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Xerox® B1022/B1025 Multifunction Printer Service Manual

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Introduction

About This Manual

This manual is part of a multinational service documentation system that is structured in the standard Xerox service manual format.

Organization

The service manual is the document used as the primary information source for repairing and maintaining this family of products and is available in PDF format. The information within the manual is divided into an introduction and 8 other sections.

Section 1 Service Call Procedures

This section is used to start and complete a service call. The procedures in this section will either direct you to a Repair Analysis Procedure (RAP), or identify a faulty component or sub-assembly.

Section 2 Status Indicator Repair Analysis Procedures

This section contains the Repair Analysis Procedures (RAPs) and checkouts necessary to diagnose, isolate and repair faults other than image quality faults.

Section 3 Image Quality

This section contains the Image Quality Repair Analysis Procedures (IQ RAPs), checkouts and setup procedures necessary to diagnose, isolate and repair image quality faults.

Section 4 Repairs and Adjustments

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

Section 5 Parts List

This section contains the detailed and illustrated spare parts list. Any part that is spared or that must be removed to access a spared part is illustrated.

Section 6 General Procedures and Information

This section contains all other procedures, product specifications and general information. It also contains Tag/MOD information. The abbreviations used in this Manual are in GP 13 Glossary of Terms, Acronyms and Abbreviations.

Section 7 Wiring Data

This section contains the PJ locations and wiring diagrams.

Section 8 Product Technical Overview

This section contains technical details of the machine.

Publication Comments Sheet

A Publication Comment Sheet is provided at the rear of the PDF version of the manual.

How To Use This Manual

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

How to Differentiate Between Machine Variants

When a procedure, parts list description or other reference is unique across different speeds of machine, the appropriate speed will be quoted. For example, B1022 or B1025. Any artwork will also be 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.*

Change History

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

- For future updates to the service manual.

Mod/Tag Identification

Figure 1 shows the Mod/Tag identification symbols.

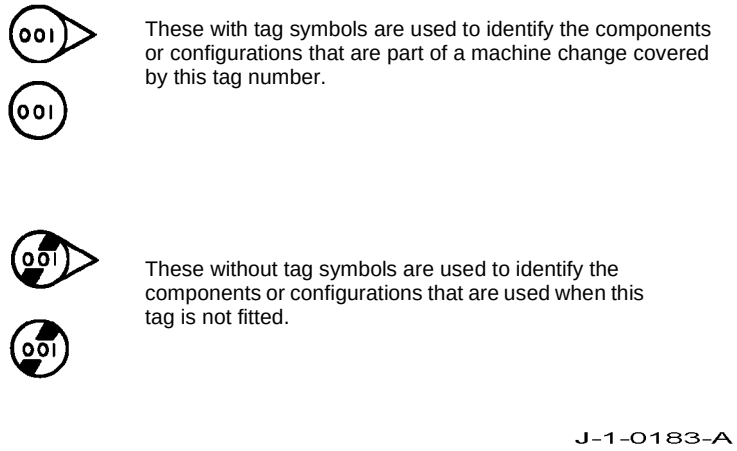


Figure 1 Mod/Tag identification symbols

Voltages Resistances and Tolerances

For AC and DC power specifications, refer to the Product Technical Overview Power Generation and Distribution

DC voltages should be measured between an available test point and a machine ground.

Safety Information

The WARNING that follows is for general guidance when live working.

WARNING

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

Safety Icons

The safety icons that follow are examples of symbols used in this manual:

ESD Caution Symbol

CAUTION

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

Location Arrow Symbol

The location arrow symbol points to the location to install, to gain access to, or to release an object.

Hot Surface Symbol

This symbol indicates hot surfaces. Take care when servicing the machine.

Lethal Voltage Symbol

This symbol indicates potentially lethal voltages. Take care when servicing the machine..

Laser Radiation Warning Symbol

This symbol indicates potentially lethal voltages. Take care when servicing the machine..

Toner Cartridge

The product contains a toner cartridge that is recyclable. Under various state and local laws, it may be illegal to dispose of the cartridge into the municipal waste. Check with the local waste officials for details on recycling options or the proper disposal procedures.

Fuses

WARNING

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

Part Replacement

Only use genuine Xerox approved spare parts or components to maintain compliance with legislation and safety certification. Also refer to GP 11 Restriction of Hazardous Substances (RoHS).

Disassembly Precautions

Do not leave the machine with any covers removed at a customer location.

Reassembly Precautions

Use extreme care during assembly. Check all harnesses to ensure they do not contact moving parts and do not get trapped between components.

General Procedures

Observe all warnings displayed on the machine and written in the service procedures. Do not attempt to perform any task that is not specified in the service procedures.

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 and 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 the method that follows:
   - Email Xerox EH&S at: usa.product.incident@xerox.com.
   - Fax Xerox EH&S at: 1-585-422-8217 (intelnet 8*222-8217).

   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.

VI. Appendices

The Health and Safety Incident Report involving a Xerox Product (Form # EH&S-700) is available at the back of the service manual PDF.

Translation of Warnings

WARNING

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

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

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

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

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

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

Do not install a fuse of a different type or rating. Installing the wrong type or rating of fuse can cause overheating and a risk of fire.

DANGER : Ne pas installer de fusible de type ou de calibre différent. Il existe un risque de surchauffe voire d'incendie.

AVVERTENZA: per evitare rischi di surriscaldamento o d'incendio, non installare un fusibile di tipo o carica diversi da quelli esistenti.

VORSICHT: Keine Sicherungen anderer Art oder anderer Leistung auf dem IOT-PWB installieren - Überhitzungs- und Brandgefahr.

AVISO: No instale un fusible de potencia o tipo distinto. Un fusible de potencia o tipo distinto puede producir sobrecalentamiento y el riesgo de incendio.

WARNING

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

DANGER : Assurez-vous que la machine est hors tension lorsque vous effectuez des tâches ne nécessitant pas d'alimentation électrique. Reportez-vous à GP 4. Débranchez le câble d'alimentation pour prévenir tout risque d'électrocution. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves. De plus, certaines pièces, lorsqu'elles sont en mouvement, peuvent être source de blessures graves.

AVVERTENZA: Accertarsi di isolare la macchina dall'alimentazione elettrica quando si eseguono attività che non richiedono elettricità. Vedere GP 4. Scollegare il cavo di alimentazione. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Sicherstellen, dass die Stromversorgung des Geräts bei Arbeiten, die keinen Strom erfordern, ausgeschaltet ist. Siehe auch GP 4. Den Netzstecker ziehen. Andernfalls besteht Stromschlaggefahr und Verletzungsgefahr durch bewegliche Teile.

AVISO: Asegúrese de mantener la máquina aislada de la energía eléctrica mientras realiza tareas que no necesitan electricidad. Consulte GP 4. Desconecte el cable de alimentación. La energía eléctrica puede producir lesiones o incluso la muerte. Las piezas sueltas pueden producir lesiones.

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Mettez la machine hors tension. Reportez-vous à GP 4. Déconnectez le cordon d'alimentation de l'alimentation du client lorsque vous réalisez des tâches qui ne nécessitent pas d'électricité. L'électricité peut être à l'origine de blessures, voire d'un accident mortel. Les pièces amovibles peuvent être à l'origine de blessures.

AVVERTENZA: Spegnere la macchina. Vedere GP 4. 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. Siehe auch GP 4. 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. Consulte el GP 4. 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

Take care when measuring AC mains (line) voltage. Electricity can cause death or injury.

DANGER : Prendre des précautions lors du relevé de la tension de la prise de courant alternatif. L'électricité peut entraîner des blessures graves voire mortelles.

AVVERTENZA: Procedere con cautela durante la misurazione della tensione CA della rete. L'elettricità può causare infortuni o morte.

VORSICHT: Bei der Netzspannungsprüfung stets vorsichtig vorgehen

AVISO: Tenga cuidado al medir la tensión de la línea de alimentación de corriente alterna. La electricidad puede causar lesiones e incluso la muerte.

WARNING

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

DANGER : Assurez-vous que la machine est hors tension lorsque vous effectuez des tâches ne nécessitant pas d'alimentation électrique. Reportez-vous à GP 4. Débranchez le câble d'alimentation pour prévenir tout risque d'électrocution. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves. De plus, certaines pièces, lorsqu'elles sont en mouvement, peuvent être source de blessures graves.

AVVERTENZA: Accertarsi di isolare la macchina dall'alimentazione elettrica quando si eseguono attività che non richiedono elettricità. Vedere GP 4. Scollegare il cavo di alimentazione. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Sicherstellen, dass die Stromversorgung des Geräts bei Arbeiten, die keinen Strom erfordern, ausgeschaltet ist. Siehe auch GP 4. Den Netzstecker ziehen. Andernfalls besteht Stromschlaggefahr und Verletzungsgefahr durch bewegliche Teile.

AVISO: Asegúrese de mantener la máquina aislada de la energía eléctrica mientras realiza tareas que no necesitan electricidad. Consulte GP 4. Desconecte el cable de alimentación. La energía eléctrica puede producir lesiones o incluso la muerte. Las piezas sueltas pueden producir lesiones.

WARNING

Avoid exposure to laser beam. Invisible laser radiation.

DANGER : Eviter toute exposition au faisceau laser. Radiation laser invisible.

AVVERTENZA: Evitare l'esposizione al fascio laser. Radiazioni laser invisibili.

VORSICHT: Nicht in den Laserstrahl blicken. Verletzungsgefahr durch unsichtbare Laserstrahlung.

AVISO: Evite la exposición al rayo láser. Radiación de láser invisible.

WARNING

Do not touch the fuser while it is hot.

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

AVVERTENZA: Non toccare il fonditore quando è caldo.

VORSICHT: Fixierbereich erst berühren, wenn dieser abgekühlt ist.

AVISO: No toque el fusor mientras está caliente.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

DANGER : Exécuter cette procédure avec précaution. La présence de bords tranchants peut entraîner des blessures.

AVVERTENZA: procedere con cautela durante questa procedura. Possono essere presenti oggetti con bordi taglienti pericolosi.

VORSICHT: Bei diesem Vorgang vorsichtig vorgehen, damit keine Verletzungen durch die scharfen Kanten entstehen.

AVISO: Tenga cuidado al efectuar este procedimiento. Puede haber bordes afilados que podrían producir lesiones.

WARNING

Do not use the power button as a safety disconnect device. The power button is not a disconnect device. Disconnect the power cord from the supply to isolate the equipment.

DANGER : Ne vous servez pas de l'interrupteur comme d'un dispositif de déconnexion. L'interrupteur n'est pas un dispositif de déconnexion. Débranchez le câble d'alimentation de la prise électrique pour isoler l'appareil.

AVVERTENZA: L'interruttore di alimentazione non è un dispositivo di disconnessione di sicurezza e pertanto non va utilizzato come tale. Per isolare la macchina, scollegare il cavo di alimentazione dalla presa elettrica.

VORSICHT: Zur Unterbrechung der Gerätestromzufuhr nicht den Betriebsschalter verwenden, sondern das Netzkabel aus der Steckdose ziehen, an die das Gerät angeschlossen ist. Nur dann ist der Drucker vollständig vom Stromnetz getrennt.

AVISO: No utilice el botón de encendido/apagado como dispositivo de desconexión de seguridad. El botón de encendido/apagado no es un dispositivo de desconexión. Desconecte el cable de alimentación de la fuente de energía para aislar el equipo.

WARNING

Use safe handling procedures when removing the module. Refer to GP 15. The module is heavy.

DANGER: Conformez-vous aux procédures de manipulation de sécurité pour le retrait du module. Reportez-vous à GP 15. Le module est lourd.

AVVERTENZA: Utilizzare procedure di gestione sicure durante la rimozione del modulo. Vedere GP 15. Il modulo è pesante.

VORSICHT: Verwenden Sie sichere Vorgehensweisen zum Entfernen des Moduls. Siehe auch GP 15. Das Modul ist sehr schwer.

AVISO: Utilice los procedimientos de seguridad cuando elimine el módulo. Consulte el GP 15. El módulo es pesado.

WARNING

Mandatory safety warning. This procedure must be performed by 2 people. The module is heavy.

DANGER: Avertissement obligatoire. Cette procédure doit être effectuée par 2 personnes. Le module est très lourd.

AVVERTENZA: Avviso di sicurezza obbligatorio. A causa della pesantezza del modulo, questa procedura deve essere eseguita da due persone.

VORSICHT: Verbindliche Sicherheitsvorschrift - dieser Vorgang muss von zwei Personen ausgeführt werden, da das Modul sehr schwer ist.

AVISO: Aviso de seguridad obligatorio. Este procedimiento debe ejecutarse entre dos personas. El módulo pesa mucho.

WARNING

This system is certified to comply with laser performance standards set by the U.S. Department of Health, Education, and Welfare as a Class 1 laser product. This is a class of laser products that does not emit hazardous light radiation. Class 1 rating is permissible only because the laser beam is totally enclosed during all modes of customer operation.

DANGER: Le système est certifié et est conforme aux standards de performance laser établis par le département de santé, d'éducation et de protection des États-Unis pour un produit de classe 1. C'est une classe de produits laser qui n'émettent pas de rayons dangereux. Sa classification en classe 1 a été permise par le fait que le faisceau laser est totalement confiné et invisible dans tous les modes opérationnels du client.

