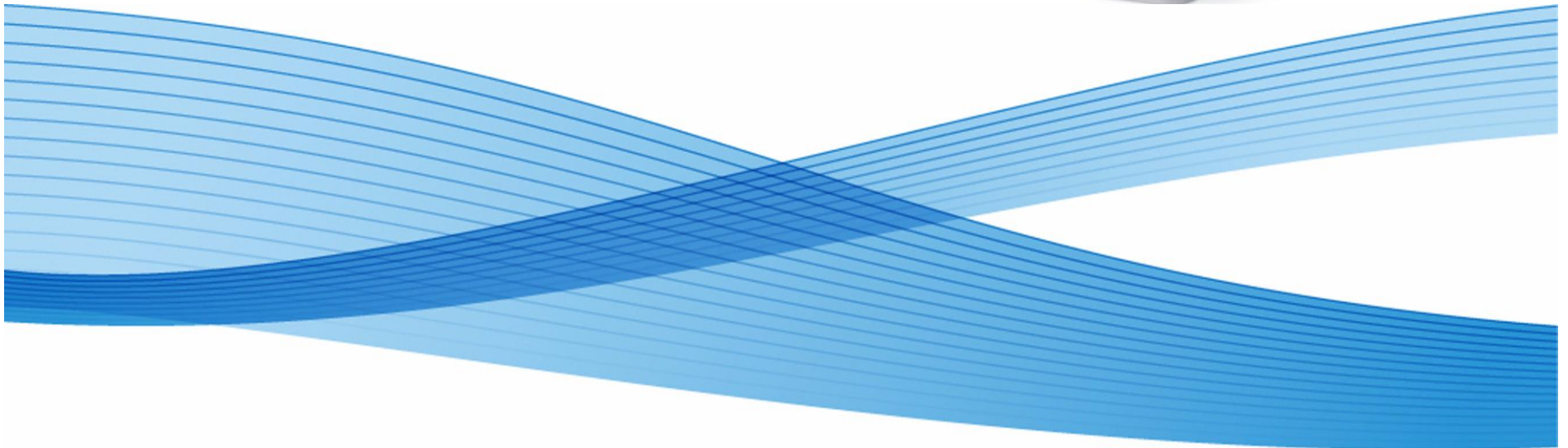


Xerox® WorkCentre® 3215/3225 Service Manual



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Xerox® WorkCentre® 3215/3225 Multifunction Printer Service Manual

Service Documentation

Xerox® WorkCentre® 3215/3225 Multifunction Printer Service Manual

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Prepared by:

Content Development and Language Services - North America

800 Phillips Road - Building 218-01A

Webster, New York 14580-9791

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WARNING

This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions documentation, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user, at his own expense, will be required to correct the interference.

DANGER: Cet équipement génère, utilise et peut émettre des fréquences radio, et, s'il n'est pas installé et utilisé selon les recommandations du manuel d'instructions, peut causer des interférences aux communications radio. Il a été testé et jugé conforme aux limites des systèmes de catégorie A, conformément à la partie 15 de l'alinéa J des règlements FCC, établis pour protéger contre de telles interférences pendant le fonctionnement en milieu commercial. Dans une zone résidentielle, il peut causer des interférences; dans ce cas, l'utilisateur devra corriger le problème à ses propres frais.

About This Manual	iii
How to Use this Manual	iv
Service Safety Summary.....	v
Reference Symbology.....	vi
Voltage Specifications.....	vii
Health and Safety Incident Reporting	viii
Regulatory Specifications.....	ix
Translation of Warnings	x
Tag Usage.....	xi
WorkCentre® 3215/3225 Overview	xii

About This Manual

Introduction

The Xerox® WorkCentre® 3215/3225 Service Manual is part of the multinational documentation for the Xerox® WorkCentre® 3215/3225 Multifunction Printer. It is structured in standard Xerox service documentation format. This manual is the primary document used for diagnosing, repairing, maintaining, and troubleshooting these systems. The Service Manual is the controlling publication for a service call. Information about using this document is found in the Introduction section. To ensure understanding of this product, complete the Xerox Service Training Program for this particular device.

Organization

The Xerox® WorkCentre® 3215/3225 Multifunction Printer Service Manual is organized and defined within the following sections:

Section 1 Service Call Procedures

This section contains procedures that determine what actions are to be taken during a service call on the machine and in what sequence they are to be completed. This is the entry level for all service calls.

Section 2 Status Indicator RAPs

This section contains the diagnostic aids for troubleshooting the Fault Code and non-Fault Code related faults (with the exception of image quality problems).

Section 3 Image Quality Repair Analysis Procedures

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

Section 4 Repairs and Adjustments

This section contains the Adjustment and Repair procedures.

Repairs include procedures for removal and replacement of parts which have the following special conditions:

- When there is a personnel or machine safety issue.
- When removal or replacement cannot be determined from the exploded view of the Parts List.
- When there is a cleaning or a lubricating activity associated with the procedure.
- When the part requires an adjustment after replacement.
- When a special tool is required for removal or replacement.

Use the Repair Procedures for the correct order of removal and replacement, for warnings, cautions, and notes.

Adjustments include procedures for adjusting the parts that must be within specification for the correct operation of the system.

Use the Adjustment Procedures for the correct sequence of operation for specifications, warnings, cautions and notes.

Section 5 Parts List

This section consists of a series of illustrations and an associated parts listing. Any part that is spared or any part that must be removed to access a spared part is illustrated. Common hardware is shown as a letter callout.

Section 6 General Procedures and Information

This section contains general information, change tag information, and general procedures.

Section 7 Wiring Data

This section contains Block Schematic Diagrams (BSDs), Plug/Jack locations, Voltage Specifications, and I/O Module locations and information.

Component Names

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

How to Use this Manual

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

How to Differentiate Between Machine Variants

The machine configuration will be identified in this manual by the configuration identifiers 3215NI, 3225DNI and 3225DN.

The WorkCentre® 3215/3225 is Blue Angel certified with software configuration for up to 29 ppm capability. Refer to the User Guide, Parts List and Procedures for information specific to printer configuration.

When a procedure, parts list description or other reference is unique amongst different configurations of the machine, the appropriate configuration designator is indicated. Any artwork is also specific.

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

Warnings, Cautions and Notes

WARNING

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

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

CAUTION

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

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

Service Safety Summary

General Guidelines

For qualified service personnel only: Refer also to Electrical Safety.

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

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

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

Electrical Safety

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

Operational Safety

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

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

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

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

Maintenance Safety

- Do not attempt 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.

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.

Electrostatic Discharge (ESD) Field Service Kit

The purpose of the ESD Protection Program is to preserve the inherent reliability and quality of electronic components that are handled by the Field Service Personnel. This program has been implemented as a direct result of advances in microcircuitry technology, as well as a new acknowledgment of the magnitude of the ESD problem in the electronics industry today.

This program will reduce Field Service costs that are charged to PWB failures. Ninety percent of all PWB failures that are ESD related do not occur immediately. Using the ESD Field Service Kit will eliminate these delayed failures and intermittent problems caused by ESD. This will improve product reliability and reduce callbacks.

The ESD Field Service Kit should be used whenever Printed Wiring Boards or ESD sensitive components are being handled. This includes activities like replacing or re-seating of circuit boards or connectors. The kit should also be used in order to prevent additional damage when circuit boards are returned for repair.

The instructions for using the ESD Field Service Kit can be found in GP 8 in the General Procedures section of the Service Documentation.

Product Safety Certification

This product is certified by various NRTLs/NCBs to the safety standards listed below:

UL60950-1/CSA22.2, No. 60950-1 (USA/Canada)

IEC60950-1 (CB Scheme)

Reference Symbolology

Safety Symbols and Terminology

The following are examples of the terminology and symbols that are used in this documentation for an Electrostatic Device Caution, Laser Warning, and general Warnings, Cautions, or Notes.

WARNING

Improper operation may result in injury to a person.



CAUTION

Improper operation may result in machine damage.



Laser

Indicates that Laser safety precautions must be used.



Hot Surface

Indicates that a surface can be hot. Use caution when reaching in the machine to avoid touching the hot surface.



Electrical Current

Danger label indicates where electrical currents travel when the machine is closed and operating. Use caution when reaching in the machine.



ESD

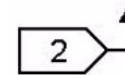
Certain components in this product are susceptible to damage from Electrostatic Discharge. Observe all ESD procedures to avoid component damage.



The following reference symbols are used throughout the Xerox® WorkCentre® 3215/3225 Service Documentation.

1. Flag

- This symbol indicates a reference point into a circuit diagram from a RAP.



2. Note

- This symbol is used to refer to notes that are found on the same page of a circuit diagram. A note is used whenever it is necessary to highlight an operating or maintenance procedure, a practice, condition, or statement.
- Hints or other information that may assist the user.



3. Parts List

- This symbol, example (PL2.1), refers to the Parts List exploded view page where the part can be found.

4. Adjustment

- This symbol refers to an adjustment procedure in the Repair/Adjustments section.



5. Test Point, Test Hole, Test Stake

- This symbol is used to indicate that a test point, test hole, or test stake is available for accessing the signal line. The prefix indicates whether the access is a test point (TP), test hole (TH), or test stake (TS).



6. Commoning Point

- This symbol is used to refer to a location in the machine wiring where more than two wires are connected together at a single point.



7. Arrow

- This symbol points to the location to install, gain access to, or to release a component.



Voltage Specifications

AC and DC Voltages

Measurements of DC voltage must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure. All measurements of AC voltage should be made with respect to the adjacent return or ACN wire ([unresolved]).

Table 1 Voltage Measurement and Specifications

VOLTAGE	SPECIFICATION
110 to 120 VAC 60Hz	100 to 132 VAC
Neutral to Ground VAC	0 VAC (+/- 5VAC)
+5 VDC	+5.05 VDC TO +5.25 VDC
+12 VDC	+11.4 VDC TO +12.6 VDC
-12 VDC	-11.4 VDC TO -12.6 VDC
+24 VDC	+22.8VDC TO +25.2 VDC
+36 VDC	+34.2 VDC TO +37.8 VDC

Logic Voltage Levels

Measurements of logic levels must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure ([unresolved]).

Table 2 Logic Levels

VOLTAGE	H/L SPECIFICATIONS
+5 VDC	H= +3.00 TO +5.25 VDC, L= 0.0 TO 0.8 VDC
+24 VDC	H= +23.37 TO +27.06 VDC, L= 0.0 TO 0.8 VDC

DC Voltage Measurements in RAPs

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

There is +5 VDC from TP7 to TP68.

In this example, the red meter lead would be placed on TP7 and the black meter lead on TP68.

Another example of a statement found in a RAP might be:

There is -15 VDC from TP21 to TP33.

In this example, the red meter lead would be placed on TP21 and the black meter lead would be placed on TP33.

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

Health and Safety Incident Reporting

I. Summary

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

II. Scope

Xerox Corporation and subsidiaries worldwide.

III. Objective

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

IV. Definitions

Incident:

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

V. Requirements

Initial Report:

1. Xerox organizations shall establish a process for individuals to report product incidents to Xerox Environment Health & Safety within 24 hours of becoming aware of the event.
2. The information to be provided at the time of reporting is contained in Appendix A (Health and Safety Incident Report involving a Xerox product).
3. The initial notification may be made by any of the following methods:
 - For incidents in North America and Developing Markets West (Brazil, Mexico, Latin American North and Latin American South):
 - Phone* Xerox EH&S at: 1-800-828-6571.
 - Electronic mail Xerox EH&S at: USA.XEROX.EHS@xerox.com.
 - Fax Xerox EH&S at: 1-585-216-8817 [internet 8*219-68817].
 - For incidents in Europe and Developing Markets East (Middle East, Africa, India, China and Hong Kong):
 - Phone* Xerox EH&S at: +44 (0) 1707 353434 [internet 8*668 3434]
 - Electronic mail Xerox EH&S at: EH&S-Europe@xerox.com
 - Fax Xerox EH&S at: +44 (0) 1707 353914 [internet 8*668 3914]

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

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

Responsibilities for resolution:

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

Regulatory Specifications

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

United States (FCC Regulations)

The WorkCentre® 3215/3225 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 in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with these instructions, it may cause harmful interference to radio communications. Operation of Class A equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense. There is no guarantee that interference will not occur in a particular installation.

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

- Reorient or relocate the receiver.
- Increase the separation between the equipment and receiver.
- Connect the equipment 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

CE Mark



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.

Translation of Warnings

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 work in a confined space. 1 m (39 inches) space is needed for safe working.

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

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

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

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

WARNING

Use safe handling procedures when removing the module. Refer to GP 16. The module is heavy.

DANGER: Conformez-vous aux procédures de manipulation de sécurité pour le retrait du module. Reportez-vous à GP 16. Le module est lourd.

AVVERTENZA: Utilizzare procedure di gestione sicure durante la rimozione del modulo. Vedere GP 16. Il modulo è pesante.

VORSICHT: Verwenden Sie sichere Vorgehensweisen zum Entfernen des Moduls. Siehe auch GP 16. Das Modul ist sehr schwer.

AVISO: Utilice los procedimientos de seguridad cuando elimine el módulo. Consulte el GP 16. El módulo es pesado.

WARNING

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

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

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

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

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

WARNING

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

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

AVVERTENZA: N/A

VORSICHT: N/A

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

WARNING

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

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

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

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

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

WARNING

Do not touch the fuser while it is hot.

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

AVVERTENZA: Non toccare il fonditore quando è caldo.

VORSICHT: Fixierbereich erst berühren, wenn dieser abgekühlt ist.

AVISO: No toque el fusor mientras está caliente.

Tag Usage

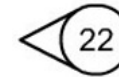
Tags

If different parts or actions exist because of a modification, the Tag number will identify the appropriate part or action.

- Example 1). Tag xx: PWB. . .
- Example 2) PWB (Tag xx) . . .

Tag Symbols

This symbol is used to show a particular part or area of a figure that has been modified by the Tag number within the circle.



This symbol is used to show a particular part or area of a figure that has not been modified by the Tag number within the circle.



This symbol is used to show a Tag change has modified an area of the terminal.



This symbol is used to show a Tag change has not modified an area of the terminal.



WorkCentre® 3215/3225 Overview

Refer to the WorkCentre® 3215/3225 User Guide, Product Configuration Section 1 for detailed descriptions and illustrations of Control Panel functions, machine features and options.

Table 1 Product Configurations

Component	WorkCentre 3215NI	WorkCentre 3225DNI	WorkCentre 3225DN
Automatic Document Feeder	Standard	Standard	Standard
Paper Tray - 250 Sheets	Standard	Standard	Standard
Manual Feed Slot - 1 sheet	Standard	Standard	Standard
Output Tray - 120 Sheets	Standard	Standard	Standard
AirPrint	Standard	Standard	Not Applicable
Google Cloud Print	Standard	Standard	Not Applicable
Network Printing	Standard	Standard	Standard
Copy	Standard	Standard	Standard
Scan	Standard	Standard	Standard
Fax	Standard	Standard	Standard
E-mail	Standard	Standard	Standard
USB Device	Standard	Standard	Standard
USB Host	Not Applicable	Not Applicable	Not Applicable
Wi-Fi	Standard	Standard	Not Applicable
Wi-Fi Direct™	Standard	Standard	Not Applicable

1 Service Call Procedures

Call Flow

Service Call Overview	1-3
Safety Precautions	1-3
SCP 01 Introduction to Service Call Procedures	1-4
SCP 02 Initial Actions.....	1-4
SCP 03 Corrective Actions.....	1-5
SCP 04 Final Actions	1-5

System/Subsystem Maintenance

HFSI's	1-6
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Service Call Overview

This section provides an overview of actions a service technician should take when servicing a machine. Refer to the checklist below as a guide for steps to take when troubleshooting problems with the printer. Follow all precautions listed in the Safety Precautions section.

1. Identify the problem
 - Verify that the problem exists.
 - Record any error codes.
 - Print both customer and test prints.
 - Make note of any image quality problems in the test prints.
 - Observe if any unusual odors or noises coming from the printer.
 - Ensure that the AC input power is within specifications.
 - From the Diagnostics Mode, print an Error Information Report.
2. Inspect and clean the printer
 - Disconnect and inspect the power cord.
 - Inspect the interior of the printer. Remove any debris or contamination.
 - Inspect the printer for damaged wires, loose connections toner leakage or any other worn or damaged parts.
3. Find the cause of the problem.
 - Use troubleshooting procedures to find the root cause of the problem
 - Use diagnostics to check the printer and components
 - Use the BSDs to locate test points.
 - Take voltage readings as instructed in the troubleshooting procedure.
4. Correct the problem
 - Use the Parts List to locate part numbers.
 - Use the Repair Procedures to replace parts.
5. Final Actions
 - Test the printer to verify that the problem has been corrected and that there are no additional problems.

Diagnostic Mode

The WorkCentre® 3215/3225 has built-in diagnostics to test components, display status and some NVM access. The diagnostic tests are accessed through the Control Panel. Refer to the User Guide for detailed instructions on using the Control Panel buttons and menus. Refer to Section 6 for diagnostic test menus.

Safety Precautions

Ensure that all Cautions and Warnings detailed in the service procedures are followed when servicing the machine.

Failure to follow the following instructions could cause an electrical shock or fire hazard.

- Only use the Power Cord supplied with this product.
Do not allow the Power Cord to become twisted, bent, or damaged.
- Do not allow liquids to spill on or into the machine.
- Do not allow paper clips, pins or other objects to fall into the machine.
- When replacing the SMPS PWB wait 5 minutes after unplugging the Power Cord before removing the PWB. This allows the PWB to discharge, preventing electrical shock.

Laser Safety

- The Laser system is designed so there is never human access to the Laser radiation during normal operation, user maintenance, or service maintenance.
- Do not bypass or disable any laser safety devices or attempt to service the Laser.

SCP 01 Introduction to Service Call Procedures

Purpose

Service Call Procedures (SCP) are the guide to performing a service call on the Xerox® WorkCentre® 3215/3225 Multifunction Printer.

The Operator has been trained in the use of the Xerox® WorkCentre® 3215/3225 User Guide, Troubleshooting in Section 12, to help analyze the fault. The Troubleshooting section directs the Operator in the following:

- Faults indicated by a Status Code or UI message
- Web Registration Module problem solving
- Image quality defect initial actions
- Image quality defect diagnosis
- Image quality fault code problem solving

If the Operator is unable to resolve the problem, they initiate a service call by contacting The Xerox Support Center at: www.xerox.com/support.

SCP 02 Initial Actions

The purpose of Initial Actions is to gather information and organize the service call. The customer is questioned, and the complaint is verified.

All anticipated service actions are classified as primary or secondary. Primary service actions are those actions that directly relate to the reason for the call.

SCP 03 Corrective Actions

Corrective Actions are the diagnostic and repair activities required to correct the problem that initiated the service call (primary actions), as well as any other problems or secondary actions identified in Initial Actions.

When performing maintenance actions, either scheduled or unscheduled, always consider the customer's print schedule and whether they are in a highly time-sensitive print run, or in a less time-sensitive print run. The customer's current mode of operation will determine the service actions on Unscheduled Maintenance (UM) calls. The objective of all service actions is to integrate the Xerox service process with the customer's printing process in a manner that maximizes customer equipment up-time and productivity during periods of time-sensitive print runs.

This is one of the tenets of Overall Equipment Effectiveness (OEE).

SCP 02 Initial Actions

Purpose

The purpose of the Initial Actions is to help organize the service call. Customer input, machine observations and print samples are all used to gather information about the condition of the system. Gather a list of symptoms, error codes, or other information concerning the problem that the customer may provide. This information may help identify and correct intermittent or unusual problems.

During each service call, perform all Primary Maintenance Activities, then decide if Secondary Maintenance Activities are needed.

- Primary Maintenance Activities are actions performed which relate to the customer's complaint.
- Secondary Maintenance Activities are any activities identified during the service call which are not related to the primary activity, but may lead to a future service call or otherwise negatively affect the customer's satisfaction.

Before deciding to perform any secondary maintenance, first determine if the customer is in a time-sensitive print run. If so, perform only those actions required to ensure completion of the run, and defer all other actions-- including HFSI's that are not required to complete the print run. The objective of any service call during a time-sensitive print run is to return the system to production as soon as possible.

Before performing any secondary maintenance actions, first inform the customer of what secondary actions are indicated and the system down time required. You may want to return on another, mutually agreeable time to perform the secondary maintenance activity/actions.

Likewise, for any secondary maintenance actions deferred during a time-sensitive print run, inform the customer of what remaining secondary actions are indicated and the down time required. Coordinate with the customer's print schedule to determine a mutually-agreeable time frame to complete these activities.

Procedure

1. Discuss the problem with the customer.
2. If the problem is IQ related, run prints to verify that the problem is present.
3. Determine if there are any bulletins, or Eureka tips relating to the Customer's primary problem. Bulletins are on Eureka and are searchable with SearchLite.
4. When all information has been gathered, and all anticipated service actions have been classified as primary or secondary, proceed to Corrective Actions.

SCP 03 Corrective Actions

Purpose

The Corrective Actions procedure will direct you to the appropriate section of the service manual to diagnose and repair the primary problem, and provides you with the information required to identify any due HFSI items.

Procedure

1. Using the Supplies Information Report, review the HFSI's in to identify any due HFSI's. Clean/replace **only** components that are due and may be contributing to the problem.

System Fault Analysis

1. If the problem is a machine fault, determine if the type of fault code.
 - a. If the problem is a Printer fault code:
 - Enter Diagnostic Mode and print an Error Information Report.
 - Check for associated fault codes that have the same or nearly the same time stamp as the primary fault code.
 - Troubleshoot fault codes with the lowest chain number first.
2. If the problem is IQ related, refer to Section 3, Image Quality.
3. When the primary problem is resolved, proceed to Final Actions.

SCP 04 Final Actions

Purpose

Final Actions verify total operation of the machine, ensures that the HFSI's are completed, and provides a Machine Site Checklist to complete the call.

Procedure

1. Print a Sample Job and verify with the operator the total operation of the machine. If any problems are identified, return to SCP 03 Corrective Actions.
2. To complete the service call.
 - Check the customer consumables.
 - Service tools are properly stored and secured.
 - Verify the access to the circuit breakers is clear.
 - Check that all of the covers are in place and closed.
 - Verify that all mandatory retrofits have been installed. If required, set a time with the customer to install any mandatory retrofits.

HFSI's

Customer and Service HFSI's

As with other CSE actions, these actions should be performed according to customer run requirements. Some actions may be deferred to a Xerox Initiated activity, taking into consideration any risks with deferring those actions.

- Customer Maintenance Log Book (operator) - tracking sheet **Service Maintenance Intervals**.

If necessary, and if the customer agrees, clean/replace any secondary HFSI's that are due or may cause a return service call.

Table 1 Customer/Service HFSI's

HSFI Item	Action	Customer	Service	Reference	Interval	Notes
Toner Cartridge	Replace	X		N/A	1,500 standard / 3,000 high yield (approx. impressions)	
Drum Cartridge (OPC)	Replace	X		N/A	10,000	
Fuser	Replace		X	REP 1.17	100,000	
Transfer Roller	Replace		X	REP 1.16	100,000	
Forward Roller	Replace		X	REP 1.15	50,000	
Retard Roller	Replace		X	REP 1.12	50,000	
Pick-up Roller	Replace		X	REP 1.15	50,000	
ADF Feed Roller	Replace		X	REP 1.24	20,000	
ADF Rubber Pad	Replace	X	X	REP 1.24	20,000	

2 Status Indicator RAPs

01-100 Front Cover Open Fault	2-3	20-600 No Answer Fault.....	2-28
03-410 Paper Mismatch at Tray 1	2-3	20-700 Number Not Assigned Fault.....	2-28
03-450 Paper Mismatch at Manual Feed Slot.....	2-4	20-900 Retry Redial Fault	2-29
03-900 Main PWB Motor Control Chip Fault.....	2-4		
04-500 Drive Motor Start Fault.....	2-5		
05-100 / 900 Paper Jam in Automatic Document Feeder (ADF) Fault	2-5		
05-500 Document Feeder Cover Open Fault.....	2-6		
06-100 / 200 LSU Motor Fault.....	2-6		
07-110 Paper Tray 1 Empty Fault	2-7		
07-130 Paper Jam in Tray 1 Fault.....	2-8		
07-500 Manual Feed Slot Paper Empty Fault	2-9		
07-530 Paper Feed Fault - Manual Feed Slot.....	2-9		
07-600 Paper Tray Empty Faults	2-10		
08-100 Paper Feed Fault - Tray 1	2-10		
08-500 Paper Jam in Exit Area Fault	2-11		
08-600 Paper Jam in Duplex Area Fault	2-11		
08-700 Output Tray Full Fault	2-12		
09-100 Toner Cartridge Near End of Life Fault.....	2-12		
09-300 Imaging Unit Near End of Life Fault.....	2-13		
09-350 / 400 Toner Cartridge End of Life Fault.....	2-13		
09-450 Print Cartridge At End of Life Fault	2-14		
09-550 Print Cartridge Undetected Fault	2-14		
09-800 Incompatible Toner Cartridge Fault	2-15		
09-900 Imaging Unit is Incompatible/Undetected Fault	2-15		
10-100 Fuser Temperature (Open) Fault	2-16		
10-200/ 300 Fuser Under/ Over Temperature Fault.....	2-16		
14-100 Document Scanner Assembly Locked Fault	2-17		
15-130 / 340 Mail Too Large Fault	2-17		
15-140 / 150 Invalid Email / Group Address Fault	2-18		
15-310 / 600 Authentication Failure Fault	2-18		
15-320 / 330 Mail Server Connection Failure Fault.....	2-19		
15-400 LDAP Communication Failure Fault.....	2-19		
15-410 / 420 LDAP Search Failure Fault	2-20		
15-410 / 420 LDAP Search Failure Fault	2-20		
15-430 LDAP Server Entry Match Failure Fault.....	2-21		
15-700 DNS Error Fault	2-21		
15-800 / 810 / 820 / 830 Pop3 Error Fault.....	2-22		
17-100 IP Conflict Error Fault.....	2-22		
17-310 Communication Error (Main PWB to Wireless PWB) Fault.....	2-23		
17-700 / 710 BOOTP Error Fault	2-23		
17-800 / 810 DHCP Error Fault.....	2-24		
17-900 802.1X Network Authentication Error Fault.....	2-24		
17-910 Firmware Upgrade Fault	2-25		
20-100 Fax Communication Error Fault.....	2-25		
20-120 Scanning Error Fault	2-26		
20-200 Group Not Available Fault.....	2-26		
20-400 / 410 Line Fault	2-27		
20-500 Memory Full Fault	2-27		

01-100 Front Cover Open Fault

The front cover is open or the cover open switch is defective.

BSD-Reference: 1.1 AC/Low Voltage and High Voltage Power/Interlocks

Initial Actions

Ensure that the front cover is completely closed.

Procedure

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.

Check the Front Cover Open Switch connection to the Main PWB. **The connection is good.**

- | | |
|----------|----------------------------------------------------------|
| Y | N |
| | • Check that there is no contamination present. |
| | • Check for open or short circuit. |
| | • Replace the Front Cover Open Switch (REP 1.1), PL 2.1. |

Check the connection between the Main PWB and the HVPS. **The connection is secure.**

- | | |
|----------|-------------------------------------------------|
| Y | N |
| | • Check that there is no contamination present |
| | • Check for broken or defective wires or cables |
| | • Replace the Main PWB (REP 1.8), PL 1.1. |

Replace the HVPS PWB (REP 1.6), PL 4.1.

03-410 Paper Mismatch at Tray 1

The size setting for the Paper Tray does not match the paper size loaded in the tray.

BSD-Reference: 3.1A Communications

Initial Actions

- Check the media size settings for the tray from the Control Panel.
- Adjust the Paper Tray Guides to match the size of the paper that is loaded into the tray.
- Place the correct size paper into the tray for the tray size setting.

Procedure

1. Switch Off the power then switch On the power.
2. If problem continues, replace the Main PWB (REP 1.8), PL 4.1.

03-450 Paper Mismatch at Manual Feed Slot

The size setting for the Manual Feed Slot does not match the paper size loaded.

BSD-Reference: 3.1A Communications

Initial Actions

- Check the media size settings for the tray from the Control Panel.
- Adjust the Paper Tray Guides to match the size of the paper that is loaded into the tray.
- Place the correct size paper into the tray for the tray size setting.

Procedure

1. Switch Off the power then switch On the power.
2. If problem continues, replace the main PWB (REP 1.8), PL 4.1.

03-900 Main PWB Motor Control Chip Fault

The Motor Control Chip on the Main PWB is not functioning normally.

BSD-Reference: 3.1A, 3.1B Communications

Procedure

1. Switch Off the power then switch On the power.
2. If problem continues, replace the Main PWB (REP 1.8), PL 4.1.

04-500 Drive Motor Start Fault

The Main Drive (BLDC) Motor did not start within the specified time after the ready signal was sent.

BSD-Reference: 4.1 Main Drive

Initial Actions

- Switch Off the power, then switch On the power.

Procedure

Enter Diagnostic Mode. Press the <Menu> button, the <#> button, then using the keypad select: [1934, **Diagnostics, Machine Test, EDC Mode, DC330 Component Control, 100 Motor**] to start the motor. **The motor rotates.**

Y N

Remove the Right Cover REP 1.2 and check the motor connector on the Main PWB. **The connector on the Main PWB is connected correctly.**

Y N

- Check that there is no contamination present
- Check for broken and defective wires or cables.
- Securely reconnect the motor connector.

Manually rotate the Main Drive Unit (REP 1.10). **The Main Drive Motor rotates freely.**

Y N

Replace the Main Drive Unit (REP 1.10) PL 4.1.

The Main PWB is defective.

- Replace the Main PWB (REP 1.8), PL 1.1.

If problem persists, replace the Main PWB (REP 1.8), PL 1.1.

05-100 / 900 Paper Jam in Automatic Document Feeder (ADF) Fault

The machine has detected a paper jam in the Automatic Document Feeder (ADF).

BSD-Reference: 5.1A, 5.1B Automatic Document Feeder

Initial Actions

- Remove jammed sheets from the document feeder and paper path. Refer to The Work-Centre® 3215/3225 User Guide, Section 11 for jam clearance instructions.
- If necessary, power the machine Off then On to clear the fault message.
- Open the top cover of the Document Feeder and check the Feed Roll for contamination or wear.

Procedure

Inspect the Paper Feed Sensor for damage or contamination (REP 1.14.) Remove any debris from the sensor.

Enter Diagnostic (EDC) Mode. Select: [**DC330 Component Control, 102 Sensor, Feed Sens**] to test the Paper Feed Sensor. **The sensor is OK.**

Y N

- Check for an open or short circuit and clear any contamination that is present.
- Replace the paper Feed Sensor PWB (REP 1.4), PL 7.1.

Check the circuit between the ADF Drive Motor and the Main PWB (BSD 5.1b). **The circuit is good.**

Y N

- Check for an open or short circuit and clear any contamination that is present.
- Replace the ADF Drive Motor (REP 1.25), PL 1.2.

Check the paper path drives and clear any jammed sheets from the paper path. If problem persists, replace the Main PWB (REP 1.8), PL 1.1.

05-500 Document Feeder Cover Open Fault

The Document Feeder or Document Feeder Top Cover is not securely latched.

BSD-Reference: 5.1A Automatic Document Feeder

Initial Actions

- Close the Document Feeder unit.
- Close the Document Feeder top cover.

Procedure

Check the circuit between the ADF Cover Sensor and the Main PWB. **The circuit is good.**

- Y N
- Check that there is no contamination present.
 - Check for broken or defective wires or cables.
 - Replace parts as required [PL 1.1](#).

Replace the Main PWB ([REP 1.8](#)) [PL 1.1](#).

06-100 / 200 LSU Motor Fault

06-100 - LSU Motor Lock Error: The machine has detected that the Laser Module Drive Motor is not working correctly.

06-200 - LSU HSync Error: The machine has detected that the Laser Module Drive Motor is not working correctly.

BSD-Reference: 6.1 LSU

Procedure

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 eye protection when performing the following procedure. Failure to wear eye protection could result in serious personal injury.

DANGER: Porter des lunettes de sécurité pendant la procédure suivante. À défaut, de graves blessures peuvent se produire.

AVVERTENZA: Indossare occhiali di protezione durante la seguente procedura. In caso contrario, si possono provocare gravi ferite.

VORSICHT: Folgende Verfahren dürfen nicht ohne Schutzbrille angewandt werden. Die Nichteinhaltung dieser Regel kann zu ernsthaften körperlichen Verletzungen führen.

AVISO: Use gafas de protección para realizar el procedimiento siguiente. No proteger los ojos puede ocasionar daños personales graves.

Enter Diagnostic (EDC) Mode. Select: **[DC330 Component Control, 110 LSU, LSU Mot1 Run]** to test the LSU motor. **The motor runs.**

- Y N
- Check the Main Wire Harness and connectors on the Laser Module, (BSD 6.1). **The connections are secure.**

- Y N
- Check that there are no broken or defective wires and that no contamination present.
 - Disconnect and securely reconnect the harness

Check the Harness for an open or short circuit. **The harness is OK.**

A

A

Y N

Check that there is no contamination present. Replace the Harness (REP1.11) [PL4.1]

Replace the Laser Module.(REP 1.11), PL 4.1.

Go to SCP 04 Final Actions.

07-110 Paper Tray 1 Empty Fault

The Tray Empty Sensor failed to detect paper in the tray.

BSD-Reference: 7.1 Paper Feed and Registration

Initial Actions

Ensure that paper is loaded in the tray. Clear any jammed sheets. Refer to Section 11 in the WorkCentre 3215/3225 User Guide for detailed instructions on cleaning paper jams.

Procedure

Check the Paper Tray Empty Sensor actuator. **The actuator moves freely and is undamaged.**

Y N

Replace the Paper Tray Empty Sensor actuator PL 4.5.

Enter Diagnostic Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 102 Sensor, Tray 1 Empty]** to block and clear the Tray 1 Empty Sensor. **The sensor signal changes.**

Y N

Check for 3.3VDC on the Main PWB PWB. **The voltage is present on the Main PWB.**

Y N

Check that all voltages are present between the HVPS PWB and the Main PWB. **The voltages between the HVPS PWB and the Main PWB are present**

Y N

- Replace the HVPS PWB (REP 1.6), PL 4.1.
- Replace the Main PWB (REP 1.8), PL 4.1.

Replace the Paper Tray Empty Sensor PL 4.5.

Replace the Paper Tray Empty Sensor PL 4.5.

If the problem is intermittent, check the circuit of the Tray Empty Sensor.

07-130 Paper Jam in Tray 1 Fault

A paper jam has occurred in Tray 1.

BSD-Reference: 7.1 Paper Feed and Registration

Initial Actions

- Remove jammed paper from Tray 1 area. (Refer to Section 11 in the WorkCentre® 3215/3225 User Guide for detailed instructions on jam clearance.)
- Clear the paper path of any debris or obstructions.
- Ensure the loaded paper is within machine specifications. Refer to Section 6 General Procedures for product specifications.

Procedure

Remove Tray 1 and ensure that guides are set correctly. **The paper is loaded correctly in the tray.**

Y N
Align the paper in Tray 1 then reinsert the tray.

Check the position of the jammed sheet. **The lead edge reached the Retard Roll.**

Y N
Enter Diagnostics Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 102-Sensor, Feed Sens]** to block and clear the Feed Sensor. **The sensor signal changes.**

Y N
Check for 3.3VDC on the Feed Sensor PWB. **The voltage is present at the connector on the Feed Sensor PWB.**

Y N
Check for 3.3VDC on the Main PWB. **The voltage is present on the Main PWB.**

Y N
Check that all voltages are present between the HVPS PWB and the Main PWB. **The voltages between the HVPS PWB and the Main PWB are present.**

- Y N**
- Replace the HVPS PWB (REP 1.6), PL 4.1.
 - Replace the Main PWB (REP 1.8) PL 1.1.

Replace the Feed Sensor PWB (REP 1.14), PL 4.4.

Replace the Feed Sensor PWB (REP 1.14), PL 4.4.

Replace the Feed Sensor PWB (REP 1.14), PL 4.4.

In Diagnostics Mode, go to **[101-Clutch, Tray 1 Pick up]** to energize the clutch. **The clutch engages.**

Y N
Check for 24VDC on the Paper Feed PWB. **The voltage is present at the connector on the Paper Feed PWB.**

A B

Y N
Check that all voltages are present between the HVPS PWB and the Main PWB. **The voltages between the HVPS PWB and the Main PWB are present.**

Y N

- Replace the HVPS PWB (REP 1.6), PL 4.1.
- Replace the Main PWB (REP 1.8), PL 1.1.

Replace the Paper Feed PWB (REP 1.13), PL 4.1 .

Replace the Feed Clutch (REP 1.13), PL 4.1.

Perform SCP Final Actions.

Remove any jammed paper. Check the following for wear or damage and replace as required:

- Retard Roller PL 6.1.
- Pick up (Feed) and Forward Roll Assembly PL 4.4.
- Elevator Plate PL 4.4.
- Elevator Plate Springs PL 4.4.

A B

07-500 Manual Feed Slot Paper Empty Fault

The Manual Feed Slot Empty Sensor failed to detect paper in the Manual Feed Slot.

BSD-Reference: 7.1 Paper Feed and Registration

Initial Actions

Ensure that paper is loaded in the tray. Clear any jammed sheets. (Refer to Section 11 in the WorkCentre® 3215/3225 User Guide for detailed instructions on jam clearance.)

Clean the Manual Feed Slot Empty Sensor.

Procedure

Check the Registration Sensor actuator. **The actuator moves freely and is undamaged.**

Y N

Replace the Registration Sensor Actuator. (REP 1.14), PL 4.4.

Enter Diagnostics Mode, Select **[Machine Test, EDC Mode, DC330 Component Control, 102-Sensor, Registration Sensor]** to block and clear the Registration Sensor. **The sensor signal changes.**

Y N

Check for 3.3VDC on the Main PWB. **The voltage is present on the Main PWB..**

Y N

- Replace the HVPS PWB (REP 1.6), PL 4.1.
- Replace the Main PWB (REP 1.8), PL 4.1.

Replace the Feed Sensor PWB (REP 1.14), PL 4.4.

Perform SCP Final Actions.

07-530 Paper Feed Fault - Manual Feed Slot

The lead edge was not detected by the Paper Feed Sensor.

BSD-Reference: 7.1 Paper Feed and Registration

Initial Actions

Clear any jammed sheets. Refer to Section 11 in the WorkCentre® 3215/3225 User Guide for detailed instructions on clearing paper jams.

Procedure

Check the position of the jammed sheet. **The lead edge reached the Retard Roll.**

Y N

Enter Diagnostics Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 102-Sensor, Feed Sens]** to block and clear the Feed Sensor. **The sensor signal changes.**

Y N

1. Check for an open or short circuit.
2. Replace the Paper Feed Sensor (REP 1.14), PL 4.4.

In Diagnostics Mode, select: **[101-Clutch, Tray 1 Pick up (Feed)]** to engage the drive to pick up paper from tray 1. **The clutch engages.**

Y N

1. Check for an open or short circuit.
2. Replace the Tray 1 Pick up (Feed Clutch). (REP 1.13), PL 4.1.

Perform SCP Final Actions.

Check the Paper Feed Sensor actuator. **The actuator moves freely is and undamaged.**

Y N

Replace the Paper Feed actuator. (REP 1.14), PL 4.4.

Inspect the Paper Feed Sensor for damage. **The sensor is OK.**

Y N

1. Check for an open or short circuit.
2. Replace the Paper Feed Sensor. (REP 1.14), PL 4.4.

Check the circuit of the Paper Feed Sensor.

07-600 Paper Tray Empty Faults

The Tray 1 Empty sensor and the Registration sensor failed to detect paper in the paper trays.

BSD-Reference: 7.1 Paper Feed and Registration

Initial Actions

Ensure that paper is loaded in the trays. Clear any jammed sheets. (Refer to Section 11 in the WorkCentre® 3215/3225 User Guide for detailed instructions on jam clearance.)

Procedure

Check the Paper Tray 1 Empty sensor, [PL 4.5](#) and the Registration sensor, [PL 4.4](#) for contamination. **The sensors are free of contamination.**

Y N
Clean the sensors.

Refer to the following RAPs:

- 07-500 Manual Feed Slot Paper Empty Fault
- 07-110 Paper Tray 1 Empty Fault

08-100 Paper Feed Fault - Tray 1

The lead edge was not detected by the Paper Feed Sensor.

BSD-Reference: 7.1 Paper Feed and Registration

Initial Actions

Clear any jammed sheets. (Refer to Section 11 in the WorkCentre® 3215/3225 User Guide for detailed instructions on jam clearance.)

Procedure

Check the Tray 1 Paper Feed Sensor Actuator. **The Actuator moves freely.**

Y N
Replace the Tray 1 Paper Feed Sensor Actuator [PL 4.4](#).

Check the position of the jammed sheet. **The lead edge reached the Retard Roll.**

Y N
Enter Diagnostics Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 101-Clutch, Tray 1 Pick up]** to engage the drive to pick up paper from tray 1 **The clutch engages.**

- Y N**
1. Check the circuit between the Feed Clutch and the HVPS PWB for an open or short circuit.
 2. Replace the Tray 1 Pick up (Feed) Clutch ([REP 1.13](#)), [PL 4.1](#).

Check the Paper Feed Actuator. **The actuator moves freely.**

Y N
Replace the Paper Feed Actuator. ([REP 1.13](#)), [PL 4.4](#).

In Diagnostics Mode. Select: **[102-Sensor, Feed Sens]** to block and clear the Paper Feed Sensor. **The signal changes.**

- Y N**
1. Check that there is no contamination present.
 2. Check for an open or short circuit.
 3. Replace the Paper Feed Sensor PWB, ([REP 1.14](#)), [PL 4.4](#).

Perform SCP Final Actions.

Check the circuit of the Paper Feed Sensor.

08-500 Paper Jam in Exit Area Fault

The machine has detected a paper jam in the Exit Area.

BSD-Reference: 10.2 Print Exit

Initial Actions

Open the Rear Cover and remove jammed sheets from exit area. Refer to Section 11 in the WorkCentre® 3215/3225 User Guide for detailed instructions on clearing paper jams.

Check the Paper Guides for proper positioning.

Check the Duplex Gate and Spring for damage. Ensure that the gate is seated correctly and moves freely without binding.

Procedure

Enter Diagnostics Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 102-Sensor, Feed Sens]** to block and clear the Exit Sensor. **The Exit Sensor is OK.**

- | | |
|----------|--------------------------------------------------|
| Y | N |
| | |
| 1. | 1. Check that there is no contamination present. |
| 2. | 2. Check for an open or short circuit. |
| 3. | 3. Replace the Exit Sensor (REP 1.19), PL 4.1. |

In Diagnostics Mode. Select **[102-Sensor, Registration]** to block and clear the Registration Sensor. **The signal changes.**

- | | |
|----------|------------------------------------------------------------|
| Y | N |
| | |
| 1. | 1. Check that there is no contamination present. |
| 2. | 2. Check for an open or short circuit. |
| 3. | 3. Replace the Registration Sensor PWB (REP 1.14), PL 4.4. |

Inspect the Exit Roller and Drives for wear or damage. REP 1.29. Replace if needed PL 4.3.

08-600 Paper Jam in Duplex Area Fault

The machine has detected a paper jam in the Duplex Area.

BSD-Reference: 7.1 Paper Feed and Registration

Initial Actions

Remove jammed sheets from duplex area. Refer to Section 11 in the WorkCentre® 3215/3225 User Guide for detailed instructions on clearing paper jams.

Ensure that the paper guide and machine settings are correct for the paper that is loaded in the tray.

Procedure

Check the Exit Sensor Actuator. **The actuator moves freely.**

- | | |
|----------|-------------------------------------------------------|
| Y | N |
| | |
| | Replace the Exit Sensor Actuator. (REP 1.19), PL 4.1. |

Enter Diagnostics Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 102-Sensor, Out Bin Exit Sens]** to block and clear the Exit Sensor. **The sensor is OK.**

- | | |
|----------|--------------------------------------------------|
| Y | N |
| | |
| 1. | 1. Check that there is no contamination present. |
| 2. | 2. Check for an open or short circuit. |
| 3. | 3. Replace the Exit Sensor (REP 1.19), PL 4.1. |

Check the following parts for wear or damage and replace if needed:

- Duplex Paper Guide (REP 1.18) PL 4.2.
- Duplex Gate PL 2.1.
- Duplex Gate Spring PL 2.1.
- Duplex Gate Mounting PL 4.2.
- Paper Guide on Rear Cover PL 4.2.

Make certain that the Duplex Gate is seated correctly and moves freely without binding.

08-700 Output Tray Full Fault

The Output Tray Full Sensor has detected that the Output Tray is full.

BSD-Reference: 10.2 Print Exit

Initial Actions

Remove sheets from the Output Tray. (Maximum capacity is 150 sheets/ standard paper 8.5 x 11 in./ 80g/m2.)

Procedure

Enter Diagnostics Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 102-Sensor, Out Bin Full]** to test the Out Bin Full Sensor. **The signal changes.**

Y N

- Check that the sensor connector is firmly seated.
- Check that there is no contamination present.
- Check for an open or short circuit.
- Replace the Output Tray Full Sensor. (REP 1.20) PL 4.3.

Check actuator for binding. If the problem is intermittent, replace the Output Tray Full Sensor Actuator (REP 1.20), PL 4.3.

09-100 Toner Cartridge Near End of Life Fault

The toner cartridge life is less than 10%.

BSD-Reference: None

Procedure

1. Press the Information button on the Control Panel, then select the menu items listed below to print the **Supplies Information Report**. Refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on Menu Options using the Control Panel.
 - WorkCentre 3215: **[Info Pages, Supplies Info]**.
 - WorkCentre 3225: **[Machine Status, Info Pages, Supplies Info]**.
2. Check the remaining life of the Print Cartridge.
3. If the Toner Cartridge has reached end of life, switch Off the power and replace the Print Cartridge.

09-300 Imaging Unit Near End of Life Fault

The Imaging Cartridge life is less than 10%.

BSD-Reference: None

Procedure

1. Press the Information button on the Control Panel, then select the menu items listed below to print the **Supplies Information Report**. Refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on Menu Options using the Control Panel.
 - WorkCentre 3215: **[Info Pages, Supplies Info]**.
 - WorkCentre 3225: **[Machine Status, Info Pages, Supplies Info]**.
2. Check the remaining life of the Imaging Unit.
3. If the Imaging Unit has reached end of life, switch Off the power and replace the Imaging Unit.

09-350 / 400 Toner Cartridge End of Life Fault

The Toner Cartridge has reached end of life.

BSD-Reference: None

Procedure

1. Press the Information button on the Control Panel, then select the menu items listed below to print the **Supplies Information Report**. Refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on Menu Options using the Control Panel.
 - WorkCentre 3215: **[Info Pages, Supplies Info]**.
 - WorkCentre 3225: **[Machine Status, Info Pages, Supplies Info]**.
2. Check the remaining life of the Toner Cartridge.
3. If the Toner Cartridge is at end of life, switch Off the power and replace the Print Cartridge.

09-450 Print Cartridge At End of Life Fault

The Print Cartridge is empty.

BSD-Reference: None

Procedure

Switch Off the power and replace the Toner Cartridge.

09-550 Print Cartridge Undetected Fault

The Print cartridge has not been installed or machine software is unable to detect the Print Cartridge.

BSD-Reference: None

Initial Actions

Ensure that the Print Cartridge has been installed and the cover is fully closed and latched.

Procedure

1. Switch Off the power then switch On the power.
2. Remove the Print cartridge. Rotate the cartridge five to six completions to distribute the toner evenly.
3. Check the CRUM contact area for contamination and clean if necessary.
4. Reinstall the Print Cartridge.
5. If the problem continues, install a new Print Cartridge.

09-800 Incompatible Toner Cartridge Fault

The Toner Cartridge is not compatible with the printer.

BSD-Reference: None

Procedure

1. Press the Information button on the Control Panel, then select the menu items listed below to print the **Supplies Information Report**.
 - WorkCentre 3215: [Info Pages, Supplies Info].
 - WorkCentre 3225: [Machine Status, Info Pages, Supplies Info].
2. Check the toner cartridge information. Replace the Toner Cartridge if is not a genuine Xerox® cartridge.

09-900 Imaging Unit is Incompatible/Undetected Fault

One of the following conditions exists:

- The Imaging Unit has not been installed
- The Imaging Unit is incompatible
- The maching software is unable to detect the Imaging Unit

BSD-Reference: 9.1 Xerographics

Initial Actions

Switch Off the power then switch On the power.

Procedure

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 eingeschalten 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.

Check that the Imaging Unit (Drum Cartridge) is compatible with the printer.

1. Press the Information button on the Control Panel, then select the menu items listed below to print the **Supplies Information Report**.
 - WorkCentre 3215: [Info Pages, Supplies Info].
 - WorkCentre 3225: [Machine Status, Info Pages, Supplies Info].
2. Check the Imaging Unit information.

The Imaging Unit is compatible with the printer.

Y N

Replace the Imaging Unit if it is not a genuine Xerox® cartridge.

Check the Imaging Unit (Drum Cartridge) CRUM is fully seated. **The Imaging Unit connection is OK.**

Y N

- Check that there is no contamination present.
- Check for an open or short circuit.
- Firmly reseal the imaging Unit (Drum Cartridge).

Check the circuit of the Imaging Unit (Drum Cartridge).

10-100 Fuser Temperature (Open) Fault

The temperature of the Fuser is outside of the normal operating range of 383°F ± 5°F (195°C ± 5°C.)

BSD-Reference: 10.1 Fusing

Initial Actions

Switch Off the power then switch On the power.

Procedure

WARNING

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

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

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

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

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

Power Off the machine and check that the Fuser connection is fully seated, [REP 1.17](#). **The Fuser connections are OK.**

Y N
Firmly reconnect the Fuser assembly. Switch the power ON.

Check for +3.3 VDC to the Thermistor on the Main PWB. **The voltage is present.**

Y N

- Check the wire harness for open or short circuits.
- Replace the Main PWB ([REP 1.8](#)), [PL 4.1](#).

Check the voltage to the Over Heat Thermostat. **The voltage is present.**

Y N

- Check for AC line voltage to the LVPS PWB. [BSD 10.1](#)
- Check for the Over Heat Thermostat for contamination.
- Check the wire harness for open or short circuits.
- Replace the LVPS/HVPS PWB ([REP 1.7](#)) [PL 4.1](#).

Check the Heat Lamp for an open circuit.

Repair or replace the Fuser Assembly as required. [PL 5.1](#).

10-200/ 300 Fuser Under/ Over Temperature Fault

The temperature of the Fuser is outside of the normal operating range of 383°F ± 5°F (195°C ± 5°C.)

BSD-Reference: 10.1 Fusing

Initial Actions

Switch Off the power. Remove and reinstall the Fuser Assembly. Switch On the power.

Procedure

WARNING

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

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

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

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

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

Enter Diagnostic Mode. Select: **[Machine Test, EDC Mode, DC330 Component Control, 109 Fuser Heat, Temp A]** to obtain a temperature reading from the Fuser. **The Fuser temperature is within normal operating range.**

Y N
Replace the Fuser Assembly ([REP 1.17](#)), [PL 5.1](#).

If problem is intermittent, check the circuit of the Fuser Assembly for one of the following:

- All connections are securely connected and no contamination is present.
- Short circuit or damaged wire. Repair as necessary.

14-100 Document Scanner Assembly Locked Fault

The Document Scanner Assembly does not move.

BSD-Reference: 14.1 Scanning

Initial Actions

Switch Off the power then switch On the power. (The Contact Image Sensor should move during start up.)

Procedure

Check the Scanner Cable to make sure it is securely connected (REP 1.26). **The scanner cable is connected.**

Y N

- Check that there is no contamination present.
- Check for open or short circuits.
- Reconnect the Scanner Cable.

Check the Scanner Drive Motor. **The Motor runs.**

Y N

- Check that there is no contamination present.
- Check Scan Drive Motor circuit for open or short circuits.
- Replace the Scanner Drive Assembly (REP 1.27) PL 7.1.

If the problem continues, replace the Main PWB. (REP 1.8), PL 4.1.

15-130 / 340 Mail Too Large Fault

The mail size has exceeded the server support.

BSD-Reference: None

Initial Actions

- Reduce max mail size option.
- Increase mail size on this device via CentreWare Internet Services

Procedure

If problem persists, increase mail size allotment on mail server.

15-140 / 150 Invalid Email / Group Address Fault

An invalid email address or group has been entered.

BSD-Reference: None

Procedure

Enter valid email address. If problem persists, contact email administrator.

15-310 / 600 Authentication Failure Fault

The user has entered an invalid account or password causing an authentication failure.

BSD-Reference: None

Procedure

1. Verify account and network configuration.
2. Enter valid user credentials.

15-320 / 330 Mail Server Connection Failure Fault

The printer is unable to contact the SMTP server.

The printer is unable to contact a DNS server to resolve the SMTP host name.

BSD-Reference: None

Initial Actions

1. Check the SMTP IP address or host name.
2. Check the network configuration.

Procedure

Check that the DNS server is online.

15-400 LDAP Communication Failure Fault

The machine is unable to contact the LDAP server.

BSD-Reference: 3.1A, 3.1B Printer Communications

Initial Actions

Switch On the power then switch Off the power.

Procedure

Printers using ethernet connection: **The ethernet connection is good.**

Y N

Connect the printer to the ethernet

Printers using WiF connection: check the connections between the WiFi PWB and the Main PWB. **The connectors are fully seated.**

Y N

- Check that there is no contamination present.
- Reseat the connector.

Check the circuit between the WiFi PWB and the Main PWB. **The circuit is good.**

Y N

Replace parts as required

Perform the following checks:

- Check the LDAP IP address or Host Name.
- Check that the LDAP port is open and connected.

15-410 / 420 LDAP Search Failure Fault

The LDAP server returned an error during transmission.

BSD-Reference: None

Initial Actions

- Ensure that the LDAP server is enabled on the device and that maximum search results have not been exceeded.
- Check if the LDAP search has exceeded time limit parameters.

Procedure

Resubmit the job. If problem persists, contact Email administrator.

15-410 / 420 LDAP Search Failure Fault

The LDAP server returned an error during transmission.

