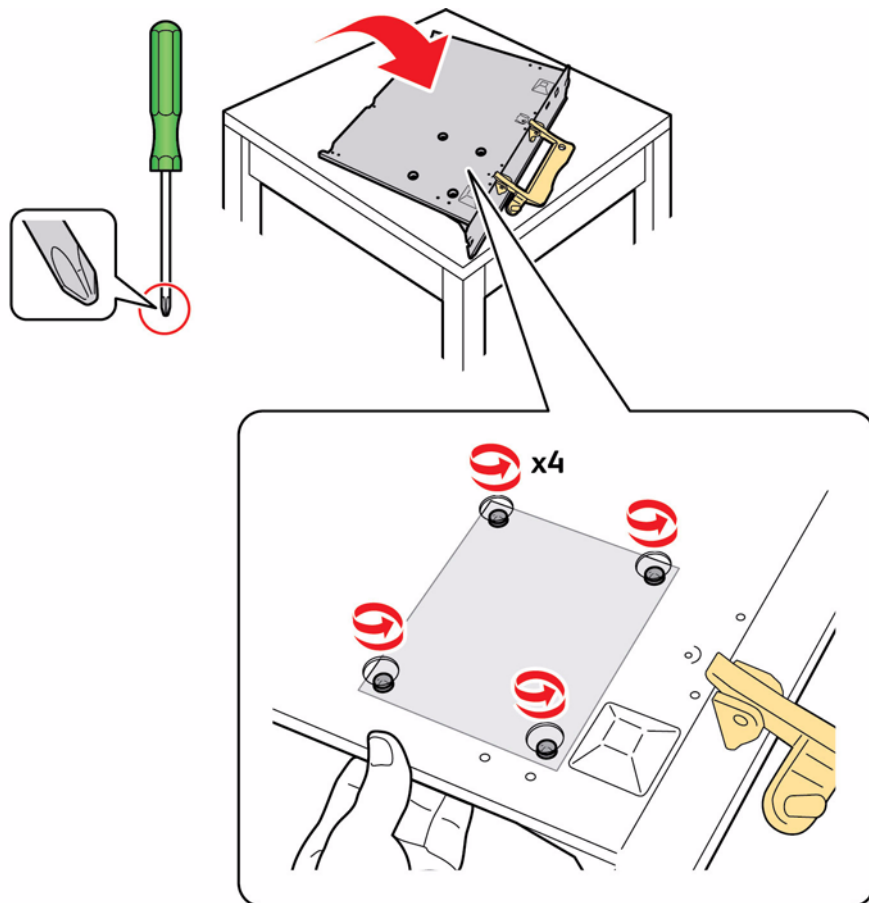


Figure 1 Removing the screws

s7800-1090

4. Turn the I/P Board over.
5. Disconnect the Hard Disk Drive from the connector to remove.

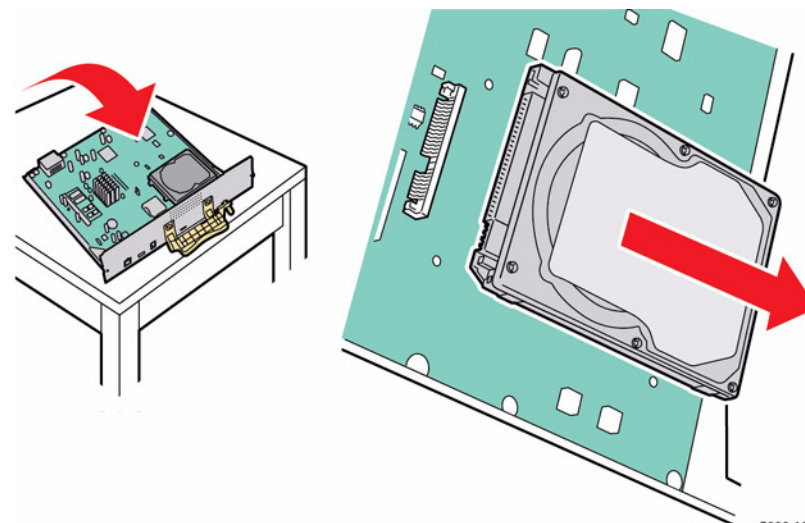


Figure 2 Removing the Hard Disk Drive

s7800-1091

REP 35.4 Secure Digital (SD) Card

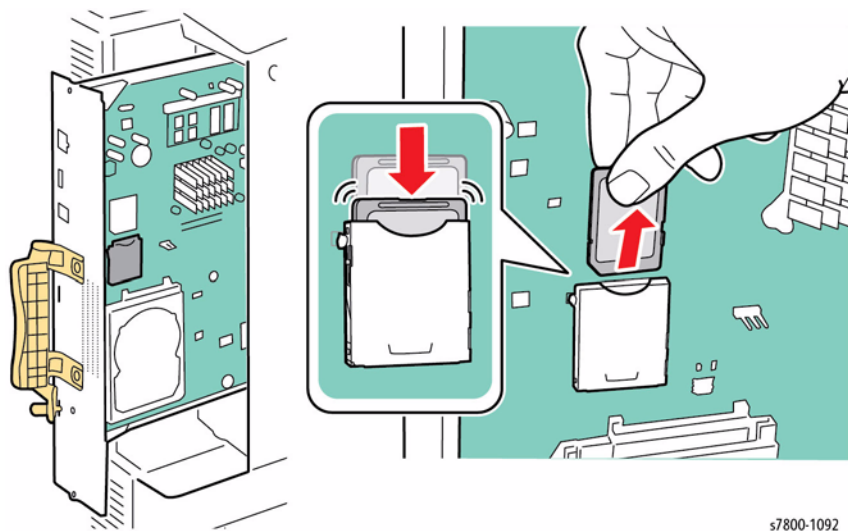
Parts List on [PL 35.2 Item 16](#)

Removal

1. Remove the I/P Board ([REP 35.1](#)).

NOTE: For SD Card removal, only need to pull the I/P Board out from the printer about 1/3 of the way to access the SD Card.

2. Press on the SD Card to release it from the card holder.
3. Pull the SD Card out from the I/P Board to remove.



s7800-1092

Figure 1 Removing the SD Card

ADJ 12.1 Professional Finisher Leveling

Purpose

The Finisher level should be checked if the machine has been moved to a new location or if the machine is having Booklet Quality issues or entrance jams.

Adjustment

1. Verify that the Finisher is properly latched and secured to the IOT.
2. Verify that the Finisher is Level and parallel with the IOT (Figure 1).
Verify that the distance between the Finisher and IOT is equal distance at the top and bottom.
3. Adjust the Finisher Level so that it is parallel with the IOT by turning the casters CW to tilt the Finisher against the IOT and CCW to tilt the Finisher away from the IOT.

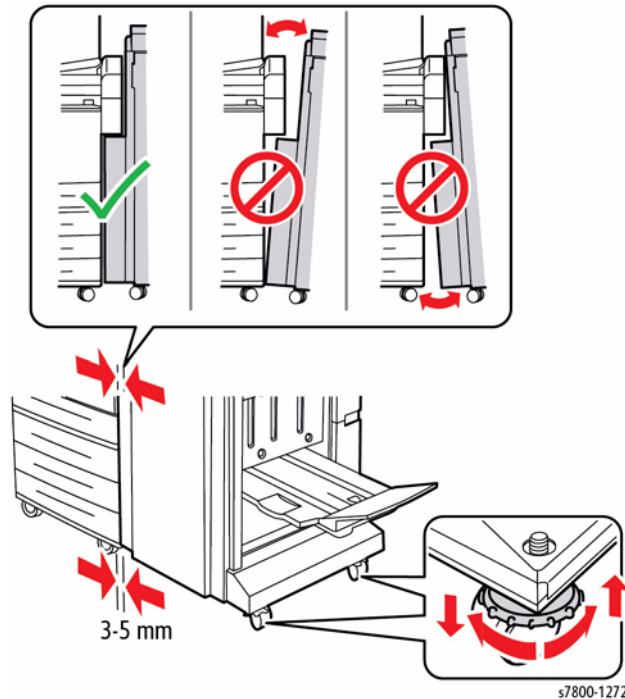


Figure 1 Verifying Finisher Level

4. When Finisher is parallel to the IOT, verify that the H-Transport does not interfere with the Finisher Entrance Gate.

ADJ 12.2 Professional Finisher Booklet Fold Skew

Purpose

To adjust the Booklet Maker so that the fold is square.

Check

1. Set machine up according to instructions in Table 1 and run a set of each Booklet job. Label each booklet.

Table 1 Booklet Jobs

Job	Select Paper Supply	Select Booklet Creation Mode	Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	3 sheet
2	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	3 sheet

2. Measure the skew (A) on all sheets of paper and verify against the Skew Specification table in Figure 1.

Skew Specification	
Paper Size	Max. Skew (A)
Smaller than 14 in./B4	0.0 ± 1.5 mm
14 in./B4 and larger	0.0 ± 2.0 mm

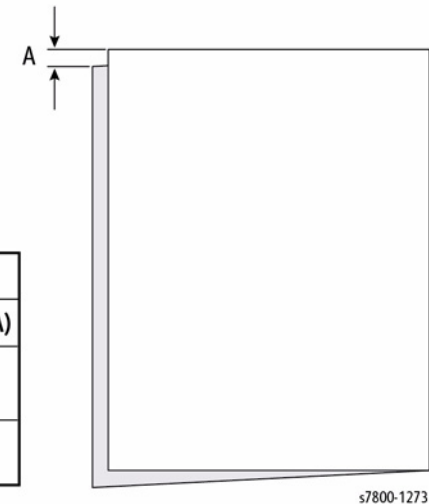


Figure 1 Skew Specification

3. If the fold is within specification on all sheets, go to ADJ 12.5 Booklet Fold Position. If any of the sheets are out of specification, go to the adjustment.

Adjustment

- Determine the type of Fold Skew:
 - Set machine up according to instructions in [Table 2](#).

Table 2 Booklet Jobs

Job	Select Paper Supply	Select Booklet Creation Mode	Booklet Size
1	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	3 sheet

- Observe the booklet as it comes out on to the Booklet Tray ([Figure 2](#)) and determine the type of skew.

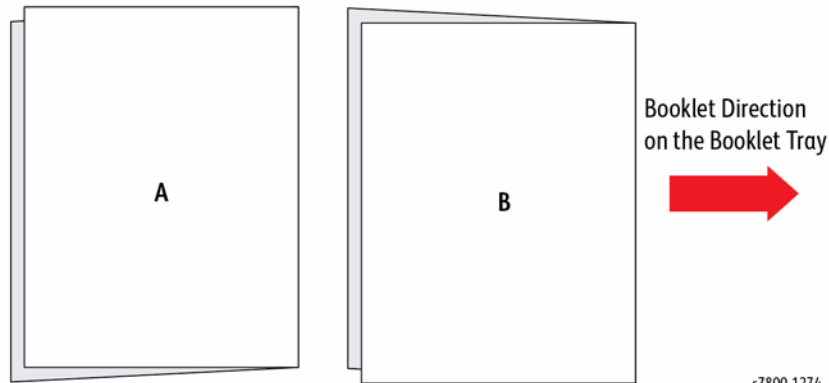


Figure 2 Type of skew

s7800-1274

- Adjust the Booklet skew ([Figure 3](#)).
 - Open the Front Door and slide out the Booklet Maker.
 - Loosen the screw.
 - For A-type skew, move the End Guide to the Left. For B-type skew, move the End Guide to the Right.

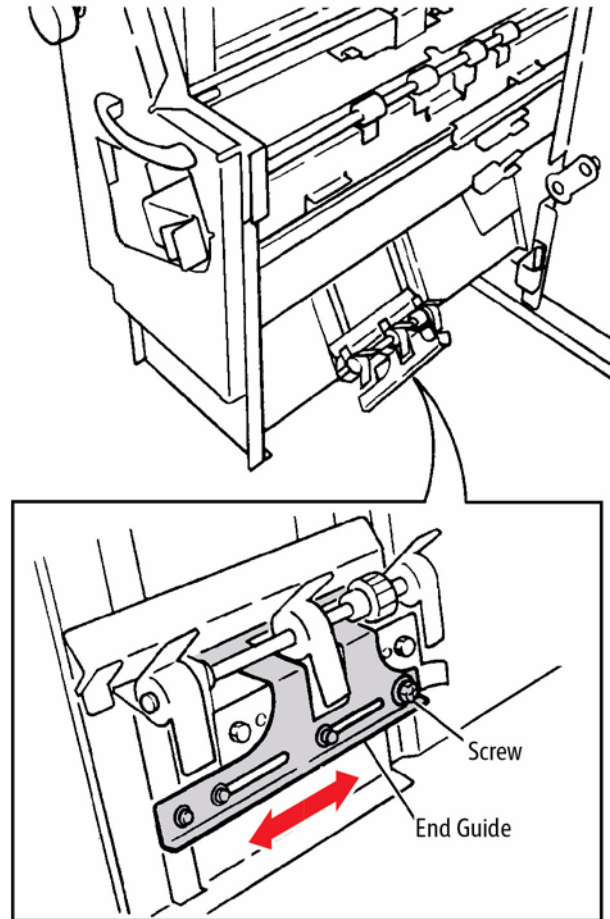


Figure 3 Adjusting the Fold Skew

s7800-1275

- Set machine up according to instructions in [Table 1](#) and re-run sample job.
- Repeat steps 1 - 3 until the Fold Skew setup meets specification or customer request.
- After adjustment is done, go to [ADJ 12.3 Booklet Fold Position](#).

ADJ 12.3 Professional Finisher Booklet Fold Position

Purpose

The purpose of this adjustment is to set up the Booklet Maker so that the fold is in the center of the booklet. Several setups are required so that fold position can be set for paper size, set size, unstapled and stapled sets.

Check

NOTE: This procedure cannot be performed from Paper Trays 3 or 4 as the folding activity requires Short Edge Feed (SEF).

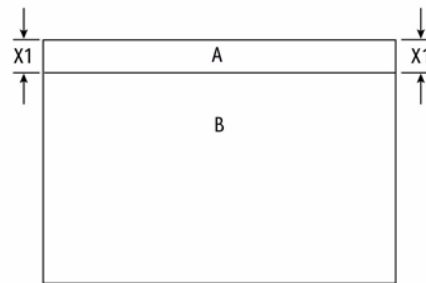
1. Ensure that the trays used are correctly programmed.
2. Ensure that the Fold Skew is within specification (ADJ 12.2).
3. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).

NOTE: There are 10 different fold position parameters available in UI diagnostics. All of them will need to be adjusted.

4. Under the **Adjustments** tab, select **dc128**.
5. On the dc128 screen, select the **Type** and **Position Adjustment** parameter for Job #1 in [Table 1](#). Select a paper tray containing SEF paper larger than B4 (11 x 17"/A3 preferred)
6. Touch the **Test Print** button to print a sample.
7. Measure and record "X1" and verify Fold Position on that job against the Fold Specification table in [Figure 1](#).

Fold Position Specification

Paper Size	X1
Smaller than 14 in./B4	0.0 ± 1.5 mm
14 in./B4 and Larger	0.0 ± 2.0 mm



Note: Example showing A-side longer than B-side

Note: To determine which side is "A" and which side is "B", open the booklet as it comes out on the Booklet Tray. The "A" -side is to the left and the "B"-side is to the right.

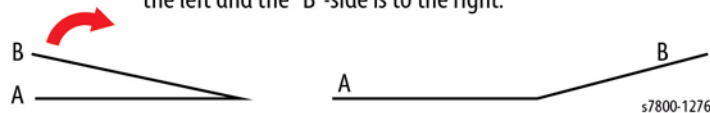


Figure 1 Fold Specification

8. If the particular fold is not within specification, perform the Adjustment.

9. Repeat steps 6 - 9 for all other jobs in [Table 1](#). Make sure that you select an appropriate paper tray for the booklet size being adjusted.
10. When the fold is within specification on all jobs, go to the Booklet Staple Position (Staple on Fold) ([ADJ 12.4](#)).

Table 1 Fold Position jobs

Job	Type	Position Adjustment	Pro. Fin. NVM
1	Bi-fold	Booklet Bi-fold position - B4 or larger	763-106
2	Booklet	Plain Booklet - 2 sheet fold position	763-133
3	Booklet	Plain Booklet - 3 or more sheet fold position.	763-134
4	Booklet	Stapled Booklet 2 sheet fold position B4 or larger	763-108
5	Booklet	Stapled Booklet 3 sheet fold position B4 or larger	763-152
6	Booklet	Stapled Booklet 4 sheet fold position B4 or larger	763-153
7	Booklet	Stapled Booklet 5/7 sheet fold position B4 or larger	763-154
8	Booklet	Stapled Booklet 8/14 sheet fold position B4 or larger	763-155
9	Booklet	Stapled Booklet 15 sheet fold position B4 or larger	763-145
10	Booklet	Booklet Tamper Shift Position	763-115

Adjustment

1. For each Test Print that was out of spec:
 - a. To make the 'B' side ([Figure 1](#)) longer, increase the value. To make the 'B' side shorter, decrease the value. Each count is equal to about 0.2 mm (5 counts will move the fold position 1mm).
 - b. Use the up and down arrows or the keypad to enter the correction and select **Write NVM**, then make another **Test Print**.
2. Check output against specifications in [Figure 1](#). Repeat the **Check** and **Adjustment** until the Fold Position meets specification or customer request.

ADJ 12.4 Professional Finisher Booklet Staple Position (Staple on Fold)

Purpose

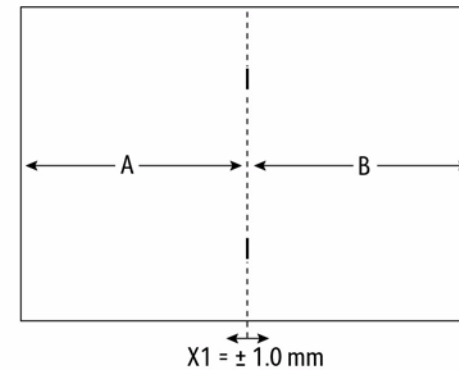
The purpose of this Adjustment is to set up the machine so that the Staples are within specification on the folded booklet.

Check

1. Ensure that the trays used are correctly programmed.
2. Ensure that the Fold Skew is within specification (ADJ 12.2).
3. Ensure that the Fold Position is within specification (ADJ 12.3).
4. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).

NOTE: There are 6 different Staple-on Fold parameters available in UI diagnostics. All of them will need to be adjusted.

5. If the NVM sheet for the Finisher is available (Tray 1 compartment), select [dc131 NVM Read/Write](#) from the **Adjustments** Tab, and enter the recorded values for the NVM locations listed in [Table 1](#).
6. Under the **Adjustments** Tab, select dC128.
7. On the dc128 screen, select the **Type** and **Position Adjustment** parameter for Job #1 in [Table 1](#). Select a paper tray containing paper larger than B4 (11 x 17"/A3 preferred)
8. Touch the **Test Print** button to print a sample.
9. Measure and record X1 and compare the staple position against the specification in [Figure 1](#). Ensure that all staples are within +/- 1.0 mm of the fold (X1 dimension).
10. If X1 is out of specification, perform the Adjustment procedure.
11. Repeat steps 7 - 10 for all other jobs in [Table 1](#). Make sure that you select an appropriate paper tray for the booklet size being adjusted.
12. When the staple position is within specification on all jobs, go to (ADJ 12.5) Booklet Staple Alignment.



Note: To determine which side is "A" and which side is "B", open the booklet as it comes out on the Booklet Tray. The "A" -side is to the left and the "B"-side is to the right.

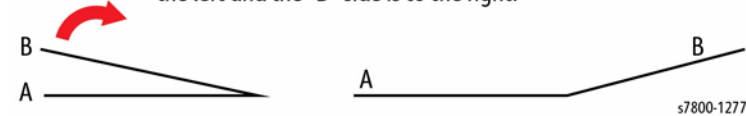


Figure 1 Staple Position

Table 1 Staple Position Jobs

Job	Type	Position Adjustment	Pro Fin. NVM
1	Booklet	Stapled Booklet 2 sheet staple and fold position B4 or larger	763-110
2	Booklet	Stapled Booklet 2 sheet staple and fold position smaller than B4	763-111
3	Booklet	Stapled Booklet 3 sheet staple and fold position	763-147
4	Booklet	Stapled Booklet 4 sheet staple and fold position	763-148
5	Booklet	Stapled Booklet 5/7 sheet staple and fold position	763-149
6	Booklet	Stapled Booklet 8/14 sheet staple and fold position	763-150

Adjustment

1. For each Test Print that was out of spec:
 - a. To move the staples to the right (toward the B side) ([Figure 1](#)), increase the value; to move the staples to the left, decrease the value. Each count is equal to about 1 mm (10 counts to move the staple position 1mm).
 - b. Use the up and down arrows or the keypad to enter the correction and select **Write NVM**, then make another **Test Print**.
2. Check output against specifications in [Figure 1](#). Repeat the **Check** and **Adjustment** until the Fold Position meets specification or customer request.

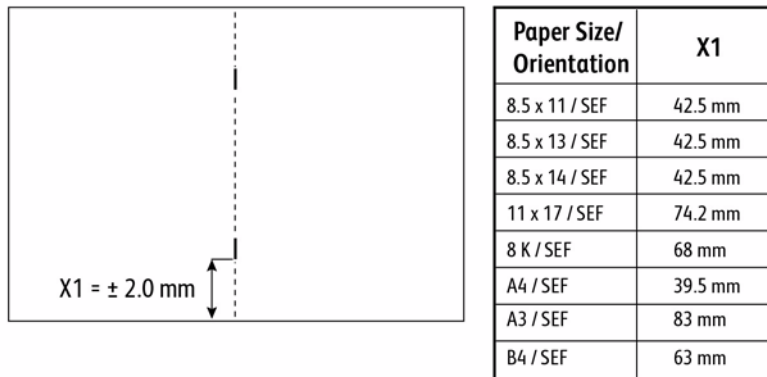
ADJ 12.5 Professional Finisher Booklet Staple Alignment

Purpose

To center the Staple Position on the fold in the SE direction.

Check

1. Ensure that the trays used are correctly programmed.
2. Ensure that the Fold Skew is within specification (ADJ 12.2).
3. Ensure that the Fold Position is within specification (ADJ 12.3).
4. Ensure that the Staple Position is within specification (ADJ 12.4).
5. Access the Service Diagnostics Menu - **Entering Service Diagnostics**. Select **Adjustments > dC 128 Fold Position Adjustment**.
6. From the drop-down menu, select **Booklet Tamper Shift Adjustment**.
7. Select the paper tray to be tested.
8. On a scrap piece of paper, record the **Stored NVM Value**.
9. Select **Test Print**.
10. When the test print is completed, remove it from the Output Tray. Open the booklet up and perform the following:
 - Record the number of the test print (test print 1, test print 2, etc.).
 - Label the outboard edge of the print (for X1 measurement).
11. Measure X1 and verify against specification in Figure 1.



s7800-1278

Figure 1 Staple Specification

12. If X1 is within specification, the Adjustment is complete. If X1 is out of specification, perform the Adjustment procedure.

Adjustment

NOTE: X1 will be adjusted in *dc128 Fold/Staple Position Read/Adjust* using the **Adjust** tab on the UI.

- To increase X1, the current NVM value should be decreased.
- To decrease X1, the current NVM value should be increased.
- 1 NVM count will move the staple position 0.26mm. (10 counts will move the staple position about 2.6mm).

1. Estimate the correction needed on the paper size(s) that did not meet specification.
2. Using the **Adjust** tab on the UI, adjust the NVM value up or down as required.

NOTE: The **Write NVM** tab must be selected in order for the NVM change to be visible on the test print.

3. Select the **Write NVM** tab.
4. Select the **Test Print** tab to run the job.
5. Measure X1 and compare against the specifications in Table 1.
6. Repeat the Adjustment until the Staple Alignment meets specification or customer request.

Table 1 Booklet Jobs

Job	Select Paper Supply	Select Booklet Creation Mode	Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	3 sheet
2	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	3 sheet

ADJ 12.6 Professional Finisher Booklet Wrinkle

Purpose

To prevent the Booklet Cover from getting wrinkled.

Check

- Press the **Job Status** button to check that there are no jobs in progress.
- Switch off the power and disconnect the power cord.
- Verify that the customer is not running jobs that are out of specification.
- Check Fold Rollers for wear or contamination.

Adjustment

1. Remove the Booklet Maker ([REP 24.94](#)).
2. Remove KL-Clip.

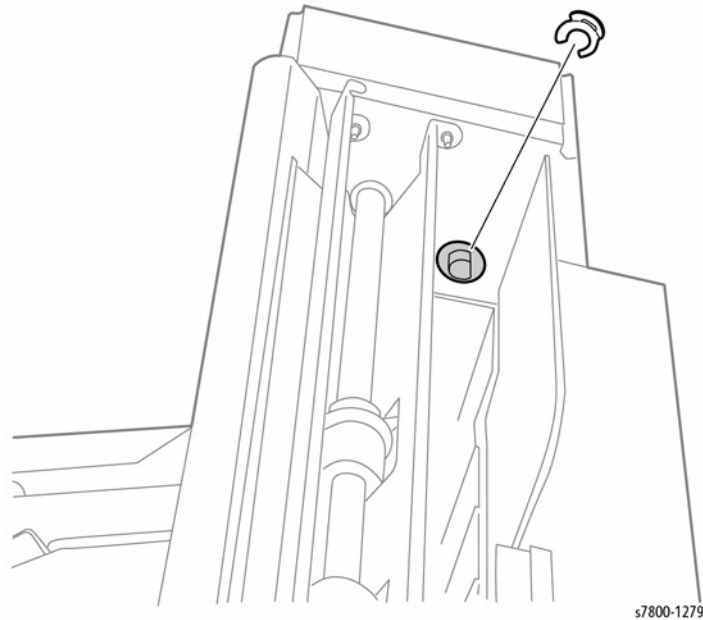


Figure 1 Removing the KL-Clip

3. Remove 4 screws that secure the Booklet Maker Front Cover.
4. Remove the Booklet Maker Front Cover.

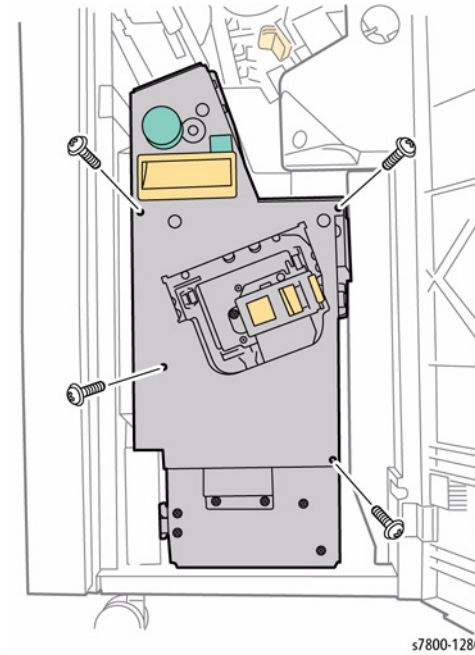


Figure 2 Removing the Booklet Maker Front Cover

5. Move the Spring to the lower hole to adjust the front Spring tension.

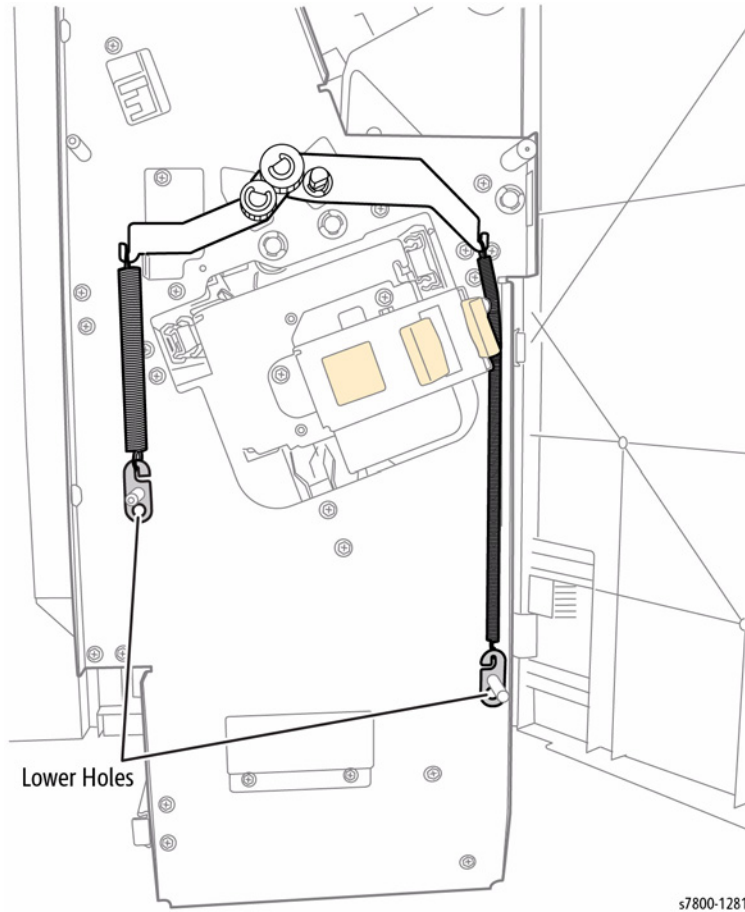


Figure 3 Adjust the front Spring tension

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6. Move the Spring to the lower hole to adjust the rear Spring tension.

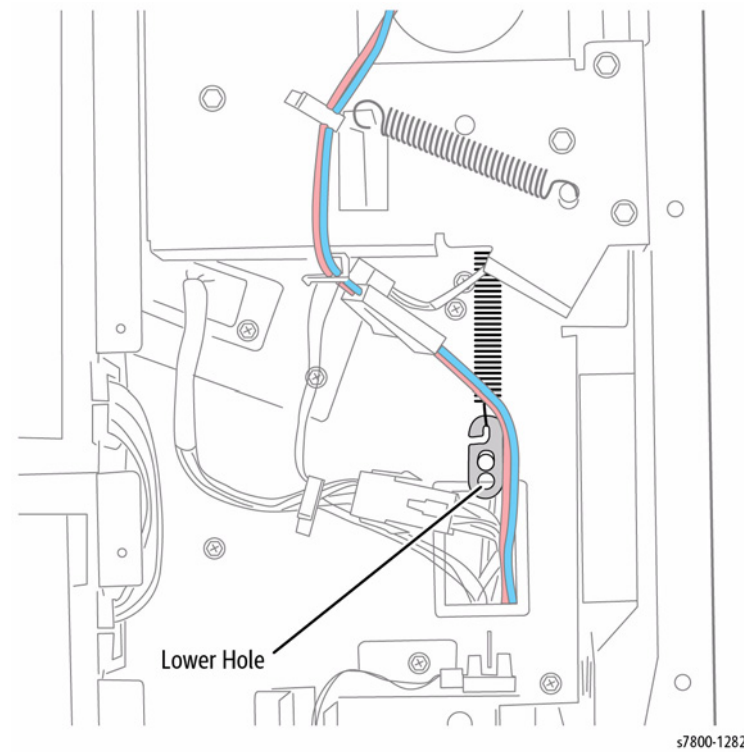


Figure 4 Adjusting the rear Spring tension

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ADJ 12.7 Advanced Finisher Hole Punch Position

Purpose

This procedure sets the distance from the trail edge of the punched sheet to the center of the punched holes.

NOTE: This adjustment is normally performed by the customer, via Tools mode.

Adjustment

1. Enter the Tool mode (from the Control Panel menu, touch **Printer > Tools > Setup > Output Settings > Hole Punch Position**).
2. Select the paper size to be printed, and touch **Edit** under the appropriate paper size choice:
 - Paper sizes larger than B4 (9.84 x 13.9")
 - Paper sizes smaller than B4 (9.84 x 13.9")
3. The printer prints the selected page.
4. Make appropriate adjustment using the arrow buttons on the UI.
5. Repeat the Check and Adjustment until the measurement is correct.
6. When the adjustment is complete, touch **OK** to return to the Output Settings menu.

ADJ 12.8 Advanced Finisher Booklet Crease/Staple Position

Purpose

This procedure centers the crease and staple positions in the booklet.

NOTE: This adjustment is normally performed by the customer, via Tools mode.

Adjustment

1. Enter the Tool mode (from the Control Panel menu, touch **Printer > Tools > Setup > Output Settings > Crease and Staple Position**).
2. Select the paper size to be printed, and touch **Edit** under the appropriate paper size choice:
 - Paper sizes larger than B4 (9.84 x 13.9")
 - Paper sizes smaller than B4 (9.84 x 13.9")
3. Select **Yes/ No** for front and back covers with the same width.
4. Touch **Next**.
5. The printer prints the selected page.
6. Make appropriate adjustment using the arrow buttons on the UI.
7. After the fold position has been adjusted, adjust the staple position to the fold.
8. Repeat the Check and Adjustment until the measurement is correct.
9. When the adjustment is complete, touch **Done** to return to the Output Settings menu.

ADJ 12.9 Skew Adjustment

Purpose

The purpose of this adjustment is to minimize skew.

Adjustment

1. Remove the Registration Transport Assembly (REP 15.1).
2. Remove the 2 screws that secure the Skew Adjustment Block (PL 15.2 Item 14).
3. Rotate the skew adjusting block approximately 30° clockwise and reinstall so that the pins on the Regi Chute are centered in the elongated slots of the Skew Adjusting Block.

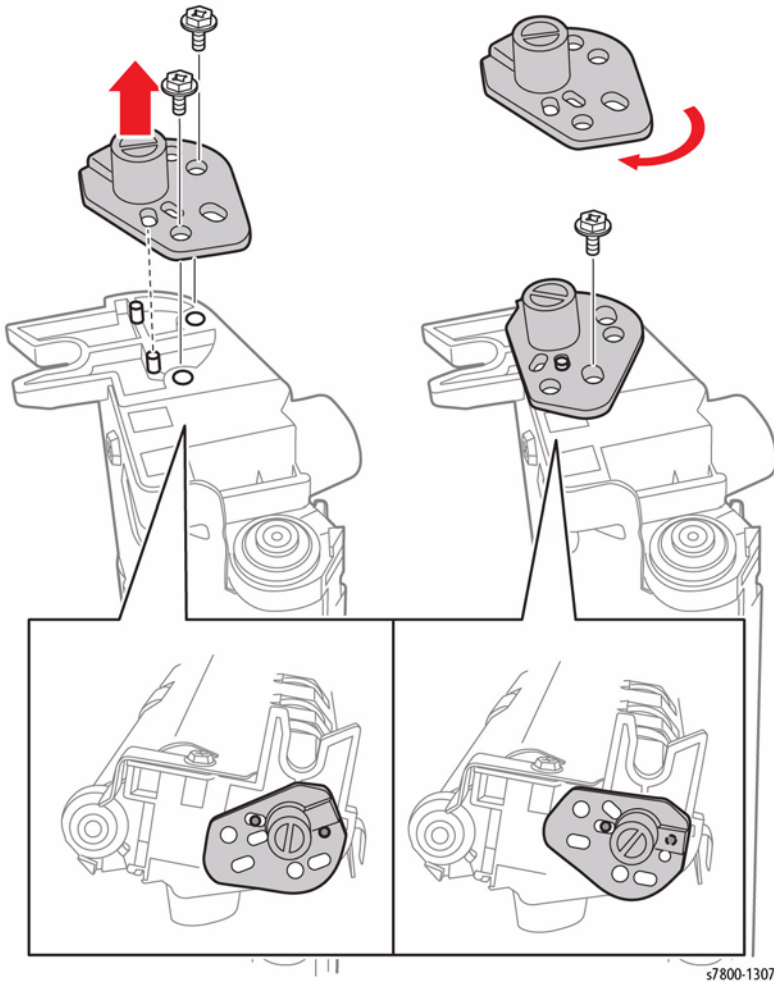


Figure 1 Removing the screws and rotating the Block

4. Leave the upper screw slightly loose so that the block can still move and tighten the bottom screw.
5. Reinstall the Registration Assembly in the printer.
6. Make a test print and observe the skew.
7. Loosen the lower screw and move the Registration Assembly slightly up or down. Tighten the screw and observe the effects on the test print.

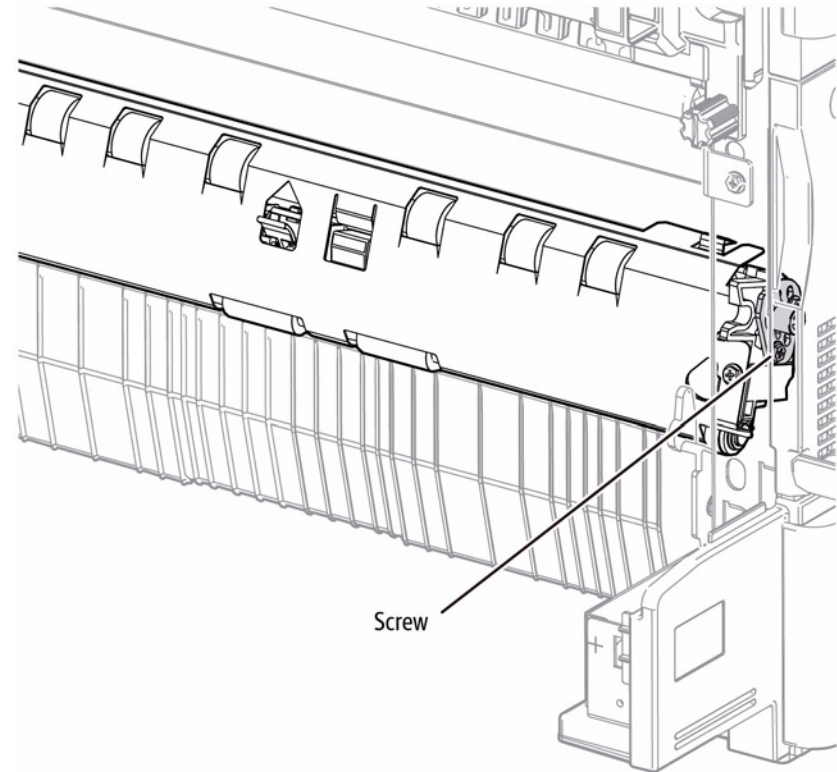


Figure 2 Adjusting Skew

8. Refine the adjustment up or down to minimize skew.
9. Remove the Registration Assembly and tighten the top screw.
10. Reinstall the Registration Assembly.

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Parts List Introduction

Overview

The Parts List section identifies all part numbers and the corresponding location of all spared subsystem components.

Organization

Parts Lists

Each item number in the part number listing corresponds to an item number in the related illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations.

Electrical Connectors and Fasteners

This section contains the illustrations and descriptions of the plugs, jacks, and fasteners used in the machine. A part number listing of the connectors is included.

Common Hardware

The common hardware is listed in alphabetical order by the letter or letters used to identify each item in the part number listing and in the illustrations. Dimensions are in millimeters unless otherwise identified.

Symbology

Symbology used in the Parts List section is identified in the Symbology section.

Service Procedure Referencing

If a part or assembly has an associated repair or adjustment procedure, the procedure number will be listed at the end of the part description in the parts lists e.g. (REP 5.1, ADJ 5.3)

Subsystem Information

Use of the Term “Assembly”

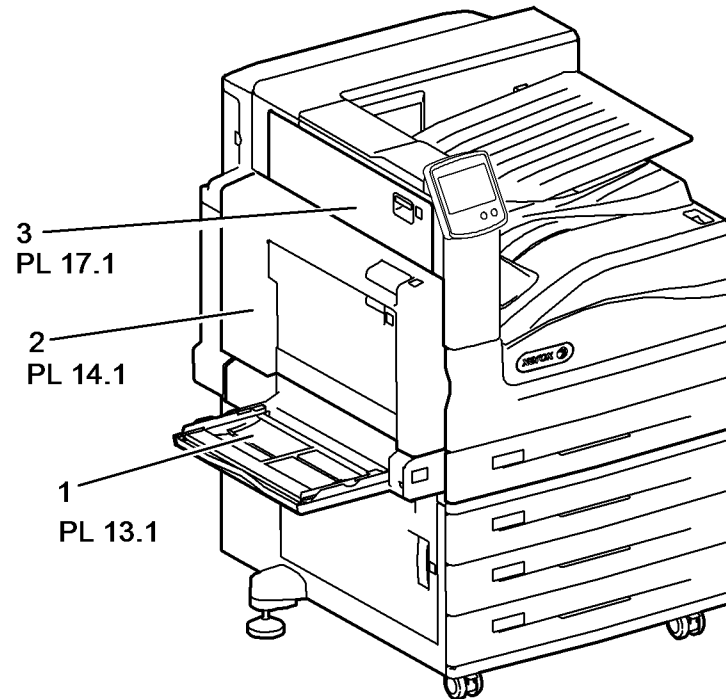
The term “assembly” will be used for items in the part number listing that include other itemized parts in the part number listing. When the word “assembly” is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

Brackets

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

PL 1.0 System

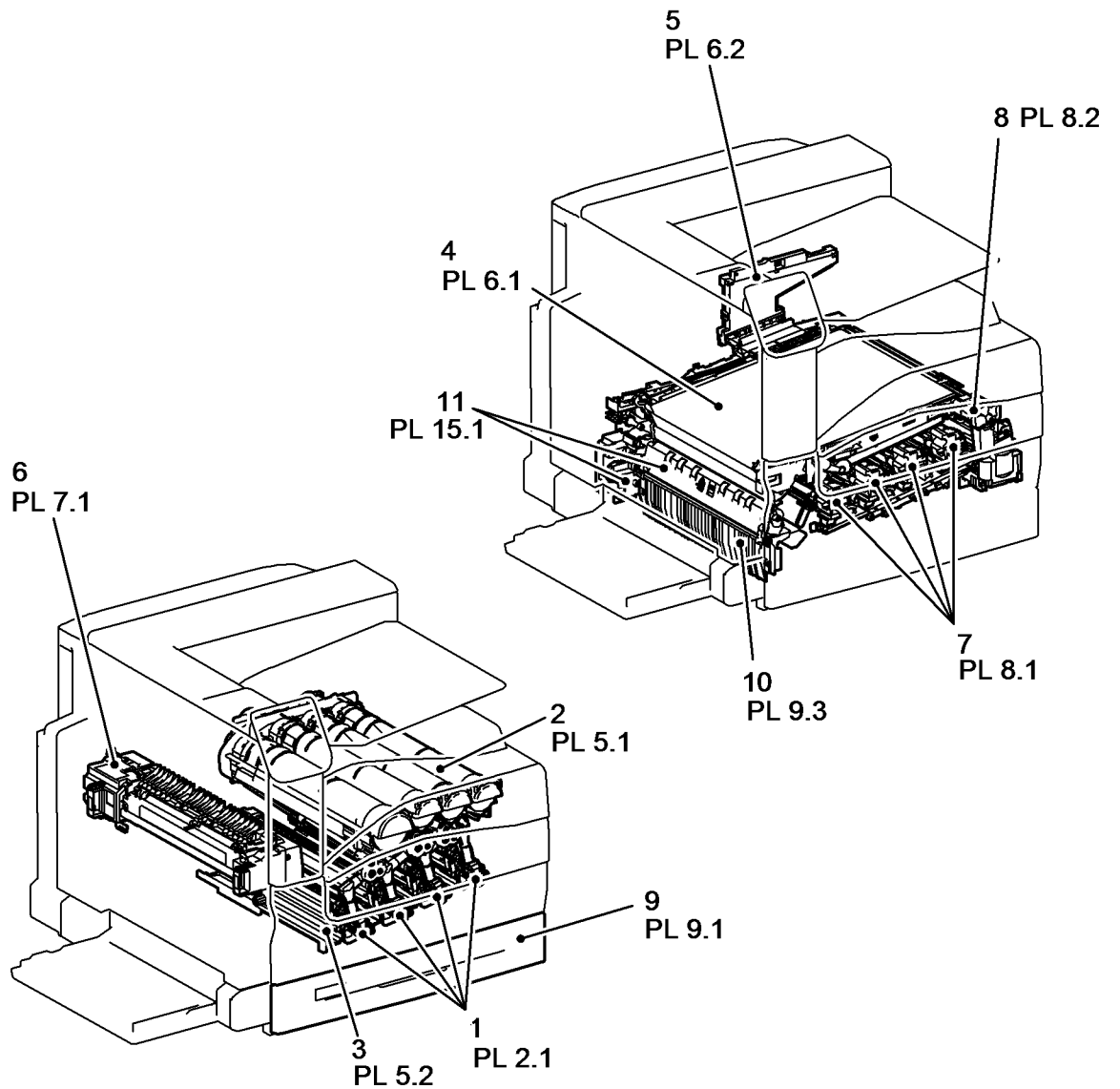
Item	Part	Description
1	-	Tray 1 (MPT) (REF: PL 13.1)
2	-	Left Hand Cover (REF: PL 14.1)
3	-	Exit 1/OCT, Exit 2 (REF: PL 17.1)



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PL 1.1 Processor (1 of 2)

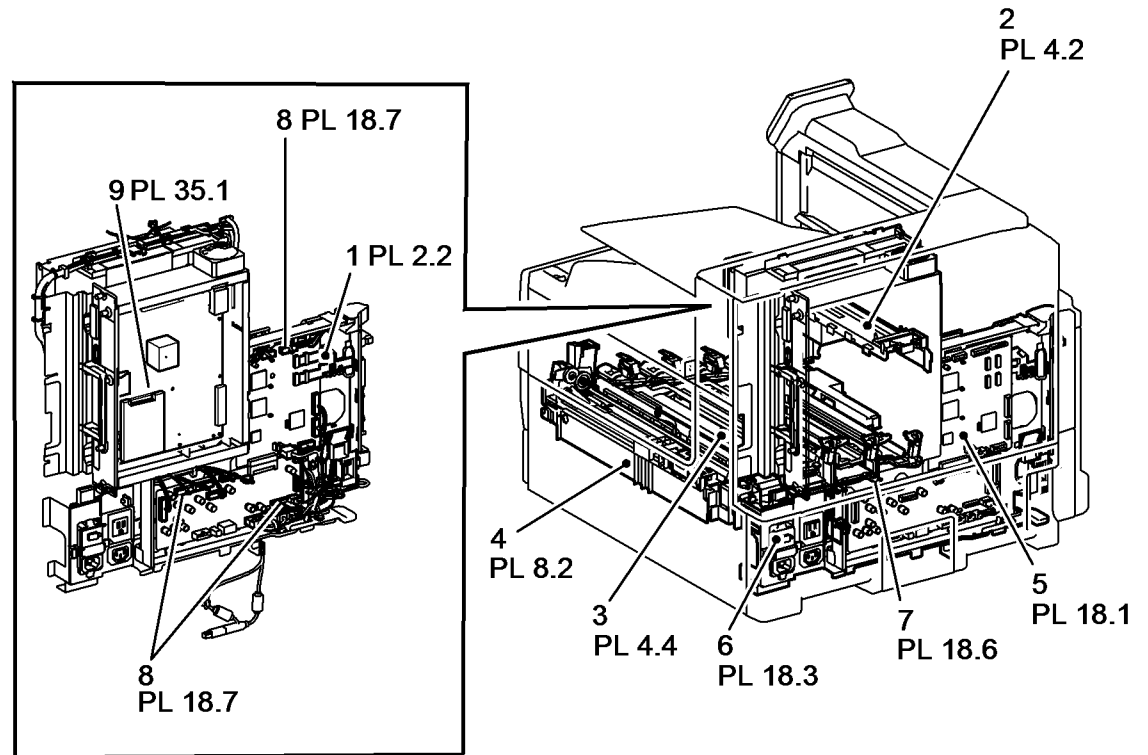
Item	Part	Description
1	-	LED Print Head (1 of 2) (REF: PL 2.1)
2	-	Development (1 of 2) (REF: PL 5.1)
3	-	Development (2 of 2) (REF: PL 5.2)
4	-	Transfer (1 of 2) (REF: PL 6.1)
5	-	Transfer (2 of 2) (REF: PL 6.2)
6	-	Fuser (REF: PL 7.1)
7	-	Xerographic (1 of 2) (REF: PL 8.1)
8	-	Xerographic (2 of 2) (REF: PL 8.2)
9	-	Tray 2 Feeder/Tray 2 (REF: PL 9.1)
10	-	Tray 2 Feeder (REF: PL 9.3)
11	-	Registration (1 of 2) (REF: PL 15.1)



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PL 1.2 Processor (2 of 2)

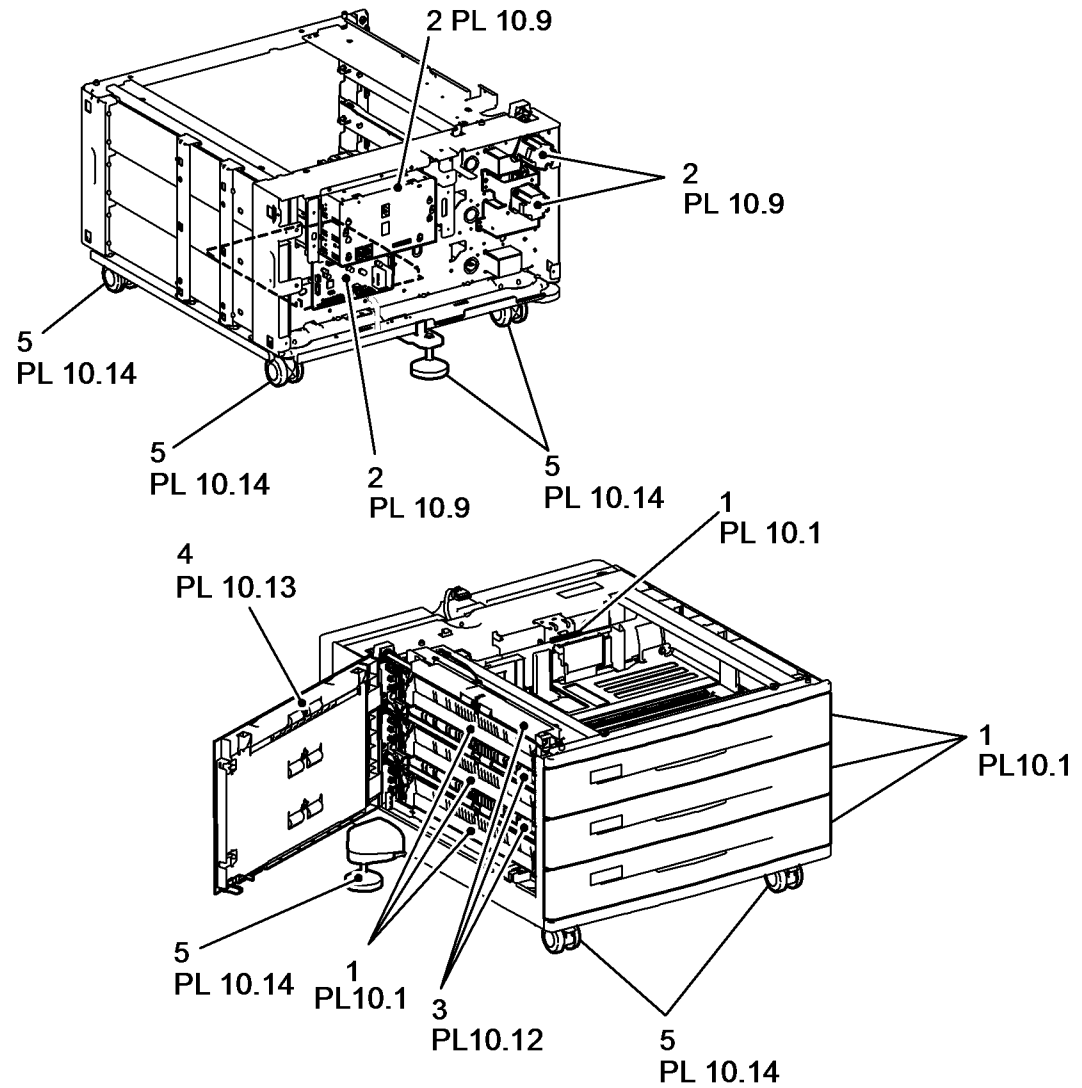
Item	Part	Description
1	—	LED Print Head (2 of 2) (REF: PL 2.2)
2	—	NOHAD (1 of 3) (REF: PL 4.2)
3	—	NOHAD (3 of 3) (REF: PL 4.4)
4	—	Xerographic (2 of 2) (REF: PL 8.2)
5	—	PWB Chassis Unit (REF: PL 18.1)
6	—	Electrical IOT Rear (REF: PL 18.3)
7	—	Electrical Bottom (REF: PL 18.6)
8	—	Wire Harness (REF: PL 18.7)
9	—	ESS (1 of 2) (REF: PL 35.1)



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PL 1.3 3TM Overview

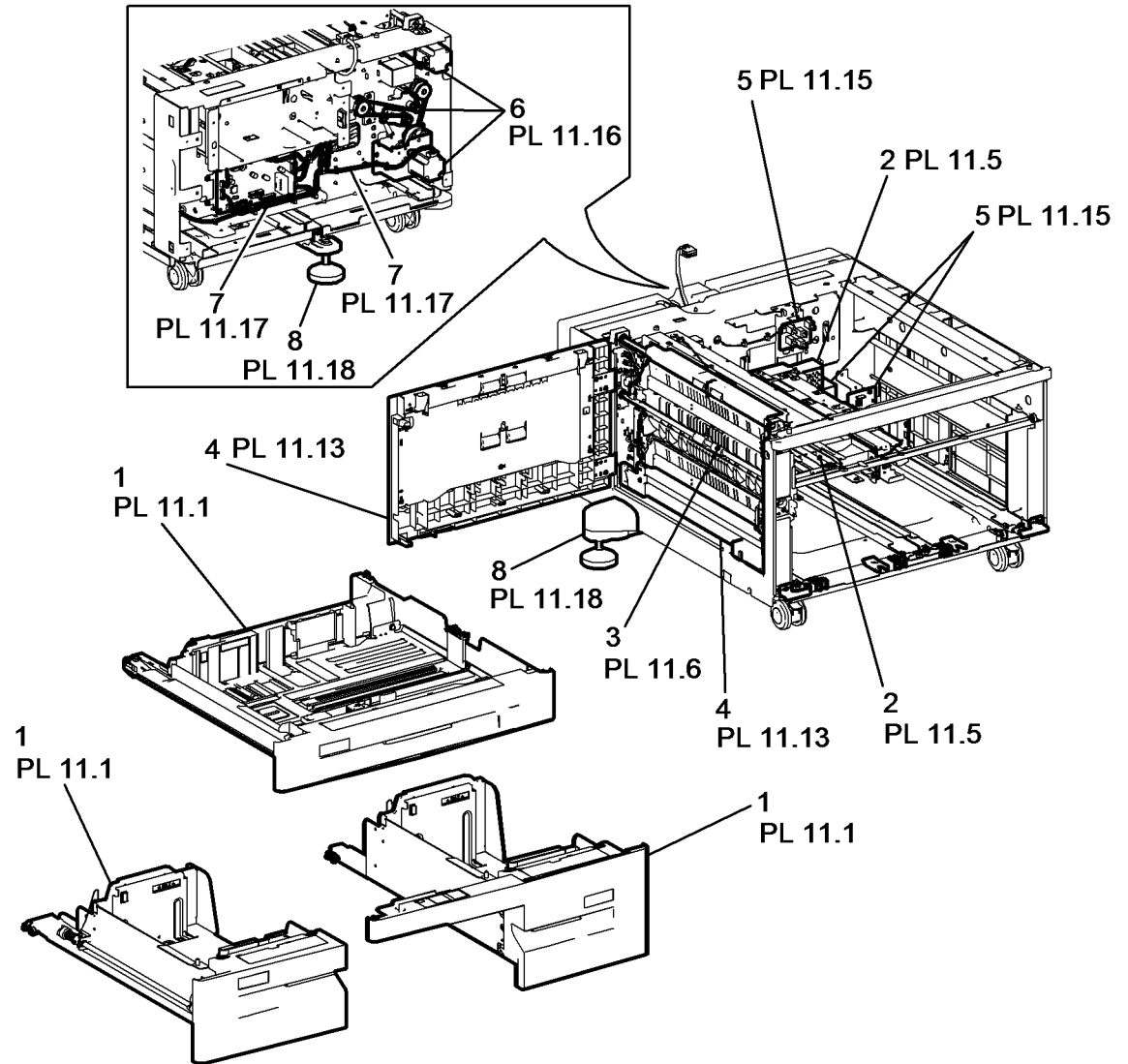
Item	Part	Description
1	-	Tray Module (3T) (REF: PL 10.1)
2	-	Electrical (REF: PL 10.9)
3	-	Roller (REF: PL 10.12)
4	-	Left Hand Cover Assembly (REF: PL 10.13)
5	-	Cover (REF: PL 10.14)



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PL 1.4 TTM Overview

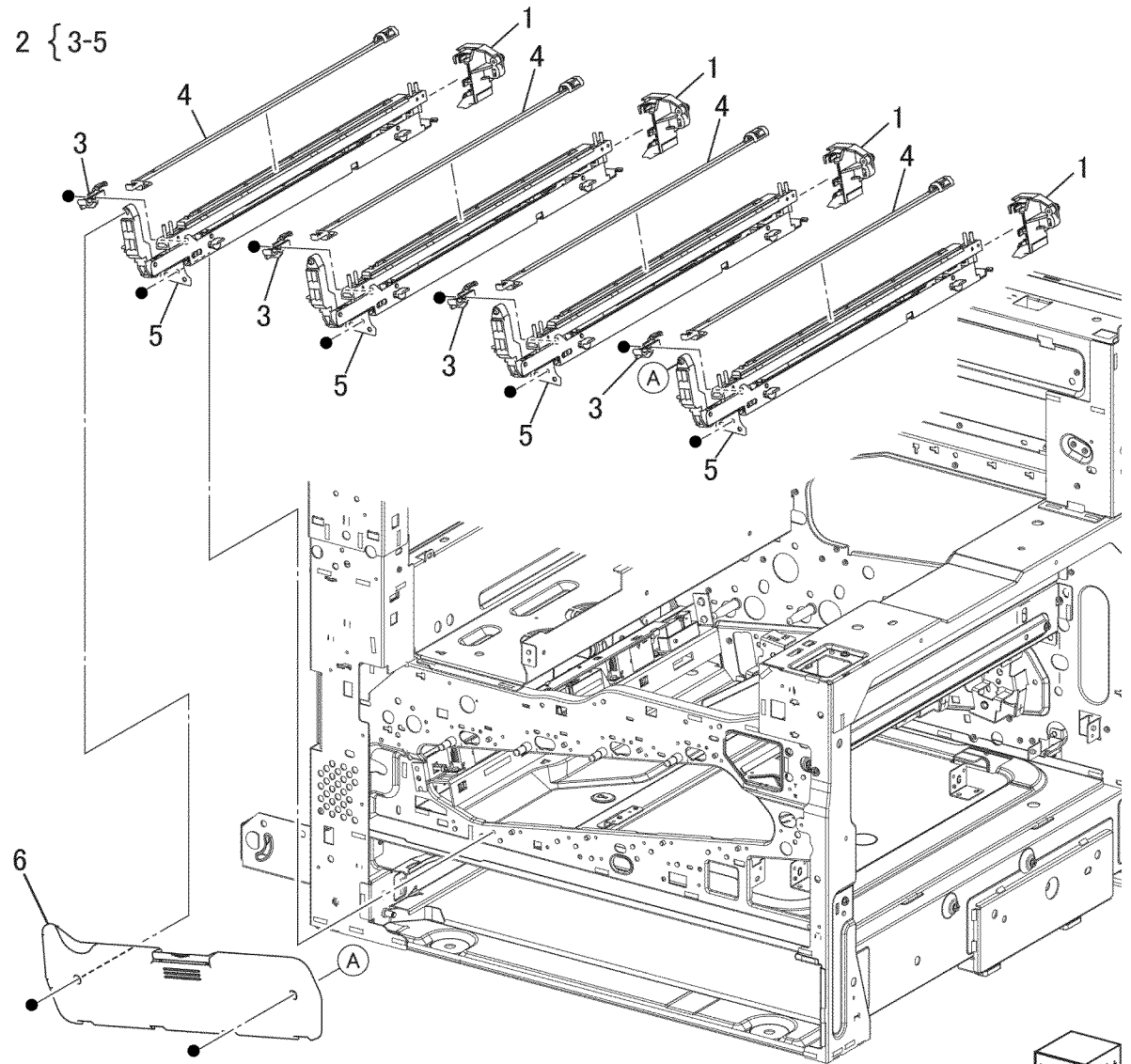
Item	Part	Description
1	-	Tray 3/4/5 Assembly - TT (REF: PL 11.1)
2	-	Tray 5 Paper Feed - TT (REF: PL 11.5)
3	-	Tray 3/4 Paper Feed - TT (REF: PL 11.6)
4	-	Left Cover Assembly - TT (REF: PL 11.13)
5	-	Tray 3/4/5 Paper Size Sensor, Tray 4/5 Lift Gear - TT (REF: PL 11.15)
6	-	Drive - TT (REF: PL 11.16)
7	-	Electrical - TT (REF: PL 11.17)
8	-	Cover, Castor - TT (REF: PL 11.18)



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PL 2.1 LED Print Head (1 of 2)

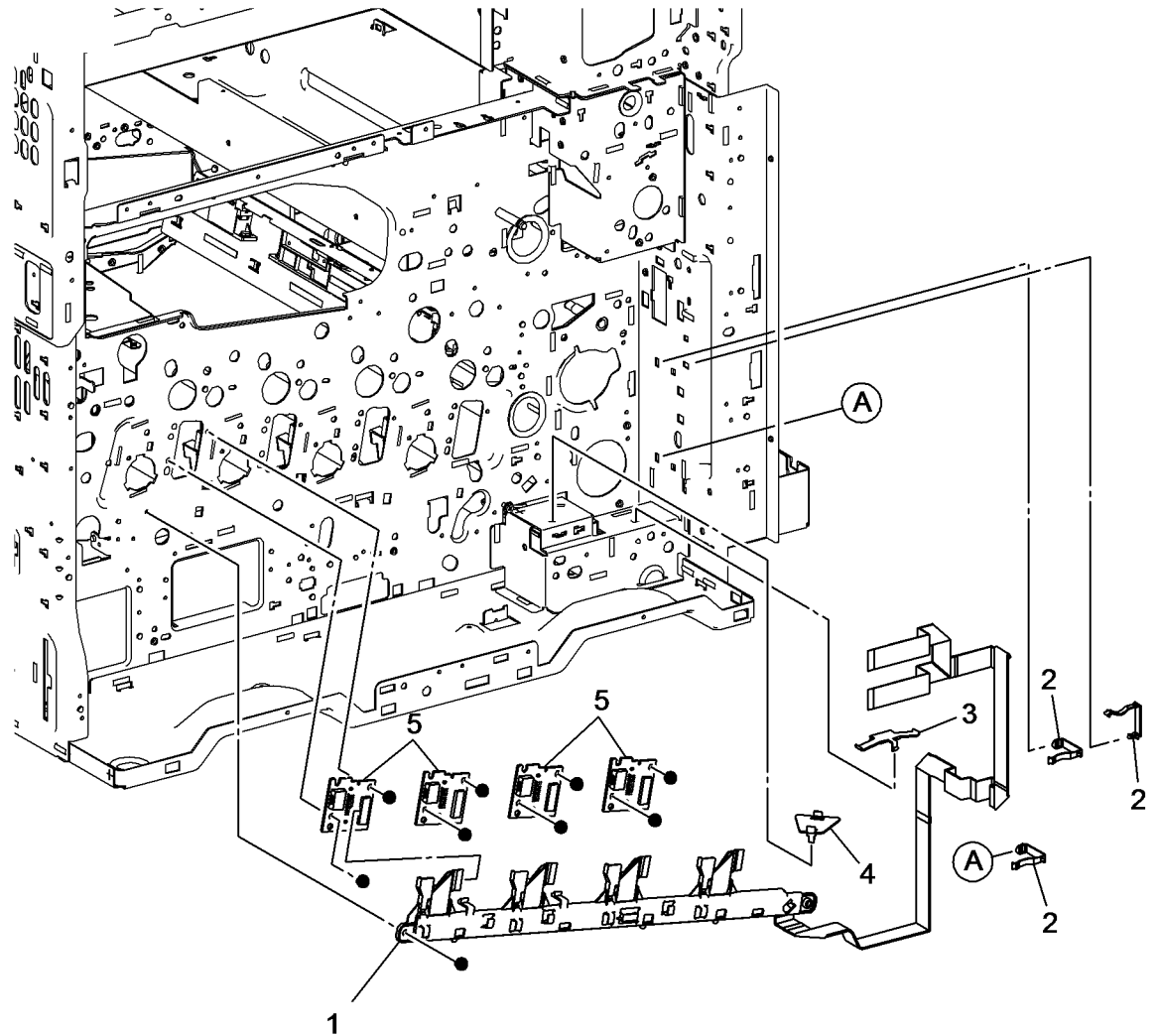
Item	Part	Description
1	019K09281	Rear Holder Assembly (REP 2.1)
2	130K78680	LED Print Head (REP 2.2)
3	—	Guide (P/O PL 2.1 Item 2)
4	—	LED Print Head Cleaner (Not Spared) (REP 2.3)
5	—	LED Print Head Assembly (P/O PL 2.1 Item 2)
6	011K98621	Imaging Unit Cover (REP 2.4)



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PL 2.2 LED Print Head (2 of 2)

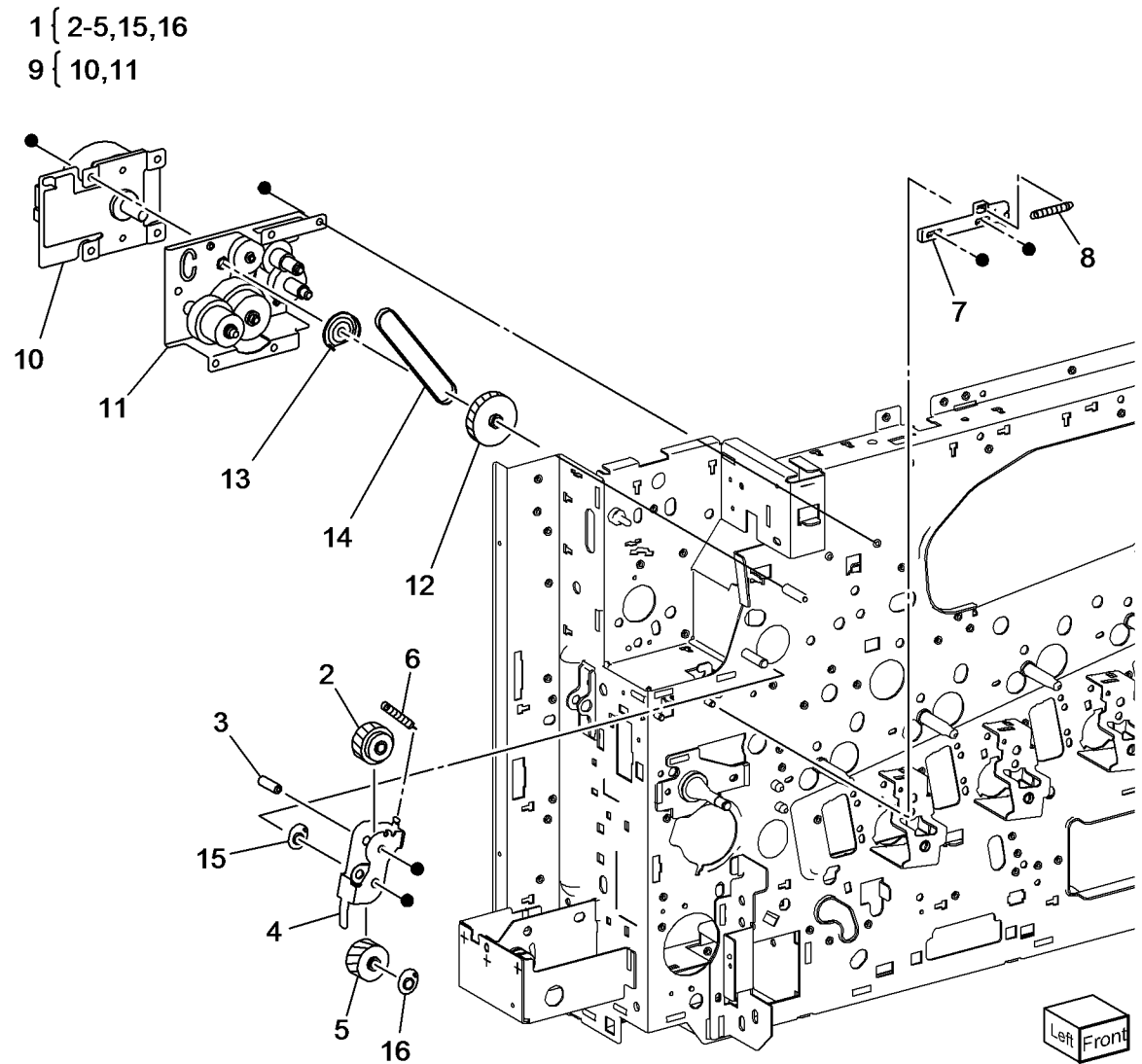
Item	Part	Description
1	962K77431	LED Print Head Cable Assembly (REP 2.5)
2	—	Cable Holder (Not Spared)
3	—	Cable Holder (Not Spared)
4	—	Cable Holder (Not Spared)
5	960K36952	LED Print Head Rear PWB (REP 2.6)



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PL 3.1 Drive (1 of 3)

Item	Part	Description
1	068K69160	Fuser Input Bracket Assembly (REP 3.1)
2	-	Helical Gear (26T) (with bearing) (P/O PL 3.1 Item 1)
3	-	Fuser Shaft (P/O PL 3.1 Item 1)
4	-	Fuser Input Bracket (P/O PL 3.1 Item 1)
5	-	Helical Gear (25T) (with bearing) (P/O PL 3.1 Item 1)
6	809E74960	Spring
7	012E15930	Fuser Link (REP 3.2)
8	809E74950	Spring (REP 3.2)
9	007K16861	Fuser Drive Motor Assembly (REP 3.3)
10	-	Fuser Drive Motor (MOT10-001) (P/O PL 3.1 Item 9)
11	-	Gear Bracket Assembly (P/O PL 3.1 Item 9)
12	807E27930	Helical Gear (40T/23T)
13	005E24620	Flange
14	423W10355	Belt
15	-	Bearing (P/O PL 3.1 Item 1)
16	-	Bearing (P/O PL 3.1 Item 1)

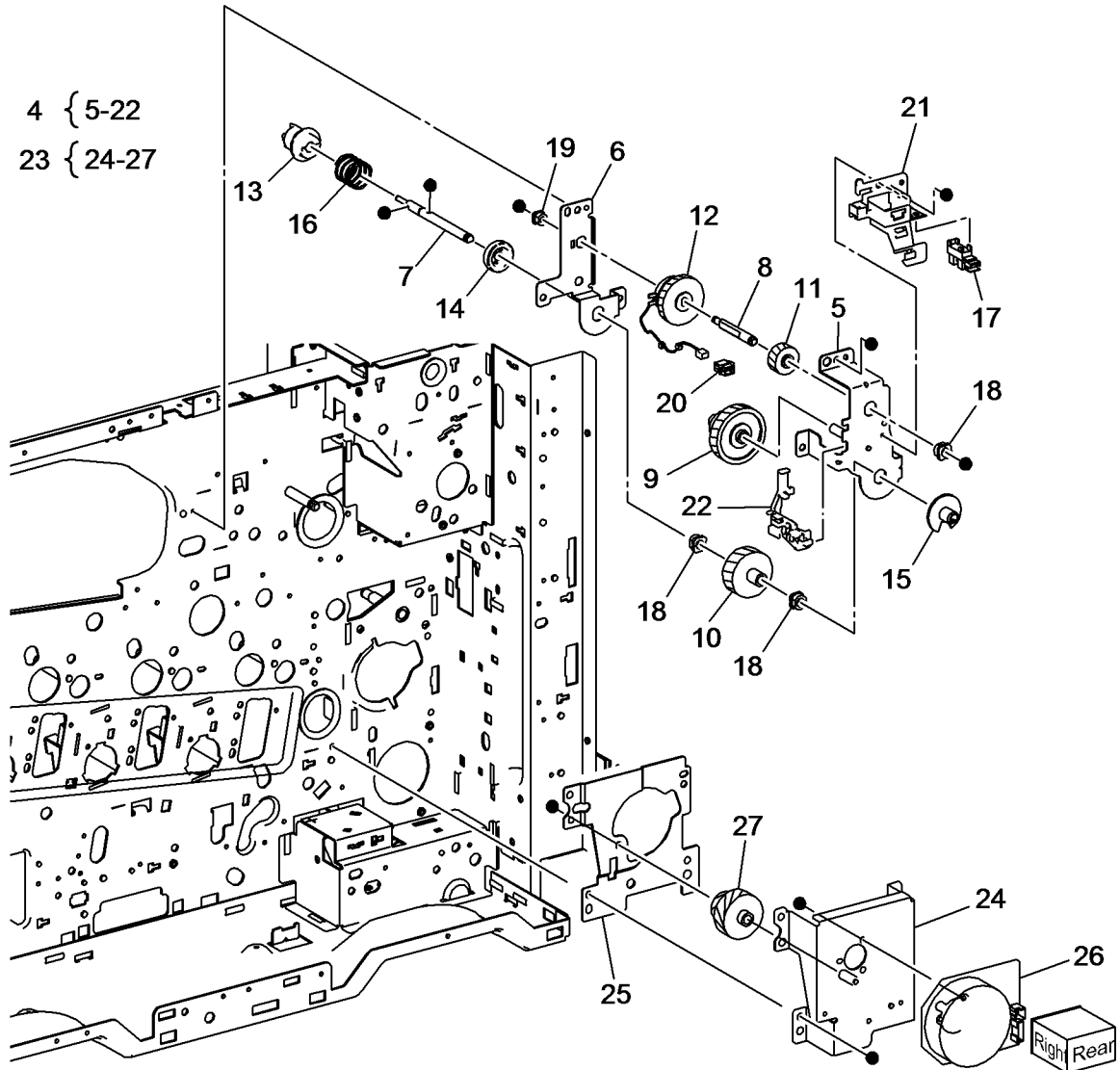


Left Front

s7800-107

PL 3.2 Drive (2 of 3)

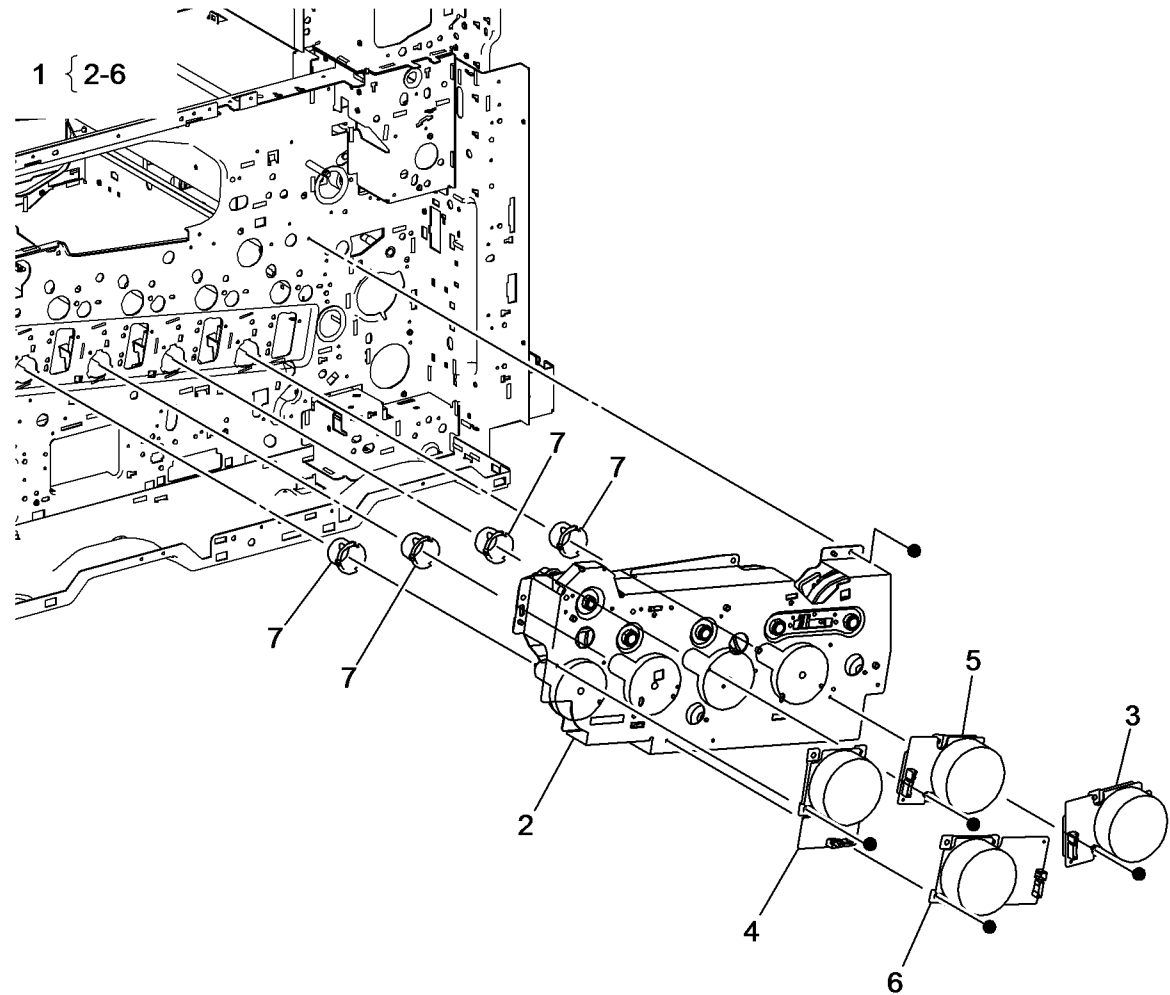
Item	Part	Description
1	-	Not Used
2	-	Not Used
3	-	Not Used
4	007K98090	Retract Drive Assembly (REP 3.4)
5	-	Retract Bracket Assembly (P/O PL 3.2 Item 4)
6	-	Retract Lower Bracket (P/O PL 3.2 Item 4)
7	-	Retract Shaft (P/O PL 3.2 Item 4)
8	-	Clutch Shaft (P/O PL 3.2 Item 4)
9	-	Helical Gear (45T/23T) (P/O PL 3.2 Item 4)
10	-	Helical Gear (36T) (P/O PL 3.2 Item 4)
11	-	Helical Gear (21T) (P/O PL 3.2 Item 4)
12	-	1st BTR Contact Retract Clutch (P/O PL 3.2 Item 4)
13	-	Coupling (P/O PL 3.2 Item 4)
14	-	Retainer (P/O PL 3.2 Item 4)
15	-	Cam Wheel (P/O PL 3.2 Item 4)
16	-	Spring (P/O PL 3.2 Item 4)
17	-	1st BTR Contact Retract Sensor (Q94-200) (P/O PL 3.2 Item 4) (REP 3.5)
18	-	Sleeve Bearing (P/O PL 3.2 Item 4)
19	-	Sleeve Bearing (P/O PL 3.2 Item 4)
20	-	Connector (P/O PL 3.2 Item 4)
21	-	Harness Holder (P/O PL 3.2 Item 4)
22	-	Harness Holder (P/O PL 3.2 Item 4)
23	007K16841	Main Drive Assembly (REP 3.6)
24	-	Motor Bracket (P/O PL 3.2 Item 23)
25	-	Bracket (P/O PL 3.2 Item 23)
26	-	Main Drive Motor (MOT42-001) (P/O PL 3.2 Item 23) (REP 3.7)
27	-	Helical Gear (46T/21T) (P/O PL 3.2 Item 23)



s7800-108

PL 3.3 Drive (3 of 3)

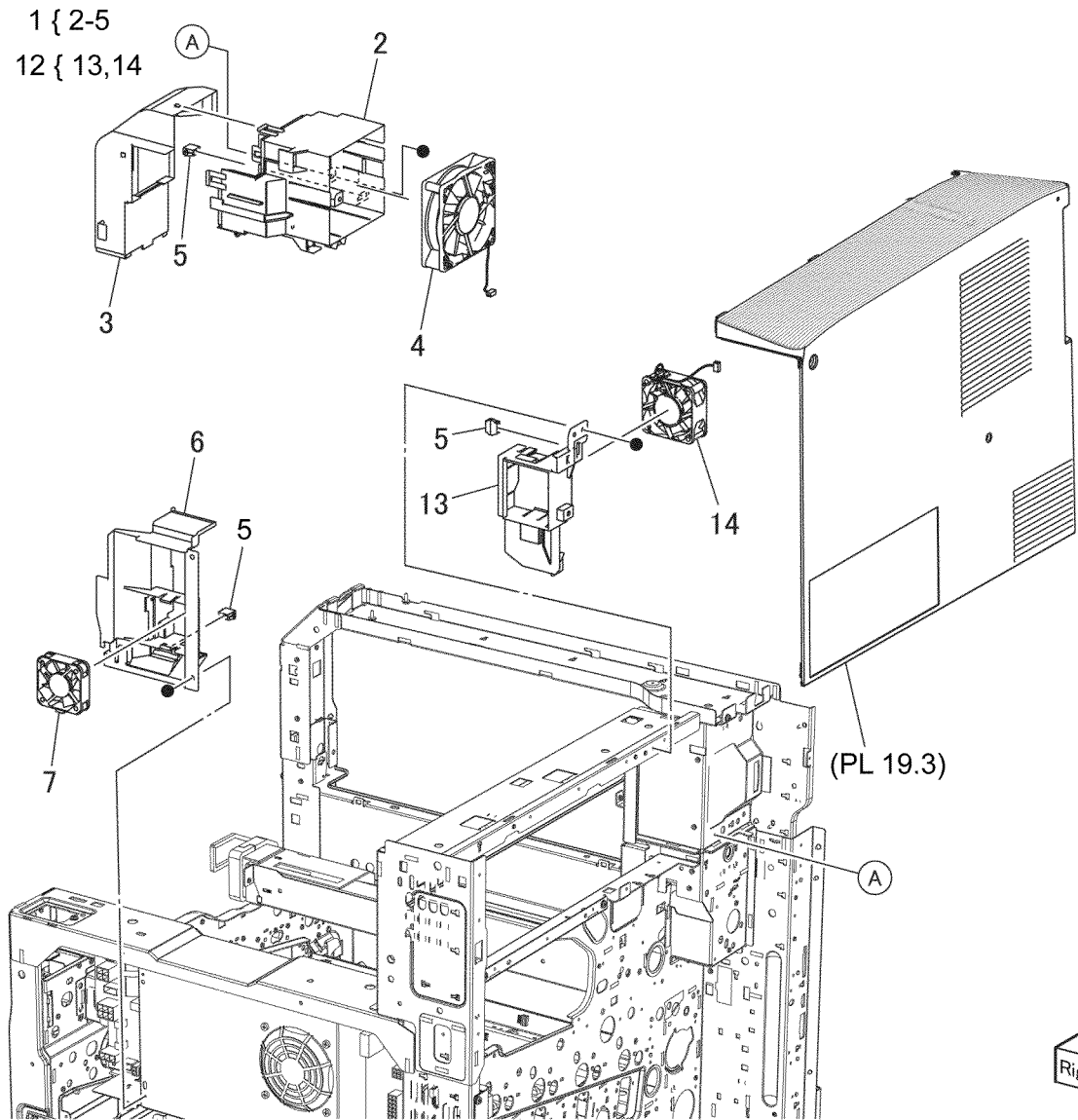
Item	Part	Description
1	007K16823	Drum/Deve Drive Assembly (REP 3.8)
2	—	Drive Assembly (P/O PL 3.3 Item 1)
3	—	Drum/Deve Drive Motor (K) (MOT91-032) (P/O PL 3.3 Item 1) (REP 3.9)
4	—	IBT Drive Motor (MOT94-005) (P/O PL 3.3 Item 1) (REP 3.10)
5	—	Drum Drive Motor (Y/M/C) (P/O PL 3.3 Item 1) (REP 3.11)
6	—	Deve Drive Motor (Y/M/C) (MOT93-022) (P/O PL 3.3 Item 1) (REP 3.12)
7	055E56040	Gear Guide



s7800-109

PL 4.1 NOHAD Common

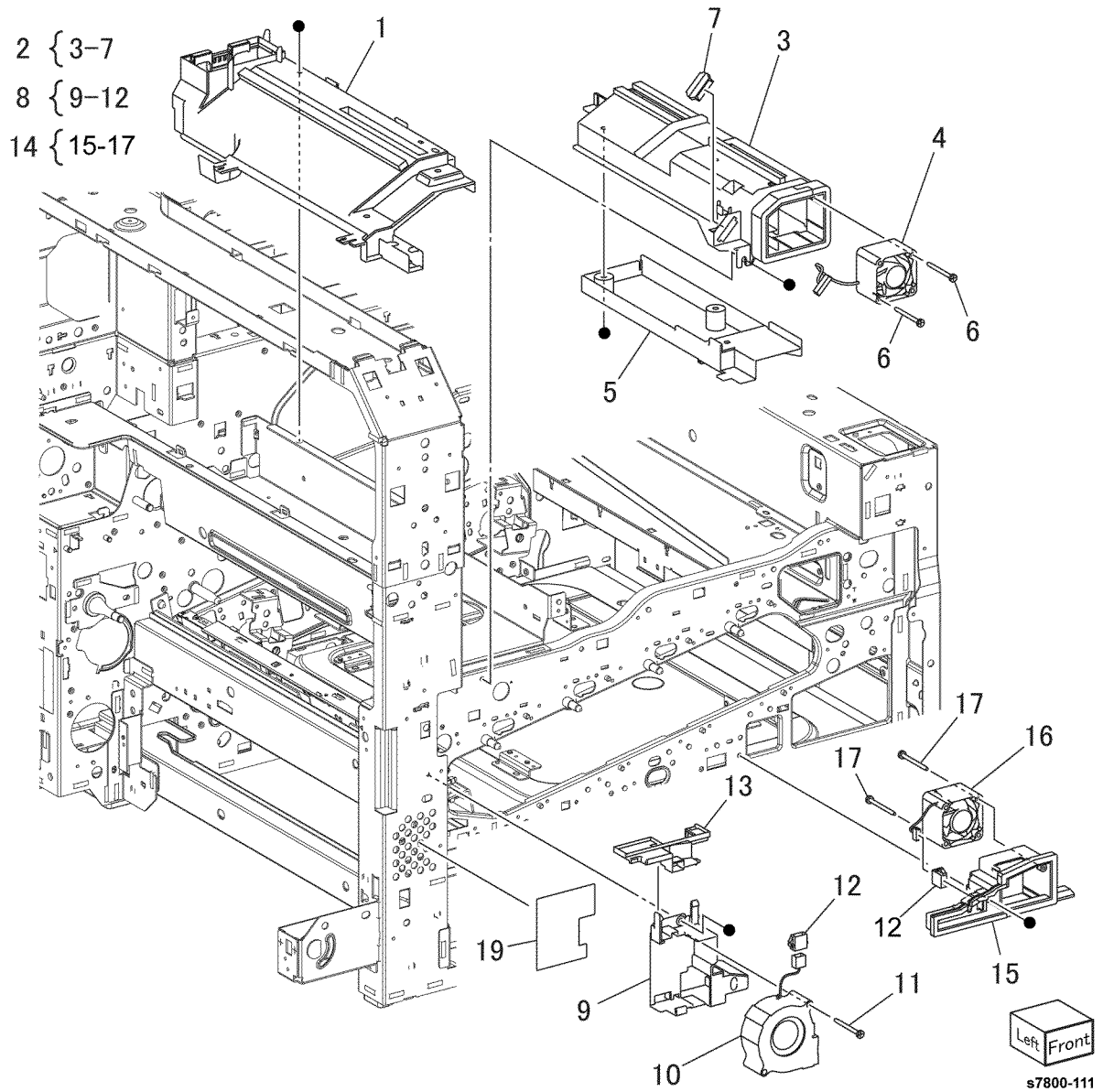
Item	Part	Description
1	054K41420	Fuser Fan and Duct (REP 4.1)
2	-	Duct (P/O PL 4.1 Item 1)
3	-	Duct (P/O PL 4.1 Item 1)
4	-	Fuser Fan (MOT42-11) (P/O PL 4.1 Item 1) (REP 4.1)
5	913W13170	Connector
6	-	LVPS Duct (Not Spared)
7	127K58360	Front LVPS Fan (MOT42-14) (REP 4.2)
8	-	Not Used
9	-	Not Used
10	-	Not Used
11	-	Not Used
12	054K41490	IH Intake Fan and Duct (REP 4.3)
13	-	Duct (P/O PL 4.1 Item 12)
14	-	IH Intake Fan (MOT42-16) (P/O PL 4.1 Item 12) (REP 4.3)



s7800-110

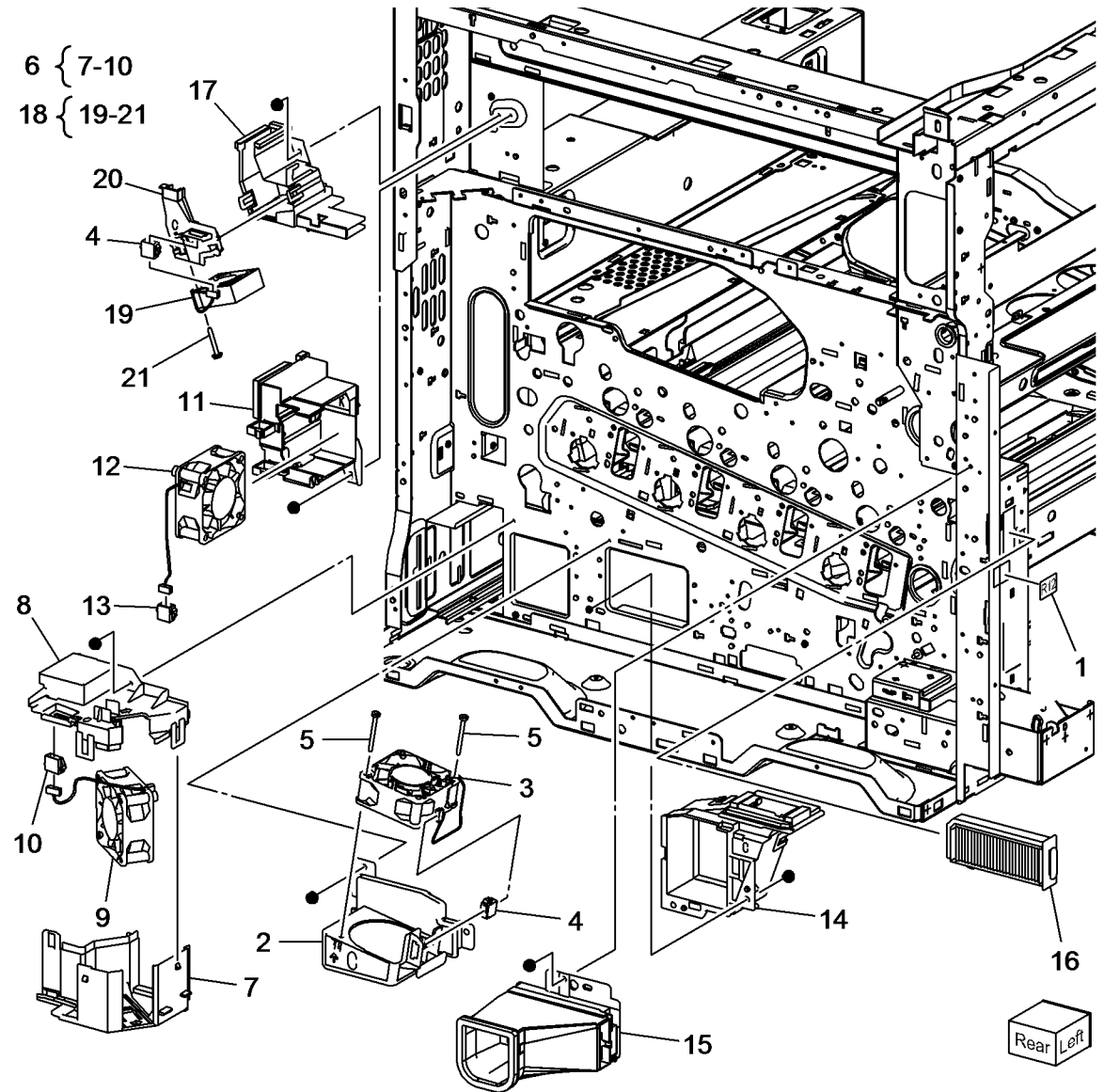
PL 4.2 NOHAD (1 of 3)

Item	Part	Description
1	-	Center Duct (Not Spared)
2	054K41430	C Fan and Duct (REP 4.4)
3	-	Duct (P/O PL 4.2 Item 2)
4	-	C Fan (MOT42-24) (P/O PL 4.2 Item 2)
5	-	Plate (P/O PL 4.2 Item 2)
6	-	Screw (P/O PL 4.2 Item 2)
7	-	Connector (P/O PL 4.2 Item 2)
8	054K41440	Process 2 Fan and Duct (REP 4.5)
9	-	P2 Duct (P/O PL 4.2 Item 8)
10	-	Process 2 Fan (MOT42-13) (P/O PL 4.2 Item 8)
11	-	Screw (P/O PL 4.2 Item 8)
12	-	Connector (P/O PL 4.2 Item 8)
13	815E51940	Plate (REP 4.6)
14	054K41410	Process 1 Fan and Duct (REP 4.7)
15	-	P1 Duct (P/O PL 4.2 Item 14)
16	-	Process 1 Fan (MOT42-22) (P/O PL 4.2 Item 14)
17	-	Screw (P/O PL 4.2 Item 14)
18	-	Not Used
19	-	Seal (Not Spared)



PL 4.3 NOHAD (2 of 3)

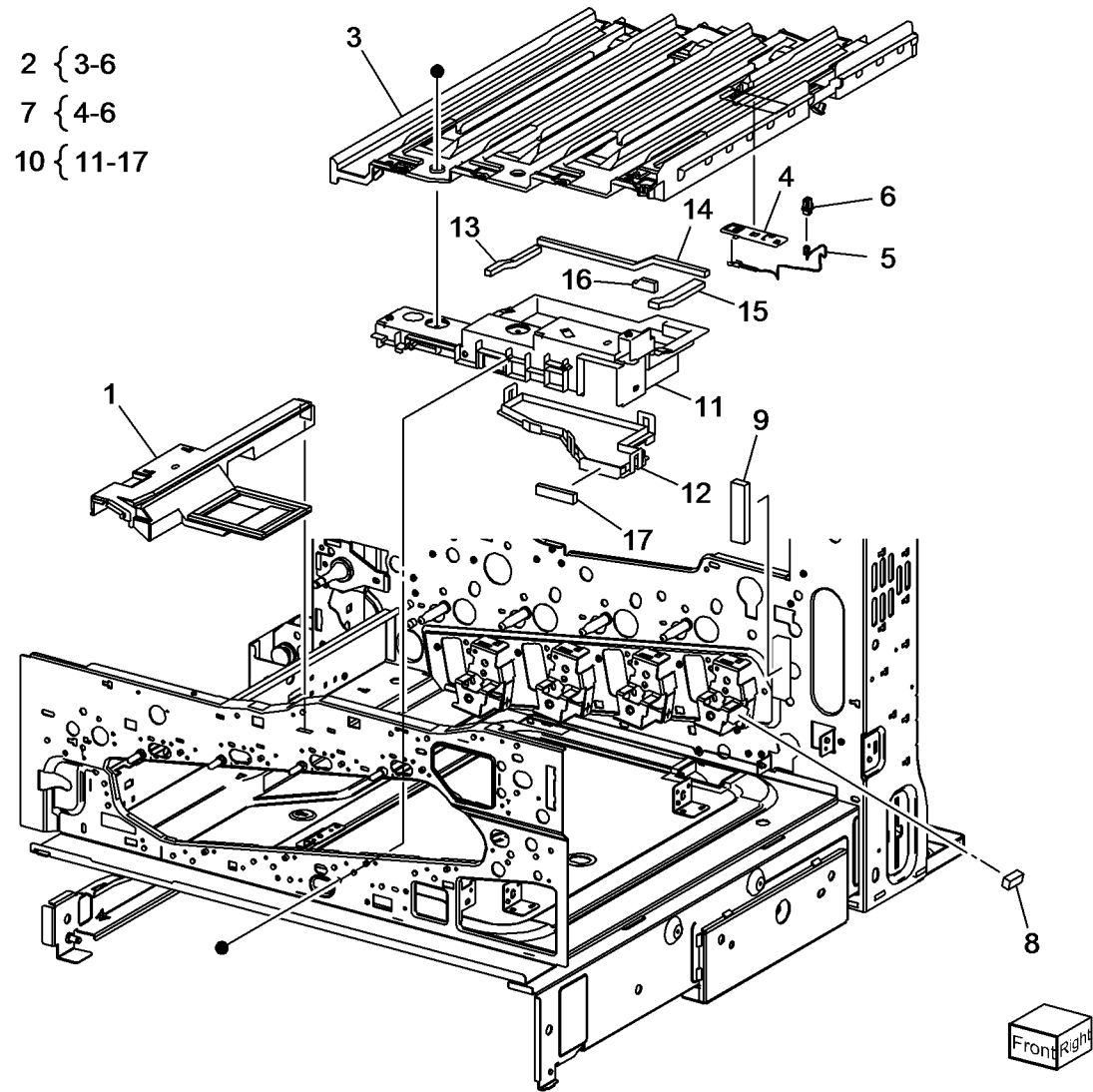
Item	Part	Description
1	-	Label (R12) (Not Spared)
2	-	Bottom Duct (Not Spared)
3	127K64480	Bottom Fan (MOT42-15) (REP 4.8)
4	-	Connector (Not Spared)
5	-	Screw (Not Spared)
6	054K41460	M Fan and Duct (REP 4.9)
7	-	Lower Duct (P/O PL 4.3 Item 6)
8	-	Upper Duct (P/O PL 4.3 Item 6)
9	-	M Fan (MOT42-12) (P/O PL 4.3 Item 6)
10	-	Connector (P/O PL 4.3 Item 6)
11	-	IH Exhaust Duct (Not Spared)
12	-	IH Exhaust Fan (MOT42-17) (REP 4.10)
13	-	Connector (Not Spared)
14	-	Duct (Not Spared)
15	-	Suction Duct (Not Spared)
16	108R01037	Suction Filter (REP 4.11)
17	-	Rear Fan Duct (Not Spared)
18	127K61230	C Exit Fan and Duct (REP 4.12)
19	-	C Exit Fan (P/O PL 4.3 Item 18) (REP 4.12)
20	-	Duct (P/O PL 4.3 Item 18) (REP 4.12)
21	-	Screw (P/O PL 4.3 Item 18)



s7800-112

PL 4.4 NOHAD (3 of 3)

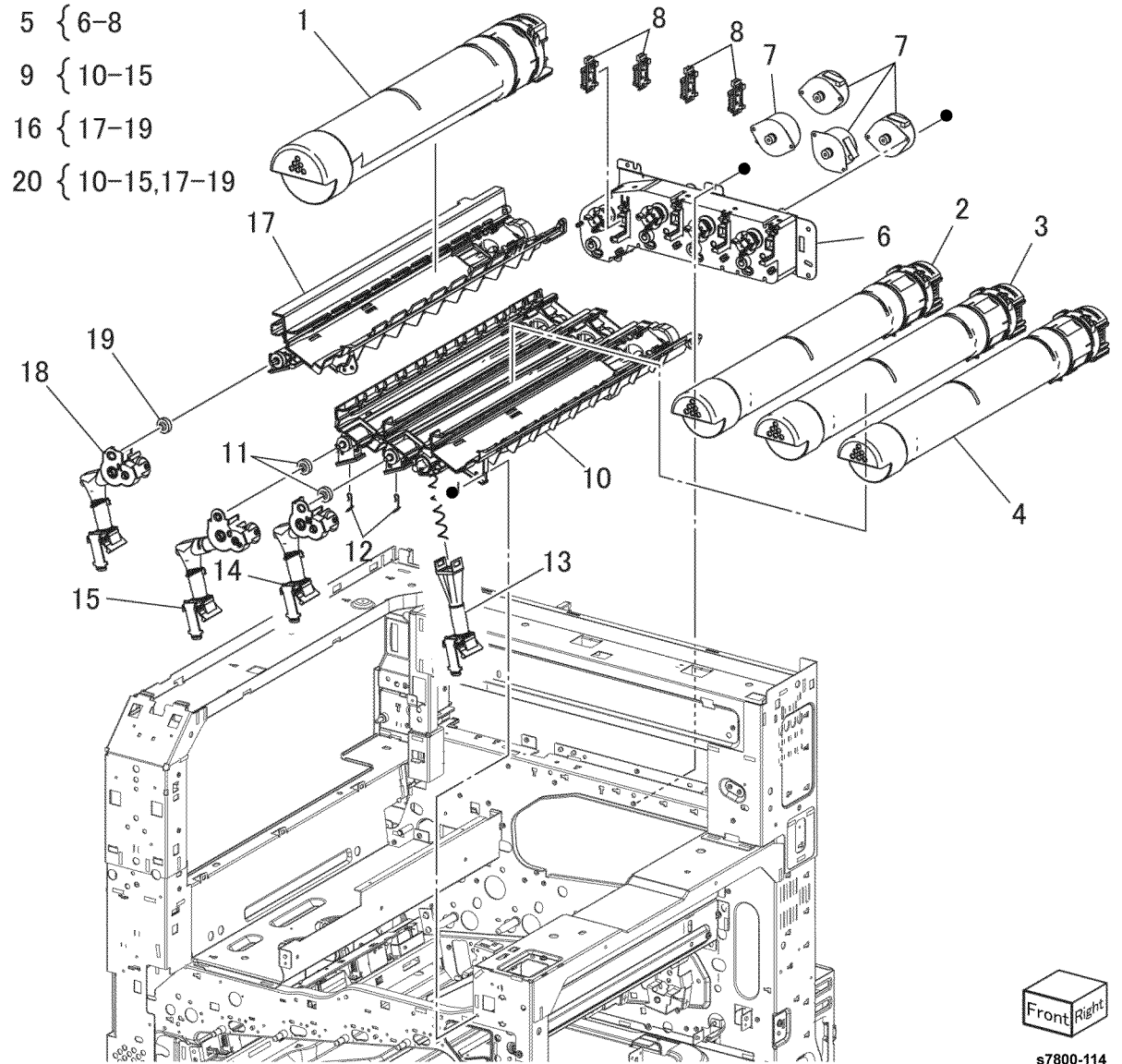
Item	Part	Description
1	-	Front Bottom Duct (Not Spared)
2	815K03601	Base Plate Assembly
3	-	Base Plate (P/O PL 4.4 Item 2)
4	-	Bracket (P/O PL 4.4 Item 7)
5	-	NOHAD Thermistor (P/O PL 4.4 Item 7)
6	-	Connector (P/O PL 4.4 Item 7)
7	130K71990	NOHAD Thermistor and Bracket (REP 4.13)
8	-	Seal (Not Spared)
9	-	Seal (Not Spared)
10	-	Front Duct Assembly (Not Spared)
11	-	Front Duct (P/O PL 4.4 Item 10)
12	-	Lower Plate (P/O PL 4.4 Item 10)
13	-	Seal (P/O PL 4.4 Item 10)
14	-	Seal (P/O PL 4.4 Item 10)
15	-	Seal (P/O PL 4.4 Item 10)
16	-	Seal (P/O PL 4.4 Item 10)
17	-	Seal (P/O PL 4.4 Item 10)



s7800-113

PL 5.1 Development (1 of 2)

Item	Part	Description
1	-	Toner Cartridge (K) (REP 5.1)
2	-	Toner Cartridge (C) (REP 5.1)
3	-	Toner Cartridge (M) (REP 5.1)
4	-	Toner Cartridge (Y) (REP 5.1)
5	127K64540	Toner Dispenser Motor Assembly (REP 5.2)
6	-	Dispense Assembly (P/O PL 5.1 Item 5)
7	-	Toner Dispenser Motor (Y/M/C/K) (P/O PL 5.1 Item 5) (REP 5.3)
8	-	Toner CRUM Coupler Assembly (Y/M/C/K) (P/O PL 5.1 Item 5)
9	094K92391	Dispenser Pipe Assembly (Y/M/C) (REP 5.4)
10	-	Guide Assembly (Y/M/C) (P/O PL 5.1 Item 9)
11	807E20080	Auger Gear (Y/M/C)
12	-	Spring (P/O PL 5.1 Item 9)
13	-	Dispenser Pipe (Y) (P/O PL 5.1 Item 9) (REP 5.5)
14	-	Dispenser Pipe (M) (P/O PL 5.1 Item 9) (REP 5.5)
15	-	Dispenser Pipe (C) (P/O PL 5.1 Item 9) (REP 5.5)
16	094K92770	Dispenser Pipe Assembly (K)
17	-	Guide Assembly (K) (P/O PL 5.1 Item 16)
18	-	Dispenser Pipe (K) (P/O PL 5.1 Item 16) (REP 5.5)
19	807E20100	Auger Gear (K)
20	-	Dispenser Pipe Assembly (Y/M/C/K) (REP 5.4)

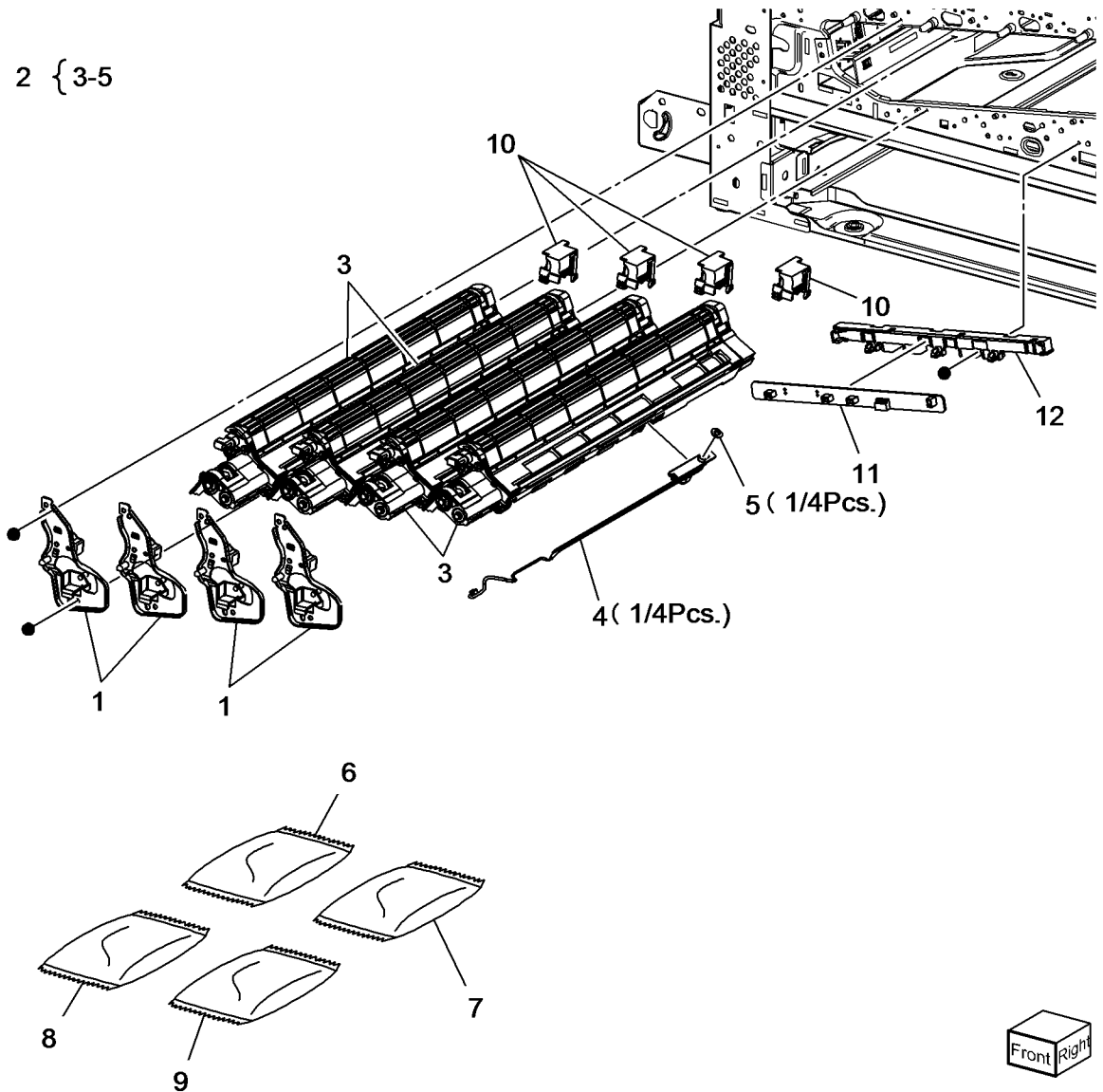


Front Right

s7800-114

PL 5.2 Development (2 of 2)

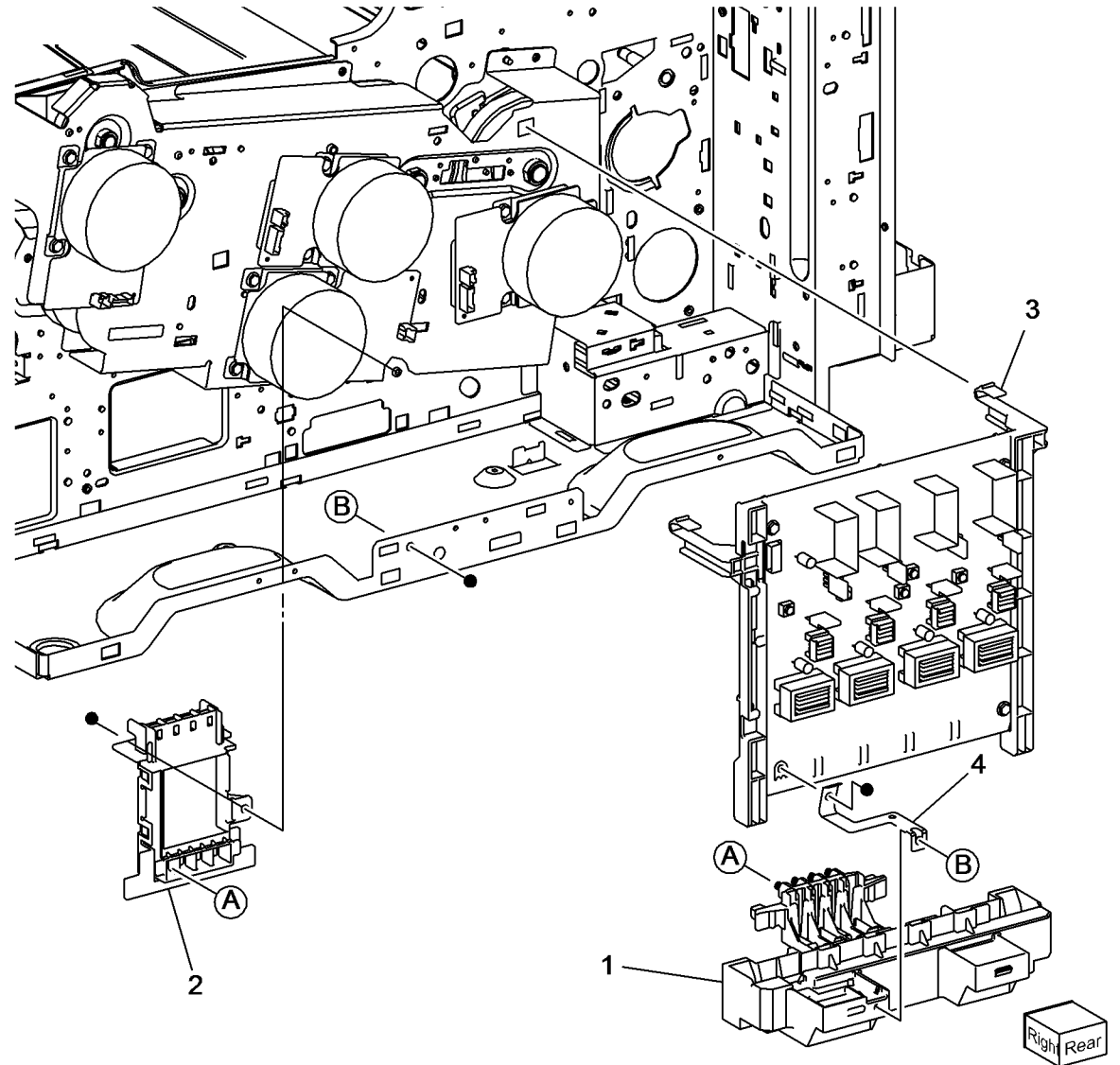
Item	Part	Description
1	—	Deve Plate Assembly (Not Spared) (REP 5.6)
2	604K63570	Developer Housing Assembly (Y/M/C/K) (REP 5.7)
3	—	Housing Assembly (P/O PL 5.2 Item 2)
4	—	ATC Sensor (Y/M/C/K) (P/O PL 5.2 Item 2)
5	—	Seal (P/O PL 5.2 Item 2)
6	675K85030	Developer (K)
7	675K85040	Developer (C)
8	675K85050	Developer (M)
9	675K85060	Developer (Y)
10	—	Plunger Assembly (Not Spared)
11	960K49660	ATC PWB (REP 5.8)
12	849E96933	Bracket



s7800-115

PL 5.3 HVPS (DEVE)

Item	Part	Description
1	848K37870	HVPS Housing (REP 5.10)
2	019K11110	Conductor Holder
3	815K04490	HVPS (DEVE) (REP 5.11)
4	130E13880	Ground Conductor

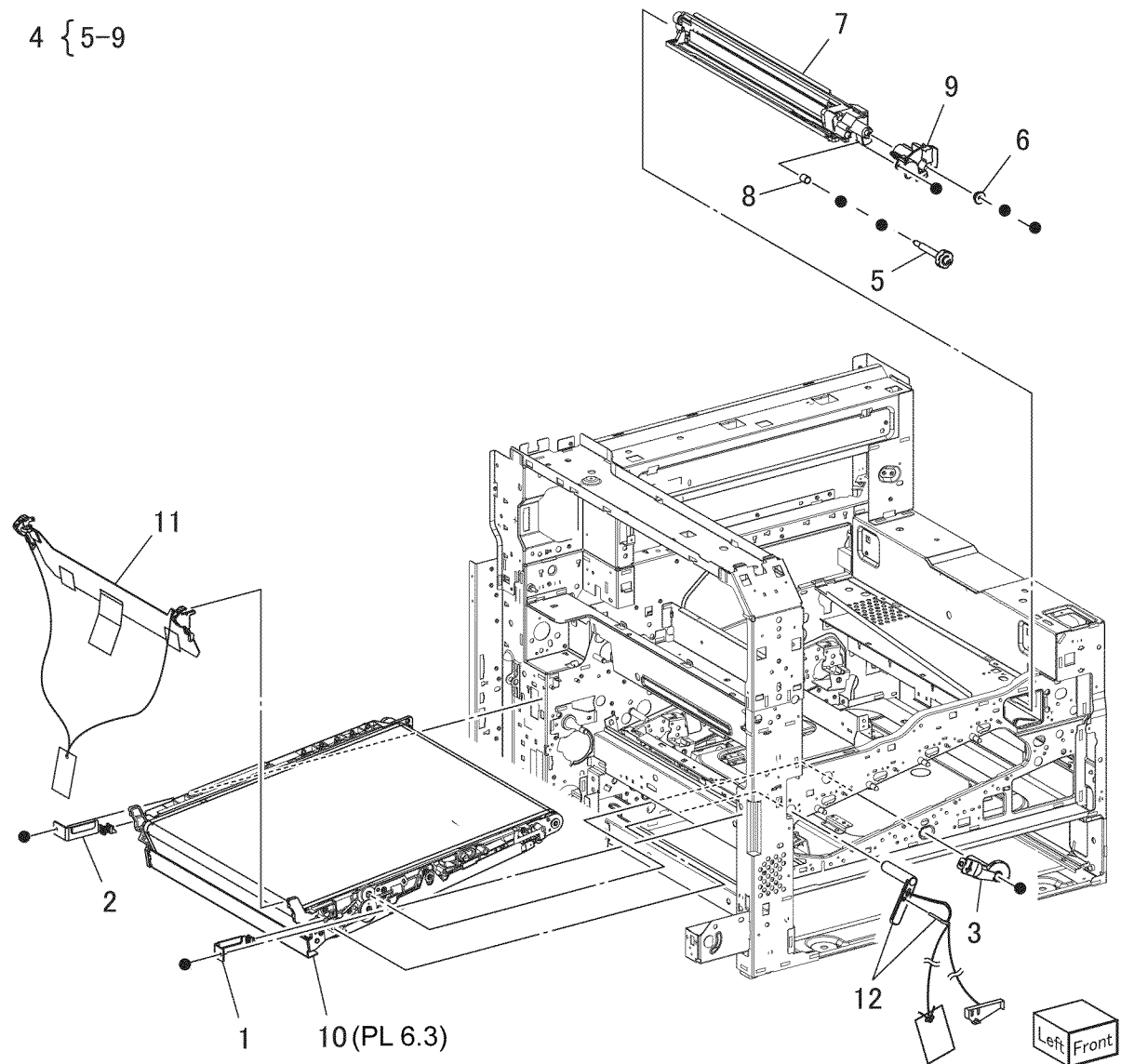


s7800-116

PL 6.1 Transfer (1 of 2)

Item	Part	Description
1	-	Front Lock Bracket (Not Spared) (REP 6.2)
2	-	Rear Lock Bracket (Not Spared) (REP 6.2)
3	-	Tension Lever (Not Spared) (REP 6.2)
4	108R01036	IBT Belt Cleaner Assembly (REP 6.1)
5	-	Knob (P/O PL 6.1 Item 4)
6	-	Bearing (P/O PL 6.1 Item 4)
7	-	IBT Belt Cleaner (P/O PL 6.1 Item 4)
8	-	Spring (P/O PL 6.1 Item 4)
9	-	Shutter (P/O PL 6.1 Item 4)
10	604K57384	IBT Belt Assembly (REP 6.2)
11	-	Packaging Assembly (Cushion) (P/O PL 6.1 Item 12)
12	604K56410	Packaging Assembly (IBT)

4 { 5-9

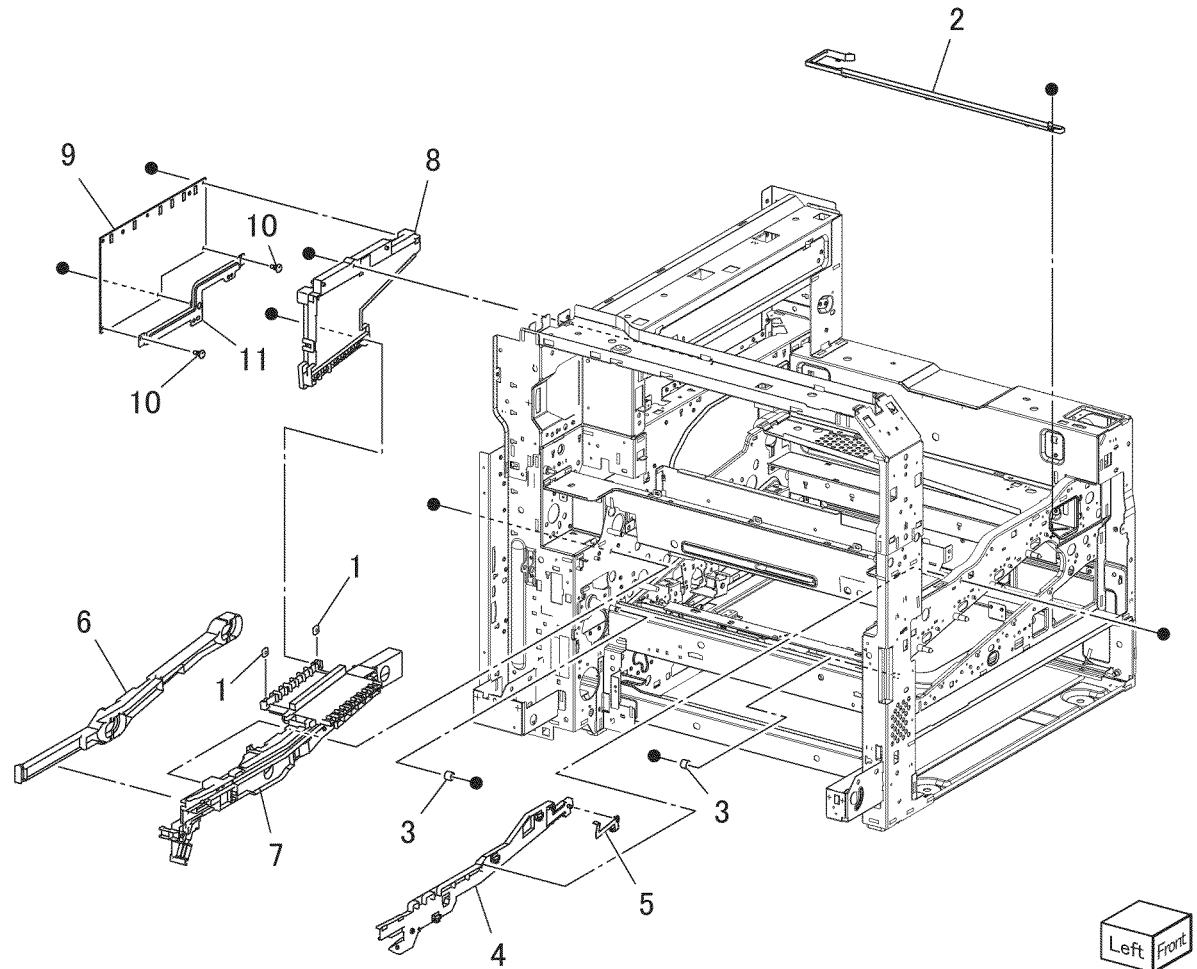


Left Front

s7800-117

PL 6.2 Transfer (2 of 2)

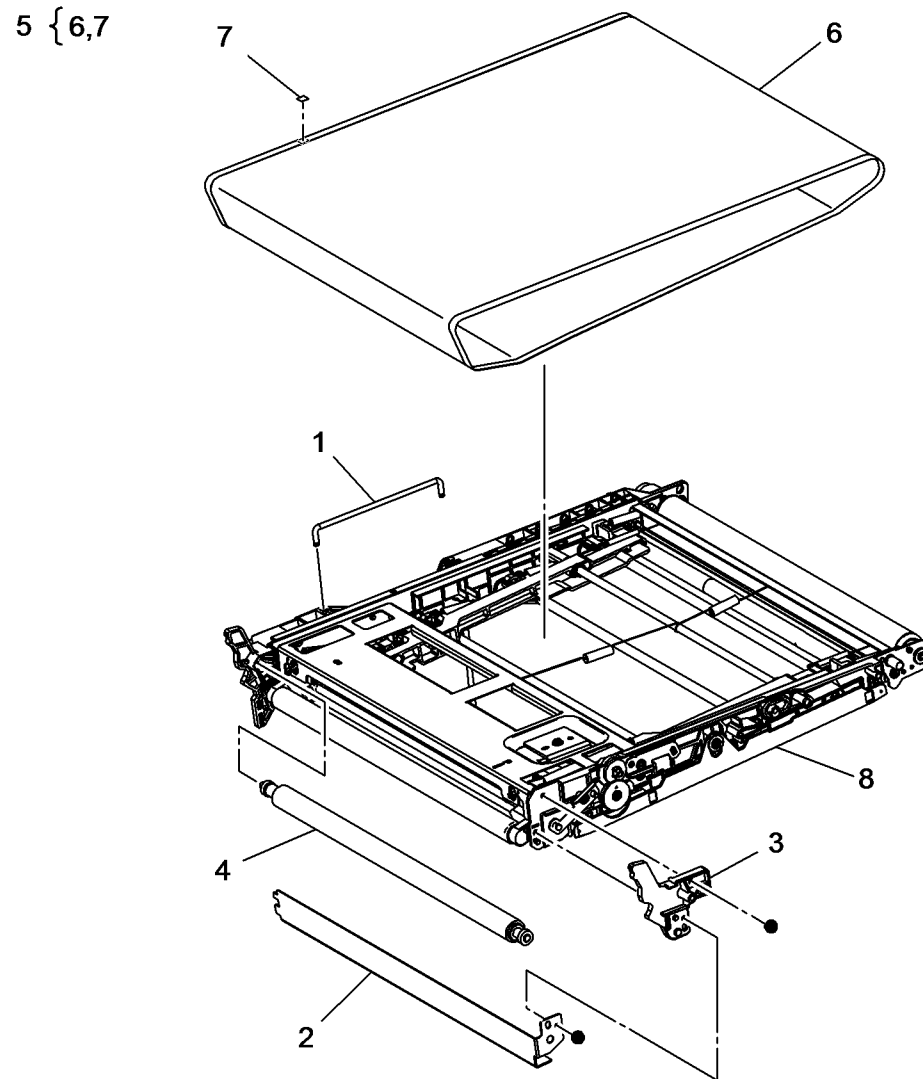
Item	Part	Description
1	-	Plate Nut (Not Spared)
2	-	IBT Cleaner Guide (Not Spared)
3	-	Metal Bearing (Not Spared)
4	-	IBT Front Guide (Not Spared)
5	-	Conductor (Not Spared)
6	120E29340	Actuator
7	-	Guide Assembly (Not Spared)
8	-	Conductor Housing Assembly (Not Spared)
9	105E17530	HVPS (1st/2nd/DTC) (REP 6.3)
10	-	PWB Support (Not Spared)
11	-	Bracket (Not Spared)



s7800-118

PL 6.3 IBT Belt Unit

Item	Part	Description
1	-	Handle (Not Spared)
2	-	Inlet Chute (Not Spared)
3	-	BUR Front Frame (Not Spared)
4	-	Backup Roll (Not Spared)
5	064K93621	IBT Belt (REP 6.2.1)
6	-	IBT Belt (P/O PL 6.3 Item 5) (REP 6.2.1)
7	-	TR0 Seal (P/O PL 6.3 Item 5)
8	-	IBT Belt Assembly (Not Spared) (REP 6.2)

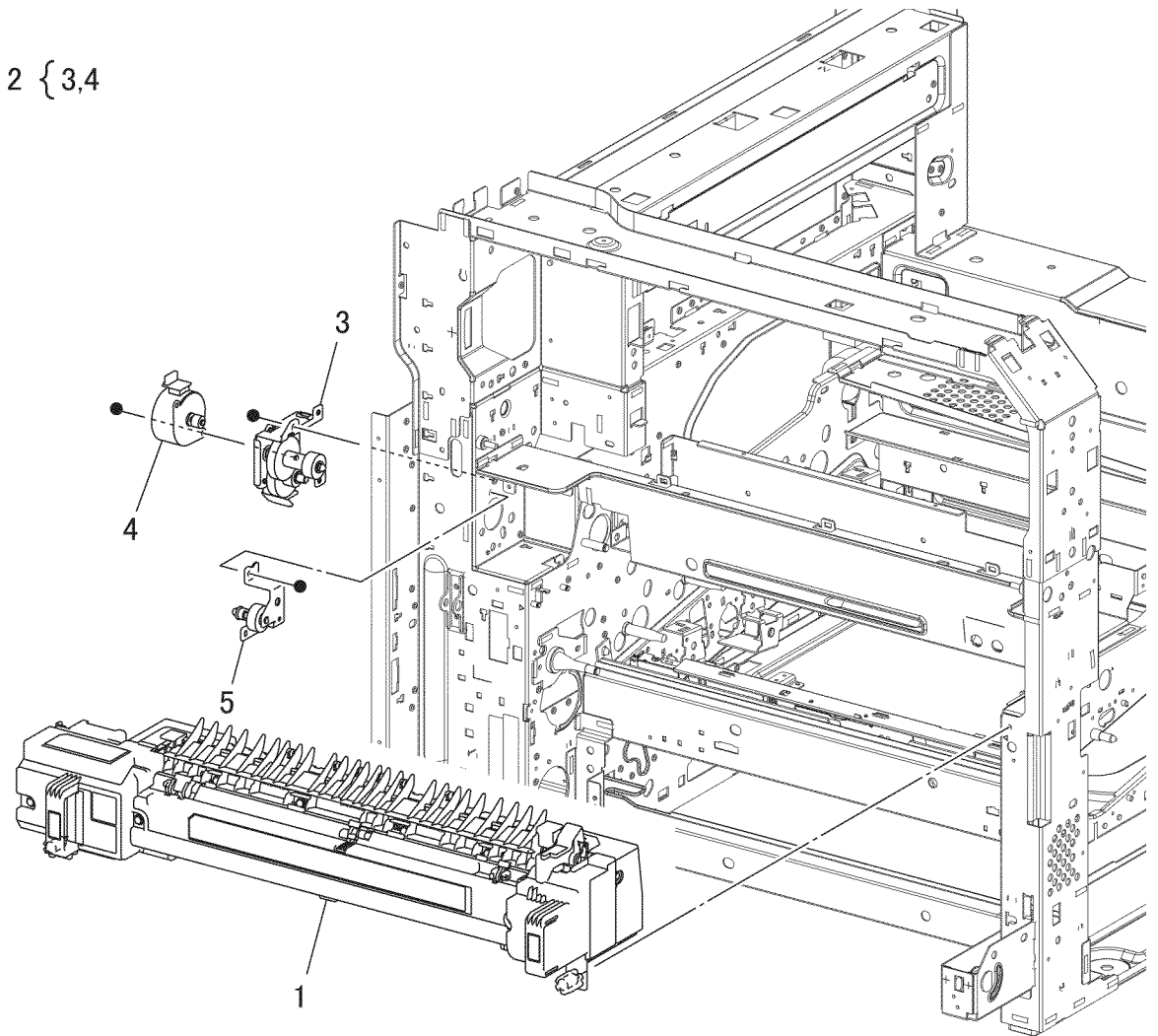


s7800-119

PL 7.1 Fuser

Item	Part	Description
1	115R00073	Fuser Assembly (110V) (REP 7.1)
-	115R00074	Fuser Assembly (220V) (REP 7.1)
2	007K16060	Retract Motor and Bracket (REP 7.2)
3	-	Motor Bracket (P/O PL 7.1 Item 2)
4	-	P/R Latch Motor (P/O PL 7.1 Item 2)
5	007K16071	Retract Gear

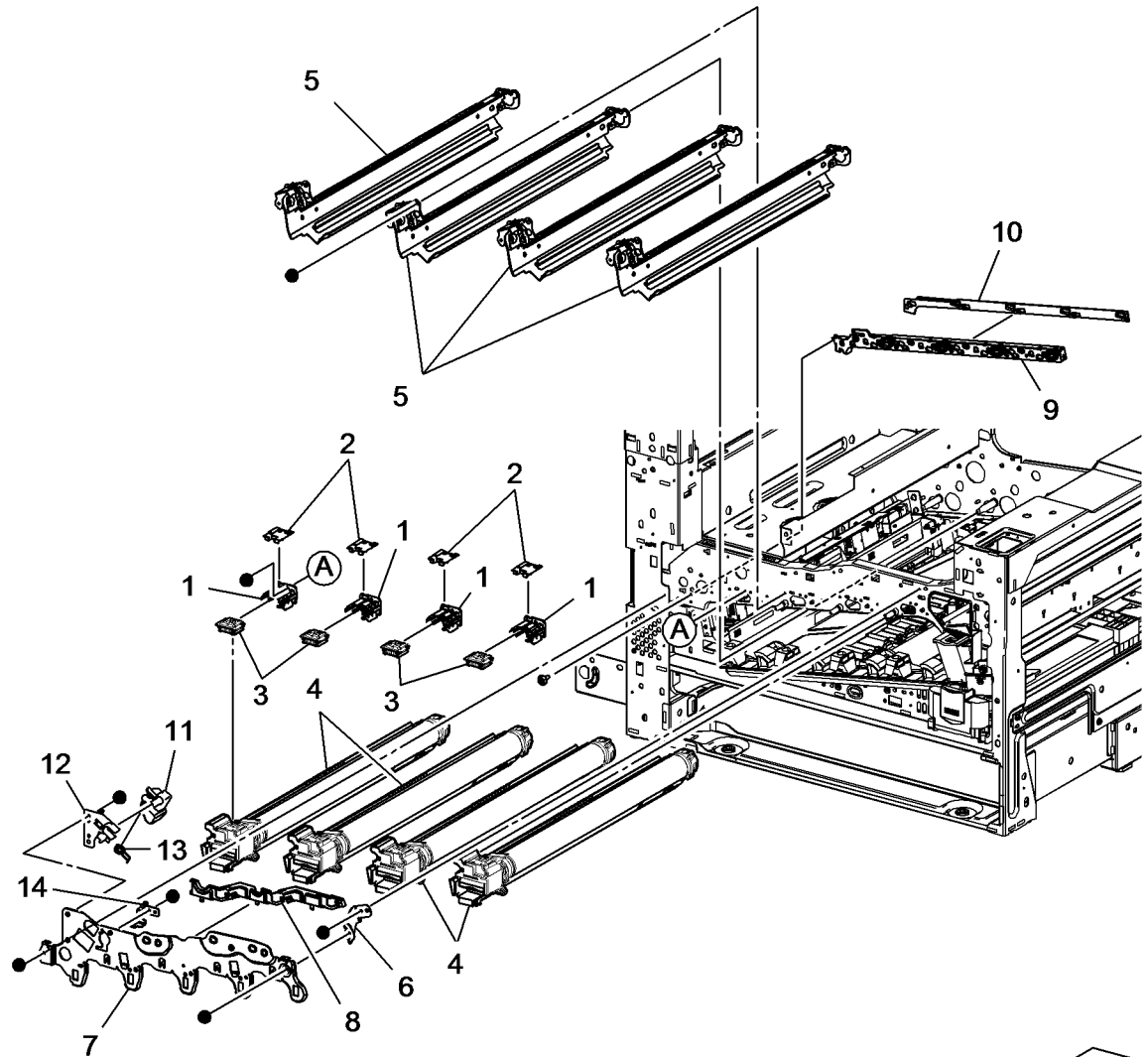
2 { 3,4



s7800-120

PL 8.1 Xerographic (1 of 2)

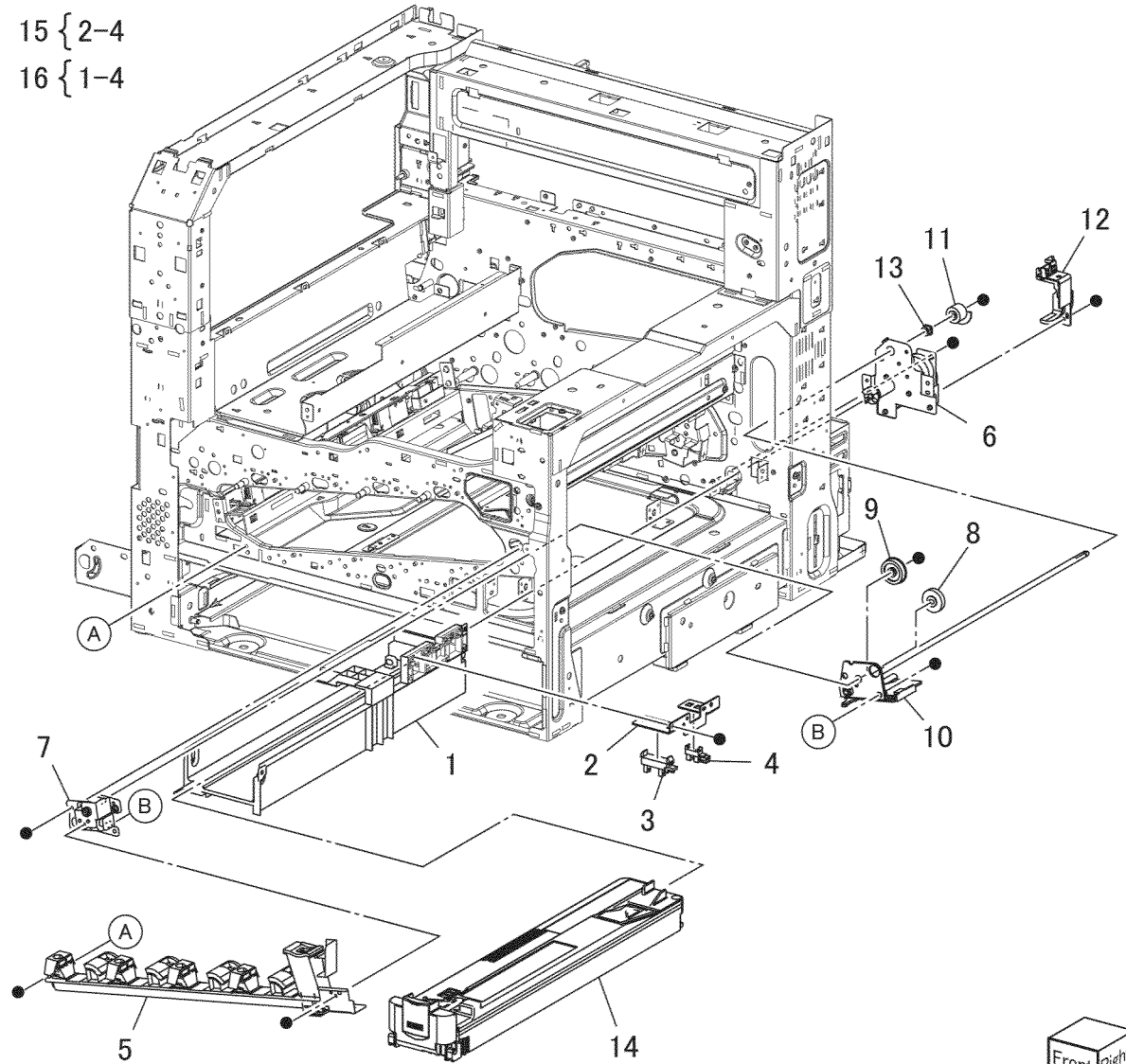
Item	Part	Description
1	—	Holder CRUM (Not Spared)
2	—	Cover CRUM (Not Spared)
3	—	Drum CRUM Coupler Assembly (Y/M/C/K) (Not Spared)
4	106R01582	Imaging Unit (Y/M/C/K) (REP 8.1)
5	032K04701	Erase Lamp Unit (K) (REP 8.2)/ Erase Lamp Unit (Y/M/C) (REP 8.3)
6	—	Bracket (Not Spared)
7	—	Plate (Not Spared)
8	—	Harness Holder (Not Spared)
9	—	Harness Holder (Not Spared)
10	—	Cover (Not Spared)
11	—	Handle Lock Lever (Not Spared)
12	868E08980	Bracket
13	809E79410	Spring
14	809E79420	Spring



s7800-121

PL 8.2 Xerographic (2 of 2)

Item	Part	Description
1	—	Bottle Guide (P/O PL 8.2 Item 16)
2	—	Sensor Bracket (P/O PL 8.2 Item 16)
3	—	Waste Toner Bottle Full Sensor (Q91-201) (P/O PL 8.2 Item 16) (REP 8.4)
4	—	Waste Toner Bottle Position Sensor (Q91-200) (P/O PL 8.2 Item 16) (REP 8.4)
5	052K97773	Waste Toner Pipe Assembly (REP 8.5)
6	068K59502	Agitator Motor Assembly (MOT91-045) (REP 8.6)
7	—	Gear Bracket Assembly (Not Spared) (REP 8.7)
8	—	Helical Gear (29T) (Not Spared)
9	—	Helical Gear (31T) (Not Spared)
10	—	Drive Shaft Assembly (Not Spared) (REP 8.8)
11	—	Helical Gear (20T) (Not Spared)
12	868E14631	Harness Holder
13	—	Sleeve Bearing (Not Spared)
14	108R00982	Waste Cartridge (REP 8.9)
15	068K58211	Sensor and Bracket (REP 8.4)
16	032K05160	Bottle Guide and Sensor (REP 8.10)

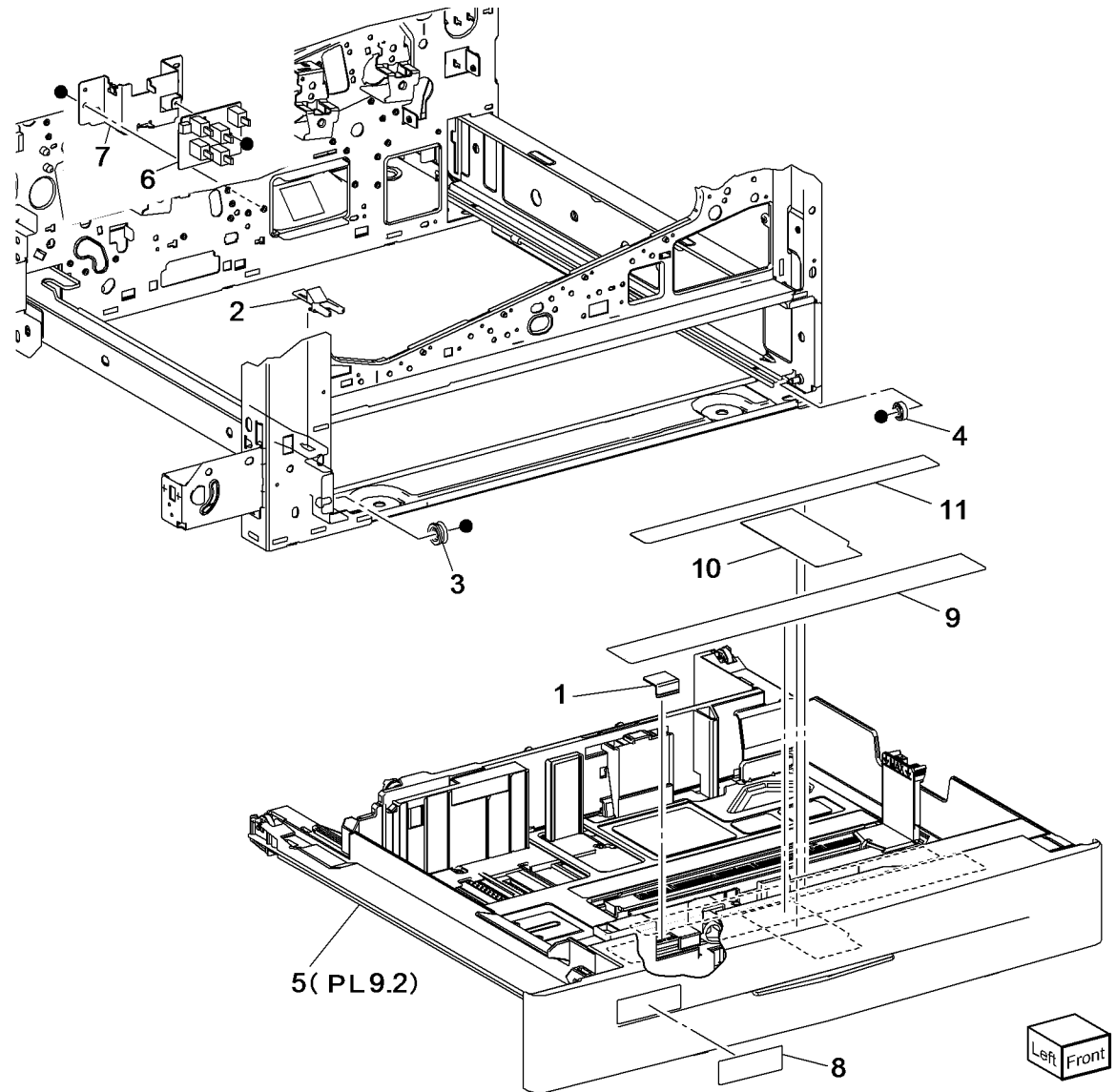


Front
Right

s7800-12:

PL 9.1 Tray 2 Feeder/Tray2

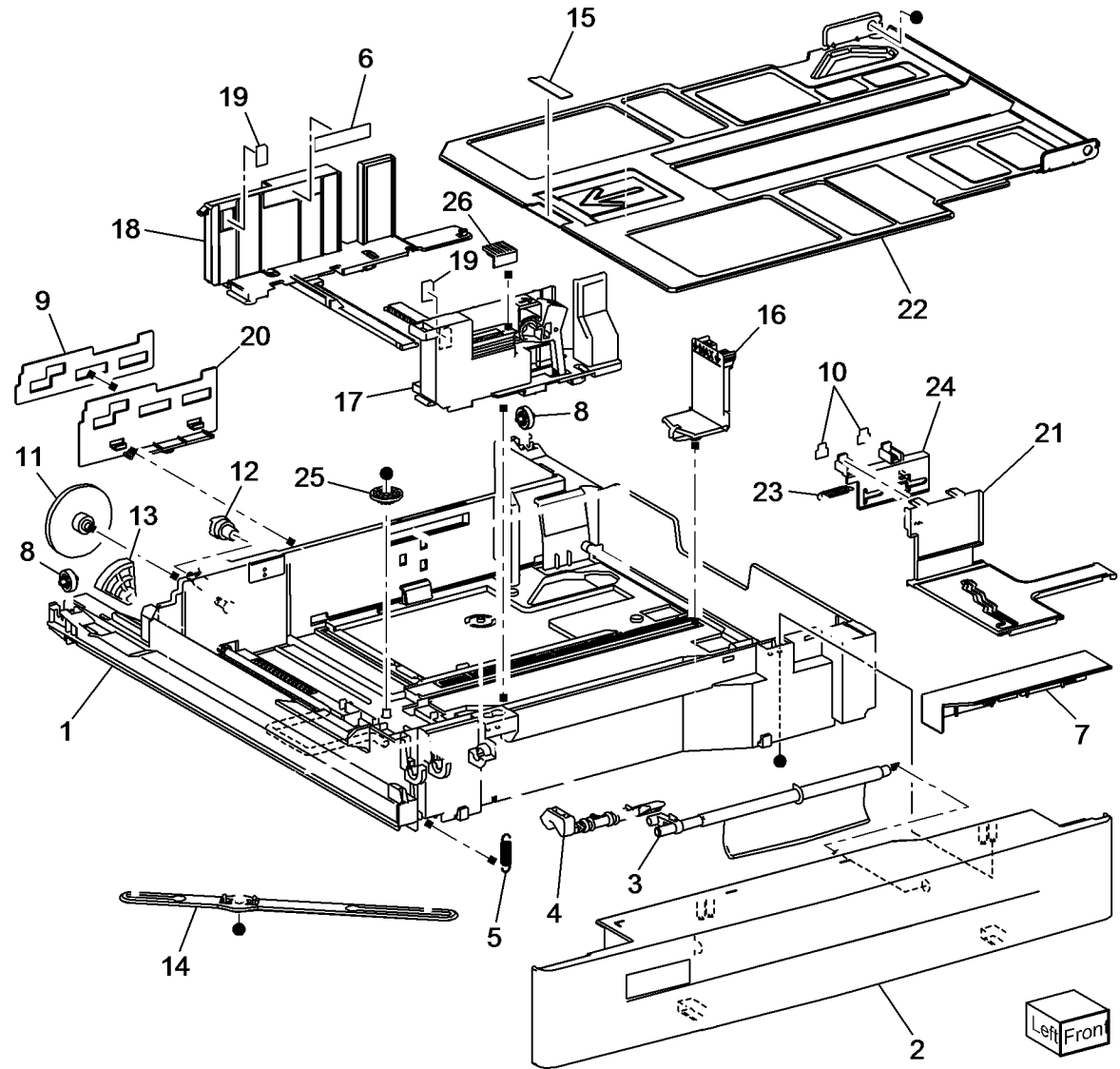
Item	Part	Description
1	-	Slide Lock Block (Not Spared)
2	-	Stopper (Not Spared)
3	-	Roller (Not Spared)
4	-	Roller (Not Spared)
5	050K65383	Tray 2 Assembly (REP 9.1)
6	110K11680	Tray 2 Paper Size Sensor (Q71-104) (REP 9.2)
7	-	Switch Bracket (Not Spared)
8	-	No.1 Tray Label (Not Spared)
9	-	Label (Not Spared)
10	-	Side Size Label (Not Spared)
11	-	End Size Label (Not Spared)



s7800-123

PL 9.2 Tray 2

Item	Part	Description
1	-	Tray 2 Assembly (REP 9.1)
2	-	Front Cover (P/O PL 9.2 Item 1)
3	-	Lever (P/O PL 9.2 Item 1)
4	-	Latch (P/O PL 9.2 Item 1)
5	-	Spring (P/O PL 9.2 Item 1)
6	-	Label (Max) (P/O PL 9.2 Item 1)
7	-	Rail Cover (P/O PL 9.2 Item 1)
8	-	Roll (P/O PL 9.2 Item 1)
9	-	Spacer (End) (P/O PL 9.2 Item 1)
10	-	Spacer (Side) (P/O PL 9.2 Item 1)
11	-	Gear (13T/60T) (P/O PL 9.2 Item 1)
12	-	Gear (13T) (P/O PL 9.2 Item 1)
13	-	Gear (60T) (P/O PL 9.2 Item 1)
14	-	Link (P/O PL 9.2 Item 1)
15	-	Bottom Pad (P/O PL 9.2 Item 1)
16	-	End Guide (P/O PL 9.2 Item 1)
17	-	Side Guide (front) (P/O PL 9.2 Item 1)
18	-	Side Guide (rear) (P/O PL 9.2 Item 1)
19	-	Pad (P/O PL 9.2 Item 1)
20	-	End Actuator (P/O PL 9.2 Item 1)
21	-	Side Actuator (P/O PL 9.2 Item 1)
22	-	Bottom Plate (P/O PL 9.2 Item 1)
23	-	Spring (P/O PL 9.2 Item 1)
24	-	Side Actuator (P/O PL 9.2 Item 1)
25	-	Pinion (P/O PL 9.2 Item 1)
26	-	Lock Slide (P/O PL 9.2 Item 1)

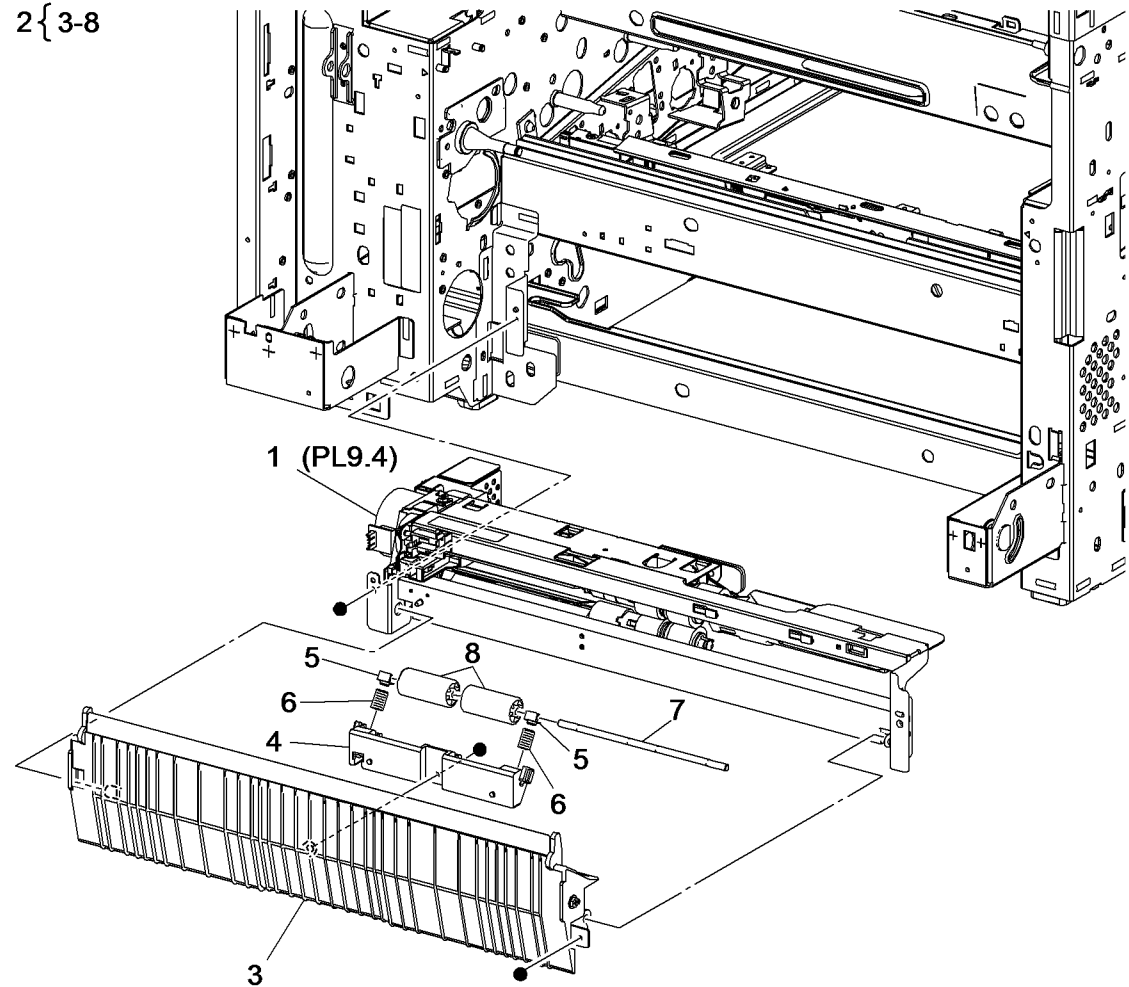


s7800-124

PL 9.3 Tray 2 Feeder

Item	Part	Description
1	059K66610	Tray 2 Feeder Assembly (REP 9.3)
2	054K35142	Chute Assembly (REP 9.4)
3	—	Chute (P/O PL 9.3 Item 2)
4	—	Pinch Guide (P/O PL 9.3 Item 2)
5	—	Spacer (P/O PL 9.3 Item 2)
6	—	Spring (P/O PL 9.3 Item 2)
7	—	Pinch Shaft (P/O PL 9.3 Item 2)
8	—	Pinch Roll (P/O PL 9.3 Item 2)

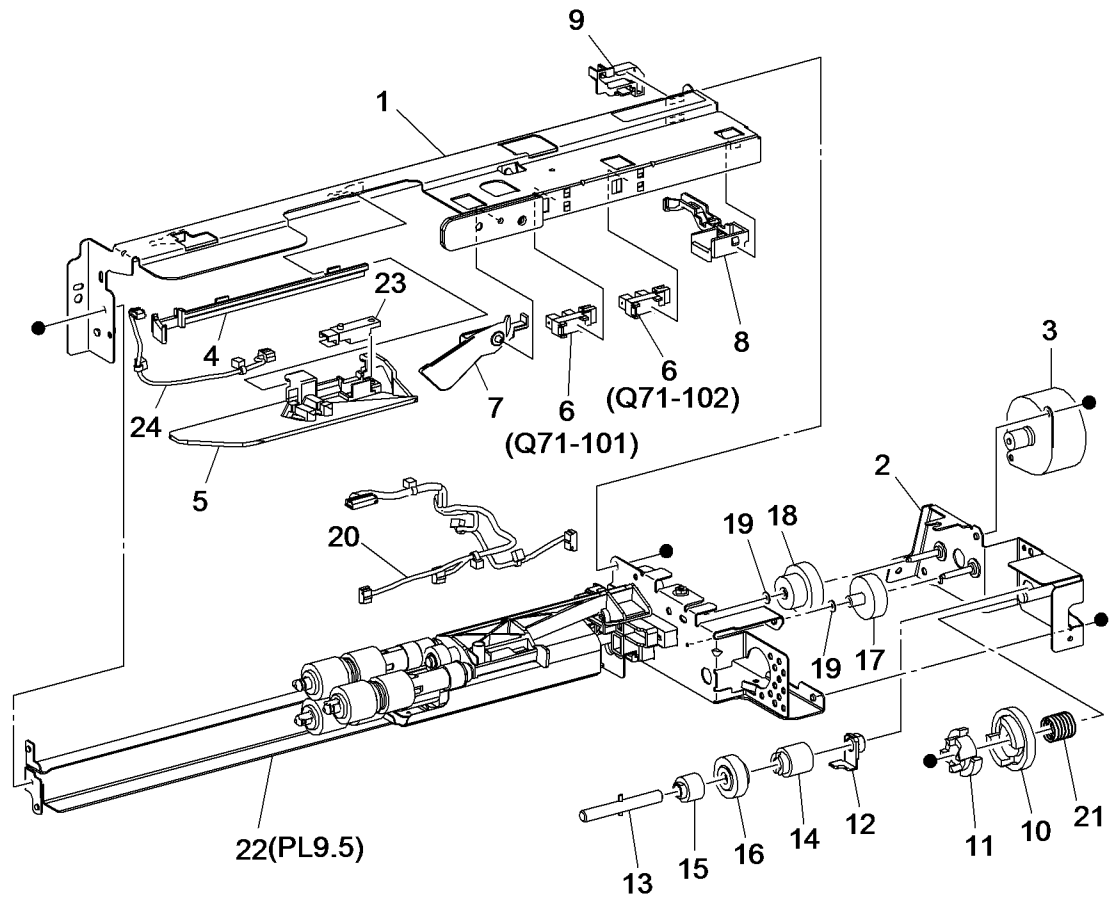
2 { 3-8



s7800-125

PL 9.4 Tray 2 Feeder Assembly (1 of 2)

Item	Part	Description
1	-	Upper Frame Assembly (Not Spared)
2	-	Drive Bracket Assembly (Not Spared)
3	-	Tray 2 Feed/Lift Up Motor (MOT72-001) (Not Spared)
4	-	Rail (Not Spared)
5	-	Chute (Not Spared)
6	930W00123	Tray 2 Nudger Level Sensor (Q71-102) / Tray 2 No Paper Sensor (Q71-101) (REP 9.5)
7	120E22481	Actuator (REP 9.6)
8	-	Upper Harness Holder (Not Spared) (ACO)
9	-	Rear Harness Holder (Not Spared)
10	-	Gear (31T) (Not Spared)
11	-	Spacer (Not Spared)
12	-	Bearing (Not Spared)
13	-	Drive Shaft (Not Spared)
14	-	Gear (13T) (Not Spared)
15	-	One Way Clutch (Not Spared)
16	-	One Way Gear (Not Spared)
17	-	Helical Gear (25T) (Not Spared)
18	-	Helical Gear (29T/24T) (Not Spared)
19	-	Washer (Not Spared)
20	-	Wire Harness (Not Spared)
21	-	Spring (Not Spared)
22	-	Roll Assembly (Not Spared)
23	-	Tray 2 Pre Feed Sensor (Q71-105) (Not Spared) (REP 9.5)
24	-	Pre Feed Sensor Harness (Not Spared)

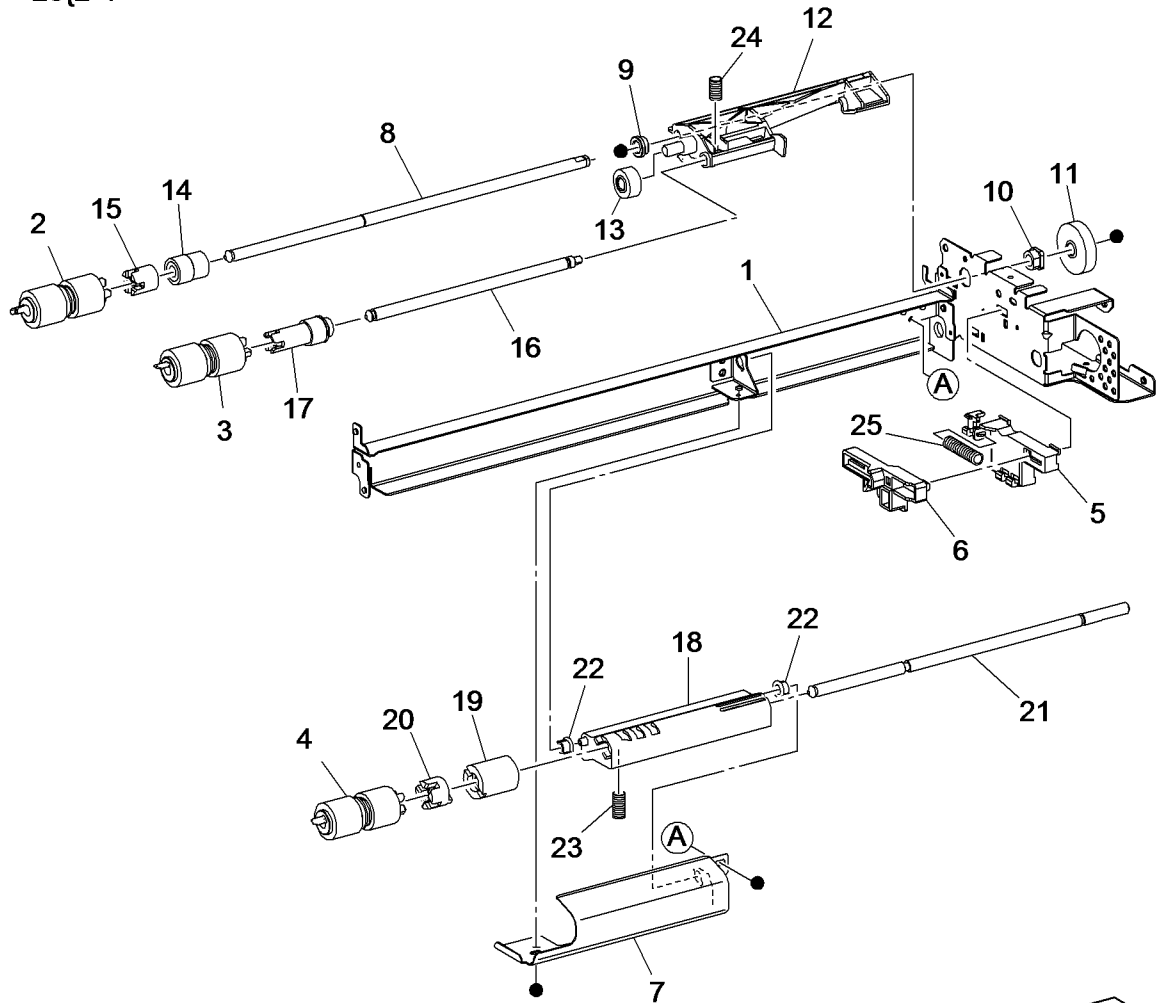


s7800-126

PL 9.5 Tray 2 Feeder Assembly (2 of 2)

Item	Part	Description
1	-	Frame Assembly (Not Spared)
2	-	Feed Roll (P/O PL 9.5 Item 26) (REP 9.7)
3	-	Nudger Roll (P/O PL 9.5 Item 26) (REP 9.7)
4	-	Retard Roll (P/O PL 9.5 Item 26) (REP 9.7)
5	-	Holder (Not Spared)
6	-	Lever (Not Spared)
7	-	Feed-in Chute (Not Spared)
8	-	Feed Shaft (Not Spared)
9	-	Bearing (Not Spared)
10	-	Sleeve Bearing (Not Spared)
11	-	Helical Gear (25T) (Not Spared)
12	-	Nudger Support (Not Spared)
13	-	Spur Gear (29T) (Not Spared)
14	-	Clutch Assembly (25T) (Not Spared) (REP 9.8)
15	-	One Way Clutch (Not Spared) (REP 9.8)
16	-	Nudger Shaft (Not Spared)
17	-	Gear (25T) (Not Spared)
18	-	Retard Support (Not Spared)
19	005K09290	Friction Clutch (REP 9.8)
20	-	Spacer (Not Spared)
21	-	Retard Shaft (Not Spared)
22	-	Retard Bearing (Not Spared)
23	-	Spring (Not Spared)
24	-	Spring (Not Spared)
25	-	Spring (Not Spared)
26	109R00790	Feed Roll Kit

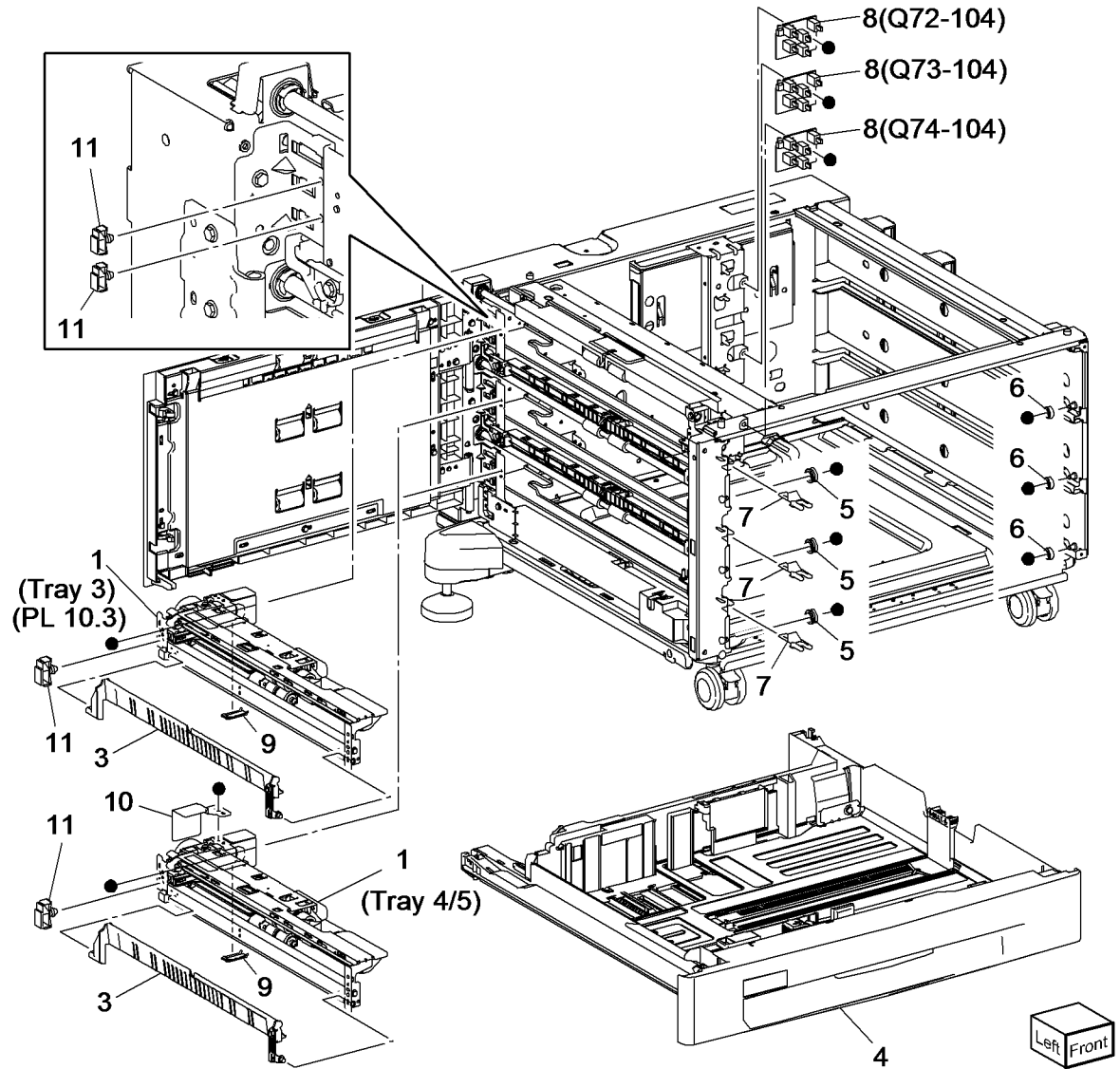
26{2-4



s7800-127

PL 10.1 3 Tray Module

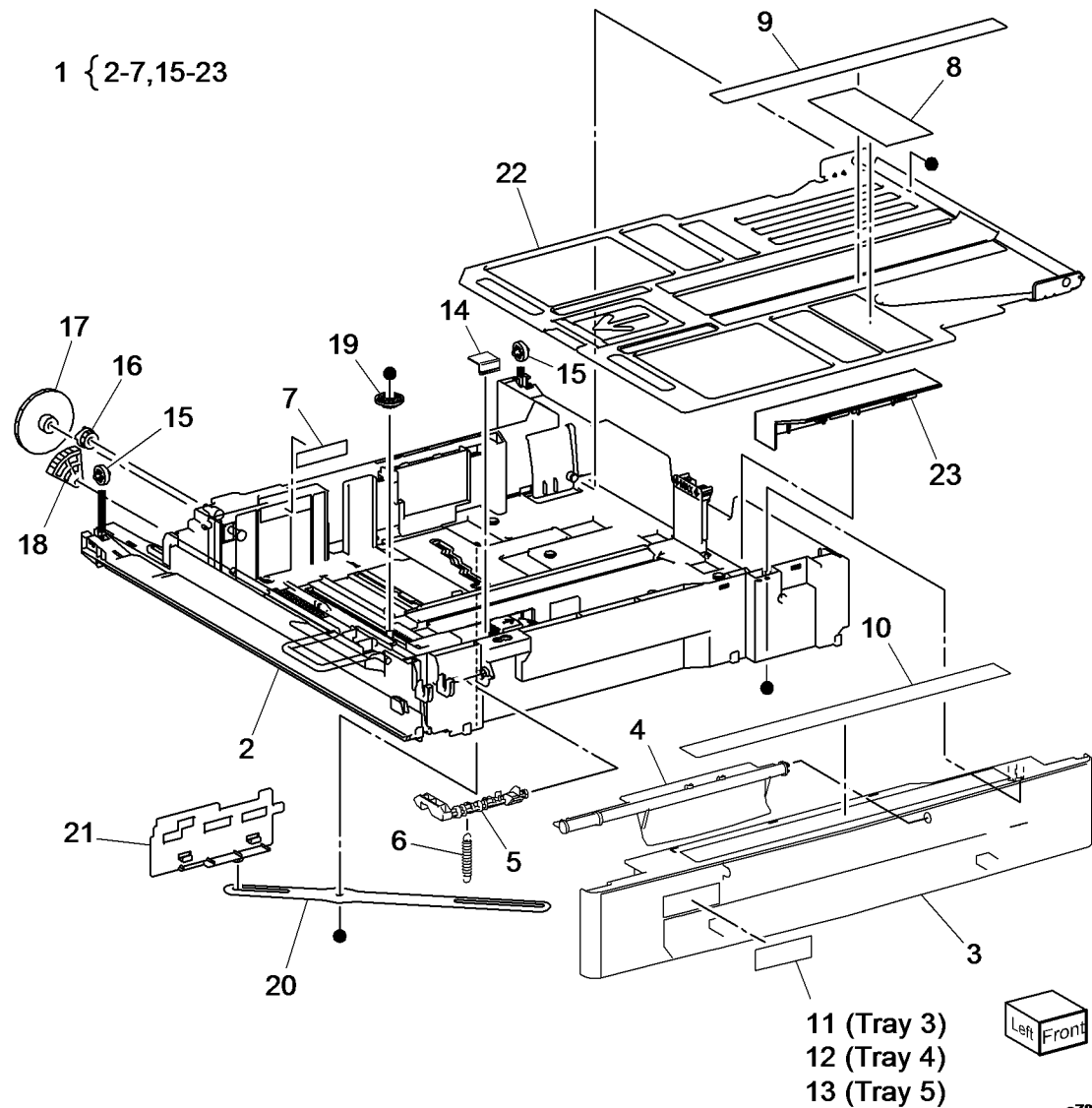
Item	Part	Description
1	059K67140	Tray 3 Feeder Assembly (REP 10.1)/Tray 4 Feeder Assembly (REP 10.2)/Tray 5 Feeder Assembly (REP 10.3)
2	-	Not Used
3	054E36441	Feed Out Chute (REP 10.1, REP 10.2, REP 10.3)
4	-	Tray 3/4/5 Unit (Not Spared)
5	-	Roller (Not Spared)
6	-	Roller (Not Spared)
7	-	Stopper (Not Spared)
8	110K12100	Tray 3 Paper Size Sensor (Q72-104)/Tray 4 Paper Size Sensor (Q73-104)/Tray 5 Paper Size Sensor (Q74-104) (REP 10.4)
9	-	Sensor Cover (Not Spared)
10	-	Bracket (Not Spared)
11	-	Clamp (Not Spared)



s7800-128

PL 10.2 Tray 3/4/5

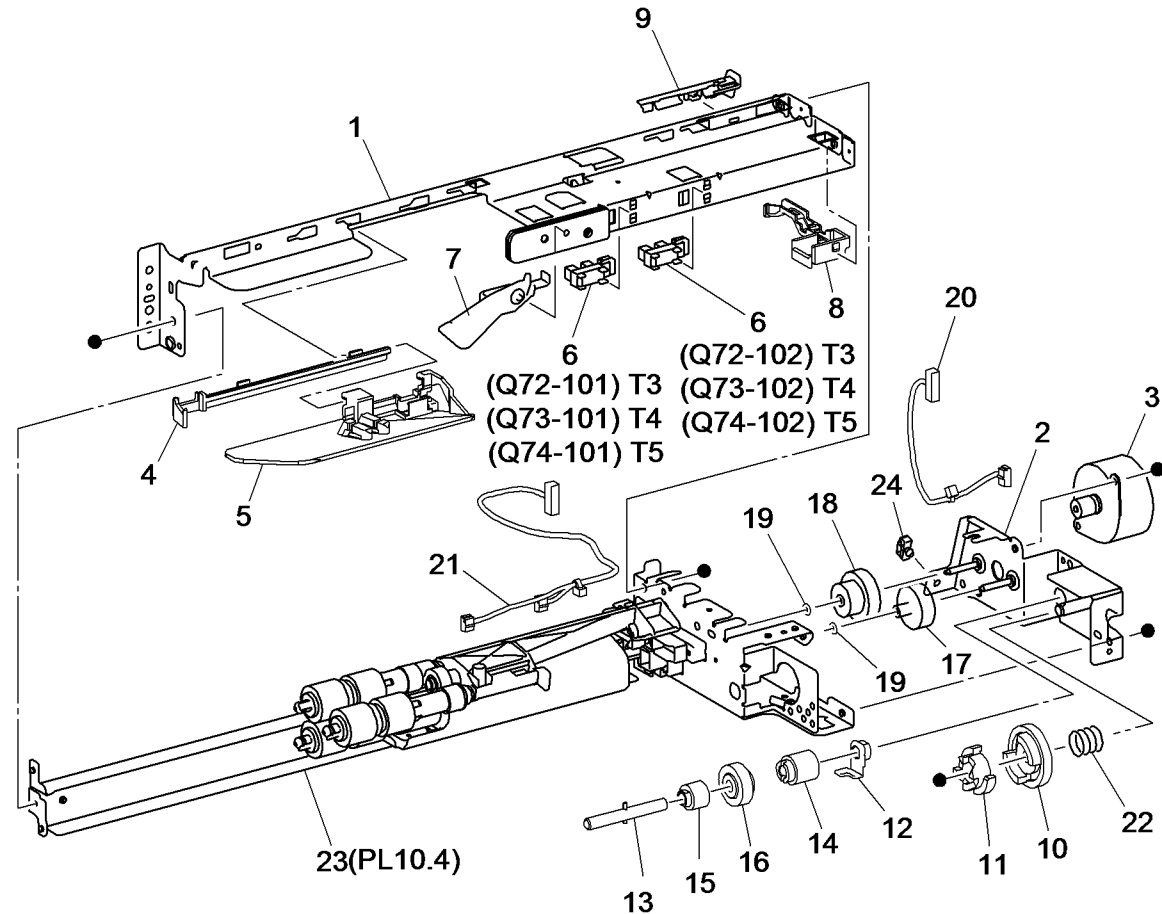
Item	Part	Description
1	050K65255	Tray 3/4/5 Assembly
2	-	Tray Assembly (P/O PL 10.2 Item 1)
3	-	Front Cover (P/O PL 10.2 Item 1)
4	-	Lever (P/O PL 10.2 Item 1)
5	-	Latch (P/O PL 10.2 Item 1)
6	-	Spring (P/O PL 10.2 Item 1)
7	-	Label (Max) (P/O PL 10.2 Item 1)
8	-	Side Size Label (Not Spared)
9	-	End Size Label (Not Spared)
10	-	Label (Instruction) (Not Spared)
11	-	Label Tray No 3 (Not Spared)
12	-	Label Tray No 4 (Not Spared)
13	-	Label Tray No 5 (Not Spared)
14	-	Slide lock block (Not Spared)
15	-	Roll (P/O PL 10.2 Item 1)
16	-	Gear (13T) (P/O PL 10.2 Item 1)
17	-	Gear (13T/60T) (P/O PL 10.2 Item 1)
18	-	Gear (60T) (P/O PL 10.2 Item 1)
19	-	Pinion (P/O PL 10.2 Item 1)
20	-	Link (P/O PL 10.2 Item 1)
21	-	End Actuator (P/O PL 10.2 Item 1)
22	-	Bottom Plate (P/O PL 10.2 Item 1)
23	-	Rail Cover (Tray 3 only) (P/O PL 10.2 Item 1)



s7800-227

PL 10.3 Tray 3/4/5 Feeder Assembly (1 of 2)

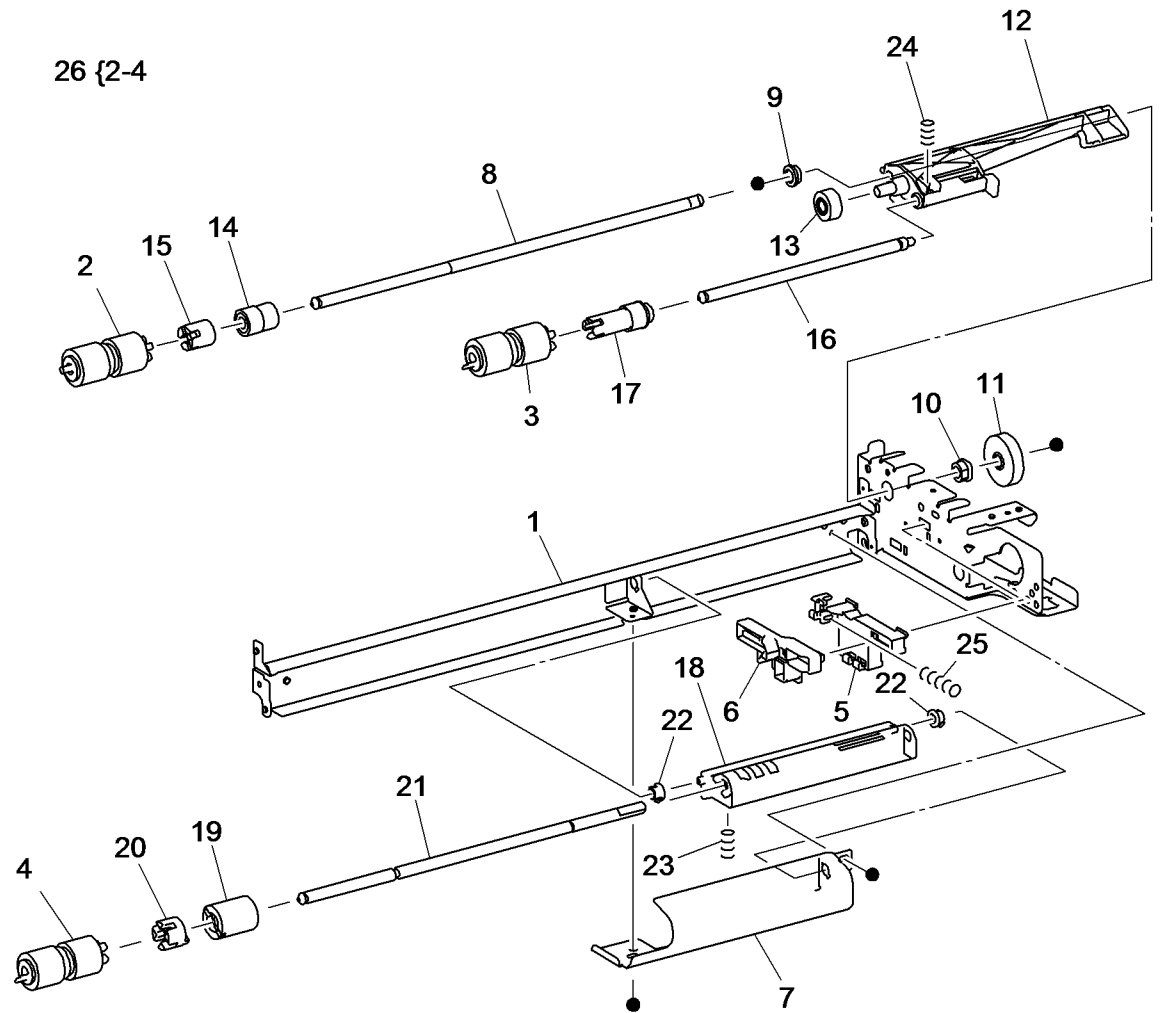
Item	Part	Description
1	-	Upper Frame Assembly (P/O PL 10.1 Item 1)
2	-	Drive Bracket Assembly (Not Spared)
3	-	Tray 3/4/5 Feed/Lift Up Motor (Not Spared)
4	-	Rail (P/O PL 10.1 Item 1)
5	-	Chute (Not Spared)
6	930W00123	Tray 3 Nudger Level Sensor (Q72-102), Tray 3 No Paper Sensor (Q72-101)/Tray 4 Nudger Level Sensor (Q73-102), Tray 4 No Paper Sensor (Q73-101)/Tray 5 Nudger Level Sensor (Q74-102), Tray 5 No Paper Sensor (Q74-101) (REP 10.5)
7	120E22481	Actuator (REP 9.6)
8	-	Upper Harness Holder (P/O PL 10.1 Item 1)
9	-	Rear Harness Holder (P/O PL 10.1 Item 1)
10	-	Gear (31T) (Not Spared)
11	-	Spacer (Not Spared)
12	-	Bearing (Not Spared)
13	-	Drive Shaft (P/O PL 10.3 Item 24)
14	-	Gear (13T) (Not Spared)
15	-	One Way Clutch (Not Spared)
16	-	One Way Gear (Not Spared)
17	-	Helical Gear (25T) (Not Spared)
18	-	Helical Gear (29T/19T) (P/O PL 10.1 Item 1)
19	-	Washer (P/O PL 10.1 Item 1)
20	-	Harness Assembly (Motor) (P/O PL 10.1 Item 1)
21	-	Harness Assembly (Sensor) (P/O PL 10.1 Item 1)
22	-	Spring (P/O PL 10.1 Item 1)
23	-	Roll Assembly (REF: PL 10.4)
24	-	Clamp (Not Spared)



s7800-129

PL 10.4 Tray 3/4/5 Feeder Assembly (2 of 2)

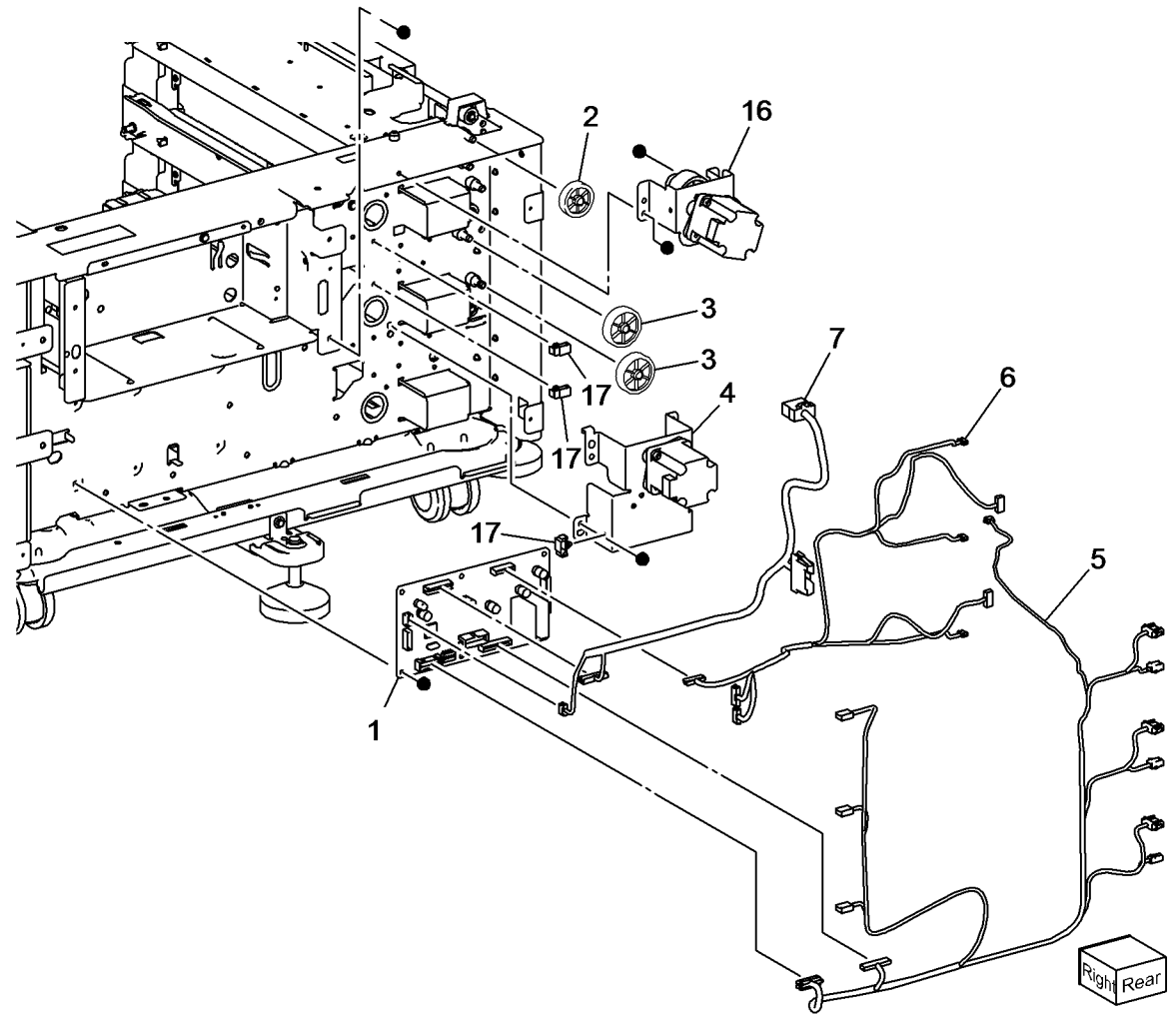
Item	Part	Description
1	-	Frame Assembly (P/O PL 10.1 Item 1)
2	-	Feed Roll (P/O PL 10.4 Item 26) (REP 10.6)
3	-	Nudger Roll (P/O PL 10.4 Item 26) (REP 10.6)
4	-	Retard Roll (P/O PL 10.4 Item 26) (REP 10.6)
5	-	Holder (Not Spared)
6	-	Lever (Not Spared)
7	-	Feed In Chute (Not Spared)
8	-	Feed Shaft (Not Spared)
9	-	Bearing (Not Spared)
10	-	Sleeve Bearing (Not Spared)
11	-	Helical Gear (30T) (Not Spared)
12	-	Nudger Support (Not Spared)
13	-	Spur Gear (29T) (Not Spared)
14	-	Clutch Assembly (25T) (Not Spared) (REP 10.7)
15	-	One Way Clutch (Not Spared) (REP 10.7)
16	-	Nudger Shaft (Not Spared)
17	-	Gear (25T) (Not Spared)
18	-	Retard Support (Not Spared)
19	005K09290	Friction Clutch (REP 10.7)
20	-	Spacer (Not Spared)
21	-	Retard Shaft (Not Spared)
22	-	Retard Bearing (Not Spared)
23	-	Compression Retard Spring (Not Spared)
24	-	Nudger Compression Spring (P/O PL 10.1 Item 1)
25	-	Compression Lever Spring (P/O PL 15.1 Item 1)
26	109R00790	Feed Roll Kit



s7800-130

PL 10.9 Electrical - 3T

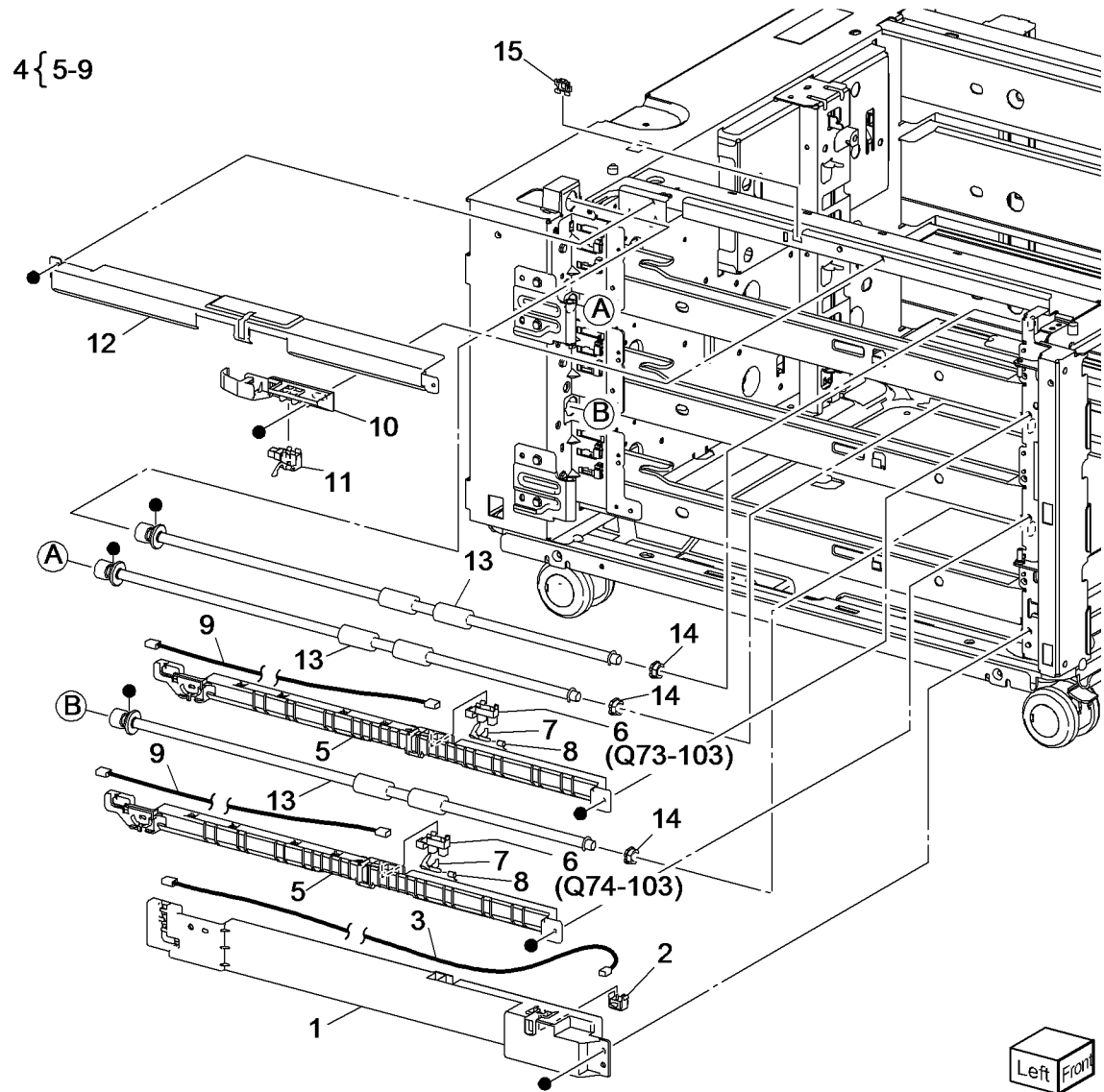
Item	Part	Description
1	960K54151	Tray Module PWB (REP 10.8)
2	807E20700	Gear (34T) (REP 10.9)
3	807E20720	Gear (39T) (REP 10.9)
4	127K60810	Tray Module Take Away Motor (MOT77-050) (REP 10.10)
5	-	Harness Assembly (Sensor) (Not Spared)
6	-	Harness Assembly (Motor) (Not Spared)
7	-	Harness assembly (Not Spared)
8	-	Not Used
9	-	Not Used
10	-	Not Used
11	-	Not Used
12	-	Not Used
13	-	Not Used
14	-	Not Used
15	-	Not Used
16	127K60800	Tray Module Take Away Motor 2 (MOT77-050) (REP 10.11)
17	-	Clamp (Not Spared)



s7800-131

PL 10.12 Roller

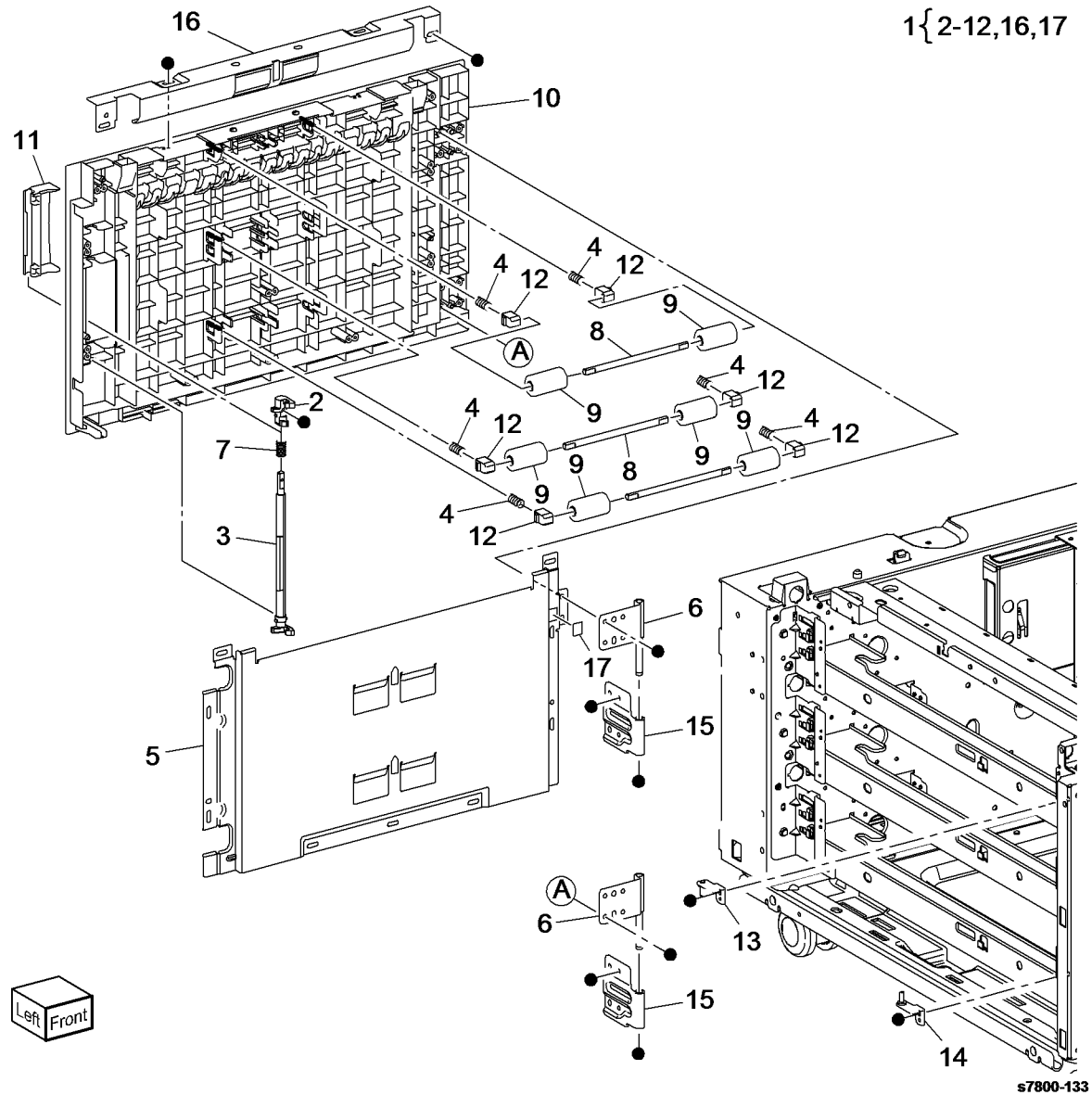
Item	Part	Description
1	-	Cover
2	110E12220	Tray Module Left Hand Cover Switch (S77-306) (REP 10.12)
3	-	Wire Harness (Not Spared)
4	054K34144	Chute Assembly (REP 10.13)
5	-	Chute (P/O PL 10.12 Item 4)
6	930W00123	Tray 4 Feed Out Sensor (Q73-103)/ Tray 5 Feed Out Sensor (Q74-103) (REP 10.13)
7	-	Actuator (P/O PL 10.12 Item 4)
8	809E82720	Spring
9	-	Wire Harness (P/O PL 10.12 Item 4)
10	032E27970	Sensor Guide
11	130K64121	Tray 3 Feed Out Sensor (Q72-103) (REP 10.14)
12	-	Chute (Not Spared)
13	059K60191	Tray 3/4/5 Take Away Roll (REP 10.15)
14	413W88650	Ball Bearing
15	-	Clamp (Not Spared)



s7800-132

PL 10.13 3 TM Left Hand Cover Assembly

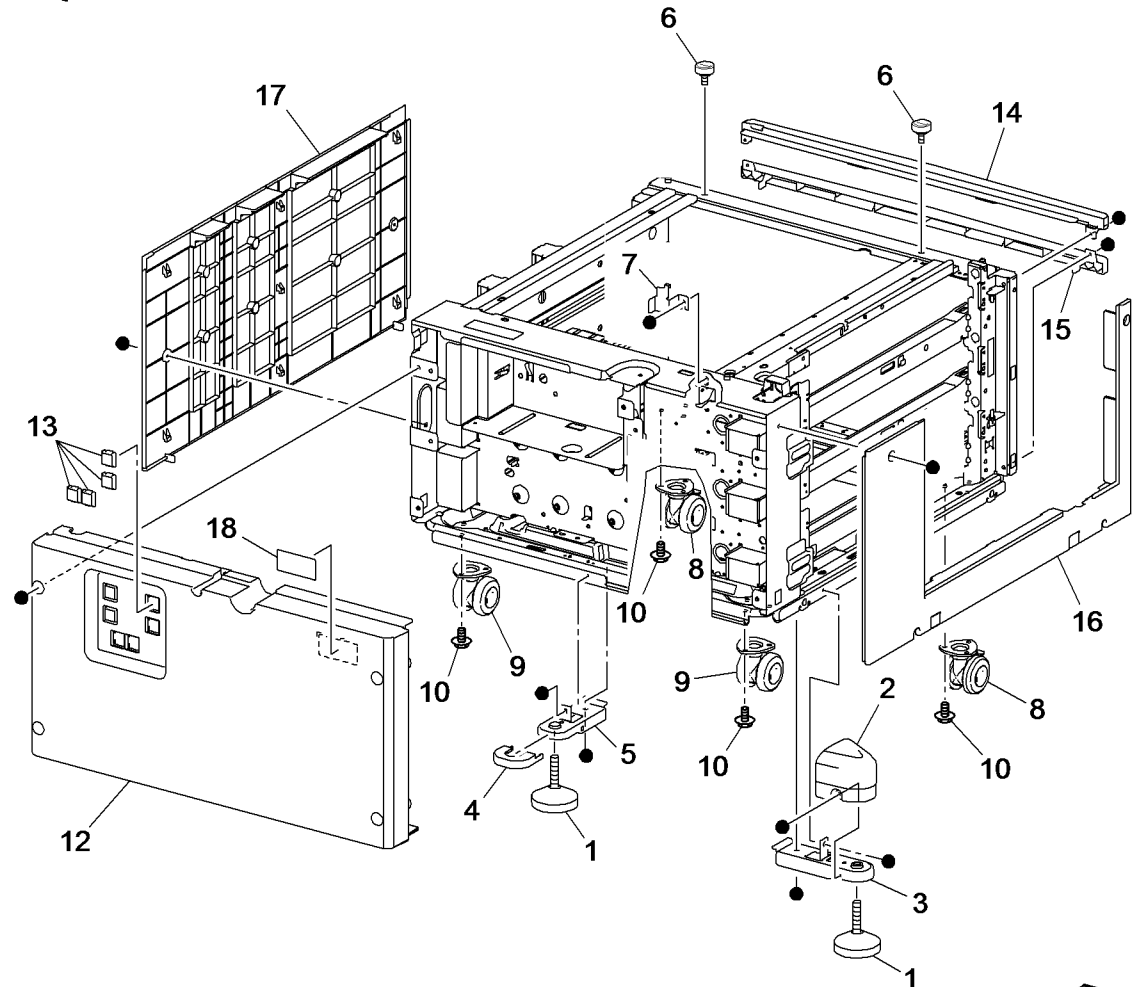
Item	Part	Description
1	848K16851	Left Hand Cover Assembly (REP 10.16)
2	-	Hook (P/O PL 10.13 Item 1)
3	-	Latch (P/O PL 10.13 Item 1)
4	-	Pinch Spring (P/O PL 10.13 Item 1)
5	-	Left Hand Chute (P/O PL 10.13 Item 1)
6	-	Bracket Assembly (P/O PL 10.13 Item 1)
7	-	Spring (P/O PL 10.13 Item 1)
8	-	Pinch Shaft (P/O PL 10.13 Item 1)
9	-	Pinch Roll (P/O PL 10.13 Item 1)
10	-	Left Hand Cover (P/O PL 10.13 Item 1)
11	-	Handle (P/O PL 10.13 Item 1)
12	-	Pinch Bearing (P/O PL 10.13 Item 1)
13	068K55701	Bracket Assembly
14	068K55711	Bracket Assembly
15	-	Bracket
16	-	Left Hand Upper Chute (P/O PL 10.13 Item 1)
17	-	Label (P/O PL 10.13 Item 1)



PL 10.14 3TM Covers

Item	Part	Description
1	017K94590	Adjuster Foot Assembly
2	848E27150	Foot Cover
3	-	Foot Bracket (Not Spared) (ACO)
4	-	Foot Cover (Not Spared)
5	-	Foot Bracket (Not Spared)
6	-	Docking Screw (Not Spared)
7	-	Joint Bracket (Not Spared)
8	-	Caster Assembly (S) (Not Spared)
9	-	Caster Assembly (Not Spared)
10	-	Screw (Not Spared)
11	-	Rear Cover Assembly (Not Spared)
12	-	Rear Cover (P/O PL 10.14 Item 11)
13	-	Blind Cover (P/O PL 10.14 Item 11)
14	-	Top Cover (Not Spared)
15	-	Foot Cover (Not Spared)
16	-	Left Cover (Not Spared)
17	-	Right Cover (Not Spared)
18	-	Label (Not Spared)

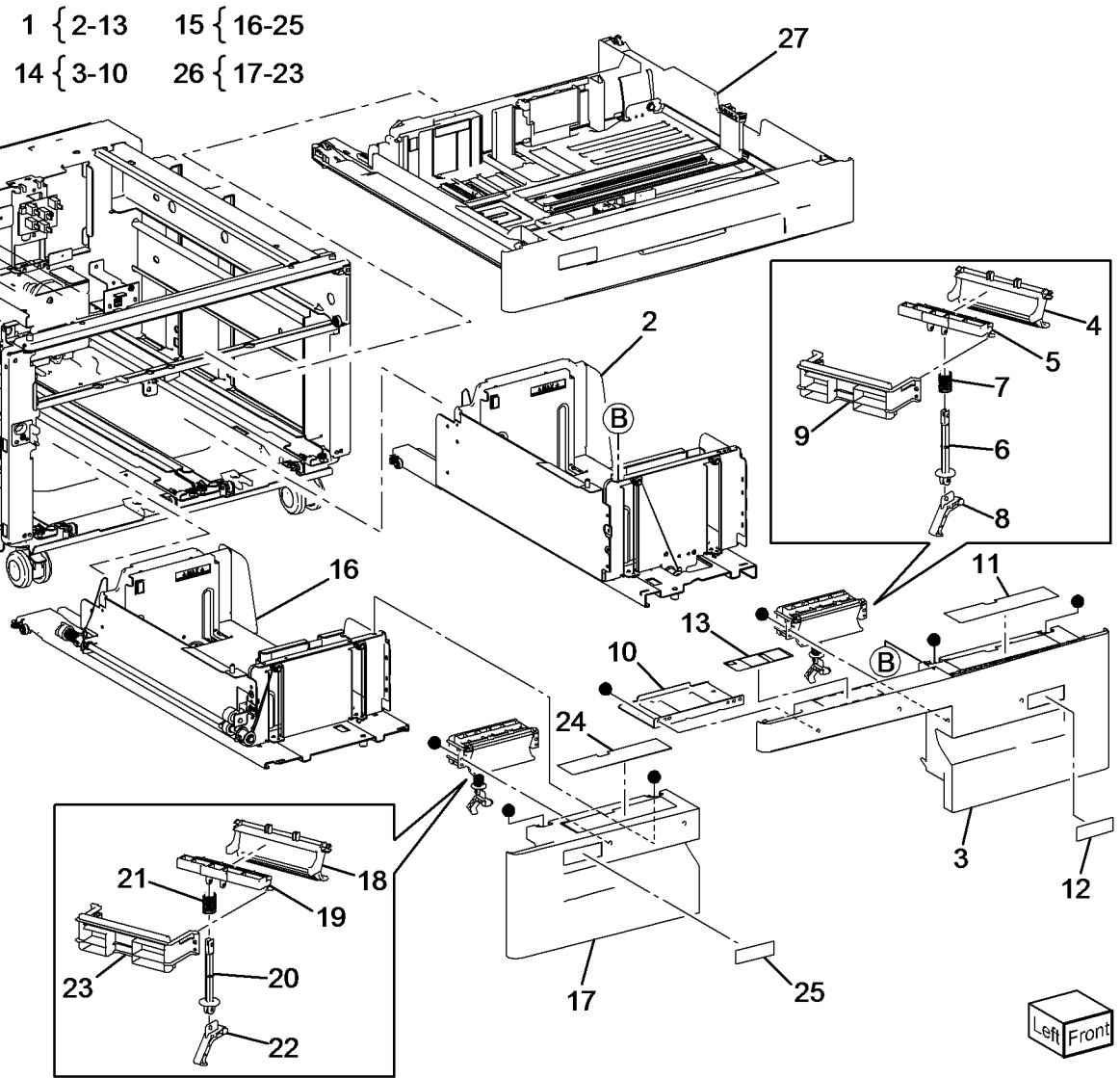
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PL 11.1 Tray 3/4/5 Feeder Assembly - TT

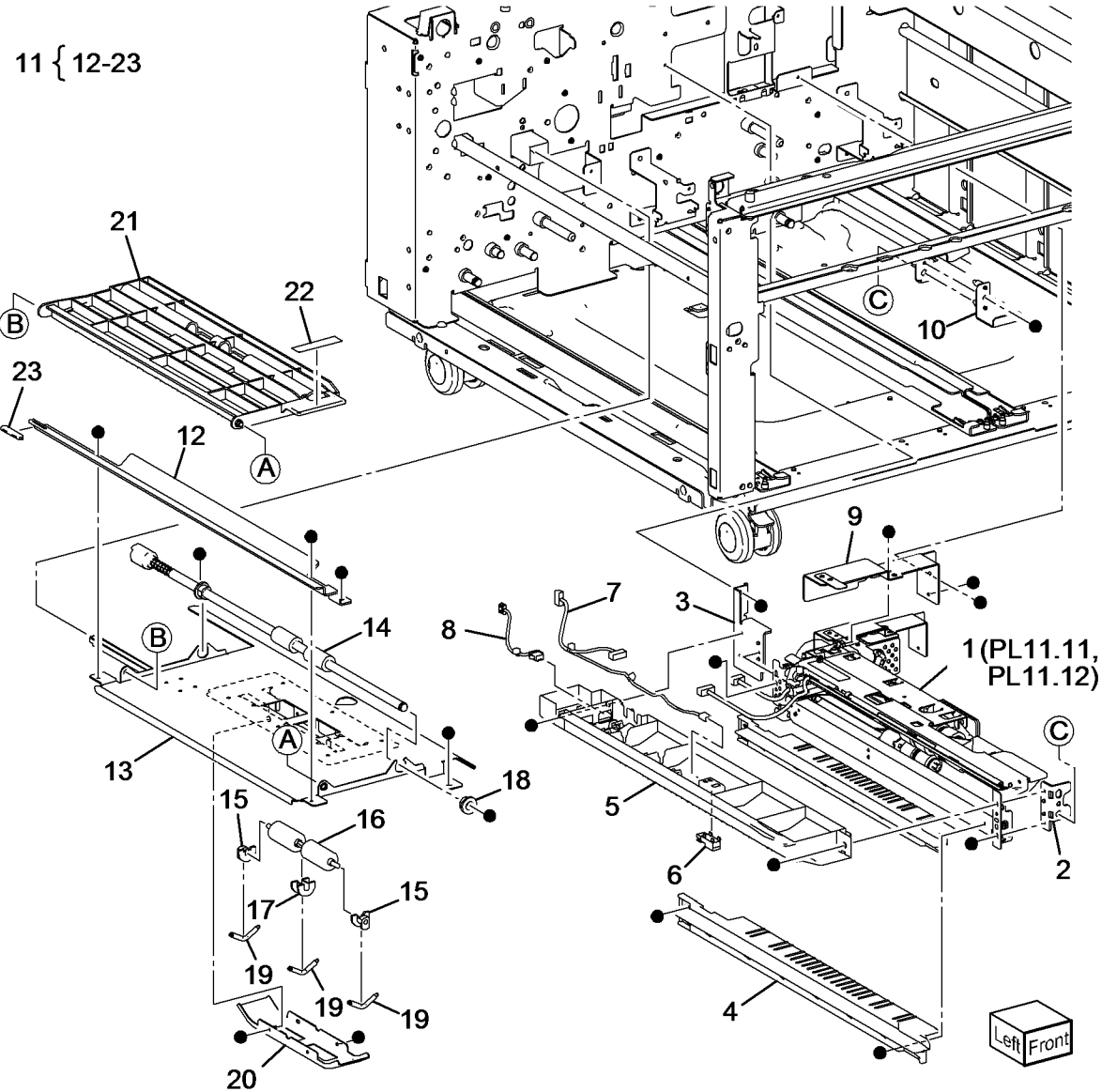
Item	Part	Description
1	050K66710	Tray 5 Assembly (REP 11.1)
2	-	Tray 5 (P/O PL 11.1 Item 1)
3	-	Tray 5 Cover (P/O PL 11.1 Item 14)
4	-	Lever (P/O PL 11.1 Item 14)
5	-	Link (P/O PL 11.1 Item 14)
6	-	Link (P/O PL 11.1 Item 14)
7	-	Spring (P/O PL 11.1 Item 14)
8	-	Latch (P/O PL 11.1 Item 14)
9	-	Cover (P/O PL 11.1 Item 14)
10	-	Transport Bracket (P/O PL 11.1 Item 14)
11	-	Label (Instruction) (P/O PL 11.1 Item 1)
12	-	Label (Tray No 5) (P/O PL 11.1 Item 1)
13	-	Label (P/O PL 11.1 Item 1)
14	-	Tray 5 Cover (Not Spared)
15	050K66700	Tray 4 Assembly (REP 11.2)
16	-	Tray 4 (P/O PL 11.1 Item 15)
17	-	Tray 4 Cover (P/O PL 11.1 Item 15)
18	-	Lever (P/O PL 11.1 Item 26)
19	-	Link (P/O PL 11.1 Item 26)
20	-	Link (P/O PL 11.1 Item 26)
21	-	Spring (P/O PL 11.1 Item 26)
22	-	Latch (P/O PL 11.1 Item 26)
23	-	Cover (P/O PL 11.1 Item 26)
24	-	Label (Instruction) (P/O PL 11.1 Item 15)
25	-	Label (Tray No 4) (P/O PL 11.1 Item 15)
26	-	Tray 4 Cover (Not Spared)
27	-	Tray 3 Assembly



s7800-135

PL 11.5 Tray 5 Paper Feed - TT

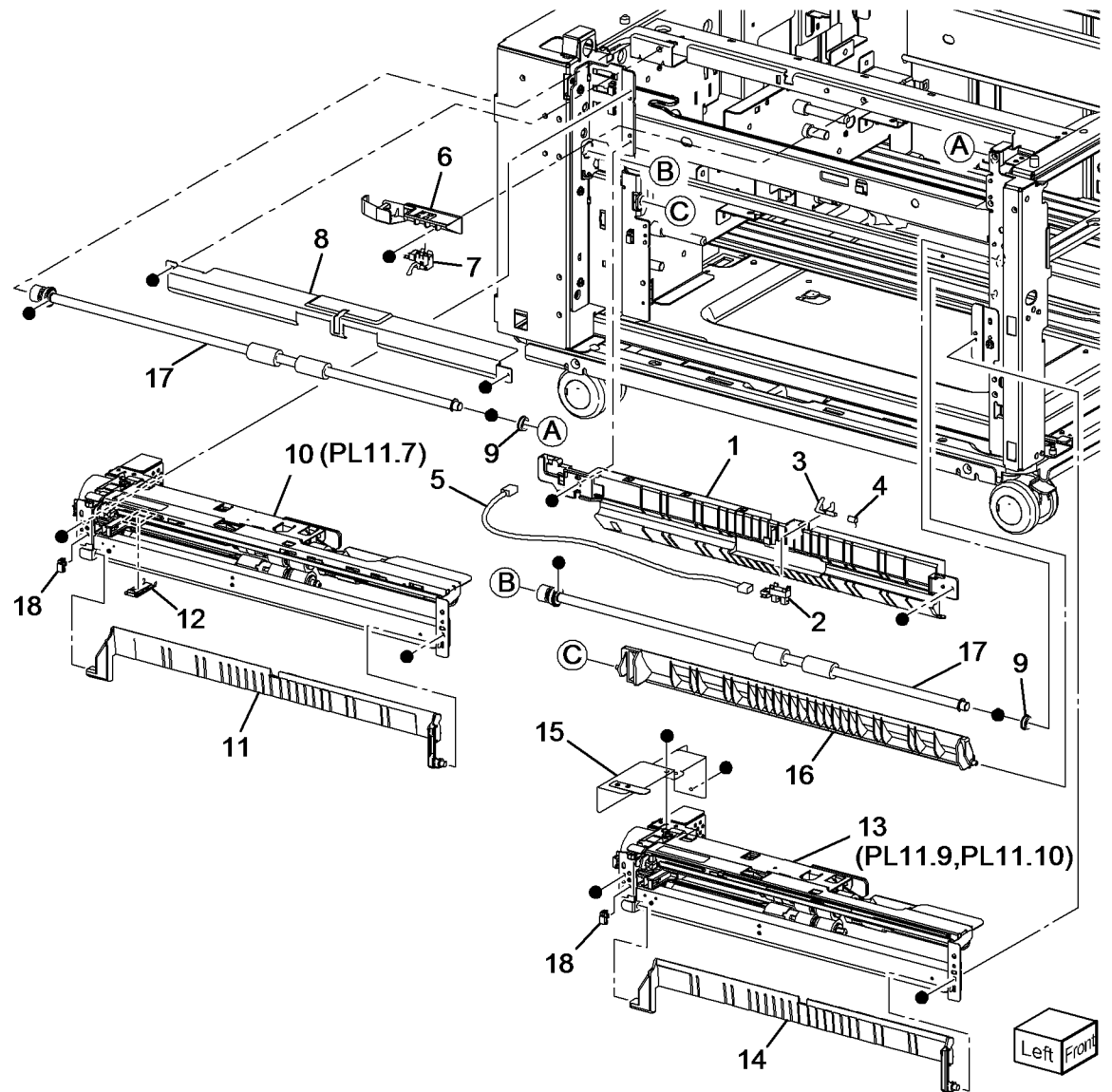
Item	Part	Description
1	059K66621	Tray 5 Feeder Assembly (REP 11.3)
2	-	Bracket (Not Spared)
3	-	Bracket (Not Spared)
4	-	Lower Chute (Not Spared)
5	-	Upper Chute (Not Spared)
6	930W00211	Tray 5 Feed Out Sensor (Q74-103)
7	-	Wire Harness (Sensor) (Not Spared)
8	-	Wire Harness (Motor) (Not Spared)
9	-	Cover (Not Spared)
10	-	Stud Bracket (Not Spared)
11	059K54320	Tray 5 Transport Assembly (REP 11.4)
12	-	Transport Rail (P/O PL 11.5 Item 11)
13	-	Lower Chute (P/O PL 11.5 Item 11)
14	-	Tray 5 Transport Roll (P/O PL 11.5 Item 11)
15	-	Bearing (P/O PL 11.5 Item 11)
16	-	Pinch roll (P/O PL 11.5 Item 11)
17	-	Bearing (P/O PL 11.5 Item 11)
18	-	Bearing (P/O PL 11.5 Item 11)
19	-	Spring (P/O PL 11.5 Item 11)
20	-	Cover (P/O PL 11.5 Item 11)
21	-	Upper Chute (P/O PL 11.5 Item 11)
22	-	Label (P/O PL 11.5 Item 11)
23	-	Spacer (P/O PL 11.5 Item 11)



s7800-136

PL 11.6 Tray 3/4 Paper Feed - TT

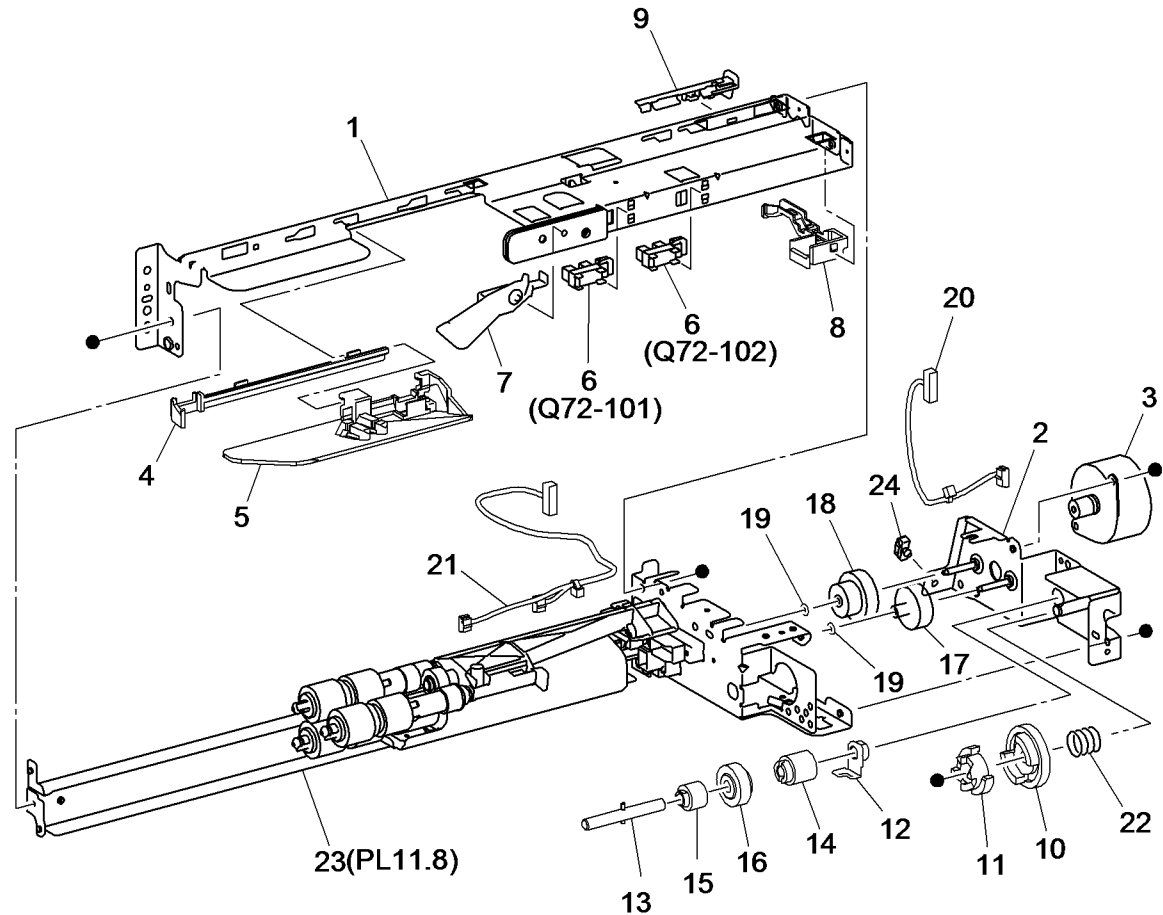
Item	Part	Description
1	-	Chute (Not Spared)
2	930W00123	Tray 4 Feed Out Sensor (Q73-103)
3	-	Actuator (Not Spared)
4	-	Spring (Not Spared)
5	-	Wire Harness (Not Spared)
6	-	Sensor Guide (Not Spared)
7	130K64121	Tray 3 Feed Out Sensor (Q72-103)
8	-	Chute (Not Spared)
9	-	Ball Bearing (Not Spared)
10	059K67140	Tray 3 Feeder Assembly (REF: PL 11.7) (REP 11.5)
11	054E36441	Feed Out Chute
12	-	Sensor Cover (Not Spared)
13	059K66621	Tray 4 Feeder Assembly (REF: PL 11.9, PL 11.10) (REP 11.6)
14	054E36441	Feed Out Chute
15	-	Cover (Not Spared)
16	-	Lower Chute (Not Spared)
17	059K60191	Take Away Roll Assembly
18	-	Clamp (Not Spared)



s7800-137

PL 11.7 Tray 3 Feeder -TT (1 of 2)

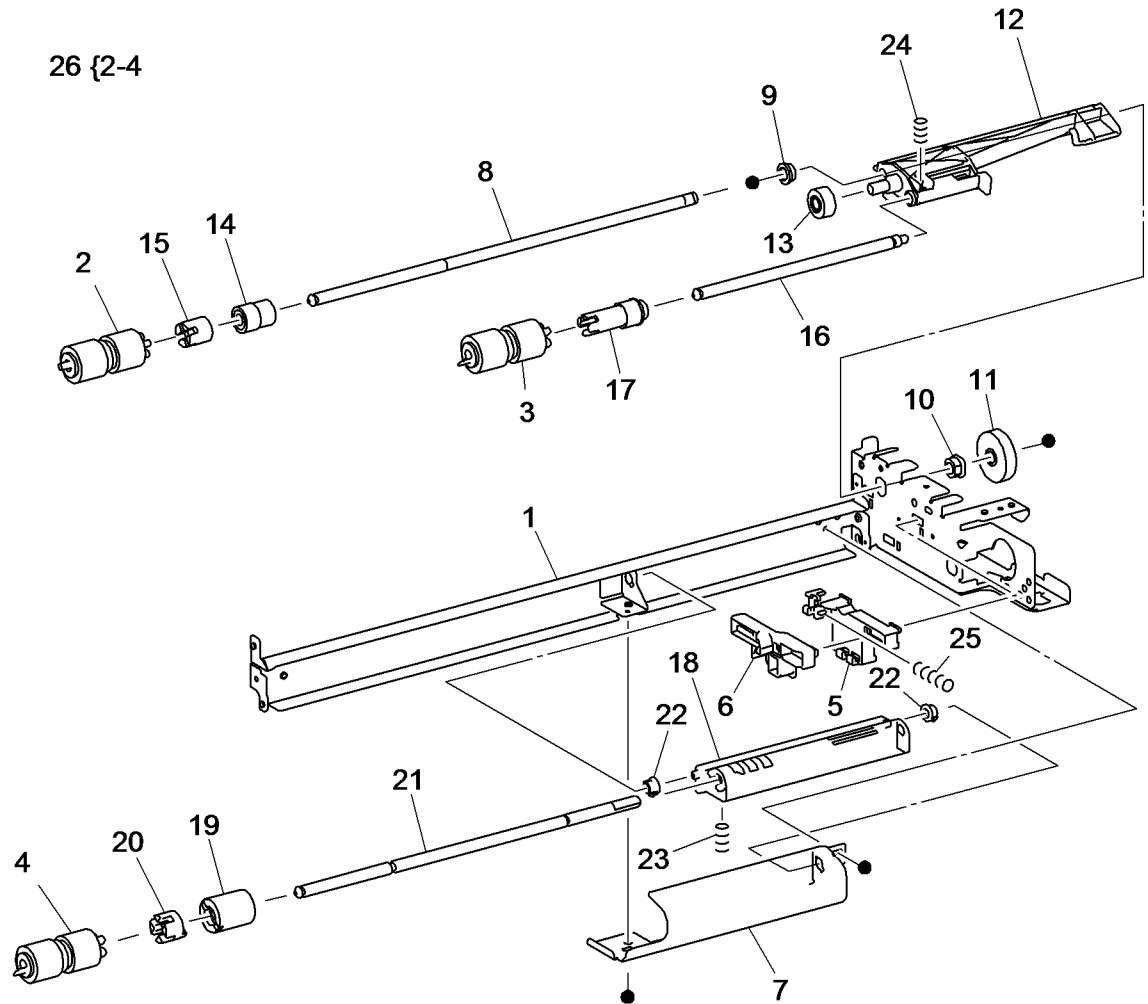
Item	Part	Description
1	-	Upper Frame Assembly (P/O PL 11.6 Item 10)
2	-	Drive Bracket Assembly (P/O PL 11.6 Item 10)
3	-	Tray 3 Feed / Lift Up Motor (MOT73-001)
4	-	Rail (Not Spared)
5	-	Chute (P/O PL 11.6 Item 10)
6	930W00123	Tray 3 Nudger Level Sensor (Q72-102)/Tray 3 No Paper Sensor (Q72-101)
7	120E22481	Actuator
8	-	Upper Harness Holder (P/O PL 11.6 Item 10)
9	-	Rear Harness Holder (Not Spared)
10	-	Gear (31T) (Not Spared)
11	-	Spacer (Not Spared)
12	-	Bearing (Not Spared)
13	-	Drive Shaft (Not Spared)
14	-	Gear (13T) (Not Spared)
15	-	One Way Clutch (Not Spared)
16	-	One Way Gear (Not Spared)
17	-	Helical Gear (25T) (Not Spared)
18	-	Helical Gear (29T/19T) (Not Spared)
19	-	Washer (P/O PL 11.6 Item 10)
20	-	Harness Assembly (Motor) (P/O PL 11.6 Item 10)
21	-	Harness Assembly (Sensor) (P/O PL 11.6 Item 10)
22	-	Spring (P/O PL 11.6 Item 10)
23	-	Roll Assembly (P/O PL 11.6 Item 10)
24	-	Clamp (P/O PL 11.6 Item 10)



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PL 11.8 Tray 3 Feeder - TT (2 of 2)

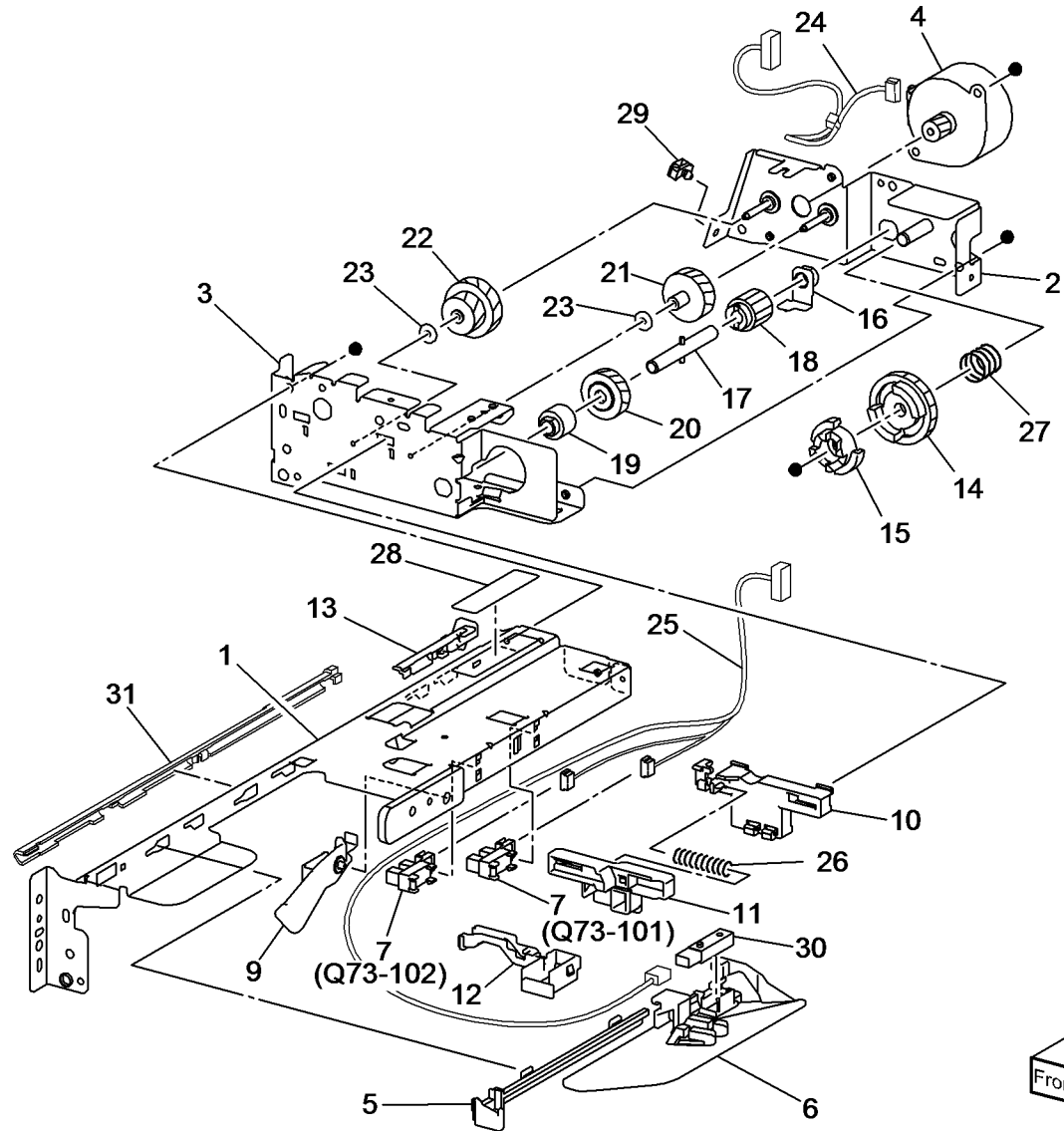
Item	Part	Description
1	-	Frame Assembly (Not Spared)
2	-	Feed Roll (P/O PL 11.8 Item 26) (REP 11.7)
3	-	Nudger Roll (P/O PL 11.8 Item 26) (REP 11.7)
4	-	Retard Roll (P/O PL 11.8 Item 26) (REP 11.7)
5	-	Holder (Not Spared)
6	-	Lever (Not Spared)
7	-	Feed In Chute (Not Spared)
8	-	Feed Shaft (Not Spared)
9	-	Bearing (Not Spared)
10	-	Sleeve Bearing (Not Spared)
11	-	Helical Gear (30T) (Not Spared)
12	-	Nudger Support (Not Spared)
13	-	Spur Gear (29T) (Not Spared)
14	-	Clutch Assembly (25T) (Not Spared)
15	-	One Way Clutch (Not Spared)
16	-	Nudger Shaft (Not Spared)
17	-	Gear (25T) (Not Spared)
18	-	Retard Support (Not Spared)
19	005K09290	Friction Clutch
20	-	Spacer (Not Spared)
21	-	Retard Shaft (Not Spared)
22	-	Retard Bearing (Not Spared)
23	-	Spring (Not Spared)
24	-	Spring (Not Spared)
25	-	Spring (Not Spared)
26	109R00790	Feed Roll Kit



s7800-139

PL 11.9 Tray 4 Feeder - TT (1 of 2)

Item	Part	Description
1	-	Frame (P/O PL 11.6 Item 13)
2	-	Bracket (P/O PL 11.6 Item 2)
3	-	Frame (P/O PL 11.6 Item 13)
4	-	Tray 4 Feed /Lift Up motor (MOT74-001) (Not Spared)
5	-	Rail (Not Spared)
6	-	Chute (Not Spared)
7	930W00123	Tray 4 Nudger Level Sensor (Q73-102)/ Tray 4 No Paper Sensor (Q73-101)
8	-	Not Used
9	120E22481	Actuator
10	-	Holder (P/O PL 11.6 Item 13)
11	-	Lever (P/O PL 11.6 Item 13)
12	-	Upper Harness Holder (P/O PL 11.6 Item 13)
13	-	Rear Harness Holder (P/O PL 11.6 Item 13)
14	-	Gear (Not Spared)
15	-	Spacer (Not Spared)
16	-	Bearing (Not Spared)
17	-	Drive Shaft (Not Spared)
18	-	Gear (Not Spared)
19	-	One Way Clutch (Not Spared)
20	-	One Way Gear (Not Spared)
21	-	Gear (25T) (Not Spared)
22	-	Gear (29T/24T) (Not Spared)
23	-	Washer (P/O PL 11.6 Item 13)
24	-	Harness Assembly (Motor) (P/O PL 11.6 Item 13)
25	-	Harness Assembly (Sensor) (P/O PL 11.6 Item 13)
26	-	Spring (P/O PL 11.6 Item 13)
27	-	Spring (P/O PL 11.6 Item 13)
28	-	Label (Not Spared)
29	-	Clamp (Not Spared)
30	-	Tray 4 Pre Feed Sensor (Q73-105) (Not Spared)
31	-	Harness Holder (Not Spared)

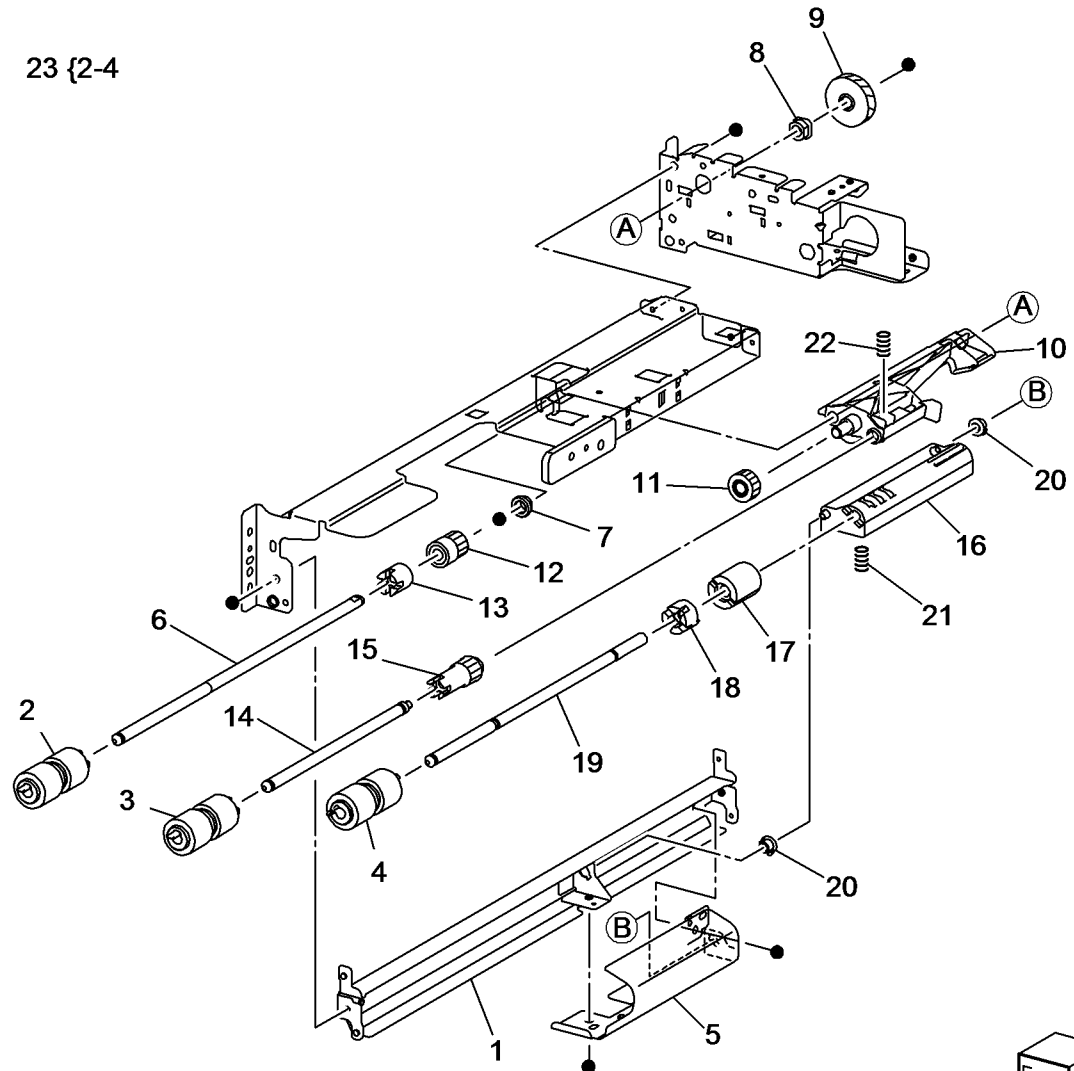


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PL 11.10 Tray 4 Feeder - TT (2 of 2)

Item	Part	Description
1	-	Frame (P/O PL 11.6 Item 13)
2	-	Feed Roll (P/O PL 11.10 Item 23) (REP 11.7)
3	-	Nudger Roll (P/O PL 11.10 Item 23) (REP 11.7)
4	-	Retard Roll (P/O PL 11.10 Item 23) (REP 11.7)
5	-	Feed In Chute (Not Spared)
6	-	Feed Shaft (P/O PL 11.6 Item 13)
7	-	Bearing (Not Spared)
8	-	Sleeve Bearing (Not Spared)
9	-	Gear (25T) (Not Spared)
10	-	Support (P/O PL 11.6 Item 13)
11	-	Gear (29T) (Not Spared)
12	-	Clutch (25T) (Not Spared)
13	-	One Way Clutch (Not Spared)
14	-	Nudger Shaft (P/O PL 11.6 Item 13)
15	-	Gear (25T) (Not Spared)
16	-	Support (P/O PL 11.6 Item 13)
17	005K09290	Friction Clutch
18	-	Spacer (Not Spared)
19	-	Retard Shaft (P/O PL 11.6 Item 13)
20	-	Retard Bearing (Not Spared)
21	-	Spring (P/O PL 11.6 Item 13)
22	-	Spring (Not Spared)
23	109R00790	Feed Roll Kit

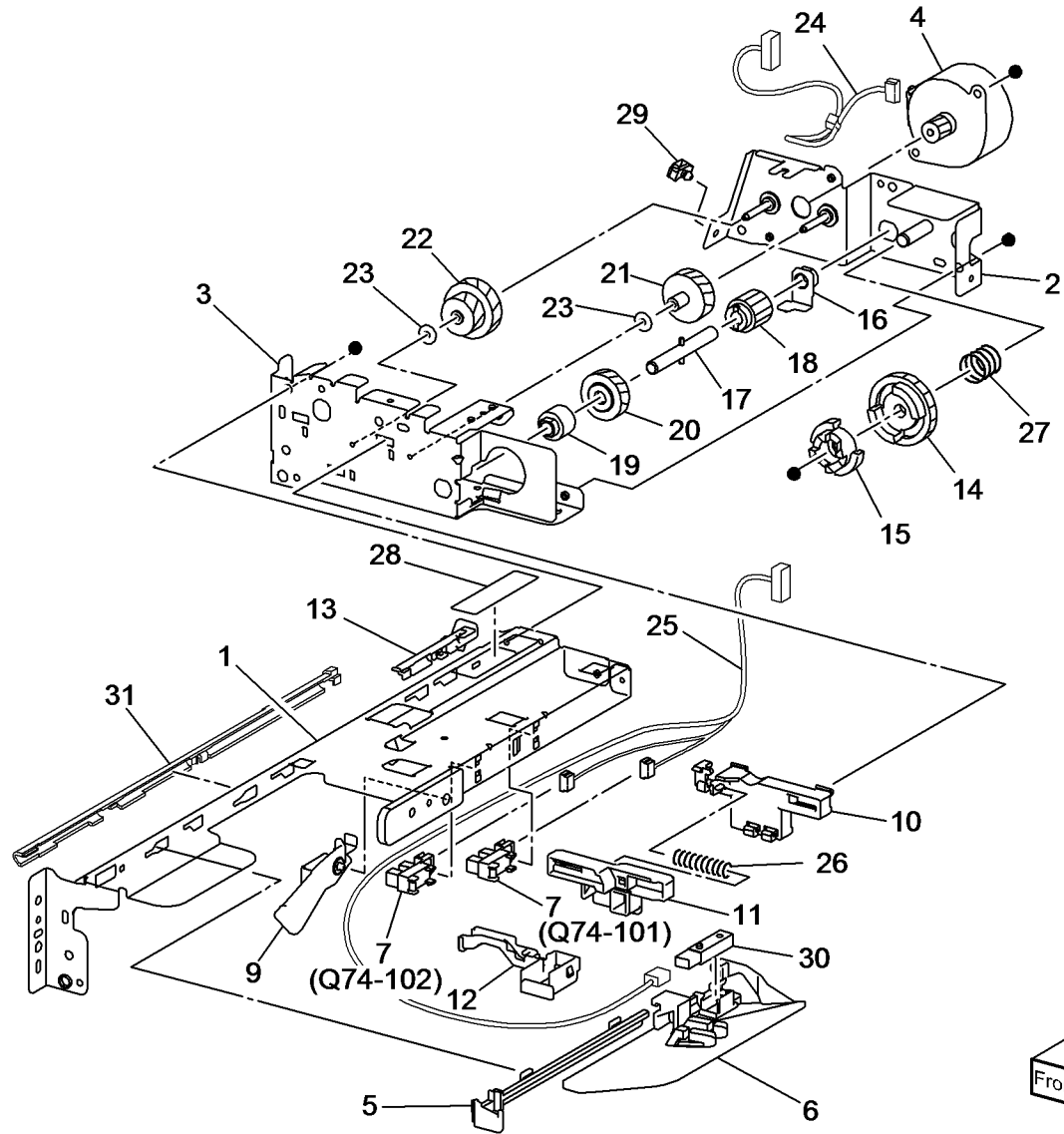
23 {2-4}



s7800-141

PL 11.11 Tray 5 Feeder - TT (1 of 2)

Item	Part	Description
1	-	Frame (P/O PL 11.5 Item 1)
2	-	Bracket (P/O PL 11.5 Item 1)
3	-	Frame (P/O PL 11.5 Item 1)
4	-	Tray 5 Feed /Lift Up Motor (Not Spared)
5	-	Rail (Not Spared)
6	-	Chute (Not Spared)
7	930W00123	Tray 5 Nudger Level Sensor (Q74-102)/Tray 5 No Paper Sensor (Q74-101)
8	-	Not Used
9	120E22481	Actuator
10	-	Holder (P/O PL 11.5 Item 1)
11	-	Lever (Not Spared)
12	-	Upper Harness Holder (P/O PL 11.5 Item 1)
13	-	Rear Harness Holder (P/O PL 11.5 Item 1)
14	-	Gear (Not Spared)
15	-	Spacer (Not Spared)
16	-	Bearing (Not Spared)
17	-	Drive Shaft (Not Spared)
18	-	Gear (Not Spared)
19	-	One Way Clutch (Not Spared)
20	-	One Way Gear (Not Spared)
21	-	Gear (25T) (Not Spared)
22	-	Gear (29T/19T) (Not Spared)
23	-	Washer (Not Spared)
24	-	Harness Assembly (Motor) (P/O PL 11.5 Item 1)
25	-	Harness Assembly (Sensor) (P/O PL 11.5 Item 1)
26	-	Spring (P/O PL 11.5 Item 1)
27	-	Spring (P/O PL 11.5 Item 1)
28	-	Label (Not Spared)
29	-	Clamp (P/O PL 11.5 Item 1)
30	-	Tray 5 Pre Feed Sensor (Q74-105) (Not Spared)
31	-	Harness Holder (Not Spared)

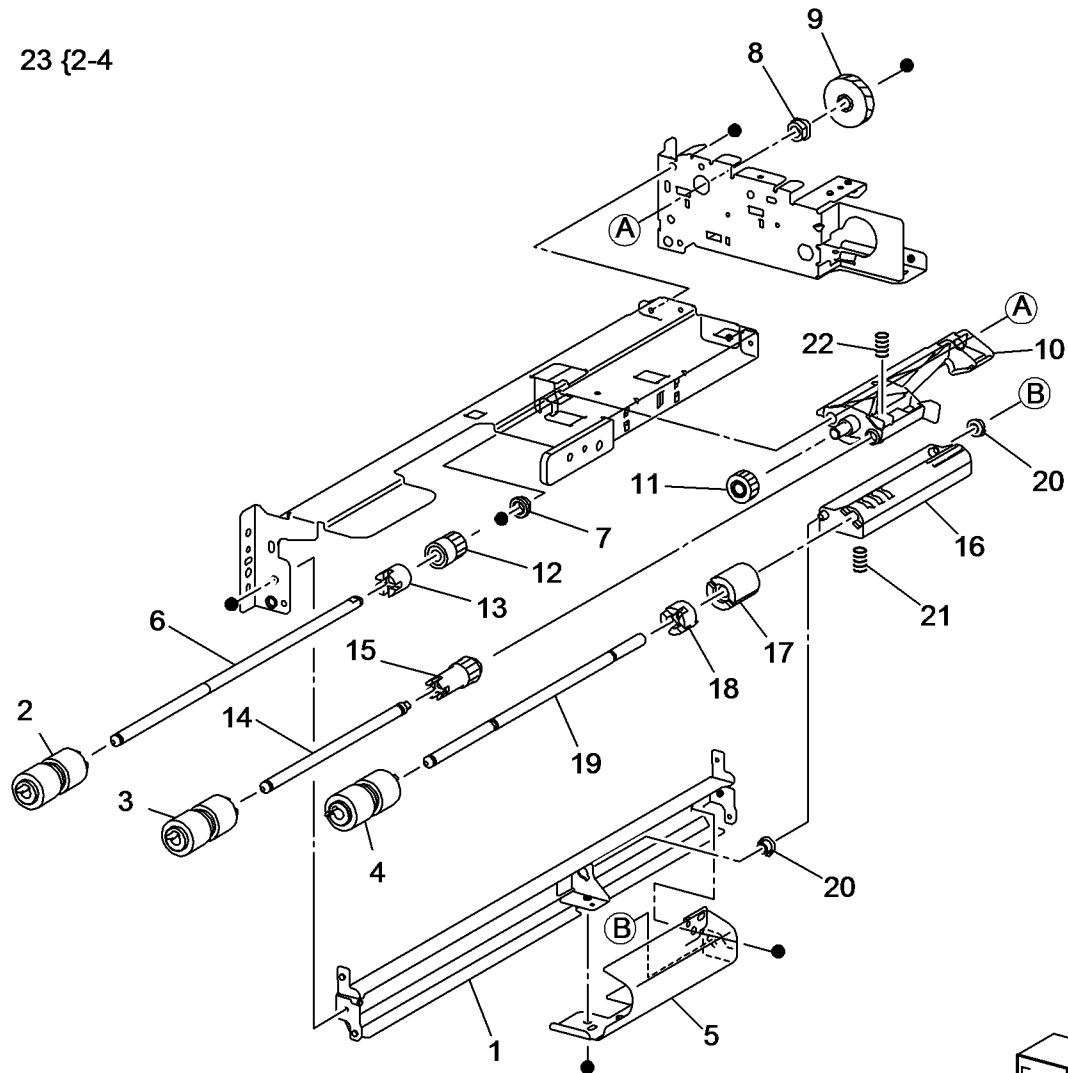


s7800-142

PL 11.12 Tray 5 Feeder - TT (2 of 2)

Item	Part	Description
1	-	Frame (Not Spared)
2	-	Feed Roll (P/O PL 11.12 Item 23) (REP 11.8)
3	-	Nudger Roll (P/O PL 11.12 Item 23) (REP 11.8)
4	-	Retard Roll (P/O PL 11.12 Item 23) (REP 11.8)
5	-	Feed In Chute (Not Spared)
6	-	Feed Shaft (Not Spared)
7	-	Bearing (Not Spared)
8	-	Sleeve Bearing (Not Spared)
9	-	Gear (25T) (Not Spared)
10	-	Support (Not Spared)
11	-	Gear (29T) (Not Spared)
12	-	Clutch (25T) (Not Spared)
13	-	One Way Clutch (Not Spared)
14	-	Nudger Shaft (Not Spared)
15	-	Gear (25T) (Not Spared)
16	-	Support (Not Spared)
17	005K09290	Friction Clutch
18	-	Spacer (Not Spared)
19	-	Retard Shaft (Not Spared)
20	-	Retard Bearing (Not Spared)
21	-	Spring (Not Spared)
22	-	Spring (Not Spared)
23	109R00790	Feed Roll Kit

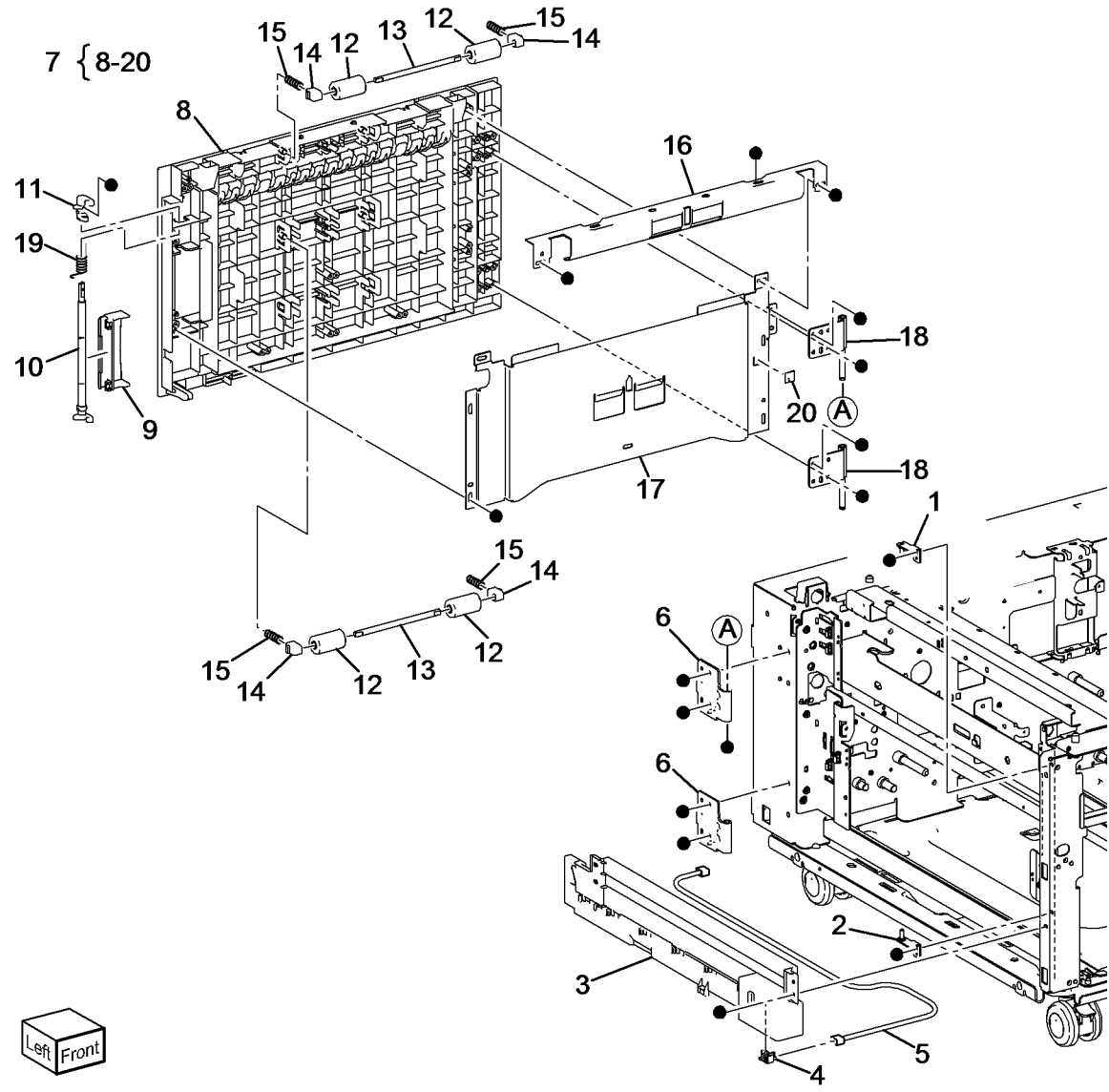
23 {2-4}



s7800-143

PL 11.13 Left Cover Assembly - TT

Item	Part	Description
1	-	Bracket (Upper) (Not Spared)
2	-	Bracket (Lower) (Not Spared)
3	-	Cover (Not Spared)
4	-	Tray Module Left Hand Cover Switch (Not Spared)
5	-	Wire Harness (Not Spared)
6	068K55791	Hinge Bracket
7	848K17711	Left Cover Assembly
8	-	Left Cover (P/O PL 11.13 Item 7) (REP 11.9)
9	-	Handle (P/O PL 11.13 Item 7)
10	-	Latch (P/O PL 11.13 Item 7)
11	-	Hook (P/O PL 11.13 Item 7)
12	-	Pinch Roll (P/O PL 11.13 Item 7)
13	-	Pinch Shaft (P/O PL 11.13 Item 7)
14	-	Pinch Bearing (P/O PL 11.13 Item 7)
15	-	Pinch Spring (P/O PL 11.13 Item 7)
16	-	Upper Chute (P/O PL 11.13 Item 7)
17	-	Lower Chute (P/O PL 11.13 Item 7)
18	-	Hinge (P/O PL 11.13 Item 7)
19	-	Spring (P/O PL 11.13 Item 7)
20	-	Label (P/O PL 11.13 Item 7)

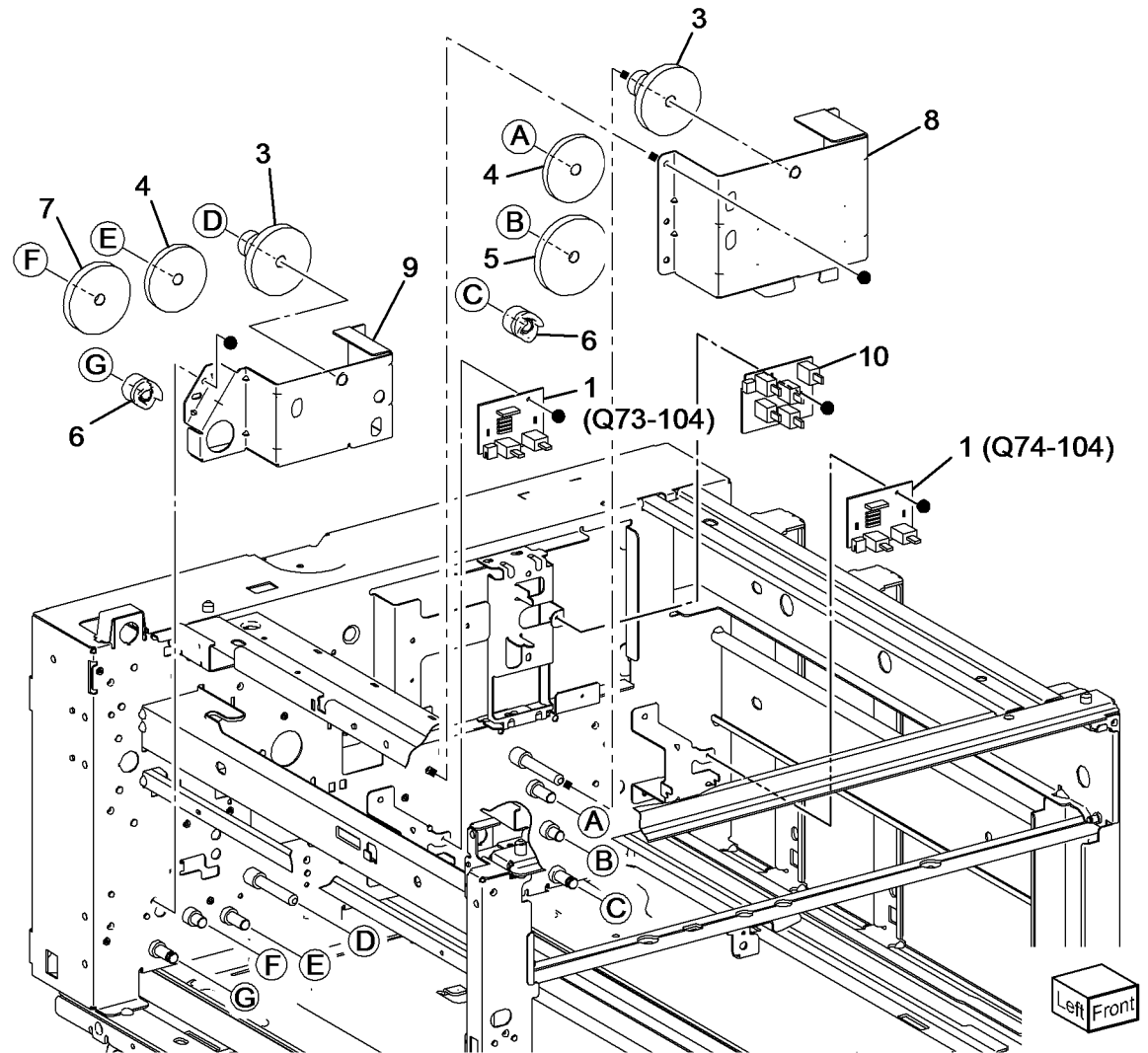


Left Front

s7800-144

PL 11.15 Tray 3/4/5 Paper Size Sensor, Tray 4/5 Lift Gear - TT

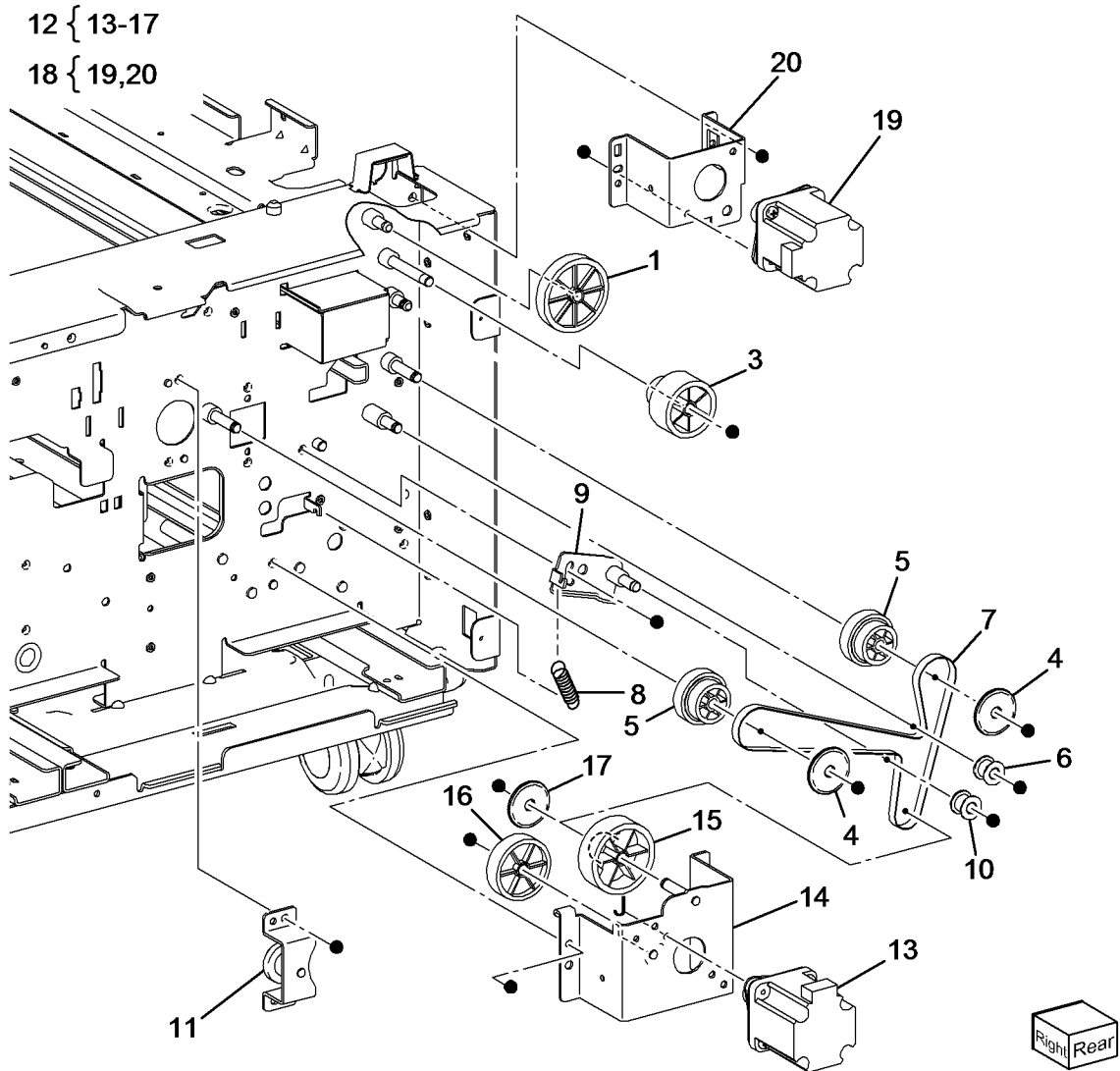
Item	Part	Description
1	110K11820	Tray 4 Paper Size Sensor (Q73-104)/Tray 5 Paper Size Sensor (Q74-104)
2	-	Not Used
3	007E78320	Gear (17/50)
4	007E78330	Gear (16/48)
5	007E78340	Gear (57)
6	807E16730	Gear (18)
7	007E78350	Gear (51)
8	-	Bracket (Not Spared)
9	-	Bracket (Not Spared)
10	110K12100	Tray 3 Paper Size Sensor (Q72-104)



s7800-145

PL 11.16 Drive - TT

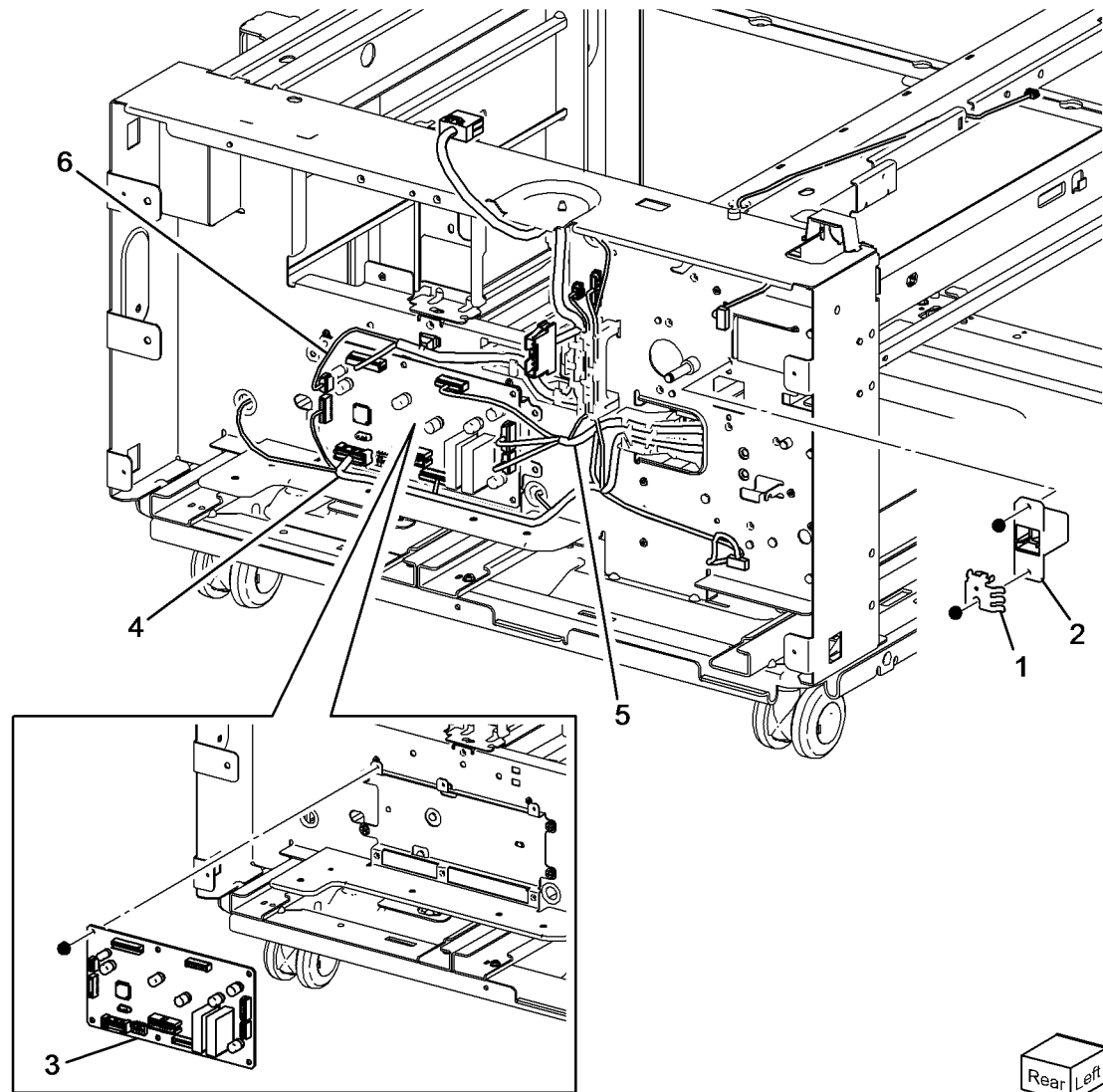
Item	Part	Description
1	807E20740	Gear (52)
2	-	Not Used
3	807E20730	Gear (20T/65T)
4	005E24940	Collar
5	020E45190	Gear Pulley
6	059E03590	Roll
7	423W56254	Belt
8	-	Spring (Not Spared)
9	-	Tension Bracket (Not Spared)
10	-	Roll (Not Spared)
11	068K55650	Gear Bracket
12	127K60441	Tray Module Take Away Motor 2 Assembly
13	-	Tray Module Take Away Motor 2 (MOT77-050) (P/O PL 11.16 Item 12) (REP 11.11)
14	-	Bracket (P/O PL 11.16 Item 12)
15	807E20760	Gear (81)
16	807E25640	Gear (70)
17	-	Collar (P/O PL 11.16 Item 12)
18	127K60452	Tray Module Take Away Motor Assembly (REP 11.12)
19	-	Tray Module Take Away Motor (P/O PL 11.16 Item 18) (REP 11.12)
20	-	Bracket (P/O PL 11.16 Item 18)



s7800-146

PL 11.17 Electrical - TT

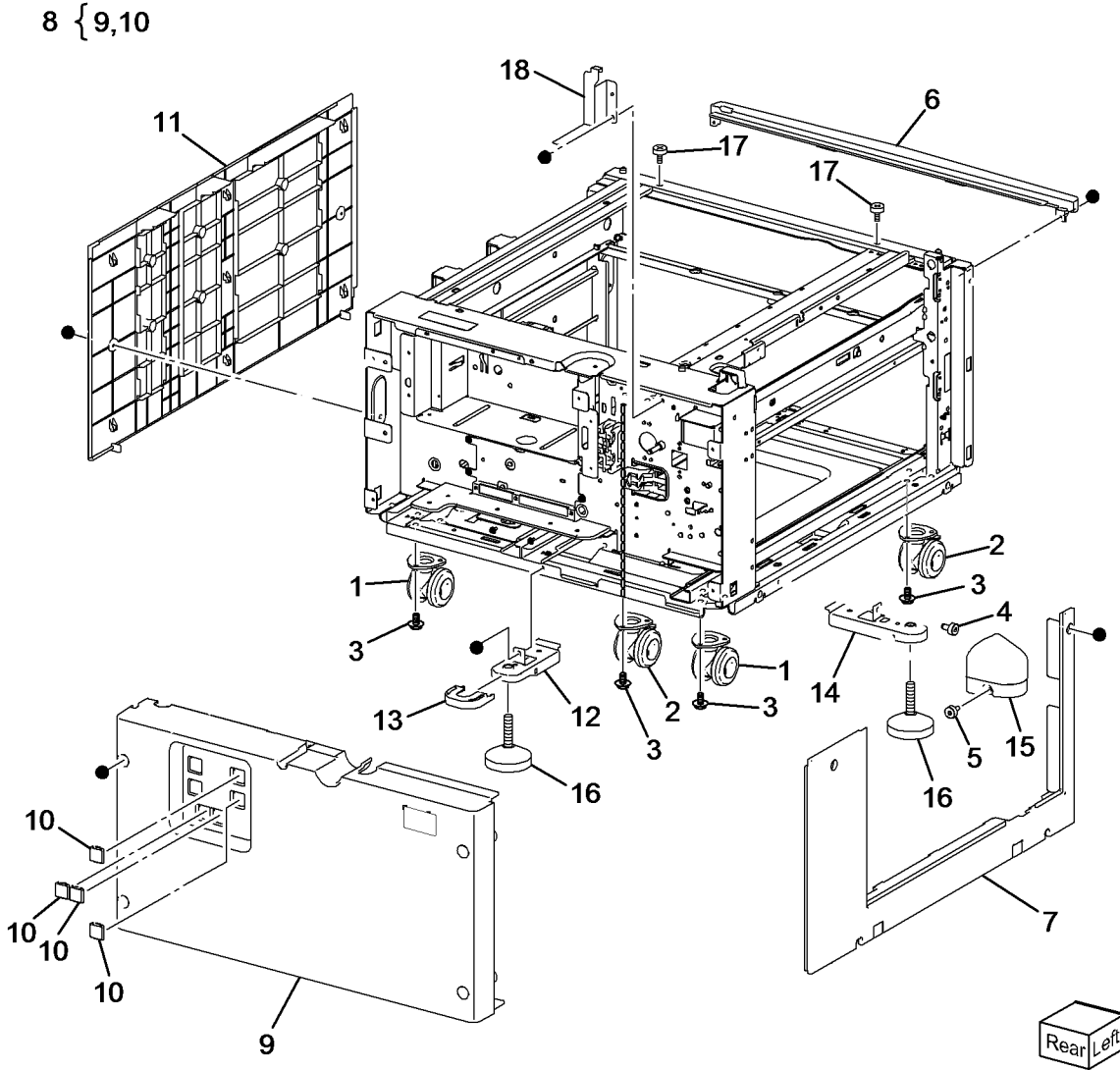
Item	Part	Description
1	-	Ground Plate (Not Spared)
2	-	Transport Guide (Not Spared)
3	960K54151	Tray Module PWB (REP 10.8)
4	-	Harness Assembly (Sensor) (Not Spared)
5	-	Harness Assembly (Motor) (Not Spared)
6	-	Harness Assembly (I/F) (Not Spared)



s7800-147

PL 11.18 Cover, Caster - TT

Item	Part	Description
1	-	Caster Assembly (Not Spared)
2	-	Caster Assembly (S) (Not Spared)
3	-	Screw (Not Spared)
4	-	Screw (M4) (Not Spared)
5	-	Screw (M3) (Not Spared)
6	-	Top Cover (Not Spared)
7	848E12691	Left Cover
8	-	Rear Cover Assembly (Not Spared) (REP 11.13)
9	-	Rear Cover (P/O PL 11.18 Item 8)
10	-	Blind Cover (P/O PL 11.18 Item 8)
11	-	Right Cover (Not Spared)
12	-	Foot Bracket (Not Spared)
13	-	Foot Cover (Not Spared)
14	-	Foot Bracket (Not Spared)
15	-	Foot Cover (Not Spared)
16	-	Adjuster Foot Assembly (Not Spared)
17	-	Docking Screw (Not Spared)
18	-	Docking Bracket (Not Spared)

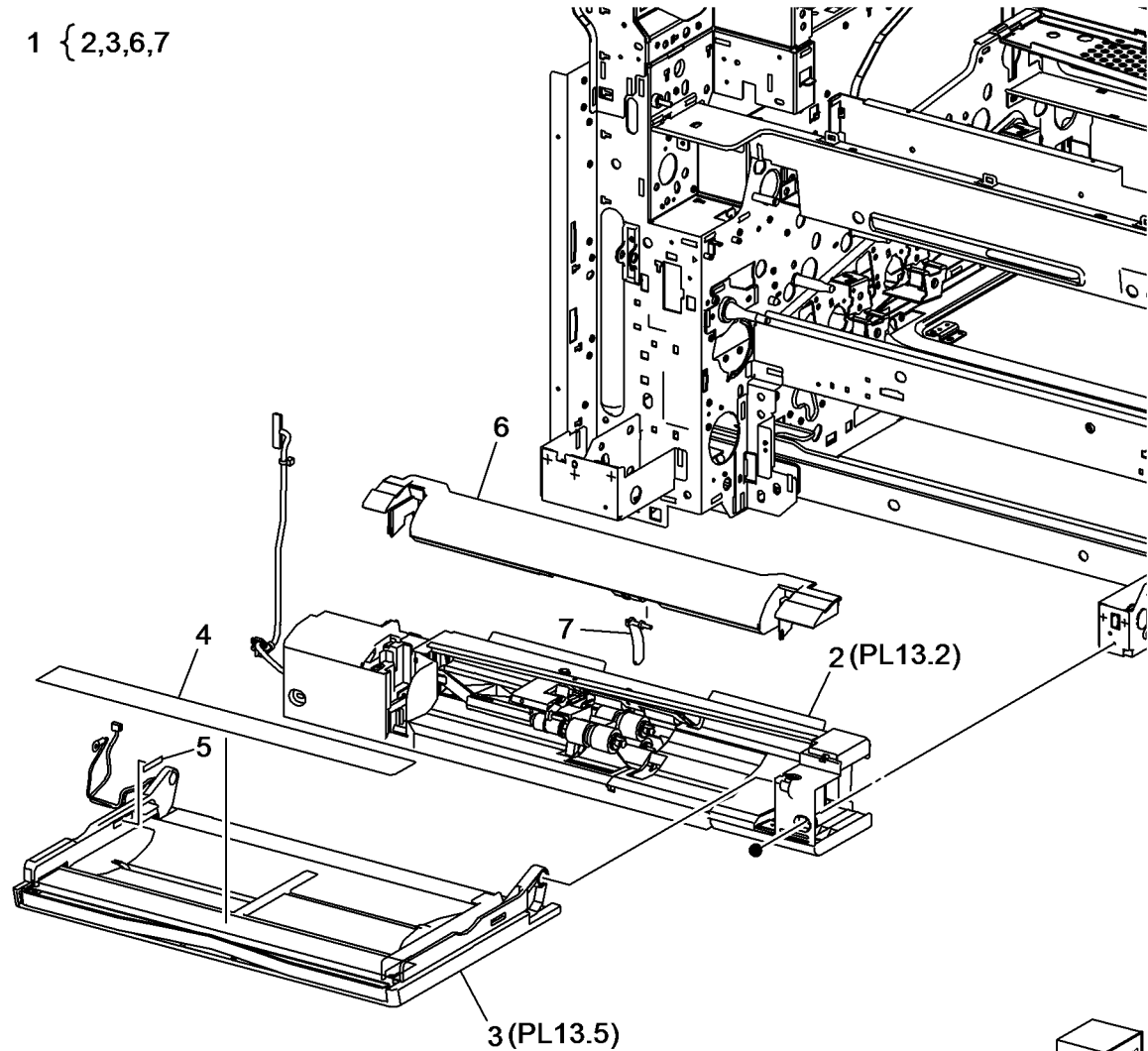


s7800-148

PL 13.1 Tray 1 (MPT) (1 of 5)