AVVERTENZA: Questo sistema è certificato come conforme agli standard di prestazione definiti dal Dipartimento della Salute e dei Servizi Umani degli Stati Uniti d'America per i prodotti laser di classe 1. I prodotti laser appartenenti a questa classe non emettono raggi luminosi pericolosi. L'appartenenza alla classe 1 è ammissibile perché il fascio di luce laser è completamente protetto durante tutte le fasi di funzionamento.

VORSICHT: Dieses System ist nach den Laser-Leistungsstandards des U.S. Department of Health, Education, and Welfare als ein Laserprodukt der Klasse 1 zertifiziert. Diese Laserproduktklasse gibt keine gefährliche Laserstrahlung ab. Eine Berechtigung der Klasse 1 ist nur zulässig, weil der Laserstrahl während sämtlicher Kundenbetriebsarten vollständig umschlossen ist.

AVISO: Este sistema está certificado para cumplir con los estándares de desempeño establecidos por el Departamento de Salud, Educación y Bienestar público de los Estados Unidos como producto láser de Clase 1. A esta clase pertenecen los productos láser que no emiten una radiación de luz peligrosa. "Clase 1" es la clasificación que sólo se da cuando el rayo láser está completamente confinado durante todos los modos de operación del cliente.

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

Wait 5 minutes before performing the repair procedure. The power supply takes 5 minutes to discharge. Electricity can cause death or injury.

DANGER : Patientez 5 minutes avant de procéder à la réparation, pour que l'alimentation électrique soit entièrement déchargée. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves.

AVVERTENZA: Attendere 5 minuti prima di eseguire la procedura di riparazione. L'alimentatore richiede 5 minuti per scaricarsi. L'elettricità può causare morte o lesioni personali.

VORSICHT: Vor der Durchführung der Reparaturarbeiten 3 Minuten warten. Das Netzteil ist erst nach 5 Minuten vollständig entladen. Andernfalls besteht Stromschlag- oder Verletzungsgefahr.

AVISO: Espere 5 minutos antes de realizar la reparación. La alimentación eléctrica tarda 3 minutos¬ en descargarse. La energía eléctrica puede producir lesiones o incluso la muerte.

1 Service Call Procedures

SCP 1 Initial Actions

Service Call Procedures are used at the beginning of a service call. Use Initial Actions to collect information about the machine performance.

Also refer to Product Technical Overview Configuration Options.

Procedure

WARNING

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

WARNING

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

1. Take note of problems, error messages or error codes. If necessary, refer to GP 2 Fault Codes and History Files.
2. Power off, then power on the device, GP 4.
3. Ask the operator to describe or demonstrate the problem.
4. If the problem is the result of an incorrect action by the operator, refer the operator to the user documentation.
5. Check the steps that follow:
   a. The power lead is connected to the wall outlet and to the machine.
   b. Documents are not loaded in the DADF or on the document glass.
   c. The paper is loaded correctly.
   d. All paper trays are closed.
   e. All doors are closed.
   f. If telephone line cables are installed, ensure that the cables are connected between the line socket and the wall jack.
   g. If telephone line cables are installed, ensure that the customer telephone line is functioning.
6. Check the machine service log book for previous actions that are related to this call.
7. Go to SCP 2 Call Actions.

SCP 2 Call Actions

Use Call Actions to perform any general actions before starting to diagnose the fault.

Procedure

1. If this is the first service call to this machine, if possible, perform the actions that follow:
   a. Check the machine configuration with the customer. Check that all the required hardware and software is installed. Check that all the required hardware and software is enabled.
   b. Check that all the machine settings are entered correctly.
   c. Mark off the hardware options, software options or Tags installed on the Tag matrix cards.
   d. Enter the machine information and the customer information in the service log book.
2. Review the copy, print and fax samples.
3. Ensure the user access settings are correct. If necessary refer to the user documentation.
4. If necessary, perform GP 7 Cloning Procedure.

   NOTE: *The clone file must be taken whenever the customer changes the network controller setting or after the system software is changed.*

5. Before switching off the machine or clearing the memory, check for a customer job in the memory.
6. Go to SCP 3 Fault Analysis.

SCP 3 Fault Analysis

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

Procedure

Run the device in all modes until the fault is determined, refer to Fault Codes. If no fault is found, go to SCP 4 Subsystem Maintenance.

Fault Codes

If a fault code is displayed, go to the relevant RAP. Also refer to Unresolved Faults.

Image Quality Defects

If the image quality is defective, go to the IQ1 Image Quality Entry RAP.

Unresolved Faults

If a fault cannot be resolved using the appropriate RAP, and only if instructed by 2nd level support, obtain a device debug log file. Refer to GP 9 Obtaining a Device Debug Log File. Escalate the problem to 2nd level support.

Additional Information

If necessary, refer to the following general procedures:

- GP 1 Service Mode
- GP 2 Fault Codes and History Files
- GP 3 How to Change the System Administrator Password
- GP 4 How to Power on the Device or Power Off the Device
- GP 5 Paper and Media Size Specifications
- GP 6 Installation Space Requirements
- GP 7 Cloning Procedure
- GP 8 Administrator Log In
- GP 9 Obtaining a Device Debug Log File
- GP 10 Miscellaneous Checks
- GP 11 Restriction of Hazardous Substances
- GP 12 Firmware Upgrade
- GP 13 Glossary of Terms, Acronyms and Abbreviations
- GP 14 Shading and Print
- GP 15 How to Safely Lift or Move Heavy Modules
- For a thorough understanding of the machine's operation refer to the Product Technical Overview-section 8

SCP 4 Subsystem Maintenance

Subsystem Maintenance contains information regarding the component life of the device.

Procedure

WARNING

Switch off the electricity to the machine GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Clean the feed rollers on every call.
2. Use the control panel to check maintenance item counters, dC135.
3. Compare the counter values to those listed in Table 2.
4. Advise the customer of any routine maintenance items that are approaching or over the service limit.

Inspection

Rollers

Replace rollers when you see any of the following defects:

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

Gears

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

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

Lubrication

CAUTION

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

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

Component Life

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

Table 1 Component life expectancies

Item	Description	Print Life
1.	Pick-up Rollers	100,000 pages
2.	Transfer Rollers	100,000 pages
3.	Fuser	100,000 pages
4.	Feed Rollers	100,000 pages

Table 1 Component life expectancies

Item	Description	Print Life
5.	Toner cartridge	137,000 pages
6.	Drum cartridge	80,000 pages

HFSI

The High Frequency Service Items are shown in Table 2.

Table 2 High Frequency service items

Item	Recommended Life	Reference
Fuser assembly	100,000 pages	PL 10.10 Item 2
Transfer roll assembly	100,000 pages	PL 8.25 Item 5
Bypass retard pad	50,000 pages	PL 7.10 Item 2
DADF Friction pad	50,000 pages	PL 5.30 Item 3
DADF Feed assembly	100,000 pages	PL 5.25 Item 6
Tray 1 and Tray 2 friction pad	50,000 pages	PL 7.15 Item 7, PL 7.25 Item 7
Tray 1 and Tray 2 friction pad holder	50,000 pages	PL 7.15 Item 6, PL 7.25 Item 6
Tray 1 and Tray 2 pick-up roller	100,000 pages	PL 7.15 Item 14, PL 7.25 Item 14

SCP 5 Final Actions

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

Procedure

Perform the steps that follow. If a fault is identified, go to SCP 3 Fault Analysis:

1. If necessary, re-connect the machine to the customer's network.
2. Perform the relevant maintenance procedures. Refer to SCP 3 Subsystem Maintenance.
3. Ensure that the machine has the latest available software loaded.
4. Operate the machine in all modes. Make the copies and prints from all trays. Use the DADF and the document glass.
5. Make copies and/or prints from all trays. Check the print quality. For image quality defects, perform the IQ1 Image Quality Entry RAP.
6. Make a proof copy or print of a customer document.
7. If some of the customer's selections were changed, return the selections to the customer's settings.
8. Mark off the hardware options, software options or Tags installed on the Tag matrix cards.
9. If some changes were made to the configuration or options were added, print the configuration report. Store the configuration report with the machine log book. Discard the previous version of the configuration report.
10. If necessary, provide the customer with training.
11. Ensure the machine and service area are clean.

2 Status Indicator RAPs

01-100 Side Door Open RAP

01-100 The machine has detected that the side cover assembly is open.

Initial Actions

WARNING

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

- Ensure the side cover assembly is closed.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Enter dC330, code 01-100 side cover interlock, PL 1.10. Open and close the side cover assembly, PL 8.10 and check if the dC330 display changes.
3. Check the interlock switch actuator flag on the side cover, PL 8.10 Item 2 is not missing or damaged.
4. Check that the side cover assembly closes correctly.
5. Refer to GP 10, then check the wiring between the side cover interlock switch and the Main PWB B1025 or Main PWB B1022. If necessary, install a new side cover interlock switch and harness assembly, PL 1.10 Item 14.

01-150 Front Door Open RAP

01-150 The machine has detected that the front cover is open.

Initial Actions

WARNING

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

- Ensure the front cover is closed.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Enter dC330, code 01-100 front cover interlock, PL 1.10. Open and close the front cover assembly, PL 28.10 Item 2 and check if the dC330 display changes.
3. Check that the switch actuator flag on the front cover assembly, PL 28.10 Item 2 is not missing or damaged.
4. Check that the front cover assembly closes correctly.
5. Refer to GP 10, then check the wiring between the front cover switch and the Main PWB B1025 or Main PWB B1022. If necessary, install a new front cover switch and harness assembly, PL 1.10 Item 5.

01-200 Tray 2 Side Cover Open RAP

01-200 The machine has detected that the tray 2 side cover is open.

Initial Actions

WARNING

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

- Ensure the side cover is closed.
- Check for obstructions behind the side cover.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Enter dC330, code 08-210 T2 door open sensor, PL 7.20 Item 14. Open and close the side cover PL 7.20 Item 5 and check if the dC330 display changes.
3. Check that the sensor actuator on the side cover is not missing or damaged.
4. Check that the side cover closes correctly.
5. Refer to GP 10, then check the wiring between the T2 door open sensor and CN7 on the Tray 2 PWB.

Install new components as necessary:

1. T2 Door open sensor, PL 7.20 Item 14.
2. Tray 2 PWB, PL 7.20 Item 9.

02-100, 200 USB Faults RAP

02-100 Invalid/Unknown USB device.

02-200 Check USB memory.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Ensure that the customer is using a valid USB device with sufficient free file space.
3. Refer to GP 10, then check the wiring between the USB Host and the Main PWB B1022 or Main PWB B1025.

Install new components as necessary:

1. Front USB host cable, PL 1.10 Item 8.
2. Main PWB, PL 1.10 Item 3.

03-120 Tray 2 Interface Error RAP

03-120 The machine has detected tray 2, but a communications error has occurred.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Refer to GP 10, then check the wiring between the Main PWB B1022 or Main PWB B1025 and CN3 on the Tray 2 PWB.

Install new components as necessary:

1. Tray 2 PWB, PL 7.20 Item 9.
2. Main PWB, PL 1.10 Item 3.

03-410, 420, 450 Paper Information Mismatch RAP

03-410 The machine has detected a tray 1 paper type or size mismatch.

03-420 The machine has detected a tray 2 paper type or size mismatch.

03-450 The machine has detected a bypass tray paper type or size mismatch.

Procedure

WARNING

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

1. Power off the device, then power on the device, GP 4.
2. From the UI or CWIS check that the appropriate tray paper size and type settings are correct.
3. On the machine check that the appropriate tray media and guide settings match.
4. **03-410 Only**. Check the operation of the front and rear paper guides, PL 7.15.

   Install a new components as necessary:
   - Front guide, PL 7.15 Item 2.
   - Rear guide. PL 7.15 Item 4.
   - Left guide. PL 7.15 Item 13.
   - Pinion gear. PL 7.15 Item 11.
5. **03-420 Only**. Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Refer to GP 10, then check the wiring between the Main PWB B1022 or Main PWB B1025 and CN3 on the Tray 2 PWB.

   Check the operation of the front and rear paper guides, PL 7.25. Install a new components as necessary:
   - Front guide, PL 7.25 Item 2.
   - Rear guide. PL 7.25 Item 4.
   - Left guide. PL 7.25 Item 13.
   - Pinion gear. PL 7.25 Item 11.
6. **03-450 Only**. Check the operation of the front and rear gear racks and the pinion gear, PL 8.15.

   Install a new components as necessary:
   - Pinion gear. PL 8.15 Item 4 .
   - Bypass tray assembly, PL 8.10 Item 1.

03-650 Ambient Temperature Sensor Fault RAP

03-650 The machine has detected a fault with the ambient temperature sensor.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Refer to GP 10, then check the wiring between the temperature sensor, PL 7.40 Item 14 and the Main PWB B1022 or Main PWB B1025.
3. Install a new temperature sensor, PL 7.40 Item 14.

03-800 SD Card Failure RAP

03-800 The machine has detected a fault with the SD card.

Procedure

WARNING

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

Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.

Install new components as necessary:

1. SD card, PL 1.10 Item 13.
2. Main PWB, PL 1.10 Item 3.

03-900, 03-901 UI Fault RAP

03-900 A user interface to main PWB communications error has been detected.