BSD-Reference: None

Initial Actions

- Ensure that the LDAP server is enabled on the device and that maximum search results have not been exceeded.
- Check if the LDAP search has exceeded time limit parameters.

Procedure

Resubmit the job. If problem persists, contact Email administrator.

15-430 LDAP Server Entry Match Failure Fault

The LDAP server directory is unable to match entry from user.

BSD-Reference: None

Procedure

Check spelling of entry and resubmit. If problem persists, contact Email administrator.

15-700 DNS Error Fault

A DNS resolution failure or the DNS server is not reachable.

BSD-Reference: None

Initial Actions

- Check DNS server configuration.
- Check network configuration.

Procedure

Ensure that the DNS server is online.

15-800 / 810 / 820 / 830 Pop3 Error Fault

An error code received during a Pop3 session.

BSD-Reference: None

Initial Actions

- Ensure a valid email address is being entered.
- Validate the Pop3 server set up.
- Ensure correct entry of user name and password.
- Check that authentication option is enabled on machine.

Procedure

If problem persists, contact Email or network administrate.

17-100 IP Conflict Error Fault

The IP address conflicts with that of another system causing a machine communication error.

BSD-Reference: None

Procedure

Use Xerox Easy Print Manger to obtain a new IP address.

From the menu, select: [**Machine Settings, Network Settings, Assign IP address**].

17-310 Communication Error (Main PWB to Wireless PWB) Fault

The machine software has detected a communication error between the Main PWB and the Wireless PWB.

BSD-Reference: BSD 3.1A Printer Communication

Initial Actions

- Switch Off the power then switch On the power.
- Check machine network and data configuration settings.

Procedure

1. Ensure that the connectors are fully seated between the Main PWB and the Wireless PWB (REP 1.33).
2. If the problem persists, replace parts in the following order:
 - Flat Cable (REP 1.11), PL 4.1
 - Wireless PWB (REP 1.33), PL 1.1
 - Main PWB (REP 1.8), PL 4.1

17-700 / 710 BOOTP Error Fault

The machine displays the error message "DHCP, or BOOTP, causing a machine communication error.

BSD-Reference: None

Procedure

1. Switch Off the power then switch On the power.
2. Check BOOTP and network configuration.

17-800 / 810 DHCP Error Fault

The machine displays the error message "DHCP, or BOOTP, causing a machine communication error.

BSD-Reference: None

Procedure

1. Switch Off the power then switch On the power.
2. Check DHCP and network configuration.

17-900 802.1X Network Authentication Error Fault

The the 802.1X network authentication failed.

BSD-Reference: None

Procedure

Ensure that the 802.1X EAP Type, User name, and Password, for the Machine, Authentication Switch and Authentication Server match.

17-910 Firmware Upgrade Fault

The firmware upgrade aborted due to an invalid file.

BSD-Reference: None

Initial Actions

1. Check the USB connection.
2. Verify that the correct firmware file is being used.

Procedure

Cycle the machine power and repeat upgrade procedure [GP 7](#).

20-100 Fax Communication Error Fault

A communication error occurred during a fax transmission.

BSD-Reference: BSD 3.1B Printer Communication

Initial Actions

1. Call the target fax number to confirm a fax response.
2. Check condition of the fax line and connection.
3. Verify that the fax line is an analog phone line.
4. Switch Off the power then switch On the power.
5. Verify that the country setting is correct.
6. Resend the fax job.
7. Check fax communications to a different machine.

Procedure

Enter Diagnostic Mode. From the Control panel, select: [**Report, Error Info, Print**] to print the Error Information Report. **The target fax is causing the error.**

Y N

In Diagnostics, select: [**Report, Fax Options**] to verify Fax Send settings are at default.

Check that the Target Fax configuration is OK. **The Target Fax is OK.**

Y N

Reconfigure Target Fax.

Reseat the Fax PWB. **The fault clears.**

Y N

Replace the Fax PWB. [PL 2.2](#).

Check the connection between the Fax board and the Main PWB. **The connection is secure.**

Y N

Firmly reconnect the connector.

Replace the Main PWB ([REP 1.8](#)), [PL 4.1](#).

20-120 Scanning Error Fault

A error such as a paper jam or scanner fault has occurred during a manual-dial fax operation.

BSD-Reference: BSD 14.1 Scanning

Procedure

Clear any jammed sheets. Refer to the WorkCentre® 3215/3555 User Guide for detailed jam clearance instructions. Check the scanner. Refer to RAP 14-100 for troubleshooting the scanner. Resubmit the job.

20-200 Group Not Available Fault

User has selected a group location where only a single location number can be used. (I.e.: Adding locations for a multi-dial operation.)

BSD-Reference: None

Procedure

Resubmit fax using a group location.

20-400 / 410 Line Fault

Unable to connect with the remote machine. The fax line is busy or an error has occurred with fax transmission due to a phone line problem.

BSD-Reference: None

Procedure

Resubmit fax job. If problem persists, resubmit after an hour.

20-500 Memory Full Fault

The memory is full.

BSD-Reference: None

Procedure

Delete necessary documents, resend job when memory becomes available, or split the transmission into multiple operations.

20-600 No Answer Fault

The printer unable to connect to remote machine after maximum redial attempts.

BSD-Reference: None

Procedure

Ensure that remote machine is powered on and reattempt submission.

20-700 Number Not Assigned Fault

The speed dial location used has no number assigned to it.

BSD-Reference: None

Procedure

Dial the number manually or assign the number to the speed dial location.

20-900 Retry Redial Fault

The machine is waiting for the programmed interval to automatically redial.

BSD-Reference: None

Procedure

Press <START> to immediately redial or <STOP> to cancel the redial operation.

3 Image Quality RAPs

Image Quality Overview 3-3
IQ1 Vertical Black Line and Band RAP 3-4
IQ2 Vertical White Line and Band RAP 3-5
IQ3 Horizontal Black Bands RAP 3-5
IQ4 Spots RAP 3-6
IQ5 Low Image Density RAP 3-7
IQ6 Black or Dark Image RAP 3-7
IQ7 Uneven Density RAP 3-8
IQ8 Background RAP 3-9
IQ9 Residual Image (Ghosting) RAP 3-10
IQ10 Side 2 Staining 3-10
IQ11 Blank Page RAP 3-11
IQ12 Partial Image Deletions RAP 3-12

Image Quality Overview

Image quality defects can be attributed to printer components, consumables, media, internal software, external software applications, and environmental conditions. To successfully troubleshoot print-quality problems, eliminate as many variables as possible.

If the print-quality defect is still present after printing on approved media from an unopened ream of paper, investigate software applications and environmental conditions. Check the temperature and humidity under which the printer is operating. Compare this to the Environmental Specifications listed in Section 6.

When analyzing a imaging defect, determine if the defect is repeating or random. Check the Supplies Information Report for end of life conditions. Inspect the visible surfaces of all rollers for obvious defects. If a cursory inspection does not reveal any obvious defects, continue troubleshooting the defect.

WARNING

Do not perform repair activities with the power on or electrical power supplied to the machine. Some machine components contain dangerous electrical voltages that can result in electrical shock and possible serious injury.

DANGER: Ne pas effectuer de dépannage avec le contact principal activé ou avec l'alimentation électrique appliquée à la machine. Certains éléments de la machine comportent des tensions électriques dangereuses qui peuvent causer un choc électrique et de graves blessures.

AVVERTENZA: Non effettuare alcuna riparazione con l'alimentazione elettrica inserita. Alcuni componenti contengono corrente ad alta tensione che può provocare forti scosse e gravi ferite.

VORSICHT: Es dürfen erst Reparaturarbeiten durchgeführt werden, wenn das Gerät ausgeschaltet ist oder der Netzstecker nicht mehr mit der Stromquelle verbunden ist. Einige Komponenten des Gerätes sind stromführend und können daher zu ernsthaften Verletzungen oder Stromschlägen führen.

AVISO: No realice reparaciones con la máquina encendida o conectada a la corriente. Algunos componentes de la máquina contienen voltajes eléctricos peligrosos que pueden producir una descarga eléctrica y causar daños graves.

Defects Associated with Specific Components

To aid with diagnosis, the list below outlines image defects associated with specific components.

Laser Scanner Unit:

- Black Print
- Vertical white lines
- Curved lines

Transfer Roller:

- Uneven Density
- Background contamination
- Ghosting
- Vertical white lines
- Vertical black line or band

- Stains on the page back

Fuser:

- Ghosting
- Stains on the page back or front
- Poor image adhesion

Drum Cartridge:

- Uneven density
- Background contamination
- Spots, smudges, or smears
- Ghosting
- Vertical white lines
- Vertical black line or band
- Stains on the page front
- Blank prints
- Black prints
- Horizontal Black lines or bands

After determining the defect type and possible source, match the defect with those listed in Table 1. Go to the RAP listed to correct the defect.

Image Defect Definitions

Table 1 lists image defect definitions and the RAP used to correct the problem.

Table 1 Image Defect Definitions

Defect	Definition	Go To
Vertical Black Line and Band	Vertical black lines or bands occur in the printed image.	IQ1
Vertical White Line and Band	Vertical white lines or bands occur in the printed image.	IQ2
Horizontal Black Band	Periodic dark or blurry horizontal bands in the printed image.	IQ3
Spots	Random or periodic dark areas in the low density areas of a print, or voids in the dark areas of a print.	IQ4
Low Image Density	Printed image is light with no ghosting.	IQ5
Black or Dark Image	Printed image is totally dark or black.	IQ6
Uneven Density	Print density is uneven between the left and right portion of the printed image.	IQ7
Background	Uniform toner contamination in most or all non-image areas.	IQ8
Residual Image (Ghosting)	The image from a previous print appears on the current print.	IQ9
Side 2 Staining	Side two of a simplex or duplex print is stained.	IQ10
Blank Page	The entire image area is blank.	IQ11
Partial Image Deletions	Areas of the printed image are light or missing entirely on limited areas of the paper.	IQ12

Test Prints

Test Pattern pages are available for troubleshooting image quality defects and to confirm proper printer operation. Printing the Test Pattern is useful for stimulating asynchronous (dynamic) events related to the print process, or as a test for media path and media-related problems.

The test print provides a variety of different line styles in both process and cross-process directions. The pattern is used to check registration, dot size and image density.

Test Pattern 1 and Test Pattern 2 are essentially the same but for different media sizes. Table 2 describes the test patterns and the purpose for which they are used to identify image quality defects.

Table 2 Internal Test Patterns

Test Pattern Number	Description	Purpose
Test Pattern 1	8.5 x 11 inches (Letter)	Light density uniformity, deletions, lines, bands, streaks, smears, solid area reproduction, motion quality (LSU).
Test Pattern 2	A4	Light density uniformity, deletions, lines, bands, streaks, smears, solid area reproduction, motion quality (LSU).

To create a test print from the Control Panel:

1. Enter Diagnostic Mode. Press the <Menu> button, the <#> button, then using the keypad select <1934>, then press the <OK> button.
2. Select: [**Diagnostics, Machine Test, Test Pattern, Print, Yes**]. Press the <OK> button after menu selections.
 - Test Pattern 1 for 8.5 x 11 prints.
 - Test Pattern 2 for A4 prints.

IQ1 Vertical Black Line and Band RAP

Thin black vertical lines or black vertical bands occur in the printed image.

Procedure

Switch Off the power.

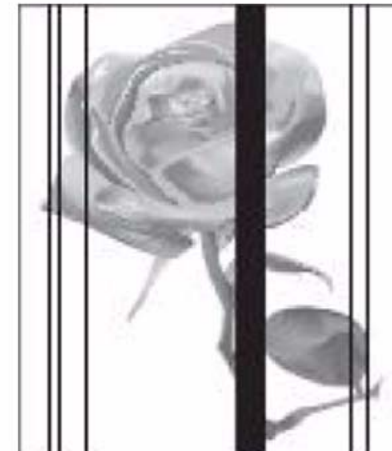
Check the Transfer Roller PL 4.1 for wear or damage; and remaining life, refer to GP 6 Machine Reports. **The Transfer Roller is OK.**

Y N

Replace the Transfer Roller; (REP 1.16), PL 4.1.

Switch On the power and make a test print.

If problem persists, replace the Drum Cartridge, refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Drum Cartridge.



0300101bat

Figure 1 Black Lines and Bands

IQ2 Vertical White Line and Band RAP

Thin white vertical lines or white vertical bands occur in the printed image (Figure 1).

Initial Actions

Clean the surface of the LSU window with a clean cotton swab and recommended cleaner.

Procedure

Check the life of the Drum Cartridge, refer to GP 6 Machine Reports. **The Drum Cartridge has reached end of life.**

Y N
Switch Off the power. Replace the Drum Cartridge. Refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Drum Cartridge.

Check the space between the LSU and the Drum Cartridge, remove any debris or blockage.

The defect is gone.

Y N
Replace the Fuser Module; (REP 1.17), PL 5.1.

Switch on the power. Perform Final Actions.



Figure 1 White Lines and Bands

0300102bat

IQ3 Horizontal Black Bands RAP

Periodic dark or blurry horizontal stripes in the printed image (Figure 1).

Procedure

- Switch Off the power.
- Check high voltage contacts between the Drum Cartridge and the HVPS PWB for contamination or damage.
- Switch On the power and make a test print.

The defect is still present.

Y N
Go to Call Closeout.

Refer to WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Drum Cartridge or Toner Cartridge.

- Replace the Drum Cartridge.
- Replace the Toner Cartridge.

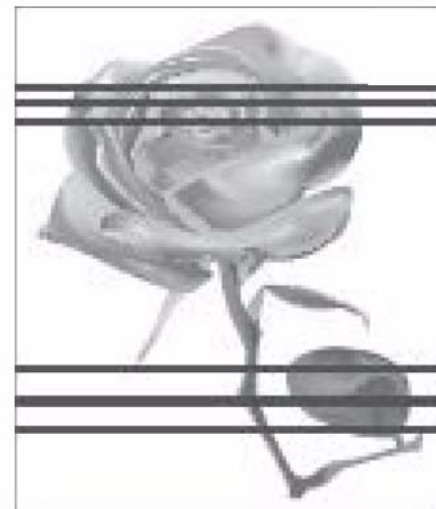


Figure 1 Horizontal Black Bands

0300103bat

IQ4 Spots RAP

Random or periodic dark areas in the low density areas of a print, or voids in the dark areas of a print (Figure 1).

Initial Actions

Ensure that the Drum Cartridge is firmly seated.

Procedure

Check the Transfer Roller for wear, damage; and remaining life, refer to GP6 Machine Reports. **The Transfer Roller is OK.**

Y N

Replace the Transfer Roller; (REP 1.16), PL 4.1.

Switch off the power.

Clean the contacts on the following components:

- Toner Cartridge
- Drum Cartridge
- HVPS PWB

Switch on the power and make a test print. **The test print looks OK.**

Y N

Replace the Toner Cartridge. Refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Toner Cartridge.

If problem persists, replace the Fuser Module;(REP 1.17), PL 5.1.



Figure 1 Black Spots

0300104bat

IQ5 Low Image Density RAP

The printed image is light, with no ghosting (Figure 1).

Initial Actions

Remove Toner Cartridge. Rotate the cartridge 5-6 full rotations to redistribute the toner. Make a test print.

Check the life of the Toner Cartridge, refer to GP 6 Machine Reports. Replace the Toner Cartridge if it has reached end of life, refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Toner Cartridge.

If the problems continue, follow the procedure.

Procedure

- Switch off the power.
- Clean the terminals on the HVPS PWB and the Toner Cartridge.
- Switch on the power and make a test print.

The problem continues.

Y N

Go to Call Closeout.

Replace the HVPS PWB; (REP 1.6), PL 4.1.



Figure 1 Light Image

0300105bat

IQ6 Black or Dark Image RAP

The printed image is totally dark or black (Figure 1).

Procedure

WARNING

Do not perform repair activities with the power on or electrical power supplied to the machine. Some machine components contain dangerous electrical voltages that can result in electrical shock and possible serious injury.

DANGER: Ne pas effectuer de dépannage avec le contact principal activé ou avec l'alimentation électrique appliquée à la machine. Certains éléments de la machine comportent des tensions électriques dangereuses qui peuvent causer un choc électrique et de graves blessures.

AVVERTENZA: Non effettuare alcuna riparazione con l'alimentazione elettrica inserita. Alcuni componenti contengono corrente ad alta tensione che può provocare forti scosse e gravi ferite.

VORSICHT: Es dürfen erst Reparaturarbeiten durchgeführt werden, wenn das Gerät ausgeschaltet ist oder der Netzstecker nicht mehr mit der Stromquelle verbunden ist. Einige Komponenten des Gerätes sind stromführend und können daher zu ernsthaften Verletzungen oder Stromschlägen führen.

AVISO: No realice reparaciones con la máquina encendida o conectada a la corriente. Algunos componentes de la máquina contienen voltajes eléctricos peligrosos que pueden producir una descarga eléctrica y causar daños graves.

- Switch off the power.
- Clean the contacts on the Toner Cartridge, Drum Cartridge, and HVPS PWB.
- Switch on the power and make a test print.

The problem continues.

Y N

- Go to Call Closeout.
- The Charge Roller is likely defective. Replace the Toner Cartridge, refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Toner Cartridge.
- If the image is Black, replace the HVPS PWB; (REP 1.16), PL 4.1.



0300106bat

Figure 1 Dark or Black Image

IQ7 Uneven Density RAP

Print density is uneven between the left and right portion of the printed image (Figure 1).

Initial Actions

- Ensure that the printer is level.
- Check the life of the Toner Cartridge, refer to [GP 6 Machine Reports](#).
Replace the Toner Cartridge if it has reached end of life, refer to the [WorkCentre® 3215/3225 User Guide](#) for detailed instructions on how to replace the Toner Cartridge.
- Remove the Toner Cartridge. Rotate the Toner Cartridge 5-6 full rotations to redistribute the toner.

Procedure

WARNING

Do not perform repair activities with the power on or electrical power supplied to the machine. Some machine components contain dangerous electrical voltages that can result in electrical shock and possible serious injury.

DANGER: Ne pas effectuer de dépannage avec le contact principal activé ou avec l'alimentation électrique appliquée à la machine. Certains éléments de la machine comportent des tensions électriques dangereuses qui peuvent causer un choc électrique et de graves blessures.

AVVERTENZA: Non effettuare alcuna riparazione con l'alimentazione elettrica inserita. Alcuni componenti contengono corrente ad alta tensione che può provocare forti scosse e gravi ferite.

VORSICHT: Es dürfen erst Reparaturarbeiten durchgeführt werden, wenn das Gerät ausgeschaltet ist oder der Netzstecker nicht mehr mit der Stromquelle verbunden ist. Einige Komponenten des Gerätes sind stromführend und können daher zu ernsthaften Verletzungen oder Stromschlägen führen.

AVISO: No realice reparaciones con la máquina encendida o conectada a la corriente. Algunos componentes de la máquina contienen voltajes eléctricos peligrosos que pueden producir una descarga eléctrica y causar daños graves.

Switch Off the Power. Check the contacts on the Toner Cartridge and HVPS PWB for contamination. **The contacts are OK.**

Y N
Clean the contacts or replace the Toner Cartridge.

Check the Transfer Roller for wear or damage. **The Transfer Roller is OK.**

Y N
Replace the Transfer Roller; ([REP 1.16](#)), [PL 4.1](#).

If problem persists, replace the HVPS PWB; ([REP 1.6](#)), [PL 4.1](#).



0300107bat

Figure 1 Uneven Density

IQ8 Background RAP

Uniform toner contamination appears in most or all non-image areas of the printed sheet (Figure 1).

Initial Actions

- Check that media type settings are correct.
- Check that the paper meets specifications. Refer to Section 6 for product specifications.
- Check the life of the Toner Cartridge, refer to GP 6 Machine Reports.

Replace the Toner Cartridge if it has reached end of life, refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Toner Cartridge.

Procedure

- Switch off the power.
- Clean the contacts on the Print Cartridge, Toner Cartridge, and HVPS PWB.
- Switch on the power and make a test print.

The test print looks OK.

Y N
| Replace the HVPS PWB; (REP 1.6), PL 4.1.

Go to Call Closeout.



0300108bat

Figure 1 Background

IQ9 Residual Image (Ghosting) RAP

The image from a previous print appears on the current print (Figure 1).

Procedure

Switch Off the Power.

Check the Transfer Roller, PL 4.1 for the following:

- Wear or damage.
- The left and right tension springs for damage.
- Be sure all parts are installed correctly.

The Transfer Roller is OK.

Y N
| Replace the Transfer Roller; (REP 1.16), PL 4.1.

If problem continues, replace components in the following order:

Refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on how to replace the Drum Cartridge or Toner Cartridge.

- Drum Cartridge
- Toner Cartridge
- Fuser Module; (REP 1.17), PL 5.1.
- HVPS PWB; (REP 1.6), PL 4.1.



0300109bat

Figure 1 Ghost Image

IQ10 Side 2 Staining

Side 2 of a simplex or duplex print is stained (Figure 1).

Procedure

Switch Off the Power.

Check the Transfer Roller, PL 4.1 for the following:

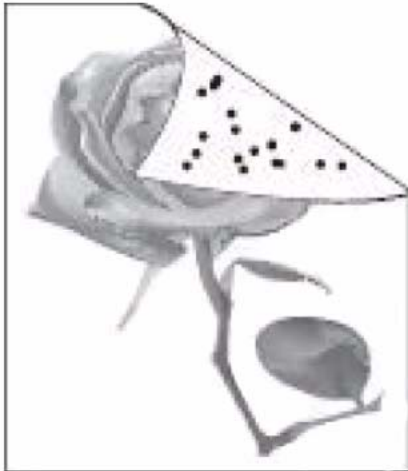
- Wear or damage.
- The left and right tension springs for damage.
- Be sure all parts are installed correctly.

The Transfer Roller is OK.

Y N

Replace the Transfer Roller; (REP 1.16), PL 4.1.

If problem persists, replace the Fuser Module; (REP 1.17), PL 5.1.



0300110bat

Figure 1 Side 2 Staining

IQ11 Blank Page RAP

The entire image area is blank (Figure 1).

Initial Actions

Replace any components at end of life, refer to GP 6 Machine Reports.

Procedure

- Switch Off the power.
- Check the space between the LSU and the Drum Cartridge, remove any debris or blockage.
- Clean the terminals on the Toner Cartridge, Drum Cartridge, and the HVPS PWB.
- Switch on the power and make a test print.

The problem continues.

Y N
Go to Call Closeout.

Replace the Drum Cartridge, refer to the WorkCentre® 3215/3225 User Guide, Section 6 Maintenance, General Care, for detailed instructions on how to replace the Drum Cartridge.

The problem continues.

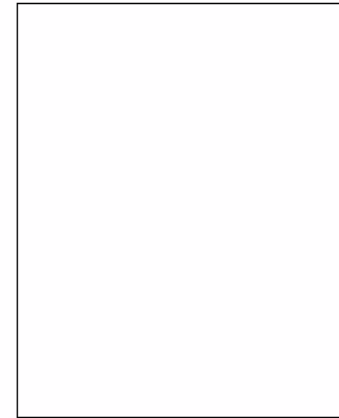
Y N
Go to Call Closeout.

Check the circuit between the Main PWB and the HVPS PWB, refer to BSD 1.1, **The circuit is OK.**

Y N
Replace any defective components:

- Main PWB to LVPS / HVPS PWB Wire Harness.
- Main PWB; (REP 1.8), PL 1.1.
- HVPS PWB; (REP 1.6), PL 4.1.

Go to Call Closeout.



0300111bat

Figure 1 Blank Image

IQ12 Partial Image Deletions RAP

Areas of the printed image are light or missing entirely on limited areas of the paper (Figure 1).

Initial Actions

Be sure the printer is installed on a level surface.

Procedure

Procedure

- Switch Off the Power.
- Remove the Toner Cartridge.
- Rotate the Toner Cartridge side to side for 5 to 6 full rotations to redistribute the toner.
- Reinstall and print 10 test copies.

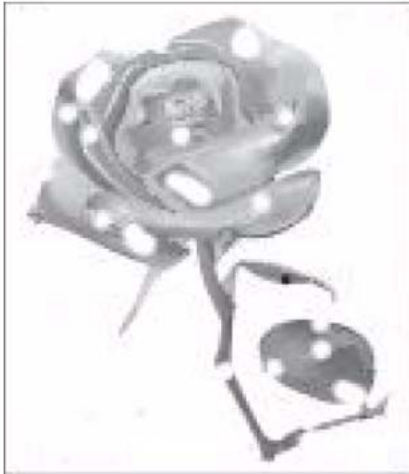
The problem continues.

Y N
Go to Call Closeout.

Switch Off the Power.

Check the Transfer Roller, [PL 4.1](#) for the following:

- Wear or damage.
- The left and right tension springs for damage.
- Be sure all parts are installed correctly.



0300112bat

Figure 1 Image Deletions

REP 1.1 Front Cover and Manual Feed Cover	4-3
REP 1.2 Left and Right Side Covers	4-5
REP 1.3 Middle Covers	4-6
REP 1.4 Rear Cover	4-8
REP 1.5 Control Panel PWB	4-9
REP 1.6 HVPS (High Voltage Power Supply)	4-11
REP 1.7 LVPS (Low Voltage Power Supply)	4-12
REP 1.8 Main PWB	4-13
REP 1.9 Drive Motor	4-14
REP 1.10 Main Drive Unit	4-19
REP 1.11 LSU and Cables	4-21
REP 1.12 Retard Roll	4-22
REP 1.13 Feed and Registration Clutches / Joint PWB	4-23
REP 1.14 Paper Feed Sensors PWB and Actuators	4-24
REP 1.15 Feed and Forward Roll Assembly	4-26
REP 1.16 Transfer Roll	4-28
REP 1.17 Fuser Module	4-29
REP 1.18 Duplex Paper Guide	4-30
REP 1.19 Exit Sensor	4-31
REP 1.20 Output Tray Full Sensor	4-32
REP 1.21 FAX PWB	4-33
REP 1.22 Automatic Document Feeder (ADF)	4-34
REP 1.23 ADF Hinges	4-35
REP 1.24 ADF Feed Rolls Assembly	4-36
REP 1.25 ADF Drive Motor	4-37
REP 1.26 Scanner Assembly	4-38
REP 1.27 Scanner Drive Motor	4-39
REP 1.28 ADF / Scanner Assembly	4-40
REP 1.29 Exit Roll and Bushings	4-41
REP 1.30 Feed Idler Gear	4-42
REP 1.31 Paper Drive Roll	4-43
REP 1.32 Manual Paper Tray	4-47
REP 1.33 WNPC (WiFi) PWB	4-48
REP 1.34 Registration Roll	4-49
REP 1.35 ADF Feed Separation Pad	4-57
REP 1.36 Manual Feed Cover	4-59

REP 1.1 Front Cover and Manual Feed Cover

Parts List on PL 2.1

Removal

1. Switch Off the Printer and disconnect the Power Cord.
2. Remove the Left and Right Side Covers (REP 1.2).
3. Disconnect the wire harness to the Front Cover (Figure 1).

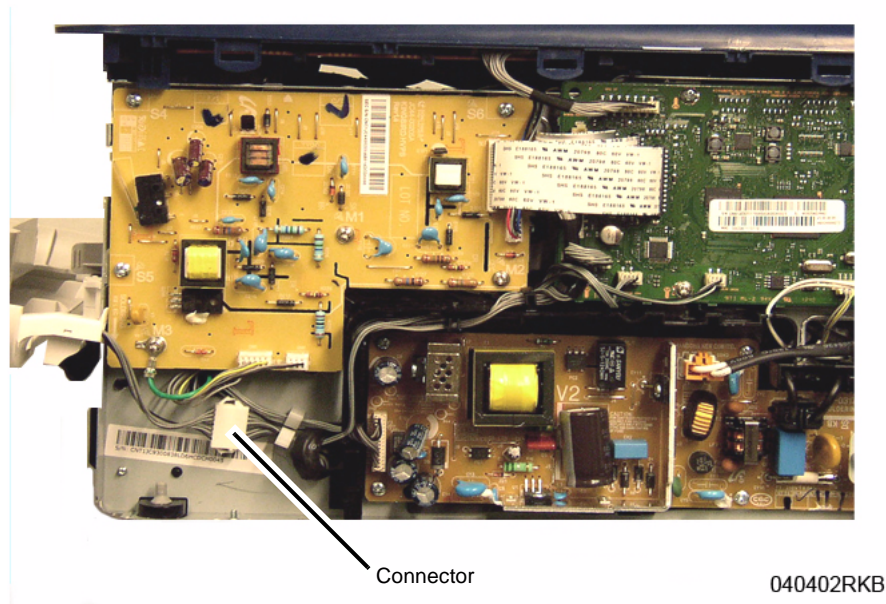


Figure 1 Front Cover P/J Connector

4. Disconnect the Front Cover Support Arm (Figure 2).

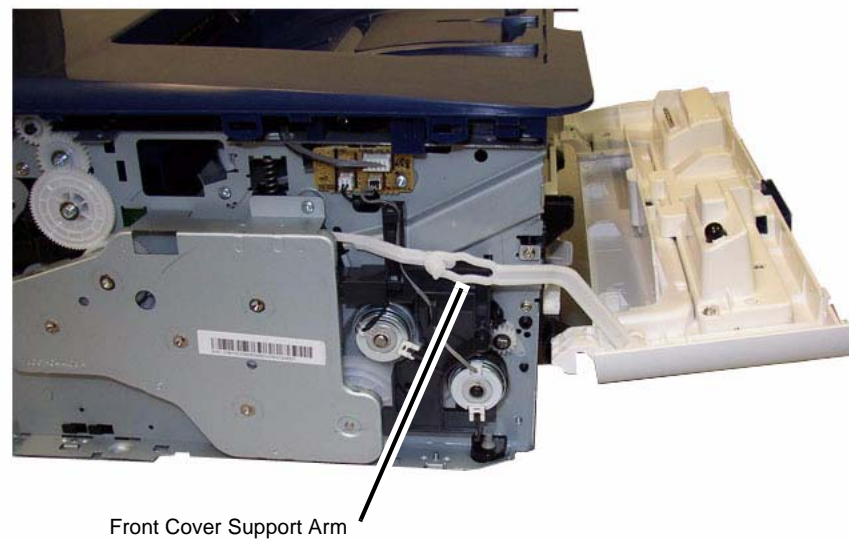
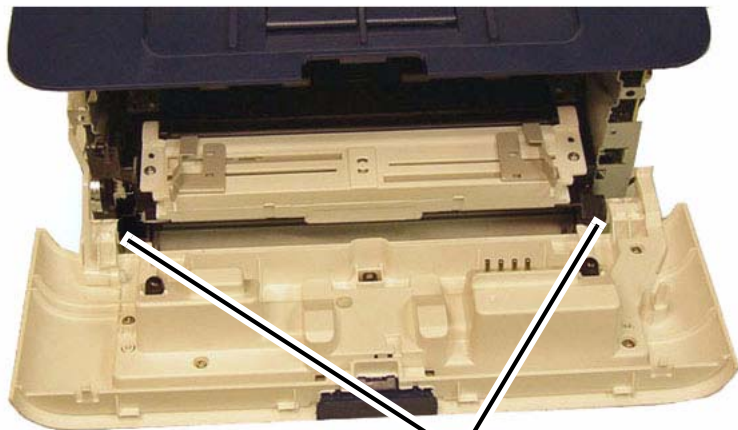


Figure 2 Front Cover Support Arm

NOTE: A wide blade flat screwdriver can be used to help release the Front Cover Pivot.

5. Release the Front Cover Pivots (2) and remove the cover (Figure 3).



Pivots

Figure 3 Front Cover Removal

040420RKB

6. **IMPORTANT**

If the Manual Feed Cover is being replaced, remove the Tag Matrix from the Manual Feed Cover and install it on to the new Cover (Figure 4).



Tag Matrix

TagMatrix-BAT-KB

Figure 4 Tag Matrix on the Manual Feed Cover

Replacement

Install the components in the reverse of removal.

REP 1.2 Left and Right Side Covers

Parts List on PL 2.1

Removal

1. Remove the Paper Tray from the printer.

NOTE: Cover the Drum Cartridge with several sheets of paper to prevent it from being light shocked.

2. Open the Front Cover, remove the Toner Cartridge and the Drum Cartridge (Figure 1).

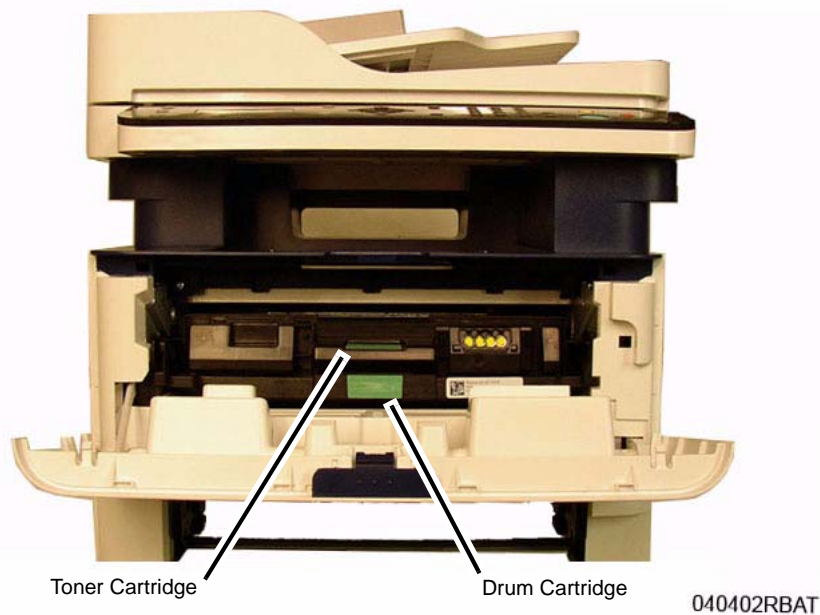


Figure 1 Toner Cartridge and Photoreceptor Handles

3. The side covers are held in place with Plastic Latches, release them carefully to avoid breakage. To release the Latches press the hook end of the latch away from the part (Figure 2).



Figure 2 Plastic Latch

4. Remove the Right Side Cover, being careful not to damage the latching hooks.
 - a. Release (pull) the upper front latch hook.
 - b. Release the top latch hooks then the bottom latch hooks.
 - c. Release the front lower latch hook, and remove the cover.
5. Remove the Left Side Cover, being careful not to damage the latching hooks.
 - a. Release (pull) the center front latch hook.
 - b. Release the top latch hooks then the bottom latch hooks.
 - c. Release the rear latch hook, and remove the cover.

Replacement

Install the components in the reverse of removal.

REP 1.3 Middle Covers

Parts List on PL 2.2

Removal

1. Remove the Left and Right Side Covers (REP 1.2).
2. Remove the ADF Module (REP 1.28).
3. Remove the Rear Cover (REP 1.4).
4. If the printer has a WiFi PWB, disconnect the WiFi connector on the Main PWB (Figure 1).

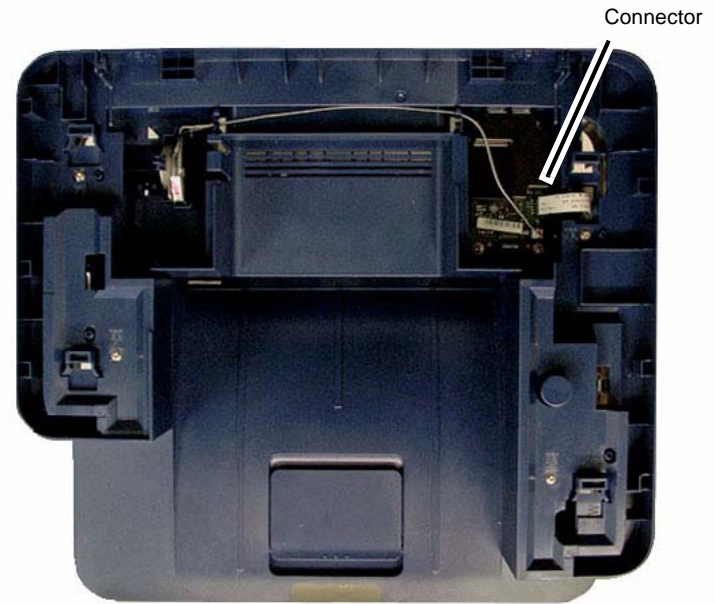


Connector

040442bRBAT

Figure 1 Wireless (WiFi) Connector

5. Disconnect the FAX PWB connector (Figure 2).



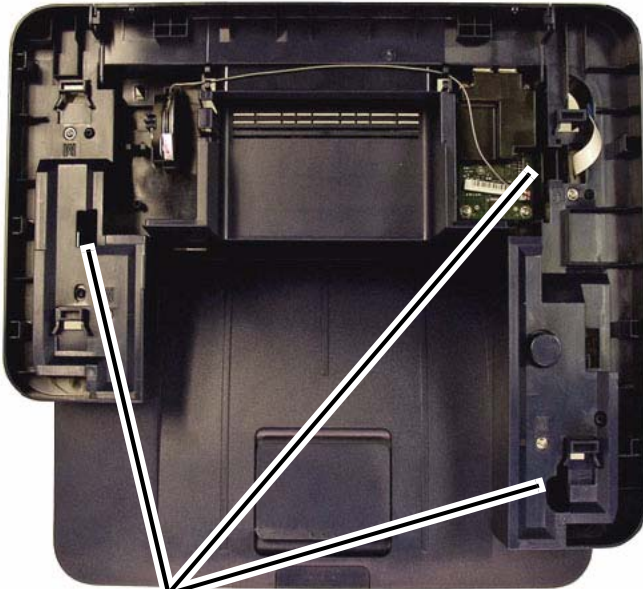
Connector

040420RBAT

Figure 2 FAX PWB Connector (Top View)

NOTE: If the Middle Cover is being replaced, remove the FAX PWB (4 screws) and the Speaker (release the latch), and reinstall them onto the new cover.

6. Remove the Middle Cover top screws (3) (Figure 3).
The screws are located at the bottom of the side cover openings.

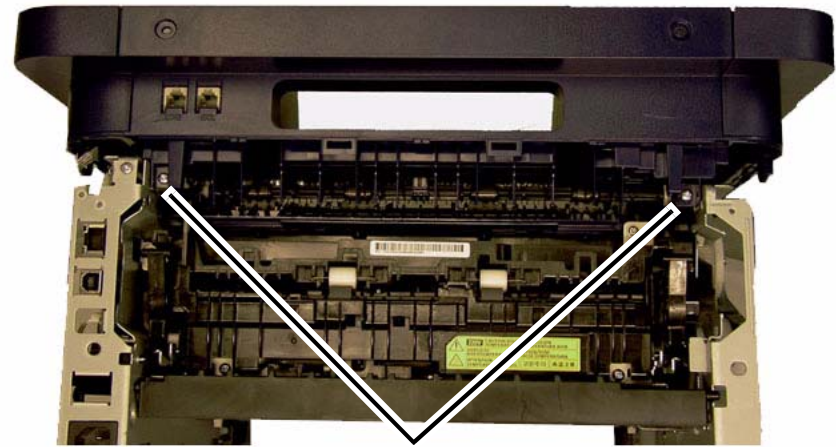


Screws

Figure 3 Middle Cover Screws (Top View)

040420aRBAT

7. Remove the Middle Cover rear screws (2) (Figure 4).

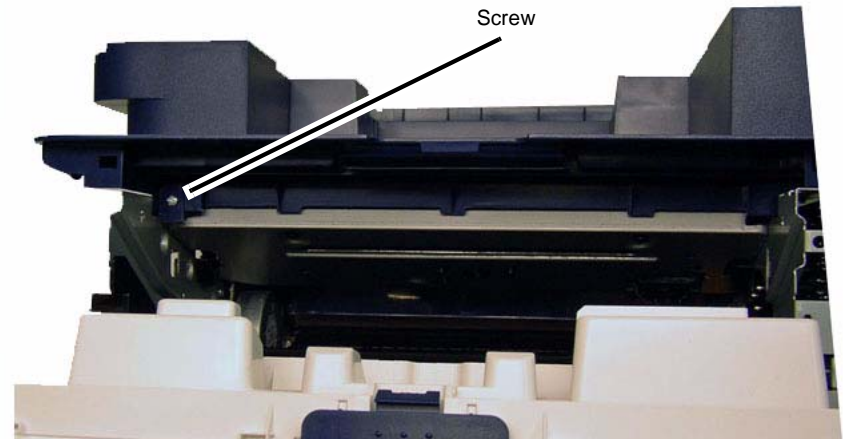


Screws

040423RBAT

Figure 4 Middle Cover Rear Screws

8. Remove the Middle Cover front screw (1) (Figure 5).
Release the Latch by the front screw and remove the Middle Cover.



Screw

040422RBAT

Figure 5 Middle Cover Front Screw

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the cover to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

REP 1.4 Rear Cover

Parts List on [PL 2.1](#)

Removal

1. Remove the Left and Right Side Covers ([REP 1.2](#)).
2. Remove the Rear Cover Screws (4) ([Figure 1](#)).

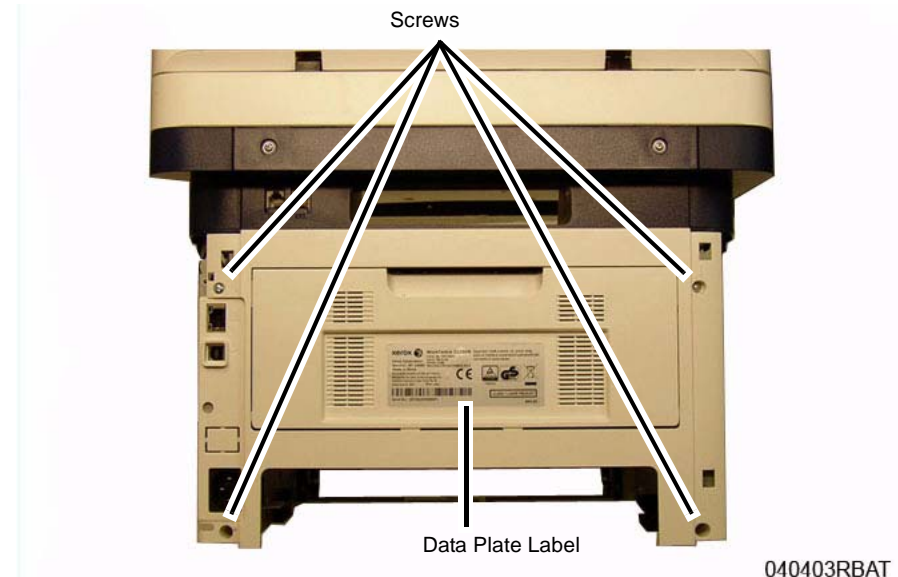
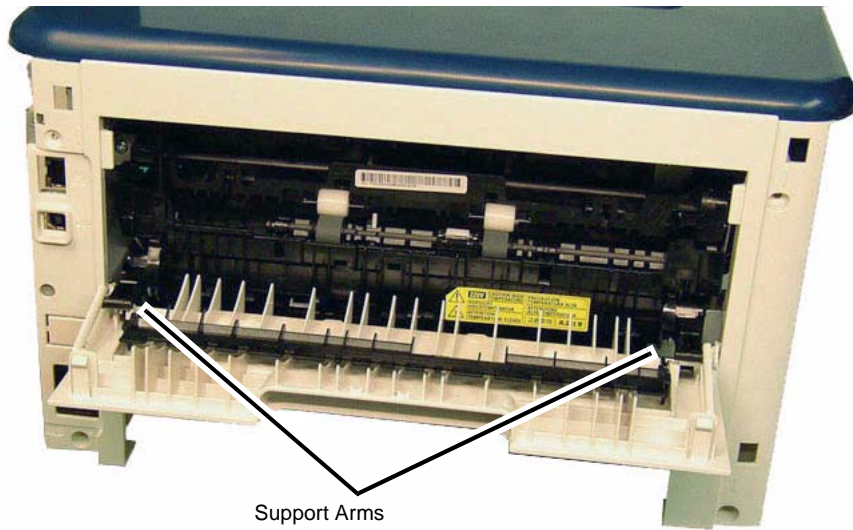


Figure 1 Rear Cover Screws

3. Open the Rear Cover and release the support arms on each side of the cover. ([Figure 2](#))



Support Arms

040419RKB

Figure 2 Support Arms

4. Push down on the top of the Rear Cover to release the Latch Hooks (3) and remove the cover.

Replacement

Install the components in the reverse of removal.

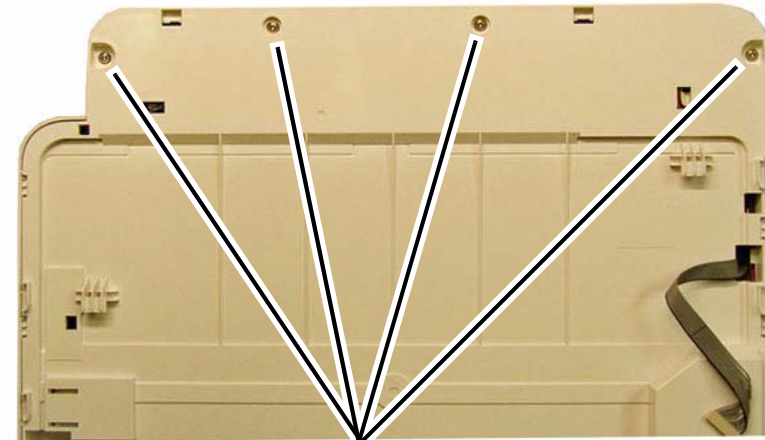
Important: If the Rear Cover is being replaced, remove the Data Plate Label from the old Rear Cover and install it onto the new Rear Cover (Figure 1).

REP 1.5 Control Panel PWB

Parts List on PL 8.1

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Right Side Cover (REP 1.2).
3. Remove the ADF Module (REP 1.22).
4. Remove the ADF/Scanner Assembly (REP 1.28).
5. Remove the screws (4) from under the Control Panel (Figure 1).



Screws

040413RBAT

Figure 1 Control Panel Screws (Bottom View)

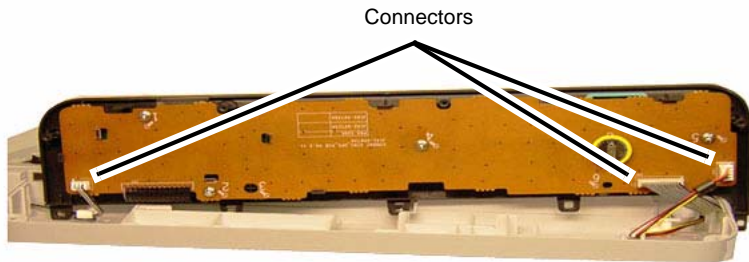
6. Remove the Control Panel Assembly by lifting up the front of the Panel and pulling it forward (Figure 2).



040414RBAT

Figure 2 Control Panel Removal

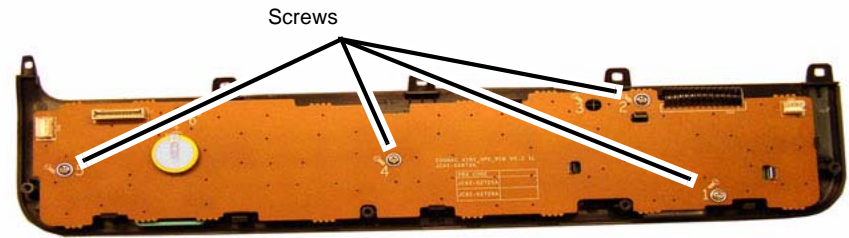
7. Disconnect the Control Panel PWB connectors (3) (Figure 3).



040415RBAT

Figure 3 Control Panel Connectors

8. Remove the Control Panel PWB. (Figure 4):
 - a. Remove the screws (4).
 - b. Release the latches and remove the PWB.



040416RBAT

Figure 4 Control Panel Screws (Bottom View)

Replacement

Install the components in the reverse of removal.

REP 1.6 HVPS (High Voltage Power Supply)

Parts List on PL 4.1

Removal

WARNING

Do not perform repair activities with the power on or electrical power supplied to the machine. Some machine components contain dangerous electrical voltages that can result in electrical shock and possible serious injury.

DANGER: Ne pas effectuer de dépannage avec le contact principal activé ou avec l'alimentation électrique appliquée à la machine. Certains éléments de la machine comportent des tensions électriques dangereuses qui peuvent causer un choc électrique et de graves blessures.

AVVERTENZA: Non effettuare alcuna riparazione con l'alimentazione elettrica inserita. Alcuni componenti contengono corrente ad alta tensione che può provocare forti scosse e gravi ferite.

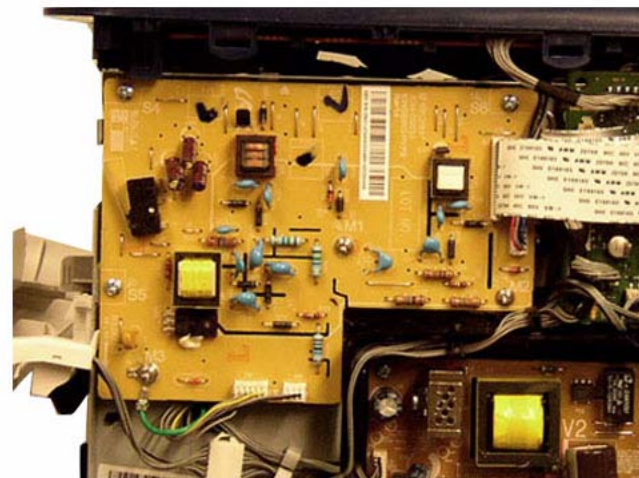
VORSICHT: Es dürfen erst Reparaturarbeiten durchgeführt werden, wenn das Gerät ausgeschaltet ist oder der Netzstecker nicht mehr mit der Stromquelle verbunden ist. Einige Komponenten des Gerätes sind stromführend und können daher zu ernsthaften Verletzungen oder Stromschlägen führen.

AVISO: No realice reparaciones con la máquina encendida o conectada a la corriente. Algunos componentes de la máquina contienen voltajes eléctricos peligrosos que pueden producir una descarga eléctrica y causar daños graves.

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Right Side Cover (REP 1.2).

NOTE: When removing the HVPS PWB be careful not to lose the spring loaded contacts between the Print Cartridge and the HVPS PWB.

3. Remove the HVPS PWB. (Figure 1).
 - a. Disconnect all the connectors on the HVPS PWB.
 - b. Remove the screws (6) and the HVPS PWB.



040411RKB

Figure 1 HVPS PWB

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the PWB to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

REP 1.7 LVPS (Low Voltage Power Supply)

Parts List on PL 4.1

Removal

WARNING

Do not perform repair activities with the power on or electrical power supplied to the machine. Some machine components contain dangerous electrical voltages that can result in electrical shock and possible serious injury.

DANGER: Ne pas effectuer de dépannage avec le contact principal activé ou avec l'alimentation électrique appliquée à la machine. Certains éléments de la machine comportent des tensions électriques dangereuses qui peuvent causer un choc électrique et de graves blessures.

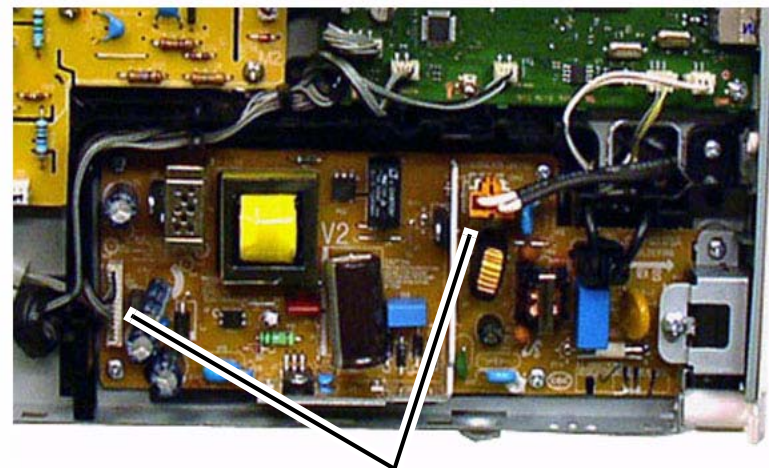
AVVERTENZA: Non effettuare alcuna riparazione con l'alimentazione elettrica inserita. Alcuni componenti contengono corrente ad alta tensione che può provocare forti scosse e gravi ferite.

VORSICHT: Es dürfen erst Reparaturarbeiten durchgeführt werden, wenn das Gerät ausgeschaltet ist oder der Netzstecker nicht mehr mit der Stromquelle verbunden ist. Einige Komponenten des Gerätes sind stromführend und können daher zu ernsthaften Verletzungen oder Stromschlägen führen.

AVISO: No realice reparaciones con la máquina encendida o conectada a la corriente. Algunos componentes de la máquina contienen voltajes eléctricos peligrosos que pueden producir una descarga eléctrica y causar daños graves.

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Right Side Cover (REP 1.2).

3. Remove the LVPS PWB. (Figure 1):
 - a. Disconnect all the connectors (2).
 - b. Remove the screws (6) and the LVPS PWB.



Connectors

040417aRKB

Figure 1 SMPS PWB

Replacement

Install the components in the reverse of removal.

REP 1.8 Main PWB

Parts List on PL 1.1

Removal

WARNING

Do not perform repair activities with the power on or electrical power supplied to the machine. Some machine components contain dangerous electrical voltages that can result in electrical shock and possible serious injury.

DANGER: Ne pas effectuer de dépannage avec le contact principal activé ou avec l'alimentation électrique appliquée à la machine. Certains éléments de la machine comportent des tensions électriques dangereuses qui peuvent causer un choc électrique et de graves blessures.

AVVERTENZA: Non effettuare alcuna riparazione con l'alimentazione elettrica inserita. Alcuni componenti contengono corrente ad alta tensione che può provocare forti scosse e gravi ferite.

VORSICHT: Es dürfen erst Reparaturarbeiten durchgeführt werden, wenn das Gerät ausgeschaltet ist oder der Netzstecker nicht mehr mit der Stromquelle verbunden ist. Einige Komponenten des Gerätes sind stromführend und können daher zu ernsthaften Verletzungen oder Stromschlägen führen.