Item	Part	Description
1	604K69750	Tray 1 Unit (REP 13.1)
2	-	Tray 1 Feeder Assembly (P/O PL 13.1 Item 1) (REP 13.1)
3	-	Tray 1 Assembly (P/O PL 13.1 Item 1)
4	-	Label (Not Spared)
5	-	Label (Max) (Not Spared)
6	-	Top Cover (P/O PL 13.1 Item 1) (REP 13.2)
7	-	Actuator (P/O PL 13.1 Item 1)

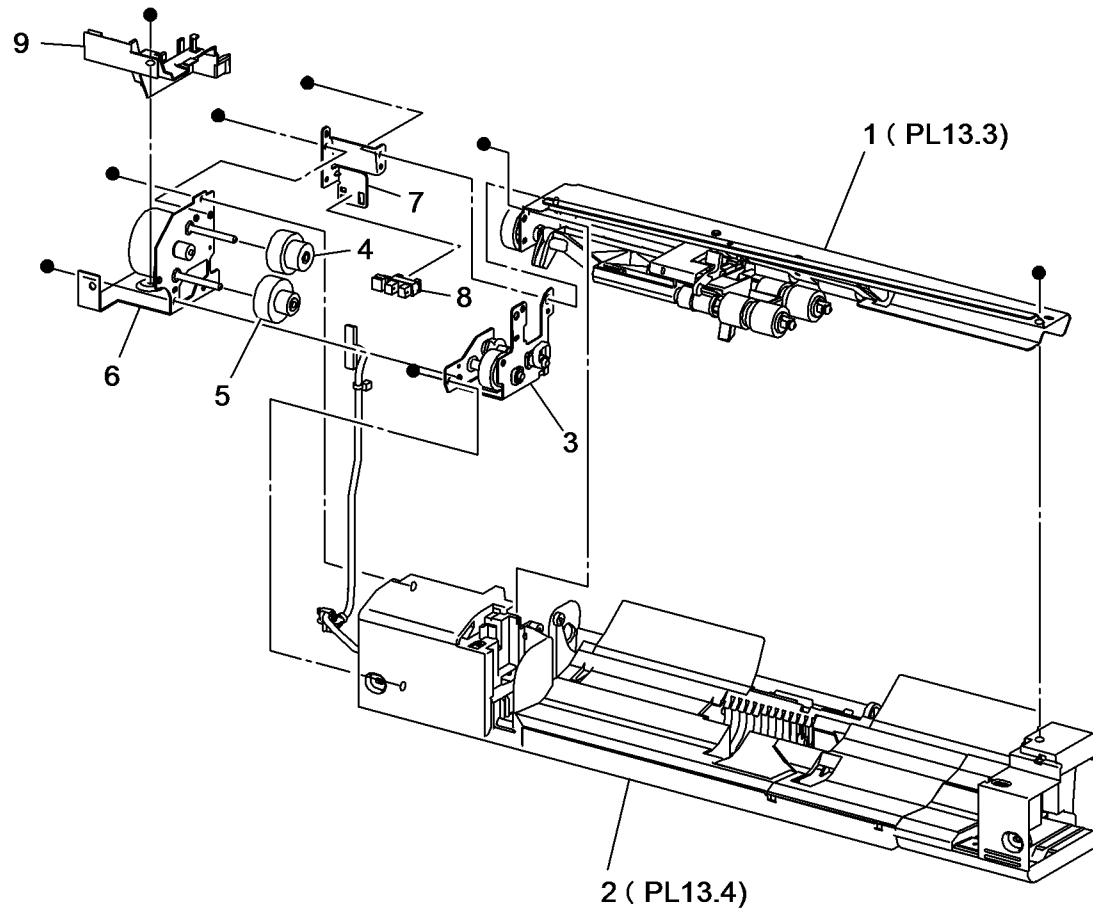
1 {2,3,6,7}



s7800-149

PL 13.2 Tray 1 (MPT) (2 of 5)

Item	Part	Description
1	-	Upper Frame Assembly (P/O PL 13.1 Item 1) (REP 13.3)
2	-	Lower Frame Assembly (Not Spared)
3	-	Drive Bracket Assembly (P/O PL 13.1 Item 1) (REP 13.4)
4	-	Gear (29T/19T) (P/O PL 13.1 Item 1)
5	-	Gear (31T/15T) (P/O PL 13.1 Item 1)
6	-	Tray 1 Feed/Nudger Motor (MOT75-001) (Not Spared)
7	-	Sensor Bracket (P/O PL 13.1 Item 1)
8	-	Tray 1 Nudger Position Sensor (Q75-102) (Not Spared) (REP 13.5)
9	-	Harness Holder (P/O PL 13.1 Item 1)

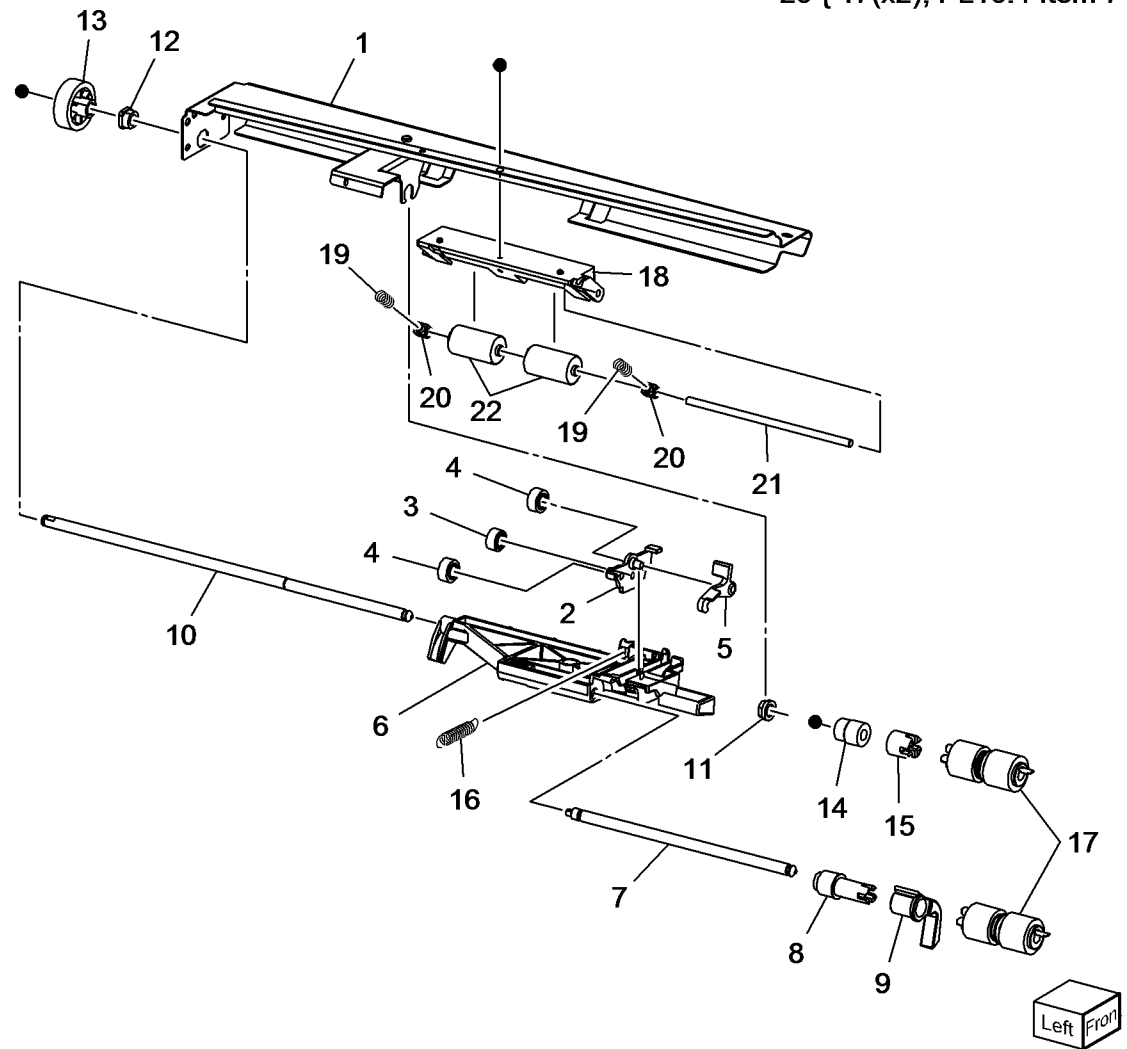


s7800-150

PL 13.3 Tray 1 (MPT) (3 of 5)

Item	Part	Description
1	-	Pinch Chute Assembly (P/O PL 13.1 Item 1)
2	-	Gear Support (P/O PL 13.1 Item 1)
3	-	Gear (21T) (P/O PL 13.1 Item 1)
4	-	Gear (23T) (P/O PL 13.1 Item 1)
5	-	Lock Stopper (P/O PL 13.1 Item 1)
6	-	Nudger Support (P/O PL 13.1 Item 1)
7	-	Nudger Shaft (P/O PL 13.1 Item 1)
8	-	Gear (25T) (P/O PL 13.1 Item 1)
9	-	Stopper (P/O PL 13.1 Item 1)
10	-	Feed Shaft (P/O PL 13.1 Item 1)
11	-	Bearing (Not Spared)
12	-	Sleeve Bearing (Not Spared)
13	-	Gear (30T) (P/O PL 13.1 Item 1)
14	005K08370	One Way Clutch (22T) (REP 13.7)
15	005K08360	One Way Clutch
16	-	Spring (P/O PL 13.1 Item 1)
17	-	Feed Roll / Nudger Roll (P/O PL 13.3 Item 23) (REP 13.6)
18	-	Guide (P/O PL 13.1 Item 1)
19	-	Pinch Spring (P/O PL 13.1 Item 1)
20	-	Spacer (P/O PL 13.1 Item 1)
21	-	Shaft (P/O PL 13.1 Item 1)
22	059E04040	Pinch Roll
23	604K66430	Tray 1 Roller Kit

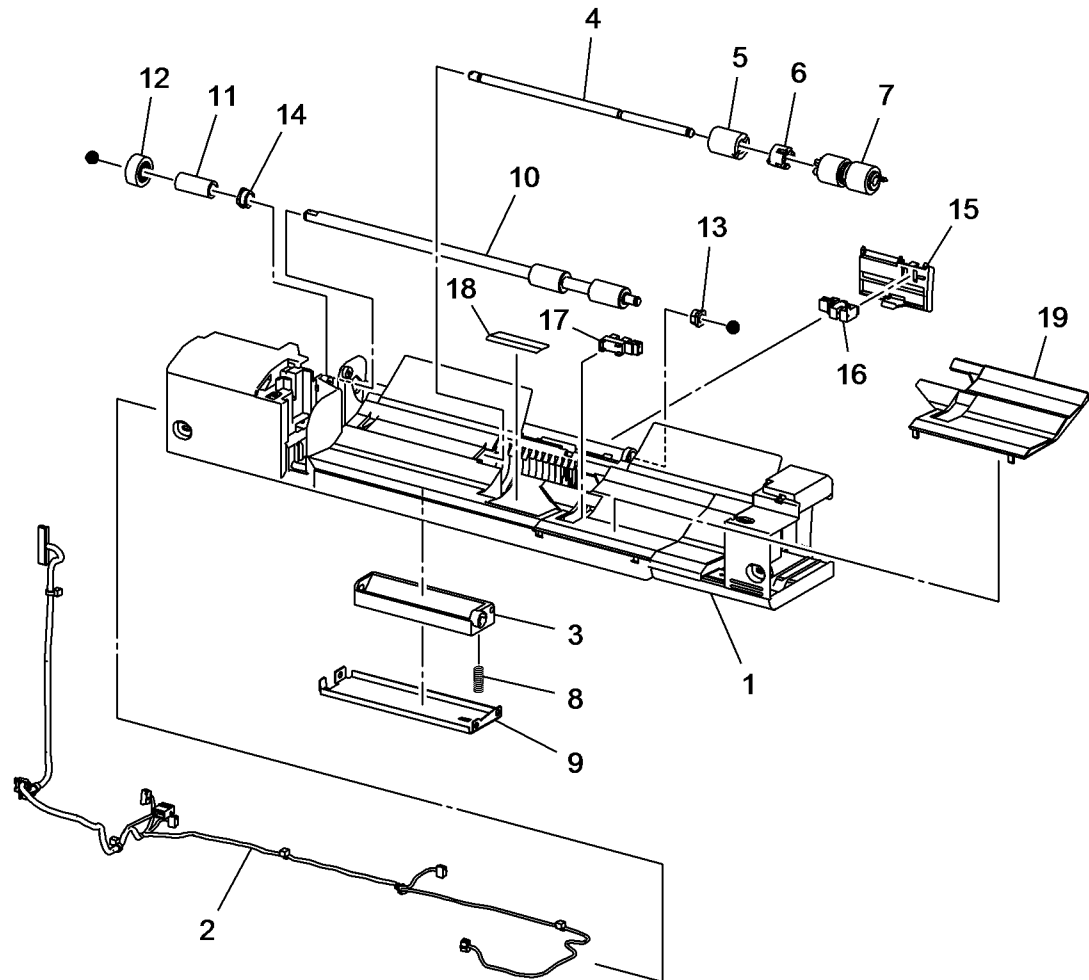
23 { 17(x2), PL13.4 Item 7



s7800-151

PL 13.4 Tray 1 (MPT) (4 of 5)

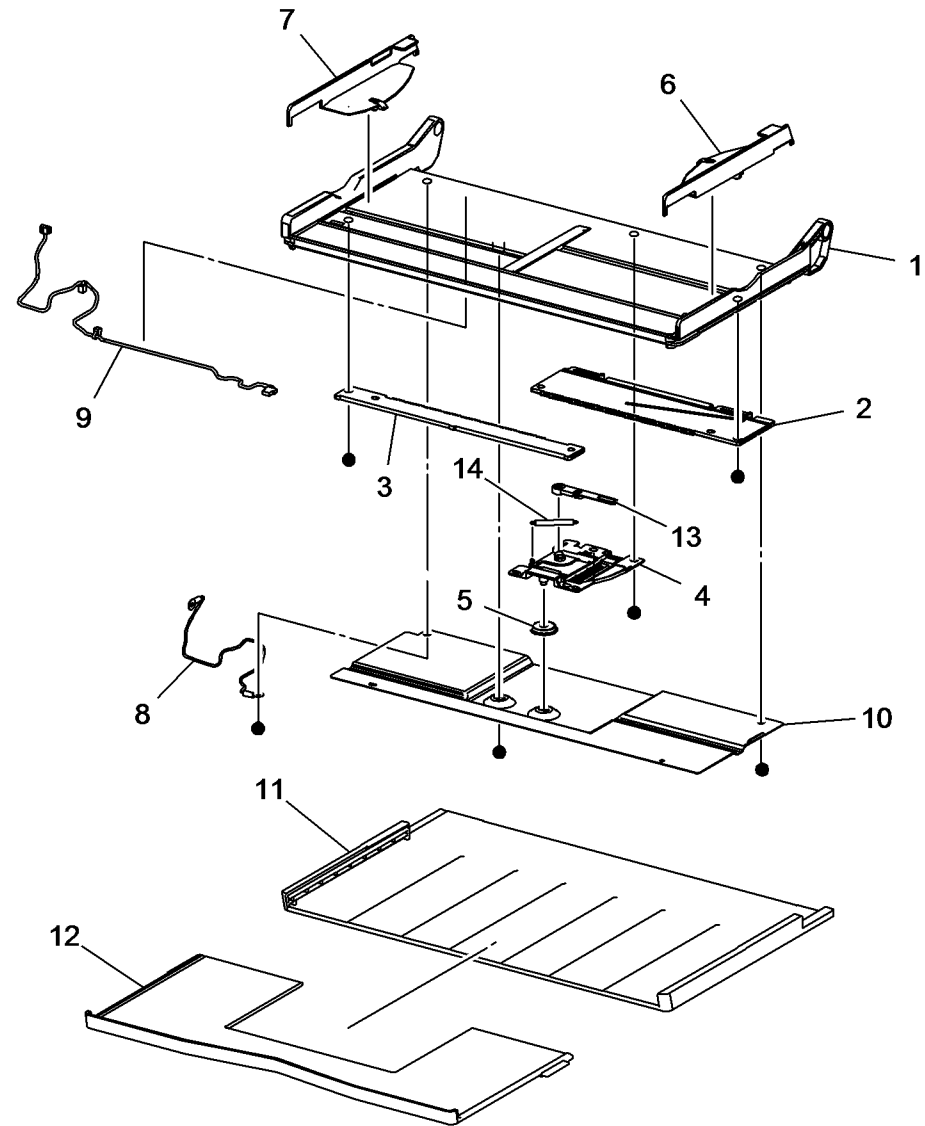
Item	Part	Description
1	-	Tray 1 Lower Frame (P/O PL 13.2 Item 2)
2	-	Wire Harness (Tray 1) (Not Spared)
3	-	Retard Support (P/O PL 13.2 Item 2)
4	-	Shaft (P/O PL 13.2 Item 2)
5	005K08830	Friction Clutch (REP 13.8)
6	-	Spacer (Not Spared)
7	-	Retard Roll (P/O PL 13.3 Item 23) (REP 13.6)
8	-	Retard Spring (P/O PL 13.2 Item 2)
9	-	Plate (P/O PL 13.2 Item 2)
10	-	Drive Roll Assembly (Not Spared)
11	-	Collar (P/O PL 13.2 Item 2)
12	-	Gear (23T) (P/O PL 13.2 Item 2)
13	-	Sleeve Bearing (P/O PL 13.2 Item 2)
14	-	Sleeve Bearing (Not Spared)
15	-	Sensor Plate (P/O PL 13.2 Item 2)
16	130K72110	Tray 1 Feed Out Sensor (Q77-104) (REP 13.9)
17	930W00113	Tray 1 No Paper Sensor (Q75-101) (REP 13.10)
18	-	Bottom Pad (Not Spared)
19	-	Front Chute (Not Spared)



s7800-152

PL 13.5 Tray 1 (MPT) (5 of 5)

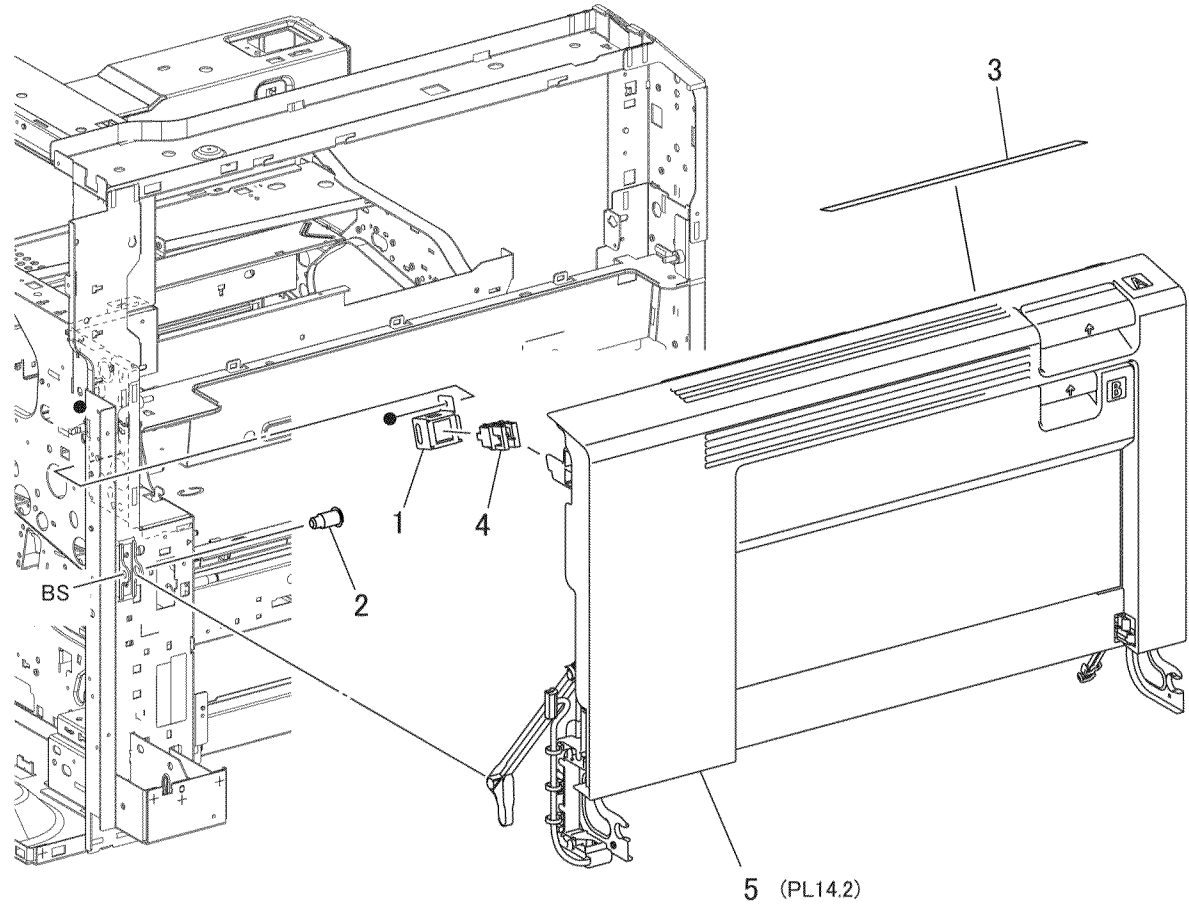
Item	Part	Description
1	-	Tray 1 (P/O PL 13.1 Item 3)
2	-	Front Rack (P/O PL 13.1 Item 3)
3	-	Rear rack (P/O PL 13.1 Item 3)
4	-	Tray 1 Paper Size Sensor (Not Spared) (REP 13.11)
5	-	Pinion Gear (Not Spared)
6	-	Front Side Guide (P/O PL 13.1 Item 3)
7	-	Rear Side Guide (P/O PL 13.1 Item 3)
8	-	Wire Harness (P/O PL 13.1 Item 3)
9	-	Wire Harness (P/O PL 13.1 Item 3)
10	-	Plate (P/O PL 13.1 Item 3)
11	-	Extension Tray (L1) (P/O PL 13.1 Item 3) (REP 13.12)
12	-	Extension Tray (L2) (P/O PL 13.1 Item 3) (REP 13.12)
13	-	Sensor Link (Not Spared)
14	-	Sensor Spring (Not Spared)



s7800-153

PL 14.1 Left Hand Cover (1 of 2)

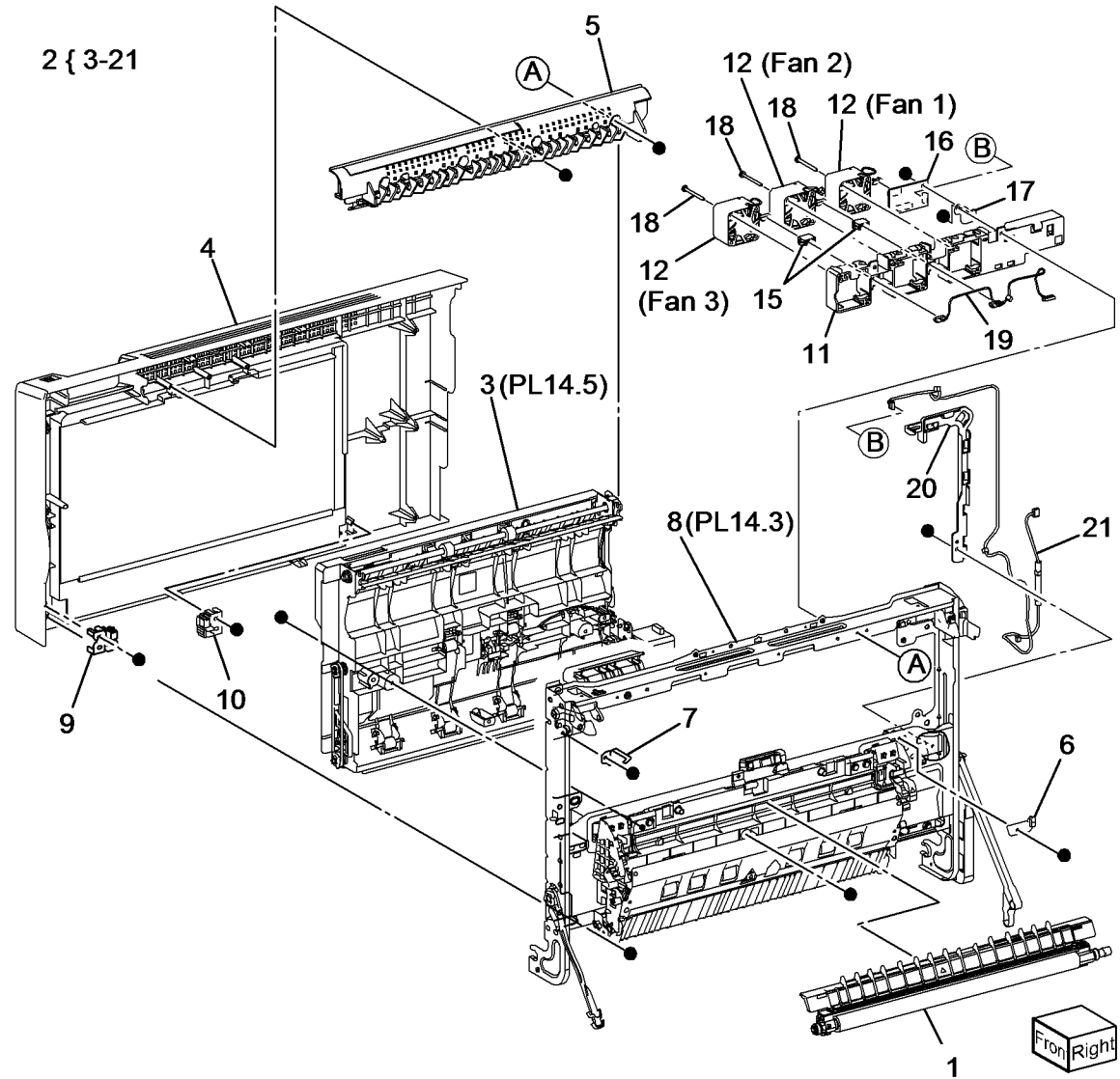
Item	Part	Description
1	-	Bracket (Not Spared)
2	-	Shaft (Not Spared)
3	-	Label (Not Spared)
4	110E11980	Left Hand Cover Interlock Switch (S77-300) (REP 14.1)
5	-	Left Hand Cover Assembly (Not Spared)



s7800-154

PL 14.2 Left Hand Cover (2 of 2)

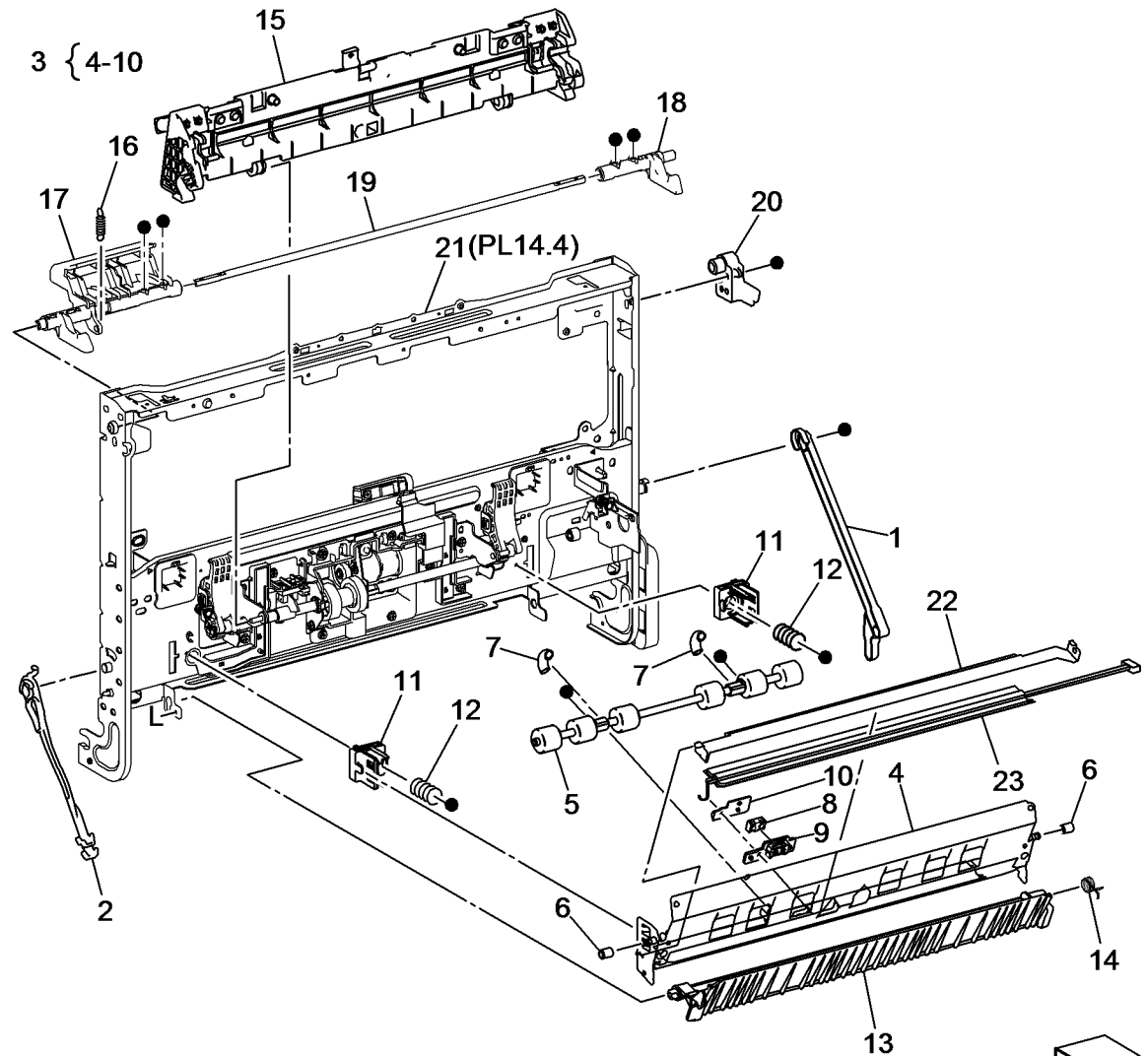
Item	Part	Description
1	108R01053	Transfer Roller (REP 14.2)
2	604K69760	Left Hand Cover Assembly (REP 14.3)
3	-	Duplex Assembly (P/O PL 14.2 Item 2) (REP 14.4)
4	-	Left Hand Cover (P/O PL 14.2 Item 2)
5	-	Chute (P/O PL 14.2 Item 2)
6	-	Fuser Link (P/O PL 14.2 Item 2)
7	-	Block (P/O PL 14.2 Item 2)
8	-	Left Hand Frame Assembly (P/O PL 14.2 Item 2)
9	-	Latch (Front) (P/O PL 14.2 Item 2)
10	-	Latch (Rear) (P/O PL 14.2 Item 2)
11	-	Fan Holder (P/O PL 14.2 Item 2)
12	127K61510	Left Hand Fan 1/Left Hand Fan 2/ Left Hand Fan 3 (REP 14.5)
13	-	Not Used
14	-	Not Used
15	-	Connector (P/O PL 14.2 Item 2)
16	960K50361	Left Hand Fan PWB (REP 14.6)
17	-	Conductor (P/O PL 14.2 Item 2)
18	-	Screw (P/O PL 14.2 Item 2)
19	-	Wire Harness (P/O PL 14.2 Item 2)
20	-	Harness Guide (P/O PL 14.2 Item 2)
21	-	Wire Harness (P/O PL 14.2 Item 2)



s7800-155

PL 14.3 Left Hand Cover Assembly (1 of 2)

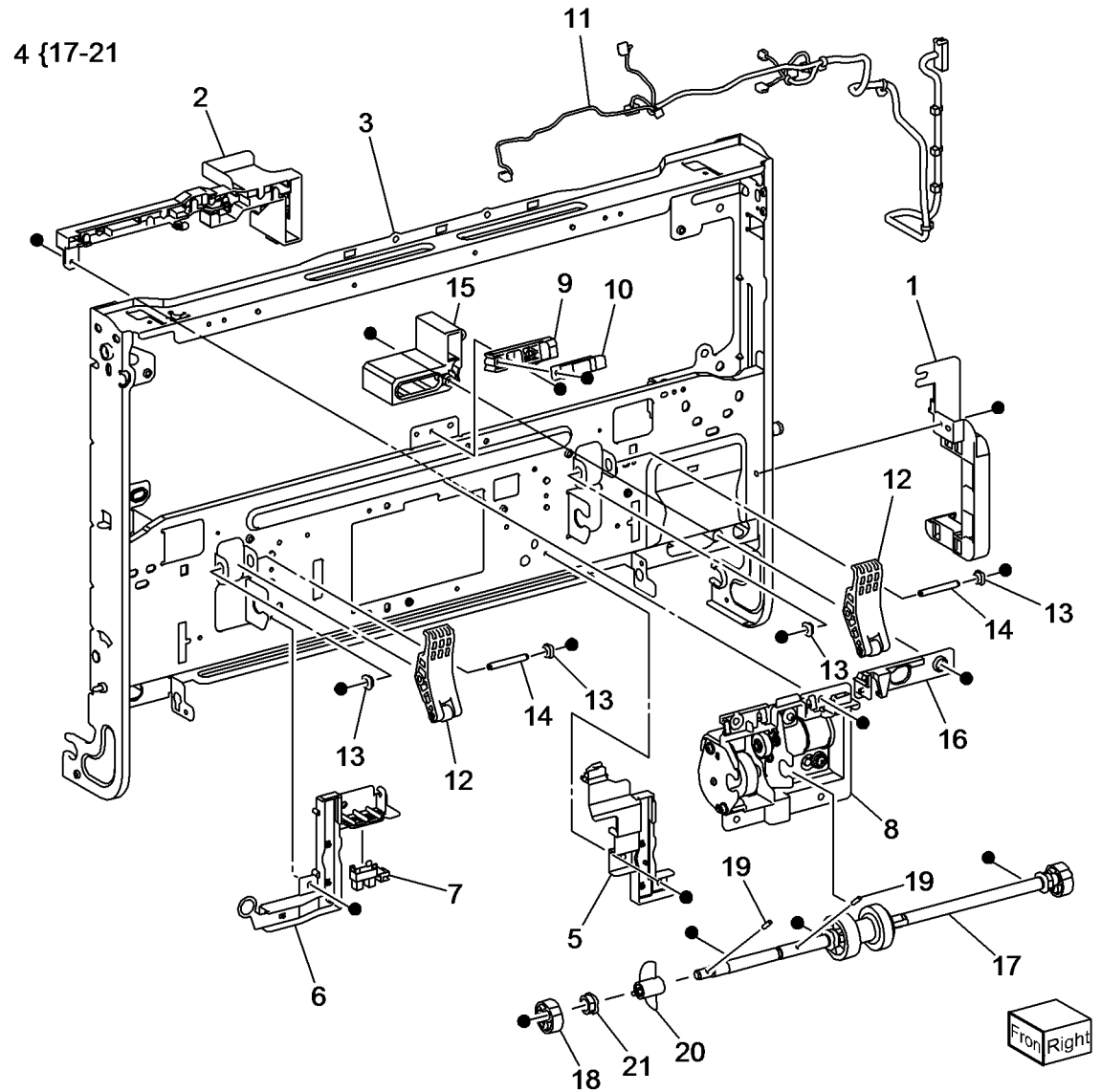
Item	Part	Description
1	849E97370	Rear Support
2	868E05450	Front Support
3	054K42161	Pinch Chute Assembly (REP 14.7)
4	-	Chute Assembly (P/O PL 14.3 Item 3)
5	-	Pinch Roller Assembly (P/O PL 14.3 Item 3)
6	-	Pulley (P/O PL 14.3 Item 3)
7	-	Spring (P/O PL 14.3 Item 3)
8	-	OHP Sensor (P/O PL 14.3 Item 3)
9	-	Holder (P/O PL 14.3 Item 3)
10	-	Cap (P/O PL 14.3 Item 3)
11	-	Chute Support (P/O PL 14.2 Item 8)
12	-	Spring (Not Spared)
13	054K35160	Duplex Chute Assembly (REP 14.8)
14	809E76900	Spring
15	-	2nd BTR Housing Assembly (Not Spared)
16	-	Spring (P/O PL 14.2 Item 8)
17	011E24361	Front Latch Lever
18	-	Rear Latch Lever (Not Spared)
19	-	Latch Shaft (Not Spared)
20	-	Actuator (Not Spared)
21	-	2nd Contact Retract Assembly (Not Spared)
22	-	Heater Bracket (Not Spared)
23	-	DC Heater (Not Spared)



s7800-156

PL 14.4 Left Hand Cover Assembly (2 of 2)

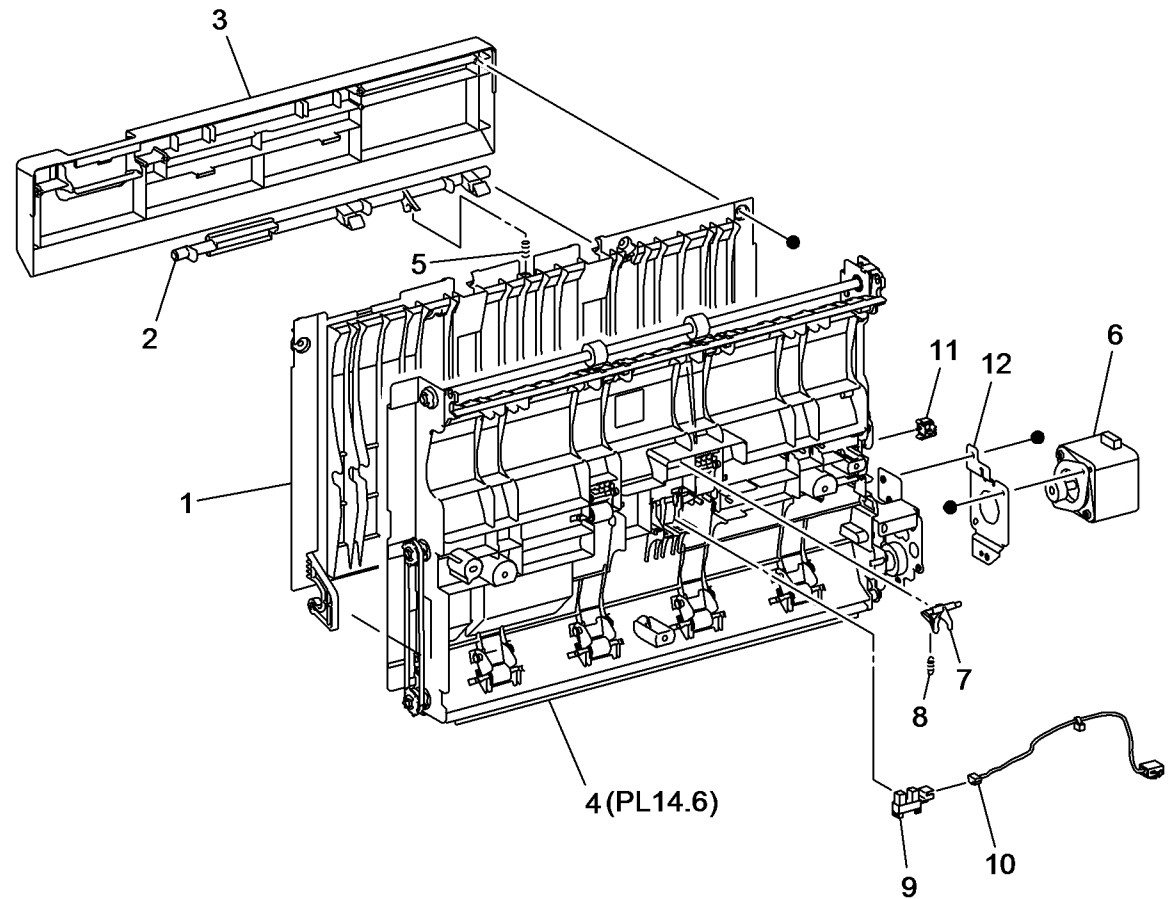
Item	Part	Description
1	-	Harness Holder (P/O PL 14.2 Item 2)
2	-	Harness Holder (P/O PL 14.2 Item 2)
3	-	Frame Assembly (P/O PL 14.2 Item 2)
4	006K86160	Retract Shaft Assembly (REP 14.9)
5	-	Conductor Assembly (P/O PL 14.2 Item 2)
6	-	Conductor Assembly (P/O PL 14.2 Item 2)
7	-	2nd BTR Contact Retract Sensor (Q94-201) (Not Spared) (REP 14.10)
8	127K52251	2nd BTR Contact Retract Motor (REP 14.10)
9	-	Sensor Holder (P/O PL 14.2 Item 2)
10	130E87410	POB Sensor (Q77-102) (REP 14.11)
11	962K78500	Harness Assembly
12	-	2nd Link Assembly (Not Spared)
13	-	Sleeve Bearing (Not Spared)
14	-	Shaft (P/O PL 14.2 Item 2)
15	-	Harness Guide (P/O PL 14.4 Item 4)
16	-	Harness Guide (P/O PL 14.4 Item 4)
17	-	Retract Shaft (P/O PL 14.4 Item 4)
18	-	Retract Cam (P/O PL 14.4 Item 4)
19	-	Pin (P/O PL 14.4 Item 4)
20	120E28260	Retract Actuator (REP 14.12)
21	-	Bearing (P/O PL 14.4 Item 4)



s7800-157

PL 14.5 Duplex Assembly (1 of 2)

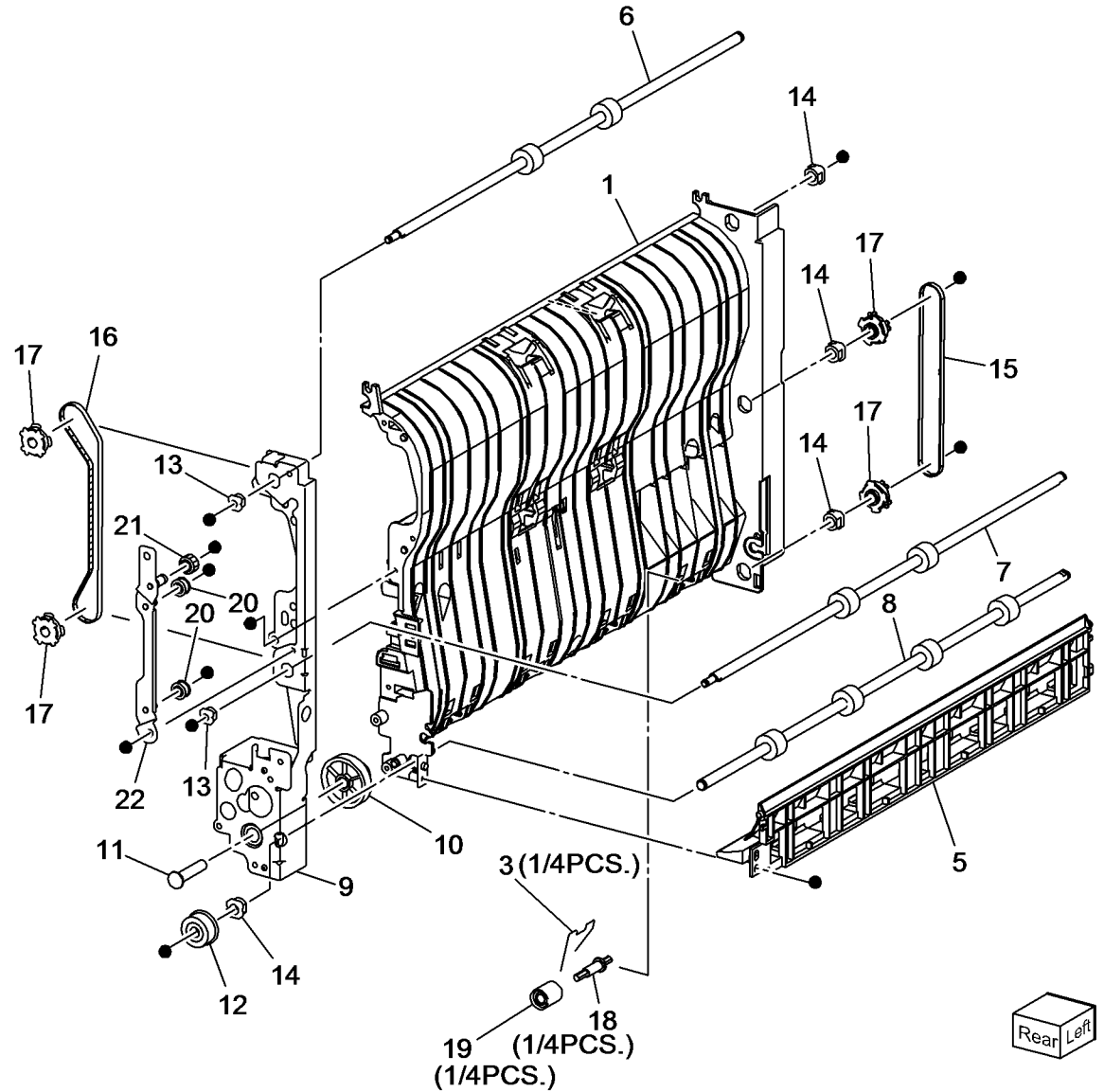
Item	Part	Description
1	-	Duplex Cover (Not Spared)
2	011E23681	Duplex Lever (REP 14.13)
3	-	Lever Cover (Not Spared)
4	-	Frame Assembly (Not Spared)
5	-	Spring (Not Spared)
6	127K60820	Duplex Motor (MOT77-071) (REP 14.14)
7	-	Actuator (Not Spared)
8	-	Spring (Not Spared)
9	-	Duplex Path Sensor (Q77-108) (Not Spared)
10	-	Wire Harness (Not Spared)
11	-	Duplex Cover Switch (S77-305) (Not Spared)
12	-	Motor Bracket (Not Spared)



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PL 14.6 Duplex Assembly (2 of 2)

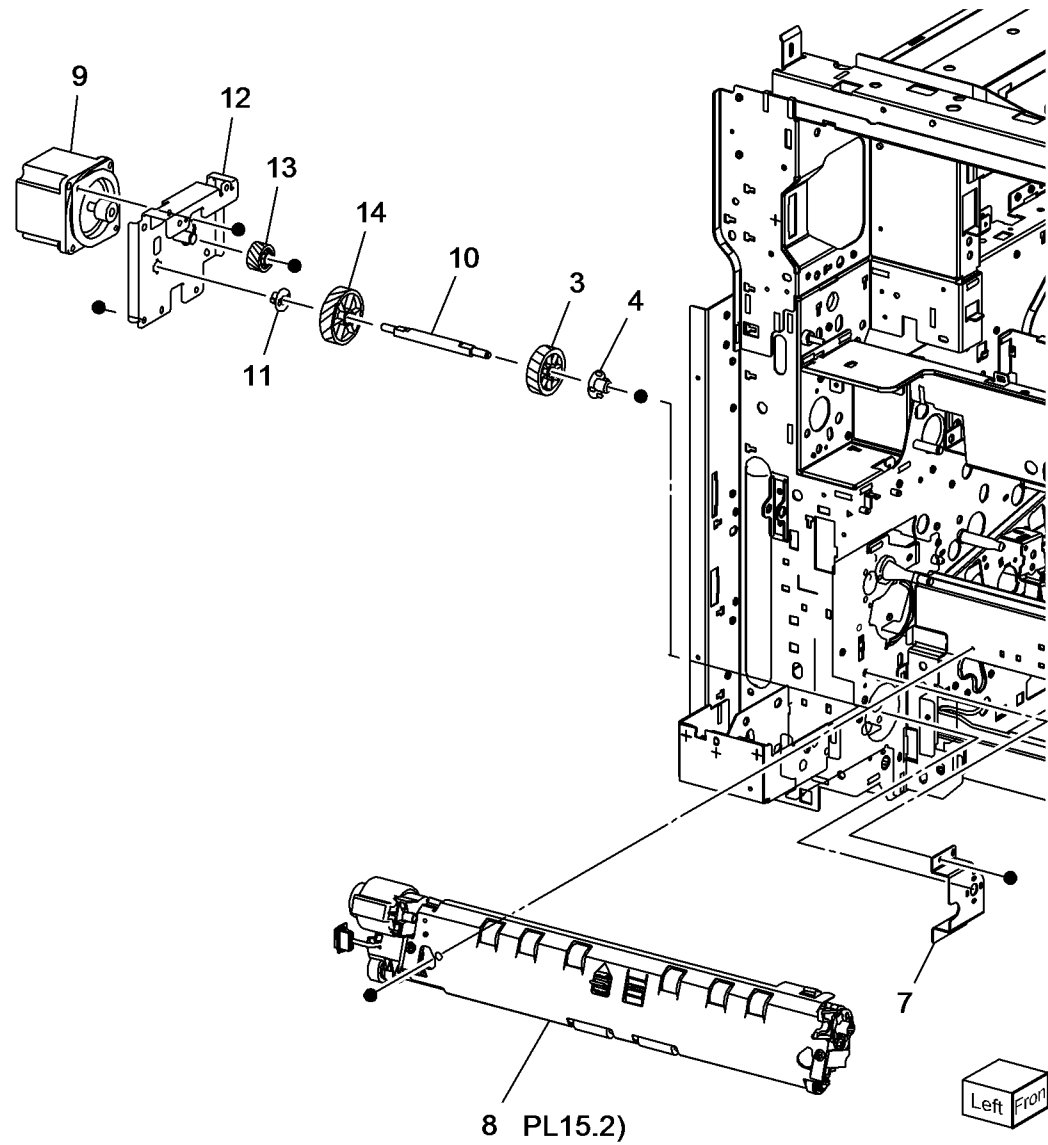
Item	Part	Description
1	-	Inner Chute (Not Spared)
2	-	Not Used
3	809E89870	Pinch Spring 1
4	-	Not Used
5	-	Lower Chute (Not Spared)
6	059K53880	Duplex Roller 1 (REP 14.15)
7	059K53890	Duplex Roller 2 (REP 14.16)
8	059K53900	Duplex Roller 3 (REP 14.17)
9	-	Duplex Rear Frame (Not Spared)
10	807E30550	Idle Gear (13T/23T)
11	029E47600	Pin
12	-	Gear Assembly (Not Spared)
13	-	Sleeve Bearing (Not Spared)
14	-	Sleeve Bearing (Not Spared)
15	023E26770	Belt
16	023E27480	Belt
17	-	Pulley (Not Spared)
18	806E31100	Shaft
19	059E06380	Duplex Pinch Roll
20	-	Tension Pulley (Not Spared)
21	-	Idler Pulley (Not Spared)
22	-	Tension Bracket (Not Spared)



s7800-159

PL 15.1 Registration (1 of 2)

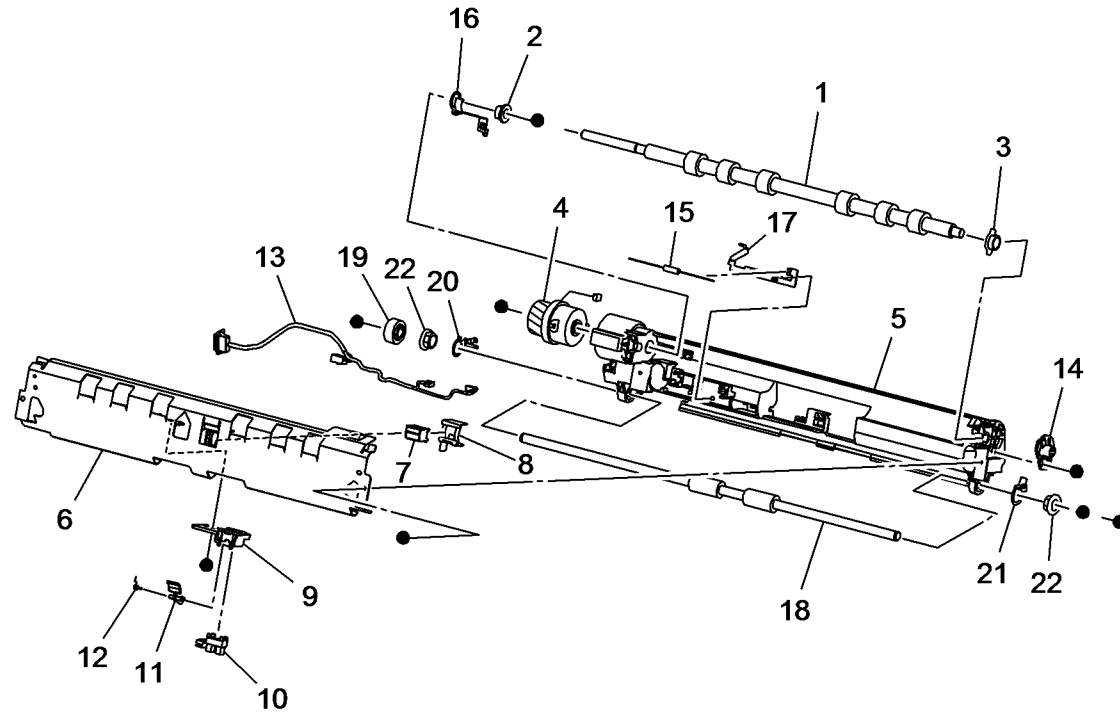
Item	Part	Description
1	—	Not Used
2	—	Not Used
3	807E20050	Gear (40T)
4	013E33420	Bearing
5	—	Not Used
6	—	Not Used
7	—	Bracket (Not Spared)
8	059K66652	Registration Transport Assembly (REP 15.1)
9	127K60770	Take Away Motor (MOT82-050) (REP 15.2)
10	806E30580	Shaft
11	013E36280	Bearing
12	068K67130	Bracket
13	807E30540	Gear (29T)
14	807E30531	Gear (60T)



s7800-160

PL 15.2 Registration (2 of 2)

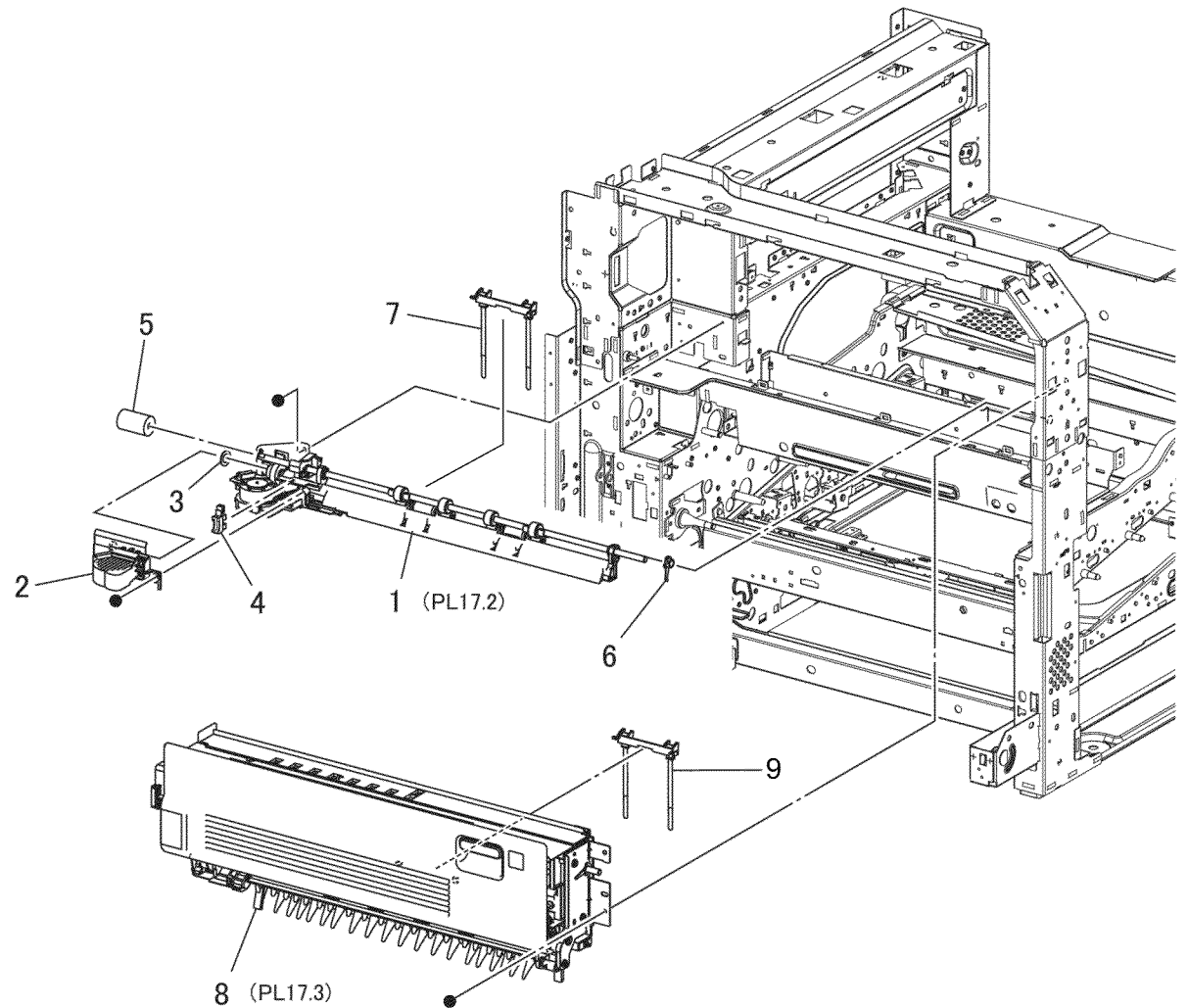
Item	Part	Description
1	—	Registration Roll (P/O PL 15.1 Item 8)
2	—	Bearing (P/O PL 15.1 Item 8)
3	—	Sleeve Bearing (P/O PL 15.1 Item 8)
4	121K46000	Registration Clutch (MOT77-002) (REP 15.3)
5	—	Regi Chute (P/O PL 15.1 Item 8)
6	—	Inlet Chute Assembly (P/O PL 15.1 Item 8)
7	—	OHP Sensor (P/O PL 15.1 Item 8)
8	—	Cap (P/O PL 15.1 Item 8)
9	—	Sensor Holder (P/O PL 15.1 Item 8)
10	—	Registration Sensor (Q77-103) (P/O PL 15.1 Item 8)
11	—	Actuator (P/O PL 15.1 Item 8)
12	—	Spring (P/O PL 15.1 Item 8)
13	—	Wire Harness (P/O PL 15.1 Item 8)
14	—	Skew Adjust Block (P/O PL 15.1 Item 8)
15	—	Inlet Resistor (P/O PL 15.1 Item 8)
16	—	Conductor (In) (P/O PL 15.1 Item 8)
17	—	Conductor (Out) (P/O PL 15.1 Item 8)
18	—	Take Away Roll (P/O PL 15.1 Item 8)
19	—	Gear (23T)
20	—	Conductor (P/O PL 15.1 Item 8)
21	—	Conductor (P/O PL 15.1 Item 8)
22	—	Bearing (P/O PL 15.1 Item 8)



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PL 17.1 Exit 1/OCT, Exit 2

Item	Part	Description
1	—	Exit 1/OCT Assembly (Not Spared)
2	—	Motor Cover (Not Spared)
3	—	Washer (Not Spared)
4	—	Exit 1 OCT Home Position Sensor (Q77-109) (Not Spared)
5	—	Gear (19T) (Not Spared)
6	—	Bearing (Not Spared)
7	—	Exit 1 Weight Assembly (Not Spared)
8	059K68361	Exit 2 Assembly (REP 17.1)
9	—	Exit 2 Weight Assembly (P/O PL 17.1 Item 8)

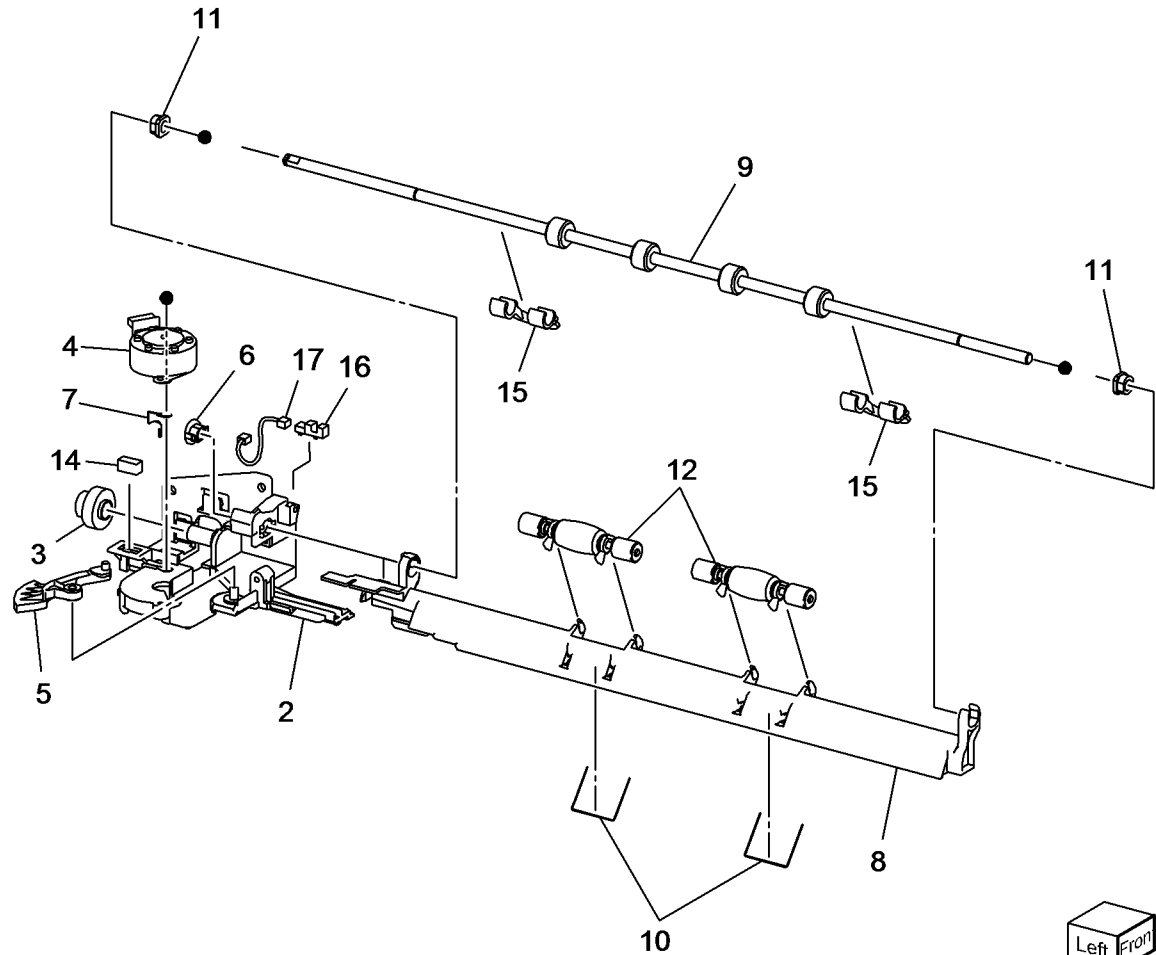


s7800-162

PL 17.2 Exit 1/OCT

Item	Part	Description
1	801K42601	Exit 1 Base Assembly (REP 17.2)
2	-	Exit 1 Base (P/O PL 17.2 Item 1)
3	-	Exit 1 Gear (P/O PL 17.2 Item 1)
4	-	Exit 1 OCT Motor (MOT77-040) (P/O PL 17.2 Item 1)
5	-	OCT Gear (P/O PL 17.2 Item 1)
6	-	Bearing (P/O PL 17.2 Item 1)
7	-	Ground Plate (P/O PL 17.2 Item 1)
8	-	OCT Chute (P/O PL 17.2 Item 13)
9	-	OCT 1 Roller (P/O PL 17.2 Item 13)
10	-	Exit Pinch Spring (P/O PL 17.2 Item 13)
11	-	Sleeve Bearing (P/O PL 17.2 Item 13)
12	-	Exit Pinch Roller (P/O PL 17.2 Item 13)
13	054K42141	Exit/OCT 1 Assembly (REP 17.3)
14	-	Connector (P/O PL 17.2 Item 1)
15	-	Guide (P/O PL 17.2 Item 13)
16	-	Full Stack Sensor 1 (Q77-124) (P/O PL 17.2 Item 1)
17	-	Harness Assembly (Full Stack Sensor) (P/O PL 17.2 Item 1)

1 { 2-7,14,16,17
 13 { 8-12,15

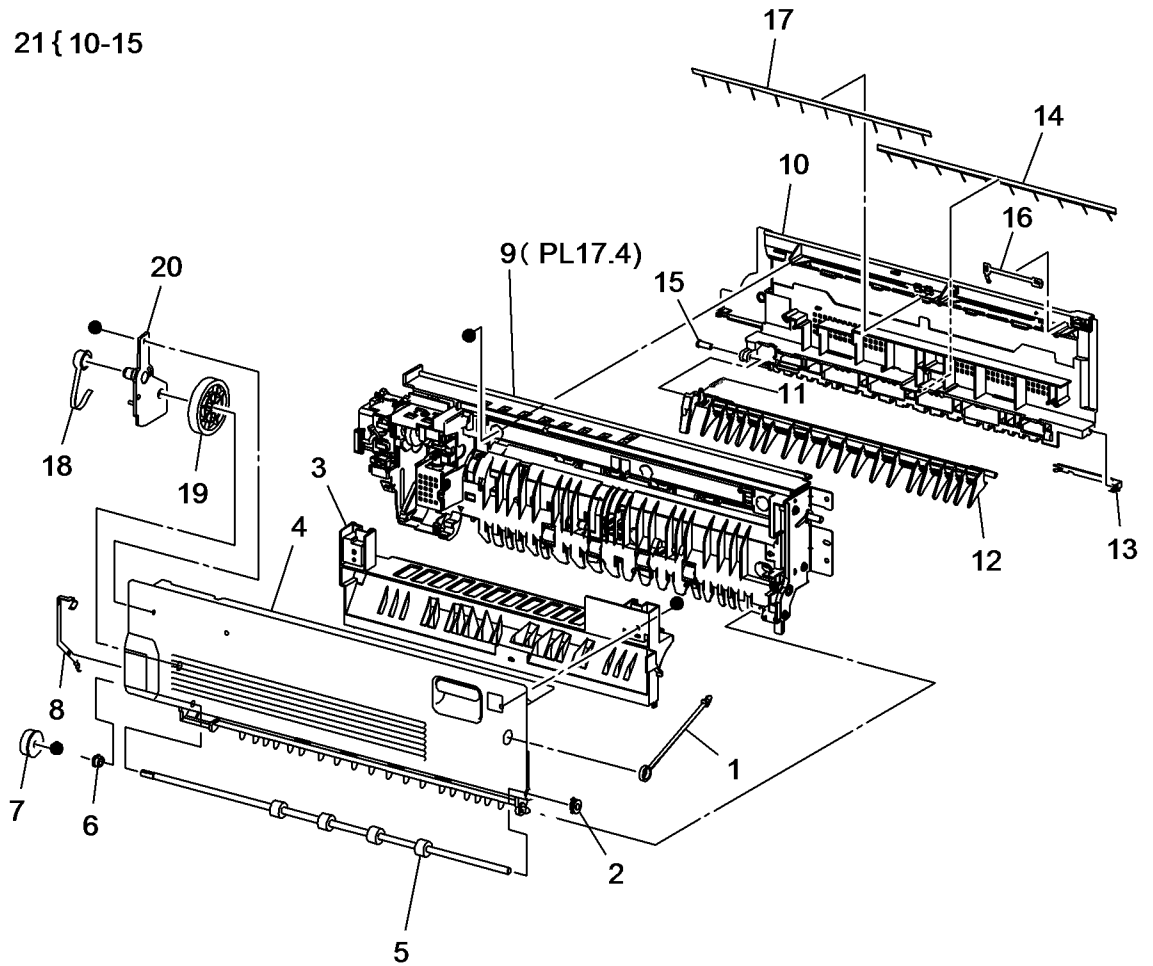


s7800-163

PL 17.3 Exit 2 (1 of 3)

Item	Part	Description
1	-	Exit 2 Front Stopper (Not Spared)
2	-	Bearing (Not Spared)
3	-	Exit 2 Chute (Not Spared)
4	-	Left Hand High Chute (Not Spared)
5	-	Inverter Roll (Not Spared)
6	-	Sleeve Bearing (Not Spared)
7	-	Gear (22T) (Not Spared)
8	-	Ground Plate (Not Spared)
9	-	Exit 2 Drive Assembly (Not Spared)
10	-	Tray 2 Guide (P/O PL 17.3 Item 21)
11	899E07560	Gate 1 Spring (REP 17.5)
12	-	Exit 1 Gate (P/O PL 17.3 Item 21)
13	-	Ground Plate (P/O PL 17.3 Item 21)
14	-	Eliminator (P/O PL 17.3 Item 21)
15	-	Gate Stopper (P/O PL 17.3 Item 21)
16	-	Ground Plate (Not Spared)
17	-	Eliminator (Not Spared)
18	-	Exit 2 Stopper (Not Spared)
19	-	Gear (52T) (Not Spared)
20	-	Gear Cover (Not Spared)
21	038K20232	Exit 2 Guide Assembly (REP 17.4)

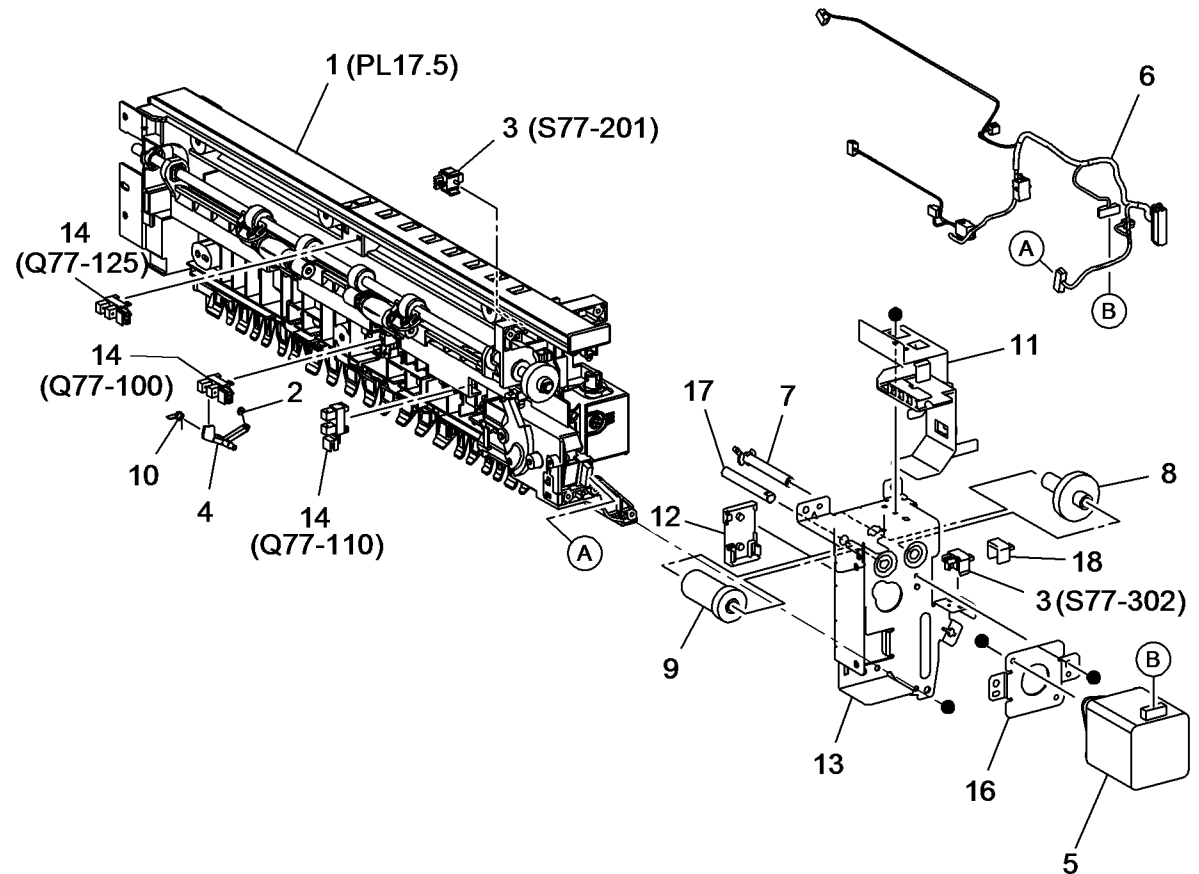
21 { 10-15



s7800-164

PL 17.4 Exit 2 (2 of 3)

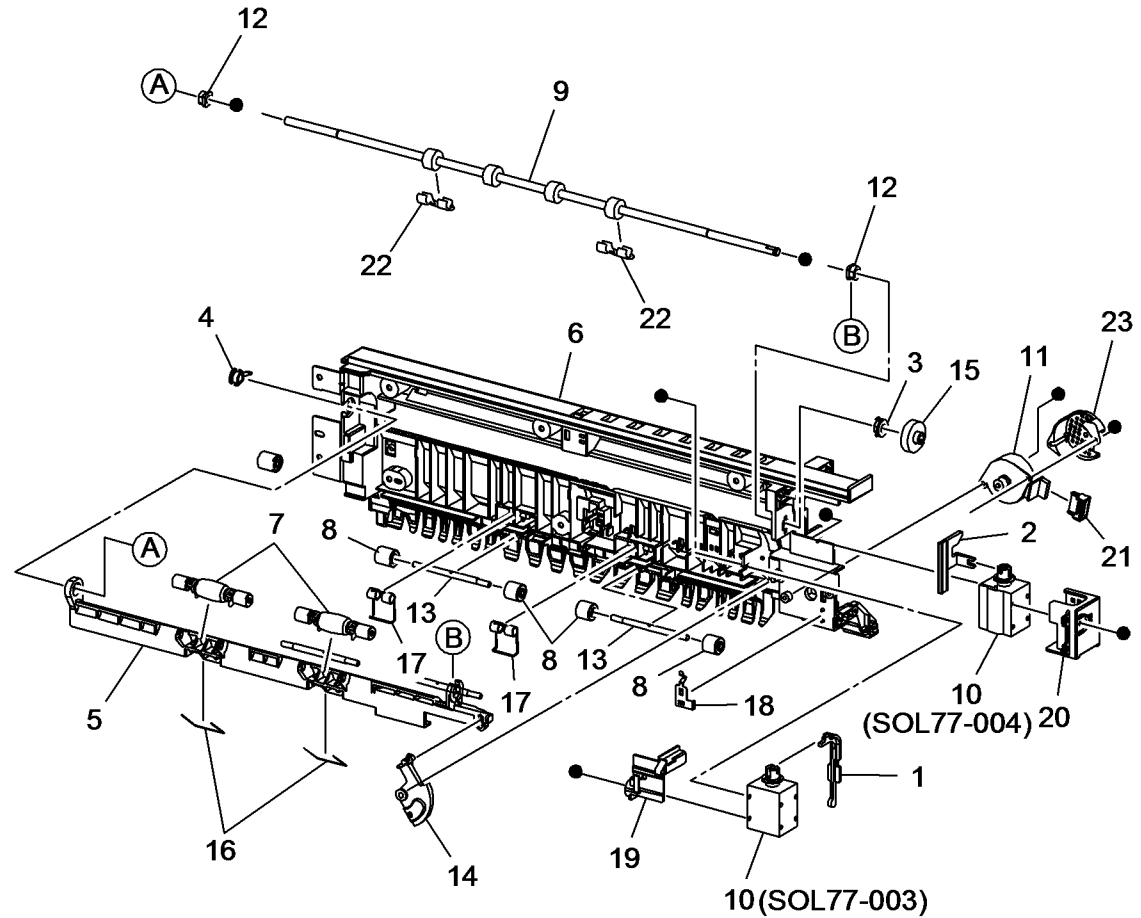
Item	Part	Description
1	-	Exit 2 OCT Assembly (REF: PL 17.5)
2	-	Actuator Roller (P/O PL 17.4 Item 1)
3	-	Face Up Tray Detect Switch (S77-201) / Left Hand High Cover Switch (S77-302) (P/O PL 17.4 Item 1)
4	-	Actuator (P/O PL 17.4 Item 1)
5	127K60830	Exit 2 Drive Motor (MOT82-060)
6	-	Wire Harness (Exit 2) (P/O PL 17.4 Item 1)
7	806E14120	Gear Shaft
8	807E20410	Gear (28T)
9	807E30560	Gear (16T/23T)
10	-	Spring (P/O PL 17.4 Item 1)
11	-	Rear Cover (P/O PL 17.4 Item 1)
12	-	Shaft Cover (P/O PL 17.4 Item 1)
13	-	Rear Bracket (P/O PL 17.4 Item 1)
14	-	Exit 2 Sensor (Q77-100)/Exit 2 OCT Home Position Sensor (Q77-110)/Full Stack Sensor 2 (Q77-125) (P/O PL 17.4 Item 1)
15	-	Not Used
16	-	Motor Bracket (P/O PL 17.4 Item 1)
17	-	Gear Shaft (P/O PL 17.4 Item 1)
18	-	Switch Cover (P/O PL 17.4 Item 1)



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PL 17.5 Exit 2 (3 of 3)

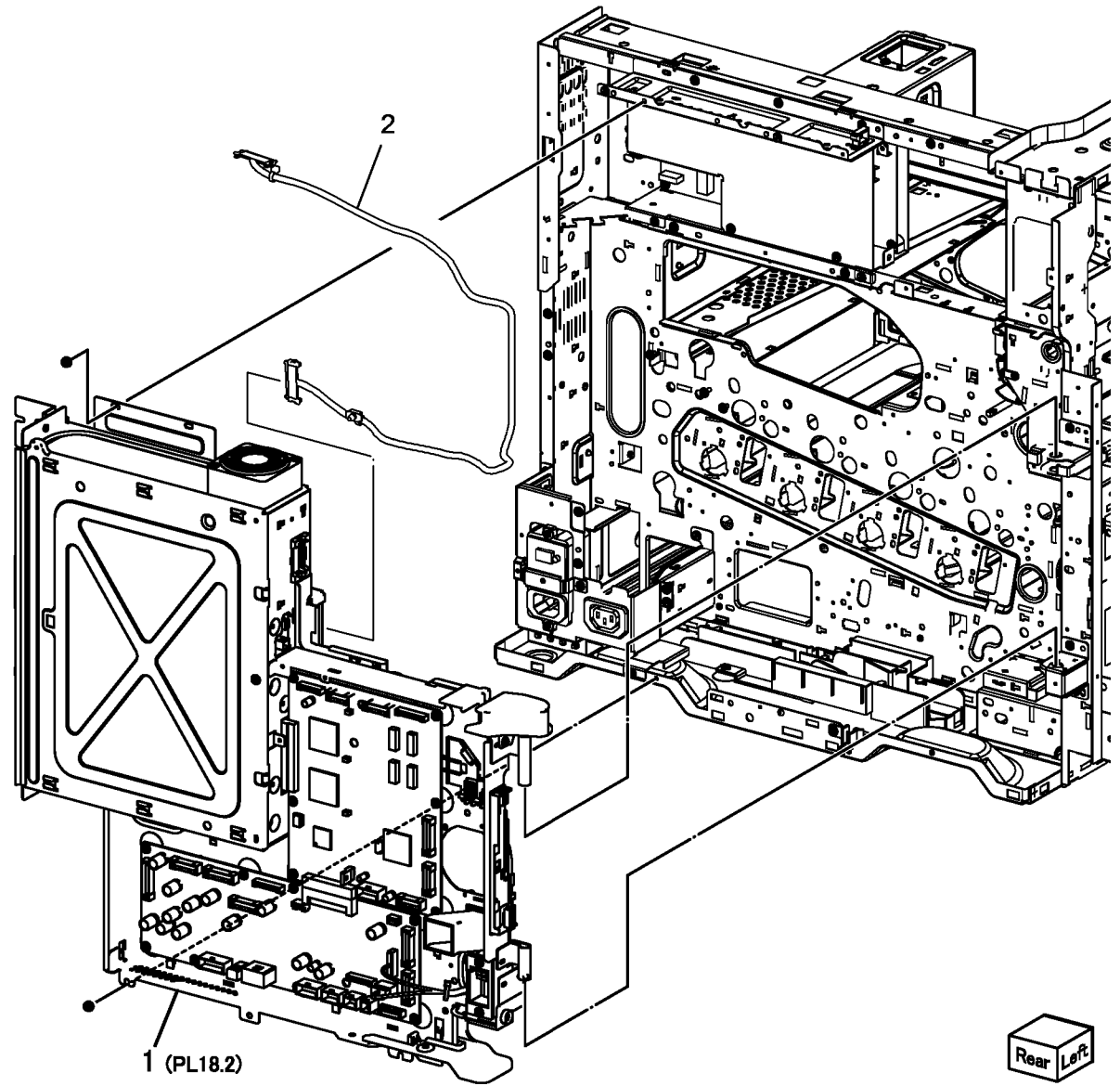
Item	Part	Description
1	-	Exit Gate Link (Not Spared)
2	-	Face Up Gate Solenoid Link (Not Spared)
3	-	Bearing (Not Spared)
4	-	Bearing (Not Spared)
5	-	OCT 2 Chute (Not Spared)
6	-	Low 2 Chute (Not Spared)
7	-	Exit Pinch Roller (Not Spared)
8	-	Inverter Pinch Roll (Not Spared)
9	-	OCT Roller (Not Spared)
10	-	Exit 2 Gate Solenoid (SOL77-003)/ Face Up Gate Solenoid (SOL77-004) (Not Spared)
11	-	Exit 2 OCT Motor (MOT77-045) (Not Spared)
12	-	Sleeve Bearing (Not Spared)
13	-	Inverter Pinch Shaft (Not Spared)
14	-	Offset 2 Gear (Not Spared)
15	-	Gear (22T) (Not Spared)
16	-	Exit Pinch Spring (Not Spared)
17	-	Inverter Pinch Spring (Not Spared)
18	-	Ground Plate (Not Spared)
19	-	Exit 2 Gate Solenoid Cover (Not Spared)
20	-	Face Up Gate Solenoid Cover (Not Spared)
21	-	Connector Cover (Not Spared)
22	-	Exit 2 Guard (Not Spared)
23	-	Motor Cover (Not Spared)



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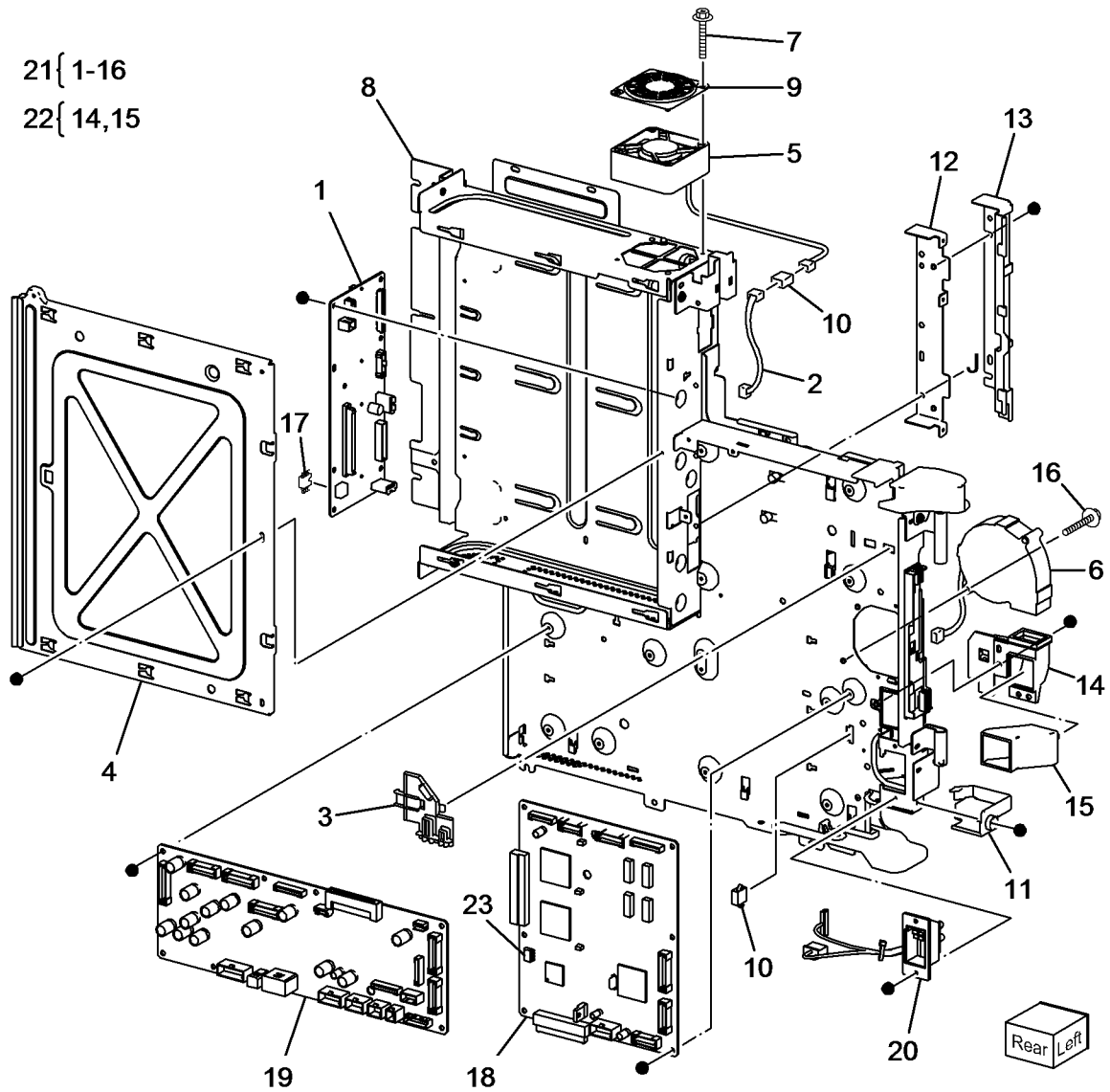
PL 18.1 PWB Chassis Unit (1 of 2)

Item	Part	Description
1	—	PWB Chassis Unit (Not Spared) (REP 18.1)
2	962K98640	UI Harness Assembly



PL 18.2 PWB Chassis unit (2 of 2)

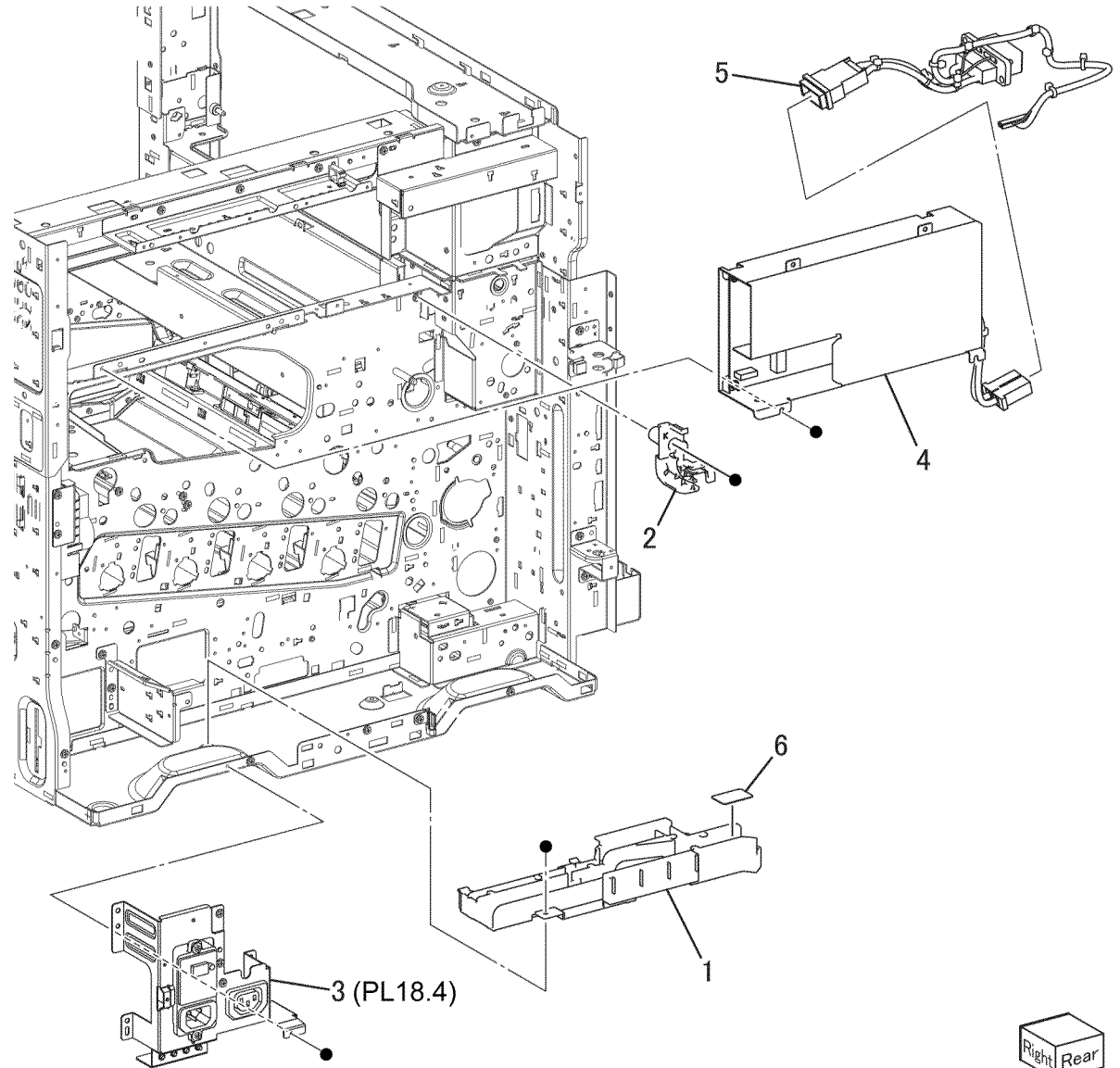
Item	Part	Description
1	960K50880	Backplane PWB (REP 18.2)
2	-	Fan Wire Harness (P/O PL 18.2 Item 21)
3	-	Cable Holder (P/O PL 18.2 Item 21)
4	-	ESS Cover (P/O PL 18.2 Item 21)
5	127K56981	ESS Fan (REP 18.3)
6	127K64490	Suction Fan (MOT42-20) (REP 18.4)
7	-	Screw (P/O PL 18.2 Item 21)
8	-	Chassis Assembly (P/O PL 18.2 Item 21)
9	-	Fan Guard (P/O PL 18.2 Item 21)
10	-	Connector (P/O PL 18.2 Item 21)
11	-	Harness Guide (P/O PL 18.2 Item 21)
12	-	Bracket (P/O PL 18.2 Item 21)
13	-	Shield (P/O PL 18.2 Item 21)
14	-	Duct (P/O PL 18.2 Item 21)
15	-	Duct (P/O PL 18.2 Item 21)
16	-	Screw (P/O PL 18.2 Item 21)
17	-	EPROM (Not Spared)
18	960K61100	MCU PWB (REP 18.5)
19	960K56651	Motor Drive (MD) PWB (REP 18.6)
20	962K67180	HCF IF Connector
21	-	PWB Chassis (Not Spared)
22	-	Duct Assembly (Not Spared)
23	-	NVRAM



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PL 18.3 Electrical IOT Rear

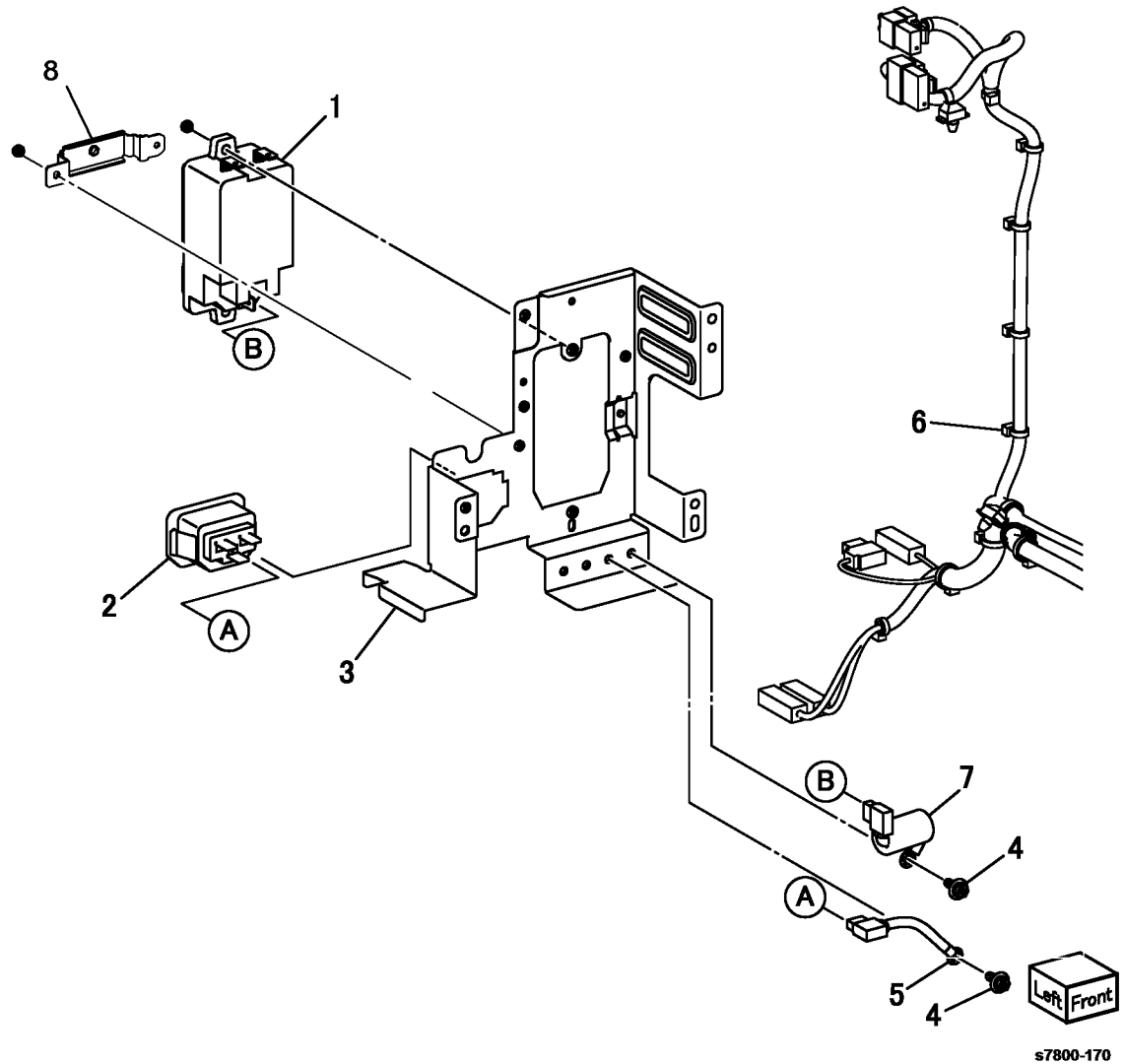
Item	Part	Description
1	-	Harness Guide (Not Spared)
2	-	Harness Guide (Not Spared)
3	-	GFI Chassis Assembly (REF: PL 18.4) (REP 18.8)
4	105E19792	IH Driver PWB (110V) (REP 18.9)
-	105E19802	IH Driver PWB (220V) (REP 18.9)
5	962K78700	Fuser Drawer Harness (220V)
6	-	Shield (Not Spared)



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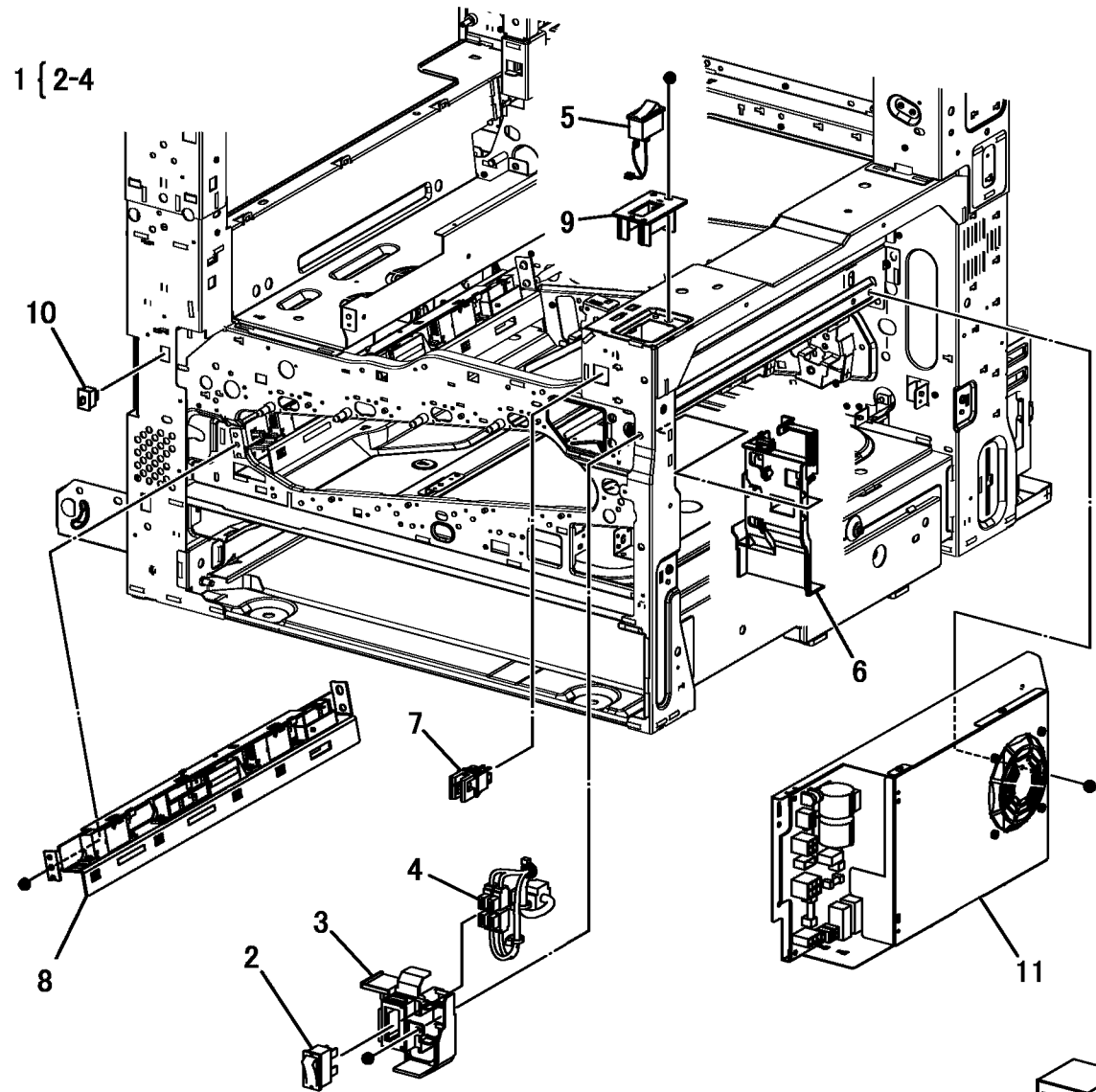
PL 18.4 GFI Chassis

Item	Part	Description
1	908W01201	GFI (REP 18.11)
2	-	Finisher/PSW Outlet (Not Spared)
3	-	GFI Chassis (Not Spared)
4	-	Screw (Not Spared)
5	-	Wire Harness (Blue) (Not Spared)
6	962K54730	Wire Harness (220V)
-	962K98650	Wire Harness (110V)
7	-	Wire Harness (Not Spared)
8	-	Bracket (Not Spared)



PL 18.5 Electrical Front/Right

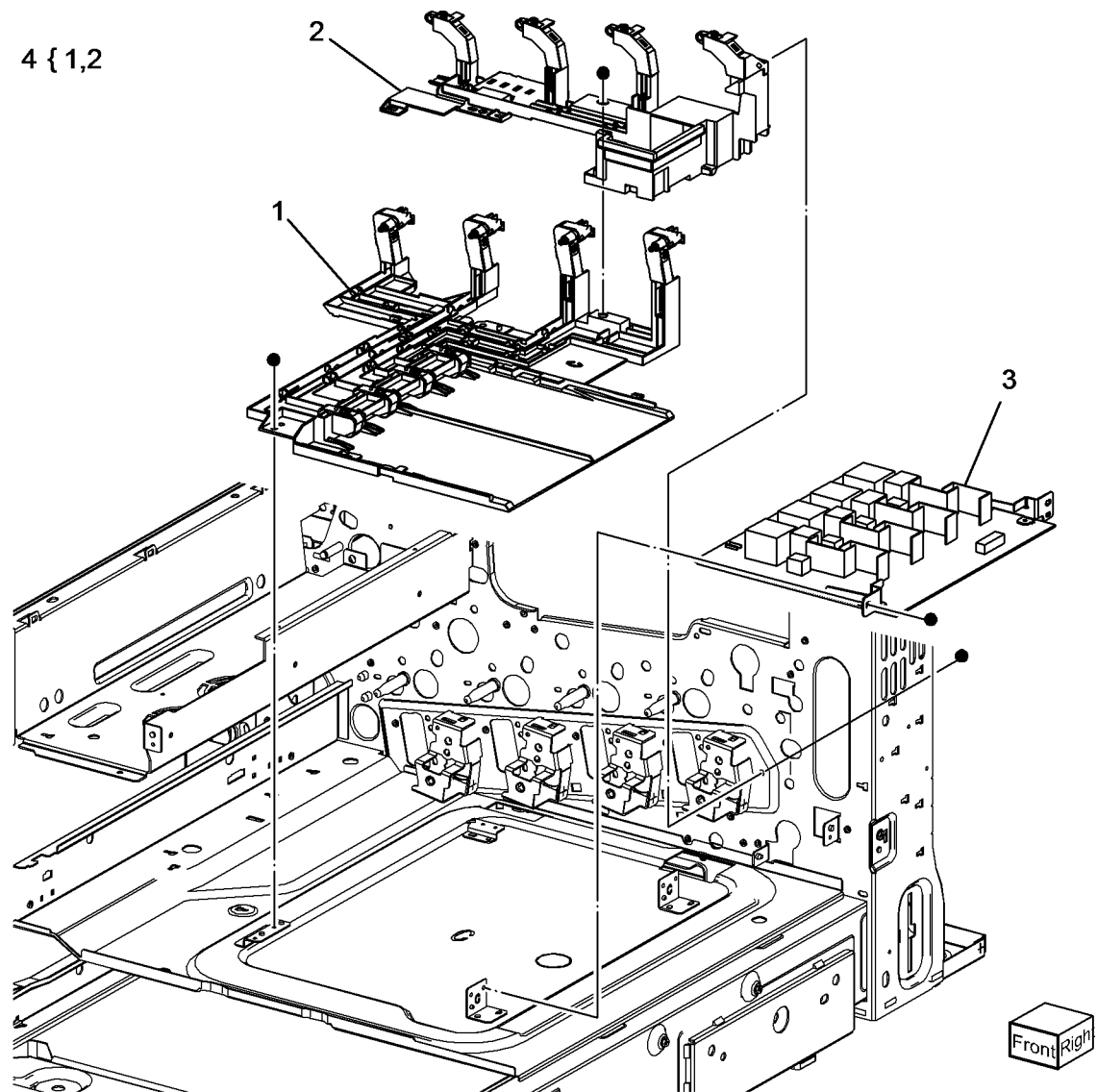
Item	Part	Description
1	101K60311	Main Power Switch and Harness
2	-	Main Power Switch (P/O PL 18.5 Item 1)
3	-	Bracket (P/O PL 18.5 Item 1)
4	-	Wire Harness (P/O PL 18.5 Item 1)
5	110K15982	Power Switch
6	-	Harness Guide (Not Spared)
7	-	Front Cover Interlock Switch (S77-303) (Not Spared) (REP 18.12)
8	130K71470	MOB ADC Assembly (REP 18.13)
9	-	Bracket (Not Spared)
10	110E12981	IBT Front Cover Switch (S77-307) (REP 18.14)
11	105E19271	Main LVPS (REP 18.15)



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PL 18.6 Electrical Bottom

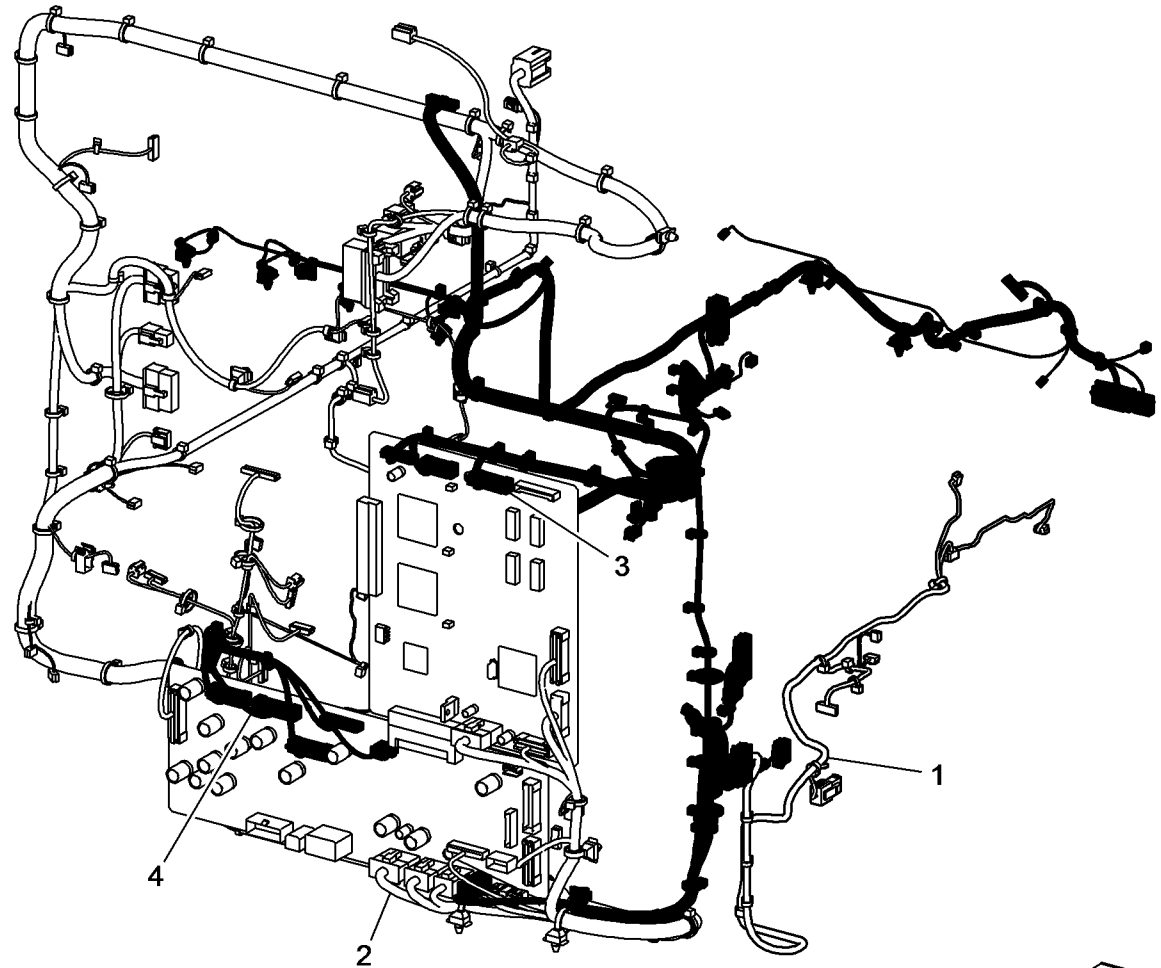
Item	Part	Description
1	—	HVPS Housing (P/O PL 18.6 Item 4)
2	—	HVPS Housing (P/O PL 18.6 Item 4)
3	105E19352	HVPS (BCR) (REP 18.16)
4	848K36390	HVPS Housing



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PL 18.7 Wire Harness

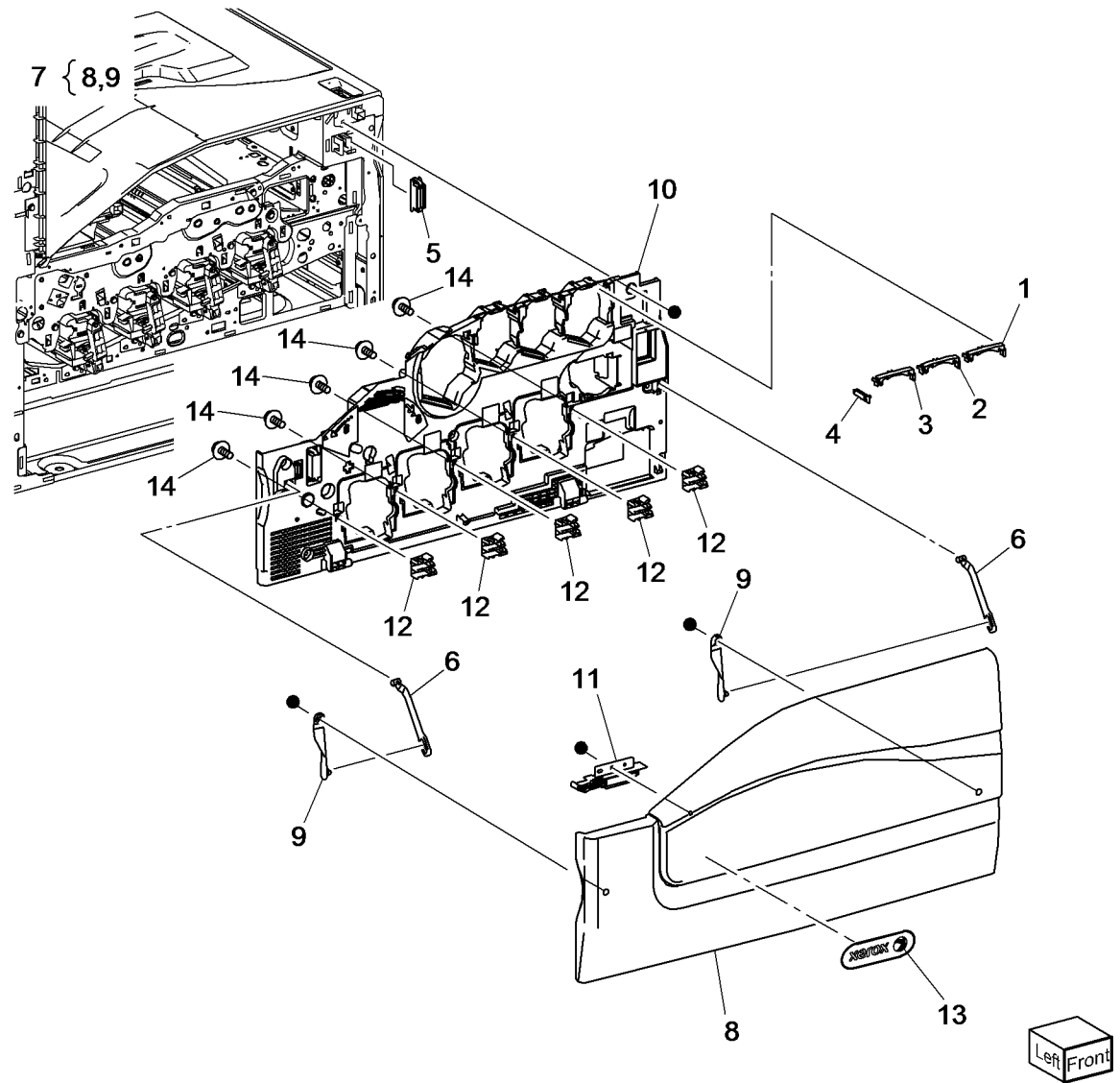
Item	Part	Description
1	962K78452	Wire Harness (Left)
2	962K93262	Wire Harness (Right)
3	962K92750	Wire Harness (Top)
4	962K78470	Wire Harness (Front)



s7800-173

PL 19.1 Covers (1 of 3)

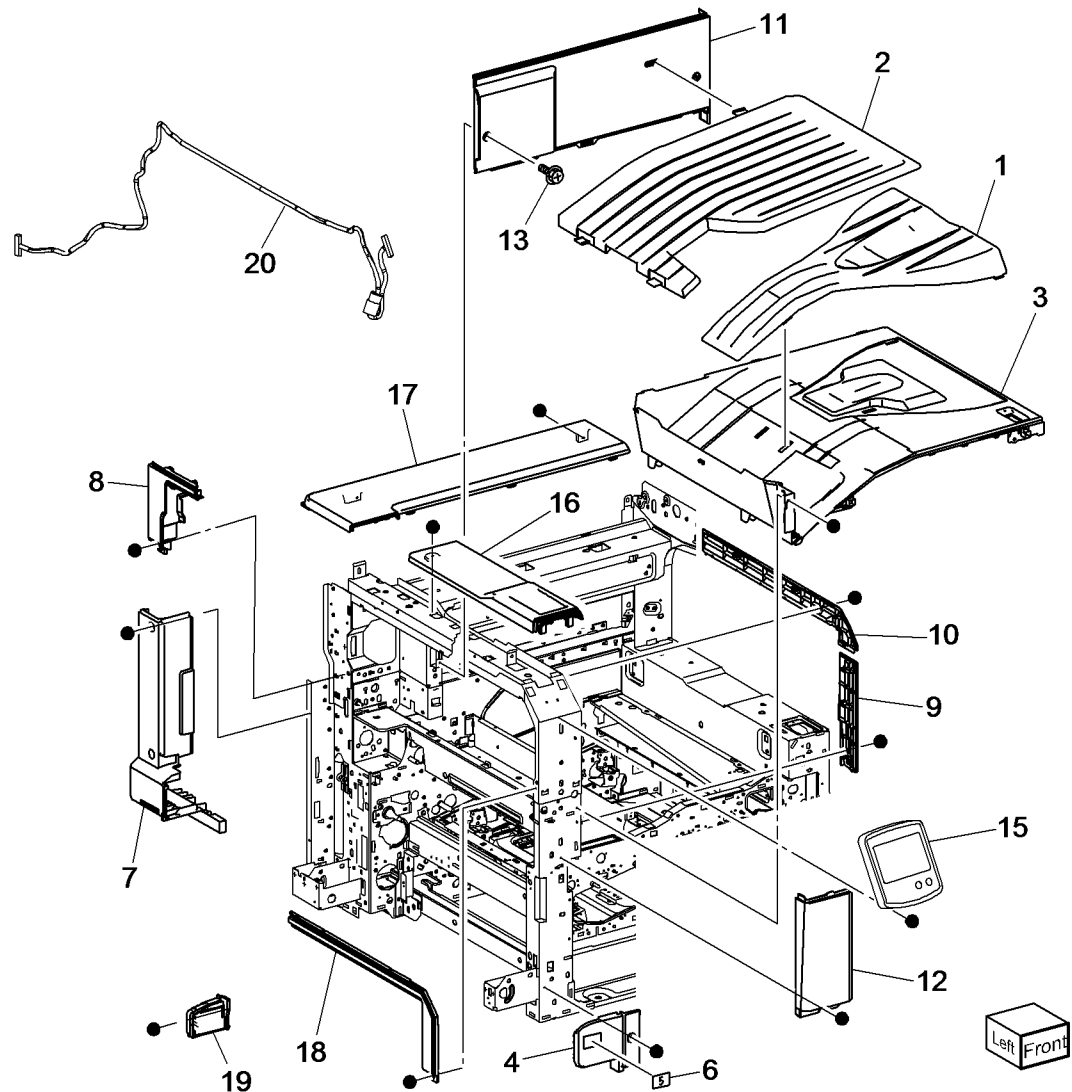
Item	Part	Description
1	815E70140	Plate (Y)
2	815E70150	Plate (M)
3	815E70160	Plate (C)
4	815E43300	Plate (K)
5	-	Magnet Catch (Not Spared)
6	-	Strip (Not Spared)
7	848K61451	Front Cover Assembly (REP 19.1)
8	-	Front Cover (P/O PL 19.1 Item 7) (REP 19.1)
9	-	Strip (P/O PL 19.1 Item 7)
10	848K42190	Inner Cover (REP 19.1)
11	-	Guide (Not Spared)
12	-	Block (Not Spared)
13	-	Logo Plate and Badge (Not Spared)
14	-	Tapping Screw (Not Spared)



s7800-174

PL 19.2 Covers (2 of 3)

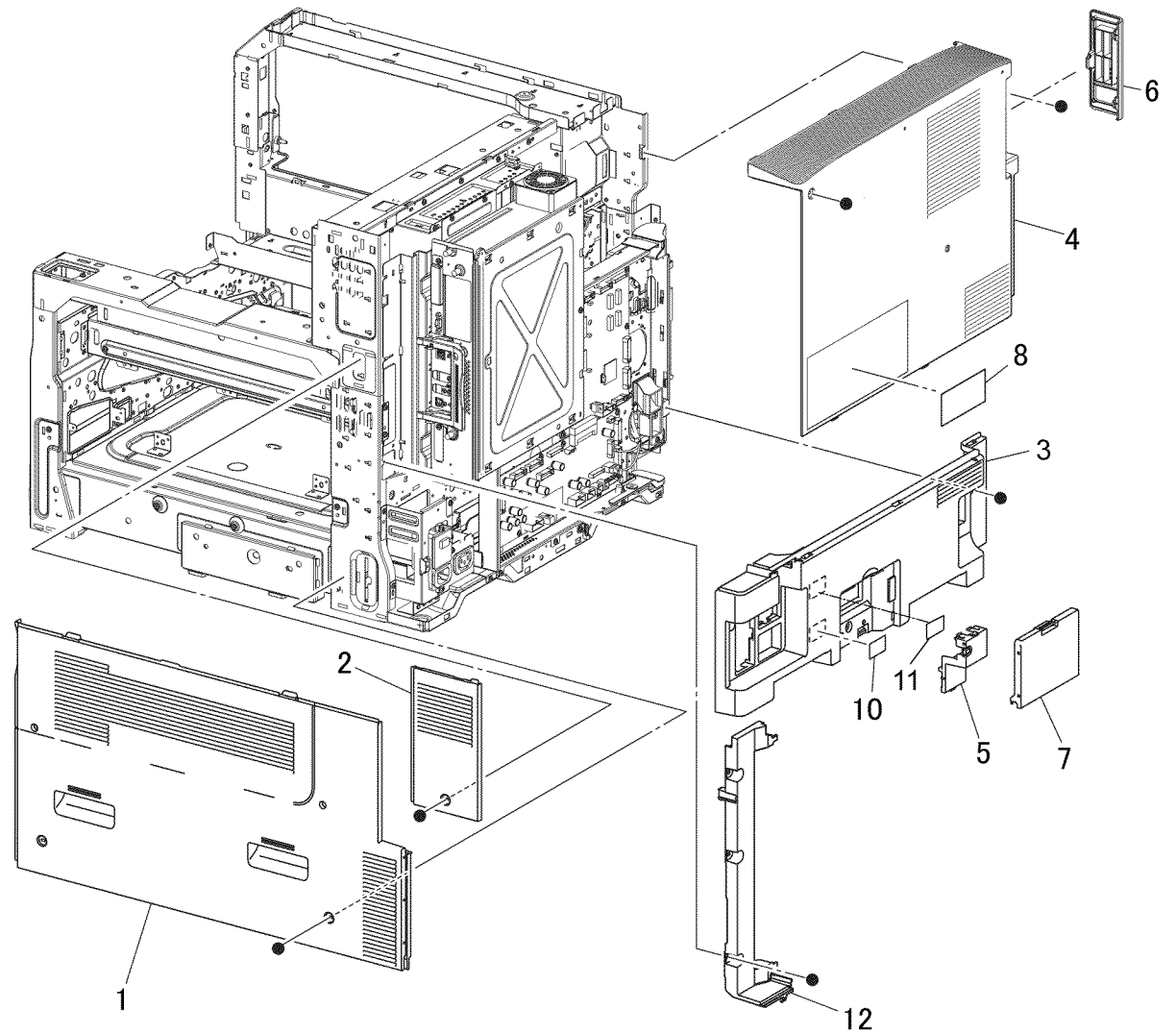
Item	Part	Description
1	050E25450	Add Tray
2	050E25661	Exit 2 Tray
3	848E44940	Top Cover (REP 19.2)
4	-	Tray 1 Front Cover (Not Spared) (REP 19.3)
5	-	Not Used
6	-	Number Label (5) (Not Spared)
7	848E44990	Left Rear Lower Cover (REP 19.4)
8	848E56720	Left Upper Cover (REP 19.5)
9	-	Exit Front Cover (Not Spared) (REP 19.6)
10	848E56650	Exit Upper Cover (REP 19.7)
11	848E56660	Deflector Shield (REP 19.8)
12	848E56630	Front Left Cover (UI Front Bracket Base) (REP 19.9)
13	-	Screw (Black)
14	-	Not Used
15	848K54000	Control Panel (REP 19.10)
16	848E56730	Left Top Cover (REP 19.11)
17	848E56740	Rear Top Cover (REP 19.12)
18	-	Left Front Cover (Not Spared) (REP 19.13)
19	-	Left Inner Cover (Not Spared) (REP 19.14)
20	962K98640	UI Harness Assembly



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PL 19.3 Covers (3 of 3)

Item	Part	Description
1	—	Right Cover (Not Spared) (REP 19.15)
2	—	Right Rear Cover (Not Spared)
3	—	Rear Lower Cover (Not Spared) (REP 19.16)
4	—	Rear Upper Cover (Not Spared) (REP 19.17)
5	—	EPSV Cover (Not Spared)
6	—	Filter Cover (Not Spared)
7	—	MCU Cover (Not Spared)
8	—	Data Plate (Not Spared)
9	—	Not Used
10	—	Label (outlet) (Not Spared)
11	—	GFI Label (Not Spared)
12	—	Rear Control Unit Cover (Not Spared)

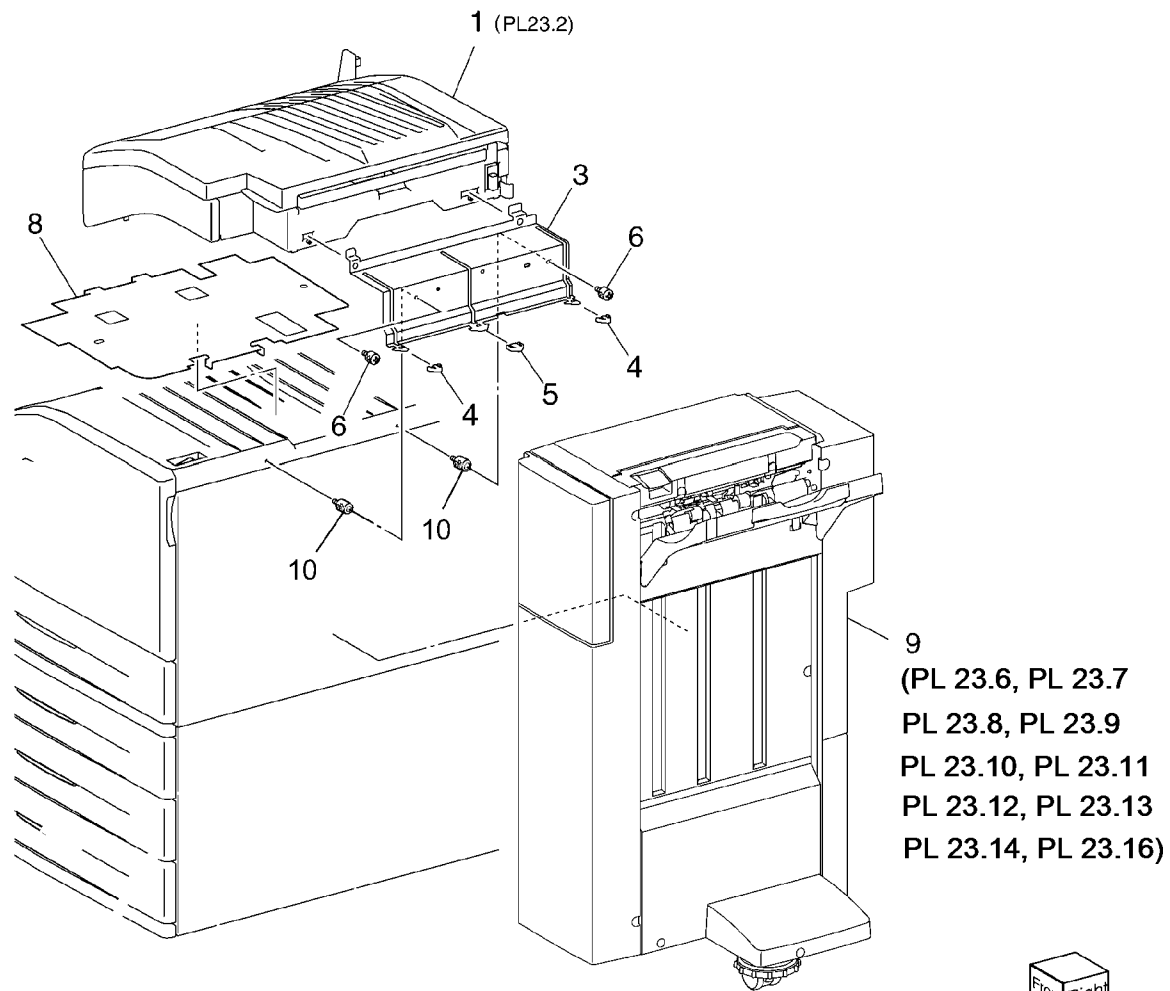


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PL 23.1 H-Transport Assembly (1 of 5)

Item	Part	Description
1	059K65560	H-Transport Assembly (REP 23.1)
2	068K59494	Docking Plate Assembly
3	—	Docking Plate (P/O PL 23.1 Item 2)
4	—	Side Guide (P/O PL 23.1 Item 2)
5	—	Center Guide (P/O PL 23.1 Item 2)
6	—	Thumb Screw (Not Spared)
7	—	Not Used
8	—	Finisher Plate (Not Spared)
9	—	SB Finisher (Not Spared) (REP 23.2)
10	—	HTU Spacer (Not Spared)

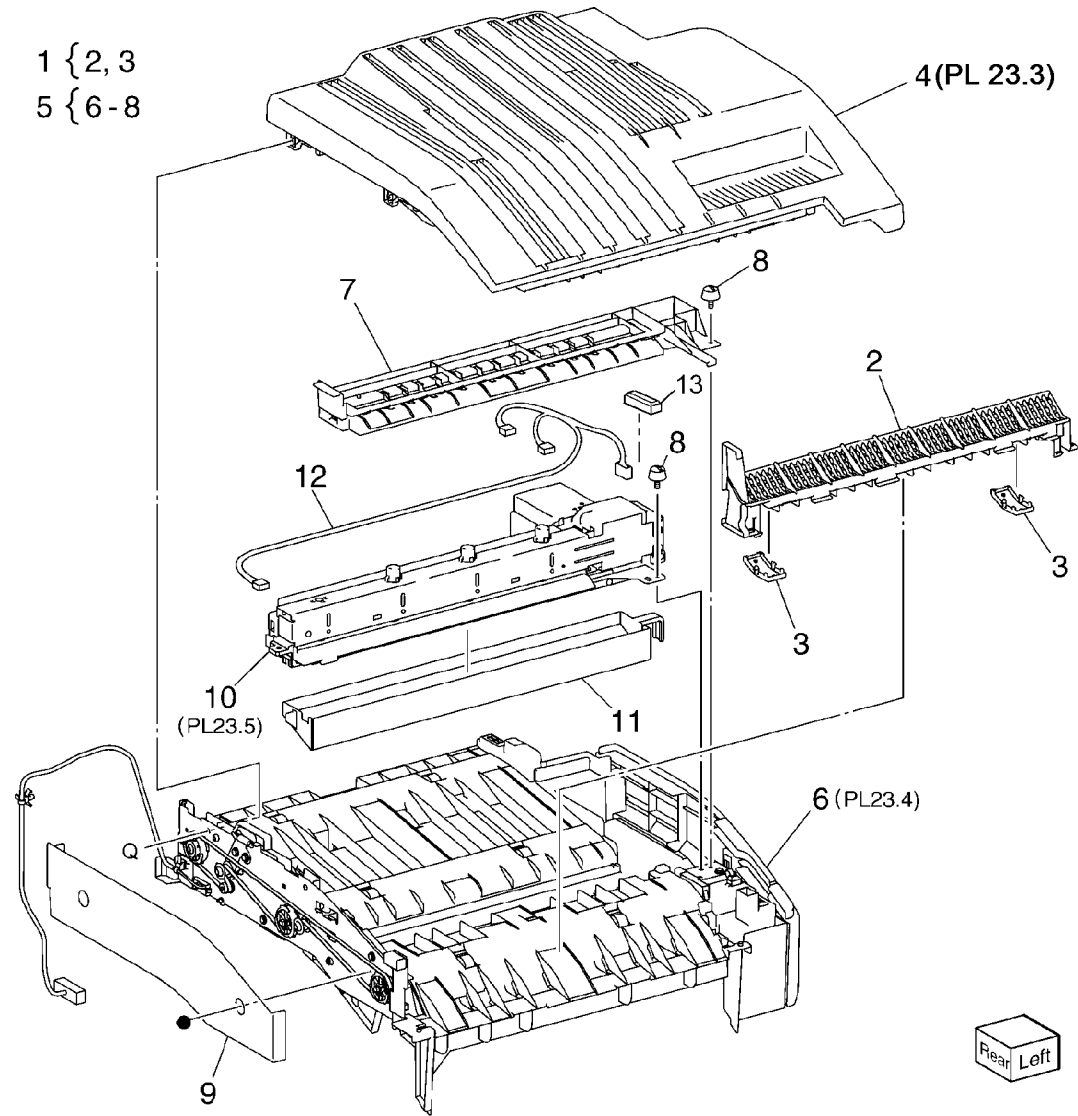
2 { 3 - 5



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PL 23.2 H- Transport Assembly (2 of 5)

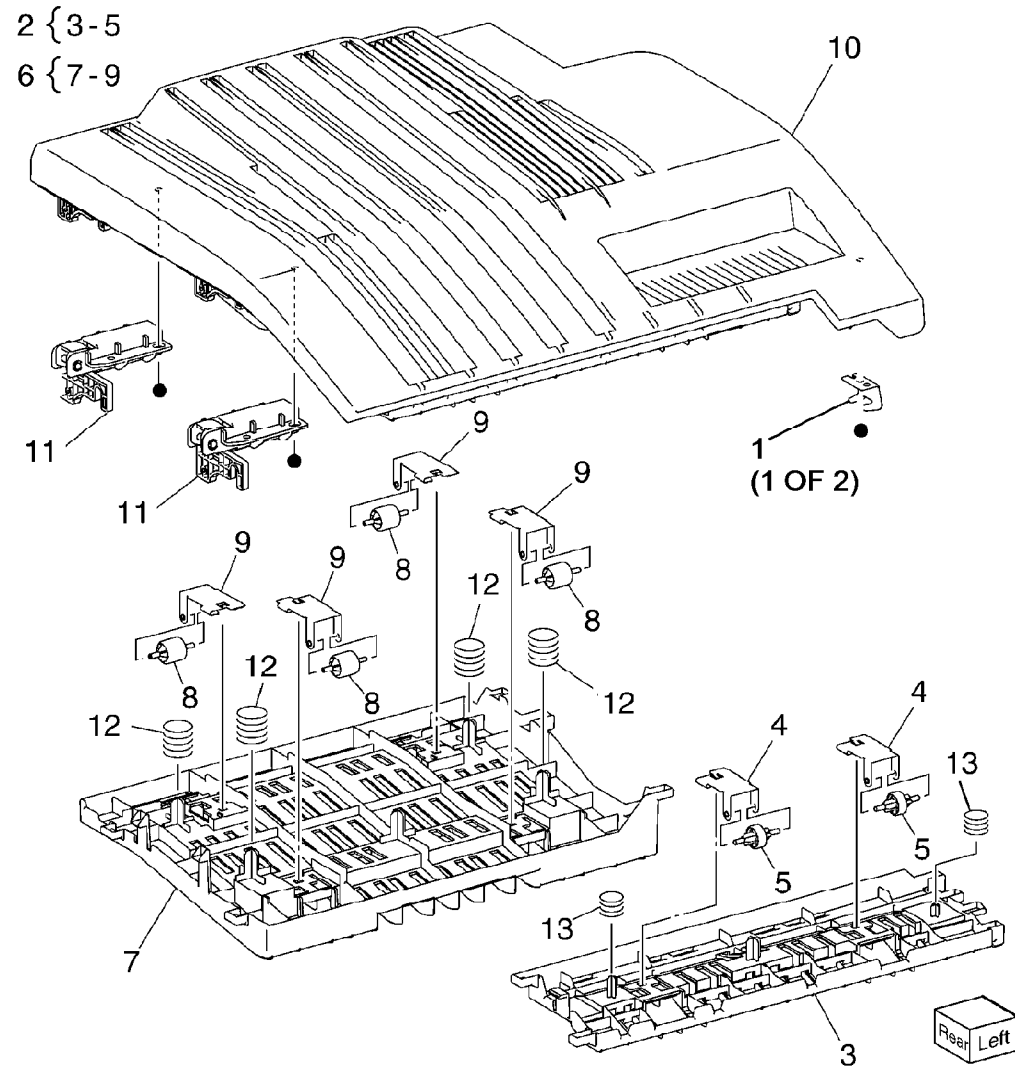
Item	Part	Description
1	848K34181	Left Cover Assembly
2	-	Left Cover (P/O PL 23.2 Item 1)
3	-	Paper Guide (P/O PL 23.2 Item 1)
4	-	Top Cover Assembly (REF: PL 23.3)
5	-	Lower Chute Assembly (P/O PL 23.1 Item 1)
6	-	Lower Chute (P/O PL 23.2 Item 5)
7	-	Chute Assembly (P/O PL 23.2 Item 5)
8	026K81200	Thumb Screw
9	-	Rear Cover (Not Spared)
10	180K00401	Punch Assembly (2/4 Hole) (REP 23.3)
-	180K00391	Punch Assembly (2/3 Hole) (REP 23.3)
11	695K19402	Dust Box (Punch Box)
12	-	Wire Harness (Not Spared)
13	-	Connector Cover (Not Spared)



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PL 23.3 H-Transport Assembly (3 of 5)

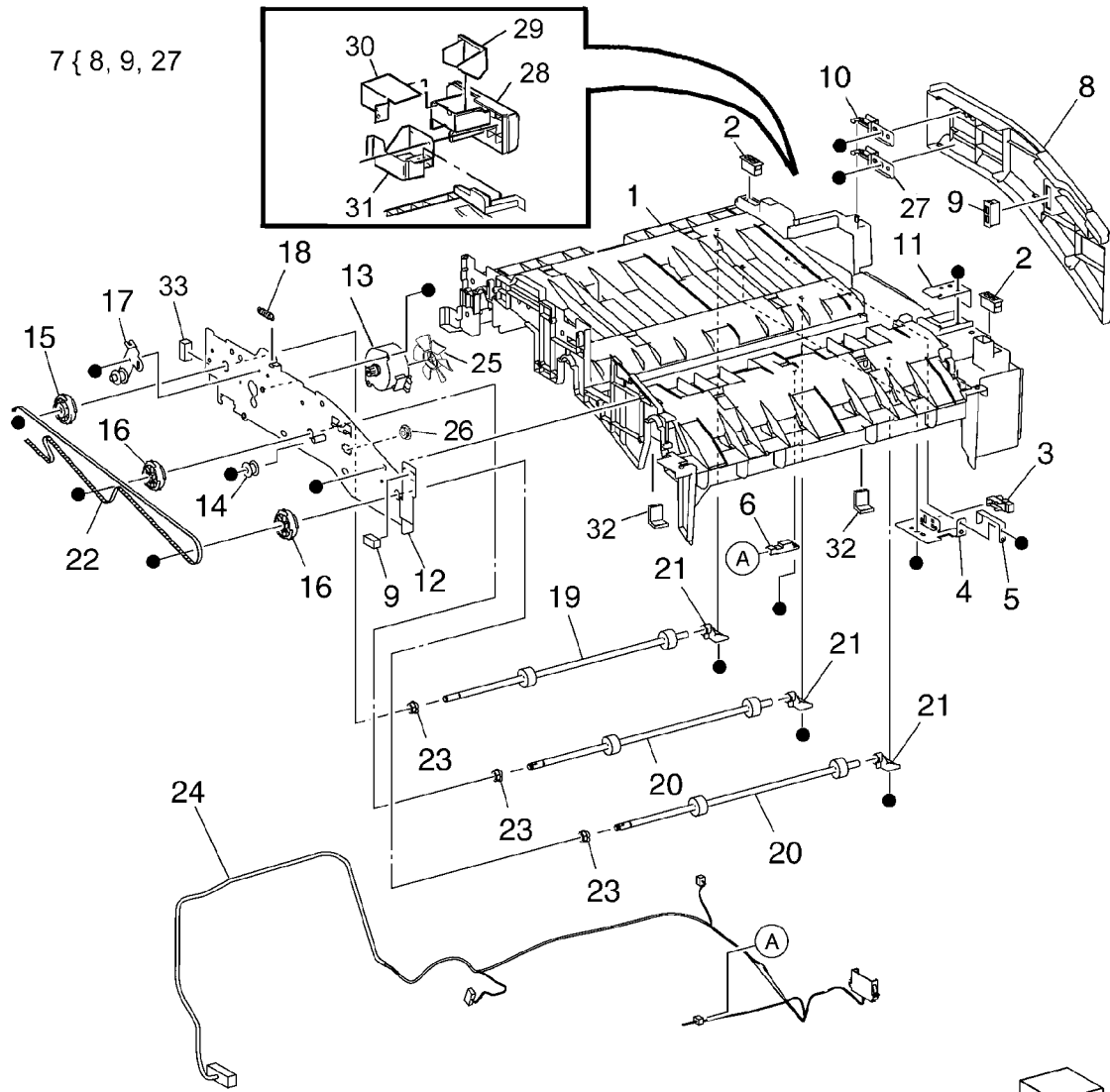
Item	Part	Description
1	-	Bracket (P/O PL 23.2 Item 4)
2	054K35239	Left Chute Assembly
3	-	Left Chute (P/O PL 23.3 Item 2)
4	-	Pinch Spring (P/O PL 23.3 Item 2)
5	-	Pinch Roller (P/O PL 23.3 Item 2)
6	054K35245	Right Chute Assembly
7	-	Right Chute (P/O PL 23.3 Item 6)
8	-	Pinch Roller (P/O PL 23.3 Item 6)
9	-	Pinch Spring (P/O PL 23.3 Item 6)
10	-	Top Cover (Not Spared)
11	003K15985	H-Transport Counter Balance Assembly (Left) (REP 23.4)
12	-	H-Transport Counter Balance Assembly (Right) (P/O PL 23.2 Item 4) (REP 23.4)
13	-	Spring (Not Spared)



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PL 23.4 H-Transport Assembly (4 of 5)

Item	Part	Description
1	-	Lower Chute (P/O PL 23.2 Item 6)
2	-	Magnet (P/O PL 23.2 Item 6)
3	130E81600	H-Transport Open Sensor (Q12-303)
4	-	Sensor Bracket (Not Spared)
5	-	Actuator (Not Spared)
6	-	H-Transport Entrance Sensor (Q12-190) (Not Spared)
7	-	H-Transport Front Cover Assembly (Not Spared)
8	-	H-Transport Front Cover (P/O PL 23.4 Item 7)
9	-	Gasket (P/O PL 23.4 Item 7)
10	-	Hinge (Not Spared)
11	-	Bracket (P/O PL 23.2 Item 6)
12	-	Rear Frame Assembly (P/O PL 23.2 Item 6)
13	127K57622	H-Transport Motor (MOT12-018) (REP 23.5)
14	-	Tension Pulley (Not Spared)
15	-	Pulley (43T) (Not Spared)
16	-	Pulley (43T) (Not Spared)
17	-	Tension Bracket (P/O PL 23.2 Item 6)
18	-	Spring Tension (Not Spared)
19	-	Drive Roll (Not Spared)
20	-	Drive Roll (Not Spared)
21	-	Bearing (Not Spared)
22	423W01154	H-Transport Belt (REP 23.6)
23	-	Sleeve Bearing (Not Spared)
24	-	Wire Harness (Not Spared)
25	-	Fan Blade (Not Spared)
26	-	Pinch Bushing (Not Spared)
27	-	Lower Hinge (P/O PL 23.4 Item 7)
28	-	Front Cover (Not Spared)
29	-	Switch Cover (Not Spared)
30	-	Cover (Not Spared)
31	-	Bracket (Not Spared)
32	-	Pinch Cushion (Not Spared)
33	-	Gasket (Not Spared)

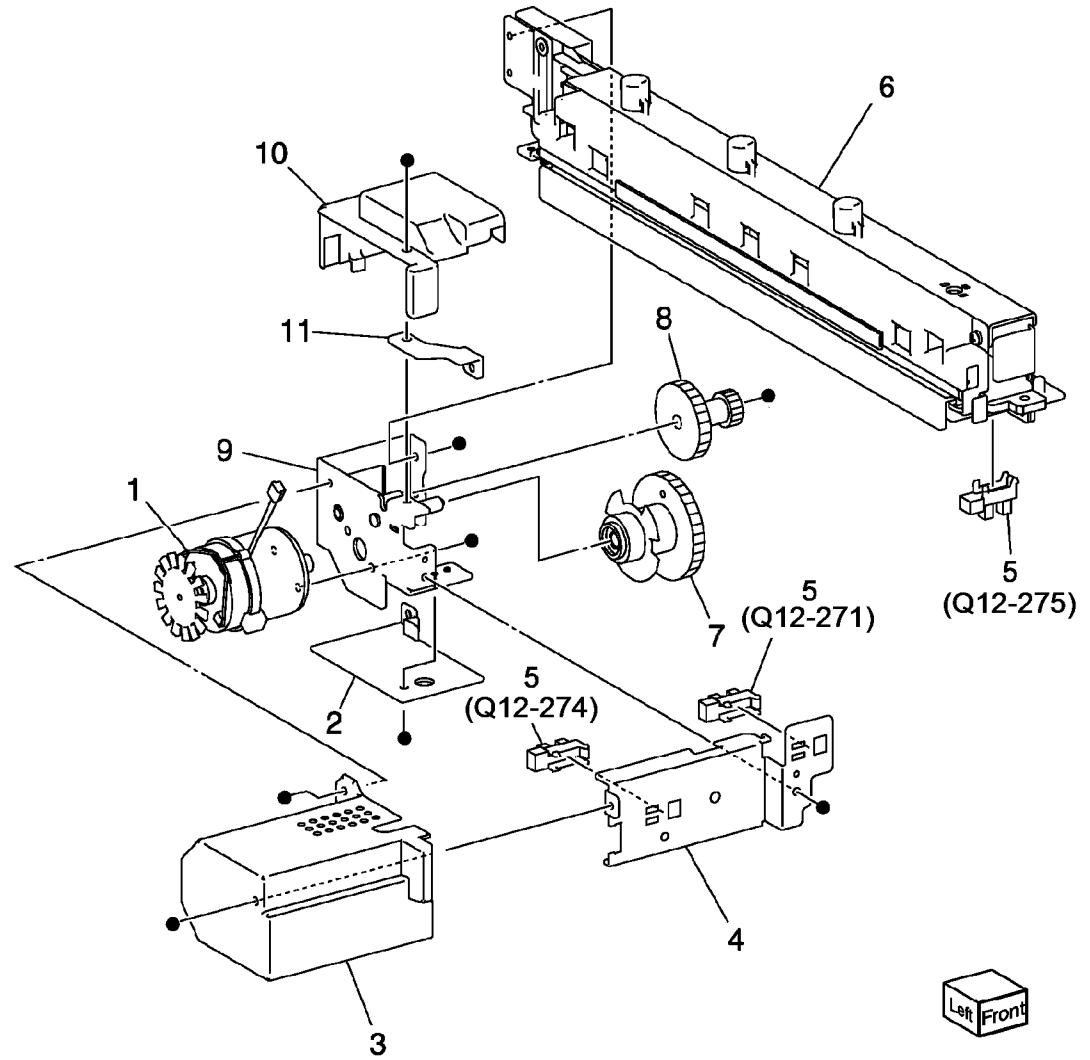


Rear Left

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PL 23.5 H-Transport Assembly (5 of 5)

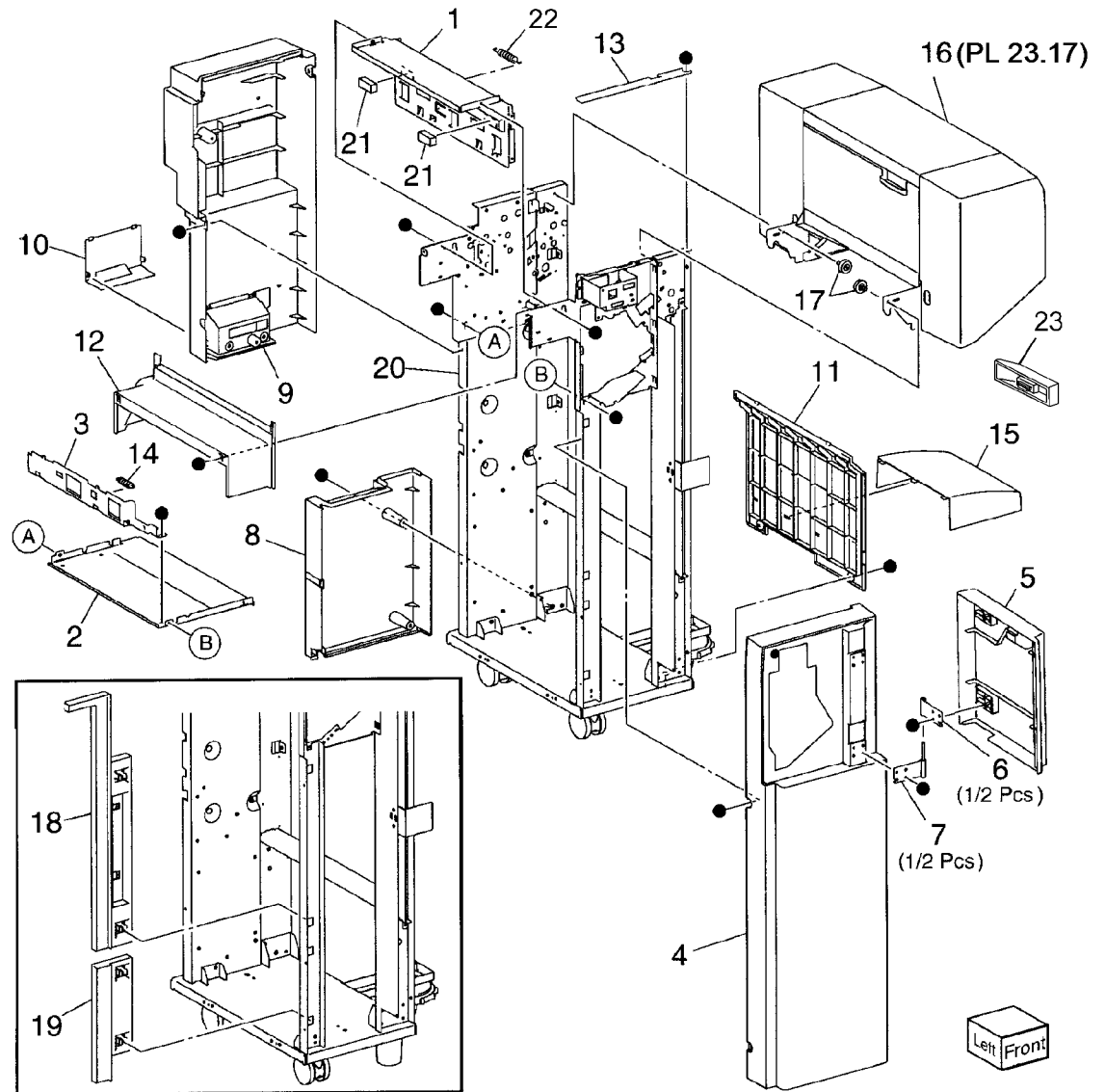
Item	Part	Description
1	–	Punch Motor (MOT12-074) (P/O PL 23.2 Item 10)
2	–	Punch Lower Cover (P/O PL 23.2 Item 10)
3	–	Punch Motor Cover (P/O PL 23.2 Item 10)
4	–	Sensor Bracket (P/O PL 23.2 Item 10)
5	–	Puncher Encoder Sensor (Q12-274)/Puncher Home Sensor (Q12-271)/Punch Box Set Sensor (Q12-275)
6	–	Punch Frame Assembly (P/O PL 23.2 Item 10)
7	–	Encoder/Gear Assembly (P/O PL 23.2 Item 10)
8	–	Gear (P/O PL 23.2 Item 10)
9	–	Motor Bracket (P/O PL 23.2 Item 10)
10	–	Punch Top Cover (P/O PL 23.2 Item 10)
11	–	Bracket (P/O PL 23.2 Item 10)



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PL 23.6 Finisher Covers

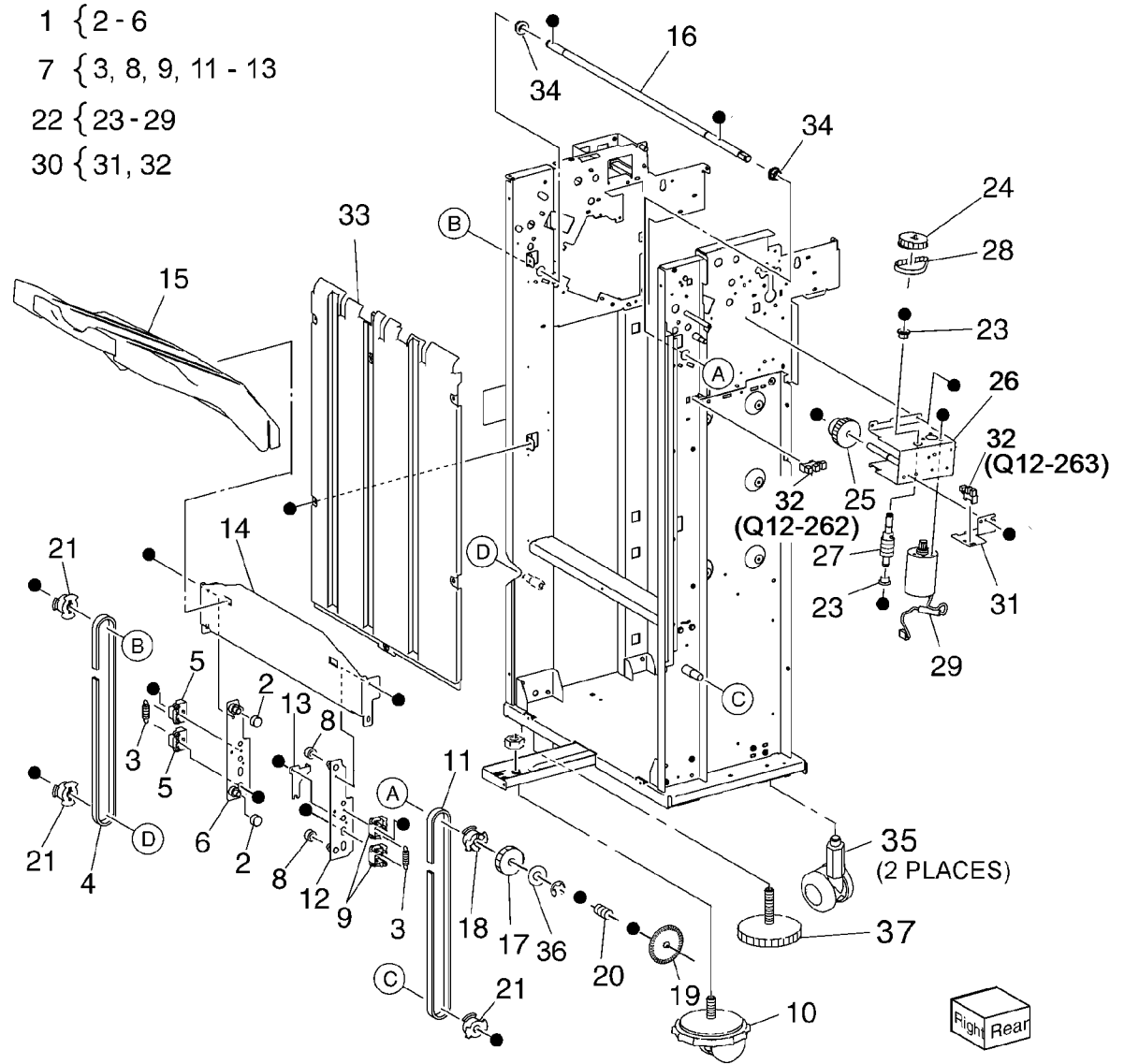
Item	Part	Description
1	-	Plate (Not Spared)
2	-	Lower Plate (Not Spared)
3	-	Docking Lever (Not Spared)
4	-	Front Cover Assembly (Not Spared) (REP 23.7)
5	-	Upper Front Door (Not Spared)
6	-	Bracket (Not Spared)
7	068K59531	Hinge
8	848E15210	Rear Lower Cover (REP 23.8)
9	848E15221	Rear Upper Cover (REP 23.9)
10	848E15233	Connector Cover
11	848E15241	Stacker Lower Cover (REP 23.10)
12	-	Left Hand Cover (Not Spared)
13	-	Cover (Not Spared)
14	-	Spring (Not Spared)
15	-	Foot Cover (Not Spared) (REP 23.11)
16	801K30701	Booklet Maker Assembly (REP 23.12)
17	826E31870	Thumb Screw
18	-	Upper Adjust Cover (Not Spared)
19	-	Lower Adjust Cover (Not Spared)
20	-	Base Frame Assembly (Not Spared)
21	921W41162	Gasket
22	-	Extension Spring (Not Spared)
23	-	Paper Guide (Not Spared)



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PL 23.7 Finisher Stacker

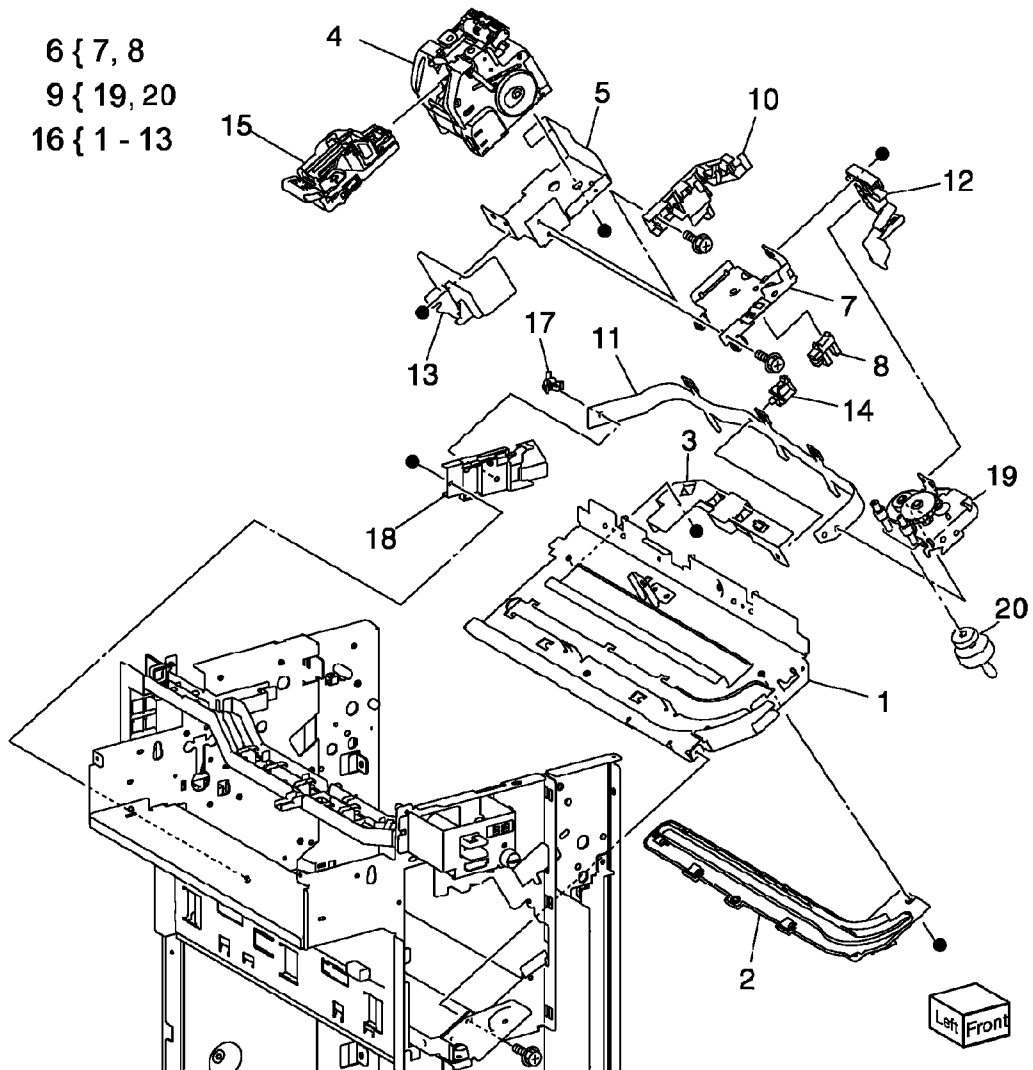
Item	Part	Description
1	041K95980	Front Carriage Assembly (REP 23.13)
2	-	Bearing (P/O PL 23.7 Item 1)
3	-	Spring (P/O PL 23.7 Item 1)
4	-	Front Stacker Belt (P/O PL 23.7 Item 1)
5	-	Clamp (P/O PL 23.7 Item 1)
6	-	Front Carriage Assembly (P/O PL 23.7 Item 1)
7	041K95990	Rear Carriage Assembly (REP 23.13)
8	-	Bearing (P/O PL 23.7 Item 7)
9	-	Clamp (P/O PL 23.7 Item 7)
10	-	Knob Caster Assembly (Not Spared)
11	-	Rear Stacker Belt (P/O PL 23.7 Item 7)
12	-	Rear Carriage (P/O PL 23.7 Item 7)
13	-	Actuator (P/O PL 23.7 Item 7)
14	-	Carriage Tray (Not Spared)
15	050K61106	Stacker Tray Assembly (REP 23.14)
16	-	Shaft (Not Spared)
17	807E08990	Gear
18	020E37710	Pulley
19	146E90650	Encoder
20	809E56860	Spring
21	020E37720	Pulley (18T)
22	068K58304	Stacker Elevator Motor Assembly (REP 23.15)
23	-	Bearing (P/O PL 23.7 Item 22)
24	-	Pulley (60T) (P/O PL 23.7 Item 22)
25	-	Gear (15T/37T) (P/O PL 23.7 Item 22)
26	-	Motor Bracket (P/O PL 23.7 Item 22)
27	-	Worm Shaft (P/O PL 23.7 Item 22)
28	-	Belt (P/O PL 23.7 Item 22)
29	-	Stacker Elevator Motor (MOT12-060) (P/O PL 23.7 Item 22)
30	-	Stacker Encoder Sensor Assembly (Not Spared)
31	-	Bracket (P/O PL 23.7 Item 30)
32	-	Stacker Encoder Sensor (Q12-263)/ Stacker No Paper Sensor (Q12-262) (P/O PL 23.7 Item 30)
33	-	Stacker Upper Cover (Not Spared) (REP 23.16)
34	-	Bearing (Not Spared)
35	017K94880	Caster Assembly
36	-	Washer (Not Spared)
37	-	Adjustable Foot Assembly (Not Spared)



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PL 23.8 Finisher Stapler

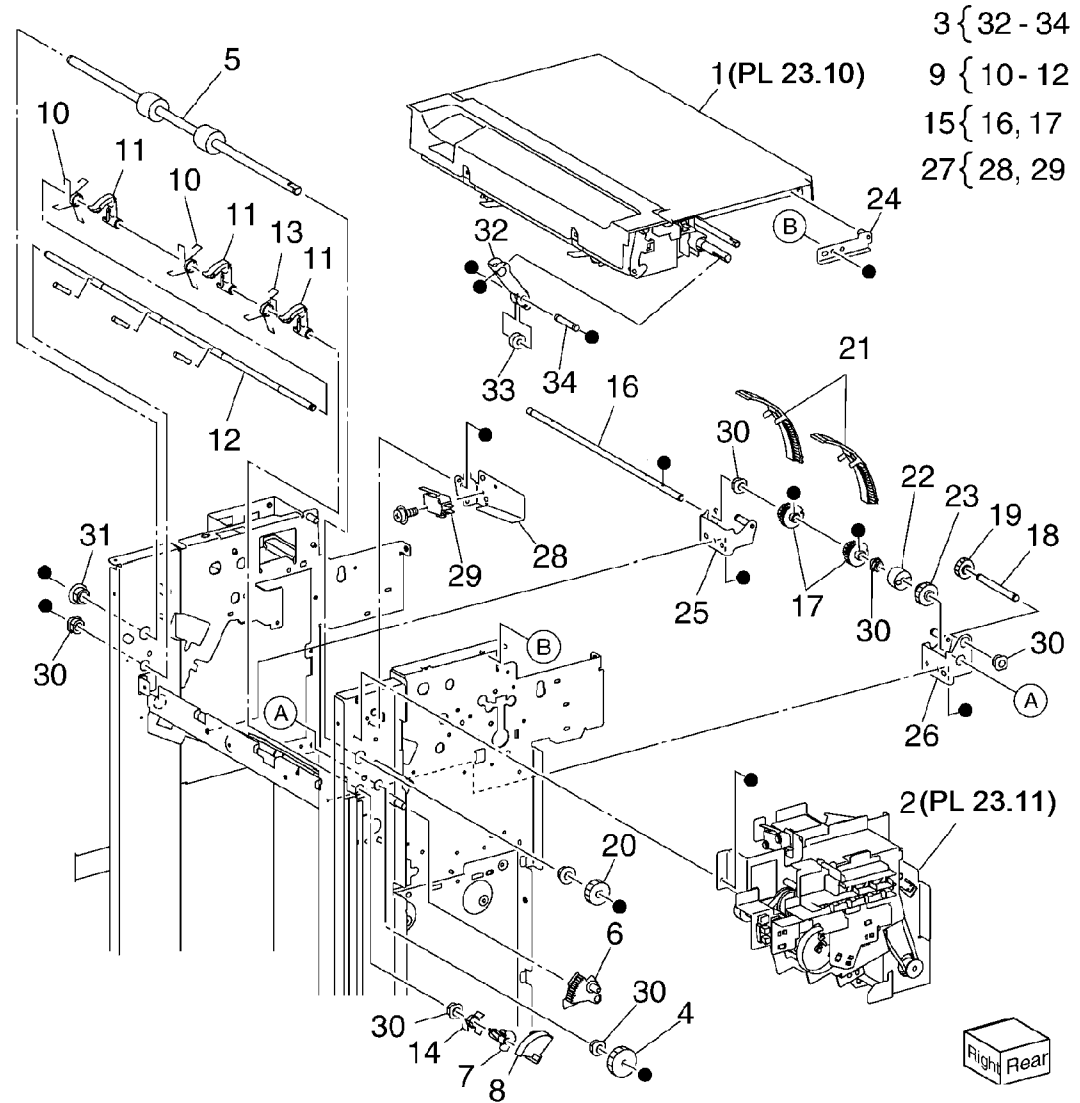
Item	Part	Description
1	-	Base Frame (P/O PL 23.8 Item 16)
2	-	Rail (P/O PL 23.8 Item 16)
3	-	Harness Guide (P/O PL 23.8 Item 16)
4	029K92350	Stapler Assembly (REP 23.17)
5	-	Holder (P/O PL 23.8 Item 16)
6	-	Stapler Move Position Sensor Assembly (P/O PL 23.8 Item 16)
7	-	Bracket (P/O PL 23.8 Item 6)
8	130E94940	Stapler Move Position Sensor (Q12-241)
9	-	Stapler Move Motor Assembly (P/O PL 23.8 Item 16) (REP 23.18)
10	-	Harness Guide (P/O PL 23.8 Item 16)
11	-	Harness Support Guide (P/O PL 23.8 Item 16)
12	-	Harness Guide (P/O PL 23.8 Item 16)
13	-	Stapler Cover (P/O PL 23.8 Item 16)
14	-	Clamp (Not Spared)
15	-	Stapler Cartridge (Not Spared)
16	-	Stapler Unit (Not Spared)
17	-	Cable Band (Not Spared)
18	-	Harness Guide (Not Spared)
19	-	Stapler Motor Assembly (P/O PL 23.8 Item 9)
20	-	Motor Assembly (P/O PL 23.8 Item 9)



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PL 23.9 Finisher Eject (1 of 5)

Item	Part	Description
1	-	Eject Chute Assembly (Not Spared) (REP 23.19)
2	-	Eject Assembly (Not Spared)
3	031K93790	Clamp Arm Assembly
4	807E21400	Gear (Z31)
5	059K55111	Eject Roller
6	807E21380	Gear (Z72)
7	807E21391	Gear (Z18)
8	120E29772	Actuator
9	006K86731	Set Clamp Shaft Assembly (REP 23.20)
10	-	Spring (P/O PL 23.9 Item 9)
11	-	Set Clamp Holder (P/O PL 23.9 Item 9)
12	-	Shaft (P/O PL 23.9 Item 9)
13	809E79060	Spring
14	809E79080	Spring
15	006K86741	Guide Paper Shaft Assembly
16	-	Guide Paper Shaft (P/O PL 23.9 Item 15)
17	-	Gear (20T) (P/O PL 23.9 Item 15)
18	-	Shaft (Not Spared)
19	807E21420	Gear (Z19)
20	807E21370	Gear (Z25)
21	038E36490	Paper Guide (Left/Right) (REP 23.21)
22	005E25820	Clutch
23	807E21970	Gear (Z23)
24	-	Stopper (Not Spared)
25	-	Bracket (Front) (Not Spared)
26	-	Bracket (Rear) (Not Spared)
27	-	Option Switch Assembly (Not Spared)
28	-	Bracket (P/O PL 23.9 Item 27)
29	-	Option Switch (P/O PL 23.9 Item 27)
30	413W77559	Sleeve Bearing
31	413W11860	Bearing
32	-	Clamp Arm (P/O PL 23.9 Item 3)
33	-	Roll (P/O PL 23.9 Item 3)
34	-	Shaft (P/O PL 23.9 Item 3)

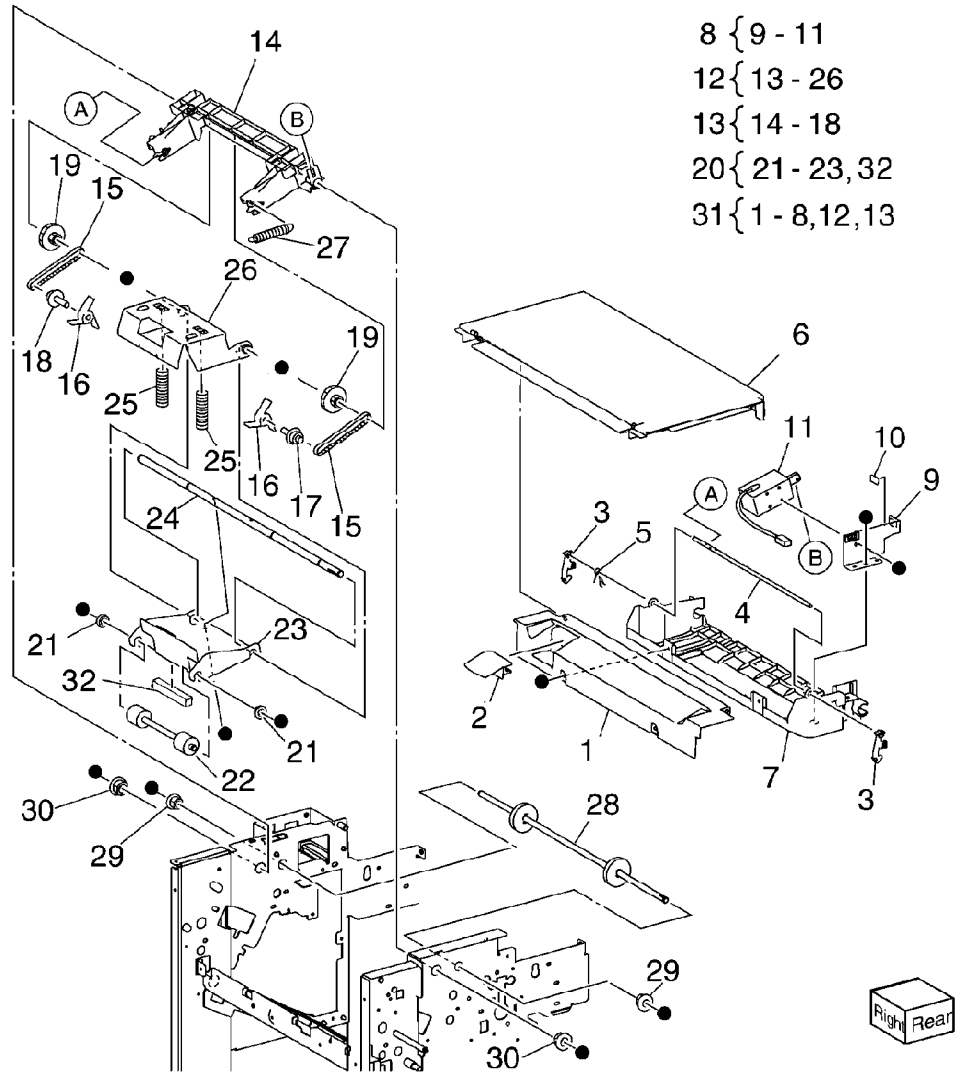


3 { 32 - 34
 9 { 10 - 12
 15 { 16, 17
 27 { 28, 29

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PL 23.10 Finisher Eject (2 of 5)

Item	Part	Description
1	848E15291	Open Cover
2	-	Top Cover Lever (P/O PL 23.10 Item 31)
3	-	Top Cover Latch (P/O PL 23.10 Item 31)
4	-	Shaft (P/O PL 23.10 Item 31)
5	809E79031	Spring
6	848E15303	Eject Cover (REP 23.22)
7	054K35301	Eject Chute
8	121K41632	Sub Paddle Solenoid Assembly (REP 23.23)
9	-	Bracket (P/O PL 23.10 Item 8)
10	-	Damper (P/O PL 23.10 Item 8)
11	-	Sub Paddle Solenoid (SOL12-013) (P/O PL 23.10 Item 8)
12	059K55721	Eject Roller Assembly
13	031K93770	Paddle Arm Assembly
14	-	Sub Paddle Arm (P/O PL 23.10 Item 13)
15	-	Belt (P/O PL 23.10 Item 13)
16	-	Sub Paddle (P/O PL 23.10 Item 13)
17	-	Pulley (P/O PL 23.10 Item 13)
18	-	Pulley (P/O PL 23.10 Item 13)
19	-	Gear/Pulley (31T/20T) (P/O PL 23.10 Item 12)
20	-	Eject Pinch Roller Assembly (Not Spared)
21	-	Bearing (P/O PL 23.10 Item 20)
22	-	Eject Pinch Roller (P/O PL 23.10 Item 12)
23	-	Bracket (P/O PL 23.10 Item 20)
24	-	Shaft (P/O PL 23.10 Item 12)
25	-	Spring (Not Spared)
26	-	Bracket (P/O PL 23.10 Item 12)
27	-	Spring (Not Spared)
28	-	Eject Drive Shaft (Not Spared)
29	-	Bearing (Not Spared)
30	-	Bearing (Not Spared)
31	-	Eject Cover Assembly (Not Spared)
32	-	Eject Eliminator (P/O PL 23.10 Item 20)

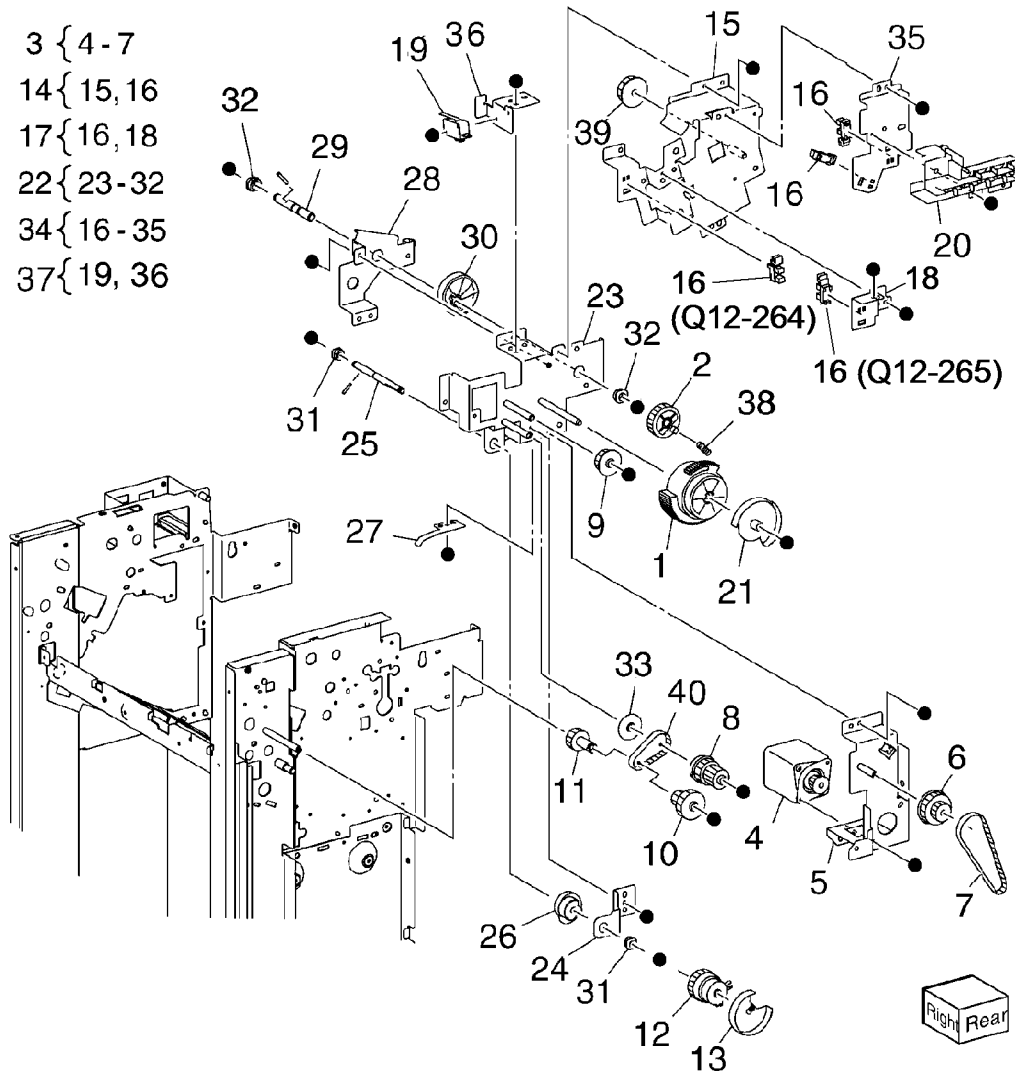


8 { 9 - 11
 12 { 13 - 26
 13 { 14 - 18
 20 { 21 - 23, 32
 31 { 1 - 8, 12, 13

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PL 23.11 Finisher Eject (3 of 5)

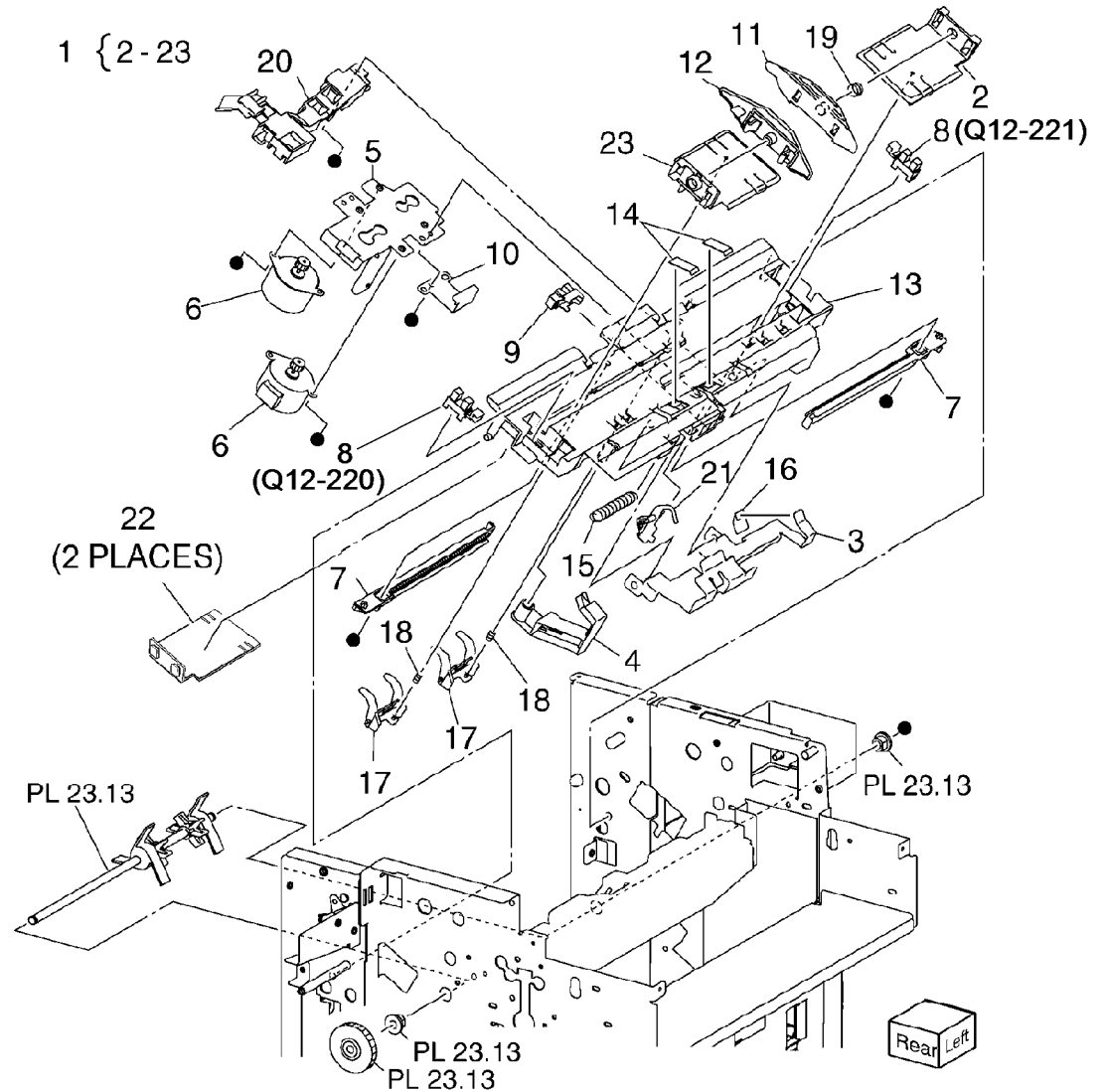
Item	Part	Description
1	807E20931	Gear (Z82/Z77/Z51)
2	807E20940	Gear (Z38)
3	-	Eject Motor Assembly (Not Spared) (REP 23.24)
4	127K53140	Eject Motor (MOT12-054) (REP 23.24)
5	-	Bracket (P/O PL 23.11 Item 3)
6	807E22030	Gear/Pulley (Z20/T49)
7	423W31054	Belt
8	807E21330	Gear (Z28/Z22/T38)
9	807E21340	Gear (Z25)
10	807E21350	Gear/Pulley (Z32L/T25)
11	807E21360	Gear (Z23L)
12	121K34631	Set Clamp Clutch (Z34) (MOT12-050)
13	120E29591	Set Clamp Cam Actuator
14	130K72170	Stacker Height Sensor 1 Assembly (REP 23.25)
15	-	Bracket (P/O PL 23.11 Item 14)
16	-	Stacker Height Sensor 1 (Q12-264)/Stacker Height Sensor 2 (Q12-265) (REP 23.25)/ Eject Clamp Home Sensor (Q12-250)/ Set Clamp Home Sensor (Q12-251) (REP 23.25)
17	130K72180	Stacker Height Sensor 2 Assembly (REP 23.25)
18	-	Bracket (P/O PL 23.11 Item 17)
19	-	Eject Cover Switch (S12-300) (P/O PL 23.11 Item 37)
20	-	Harness Guide (Not Spared)
21	120E29851	Gear Select Actuator
22	068K58731	Eject Drive Bracket Assembly
23	-	Bracket (P/O PL 23.11 Item 22)
24	-	Bracket (P/O PL 23.11 Item 22)
25	-	Shaft (P/O PL 23.11 Item 22)
26	-	Clamp Set Cam (P/O PL 23.11 Item 22)
27	-	Spring (P/O PL 23.11 Item 22)
28	-	Bracket (P/O PL 23.11 Item 22)
29	-	Shaft (P/O PL 23.11 Item 22)
30	-	Eject Clamp Cam (P/O PL 23.11 Item 22)
31	-	Sleeve Bearing (P/O PL 23.11 Item 22)
32	-	Sleeve Bearing (P/O PL 23.11 Item 22)
33	-	Drive Eject Flange (P/O PL 23.11 Item 34)
34	130K72190	Eject Clamp Home Sensor Assembly
35	-	Bracket (P/O PL 23.11 Item 34)
36	-	Bracket (P/O PL 23.11 Item 37)
37	068K58741	Eject Cover Switch Assembly
38	809E79820	Spring
39	807E22040	Gear (Z30)
40	-	Belt (Not Spared)



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PL 23.12 Finisher Eject (4 of 5)

Item	Part	Description
1	050K61091	Compiler Tray Assembly (REP 23.26)
2	-	Tamper Guide, Rear (P/O PL 23.12 Item 1)
3	-	Compile Center Paper Guide (P/O PL 23.12 Item 1)
4	-	Compile Rear Paper Guide (P/O PL 23.12 Item 1)
5	-	Bracket (P/O PL 23.12 Item 1)
6	-	Front /Rear Tamper Motor (P/O PL 23.12 Item 1) (REP 23.27)
7	-	Rack (Front) (P/O PL 23.12 Item 1)
8	-	Front Tamper Home Sensor (Q12-220)/ Rear Tamper Home Sensor (Q12-221) (P/O PL 23.12 Item 1) (REP 23.28)
9	-	Compile Tray No Paper Sensor (Q12-151) (P/O PL 23.12 Item 1) (REP 23.29)
10	-	Spring (P/O PL 23.12 Item 1)
11	-	Tamper Front Guide (P/O PL 23.12 Item 1)
12	-	Tamper Rear Guide (P/O PL 23.12 Item 1)
13	-	Compile Tray (P/O PL 23.12 Item 1)
14	-	Paper Paddle Guide (P/O PL 23.12 Item 1)
15	-	Spring (P/O PL 23.12 Item 1)
16	-	Paper End Guide (P/O PL 23.12 Item 1)
17	-	Paper Tray Guide (P/O PL 23.12 Item 1)
18	-	Spring (P/O PL 23.12 Item 1)
19	-	Spring (P/O PL 23.12 Item 1)
20	-	Harness Guide (P/O PL 23.12 Item 1)
21	-	Actuator (P/O PL 23.12 Item 1)
22	-	Tamper Base (P/O PL 23.12 Item 1)
23	-	Tamper Guide, Front (P/O PL 23.12 Item 1)

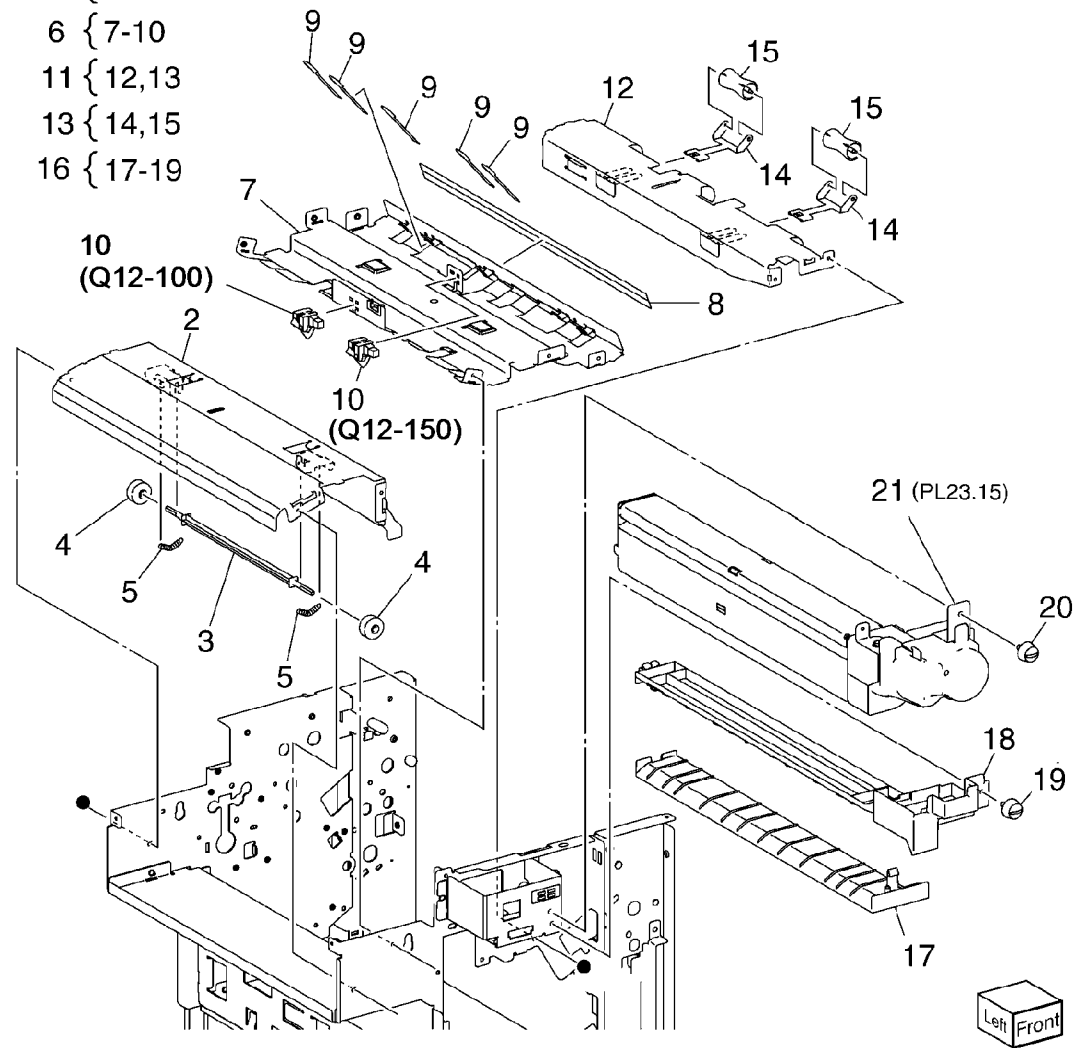


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PL 23.14 Finisher Exit/Folder Assembly

Item	Part	Description
1	-	Lower Chute Assembly (Not Spared)
2	-	Lower Chute (P/O PL 23.14 Item 1)
3	-	Shaft (P/O PL 23.14 Item 1)
4	-	Pinch Roll (P/O PL 23.14 Item 1)
5	-	Spring (P/O PL 23.14 Item 1)
6	054K35540	Exit Upper Chute Assembly
7	-	Exit Upper Chute (P/O PL 23.14 Item 6)
8	-	Static Eliminator (P/O PL 23.14 Item 6)
9	-	Paper Guide (P/O PL 23.14 Item 6)
10	-	Compile Exit Sensor (Q12-150) / Finisher Entrance Sensor (Q12-100) (P/O PL 23.14 Item 6)
11	054K35559	Exit Lower Chute Assembly
12	-	Exit Lower Chute (P/O PL 23.14 Item 11)
13	-	Pinch Roll Assembly (P/O PL 23.14 Item 11)
14	-	Spring (P/O PL 23.14 Item 13)
15	-	Pinch Roll (P/O PL 23.14 Item 13)
16	695K18691	Chute Assembly (REP 23.32)
17	-	Lower Chute (P/O PL 23.14 Item 16)
18	-	Upper Chute (P/O PL 23.14 Item 16)
19	-	Thumb Screw (P/O PL 23.14 Item 16)
20	-	Not Used
21	-	Crease Assembly (option) (Not Spared) (REP 23.33)

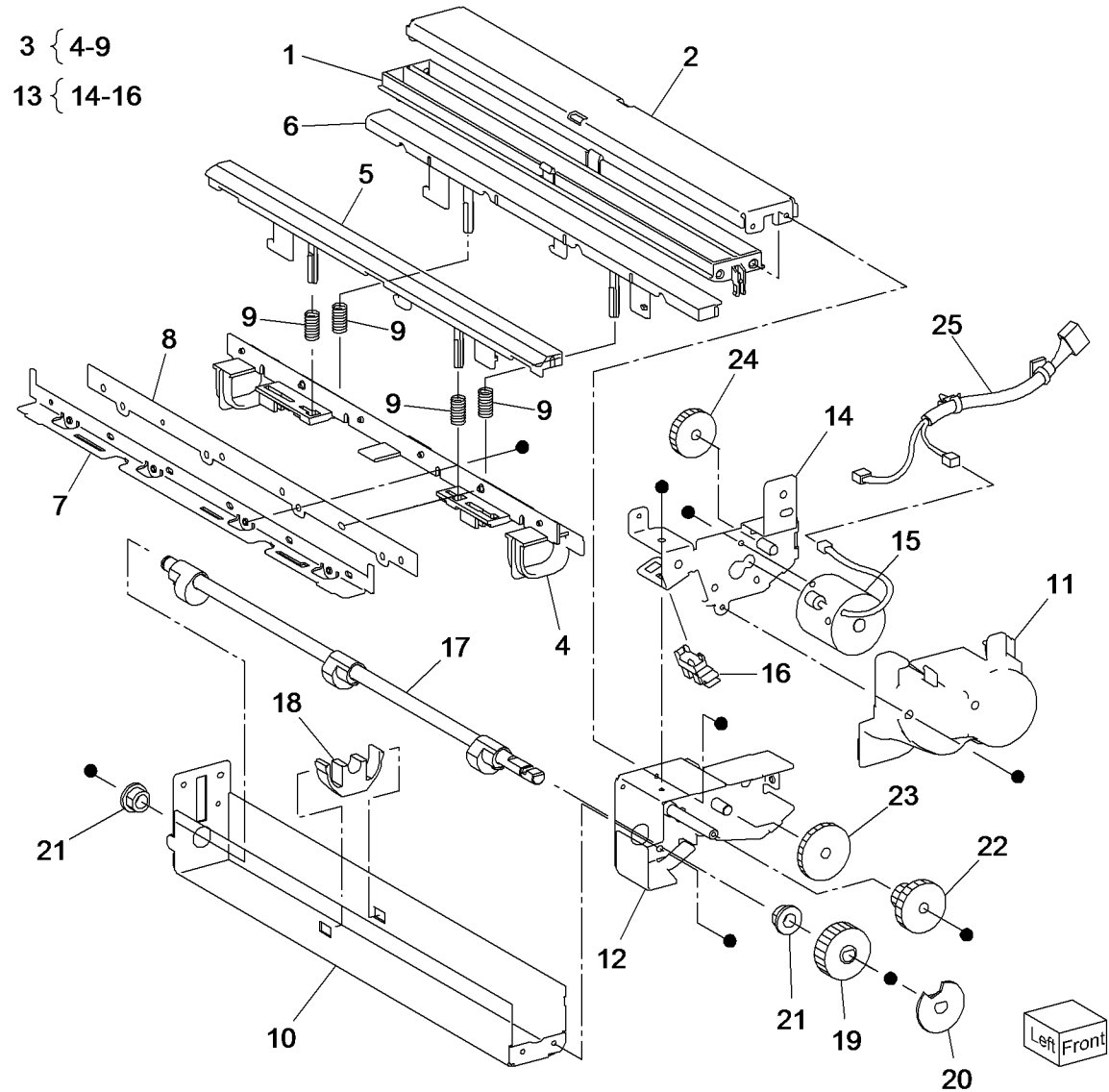
- 1 { 2-5
- 6 { 7-10
- 11 { 12,13
- 13 { 14,15
- 16 { 17-19



s7800-191

PL 23.15 Folder Assembly

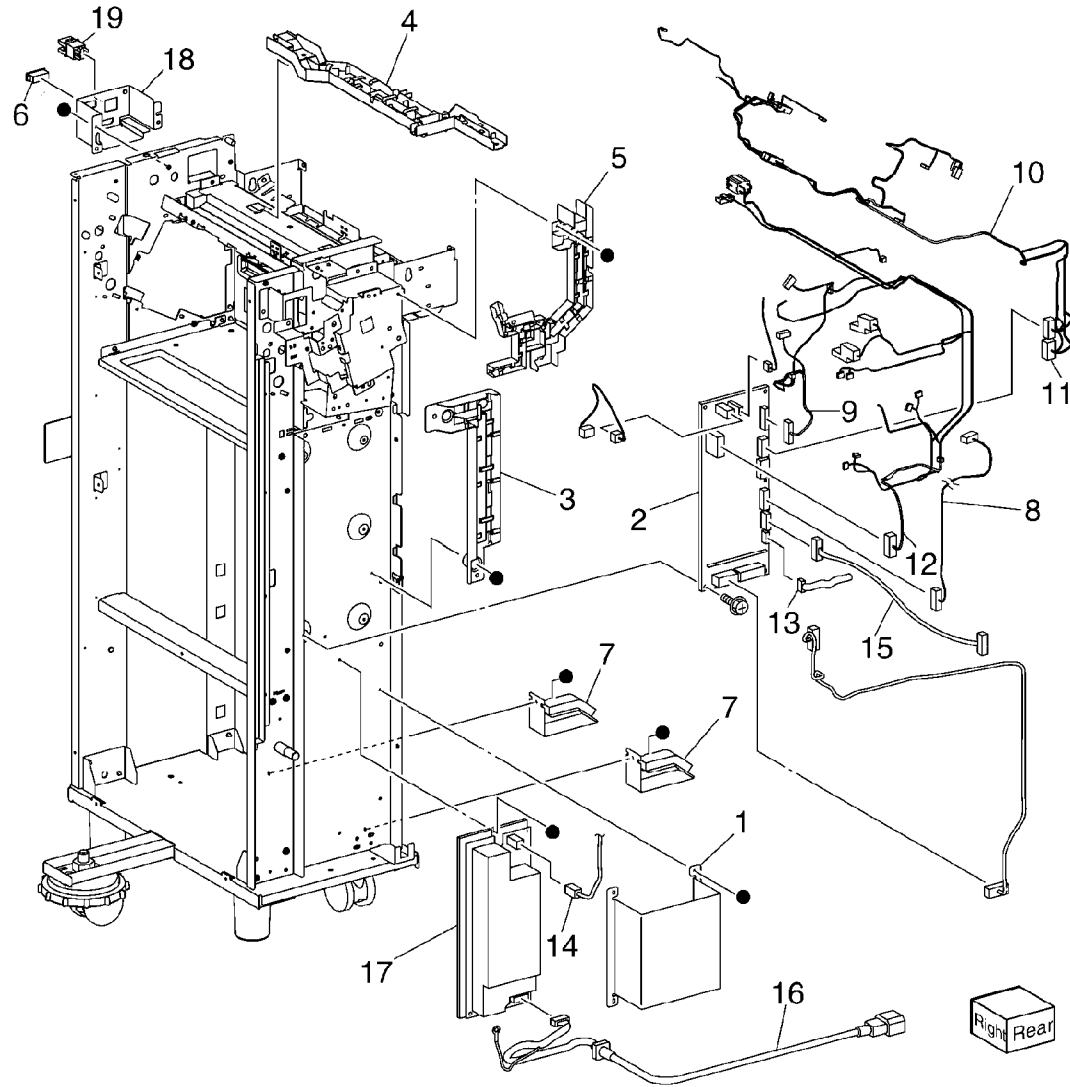
Item	Part	Description
1	-	Upper Chute (P/O PL 23.14 Item 21)
2	-	Upper Plate (P/O PL 23.14 Item 21)
3	-	Knife Assembly (P/O PL 23.14 Item 21)
4	-	Blade Holder (P/O PL 23.15 Item 3)
5	-	Lower Holder 1 (P/O PL 23.15 Item 3)
6	-	Lower Holder 2 (P/O PL 23.15 Item 3)
7	-	Bracket (P/O PL 23.15 Item 3)
8	-	Blade (P/O PL 23.15 Item 3)
9	-	Spring (P/O PL 23.14 Item 2)
10	-	Base Frame (P/O PL 23.14 Item 21)
11	-	Front Cover (P/O PL 23.14 Item 21)
12	-	Bracket (P/O PL 23.14 Item 21)
13	-	Folder Knife Motor Assembly (P/O PL 23.14 Item 21)
14	-	Motor Bracket (P/O PL 23.15 Item 13)
15	-	Folder Knife Motor (MOT13-022) (P/O PL 23.15 Item 13)
16	-	Folder Home Sensor (Q13-160) (P/O PL 23.15 Item 13)
17	-	Cam Shaft Assembly (P/O PL 23.14 Item 21)
18	-	Guide (P/O PL 23.14 Item 21)
19	-	Gear (28T/8T) (P/O PL 23.14 Item 21)
20	-	Encoder (P/O PL 23.14 Item 21)
21	-	Bearing (P/O PL 23.14 Item 21)
22	-	Gear (12T/27T) (P/O PL 23.14 Item 21)
23	-	Gear (12T/30T) (P/O PL 23.14 Item 21)
24	-	Gear (12T/51T) (P/O PL 23.14 Item 21)
25	-	Wire harness (P/O PL 23.14 Item 21)



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PL 23.16 Finisher Electrical

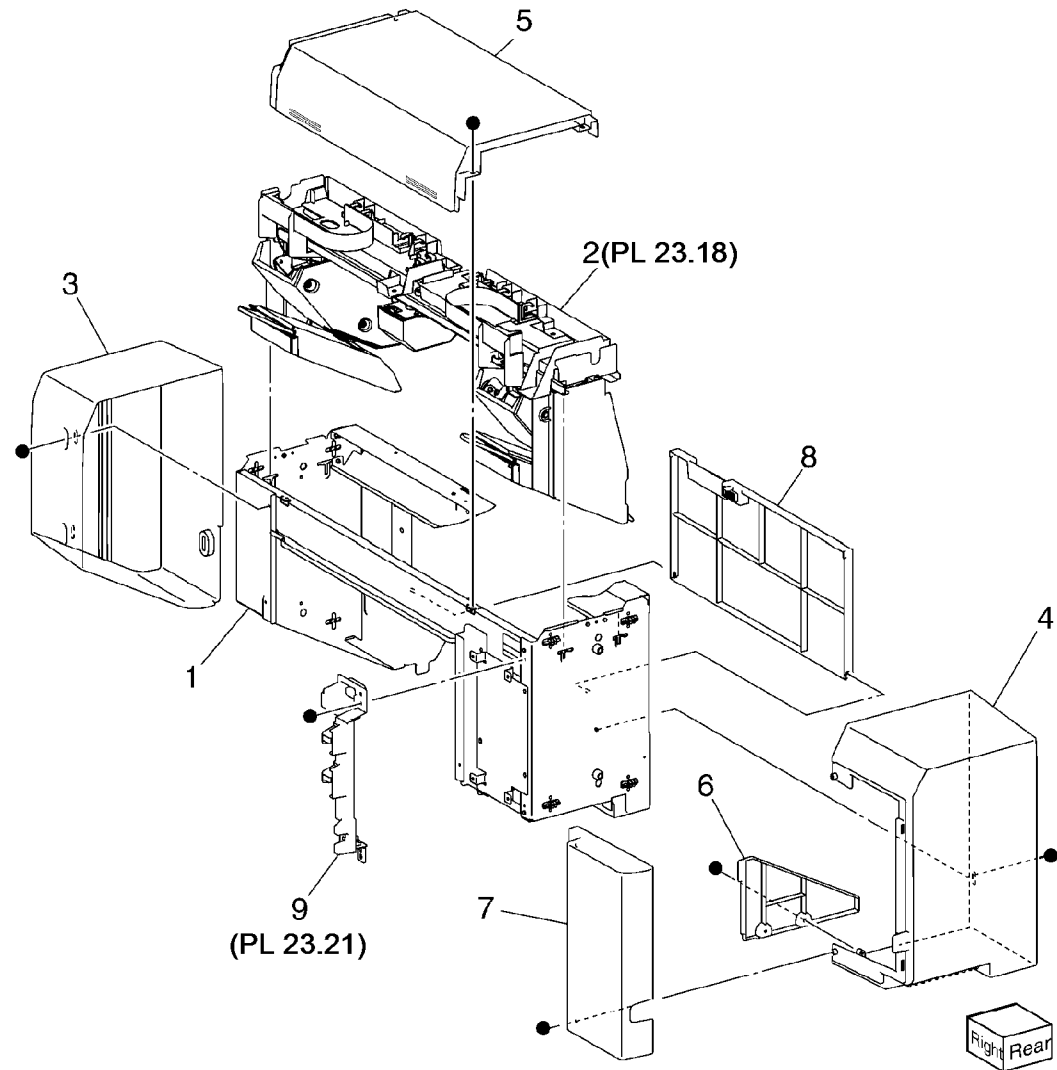
Item	Part	Description
1	-	LVPS Cover (Not Spared)
2	960K51447	Finisher Main PWB (REP 23.34)
3	-	Harness Guide (Not Spared)
4	-	Harness Guide (Not Spared)
5	-	Harness Guide (Not Spared)
6	-	Magnet (Not Spared)
7	815K04920	Gasket Plate Assembly
8	-	Wire Harness (Not Spared)
9	-	Wire Harness (Not Spared)
10	962K60481	Wire Harness
11	-	Wire Harness (Not Spared)
12	-	Wire Harness (Not Spared)
13	-	Wire Harness (Not Spared)
14	-	Wire Harness (Not Spared)
15	-	Wire Harness (Not Spared)
16	962K74540	Power Cable
17	105E17550	Finisher LVPS (REP 23.35)
18	-	Bracket (Not Spared)
19	110E97990	Finisher Front Door Interlock Switch (S14-302)



s7800-193

PL 23.17 Booklet Maker Covers

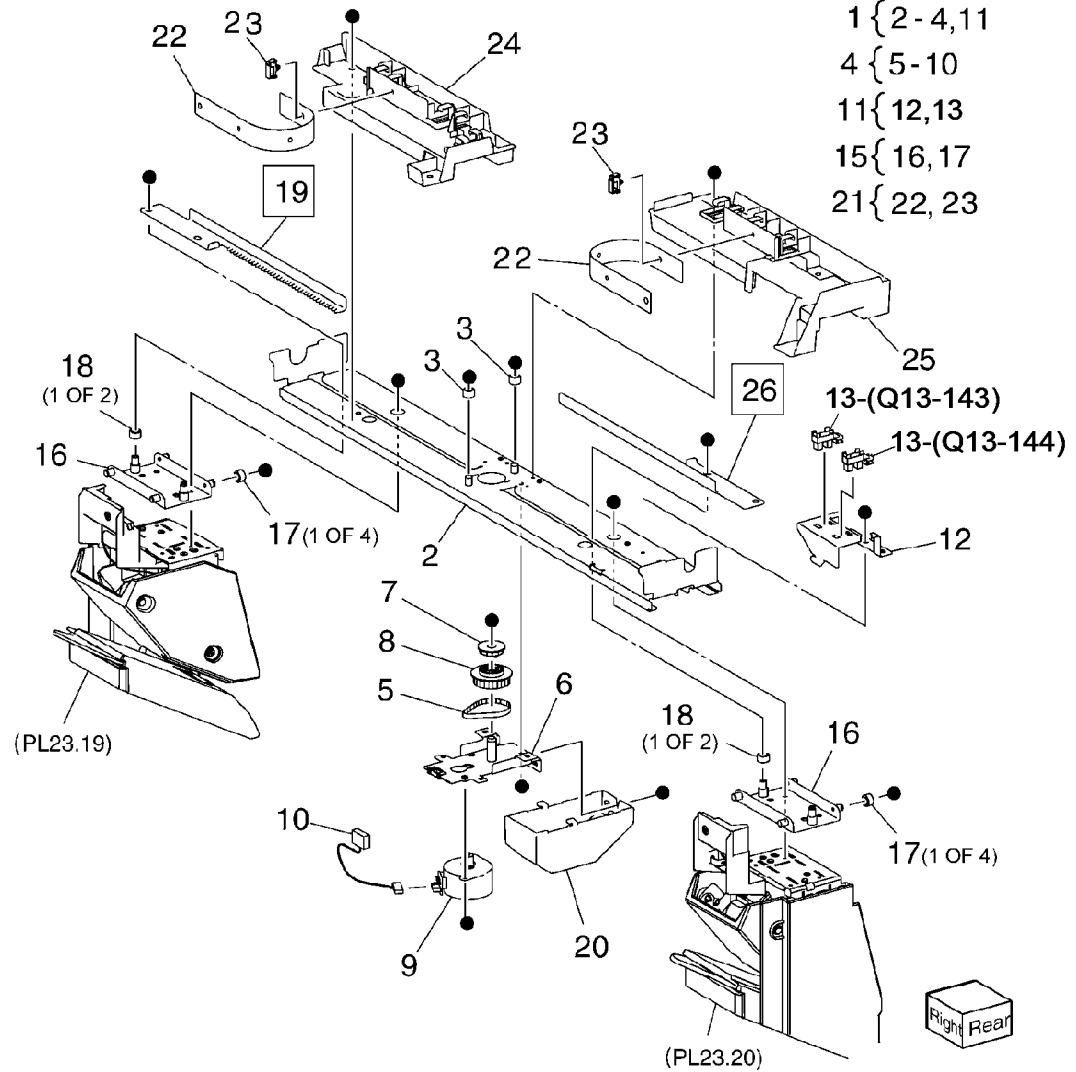
Item	Part	Description
1	–	Frame Assembly (Not Spared)
2	–	Booklet Stapler Assembly (Not Spared)
3	848E15333	Front Cover (REP 23.36)
4	–	Rear Cover (Not Spared) (REP 23.37)
5	–	Top Cover (Not Spared) (REP 23.38)
6	848E15350	Side Cover (REP 23.39)
7	848E15361	Rear PWB Cover (REP 23.40)
8	–	Left Cover (Not Spared) (REP 23.41)
9	–	Harness Guide (Not Spared)



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PL 23.18 Booklet Stapler Assembly

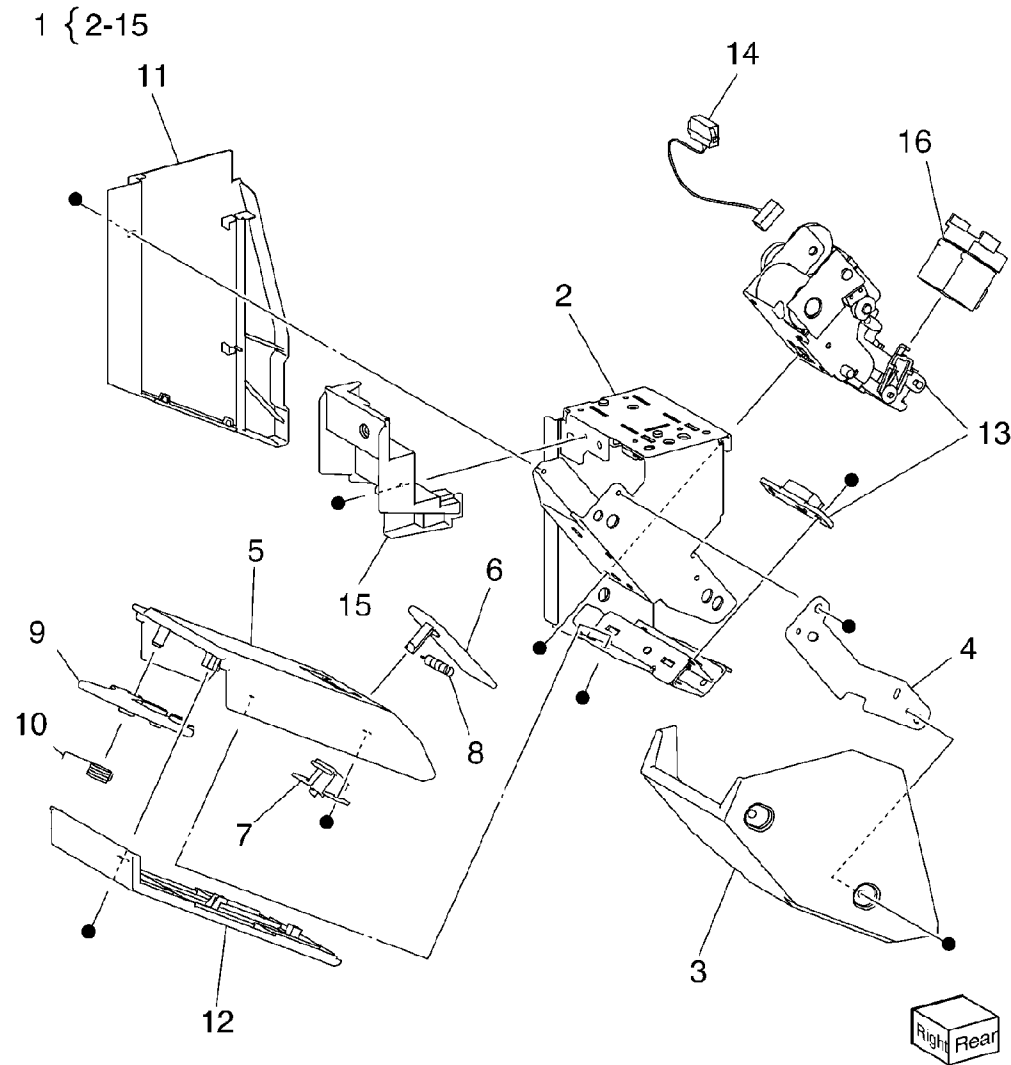
Item	Part	Description
1	-	Front Carriage Rail (Not Spared)
2	-	Frame (P/O PL 23.18 Item 1)
3	-	Core (P/O PL 23.18 Item 1)
4	127K57051	Booklet Stapler Move Motor Assembly (REP 23.42)
5	-	Belt (P/O PL 23.18 Item 4)
6	-	Bracket (P/O PL 23.18 Item 4)
7	-	Gear (12T) (P/O PL 23.18 Item 4)
8	-	Pulley (50T) (P/O PL 23.18 Item 4)
9	-	Booklet Stapler Move Motor (MOT13-028)
10	-	Wire Harness (P/O PL 23.18 Item 4)
11	-	Sensor Bracket Assembly (P/O PL 23.18 Item 1)
12	-	Sensor Bracket (P/O PL 23.18 Item 1)
13	-	Booklet Stapler Move Home Sensor (Q13-143)/Booklet Stapler Move Position Home Sensor (Q13-144)
14	-	Not Used
15	-	Carriage Assembly (Not Spared)
16	-	Carriage (P/O PL 23.18 Item 15)
17	-	Core (P/O PL 23.18 Item 15)
18	-	Core (Not Spared)
19	-	Left Rear Rack (Not Spared) (REP 23.43)
20	848E15400	Motor Cover
21	032K05222	Harness Guide Assembly
22	-	Harness Strap (P/O PL 23.18 Item 21)
23	-	Locking Clamp (P/O PL 23.18 Item 21)
24	-	Harness Guide (front) (Not Spared)
25	-	Harness Guide (rear) (Not Spared)
26	-	Right Rear Rack (Not Spared) (REP 23.43)



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PL 23.19 Booklet Front Stapler Assembly

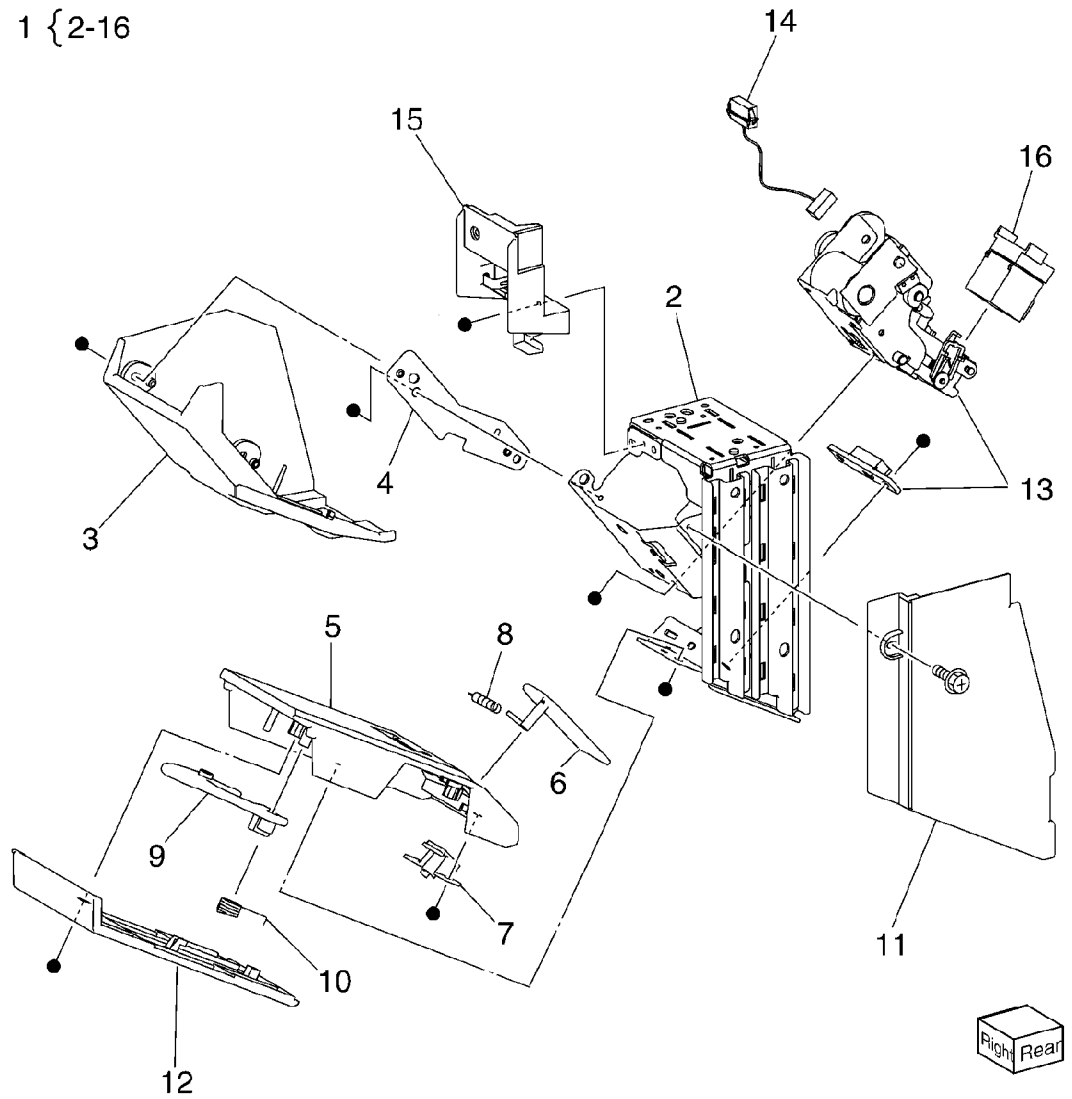
Item	Part	Description
1	-	Booklet Front Stapler Assembly (REP 23.44)
2	-	Bracket (P/O PL 23.19 Item 1)
3	-	Rear Cover (P/O PL 23.19 Item 1)
4	-	Bracket (P/O PL 23.19 Item 1)
5	-	Lower Chute (P/O PL 23.19 Item 1)
6	-	Sub Chute (P/O PL 23.19 Item 1)
7	-	Support (P/O PL 23.19 Item 1)
8	-	Spring (P/O PL 23.19 Item 1)
9	-	Exit Sub Chute (P/O PL 23.19 Item 1)
10	-	Spring (P/O PL 23.19 Item 1)
11	-	Front Cover (P/O PL 23.19 Item 1)
12	-	Lower Cover (P/O PL 23.19 Item 1)
13	-	Booklet Stapler Assembly (P/O PL 23.19 Item 1)
14	-	Wire Harness (P/O PL 23.19 Item 1)
15	-	Guide (P/O PL 23.19 Item 1)
16	-	Booklet Staple Cassette Assembly (Not Spared)



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PL 23.20 Booklet Rear Stapler Assembly

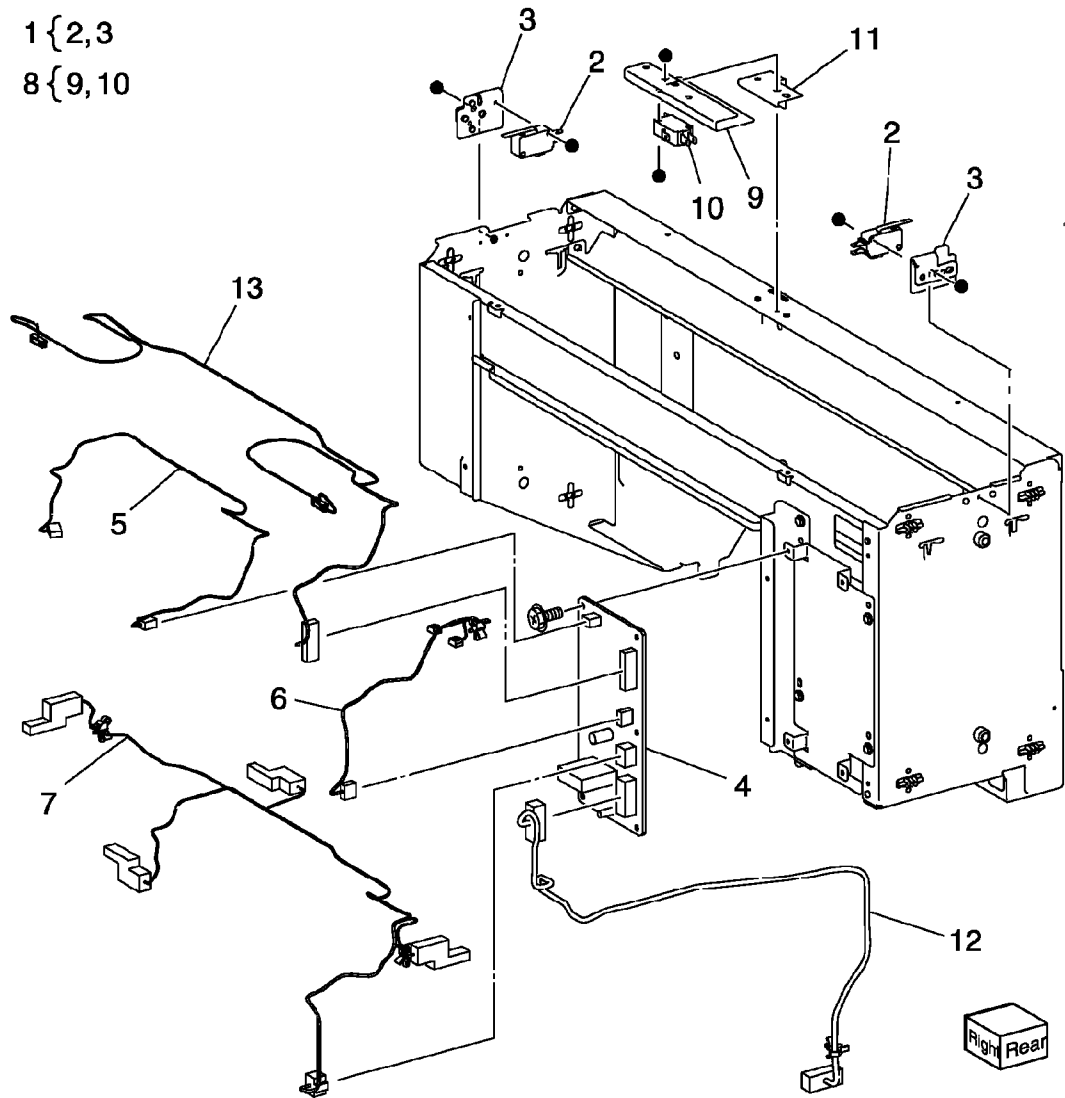
Item	Part	Description
1	029K92500	Booklet Rear Stapler Assembly (REP 23.44)
2	-	Bracket (P/O PL 23.20 Item 1)
3	-	Rear Cover (P/O PL 23.20 Item 1)
4	-	Bracket (P/O PL 23.20 Item 1)
5	-	Chute (P/O PL 23.20 Item 1)
6	-	Sub Chute (P/O PL 23.20 Item 1)
7	-	Support (P/O PL 23.20 Item 1)
8	-	Spring (P/O PL 23.20 Item 1)
9	-	Sub Chute (P/O PL 23.20 Item 1)
10	-	Spring (P/O PL 23.20 Item 1)
11	-	Front Cover (P/O PL 23.20 Item 1)
12	-	Lower Cover (P/O PL 23.20 Item 1)
13	-	Booklet Stapler Assembly (P/O PL 23.20 Item 1)
14	-	Wire Harness (P/O PL 23.20 Item 1)
15	-	Guide (P/O PL 23.20 Item 1)
16	-	Booklet Staple Cassette Assembly (P/O PL 23.20 Item 1)



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PL 23.21 Booklet Electrical

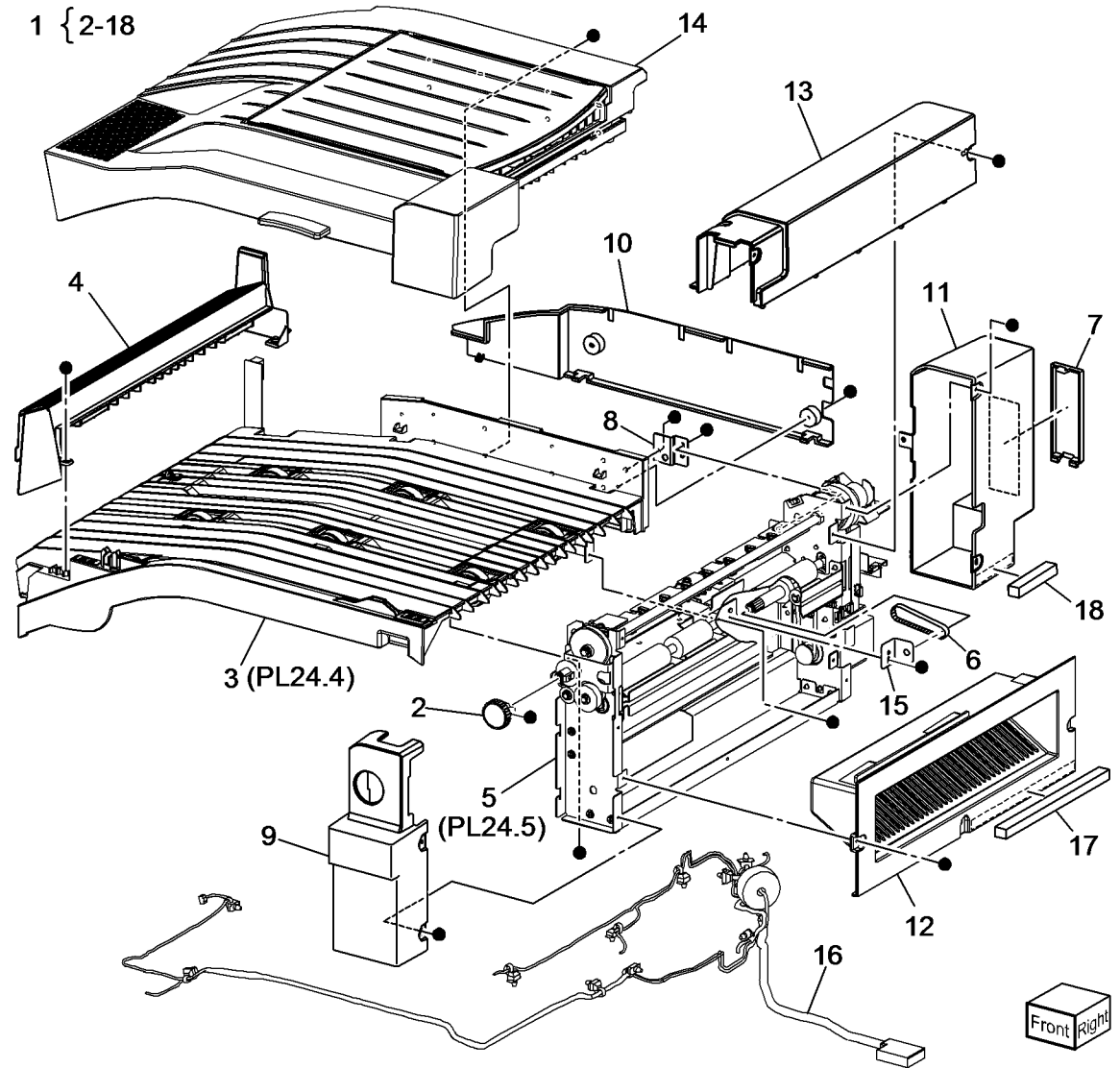
Item	Part	Description
1	068K58350	Booklet Stapler Front Safety Switch Assembly
2	—	Booklet Stapler Front Safety Switch (S13-301) (P/O PL 23.21 Item 1)
3	—	Bracket (P/O PL 23.21 Item 1)
4	960K32543	Booklet Maker PWB (REP 23.46)
5	—	Wire Harness (Not Spared) (REP 23.45)
6	—	Wire Harness (Not Spared) (REP 23.45)
7	—	Wire Harness (Not Spared) (REP 23.45)
8	—	Booklet Stapler Cover Switch Assembly (Not Spared)
9	—	Bracket (P/O PL 23.21 Item 8)
10	—	Booklet Stapler Cover Switch (S13-300) (P/O PL 23.21 Item 8)
11	—	Plate (Not Spared)
12	962K60533	Wire Harness (REP 23.45)
13	962K60540	Wire Harness (REP 23.45)



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PL 24.2 H-Transport Assembly (1 of 4)

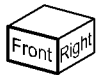
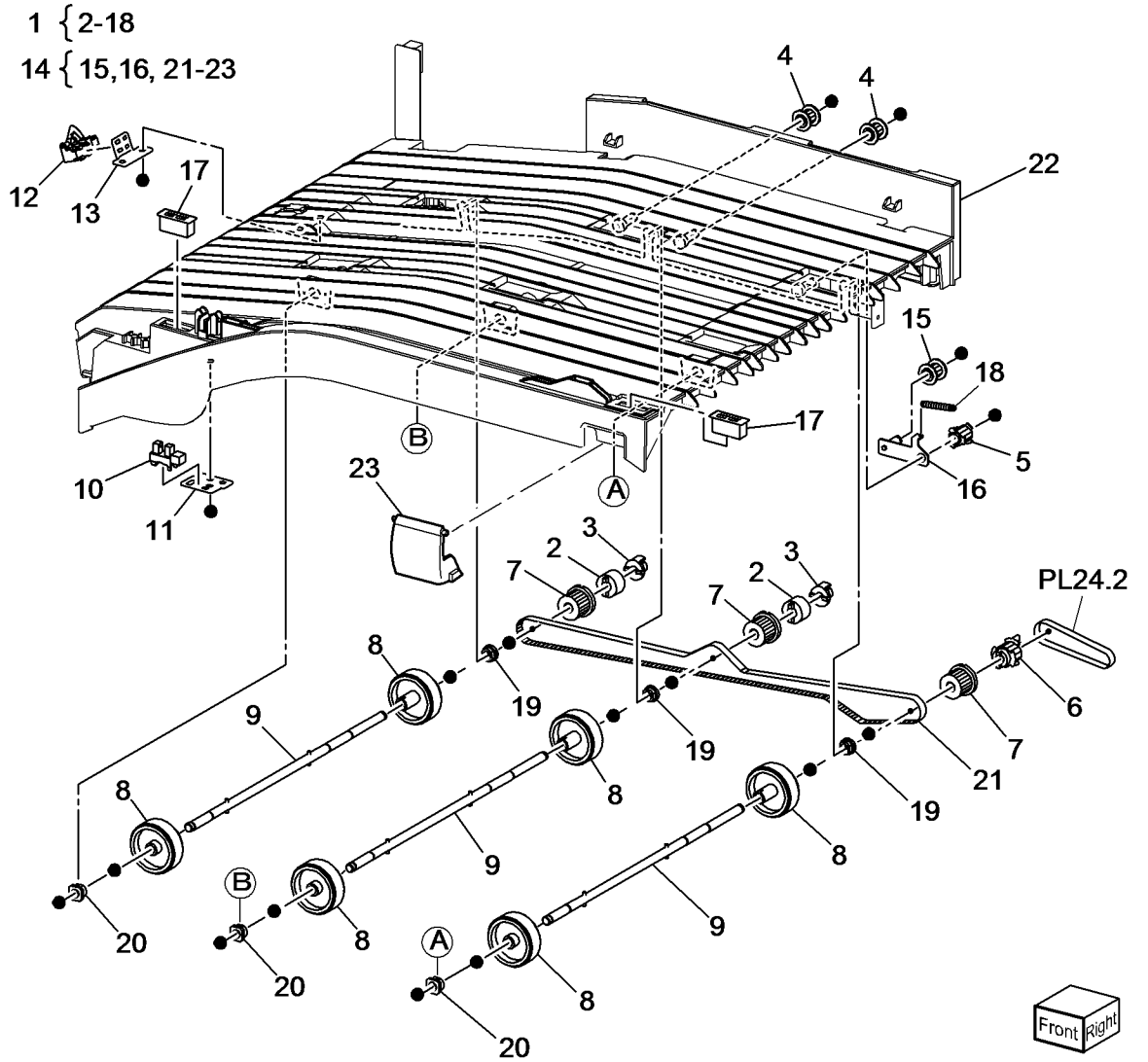
Item	Part	Description
1	059K73300	H-Transport Assembly (REP 24.1)
2	-	Knob
3	-	Lower Chute Assembly (P/O PL 24.2 Item 1)
4	-	Left Upper Chute Assembly (P/O PL 24.2 Item 1)
5	-	Dec Transport Assembly (P/O PL 24.2 Item 1)
6	-	Belt (P/O PL 24.2 Item 1)
7	-	Connector Cover (P/O PL 24.2 Item 1)
8	-	Bracket (P/O PL 24.2 Item 1)
9	-	Decurler Front Cover (REP 24.2)
10	-	Rear Cover (REP 24.3)
11	-	Decurler Rear Cover (REP 24.4)
12	-	Decurler Right Hand Cover (REP 24.5)
13	-	Decurler Top Cover (REP 24.6)
14	-	Top Cover Assembly (P/O PL 24.2 Item 1) (REP 24.7)
15	-	Stud Bracket (P/O PL 24.2 Item 1)
16	-	Wire Harness (P/O PL 24.2 Item 1)
17	-	Shield (P/O PL 24.2 Item 1)
18	-	Shield (P/O PL 24.2 Item 1)



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PL 24.4 H-Transport Assembly (2 of 4)

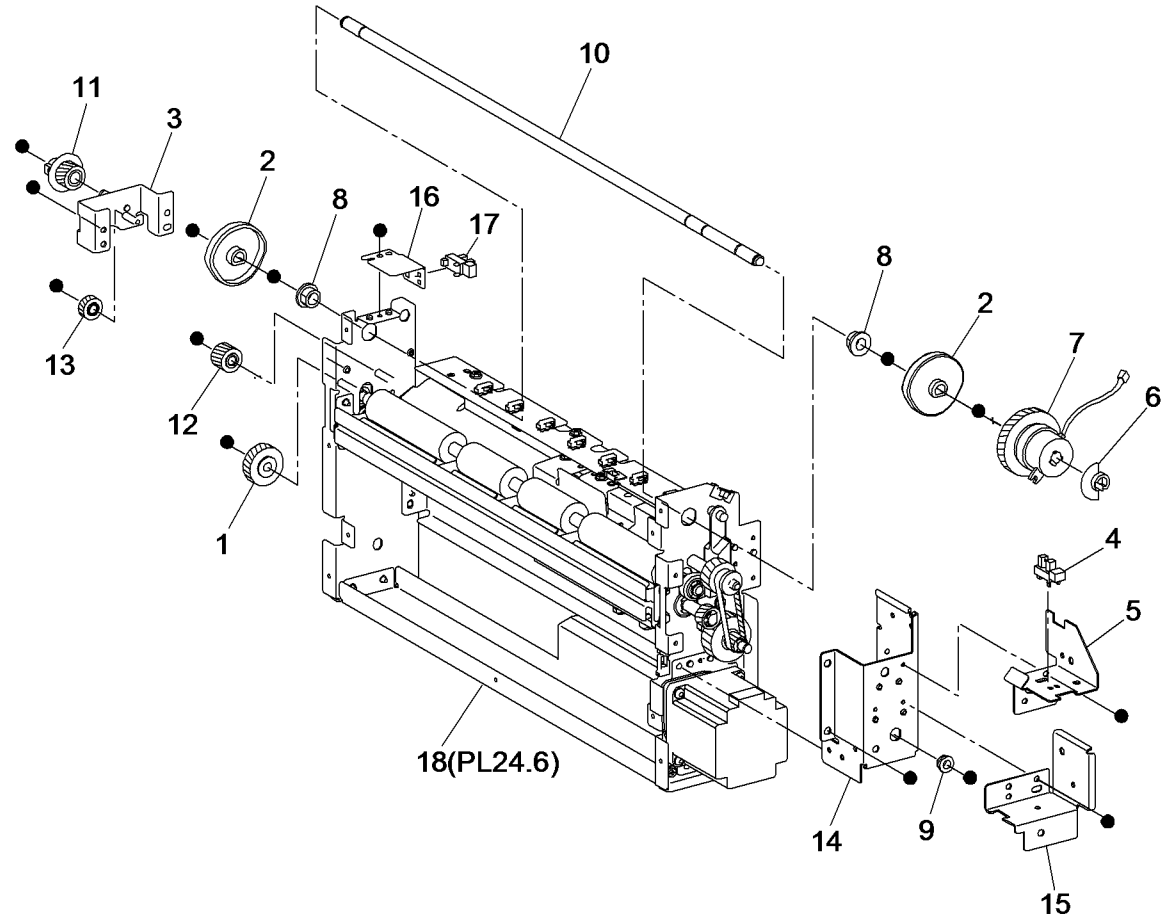
Item	Part	Description
1	-	Lower Chute Assembly
2	-	Clutch (P/O PL 24.4 Item 1)
3	-	Joint (P/O PL 24.4 Item 1)
4	-	Pulley (P/O PL 24.4 Item 1)
5	-	Pulley (P/O PL 24.4 Item 1)
6	-	Pulley (P/O PL 24.4 Item 1)
7	-	Pulley (P/O PL 24.4 Item 1)
8	-	Roll Assembly (P/O PL 24.4 Item 1) (REP 24.8)
9	-	Roll Shaft Assembly (P/O PL 24.4 Item 1)
10	130K70160	H-Transport Interlock Sensor (Q12-303) (REP 24.9)
11	-	Sensor Bracket (P/O PL 24.4 Item 1)
12	-	H-Transport Entrance Sensor (Q12-190) (P/O PL 24.4 Item 1)
13	-	Sensor Bracket (P/O PL 24.4 Item 1)
14	-	Tension Bracket Assembly (P/O PL 24.4 Item 1)
15	-	Pulley (P/O PL 24.4 Item 1)
16	-	Tension Bracket (P/O PL 24.4 Item 14)
17	-	Magnet (P/O PL 24.4 Item 1)
18	-	Spring (P/O PL 24.4 Item 1)
19	-	Bearing (Not Spared)
20	-	Sleeve Bearing (Not Spared)
21	-	H-Transport Drive Belt (P/O PL 24.4 Item 1) (REP 24.10)
22	-	Lower Chute (P/O PL 24.4 Item 1)
23	-	Cover (P/O PL 24.4 Item 1)



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PL 24.5 H-Transport Assembly (3 of 4)

Item	Part	Description
1	—	One Way Gear Assembly (30T) (Not Spared)
2	—	Decurler Cam (Not Spared)
3	—	Bracket (Not Spared)
4	—	Decurler Cam Home Sensor (Not Spared)
5	—	Sensor Bracket (Not Spared)
6	—	Actuator (Not Spared)
7	121K41980	Decurler Cam Clutch (REP 24.11)
8	—	Bearing (Not Spared)
9	—	Bearing (Not Spared)
10	—	Shaft (Not Spared)
11	—	Knob gear (18T) (Not Spared)
12	—	Gear (18T) (Not Spared)
13	—	Gear (16T) (Not Spared)
14	—	Bracket (Not Spared)
15	—	Harness Bracket (Not Spared)
16	—	Sensor Bracket (Not Spared)
17	130K70160	Decurler Front Cover Interlock Sensor (REP 24.9)
18	—	Decurler Frame Assembly (Not Spared)

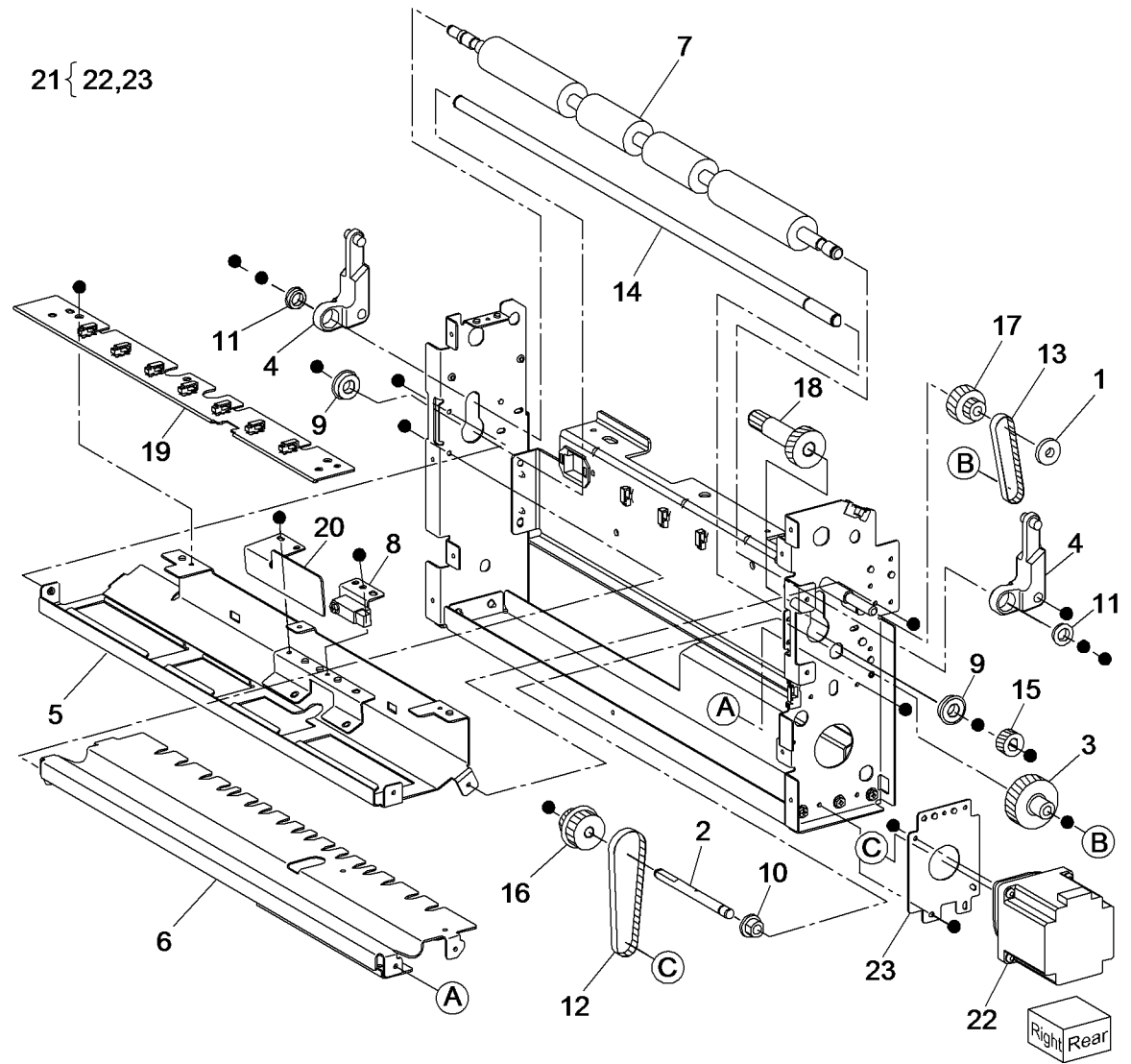


Right Rear

s7800-201

PL 24.6 H-Transport Assembly (4 of 4)

Item	Part	Description
1	-	Collar (Not Spared)
2	-	Shaft (Not Spared)
3	-	Gear (36T/18T) (Not Spared)
4	-	Arm (Not Spared)
5	-	Decurler Upper Chute Assembly (Not Spared)
6	-	Decurler Lower Chute Assembly (Not Spared)
7	-	Decurler Roll Assembly (Not Spared)
8	068K58501	H-Transport Exit Sensor (Q12-191) (REP 24.12)
9	-	Bearing (Not Spared)
10	-	Bearing (Not Spared)
11	-	Bearing (Not Spared)
12	-	Belt (Not Spared)
13	-	Belt (Not Spared)
14	-	Shaft (Not Spared)
15	-	Gear (16T) (Not Spared)
16	-	Gear (18T/36T) (Not Spared)
17	-	Gear (24T/20T) (Not Spared)
18	-	Gear (27T/18T) (Not Spared)
19	-	Harness Bracket (Not Spared)
20	-	Decurler Shield (Not Spared)
21	127K57061	H-Transport Motor Assembly (REP 24.13)
22	-	H-Transport Motor (MOT12-090) (P/O PL 24.6 Item 21)
23	-	Plate (P/O PL 24.6 Item 21)

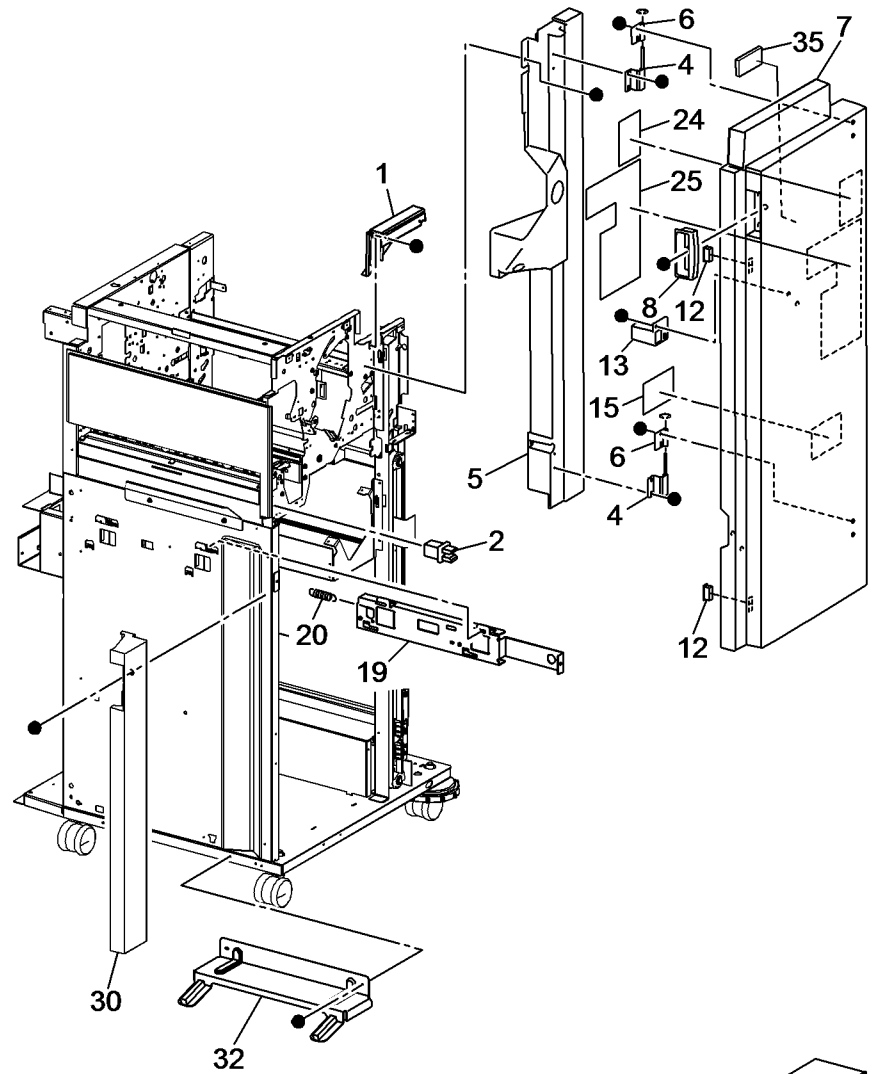
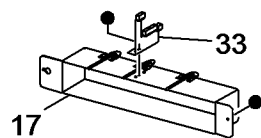


s7800-202

PL 24.11 Covers (1 of 2)

Item	Part	Description
1	-	Front Top Cover (Not Spared) (REP 24.15)
2	-	Finisher Front Door Interlock Switch (Q12-302) (Not Spared) (REP 24.16)
3	848K37492	Front Door Assembly (REP 24.19)
4	-	Bracket (P/O PL 24.11 Item 3)
5	-	Front Right Inner Cover (P/O PL 24.11 Item 3) (REP 24.17)
6	-	Bracket (P/O PL 24.11 Item 3)
7	-	Front Door (P/O PL 24.11 Item 3)
8	-	Handle (P/O PL 24.11 Item 3)
9	-	Not Used
10	-	Not Used
11	-	Not Used
12	-	Magnet (P/O PL 24.11 Item 3)
13	-	Stopper (P/O PL 24.11 Item 3)
14	-	Not Used
15	-	Label (Booklet)
16	-	Not Used
17	015K78071	IOT Docking Plate (REP 24.18)
18	-	Not Used
19	-	Docking Plate (Not Spared)
20	-	Spring (Not Spared)
21	-	Not Used
22	-	Not Used
23	-	Not Used
24	-	Label (instruction) (Not Spared)
25	-	Label (instruction) (P/O PL 24.11 Item 3)
26	-	Not Used
27	-	Not Used
28	-	Not Used
29	-	Not Used
30	-	Front Cover
31	-	Not Used
32	015K78080	Bottom Plate
33	-	Shield Assembly (Not Spared)
34	-	Not Used
35	-	Baffle (Not Spared)

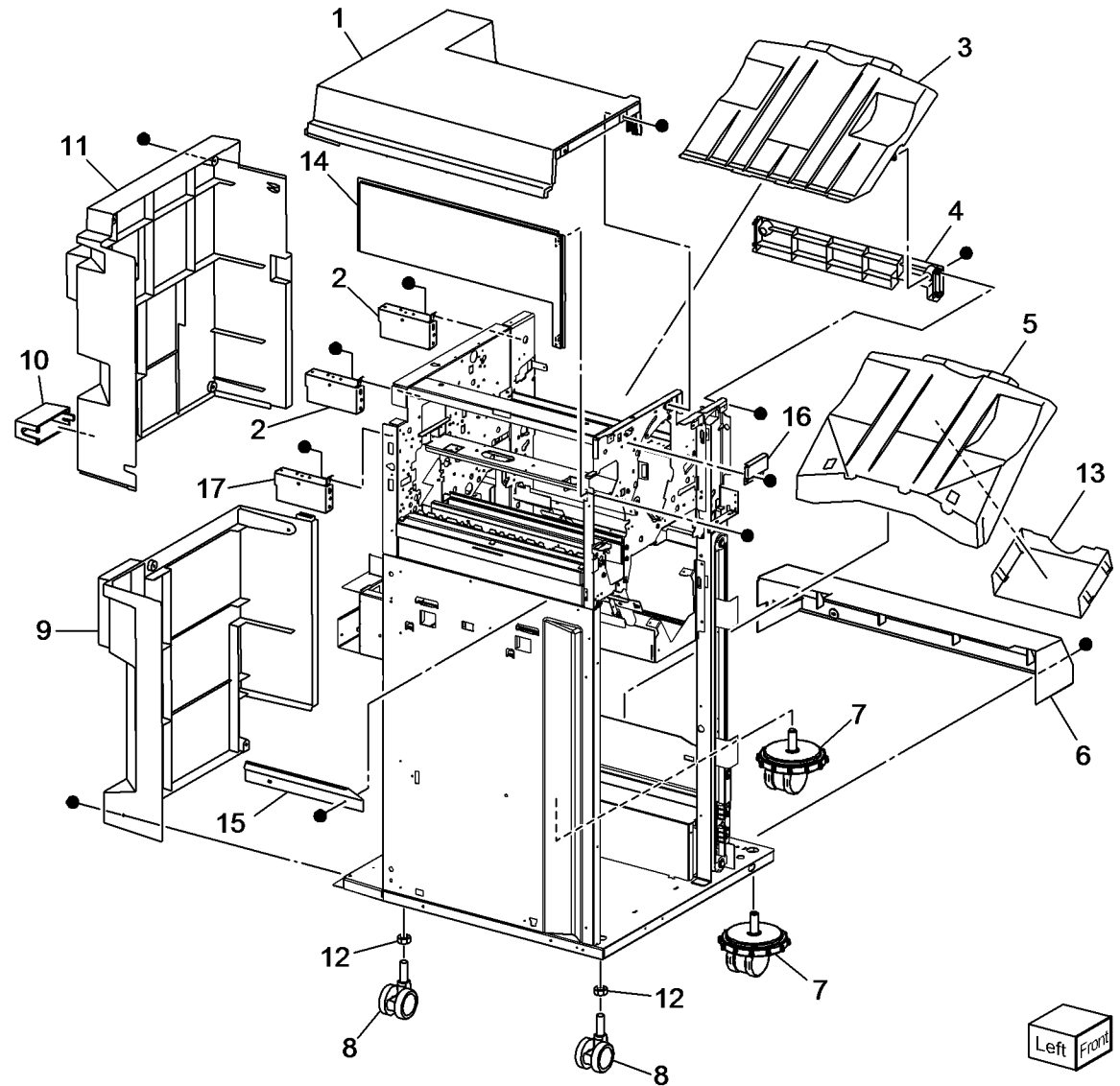
3 { 4-8,12,13,25



s7800-203

PL 24.12 Covers (2 of 2)

Item	Part	Description
1	—	Top Cover (Not Spared) (REP 24.20)
2	—	Bracket (Not Spared)
3	—	Top Tray (Not Spared) (REP 24.21)
4	—	Eject Cover (Not Spared) (REP 24.22)
5	050K51280	Stacker Lower Tray (REP 24.23)
6	—	Bottom Cover (Not Spared)
7	—	Caster (Not Spared)
8	—	Caster (Not Spared)
9	—	Rear Lower Cover (Not Spared) (REP 24.25)
10	—	Connector (Not Spared)
11	—	Rear Upper Cover (Not Spared) (REP 24.26)
12	—	Nut (M12) (Not Spared)
13	—	Spacer (Booklet) (Not Spared)
14	—	Left Top Cover (Not Spared) (REP 24.27)
15	—	Spacer Plate (Not Spared)
16	—	Cover (Not Spared)
17	—	Bracket (Not Spared)

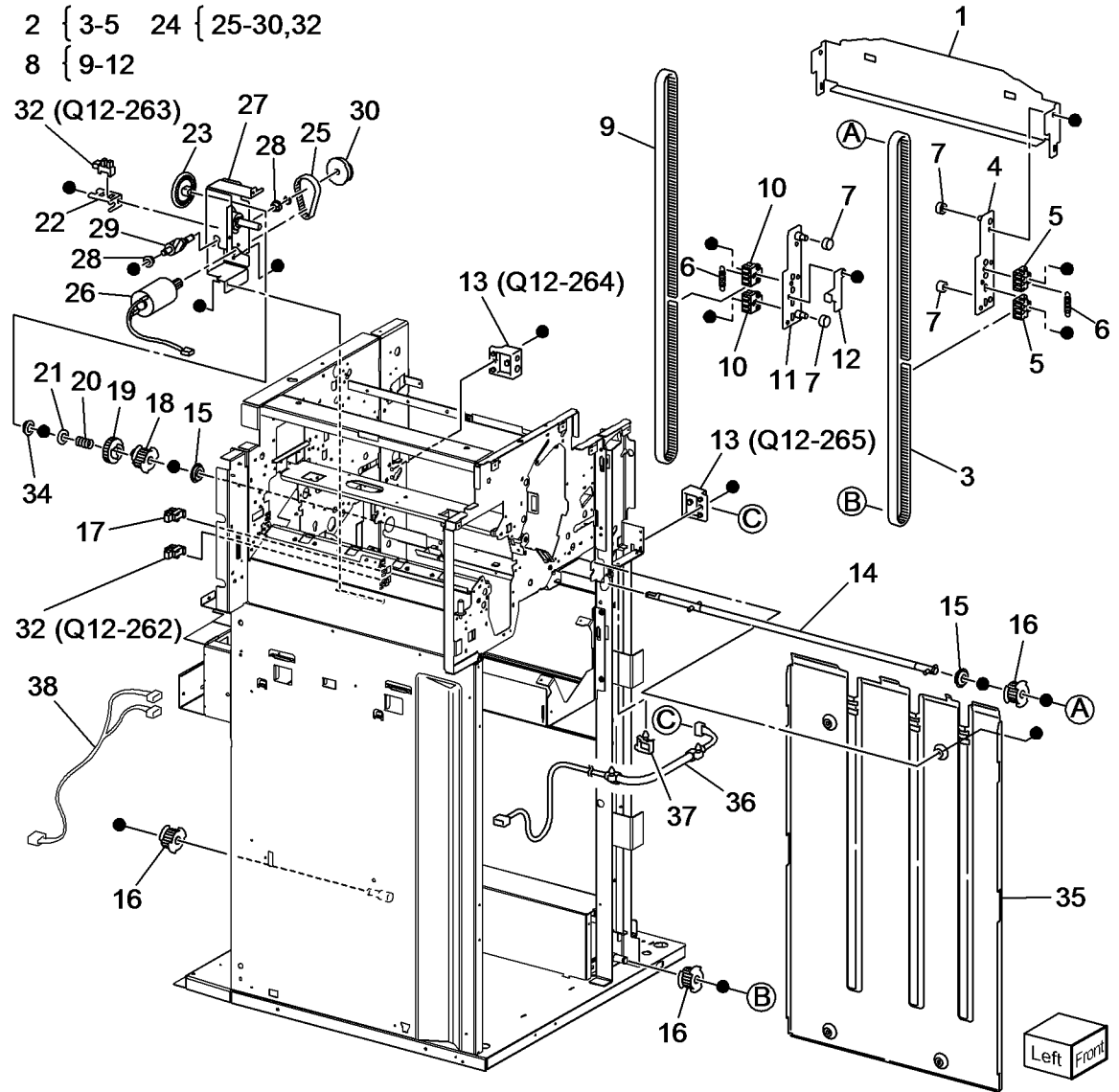


Left Front

s7800-204

PL 24.31 Finisher Stack

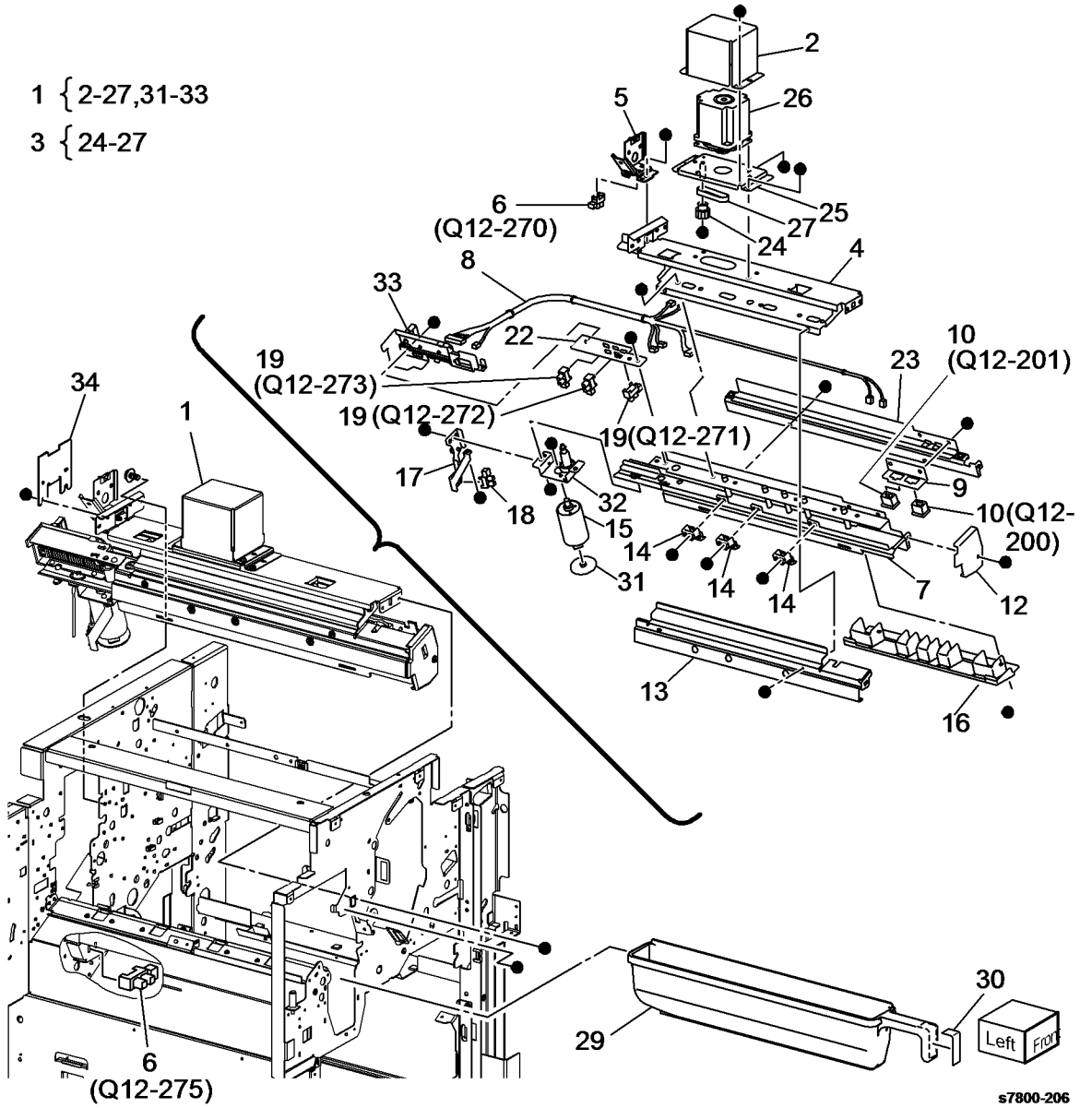
Item	Part	Description
1	-	Carriage Tray (Not Spared)
2	041K94721	Carriage Assembly (Left) (REP 24.28)
3	-	Stacker Left Drive Belt (P/O PL 24.31 Item 2) (REP 24.29)
4	-	Carriage Assembly (Left) (P/O PL 24.31 Item 2)
5	-	Clamp (P/O PL 24.31 Item 2)
6	-	Spring (Not Spared)
7	-	Bearing (Not Spared)
8	041K94731	Carriage Assembly (Right) (REP 24.28)
9	-	Stacker Right Drive Belt (P/O PL 24.31 Item 8) (REP 24.30)
10	-	Clamp (P/O PL 24.31 Item 8)
11	-	Carriage Assembly (Right) (P/O PL 24.31 Item 8)
12	-	Actuator (P/O PL 24.31 Item 8)
13	802K67140	Stack Height Sensor 1 (Q12-264) (REP 24.31) / Stack Height Sensor 2 (Q12-265)(REP 24.32)
14	-	Shaft (Not Spared)
15	-	Bearing (Not Spared)
16	-	Pulley (18T) (Not Spared)
17	130E82530	Lower Tray Upper Limit Sensor (Q12-260) (REP 24.33)
18	020E37710	Pulley
19	-	Gear (Not Spared)
20	-	Spring Doc (Not Spared)
21	-	Washer (Not Spared)
22	-	Bracket (Not Spared)
23	-	Encoder (Not Spared)
24	015K69730	Elevator Motor Assembly (REP 24.34)
25	-	Belt (P/O PL 24.31 Item 24)
26	-	Elevator Motor (P/O PL 24.31 Item 24)
27	-	Stacker Bracket Assembly (P/O PL 24.31 Item 24) (REP 24.35)
28	-	Ball Bearing (P/O PL 24.31 Item 24)
29	-	Worm Gear (P/O PL 24.31 Item 24)
30	-	Pulley (60T) (P/O PL 24.31 Item 24)
31	-	Not Used
32	130K88770	Stacker Encoder Sensor (Q12-263) (REP 24.36)/Stacker No Paper Sensor (Q12-262) (REP 24.33) (P/O PL 24.31 Item 24)
33	-	Not Used
34	-	Bearing (Not Spared)
35	-	Tray Guide (Inner Cover) (Not Spared) (REP 24.37)
36	-	Harness Assembly (Stack Height Front) (Not Spared)
37	-	Clamp (Not Spared)
38	-	Harness Assembly (Not Spared)



s7800-205

PL 24.32 Finisher Punch

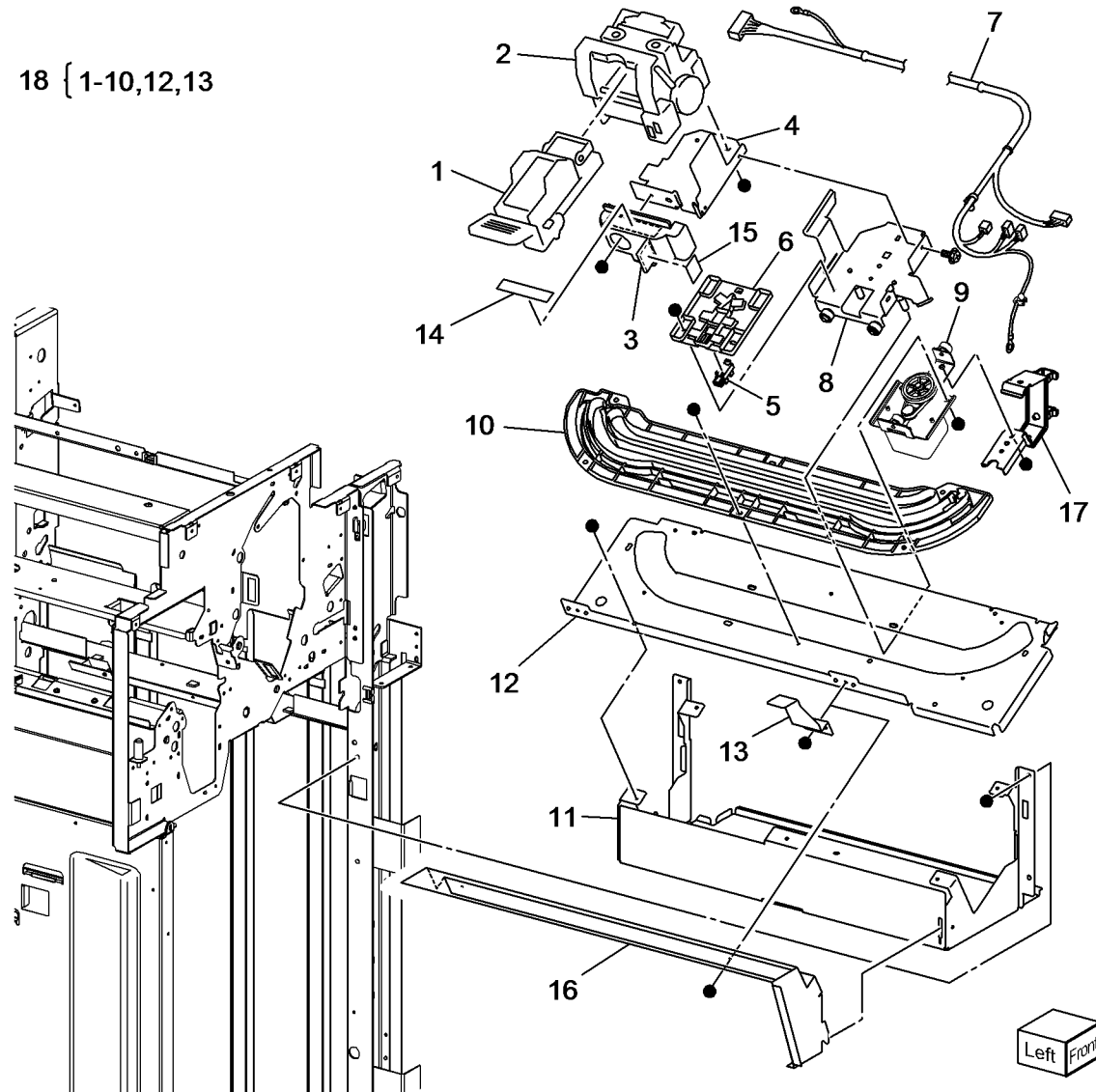
Item	Part	Description
1	801K30943	Puncher Frame Assembly (2 Hole)
-	801K36443	Puncher Frame Assembly (3 Hole) (REP 24.38)
2	-	Cover (P/O PL 24.32 Item 1)
3	-	Puncher Move Motor Assembly (P/ O PL 24.32 Item 1)
4	-	Frame Assembly (P/O PL 24.32 Item 1)
5	-	Bracket Assembly (P/O PL 24.32 Item 1)
6	-	Puncher Move Home Sensor (Q12- 270) (REP 24.39)/Punch Box Set Sensor (Q12-275) (REP 24.43) (P/ O PL 24.32 Item 1)
7	-	Punch Bracket Assembly (P/O PL 24.32 Item 1) (REP 24.40)
8	-	Harness Assembly (P/O PL 24.32 Item 1)
9	-	Bracket (P/O PL 24.32 Item 1)
10	-	Side Registration Sensor 1 (Q12- 200) (REP 24.41)/Side Registration Sensor 2 (Q12-201) (REP 24.41) (P/O PL 24.32 Item 1)
11	-	Not Used
12	-	Punch Front Cover (P/O PL 24.32 Item 1)
13	-	Punch Left Cover (P/O PL 24.32 Item 1)
14	-	2 Hole Guide (12mm type) (P/O PL 24.32 Item 1)
-	-	3 Hole Guide
15	-	Puncher Motor (P/O PL 24.32 Item 1)
16	-	Guide Box (P/O PL 24.32 Item 1)
17	-	Bracket (P/O PL 24.32 Item 1)
18	-	Puncher Motor Sensor (Q12-274) (P/O PL 24.32 Item 1)
19	-	Puncher Front Sensor (Q12-272) (REP 24.42) /Puncher Home Sensor (Q12-271) (REP 24.42)/ Punch Hole Select Sensor (Q12- 273) (REP 24.42) (P/O PL 24.32 Item 1)
20	-	Not Used
21	-	Not Used
22	-	Bracket (P/O PL 24.32 Item 1)
23	-	Regi Chute (P/O PL 24.32 Item 1)
24	-	Gear Pulley (P/O PL 24.32 Item 3)
25	-	Bracket (P/O PL 24.32 Item 3)
26	-	Puncher Move Motor (MOT12-070) (P/O PL 24.32 Item 1)
27	-	Belt (P/O PL 24.32 Item 1)
28	-	Not Used
29	060E91300	Dust Box (Punch Box)
30	-	Label (R4) (Not Spared)
31	-	Actuator (P/O PL 24.32 Item 1)
32	-	Bracket (P/O PL 24.32 Item 1)
33	-	Harness Guide (P/O PL 24.32 Item 1)
34	-	Cover (Not Spared)



PL 24.33 Finisher Stapler

Item	Part	Description
1	-	Staple Cartridge (P/O PL 24.33 Item 18)
2	029K92350	Stapler Assembly (REP 24.45)
3	-	Stapler Cover (P/O PL 24.33 Item 18)
4	-	Holder (P/O PL 24.33 Item 18)
5	-	Stapler Move Position Sensor (Q12-241) (P/O PL 24.33 Item 18)
6	-	Guide (P/O PL 24.33 Item 18)
7	962K59060	Harness Assembly (Staple)
8	-	Upper Slider (P/O PL 24.33 Item 18)
9	041K94970	Stapler Move Motor (MOT12-041) (REP 24.46)
10	-	Stapler Rail (P/O PL 24.33 Item 18) (REP 24.47)
11	-	Frame (Not Spared)
12	-	Base Rail (P/O PL 24.33 Item 18)
13	-	Stopper (P/O PL 24.33 Item 18)
14	-	Label (R1) (Not Spared)
15	-	Label (Not Spared)
16	-	Bracket (Not Spared)
17	-	Harness Bracket (Not Spared)
18	-	Stapler Unit (REP 24.48)

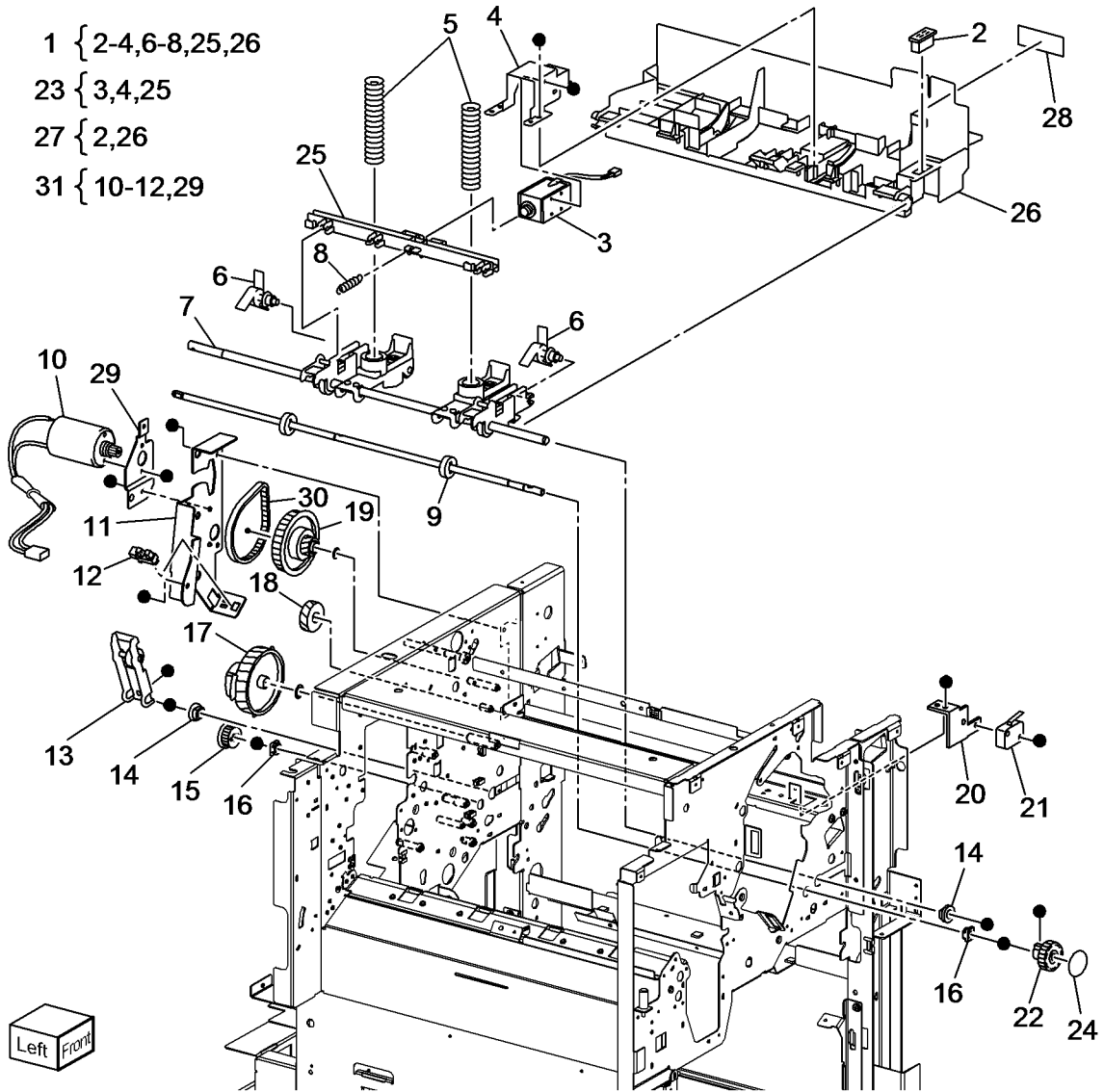
18 { 1-10,12,13



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PL 24.34 Finisher Eject (1 of 3)