03-901 The machine has detected a user interface failure.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Refer to GP 10, then check the wiring between the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3 and P/J2 on the UI PWB B1022, PL 2.10 Item 7 or CN4 on the UI PWB B1025, PL 2.15 Item 8.
3. **B1025** machines only, enter diagnostics GP 1, then perform dC305 user interface tests.
4. **B1022** machines only, enter diagnostics GP 1 then perform the System > Switch Test.

Install a new components as necessary:

1. UI PWB B1022, PL 2.10 Item 7.
2. UI PWB B1025, PL 2.15 Item 8.
3. Main PWB, PL 1.10 Item 3.

04-500 Main Motor Locked RAP

04-500 The machine has detected that the main BLDC motor does not run.

Initial Actions

WARNING

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

- Ensure the side cover assembly PL 8.10 Item 5 is closed.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off, then power on the device, GP 4.
2. Remove the toner cartridge, PL 9.10 Item 1, then remove the drum cartridge, PL 9.10 Item 2.
3. Enter dC330, code 04-100. Check the main BLDC motor (MOT04-100) runs, PL 4.10 Item 11.
4. Refer to GP 10, then check the wiring between the main BLDC motor, PL 4.10 Item 11 and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Main BLDC motor, PL 4.10 Item 11.
2. Side cover interlock switch and harness assembly, PL 1.10 Item 14.
3. Main PWB, PL 1.10 Item 3.

04-600 Fuser Fan Locked RAP

04-600 The machine has detected that the fuser fan does not run.

Initial Actions

WARNING

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

- Ensure the side cover assembly PL 8.10 Item 5 is closed.
- Check for contamination or blockage in the fuser fan, PL 10.10 Item 3.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off, then power on the device, GP 4.
2. Enter dC330, code 10-500. Check the fuser fan motor (MOT10-500) runs.
3. Refer to GP 10, then check the wiring between the fuser fan, PL 10.10 Item 3 and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Install a new fuser fan, PL 10.10 Item 3.
2. Side cover interlock switch and harness assembly, PL 1.10 Item 14.
3. Main PWB, PL 1.10 Item 3.

04-910 SMPS Fan Locked RAP

04-910 The machine has detected that the SMPS fan does not run.

Initial Actions

WARNING

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

- Ensure the front cover PL 28.10 Item 2 and side cover assembly PL 8.10 Item 5 are closed.
- Check for contamination or blockage in the SMPS fan, PL 1.10 Item 7.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off, then power on the device, GP 4.
2. Enter dC330, code 09-500. Check the SMPS fan motor (MOT09-500) runs, PL 1.10 Item 7.
3. Check the wiring between the SMPS fan, PL 1.10 Item 7 and CN4 on the HVPS PWB, PL 1.10 Item 2.

Install a new components as necessary:

1. SMPS Fan, PL 1.10 Item 7.
2. HVPS PWB, PL 1.10 Item 2.

05-100 DADF Jam 1 RAP

05-100 The lead edge or trail edge of the document failed to actuate or deactuate the scan sensor within the correct time.

Procedure

WARNING

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

Refer to Wiring Diagram B1025. Perform the steps that follow:

1. Open the DADF cover assembly, PL 5.15 Item 1. Remove any jammed paper.
2. Check the document path for damage or obstructions.
3. Check that the components that follow are clean and rotate freely.
   - Registration roller, PL 5.30 Item 8.
   - Registration roll idlers, part of the DADF cover assembly, PL 5.15 Item 1.
4. Check that the registration actuator PL 5.25 Item 4, moves freely and is not damaged.
5. Enter code 05-100. Check the document detect sensor (Q05-100). PL 5.35 Item 7.
6. Remove the DADF rear cover, PL 5.15 Item 2. Enter code 05-200. Check that the DADF motor (MOT05-200) runs, PL 5.35 Item 2 and drives the exit roller, PL 5.30 Item 7.
7. Close the DADF top cover assembly. While the DADF motor runs, stack the code 05-310 to energize the DADF registration clutch (CL05-310), PL 5.30 Item 10. Check that the registration roller, PL 5.30 Item 8 rotates.
8. Refer to GP 10 and Wiring Diagram B1025, then check the wiring between the DADF motor MOT05-200, PL 5.35 Item 2, CN3 on the DADF PWB, PL 5.15 Item 3.
9. Refer to GP 10 and Wiring Diagram B1025, then check the wiring between the DADF Regi clutch (CL05-310), PL 5.30 Item 10 and CN13 on the DADF PWB. If necessary, install a new DADF Regi clutch (CL05-310), PL 5.30 Item 10.
10. If necessary, install new components:
    - DADF PWB, PL 5.15 Item 3.
    - DADF motor MOT05-200, PL 5.35 Item 2.
    - DADF feed sub PL 5.20 Item 5.

05-300 DADF Jam 3 RAP

05-300 The lead edge of the document failed to actuate the duplex sensor within the correct time in reverse mode.

Procedure

WARNING

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

Refer to Wiring Diagram B1025. Perform the steps that follow:

1. Raise the DADF input tray assembly. PL 5.20 Item 4. Remove all jammed paper.
2. Check the document path for damage or obstructions.
3. Check that the components that follow are clean and rotate freely.
   - Exit roller, PL 5.30 Item 7.
   - Exit idle roller, PL 5.30 Item 18.
4. Check that the exit actuator, PL 5.30 Item 17 moves freely and is not damaged.
5. Enter dC330 code 05-170. Check the DADF exit sensor (Q05-170), PL 5.45 Item 2. If necessary, install a new DADF exit sensor (Q05-170), PL 5.45/2
6. Remove the DADF rear cover, PL 5.15 Item 2. Enter code 05-200. Check that the DADF motor (MOT05-200) runs, PL 5.35 Item 2 and drives the exit roller, PL 5.30 Item 7.
7. Enter dC330code 05-201. Check that the DADF motor (MOT05-200) runs, PL 5.35 Item 2 and drives the exit roller, PL 5.30 Item 7 in reverse.
8. Refer to GP 10 and Wiring Diagram B1025, then check the wiring between the DADF motor MOT05-200, PL 5.35 Item 2, and CN3 on the DADF PWB, PL 5.15 Item 3.
9. If necessary, install new components:
   - DADF PWB, PL 5.15 Item 3.
   - DADF motor MOT05-200, PL 5.35 Item 2.
   - DADF feed sub PL 5.20 Item 5.

05-400 DADF Jam 4 RAP

05-400 The lead edge or trail edge of the document failed to actuate or deactuate the scan sensor within the correct time in reverse mode.

Procedure

WARNING

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

Refer to Wiring Diagram B1025. Perform the steps that follow:

1. Open the DADF cover assembly, PL 5.15 Item 1. Remove any jammed paper.
2. Raise the DADF input tray assembly. PL 5.20 Item 4. Remove all jammed paper.
3. Check the document path for damage or obstructions.
4. Check that the following components are clean and rotate freely.
   - Feed roller, PL 5.30 Item 20.
   - SCF idle rollers, PL 5.45 Item 5.
   - Exit roller, PL 5.30 Item 7.
   - Exit idle roller, PL 5.30 Item 18.
5. Check that the document present actuator, PL 5.25 Item 5 moves freely and is not damaged.
6. Enter dC330 detect code 05-100. Check the document sensor (Q05-100). PL 5.35 Item 7.
7. Remove the DADF rear cover, PL 5.15 Item 2. Enter code 05-200. Check that the DADF motor (MOT05-200) runs, PL 5.35 Item 2 and drives the components that follow:
   - Exit roller, PL 5.30 Item 7.
   - Exit idle roller, PL 5.30 Item 18.
8. Refer to GP 10 and Wiring Diagram B1025, then check the wiring between the DADF motor MOT05-200, PL 5.35 Item 2, and CN3 on the DADF PWB, PL 5.15 Item 3.
9. If necessary, install new components:
   - DADF PWB, PL 5.15 Item 3.
   - DADF motor MOT05-200, PL 5.35 Item 2.
   - DADF feed sub PL 5.20 Item 5.

05-500 DADF Jam 5 RAP

05-500 The machine has detected that the DADF or DADF top cover assembly are open during run.

Procedure

WARNING

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

Refer to Wiring Diagram B1025. Perform the steps that follow:

1. Open the DADF cover assembly, PL 5.15 Item 1. Remove any jammed paper.
2. Raise the DADF input tray assembly. PL 5.20 Item 4. Remove all jammed paper.
3. Open the DADF. Check that the cover open sen 1 actuator, PL 14.10 Item 11, moves freely and is not damaged.
4. Enter dC330 code 05-400. Check the cover open sen 1 (S05-400), PL 14.10 Item 11.
5. Check the wiring between the cover open sen 1 and the main PWB. If necessary, install a new cover open sen 1, PL 14.10 Item 11.
6. Open the DADF cover assembly, PL 5.25 Item 2. Check that the cover open sensor actuator is not damaged.
7. Enter dC330 code 05-160. Check the cover open sensor (S05-160), PL 5.35 Item 7.
8. Check the wiring between the DADF cover open sensor and CN6 on the DADF PWB. If necessary, install a new DADF cover open sensor, PL 5.35 Item 7.
9. If necessary, install new components:
   - DADF PWB, PL 5.15 Item 3.
   - DADF feed sub PL 5.20 Item 5.

05-600 DADF Jam 6 RAP

05-600 The machine has detected that a DADF sensor is actuated when the machine is switched on.

Procedure

WARNING

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

Refer to Wiring Diagram B1025. Perform the steps that follow:

1. Open the DADF cover assembly, PL 5.15 Item 1. Remove any jammed paper.
2. Raise the DADF input tray assembly. PL 5.20 Item 4. Remove all jammed paper.
3. Check the document path for damage or obstructions.
4. Check that the actuators that follow move freely and are not damaged:
   - Registration actuator, PL 5.25 Item 4.
   - Document present actuator, PL 5.25 Item 5.
   - Exit actuator, PL 5.30 Item 17.
   - Rear rack gear guide, PL 5.40 Item 4.
   - Paper length actuator, PL 5.40 Item 8.
   - Scan actuator, PL 5.45 Item 6.
5. Enter dC330. Check the sensors that follow. Install new components as necessary:
   - Document registration sensor (Q05-130), PL 5.35 Item 7.
   - Document detect sensor (Q05-100), PL 5.35 Item 7.
   - DADF exit sensor (Q05-170), PL 5.45 Item 2.
   - Width sensor 1 (Q05-110), PL 5.40 Item 9.
   - Width sensor 2 (Q05-111), PL 5.40 Item 9.
   - Width sensor 2 (Q05-112), PL 5.40 Item 9.
   - Length sensor 1 (Q05-120), PL 5.40 Item 9.
   - Length sensor 2 (Q05-121), PL 5.40 Item 9.
   - DADF scan start sensor (Q05-140), PL 5.45 Item 2.
6. Check the wiring that follows:
   - Between the document registration sensor (Q05-130) and CN6 on the DADF PWB.
   - Between the document detect sensor (Q05-100) and CN6 on the DADF PWB.
   - Between the DADF exit sensor (Q05-170) and CN6 on the DADF PWB.
   - Between the width sensor 1 (Q05-110) and CN7 on the DADF PWB.
   - Between the width sensor 2 (Q05-111) and CN7 on the DADF PWB.
   - Between the width sensor 2 (Q05-112) and CN7 on the DADF PWB.
   - Between the length sensor 1 (Q05-120) and CN7 on the DADF PWB.
   - Between the length sensor 2 (Q05-121) and CN7 on the DADF PWB.
   - Between the DADF scan start sensor (Q05-140) and CN13 on the DADF PWB.
7. If necessary, install new components:
   - DADF PWB, PL 5.15 Item 3.
   - DADF feed sub PL 5.20 Item 5.

05-900 DADF Jam 0 RAP

05-900 The lead edge of the document failed to actuate the registration sensor within the correct time.

Procedure

WARNING

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

Refer to Wiring Diagram B1025. Perform the steps that follow:

1. Remove all jammed paper from the DADF input tray.
2. Open the DADF cover assembly, PL 5.25 Item 2. Check the document path for damage or obstructions.
3. Check the feed rollers, PL 5.30 Item 20. If necessary, clean the rollers.
4. DADF friction pad assembly, PL 5.30 Item 2. If necessary, install a new DADF friction pad assembly, PL 5.30 Item 2.
5. Check that the registration actuator PL 5.25 Item 4 moves freely and is not damaged.
6. Enter dC330 code 05-130. Check the document registration sensor, Q05-130, PL 5.35 Item 7.
7. Check the wiring between the document registration sensor and CN6 on the DADF PWB. If necessary, install a document registration sensor, Q05-130, PL 5.35 Item 7.
8. Enter dC330 code 05-200. Check that the DADF motor MOT05-200, PL 5.35 Item 2 runs.
9. While the DADF motor runs, stack the code 05-300 to energize the DADF pick up clutch (CL05-300). Check that the feed roll, PL 5.30 Item 20 rotates.
10. Check the wiring between the pick up clutch and CN13 on the DADF PWB.
11. Check the wiring between the DADF motor and CN3 on the DADF PWB.
12. If necessary, install new components:
    - DADF PWB, PL 5.15 Item 3.
    - DADF motor MOT05-200, PL 5.35 Item 2.
    - DADF feed sub PL 5.20 Item 5.

05-920 DADF Top Cover Open RAP

05-920 The machine has detected that the DADF cover assembly is open.