AVISO: No realice reparaciones con la máquina encendida o conectada a la corriente. Algunos componentes de la máquina contienen voltajes eléctricos peligrosos que pueden producir una descarga eléctrica y causar daños graves.

1. Record the machine serial number from the Data Plate (located on the rear cover beneath the bar code) or from a Configuration Report printed prior to installing the new PWB. To print a Configuration Report (GP 2) press the <Information> Button then using the up/down arrows, navigate to **Info Pages> Configuration>OK**, then <Yes> to print the report.
2. Switch Off the Printer and disconnect the Power Cord.
3. Remove the Right Side Cover (REP 1.2).
4. Remove the Wifi PWB if installed (REP 1.33)
5. Remove the Main PWB. (Figure 1).
 - a. Disconnect all the connectors on the Main PWB.
 - b. Remove the screws (5) and the Main PWB.

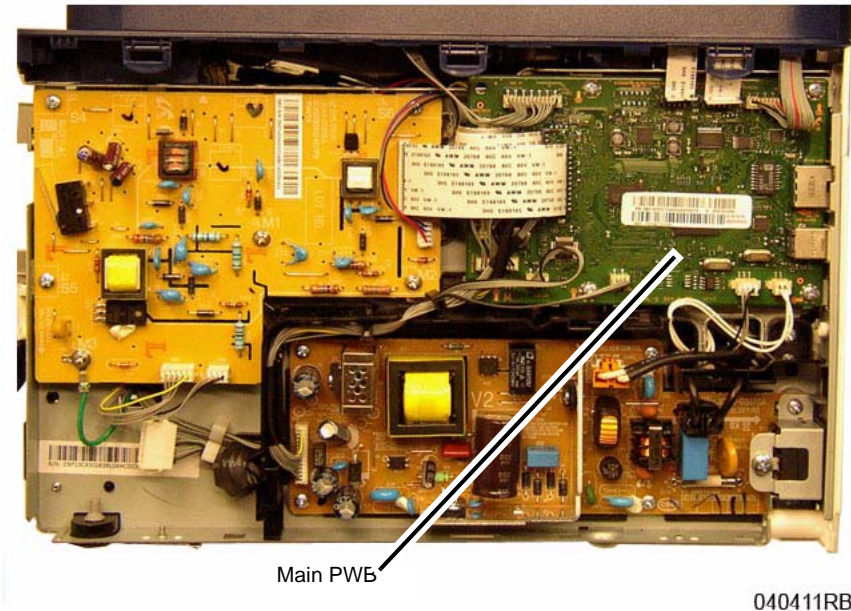


Figure 1 Main PWB

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the PWB to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

After installing a new Main PWB, the following steps **MUST** be performed to write the machine serial number to the new Main PWB:

1. Reconnect the Power Cord. Power On the machine.
2. Connect the PWS to the printer via USB connection.
3. Download the USB Serial Number writing application; *USB_Serial.V1.02.exe*, to the PWS from the GSN website (GP 10), and run the application.
 - a. Double-click the executable file and follow the steps listed in the USB Serial application window to write the machine serial number to the new Main PWB. [Figure 3].

NOTE: Select the **[Check USB]** button to ensure that there is a good USB connection BEFORE entering the serial number. If the connection is good, "USB Success," will display in the area above the button. If there is a problem with the USB connection, "USB Fail" will display.



040440RKB

Figure 2 PWB Serial Number Tool Screen

4. After successfully entering the serial number, exit the PWB Serial Number writing application.
5. Print a Configuration Report (GP 6) and check that the original machine serial number is displayed under the **Device Profile** heading.

NOTE: There is a function in *Diagnostics* that allows for entry of the serial number using the keypad. From *Diagnostic Mode*, (GP 1) select: **[Data Set Up>Set Serial Number]** then, using the keypad, enter the serial number. Press the **<OK>** button to confirm selections. **This function allows numeric entries only.** For serial numbers containing alpha characters (letters), use the serial number writing tool; *USB_Serial.V1.02.exe* (GP 10).

REP 1.9 Drive Motor

Parts List on **PL 4.6**

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the following covers:
 - a. The Left and Right Side Covers (REP 1.2).
 - b. The Front Cover (REP 1.1).
 - c. The Rear Cover (REP 1.4).
3. Remove the Middle Cover (REP 1.3).
4. Remove the Bottom Bar and Duplex Module (Figure 1).
 - a. Remove the screws (2) and Bottom Bar.
 - b. Press the Green Tabs (2) to unlatch the Duplex Paper Guide. Remove the Duplex Paper Guide through the rear of the printer.

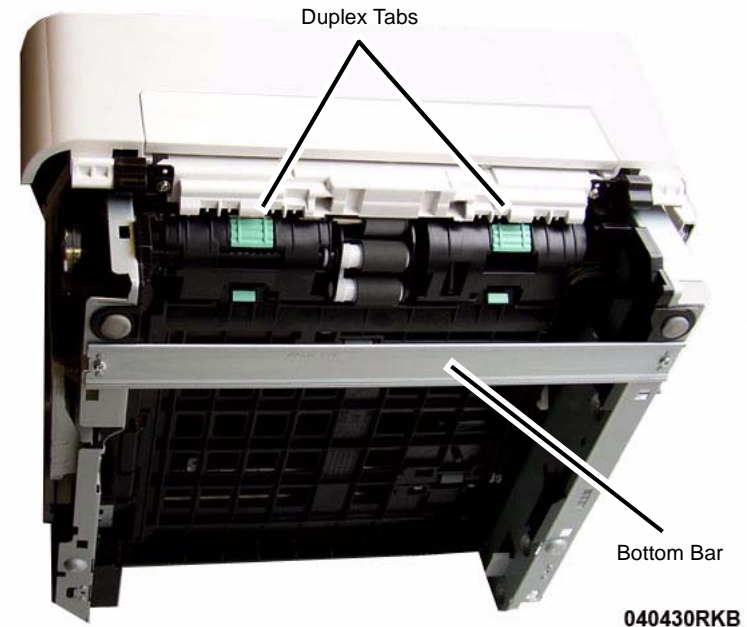


Figure 1 Bottom Bar and Duplex Paper Guide (Bottom View)

5. Remove the Main Drive Unit (5 screws) and move the Fuser Drive Locking Lever to the Unlock position (Right) (Figure 2).

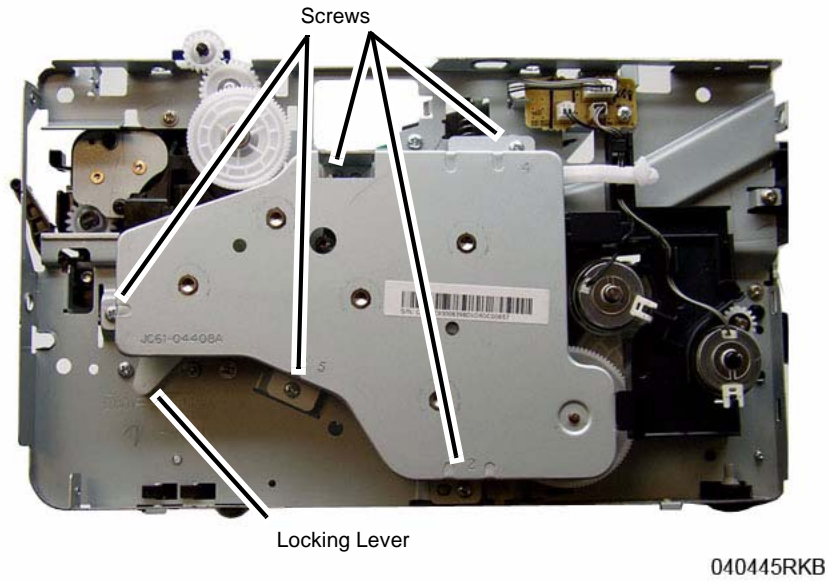


Figure 2 Main Drive Unit

040445RKB

6. Perform the Following (Figure 3):
- Disconnect the Feeder PWB Connector (CN3), and remove the PWB (1 screw).
 - Remove the Feed and Registration Clutches, remove the Snap Rings and Washer from the Clutches.
 - Remove the Feed and Registration Clutch Assembly and the PWB, release the latches (2).

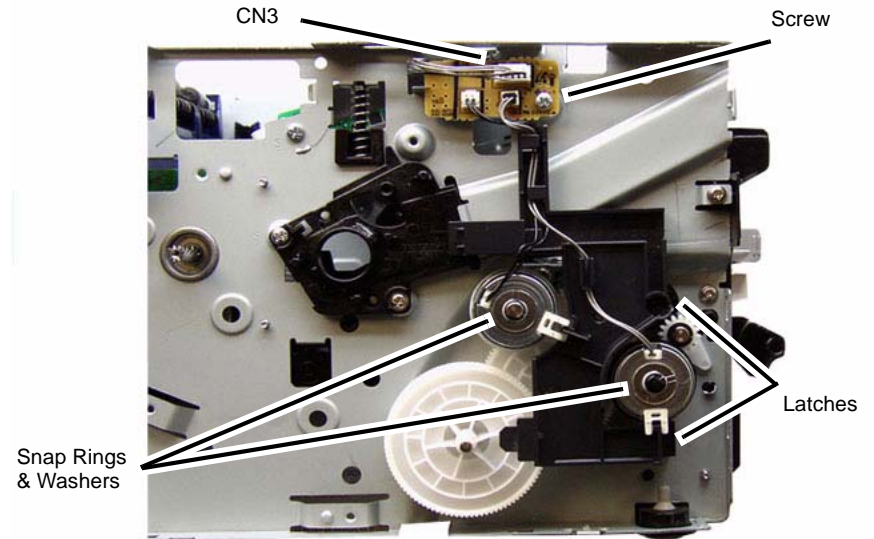
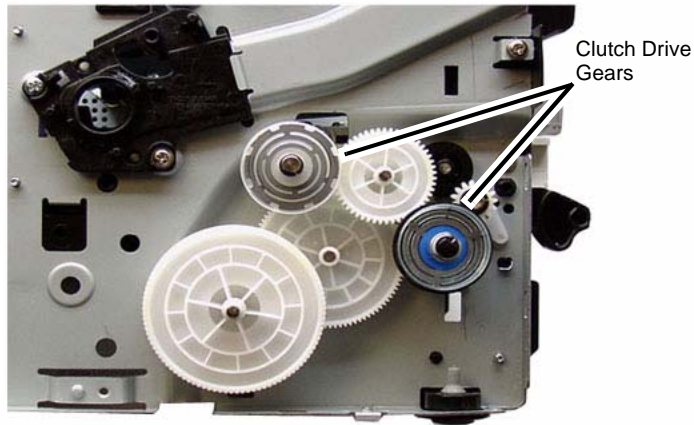


Figure 3 Feed and Registration Clutch / Feeder PWB

040446RKB

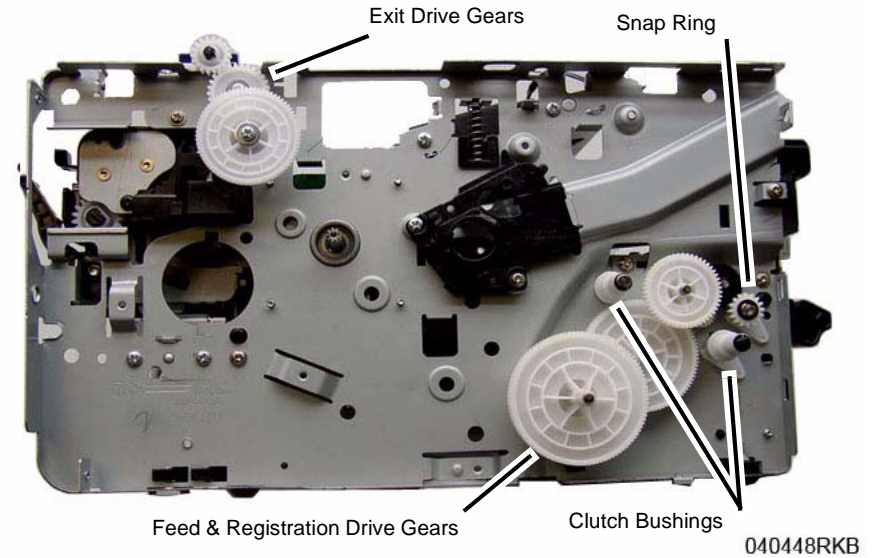
7. Remove the Feed and Registration Clutch Drive Gears (Figure 4).



040447RKB

Figure 4 Feed and Registration Clutch Drive Gears

8. Remove the following (Figure 5):
 Make note of the order that the Feed and Registration Drive Gears were removed so that they may be re-installed correctly.
 - a. Feed and Registration Drive Gears, there is a Snap Ring on one gear.
 - b. Feed and Registration Clutch Bushings (2 Snap Rings).
 - c. Exit Drive Gears, (2 screws and a Latch).



040448RKB

Figure 5 Drive Gears and Bushings

9. Remove the following from the Left Frame (Figure 6):
 - a. Shaft Bushings (2), release the latches.
 - b. LSU Assembly Support (2 screws).
 - c. Paper Path Module screws (5).

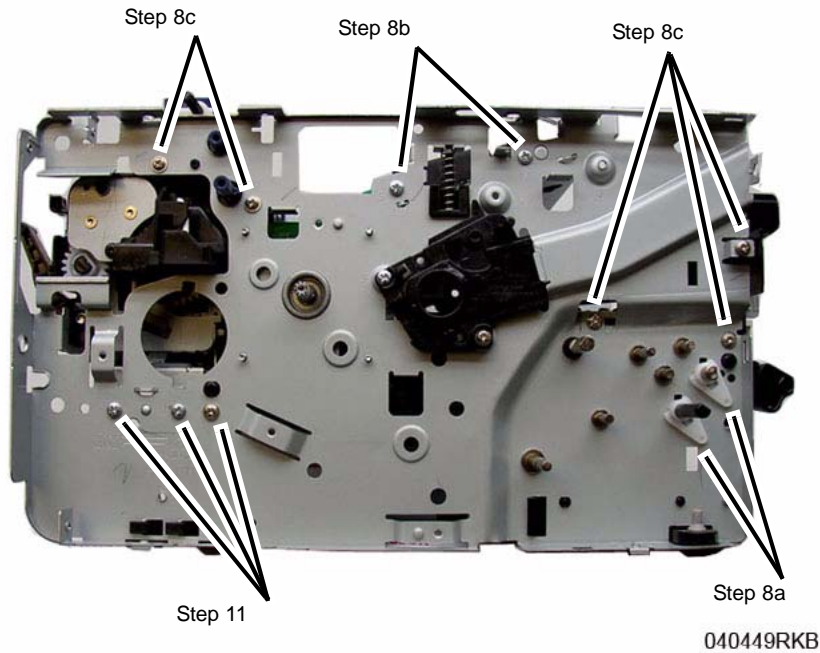


Figure 6 Left Frame Screw Removal

040449RKB

10. On the bottom of the Printer (Figure 7):
 - a. Disconnect the Drive Motor Connector.
 - b. Remove the screw (1) and the Ground Clip.

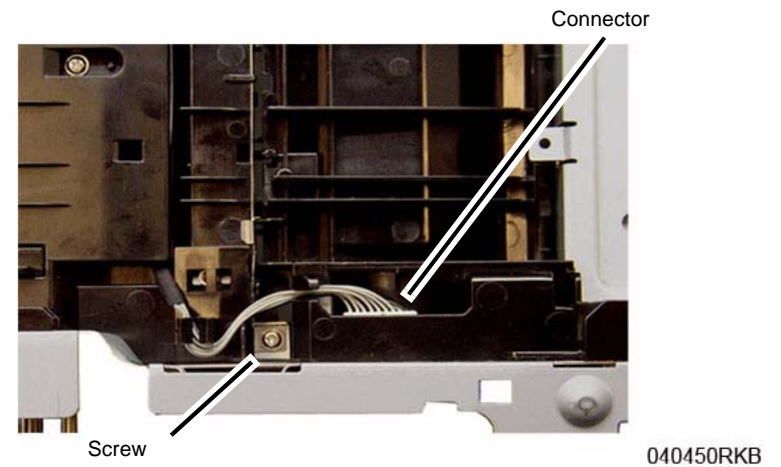


Figure 7 Drive Motor Connector & Ground Clip (Bottom View)

040450RKB

11. Remove the Left Frame screws (3) (Figure 6).
12. Remove the Drive Motor (4 screws) (Figure 8).

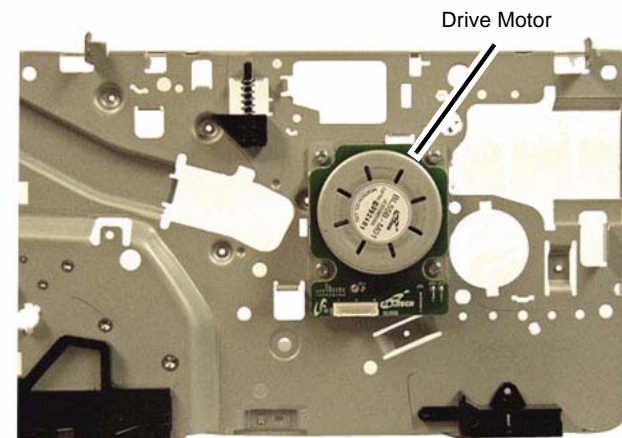


Figure 8 Drive Motor

040451RKB

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the cover to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

1. Install the new Drive Motor (4 screws).

NOTE: The Frame is flexible and can be bowed out if the screws are not tightened in the correct order.

Reinstall the Frame as follows so it seats flush against the printer's internal modules.

2. Align the Frame on to the internal modules and shafts.

NOTE: Do Not fully tighten the screws in Step 3 until instructed.

3. Install, but do not tighten, the following module screws (Figure 9):
 - a. The Exit Sensor Plate screws (2)
 - b. The Front Paper Path Module screws (3)

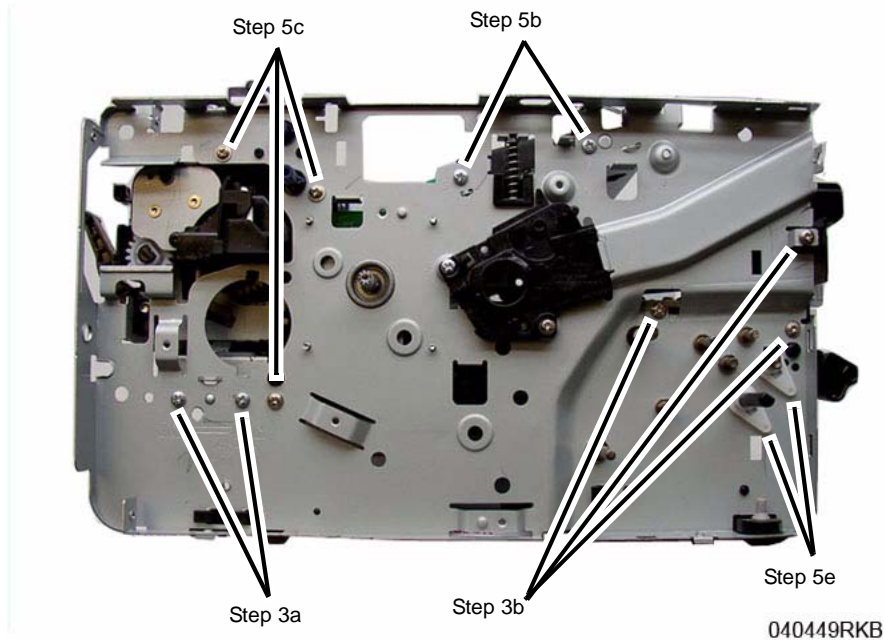
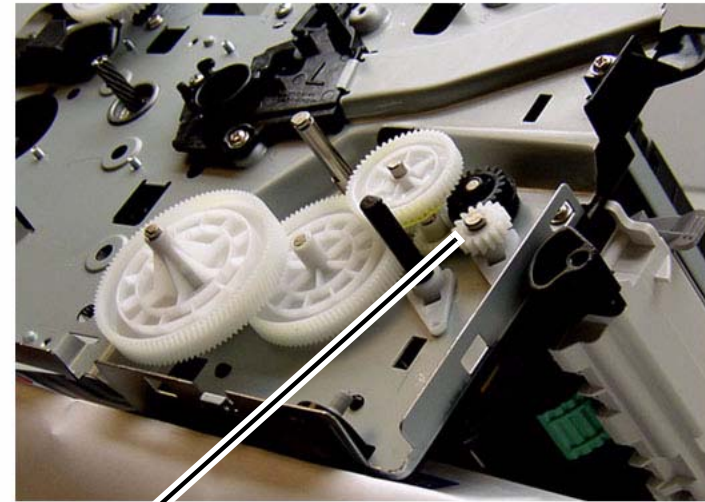


Figure 9 Frame Screw Installation

4. On the bottom of the Printer (Figure 7):
 - a. Install the Ground Clip and screw (1). Tighten the screw.
 - b. Connect the Drive Motor Connector.

5. Install and tighten the Frame screws from the center of the Frame; to the front of the printer, then to the rear of the Printer. Install the shaft bushings (2) (Figure 9).
 - a. Tighten the Front Paper Path Module screws (3) installed in Step 3b.
 - b. The ROS Support screws (2)
 - c. The Rear Paper Path Module screws (3)
 - d. Tighten all the Exit Sensor Plate screws (2) installed in Step 3a.
 - e. Shaft Bushings (2).
6. Reinstall the Drive Gears, and Snap Ring. Refer to (Figure 10) for correct installation the Feed and Registration Drive Gears.



Snap Ring

040452RKB

Figure 10 Feed and Registration Drive Gears

7. Install the remaining components in the reverse of removal. When installing the Front Cover Support Arm make sure it is correctly placed on the Stop Bracket (Figure 11).

Support Arm

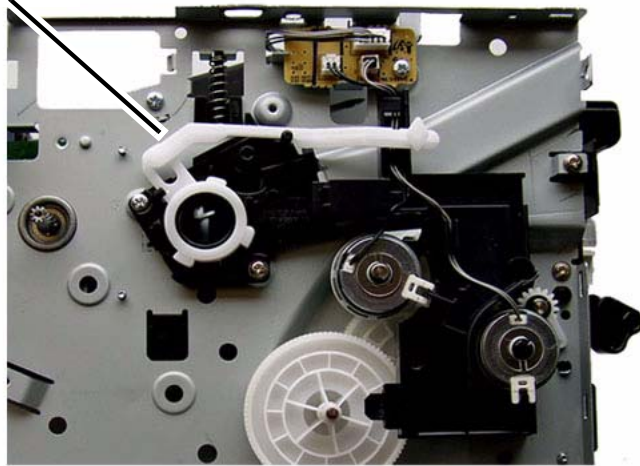


Figure 11 Front Cover Support Arm Placement

040443RKB

REP 1.10 Main Drive Unit

Parts List on [PL 4.6](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Left Side Cover ([REP 1.2](#)).
3. Remove the screws (5) from the Main Drive Unit ([Figure 1](#)).
4. Move the Fuser Drive Locking Lever to the Unlock position (Right) ([Figure 1](#)).
Remove the Main Drive Unit and the Front Door Support Arm.

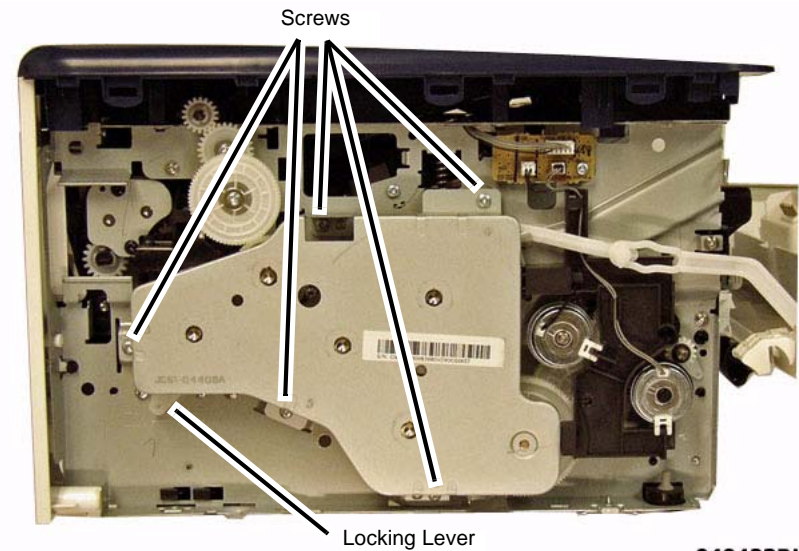


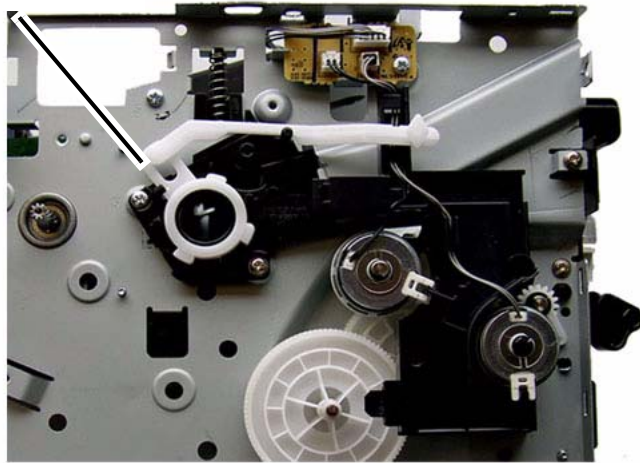
Figure 1 Main Drive Unit Removal

040423RKB

Replacement

1. Place the Front Cover Support Arm on the Stop Bracket ([Figure 2](#)).

Support Arm



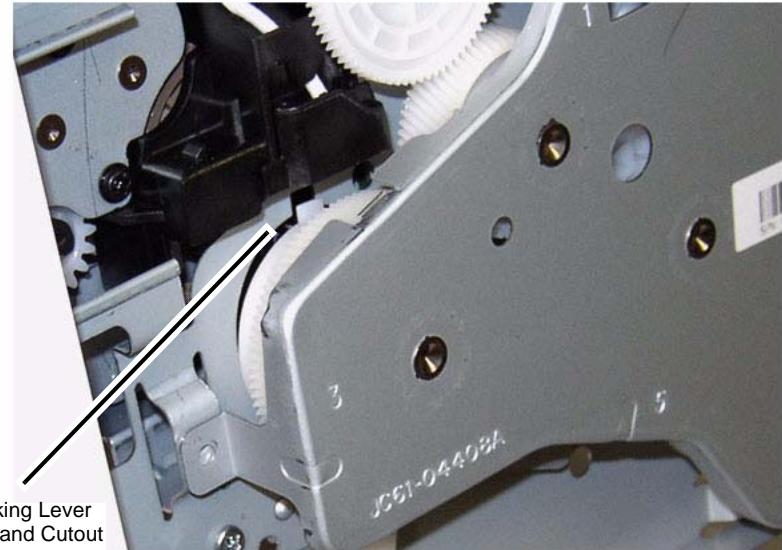
040443RKB

Figure 2 Front Cover Support Arm Placement

2. Reinstall the Main Drive Unit (5 screws).

NOTE: Make sure the Tabs (2) on the Locking Lever are inside the Frame cutouts before moving the Fuser Drive Locking Lever to the Lock position.

3. Align the Locking Lever Tabs (2) to the cutouts in the frame (Figure 3).



Locking Lever
Tab and Cutout

040424RKB

Figure 3 Locking Lever Tab and Frame Cutout

4. Press in on the Locking Lever to move the Tabs into the cutouts. Move the Locking Lever to the Lock position (Left).
5. Install the remaining components in the reverse of removal.

REP 1.11 LSU and Cables

Parts List on PL 4.1

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Middle Cover (REP 1.3).
3. To replace the LSU Cables: (Figure 1).
 - Disconnect the cable connector at the LSU.
 - Disconnect the cable connector at the Main PWB.

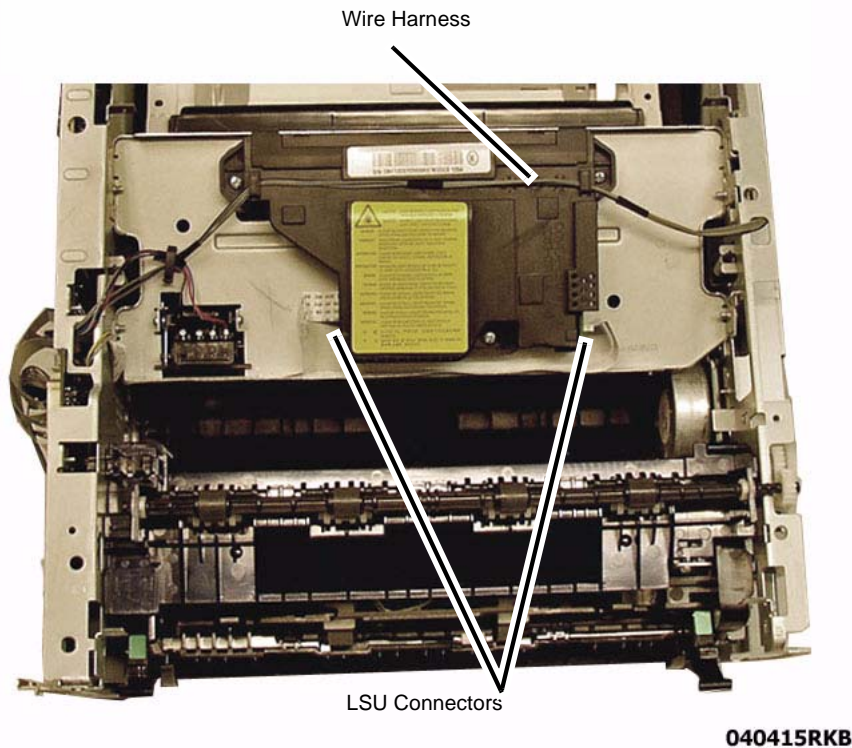


Figure 1 LSU Cable Connectors and Wire Harness (Top View)

NOTE: The Flat Cable may be adhered to the LSU. Detach it from the LSU and reinstall it on the new LUS in the same location.

4. Removing the LSU:
 - a. Release the wire harness from the top of the LSU.
 - Disconnect the connectors (2) at the LSU (Figure 1).
 - b. Remove the screws (3), and the LSU (Figure 2).

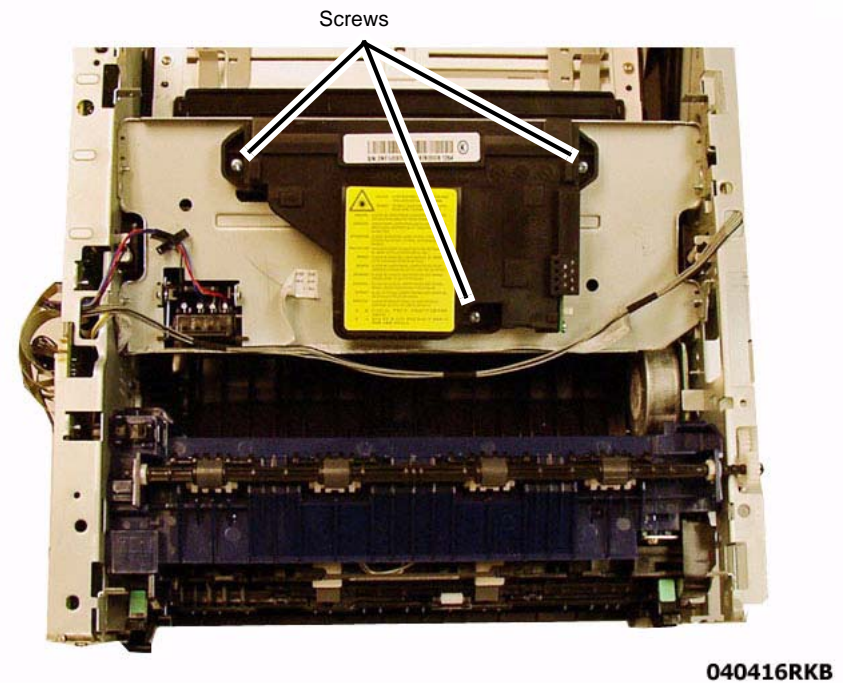


Figure 2 LSU Removal

Replacement

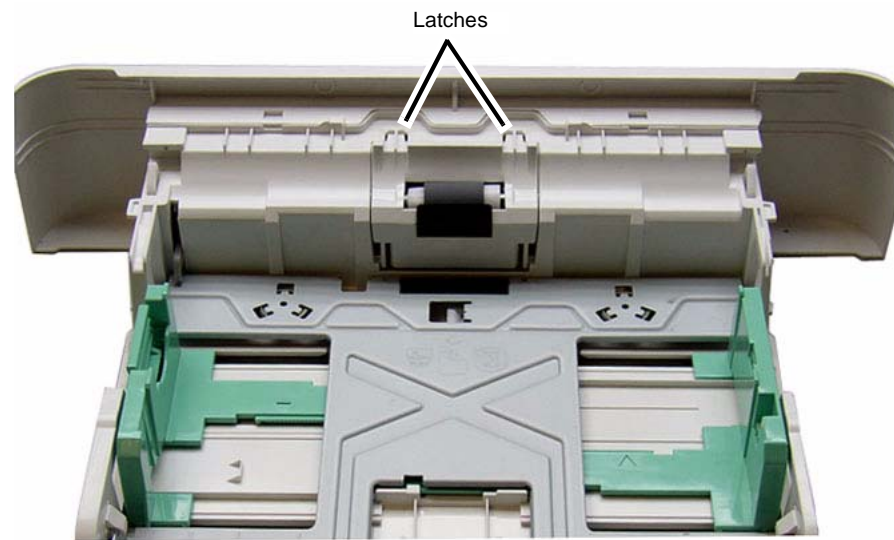
Install the components in the reverse of removal.

REP 1.12 Retard Roll

Parts List on [PL 6.1](#)

Removal

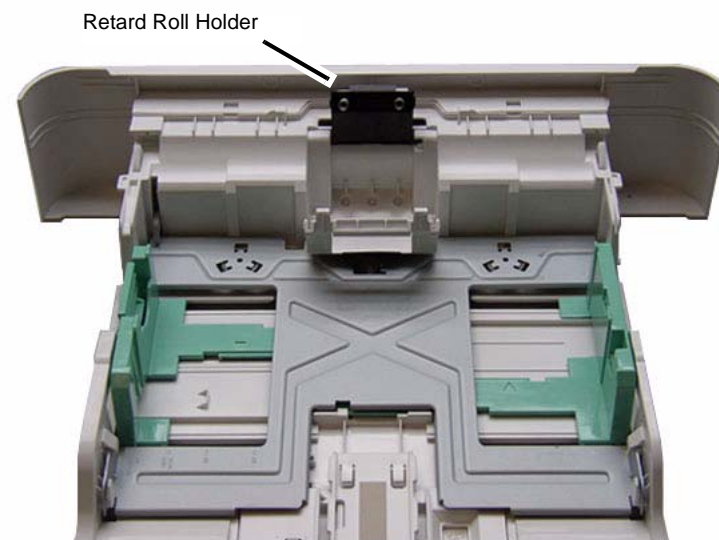
1. Remove the Paper Cassette and any paper from the tray.
2. In the Cassette, pull down on the latches (2) to open the Retard Roll Cover ([Figure 1](#)).



040432RKB

Figure 1 Retard Roll Cover Latches

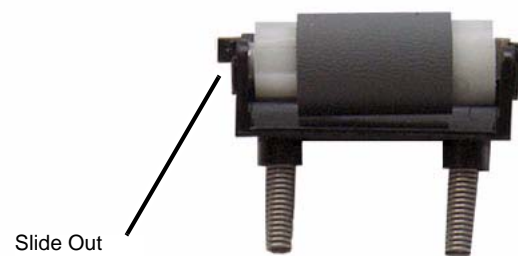
3. Rotate the Retard Roll Holder up and remove it from the Cassette ([Figure 2](#)).



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Figure 2 Retard Roll Holder Removal

4. Sliding the left side of the Retard Roll out of the holder and remove it ([Figure 3](#)).



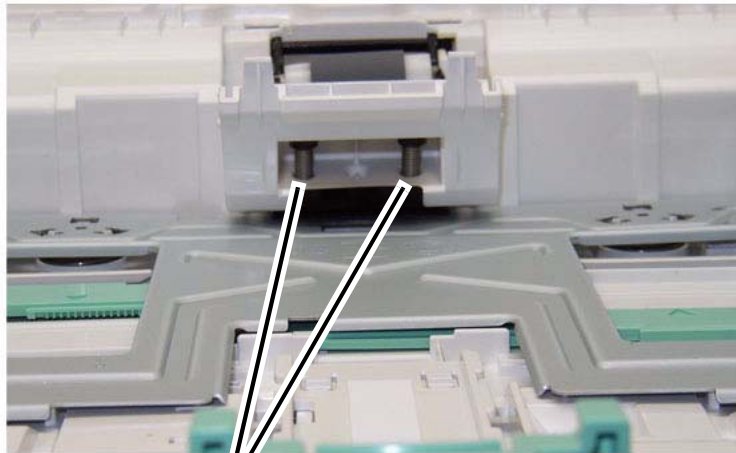
040434RKB

Figure 3 Retard Roll Removal

Replacement

1. Install the components in the reverse of removal.

NOTE: Make sure the Springs (2) on the Retard Roll Holder are correctly positioned in the holes (Figure 4).



Springs

Figure 4 Springs in Holes

040435RKB

REP 1.13 Feed and Registration Clutches / Joint PWB

Parts List on PL 4.1

Removal

1. Switch Off the Printer and disconnect the Power Cord.
2. Remove the Left Side Cover (REP 1.2).
3. Removing the Joint PWB (Figure 1):
 - a. Disconnect the Connectors (3) on the Joint PWB.
 - b. Remove the Screw (1) and the PWB.
4. Removing the Feed Clutch (Figure 1):
 - a. Disconnect the Feeder Clutch Connector (CN2) on the Joint PWB and release the wires from the wire clamps.
 - b. Remove the E-ring and Washer from the Feeder Clutch.
 - c. Remove the Feeder Clutch.
5. Removing the Registration Clutch (Figure 1):
 - a. Disconnect the Registration Clutch Connector (CN1) on the Joint PWB and release the wires from the wire clamps.
 - b. Remove the E-ring and Washer from the Registration Clutch.
 - c. Remove the Registration Clutch.

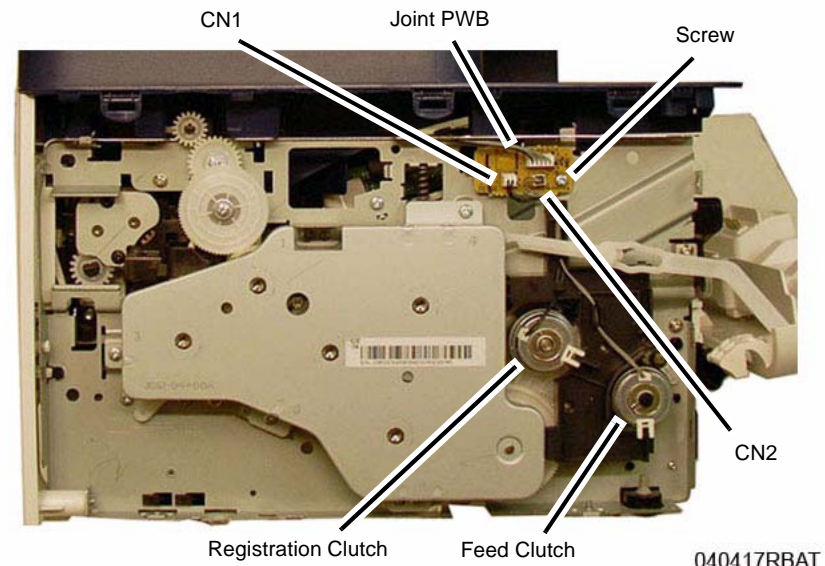


Figure 1 Feed and Registration Clutches / Joint PWB

040417RBAT

Replacement

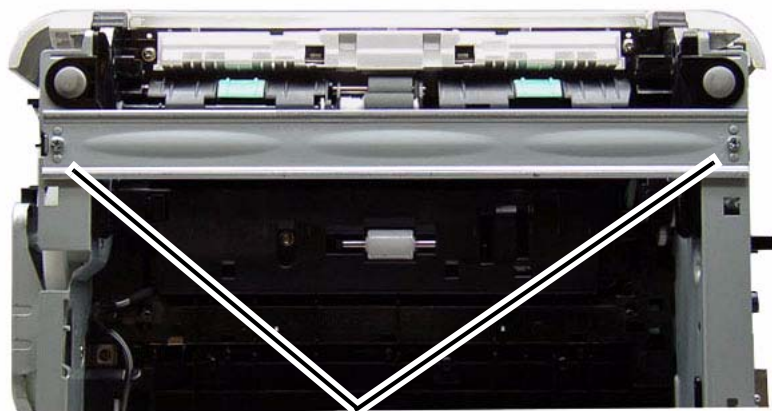
Install the components in the reverse of removal.

REP 1.14 Paper Feed Sensors PWB and Actuators

Parts List on [PL 4.4](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Duplex Paper Guide ([REP 1.18](#)).
3. Set the printer on the Rear Cover (Front of printer facing up).
4. Remove the Bottom Bar (2 screws) ([Figure 1](#)).

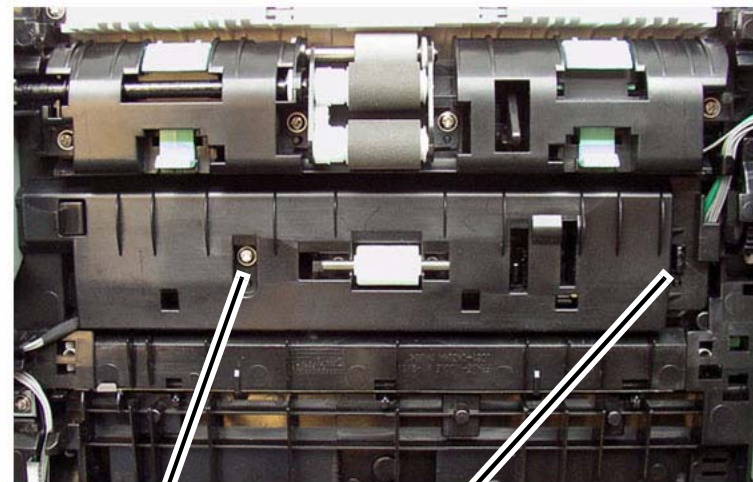


Screws

040436RKB

Figure 1 Bottom Bar (Bottom View)

5. Remove the Paper Feed Sensor PWB Cover ([Figure 2](#)).
 - a. Remove the screw (1).
 - b. Release the Latch and remove the cover.



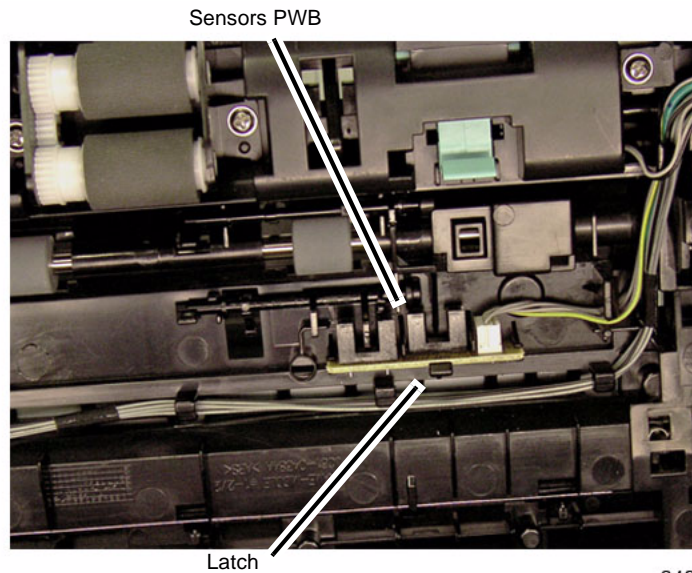
Screw

Latch

040441RKB

Figure 2 Feed Sensors PWB Cover (Bottom View)

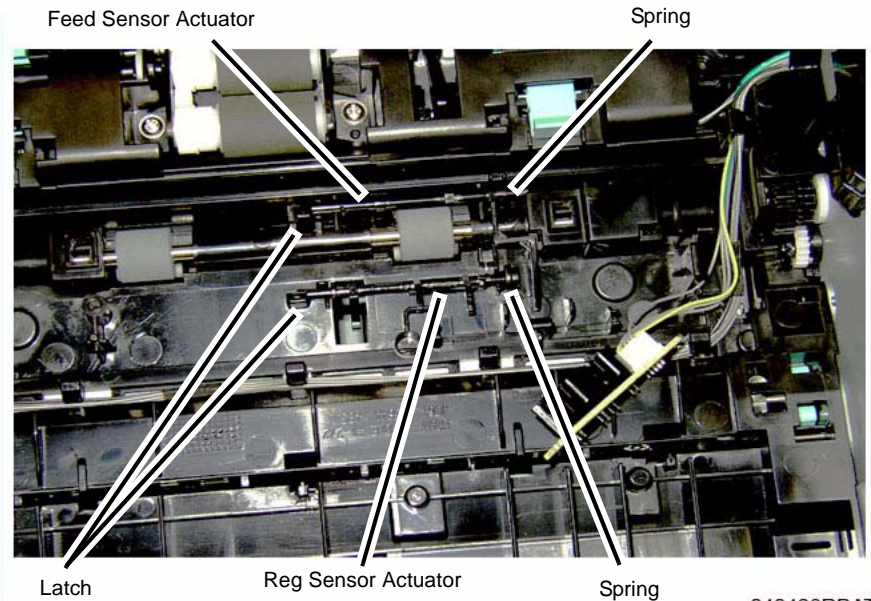
6. Release the Latch and remove the Feed Sensor PWB (Figure 3).



040442RKB

Figure 3 Feed Sensor PWB (Bottom View)

7. Removing the Feed and Registration Sensor Actuators (Figure 4):
Note the location of the Spring in the frame cutout for reinstallation (Figure 5).
- Release the Actuator from the latch.
 - Remove the Actuator.



040428RBAT

Figure 4 Feed and Registration Sensors Actuators (Bottom View)

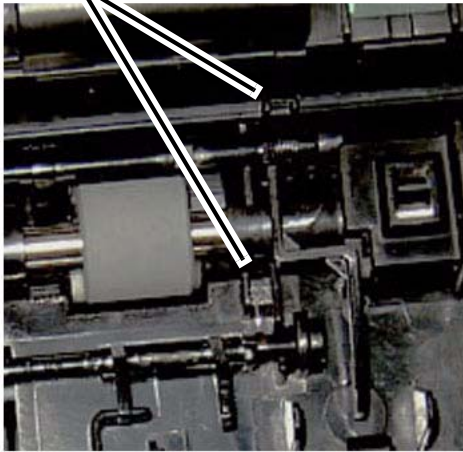
Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the cover to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

NOTE: When replacing the Actuators make sure the Spring is correctly seated in the cutout in the frame (Figure 5).

Spring Cutouts



040428aRBAT

Figure 5 Actuator Spring Cutouts (Bottom View)

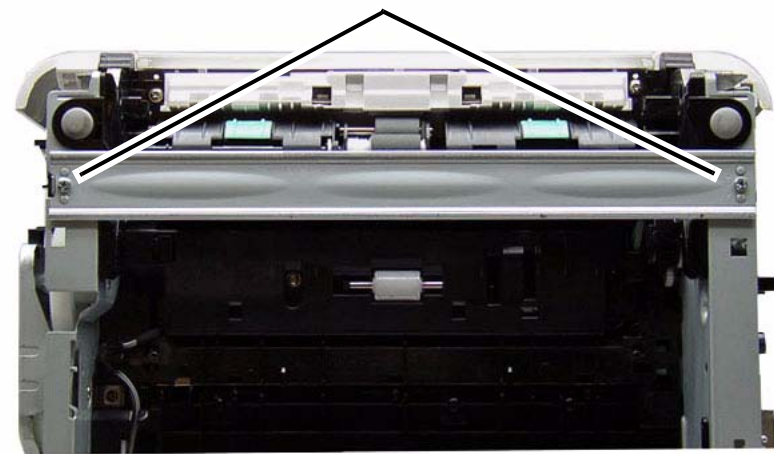
REP 1.15 Feed and Forward Roll Assembly

Parts List on [PL 4.5](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Paper Cassette.
3. Remove the ADF ([REP 1.22](#)).
4. Remove the Left and Right Side Covers ([REP 1.2](#)).
5. Set the printer so the Front of the printer facing up.
6. Remove the bottom bar (2 screws) ([Figure 1](#)).

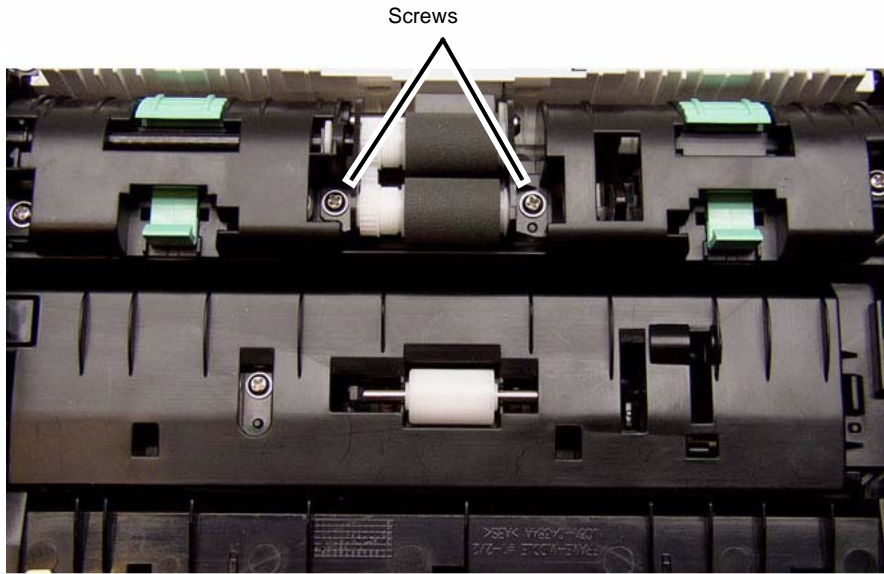
Screws



040436RKB

Figure 1 Bottom Bar (Bottom View)

7. Remove the Feed and Forward Roll Assembly ([Figure 2](#)):
 - a. Remove the screws (2)
 - b. Pull the right side of the assembly out, then slide the assembly out to the right.



040437RKB

Figure 2 Removing the Feed and Forward Roll Assembly (Bottom View)

8. Remove the Feed and Forward Rolls from the assembly (Figure 3).



040438RKB

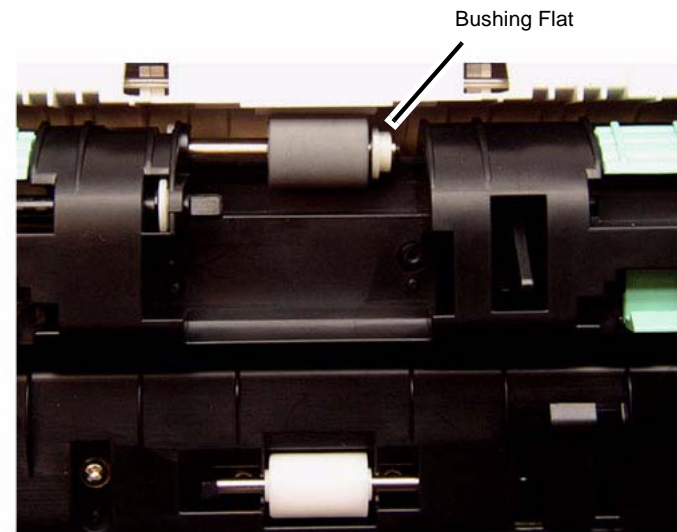
Figure 3 Feed and Forward Roll Assembly

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the cover to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

NOTE: When replacing the Feed and Forward Roll Assembly make sure the Flat on the Bushing is lined up with the Flat on the Assembly (Figure 4).



040439RKB

Figure 4 Bushing Flat (Bottom View)

REP 1.16 Transfer Roll

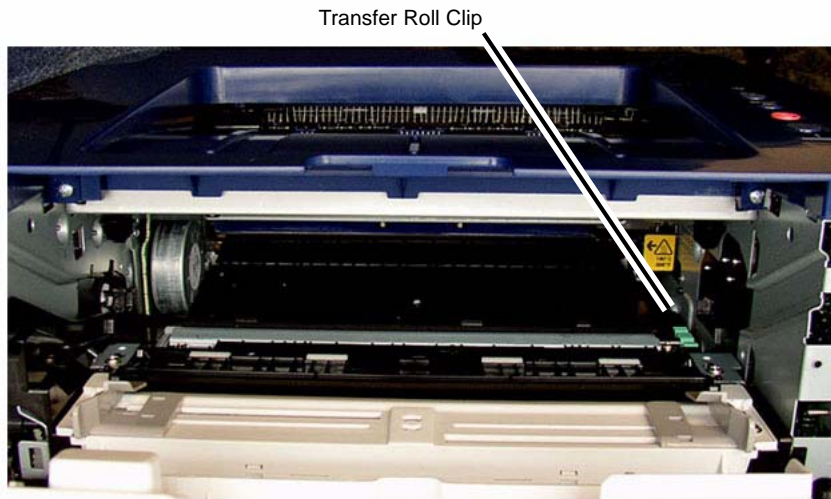
Parts List on PL 4.1

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Open the Front Cover.

NOTE: Cover the Drum Cartridge with several sheets of paper to prevent it from being light shocked.

3. Remove the Toner Cartridge and the Drum Cartridge.
4. Remove (squeeze and lift) the Transfer Roll Retainer Clip (Figure 1).



0404021RKB

Figure 1 Transfer Roll Retainer Clip (Front View)

5. Remove the Transfer Roll (Figure 2):
 - a. Lift the right end of the Transfer Roll and slide the left end out of the bushing.



040422RKB

Figure 2 Removing the Transfer Roll

Replacement

Install the components in the reverse of removal.

((

REP 1.18 Duplex Paper Guide

Parts List on PL 4.2

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Paper Cassette.
3. Remove the following covers:
 - a. Remove the Left and Right Side Covers (REP 1.2).
 - b. Remove the Rear Cover (REP 1.4).