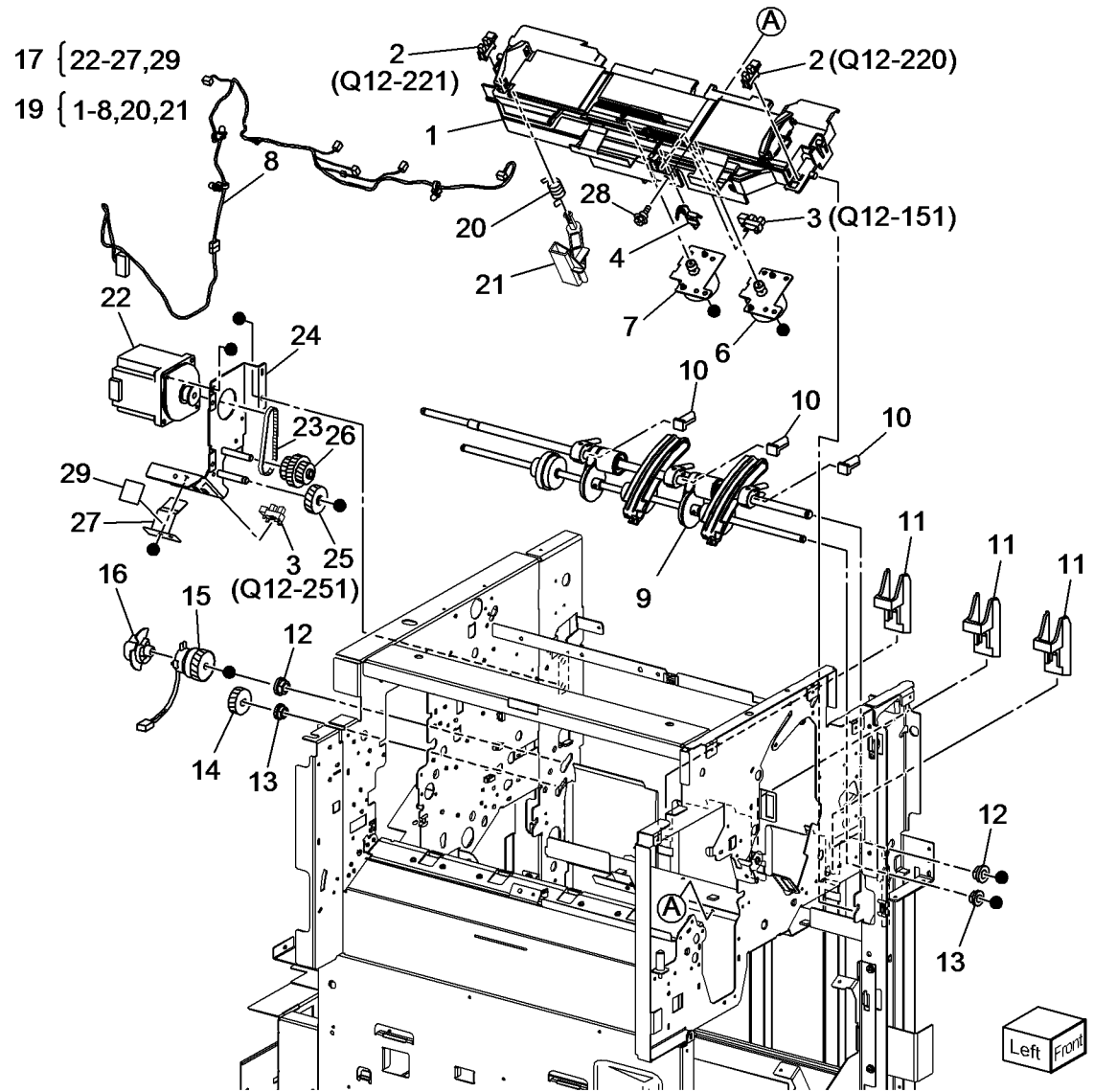
Item	Part	Description
1	054K38701	Eject Chute Assembly (REP 24.49)
2	-	Magnet (P/O PL 24.34 Item 1)
3	-	Sub Paddle Solenoid (SOL12-013) (P/O PL 24.34 Item 1) (REP 24.50)
4	-	Bracket (P/O PL 24.34 Item 1)
5	-	Spring (Not Spared)
6	-	Paddle (P/O PL 24.34 Item 1)
7	-	Eject Pinch Shaft Assembly (P/O PL 24.34 Item 1)
8	-	Spring (P/O PL 24.34 Item 31)
9	006K23861	Paddle Shaft Assembly (REP 24.51)
10	127K52690	Eject Clamp Motor (MOT12-052) (REP 24.52)
11	-	Eject Clamp Bracket (P/O PL 24.34 Item 31) (REP 24.53)
12	-	Eject Clamp Home Sensor (Q12-250) (P/O PL 24.34 Item 31) (REP 24.54)
13	-	Lever Assembly (Not Spared)
14	-	Bearing (Not Spared)
15	-	Gear (23T) (Not Spared)
16	-	Bearing (Not Spared)
17	-	Cam Gear (70T) (Not Spared)
18	-	Gear (30T) (Not Spared)
19	-	Gear (Not Spared)
20	-	Bracket (Not Spared)
21	-	Eject Cover Switch (Q12-300) (Not Spared) (REP 24.55)
22	-	Knob (Not Spared)
23	-	Knob (Not Spared)
24	-	Label (2C) (Not Spared)
25	-	Link (P/O PL 24.34 Item 23)
26	-	Eject Chute (P/O PL 24.34 Item 27)
27	-	Eject Chute Assembly (Not Spared)
28	-	Label (5) (Not Spared)
29	-	Motor Bracket (P/O PL 24.34 Item 31)
30	-	Belt (Not Spared)
31	-	Eject Clamp Motor Assembly (Not Spared)



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PL 24.35 Finisher Eject (2 of 3)

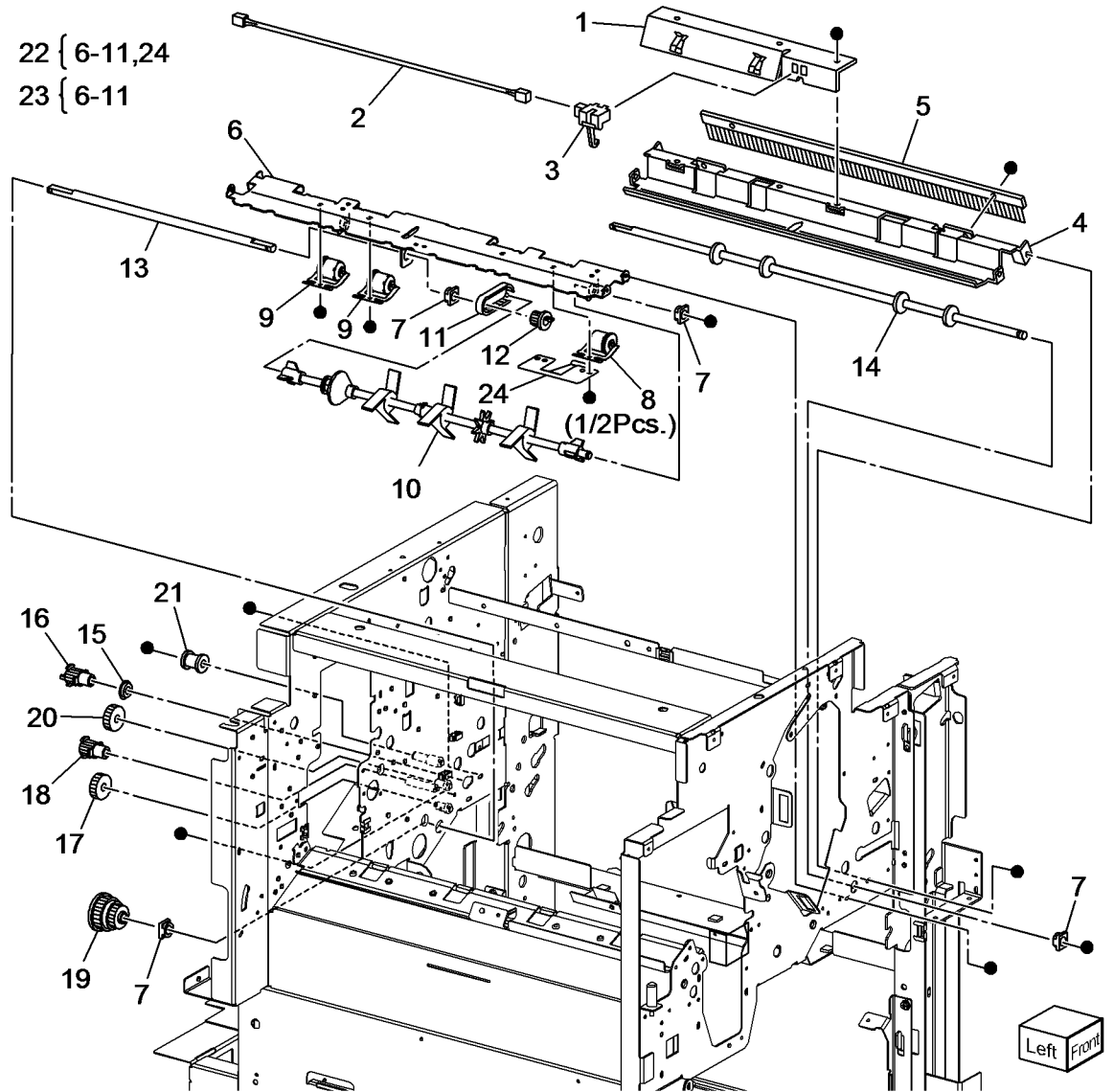
Item	Part	Description
1	-	Compiler Tray (P/O PL 24.35 Item 19) (REP 24.56)
2	-	Front Tamper Home Sensor (Q12-220) (REP 24.57) /Rear Tamper Home Sensor (Q12-221) (REP 24.57) (P/O PL 24.35 Item 19)
3	-	Compiler Tray No Paper Sensor (Q12-151) (REP 24.58) /Set Clamp Home Sensor(Q12-251) (REP 24.61) (P/O PL 24.35 Item 19)
4	-	Actuator (P/O PL 24.35 Item 19)
5	-	Not Used
6	-	Front Tamper Motor (MOT12-020) (P/O PL 24.35 Item 19)
7	-	Rear Tamper Motor (MOT12-026) (P/O PL 24.35 Item 19)
8	-	Harness Assembly (Compiler) (P/O PL 24.35 Item 19)
9	006K86372	Eject Roll Shaft Assembly (REP 24.59)
10	-	Paddle (Not Spared)
11	-	Guide (Not Spared)
12	-	Bearing (Not Spared)
13	-	Bearing (Not Spared)
14	-	Gear (39T) (Not Spared)
15	-	Set Clamp Clutch (MOT12-050) (Not Spared) (REP 24.60)
16	120E29570	Actuator
17	049K02710	Eject Motor Assembly (REP 24.62)
18	-	Not Used
19	050K65130	Compiler Tray Assembly
20	-	Spring (P/O PL 24.35 Item 19)
21	-	Guide (P/O PL 24.35 Item 19)
22	-	Eject Motor (MOT12-054) (P/O PL 24.35 Item 17)
23	-	Belt (P/O PL 24.35 Item 17)
24	-	Bracket (P/O PL 24.35 Item 17) (REP 24.63)
25	-	Gear (30T) (P/O PL 24.35 Item 17)
26	-	Gear (35T/23T/35T) (P/O PL 24.35 Item 17)
27	-	Spring (P/O PL 24.35 Item 17)
28	-	Shoulder Screw (Not Spared)
29	-	Damper (P/O PL 24.35 Item 17)



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PL 24.36 Finisher Eject (3 of 3)

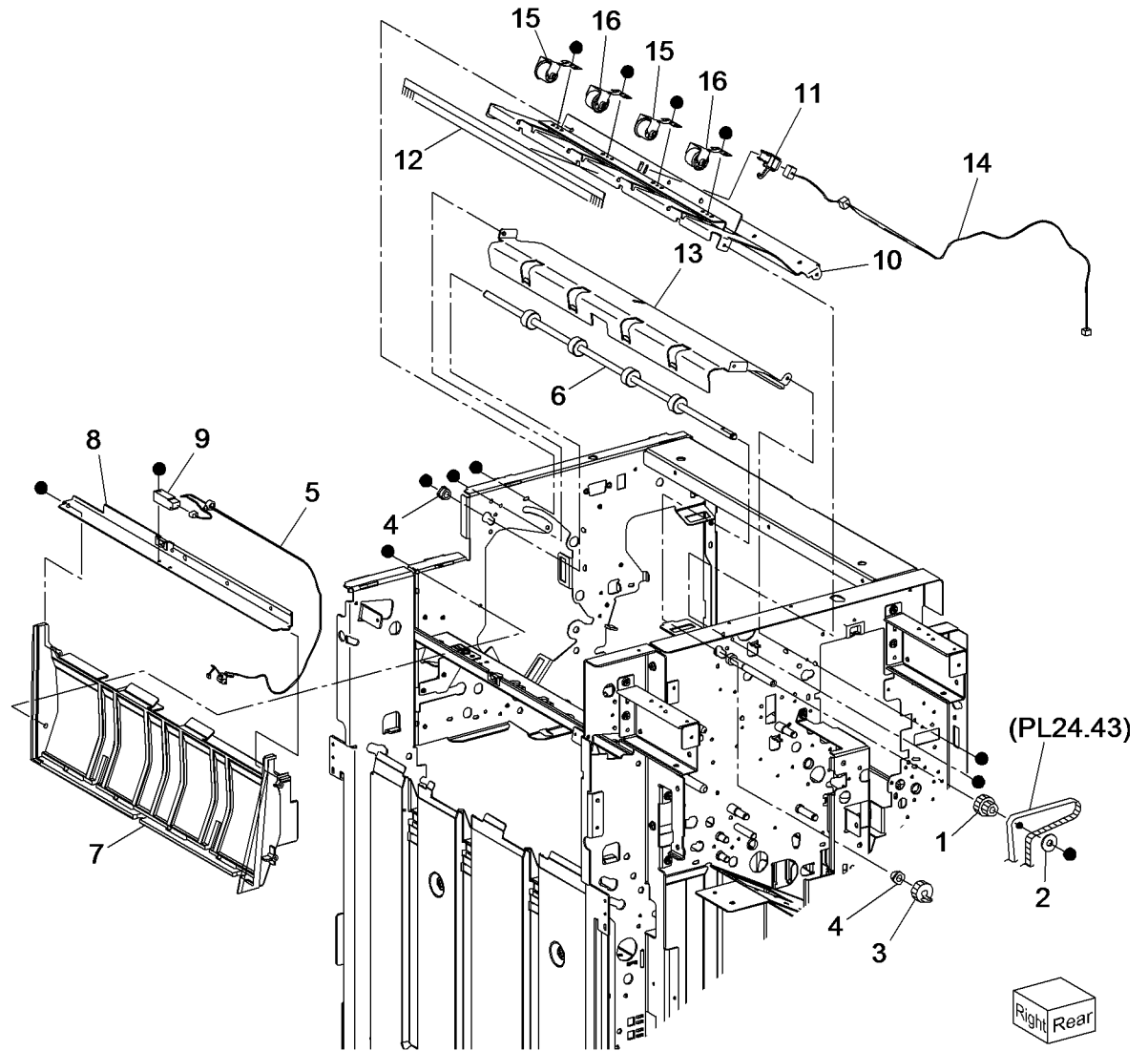
Item	Part	Description
1	-	Bracket (Not Spared)
2	-	Wire Harness (Not Spared)
3	130K88190	Compiler Exit Sensor (Q12-150) (REP 24.64)
4	-	Exit Chute (Not Spared)
5	-	Static Eliminator (Not Spared)
6	-	Lower Exit Chute (P/O PL 24.36 Item 22)
7	-	Bearing (P/O PL 24.36 Item 22)
8	022K67880	Pinch Roll (REP 24.65)
9	022K67870	Pinch Roll (REP 24.65)
10	006K87430	Paddle Shaft Assembly (REP 24.66)
11	-	Belt (P/O PL 24.36 Item 22)
12	-	Pulley (17T) (Not Spared)
13	-	Shaft (Not Spared)
14	022K67841	Lower Exit Roller Assembly (REP 24.67)
15	-	Bearing (Not Spared)
16	-	Pulley (20T) (Not Spared)
17	-	Gear (23T) (Not Spared)
18	-	Pulley (20T) (Not Spared)
19	-	Pulley (44T/20T) (Not Spared)
20	-	Gear (23T) (Not Spared)
21	-	Pulley (Not Spared)
22	-	Lower Exit Chute Assembly (Not Spared)
23	-	Not Used
24	-	Paddle Guide Bracket (P/O PL 24.36 Item 22)



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PL 24.38 Finisher SCT

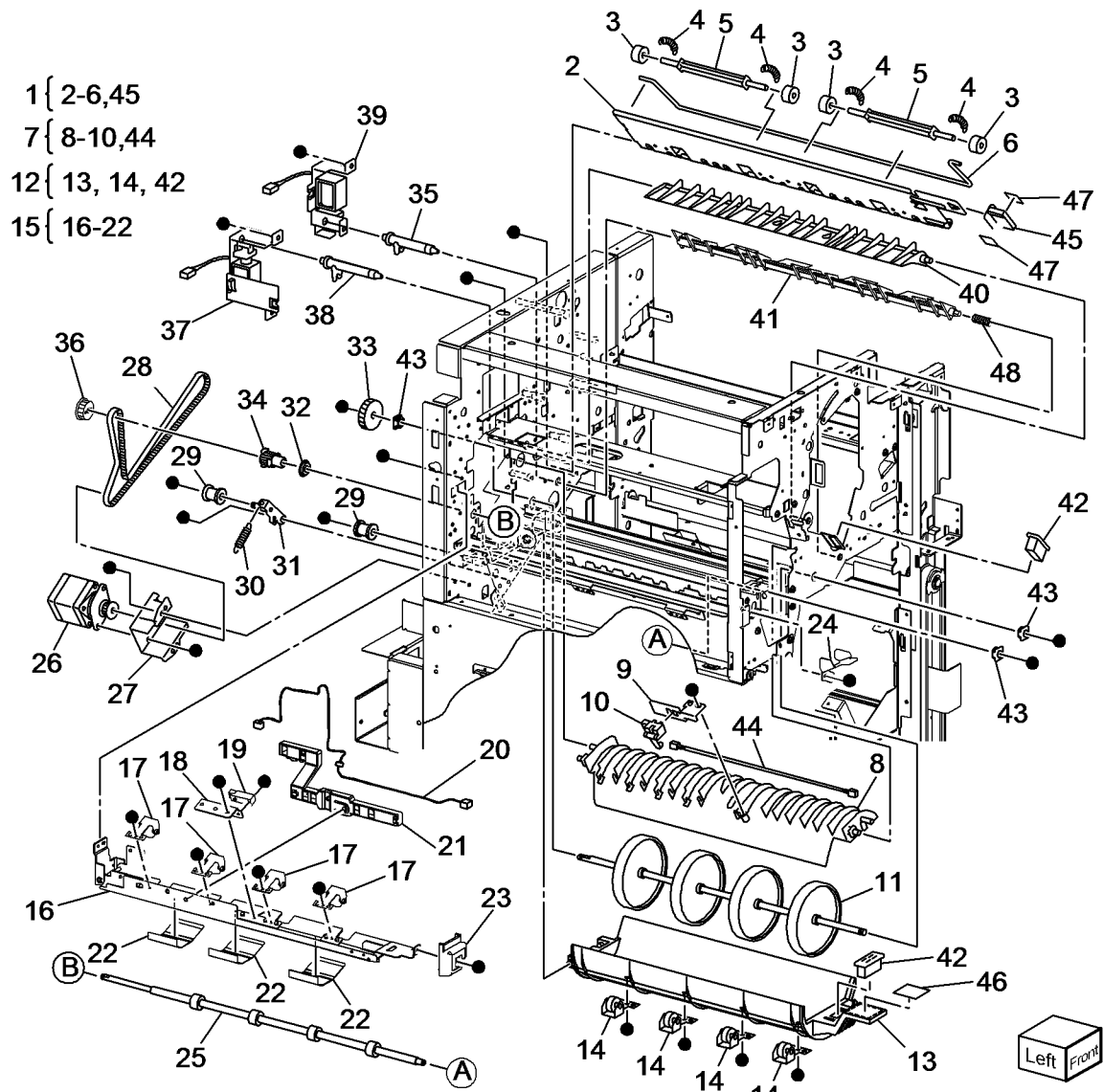
Item	Part	Description
1	-	Pulley (20T/20T) (Not Spared)
2	-	Collar (REF: PL 24.43)
3	-	Gear (Not Spared)
4	-	Sleeve Bearing (Not Spared)
5	-	Wire Harness (Not Spared)
6	022K75720	Top Exit Roll Assembly (REP 24.68)
7	-	Tray Guide Spring (Not Spared)
8	-	Bracket (Not Spared)
9	130E87370	Top Tray Full Sensor (Q12-215) (REP 24.69)
10	-	Chute Assembly (Not Spared)
11	-	Stacker Top Tray Exit Sensor (Q12-115) (Not Spared) (REP 24.70)
12	-	Static Eliminator (Not Spared)
13	-	Right Lower Top Exit Chute Assembly (Not Spared)
14	-	Wire Harness (Not Spared)
15	-	Left Exit Pinch Roll (Not Spared) (REP 24.71)
16	-	Right Exit Pinch Roll (Not Spared) (REP 24.71)



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PL 24.41 Finisher Transport (1 of 3)

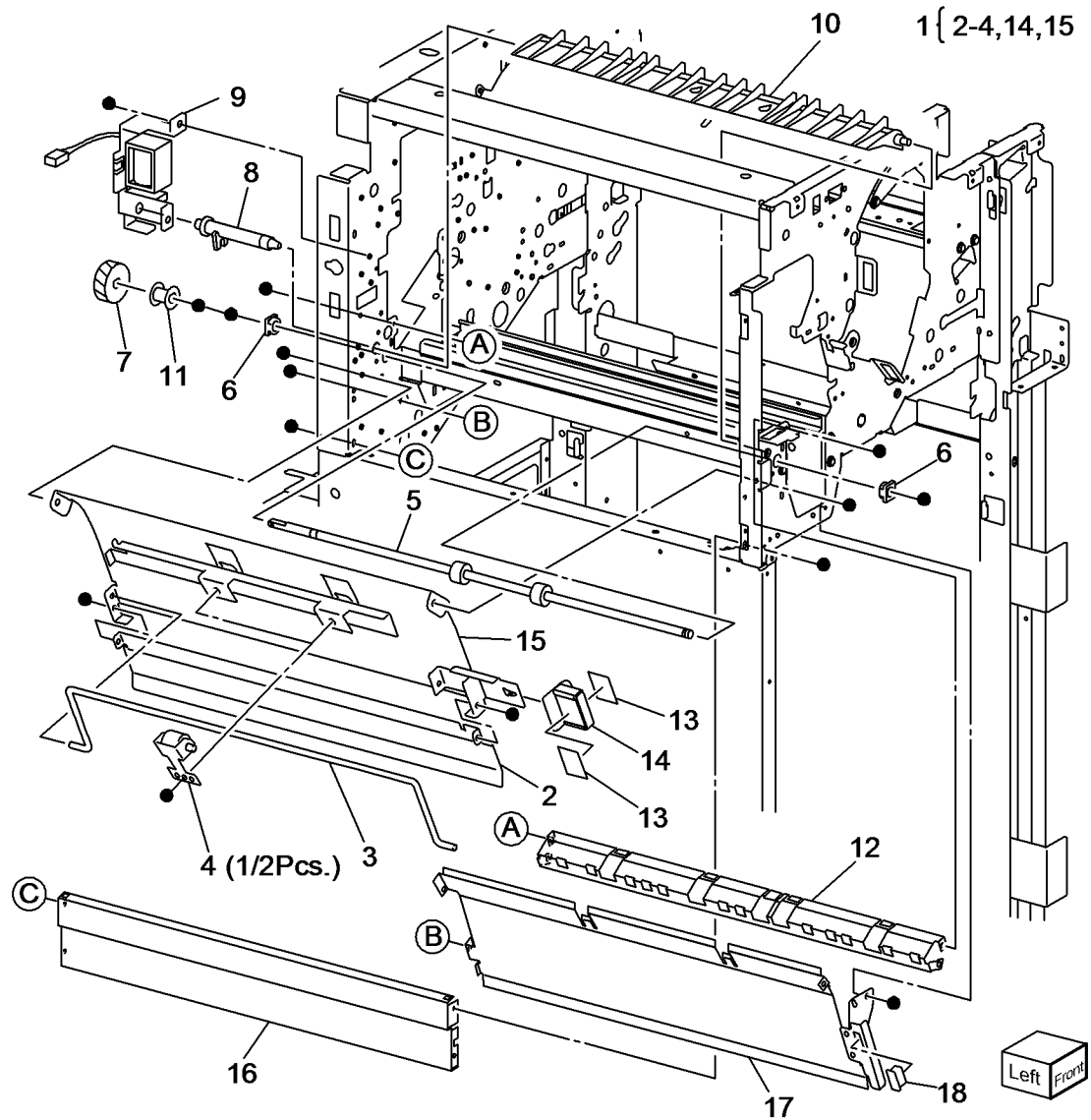
Item	Part	Description
1	054K27140	Lower Exit Chute Assembly (REP 24.72)
2	-	Lower Exit Chute (P/O PL 24.41 Item 1) (REP 24.73)
3	-	Lower Exit Chute Pinch Rollers (P/O PL 24.41 Item 1) (REP 24.72)
4	-	Spring (P/O PL 24.41 Item 1)
5	-	Shaft (P/O PL 24.41 Item 1)
6	-	Torsion Spring (P/O PL 24.41 Item 1)
7	054K33940	Top Buffer Chute Assembly
8	-	Chute (P/O PL 24.41 Item 7)
9	-	Bracket (P/O PL 24.41 Item 7)
10	-	Buffer Path Sensor (Q12-101) (P/O PL 24.41 Item 7) (REP 24.75)
11	022K67891	Buffer Roll (REP 24.76)
12	054K27160	Bottom Buffer Chute Assembly
13	-	Bottom Buffer Chute (P/O PL 24.41 Item 12) (REP 24.77)
14	-	Pinch Roll (P/O PL 24.41 Item 12)
15	054K38821	Upper Chute Assembly (REP 24.78)
16	-	Chute Assembly (P/O PL 24.41 Item 15)
17	-	Entrance Pinch Roller (P/O PL 24.41 Item 15) (REP 24.79)
18	-	Bracket (P/O PL 24.41 Item 15)
19	-	Transport Entrance Sensor (Q12-100) (P/O PL 24.41 Item 15) (REP 24.80)
20	-	Wire Harness (P/O PL 24.41 Item 15)
21	-	Guide (P/O PL 24.41 Item 15)
22	-	Paper Guide (P/O PL 24.41 Item 15)
23	-	Knob (Not Spared)
24	-	Stopper Bracket (Not Spared)
25	022K67811	Entrance Roll (REP 24.81)
26	127K40282	Transport Motor (MOT12-001) (REP 24.82)
27	-	Bracket (Not Spared)
28	-	Transport Motor Belt (Not Spared)
29	-	Pulley (Not Spared)
30	-	Spring (Not Spared)
31	-	Bracket (Not Spared)
32	-	Ball Bearing (Not Spared)
33	-	Gear (46T) (Not Spared)
34	-	Pulley (20T) (Not Spared)
35	-	Link (Not Spared)
36	-	Gear (23T) (Not Spared)
37	068K55250	Transport Gate Solenoid (SOL12-012) (REP 24.83)
38	012E11991	Link
39	068K55840	Buffer Gate Solenoid (SOL12-016) (REP 24.84)
40	809E56910	Transport Gate (REP 24.85)
41	050K65450	Buffer Gate (REP 24.86)
42	-	Magnet (P/O PL 24.41 Item 12)
43	-	Bearing (Not Spared)
44	-	Wire Harness (P/O PL 24.41 Item 7)
45	-	Knob (P/O PL 24.41 Item 1)
46	-	Label (3) (Not Spared)
47	-	Label (2b) (Not Spared)
48	-	Spring (Not Spared)



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PL 24.42 Finisher Transport (2 of 3)

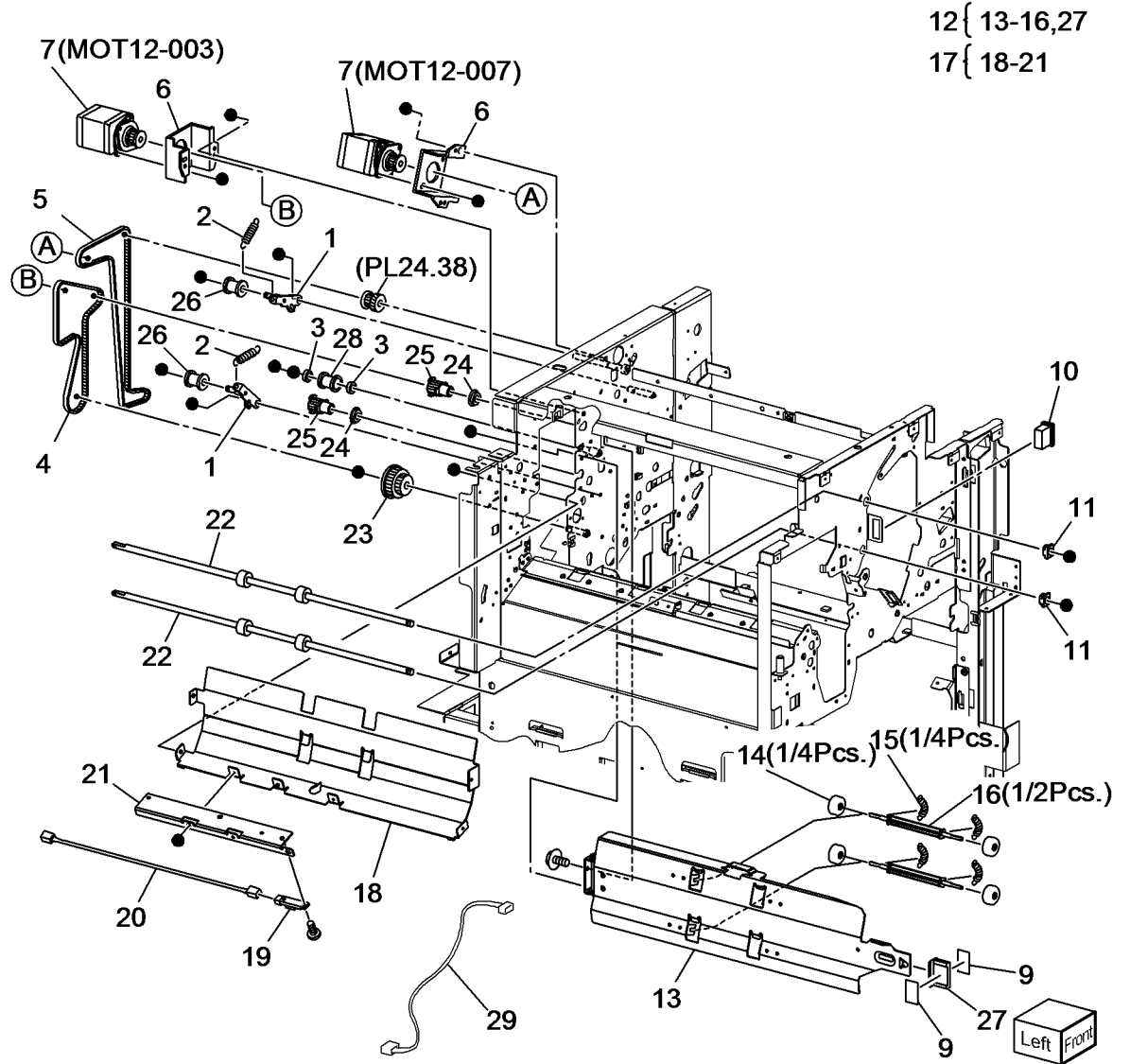
Item	Part	Description
1	-	Booklet Chute Assembly
2	-	Booklet Chute (P/O PL 24.42 Item 1)
3	-	Torsion Spring (P/O PL 24.42 Item 1)
4	-	Pinch Roller Assembly (P/O PL 24.42 Item 1)
5	-	Roller Assembly (Not Spared)
6	-	Bearing (Not Spared)
7	-	Gear (Not Spared)
8	-	Link (Not Spared)
9	-	Booklet Gate Solenoid (SOL13-069) (Not Spared)
10	-	Gate (Not Spared)
11	-	Pulley (Not Spared)
12	-	Lower Entrance Chute (Not Spared)
13	-	Label (4b) (Not Spared)
14	-	Knob (P/O PL 24.42 Item 1)
15	-	Chute Assembly (P/O PL 24.42 Item 1)
16	-	Plate (Not Spared)
17	-	Booklet Upper Chute (Not Spared)
18	-	Magnet (Not Spared)



s7800-213

PL 24.43 Finisher Transport (3 of 3)

Item	Part	Description
1	-	Bracket Assembly (Not Spared)
2	-	Tension Spring (Not Spared)
3	-	Bearing (Not Spared)
4	-	Registration Motor Belt (Not Spared) (REP 24.87)
5	-	Exit Motor Belt (Not Spared) (REP 24.88)
6	-	Bracket (Not Spared)
7	-	Registration Motor (MOT12-003) (REP 24.87)/ Exit Motor (MOT12-007) (REP 24.88) (Not Spared)
8	-	Not Used
9	-	Label (2a) (Not Spared)
10	-	Magnet (Not Spared)
11	-	Bearing (Not Spared)
12	054K28220	Upper Exit Chute Assembly (REP 24.89)
13	-	Upper Exit Chute (P/O PL 24.43 Item 12)
14	-	Upper Exit Chute Pinch Rollers (P/O PL 24.43 Item 12)
15	-	Spring (P/O PL 24.43 Item 12)
16	-	Shaft (P/O PL 24.43 Item 12)
17	-	Left Lower Top Exit Chute Assembly (Not Spared)
18	-	Chute (P/O PL 24.43 Item 17)
19	130E87410	Transport Gate Sensor (Q12-102) (REP 24.90)
20	-	Wire Harness (P/O PL 24.43 Item 17)
21	-	Bracket (P/O PL 24.43 Item 17)
22	022K71431	Transport Rolls (REP 24.91)
23	-	Pulley (53T/23T) (Not Spared)
24	-	Bearing (Not Spared)
25	-	Pulley (20T) (Not Spared)
26	-	Pulley (Not Spared)
27	-	Knob (P/O PL 24.43 Item 12)
28	-	Pulley (Not Spared)
29	-	Wire Harness (Not Spared)

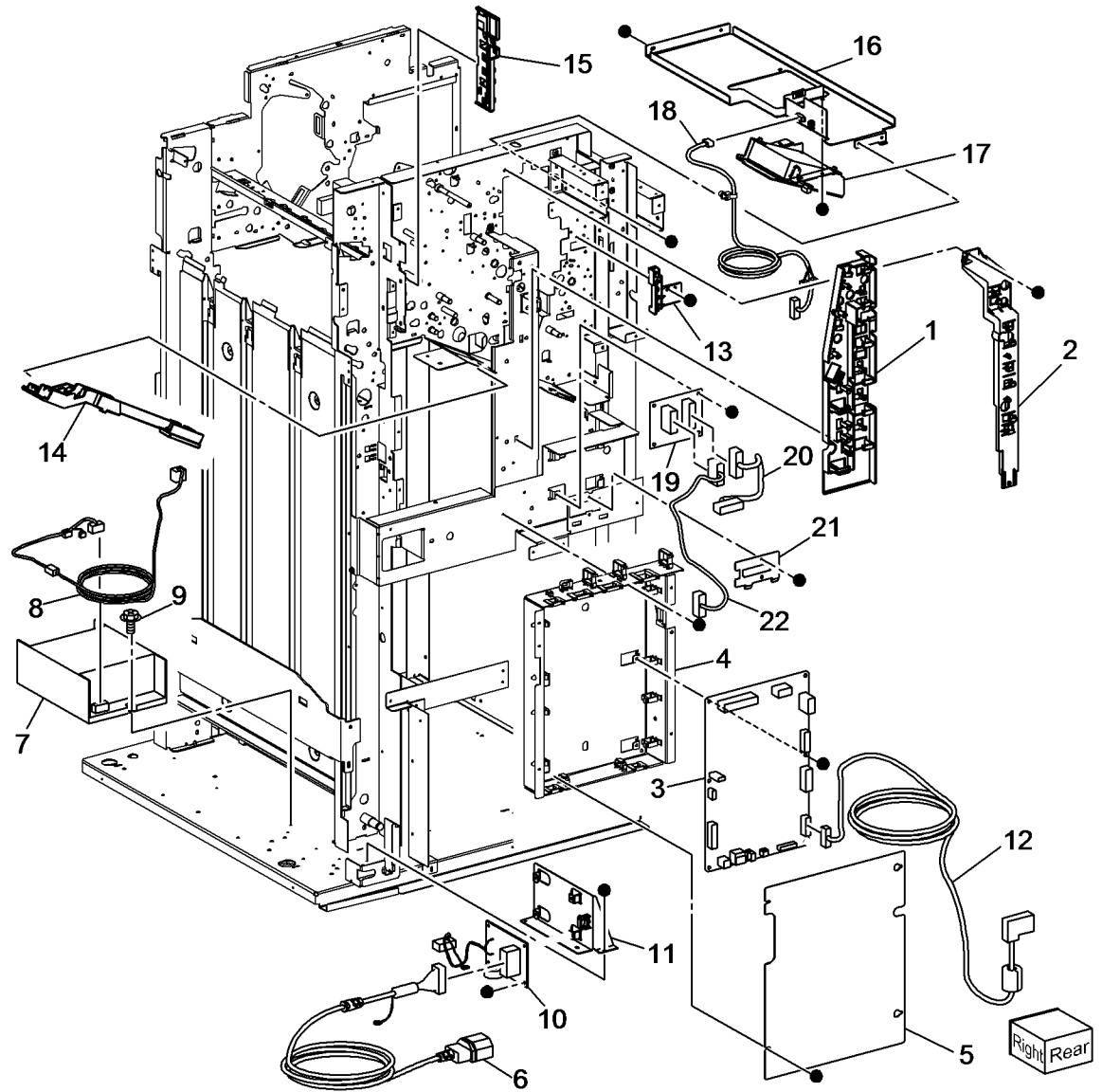


12 { 13-16,27
17 { 18-21

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PL 24.44 Finisher Electrical

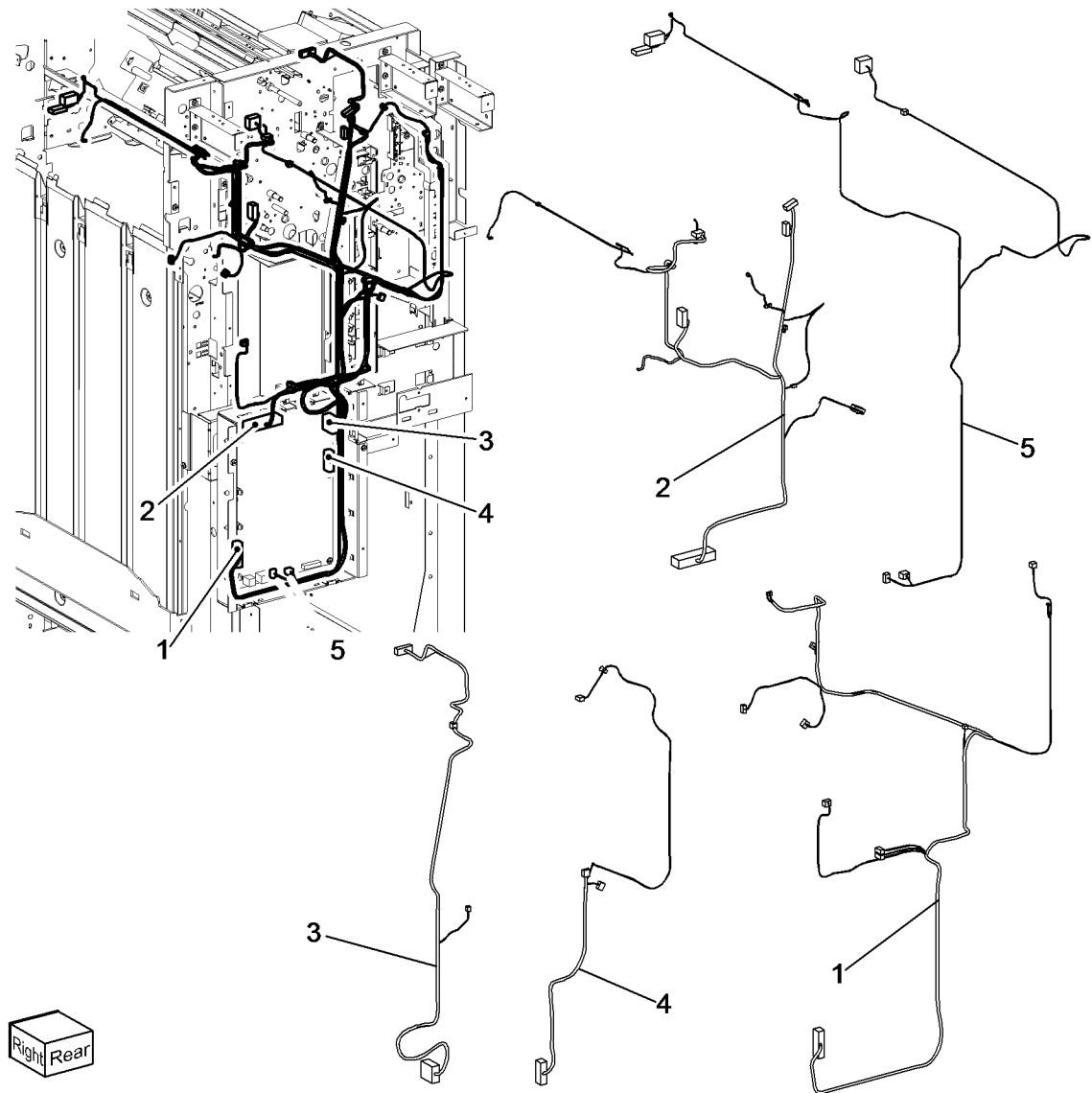
Item	Part	Description
1	-	Harness Guide (Not Spared)
2	-	Harness Guide (Not Spared)
3	960K51453	Main PWB (REP 24.92)
4	-	Bracket (Not Spared)
5	-	Plate (Not Spared)
6	962K38690	Harness Assembly (AC Inlet)
7	105E15200	LVPS (REP 24.93)
8	-	Wire Harness (Not Spared)
9	-	Screw (Not Spared)
10	960K31130	AC Filter
11	-	Bracket (Not Spared)
12	962K67080	I/F Cable
13	-	Harness Guide (Not Spared)
14	-	Harness Guide (Not Spared)
15	-	Harness Guide (Not Spared)
16	-	Fan Bracket (Not Spared)
17	-	Dew Fan (Not Spared)
18	-	Fan Wire Harness (Not Spared)
19	960K04681	H-Transport PWB
20	962K29160	Harness Assembly
21	-	Connector Plate (Not Spared)
22	-	Harness Assembly (Not Spared)



s7800-215

PL 24.45 Finisher Harness

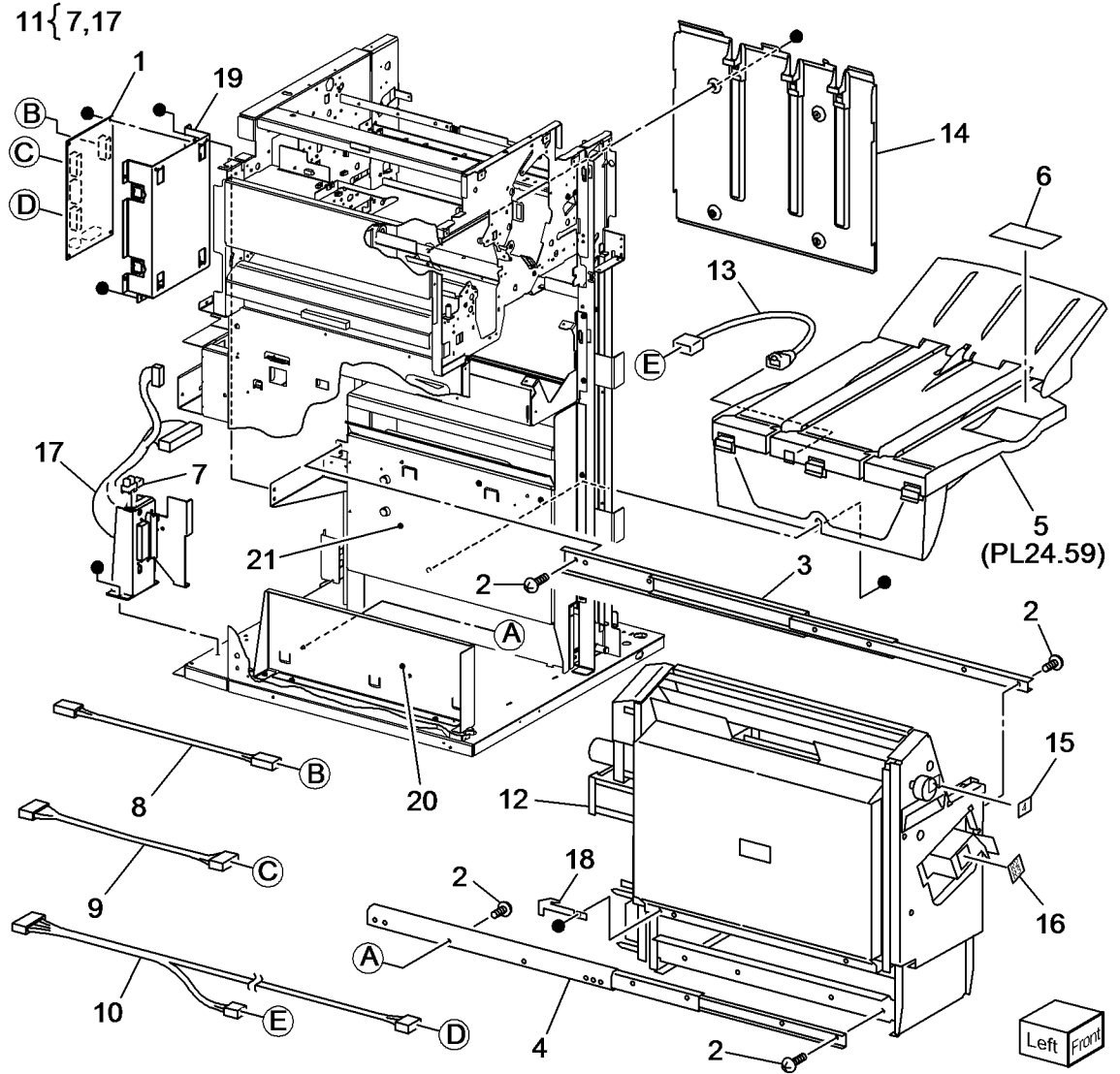
Item	Part	Description
1	-	Harness Assembly (Main sensor) (Not Spared)
2	-	Harness Assembly (Main drive) (Not Spared)
3	-	Harness Assembly (Punch drive) (Not Spared)
4	-	Harness Assembly (Punch sensor) (Not Spared)
5	-	Harness Assembly (Interlock) (Not Spared)



s7800-216

PL 24.51 Booklet Accessory

Item	Part	Description
1	-	Booklet PWB (Not Spared)
2	-	Screw (Not Spared)
3	-	Right Rail (P/O PL 24.51 Item 21)
4	-	Left Rail (P/O PL 24.51 Item 20)
5	050K62855	Booklet Tray Unit
6	-	Label (Not Spared)
7	-	Booklet Drawer Set Sensor (Q13-104) (P/O PL 24.51 Item 11)
8	-	Wire Harness (Not Spared)
9	-	Wire Harness (Not Spared)
10	-	Wire Harness (Not Spared)
11	-	Connector Assembly (Not Spared)
12	-	Booklet Maker (Not Spared) (REP 24.94)
13	-	Wire Harness (Not Spared)
14	-	Tray Guide Assembly (Not Spared)
15	-	Label (Not Spared)
16	-	Label (Not Spared)
17	-	Connector Assembly (P/O PL 24.51 Item 11)
18	-	Stopper (Not Spared)
19	-	Bracket (Not Spared)
20	-	Left Rail Assembly (Not Spared)
21	-	Right Rail Assembly (Not Spared)

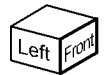
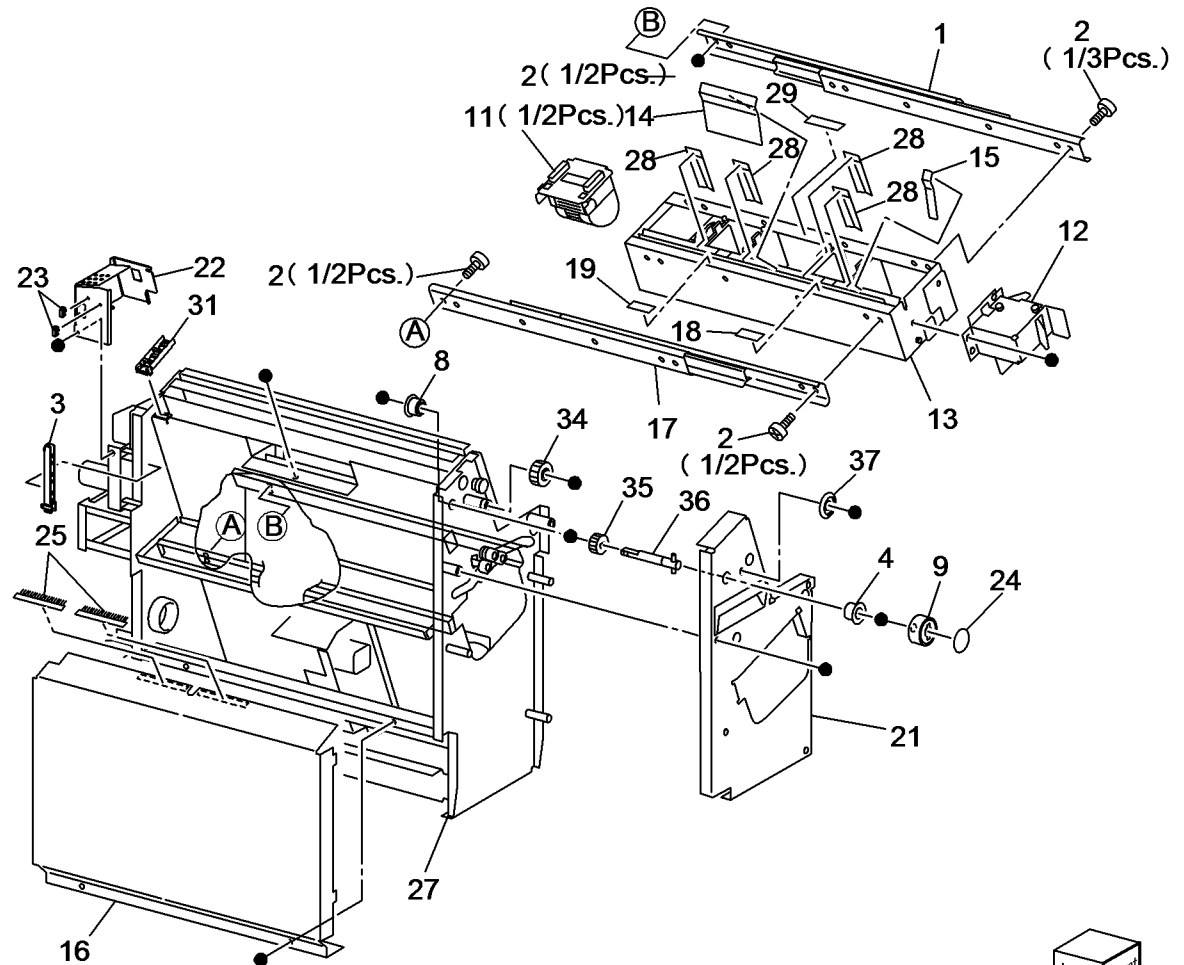


s7800-217

PL 24.52 Booklet - Stapler

Item	Part	Description
1	-	Right Rail (Not Spared)
2	-	Screw (Not Spared)
3	-	Harness Cover (P/O PL 24.52 Item 26)
4	-	Bearing (P/O PL 24.52 Item 26)
5	-	Not Used
6	-	Not Used
7	-	Not Used
8	-	Ball Bearing (P/O PL 24.52 Item 26)
9	-	Knob (P/O PL 24.52 Item 26)
10	-	Booklet Stapler Assembly (P/O PL 24.52 Item 20)
11	-	Stapler (P/O PL 24.52 Item 10)
12	-	Latch (P/O PL 24.52 Item 20)
13	-	Stapler Base (P/O PL 24.52 Item 10)
14	-	Paper Guide (P/O PL 24.52 Item 20)
15	-	Paper Guide (P/O PL 24.52 Item 20)
16	-	Left Cover (P/O PL 24.52 Item 26)
17	-	Left Rail (Not Spared)
18	-	Label (Not Spared)
19	-	Label (Not Spared)
20	029K92175	Booklet Stapler (REP 24.95)
21	-	Front Cover (P/O PL 24.52 Item 26)
22	-	Cover (P/O PL 24.52 Item 26)
23	-	Clamp (P/O PL 24.52 Item 26)
24	-	Label (4a) (P/O PL 24.52 Item 26)
25	-	Eliminator (P/O PL 24.52 Item 26)
26	-	Booklet Assembly
27	-	Frame Assembly (P/O PL 24.52 Item 26)
28	-	Paper Guide (P/O PL 24.52 Item 20)
29	-	Label
30	-	Not Used
31	-	Guide (P/O PL 24.52 Item 26)
32	-	Not Used
33	-	Not Used
34	-	Gear (29T) (P/O PL 24.52 Item 26)
35	-	Gear (31T) (P/O PL 24.52 Item 26)
36	-	Shaft (P/O PL 24.52 Item 26)
37	-	Spacer (P/O PL 24.52 Item 26)

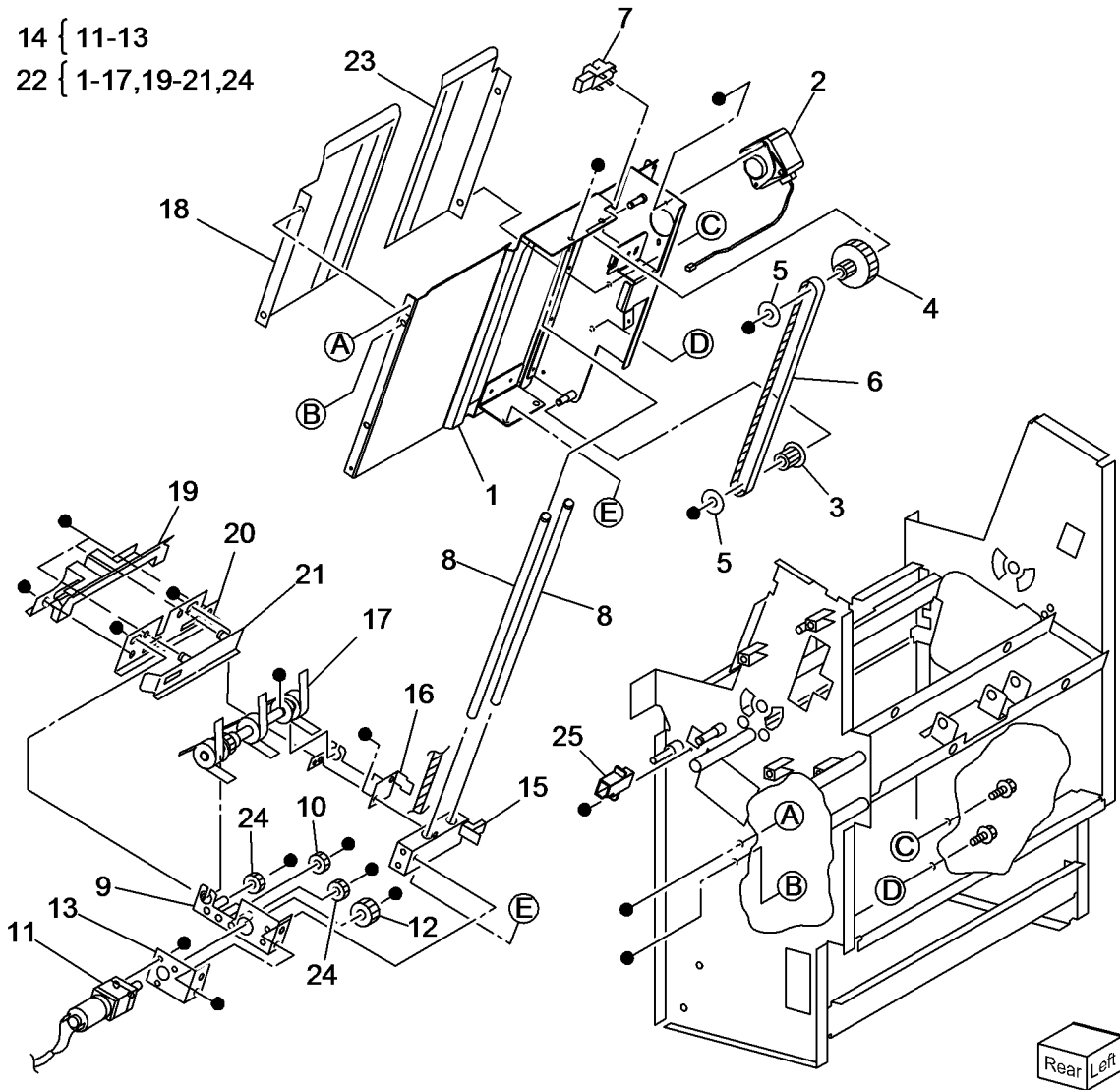
10 { 11,13
 20 { 10-15,28
 26 { 4,8,9,16,21,22,24,25,27,34-37



s7800-218

PL 24.53 Booklet - End Guide

Item	Part	Description
1	-	Compile Chute (P/O PL 24.53 Item 22)
2	-	Booklet End Guide Motor (MOT13-011) (P/O PL 24.53 Item 22)
3	-	Pulley (P/O PL 24.53 Item 22)
4	-	Gear Pulley (40T/20T) (P/O PL 24.53 Item 22)
5	-	Washer (P/O PL 24.53 Item 22)
6	-	Belt (P/O PL 24.53 Item 22)
7	-	Booklet End Guide Home Sensor (Q13-137) (P/O PL 24.53 Item 22)
8	-	Shaft (P/O PL 24.53 Item 22)
9	-	Bracket (P/O PL 24.53 Item 22)
10	-	Gear (14T) (P/O PL 24.53 Item 22)
11	-	Booklet Paddle Motor (MOT13-021) (P/O PL 24.53 Item 14)
12	-	Gear (14T) (P/O PL 24.53 Item 14)
13	-	Bracket (P/O PL 24.53 Item 14)
14	-	Booklet Paddle Motor Assembly (P/O PL 24.53 Item 22)
15	-	Belt Clamp (P/O PL 24.53 Item 22)
16	-	Paddle Bracket (P/O PL 24.53 Item 22)
17	-	Paddle Assembly (P/O PL 24.53 Item 22)
18	-	Chute (Rear) (Not Spared)
19	-	End Guide (P/O PL 24.53 Item 22)
20	-	Support Bracket (P/O PL 24.53 Item 22)
21	-	Adjust Bracket (P/O PL 24.53 Item 22)
22	-	Compile Chute Assembly
23	-	Chute (Front)
24	-	Gear (14T) (P/O PL 24.53 Item 22)
25	-	Guide (Not Spared)



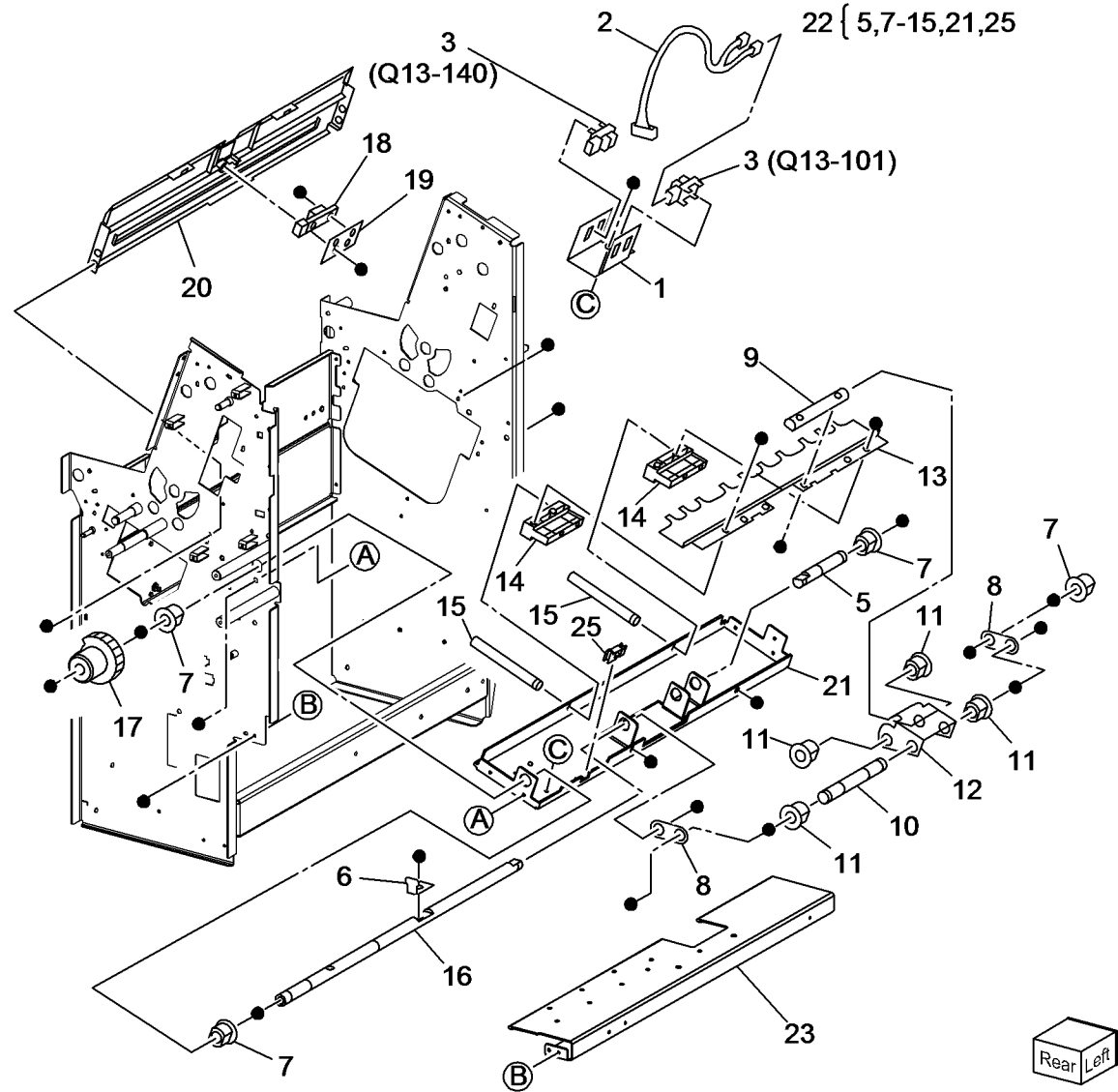
14 { 11-13
22 { 1-17,19-21,24

Rear Left

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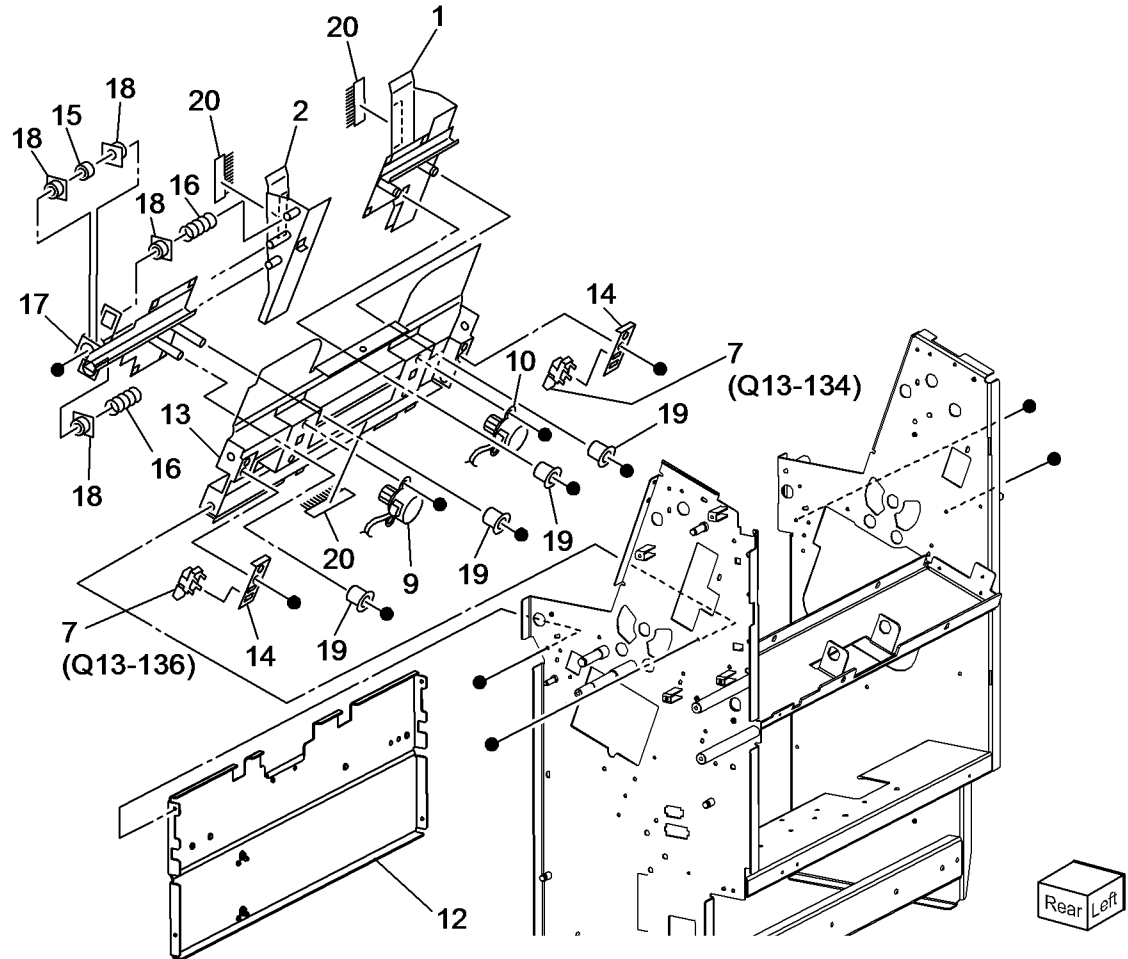
PL 24.54 Booklet - Knife

Item	Part	Description
1	-	Bracket
2	-	Wire Harness
3	-	Knife Home Sensor (Q13-101)/ Knife Folding Sensor (Q13-140)
4	-	Not Used
5	-	Shaft (P/O PL 24.54 Item 22)
6	-	Actuator (Not Spared)
7	-	Bearing (P/O PL 24.54 Item 22)
8	-	Joint (P/O PL 24.54 Item 22)
9	-	Shaft (P/O PL 24.54 Item 22)
10	-	Shaft (P/O PL 24.54 Item 22)
11	-	Bearing (P/O PL 24.54 Item 22)
12	-	Bracket (P/O PL 24.54 Item 22)
13	-	Knife (P/O PL 24.54 Item 22)
14	-	Guide (P/O PL 24.54 Item 22)
15	-	Shaft (P/O PL 24.54 Item 22)
16	-	Shaft (Not Spared)
17	-	Gear (42T) (Not Spared)
18	-	Booklet Compiler No Paper Sensor (Q13-102) (Not Spared)
19	-	Bracket (Not Spared)
20	-	Chute (Not Spared)
21	-	Tie Plate (P/O PL 24.54 Item 22)
22	-	Knife Assembly (Not Spared)
23	-	Tie Plate (Not Spared)
24	-	Not Used
25	-	Edge Saddle (P/O PL 24.54 Item 22)



PL 24.55 Booklet - Tamper

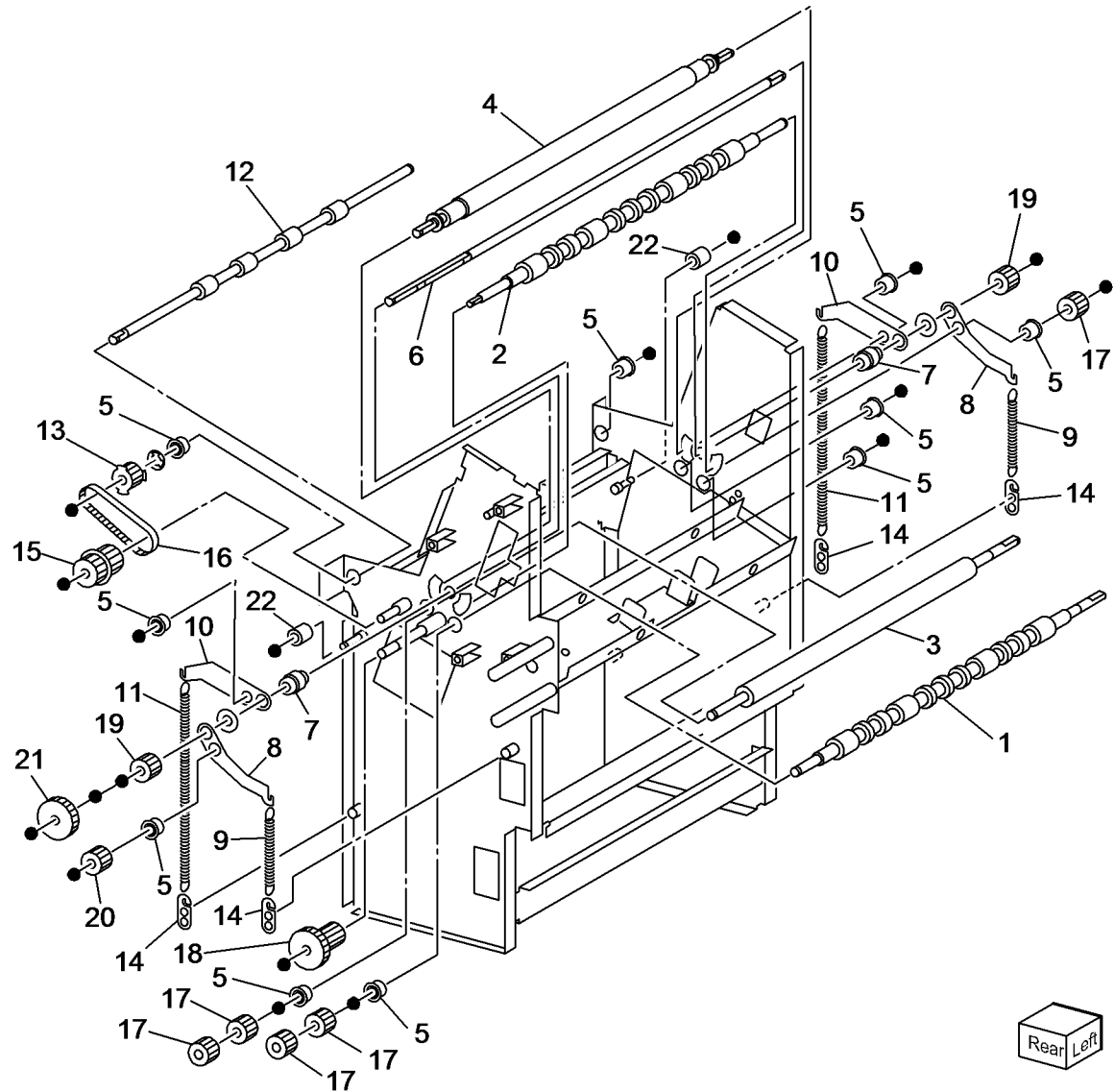
Item	Part	Description
1	-	Front Tamper Guide (Not Spared)
2	-	Rear Tamper Guide (Not Spared)
3	-	Not Used
4	-	Not Used
5	-	Not Used
6	-	Not Used
7	-	Booklet Rear Tamper Home Sensor (Q13-136)/Booklet Front Tamper Home Sensor (Q13-134) (Not Spared)
8	-	Not Used
9	-	Booklet Rear Tamper Motor (MOT13-060) (Not Spared)
10	-	Booklet Front Tamper Motor (MOT13-052) (Not Spared)
11	-	Not Used
12	-	Tie Plate (Not Spared)
13	-	Frame Assembly (Not Spared)
14	-	Bracket (Not Spared)
15	-	Roll (Not Spared)
16	-	Spring (Not Spared)
17	-	Rack (Not Spared)
18	-	Bearing (Not Spared)
19	-	Roll (Not Spared)
20	-	Static Eliminator (Not Spared)



s7800-221

PL 24.56 Booklet - Roll

Item	Part	Description
1	-	Booklet Pre Folding Roll (Not Spared)
2	-	Booklet Pre Folding Nip Roll (Not Spared)
3	-	Booklet Folding Roll (Not Spared)
4	-	Booklet Folding Nip Roll (Not Spared)
5	-	Ball Bearing (Not Spared)
6	-	Shaft (Not Spared)
7	-	Bearing (Not Spared)
8	-	Tension Plate 1 (Not Spared)
9	-	Spring (Not Spared)
10	-	Tension Plate 2 (Not Spared)
11	-	Spring (Not Spared)
12	-	Booklet Eject Roll (Not Spared)
13	-	Pulley (16T) (Not Spared)
14	-	Spring Plate (Not Spared)
15	-	Gear Pulley (20T/25T) (Not Spared)
16	-	Belt (Not Spared)
17	-	Gear (16T) (Not Spared)
18	-	Gear (38T/18T) (Not Spared)
19	-	Gear (18T) (Not Spared)
20	-	Gear (16T) (Not Spared)
21	-	Gear (38T) (Not Spared)
22	-	Roll (Not Spared)

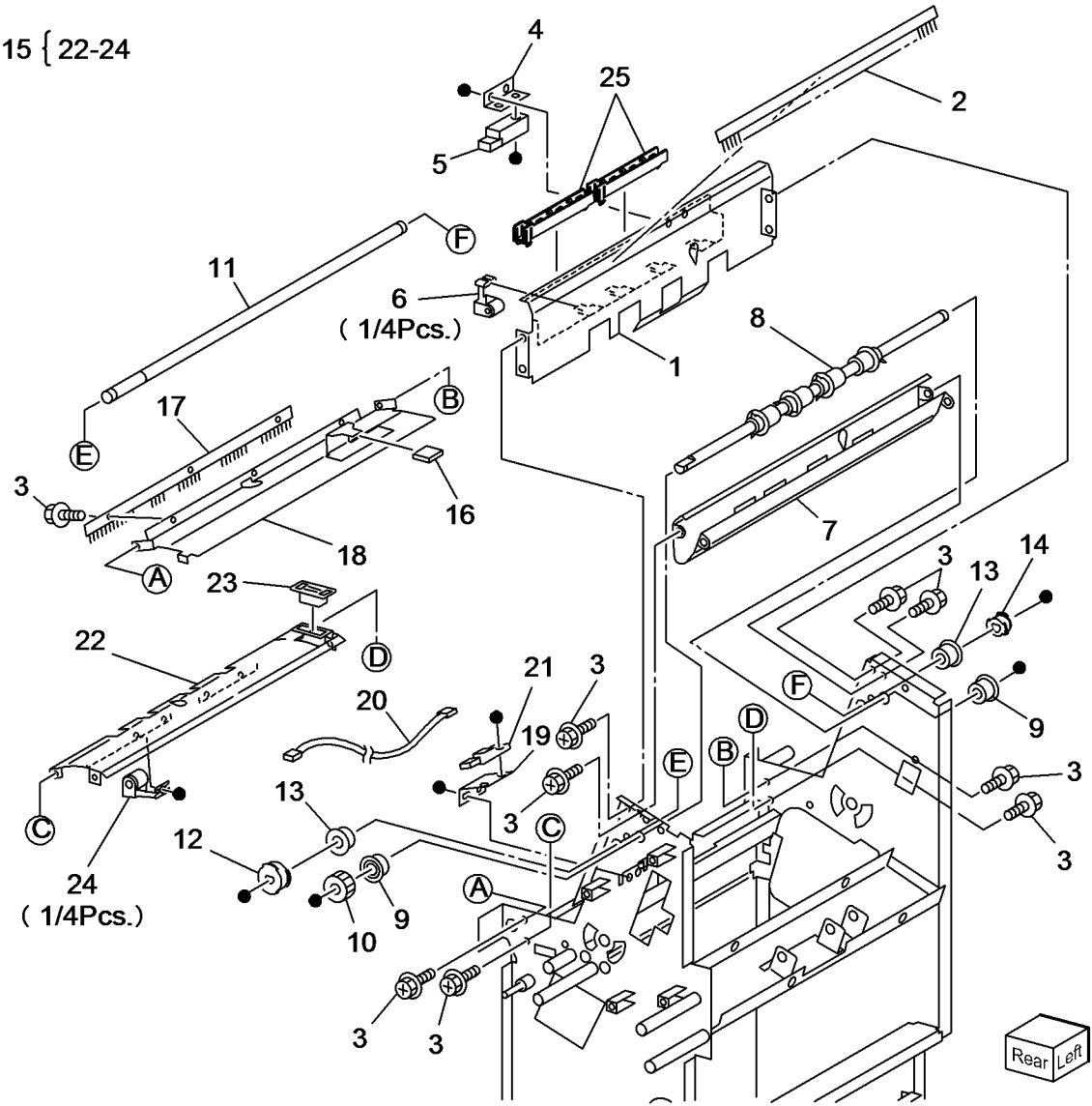


s7800-222

PL 24.57 Booklet - Chute

Item	Part	Description
1	-	Chute (Not Spared)
2	-	Static Eliminator (Not Spared)
3	-	Screw (Not Spared)
4	-	Bracket (Not Spared)
5	-	Booklet In Sensor (Q13-135) (Not Spared)
6	-	Pinch Roll (Not Spared)
7	-	Chute (Not Spared)
8	-	Booklet In Roll (Not Spared)
9	-	Ball Bearing (Not Spared)
10	-	Gear (16T) (Not Spared)
11	-	Shaft (Not Spared)
12	-	Gear (27T) (Not Spared)
13	-	Bearing (Not Spared)
14	-	Gear (27T) (Not Spared)
15	-	Lower Exit Chute Assembly (Not Spared)
16	-	Knob (Not Spared)
17	-	Static Eliminator (Not Spared)
18	-	Upper Exit Chute (Not Spared)
19	-	Bracket (Not Spared)
20	-	Wire Harness (Not Spared)
21	-	Booklet Folder Roll Exit Sensor (Q13-103) (Not Spared)
22	-	Lower Exit Chute (P/O PL 24.57 Item 15)
23	-	Magnet (P/O PL 24.57 Item 15)
24	-	Pinch Roll (P/O PL 24.57 Item 15)
25	-	Harness Cover (Not Spared)

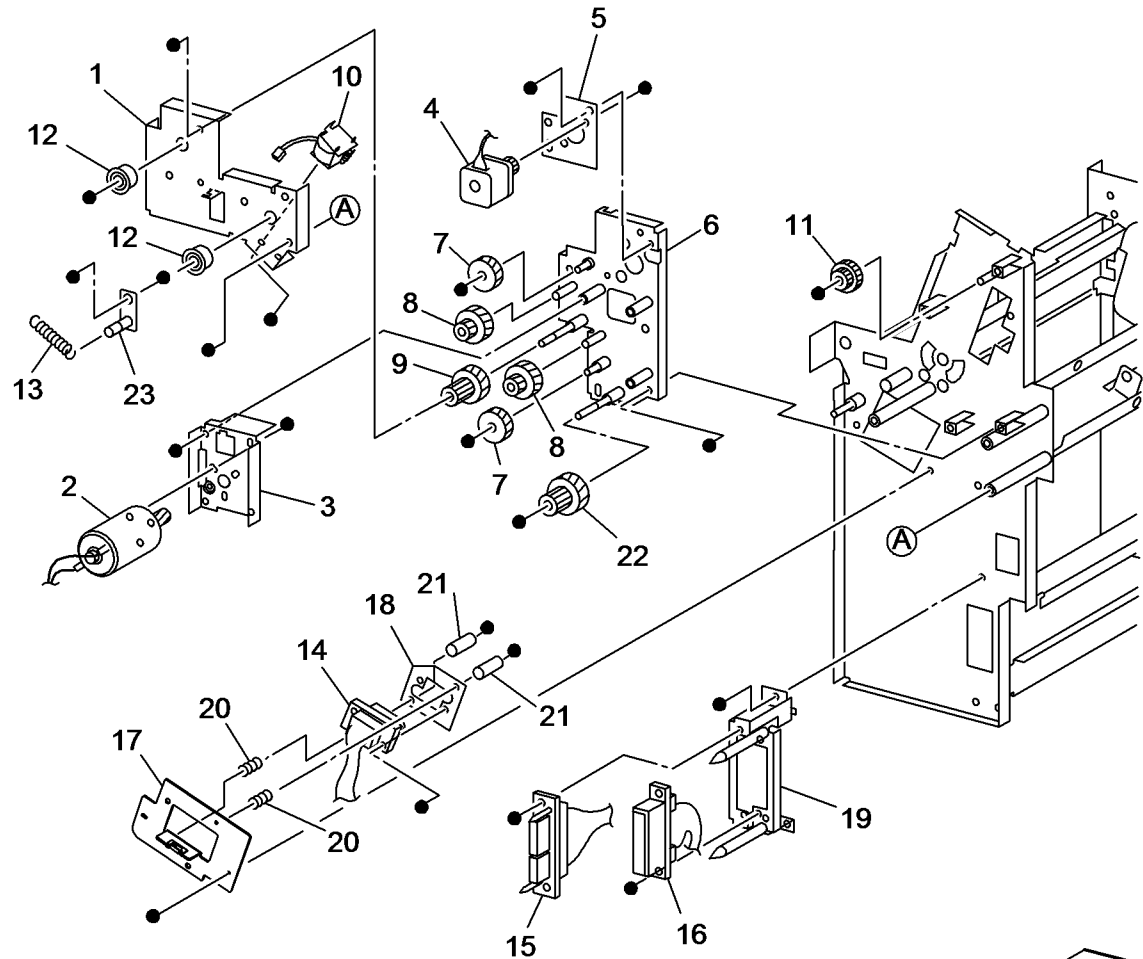
15 { 22-24



s7800-223

PL 24.58 Booklet - Motor

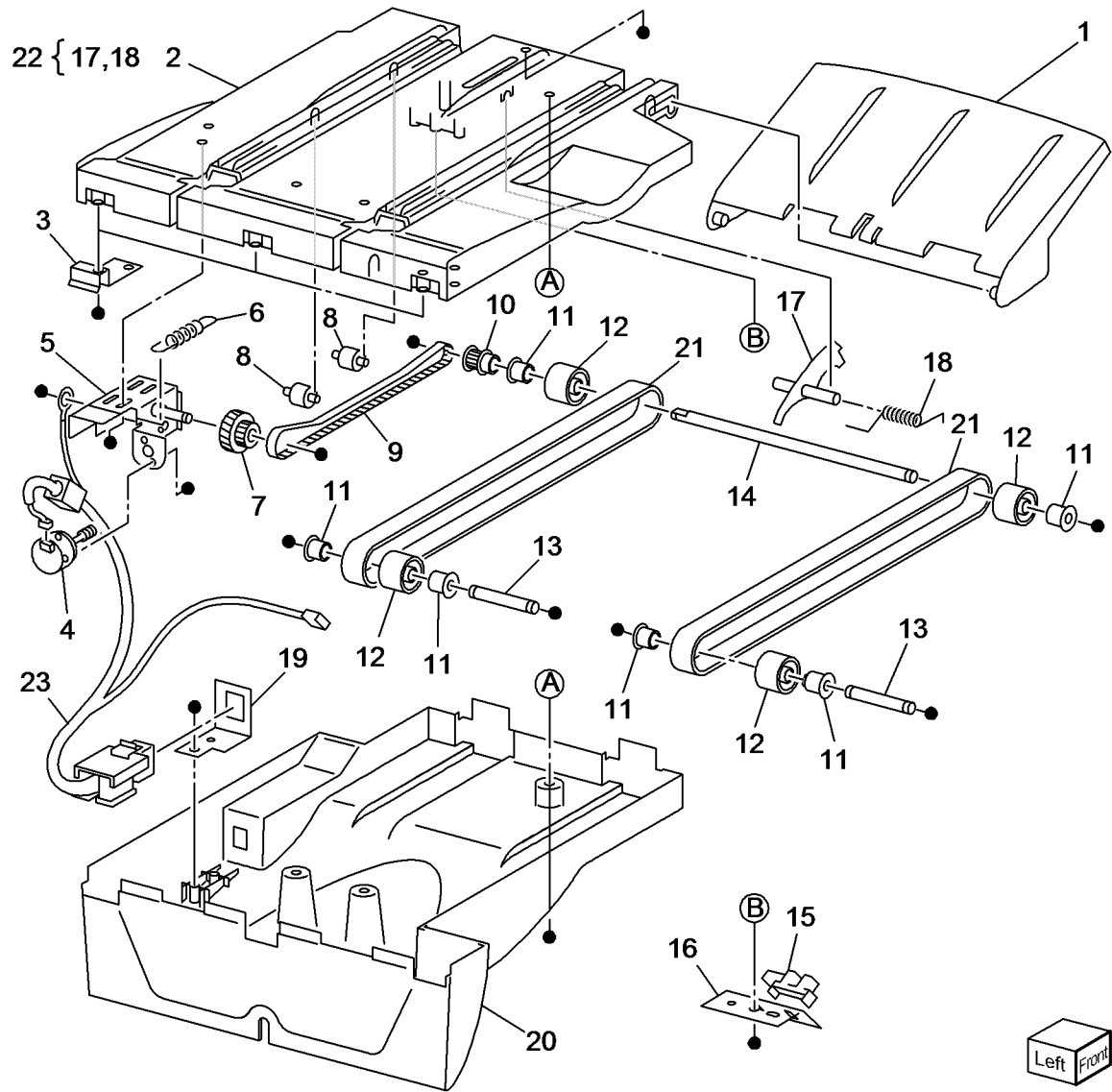
Item	Part	Description
1	-	Bracket (Not Spared)
2	-	Booklet Fold Motor (Not Spared)
3	-	Bracket (Not Spared)
4	-	Booklet Paper Path Motor (MOT13-064) (Not Spared)
5	-	Bracket (Not Spared)
6	-	Bracket (Not Spared)
7	-	Gear (45T) (Not Spared)
8	-	Gear (43T/14T) (Not Spared)
9	-	Gear (46T/13T) (Not Spared)
10	-	Knife Solenoid (SOL13-010) (Not Spared)
11	-	Gear (27T/34T) (Not Spared)
12	-	Ball Bearing (Not Spared)
13	-	Spring (Not Spared)
14	-	Wire Harness (Not Spared)
15	-	Wire Harness (Not Spared)
16	-	Wire Harness (Not Spared)
17	-	Bracket (Not Spared)
18	-	Bracket (Not Spared)
19	-	Bracket (Not Spared)
20	-	Spring (Not Spared)
21	-	Spacer (Not Spared)
22	-	Gear (48T/18T) (Not Spared)
23	-	Link (Not Spared)



s7800-224

PL 24.59 Booklet Tray Components

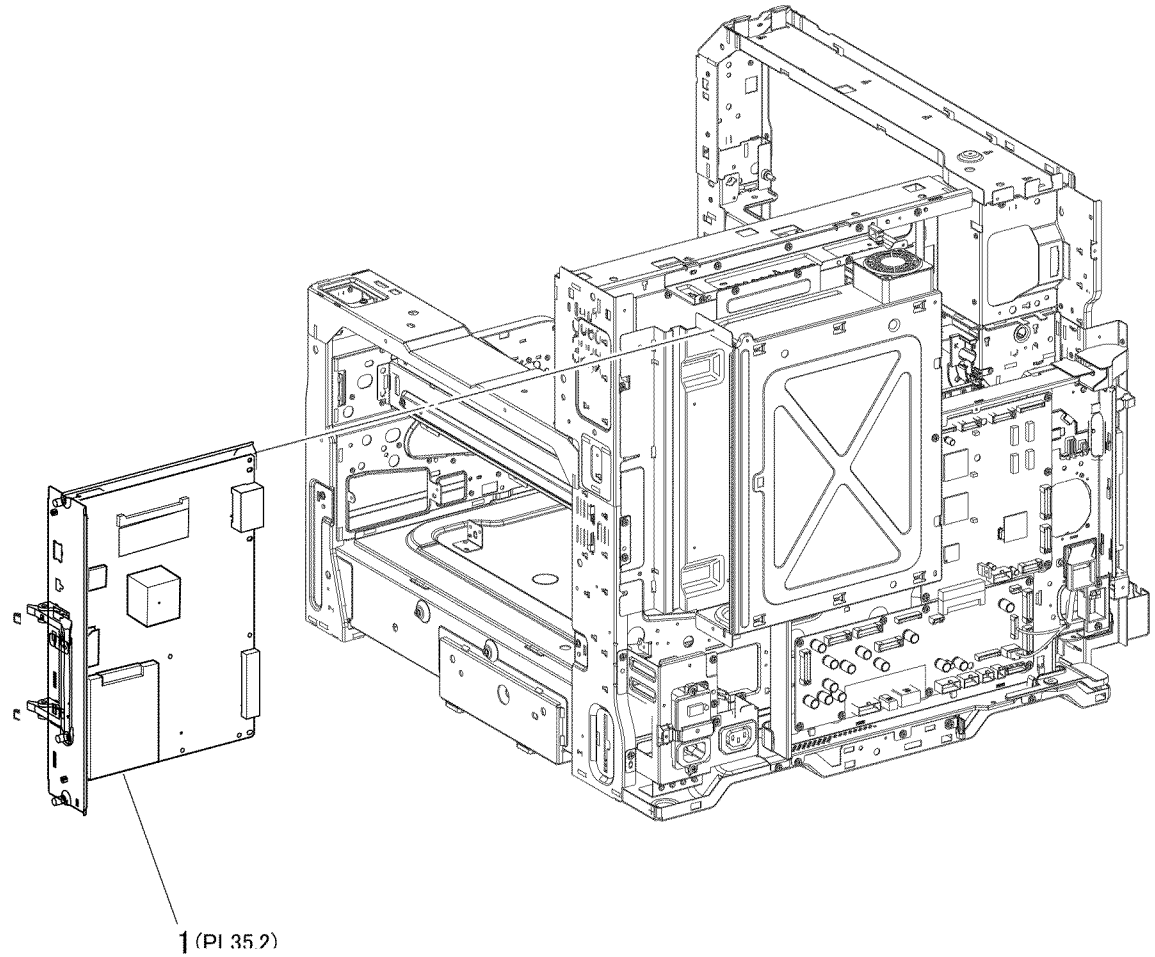
Item	Part	Description
1	-	Tray (Not Spared)
2	-	Upper Tray (Not Spared)
3	-	Bracket (Not Spared)
4	-	Tray Belt Drive Motor (MOT13-020) (Not Spared)
5	-	Bracket (Not Spared)
6	-	Spring (Not Spared)
7	-	Gear Pulley (Not Spared)
8	-	Roll (Not Spared)
9	-	Belt (Not Spared)
10	-	Pulley (Not Spared)
11	-	Bearing (Not Spared)
12	-	Roll (Not Spared)
13	-	Shaft (Not Spared)
14	-	Shaft (Not Spared)
15	-	Booklet No Paper Sensor (Q13-139) (Not Spared)
16	-	Bracket (Not Spared)
17	-	Actuator (P/O PL 24.59 Item 22)
18	-	Spring (P/O PL 24.59 Item 22)
19	-	Bracket (Not Spared)
20	-	Lower Tray (Not Spared)
21	-	Belt (Not Spared)
22	-	Actuator Assembly (Not Spared)
23	-	Harness Assembly (Not Spared)



s7800-225

PL 35.1 ESS (1 of 2)

Item	Part	Description
1	-	Image Processor Board (REF: PL 35.2 Item 17) (REP 35.1)

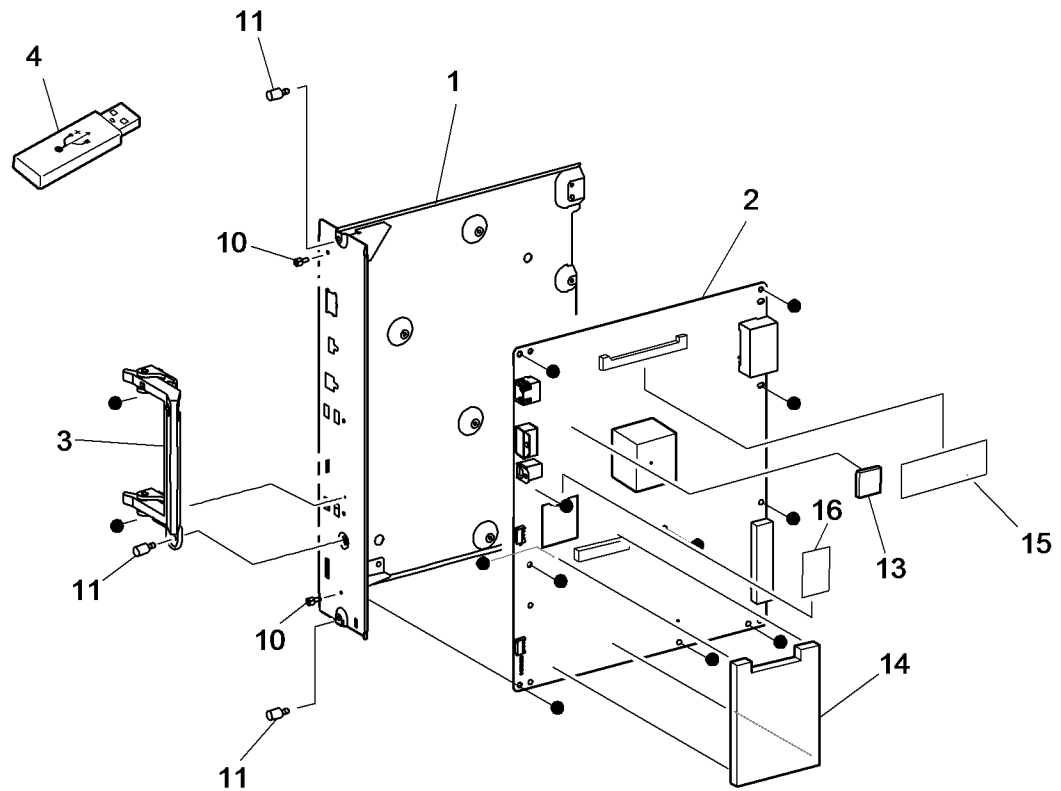


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PL 35.2 ESS (2 of 2)

Item	Part	Description
1	—	Chassis Assembly (P/O PL 35.2 Item 17)
2	—	ESS PWB (P/O PL 35.2 Item 17)
3	—	Handle (P/O PL 35.2 Item 17)
4	237E26390	USB Memory with Firmware
5	—	Not Used
6	—	Not Used
7	—	Not Used
8	—	Not Used
9	—	Not Used
10	—	Lock Screw (P/O PL 35.2 Item 17)
11	—	Thumb Screw (P/O PL 35.2 Item 17)
12	—	Not Used
13	237E26300	EEPROM Chip
14	007K20380	Hard Disk Drive (REP 35.2)
15	137E30900	DIMM (2GB)
16	160E04220	SD Card
17	960K72100	Image Processor Board (REP 35.1)

17 { 1-3,8-11, 13-16



s7800-177

PL 36.1 Kits

Item	Part	Description
1	604K16631	Sensor Kit
2	600K87510	Sensor Flag Kit
3	604K00821	Hardware Kit
4	697E62760	Repackaging Kit

**NO EXPLODED
VIEW PROVIDED**

Part Number Index

The Part Number Index Table has been deleted from the EDOC.

Use SearchLite to search for Part Numbers and Part Descriptions.

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General Procedures Introduction

This chapter covers the System Startup, Power On Self Test (POST), Service Diagnostics, and troubleshooting problems that are not associated with a fault code or Control Panel error message.

For troubleshooting problems associated with an error code or Control Panel error message, refer to the individual Status Indicator RAPs. Image Quality problems are covered in Image Quality chapter.

Troubleshooting procedures isolates a problem to a specific component or subassembly, in some cases including the wiring harness.

Service Diagnostics are to be executed by a certified service technician only through the Service Diagnostics Menu.

System Startup

When the printer is turned On, the system power state is indicated by an LED on the UI.

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 \(POST\)](#).
2. A static power-on splash screen is displayed with the Energy Star logo and Xerox badge 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 provide a quick means of isolating a defective subsystem associated with the Image Processor 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 I/P 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 will be made to write more detailed information to the serial debug port (which should work as the RAM is not being used at this point and the debug serial port has been initialized).

4. The CPU loads its single FPGA. If an error is detected during this step, the system attempts to continue with the Uboot process to allow for recovery and a text message is displayed on the Control Panel and a Health LED blinks the appropriate code.
5. The I/P Board health is checked. If there is a failure on the board, the Health LED blinks.
6. The Operating System (OS) is loaded from Hard Drive and the OS is brought up.

POST Error Reporting

POST reports errors using the Health LED located on the I/P 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

[Table 1](#) contains blink codes for each error. All errors blink the LED a certain number of times @ 2 Hz, pause for 2 seconds, and then repeat.

Table 1 POST Health LED Error Blink Patterns

Blink Code	Message	Action	Parts List
2 blinks	RAM Error	Replace DIMM. If error persists, replace the I/P Board.	PL 35.2 Item 2
3 blinks	FPGA Error	Update software, then replace the Secure Digital (SD) Card.	PL 35.2 Item 16
4 blinks	EEPROM Error	Replace the I/P Board EEPROM.	PL 35.2 Item 13
6 blinks	UI Failure	Replace the Control Panel.	PL 19.2 Item 15
7 blinks	UI Version Error	Update software.	N/A

Errors

RAM Error

A RAM error is displayed on the UI when the test detects errors on the RAM DIMM installed on the I/P Board. This error most often means an incompatible DIMM has been installed, or the DIMM has been installed incorrectly or is missing. However, it can mean the DIMM is faulty. In rare instances, it could mean the I/P 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 software may or may not fix the problem. If it does not, replace the Image Processor Board ([REP 35.1](#)).

EEPROM Error

This indicates the I/P 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

Ensure the UI software version is correct. Reinstall the software using Altboot ([GP 21 - Firmware Restore Using AltBoot](#)), if this error occurs.

GP 1 Initial Actions and General Troubleshooting Checklist

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 Chapter 2 (Status Indicator RAPs) 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?

General Troubleshooting Checklist

Before starting to troubleshoot, always check these items.

1. Check the supply voltage. Is the printer plugged directly into the wall outlet? The printer should not be plugged into a surge protector or uninterruptable power supply.
2. Is the wall outlet voltage within printer specifications? The voltage should drop no more than 10% when the printer is operating.
3. Check the Power Cord connection and condition.
4. Check the installation environment. Is the installation in an area that exposes the printer to temperatures, humidity, direct sunlight, or dust that exceed specifications?
5. Check the condition of the media. Is the media in good condition, within media specifications, and loaded correctly?
6. Check the printer's condition. Are there accumulations of dust at the air vents? Check the life counts of the CRU components.

GP 2 Printing Configuration Reports

Purpose

This procedure describes the procedure for accessing Configuration Reports.

Procedure

A Configuration Report can be produced in three ways:

1. Switching power off then on (if configured)
2. Through use of Centroware® Internet Services.
3. From the local UI:

NOTE: *It is not necessary to enter SA mode (log in) in order to perform this procedure.*

- a. From the Printer's Control Panel menu, touch **Printer**.
- b. Touch **Print Reference Materials**.
- c. Touch **Configuration Report**.
- d. Touch **Print** to print the report.

GP 3 Service Diagnostics

The Phaser 7800 has built-in diagnostics that provide tests for sensors, motors, clutches, solenoids, and suite of built-in test prints to aid in troubleshooting print-quality problems. Access is also provided to system status and NVM addresses. Using these tests, 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 sub-assemblies or parts in the vicinity of the reported error. Diagnostic tests are controlled from the Control Panel.

Most of the diagnostic tests are straightforward and require no additional explanation, but there are some that require specific conditions be met to achieve meaningful results. These instructions cover each of the test groups, listing special instructions, conditions, or other information necessary to successfully interpret the results of the diagnostic tests.

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 the following methods. Login at the passcode screen is required. The passcode is **6789**.

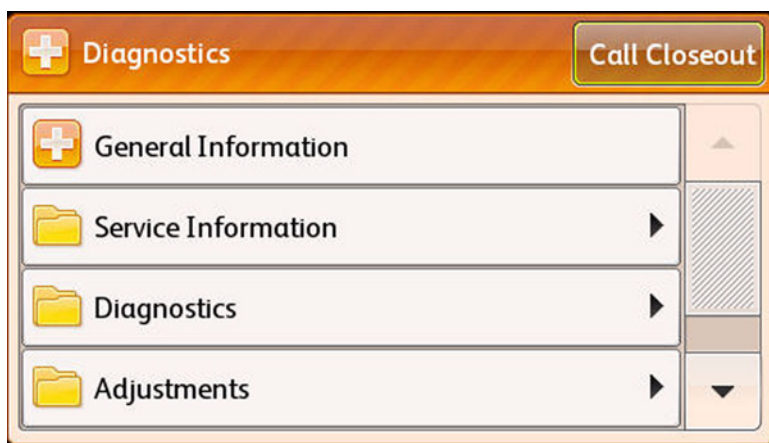


Figure 1 Service Diagnostics

When Menu is Locked

1. With the printer in the Ready state, press and hold the **Pause** button for 5 seconds, then press and release the **Power Saver** button.
2. In the passcode field, enter **6789**. Touch **OK**.

When Menu is Not Locked

1. From the Printer menu, touch **Tools > Setup > Service Tools > Service Diagnostics**.
2. In the passcode field, enter **6789**. Touch **OK**.

Service Diagnostic Routines

The Services Diagnostics menu provides access to these diagnostic routines.

Table 1 Service Diagnostics Routines

Test	Control Panel Display	Test Description
General Information: Provides information about the printer.		
	<ul style="list-style-type: none"> • Product Code • Serial Number • Total Images • IPv4 Address • IPv6 Address • System Software Version 	
Service Info: Provides information required during the servicing of the system. Service Information lists utilities for managing counters, reviewing status, and access to embedded test prints.		
dc104 Usage Counters	<ul style="list-style-type: none"> • Black Impressions • Color Impressions • Total Impressions • Black Large Impressions • Color Large Impressions • Total Large Impressions • Maintenance Impressions • Black Maintenance Impressions • Color Maintenance Impressions • Sheets • 2-Sided Sheets 	Provides usage counts for the listed items.
dc108 Software Versions	<ul style="list-style-type: none"> • Software Upgrade • NC • NC OS • Finisher 	Provides software information including: <ul style="list-style-type: none"> • System Software Version • Software Module Name
dc122 Fault History	<ul style="list-style-type: none"> • Chain Link • Description • Date & Time 	Provides the most recent (last 40) Faults including: <ul style="list-style-type: none"> • Chain Link • Description • Occurrence

Table 1 Service Diagnostics Routines

Test	Control Panel Display	Test Description
dc135 CRU/HFSI Read & Reset	<ul style="list-style-type: none"> • Y/M/C/K/Toner • Fuser • Belt Cleaner • Transfer Roller • Waste Cartridge • Y/M/C/K Imaging Unit • Transfer Belt • Staple Cartridge R1/R2/R3 • Suction Filter • Feed Roller 1/2/3/4/5 • Developer 1/2/3/4 • Punch Waste 	Provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset: <ul style="list-style-type: none"> • Fuser • Accumulator (IBT) Belt • Transfer Roller • Developers • Belt Cleaner • Suction Filter • Feed Rollers
dc612 Print Test Patterns	<ul style="list-style-type: none"> • Engine Test Prints <ul style="list-style-type: none"> – 90 Degree Grid – B Patch – Drum Pitch Halftone • Controller Test Prints <ul style="list-style-type: none"> – 50% CMKRGB Fill Pages – A3 Total – A4 Total – Letter Total – Y/M/C/K Line Freq – Red/Green/Blue Line Freq 	Provides test patterns for the service provider to use while troubleshooting print-quality problems.
Diagnostics: Provides access to specific component controls and test patterns. Diagnostics lists utilities for testing components and combinations of components.		
dc140 Analog Monitor	<ul style="list-style-type: none"> • Component Name • Status • Range • Value 	Provides the ability to monitor values for diagnostic troubleshooting.
dc330 Component Control	<ul style="list-style-type: none"> • Chain-Link • I/O • Description • State 	Provides a means of testing the operation of individual machine electrical and mechanical components.
dc711 Roller Test	<ul style="list-style-type: none"> • Component Name • Status 	Provides a means of testing the operation of multiple components operating together.

Table 1 Service Diagnostics Routines

Test	Control Panel Display	Test Description
dc741 Paper Size Switch	<ul style="list-style-type: none"> • Tray 1 Paper Size Switch Test • Tray 2 Paper Size Switch Test • Tray 3 Paper Size Switch Test • Tray 4 Paper Size Switch Test • Tray 5 Paper Size Switch Test 	Monitors the Size Switch outputs SW1 to SW5.
dc402 LPH E2PROM Self Test	<ul style="list-style-type: none"> • Diagnostic Result • Self Test Result (C/M/Y/K) 	Exercises self-diagnostic of E2PROM loaded on the LED Print Head.
dc671 Regi Check Cycle/Read	Diagnostic Result	Checks and adjusts color registration.
dc673 RegiCon Sensor Check	Diagnostic Result	Measures and displays results of RegiCon Sensor Regi Mis-regi quantity and self-diagnosis. Any misregistration detected in the MOB Sensor is displayed on the UI screen.

Table 2 Service Diagnostics Routines (continue)

Test	Control Panel Display	Test Description
Adjustments: Contains service diagnostic/mode routines that modify or change a value setting for the printer. Adjustments lists utilities for accessing NVRAM and making xerographic process adjustments.		
dc128 Fold/Staple Position Read/Adjust	<ul style="list-style-type: none"> • Current Setting • Tray 	Provides access to NVM locations affecting the Professional (C) Finisher folding and staple position setup.
dc131 NVM Read/Write	<ul style="list-style-type: none"> • Enter NVM ID (left) • Enter NVM ID (right) • Read • Value Field • Write • Table (NVM ID, Description, Value, Default) • Clear 	Provides the capability to review and modify machine control parameters stored in Non-Volatile Memory (NVM).
dc301 NVM Initialization	<ul style="list-style-type: none"> • Domain <ul style="list-style-type: none"> – Controller – Engine – Finisher • NVM Data 	Allows the user to reset the NVM value to default value of all applicable NVM within a specified service or module.

Table 2 Service Diagnostics Routines (continue)

Test	Control Panel Display	Test Description
dc361 NVM Save/Restore	<ul style="list-style-type: none"> • Location • Serial Number • Date • Platform 	Backups NVM data or restores the machine's NVM parameters to their previous values following a service action, replacement of NVM Module, Hard Disk, I/P Board, SD Card, or any others that would necessitate a full NVM initialization and restoration.
dc949 Initial ATC Setup/Read	<ul style="list-style-type: none"> • ATC Setup Started • Completed 	Reads current ATC Setup Parameter.
dc950 ATC Sensor Setup	<ul style="list-style-type: none"> • Cyan Setup • Magenta Setup • Yellow Setup • Black Setup • Current C/M/Y/K Setting 	Sets the ATC Sensor output value from the bar coded number on the ATC sensor.
Maintenance: Provides the ability to perform maintenance routines and access CRU/HFSI usage and Fault logs. Maintenance lists utilities for managing consumables.		
dc122 Fault History	<ul style="list-style-type: none"> • Chain Link • Description • Date & Time 	Provides the most recent (last 40) Faults including: <ul style="list-style-type: none"> • Chain Link • Description • Occurrence
dc135 CRU/HFSI Status and Reset	<ul style="list-style-type: none"> • Y/M/C/K Toner • Fuser • Belt Cleaner • Transfer Roller • Waste Cartridge • Y/M/C/K Imaging Unit • Transfer Belt • Staple Cartridge R1/R2/R3 • Suction Filter • Feed Roller 1/2/3/4/5 • Developer 1/2/3/4 • Punch Waste 	Provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset: <ul style="list-style-type: none"> • Fuser • Accumulator Belt • Transfer Roller • Developer • Belt Cleaner • Suction Filter • Feed Rollers
dc137 Page Pack	<ul style="list-style-type: none"> • Disable • Enable • Enter Page Passcode • Cancel • Save 	Enables or disables PagePack feature.
Call Closeout: Call Closeout takes the printer out of Service Diagnostics mode and clear specific counters. Available options include the reset of the fault history logs (Reset Counters), Exit Only, Exit & Reboot, and Cancel. It is recommended that following diagnostic testing, reboot the printer to return it to correct operation.		

Table 2 Service Diagnostics Routines (continue)

Test	Control Panel Display	Test Description
Exiting Service Diagnostics	<ul style="list-style-type: none"> • Reset Counters • Exit Only • Exit & Reboot 	Exits the Service Diagnostics menu.

GP 4 Service Test Prints

Fault Isolation

Test prints can isolate printing problems to the MCU Board or Image Processor Board by eliminating image data transfer between the two. Engine Test prints print directly from ROM bypassing the Image Processor Board. This allows examination of Engine Control Board 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.

Isolate a fault to the print engine or Image Processor Board by printing an Engine Test Print ([Print Test Patterns \(dc612\)](#)).

- If the printer successfully print the Engine Test Print, troubleshoot the I/P Board and it's components.
- If the printer fails to print the engine test print, troubleshoot the print engine.

Service test prints are available from the Service Diagnostics menu to aid in determining the quality output from the printer and to assist in troubleshooting the problems.

Print Test patterns provide test patterns stored in the engine firmware or IP Board controller PS software. The patterns will be used by the service personnel to identify, repair and validate the operability of printer xerographic and paper handling from all paper sources, options and output sources. Two categories of Test Prints are available for the Phaser 7800:

- Engine Test Prints
- Controller Test Prints

Engine Test Prints

The Engine Test Prints include the following patterns:

- **90 Degree Grid** - Displays the 4 colors aligned on a grid.
- **B Patch** - Prints chevron pattern; used to check for defects in the chevron printing area.
- **Drum Pitch Halftone** - Consists of CKGM pattern; should be printed on B-size media. The print does not scale.

Controller Test Prints

The Controller Test Prints include the following patterns:

- 50% CMKRGB Fill Pages
- A3 Total
- A4 Total
- Letter Total
- Yellow Line Freq
- Magenta Line Freq
- Cyan Line Freq
- Black Line Freq
- Red Line Freq
- Green Line Freq
- Blue Line Freq

Entering Service Test Prints

1. From the printer's Control Menu, touch **Printer**.
2. Touch **Tools**.
3. Touch **Setup**.
4. Touch **Service Tools**.
5. Touch **Service Diagnostics**.
6. In the passcode field, enter **6789**.
7. Touch **OK**.
8. Select **Service Information**.
9. Scroll down the menu and touch **dc612 Test Patterns**.
10. The dc612 Print Test Patterns screen is displayed.
11. Select the desired Test Prints category to see list of test prints.

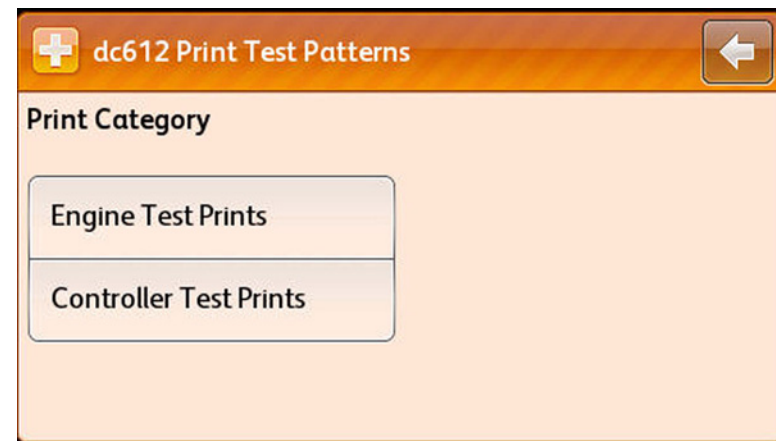


Figure 1 Service Test Prints

GP 5 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 [GP 10 - Control Panel Troubleshooting](#).
3. When all tests and operating system loading is complete, **Ready to Print** should appear at the top left corner of the display.

If the problem persists, see [GP 10](#) (Control Panel Troubleshooting), [+5VDC Power](#), and [+24VDC Power](#) troubleshooting.

If the touch panel is unresponsive or appear to be out of adjustment, see [GP 10](#) (Control Panel Troubleshooting).

GP 6 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, 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. Connect via a crossover cable and Laptop to verify printer operation or network issue.
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 (**Printer Menu > About This Printer > Network**). Determine the host interface you are using. Print a Configuration page to verify that the current interface settings are correct.

GP 7 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 Image Processor 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 amounts of memory or Hard Disk space.

GP 8 Misfeed

If print media misfeed or multiple feeds occur, check the following:

1. Make sure the print media meets the specifications. Refer to [Media and Tray Specifications](#) in the Introduction chapter.
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. Is the media from the RML? This media is guaranteed to perform in the printer.
 - RML Information - <http://www.xerox.com/printer-supplies/paperstock/enus.html>
7. Turn the media over or around and try printing again.
8. Fill trays with only one type of media.
9. Remove the top and bottom sheets of a ream before loading.
10. Do not reload media until the media source is empty.
11. Try loading media from a newly opened ream.
12. Check the Feed Rollers for contamination or wear. Replace if necessary.

GP 9 Jamming in the Media Path

Use [dc711 Roller Test](#) to exercise drive assemblies, clutches, and motors in combination to test media transport at specific locations in the media path.

GP 10 Control Panel Troubleshooting

Follow the steps below in order depending on the symptom. Test the printer after each step to see if the problem has been resolved.

Control Panel is functional, but the printer does not come to a “Ready” State

1. Disconnect the printer from the network or USB.
2. Power Off the printer.
3. Remove and reseat the Image Processor Board ([REP 35.1](#)).
4. Reseat the SD Card ([REP 35.4](#)).
5. Refer to [+5VDC Power](#) and [+24VDC Power](#) troubleshooting.

Control Panel LED is On, Control Panel Display is Blank

Will the printer print a job that is sent to it? If yes, start at step #2.

1. Remove and reseat the Image Processor Board ([REP 35.1](#)).
2. Check to see if the wiring harness has been disconnected from the Control Panel. If the connection is OK, replace the Control Panel ([REP 19.10](#)).
3. Replace the Control Panel wiring harness.
4. Replace the Image Processor Board ([REP 35.1](#)).
5. Refer to [+5VDC Power](#) and [+24VDC Power](#) troubleshooting.

Printer Hangs with the Xerox Logo Displayed, or Reboots

1. Verify that the printer is plugged directly into a wall outlet and that the circuit is capable of meeting the power specifications for the printer (voltage within the specified range and less than a 10% drop in voltage when printing). The printer will not perform reliably when plugged into a surge protector, power strip or an un-interruptible power supply.
2. Power Off the printer, disconnect the network or USB cable and then power the printer back on. If the printer comes to Ready, print an internal page from the printer information menu. Then make a print from a laptop connected directly to the printer; if both of these are successful, the problem is a network issue and normal network troubleshooting procedures should be used. If the printer does not come to Ready, try pressing the Cancel button to clear any jobs from the queue that could be causing the printer to hang. The Cancel button may have to be pressed multiple times to clear out all jobs. Then try to print internal pages and from a laptop again.
3. Run "Network Diagnostics" from the Troubleshooting menu: **Troubleshooting > Service Tools > Network Troubleshooting**. Correct any issues identified in the test result.

Control Panel Calibration

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.

Procedure

1. From the Printer Control menu, touch **Printer > Tools > Setup > Service Tools > Panel Diagnostics**.
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
 - LED Test
 - Exit

Panel Diagnostics

- 1 LCD Pixel Test...
- 2 Touch Panel Test...
- 3 Touch Panel Calibration...
- 4 Button Test
- 5 Display Vertical Test...
- 0 Exit

Figure 1 Control Panel Calibration

3. Touch the desired test on the Control Panel to perform the test.
4. To exit any test while the test is in progress, press the **Pause** button.
5. To exit Panel Diagnostics, touch **Exit**.

GP 11 Reset Faults

Reset Faults allows customer to quickly reset "tech rep faults" parameters to zero when directed by phone support.

Reset Faults is used after a defective part has been replaced.

Procedure

1. From the printer Control Panel menu, touch **Printer > Tools > Setup > Service Tools > Reset Faults**.
2. Touch **Reset Faults** to start the process.



Figure 1 Reset Faults

3. A prompt appears to confirm the reset request. Touch **Reset Faults**.



Figure 2 Confirming Reset Faults

- The display returns to the previous screen with new life counter information for the reset component.
- Touch the **Back Arrow** to return to the Service Tools menu.
- A completion screen is displayed when the reset process is complete.



Figure 3 Completing Reset Faults

GP 12 Reset HFSI Counter

NOTE: Reset HFSI Counter can also be accessed using *dc135 CRU/HFSI Status and Reset*.

Reset HFSI Counter allows Customer Service Engineer (CSE) to quickly reset the printer's HFSI (High Frequency Service Items) parameters to zero following a service replacement.

The CSE is able to enter Service Tools, select the HFSI item, read the current count, and reset the count to zero if the item is replaced.

Procedure

- From the printer Control Panel menu, touch **Printer > Tools > Setup > Service Tools > Reset HFSI Counters**.
- Select the item to reset.
- Touch **Reset Counter**.



Figure 1 Selecting the Component

- A prompt appears to confirm the reset request. Touch **Reset**.

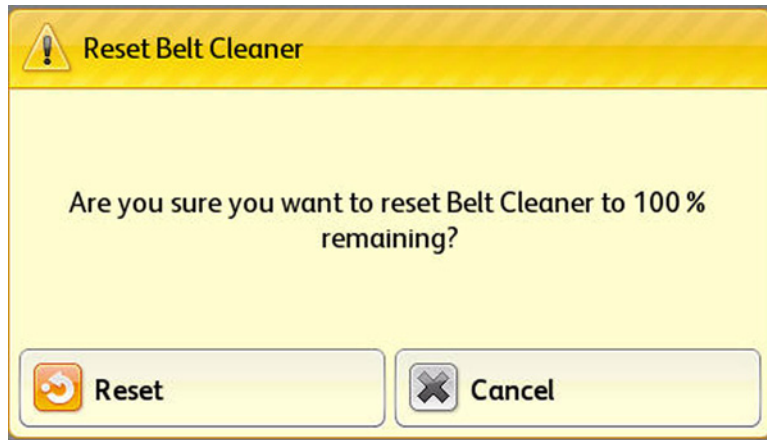


Figure 2 Resetting the Component

- The display returns to the previous screen with new life counter information for the reset component.
- Touch the **Back Arrow** to return to the Service Tools menu.



Figure 3 Exiting Reset HFSI Counter

GP 13 Printer Not Ready

“Printer not ready” is defined as any condition where the printer is not capable of performing its basic tasks. This does not include failure of ancillary devices (Finishers, Paper Trays). “Not ready” ranges from a printer that is dead, without any indication of power, to a printer that appears ready but does not respond to either Control Panel commands or Network input.

Procedure

The first step is to categorize the problem. Decide which of the following condition best describes the problem:

- [Dead Machine](#)
- [Does not complete Boot-up](#)
- [Boots up; does not respond to Control Panel](#)
- [Boots up; does not print \(or other Network problem\)](#)

Dead Machine

If the machine shows no sign of power (fans or motors running, backlight on UI display, LEDs on Control panel), check for AC line voltage at the Finisher Outlet.

- If AC is not present, go to the [AC Power](#) RAP.
- If AC is present check for:
 - [STBY +5VDC Power](#)
 - [+5VDC Power](#)
 - [+24VDC Power](#)

If the UI remains blank, go to [Power On Self Test \(POST\)](#).

Does not complete Boot-up

Failure to complete the boot routine can be caused by corrupt software or mismatched software versions. [GP 21](#) (Firmware Update) explains how to reload s/w.

Some boot-up failures may be caused by structural flaws in a command sent to the machine. In these cases, it is sometimes possible to bypass or delete the offending code during the startup process. Refer to [GP 14](#) (Intermittent Problems) Special Boot Modes. Take note of the Cautions in the procedure.

Boot failures can also be caused by hardware failures in the I/P Board, or communication failures between the I/P Board and the rest of the printer. The I/P PWB has a 7-segment LED that changes state as the boot-up progresses. See [Power On Self Test \(POST\)](#) for details.

Boots up; does not respond to Control Panel

Check the following:

- Refer to [BSD 2.1 Control Panel](#).
- Check the UI Cable between the I/P PWB and the UI I/F PWB for damage or loose connections.
- Check the connections of the wiring and PWBs within the Control Panel Assembly.
- If the check is good, replace the Control Panel Assembly ([REP 19.10](#)). If the problem continues, replace the I/P PWB ([REP 35.1](#)).

Boots up; does not print (or other Network problem)

Go to the [GP 18](#) (Network Printing Simulation).

GP 14 Intermittent Problems

This is not an exact procedure, but a set of recommended actions that use the resources of the service manual to help locate the cause of an intermittent problem.

1. Check the error logs. 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. Using the troubleshooting procedure associated with the symptom of the intermittent problem, examine all applicable parts. Look for:
 - contamination, such as a feed roller that has a build up of dirt or toner
 - wear, such as gear teeth that are rounded or have excessive backlash
 - HFSI, even if they are not near or have not exceeded life values
 - chafing wires, especially against moving components
 - misaligned, misadjusted, or incorrectly installed components
 - slow or slipping clutches; slow or binding solenoids
 - damaged components
 - excessive heat, or symptoms of excessive heat, such as the discoloration of a component
 - loose cables or wires
 - packing materials not removed
4. Using the troubleshooting procedure associated with symptoms of the intermittent problem, 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.
5. Using Service Diagnostics, 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.
6. Check that the AC and DC power are within specification (refer to [Electrical Specifications](#) in Introduction Chapter).
7. Get technical advice or assistance when it is appropriate. This will depend upon the situation and the established local procedures.
8. Examine the defective parts associated with the failing function. Refer to the parts list and wiring diagrams to determine part interactions.
9. Perform any adjustments available for the related parts. As with the applicable parts, adjustments should fall within normal tolerances.
10. 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 BSDs. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
11. 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.
12. Leave an accurate and detailed record of your actions in the service log. Describe what you have observed, what actions you took, and the recommended next steps.

GP 15 Media Jam and the Paper Path

Media-Based Problems

1. Check that the correct type of media is being used; for the correct media types and weights, see [Media and Tray Specifications](#) in the Introduction Chapter. The customer should be using a quality laser printer paper. The printer may have trouble picking glossy or overly smooth paper.
2. Use only Xerox Premium Transparency Film in this printer.
3. Inspect the media for bent, torn, or folded corners.
4. Check the media path for obstructions or debris.
5. Ensure that the correct media type is set in the Control Panel.
6. Ensure the Pick and Feed Rollers are clean and not excessively worn.
7. Try printing from a different tray to ensure problem is not tray specific.
8. Try printing on a different media. Not all media that fall within specifications will feed reliably.
9. Ensure that the paper guides are set correctly.
10. Ensure that the media is a supported type for the tray. See [Media and Tray Specifications](#) for the correct media types, sizes and weights for each tray.
11. Load a fresh ream of paper in the tray.

Multiple-Sheet Pick

1. Ensure that the media is in good condition and is listed on the Recommended Media List (www.xerox.com/paper) as supported; quality office printer paper works best.
2. Ensure that the printer is printing within its environmental specifications by printing and reviewing the Status page.
3. Remove the tray and remove, fan, and reload the media. Ensure that the guides are securely against the paper and the tray has not been over filled.
4. Try loading paper from a fresh ream, fan the paper, and then insert into the tray or flip existing paper over.
5. Check the tray's Retard Roller for damage.
6. Try printing from a different tray to verify if problem is tray specific.
7. Clean the Feed Rollers with a clean, dry, lint-free wipe.
8. Replace the Feed Rollers and Friction Clutch.
 - Tray 2 Feed Roller ([REP 9.7](#))
 - Tray 2 Friction Clutch ([REP 9.8](#))
 - Tray 3/4/5 Feed Roller ([REP 10.6](#))
 - Tray 3/4/5 Friction Clutch ([REP 10.7](#))
9. Replace the Tray.

Mis-Pick

1. Check that the correct type of media for the tray is being used and the paper guides are set correctly.
2. Remove, fan, and reload the media. Ensure that the tray has not been over filled.
3. Try loading paper from a fresh ream, fan the paper, and then insert into the tray or flip existing paper over.
4. Clean the Feed Rollers with a clean, moistened with water, lint-free wipe.
5. Troubleshoot the pick assembly.

Skewed Image

1. The image area is not parallel, Skewed, with the sides of the page but the printer neither jams nor displays an error code.
2. Remove the tray and ensure the paper guides are set correctly.
3. Check that the correct type of media for the tray is being used.
4. Ensure that the tray has not been over filled. (Skewed images are a common defect when Tray 1 (MPT) is overfilled.)
5. Check the paper path for scraps of paper or other debris.
6. Verify the Feed Rollers are installed correctly.
7. Clean the Feed Rollers with a clean, moistened with water, lint-free wipe.
8. Troubleshoot the pick assembly.
9. If the skew is minimal perform the skew adjustment.

Damaged Prints

The printed page exits the printer either wrinkled, creased, or torn. The printer neither jams nor displays an error code.

1. Stop the page at various points in the media path to determine where the media becomes damaged.
2. Try using the next heaviest type of paper.
3. Feed paper through the printer from each tray. Is the paper damaged when fed out of one tray but not when fed out of the others? If so, inspect the tray for damage, ensure that the media guides are set correctly and verify that the proper media is being used.
4. If media shows damage from all trays, check for a problem in registration area of the media path.
5. Inspect the tray and media path for debris or broken components.

Wrinkled Envelopes

Envelope wrinkling of varying severity can sometimes occur. In general, envelope wrinkling is considered a laser technology limitation due to the fusing process which relies on heat and pressure to bond toner to the media. The #10 Commercial envelopes are particularly susceptible to wrinkling.

Testing different manufacturer's envelopes demonstrated that some brands of #10 Commercial envelopes exhibit less wrinkling when loaded face down with the flap oriented to the right side of Tray 1 (MPT) not the left as indicated on the tray label.

1. Check the media path for obstructions or debris.
2. Check that the paper guides are set correctly.
3. Check that the Tray 1 (MPT) has not been over filled.
4. Test envelopes from other manufacturers to find the best result.

Fuser Jams

1. Check that the Fuser is properly seated, locked, and operates normally.
2. Ensure that the paper is in good condition and is listed on the Paper Tips page as supported media. Try loading new media from a fresh ream.
3. Ensure that only supported transparency film is being used.
4. Check that the printer is operating within its environmental specifications by using the Printer Status Page.
5. Ensure that the loaded media matches the Control Panel settings.
6. Are the margins on the page greater than 5 mm?
7. Check the Fuser area for debris.
8. Visually inspect the Fuser baffle for burrs.
9. Perform the Fuser Motor test in Service Diagnostics, [dc330 Component Control](#), Chain 010.

Exit Jams

1. Ensure the paper is in good condition and is the correct type for the printer. See [Media and Tray Specifications](#) in Introduction Chapter for the correct media types, sizes and weights for each tray.
2. Ensure the printer is within its operating environmental specifications.
3. If media is showing excessive curl when exiting, try turning the media over, loading new media from a fresh ream, or a different type of media.
4. Ensure that the loaded media matches the Control Panel settings.
5. Is the jam caused by a heavy, stiff paper being used for two-sided printing? In such cases, use a lighter weight paper.
6. If visible, check and clean the paper path of all debris or scraps of paper.
7. Does the Exit Roller turn? Perform the Duplex Motor test in Service Diagnostics, [dc330 Component Control](#), Chain 077.
8. Refer to [RAP 377.907](#) (Duplex Wait Sensor Static Jam) for troubleshooting duplex jams if the Duplex Motor test fails.

Paper Size Detection

Tray 1

Paper width (size in fast scan direction) is sensed by the voltage corresponding to the Tray 1 (MPT) Paper Size Sensor resistance. Tray 1 (MPT) Paper Size Sensor resistance is determined by the position of the front and rear side guides. Some variation in values is normal within the specified range.

Table 1 Paper Size Switch Output Values for Tray 1 (MPT)

Paper Size	Voltage (V)	AD Value Change
Post Card	2.676 - 2.732	824.958 - 851.600
5.5" x 8.5" SEF	2.246 - 2.302	691.590 - 718.233
A5 SEF	2.156 - 2.212	663.708 - 690.350
B5 SEF	1.788 - 1.843	549.488 - 576.131
8" x 10" SEF	1.636 - 1.692	502.457 - 529.099
8.5" x 11" SEF (Letter) & x 13" & x 14"	1.503 - 1.559	461.304 - 487.947
A4 SEF	1.484 - 1.540	455.425 - 482.068
7.25" x 10.5" LEF	0.972 - 1.028	296.694 - 323.337
B5 LEF	0.975 - 1.031	297.534 - 324.176
B4 SEF		
16K LEF (Taiwan)	0.867 - 0.922	263.940 - 290.583
8K SEF (Taiwan)		
16K LEF (China)	0.834 - 0.890	253.862 - 280.504
8K SEF (China)		
11" x 17" SEF	0.732 - 0.788	222.284 - 248.926
8.5" x 11" LEF (Letter)		
A4 LEF	0.541 - 0.597	163.159 - 189.801
A3 SEF		
12.6" x 19.2" SEF	0.415 - 0.470	123.854 - 150.496
13" x 19" (x18")	0.308 - 0.364	90.932 - 117.574
SRA3	0.292 - 0.348	85.893 - 112.535

NOTE: Paper length (size in slow scan direction) is sensed by measuring how long paper takes to pass Registration Sensor.

Tray 2

For Tray 2, media size is detected by the state of five paper size switches. Media size is sensed by the voltage corresponding to the combined resistance of SW1 through SW4 and the state of SW5 (On/Off). A failed or jammed switch effects the printer's ability to accurately detect media size or presence in the tray.

Included in the table are the expected values for voltage readings at J417-B4. Also listed are the range of A/D converter values. Any combination other than the ones listed result in an undetermined size.

Table 2 Paper Size Switch Output Values Tray 2

Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage at J417-B4	AD Value
No Tray	Off	Off	Off	Off	Off	3.08±0.066	922-989
A5 SEF 5.5" x 8.5" SEF (*1)	Off	Off	On	Off	Off	2.671±0.066	797-857
B5 SEF	Off	Off	On	On	On	2.468±0.066	735-796
8.5" x 13" SEF	Off	On	Off	On	Off	2.464±0.066	610-671
8.5" x 14" SEF	Off	On	Off	On	On		
A4 SEF	Off	On	On	Off	Off	1.864±0.066	548-609
8.5" x 11" SEF	Off	On	On	Off	On		
A4 LEF	On	Off	On	Off	Off	1.079±0.066	304-365
A3 SEF	On	Off	On	On	Off	0.881± 0.066	244-303
B5 LEF 7.25" x 10.5" LEF (*1)	On	On	Off	Off	On	0.691± 0.066	184-243
8K SEF (*2)	On	On	Off	On	Off	0.493±0.066	124-183
B4 SEF	On	On	Off	On	On		
8.5" x 11" LEF	On	On	On	Off	Off	0.300±0.066	64-123
16K LEF (*2)/ 7.25" x 10.5" LEF (*1)	On	On	On	Off	On		
11" x 17" SEF	On	On	On	On	On	0.106±0.066	0-63

*1 Paper size is changed in diag.
*2 System setting makes possible changing between GCO and TFX sizes

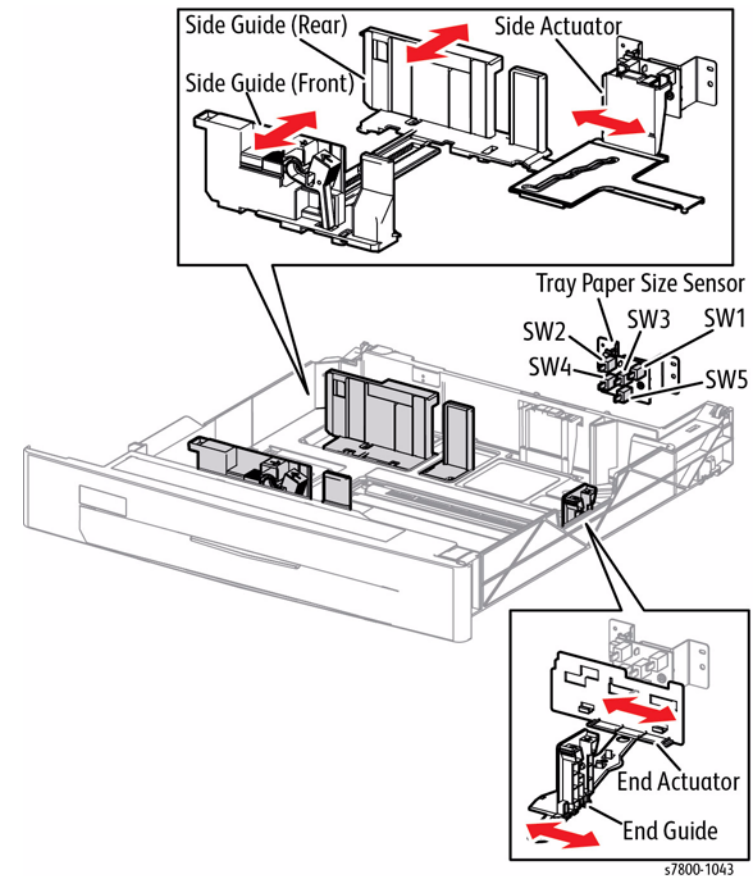


Figure 1 Tray 2 Paper Size Detection

Trays 3 through 5

For optional Trays 3 through 5, media size is detected by the state of five paper size switches located at the rear of the chassis. Media size is sensed by the voltage corresponding to the combined resistance of SW1 through SW4 and the state of SW5 (On/Off). A failed or jammed switch effects the printer's ability to accurately detect media size or presence in the tray.

Included in the table are the expected values for voltage readings at J548-14, J549-B11, and J549-B17 respectively. Also listed are the range of A/D converter values. Any combination other than the ones listed result in an undetermined size.

Table 3 Paper Size Switch Output Values Trays 3 through 5 (3TM)

Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage	AD Value
No Tray	Off	Off	Off	Off	Off	4.66±0.03	237-247
A5 SEF 5.5" x 8.5" SEF (*1)	Off	Off	On	Off	Off	4.01±0.03	199-214
B5 SEF	Off	Off	On	On	On	3.69±0.03	184-198
8.5" x 13" SEF	Off	On	Off	On	Off	3.07±0.03	153-167
8.5" x 14" SEF	Off	On	Off	On	On		
A4 SEF	Off	On	On	Off	Off	2.75±0.03	137-152
8.5" x 11" SEF	Off	On	On	Off	On		
8" x 10" SEF	Off	On	On	On	On	2.44±0.03	122-136
12.6" x 19.2" SEF/ 13" x 19" SEF (*1)	On	Off	Off	Off	On	2.15±0.03	107-121
SRA3 SEF/ 13" x 18" SEF/ 2" x 18" SEF (*1)	On	Off	Off	On	On	1.83±0.03	92-106
A4 LEF	On	Off	On	Off	Off	1.52±0.03	77-91
A3 SEF	On	Off	On	On	Off	1.21±0.03	61-76
B5 LEF 7.25" x 10.5" LEF (*1)	On	On	Off	Off	On	0.91±0.03	46-60
8K SEF (*2)	On	On	Off	On	Off	0.60±0.03	31-45
B4 SEF	On	On	Off	On	On		
8.5" x 11" LEF	On	On	On	Off	Off	0.30±0.03	16-30
16K LEF (*2)/ 7.25" x 10.5" LEF (*1)	On	On	On	Off	On		
11" x 17" SEF	On	On	On	On	On	0.00±0.03	0-15
*1 Paper size is changed in diag.							
*2 System setting makes possible changing between GCO and TFX sizes							

Table 4 Paper Size Switch Output Values Trays 3 through 5 (TTM)

Paper Size	SW1	SW3	AD Value
No Tray	Off	Off	237-247
B5 / 7.25" x 10.5"	Off	On	168-230
A4 (210 x 297mm)	On	On	0-91
Letter (8.5"x11")	On	Off	91-167

GP 16 USB Port Disabled

USB Ports can be Enabled/Disabled in Centroware® Internet Services (CWIS) by the System Administrator.

Procedure

Log into CWIS as the System Administrator and verify the status of the USB Ports.

GP 17 USB Port Testing

In situations where USB communications fail, test the printer's USB Port directly using a USB cable and a second, known good, USB Port. A successful test using this procedure eliminates the printer's USB Port as the root cause.

Initial Actions

- Check that the driver software is properly installed on the host.
- Make sure the USB cable is connected at both ends and is serviceable.
- Print a Configuration page and verify that USB 2.0 is enabled in the printer's NVRAM.

NOTE: *The testing procedure was developed for Windows XP. If a different operating system is in use, adapt the steps as necessary.*

USB Port Verification

1. Verify that the printer is Ready.
2. Insert the "Software and Product Documentation" CD-ROM into the computer.
3. If the installer autoruns, exit the installer window.
4. Connect a USB cable between the printer and computer's USB Ports. The computer automatically detects the new hardware and creates a driver.

NOTE: *If the driver is not installed on the computer, locate the driver files on the CDROM. Once the files are located, the computer installs the driver and automatically configures it to match the printer's feature set.*

5. On the computer, click **Start > Settings > Printers and Faxes**.
6. Locate the printer being tested, right-click and from the pull-down menu, select **Properties**.
7. Open the **General** tab and click the **Print Test Page** button to generate the test print. If the test page is printed, the USB port is functioning normally.

GP 18 Network Printing Simulation

Purpose

This procedure details a method of troubleshooting network printing problems.

Prerequisites

- Crossover Cable and a PWS equipped with a Network Interface Card.
- User software CD or driver files downloaded and extracted to a folder on the PWS.
- Windows 2000/Windows XP

Procedure

Setup

1. Print the Configuration Report. Refer to [GP 2](#).
2. Configure the PWS IP Address:
 - a. Right click on the **My Network Places** icon.
 - b. Select **Properties** to bring up the Network and Dial-up Connections window.
 - c. Right click on **Local Area Connection** and select **Properties**.
 - d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight **TCP/IP** and select **Properties**.
 - e. Select the **Use the following IP address** radio button.
 - f. Enter an **IP address** one digit different than the machine IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).

NOTE: *In some DHCP systems, this may come up as 0.0.0.0*

- g. Enter 255.255.255.0 for **Subnet mask**.
3. Connect the PWS to the printer with the Crossover Cable.
 4. Click the Windows **Start** button.
 5. Select **Settings**, then **Printers and Faxes**.
 6. Select **Add Printer**.
 7. On the **Add Printer Wizard** screen, click **Next**.
 8. On the next screen, select **Local printer**, then click **Next**.
 9. When the **Add Printer Wizard** asks you to select the printer port, select **Create a new port**. In the Type: menu, select **Standard TCP/IP Port**, then click **Next**. This will open the **Add Standard TCP/IP Printer Port Wizard**. Click **Next**.
 10. Enter the IP address of the printer. Click **Next**.
 11. Select **Custom**, then click on **Settings...**
 12. In the **Protocol** box, select **LPR**. In the **LPR Settings** box, type **print** for **Queue Name**;, then click **OK**.
 13. Click **Next**. Click **Finish** to return to the **Add Printer Wizard**.
 14. If the printer driver was previously loaded on the PWS, select the printer from the list and click **Next**. Otherwise, click **Have Disk**. Print Drivers can be found on the customer's User Software CD. The drivers can be downloaded from the Controller via Web Tools. The latest driver can also be downloaded from the Xerox Website. Navigate to the CD or downloaded driver for your PWS' operating system. Click **OK**.

15. On the **Name Your Printer** screen, enter a name for the printer. Do not set this printer as the default. Click **Next**.
16. Select **Do not share...**
17. Select **Yes** when asked if you want to print a test page. Correct printing indicates a functioning network connection.

Using the Simulator

To use this simulator tool on different machines, modify the Setup as follows:

1. Print a new **System Settings List** (Configuration Report).
2. Reconfigure the PWS IP Address per step 2 in **Setup**.
3. Click the Windows **Start** button.
4. Select **Settings**, then **Printers and Faxes**.
5. Right-click on the name of the test printer you created, and select **Properties**
6. Select the **Ports** tab, then click on **Configure Port...**
7. Enter the printer's IP address then click on **OK**.

GP 19 Network Troubleshooting

This procedure details a method of troubleshooting network printing problems.

Required Tools

- Crossover Cable and a PWS equipped with a Network Interface Card.
- User software CD or driver files downloaded and extracted to a folder on the PWS.
- Windows 2000/ Windows XP/ Windows 7/ Windows Vista

Procedure

Setup

1. Print the Configuration Report.
2. Configure the PWS IP Address:
 - a. Right click on the **My Network Places** icon.
 - b. Select **Properties** to bring up the Network and Dial-up Connections window.
 - c. Right click on **Local Area Connection** and select **Properties**.
 - d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight TCP/IP and select Properties.
 - e. Select the Use the following IP address radio button.
 - f. Enter an IP address one digit different than the machine IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
 - g. Enter 255.255.255.0 for **Subnet mask**.

NOTE: In some DHCP, this value may come up as 0.0.0.0.

3. Connect the PWS to the printer with the Crossover Cable.
4. Click the Windows **Start** button.
5. Select **Settings**, then **Printers and Faxes**.
6. Select **Add Printer**.
7. On the **Add Printer Wizard** screen, click **Next**.
8. On the next screen, select **Local printer**, then click **Next**.
9. When the **Add Printer Wizard** asks you to select the printer port, select **Create a new port**. In the Type: menu, select **Standard TCP/IP Port**, then click **Next**. This will open the **Add Standard TCP/IP Printer Port Wizard**. Click **Next**.
10. Enter the IP address of the printer. Click **Next**.
11. Select **Custom**, then click on **Settings...**
12. In the **Protocol** box, select **LPR**. In the **LPR Settings** box, type print for **Queue Name:**, then click **OK**.
13. Click **Next**. Click **Finish** to return to the **Add Printer Wizard**.
14. If the printer driver was previously loaded on the PWS, select the printer from the list and click **Next**. Otherwise, click **Have Disk**. Print Drivers can be found on the customer's User Software CD. The drivers can be downloaded from the Controller via Web Tools. The latest driver can also be downloaded from the Xerox Website. Navigate to the CD or downloaded driver for your PWS' operating system. Click **OK**.
15. On the **Name Your Printer** screen, enter a name for the printer. Do not set this printer as the default. Click **Next**.
16. Select **Do not share...**

17. Select **Yes** when asked if you want to print a test page. Correct printing indicates a functioning network connection.

Using the Simulator

To use this simulator tool on different machines, modify the Setup as follows:

1. Print the Configuration Report.
2. Reconfigure the PWS IP Address per step 2 in Setup.
3. Click the Windows **Start** button.
4. Select **Settings**, then **Printers and Faxes**.
5. Right-click on the name of the test printer you created, and select **Properties**.
6. Select the **Ports** tab, then click on **Configure Port...**
7. Enter the printer's IP address then click on **OK**.

Windows Ethernet Port Verification

1. Connect a crossover cable between the printer and computer's Ethernet Ports.
2. Verify that the printer is Ready.
3. From the computer menu, click **Start -> Run** at the computer to access the **Run** dialog.
4. In the **Run**, type in **cmd** and click **OK** to launch the MS-DOS command window.
5. At the MS_DOS command prompt, type **ipconfig** and press **Enter** to display the computer's **IP Address**, **Subnet Mask**, and **Default Gateway**.
6. Print the Configuration page to verify that TCP/IP is enabled and obtain the current TCP/IP values stored in the printer's NVRAM.

***NOTE:** Configure the printer's TCP/IP network parameters to enable direct communication with the computer.*

7. Disable **DHCP/BOOTP** and **AutoIP** on the printer.
8. Select an IP address for the printer that matches the computer, except for the last field, which must be unique.
9. Edit the printer's **Gateway** and **Subnet Mask** to match the computer.
10. At the MS_DOS command prompt, type **ping** followed by a **space** and the printer's IP address, and then press **Enter**. If the number of packets sent and received match, the Ethernet Port is functional. If the request times out and fails to reply, either the cable or the port is defective.

Ethernet Port Verification for LOCAL LINK Default IP Addresses

An alternate method is required to test the Ethernet port when the PC's IP address falls within the range 169.254.xxx.xxx. PCs that have not been configured for a specific network default to a "LOCAL LINK" value within the 169.254.xxx.xxx range.

***NOTE:** To comply with industry standards, ColorQube products cannot be manually configured for IP addresses within the LOCAL LINK range.*

***NOTE:** Always print the Configuration page to obtain a record of the printer settings before changing the IP address. After testing the printer, be sure to restore the printer's original network settings.*

1. Connect a crossover cable between the PC and printer.
2. Verify the printer is Ready.
3. Use the printer's control panel to enable **AutoIP**:
 - a. From the Control Panel menu, select **Printer Setup > Connection Setup > Network Setup > TCP/IPv4**.
 - b. Select and set **AutoIP** to **On**.
 - c. Exit the menu so the printer is Ready.
4. Reset the printer to cause AutoIP to assign a new IP address (cycle power or from the **Shut Down** menu, select **Restart Printer**).
5. After the printer's IP address is set, test communication by sending the "PING" command.
6. If the test fails, install a different cable and retest.

Mac OS X Ethernet Port Verification

1. Turn the printer On and wait until it is Ready.
2. To check the computer's TCP/IP settings, use the Apple menu to select **System Preferences**.
3. Select **Network**.
4. Select **Show Built-in Ethernet**.
5. Click the **TCP/IP** tab and record the computer's IP Address, Subnet Mask, and Gateway.
6. Print the Configuration page and verify that TCP/IP is enabled on the printer.
7. Select an IP address for the printer that matches the computer, except for the last field, which must be unique.
8. Edit the printer's **Gateway** and **Subnet Mask** to exactly match the computer's.
9. Connect a crossover cable between the Ethernet Ports on the printer and the Mac.
10. Test the application using **Network Utility** by double-clicking the hard drive icon.
11. Select **Applications > Utilities > Network Utility**.
12. Click the **PING** tab.
13. Enter the printer's IP address.
14. Configure the utility to ping the printer four times. The test will end after four attempts.
15. Click the **PING** button to complete the test.
16. If the number of packets sent and received match, the test was successful and the Ethernet port is functioning. If the request times out and fails, the cable or the port are malfunctioning.

Obtaining Serial Back Channel Trace

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 on-board serial port. The Back Channel Trace, lists step-by-step what the printer is doing up to the point that an error occurs. The trace may offer clues to help troubleshoot the problem.

Required Tools

- Computer with a serial port or a USB to Serial DB9 adaptor
- Serial Null Modem Cable - P/N 600T80375
- Serial Adapter Cable - P/N 600T80374

Procedure

1. Connect the serial cable to the computer. Serial port settings are **115.2 kbaud, 8 bits, None Parity, 1 Stop bit, and Hardware Control**.
2. Turn Off the printer.
3. Connect the serial cable with adapter to the 5-pin connector (J14). The label **THIS SIDE UP** of the serial port adapter should face towards the back of the printer.
4. Start up a terminal program such as in MS Window's HyperTerminal (usually located in **Programs > Accessories > Communications > HyperTerminal**). Ensure the serial port settings, usually COM1: is correct.
5. Turn On the printer.

The trace should appear in the terminal dialog window. Examine the trace to troubleshoot the problem. Save the trace as a file, if necessary.

NOTE: Additional detail instructions are available on GSN web site, library #9774.

GP 20 HyperTerminal Setup for Controller Communication

Purpose

This procedure allows you to connect your PWS directly to the CCS communication port on the I/P Board.

Procedure

To configure your PWS for a HyperTerminal connection, perform the following:

1. In the Task bar at the bottom left of your PWS, select **Start**.
2. Select **All Programs**.
3. Select **Accessories**.
4. Select **Communications**.
5. Select **HyperTerminal**.
6. If a **Default Telnet Program?** dialog box appears, select **No**.
7. When the **Connection Description** dialog box appears, enter **SBC** in the **Name** space.
8. In the **Connect To** dialog box, select **COM1** in the **Connect using:** pull-down
9. Ensure that the following are set in the **COM1 Properties/Port Settings** window:
 - **Bits per second:** = 115200
 - **Data bits:** = 8
 - **Parity:** = None
 - **Stop bits:** = 1
 - **Flow Control:** = None
10. Select **Apply**, then select **OK**.

GP 21 Firmware Update

NOTE: When performing an upgrade, clone customer configuration settings before upgrading the firmware.

Cloning Printer Configuration Using 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.

Procedure

1. In a web browser, enter the printer IP address.
2. In the upper right corner, click **Login**.
3. In the User ID field, enter **admin** (default User ID).
4. In the Password field, enter **1111** (default password).
5. Click the **Login** button.
6. From the top menu, click **Properties**.
7. Under the Configuration Overview -> Cloning page, click **View**.
8. On the Cloning page, verify all boxes are checked.
9. Click the **Clone** button.
10. A progress bar is displayed on the bottom of the page.
11. 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.

Procedure

1. In a web browser, enter the printer IP address.
2. In the upper right corner, click **Login**.
3. In the User ID field, enter **admin** (default User ID).
4. In the Password field, enter **1111** (default password).
5. Click the **Login** button.
6. From the top menu, click **Properties**.
7. From the Properties menu on the left, expand General Setup.
8. Expand Machine Software and select Manual Upgrade.
9. Click the **Browse** button to locate the .dlm file.
10. Click the **Open** button.
11. 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 hung and no other method to return the system to operation has succeeded. AltBoot resets system configuration to its default values. Restore customer settings after the system returns to Ready To Print.

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.

Procedure

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 return to Ready To Print.

GP22 Operating System and Application Problems

Windows 2000, Windows XP, Windows 7/ Vista, Windows Server Troubleshooting

NOTE: For Windows XP, select Classic Look or Windows XP procedures will not match the following procedures.

1. To select Classic Look, from the Start menu, select **Start > Settings > Control Panel > Taskbar and Start Menu**.
2. Select the **Start Menu** tab and then **Classic Start Menu**.
3. Click **OK**.

This troubleshooting section assumes you have completed the following tasks.

- Loaded a Phaser printer PCL or PostScript printer driver.
- Printed and kept a current copy of the Configuration page.

Verify Settings

1. Verify the settings on the Configuration page.
 - a. Get Address is set to: DHCP, Panel, DHCP/Autonet, BOOTP, and RARP (depending on your network configuration).
 - b. Current IP Address is set correctly. (Note this address if it is assigned by Auto IP, DHCP, or BOOTP.)
 - c. Subnet Mask is set correctly (if used).
 - d. Default Gateway is set correctly (if used).
 - e. LPR is enabled. Verify that the LPR and Port 9100 (AppSocket) settings are set as desired.
2. Verify that the client is logged on to the network and printing to the correct print queue. The user should also have access to the Phaser printer queue.

Verify Driver Installation

1. From the desktop, right-click **My Network Places**, and select **Properties**.
2. Right-click **Local Area Connection** and select **Properties**.
3. Click the **General** tab. View the list of installed network protocols to verify that TCP/IP is installed. (For more information, contact your network administrator.)
4. Click **Install** to install any components not listed, and then restart your computer.
5. From the **Start** menu, select **Start > Settings > Printers and Faxes**.
6. Right-click the printer icon, and select **Properties**.
7. Click the **Advanced** tab. Verify that the correct printer driver is installed.
8. Click the **Ports** tab. Verify that the IP Address in the Print to the Following Ports list is identical to the one on the Configuration page. You may need to click the **Configure Port** button to see the IP address. If necessary, re-select the TCP/IP number used for the printer.
9. Try to ping the printer.
10. Access the CentreWare IS.

Macintosh Troubleshooting

The following procedures eliminates cabling, communication, and connection problems. Once you complete these steps, print a test page from your software application.

NOTE: If the job prints, no further troubleshooting is necessary. If there are print quality problems, refer to the User Guide at www.xerox.com/office/7800support.

Macintosh Troubleshooting OS 10.3 Step-by-Step

Perform these steps only for Mac OS 10.3 and higher.

1. Open the **Network Utility** and click the **Ping** tab.
2. Enter the printer's IP address.
3. Click **Ping**. If you do not get a response, verify that your TCP/IP settings are correct for your printer and computer.

NOTE: See also: www.xerox.com/office/7800support

UNIX/ Linux

This section includes:

- Quick Install Steps
- Additional Resources

Your printer supports connection to a variety of UNIX platforms through the Parallel and Network interface. The workstations currently supported by CentreWare for UNIX/ Linux to a network-connected printer are:

- Sun Solaris
- IBM AIX
- Hewlett-Packard HP-UX
- Linux (i386) tested on SUSE 10.0, RedHat 9, Fedora Core1

The following procedures enable you to connect your printer using any of the supported versions of UNIX or Linux listed above.

Quick Install Steps

Perform the following procedures to set up the printer and install the appropriate drivers.

From the Printer

To set up the printer:

1. Verify that both TCP/IP protocol and the proper connector are enabled.
2. On the Control Panel, select one of these IP address options:
 - Allow the printer to set up a DHCP address
 - Enter the IP address manually
3. Print the Configuration page and keep it for reference.

From Your Computer

To install the CentreWare for Unix driver:

1. Go to www.xerox.com/office/7800drivers.
2. Select your printer, the platform you are running (UNIX), and file type (Drivers).
3. Click **Go to Downloads**.
4. From the list of provided files, download the PrinterPackageXPXX and the appropriate CentreWare printer driver for your platform <OS>XPXX 4.xx.x.tar.
 - a. As root untar the Driver and Printer package, this will create two subdirectories. Cd to <O/S>InstallPackage and type **./setup** to install the driver.
 - b. CD to the PrinterPackagexpxx and type **./setup** to install the printer specific data files.
 - c. Type **xpadmin** to open the admin tool for creating print queues. Select the printer from the list of discovered printers you want to print to. Click on the printer icon at the top left of the screen to add a print queue.
5. Print a test page and verify the print quality of the printed page.

NOTE: If print-quality problem exists, or your job did not print, refer to the User Guide at www.xerox.com/office/7800support.

Additional Resources

For users that want to use the CUPS driver instead of CentreWare for Unix, access the Xerox web site for the latest CUPS ppd package at www.xerox.com/office/7800drivers. To download printer drivers:

1. Find your printer. Click the **Drivers & Downloads** link. Select the platform you are running (UNIX), and the files you would like to download (Drivers).
2. Click the **Go** button.
3. Click the CUPSPrinterPackage.
4. Untar the printer package and select the ppd for the printer you want to install.
5. Copy the file to `/usr/share/cups/model/Xerox`. (This is the directory for SUSE10.1. The directory may not be in the same location on other Linux versions).
6. Open the printer manager supplied for the Linux release and follow the instructions for adding a print queue.

NOTE: The print daemon may need restarting for the print manager to see the new PPD added to the CUPS ppd directory.

GP 23 Regional Toner Conversion

This procedure explains how to set the Geographic Region Code for the Toner Cartridge Type to the correct value.

Introduction

The Phaser 7800 printers are shipped with "Region Neutral" Toner Cartridges. The cartridges shipped with the printer are Neutral configuration.

When the first toner cartridge (any color) is replaced, the Region Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge.

The part numbers for replacement cartridges of the type the printer has been set to will appear on the supplies page and in low or empty replacement messages on the control panel. Once these NVM are set, the regional configuration can only be changed by sending a .ps snippet to reset the region setting to neutral.

There are three types of toner: Metered/Page Pack, which are single part numbers for each color world wide, Sold toner that is specific to the DMO market, and Sold toner that is specific to US/XE market.

If a toner cartridge of the wrong type (i.e., a "DMO" cartridge in a "XE" configured machine) is installed, it will generate a fault code and/or a message on the UI indicating toner incompatibility.

If the problem occurs after several toner replacements, the customer may have received the wrong toner in a consumables order; either because the wrong part number was ordered, or the shipment did not match the order or the toner was obtained somehow from an unauthorized region.

Resolution in this case is simple; the customer should exchange the toner for the correct part from where it was purchased.

If the wrong toner was installed at the first toner replacement after install, or if the configuration NVM have changed due to software or NVM corruption, perform the following procedure:

Procedure

1. Record the machine serial number and the number of **Total Impressions**.
2. Remove any toner cartridges that are from an incorrect region.
3. Call Phone Support or your NTS and provide the information collected in step 1.
4. You will be given a secure snippet good for up to 500 prints difference from the total impressions provided in step 1. The snippet will set the region back to neutral.
5. Download the snippet to the printer.
6. Install a toner cartridge(s) from the correct region, the printer will learn the correct region from this toner cartridge.

GP 24 Resetting the System Administrator (SA) Password

This procedure provides information for how to reset the SA password.

1. Obtain the printer serial number ([Serial Number Format](#)) and page count.
2. Call the Welcome Center for a temporary pass code.
3. At the login screen, enter **reset** (not case sensitive) and temporary pass code.

NOTE: SA login credentials can be reset to default values (ADMIN/ 1111) within 100 pages from the print count given to the Welcome Center.

GP 25 PostScript Error Interpreter

PostScript errors happen for many reasons during the interpretation of a job. The interpreter stores some error information and calls the current error handler.

- When PostScript Error Info is On, the default error handler adds small red text on white backing to the print currently in progress, prints the page with all the current settings, and stops the job from being interpreted.
- The red printed text includes some header text, the offending command, the top 20 entries of the operand and dict stacks and top 10 entries of the execution stack, and the next 320 characters in the job, or as many of each as are present.
- If PostScript Error Info is On or Off and if the current job's I/O device has a back channel, this line is sent over it: “%%[Error: (errortype); Offendingcommand: (whatever)]%%”, where (errortype) is the type of error and (whatever) is the command being executed. The (whatever) might be unprintable characters.
- If PostScript Error Info is Off OR there were more than 320 characters left in the job after the error AND the current job's I/O device has a back channel, this line is sent over it: “%%[Flushing: rest of job (to end-of-file) will be ignored]%%”.

GP 26 PhaserMeter

PhaserMeter is used to color calibrate the Phaser 7800. The Printer Calibration described in this section includes the PhaserMeter as the Measure Device.

Printer Calibration

1. Turn Rotary Disk to mode **D** for calibration.

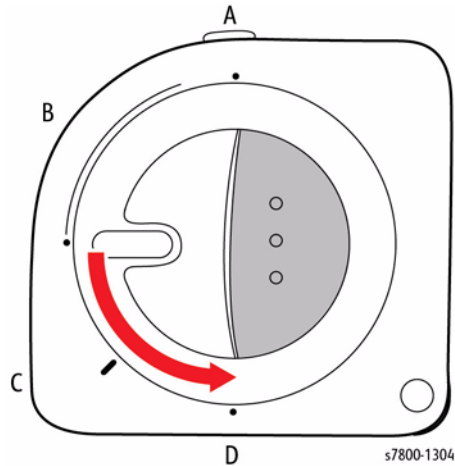


Figure 1 Selecting Mode

2. Connect the PhaserMeter or your Measure Device to the computer via USB cable.

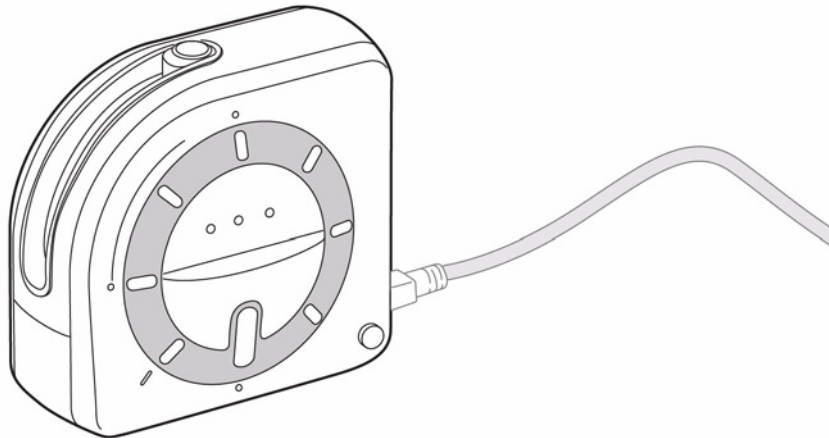


Figure 2 Connecting the PhaserMeter

3. Launch PhaserMatch application.
4. On the left side, under Printer Calibration, click **Calibrate My "Printer Name"**.

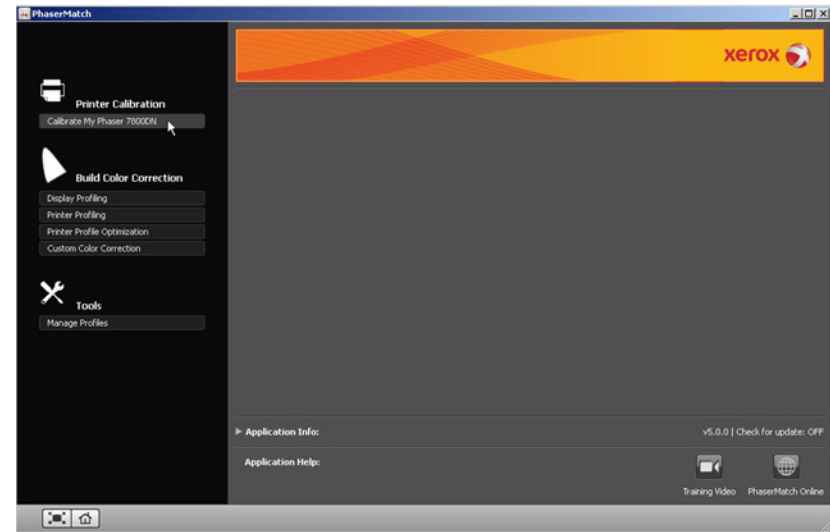


Figure 3 Accessing Printer Calibration

5. Select the desired options to calibrate the printer.
 - Select Measurement Device
 - PhaserMeter
 - i1Pro
 - i1iO
 - i1iO (Compatibility Mode)
 - i1iSis
 - i1iSis XL
 - Select Printer
 - Select Chart Size (Small, Medium, Large)
 - Print Preference Page
6. Click **Print** to print the Reference Page.

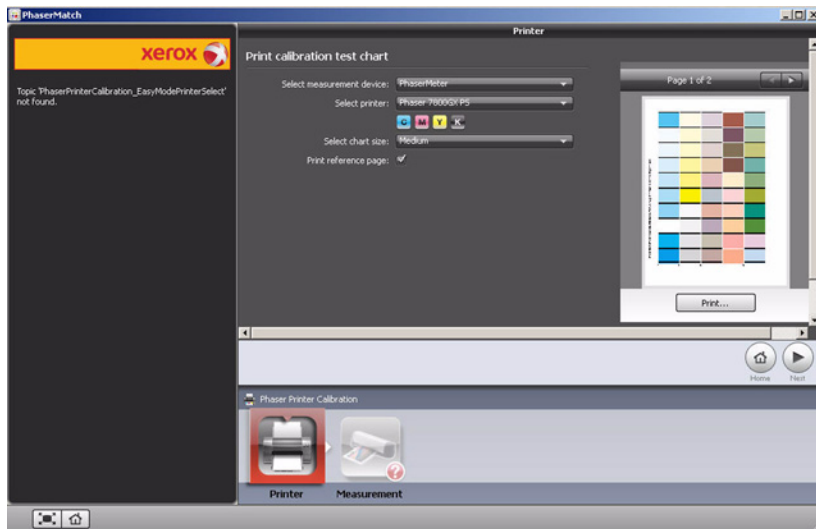


Figure 4 Selecting Options

7. Place the PhaserMeter on top of the Printed Test Chart Page at the bottom of the 1st column.
8. While pressing the button on the PhaserMeter, scan the color column. Repeat for all columns.

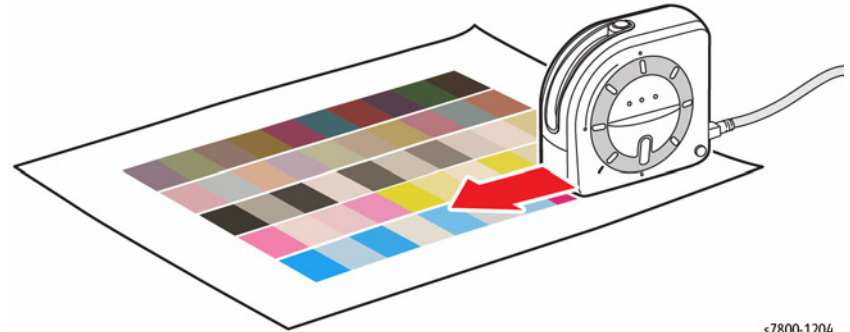


Figure 5 Measuring Color

s7800-1204

9. Follow on-screen instructions to complete the procedure.

General Information

General Information provides information about the printer.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **General Information**.
3. The General Information screen is displayed showing printer information.

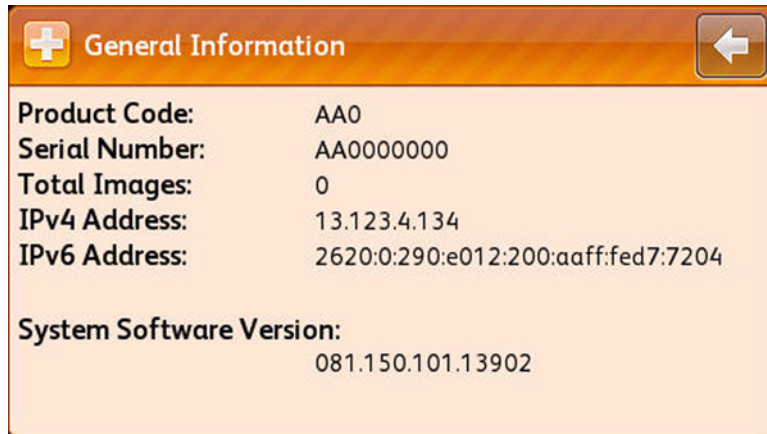


Figure 1 General Information

Service Information

dc104 Usage Counters

The dc104 Usage Counters routine displays printer usage information.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
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** to view the counter information.



Figure 1 dc104 Usage Counters

5. Information includes:
 - Total Impressions
 - Black Impressions
 - Color Impressions
 - Total Large Impressions
 - Black Large Impressions
 - Color Large Impressions
 - Maintenance Impressions
 - Black Maintenance Impressions
 - Color Maintenance Impressions
 - Sheet
 - 2-Sided Sheets
6. Touch **X** to exit.

dc104 Usage Counters	
Total Impressions	179
Black Impressions	33
Color Impressions	146
Total Large Impressions	0

Figure 2 Usage Counter Information

7. Touch the **Back Arrow** to return to the Service Information menu.

dc108 Software Versions

The dc108 Software Versions routine displays the current system software versions.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Service Information**.
3. Touch **dc108 Software Versions**.
4. The dc108 Software Version screen is displayed listing current firmware versions for the printer and attached options.
 - SW Upgrade
 - NC
 - NC OS
 - LUI
 - Marking Engine
5. Touch the **Back Arrow** to exit.

dc108 Software Version	
System Software Version: 081.150.101.13902	
Software Module Name	Version
SW Upgrade	150.116.00162
NC	0.080.151.13910
NC OS	080.151.13910

Figure 3 dc108 Software Versions

dc122 Fault History

The dc122 Fault History routine displays the most recent (last 40) faults.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Service Information**.
3. Touch **dc122 Fault History**.
4. A Fault History screen is displayed. Information includes:
 - Chain Link
 - Description
 - Date & Time
5. Select the fault for additional details.

Chain-Link	Description	Date & Time
371.105.00	Tray 2 Jam	05/17/11 12:10:23
371.105.00	Tray 2 Jam	05/17/11 12:09:14
371.105.00	Tray 2 Jam	05/17/11 11:54:58

Figure 4 dc122 Fault History

6. An information screen appears displaying the fault details.
7. Touch **X** to exit the details screen.

Occurred:	06/02/11 12:26:06
Image Count:	2203
Paper:	letter85x11

Figure 5 Exiting the Information Screen

8. Touch the **Back Arrow** to return to the Service Information screen.

dc135 CRU/HFSI Read & Reset

The dc135 CRU/HFSI 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 - [Entering Service Diagnostics](#).
2. Touch **Service Information**.
3. Touch **dc135 CRU/HFSI Read & Reset**.
4. A dc135 CRU/HFSI screen is displayed. Information includes:
 - Component Name
 - % Remaining
5. To reset a non-CRUM supply item, select the item. Touch the **Reset Counter** to reset the life counter. Components can be reset include:
 - Fuser
 - Belt Cleaner
 - Transfer Roller
 - Transfer Belt
 - Developer



Figure 6 Selecting the Component

6. A prompt appears to confirm the reset request.
7. Touch **Reset** to reset the component.



Figure 7 Resetting the Component

8. The display returns to the previous screen.
9. Touch the **Back Arrow** to return to the Service Information menu.

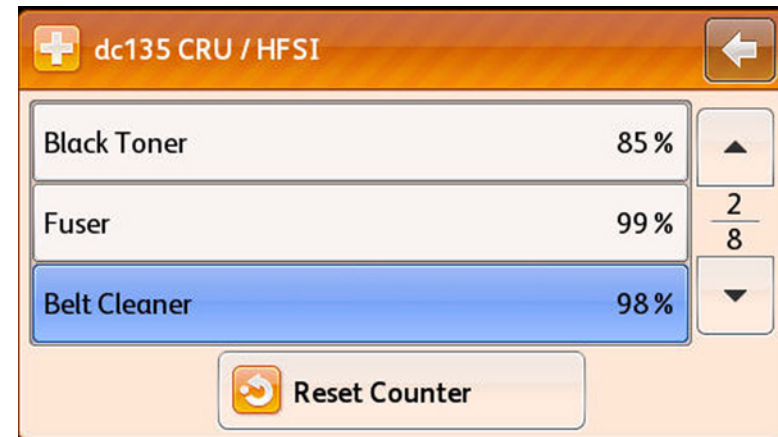


Figure 8 Exiting dc135 CRU/HFSI Read and Reset

dc612 Print Test Patterns

The dc612 Print Test Patterns routine provides access to embedded test prints for troubleshooting image quality and media transport problems. Options include number of prints, source tray and simplex or duplex printing.

Engine Test Prints

The Engine Test Prints include the following patterns:

- 90 Degree Grid
- B Patch
- Drum Pitch Halftone

Accessing Engine Test Prints

1. From the printer's Control Menu, touch **Printer**.
2. Touch **Tools**.
3. Touch **Setup**.
4. Touch **Service Tools**.
5. Touch **Service Diagnostics**.
6. In the passcode field, enter **6789**.
7. Touch **OK**.
8. Select **Service Information**.
9. Scroll down the Service Information menu.
10. Touch **dc612 Test Patterns**.
11. Touch **Engine Test Prints**.
12. Select the desired test pattern.

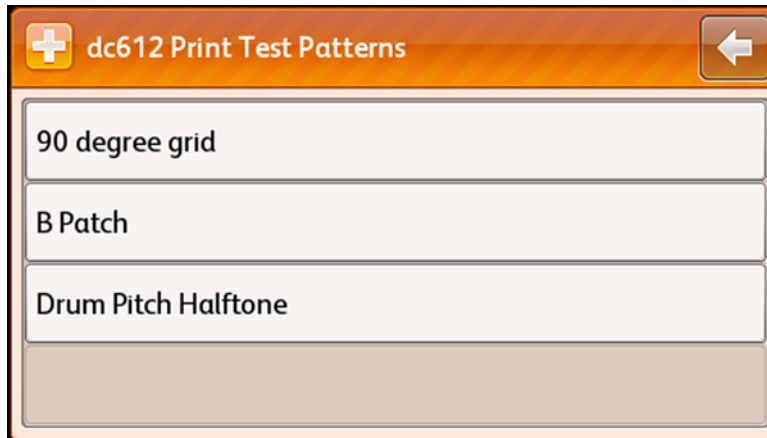


Figure 9 Engine Test Prints

13. Touch **Start** to print the test pattern.
14. A progress window appears showing the status.
15. Touch **X** to exit.

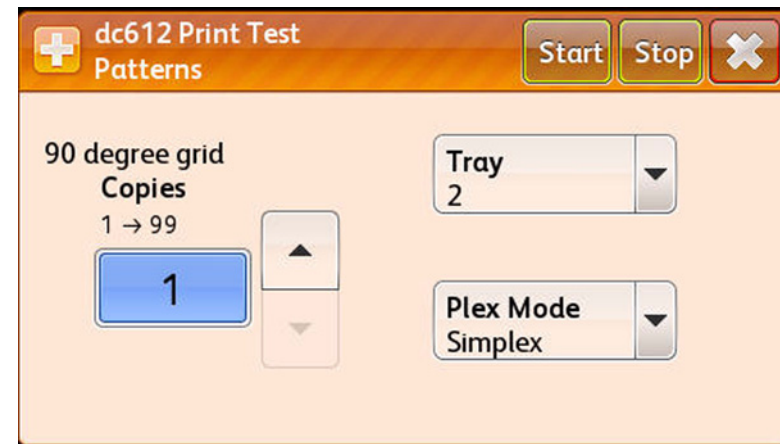


Figure 10 Printing and Exiting Engine Test Prints

16. Touch the **Back Arrow** to exit the Engine Test Prints.
17. Touch the **Back Arrow** one more time to return to the Service Information menu.

Controller Test Prints

The Controller Test Prints include the following patterns:

- 50% CMKRGB Fill Pages
- A3 Total
- A4 Total
- Letter Total
- Yellow Line Freq
- Magenta Line Freq
- Cyan Line Freq
- Black Line Freq
- Red Line Freq
- Green Line Freq
- Blue Line Freq

Accessing Controller Test Prints

1. From the printer's Control Menu, touch **Printer**.
2. Touch **Tools**.
3. Touch **Setup**.
4. Touch **Service Tools**.
5. Touch **Service Diagnostics**.
6. In the passcode field, enter **6789**.
7. Touch **OK**.
8. Select **Service Information**.
9. Scroll down the Service Information menu.
10. Select **dc612 Test Patterns**.
11. Touch **Controller Test Prints**.
12. Select the desired test pattern.

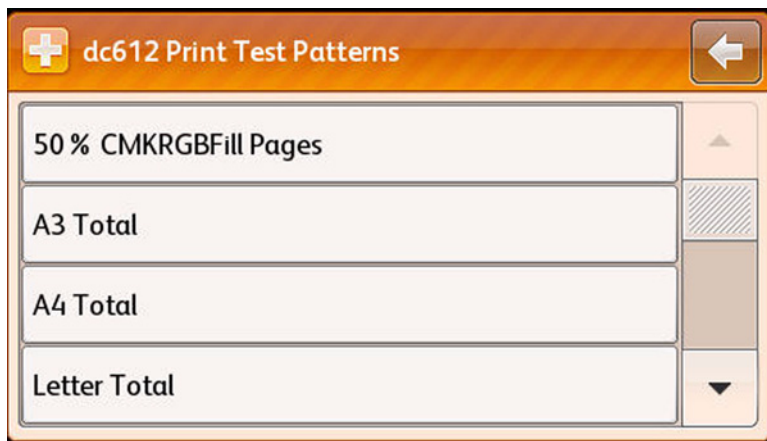


Figure 11 Controller Test Prints

13. Touch **Start** to print the test pattern.
14. A progress window appears showing the status.
15. Touch **X** to exit.

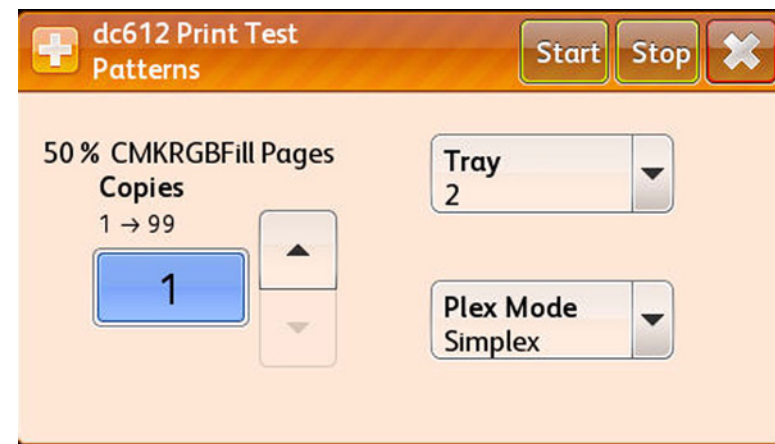


Figure 12 Printing and Exiting Controller Test Prints

16. Touch the **Back Arrow** to exit the Controller Test Prints.
17. Touch the **Back Arrow** one more time to return to the Service Information menu.

Diagnostics

dc140 Analog Monitor

The dc140 Analog Monitor routine monitors one or more analog inputs for diagnostic troubleshooting.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Diagnostics**.
3. Touch **dc140 Analog Monitor**.
4. A dc140 Analog Monitor screen is displayed. Information includes:
 - Component Name
 - Status
 - Range
 - Value
5. Select the component to check.
6. Touch **Start** to begin the test.
7. The output component is switched on and the Status changes to **Active**.
8. The bit count is displayed in the Value column.

NOTE: You can switch On an input component to monitor the output component in the printer.

If the component has a runtime restriction, the component is switched On for that period and automatically switched Off.

Some components cannot be energized at the same time as another component. If you activate such a combination of components, the first component switched On will be automatically switched Off.

If the component cannot be automatically turned Off, the following message appears: **Cannot check the component. Stop another output component.**

9. To stop the process, touch **Stop** or **Stop All**.
10. Touch the **Back Arrow** to return to the Diagnostics menu.



Component Name	Status	Range	Value
Heat Belt STS Center	Inactive	120-1018	
Heat Belt STS Rear	Inactive	120-1018	
NOHAD Environment...	Active	42-200	354

Figure 1 dc140 Analog Monitor

Checking Multiple Components

1. To check multiple components simultaneously, repeat steps 5 through 8.
2. To stop the process, touch **Stop** while the component is selected, or **Stop All**, which switches Off all output components.
3. Touch the **Back Arrow** to return to the Diagnostics menu.



Component Name	Status	Range	Value
Heat Belt STS Center	Active	120-1018	441
Heat Belt STS Rear	Inactive	120-1018	
NOHAD Environment...	Active	42-200	355

Figure 2 Checking Multiple Components

DC140 Analog Monitor Codes List

Table 1 Monitor Codes List

Chain Link	Component Name	Functional Description	Range
010-200	Heat Belt STS Center	Heat Belt Center STS temperature AD value	-
010-200	Heat Belt STS Rear	Heat Belt Rear STS temperature AD value	-
042-200	NOHAD Environment Temp Sensor	NOHAD Environment Temp Sensor input value	-
077-200	OHP Sensor	Displays OHP Sensor output value (AD value). [I/O]OHP Sensor	-
091-200	BCR DC I MONI Y	Y-color BCR DC Current Monitor	170 - 927
091-201	BCR DC I MONI M	M-color BCR DC Current Monitor	170 - 927
091-202	BCR DC I MONI C	C-color BCR DC Current Monitor	170 - 927
091-203	BCR DC I MONI K	K-color BCR DC Current Monitor	170 - 927
092-200	ADC_SNR	ADC Sensor input value	-
092-201	EMV_TEMP_SNR	Temp Sensor input value	-
092-202	EMV_HUM_SNR	Humidity Sensor input value	-
092-203	ATC_SNR_Y	Detection of TC in Y-color Developer Housing	-
092-204	ATC_SNR_M	Detection of TC in M-color Developer Housing	-
092-205	ATC_SNR_C	Detection of TC in C-color Developer Housing	-
092-206	ATC_SNR_K	Detection of TC in K-color Developer Housing	-

dc330 Component Control

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

- Inputs: Sensors, Switches, and Motor Encoders.
- Outputs: Motors, Solenoids, Clutches, Lamps (e.g. LED's) and heaters.

In some cases, you may need to activate an Interlock to be able to view the operation of a component.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Diagnostics**.
3. Touch **dc330 Component Control**.
4. A dc330 Component Control screen is displayed. Information includes:
 - Chain Link
 - I/O (Input or Output)
 - Component Description
5. From the Chain pull-down menu, select the Chain number.

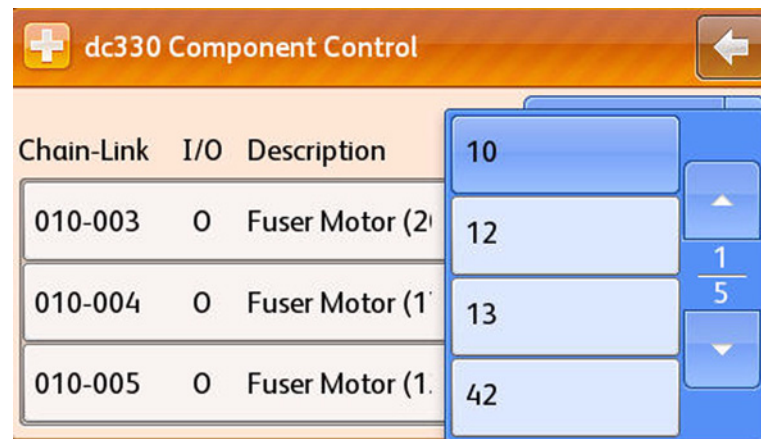


Figure 3 Selecting Chain Number

6. Select the component for test.
7. Touch **Start** to perform the test.
8. Touch **Stop** to stop the test.
9. Touch **X** to exit.

NOTE: Sensor, motor, clutch, and solenoid test results appear as On or Off states. The test also allow audible and visual confirmation of operation where applicable. Refer to [Table 2](#), [Table 3](#), [Table 4](#), [Table 5](#), [Table 6](#), and [Table 7](#) for specific details of each test.



Figure 4 Starting and Stopping the Test

10. Touch the **Back Arrow** to return to the Diagnostics menu.

Finding a Code

You can find a specific code by scrolling through the upper table on the UI or by selecting from the following list:

1. Input and Output Codes
 - IOT Input Codes ([Table 2](#))
 - IO Output Codes ([Table 3](#))
 - Advanced Finisher Input Codes ([Table 4](#))
 - Advanced Finisher Output Codes ([Table 5](#))
 - Professional Finisher Input Codes ([Table 6](#))
 - Professional Finisher Output Codes ([Table 7](#))
2. The Component Control Codes in the upper table are arranged by Chain. Touch the Chain button and select a chain. The codes within that chain will be listed.
3. Select the desired code. A popup menu gives you the choice to either Close Menu or Add the code to the lower table.

Activating a Code

CAUTION

Some components have special printer safety requirements, such as removing the IBT Assembly before running the IBT Drive, etc. Read the entry for codes in tables 2 - 7 in order to avoid printer damage.

1. To add a code directly to the lower table, touch the Chain-link icon on the UI. Use the keypad to enter the complete 6-digit component control code, then touch the **Add**.
2. Codes are activated by touching the entry in the lower table. Select the desired action from the popup table that occurs.

NOTE: If the component has a runtime restriction, the component is switched on for that period and automatically switched off.

3. Touch **Stop** or **Stop All**, or double-click the active component in the Active Stack box to end the test. The ID and Active Stack components are removed from the Active Stack box.

Stacking Component Codes

NOTE: Some components cannot be energized at the same time as another component. If you activate such a combination of components, the first component switched on will be automatically switched off. If the component cannot be automatically turned off, the following message appears: **Cannot check the component. Stop another output component.**

1. To stack several codes, select the first code and touch **Start**, then select the next code and touch **Start**. Continue to enter up to eleven codes.
2. The state changes to Run; H or L as applicable.
3. Stop a highlighted component by touching **Stop** or
4. To switch Off all components, touch **Stop All**.

Table 2 IOT Input Codes

Chain Link	Component Name	Operational Description
010-201	Fuser Thermostat Status	Display of the current level of Thermostat H: Thermostat disconnected L: Thermostat connected
010-202	P/Roll Latch Sensor	Display of the current level of Latch Sensor H: P/Roll Latch On L: P/Roll Latch Off
010-203	Belt Speed Sensor	Display of the level of Belt Speed Sensor 0: With Belt Speed Sensor Input 1: Without Belt Speed Sensor Input
042-201	IBT Belt Home Sensor	Detects IBT Belt Home Sensor On/Off.
042-202	Fuser Fan Fail	Detects whether Fuser Fan is rotating. H: Not rotating L: Rotating
042-203	Drive Fan Fail	Detects whether Drive Fan is rotating. H: Not rotating L: Rotating

Table 2 IOT Input Codes

Chain Link	Component Name	Operational Description
042-204	Rear Bottom Fan Fail	Detects whether Rear Bottom Fan is rotating. H: Not rotating L: Rotating
042-205	IBT Fan Fail	Detects whether IBT Fan is rotating. H: Not rotating L: Rotating
042-206	MHVPS Fan Fail	Detects whether MHVPS Fan is rotating. H: Not rotating L: Rotating
042-207	Process 2 Fan Fail	Detects whether Process2 Fan is rotating. H: Not rotating L: Rotating
042-208	LVPS Exhaust Fan Fail	Detects whether LVPS Exhaust Fan is rotating. H: Not rotating L: Rotating
042-209	Cartridge Fan Fail	Detects whether Cartridge Fan is rotating. H: Not rotating L: Rotating
042-210	Process 1 Fan Fail	Detects whether Process1 Fan is rotating. H: Not rotating L: Rotating
042-211	Suction Fan Fail	Detects whether Suction Fan is rotating. H: Not rotating L: Rotating
042-213	C Exhaust Fan Fail	Detects whether C Exhaust Fan is rotating. H: Not rotating L: Rotating
042-214	IH Intake Fan Fail	Detects whether IH Intake Fan is rotating. H: Not rotating L: Rotating
042-215	IH Exhaust Fan Fail	Detects whether IH Exhaust Fan is rotating. H: Not rotating L: Rotating
042-216	LH Fan Fail	Detects whether LH Fan is rotating. H: Not rotating L: Rotating
071-101	Tray 1/MPT No Paper Sensor	Detects Tray 1 No Paper Sensor On/Off. H: No paper L: Paper present
071-102	Tray 1/MPT Nudger Position Sensor	Detects Tray 1 Level Sensor On/Off. H: No paper L: Paper present
072-101	Tray 2 No Paper Sensor	Detects Tray 2 No Paper Sensor On/Off. H: No paper L: Paper present

Table 2 IOT Input Codes

Chain Link	Component Name	Operational Description
072-102	Tray 2 Level Sensor	Detects Tray 2 Level Sensor On/Off. H: No paper L: Paper present
072-104	Tray 2 Paper Size Switch	Detects Tray 2 Paper Size Sensor SW5 On/Off.
072-105	Tray 2 Pre Feed Sensor	Detects Tray 2 Pre Feed Sensor On/Off.
073-101	Tray 3 No Paper Sensor	Detects Tray 3 3 No Paper Sensor On/Off. H: No paper L: Paper present
073-102	Tray 3 Level Sensor	Detects Tray 3 Level Sensor On/Off. H: No paper L: Paper present
073-103	Tray 3 Feed Out Sensor	Detects Tray 3 Feed Out Sensor On/Off.
073-104	Tray 3 Paper Size Switch	Detects Tray 3 Paper Size Sensor SW5 On/Off.
074-101	Tray 4 No Paper Sensor	Detects Tray 4 No Paper Sensor On/Off. H: No paper L: Paper present
074-102	Tray 4 Level Sensor	Detects Tray 4 Level Sensor On/Off. H: No paper L: Paper present
074-103	Tray 4 Feed Out Sensor	Detects Tray 4 Feed Out Sensor On/Off.
074-104	Tray 4 Paper Size Switch	Detects Tray 4 Paper Size Sensor SW5 On/Off.
074-105	Tray 4 Pre Feed Sensor (TTM only)	Detects #4 Pre Feed Sensor On/Off.
075-101	Tray 5 No Paper Sensor	Detects Tray 1 No Paper Sensor On/Off. H: No paper L: Paper present
075-102	Tray 5 Level Sensor	Detects Tray 5 Level Sensor On/Off. H: No paper L: Paper present
075-103	Tray 5 Feed Out Sensor	Detects Tray 5 Feed Out Sensor On/Off.
075-104	Tray 5 Paper Size Switch	Detects Tray 5 Paper Size Switch On/Off.
075-105	Tray 5 Pre Feed Sensor (TTM only)	Detects Tray 5 Pre Feed Sensor On/Off.
077-300	Left Hand Interlock Switch	Detects Left Hand Interlock Switch On/Off.
077-302	Left Hand High Cover Switch	Detects Left Hand High Cover Switch On/Off.
077-303	Front Interlock Switch	Detects Front Interlock Switch On/Off.
077-305	Dup Cover Switch	Detects Dup Cover Switch On/Off.
077-306	TM Left Hand Interlock Switch	Detects TM Left Hand Interlock Switch On/Off.
077-307	IBT Cover Switch	Detects IBT Cover Switch On/Off.

Table 2 IOT Input Codes

Chain Link	Component Name	Operational Description
079-121	Regi Stop Input	Detects Regi Stop signal Off/On. H: No paper L: Paper present
079-123	Feed ON Input	Detects Feed ON Signal Off/On.
081-103	Regi Sensor	Detects Regi Sensor. H: No paper L: Paper present
081-104	Tray 1 Feed Out Sensor	Detects Tray 1 Feed Out Sensor. H: No paper L: Paper present
081-105	Tray 2 Feed Out Sensor	Detects Tray 2 Feed Out Sensor. H: No paper L: Paper present
081-106	Tray 3 Feed Out Sensor (1TM excluded)	Detects Tray 3 Feed Out Sensor. H: No paper L: Paper present
081-107	Tray 4 Feed Out Sensor (1TM excluded)	Detects Tray 4 Feed Out Sensor. H: No paper L: Paper present
081-120	Feed Ready Input	Detects Feed Ready Signal Off/On.
082-100	# 2 Exit Sensor	Detects # 2 Exit Sensor. H: No paper L: Paper present
082-101	# 1 Exit Sensor	Detects # 1 Exit Sensor. H: No paper L: Paper present
082-102	POB Sensor	Detects POB Sensor. H: No paper L: Paper present
082-109	#1 OCT Home Position Sensor	H: Not home L: Home position
082-110	#1 OCT Home Position Sensor	H: Not home L: Home position
082-124	Full Stack Sensor 1	Detects Full Stack Sensor 1 On/Off.
082-125	Full Stack Sensor 2	Detects Full Stack Sensor 2 On/Off.
083-108	Dup Path Sensor	H: No paper L: Paper present
091-200	Bottle Position Sensor	Displays the state (High/Low) of Waste Toner Bottle Existence Detection Sensor.
091-201	Bottle Full Sensor	Displays the state (High/Low) of Waste Toner Bottle Full Detection Sensor.
091-202	Sensor Photo	Displays a High/Low output from Rotation Detection Sensor.
094-200	1st BTR Retract Sensor	1st BTR Retract Sensor Reading Displays the current level at "On" (H or L).

Table 2 IOT Input Codes

Chain Link	Component Name	Operational Description
094-201	2nd BTR Retract Sensor	2nd BTR Retract Sensor Reading Displays the current level at "On". (H or L)
094-202	POB Jam Sensor	Detects the active level of POB Jam Sensor.

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
010-003	Fuser Motor (200mm Speed)	Fuser Motor rotation: Rotates at 200mm/s (+0.8%). [Ref Clk] 1173.7089Hz
010-004	Fuser Motor (175mm High Speed)	Fuser Motor rotation: Rotates at 175mm/s (+1.2%). [Ref Clk] 1031.0129Hz
010-005	Fuser Motor (121mm High Speed)	Fuser Motor rotation: Rotates at 121mm/s (+1.2%). [Ref Clk] 712.9007Hz
010-008	Fuser Motor (79mm Speed)	Fuser Motor rotation: Rotates at 79mm/s (+1.7%). [Ref Clk] 668.163Hz
010-009	Pressure Roll Latch On	Pressure Roll Latch On Latch Motor automatically stops at Pressure Roll Latch On position.
010-010	Pressure Roll Latch Off	Pressure Roll Latch Off Latch Motor automatically stops at Pressure Roll Latch Off position.
010-011	Pressure Roll Half Latch	Pressure Roll Half Latch Latch Motor automatically stops at pressure roll half latch position.
042-001	Main Motor (79mm/s)	Drive of main motor: Motor starts running at 79mm/s) at Start command and stops running at Stop command.
042-002	Main Motor (121mm/s)	Drive of main motor: Motor starts running at 121mm/s) at Start command and stops running at Stop command
042-003	Main Motor (175mm/s)	Drive of main motor: Motor starts running at 175mm/s) at Start command and stops running at Stop command.
042-004	Main Motor (200mm/s)	Main Motor solo rotation operation: A start instruction triggers a rotary drive operation (200mm/s). A stop instruction stops it.
042-011	Fuser Fan	Fuser Fan rotation speed change: Fan rotates for 2 seconds at 90% PWM at Start command and then rotates at xx% duty. xx% = Max process speed NVM of each product. Fan stops at Stop command. A stop instruction stops the Fan operation.

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
042-012	MHVPS Fan	MHVPS Fan rotation speed change: Fan rotates for 2 seconds at 90% PWM at Start command and then rotates at xx% duty. xx% represents max PS NVM value for a product. Fan stops at Stop command.
042-013	Process 2 Fan	Process 2 Fan rotation: Fan rotates at high speed at Start command and changes to low speed after 2 seconds. Fan stops at Stop command.
042-014	LVPS Exhaust Fan	LVPS Exhaust Fan rotation: Fan rotates at Start command and stops at Stop command.
042-015	Rear Bottom Fan	Rear Bottom Fan rotation: Fan rotates at Start command and stops at Stop command.
042-016	IH Intake Fan	IH Intake Fan rotation speed change: Fan rotates for 2 seconds at 90% PWM at Start command and then rotates at xx% duty. xx% = Max process speed NVM of each product. Fan stops at Stop command.
042-017	IH Exhaust Fan	IH Exhaust Fan rotation speed change: Fan rotates for 2 seconds at 90% PWM at Start command and then rotates at xx% duty. xx% = Max process speed NVM of each product. Fan stops at Stop command.
042-018	LVPS Fan	LVPS Fan rotation: Fan rotates at Start command and stops at Stop command. * However, the behavior of the fan itself is to rotate at high speed at Start command and changes to low speed at Stop command.
042-020	Suction Drive Fan	Suction or Drive Fan rotation: Fan rotates at Start command and stops at Stop command.
042-021	Cartridge Fan	Cartridge Fan rotation speed change: Fan rotates for 2 seconds at 90% PWM at Start command and then rotates at xx% duty. xx% = Max process speed NVM of each product. Fan stops at Stop command.
042-022	Process 1 Fan	Process 1 Fan rotation speed change: Fan rotates for 2 seconds at 90% PWM at Start command and then rotates at xx% duty. xx% = Max process speed NVM of each product. Fan stops at Stop command.
042-024	C Exhaust Fan	C Exhaust Fan rotation: Fan rotates at Start command and stops at Stop command.

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
042-025	NOHAD Fan Fail Detection	Detects a failure by running all fans at a time. Fans start running at Start command and fail detection is performed in 5 seconds. Fans stop running after fail detection process is completed. * For Fault Codes reported, see dc122 Fault History . Fans to be checked for a failure: <ul style="list-style-type: none"> Fuser Fan Drive (Suction) Fan Rear Bottom Fan MHVPS Fan Process 2 Fan LVPS Exhaust Fan Cartridge Fan Process1 Fan C-Exhaust Fan IH Intake Fan IH Exhaust Fan Left Hand (LH) Fan
042-026	LH Fan	LH Fan rotation: Fan rotates at 90% duty at Start command and stops at Stop command.
071-001	Tray 2 Feed Motor CW2	Runs the Motor in 2-phase excitation, in feed direction, at feed speed. However, if speed is specified by NVM (742-490), the motor runs at specified speed.
071-002	Tray 2 Feed Motor CCW2	Runs the motor at 2 phase excitation, liftup direction, and liftup speed. However, if speed is specified by NVM (742-490), the motor runs at specified speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start. The motor steps down to Opps when Level Sensor is detected and stops.
071-003	Tray 2 Feed Motor CW1-2	Runs the motor at 1-2 phase, feed direction, and feed speed.
071-004	Tray 2 Feed Motor CCW1-2	Runs the motor at 1-2 phase, liftup direction, and liftup speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start. The motor steps down to Opps when Level Sensor is detected and stops.

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
072-001	Tray 3 Feed Motor CW2	Runs the motor at 2 phase excitation, feed direction, and feed speed.
072-002	Tray 3 Feed Motor CCW2	Runs the motor at 2 phase excitation, liftup direction, and liftup speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start The motor steps down to Opps when Level Sensor is detected and stops.
072-003	Tray 3 Feed Motor CW1-2	Runs the motor at 1-2 phase, feed direction, and feed speed. However, if speed is specified by NVM (742-490), the motor runs at specified speed.
072-004	Tray 3 Feed Motor CCW1-2	Runs the motor at 1-2 phase, liftup direction, and liftup speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start. The motor steps down to Opps when Level Sensor is detected and stops.
073-001	Tray 4 Feed Motor CW2	Runs the motor at 2 phase excitation, feed direction, and feed speed.
073-002	Tray 4 Feed Motor CCW2	Runs the motor at 2 phase excitation, liftup direction, and liftup speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start. The motor steps down to Opps when Level Sensor is detected and stops.
073-003	Tray 4 Feed Motor CW1-2	Runs the motor at 1-2 phase excitation, feed direction, and feed speed. However, if speed is specified by NVM (742-490), the motor runs at specified speed.
073-004	Tray 4 Feed Motor CCW1-2	Runs the motor at 1-2 phase excitation, liftup direction, and liftup speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start The motor steps down to Opps when Level Sensor is detected and stops.
074-001	Tray 5 Feed Motor CW2	Runs the motor at 2 phase excitation, feed direction, and feed speed.

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
074-002	Tray 5 Feed Motor CCW2	Runs the motor at 2 phase excitation, liftup direction, and liftup speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start. The motor steps down to Opps when Level Sensor is detected and stops.
074-003	Tray 5 Feed Motor CW1-2	Runs the motor at 1-2 phase excitation, feed direction, and feed speed.
074-004	Tray 5 Feed Motor CCW1-2	Runs the motor at 1-2 phase excitation, liftup direction, and liftup speed. <Constraints> <ul style="list-style-type: none"> The motor does not run if Level Sensor is On at the time of motor rotation start. The motor steps down to Opps when Level Sensor is detected and stops.1-2
075-001	MSI Feed Motor CW2	Runs the motor at 2 phase excitation, feed p direction, and feed speed.
075-002	MSI Feed Motor CCW2	Runs the motor at 2 phase excitation, nudger up/down direction, and nudger up/down speed.
075-003	MSI Feed Motor CW1-2	Runs the motor at 1-2 phase excitation, feed direction, and feed speed.
075-004	MSI Feed Motor CCW1-2	Runs the motor at 1-2 phase excitation, In nudger up/down direction, and nudger up/down speed.
079-032	Take Away Clutch	Turns On Take Away Clutch [I/O]TA Clutch (applies to MSI TA also) By combining with Possible to run by #5 Take Away Roll or MSI Take Away Roll by using with a combination with Component Main Drive Motor[042-XXX]
079-033	Regi Clutch	Turns On Regi Clutch [I/O]TA Clutch (applies to MSI TA also) Possible to run by Regi Roll by using with a combination with Component Main Drive Motor[042-XXX]
079-034	Exit Gate Solenoid	Switch Exit Gate Off: Output to Exit 1 On: Output to Exit 2
079-035	Feed Ready Output	Turns On Feed Ready signal.
079-036	Regi Stop Output	Turns On Regi Stop signal.
079-037	Feed On Output	Turns on Feed On signal.
079-038	TM T/A Motor 2 Full Speed	Runs the Tray Module T/A Motor 1 at full speed (2 phase).

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
081-001	TM T/A Motor 2 Half Speed	Runs the Tray Module T/A Motor 1 at half speed (1-2 phase).
081-002	TM T/A Motor 2 Full Speed	Runs the Tray Module T/A Motor 2 at full speed (2 phase).
081-003	TM T/A Motor 2 Half Speed	Runs the Tray Model T/A Motor 2 at half speed (1-2 phase).
082-040	#1 OCT Motor(CW1-2)	Moves the #1 Exit Roll in axial direction (On for 1000msec and then timeout) CW: Exit Roll moves to machine O/B end Runs in 1-2 phase excitation mode.
082-041	#1 OCT Motor(CCW1-2)	Moves the #1 Exit Roll in axial direction (On for 1000msec and then timeout) CCW: Exit Roll moves to machine I/B end Runs in 1-2 phase excitation mode.
082-042	#1 OCT Motor(CW2)	Moves the #1 Exit Roll in axial direction (On for 1000msec and then timeout) CW: Exit Roll moves to machine O/B end Runs in 2 phase excitation mode.
082-043	#1 OCT Motor(CCW2)	Moves the #1 Exit Roll in axial direction (On for 1000msec and then timeout) CCW: Exit Roll moves to machine I/B end Runs in 2 phase excitation mode.
082-045	#2 OCT Motor(CW1-2)	Moves the #2 Exit Roll in axial direction (On for 1000msec and then timeout) CW: Exit Roll moves to machine O/B end Runs in 1-2 phase excitation mode.
082-046	#2 OCT Motor(CCW1-2)	Moves the #2 Exit Roll in axial direction (On for 1000msec and then timeout) CCW: Exit Roll moves to machine I/B end Runs in 1-2 phase excitation mode.
082-047	#2 OCT Motor(CW2)	Moves the #2 Exit Roll in axial direction (On for 1000msec and then timeout) CW: Exit Roll moves to machine O/B end Runs in 2 phase excitation mode.
082-048	#2 OCT Motor(CCW2)	Moves the #2 Exit Roll in axial direction (On for 1000msec and then timeout) CCW: Exit Roll moves to machine I/B end Runs in 2 phase excitation mode.
082-050	Take Away Motor CW1-2	Runs Take Away Motor at 1-2 phase excitation, normal rotation, and max speed (output direction).
082-060	Exit 2 Drive Motor CW1-2	Runs Exit 2 Drive Motor at 1-2 phase excitation, normal rotation, and max speed (output direction).

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
082-061	Exit 2 Drive Motor CCW1-2	Runs Exit 2 Drive Motor at 1-2 phase excitation, reverse rotation, and max speed (drawing direction).
082-062	Exit 2 Drive Motor CW2	Runs Exit 2 Drive Motor at 2 phase excitation, normal rotation, and max speed (output direction).
082-063	Exit 2 Drive Motor CCW2	Runs Exit 2 Drive Motor at 2 phase excitation, reverse rotation, and max speed (drawing direction).
082-071	Duplex Drive Motor CCW1-2	Runs Duplex Drive Motor at 1-2 phase excitation, reverse rotation, and max speed (drawing direction).
082-073	Duplex Drive Motor CCW2	Runs Duplex Drive Motor at 2 phase excitation, reverse rotation, and max speed (drawing direction).
091-010	BCR DC/AC Y	<Combined-Component Control> BCR DC/AC Y output Perform the following complex component control. [Component]BCR DC Y (091-001) [Component]BCR AC Y (091-005)
091-011	BCR DC/AC M	<Combined-Component Control> BCR DC/AC M output Operates the combined components below: [Component]BCR DC M (091-002) [Component]BCR AC M (091-006)
091-012	BCR DC/AC C	<Combined-Component Control> BCR DC/AC C output Perform the following complex component control. [Component]BCR DC C (091-003) [Component]BCR AC C (091-007)
091-013	BCR DC/AC K	<Combined-Component Control> BCR DC/AC K output (value set for High speed @225mm/sec, Low speed @175mm/sec) Perform the following complex component control. [Component]BCR DC K (091-004) [Component]BCR AC K (091-008)

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
091-014	Drum YMC/Drum K/IBT MOT (79 Speed)	YMC/K drum motor rotation at process speed of 79mm/sec. NVM(741-001:IBT Motor speed fine-tuning @79mm/sec NVM(741-014:Drum YMC Motor speed fine-tuning @79mm/sec-1 NVM(741-014:Drum K Motor speed fine-tuning @79mm/sec-1)
091-015	Drum YMC/Drum K/IBT MOT (121 Speed)	YMC/K drum motor rotation at process speed of 121mm/sec. NVM(741-002:IBT Motor speed fine-tuning @121mm/sec NVM(741-015:Drum YMC Motor speed fine-tuning @121mm/sec-1 NVM(741-015:Drum K Motor speed fine-tuning @121mm/sec-1)
091-016	Drum YMC/Drum K/IBT MOT (175 Speed)	Drum YMC Motor/DRUM K Motor/IBT Motor (@175mm/sec) output NVM(741-003:IBT Motor speed fine-tuning @175mm/sec NVM(741-016:Drum YMC Motor speed fine-tuning @175mm/sec-1 NVM(741-016:Drum K Motor speed fine-tuning @175mm/sec-1)
091-017	Drum YMC/Drum K/IBT MOT (200 Speed)	YMC/K drum motor rotation at process speed of 200mm/sec. NVM(741-004:IBT Motor speed fine-tuning @200mm/sec NVM(741-017:Drum YMC Motor speed fine-tuning @200mm/sec-1 NVM(741-017:Drum K Motor speed fine-tuning @200mm/sec-1)
091-019	Drum MOT/IBT MOT YMC (121Speed) Reverse	Drum YMC Motor/Drum K Motor/IBT Motor YMC (Reverse Rotation) output Output stops within a time specified in the following NVM. (NVM 751-184:Drum YMC Motor Reverse Rotation Time Adjustment)
091-020	Drum MOT/IBT MOT K (79Speed)	Drum Motor/IBT Motor (@79mm/sec) output NVM(741-001:IBT Motor speed fine-tuning @79mm/sec NVM(741-014:Drum K Motor speed fine-tuning @79mm/sec-1)

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
091-021	Drum MOT/IBT MOT K(121Speed)	Drum Motor/IBT Motor (@121mm/sec) output NVM(741-002:IBT Motor speed fine-tuning @121mm/sec NVM(741-015:Drum K Motor speed fine-tuning @121mm/sec-1)
091-022	Drum MOT/IBT MOT K(175 Speed)	Drum Motor/IBT Motor (@175mm/sec) output NVM(741-003:IBT Motor speed fine-tuning @175mm/sec NVM(741-016:Drum K Motor speed fine-tuning @175mm/sec-1)
091-023	Drum MOT/IBT MOT K(200 Speed)	Drum Motor/IBT Motor (@200mm/sec) output NVM(741-004:IBT Motor speed fine-tuning @200mm/sec NVM(741-017:Drum K Motor speed fine-tuning @200mm/sec-1)
091-024	Drum MOT/IBT MOT K(255 Speed)	Drum Motor/IBT Motor (@255mm/sec) output NVM(741-006:IBT Motor speed fine-tuning @255mm/sec NVM(741-019:Drum K Motor speed fine-tuning @255mm/sec-1)
091-025	Drum MOT/IBT MOT K(121Speed)reverse	Drum Motor/IBT Motor (@121mm/sec) reverse rotation output * This component control automatically stops within a specified period of time (NVM 751-184: Drum Reverse Time). (751-184: Drum Reverse Time[ms]: Initial value=100, Min value=0, Max value=1023)
091-026	Drum YMC MOT ON(79_1mm/s)	Drum YMC Motor rotation at process speed of 79mm/sec-1. NVM(741-014:Drum YMC Motor speed fine-tuning @79mm/sec-1)
091-027	Drum YMC MOT ON(121_1mm/s)	Drum YMC Motor rotation at process speed of 121mm/sec-1. NVM(741-015:Drum YMC Motor speed fine-tuning @121mm/sec-1)
091-028	Drum YMC MOT ON(175_1mm/s)	Drum YMC Motor rotation at process speed of 175mm/sec-1. NVM(741-016:Drum YMC Motor speed fine-tuning @175mm/sec-1)
091-029	Drum YMC MOT ON(200_1mm/s)	Drum YMC Motor rotation at process speed of 200mm/sec-1. NVM(741-017:Drum YMC Motor speed fine-tuning @200mm/sec-1)

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
091-031	Drum YMC MOT Reverse On	Drum YMC Motor rotation at reverse rotation NVM(741-015:Drum YMC Motor speed fine-tuning @121mm/sec-1) Output stops within a time specified by the following NVM. (NVM 751-184:Drum YMC Motor Reverse Rotation Time Adjustment) * Value will be rounded off to 10ms. * This component control automatically stops within a specified period of time (NVM 751-184: Drum Reverse Time). (751-184: Drum Reverse Time[ms]: Initial value=100, Min value=0, Max value=1023)
091-032	Drum K MOT ON(79_1mm/s)	Drum K Motor rotation at process speed of 79mm/sec-1. NVM(741-014:Drum K Motor speed fine-tuning @79mm/sec-1)
091-033	Drum K MOT ON(121_1mm/s)	Drum K Motor rotation at process speed of 121mm/sec-1. NVM(741-015:Drum K Motor speed fine-tuning @121mm/sec-1)
091-034	Drum K MOT ON(175_1mm/s)	Drum K Motor rotation at process speed of 175mm/sec-1. NVM(741-016:Drum K Motor speed fine-tuning @175mm/sec-1)
091-035	Drum K MOT ON(200_1mm/s)	Drum K Motor rotation at process speed of 200mm/sec-1. NVM(741-017:Drum K Motor speed fine-tuning @200mm/sec-0)
091-037	Drum K MOT Reverse On	Drum K Motor reverse rotation output NVM(741-015:Drum K Motor speed fine-tuning @121mm/sec) Output stops within a time specified by the following NVM.(NVM 751-184:Drum K Motor Reverse Rotation Time Adjustment) * Value will be rounded off to 10ms
091-038	Erase Lamp Y	Erase Lamp Y light output
091-039	Erase Lamp M	Erase Lamp M light output
091-040	Erase Lamp C	Erase Lamp C light output
091-041	Erase Lamp K	Erase Lamp K light output
091-042	Erase Lamp YMCK	Erase Lamp YMCK light output Perform the following complex component control. [Component]ERASE LAMP Y(091-038) [Component]ERASE LAMP M(091-039) [Component]ERASE LAMP C(091-040) [Component]ERASE LAMP K(091-041)

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
091-043	Agitator MOT	Agitator Motor output
091-044	CF Leak Recovery	<Complex Component Control> Drum/Deve YMCK Motor/IBT Motor rotates according to a selected process speed (Top speed for each process speed in FC mode is selecte3d) 79mm/sec-2 (NVM 741-20:Drum YMC Motor speed fine-tuning, 741-7:IBT Motor speed fine-tuning) 121mm/sec-2 (NVM 741-21:Drum YMC Motor speed fine-tuning, 741-8:IBT Motor speed fine-tuning) 175mm/sec-2 (NVM 741-22:Drum YMC Motor speed fine-tuning, 741-9:IBT Motor speed fine-tuning) 200mm/sec-2 (NVM 741-23:Drum YMC Motor speed fine-tuning, 741-10:IBT Motor speed fine-tuning) BCR AC/DC is Vcln output Drum/Deve Motor YMCK / IBT Motor / Erase Lamp YMCK / Agitator Motor / BCR AC YMCK are output all together. BCR DC YMCK is output in 50ms after start Output stops within a time specified by NVM. NVM(751-193 nxero_CFRrefreshTime)

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
091-045	CRU CHG Agitator	<p><Complex Component Control> Drum/Deve YMCK Motor/IBT Motor rotates according to a selected process speed (Top speed for each process speed in FC mode is selecte3d) 79mm/sec (NVM 741-14:Drum YMC Motor speed fine-tuning, 741-1:IBT Motor speed fine-tuning) 121mm/sec (NVM 741-15:Drum YMC Motor speed fine-tuning, 741-2:IBT Motor speed fine-tuning) 175mm/sec (NVM 741-16:Drum YMC Motor speed fine-tuning, 741-3:IBT Motor speed fine-tuning) 200mm/sec (NVM 741-17:Drum YMC Motor speed fine-tuning, 741-4:IBT Motor speed fine-tuning) 225mm/sec (NVM 741-18:Drum YMC Motor speed fine-tuning, 741-5:IBT Motor speed fine-tuning) BCR AC/DC is VcIn output Drum/Deve Motor YMCK / IBT Motor / Erase Lamp YMCK / Agitator Motor / BCR AC YMCK are output all together and stop within a time specified by NVM (CRU CHG Time) all together. BCR DC YMCK is output in 50ms after Agitator Motor output start and output stops 50ms before Agitator Motor stop.</p>
092-001	ADC Specular	Turns on/off LED of ADC specular surface. [I/O] LED_SPECULAR
092-002	ADC Diffuse	Turns on/off LED of ADC diffusion surface. [I/O] LED_DIFFUSE
092-003	ADC Shutter Open	Opening ADC Shutter. [I/O]SHUTTER_OPEN_KEEP_SOL * Make sure to run MOB ADC Shutter Close after running this component control to prevent the shutter from being contaminated (however, the shutter will automatically close when machine starts printing)
092-004	ADC Shutter Close	Closing ADC Shutter.
093-001	Dispense Motor-Y (79mm/s)	Yellow dispense motor output at 79 mm/sec
093-002	Dispense Motor-Y (121mm/s)	Yellow dispense motor output at 121mm/sec
093-003	Dispense Motor-Y (175mm/s)	Yellow dispense motor output at 175mm/sec
093-004	Dispense Motor-Y (200mm/s)	Yellow dispense motor output at 200mm/sec
093-006	Dispense Motor-M (79mm/s)	Magenta dispense motor output at 79mm/sec

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
093-007	Dispense Motor-M (121mm/s)	Magenta dispense motor output at 121mm/sec
093-008	Dispense Motor-M (175mm/s)	Magenta dispense motor output at 175mm/sec
093-009	Dispense Motor-M (200mm/s)	Magenta dispense motor output at 200mm/sec
093-011	Dispense Motor-C (79mm/s)	Cyan dispense motor output at 79mm/sec
093-012	Dispense Motor-C (121mm/s)	Cyan dispense motor output at 121mm/sec
093-013	Dispense Motor-C (175mm/s)	Cyan dispense motor output at 175mm/sec
093-014	Dispense Motor-C (200mm/s)	Cyan dispense motor output at 200mm/sec
093-016	Dispense Motor-K (79mm/s)	Black dispense motor output at 79mm/sec
093-017	Dispense Motor-K (121mm/s)	Black dispense motor output at 121mm/sec
093-018	Dispense Motor-K (175mm/s)	Black dispense motor output at 175mm/sec
093-019	Dispense Motor-K (200mm/s)	Black dispense motor output at 200mm/sec
093-022	Dev YMC Motor (121mm/s)	Deve YMC Motor Rotation: Motor starts running at Start command (@121mm/sec) and stops at Stop command.
093-023	Dev YMC Motor (175mm/s)	Deve YMC Motor Rotation: Motor starts running at Start command (@175mm/sec) and stops at Stop command.
093-024	Dev YMC Motor (200mm/s)	Deve YMC Motor Rotation: Motor starts running at Start command (@200mm/sec) and stops at Stop command.
094-003	2nd BTR Contact	2nd BTR Contact Movement 2nd BTR contact movement automatically stops at detection of 2nd BTR Retract Sensor at Contact position.
094-004	2nd BTR Retract	2nd BTR Retract Movement 2nd BTR retract movement automatically stops at detection of 2nd BTR Retract Sensor at Retract position.
094-005	IBT MOT On (79mm/s)	IBT Motor rotation at process speed of 79mm/sec
094-006	IBT MOT On (121mm/s)	IBT Motor rotation at process speed of 121mm/sec.
094-007	IBT MOT On (175mm/s)	IBT Motor rotation at process speed of 175mm/sec.
094-008	IBT MOT On (200mm/s)	IBT Motor rotation at process speed of 200mm/sec.
094-011	IBT MOT Reverse On	IBT Motor reverse rotation at process speed of 79mm/sec. The motor stops running within a specified time after reverse rotation start.

Table 3 IOT Output Codes

Chain-Link	Component Name	Operational Description
094-012	1st BTR Contact	Turn on fuser motor 121mm/s and move 1st BTR to contact position. 1st BTR contact movement and fuser motor automatically stop at detection of 1st BTR Retract Sensor at contact position.
094-013	1st BTR Retract	Turn on fuser motor 121mm/s and move 1st BTR to contact position. 1st BTR retract movement and fuser motor automatically stop at detection of 1st BTR Retract Sensor at retract position.
094-200	1st BTR Retract Sensor	1st BTR Retract Sensor read value Display current level at "On" (H or L)
094-201	2nd BTR Retract Sensor	2nd BTR Retract Sensor read value Display current level at "On" (H or L)
094-202	POB Jam Sensor	Detection of active level of POB Jam Sensor

Table 4 Advanced Finisher Input Codes

Chain Link	Name	Description	Port Level
012-100	Transport Entrance Sensor	Detects paper at Finisher Entrance Sensor	H: No paper detected L: Paper detected
012-110	Regi Clutch On	Status of IOT Regi Clutch (Hot Line)	H: Clutch On L: Clutch Off
012-111	IOT Exit Sensor	Status of IOT Exit Sensor (Hot Line)	H: Paper detected L: No paper detected
012-150	Compile Exit Sensor	Detects paper at Compile Exit Sensor	H: Paper detected L: No paper detected
012-151	Compiler Tray No Paper Sensor	Detects paper at Compiler Tray No Paper Sensor	H: Paper detected L: No paper detected
012-190	H-Transport Entrance Sensor	Detects paper at H-Transport Entrance Sensor	H: Paper detected L: No paper detected
012-220	Front Tamper Home Sensor	Detects the position of Front Tamper	H: Not Home L: Home
012-221	Rear Tamper Home Sensor	Detects the position of Rear Tamper	H: Not Home L: Home
012-241	Stapler Move Position Sensor	Detects the position of Stapler Unit	0: Home 1: Not Home
012-242	Low Staple Sensor	Detects the availability of Stapler and Staple Cartridge	0: With pin 1: Without pin
012-243	Self Priming Sensor	Detects the Ready status of Stapler	H: Ready L: Not Ready
012-244	Staple Home Sensor	Detects the position of Staple Head	H: Home L: Not Home
012-250	Eject Clamp Home Sensor	Detects the home position of the Eject Clamp	H: Home L: Not Home

Table 4 Advanced Finisher Input Codes

Chain Link	Name	Description	Port Level
012-251	Set Clamp Home Sensor	Detects the home position of the Set Clamp	H: Home L: Not Home
012-262	Stacker No Paper Sensor	Detects the presence of paper in Stacker Tray	0: With Finisher 1: Without Finisher
012-263	Stack Encoder Sensor	Detects the encoder pulse of the Stacker	1: When the Encoder Pulse pass the slit
012-264	Stacker Height Sensor 1	Detects the position of Stacker Tray	H: Paper L: No paper
012-265	Stacker Height Sensor 2	Detects the position of Stacker Tray	H: Paper L: No paper
012-271	Punch Home Sensor	Detects the home position of the Puncher	H: Not Home L: Home
012-274	Punch Encoder Sensor	Detects the encoder pulse of the Puncher	H: Blocked L: Exposed
012-275	Punch Box Set Sensor	Detects whether the Punch Box is set	0: Dust Box 1: No Dust Box
012-277	Puncher Detect	Detects the connection of Puncher Unit by shorting wire	H: No Punch Unit L: Punch Unit installed
012-300	Eject Cover Switch	Detects the opening/closing of Eject Cover	H: Open L: Close
012-302	Finisher Front Door Switch	Detects the opening/closing of Front Door	H: Close L: Open
012-303	H-Transport Open Sensor	Detects the open status of covers at H-Transport Unit	H: Cover Open L: Cover Closed
013-101	Knife Home Sensor	Detects the home position of the Folder Knife	H: Not Home L: Home
013-107	Booklet Front Low Staple Switch	Detects Low Staple status at the front of Booklet Stapler and loading status of the cartridge	H: Stapler available L: Stapler not available Set condition of Low Staple and cartridge of a/the Booklet Stapler front side staple detection
013-108	Booklet Rear Low Staple Switch	Detects Low Staple status at the rear of Booklet Stapler and loading status of the cartridge	H: Stapler available L: Stapler not available Set condition of Low Staple and cartridge of a/the Booklet Stapler front side staple detection
013-141	Booklet Front Stapler Home Switch	Detects the position of Booklet Front Stapler Head	H: Not Home L: Home
013-142	Booklet Rear Stapler Home Switch	Detects the position of Booklet Rear Stapler Head	H: Not Home L: Home

Table 4 Advanced Finisher Input Codes

Chain Link	Name	Description	Port Level
013-143	Booklet Stapler Move Home Sensor	Detects the home position of Booklet Stapler Unit	H: Not Home L: Home
013-144	Booklet Stapler Move Position Home Sensor	Detects the staple position of Booklet Stapler Unit	H: Detected L: Not detected
013-160	Folder Detect	Detects the connection of Folder Unit	H: Not connected L: Connected
013-161	Booklet Detect	Detects the connection of Booklet Unit	H: Not connected L: Connected
013-300	Booklet Cover Open Switch	Detects the opening/closing of Booklet Cover	H: Open L: Closed
013-301	Booklet Safety Switch	Detects obstructions at the lower part of Booklet Unit	24V: Normal Closed 0V: Malfunction (when obstruction is detected)

Table 5 Advanced Finisher Output Codes

Chain Link	Name	Description	Port Level
012-013	Sub Paddle Solenoid On/Off	Turns the Sub Paddle Solenoid On/Off	H: Off L: On
012-018	Transport Motor Reverse On/Off	Transport Motor reverse rotation	H: Enable L: Disable
012-020	Front Tamper Motor Low Front On/Off	Front Tamper Front shift - Low Speed	H: Disable L: Enable
012-022	Front Tamper Motor High Front On/Off	Front Tamper Front shift - High Speed	H: Disable L: Enable
012-023	Front Tamper Motor Low Rear On/Off	Front Tamper Rear shift - Low Speed	H: Disable L: Enable
012-025	Front Tamper Motor High Rear On/Off	Front Tamper Rear shift - High Speed	H: Disable L: Enable
012-026	Rear Tamper Motor Low Front On/Off	Rear Tamper Front shift - Low Speed	H: Disable L: Enable
012-028	Rear Tamper Motor High Front On/Off	Rear Tamper Front shift - High Speed	H: Disable L: Enable
012-029	Rear Tamper Motor Low Rear On/Off	Rear Tamper Rear shift - Low Speed	H: Disable L: Enable

Table 5 Advanced Finisher Output Codes

Chain Link	Name	Description	Port Level
012-031	Rear Tamper Motor High Rear On/Off	Rear Tamper Rear shift - High Speed	H: Disable L: Enable
012-032	H-Transport Motor 1 On/Off	Xport Motor forward rotation - Speed 1 (Max. Speed)	H: Enable L: Disable
012-033	H-Transport Motor 2 On/Off	Xport Motor forward rotation - Speed 2 (High Speed)	H: Enable L: Disable
012-034	H-Transport Motor 3 On/Off	Xport Motor forward rotation - Speed 3 (Medium-High Speed)	H: Enable L: Disable
012-035	H-Transport Motor 4 On/Off	Xport Motor forward rotation - Speed 4 (Medium Speed)	H: Enable L: Disable
012-036	Transport Motor 1 On/Off	Transport Motor forward rotation - Speed 1 (High Speed)	H: Enable L: Disable
012-037	Transport Motor 2 On/Off	Transport Motor forward rotation - Speed 2 (Medium Speed)	H: Enable L: Disable
012-038	Transport Motor 3 On/Off	Transport Motor forward rotation - Speed 3 (Low Speed)	H: Enable L: Disable
012-039	H-Transport Motor Reverse On/Off	Xport Motor reverse rotation	H: Enable L: Disable
012-040	Stapler Move Motor Low Front On/Off	Stapler Move Front shift - Low Speed	H: Enable L: Disable Dir= H:Rear L:Front
012-042	Stapler Move Motor High Front On/Off	Stapler Move Front shift - High Speed	H: Enable L: Disable Dir= H:Rear L:Front
012-043	Stapler Move Motor Low Rear On/Off	Stapler Move Rear shift - Low Speed	H: Enable L: Disable Dir= H:Rear L:Front
012-045	Stapler Move Motor High Rear On/Off	Stapler Move Rear shift - High Speed	H: Enable L: Disable Dir= H:Rear L:Front
012-046	Staple Motor Forward On/Off	Staple Motor forward rotation This will take longer when a fail has occurred	H: Enable L: Disable Dir= H: CW L: CCW MotStop= H: Normal L: Stop
012-047	Staple Motor Reverse On/Off	Staple Motor reverse rotation	H: Disable L: Enable Dir= H: CW L: CCW MotStop= H: Normal L: Stop
012-050	Set Clamp Clutch On/Off	Set Clamp Paddle rotation	L: Clutch On H: Clutch Off

Table 5 Advanced Finisher Output Codes

Chain Link	Name	Description	Port Level
012-052	Eject Clamp UP	Eject Clamp Roll Up operation Eject Motor reverse rotation - High Speed	H: Enable L: Disable
012-053	Eject Clamp Down	Eject Clamp Roll Down operation Eject Motor reverse rotation - High Speed	H: Enable L: Disable Dir= H: CW L: CCW
012-054	Eject Motor Low Forward On/Off	Eject Motor forward rotation - Low Speed	H: Enable L: Disable
012-055	Eject Motor High Forward On/Off	Eject Motor forward rotation - High Speed	H: Enable L: Disable Dir= H: CW L: CCW
012-060	Stacker Motor Up On/Off	Stacker Tray upward movement Does not operate when the Stacker Tray No Paper Sensor is On	MotUP= H: MotUpOn L: MotUpOff MotDown= H: MotDownOn L: MotDownOff
012-061	Stacker Motor Down On/Off	Stacker Tray downward movement Does not operate when paper Full is detected	MotUP= H: MotUpOn L: MotUpOff MotDOWN= H: MotDownOn L: MotDownOff
012-074	Punch Motor Home Move	Punch Motor Home operation This will take longer when a fail has occurred	MotCCW= MotA: H MotB: L MotCW= MotA: L MotB: H
012-077	Punch (2Hole)	2-hole Punch operation This will take longer when a fail has occurred	MotCCW= MotA: H MotB: L MotCW= MotA: L MotB: H

Table 5 Advanced Finisher Output Codes

Chain Link	Name	Description	Port Level
012-078	Punch (3Hole)	3-hole Punch operation (For machines without 3-hole punch, this will be anything other than 2-hole operation or it will be empty rotation) This will take longer when a fail has occurred	MotCCW= MotA: H MotB: L MotCW= MotA: L MotB: H
012-079	Punch (4Hole)	4-hole Punch operation (For machines without 4-hole punch, this will be anything other than 2-hole operation or it will be empty rotation) This will take longer when a fail has occurred	MotCCW= MotA: H MotB: L MotCW= MotA: L MotB: H
013-022	Knife Motor Forward On/Off	Folder Knife Motor forward rotation	MotCCW= MotNrml: H MotRev: L MotCW= MotNrml: L MotRev: H
013-023	Knife Motor Reverse On/Off	Folder Knife Motor reverse rotation	MotCCW= MotNrml: H MotRev: L MotCW= MotNrml: L MotRev: H
013-024	Booklet Front Stapler Motor Forward On/Off	Booklet Front Stapler Motor forward rotation This will take longer when a fail has occurred	MotCCW= MotNrml: L MotRev: H MotCW= MotNrml: H MotRev: L MotStop= H: Normal L: Stop

Table 5 Advanced Finisher Output Codes

Chain Link	Name	Description	Port Level
013-025	Booklet Front Stapler Motor Reverse On/Off	Booklet Front Stapler Motor reverse rotation	MotCCW= MotNrml:L MotRev:H MotCW= MotNrml:H MotRev:L MotStop= H:Normal L:Stop
013-026	Booklet Rear Stapler Motor Forward On/Off	Booklet Rear Stapler Motor forward rotation This will take longer when a fail has occurred	MotCCW= MotNrml:L MotRev:H MotCW= MotNrml:H MotRev:L MotStop= H:Normal L:Stop
013-027	Booklet Rear Stapler Motor Reverse On/Off	Booklet Rear Stapler Motor reverse rotation	MotCCW= MotNrml:L MotRev:H MotCW= MotNrml:H MotRev:L MotStop= H:Normal L:Stop
013-028	Booklet Stapler Move Motor In	Drives the Booklet Stapler Move Motor and moves the Booklet Stapler inside	H: Enable L: Disable Dir= H:CCW(OUT) L:CW(IN)
013-029	Booklet Stapler Move Motor Out	Drives the Booklet Stapler Move Motor and moves the Booklet Stapler outside	H: Enable L: Disable Dir= H:CCW(OUT) L:CW(IN)

Table 6 Professional Finisher Input Codes

Chain-Link	Component Name	Port Level
012-100	Xport Ent. Sensor	H: No paper L: Paper
012-101	Buffer Path Sensor	H: No paper L: Paper
012-102	Gate Sensor	H: No paper L: Paper
012-110	Regi Clutch On	H: Clutch On L: Clutch Off
012-111	IOT Exit Sensor	H: No paper L: Paper
012-115	Top Tray Exit Sensor	H: No paper L: Paper
012-150	Compile Exit Sensor	H: No paper L: Paper
012-151	Compiler Tray No Paper Sensor	H: No paper L: Paper
012-190	H-Xport Ent. Sensor	H: No paper L: Paper
012-191	H-Xport Exit Sensor	H: No paper L: Paper
012-200	Side Regi Sensor 1	H: No paper L: Paper
012-201	Side Regi Sensor 2	H: No paper L: Paper
012-215	Top Tray Full Sensor	H: Not Full L: Full
012-220	Front Tamper Home Sensor	H: Not Home L: Home
012-221	Rear Tamper Home Sensor	H: Not Home L: Home
012-241	Stapler Move Position Sensor	H: Home L: Not Home
012-242	Low Staple Sensor	H: Staples detected L: No staples detected
012-243	Self Priming Sensor	H: Ready L: Not Ready
012-244	Staple Home Sensor	H: Home L: Not Home
012-250	Eject Clamp Home Sensor	H: Home L: Not Home
012-251	Set Clamp Home Sensor	H: Home L: Not Home
012-260	Upper Limit Sensor	H: Not Limit L: Limit

Table 6 Professional Finisher Input Codes

Chain-Link	Component Name	Port Level
012-262	Stacker No Paper Sensor	H: Finisher present L: No Finisher
012-263	Stack Encoder Sensor	H: When the Encoder pulse pass the slit
012-264	Stacker Height Sensor 1	H: No paper L: Paper
012-265	Stacker Height Sensor 2	H: No paper L: Paper
012-270	Puncher Move Home Sensor	H: Home L: Not Home
012-271	Puncher Home Sensor	H: Not Home L: Home
012-272	Puncher Front Sensor	H: Not Home L: Home
012-273	Punch Hole Select Sensor	H: Not Home L: Home
012-274	Puncher Motor Sensor	H: Unblocked L: Blocked
012-275	Punch Box Set Sensor	H: Present L: Missing
012-276	Punch Full Sensor	H: OK L: Full
012-282	Decurler Home Sensor	H: Home L: Not Home
012-300	Eject Cover SW	H: Open L: Close
012-302	Finisher Front Door SW	H: Close L: Open
012-303	H-Xport Interlock Sensor	H: Close L: Open
013-101	Booklet Knife Home Sensor	Home
013-102	Booklet Compile No Paper Sensor	Paper present
013-103	Booklet Folder Roll Exit Sensor	Paper present
013-104	Booklet Drawer Set Sensor	Drawer open
013-105	Booklet Stapler Ready	Not Ready
013-106	Booklet Stapler Error	Error
013-107	Booklet Low Staple F SW	Non Low Staple and cartridge present
013-108	Booklet Low Staple R SW	H: Staple and cartridge present
013-134	Booklet Tamper Home Sensor F	Home
013-135	Booklet In Sensor	No paper
013-136	Booklet Tamper Home Sensor R	Home
013-137	Booklet End Guide Home Sensor	Home

Table 6 Professional Finisher Input Codes

Chain-Link	Component Name	Port Level
013-139	Booklet No Paper Sensor	No paper
013-140	Booklet Knife Folding Sensor	Fold Position

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
012-001	Fin Transport Motor 350 On/Off	H: Enable L: Disable
012-002	Fin Transport Motor 600 On/Off	H: Enable L: Disable
012-003	Regi Motor 285F On/Off	H: Enable L: Disable
012-004	Regi Motor 350F On/Off	H: Enable L: Disable
012-005	Regi Motor 600F On/Off	H: Enable L: Disable
012-006	Regi Motor 285R On/Off	H: Enable L: Disabled Dir = H: CW L: CCW
012-007	Exit Motor 285F On/Off	H: Enable L: Disable Dir = H: CW L: CCW
012-008	Exit Motor 350F On/Off	H: Enable L: Disable
012-009	Exit Motor 600F On/Off	H: Enable L: Disable
012-010	Exit Motor 285R On/Off	H: Enable L: Disable Dir = H: CW L: CCW
012-011	Transport Gate Solenoid Top	SoIFIN = H: Sol Off L: Sol Fin On SoITOP = H: Sol Off; L: Sol Top On

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
012-012	Transport Gate Solenoid Stacker	SolFIN = H: Sol Off L: Sol Fin On SolTOP = H: Sol Off L: Sol Top On
012-013	Sub Paddle Solenoid On/Off	H: Sol Off L: Sol On
012-015	Buffer Gate Solenoid STK	SolSTK= H:Sol Off L:Sol On SolBUF= H:Sol Off L:Sol On
012-016	Buffer Gate Solenoid BUF	SolSTK = H: Sol Off L: Sol On SolBUF = H: Sol Off L: Sol On
012-020	Front Tamper Motor Low Front On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-021	Front Tamper Motor Middle Front On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-022	Front Tamper Motor High Front On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-023	Front Tamper Motor Low Rear On/Off	H: Disable L: Enable Dir = H: Rear L: Front

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
012-024	Front Tamper Motor Middle Rear On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-025	Front Tamper Motor High Rear On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-026	Rear Tamper Motor Low Front On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-027	Rear Tamper Motor Middle Front On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-028	Rear Tamper Motor High Front On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-029	Rear Tamper Motor Low Rear On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-030	Rear Tamper Motor Middle Rear On/Off	H: Disable L: Enable Dir = H: Rear L: Front

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
012-031	Rear Tamper Motor High Rear On/Off	H: Disable L: Enable Dir = H: Rear L: Front
012-041	Stapler Move Motor Middle Front On/Off	H: Enable L: Disable Dir = H: Rear L: Front
012-042	Stapler Move Motor High Front On/Off	H: Enable L: Disable Dir = H: Rear L: Front
012-044	Stapler Move Motor Middle Rear On/Off	H: Enable L: Disable Dir = H: Rear L: Front
012-045	Stapler Move Mot High Rear On/Off	H: Enable L: Disable Dir = H: Rear L: Front
012-046	Staple Motor Forward On/Off	H: Disable L: Enable Dir = H: CW L: CCW MotStop= H:Normal L:Stop

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
12-047	Staple Motor Reverse On/Off	H: Disable L: Enable Dir = H: CW L: CCW MotStop = H: Normal L: Stop
012-050	Set Clamp Clutch On/Off	H: Clutch Off L: Clutch On
012-051	Sub Paddle Solenoid	H: On L: Off
012-052	Eject Clamp Motor Up On/Off	Mot CW = H: Mot Off L: Mot CW On Mot CCW = H: Mot Off L: Mot CCW On
012-053	Eject Clamp Motor Down On/Off	Mot CW = H: Mot Off L: Mot CW On Mot CCW = H: Mot Off L: Mot CCW On
012-054	Eject Motor Low Forward On/Off	H: Enable L: Disable Dir = H: CW L: CCW
012-055	Eject Motor High Forward On/Off	H: Enable L: Disable Dir = H: CW L: CCW
012-056	Eject Motor Low Reverse On/Off	H: Enable L: Disable Dir = H: CW L: CCW

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
012-057	Eject Motor High Reverse On/Off	H: Enable L: Disable Dir = H: CW L: CCW
012-060	Stacker Motor Up On/Off	Mot Up = H: Mot Up On L: Mot Up Off Mot Down = H: Mot Down On L: Mot Down Off
012-061	Stacker Motor Down On/Off	Mot Up = H: Mot Up On L: Mot Up Off Mot Down = H: Mot Down On L: Mot Down Off
012-070	Puncher Move Motor Low Front On/Off	H: Enable L: Disable Dir = H: Front L: Rear
012-071	Puncher Move Motor High Front On/Off	H: Enable L: Disable Dir = H: Front L: Rear
012-072	Puncher Move Motor Low Rear On/Off	H: Enable L: Disable Dir = H: Front L: Rear
012-073	Puncher Move Motor High Rear On/Off	H: Enable L: Disable Dir = H: Front L: Rear

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
012-074	Puncher Motor 2 Hole Home Move	Mot Front = H: Mot Off L: Mot Front On Mot Rear = H: Mot Off L: Mot Rear On Speed = H: High Speed L: Low Speed
012-075	Puncher Motor 3 Hole Home Move	Mot Front = H: Mot Off L: Mot Front On Mot Rear = H: Mot Off L: Mot Rear On Speed = H: High Speed L: Low Speed
012-076	Puncher Motor 4 Hole Home Move	Mot Front = H: Mot Off L: Mot Front On Mot Rear = H: Mot Off L: Mot Rear On Speed = H: High Speed L: Low Speed
012-077	Punch (2 Hole)	Mot Front = H: Mot Off L: Mot Front On Mot Rear = H: Mot Off L: Mot Rear On Speed = H: High Speed L: Low Speed

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
012-078	Punch (3 Hole)	Mot Front = H: Mot Off L: Mot Front On Mot Rear = H: Mot Off L: Mot Rear On Speed = H: High Speed L: Low Speed
012-079	Punch (4 Hole)	Mot Front = H: Mot Off L: Mot Front On Mot Rear = H: Mot Off L: Mot Rear On Speed = H: High Speed L: Low Speed
012-0910	H XPort Motor 145 On/Off	H: Enable L: Disable
012-091	H XPort Motor 242 On/Off	H: Enable L: Disable
013-008	Booklet Folder Roll Motor Forward On/Off	H: On L: Off Booklet Tamper R & F must be in the Home position
013-009	Booklet Folder Roll Motor Reverse On/Off	H: On L: Off Booklet Tamper R & F must be in the Home position
013-010	Booklet Knife Flapper Solenoid	H: On L: Off
013-011	Booklet End Guide Motor Low Down	H: Enable L: Disable Dir = H: Up L: Down

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
013-013	Booklet End Guide Motor Hi Down	H: Enable L: Disable Dir = H: Up L: Down
013-014	Booklet End Guide Motor Low Up	H: Enable L: Disable Dir = H: Up L: Down
013-016	Booklet End Guide Motor Hi Up	H: Enable L: Disable Dir = H: Up L: Down
013-017	Booklet Staple On	Performs stapling for F & R positions H: Off L: On (Turns On by H Æ L)
013-020	Tray Belt Drive Motor On/Off	H: On L: Off
013-021	Booklet Paddle Motor On/Off	H: Off L: On
013-048	Booklet Tamper Motor F Rear On/Off 1	Drives the Tamper home if away from home position H: Disable L: Enable
013-049	Booklet Tamper Motor F Rear On/Off 2	Drives the Tamper home if away from home position H: Disable L: Enable
013-050	Booklet Tamper Motor F Rear On/Off 3	Drives the Tamper home if away from home position H: Disable L: Enable
013-051	Booklet Tamper Motor F Rear On/Off 4	Drives the Tamper home if away from home position H: Disable L: Enable
013-052	Booklet Tamper Motor F Front On/Off 1	Drives the Tamper home if away from home position H: Disable L: Enable

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
013-053	Booklet Tamper Motor F Front On/Off 2	Drives the Tamper home if away from home position H: Disable L: Enable
013-054	Booklet Tamper Motor F Front On/Off 3	Drives the Tamper home if away from home position H: Disable L: Enable
013-055	Booklet Tamper Motor F Front On/Off 4	Drives the Tamper home if away from home position H: Disable L: Enable
013-056	Booklet Tamper Motor R Front 1 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable
013-057	Booklet Tamper Motor R Front 2 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable
013-058	Booklet Tamper Motor R Front 3 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable
013-059	Booklet Tamper Motor R Front 4 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable
013-060	Booklet Tamper Motor R Rear 1 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable
013-061	Booklet Tamper Motor R Rear 2 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable
013-062	Booklet Tamper Motor R Rear 3 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable
013-063	Booklet Tamper Motor R Rear 4 On/Off	Drives the Tamper home if away from home position H: Disable L: Enable

Table 7 Professional Finisher (C) Output Codes

Chain-Link	Component Name	Port Level
013-064	Booklet Paper Path Motor 1 On/Off	H: Enable L: Disable Dir = H: REV L: FWD
013-065	Booklet Paper Path Motor 2 On/Off	H: Enable L: Disable Dir = H: REV L: FWD
13-066	Booklet Paper Path Motor 3 On/Off	H: Enable L: Disable Dir = H: REV L: FWD
13-067	Booklet Paper Path Motor 4 On/Off	H: Enable L: Disable Dir = H: REV L: FWD
13-068	Booklet Gate Solenoid Stacker	Sol Stacker: H Sol Booklet: L Stacker SolStacker:L SolBooklet:H
13-069	Booklet Gate Solenoid Booklet	Sol Stacker: H Sol Booklet: L Stacker SolStacker:L SolBooklet:H

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 - [Entering Service Diagnostics](#).
2. Touch **Diagnostics**.
3. Touch **dc711 Roller Test**.
4. A dc711 Roller screen is displayed listing the components.
5. Select the component for test.
6. Touch **Start** to perform the test.
7. Touch **Stop** to stop the test.
8. Touch the **Back Arrow** to return to the Diagnostics menu.



Figure 5 dc711 Roller Test

dc741 Paper Size Switch

The dc741 Paper Size Switch routine monitors the signal from Tray 1 ~ 5 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 - [Entering Service Diagnostics](#).
2. Touch **Diagnostics**.
3. Touch **dc741 Paper Size Switch Test**.
4. A dc741 Paper Size Switch screen is displayed listing the tests.
5. Select the target tray.
6. The current status of the switches and media size represented appear.
7. Touch the **Back Arrow** to exit.

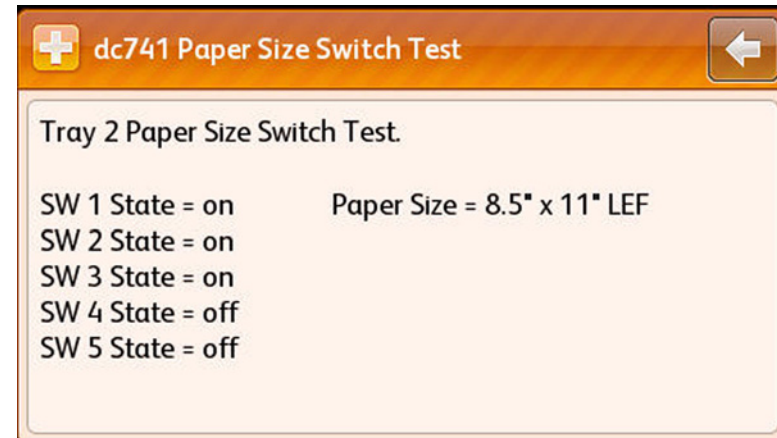


Figure 6 dc741 Paper Size Switch

8. Touch the **Back Arrow** one more time to return to the Diagnostics menu.

dc402 LPH E2PROM Self Test

The dc402 LPH E2PROM Self Test exercises self-diagnostic of E2PROM loaded on the LED Print Head.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Diagnostics**.
3. Touch **dc402 LPH E2PROM Self Test**.
4. A dc402 LPH E2PROM Self Test is displayed listing the test results.
5. Touch the **Back Arrow** to return to the Diagnostics menu.

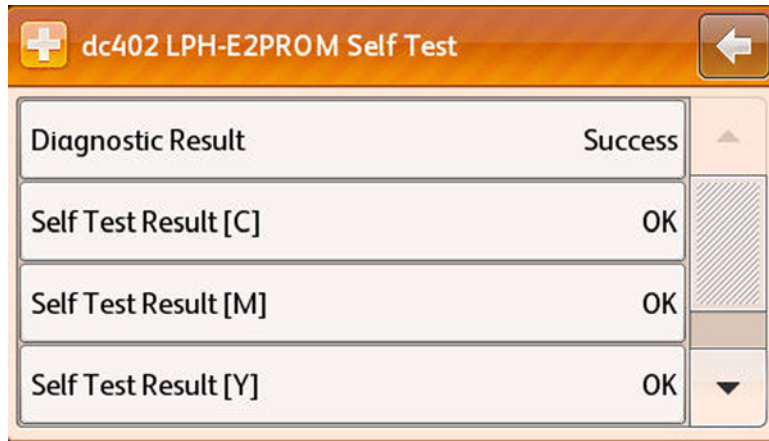


Figure 7 dc402 E2PROM Self Test

dc671 Regi Check Cycle/Read

The dc671 Regi Check Cycle/Read checks and adjusts color registration.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Diagnostics**.
3. Touch **dc671 Regi Check Cycle/Read**.
4. A dc671 Regi Check Cycle/Read screen is displayed.
5. Touch **Start** to begin the test.



Figure 8 Starting dc671 Regi Check Cycle/Read Test

6. A Start Completed Successful screen is displayed briefly when the test is complete.



Figure 9 Completing Regi Check Cycle/Read

7. Touch **Read** to display the last values generated by the test.

NOTE: Values are displayed as OK or NG.



Figure 10 dc671 Result - Passed

A failed result displays the error or errors that are causing the error condition.

8. Touch the **Back Arrow** to return to the Diagnostics menu.

dc673 RegiCon Sensor Check

The dc673 RegiCon Sensor Check routine measures and displays results of RegiCon Sensor Regi Mis-regi quantity and self-diagnosis. Any misregistration detected in the MOB Sensor is displayed on the UI screen. The result is compared with the target value to determine the OK or NG status. Correction is not performed.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Diagnostics**.
3. Touch **dc673 RegiCon Sensor Check**.
4. Touch **Start** to begin the test.

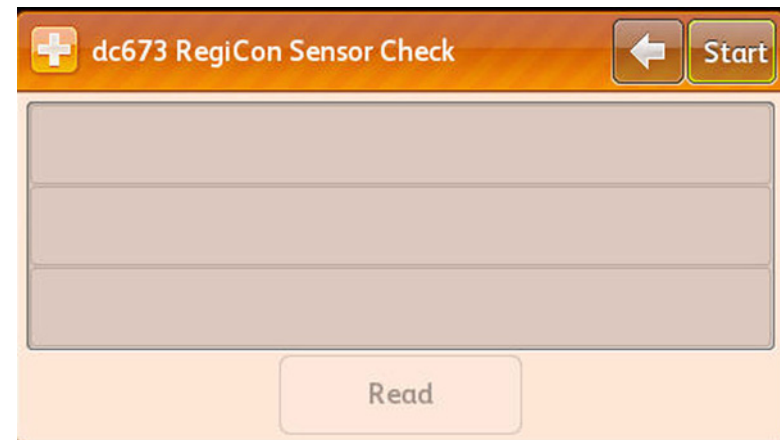


Figure 11 Starting dc673 RegiCon Sensor Check

5. A Start Completed Successful screen is displayed briefly when the test is complete.



Figure 12 Completing dc673 RegiCon Sensor Check

6. Touch **Read** to display the last values generated by the test.

NOTE: Value is displayed as OK or NG.

7. Touch the **Back Arrow** to return to the Diagnostics menu.

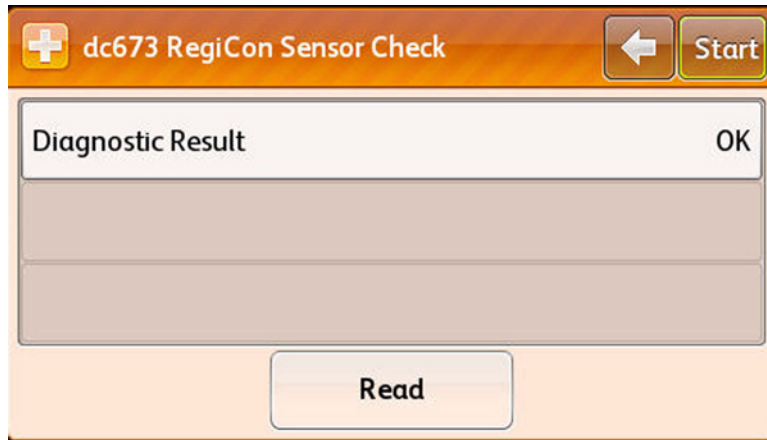


Figure 13 RegiCon Sensor Check Result

Adjustments

dc128 Fold/Staple Position Read/Adjust

The dc128 Fold/Staple Position Read/Adjust routine provides access to NVM locations affecting the Finisher folding and staple position setup. There are several different adjustments, depending on the model of the finisher.

Refer to Adjustment procedures for detail adjustment information.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Adjustments**.
3. Touch **dc128 Fold/Staple Position Read/Adjust**.
4. A dc128 Fold/Staple Position Adjust screen is displayed listing the fold positions.
 - Booklet Bi Fold Position > B4
 - Booklet Bi Fold Position < B4
 - Stapled Booklet 2 Sheet Fold Position > B4
 - Stapled Booklet 2 Sheet Fold Position < B4
 - Stapled Booklet 2 Sheet Staple and Fold Position > B4
 - Stapled Booklet 2 Sheet Staple and Fold Position < B4
 - Plain Booklet 2 Sheet Fold Position
 - Plain Booklet 3 or More Sheet Fold Position
 - Stapled Booklet 3 Sheet Fold Position < B4
 - Stapled Booklet 4 Sheet Fold Position < B4
 - Stapled Booklet 5/7 Sheet Fold Position < B4
 - Stapled Booklet 8/14 Sheet Fold Position < B4
 - Stapled Booklet 15 Sheet Fold Position < B4
 - Stapled Booklet 15 Sheet Fold Position > B4
 - Stapled Booklet 3 Sheet Staple and Fold Position
 - Stapled Booklet 4 Sheet Staple and Fold Position
 - Stapled Booklet 5/7 Sheet Staple and Fold Position
 - Stapled Booklet 8/14 Sheet Staple and Fold Position
 - Stapled Booklet 3 Fold Position > B4
 - Stapled Booklet 4 Fold Position > B4
 - Stapled Booklet 5/7 Fold Position > B4
 - Stapled Booklet 8/14 Fold Position > B4
 - Booklet Tamper Shift Position

- Select the appropriate adjust position to test. Make sure the tray you select has media that matches the test.

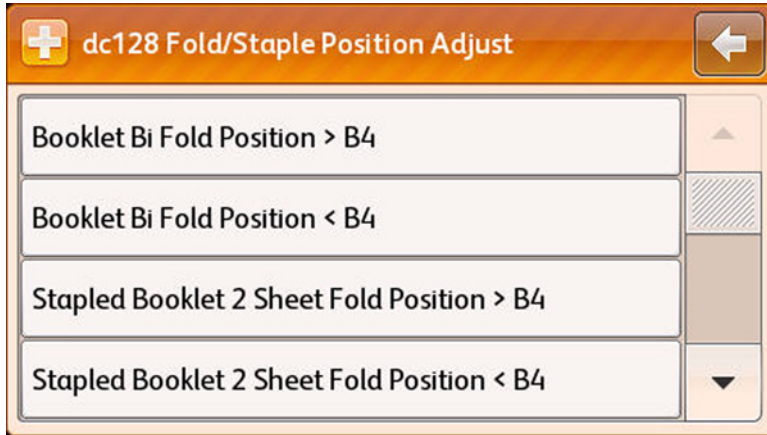


Figure 1 Selecting the Adjustment Position

- The printer prints the pages.
- Enter the desired value (within the min./max range given).
- Touch **Write** to save the new value.
- Touch **Start** to print or reprint the pages.
- A Print in Progress screen is displayed.
- Verify the changes. Make necessary changes as needed.
- Touch **X** to exit.

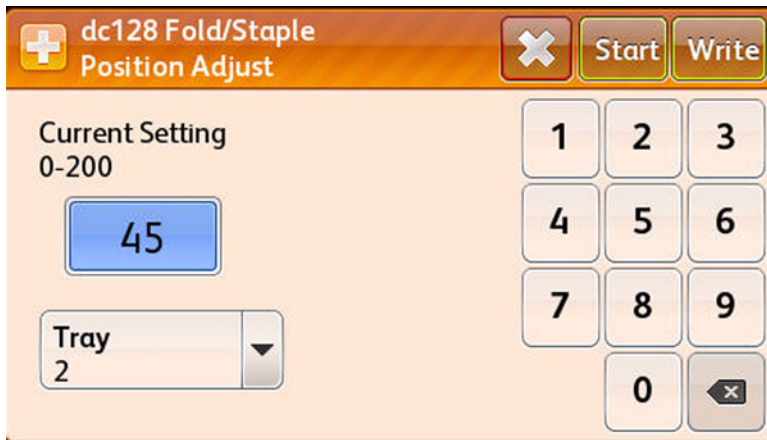


Figure 2 Entering the Value

- Touch the **Back Arrow** to return to the Adjustments menu.

dc131 NVM Read/Write

The dc131 NVM Read/Write routine provides access to read and modify specific NVM values within the I/P Board and access and read IOT NVM.

CAUTION

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

- Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
- Touch **Adjustments**.
- Touch **dc131 NVM Read/Write**.

NOTE: The NVM ID has two numeric fields; the NVM value range is from 1 to 999. Not all NVM fields can be modified. Refer to the *Phaser 7800NVM Values table (Phaser_7800_NVM_Values.pdf)* for additional information.

Reading NVM Value

- In the left field, enter the Chain number.
- In the right field, enter the Link number.
- Touch **Read** to get the value.

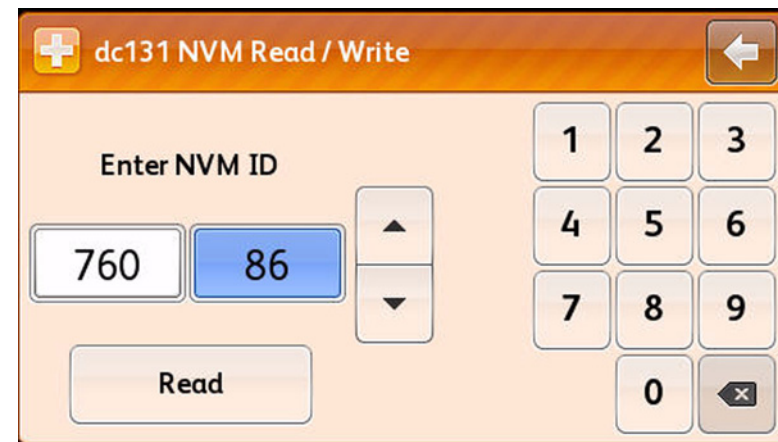


Figure 3 Entering the Data

- A result screen is displayed.

NVM ID	Description	Value	Default
760-86	Skoffset Safe Margin	2	2

Figure 4 Reading the NVM Value

- Touch the **Back Arrow** to exit.
- Touch the **Back Arrow** one more time to return to the Adjustments menu.

Writing NVM Value

- Perform the [Reading NVM Value](#) procedure.

NOTE: The Write button will not be accessible if the Value field is the same as the current value.

- Select the NVM ID to write.

NVM ID	Description	Value	Default
760-86	Skoffset Safe Margin	2	2

Figure 5 Selecting the NVM ID

- Touch the +/- button to toggle the value to positive or negative.
- Touch the value field and enter the desired value.
- Touch the **Write** button to perform the NVM Write routine.
- Touch the **Back Arrow** to exit. Touch the **Back Arrow** one more time to exit.

Value of Skoffset Safe Margin

+/- 2

Write

1 2 3
4 5 6
7 8 9
0

Figure 6 Writing NVM Value

- Touch the **Back Arrow** to return to the Adjustments menu.

dc301 NVM Initialization

CAUTION

Use the NVM Initialization procedure as a last option when servicing the Phaser 7800.

The dc301 NVM Initialization routine resets selected NVM to their factory default settings. NVM areas are defined by domain.

DC301 Finisher Notes

These Finisher values must be set after running dc301.

Table 1 Finisher Values

Chain Link	Description
763-011	Punch Detect
763-012	Booklet Detect
763-013	Mailbox Detect
763-981	Decurler Detect

Procedure

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Adjustments**.
3. Touch **dc301 NVM Initialization**.
4. A dc301 NVM Initialization screen is displayed.
5. Touch the Domain option (**Controller** or **Engine**) to reset.
6. Touch **User**, **System**, or **All**.
7. Touch **Initialize** to start the process.

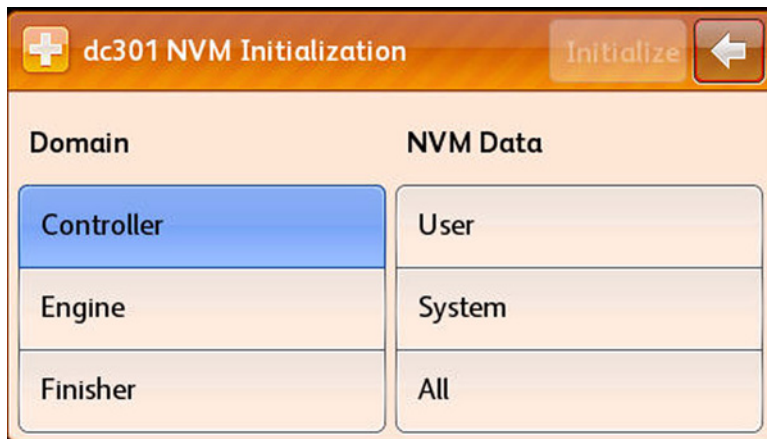


Figure 7 Selecting the NVM Domain and Data

8. A prompt appears to confirm the initialization request. Touch **Initialize** to reset NVM.

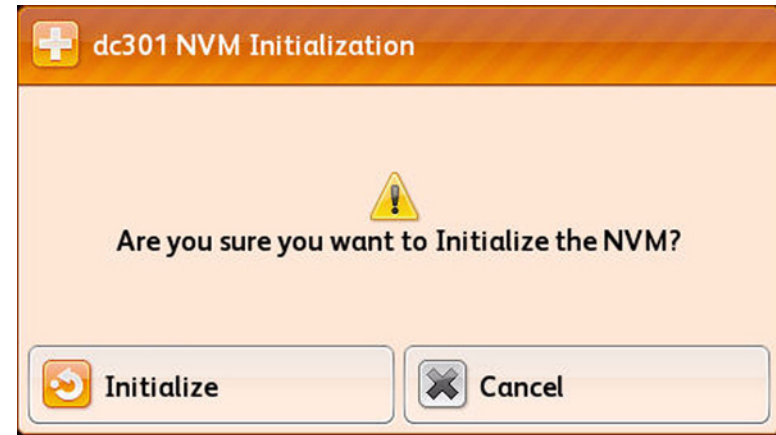


Figure 8 Initializing NVM

9. After confirmation, the display returns to the Adjustments menu and status messages appear at the top of the display during the reset process.

NOTE: Engine and Finisher domains reset system NVM for the target board. Select **Exit and Reboot** during Call Closeout after any NVM initialization.

dc361 NVM Save/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 backup copy of I/P 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.

Saving NVM

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Adjustments**.
3. Touch **dc361 NVM Save/Restore**.
4. A dc361 NVM Save/Restore is displayed.
5. Touch **Save** to start the process.

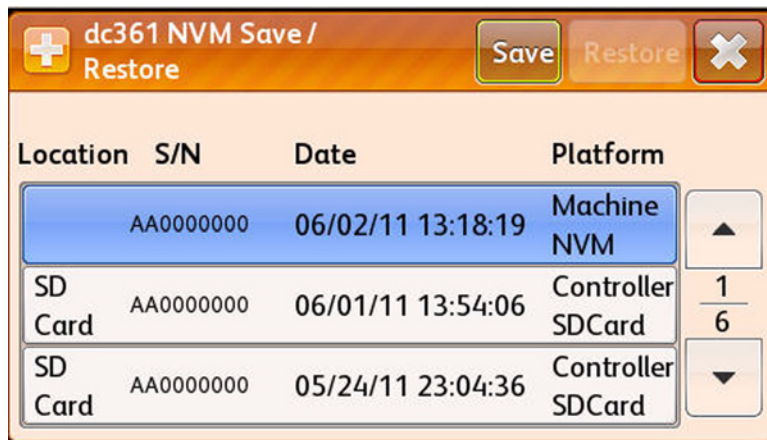


Figure 9 Saving NVM

6. A saving in progress screen is displayed.

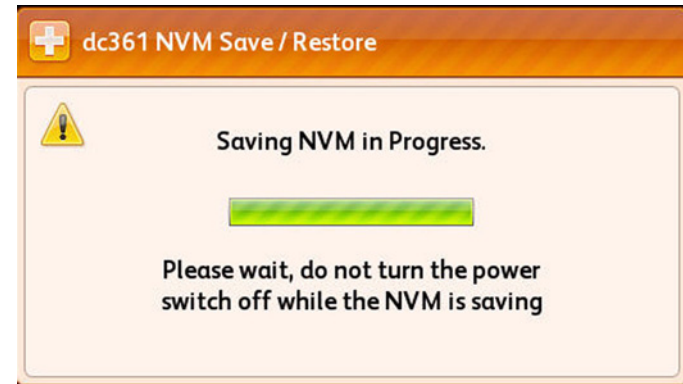


Figure 10 Saving in progress

7. After confirmation, the display returns to the Adjustments menu.

Restoring NVM

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Adjustments**.
3. Touch **dc361 NVM Save/Restore**.
4. A dc361 NVM Save/Restore is displayed.
5. Select the location of the file to be restore. Then touch **Restore**.
 - Machine NVM
 - Controller SD Card
 - NVM EEPROM

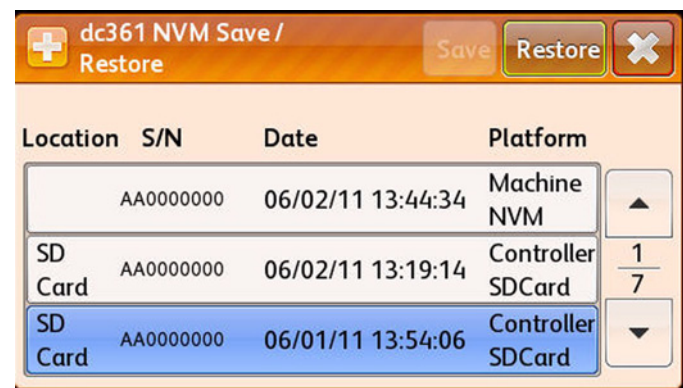


Figure 11 Selecting the NVM File

6. A Restore NVM In Progress window appears.
7. A result window appears displaying the NVM Restore process status (Complete or Failed).

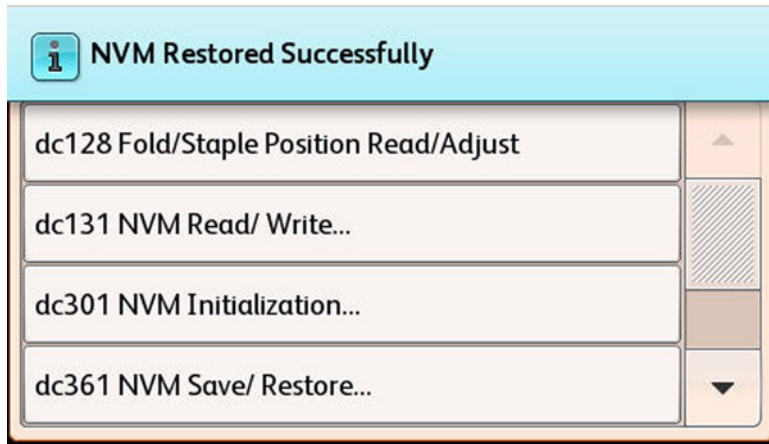


Figure 12 NVM Restore Complete

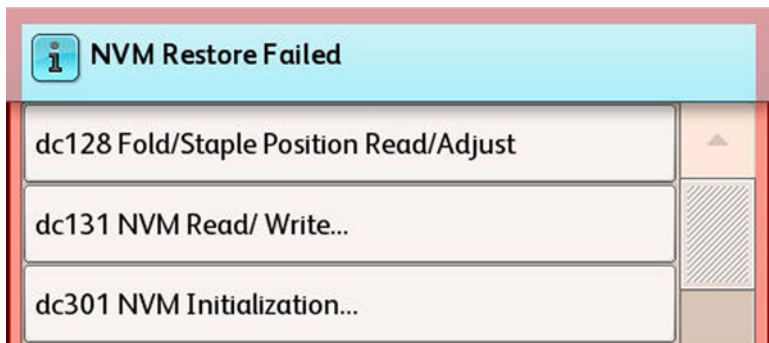


Figure 13 NVM Restore Failed

NOTE: Select **Exit and Reboot** during Call Closeout after any restoring of NVM parameters.

dc949 Initial ATC Setup/Read

The dc949 Initial ATC Setup/Read routine sets up Initial ATC Setup Parameter. This procedure is used to read the ATC parameters from a developer with a known and desired toner concentration so that the tag value can be set to match.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Adjustments**.
3. Touch **dc949 Initial ATC Setup/Read**.
4. A progress screen appears showing status message at the top of the display **ATC Setup Started** while the printer performs the setup.

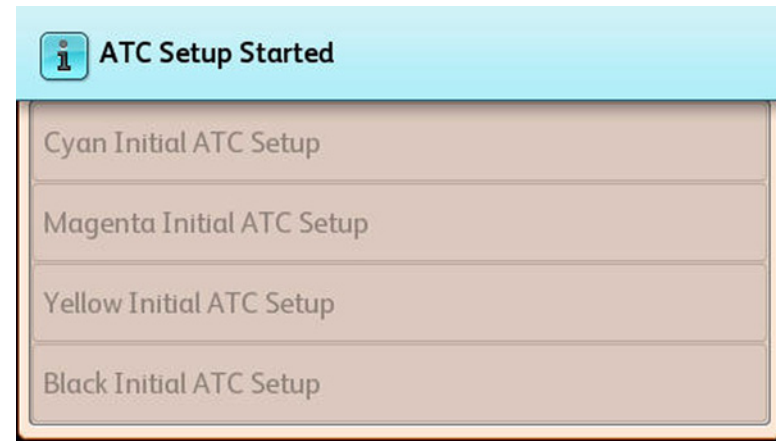


Figure 14 ATC Setup Progress

- When the process is complete, a progress screen appears showing the status message at the top of the display **Start Completed Successfully**.

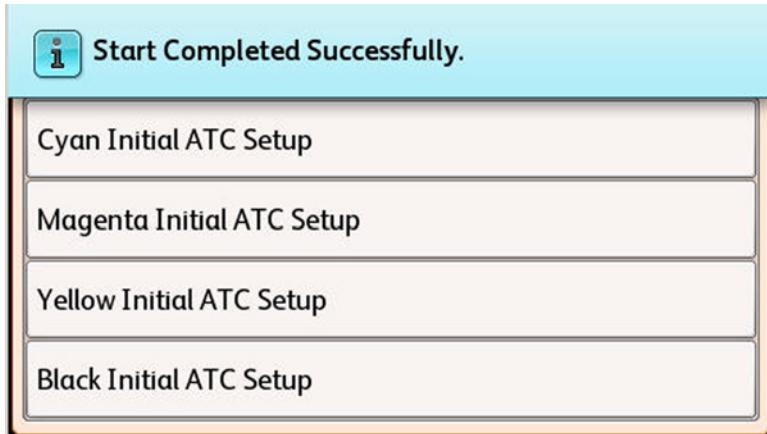


Figure 15 ATC Setup Complete

- Select the color to view the values for that color.
 - ATC Measurement Value: 0 ~1023
 - ATC Target Value: 0 ~1023
 - Measurement Result: OK, NG
 - Setup Result: OK, NG
- Touch **X** to exit the value screen.

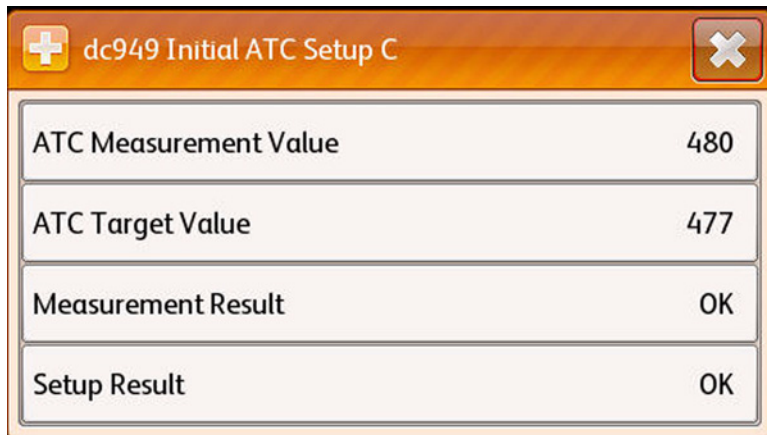


Figure 16 ATC Setup Values

- Touch the **Back Arrow** to return to the Adjustments menu.

dc950 ATC Sensor Setup

The dc950 ATC Sensor Setup routine adjusts the ATC Sensor output value from the bar coded number on the ATC sensor.

- Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
- Touch **Adjustments**.
- Touch **dc950 ATC Sensor Setup**.
- Touch the color to setup.

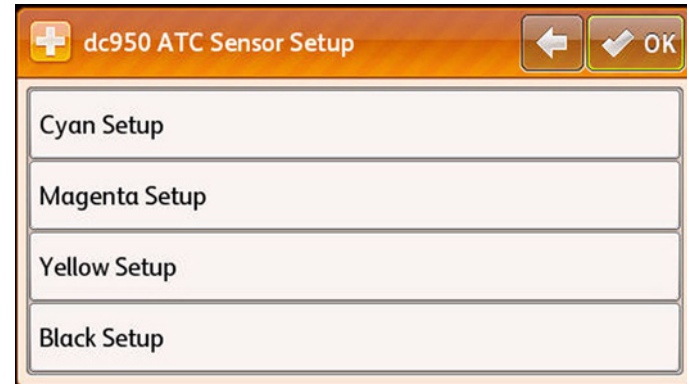


Figure 17 Selecting ATC Sensor Setup

- Enter the desired new value.

NOTE: The two digit display automatically restricts to within the min./max. range of 0-99.
- Touch **OK** to save the new ATC Sensor setting.

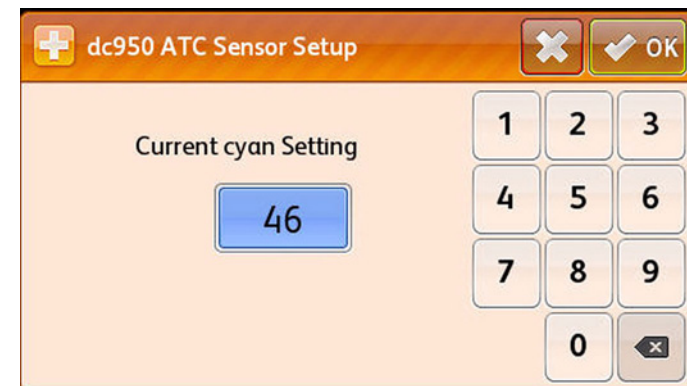


Figure 18 Entering New Value

- The display returns to the Adjustments menu.

Maintenance

dc122 Fault History

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Maintenance**.
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.



Chain-Link	Description	Date & Time
371.105.00	Tray 2 Jam	05/17/11 12:10:23
371.105.00	Tray 2 Jam	05/17/11 12:09:14
371.105.00	Tray 2 Jam	05/17/11 11:54:58

Figure 1 dc122 Fault History

6. An information screen appears with fault details.
7. Touch **X** to exit the information screen.



Figure 2 Exiting the Information Screen

8. Touch the **Back Arrow** to return to the Service Information menu.

dc135 CRU/HFSI Status and Reset

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 - [Entering Service Diagnostics](#).
2. Touch **Maintenance**.
3. Touch **dc135 CRU/HFSI Status and Reset**.
4. A dc135 CRU/HFSI screen is displayed. Information includes:
 - Component Name
 - % Remaining
5. To reset a non-CRUM supply item, select the item. Touch the **Reset Counter** to reset the life counter. Components that can be reset include:
 - Fuser
 - Belt Cleaner
 - Transfer Roller
 - Transfer Belt



Figure 3 Selecting the Component

6. A prompt appears to confirm the reset request.
7. Touch **Reset** to reset the component.

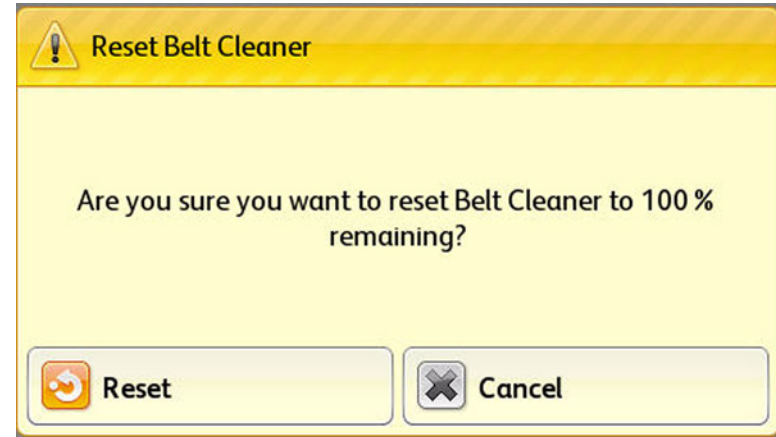


Figure 4 Resetting the Component

8. The display returns to the previous screen.
9. Touch the **Back Arrow** to return to the Maintenance menu.

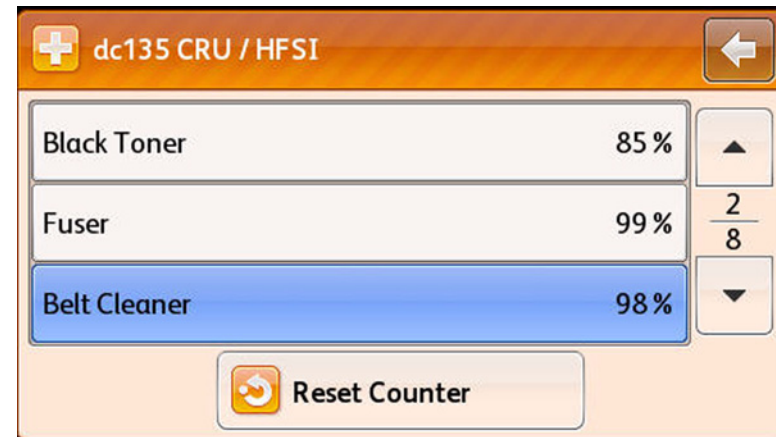


Figure 5 Exiting dc135 CRU/HFSI and Reset

dc137 Page Pack

Page Pack requires unique CRU components, a valid Page PIN and an established Page Pack contact.

NOTE: The printer shall not allow more than 5 attempts at entering the PIN in any 24 hour period. If more than 5 attempts are made, PIN entry is locked out for 24 hours.

1. Access the Service Diagnostics Menu - [Entering Service Diagnostics](#).
2. Touch **Maintenance**.
3. Touch **dc137 Page Pack**.
4. Available states: **Disable** and **Enable**.

Disable

- a. Select **Disable**.
- b. Select **Save**.

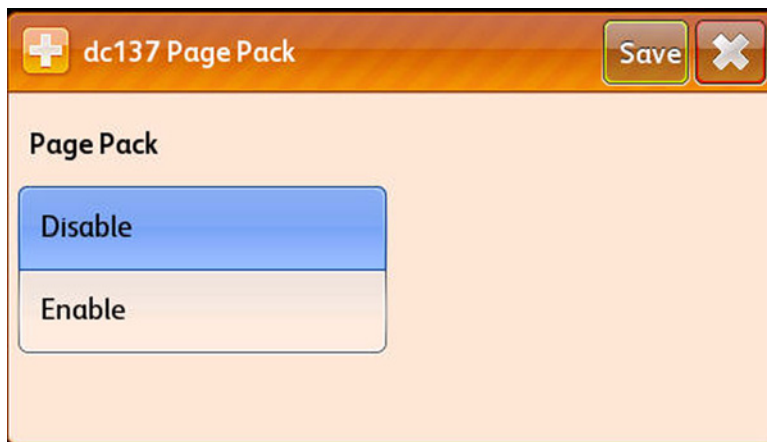


Figure 6 Selecting the State

- c. Disable state returns the display to the Maintenance menu.