Procedure

WARNING

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

Refer to Wiring Diagram B1025. Perform the steps that follow:

1. Open the DADF cover assembly, PL 5.25 Item 2. Check that the DADF cover open sensor actuator on the DADF cover assembly, PL 5.15 Item 22 is not missing or damaged. If necessary, install a new DADF feed sub PL 5.20 Item 5.
2. Enter dC330 code 05-160. Check the DADF cover open sensor (Q05-160), PL 5.35 Item 7.
3. Check the wiring between the DADF cover open sensor and CN6 on the DADF PWB. If necessary, install a new DADF cover open sensor (Q05-160), PL 5.35 Item 7.
4. If necessary, install new components:
   - DADF PWB, PL 5.15 Item 3.
   - DADF feed sub PL 5.20 Item 5.

06-100, 200 LSU Error RAP

06-100 The machine has detected that the LSU did not reach a ready state within the correct time.

06-200 LSU Hsync error. The machine did not detect the laser beam within the correct time.

Procedure

WARNING

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

WARNING

Avoid exposure to laser beam. Invisible laser radiation.

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off, then power on the device, GP 4.
2. Enter dC330 codes 06-100 and 06-110. Check that the LSU motor runs, PL 1.10 Item 4.
3. Refer to GP 10, then check the flat cable between the LSU and the Main PWB B1022 or Main PWB B1025.
4. If necessary, install a new LSU, PL 1.10 Item 4.

07-110 Tray 1 Empty RAP

07-110 The machine has detected that tray 1 is empty.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Remove tray 1, PL 7.15 Item 1.
3. Enter dC330, code 07-110. Check the tray 1 paper empty sensor (Q07-110), PL 7.10 Item 6.
4. Refer to GP 10, then check the wiring between the tray 1 paper empty sensor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Tray 1 paper empty sensor, PL 7.10 Item 6.
2. Side cover interlock switch and harness assembly, PL 1.10 Item 14.
3. Main PWB, PL 1.10 Item 3.

07-130 Jam 0 From Tray 1 RAP

07-130 The lead edge of the paper failed to actuate the registration sensor within the correct time after paper was fed from tray 1.

Procedure

WARNING

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

NOTE: *The side cover assembly interlock switch PL 1.10 Item 14 must be closed to supply +24V to the motors and clutches.*

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Remove tray 1, PL 7.15 Item 1. Remove any jammed paper.
3. Check the paper path for damage or obstructions.
4. Enter dC330, code 08-500. Check the registration sensor (Q08-500), PL 8.30 Item 9.
5. Check that the registration sensor actuator moves freely and is not damaged.
6. Enter dC330, code 04-100. Run the main BLDC motor, PL 4.10 Item 11.
7. While the main BLDC motor runs stack the code 08-810 T1 pick-up clutch. Check that the tray 1 roller rotates, PL 7.15 Item 14.
8. Refer to GP 10, then check the wiring between the registration sensor, main BLDC motor, pick-up clutch and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Registration sensor, PL 8.30 Item 9.
2. Tray 1 roller, PL 7.15 Item 14.
3. Main BLDC motor, PL 4.10 Item 11.
4. Tray 1 pick-up clutch, PL 4.10 Item 8.
5. Side cover interlock switch and harness assembly, PL 1.10 Item 14.
6. Main PWB, PL 1.10 Item 3.

07-210 Paper Empty at Tray 2 RAP

07-210 The machine has detected that tray 2 is empty when the tray is full.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Remove tray 2, PL 7.20 Item 1.
3. Enter dC330, code 07-210. Check the tray 2 paper empty sensor (Q07-210), PL 7.20 Item 13.
4. Refer to GP 10, then check the wiring between the tray 2 paper empty sensor (Q07-210) and the Tray 2 PWB, PL 7.20 Item 9.
5. Refer to GP 10, then check the wiring between the tray 2 and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Tray 2 paper empty sensor, PL 7.20 Item 13.
2. Main PWB, PL 1.10 Item 3.

07-230 Jam 0 From Tray 2 RAP

07-230 The lead edge of the paper failed to actuate the registration sensor within the correct time after paper was fed from tray 2.

Procedure

WARNING

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

NOTE: *The side cover assembly interlock switch PL 1.10 Item 14 must be closed to supply +24V to the motors and clutches.*

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Remove tray 2, PL 7.20 Item 1. Remove any jammed paper.
3. Open the side access cover, PL 7.20 Item 5. Remove all jammed paper.
4. Check the paper path for damage or obstructions.
5. Enter dC330, code 08-500. Check the registration sensor (Q08-500), PL 8.30 Item 9.
6. Check that the registration sensor actuator moves freely and is not damaged.
7. Refer to GP 10, then check the wiring between the registration sensor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
8. Enter dC330, code 08-920. Run the tray 2 feed motor, PL 7.35 Item 1.
9. While the tray 2 motor runs stack the code 08-820 tray 2 clutch, PL 7.35 Item 6. Check that the feed roll assembly rotates, PL 7.20 Item 2.
10. Check the wiring between the tray 2 feed motor, PL 7.35 Item 1 and Tray 2 PWB, PL 7.20 Item 9.
11. Check the wiring between the Tray 2 PWB, PL 7.20 Item 9 and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Registration sensor, PL 8.30 Item 9.
2. Side cover interlock switch and harness assembly, PL 1.10 Item 14.
3. Tray 2 feed motor, PL 7.35 Item 1.
4. Tray 2 clutch, PL 7.35 Item 8.
5. Feed roll assembly, PL 7.20 Item 2.
6. Main PWB, PL 1.10 Item 3.

07-500 Bypass Tray Faults RAP

07-500 The machine has detected a failure to feed from the bypass tray.

07-530 The registration sensor failed to actuate within the correct time after paper was fed from the bypass tray.

Procedure

WARNING

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

NOTE: *The side cover assembly interlock switch PL 1.10 Item 14 must be closed to supply +24V to the motors and clutches.*

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Open the side cover assembly, PL 8.10 Item 5 . Check that the bypass guide area is clear and clean, PL 7.10 Item 1.
3. Check the bypass retard pad, PL 7.10 Item 2.
4. Check the operation of the bypass paper empty sensor actuator, PL 7.10 Item 8.
5. Enter dC330 code 07-510. Check the bypass paper empty sensor (Q07-510), PL 7.10 Item 6.
6. Check the wiring between the bypass paper empty sensor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
7. Enter dC330, code 08-500. Check the registration sensor (Q08-500), PL 8.30 Item 9.
8. Check that the registration sensor actuator moves freely and is not damaged.
9. Refer to GP 10, then check the wiring between the registration sensor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
10. Enter dC330, code 04-100. Run the main BLDC motor, PL 4.10 Item 11.
11. While the main BLDC motor runs stack the code 08-800 bypass feed clutch, PL 7.10 Item 12. Check that the bypass pick-up roll rotates, PL 7.10 Item 3.
12. Refer to GP 10, then check the wiring between the Main BLDC motor, registration sensor, bypass paper empty sensor, bypass feed clutch and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Bypass paper empty sensor, PL 7.10 Item 6.
2. Bypass retard pad, PL 7.10 Item 2.
3. Registration sensor, PL 8.30 Item 9.
4. Side cover interlock switch and harness assembly, PL 1.10 Item 14.
5. Main BLDC motor, PL 4.10 Item 11.
6. Bypass feed clutch, PL 7.10 Item 12.
7. Feed roll assembly, PL 7.10 Item 3.
8. Main PWB, PL 1.10 Item 3.

07-600 All Trays Empty RAP

07-600 The machine has detected that all paper trays are empty.

Procedure

WARNING

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

Go to the relevant procedure:

- 07-110 Paper Empty at Tray 1 RAP.
- 07-210 Paper Empty at Tray 2 RAP.
- 07-500 Paper Empty at Bypass Tray RAP.

08-100 Jam 1 RAP

08-100 The machine has detected a paper jam in the paperpath.

Initial Actions

- Check that the paper tray guides are set correctly.
- Check the media is of the correct type, GP 5.
- Ensure the size, orientation and type of media in the tray matches the media displayed in the UI menus.
- Check the fault history, then clear any current faults, GP 2.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

NOTE: *The side cover assembly interlock switch PL 1.10 Item 14 must be closed to supply +24V to the motors and clutches.*

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Open the side cover assembly PL 8.10 Item 5. Remove any jammed paper.
3. Check the paper path for damage or obstructions.
4. Remove the paper trays, then remove any jammed paper.
5. Enter dC330, code 08-500. Check the registration sensor (Q08-500), PL 8.30 Item 9.
6. Check that the registration sensor actuator moves freely and is not damaged.
7. Refer to GP 10, then check the wiring between the registration sensor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
8. Refer to GP 10, then check the registration feed roll, PL 8.30 Item 3 and registration idler roller, PL 8.30 Item 5. If necessary clean the rollers with a water dampened lint free cloth.
9. Enter dC330, code 04-100. Run the main BLDC motor, PL 4.10 Item 11.
10. While the main BLDC motor runs stack the code 08-850 registration clutch, PL 8.30 Item 4. Check that the registration feed roll rotates, PL 8.30 Item 3.
11. Refer to GP 10, then check the wiring between the main BLDC motor, registration clutch and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
12. Enter dC330, code 10-400. Run the fuser motor, PL 10.10 Item 5, then check the fuser rollers rotates.
13. Refer to GP 10, then check the wiring between the fuser motor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
14. Enter dC330, code 08-600. Check the exit sensor (Q08-600), PL 10.10 Item 6.
15. Refer to GP 10, then check the exit sensor actuator, PL 10.15 Item 1.
16. Enter dC330, code 04-200. Run the exit motor, PL 10.10 Item 4, then check the exit rollers rotates, PL 10.20 Item 5.
17. Refer to GP 10, then check the wiring between the exit motor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Registration sensor, PL 8.30 Item 9.
2. Registration feed roll, PL 8.30 Item 3.
3. Main BLDC motor, PL 4.10 Item 11.
4. Registration clutch, PL 8.30 Item 4.
5. Side cover interlock switch and harness assembly, PL 1.10 Item 14.
6. Fuser motor, PL 10.10 Item 5.
7. Fuser assembly, PL 10.10 Item 2.
8. Exit sensor, PL 10.10 Item 6.
9. Exit motor, PL 10.10 Item 4.
10. Exit assembly, PL 10.20 Item 1.
11. Main PWB, PL 1.10 Item 3.

08-500 Jam 2 RAP

08-500 The machine has detected a paper jam in the fuser area.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

NOTE: *The side cover assembly interlock switch PL 1.10 Item 14 must be closed to supply +24V to the motors and clutches.*

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Open the side cover assembly PL 8.10 Item 5. Remove any jammed paper.
3. Enter dC330, code 10-400. Run the fuser motor, PL 10.10 Item 5, then check the fuser rollers rotates.
4. Refer to GP 10, then check the wiring between the fuser motor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
5. Enter dC330, code 08-600. Check the exit sensor (Q08-600), PL 10.10 Item 6.
6. Enter dC330, code 04-200. Run the exit motor, PL 10.10 Item 4, then check the exit rollers rotates, PL 10.20 Item 5.
7. Refer to GP 10, then check the wiring between the exit motor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Fuser motor, PL 10.10 Item 5.
2. Fuser assembly, PL 10.10 Item 2.
3. Exit sensor, PL 10.10 Item 6.
4. Exit motor, PL 10.10 Item 4.
5. Exit assembly, PL 10.20 Item 1.
6. Main PWB, PL 1.10 Item 3.

08-600 Duplex Jam 0 RAP

08-600 The machine has detected a Jam in the duplex area.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

NOTE: *The side cover assembly interlock switch PL 1.10 Item 14 must be closed to supply +24V to the motors and clutches.*

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Open the side cover assembly PL 8.10 Item 5. Remove any jammed paper.
3. Enter dC330, code 04-220. Run the exit motor in reverse, PL 10.10 Item 4, then check the exit rollers rotates, PL 10.20 Item 5.
4. Refer to GP 10, then check the wiring between the exit motor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
5. Enter dC330, code 10-400. Run the fuser motor, PL 10.10 Item 5, then check the fuser rollers rotates.
6. Refer to GP 10, then check the wiring between the fuser motor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
7. Refer to GP 10, then check the duplex drive gear, PL 4.10 Item 3, duplex drive in gear PL 8.20 Item 3 and duplex drive out gear PL 8.20 Item 2.
8. Refer to GP 10, then check the duplex drive roller, PL 8.20 Item 6 and duplex feed roll, PL 8.20 Item 1.

Install new components as necessary:

1. Fuser motor, PL 10.10 Item 5.
2. Fuser assembly, PL 10.10 Item 2.
3. Exit sensor, PL 10.10 Item 6.
4. Exit motor, PL 10.10 Item 4.
5. Exit assembly, PL 10.20 Item 1.
6. Duplex feed roller, PL 8.20 Item 1.
7. Duplex drive roller, PL 8.20 Item 6
8. Main PWB, PL 1.10 Item 3.

09-100 Toner Low RAP

09-100 The device has detected that the toner cartridge is almost empty. The toner material may be either low or unevenly distributed within the toner cartridge.