NOTE: The Rear Cover holds the Duplex Paper Guide Pivot in the frame cutout. With the Rear Cover removed, the paper guide will come out of the pivot when the front latches are released.

4. Remove the Duplex Paper Guide (Figure).
 - a. From the front of the printer press the Duplex Paper Guide release tabs (2) (Figure 1).
 - b. From the rear of the printer slide the Duplex Paper Guide off the pivots to remove it (Figure 2).

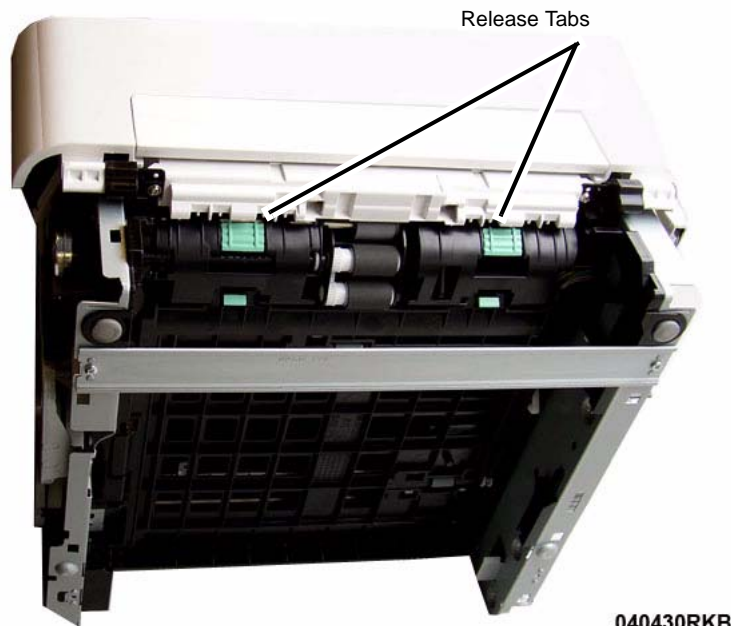


Figure 1 Duplex Paper Guide Release Tabs (Bottom View)

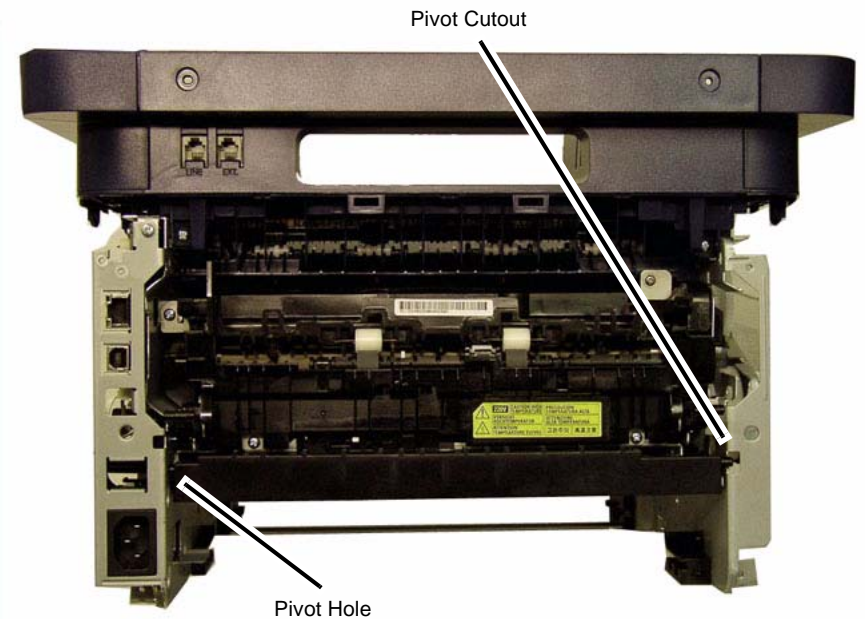


Figure 2 Duplex Paper Guide Pivots (Rear View)

Replacement

Install the components in the reverse of removal.

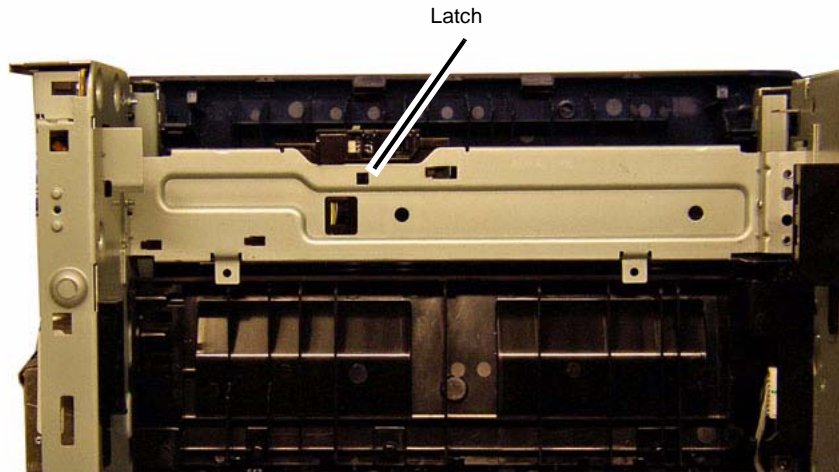
1. Insert the pivot on the left side into the hole.
2. Insert the right pivot into the frame cutout.
3. Lift and latch the front of the Duplex Paper Guide into position (Figure).

REP 1.19 Exit Sensor

Parts List on PL 4.5

Removal

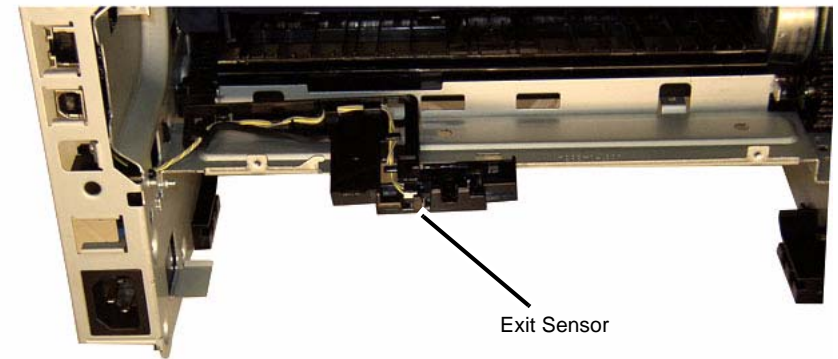
1. Remove the following covers:
 - a. Remove the Left and Right Side Covers (REP 1.2).
 - b. Remove the Rear Cover (REP 1.4).
2. Remove the Fuser Module (REP 1.17).
3. Press the Latch on the underside of the frame to release the Exit Sensor Mounting Plate from the frame (Figure 1).



040426RKB

Figure 1 Exit Sensor Plate Latch Release (Bottom View)

4. Remove the Exit Sensor (Figure 2).
 - a. Release the wires from the cable clamps.
 - b. Unlatch and remove the Exit Sensor, disconnect the connector.



040427RKB

Figure 2 Exit Sensor Removal (Rear View)

Replacement

Install the components in the reverse of removal.

REP 1.20 Output Tray Full Sensor

Parts List on PL 4.5

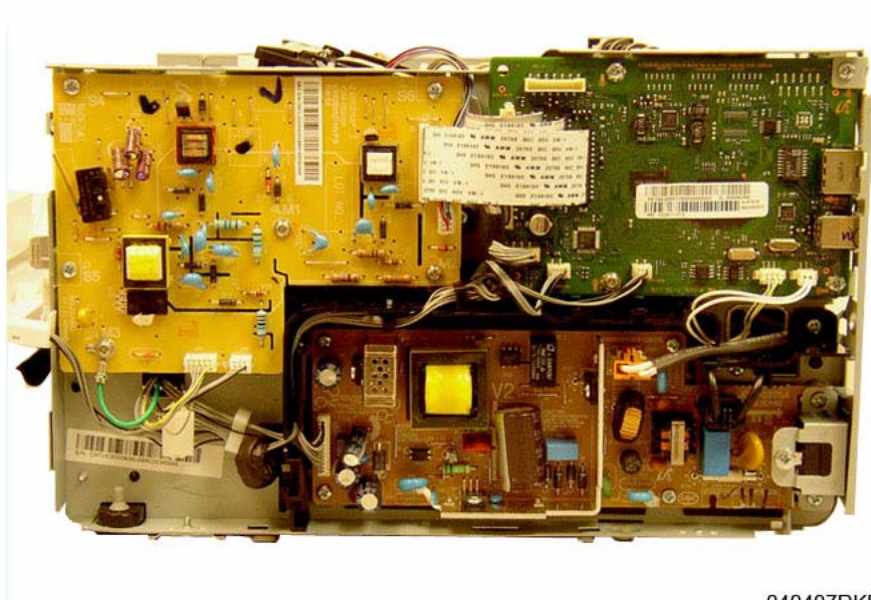
Removal

1. Switch Off the Printer and disconnect the Power Cord.
2. Remove the Middle Cover (REP 1.3).

NOTE: Do not disconnect the connectors to the Main PWB. The PWB only needs to be moved away from the frame to access the Output Tray Full Sensor.

NOTE: Mark the location of the Ground Screw, with larger head, so it can be re-installed in the correct location.

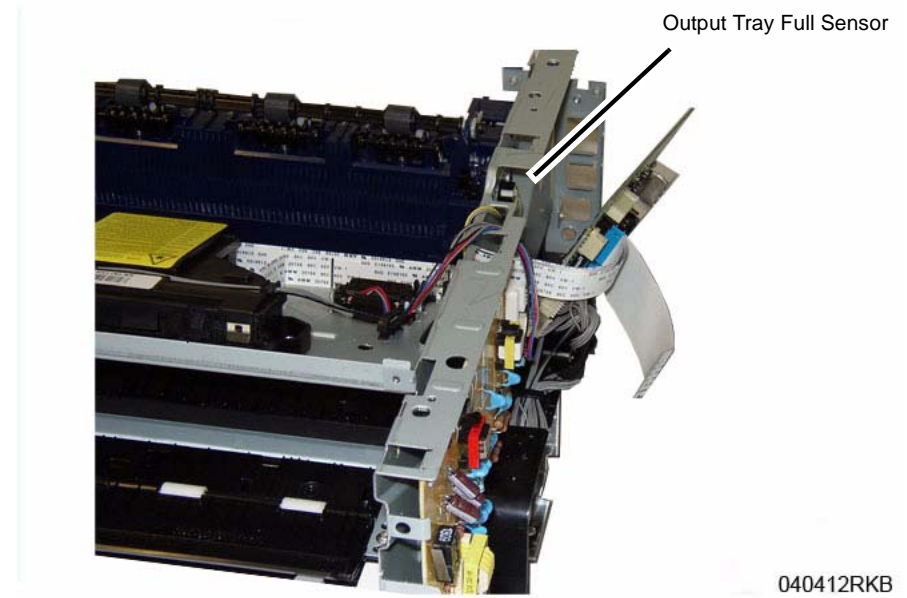
3. Remove the screws (5) to move the Main PWB away from the printer frame (Figure 1).



040407RKB

Figure 1 Main PWB

4. Remove the Output Tray Full Sensor (Figure 2):
 - a. Disconnect the Sensor connector.
 - b. Unlatch and remove the Output Tray Sensor.



040412RKB

Figure 2 Output Tray Full Sensor (Top Right View)

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the Fuser to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

REP 1.21 FAX PWB

Parts List on [PL 2.2](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the ADF / ISM Module ([REP 1.28](#)).
3. Remove the Fax PWB ([Figure 1](#)):
 - a. Disconnect the connectors (2).
 - b. Remove the screws (4) and the PWB.
 - c. Remove the cover from the PWB.

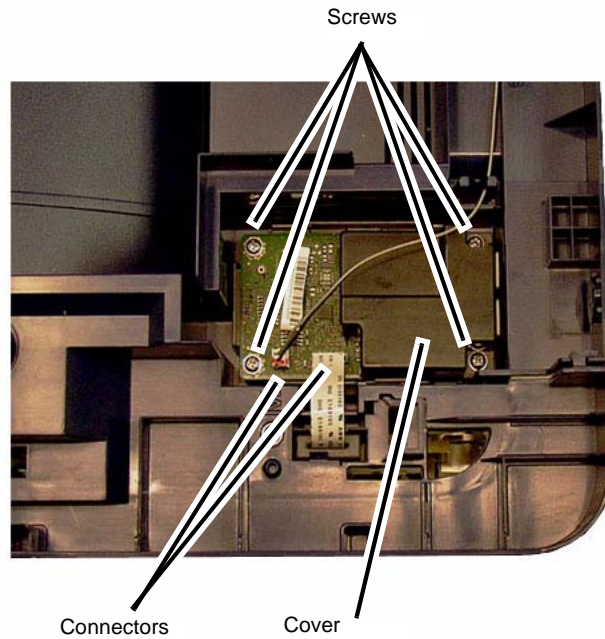


Figure 1 FAX PWB (Top View)

040419RBAT

Replacement

Install the components in the reverse of removal.

REP 1.22 Automatic Document Feeder (ADF)

Parts List on [PL 1.2](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Open and lift the ADF up.
Unlatch and remove the Connector Cover ([Figure 1](#)).

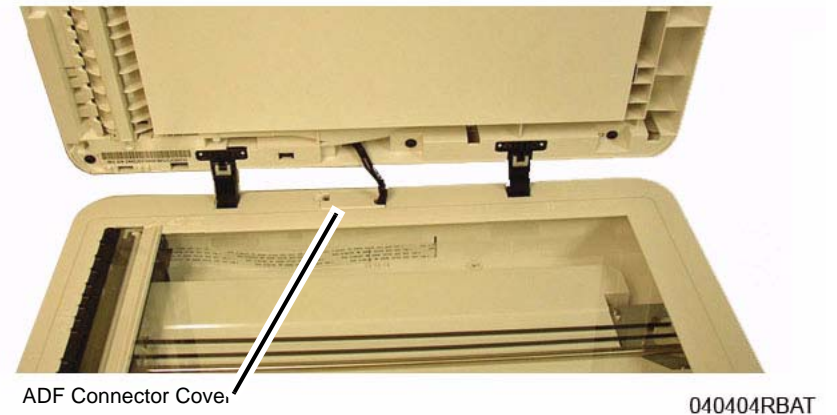
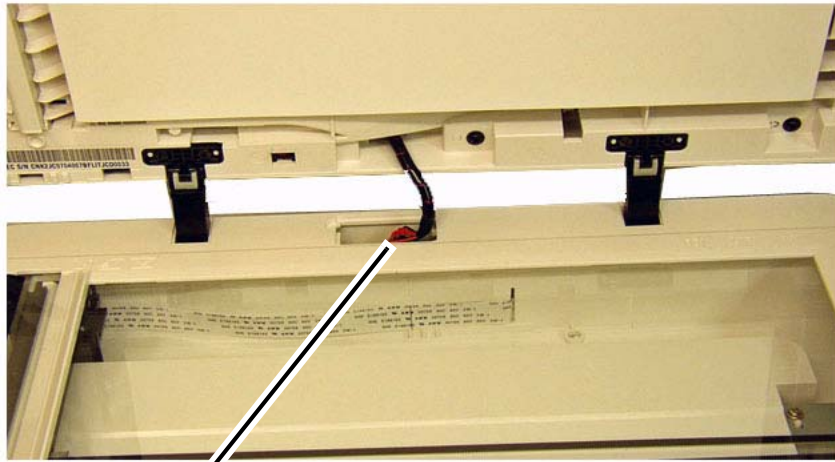


Figure 1 ADF Connector Cover

3. Disconnect the connector and lift the ADF off of the Printer (Figure 2).



ADF Connector

040405RBAT

Figure 2 ADF Connector

Replacement

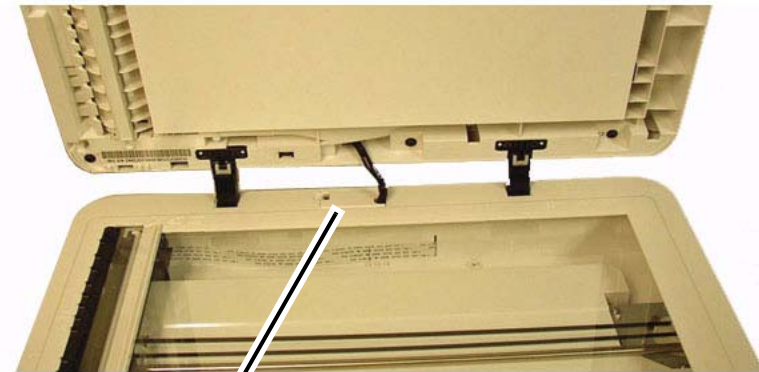
Install the components in the reverse of removal.

REP 1.23 ADF Hinges

Parts List on [PL 1.1](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Open and lift the ADF up.
Unlatch and remove the Connector Cover (Figure 1).



ADF Connector Cover

040404RBAT

Figure 1 ADF Connector Cover

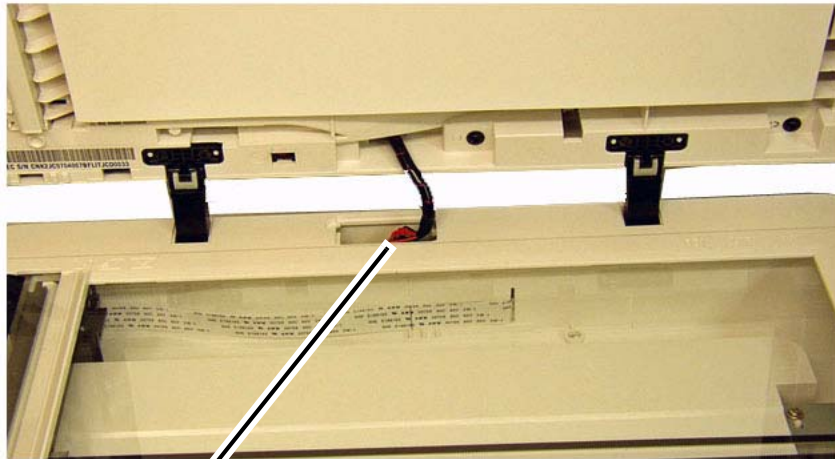
3. Disconnect the connector and lift the ADF off of the Printer (Figure 2).

REP 1.24 ADF Feed Rolls Assembly

Parts List on [PL 1.2](#)

Removal

1. Remove the ADF Cover, release the Rear Pivots and remove the cover ([Figure 1](#)).

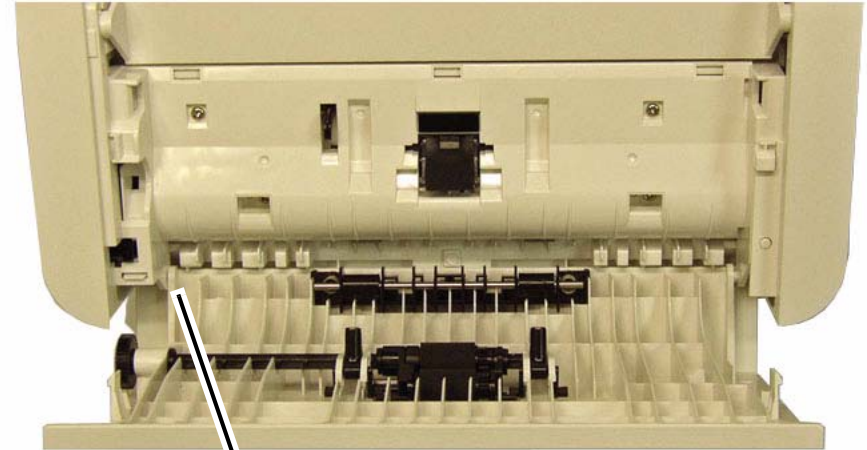


ADF Connector

040405RBAT

Figure 2 ADF Connector

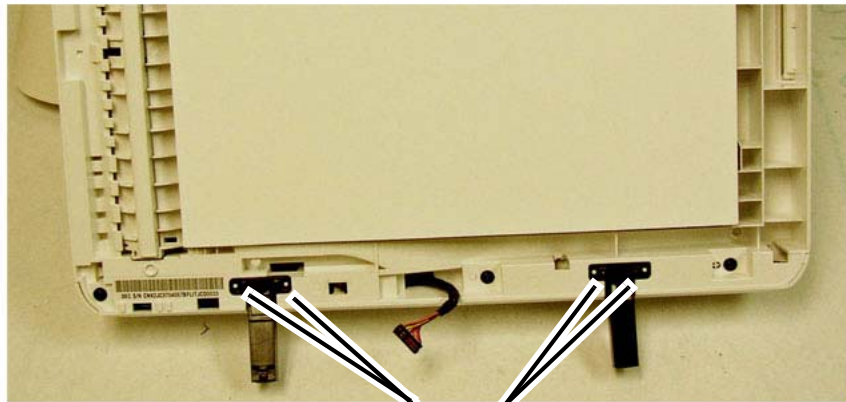
4. Remove the screws (2) and the hinge ([Figure 3](#)).



Rear Pivot

040409RBAT

Figure 1 ADF Cover Pivots (Top View)



Screws

040418RBAT

Figure 3 ADF Hinges (Bottom View)

Replacement

Install the components in the reverse of removal.

2. Remove the Document Feed Roll Assembly (Figure 2).
 - a. Remove the E-Rings (3).
 - b. Slide the drive shaft out of the Feed Roll Assembly.

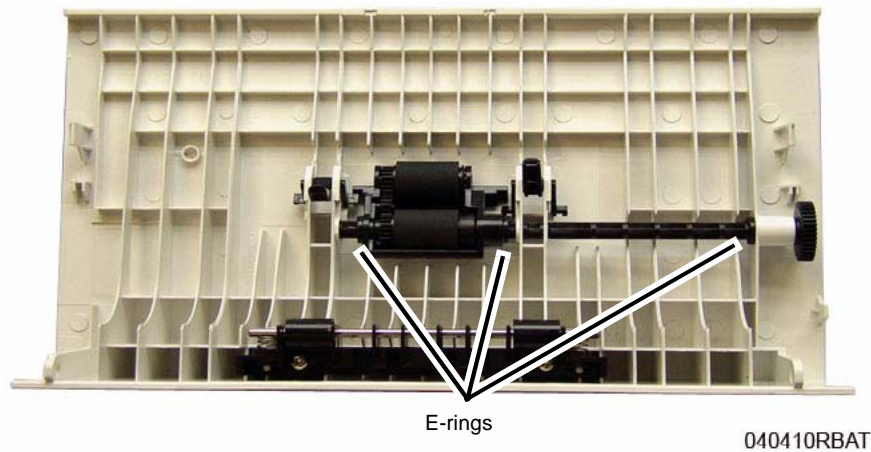


Figure 2 Feed Roll E-rings

Replacement

Install the components in the reverse of removal.

NOTE: Install the E-rings in the following order:

1. The E-ring by the gear.
2. The E-ring (center) by the Spring.
3. The E-ring at the end of the shaft.

REP 1.25 ADF Drive Motor

Parts List on [PL 1.2](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the ADF (REP 1.22).
3. Remove the ADF Rear Cover (Figure 1):
 - a. On the underside of the ADF, remove the Rear Cover screws (3).
 - b. Lift the Top of the cover away from the ADF, then pull the bottom away to release the latches.

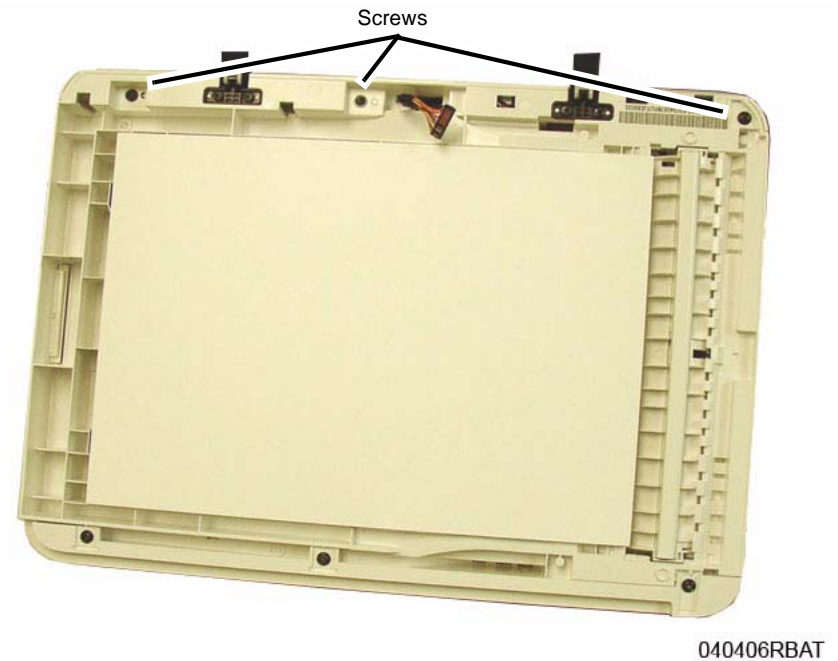


Figure 1 Rear Cover Screws (Bottom View)

4. Remove the ADF Drive Motor (Figure 2).
 - a. Disconnect the connector.
 - b. Remove the screws (2) and the motor.

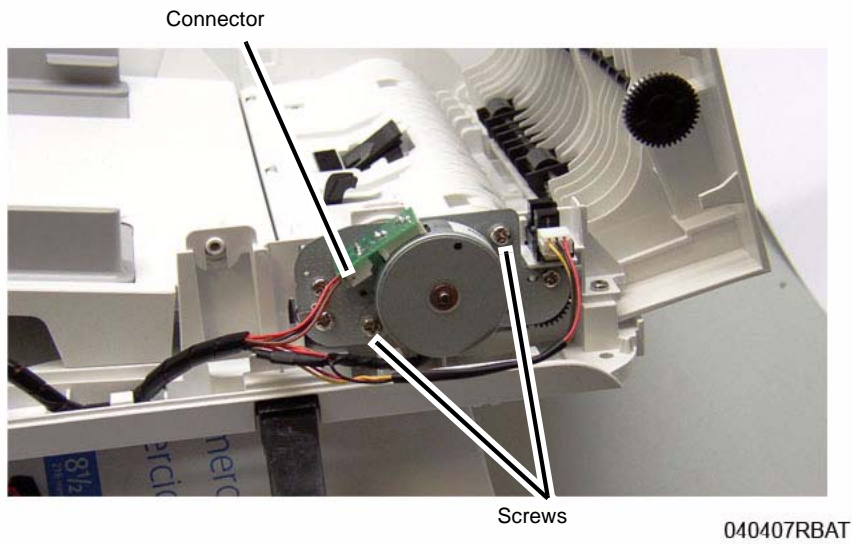


Figure 2 ADF Drive Motor

Replacement

Install the components in the reverse of removal.

REP 1.26 Scanner Assembly

Parts List on [PL 7.1](#)

Removal

1. Remove the ADF (REP 1.22).
2. Remove the Right Side Cover (REP 1.2).
3. At the Rear of the printer, remove the screws (2) (Figure 1).

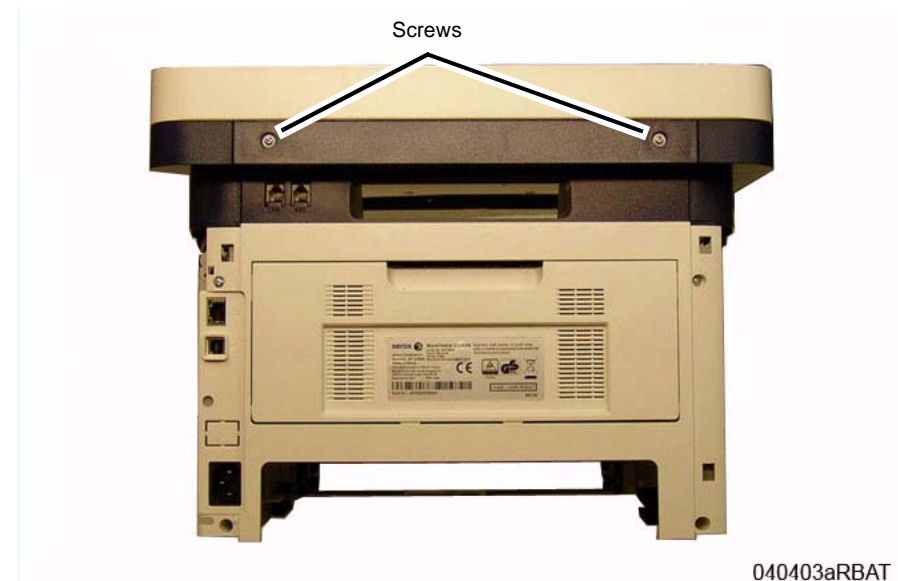
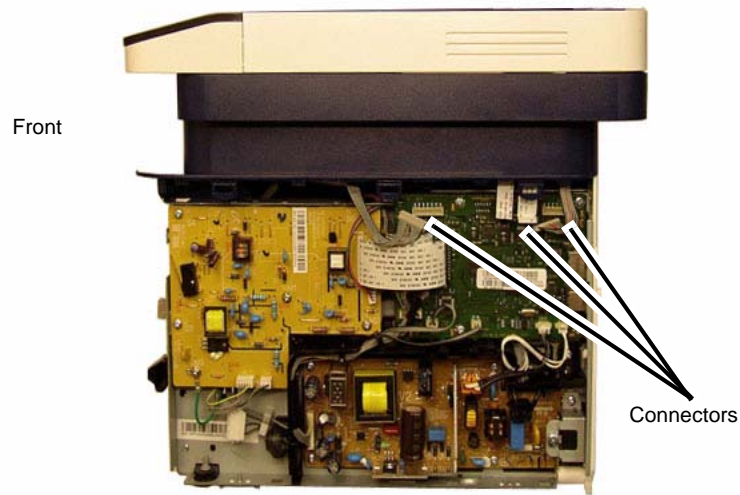


Figure 1 Scanner Assembly Screws

4. Remove the Scanner Assembly (Figure 2):
 - a. Disconnect the connectors (3) from the Main PWB
 - b. Slide the Scanner to the Front and lift it off of the printer.
Route the wire harnesses through the Middle Cover.



040412aRBAT

Figure 2 Scanner Removal

Replacement

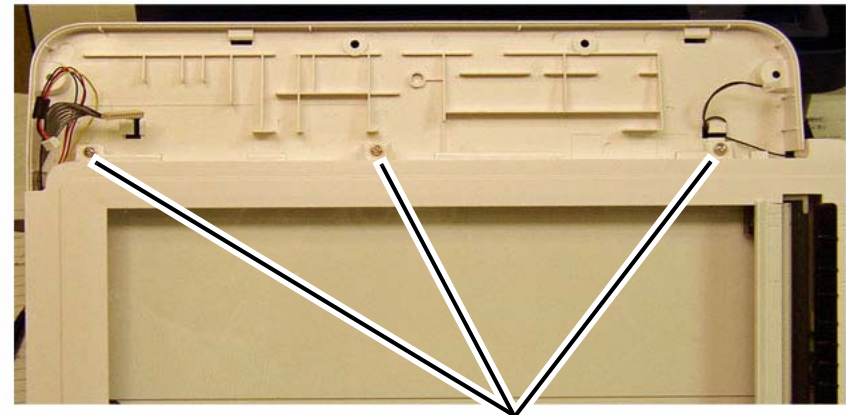
Install the components in the reverse of removal.

REP 1.27 Scanner Drive Motor

Parts List on [PL 7.1](#)

Removal

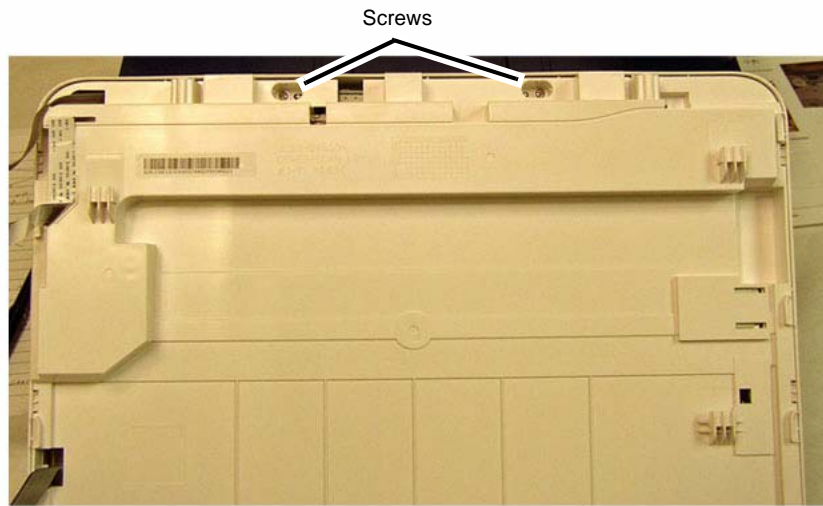
1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Control Panel Assembly ([REP 1.5](#)).
3. Remove the Scanner Assembly Frame top screws (3), under the Control Panel Assembly ([Figure 1](#)).



040438RBAT

Figure 1 Scanner Assembly Frame Top Screws (Top View)

4. Remove the Scanner Assembly Frame bottom screws (2) (Figure 2).



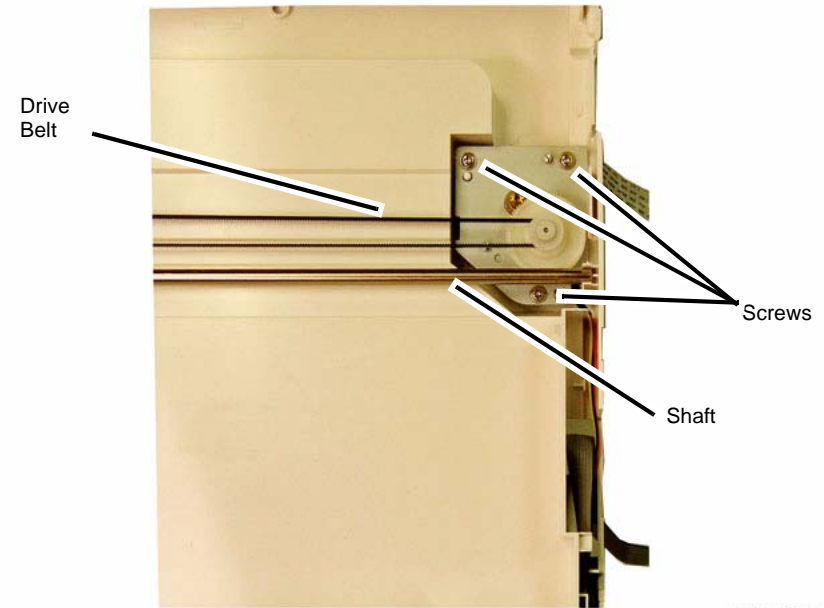
040439RBAT

Figure 2 Scanner Frame Bottom Screws (Bottom View)

5. Separate the Scanner Assembly Upper Frame from the Lower Frame:
 - a. Place the Scanner with the bottom facing up.
 - b. Release the latches (8) around the frame.
6. Remove the Scan Motor (Figure 3):

NOTE: There is tension on the motor from the ISM Drive Belt, hold the motor down when removing the screws.

- a. Move the Shaft out of the slot.
- b. Remove the screws (3).
- c. Remove the Drive Belt from the motor.
- d. Release the wires from the cable guides.



040440RBAT

Figure 3 Scanner Drive Motor (Top View)

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the cover to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

1. Clean the CIS (Contact Image Sensor) Bar and the underside of the Platen Glass before reassembling the ISM Module Frame.
2. Install the components in the reverse of removal.

REP 1.28 ADF / Scanner Assembly

Parts List on PL 1.1

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Right Side Cover (REP 1.2).
3. At the Rear of the printer, remove the screws (2) (Figure 1).

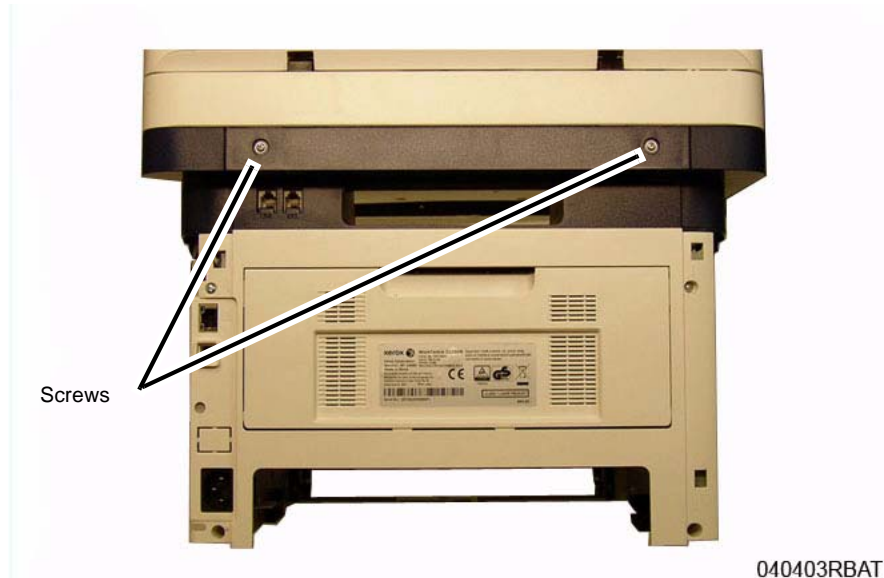


Figure 1 ADF / Scanner Screws

4. Remove the ADF / Scanner Assembly (Figure 2):
 - a. Disconnect the connectors (3) from the Main PWB
 - b. Slide the ADF to the Front and lift it off of the printer, routing the wires through the Middle Cover.

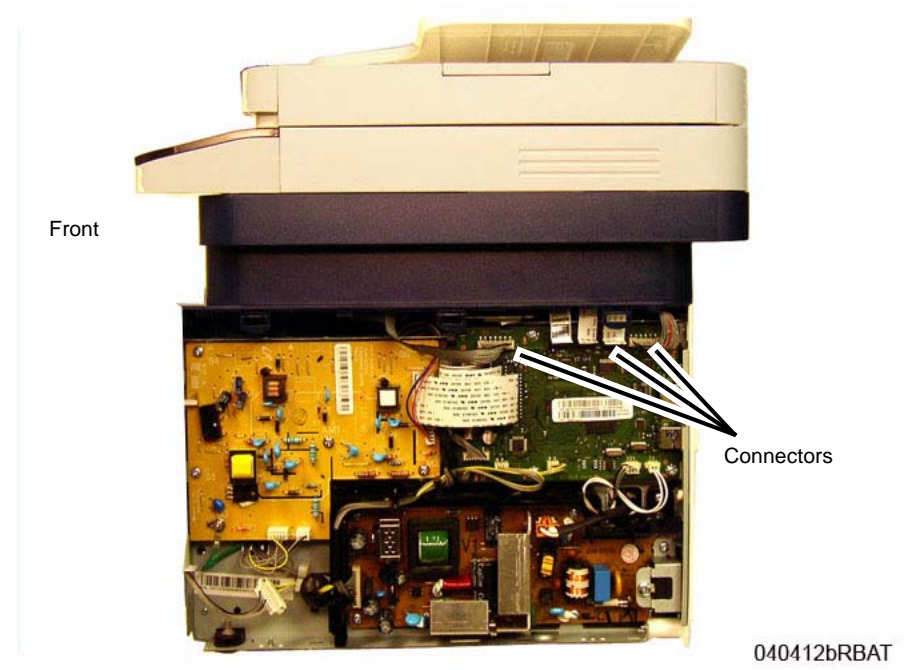


Figure 2 ADF / Scanner Removal

Replacement

Install the components in the reverse of removal.

REP 1.29 Exit Roll and Bushings

Parts List on [PL 4.3](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Middle Cover ([REP 1.3](#)).
3. Remove the Exit Roll and Bushings ([Figure 1](#)).
 - a. Remove the Drive Gear, release the latch.
 - b. Remove the Bushings (2), release the latch and rotate the bushing.
 - c. Remove the Exit Roll.

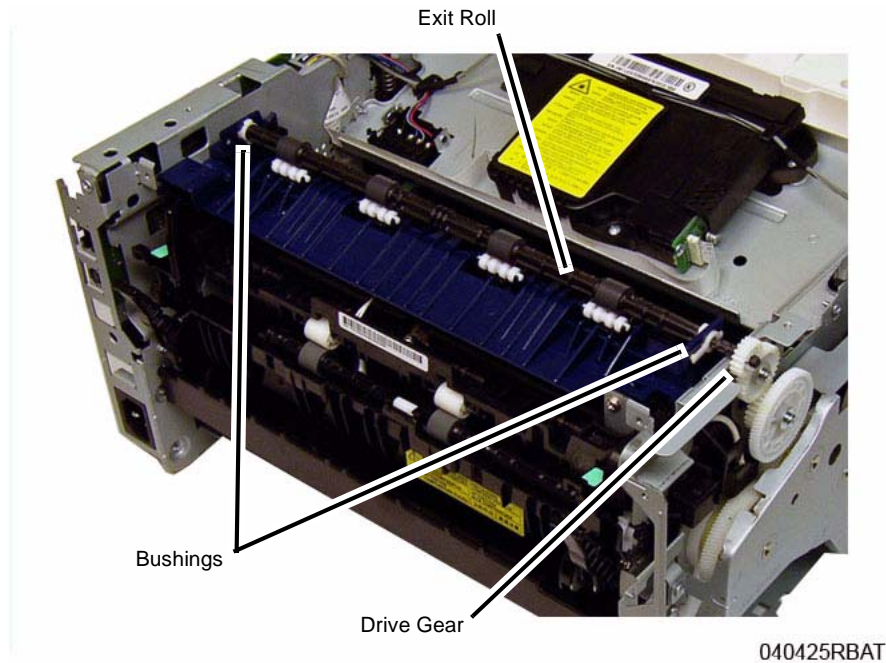


Figure 1 Exit Roll and Bushing (Top View)

Replacement

Install the components in the reverse of removal.

REP 1.30 Feed Idler Gear

Parts List on [PL 4.6](#)

Removal

1. Switch Off the Printer and disconnect the Power Cord.
2. Remove the Left Side Cover ([REP 1.2](#)).
3. Remove the Feed Clutch and Drive Gear ([Figure 1](#)):
 - a. Remove the E-ring and Washer from the Feeder Clutch.
 - b. Remove the Feeder Clutch and Drive Gear.

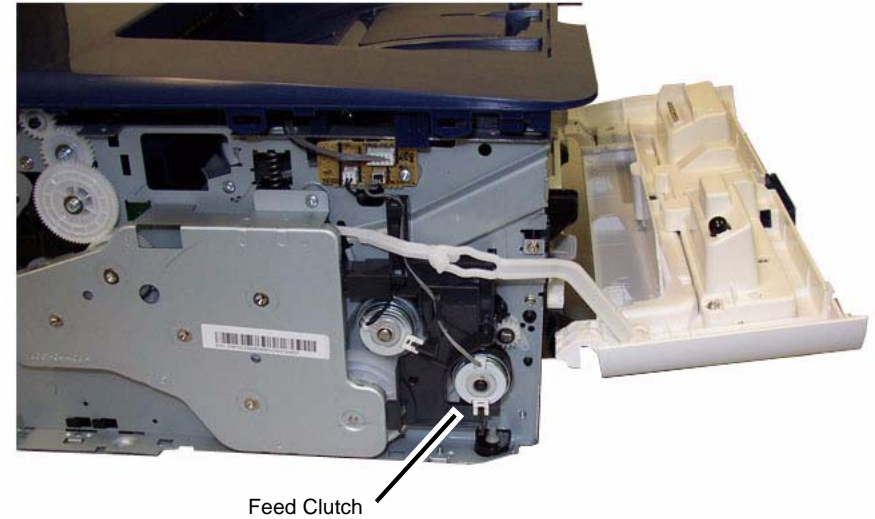
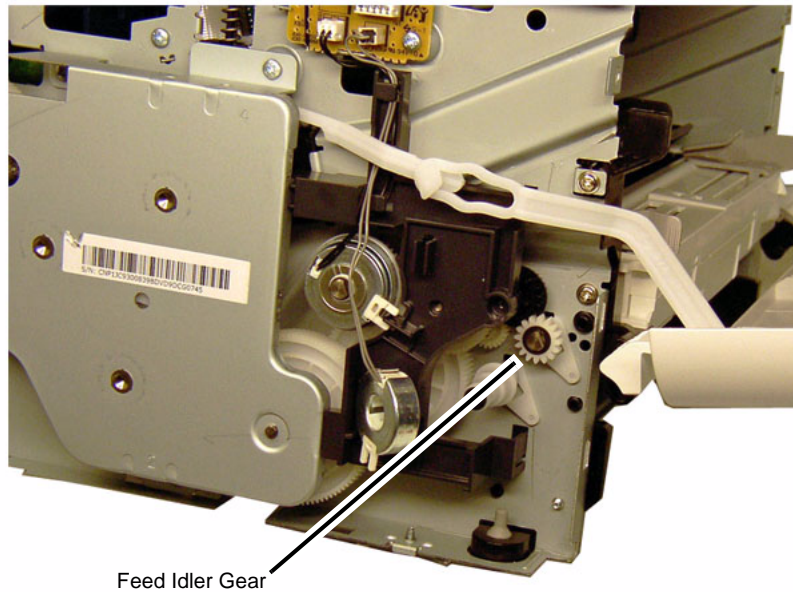


Figure 1 Feed Clutch Removal

4. Remove the Snap Ring and Idler Gear (Figure 2).



Feed Idler Gear

Figure 2 Feed Idler Gear

040427RBAT

Replacement

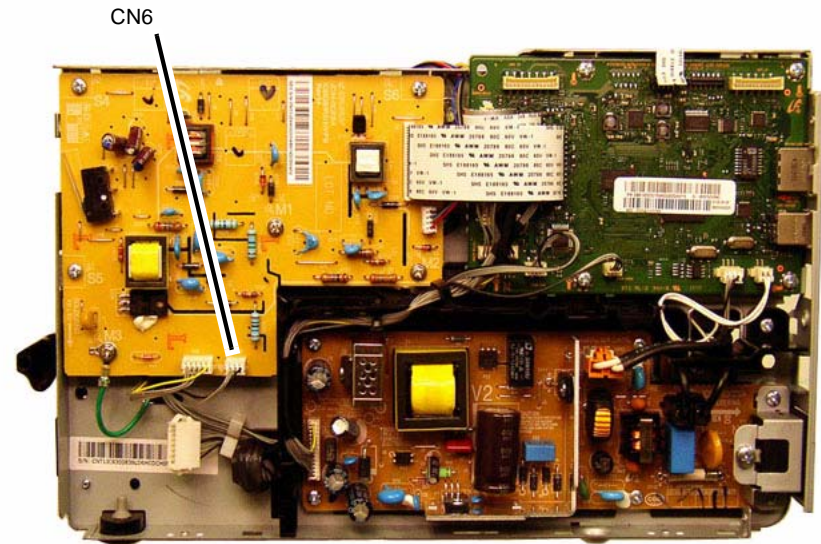
Install the components in the reverse of removal.

REP 1.31 Paper Drive Roll

Parts List on PL 4.5

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the following covers:
 - a. The Front Cover (REP 1.1).
 - b. The Middle Cover (REP 1.3).
3. Disconnect connector CN6 from the HVPS PWB, and route the wires through the frame (Figure 1).



CN6

Figure 1 HVPS CN6

040435RBAT

4. Remove the Main Drive Unit (5 screws) and move the Fuser Drive Locking Lever to the Unlock position (Right) (Figure 2).

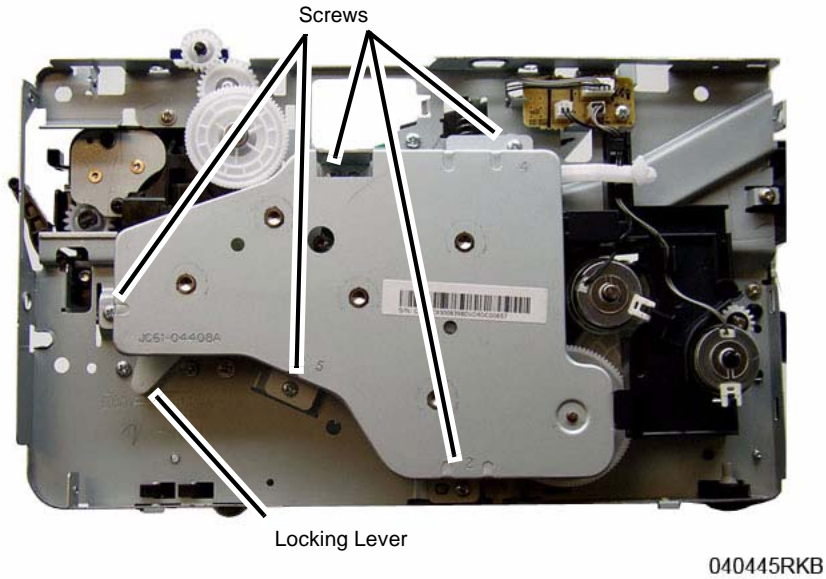


Figure 2 Main Drive Unit

5. Perform the Following (Figure 3):
 - a. Disconnect CN3 from the Joint PWB, and remove the screw (1).
 - b. Remove the Feed and Registration Clutches, remove the Snap Rings and Washer from the Clutches.
 - c. Remove the Feed and Registration Clutch Assembly and the PWB, release the latches (2).

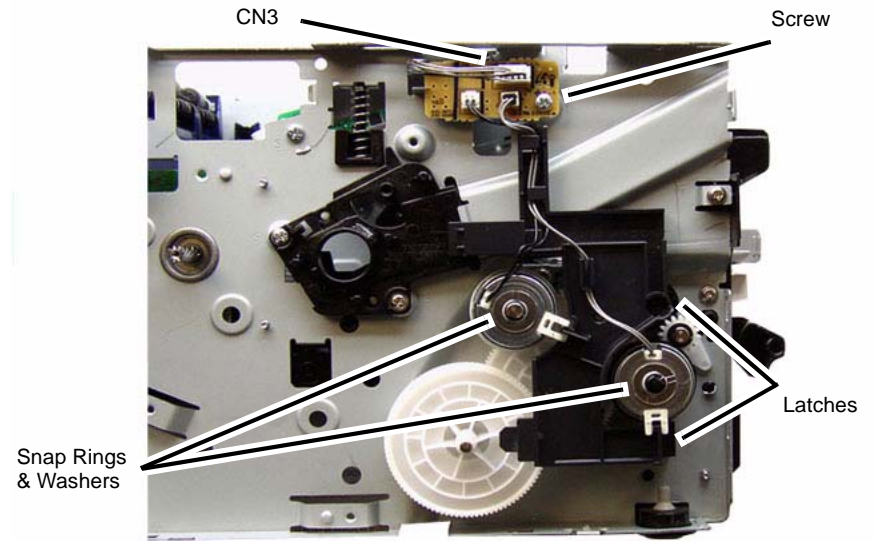


Figure 3 Feed and Registration Clutch / Feeder PWB

6. Remove the Feed and Registration Clutch Drive Gears (Figure 4).

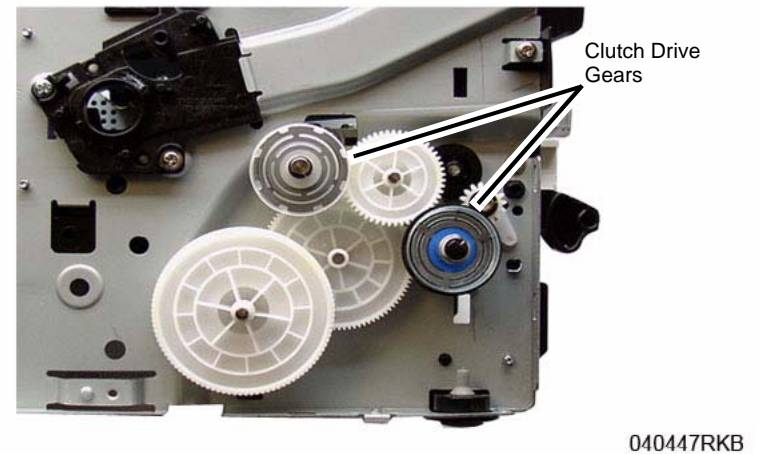


Figure 4 Feed and Registration Clutch Drive Gears

7. Remove the following (Figure 5):
 - a. Drive Gears (2).
 - b. Feed Clutch Bushing, remove the Snap Ring.
 - c. Feed Shaft Bushings (2), release the latch and rotate the bushing.
 - d. Feed Assembly screw (1).