Enable

- a. Touch **Enable**.
- b. Enter the 4 digit passcode.
- c. Touch **OK**.



Figure 7 Entering Passcode

- d. After the passcode is entered correctly, the display returns to the Maintenance menu.

Call Closeout

Exiting Service Diagnostics

Call Closeout takes the printer out of Service Diagnostics mode. Available options include the reset of the fault history logs (Reset Counters), Exit Only, Exit & Reboot, and Cancel. It is recommended that following diagnostic testing, reboot the printer to return it to correct operation.

1. Touch **Call Closeout**.
2. Touch **Exit & Reboot**.

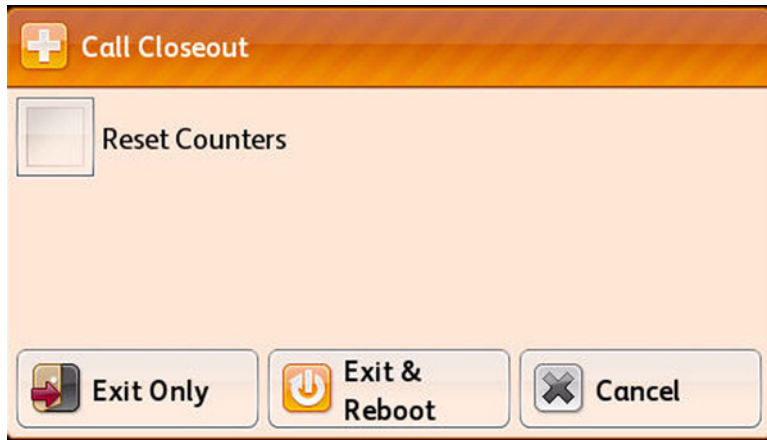


Figure 1 Exiting Service Diagnostics

Status Messages

Status messages are informational and do not stop printer operation. The following table contains a comprehensive list of the status messages that can be displayed on the control panel.

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
01-508-00	Left side door A open	
01-507-00	Left side door B open	
01-505-00	Left side door C open	
01-506-00	Left side door D open	
01-510-00	Front door open	
01-510-01	Front door open jam	
01-540-01	Tray 1 confirm	
01-540-02	Tray 2 confirm	
01-540-03	Tray 3 confirm	
01-540-04	Tray 4 confirm	
01-540-05	Tray 5 confirm	
01-545-02	Dedicated tray 2 closed with media size other than what was set	
01-545-03	Dedicated tray 3 closed with media size other than what was set	
01-545-04	Dedicated tray 4 closed with media size other than what was set	
01-545-05	Dedicated tray 5 closed with media size other than what was set	
03-275-00	Ready To Print	
03-504-01	NC status code	None
04-568-01	Output Tray 1 is full	
04-568-02	Output Tray 2 is full	
04-568-03	Output Tray 2 is full	
04-568-04	Output Tray 2 is full	
04-569-01	Output Tray 1 is full	
04-569-02	Output Tray 2 is full	
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	
07-514-02	Adjustable tray 2 is open	
07-514-03	Adjustable tray 3 is open	
07-514-04	Adjustable tray 4 is open	
07-514-05	Adjustable tray 5 is open	
09-590-00	Waste Cartridge Missing	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
09-600-00	Waste Cartridge Is Near Full	
09-601-00	Waste Cartridge Full	
09-602-00	Cyan Toner Low	
09-603-00	Magenta Toner Low	
09-604-00	Yellow Toner Low	
09-605-00	Black Toner Low	
09-606-00	Transfer Roller Is PAST End Of Life	
09-607-00	Belt Cleaner Is PAST End Of Life	
09-608-01	Developer 1 Is PAST End Of Life	
09-608-02	Developer 2 Is PAST End Of Life	
09-608-03	Developer 3 Is PAST End Of Life	
09-608-04	Developer 4 Is PAST End Of Life	
09-609-01	Feed Roller 1 Is PAST End Of Life	
09-609-02	Feed Roller 2 Is PAST End Of Life	
09-609-03	Feed Roller 3 Is PAST End Of Life	
09-609-04	Feed Roller 4 Is PAST End Of Life	
09-609-05	Feed Roller 5 Is PAST End Of Life	
09-612-00	Fuser Past EOL	
09-613-00	Transfer Belt Is PAST End Of Life	
09-615-00	Imaging Unit 1 Is PAST End Of Life	
09-616-00	Imaging Unit 2 Is PAST End Of Life	
09-617-00	Imaging Unit 3 Is PAST End Of Life	
09-618-00	Imaging Unit 4 Is PAST End Of Life	
09-619-00	Cyan Toner Empty (RB)	
09-619-01	Cyan Toner Empty (RB)	
09-619-02	Cyan Toner Empty (RB)	
09-619-03	Cyan Toner Empty (RB)	
09-619-04	Cyan Toner Empty (RB)	
09-619-09	Cyan Toner Empty (RB)	
09-620-00	Magenta Toner Empty (RB)	
09-620-01	Magenta Toner Empty (RB)	
09-620-02	Magenta Toner Empty (RB)	
09-620-03	Magenta Toner Empty (RB)	
09-620-04	Magenta Toner Empty (RB)	
09-620-09	Magenta Toner Empty (RB)	
09-621-00	Yellow Toner Empty (RB)	
09-621-01	Yellow Toner Empty (RB)	
09-621-02	Yellow Toner Empty (RB)	
09-621-03	Yellow Toner Empty (RB)	
09-621-04	Yellow Toner Empty (RB)	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
09-621-09	Yellow Toner Empty (RB)	
09-623-01	Cyan Toner Empty	
09-623-02	Cyan Toner Empty	
09-623-03	Cyan Toner Empty	
09-623-04	Cyan Toner Empty	
09-624-00	Magenta Toner Empty	
09-624-01	Magenta Toner Empty	
09-624-02	Magenta Toner Empty	
09-624-03	Magenta Toner Empty	
09-624-04	Magenta Toner Empty	
09-625-00	Yellow Toner Empty	
09-625-01	Yellow Toner Empty	
09-625-02	Yellow Toner Empty	
09-625-03	Yellow Toner Empty	
09-625-04	Yellow Toner Empty	
09-626-00	Black Toner Empty	
09-626-01	Black Toner Empty	
09-626-02	Black Toner Empty	
09-626-03	Black Toner Empty	
09-626-04	Black Toner Empty	
09-627-00	Imaging Unit 1 Expired	
09-628-00	Imaging Unit 2 Expired	
09-629-00	Imaging Unit 3 Expired	
09-630-00	Imaging Unit 4 Expired	
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	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
09-637-01	Black Toner Missing	
09-637-02	Black Toner Missing	
09-637-03	Black Toner Missing	
09-637-04	Black Toner Missing	
09-638-01	Imaging Unit 1 Unit Missing	
09-638-02	Imaging Unit 2 Unit Missing	
09-638-03	Imaging Unit 3 Unit Missing	
09-638-04	Imaging Unit 4 Unit Missing	
09-639-00	Fuser Missing	10-371-01,10-373-01
09-644-00	Non-Xerox Cyan Toner In Use (permitted)	
09-645-00	Non-Xerox Magenta Toner In Use (permitted)	
09-646-00	Non-Xerox Yellow Toner In Use (permitted)	
09-647-00	Non-Xerox Black Toner In Use (permitted)	
09-648-00	Invalid Imaging Unit 1	
09-649-00	Invalid Imaging Unit 2	
09-650-00	Invalid Imaging Unit 3	
09-651-00	Invalid Imaging Unit 4	
09-658-00	Cyan Toner Invalid	
09-658-01	Cyan Toner Invalid	
09-658-02	Cyan Toner Invalid	
09-658-03	Cyan Toner Invalid	
09-658-04	Cyan Toner Invalid	
09-659-00	Magenta Toner Invalid	
09-659-01	Magenta Toner Invalid	
09-659-02	Magenta Toner Invalid	
09-659-03	Magenta Toner Invalid	
09-659-04	Magenta Toner Invalid	
09-660-00	Yellow Toner Invalid	
09-660-01	Yellow Toner Invalid	
09-660-02	Yellow Toner Invalid	
09-660-03	Yellow Toner Invalid	
09-660-04	Yellow Toner Invalid	
09-661-00	Black Toner Invalid	
09-661-01	Black Toner Invalid	
09-661-02	Black Toner Invalid	
09-661-03	Black Toner Invalid	
09-661-04	Black Toner Invalid	
09-670-00	Suction Filter Is PAST End Of Life	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
10-105-01	Jam at Left Side Door A	75-135-00/77-101-00/77-103-00/77-104-00/77-106-00/77-110-00/77-900-00/77-901-00/77-903-00
10-105-02	Jam at Left Side Door B	
10-105-03	Jam at Left Side Door C	
10-105-04	Jam at Left Side Door D	77-105-00/77-109-00/77-902-00
10-105-05	Jam at Left Side Door AB	77-130-00/77-131-00/77-907-00
10-320-00	Fuser Failure	10-329-01/10-368-01/10-372-01/10-374-01/10-375-01/10-376-01/10-377-01/10-378-01/10-379-01/10-381-01/10-382-01
10-380-00	Motor Failure	10-330-01/10-380-01/42-320-01/42-323-01/42-324-01/42-325-01/93-324-01
12-200-00	Finisher Failure	12-209-01/12-210-01/12-211-01/12-212-01/12-213-01/12-221-01/12-223-01/12-224-01/12-225-01/12-226-01/12-227-01/12-228-01/12-229-01/12-230-01/12-231-01/12-232-01/12-233-01/12-234-01/12-237-01/12-243-01/12-246-01/12-247-01/12-249-01/12-259-01/12-260-01/12-26
12-404-00	HTRA1/HTRA2	
12-404-02	HTRA1/HTRA2	
12-404-01	HTR	
12-502-00	C-Finisher HXPort Cover Open	
12-502-02	SB-Finisher Horizontal Transport Cover Interlock Open.	
12-503-00	SB-Finisher Booklet Cover open	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
12-517-00	TOP1, TOP2	12-112-00/12-132-00/12-152-00/12-151-00/12-161-00/12-171-00/12-172-00/12-113-00/12-114-00/12-115-00/12-180-00/12-111-00/12-162-00/12-142-00/12-125-00/12-901-00/12-900-00/12-903-00/12-905-00/12-907-00/12-936-00/13-902-00/13-903-00/12-920-00/12-932-00/12-90
12-518-00	TOP3, TOP4	
12-522-00	STK1, STK2, STK3	
12-523-00	STK3	
12-525-00	C-Finisher Staple Cartridge R1 empty	
12-525-02	SB-Finisher Staple Cartridge R1 empty	
12-525-03	SB-Finisher Staple Cartridge R1 empty	
12-529-00	Punch Waste C Missing Error	
12-529-02	Punch Waste SB Missing Error	
12-530-00	C-Finisher Top Tray is full	
12-533-00	C-Finisher Main Tray is full	
12-533-02	SB-Finisher Tray is full	
12-533-03	SB-Finisher Tray is full	
12-534-00	Punch Waste C Full Error	
12-534-02	Punch Waste SB Full Error	
12-538-00	STK4	
12-538-01	EXT1	
12-538-02	EXT2	
12-549-00	BKLT1	
12-551-00	BKLT2, BKLT4	
12-552-00	BKLT3	
12-552-01	CMP1	
12-552-02	CMP2	
12-554-02	Scratch sheet error on SB no BM finisher.	
12-554-03	Scratch sheet error on SB w/ BM finisher.	
12-560-00	Exit Cover Interlock open	
12-560-02	Top Cover Interlock open	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
12-560-03	Top Cover Interlock open	
12-562-00	BKL Drawer open	
12-564-00	C-Finisher Front Door Open	
12-564-02	SB-Finisher Front Door Open	
12-564-03	SB-Finisher Front Door Open	
12-582-00	C-Finisher Booklet Tray is full	
12-583-00	C-Finisher Staple Cartridge R2 empty	
12-583-03	SB-Finisher Staple Cartridge R2 empty	
12-584-00	C-Finisher Staple Cartridge R3 empty	
12-584-03	SB-Finisher Staple Cartridge R3 empty	
12-715-01	Finisher Staple Cartridge R1 empty	
12-715-02	Finisher Staple Cartridge R2 empty	
12-715-03	Finisher Staple Cartridge R3 empty	
12-829-00	Punch Waste Missing Warning	
12-834-00	Punch Waste Full Warning	
12-835-00	Punch Waste Near Full Warning	
16-506-00	Administrator is reconfiguring the system.	
17-510-00	Duplicate IPv6 address detected	
17-513-00	Duplicate IPv4 address detected	
17-562-00	Registration with edge server fails	16-891
17-563-00	Communication with edge server fails	16-892
17-590-00	Image Overwrite (ODIO) is in Progress	
22-513-04	One or more queued jobs in the system is being held.	
41-000-00	Unrecognized Status	
41-310-00	Engine Failure	41-310-01/41-340-01/41-341-01/41-342-01/41-347-01/41-351-01/41-356-01/41-360-01/41-361-01/45-310-01/45-311-01/45-321-01/45-322-01/45-331-01/45-332-01/45-350-01/45-351-01/45-352-01

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
41-330-00	Fuse Broken Failure	41-330-01/41-331-01/41-332-01/41-333-01/41-345-01/41-346-01/41-348-01/41-349-01/41-350-01/41-352-01/41-353-01/41-354-01/41-355-01/41-356-01/41-357-01/41-358-01/41-361-01/41-362-01/41-363-01
41-360-00	Power Supply Failure	10-360-01/10-361-01/10-362-01/10-363-01/10-364-01/10-367-01/10-369-01/10-370-01/41-316-01/41-317-01
42-330-00	Fan Failure	10-398-01/42-330-01/42-332-01/42-334-01/42-335-01/42-336-01/42-338-01/42-340-01/42-341-01/42-342-01/42-343-01/42-344-01
45-310-00	Engine Logic Failure	45-313-01/77-314-01
45-400-00	Download Failure	12-334-01
47-210-00	Exit Offset Home Failure	47-211-01/47-212-01
61-300-00	LED Failure	45-370-01/45-371-01/45-372-01/45-373-01/45-374-01/45-375-01/45-376-01/61-350-01/61-351-02/61-352-03/61-353-04/61-354-01/61-355-02/61-356-03/61-357-04/61-358-01/61-359-02/61-360-03/61-361-04/61-362-01/61-363-02/61-364-03/61-365-04/61-366-01/61-367-02/61-36
61-390-00	BITZ Initialize Failure	61-398-01/61-399-01
70-532-00	Paper Not Available in any tray	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
71-101-00	Tray 1 Misfeed Jam	75-100-00
71-103-00	Paper Size Jam at Tray 1	75-103-00
71-104-00	Paper Type Jam at Tray 1	
71-531-00	Tray 1 out of paper	
71-532-00	Paper Not Available in tray 1	
72-102-00	Tray 2 Jam	71-105-00
72-103-00	Paper Size Jam at Tray 2	
72-104-00	Paper Type Jam at Tray 2	
72-210-00	Tray 2 Failure	72-210-05/72-212-08/72-940-04
72-530-00	Tray 2 is empty.	
72-531-00	Tray 2 out of paper	
72-532-00	Paper Not Available in tray 2	
72-535-00	Tray 2 media low	
72-539-00	Tray 2 Open	
73-102-00	Tray 3 Jam	72-101-00
73-102-01	Tray 3 Jam HiCap	
73-103-00	Paper Size Jam at Tray 3	
73-103-01	Paper Size Jam at Tray 3 HiCap	
73-104-00	Paper Type Jam at Tray 3	
73-104-01	Paper Type Jam at Tray 3 HiCap	
73-210-00	Tray 3 Failure	73-210-05/73-212-08/73-940-04
73-530-00	Tray 3 is empty.	
73-531-00	Tray 3 out of paper	
73-532-00	Paper not available in Tray 3	
73-535-00	Tray 3 media low	
73-539-00	Tray 3 Open	
73-539-01	Tray 3 Open Hi Cap	
74-102-00	Tray 4 Jam	73-101-00/73-102-00/73-900-00
74-102-01	Tray 4 Jam HiCap	
74-103-00	Paper Size Jam at Tray 4	
74-103-01	Paper Size Jam at Tray 4 HiCap	
74-104-00	Paper Type Jam at Tray 4	
74-104-01	Paper Type Jam at Tray 4 HiCap	
74-210-00	Tray 4 Failure	74-210-05/74-212-08/74-940-04
74-530-00	Tray 4 is empty.	
74-531-00	Tray 4 out of paper	

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
74-532-00	Paper not available in Tray 4	
74-535-00	Tray 4 media low	
74-539-00	Tray 4 Open	
74-539-01	Tray 4 Open Hi Cap	
74-104-00	Paper Type Jam at Tray 5	
75-104-01	Paper Type Jam at Tray 5 HiCap	
75-102-00	Tray 5 Jam	74-101-00/74-900-00
75-102-01	Tray 5 Jam HiCap	
75-103-00	Paper Size Jam at Tray 5	
75-103-01	Paper Size Jam at Tray 5 HiCap	
75-210-00	Tray 5 Failure	75-210-05/75-212-08/75-940-04
75-212-00	MPT Nudger Down Failure	75-212-01
75-530-00	Tray 5 is empty.	
75-531-00	Tray 5 out of paper	
75-532-00	Paper not available in Tray 5	
75-535-00	Tray 5 media low	
75-539-00	Tray 5 Open	
75-539-01	Tray 5 Open Hi Cap	
77-210-00	Tray Module Failure	77-211-01/77-212-01/77-214-01/77-215-01
77-320-00	Tray Failure	47-320-01/77-320-01
89-560-00	Calibrating	
91-313-00	CRUM ASIC Comm Failure	91-313-01
91-901-00	Drum 1 Cartridge Error	91-914-05/91-915-03/91-916-04
91-903-00	Drum 2 Cartridge Error	91-919-05/91-942-03/91-945-04
91-905-00	Drum 3 Cartridge Error	91-918-07/91-941-03/91-944-04
91-907-00	Drum 4 Cartridge Error	91-917-06/91-940-03/91-943-04
92-310-00	ATC Failure	92-312-01/92-313-01/92-314-01/92-315-01
92-573-00	Warming Up	
93-314-00	Y Dispense Motor Failure	93-314-01
93-315-00	M Dispense Motor Failure	93-315-01

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
93-316-00	C Dispense Motor Failure	93-316-01
93-317-00	K Dispense Motor Failure	93-317-01
93-901-00	K Toner Cartridge Error	93-924-07/93-925-05/93-926-06
93-903-00	Y Toner Cartridge Error	93-943-07/93-950-05/93-960-06
93-905-00	M Toner Cartridge Error	93-941-07/93-951-05/93-961-06
93-907-00	C Toner Cartridge Error	93-942-07/93-952-05/93-962-06
94-320-00	BTR Contact Retract Failure	94-320-01/94-323-01
94-324-00	Belt Home Failure	94-324-01

Plug/Jack Locations

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Plug/Jack Diagrams and Designators

This chapter contains the Plug/Jack Designators, Locators, and wiring diagrams for the print engine and all options.

The Plug/Jack Locator diagrams show the P/J locations within the printer, Optional 550-Sheet Feeder, Duplex Unit, Fax, Copier, and Scanner. Use these illustrations to locate P/J connectors called out in the Troubleshooting procedures presented in Chapters 2, 3, and 6.

The Plug/Jack locators consist of the P/J Designator Tables and the P/J Locator Diagrams.

- The P/J column lists the Plug/Jack numbers in numerical order.
- The Map column provides the map number of the specific areas (i.e., Electrical, Laser Unit...etc.)
- The Coordinates column lists the diagram coordinates for the location of the connector.
- The Remarks column provides a brief description of each connection.

To find the location of a Plug or Jack:

1. Locate the P/J connector designator in the first column of the table.
2. With this information, go to the second column (Map - Figure Number).
3. Use the coordinates to locate the connection indicated on the map with its P/J designation number. If coordinates are not given, go to the referenced Wire Routing Diagrams.

Print Engine Plug/Jack

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J1	Figure 16	C-104	Connects Main Low Voltage Power Supply
P/J4	Figure 16	C-103	Connects Main Low Voltage Power Supply
P/J5	Figure 16	C-102	Connects Main Low Voltage Power Supply
P/J6	Figure 16	C-102	Connects Main Low Voltage Power Supply
P/J7	Figure 16	C-103	Connects Main Low Voltage Power Supply
J10	Figure 14	B-106	Connects GFI Breaker
J11	Figure 14	C-106	Connects GFI to Main LVPS
P/J12	Figure 2	H-108	
P/J13	Figure 2	H-107	
P/J14	Figure 2	I-108	Connects the Imaging Unit CRUM Coupler Assembly (C)
P/J15	Figure 2	I-107	
P/J30	Figure 23	C-103	Connects Induction Heater Driver Board
P/J70	Figure 15	F-108	
P/J72	Figure 15	E-108	
P81	Figure 14	B-106	Connects PSW Outlet
P82	Figure 14	B-106	Connects PSW Outlet
P83	Figure 14	B-107	Connects GFI Breaker
P85	Figure 14	B-107	Connects GFI Breaker
P86	Figure 14	B-107	Connects GFI Breaker
P87	Figure 14	B-107	Connects GFI Breaker
P90	Figure 14	C-107	
P/J91	Figure 16	C-104	Connects Main LVPS
P/J92	Figure 16	C-104	Connects Main LVPS
P/J100	Figure 12	F-104	Connects Left Hand Cover Interlock Switch
P/J101	Figure 2	E-105	Connects Front Cover Interlock Switch
P/J101	Figure 17	I-106	Connects Tray 3 Paper Size Sensor - 3TM
P/J101	Figure 22	D-105	Connects Tray 3 Paper Size Sensor - TTM
P/J102	Figure 17	I-107	Connects Tray 4 Paper Size Sensor - 3TM
P/J102	Figure 22	C-107	Connects Tray 4 Paper Size Sensor - TTM
P/J103	Figure 17	I-108	Connects Tray 5 Paper Size Sensor - 3TM
P/J103	Figure 22	G-107	Connects Tray 5 Paper Size Sensor - TTM
P/J104	Figure 17	H-110	Connects Left Hand Cover Switch - 3TM
P/J104	Figure 20	I-108	Connects Left Hand Cover Switch - TTM
P/J106	Figure 17	C-103	Connects Tray 3 No Paper Sensor - 3TM
P/J106	Figure 21	B-105	Connects Tray 3 No Paper Sensor - TTM
P/J107	Figure 17	C-103	Connects Tray 3 Nudger Level Sensor - 3TM
P/J107	Figure 21	B-105	Connects Tray 3 Nudger Level Sensor - TTM

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J108	Figure 17	C-107	Connects Tray 3 Feed Out Sensor - 3TM
P/J108	Figure 20	G-105	Connects Tray 3 Feed Out Sensor - TTM
P/J109	Figure 21	C-109	Connects Tray 4 Pre-feed Sensor - TTM
P/J110	Figure 16	F-108	Connects Waste Toner Bottle Full Sensor
P/J110	Figure 17	C-103	Connects Tray 4 No Paper Sensor - 3TM
P/J110	Figure 21	C-109	Connects Tray 4 No Paper Sensor - TTM
P/J111	Figure 16	F-108	Connects Waste Toner Bottle Position Sensor
P/J111	Figure 17	C-103	Connects Tray 4 Nudger Level Sensor - 3TM
P/J111	Figure 21	B-108	Connects Tray 4 Nudger Level Sensor - TTM
P/J112	Figure 1	F-106	Connects Drum CRUM Coupler Assembly (Y)
P/J112	Figure 17	G-107	Connects Tray 4 Feed Out Sensor - 3TM
P/J112	Figure 20	G-106	Connects Tray 4 Feed Out Sensor - TTM
P/J113	Figure 1	E-106	Connects Drum CRUM Coupler Assembly (M)
P/J113	Figure 21	I-103	Connects Tray 5 Pre-feed Sensor - TTM
P/J114	Figure 1	E-106	Connects Drum CRUM Coupler Assembly (C)
P/J114	Figure 17	C-103	Connects Tray 5 No Paper Sensor - 3TM
P/J114	Figure 21	H-102	Connects Tray 5 No Paper Sensor - TTM
P/J115	Figure 1	C-106	Connects Drum CRUM Coupler Assembly (K)
P/J115	Figure 17	C-103	Connects Tray 5 Nudger Level Sensor - 3TM
P/J115	Figure 21	H-102	Connects Tray 5 Nudger Level Sensor - TTM
P/J116	Figure 17	G-108	Connects Tray 5 Feed Out Sensor - 3TM
P/J116	Figure 21	H-103	Connects Tray 5 Feed Out Sensor - TTM
P/J120	Figure 3	I-106	Connects Toner CRUM Coupler Assembly (Y)
P/J121	Figure 3	H-106	Connects Toner CRUM Coupler Assembly (M)
P/J122	Figure 3	H-106	Connects Toner CRUM Coupler Assembly (C)
P/J123	Figure 3	G-106	Connects Toner CRUM Coupler Assembly (K)
P/J124	Figure 1	G-108	Connects ATC PWB (Y)
P/J125	Figure 1	F-108	Connects ATC PWB (M)
P/J126	Figure 1	F-108	Connects ATC PWB (C)
P/J127	Figure 1	E-108	Connects ATC PWB (K)
P/J130	Figure 16	A-109	Connects NOHAD Thermistor
P/J144	Figure 12	E-105	Connects 1st BTR Contact Retract Sensor
P/J150	Figure 4	H-108	Connects MOB Sensor In
P/J151	Figure 4	B-110	Connects MOB Sensor Out
P/J153	Figure 4	E-109	Connects ADC Sensor
P/J154	Figure 4	I-108	Connects Environment Sensor
P/J160	Figure 8	E-110	Connects Registration Sensor
P/J161	Figure 8	F-110	Connects OHP Sensor
P/J162	Figure 6	C-109	Connects Exit 1 OCT Home Position Sensor
P/J163	Figure 6	B-109	Connects Exit 1 Full Stack Sensor
P/J164	Figure 6	F-102	Connects Exit 2 Sensor

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J165	Figure 6	G-103	Connects Exit 2 OCT Home Position Sensor
P/J166	Figure 6	B-103	Connects Exit 2 Full Stack Sensor
P/J168	Figure 6	I-107	Connects Left Hand High Cover Switch
P/J169	Figure 6	I-108	Connects Face Up Tray Detect Switch
P/J170	Figure 7	D-109	Connects DC Heater
P/J171	Figure 8	F-107	Connects Tray 1 Pre Feed Sensor
P/J172	Figure 9	E-108	Connects Tray 1 No Paper Sensor
P/J173	Figure 9	D-108	Connects Tray 1 Paper Size Sensor
P/J174	Figure 15	A-109	Connects Tray 2 Paper Size Sensor
P/J175	Figure 7	F-108	Connects Duplex Wait Sensor
P/J176	Figure 7	E-108	Connects Duplex Cover Switch
P/J177	Figure 8	D-106	Connects Tray 1 Nudger Level Sensor
P/J178	Figure 8	E-106	Connects Tray 1 No Paper Sensor
P/J179	Figure 9	E-107	Connects Tray 1 Feed Out Sensor
P/J180	Figure 7	E-102	Connects POB Sensor
P/J181	Figure 7	D-103	Connects 2nd BTR Contact Retract Sensor
P/J182	Figure 4	I-107	Connects IBT Belt Home Position Sensor
P/J183	Figure 9	C-106	Connects Tray 1 Nudger Position Sensor
P/J192	Figure 5	A-110	Connects Fuser Exit Sensor
P/J193	Figure 5	B-105	Connects Pressure Roller Latch Sensor
P/J194	Figure 5	B-110	Connects Fuser Belt Speed Sensor
P/J195	Figure 5	G-108	Connects Center Thermistor
P/J197	Figure 5	G-108	
P/J198	Figure 5	B-110	
P/J210	Figure 1	F-106	Connects Erase Lamp Unit Y
P/J211	Figure 1	E-106	Connects Erase Lamp Unit M
P/J212	Figure 1	D-106	Connects Erase Lamp Unit C
P/J213	Figure 1	C-106	Connects Erase Lamp Unit K
P/J215	Figure 16	C-108	Connects Agitator Motor
P/J217	Figure 7	F-107	Connects Left Hand Fan 2
P/J218	Figure 7	G-107	Connects Left Hand Fan 3
P/J220	Figure 14	B-102	Connects Toner Dispenser Motor (Y)
P/J221	Figure 14	C-103	Connects Toner Dispenser Motor (M)
P/J221	Figure 17	A-103	Connects Tray 3 Feed/ Lift Up Motor - 3TM
P/J221	Figure 21	A-105	Connects Tray 3 Feed/ Lift Up Motor - TTM
P/J222	Figure 14	D-102	Connects Toner Dispenser Motor (C)
P/J222	Figure 17	A-103	Connects Tray 4 Feed/ Lift Up Motor - 3TM
P/J222	Figure 21	A-108	Connects Tray 4 Feed/ Lift Up Motor - TTM
P/J223	Figure 14	E-102	Connects Toner Dispense Motor (K)
P/J223	Figure 17	A-103	Connects Tray 4 Feed/Lift Up Motor - 3TM
P/J223	Figure 21	F-102	Connects Tray 4 Feed/Lift Up Motor - TTM

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J224	Figure 18	I-108	Connects Take Away Motor 1 - 3TM
P/J224	Figure 19	H-105	Connects Take Away Motor 1 - TTM
P/J225	Figure 23	C-108	Connects IH Exhaust Fan
P/J226	Figure 18	I-107	Connects Take Away Motor 2 - 3TM
P/J226	Figure 19	I-107	Connects Take Away Motor 1 - TTM
P/J226	Figure 23	G-106	Connects Induction Heater Intake Fan
P/J227	Figure 23	C-108	Connects C Exit Fan
P/J228	Figure 1	F-108	Connects Process Fan 1
P/J230	Figure 12	F-103	Connects Fuser Fan
P/J231	Figure 10	F-106	Connects Suction Fan
P/J233	Figure 11	H-102	Connects IH Intake Fan
P/J234	Figure 14	H-108	Connects Bottom Fan
P/J235	Figure 16	C-109	Connects M Fan
P/J236	Figure 16	C-103	Connects LVPS Fan
P/J238	Figure 1	A-106	Connects Process 2 Fan
P/J239	Figure 16	D-107	Connects Front LVPS Fan
P/J240	Figure 12	E-107	Connects Drum/ Deve Drive Motor (K)
P/J241	Figure 12	E-107	Connects Drum/ Deve Drive Motor (K)
P/J242	Figure 12	F-104	Connects Fuser Drive Motor
P/J243	Figure 12	F-104	Connects Fuser Drive Motor
P/J244	Figure 12	F-105	Connects Main Drive Motor
P/J245	Figure 12	F-105	Connects Main Drive Motor
P/J246	Figure 12	C-106	Connects Drum Drive Motor (Y/M/C)
P/J247	Figure 12	C-107	Connects Drum Drive Motor (Y/M/C)
P/J248	Figure 12	B-107	Connects IBT Drive Motor
P/J249	Figure 12	B-107	Connects IBT Drive Motor
P/J250	Figure 12	D-105	Connects Retract Drive Assembly
P/J251	Figure 13	E-107	Connects Deve Drive Motor (Y/M/C)
P/J252	Figure 13	E-107	Connects Deve Drive Motor (Y/M/C)
P/J253	Figure 8	A-101	
P/J254	Figure 12	F-104	Connects Retract Motor
P/J260	Figure 8	H-110	Connects Registration Clutch
P/J262	Figure 6	H-108	Interim connection between Motor Driver Board and Exit 2 Gate Solenoid
P/J263	Figure 6	G-103	Interim connection between Motor Driver Board and Face Up Gate Solenoid
P/J265	Figure 6	G-108	
P/J266	Figure 6	I-103	Connects Exit 2 OCT Motor
P/J268	Figure 8	B-106	Connects Tray 2 Feed/Lift Up Motor
P/J269	Figure 9	C-106	Connects Tray 1 Feed/Nudger Motor
P/J271	Figure 6	B-110	Connects Exit 1 OCT Motor

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J272	Figure 1	A-105	Connects IBT Front Cover Switch
P/J275	Figure 7	D-108	Connects Tray 1 Motor
P/J280	Figure 7	F-103	Connects 2nd BTR Contact Retract Sensor
P/J300	Figure 11	F-107	Connects I/P Board and Main LVPS
P309	Figure 11	F-108	Connects I/P Board and Back Plane Board
J309	Figure 24	D-106	Connects I/P Board and Back Plane Board
P/J310	Figure 11	F-110	Connects I/P Board and Hard Drive
P/J313	Figure 24	D-106	Connects the Backplane Board
J330	Figure 11	D-110	
J331	Figure 11	D-110	
J332	Figure 11	E-108	
J333	Figure 11	E-108	
P/J334	Figure 11	E-109	
P335	Figure 11	F-110	Connects I/P Board and Back Plane Board
J335	Figure 24	D-109	Connects I/P Board and Back Plane Board
J340	Figure 11	C-108	
J342	Figure 11	C-109	
J343	Figure 11	C-109	
J344	Figure 11	C-109	
P348	Figure 11	D-106	Connects I/P Board
J351	Figure 11	C-108	
P380	Figure 11	C-110	
P/J390	Figure 24	E-110	Connects Back Plane Board and Control Panel
P/J401	Figure 10	E-106	Connects MCU Board Power Switch
P/J411	Figure 10	E-104	Connects MCU Board and Toner CRUM Coupler Assembly (Y/M/C/K)
P/J412	Figure 10	F-106	Connects MCU Board and HVPS (BCR)
P/J414	Figure 10	F-105	Connects MCU Board and HPVS (1st/2nd/DTC), NOHAD Thermistor/Induction Heater Driver Board, and IBT Front Cover Switch
P/J415	Figure 10	F-104	Connects MCU Board and MOB ADC Assembly
P/J416	Figure 10	E-104	Connects MCU Board and IBT Front Cover Switch
P/J417	Figure 10	F-105	Connects MCU Board and 1st BTR Contact Retract Sensor, Waste Toner Bottle Full Sensor, and Waste Toner Bottle Position Sensor
P/J431	Figure 10	F-103	Connects MCU Board and Fuser
P/J450	Figure 7	E-107	Connects Left Hand Fan Board
P/J451	Figure 10	E-105	Connects MCU Board and Back Plane Board
P/J452	Figure 10	E-106	Connects MCU Board and Motor Driver Board
P/J453	Figure 7	E-107	Connects Left Hand Fan Board to Left Hand Fan 1
P/J454	Figure 7	E-107	Connects Left Hand Fan Board to Left Hand Fan 2 and Left Hand Fan 3

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J460	Figure 16	B-109	Connects HVPS (BCR)
P/J461	Figure 12	C-106	Connects HVPS (1st/ 2nd/ DTC)
P/J501	Figure 16	G-103	Connects Main LVPS and I/P Board
P/J502	Figure 16	G-103	Connects Main LVPS and Motor Driver Board
P/J503	Figure 16	G-104	
P/J510	Figure 16	G-102	Connects Main LVPS (Interlock Relay) and Main Driver Board
P/J513	Figure 16	B-107	Connects HVPS (BCR) and MCU Board
P/J514	Figure 16	I-108	Connects HVPS (Developer)
P/J520	Figure 10	E-107	Connects Motor Driver Board and Interlock Relay
P/J521	Figure 10	E-107	Connects Motor Driver Board and Front Cover Interlock Switch
P/J522	Figure 10	C-106	Connects Motor Driver Board and Exit 2 OCT Home Position Sensor, Exit 2 Full Stack Sensor, Exit 2 Sensor, and Exit 1 Stack Sensor
P/J523	Figure 10	C-106	Connects Motor Driver Board and Registration Sensor
P/J524	Figure 10	D-106	Connects Motor Driver Board and Exit 1 OCT Home Position Sensor
P/J525	Figure 10	D-106	Connects Motor Driver Board and Tray 1 Feed Out Sensor, Tray 1 No Paper Sensor, Tray 1 Nudger Position Sensor, Fuser Drive Motor, and Main Drive Motor
P/J526	Figure 10	F-107	Connects Motor Driver Board and Drum/Developer (Y/M/C/K), IBT Drive Motor, and Developer Drive Motor (Y/M/C/K)
P/J527	Figure 10	F-107	Connects Motor Driver Board and Drum Developer (Y/M/C/K), IBT Drive Motor, and Developer Drive Motor (Y/M/C)
P/J528	Figure 10	F-106	Connects Motor Driver Board and Tray 1 Nudger Level Sensor, Tray 1 No Paper Sensor, and Tray 1 Pre Feed Sensor
P/J529	Figure 10	C-106	Connects MD PWB.
P/J530	Figure 23	D-103	Connect IH Drive Board and MCU Board
P/J532	Figure 10	E-106	Connects Motor Driver Board and LPH Rear Board (Y/M/C/K)
P/J534	Figure 10	F-107	Connects Motor Driver Board and Left Hand Cover Interlock Switch
P/J535	Figure 10	E-106	Connects MD PWB and Main Drive Motor.
P/J536	Figure 10	E-107	Connects Motor Driver Board and Back Plane Board
P/J537	Figure 10	F-106	Connect MD PWB and Ground.
P/J541	Figure 18	B-102	Connects Tray Module PWB - 3TM
P/J541	Figure 19	E-106	Connects Tray Module PWB - TTM

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J542	Figure 18	A-103	Connects Tray Module PWB - 3TM
P/J542	Figure 19	C-106	Connects Tray Module PWB - TTM
P/J545	Figure 18	B-103	Connects Tray Module PWB - 3TM
P/J545	Figure 19	D-106	Connects Tray Module PWB - TTM
P/J548	Figure 18	D-104	Connects Tray Module PWB - 3TM
P/J548	Figure 19	E-107	Connects Tray Module PWB - TTM
P/549	Figure 18	B-104	Connects Tray Module PWB - 3TM
P/J549	Figure 19	D-107	Connects Tray Module PWB - TTM
P/J550	Figure 15	C-104	Connects LPH Rear (PWB (K)
P/J550	Figure 18	D-103	Connects Tray Module PWB - 3TM
P/J550	Figure 19	E-106	Connects Tray Module PWB - TTM
P/J551	Figure 15	C-103	Connects LPH Rear PWB (C)
P/J551	Figure 18	E-103	Connects Tray Module PWB - 3TM
P/J551	Figure 19	F-106	Connects Tray Module PWB - TTM
P/J552	Figure 15	C-103	Connects LPH Rear PWB (M)
P/J552	Figure 18	E-104	Connects Tray Module PWB - 3TM
P/J552	Figure 19	F-107	Connects Tray Module PWB - TTM
P/J553	Figure 15	C-103	Connects LPH Rear PWB (Y)
P553	Figure 18	C-104	Connects Tray Module PWB - 3TM
P553	Figure 19	E-107	Connects Tray Module PWB - TTM
P/J554	Figure 10	F-104	Connects LPH to MCU
P/J555	Figure 10	F-104	Connects LPH to MCU
P/J556	Figure 10	F-104	Connects LPH to MCU
P/J557	Figure 10	F-104	Connects LPH to MCU
P/J558	Figure 15	D-104	Connects LPH Rear PWB and MCU PWB
P/J559	Figure 15	D-104	Connects LPH Rear PWB and MCU PWB
P/J560	Figure 15	D-104	Connects LPH Rear PWB and MCU PWB
P/J561	Figure 15	D-104	Connects LPH Rear PWB and MCU PWB
P/J562	Figure 15	E-103	Connects LPH Board and LPH (K)
P/J563	Figure 15	E-103	Connects LPH Board and LPH (C)
P/J564	Figure 15	E-103	Connects LPH Board and LPH (M)
P/J565	Figure 15	E-103	Connects LPH Board and LPH (Y)
P/J566	Figure 15	E-103	Connects LPH Assembly (K)
P/J567	Figure 5	H-108	Connects Fuser
P/J567	Figure 15	E-103	Connects LPH Assembly (C)
P/J568	Figure 15	E-103	Connects LPH Assembly (M)
P/J569	Figure 15	E-103	Connects LPH Assembly (Y)
P/J570	Figure 15	F-103	Connects LPH (K) and LPH Board
P/J571	Figure 15	F-103	Connects LPH (C) and LPH Board
P/J572	Figure 15	F-103	Connects LPH (M) and LPH Board
P/J573	Figure 15	F-103	Connects LPH (Y) and LPH Board

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J574	Figure 15	E-103	Connects LPH PWB and LPH K
P/J575	Figure 15	E-103	Connects LPH PWB and LPH C
P/J576	Figure 15	E-103	Connects LPH PWB and LPH M
P/J577	Figure 15	E-103	Connects LPH PWB and LPH Y
P/J578	Figure 15	D-104	Connects LPH Board (K) and LPH Rear Board (K)
P/J579	Figure 15	D-104	Connects LPH Board (C) and LPH Rear Board (C)
P/J580	Figure 15	D-104	Connects LPH Board (M) and LPH Rear Board (M)
P/J581	Figure 15	D-104	Connects LPH Board (Y) and LPH Rear Board (Y)
P/J590	Figure 10	D-107	Connects MD PWB
P/J591	Figure 10	D-107	Connects Motor Driver Board and Finisher
P592	Figure 10	D-107	Connects MD PWB
J592	Figure 18	H-106	Connects 1500-Sheet Feeder - 3TM
J592	Figure 19	F-104	Connects 2500-Sheet Feeder - TTM
P/J593	Figure 10	F-107	Connects MD Board and interim connector
P/J594	Figure 10	F-106	
DJ600	Figure 5	E-103	Connects MCU Board and Fuser
DJ600A	Figure 5	E-103	Connects MCU Board and Fuser
DJ600B	Figure 5	E-103	Connects MCU Board and Fuser
P600	Figure 5	B-104	Connects Fuser and MCU Board
P600A	Figure 5	B-105	Connects Fuser and MCU Board
P600B	Figure 5	B-104	Connects Fuser and MCU Board
P/J610	Figure 4	B-109	Interim connection between MCU Board and MOB Sensor In< MOB Sensor Out, Environment Sensor, ADC Sensor, and IBT Belt Home Position Sensor
P/J611	Figure 8	D-106	Interim connection between Motor Driver Board and Tray 1 Nudger Level Sensor and Tray 1 No Paper Sensor
P/J612	Figure 7	C-108	Interim connection between Motor Driver Board and POB Sensor, 2nd BTR Contact Retract Sensor, and Duplex Wait Sensor
P/J615	Figure 2	E-105	Interim connection between Power Switch and MCU Board
P/J616	Figure 9	F-102	Interim connection between Motor Driver Board and Tray 1 Feed Out Sensor, Tray 1 No Paper Sensor, and Tray 1 Nudger Position Sensor
P/J617	Figure 9	B-106	Connects Tray 1 Feed/Nudger Motor
P/J618	Figure 8	G-107	Interim connection between Motor Driver Board and Tray 1 Feed Sensor
P/J619	Figure 3	A-105	Interim connection between Motor Driver Board and C Fan
P/J624	Figure 7	D-108	Interim connection
P/J631A	Figure 12	G-103	Interim connection between Motor Driver Board and Exit 2 OCT Home Position Sensor

Table 1 Print Engine Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J631B	Figure 12	G-103	Interim connection between Motor Driver Board and Exit 2 Full Stack Sensor and Exit 2 Sensor
P/J632	Figure 8	C-102	Interim connection between Motor Driver Board and Registration Clutch
P/J633	Figure 1	F-108	Connects ATC PWB
P/J634	Figure 23	F-108	Relay connector.
P/J635	Figure 7	C-108	Interim connection between Motor Driver Board and Left Hand Fan Board
P/J640	Figure 6	B-110	Interim connection between Motor Driver Board and Exit 1 Full Stack Sensor
P/J661	Figure 17	E-106	Connects Tray 3 Feeder Assembly - 3TM
P/J661	Figure 20	D-105	Connects Tray 3 Feeder Assembly - TTM
P/J662	Figure 17	E-107	Connects Tray 4 Feeder Assembly - 3TM
P/J662	Figure 20	D-106	Connects Tray 4 Feeder Assembly - TTM
P/J663	Figure 17	E-108	Connects Tray 5 Feeder Assembly - 3TM
P/J663	Figure 21	F-102	Connects Tray 5 Feeder Assembly - TTM
P/J668	Figure 17	E-108	Connects Tray 5 Feeder Assembly - 3TM
P/J668	Figure 20	D-107	Connects Tray 5 Feeder Assembly - TTM
P/J669	Figure 17	E-107	Connects Tray 3 Feeder Assembly - 3TM
P/J669	Figure 20	D-105	Connects Tray 3 Feeder Assembly - TTM
P/J671	Figure 17	E-107	Connects Tray 4 Feeder Assembly - 3TM
P/J671	Figure 20	E-106	Connects Tray 4 Feeder Assembly - TTM
P/J672	Figure 17	E-107	Connects Chute Assembly - 3TM
P/J672	Figure 20	D-105	Connects Chute Assembly - TTM
P/J673	Figure 17	E-108	Connects Tray 5 Feeder Assembly - 3TM
P/J673	Figure 21	F-103	Connects Tray 5 Feeder Assembly - TTM
J675	Figure 21	F-102	Connects Tray 5 Feeder Assembly - TTM
J676	Figure 21	F-102	Connects Tray 5 Feeder Assembly - TTM
P/J674	Figure 17	E-108	Connects Tray 4 Feeder Assembly - 3TM
P/J675	Figure 19	G-105	
P/J676	Figure 19	G-105	
P678	Figure 10	G-106	
P/J710	Figure 4	B-104	Connects Control Panel
P903	Figure 14	A-106	
P904	Figure 18	G-107	TTM
P904	Figure 19	F-106	3TM
P/J1313	Figure 24	E-109	
P/J1343	Figure 24	C-106	Connects Back Plane Board

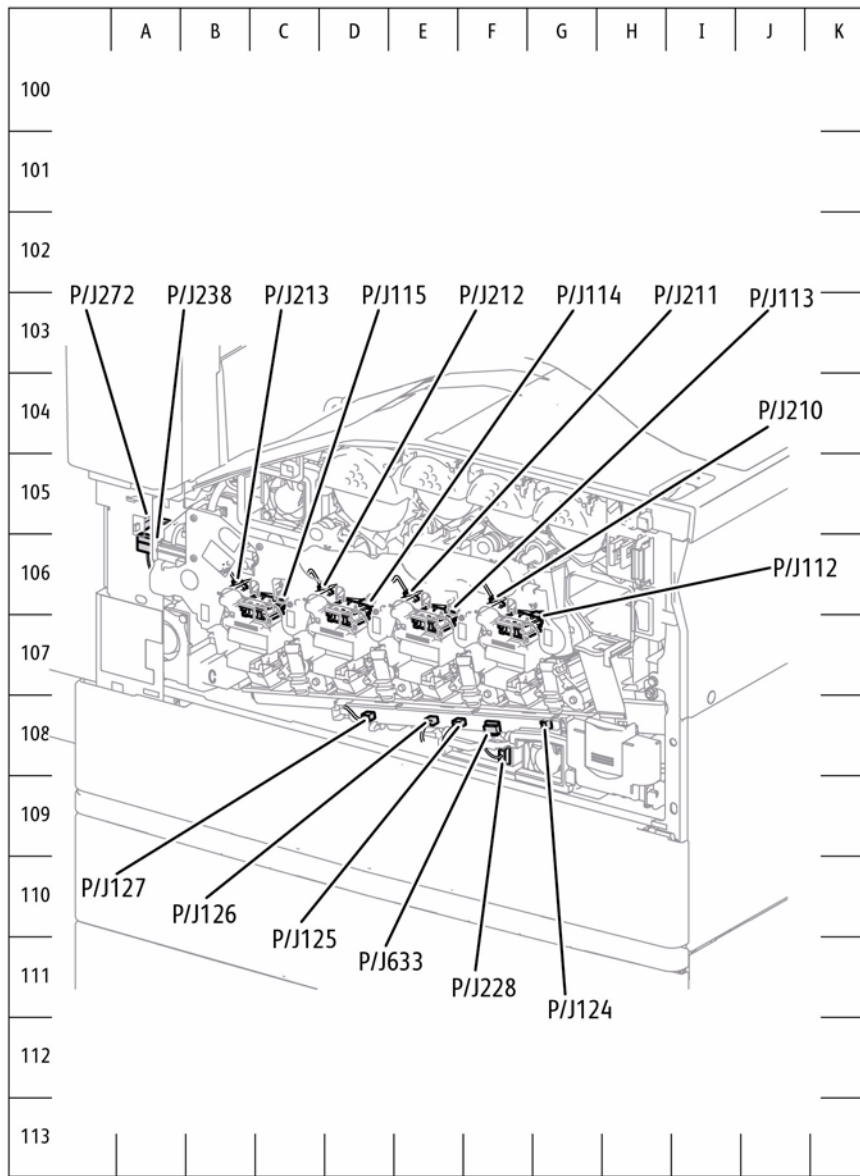


Figure 1 Xerographics

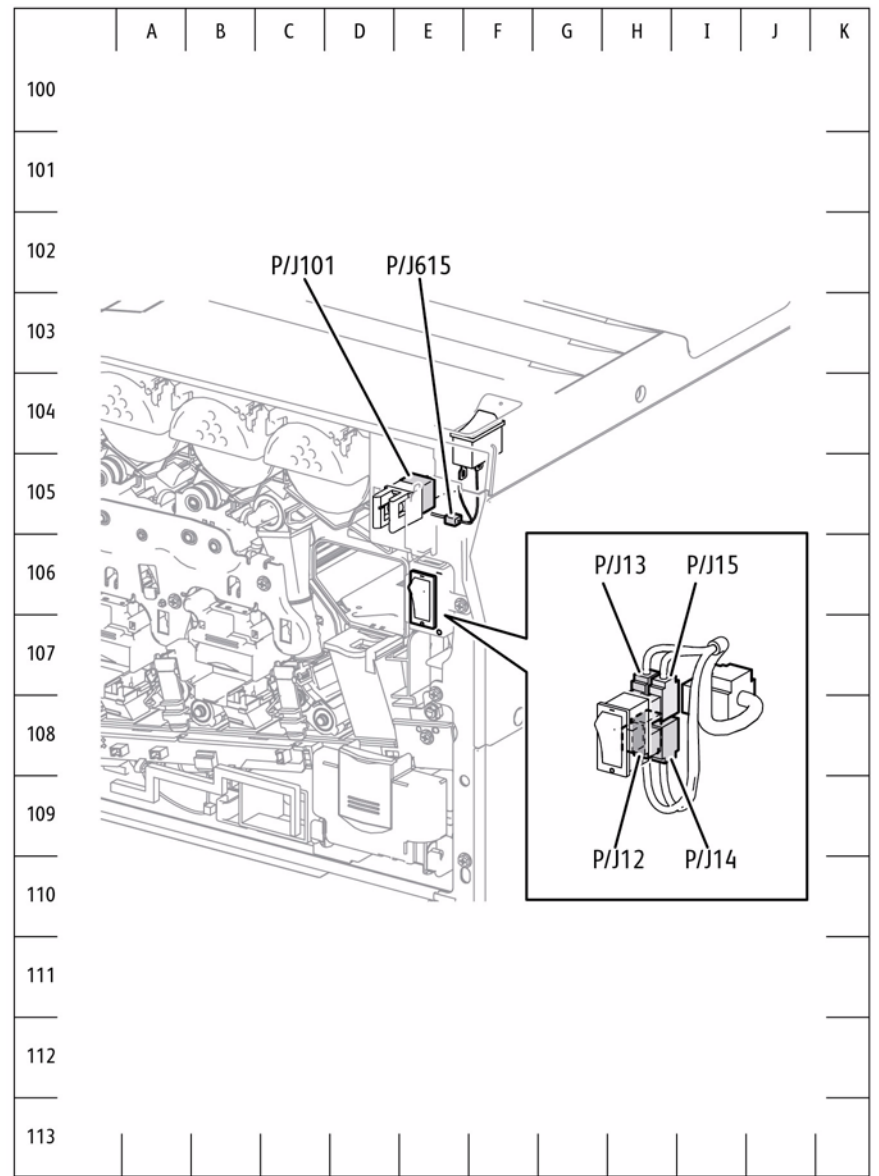
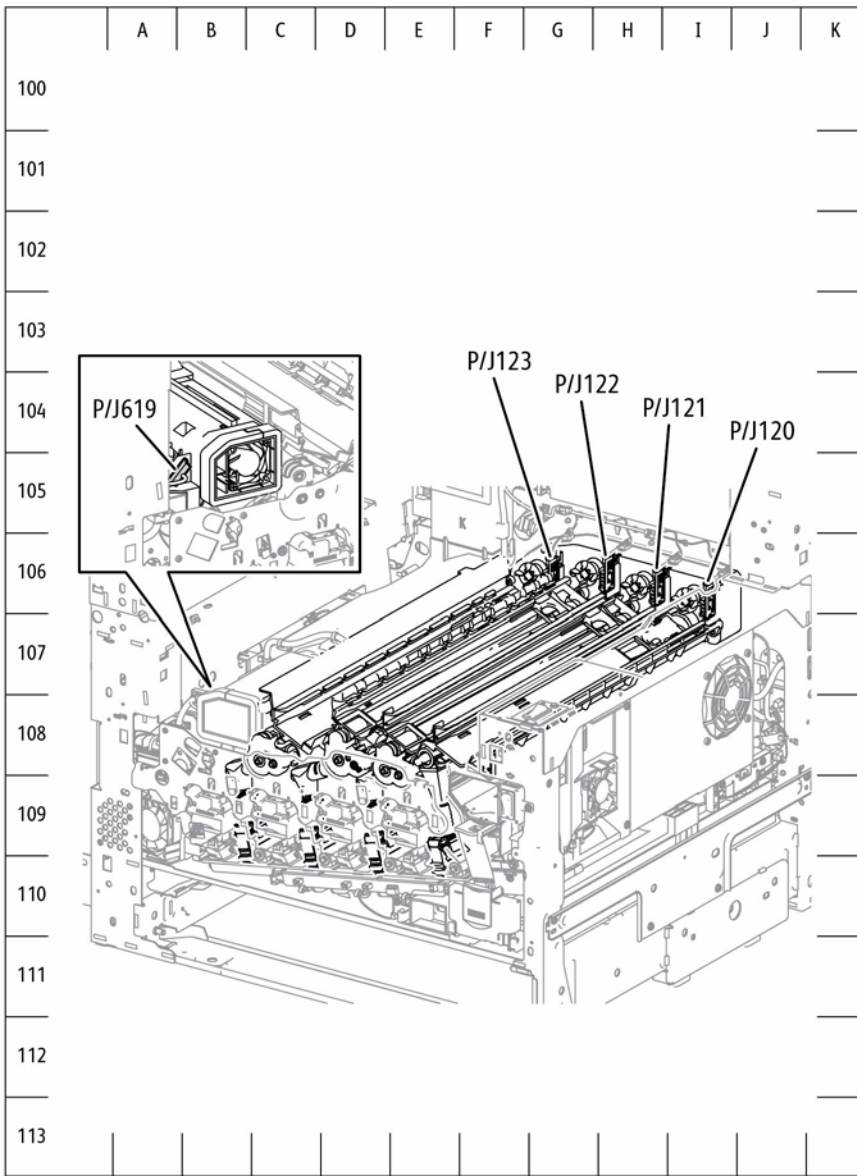
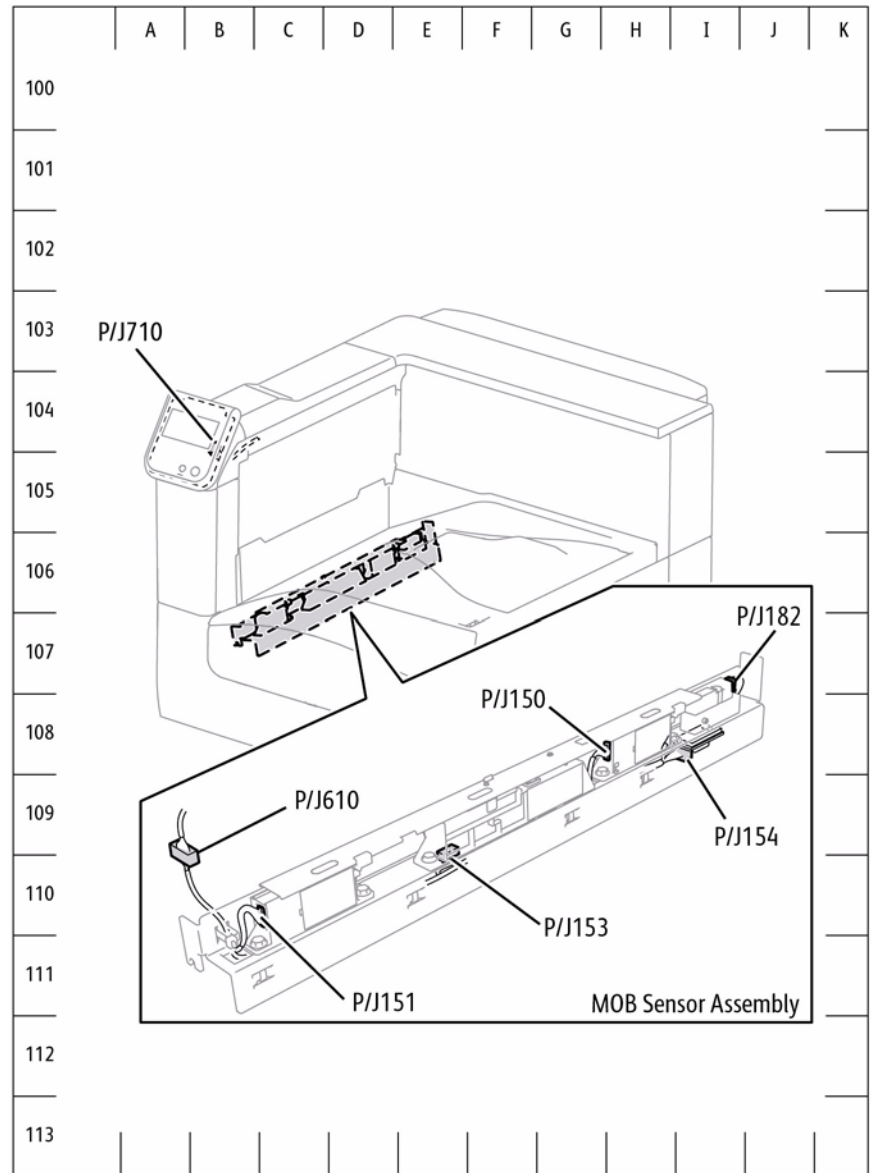


Figure 2 Main Power/ Front Cover Interlock Switch



s7800-373

Figure 3 Toner CRUM Coupler, C Fan



s7800-374

Figure 4 MOB ADC Assembly

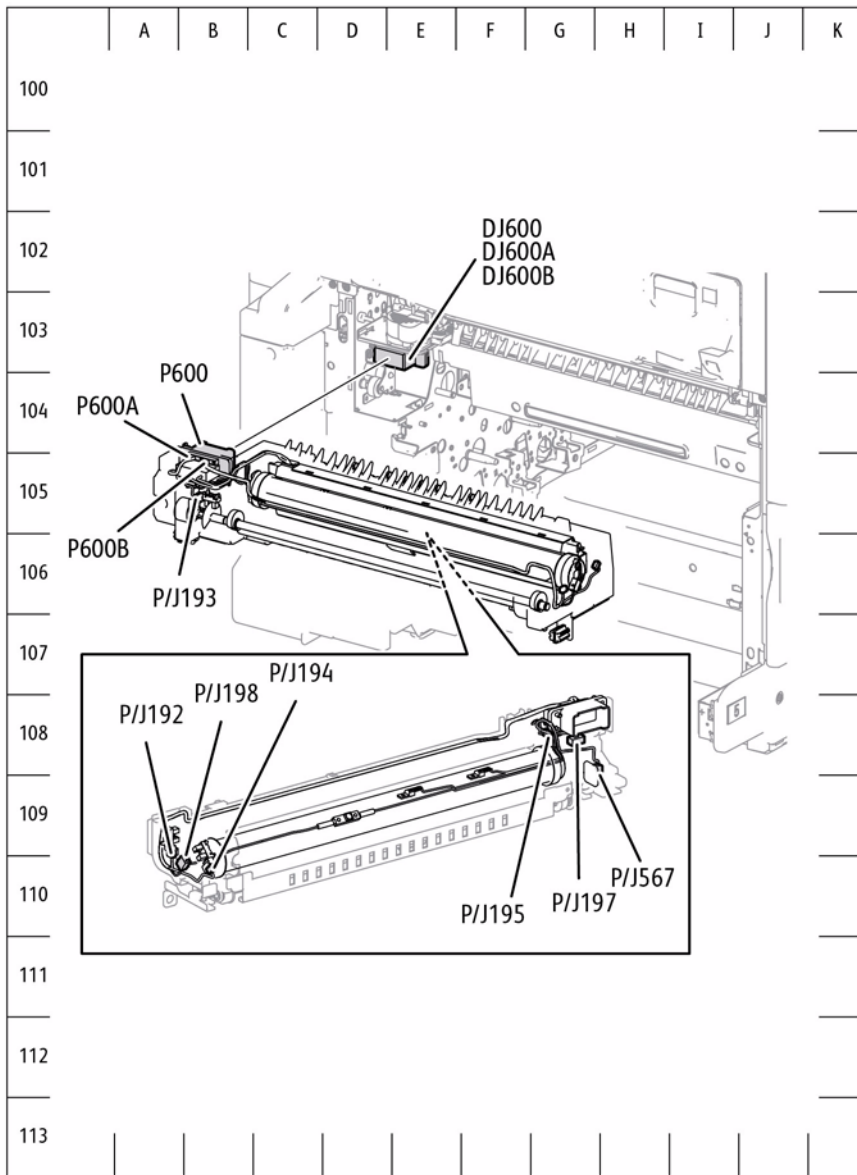


Figure 5 Fusing Unit

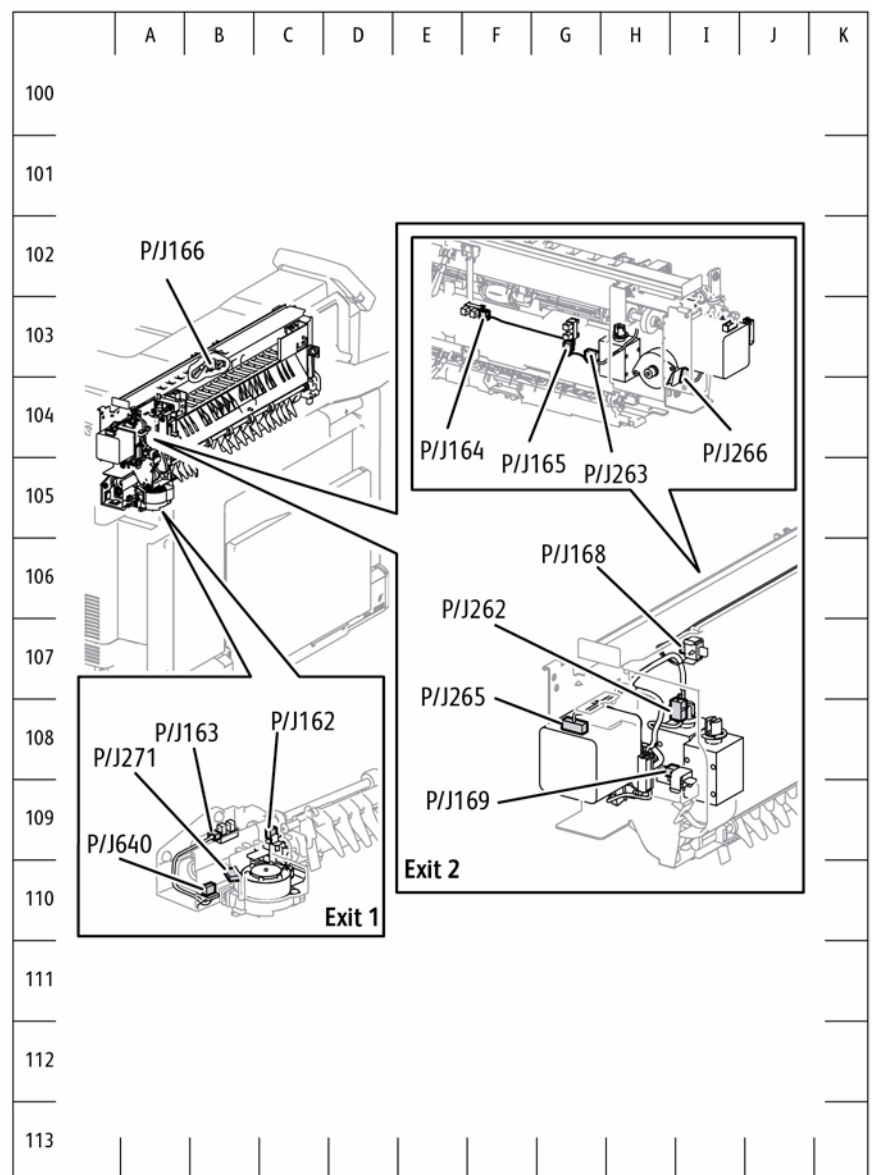


Figure 6 Exit 1, Exit 2

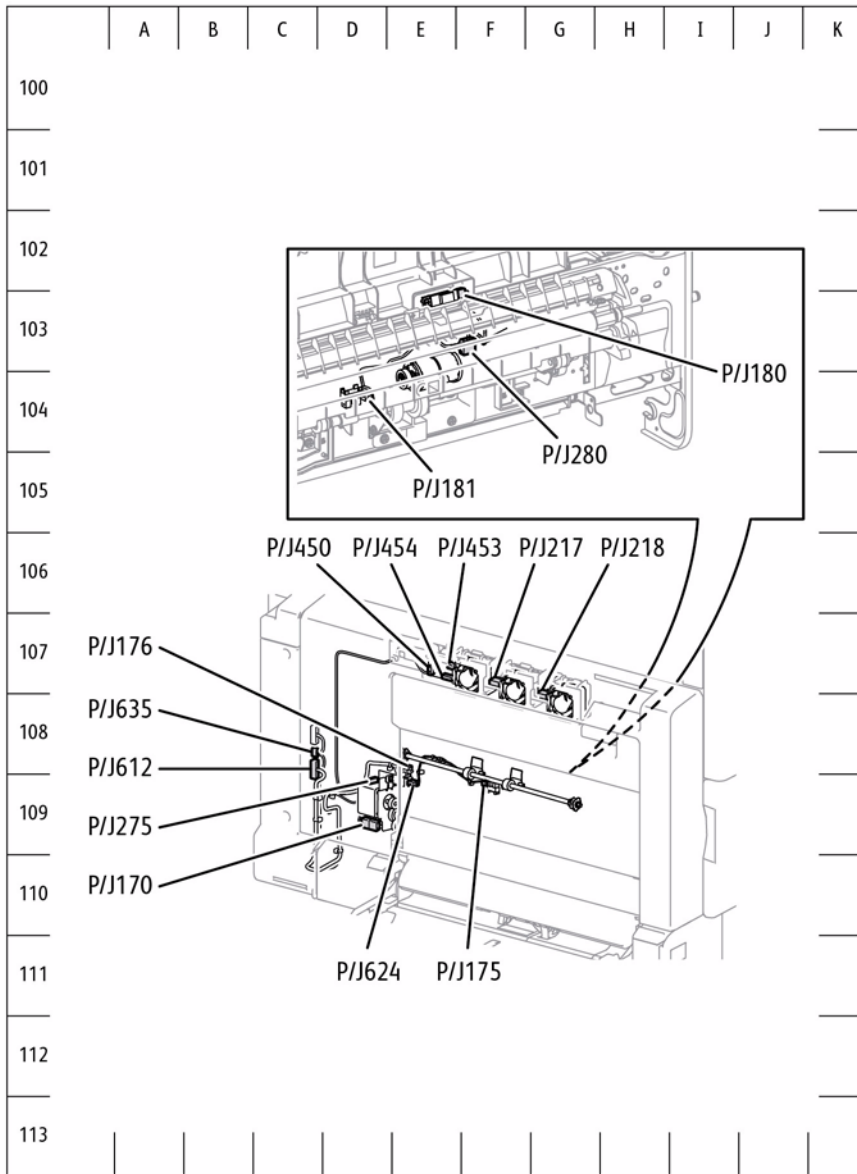


Figure 7 Left Hand Cover

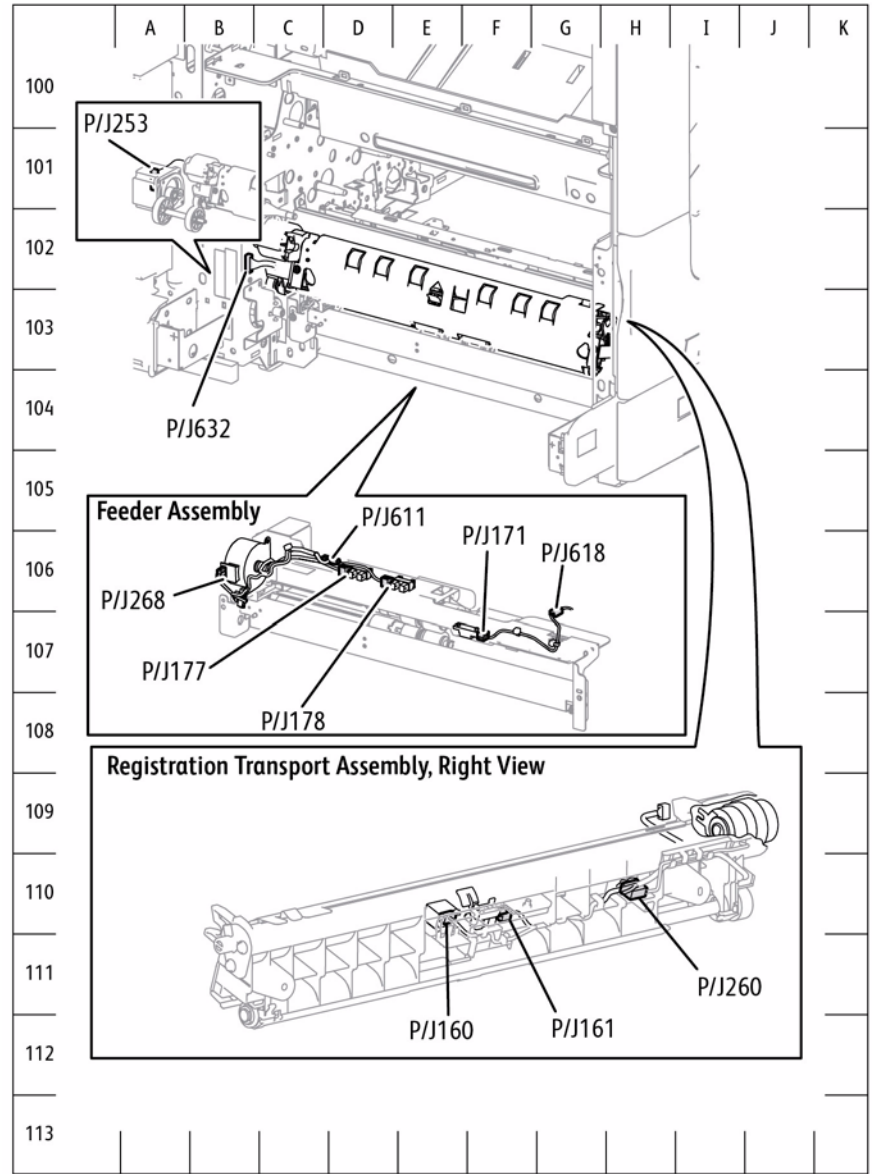
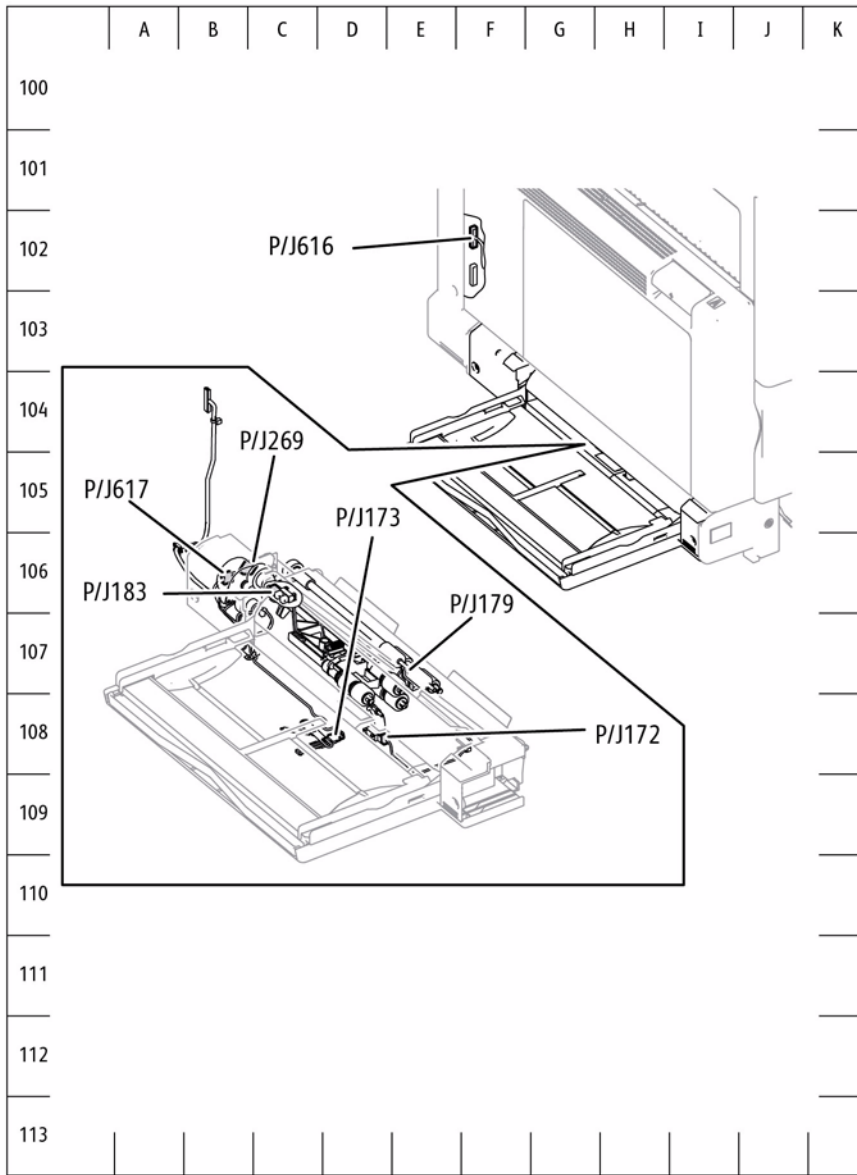
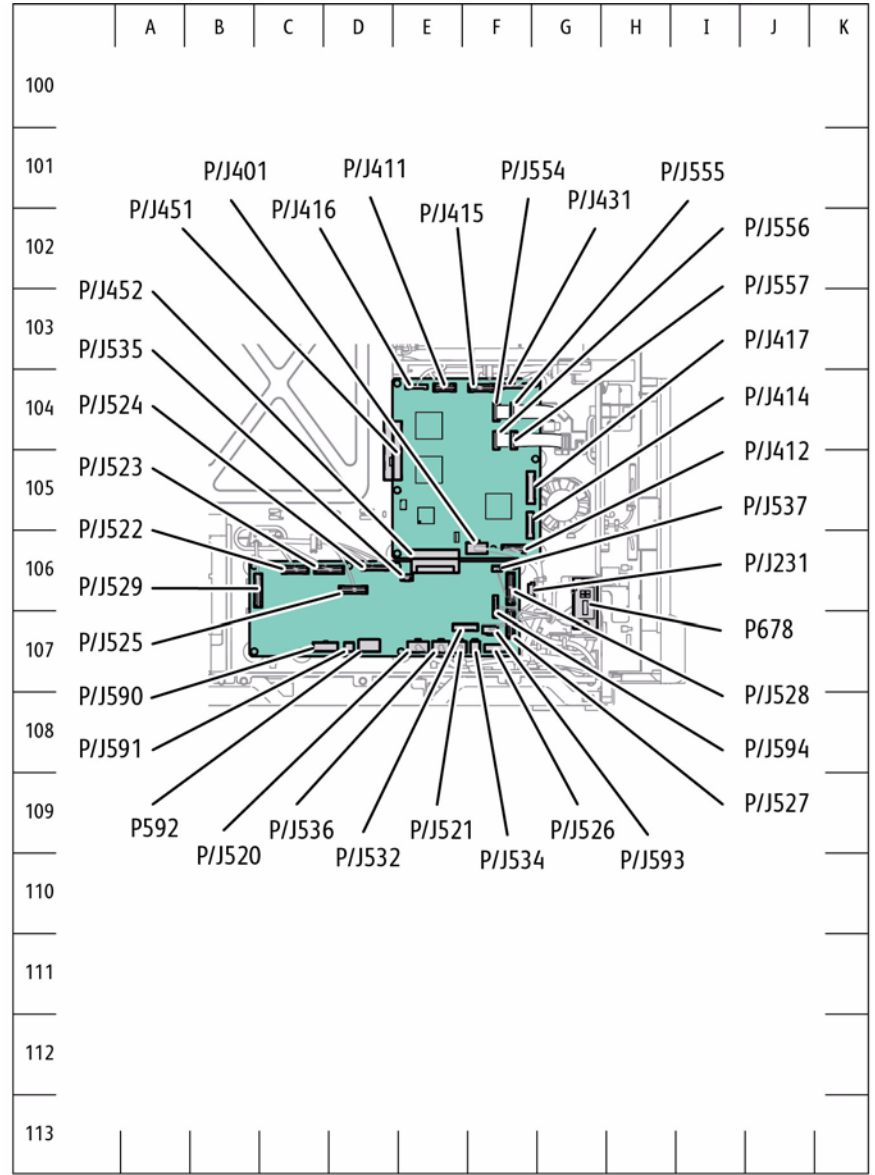


Figure 8 Registration, Tray 2 Feeder



s7800-379

Figure 9 Tray 1



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Figure 10 MCU/ Motor Drive PWB

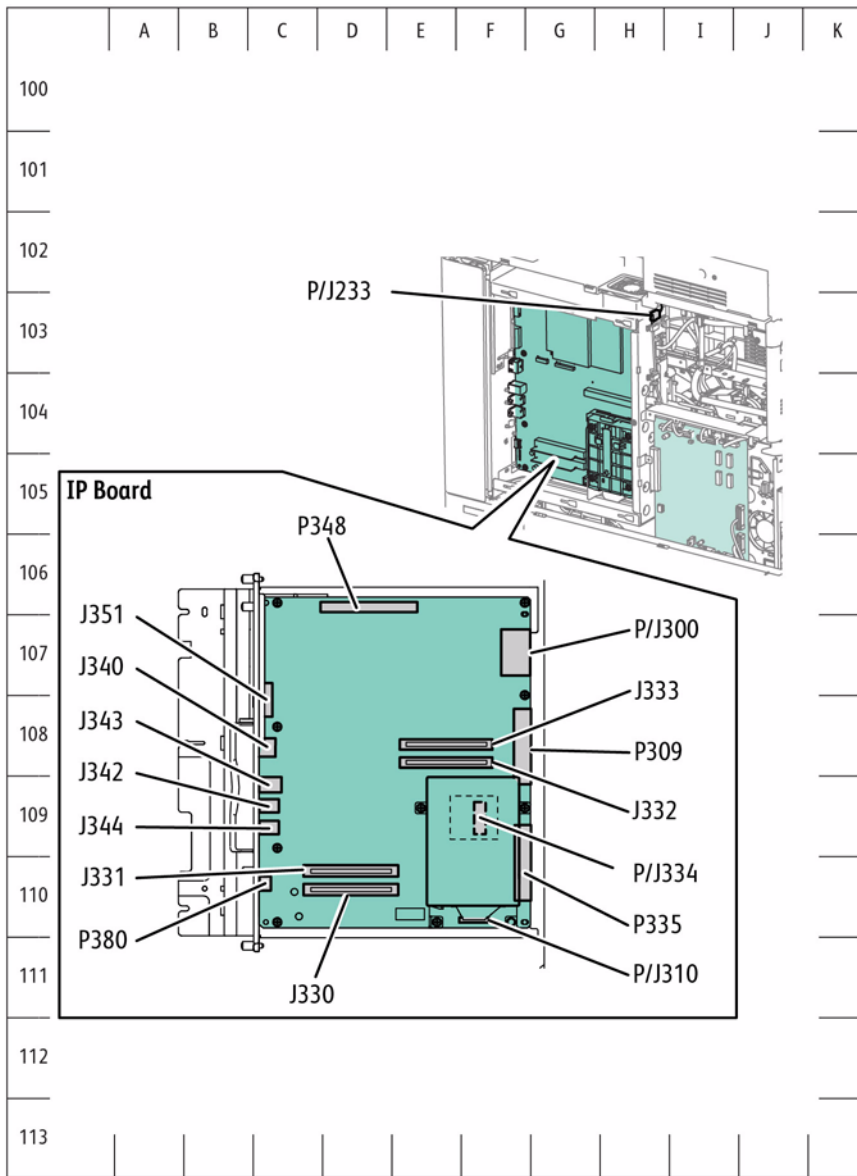


Figure 11 Control Unit

s7800-381

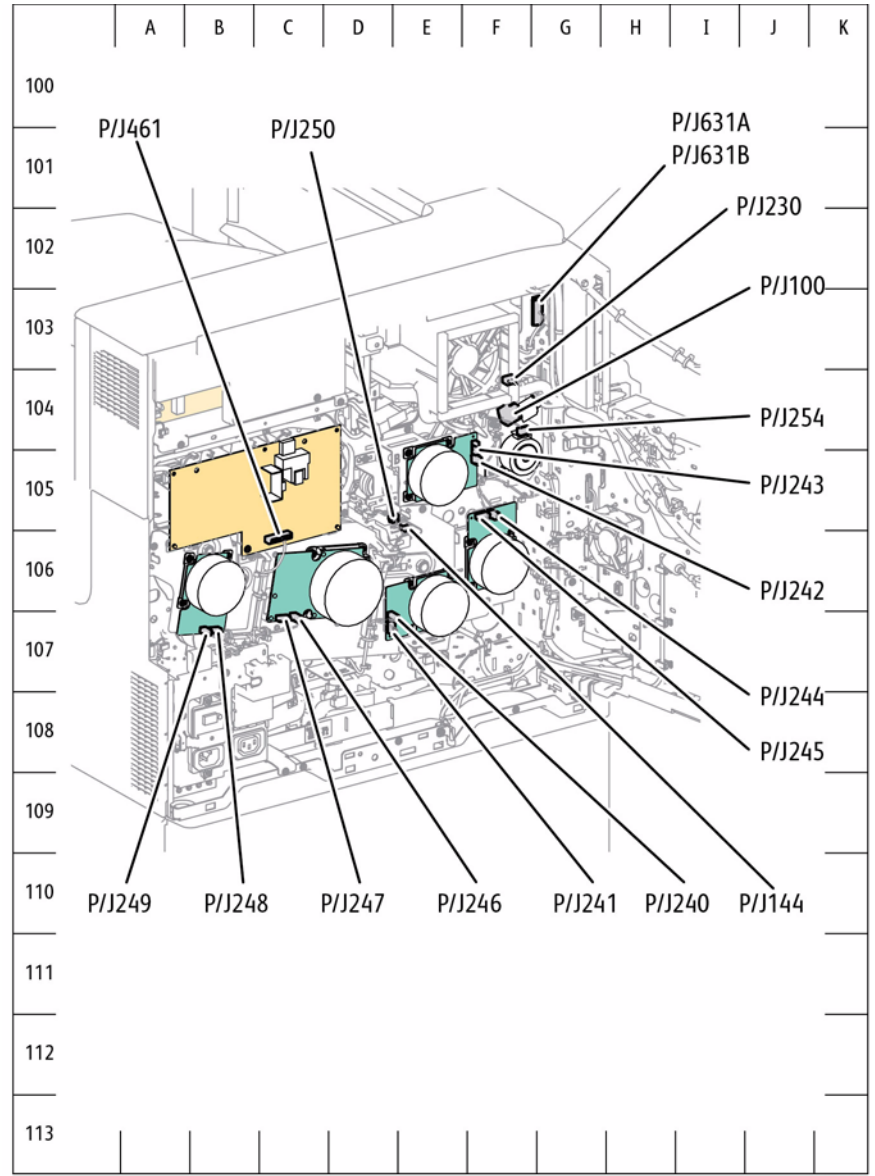


Figure 12 IOT Rear Location

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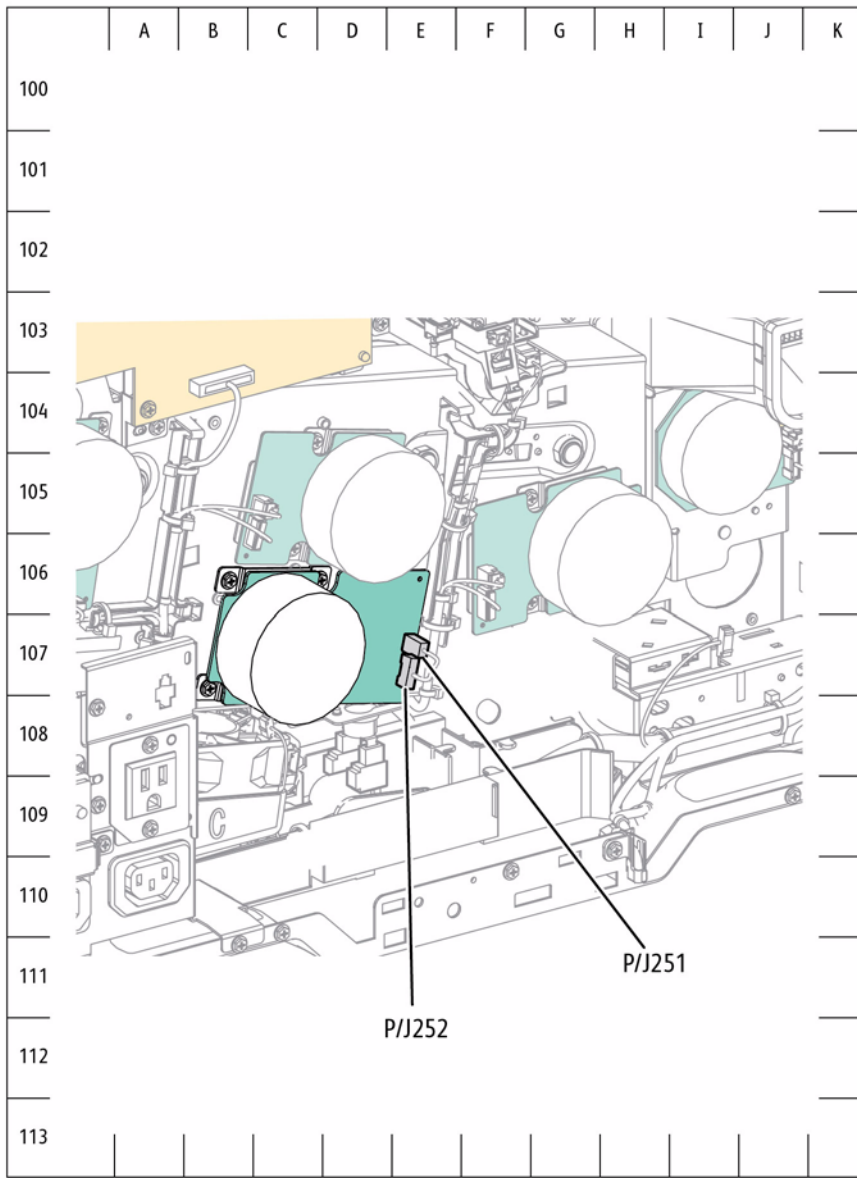


Figure 13 Deve Drive Motor Thermostat

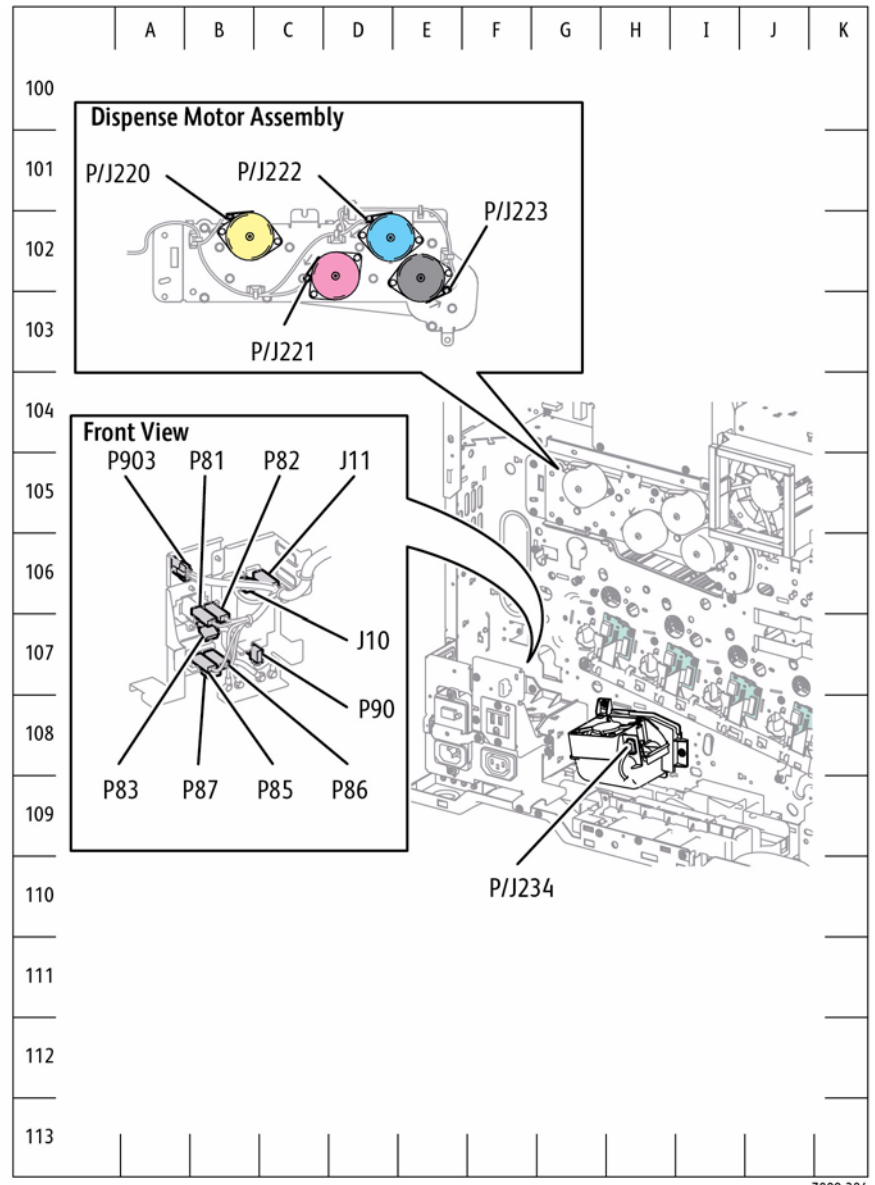


Figure 14 Toner Dispense Motor (Y/M/C/K), GFI Chassis, Bottom Fan

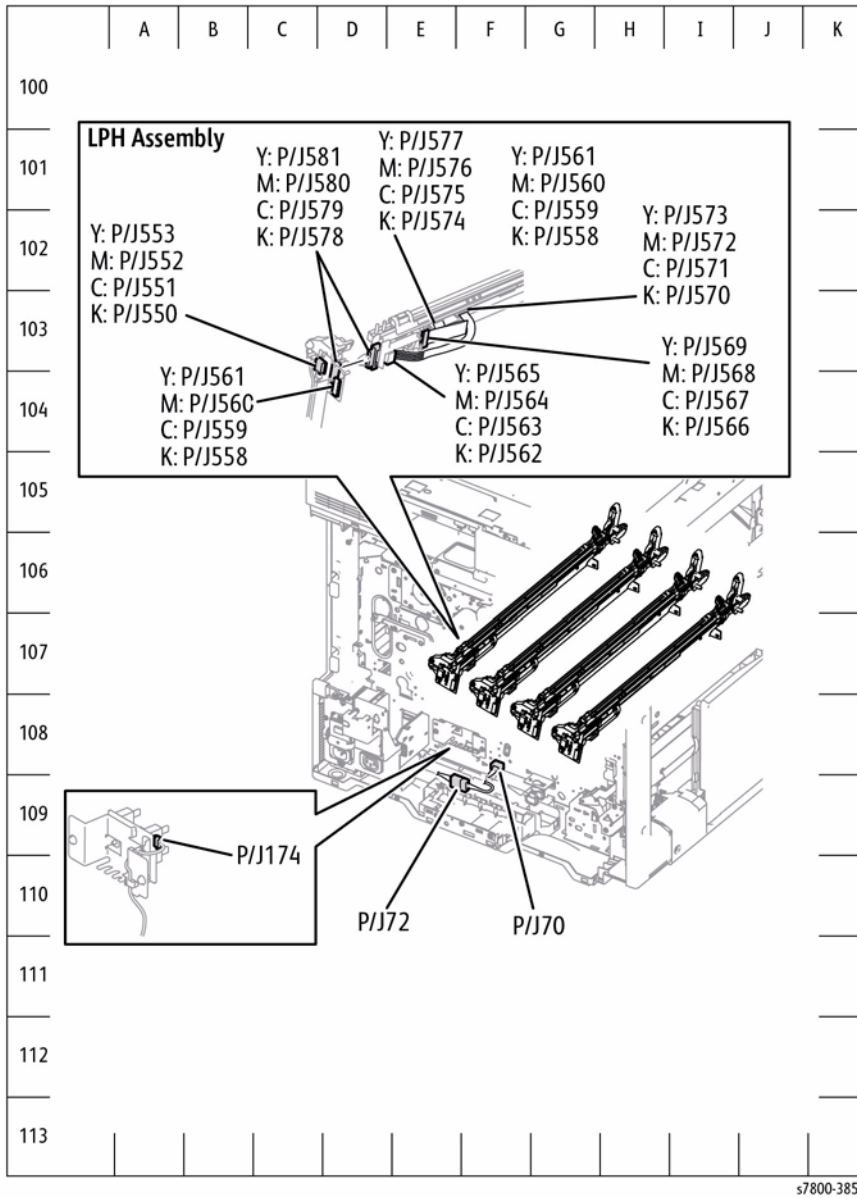


Figure 15 LED Printhead, Tray 2 Paper Size Sensor

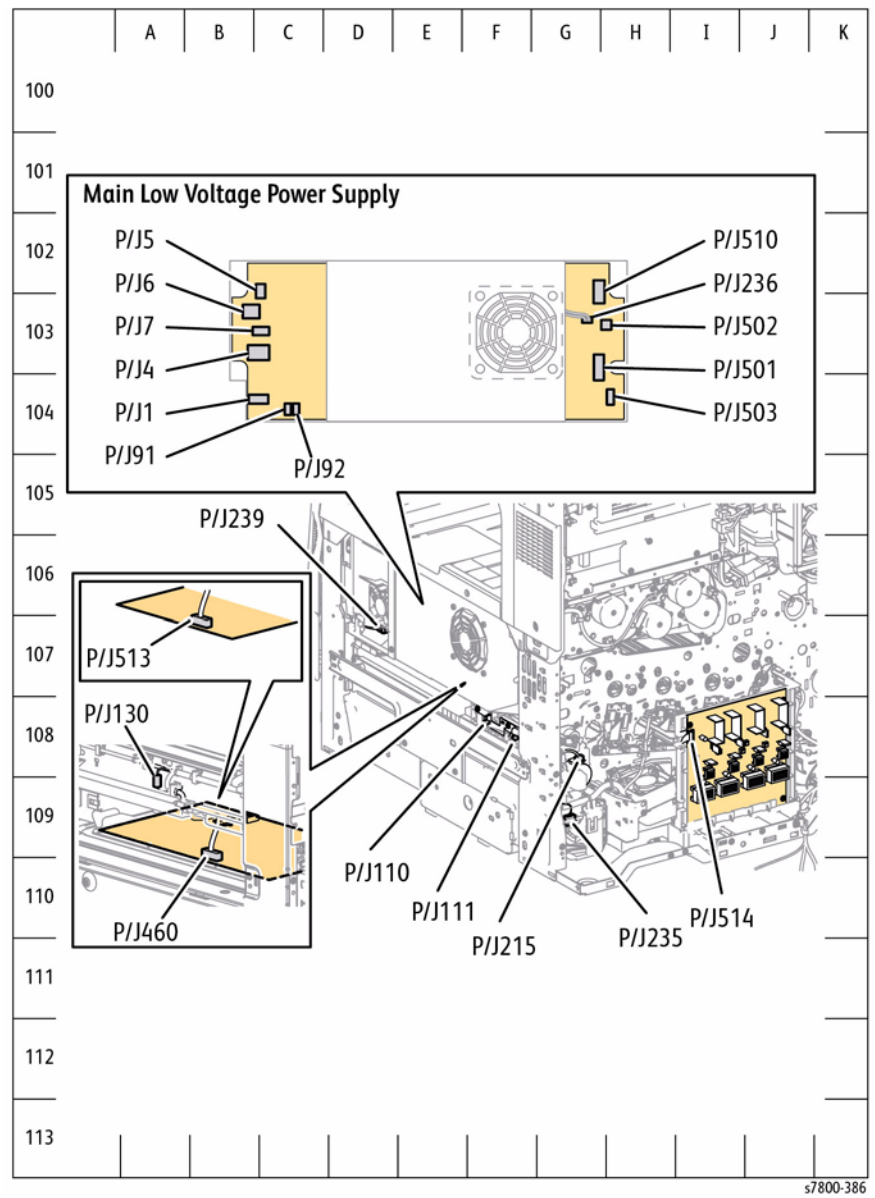


Figure 16 Main LVPS, HVPS (DEVE/ BCR), Agitator Motor

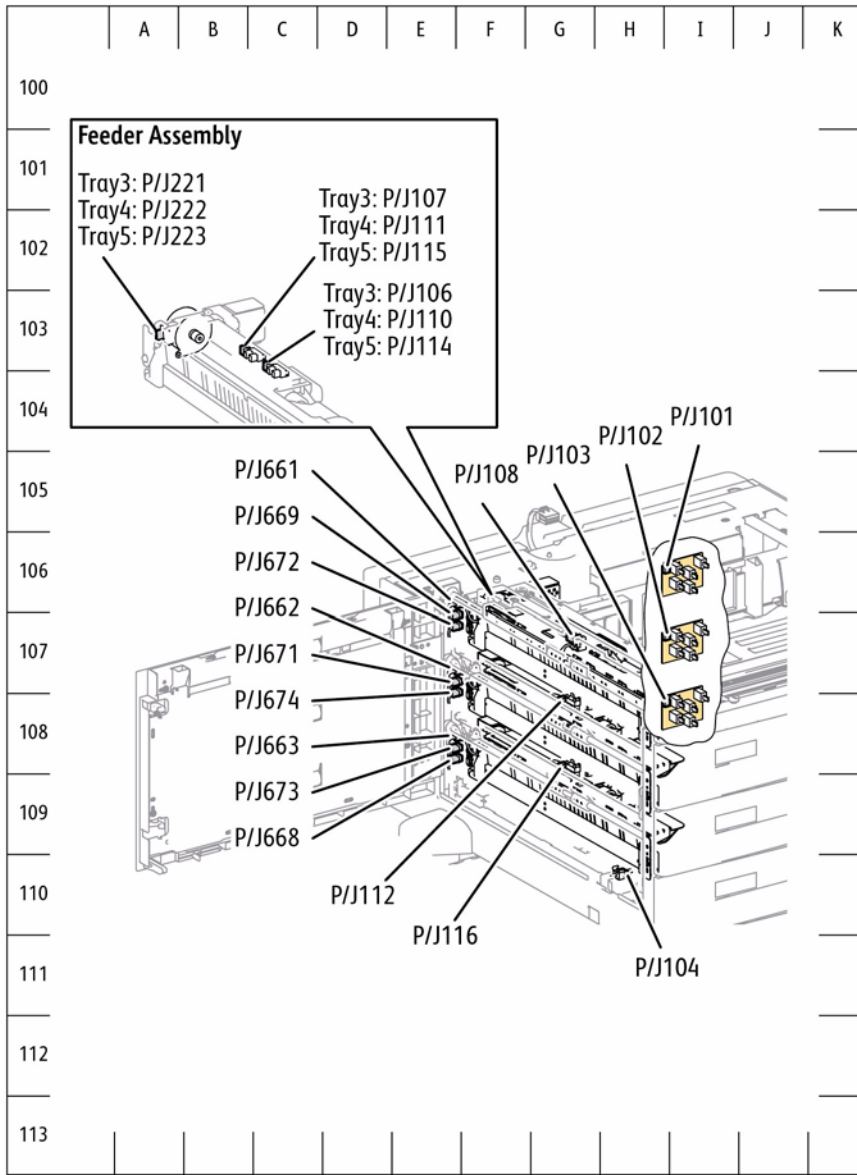


Figure 17 3TM Tray 3, 4, 5 Feeder, Paper Size Sensor

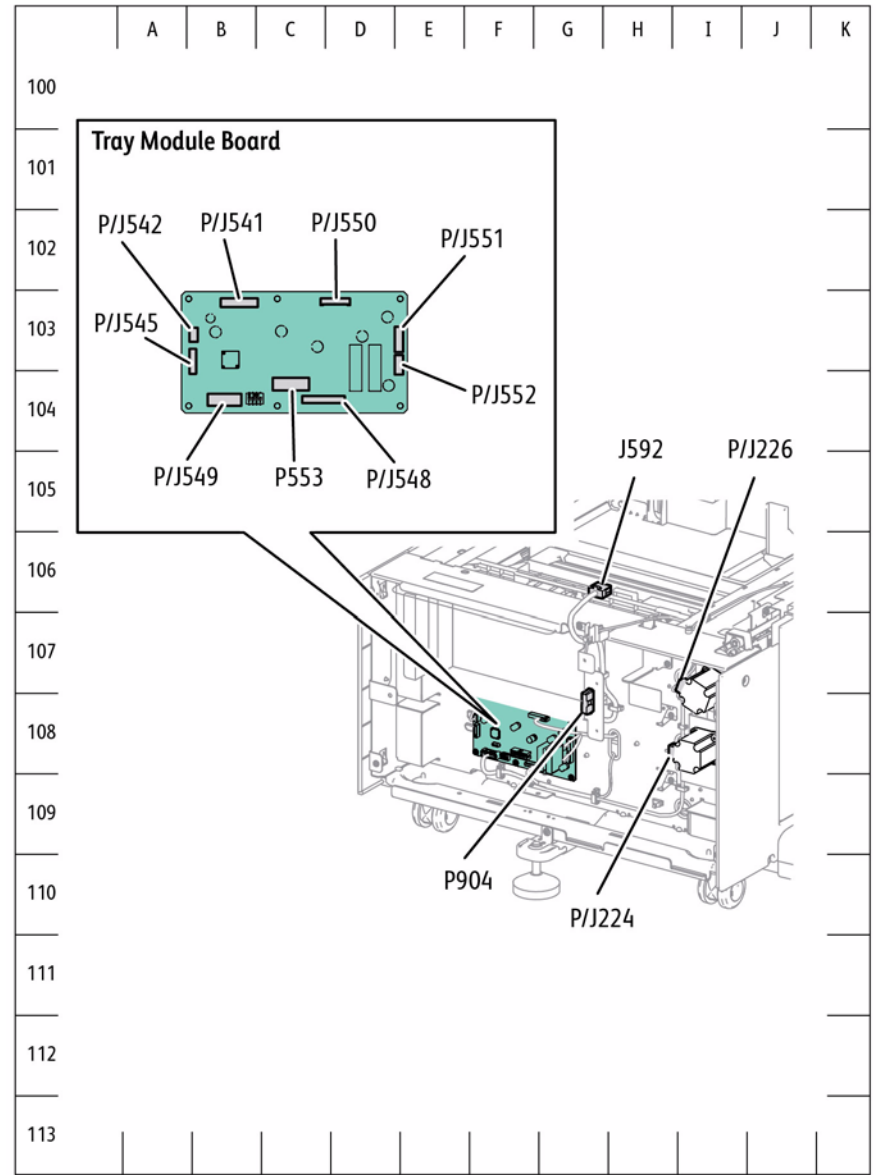


Figure 18 3TM Tray Module PWB

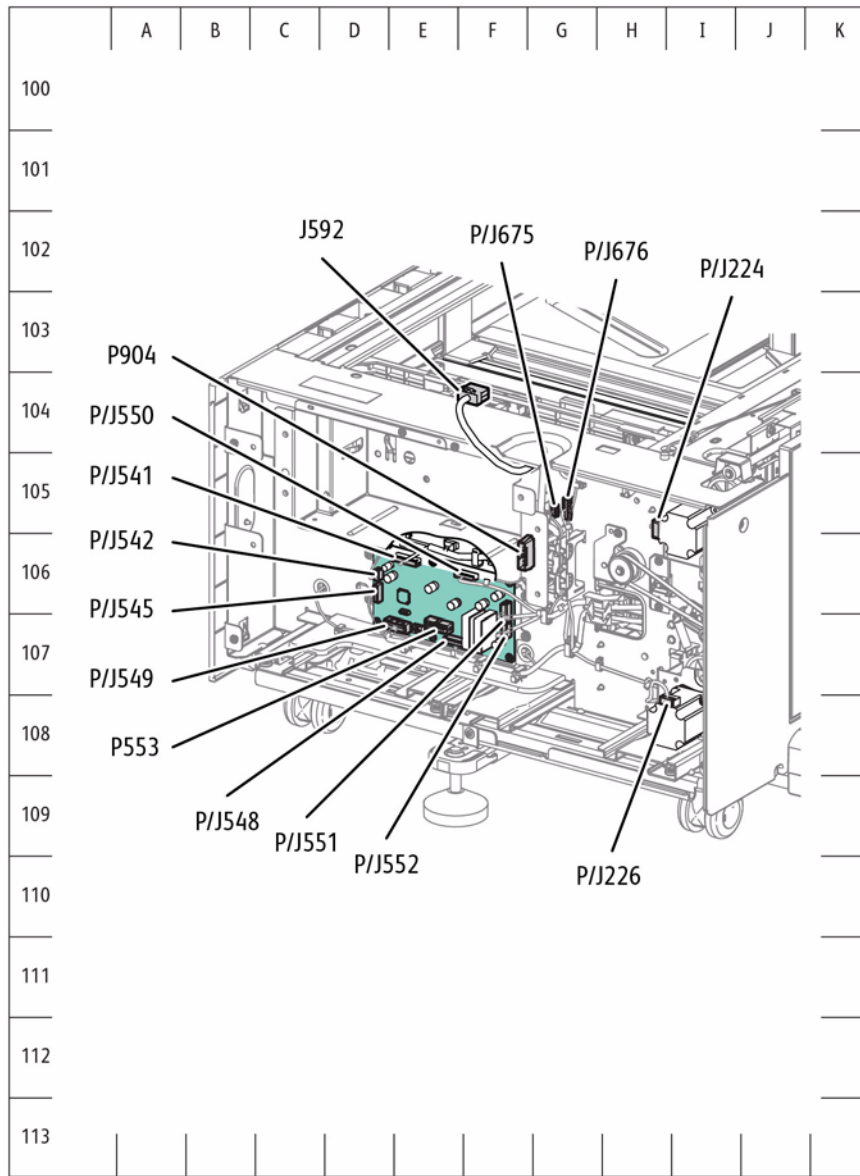


Figure 19 TTM Tray Module PWB

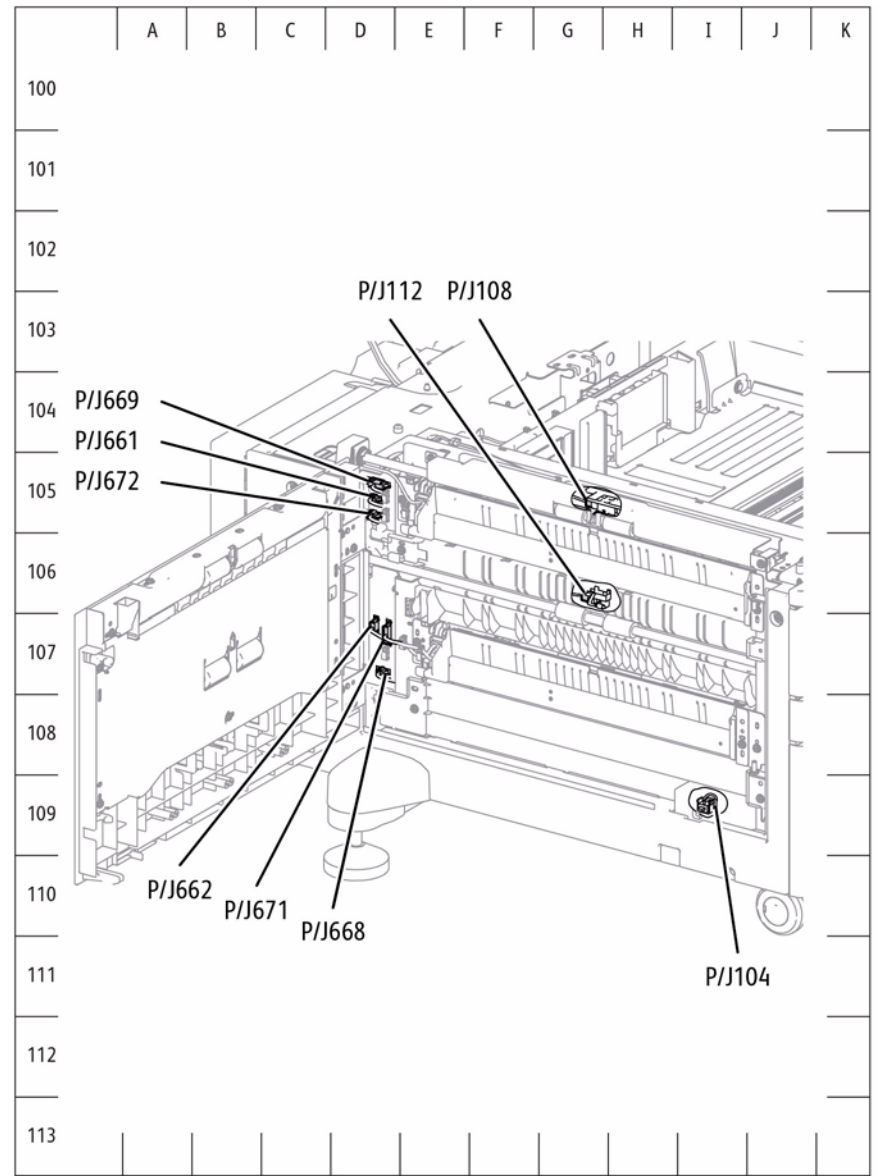
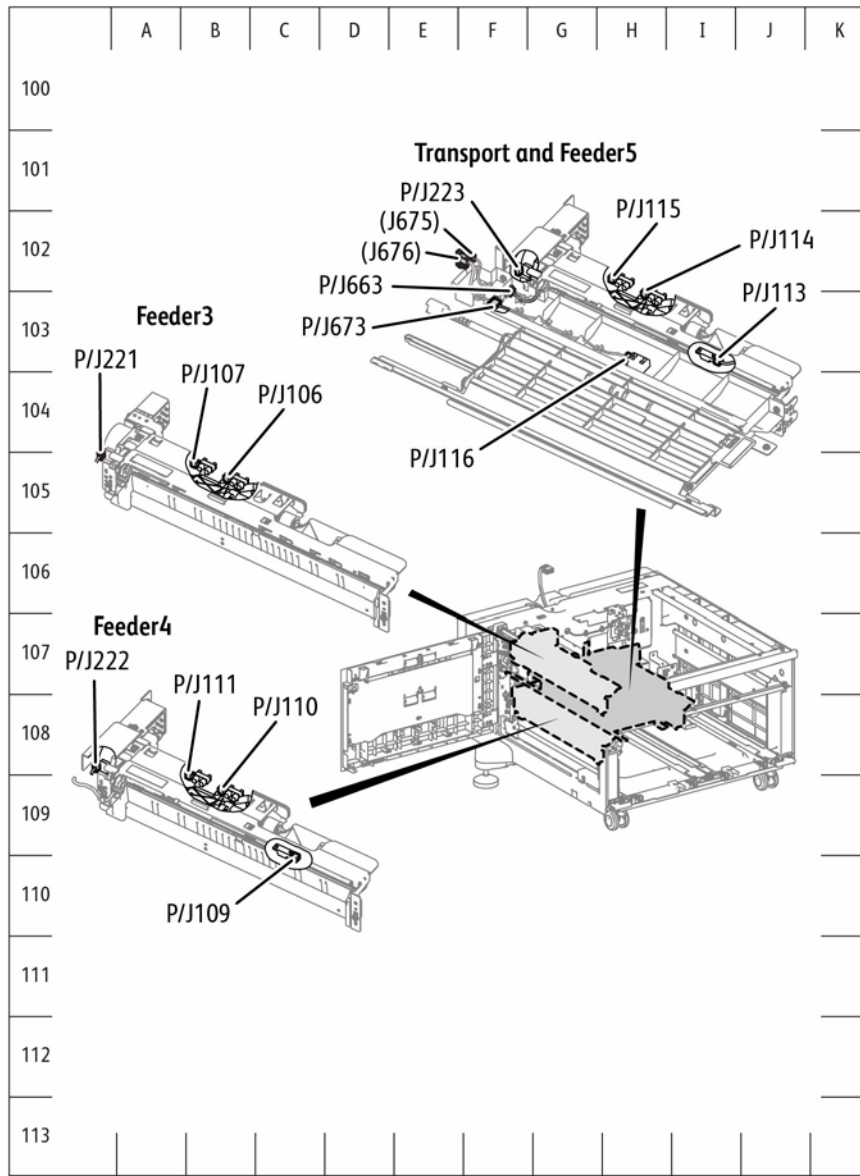
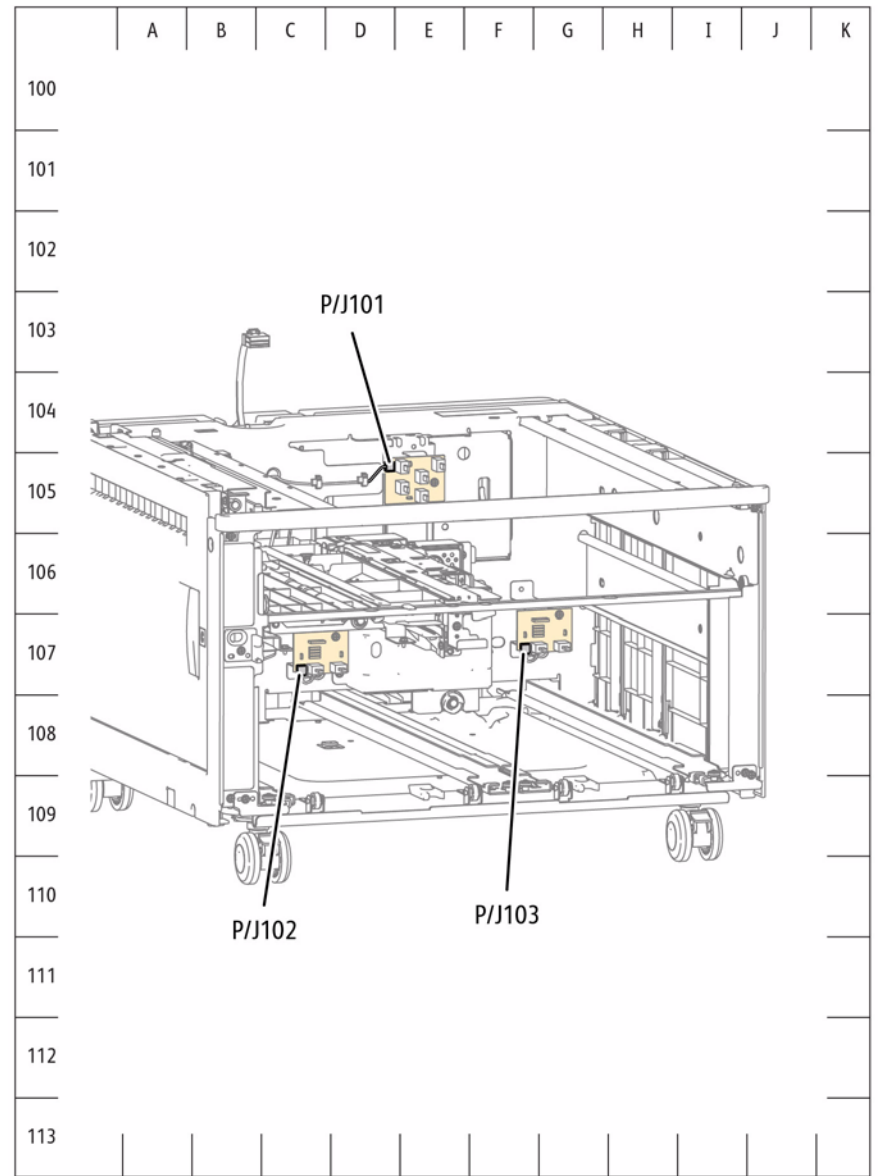


Figure 20 TTM Tray 3, 4 Feed Out Sensor



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Figure 21 TTM Tray 3, 4, 5 Feeder



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Figure 22 TTM Paper Size Sensor

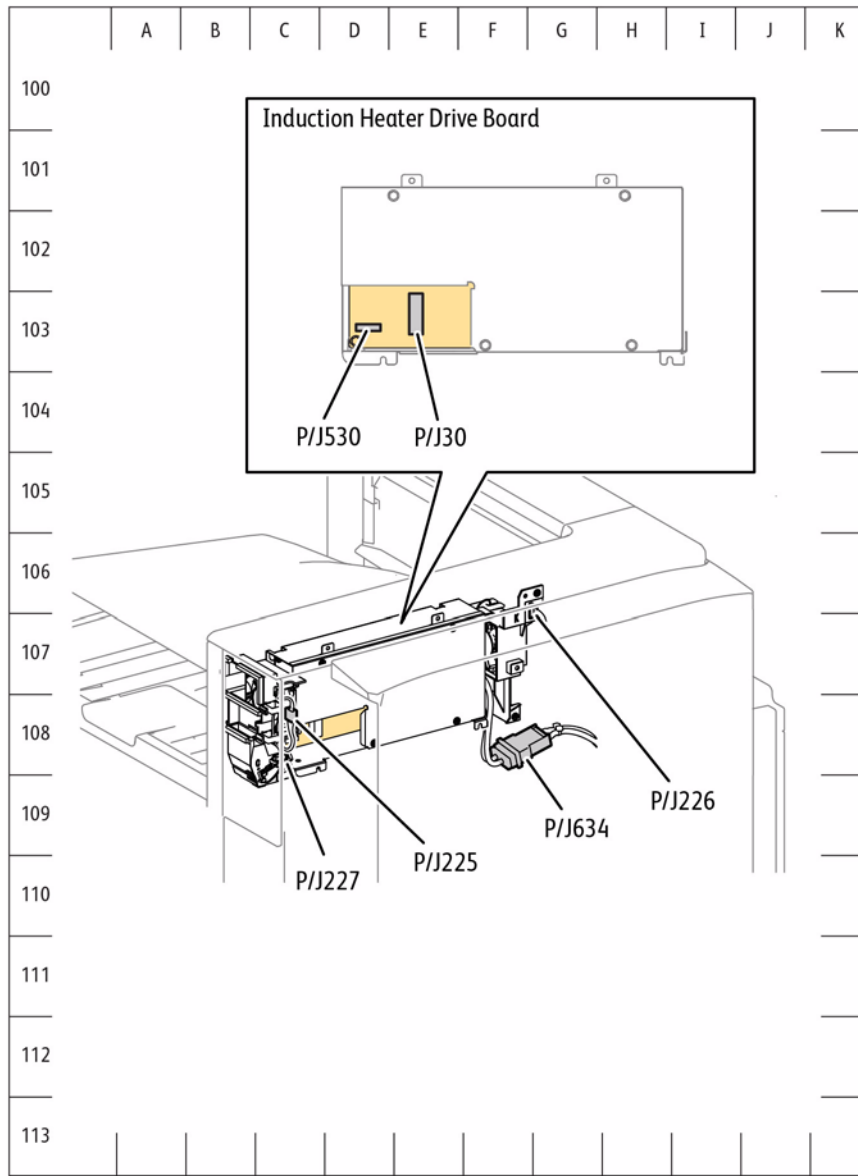


Figure 23 IH Drive PWB

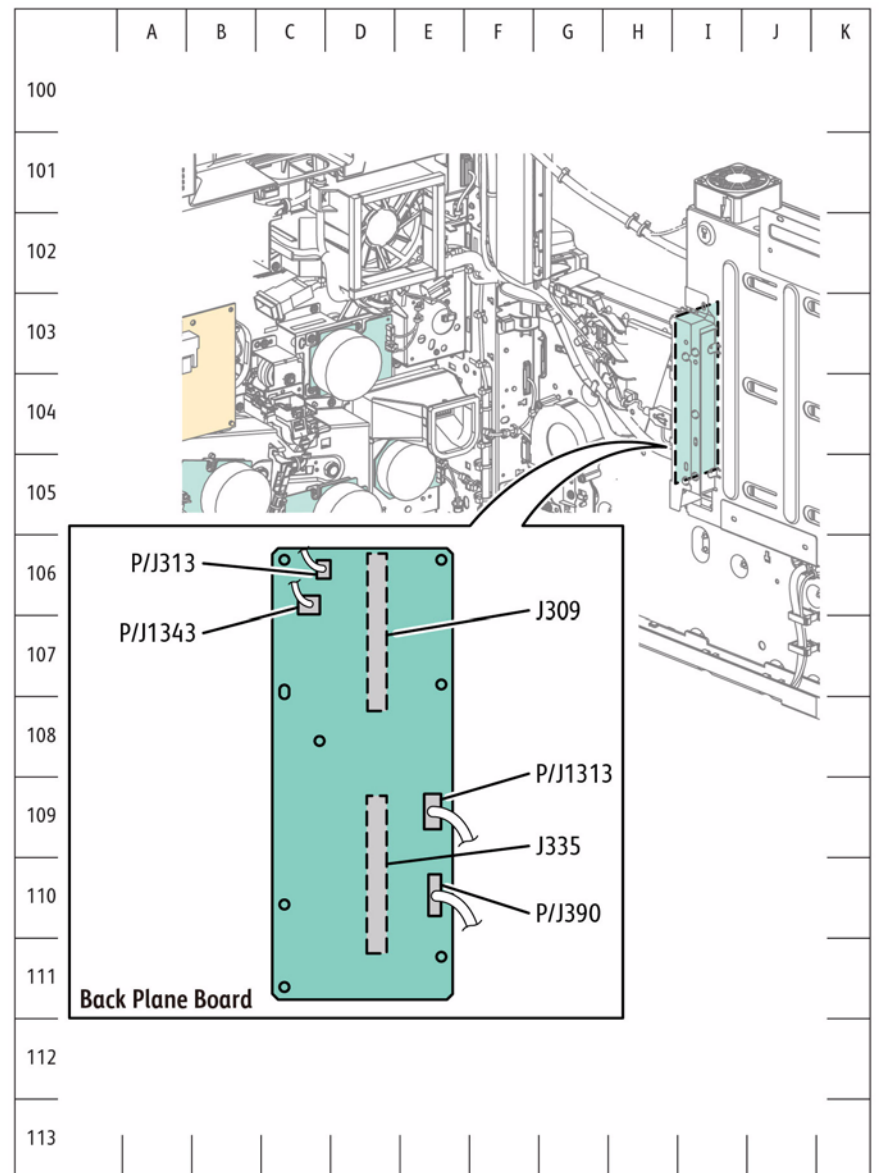


Figure 24 BP PWB

Advanced Finisher Plug/Jack

Table 1 Advanced Finisher Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J590	Figure 3	E-109	Finisher LVPS
P/J591	Figure 3	E-108	Finisher LVPS
P/J8860	Figure 1	E-106	H-Transport Open Sensor
P/J8861	Figure 1	H-106	H-Transport Entrance Sensor
P/J8862	Figure 1	G-108	H-Transport Motor
P8863	Figure 1	G-106	Relay Connector (H-Transport)
J8863	Figure 1	D-104	Relay Connector (Punch Unit)
J8864	Figure 1	C-104	Punch Home Sensor
J8865	Figure 1	B-105	Punch Encoder Sensor
J8866	Figure 1	E-105	Punch Box Set Sensor
P/J8867	Figure 1	B-104	Punch Motor
J8868	Figure 4	G-105	Finisher Entrance Sensor
J8869	Figure 4	E-105	Compile Exit Sensor
J8870	Figure 3	D-104	Eject Clamp Home Sensor
J8871	Figure 3	D-104	Set Clamp Home Sensor
J8872	Figure 3	D-105	Stacker No Paper Sensor
J8873	Figure 3	D-103	Stacker Height Sensor 1
J8874	Figure 3	C-103	Stacker Height Sensor 2
J8875	Figure 3	D-105	Stacker Encoder Sensor
P/J8876	Figure 4	H-106	Sub Paddle Solenoid
P/J8877	Figure 3	E-105	Set Clamp Clutch
P/J8878	Figure 3	F-105	Eject Motor
P/J8879	Figure 3	E-104	Transport Motor
J8880	Figure 4	E-107	Compiler Tray No Paper Sensor
J8881	Figure 4	C-105	Front Tamper Home Sensor
J8882	Figure 4	G-107	Rear Tamper Home Sensor
P/J8883	Figure 4	D-107	Rear Tamper Motor
P/J8884	Figure 4	D-107	Front Tamper Motor
J8885	Figure 2	G-108	Stapler Move Position Sensor
J8886	Figure 2	F-108	Stapler Unit
J8887	Figure 2	F-108	Stapler Unit
P/J8888	Figure 4	C-107	Stapler Move Motor
J8889	Figure 3	D-103	Eject Cover Switch
J8890	Figure 3	D-103	Open Switch
J8891	Figure 4	C-104	Front Door Interlock Switch
P/J8892	Figure 5	G-106	Relay Connector (Front Stapler)
P/J8893	Figure 5	D-105	Relay Connector (Rear Stapler)
J8894	Figure 6	C-107	Booklet Front Stapler
J8895	Figure 6	B-107	Booklet Rear Stapler

Table 1 Advanced Finisher Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J8896	Figure 5	D-105	Relay Connector (Booklet Stapler Move Motor)
J8897	Figure 5	C-104	Booklet Stapler Move Home Sensor
J8898	Figure 5	C-105	Booklet Stapler Position Sensor
J8899	Figure 5	D-106	Booklet Stapler Cover Switch
J8900	Figure 5	I-108	Booklet Safety Front Switch
J8901	Figure 5	B-104	Booklet Safety Rear Switch
P/J8903	Figure 2	D-105	Relay Connector (Folder Assembly)
P8903	Figure 4	C-104	Finisher Eject
J8904	Figure 2	D-105	Folder Home Sensor
P/J8905	Figure 2	C-106	Folder Knife Motor
P/J8906	Figure 6	C-107	Booklet Stapler Move Motor
J8980	Figure 3	E-105	Finisher PWB
P/J8981	Figure 3	F-106	Finisher PWB
J8982	Figure 3	E-106	Finisher PWB
P/J8983	Figure 3	E-106	Finisher PWB
J8984	Figure 3	E-106	Finisher PWB
P8985	Figure 3	E-107	Finisher PWB
J8985	Figure 6	G-106	Booklet Maker PWB
P/J8986	Figure 3	E-106	Finisher PWB
P8987	Figure 3	E-107	Finisher PWB
J8987	Figure 1	J-108	Finisher Horizontal Transport
P/J8988	Figure 3	F-107	Finisher PWB
J8989	Figure 3	E-108	Finisher PWB
P/J8990	Figure 3	F-108	Finisher PWB
P/J8991	Figure 6	G-104	Booklet Maker PWB
P/J8992	Figure 6	H-105	Booklet Maker PWB
P/J8993	Figure 6	H-105	Booklet Maker PWB
P/J8994	Figure 6	H-106	Booklet Maker PWB
P/J8995	Figure 6	B-107	Booklet Maker PWB

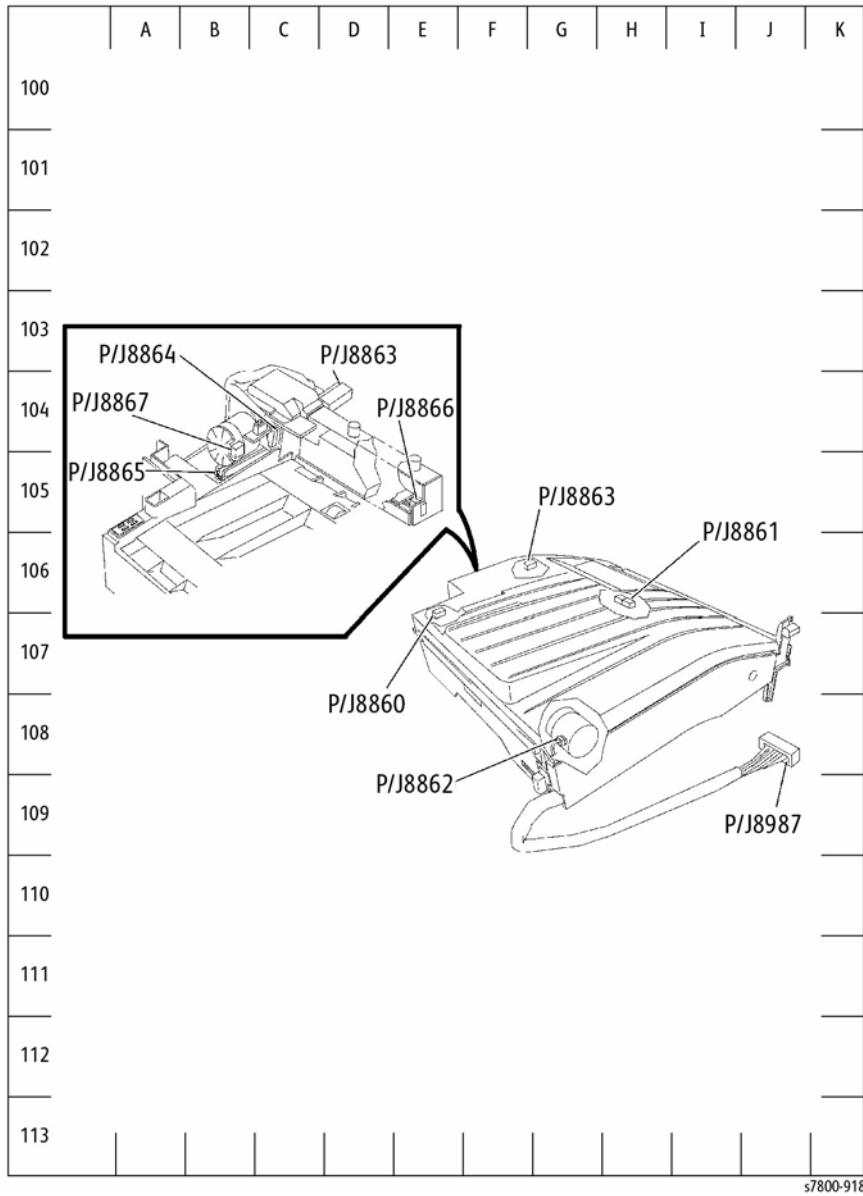


Figure 1 Horizontal Transport

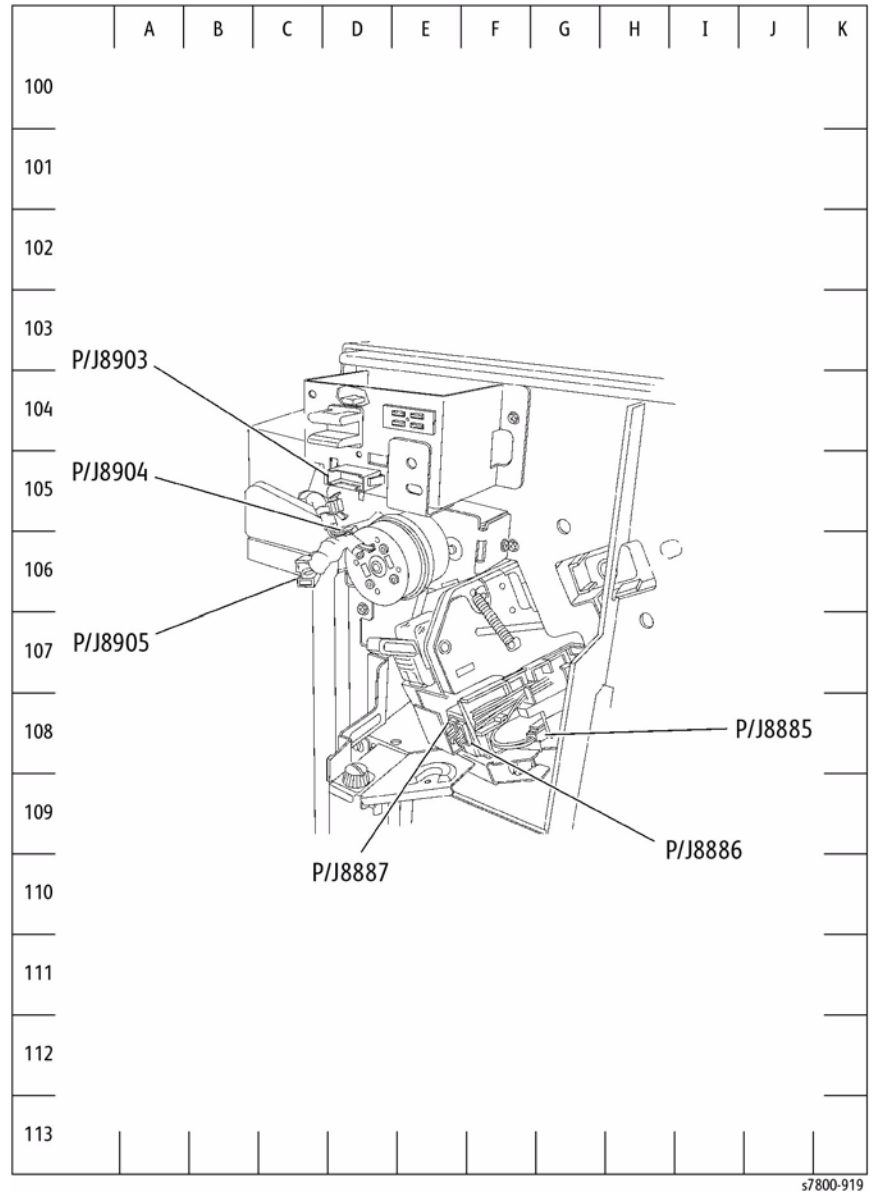


Figure 2 Finisher Front

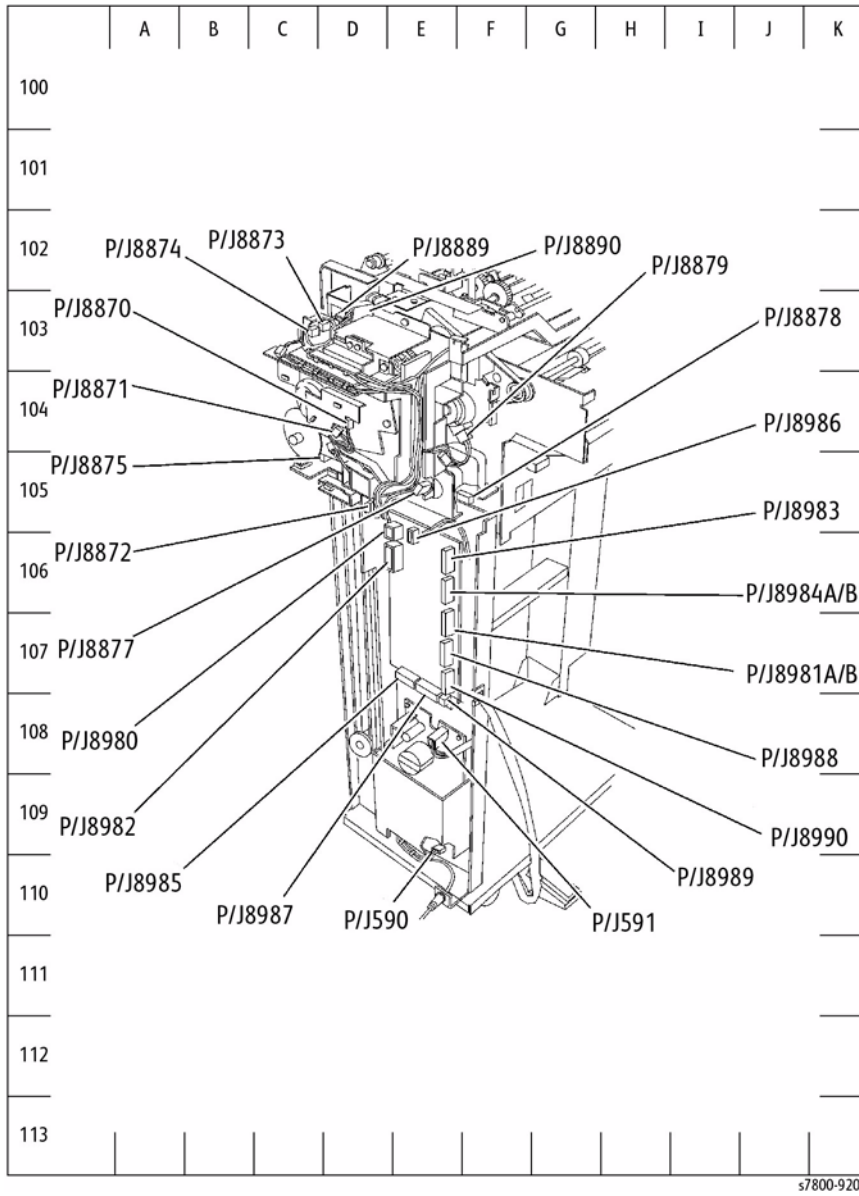


Figure 3 Finisher Rear

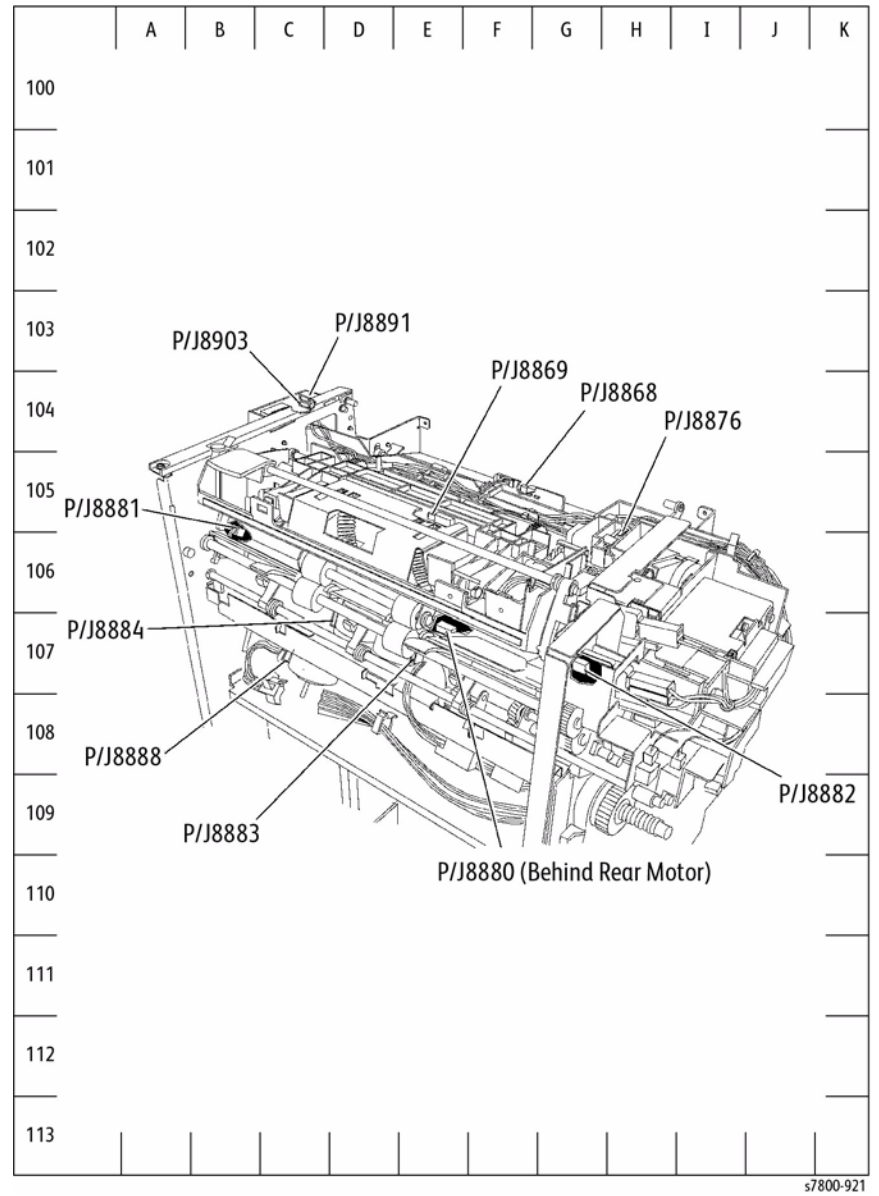


Figure 4 Finisher Eject

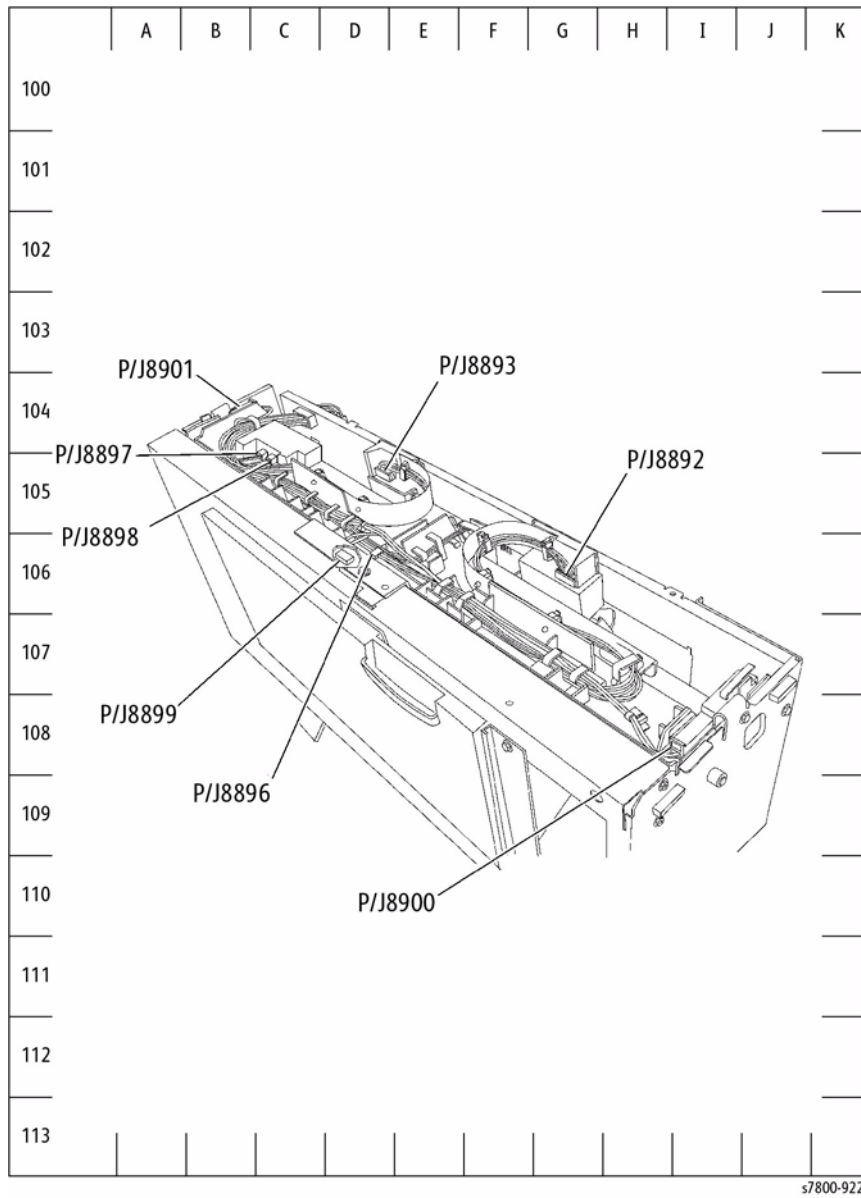


Figure 5 Booklet Maker Stapler Assembly

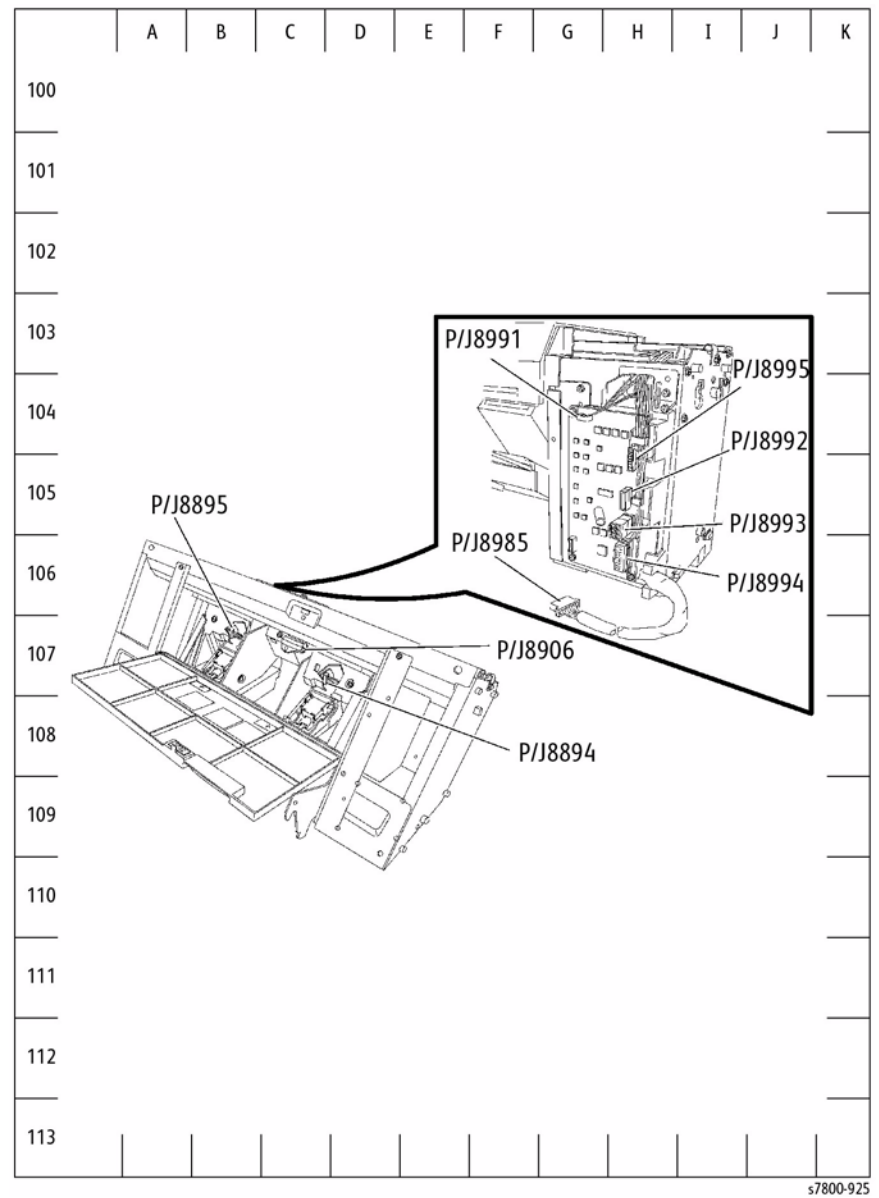


Figure 6 Booklet Maker PWB

Professional Finisher Plug/Jack

Table 1 Professional Finisher Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
CN1	Figure 13	D-104	Booklet PWB
P/J2	Figure 8	D-109	Finisher Power Supply
P/J502	Figure 8	C-108	Finisher Power Supply
P/J505	Figure 8	B-108	Finisher Power Supply
P/J800	Figure 9	D-103	Finisher/Printer Communication
P/J8175	Figure 11	G-108	Booklet Maker Front
P/J8176	Figure 10	G-106	Booklet Maker Rear
P/J8177	Figure 10	D-104	Booklet Maker Rear
P/J8178	Figure 10	E-105	Booklet Maker Rear
P/J8179	Figure 10	D-105	Booklet Maker Rear
P/J8180	Figure 10	D-106	Booklet Maker Rear
P/J8181	Figure 11	G-107	Booklet Maker Front
P/J8182	Figure 11	D-103	Booklet Maker Front
P/J8183	Figure 11	D-106	Booklet Maker Front
P/J8185	Figure 10	F-107	Booklet Maker Rear
P/J8186	Figure 10	D-106	Booklet Maker Rear
P/J8187	Figure 10	E-107	Booklet Maker Rear
P/J8188	Figure 10	C-104	Booklet Maker Rear
P/J8189	Figure 11	G-108	Booklet Maker Front
P/J8190	Figure 10	E-105	Booklet Maker Rear
P/J8191	Figure 10	C-105	Booklet Maker Rear
P/J8196	Figure 10	D-106	Booklet Maker Rear
P/J8197	Figure 10	D-107	Booklet Maker Rear
J8201	Figure 11	C-110	Booklet Maker Front
P8201	Figure 11	F-107	Booklet Maker Front
J8202	Figure 13	H-105	Booklet Maker PWB
P8202	Figure 11	G-109	Booklet Maker - Front
J8203	Figure 13	G-106	Booklet Maker PWB
P8203	Figure 11	G-110	Booklet Maker - Front
P/J8217	Figure 12	C-107	Booklet Tray Unit
P/J8218	Figure 12	G-106	Booklet Tray Unit
P/J8300	Figure 9	H-107	Connects Finisher Main PWB
P/J8301	Figure 9	H-108	Connects Finisher Main PWB
P/J8302	Figure 9	D-108	Connects Finisher Main PWB
P/J8304	Figure 9	E-104	Connects Finisher Main PWB
P/J8305	Figure 9	D-106	Connects Finisher Main PWB
P/J8306	Figure 9	H-105	Connects Finisher Main PWB
P/J8307	Figure 9	H-106	Connects Finisher Main PWB
P/J8308	Figure 9	F-104	Connects Finisher Main PWB

Table 1 Professional Finisher Plug/ Jack Location List

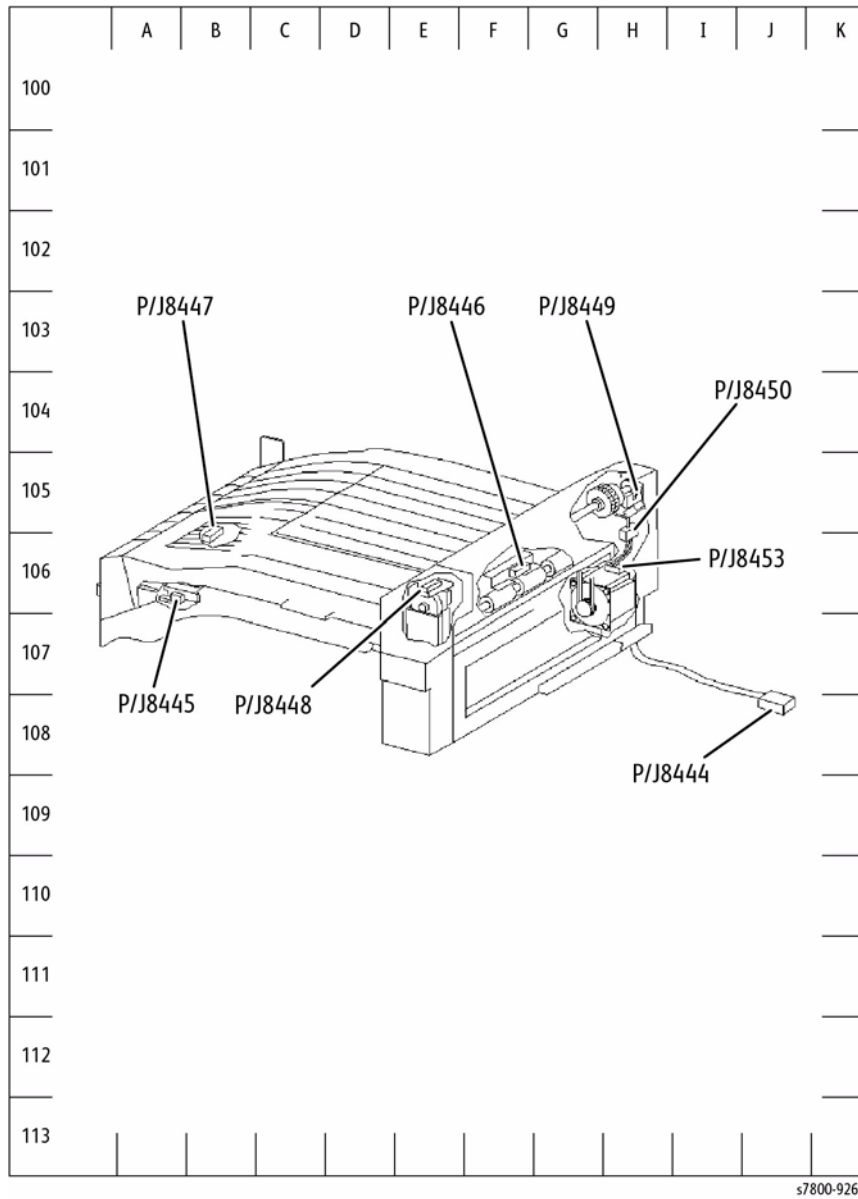
P/J	Map	Coordinates	Remarks
P/J8309	Figure 9	D-106	Connects Finisher Main PWB
P/J8310	Figure 9	H-109	Connects Finisher Main PWB
P8311	Figure 9	D-109	Connects Finisher Main PWB
P/J8312	Figure 7	H-104	Finisher - Rear
P/J8313	Figure 9	E-109	Connects Finisher Main PWB
P/J8314	Figure 9	F-109	Connects Finisher Main PWB
P/J8315	Figure 9	E-109	Connects Finisher Main PWB
P/J8316	Figure 9	G-109	Connects Finisher Main PWB
P/J8317	Figure 9	D-109	Connects Finisher Main PWB
P/J8318	Figure 7	F-107	Finisher - Rear
P/J8319	Figure 2	D-107	Connects Transport Entrance Sensor
P/J8320	Figure 3	F-107	Compiler Exit Sensor, Buffer Path Sensor
P/J8321	Figure 2	E-105	Connects Upper Tray Exit Sensor
P/J8322	Figure 2	F-105	Connects Upper Tray Full Sensor
P/J8324	Figure 7	D-106	Connects Eject Clamp Bracket
P/J8325	Figure 7	C-107	Connects Set Clamp Home Sensor
P/J8326	Figure 8	E-106	Connects No Paper Sensor
P/J8327	Figure 8	E-106	Connects Lower Tray Upper Limit Sensor
P/J8328	Figure 7	D-108	Connects Stacker Encoder Sensor
P/J8330	Figure 8	B-104	Connects Stack Height Sensor 2
P/J8331	Figure 8	D-105	Stacker, H-Transport PWB, LVPS
P/J8332	Figure 7	F-107	Finisher - Rear
P/J8333	Figure 7	G-107	Finisher - Rear
P/J8334	Figure 7	F-104	Connects Exit Motor
P/J8335	Figure 7	E-105	Connects Registration Motor
P/J8336	Figure 7	C-106	Connects Eject Motor
P/J8338	Figure 7	E-106	Connects Set Clamp Clutch
P/J8339	Figure 7	D-105	Connects Eject Clamp Motor
P/J8340	Figure 3	G-105	Connects Sub Paddle Solenoid to Main Drive Harness
P/J8341	Figure 7	D-108	Connects Transfer Gate Solenoid
P/J8342	Figure 7	G-107	Connects Transport Motor
P/J8343	Figure 7	G-106	Finisher - Rear
P/J8344	Figure 6	E-104	Puncher Unit
P/J8345	Figure 7	G-106	Finisher - Rear
P/J8346	Figure 6	B-105	Punch Hole Select Sensor - Puncher Unit
P/J8347	Figure 6	B-105	Connects Puncher Front Sensor
P/J8348	Figure 6	C-105	Connects Puncher Home Sensor
P/J8349	Figure 7	G-106	Finisher - Rear
P/J8350	Figure 6	I-107	Connects Side Regi Sensor 1
P/J8351	Figure 6	I-106	Connects Side Regi Sensor 2

Table 1 Professional Finisher Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J8352	Figure 6	C-104	Connects Punch Unit Move Home Sensor
P/J8353	Figure 6	C-108	Puncher Unit
P/J8354	Figure 4	F-105	Connects Staple Move Position Sensor
P/J8355	Figure 7	F-107	Finisher - Rear
P/J8356	Figure 4	G-104	Connects Staple Head
P/J8357	Figure 4	G-105	Connects Staple Head
P/J8358	Figure 4	D-108	Stapler Unit
P/J8359	Figure 5	F-107	Connects Compiler Tray No Paper Sensor
P/J8360	Figure 5	J-107	Connects Front Tamper Home Sensor
P/J8361	Figure 5	A-105	Connects Rear Tamper Home Sensor
P/J8362	Figure 5	B-106	Compile Tray Assembly
P/J8363	Figure 5	E-107	Compile Tray Assembly
J8364	Figure 2	H-106	Connects Door H Interlock
J8365	Figure 2	F-108	Top Tray Exit Sensor, Gate Sensor
P/J8371	Figure 8	G-108	Stacker, H-Transport PWB, LVPS
P/J8373	Figure 8	H-109	Stacker, H-Transport PWB, LVPS
P/J8376	Figure 9	D-106	Finisher PWB
P/J8377	Figure 13	E-104	Booklet PWB
P/J8378	Figure 13	C-105	Booklet PWB
P/J8383	Figure 2	G-105	Top Tray Exit Sensor, Gate Sensor
J8384	Figure 2	G-105	Top Tray Exit Sensor, Gate Sensor
P8389	Figure 9	G-104	Finisher PWB
P/J8391	Figure 7	C-105	Finisher - Rear
P/J8392	Figure 3	F-108	Connects Buffer Path Sensor
P/J8393	Figure 7	C-105	Finisher - Rear
P/J8394	Figure 7	E-106	Connects Buffer Gate Solenoid
P/J8396	Figure 8	H-108	Stacker, H-Transport PWB, LVPS
P/J8405	Figure 13	E-105	Booklet PWB
P/J8406	Figure 13	C-108	Booklet PWB
P/J8407	Figure 13	E-108	Booklet PWB
P/J8408	Figure 13	E-107	Booklet PWB
P/J8409	Figure 7	H-105	Finisher - Rear
P/J8411	Figure 13	B-106	Booklet PWB
P/J8429	Figure 13	H-105	Booklet PWB
P/J8432	Figure 2	E-106	Top Tray Exit Sensor, Gate Sensor
P/J8434	Figure 7	F-104	Finisher - Rear
P/J8440	Figure 7	E-108	Finisher - Rear
P/J8441	Figure 7	E-108	Finisher - Rear
J8444	Figure 1	J-108	Horizontal Transport Assembly
P8444	Figure 8	H-110	Stacker, H-Transport PWB, LVPS

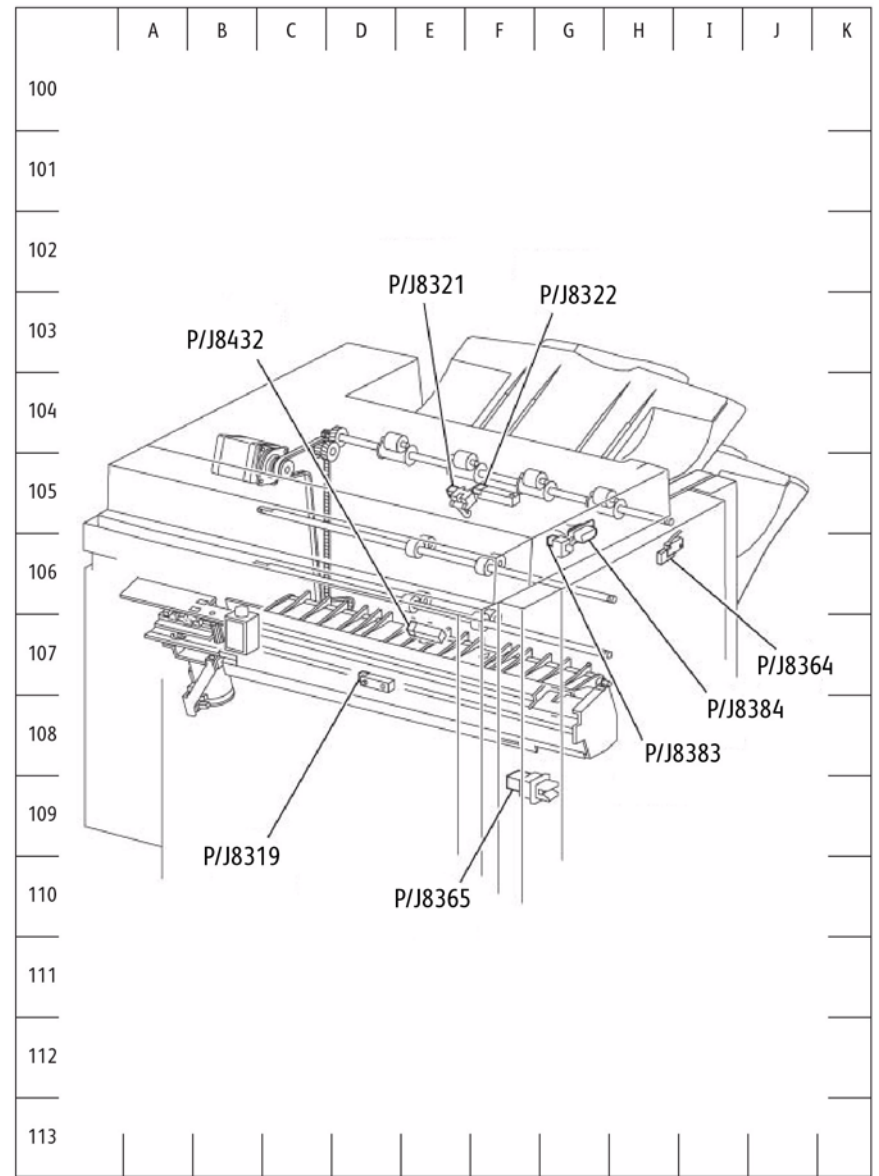
Table 1 Professional Finisher Plug/ Jack Location List

P/J	Map	Coordinates	Remarks
P/J8445	Figure 1	B-106	Connects H-Transport Interlock Switch - Horizontal Transport Assembly
P/J8446	Figure 1	F-106	Connects H-Transport Exit Sensor - Horizontal Transport Assembly
P/J8447	Figure 1	B-106	Horizontal Transport Assembly
P/J8448	Figure 1	E-106	Connects Decurler Front Cover Interlock Sensor - Horizontal Transport Assembly
P/J8449	Figure 1	H-105	Connects Decurler Cam Home Sensor - Horizontal Transport Assembly
P/J8450	Figure 1	H-106	Connects Decurler Cam Clutch - Horizontal Transport Assembly
P/J8453	Figure 1	H-106	Connects H-Transport Motor - Horizontal Transport Assembly
P/J8460	Figure 12	D-107	Booklet Tray Unit
P/J8461	Figure 8	D-106	Stacker, H-Transport PWB, LVPS



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Figure 1 Horizon Transport Assembly



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Figure 2 Top Tray Exit Sensor, Gate Sensor

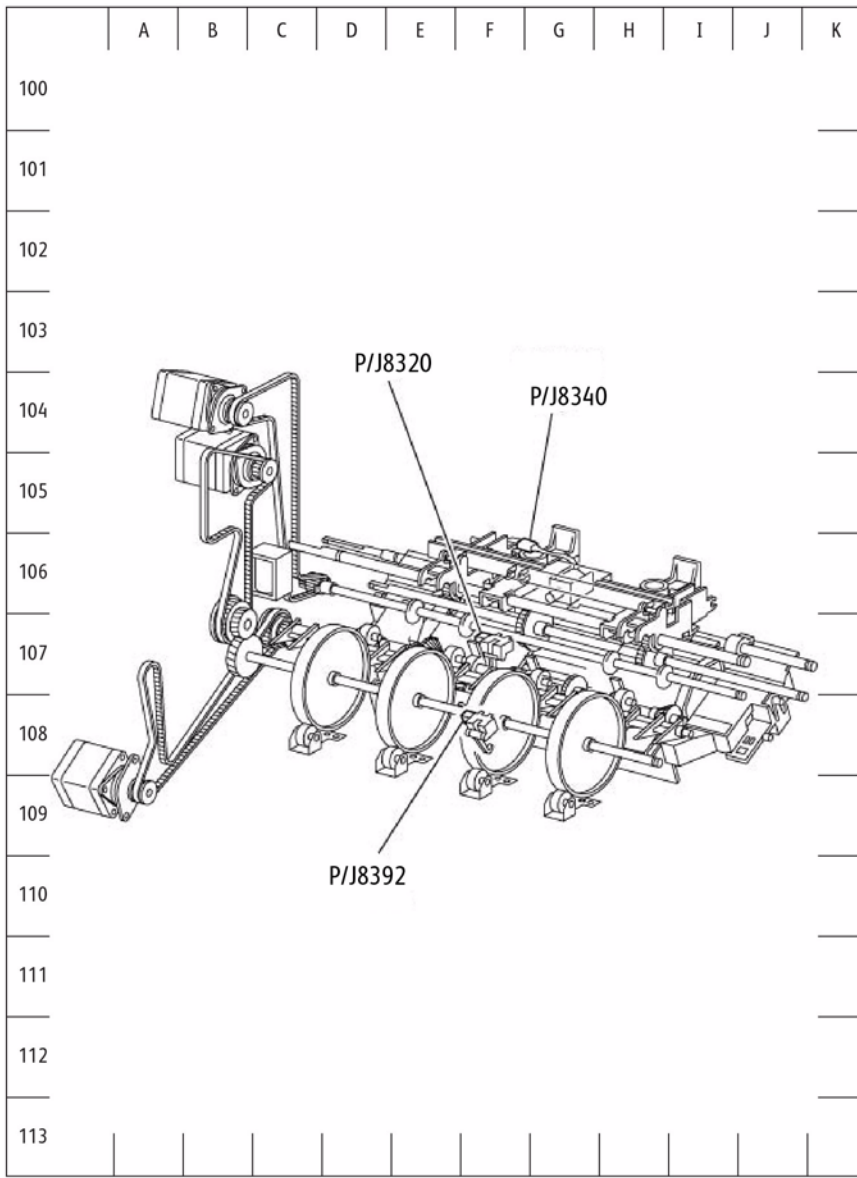


Figure 3 Compiler Exit Sensor, Buffer Path Sensor

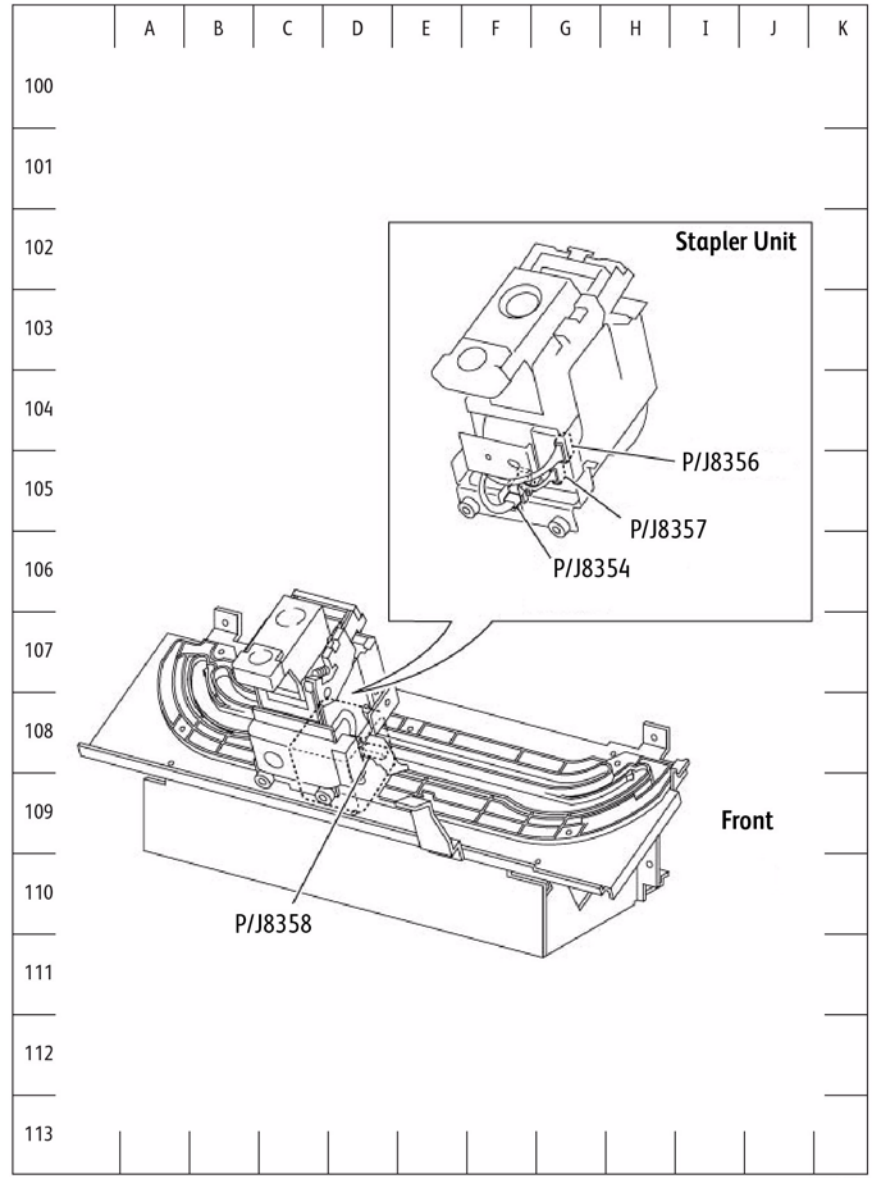


Figure 4 Stapler Unit

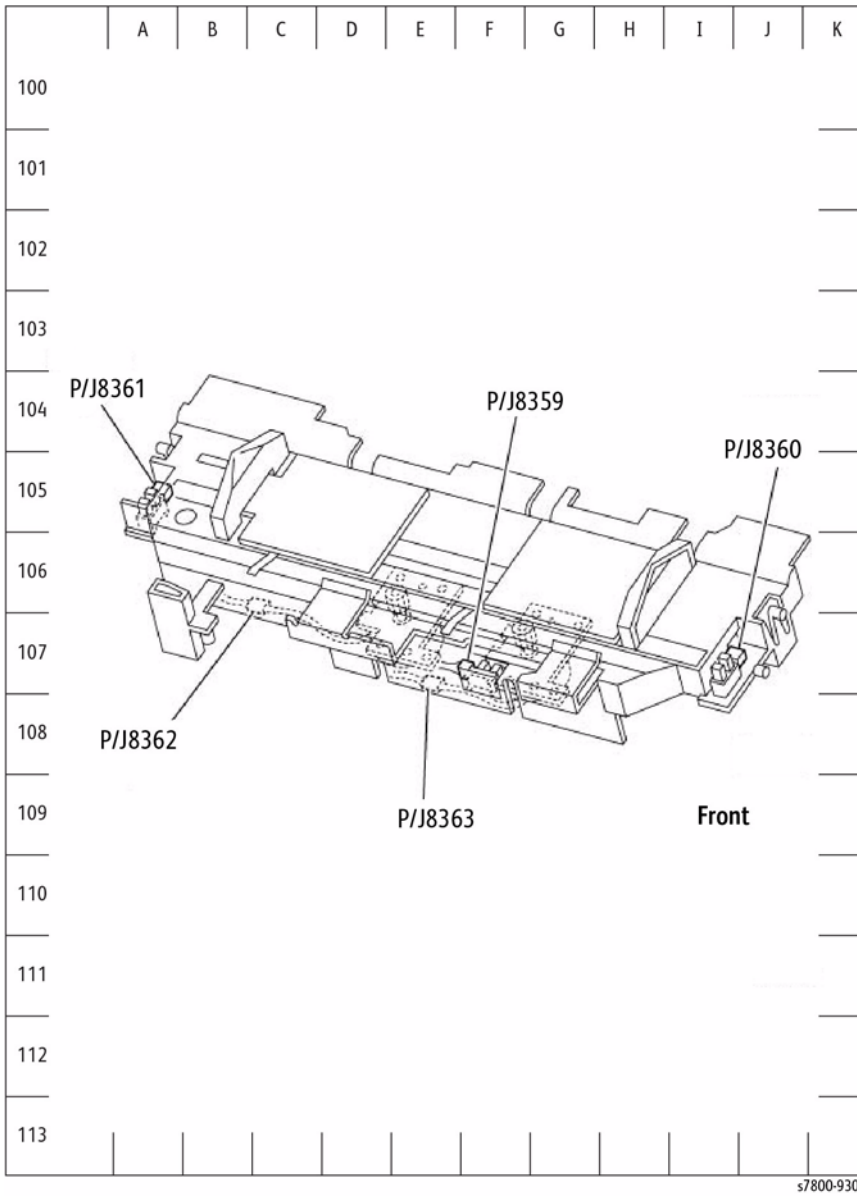


Figure 5 Compile Tray Assembly

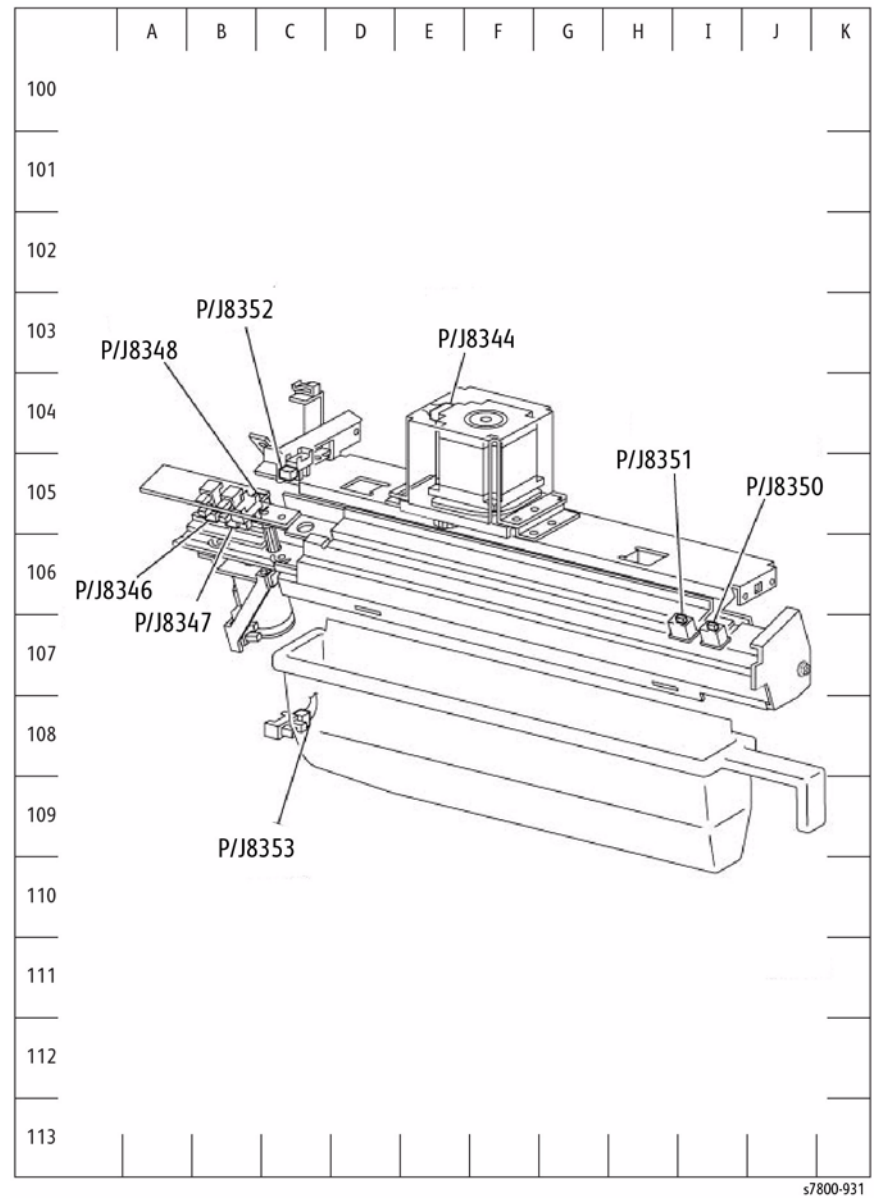


Figure 6 Puncher Unit

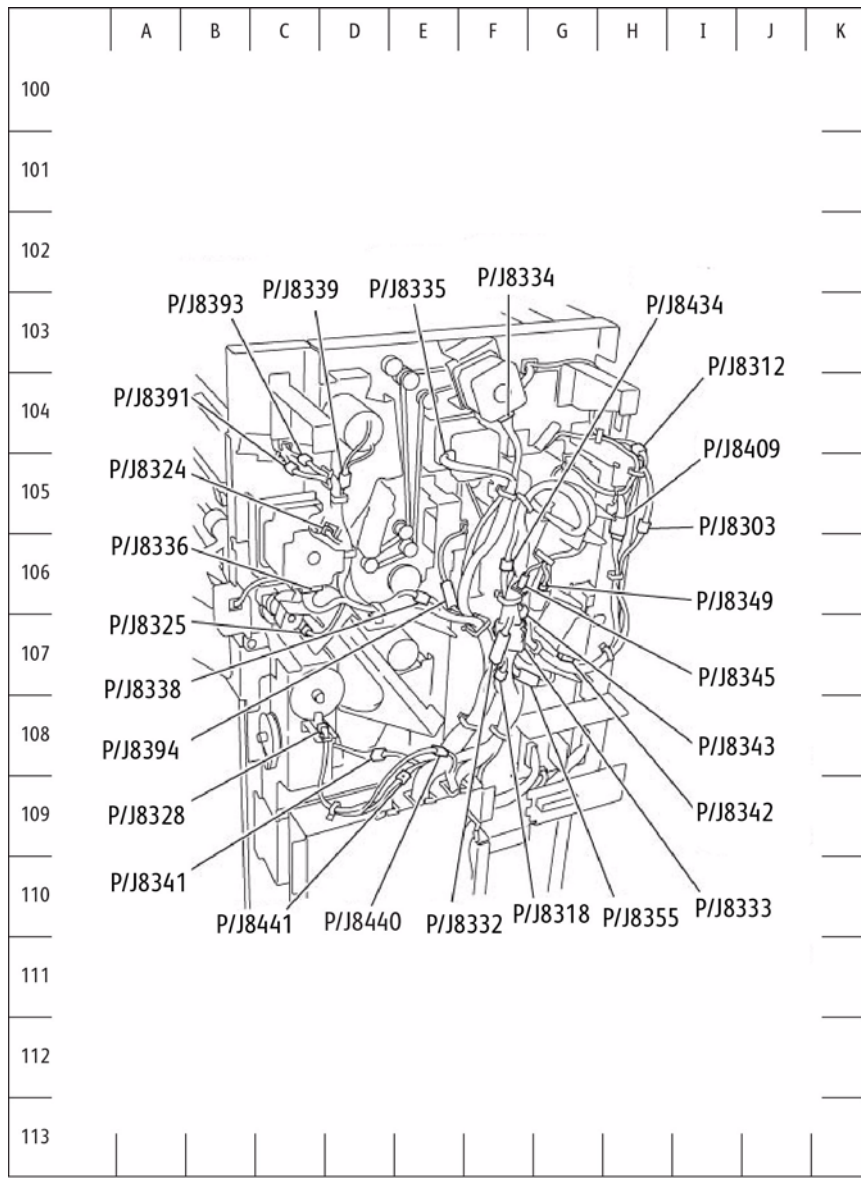


Figure 7 Finisher Rear

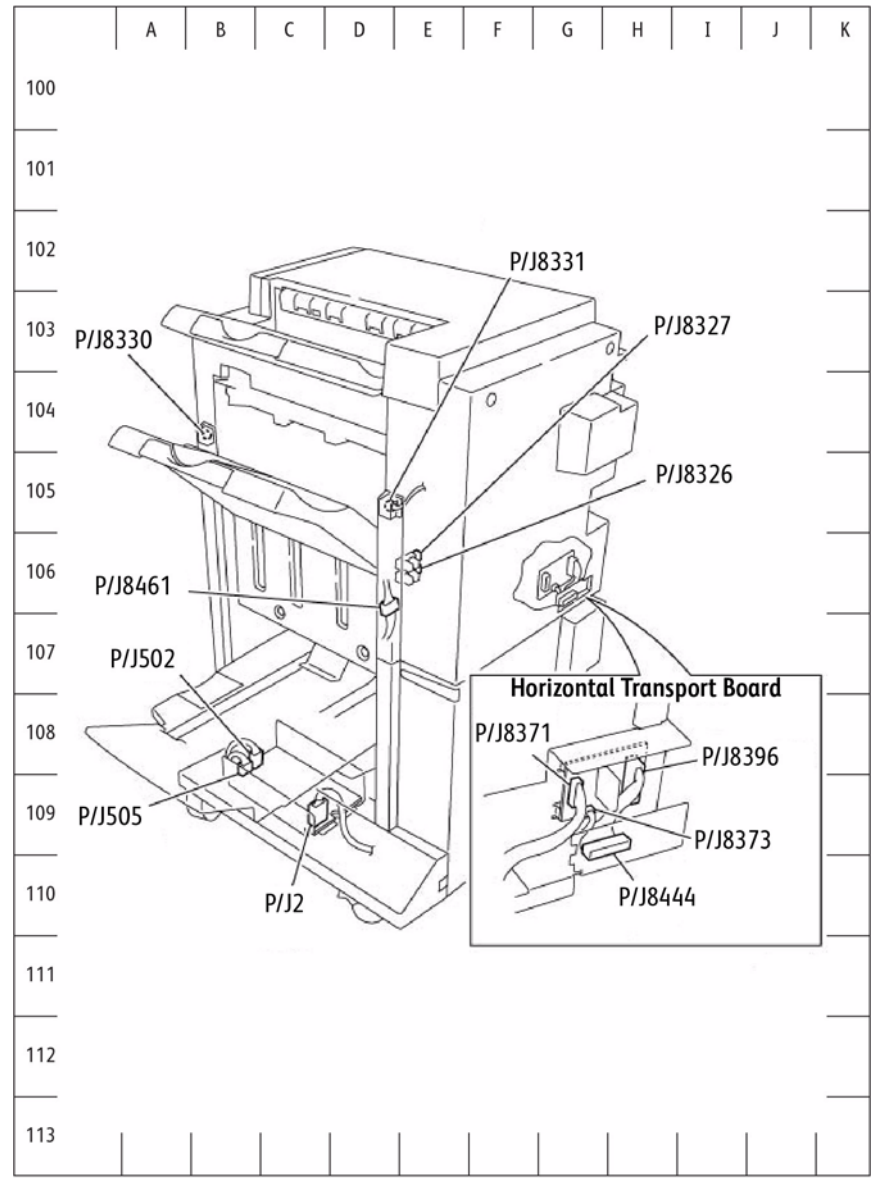
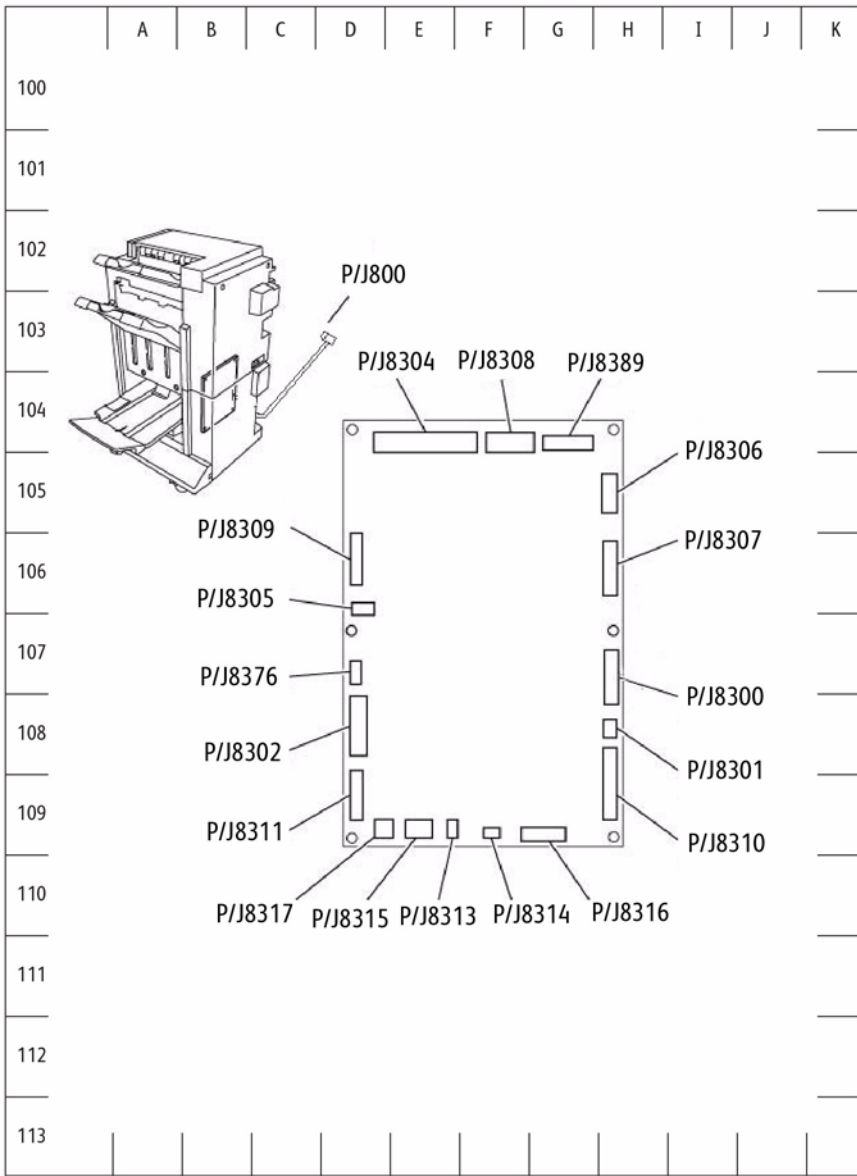
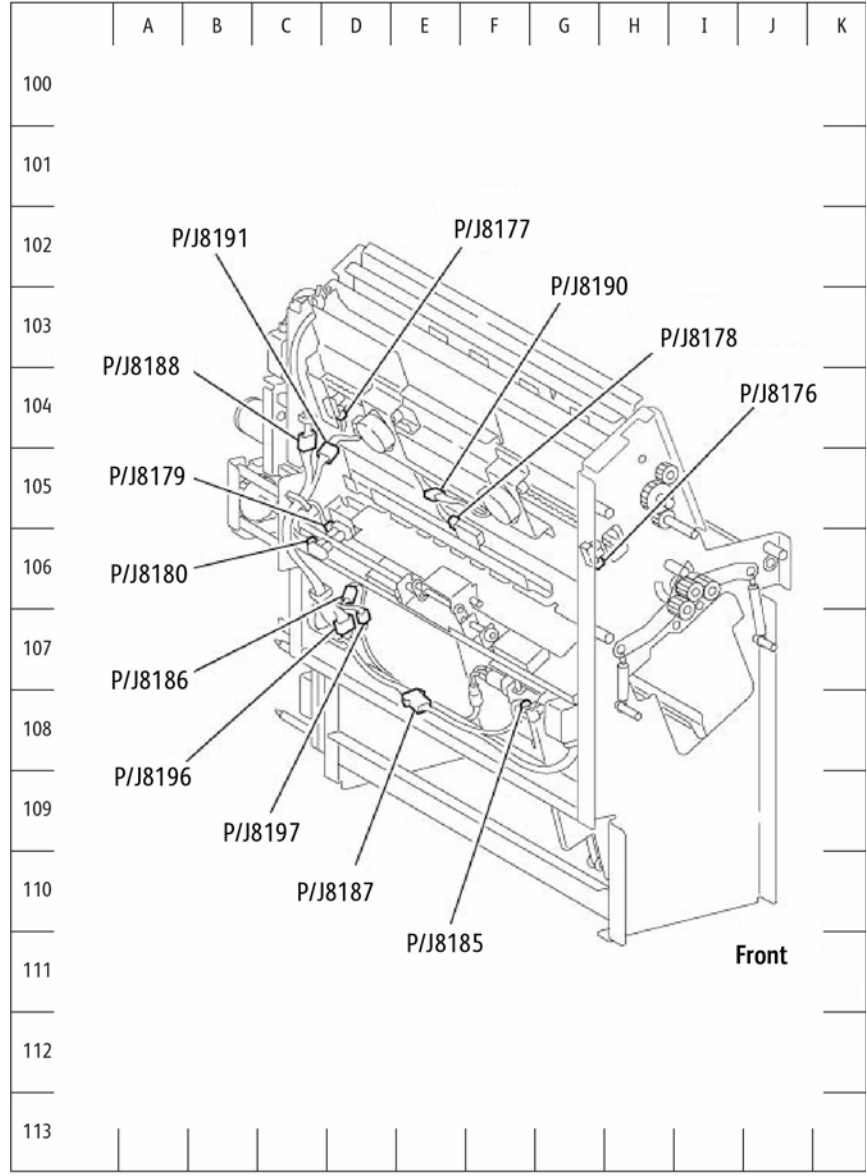


Figure 8 Stacker, H-Transport PWB, LVPS



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Figure 9 Finisher PWB



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Figure 10 Booklet Rear

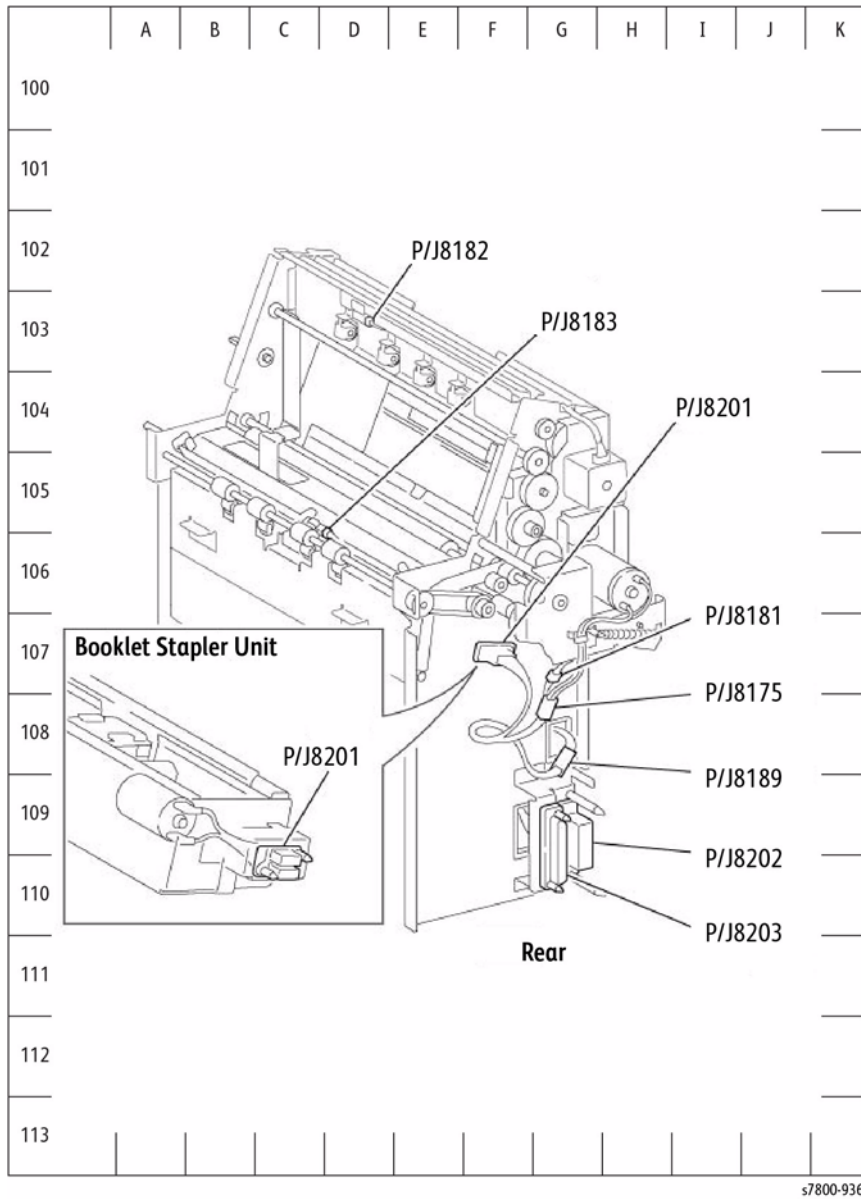


Figure 11 Booklet Maker - Front

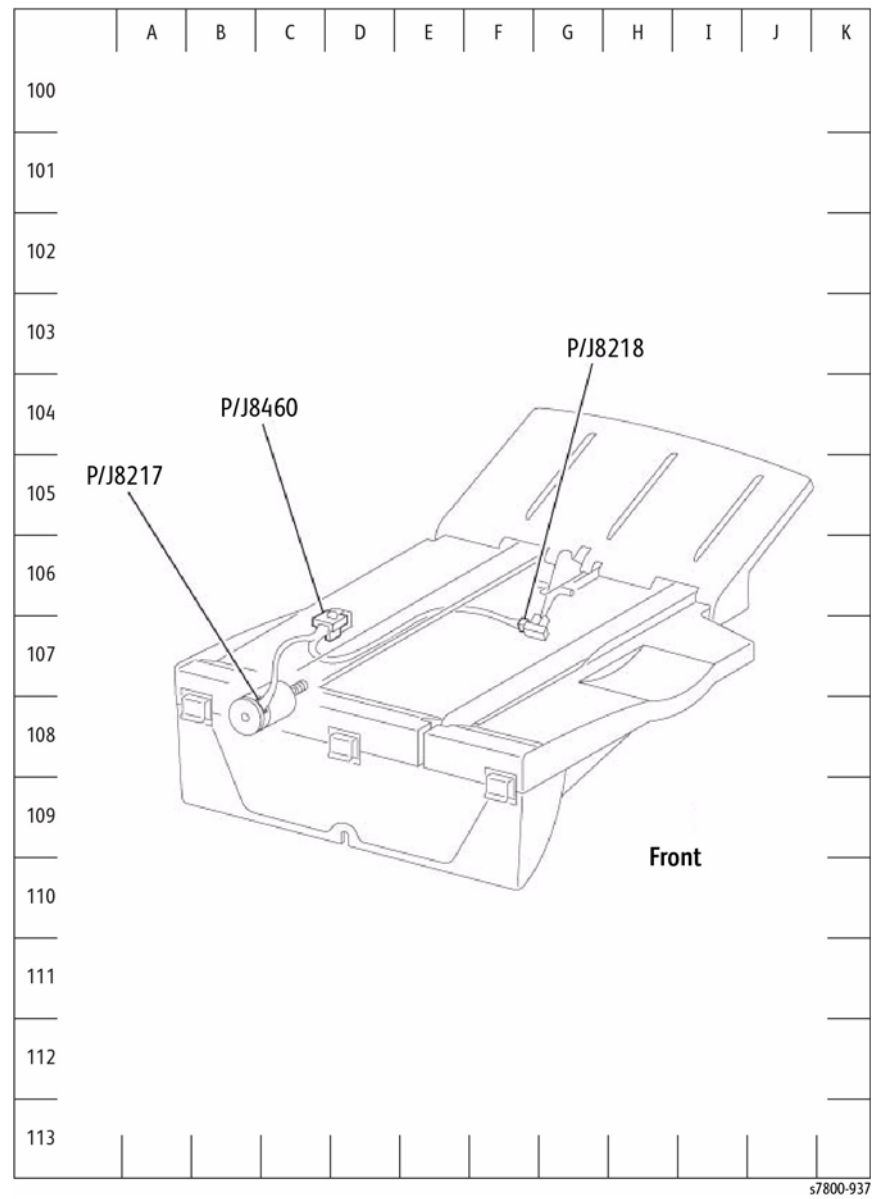
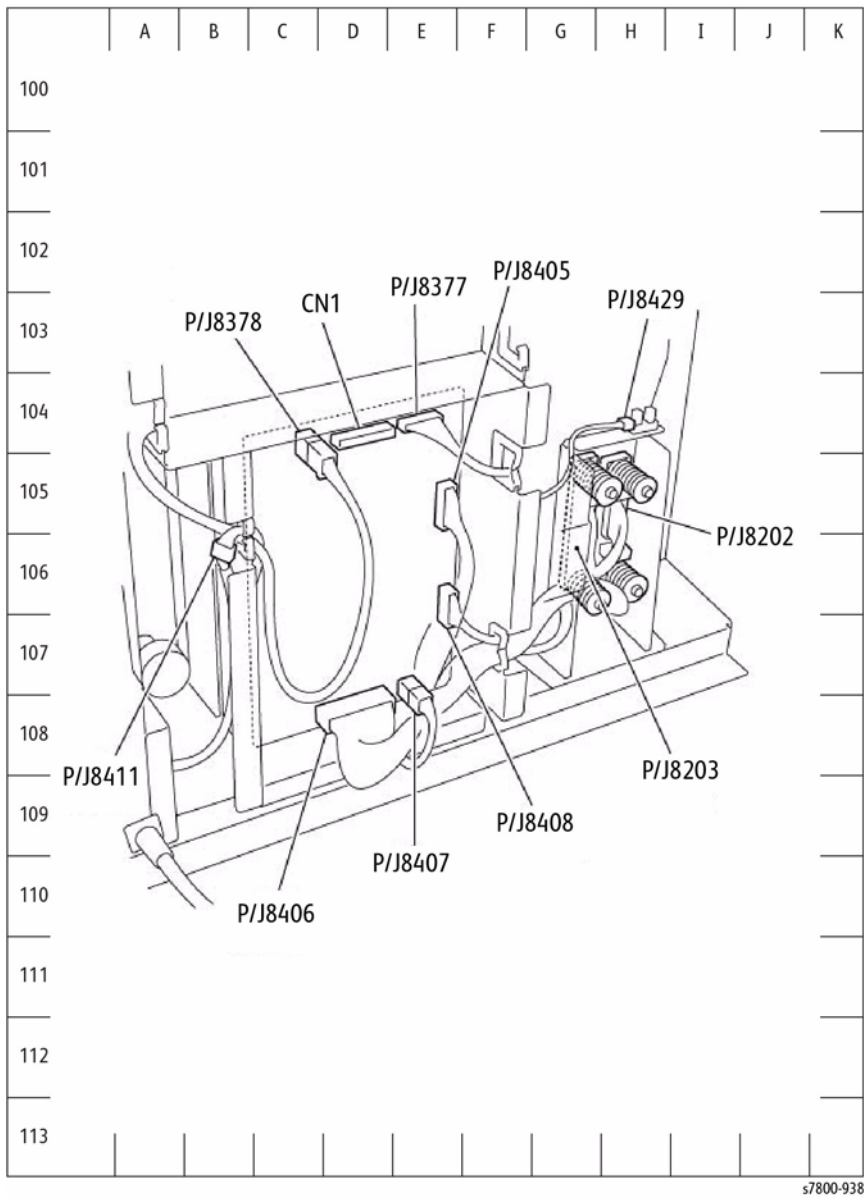


Figure 12 Booklet Tray Unit

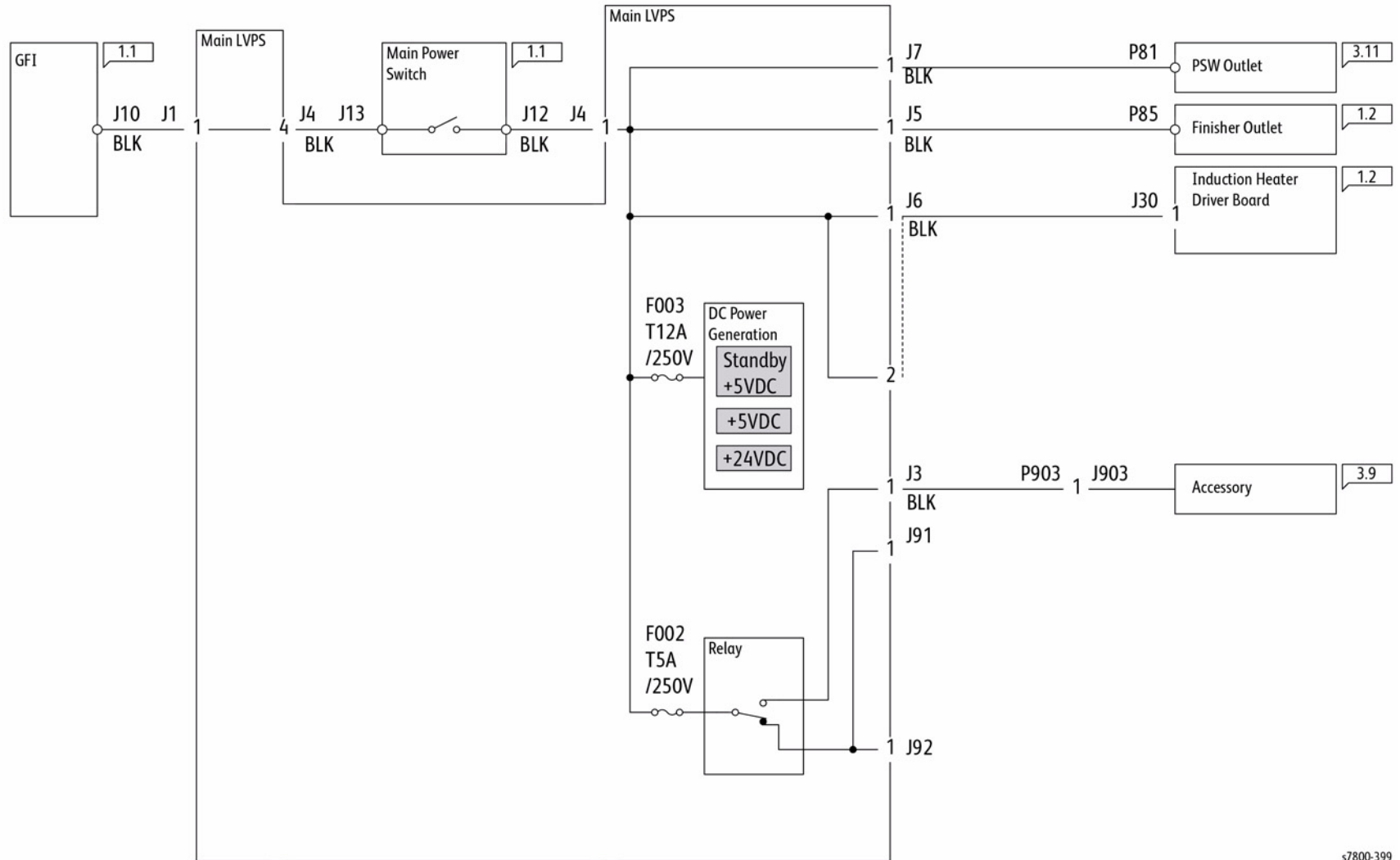


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Figure 13 Booklet PWB

Print Engine Wirenet

ACH



s7800-399

Figure 1 ACH

ACN

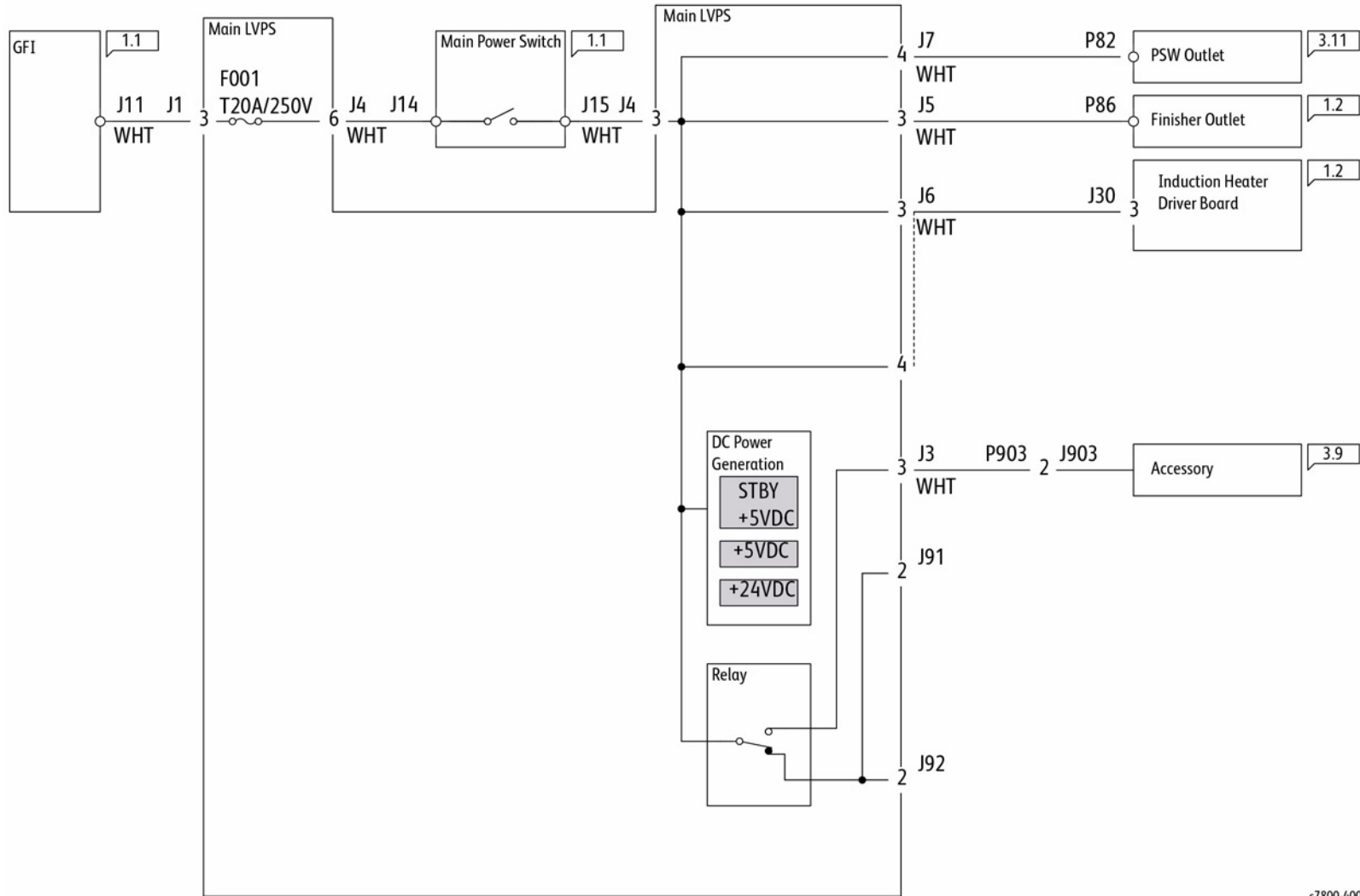


Figure 2 ACN

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+1.8 VDC

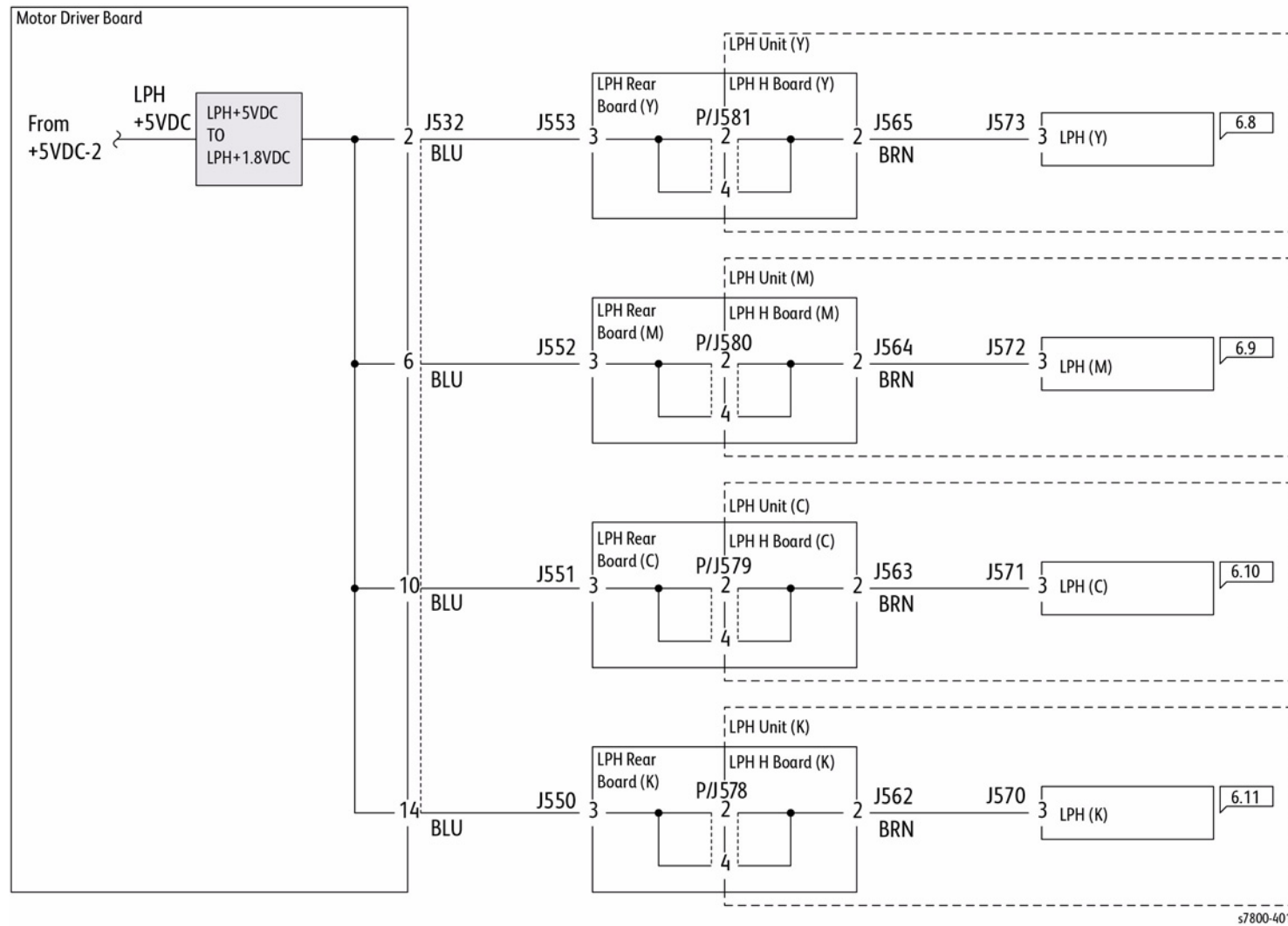


Figure 3 +1.8 VDC

DC COM (1.8VRTN)

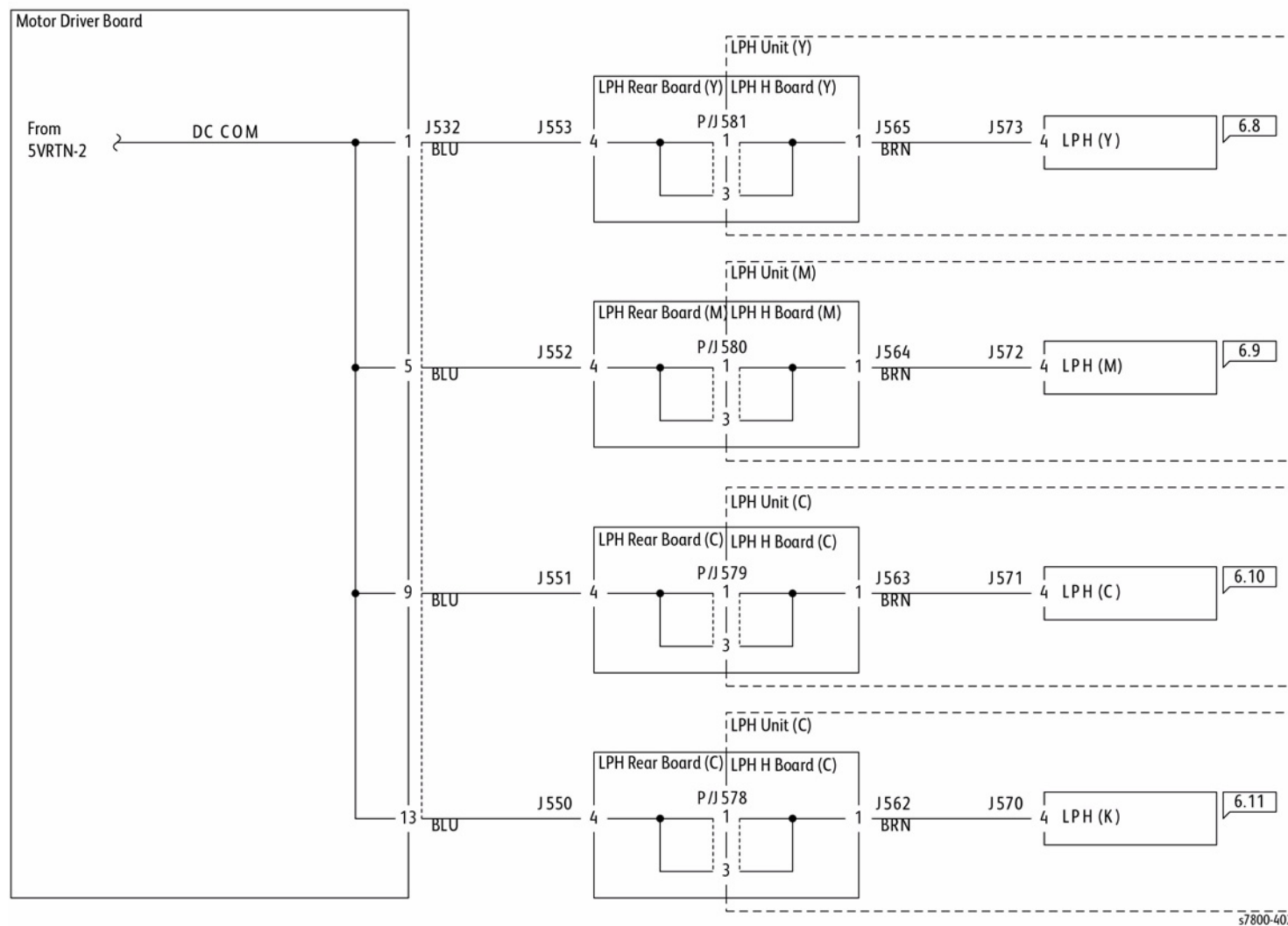


Figure 4 DC COM (1.8VRTN)

+2.5 VDC

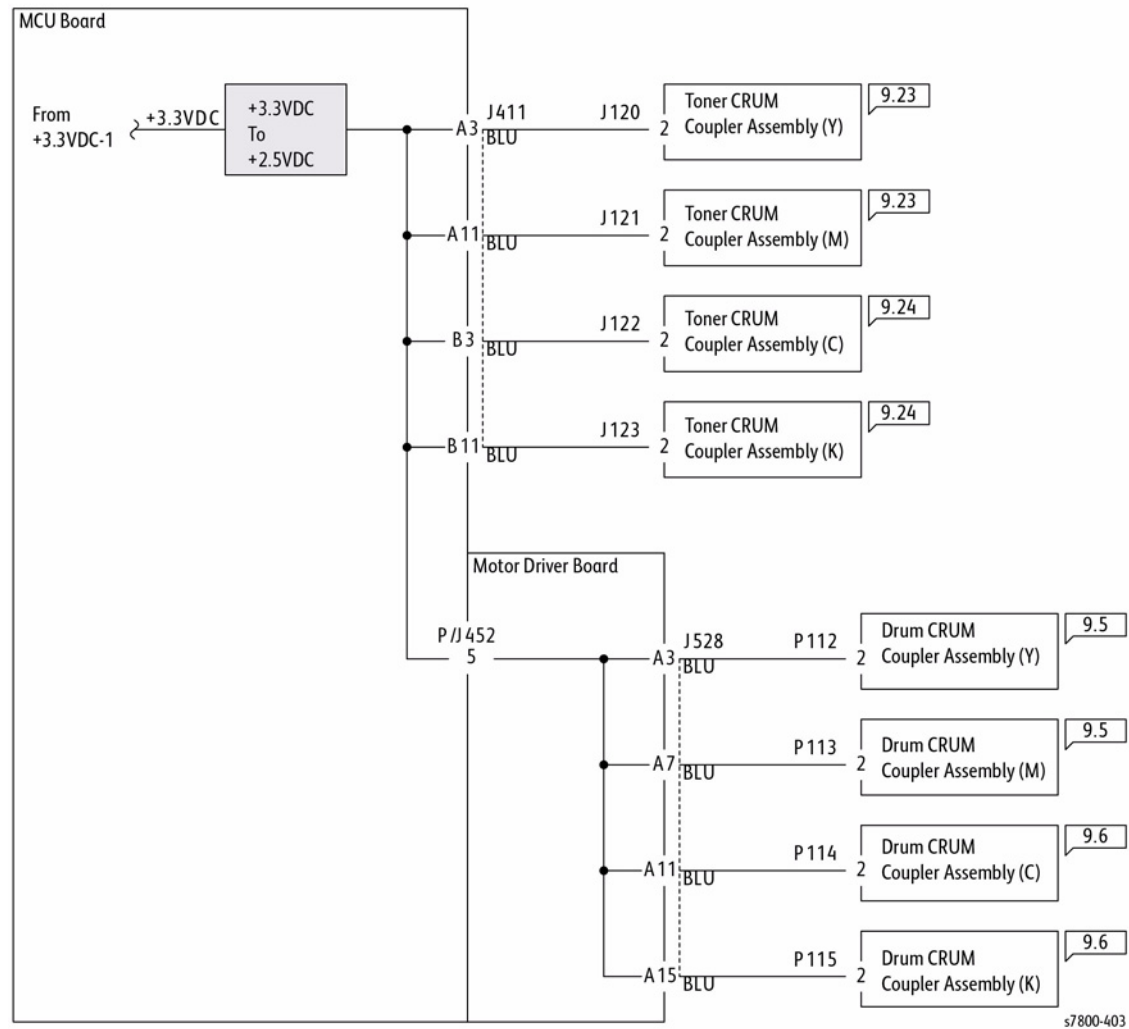


Figure 5 +2.5 VDC

DC COM (2.5VRTN)

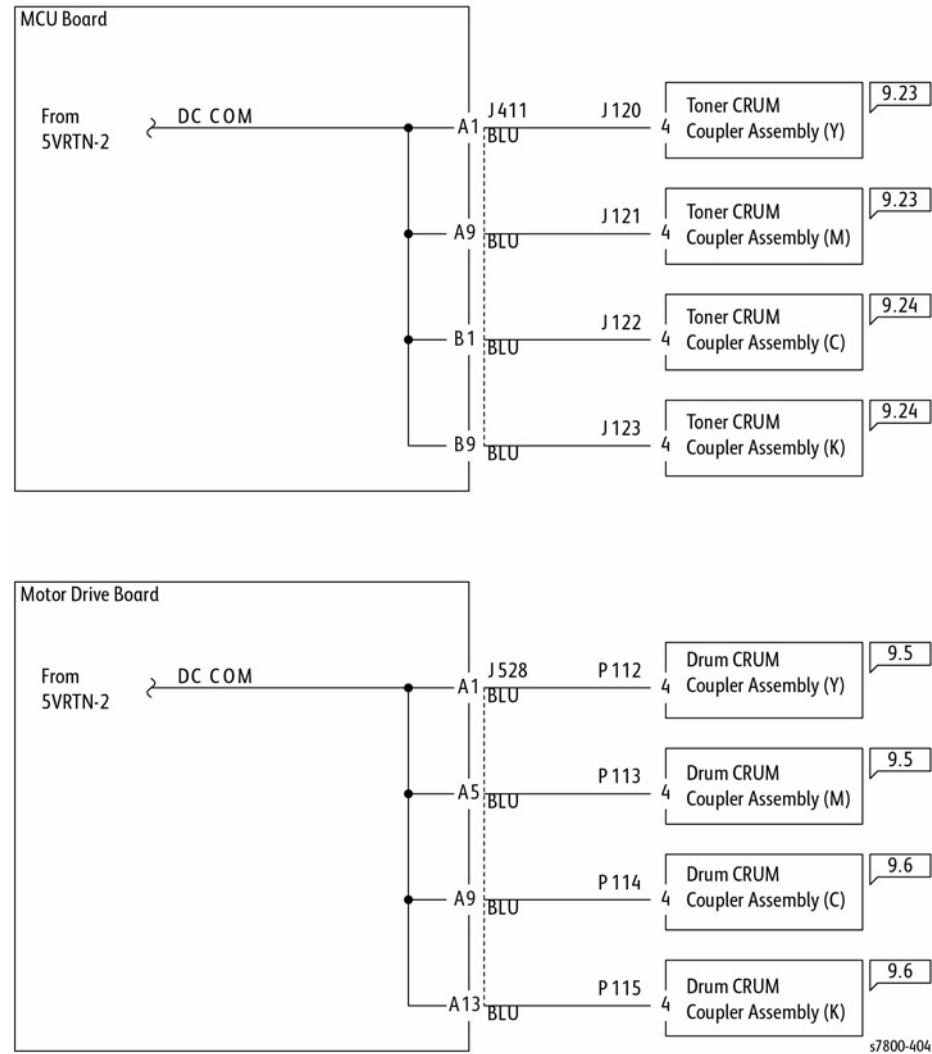
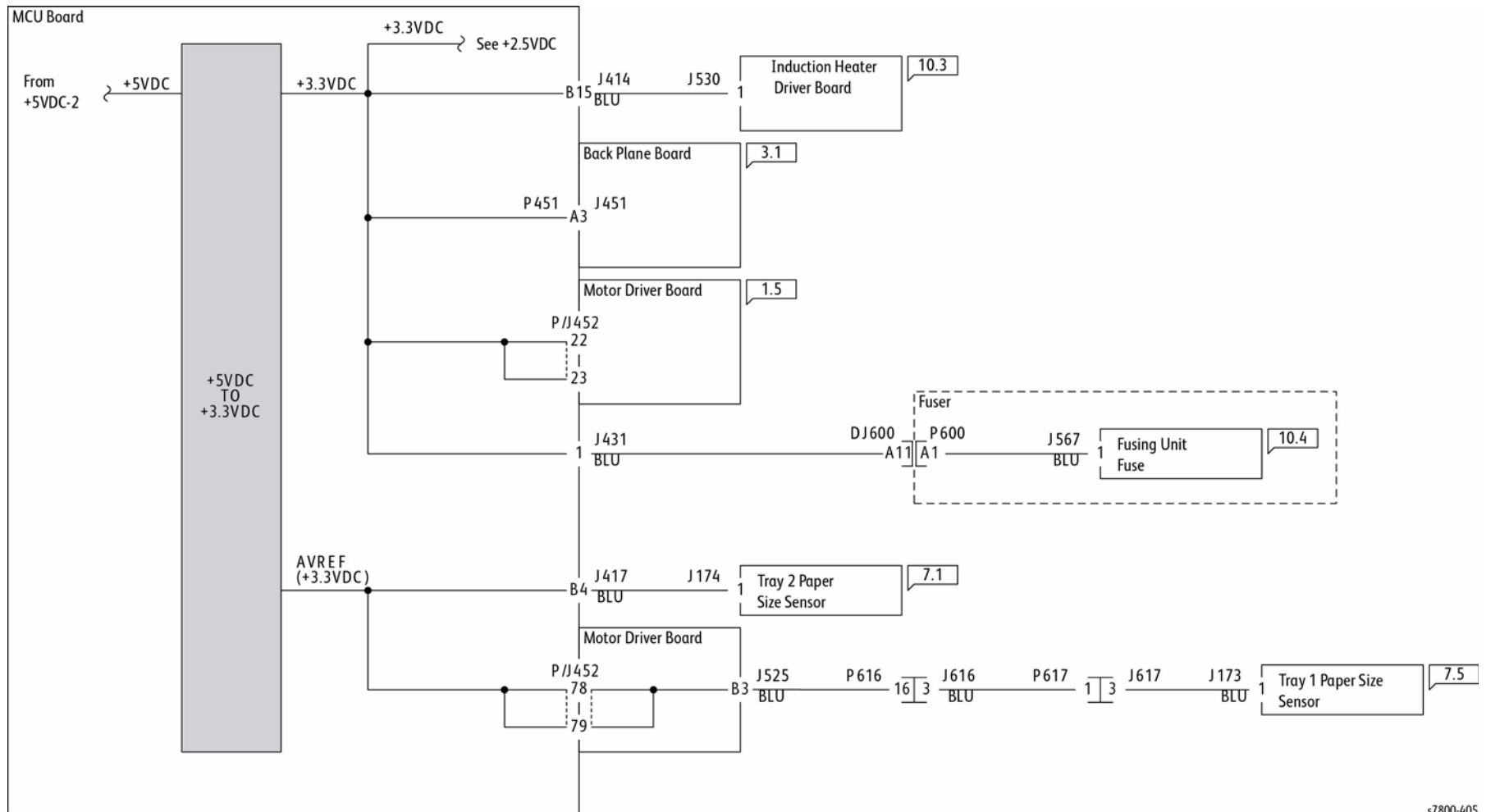


Figure 6 DC COM (2.5VRTN)

+3.3 VDC-1



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Figure 7 +3.3 VDC-1

+3.3 VDC-2

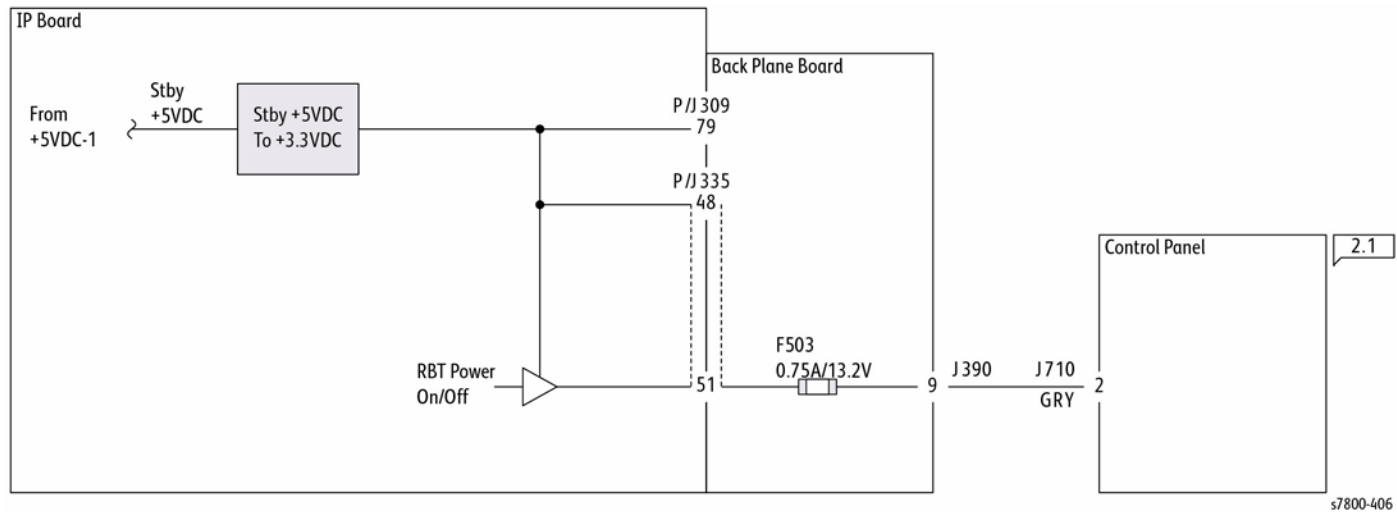


Figure 8 +3.3 VDC-2

DC COM (3.3VRTN-1)

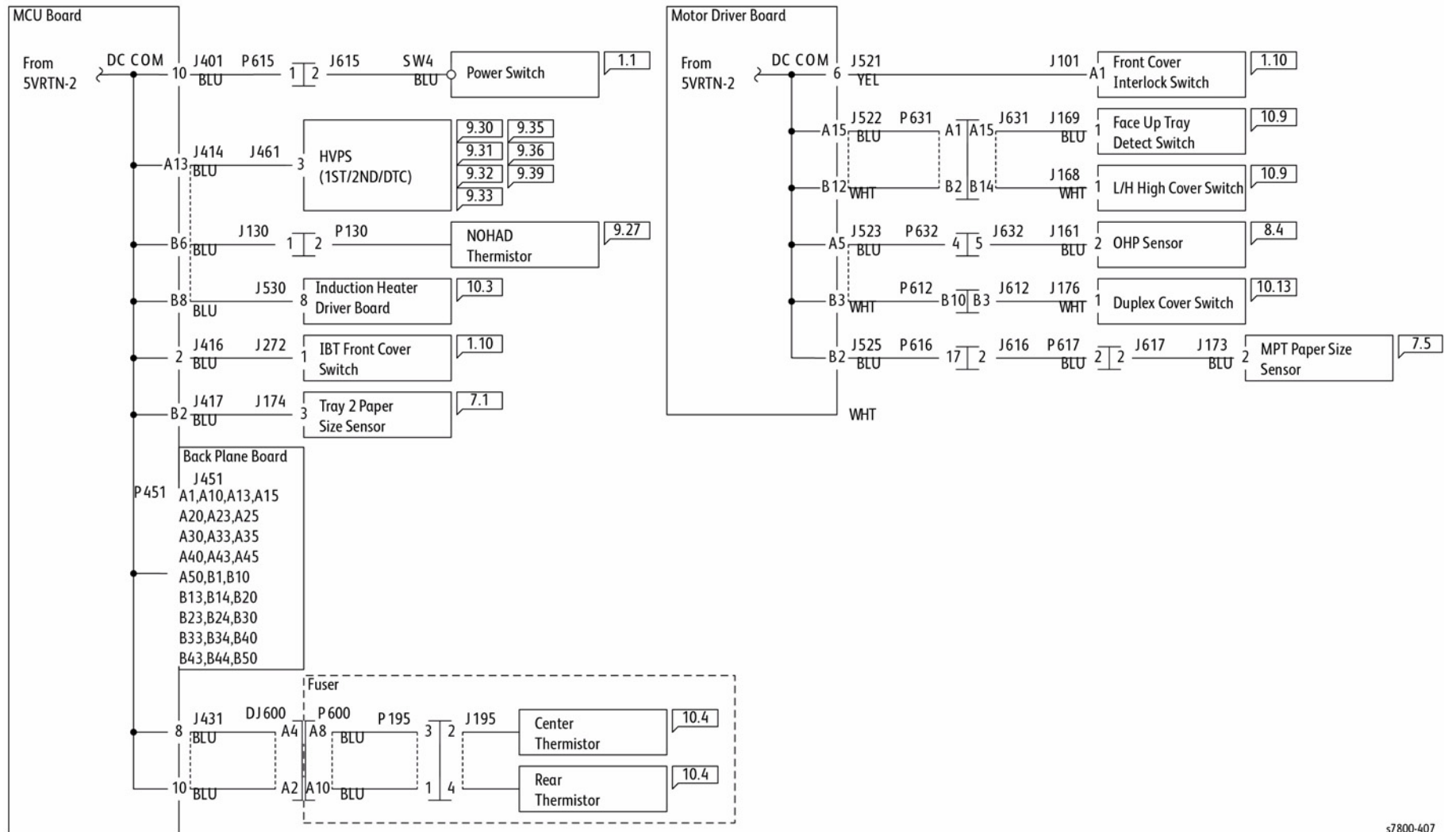


Figure 9 DC COM (3.3VRTN-1)

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DC COM (3.3VRTN-2)

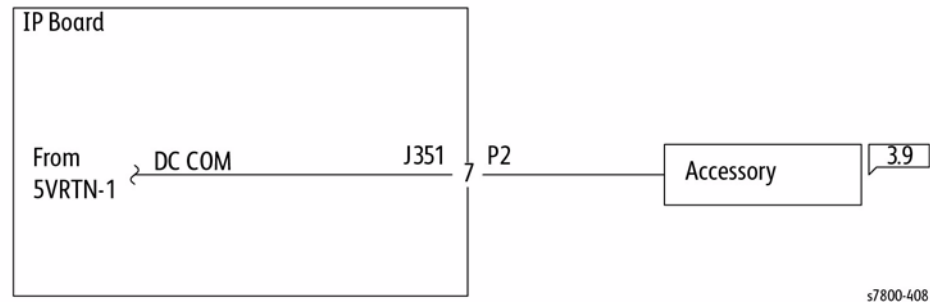
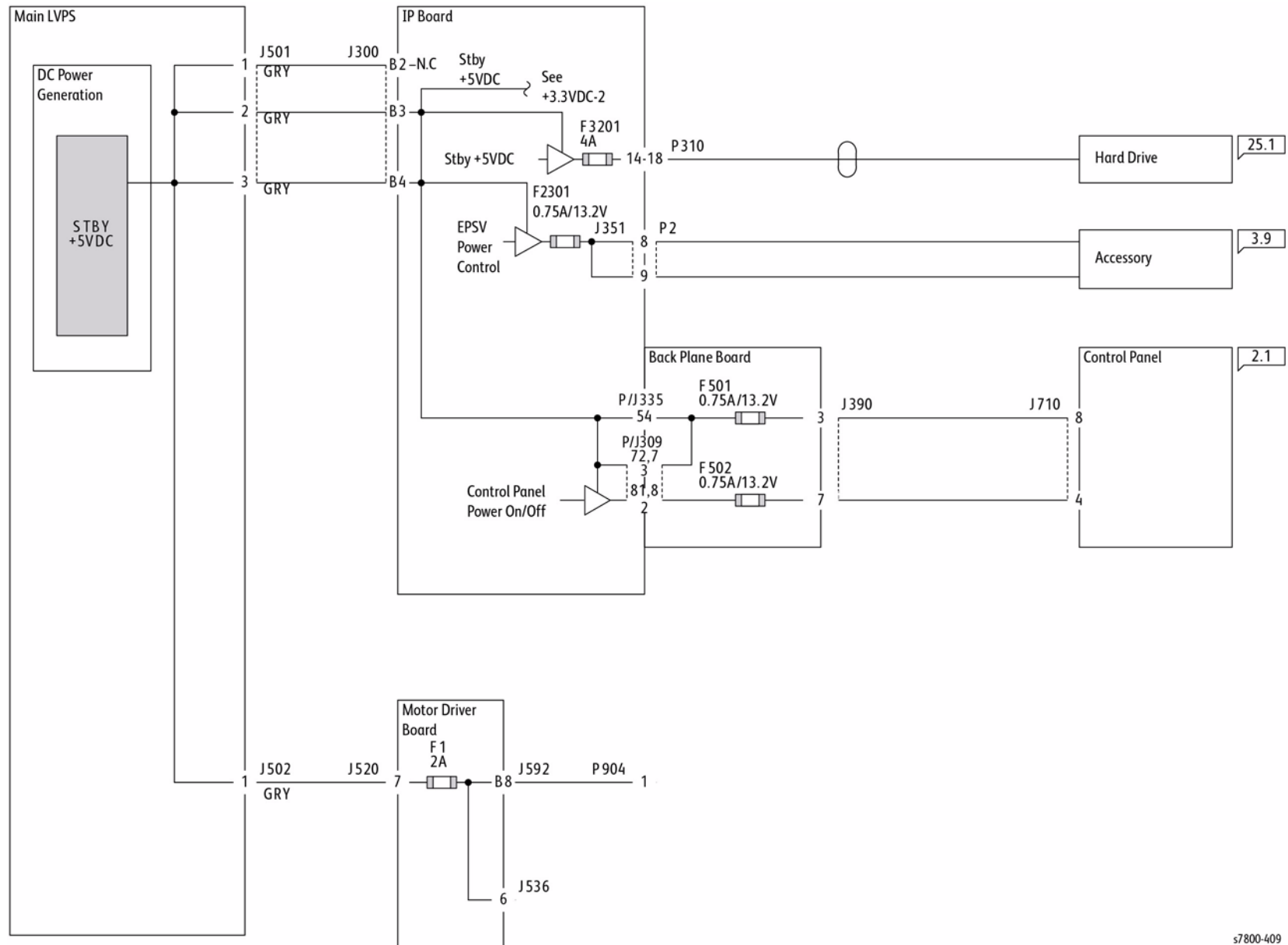


Figure 10 DC COM (3.3VRTN-2)

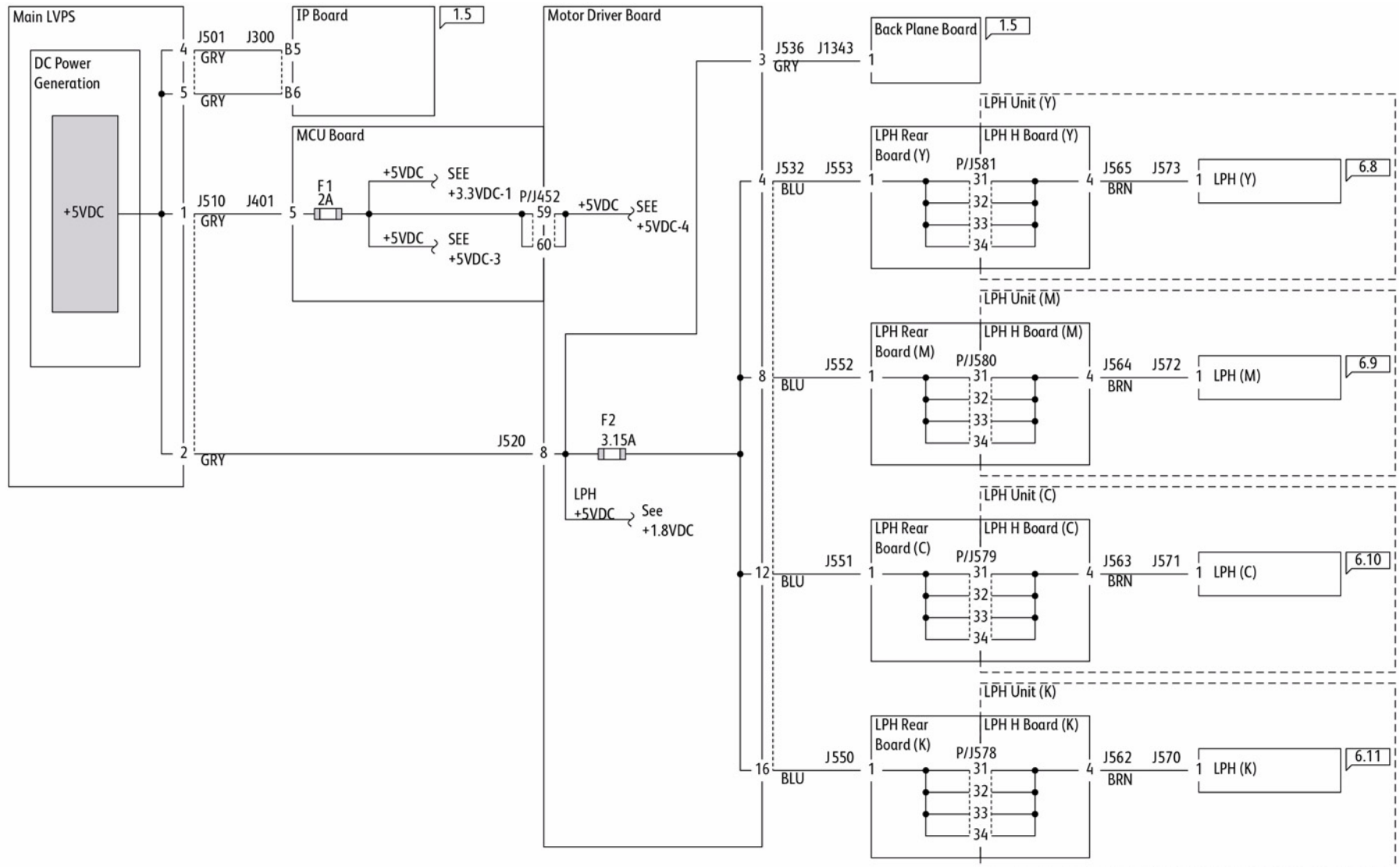
+5 VDC-1



s7800-409

Figure 11 +5 VDC-1

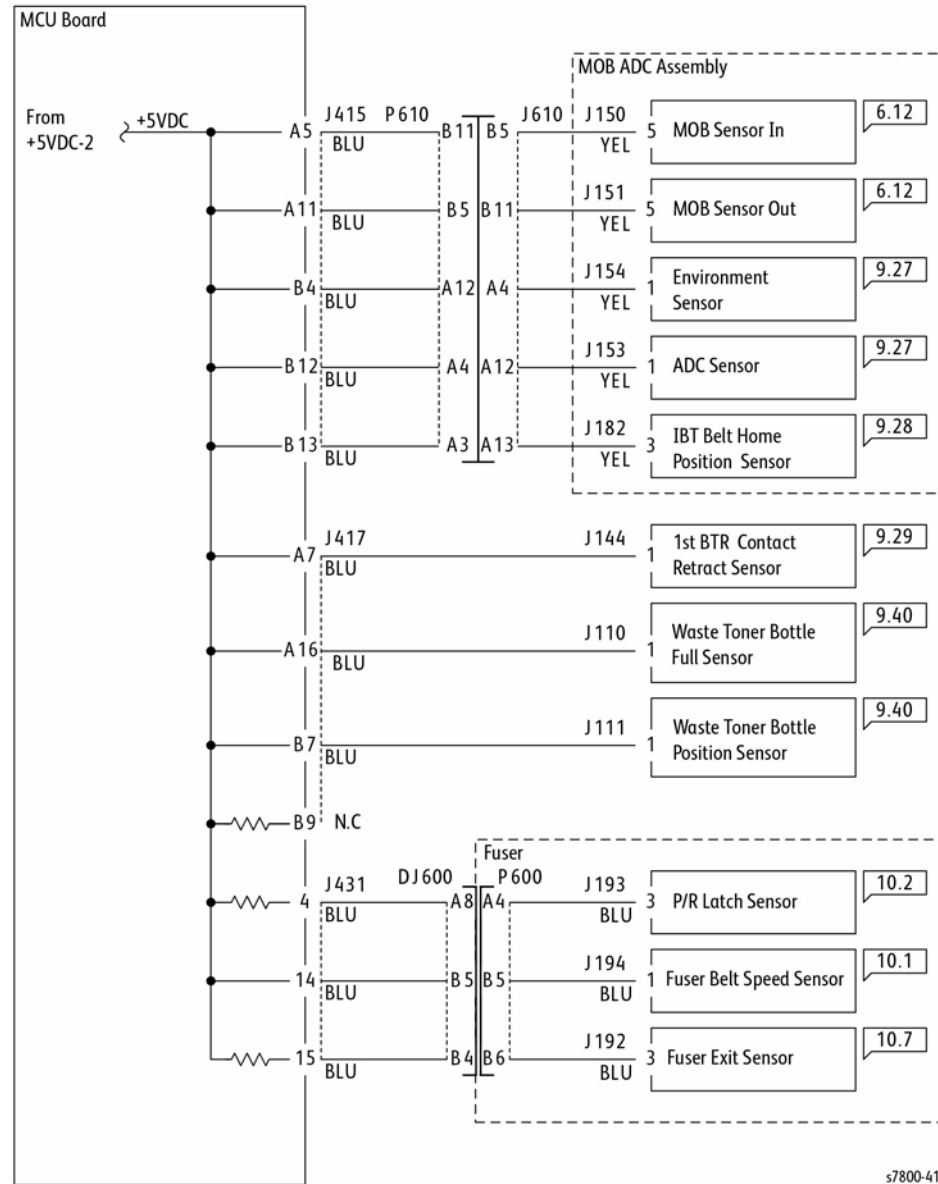
+5 VDC-2



s7800-410

Figure 12 +5 VDC-2

+5 VDC-3



s7800-411

Figure 13 +5 VDC-3

+5 VDC-4

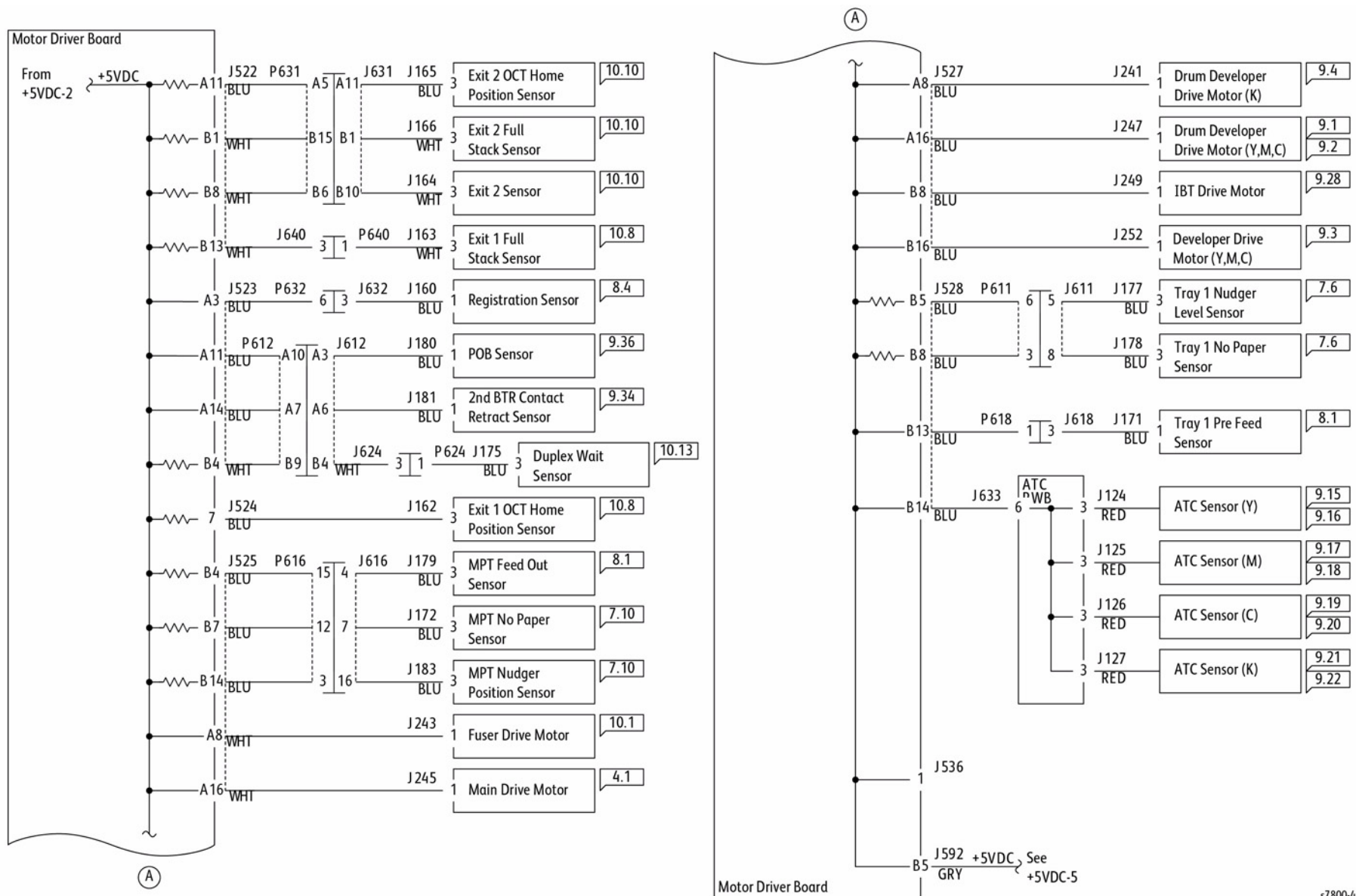


Figure 14 +5 VDC-4

s7800-412

+5 VDC-5

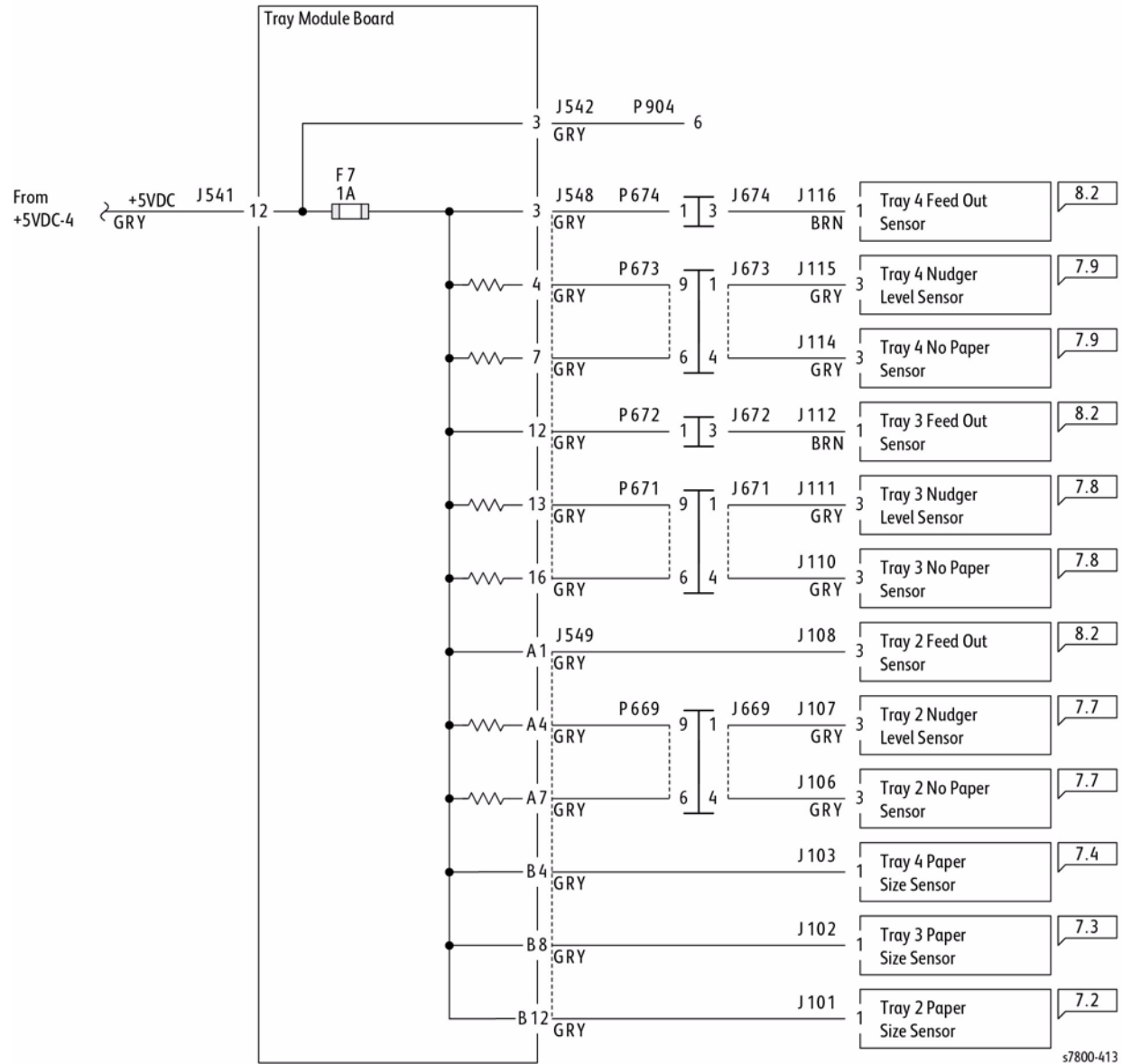
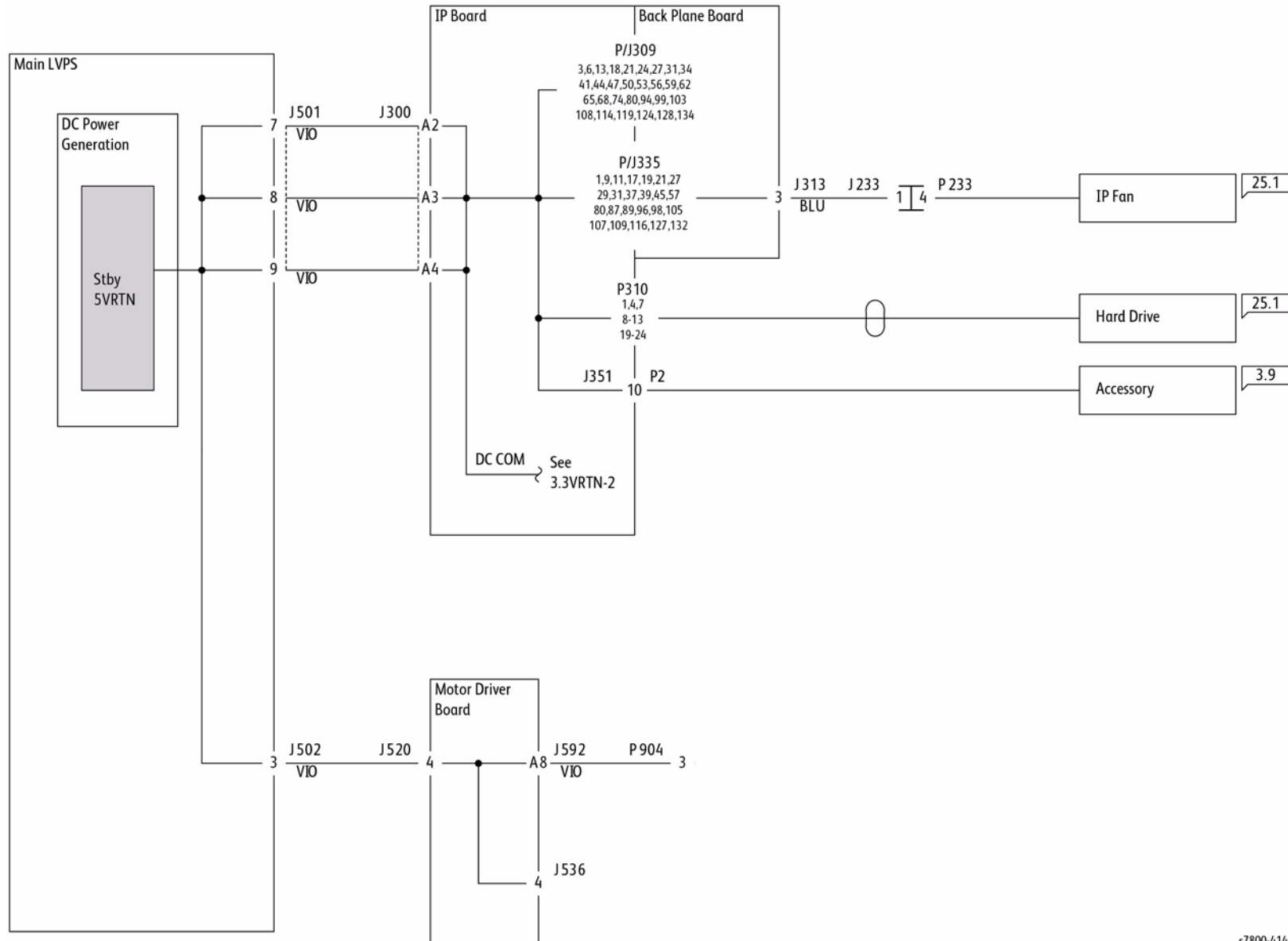


Figure 15 +5 VDC-5

DC COM (5VRTN-1)



s7800-414

Figure 16 DC COM (5VRTN-1)

DC COM (5VRTN-2)

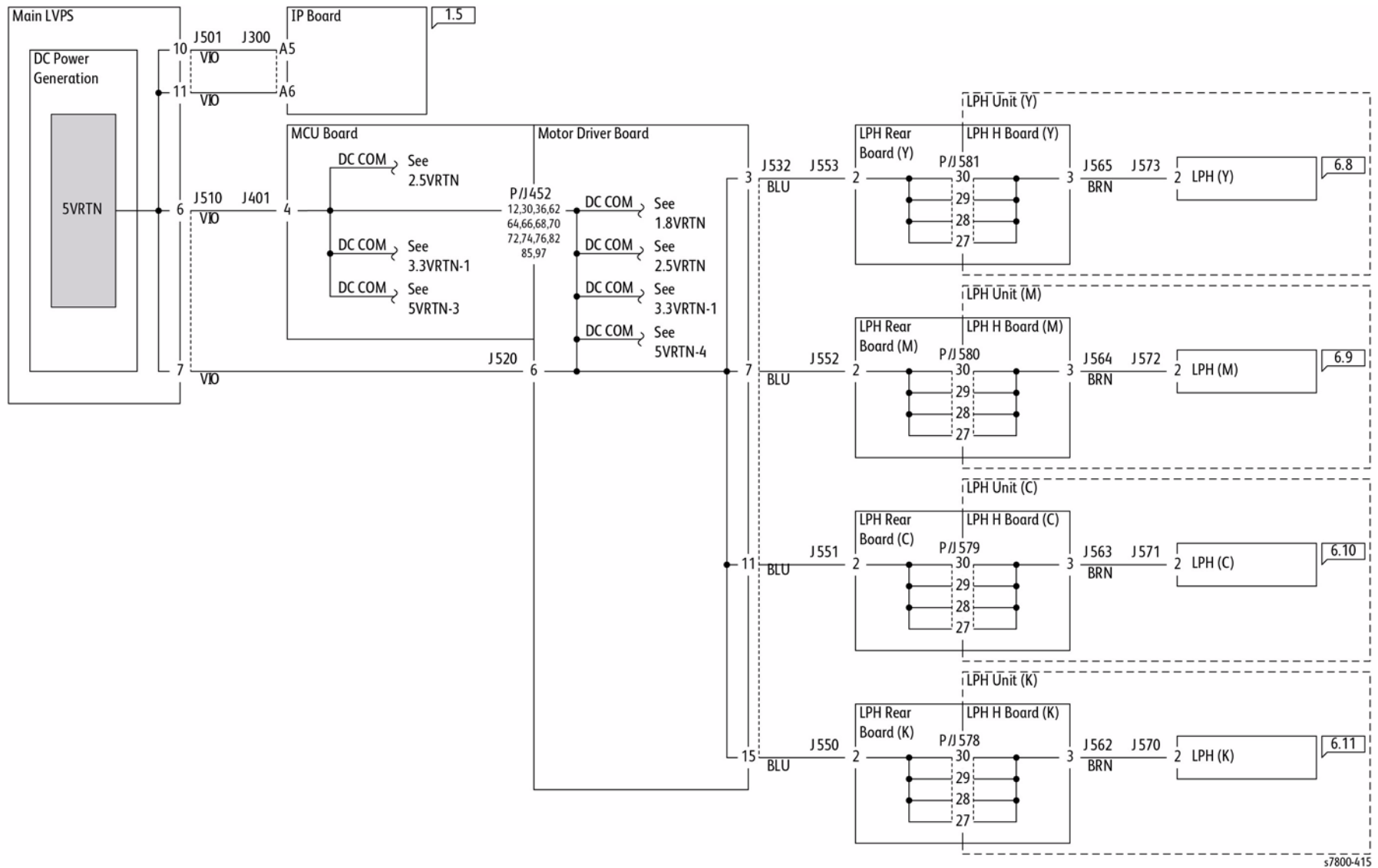


Figure 17 DC COM (5VRTN-2)

DC COM (5VRTN-3)

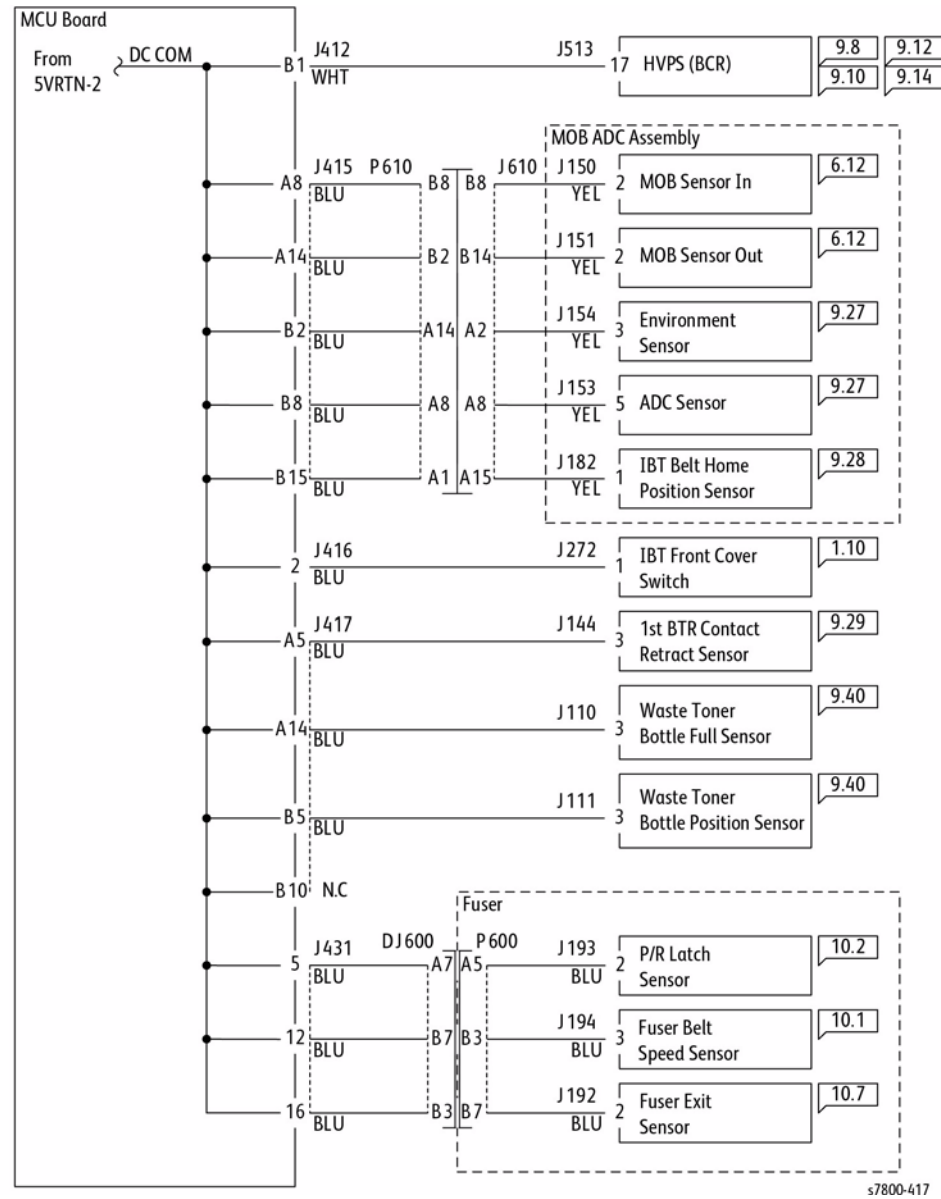
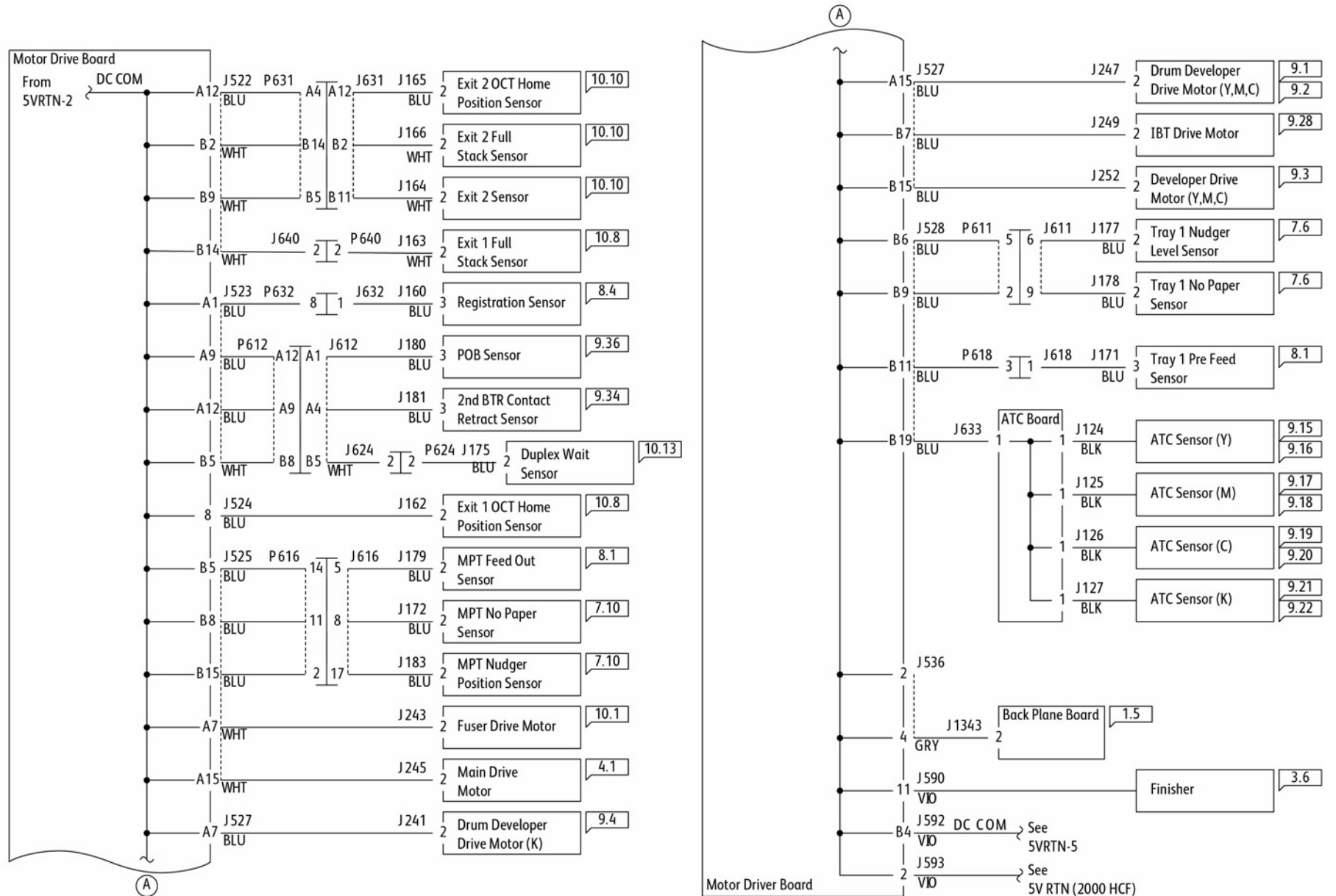


Figure 18 DC COM (5VRTN-3)

DC COM (5VRTN-4)



s7800-418

Figure 19 DC COM (5VRTN-4)

DC COM (5VRTN-5)

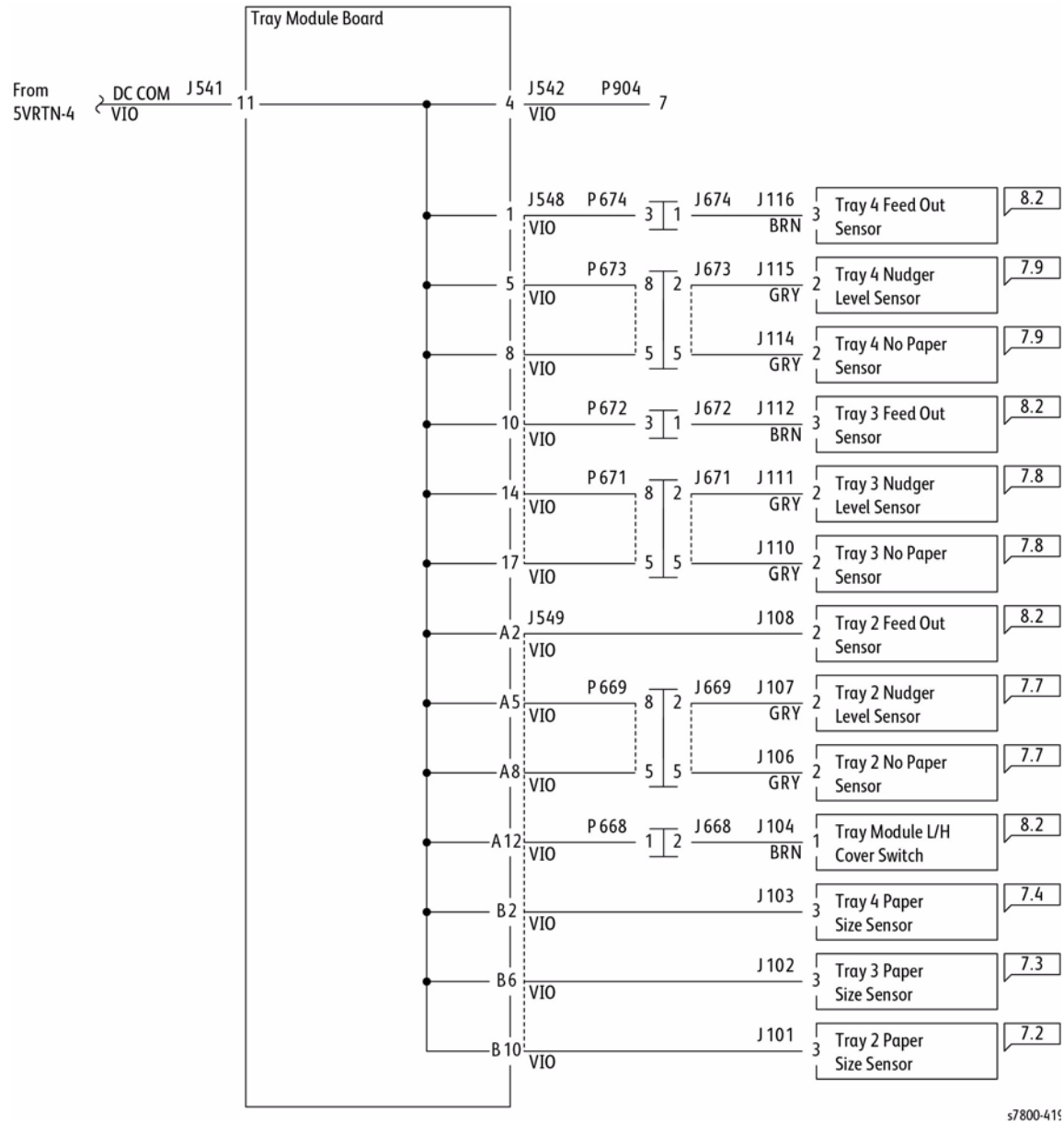
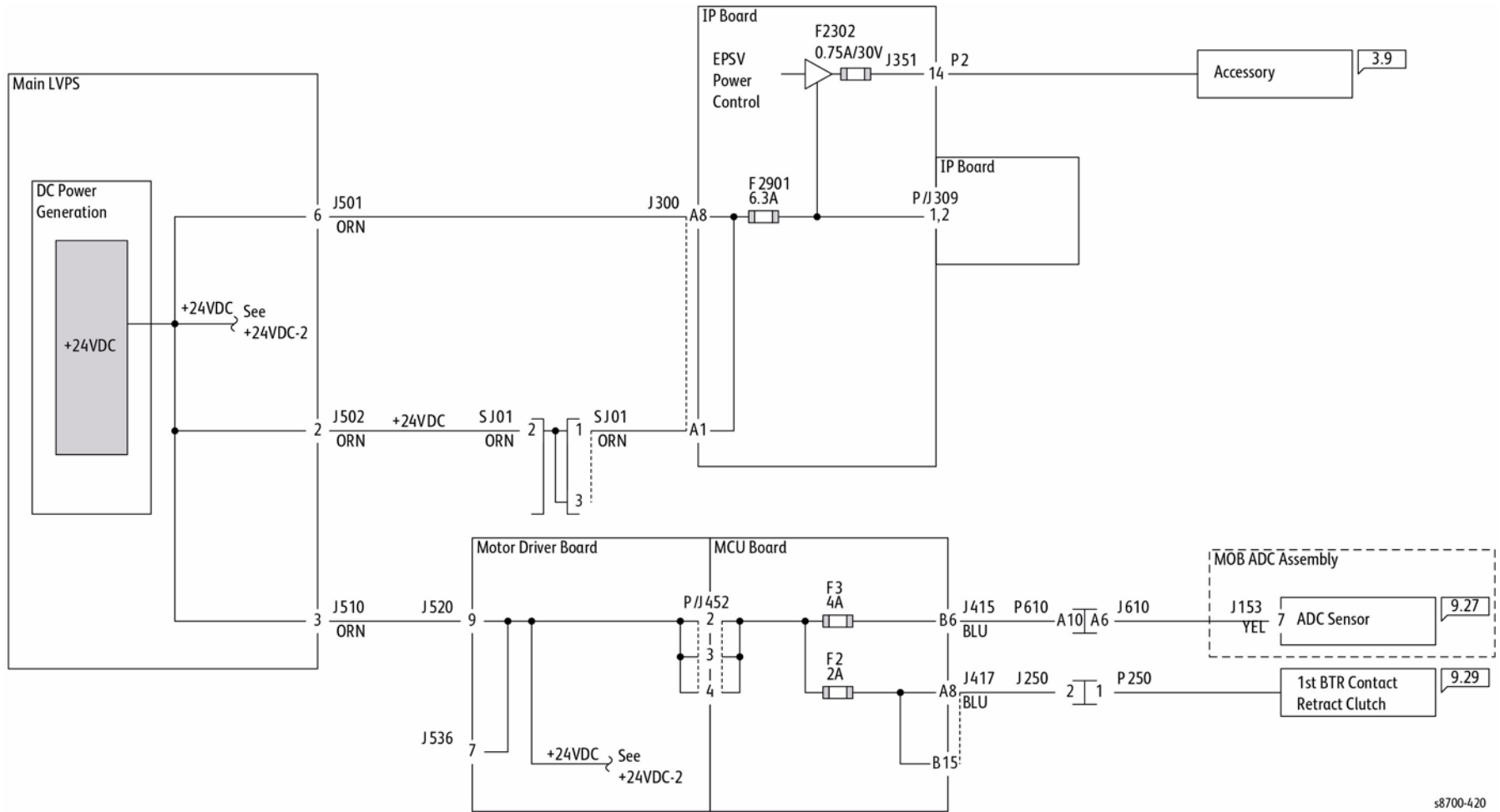


Figure 20 DC COM (5VRTN-5)