Procedure

WARNING

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

Perform the steps that follow:

1. Remove the toner cartridge, REP 9.1.
2. Gently shake the toner cartridge horizontally to distribute the toner evenly inside the cartridge.
3. Reinstall the toner cartridge, REP 9.1.
4. Ensure that a replacement toner cartridge, PL 9.10 Item 1 is in stock.

09-200 Toner Empty RAP

09-200 The device has detected that the toner cartridge is empty.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Ensure that the toner cartridge is not empty. If necessary, install a new toner cartridge, PL 9.10 Item 1.
2. Enter dC330 code 09-600 and 09-700. Check that the toner dispense motor (MOT09-600, PL 4.10 Item 12) runs and deactuates the toner sensor (Q09-700).
3. Remove the toner cartridge, PL 9.10 Item 1 and drum cartridge, PL 9.10 Item 2. Enter dC330 code 09-600. Ensure that the toner dispense motor runs (MOT09-600) and drives the toner cartridge supply coupling/gear, PL 4.10 Item 4.
4. Check the wiring between the toner dispense motor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
5. Check the wiring between the toner cartridge connector and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
6. If necessary, install a new toner cartridge, PL 9.10 Item 1. Enter dC135 HFSI and reset the toner cartridge counter.

Install new components as necessary:

1. Toner dispense motor, PL 4.10 Item 12.
2. Toner cartridge, PL 9.10 Item 1.
3. Main PWB, PL 1.10 Item 3.

09-260 Toner Dispense Motor RAP

09-260 The toner dispense motor failure.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Remove the toner cartridge, PL 9.10 Item 1 and drum cartridge, PL 9.10 Item 2. Enter dC330 code 09-600, then check that the toner dispense motor (MOT09-600) runs and drives the toner cartridge supply coupling/gear, PL 4.10 Item 12.
2. Check the wiring between the toner dispense motor (MOT09-600) and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
3. Enter dC330 code 09-700, then check that the toner dispense motor senor (Q09-700) PL 4.10 Item 17.
4. Check the wiring between the toner dispense motor sensor and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Toner dispense motor, PL 4.10 Item 12.
2. Toner dispense motor sensor, PL 4.10 Item 17.
3. Main PWB, PL 1.10 Item 3.

09-300 Drum Warning RAP

09-300 The drum cartridge is near end of life.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. No immediate action is necessary. Ensure that a replacement drum cartridge, PL 9.10 Item 2 is in stock.

09-400 Drum Cartridge RAP

09-400 The drum cartridge has reached the end of life.

Procedure

WARNING

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

Perform the steps that follow:

1. Install a new drum cartridge, REP 9.2.
2. Enter dC135 HFSI then reset the drum cartridge counter.

09-500 Toner Cartridge Not Installed RAP

09-500 The toner cartridge is not installed or the Customer Replaceable Unit Monitor (CRUM) is not making contact.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off, then power on the device, GP 4.
2. Remove the toner cartridge, REP 9.1.
3. Check the contacts on the toner CRUM connector.
4. Reinstall the toner cartridge, REP 9.1.
5. Refer to GP 10. Check the wiring between the toner CRUM connector and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.

Install new components as necessary:

1. Toner cartridge, PL 9.10 Item 1. Enter dC135 HFSI then reset the toner cartridge counter.
2. Main PWB, PL 1.10 Item 3.

09-600, 730 Drum Cartridge Error RAP

09-600 The drum cartridge is not installed or the Customer Replaceable Unit Monitor (CRUM) is not making contact.

09-730 The device has detected a drum cartridge error.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off, then power on the device, GP 4.
2. Remove the drum cartridge, REP 9.2.
3. Check the contacts on the drum CRUM connector.
4. Reinstall the drum cartridge, REP 9.2.
5. Refer to GP 10. Check the wiring between the drum cartridge connector PL 1.10 Item 16 and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
6. Install a new components as necessary:
   - Drum cartridge, PL 9.10 Item 2.
   - Front cover switch and harness assembly, PL 1.10 Item 5.
7. Enter dC135 HFSI then reset the drum cartridge counter.

09-700, 720 Toner Supply Error RAP

09-700 The device has detected an insufficient supply of toner to the drum cartridge.

09-720 The device has detected a toner supply error.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off, then power on the device, GP 4.
2. Remove the drum cartridge, REP 9.2.
3. Check that the tape seal on the toner cartridge has been removed.
4. Perform the 09-260 Toner Dispense Motor RAP.
5. Gently shake the toner cartridge horizontally to distribute the toner evenly inside the cartridge.
6. Reinstall the drum and toner cartridges.
7. Install a new components as necessary:
   - Toner cartridge, PL 9.10 Item 1.
   - Drum cartridge, PL 9.10 Item 2.
8. Enter dC135 HFSI then reset the appropriate cartridge counter.

09-710 Image Quality Adjustment RAP

09-710 The device is performing image quality adjustments.

Procedure

No service actions are required. Advise the customer to wait until the calibrations have completed. Printing is held while the adjustments are in progress, all other machine services (if installed) are unaffected.

09-800, 810 Incompatible Toner Cartridge RAP

09-800 The device has detected an incompatible toner cartridge.

09-810 The device has detected a non Xerox toner cartridge.

Procedure

WARNING

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

Perform the steps that follow:

1. Remove the toner cartridge, REP 9.1.
2. Ensure that the toner cartridge is the correct toner cartridge for the device.
3. Install a new toner cartridge, PL 9.10 Item 1
4. Enter dC135 HFSI then reset the toner cartridge counter.

09-900, 910 Incompatible Drum Cartridge RAP

09-900 The machine has detected an incompatible drum cartridge.

09-910 The machine has detected a non Xerox drum cartridge.

Procedure

WARNING

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

Perform the steps that follow:

1. Remove the drum cartridge, REP 9.2.
2. Ensure that the drum cartridge is the correct drum cartridge for the device.
3. Install a new drum cartridge, PL 9.10 Item 2.
4. Enter dC135 HFSI then reset the drum cartridge counter.

09-950 Transfer Roller Warning RAP

09-950 The transfer roller is near end of life.

Procedure

WARNING

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

Perform the steps that follow:

1. No immediate action is necessary. Ensure that a replacement transfer roll assembly, PL 8.25 Item 5 is in stock.

09-960 Transfer Roller End of Life RAP

09-960 The transfer roller has reached the end of life.

Procedure

WARNING

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

Perform the steps that follow:

1. Install a new transfer roll assembly, PL 8.25 Item 5.
2. Enter dC135 HFSI then reset the transfer roller counter.

09-970 Transfer Roller Error RAP

09-970 The device has detected a transfer assembly error.

Procedure

WARNING

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

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Remove, then reseat the transfer roller assembly, PL 8.25 Item 5.
2. Check the transfer roller assembly for up and down movement.
3. Check the high voltage contacts between the HVPS, PL 1.10 Item 2, high voltage connector, PL 1.10 Item 6 and the transfer roller assembly for continuity.
4. Install a new components as necessary:
   - Transfer roll assembly, PL 8.25 Item 5.
   - High voltage connector, PL 1.10 Item 6.
   - HVPS, PL 1.10 Item 2.

10-100, 200 Open Fuser Error/Low Heat Error RAP

10-100 During normal operation, the temperature of the fuser has dropped below the operating level.

10-200 The fuser has failed to reach the correct operating temperature.

Initial Actions

WARNING

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

WARNING

Do not touch the fuser while it is hot.

- Enter dC330 code 10-500 Check the fuser fan runs, PL 10.10 Item 3. If necessary perform the 04-910 Fuser Fan Locked RAP.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Enter dC330 codes 10-200 (centre thermistor) and 10-210 (front thermistor) to verify the condition of the thermistors.
3. Check that the thermistors, PL 10.15 Item 9 and PL 10.15 Item 18 are clean and in good contact with the fuser heat roller.
4. Refer to GP 10, then check the wiring between the fuser assembly, PL 10.10 Item 2 and the SMPS, PL 1.10 Item 1.
5. Switch on the device, then check the fuser input voltage CON1 on the SMPS.
6. Refer to GP 10, then check the wiring between CON4 on the SMPS and the Main PWB B1022 or Main PWB B1025, PL 1.10 Item 3.
7. If the fault persists install new components as necessary:
   - Fuser assembly, PL 10.10 Item 2
   - SMPS, PL 1.10 Item 1.
   - HVPS, PL 1.10 Item 2.

10-300, 310 Fuser Over Temperature RAP

10-300 The temperature of the fuser has risen over the operating level.

10-310 The fuser temperature is under adjustment.

Initial Actions

WARNING

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

WARNING

Do not touch the fuser while it is hot.

- Enter dC330 code 10-500 Check the fuser fan motor runs, PL 10.10 Item 3. If necessary perform the 04-600 04-910 Fuser Fan Locked RAP.

Procedure

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, GP 4. Wait until the fuser has cooled down, then power on the device GP 4.
2. If the fault persists install a new fuser assembly, PL 10.10 Item 2.

14A Scanner Fault RAP

The device has detected a fault with the scanner assembly.

Procedure

WARNING

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

Scanner checkout

Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Perform the steps that follow:

1. Power off the device, then power on the device, GP 4.
2. Remove the scanner top cover assembly, PL 14.10 Item 1.
3. Refer to GP 10, then check that the scanner drive belt, PL 14.10 Item 5.
4. Enter dC330 code 05-720, then check the platen motor (MOT05-720) runs, PL 14.10 Item 6.
5. Check the wiring between (MOT05-720) and the main PWB, PL 1.10 Item 3.
6. Enter dC330, then check the platen cover sensor (S05-400), PL 14.10 Item 11.
7. Check the CIS home sensor, PL 14.10 Item 4.
8. Check the connections between the contact image sensor (CIS) and the main PWB, PL 1.10 Item 3.
9. If necessary, install new components:
   - Scanner top cover, PL 14.10 Item 1.
   - Scanner drive belt, PL 14.10 Item 5.
   - Scan motor, PL 14.10 Item 6.
   - Platen cover sensor, PL 14.10 Item 11.
   - CIS sensor, PL 14.10 Item 3.
   - CIS home sensor, PL 14.10 Item 4.
   - Scanner flat cable, PL 14.10 Item 12.

15-100 to 15-700 Scan to E-mail Faults RAP

These are the faults displayed when the device encounters scan to e-mail problems. The faults are listed in code order, together with any recommended action. Please note that service actions are limited.

Procedure

WARNING

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

Go to the relevant fault code, then perform any service actions.

15-100 Group Name has no Assigned Email Address

No email address is assigned to the group name. Remove the group name from the 'To:' field or enter a valid email address.

15-110 Email Send Failed

The email SMTP server returned an error during transmission. The SMTP server authentication may be supported but not enabled on the device or any 500 code is returned from the mail server. Resend the email.

15-130 Mail Too Large

The device is unable to split the mail and send it. This can occur when the device is configured to send a maximum mail size. For example 1.0MB and the scanned mail page exceeds this size. Increase the mail size allocation on the mail server.

15-140 Invalid Email Address

The user has attempted to enter an invalid email ID. Examples are:

- Spaces in the ID
- Invalid starting character such as '.', '+', '_', '@'
- More than one '@'

15-150 Group Not Available

The user has attempted to enter an invalid group number. Confirm that the group is available and has mail addresses associated with it.

15-160 Memory Full

The HDD is full during scan to email.

15-170 Memory Full

The device does not have enough memory to prepare the next job.

15-200 Network Controller Error

An SMTP error occurred during an Scan-to-Email operation. Switch off the device, then switch on the device, GP 4. Resend the email.

15-300 Network Connection Failure

Any communication or network failure during SMTP or LDAP operations. Check the connect i ions to the customer's network. Switch off the device, then switch on the device, GP 4.

15-310 Authentication Failure

The user has attempted to enter an invalid user name or corresponding password. Enter a valid user name and password. Re-enter the User name and password.

15-320 Mail Server Connection Failure

The device can not contact the SMTP server. Check the SMTP IP address or host name. Check that the SMTP port is open and working correctly.

15-330 DNS Connection Failure

The device cannot contact the Domain Name System to resolve the SMTP host name. Check that the DNS server is online.

15-340 Mail Exceed Server Support

The maximum configured mail size exceeds the server limit. Reduce the mail size option.

15-400 LDAP Communication Failure

The device can not contact the LDAP server. Check the LDAP IP address or host name. Check that the LDAP port is correct and open.

15-410 LDAP Search Failed

The LDAP server has returned an error during transmission. The LDAP server authentication may be supported but not enabled on the device or the maximum search results have been exceeded. Resend the email.

15-420 LDAP Search Timeout Exceeded

The LDAP search timeout parameter has been exceeded. Resend the email.

15-510 Scan Error

The device has detected an error with the scanner. Check the scanner, refer to the 14A Scanner Fault RAP.

15-600 Authentication Required

The mail server requires user authentication to be enabled. Advise the customer to contact the System Administrator to add SMTP user credentials to the device.

15-700 DNS Error

The device can not contact the DNS server or a DNS resolution failure has been detected. Check the DNS server setup or enter a valid email address.

17-100 to 17-610 Network Controller Faults RAP

These are the faults displayed when the device encounters network controller problems. The faults are listed in code order, together with any recommended actions. Please note that the service actions are limited.

Procedure

WARNING

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

Go to the relevant fault code, then perform any service actions.

17-100 IP Address is Conflicted

The IP address of the machine is being used by another device on the network. Advise the customer to contact the system administrator to change the machine's IP address.