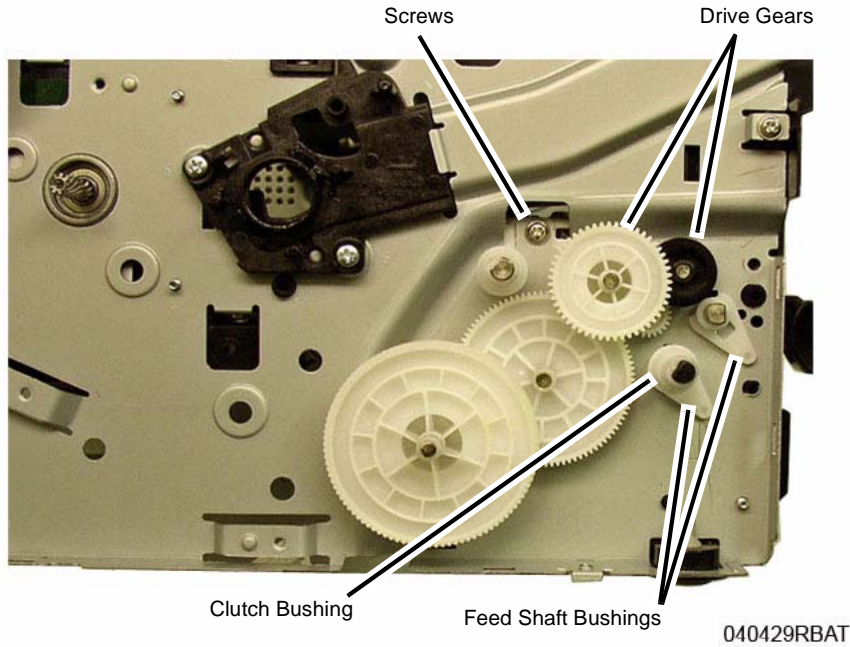
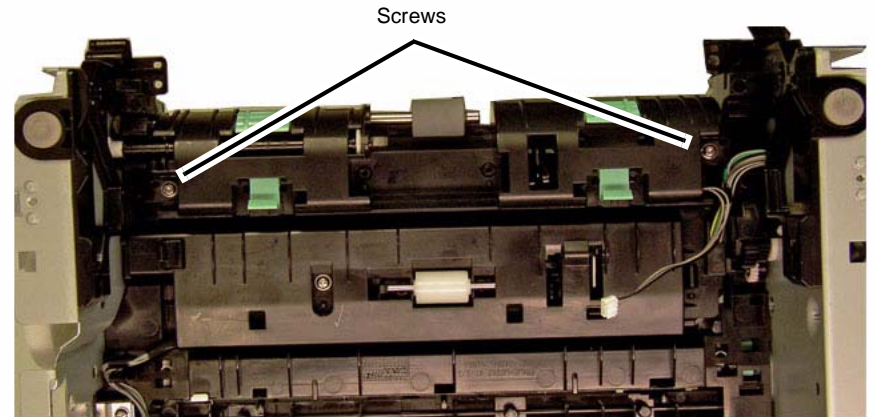


Figure 5 Feeder Drives

8. Remove the Feed Assembly bottom screws (2) (Figure 6).

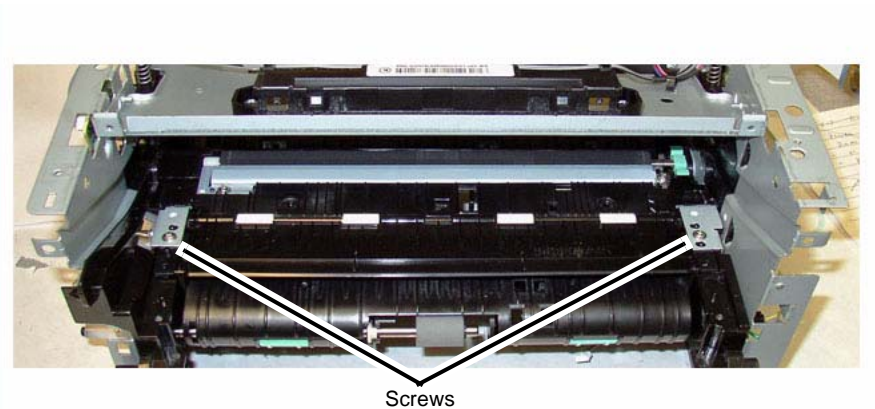


040430RBAT
Figure 6 Feeder Assembly Bottom Screws (Bottom View)

CAUTION

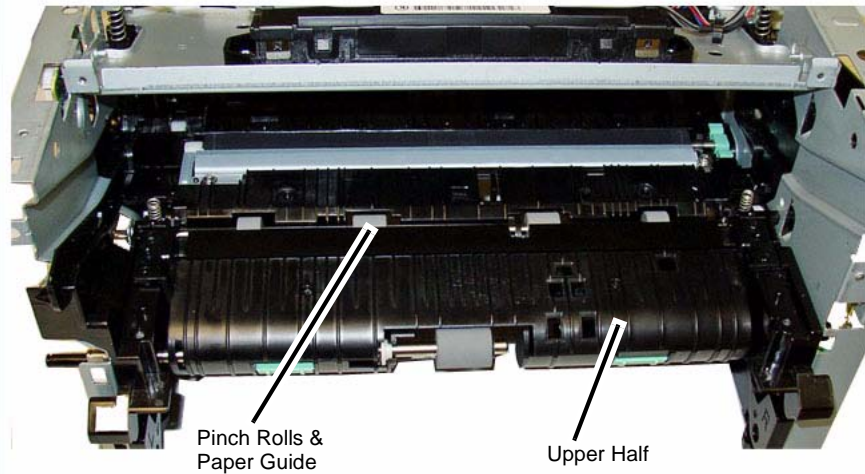
The Brackets holding the Registration Pinch Rolls and Guide are Spring Loaded. Maintain light pressure on the Brackets when removing them to avoid damaging parts or personal injury.

9. Remove the Registration Pinch Rolls and Paper Guide Brackets (2 screws) (Figure 7):



040431RBAT
Figure 7 Registration Pinch Rolls and Paper Guide Brackets

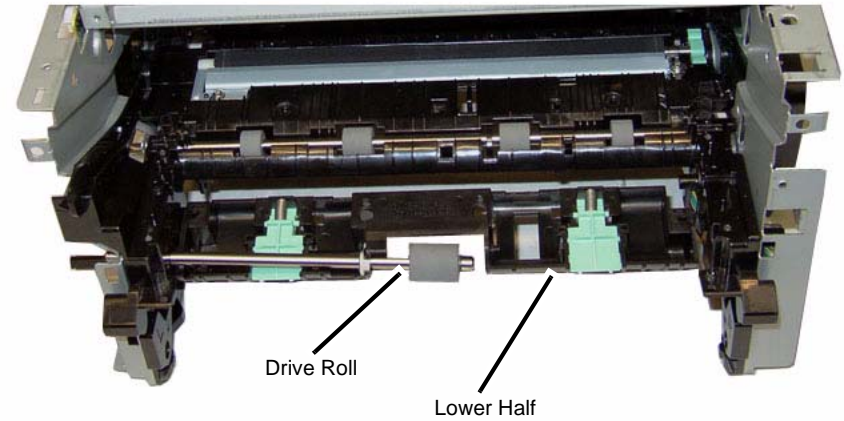
10. Remove the following (Figure 8):
 - a. Lift the Pinch Rolls and Paper Guide out of the printer.
 - b. Remove the Feed Assembly upper half.



040432RBAT

Figure 8 Registration Pinch Rolls and Paper Guide

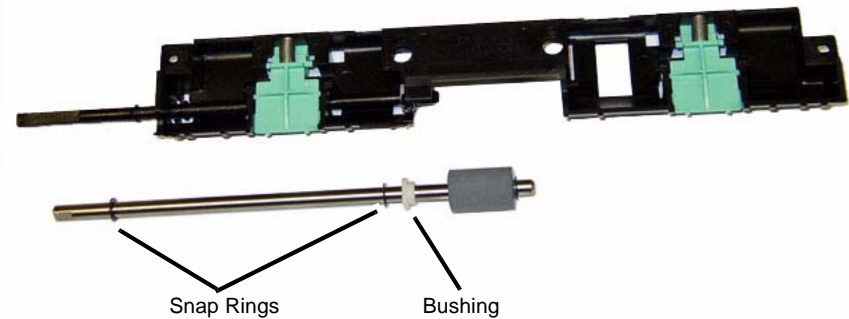
11. Remove the following (Figure 9):
 - a. The Feed Assembly lower half.
 - b. The Drive Roll from the lower half.



040433RBAT

Figure 9 Feed Assembly Lower Half

12. Remove the Snap Rings and Bushing from the Drive Roll Shaft (Figure 10).



040434RBAT

Figure 10 Drive Roll

Replacement

NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the cover to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

1. When replacing the Drive Roll in the Feed Assembly lower half make sure the flat on the bushing aligns with the flat on the assembly
2. After installing the Feed Assembly upper half; install the Feed Assembly bottom screws (2) first, and route the wires through the frame (Figure 6).

REP 1.32 Manual Paper Tray

Parts List on [PL 4.4](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the Middle Cover ([REP 1.3](#)).
3. Remove the Manual Paper Tray bottom screws (2) ([Figure 1](#)).

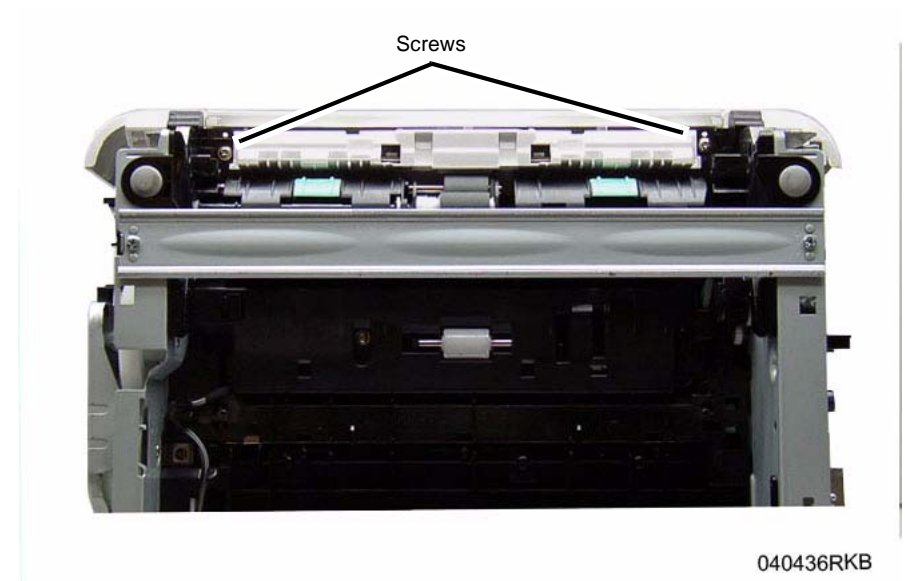
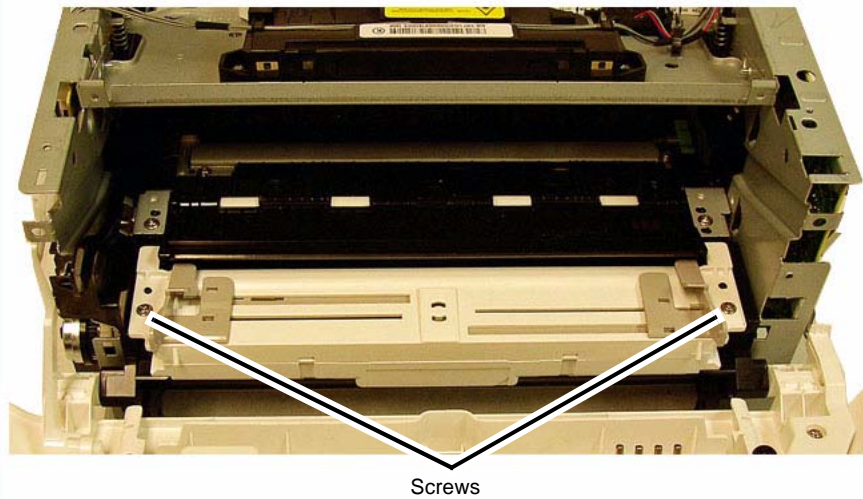


Figure 1 Manual Paper Tray Bottom Screws (Bottom View)

4. Remove the Manual Paper Tray top screws (2) and the paper tray (Figure 2).



040437RBAT

Figure 2 Manual Paper Tray Top Screws (Top View)

Replacement

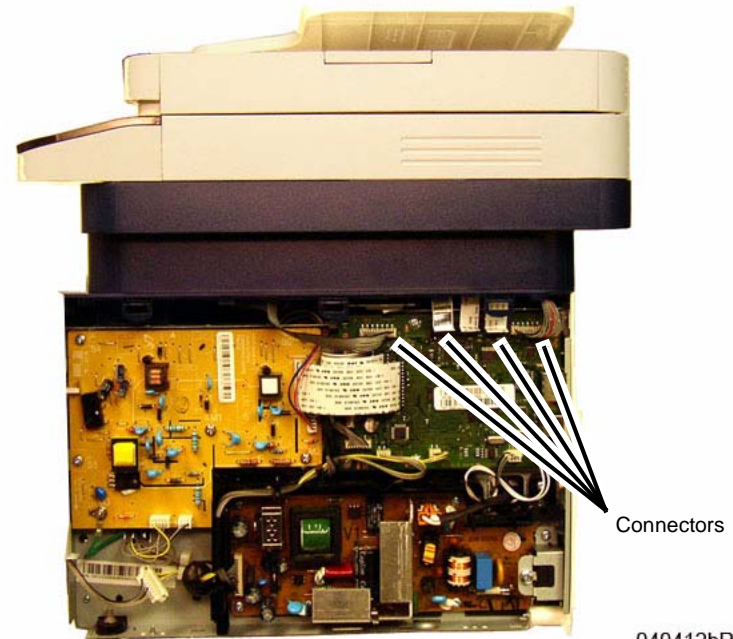
Install the components in the reverse of removal.

REP 1.33 WNPC (WiFi) PWB

Parts List on [PL 1.1](#)

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the following covers:
 - a. Remove the Left and Right Side Covers ([REP 1.2](#)).
 - b. Remove the Rear Cover ([REP 1.4](#)).
3. Disconnect the 4 connectors from the Main PWB ([Figure 1](#)).



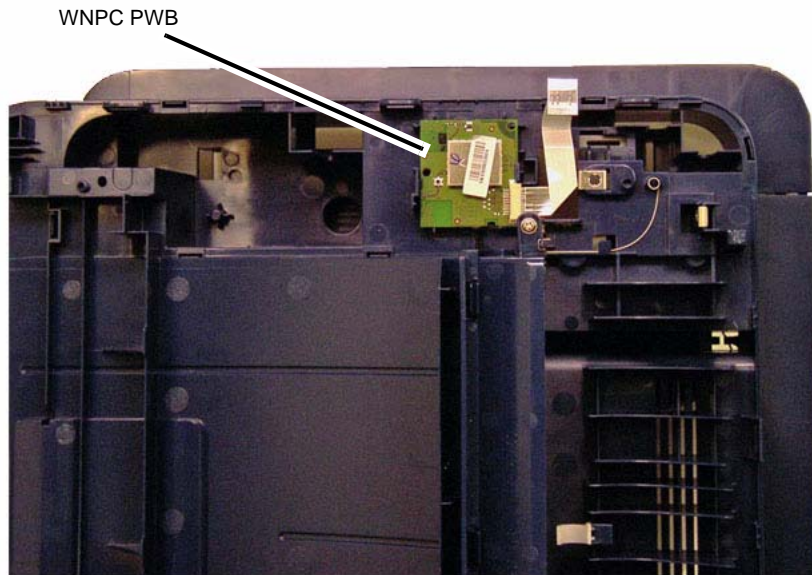
Connectors

040412bRBAT

Figure 1 Main PWB Connectors

4. Remove the ADF / Scanner Assembly ([REP 1.28](#)).
5. Remove the Middle Cover ([REP 1.3](#)).

6. Unlatch the WNPC PWB from the underside of the Middle Cover and remove it (Figure 2).



040441RBAT

Figure 2 WNPC PWB (Middle Cover Bottom View)

Replacement

Install the components in the reverse of removal.

REP 1.34 Registration Roll

Parts List on PL 4.4

Removal

1. Switch Off the Printer and unplug the Power Cord.
2. Remove the following covers:
 - a. The Left and Right Side Covers (REP 1.2).
 - b. The Front Cover (REP 1.1).
 - c. The Rear Cover (REP 1.4).
3. Remove the Middle Cover (REP 1.3).
4. Remove the Bottom Bar and Duplex Module (Figure 1).
 - a. Remove the screws (2) and the Bottom Bar.
 - b. Press the Green Tabs (2) to unlatch the Duplex Paper Guide. Remove the Duplex Paper Guide through the rear of the printer.

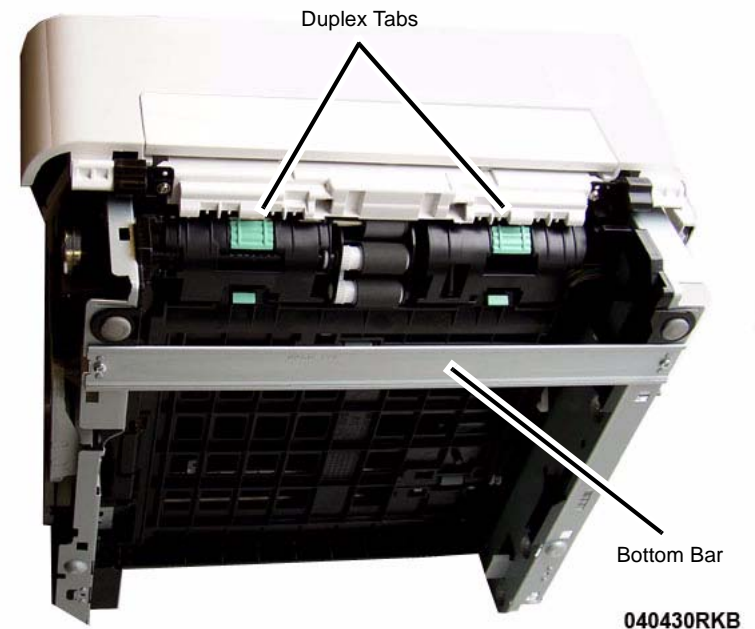


Figure 1 Bottom Bar and Duplex Paper Guide (Bottom View)

5. Remove the Fuser Module (REP 1.17).

6. Remove the Main Drive Unit (5 screws) and move the Fuser Drive Locking Lever to the Unlock position (Right) (Figure 2).

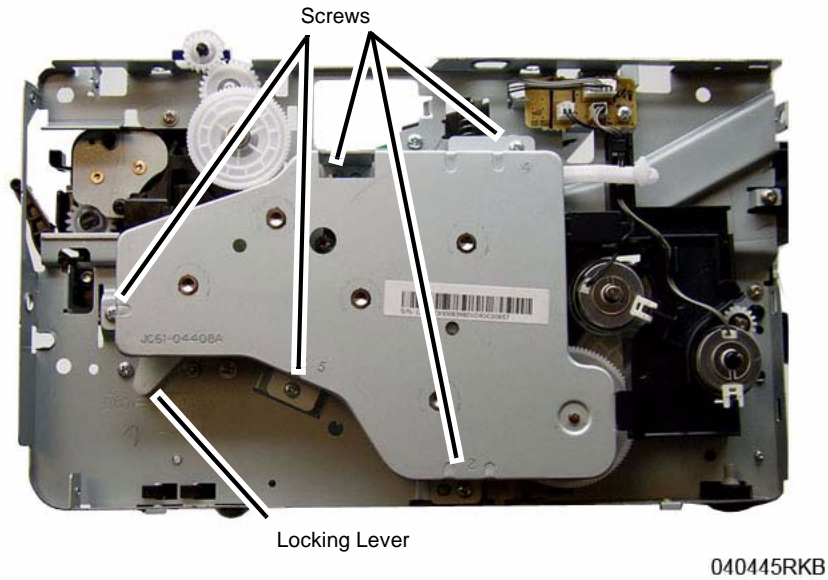


Figure 2 Main Drive Unit

7. Perform the Following (Figure 3):
 - a. Disconnect the Feeder PWB Connector (CN3), and remove the PWB (1 screw).
 - b. Remove the Feed and Registration Clutches, remove the Snap Rings and Washer from the Clutches.
 - c. Remove the Feed and Registration Clutch Assembly and the PWB, release the latches (2).

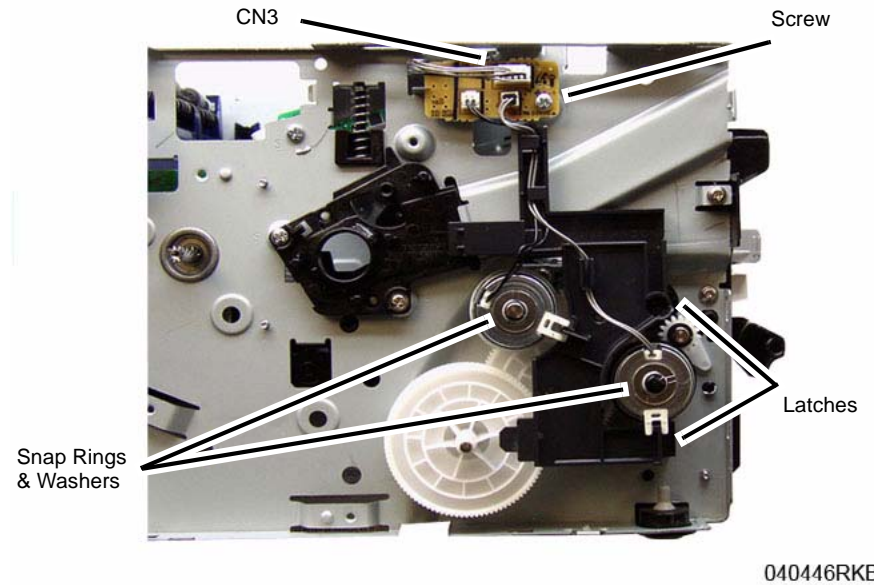


Figure 3 Feed and Registration Clutch / Feeder PWB

8. Remove the Feed and Registration Clutch Drive Gears (Figure 4).

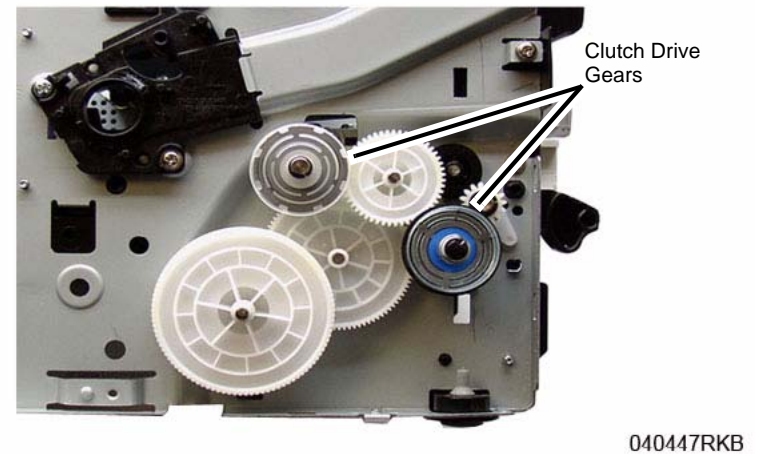


Figure 4 Feed and Registration Clutch Drive Gears

9. Remove the following (Figure 5):
Make note of the order that the Feed and Registration Drive Gears are removed in so they can be re-installed correctly.
- Feed and Registration Drive Gears, there is a Snap Ring on one gear.
 - Feed and Registration Clutch Bushings (2 Snap Rings).
 - Shaft Bushings (2), release the latches.

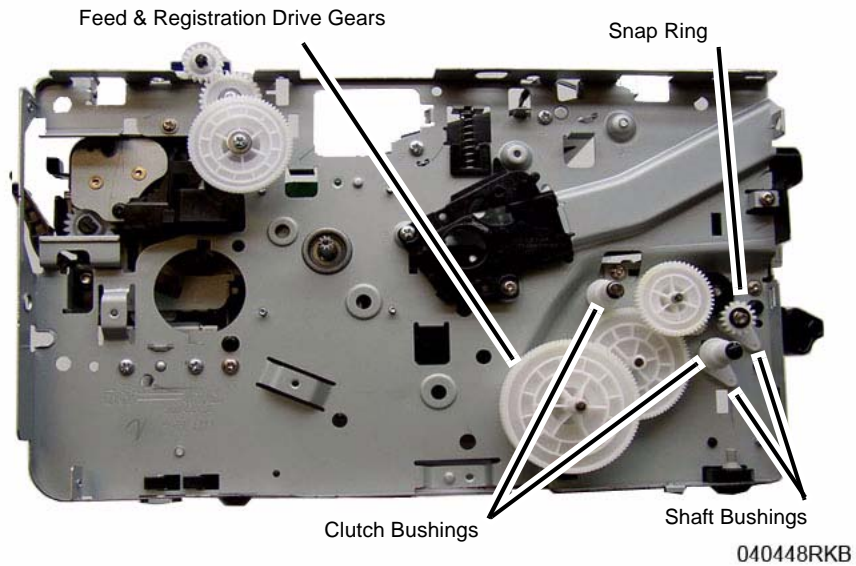


Figure 5 Drive Gears and Bushings

10. On the Bottom of the printer, remove the Feed and Registration Sensor PWB Cover (Figure 6).
- Remove the screw (1).
 - Release the Latch and remove the cover.

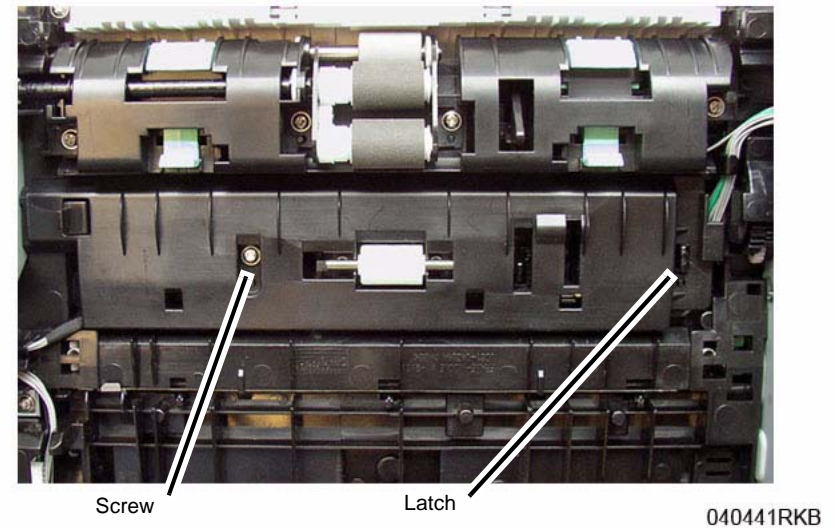
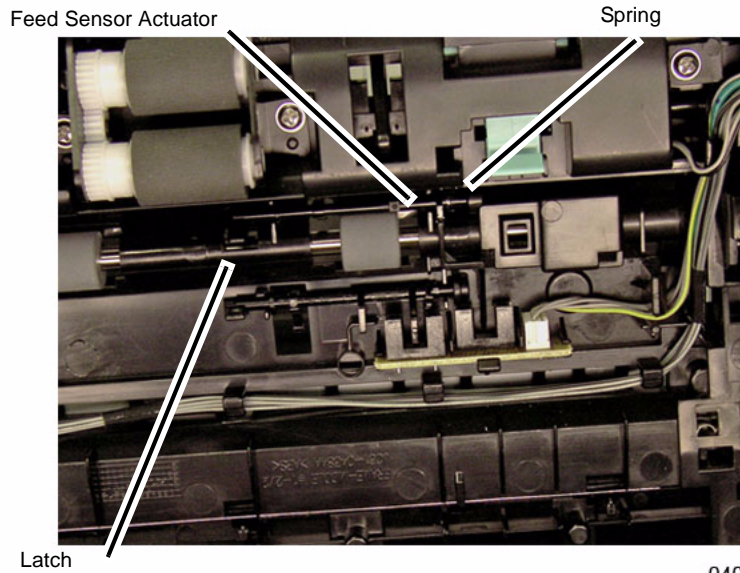


Figure 6 Feed and Reg Sensors PWB Cover (Bottom View)

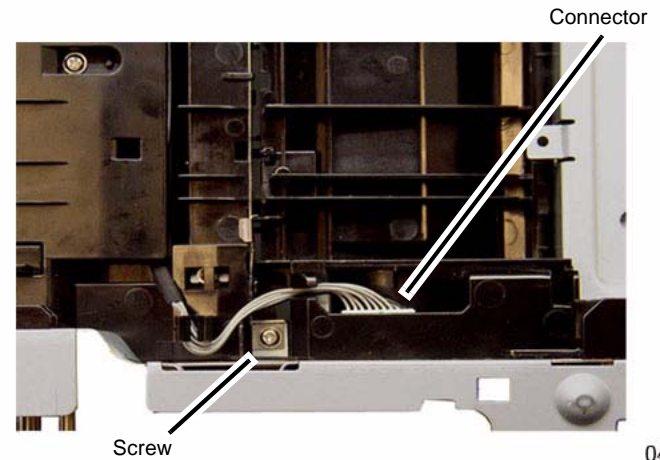
11. Removing the Feed Sensor Actuator, release the actuator from the latch (Figure 7):
Note the location of the Spring in the frame cutout for reinstallation.



040442RKB

Figure 7 Feed Sensor Actuator (Bottom View)

12. On the bottom of the Printer (Figure 8):
a. Disconnect the Drive Motor Connector.
b. Remove the ground screw (1).



040450RKB

Figure 8 Drive Motor Connector & Screw (Bottom View)

13. Remove the PWB's (3), disconnect the connectors (Figure 9):
 - a. The HVPS PWB (6 screws), and remove the Spring Contacts (4) from the high voltage contact guide.
 - b. Remove the LVPS PWB (6 screws), and the insulation (black) pad behind the PWB.
 - c. Remove the Main PWB (5 screws)

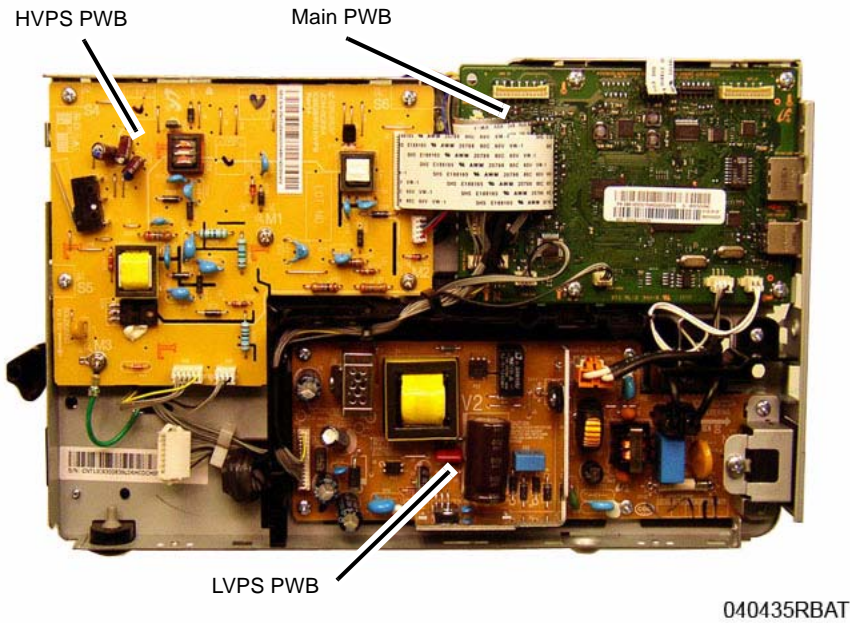


Figure 9 PWB Removal

14. Remove the LSU Assembly (4 screws), 2 on each side of the printer (Figure 10, Figure 11).

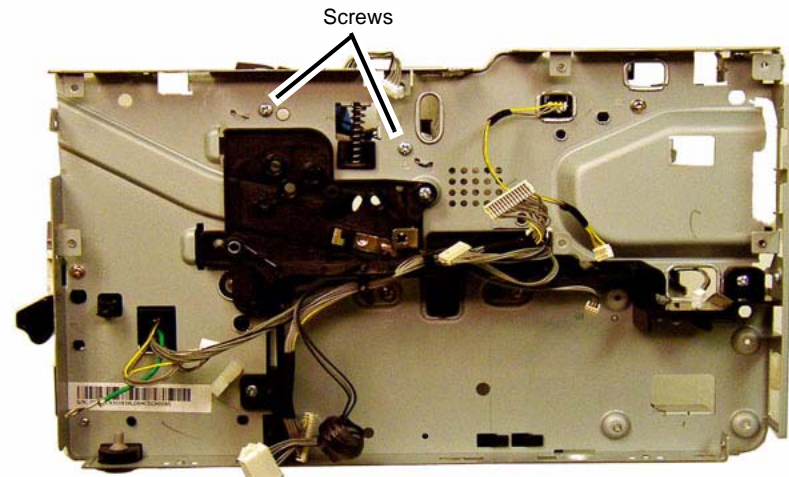


Figure 10 LSU Left Side Screws

040443RBAT

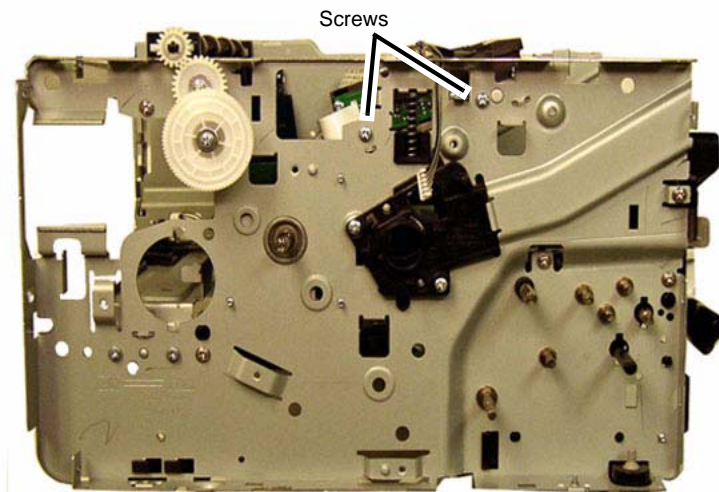


Figure 11 LSU Right Side Screws

040444RBAT

15. Remove the following (Figure 12):
Wire harness guide (2 screws).
High voltage contact guide (2 screws).

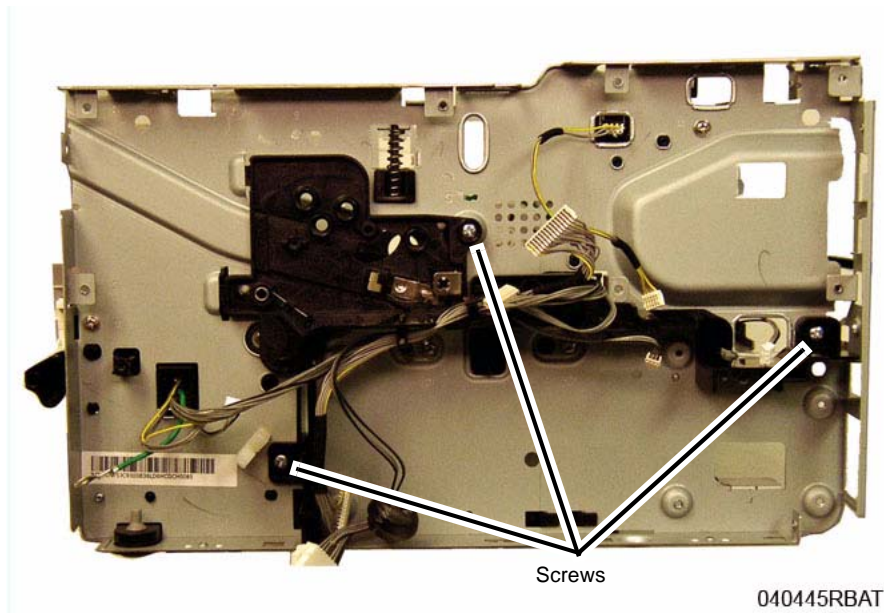


Figure 12 Wire Guides and HV Contact Guide

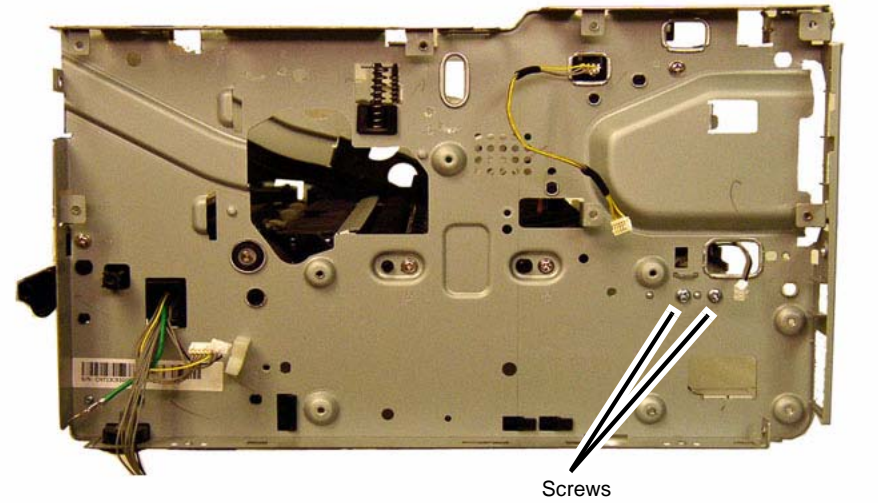
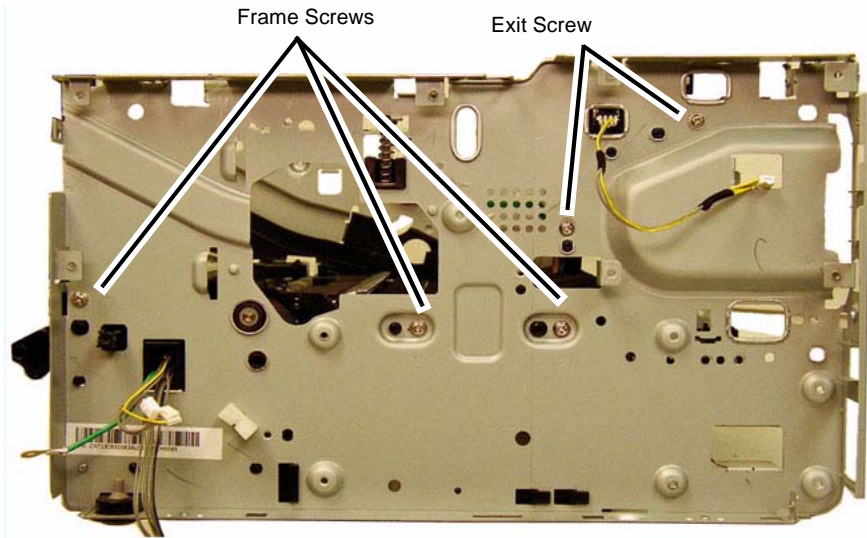


Figure 13 Exit Sensor Plate Screws

16. Remove the Exit Sensor Plate screws (2) from the Right Frame (Figure 13).

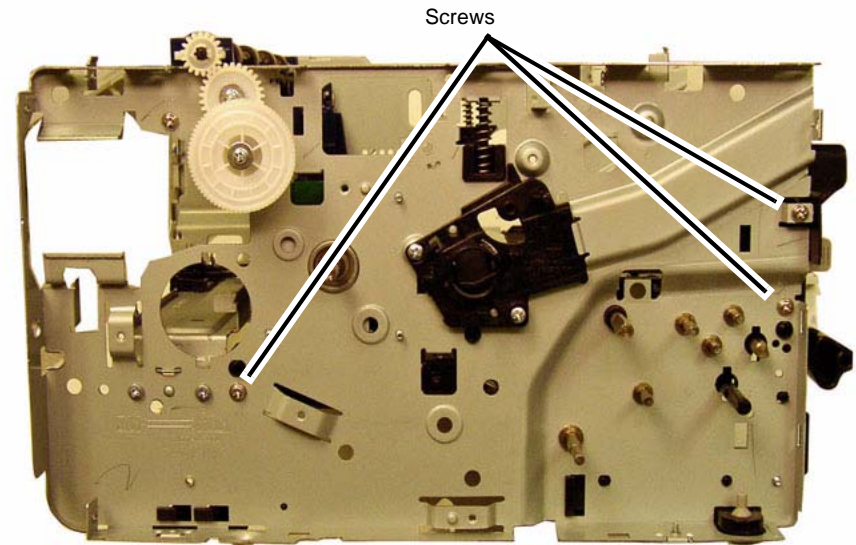
17. Remove the Right Frame Paper Path screws (3) and the Exit Assembly screw (2) (Figure 14).



040447RBAT

Figure 14 Right Frame Screws Removal

18. Remove the Left Frame Paper Path screws (3) (Figure 15).

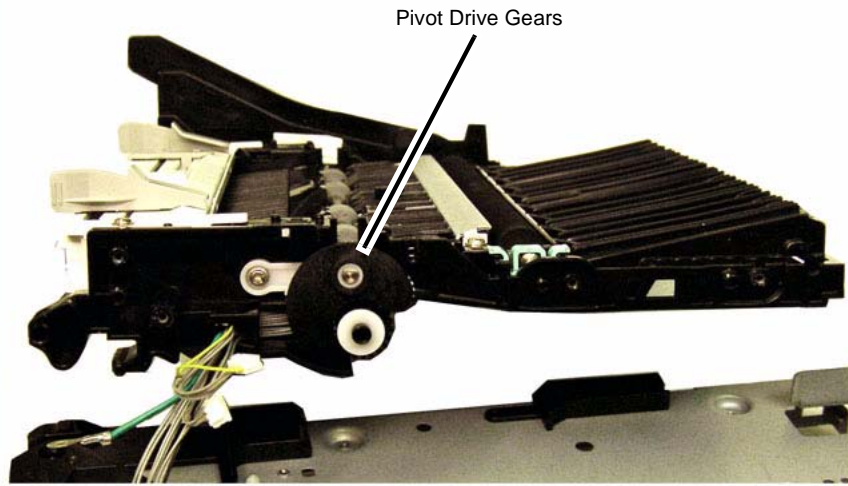


040448RBAT

Figure 15 Left Frame Screw Removal

19. Separate the Left and Right Frames from the Paper Path Frame, route the wires through the frames as needed.

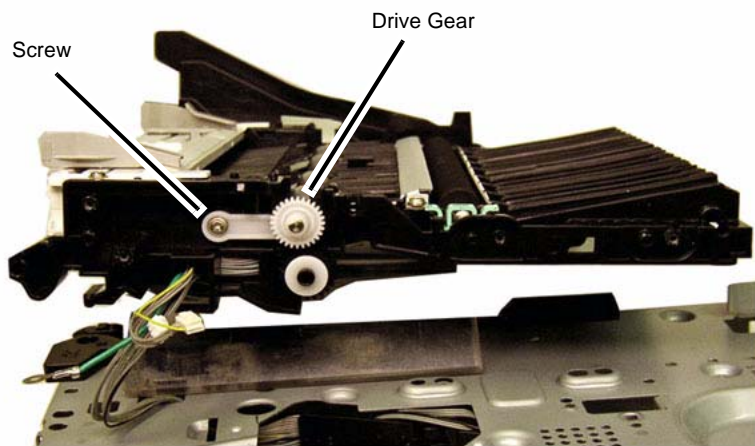
20. Remove the Reg Roll Drive Pivot Gears from the Paper Path Frame (Figure 16).



040449RBAT

Figure 16 Registration Roll Drive Pivot Gears

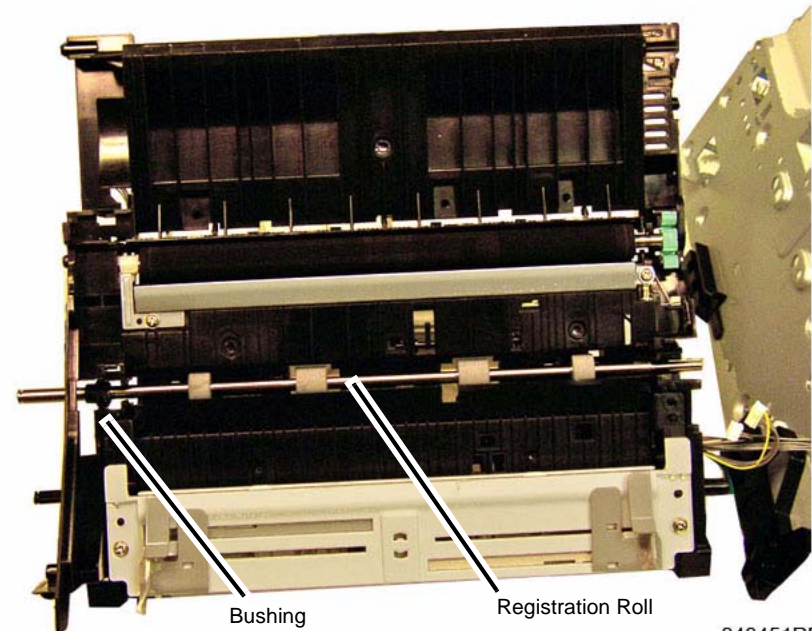
21. Remove the Reg Roll Drive Gear and Bushing (1 screw) (Figure 17).



040450RBAT

Figure 17 Registration Roll Drive Gear and Bushing

22. Remove the Reg Roll from the Paper Path Frame (Figure 18). Note the location of the Bushing in the frame for reinstallation.



040451RBAT

Figure 18 Registration Roll Removal

23. Remove the Bushing and E-ring from the Reg Roll (Figure 19).



040452RBAT

Figure 19 Registration Roll

Replacement

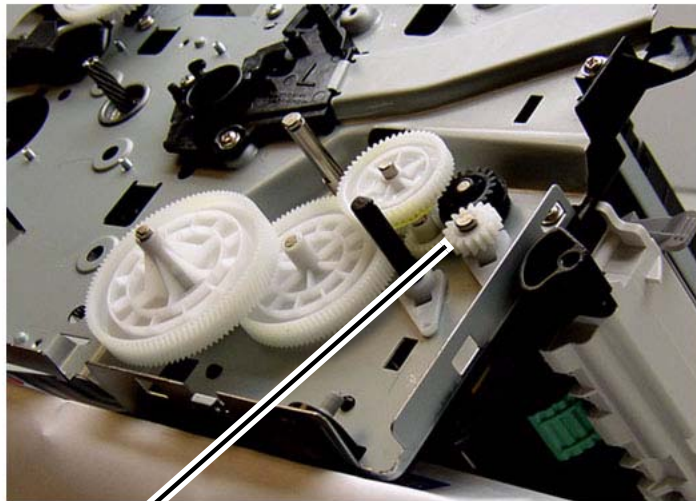
NOTE: Tapered Plastic Screws and Round Machine Screws are used to hold the parts to the frame. Make sure that the Plastic Screws go into plastic components and Machine Screws go into the metal frame.

Install the components in the reverse of removal.

NOTE: The Frame is flexible and can be bowed out if the screws are not tightened in the correct order.

Reinstall the Frame as follows so it seats flush against the printer's internal modules.

1. After aligning the left and right frames together with the inside modules; install, but do not tighten, the Paper Path Frame screws, (3) on the Left and Right Side Frame to hold the printer together.
Refer to (Figure 14) and (Figure 15).
2. On the bottom of the printer, refer to (Figure 8):
 - a. Install the ground screw (1).
 - b. Connect the Printer Drive Motor Connector.
3. Tighten the Paper Path Frame screws installed in Step 1.
4. Continue with the parts replacement.
 - a. When installing the Paper Feed Sensor Actuator made sure the spring is seated in the frame cutout, refer to (Figure 7).
 - b. Refer to Figure 20 for installation of the Feed and Registration Drive Gears, and Snap Ring.



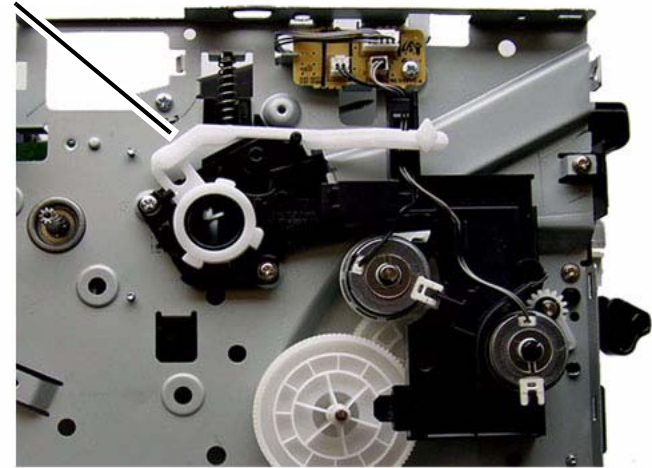
Snap Ring

040452RKB

Figure 20 Feed and Registration Drive Gears

- c. When installing the Front Cover Support Arm, ensure that it is placed correctly on the Stop Bracket (Figure 21).

Support Arm



040443RKB

Figure 21 Front Cover Support Arm Placement

REP 1.35 ADF Feed Separation Pad

Parts List on PL 1.2

Removal

1. Remove the ADF Cover, release the Rear Pivots and remove the cover (Figure 1).

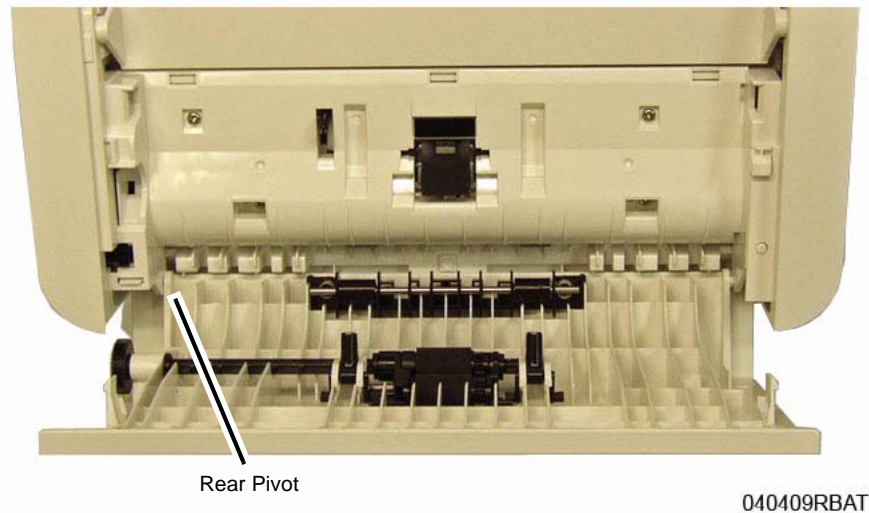


Figure 1 ADF Cover Pivots (Top View)

NOTE: The Separation Pad has spring tension pushing up on it, be careful not to lose the spring.

2. Release the latches (2) and remove the Separation Pad (Figure 2).

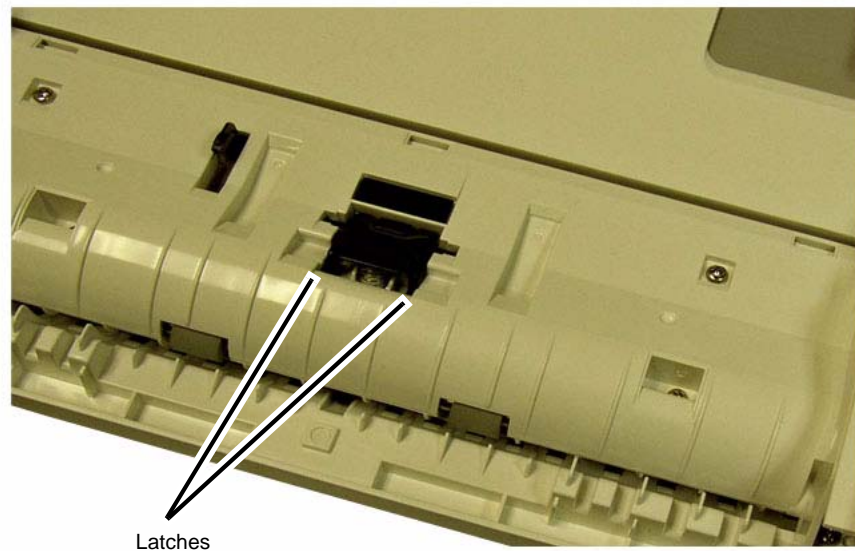
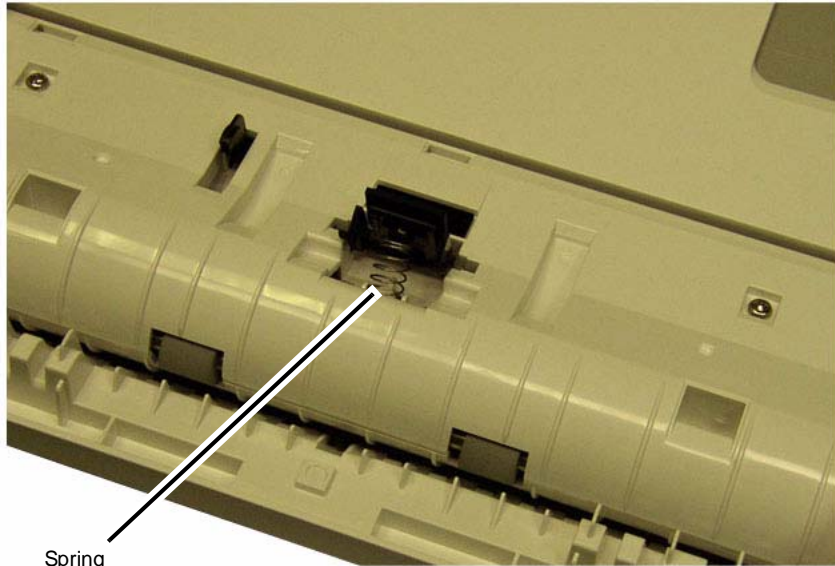


Figure 2 Separation Pad Latches (Top View)

Replacement

NOTE: Make sure the post on the Separation Pad is positioned inside the Spring (Figure 3).

Install the components in the reverse of removal.



040454RBAT

Figure 3 Separation Pad Spring (Top View)

REP 1.36 Manual Feed Cover

Parts List on PL 2.1

Removal

1. Remove the Manual Feed Cover, release it from the pivots (2) (Figure 1).

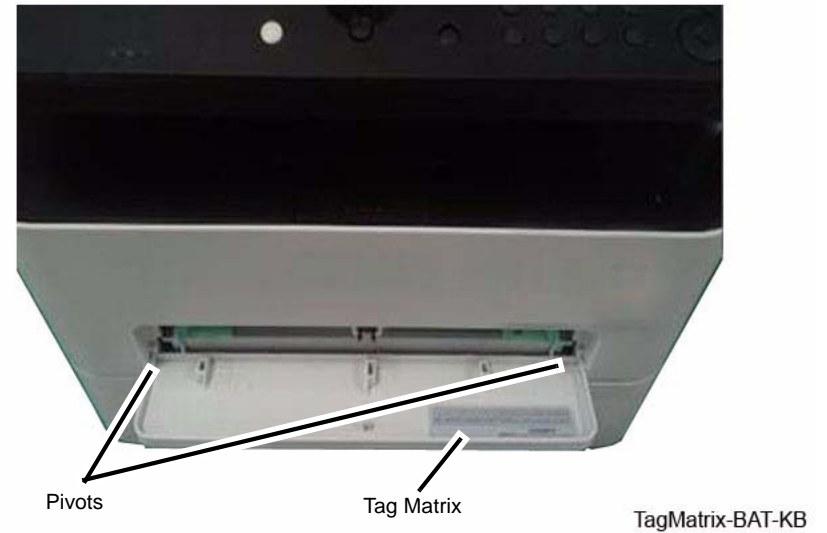


Figure 1 Manual Feed Cover (Top View)

Replacement

1. Remove the Tag Matrix from the old cover and install it on to the new Manual Feed Cover (Figure 1).

Install the components in the reverse of removal.