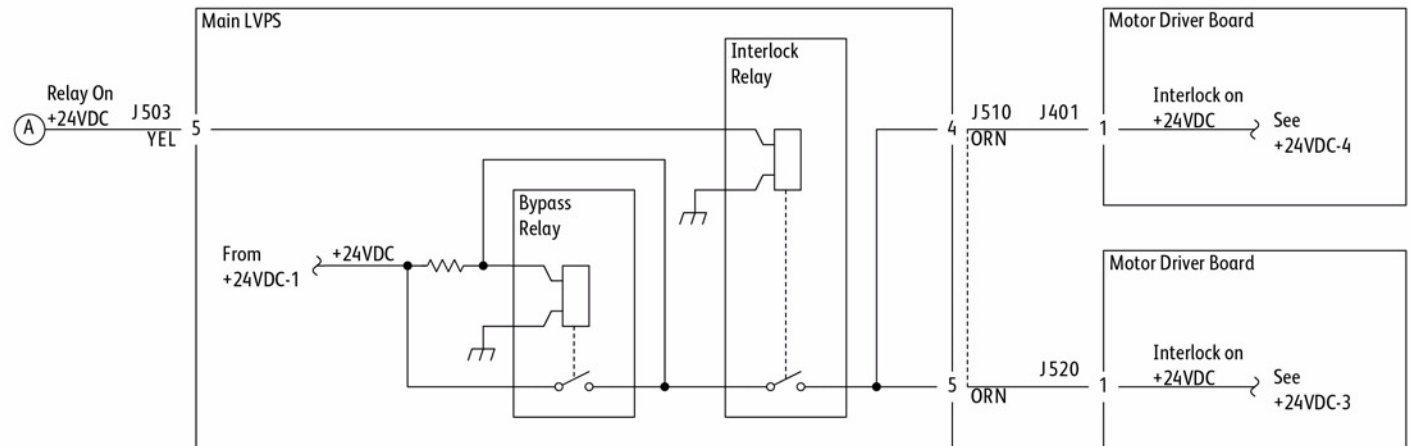
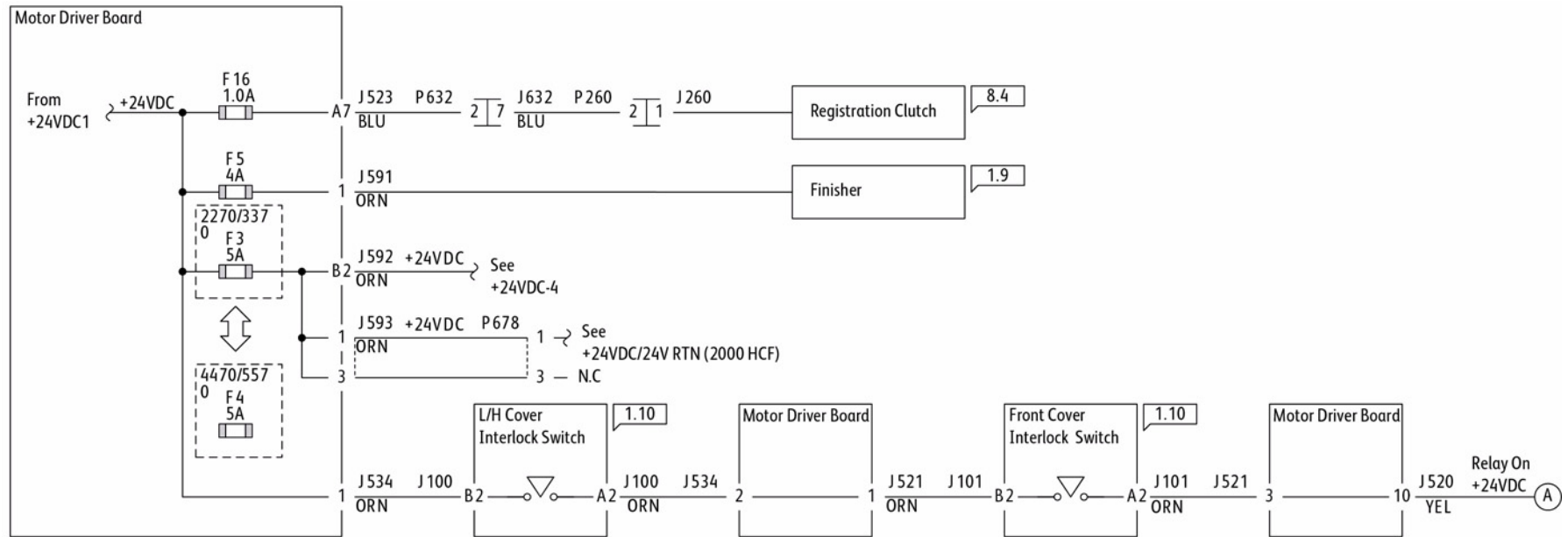
+24 VDC-1



s8700-420

Figure 21 +24 VDC-1

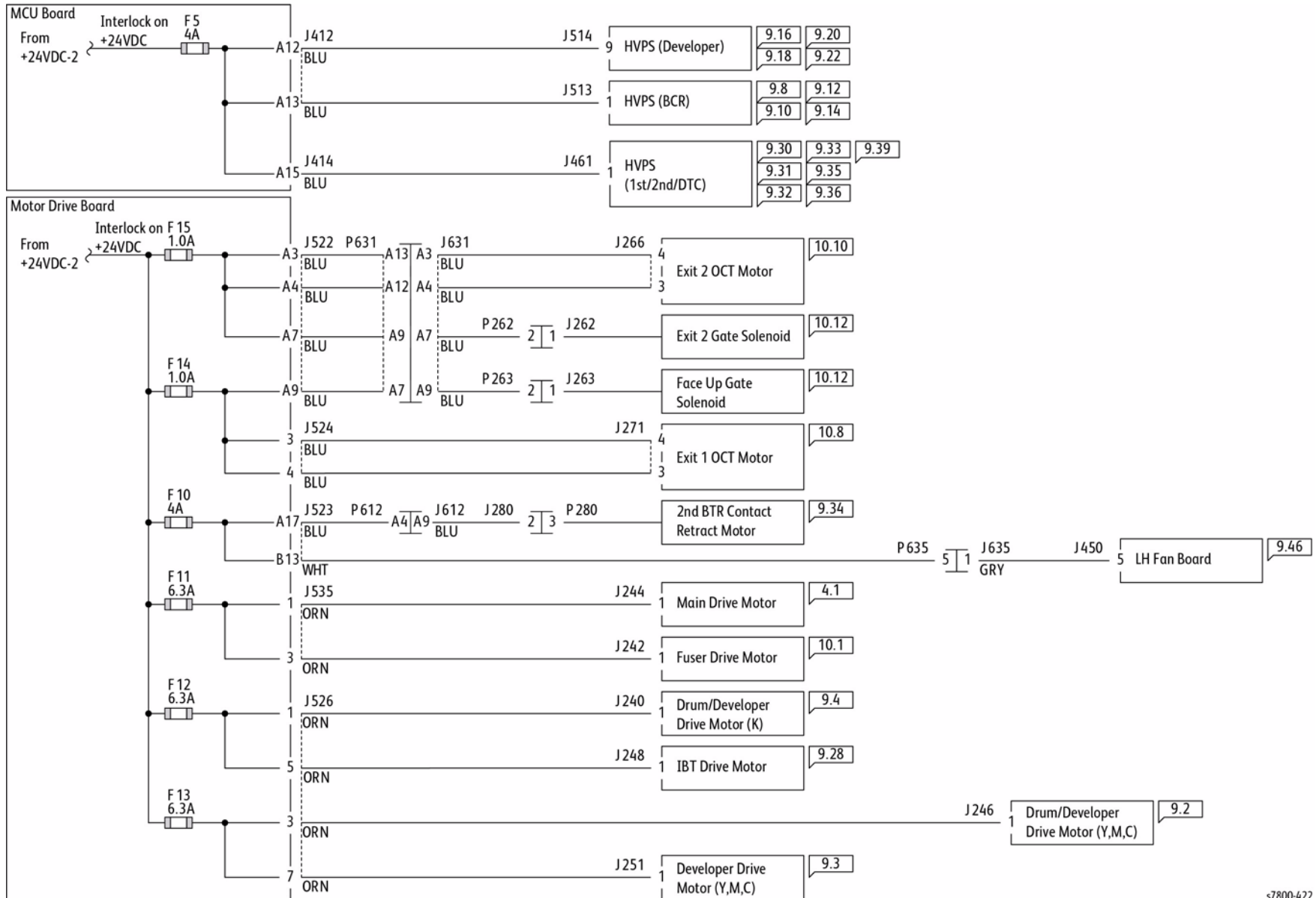
+24 VDC-2



s7800-421

Figure 22 +24 VDC-2

+24 VDC-3



s7800-422

Figure 23 +24 VDC-3

+24 VDC-4

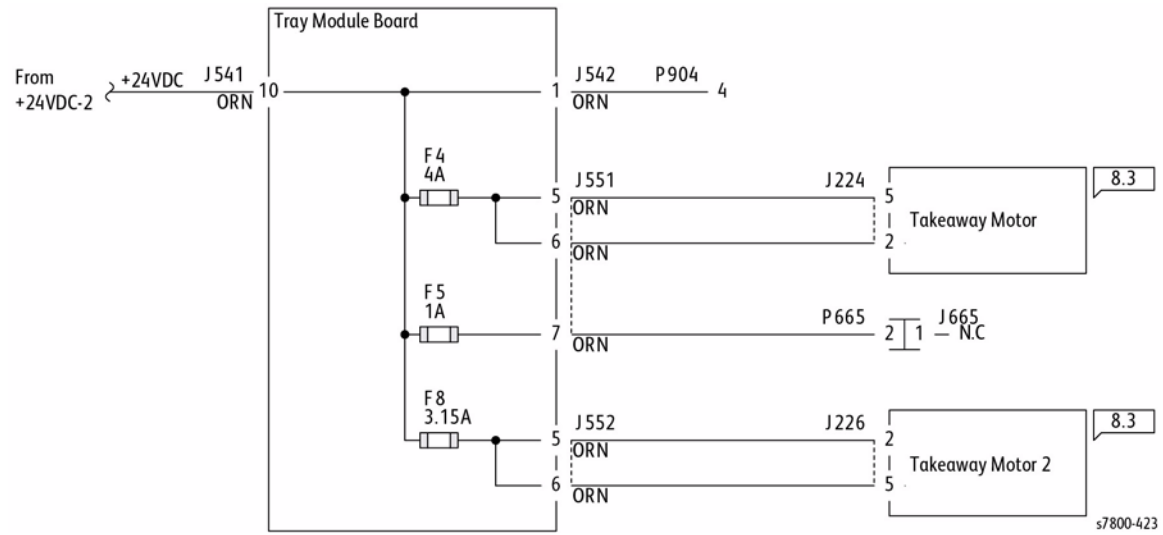
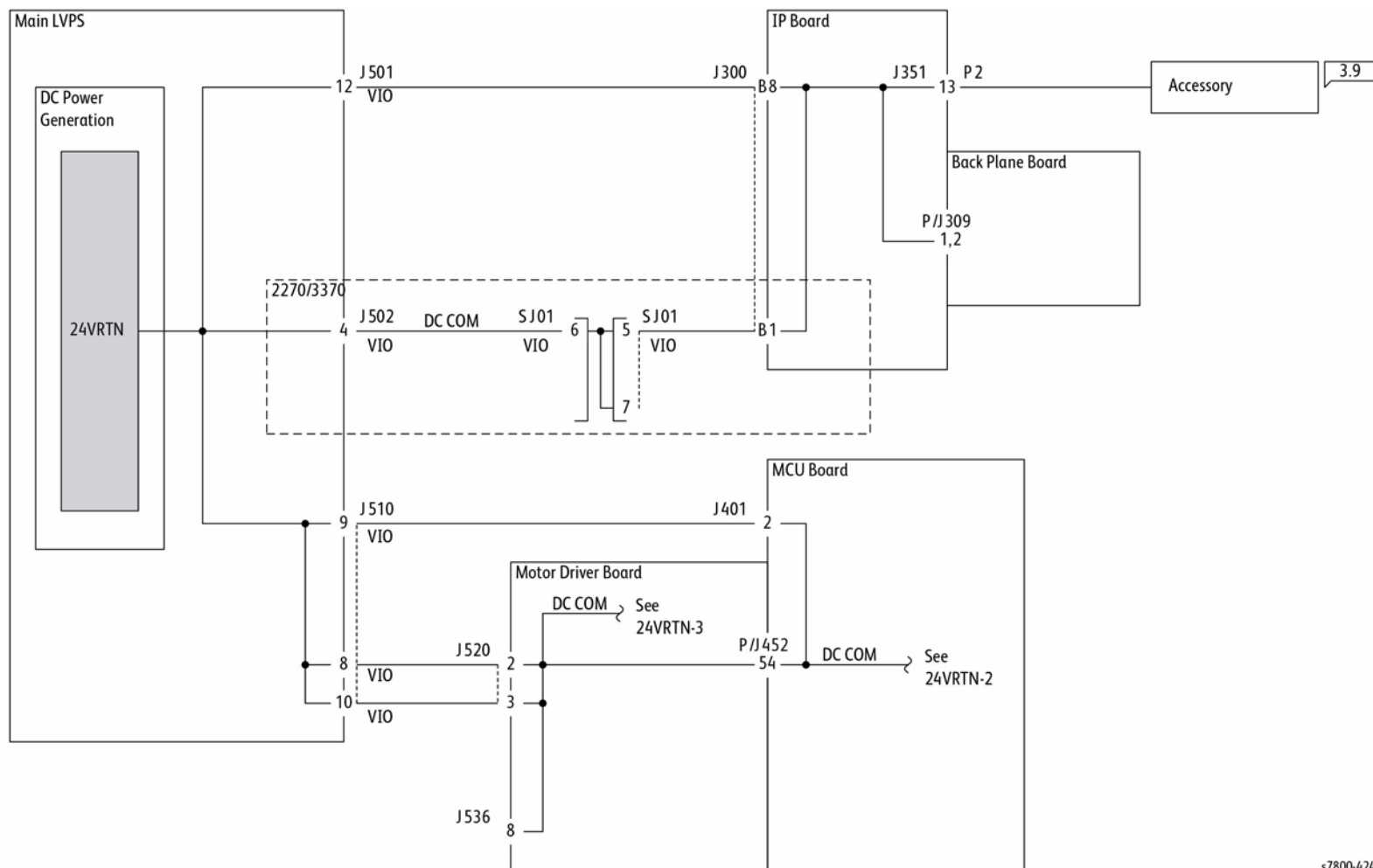


Figure 24 +24 VDC-4

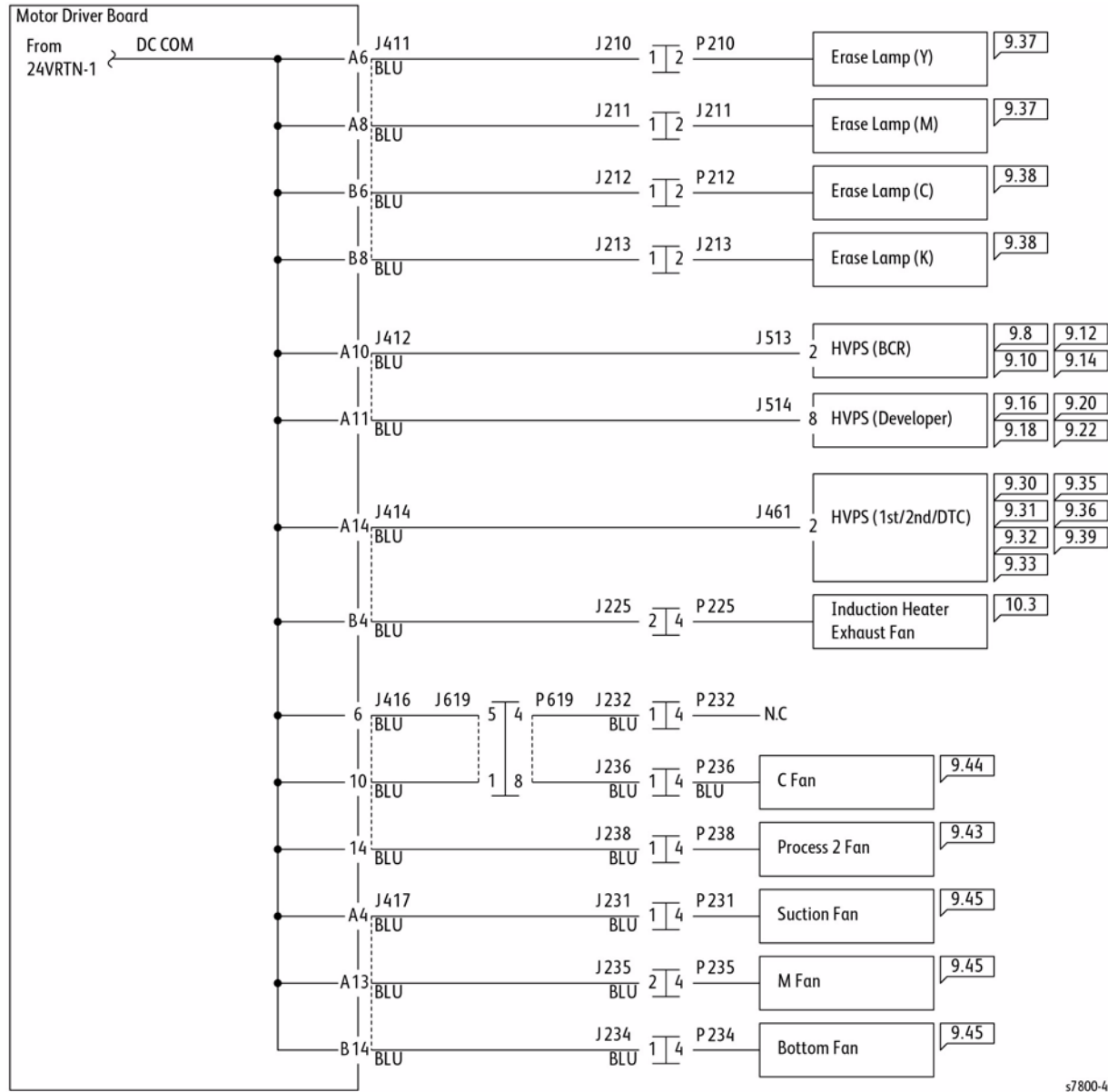
DC COM (24VRTN-1)



s7800-424

Figure 25 DC COM (24VRTN-1)

DC COM (24VRTN-2)



s7800-425

Figure 26 DC COM (24VRTN-2)

DC COM (24VRTN-3)

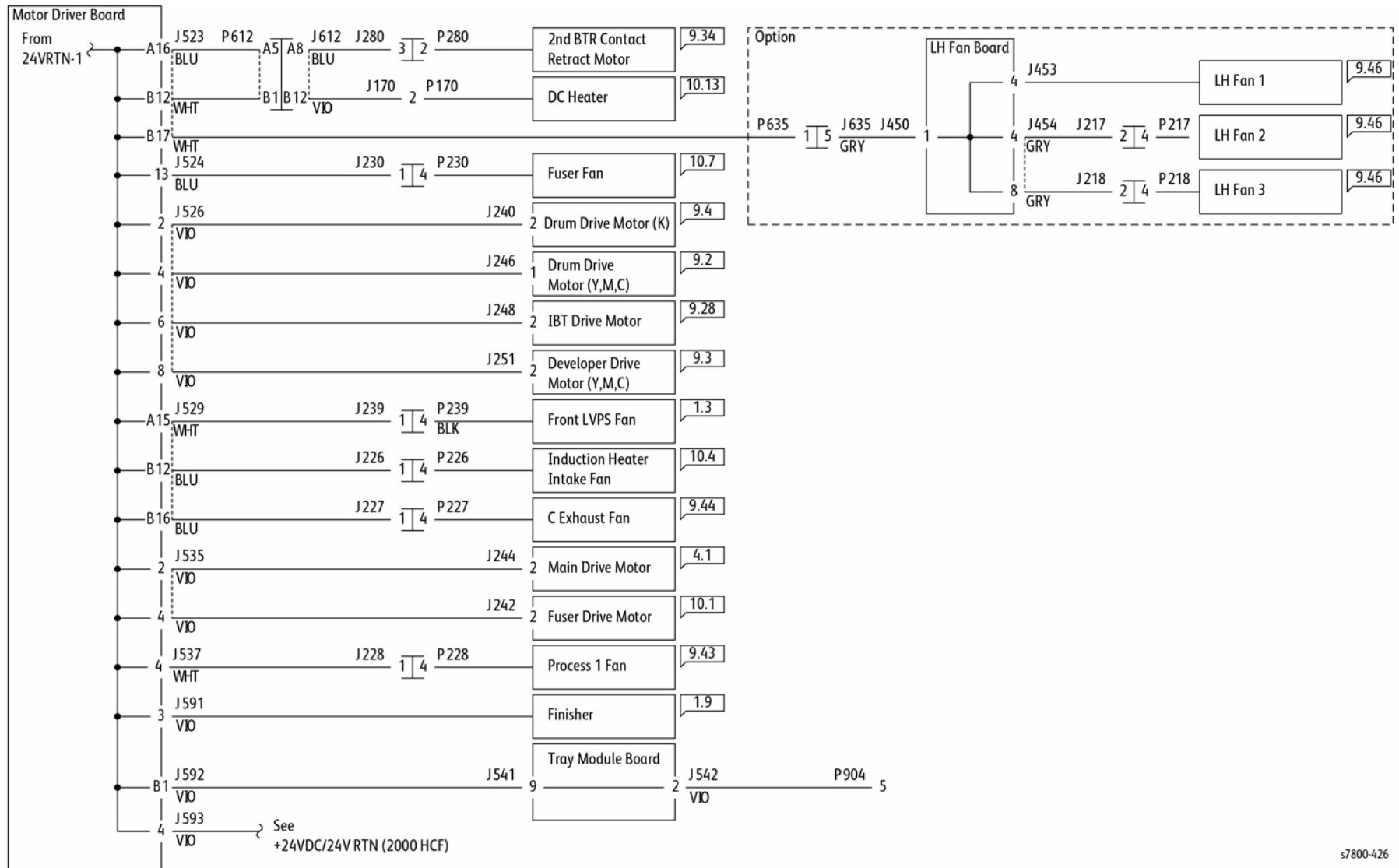
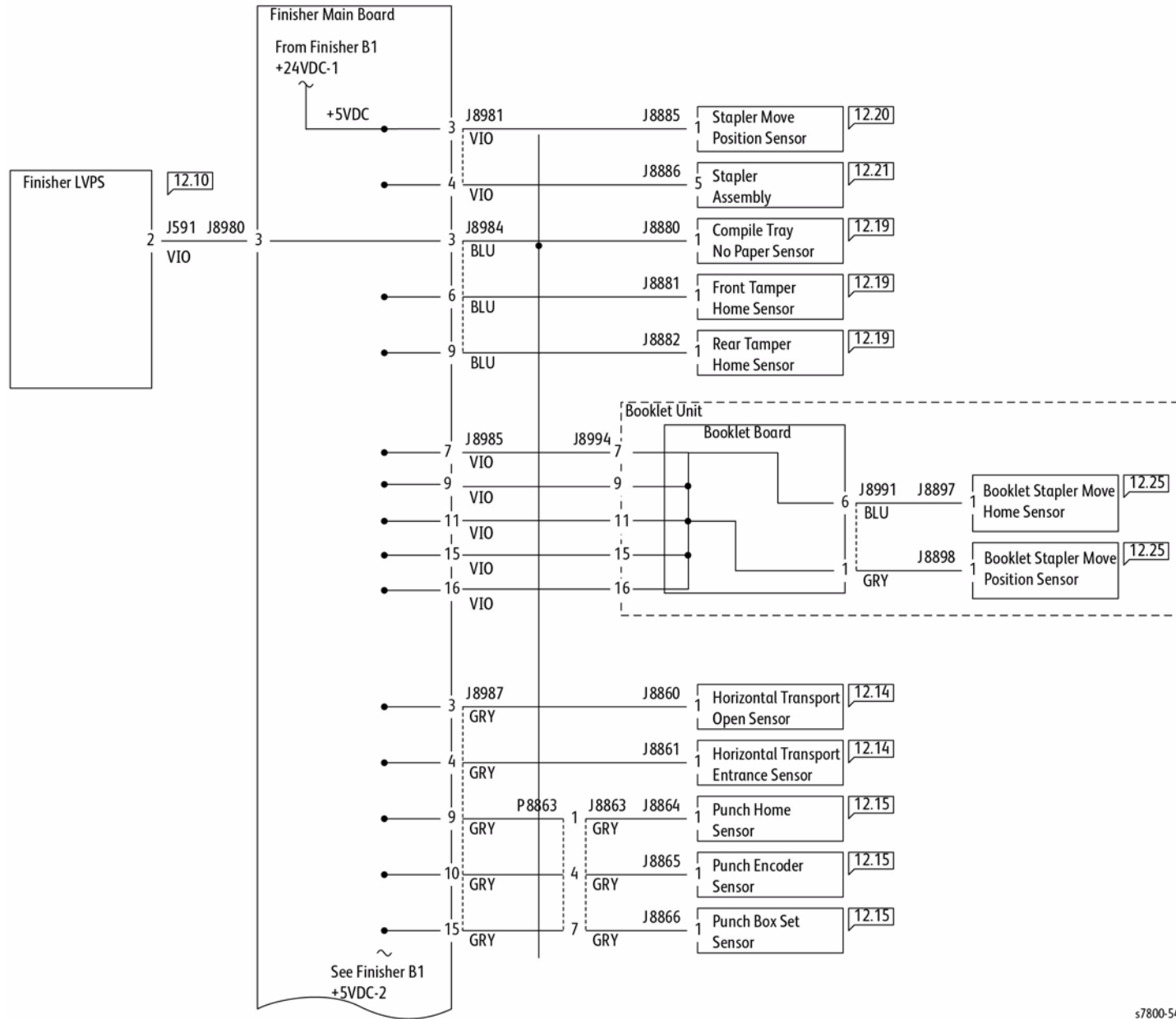


Figure 27 DC COM (24VRTN-3)



s7800-543

Figure 1 5+VDC-1

+5VDC-2

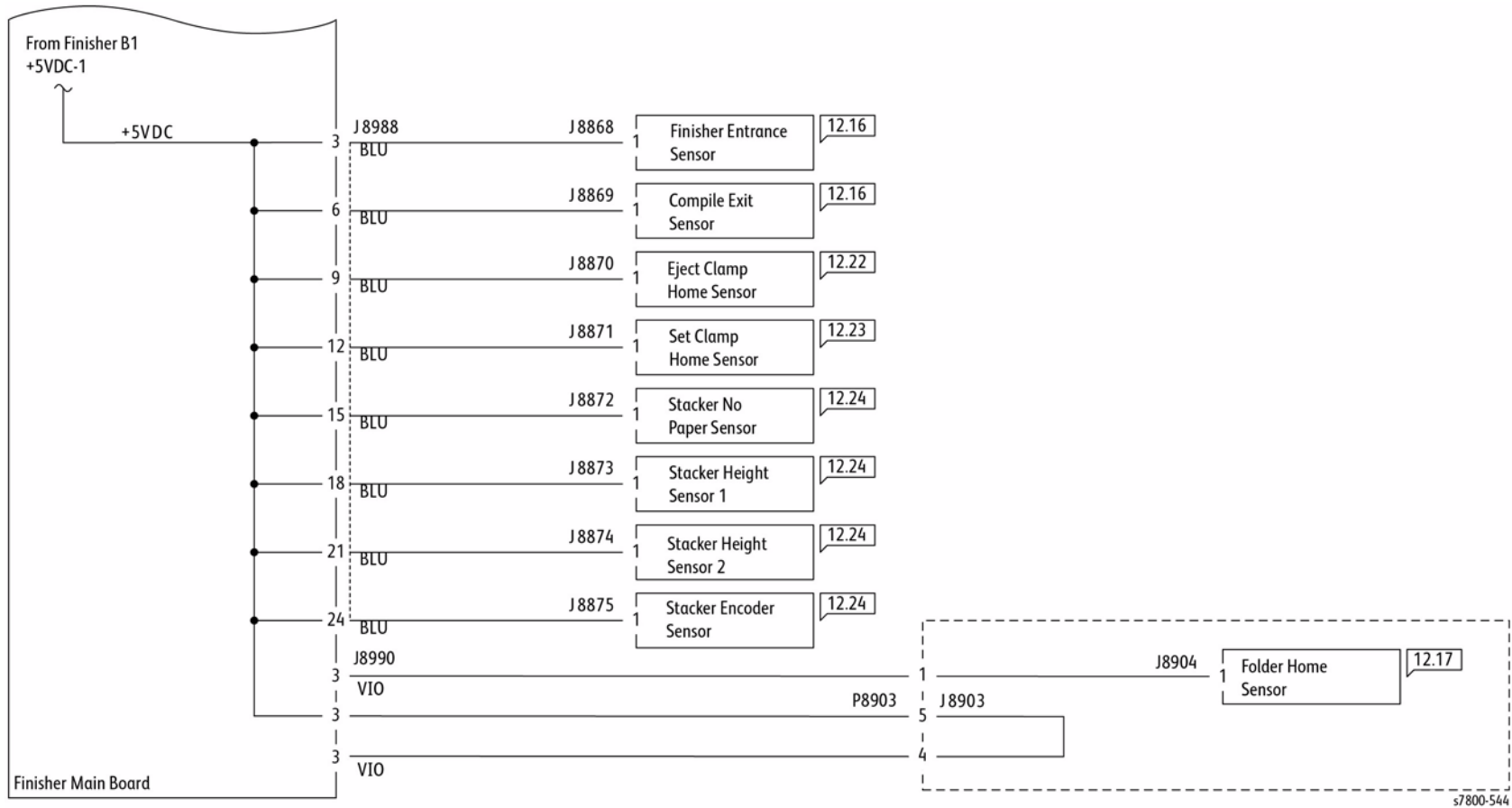


Figure 2 +5VDC-2

DC COM (5VTRN)-1

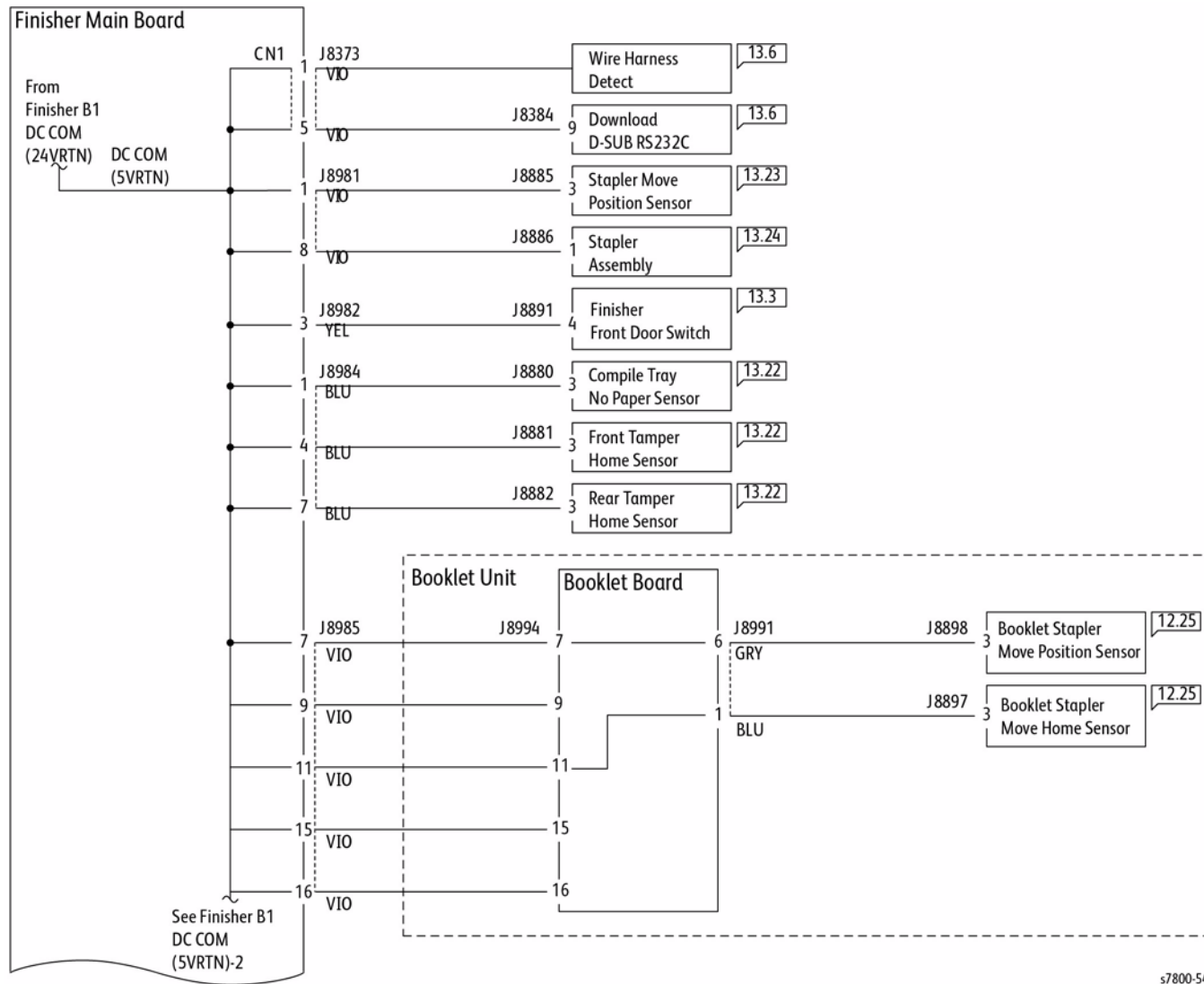
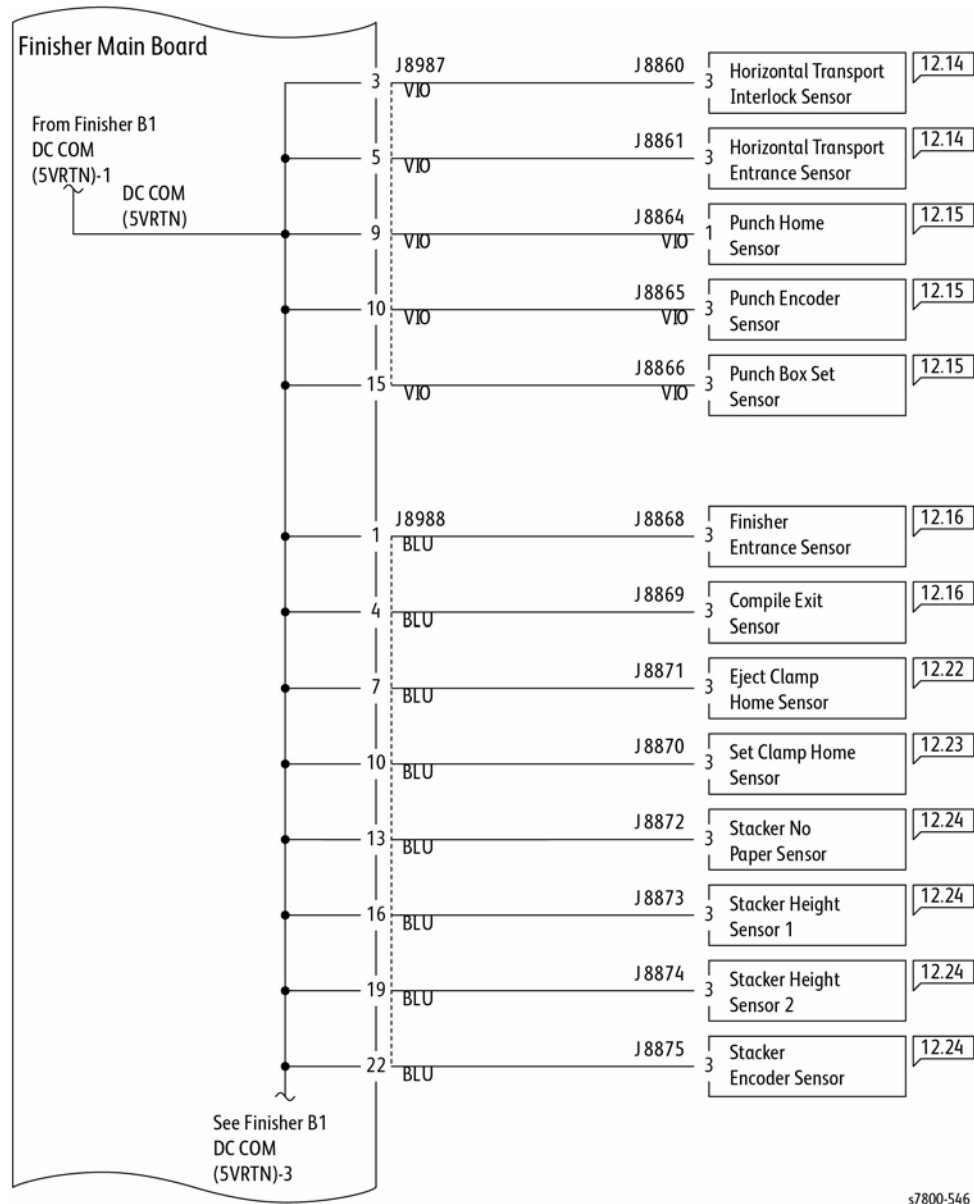


Figure 3 DC COM (5VTRN)-1



s7800-546

Figure 4 DC COM (5VRTN)-2

DC COM (5VRTN)-3

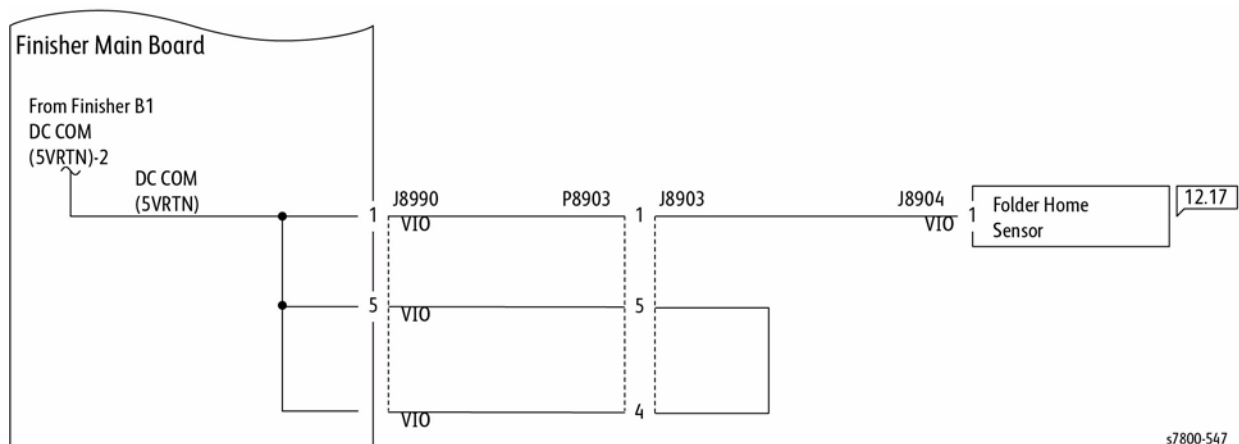
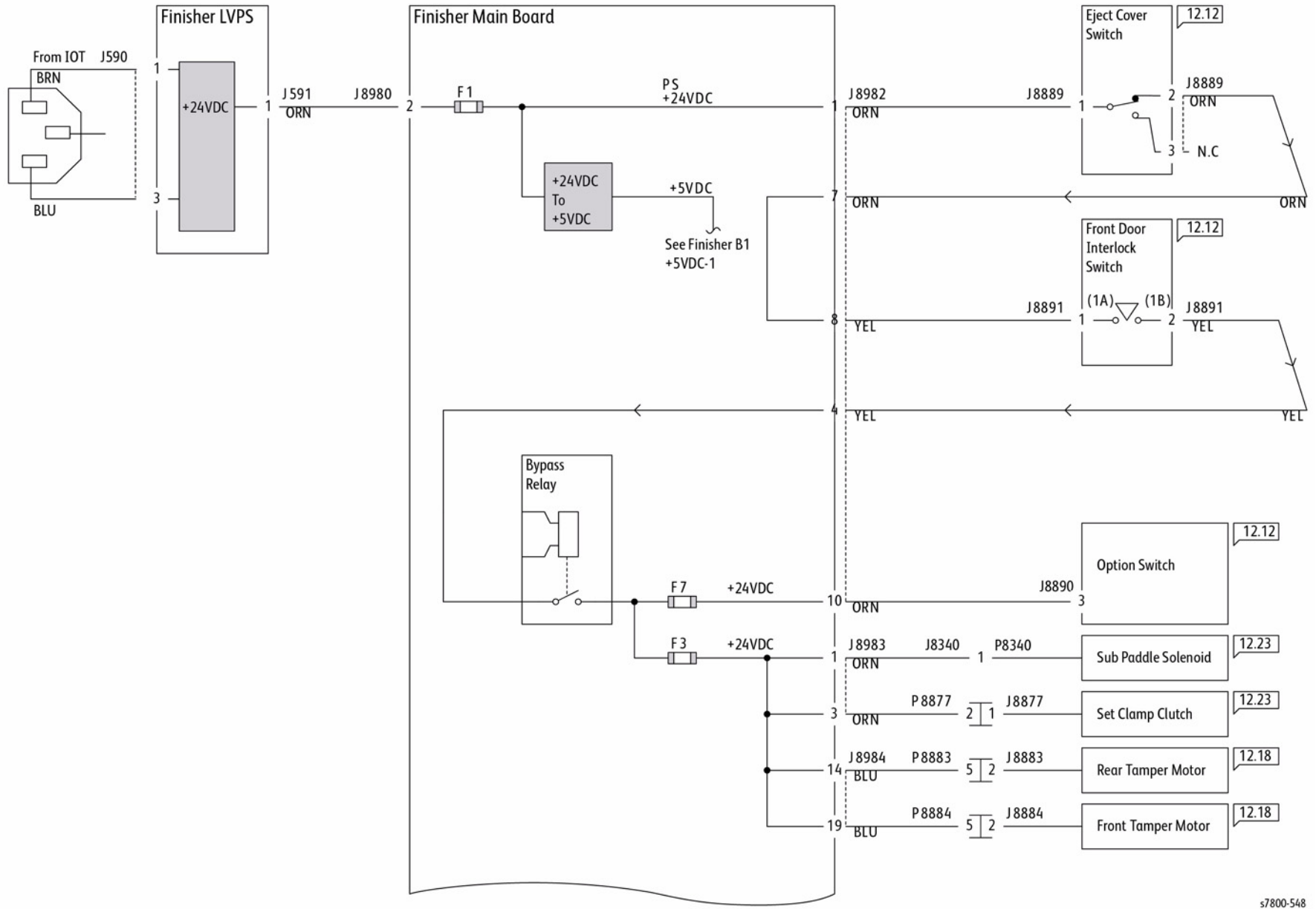


Figure 5 DC COM (5VRTN)-3

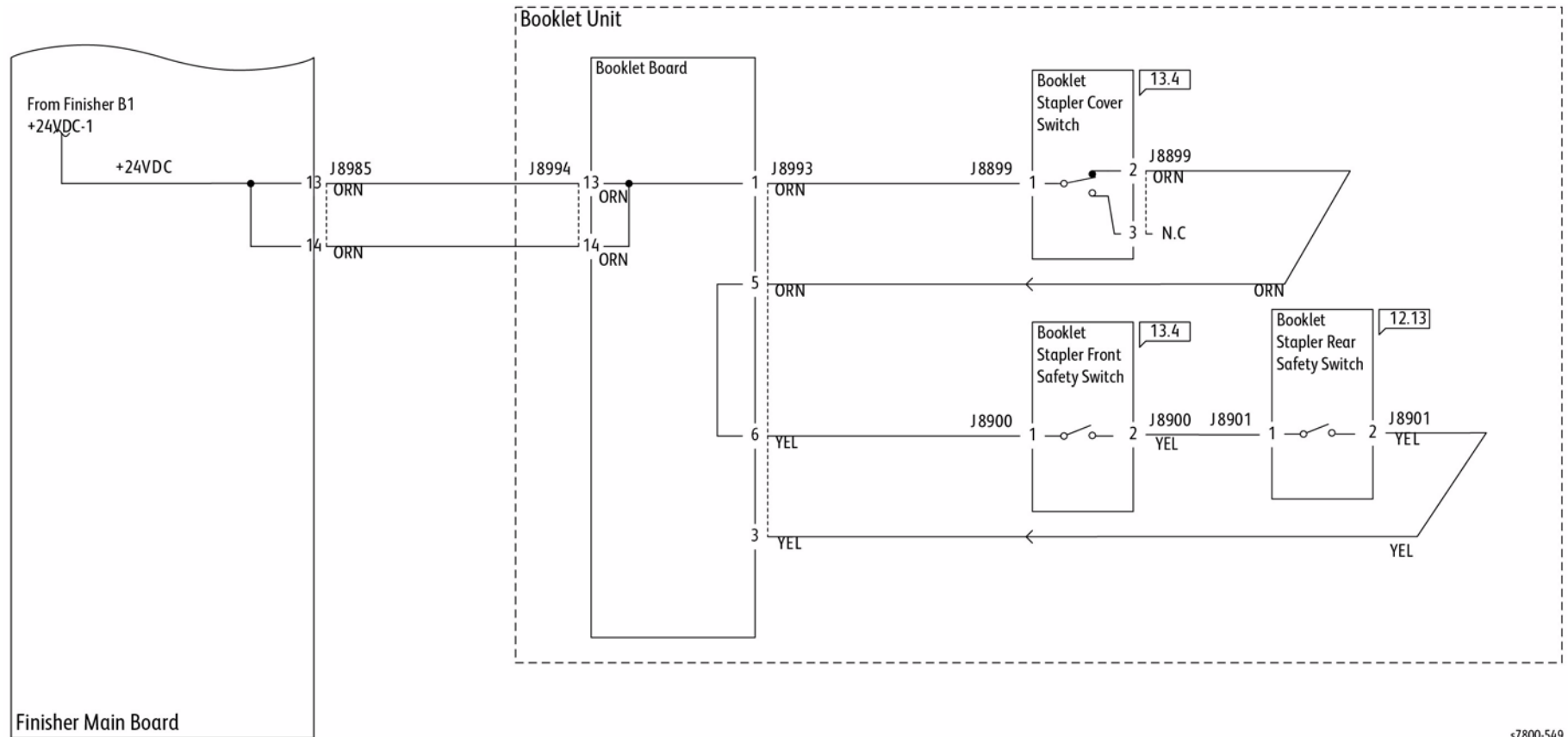
+24VDC-1



s7800-548

Figure 6 +24VDC-1

+24VDC-2



s7800-549

Figure 7 +24VDC-2

DC COM (24VRTN)

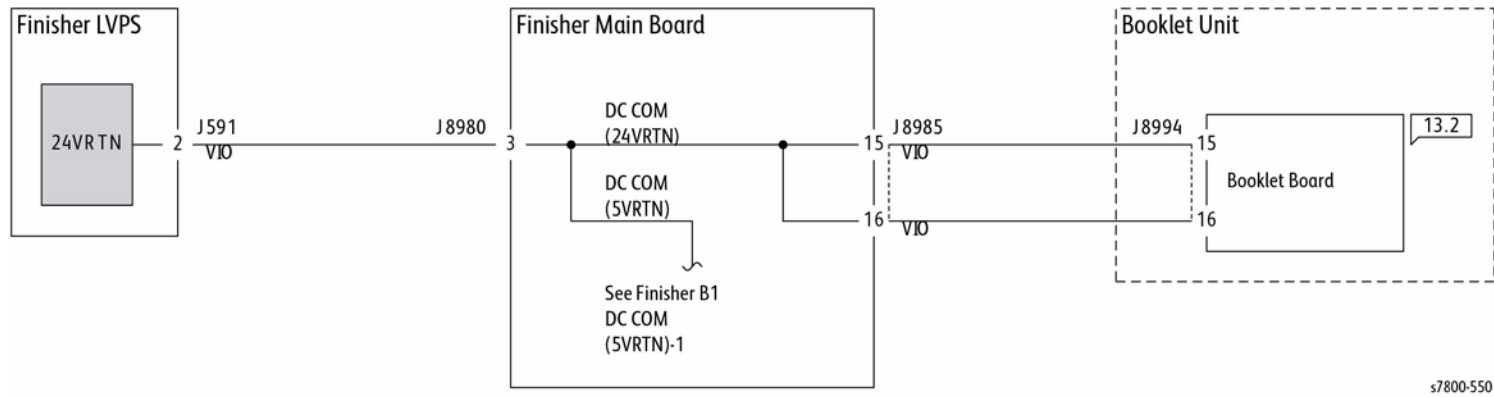


Figure 8 DC COM (24VRTN)

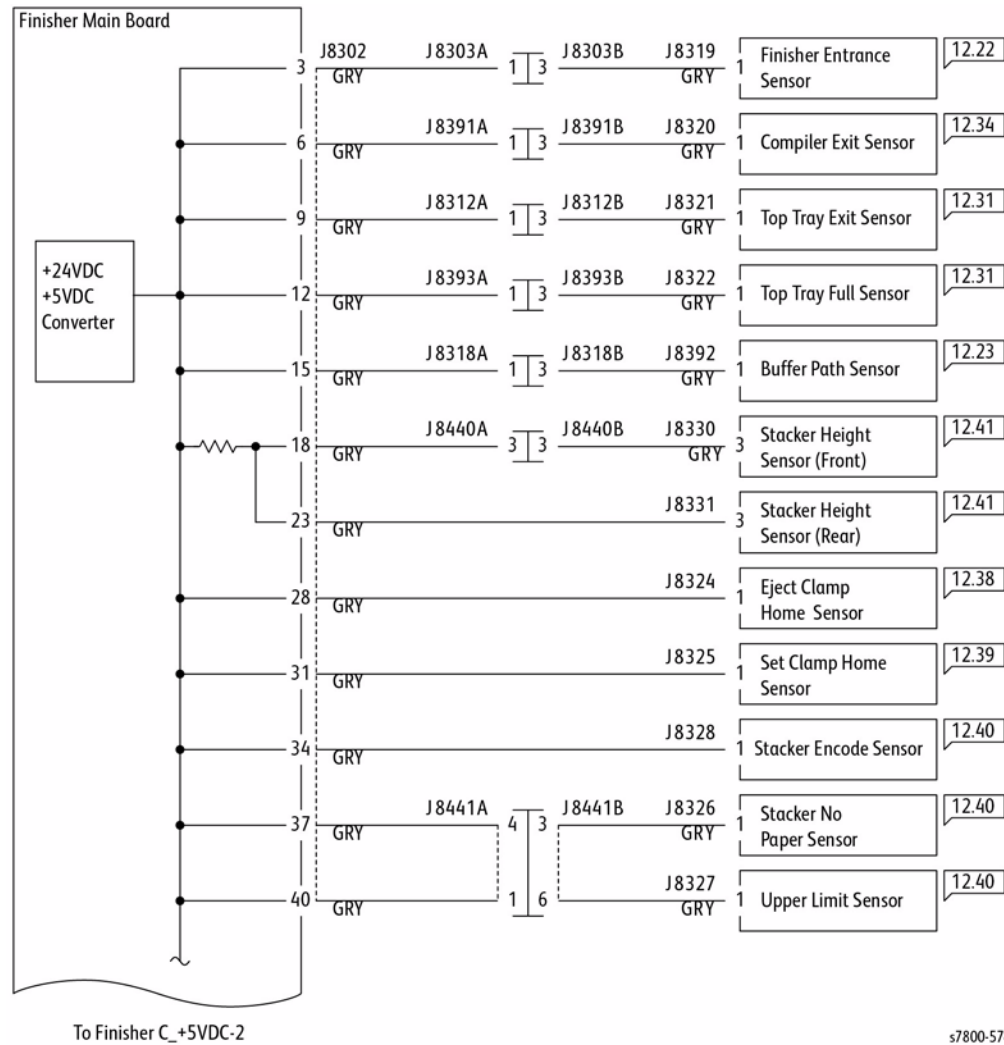


Figure 1 +5VDC-1

+5VDC-2

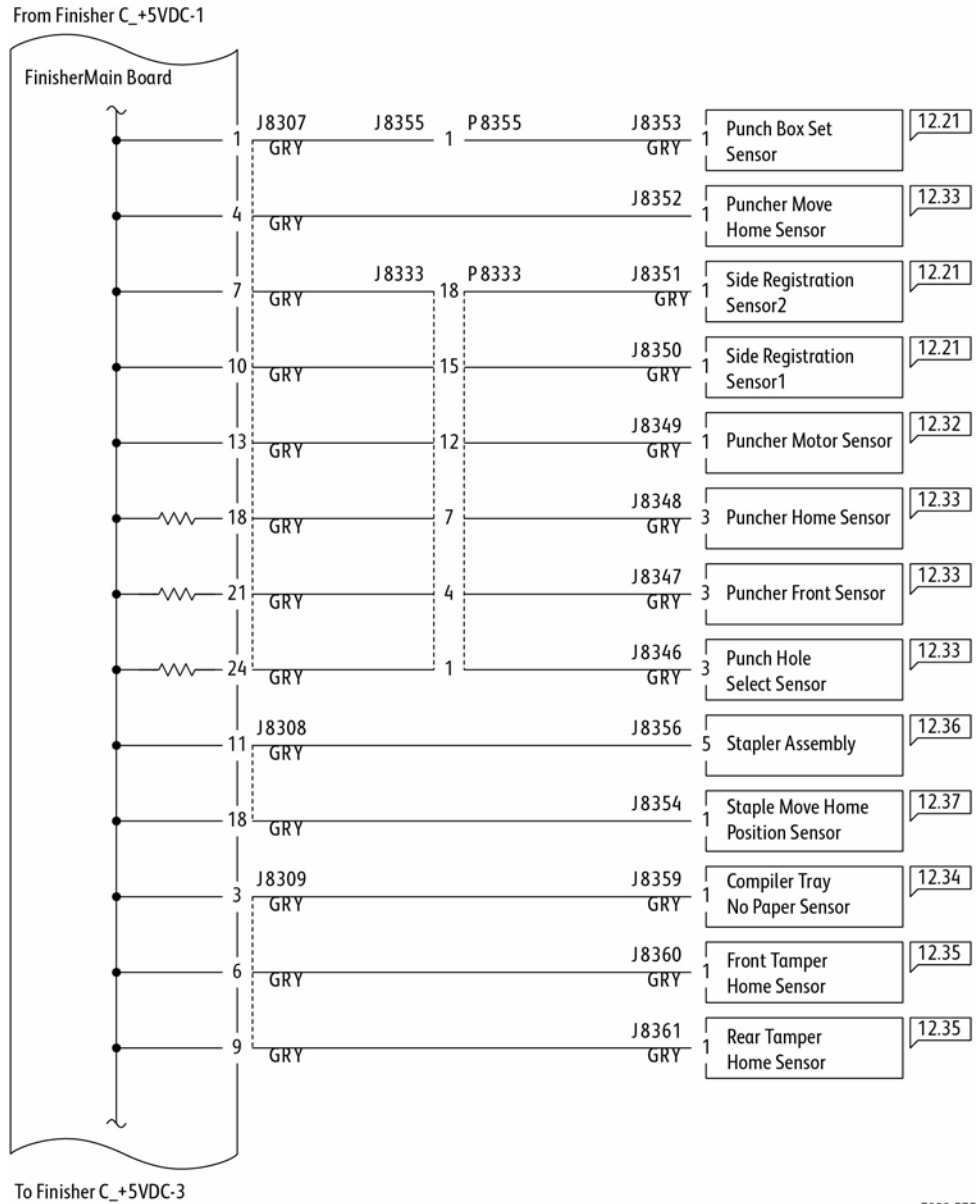
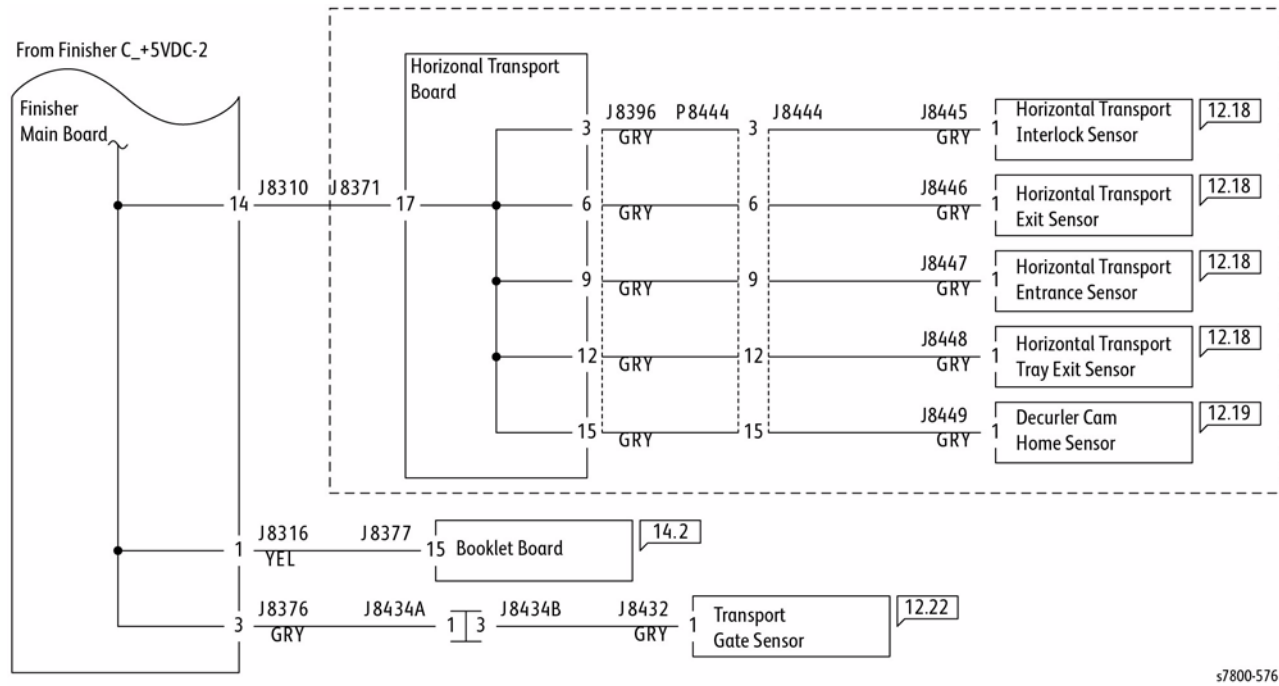


Figure 2 +5VDC-2

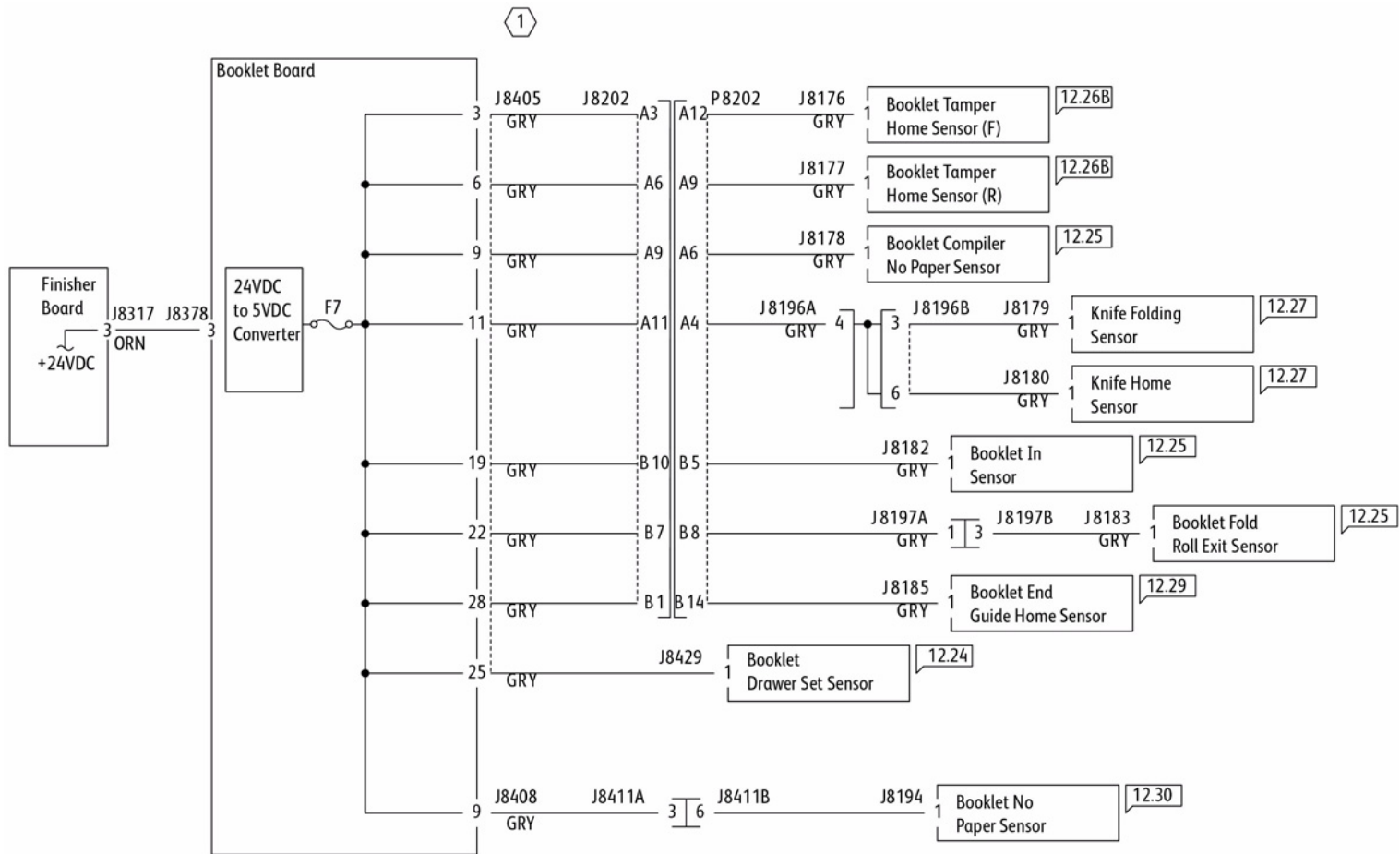
+5VDC-3



s7800-576

Figure 3 +5VDC-3

+5VDC-4



Note: 1 Booklet M/C Only

s7800-577

Figure 4 +5VDC-4

5V RTN-1

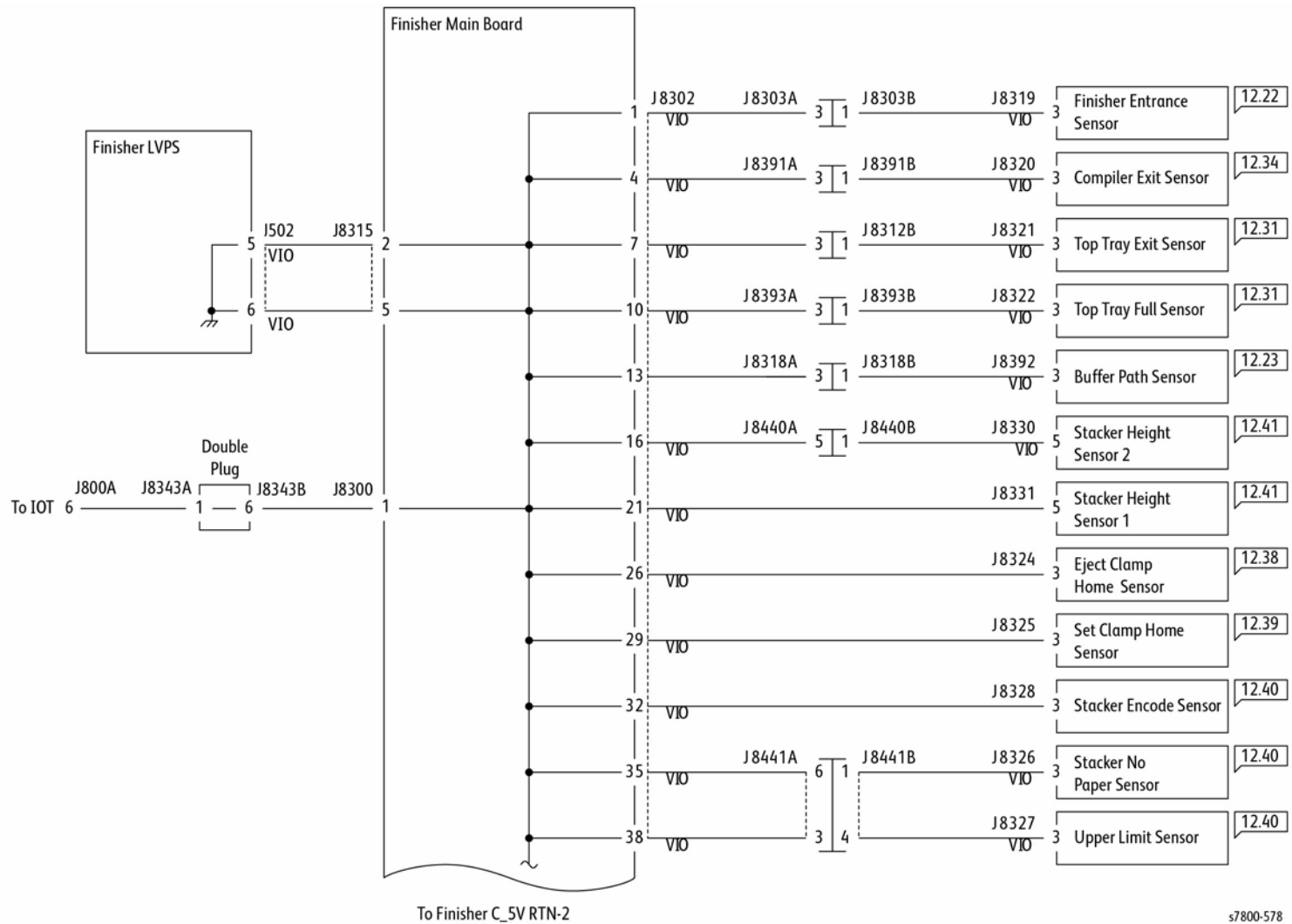


Figure 5 5V RTN-1

5V RTN-2

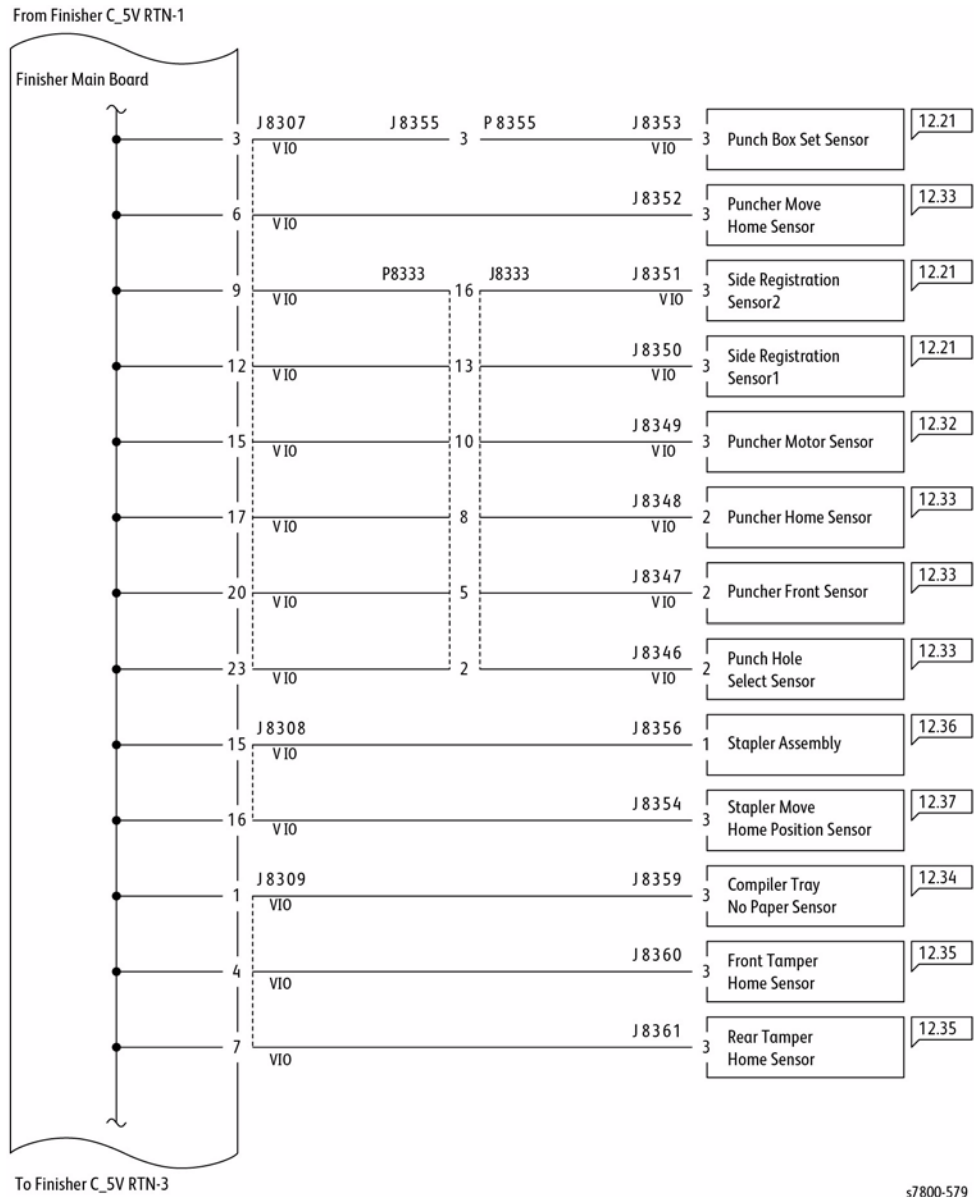


Figure 6 5V RTN-2

5V RTN-3

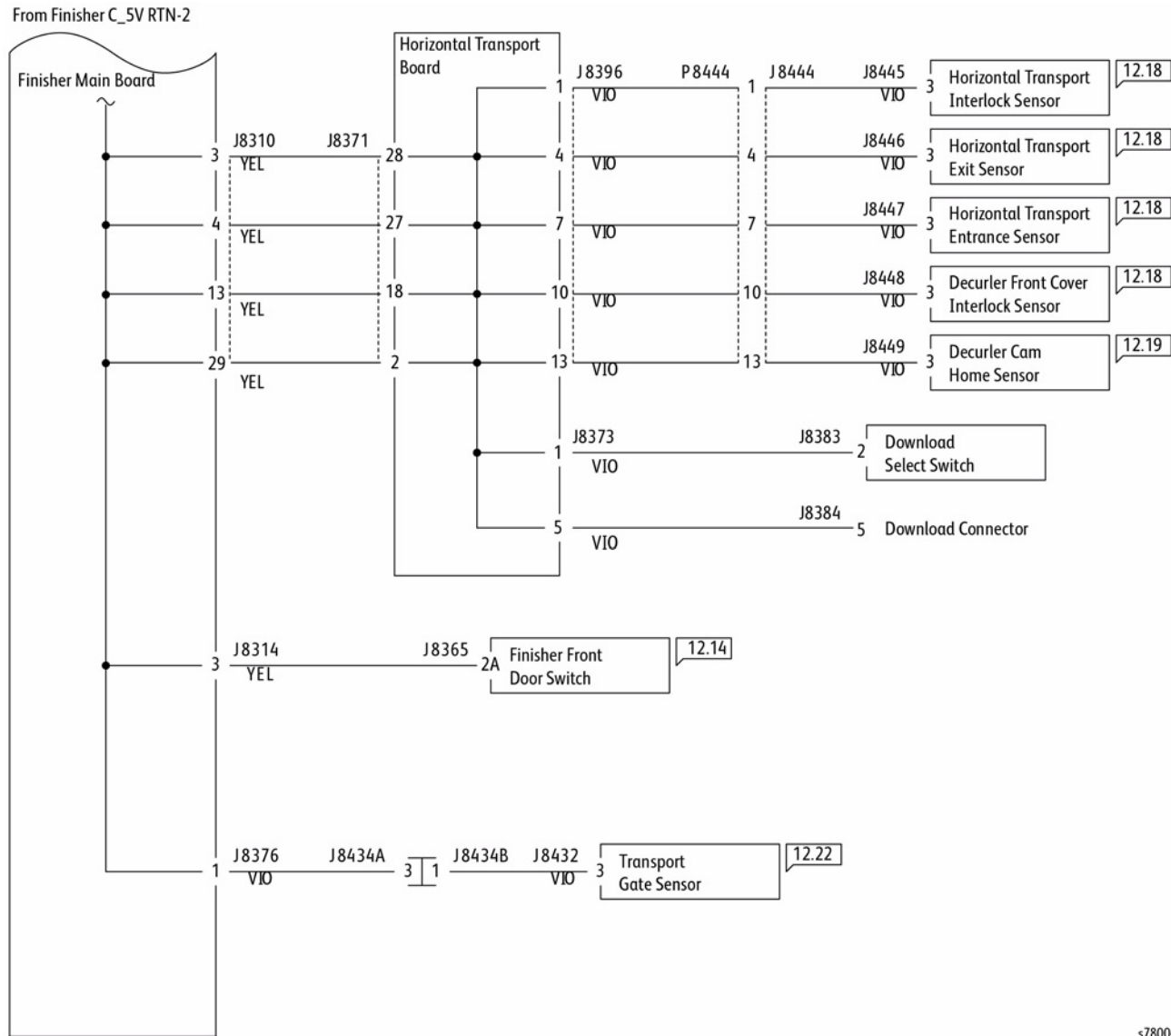
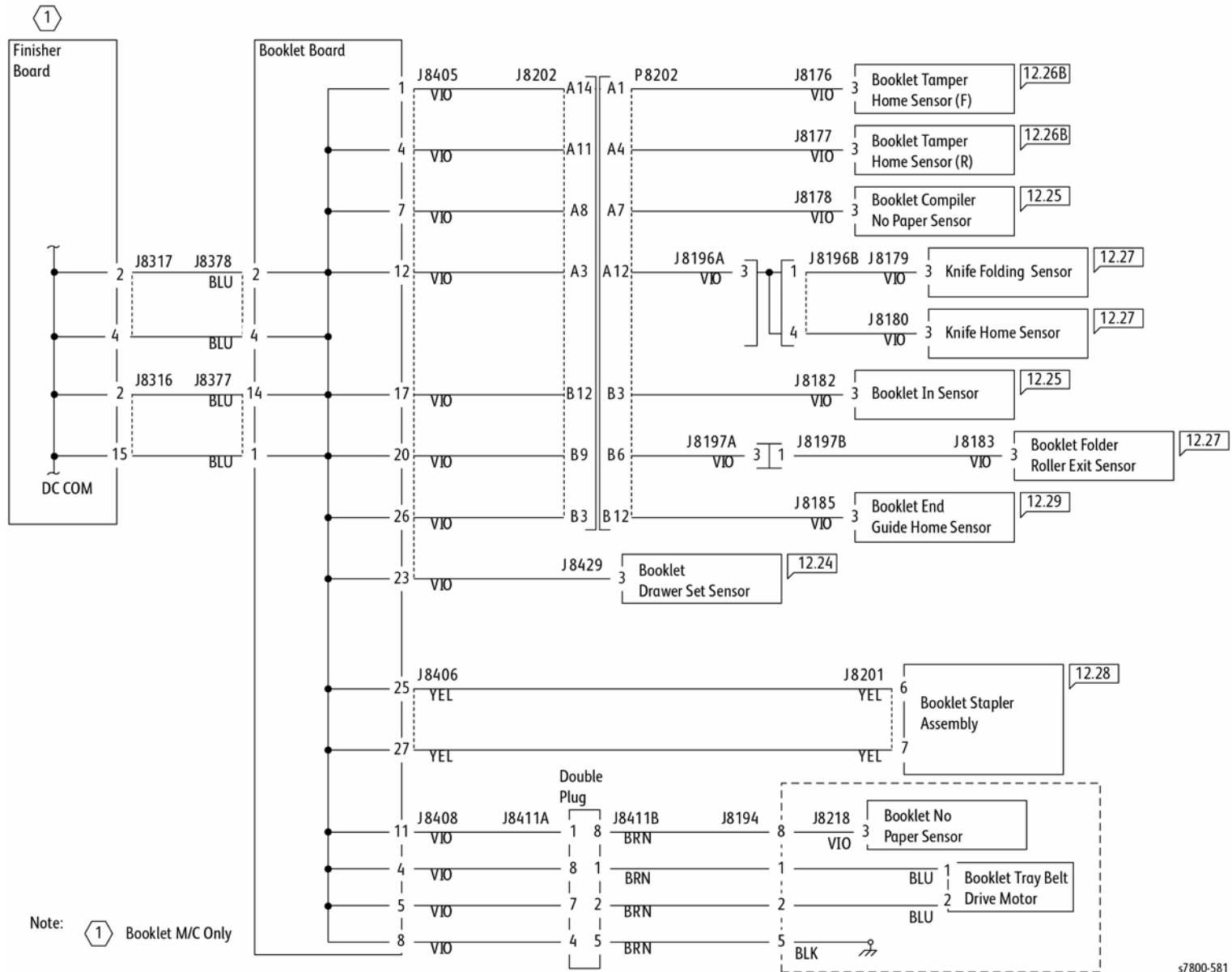


Figure 7 5V RTN-3

s7800-580

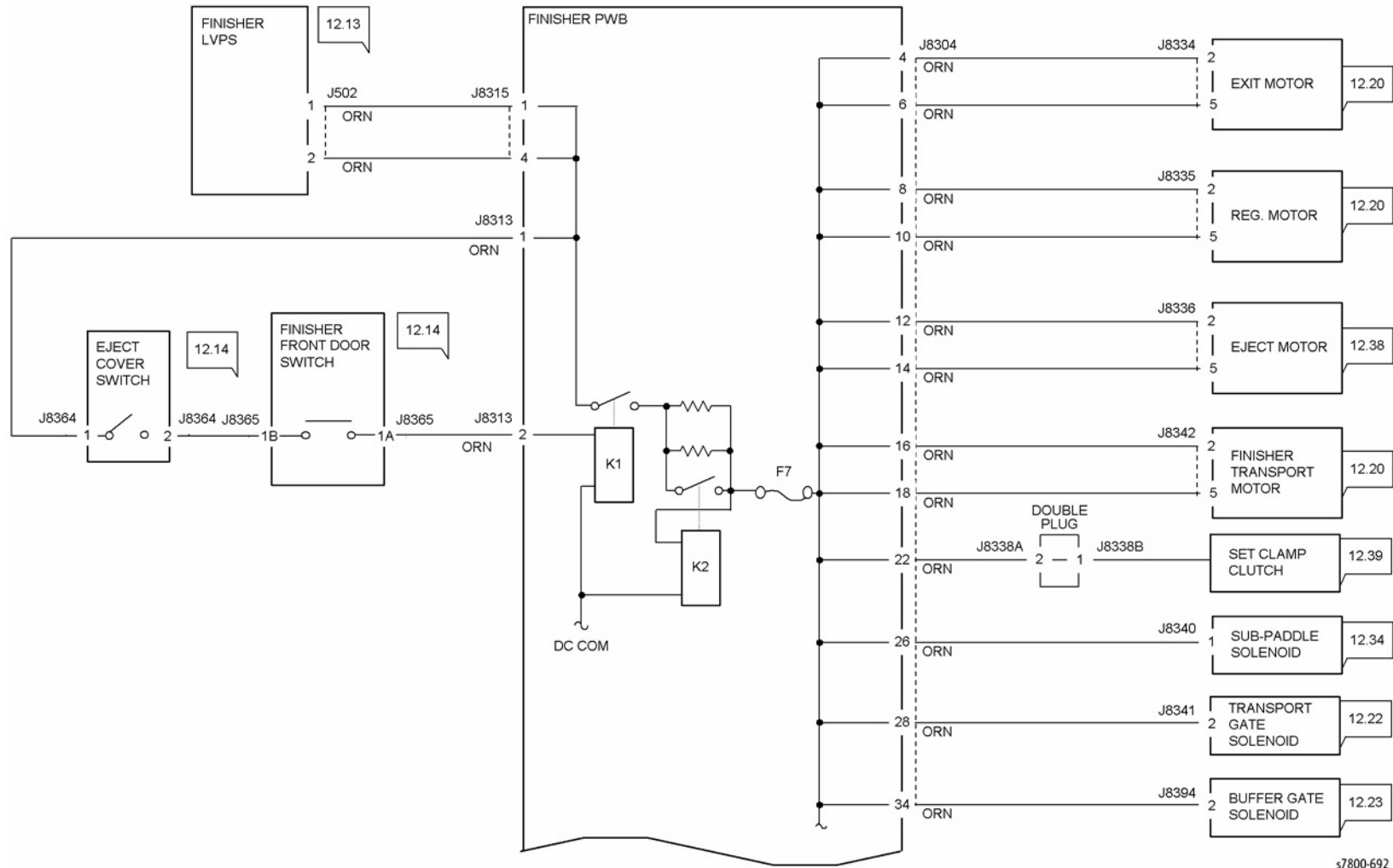
5V RTN-4



s7800-581

Figure 8 5V RTN-4

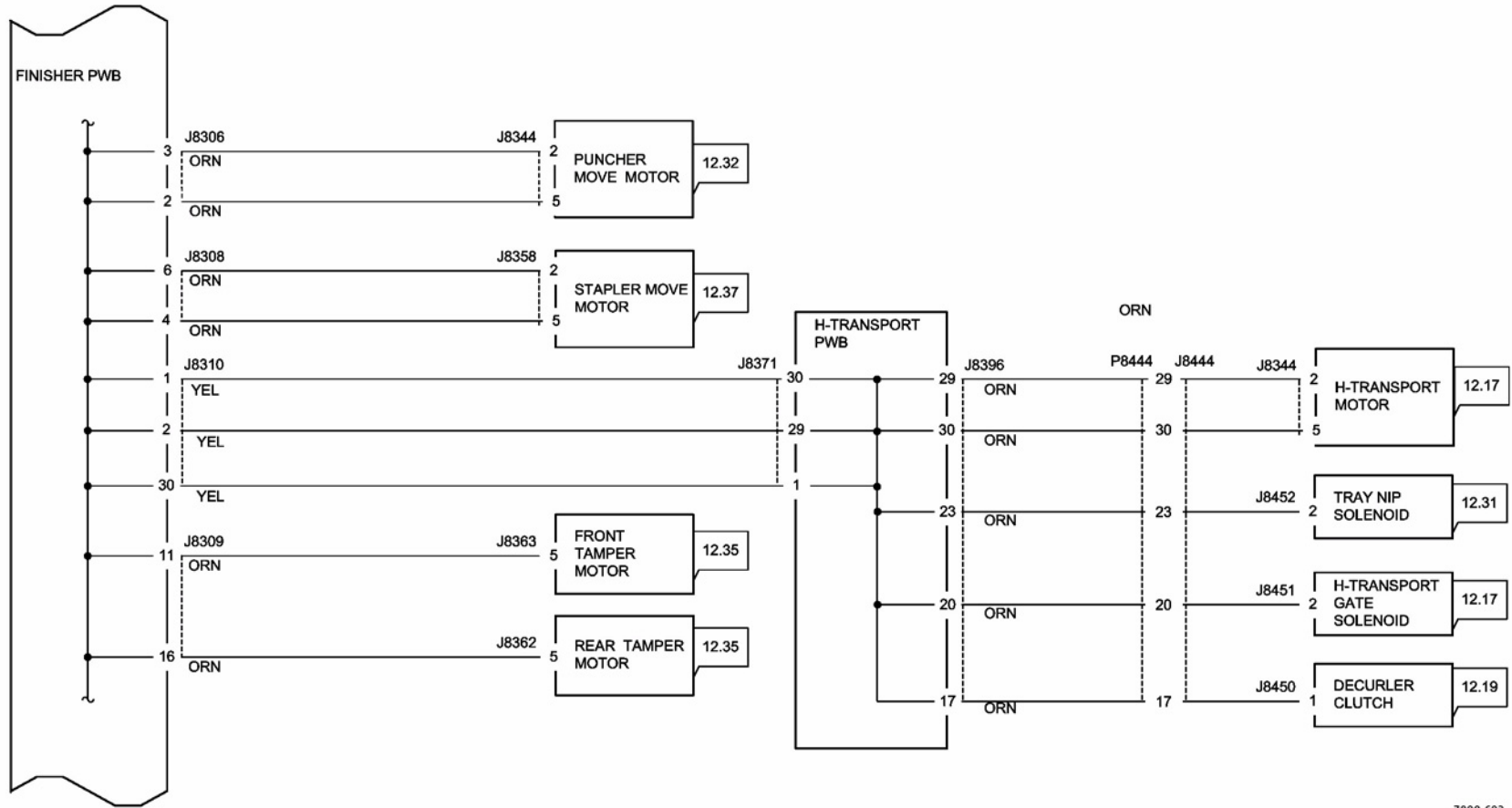
+24VDC Distribution (1 of 3)



s7800-692

Figure 9 +24VDC Distribution (1 of 3)

+24VDC Distribution (2 of 3)



s7800-693

Figure 10 +24VDC Distribution (2 of 3)

+24VDC Distribution (3 of 3)

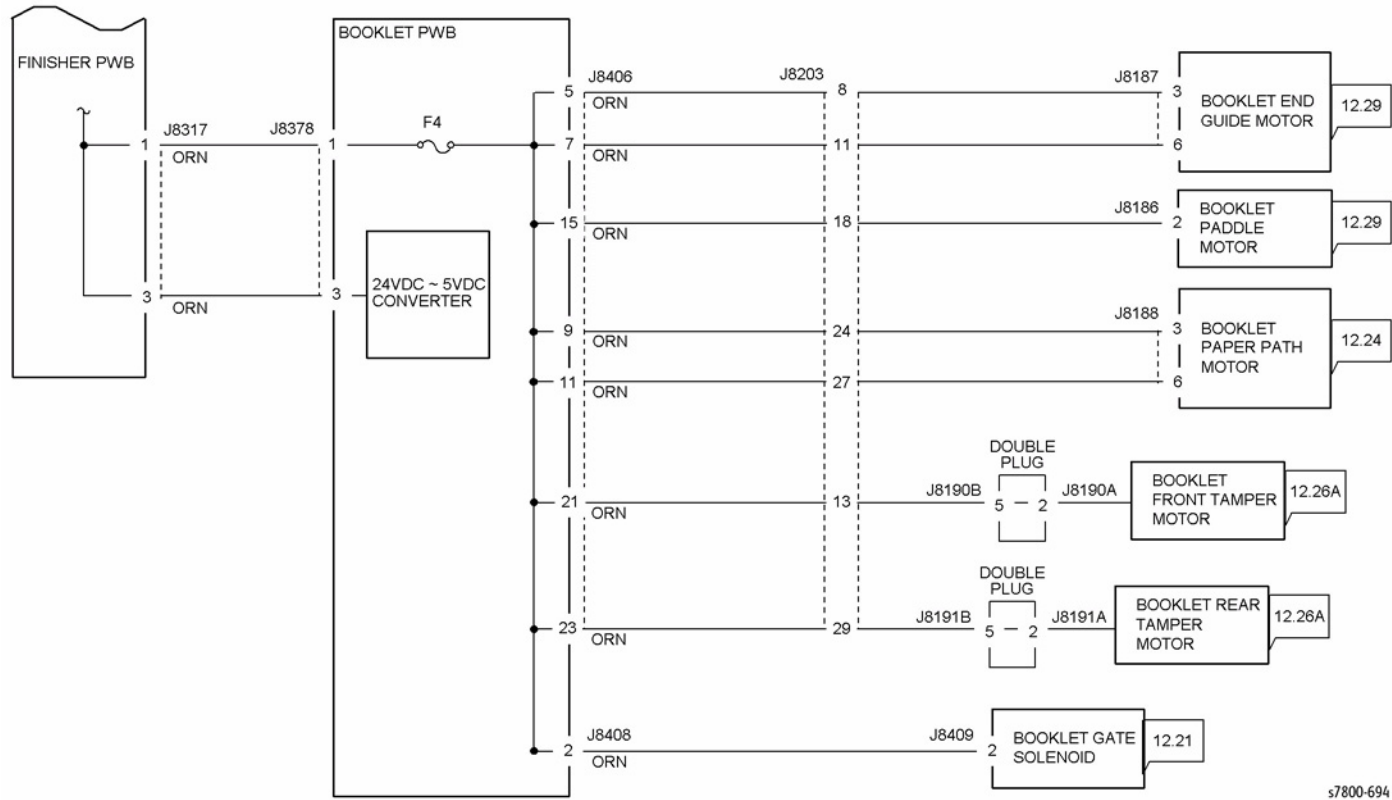
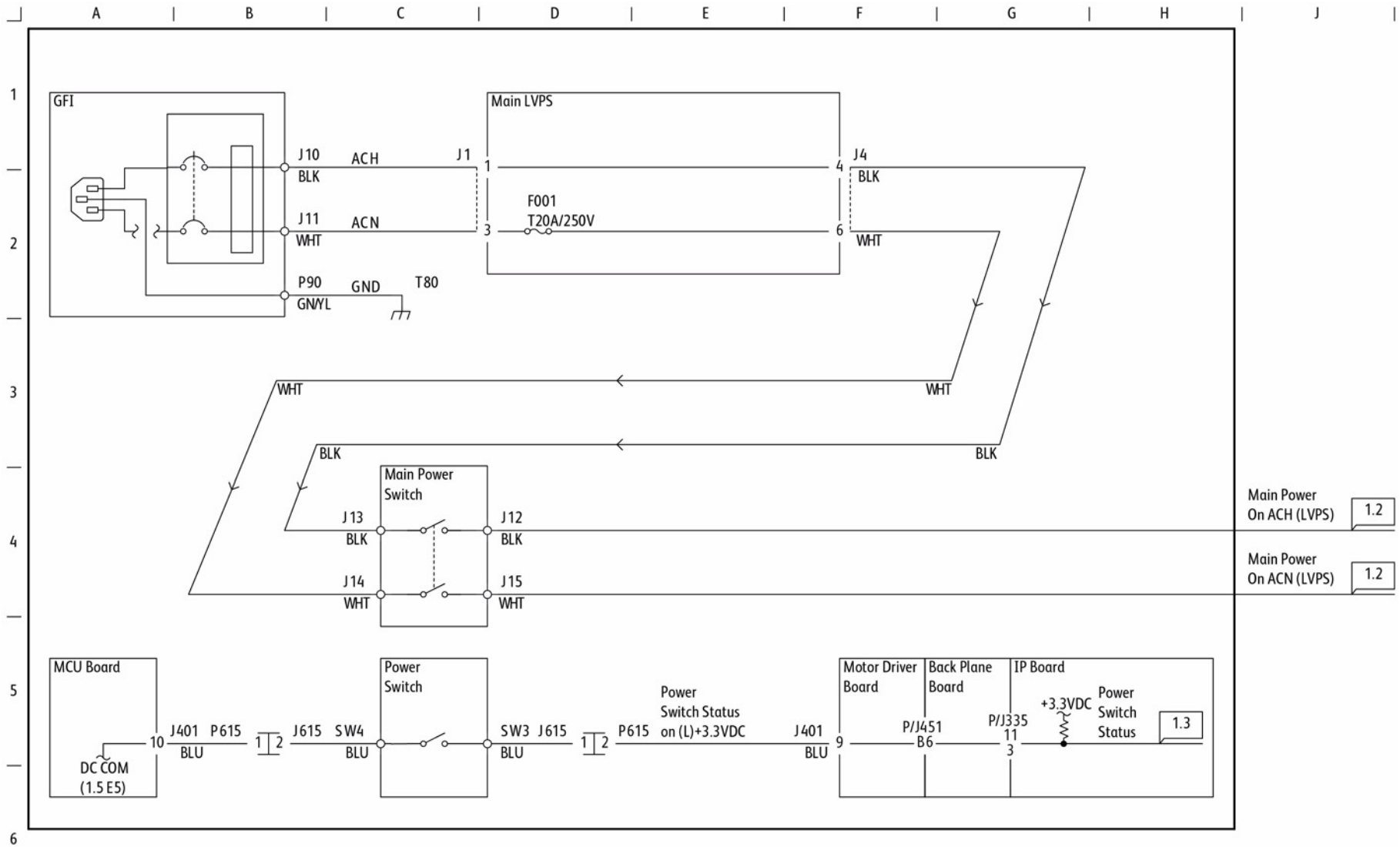


Figure 11 +24VDC Distribution (3 of 3)

Chain 1 Standby Power

BSD 1.1 Main Power (1 of 2)



Main Power On ACH (LVPS) 1.2

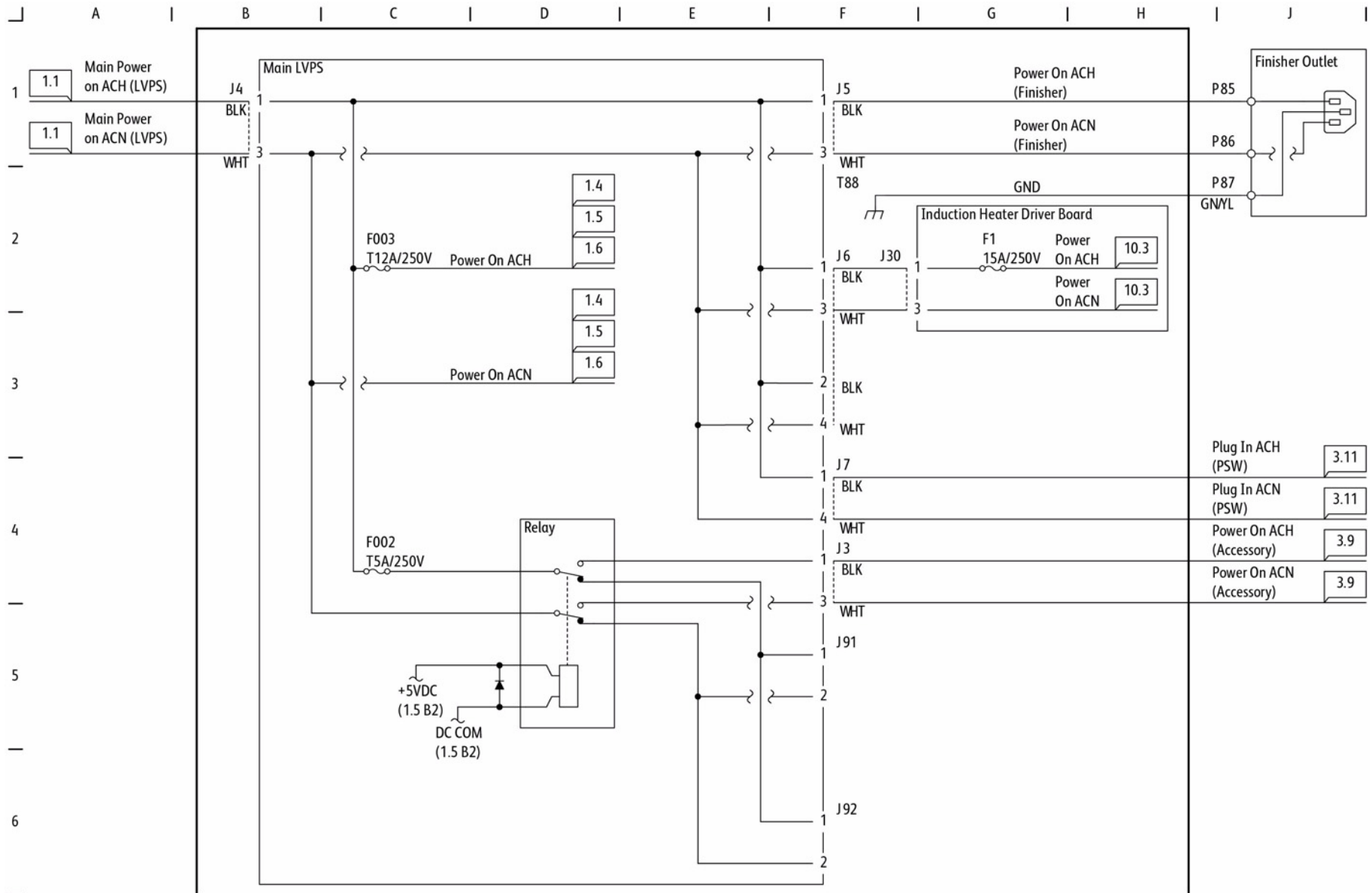
Main Power On ACN (LVPS) 1.2

1.3

s7800-440

Figure 1 Main Power (1 of 2)

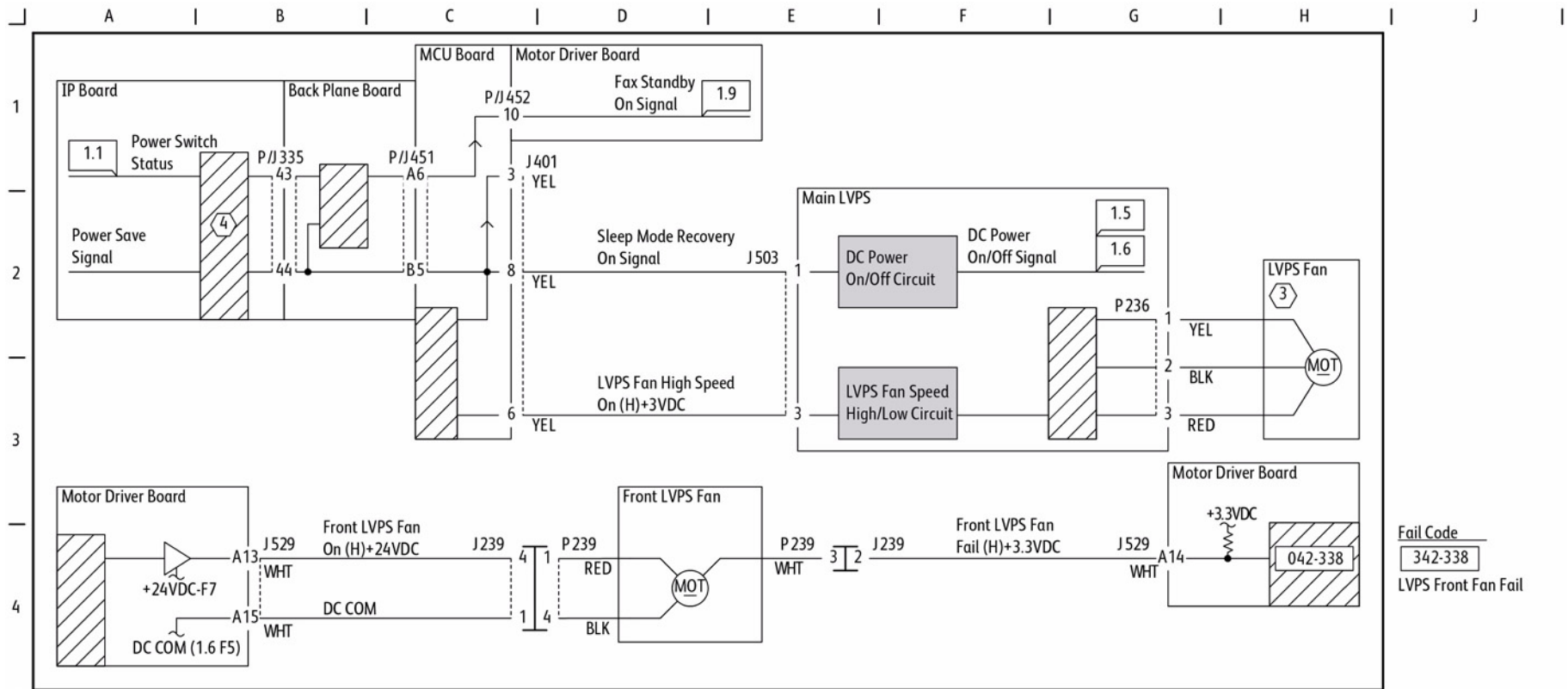
BSD 1.2 Main Power (2 of 2)



s7800-441

Figure 2 Main Power (2 of 2)

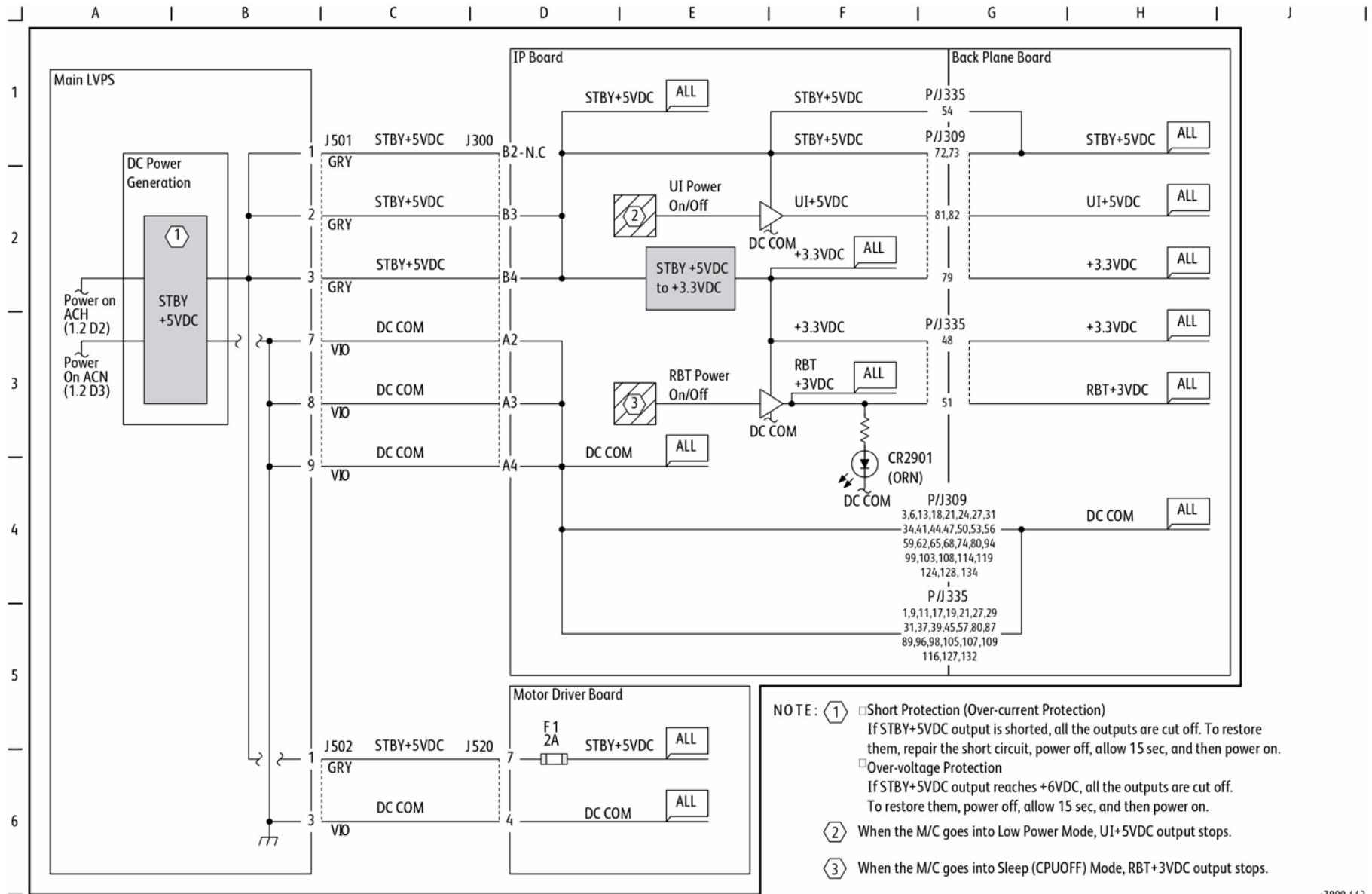
BSD 1.3 LVPS Control



s7800-442

Figure 3 LVPS Control

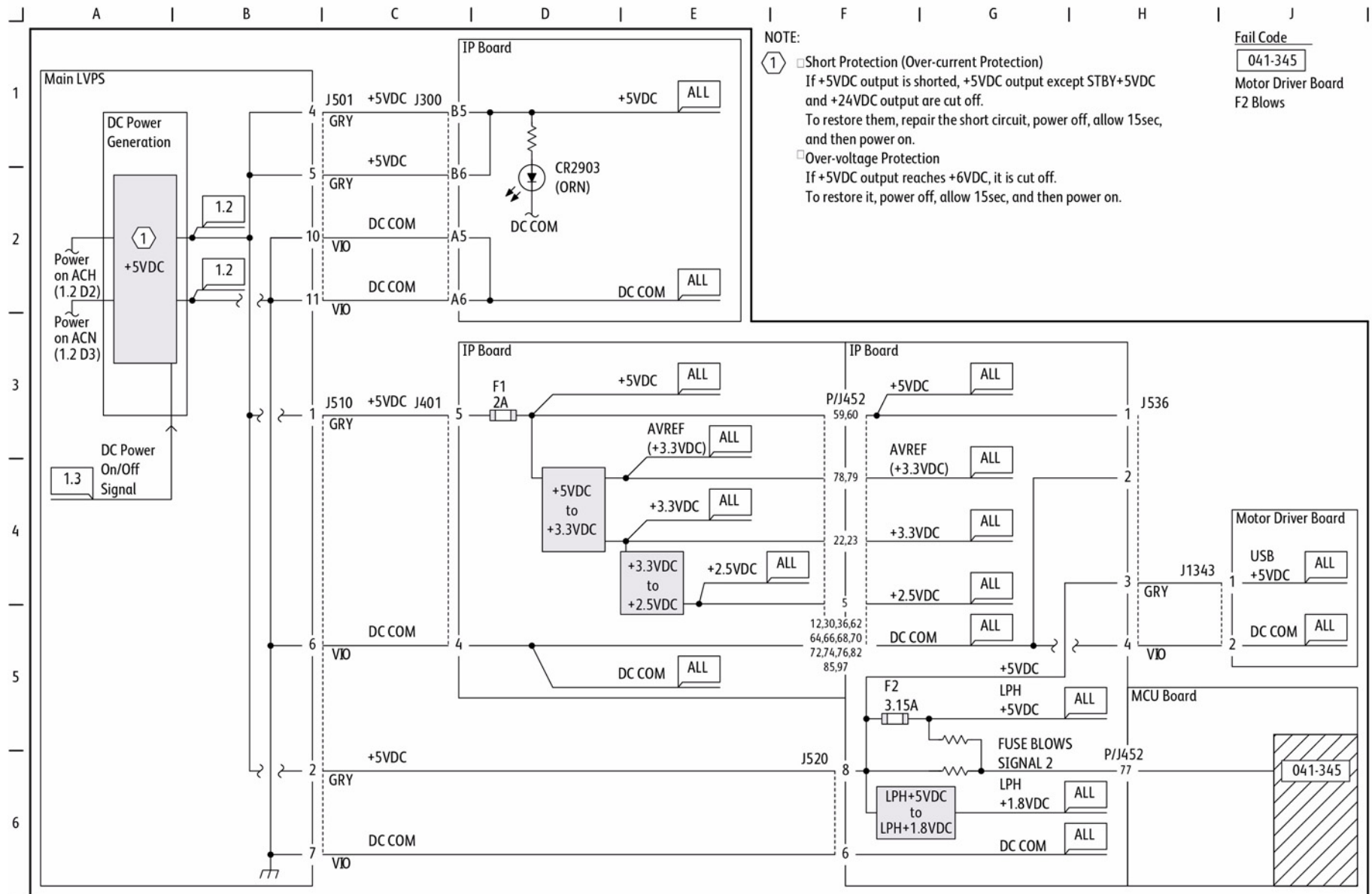
BSD 1.4 DC Power Generation (1 of 4)



s7800-443

Figure 4 DC Power Generation (1 of 4)

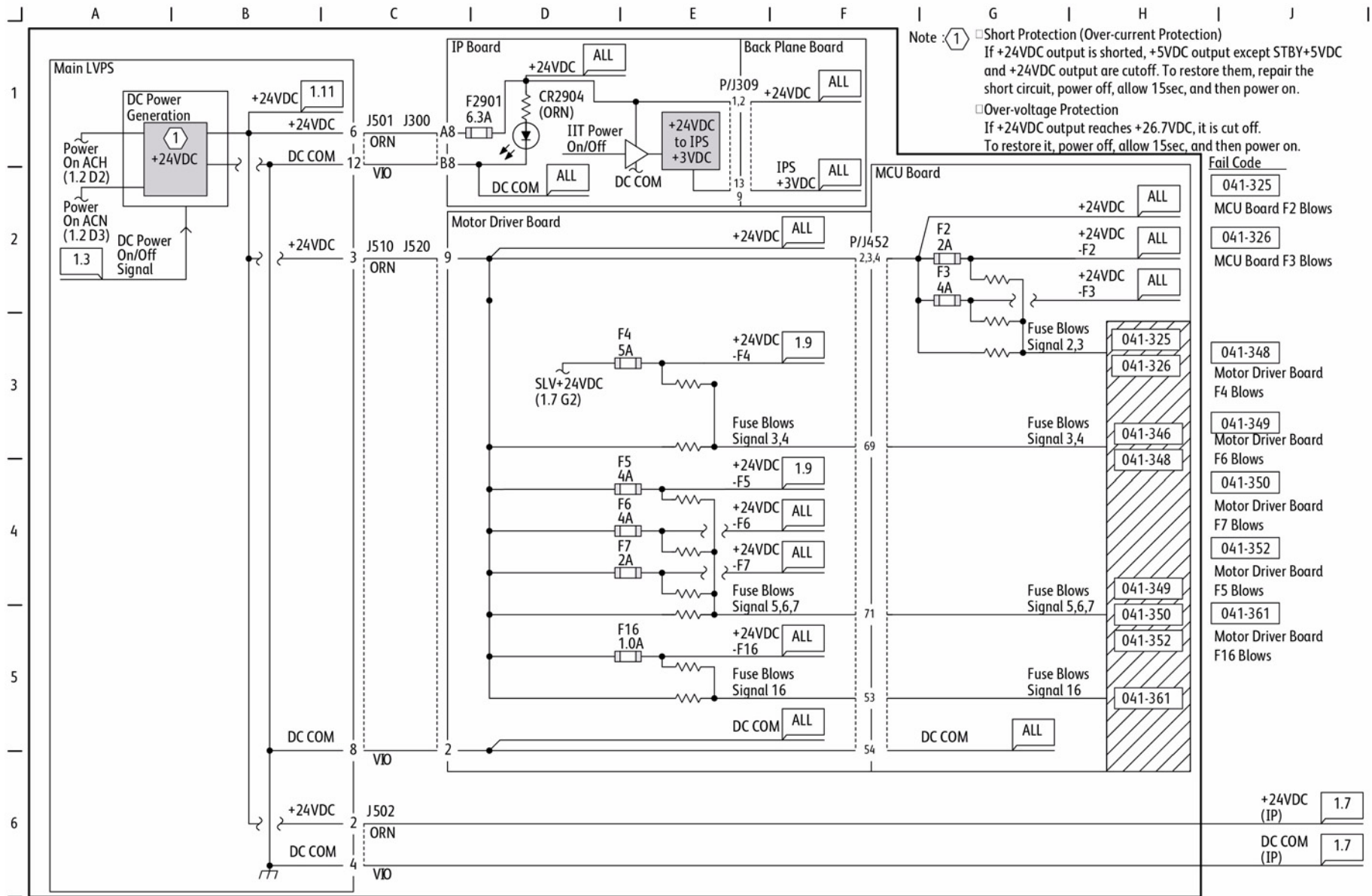
BSD 1.5 DC Power Generation (2 of 4)



s7800-444

Figure 5 DC Power Generation (2 of 4)

BSD 1.6 DC Power Generation (3 of 4)



s7800-445

Figure 6 DC Power Generation (3 of 4)

BSD 1.7 DC Power Generation (4 of 4)

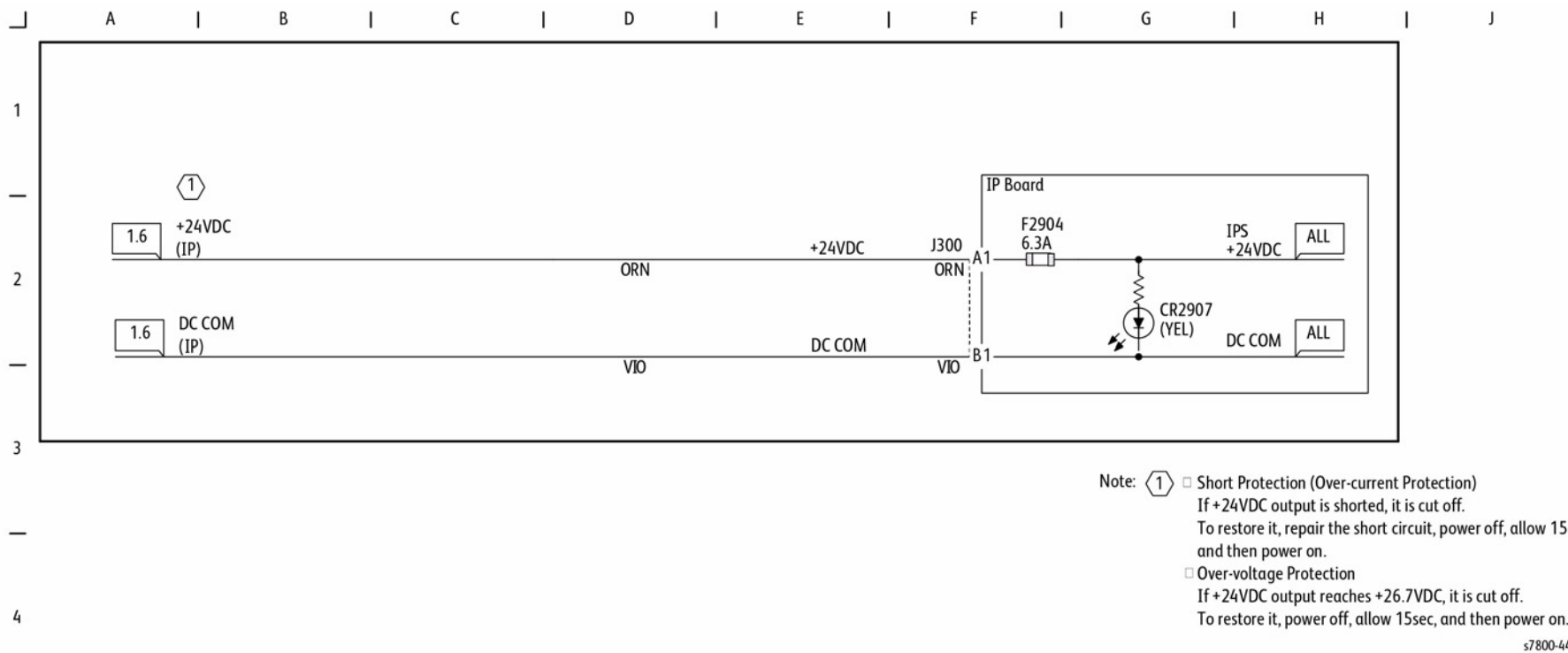
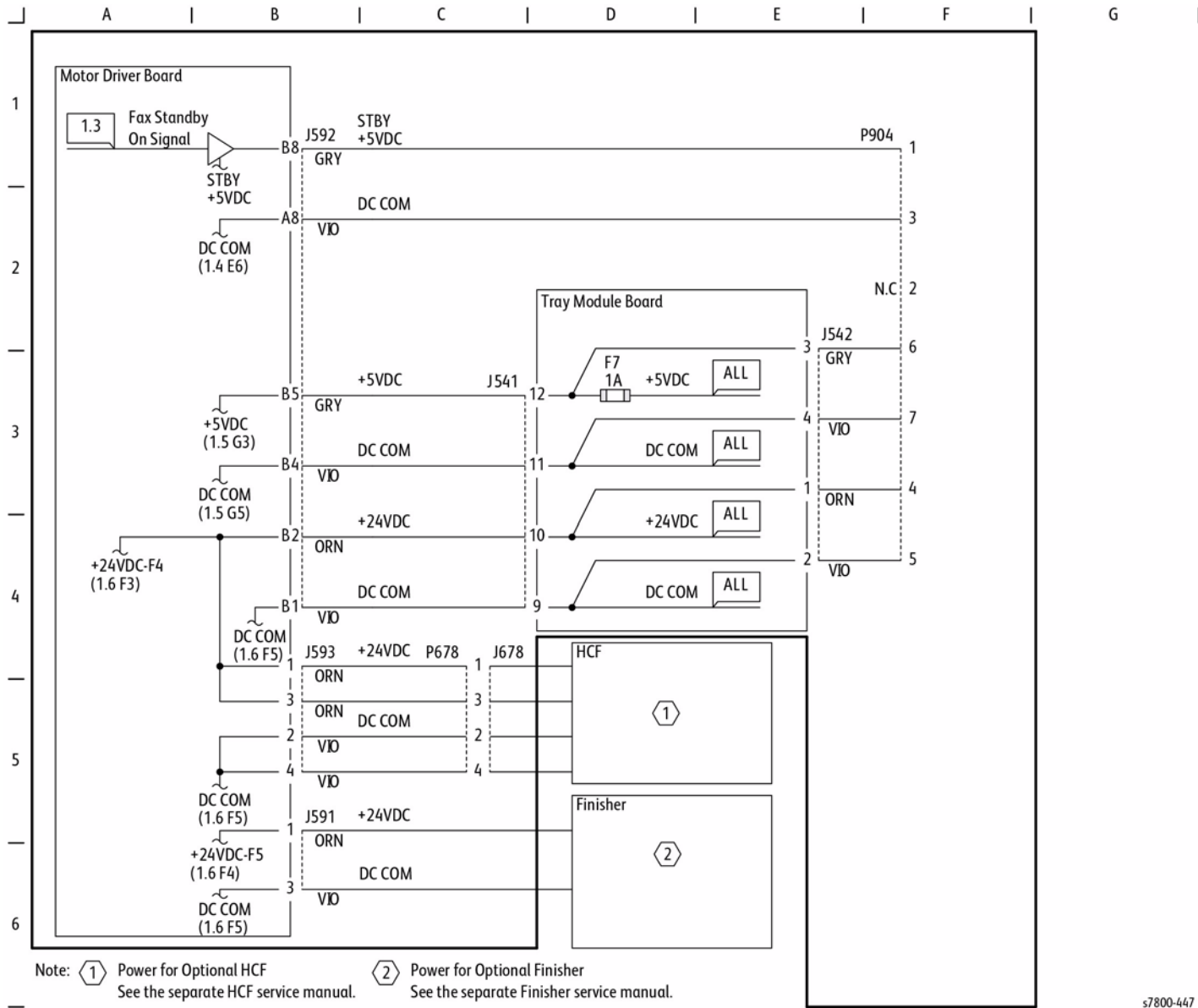


Figure 7 DC Power Generation (4 of 4)

BSD 1.9 Option DC Power Distribution



s7800-447

Figure 8 Option DC Power Distribution

BSD 1.10 Power Interlock Switching (1 of 2)

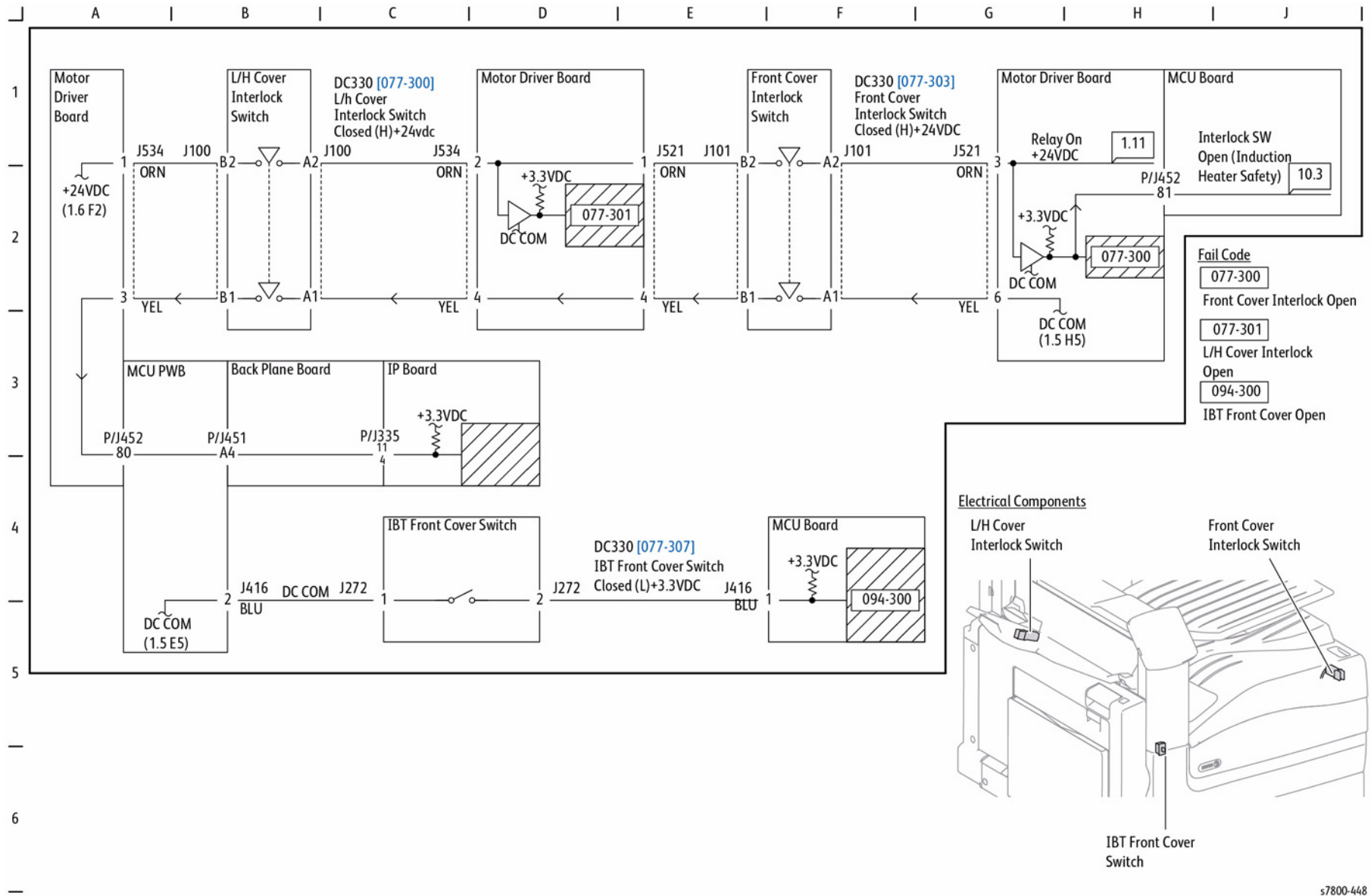


Figure 9 Power Interlock Switching (1 of 2)

BSD 1.11 Power Interlock Switching (2 of 2)

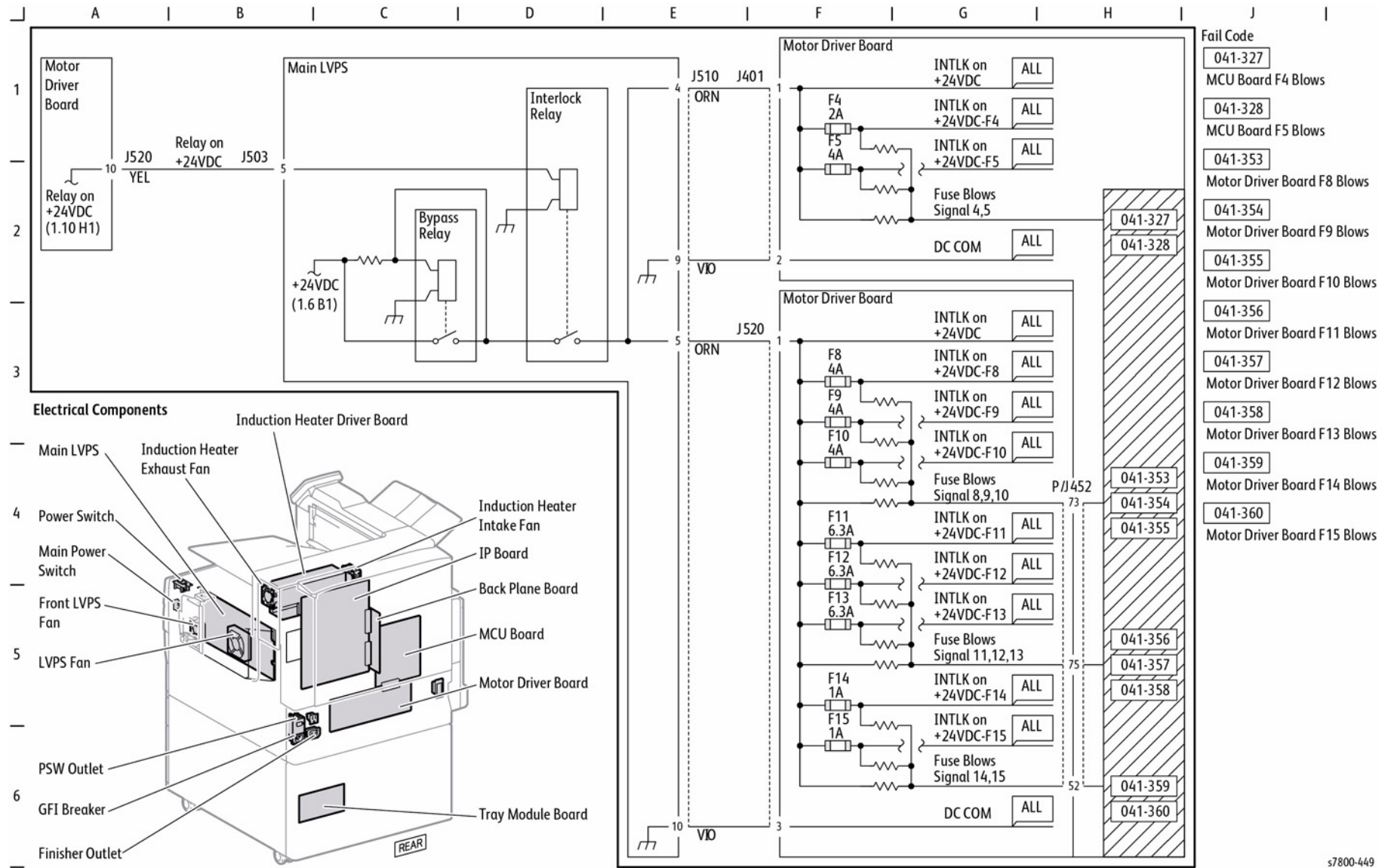
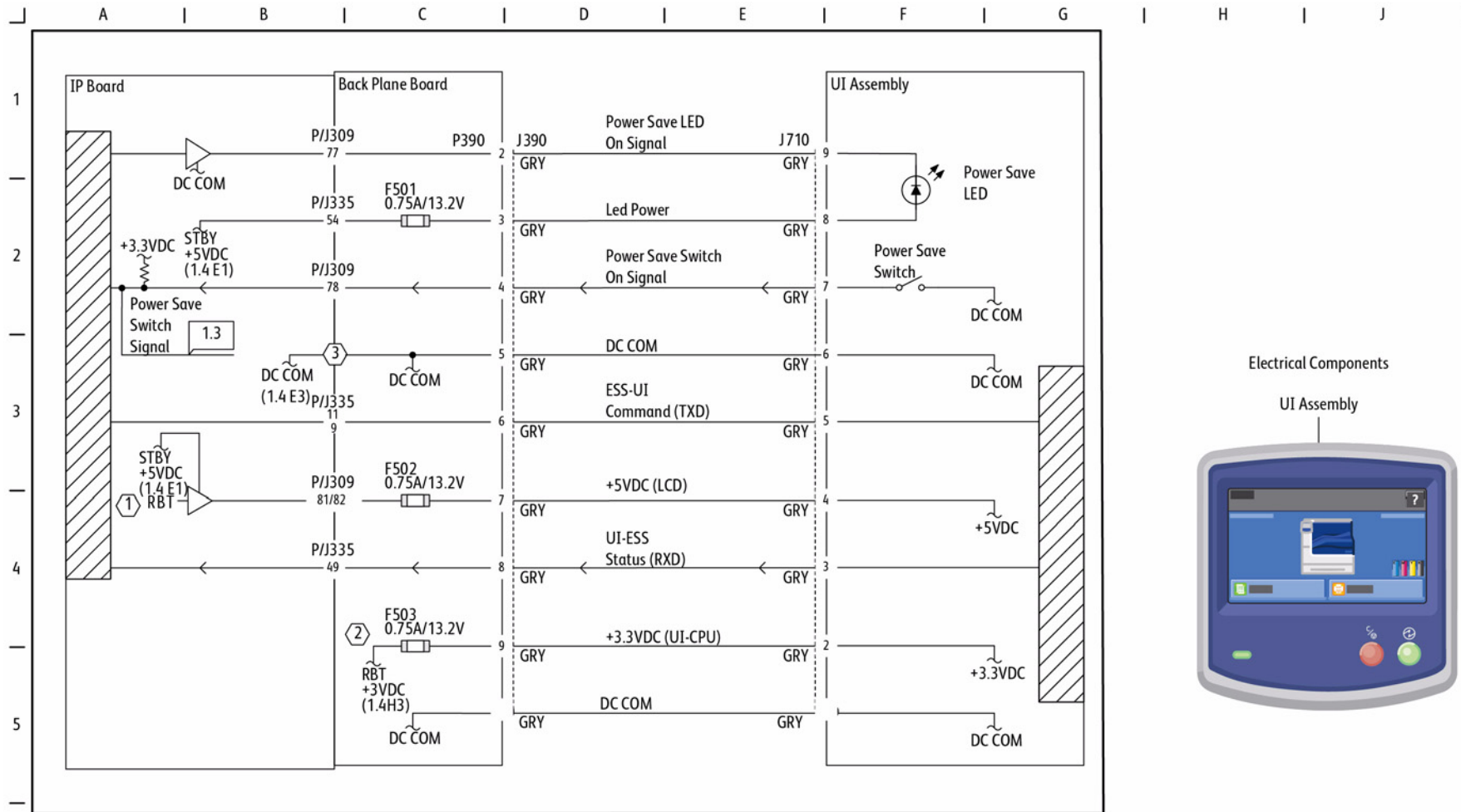


Figure 10 Power Interlock Switching (2 of 2)

Chain 2 Mode Selection

BSD 2.1 Control Panel



- Note:
- ① When the M/C goes into Low Power, Sleep (CPU OFF) Mode, the +5VDC output gets stopped.
 - ② When the M/C goes into Sleep (CPU OFF) Mode, the +3.3VDC output gets stopped.
 - ③ For detailed Pin Numbers, see Wire Network.

s7800-450

Figure 1 Control Panel

Chain 3 Machine Run Control

BSD 3.1 PWB Communication (1 of 4)

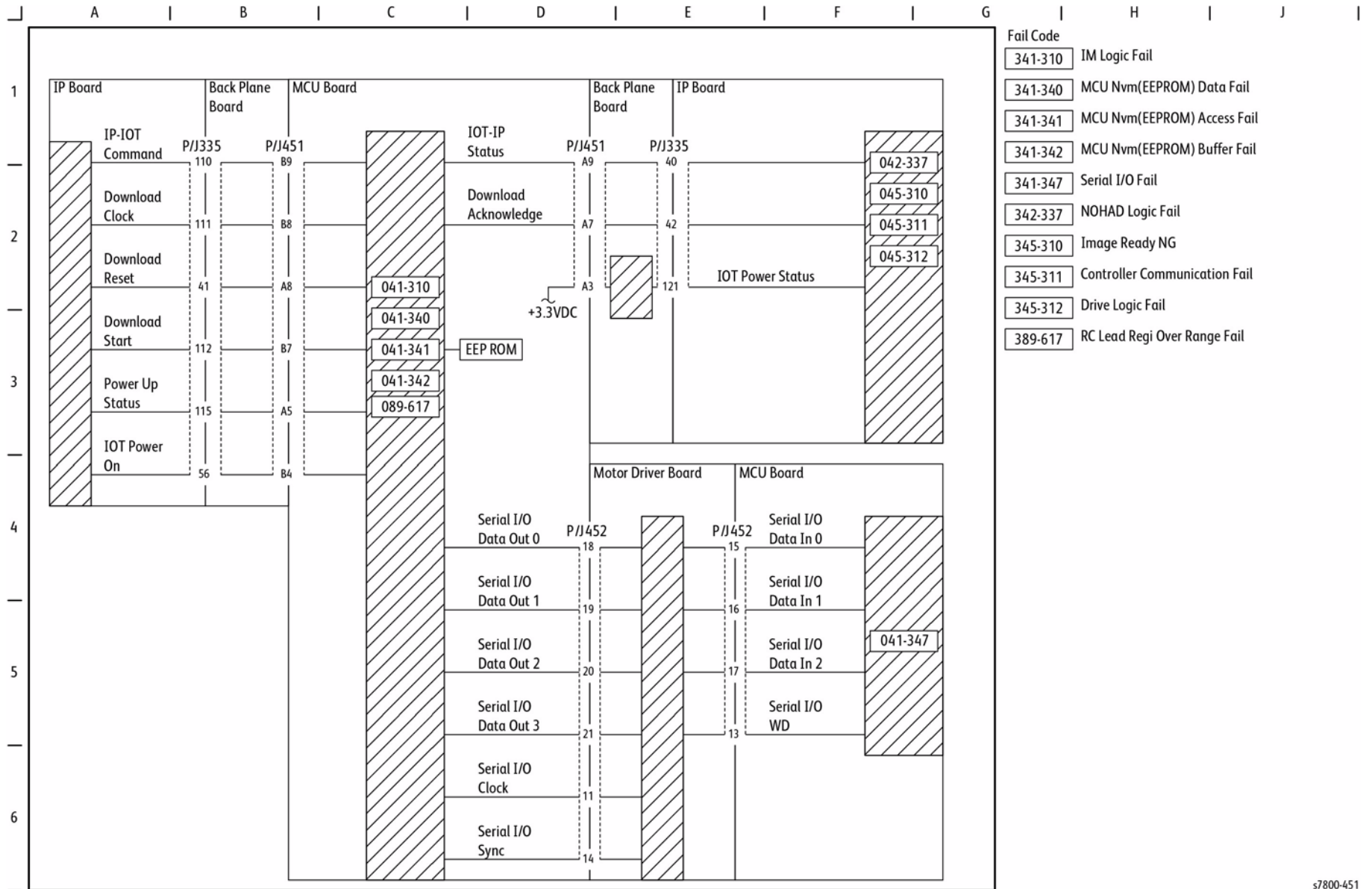
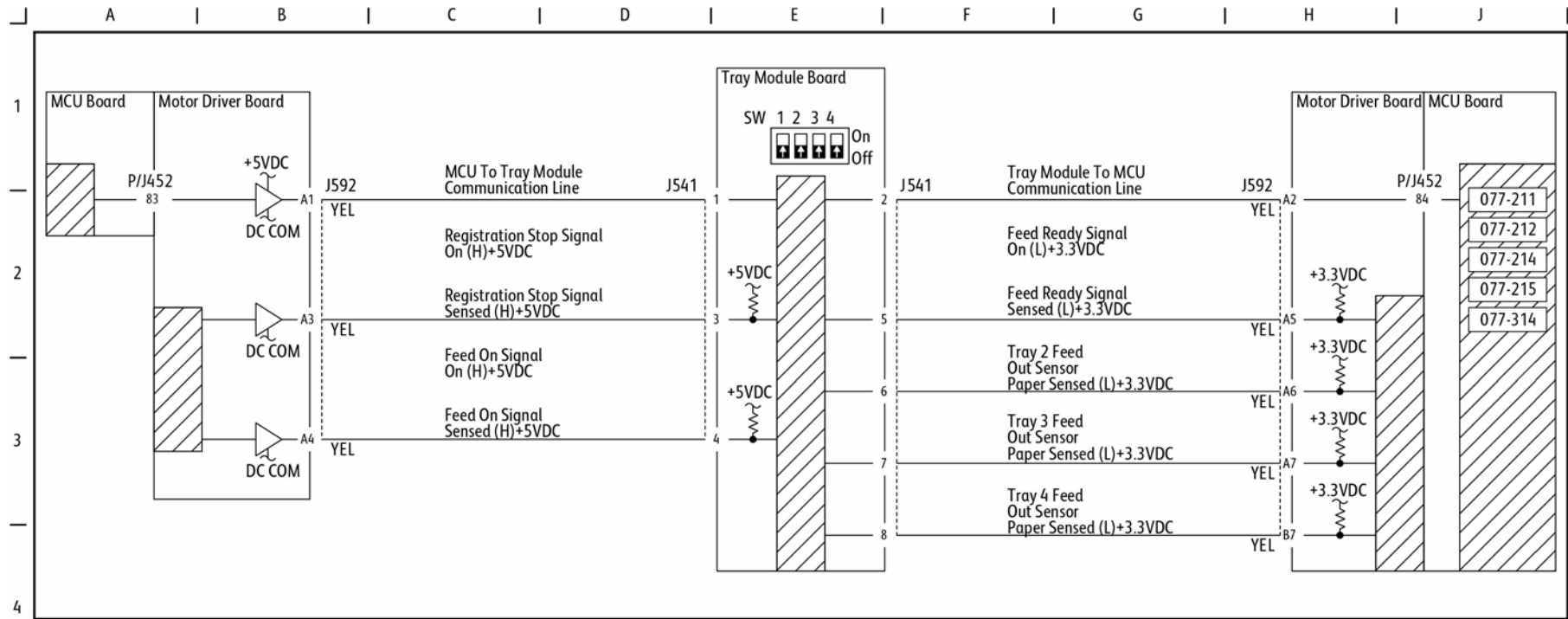


Figure 1 PWB Communication (1 of 4)

BSD 3.2 PWB Communication (2 of 4)



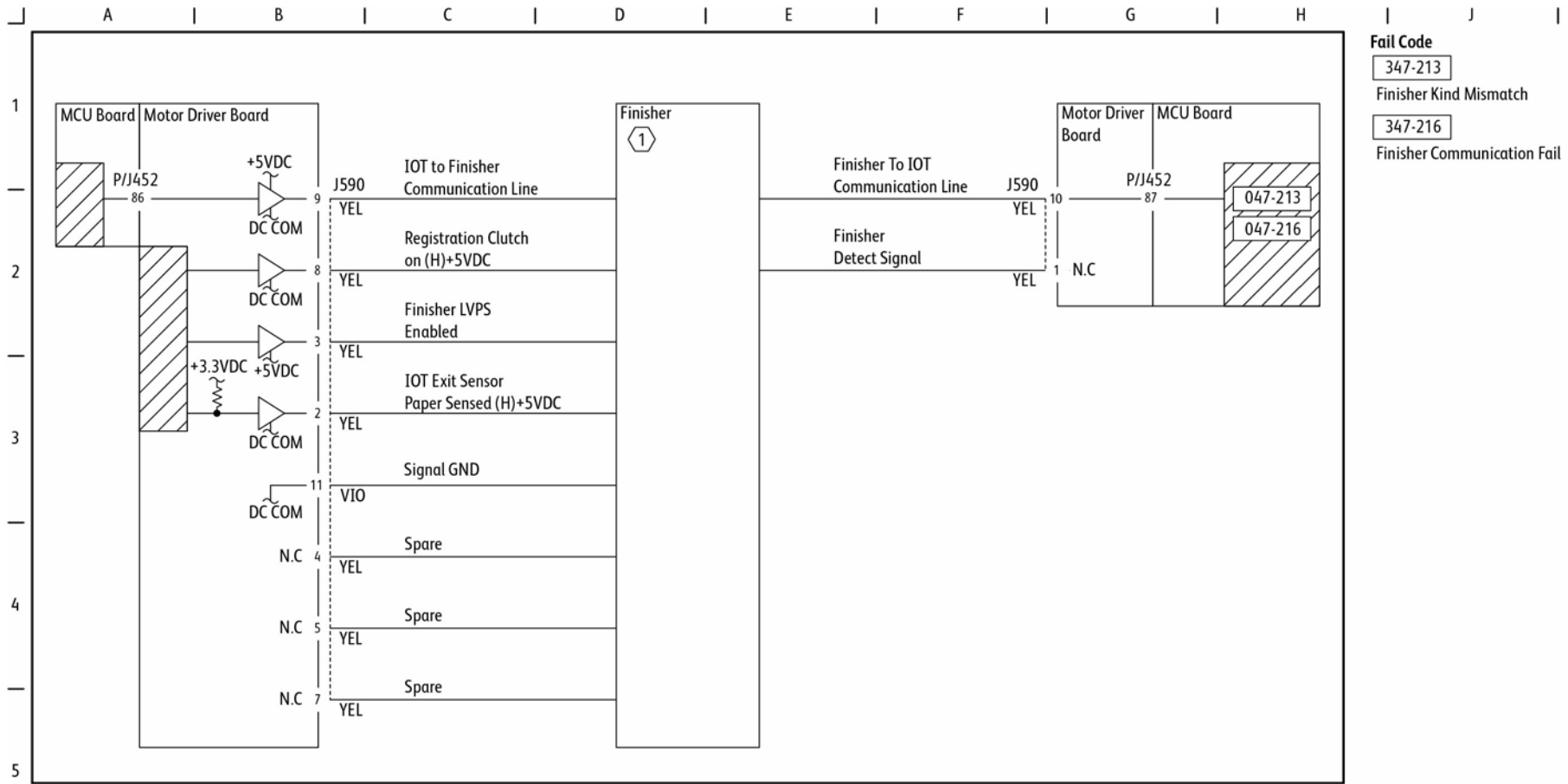
Fail Code

- 377-211
Tray Module Kind Mismatch
- 377-212
Tray Module Reset Fail
- 377-214
Tray Module Logic Fail
- 377-215
Tray Module Communication Fail
- 377-314
P/H Module Logic Fail

s7800-452

Figure 2 PWB Communication (2 of 4)

BSD 3.6 PWB Communication (3 of 4)



s7800-453

Figure 3 PWB Communication (3 of 4)

BSD 3.7 PWB Communication (4 of 4)

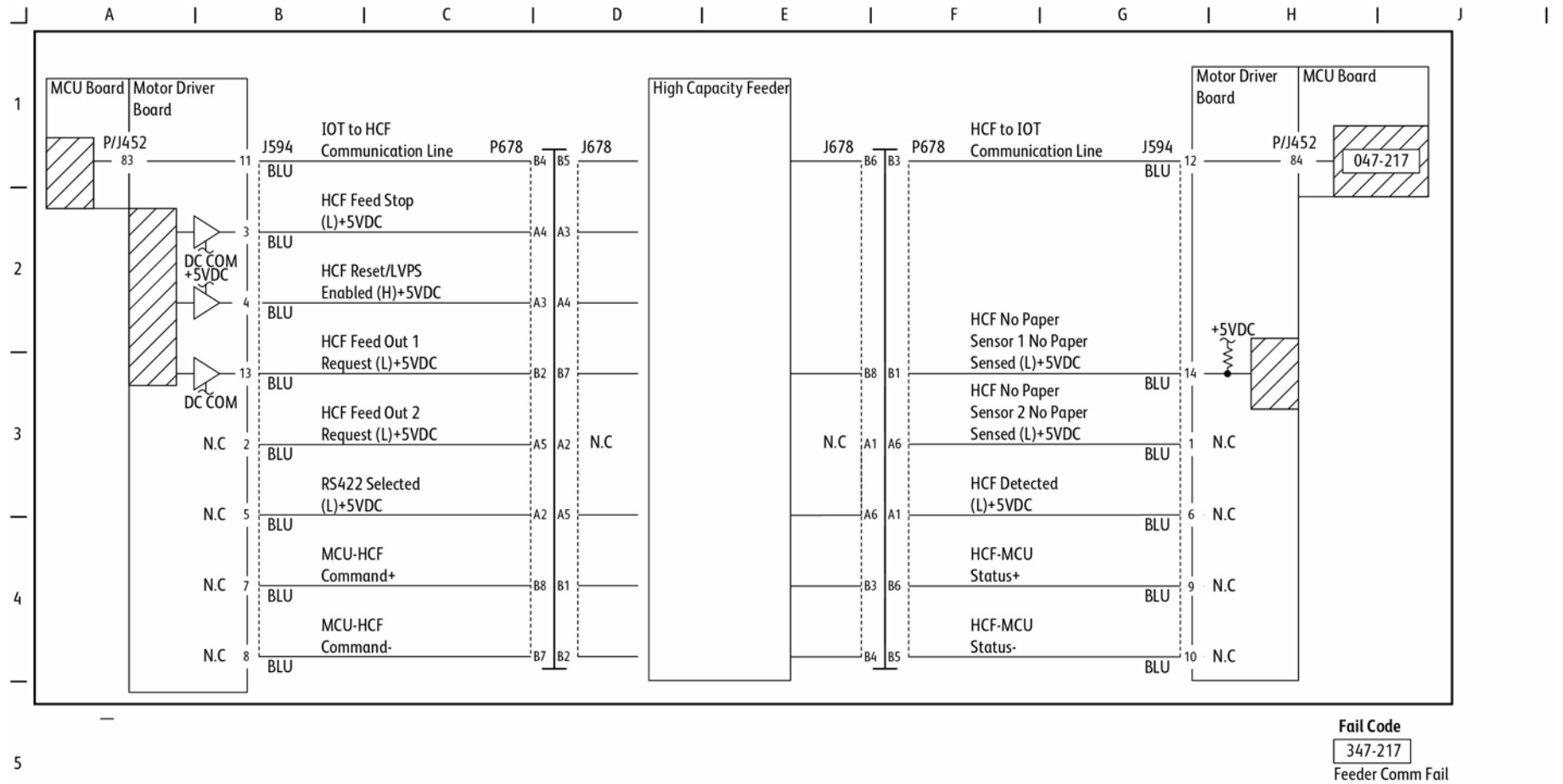
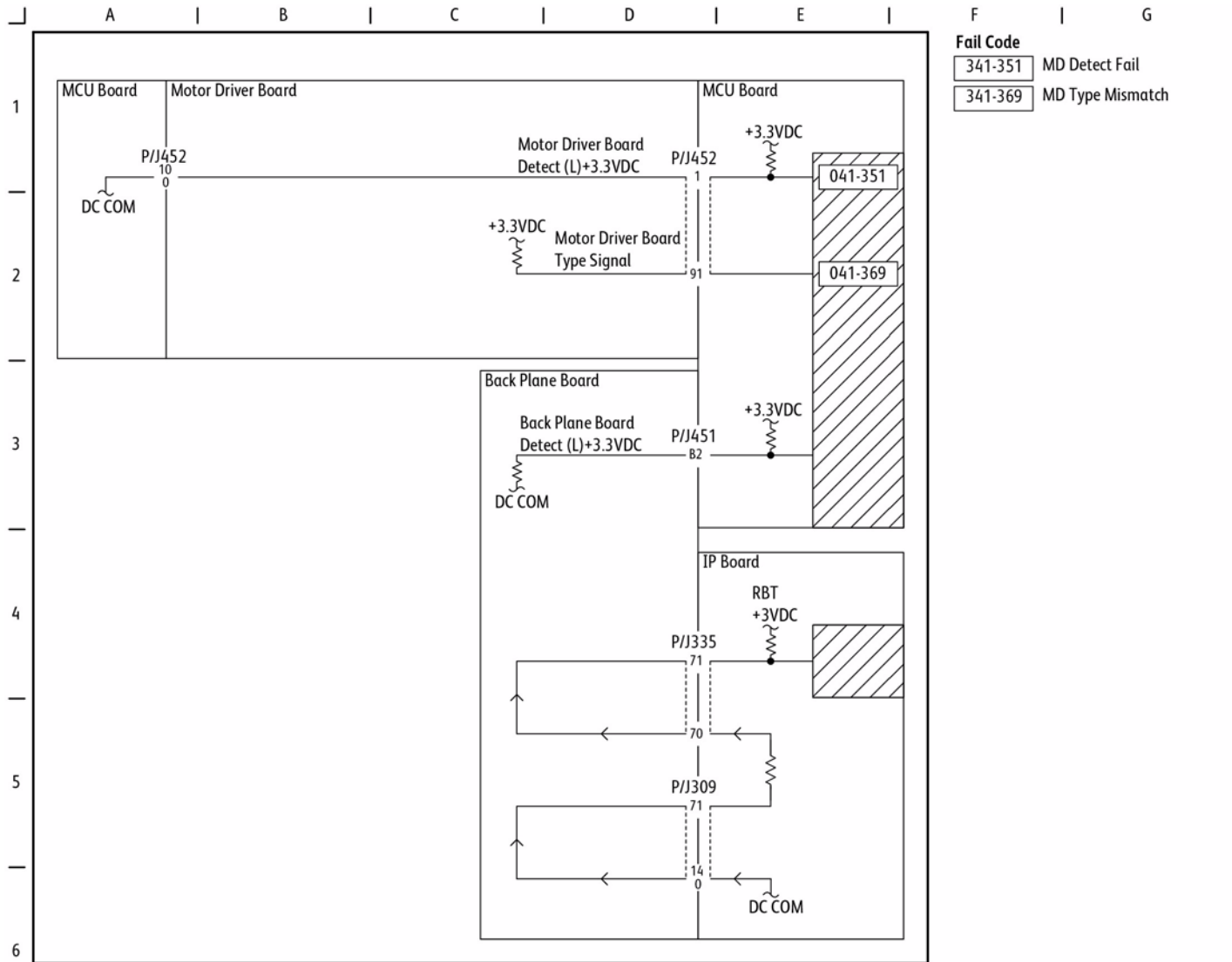


Figure 4 PWB Communication (3 of 4)

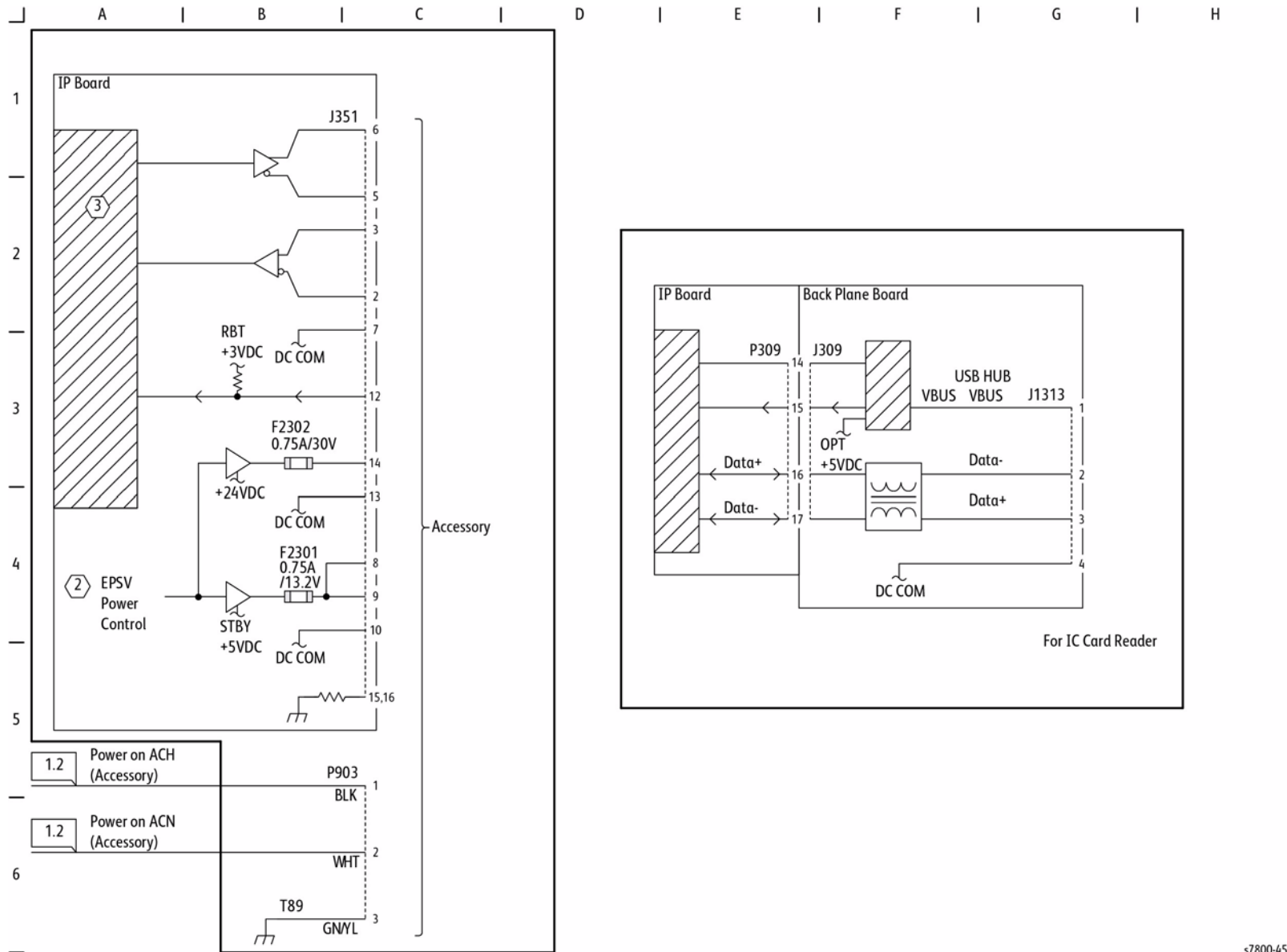
BSD 3.8 PWBS Detection



s7800-456

Figure 5 PWBS Detection

BSD 3.9 Accessory



s7800-457

Figure 6 Accessory

BSD 3.10 Electric Billing

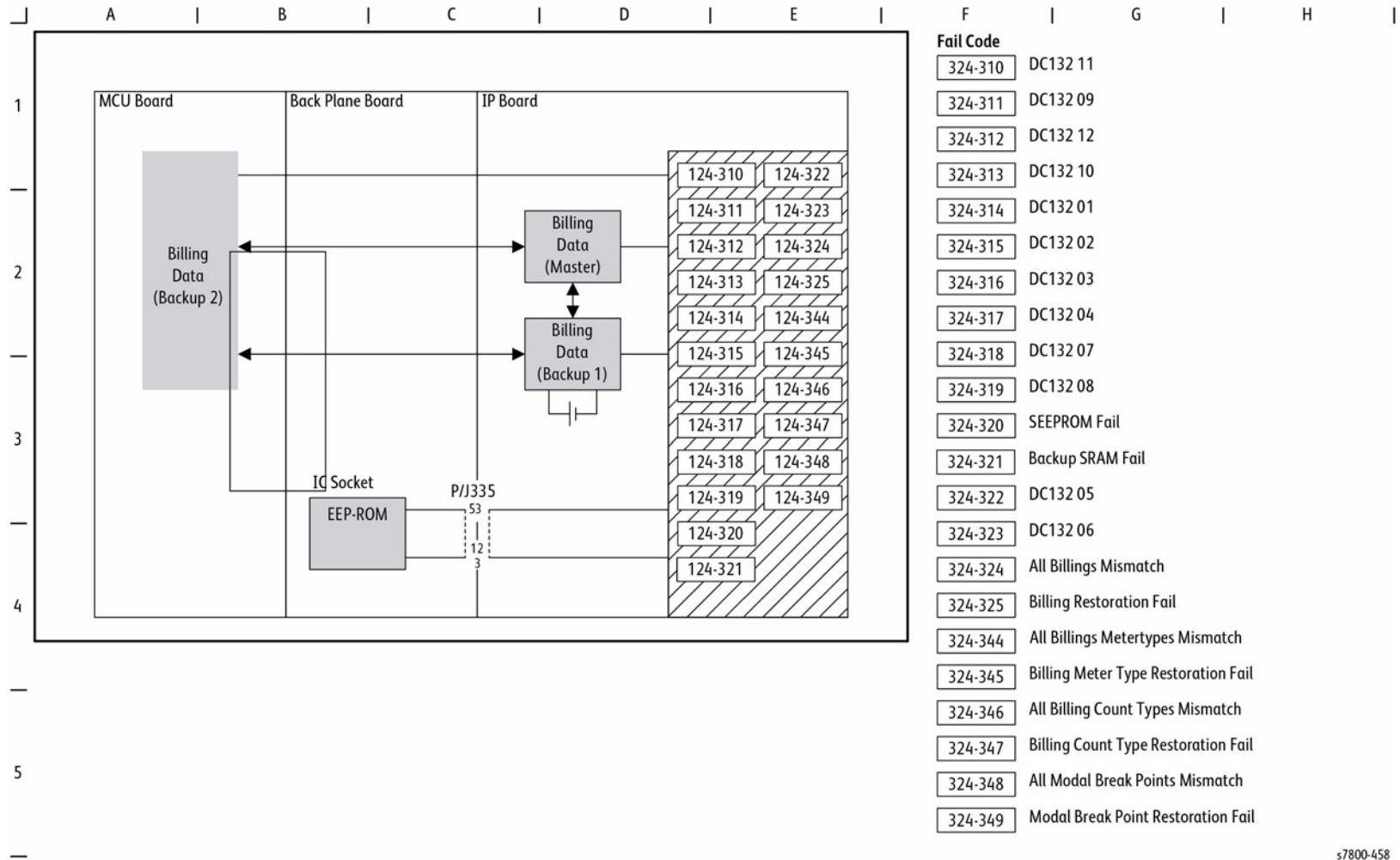


Figure 7 Electric Billing

BSD 3.11 Download Interface

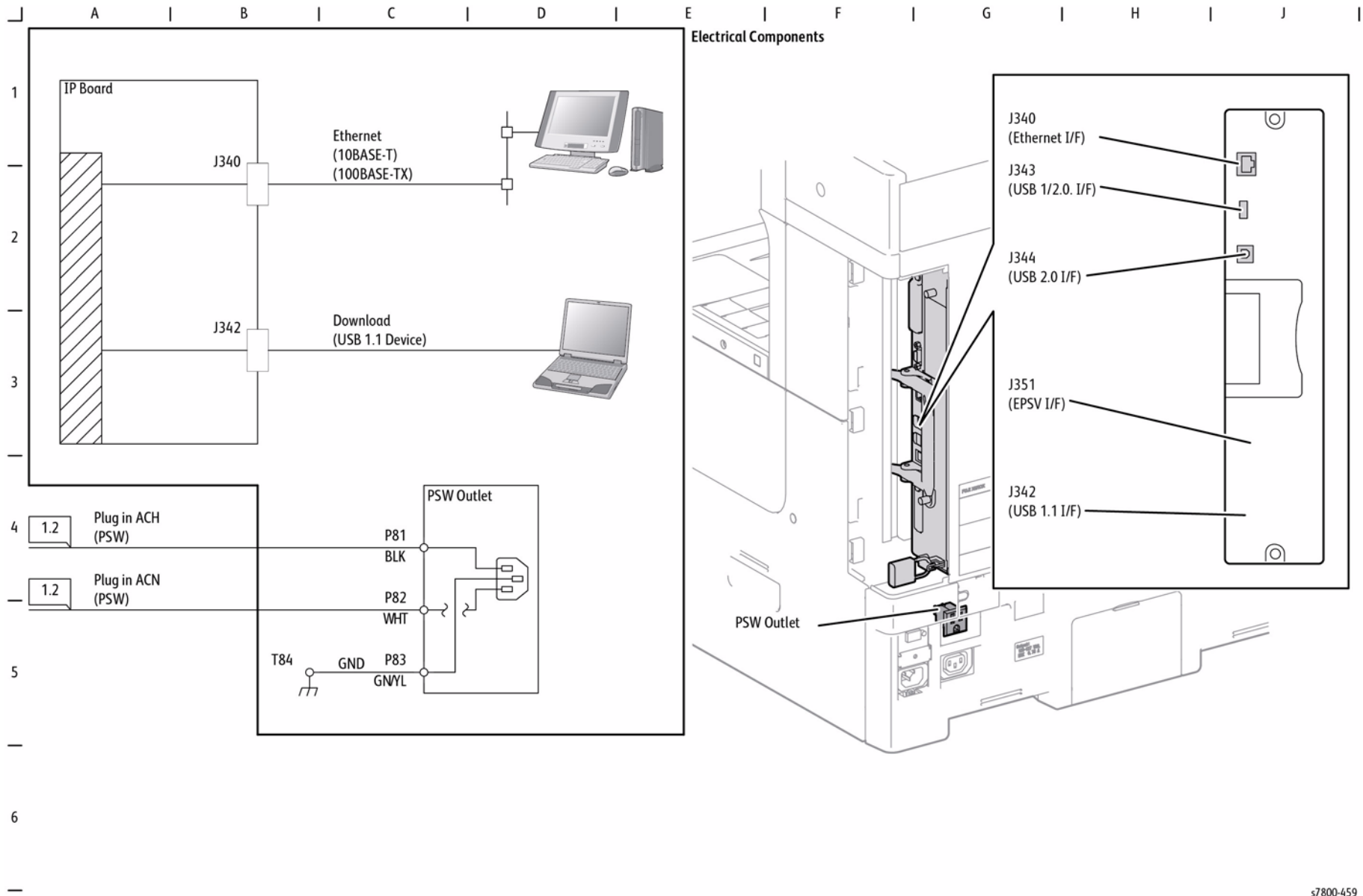


Figure 8 Download Interface

s7800-459

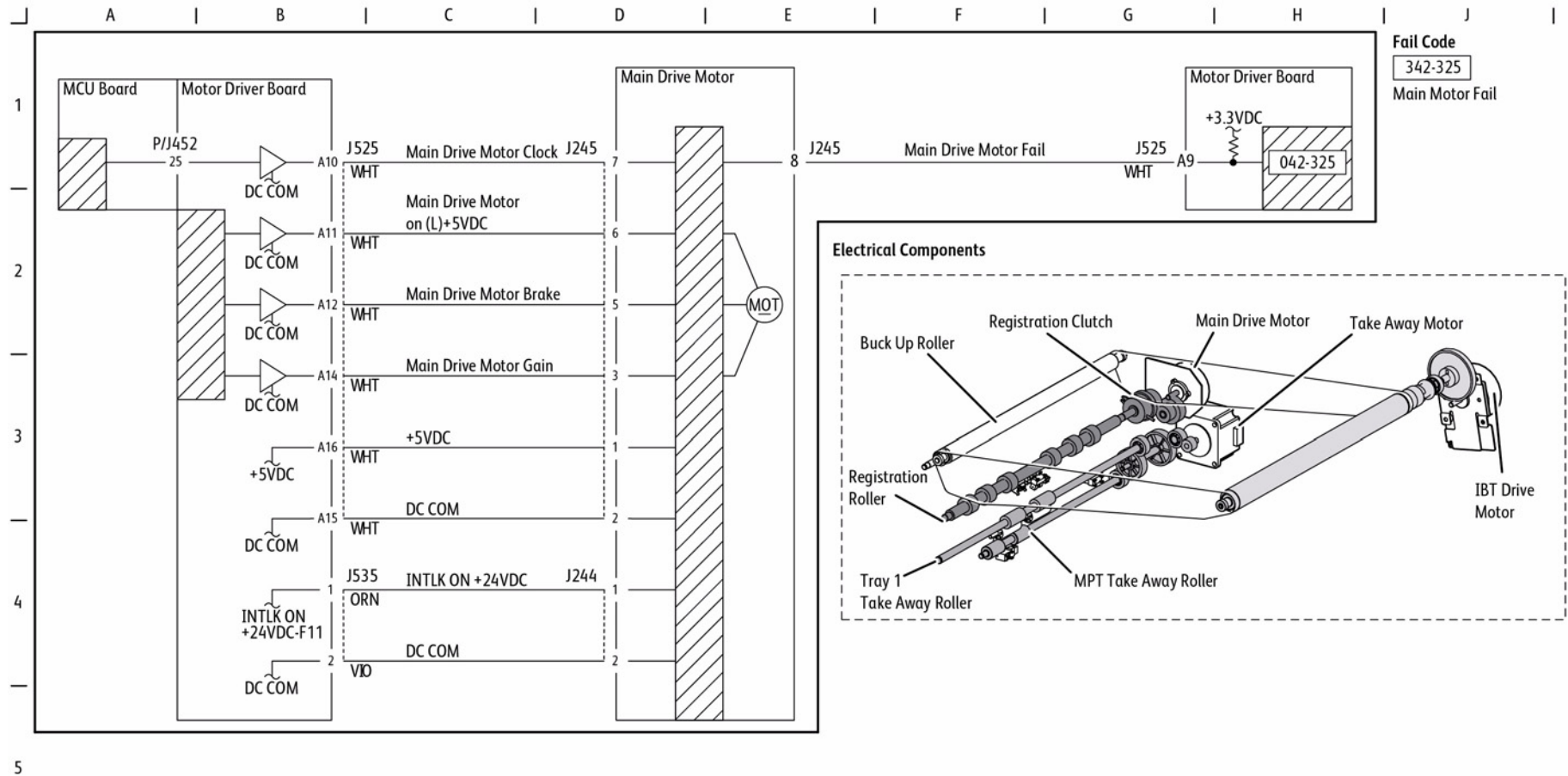
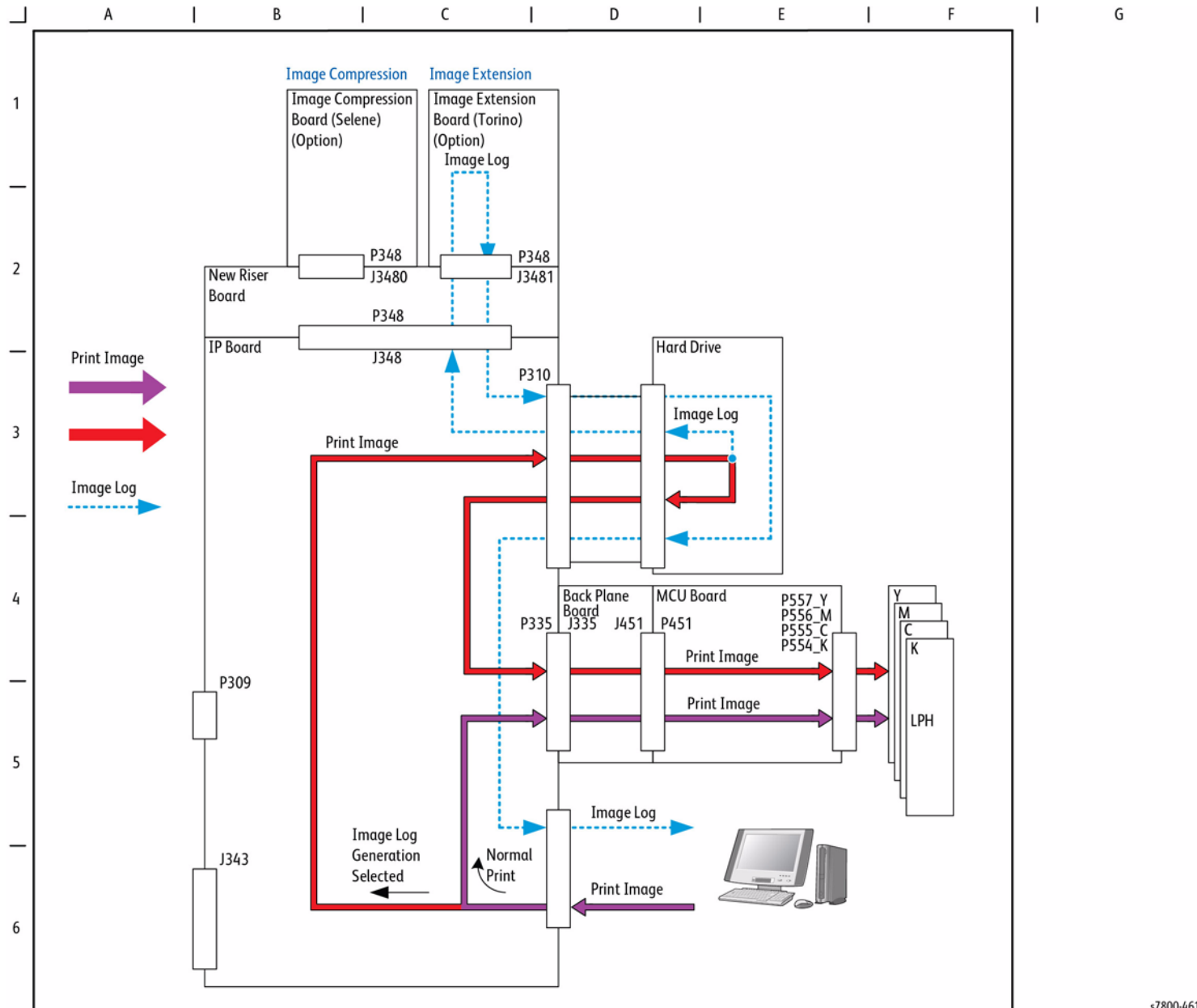


Figure 1 Main Drive Control

s7800-460

Chain 6 Imaging

BSD 6.4 Print Image Flow



s7800-461

Figure 1 Print Image Flow

BSD 6.8 LPH Control (Y)

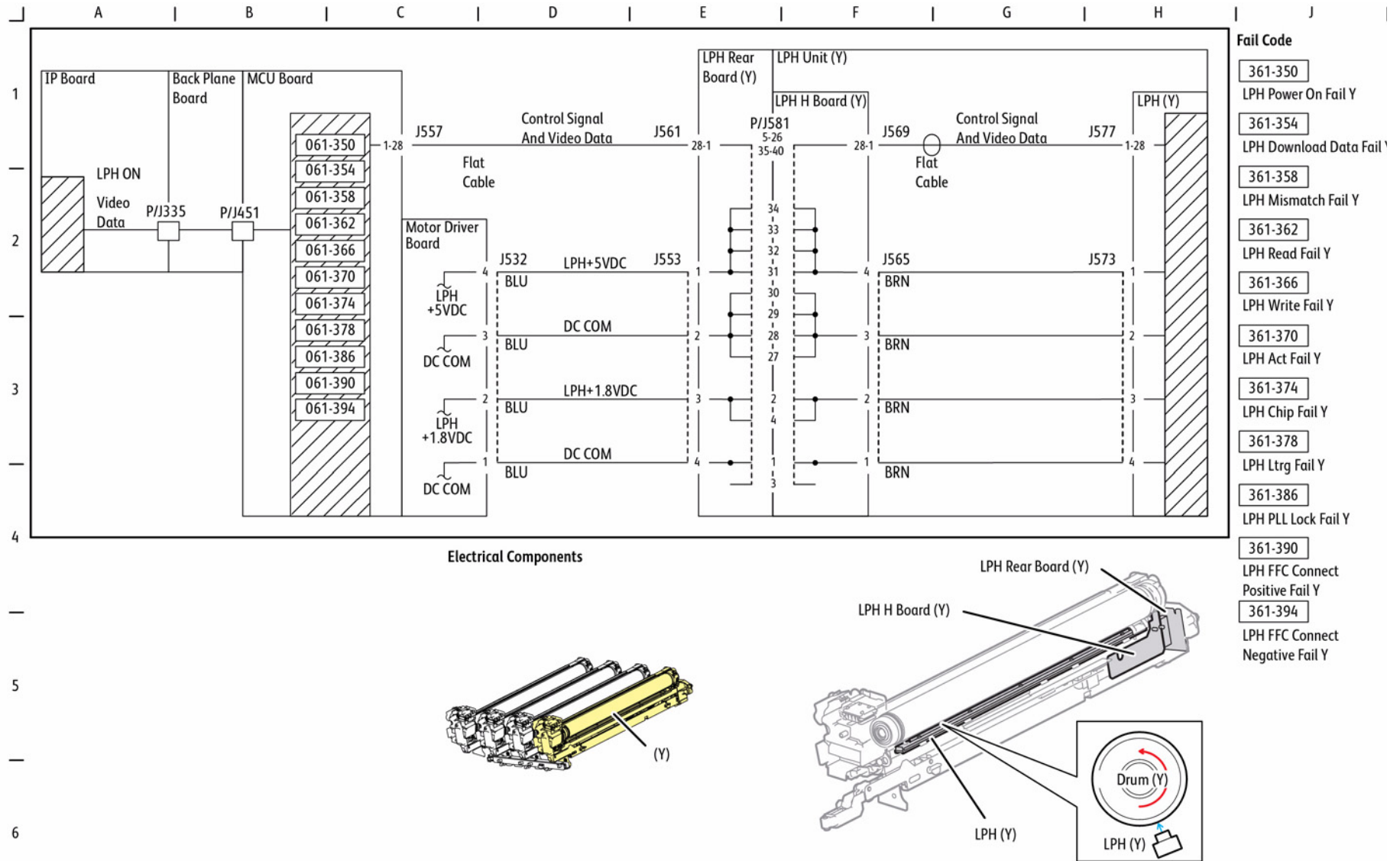
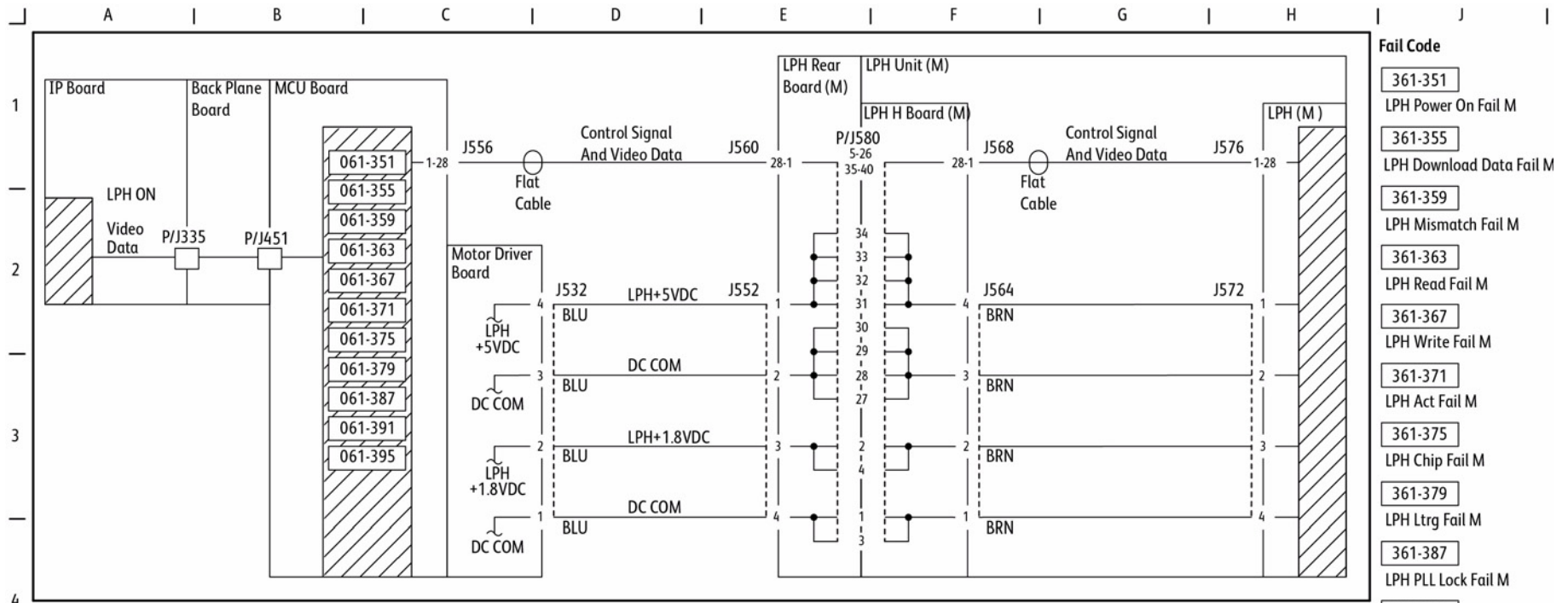


Figure 2 LPH Control (Y)

BSD 6.9 LPH Control (M)



- Fail Code**
- 361-351 LPH Power On Fail M
 - 361-355 LPH Download Data Fail M
 - 361-359 LPH Mismatch Fail M
 - 361-363 LPH Read Fail M
 - 361-367 LPH Write Fail M
 - 361-371 LPH Act Fail M
 - 361-375 LPH Chip Fail M
 - 361-379 LPH Ltrg Fail M
 - 361-387 LPH PLL Lock Fail M
 - 361-391 LPH FFC Connect Positive Fail M
 - 361-395 LPH FFC Connect Negative Fail M

Electrical Components

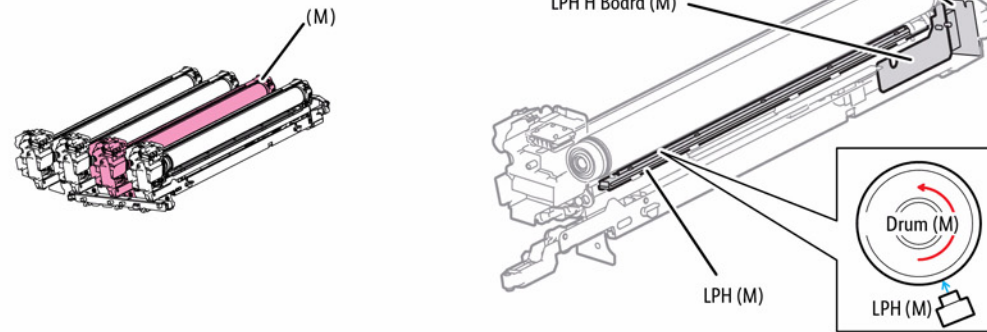
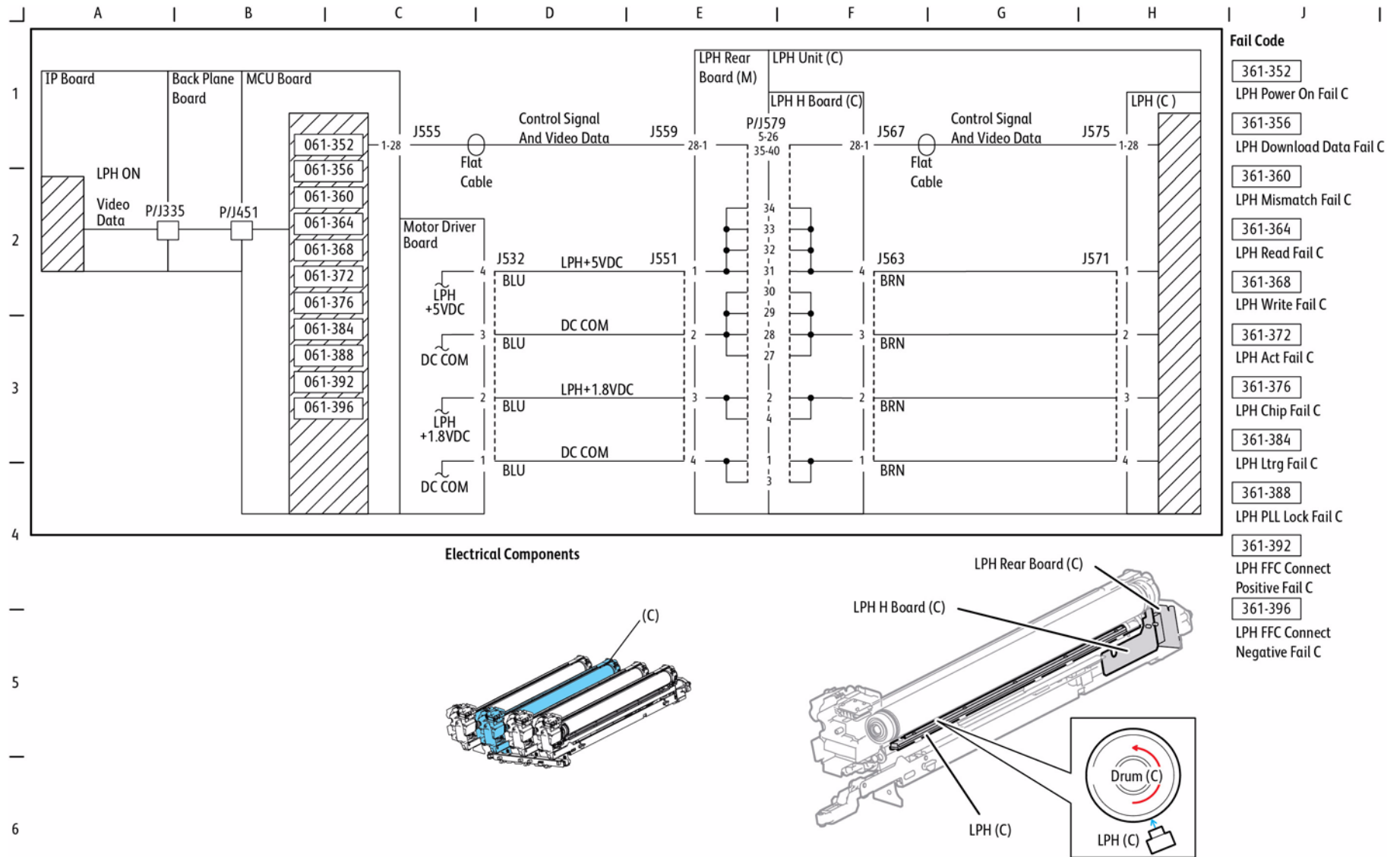


Figure 3 LPH Control (M)

s7800-463

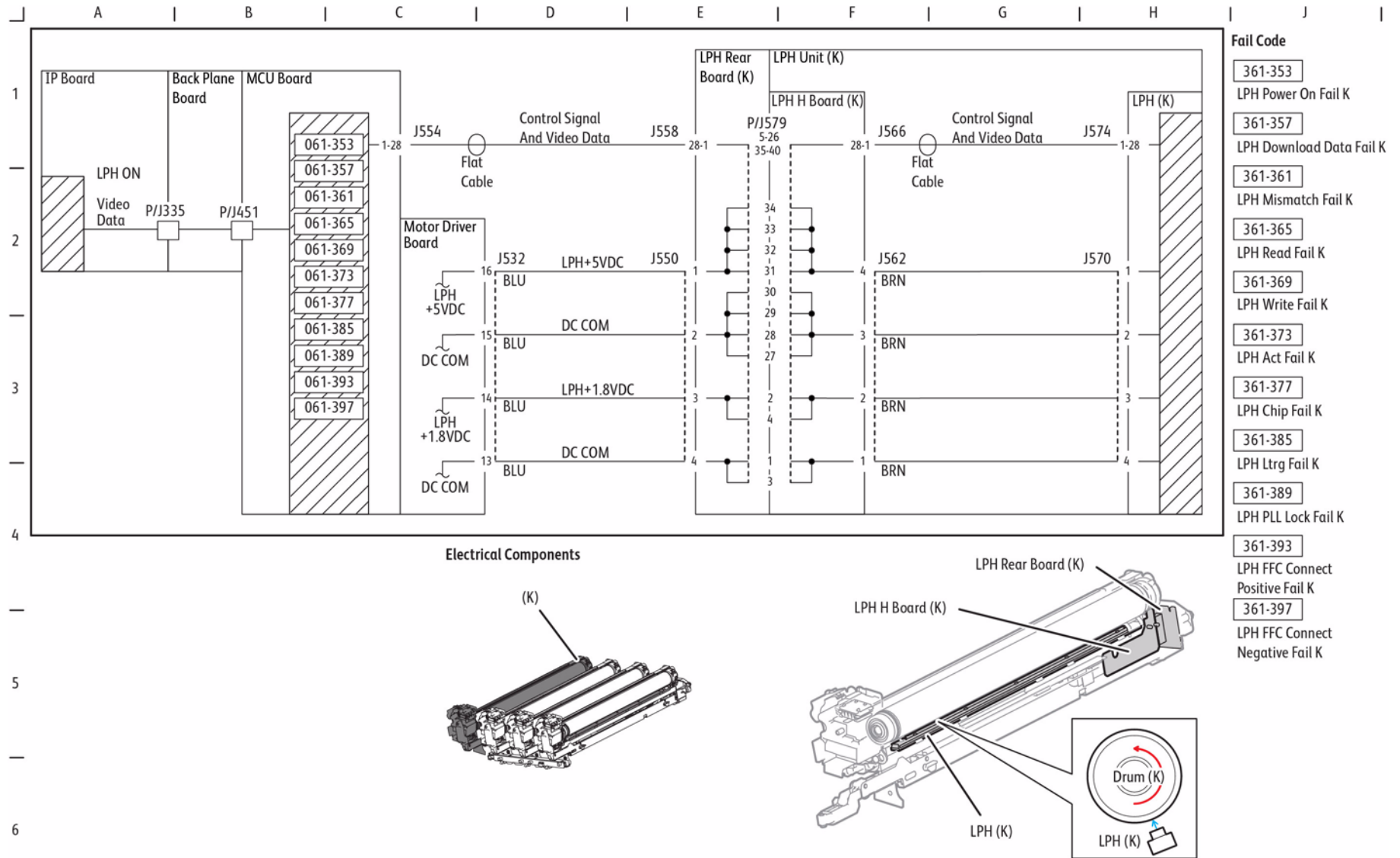
BSD 6.10 LPH Control (C)



s7800-464

Figure 4 LPH Control (C)

BSD 6.11 LPH Control (K)



s7800-465

Figure 5 LPH Control (K)

BSD 6.12 Color Registration Control

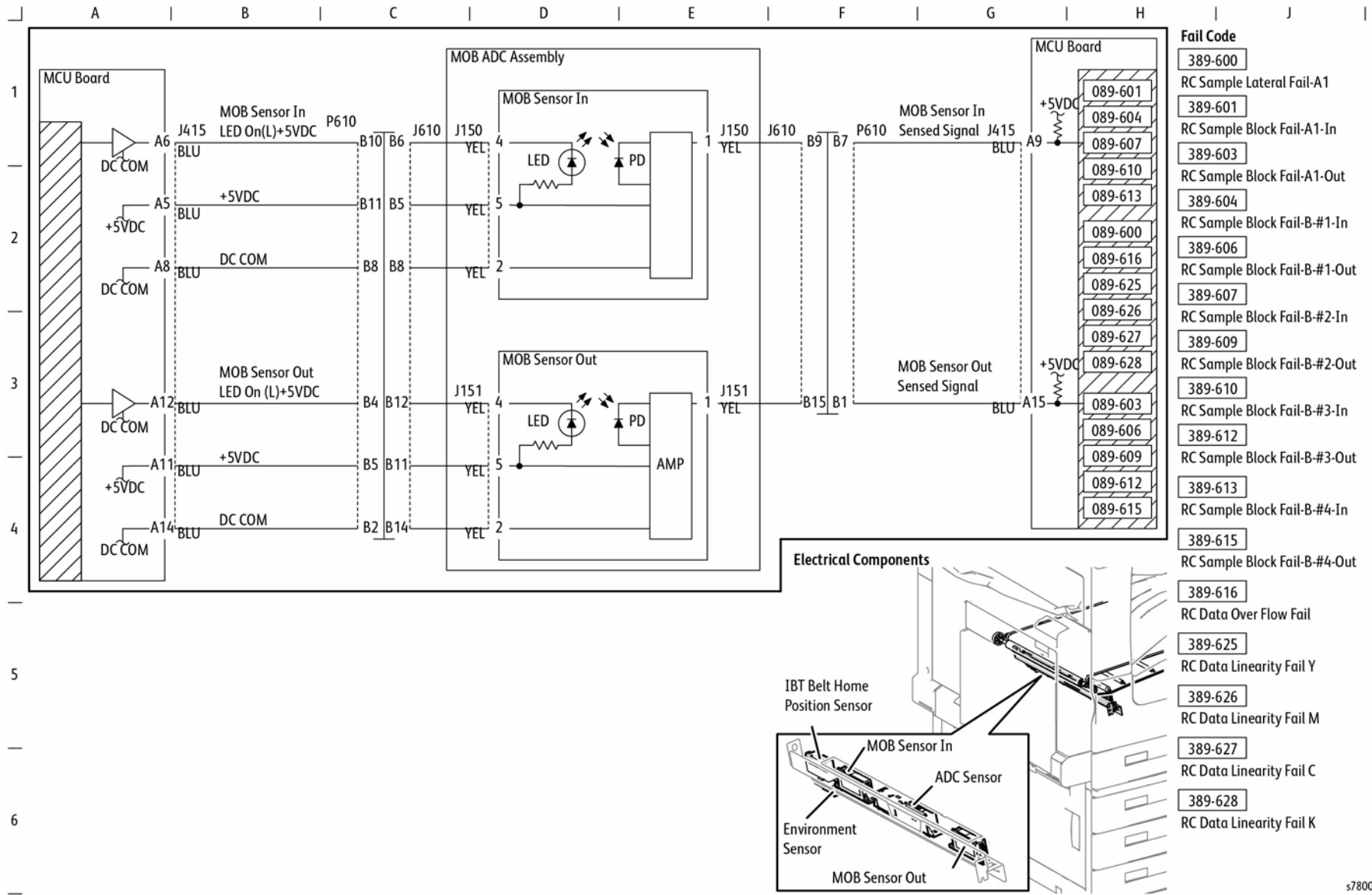
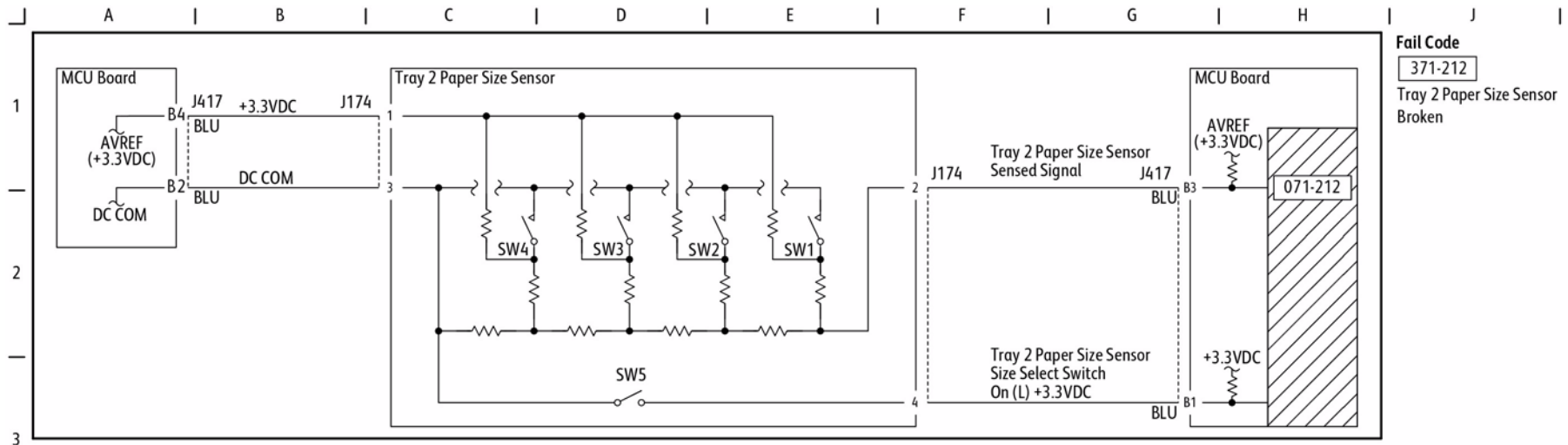


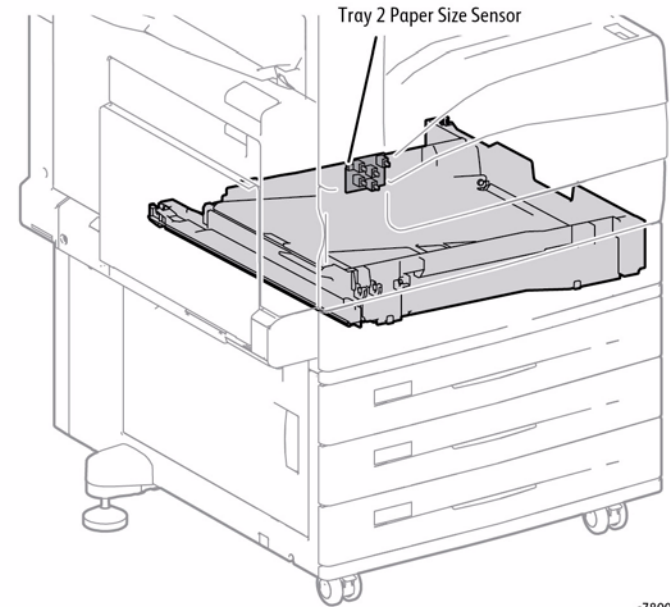
Figure 6 Color Registration Control

Chain 7 Paper Supplying

BSD 7.1 Tray 2 Paper Size Sensing



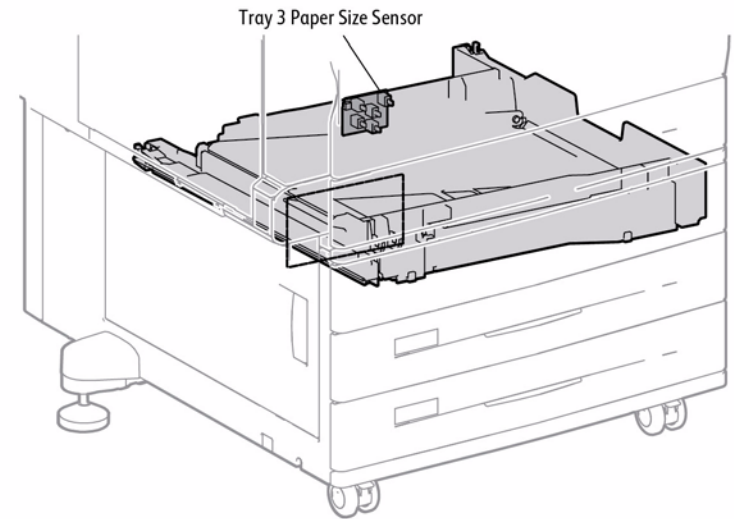
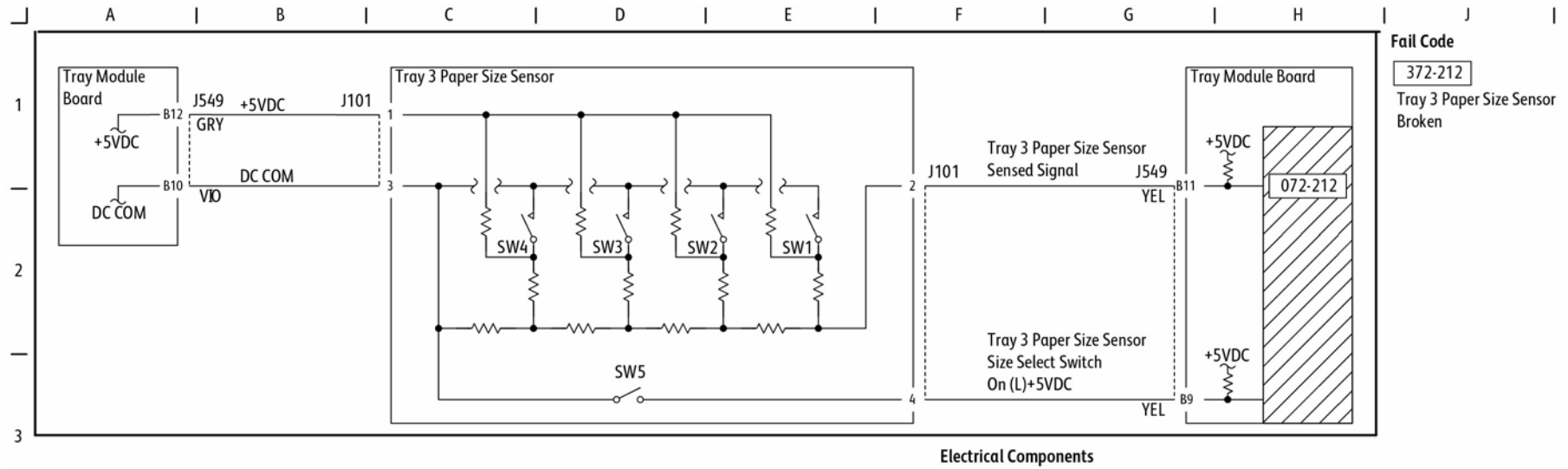
Electrical Components



s7800-467

Figure 1 Tray 2 Paper Size Sensing

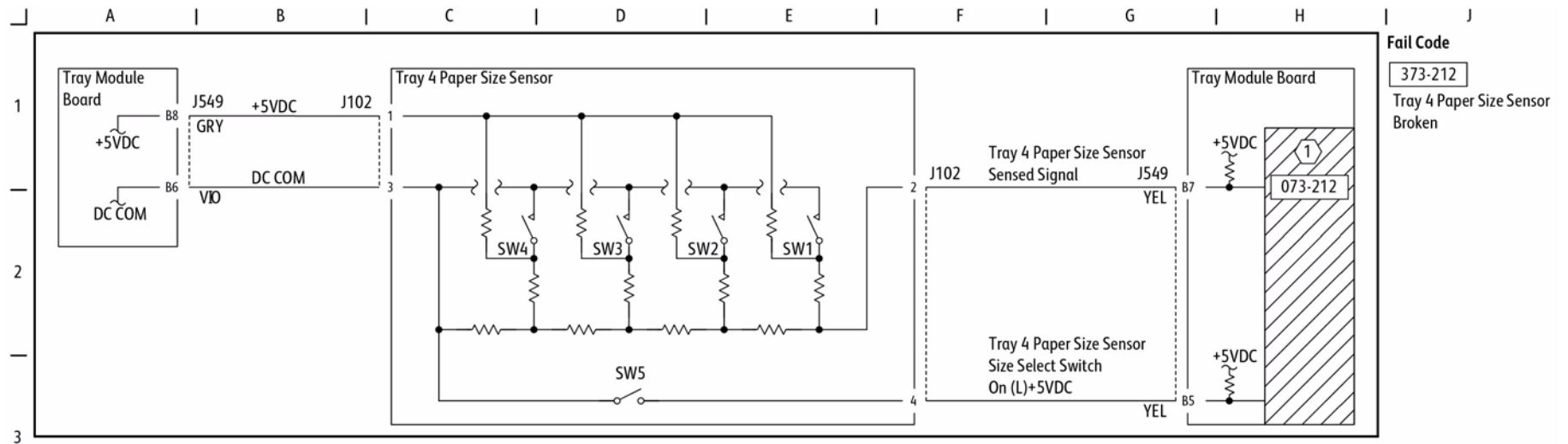
BSD 7.2 Paper Size Sensing (3TM, TM)



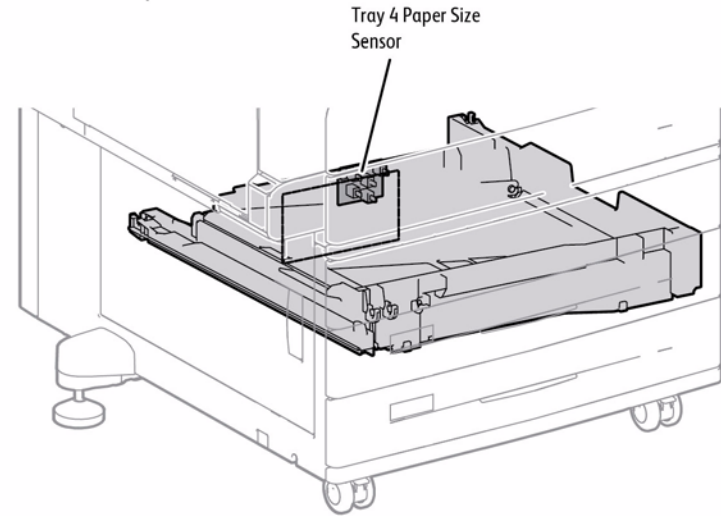
s7800-468

Figure 2 Paper Size Sensing (3TM, TM)

BSD 7.3 Tray 4 Paper Size Sensing (3TM)



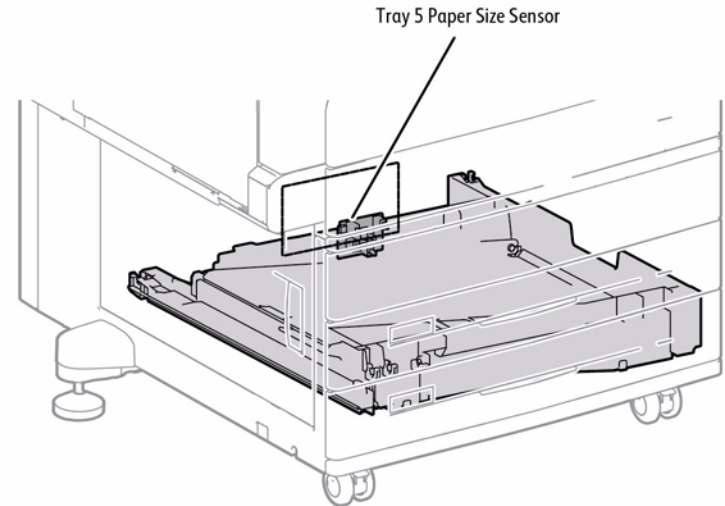
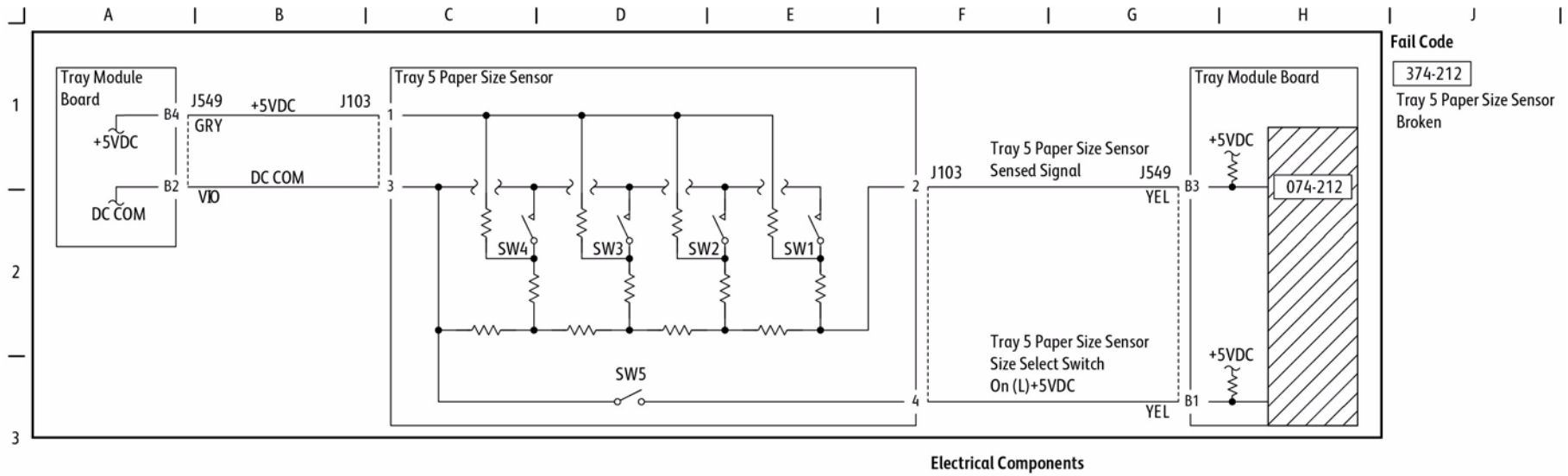
Electrical Components



s7800-469

Figure 3 Tray 4 Paper Size Sensing (3TM)

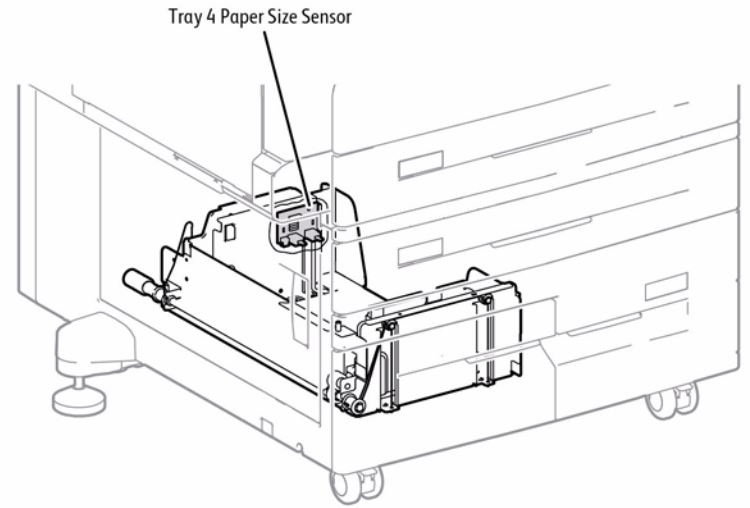
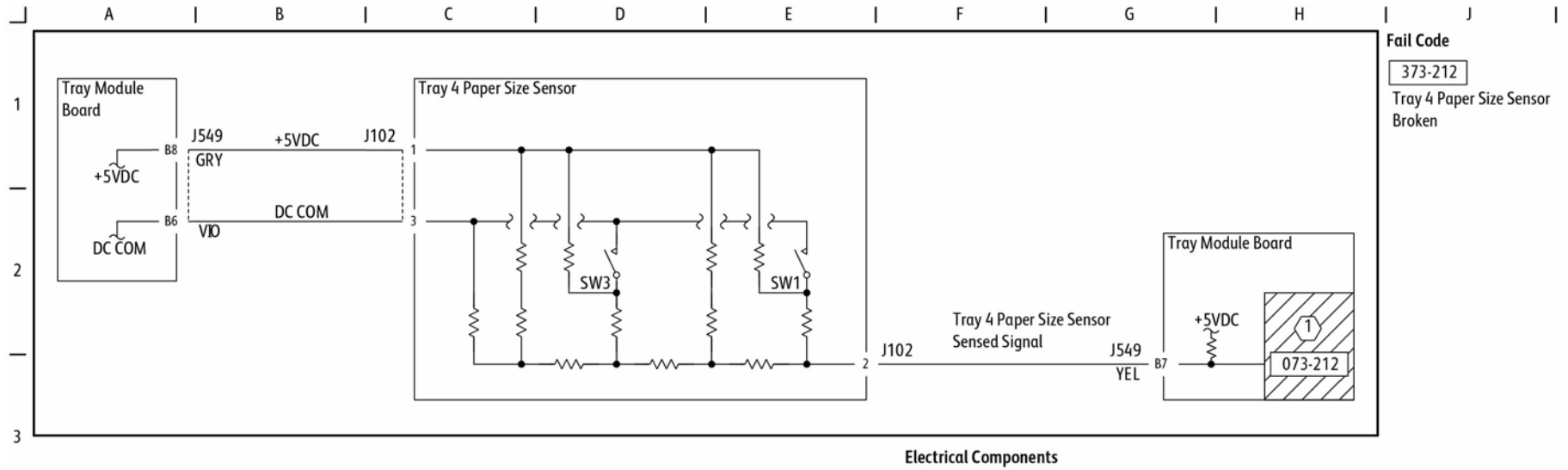
BSD 7.4 Tray 5 Paper Size Sensing (3TM)



s7800-470

Figure 4 Tray 5 Paper Size Sensing (3TM)

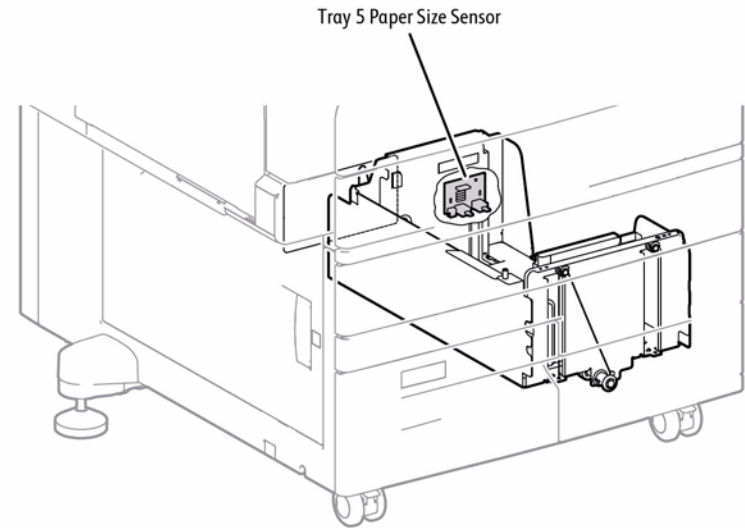
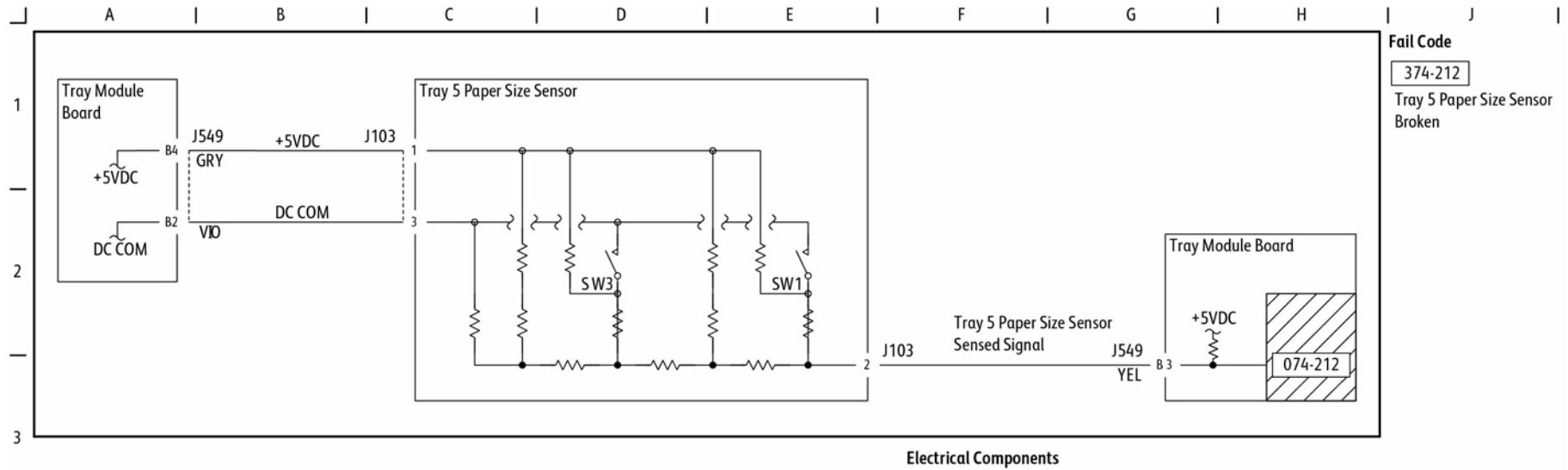
BSD 7.5 Tray 4 Paper Size Sensing (TTM)



s7800-471

Figure 5 Tray 4 Paper Size Sensing (TTM)

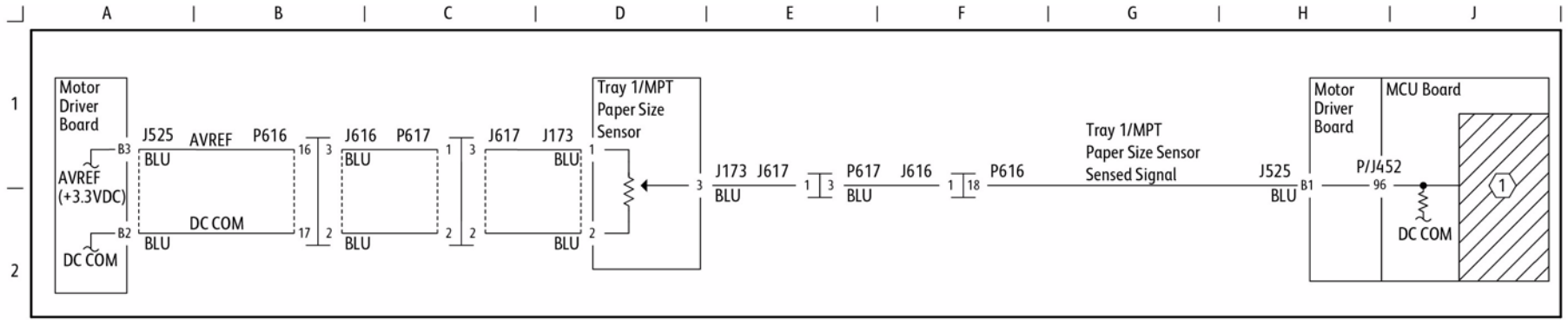
BSD 7.6 Tray 5 Paper Size Sensing (TTM)



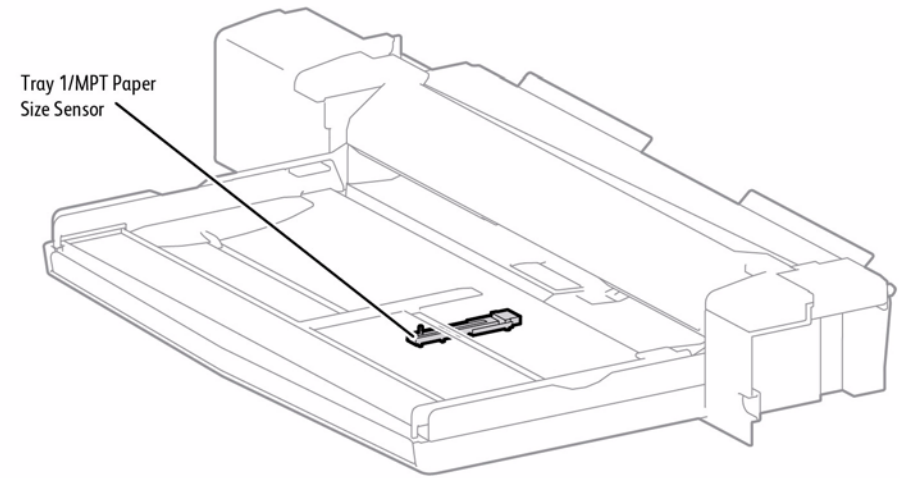
s7800-472

Figure 6 Tray 5 Paper Size Sensing (TTM)

BSD 7.7 Tray 1 Paper Size Sensing



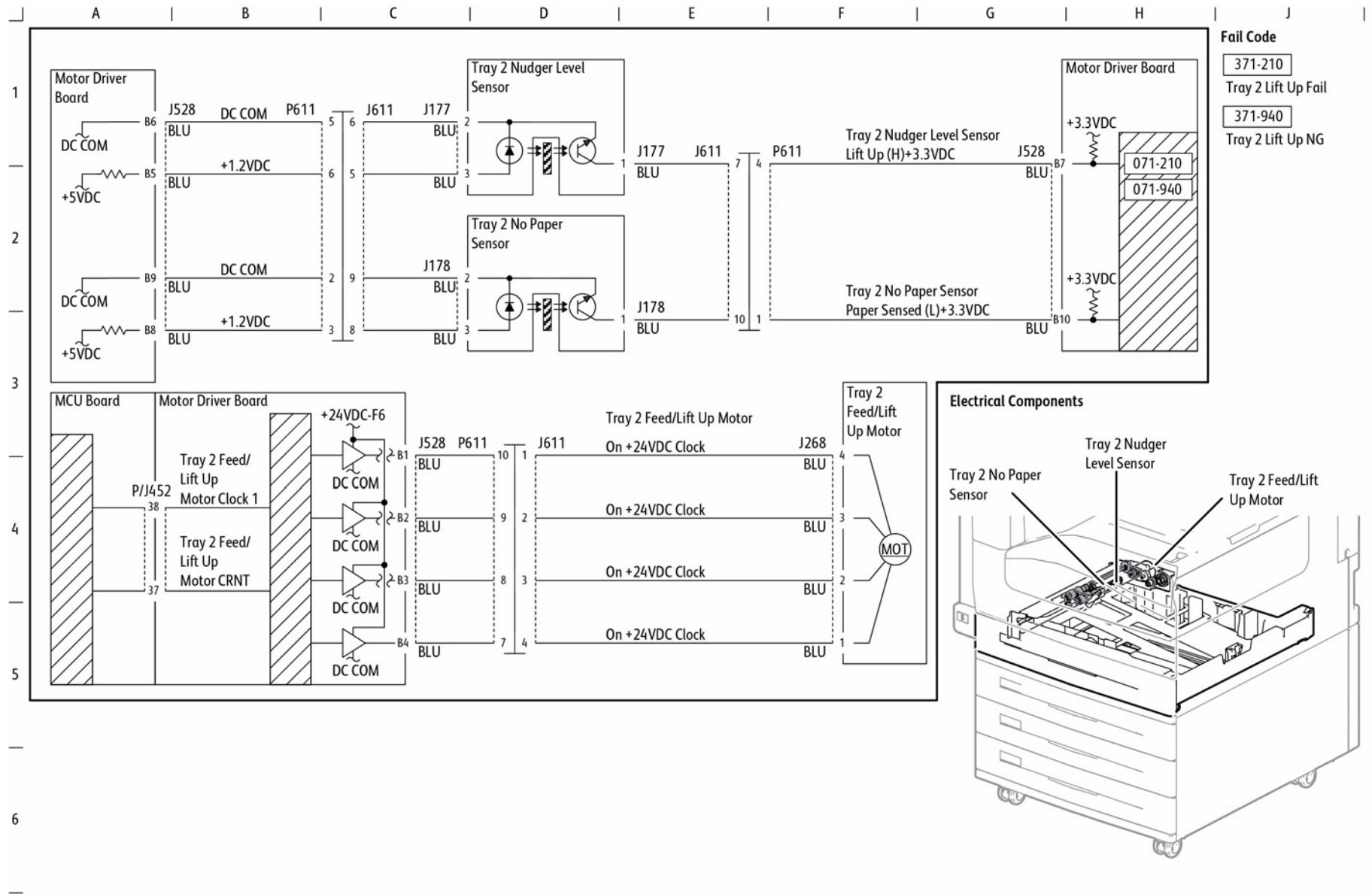
Electrical Components



s7800-473

Figure 7 Tray 1 Paper Size Sensing

BSD 7.8 Tray 2 Paper Stacking



s7800-474

Figure 8 Tray 2 Paper Stacking

BSD 7.9 Tray 3 Paper Stacking (3TM, TTM)

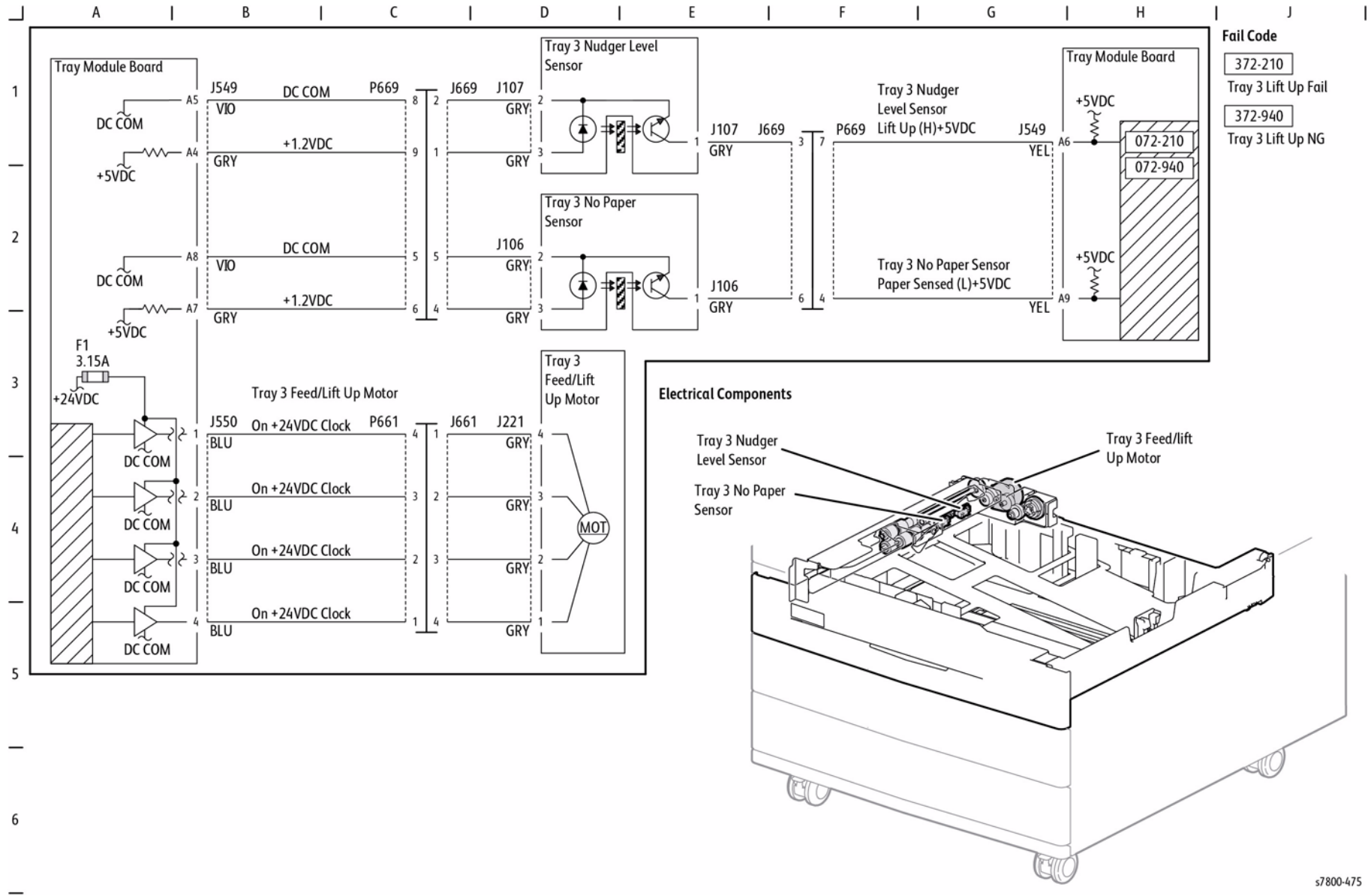


Figure 9 Tray 3 Paper Stacking (3TM, TTM)

BSD 7.10 Tray 4 Paper Stacking (3TM)

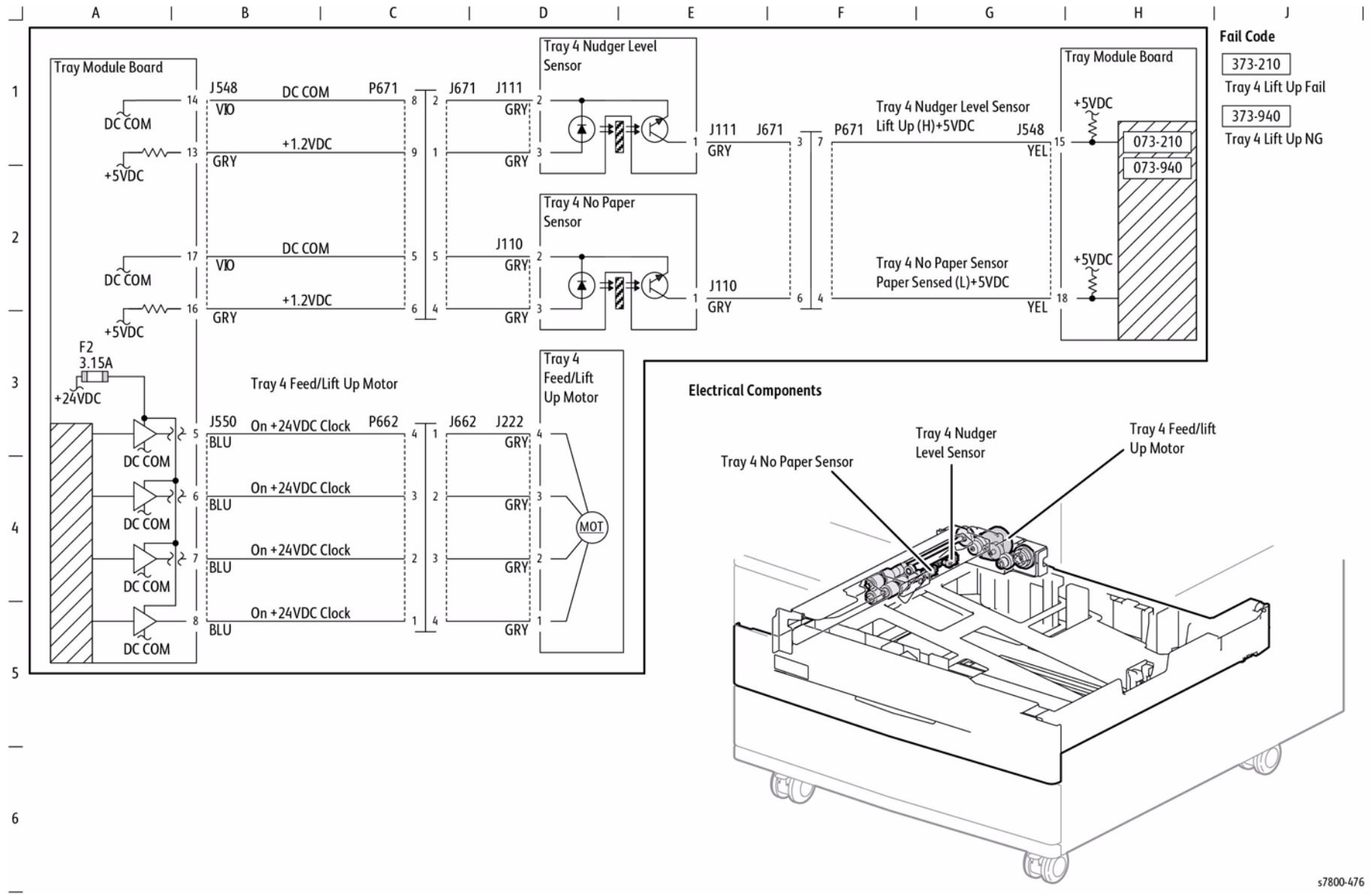


Figure 10 Tray 4 Paper Stacking (3TM)

BSD 7.11 Tray 5 Paper Stacking (3TM)

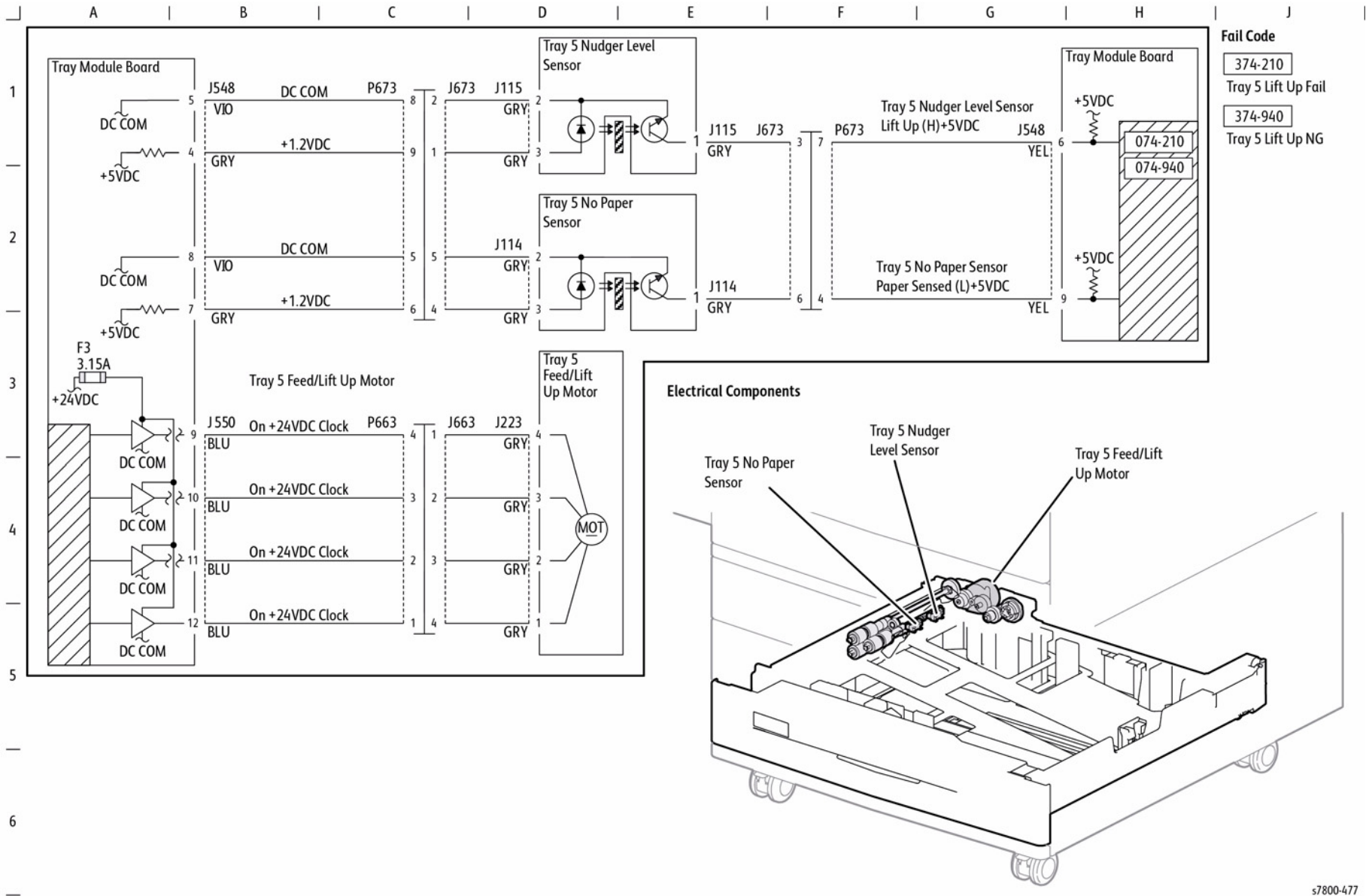


Figure 11 Tray 5 Paper Stacking (3TM)

BSD 7.12 Tray 4 Paper Stacking (TTM)

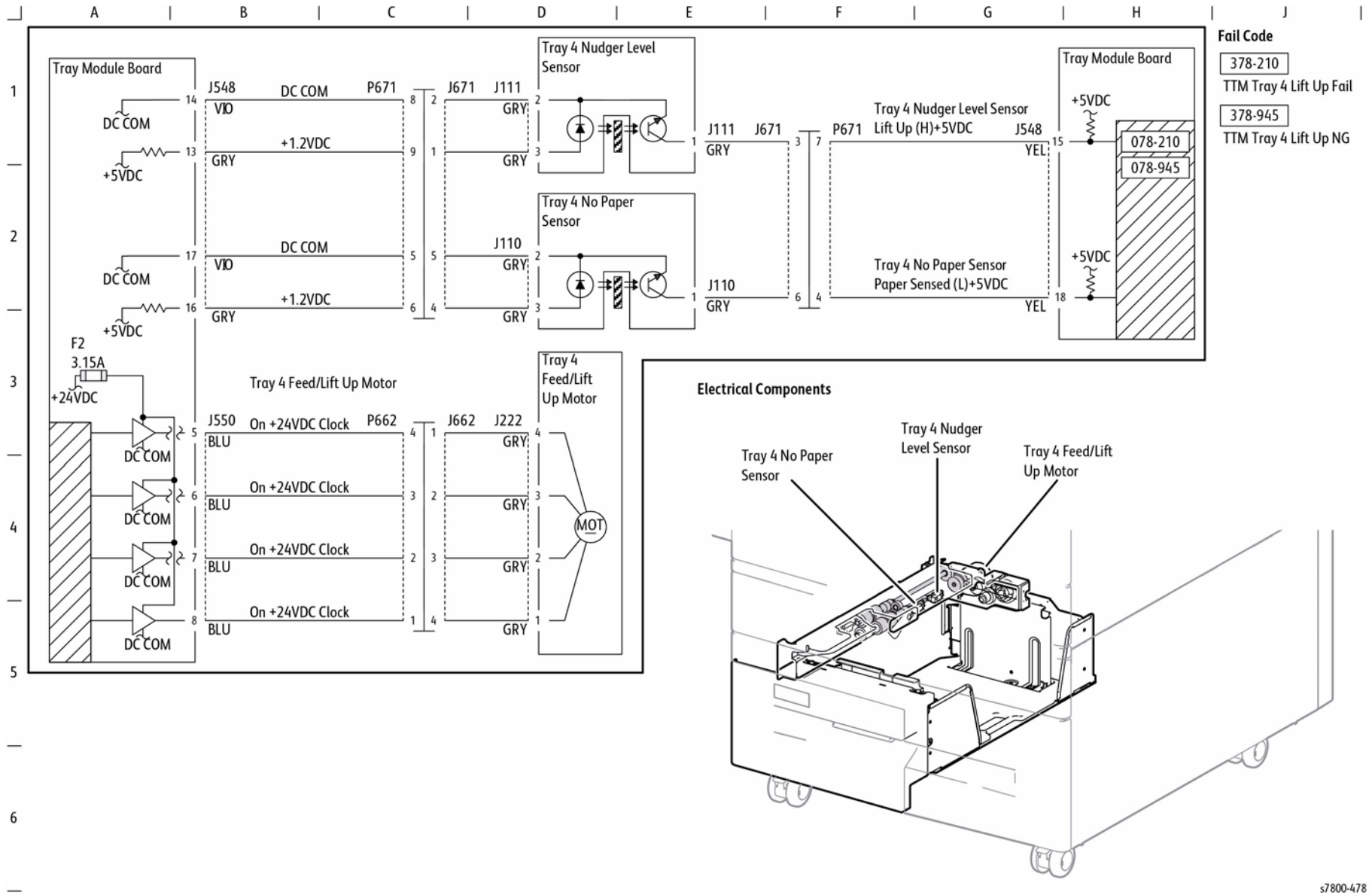


Figure 12 Tray 4 Paper Stacking (TTM)

BSD 7.13 Tray 5 Paper Stacking (TTM)

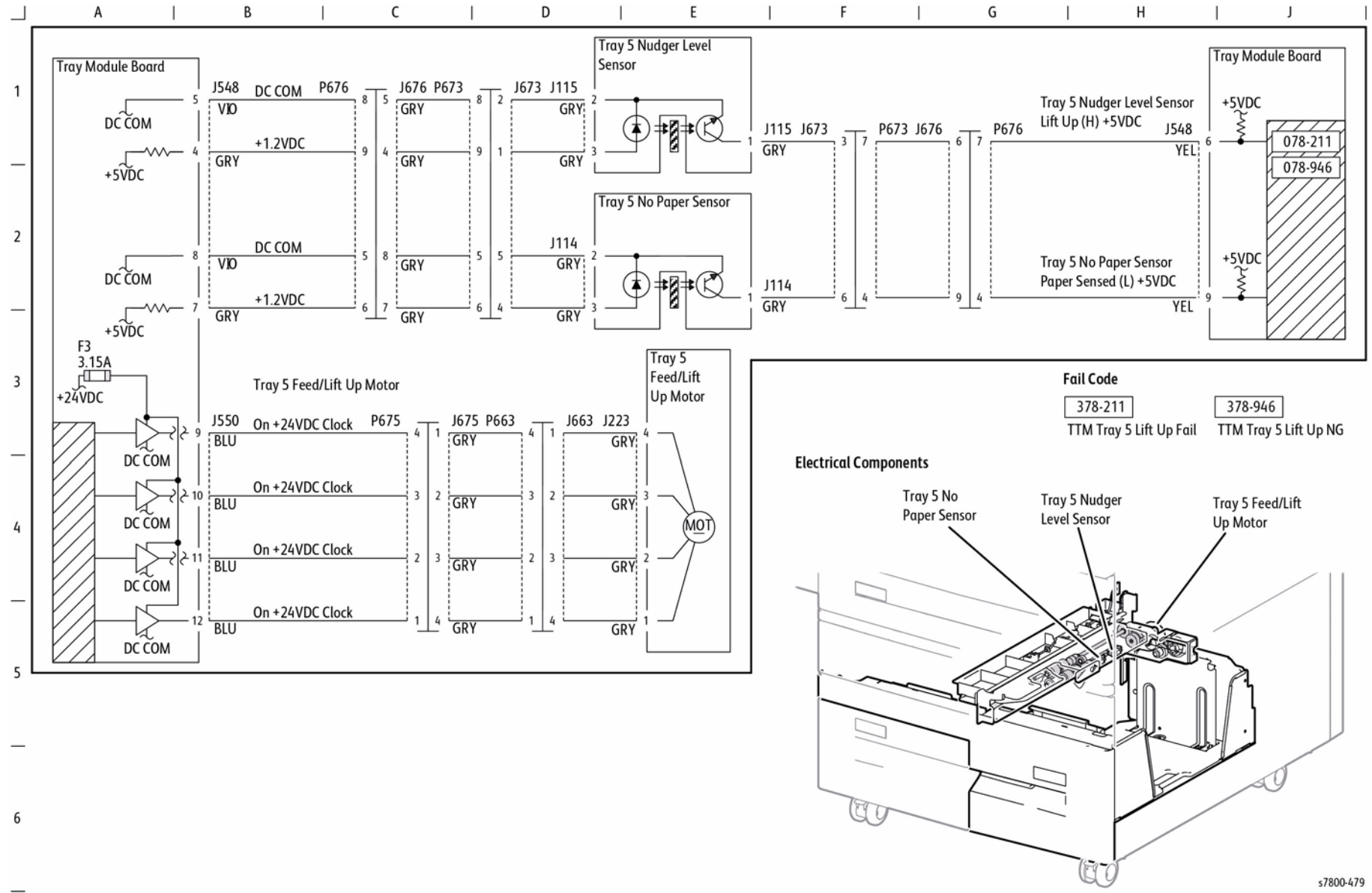


Figure 13 Tray 5 Paper Stacking (TTM)

BSD 7.14 Tray 1 Paper Stacking

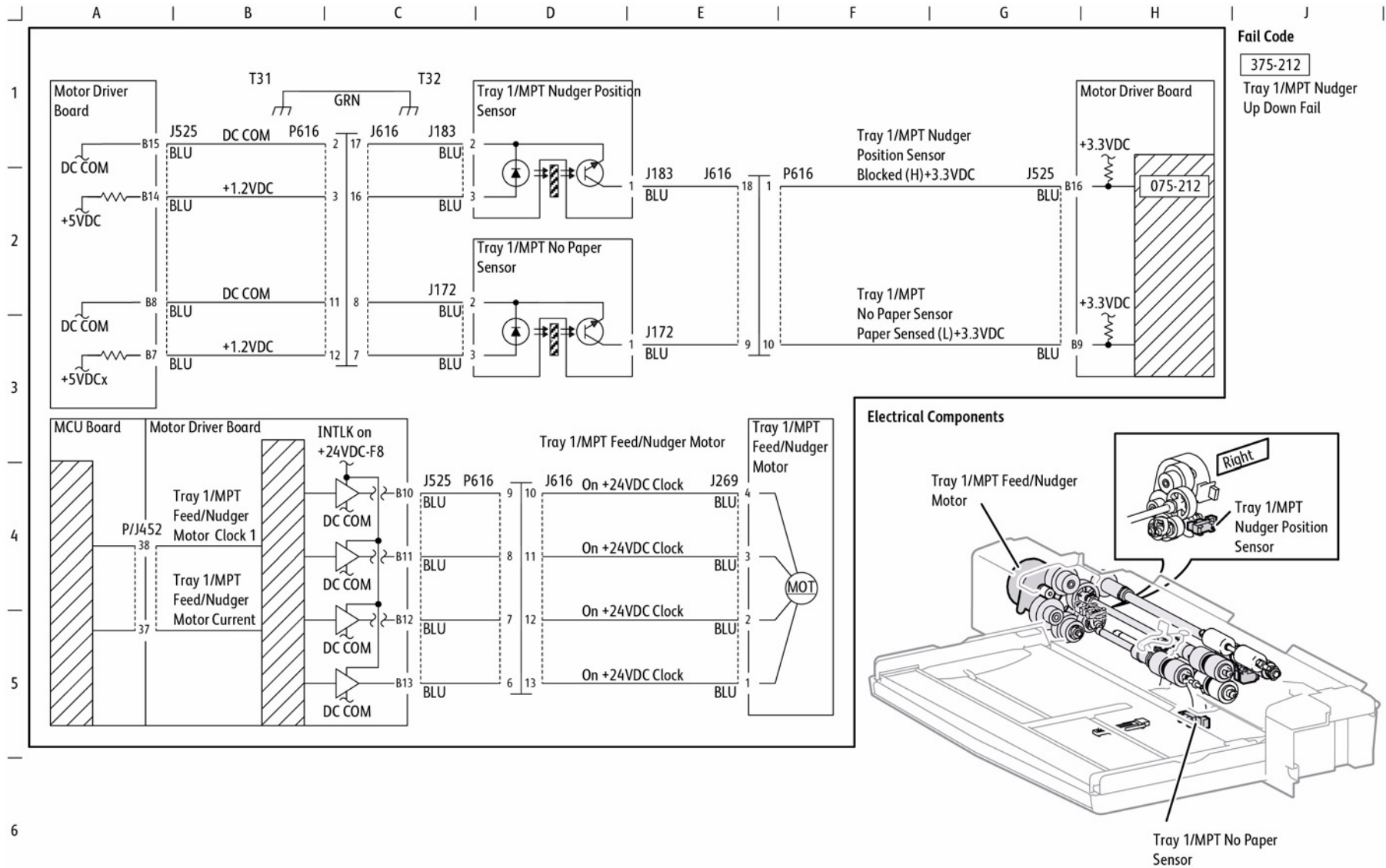
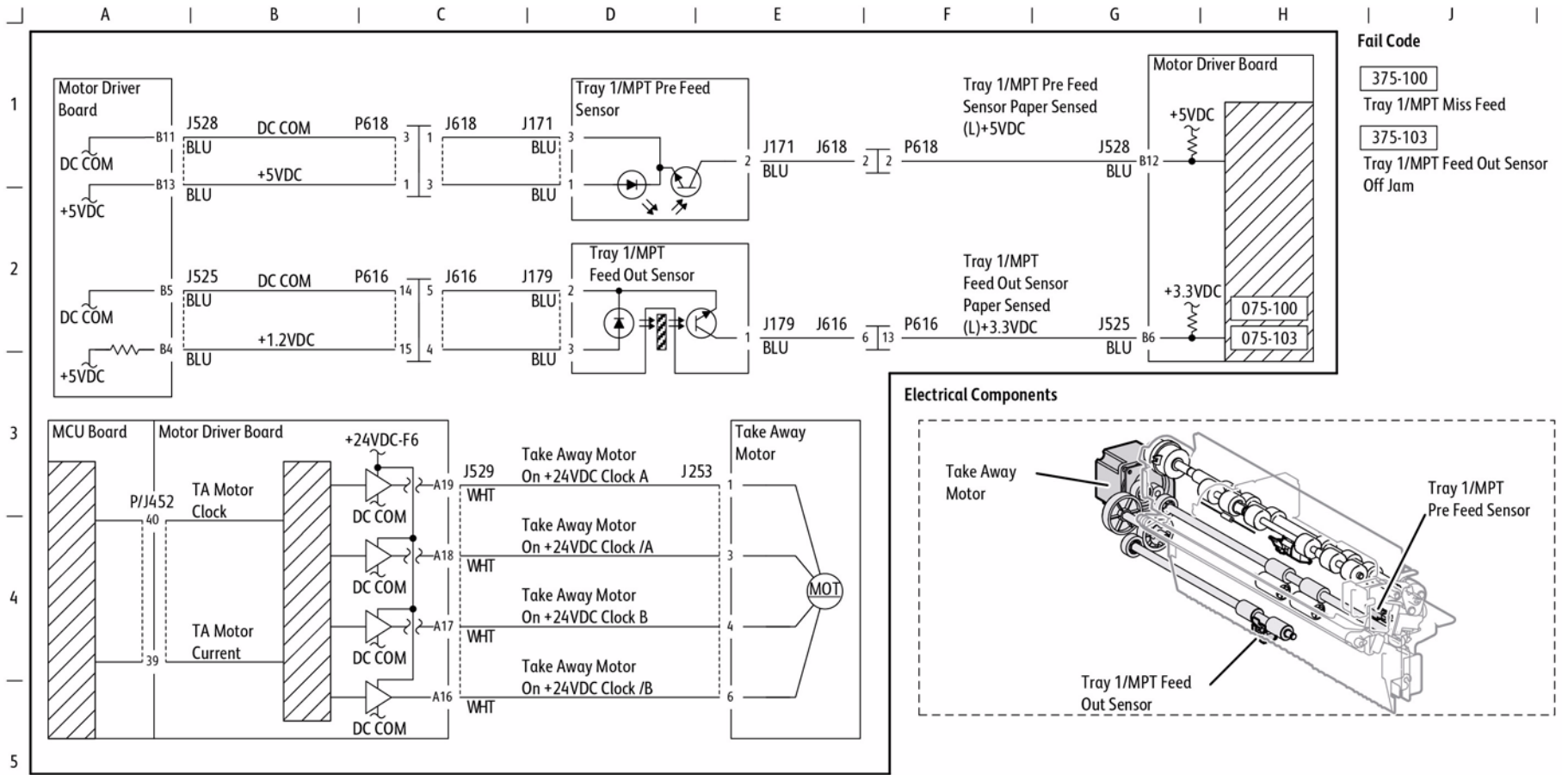


Figure 14 Tray 1 Paper Stacking

Chain 8 Paper Transportation

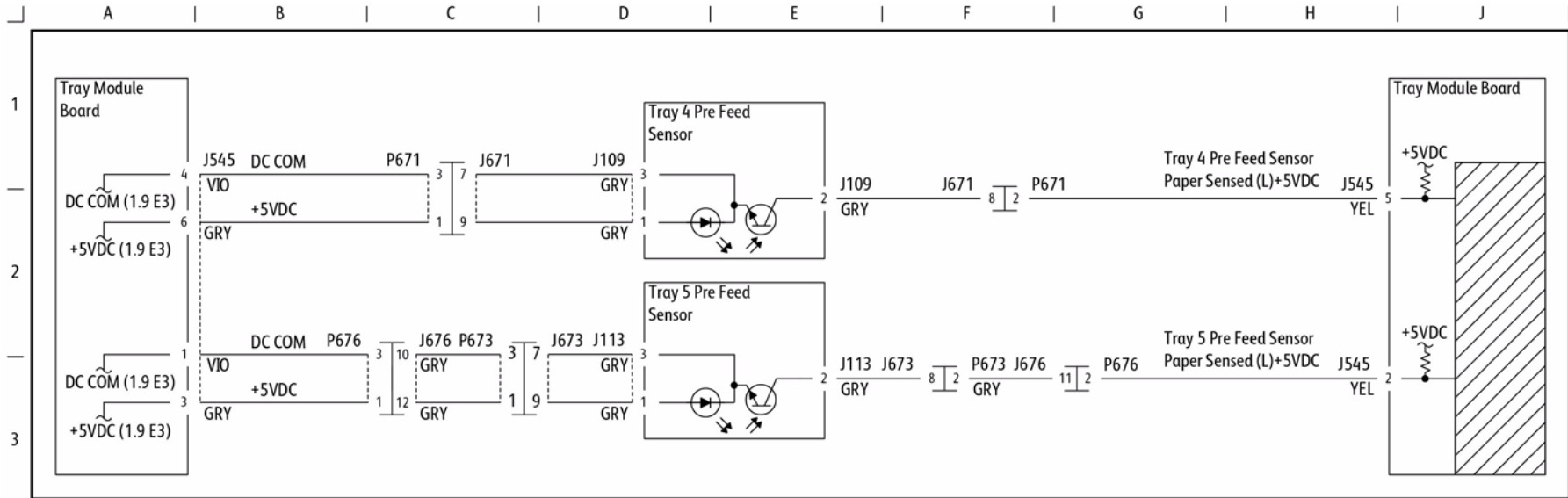
BSD 8.1 Tray 2 and Tray 1 Paper Transportation



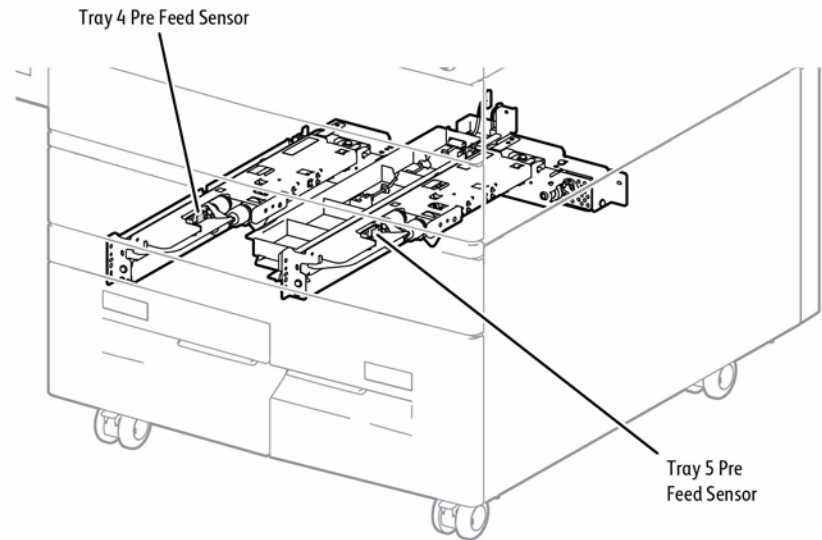
s7800-481

Figure 1 Tray 2 and Tray 1 Paper Transportation

BSD 8.2 Tray Module Paper Transportation (1 of 4) (TTM)



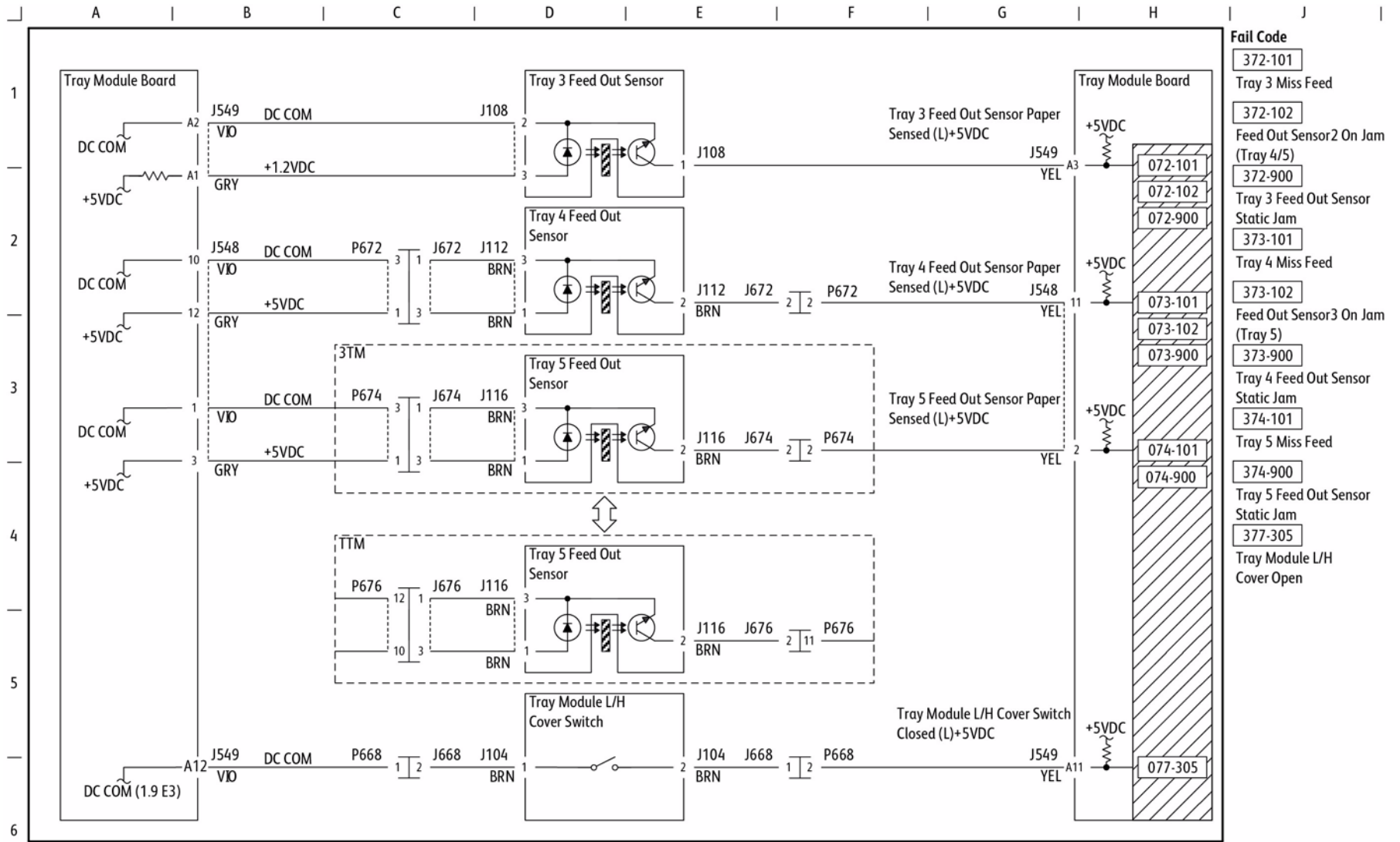
Electrical Components



s7800-482

Figure 2 Tray Module Paper Transportation (1 of 4) (TTM)

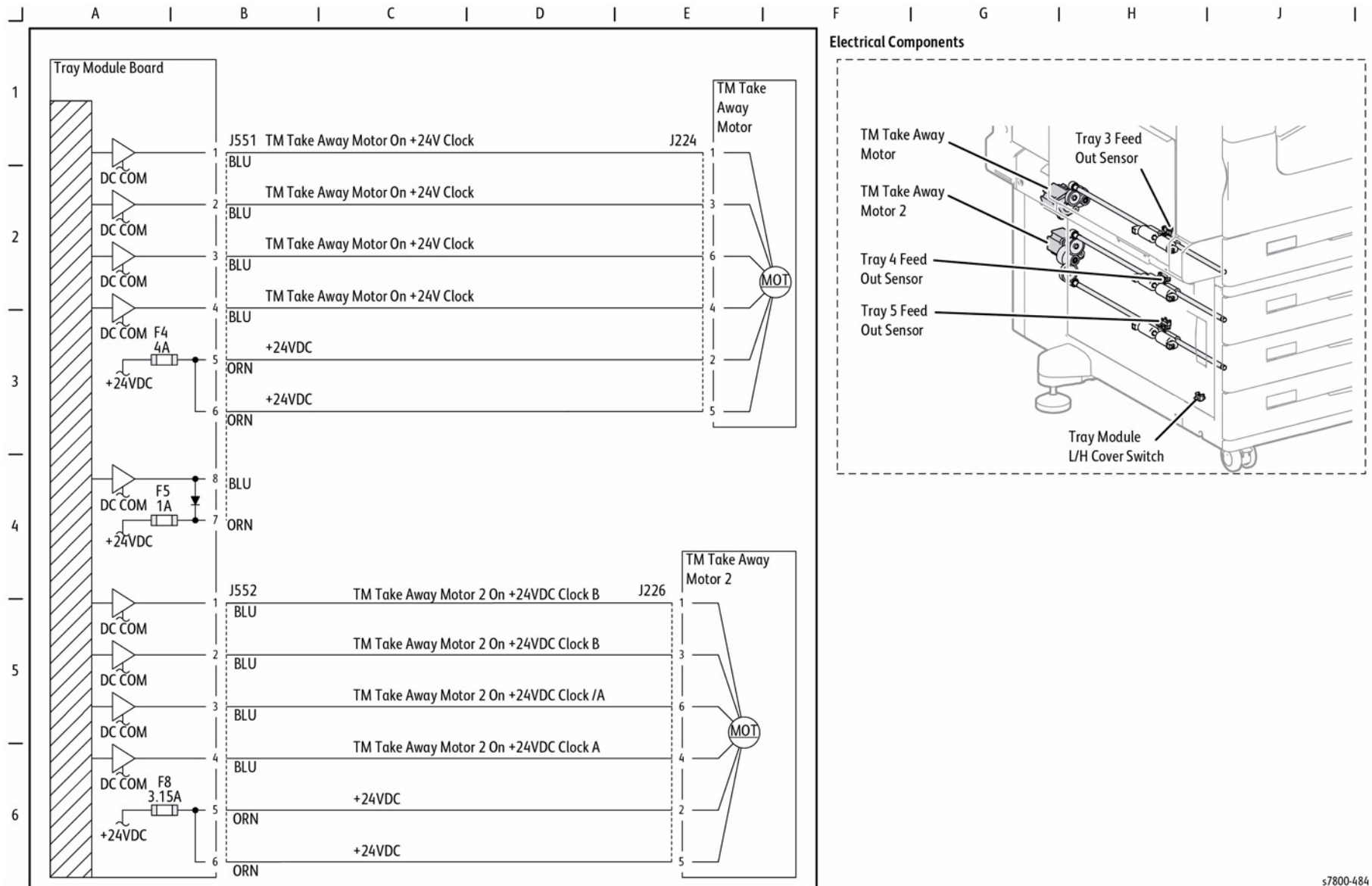
BSD 8.3 Tray Module Paper Transportation (2 of 4) (TTM)



s7800-483

Figure 3 Tray Module Paper Transportation (2 of 4) (TTM)

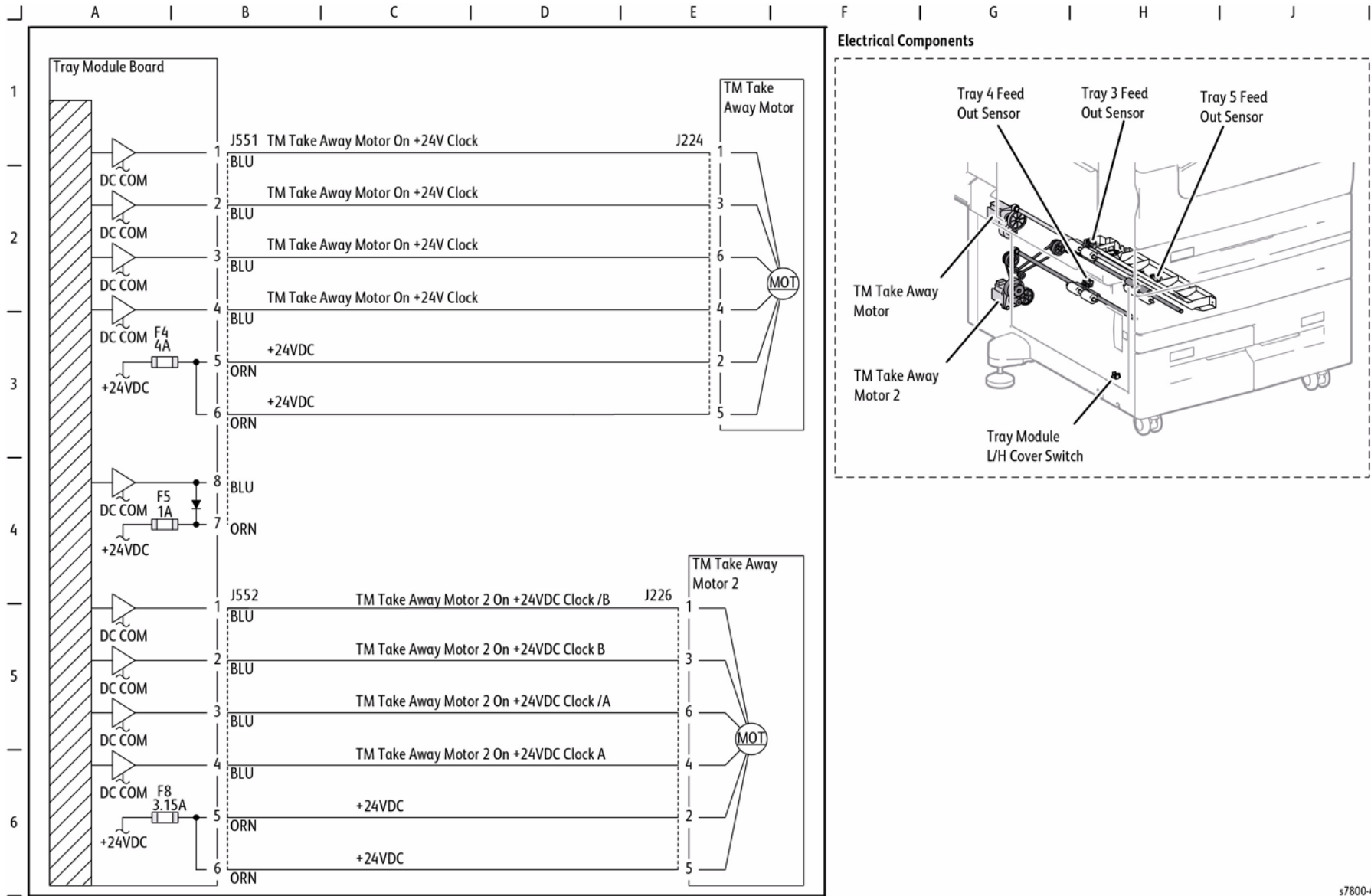
BSD 8.4 Tray Module Paper Transportation (3 of 4) (TTM)



s7800-484

Figure 4 Tray Module Paper Transportation (3 of 4) (TTM)

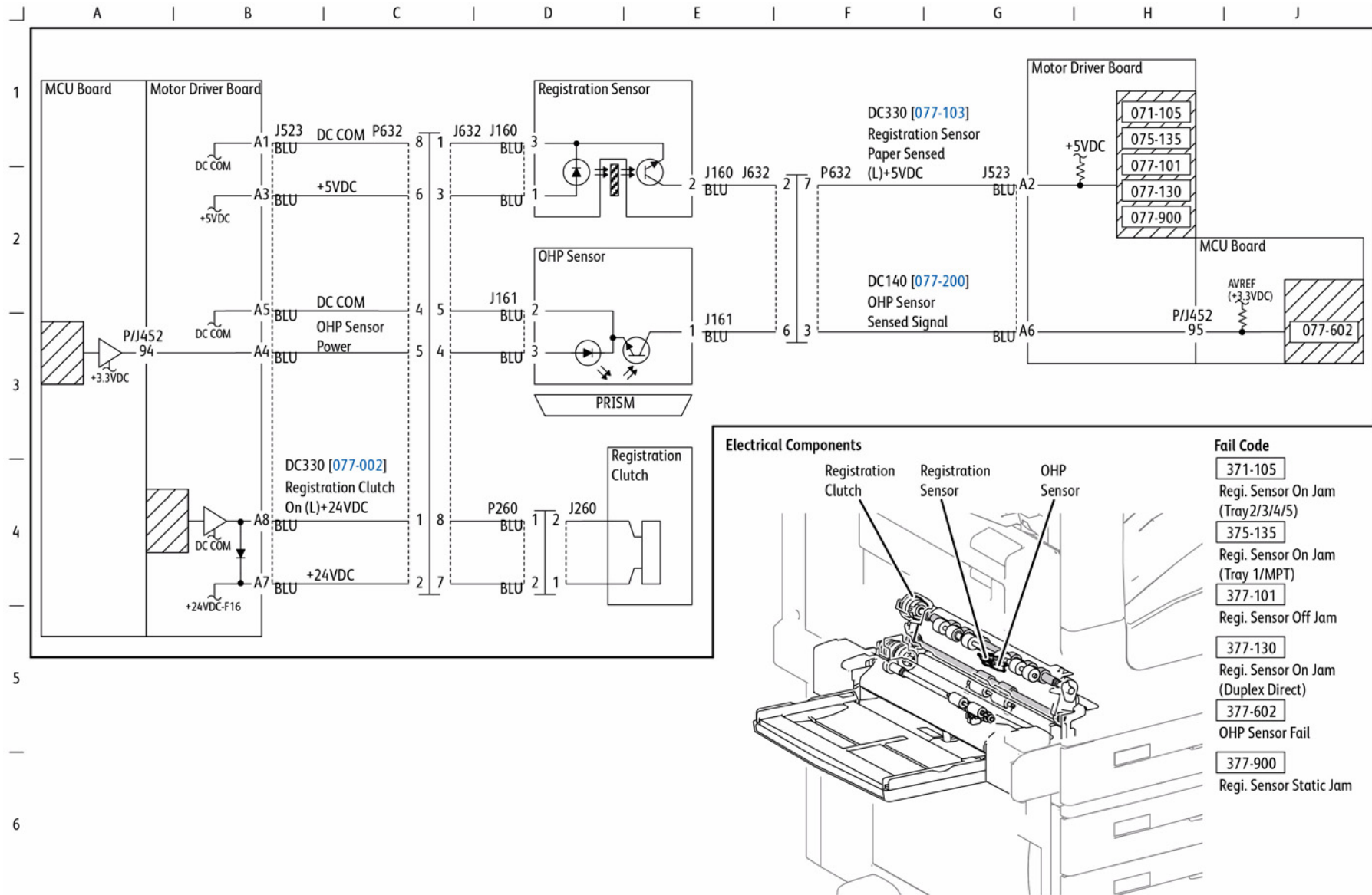
BSD 8.5 Tray Module Paper Transportation (4 of 4) (TTM)



s7800-485

Figure 5 Tray Module Paper Transportation (4 of 4) (TTM)

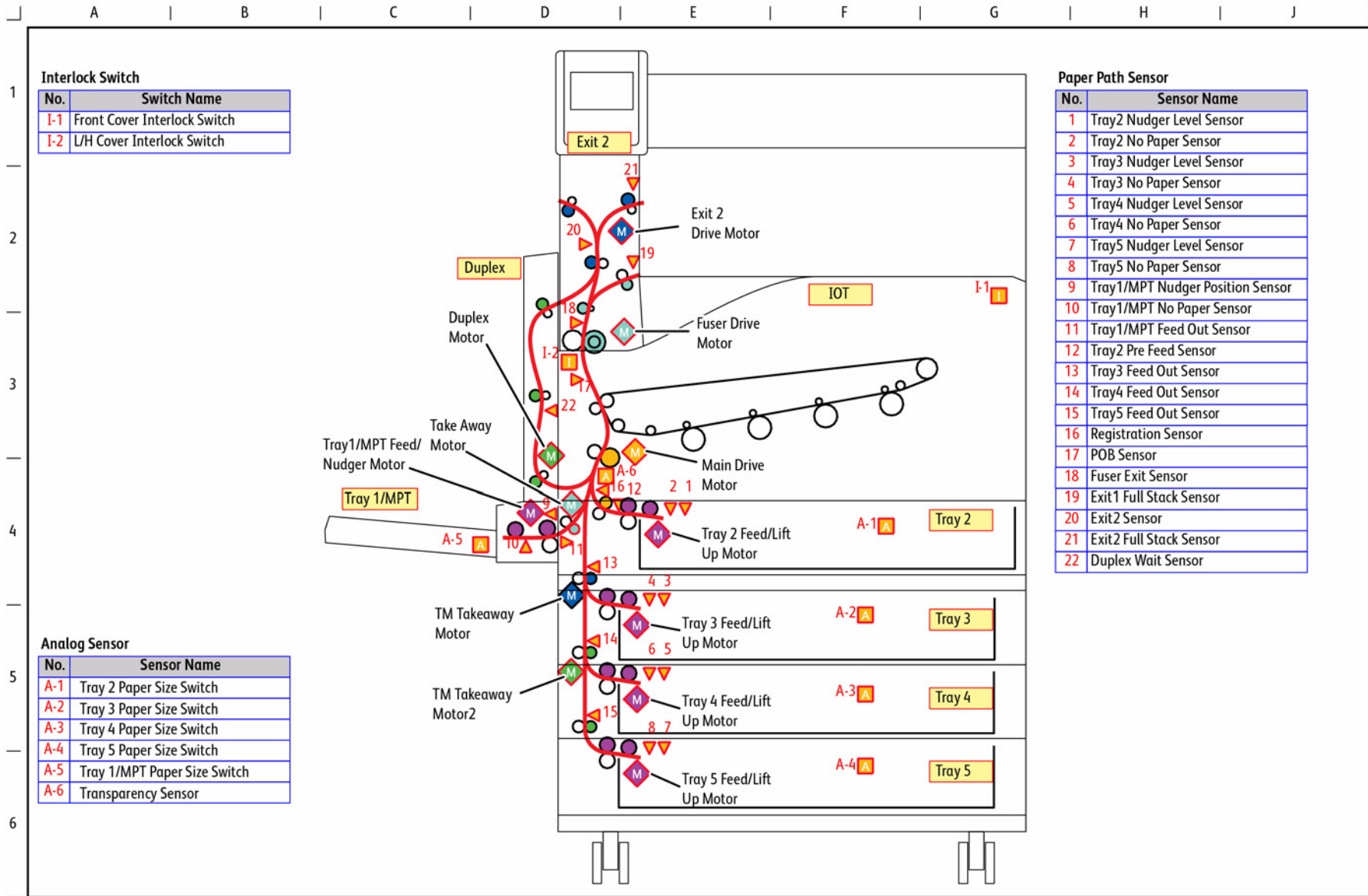
BSD 8.6 Registration



s7800-486

Figure 6 Registration

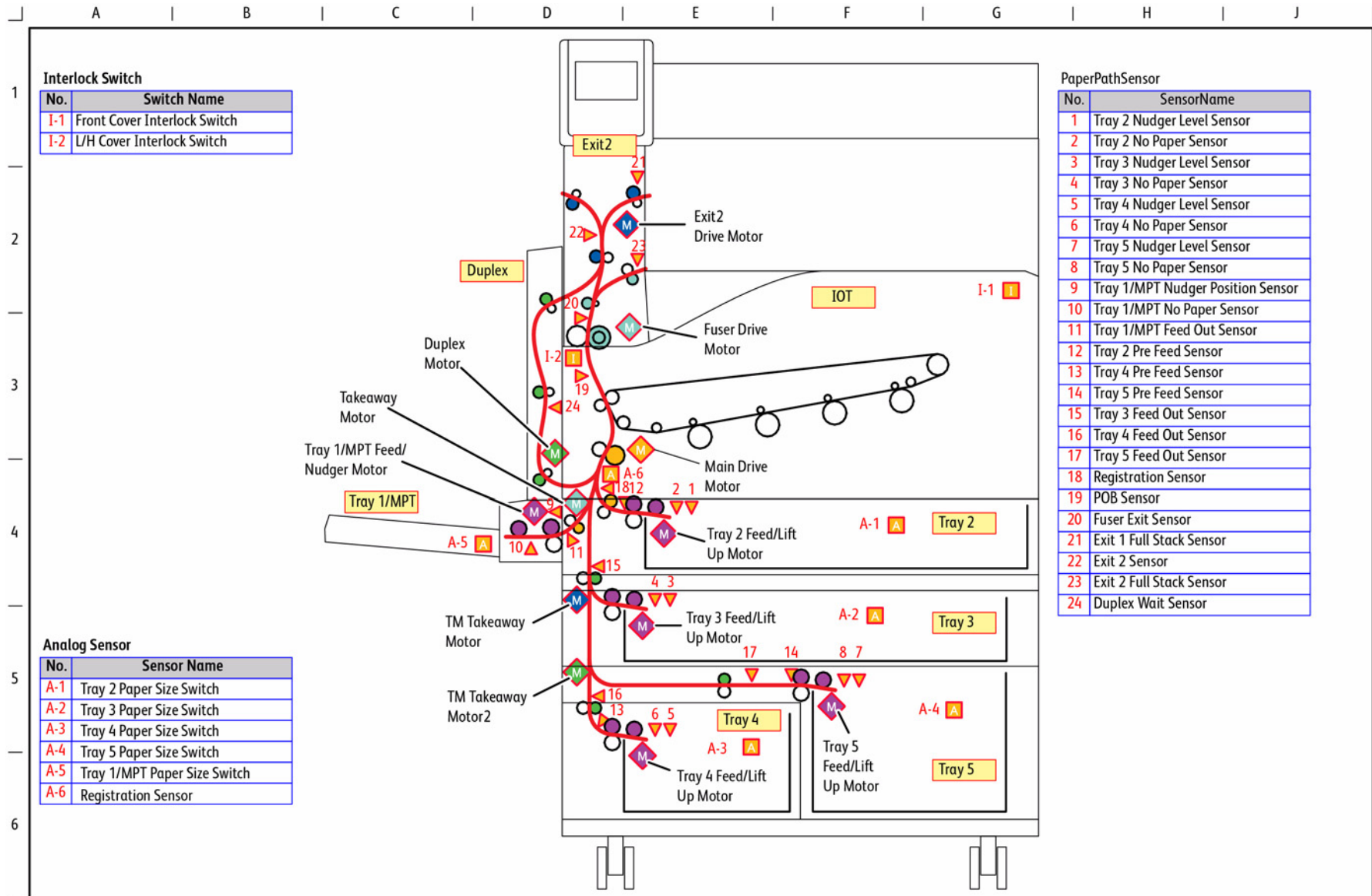
BSD 8.8 Paper Path (3TM)



s7800-487

Figure 7 Paper Path (3TM)

BSD 8.10 Paper Path (TTM)

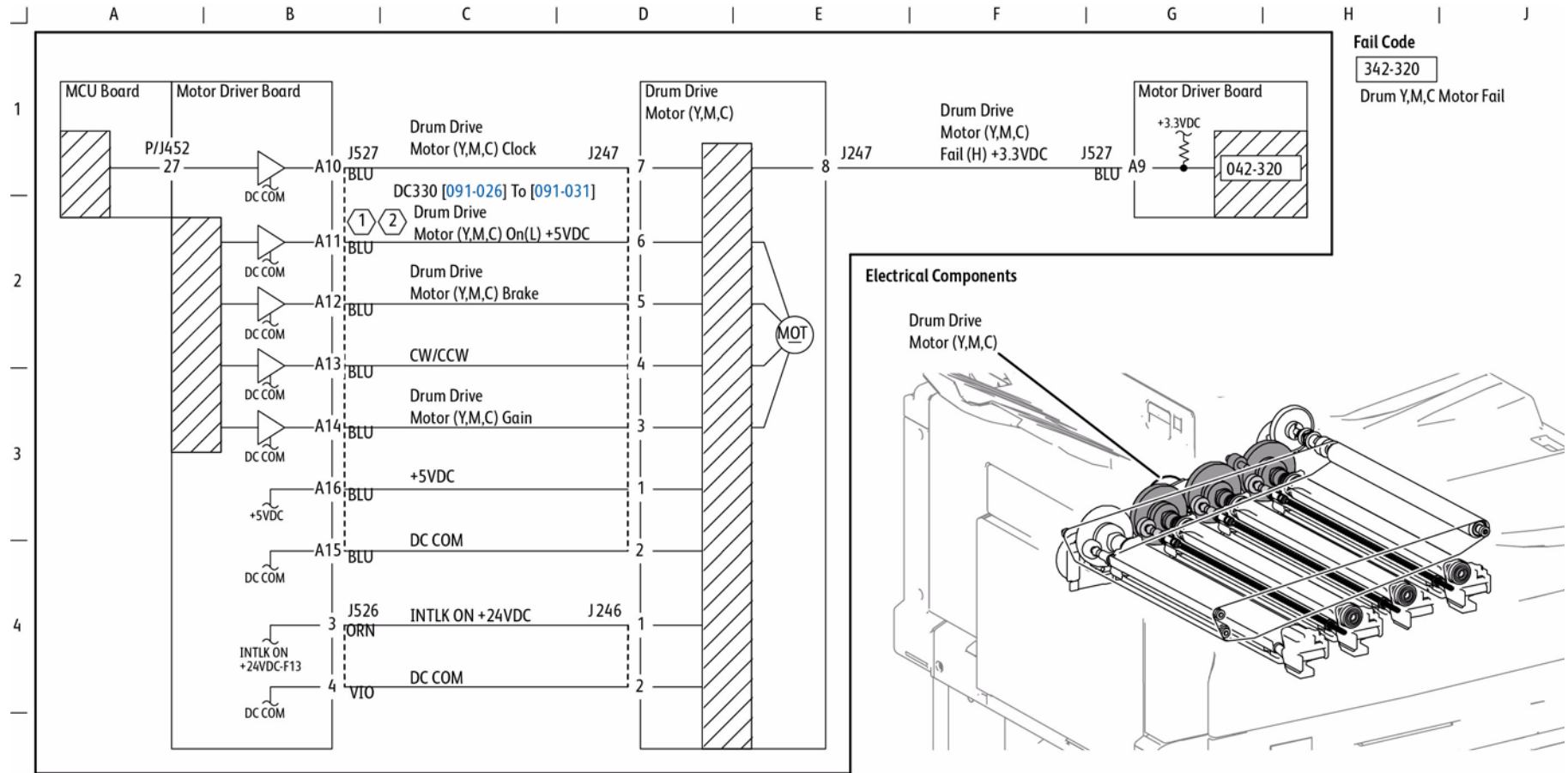


s7800-488

Figure 8 Paper Path (TTM)

Chain 9 Marking

BSD 9.2 Drum Drive Control (Y, M, C)



5 Note:
 ① The operation speed varies depending on the diag code.
 ② The diag codes below drive Drum/Deve Drive Motor (Y/M/C), Drum/Deve Drive Motor (K) and IBT Drive Motor simultaneously.