17-110 Connection Error

The machine encountered an error when establishing a connection to the designated server. Check with the customer that the connectivity and network setup settings are correct.

17-120 Server Not Found

The machine can not find the designated server. Check with the customer that the connectivity and network setup settings are correct.

17-130 Login Error

The machine can not login to the designated server. Check with the customer that the connectivity and network setup settings are correct.

17-140 Access Denied

A permissions error occurred. Check with the customer that the connectivity and network setup settings are correct.

17-150 Lock Exists

The *.lck directory already exists.

17-200 Network Cable is Disconnected

Ensure the net work cable is connected.

17-310 Wireless Network Communication Error

Check that the USB wireless network adapter is plugged into a USB port on the machine.

Print a configuration report:

- Ensure that the USB ports are enabled.
- Ensure that the machine is configured for wireless printing.

17-510 Operation Error

An error occurred when sending the image file.

17-600 Filename is Too Long

The name of the file to be sent is longer than the destination systems limits. Shorten the file name.

17-610 Scan File Exists

The file name already exists on the destination server. Change the file name.

17-562, 563 ESolutions Communication Error RAP

17-562 The auto-registration process failed to communicate.

17-563 The machine failed to communicate with the Xerox edge server.

Procedure

WARNING

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

Perform the steps that follow:

1. Ensure that the SMart eSolutions settings are correct.
2. Check the network cable and connection.
3. Check that the machine IP address is correct.
4. **(17-563 Only)**. Check that the SMart eSolution edge host is connected and operational.

17-700 to 810 Server Error RAP

17-700 A BOOTP server error has occurred but the automatic assigning of an IP address is working.

17-710 A BOOTP server error has occurred and the automatic assigning of an IP address is not working.

17-780 A DHCP server error has occurred but the automatic assigning of an IP address is working.

17-810 A DHCP server error has occurred and the automatic assigning of an IP address is not working.

Procedure

WARNING

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

Perform the steps that follow:

1. Switch off, then switch on the device GP 4.
2. If the fault persists assign a new static IP address.

17-900 802.1X Authentication Error RAP

17-900 The 802.1X authentication failed.

Procedure

WARNING

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

Perform the steps that follow:

1. Ensure that the 802.1X EAP type, user name and password for the machine authentication switch and authentication server match.

17-919 Firmware Upgrade Error RAP

17-910 An attempt was made to load an invalid firmware upgrade file.

Procedure

WARNING

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

Perform the steps that follow:

1. Load the correct firmware upgrade file, refer to GP 12 Firmware Upgrade.

20-100 to 20-600 Network Fax Faults RAP

These are the faults displayed when the device encounters fax problems. The faults are listed in code order, together with any recommended actions. Please note that the service actions are limited.

Procedure

WARNING

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

Go to the relevant fault code, then perform any service actions.

B1025 Only. If necessary, print the embedded fax protocol report, refer to dC109.

20-100 Communication Error

A communication failure has occurred with either the fax transmission or reception. Resend the fax.

20-120 Scanning Error

While sending a fax using manual dial, a scanning error has occurred. Clear any jams. Switch off the machine, then switch on the machine. Resend the fax. If the fault persists, check the scanner, refer to the 14A Scanner Fault RAP.

20-300 Incompatible

The remote party does not have the feature the user has requested, for example, polling. Change the settings, then resend the fax.

20-400 Line Busy

The remote party did not answer. Wait, then resend the fax.

20-410 Line Error

There is a problem with the phone line, affecting transmission or reception. Try again and if necessary, wait for the line to clear.

20-500 Memory Full

The fax data memory is full. Delete any unnecessary documents awaiting transmission, wait until more memory becomes available, or split the current fax in to smaller units.

20-600 No Answer

It has not been possible to connect to the remote fax, even after re-dial attempts. Check that the remote fax is on line and try again.

3 Image Quality

Image Quality RAPs

IQ1 Image Quality Entry RAP

The purpose of this RAP is to serve as the entrance vehicle into the Image Quality RAPs section. All Image Quality RAPs must be accessed through this RAP.

The RAP will have you evaluate the copies made during the Service Call Procedures for image quality defects. It will refer you to the Image Quality Analysis RAPs, the Image Quality Defect section in order to diagnose and repair any image quality problems.

Procedure

WARNING

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

Check for the presence of the defect in IIT (Scanner/DADF) copy mode and in IOT print mode, then perform the appropriate RAP:

- If the problem occurs in print mode, go to the IQ1a IOT Image Quality Entry RAP.
- If the problem occurs in copy mode, go to the IQ1b IIT Image Quality Entry RAP.

IQ1a IOT Image Quality Entry RAP

This RAP is for troubleshooting IOT print mode problems only. Before proceeding, verify that the defect is present in print mode only. If the defect is present in IIT (Scanner/DADF) copy mode, go to the IQ1b IIT Image Quality Entry RAP.

Initial Actions

Refer to Figure 1 for the print/copy definitions.

Perform the steps that follow. If the image quality fault persists, go to Image Quality Defects:

- Discuss the IQ problem with the customer to fully understand the defect and the modes in which it occurs. Produce the customer job that displays the customer's IQ defect.
- Check the condition of the paper. Do not use incorrectly cut paper, damp paper, paper with rough edges, badly drilled paper, paper with wrapper wax or glue. Paper and media should be stored flat, enclosed in wrappers, in a cool dry environment.
- Check that the paper is within specifications, GP 5.
- Verify that the media type is set correctly.
- Inspect the paper path for items such as staples, paper clips or paper fragments.
- Check that all paper tray guides are set to the correct paper size.
- Ensure that the image adjustment mode selections are those used by the customer.
- Ensure the machine altitude NVM value is correct. Refer to ADJ 9.1 Altitude Adjustment.
- Check the original documents for defects.
- Ensure that the Drum Cartridge, PL 9.10 Item 2, and the toner cartridge, PL 9.10 Item 1, are installed correctly.
- Enter dC131 Check NVM value 09-200 Drum Life Page Counter. If the Drum Cartridge is close to end of life (80,000 feeds), install a new Drum Cartridge, PL 9.10 Item 2.
- Enter dC131. Check NVM value 09-210 Toner Cartridge Life Page Counter. If the toner cartridge is nearly empty (13,700 feeds), install a new toner cartridge, PL 9.10 Item 1.

Image Quality Defects

Compare the defective prints with the image defect descriptions listed in Table 1, then perform the corresponding corrective RAP for that defect.

Table 1 Image defects

Image Defect	Corrective RAP
Black Line or Band in the Process Direction on Print	IQ2
White Line or Band in the Process Direction on Print	IQ3
Black Bands in the Cross Process Direction on Print	IQ4
Black and White Spots on Print	IQ5
Light Image on Print	IQ6
Dark or Black Page on Print	IQ7
Uneven Density on Print	IQ8
Light or Dark Background on Print	IQ9
Ghost Image on Print	IQ10
Stains on Back of Page on Print/Copy	IQ11

Table 1 Image defects

Image Defect	Corrective RAP
Blank Page on Print	IQ12
Partial Image Void on Print/Copy/Scanned Image	IQ13
Unfused Image on Print/Copy	IQ14
Duplex Trailing Edge Fade on Print/Copy	IQ15
Duplex Blur on Print/Copy	IQ16

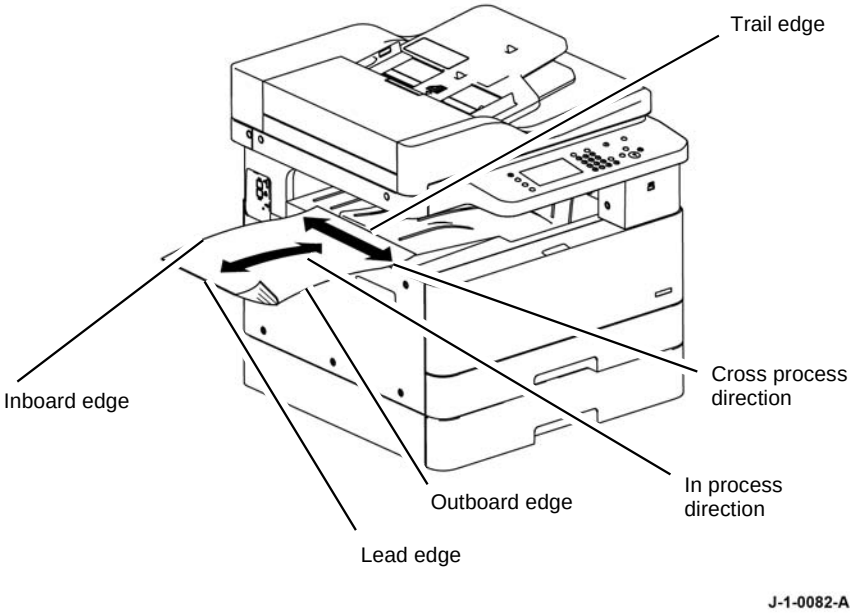


Figure 1 Print/copy definitions

IQ1 Internal Test Patterns

To print the test print from the control panel, perform dC612 Print Test Pattern.

IQ1b IIT Image Quality Entry RAP

This RAP is for troubleshooting IIT (Scanner/DADF) copy problems only. Before proceeding, verify that the defect is present in copy mode only. If the defect is present in print mode, go to the IQ1a IOT Image Quality Entry RAP.

Initial Actions

Refer to Figure 1 for the print/copy definitions.

Perform the steps that follow. If the image quality fault persists, go to Image Quality Defects:

- Discuss the IQ problem with the customer to fully understand the defect and the modes in which it occurs. Produce the customer job that displays the customer's IQ defect.
- Check the original documents for defects.
- Check that the document guides on the DADF are set correctly.
- Clean widow of the Contact Image Sensor (CIS Unit), the top and bottom surface of the platen glass, and the top and bottom surface of CVT glass with a soft, lint-free cloth, refer to ADJ 6.1 Scanner Cleaning Procedure.
- If the defect occurs only on side 2 when copies are made using the DADF, clean the CVT glass, refer to ADJ 6.1 Scanner Cleaning Procedure.
- Perform GP 14 Shading & Print routine.

Image Quality Defects

Compare the defective copies with the descriptions listed in the Table 1. Perform the corrective action listed for that defect.

Table 1 Image defects

Defect	Go To
Black Line or Band in the Process Direction on Copy/Scanned Images	IQ17
White Line or Band in the Process Direction on Copy/Scanned Images	IQ18
Black Bands in the Cross Process Direction on Copy/Scanned Image RAP	IQ19
Black and White Spots on Copy/Scanned Image RAP	IQ20
Light Image on Copy/Scanned Image	IQ21
Dark or Black Page on Copy/Scanned Image	IQ22
Uneven Density on Copy/Scanned Image	IQ23
Light or Dark Background on Copy/Scanned Image	IQ24
Ghost Image on Copy/Scanned Image	IQ25
Stains on Back of Page on Print/Copy	IQ11
Blank Page on Copy/Scanned Image	IQ26
Partial Image Void on Print/Copy Scanned Image	IQ13
Unfused Image on Print/Copy	IQ14
Duplex Trailing Edge Fade on Print/Copy	IQ15
Duplex Blur on Print/Copy	IQ16

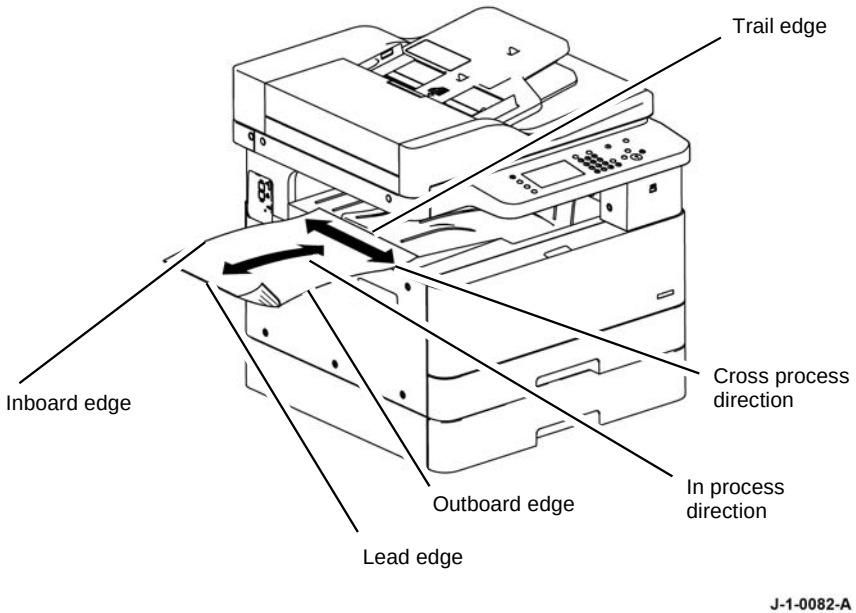


Figure 1 Print/copy definitions

IQ2 Black Line or Band in the Process Direction on Print RAP

Black lines occur in the process direction, Figure 1.

Figure 1 Black lines or bands in the process direction

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Black Lines or Bands in Process Direction

Probable Cause	Solution
The paper is not the proper type.	Use the correct media, GP 5.
The paper path is contaminated by toner residue paper dust or debris.	Clean the paper path.
The drum cartridge is defective.	Install a new drum cartridge, PL 9.10 Item 2.
The transfer roller is contaminated or worn out.	Install a new transfer roller, PL 8.25 Item 10.
The pressure roller or heat roller in the fuser assembly is defective.	Install a new fuser assembly, PL 10.10 Item 2.