Main
 PL 1.1 Main 5-3

ADF
 PL 1.2 ADF 5-4

Covers
 PL 2.1 Covers 5-5

Middle Cover
 PL 2.2 Middle Cover 5-6

Frame
 PL 4.1 Frame 5-7

Duplex
 PL 4.2 Duplex 5-8

Exit Frame
 PL 4.3 Exit Frame 5-9

Paper Path
 PL 4.4 Paper Path 5-10

Base Pick Up
 PL 4.5 Base Pick Up 5-11

Left Main Frame
 PL 4.6 Left Main Frame 5-12

Right Main Frame
 PL 4.7 Right Main Frame 5-13

Fuser
 PL 5.1 Fuser 5-14

Lower Fuser
 PL 5.2 Lower Fuser 5-15

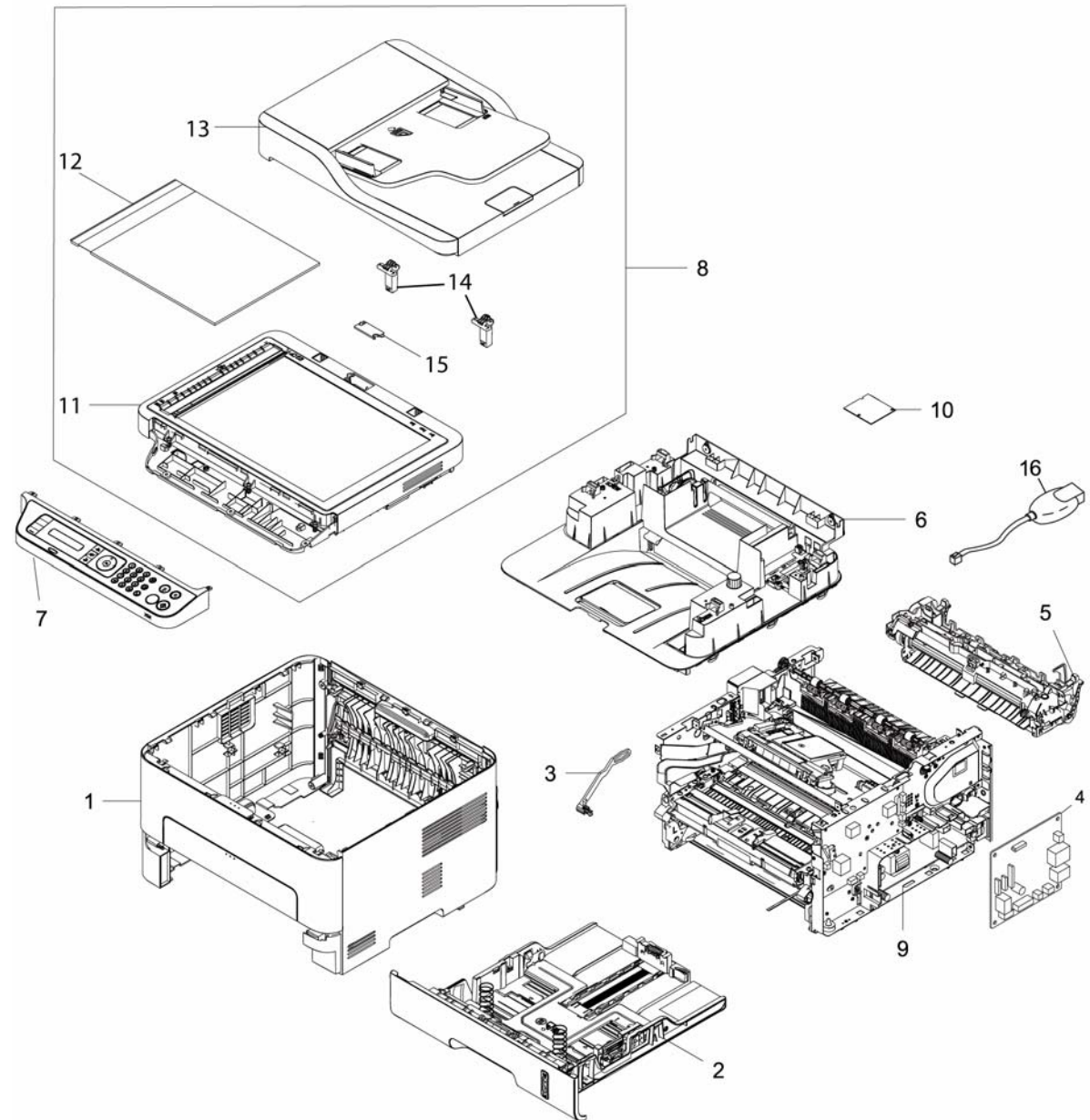
Cassette
 PL 6.1 Paper Tray 5-16

Platen
 PL 7.1 Scanner Module 5-17

Control Panel
 PL 8.1 Control Panel 5-18
 Part Number Index 5-19
 5-20

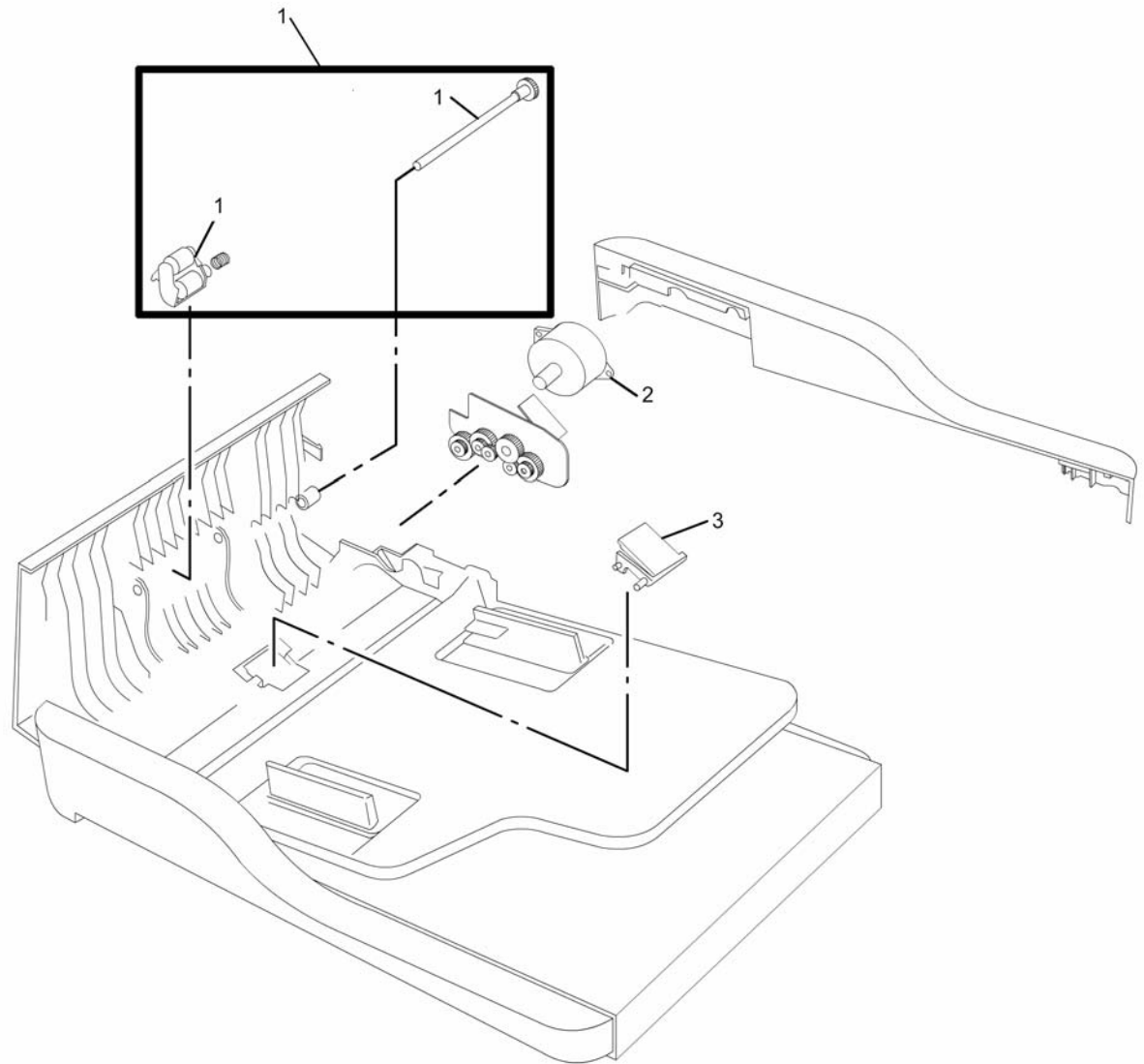
PL 1.1 Main

Item	Part	Description
1	–	Cover
2	–	Paper Tray (PL 6.1)
3	–	Coupling B Lever
4	140N63716	PWB-MAIN-3225 DN
–	140N63715	PWB-MAIN-3225 DNI
–	140N63714	PWB-MAIN-3215 NI
5	–	Fuser (PL 5.1)
6	–	Middle Cover (PL 2.2)
7	–	Control Panel (PL 8.1)
8	–	Scanner/ADF Assembly
9	–	Frame
10	140N63727	WIFI PWB
11	–	Platen (PL 7.1)
12	050N00680	Document Pad
13	022N02799	ADF Module (PL 1.2)
14	003N01117	ADF Hinge
15	–	Connector Cover
16	005N01172	Surge Protector (South Africa Only)



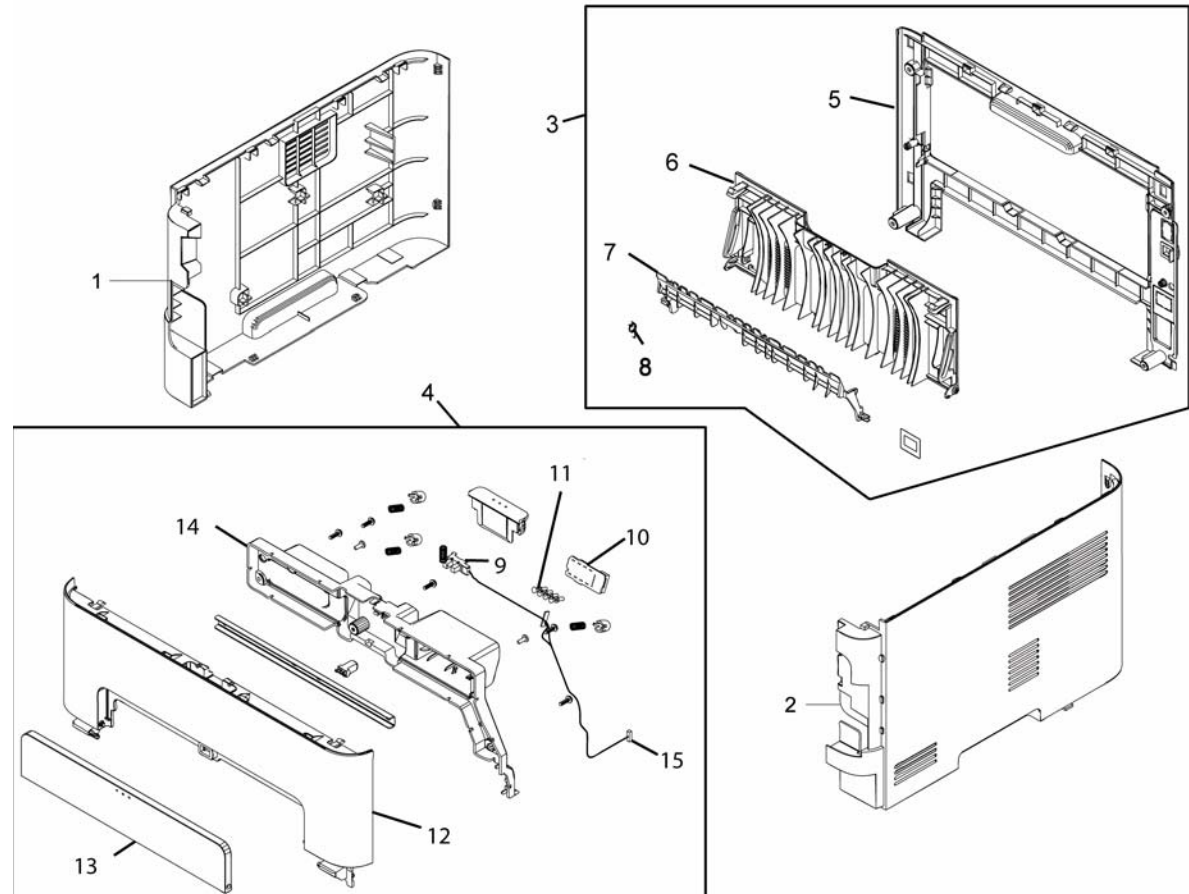
PL 1.2 ADF

Item	Part	Description
1	022N02801	ADF Feed Roll Assembly
2	127N07864	ADF Drive Motor
3	022N02800	ADF Retard Pad



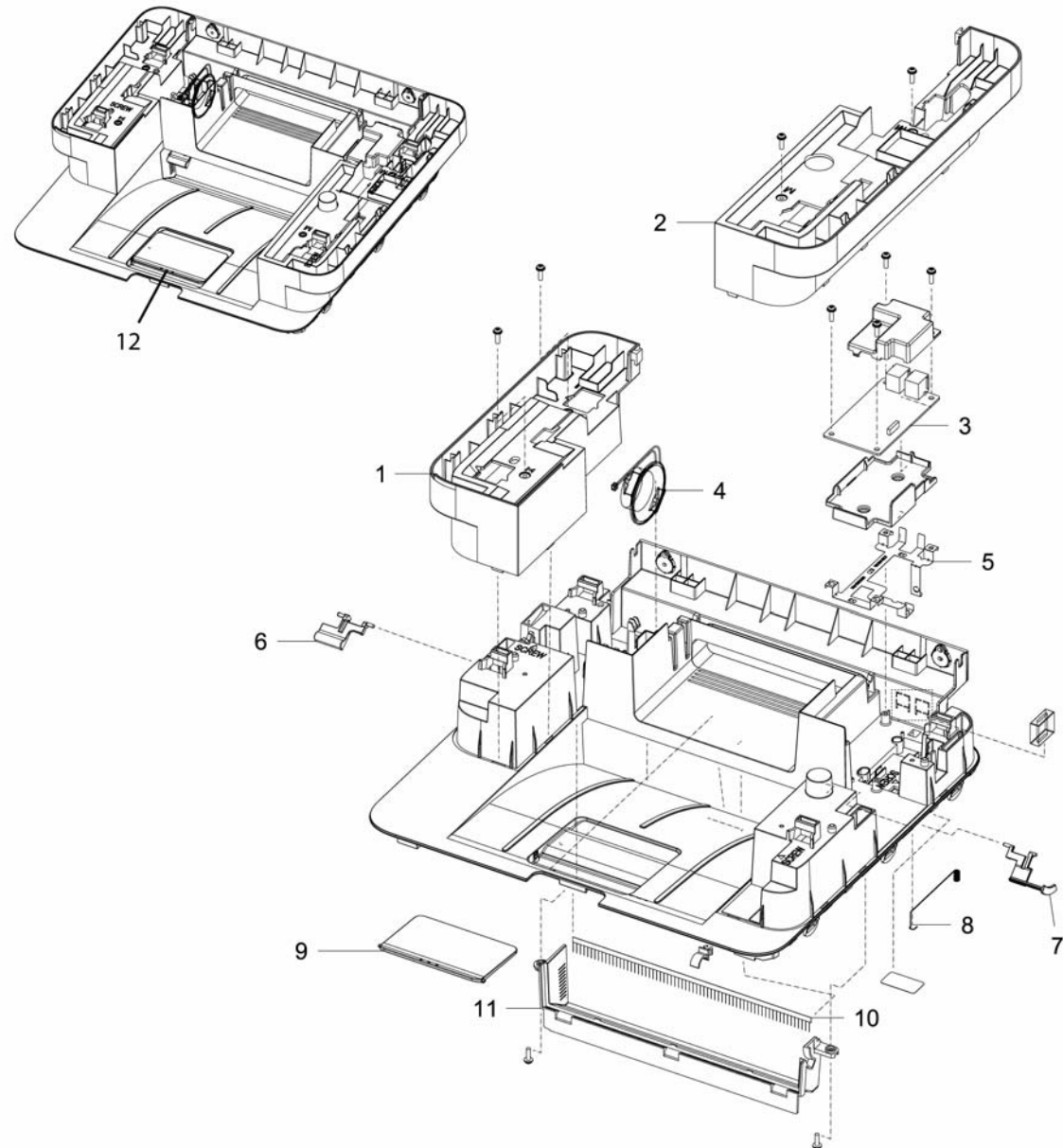
PL 2.1 Covers

Item	Part	Description	
1	002N03167	Left Cover	3 { 5-8
2	002N03182	Right Cover	4 { 9-14
3	002N03172	Rear Cover Assembly	
4	002N03175	Front Cover Assembly	
5	-	Rear Cover	
6	-	Exit Paper Guide	
7	-	Duplex Gate	
8	-	Spring	
9	-	Front Cover Latched Sensor	
10	-	CRUM PWB	
11	-	CRUM Contacts	
12	-	Front Cover	
13	-	Manual Cover	
14	-	Front Harness Cover	
15	-	CRUM Harness	



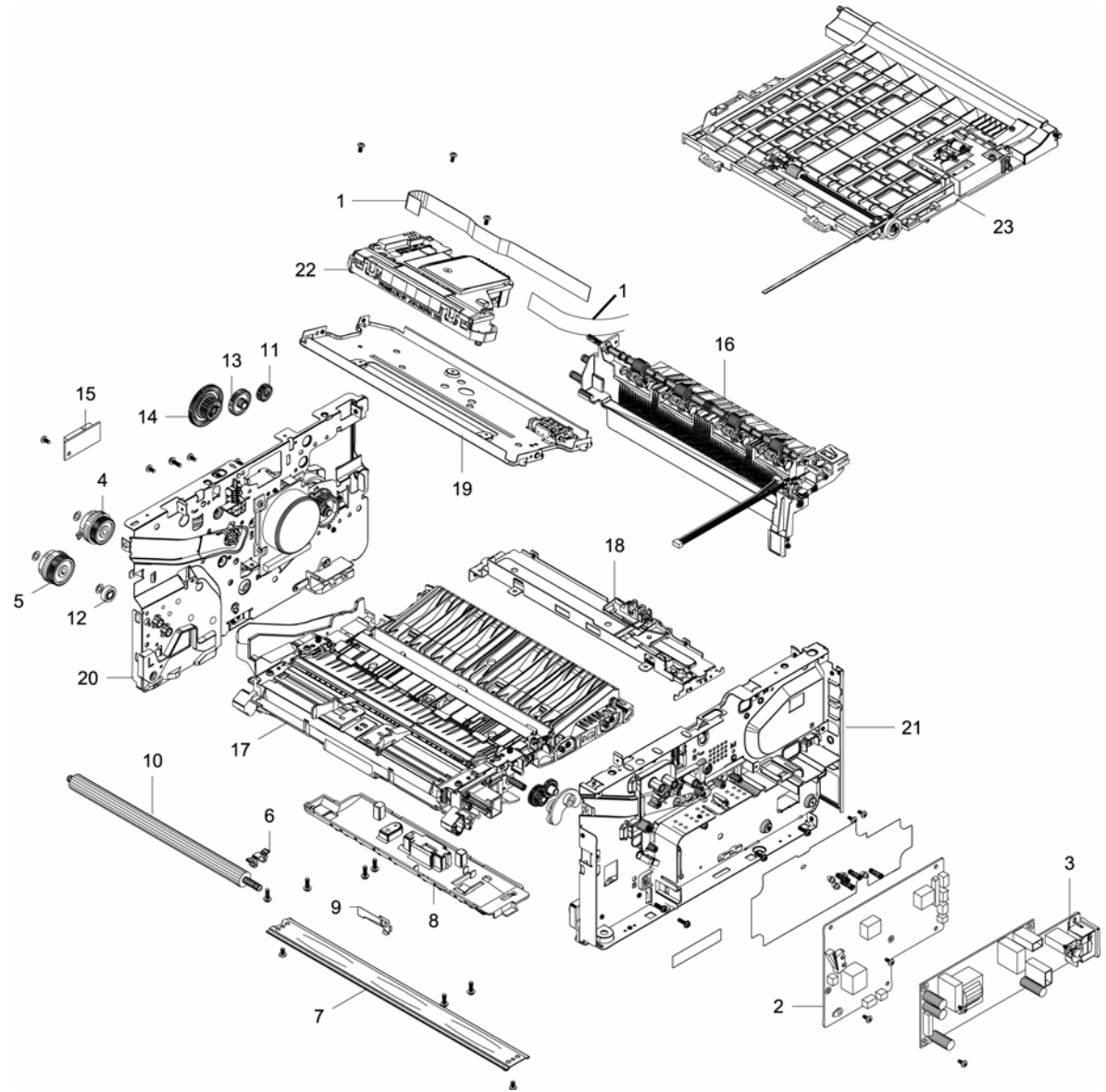
PL 2.2 Middle Cover

Item	Part	Description
1	002N03157	Left Middle Cover
2	002N03158	Right Middle Cover
3	140N63726	FAX PWB
4	-	Speaker
5	-	FAX Ground
6	-	Paper Stacker
7	-	Bin Full Sensor
8	-	Spring
9	004N00286	Output Support
10	-	Antistatic Brush
11	-	Exit Cover
12	-	Middle Cover Assembly



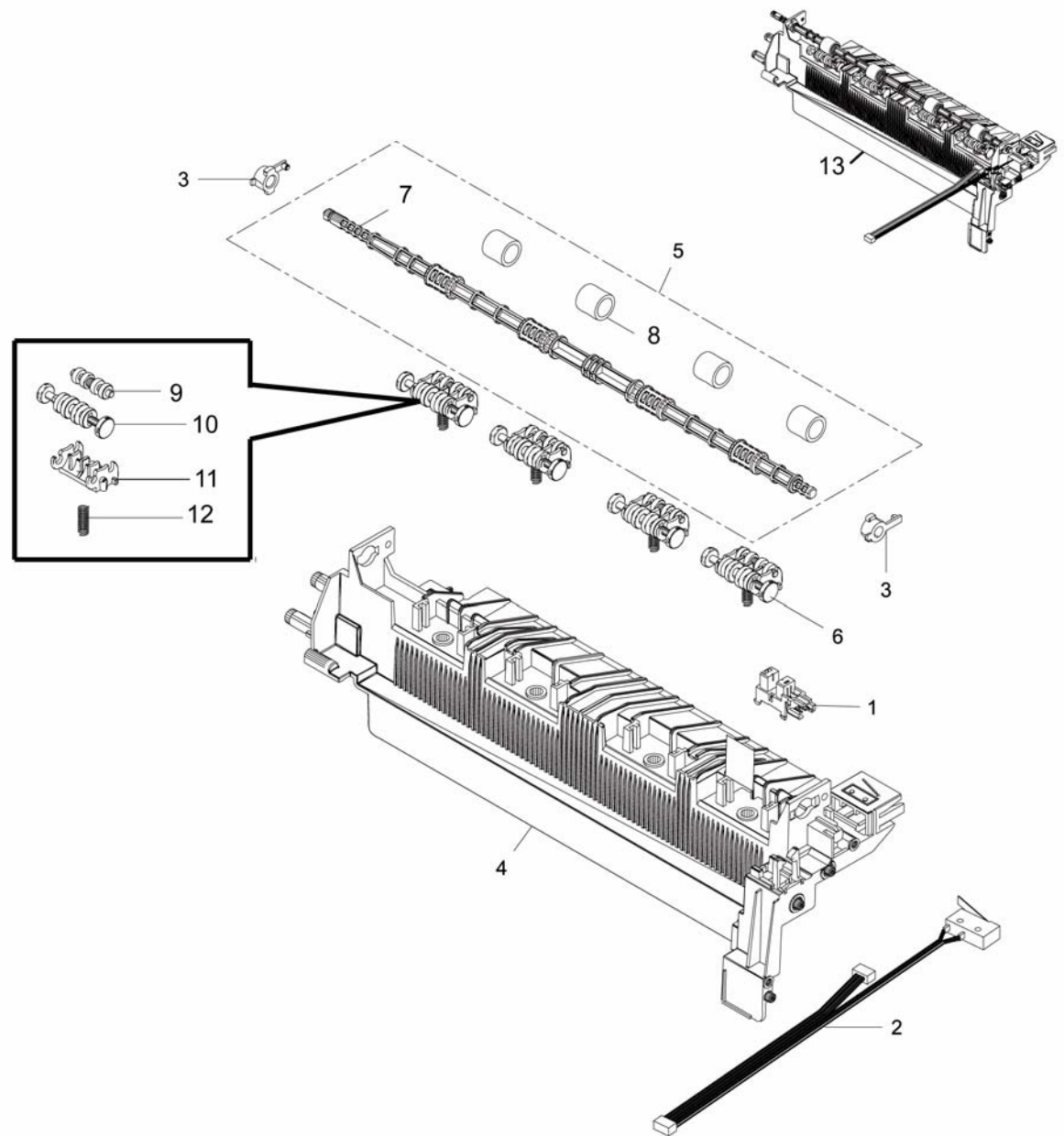
PL 4.1 Frame

Item	Part	Description
1	117N01969	Flat Cable
2	105N02301	HVPS
3	105N02300	LVPS 220V
–	105N02299	LVPS 110V
4	121N01247	Registration Clutch
5	121N01248	Feed Clutch
6	–	Transfer Roll Holder
7	–	Bottom Bar
8	–	Feed Frame
9	–	Ground Clip
10	022N02803	Transfer Roller
11	–	Exit Gear
12	–	Feed Gear
13	–	Exit Idle Gear
14	–	Exit Gear
15	011N00581	Paper Feed PWB
16	–	Main Exit Frame
17	–	Paper Path Frame
18	–	Exit Sensor Frame
19	–	LSU Bracket Frame
20	–	Left Main Frame
21	–	Right Main Frame
22	062N00292	LSU
23	–	Duplex (PL 4.2)



PL 4.3 Exit Frame

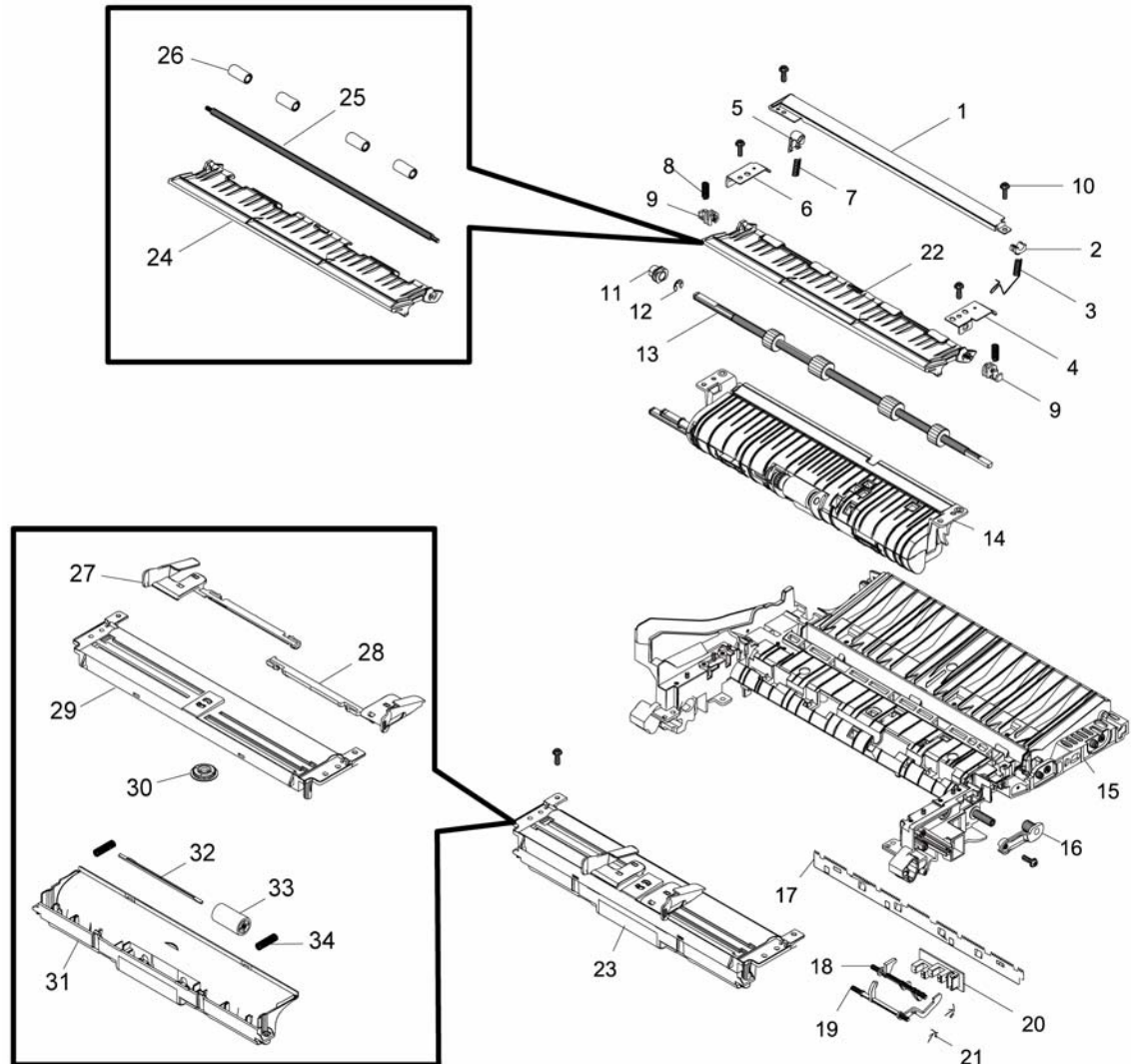
Item	Part	Description
1	130N01758	Output Tray Full Sensor
2	-	Harness
3	006N01361	Bushing
4	-	Exit Frame
5	001N00546	Exit Roller
6	-	Decurler Roller
7	-	Exit Shaft
8	-	Rubber Exit Dup
9	-	Inner Exit Roller
10	-	Outer Exit Roller
11	-	Exit Roll Holder
12	-	Spring
13	-	Exit Frame Assembly



PL 4.4 Paper Path

Item	Part	Description
1	—	Earth Transfer Plate
2	—	Bushing
3	—	Spring
4	—	Right Push Brush Plate
5	—	Bushing
6	—	Left Push Brush Plate
7	—	Spring
8	—	Spring
9	—	Feed Bushing
10	—	Screw
11	—	Exit Shaft Bushing
12	—	E-Ring
13	022N02797	Registration Roller
14	—	Pickup Frame Base
15	—	Middle Frame
16	—	Registration Holder
17	—	P SAW Plate
18	120N00545	Feed Sensor Actuator
19	120N00548	Registration Sensor Actuator
20	130N01759	Paper Feed Sensor PWB
21	—	Spring
22	—	Registration Base Assembly
23	050N00681	Manual Paper Tray
24	—	Paper Guide Cover
25	—	Registration Idle Shaft
26	—	Registration Idle Roller
27	—	Manual Left Adjust
28	—	Manual Right Adjust
29	—	Lower Paper Guide
30	—	Pinion Gear
31	—	Roller Cover
32	—	Pin
33	—	Idle Roller
34	—	Spring
35	—	Sub-Holder Idle

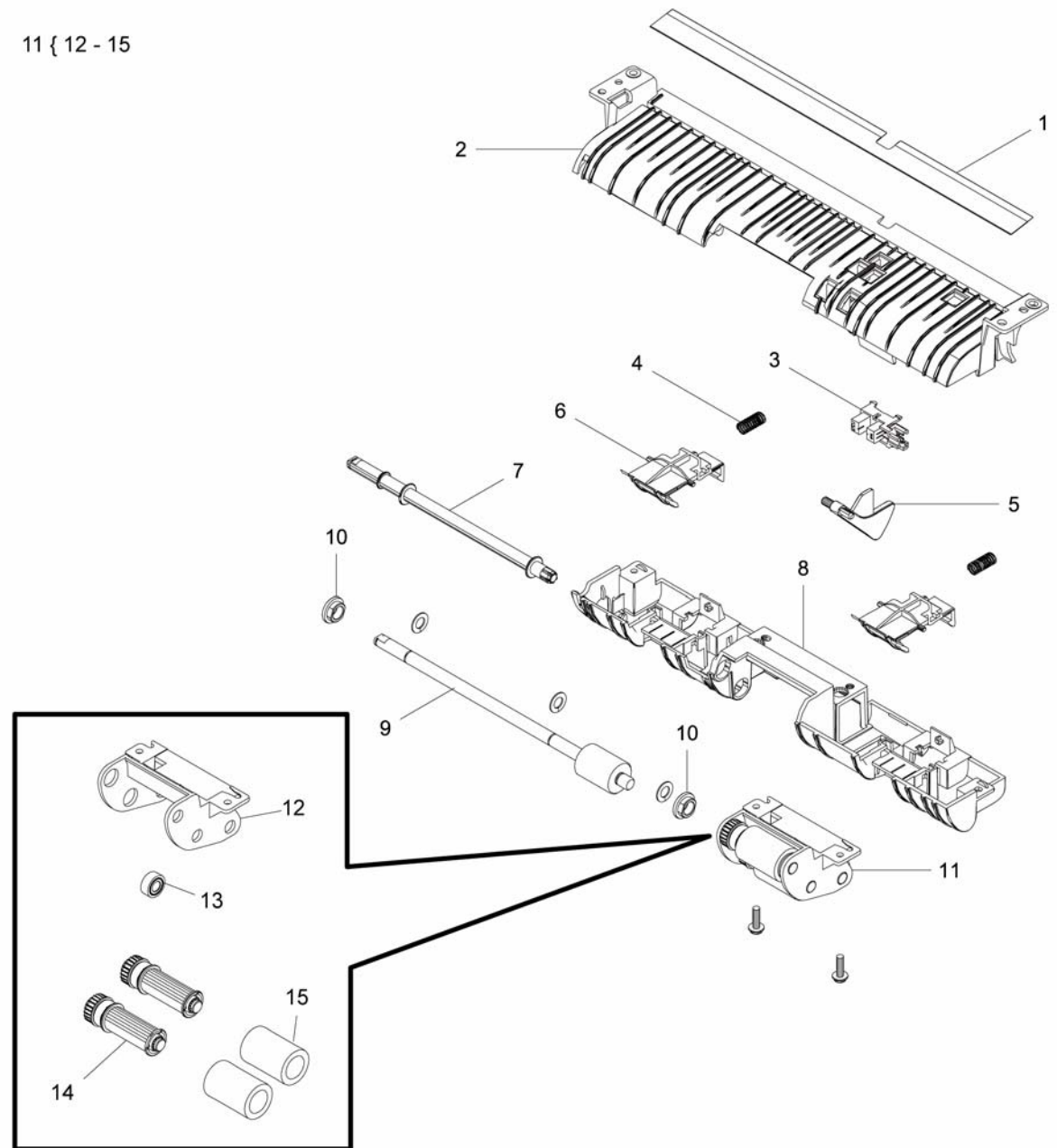
22 { 24 - 26
23 { 27 - 30
35 { 31-34



PL 4.5 Base Pick Up

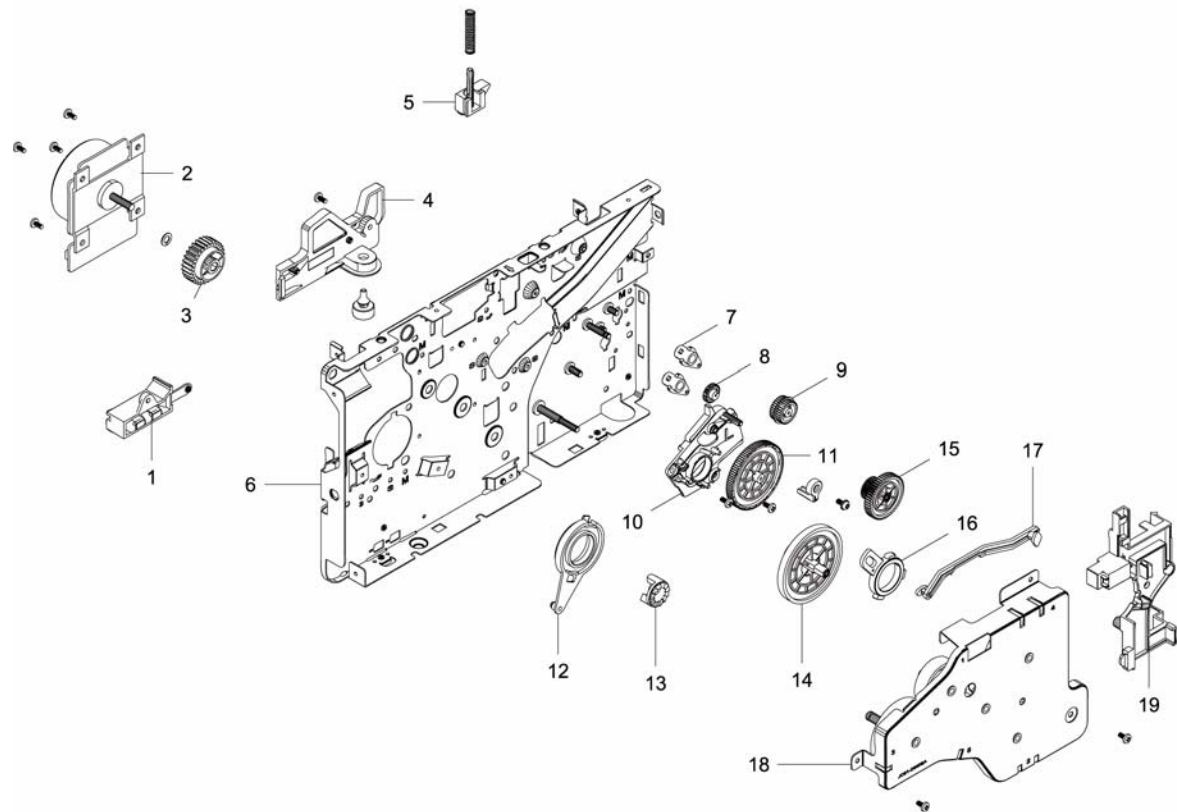
Item	Part	Description
1	–	Duplex Path Sheet
2	–	Duplex Guide
3	130N01758	Sensor
4	–	Spring
5	–	Paper Tray Empty Sensor
6	–	Duplex Guide Lever
7	–	Pick Up Shaft
8	–	Pick Up Guide
9	022N02802	Paper Drive Roller
10	–	Bushing
11	130N01760	Paper Feed Roll Assembly
12	–	Feed Roll Holder
13	–	Idle Pick Up Gear
14	–	One Way Clutch
15	–	Retard Roller

11 { 12 - 15



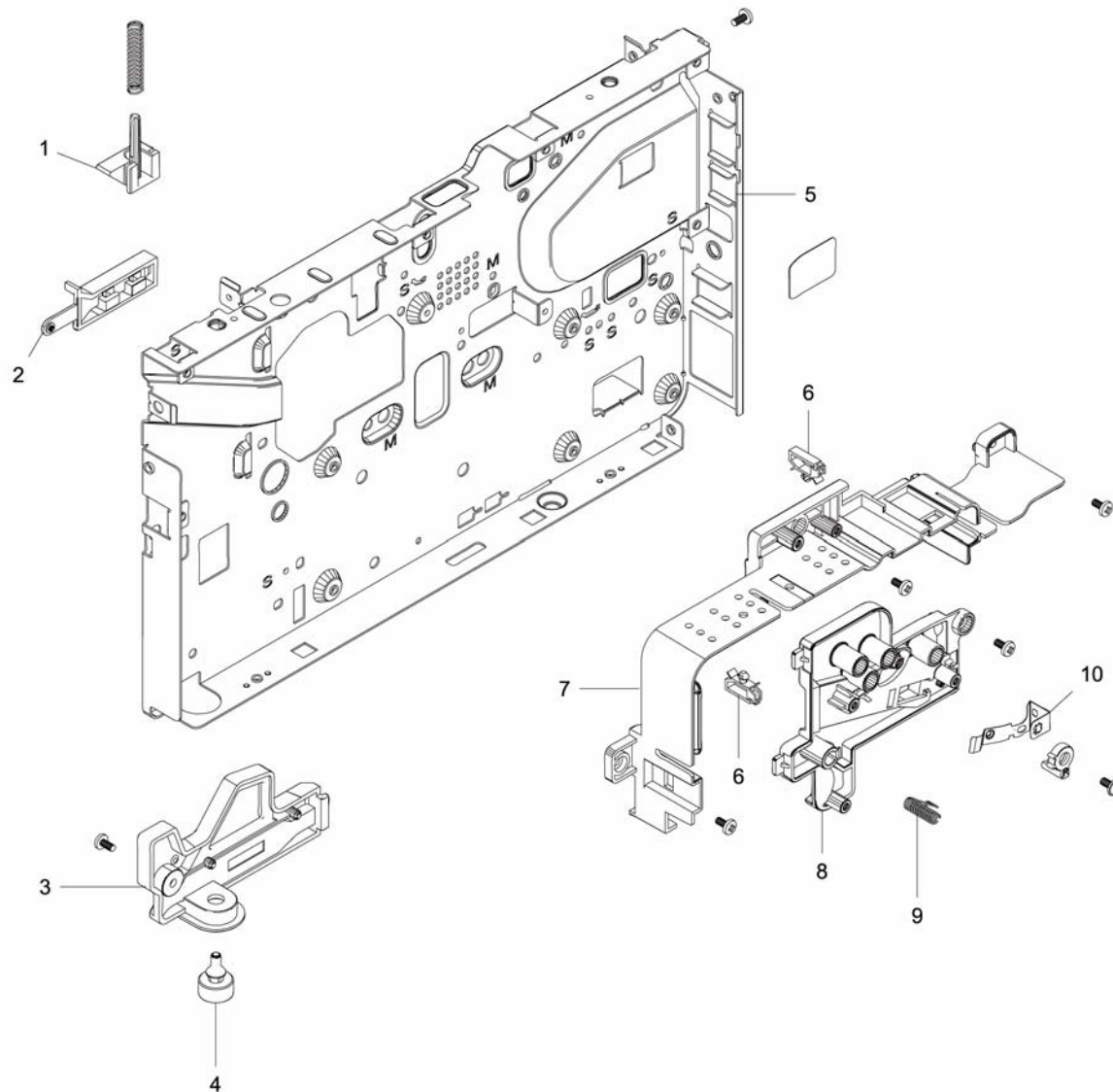
PL 4.6 Left Main Frame

Item	Part	Description
1	—	Left Rear Guide
2	127N07865	Main Drive Motor
3	—	Fuser Drive Out Gear
4	—	Knock Up Left Guide
5	—	Left Developer Guide Plate
6	—	Left Frame
7	—	Shaft Bushing
8	007N01802	Paper Feed Idler Gear
9	—	Idler Gear
10	—	Pivot Frame
11	—	Idler Gear
12	—	Fuser Locking Lever
13	—	Hub Clutch Gear
14	—	Feed Gear
15	—	Feed Gear 2
16	—	Cam Coupler
17	—	Coupling Lever
18	007N01803	Main Drive Unit
19	—	Harness Cover



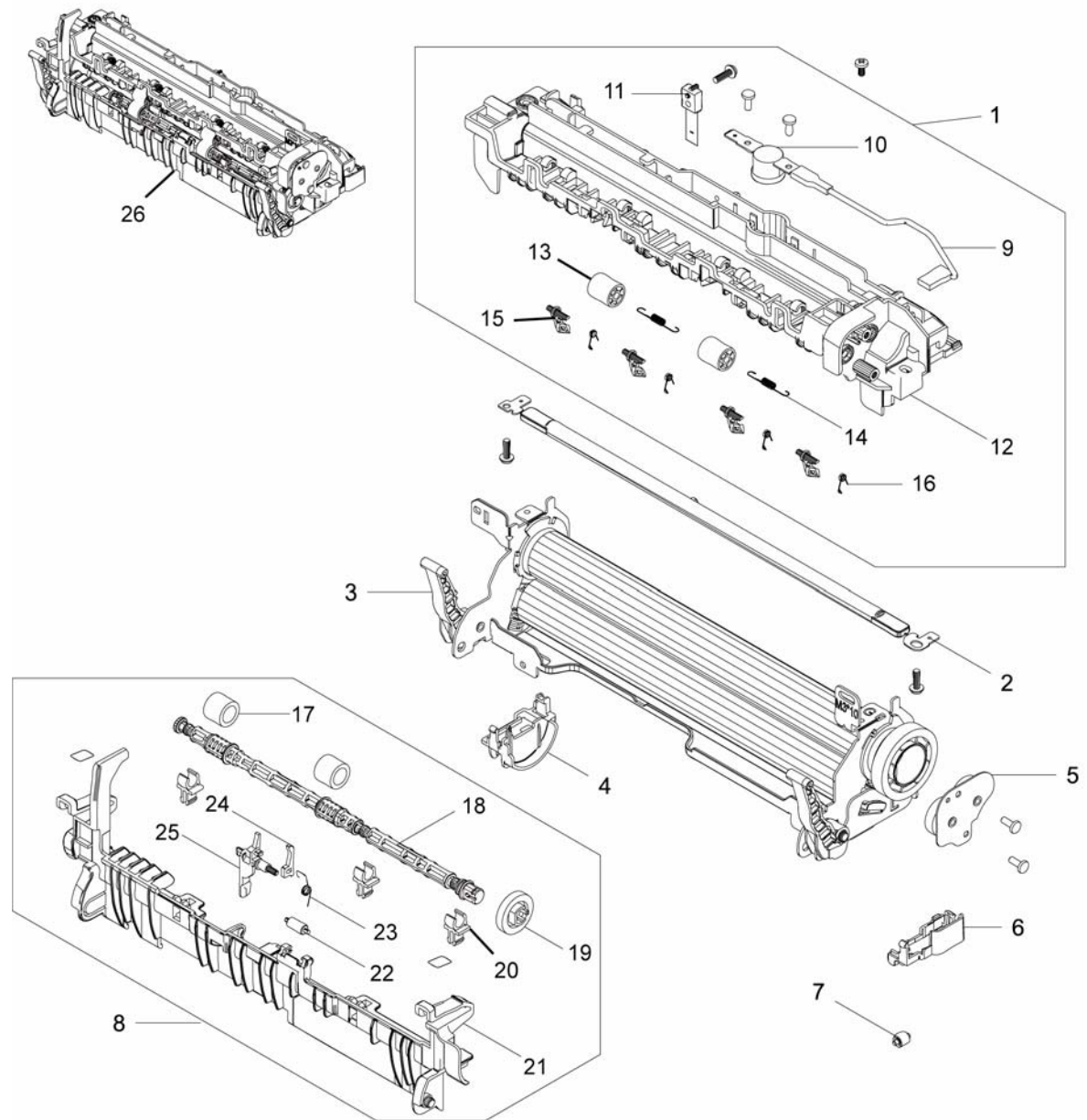
PL 4.7 Right Main Frame

Item	Part	Description
1	–	Right Developer Guide Plate
2	–	Rear Guide
3	–	Lower Guide
4	–	Foot
5	–	Right Frame
6	–	Cable Clamp
7	–	LVPS Cover
8	–	Developer Right Guide
9	–	Spring
10	–	Ground Clip



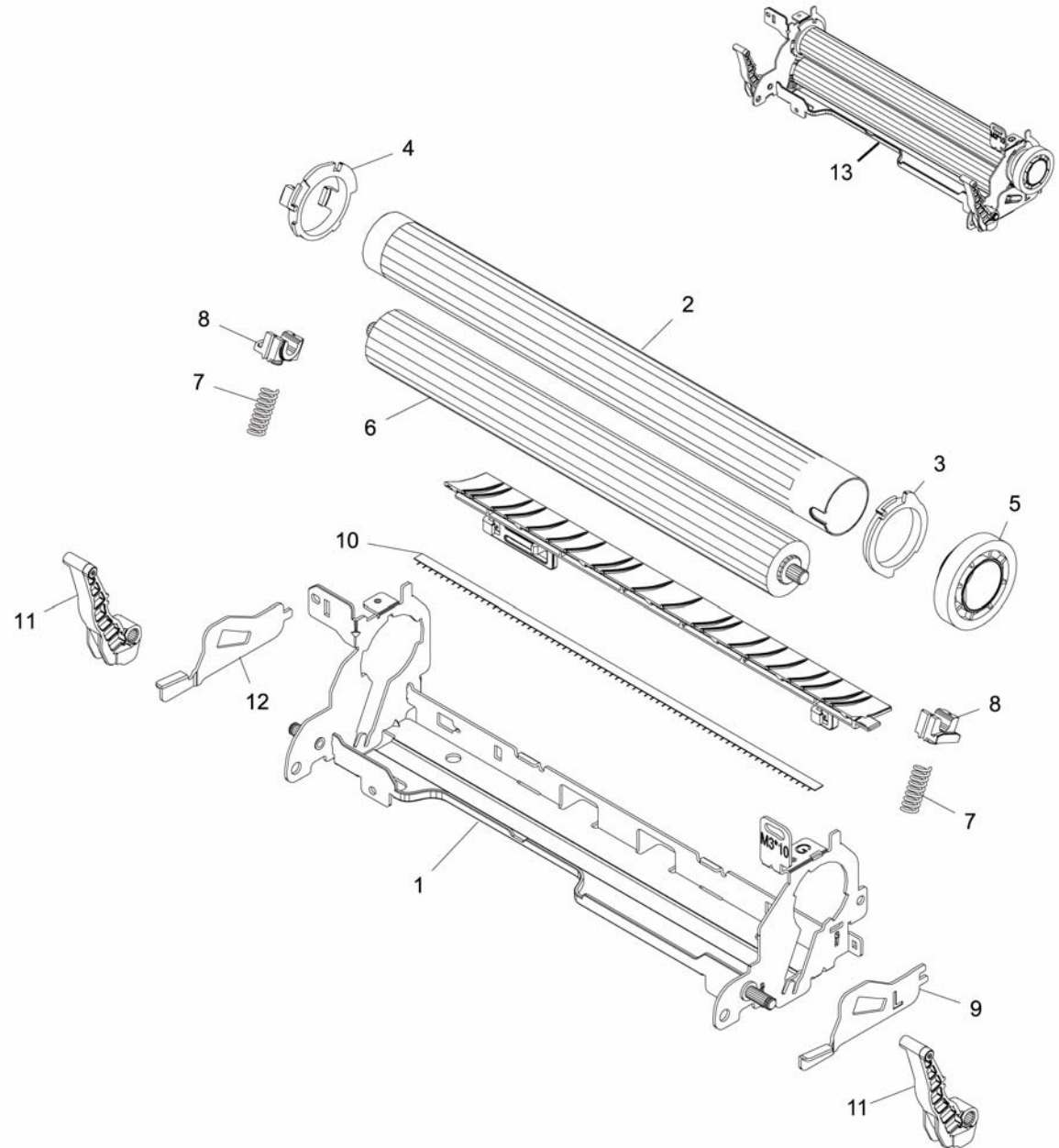
PL 5.1 Fuser

Item	Part	Description
1	–	Upper Fuser
2	–	Fuser Lamp
3	–	Lower Fuser
4	–	Right Lamp Cap
5	–	Fuser Exit Drive
6	–	Left Lamp Cap
7	–	Fuser Gear Stopper
8	–	Fuser Rear
9	–	Fuser Joint Harness
10	–	Thermostat
11	–	Thermistor
12	–	Fuser Cover
13	–	Exit Roller
14	–	Spring
15	–	Guide
16	–	Spring
17	–	Exit Roller
18	–	Exit Shaft
19	–	Exit Gear
20	–	Bushing
21	–	Rear Guide
22	–	Exit Idle Roller
23	–	Spring
24	–	Actuator Holder
25	–	Exit Sensor Actuator
26	126N00430	Fuser Module 110V
–	126N00431	Fuser Module 220V