Drum Drive Motor (Y,M,C)	Operation Speed
DC330[091-027]	121mm/sec (Speed 1)
DC330[091-028]	175mm/sec (Speed 1)
DC330[091-029]	200mm/sec (Speed 1)
DC330[091-030]	79mm/sec (Speed 1)
DC330[091-031]	121mm/sec (Reverse)

Complex Diagnostics	Operation Speed
DC330[091-015]	121mm/sec (Speed 1)
DC330[091-016]	175mm/sec (Speed 1)
DC330[091-017]	200mm/sec (Speed 1)
DC330[091-018]	79mm/sec (Speed 1)
DC330[091-019]	121mm/sec (Reverse)

s7800-489

Figure 1 Drum Drive Control (Y, M, C)

BSD 9.3 Deve Drive Control (Y, M, C)

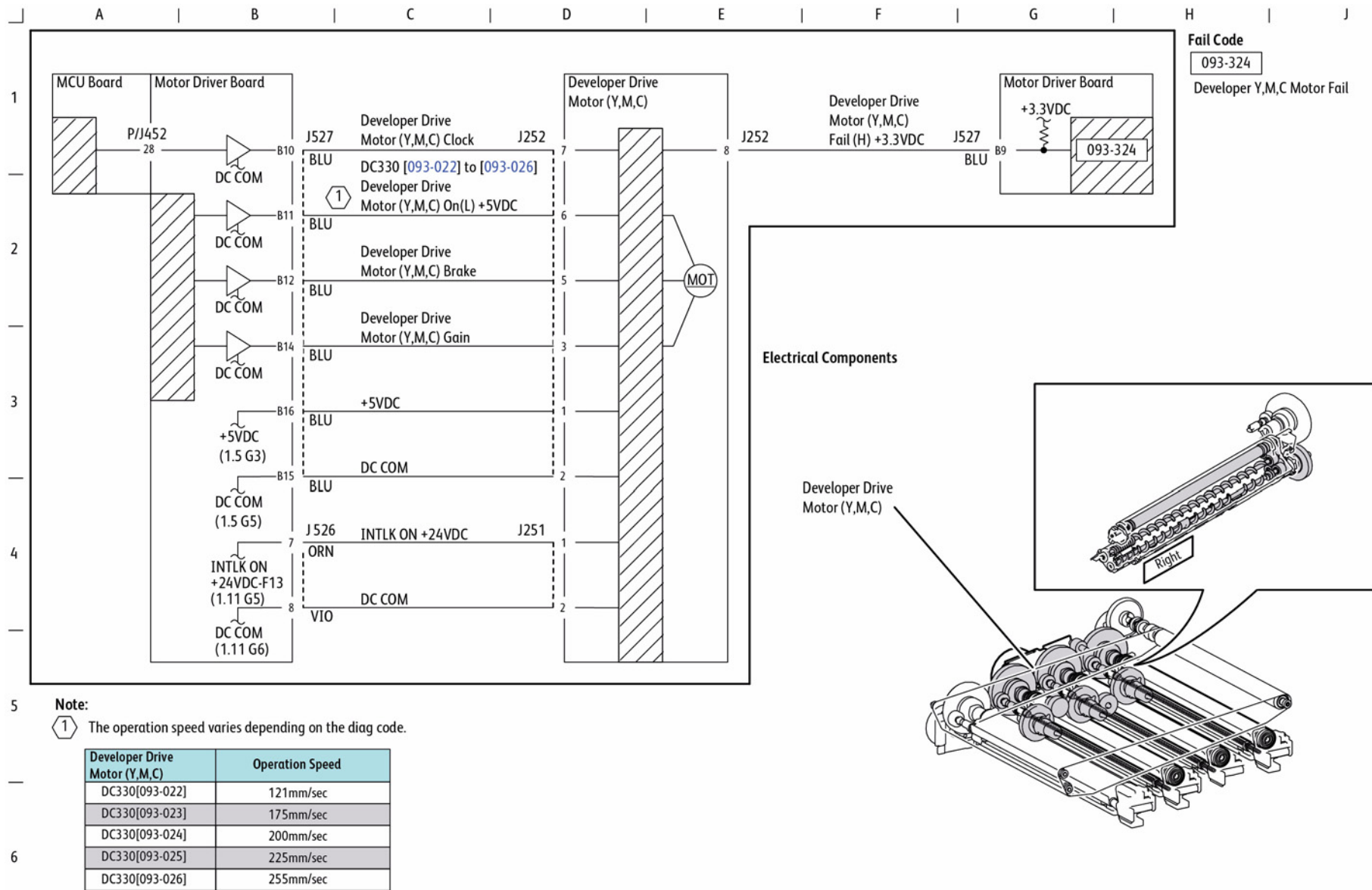
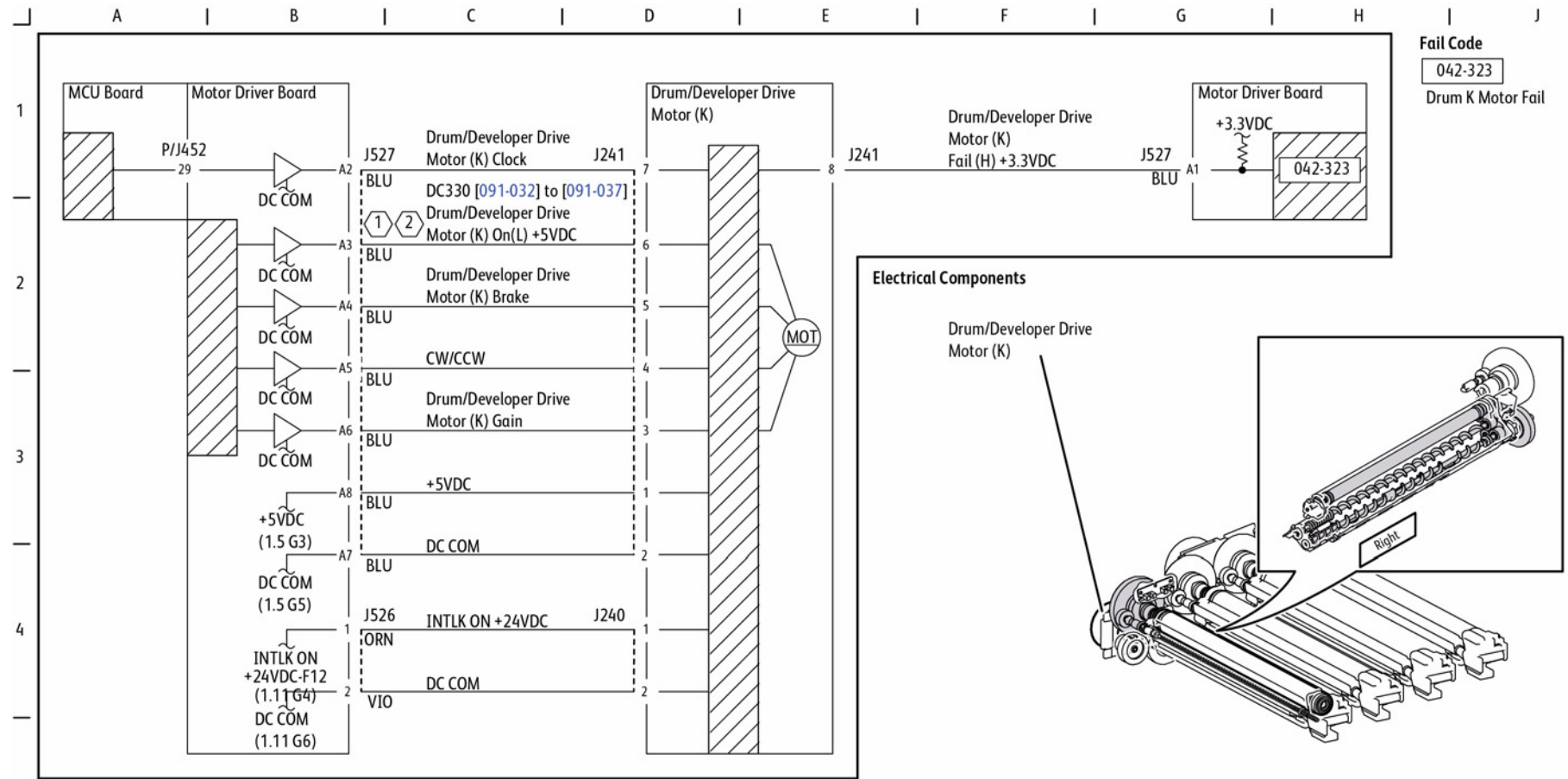


Figure 2 Deve Drive Control (Y, M, C)

s7800-490

BSD 9.4 Drum/Deve Drive Control (K)



5 Note:

① The operation speed varies depending on the diag code.

Drum/Developer Drive Motor (K)	Operation Speed
DC330[091-033]	121mm/sec (Speed 1)
DC330[091-034]	175mm/sec (Speed 1)
DC330[091-035]	200mm/sec (Speed 1)
DC330[091-036]	255mm/sec (Speed 1)
DC330[091-037]	121mm/sec (Reverse)

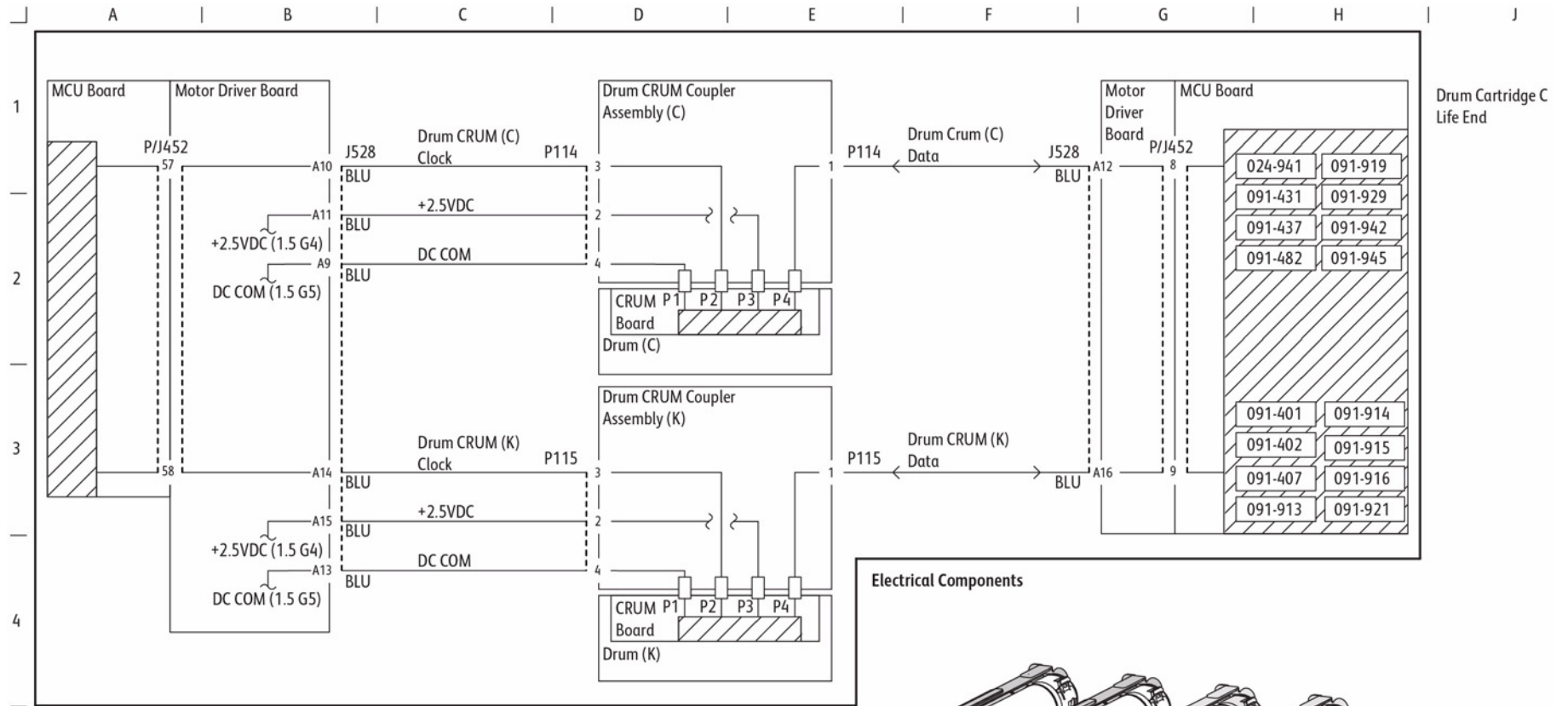
② The diag codes below drive Drum/Deve Drive Motor (K) and IBT Drive Motor simultaneously.

Complex Diagnostics	Operation Speed
DC330[091-021]	121mm/sec (Speed 1)
DC330[091-022]	175mm/sec (Speed 1)
DC330[091-023]	200mm/sec (Speed 0)
DC330[091-024]	255mm/sec (Speed 2)
DC330[091-025]	121mm/sec (Reverse)

s7800-491

Figure 3 Drum/Deve Drive Control (K)

BSD 9.5 Drum Life Control (Y, M)



Fail Code			
024-941	091-437	091-916	091-945
Drum Cartridge C Life End	Drum C CRUM Trouble Info	Drum CRUM K Data Mismatch	Drum CRUM C Data Mismatch
091-401	091-482	091-919	
Drum Cartridge K Near Life	Drum Cartridge C Life Over	Drum CRUM C Communication Fail	
091-402	091-913	091-921	
Drum Cartridge K Life Over	Drum Cartridge K Life End	Drum CRUM K Not In Position	
091-407	091-914	091-929	
Drum K CRUM Trouble Info	Drum CRUM K Communication Fail	Drum CRUM C Not In Position	
091-431	091-915	091-942	
Drum Cartridge C Near Life	Drum CRUM K Data Broken	Drum CRUM C Data Broken	

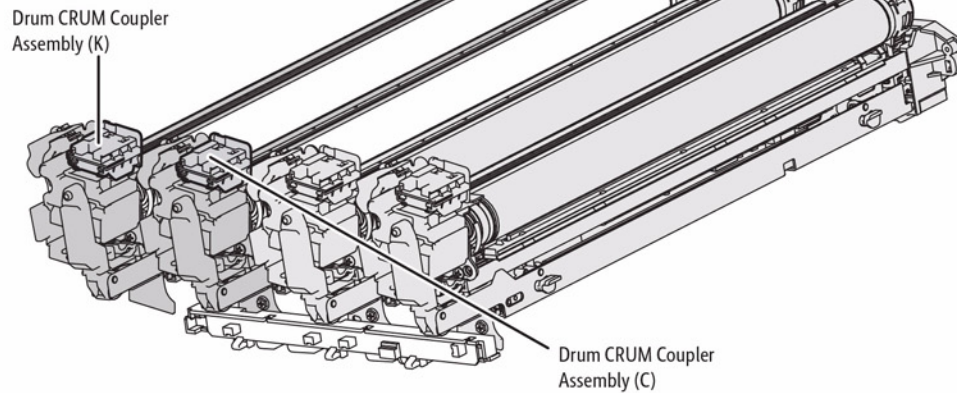
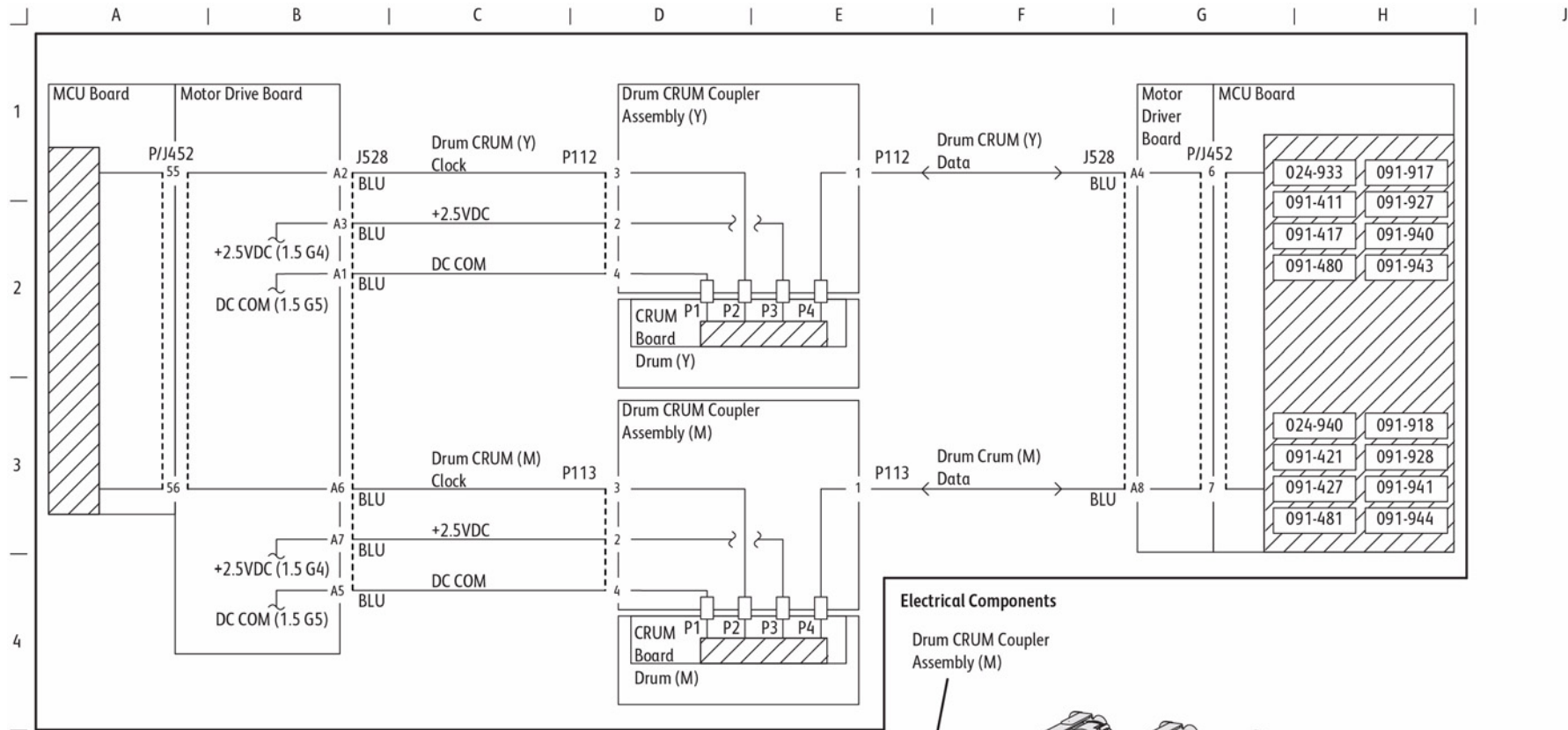


Figure 4 Drum Life Control (Y, M)

BSD 9.6 Drum Life Control (C, K)



Fail Code

024-933
Drum Cartridge
Y Life End

024-940
Drum Cartridge
M Life End

091-411
Drum Cartridge
Y Near Life

091-417
Drum Y CRUM
Trouble Info

091-421
Drum Cartridge M
Near Life

091-427
Drum M CRUM
Trouble Info

091-480
Drum Cartridge Y
Life Over

091-481
Drum Cartridge M
Life Over

091-917
Drum CRUM Y
Communication Fail

091-918
Drum CRUM M
Communication Fail

091-927
Drum CRUM Y
Not In Position

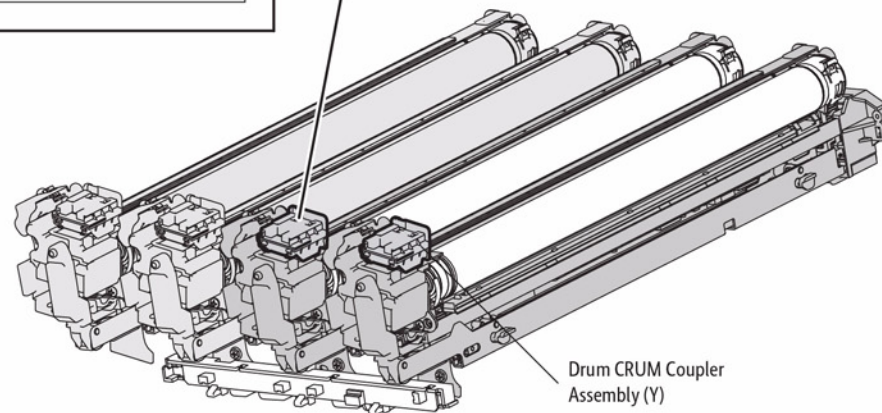
091-928
Drum CRUM M
Not In Position

091-940
Drum CRUM Y
Data Broken

091-941
Drum CRUM M
Data Broken

091-943
Drum CRUM Y
Data Mismatch

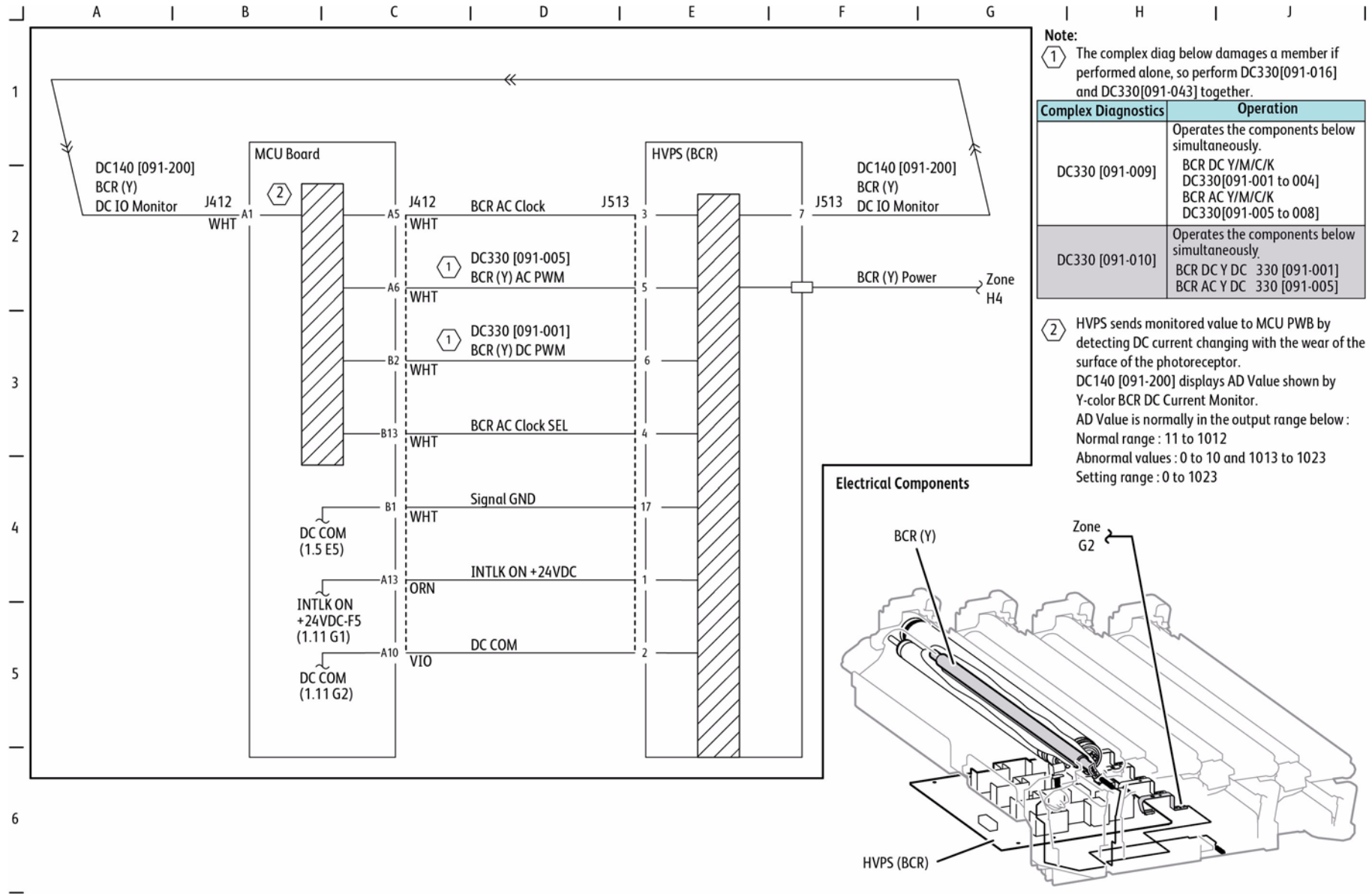
091-944
Drum CRUM M
Data Mismatch



s7800-493

Figure 5 Drum Life Control (C, K)

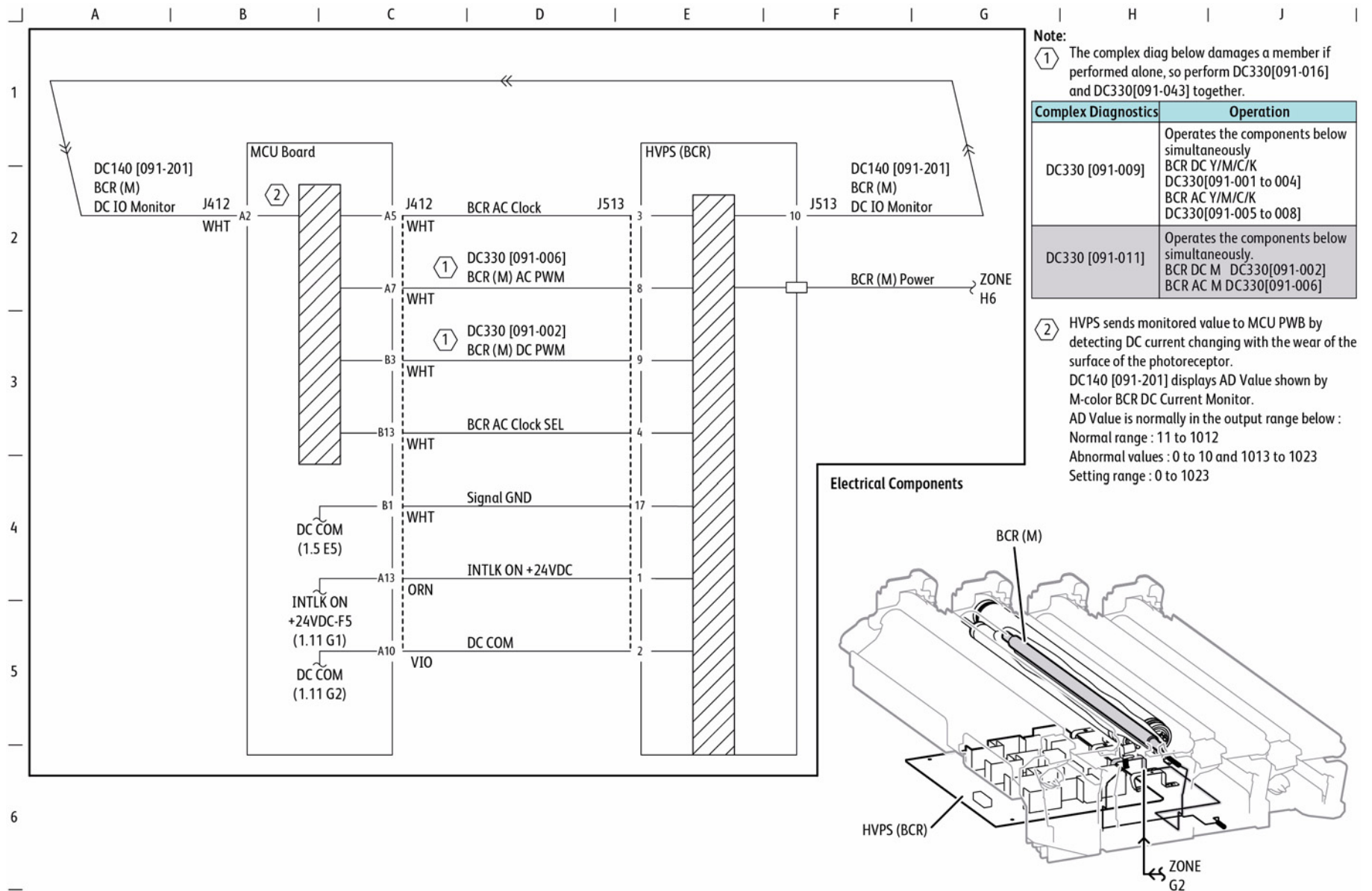
BSD 9.8 Charging and Exposure (Y)



s7800-494

Figure 6 Charging and Exposure (Y)

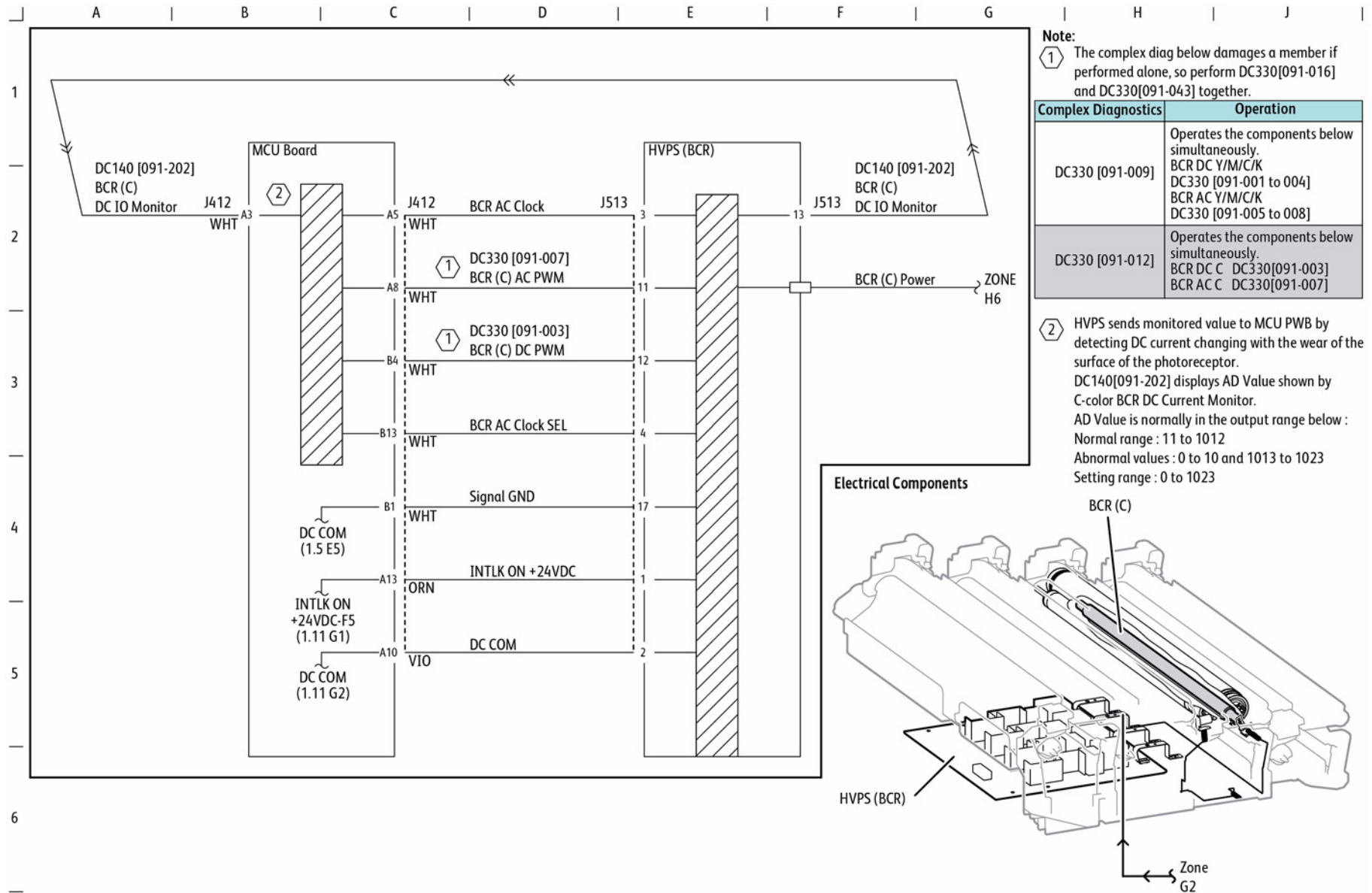
BSD 9.10 Charging and Exposure (M)



s7800-495

Figure 7 Charging and Exposure (M)

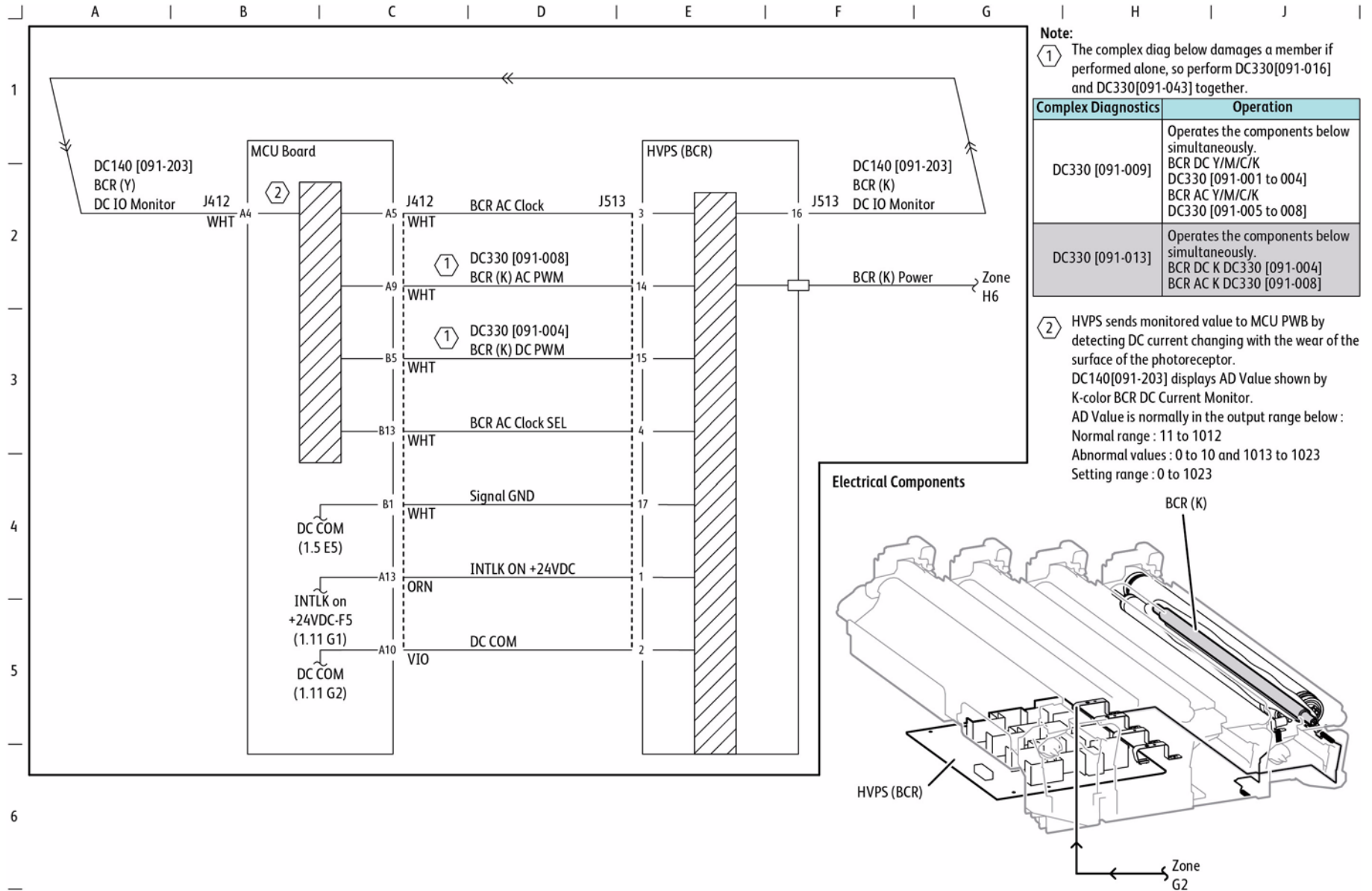
BSD 9.12 Charging and Exposure (C)



s7800-496

Figure 8 Charging and Exposure (C)

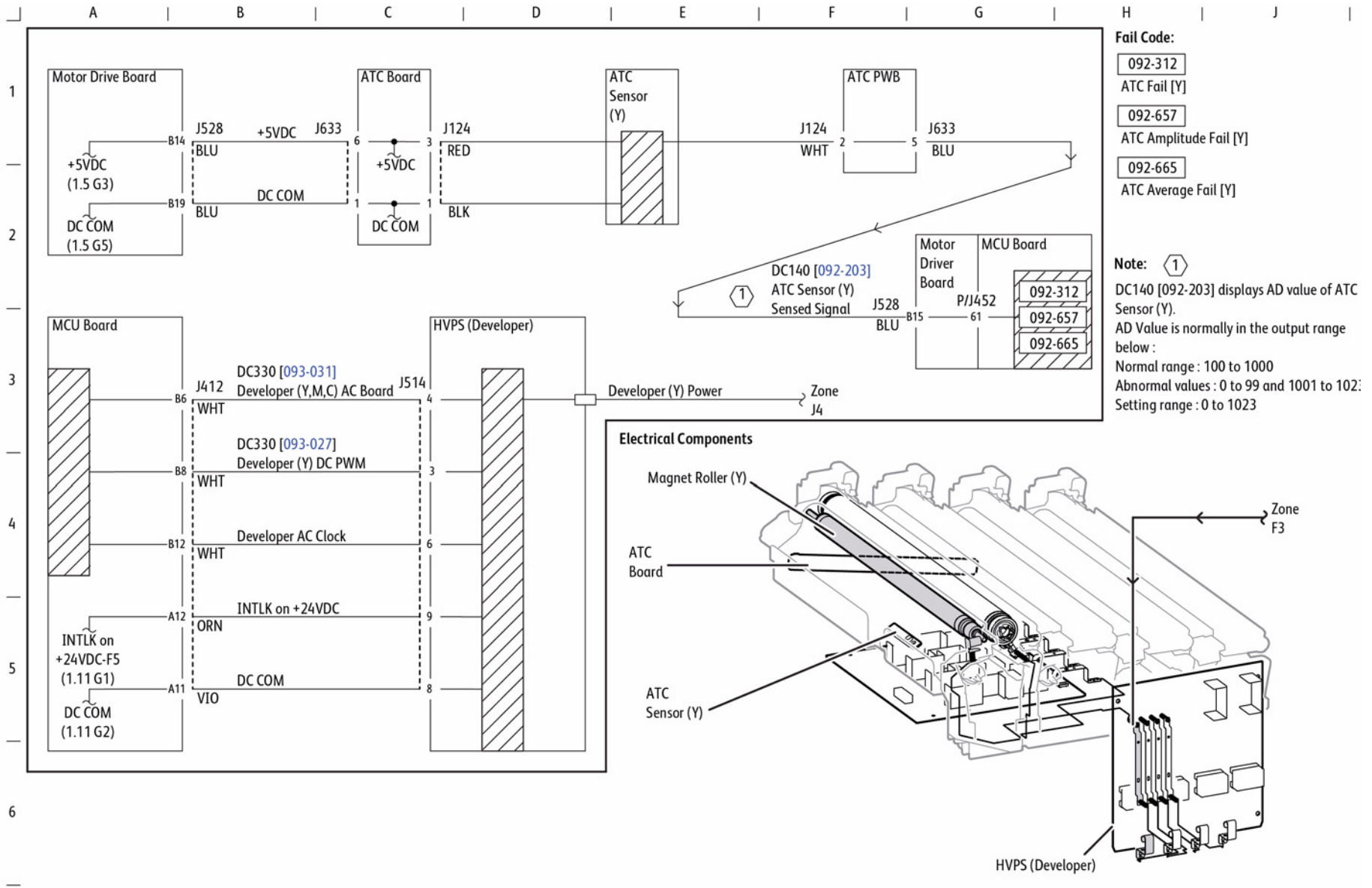
BSD 9.14 Charging and Exposure (K)



s7800-497

Figure 9 Charging and Exposure (K)

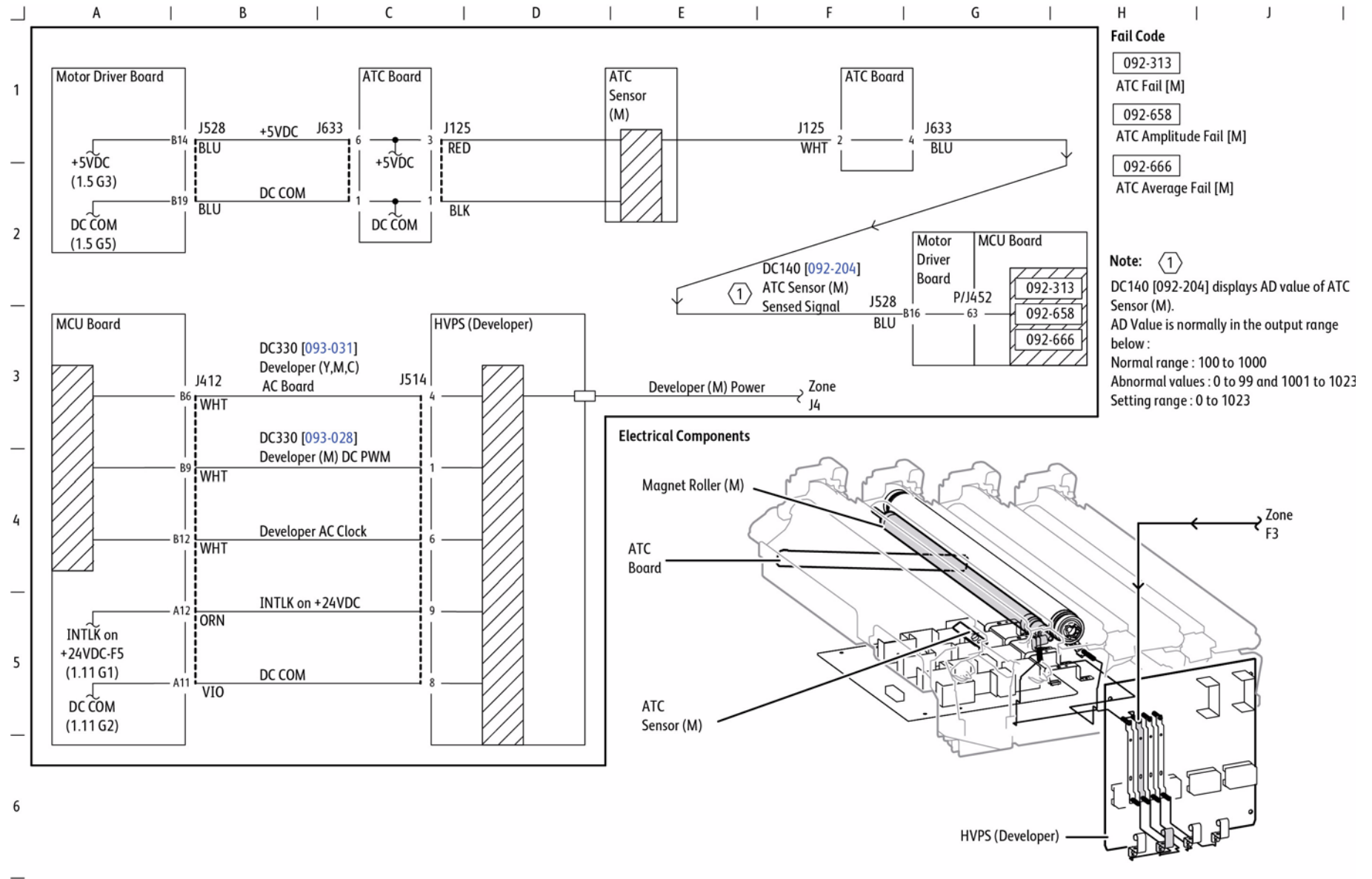
BSD 9.16 Development (Y)



s7800-498

Figure 10 Development (Y)

BSD 9.18 Development (M)



s7800-499

Figure 11 Development (M)

BSD 9.20 Development (C)

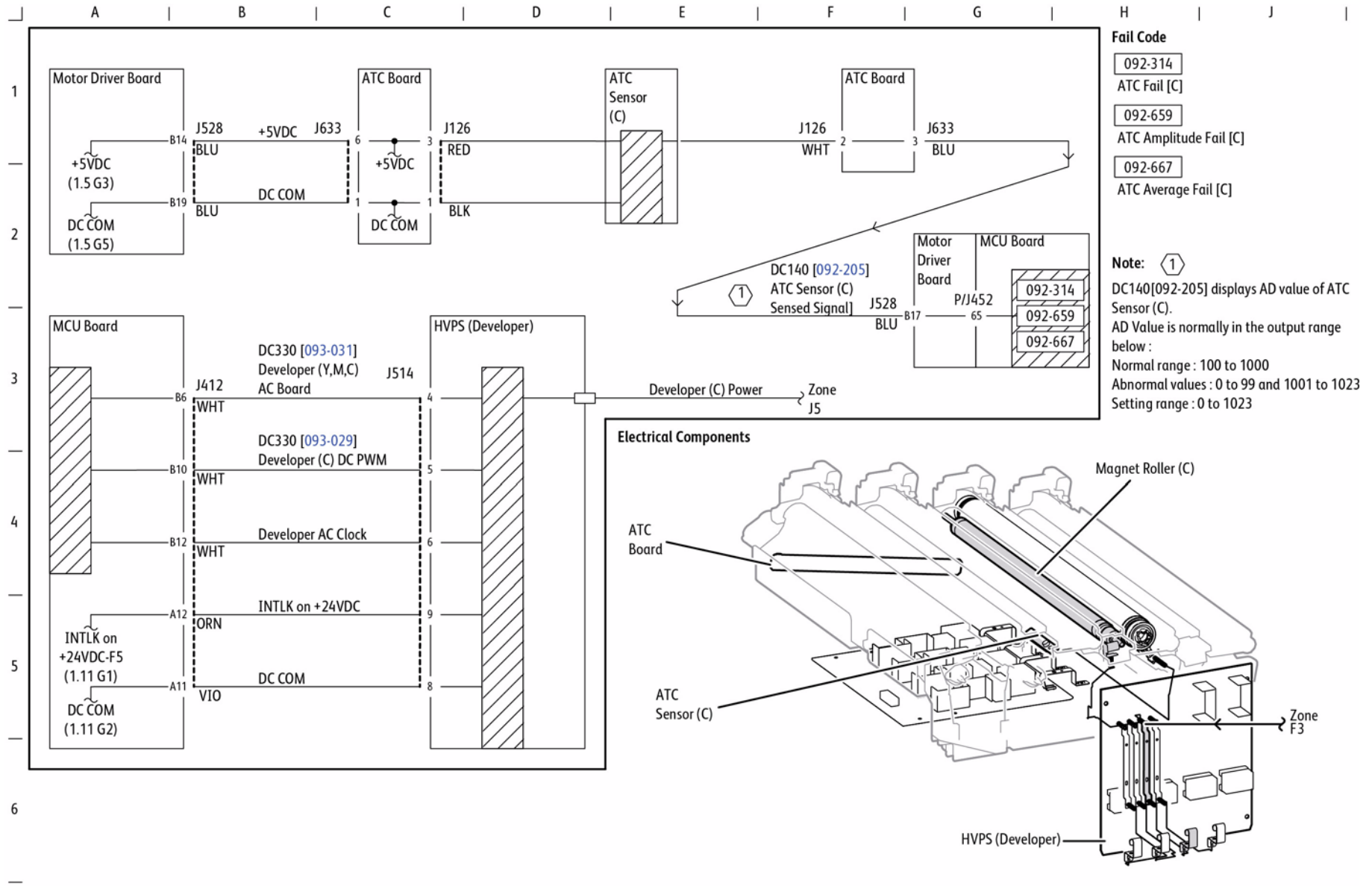
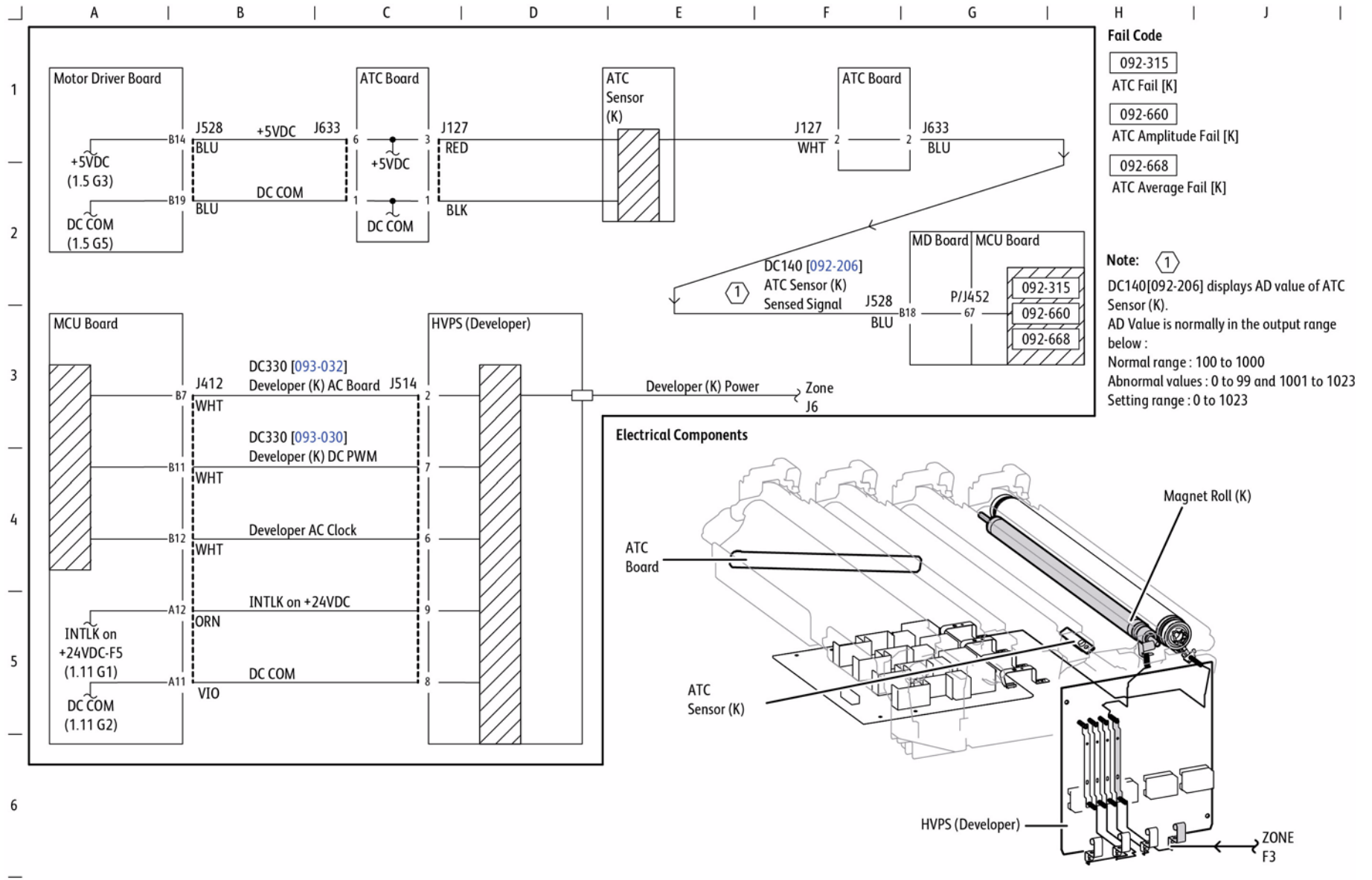


Figure 12 Development (C)

BSD 9.22 Development (K)



s7800-501

Figure 13 Development (K)

BSD 9.23 Toner Cartridge Life Control (Y, M)

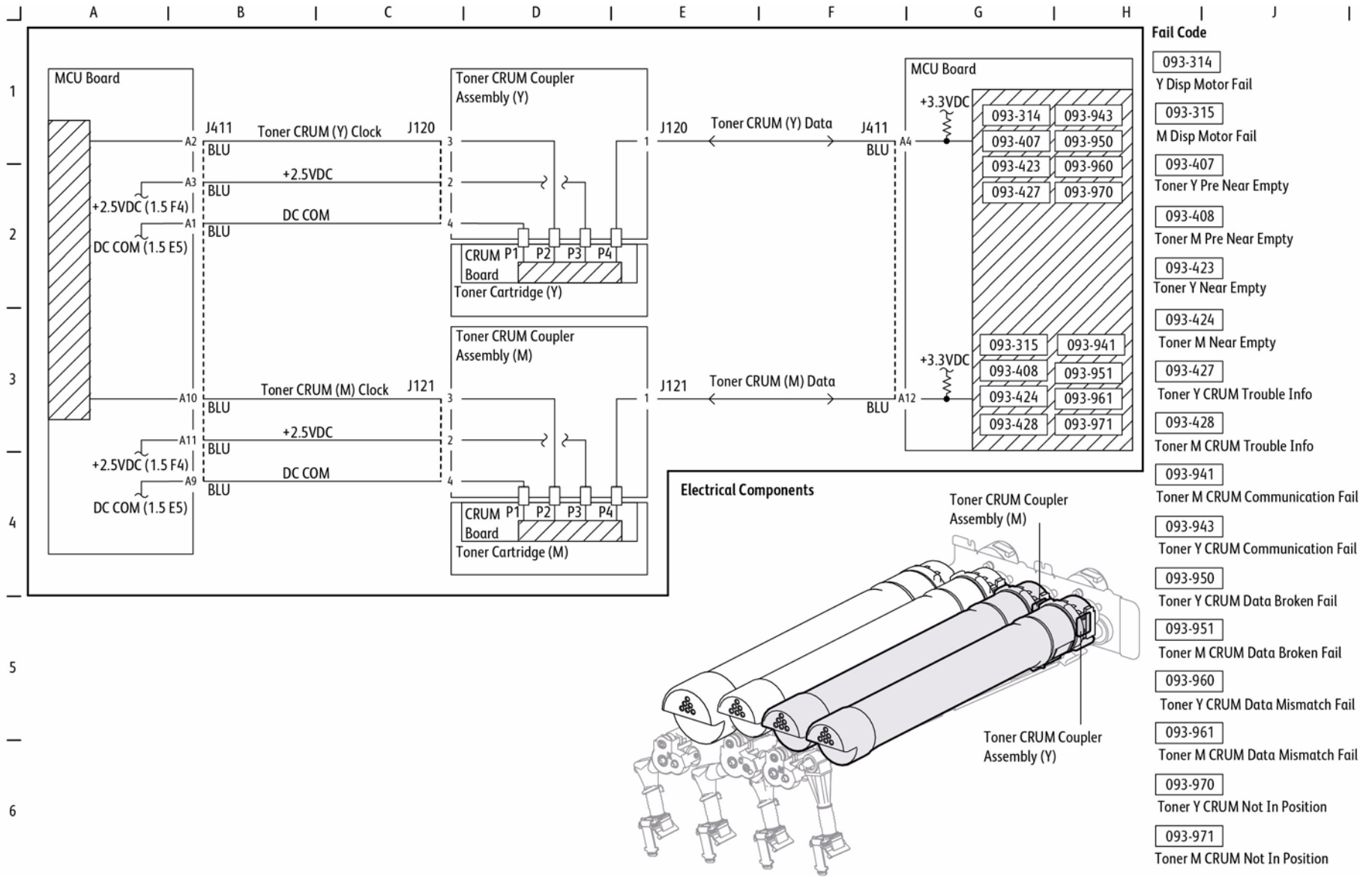


Figure 14 Toner Cartridge Life Control (Y, M)

s7800-502

BSD 9.24 Toner Cartridge Life Control (C, K)

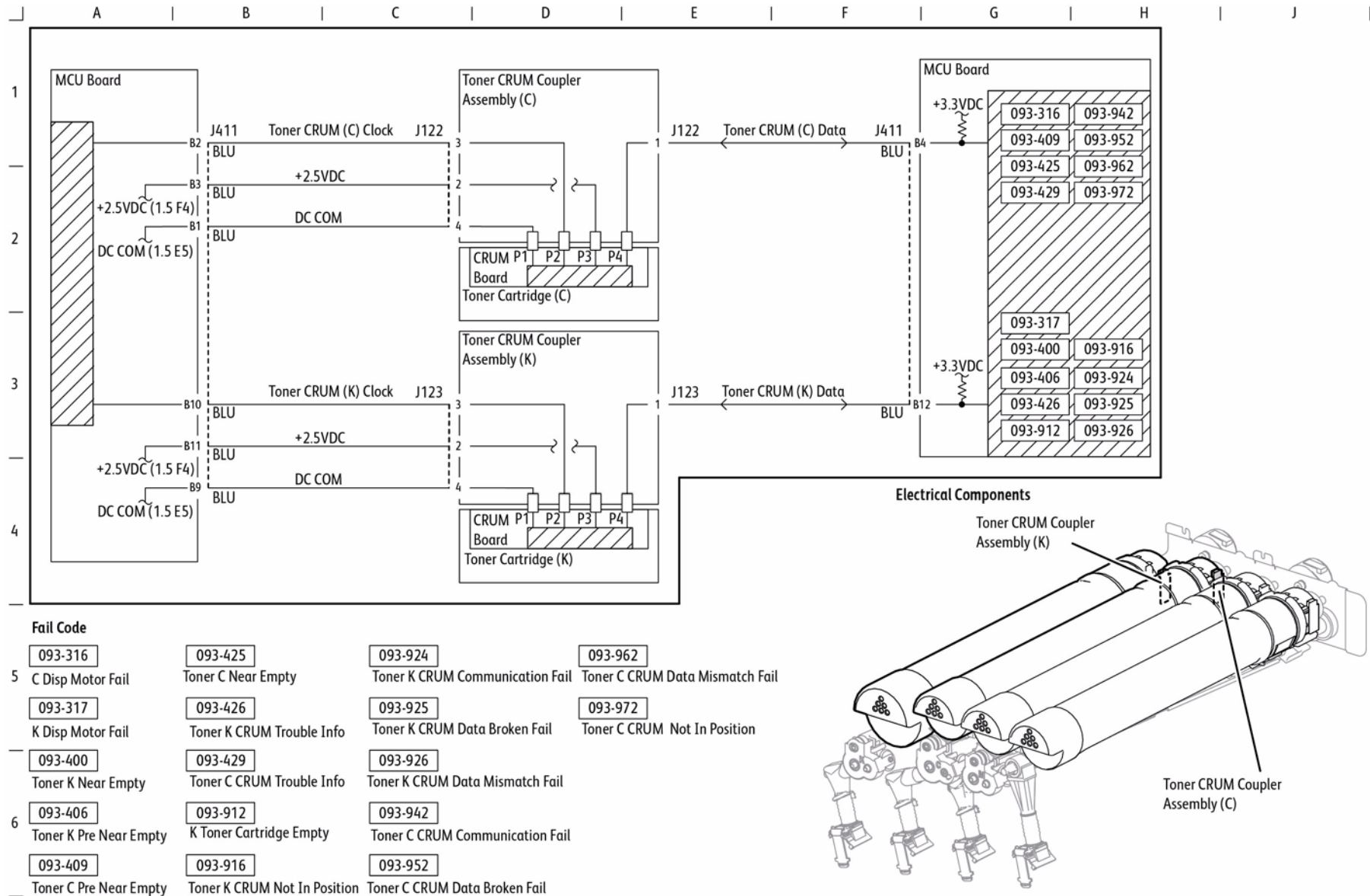
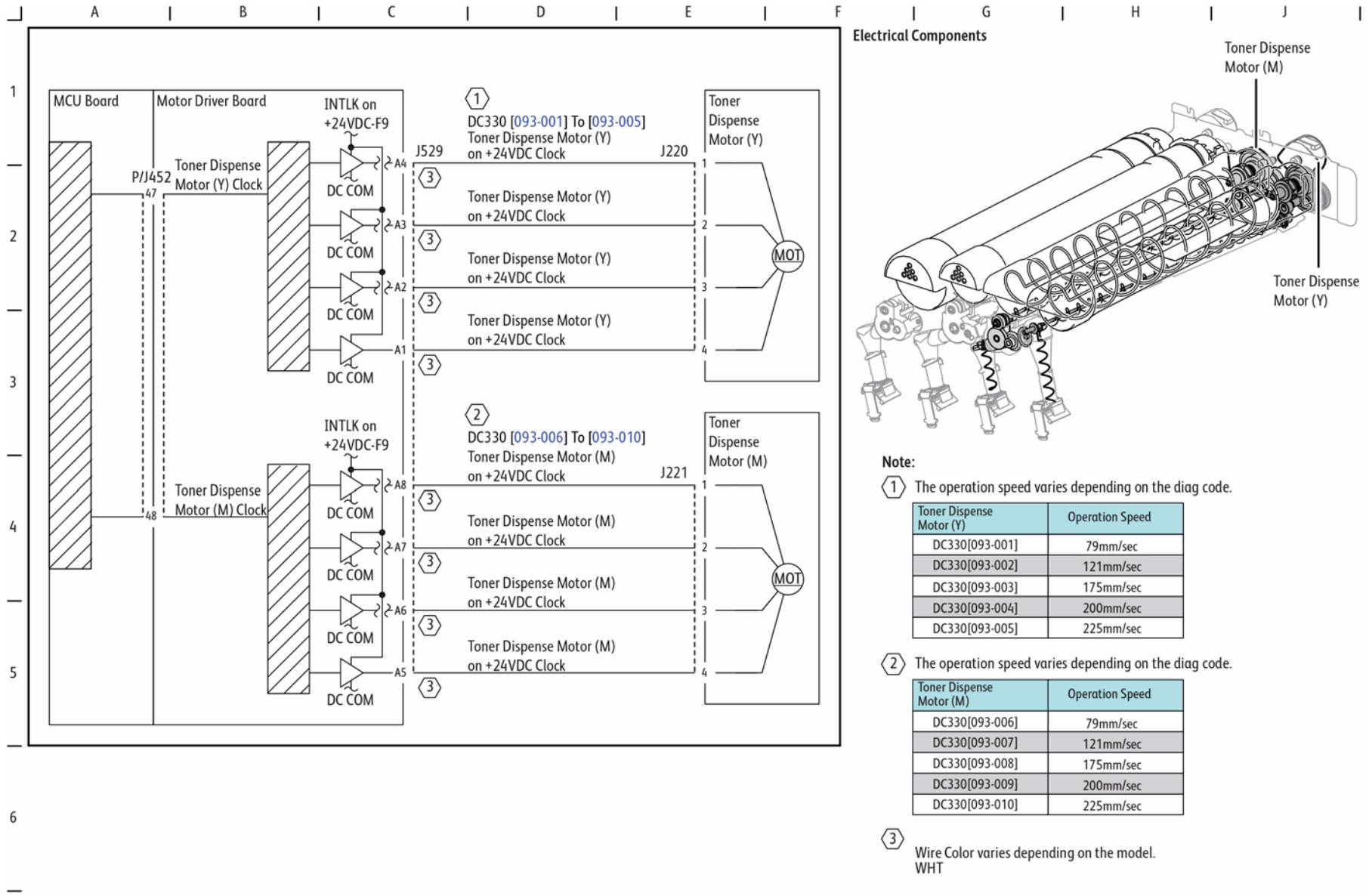


Figure 15 Toner Cartridge Life Control (C, K)

BSD 9.25 Toner Dispense Control (Y, M)



s7800-504

Figure 16 Toner Dispense Control (Y, M)

BSD 9.26 Toner Dispense Control (C, K)

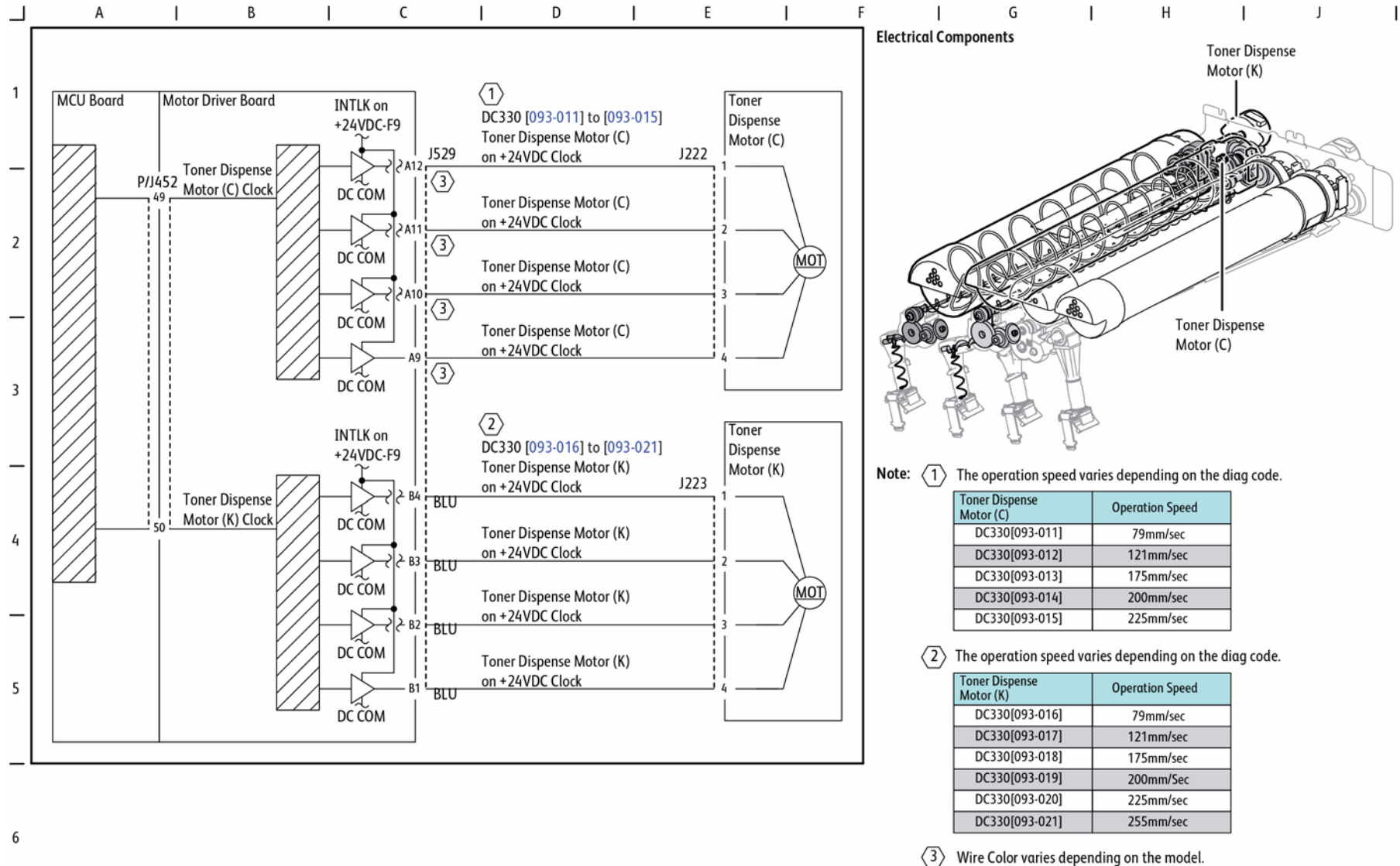
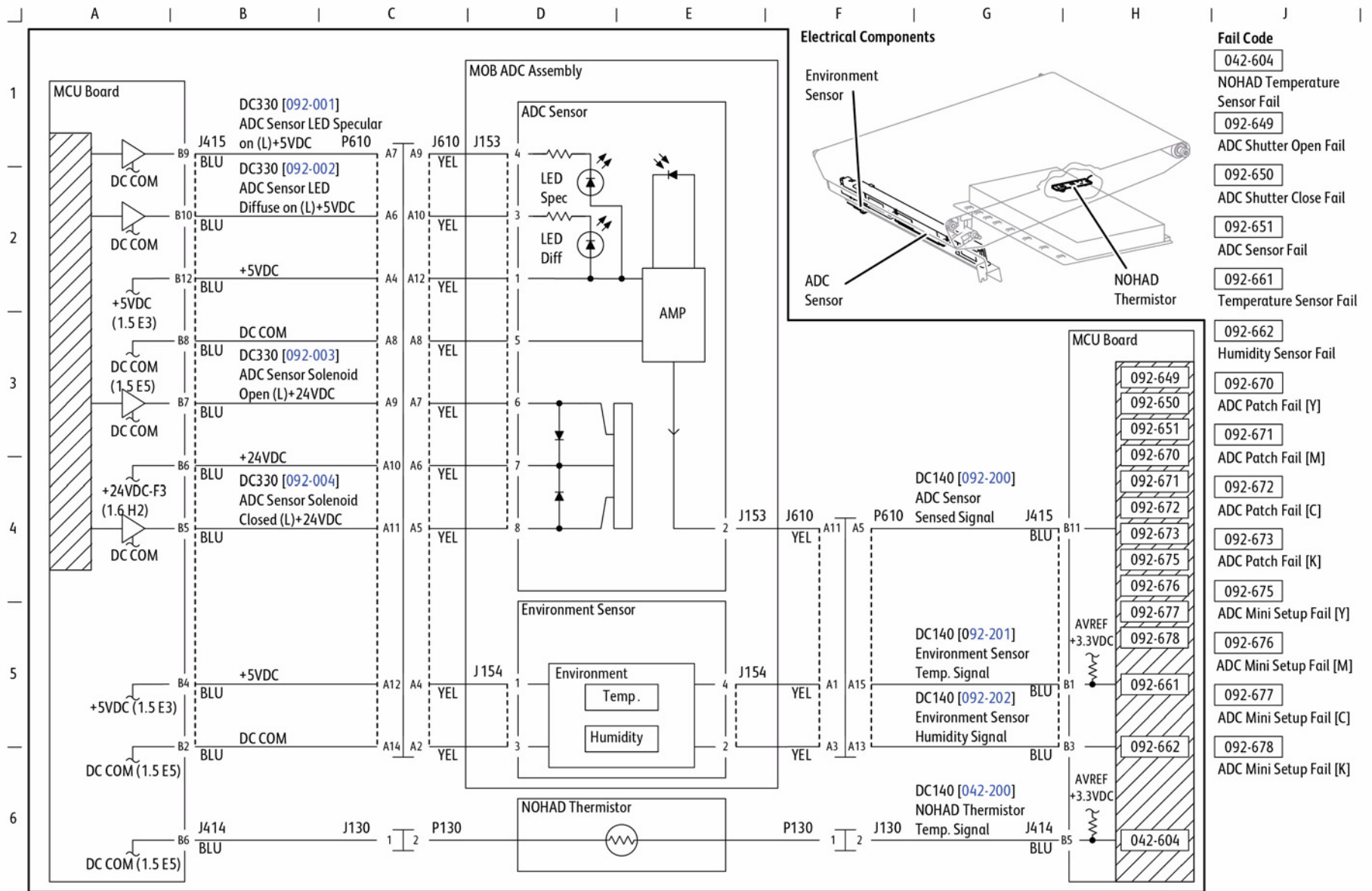


Figure 17 Toner Dispense Control (C, K)

BSD 9.27 ADC and Environment Sensing



s7800-506

Figure 18 ADC and Environment Sensing

BSD 9.28 IBT Drive Control

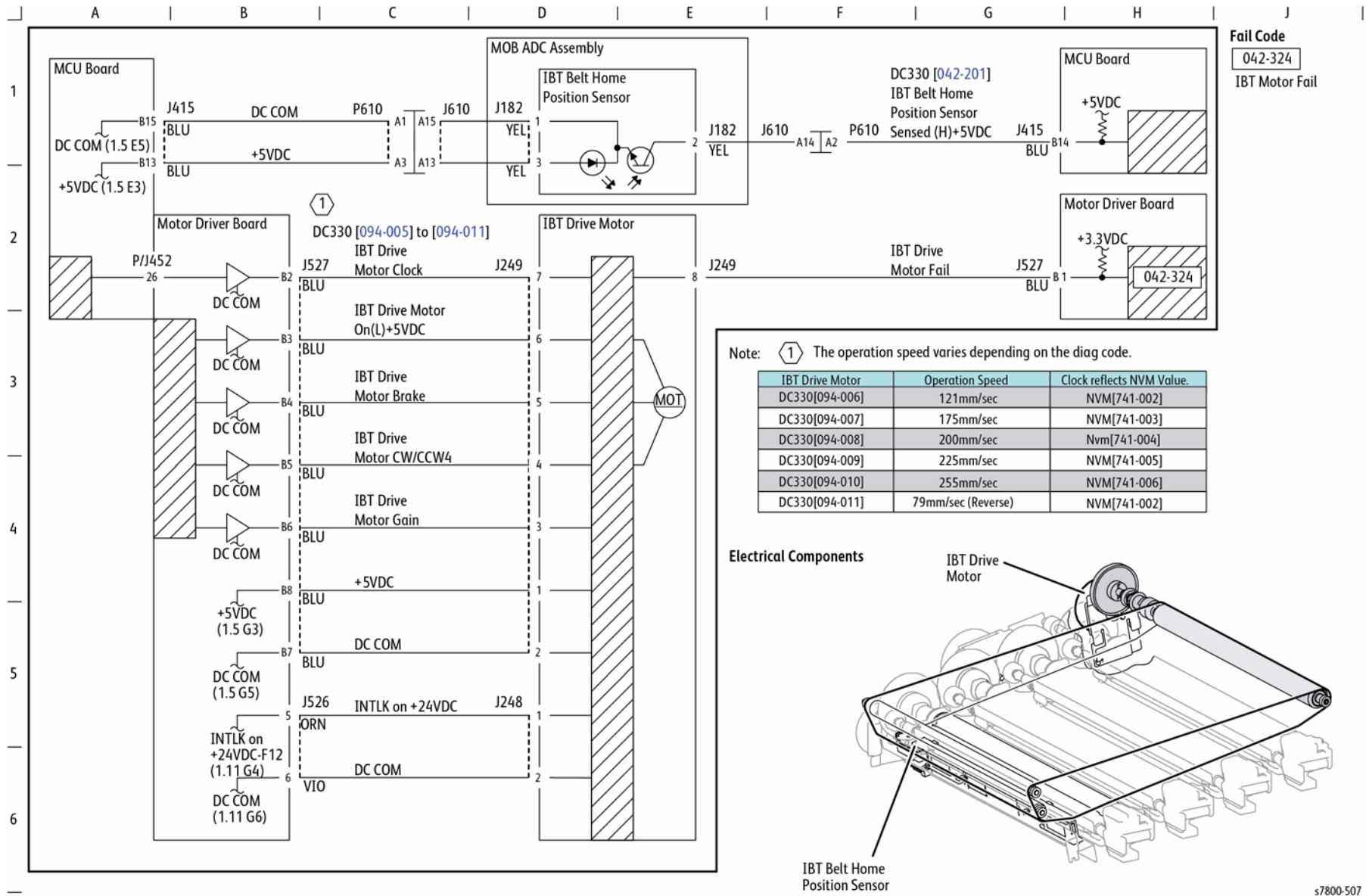


Figure 19 IBT Drive Control

BSD 9.29 1st BTR Contact Retract Control

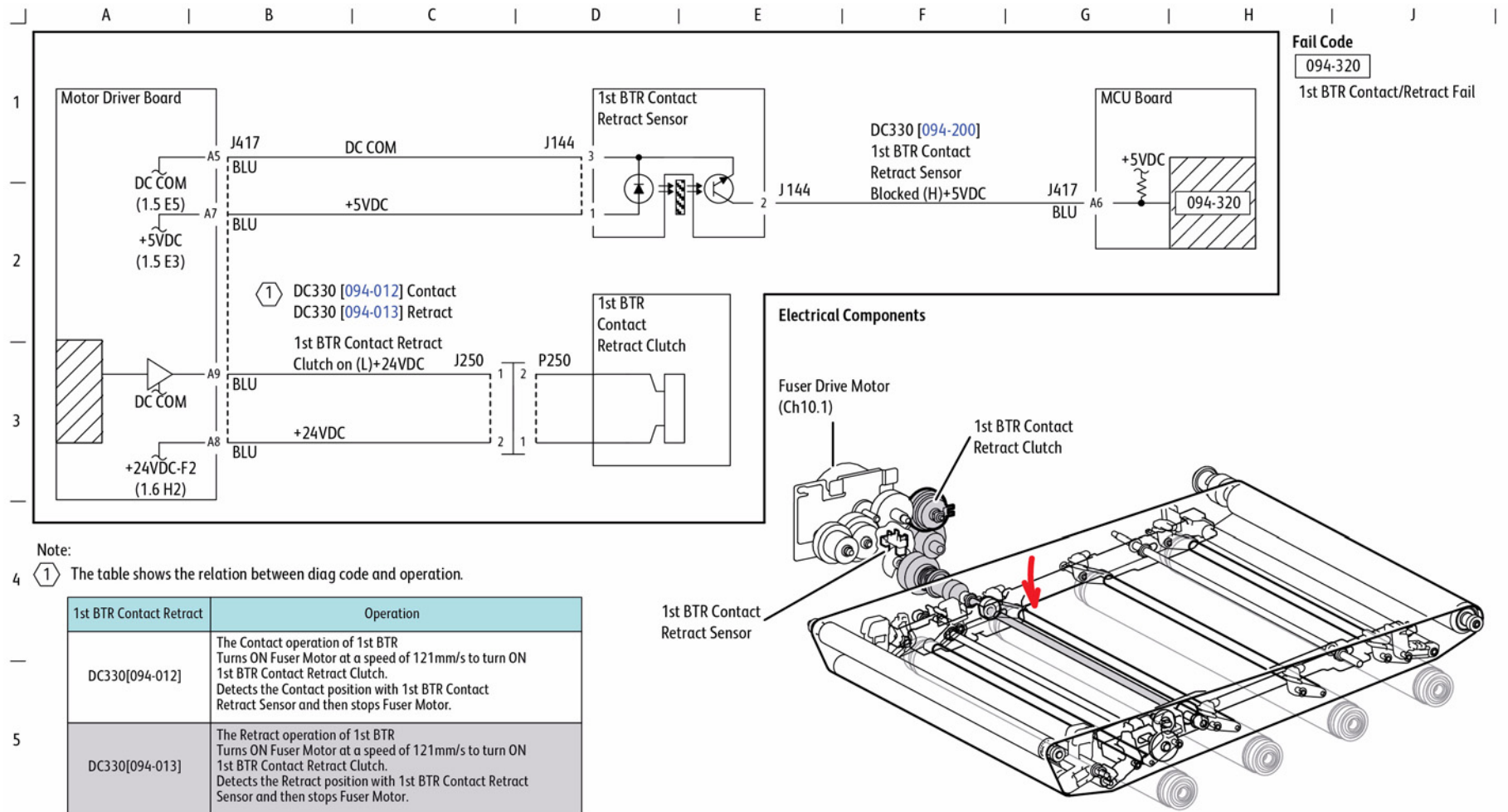
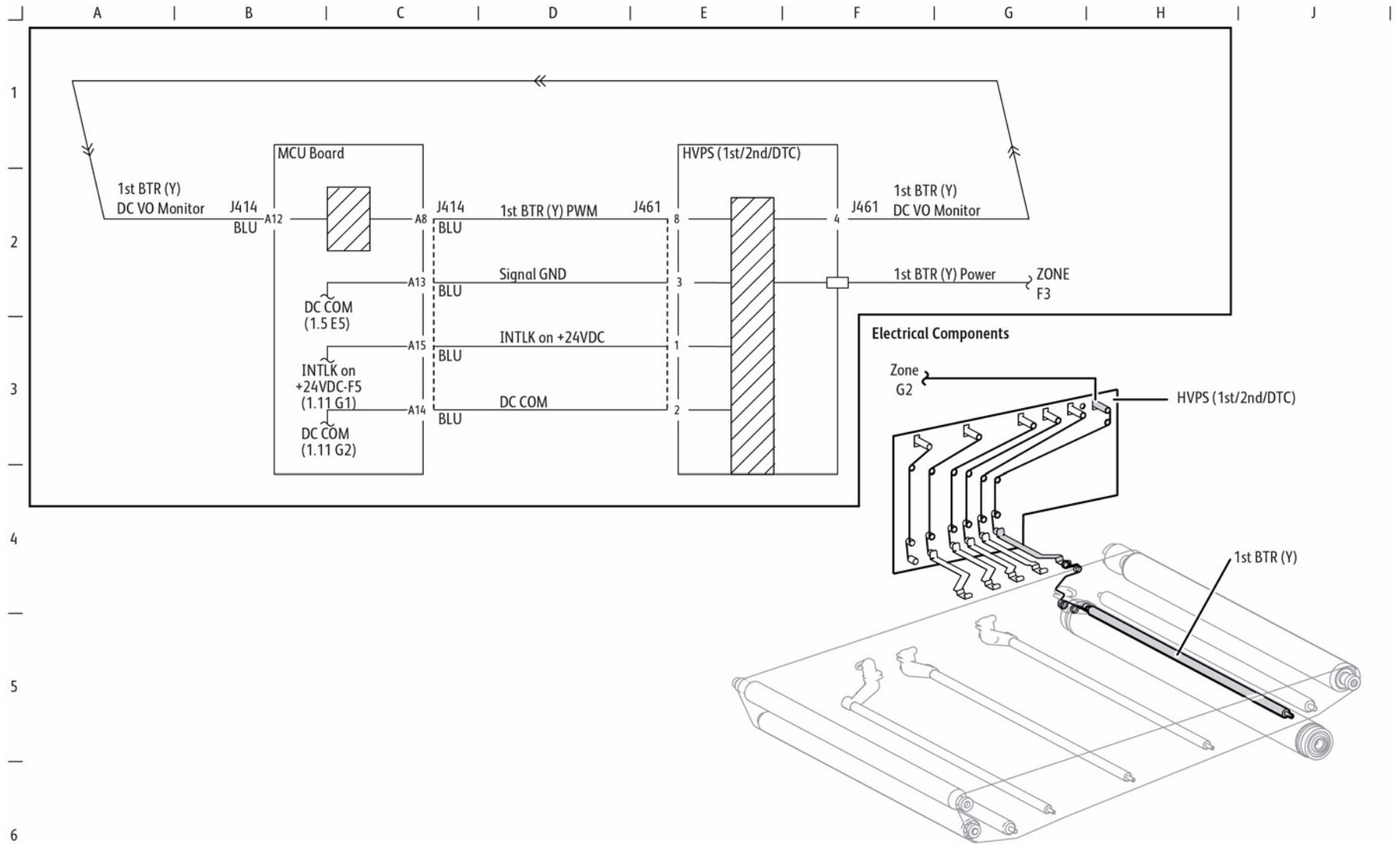


Figure 20 1st BTR Contact Retract Control

s7800-508

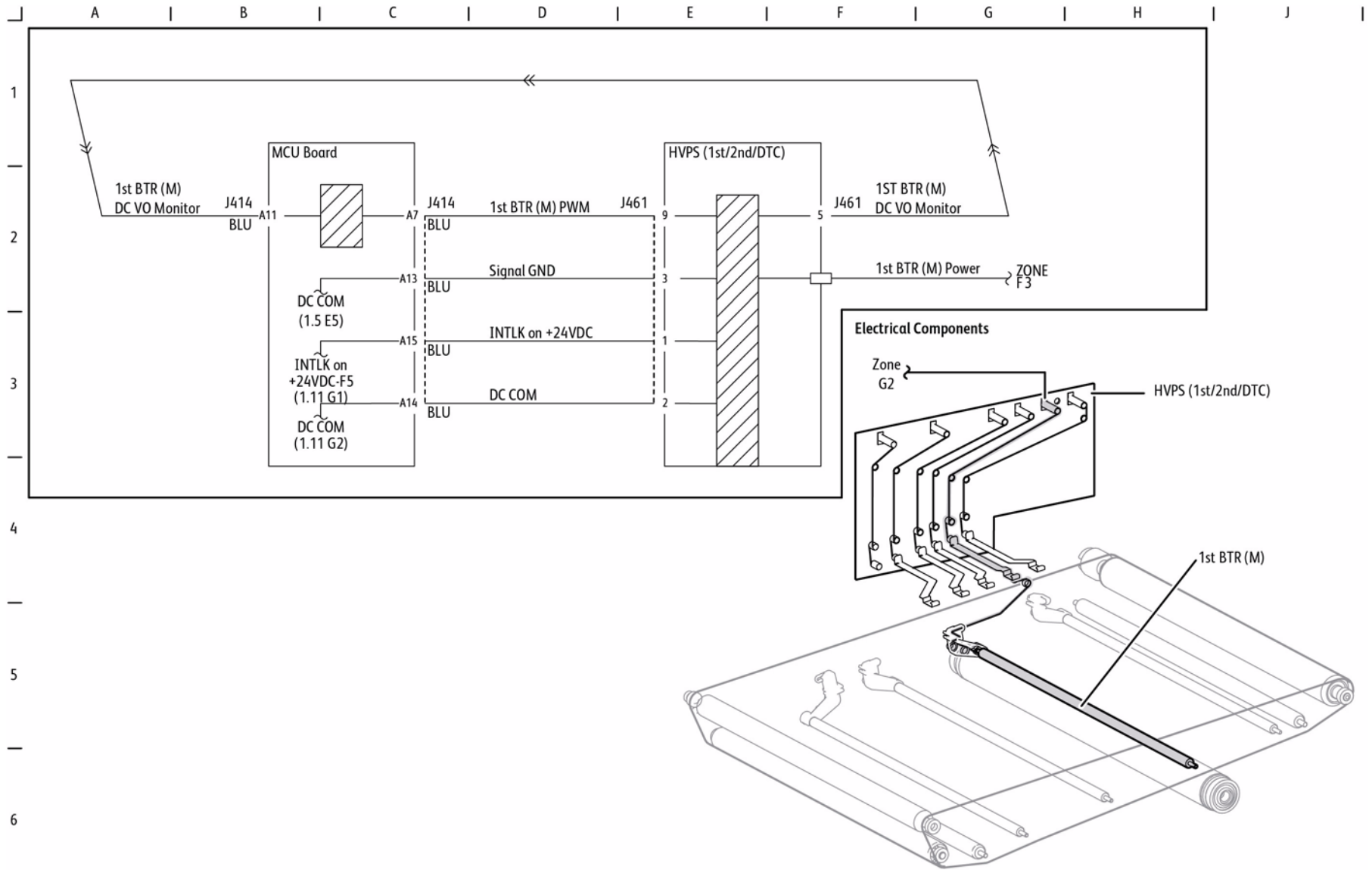
BSD 9.30 Image Transfer to IBT (Y)



s7800-509

Figure 21 Image Transfer to IBT (Y)

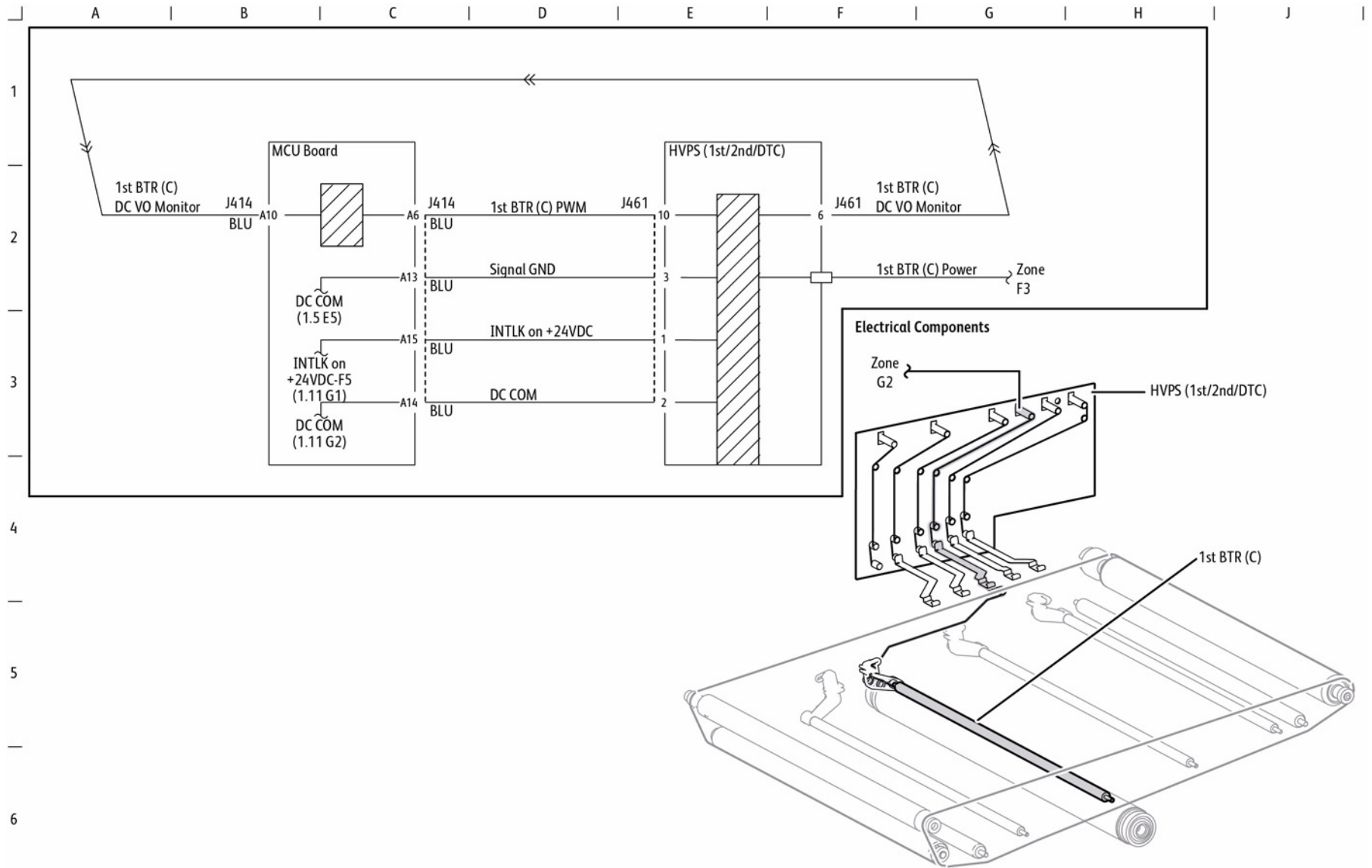
BSD 9.31 Image Transfer to IBT (M)



s7800-509

Figure 22 Image Transfer to IBT (M)

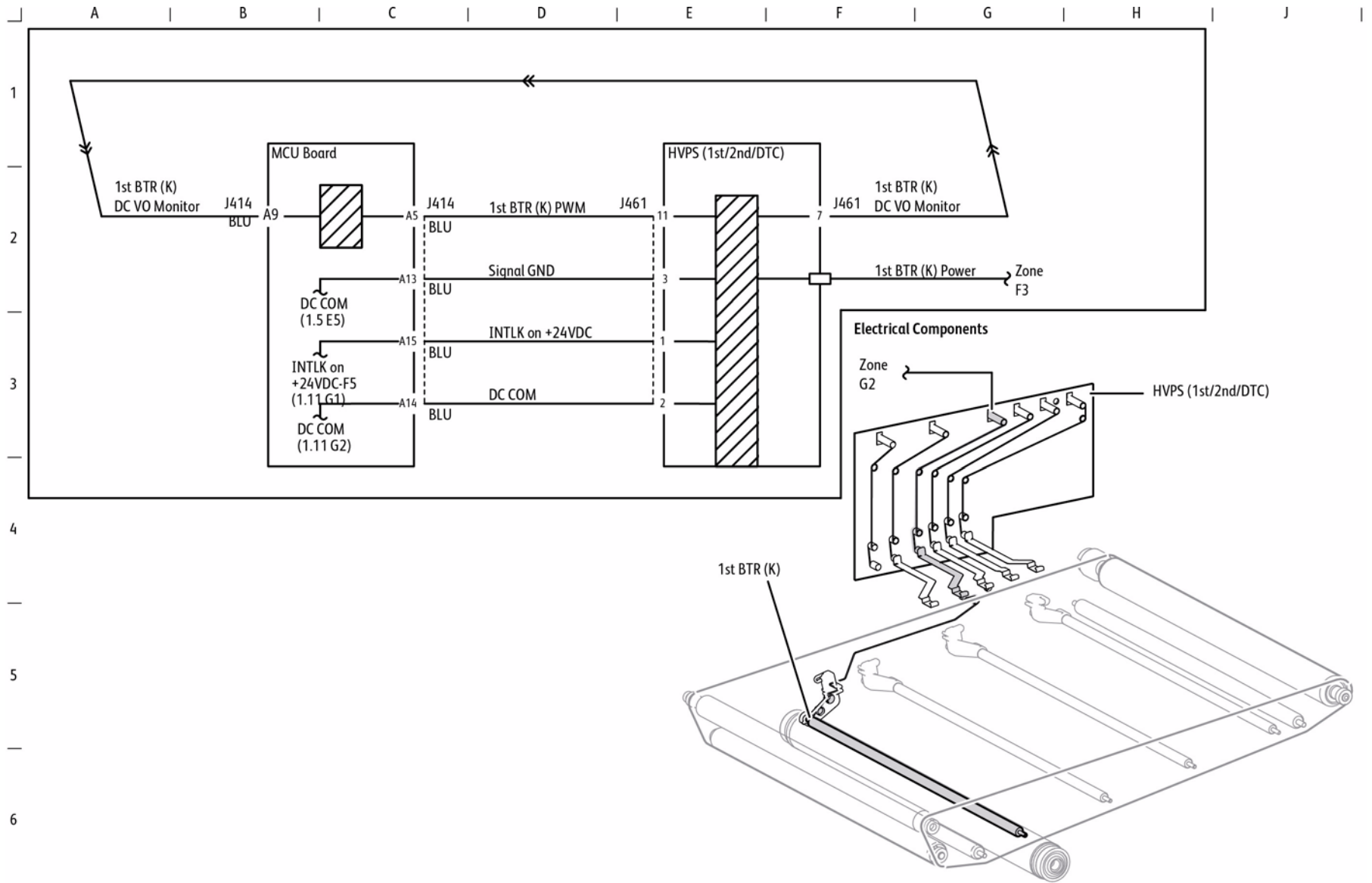
BSD 9.32 Image Transfer to IBT (C)



s7800-511

Figure 23 Image Transfer to IBT (C)

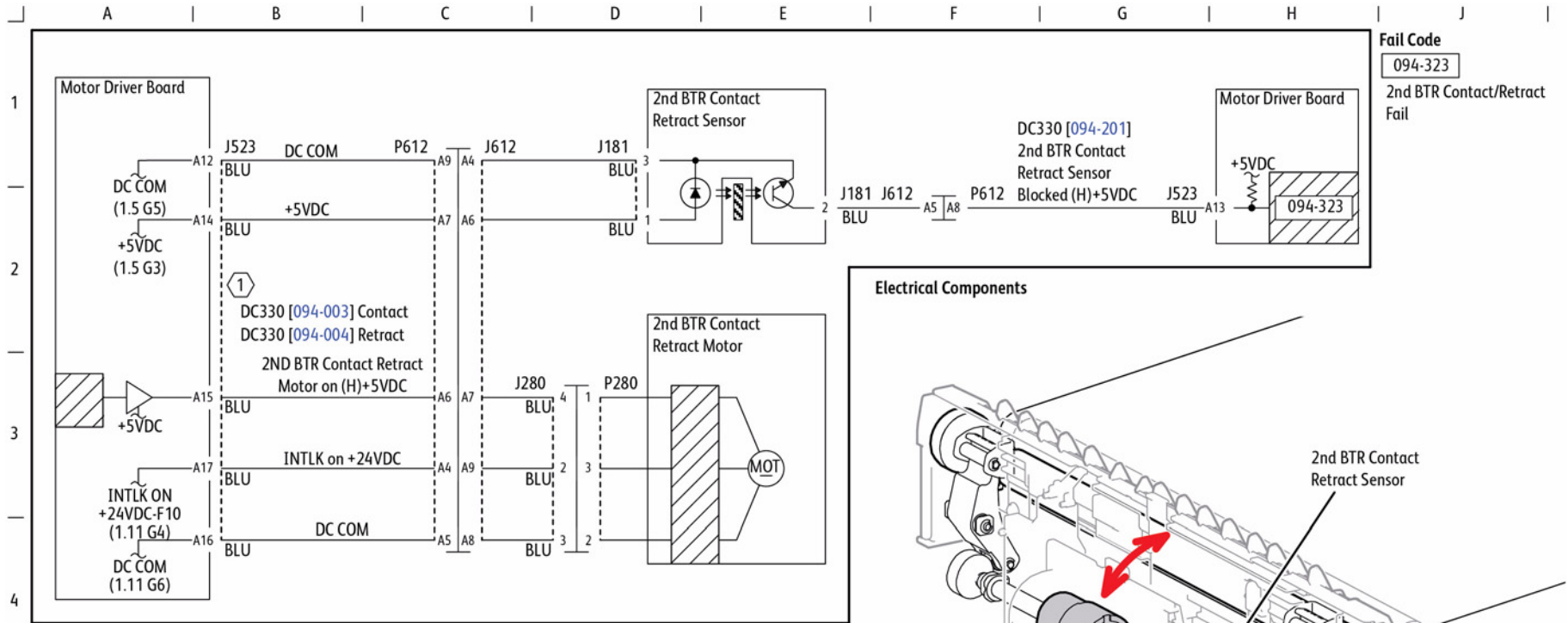
BSD 9.33 Image Transfer to IBT (K)



s7800-512

Figure 24 Image Transfer to IBT (K)

BSD 9.34 2nd BTR Contact Retract Control



Fail Code
094-323
2nd BTR Contact/Retract Fail

NOTE:
① The table shows the relation between diag code and operation.

2nd BTR Contact Retract	Operation
DC330[094-003]	The Contact operation of 2nd BTR Turns ON 2nd BTR Contact Retract Motor at a speed of 121mm/s. Detects the Contact position with 2nd BTR Contact Retract Sensor and then stops 2nd BTR Contact Retract Motor.
DC330[094-004]	The Retract operation of 2nd BTR Turns ON 2nd BTR Contact Retract Motor at a speed of 121mm/s. Detects the Retract position with 2nd BTR Contact Retract Sensor and then stops 2nd BTR Contact Retract Motor.

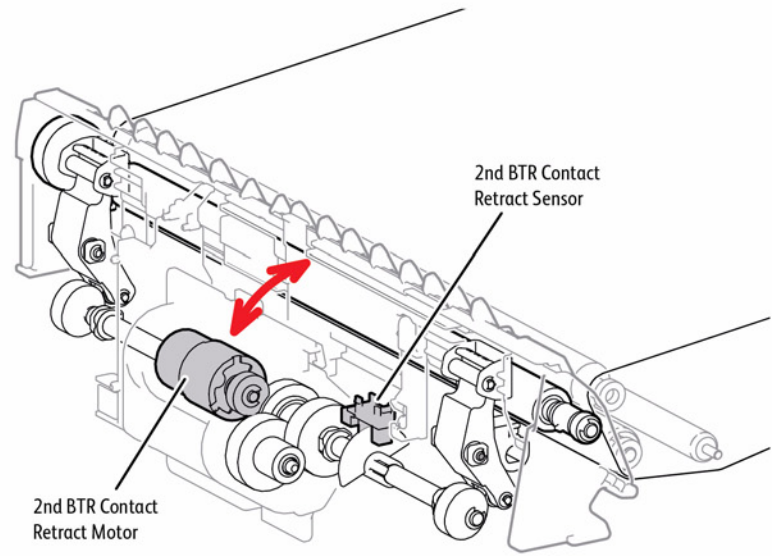
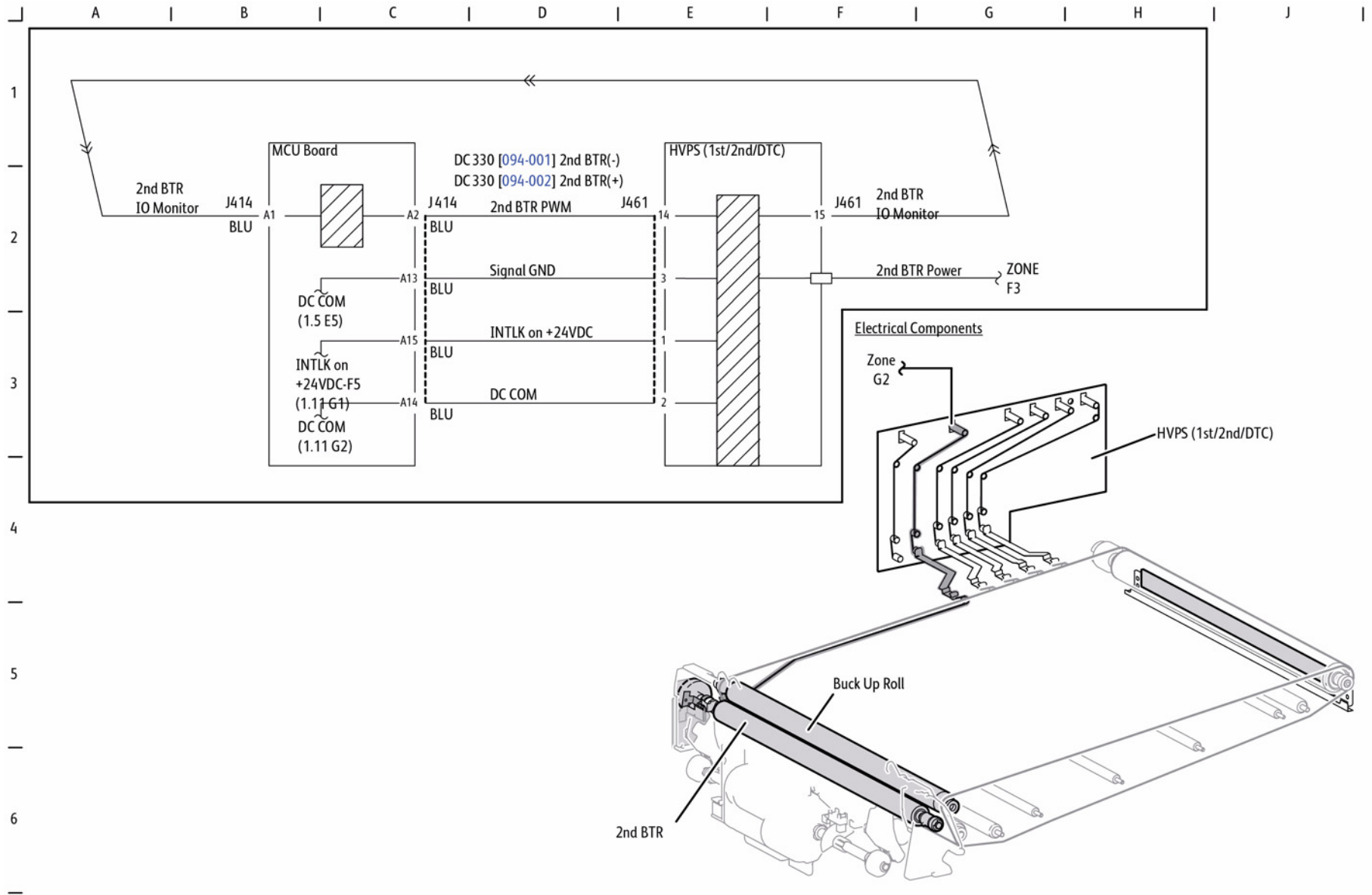


Figure 25 2nd BTR Contact Retract Control

BSD 9.35 Image Tranfer to Paper



s7800-513

Figure 26 Image Transfer to Paper

BSD 9.36 Stripping

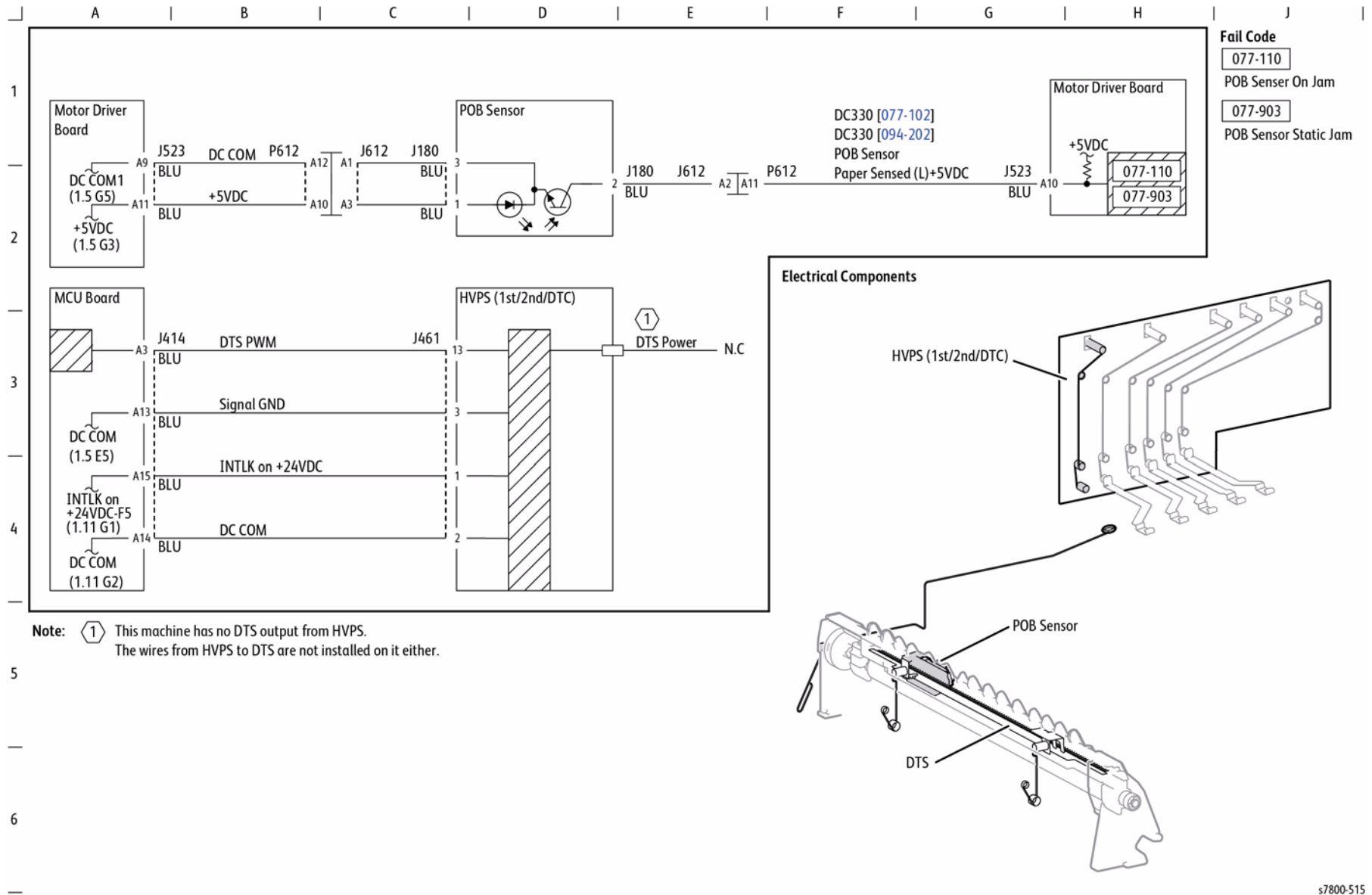
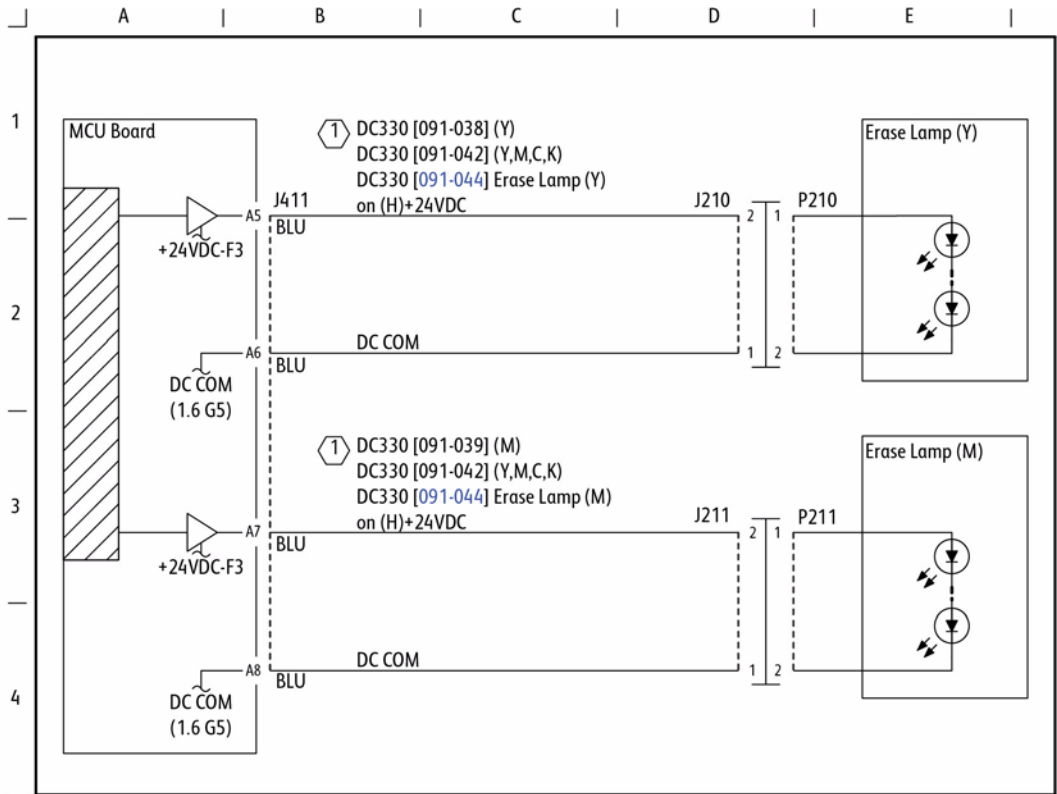


Figure 27 Stripping

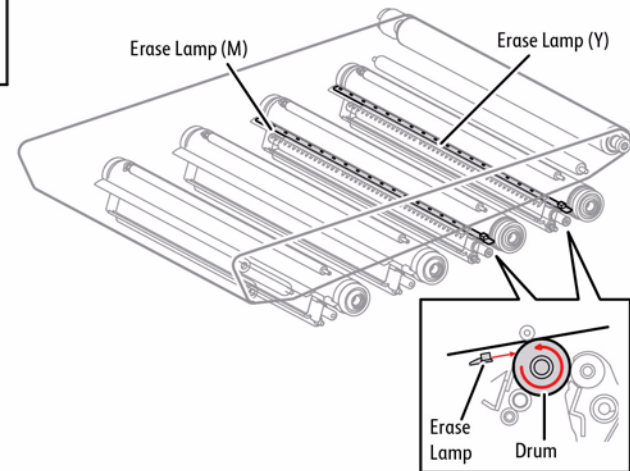
BSD 9.37 Drum Cleaning (Y, M)



Note: ① The operation varies depending on the diag code.

Erase Lamp	Operation
DC330 [091-038]	Makes Erase Lamp (Y) emit light.
DC330 [091-039]	Makes Erase Lamp (M) emit light.
DC330 [091-042]	Makes Erase Lamp (Y/M/C/K) emit light.
DC330 [091-044]	<p>"Multiple-Component Control" Drum Deve Mot. YMC P/S operates at speed set in NVM[Drum YMC Motor Speed Fine Adj. 121/175 Speed 2] and Drum Deve Mot. K P/S at speed set in NVM[Drum K Motor Speed Fine Adj. 121/175 Speed 2]. IBT Mot. P/S operates at 121/175 (mm/s).</p> <p>"BCR AC/DC Output: Vcln Output" Drum/Deve Mot. YMCK, IBT Mot., Erase Lamp YMCK, Agitator Mot., and BCR AC YMCK are simultaneously output. An elapse of 50ms after the start, BCR DC YMCK is output. An elapse of 540ms (121 speed)/400ms (175 speed) after the start, Erase Lamp is stopped. 300ms (121 speed)/200ms (175 speed) after that, BCR AC/DC is stopped. NVM (nxero_DrumRefreshTime)[s] after the start, all are stopped.</p>

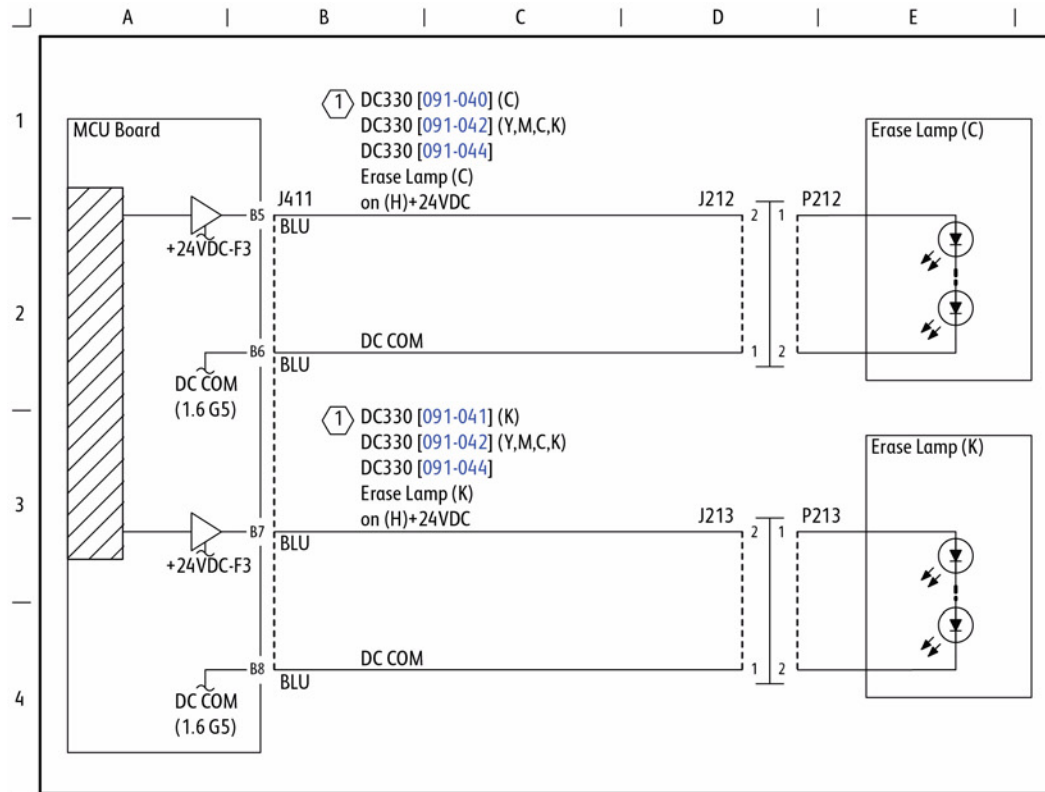
Electrical Components



s7800-516

Figure 28 Drum Cleaning (Y, M)

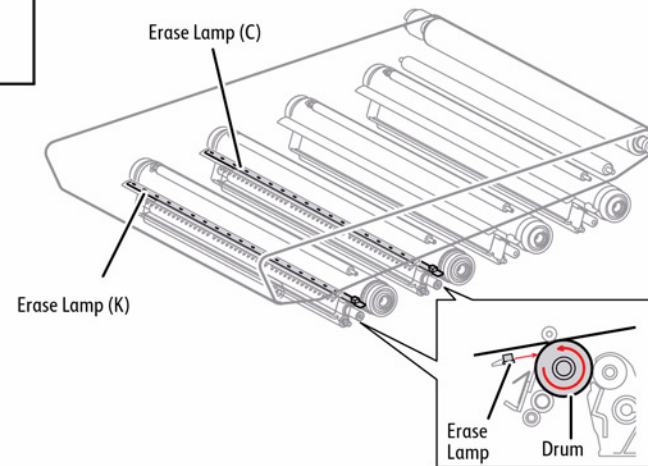
BSD 9.38 Drum Cleaning (C, K)



Note: ① The operation varies depending on the diag code.

Erase Lamp	Operation
DC330 [091-040]	Makes Erase Lamp (C) emit light.
DC330 [091-041]	Makes Erase Lamp (K) emit light.
DC330 [091-042]	Makes Erase Lamp (Y/M/C/K) emit light.
DC330 [091-044]	<p>"Multiple-Component Control" Drum Deve Mot. YMC P/S operates at speed set in NVM[Drum YMC Motor Speed Fine Adj. 121/175 Speed 2] and Drum Deve Mot. K P/S at speed set in NVM[Drum K Motor Speed Fine Adj. 121/175 Speed 2]. IBT Mot. P/S operates at 121/175 (mm/s).</p> <p>"BCR AC/DC Output: Vcln Output" Drum/Deve Mot. YMCK, IBT Mot., Erase Lamp YMCK, Agitator Mot., and BCR AC YMCK are simultaneously output. An elapse of 50ms after the start, BCR DC YMCK is output. An elapse of 540ms (121 speed)/400ms (175 speed) after the start, Erase Lamp is stopped. 300ms (121 speed)/200ms (175 speed) after that, BCR AC/DC is stopped. NVM (nxero_DrumRefreshTime)[s] after the start, all are stopped.</p>

Electrical Components



s7800-517

Figure 29 Drum Cleaning (C, K)

BSD 9.39 IBT Cleaning

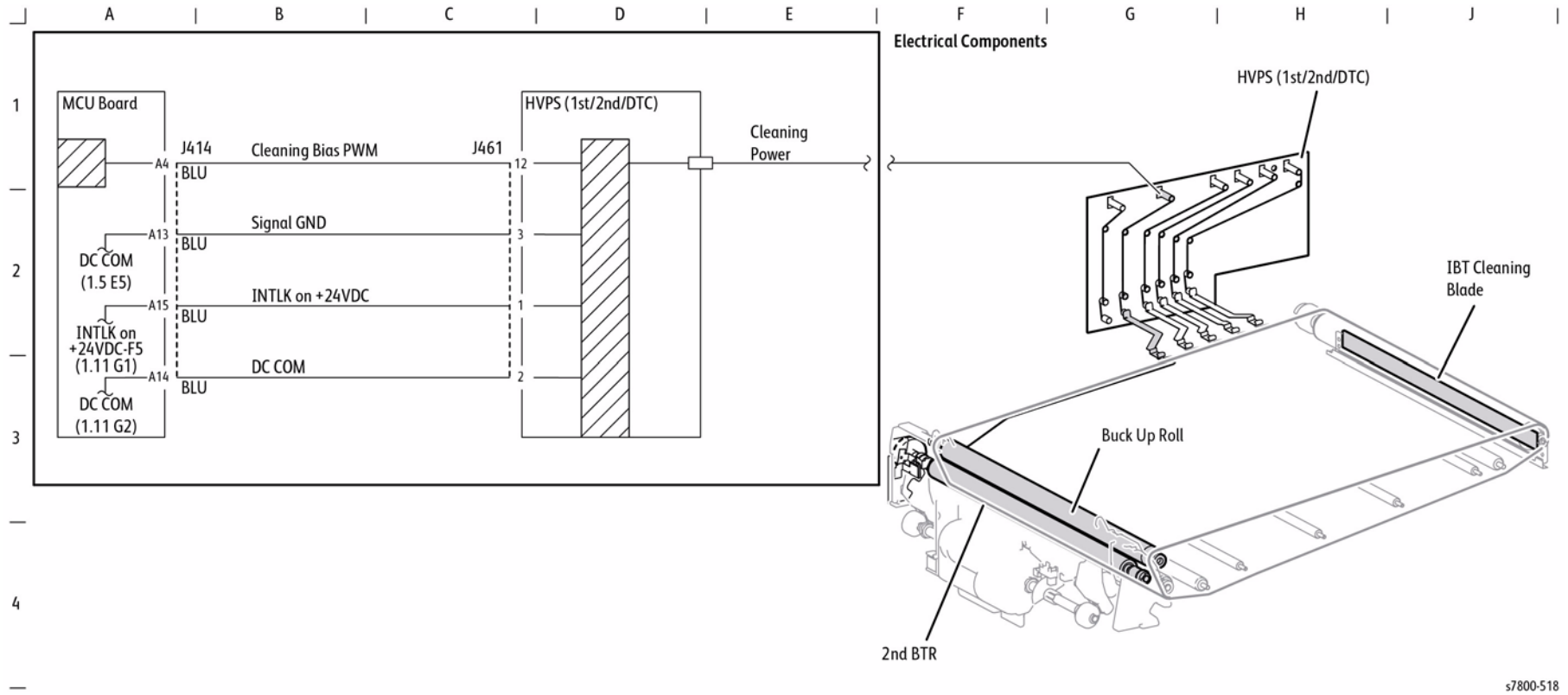
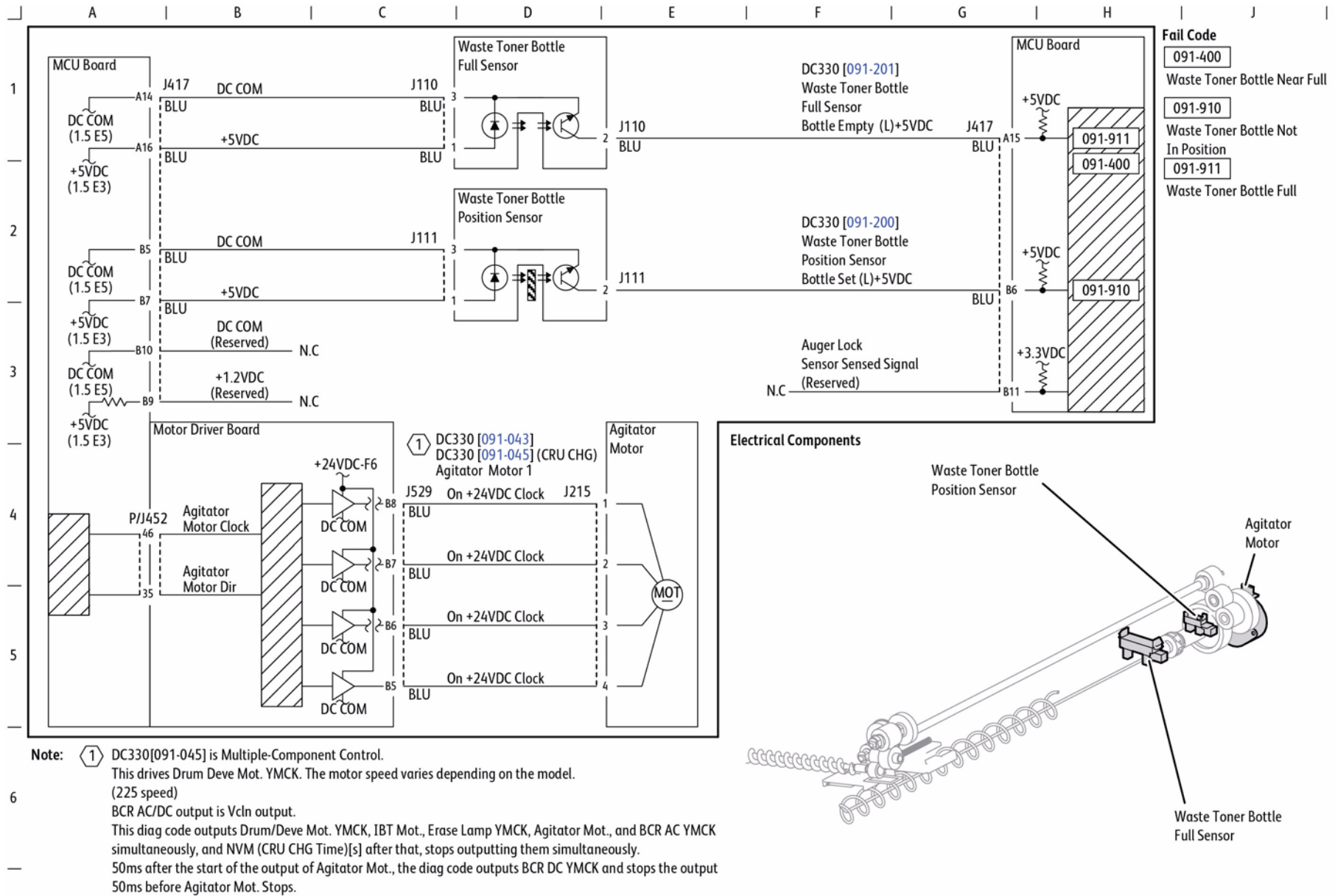


Figure 30 IBT Cleaning

s7800-518

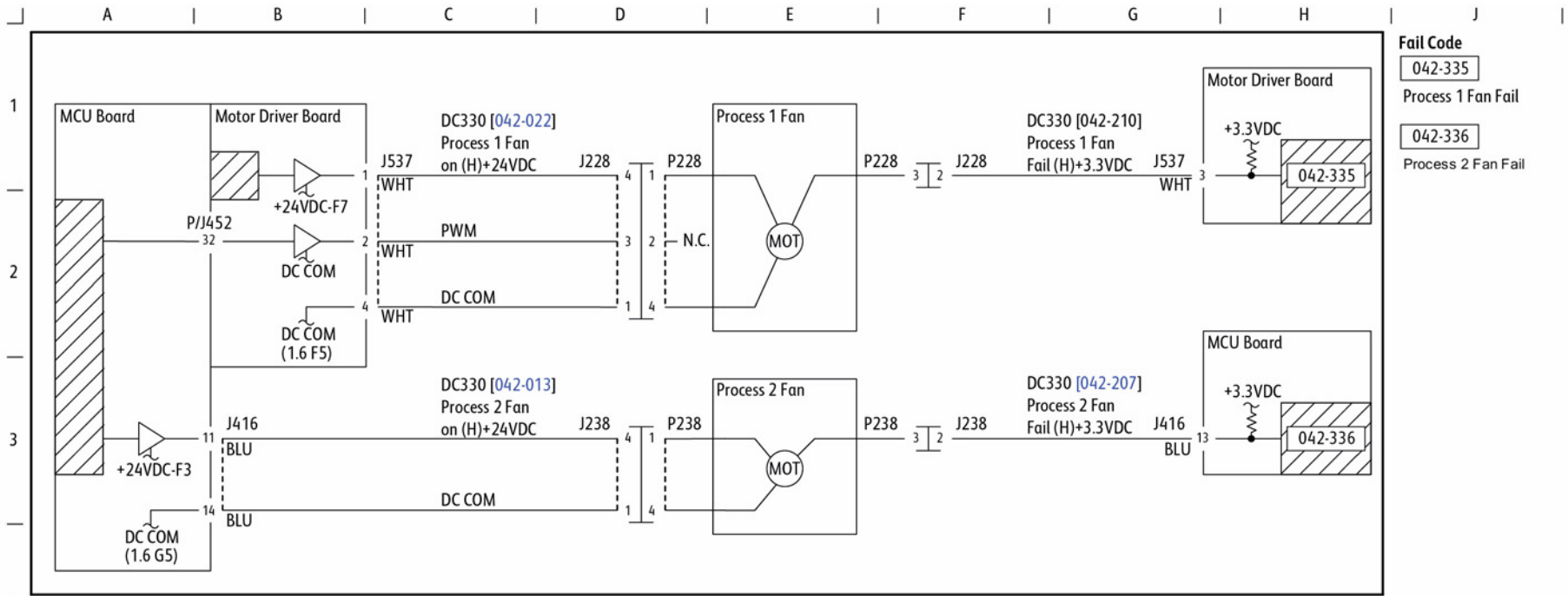
BSD 9.40 Waste Toner Disposal



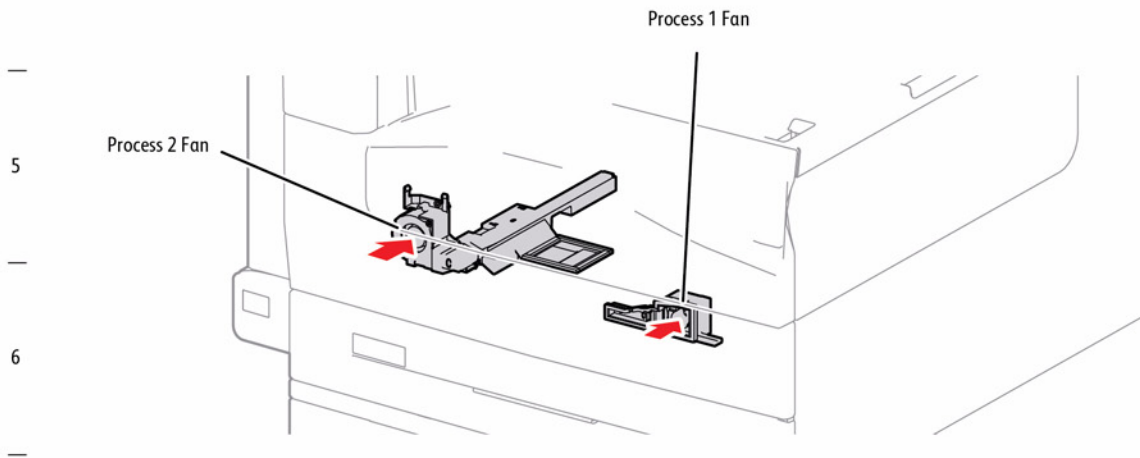
s7800-519

Figure 31 Waste Toner Disposal

BSD 9.43 Process Fan Control



4 Electrical Components



s7800-520

Figure 32 Process Fan Control

BSD 9.44 C Fan Control

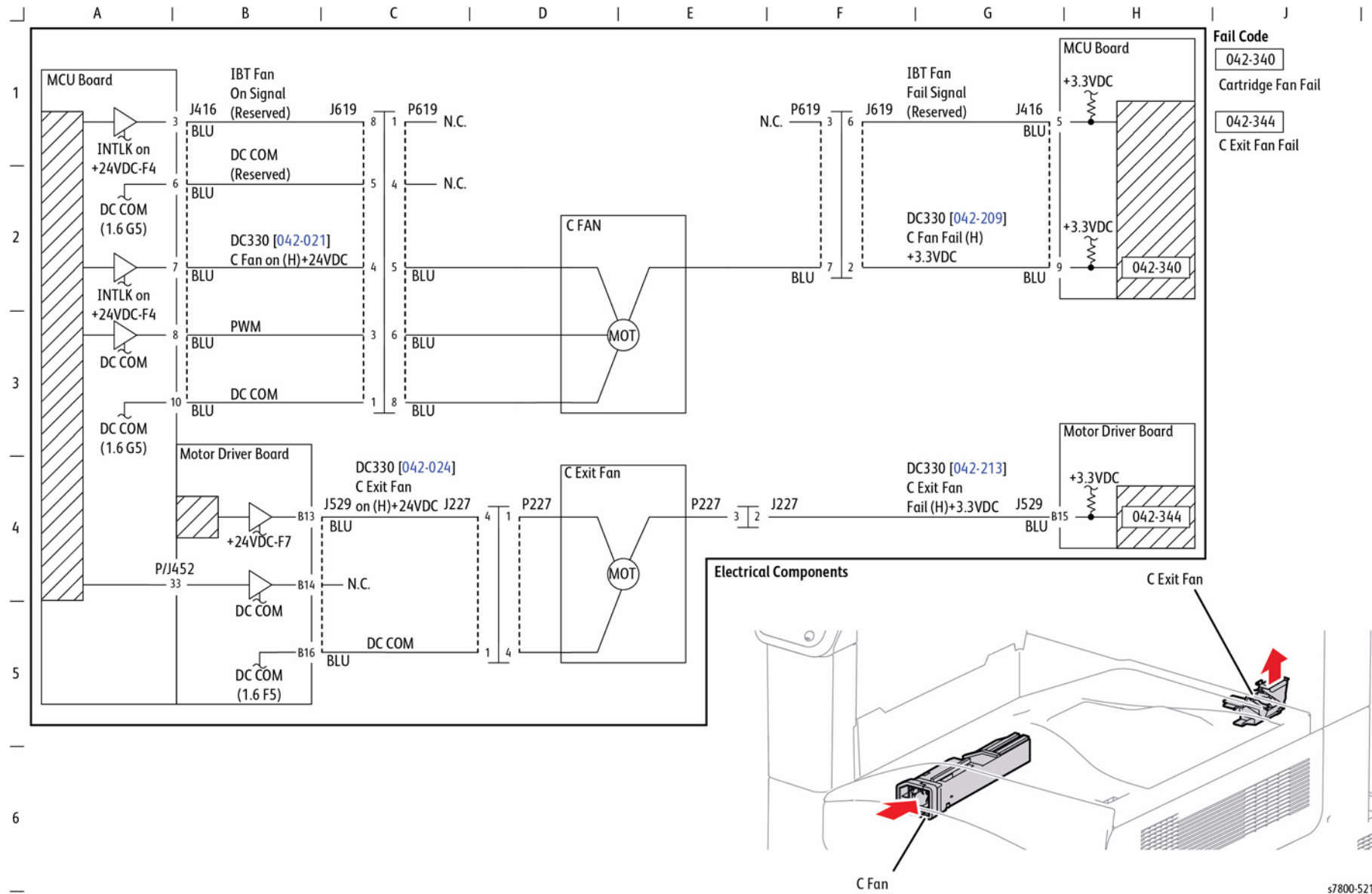


Figure 33 C Fan Control

BSD 9.45 Suction/ M/ Bottom Fan Control

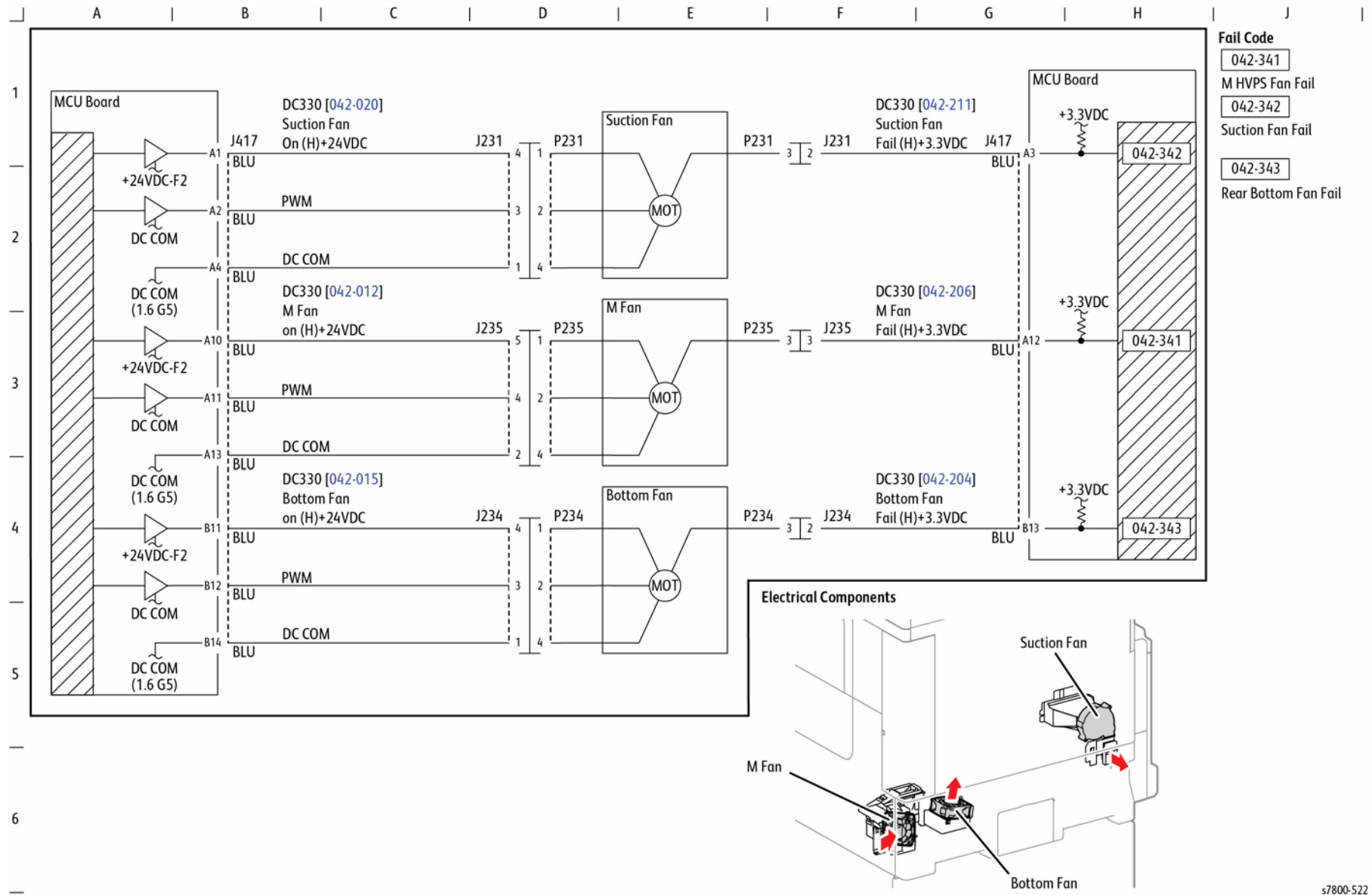


Figure 34 Suction/ M/ Bottom Fan Control

BSD 9.46 LH Fan Control

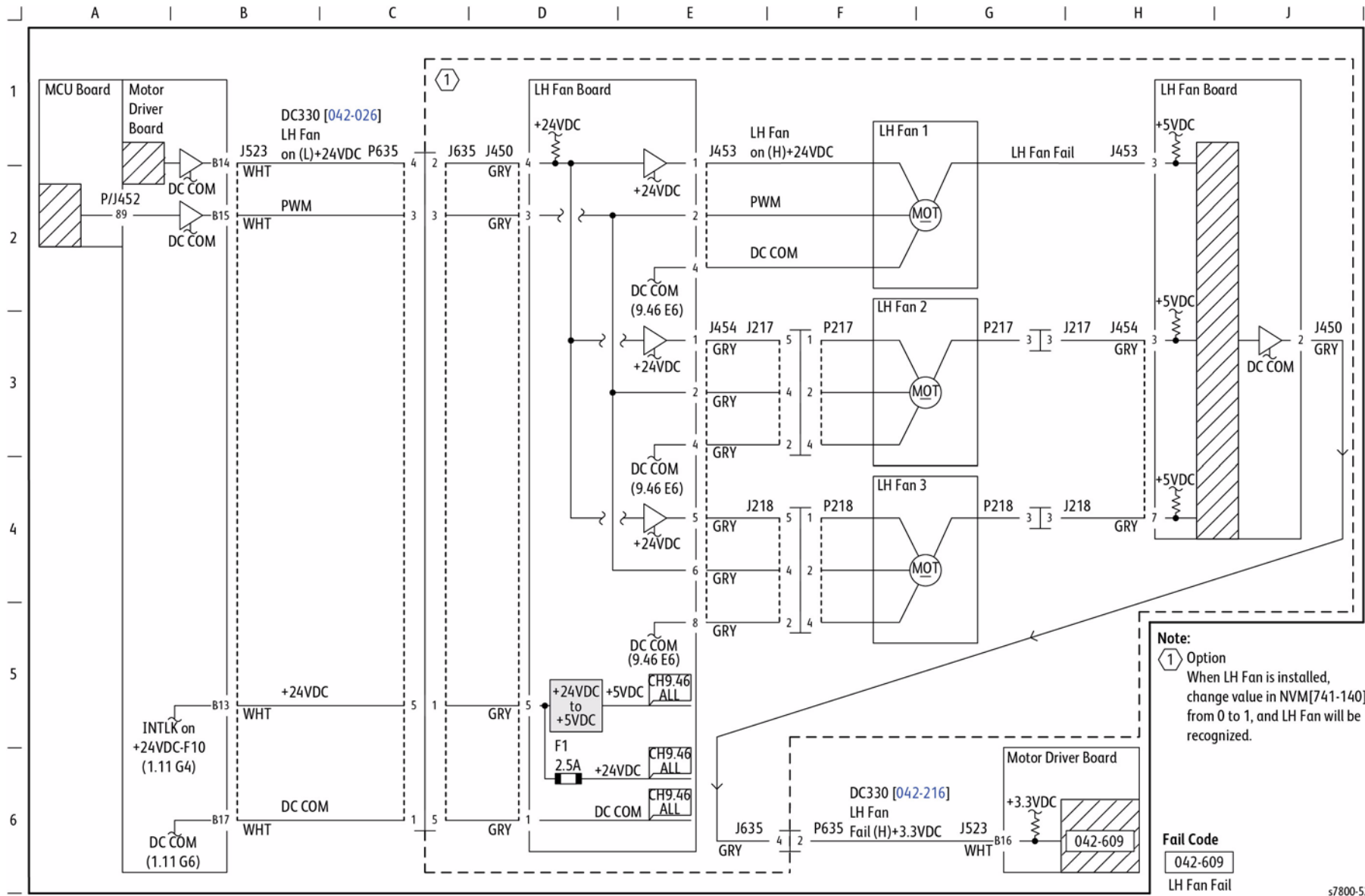
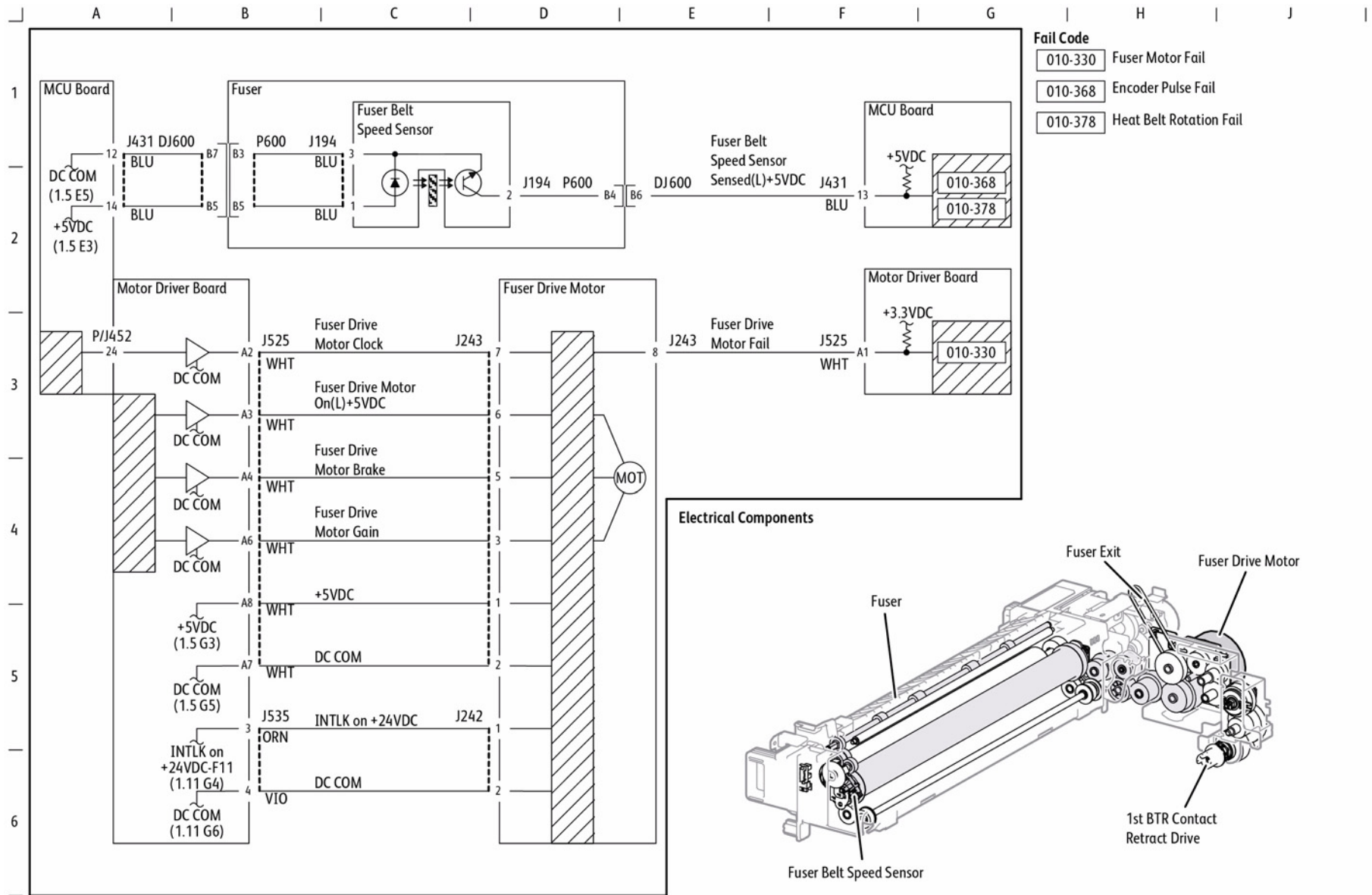


Figure 35 LH Fan Control



57800-524

Figure 1 Fusing Unit Drive Control (1 of 2)

BSD 10.2 Fusing Unit Drive Control (2 of 2)

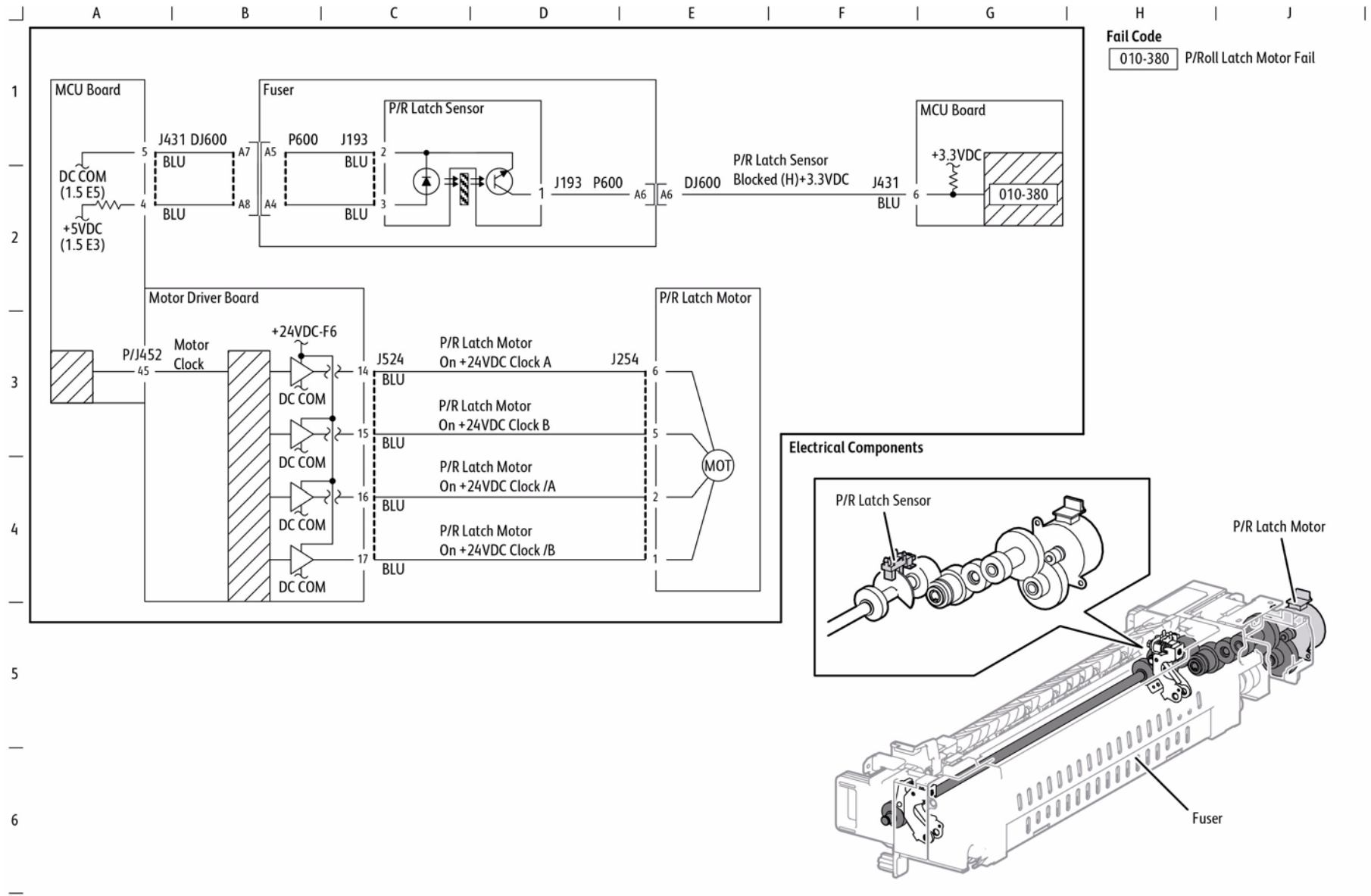
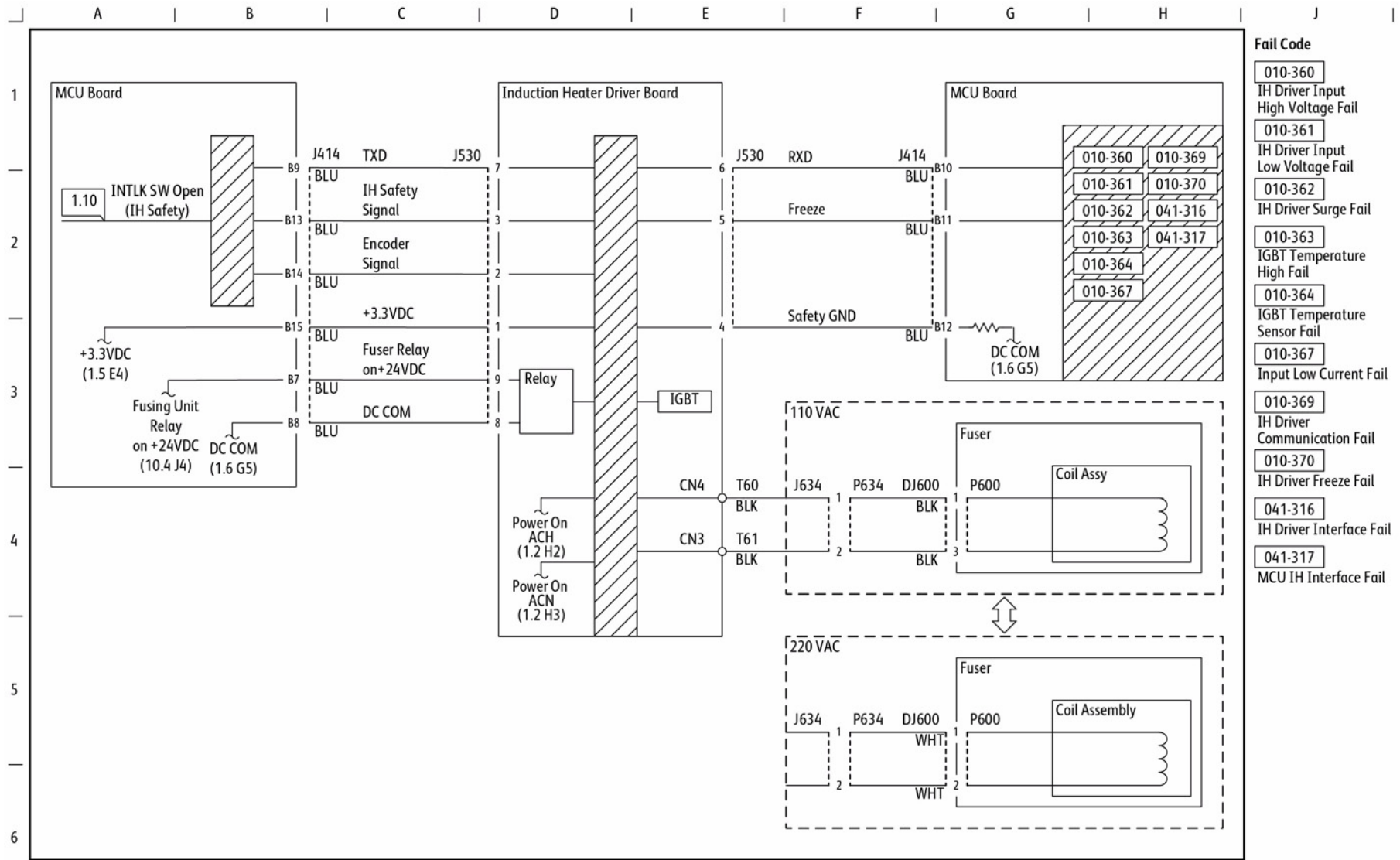


Figure 2 Fusing Unit Drive Control (2 of 2)

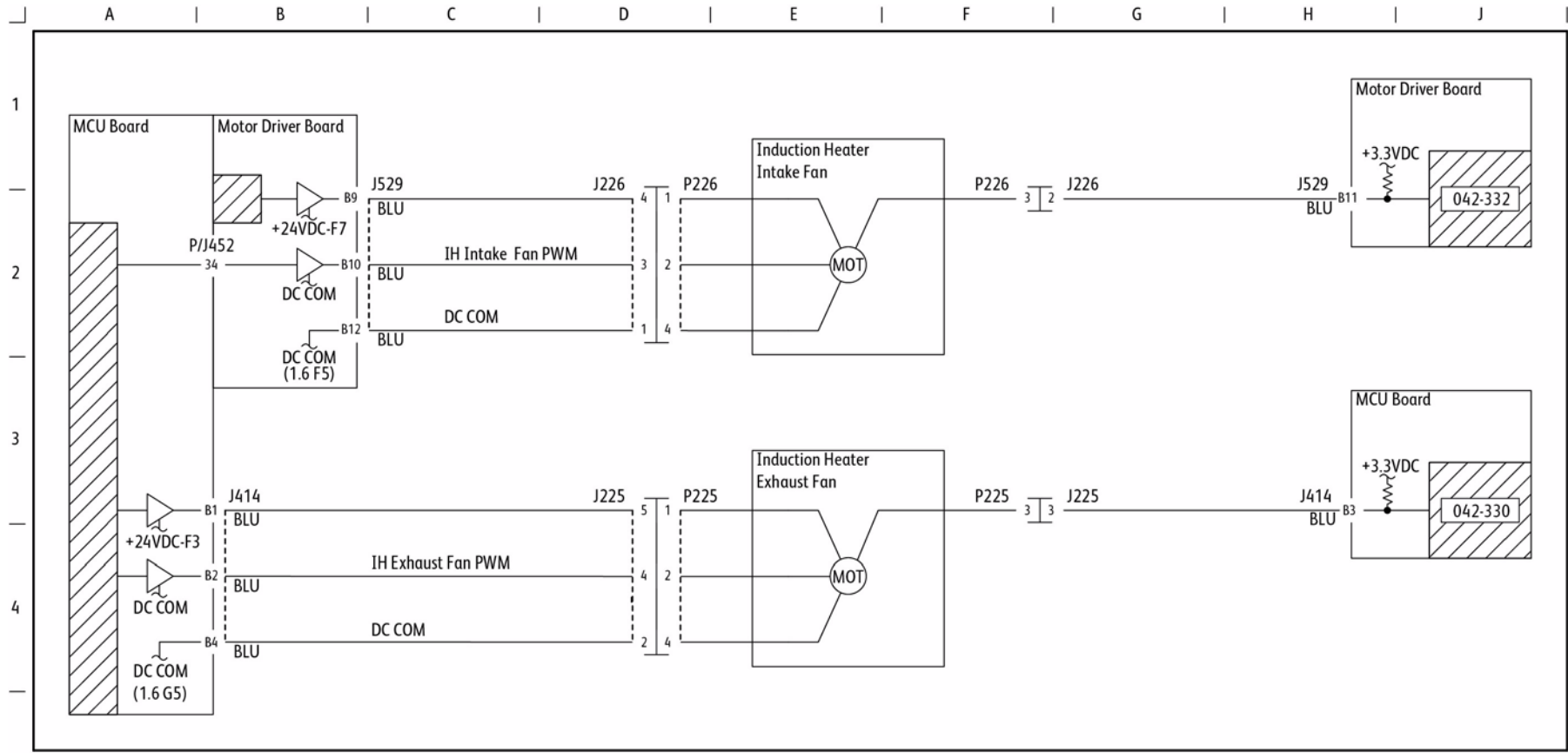
BSD 10.3 Fusing Heat Control (1 of 3)



s7800-526

Figure 3 Fusing Heat Control (1 of 3)

BSD 10.4 Fusing Heat Control (2 of 3)



Fail Code

042-330

IH Exhaust Fan Fail

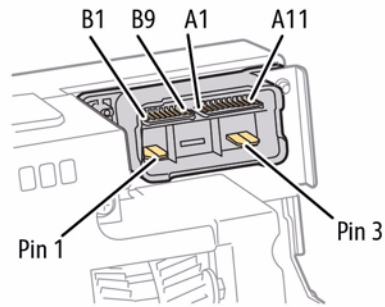
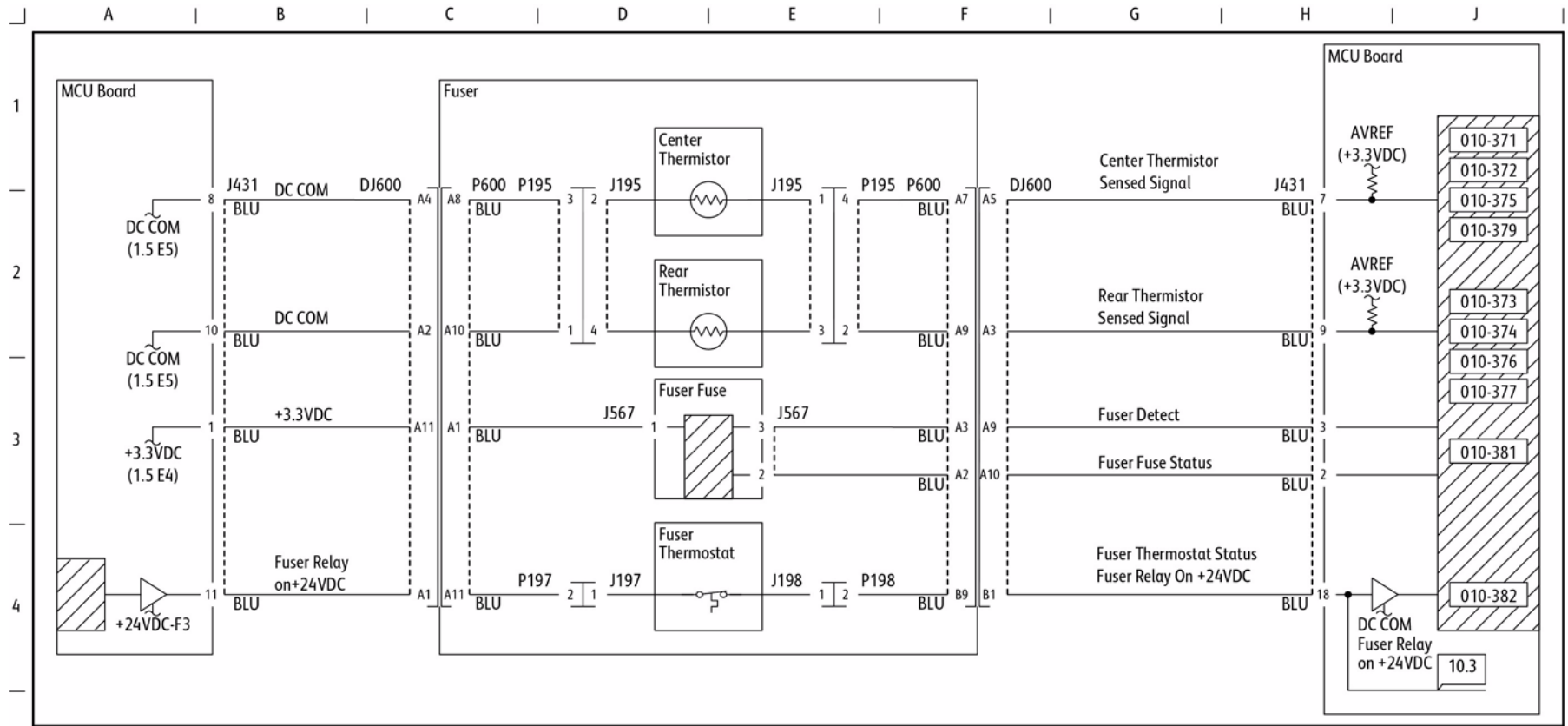
042-332

IH Intake Fan Fail

s7800-527

Figure 4 Fusing Heat Control (2 of 3)

BSD 10.5 Fusing Heat Control (3 of 3)



Fail Code

010-371	010-374	010-377	010-382
Heat Belt STS Center Disconnection Fail	Heat Belt STS Rear Over Temperature Fail	Fusing Unit On Time Fail	Fusing Unit Thermostat Fail
010-372	010-375	010-379	
Heat Belt STS Center Over Temperature Fail	Heat Belt STS Center Warm Up Time Fail	Fusing Unit Hot Not Ready Return Time Fail	
010-373	010-376	010-381	
Heat Belt STS Rear Disconnection Fail	Heat Belt STS Rear Warm Up Time Fail	Fusing Unit Illegal Fail	

s7800-528

Figure 5 Fusing Heat Control (3 of 3)

BSD 10.6 Electrical Components (Fusing Heat)

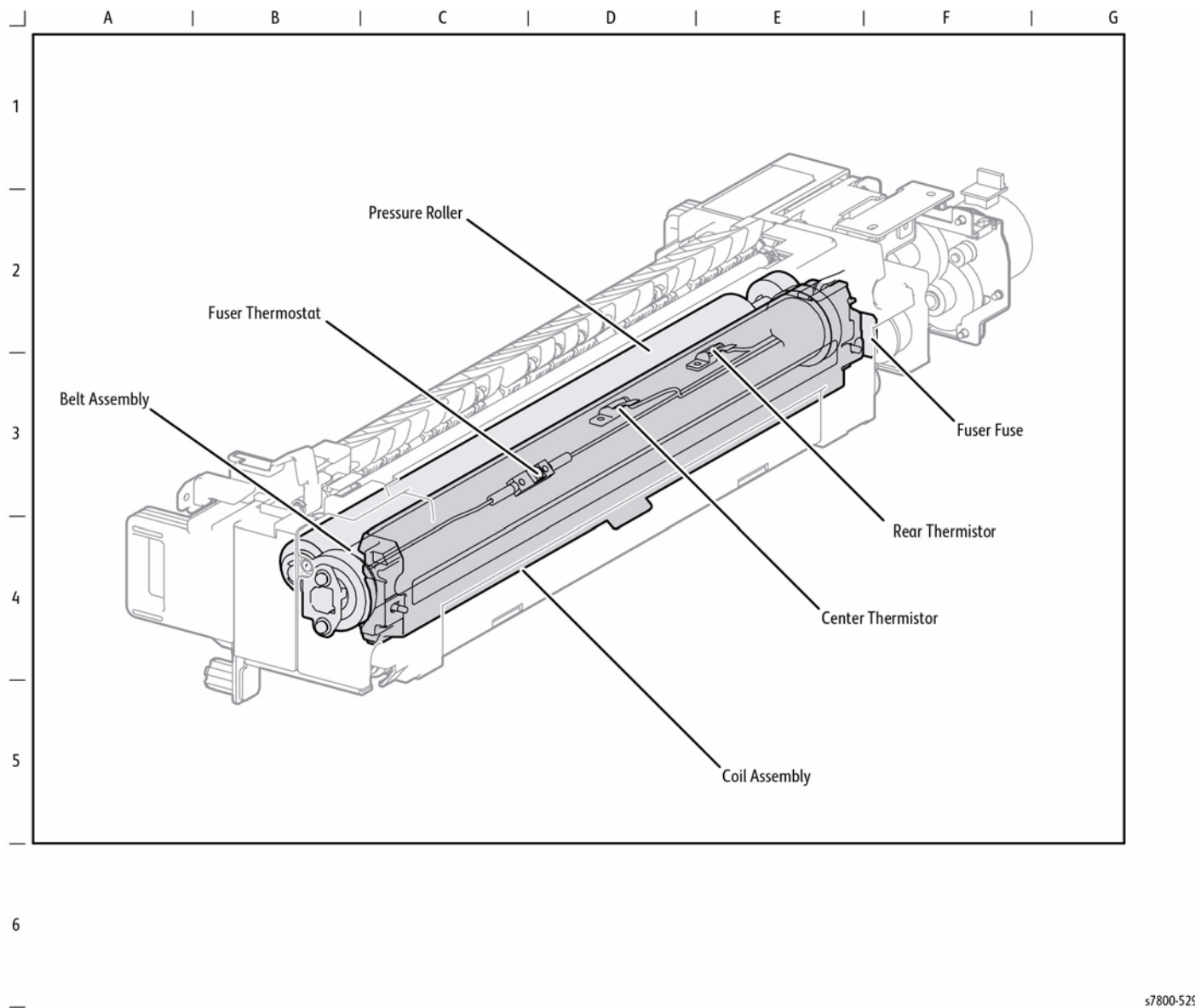
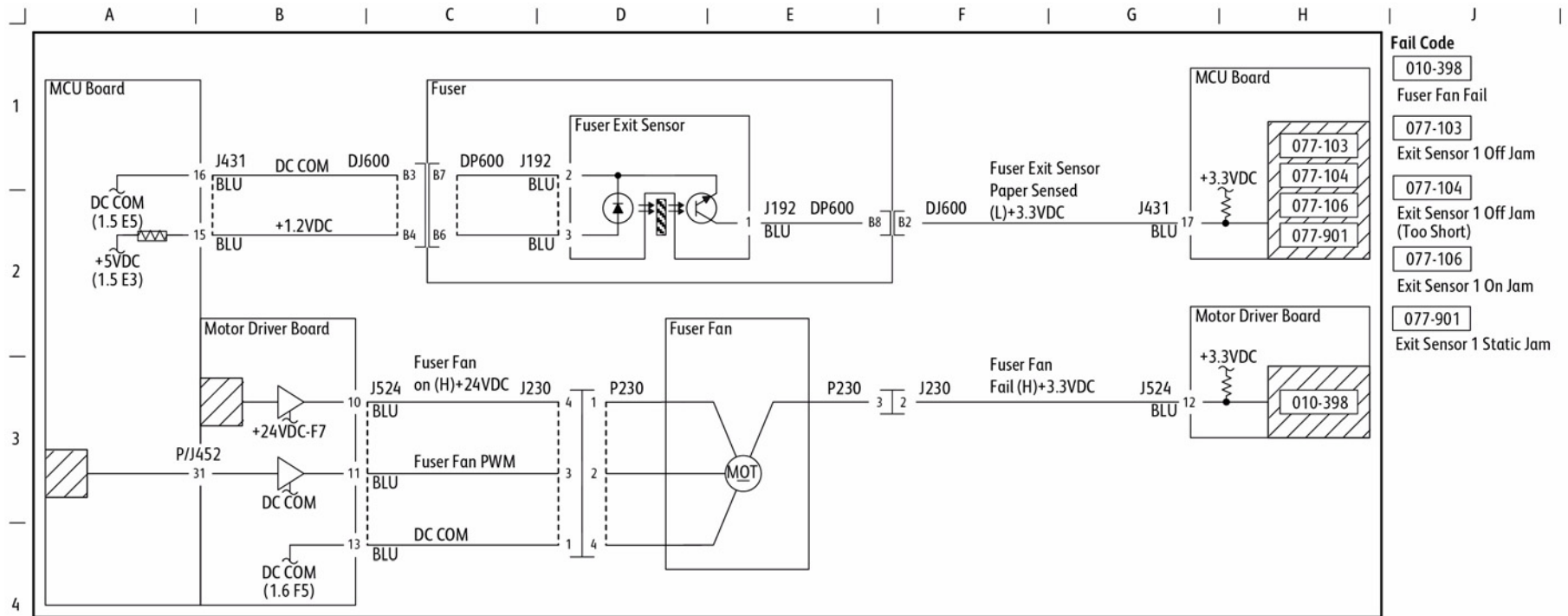


Figure 6 Electrical Components (Fusing Heat)

BSD 10.7 Fusing



Electrical Components

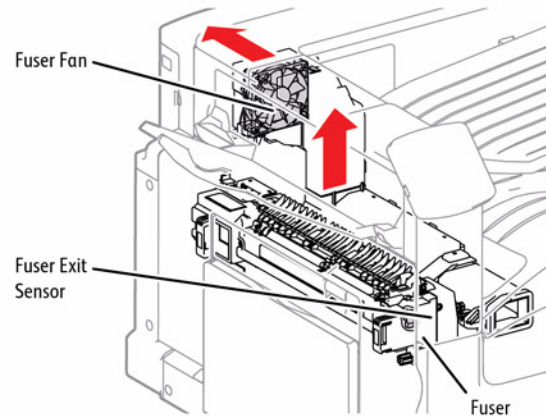


Figure 7 Fusing

s7800-530

BSD 10.8 Fused Paper Exit 1

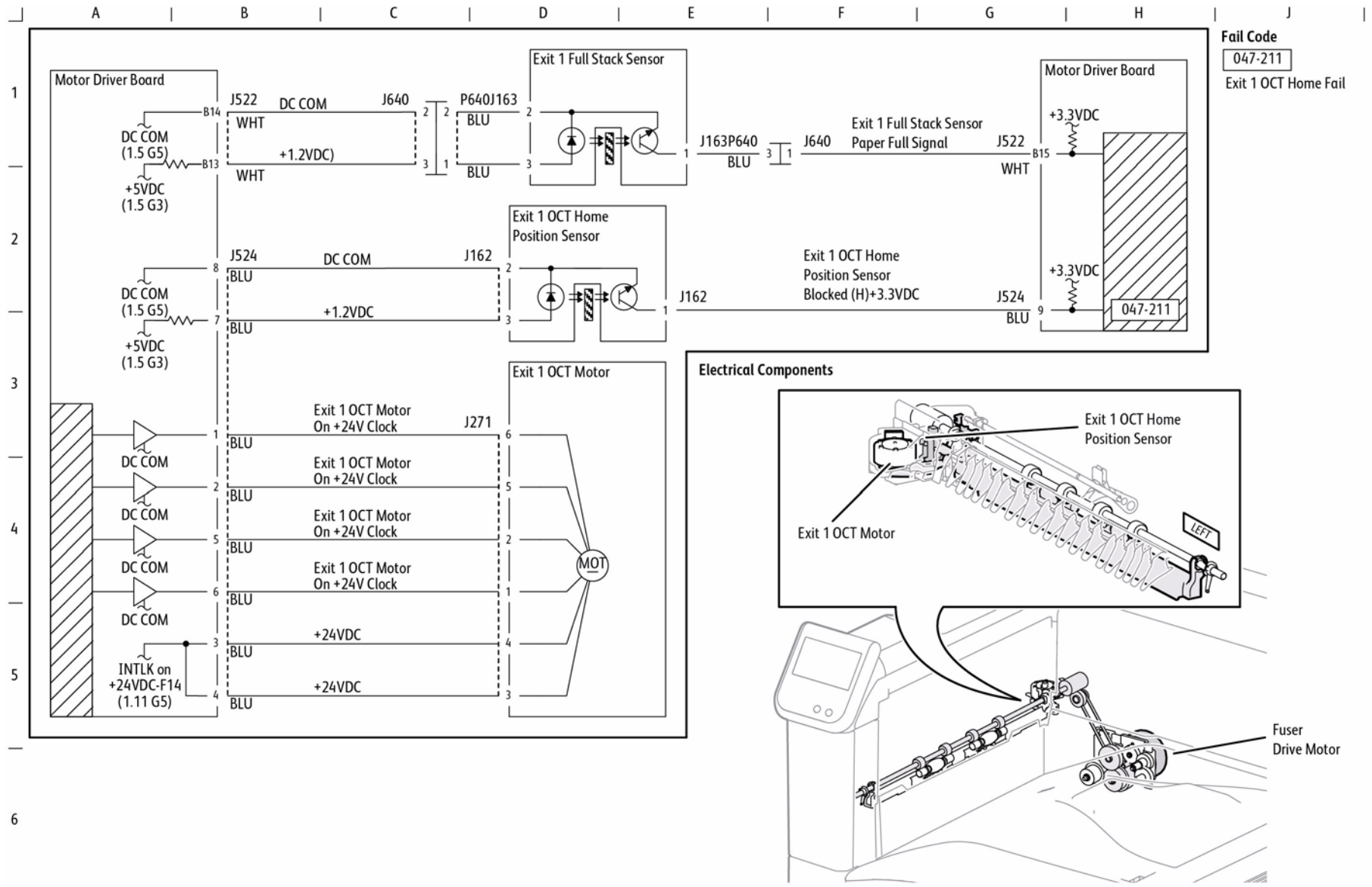
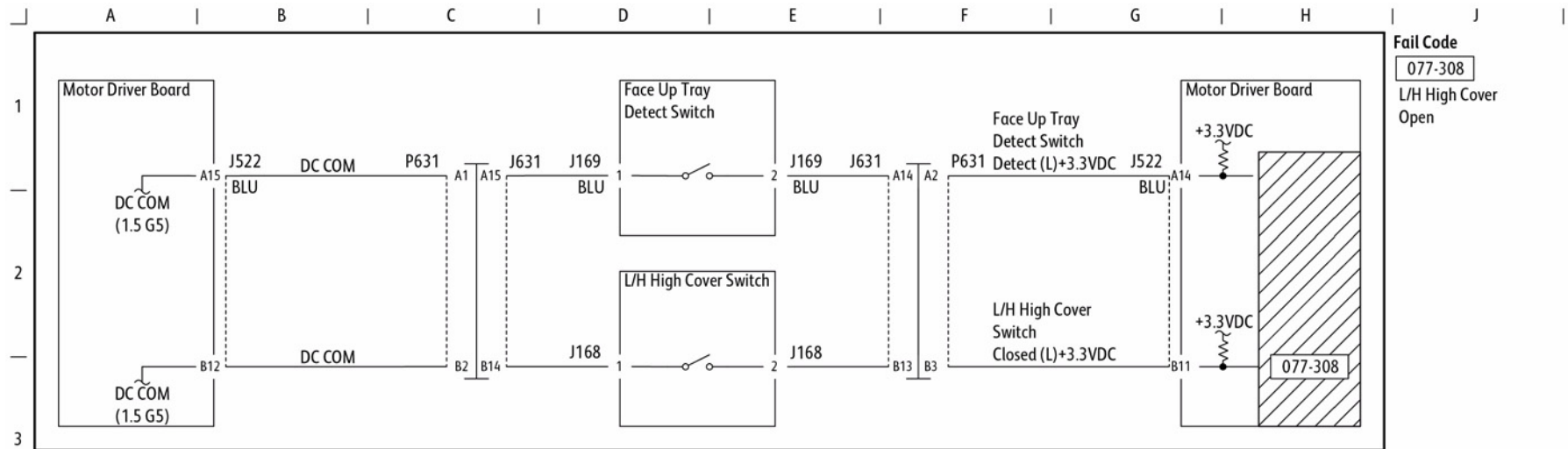
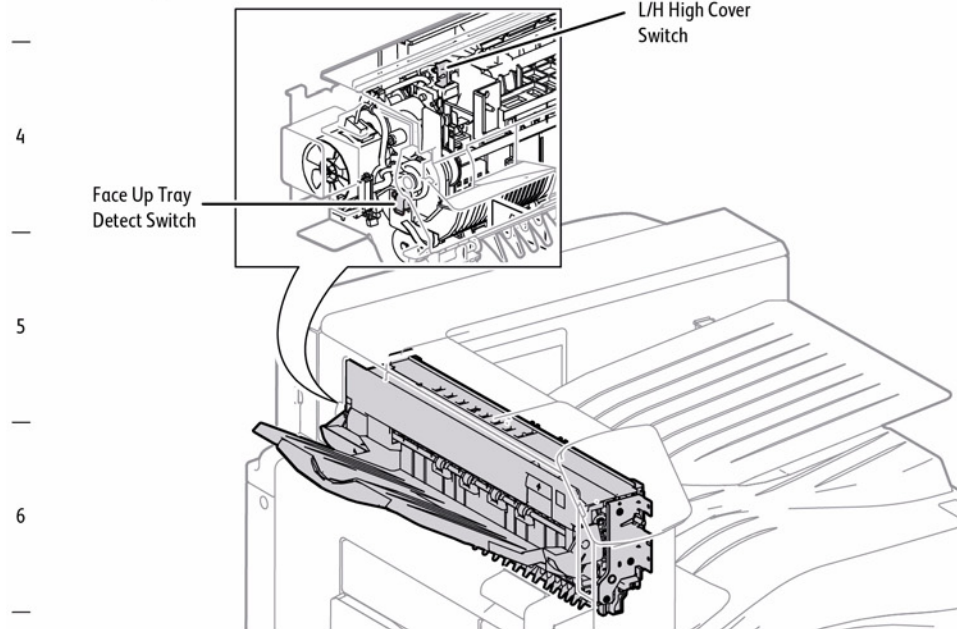


Figure 8 Fused Paper Exit 1

BSD 10.9 Fused Paper Exit 2 (1 of 4)



Electrical Components



s7800-532

Figure 9 Fused Paper Exit 2 (1 of 4)

BSD 10.10 Fused Paper Exit 2 (2 of 4)

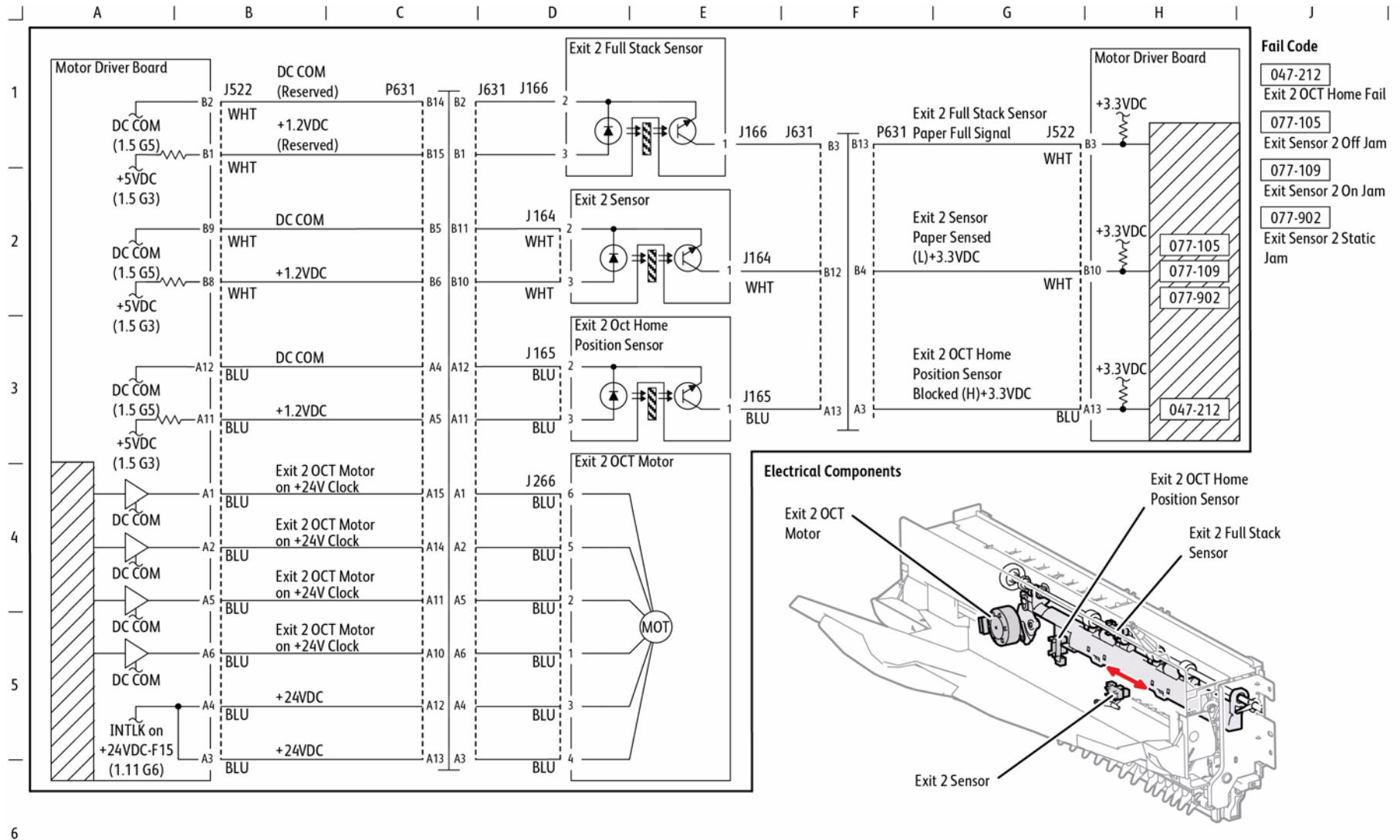
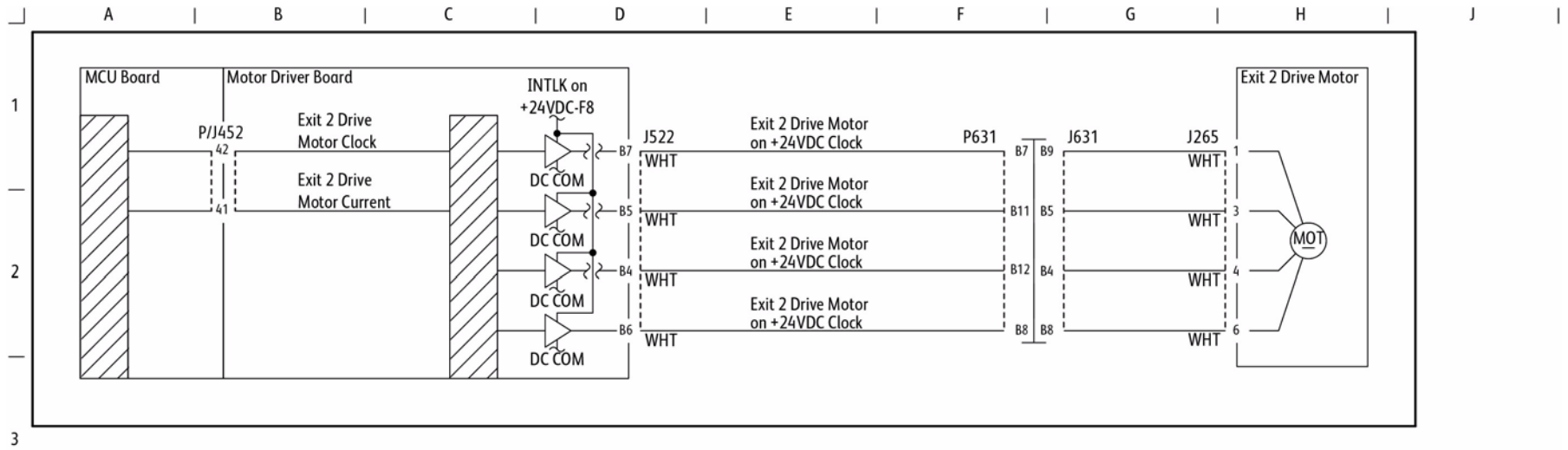


Figure 10 Fused Paper Exit 2 (2 of 4)

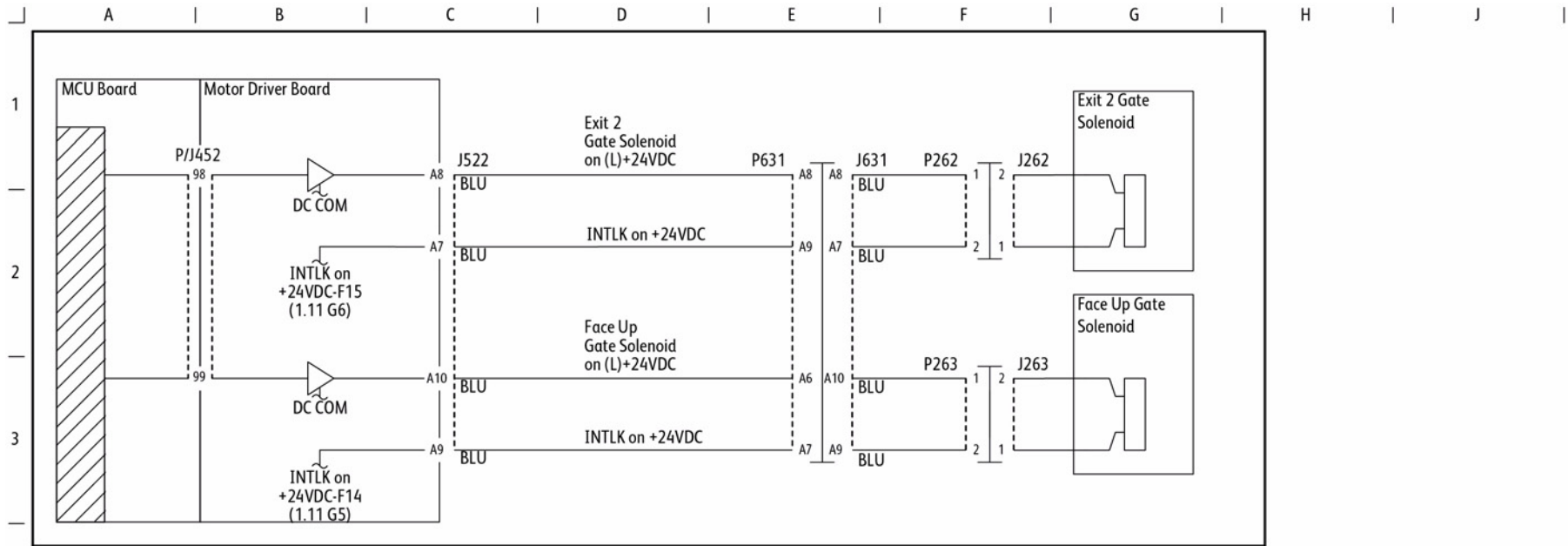
BSD 10.11 Fused Paper Exit 2 (3 of 4)



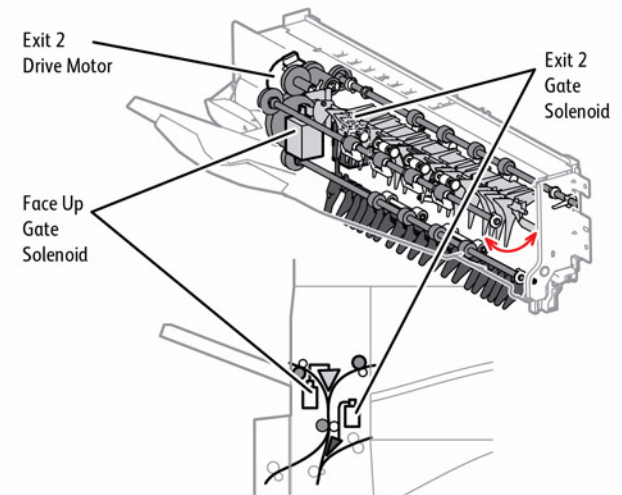
s7800-534

Figure 11 Fused Paper Exit 2 (3 of 4)

BSD 10.12 Fused Paper Exit 2 (4 of 4)



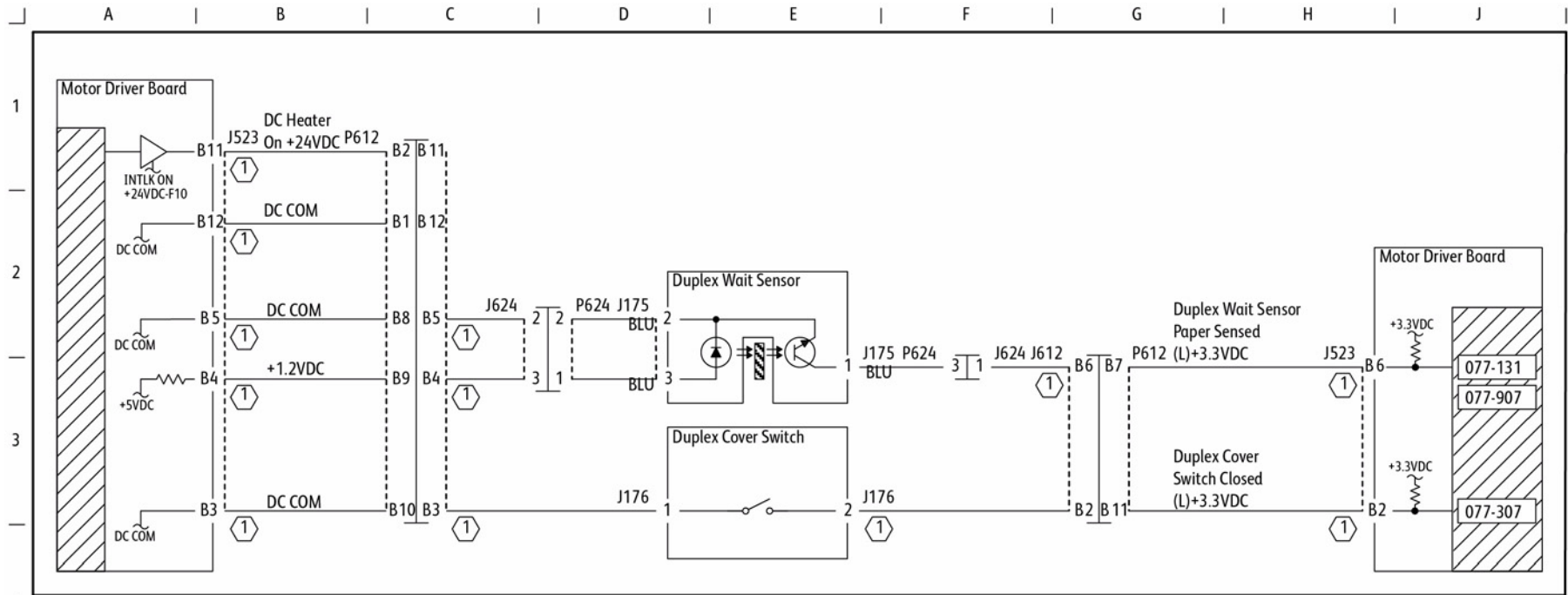
Electrical Components



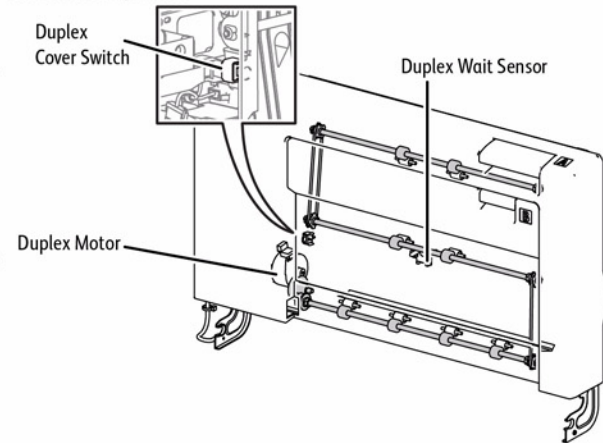
s7800-535

Figure 12 Fused Paper Exit 2 (4 of 4)

BSD 10.13 Duplex Transportation (1 of 2)



Electrical Components



Note: (1) Wire Color varies depending on the model
WHT

Fail Code

- 377-131
Duplex Wait Sensor On Jam
- 377-307
Duplex Cover Open
- 377-907
Duplex Wait Sensor Static Jam

s7800-536

Figure 13 Duplex Transportation (1 of 2)

BSD 10.14 Duplex Transportation (2 of 2)

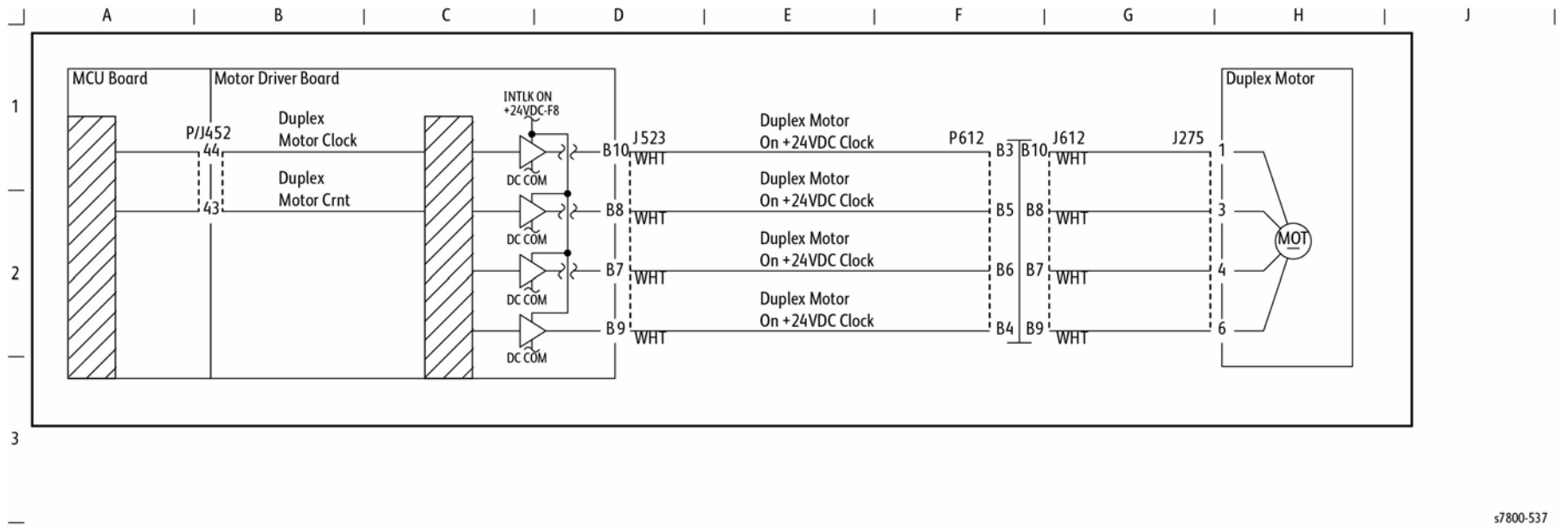
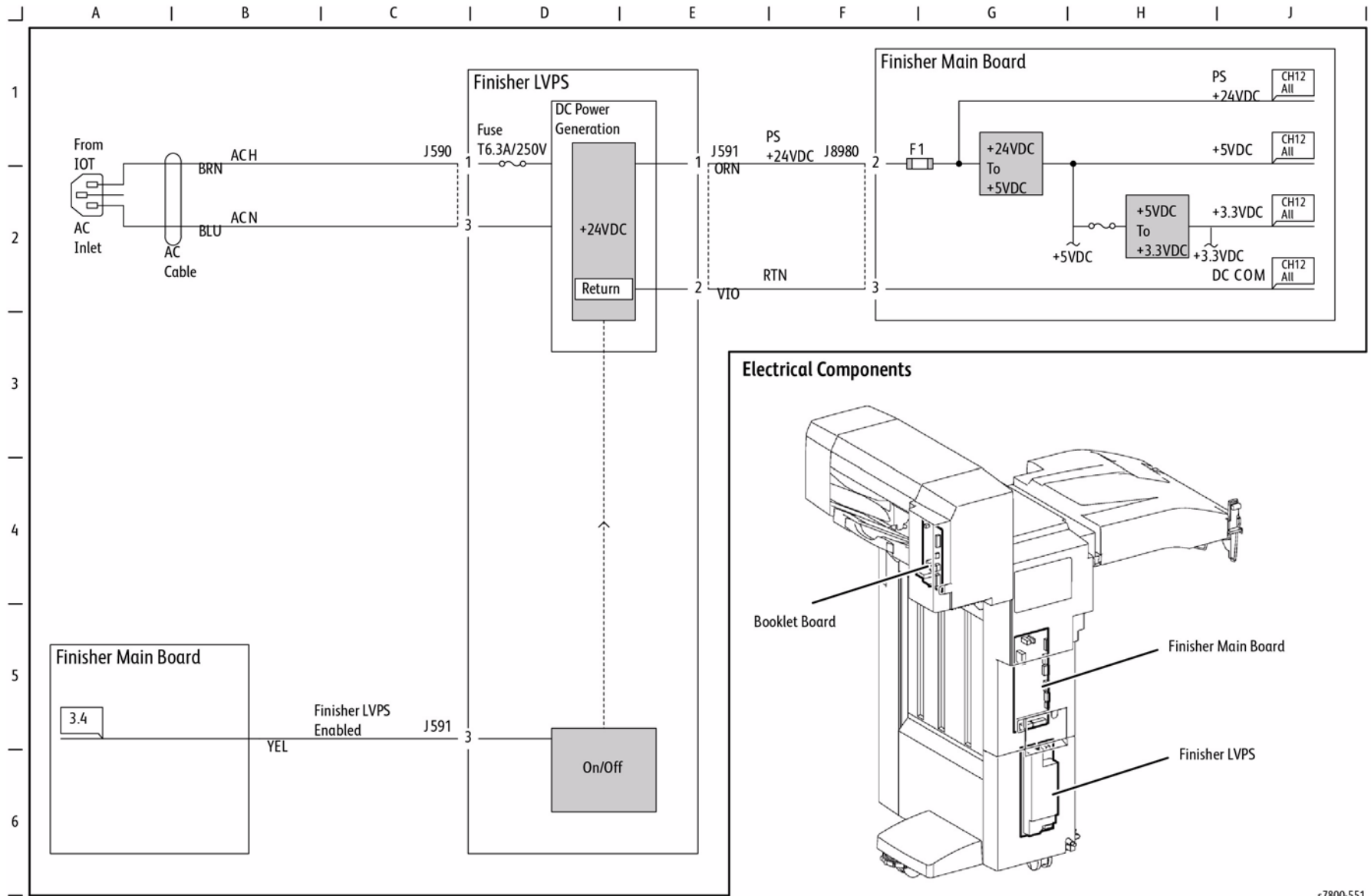


Figure 14 Duplex Transportation (2 of 2)

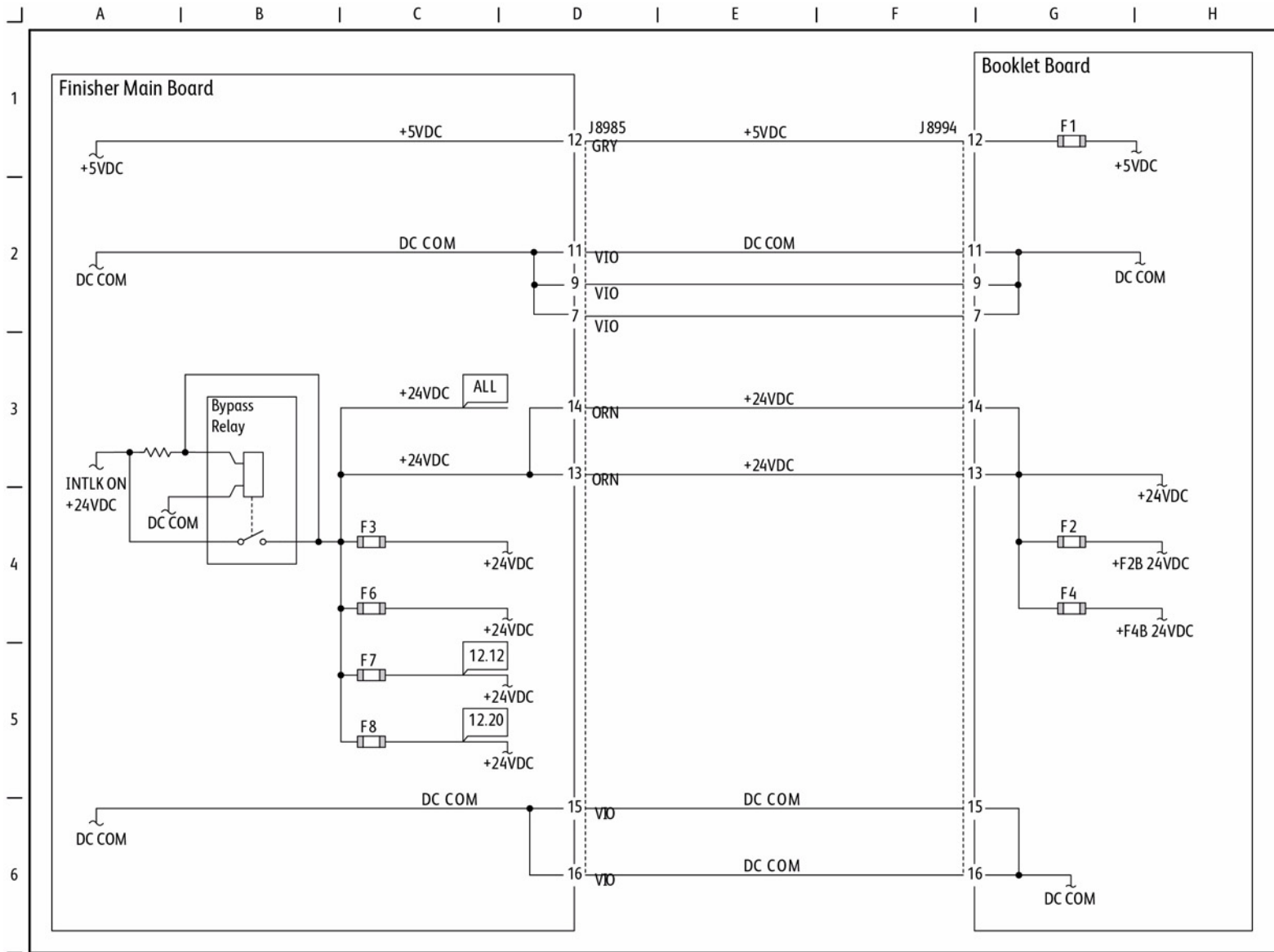
s7800-537



s7800-551

Figure 1 Finisher DC Power Generation

BSD 13.2 Finisher DC Power Distribution



s7800-552

Figure 2 Finisher DC Power Distribution

BSD 13.3 Finisher Interlock Switching

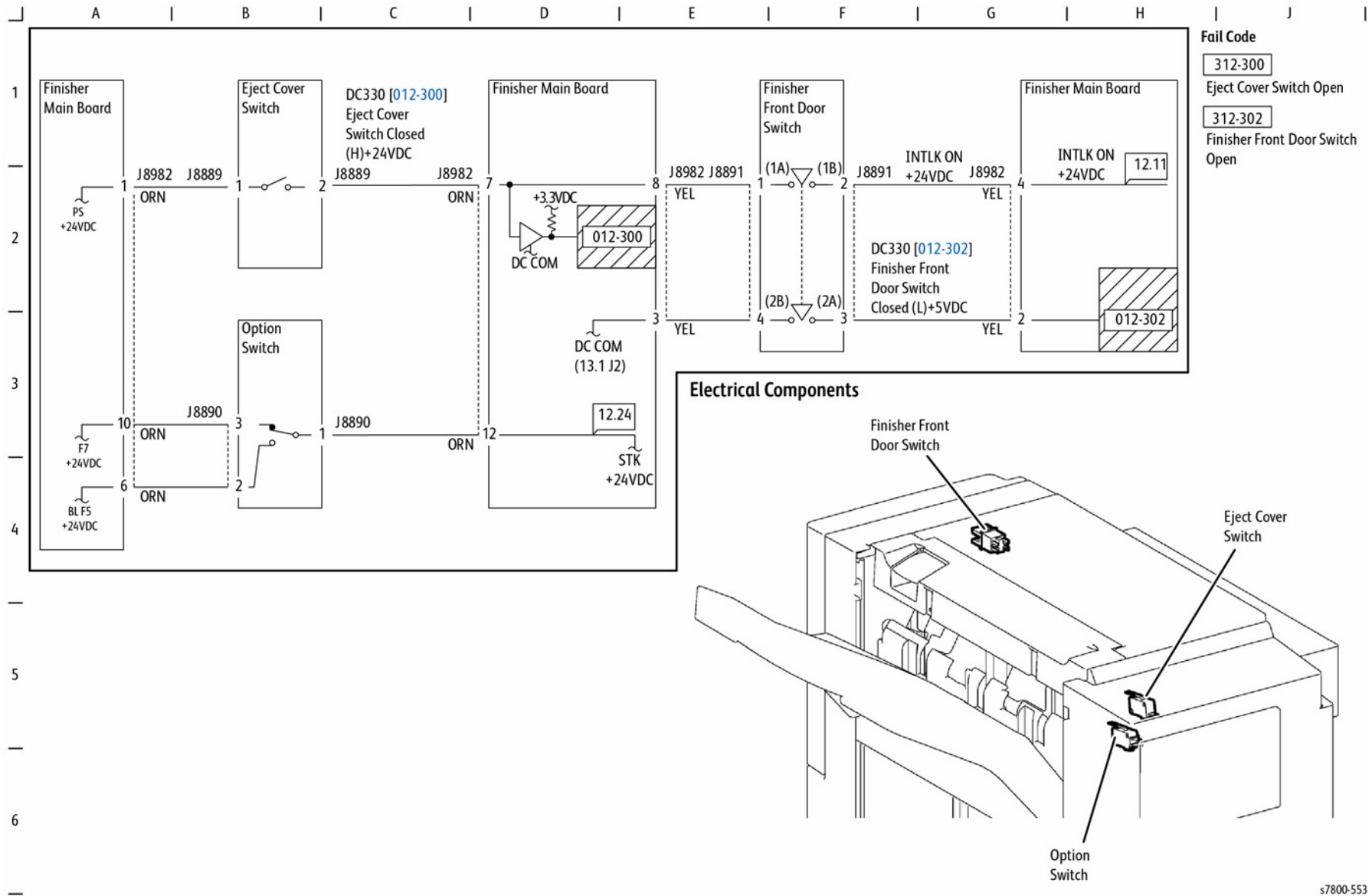


Figure 3 Finisher Interlock Switching

BSD 13.4 Booklet Interlock Switching

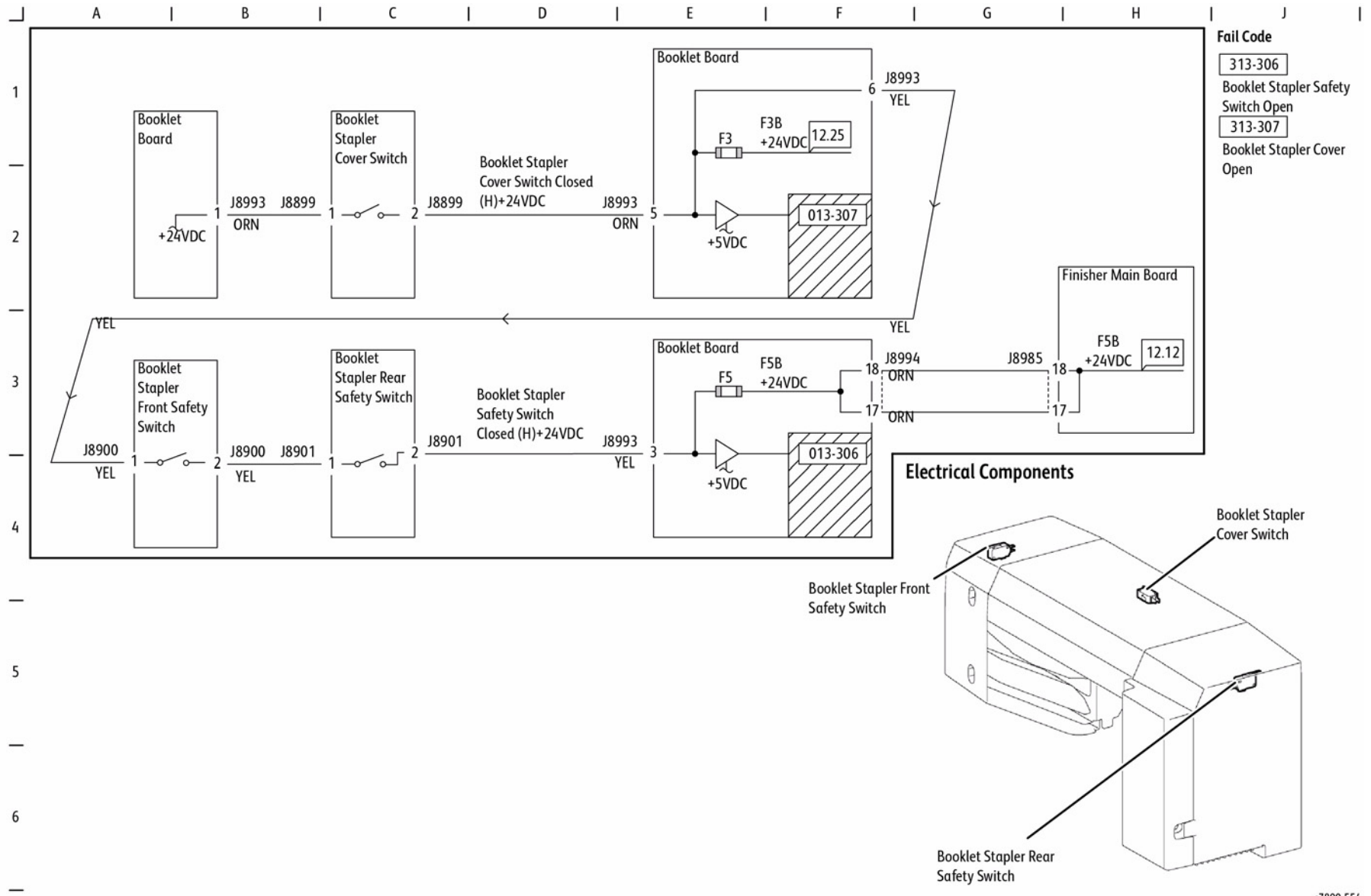


Figure 4 Booklet Interlock Switching

BSD 13.5 PWBS Communication

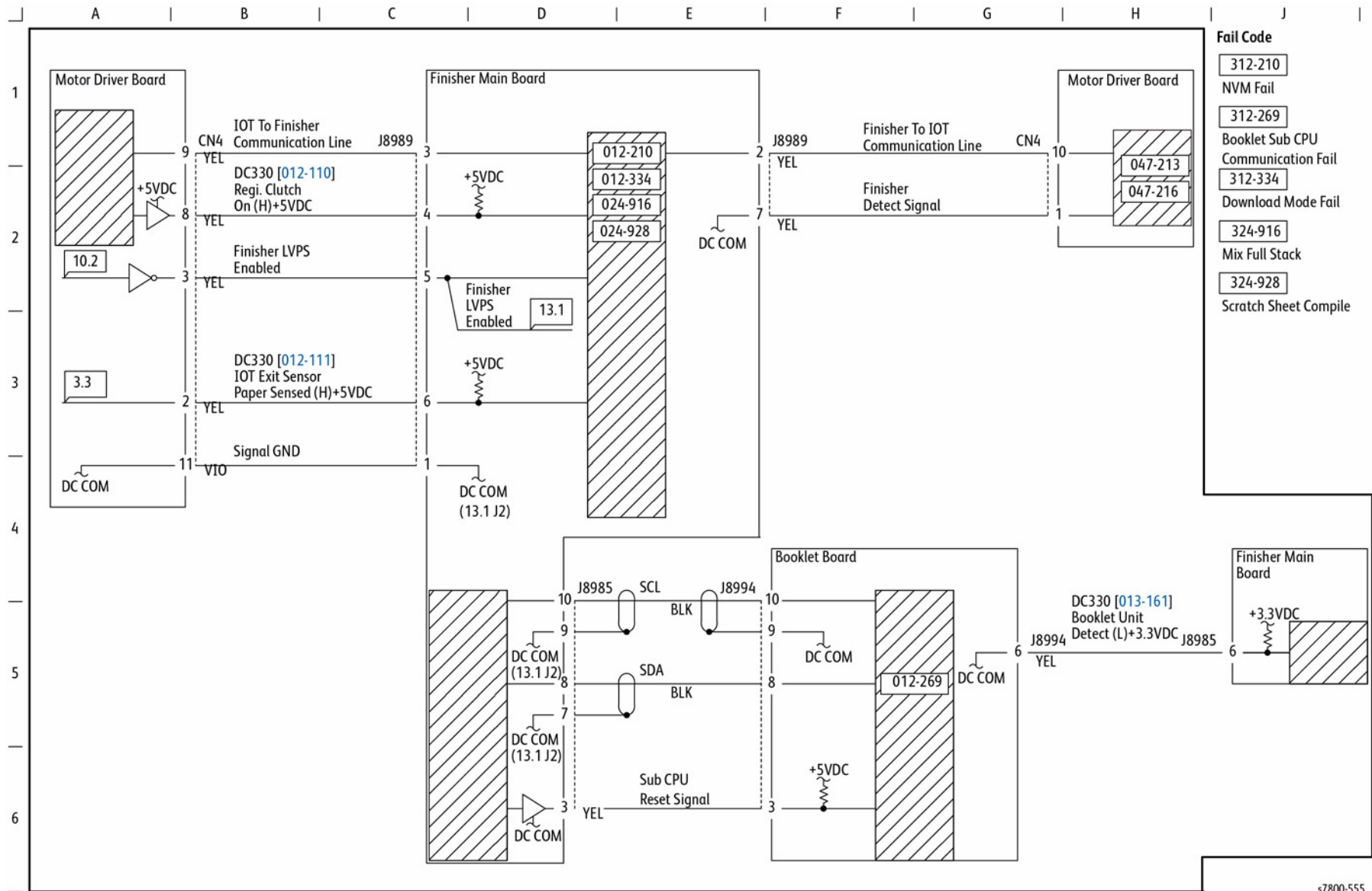


Figure 5 PWBS Communication

BSD 13.6 Finisher PWS Interface

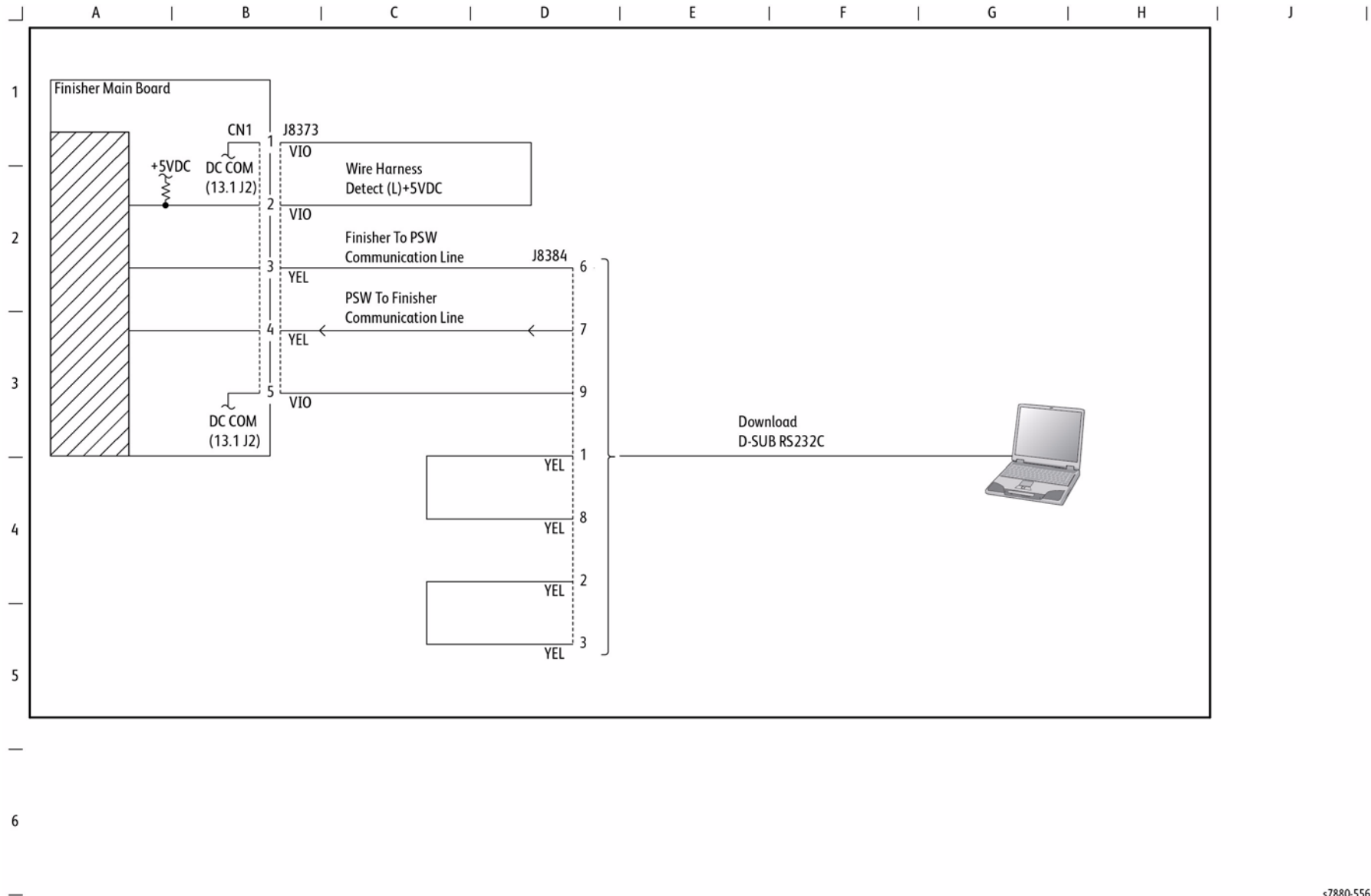


Figure 6 Finisher PWS Interface

s7880-556

BSD 13.10 Horizontal Paper Transportation

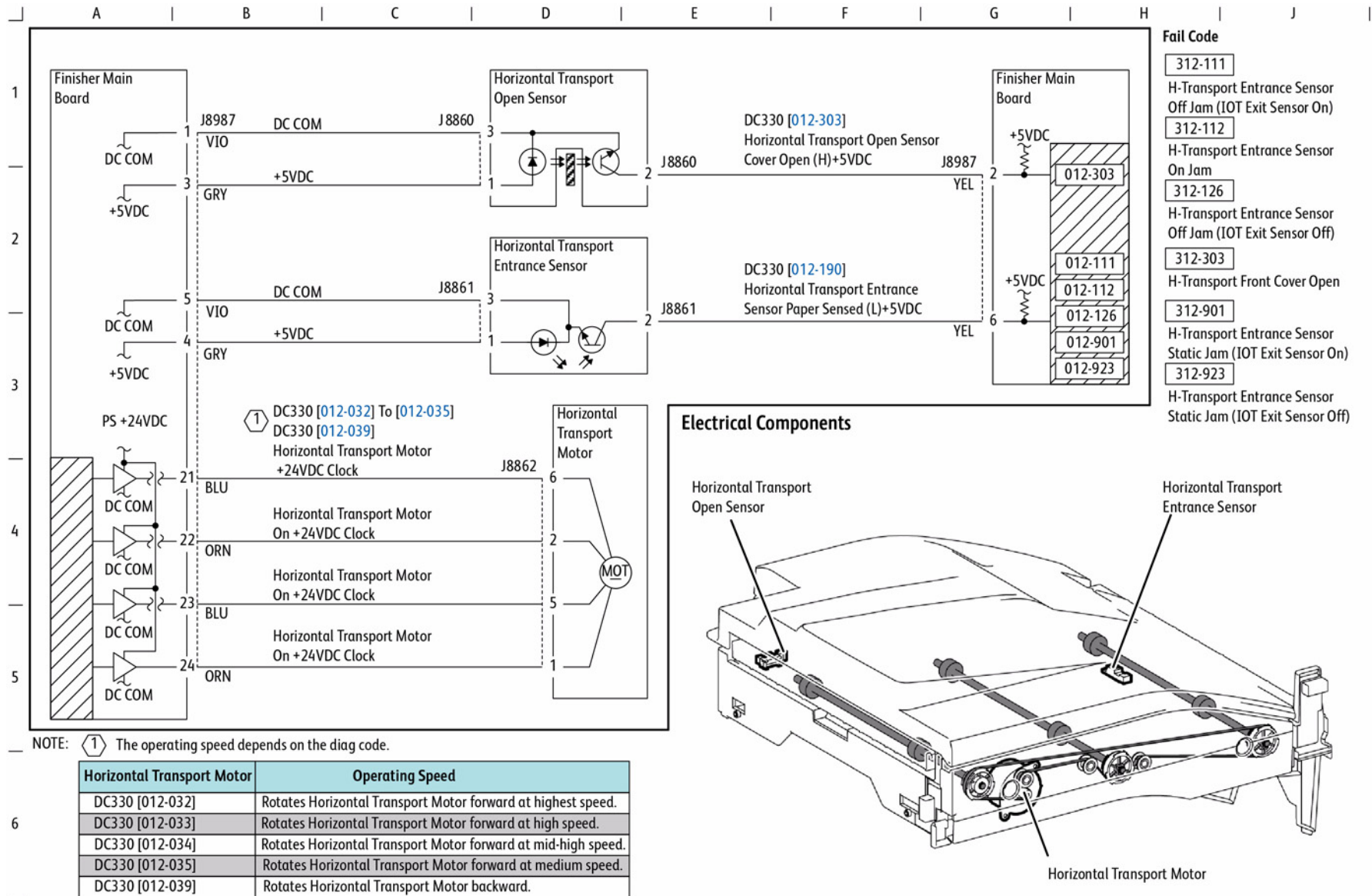


Figure 7 Horizontal Paper Transportation

BSD 13.11 Punch Control

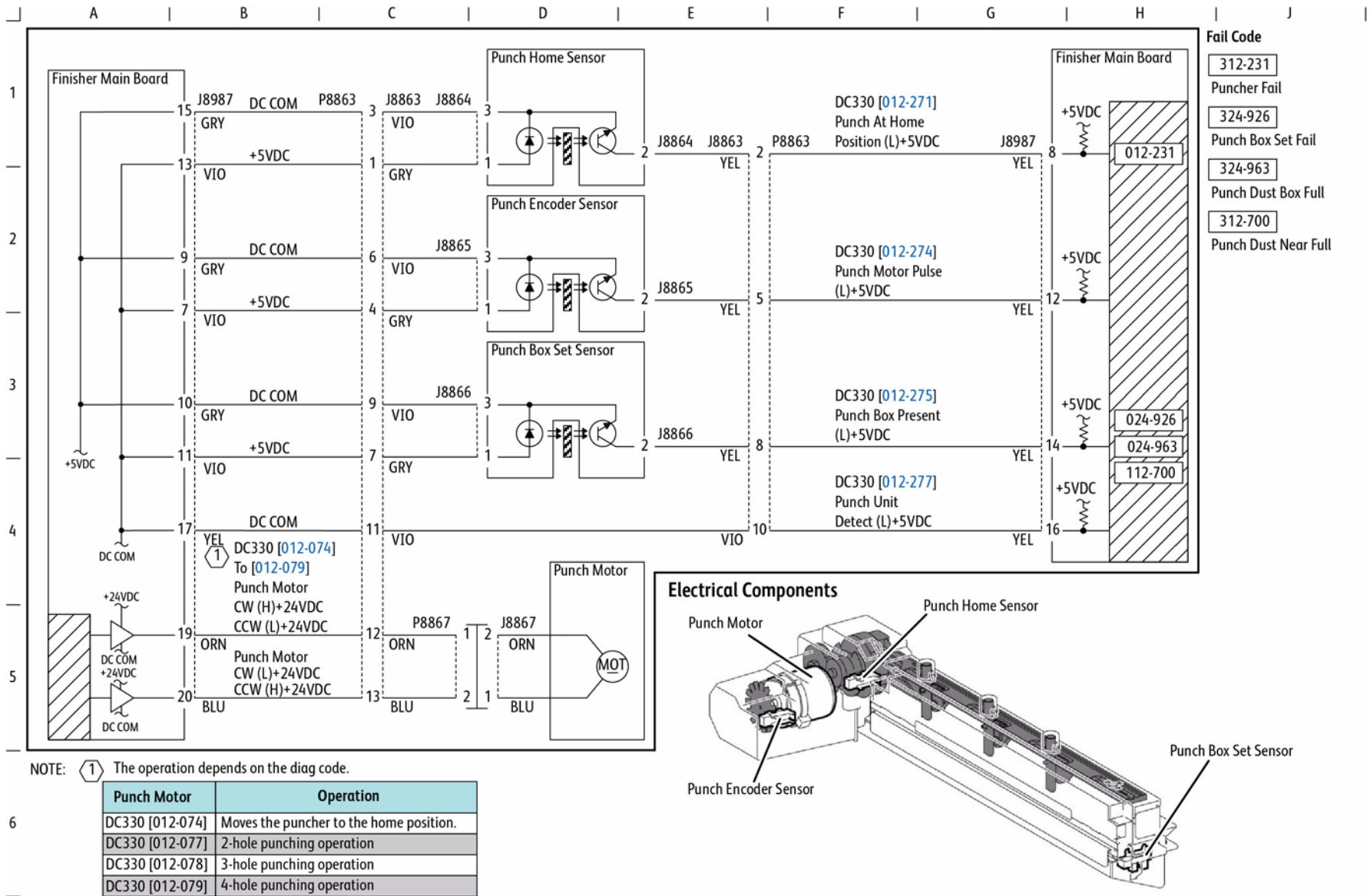


Figure 8 Punch Control

s7800-558

BSD 13.20 Finisher Paper Transportation

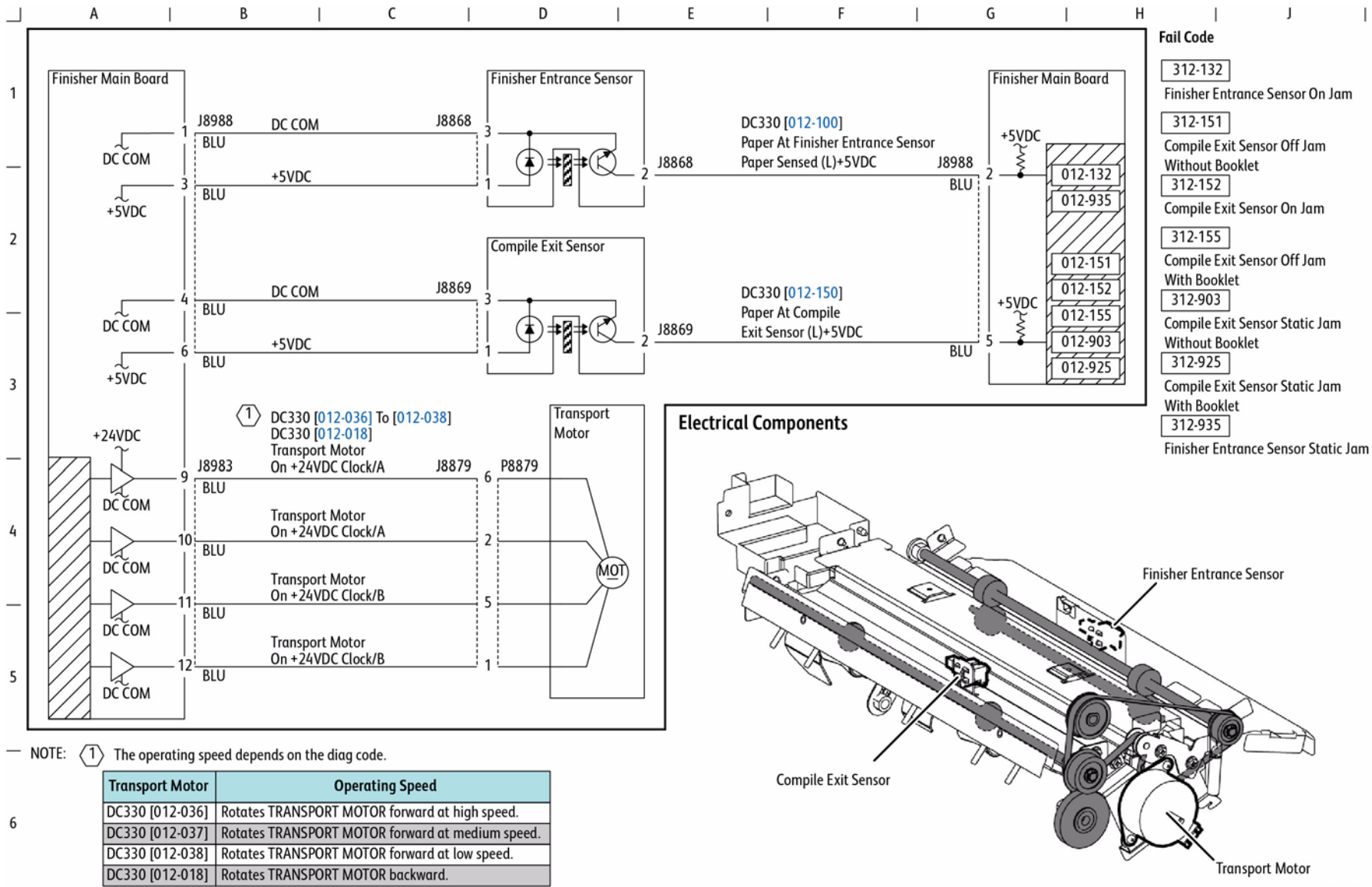
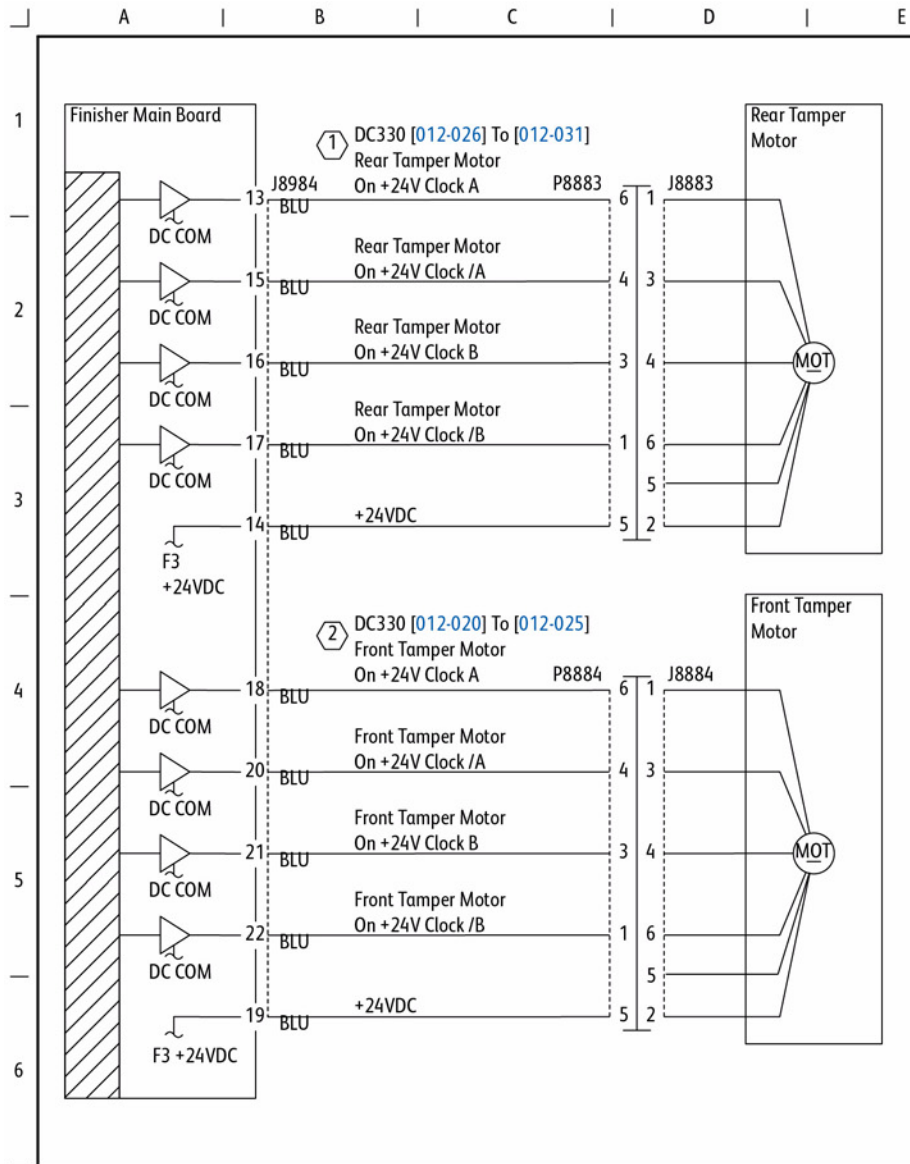


Figure 9 Finisher Paper Transportation

BSD 13.21 Tamping Control (1 of 2)



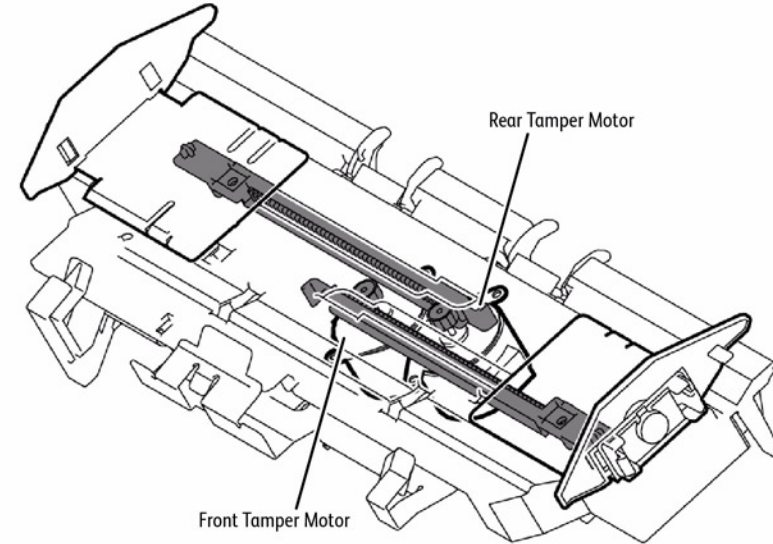
NOTE: ① The operation speed depends on the diag code.

Rear Tamper Motor	Operation
DC330 [012-026]	Moves REAR TAMPER to front at low speed.
DC330 [012-028]	Moves REAR TAMPER to front at high speed.
DC330 [012-029]	Moves REAR TAMPER to rear at low speed.
DC330 [012-031]	Moves REAR TAMPER to rear at high speed.

NOTE: ② The operation speed depends on the diag code.

Front Tamper Motor	Operation
DC330 [012-020]	Moves FRONT TAMPER to front at low speed.
DC330 [012-022]	Moves FRONT TAMPER to front at high speed.
DC330 [012-023]	Moves FRONT TAMPER to rear at low speed.
DC330 [012-025]	Moves FRONT TAMPER to rear at high speed.

Electrical Components



s7800-560

Figure 10 Tamping Control (1 of 2)

BSD 13.22 Tamping Control (2 of 2)

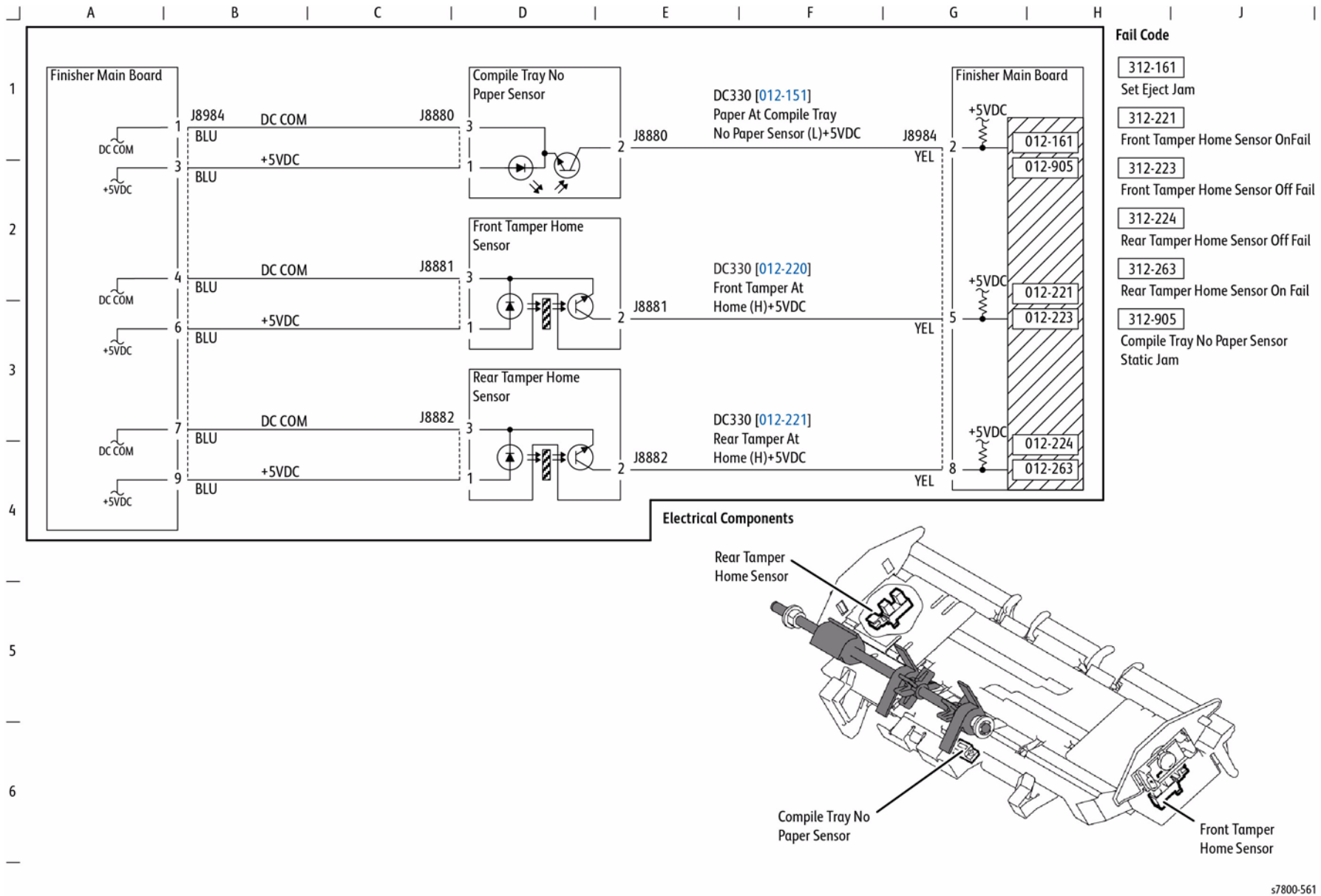
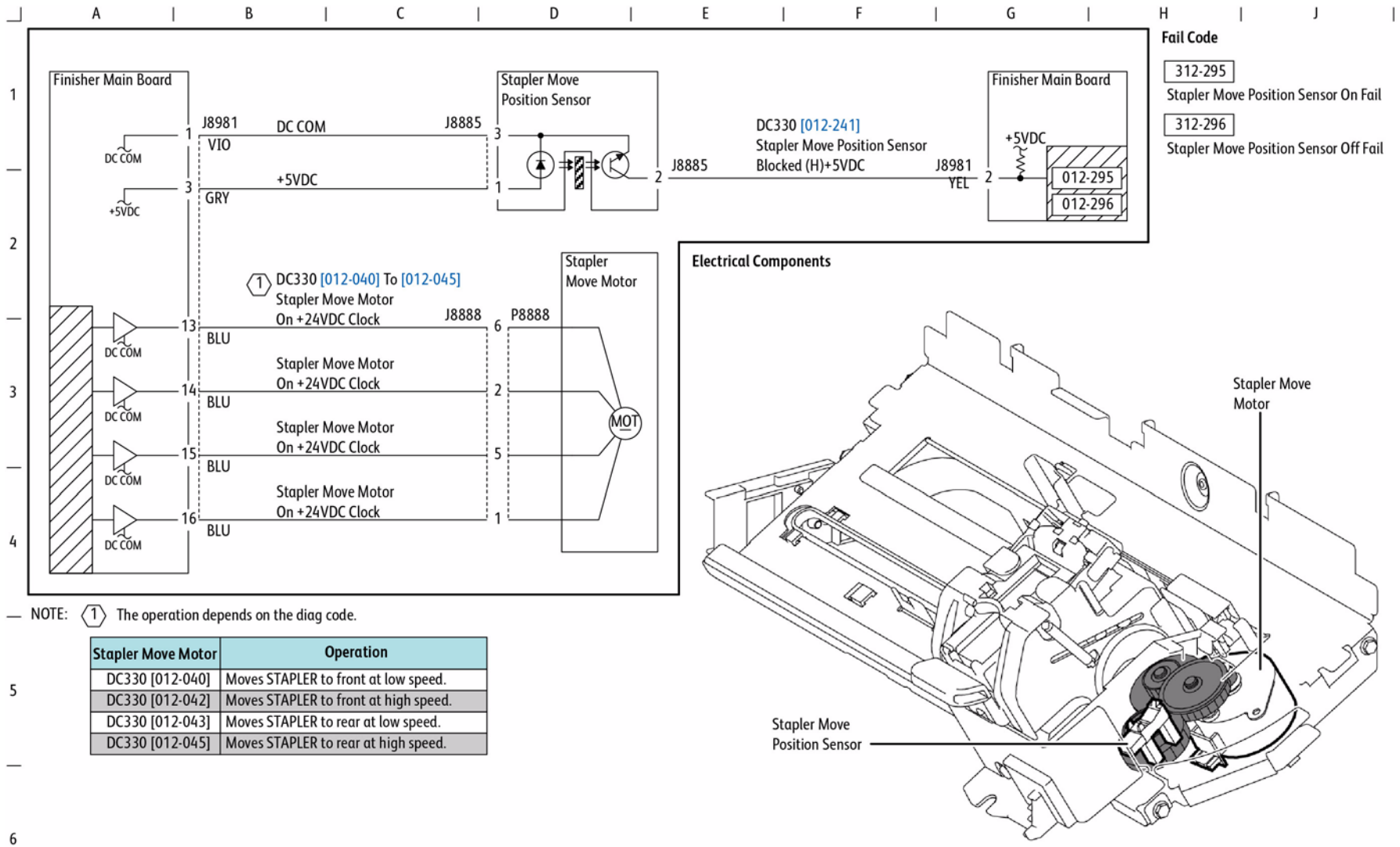


Figure 11 Tamping Control (2 of 2)

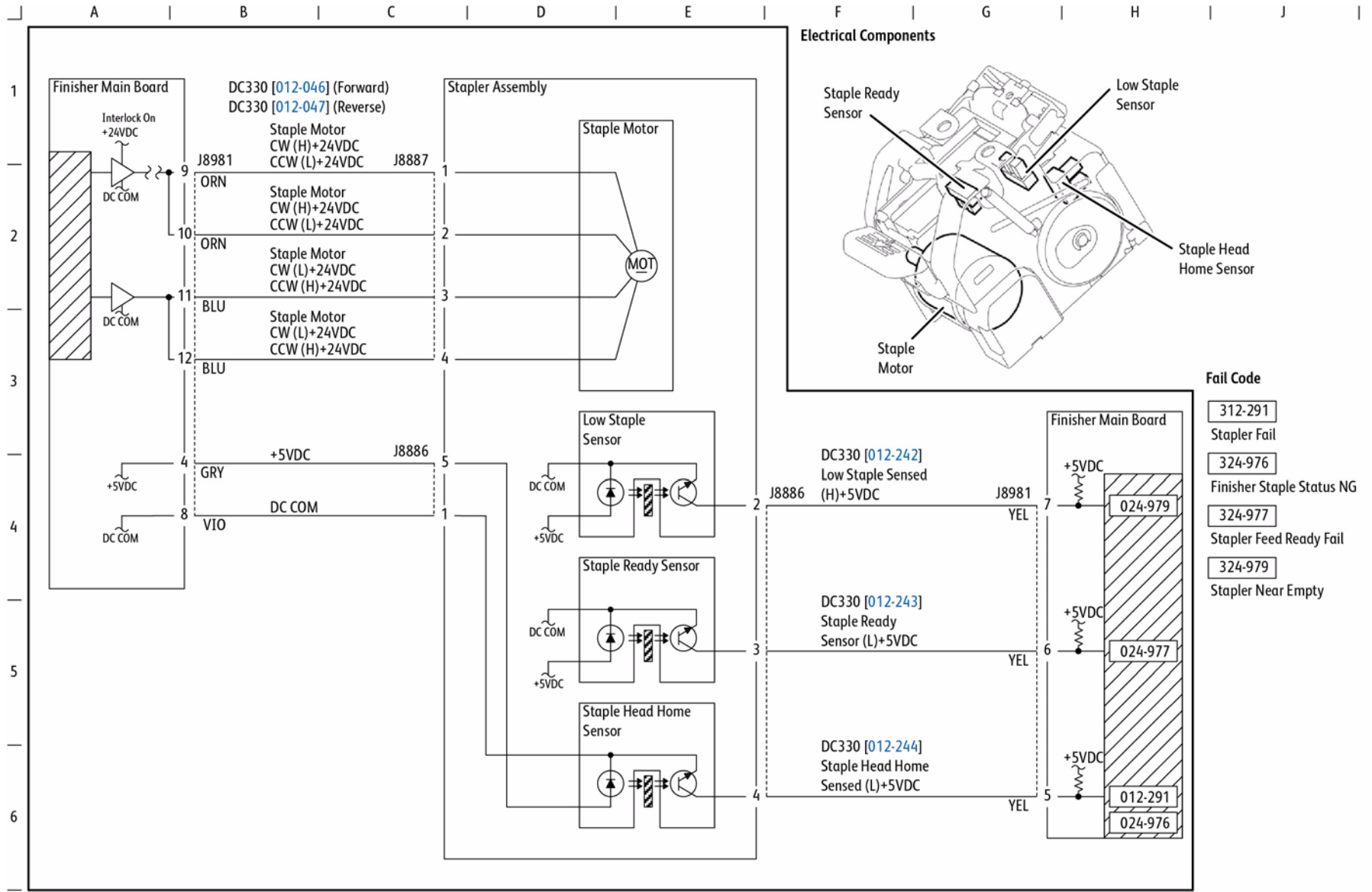
BSD 13.23 Staple Positioning



s7800-562

Figure 12 Staple Positioning

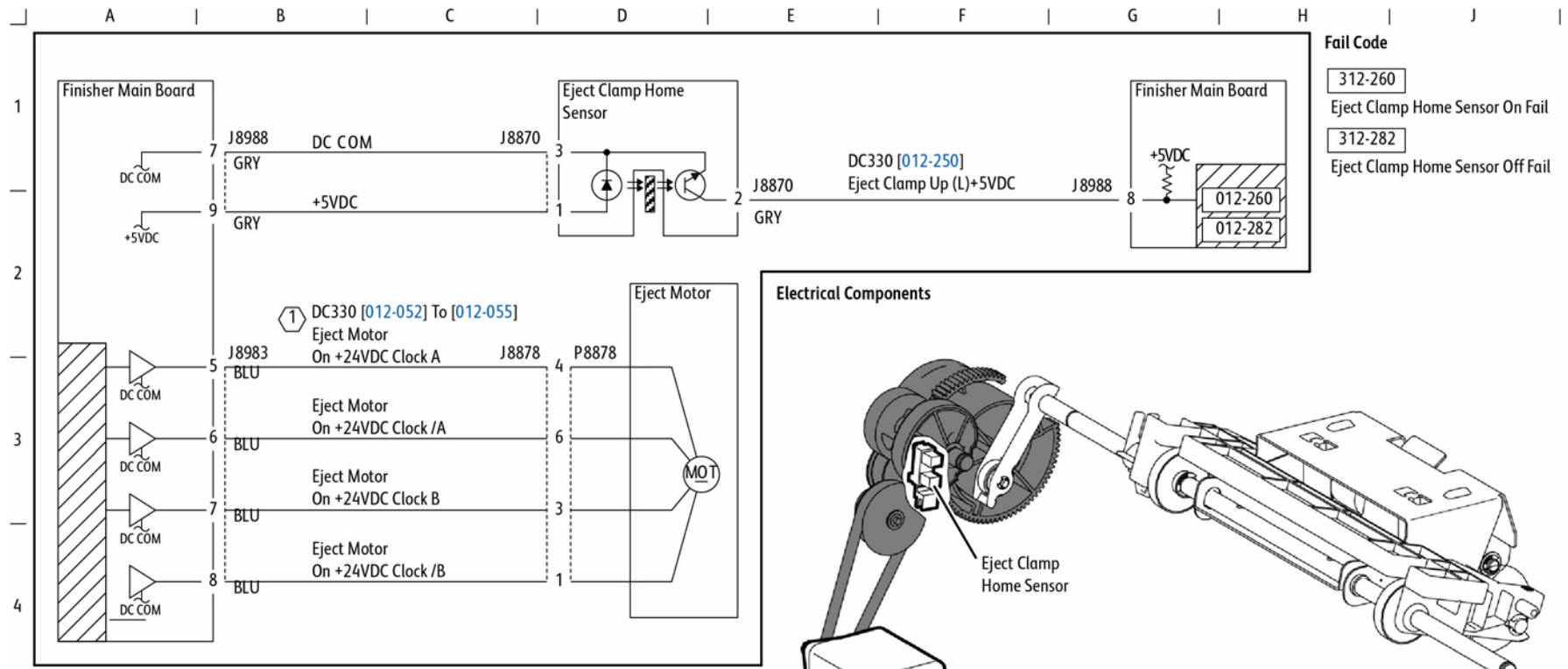
BSD 13.24 Staple Control



s7800-563

Figure 13 Staple Control

BSD 13.25 Set Eject Control (1 of 2)



Fail Code

- 312-260 Eject Clamp Home Sensor On Fail
- 312-282 Eject Clamp Home Sensor Off Fail

NOTE: ① The operation depends on the diag code.