IQ3 White Line or Band in the Process Direction on Print RAP

White voids occur in the process direction, Figure 1.

Figure 1 White lines or bands in the process direction

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 White Lines or Bands in Process Direction

Probable Cause	Solution
The paper is not the proper type.	Use the correct media, GP 5.
The paper path is contaminated by toner residue, paper dust or debris.	Clean the paper path.
The drum cartridge is defective.	Install a new drum cartridge, PL 9.10 Item 2.
The LSU window is contaminated.	Clean the LSU window, PL 1.10 Item 4.

Table 1 White Lines or Bands in Process Direction

Probable Cause	Solution
The connection between the LSU, PL 1.10 Item 4, and the main PWB, PL 1.10 Item 3, is defective.	• Disconnect and reconnect the harness between the LSU, PL 1.10 Item 4, and the main PWB, PL 1.10 Item 3. • Install a new LSU flat cable, PL 1.10 Item 12. • Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines.

IQ4 Black Bands in the Cross Process Direction on Print RAP

Dark of blurry stripes occur in the cross process direction, Figure 1.

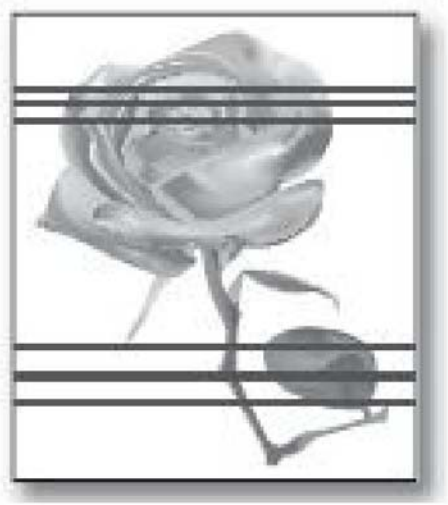


Figure 1 Cross process black bands

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Cross Process Black Bands

Probable Cause	Solution
The paper is dirty or not the proper type.	Replace the paper, GP 5.
The paper path is contaminated by toner residue paper dust or debris.	Clean the paper path.
The drum cartridge contact terminal is making a poor contact.	1. Clean the contact terminal of the drum cartridge, PL 9.10 Item 2. 2. Install a new drum cartridge, PL 9.10 Item 2.
The surface of the transfer roller is contaminated or worn out.	Install a new transfer roller, PL 8.25 Item 10.
The LSU window is contaminated.	Clean the LSU window, PL 1.10 Item 4.
The pressure roller or heat roller in the fuser assembly is defective.	Install a new fuser assembly, PL 10.10 Item 2.
The HVPS terminal is contaminated.	Clean the connections to the HVPS PWB, PL 1.10 Item 2.

Table 1 Cross Process Black Bands

Probable Cause	Solution
The output from the HVPS is abnormal.	Install a new HVPS PWB, PL 1.10 Item 2.

Roller Dimensions for Cross Process Bands

The space between regular bands in the cross process direction can indicate defective components in the paper path. Refer to Table 2 to identify defective components, refer to Figure 2. Where cross process defects repeat with spacing close to the dimensions listed below consider installing new components as described in the table.

Table 2 Paper Path Components

No.	Roller	Dimension
1	Charge roller, part of the drum cartridge, PL 9.10 Item 2.	37.7 mm
2	OPC drum, part of drum cartridge, PL 9.10 Item 2.	94.4mm
3	Developing roller, part of the drum cartridge, PL 9.10 Item 2.	35.7 mm
4	Transfer roller, PL 8.25 Item 10	59.7 mm
5	Heat roller, part of fuser assembly, PL 10.10 Item 2	75.7 mm
6	Pressure roller, part of fuser assembly, PL 10.10 Item 2	69.3 mm

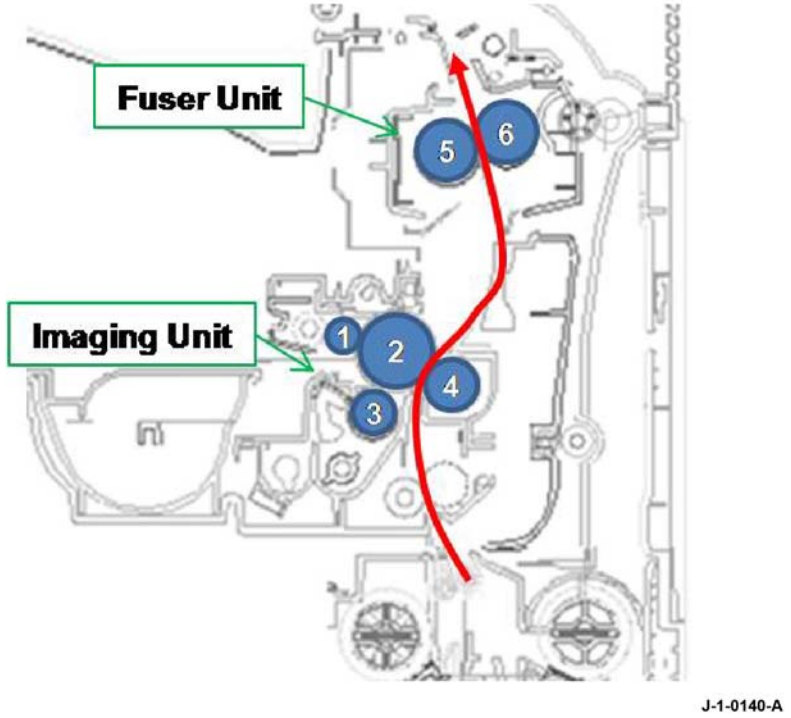


Figure 2 Paper path components

IQ5 Black and White Spots on Print RAP

Black and white spots occur on the image, Figure 1.

J-1-0150-A

Figure 1 Black and white spots

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Black and White Spots

Probable Cause	Solution
The paper path is contaminated by toner residue paper dust or debris.	Clean the paper path.
The rollers in the drum unit may be contaminated with foreign matter or paper particles.	Install a new drum cartridge, PL 9.10 Item 2.
The transfer roller is contaminated or worn out.	Install a new transfer roller, PL 8.25 Item 10.
The pressure roller or heat roller in the fuser assembly is defective.	Install a new fuser assembly, PL 10.10 Item 2.

IQ6 Light Image on Print RAP

The printed image is light, with no ghost, Figure 1.

J-1-0151-A

Figure 1 Light image

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Light Image

Probable Cause	Solution
The toner cartridge life is expired.	install a new toner cartridge, PL 9.10 Item 1.
The drum unit life is expired.	Install a new drum cartridge, PL 9.10 Item 2.
The surface of the transfer roller is contaminated or worn out.	Install a new transfer roller, PL 8.25 Item 10.
The terminal of the HVPS is contaminated.	Clean the contaminated terminal.
The output from the HVPS is abnormal.	Install a new HVPS PWB, PL 1.10 Item 2.

IQ7 Dark or Black Page on Print RAP

The printed image is dark or black, Figure 1.

J-1-0152-A

Figure 1 Dark or black page

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Dark or Black Page

Probable Cause	Solution
The charging roller in the drum unit is defective.	Install a new drum cartridge, PL 9.10 Item 2.
The HVPS contact terminal is contaminated.	Clean the contacts of the HVPS PWB, PL 1.10 Item 2.
The output from the HVPS is abnormal.	Install a new HVPS PWB, PL 1.10 Item 2.
The LSU is defective.	Install a new LSU, PL 1.10 Item 4.

IQ8 Uneven Density on Print RAP

Print density is uneven between left and right, Figure 1.

J-1-0153-A

Figure 1 Uneven density

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Uneven Density

Probable Cause	Solution
• The pressure between the left and right springs of the transfer roller is not even. • The springs are damaged. • The transfer roller is improperly installed.	1. Remove and reinstall the transfer roller, PL 8.25 Item 10. 2. Install a new transfer roller.
The toner level is not even on the drum.	Install a new drum cartridge, PL 9.10 Item 2.

IQ9 Light or Dark Background on Print RAP

Light or dark background appears in the whole area of the print, Figure 1.

J-1-0154-A

Figure 1 Light or dark background

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Light or Dark Background

Probable Cause	Solution
Is recycled paper being used	Use the correct media, GP 5.
The life of the drum cartridge has expired.	Install a new drum cartridge, PL 9.10 Item 2.
The output from the HVPS is abnormal.	Install a new HVPS PWB, PL 1.10 Item 2.

IQ10 Ghost Image on Print RAP

A ghost image occurs in the process direction, Figure 1.

J-1-0155-A

Figure 1 Ghost image

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Ghost Image

Probable Cause	Solution
The residual toner on the rollers exists.	Print 10 test prints.
The contact terminal on the drum cartridge is not making a good connection.	• Clean the contact terminal of the drum unit. • Install a new drum cartridge, PL 9.10 Item 2.
The transfer roller is contaminated or worn out.	Install a new transfer roller, PL 8.25 Item 10.
The pressure roller or heat roller in the fuser assembly is defective.	Install a new fuser assembly, PL 10.10 Item 2.
The contact terminals on the HVPS PWB are contaminated.	Clean the HVPS contact terminals, PL 1.10 Item 2.
The output from the HVPS PWB is abnormal.	Install a new HVPS PWB, PL 1.10 Item 2.

IQ11 Stains on Back of Page on Print/Copy RAP

The back of the page is marked or stained, Figure 1.

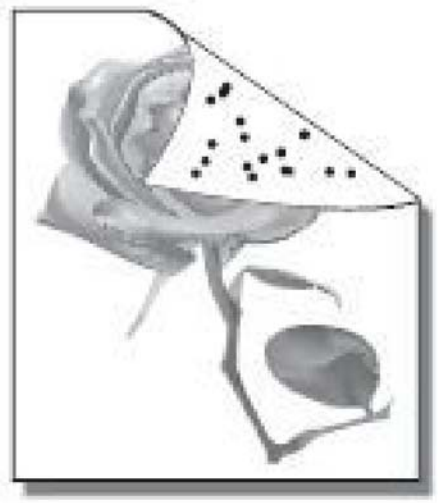


Figure 1 Stains or marks on back of page

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Stains on Back of Page

Probable Cause	Solution
The transfer roller is contaminated or worn out.	Install a new transfer roller, PL 8.25 Item 10.
The pressure roller or heat roller in the fuser assembly is defective.	Install a new fuser assembly, PL 10.10 Item 2.

IQ12 Blank Page on Print RAP

No visible image anywhere on the output, Figure 1.

Figure 1 Blank page

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Blank Page

Probable Cause	Solution
The contact terminal on the drum cartridge is making a poor connection.	• Clean the contact terminal of the drum cartridge, PL 9.10 Item 2. • Install a new drum cartridge.
The surface of the transfer roller is contaminated or worn out.	Install a new transfer roller, PL 8.25 Item 10.
The LSU window is contaminated.	1. Clean the LSU window, PL 1.10 Item 4. 2. Replace the LSU.

Table 1 Blank Page

Probable Cause	Solution
The connection between the LSU, PL 1.10 Item 4, and main PWB, PL 1.10 Item 3 is defective.	1. Disconnect and reconnect the harness. 2. Install a new LSU flat cable, PL 1.10 Item 12. Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines.
The connection between the main PWB, PL 1.10 Item 3, and HVPS PWB, PL 1.10 Item 2, is defective.	1. Disconnect and reconnect the harness. 2. Install a new HVPS I/F flat cable, PL 1.10 Item 11. Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines. Install a new main PWB, PL 1.10 Item 3, or HVPS PWB, PL 1.10 Item 2, as necessary.

IQ13 Partial Image Void on Print/Copy/Scanned Image RAP

A partial void occurs on the printed page, Figure 1.

Figure 1 Partial image void

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Partial Image Void

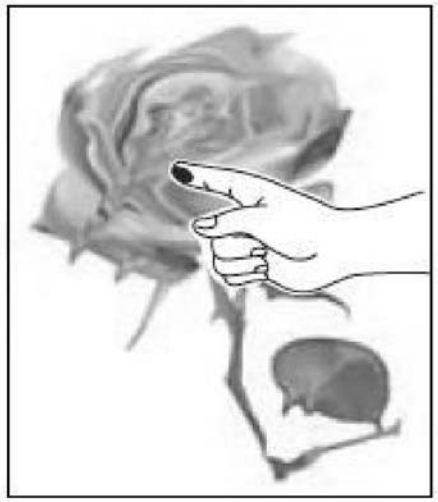
Probable Cause	Solution
The printer is not installed on a level surface.	Install the printer on flat level surface. Print 10 sample pages for test.
The developer in the drum cartridge is not circulating properly.	1. Shake the drum cartridge 2~3 times from right to left. Reinstall the drum cartridge. Print 10 sample pages for test. 2. If the problem persists install a new drum cartridge, PL 9.10 Item 2.
Paper idler roll dust cleaner is clogged.	Remove and clean the registration idler roll paper dust cleaner, PL 8.30 Item 10.