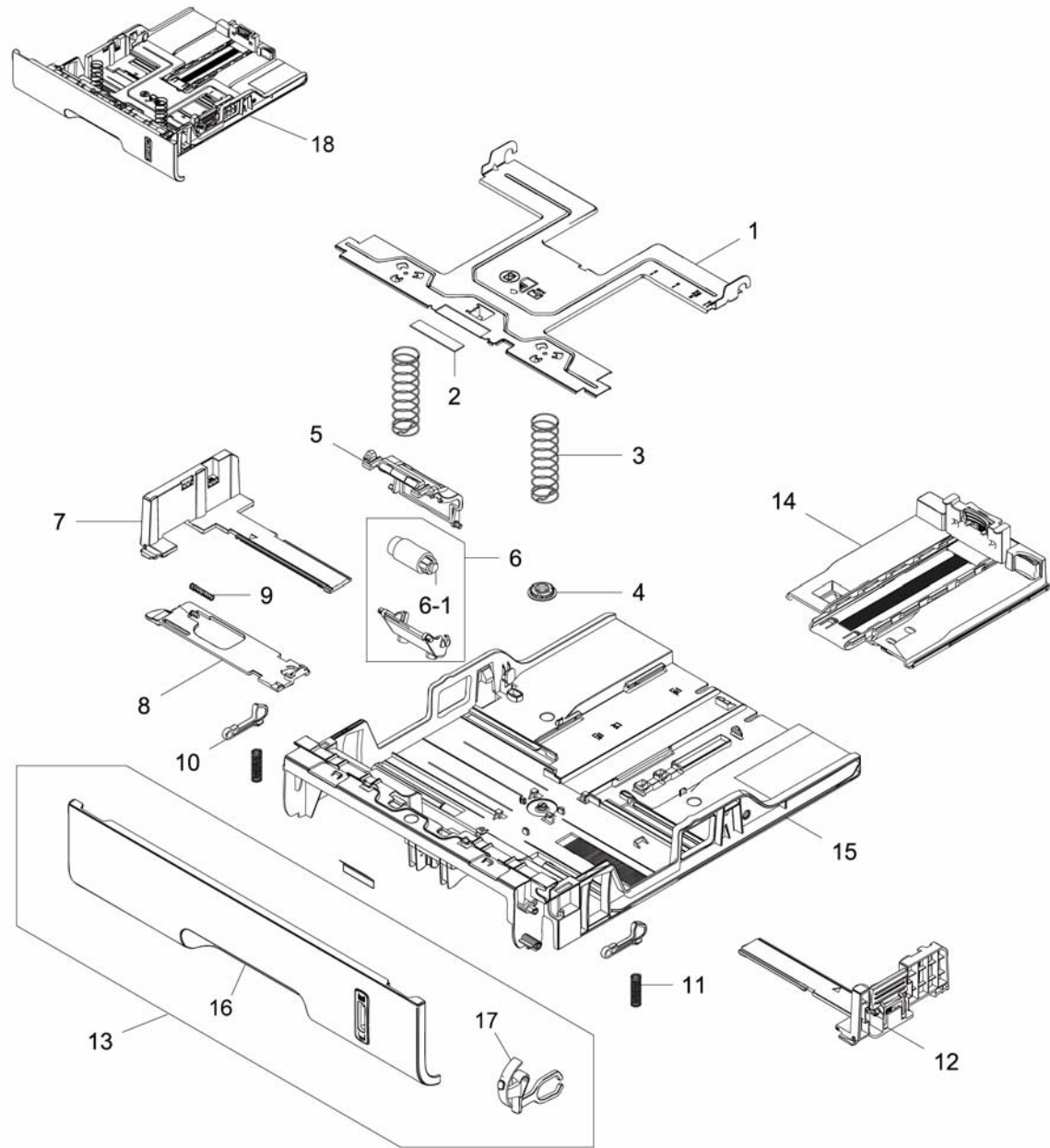
PL 5.2 Lower Fuser

Item	Part	Description
1	–	Fuser Frame
2	–	Heat Roller
3	–	Left Bushing
4	–	Right Bushing
5	–	Gear
6	–	Roller
7	–	Spring
8	–	Bushing
9	–	Left Jam Lever Link
10	–	Antistatic Brush
11	–	Jam Lever
12	–	Paper Guide Holder
13	–	Lower Fuser Assembly



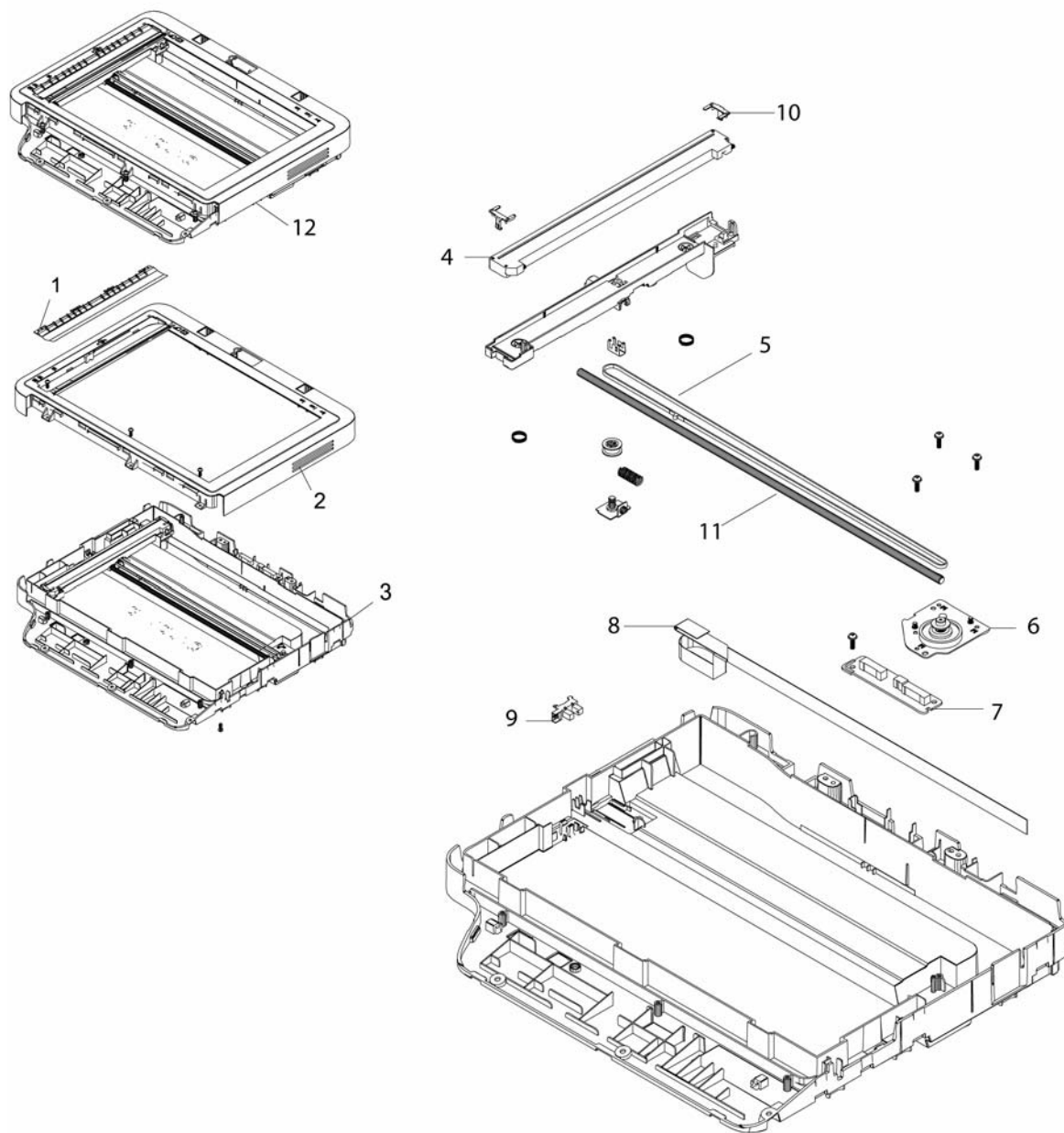
PL 6.1 Paper Tray

Item	Part	Description
1	–	Lift Plate
2	–	Pad
3	–	Spring
4	–	Pinion Gear
5	–	Retard Roll Cover
6	050N00683	Retard Roll Assembly
7	–	Left Paper Guide
8	–	Latch Plate
9	–	Spring
10	–	Paper Tray Latch
11	–	Spring
12	–	Right Paper Guide
13	–	Paper Tray Handle
14	–	Paper Tray Rear Guide
15	–	Paper Tray Frame
16	–	Paper Tray Handle
17	–	Paper Indicator
18	050N00682	Paper Tray



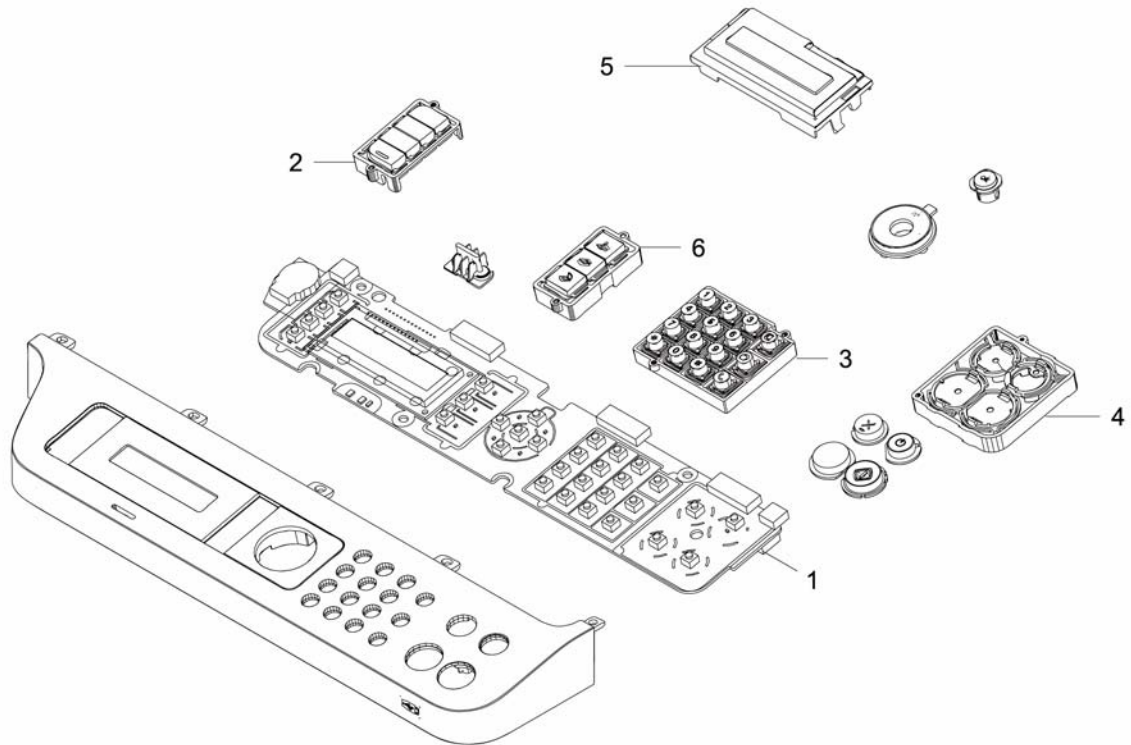
PL 7.1 Scanner Module

Item	Part	Description
1	–	Paper Guide
2	–	Upper Scanner Frame
3	–	Lower Scanner Frame
4	–	Contact Image Sensor (CIS)
5	–	Drive Belt
6	–	Scanner Drive Motor
7	–	Scanner PWB
8	–	Flat Cable
9	–	Sensor
10	–	CIS Holder
11	–	CIS Guide Shaft
12	090N00182	Scanner Module



PL 8.1 Control Panel

Item	Part	Description
1	140N63722	Control Panel PWB
2	–	Function Keypad
3	–	Number Key Pad
4	–	Key Holder Cover
5	–	LCD Cover
6	–	FAX Key
7	140N63728	Control Panel Assembly -3225 DNI (Dup / NW / Wifi)
–	140N63729	Control Panel Assembly -3225 DN (Dup / NW)
–	140N63730	Control Panel Assembly -3215 NI (NW / Wifi)



Part Number Index

Table 1 Part Number Index

Part Number	Part List
001N00546	PL 4.3
002N03157	PL 2.2
002N03158	PL 2.2
002N03167	PL 2.1
002N03172	PL 2.1
002N03175	PL 2.1
002N03182	PL 2.1
003N01117	PL 1.1
004N00286	PL 2.2
005N01172	PL 1.1
006N01361	PL 4.3
007N01802	PL 4.6
007N01803	PL 4.6
011N00581	PL 4.1
022N02795	PL 4.2
022N02796	PL 4.2
022N02797	PL 4.4
022N02799	PL 1.1
022N02800	PL 1.2
022N02801	PL 1.2
022N02802	PL 4.5
022N02803	PL 4.1
050N00680	PL 1.1
050N00681	PL 4.4
050N00682	PL 6.1
050N00683	PL 6.1

Table 1 Part Number Index

Part Number	Part List
062N00292	PL 4.1
090N00182	PL 7.1
105N02299	PL 4.1
105N02300	PL 4.1
105N02301	PL 4.1
117N01969	PL 4.1
120N00545	PL 4.4
120N00548	PL 4.4
121N01247	PL 4.1
121N01248	PL 4.1
126N00430	PL 5.1
126N00431	PL 5.1
127N07864	PL 1.2
127N07865	PL 4.6
130N01758	PL 4.3
130N01758	PL 4.5
130N01759	PL 4.4
130N01760	PL 4.5
140N63714	PL 1.1
140N63715	PL 1.1
140N63716	PL 1.1
140N63722	PL 8.1
140N63726	PL 2.2
140N63727	PL 1.1
140N63728	PL 8.1
140N63729	PL 8.1
140N63730	PL 8.1

6 General Procedures and Information

General Procedures and Information

General Information	6-3
System Overview	6-3
Product Specifications.....	6-7

General Procedures

GP 1 Diagnostics Entry and Exit	6-13
GP 2 Machine Counters	6-13
GP 3 Machine Firmware Version	6-14
GP 4 Machine Settings	6-14
GP 5 Altitude Adjustment	6-15
GP 6 Machine Reports	6-16
GP 7 Firmware Upgrade	6-17
GP 8 Usage of the Electrostatic Discharge (ESD) Field Service Kit	6-18
GP 9 DC 305 UI Button Test Sequence (3025NI).....	6-18
GP 10 Software ServiceTools	6-19

6c Diagnostics

Diagnostic Information	6-21
Entering Diagnostic Mode (Tech Mode).....	6-21
Data Setup	6-24
Machine Test.....	6-25
Report	6-25
EDC Mode.....	6-26

6d Glossary

Glossary of Terms.....	6-27
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General Information

The Xerox® WorkCentre® 3215/3225 Multifunction Printer uses a single-pass laser design offering simplex speeds of up to 29 ppm and output resolution of up to 1200 x 1200 dpi.

The WorkCentre® 3225DN printer features; copy, scan, fax, email and USB device functions. In addition to all of the functions of the 3225DN, the WorkCentre® 3215NI and 3225DNI printers include Wi-Fi and Wi-Fi Direct™ as standard components.

System Overview

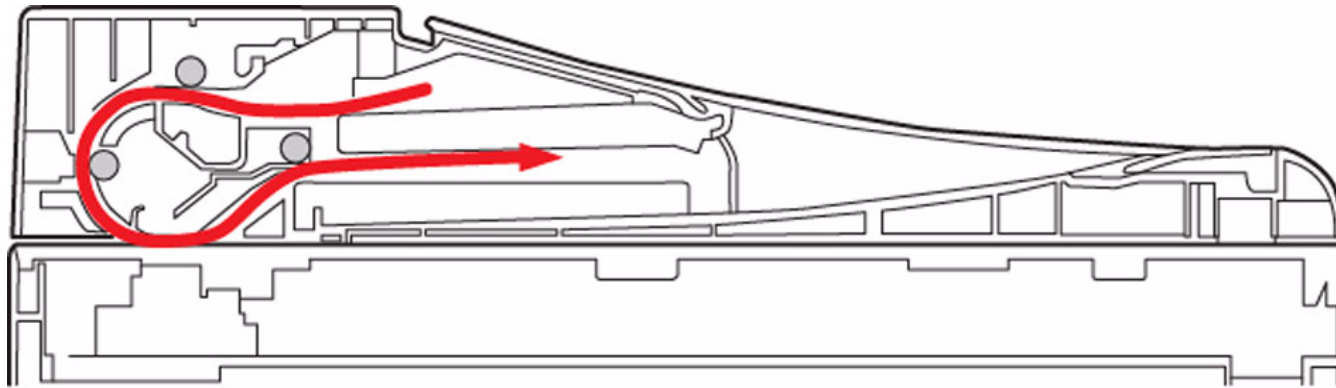
This section provides illustrations of the following systems:

- ADF Paper Path - [Figure 1](#)
- Engine Paper Path - [Figure 2](#)
- System Layout - [Figure 3](#)
- Print Process - [Figure 4](#)
- Laser Scanner Unit (LSU) - [Figure 5](#)
- Drives - [Figure 6](#)
- Toner System - [Figure 7](#)

Some features and options may not be available depending on machine configuration. Refer to the Xerox® WorkCentre® 3215NI/3225DN/3225DNI User Guide for detailed feature and configuration information.

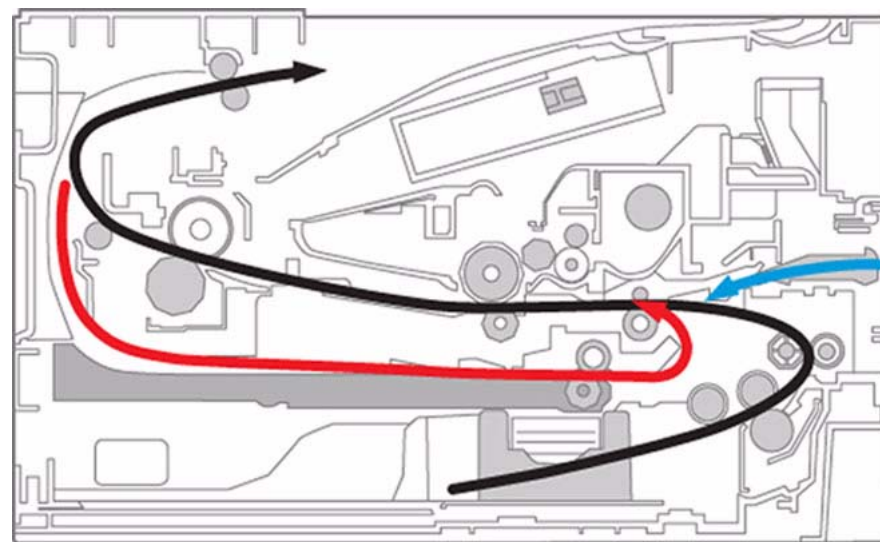
Paper Path

The following diagrams display the path that the paper follows during the printing process.



s3215_3225-001

Figure 1 ADF Paper Path



- Simplex
- Duplex
- MP

s3215_3225-002

Figure 2 Engine Paper Path

System Layout

The figures below illustrates the mechanical parts of the scanner and print engine.

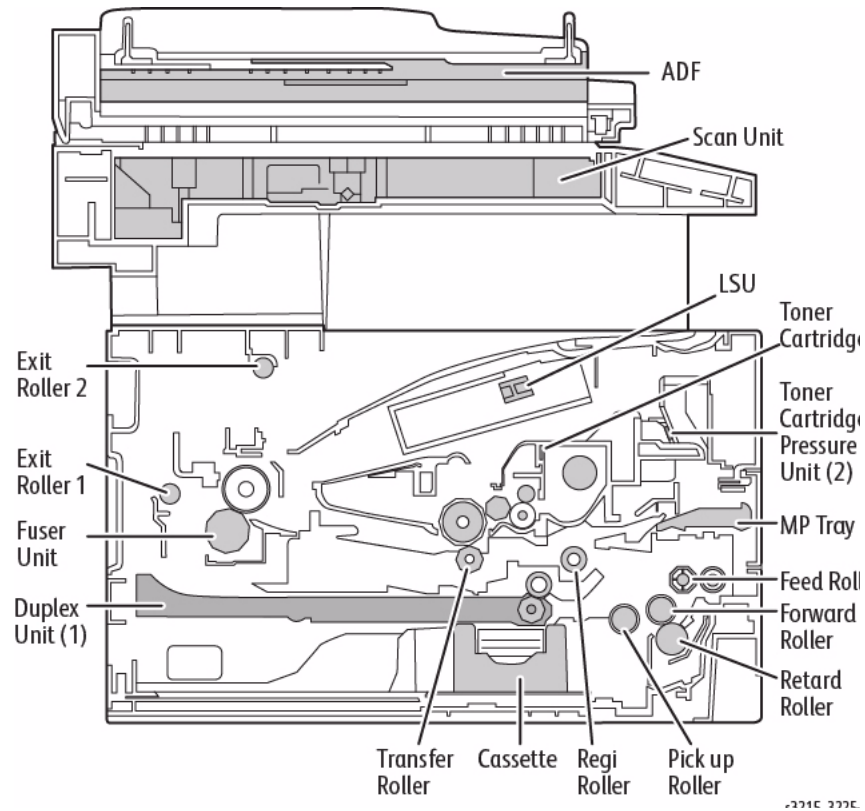


Figure 3 System Layout

Print Process

Figure 4 presents a general layout of the fusing and printing components used in the print process.

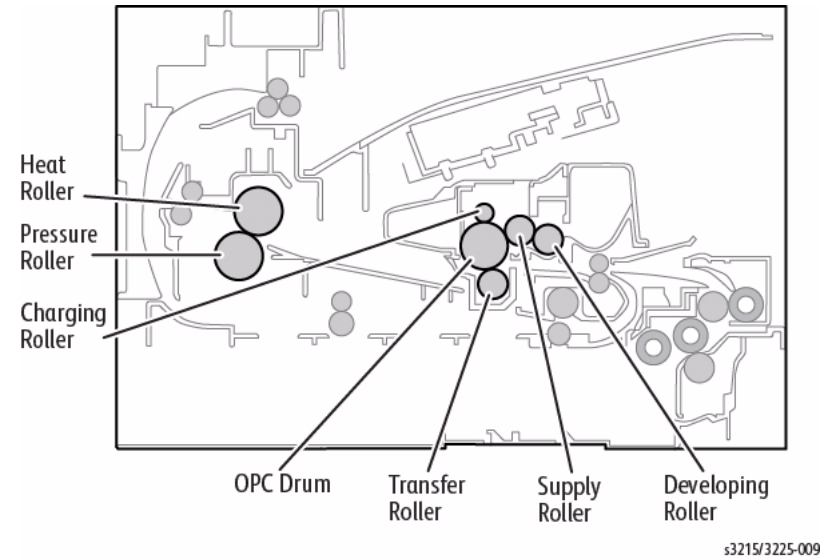
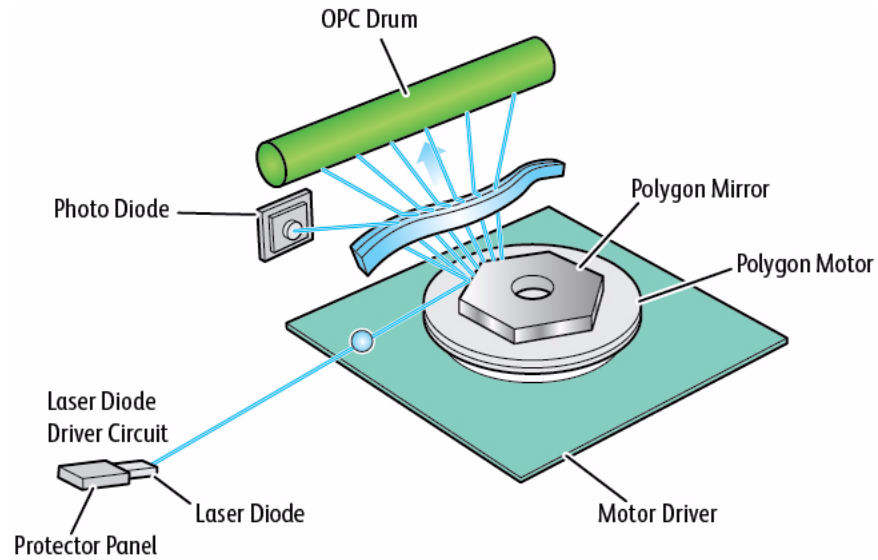


Figure 4 Paper Feed System

Laser Scanner Unit (LSU)

The Scanner Unit receives image data from the HVPS PWB and scans the surface of the photoreceptor drum (OPC) with a laser to create a latent image.

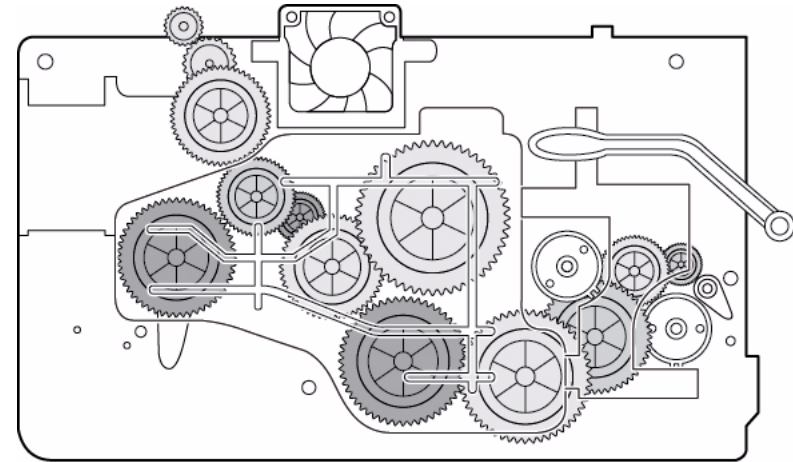


s3215_3225-005

Figure 5 Laser Scanner Unit

Drives

The Drive System consists of the Main (BLDC) Motor, Registration and Pick-up Clutches along with various gears for the Drum Cartridge (OPC), Fuser, Pick-up, Registration, Feed and Exit Rollers.



s 3215/3225-004

Figure 6 Drive Gears and Clutches

Toner System

The printer uses a separated toner system comprised of a Toner Cartridge and Imaging Unit.

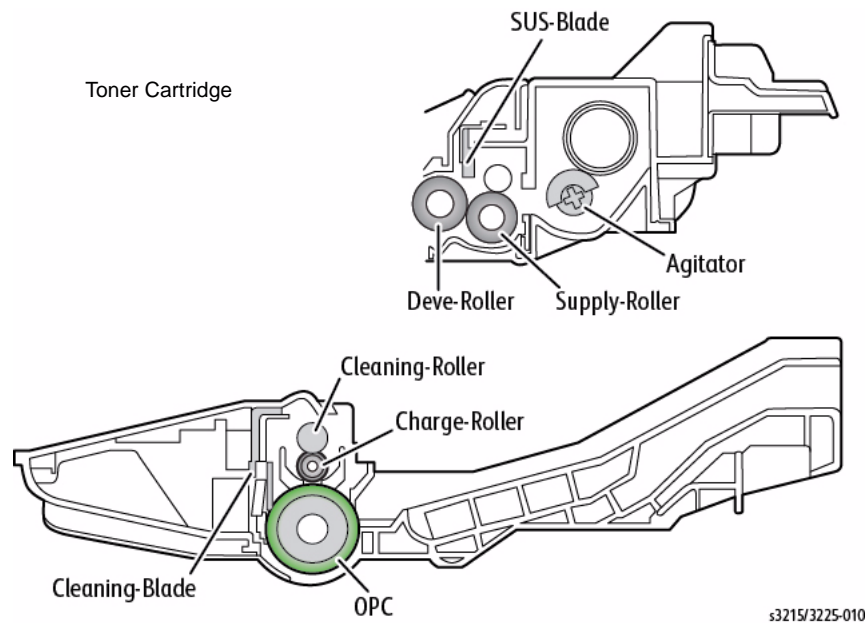


Figure 7 Separated Toner System

Product Specifications

Table 1 Product Overview

Feature	WorkCentre 3215NI	WorkCentre 3225DN/ DNI
Speed	26 ppm (A4), 27 ppm (8.5 x 11 in.)	28 ppm (A4), 29 ppm (8.5 x 11 in.)
Print Resolution - effective output	1200 x 1200 dpi	1200 x 1200 dpi
Processor	600MHz	600MHz
Printer Language Emulation	PCL6/5e, IBM ProPrinter, EPSON, SPL	PCL6/5e, IBM ProPrinter, EPSON, SPL
Memory	DDR3 128MB	DDR3 128MB
Interface	High speed USB 2.0 10/100 BaseTX network connector	High speed USB 2.0 10/100 BaseTX network connector 802.11b/g/n wireless LAN
Toner Cartridge - Initial	1,500 images	1,500 images
Toner Cartridge - Standard/High Yield	1,500 images/3,000 images	1,500 images/3,000 images

Table 2 General Print Engine Specifications

Item	Mode	WorkCentre 3215	WorkCentre 3225
Engine Speed	Simplex	26 ppm (A4), 27 ppm (8.5 x 11 in.)	28 ppm (A4), 29 ppm (8.5 x 11 in.)
	Duplex	13 ppm (A4), 14 ppm (8.5 x 11 in.)	14 ppm (A4), 15 ppm (8.5 x 11 in.)
Warm-up Time	From Sleep Mode	Less than 14 seconds	Less than 14 seconds
FPOT	From Sleep Mode	Less than 8.5 seconds	Less than 8.5 seconds
	From Standby	Less than 15 seconds	Less than 15 seconds
Resolution		1200 x 1200 dpi	1200 x 1200 dpi

Table 3 Copy Function Specifications

Item	Specification (WorkCentre 3215NI / 3225DN/ DNI)	
Copy Speed	1 to 1 copying	20 cpm
FCOT	From Standby	Less than 15 seconds

Table 3 Copy Function Specifications

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
Copy Resolution	Text	<ul style="list-style-type: none"> From Document Feeder Scan 600 x 600 dpi (Optical 600 x 300 dpi), Printing: 600 x 600 dpi From Document Glass Scan: 600 x 600 dpi (Optical 600 x 600 dpi), Printing: 600 x 600 dpi
	Text/Photo	<ul style="list-style-type: none"> From Document Feeder Scan 600 x 600 dpi (Optical 600 x 300 dpi), Printing: 600 x 600 dpi From Document Glass Scan: 600 x 600 dpi (Optical 600 x 600 dpi), Printing: 600 x 600 dpi
	Photo	<ul style="list-style-type: none"> From Document Feeder Scan 600 x 600 dpi (Optical 300 x 300 dpi), Printing: 600 x 600 dpi From Document Glass Scan: 1200 x 1200 dpi (Optical 300 x 300 dpi), Printing: 1200 x 1200 dpi
Original Type	Factory Default	Text/Photo
Max Original Size	Document Glass	A4
	Document Feeder (ADF)	Legal (8.5 x 14 in.)
Basic Copy	Multi Copy	1 to 99
	Automatic Paper Selection	No
	Manual Paper Selection	Yes
	Duplex Copy	Yes
	Darkness Control	11 levels
	Magnification	Document Feeder: 25 - 400% Document Glass: 25 - 100%

Table 4 Scan Function Specifications

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
Resolution	Optical	1200 x 1200 dpi
	Enhanced	4800 x 4800 dpi
Halftone		256 levels
Scan Size	Max. Document Width	216 mm (8.5 in.)
	Effective Scan Width	208 mm (8.2 in.)
	Max. Document Length	ADF: 356 mm (14 in.) Document Glass: 297 mm (11.7 in.)
	Effective Scan Length	ADF: 328 mm (13.7 in.) Document Glass: 289 mm (11.4 in.)
Scan Depth	Color	24 bits
	Mono	1 bit for Line art and Halftone 8 Bits for Gray scale
ADF	Capacity	40 sheets @ 80 gsm
	Document size	Width: 142 to 216 mm Length: 148 to 356 mm

Table 4 Scan Function Specifications

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
Scan Method		Color CIS cpm
Compatibility		TWAIN, WIA
Color Mode		Mono / Gray / Color
Scan Speed	Line art, Halftone (mono)	20 ipm @ 300 dpi
	Gray (mono)	20 ipm @ 300 dpi
	Color	6 ipm @ 300 dpi

Table 5 Fax Function Specifications

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
Compatibility		ITU-T G3, ECM
Communication System		PSTN/PABX
Modem Speed		33.6 Kbps
TX Speed		Approx. 3 sec (Mono/Standard/ECM-MMR, @ ITU-T G3 No.1)
Compression		MH/MR/MMR/JBIG/JPEG
Color Fax		Yes (Tx only)
ECM		Yes
Resolution (mono)	Standard	203 x 98 dpi
	Fine	203 x 196 dpi
	S Fine	300 x 300 dpi
Telephone Features	Handset	Yes (China Only)
	On hook Dial	Yes
	Search	Yes (Phone Book)
	Speed Dial	200 locations
	Group Dial	Group Dial
	TAD I/F	Yes
	Tone/Pulse	Yes (Selectable in Tech Mode)
	Pause	Yes
	Auto Redial	Yes
	Last Number Redial	Yes
	Caller ID	No
	External Phone Interface	Yes

Table 6 Controller and Software

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
Processor		600 MHz
Memory	Standard	256 MB
	Maximum	256 MB
Printer Languages		PCL6/5e, IBM ProPrinter, EPSON, SPL
Fonts		Windows
Print Driver	Default Driver	WorkCentre 3215: SPL
		WorkCentre 3225: PCL6
	Install	WorkCentre 3215: SPL
		WorkCentre 3225: PCL6
	Supporting OS	Windows® 2000/ XP (32/64bits) Windows® Vista(32/64bits) Windows® 2003 Server (32/64bits) Windows® 2008 Server (32/64bits) Windows® 7 (32/64bits) Windows® 2008 Server R2 (64bits)
		Linux RedHat Enterprise Linux WS 4, 5 (32/64 bit) Fedora 4, 5, 6, 7, 8, 9, 10, 11, 12 (32/64 bit) SuSE Linux 10.0, 10.1 (32 bit) OpenSuSE 10.2, 10.3, 11.0, 11.1, 11.2 (32/64 bit) Mandriva 2005, 2006, 2007, 2008, 2009, 2009.1 (32/64 bit) Ubuntu 5.04, 5.10, 6.06, 6.10, 7.04,7.10, 8.04, 8.10,9.04, 9.10(32/64 bit) SuSE Linux Enterprise Desktop 10, 11 (32/64 bit) Debian 4.0, 5.0 (32/64 bit)
WHQL	UNIX Sun Solaris 9,10 (x86, SPARC) HP-UX 11.0, 11i v1, 11i v2, 11i v3 (PA-RISC, Itanium) IBM AIX 5.1, 5.2, 5.3, 5.4	
	Windows® 2000/ XP (32/64bits) Windows® Vista(32/64bits) Windows® 2003 Server (32/64bits) Windows® 2008 Server (32/64bits) Windows® 7 (32/64bits) Windows® 2008 Server R2 (64bits)	

Table 6 Controller and Software

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
	Compatibility	Windows® 2000/ XP (32/64bits) Windows® Vista(32/64bits) Windows® 2003 Server (32/64bits) Windows® 2008 Server (32/64bits) Windows® 7 (32/64bits) Windows® 2008 Server R2 (64bits)
Scan Driver	TWAIN	Yes
	WIA	Yes
	ICDM	Yes
	Supporting OS	Windows® 2000/ XP (32/64bits) Windows® Vista(32/64bits) Windows® 2003 Server (32/64bits) Windows® 2008 Server (32/64bits) Windows® 7 (32/64bits) Windows® 2008 Server R2 (64bits) Linux RedHat Enterprise Linux WS 4, 5 (32/64 bit) Fedora 4, 5, 6, 7, 8, 9, 10, 11, 12 (32/64 bit) SuSE Linux 10.0, 10.1 (32 bit) OpenSuSE 10.2, 10.3, 11.0, 11.1, 11.2 (32/64 bit) Mandriva 2005, 2006, 2007, 2008, 2009, 2009.1 (32/64 bit) Ubuntu 5.04, 5.10, 6.06, 6.10, 7.04,7.10, 8.04, 8.10,9.04, 9.10(32/64 bit) SuSE Linux Enterprise Desktop 10, 11 (32/64 bit) Debian 4.0, 5.0 (32/64 bit) Mac OS X 10.4 through 10.6

Table 6 Controller and Software

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
Wired Network	Protocol	TCP/IP TCP/IPv4/IPv6, HTTP, SNMPv1/v2c/v3, SMTP, IPSec, DNS/WINS, DDNS, DHCP, SSL/TLS, BOOTP, AutoIP, Standard TCP/IP printing, LPR, IPP,UPnP(SSDP),Bonjour,Telnet,WSD,SLP,SetIP
		Others HTTPs, IPPs, 802.1x (EAP-MD5,EAP-MSCHAPv2, PEAP,TLS), IPSec
	Supporting OS	Windows® 2000/ XP (32/64bits) Windows® Vista(32/64bits) Windows® 2003 Server (32/64bits) Windows® 2008 Server (32/64bits) Windows® 7 (32/64bits) Windows® 2008 Server R2 (64bits) Linux RedHat Enterprise Linux WS 4, 5 (32/64 bit) Fedora 4, 5, 6, 7, 8, 9, 10, 11, 12 (32/64 bit) SuSE Linux 10.0, 10.1 (32 bit) OpenSuSE 10.2, 10.3, 11.0, 11.1, 11.2 (32/64 bit) Mandriva 2005, 2006, 2007, 2008, 2009, 2009.1 (32/64 bit) Ubuntu 5.04, 5.10, 6.06, 6.10, 7.04,7.10, 8.04, 8.10,9.04, 9.10(32/64 bit) SuSE Linux Enterprise Desktop 10, 11 (32/64 bit) Debian 4.0, 5.0 (32/64 bit) Mac OS X 10.4 through 10.6
Wireless Network (WorkCentre 3225 only)	Protocol	2.11 b/g/n
	Supporting OS	Same as wired network
Application	Easy Printer Manager	Windows and Macintosh
	Smart Panel	Linux
	Network Management	CentreWare® Internet Services
Interface	Parallel	N/A
	USB	High speed USB 2.0

Table 7 Paper Handling

Item		Specification (WorkCentre 3215NI / 3225DN/ DNI)
Standard Capacity		Paper Tray (Cassette) 250 sheets 80gsm Multi Purpose Tray 1 sheet
Maximum Capacity		250 sheets 80gsm
Printing	Minimum media size	8.5 x 14 in. (216 x 356 mm)
	Maximum media size	3.0 x 5.0 in. (76 x 127 mm)
Main Paper Tray	Capacity	250 sheets 80gsm
	Media sizes	8.5 x 14 in. (legal) 8.5 x 11 in. (A4), 5.5 x 8.5 in. (A5), ISO B5, JIS B5, Executive, Oficio, Folio
	Media type	Plain, Lightweight, Recycled, Heavy-weight, Archive
	Media weight	16 to 43 lb (60 to 163 gsm)
	Sensing	Yes
Manual Feed Slot	Capacity	Plain paper and envelope 1 sheet (80 gsm)
	Media sizes	8.5 x 14 in. (legal) 8.5 x 11 in. (A4), 5.5 x 8.5 in. (A5), A6, EXEC, ISO B5, JIS B5, Oficio, Folio, Envelope (No 10, Monarch, DL, C5, C6) Postcard 4x6, Custom
	Media type	Plain, Heavy-weight, Light-weight, Cotton, Colored, Pre-printed, Recycled, Envelope, Transparency, Label, Cardstock, Bond, Archive
	Media weight	16 to 58 lb (60 to 220 gsm)
	Sensing	Yes
Output Tray Full sensing		Yes
Optional Cassette Tray		N/A
Output Tray stacking capacity		Face-down: 150 sheets (80 gsm) Face-up: 1 sheet
Duplex (3225DN/ DNI only)	Supporting	Yes (Built-in)
	Media sizes	8.5 x 14 in. (legal) 8.5 x 11 in. (A4), 5.5 x 8.5 in. (A5), A6, ISO B5, JIS B5, Executive, Oficio, Folio, Custom
	Media types	Plain, Light-weight, Recycled, Heavy-weight, Archive
	Media weight	16 to 28 lb (60 to 105 gsm)
Non-printable Area	Envelope	0.4 in (10 mm) from edge
	Other media	0.16 in (4 mm) from edge

Table 8 Toner Cartridge/Print Cartridge

Machine Model	Item		Approx yield See note
WorkCentre 3215/3225	Toner/Print Cartridge	Initial Cartridge	1500 images
		Standard Cartridge	1500 images
		High Yield Cartridge	3000 images
	Imaging Unit		10,000 images

NOTE:

Declared yield value in accordance with ISO/IEC 19752.

Depending on the options and job mode used, the toner cartridge's life span may differ.

When replacing a Toner/Print Cartridge, check model number and consumables code. Refer to the WorkCentre® 3215/3225 User Guide for information regarding ordering consumables.

Table 9 Reliability and Service

Item	Specification (WorkCentre 3215NI / 3225DN/ DNI)
Printing Volume (SET AMPV)	208 pages
Maximum Monthly Duty	12,000 pages
MPBF	30,000 pages
MTTR	30 minutes
SET Life Cycle	100,000 pages or 5 years (whichever comes first)

Table 10 Environment

Item	Specification (WorkCentre 3215NI / 3225DN/ DNI)	
Operating Environment	Temperature	50 - 90 F (10C to 32C)
	Humidity	20% - 80%
Acoustic Noise Level (Sound Power/Pressure)	Print	Less than 50 dB
	Standby	Less than 30 dB
	Sleep Mode	Back Ground Level
Power Consumption	Print	Less than 400 W
	Standby	Less than 50 W
	Sleep Mode	Less than 2.4 W
	Power Off	Less than 0.2 W When Wi-fi Direct Mode off, Less 1.6W
Dimension (W x D x H)	SET	15.8 x 14.25 x 14.4 in. (401 x 362 x 365.1 mm)
Weight (SET with Toner Cartridge)	Net Weight	24.54 lbs (11.13 Kg)
	Gross Weight	28.48 lbs.(12.92 Kg)

GP 1 Diagnostics Entry and Exit

Purpose

This procedure describes the following items:

- How to enter Diagnostics
- The Diagnostic screen
- How to exit Diagnostics

Procedure

Use these steps to enter Diagnostics:

1. Make sure the machine is in Ready mode.
2. Press the **<Menu>** button.
3. Press the **<#>** button.
4. Enter **1934** on the keypad
5. Press the **<OK>** button.
6. From **Diagnostics**, use up and down arrows to scroll to the desired function.

To exit Diagnostics:

1. From the Diagnostics menu, use up and down arrows to scroll to **<Exit Diagnostics>**.
2. Press the **<OK>** button.

Refer to Section 6, Diagnostics for a listing of available functions within Diagnostic Mode.

GP 2 Machine Counters

Purpose

Use this procedure to access the Machine Counters.

NOTE: *If frequent paper jams or printing problems are occurring, check the number of pages the machine has printed or scanned. Replace worn parts if necessary.*

Procedure

From the Control Panel:

1. Press the **<Information>** button
2. Use the up/down arrows to scroll to **<Info Pages>**, then press the **<OK>** button.
3. Scroll to **<Usage Counter>** then press the **<OK>** button to print a Usage Counter report.

or

1. Enter Diagnostics Mode, select **<Diagnostics>** then press the **<OK>** button
2. Use the up/down arrows to select **<Report>**, then press **<OK>**.
3. Use the up/down arrows to select **<Usage Counter>**, then press **<OK>**, then **<OK>** again to print a Usage Counter report.

GP 3 Machine Firmware Version

Purpose

Use this procedure to check the firmware version of the machine.

Procedure

From the Control Panel:

1. Press the **<Information>** button.
2. Use the up/down arrows to scroll to **Info Pages**, then press the **<OK>** button.
3. Use the up/down arrows to scroll to **Configuration** then press the **<OK>** button to print a configuration report.

or:

1. From Diagnostics Mode:
2. Use the up/down arrows to select **<Report>** then press **<OK>**.
3. Use the up/down arrows to select **<Configuration>** then press **<OK>**, then **<OK>** again to print a configuration report.

The firmware version is listed under Device Setup/ System.

GP 4 Machine Settings

Purpose

Use this procedure is used to provide information on how to select and change machine settings from the Control Panel, Easy Print Manager, and CWIS.

Procedure

From the Control Panel:

1. Press the **<Information>** button.
2. Use the up/down arrows to scroll to the following menu items:
 - Feature Default
 - Print Setup
 - Fax Setup
 - System Setup
 - Network
3. Use the up/down arrows to scroll to the associated sub-menus to select machine settings.
 - For a detailed menu map, press the Information Button then select: **<Info pages>**, **<Menu Map>**.

To change settings Using Easy Print Manager (EPM):

1. Connect to the WorkCentre® 3215/3225 Printer with a USB cable.
2. Open Easy Print Manager at your workstation.
3. Select **<Advanced Mode>** then select **<Machine Settings>**.
4. Select from the following menu items to change the machine settings.
 - System
 - Earth Smart
 - Input Tray
 - Layout
 - Printer
 - Emulation
 - Copy
 - Fax
 - Scan
 - Network Settings

From CWIS

1. Connect to the WorkCentre® 3215/3225 Printer with a USB cable or wirelessly.
2. Open Easy Print Manager and select the **[CWIS]** icon.
3. Login in to CWIS with Username: **(Admin)** and Password: **(1111)**.

NOTE: It may be necessary to obtain the username and password from the customer if they have been changed.

4. Select **[Properties]** and select from the following menu items to adjust the machine settings.
 - Firmware
 - System
 - Printer
 - Copy
 - Fax
 - Scan
 - E-mail Notification
 - Network Settings
 - Security

GP 5 Altitude Adjustment

Purpose

Print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level.

Requirements

- WiFi or Network connection

Procedure

1. Determine altitude of machine placement:

Table 1 Altitude Values

Altitude	Value
0 - 1000 M 0 - 3,280 ft.	Normal
1000 - 2000 M 3,280 - 6,561 ft.	High 1
2000 - 3000M 6,561 - 9,842 ft.	High 2
3000 - 4000 M 9,842 - 13,123 ft.	High 3
4000 - 5000 M 13,123 - 16,404 ft.	High 4

2. Press the **<Information>** button on the Control Panel to go to Machine Status.
3. Using the up/down arrows, navigate to: **[System Setup]**.
4. When prompted for the admin password, enter **1111**, then **<OK>**.

NOTE: It may be necessary to obtain the username and password from the customer if they have been changed.

5. Using the up/down arrows, navigate to: **[Machine Setup>Altitude Adjustment]**. Press the **<OK>** button to confirm selections.
6. Select the correct altitude for the placement of the machine. [Table 1](#).
7. Press **<OK>**.

or

1. Open Easy Printer Manager. Select: **[Machine Settings, System Altitude Adjustment]**.
2. Select correct value from the drop down menu. [Table 1](#). Press **<OK>**.

GP 6 Machine Reports

Purpose

Use this procedure to access and print machine reports. The information in the machine reports may be useful for troubleshooting problems.

Procedure

Follow the steps below to access machine reports.

1. Enter Diagnostics Mode, **GP 1**.
2. Using the up/down arrows, scroll to **<Report>** then press **<OK>**.
3. Use the up/down arrows to choose the following reports:
 - **Protocol Dump** : Prints Fax Protocol data.
 - **Supplies Information**: Prints general supplies and consumables information
 - **Configuration**: Detailed machine configuration.
 - **Error Information**: Displays fault codes, error types, error counts and date/time.
 - **Usage Counter**: Total impressions, impression type and sheet counts.
 - **Component Check**: Displays the steps for the: Switch, Modem, DRAM, ROM and Shading Test procedures.
 - **Fax Options**: Fax Setup.
 - **Service Support**: Country setting, Firmware Upgrade Procedure.

From the Control Panel, press the **<Information>** button. Using the up/down arrows, navigate to **<Info Pages>** then select from the following reports:

- **Configuration**
- **Demo Page**
- **Network Configuration**
- **Supplies Information**
- **Usage Counters**
- **Fax Received**
- **Fax Confirmation**
- **Fax Sent**
- **Junk Fax**
- **Scheduled Jobs**
- **PCL Font**
- **PostScript Font**
- **EPSON Font**
- **Address Book**

Select **<OK>** to confirm menu selections.

For detailed information on Machine reports, refer to Section 1: Getting Started, Information Pages, in the Xerox® WorkCentre® 3215/3225 User Guide.

For accessing and printing machine reports from a networked PC using CentreWare Internet Services (CWIS), refer to Section 12: Troubleshooting; Further Assistance, in the Xerox® WorkCentre® 3215/3225 User Guide.

GP 7 Firmware Upgrade

Purpose

Use this procedure is used to update the machine firmware. The firmware can be updated over the network or by using the USB port.

Requirements

- Wired or wireless connection to upgrade using the network.
- The usblast2.exe tool and SWUPGRADE_ON.prn, located in the GSN website, installed on the PWS device.
- Correct firmware file for update.
- Firmware Upgrade must be enabled in the machine settings on the printer.
- Complete or delete all jobs in the printer queue before initiating a firmware upgrade.

Procedure

Upgrading the Firmware using a USB Port:

1. Connect a USB cable from the PWS to the USB port on the printer.
2. Confirm that the printer is the Ready status.
3. To enable firmware upgrades on the device:
 - Drag the SWUPGRADE_ON.prn file and drop it onto usblast2.exe.
or
 - In Diagnostic Mode, select **[Data Setup>F/W Upgrade>On]**. Press the **<OK>** button to confirm menu selections.
4. Drag and drop the firmware file onto usblast2.exe. The firmware update will start automatically.
5. The Printer will reboot when the upgrade is complete.

Upgrading the Firmware using the Network:

1. Open a web browser and enter the machine's IP address.
2. Select **[Enter]**. The CentreWare Internet Services window will open.
3. Select the **[Login]** link at the top of the screen.
4. Enter the Administrator username (admin) and password (1111). The Firmware Upgrade window will open.

NOTE: It may be necessary to obtain the username and password from the customer if they have been changed.

5. Click on the **[Properties]** tab.
6. In the security link, select **[System Security]**.
7. Select the **[Feature Management]** link in the directory tree.
8. Select the **[Firmware Upgrade Enable]** box.
9. Click **[Apply]** to save the changes.
10. Select the **[Support]** tab.
11. In the **[Firmware Upgrade]** link, select the **[Upgrade Wizard]** button.

- a. In the Firmware File area, select **[Browse]**.
 - b. Locate and select the correct firmware upgrade .hd file.
 - c. Select **[Open]**.
12. Select **[Next]**. The firmware will now be verified and display information about the upgrade.
 13. Select **[Next]** to continue. The upgrade should take approximately 10 minutes.
 14. The machine will reboot automatically when the upgrade has completed.
 15. Print a Configuration Report and verify that the firmware has been successfully upgraded.

GP 8 Usage of the Electrostatic Discharge (ESD) Field Service Kit

Purpose

The purpose of the Electrostatic Discharge (ESD) Field Service Kit is to preserve the inherent reliability and quality of sensitive electronic components handled by the service representative. The kit should be used whenever handling the circuit boards or any other ESD sensitive components.

Procedure

1. Switch off the machine power and disconnect the machine power cords.
2. Assemble the kit:
 - a. Place the static dissipative work surface mat on a flat surface in close proximity to the machine or the component
 - b. Connect the snap end of the green grounding cord to the snap on the static dissipative work surface mat. Connect the male end (plug) to the frame.
 - c. Connect the small snap end of the blue cord to the top snap on the green grounding cord.
 - d. Connect the small snap end of the blue cord to the snap on the adjustable cloth wrist strap or the ESD wristwatch.
 - e. Install the adjustable wrist strap or ESD wristwatch securely on the wrist.
3. The circuit boards (PWBs) and ESD sensitive components can now be handled without causing any ESD related damage. Place all of the components removed from the machine onto the static dissipative work surface mat.
4. New replacement components, as well as defective components, should be handled during unpacking and repacking using the ESD Field Service Kit. During transfer from or to the packing material or container, the PWB should be placed on the static dissipative work surface mat.

GP 9 DC 305 UI Button Test Sequence (3025NI)

Purpose

Use this procedure to access and run the DC 305 UI Button Test.

Procedure

1. Enter the Diagnostic (Tech) Mode from the Control Panel. Press the following buttons in quick succession: **<Menu>#>1934>OK>**.
2. In the Diagnostic Mode, use the navigation buttons to scroll to the **Machine Test** sub-menu.
3. Press any button to start the LDC test.
4. Press the OK button 2 times. A series of black boxes will be shown on the Control Panel display. **Figure 1**.

NOTE: Control Panel options vary by model.



First display



Second display

Figure 1 Control Panel Display

5. Press the **<OK>** button until **PRESS BELOW Copy Mode 00** is displayed on the Control Panel. Press the **<Copy Mode>** button to continue.
6. Test the display buttons by pressing them sequentially, as indicated on the Control Panel display.

NOTE: The OK button does not have an indicator light. It is depicted by a series of black boxes displayed when the Menu button is pressed. *Figure 2.* Press the <OK> button to test the button and return to the test sequence.



OK Button Indication

UI-Rows-All

Figure 2 OK Button Indication

7. Press the Stop button to end the test. All control panel lights are illuminated.
8. Continue pressing the Stop button until all control panel indicator lights are turned off and the machine is returned to Copy mode.

GP 10 Software ServiceTools

Purpose

Use this procedure access and download the software service tools.

Procedure

1. To access the software tools file go to:
 - GSN Library #7387
 - <https://www.xrsgsn.com/secure/main.pl?catid=13991>
 - Software_tools.zip
2. Download the Software_tools.zip file onto the PWS.
3. Open the zip folder and extract the tool files.
4. The WorkCentre® 3215/3225 uses the following tools:
 - SWUPGRADE_ON.prn - to enable the machine to accept software downloads
 - usblist2.exe - to download software via USB connection.
 - USB_Serial_V1.02.exe - to write the machine number to the Main PWB.

Diagnostic Information

This section of the Service Documentation contains information about Diagnostic Procedures. This section also contains various other product-specific information that may be useful and/or needed for servicing the machine.

Entering Diagnostic Mode (Tech Mode)

To enter Diagnostic (Tech) Mode, use the steps listed below. Refer to the WorkCentre® 3215/3225 User Guide for detailed instructions on menu options using the Control Panel.

1. From the Control Panel, press the **<Menu>** button.
2. Press the **<#>** button
3. On the keypad, enter **1934**
4. Select **[Diagnostics]** and press **<OK>**
5. Once in Diagnostic Mode, use the up and down arrows to scroll to the following sub-menus:
 - **Data Setup**
 - **Machine Test**
 - **Report**
 - **Exit Diagnostics**

NOTE: Press the **<OK>** button to confirm selections

Table 1 Diagnostic Mode Menu - Data Setup

Level 1	Level 2	Level 3	Level 4	
Data Setup	Send Level	9-15	12	
	DTMF Level	(High) 0-15	(Low) 0-15	
	Pause Time	1-9		
	Dial Mode	Tone		
		Pulse		
	Modem Speed	33.6		
		28.8		
		14.4		
		12.0		
		9.6		
		4.8		
	Error Rate	10%		
		5%		
	Clear All Memory			
	Toner Low Level	1-50%		
	ImgU. Low Level	1-50%		
	Clear Counts	Enter <1934>		ADF Scan
			Platen Scan	
			Fuser	
			Transfer Roller	
			Pickup Roller	
			Retard Roller	
			Forward Roller	
Engine Footer	Off/On			
Dial Tone	Status: Off/On			

Table 1 Diagnostic Mode Menu - Data Setup

Level 1	Level 2	Level 3	Level 4
Data Setup	Caller ID	Status: Off/On	
	Busy Tone	Status: Off/On	
	F/W Upgrade	Status: Off/On	
	*Set Serial No.	Enter machine serial number	
	Format Flash	Yes	

NOTE: * Indicates that there is a function in Diagnostics that allows for entry of the serial number using the keypad (3025NI). From Diagnostic Mode, (Ref. GP 1) select: [Data Set Up>Set Serial Number] then, using the keypad, enter the serial number. Press the <OK> button to confirm selections. **This function allows numeric entries only.** For serial numbers containing alpha characters (letters) use the serial number writing tool; USB_Serial.V1.02.exe.