Eject Motor	Operation
DC330 [012-052]	Rotates EJECT MOTOR backward at high speed. Stops it when EJECT CLAMP HOME SENSOR detects EJECT CLAMP is home. (EJECT CLAMP ROLL UP operation)
DC330 [012-053]	Rotates EJECT MOTOR backward at high speed. Stops it when EJECT CLAMP HOME SENSOR detects EJECT CLAMP is not home. (EJECT CLAMP ROLL DOWN operation)
DC330 [012-054]	Rotates EJECT MOTOR forward at low speed.
DC330 [012-055]	Rotates EJECT MOTOR forward at high speed.

s7800-564

Figure 14 Set Eject Control (1 of 2)

BSD 13.26 Set Eject Control (2 of 2)

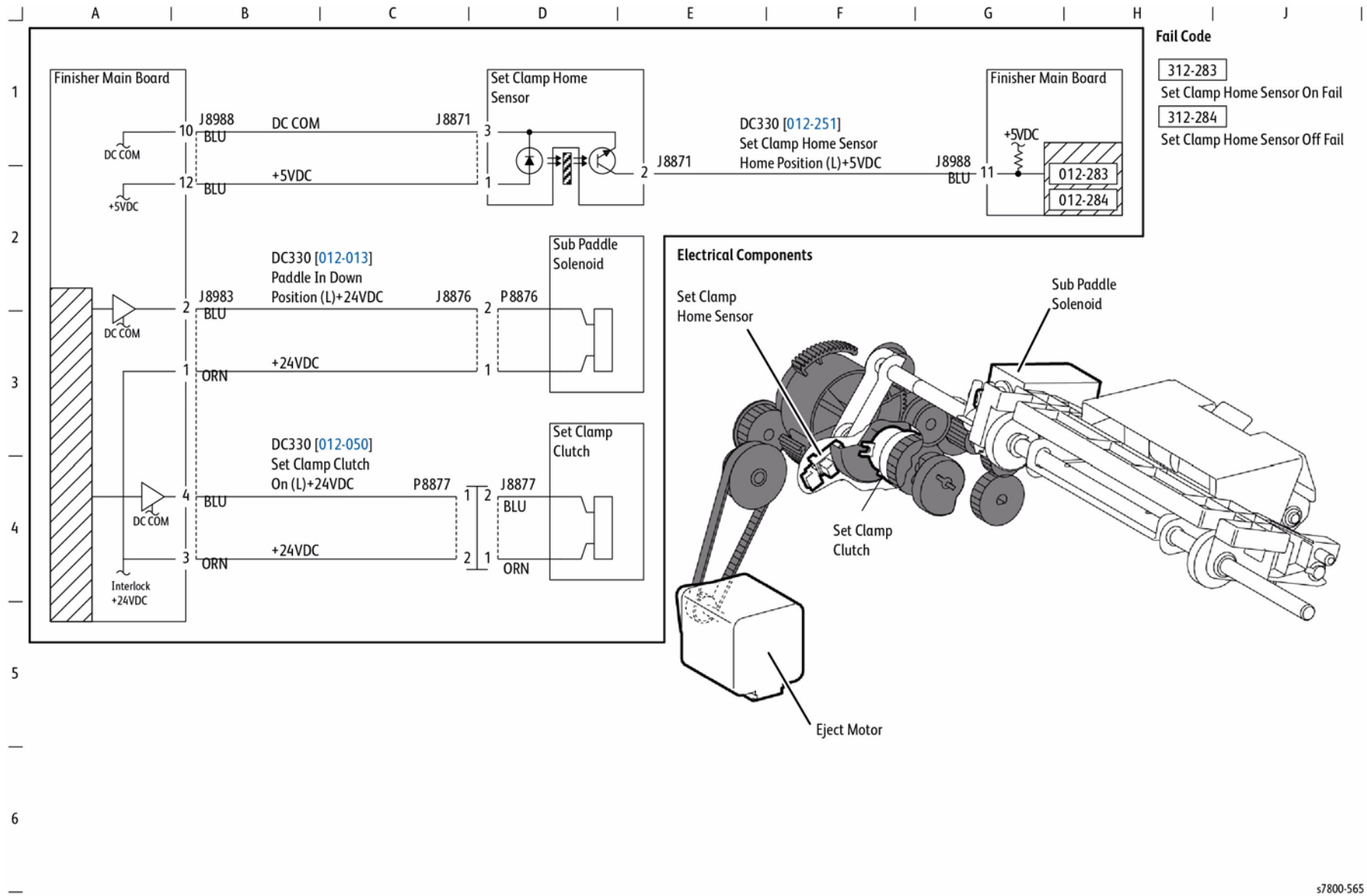


Figure 15 Set Eject Control (2 of 2)

BSD 13.27 Stacker Tray Control

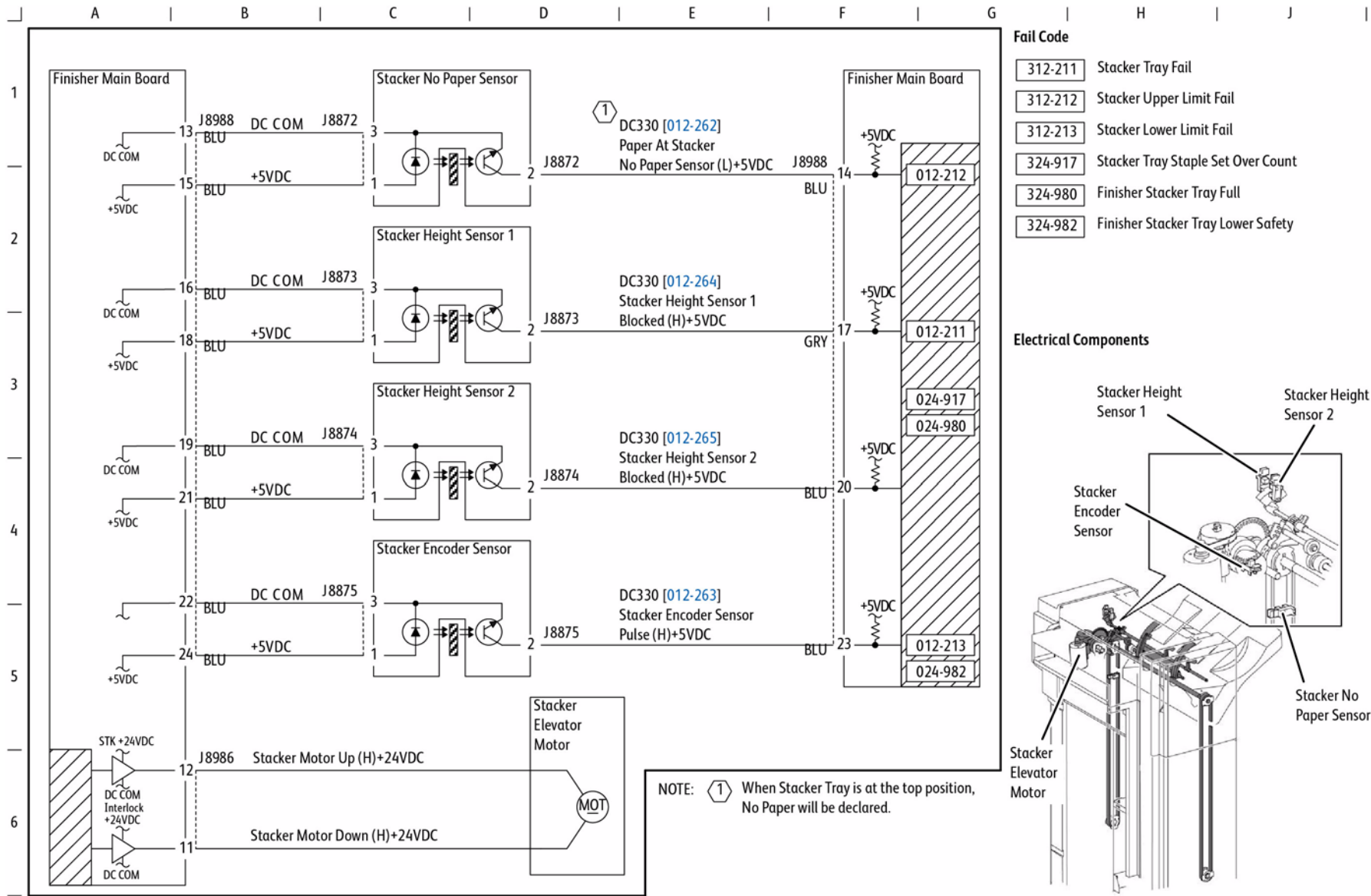


Figure 16 Stacker Tray Control

BSD 13.30 Booklet Staple Positioning

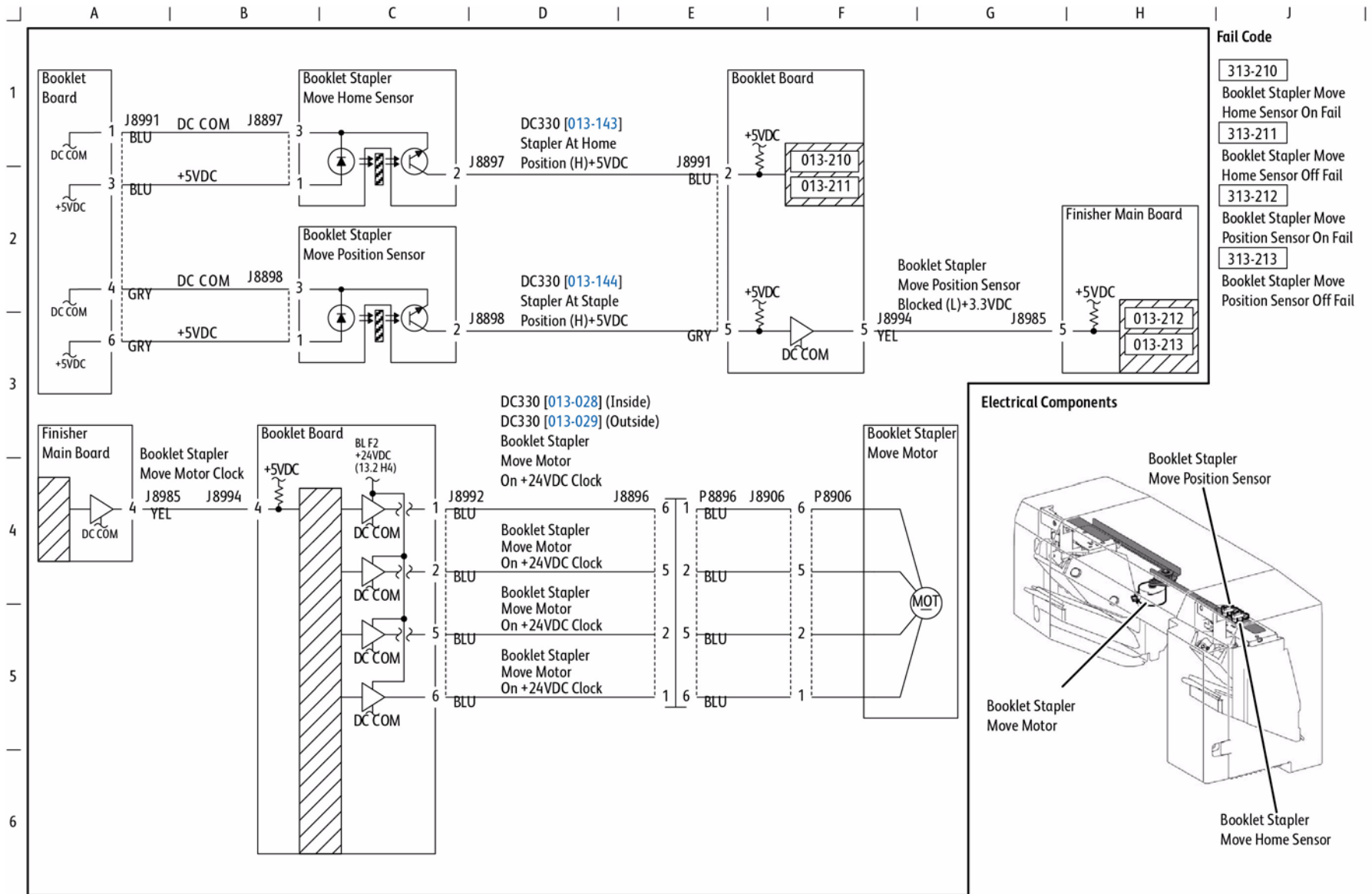
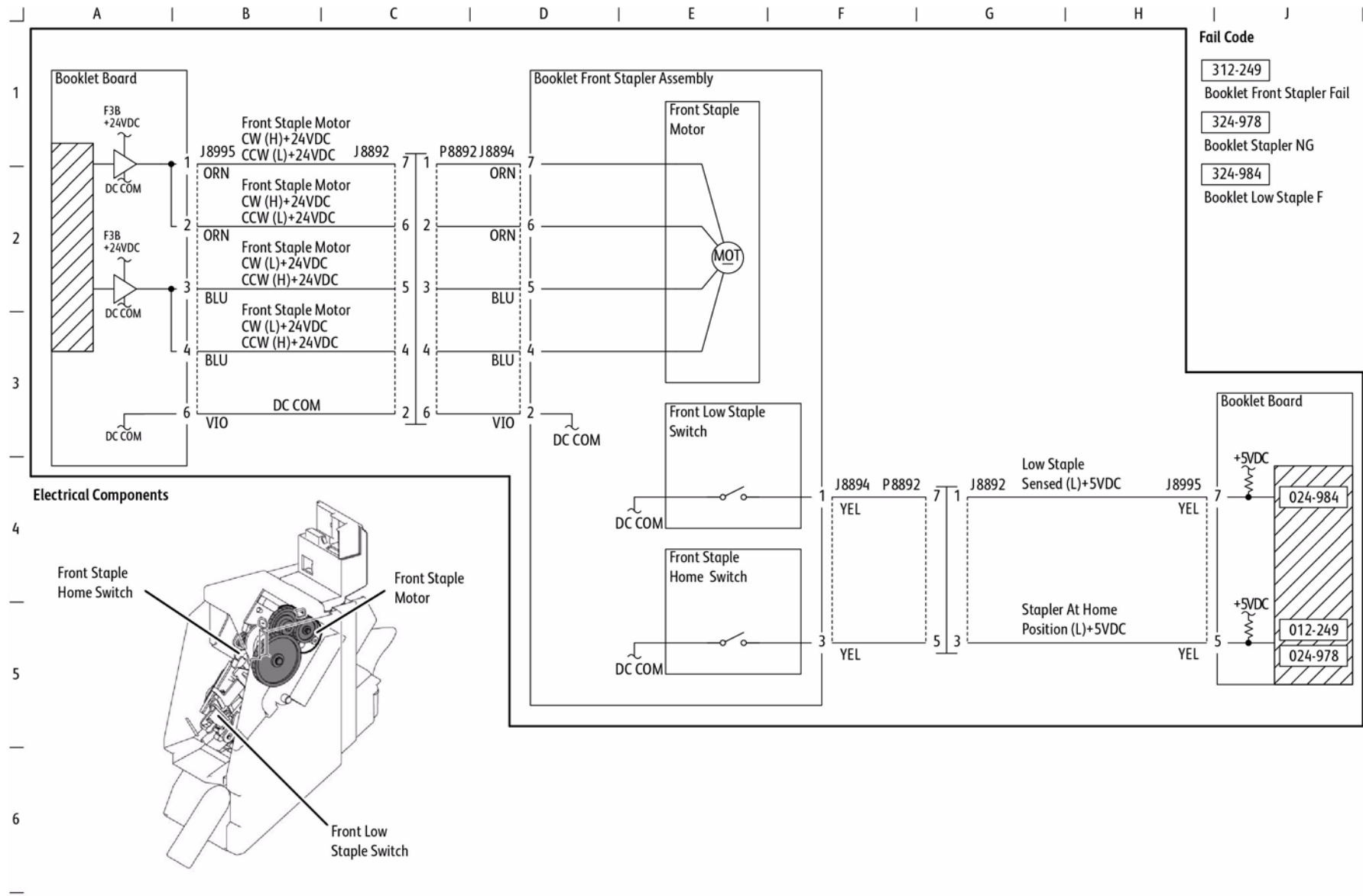


Figure 17 Booklet Staple Positioning

s7800-567

BSD 13.31 Booklet Staple Control (1 of 2)



s7800-568

Figure 18 Booklet Staple Control (1 of 2)

BSD 13.32 Booklet Staple Control (2 of 2)

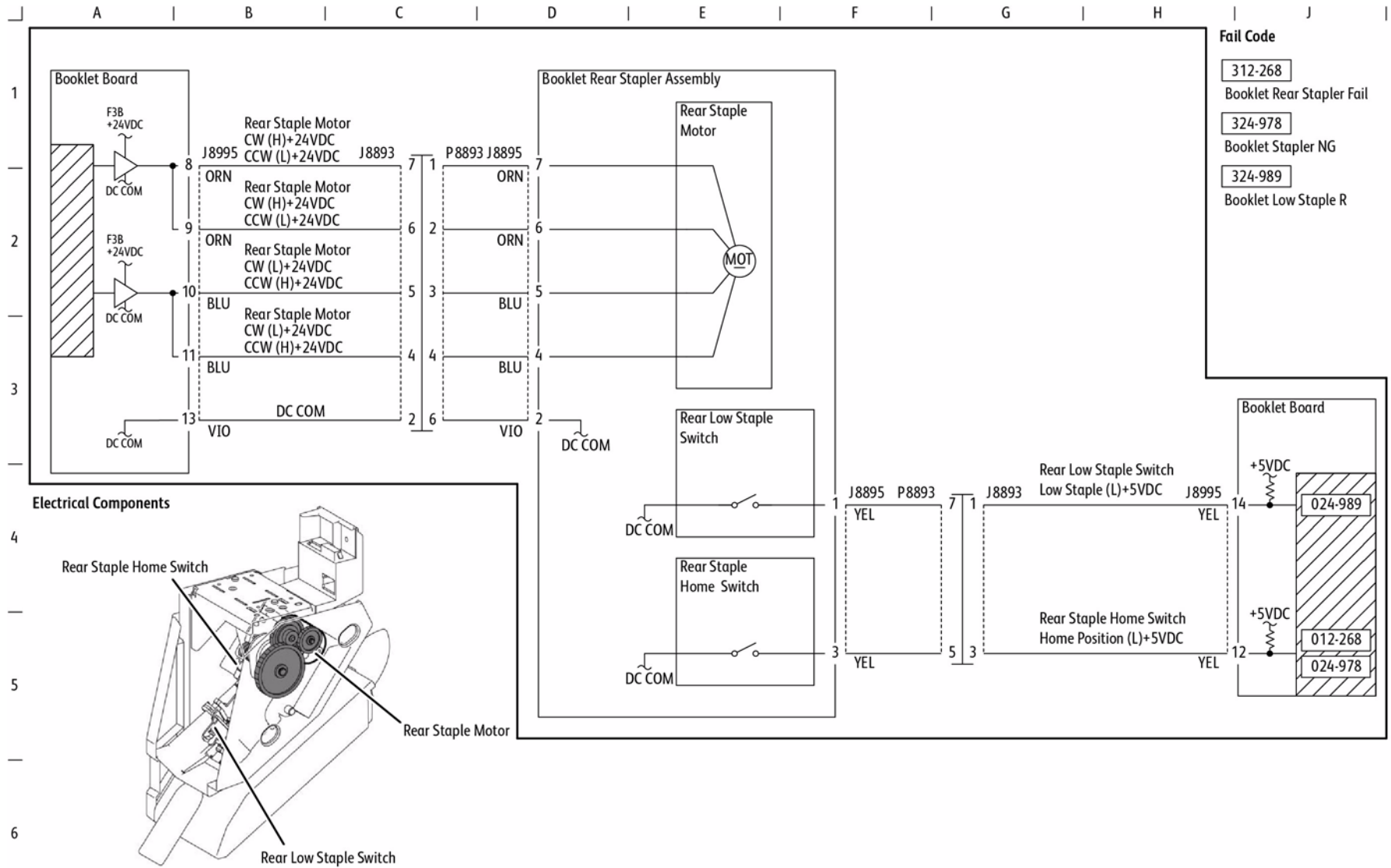
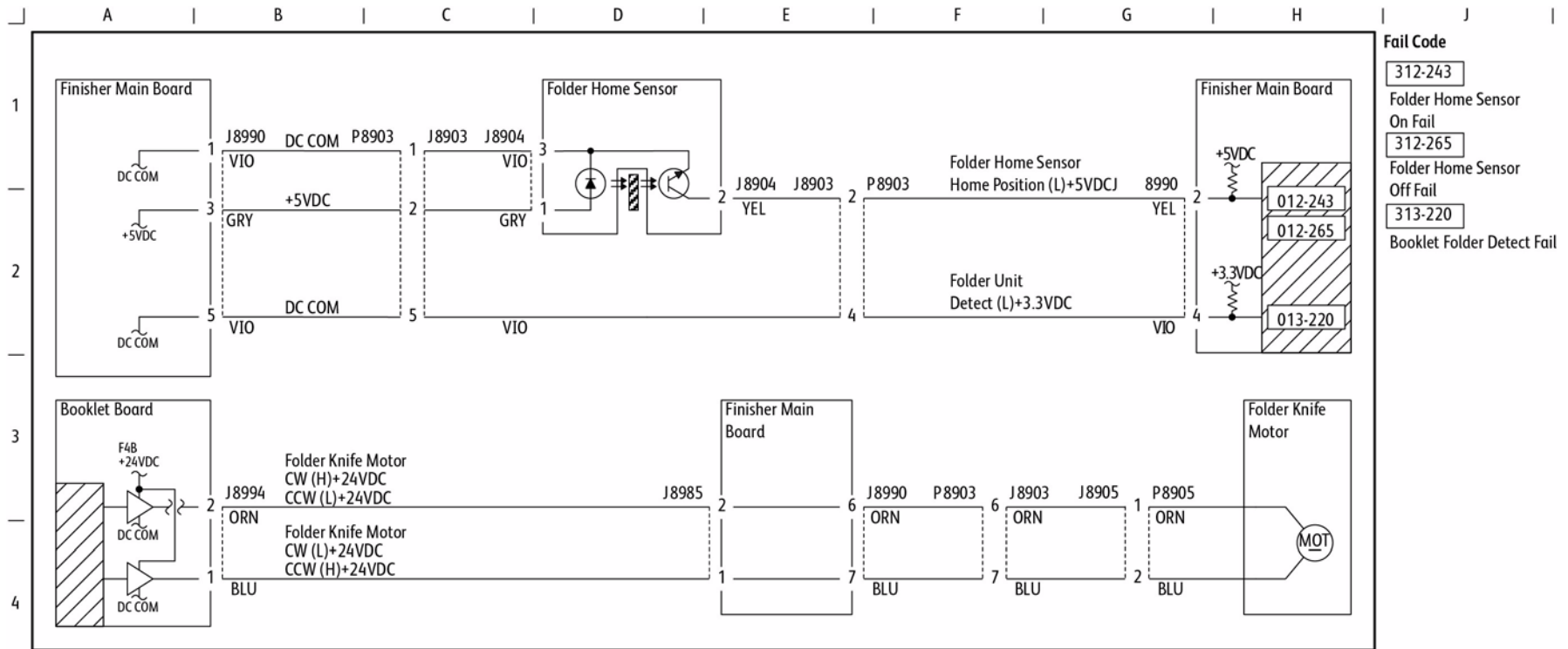


Figure 19 Booklet Staple Control (2 of 2)

BSD 13.33 Folder Control



- Fail Code**
- 312-243 Folder Home Sensor On Fail
 - 312-265 Folder Home Sensor Off Fail
 - 313-220 Booklet Folder Detect Fail

Electrical Components

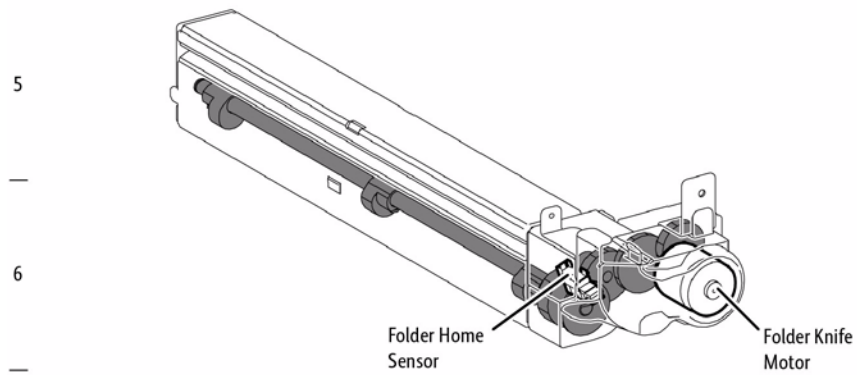
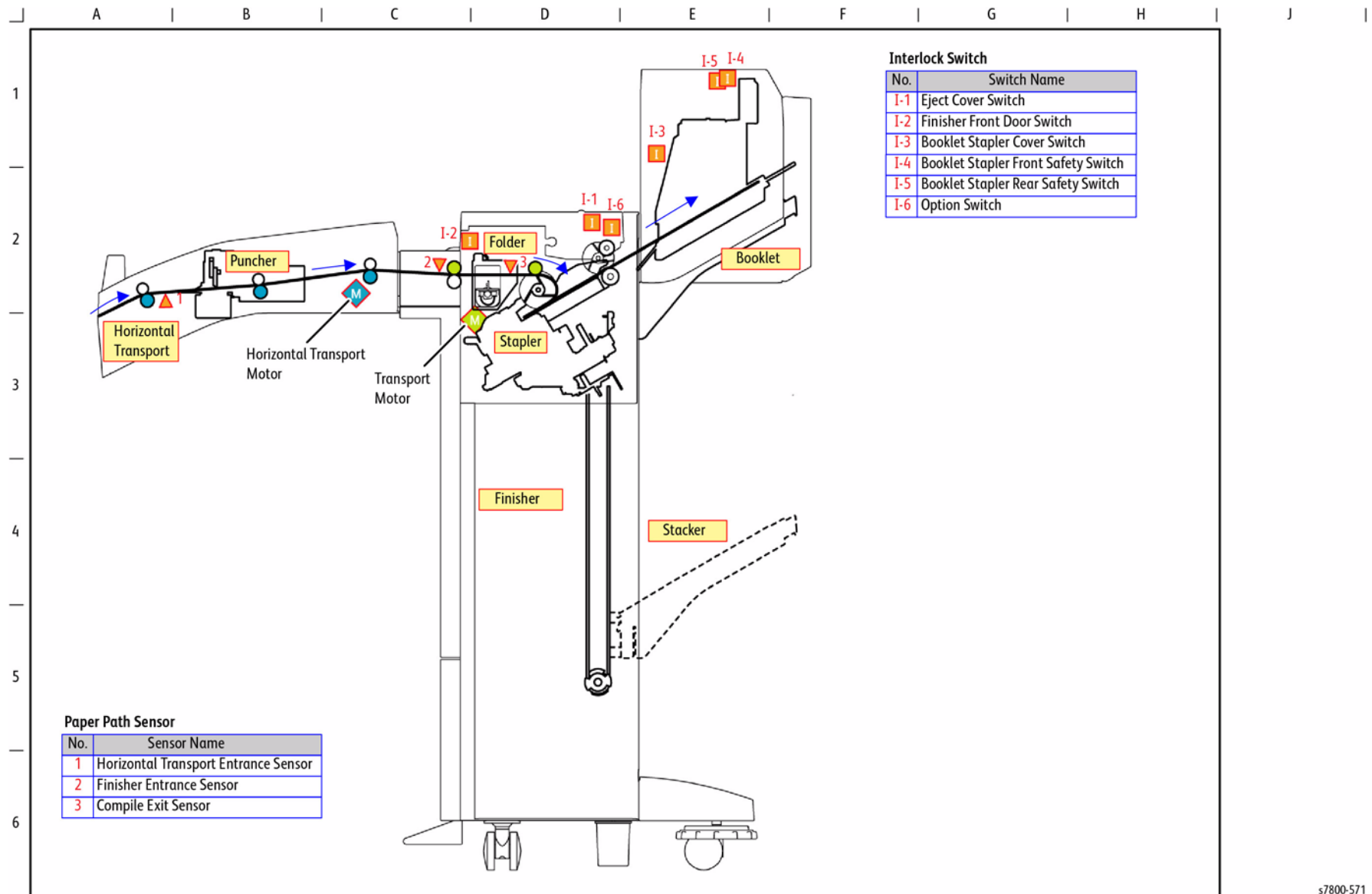


Figure 20 Folder Control

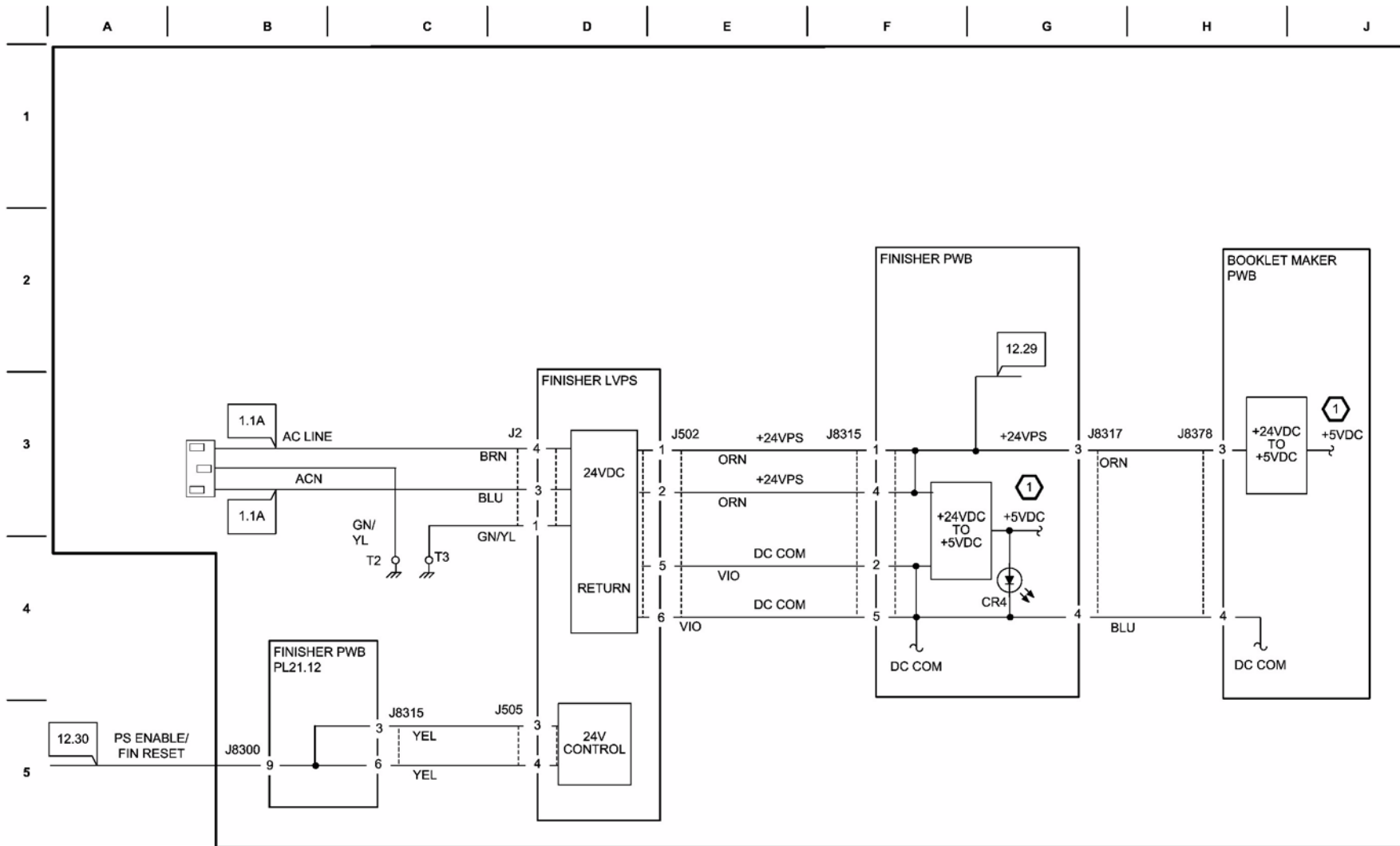
s7800-570

BSD 13.36 Finisher Paper Path



s7800-571

Figure 21 Finisher Paper Path



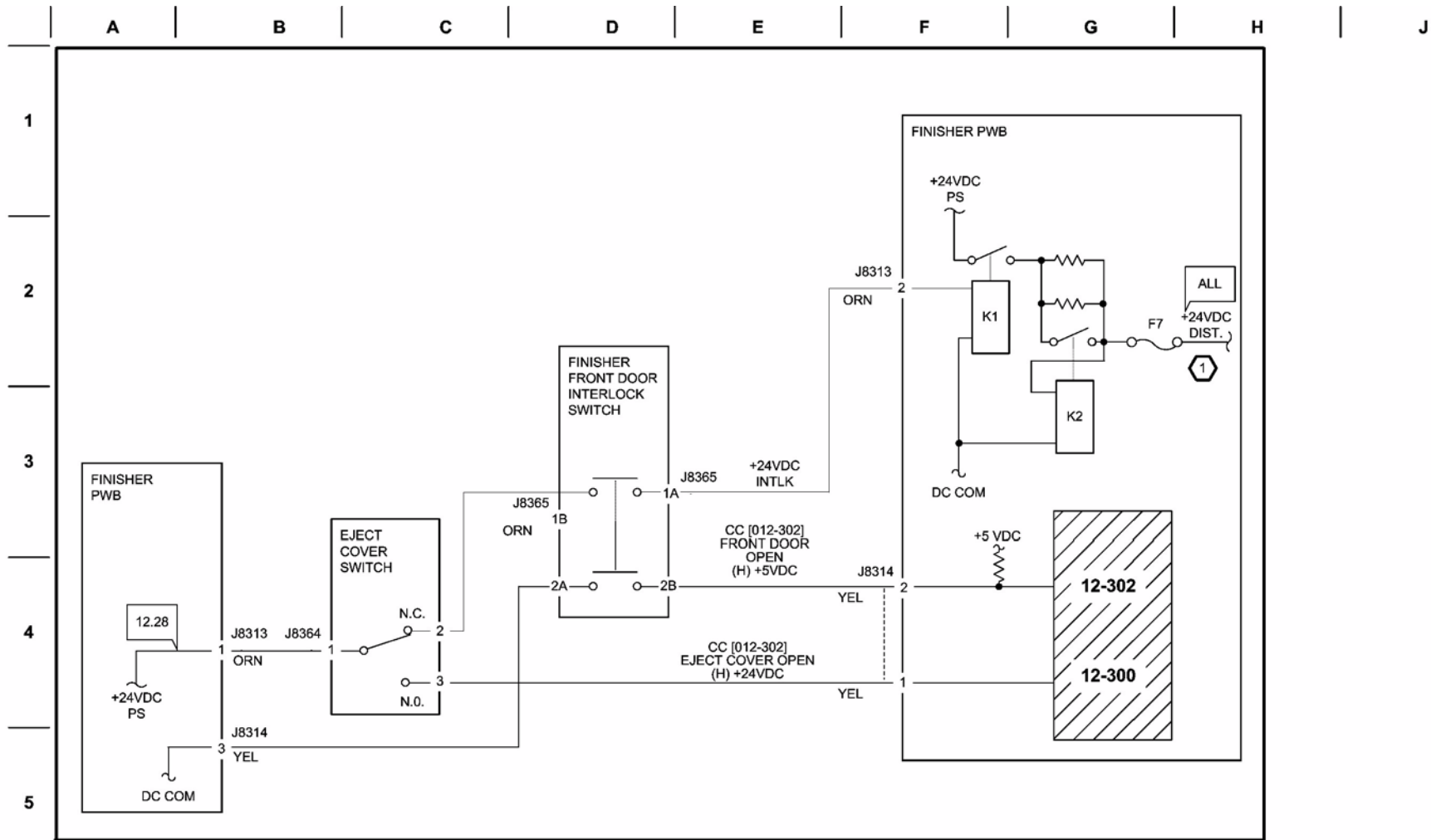
NOTES:

1 REFER TO WIRENETS FOR DC POWER DISTRIBUTION

s7800-661

Figure 1 Finisher Power Generation

BSD 14.2 Finisher Interlocks



NOTES:

REFER TO WIRENETS FOR DC POWER DISTRIBUTION

Figure 2 Finisher Interlocks

BSD 14.3 Finisher Detection & Communication

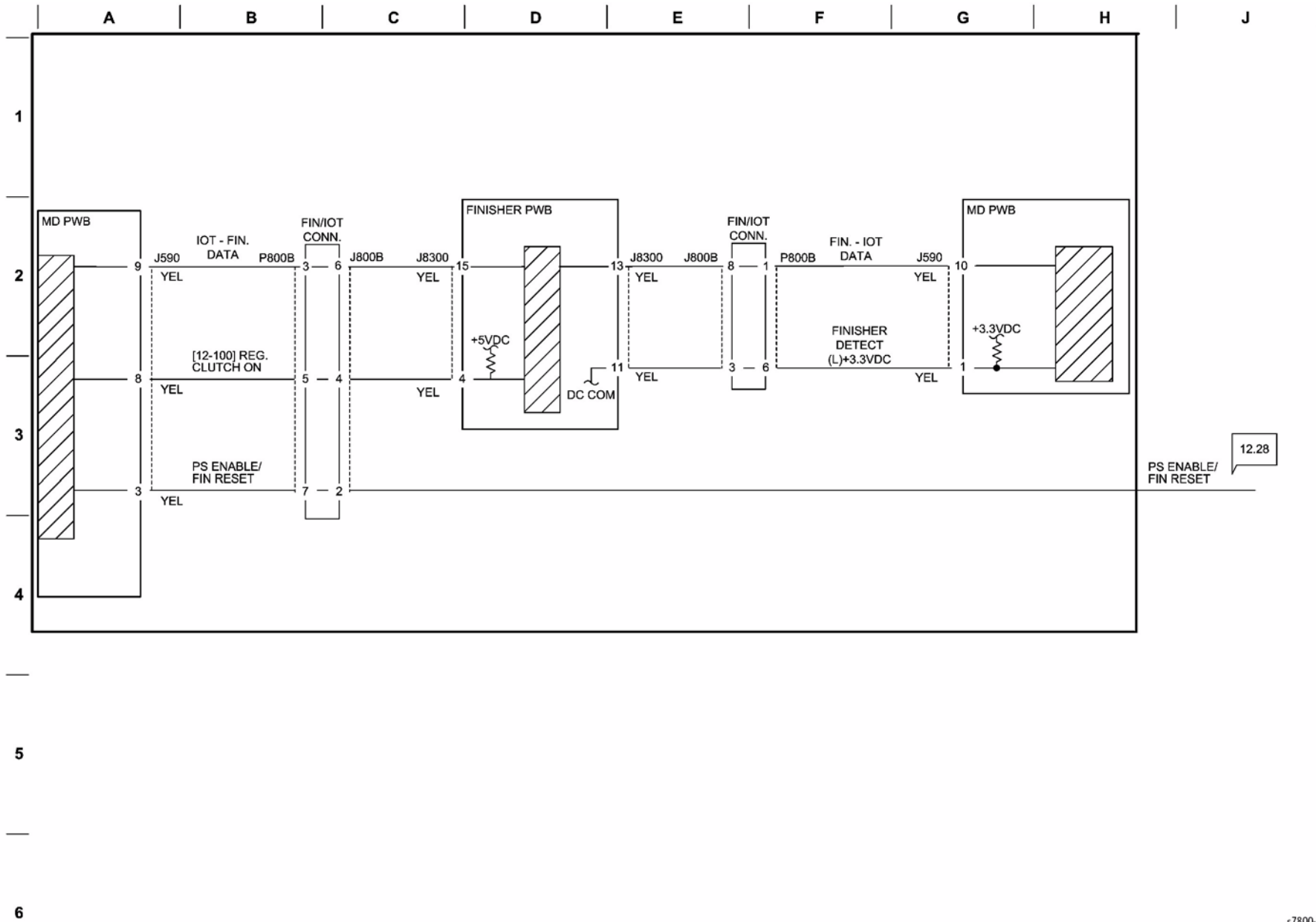


Figure 3 Finisher Detection & Communication

BSD 14.4 Finisher PWB Communication

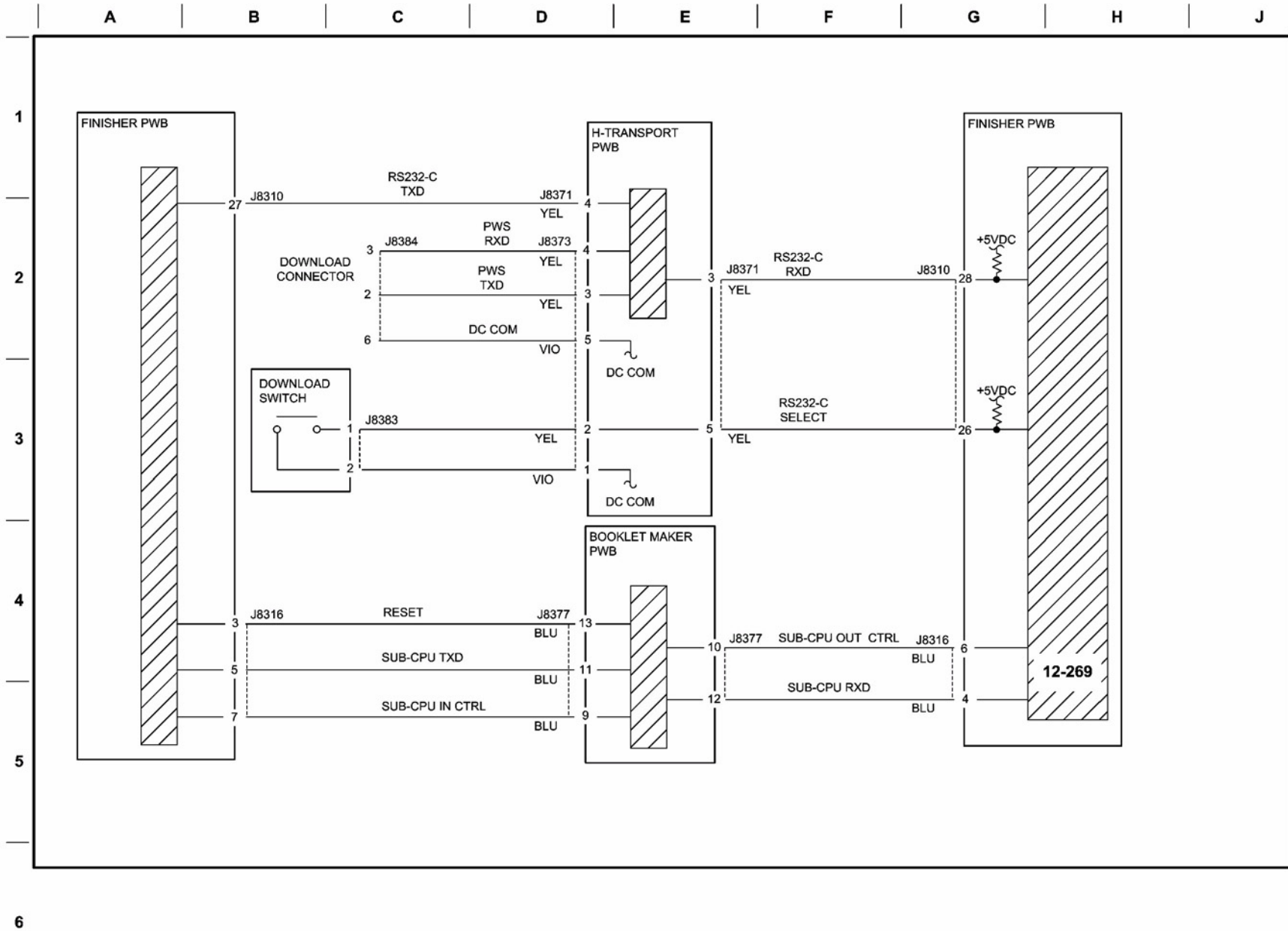
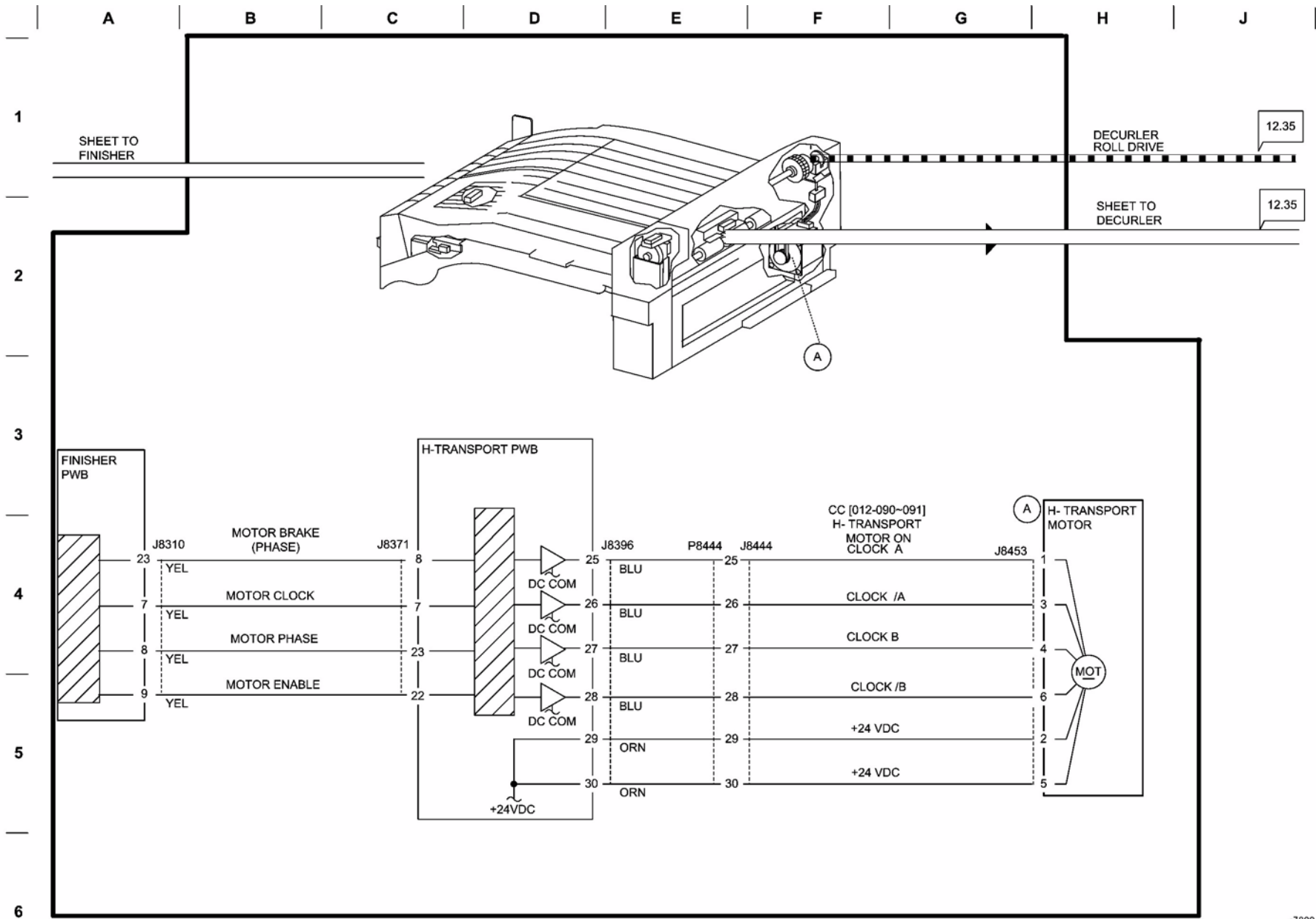


Figure 4 Finisher PWB Communication

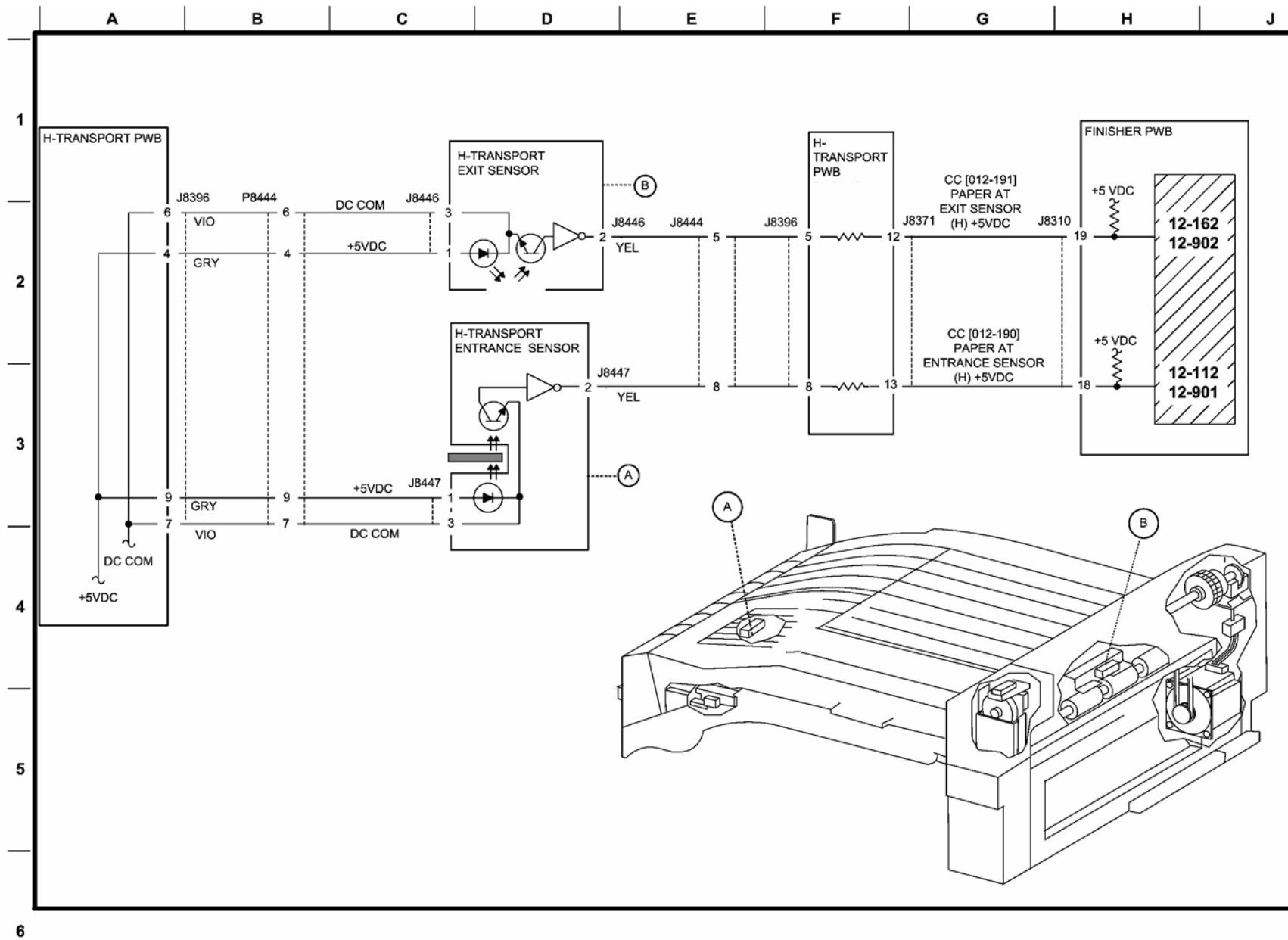
BSD 14.5 Finisher H-Transport Drives



s7800-665

Figure 5 Finisher H-Transport Drives

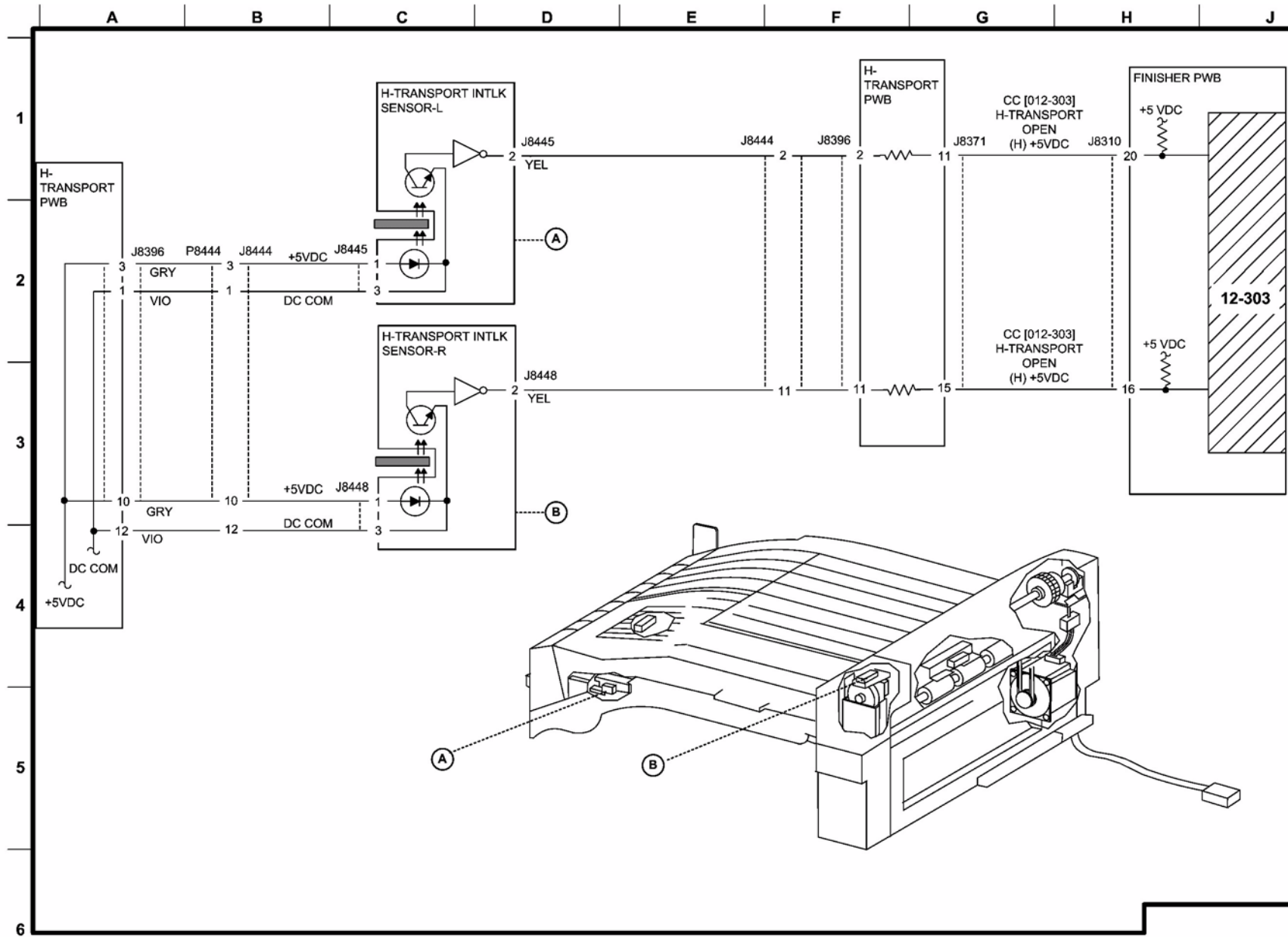
BSD 14.6 Finisher Horizontal Transportation (1 of 2)



s7800-666

Figure 6 Finisher Horizontal Transportation (1 of 2)

BSD 14.7 Finisher Horizontal Transportation (2 of 2)



s7800-667

Figure 7 Finisher Horizontal Transportation (2 of 2)

BSD 14.8 Finisher Decurling

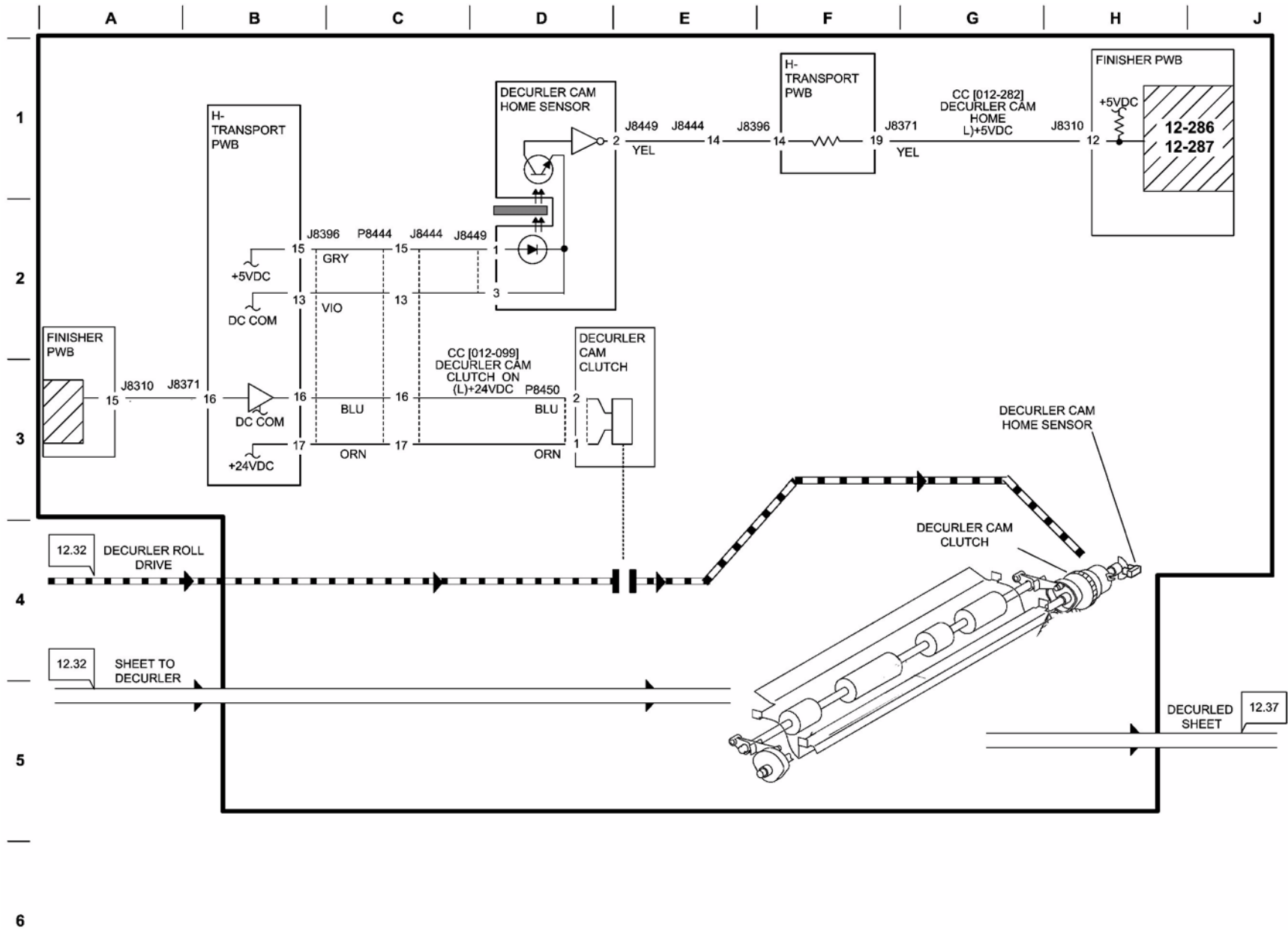
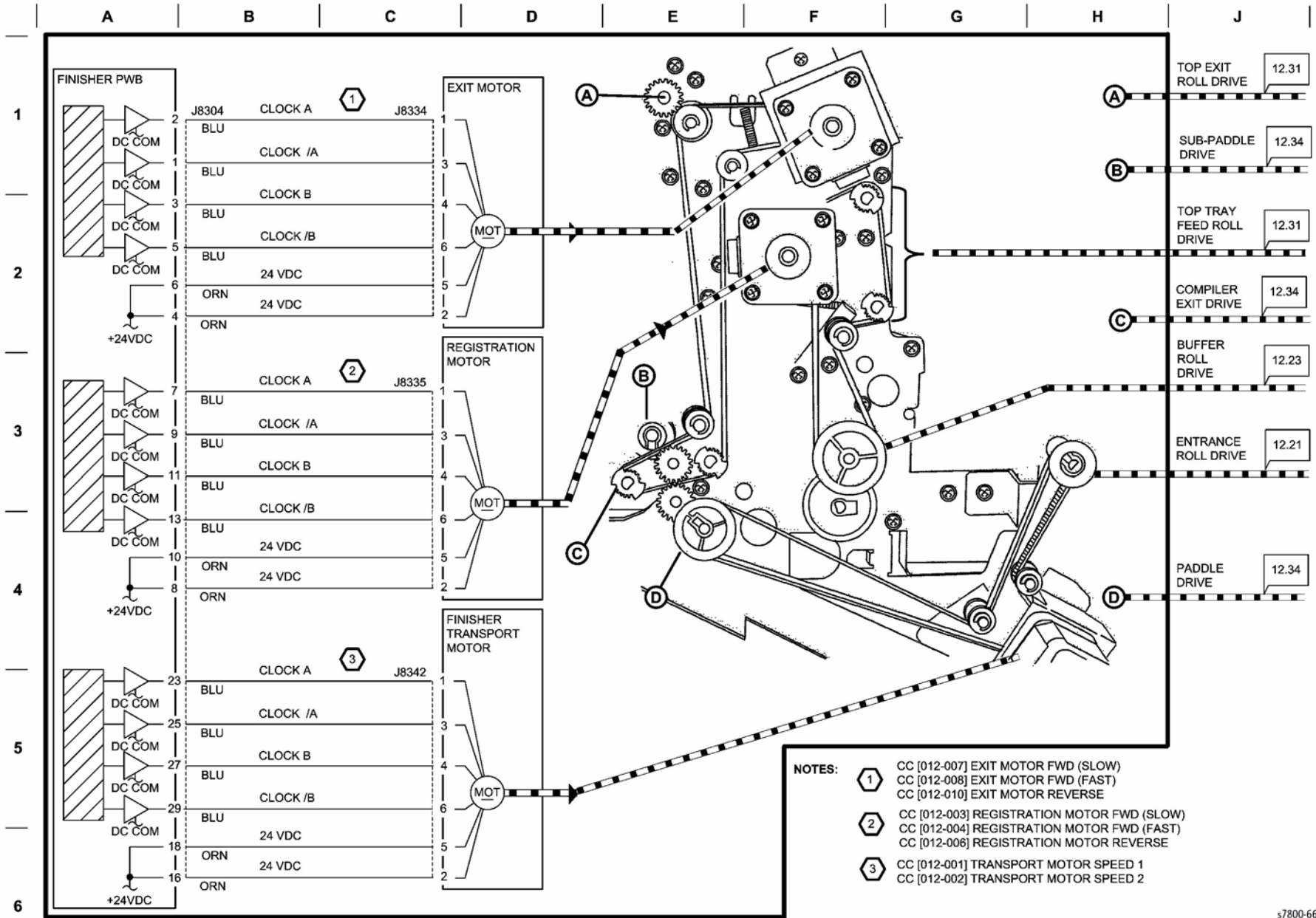


Figure 8 Finisher Decurling

s7800-668

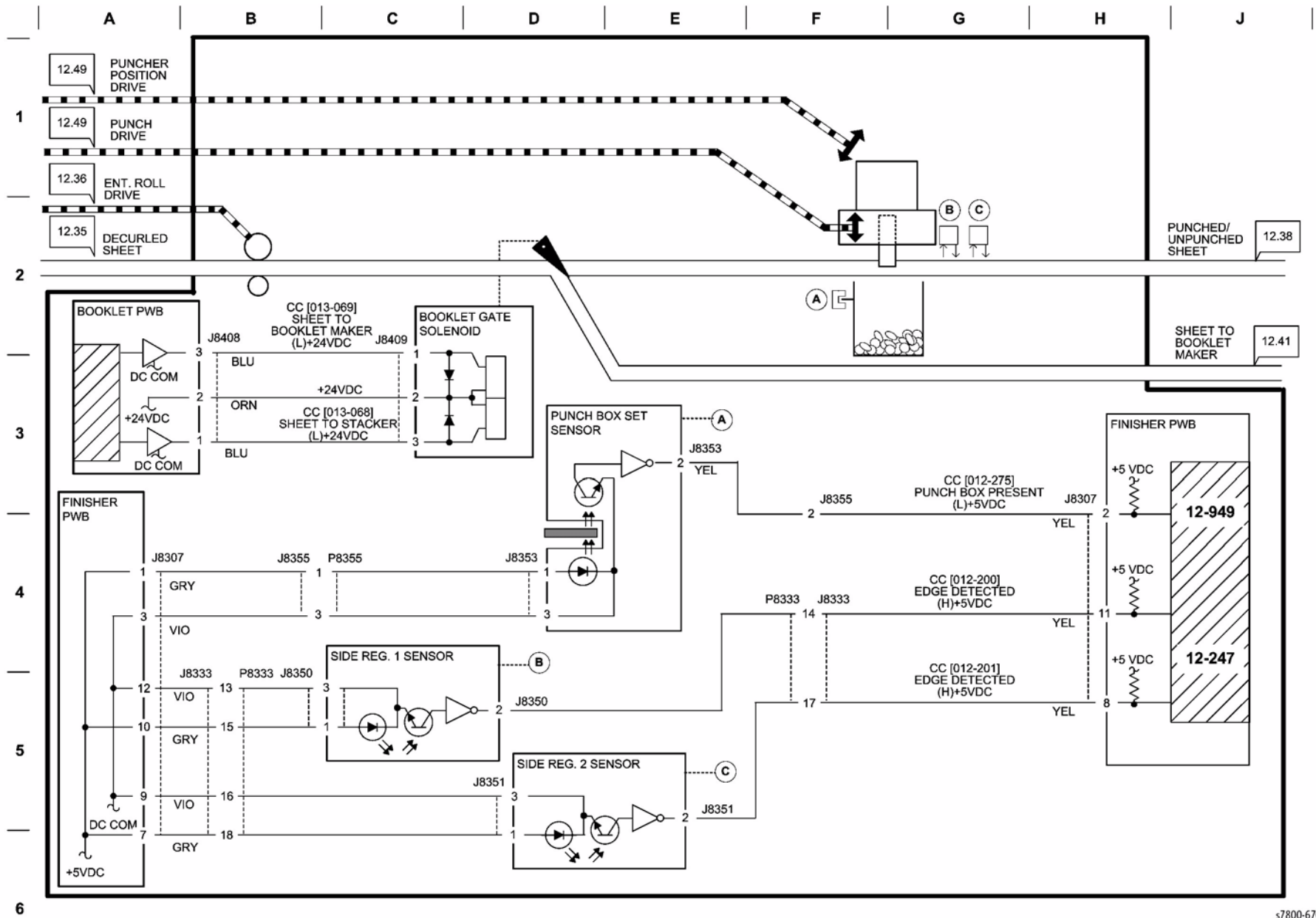
BSD 14.9 Finisher Drives



s7800-669

Figure 9 Finisher Drives

BSD 14.10 Finisher Booklet/ Punch Transport



s7800-670

Figure 10 Finisher Booklet/ Punch Transport

BSD 14.11 Finisher Transport, Top Tray Gating

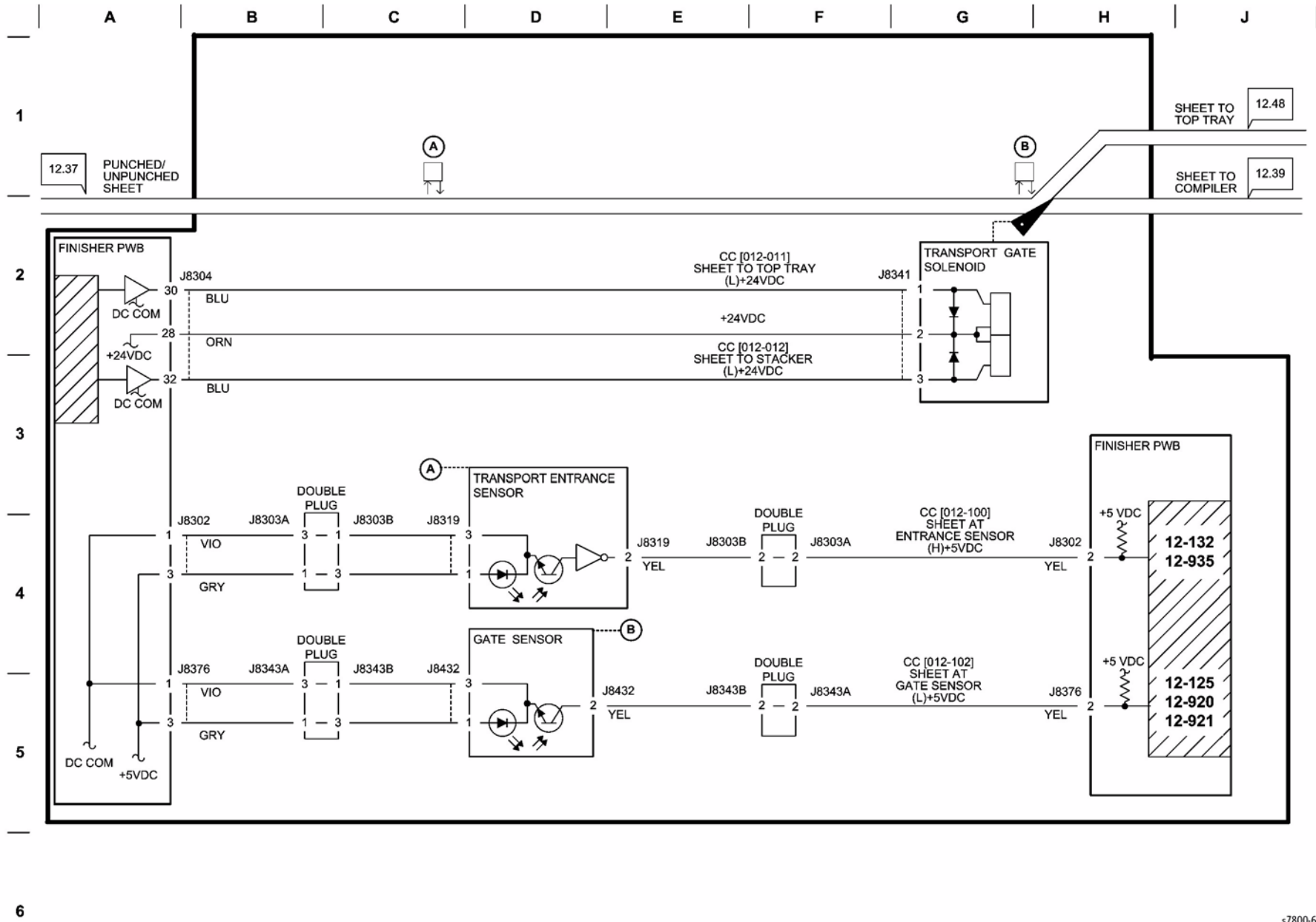


Figure 11 Finisher Transport, Top Tray Gating

BSD 14.12 Finisher Buffer Transport

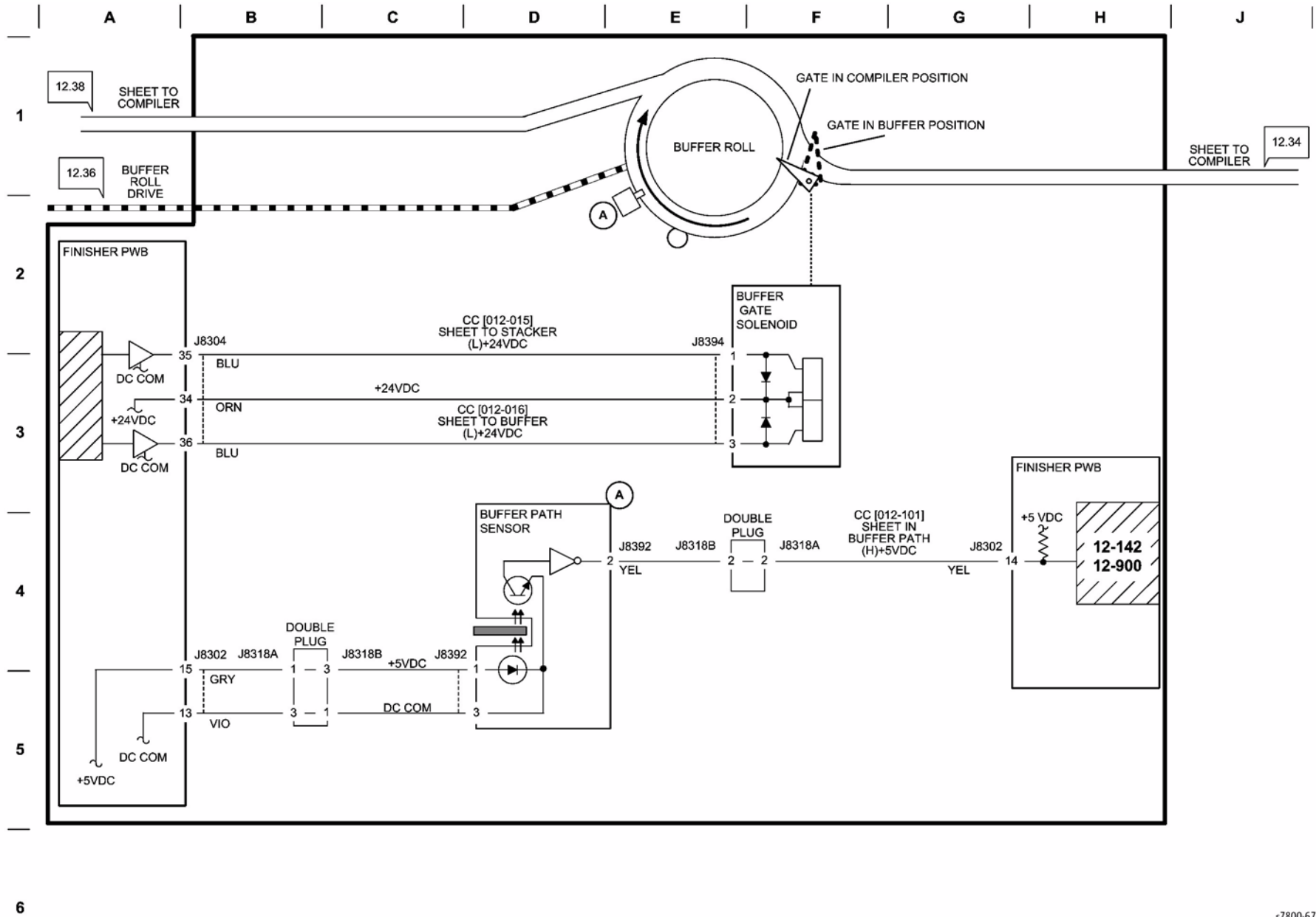


Figure 12 Finisher Buffer Transport

s7800-672

BSD 14.13 Booklet Drive

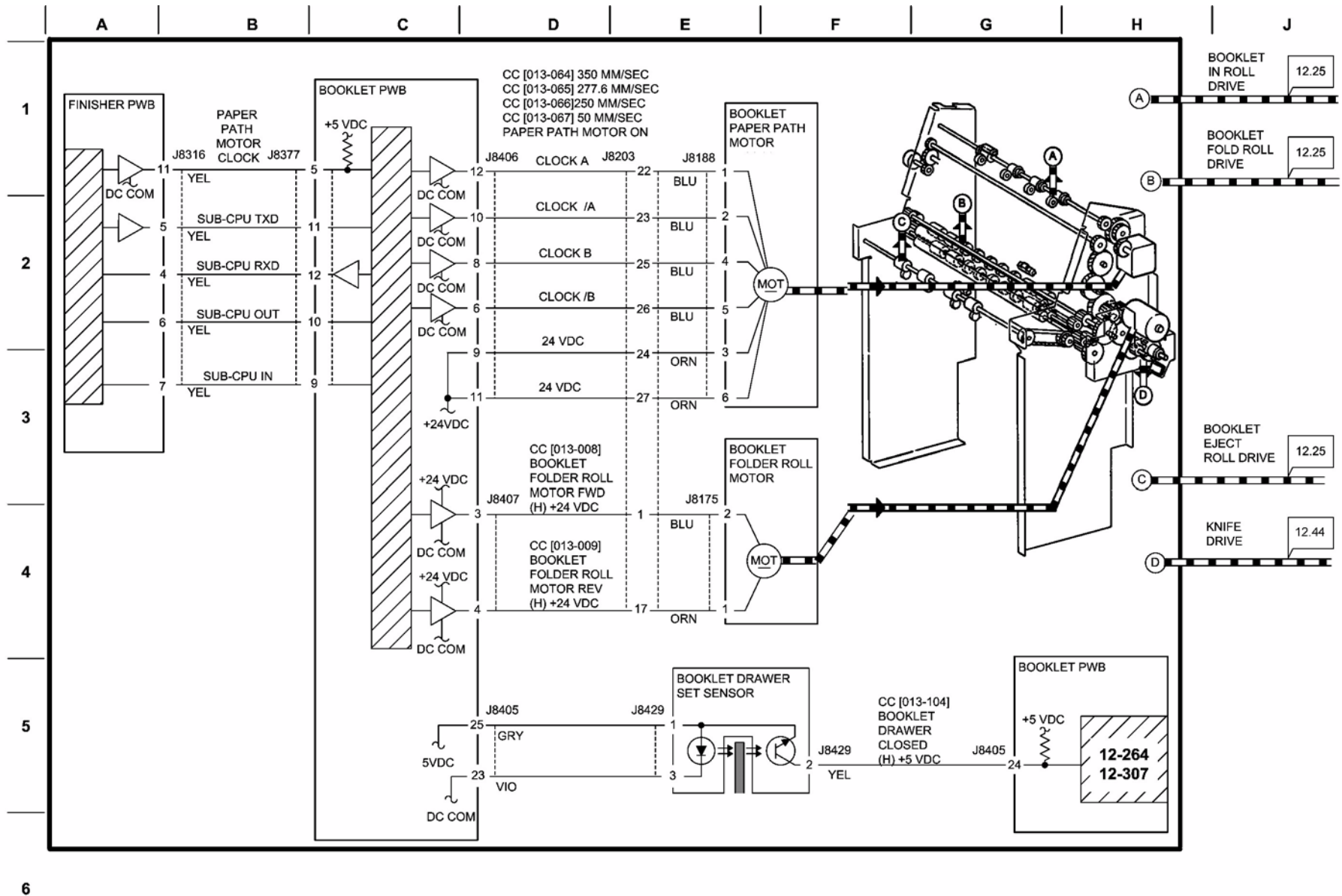
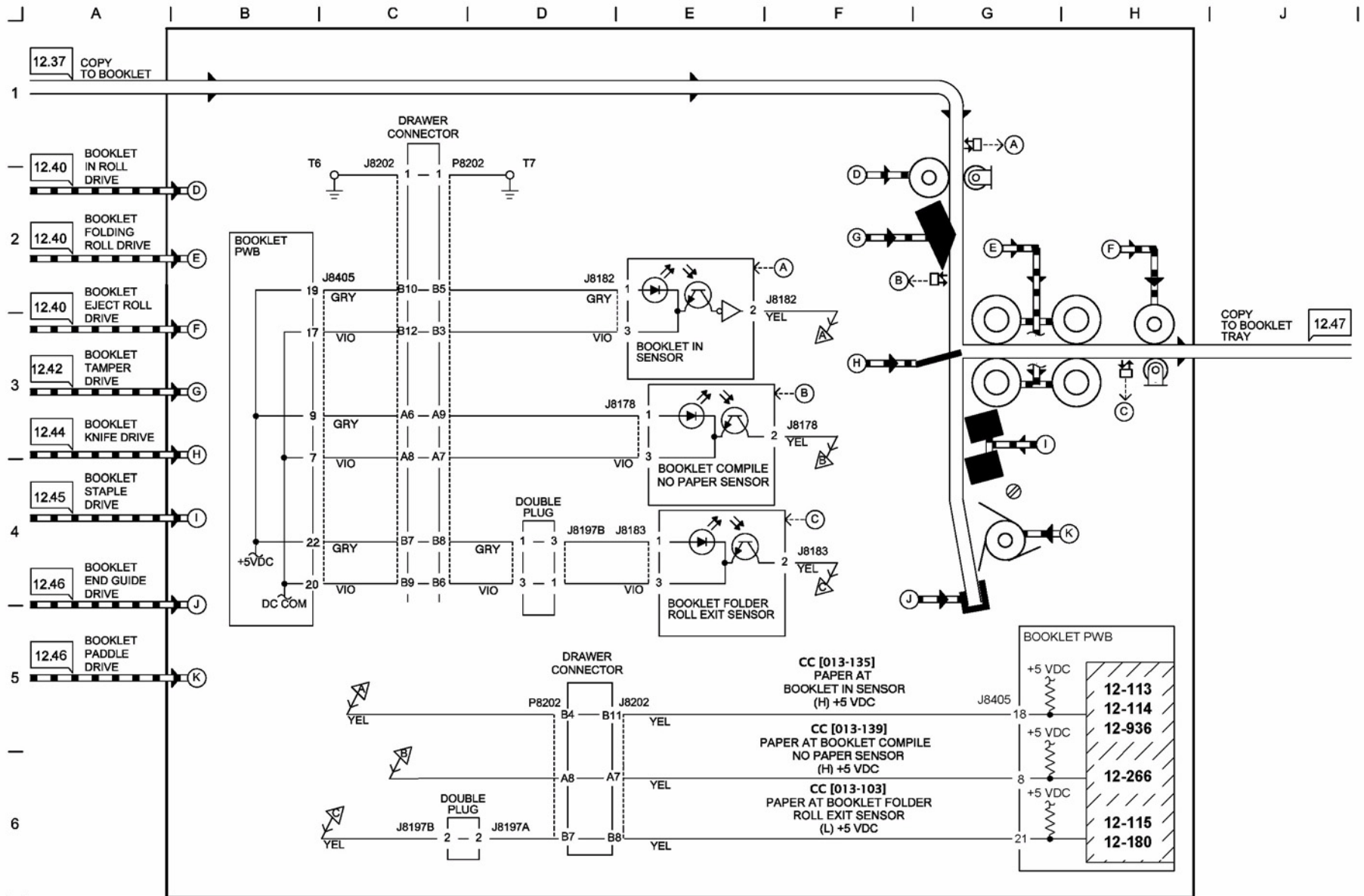


Figure 13 Booklet Drive

s7800-673

BSD 14.14 Booklet Transportation



s7800-674

Figure 14 Booklet Transportation

BSD 14.15 Booklet Tamper Control (1 of 2)

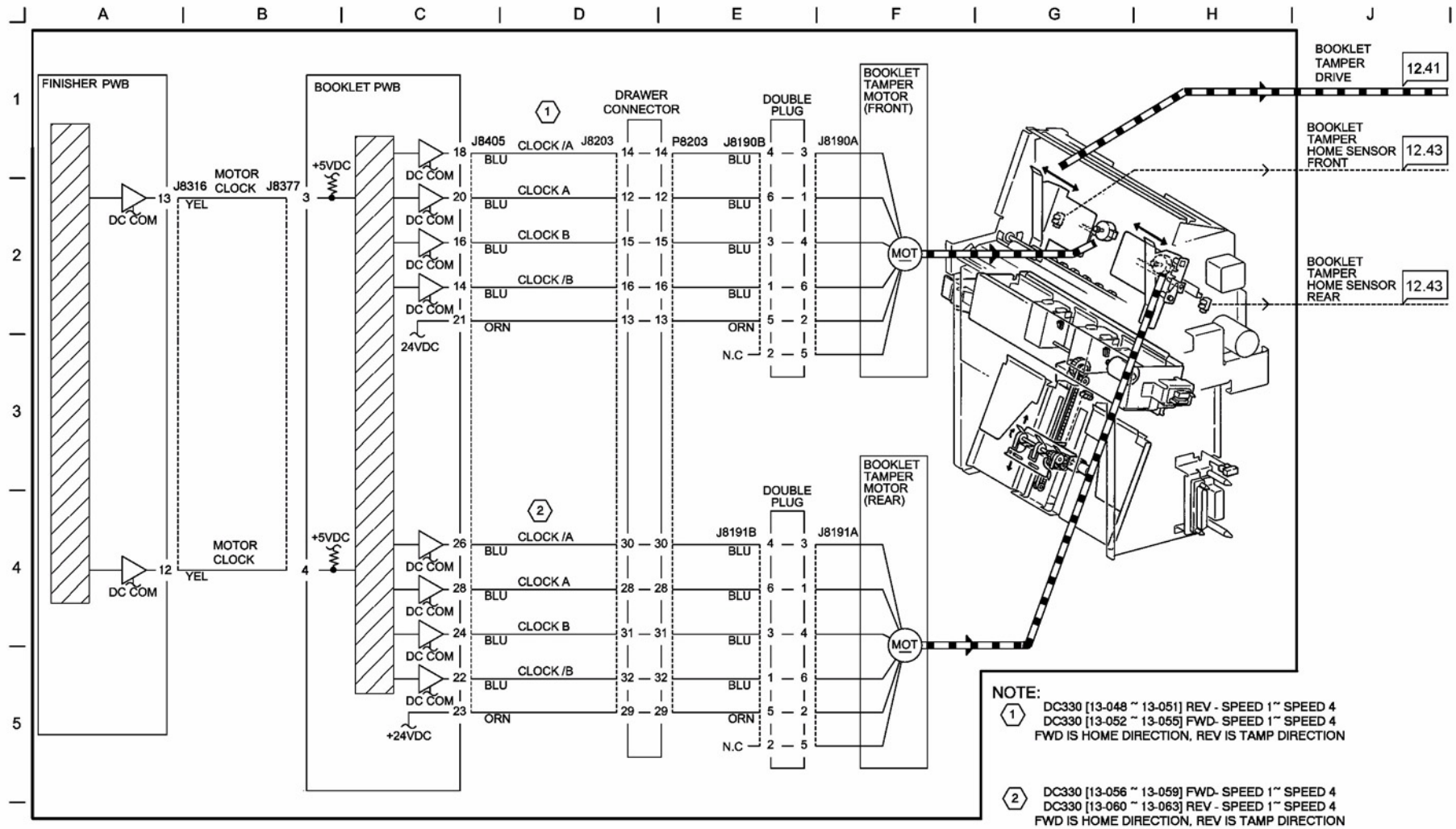
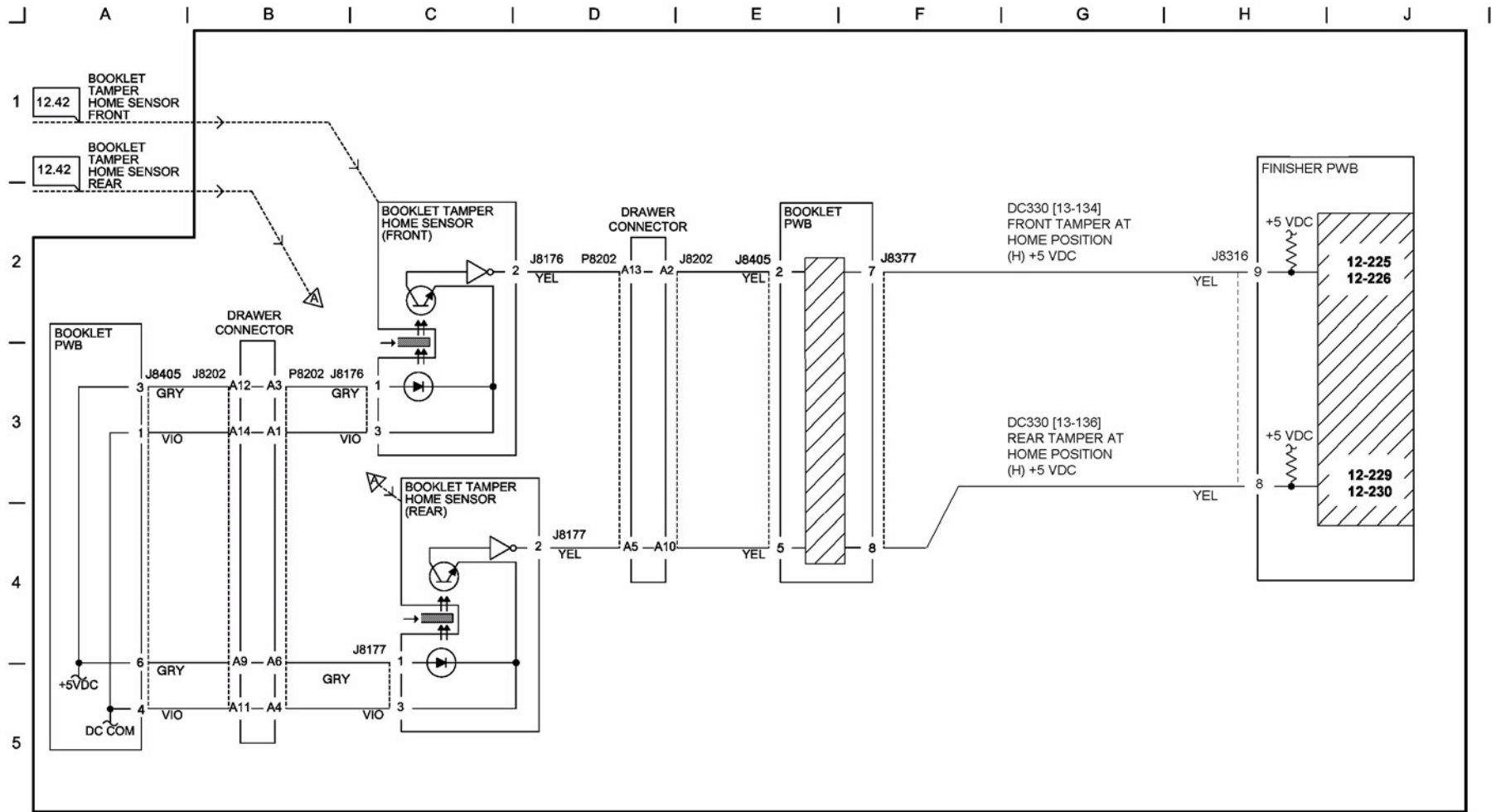


Figure 15 Booklet Tamper Control (1 of 2)

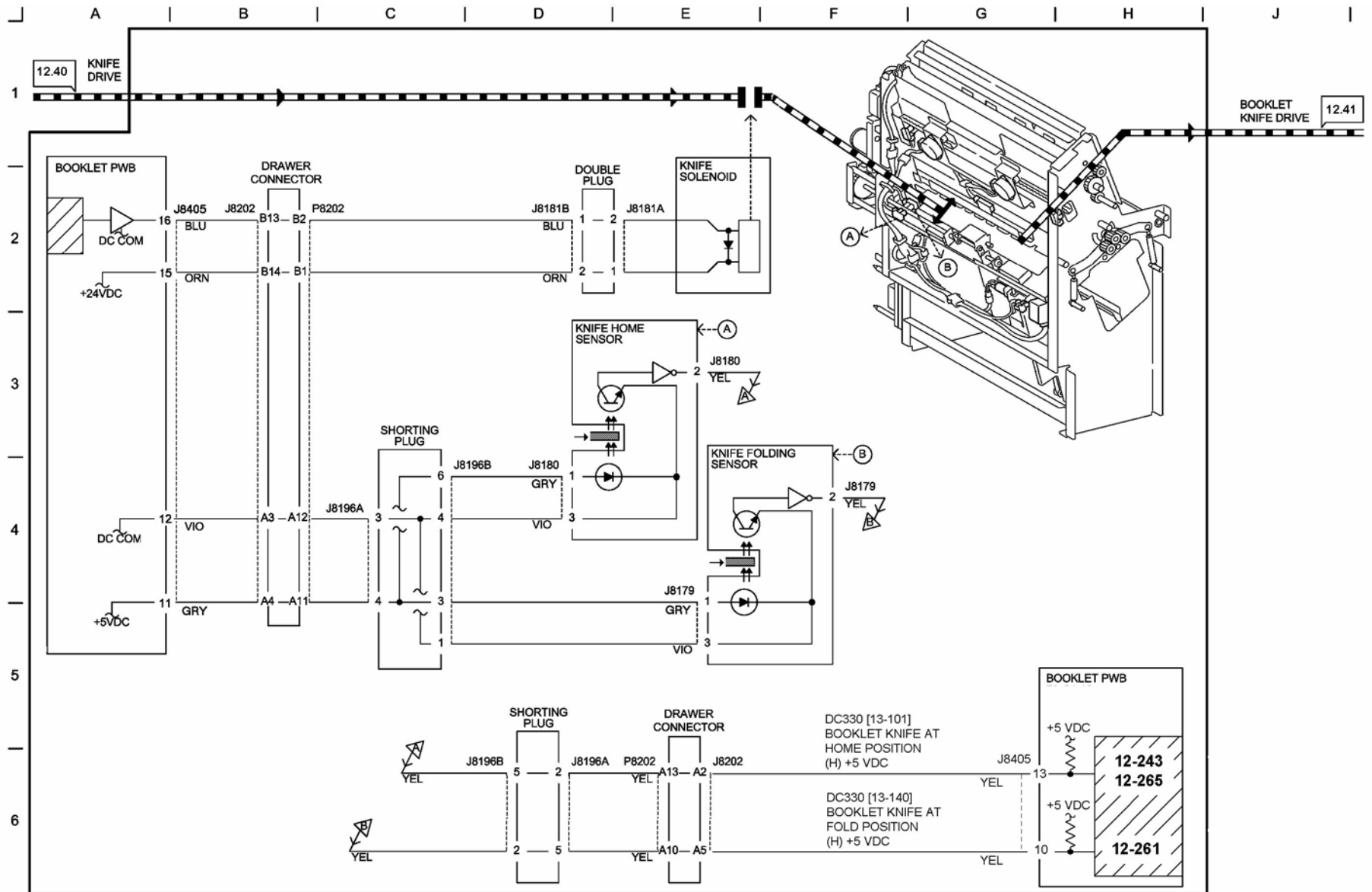
BSD 14.16 Booklet Tamper Control (2 of 2)



s7800-676

Figure 16 Booklet Tamper Control (2 of 2)

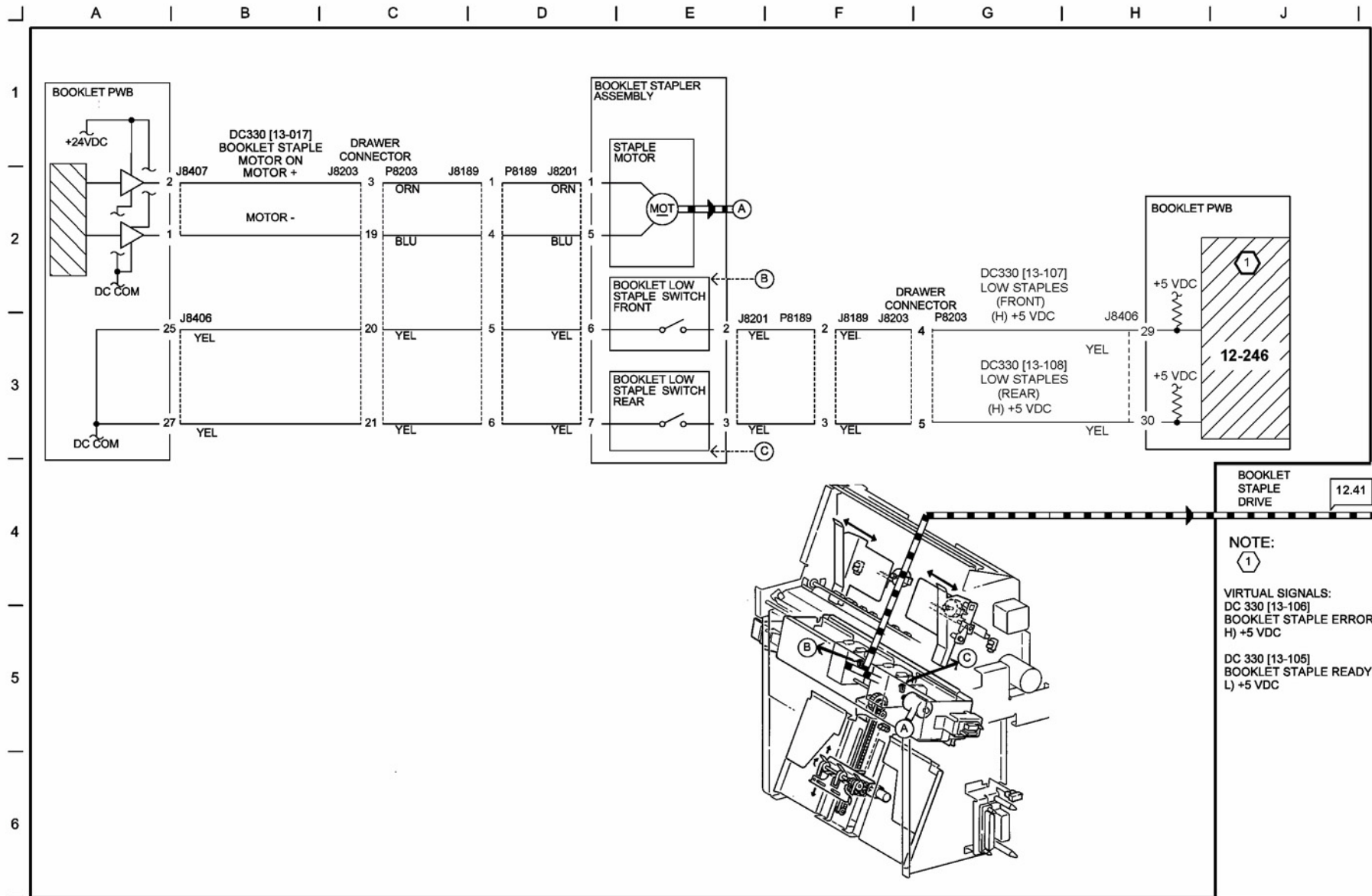
BSD 14.17 Booklet Knife Control



s7800-677

Figure 17 Booklet Knife Control

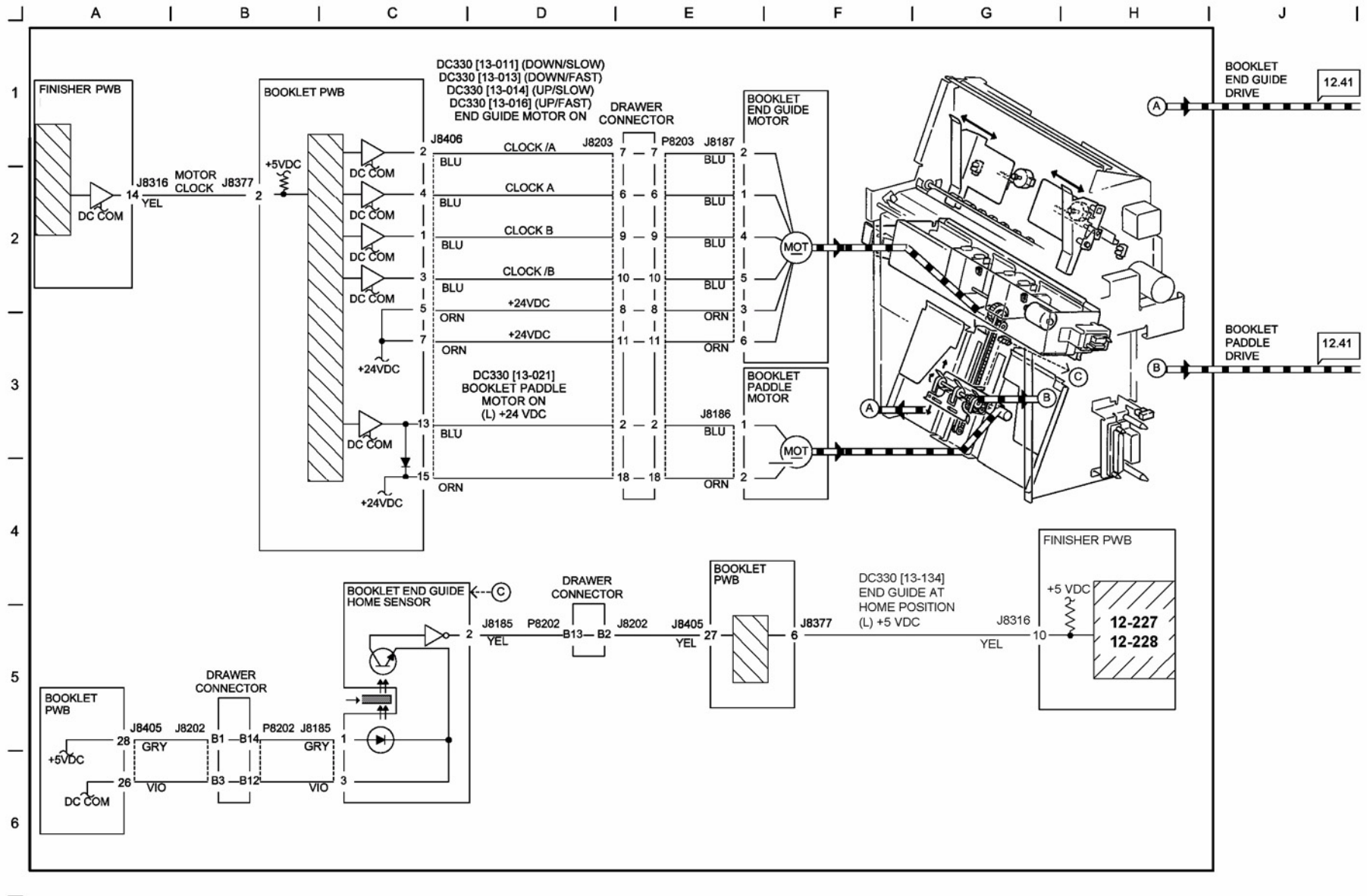
BSD 14.18 Booklet Staple Control



s7800-678

Figure 18 Booklet Staple Control

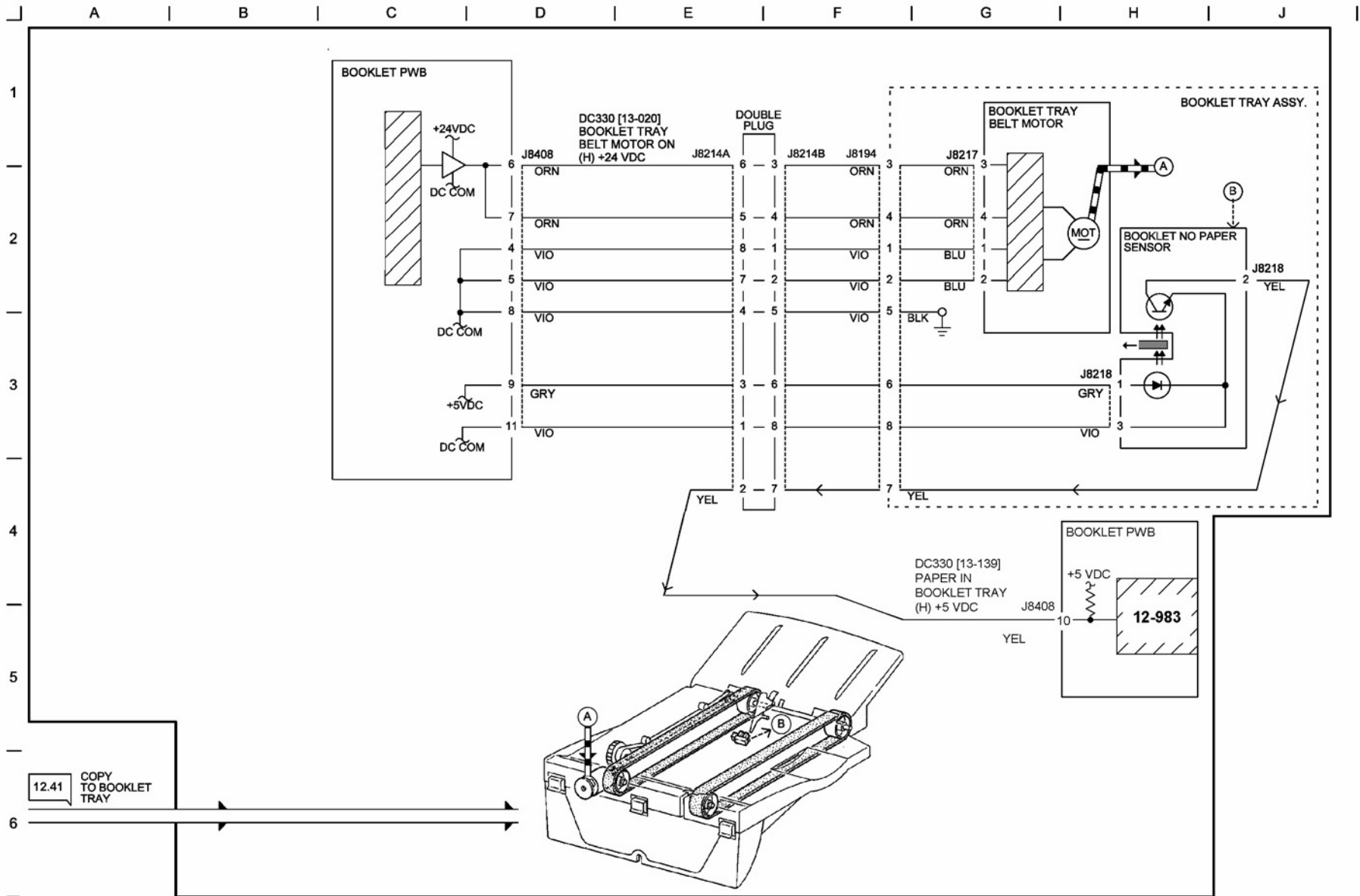
BSD 14.19 Booklet End Guide Control



s7800-679

Figure 19 Booklet End Guide Control

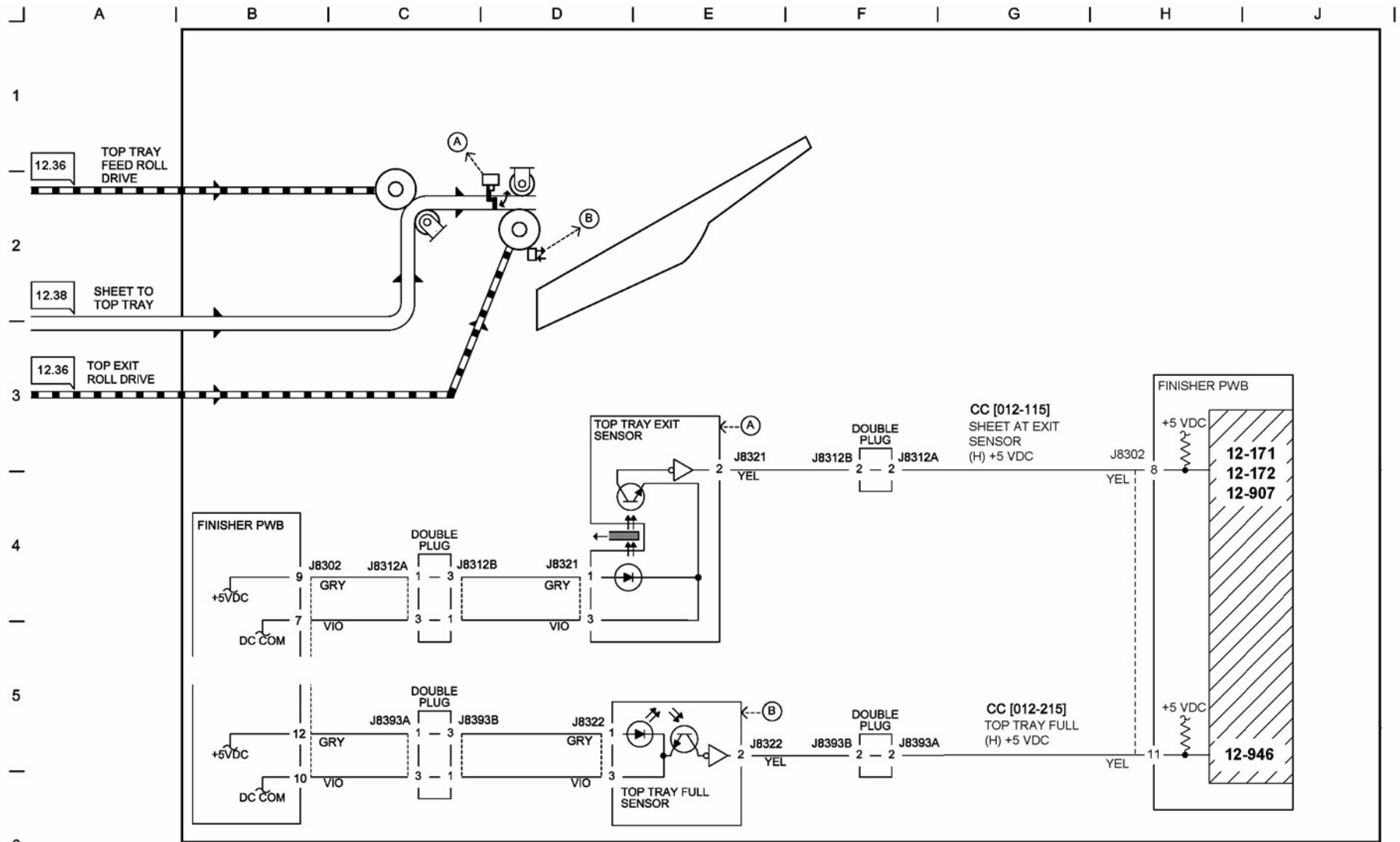
BSD 14.20 Booklet Tray Control



s7800-680

Figure 20 Booklet Tray Control

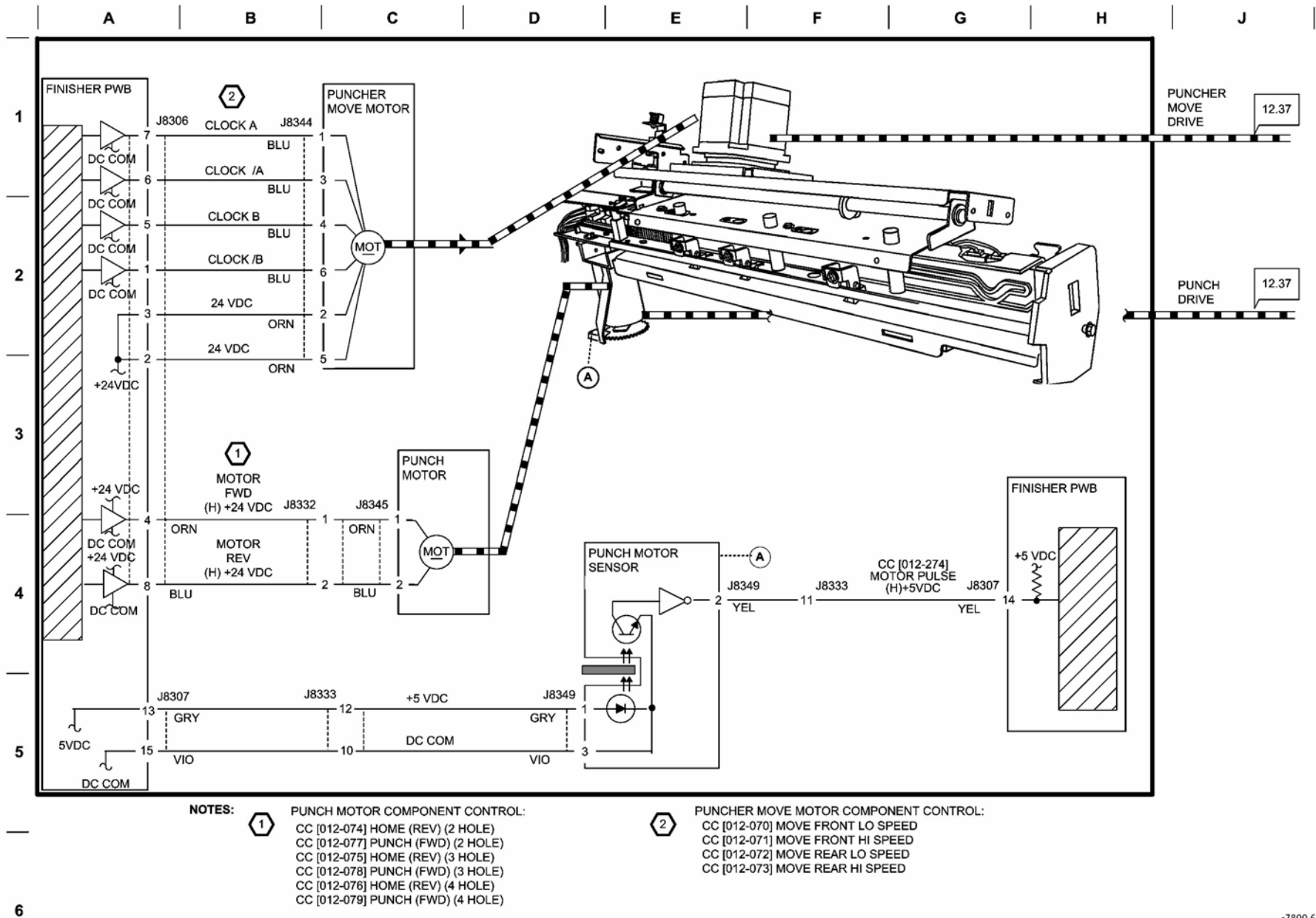
BSD 14.21 Finisher Top Tray Stacking



s7800-681

Figure 21 Finisher Top Tray Stacking

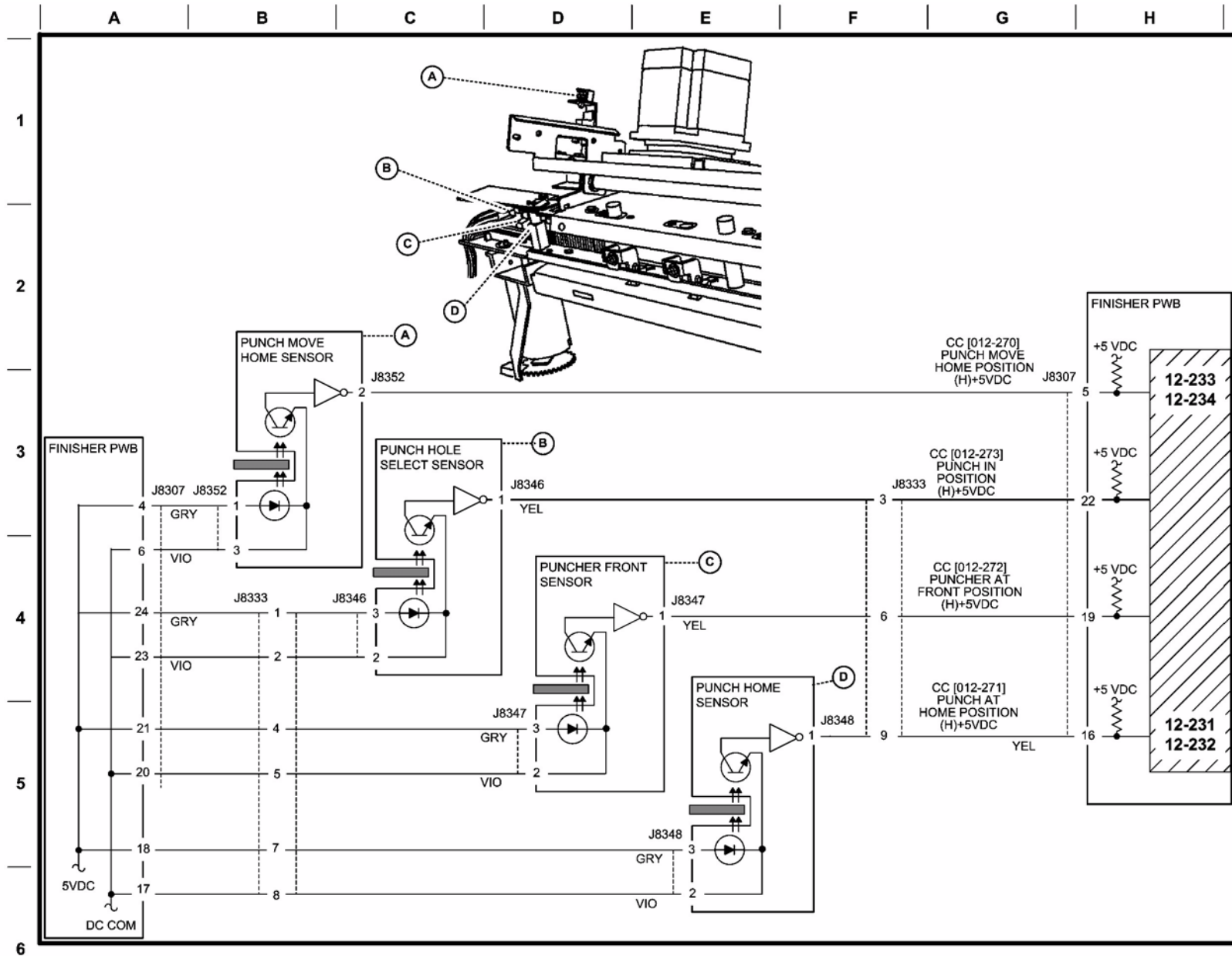
BSD 14 22 Finisher Punch Drive



s7800-682

Figure 22 Finisher Punch Drive

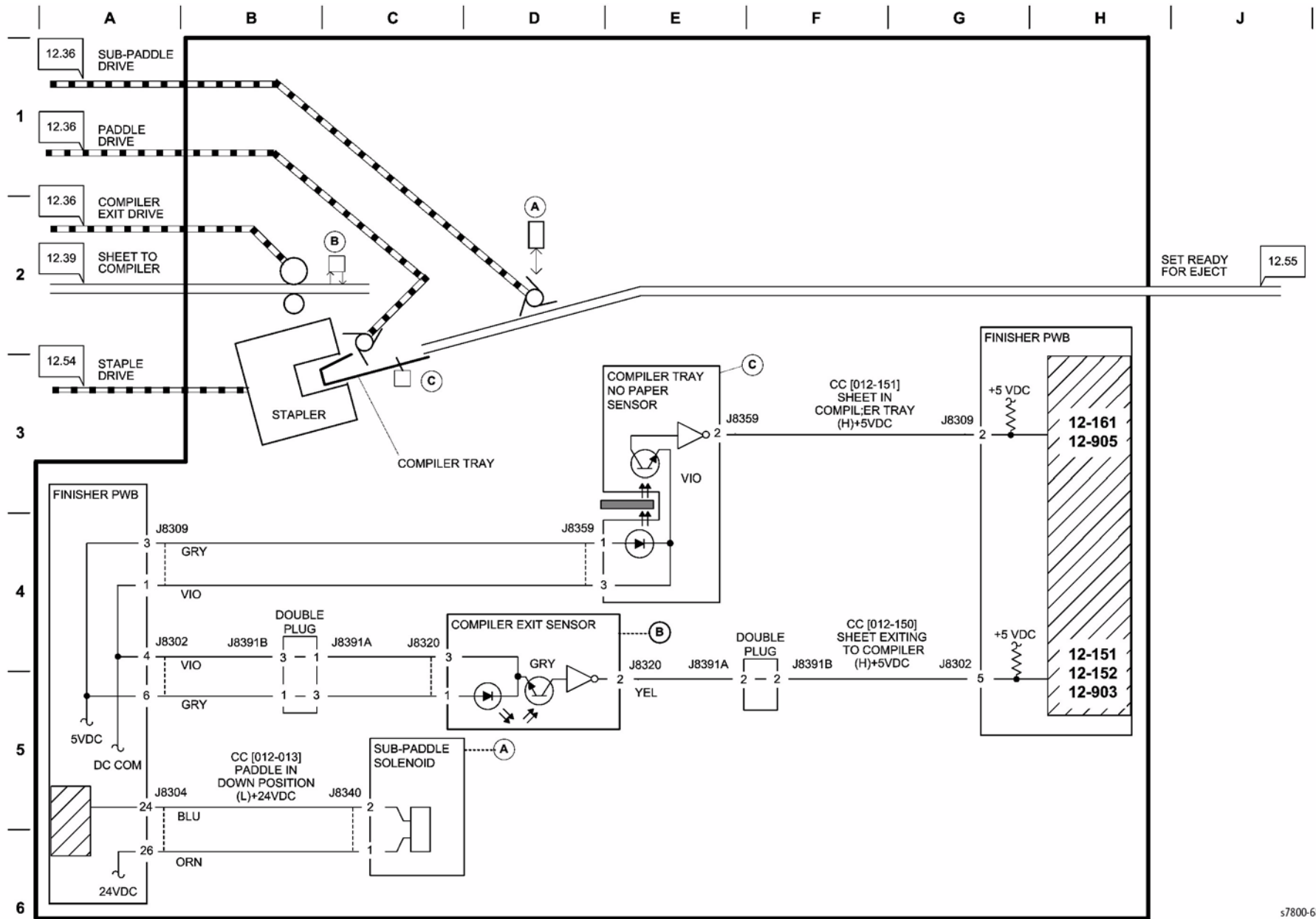
BSD 14.23 Finisher Punch Hole Control



s7800-683

Figure 23 Finisher Punch Hole Control

BSD 14.24 Finisher Compiling



s7800-684

Figure 24 Finisher Compiling

BSD 14.25 Finisher Tamper Control

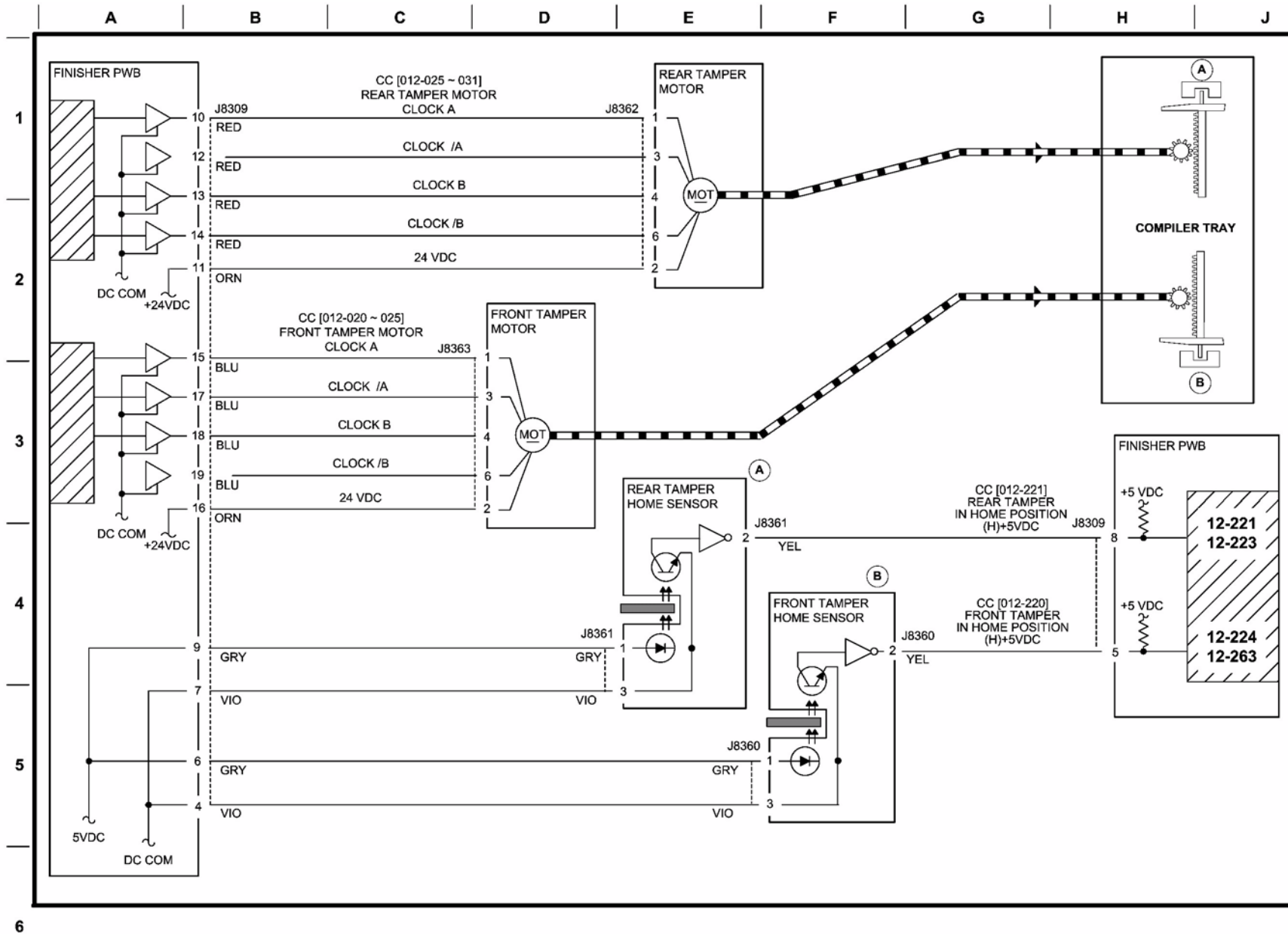
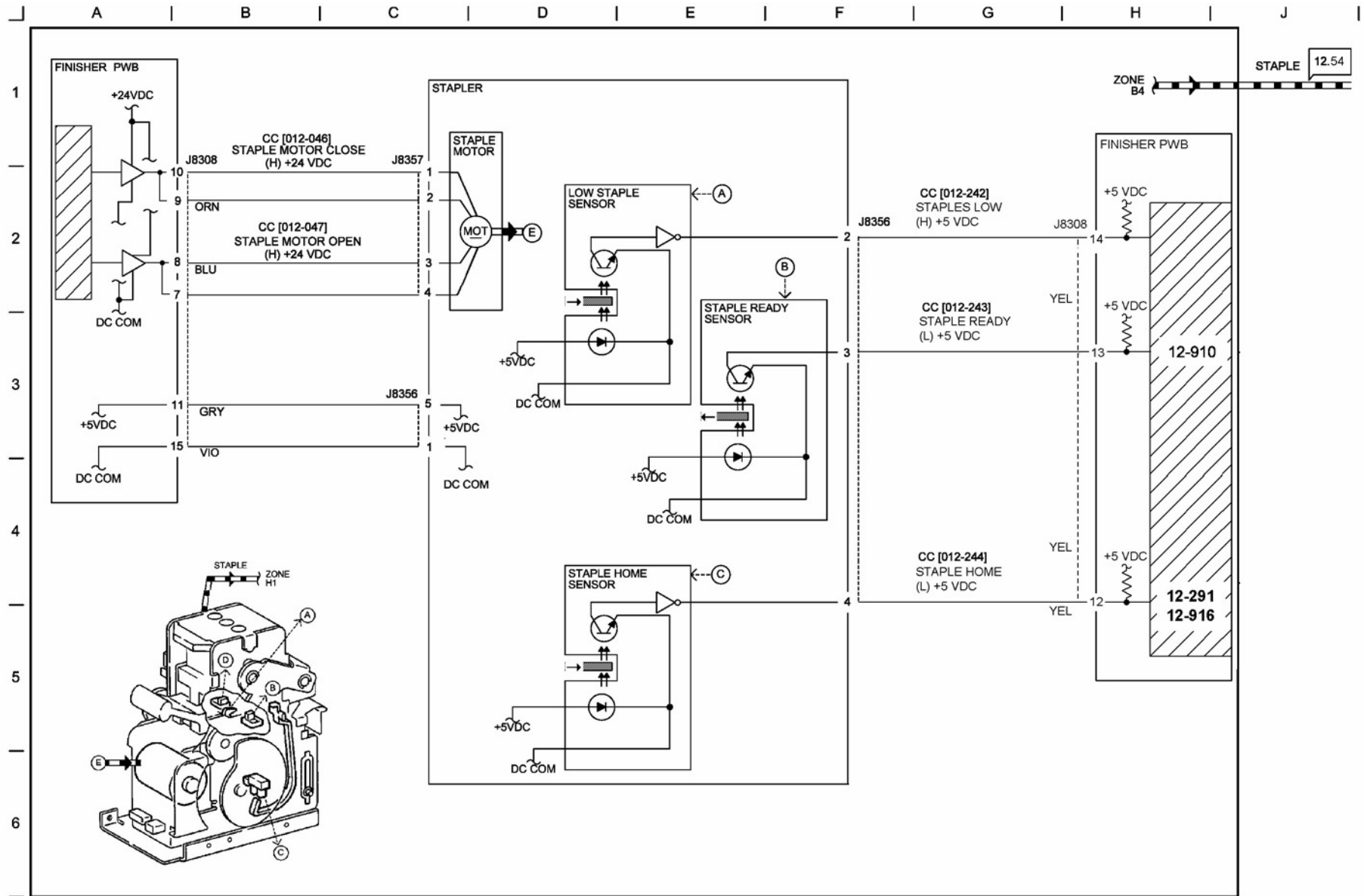


Figure 25 Finisher Tamper Control

s7800-685

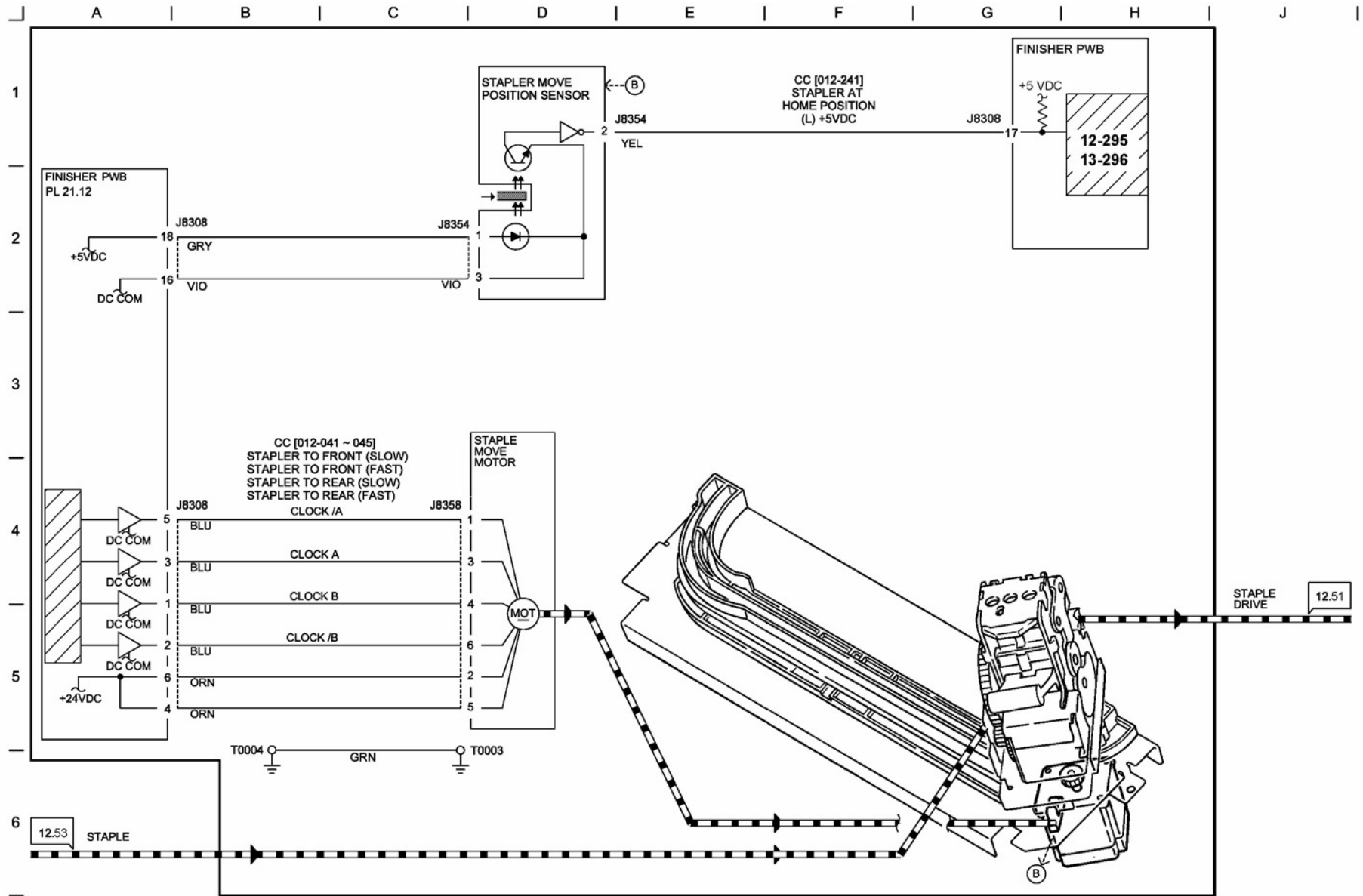
BSD 14.26 Finisher Stapler Control



57800-686

Figure 26 Finisher Stapler Control

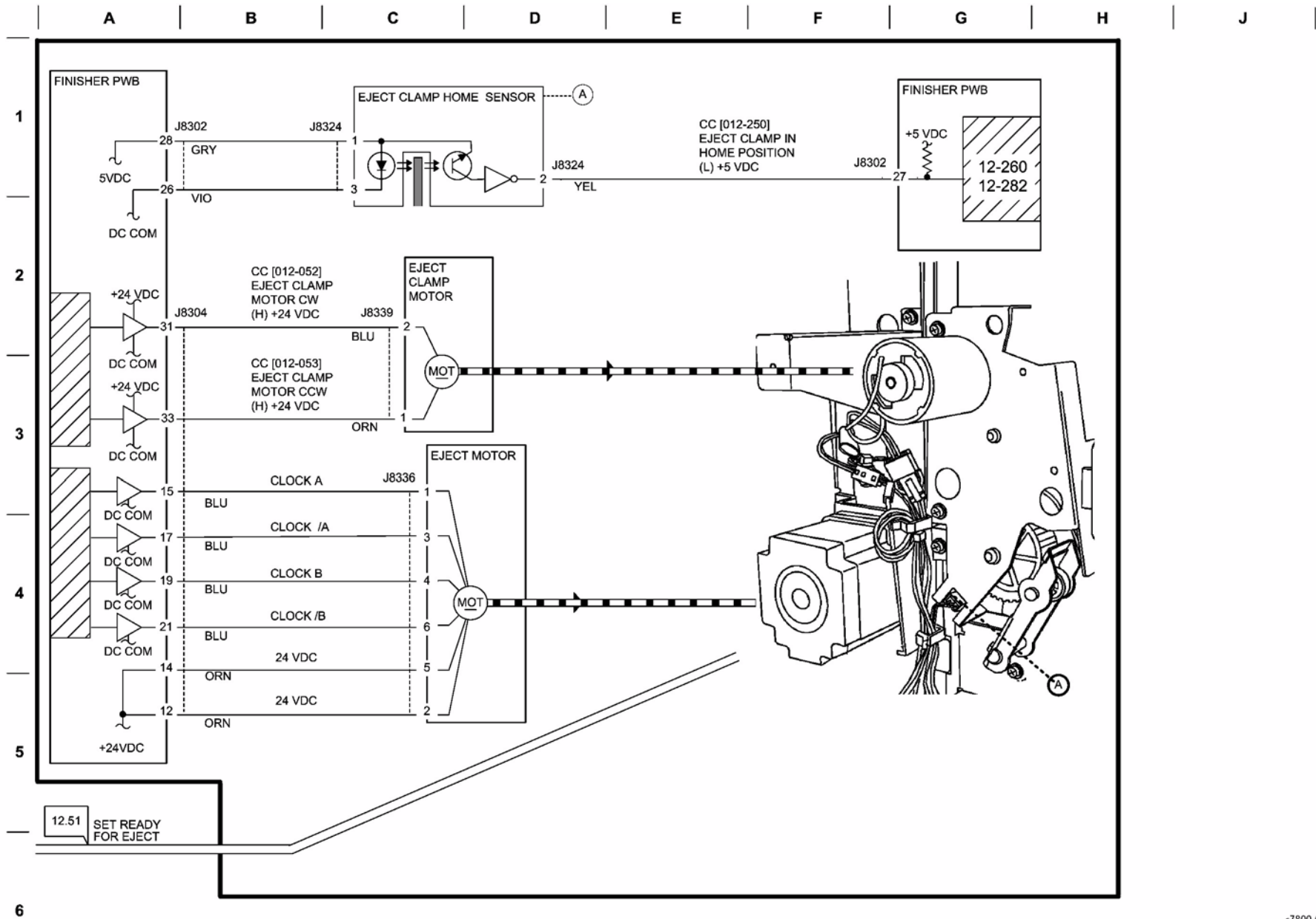
BSD 14.27 Finisher Staple Positioning



s7800-687

Figure 27 Finisher Staple Positioning

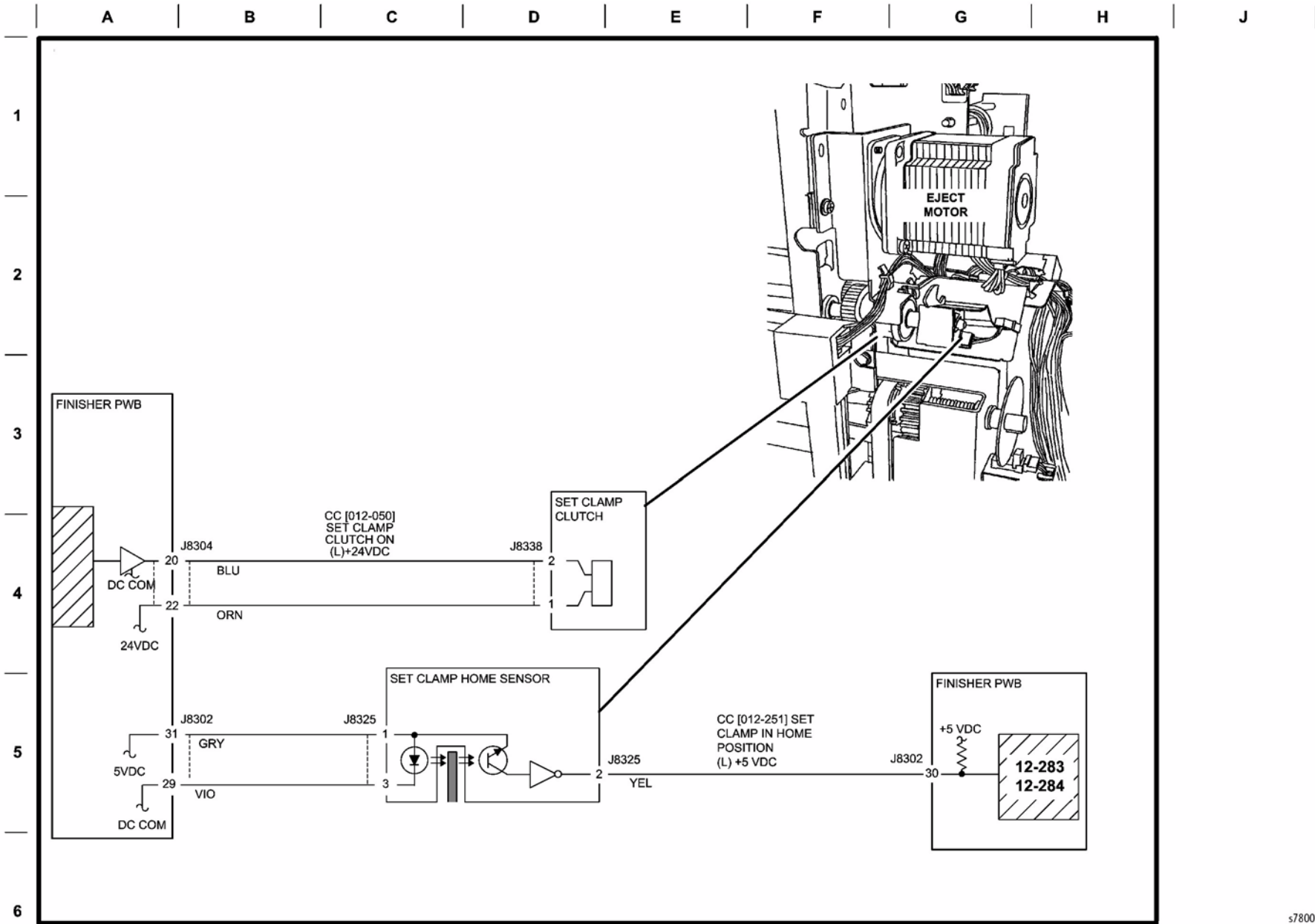
BSD 14.28 Finisher Eject Drive



57800-688

Figure 28 Finisher Eject Drive

BSD 14.29 Finisher Set Clamp Control



s7800-689

Figure 29 Finisher Set Clamp Control

BSD 14.30 Finisher Stacker Drive

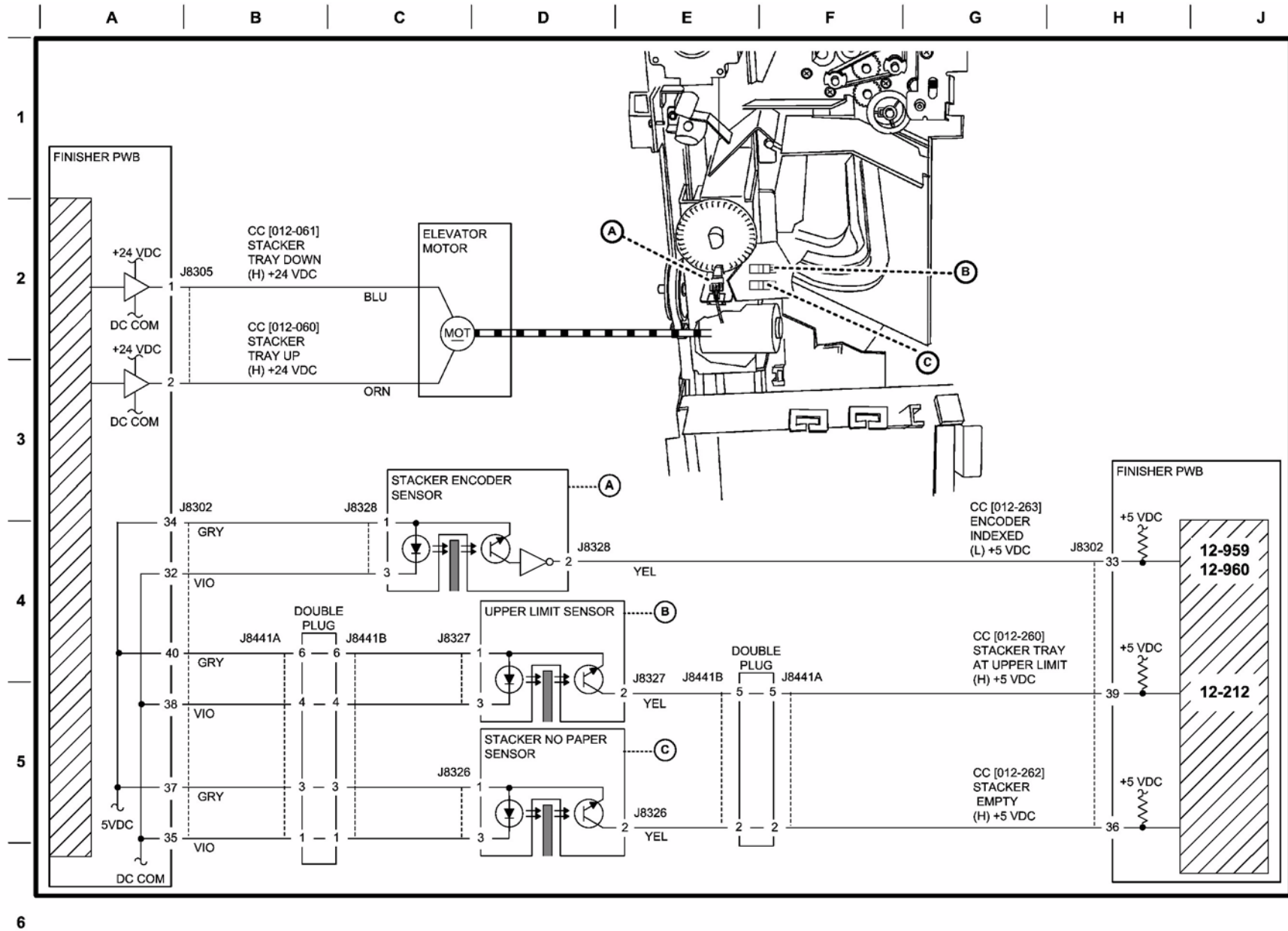
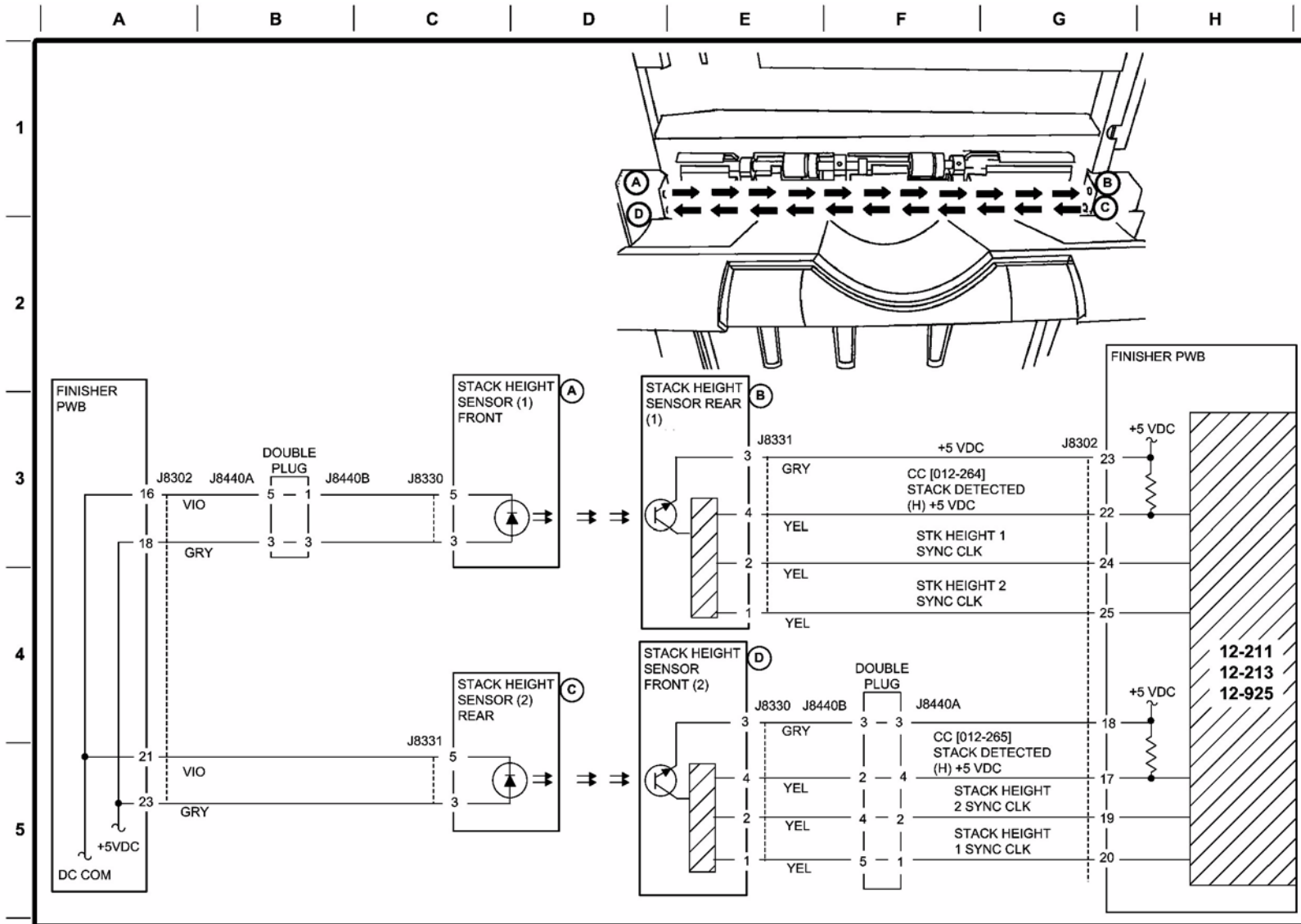


Figure 30 Finisher Stacker Drive

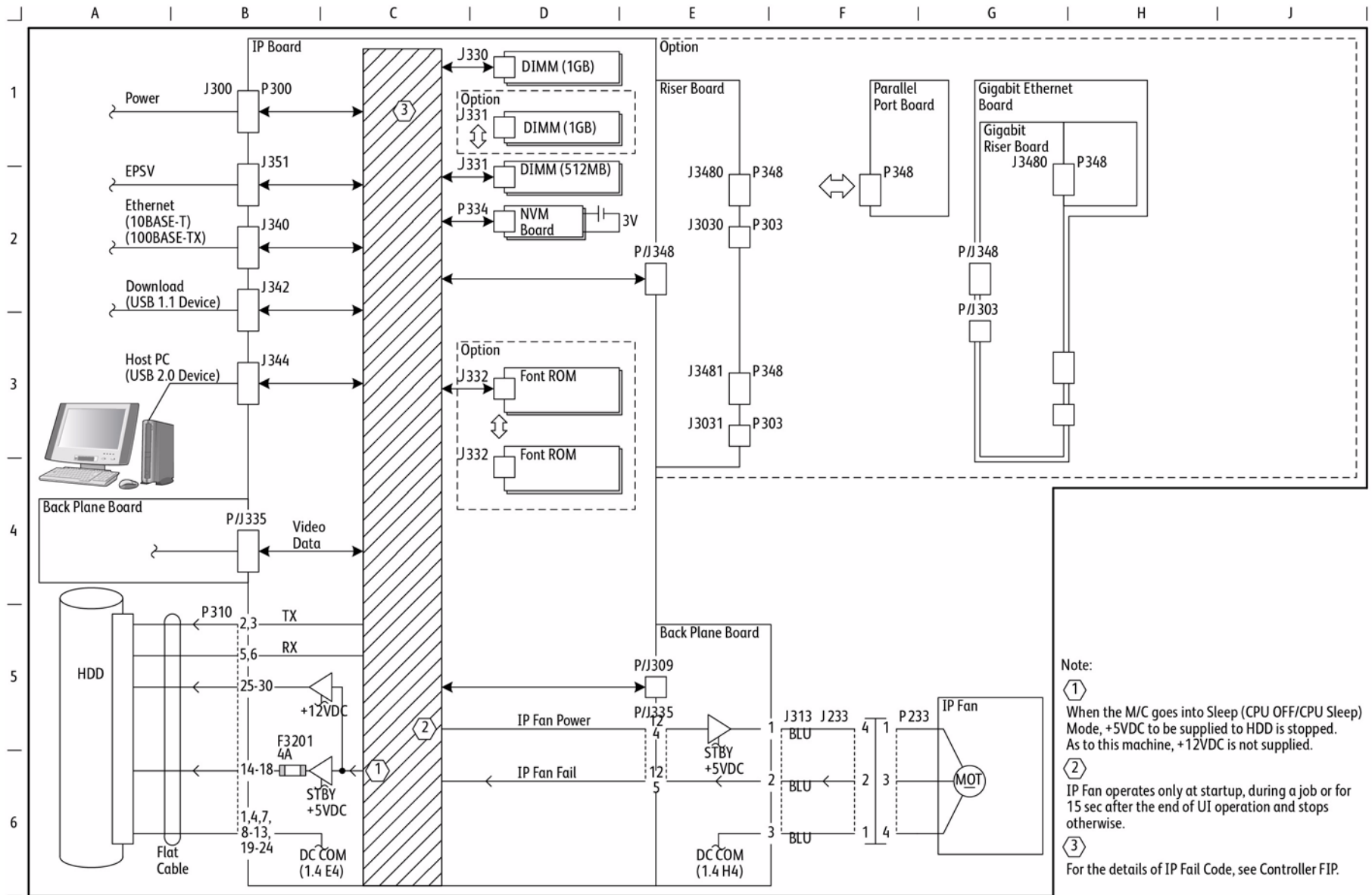
BSD 14.31 Finisher Stack Height Detection



6

s7800-691

Figure 31 Finisher Stack Height Detection



s7800-538

Figure 1 Image Processor Board

BSD 25.2 I/P Board Status LED (1 of 2)

Illumination Status and Description of On Board Debug LEDs						
Number	LED Pattern					
	LED7	LED6	LED5	LED4	LED3	LED0
	Situation	Problem	Normal Diagnosis	LongBoot Diagnosis	Related Fail Code	
1	■ ■ ■ ■ ■ ■ ■ ■	Initial status at power-on	All Off: Failure in power supply to the IP Board		-	
2	□ □ □ □ □ □ ■ ■	Interrupt vector setting completed	On: IP failure		-	
3	□ □ □ □ □ □ ■ ■	ROM controller initialization completed	On: IP failure		-	
4	□ □ □ □ □ □ ■ ■	Zero-clear of D-Cache	On: IP failure		-	
5	□ □ □ □ □ □ ■ ■	DDR output buffer enabled, Soft Wait processing	On: IP failure		-	
6	□ □ □ □ □ □ ■ ■	Normal initialization of DDR Controller started	On: IP failure		-	
7	■ □ □ □ □ □ ■ ■	Recovery process from CPU Off started	On: IP failure		-	
8	■ ■ ■ ■ ■ □ □ □ □ □	DDR initialization failed	Blinking: RAM failure		-	
9	■ ■ ■ ■ ■ □ □ □ □ □	Error in checking evaluated data	Blinking: RAM failure		-	
10	□ □ □ □ □ □ ■ ■	DDR initialization completed	On: RAM failure		-	
11	□ □ □ □ □ □ ■ ■	I-Cache/D-Cache disabled	On: IP failure		-	
12	□ □ □ □ □ □ ■ ■	CPU internal register settings	On: IP failure		-	
13	□ □ □ □ □ □ ■ ■	DDR memory write check	On: RAM failure		-	
14	■ ■ ■ ■ ■ □ □ □ □ □	DDR memory read/write failed	Blinking: RAM failure		-	
15	□ □ □ □ □ □ ■ ■	Read check and zero-clear of DDR memory completed	On: RAM failure		-	
16	□ □ □ □ □ □ ■ ■	Copying a program to memory (Text)	On: ROM/RAM failure		-	
17	□ □ □ □ □ □ ■ ■	Copying a program to memory (Base)	On: ROM/RAM failure		-	
18	□ □ □ □ □ □ ■ ■	FPU register test completed	On: IP failure		-	
19	□ □ □ ■ □ □ □ □ □ □	Preparation for jumping to C code completed	On: IP failure		-	
20	□ □ □ ■ □ □ □ □ □ □	Diagnosis of Standard RAM_1 started	On: Standard RAM_1 failure		116-315	
21	□ □ □ ■ □ □ □ □ □ □	Diagnosis of Standard RAM_2 started	On: Standard RAM_2 failure		116-316	
22	□ □ □ ■ □ □ □ □ □ □	Diagnosis of Standard ROM started	On: Standard ROM failure		116-317	
23	□ □ □ ■ □ □ □ □ □ □	Diagnosis of NVRAM started	On: NVRAM failure		116-323	
24	□ □ □ ■ □ □ □ □ □ □	Transition from MiniOS to CORE (DIAG) started	On: ROM/RAM failure		116-317	
25	■ ■ ■ ■ ■ □ □ □ □ □		On: BackPlane connection failure		016-327	
26	■ ■ ■ ■ ■ □ □ □ □ □		On: UI cable connection failure		016-326	
27	■ ■ ■ ■ ■ □ □ □ □ □		On: MCU harness connection failure		016-328	
28	□ ■ □ □ □ □ □ □ □ □		On: ASIC failure		-	
29	□ ■ □ □ □ □ □ □ □ □	Diagnosis of Codec ASIC started	On: ASIC failure		-	
30	□ ■ □ □ □ □ □ □ □ □	Diagnosis of standard Font ROM started	On: ASIC failure		116-380 116-310 016-338 016-339	
31	□ ■ □ □ □ □ □ □ □ □	Diagnosis of extended Font ROM started	On: ASIC failure		016-341	

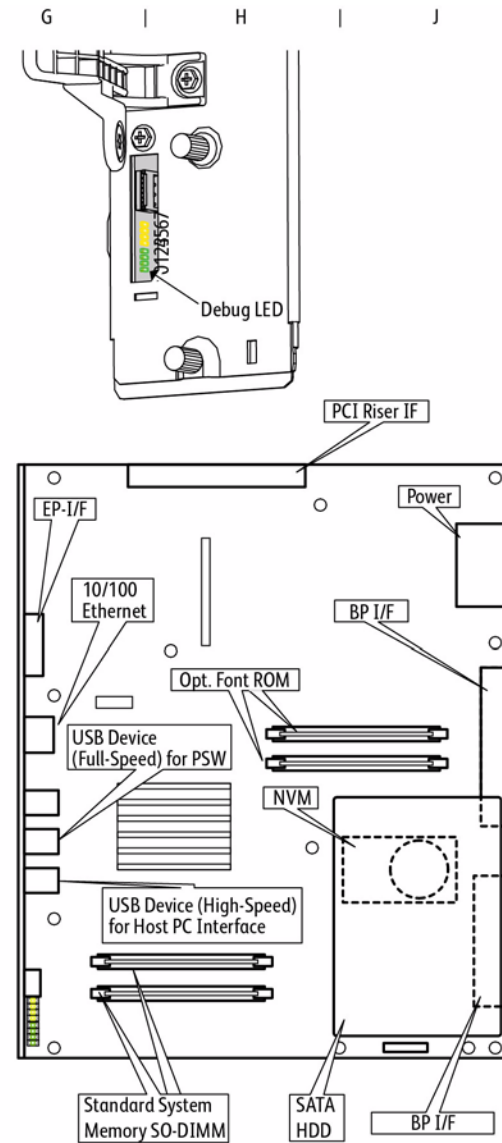
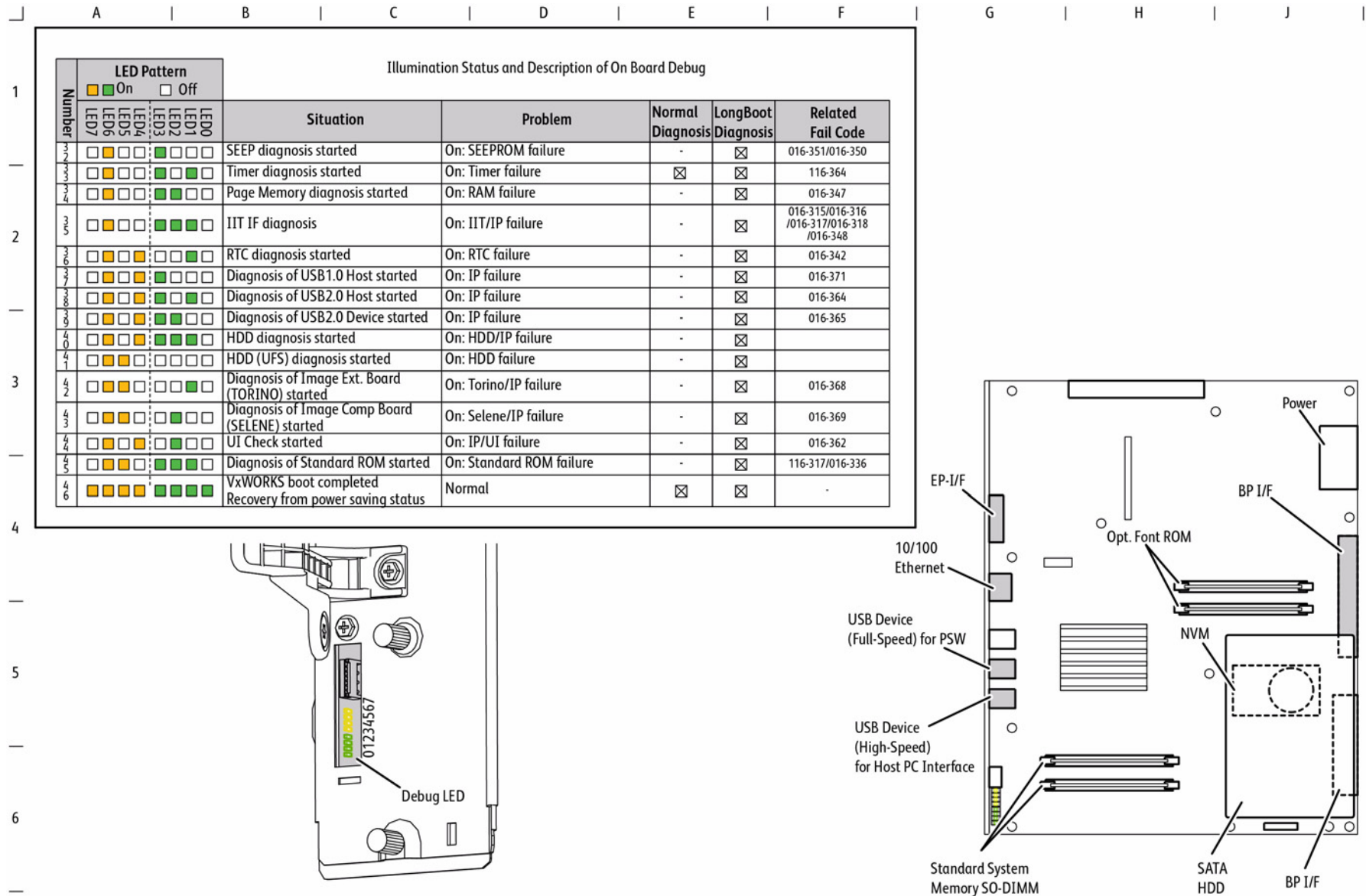


Figure 2 I/P Board Status LED (1 of 2)

BSD 25.3 I/P Board Status LED (2 of 2)



s7800-540

Figure 3 I/P Board Status LED (2 of 2)

8 Theory of Operation

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Operational Overview

The Phaser 7800 is a LED Print Head Color printer that is based on the electrophotographic recording principle. It utilizes a tandem system where each of the colors - Yellow, Magenta, Cyan, and Black (Abbr: Y, M, C, K) have its own Drum and Developer. A toner image for each color is formed on the Drum and then transferred to the belt (Intermediate Transfer Unit). The toner image of the 4 colors are overlapped on the belt to form the full color print, which is then transferred and fused onto the paper.

System Overview

The Phaser 7800 consists of the Control Panel, Print Engine, Duplex Unit, Optional 1500-Sheet, Optional 2500-Sheet Feeder, Optional Advanced Finisher, and Professional Finisher,

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

1. Electric Charge - Charges the Drum surface.
2. Exposure - Exposes the Drum surface with LED (Light Emitting Diode) to form the image.
3. Development - Develops the image section on the Drum surface with toner.
4. Primary Transfer - Transfers the toner image on each Drum to the belt.
5. Drum Cleaning - Discharges each Drum and removes any remaining Toner on the Drums and Bias Charge Roller (BCR).
6. Secondary Transfer - Transfers the toner image on the belt to paper.
7. Electric Discharge - Discharges electric charge on the paper.
8. Cleaning - Removes any remaining Toner on the belt and 2nd Bias Transfer Roller (BTR).
9. Fusing - Fuses the toner on the paper with heat and pressure.

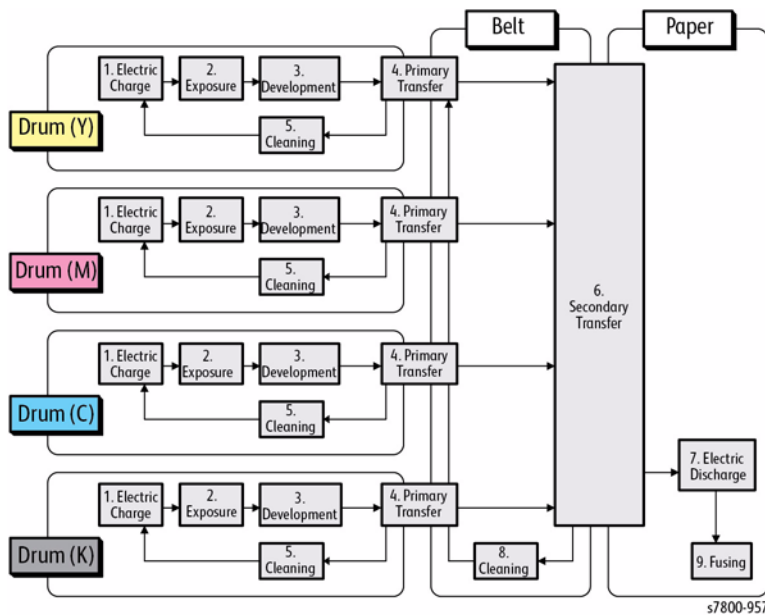


Figure 1 System Overview

Printing Process

The diagrams in Figure 1 and Figure 2 provide the print process for the Phaser 7800.

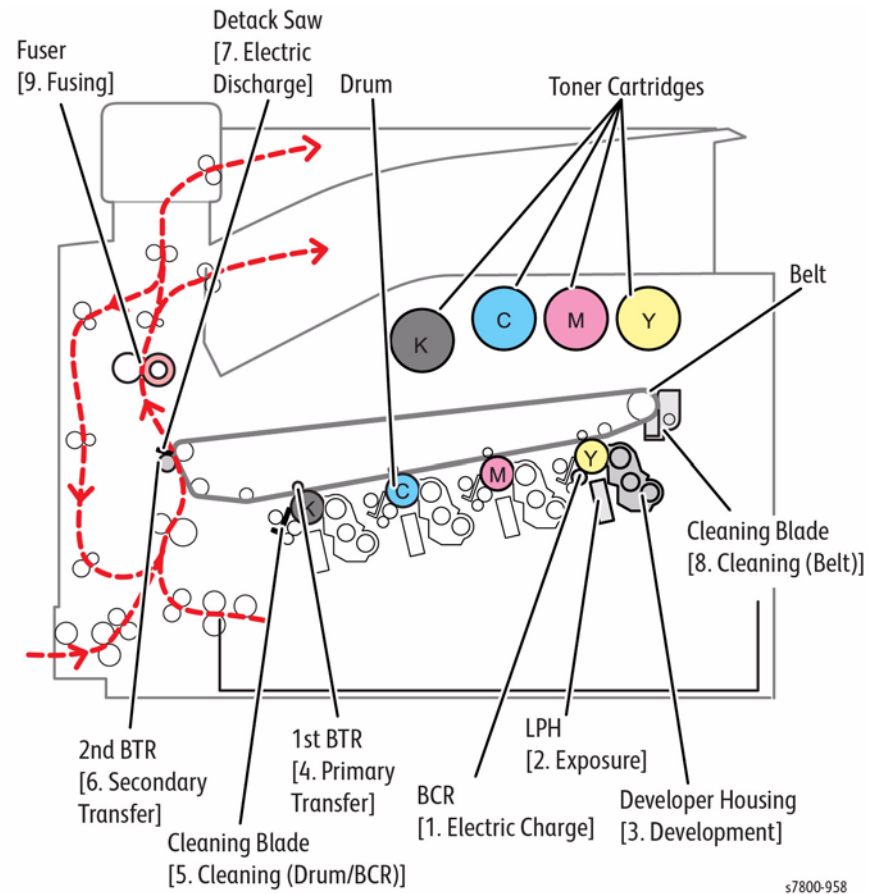


Figure 1 Print Process

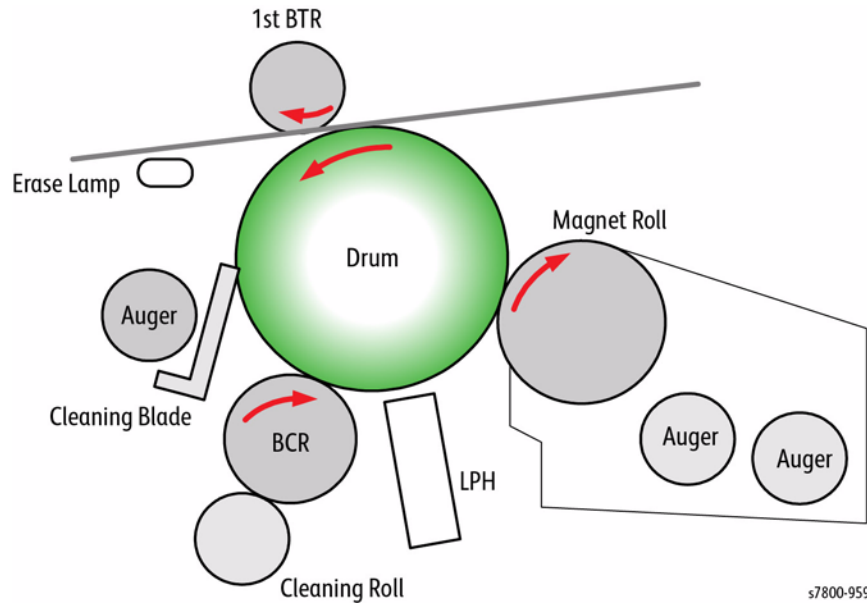


Figure 2 Print Process

s7800-959

Electric Charge

The BCR (Bias Charge Roll) evenly distributes a negative electric charge on the surface of the Drum that rotates at a fixed speed. This is performed in parallel for each color - Yellow, Magenta, Cyan, and Black.

- The BCR is always in contact with the Drum and it is driven by the Drum rotation. The BCR is a conductive roll that is energized by the negative DC component of the AC voltage from the HVPS and charges the Drum surface evenly with negative charge.
- The Drum surface is photoconductive (becomes a nonconductor when it is in a dark place and a conductor when exposed to light) and its inner side is composed of a conductor (aluminum cylinder).
- The Cleaning Roll cleans the BCR surface.

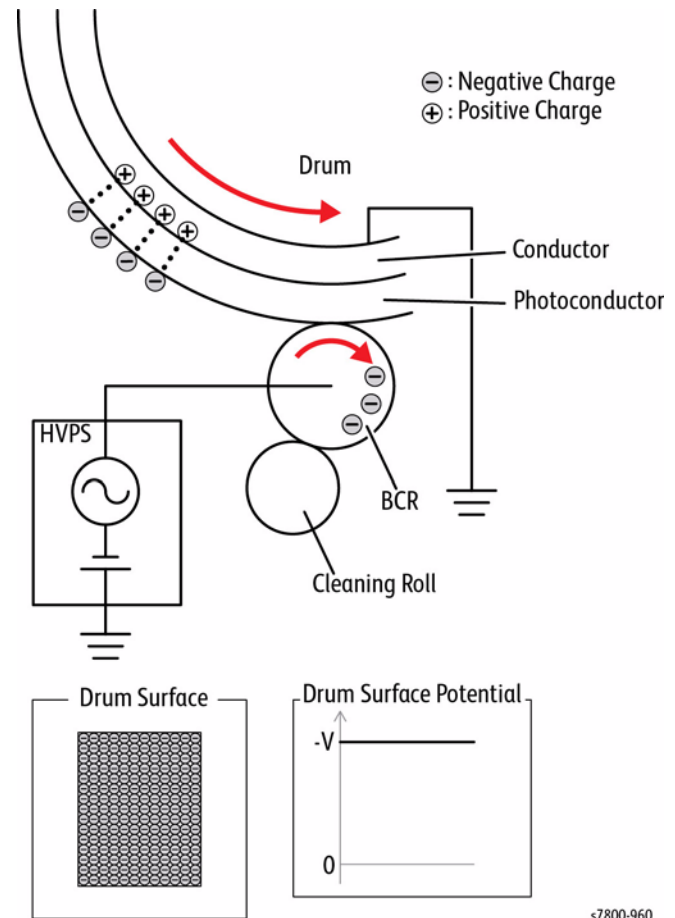


Figure 3 Electric Charge

s7800-960

Exposure

The negatively charged Drum surface is exposed to the LED (Light Emitting Diode) to form an invisible electrostatic latent image on it. This is performed in parallel for each color - Yellow, Magenta, Cyan, and Black.

The Phaser 7800 uses the LPH (LED Print Head) for the Exposure process. The LPH is made up of numerous LEDs that are lined up in the Fast Scan Direction.

The LPH for the printer consists of 57 sheets of the newly developed SLED (Self-Scanning Light Emitting Device). Each sheet of SLED contains 256 dots of luminous points, which adds up to 14592 dots of luminous points on the 57 sheets that is capable of producing a high image quality of 1200 dpi in the Fast Scan direction.

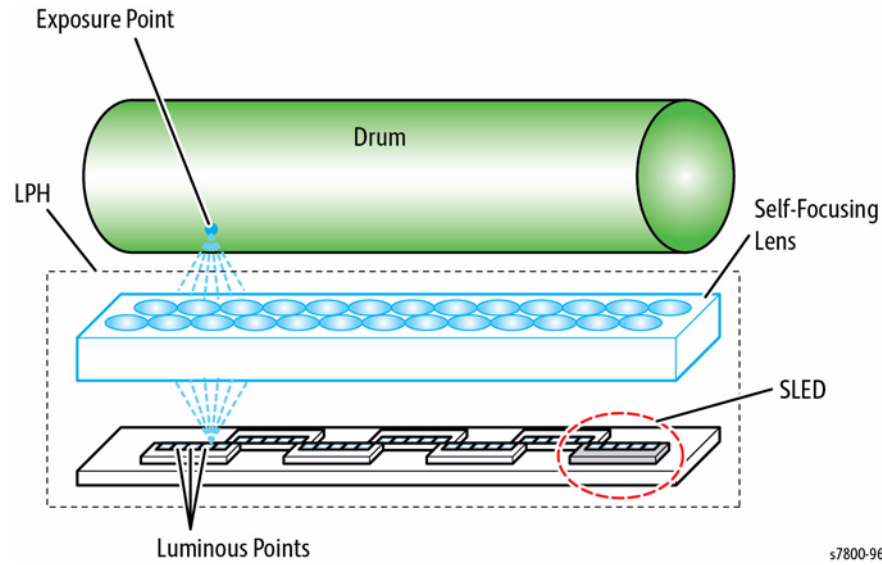


Figure 4 Exposure Point

s7800-961

The LEDs are lit in one line units based on the print data (image data) that is sent from the printer controller.

The lenses then focus the light onto the Drum surface. The LED is only lit for the parts where the one line is made up of pixels (small dots that form characters or images). When parts of the Drum surface are exposed, they become conductive and the negative charges flow towards the positive side to cancel out the positive charges, reducing the potential on the Drum surface. These sections with lowered surface potential form the electrostatic latent image.

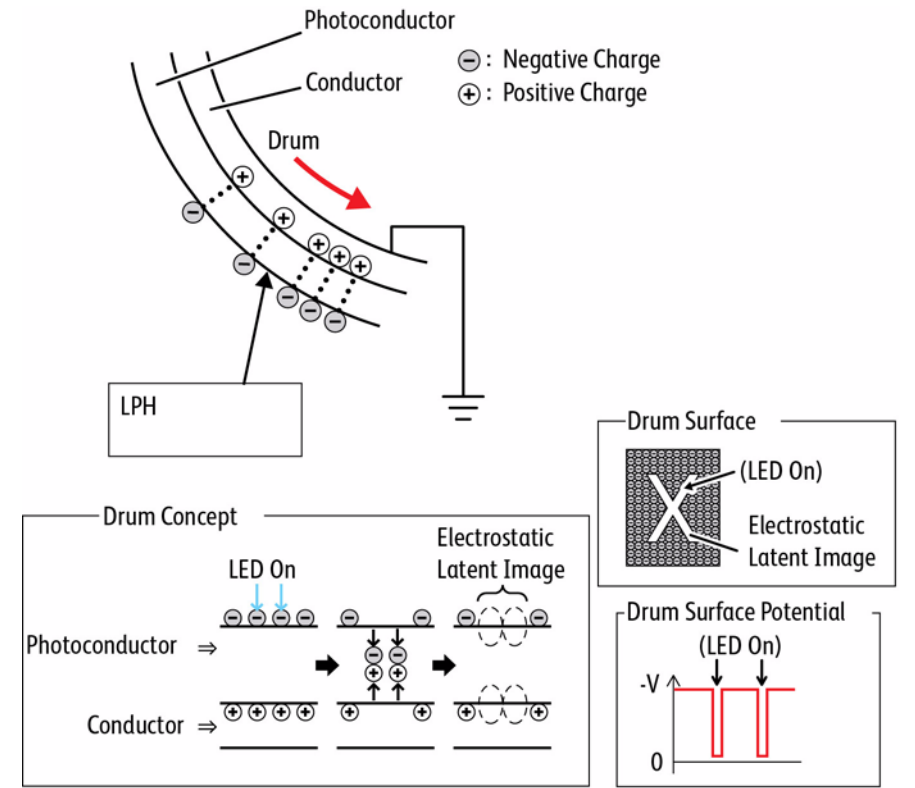


Figure 5 Charges

s7800-962

Development

The electrically charged toners adhere to the electrostatic latent image on the Drum surface to form a visible image (a toner image that can be seen) on it. This is performed in parallel for each color - Yellow, Magenta, Cyan, and Black.

- The Toner in the Cartridge is transported into the Developer Housing Assembly by the Agitator and Auger that are driven by the Dispense Motor.

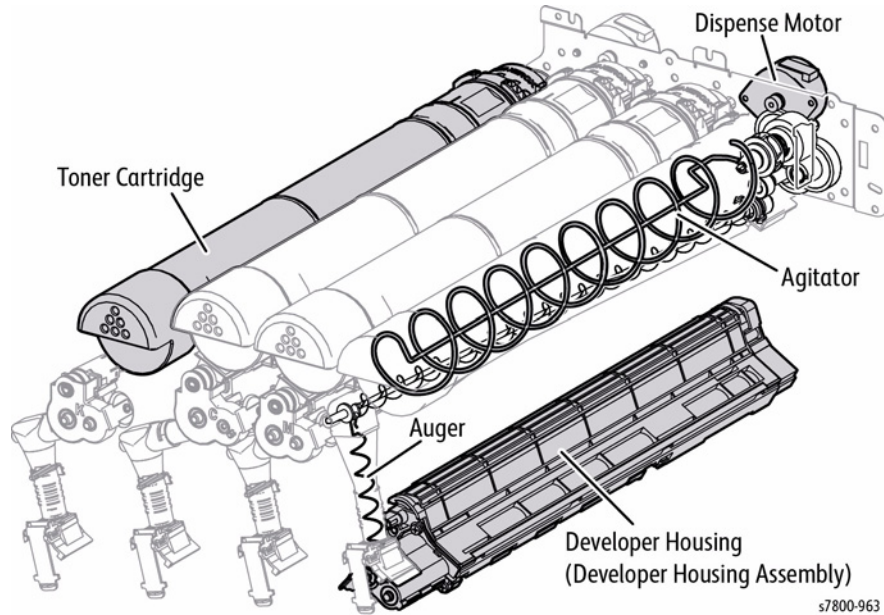


Figure 6 Development

- The Toner and the Developing Beads (toner + carrier) in the Developer Housing Assembly is agitated by the Auger, and then supplied to the Magnet Roll that is located close to the Drum surface. Friction generated by the agitation charges the toner and the carrier (toner becomes negative and carrier becomes positive) and causes them to stick together by mutual electrical attraction. Since the carrier is a magnetic substance, it is attracted to the magnetized Magnet Roll and formed into an even layer by the Trimmer.
- The Magnet Roll surface is covered with thin semi-conductive sleeve. DB (Developing Bias) voltage is supplied from the HVPS to this semi-conductive sleeve. The DB voltage consists of overlapping AC voltage and negative DC voltage.
- The DC voltage is used to maintain the Magnet Roll at a constant negative potential compared to the Drum conductive layer. Therefore, sections of Drum surface where the negative charges have not been reduced will have lower potential than the Magnet Roll, while sections where the negative charges have been reduced will have higher potential than the Magnet Roll.

The AC voltage is used vibrate the toner on the Magnet Roll surface so that it can be transferred more easily. Hence, the negatively charged toner is only attracted to the sections with reduced negative charges on the Drum surface (the electrostatic latent image) to form a toner image on the Drum. (Since the attraction of the positive charge on the Drum conductive layer is stronger than the repulsive force of the negative charge on the Drum surface, the toner still gets pulled to the Drum despite being affected by repulsive force of the negative charge.) As more toner adheres to the Drum, the negative charge of that section increases, causing the potential to drop and the attraction force that pulls the toner to weaken.

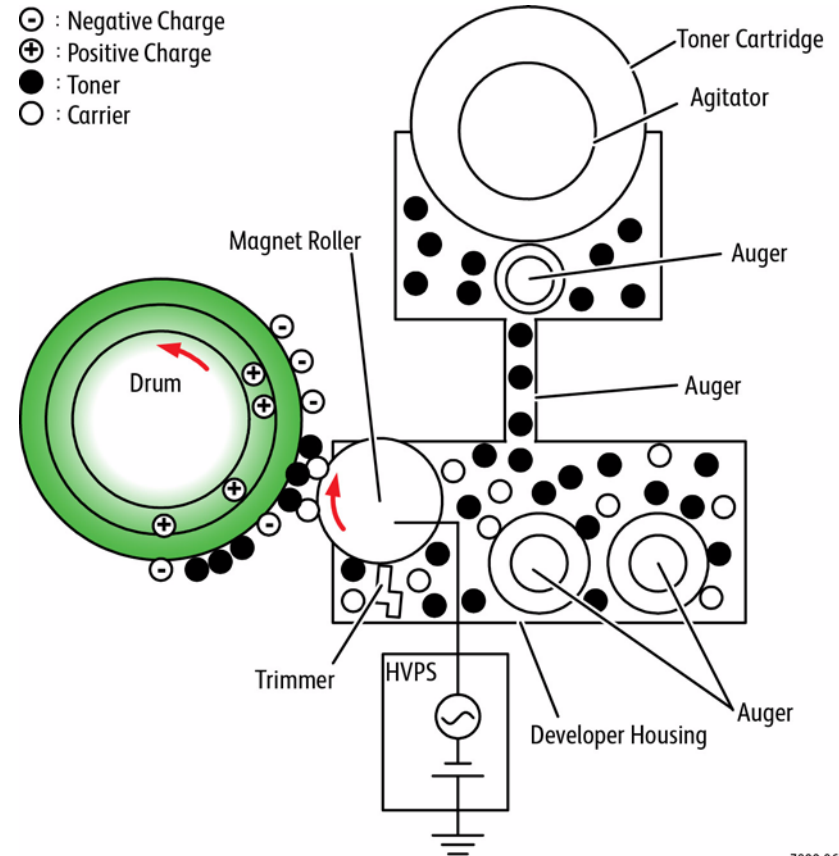
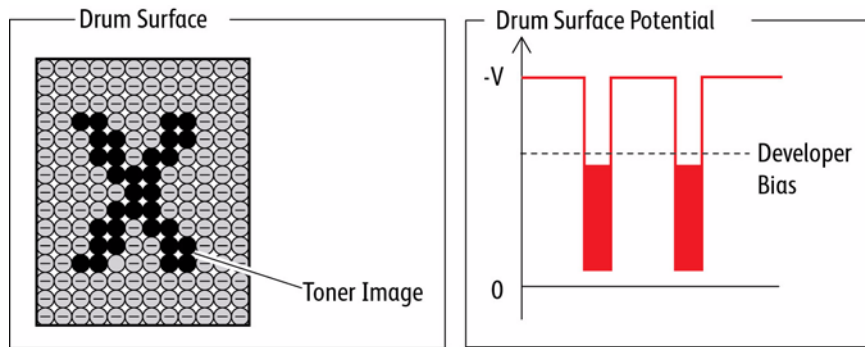


Figure 7 Charges



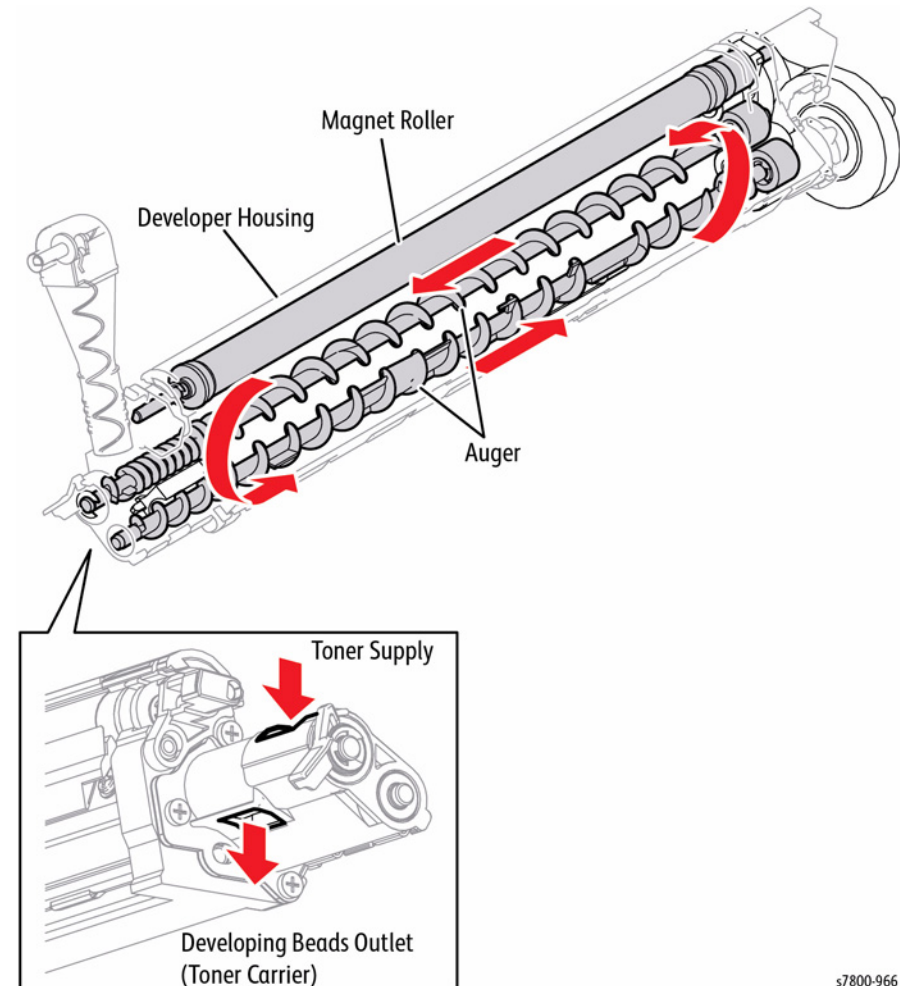
s7800-965

Figure 8 Drum Surface

Print Process

The Phaser 7800 uses dry bi-component magnetic toner with the 2 components: toner and carrier.

Other than toner, a small amount of carrier is also present in the Toner Cartridge. To prevent the degradation of Developing Beads, the "Trickle Development Method" is used. This involves supplying the toner together with the carrier into the Developer Housing Assembly while at the same time removing the used Developing Beads from the Developer Housing Assembly.



s7800-966

Figure 9 Print Process

Primary Transfer (Drum --> Belt)

The 1st BTR (First Bias Transfer Roll) is used to transfer the toner image on the Drum surface onto the belt. The toner images are transferred from the Drums onto the belt in the order of Y, M, C, K.

- The 1st BTR is a metal roll that is energized with positive DC voltage from the HVPS. The 1st BTR contacts the underside of the belt, where it generates a potential through the resistance of the belt, and transfers the positive charges to the underside of the belt. The negatively charged toner image on the Drum surface is attracted to the positive charge on the underside of the belt and gets transferred from the Drum to the belt.

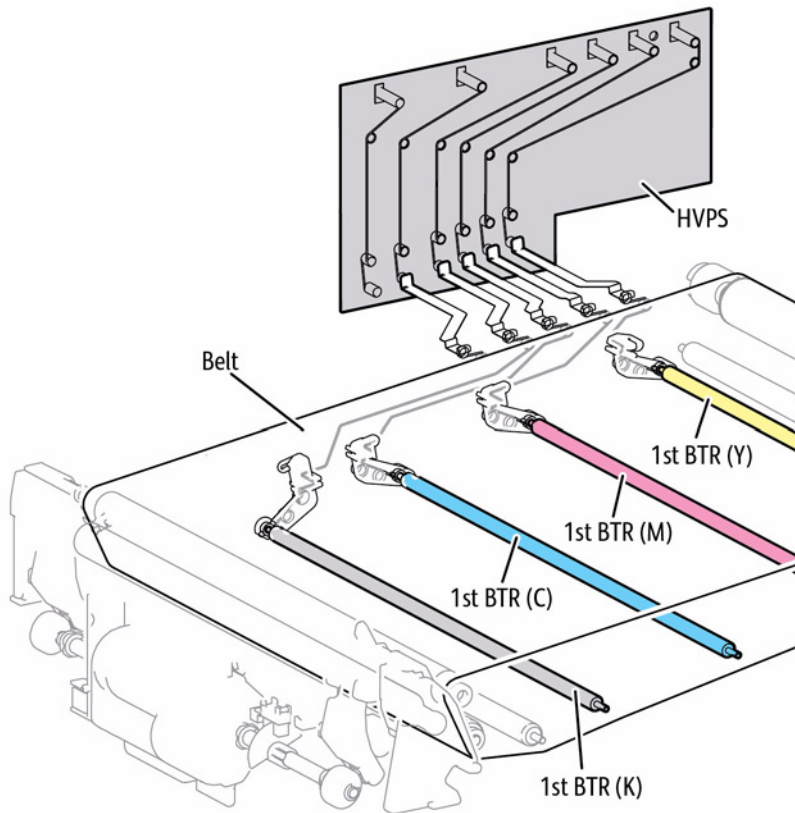
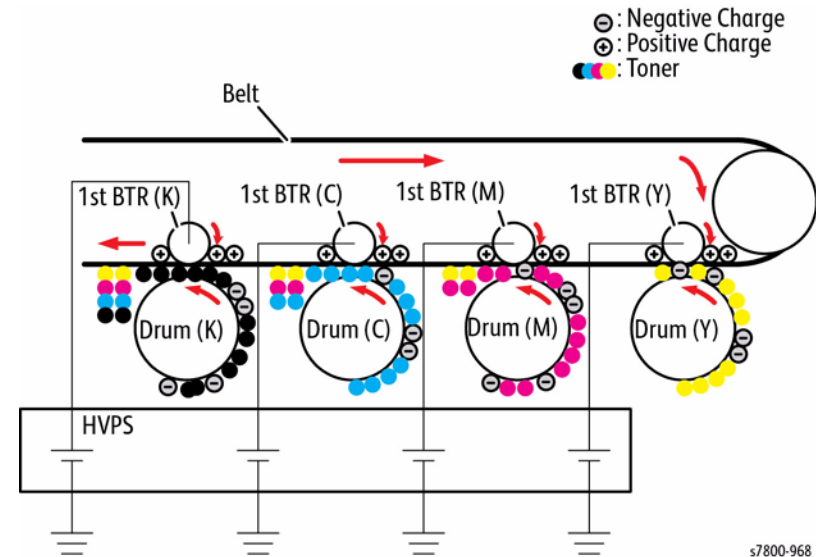


Figure 10 Primary Transfer

s7800-967

Print Process

The following diagrams contain the print process.



s7800-968

Figure 11 Print Process

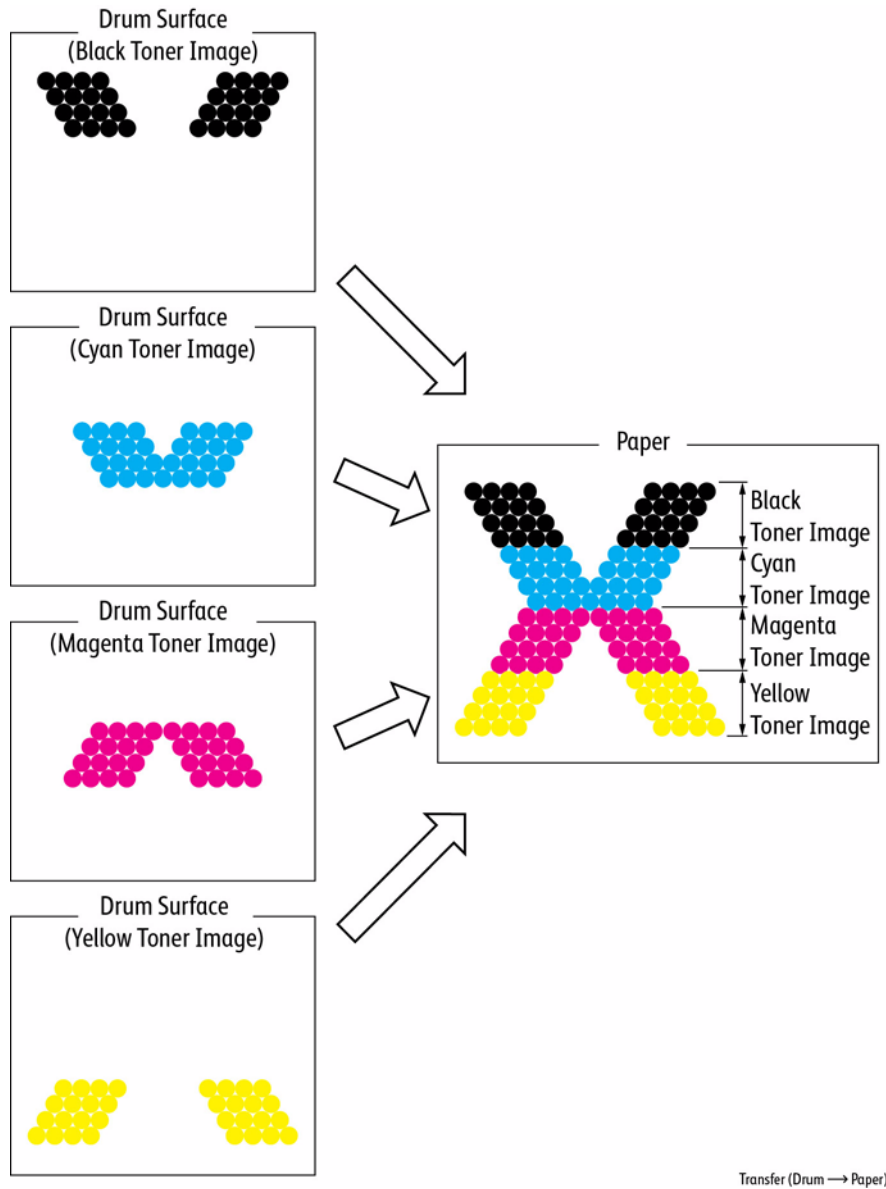


Figure 12 Transfer - Drum to Paper

Cleaning (Drum/ BCR)

Excess toner on the Drum surface and the BCR is removed, and the potential on the Drum surface is discharged.

- **Discharging the Drum** - A Drum that has gone through the **Primary Transfer** process is discharged by exposure of light from the Erase Lamp.
- **Cleaning a Drum** - Toner that was not transferred to the belt during the **Primary Transfer** process remains on the Drum surface. Because this toner will interfere with the subsequent processes if allowed to remain on the Drum surface, the Cleaning Blade that is in contact with the Drum scrapes off the remaining toner, which is then transported by the Drum Waste Toner Collector into the Waste Toner Bottle.
- **Cleaning the BCR** - The Cleaning Roll, which is made from spongy material, contacts the BCR surface to remove the remaining External Additive (the whitish transparent powder on the toner surface) and returns it to the Drum. The External Additive that was returned to the Drum, along with any remaining toner on the Drum, will be scraped off and removed by the Cleaning Blade during the Drum Cleaning process.

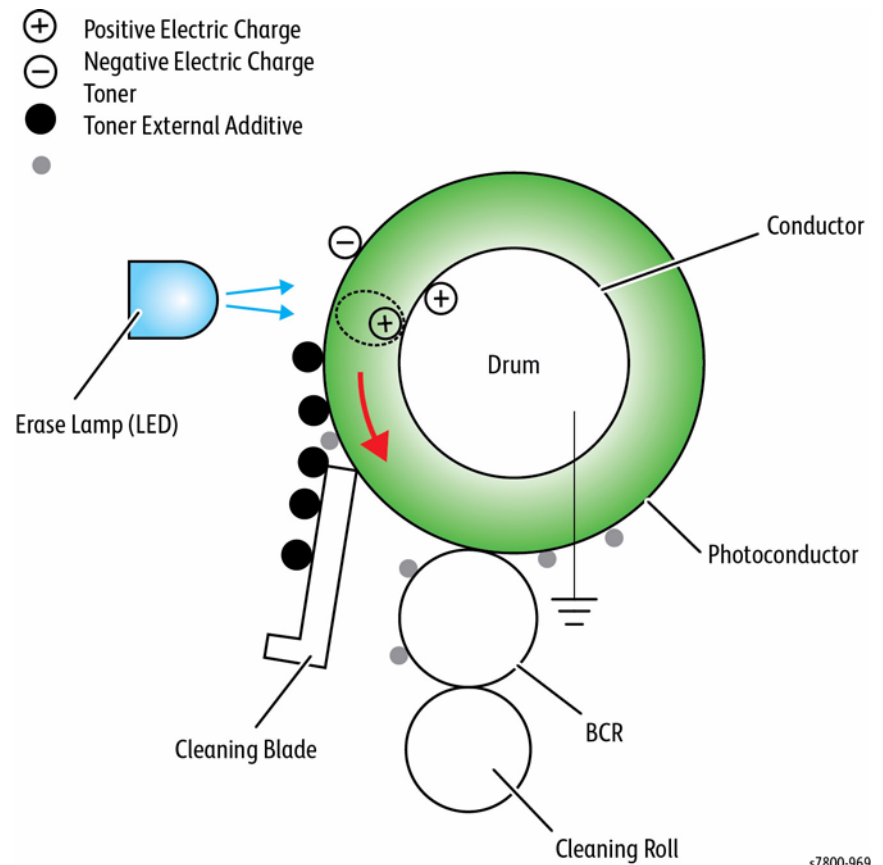


Figure 13 Cleaning

s7800-969

Secondary Transfer (Belt --> Paper)

The complete toner image formed on the belt surface is transferred onto the paper by the 2nd BTR (Second Bias Transfer Roll: Secondary Transfer Roll).

- The 2nd BTR will contact the belt after the power is turned On. Because the L/H Cover opening/ closing strength is reduced, it is retracted from the belt during a jam, or when the power is turned Off.
- During the transfer to the paper, the 2nd BTR contacts the Backup Roll (the conductive roll at the inner side of the belt) through the belt to pinch the paper that is being transported between the belt and the 2nd BTR.
- The Backup Roll is charged with negative DC Voltage from the HVPS, forming a transfer field with the grounded 2nd BTR that transfers the completed toner image on the belt onto the paper.

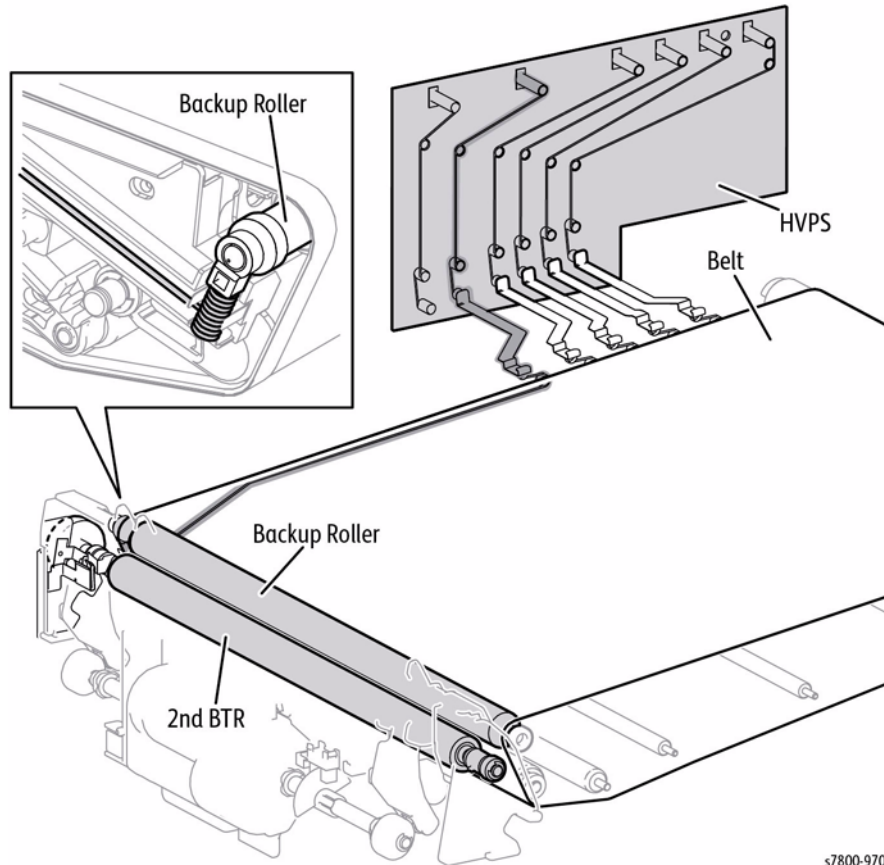


Figure 14 Secondary Transfer

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Secondary Transfer Process

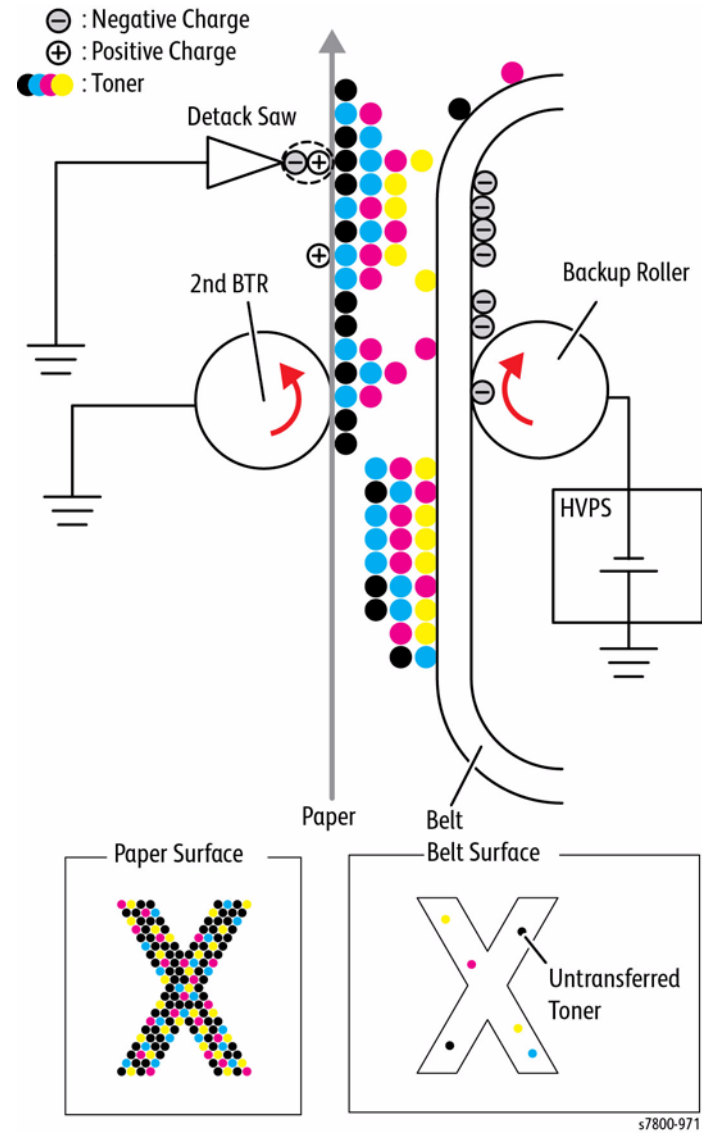


Figure 15 Secondary Transfer

s7800-971

Electric Discharge

The charge on the paper is neutralized/removed by the Detack Saw (serrated metal plate) to peel off the paper from the belt.

- The Detack Saw is a serrated metal plate with an acute edge that is connected to the frame ground.
- The Detack Saw is close to the back of the paper. If the charge that was applied to the paper in the "Secondary Transfer" process gets discharged unevenly to the chutes and other metallic parts before the fusing, it will cause image distortion and toner dispersion. To prevent this, the positive charge that was applied to the paper is actively discharged by the Detack Saw so as to evenly neutralize/remove it.

Cleaning (Belt/ 2nd BTR)

The non-transferred toner on the belt and the unwanted toner that is stuck to the 2nd BTR are removed after the toner image has been transferred to the paper.

- **Cleaning the Belt** - Toner that was not transferred to the paper during the **Secondary Transfer** process remains on the belt surface. Because this toner will interfere with the subsequent processes if allowed to remain on the belt surface, the Cleaning Blade that is in contact with the belt scrapes off the remaining toner, which is then transported by the Belt Waste Toner Collector into the Waste Cartridge.
- **Cleaning the 2nd BTR** - Unwanted toner that adhered to the 2nd BTR during the **Secondary Transfer** process will dirty the back side of subsequent paper. To prevent this, positive DC Voltage from the HVPS is applied to the Backup Roll that faces the 2nd BTR to transfer the toner on the 2nd BTR back to the belt. The Cleaning Blade that is in contact with the belt then scrapes off the toner that was transferred back to the belt, which is then transported by the Belt Waste Toner Collector into the Waste Cartridge.

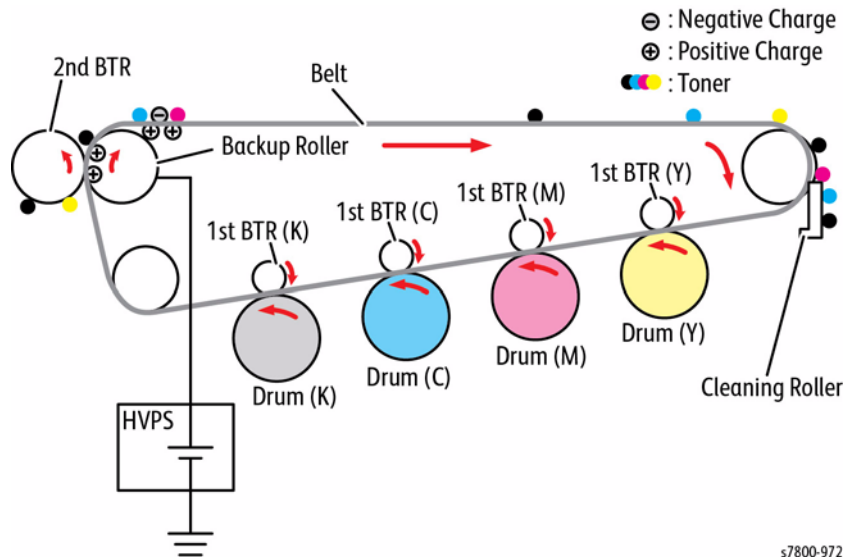


Figure 16 Cleaning Process

s7800-972

Waste Toner Collection

All the waste toner that is generated during the cleaning of the Drums and belts, as well as the depleted Developing beads from the Developer Housing Assemblies are transported into the Waste Cartridge by the Auger.

Although only one Drum and Developer are shown in the illustration for simplification, each section has its own collector.

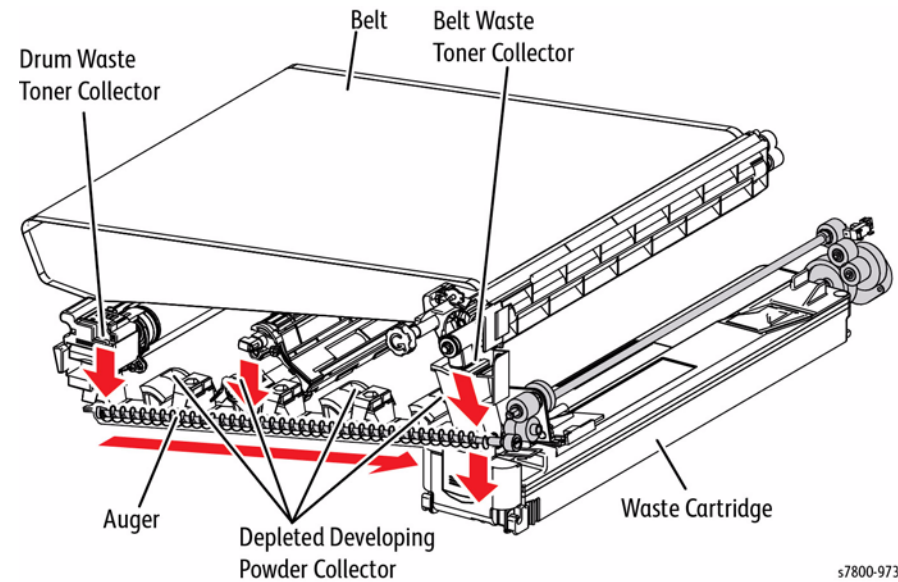


Figure 17 Waste Toner Collection

s7800-973

Fusing (Fuser)

The Fuser Assembly fuses the complete toner image that was transferred onto the paper, using heat and pressure.

The fusing system in the Phaser 7800 uses Induction Heating rather than Heat Rods to deliver the fusing temperatures required for a wide range of media. Among the chief benefits of this technology are customer convenience and reduced energy consumption because the Fuser can be brought to temperature from a "cold" state or standby in a fraction of the time of conventional systems.

The Fuser also feature increased elasticity of the Fuser Belt for improved separation of the fused print, plus easier jam clearance due to the presence of a latching mechanism.

The Phaser 7800 uses a Thermal Storage system which produces heat based on a common principle: when AC current passes through the IH Coil it induces eddy currents within the thin copper (heating) layer built into the Fuser Belt. This heat then transfers to and is distributed evenly by the metal core.

The Thermal Storage system takes somewhat longer to come to fusing temperature, but the mass of the core has a greater heat capacity, as is needed in high print speed machines.

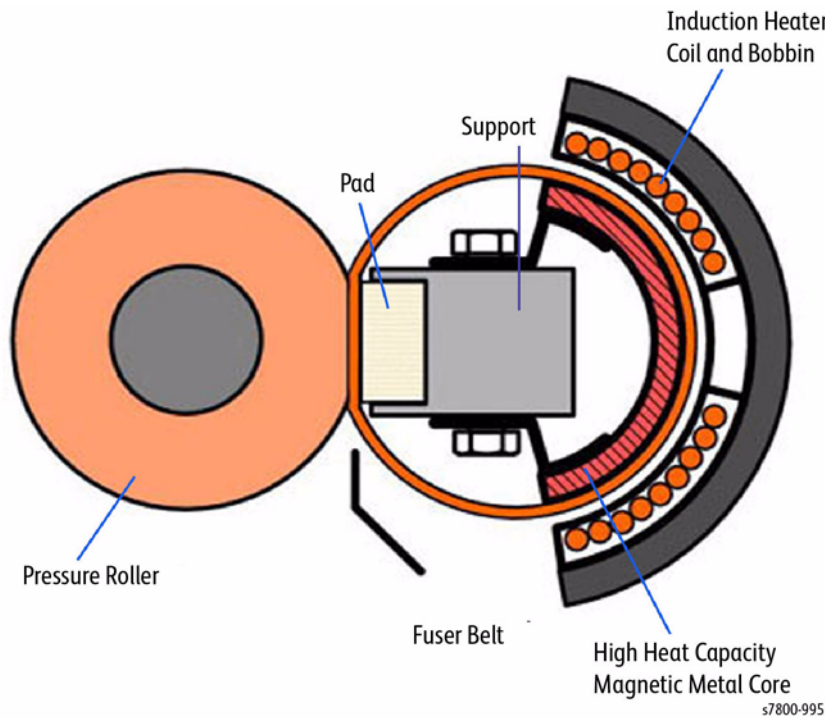


Figure 18 Thermal Storage Fuser

Fuser Drive

The Fuser Drive Motor provides drive to the Fuser Assembly components, to the 1st BTR Contact Retract operation, and the OCT 1 Roller.

The Pressure Roll is moved out of contact with (unnipped) from the Fuser Belt between jobs and for a short period at the start of a new job. Keeping the Pressure Roll and Fuser Belt unnipped enables the Fuser Belt to reach fusing temperature faster.

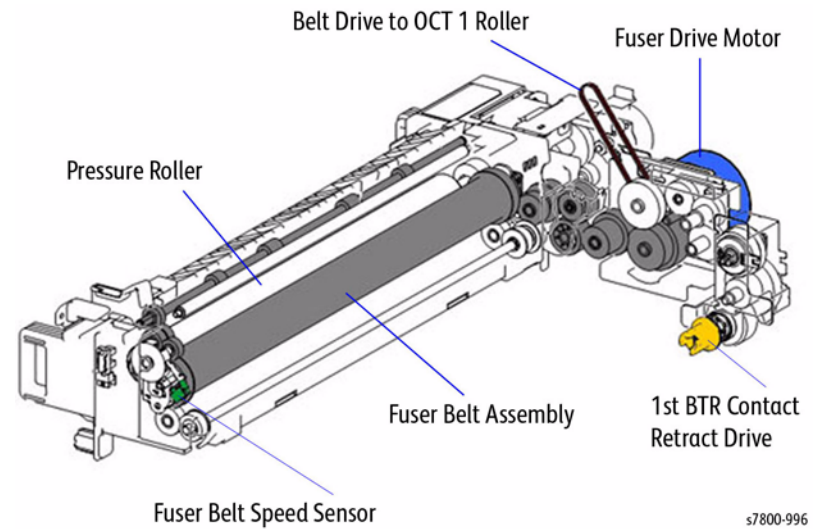


Figure 19 Fuser Drive

When the Fuser reaches fusing temperature, the Pressure Roll Latch Motor turns On, closing the nip. The Pressure Roll Latch Sensor informs the control logic when the Pressure Roll and Fuser Belt are nipped or unnipped.

Heating also causes the Pressure Roll to expand. This expansion tends to increase the velocity of the media through the system. To maintain the optimum fusing speed, the control logic monitors the signal from the Fuser Belt Speed Sensor, then adjusts the Fuser Drive Motor speed as appropriate.

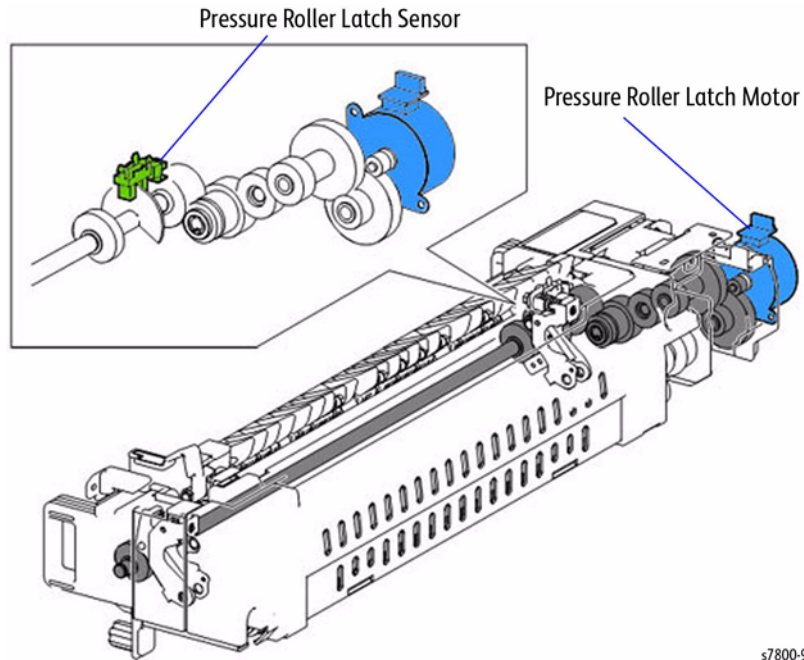


Figure 20 Fuser Components

s7800-997

Temperature Control

The Fuser receives AC power from the IH Drive PWB. This power is switched On and Off as required by the IGBT (Insulated Gate Bipolar Transistor) located on the IH Drive PWB. The temperature inputs that inform the MCU PWB when to switch the fusing power on and off come from the Center and Rear Thermistors.

The Thermostat provides overtemperature protection. When the temperature at the surface of the Heat Roll exceeds a predetermined value, the Thermostat opens, opening the Fuser Relay and cutting power to the Fuser's Coil Assembly.

NOTE: The first time that a replacement Fuser is powered on after installation, a fuse on the Fuser Fuse PWB opens, indicating to the machine logic that the new Fuser is present. The logic then resets the HFSI counter.

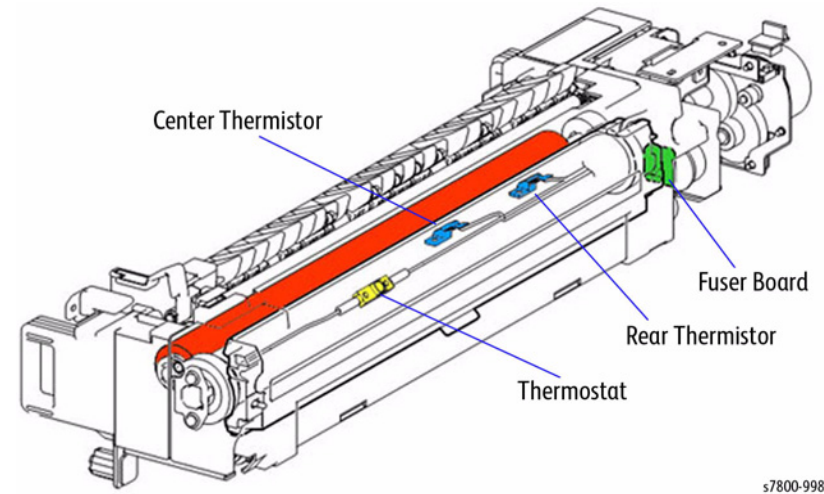


Figure 21 Fuser Temperature Components

s7800-998

Fuser Cooling

The Fuser Exhaust Fan removes heated air from the Fuser area.

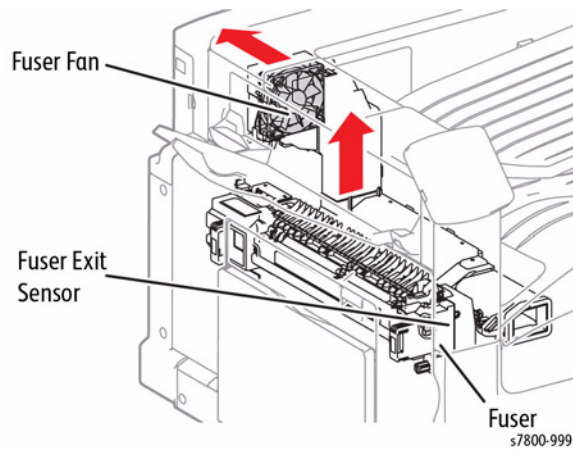


Figure 22 Fuser Fan

Print Data Flow

The print data (electric signals) from the Printer Controller goes through the flow as shown in the following diagram to become a print image.

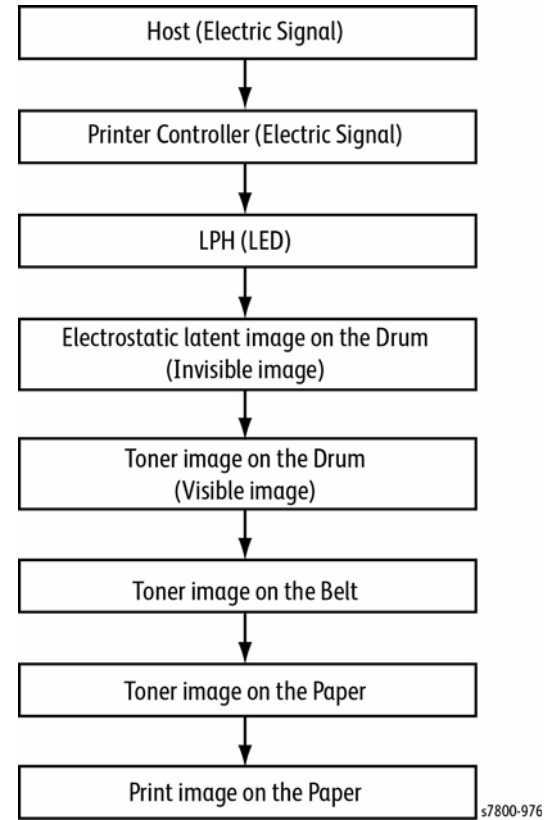


Figure 1 Print Data Flow

Paper Feed

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

Paper Feed Layout

Paper Transport (3TM)

The following diagram contains the paper transport layout and the parts related to paper transportation in a printer with a Duplex Unit and 1500-Sheet Feeder attached.

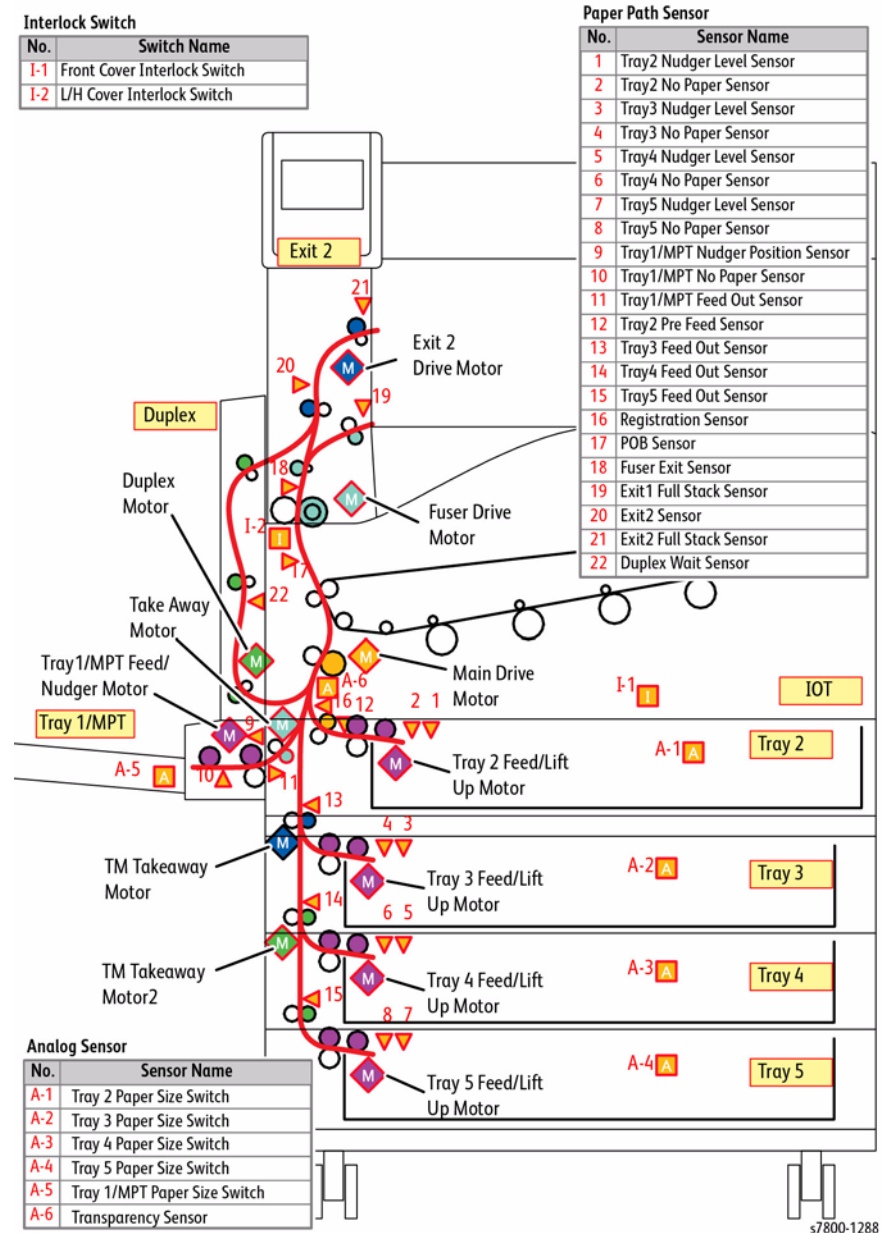


Figure 1 1500-Sheet Feeder (3 Tray Module)

Paper Transport (TTM)

The following diagram contains the paper transport layout and the parts related to paper transportation in a printer with a Duplex Unit and 2500-Sheet Feeder attached.

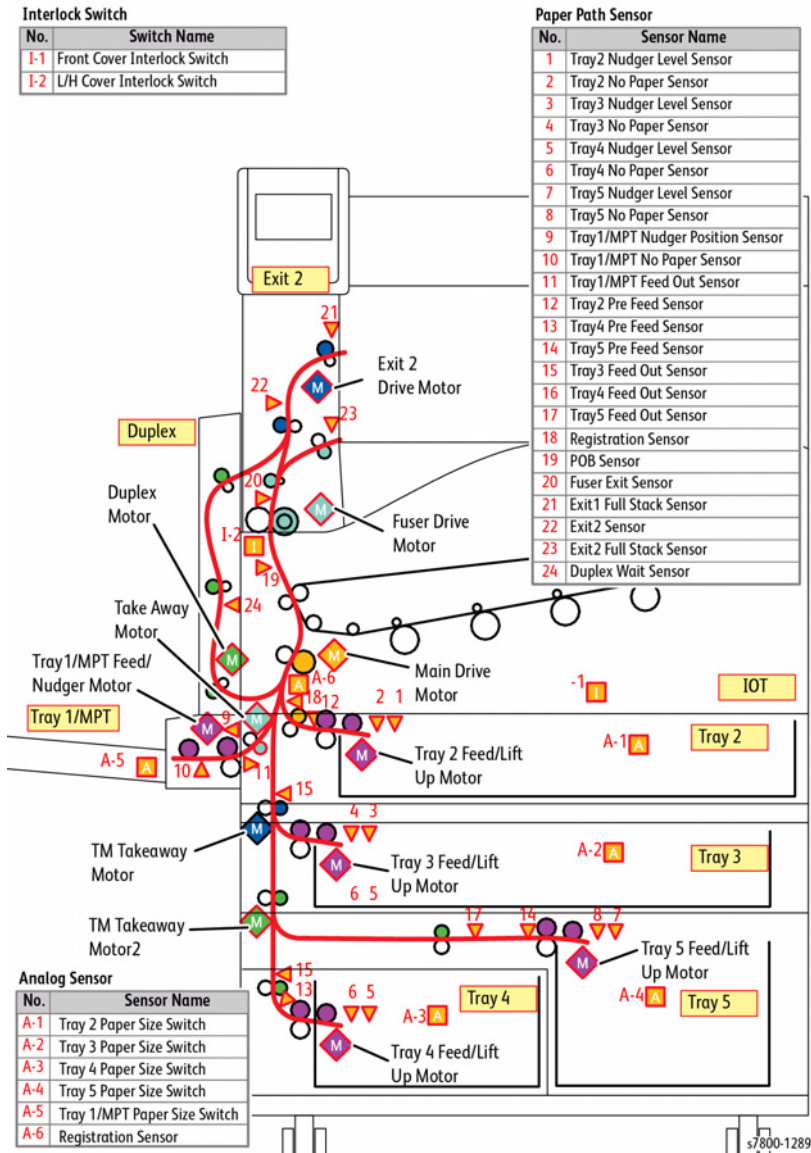


Figure 2 2500-Sheet Feeder (TTM)

Paper Feed from the Paper Tray

Upon insertion of Paper Tray, the mechanisms (1), (2), and (3) raise the Bottom Plate to press it against the Feed Roll, while the Nudger Roll is lowered (4). At the same time, reverse rotation (CCW direction) of the Tray Feed/Lift Motor raises the Bottom Plate of the Paper Tray until the paper reaches the Feed Position (5).

As the paper feed from the Paper Tray is starting, forward rotation (CW direction) of the Tray Feed/Lift Motor rotates the Nudger Roll, Feed Roll, and Retard Roll. The paper is fed in between the Feed Roll and Retard Roll by the Nudger Roll and then transported towards the Takeaway Roll by the rotation of Feed Roll and Retard Roll.

The spring pressure and the Retard Roll press against the Feed Roll to perform the role that separates paper by using rotation resistance (6).

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

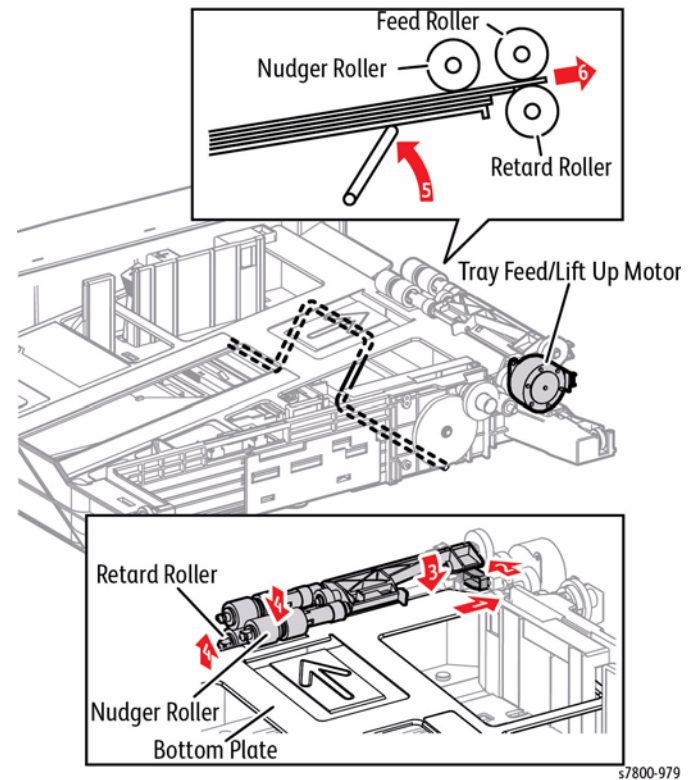


Figure 3 Paper Feed

Paper Feed from Tray 1 (MPT)

As the paper feed from the Tray 1 (MPT) is starting, forward rotation (CW direction) of the Tray 1 Feed/ Nudger Motor lowers the Nudger Roll to contact the paper.

Next, reverse rotation (CCW direction) of the Tray 1 Feed/ Nudger Motor rotates the Nudger Roll and Feed Roll.

The paper is fed in between the Feed Roll and Retard Roll by the Nudger Roll and then transported towards the Drive Roll by the rotation of Feed Roll and Retard Roll.

The spring pressure and the Retard Roll press against the Feed Roll to perform the role that separates paper by using rotation resistance.

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

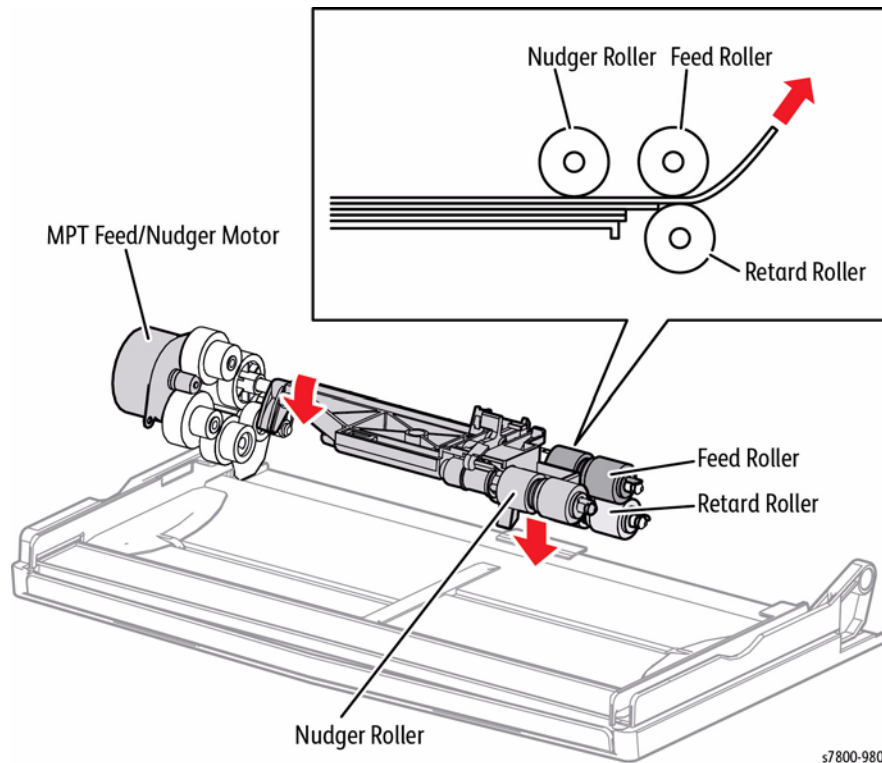


Figure 4 Paper Feed from Tray 1

Paper Transport

Paper Transport up to the Registration Area

Paper that was fed from the Paper Tray is transported to the Registration section by the Take-away Roll. The Takeaway Roll rotates from the drive that is provided by the Main Drive Motor through the Takeaway Clutch.

Paper fed from the Tray 1 (MPT) is transported to the Registration section by the Drive Roll. The Drive Roll rotates by the drive that is provided from the Main Drive Motor through the Takeaway Clutch.

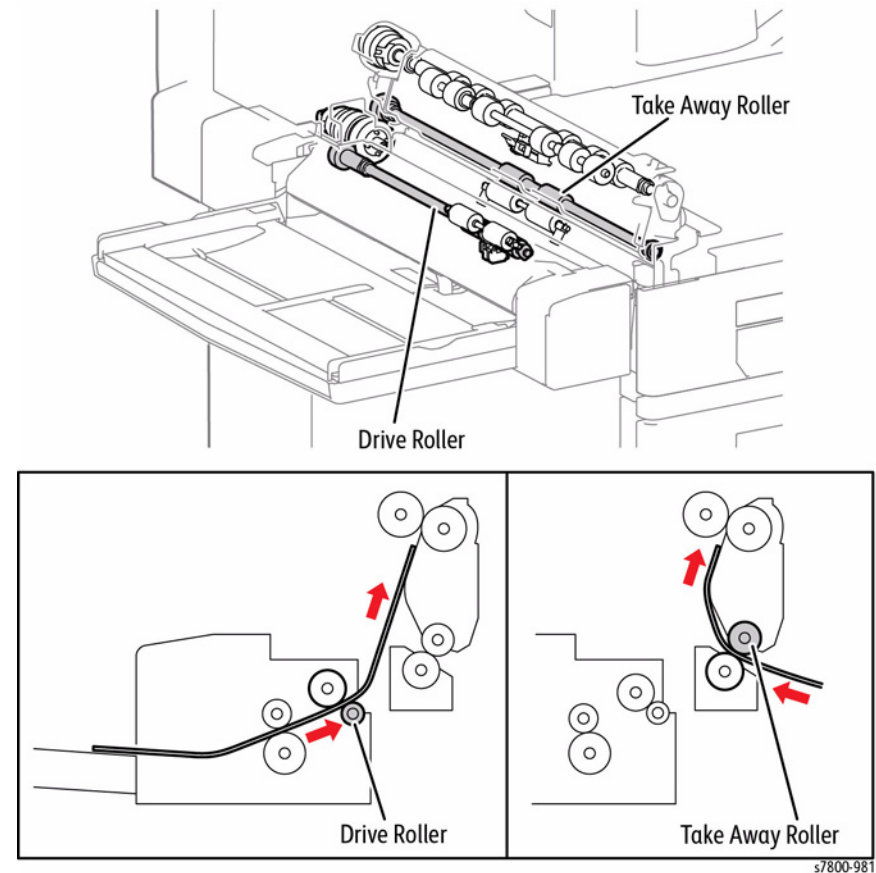


Figure 5 Paper Transport

Paper Lead Edge Adjustment

When paper is fed to the Transfer section, the paper lead edge is aligned using the buckle method in the Registration section.

The buckle method puts the paper that was fed and transported from the trays or the Tray 1 against the Regi Roll, and buckles the paper. By rotating the Regi Roll with the paper buckled, the paper can be transported with its lead edge aligned.

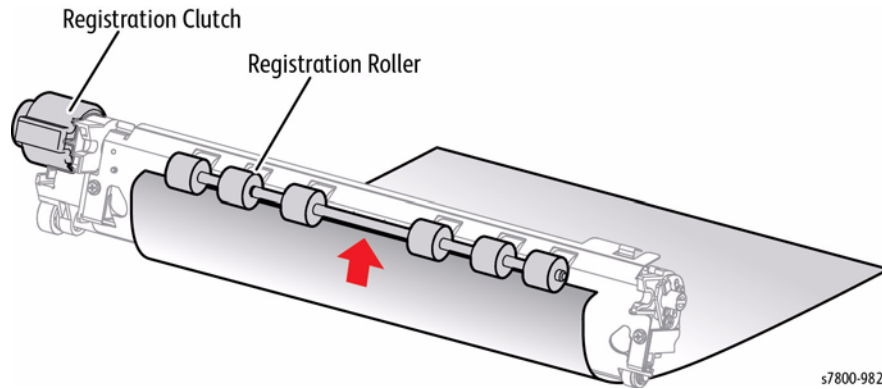


Figure 6 Paper Lead Edge Adjustment

Paper Transport from the Registration Area

When paper is fed to the Transfer section, the paper lead edge is aligned using the buckle method in the Registration section.

The buckle method puts the paper that was fed and transported from the trays or the Tray 1 against the Regi Roll, and buckles the paper. By rotating the Regi Roll with the paper buckled, the paper can be transported with its lead edge aligned.

Transfer/ Fusing/ Output

The belt (IBT Belt Unit) that rotates from the drive of the IBT Belt Drive Motor and the 2nd BTR transfers the latent image from the belt onto the paper as it passes through the Registration section. Next, the Heat Roll (Fuser Assembly) fuses the latent image on the paper and transports the paper towards the Paper Output section. At the Paper Output section, forward rotation (CW direction) of the Exit Motor rotates the Exit Roll in the paper output direction. The completion of paper output is detected by the Fuser Exit Sensor.

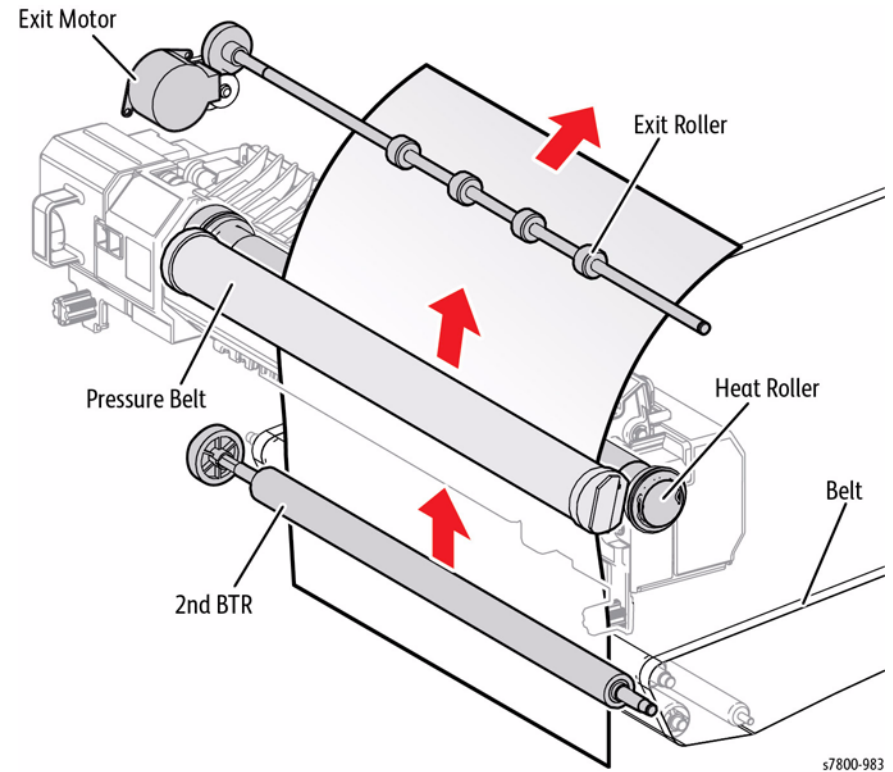


Figure 7 Transfer/ Fusing / Paper Output

2-Sided Feed

After the paper had passed through the Fuser Assembly and side 1 is completed, the rotation of the Exit Motor will change from forward rotation to reverse rotation (CCW direction) at the appropriate time.

This causes the Exit Motor to rotate in the duplex transport direction, which transports the paper through the top of the Duplex Chute Assembly, and into the Duplex Assembly.

The Duplex Roller 1, Duplex Roller 2, and Duplex Roller 3 then are rotated from the drive of the Duplex Motor to transport the paper to the Registration position.

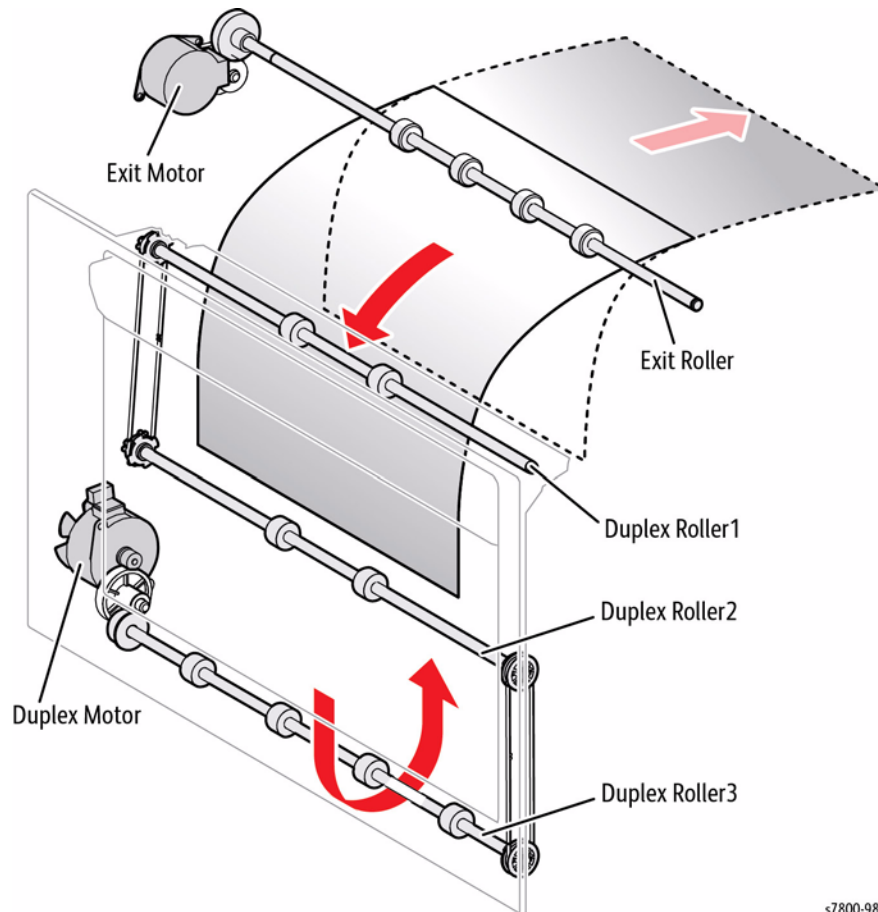


Figure 8 2-Sided Feed

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Major Assemblies and Functions

Exposure (LPH)

Exposure of the Drum surface is performed using an LED Print Head (LPH). The following illustration contains the main functional parts of the printer.

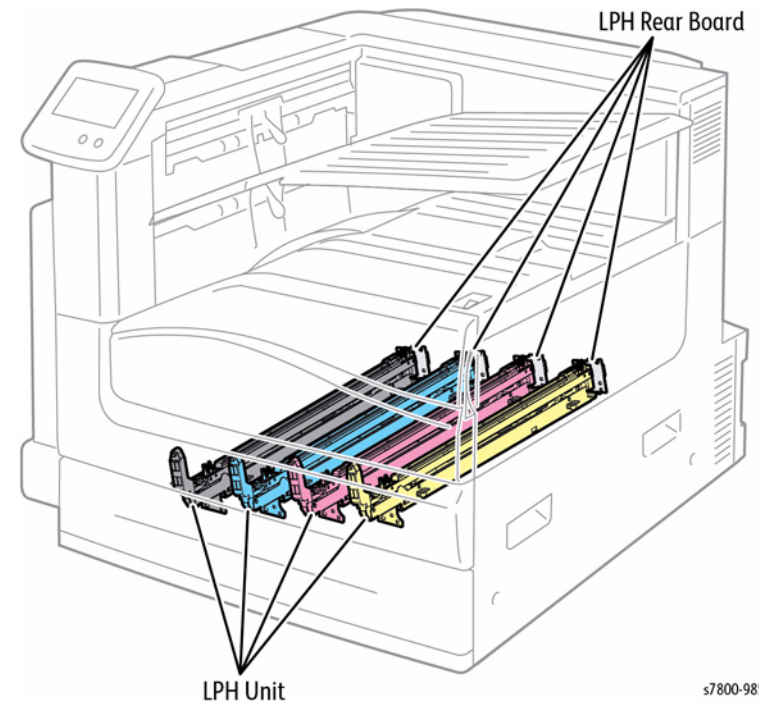


Figure 1 LED Printhead and PWB

LPH Unit

An exposure device that is used to form electrostatic latent images on the Drum surface. One is allocated to each color - Yellow, Magenta, Cyan, and Black. The LPH turns on the LEDs (Light Emitting Diodes) based on the image data from the Controller. The LPH also concentrates and focuses the light from the LEDs.

LPH Rear PWB

The LPH Rear PWB acts as a relay between the MCU PWB and the LPH Unit. The LPH PWB converts 5VDC from the MD PWB to 3.3VDC, which is the power source for the SLEDs. The LPH PWB is also supplied with 1.8V from the MD PWB, and is equipped with an ASIC and the EEPROM that drive the SLEDs.

Electric Charge (Drum)

The process of building an image begins with the Bias Charge Roll (BCR) supplying a high voltage AC and DC charge to the OPC surface of the Drum.

Charge Timing

Drum charging with BCR AC Voltage begins a specified time after the Drum Motor turns On. Drum charging with BCR DC voltage starts a specified time after the BCR AC charging begins. BCR DC is increased in five steps until the final output is reached. The final output is determined by process control. The default value for DC voltage is -750V.

Simple Process Control

As the Drum rotates its surface coating becomes thinner due to the friction with the Cleaner Blade and the BCR. As the coating changes, its charging capability also changes. To maintain the charging capability of the Drum at a desired level, the BCR DC charge voltage is corrected.

The correction value for the BCR DC voltage is calculated based on the number of Drum cycles, temperature, and humidity. This correction is called Simple Process Control.

BCR Cleaning

The contaminated BCR is cleaned by the BCR Cleaning Roll that is in continuous contact with it.

Imaging Unit

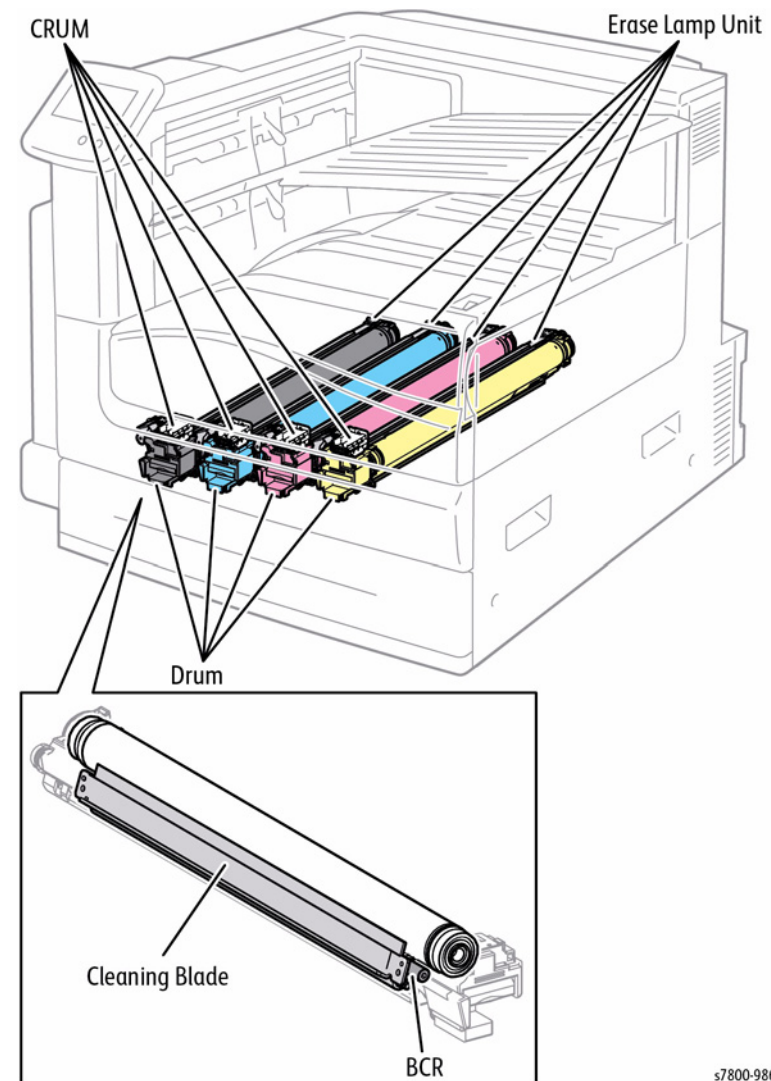
The Drum unit forms electrostatic latent images and toner images. One is for each color - Yellow, Magenta, Cyan, and Black.

Other than the Drum itself, it is made up of the following main components.

- **BCR** - Charges the Drum.
- **Cleaning Blade** - Cleans any toner remaining on the Drum after the transfer of toner image onto the paper.
- **CRUM** - This is a non-volatile memory that stores the machine data.

Erase Lamp Unit

The Erase Lamp Unit photoelectrically discharges the Drum surface after the toner image has been transferred onto the Transfer Belt. One is allocated to each color - Yellow, Magenta, Cyan, and Black.

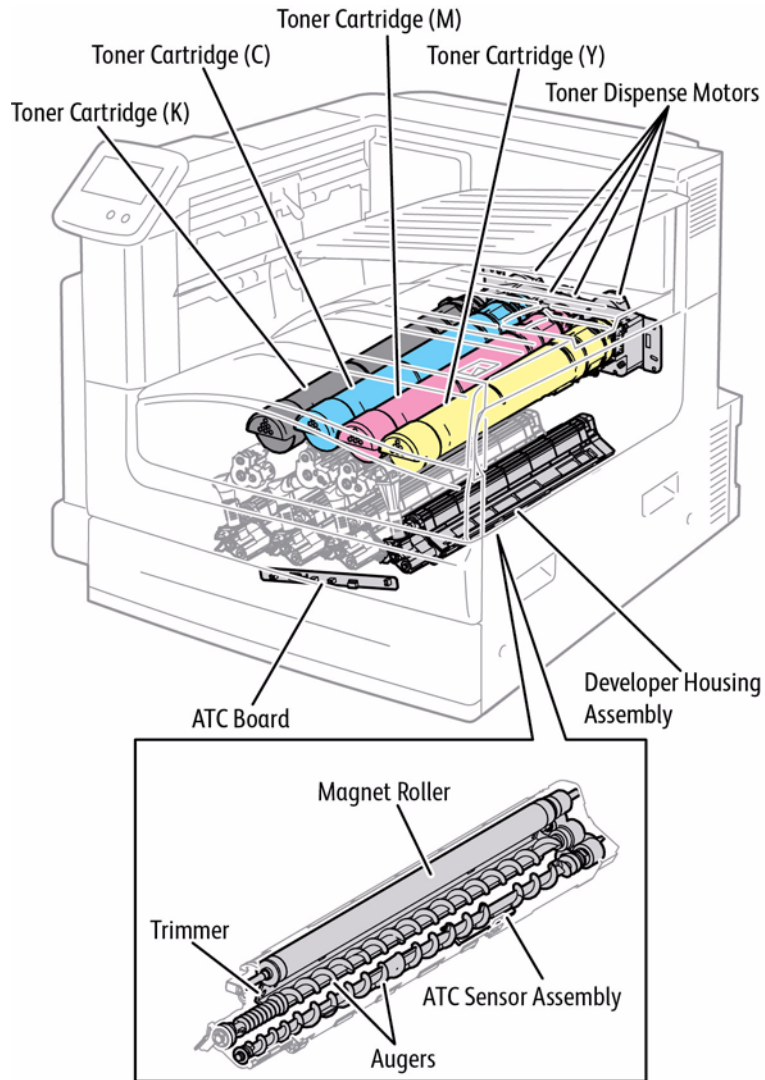


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Figure 2 Electric Charge

Development (Developer)

Toner supplied from the Toner Cartridge into the Developer Housing is blended with developer and adsorbed on the Magnet Roll. Development bias is applied to the rotating Magnet Roll, thereby attracting the toner from the Magnet Roll to the electrostatic latent image on the surface of the Drum. As a result, the toner image is generated there. This development operation is done for each of the colors.



s7800-987

Figure 3 Development

Toner Cartridges

The Toner Cartridge contains toner and a small amount of carrier. It also comes with a CRUM, which is a nonvolatile memory that stores the machine data.

Toner Dispenser Motor

The Toner Dispenser Motor drives the Agitator in the Toner Cartridge and the Auger in the Transport section to convey the toner from the Toner Cartridge to the Developer Housing Assembly. One is allocated to each color - Yellow, Magenta, Cyan, and Black.

Developer Housing Assembly

The Developer Housing Assembly uses toner and carrier to develop images on the Drum. One is allocated to each color - Yellow, Magenta, Cyan, and Black.

The Developer Housing Assembly is made up of the following main components.

- **Magnet Roll** - Contacts the Drum and forms toner images on the Drum.
- **Auger** - Agitates toner.
- **Trimmer** - Evens out the layer of toner and carrier on the Magnet Roll.
- **ATC Sensor Assembly**

ATC Sensor Assembly

The ATC Sensor Assembly detects the amount of toner and carrier in the Developer (Developer Housing Assembly). It is part of the Developer Housing Assembly. The ATC Sensor is located inside the Developer Unit.

ATC PWB

The ATC PWB acts as a relay between the MCU PWB and each ATC Sensor.

Detection of Remaining Amount of Toner

The remaining amount of toner is reported, based on pixel counts. The amount remaining is calculated in steps of one percent.

Detection of Toner Cartridge Replacement Time

At Power On or when the Front Cover is closed, the printer reads information in the CRUM and compares it with the corresponding NVM value. This information determines the replacement time of Toner Cartridge.

The CRUM stores information such as the amount of remaining toner (Total Time of Dispense Motor Rotation) and Serial Number.

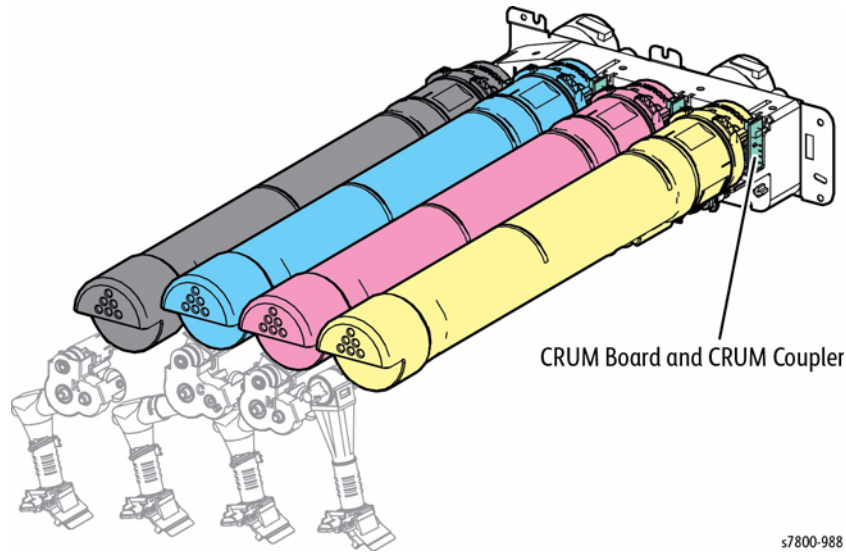


Figure 4 CRUM PWB and CRUM Coupler

Trickle Development System

The trickle development system mixes a small quantity of carrier beads into the Toner Cartridge and supplies them along with toner to the Developer Housing.

The housing also discharges the deteriorated carrier beads of developer from the Developing Housing.

In addition, the printer makes "low-cloud development" possible by simultaneously removing air from the Developer Housing through the port for collecting excess developer.

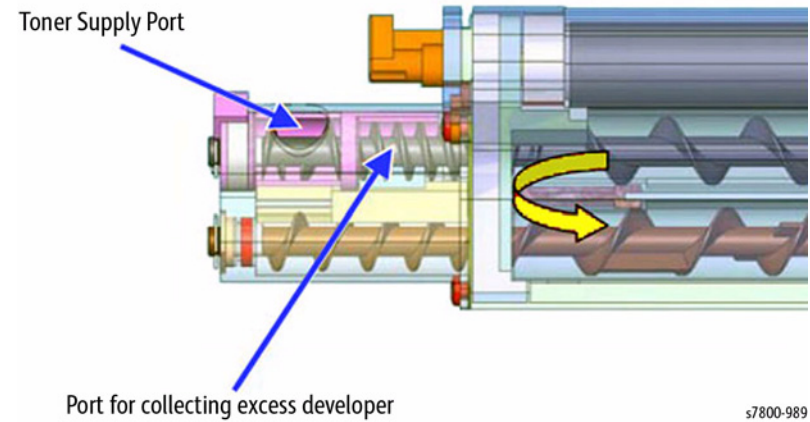


Figure 5 Trickle Development System

Primary Transfer

First Transfer transfers the yellow, magenta, cyan, and black toner images, one after another, from the Drums to the Transfer Belt. First transfer voltage, a positive electrical charge, is supplied by the HVPS (1st/2nd/DTC) to the 1st Bias Transfer Rolls (BTRs). The positive charge thus applied to the inner surface of the IBT Belt attracts the negatively charged toner on the Drums, causing it to transfer to the surface of the IBT Belt.

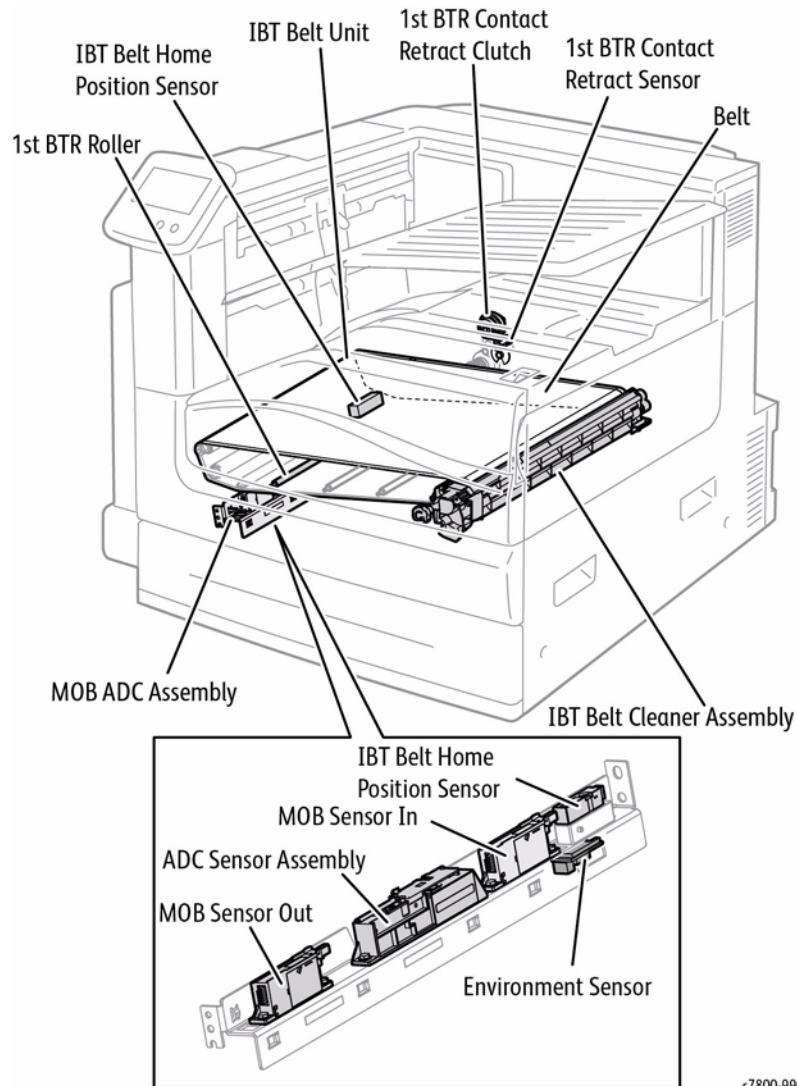


Figure 6 Primary Transfer

1st BTR Retract Clutch

The 1st BTR Retract Clutch engages or disengages the 1st Bias Transfer Rollers from contact with the Imaging Unit, BTR Roll (Y), 1st BTR Roll (M), and 1st BTR Roll (C) that are part of the IBT Belt Unit.

1st BTR Contact Retract Sensor

The 1st BTR Contact Retract Sensor detects the position of the 1st BTR Roll (Y), 1st BTR Roll (M), and 1st BTR Roll (C) (whether or not they are in contact with the belt).

NOTE: *In contact with belt: Sensor blocked*

MOB ADC Assembly

The Mark On Belt (MOB) Automatically Density Control (ADC) Sensor is a Sensor Unit related to the Image Formation Control (Process Control, Color Registration Control).

The MOB ADC Assembly is made up of the following main components.

- **ADC Sensor Assembly** - Consists of the ADC Sensor and the Shutter Solenoid.
 - **ADC Sensor** - Detects the toner patch density on the belt before the secondary transfer.
 - **Shutter Solenoid** - Uncovers the belt detection section of the ADC Sensor during the detection of toner patch density on the belt and opens/closes the shutter.
- **Environment Sensor** - Detects the temperature and humidity in the printer.
- **IBT Belt Home Position Sensor** - Detects the reference position of the belt.
- **MOB Sensor In** - Detects the regi shift for each of the colors - Y, M, C, K by the Chevrons printed at the rear of the belt.
- **MOB Sensor Out** - Detects the regi shift for each of the colors - Y, M, C, K by scanning the Chevrons printed at the front of the belt.

IBT Belt Unit

The Primary Transfer Unit transfers the toner image that was formed on the Drum surface for each color onto the belt.

The IBT Belt Unit is made up of the following main components.

- 1st BTR Roll (Y/M/C/K) - During printing, these apply positive charge to the bottom side of the belt to transfer the toner image that was created on the Drum onto the belt.
- Belt - Overlays the toner images that were formed by each color and transfers it.
- Backup Roll - Contacts the 2nd BTR through the belt during the Secondary Transfer to transfer the toner image from the belt onto the paper.

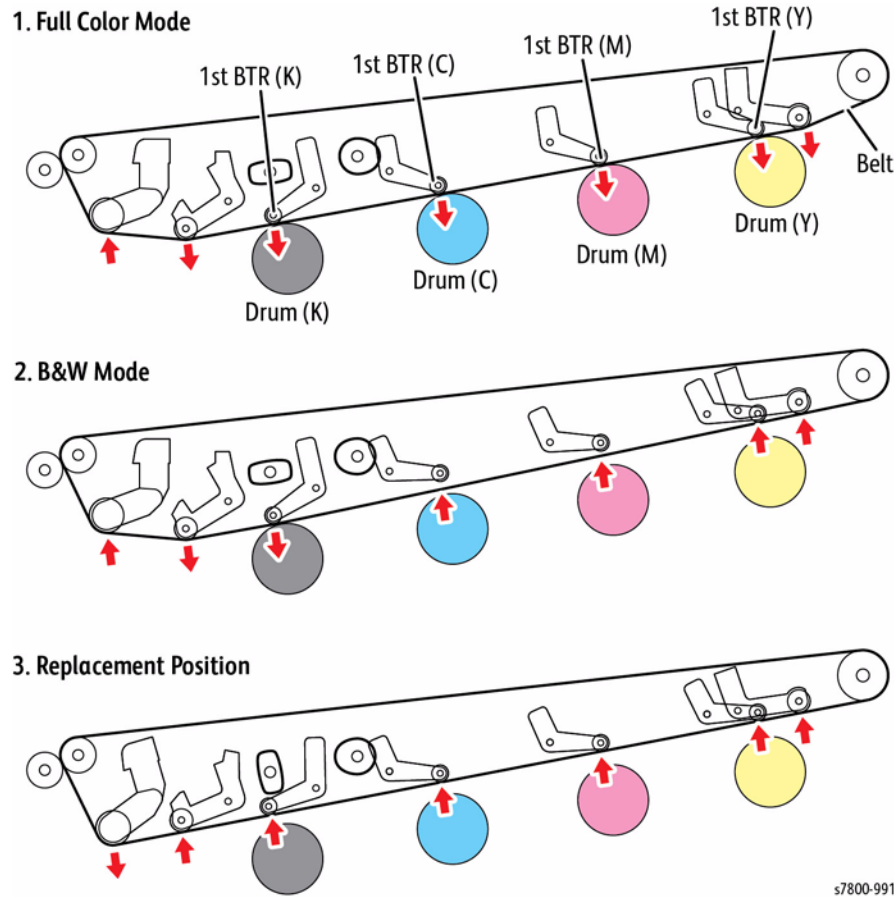
IBT Belt Cleaner

The IBT Belt Cleaner cleans any toner remaining on the Transfer Belt after the transfer of toner image onto the paper.

1st BTR Contact/ Retract

Depending on the mode, there are 3 positions for the 1st BTR as shown in Figure 7.

1. In Full Color Mode, all four 1st BTRs will contact the Drum through the belt.
2. In Black & White Mode, only the 1st BTR (K) will contact the belt (Drum). The other three 1st BTRs (Y/M/C) will not contact the belt (Drum). The 1st BTR Contact Retract Clutch operation controls whether the 1st BTR (Y/M/C) is in Contact/Retract state with the belt (Drum).
3. When in the replacement position, all four 1st BTRs will not contact the belt (Drum). This position is attained by releasing the lever at the front of the IBT Belt Unit.



Toner Collection

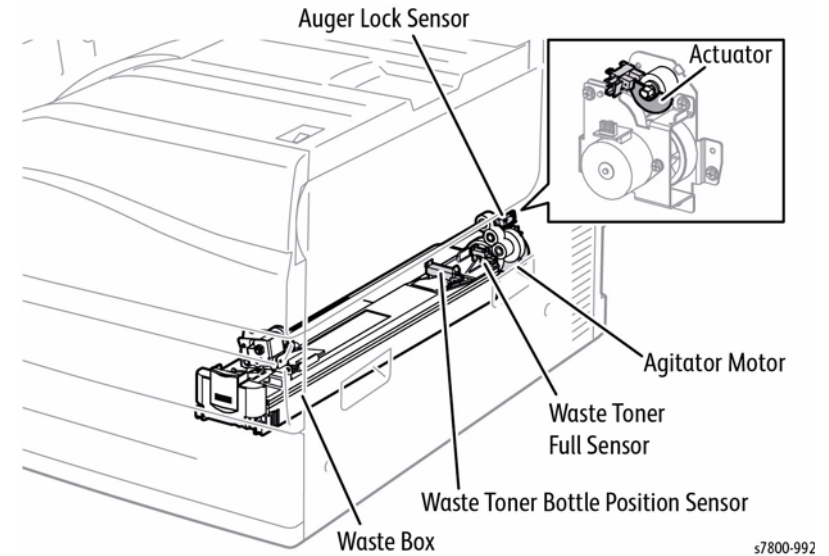


Figure 8 Toner Collection

Waste Toner Bottle Full Sensor

The Waste Toner Bottle Full Sensor detects whether the Waste Cartridge is full. The top of the Waste Cartridge is transparent, and that portion acts as an Actuator which blocks light to the Sensor. As waste toner accumulates, the transparent actuator section will eventually become opaque due to the waste toner. Therefore, when the Sensor becomes blocked, a Full state is detected.

Waste Toner Bottle Position Sensor

The Waste Toner Bottle Position Sensor detects whether the Waste Cartridge is installed.

NOTE: Toner Waste Cartridge installed: Sensor blocked

Agitator Motor

The Agitator Motor drives the Auger and Agitator that transports waste toner.

Auger Lock Sensor

The Auger Lock Sensor detects a Stalled state of the Agitator Motor through the half-crescent Actuator that moves in tandem with the shaft driven by the Agitator Motor.

Waste Cartridge

The Waste Cartridge collects waste toner.

Secondary Transfer

The second transfer function transfers the developed image from the Transfer Belt to the paper. The 2nd BTR receives a negative DC voltage from the HVPS (1st/2nd/DTC). The IBT Belt runs between the 2nd BTR and the Back Up Roll (BUR). The negative DC voltage that is applied to the belt transfers the toner image to the paper.

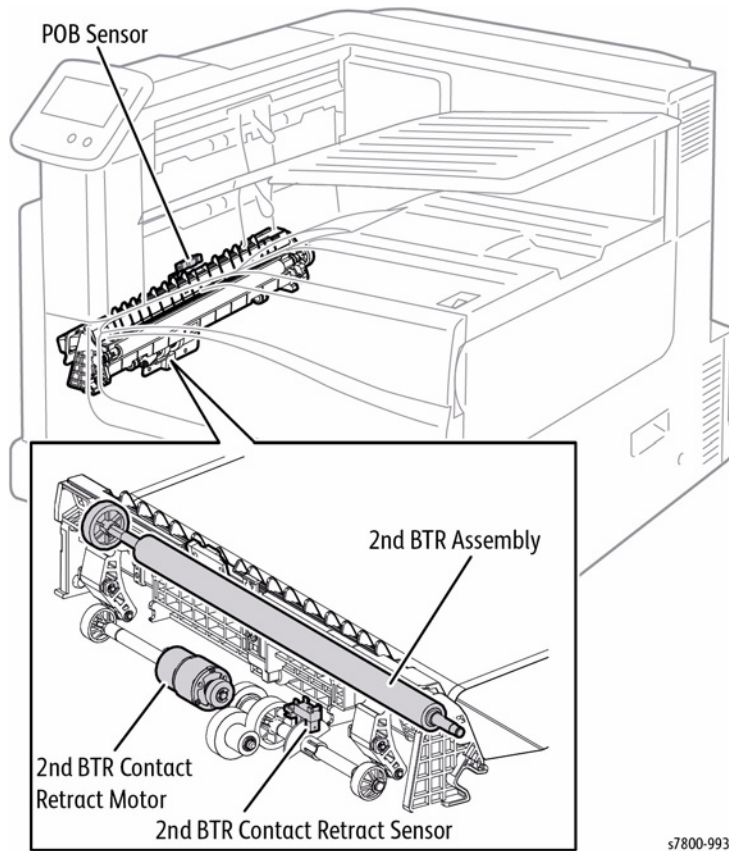


Figure 9 Secondary Transfer

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2nd BTR Assembly

The 2nd BTR Assembly contacts the paper on the backside of the paper and transfers the toner image that was formed on the belt onto the paper.

2nd BTR Contact Retract Sensor

The 2nd BTR Contact Retract Sensor detects the position of the 2nd BTR (whether or not it is in contact with the belt).

NOTE: In contact with belt: Sensor blocked

2nd BTR Contact Retract Motor

The 2nd BTR Contact Retract Motor drives the shaft with the attached Cam that operates in tandem with the 2nd BTR. This motor operates when transferring the toner image from the belt onto the paper. By rotating the Cam, the 2nd BTR contacts the paper that is passing on the belt.

POB Sensor

The POB Sensor detects the paper with transferred image that has passed the belt during the Secondary Transfer process.

NOTE: No paper: Sensor reflective

2nd BTR Contact/ Retract

The following illustration shows the mechanical components of the 2nd BTR Contact/ Retract.

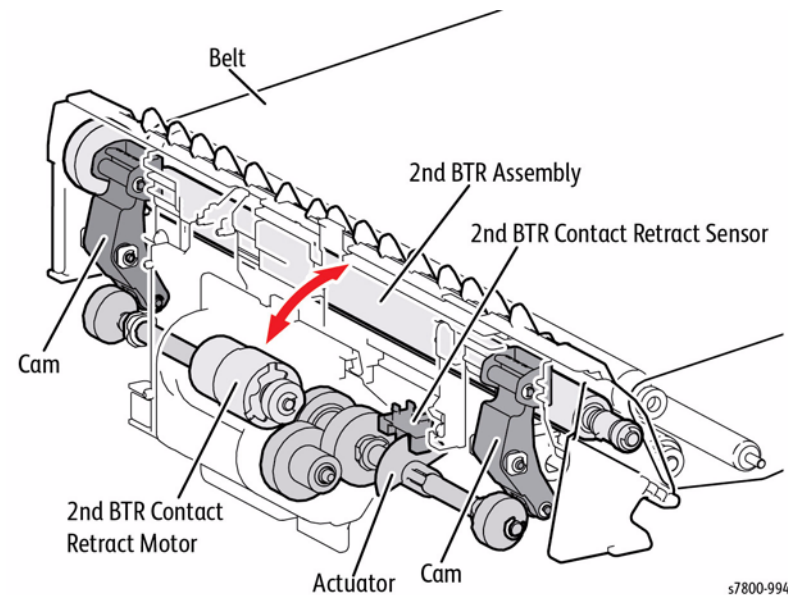


Figure 10 2nd BTR Retract

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Paper Feeder

The feed side of the Bottom Plate is lifted until it is in position to feed the top sheet (Tray Nudger Level Sensor: ON). The tray's Feed/Lift Up Motor rotates backward (CCW) to lift the Bottom Plate.

The tray mechanically drops when the tray is slid out and the gears disengage.

At Power On/When Interlock Closed/When Tray Inserted

The state of the Tray Nudger Level Sensor is detected. When the sensor is ON, it indicates the tray is up (waiting to feed paper). When it is OFF, the tray is down. When Tray Level Sensor ON is detected, the tray does not operate (because it is lifted).

When OFF is detected, the Feed/Lift Up Motor rotates backward (CCW), lifting the Bottom Plate to the feed position (Tray Level Sensor: ON), and then the Feed/Lift Up Motor stops.

During Feed

The Tray Nudger Level Sensor is always monitored during feed. When Tray Level Sensor OFF is detected, the machine determines that it cannot feed the next sheet. The Feed/Lift Up Motor, which is rotating forward during feed, begins rotating backward (CCW) a certain time after the end of the feed operation, lifting the tray slightly.

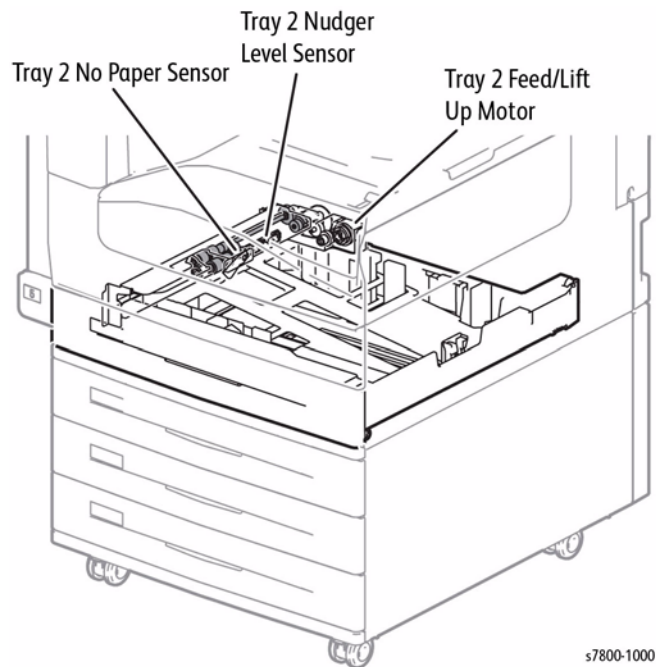


Figure 11 Paper Feed

Tray 2 Paper Size Sensor

Setting the Paper Size in the Paper Tray by using the guides changes how the Actuators interact with the 5 buttons when the Paper Tray is inserted. The paper size in the Paper Tray is determined by the combination of On/Off states of these buttons.

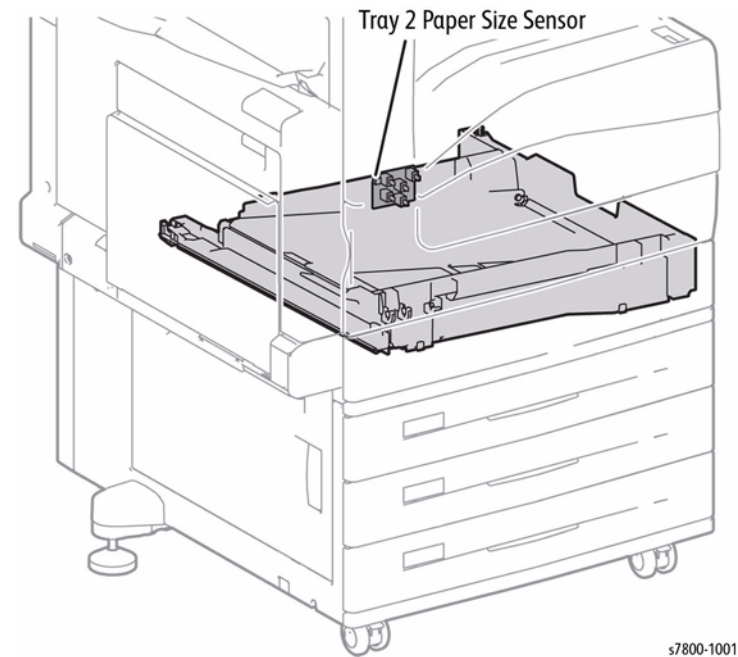


Figure 12 Tray 2 Paper Size Sensor

Tray 2 No Paper Sensor

The Tray 2 No Paper Sensor detects whether paper exists inside the Paper Tray by changes in the Actuator.

NOTE: No paper: Sensor blocked

Tray 2 Feed/ Lift Up Motor

Tray 2 Feed/ Lift Up Motor drives the Feed Roll and Nudger Roll when in forward rotation (CW direction), and raises/ lowers the Bottom Plate of the Tray Assembly when in reverse rotation (CCW direction).

Tray 2 Nudger Level Sensor

The Tray 2 Nudger Level Sensor detects whether the paper in the Paper Tray has reached the Feed Position by the rising of the Bottom Plate.

NOTE: Raised: Sensor blocked

Tray 1

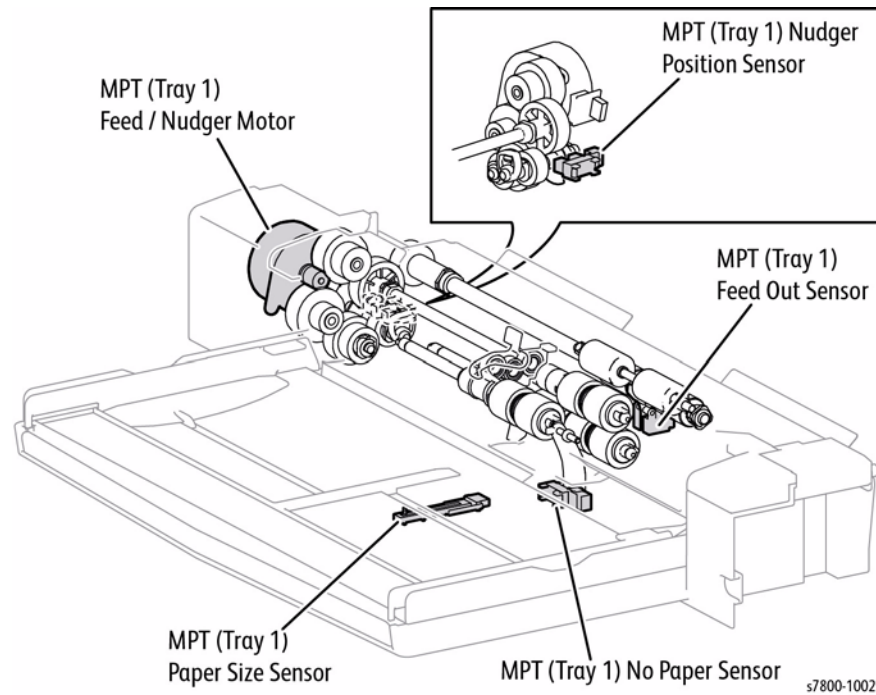


Figure 13 Tray 1 Components

Tray 1 Size Sensor

The Tray 1 Size Sensor detects the paper width by the position of the Tray 1 Guides. As the position of the guide changes, the output voltage also changes due to the variable resistance.

The paper width is determined by the output voltage.

Tray 1 No Paper Sensor

The Tray 1 No Paper Sensor detects whether paper exists in Tray 1 by changes in the Actuator.

NOTE: No paper: Sensor blocked

Tray 1 Feed/ Nudger Motor

The Tray 1 Feed/ Nudger Motor raises/lowers the Nudger Roll when in forward rotation (CW direction), and drives the Feed Roll and the Nudger Roll when in reverse rotation (CCW direction).

Tray 1 Nudger Position Sensor

Tray 1 Nudger Position Sensor detects the position of the Nudger Roll.

NOTE: Nudger Roll lowered: Sensor blocked

Tray 1 Feed Out Sensor

Tray 1 Feed Out Sensor detects whether paper was fed from Tray 1 by changes in the Actuator.

NOTE: No paper: Sensor blocked

1500-Sheet Feeder (3TM)

Media Detection

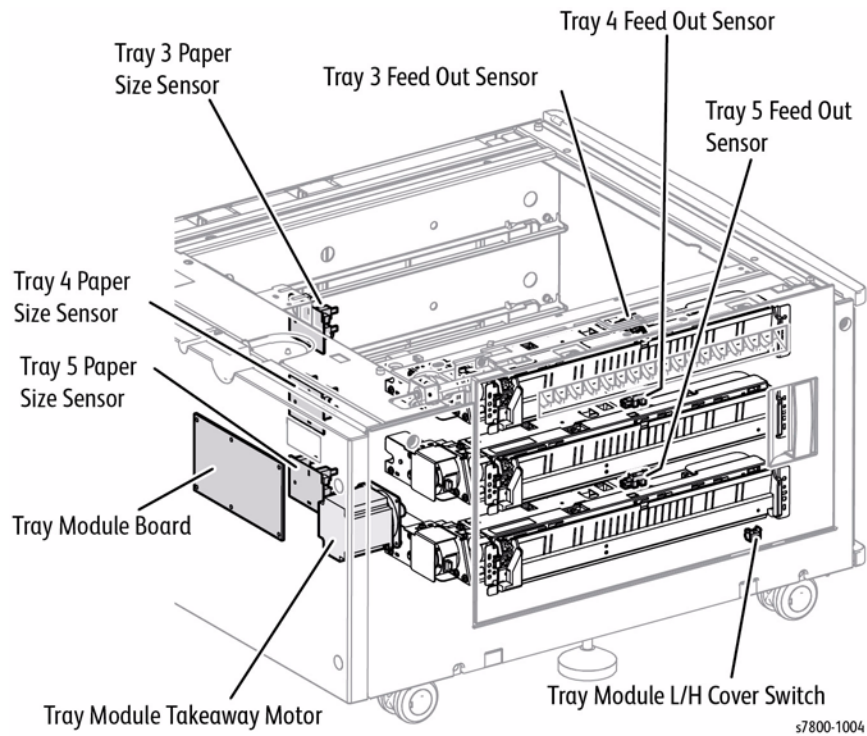


Figure 14 1500-Sheet Feeder

Tray 3/ 4/ 5 Paper Size Sensor

Setting the Paper Size in the Paper Tray by using the guides will change how the Actuators interact with the 5 switches when the Paper Tray is inserted. The paper size in the Paper Tray is determined by the combination of On/Off states of these switches.

3TM Takeaway Motor

The 3TM Takeaway Motor drives the Tray 3/ 4/ 5 Roll Assembly.

Tray 3 Feed Out Sensor

The Tray 3 Feed Out Sensor detects whether paper was fed from Tray 3.

NOTE: No paper: Sensor blocked

Tray 4 Feed Out Sensor

The Tray 4 Feed Out Sensor detects whether paper was fed from Tray 4.

NOTE: No paper: Sensor blocked

Tray 5 Feed Out Sensor

Tray 5 Feed Out Sensor detects whether paper was fed from Tray 5.

NOTE: No paper: Sensor blocked

Tray Module L/H Cover Switch

The Tray Module L/H Cover Switch detects the Open/ Close state of Left Hand Cover of the 3 Tray Cabinet.

Tray Module PWB

The Tray Module PWB controls all 3 Tray Cabinet components.

Paper Feed Components

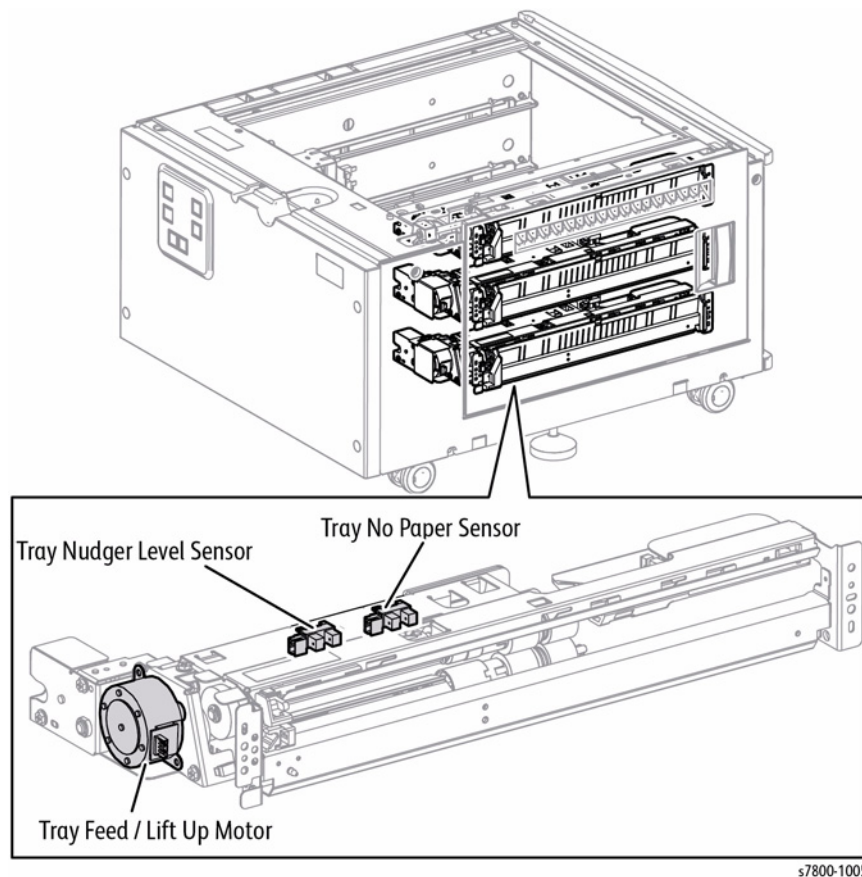


Figure 15 Paper Feed Components

Tray 3/4/5 Feed/ Lift Up Motor

The Tray 3/4/5 Feed/ Lift Up Motor drives the Feed Roll and Nudger Roll when in forward rotation (CW direction), and raises/ lowers the Bottom Plate of the Tray Assembly when in reverse rotation (CCW direction).

Tray 3/4/5 No Paper Sensor

The Tray 3/4/5 No Paper Sensor detects whether paper exists inside the Paper Tray by changes in the Actuator.

NOTE: No paper: Sensor blocked

Tray 3/ 4/ 5 Nudger Level Sensor

The 3/4/5 Nudger Level Sensor detects whether the paper in the Paper Tray has reached the Feed Position by the rising of the Bottom Plate.

NOTE: Raised: Sensor blocked

2500-Sheet Feeder (TTM)

Tray 4 Components

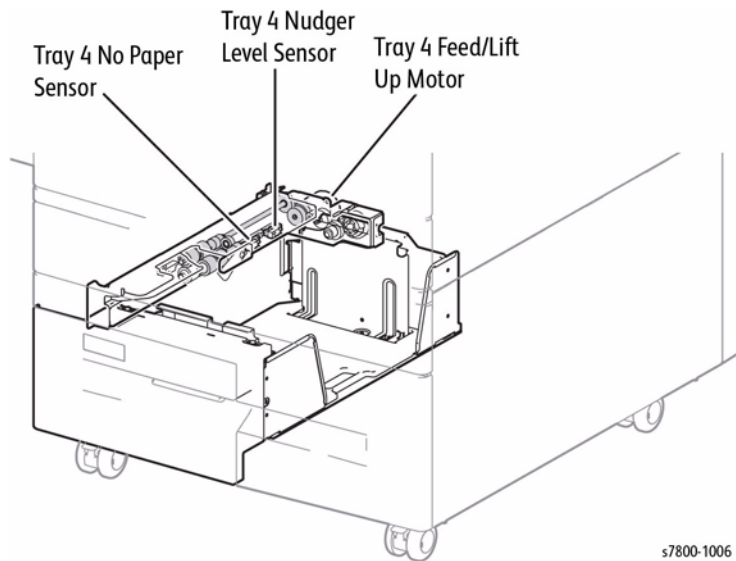


Figure 16 Tray 4 TTM

Tray 4 Paper Size Sensor

Tray 4 Paper Size Sensor detects whether or not the tray is inserted and senses paper size. Tray 4 has two switches. The actuator mounted on the tray, which works with the tray side and the end guides, presses these switches. The combination of the On and Off states of these switches changes the output voltage, based on which paper size is sensed.

Tray 4 Level Sensor

Tray 4 Level Sensor detects that the tray has lifted the paper and is ready to feed.

Tray 4 Feed/Lift Up Motor

The Feed/Lift-up Motor is a bi-directional stepping Motor. When the Motor rotates backward (CCW), it rotates the Shaft through the gears and lifts up the Bottom Plate. As it rotates forward (CW), it drives the Nudger Roll and the Feed Roll.

Tray 5 Components

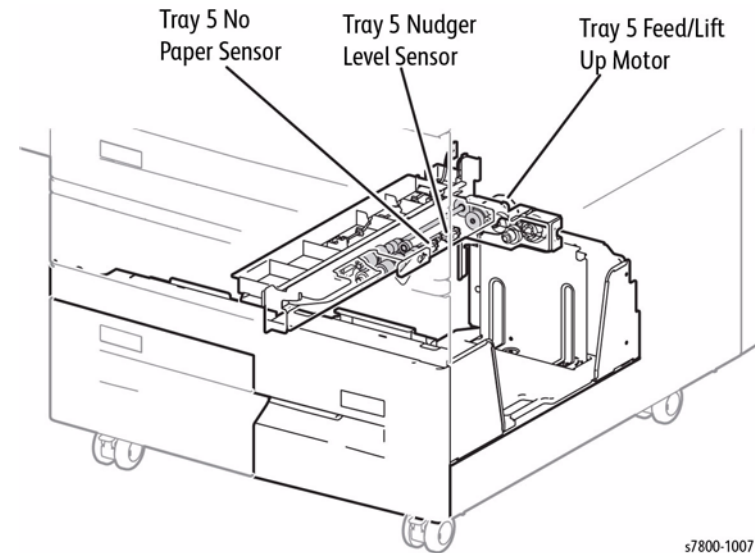


Figure 17 Tray 5 TTM

Paper Size Sensing

Tray 5 Paper Size Sensor is identical to the Tray 4 Paper Size Sensor. Moving the Paper Guides provides the control logic with the paper size information which it displays on the UI. Paper sizes are checked and sent from the Tray Module PWB to the MCU PWB each time the printer is switched On.

Tray 5 Tray Lift

Lifting the paper stack is accomplished through a cable and pulley system. When the tray is loaded and pushed into the printer, thereby actuating the Paper Size Sensor, the control logic commands the Tray 5 Feed/Lift Up Motor to rotate in a clockwise direction. The Motor provides drive to the cable and pulley system, raising the stack. When the stack actuates the Tray 5 Nudger Level Sensor, the motor stops. The stack is now in the feed position.

Tray 5 Nudger Level Sensor

Stack height is maintained in the same way for Trays 2, 3, 4, and 5.

Tray 5 No Paper Detection

When the last sheet feeds from the tray, the Tray 5 No Paper Sensor Actuator drops into an opening in the Paper Tray Elevator and unblocks the Tray 5 No Paper Sensor. This signals the control logic that the tray is empty and to display a "Tray Empty" message on the UI.

Duplex Feed

The Duplex Paper Path reverses the direction of travel, enabling side 2 printing.

- The gates direct the paper through the Inverter and into the Duplex Transport.
- Paper starts the side two image transfer process.
- The sheet then re-enters the registration transport, the second side of the image is registered, and then is transferred.

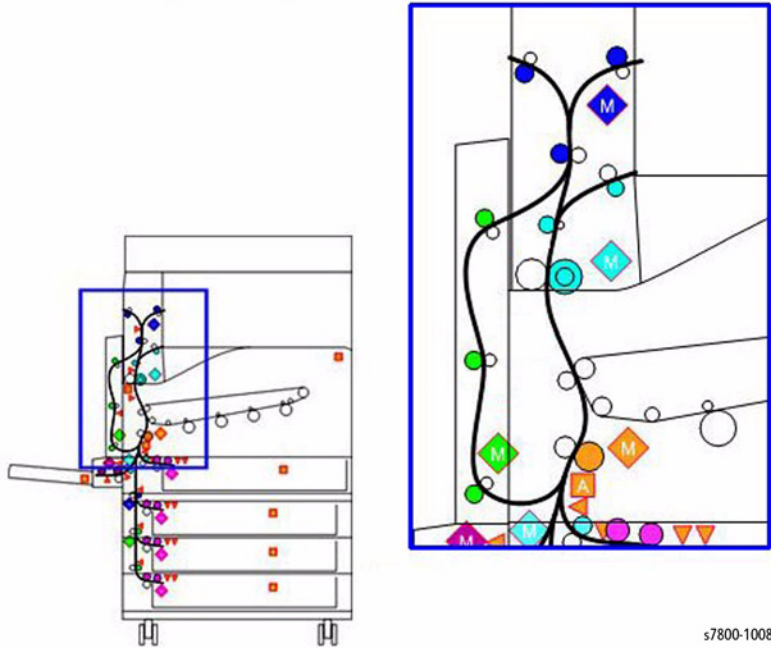


Figure 18 Duplex Media Path

Duplex Feed Components

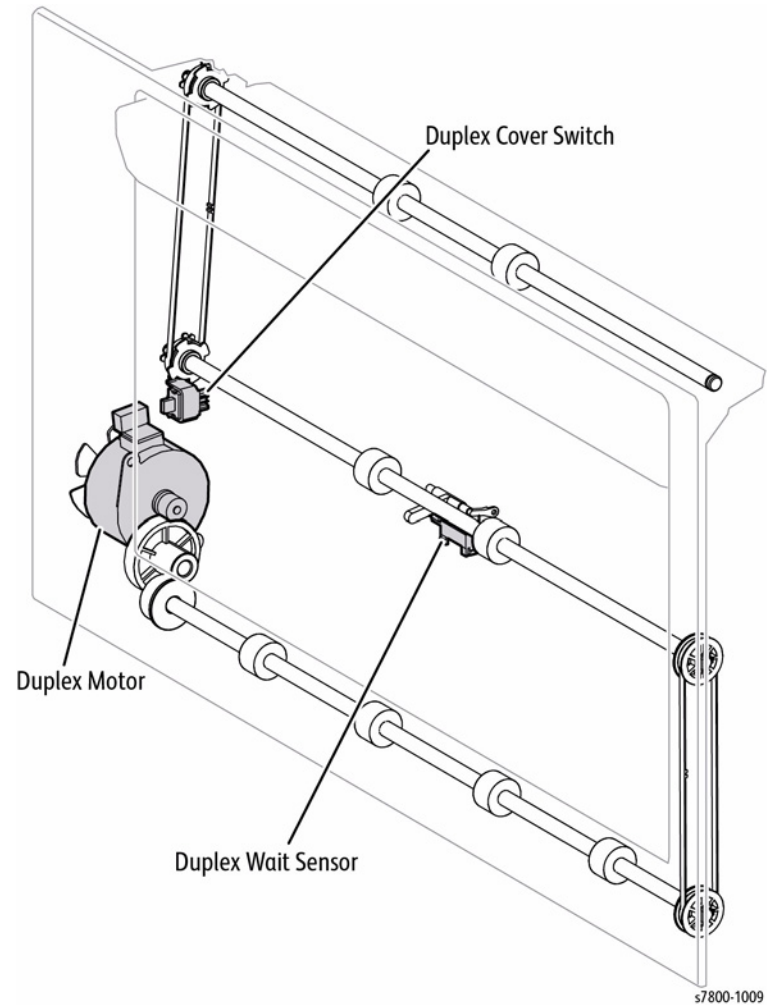


Figure 19 Duplex Feed Components

Duplex Motor

The Duplex Motor drives the Duplex Roller 1, Duplex Roller 2, and Duplex Roller 3 and transports paper within the Duplex Assembly.

Duplex Wait Sensor

The Duplex Wait Sensor detects whether the paper is being transported in the Duplex Assembly by changes in the Actuator. Wait Sensor

NOTE: No paper: Sensor blocked

Duplex Cover Switch

The Duplex Cover Switch detects the Open/ Close state of the Duplex Cover. Closing the Duplex Cover turns the Switch On.

Registration

The purpose of Media Feed to Transfer is to transport to the Registration Rolls a sheet of media fed from any installed media supply, and then deliver the registered sheet to the point of transfer (the Second BTR).

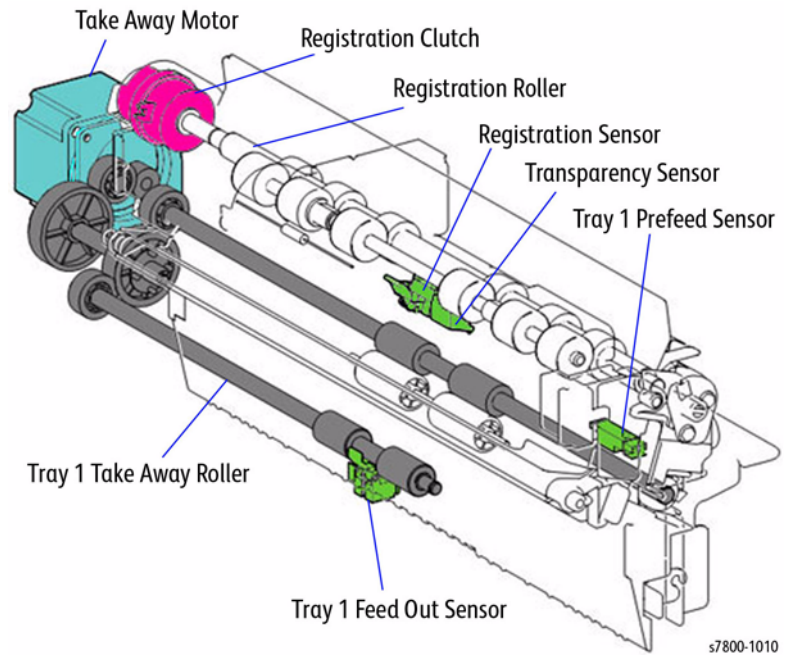


Figure 20 Registration

Take Away Motor

The Take Away Motor drives the Take Away Roll.

Registration Clutch

The Regi Clutch transfers the drive of the Main Drive Motor to the Regi Roll.

Registration Sensor

The Regi Sensor detects whether the lead edge of the paper has reached the Registration section by changes in the Actuator.

NOTE: No paper: Sensor blocked

Transparency Sensor

The Transparency Sensor is a reflective sensor that works together with the Transparency Reflector. The Transparency Sensor Reflector is mounted on Door A. It detects the change in potential due to exposure to light as the media passes between the Transparency Reflector and the Transparency Sensor. The Transparency Sensor also assesses the type of media (whether it is a Transparency or not) by the output voltage.

Paper Output

Prints exiting the Fuser may go to any one of the following:

- To the Output Catch Tray as single sheets or offset stacks
- To the Exit 2 Tray.
- To a Finisher.

Exit 1

Prints are directed toward Paper Exit 1 by the Exit 2 Gate Solenoid actuating the Exit 1 Gate to direct prints toward that exit. Paper Exit 1 output is used to move paper to the H-Transport when an optional finisher is installed.

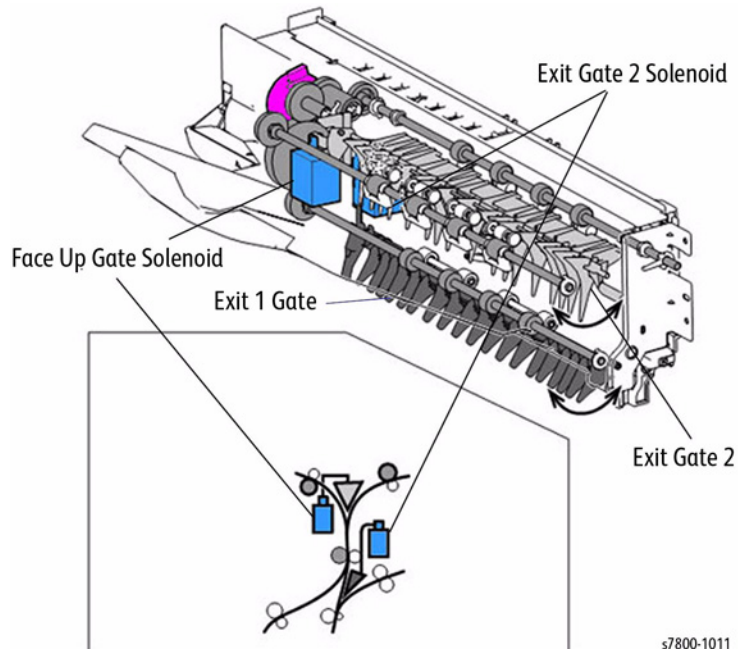


Figure 21 Exit 1

Exit 1 Stacking

The Offset Catch Tray (OCT) 1 Roller and the Exit 1 OCT Motor offset prints into sets as they exit the printer.

The Exit 1 OCT Motor moves the OCT 1 Roller toward the front and the rear of the printer to offset the sheets. The Exit 1 OCT Home Position Sensor monitors the position of the OCT 1 Roller. The OCT 1 Roller receives drive from the Fuser Drive Motor.

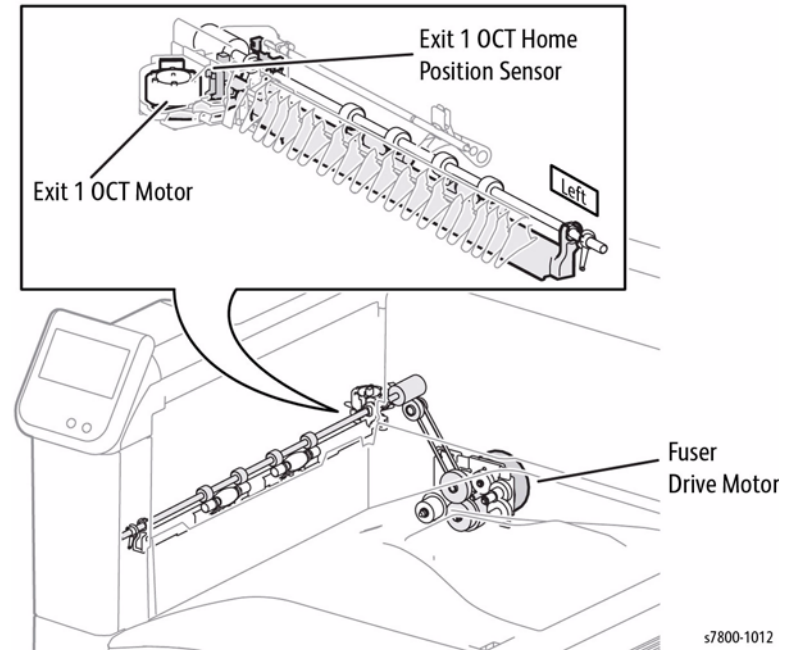


Figure 22 Exit 1 Stacking

Exit 2

Prints are directed toward Paper Exit 2 by the Exit 2 Gate Solenoid actuating the Exit 1 Gate to direct prints past Exit 1.

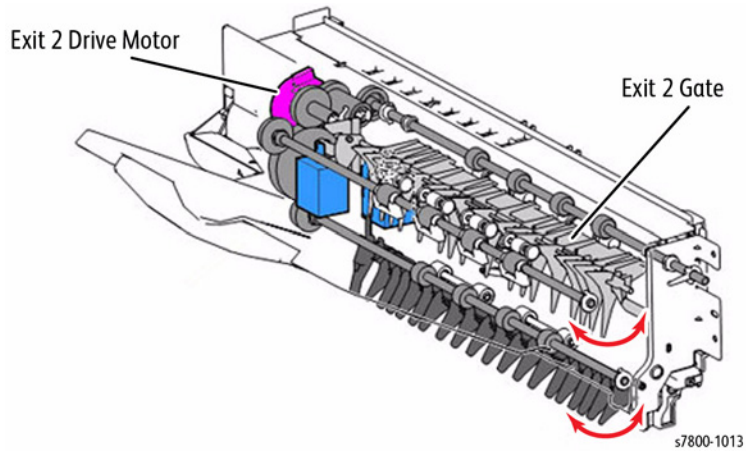


Figure 23 Exit 2

Exit 2 Stacking

As with Exit 1, the OCT Roller and the OCT Motor offset the prints into sets as they exit the printer. The sheets are stacked at the front or rear of the output area by the movement of the OCT Roller.

When the trail edge of a sheet is detected by the Exit 2 Sensor, the Exit 2 OCT Motor moves the OCT Roller toward the front or rear to offset the sheet.

The Exit 2 OCT Home Position Sensor monitors the position of the OCT Roller.

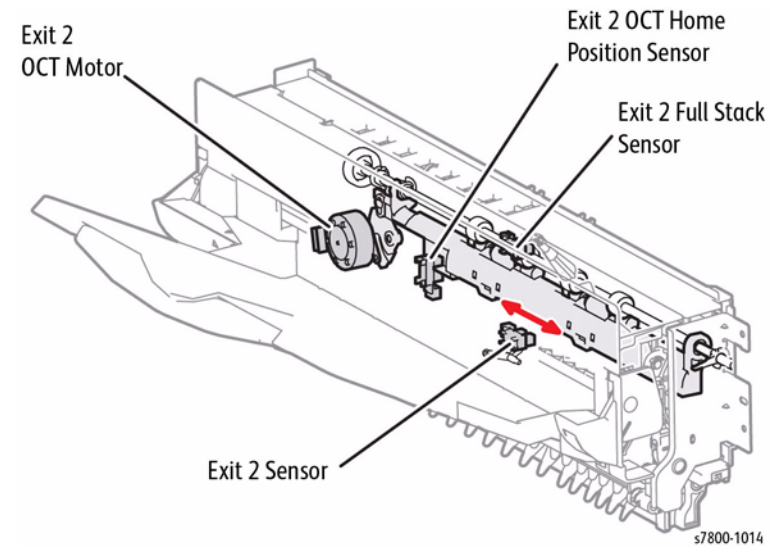


Figure 24 Exit 2 Stacking

Drive

Drive for the YMC Drums is provided by the Drum Drive Motor (YMC). A separate Developer Drive Motor (YMC) provides drive to the Developer components. The black Drum and black Developer components receive drive from the Drum/Developer Drive Motor (K).

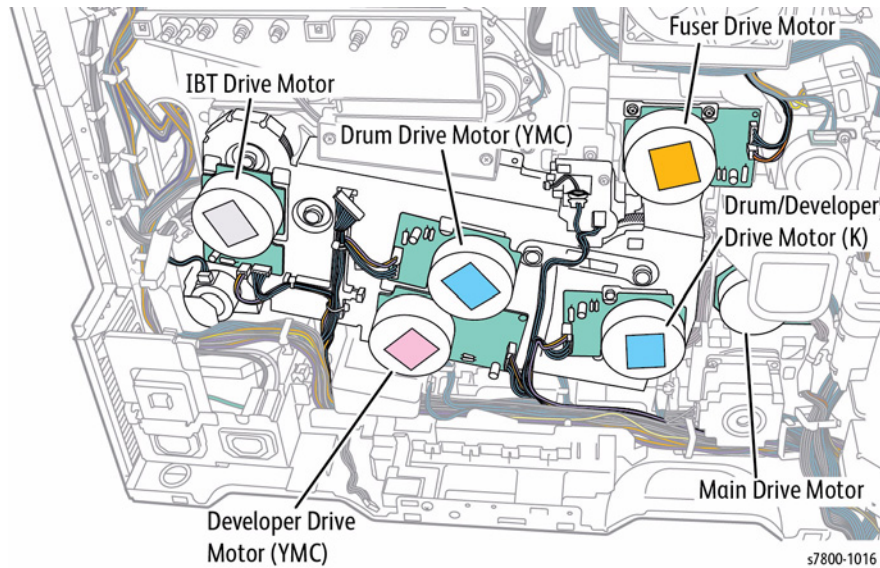


Figure 25 Drive

Main Drive Motor Assembly

The Main Drive Motor drives the Tray 1 Feed Roll, Tray 1 Drive Roll, Takeaway Roll, Regi Roll, and 2nd BTR Assembly.

Drum/ Deve Drive Motor (K)

The Drum/ Deve Drive Motor drives the Auger and Magnetic Roll that are part of the Drum (K) and Developer Housing Assembly (K).

Developer Drive Motor (Y/M/C)

The Developer Drive Motor drives the YMC Developer Housing.

Drum Drive Motor (Y/M/C)

The Drum Drive Motor drives the YMC Drums.

IBT Drive Motor Assembly

The IBT Drive Motor Assembly drives the belt section of the IBT Belt Unit.

Fuser Drive Motor Assembly

The Fuser Drive Motor Drive Assembly drives the Heat Roll of the Fuser Assembly and the 1st BTR (Y/M/C/K) that are part of the IBT Belt Unit.

NOHAD and Fans

The Phaser 7800 printer contains a number of fans to keep the printer's components at the optimum operating temperatures.

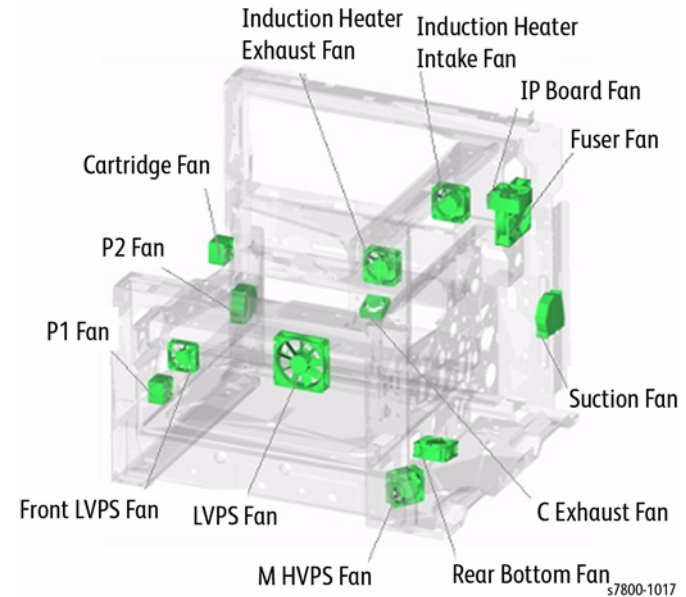


Figure 26 Phaser 7800 Fans

LVPS Exhaust Fan

The LVPS Exhaust Fan prevents temperature rise of the LVPS control circuit. Since air intaking/exhausting capability of the LVPS Fan is degraded when the Finisher is attached, by running the LVPS Exhaust Fan, a rise of ambient temperature around the LVPS control circuit can be minimized.

The LVPS Exhaust Fan will run when all of the following conditions are met:

- The Advanced Finisher or Professional Finisher is attached to the print engine.
- The printer is in the process of printing.
- Temperature inside the printer is equal to or above the threshold value.

The LPVS Exhaust Fan stops when the printer completed printing or is brought to emergency stop (hard down).

LVPS Fan

The LVPS Fan prevents temperature rise of the LVPS control circuit. By running the LVPS Fan, a rise of ambient temperature around the LVPS control circuit can be minimized.

While the printer is printing a job, the LVPS Fan will run at high speed. The LVPS Fan runs at low speed when the printer is in Standby mode.

IH Intake Fan

The IH-Intake Fan prevents temperature rise of the IH Power Supply switching device (IGBT). By running the Fan, air is supplied to the switching device to minimize temperature rise.

The IH Intake Fan runs at high speed when the printer engine state enters Fuser Wait, Fuser Ready, Run, Fuser Over Temperature Not Ready, or Fuser Low Temperature Not Ready state (Fuser On).

The IH Intake Fan runs at low speed when the IGBT alarm C or D is received while the IOT is in the Fuser Standby or Low Power state.

IH Exhaust Fan

The IH-Exhaust Fan exhausts the air around the IH Power Supply to outside the printer in order to minimize temperature rise.

The IH Exhaust Fan runs at high speed for the following condition:

- When IOT state enters Fuser Wait, Fuser Ready, Run, Fuser Over Temperature Not Ready, or Fuser Low Temperature Not Ready state (Fuser On).
- When the NOHAD Environment Sensor read value is equal to or above the threshold value (NVM) of the anti-condensation mode.

The IH Exhaust Fan runs at low speed when IGBT alarm C is received while the IOT is in the Fuser Standby or Low Power state.

LH Fan

The LH Fan prevents blocking (papers are sticking together) by cooling the paper when after it passes the Fuser. The LH Fan will start running after printing specified number of pages when all of the following conditions are met:

- The printer is printing a job.
- Temperature is high.
- Job is printed in a specified color mode.
- Job is printed at a specified process speed.
- Job is printed in specified ring mode (simplex or duplex).

Fuser Fan

The Fuser Fan removes heat from the Fuser from reaching to the IBT Belt and 2nd BTR. By running the Fuser Fan, a rise of ambient temperature around the Fuser can be minimized, and as a result, the transmission of heat from the Fuser to adjacent devices can be prevented.

When the printer is printing a job, if the temperature detected by the NOHAD Environment Sensor is above the threshold value (specified by NVM switch for the anti-condensation mode), the Fuser Fan will run.

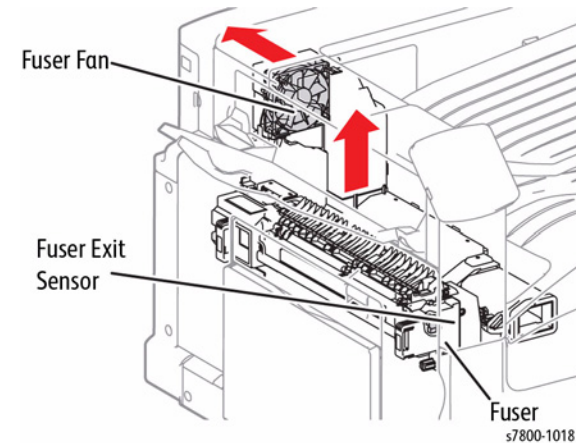


Figure 27 Fuser Fan

M HVPS Fan

The M HVPS Fan prevents a rise in temperature of the marking engine. By running the M HVPS fan, air is drawn into the marking engine in order to prevent rise of temperature of the Developer Unit.

When the printer is printing in color mode, if the temperature inside the printer is above the threshold value, the M HVPS fan will run. However, if the print mode changes to B/W mode, the M HVPS Fan stops running.

Suction Fan

The Suction Fan draws toner cloud coming from the Developer Unit and discharges it outside the printer. The Suction Fan stops when the IOT is in Standby state.

Bottom Fan

The Rear Bottom Fan prevents temperature rise of the rear bottom area of the IOT. By running the Rear Bottom Fan, air is exhausted from the rear bottom area of the printer in order to minimize a rise of ambient temperature around the rear bottom of the IOT.

The Rear Bottom Fan will run when temperature inside the printer is equal to or above the threshold value.

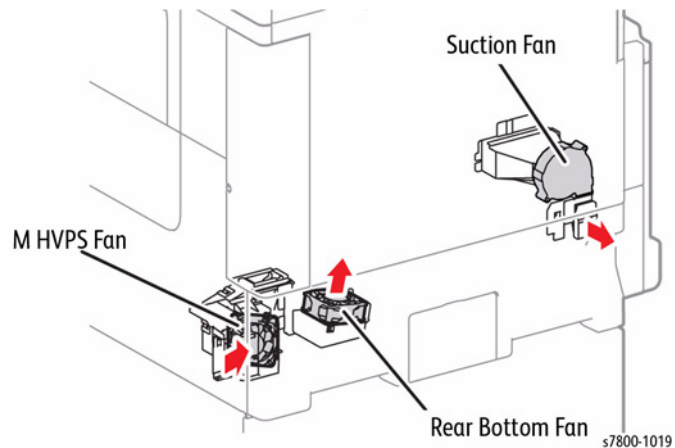


Figure 28 Suction, M HVPS, and Bottom Fans

Process 1 Fan

The Process 1 Fan prevents temperature rise of the marking engine. By running the Process 1 Fan, air is drawn into the marking engine in order to prevent rise of temperature of the Developer Unit.

When the printer is printing a job in Color mode, if temperature inside the printer is above the threshold value, the Process-1 fan will run. The Process 1 Fan stops running when the printer completes the print jobs.

Process 2 Fan

The Process 2 Fan prevents clumping of toner or waste toner which may be caused by temperature rise inside the printer. By running the Process 2 Fan, a rise of ambient temperature at lower area of the Xerographic/developer module can be minimized, and as a result, toner clogging in the Developer Unit, toner supply path, or waste toner path can be prevented.

The Process 2 Fan runs when temperature inside the printer is above the threshold value.

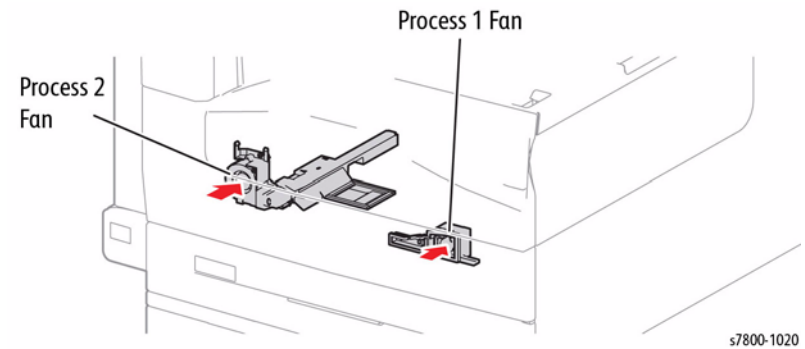


Figure 29 Process 1 and 2 Fans

C (Cartridge) Fan

The Cartridge Fan prevents heat from prints from reaching to the Toner Cartridge when Advanced Finisher or Professional Finisher is attached to the IOT. By running the Cartridge Fan, a rise of ambient temperature around the Toner Cartridge can be minimized.

When the IOT, to which the Advanced Finisher or Professional Finisher is attached, is in the process of printing, if temperature inside the printer exceeds the threshold value, the Cartridge Fan will run. The Cartridge Fan stops when the printer completes printing or is brought to emergency stop.

C Exit Fan

The C Exit Fan releases heat from the Motors and Gears used in the HVPS and Drive system.

The C Exit Fan will run when all of the following conditions are met:

- Either the Advanced Finisher or Professional Finisher is attached to the printer.
- Temperature inside the printer is equal to or above the threshold value.

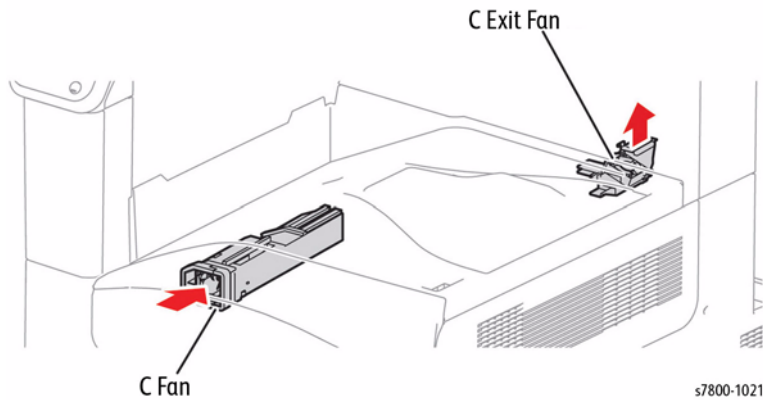


Figure 30 C Fans

NOHAD Thermistor Assembly

The NOHAD Thermistor Assembly monitors the temperature within the printer.

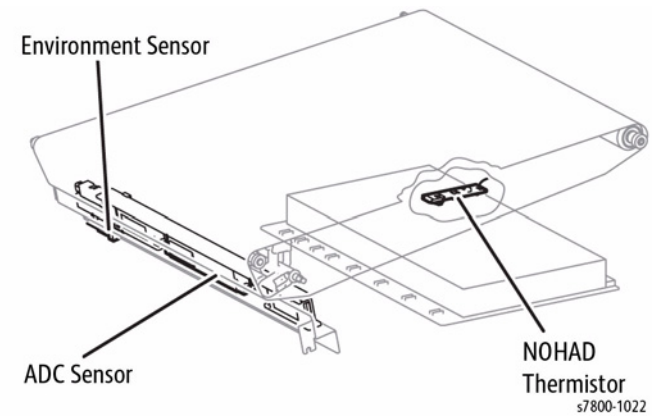


Figure 31 NOHAD Thermistor

Electrical

Powering the Printer On/Off

The printer is equipped with two power switches. To access the Main Power Switch, open the Front Cover Assembly. The Power Switch is located at the top front corner of the output area.

When powering on the printer from a cold start (1) switch on the Main Power Switch, then (2) switch on the Power Switch.

To power down the printer, switch Off the Power Switch and wait until the UI is dark, then open the Front Cover Assembly and switch Off the Main Power Switch.

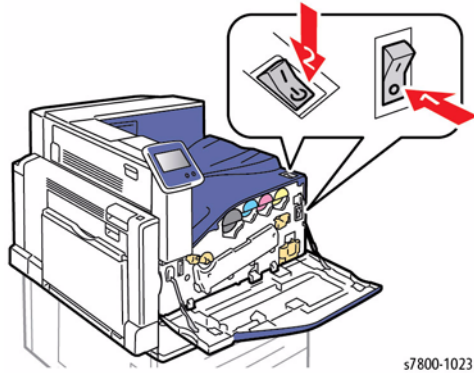


Figure 32 Power Switches

Main Power Switch Chassis Assembly

The Main Power Switch Chassis Assembly is the Main Switch that controls the power supply.

Closing the Main Power Switch supplies ACH to the Main Low Voltage Power Supply, from which it is distributed throughout the printer. Also at the Main Low Voltage Power Supply, the ACH is converted into +5VDC Standby power which is supplied to the Controller.

The Controller monitors the Power Switch. When the Power Switch is switched On, the Controller detects the change in status and enables the Main LVPS to begin producing and distributing both the +5VDC or +24VDC power required for operation.

Interlock Power

The series wired Front Cover Interlock Switch and L/H Cover Interlock Switch are each equipped with two sets of contacts. The MD PWB supplies +24VDC through one contact in each switch, while the second contact carries 3.3VDC. With all interlocks closed, the +24VDC power energizes the Interlock Relay on the Main LVPS.

When either the Front Cover Interlock Switch or the L/H Cover Interlock Switch opens, the +24VDC RELAY ON signal is interrupted, deenergizing the Interlock Relay and cutting the +24VDC power to the MCU PWB, the MD PWB, and the devices they supply and/or control. The control logic also sets fault 077-300 Front Cover Interlock Open or 077-301 L/H Cover Interlock Open and displays the code and a message on the UI. At the same time, the IH Safety Signal causes the IH Driver PWB to cut AC power to the Fuser Coil Assembly.

The MCU PWB also monitors the IBT Front Cover Switch. When the Front Cover opens, the MCU PWB will display the fault condition on the UI and disable the machine. Closing the Front Cover clears the condition.

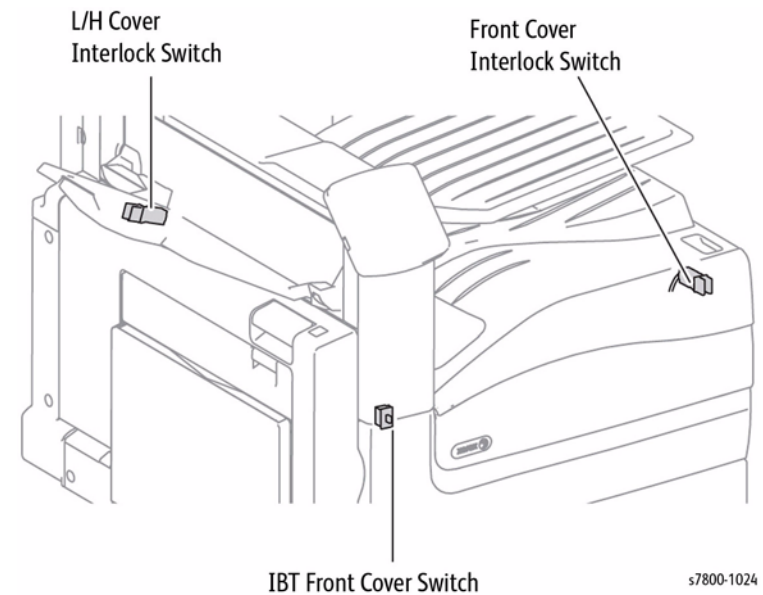


Figure 33 Interlock Switches

Electrical Components

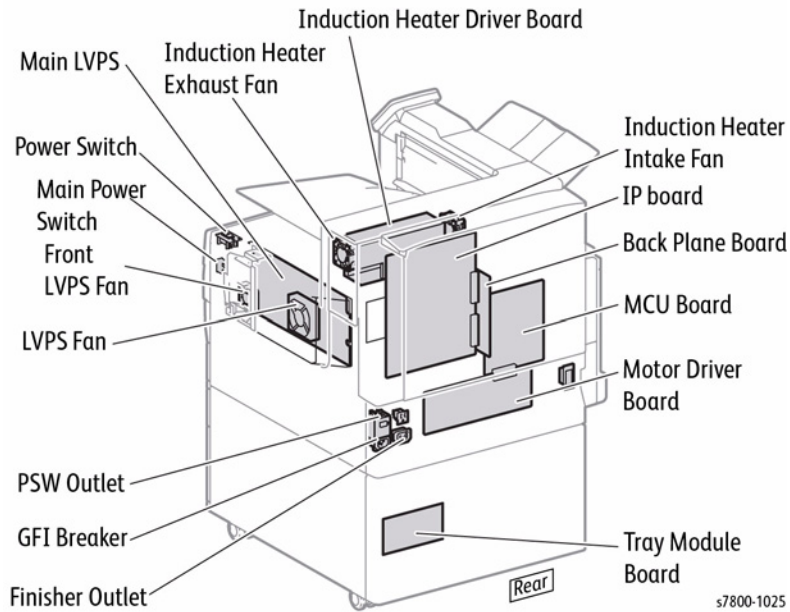


Figure 34 PWBs

IH Driver PWB

The IH Driver PWB is supplied with ACH via the Main LVPS. The IH Driver PWB includes the Fuser Relay and an "IGBT," an "Insulated Gate Bipolar Transistor." The IGBT is a switching device used in induction heating and a wide range of other applications. In this system, the IGBT performs essentially the same task as a Triac, that is, it switches On and Off the AC power to the Fuser Coil.

MCU PWB

The MCU PWB communicates with the Printer Controller and controls the components used in print operation. The MCU PWB also generates the +3.3VDC and +2.5VDC voltages that are used by the components from the +5VDC that is provided by the Main LVPS.

The MCU PWB receives +5VDC and +24VDC power from the Main LVPS at P401. It supplies this power to a large number of components within the IOT and controls and monitors their operation. It also checks the communications between PWBs, and signals the Controller when it detects a fault.

Among the functions performed and devices controlled directly by the MCU PWB are those listed as follows:

- **NVM** - Stores IOT NVM settings.

- **Xerographics** - Controls and/or monitors the charge voltage (supplied to the Bias Charge Rollers), Developer Bias voltage, exposure (routes image data to the LED Print Heads via the Flexible Flat Cables), First and Second Transfer, First BTR Contact Retract Clutch and Sensor, Detack, IBT cleaning bias, Waste Toner Bottle presence and state, Erase Lamp operation.
- **Billing** - Stores backup serialization information within its EEPROM.
- **CRUM** - Monitors and controls the YMCK CRUM Couplers.
- **Power On, Recovery, and Interlocks** - Monitors the Power Switch Status and Sleep Mode Recovery ON signals, and the state of the IBT Front Cover Switch.
- **Fusing** - Monitors Fusing subsystem components such as the Fuser Belt Speed Sensor, Pressure Roll Latch Sensor, Thermistors, Thermostat, and Fuser Exit Sensor
- **Process Control and RegiCon** - Monitors the MOB Sensors and IBT Belt Home Sensor; controls the ADC Sensor LEDs and ADC Sensor Solenoid.
- **NOHAD** - Monitors the NOHAD Thermistor and monitors and controls numerous Fans throughout the IOT

Motor Drive (MD) PWB

The Motor Drive PWB transmits the signals from the MCU PWB to the parts that are involved with the print operation.

The MD PWB is connected to and serves as an extension of the MCU PWB. One of its primary roles is to function as a driver for the following components:

- Fuser Drive Motor
- Main Drive Motor
- Tray 1 Feed/Nudger Motor
- Second BTR Contact Retract Motor
- Duplex Motor
- Pressure Roll Latch Motor
- Tray 1 Feed/Lift Up Motor
- Drum/Developer Drive Motors (YMC and K)
- Developer Drive Motor (YMC)
- IBT Drive Motor
- Take Away Motor
- Toner Dispense Motors (YMCK)
- Agitator Motor
- Exit 2 OCT Motor and Exit 2 Drive Motor
- Various solenoids, e.g., the Exit 2 Gate Solenoid, Face Up Gate Solenoid
- Various fans throughout the IOT

In addition to the above components, the MD PWB is the system's main link to the Tray Modules and the HCF, providing low voltage DC power and monitoring communications and signals from the HCF and Trays 2, 3, and 4.

The MD PWB also monitors the input signals from a wide array of sensors and switches throughout the paper feed and handling pathways.

Main LVPS

The Main LVPS generates +24VDC and +5VDC voltages from the AC power source to supply the components that require the power.

Backplane (BP)

The Backplane PWB acts as a connection between the MCU PWB and the Image Processor Board.

Image Processor (ESS) PWB

The Image Processor PWB is the Printer Controller. The I/P Board performs conversion of print data input from a network or USB port, and communicates with the computer.

GFI

The GFI consists of the AC power supply inlet and the breaker for preventing ground faults.

Tray Module PWB

The Tray Module PWB receives +5VDC and +24VDC from the Main LVPS via the MD PWB.

For all machine models and configurations, +3.3VDC is used to communicate the Feed Ready Signal and the status of the Tray 2, 3, and 4 Feed Out Sensors.

The +5VDC power supplies the Tray Module L/H Cover Switch and various sensors, e.g., the Tray 2, 3, and 4 Nudger Level Sensors, No Paper Sensors, Feed Out Sensors, and Paper Size Sensors.

HVPS (1st/ 2nd/ DTS)

The HVPS supplies high voltage to the 1st BTR of each color in the IBT Belt Unit, as well as to the 2nd BTR and Detack Saw in the 2nd BTR Assembly.

HVPS (Deve/ BCR)

The HVPS (Deve/ BCR) supplies high voltage to the BCR in the Imaging Units of each color, as well as to the Magnet Roll in the Developer Housing Assembly of each color.

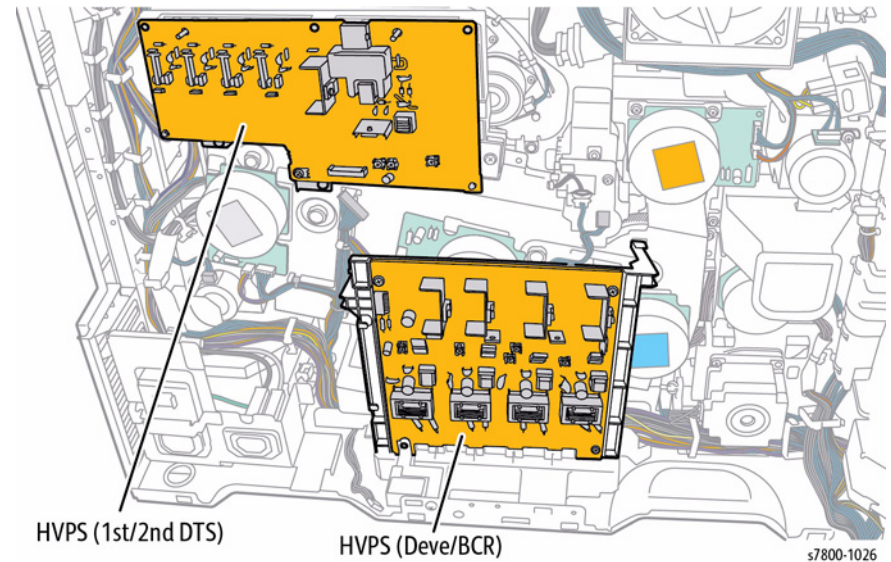


Figure 35 HVPS (1st/2nd/DTS), (Deve/BCR)

SD Card

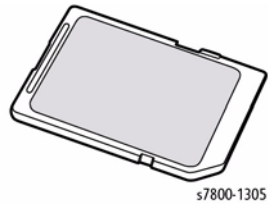


Figure 36 SD Card

The Phaser 7800 printer has four types of non-volatile read-only-memory (NVRAM): CRUMs on some consumables, a chip on the IOT, a removable EEPROM chip on the Image Processor board, and the SD Card (as a file system). The EEPROM has 16K bytes; it is used only for parameters that are "attached" to the engine such as some Usage Profile items. The SD Card is used for everything else, using a Configuration Manager to access most stored parameters and a Data Store for a few others. Items on the IOT chip are shadowed on the EEPROM and the SD Card. Many items on the EEPROM are also on the SD Card for ease of access or for shadowing.

There are various ways to reset the IOT and EEPROM chips and SD Card NVRAM parameters back to their factory default values. The LUI and CWIS support two partial resets for user-settable parameters to "refresh" a printer, for customers and service.

CAUTION

Service replacement of any of the NVRAM devices should ONLY be one at a time unless directed otherwise by support. This preserves critical parameters through shadowing from one NVRAM device to another. Failure to follow a one at a time replacement protocol can result in a dead printer that cannot be restored to operability.

At power up, settings that are stored in more than one place are compared and if different resolved as follows. Note that new, empty IOT chips and EEPROMs do not have any items on them.

- If the IOT chip has an item and its value is valid, it is written to the EEPROM and SD Card if they support the item.
- Else if the EEPROM has an item and its value is valid, it is written to the IOT chip and/or SD Card if they support the item.
- Else if the SD Card has an item and its value is valid, it is written to the IOT chip and/or EEPROM if they support the item.
- Else if the IOT chip, EEPROM or SD Card has an item with no valid value amongst them the item's factory default is written to all locations that support it.

After the above occurs, if the "factoryFresh" parameter is true (which is set during netboot and allboot, or if the SD card is new, or maybe some other ways), a set of critical parameters that had been stored on EEPROM is restored from that location. These critical parameters are stored after 24 hours has passed since startup or the last storing and the printer is not in Sleep Mode. Most of these critical parameters are not covered in this article. The DC361 tool may be used from the LUI to manually store/restore the critical parameters, for Service when an SD card gets replaced.

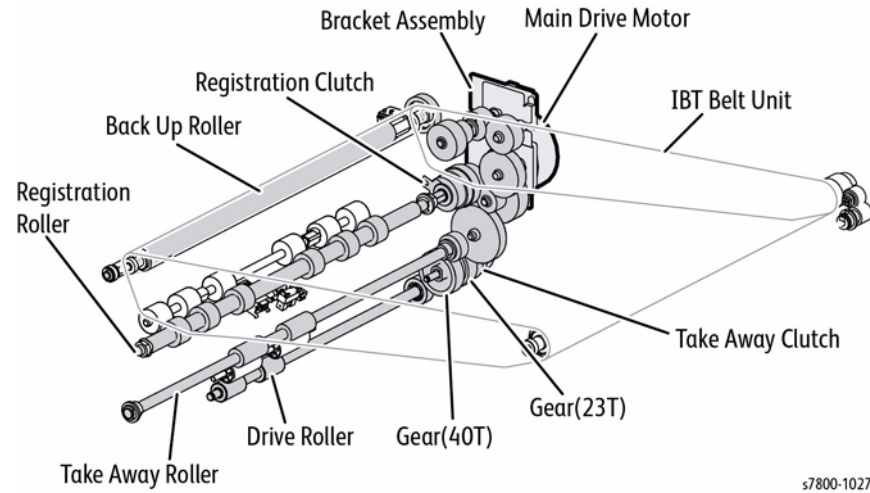
Selecting **Printer > Tools > Setup > Service Tools > Reset NVRAM** in the LUI restores most* user-settable printer settings stored in the EEPROM and SD card to their factory.

- When a SD Card is moved from one printer to another, the parameters stored on it are which are not also stored on the EEPROM chip used by the second printer.
- When the EEPROM chip on the main controller board is moved from one printer to another, the parameters stored on it are used by the second printer.
- When a new EEPROM chip is installed, all its parameters on it are restored from the SD card.
- The MAC address is on the EEPROM and cannot be changed by any means.
- Each EEPROM chip has a different MAC address value.
- The serial number is stored on the IOT chip, EEPROM and SD Card and is reset only by manufacturing.
- The printer name is stored on the SD Card.
- The DNS Name is not stored in any NVRAM.
- The TCP/IPV4 address is stored on the SD Card.
- The TCP/IPV6 addresses are stored on the SD Card.
- The product string, license number, version and revision are read-only ROM-stored values, unaffected by any NVRAM resets.

Drive Assembly

This section contains illustrations for the mechanical components of the Drive Assembly.

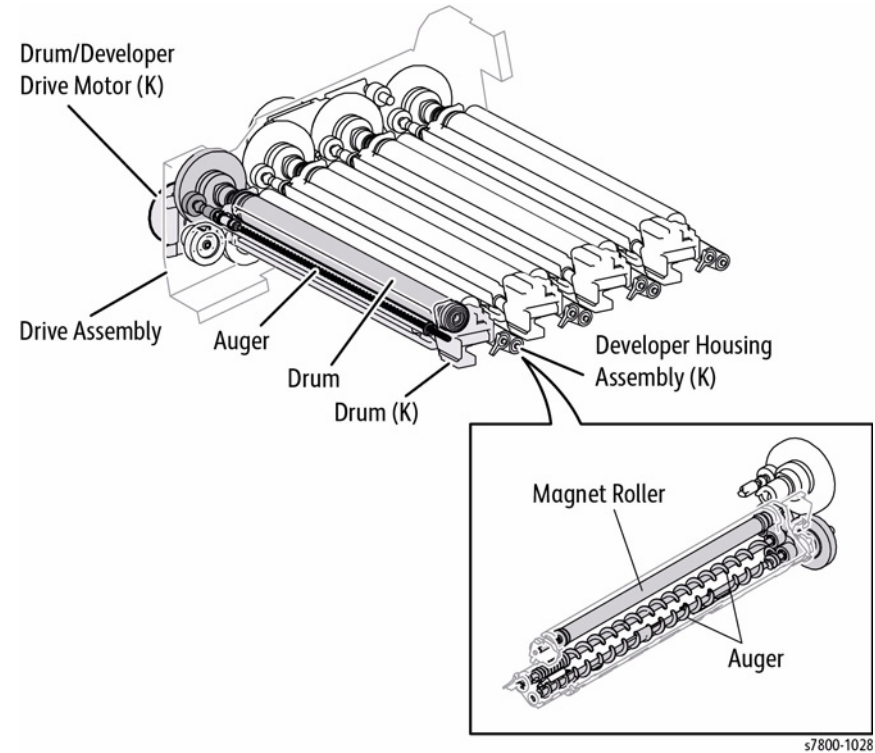
Main Drive Motor Assembly



s7800-1027

Figure 1 Main Drive Motor Assembly

Drum/ Deve Drive Motor (K)



s7800-1028

Figure 2 Drum/ Deve Drive Motor (K)

Drum Drive Motor (Y/M/C)

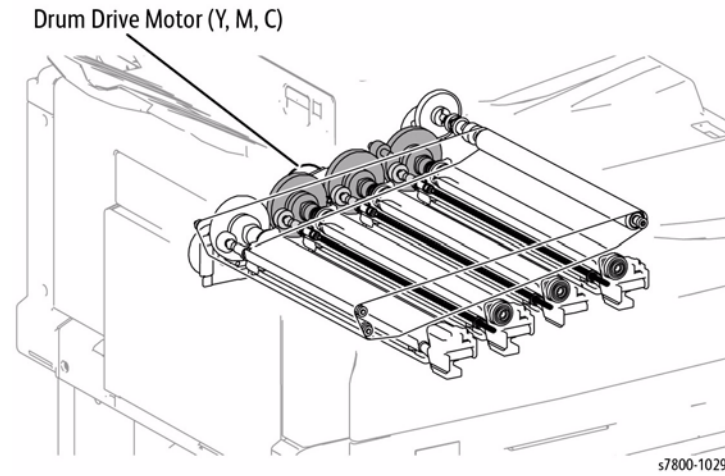


Figure 3 Drum Drive Motor (Y/M/C)

Developer Drive Motor (Y/M/C)

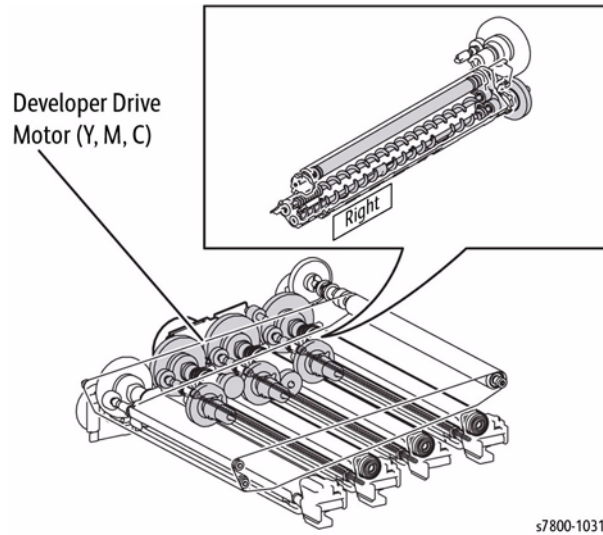


Figure 4 Developer Drive Motor (Y/M/C)

IBT Drive Motor Assembly

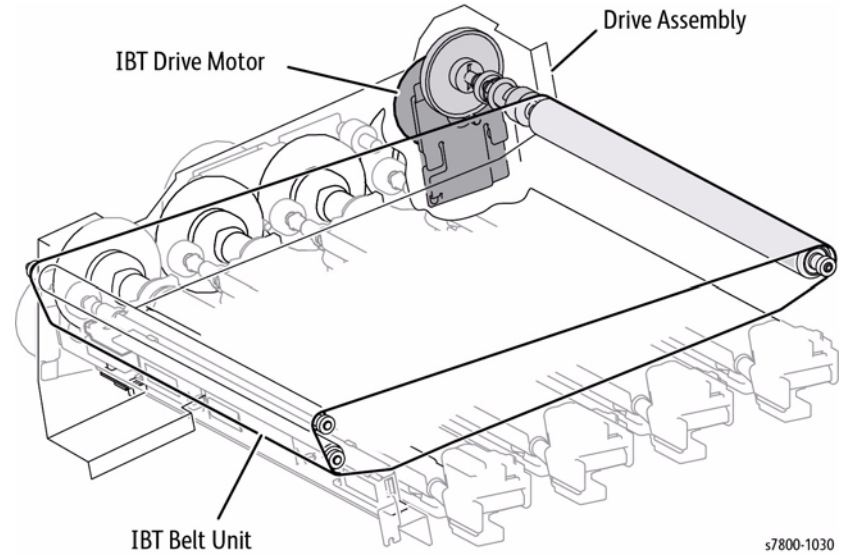


Figure 5 IBT Drive Motor Assembly

Fuser Drive Motor Assembly

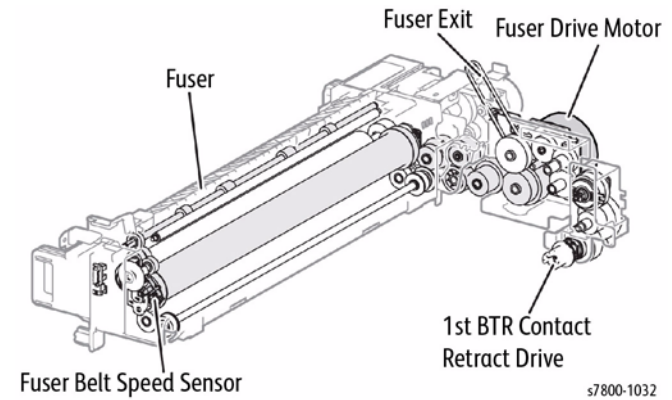


Figure 6 Fuser Drive Motor Assembly

Exit 1 OCT Motor

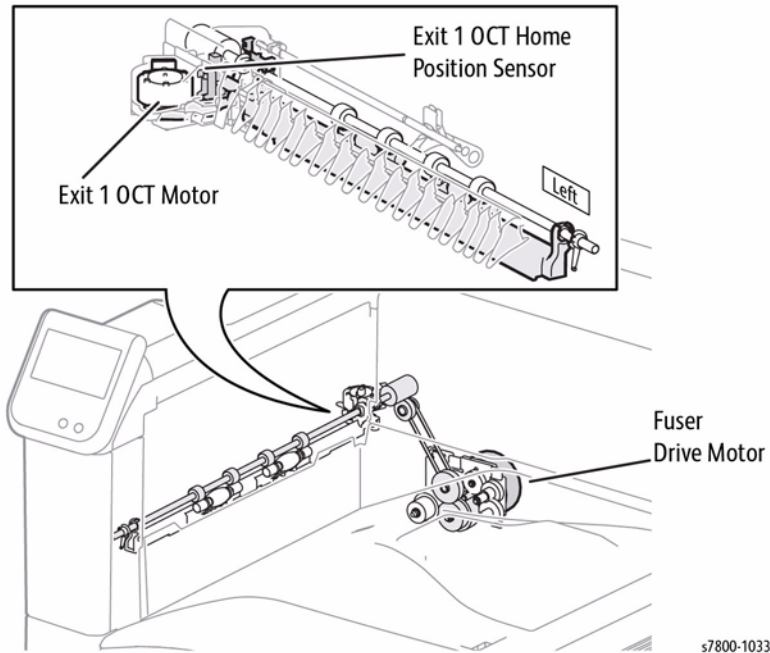


Figure 7 Exit 1 OCT Motor

Agitator Motor

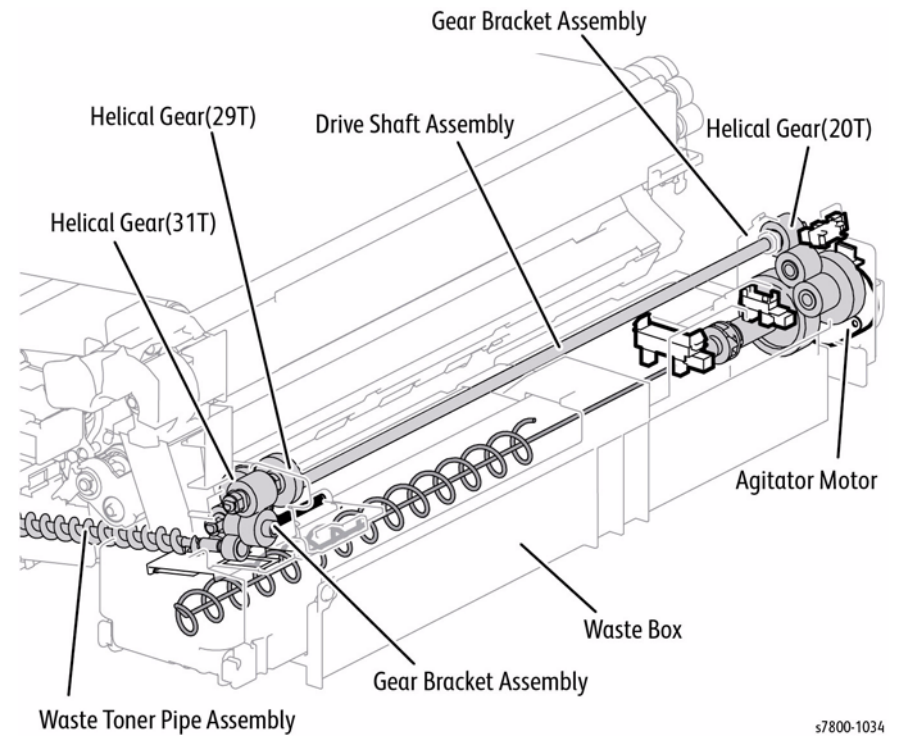


Figure 8 Agitator Motor

Tray Feed/ Lift Up Motor

The drive channels for the Trays of Single Tray Module (STM) and 3 Tray Cabinet are the same. Individual components for the tray are listed below.

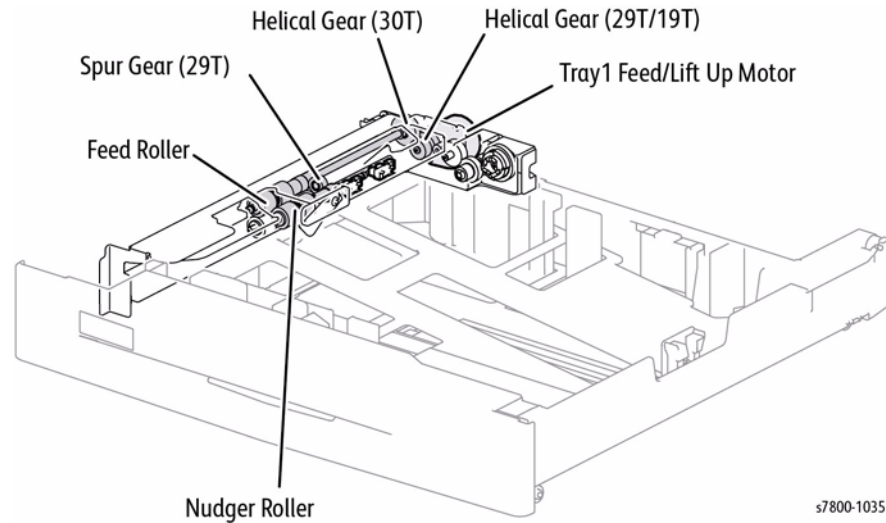


Figure 9 Tray Feed/ Lift Up Motor

Single Tray Module (STM)

- Tray 3/4/5 Feed/ Lift Up Motor
- Helical Gear (29T/19T)
- Feed Roll
- Nudger Roll
- Helical Gear (30T)
- Spur Gear (29T)

Tray 3/ 4/ 5

- Tray 3/4/5 Feed/ Lift Up Motor
- Helical Gear (29T/19T)
- Helical Gear (30T)
- Feed Roll
- Spur Gear (29T)
- Nudger Roll

Tray 1 Feed/ Nudger Motor

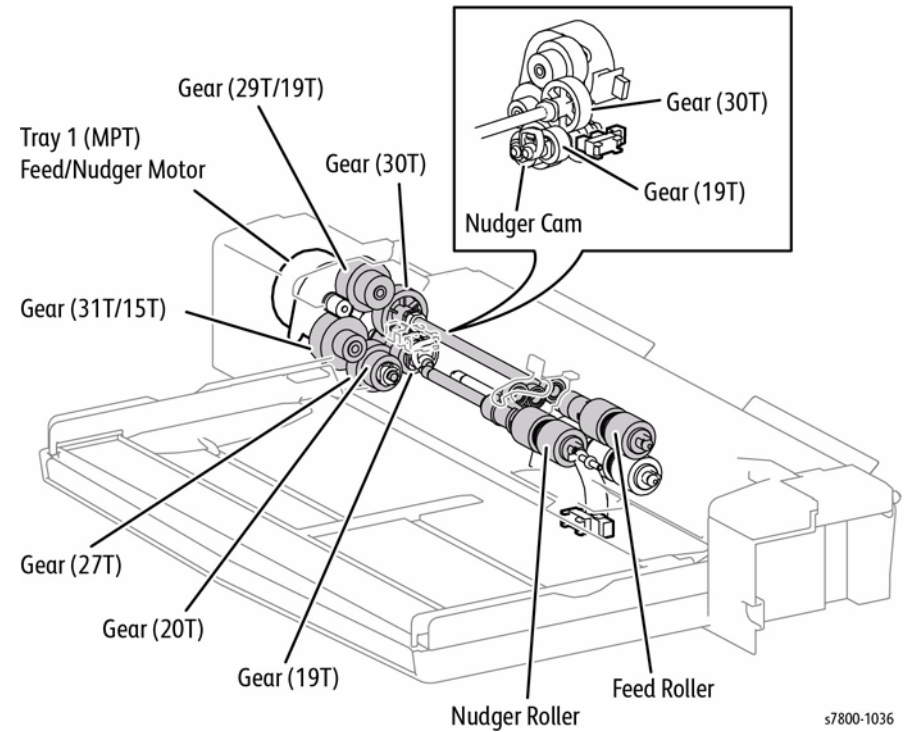
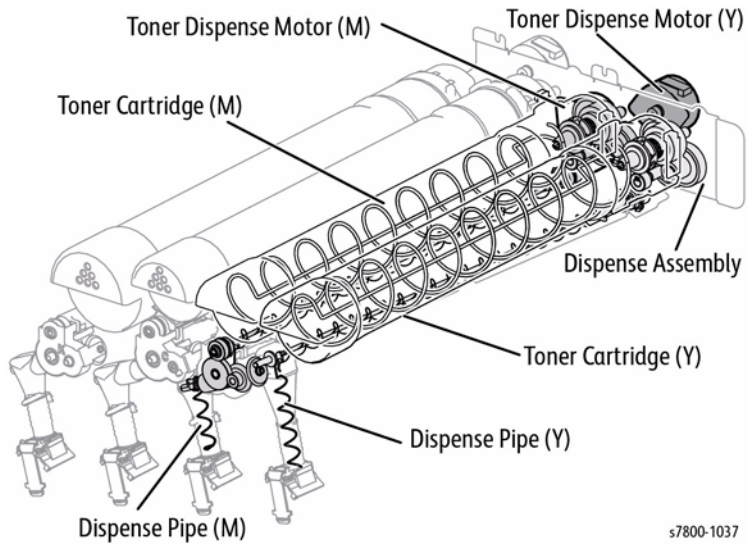


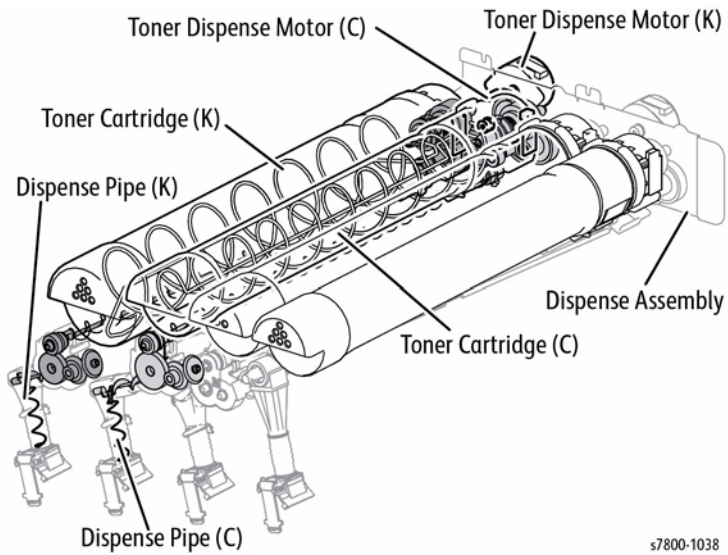
Figure 10 Tray 1 Feed/ Nudger Roll

Toner Dispenser Motor



s7800-1037

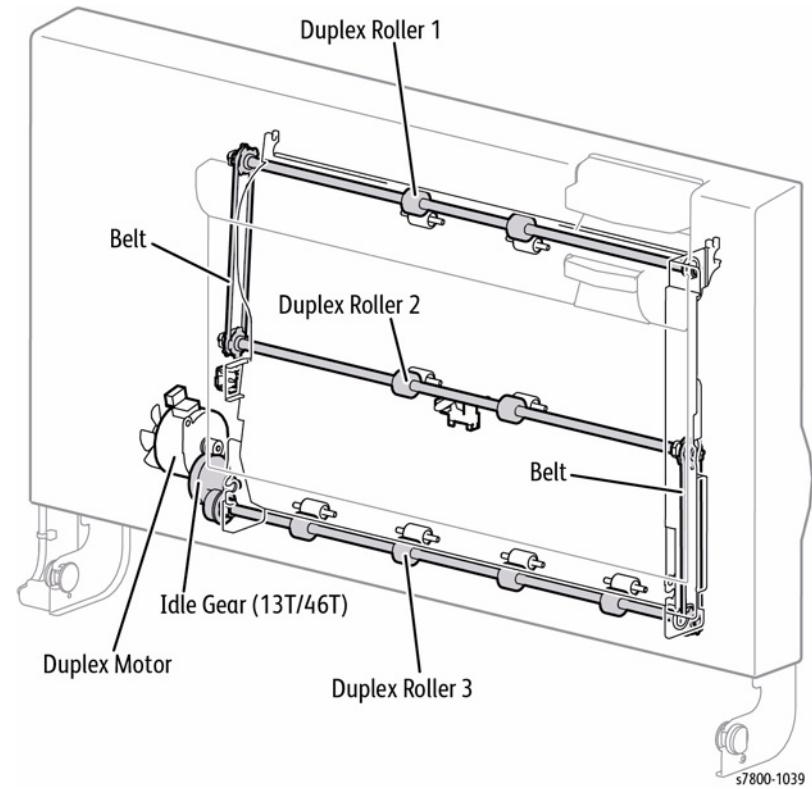
Figure 11 Toner Dispenser Motor



s7800-1038

Figure 12 Toner Dispenser Motor

Duplex Motor



s7800-1039

Figure 13 Duplex Motor

TM Takeaway Motor

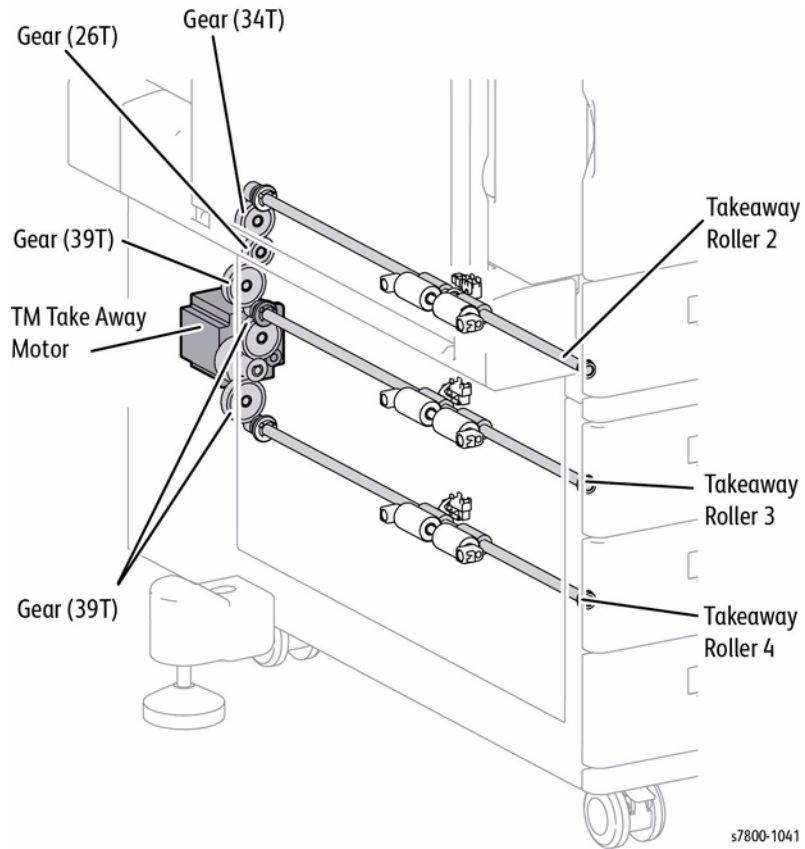


Figure 14 TM Take Away Motor

Operating Mode

Three operating modes are available for the Phaser 7800.

Ready Mode

The Ready mode operates states such as running or recording, etc.

Table 1 Ready Mode

	Item	Status
Image Processor	Image Processor Board	Full Power
UI	LCD	Normal display
	LED	On
IOT	Fusing system (Fuser Assembly)	Maintains the operating temperature
	Recording system (Transfer/ Developer)	In operation
	MCU PWB	Full power

Standby Mode

It is possible to enter the Standby mode within 25 seconds after power Off then On or from the Sleep Mode.

Table 2 Standby Mode

	Item	Status
Image Processor	Image Processor Board	Full Power
UI	LCD	Lowered intensity
	LED	On
IOT	Fusing system (Fuser Assembly)	Maintains the operating temperature
	Recording system (Transfer/ Developer)	Paused
	MCU PWB	Full power

Energy Saver Mode (Deep Sleep)

To save power consumption, the printer enters Energy Saver mode when it has not received print data for a certain time after it has entered the Standby mode. The default waiting time before switching to Energy Saver mode is 1 minute. It can be set in increments of 1 minute in the range between 1 and 240 minutes from the Control Panel. The printer cannot be prohibited from entering this mode.

This is not guaranteed when a non-standard HDD etc. is installed as an option.

Table 3 Energy Saver Mode

	Item	Status
Image Processor	Image Processor Board	Sleep
UI	LCD	No display
	LED	On (Power Off)
IOT	Fusing system (Fuser Assembly)	Paused
	Recording system (Transfer/ Developer)	Paused
	MCU PWB	Paused

Recovery from Energy Saver Mode

The printer returns to Ready mode when a print job is received or the Energy Saver button on the Control Panel is pressed during Energy Saver mode.

Operating Mode Status Transition

The status transition among the operating modes is illustrated as in [Figure 1](#).

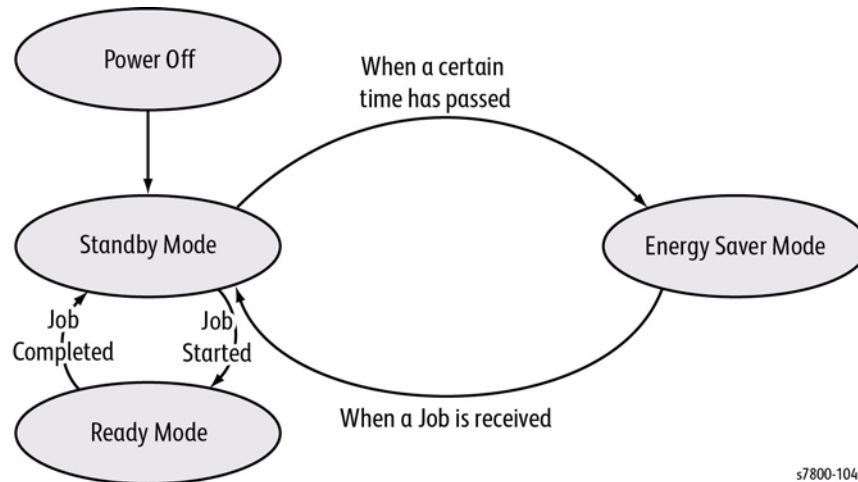


Figure 1 Operating Mode

s7800-1042

Control

Paper Size Detection

Tray 2

Inserting the Paper Tray causes the Actuator to press on the Tray Paper Size Sensor Switches at the rear, and the paper size is detected.

Load paper into the Paper Tray and align the Side Guides and End Guide. The End Actuator and Side Actuator positions change as the guides are moved, which changes the combination in which the Tray Paper Size Sensor Switches are pressed. The paper size is determined by the combination of On/Off states of these Switches.

Optional Trays: Lower Tray Assembly also utilizes the same paper size detection mechanism.

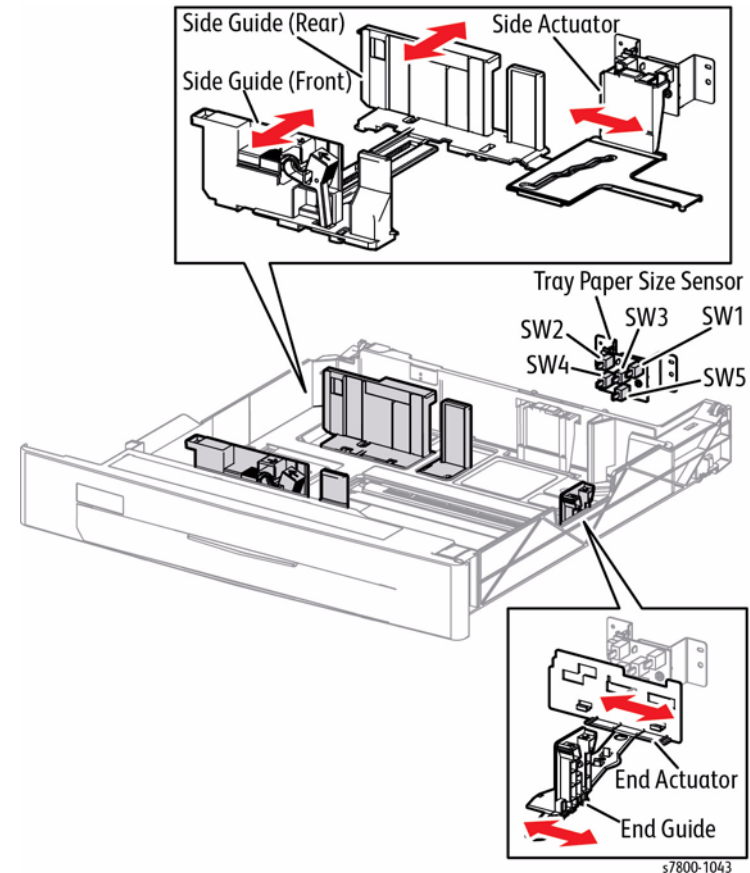


Figure 1 Tray 2 Paper Size Detection

s7800-1043

Tray Statuses

Table 1 Tray Paper Size Sensor Switches and Paper Size (Tray 2)

Paper Size	SW1	SW2	SW3	SW4	SW5	AD Value
No Tray	OFF	OFF	OFF	OFF	OFF	922 - 989
A5 SEF/ 5.5" x 8.5" SEF	OFF	OFF	ON	OFF	OFF	797 - 857
B5 SEF	OFF	OFF	ON	ON	ON	735 - 796
8.5" x 13" SEF	OFF	ON	OFF	ON	OFF	610 - 671
A4 SEF	OFF	ON	ON	OFF	OFF	548 - 609
8.5" x 11" SEF	OFF	ON	ON	OFF	ON	
A4 LEF	ON	OFF	ON	OFF	OFF	304 - 365
A3 SEF	ON	OFF	ON	ON	OFF	244 - 303
B5 LEF/ 7.25" x 10.25" LEF	ON	ON	OFF	ON	OFF	184 - 243
8K SEF	ON	ON	OFF	ON	OFF	124 - 183
B4 SEF	ON	ON	OFF	ON	ON	
8.5" x 11" LEF	ON	ON	ON	OFF	OFF	64 - 123
16K LEF/ 7.25" x 10.5" LEF	ON	ON	ON	OFF	ON	
11" x 17" SEF	ON	ON	ON	ON	ON	0 - 63

Table 2 Tray Paper Sensor Switches and Paper Size (Tray 3 and 4 + 5 of 3TM)

Paper Size	SW1	SW2	SW3	SW4	SW5	AD Value
No Tray	OFF	OFF	OFF	OFF	OFF	237 - 247
A5 SEF/ 5.5" x 8.5" SEF	OFF	OFF	ON	OFF	OFF	199 - 214
B5 SEF	OFF	OFF	ON	ON	ON	184 - 198
8.5" x 13" SEF	OFF	ON	OFF	ON	OFF	153 - 167
8.5" x 14" SEF	OFF	ON	OFF	ON	ON	
A4 SEF	OFF	ON	ON	OFF	OFF	137 - 152
8.5" x 11" SEF	OFF	ON	ON	OFF	ON	
8" x 10" SEF	OFF	ON	ON	ON	ON	122 - 136
12.6" x 19.2" SEF/13" x 19" SEF*	ON	OFF	OFF	OFF	ON	107 - 121
SRA3 SEF/ 13" x 18" SEF/ 2" x 18" SEF*	ON	OFF	OFF	ON	ON	92 - 106
A4 LEF	ON	OFF	ON	OFF	OFF	77 - 91
A3 SEF	ON	OFF	ON	ON	OFF	61 - 76
B5 LEF/ 7.25" x 10.25" LEF	ON	ON	OFF	OFF	ON	46 - 60

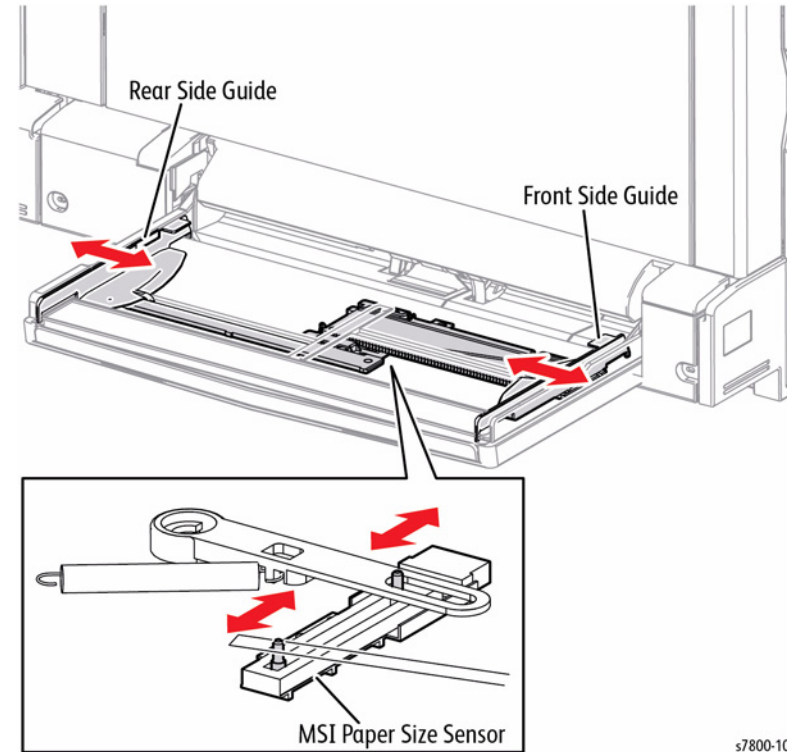
Table 3 Tray Paper Sensor Switches and Paper Size (Trays 4 + 5 of TTM)

Paper Size	SW1	SW2	SW3	SW4	SW5	AD Value
8K SEF	ON	ON	OFF	ON	OFF	31 - 45
B4 SEF	ON	ON	OFF	ON	ON	
8.5" x 11" LEF	ON	ON	ON	OFF	OFF	16 - 30
16K LEF/ 7.25" x 10.5" LEF	ON	ON	ON	OFF	ON	
11" x 17" SEF	ON	ON	ON	ON	ON	0 - 15

Tray 1

Load paper into Tray 1 and align the Front Side Guide and Rear Side Guide. As the guide positions change, the variable resistance of the Tray 1 Paper Size Sensor also changes, which changes the output voltage.

The paper width is detected by the value of the output voltage.



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Figure 2 Tray 1 Paper Size Detection

The relationship between the output voltage and the paper width is provided in [Table 4](#).

Table 4 Paper Size Sensor Voltage and Paper Width (Tray 1/MPT)

Paper Size	Voltage (V)	AD Value
Postcard SEF	2.676 - 2.732	825 - 852
5.5" x 8.5"	2.246 - 2.302	692 - 718
A5 SEF	2.156 - 2.212	664 - 690
B5 SEF	1.788 - 1.843	549 - 576
8" x 10" SEF	1.636 - 1.692	502 - 529
8.5" x 11" SEF (Letter) & x 13" & x 14"	1.503 - 1.559	461 - 488
A4 SEF	1.484 - 1.54	455 - 482
7.25" x 10.5" LEF	0.972 - 1.028	297 - 323
B5 LEF	0.975 - 1.031	298 - 324
B4 SEF	0.975 - 1.031	298 - 324
16K	0.867 - 0.922	264 - 291
8K	0.867 - 0.922	264 - 291
16K	0.834 - 0.890	254 - 281
8K	0.834 - 0.890	254 - 281
11" x 17" SEF	0.732 - 0.788	222 - 249
8.5" x 11" LEF (Letter)	0.732 - 0.788	222 - 249
A4 LEF	0.541 - 0.597	163 - 190
A3 SEF	0.541 - 0.597	163 - 190
12.6" x 19.2" SEF	0.415 - 0.470	124 - 150
13" x 19" (x 18")	0.308 - 0.364	91 - 118
SRA3	0.292 - 0.348	86 - 113
12" x 18"	0.574 - 0.630	173 - 200

Process Control

The Process Control minimizes variation in the image quality due to varying temperature and humidity in the printer, and Drum wear. Two process control include: Potential Control and Toner Supply Control.

Potential Control

The Potential Control of the printer sets the charge potential (DC voltage in the BCR), the DC component of the developing bias potential (DC voltage in the Developer) and the exposure potential (brightness of LED in the LPH).

The charge potential (DC voltage in the BCR) and the developing bias potential are calculated based on the temperature and humidity in the printer, which are measured by the Environment Sensor.

The exposure potential is calculated based on the temperature and humidity in the printer, which are measured by the Environment Sensor, and the patch density on the belt, which is read by the ADC Sensor.

The patch is a small image for Process Control that is created on the belt.

ADC Sensor

Using two LEDs for Black and Color, the ADC Sensor reads the patch density of each of the two reflection paths, which have different light axis angles. The LED for Black uses a mirror reflection light path and the LED for Color uses a diffused reflection light path.

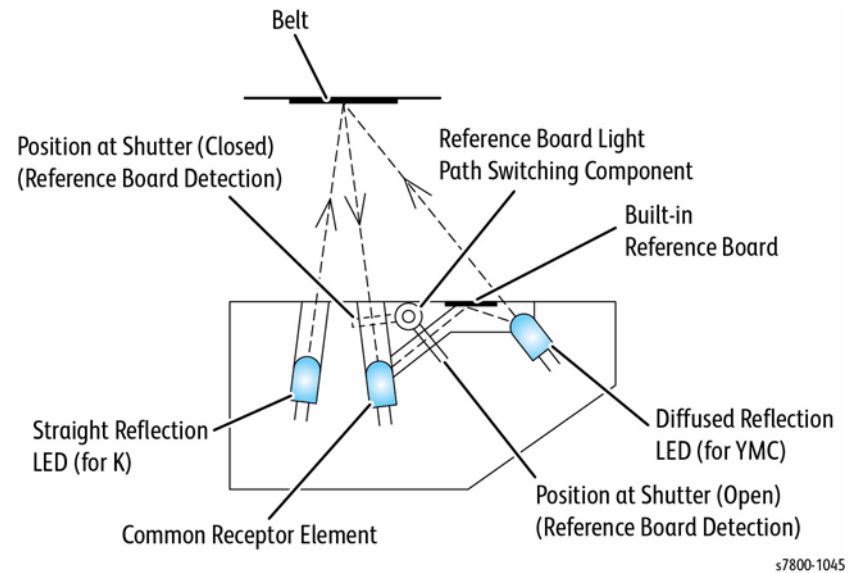


Figure 3 ADC Sensor

Toner Supply Control

The Toner Supply Control calculates the toner amount to be supplied based on the toner density in the Developer, which is detected by the Image Count Dispense Control (ICDC) Count and the ATC Sensor, in order to maintain the image density.

The toner supply amount is then calculated as the operating time of the Toner Dispense Motor. Based on the calculated value, just the right amount of toner is supplied to the Developer Housing Assembly.

Table 5 Toner Supply Mode

Mode Name	Description
Timer Toner Supply Mode	A fixed amount of toner is supplied at regular intervals.
Procon Toner Supply Mode	The toner supply amount is calculated and supplied based on the ICDC count value + ATC Sensor output value.
ICDC Toner Supply Mode	The toner supply amount is calculated and supplied based on the ICDC count value.

Toner Supply Amount Calculation by ICDC (Image Count Dispense Control)

The ICDC calculates the toner supply amount based on the number of pixels per page that is counted by the LPH module.

In the ICDC Toner Supply Mode, only the toner supply amount calculated by the ICDC is used to perform Toner Supply Control.

Toner Supply Amount Calculation by ATC Sensor

As the Drum/Deve Drive Motor is operating, the ATC Sensor detects the toner density in the Developer Housing Assembly at regular intervals. At the same time, the toner supply amount is calculated.

ATC Sensor

The ATC Sensor detects changes in the magnetic permeability that varies according to the blend ratio of the carrier and toner, and converts the changes into electrical signals to detect the toner density.

Low ATC Sensor output indicates high toner density, while high ATC Sensor output indicates low toner density.

Color Registration Control

Overview

The Phaser 7800 is a Full Color Printer that uses the tandem system, where each color - Yellow, Magenta, Cyan, and Black has its own Drum and Developer Housing Assembly. Because each color forms an image on their own Drum, which are then overlaid to create one image, color plane shift may occur due to Drum misalignments, skewed installation positions, and etc. The function to correct this problem is the Color Registration Control or Regi Con.

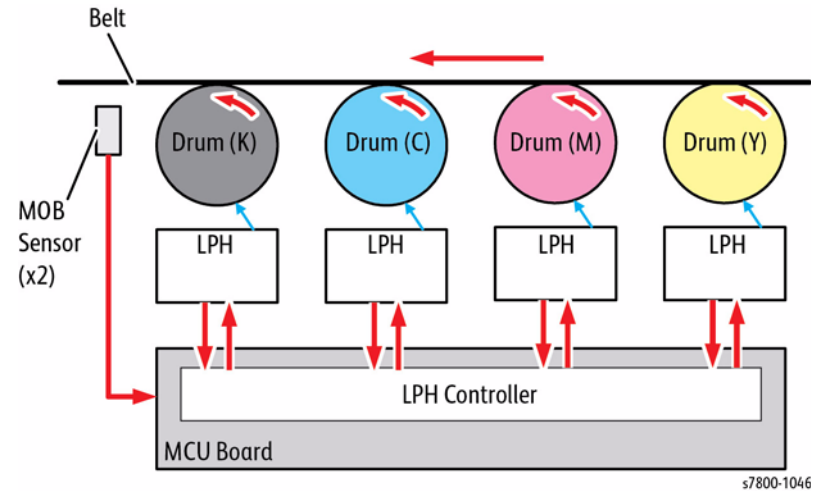


Figure 4 Color Registration Control

Types of Color Registration Control

The Phaser 7800 provides the following types of control according to the operation timings.

Closed Loop Regi Con

When the power is turned On or if the printer internal temperature has changed since the last operation when the IOT is operating (when the Drums and belts are rotating), a patch for the Color Registration Control is created on the belt for the detection/correction of color shift.

The color shift is detected by the MOB Sensors (x2). A combination of rough adjustments and fine adjustments are performed according to the conditions.

Open Loop Regi Con

The color shift for each color is calculated and corrected based on the changes in the printer internal temperature at the heading of a page during the print job. This correction is performed in both lateral direction (fast scan direction) and process direction (slow scan direction).

Regi Measuring Cycle (Diag)

The Color Registration is measured to determine the periodical shifts generated by the Drum and belt operations, which is one of the causes for color shift.

The patch for the Color Registration Control is measured to detect the amount of color shift. The difference between the average value and the maximum/minimum values of the relative color shift amount against Black in the fast scan and slow scan directions, which are detected by the MOB Sensors (x2), is calculated and becomes the measurement result. In addition, this measurement result is compared with the target value to perform OK/ NG judgment. The measurement and judgment results are displayed but corrections are not performed.

Registration Control Sensor Check Cycle (Diag)

The Registration Control Sensor Check Cycle checks the functions of the MOB Sensors (x2), which are used to measure the Color Shift.

This is a self diagnosis cycle for checking whether the detection systems are operating normally. A single color - Cyan in the patch for the Color Registration Control is measured to detect the amount of Color Shift. In addition, the detected shift amount result is compared with the target value to perform OK/NG judgment. The detected shift result amount at each sensor and judgment result are displayed but corrections are not performed.

Registration Control Setup Cycle (Diag)

The Registration Control Setup Cycle is the same control operation as the one performed in Closed Loop Regi Con, but performed in Diag Mode.

This process is to be performed during printer installation, parts replacement, and NVM initialization to correct the Color Registration to be within the pre-defined range.

Control Shift Detection/ Correction Process

This section describes an overview of the Color Shift Detection and Correction operations at the controls that use patches.

Patch Shape

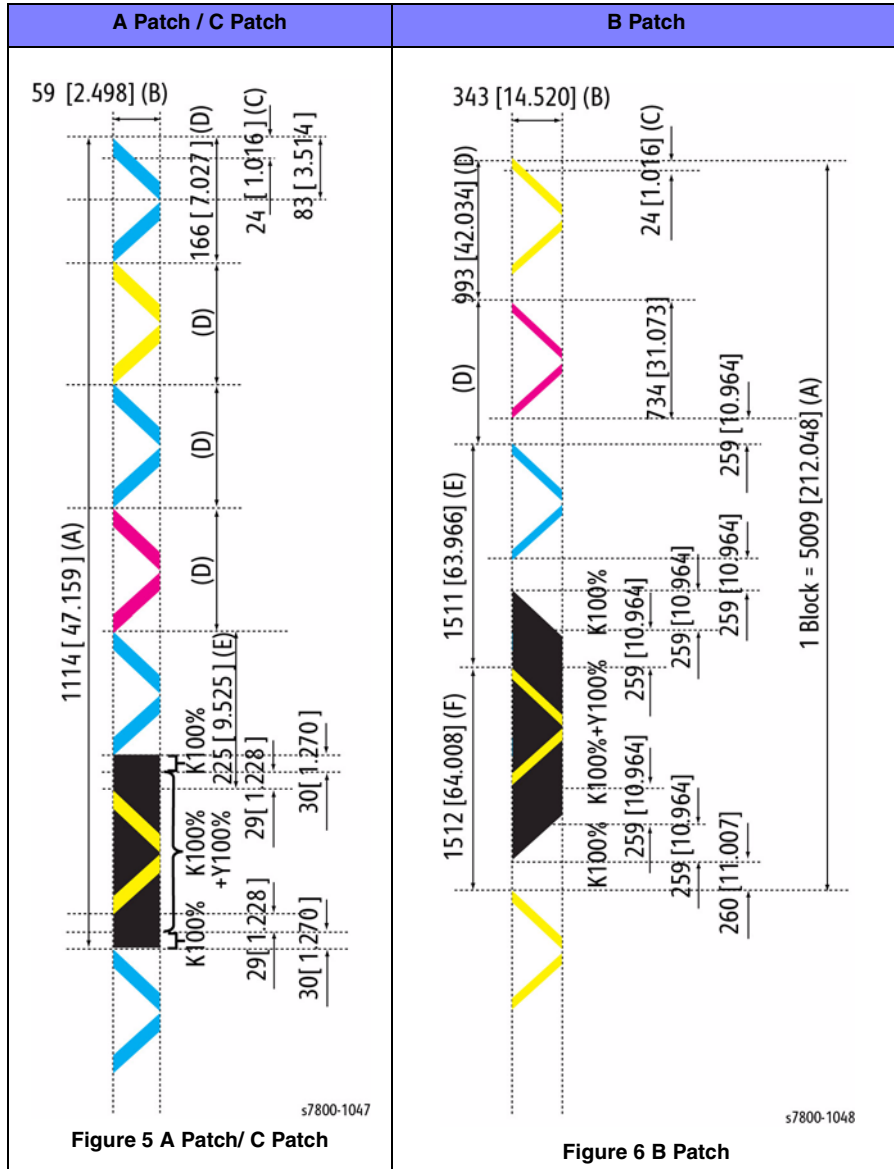
The patch for the Color Registration Control comes in three "<" patterns - A, B, and C, which go approximately one round on the belt.

Each pattern is made up of 2 patterns that have the same shape at the front and the rear. The formation positions in the fast scan direction, as well as the positions relative to the center of the ideal image at the front and the rear are the same.

Table 6 Types of Patch

Types of Patch	Patch Overview	Registration Control that uses this patch
A	Forms one round on the belt for all colors (small "<" shape)	Closed Loop Regi Con (fine adjustment)
B	Forms one round on the belt for all colors (large "<" shape)	Closed Loop Regi Con (rough adjustment)
C	Forms one round on the belt for single color - Cyan (small "<" shape)	

Table 7 Patches



Color Shift Detection

The keys for the color detection are the configuration of the MOB Sensor light receptor and the shape ("<" shape) of the Regi Con patch image. This section describes the principle of "Color Shift Detection" by using the example of Colors.

Shift between two colors.

- (3) provides the ideal patch alignment where the Color Shift is zero. At this time, the pulse output interval is $tA1$ to $tA2 = tT1$ to $tT2 = tB1$ to $tB2$ and $tA2$ to $tT1 = tT2$ to $tB1$.
- (2) and (4) provide the patch alignments where the Color Shift is only in the fast scan direction. The pulse output intervals are each different compared to (3), where the shift amount is 0.
- (1) and (5) provide the patch alignments where the Color Shift is only in the slow scan direction. The pulse output intervals are each different compared to (3), where the shift amount is 0.

Although the actual Color Shift occurs independently in both the fast scan and slow scan directions and hence is a combination of items as shown in the following illustration, the Color Shift between the two colors in the fast scan and slow scan directions can be detected by using the difference of the patch pass timing in the slow scan direction.

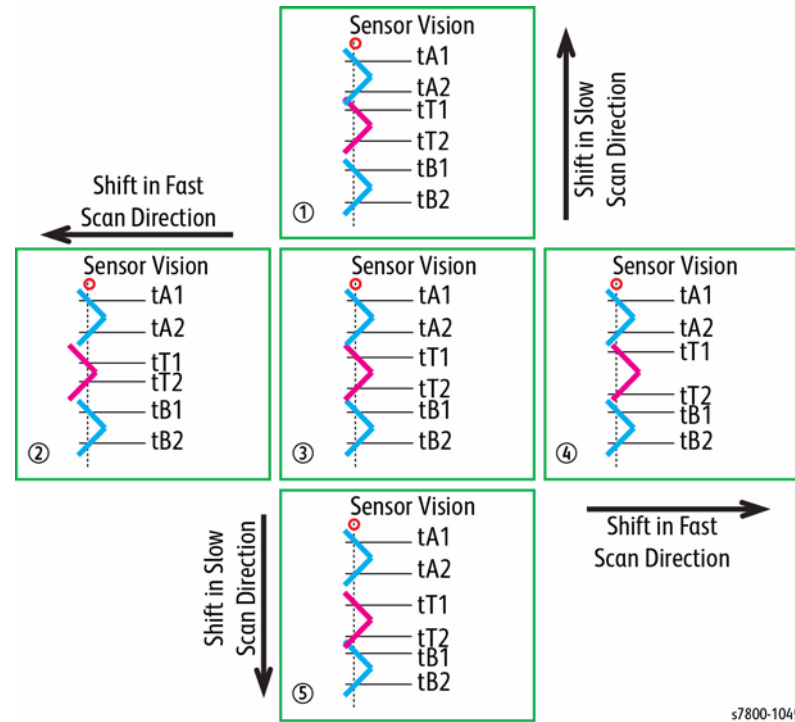


Figure 7 Color Shift Detection

Color Shift Correction

The detected Color Registration shift amount is computed and converted into the following corrective elements. The correction itself is performed by the LPH control.

- Intra engine difference image start occurrence
- Slow scan write position correction (Y fine)
- Slow scan write position correction (Y super fine)
- Slow scan skew/ bow/ LPH linearity correction
- Fast scan write position correction (X rough/X fine)

Mark On Belt Sensor

The Mark On Belt (MOB) Sensor detects marks on the belt.

- The MOB Sensor is a reflective sensor that projects the Regi Con (chevron) patch image that was formed on the opaque belt onto the Detection Unit, and then outputs a pulse when the center line of the patch is aligned with the center line of the Detection Unit.
- The above-mentioned Detection Unit consists of only one Photo Diode that is perpendicular to the belt surface and one LED for diffused light illumination.
- The Sensors (x2) are placed downstream of the last color engine, on the axis perpendicular to the slow scan direction (in other words, on the axis parallel to the fast scan direction) in order to detect the relative Color Shift between the Regi Con patches that were formed by the respective color engines.

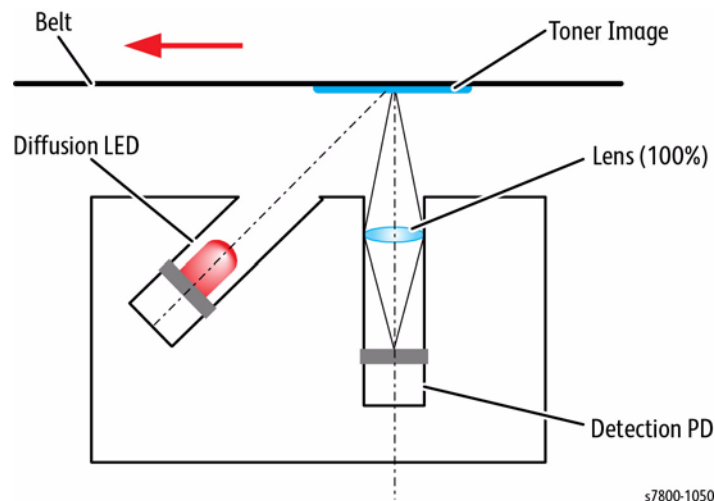


Figure 8 Mark On Belt Sensor

(SB) Advanced Finisher

The Advanced Finisher consists of a Horizontal Transport and a Finisher module. It can collate, stack, staple, and hole punch sets of copies or prints.

When fitted with the optional Booklet Maker Assembly, the Finisher also can produce booklets.

The Advanced Finisher can collate, stack, staple, and hole punch up to 2000 sheets or 200 sets of 90 gsm or 20 lb paper. For paper sizes greater than A4 SEF, the maximum number of sets is limited to 100.

NOTE: The finisher cannot handle transparencies or envelopes.

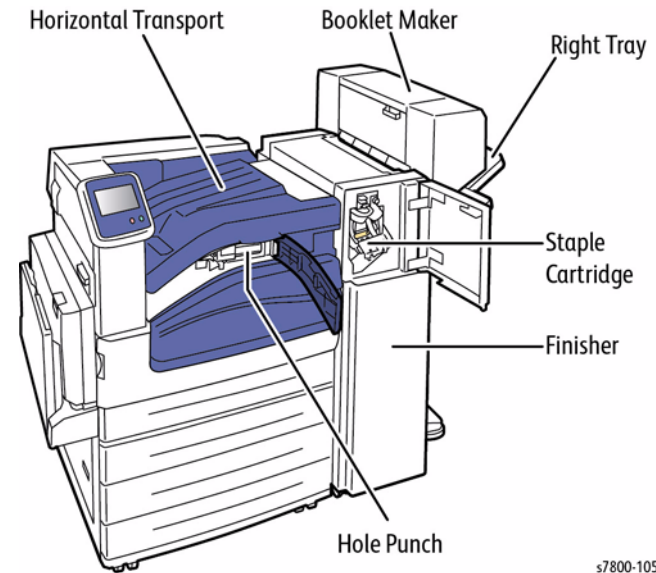


Figure 1 Advanced Finisher

- **Horizontal Transport** - Feeds the sheets exiting from the IOT to the Finisher
- **Finisher** - Squares up the edges of sheets in the Compiler Tray to create sets and ejects/offsets the sets into the Stacker Tray
- **Stapler** - Staples sets as specified.
- **Punch** - Punches 2, 3, or 4 holes depending on the market. If used, the punch unit is in the H-transport.
- **Right Tray** - Collects the sets ejected from the Finisher.
- **Booklet Maker Assembly** - (Optional) Saddle stitches and creases booklets

Horizontal Transport Assembly

The Horizontal Transport Assembly moves the sheets from the Exit 1 Assembly to the Finisher.

The Horizontal Transport Assembly has its own Drives, Rollers, Sensors, and Interlocks and is powered and controlled by the Finisher.

The Top Cover can be opened for jam clearance.

The hole punch for the sheets is installed in the Horizontal Transport.

Horizontal Transport Assembly: Top Cover Interlock

The Horizontal Transport Assembly has one Interlock, the Top Cover Interlock.

The Top Cover Interlock senses when the Top Cover is raised and disconnects the 24V supply from the Horizontal Transport Assembly.

The Top Cover Interlock is located under the Horizontal Transport.

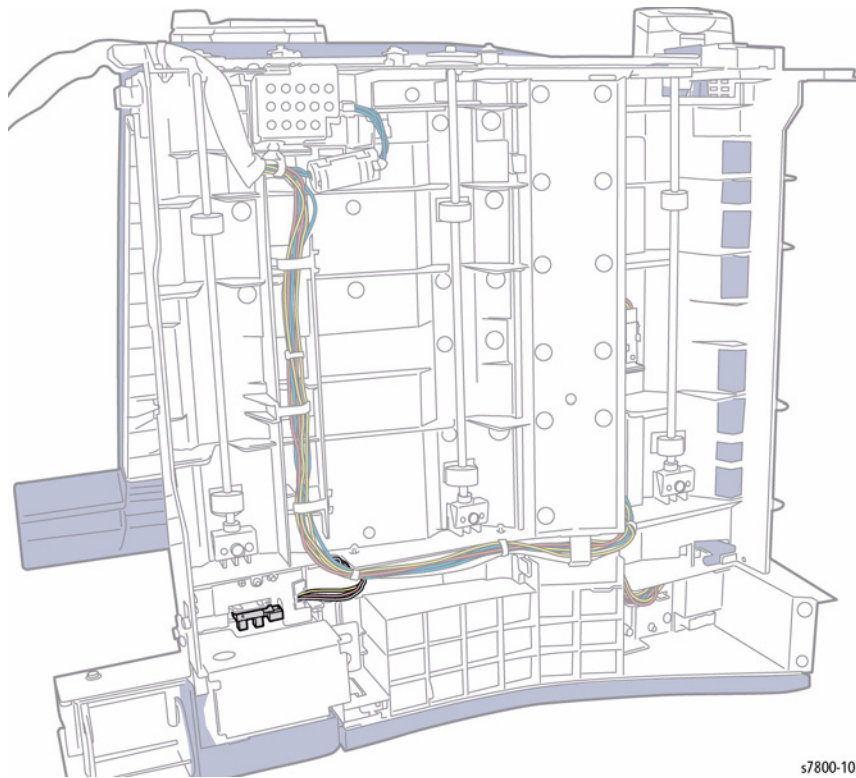


Figure 2 Top Cover Interlock

Horizontal Transport Assembly: Sensors

The movement of paper through the Horizontal Transport is monitored by the Entrance Sensor.

The Entrance Sensor is an optical sensor which is triggered when the light it emits is reflected by the sheet of paper.

As paper is fed from Exit 1 into the Horizontal Transport, the Entrance Sensor detects this.

If after a preset amount of time, the Entrance Sensor is not de-actuated, this indicates a paper jam and an error message is displayed on the UI.

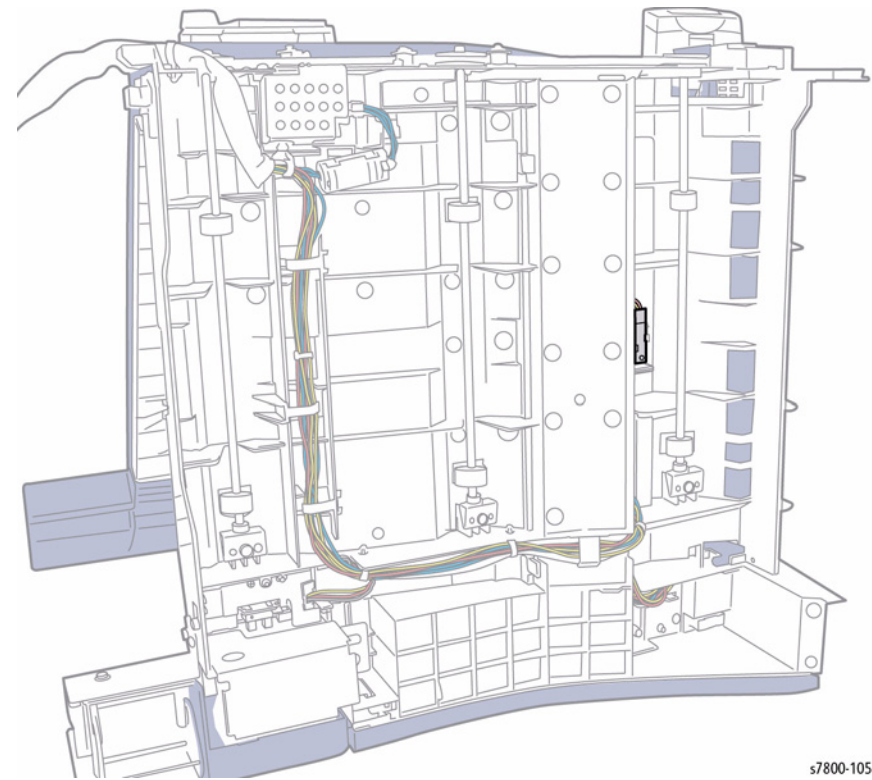


Figure 3 Entrance Sensor

Horizontal Transport Assembly: Rolls and Drives

The paper is moved through the Horizontal Transport Assembly by three sets of Transport Rolls.

Drive is provided to the Transport Rolls by the Transport Motor through a system of gears and belts.

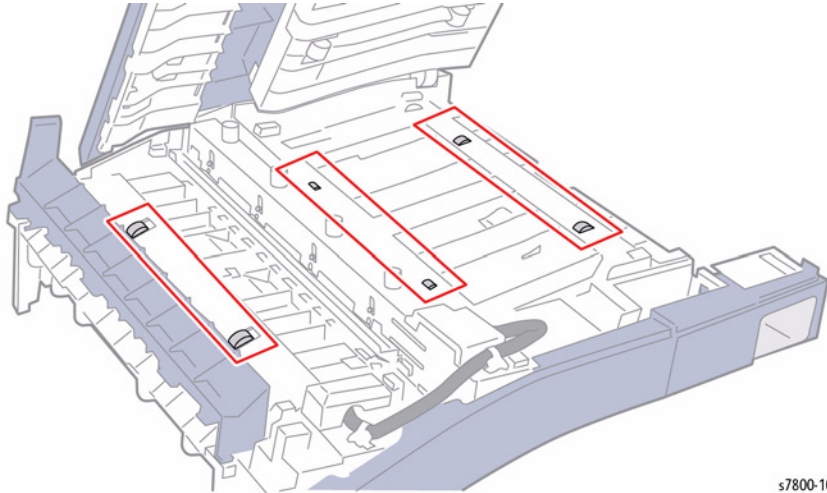


Figure 4 Rolls and Drives

Power and Control

LVPS

The Power is supplied to the Finisher components by the Low Voltage Power Supply (LVPS).

The LVPS receives 110/240 VAC supply from the GFI via the Power Cord and provides +24V to the Finisher PWB.

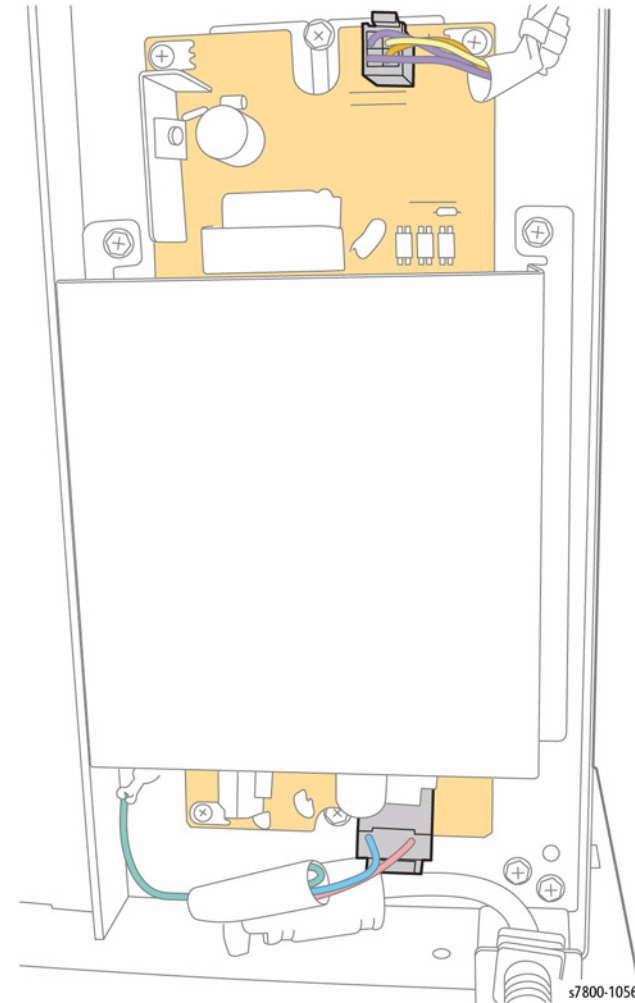


Figure 5 Finisher LVPS

Main PWB

All the Sensors, Switches, Interlocks, Motors, and Clutches are controlled by the Finisher PWB.

The Finisher PWB receives +24V from the LVPS, which in turn it supplies to the Motors and Clutches.

In addition to the +24V supplies, the Finisher PWB also provides +5V supply for all the Sensors and Switches.

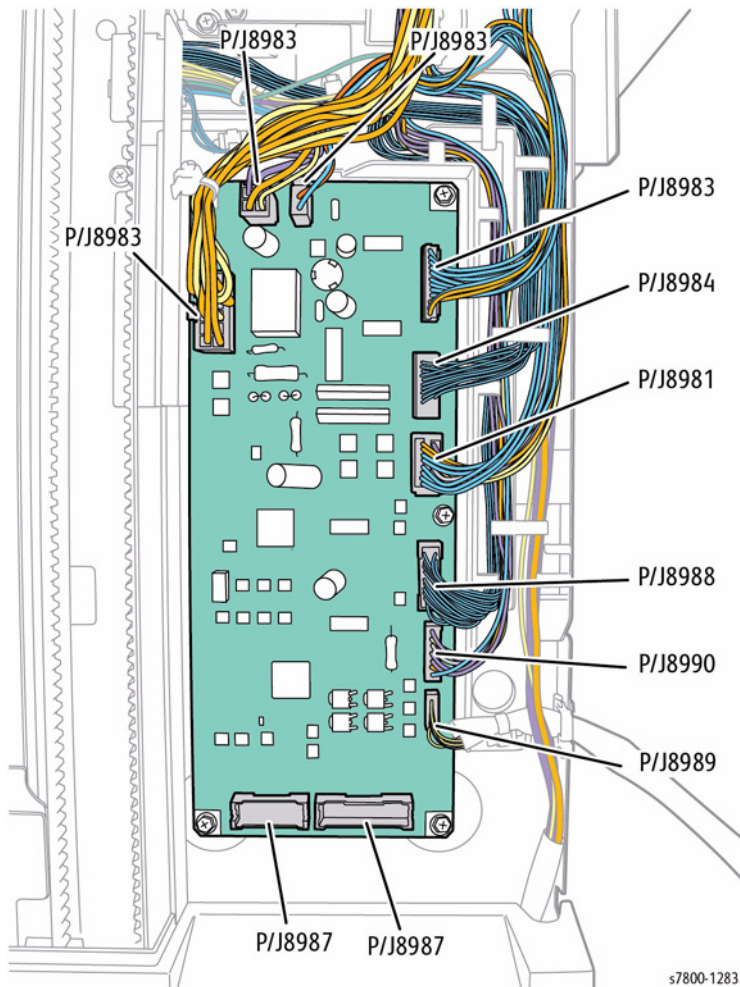


Figure 6 Main PWB

Interlocks

Finisher LX has two Interlocks which disconnect the + 24V supply when deactivated.

- **Eject Cover Switch** - is triggered when the Eject Cover is raised.

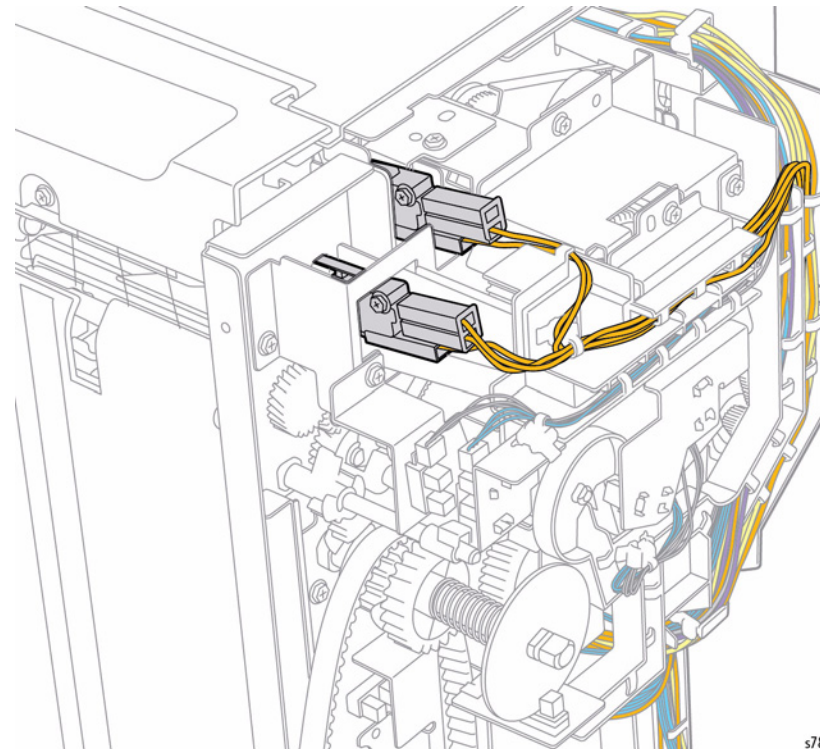


Figure 7 Eject Cover Switch

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- **Front Door Interlock** - is triggered when the Front Cover is opened.

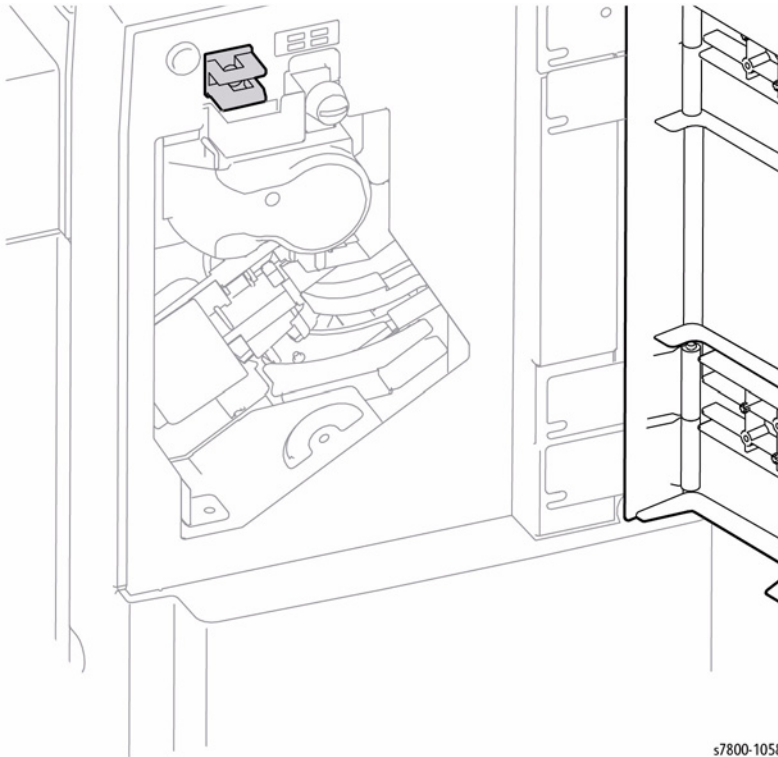


Figure 8 Front Door Interlock

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Stacker Tray

Overview

The Stacker Tray is an output tray on the Finisher LX that is used to store compiled sets in a stack. The Stacker Tray lowers in steps to accommodate up to 200 sets.

The Stacker Tray is raised and lowered by a system of gears and belts. The gears and belts are driven by the Stacker Elevator Motor through a Rack Gear.

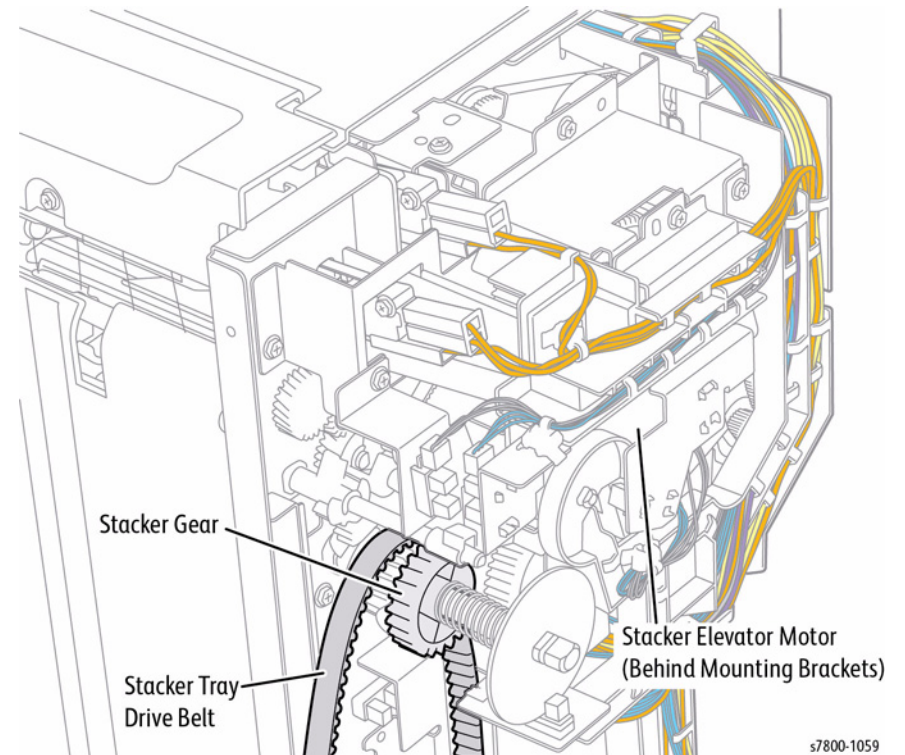


Figure 9 Stacker Tray Components

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Elevation System

The position of the Stacker Tray is controlled by an Encoder and Sensor.

The Encoder has a number of apertures cut into it and is connected directly to the main Stacker Tray Drive Gear via a shaft.

As the Stacker Tray Drive Gear rotates to lower or raise the Stacker Tray, the Encoder also rotates. The rotation of the Encoder is monitored by the Encoder Wheel Sensor which is an optical sensor that reflects light onto the Encoder.

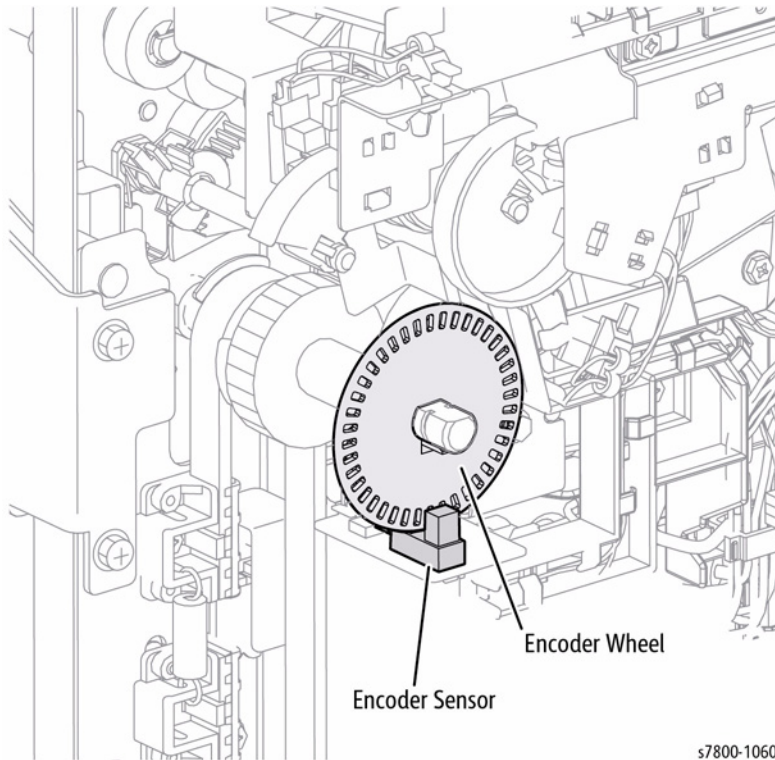


Figure 10 Elevation System

The uppermost position of the Stacker Tray is monitored by the Stacker No Paper Sensor.

When triggered, this indicates that the Stacker Tray is in the uppermost feed position.

Paper Feed

Drive

The sheets of paper are moved through the main section of the Compiler by the Entrance Roll, Exit Roll, Paddle Shaft Assembly and Sub-Paddle Assembly.

Drive is provided to these components by the Transport Motor and a system of Gears and Pulleys.

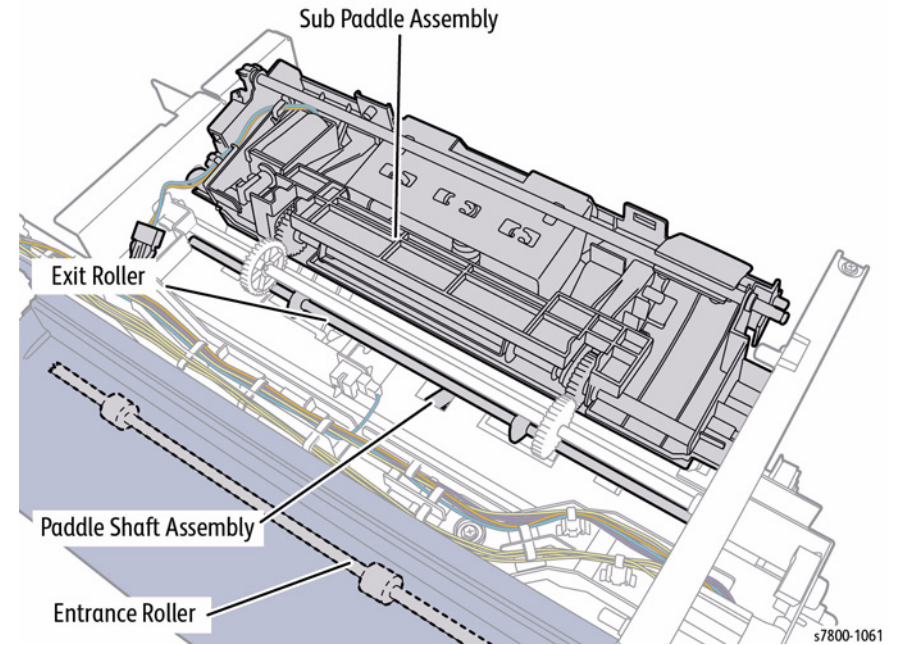


Figure 11 Drive Components

Sensors

The progress of paper through the main Compiler is monitored by two Sensors: the Entrance Sensor and Compiler Exit Sensor.

The Entrance Sensor is actuated by the lead edge of the paper entering the Finisher from the Horizontal Transport. This signals the paper feed process to begin.

The Compiler Exit Sensor is used to ensure that paper successfully moves through the paper path. If the Compiler Exit Sensor is not actuated within a pre-set time of the Entrance Sensor being actuated, a paper jam condition is signalled and an error message appears.

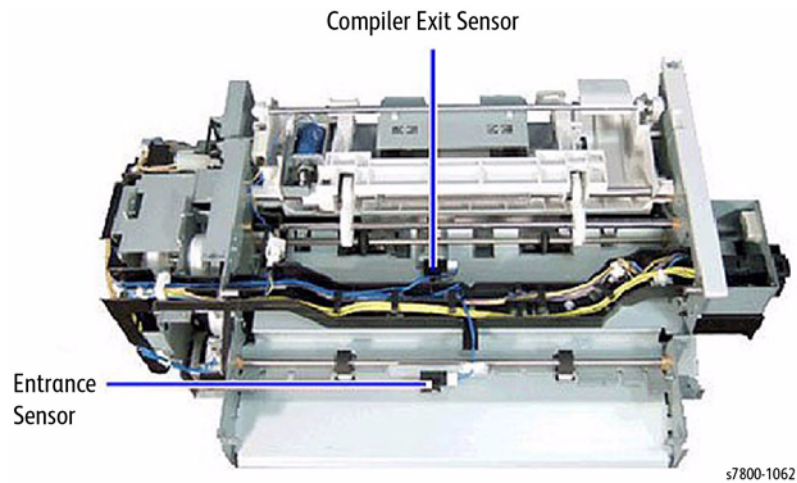


Figure 12 Sensors

Sub Paddle Assembly

The Sub-Paddle Assembly actively drives fed paper into the Compiler Tray when it exits the Exit Roll.

The Sub-Paddle Assembly consists of a set of Sub-Paddles, a Eject Chute and a Solenoid. Drive is provided by the Transport Motor.

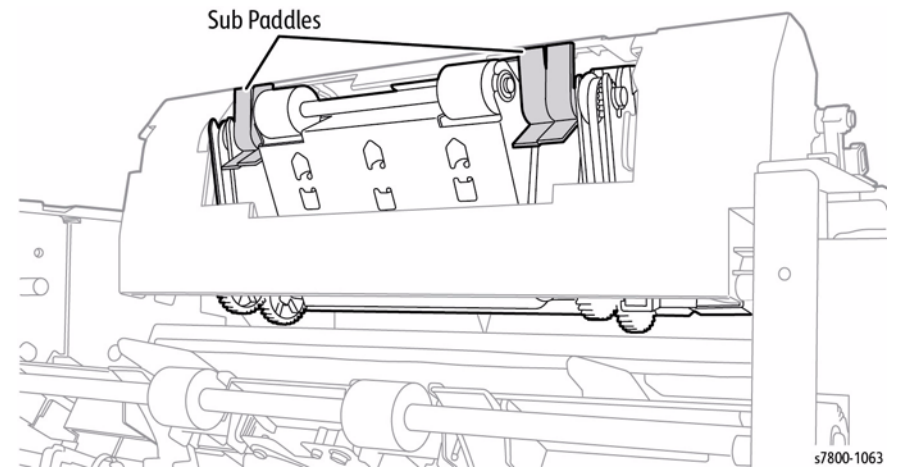


Figure 13 Sub Paddle Assembly

When instructed, the Solenoid is energized, which lowers the Eject Chute and thus the Sub Paddles onto the paper.

The rotation of the Sub Paddles actively drives the paper against the Compiler Backstops where the paper is tamped, stapled (if required), and ejected.

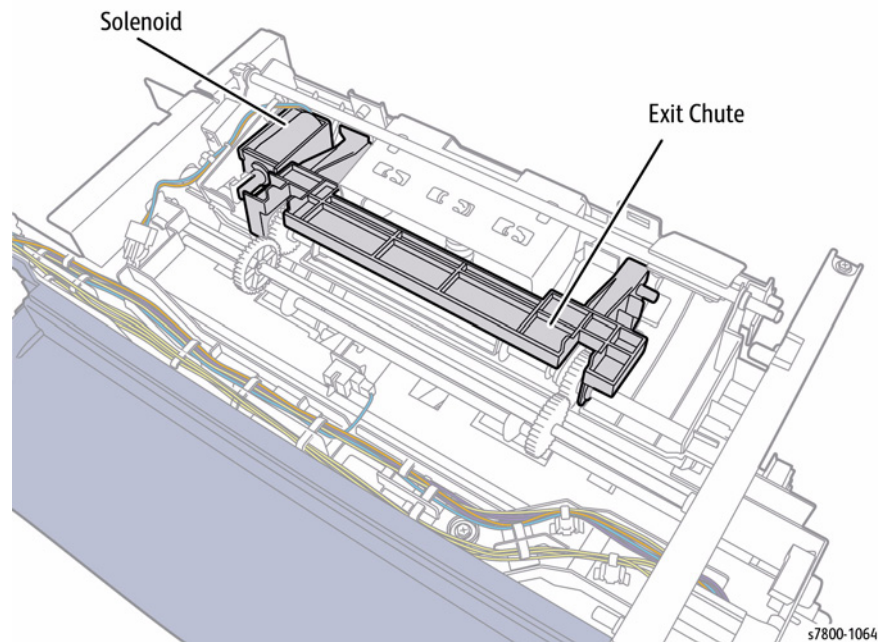


Figure 14 Sub Paddle Assembly Components

The Sub Paddles rotate constantly and only come into contact with the paper when the Solenoid is actuated.

Tamper Assemblies

The Tamper Assemblies are used to compile sets of paper into registered stacks either for stapling or exit to the Stacker Tray. The Tamper Assemblies tamp the sets of paper to the front, center, or rear of the Compiler, as required.

The Advanced Finisher has two separate Tamper Assemblies which operate as a single unit. These are the Front and Rear Tamper Assemblies. Each Tamper Assembly consists of a Tamping Paddle, Tamper Paddle Motor, and a Tamper Home Sensor.

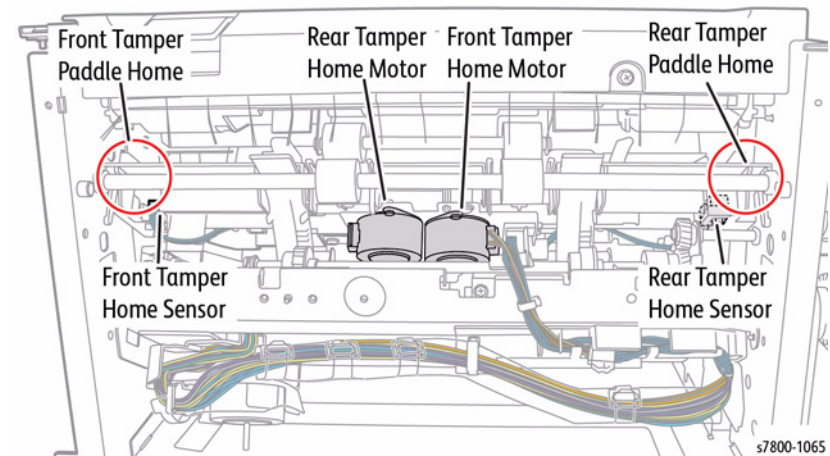


Figure 15 Tamper Assembly Components

Exit and Stack

The Exit Roll, Paper Guides, and Set Clamp Assembly all are driven by the Eject Motor through the Main Exit Drive Gear.

Each assembly has a discrete system of gears and quadrant gears which transfer drive from the Main Exit Drive Gear to the individual assembly.

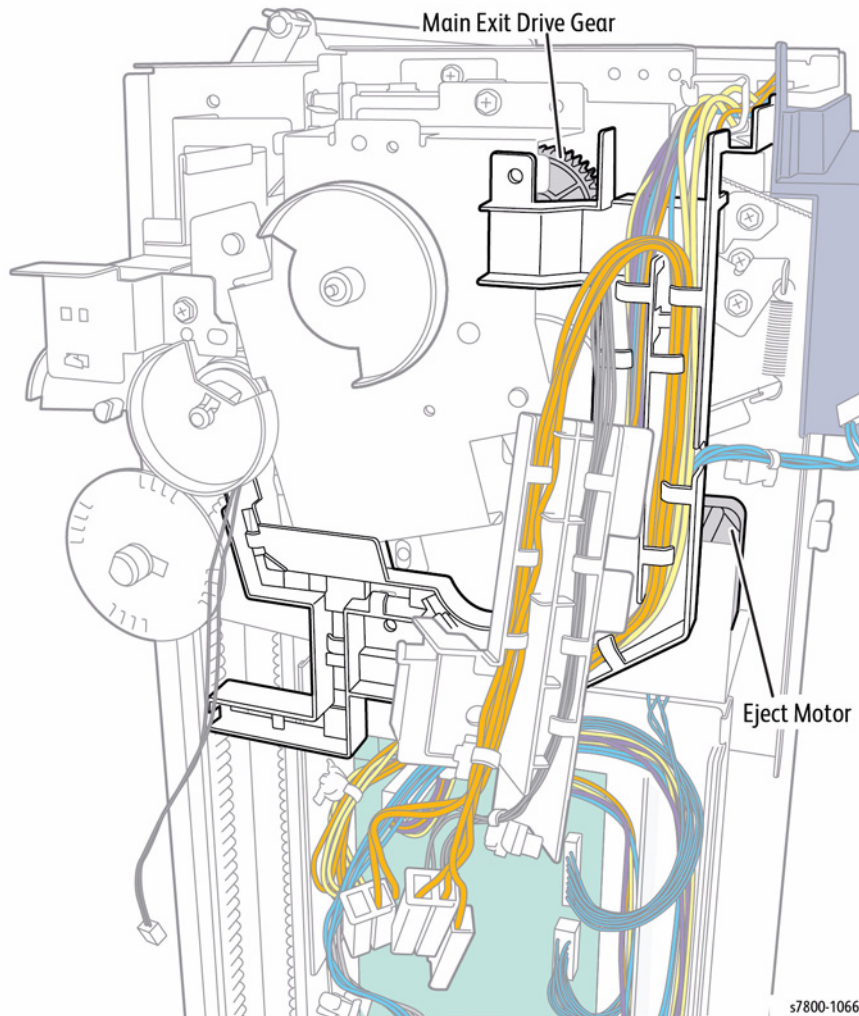


Figure 16 Exit and Stack

Exit Roll Assembly

The Exit Roll Assembly consists of Exit Roll Gears, Exit Roll Cam, Upper Exit Roll, Lower Exit Roll, Retaining Chassis, and Retaining Chassis Lever. The Upper Exit Roll is free rotating and is maintained in the raised or lowered position by the Retaining Chassis.

The Exit Cam Roll, driven by the Main Exit Drive Gear, moves the Retaining Chassis into the raised or lowered position by actuating the Retaining Chassis Lever.

The Lower Exit Roll is driven by the Exit Roll Gears through the Main Exit Drive Gear. Paper is moved from the Compiler Tray to the Stacker Tray when the Upper Exit Roll is lowered onto the Lower Exit Roll.

The Eject Roll is driven by the Exit Roll Gears through the Main Exit Drive Gear.

Paper is moved from the Compiler Tray to the Stacker Tray when the Eject Pinch Roll is lowered onto the Eject Roll.

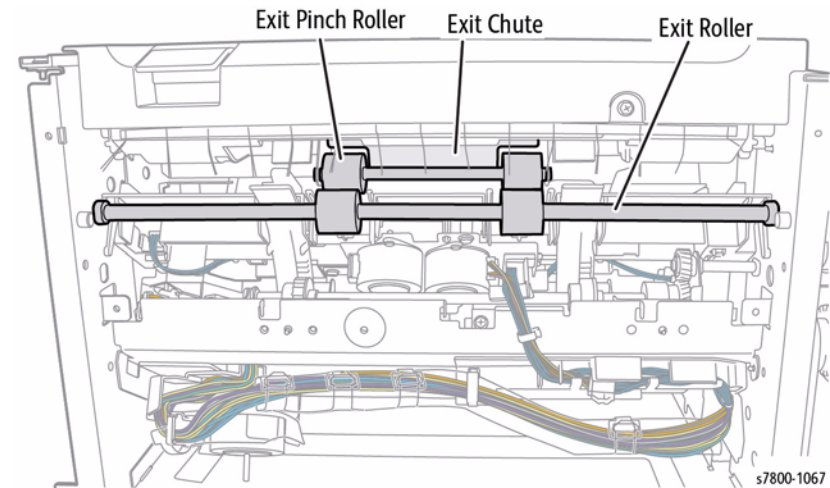


Figure 17 Exit Roll Assembly

Paper Support Assembly

Paper Guide

The Paper Guide consists of two Paper Guides, Eject Assembly, Gear Select Actuator and a Eject Clamp Home Sensor. Each Paper Guide features an integral Rack which connects to the Gears.

As the Main Exit Drive Gear rotates, the Eject Assembly rotates which in turn extends or retracts the Paper Guide. This action is reversed by a change in direction of the Main Exit Drive Gear.

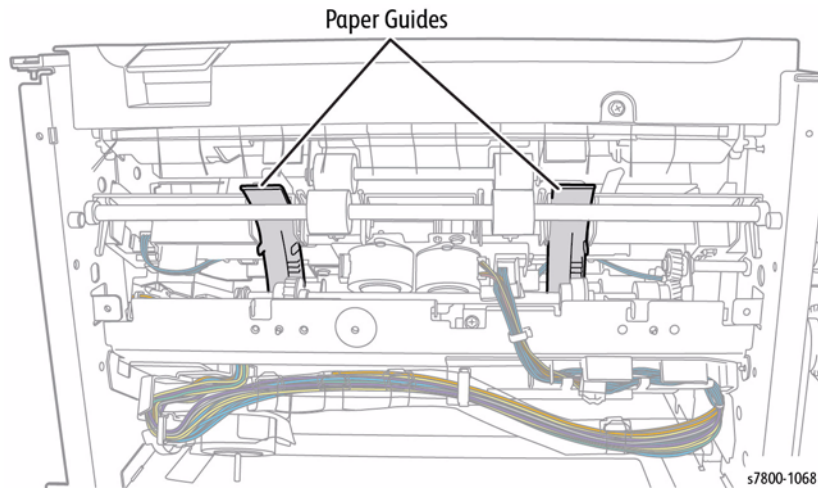


Figure 18 Paper Guide

Eject Assembly

The position of the Paper Guide is monitored by the Eject Clamp Home Sensor. The Gear Select Actuator is fixed to the end of one of the Drive Shafts for the Eject Assembly and rotates to trigger the Eject Clamp Home Sensor.

The Eject Clamp Home Sensor and Gear Select Actuator are only used to confirm that the Support Arms are fully extended or retracted. They do not control drive to the Main Exit Drive Gear.

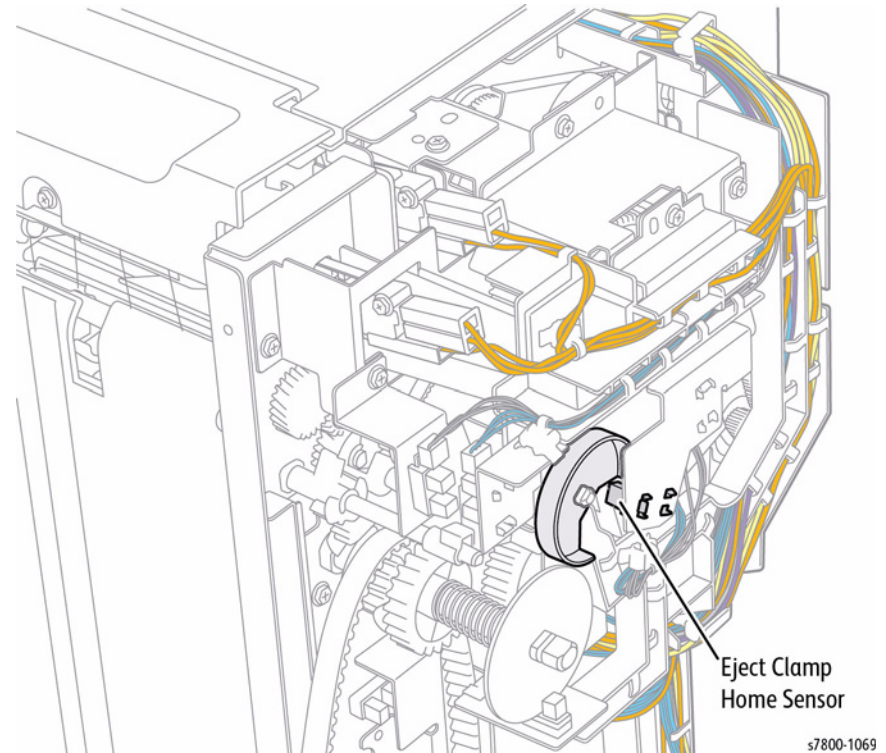


Figure 19 Eject Assembly

Paper Clamp Assembly

The Set Clamp Assembly uses Set Clamps to hold sets of paper in position on the Stacker Tray. The Set Clamps are fixed to the Set Clamp Shaft which is rotated by the Set Clamp Quadrant Gear. The Main Exit Drive Gear provides drive to the Paper Clamp Assembly.

The position of the Set Clamps is monitored by two Sensors. These are the Upper and Lower Stack Height Sensors. The Set Clamp Actuator is fixed to the end of the Paper Clamp Shaft and triggers the Sensors when the Set Clamps are in either the upper or lower position. The Sensors and Actuator are only used to confirm that the Set Clamps are fully raised or lowered. They do not control drive to the Main Exit Drive Gear.

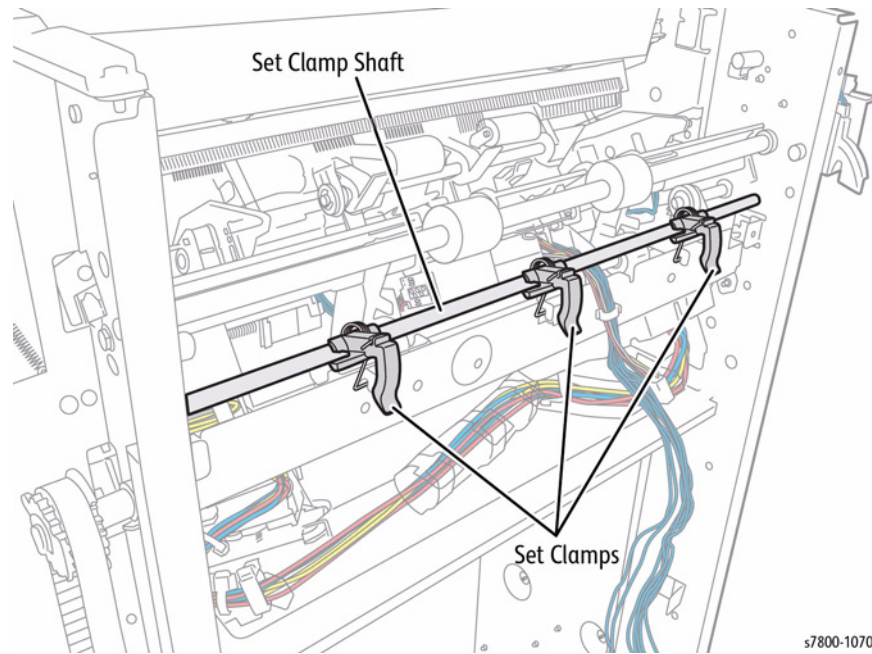


Figure 20 Set Clamps

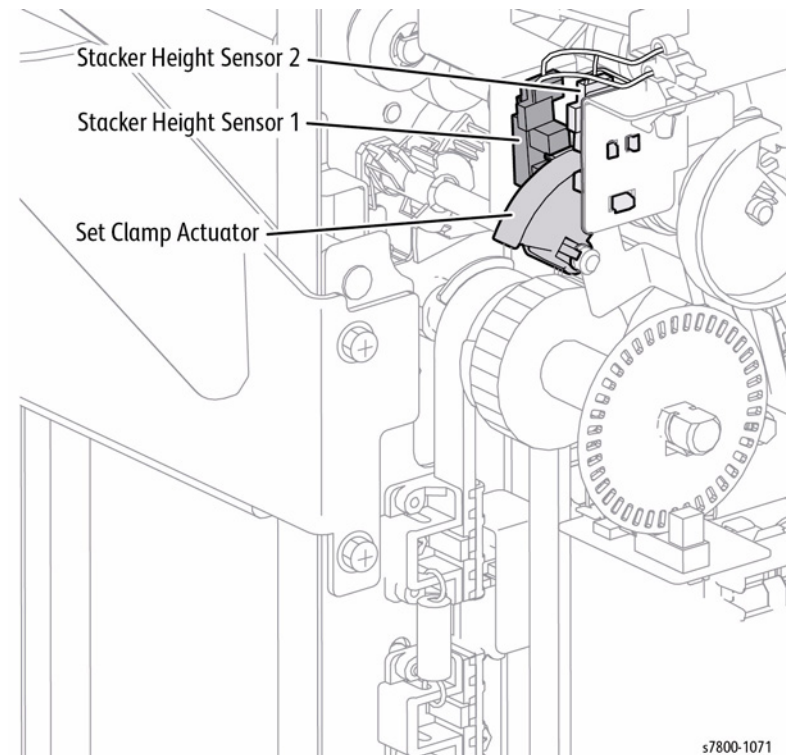


Figure 21 Sensors and Actuator

Booklet Maker

The optional Booklet Maker produces pre-created booklets with either 1 or 2 staples. The Booklet Maker is supplied with a Crease Assembly which is installed into the Advanced Finisher. The Booklet Maker consists of two separate component, the Booklet Creasing Unit and the Booklet Stapler Unit.

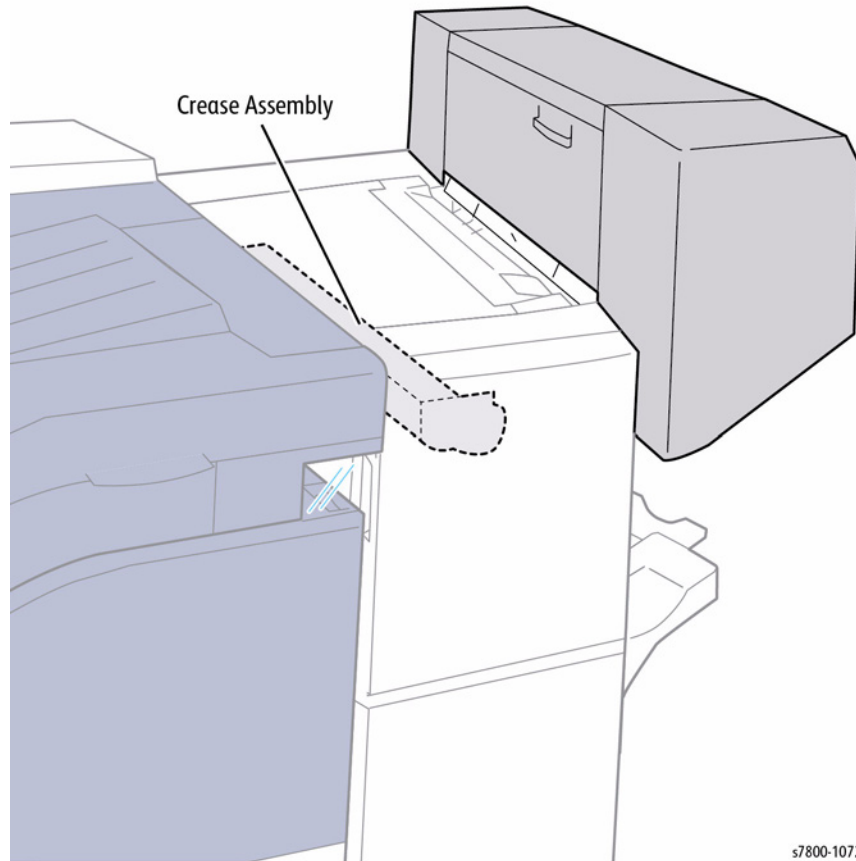


Figure 22 Booklet Maker

Power and Control

The Advanced Finisher supplies the Booklet PWB with +24V power through the Interconnection Harness.

The Booklet PWB controls all the Booklet Maker components and distributes + 24V to the Motors and + 5V to the sensors and interlocks.

The Crease Assembly is powered and controlled by the Finisher PWB.

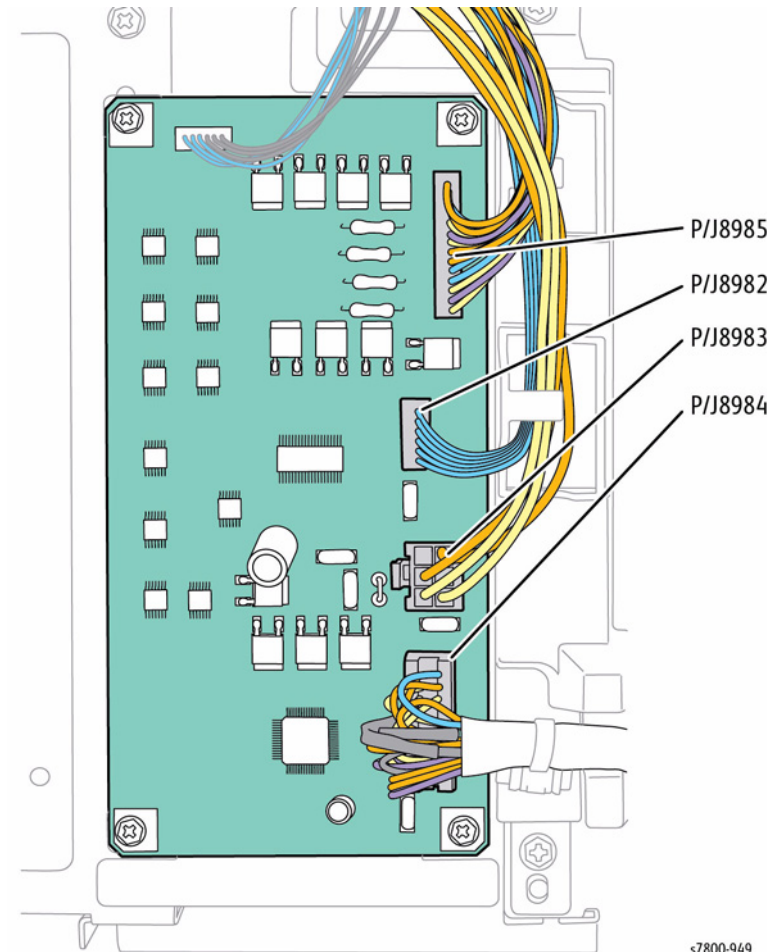


Figure 23 Booklet Maker PWB

Interlocks

The Front and Rear Booklet Stapler Safety Switches are actuated when either the Front or Rear Covers are raised.

These Interlocks prevent the Booklet Maker from operating when either the Front or Rear covers are obstructed, i.e., raised, or when the Booklet Maker is incorrectly mounted.

An Option Switch is used to detect when the Booklet Maker is installed on the Finisher. This Interlock is located on the Advanced Finisher, not the Booklet Maker.

When the Interlocks are open, power is removed and an error message displays on the UI.

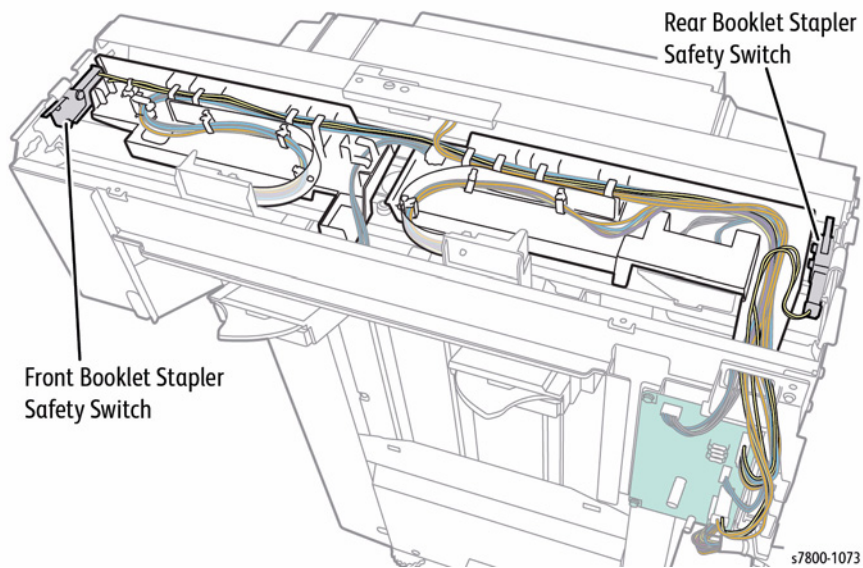


Figure 24 Interlocks

Stapler Assembly

The Booklet Maker contains two Staple Assemblies which support and staple compiled booklets prior to ejecting into the Stacker Tray. Each Staple Assembly contains a Staple Module and a Exit Sub Chute. The Staple Units are mounted on a Carriage Rail.

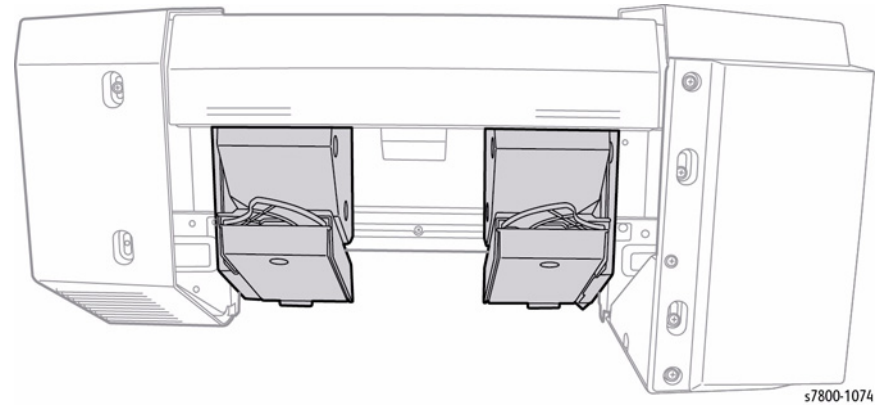


Figure 25 Stapler Assembly

The Stapler Assemblies are moved into position along the Carriage Rail by the Booklet Stapler Move Motor.

The Booklet Stapler Move Motor drives along two Rack Gears, one connected to each Stapler Assembly.

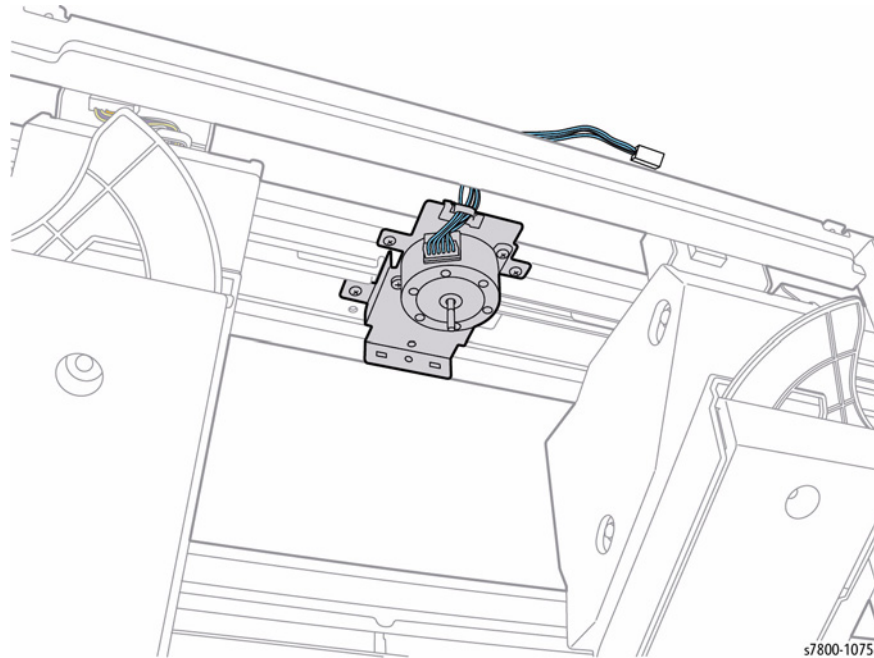


Figure 26 Booklet Stapler Move Motor

The position of the Stapler Assemblies is controlled by the Booklet Stapler Move Home Sensor and Booklet Stapler Move Position Sensor which monitor the position of the Rack Gears.

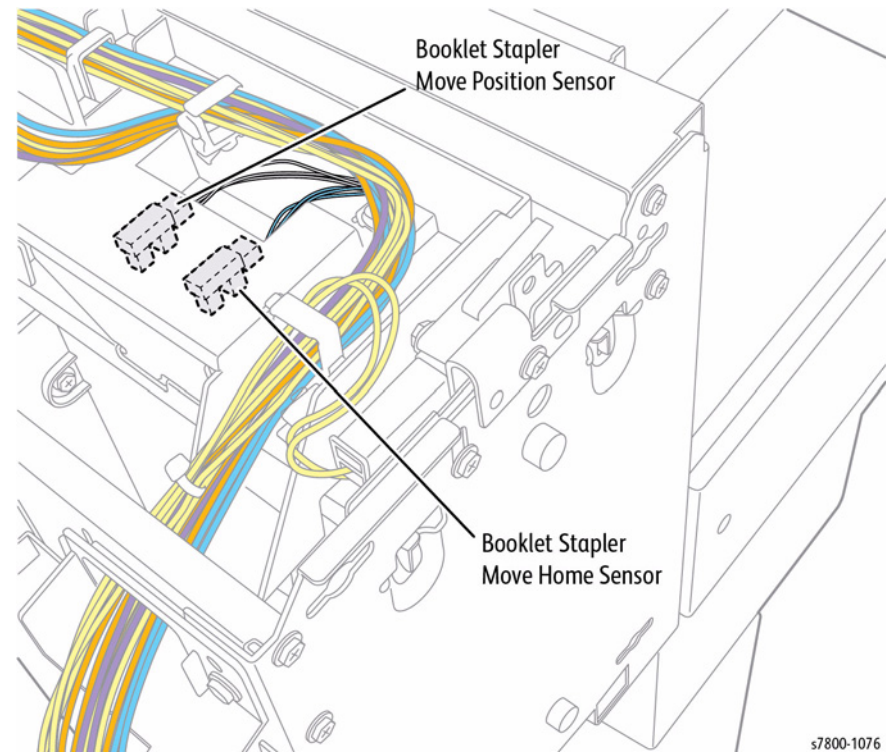


Figure 27 Booklet Stapler Move Home Sensor & Booklet Stapler Move Position Stapler

Crease Assembly

The Crease Assembly pre-creases sheets of paper prior to collating, stapling and stacking of Booklets. It is installed behind the Compiler within the Finisher LX and is controlled by the Finisher PWB.

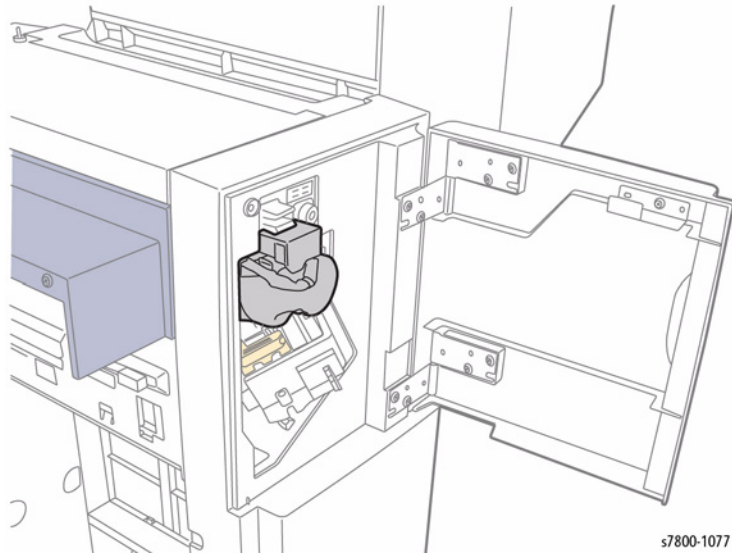


Figure 28 Crease Assembly

The Crease Assembly consists of a Folder Knife Motor, Gears, Crease Blade and Paper Chute.

The Folder Knife Motor raises and lowers the Crease Blade through one cycle of the Gears.

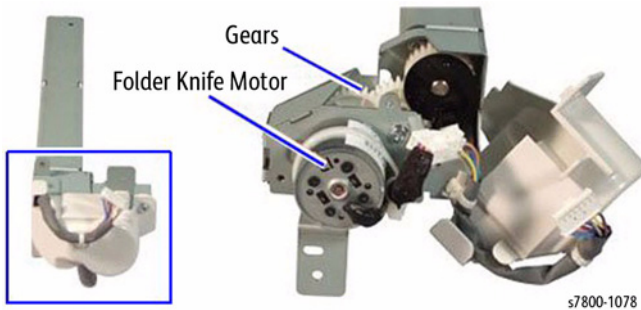


Figure 29 Folder Knife Motor

The action of the Crease Blade pressing the paper against the Paper Chute creates a pre-crease in the sheet of paper. The position of the paper within the Crease Assembly is monitored by the Entrance and Compiler Exit Sensors (part of the Advanced Finisher).

When the paper is in the correct position within the Paper Chute, the paper momentarily stops feeding and the Crease Blade is raised and lowered. Paper feed now resumes.

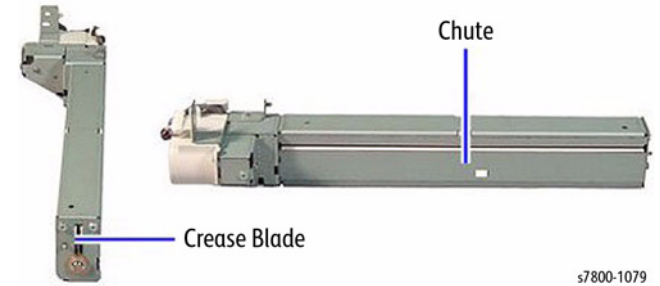


Figure 30 Crease Blade

Compiler Stapler

The Compiler Stapler has a Stapler Unit which is installed on a Stapler Mount.

The Stapler Mount moves the Stapler Unit to key stapling positions along the Rail.

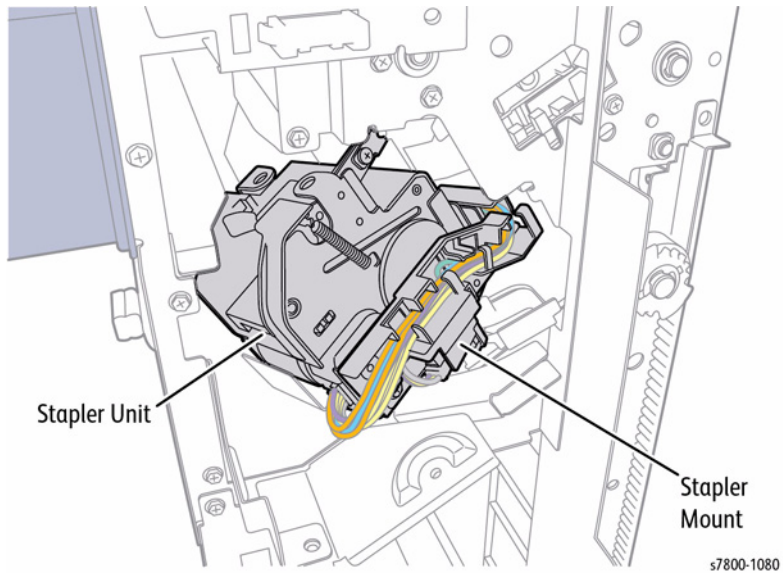


Figure 31 Stapler Unit

The Stapler Mount is driven by the Stapler Move Motor which is secured to the bottom of the Stapler Mount.

A Gear fixed to the end of the Stapler Move Motor drives the Stapler Mount along the Rail, which is an integral part of the Base Frame.

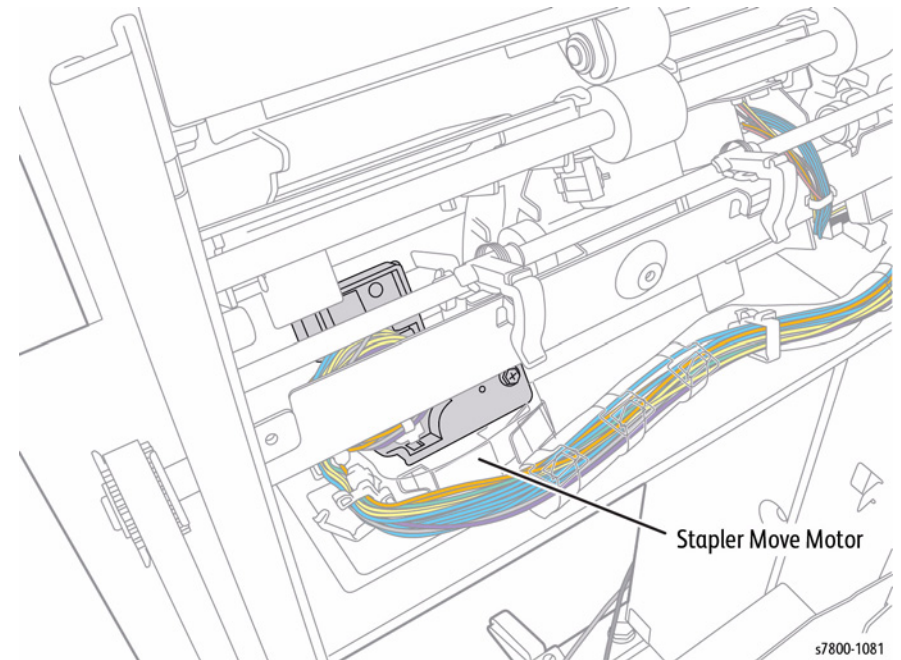


Figure 32 Stapler Move Motor

The position of the Stapler Mount is controlled by the Stapler Move Position Sensor.

As the Stapler Mount moves along the Base Frame, the light emitted between the two prongs of the Stapler Move Position Sensor is interrupted by one of three Positional Tabs. These are the End, Front and Rear Positional Tabs.

The End Positional Tab is used to indicate the correct position along the Base Frame for single stapling. The Front and Rear Positional Tabs are used to indicate the correct position along the Base Frame for double stapling.

The Staple Units contain a Staple Cartridge CRU, Staple Clinch Motor, Cam and a Staple Drive Mechanism.

When required, the Staple Clinch Motor is energized to drive the Cam.

One full rotation of the Cam causes the Staple Drive Mechanism to drive and clinch a Staple, stored in the Staple Cartridge CRU, through the paper set.

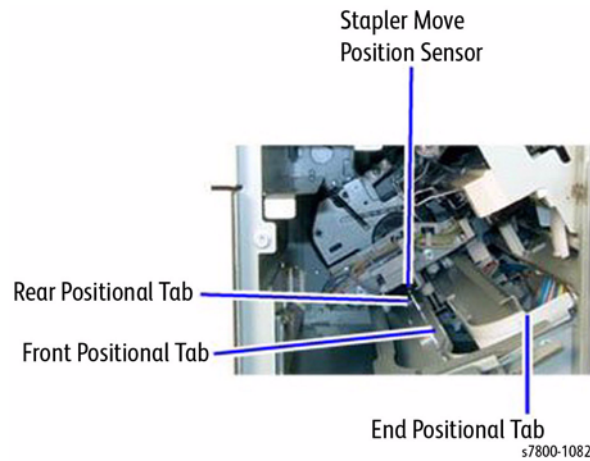


Figure 33 Positional Tabs

Hole Punch Assembly

The Hole Punch Assembly punches either 2 or 4 holes in Europe or 2 or 3 holes. The Hole Punch Assembly is installed within the Horizontal Transport. It is controlled by the Finisher PWB.

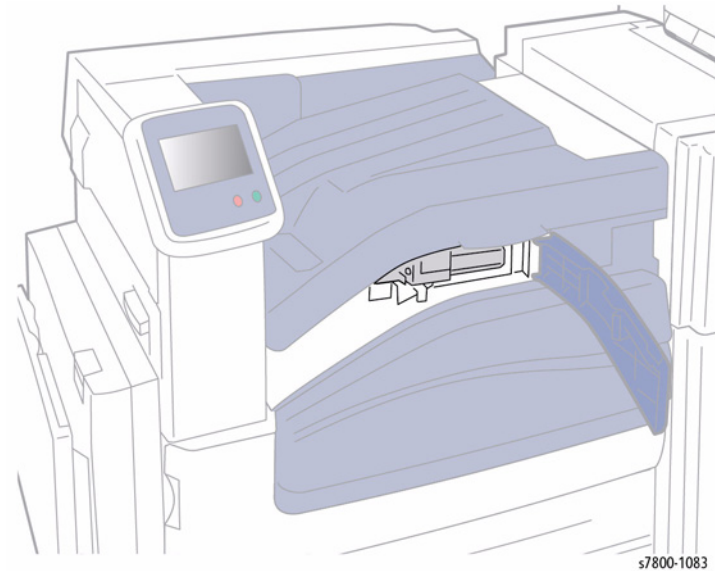


Figure 34 Hole Punch Assembly

The Hole Punch Assembly consists of a Motor, Gears, Main Cam, four (XE) or three (USSG, XCL) Punch Cams and a Punch Box.

The Motor raises and lowers the Punches through one cycle of the Gears. When the Motor rotates in a clockwise direction it operates the two inner Punch Cams and in a counter-clockwise direction it operates all four or three Punch Cams.

The operation of the Hole Punch is controlled by an Encoder and Sensor. The Encoder has a number of apertures cut into it and is connected to the motor.

As the motor rotates the Gears to operate the Hole Punch, the Encoder also rotates. The rotation of the Encoder is monitored by the Encoder Sensor which is an optical sensor that reflects light onto the Encoder.

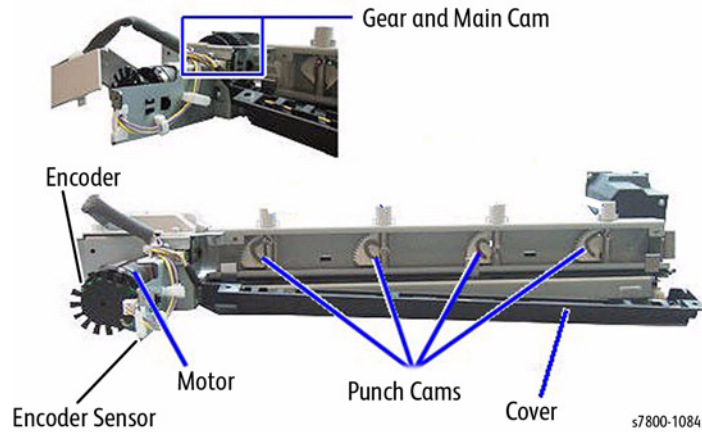


Figure 35 Hole Punch Assembly Components

Encoder Wheel and Sensor

The rotation of the Encoder Wheel causes the apertures to pass through the Encoder Wheel Sensor, allowing light to pass. This triggers the sensor, which indicates that the Hole Punch has rotated one cycle.

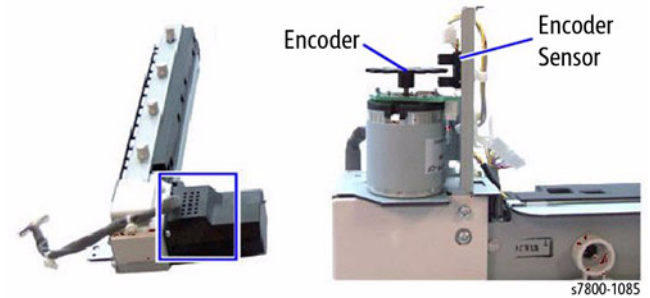


Figure 36 Encoder Sensor

Punch Box

The Punch Box is located beneath the Hole Punch Assembly and collects the discarded chads. The Punch needs to be emptied periodically.

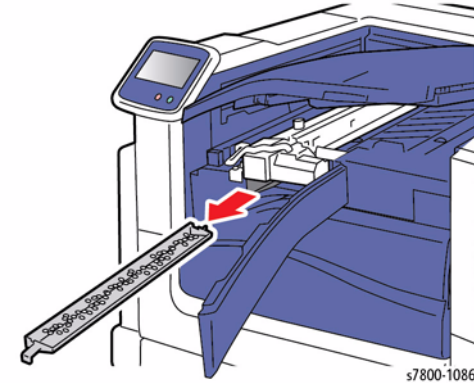


Figure 37 Punch Box

Paper Path

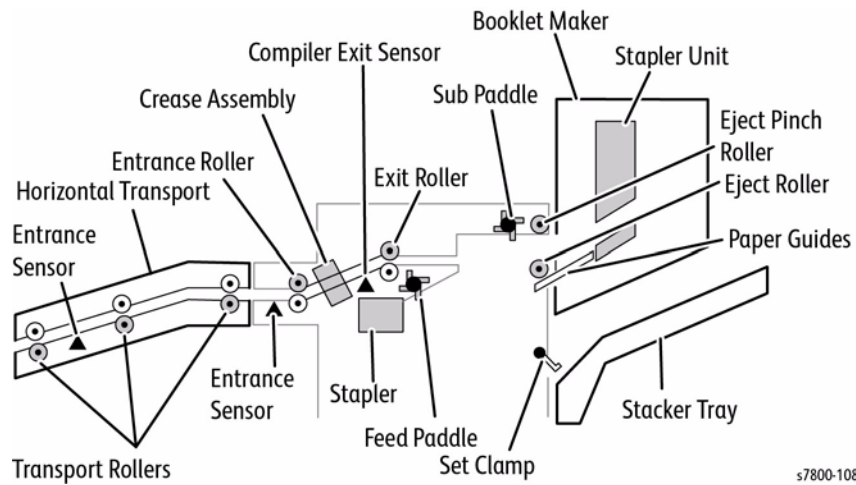


Figure 38 Advanced Finisher Paper Path

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(C) Professional Finisher

The Professional Finisher is a customer option and includes a Booklet Maker. The Professional Finisher has two trays and an interface unit that mates with the IOT. The Top Tray stacks and offsets 500 sheets. The Professional model holds and offsets 1500 sheet.

NOTE: The NVM list for the Professional Finisher ships with the unit and is affixed as shown on Figure 1. Do not discard this list.

The Finisher can compile and staple up to 50 sheets default. Twenty five to 75 may be set in NVM. Four staple settings can be selected. The Hole Punch feature can punch two, three, or four holes in the lead edge. The Booklet Maker on the Professional Finisher can saddle stitch and centerfold up to 15 sheets of 80 gsm paper.

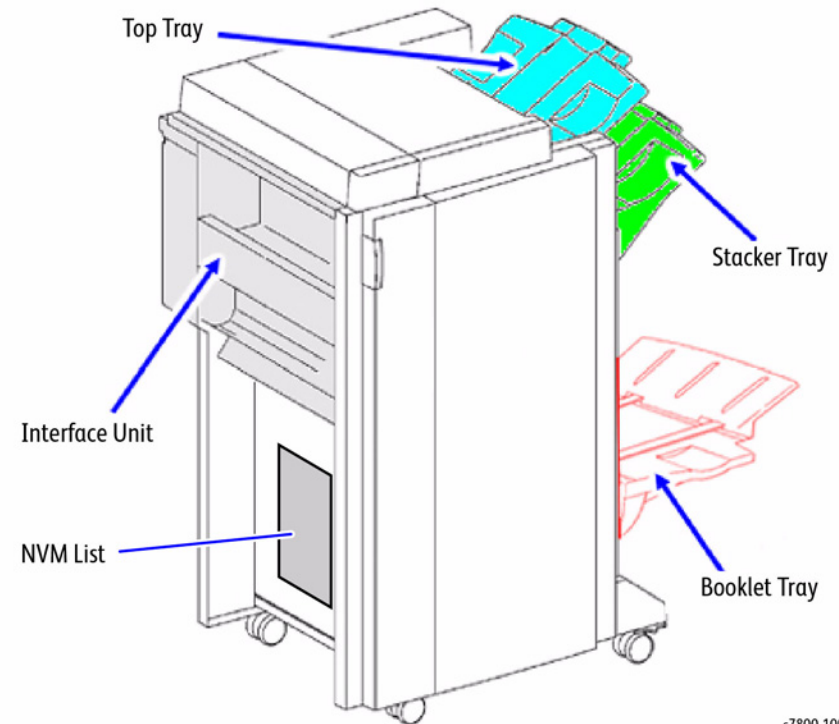


Figure 1 Professional Finisher

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Power and Control

- **Finisher Front Door Interlock** – Disables the Interlock +24VDC when opened.
- **Eject Cover Switch** - Disables the Interlock +24VDC when opened.

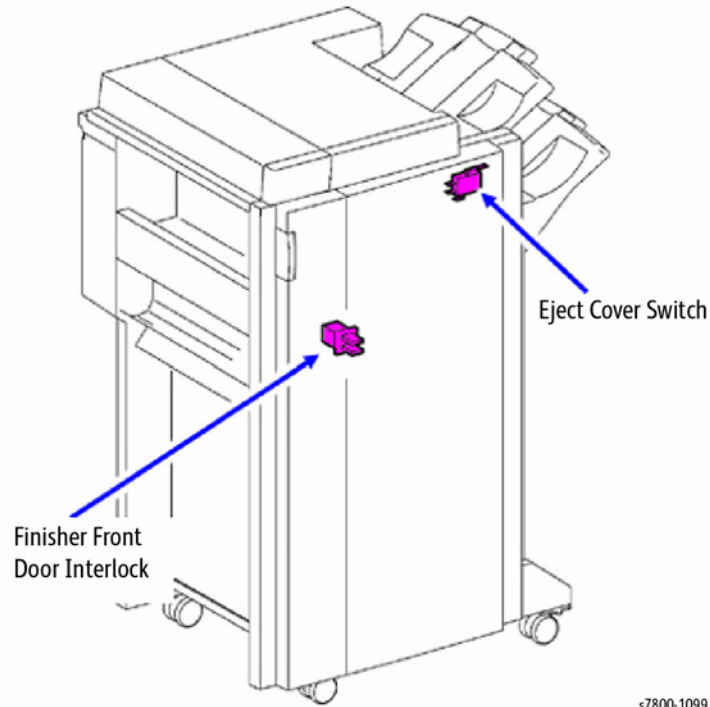


Figure 2 Interlock and Cover Switch

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- **Finisher PWB** – Controls the operation of the finisher, including communication with the Booklet Maker PWB.
- **Booklet PWB** – Controls the operation of the Booklet Maker.
- **H-Transport PWB** – Contains the electrical components for the Interface Transport (same PWB as other products).
- **Finisher LVPS** – Supplies +24VDC for the Finisher.

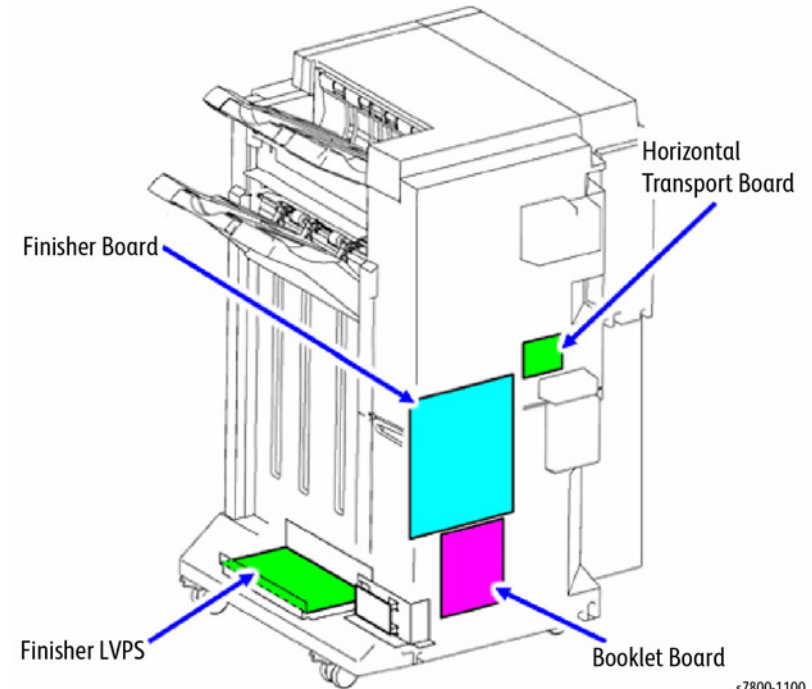


Figure 3 Finisher Printed Circuit Boards

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Power and Control: Switched Standby Power

AC Power is received from the Finisher Outlet on the machine. The AC is delivered to the Finisher Low Voltage Power Supply. The MCU PWB sends a Power Supply Enable signal through the Finisher PWB to the Finisher LVPS. The Finisher LVPS supplies 24 volts to the Finisher PWB that distributes the 24VDC to the finisher components and the H transport PWB and the Booklet PWB. The Finisher PWB also converts 24VDC to 5VDC and distributes the 5VDC to the H transport PWB and the Booklet PWB. The Finisher 24VDC lines are interlocked through the Eject Cover Switch and the Finisher Interlock Switch.

Drives

- **Finisher Transport Motor** – This motor provides drive for the Punch Entrance Roll, Compile Paddle Roll, and Booklet Entrance Roll.
- **Finisher Registration Motor** – This motor provides drive for the Top Tray Transport Roll and the Buffer Roll.
- **Finisher Exit Motor** - This motor provides drive for the Top Tray Exit Roll and the Sub Paddle Roll.

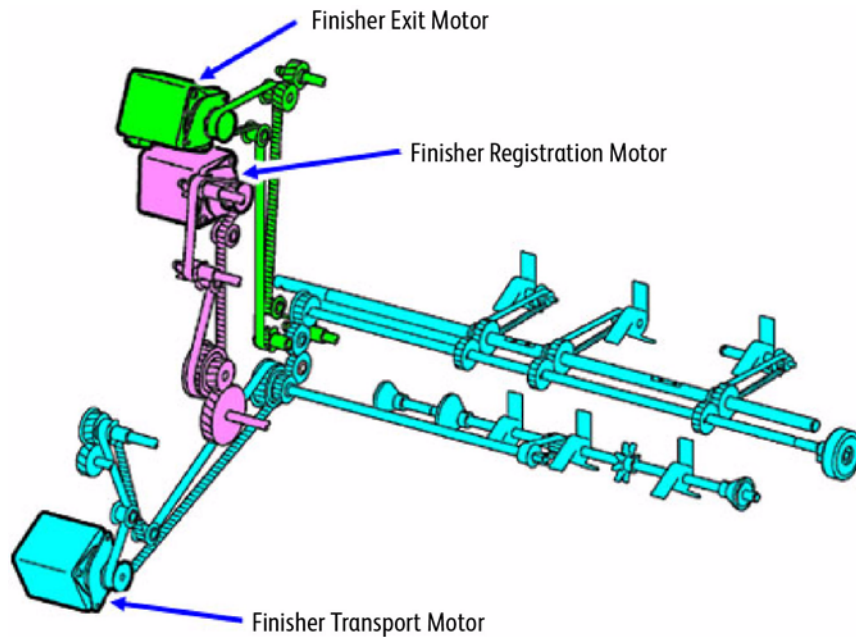


Figure 4 Drive Components

s7800-1101

Decurler Transport

Toner and heat from the fuser may cause the prints to curl. The extent of the curl depends on factors such as image density, humidity, paper quality, paper size, and Simplex/Duplex mode. To remove the curl, the Decurler applies pressure in the opposite direction of the curl.

The Decurler Transport Assembly is located in the H-Transport Module.

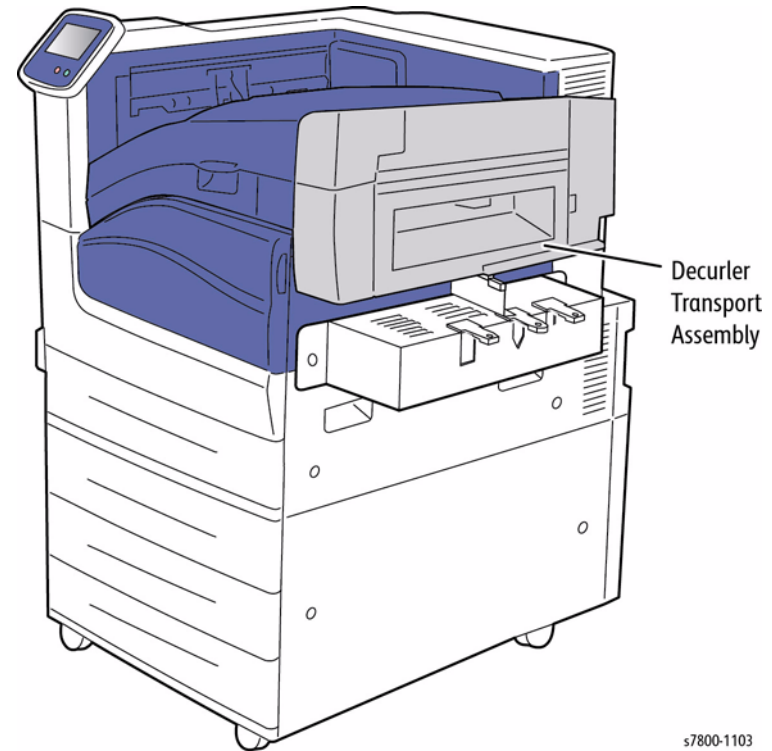


Figure 5 Decurler Transport

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Top Tray

When stapling is not required and the job is less than 500 sheets, the operator can select the Top Tray for Finisher output. An added feature of the Top Tray is that the sets are offset to help separate the job once it is printed.

- **Top Tray Exit Sensor** - This photo interrupter sensor monitors paper delivered to the Top Tray.
- **Top Tray Full Sensor** - This reflective sensor monitors the amount of paper in the Top Tray.

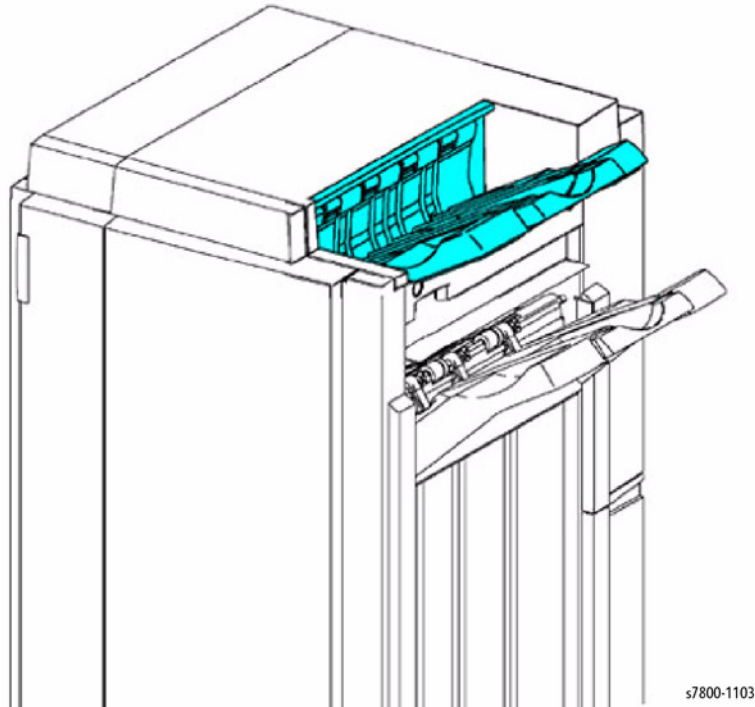


Figure 6 Top Tray

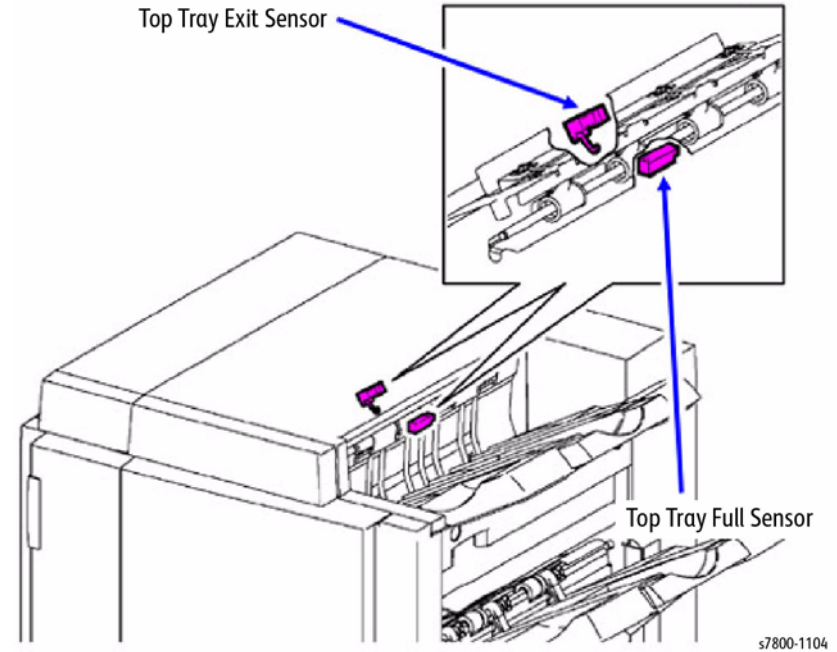


Figure 7 Top Tray Sensors

Top Tray: Offset Stacking

Paper is stacked in an offset position by the movement of the Top Tray Exit Roll in the front-to-rear direction. A sector gear is rotated by the Top Tray Offset Motor which mechanically slides the exit roll front-to-rear. The actuator installed on the sector gear is used to block (actuate) the Top Tray Offset Sensor to monitor the position of the exit roll (front or rear position).

- **Top Tray Offset Motor** - This motor positions the Top Tray Exit Roll front-to-rear.
- **Top Tray Offset Sensor** - This sensor detects the front-to-rear position of the Top Tray Exit Roll.

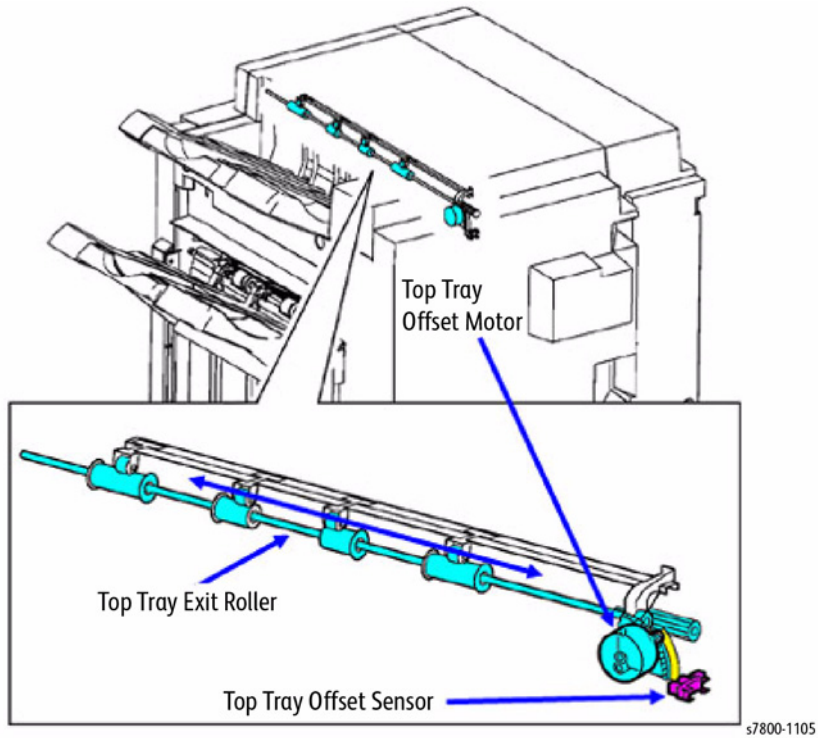


Figure 8 Offset Stacking

Top Tray

A signal from control logic initiates offset operation and is applied to paper width between 203.0mm and 297.0mm. Paper outside these parameters will be delivered in the center position. The center position is the default position. The offset distance is 15mm from center.

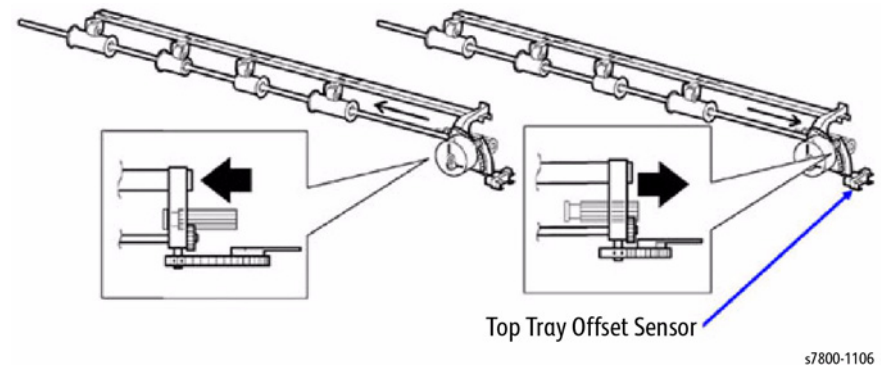
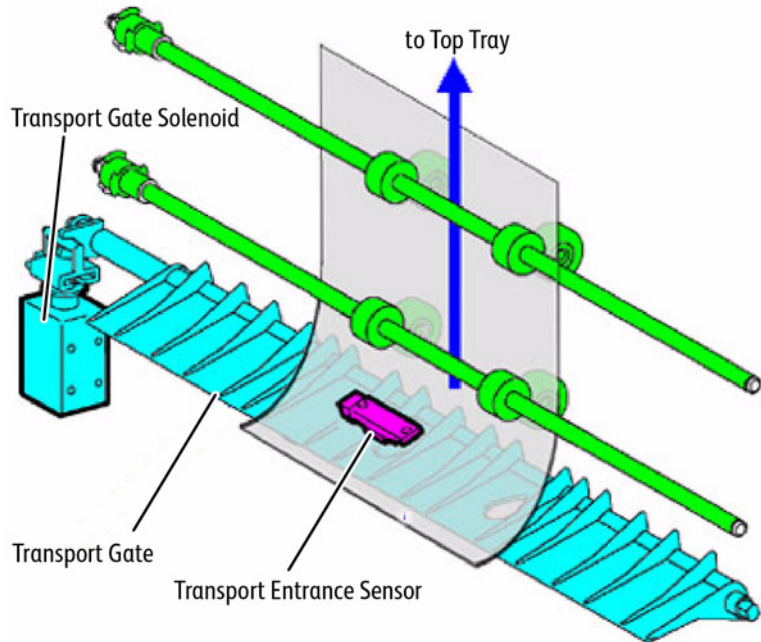


Figure 9 Top Tray Offset Sensor

Transfer Gate

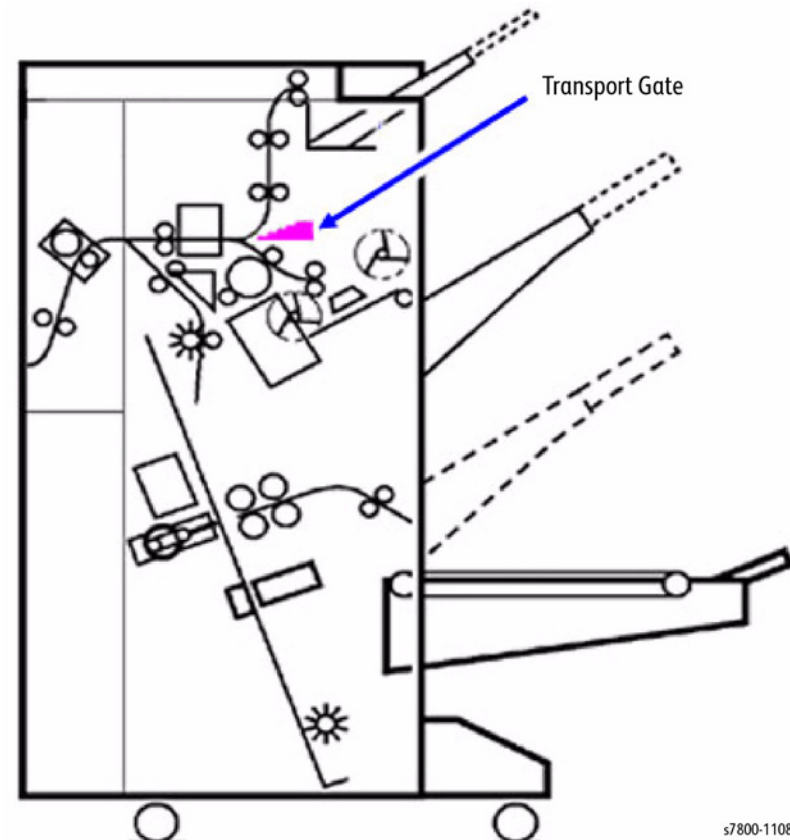
- **Transport Entrance Sensor** - This sensor monitors paper delivered to the Transport Gate.
- **Transport Gate Solenoid** - This solenoid positions the Transport Gates to select the paper delivery direction (Top Tray direction or Stacker Tray direction).



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Figure 10 Transfer Gate Components

The position of the Transport Gate determines the destination for the print. If stapling is selected, the Transport Gate will direct the prints towards the Stacker Tray. If stapling is not selected, the gate will direct the prints towards the Top Tray.



s7800-1108

Figure 11 Transfer Gate Location

Buffer Path

- **Buffer Gate Solenoid** - This solenoid positions the Buffer Gate and selects the paper delivery direction (Stacker Tray direction or Buffer Path direction).
- **Buffer Path Sensor** - This sensor monitors paper delivered to the Buffer Path.
- **Compiler Exit Sensor** - This sensor monitors paper delivered to the Compiler Tray.

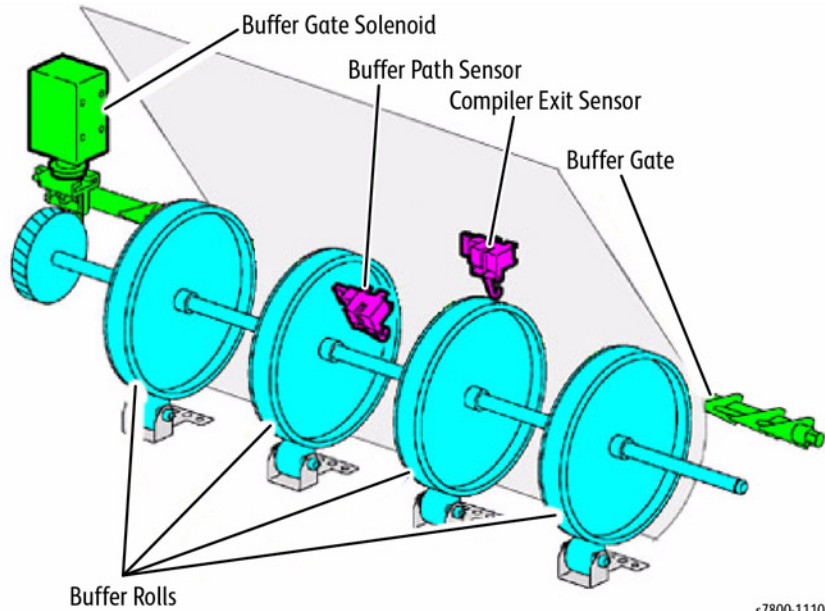


Figure 12 Buffer Path Components

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When producing multiple sets of prints, it is important to prevent the first sheet of each set from being delivered to the Compiler Tray while the first set is being stapled in the Compiler Tray or being sent to the Stacker Tray.

Therefore, when the first sheet of each set is being sent to the Finisher, control logic will energize the Buffer Gate Solenoid when the second sheet actuates the Transport Entrance Sensor (see Transport Gate). When the Solenoid lifts the gate, the first sheet of each set will be directed into the Buffer Path and wraps around the Buffer Rolls.

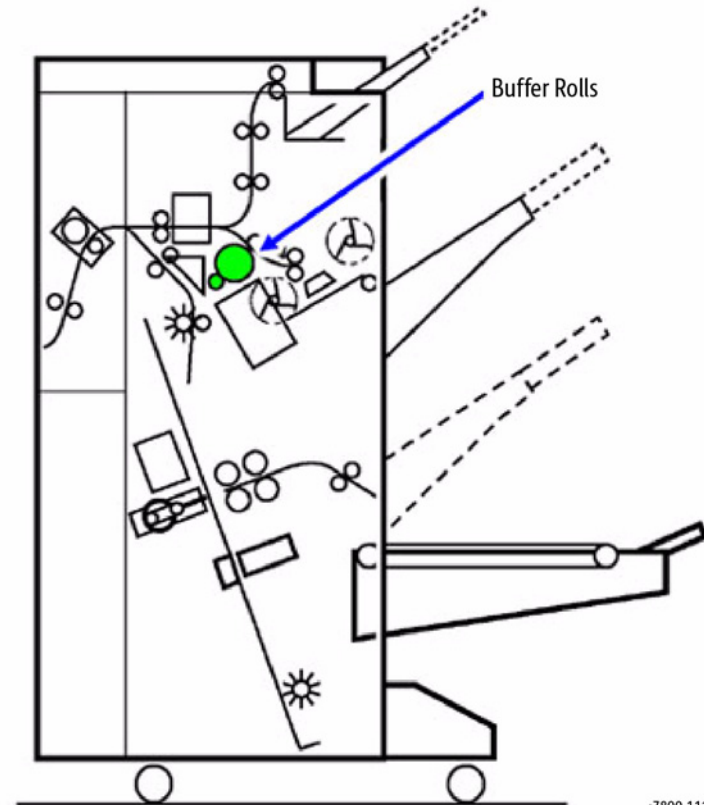


Figure 13 Buffer Rolls

s7800-1111

In this way, the timing for the paper delivered to the Compiler Tray will be delayed as the print travels around the Buffer Rolls. During this interval, the first set of prints is stapled and ejected.

If the second sheet is a different size from the first sheet, the feed time of the second sheet of paper is delayed to avoid colliding with the first sheet.

NOTE: The Buffer Path is only used for paper size 216mm or less.

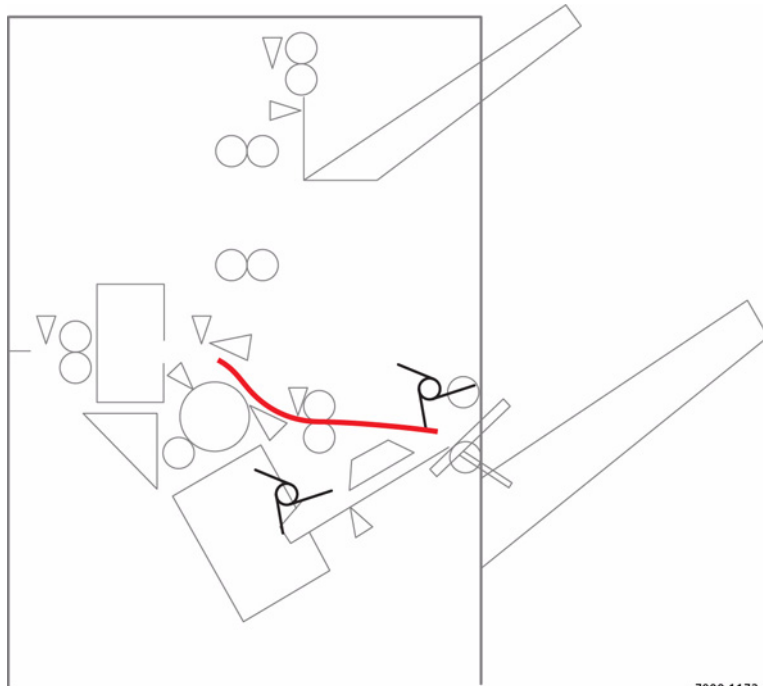


Figure 14 Buffer Path

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Compiler Tray

The Compiler Tray assembles and aligns print sets for collation, punching, or stapling.

Components

- **Compiler Tray No Paper Sensor** - This sensor is unblocked when paper is present in the Compiler Tray.
- **Front and Rear Tamper Home Sensor** – These sensors detect the home position of the Tampers. The home position serves as a starting point for controlling the Tamper Motors.
- **Front and Rear Tamper Motor** - The stepper motors move the Tampers left and right to align the print set.

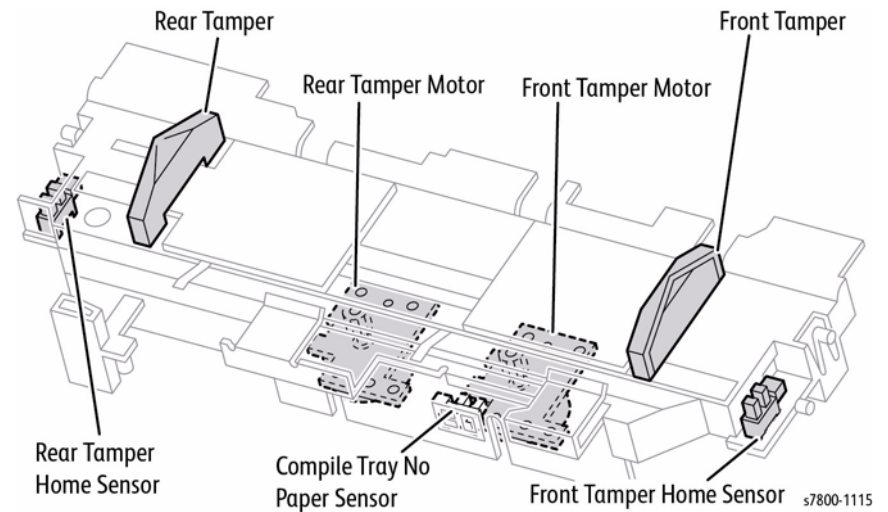


Figure 15 Compiler Tray Components

Paper Capacity

Compiler Tray capacity varies by paper size or if the set is stapled and can be changed in NVM. If the paper capacity is exceeded in a stapled set, the finisher will staple the maximum and then deliver the unstapled remaining sheets to the top of the stapled set. Refer to the table on the right for Compiler Tray paper capacity.

NOTE: In order for the sets to be stapled, they must be the same width (example: 8.5 X 11 LEF and 11 X 17). If the sets contain different width paper, they will be delivered to the Stacker Tray unstapled.

Table 1 Paper Capacity

Mode	Min.	Default	Max.
Stapled Sets (number of sheets)	25	50	75
Unstapled sets for paper shorter than 216mm in the transport direction	2	10	50
Unstapled sets for paper longer than 216mm in the transport direction.	2	10	50

Tamping Operation

The Compiler Tray will tamp sets according to the stapled output selected by the operator. Refer to the table on the right for tamping operation by staple position.

Table 2 Tampering Operation

Tamping Type	Overview	Staple Selection
Front Tamping	The Rear Tamper moves and the Front Tamper remains at the home position.	When no stapling is selected. Front stapling (corner) is selected.
Rear Tamping	The Front Tamper moves and the Rear Tamper remains at the home position.	When Rear stapling (corner) is selected. When dual stapling is specified.
Center Tamping	Both the Front and the Rear Tampers operate to align the set to the center position.	When Rear stapling (straight) is selected.

Offset Stacking

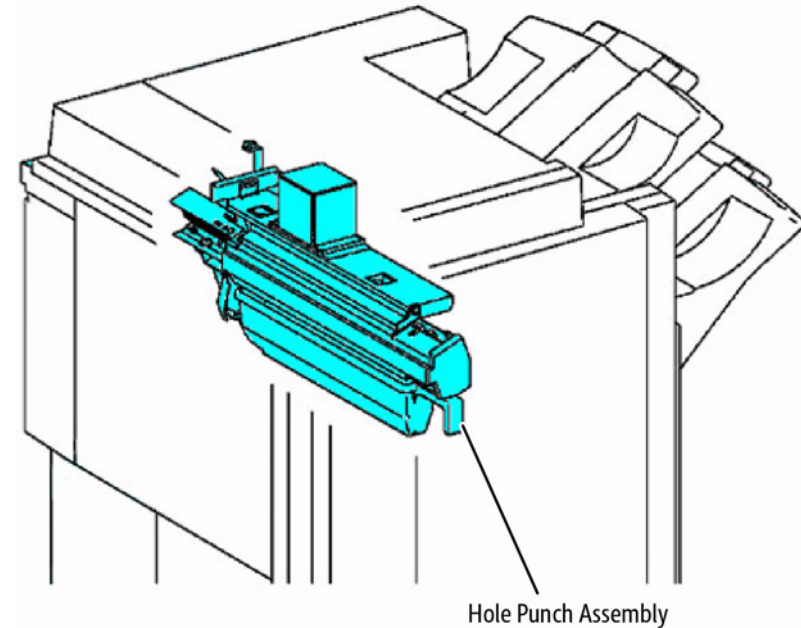
The Compiler Tray will vary the offset under the following conditions.

Table 3 Offset Stacking

Stapling Position	
Front Stapling Corner	The stapled paper will be moved 20mm towards the rear by the Front Tamper and output to the Stacker Tray.
Rear Tamping	The Front Tamper moves and the Rear Tamper remains at the home position.
Center Tamping	Both the Front and the Rear Tampers operate to align the set to the center position.

Hole Punch

The Hole Punch feature can punch 2, 3, or 4 (depending on market region) holes into each individual sheet as it passes through the Punch Assembly.



s7800-1116

Figure 16 Hole Punch Assembly

The Punch Motor drives a cam bar that pushes the punch pins. The holes are fixed in relationship to each other. The Puncher Move Motor moves the entire block of punch pins front or back to position the punch pins.

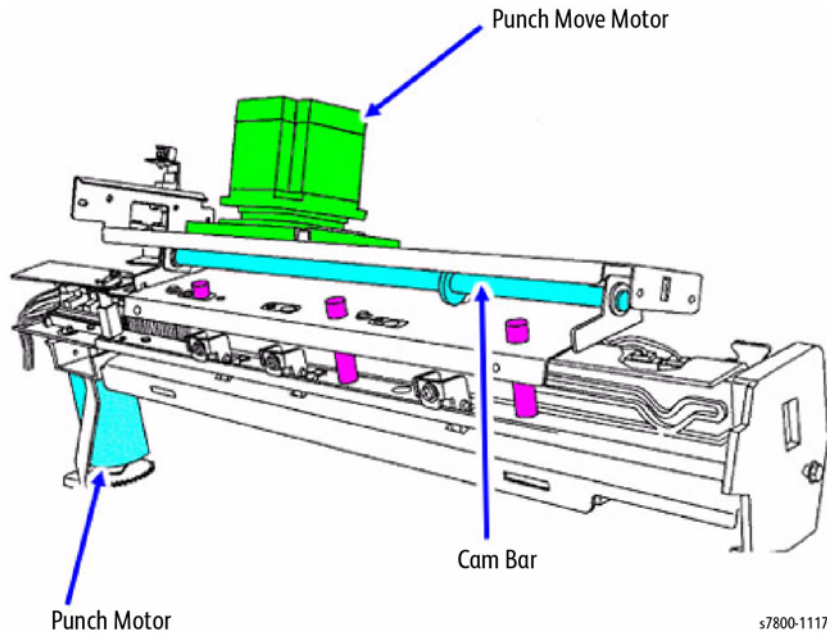


Figure 17 Motors

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Components

- **Puncher Move Motor** - This stepper motor moves the puncher assembly front and back.
- **Puncher Motor** - This DC motor moves the Cam Plate that drives the punch pins through the paper. The Cam Plate moves toward the front when the motor rotates clockwise and toward the rear when the motor rotates counterclockwise.
- **Punch Box Set Sensor** - This photo interrupter sensor detects the presence of the Dust Box that holds the chad. When the Dust Box is installed, an actuator on the Dust Box will block the sensor.

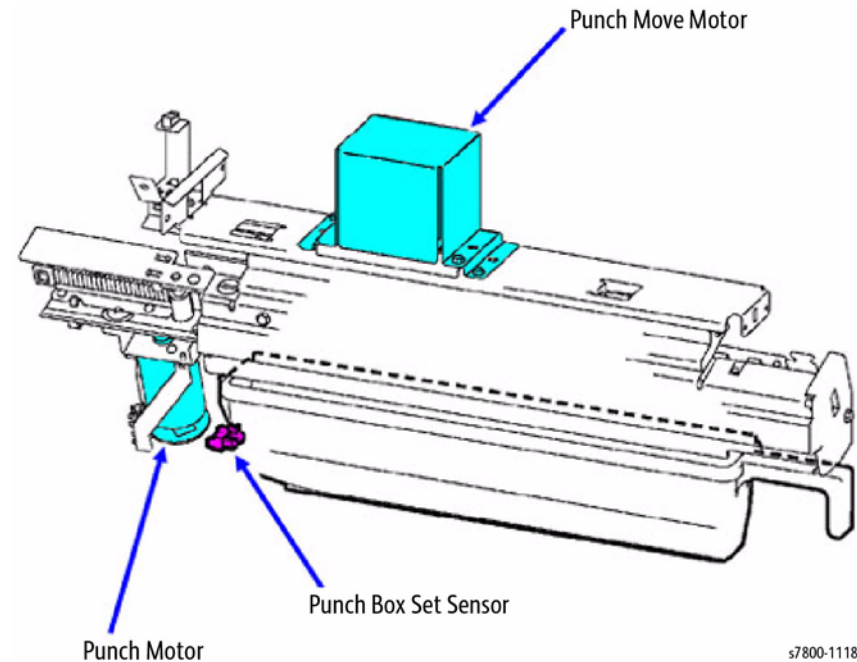


Figure 18 Motors and Sensor

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- **Side Registration Sensor 1** - The Reflective Sensor detects the side edge of large-sized paper.
- **Side Registration Sensor 2** - The Reflective Sensor detects the side edge of small-sized paper.
- **Puncher Move Home Sensor** - The Photo Interrupter Sensor detects the home position of the puncher assembly.
- **Puncher Motor Sensor** - The Photo Interrupter Sensor detects the pulse of the Actuator on the Puncher Motor. This sensor counts the Puncher Motor rotations and serves as the trigger to stop the Motor.

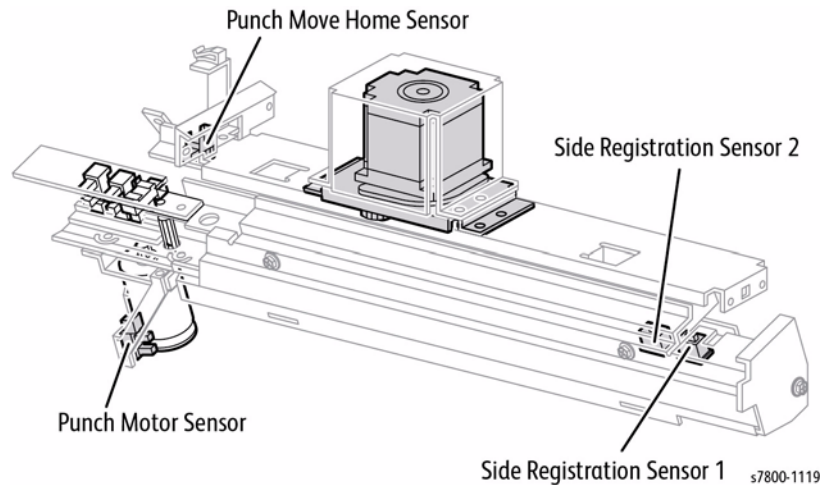


Figure 19 Sensors

- **Puncher Home Sensor** - This photo interrupter sensor detects the home position of the Cam Plate that drives the punch pins.
- **Punch Hole Select Sensor** - This photo interrupter sensor detects the rear position of the Cam Plate. It also detects the switch between 2 punched holes or 3, 4 punched holes.
- **Puncher Front Sensor** - This photo interrupter sensor detects the front position of the Cam Plate. Based on input from this sensor, control logic determines whether the Cam Plate is to move to the front or to the rear.

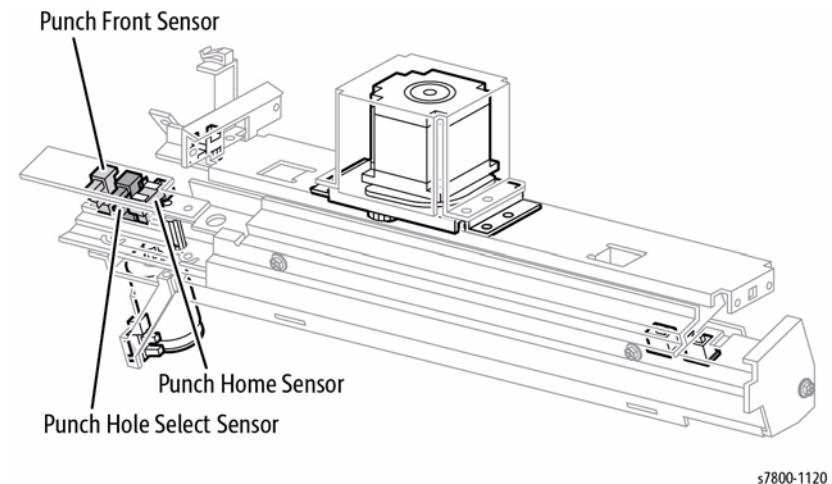


Figure 20 Sensors

Puncher Positioning

Punch Position in the Process Direction

To correctly register prints for punching in the process direction, the Registration Motor briefly stops and reverses direction to register the print against the Guide Assembly inside the Puncher Assembly. The Guide Assembly serves as a hard stop for punch registration. After the print is punched, the Registration Motor again reverses direction to drive the print to the Compiler area.

Punch Position Side-To-Side

1. The Puncher Move Motor switches on clockwise to move the Punch Assembly towards the front until the Puncher Move Home Position Sensor is unblocked.
2. Then the Puncher Move Motor reverses direction and moves the Puncher Assembly towards the rear until the Puncher Move Home Position Sensor is blocked. Home position is now determined.
3. Then the Puncher Move Motor rotates clockwise until the front edge of the paper is detected by Side Registration Sensor 1 or 2. Additionally, the puncher will continue to move to the front the specified pulse count based on the size of the paper. The Puncher Assembly is now in the correct punch position.

Dust Box Full Detection

There is no sensor to detect the level of hole scraps in the Dust Box. Instead, control logic tracks the number of punch operations in NVM and informs the operator of a near-full condition via the UI.

Dust Box Detection

The Punch Box Set Sensor detects the presence of the Dust Box. If the Dust Box is not detected for a specified time interval, control logic resets the Dust Box Full counter in NVM.

Stapler

The stapler can staple compiled sets in a number of staple positions.

- **Staple Move Home Position Sensor** - The Sensor detects the home position, Rear Stapling (Corner) position, and Rear Stapling (Straight) position of the Stapler.
- **Staple Move Motor** - The Motor moves the Stapler Head. Clockwise rotation moves the Stapler Head to the rear and counter-clockwise rotation moves it to the front.

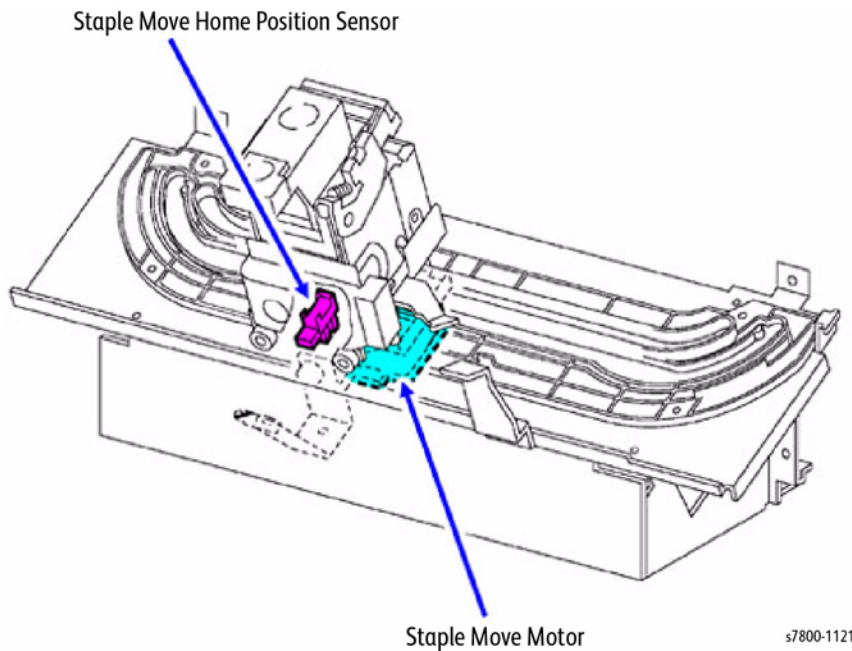


Figure 21 Sensor and Motor

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Components

- **Low Staple Sensor** - The Sensor detects when the staple cartridge needs to be replaced. A message is displayed on the UI for the operator.
- **Self-Priming Sensor** - The Sensor detects when the staple cartridges are in position at the front end of the Stapler Head. This sensor also detects stapling failure.
- **Stapler Home Sensor** - The Sensor detects the home position of Stapler Head, stapling failure and functions as the brake trigger for the Staple Motor.
- **Stapler Motor** - The bi-directional Motor drives the Stapler Head to perform the stapling operation. When this motor rotates in the clockwise direction, stapling occurs; when it rotates counter-clockwise, the stapler is returned to the standby or open condition.

NOTE: The components are located inside the Stapler Assembly.

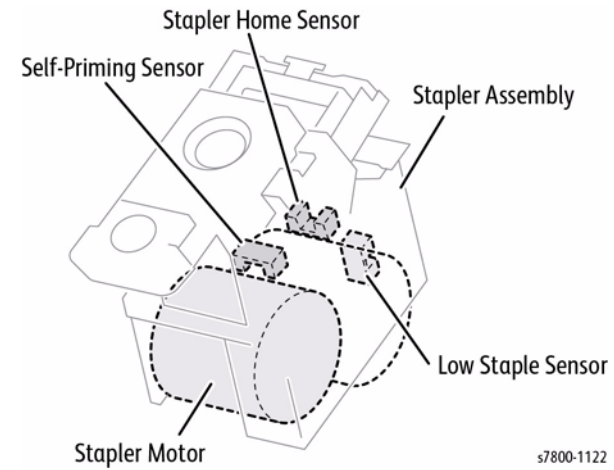
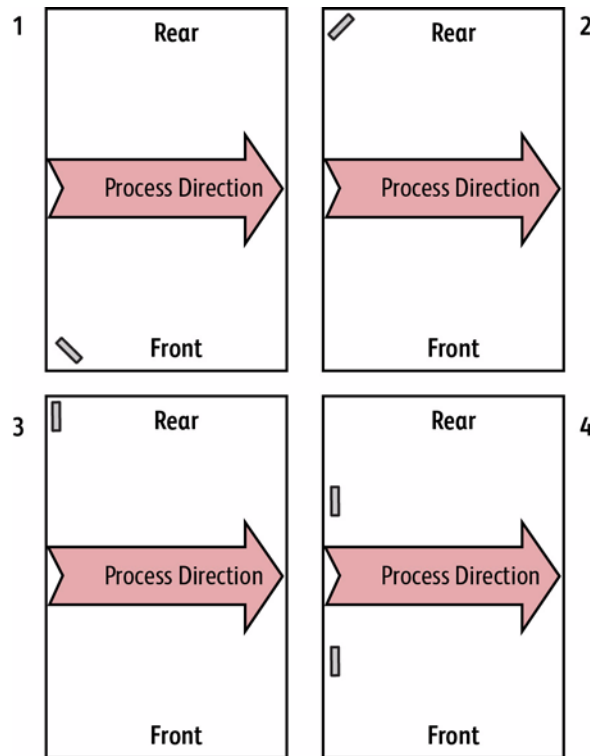


Figure 22 Stapler Components

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Stapling Position

1. **Front Stapling (Corner) (Front Corner)** - The Rear Tamper will align the paper to the front and the Stapler will staple the paper at 45 degree.
2. **Rear Stapling (Corner) (Rear Corner)** - Rear Stapling (Corner) is applicable to paper with a width wider than 250mm. The Front Tamper will align the paper to the rear and the Stapler will move to the rear corner to staple the paper at 45 degree.
3. **Rear Stapling (Straight) (Rear Straight)** - Rear Stapling (Straight) is applicable to paper with a width less than 250mm. Front Tamper will align the paper to the rear and the Stapler will staple parallel to the edge of the paper.
4. **Dual Stapling (Dual)** - The position for Dual Stapling is fixed. The Front Tamper will align all paper sizes to the center position and two staples will be applied to the front and rear of the paper, parallel to the edge of the paper.



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Figure 23 Stapling Position

Supported Paper Sizes

Depending on the stapling position, the set of paper sizes that can be stapled is different.

- **Front Stapling;**
 - More than 203.0mm and less than 297.0mm in Fast Scan length.
 - More than 182.0mm and less than 432.0mm in Slow Scan length.
- **Rear Stapling (Corner):** Fast Scan length of 250.0mm and above is supported.
- **Rear Stapling (Straight):** Fast Scan length of less than 250.0mm is supported.
- **Mixed Size Stapling:** In order for the sets to be stapled, they must be the same width (example: 8.5 X 11 LEF and 11 X 17). If the sets contain different width paper, they will be delivered to the Stacker Tray unstapled.
- **Paper Capacity for Stapling:** To prevent damage to the Stapler mechanism, the amount of paper that can be stapled is restricted. The maximum number of paper in the Compiler Tray for Stapling is 50 sheets by default of 64 to 90gsm. (The value can be changed (25 to 75 sheets) in NVM.)

If the set of printouts to be stapled exceeds the paper limit of the Compiler Tray for Stapling, additional prints will be forced to the Stacker Tray without being stapled.

After the forced delivery, if the paper count for the succeeding set to be stapled exceeds the limit of the Compiler Tray for Stapling, the entire print set will be forced delivered to the Stacker Tray without being stapled.

After the forced delivery, even if the paper count for the succeeding set to be stapled does not exceed the limit of the Compiler Tray for Stapling, the print sets will be forced delivered to the Stacker Tray without being stapled.

Stacker Tray

The Stacker Tray will lower to the appropriate position according to the amount of paper delivered from Compiler Tray until the Full Stack condition is detected.

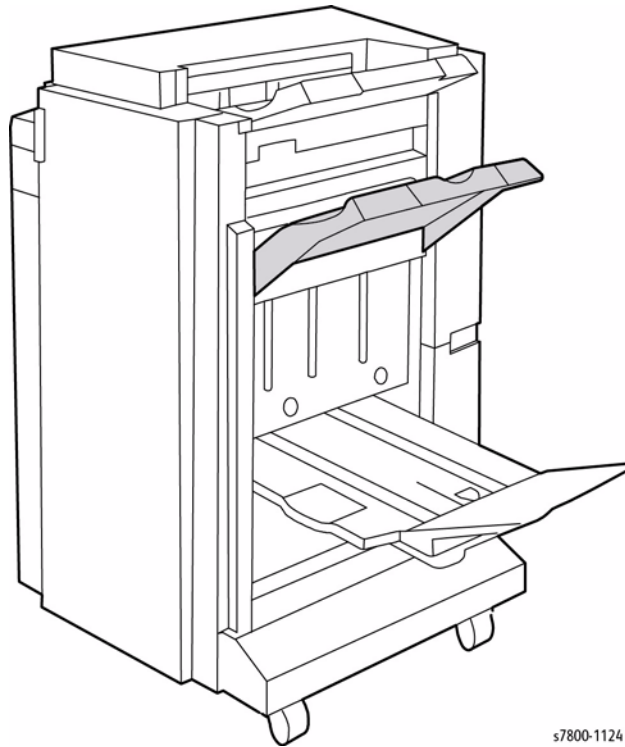


Figure 24 Stacker Tray

Specifications

The Stacker Tray is part of the Advanced Finisher and the Professional Finisher. Specifications are different for the two configurations. Refer to the table on the right for both Finisher configurations.

Table 4 Specifications

Configuration	Stapling Not Selected	Stapling Selected (Max/ 50 sheets)	Specifications
Advanced Finisher	3000 sheets	200 Sets (1 staple) 100 Sets (2 staples) or 3000 Sheets	Paper Size: 216.0mm or smaller in the Slow Scan direction
	1500 sheets	100 Sets or 1500 Sheets	Paper Size: 216.0mm or larger in the Slow Scan direction
	300 sheets or more	70 Sets or 200 sheets	When paper is larger than 279.4mm in Fast Scan direction and there are various sets of paper including non-stapled sets and stapled sets with different stapling positions.
Professional Finisher	1500 Sheets	200 Sets (1 staple) 100 Sets (2 staples) or 3000 Sheets	Paper Size: 216.0mm or smaller in the Slow Scan direction
	1500 Sheets	100 Sets or 1500 Sheets	Paper Size: 216.0mm or larger in the Slow Scan direction
	300 Sheets or more	70 Sets or 200 sheets	When paper is larger than 279.4mm in Fast Scan direction and there are various sets of paper including non-stapled sets and stapled sets with different stapling positions.

Stacker Components

- **Stacker Height Sensors 1 and 2** - These sensors consist of an emitter and a receiver to monitor the height of the paper delivered to the Stacker Tray. The Elevator Motor is controlled based on this output.
- **Stacker No Paper Sensor** - The Photo Interrupter Sensor detects when the Stacker Tray is at the top position. This sensor also detects a No Paper condition. The actuator is located on the carriage assembly.
- **Upper Limit Sensor** - The Photo Interrupter Sensor detects abnormal elevation of the Stacker Tray when it exceeds the top position (Stacker No Paper Sensor detection position).

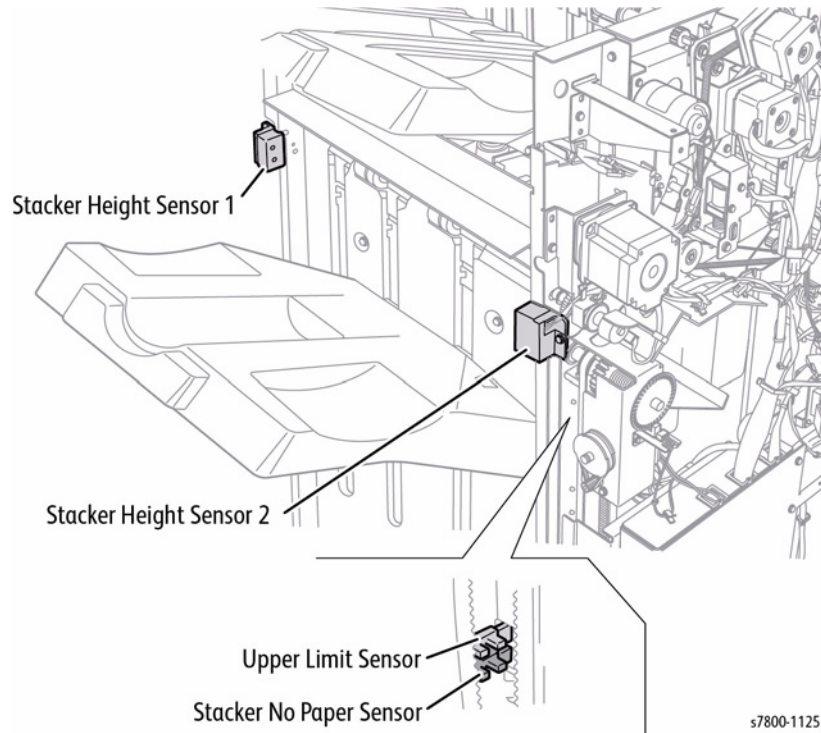


Figure 25 Sensors

- **Stack Encoder Sensor** - The Stack Encoder Sensor counts the pulses of the Encoder installed on Shaft-Elevator Motor. Based on this output, the amount of paper delivered to the Stacker Tray is calculated.
- **Elevator Motor** - The Motor raises or lowers the Stacker Tray. The Stacker Tray will be elevated when the motor rotates clockwise; and lowered when it rotates counter-clockwise.

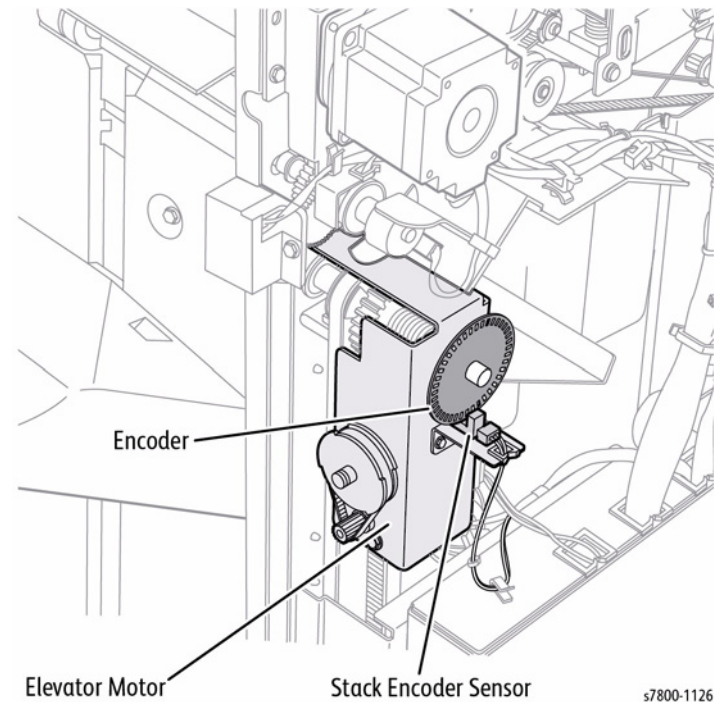


Figure 26 Motor and Sensor

- **Eject Motor** - The Eject Motor is used to deliver the stapled or unstapled print sets to the Stacker Tray. When this motor rotates clockwise, print sets are delivered to the Stacker Tray; when it rotates counter-clockwise; the Eject Roll is rotated counterclockwise to deliver paper from the Puncher to the Compiler Tray.
- **Set Clamp Home Sensor** - The Photo Sensor detects the home position of Set Clamp. The purpose of the Set Clamp is to hold the trail edge of the finished sets down in the Stacker tray. This sensor turns the Set Clamp Clutch On/Off.
- **Set Clamp Clutch** - The Set Clamp Clutch transfers drive from the Eject Motor to the Shaft Assembly Eject Roll.

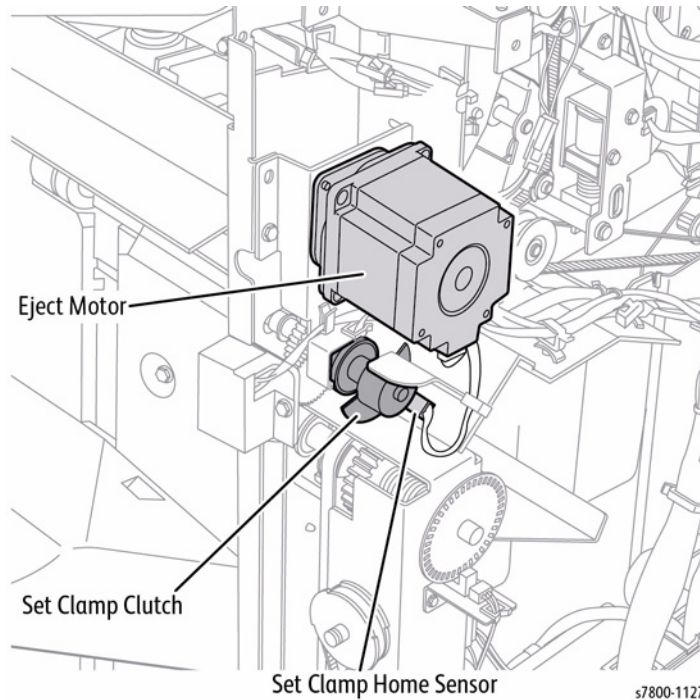


Figure 27 Clutch, Motor, and Sensor

- **Sub Paddle Solenoid** – The Sub Paddle Solenoid moves Sub Paddle up and down.
- **Eject Clamp Motor** - The Eject Clamp Motor raises or lowers the Eject Clamp used for holding down paper when delivering paper from the Puncher to the Compiler Tray or from the Compiler Tray to the Stacker Tray.
- **Eject Clamp Home Sensor** - The Photo Sensor detects the home position of Eject Clamp.

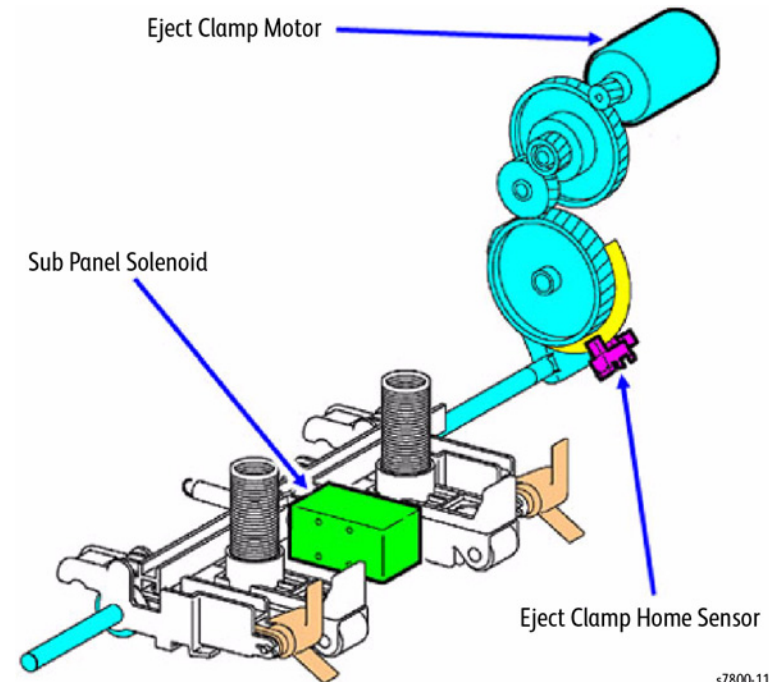


Figure 28 Motor, Sensor, and Solenoid

Stacker Operation

When paper is delivered from the Compiler Tray, the Elevator Motor will move the Stacker Tray down until Stack Height Sensor 1 is unblocked. This will continue until a Full Stack condition is detected or paper is removed from the Stacker Tray.

When paper is removed from the Stacker Tray the Elevator Motor will raise the Stacker Tray until the actuator on the tray blocks stack Height Sensor 2.

During Stacker operation, Stacker Height Sensors 1 and 2 monitor the height of the paper delivered to the Stacker Tray and the position of the Tray.

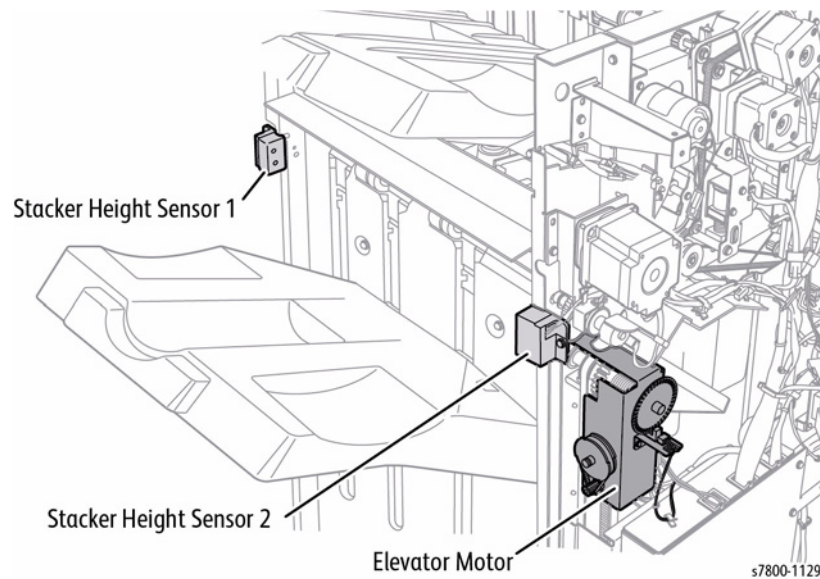


Figure 29 Motor and Sensors

During Stacker operation, Stacker Height Sensors 1 and 2 monitor the height of the paper delivered to the Stacker Tray. The amount of paper delivered to the Stacker Tray is detected by Stacker Encode Sensor. When either paper or the Actuator on the tray blocks Stacker Height Sensor 1 and 2, paper height or tray height will be detected.

The Elevator Motor is controlled based on this information. The Motor rotates when the Stacker Height Sensor 1 is blocked and stops when the Sensor is unblocked. The Actuator on the rear Carriage Assembly will actuate the Stacker No Paper Sensor. The Upper Limit Sensor located on top of the Stacker No Paper Sensor serves as a fail-safe shutdown in the event of an over-raised condition.

When print sets delivered to Stacker Tray are removed by the operator during printing, the Stacker Height Sensor 2 will detect that the print sets have been removed and set delivery to the Stacker Tray will stop. After the Elevator Motor moves the Stacker Tray (up) until it reaches the Stacker Height Sensor 1 detection position, paper delivery will resume.

If print sets delivered to the Stacker Tray were removed by the operator when printing is complete, the Stacker Height Sensor 2 will detect that the print sets have been removed. After 3 seconds, the Elevator Motor raise the Stacker Tray. It will move until it actuates the Stacker Height Sensor 1. This operation enables paper delivery again.

However, if the tray cannot be lowered because of obstructions in the tray path, the **Stacker Lower Safety Warning** message will be displayed on the UI panel and the Stacker Motor will be switched Off.

Horizontal Transport

The Horizontal Transport moves paper from the IOT to the Finisher. The major components of the H-Transport are:

- **H-Transport Interlock Sensor** - The Sensor detects whether the H-Transport Top Door is open. High (unshielded): The H-Transport Top Door is open.
- **H-Transport Entrance Sensor** - The Sensor detects that paper has been fed from the IOT into the H-Transport. High (unshielded): Paper is detected.
- **H-Transport Exit Sensor** - The Sensor detects that paper has passed the H-Transport. High (unshielded): Paper is detected.
- **H-Transport Motor** - This is a stepping motor that drives the H-Transport Belt via the Shaft Assembly.
- **H-Transport Shaft Assemblies** - These shafts are driven by the H-Transport motor to drive the Belts.
- **H-Transport Belts** - These Belts transport the paper through the H-Transport.

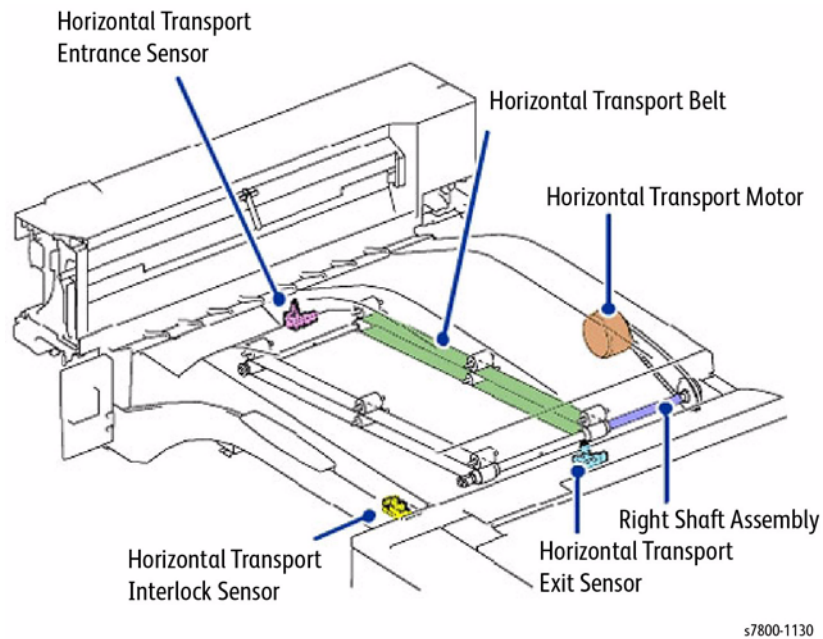


Figure 30 Horizontal Transport

Booklet Maker

Overview and Operation

The Booklet Maker is a customer purchased option and is installed below the mechanical hardware existing in the Finisher. Paper is directed to the Booklet Maker by the Booklet Gate

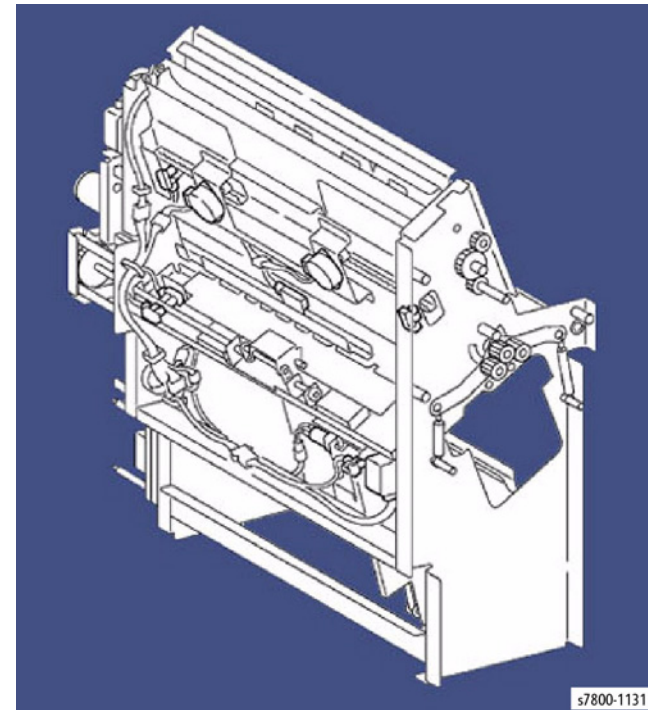


Figure 31 Booklet Maker

Prints entering the Finisher are diverted into the Booklet Maker by the Booklet Gate.

- **Booklet Gate Solenoid** - The Solenoid positions the Booklet Gate to direct the paper to the Puncher or the Booklet Maker.
- **Transport Entrance Sensor** - The Sensor monitors paper delivered to the Booklet Gate.

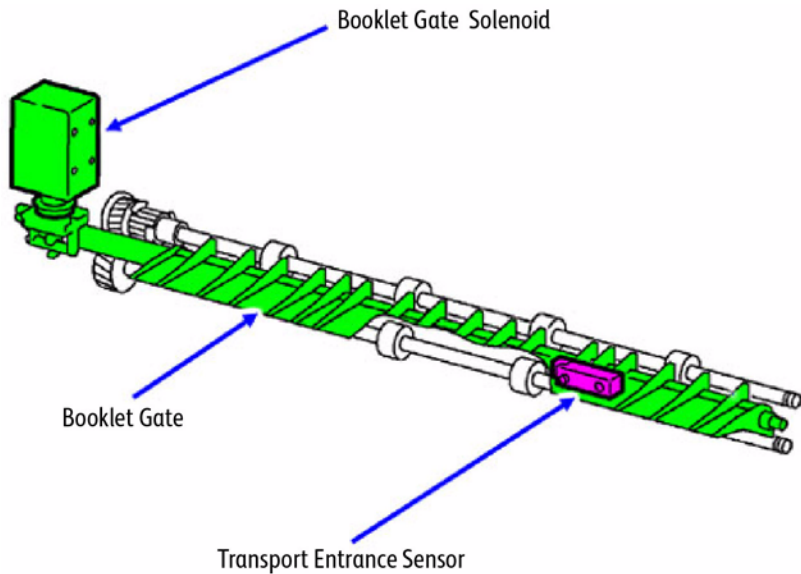


Figure 32 Sensor and Solenoid

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- **Booklet In Sensor** - The Photo Sensor monitors paper delivered to the Booklet Maker.
- **Booklet Folder Roll Exit Sensor** - The Photo Sensor monitors paper delivered to the Booklet Tray.
- **Booklet Paper Path Motor** - The Stepper Motor drives the Booklet Exit Roll.
- **Booklet Fold Motor** - The DC Motor drives the Booklet Folding Roll, Booklet Eject Roll, and Knife.
- **Knife Solenoid** - The Solenoid transfers drive from the Booklet Fold Roll Motor to the Knife through a gear.

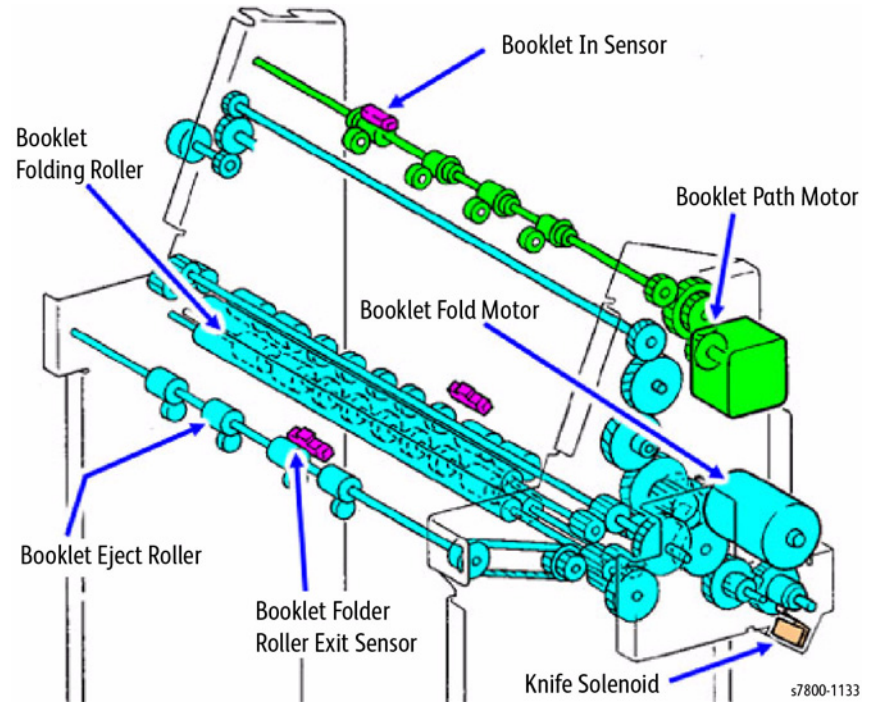


Figure 33 Motor, Sensors, and Solenoid

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- **Booklet Tamper Home Sensor (F)** - The Photo Sensor detects the home position of the Booklet Front Tamper.
- **Booklet Tamper Home Sensor (R)** - The Photo Sensor detects the home position of the Booklet Rear Tamper.
- **Booklet Compile No Paper Sensor** - The Photo Sensor detects paper availability in the Booklet Compiler Tray.
- **Booklet Tamper Motor (F)** - The Stepping Motor drives the Booklet Front Tamper.
- **Booklet Tamper Motor (R)** - The Stepping Motor drives the Booklet Rear Tamper.
- **Knife Home Sensor** - The Photo Sensor detects the home position (stored condition) of Knife.

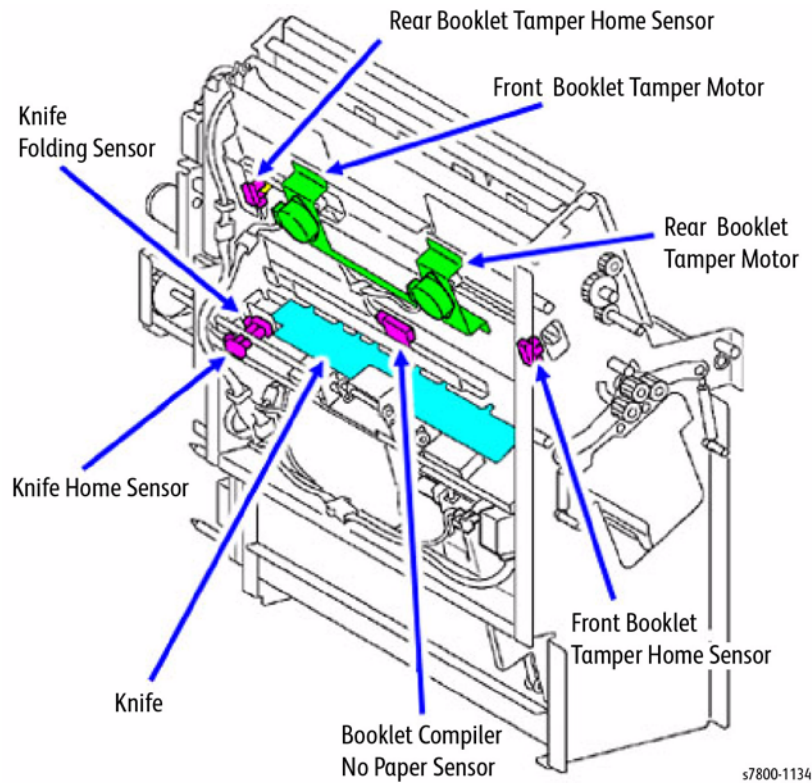


Figure 34 Motors and Sensors

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- **Booklet Staple Assembly** - This Booklet Stapler consists of two Staplers (including Stapler Low Switch) and Booklet Stapler Head Motor
- **Booklet Paddle Motor** - The DC Motor drives the Paddle at the Booklet section.
- **Booklet End Guide Home Sensor** - The Photo Sensor detects the home position of the Booklet End Guide.
- **Booklet End Guide Motor** - The Stepping Motor moves the Booklet End Guide up and down.
- **Booklet Drawer Set Sensor** - The Photo Sensor detects when the Booklet unit is set.

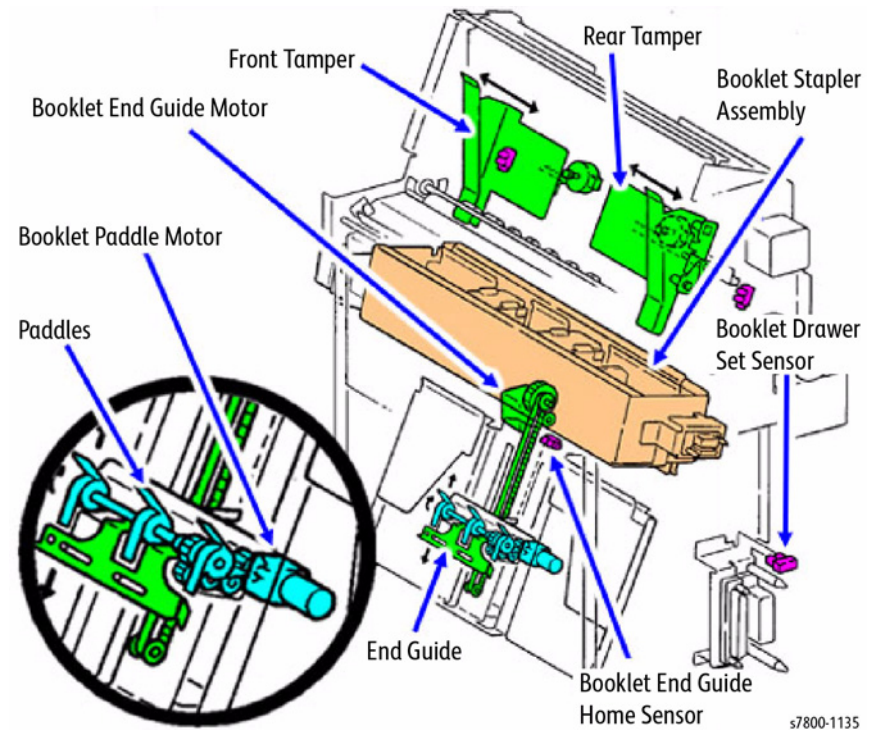


Figure 35 Booklet Staple Assembly

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Booklet Tray

- **Tray Belt Drive Motor** - The Motor drives the paper delivery belt for the Booklet Tray.
- **Booklet No Paper Sensor** - The Photo Sensor detects paper present on the Booklet Tray. It takes approximately 15 booklets to fill the tray.

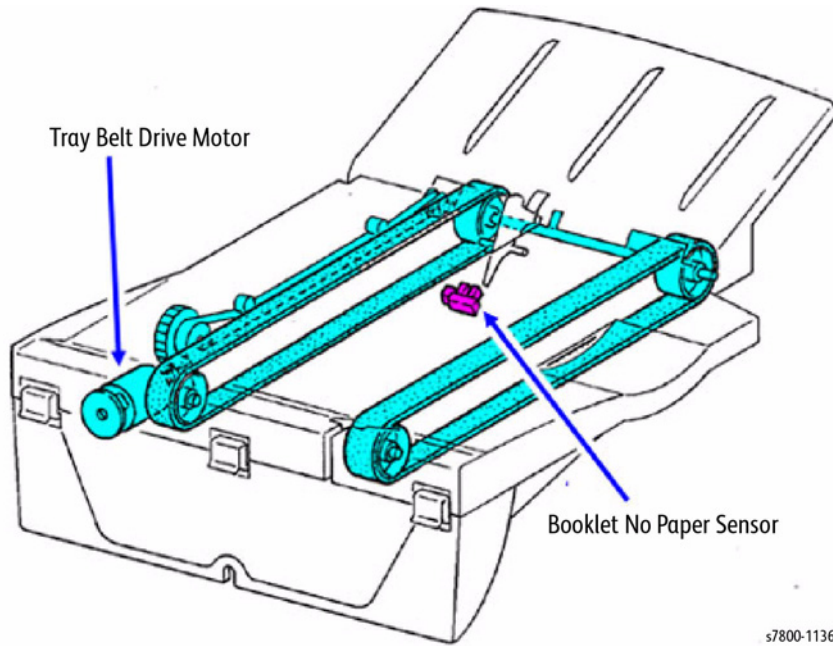


Figure 36 Booklet Tray

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Booklet Making Operation

The following sequence of operation describes the Booklet Making process and corresponds to the diagram.

1. Adjusting the height of the End Guide

The control logic adjusts the End Guide according to the incoming paper size.

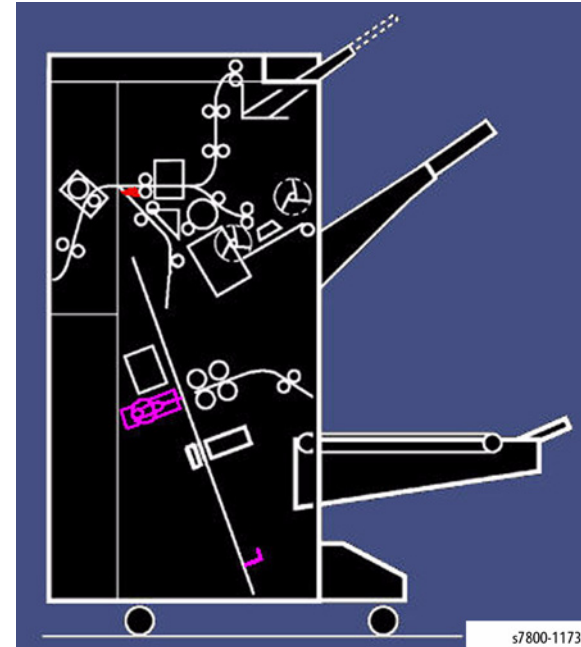


Figure 37 Adjusting the height

2. **Paper delivery to Booklet Unit**

When the Booklet Gate is up, the Booklet Paper Path Motor delivers paper from the Interface Unit and registers it against the End Guide. When the End Guide is at the bottom of Compiler Tray, paper will be delivered in sets.

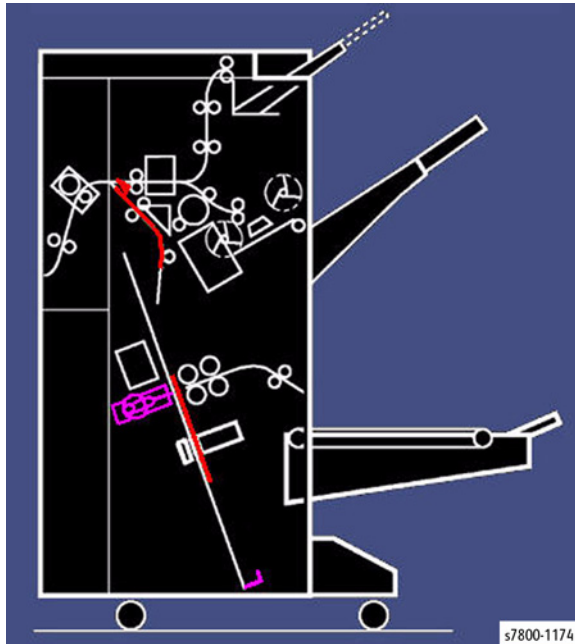


Figure 38 Delivering paper to Booklet Unit

3. **Stapling** (when available)

When print sets are delivered to the Compiler Tray in set quantity and sorted, the End Guide will be lifted to the stapling position (Staple Assembly Staple Head position). This position equally divides the print set so that the prints will be saddle stitched in the center of the set.

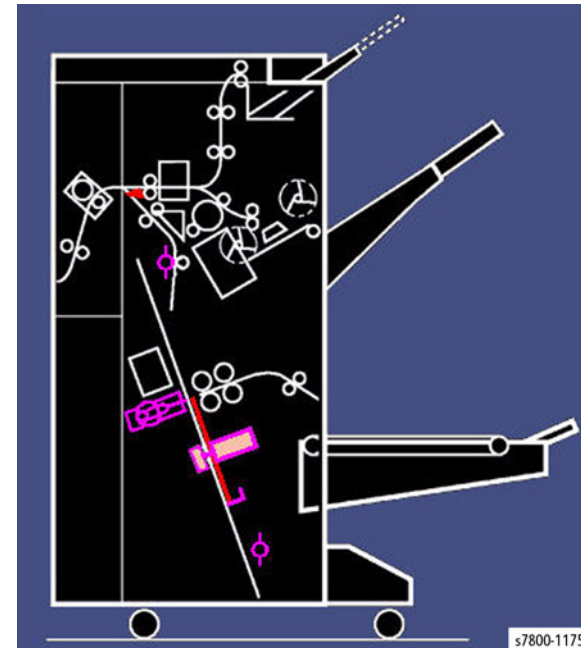


Figure 39 Stapling

4. Lifting End Guide

The End Guide is then lifted to the folding position (between Booklet Folding Roll and Booklet Folding Nip Roll). This position equally divides the set so that the fold occurs in the middle of the set.

When the printouts are stapled, the End Guide will be lifted so that the stapled position is at the folding position. The stapling position is slightly lower than the folding position so that the fold operation does not damage the staples.

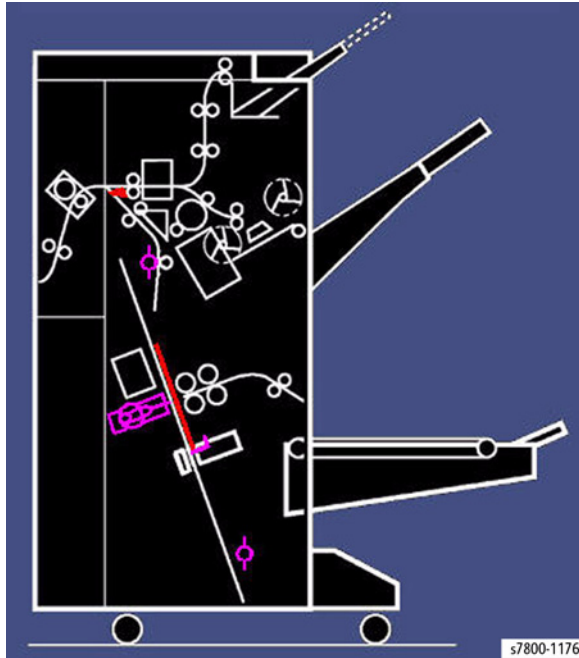


Figure 40 Lifting End Guide

5. Folding Operation

When the Knife Solenoid is energized, a gear transfers drive from Booklet Fold Roll Motor to the Knife. The Knife then drives the center of the print set into the area between Booklet Folding Roll and Booklet Folding Nip Roll. The Knife then is retracted to the standby position.

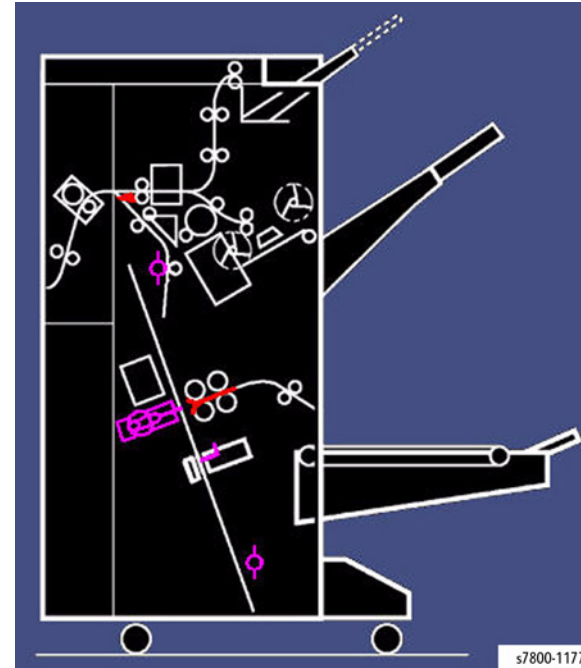


Figure 41 Folding

6. Paper Delivery

The Booklet Folding Roll, driven by Booklet Fold Roll Motor, delivers the folded booklet to the Booklet Tray.

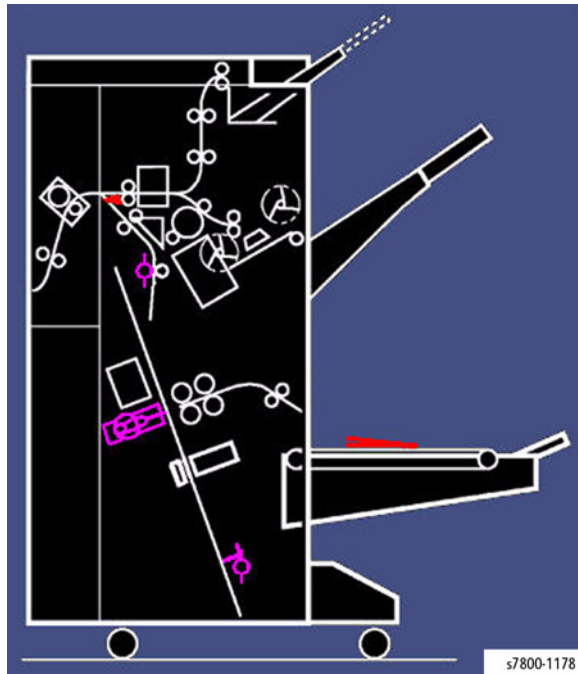


Figure 42 Delivering paper to Paper Tray

Compiling Operation

Compiling Print Sets

Paper delivered to the Booklet Maker will be stacked in the Compiler Tray against the bottom of the End Guide and assembled in print sets. When the set is assembled, stapling or folding is implemented.

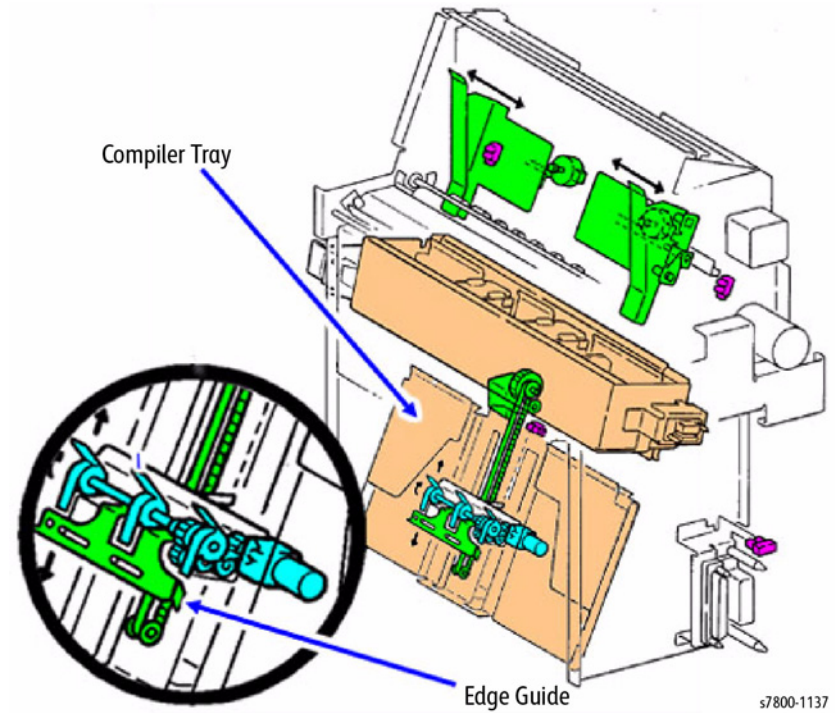


Figure 43 Compiling Print Sets

Compiling the Set

Paper is directed by the Booklet Gate into the Booklet Maker. The Booklet Paper Path Motor drives the paper into the End Guide. The tampers ensure that the paper stacks evenly and the paddles keep the paper against the End Guide.

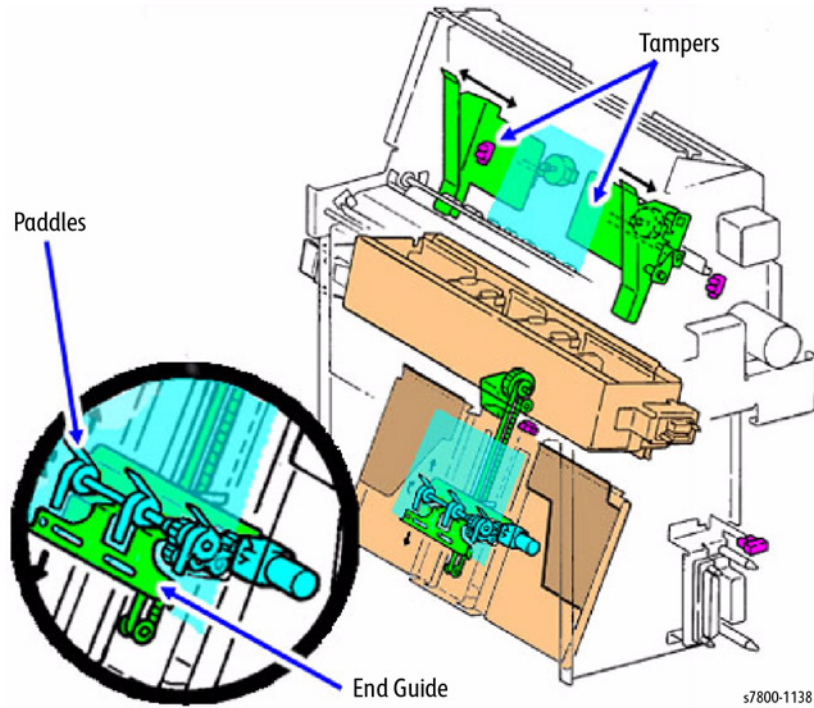


Figure 44 Compiling the Set

Stapling and Folding

When the set is complete, the tray moves toward the center to position the set so that the staples will be equidistant from the top and bottom of the set. The End Guide is raised to position the set for stapling in the center (This position is NVM controlled and is adjustable). The sheets are then stapled. The End Guide continues to raise the set until the center of the set is aligned to the fold position (This position is NVM controlled and is adjustable).

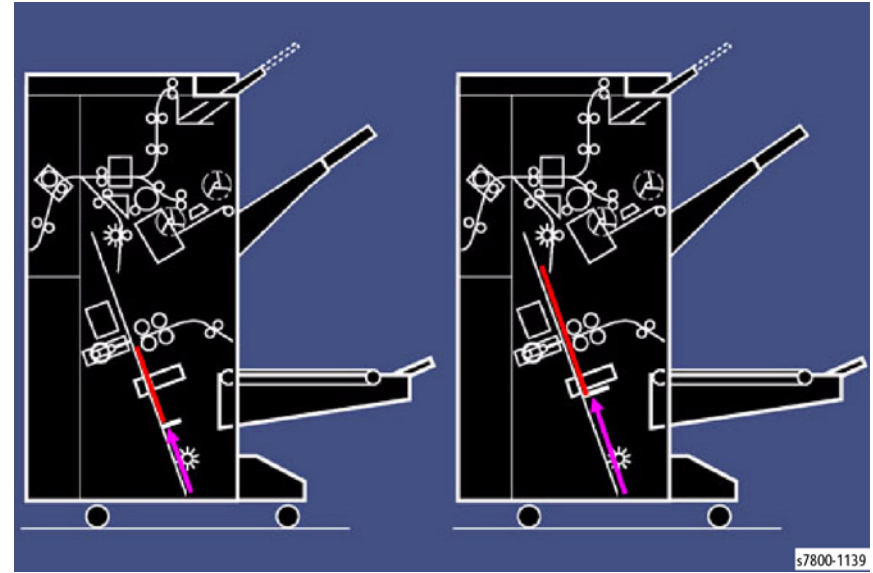


Figure 45 Stapling and Folding

Folding the Set

When the set is in the fold position, the Knife Solenoid is energized. This allows one rotation of the Knife gear. The Knife extends to push the set into the Fold Rolls and then retracts to the home position.

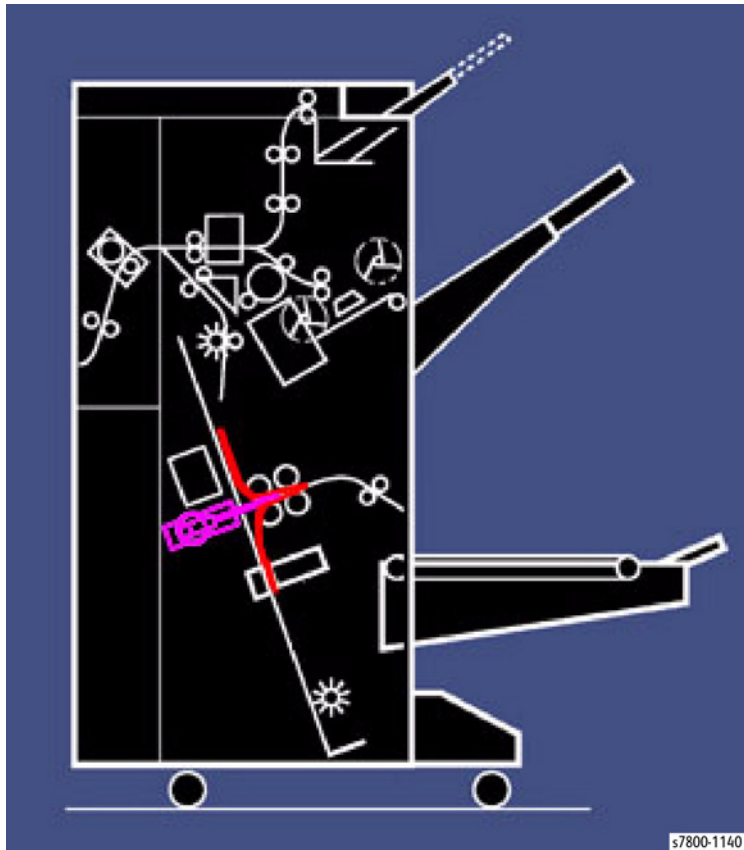


Figure 46 Folding the Set

Set Exit

The now-folded and stapled booklet is transported to the Booklet Tray. The Booklet Tray belts transport the booklets to the end of the Tray. The end of the Booklet Tray may be dropped to allow the booklets to drop into a receptacle.

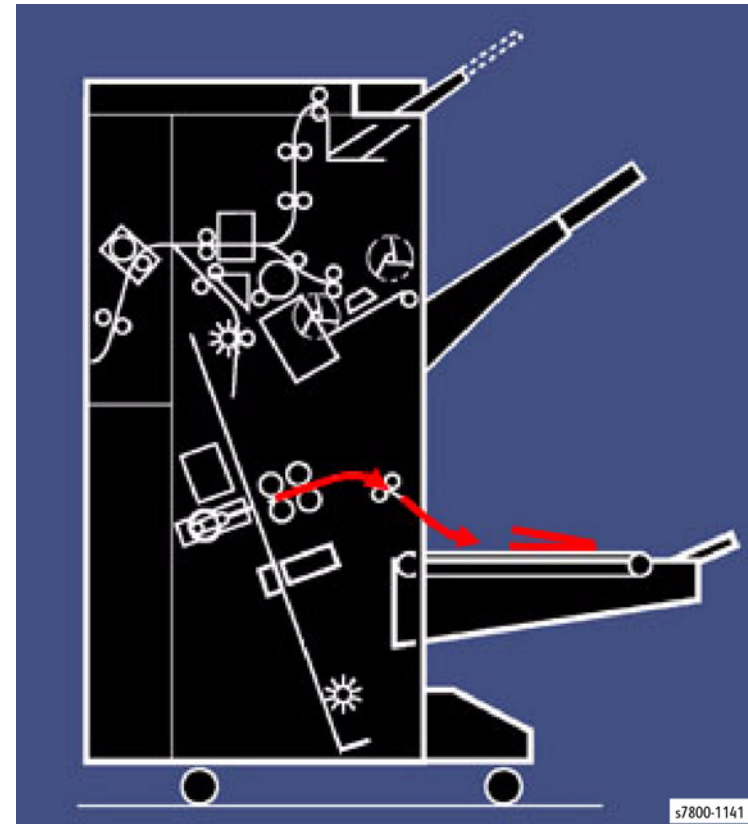


Figure 47 Exiting

Stapling Operation

Stapling is performed by two Staple Heads in the Booklet Staple Assembly. When the Booklet Stapler Head Motor in Staple Assembly rotates forward the two Staple Heads close to staple the set.

- **Stapler Low Front and Rear Switches** - These switches detect whether the Staple Cartridge is available in the Front Staple Head and the level of wire staples available.
- **Booklet Stapler Head Motor** - This DC motor drives the Staple Heads.
- **Staple Cartridge Set SW Front and Rear** - Detect whether the Front Staple Head is installed. These switches are connected in series.

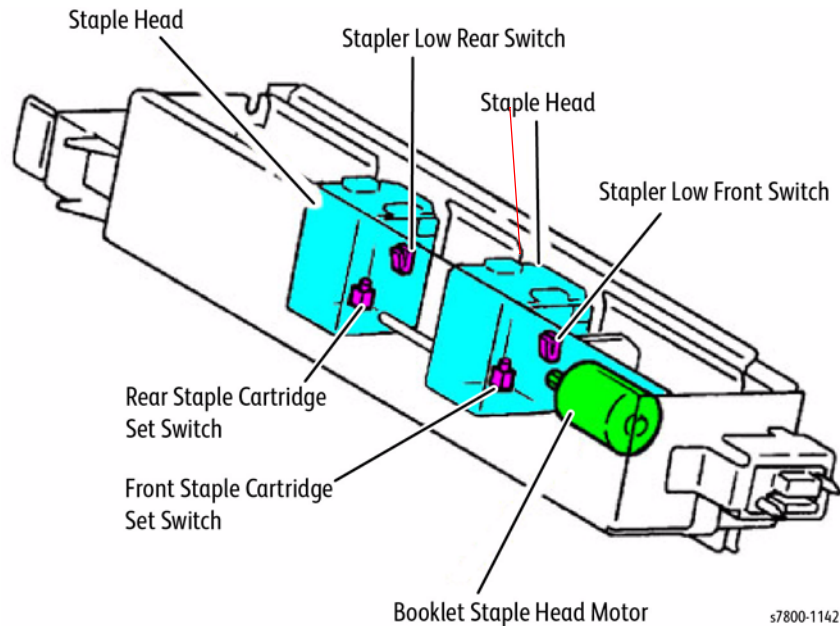


Figure 48 Stapling Operation

Booklet Maker Tray

Booklet Set Exit

When the booklet set is folded, the Booklet Fold Roll Motor provides drive for the Booklet Folding Rolls and the Booklet Eject Roll to deliver the set to the Booklet Tray.

A Booklet Folder Roll Exit Sensor monitors the booklets as they exit the booklet maker for jams.

The Booklet Tray is at a position lower than the set delivery exit. As booklets exit the booklet maker they drop onto the tray.

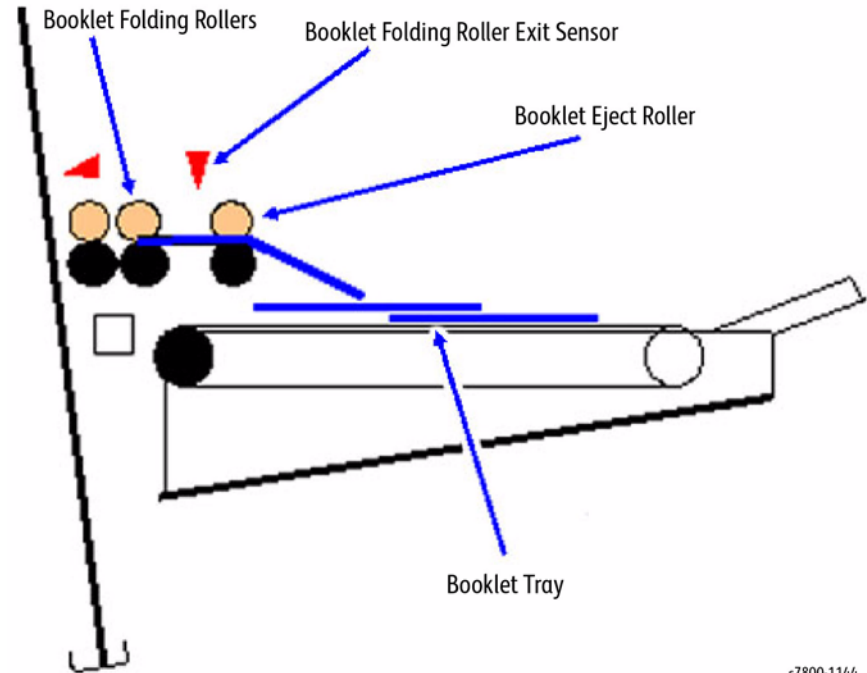
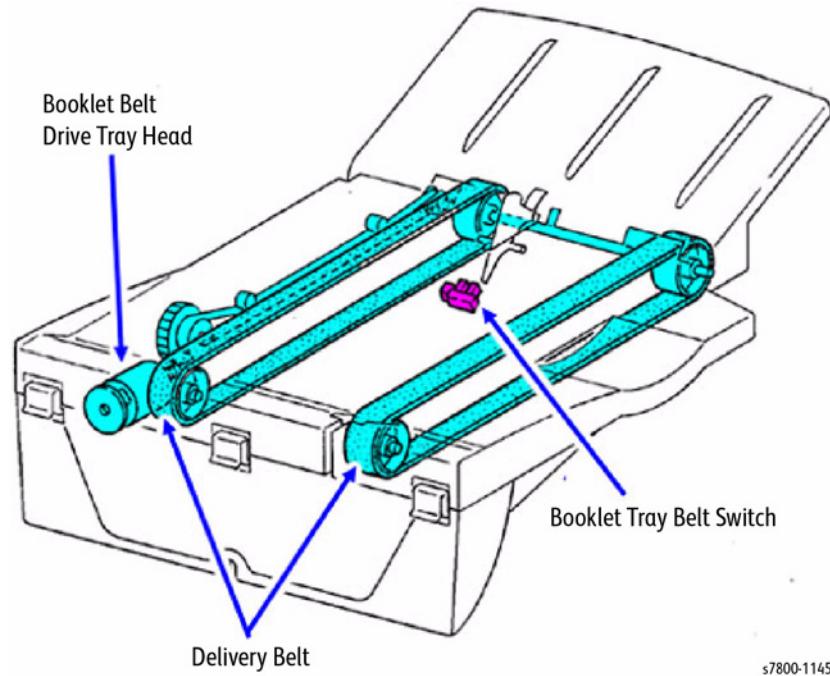


Figure 49 Rollers and Sensor

The Booklet Belt Drive Motor moves the delivery belts at a constant speed. The belts move the booklets toward the end of the tray.

The Booklet Tray Belt Switch informs the control logic that the booklets have reached the end of the tray.

The Booklet Tray Belt Switch can be disabled so that when the Booklet Tray is in the down position, the set will fall off the tray.



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Figure 50 Belts and Switch

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