Table 2 Diagnostic Mode Menu - Machine Test

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
Machine Test	DC305 UI Test (Ref. GP 9)	Press any key to start					
	Modem Test	Fsk ?					
	DRAM Test	DRAM Test OK					
	ROM Test	Press <OK>					
	Continuous DTMF		DTMF # Line 1				
			DTMF *Line 2				
	Test Pattern		Test Pattern 1	Yes/No			
			Test Pattern 2	Yes/No			
	Shading Test	Shading & Print	Yes/No				
	Scan Aging	P.1...P.2...etc	Press Stop button to cancel				
	EDC Mode	DC131 NVM Read/Write	105 MHV Bias	MHV DC K	50-900		
			106 Dev Bias	Deve DC K	50-900		
			107 ATTR Bias	THV K	50-900		
			109 Fuser Heat	Ready Temp	-10 - 10		
			110 LSU	LD Power K	50-900		
		DC132 NVM Initialize	Yes/No				
		DC330 Component Control	100 Motor	Main BLDC	Status [Off]		
				Main BLDC Ready	Status: [Low]		
			101 Clutch	Tray 1 Pickup	Status: [Off]		
				Registration	Status: [Off]		
Out Bin Full				Low			
102 Sensor			Tray 1 Empty	Status: {Low}			
			Feed Sens	Status: [Low]			
	Regi Sens	Status: [Low]					
	Exit Sens	Status: [Low]					
105 MHV Bias	K MHV Bias	Status: [Off]					

Table 2 Diagnostic Mode Menu - Machine Test

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Machine Test	EDC Mode	DC330 Component Control	106 Dev Bias	K Dev Bias	Status: [Off]
			107 ATTR Bias	K THV Bias	Status: [Off]
				K THV - Bias	Status:[Off]
				K THV Bias R	Status: [0]
			109 Fuser Heat	Temp A	Status: [0]
			110 LSU	LSU Mot1 Ready	Status: [Low]
				LSU Mot1 Run	Status: [Off]
				LD Power4	Status: [Off]
				LSU HSync4	Status: [Low]

Table 3 Diagnostic Mode Menu - Report

Level 1	Level 2	Level 3
Report	Protocol Dump	Yes
	Supplies Info	Yes
	Configuration	Yes
	Error Info	Yes
	Usage Counter	Yes
	Component Check	Yes
	Fax Options	Yes
	Service Support	Yes

Data Setup

The following items can be modified:

- **Send Level**

The level of the transmission signal (Tx). The Tx signal can be set to a value between 9dBm and 15 dBm. Normally, the Tx level should be less than 12 dBm.
- **DTMF Level**

The value of the High level tone and the Low level tone in DTMF mode. (Not dial mode). Both High and Low can be set to a value between 0 and 15.
- **Pause Time**

The delay time when receiving the pause input at auto dial. The pause time can be set to a value between 1 and 9 seconds.
- **Dial Mode**

The type of dial method, either Dial or Pulse. The default setting is Dial.
- **Modem Speed**

The modem speed is automatically set to a slower speed when communicating with a slower speed modem, as communication is done on the standard of the side where modem speed is low for transmission/reception. Available settings are 33.6 Kbps, 28.8 Kbps, 14.4 Kbps, 12.0 Kbps, 9.6 Kbps, and 4.8 Kbps. It is recommended to maintain the default setting of 33.6 Kbps.
- **Error Rate**

When the error rate is about exceed the set value, the Baud rate automatically adjusts to 2400 bps. This ensures that the error rate remains below the set value. The error rate can be set to 5% or 10%.
- **Clear All Memory**

To reset the system to factory default settings when the product is functioning abnormally. All system settings are returned to the default values, including all customer settings.

NOTE: Clear All Memory must be performed after replacing the Main PWB. Failure to do so could negatively effect machine performance.
- **Toner Low Level**

This is used to set up when the customer is notified to replace the Toner Cartridge. The time can be set to 1-30%.
- **ImgU Low Level**

This is used to set up when the customer is notified to replace the Imaging Unit?. The time can be set to 1-50%.
- **Clear Count**

Use this to reset the copy counters for the following operations or components:

 - ADF Scan
 - Platen Scan
 - Transfer Roller
 - Pickup Roller
 - Retard Roller
 - Forward Roller

NOTE: A password is required to reset these counters.

- **Engine Footer**

This function is used to display the print engine status on the bottom of a printed page. It is set to either On or Off. The default setting is Engine footer Off.
- **Dial Tone**

The dial tone feature can be set to on or off.
- **Caller ID**

The caller ID feature can be set to on or off.
- **Busy Tone**

The busy tone feature can be set to on or off
- **Firmware Upgrade**

The F/W Upgrade feature can be set to on or off.
- **Set Serial Number**

The Set Serial Number feature is used to manually input the machine serial number after replacing the Main PWB.
- **Format Flash**

The Format Flash feature clears the flash memory which is allocated to store fonts.

Machine Test

The following machine tests can be performed:

- **DC305 UI Test**
The DC 305 UI Test is used to test the Control Panel buttons. When a functioning button is pressed, the LCD will indicate that it is functioning.
- **Modem Test**
The Modem Test transmits signals from the MODEM to a telephone. If no transmission sound is heard, the modem segment of the Main PWB has malfunctioned.
- **DRAM Test**
Use this feature to test the system DRAM. The test result will be shown on the LCD display.
- **ROM Test**
Use this feature to test the system ROM. The test result will be shown on the LCD display.
- **Continuous DTMF Test**
Dual Tone Multi-Frequency Signal (DTMF) tests the line for the volume of the dialing and dial tone for machines equipped with a fax option.
- **Test Pattern**
Use this feature to generate a test pattern for troubleshooting image quality defects.
- **Shading Test**
The Shading Test is performed to assess and optimize image quality by checking the Contact Image Sensor.
- **Scan Aging**
An internal Engineering tool that tests the reliability of the Scanner Motor. (Not a field diagnostic function.)
- **DC131 NVM Read/Write**
This routine provides the capability to view and modify machine control parameters stored in non-volatile memory.
- **DC132 NVM Initialize**
This routine provides the ability to set the machine control parameters stored in non-volatile memory to default.
- **DC330 Component Control**
Test routines available to verify component functionality by monitoring input signals and controlling output states.

Report

The following machine reports can be printed:

- **Protocol Dump**
Protocol report shows the sequence of the CCITT group 3 T.30 protocol during the most recent sending or receiving operation. Use this report to check for send and receive errors.
- **Supplies Info**
The Supplies Information report shows Toner Cartridge information such as toner remaining, toner capacity, and toner product date.
- **Configuration**
The Configuration report shows the status of the user-selectable options. This report should be printed after changing machine settings to confirm the changes have been made. This report provides useful information for service personnel.
- **Error Info**
The Error Info report shows a list of all machine errors since the last service call.
- **Usage Counter**
The Usage Page report shows the number of Duplex Print and Simplex prints since the last service call.
- **Component Check**
The Component Check report shows the operation procedure of the machine test in Diagnostic Mode.
- **Fax Options**
Fax Setup (i.e., Resolution, send confirmation, etc.)
- **Service Support**
Country setting and Firmware upgrade (USB cable) procedures.

EDC Mode

The following diagnostic routines can be accessed in EDC Mode. Refer to [Table 1](#) for a complete listing of Test Routine options.

- **DC131 NVM Read/Write**

The NVM Read/Write routine provides the capability to review and modify machine control parameters stored in Non-Volatile Memory (NVM). Refer to [Table 1](#).

- **DC132 NVM Initialize**

The NVM Initialize routine provides the capability to initialize (set to default) machine control parameters stored in Non-Volatile Memory (NVM). Refer to [Table 1](#)

Table 1 NVM Codes and values

NVM Code	LCD	Definition	Default	Min	Max
105	MHV Bias	Charger HV Black DC Duty	210	50	250
106	Deve Bias	Deve DC Black	190	50	250
107	ATTR bias	Transfer2 HV	130	50	250
109	Fuser Heat	Standby target temperature	10	0	15
110	LSU	LSU Power at Normal Speed	450	50	600

- **DC330 Test Routines**

This routine provides the capability to verify component functionality by monitoring input signals and controlling output states. Refer to [Table 2](#).

Table 2 Input/Output Components

Diagnostic Code	Displayed name	Definition	Input/Output	State Displayed
100 Motor	Main BLDC	Main Feed (BLDC) Motor is On/Off	Output	[Off]
	Main BLDC Rdy	Detect if Main Feed (BLDC) Motor runs at normal speed	Input	[Off]
101 Clutch	Tray 1 Pick up	Engages drive to pick up a paper from tray1	Output	[Off]
	Registration	Engages drive to registration rolls	Output	[Off]
	Out Bin Full	Detects when the output tray is full	Output	[Low]
102 Sensor	Tray 1 Empty	Detects when a sheet is in Tray1	Input	[Low]
	Feed Sens	Detects when a sheet is at Feed sensor	Input	[Low]
	Regi Sens	Detects when a sheet is at registration sensor	Input	[Low]
	Exit Sens	Detects when a sheet is at Exit sensor	Input	[Low]

Table 2 Input/Output Components

Diagnostic Code	Displayed name	Definition	Input/Output	State Displayed
105 Charger	K MHV Bias	Black MHV bias voltage on at normal drive level	Output	[Off]
106 Development	K Dev Bias	Black Dev bias voltage on at normal drive level	Output	[Off]
107 Transfer	K THV Bias	Black THV bias voltage on at normal drive level	Input	[Off]
	K THV(-) Bias	Black THV bias voltage on at normal drive level	Input	[Off]
	K THV(-) BiasR	Black THV bias voltage		
109 Fuser	Fuser Heat Temp A	Detects what the temperature A is on fuser.	Input	Numeric 3 digits
110 LSU	LSU Motor1 Rdy	Detects if LSU motor1 runs at normal speed	Input	[Low]
	LSU Motor1 Run	LSU Motor1 On/Off	Output	[Off]
	LSU LD Power4	LSU LD4 Power On/Off (black)	Output	[Off]
	LSU HSync4	Horizontal Sync	Input	[Low]

Glossary of Terms

NOTE: For a comprehensive list of Xerox acronyms, refer to the Xerox Acronym database at: <https://open.xerox.com/Services/acronym>

Table 1 Glossary

Term/Acronym	Definition
802.11	802.11 is a set of standards for wireless local area network (WLAN) communications, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).
802.11b/g/n	802.11b/g/n refers to specifications within the 802.11 family. 802.11b is also referred to as High-Rate or Wi-Fi, 802.11g is used for transmission over short distances and 802.11n adds multiple-input multiple-output.
ADF	Automatic Document Feeder. Scanning device that automatically feeds a document or stack of documents.
Bit Depth	A computer graphics term describing the number of bits used to represent the color of a single pixel in a bit mapped image. Bit depth determines the maximum number of colors that can be used at one time. 1-bit color is commonly called monochrome or black and white.
BOOTP	Bootstrap Protocol. Used by a network client to obtain an IP address from a configuration server. During computer startup, a BOOTP configuration server assigns an IP address to each client from a pool of addresses.
Control Panel	Area where control or monitoring instruments are displayed, typically located in the front area of the machine.
Default	The value or setting that is in effect when the printer/copier is first installed, reset, or initialized.
DHCP	The Dynamic Host Configuration Protocol. A standardized networking protocol used by servers on an IP computer network to allocate assigned IP addresses to a computer requesting an IP address.
DNS	Domain Name Server. The Domain Name Server translates alphabetic domain names into a corresponding IP address.
DPI	Dots Per Inch. The measure of the resolution of an image displayed on a screen or on a printed page, in dots or pixels.
Duplex	In printing, the capability to automatically turn over a sheet of paper so that the machine can print both sides of the sheet during one print cycle.
Duty Cycle	The proportion of time during which a device is active. (E.g., if the duty cycle for a printing device is 48,000 pages per month for 20 working days, the output that device can reliably produce is 2,400 pages a day.)
ECM	Error Correction Mode. A transmission mode built into fax machines or fax modems to automatically detect and correct errors in the transmission process.
Emulation	Hardware and/or software that emulates the functions of one computer system (the guest) in another computer system (the host).

Table 1 Glossary

Term/Acronym	Definition
Fuser	The Fuser subsystem permanently affixes toner onto print media by applying heat and pressure.
Gateway	A node (a router) on a TCP/IP network that serves as an access point to another network.
Grayscale	Varying shades of gray pixels ranging from black to white that represent different tones of an image.
Halftone	The reprographic technique that simulates continuous tone imagery through the use of dots, varying in either size, shape or spacing.
IP address	Internet Protocol Address. A unique number that devices use to identify and communicate with each other over a network utilizing the IP standard.
IPM	Images Per Minute. A measurement of printer speed that indicates the number of single-sided sheets a printer can complete within one minute.
IPP	The Internet Printing Protocol. A standard protocol that can be used locally or over the internet to create and manage print jobs, and to support access control, authentication, and encryption.
IPX/SPX	Internet Packet Exchange/Sequenced Packet Exchange. A networking protocol to provide connection services similar to TCP/IP, with the IPX protocol having similarities to IP, and SPX having similarities to TCP.
ISO	International Standardization Organization. An international standard-setting body that develops and promotes world-wide industrial and commercial standards.
ITU-T	International Telecommunication Union (Telecommunications sector). Established to standardize and regulate international radio and telecommunications.
ITU-T standard Chart number 1	Standardized test chart published by ITU-T for document facsimile transmissions.
JBIG	Joint Bi-level Image Experts Group (JBIG), is lossless (no loss of accuracy or quality) bi-level image compression standard. It's widely implemented in fax machines, but can also be used for other images.
JPEG	Joint Photographic Experts Group. A commonly used standard method of lossy (compressing data by losing some of it) compression for photographic images.
LED	A Light-Emitting Diode. A semiconductor device used to display machine status.
MFP	Multi Function Printer. A machine that includes multiple functions in one device such as; printing, copying, faxing, and scanning functions.
MH	Modified Huffman. A compression method for decreasing the amount of data that needs to be transmitted between fax machines to transfer the image.
MMR	Modified Modified READ. A compression method recommended by ITU-T T.6.

Table 1 Glossary

Term/Acronym	Definition
Modem	Modulator-Demodulator. A device that modulates an analog carrier signal to encode digital information, and demodulates a carrier signal to decode the transmitted information.
MR	Modified Read. A compression method that encodes the first scanned line (using MH), then compares the next line to the first, determines the differences, then encodes and transmits those differences.
OPC	Organic Photo Conductor. A mechanism that creates a virtual image for print using a laser beam emitted from a laser printer. Also referred to as Photoreceptor Drum.
Originals	The original is the first example of a document, photograph, chart, or any combination of these, used to produce others.
PABX	Private Automatic Branch Exchange. An automatic telephone switching system within a private enterprise.
PCL	Printer Command Language. A page description language developed to provide an efficient way to control printer features across various printing devices.
Printer Driver	A program used to send commands and transfer data from the computer to the printer.
Print Media	Material such as paper, envelopes, labels, and transparencies which can be used in printers, scanners, fax machines, or copiers.
PPM	Prints Per Minute. Used to measure printer speed. The number of copies or prints produced in one minute.
PRN file	An interface for a device driver that allows software to interact with the device driver by using standard input/output system calls.
Protocol	A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.
PSTN	Public Switched Telephone Network. The aggregate of the world's circuit-switched telephone networks providing infrastructure and services for public telecommunication.
Resolution	The sharpness of an image, measured in Dots Per Inch (DPI).
SMTP	Simple Mail Transfer Protocol. A text-based protocol generally used for sending messages from a mail client to a mail server.
TCP/IP	Transmission Control Protocol (TCP) / Internet Protocol (IP). The suite of protocols for communication between computers, used as a standard for transmitting data over networks.
Toner Cartridge	A bottle or container used in a xerographic copier/printer that contains the powder used to form the text and images on the printed paper.
TWAIN	An applications programming interface and communications protocol that regulates communications between software and digital imaging devices.
USB	Universal Serial Bus. A hardware interface that connects computers and peripherals. The USB is designed to concurrently connect a single computer USB port to multiple peripherals.

Table 1 Glossary

Term/Acronym	Definition
WEP	Wired Equivalent Privacy. A protocol for wireless local area networks that provides security by encrypting data over radio waves so that it is protected as it is transmitted from one end point to another.
WPS	The Wi-Fi Protected Setup. A standard for establishing a wireless home network, allowing easy wireless network connection without a computer.

Xerox® WorkCentre® 3215/3225 Multifunction Printer
BLOCK SCHEMATIC DIAGRAMS
June, 2014

This document contains wiring and mechanical power data for the Xerox® Work Centre® 3215/3225 Printers. These block schematic diagrams are supplemental to the diagnostic and troubleshooting information found in the Xerox Work Centre 3215/3225 Service Manual.

Every effort has been made to achieve accuracy on these schematics. However, if a difference is noted between these schematics and the Xerox service documentation, the service documentation takes precedence.

TABLE OF CONTENTS

CHAIN 1 1.1	POWER AC / LOW VOLTAGE And HIGH VOLTAGE POWER / INTERLOCKS
CHAIN 3 3.1A 3.1B	COMMUNICATIONS PRINTER COMMUNICATION PRINTER COMMUNICATION
CHAIN 4 4.1	MAIN DRIVE MAIN DRIVE
CHAIN 5 5.1A 5.1B	AUTOMATIC DOCUMENT FEEDER ADF ADF
CHAIN 6 6.1	LSU LSU
CHAIN 7 7.1	PAPER FEED AND REGISTRATION PAPER FEED AND REGISTRATION
CHAIN 9 9.1	XEROGRAPHICS PRINT MODULE
CHAIN 10 10.1 10.2	FUSING AND PRINT EXIT FUSING PRINT EXIT
CHAIN 14 14.1	DOCUMENT SCANNING SCANNING

Prepared by:

Content Development and Language Services - North America

Xerox Corporation

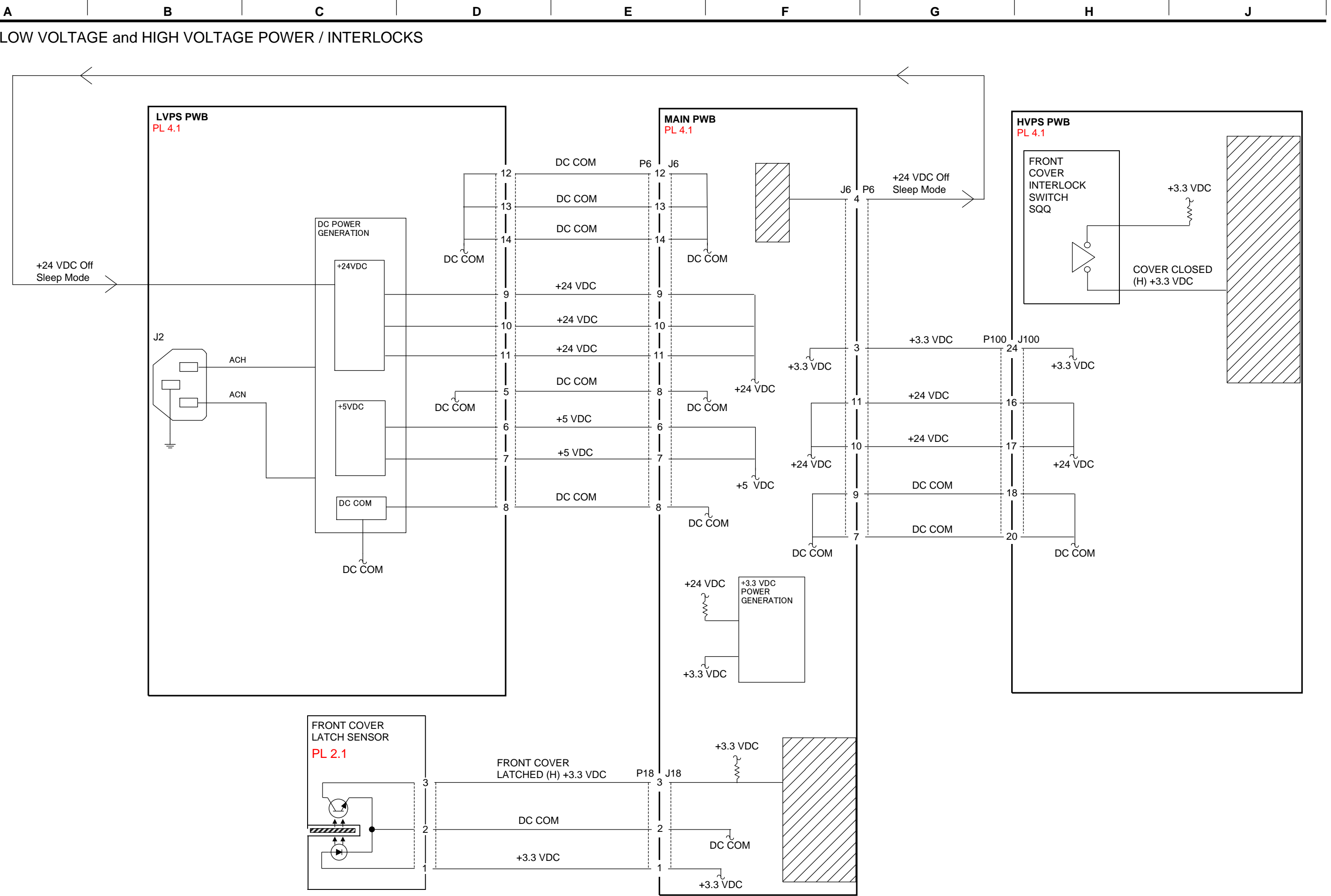
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Webster, New York 14580 USA

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1.1 AC / LOW VOLTAGE and HIGH VOLTAGE POWER / INTERLOCKS

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3.1A COMMUNICATIONS (1 of 2)

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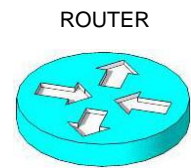
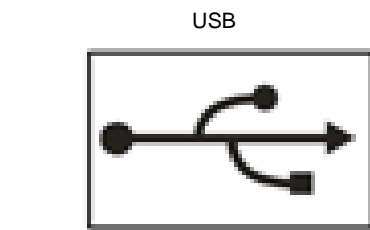
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MAIN PWB
PL 4.1

J16

J17

DC COM

DC COM

J1

P1

+3.3 VDC

DC COM

DC COM

DC COM

DC COM

+3.3 VDC

J11

P11

DC COM

+5 VDC

+3.3 VDC

DC COM

SIGNAL

DC COM

SIGNAL

SIGNAL

SIGNAL

DC COM

SIGNAL

+3.3 VDC

ECO LED

ECO KEY

WPS LED

WPS KEY

POWER LED

POWER KEY

DC COM

+5 VDC

CANCEL KEY

READY LED

ERROR LED

TONER LED

WPNC (WiFi) PWB
PL 1.1

+3.3 VDC

DC COM

DC COM

DC COM

DC COM

DC COM

DC COM

DC COM

+3.3 VDC

CONTROL PANEL PWB
PL 8.1

ECO LED

ECO KEY

WPS LED

WPS KEY

POWER LED

POWER KEY

DC COM

+5 VDC

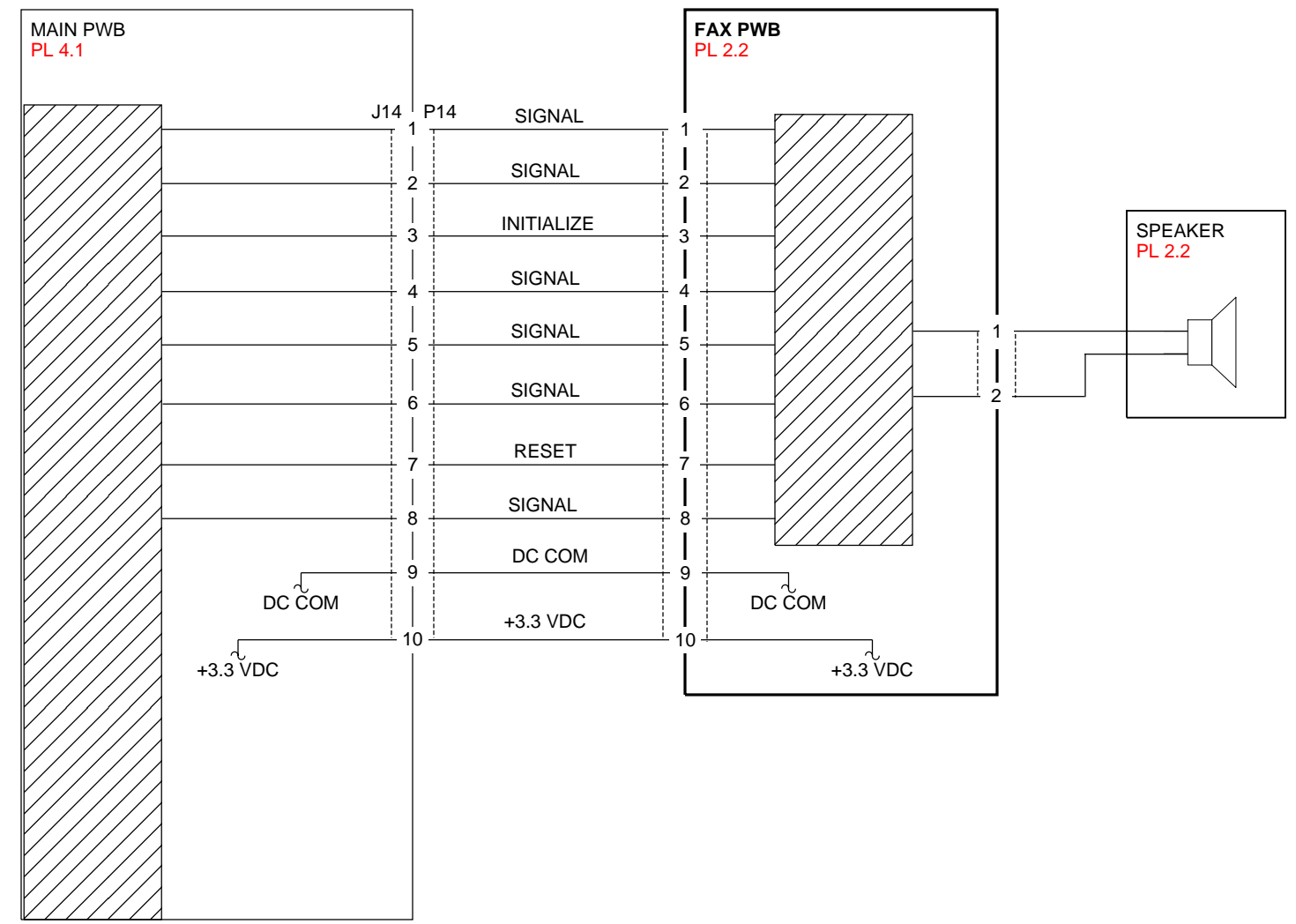
CANCEL KEY

READY LED

ERROR LED

TONER LED

3.1B COMMUNICATIONS (2 of 2)



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4.1 MAIN DRIVE

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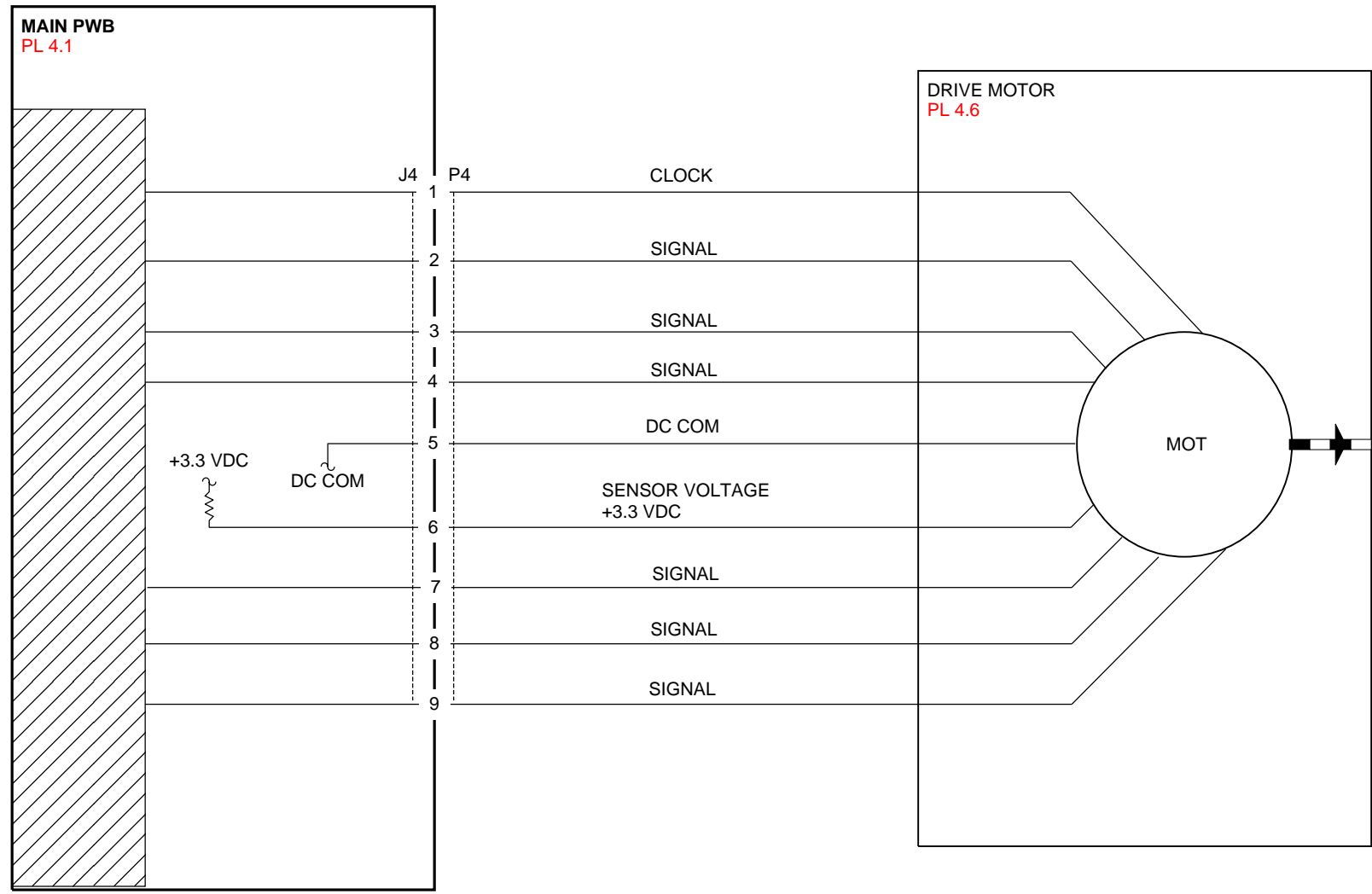
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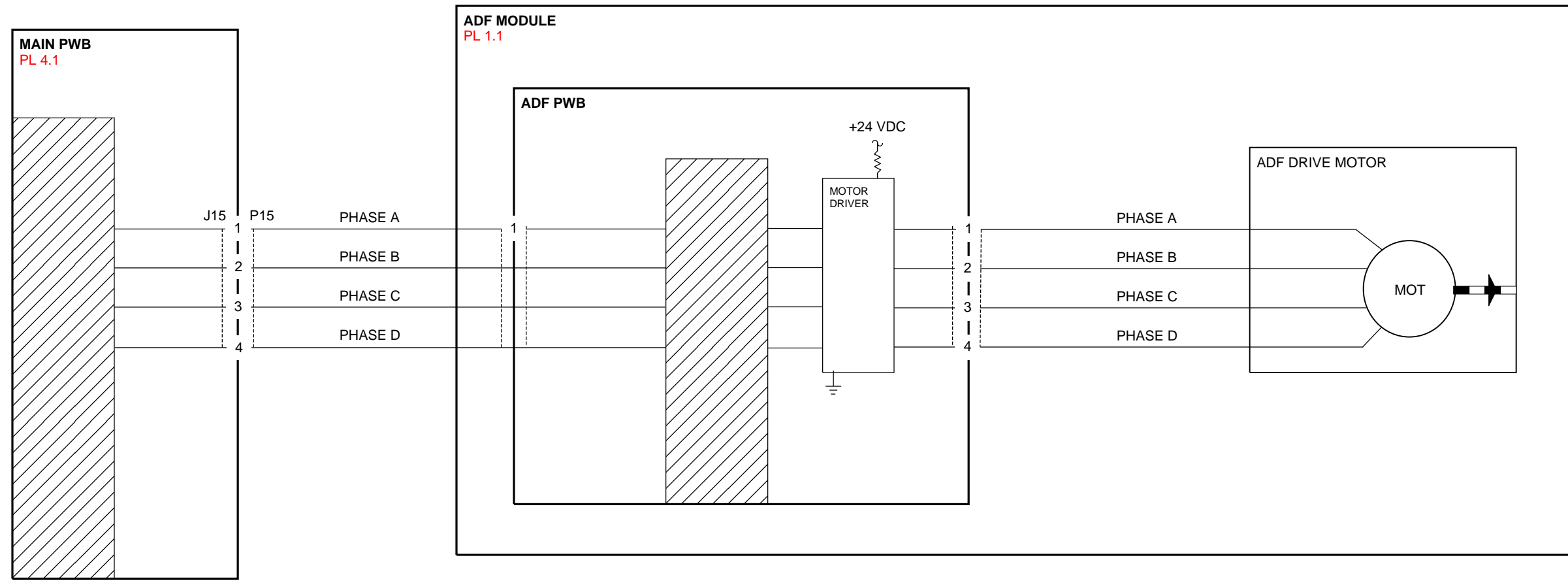
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5.1B AUTOMATIC DOCUMENT FEEDER (2 OF 2)



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6.1 LSU

MAIN PWB
PL 4.1

LSU
PL 4.1

1

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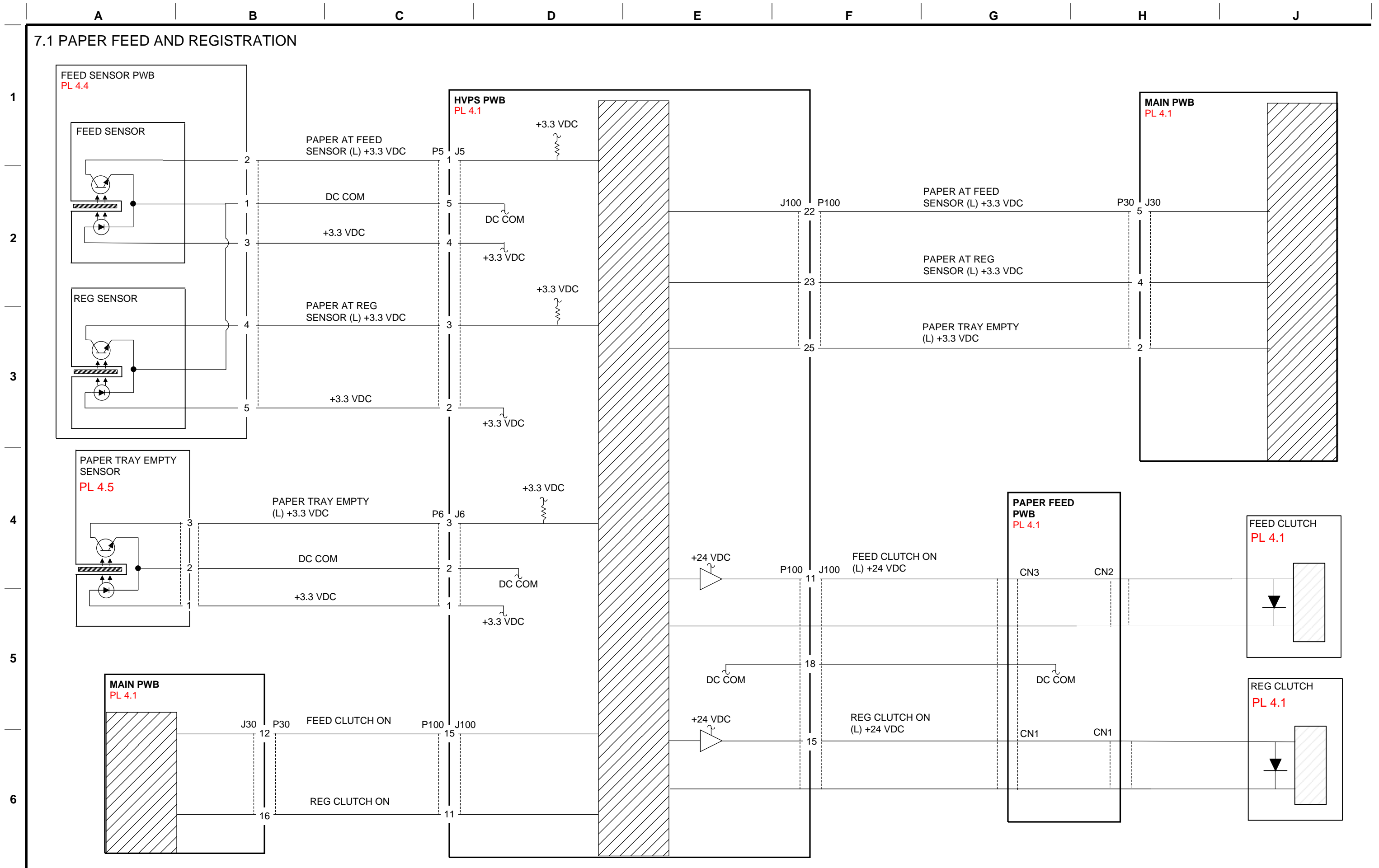
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7.1 PAPER FEED AND REGISTRATION



9.1 XEROGRAPHICS

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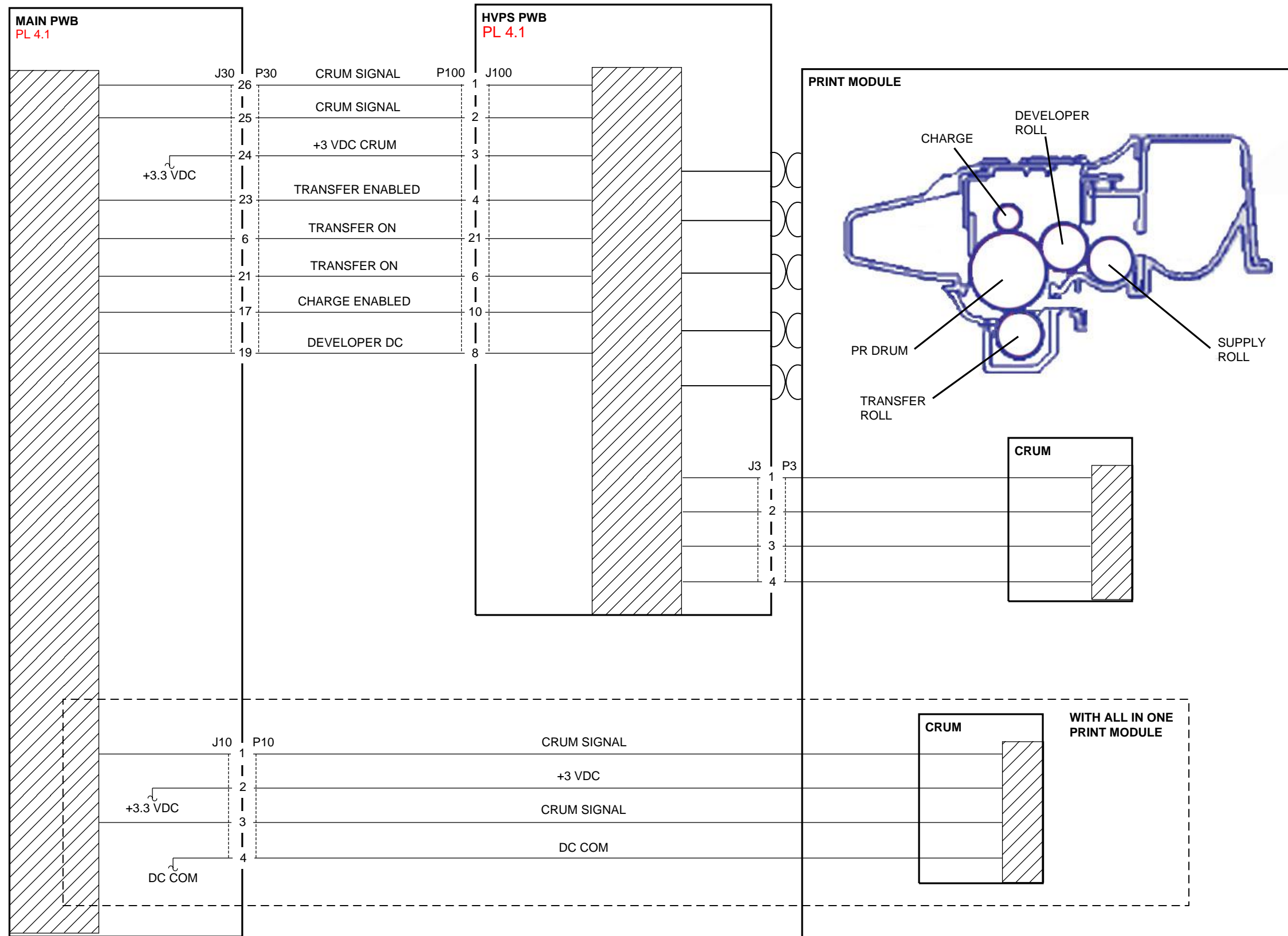
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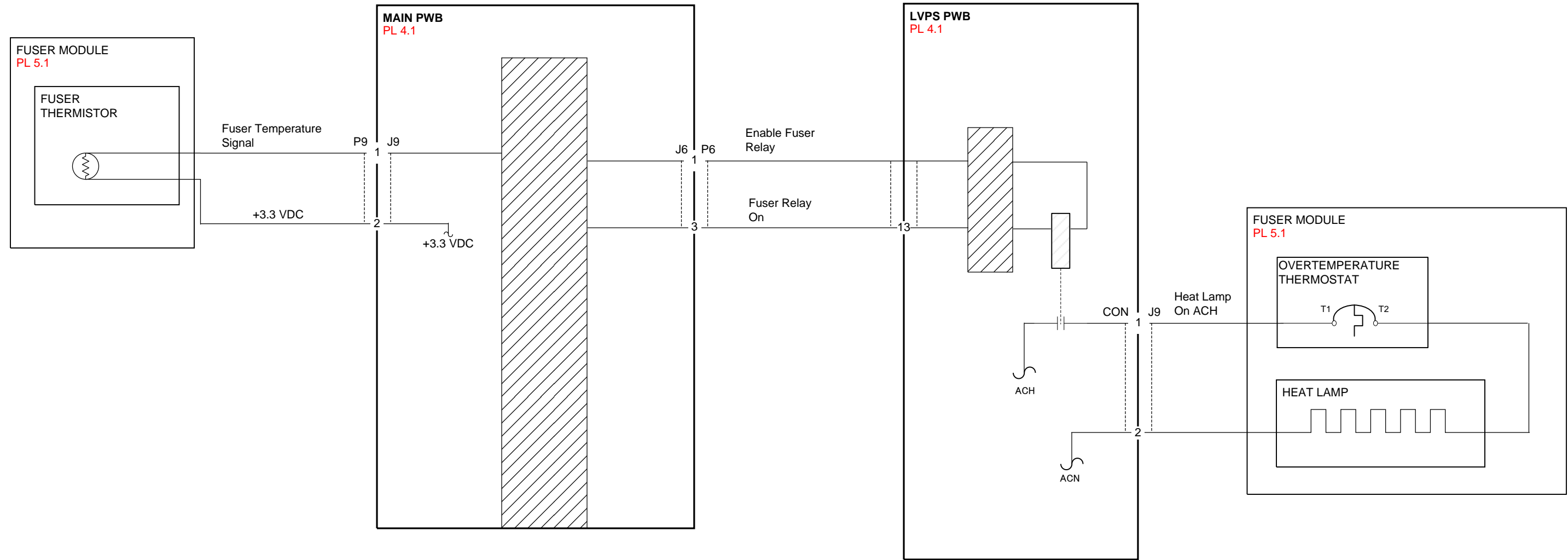
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10.1 FUSER

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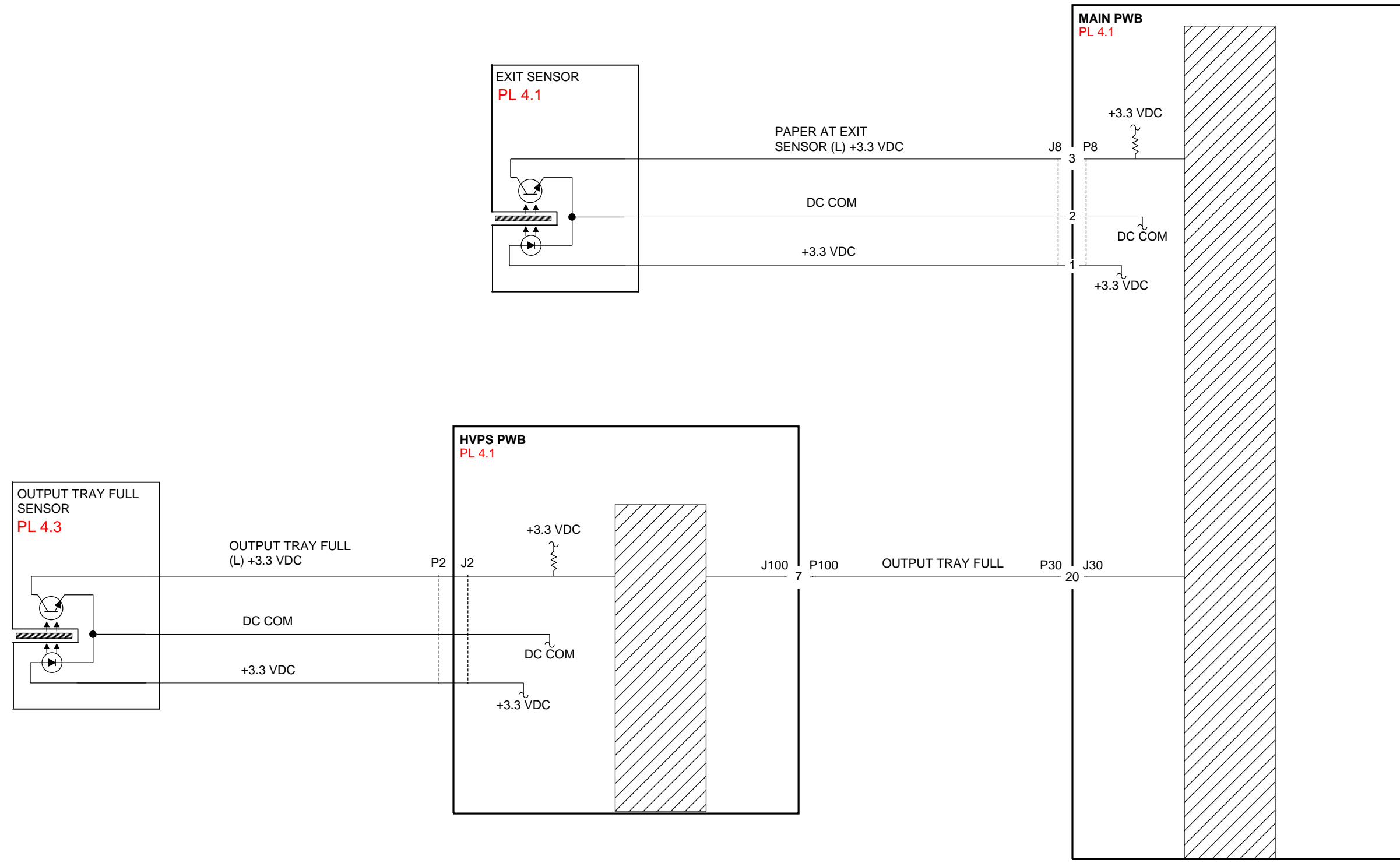
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10.2 PRINT EXIT

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A B C D E F G H J



14.1 SCANNING

1

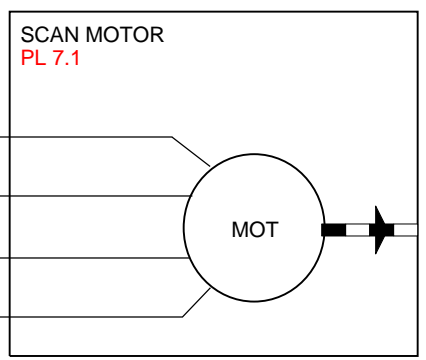
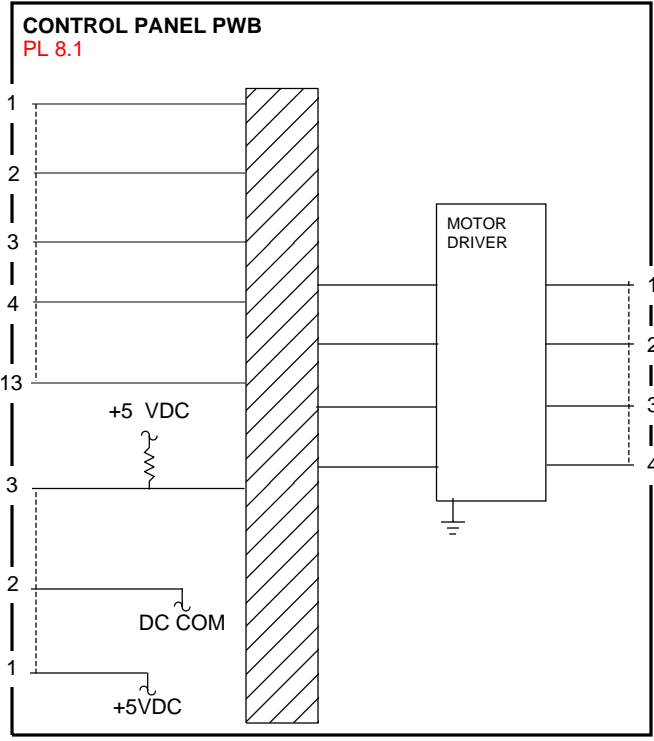
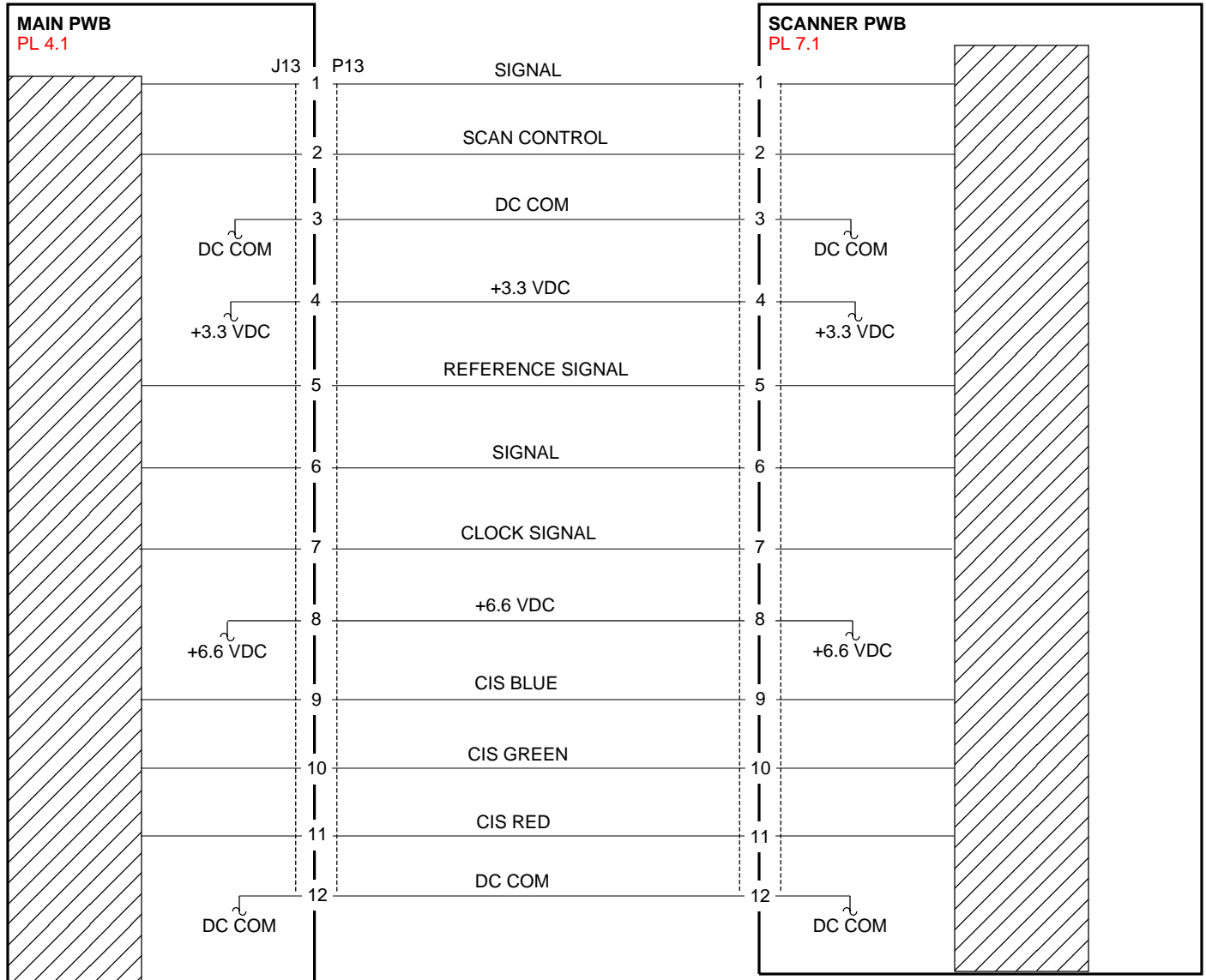
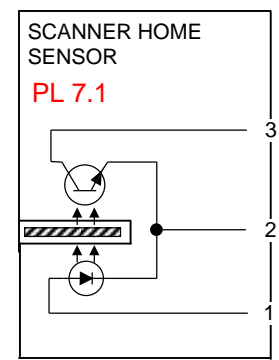
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