Table 1 Partial Image Void

Probable Cause	Solution
There is a poor contact between the drum cartridge, PL 9.10 Item 2, and transfer roller, PL 8.25 Item 10.	1. Check the drum cartridge, PL 9.10 Item 2, and transfer roller, PL 8.25 Item 10, are installed properly. 2. Disconnect and reconnect the harness. 3. Repair the harness or install a new harness as necessary. Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines.

IQ14 Unfused Image on Print/Copy RAP

The printed image is not fully fused to the paper. The image rubs off easily, Figure 1.



J-1-0159-A

Figure 1 Unfused image

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Unfused Image

Probable Cause	Solution
The papers are damp with moisture.	Replace the paper, GP 5.
The fuser assembly is correctly installed.	Remove and reinstall the fuser assembly, PL 10.10 Item 2.
There is a poor connection between the fuser assembly, PL 10.10 Item 2, and the main PWB, PL 1.10 Item 3.	1. Check the connection between the fuser assembly and the main PWB. 2. Repair the harness or install a new harness as necessary. 3. Refer to Wiring Diagram 1 for B1022 Machines or Wiring Diagram 2 for B1025 Machines.
The fuser assembly is defective.	Install a new fuser assembly, PL 10.10 Item 2.

IQ15 Duplex Trailing Edge Fade on Print/Copy RAP

Image fade occurs on the trailing edge of a duplex image within 3mm of the edge of the image. This error occurs on coping only.

The registration sensor detects paper exit but main bias timing is inaccurate due to build-up of mechanical tolerances. This causes 1mm sensing deviation which can generate a voltage drop and 3mm fade at the bottom of a duplex page.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Tune up the step bias at 2mm from the bottom of the page on duplex copies.

Refer to Figure 1 and Figure 2.

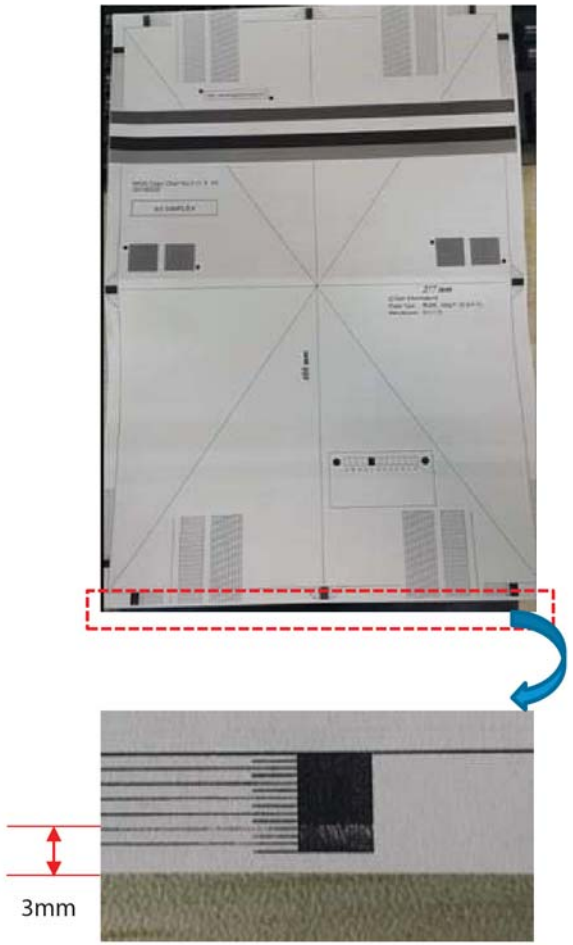


Figure 1 Trailing edge fade

1. Enter NVM Read/Write, dC131.
2. Select location 09-340.
3. Increase the value of NVM 09-340 in 1mm increments. (Available range 0 to 20mm, default value 10)

J-1-0185-A

Figure 2 Trailing edge with solution applied

IQ16 Duplex Blur on Print/Copy RAP

While duplex printing blur around solid pattern areas can appear in certain environments with high resistance paper.

Procedure

WARNING

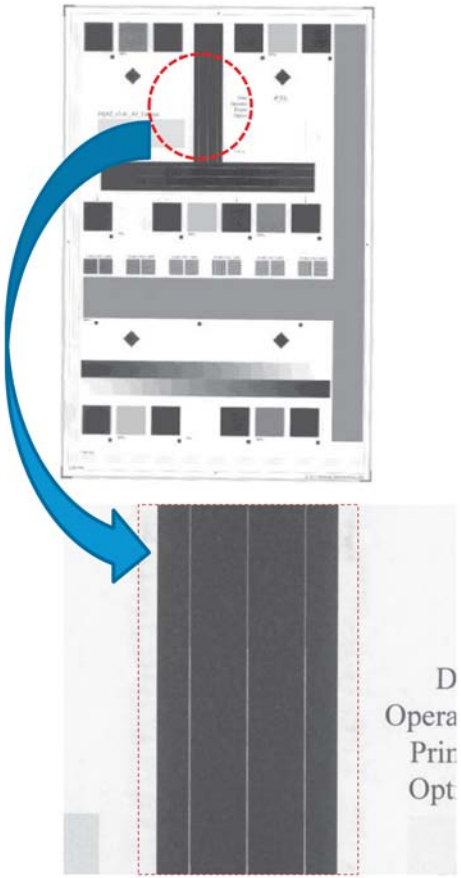
Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Refer to GP 4. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

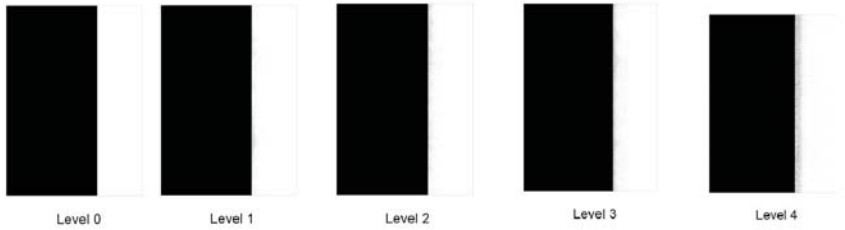
1. Enter NVM Read/Write, dC131.
2. Select location 09-330.
3. Increase the value of NVM 09-330 in increments of 1 until a suitable result is achieved. (Available range 0 to 20, default value 10)

Refer to Figure 1 and Figure 2.



J-1-0186-A

Figure 1 Duplex blur



J-1-0187-A

Figure 2 Examples of adjustment for duplex blur

IQ17 Black Line or Band in the Process Direction on Copy/ Scanned Image RAP

Black lines occur in the process direction only on copy/scanned images, Figure 1.

Figure 1 Black lines or bands in the process direction

Initial Actions

- Confirm output has white boarders around the edges of paper.
- Confirm the problem is only observed on copies.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Black Lines or Bands in Process Direction

Probable Cause	Solution
The streaks only appears when DADF was used to make a copy.	Clean the top and bottom surface of the CVT glass, PL 14.10 Item 1 and CVT backing plate – chute, ADJ 5.2.

Table 1 Black Lines or Bands in Process Direction

Probable Cause	Solution
The streaks only appears when platen glass was used to make a copy.	Clean the top and bottom surface of the platen glass, PL 14.10 Item 1, ADJ 6.1 and DADF document pad, PL 5.10 Item 2, ADJ 5.2.
The streaks appears when platen glass or DADF were used to make a copy.	Clean the surface of CIS Unit sensor, PL 14.10 Item 3, ADJ 6.1. If the fault persists, install a new CIS Unit PL 14.10 Item 3.

IQ18 White Line or Band in the Process Direction on Copy/ Scanned Image RAP

White voids occur in the process direction on copy/scanned images, Figure 1.

Figure 1 White lines or bands in the process direction

Initial Actions

- Confirm output has white boarders around the edges of paper.
- Confirm the problem is only observed on copies.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 White lines or bands in process direction on copies

Probable Cause	Solution
The streaks only appears when DADF was used to make a copy.	Clean the top and bottom surface of the CVT glass, PL 14.10 Item 1, ADJ 6.1 and pickup guide, PL 5.30 Item 4, ADJ 5.2.

Table 1 White lines or bands in process direction on copies

Probable Cause	Solution
The streaks only appears when platen glass was used to make a copy.	Clean the top and bottom surface of the platen glass,PL 14.10 Item 1, ADJ 6.1 and DADF document pad, PL 5.10 Item 2 or document cover pad, PL 5.50 Item 5, ADJ 5.2.
The streaks appears when platen glass or DADF were used to make a copy.	Clean the surface of CIS Unit sensor, PL 14.10 Item 3, ADJ 6.1. If the fault persists, install a new CIS Unit PL 14.10 Item 3.

IQ19 Black Bands in the Cross Process Direction on Copy/Scanned Image RAP

Dark of blurry stripes occur in the cross process direction on copy/scanned images, Figure 1.

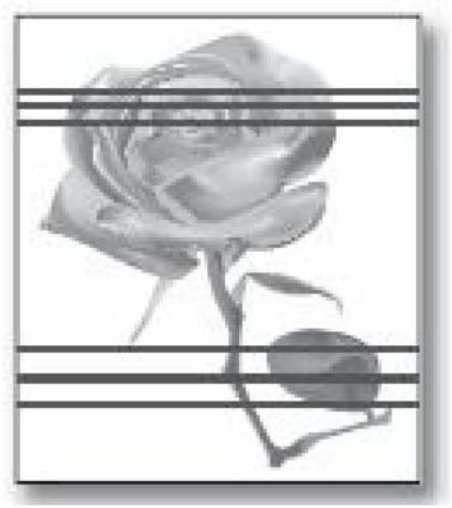


Figure 1 Cross process black bands

Initial Actions

- Confirm output has white boarders around the edges of paper.
- Confirm the problem is only observed on copies.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Cross process black bands on copies

Probable Cause	Solution
Carriage movement creating inconsistent banding.	Clean the carriage rail PL 14.10 Item 9 and apply grease/lubricant.
Carriage Drive timing belt creating high frequency banding.	Install a new timing belt on contact image sensor PL 14.10 Item 5.
Video signal creating inconsistent noise in the surface of paper.	1. Install a new contact image sensor PL 14.10 Item 3. 2.Install a new platen motor PL 14.10 Item 6.

IQ20 Black and White Spots on Copy/Scanned Image RAP

Black and white spots occur on the image, Figure 1.

Figure 1 Black and white spots

Initial Actions

- Confirm the problem is only observed on copies.
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Black and white Spots on copies

Probable Cause	Solution
Platen glass is dirty – only happens when copy from platen glass.	Clean the top and bottom surface of the platen glass,PL 14.10 Item 1, ADJ 6.1.

IQ21 Light Image on Copy/Scanned Image RAP

The printed image is light, with no ghost, Figure 1.

Figure 1 Light image

Initial Actions

- Confirm output has white boarders around the edges of paper.
- Confirm the problem is only observed on copies.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Light Image

Probable Cause	Solution
Platen glass is dirty.	Clean the top and bottom surface of the platen glass,PL 14.10 Item 1, ADJ 6.1.
Window of CIS unit is dirty	Clean the top and bottom surface of the CVT glass, PL 14.10 Item 1, ADJ 6.1.

IQ22 Dark or Black Page on Copy/Scanned Image RAP

The printed image is dark or black on copy/scanned images, Figure 1.

Figure 1 Dark or black page

Initial Actions

- Confirm output has white boarders around the edges of paper.
- Confirm the problem is only observed on copies.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Dark or Black Page

Probable Cause	Solution
Poor contact of the FFC cable.	Reseat the cable on the CIS Unit PL 14.10 Item 3 and Main PWB PL 1.10 Item 3.
Defective CIS Unit.	Install a new contact image sensor PL 14.10 Item 5.
Defect Main PWB	Install a new Main PWB PL 1.10 Item 3.

IQ23 Uneven Density on Copy/Scanned Image RAP

Print density is uneven between left and right on copy/scanned images, Figure 1.

J-1-0221-A

Figure 1 Uneven density

Initial Actions

- Confirm output has white boarders around the edges of paper.
- Confirm the problem is only observed on copies.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Dark or Black Page

Probable Cause	Solution
The scanner top cover is not seated properly.	Reseat the scanner top cover, PL 14.10 Item 1 onto the lower cover, PL 14.10 Item 8.
The space guides are not seated properly, this may cause unwanted noise.	Reseat the space guides PL 14.10 Item 10 on the contact image sensor, PL 14.10 Item 3.
The inboard and/or outboard springs on the contact image sensor are damaged, this may cause unwanted noise.	Install a new contact image sensor, PL 14.10 Item 3.

IQ24 Light or Dark Background on Copy/Scanned Image RAP

Light or dark background appears in the whole area of the copy/scanned images, Figure 1.

J-1-0222-A

Figure 1 Light or dark background

Initial Actions

- Confirm output has white boarders around the edges of paper.
- Confirm the problem is only observed on copies.
- Enable/Disable Auto Background Suppression in Copy Feature, then check if the copy improves.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Light or Dark Background

Probable Cause	Solution
DADF or Document Cover not seated flat on platen glass	Clean the DADF or document cover, ADJ 5.2.
Contaminated cover pad.	Clean the top and bottom surface of the platen glass, PL 14.10 Item 1, ADJ 6.1. Clean the DADF cover pad, PL 5.10 Item 2 or document cover pad, PL 5.50 Item 5.

IQ25 Ghost Image on Copy/Scanned Image RAP

A ghost image occurs in the process direction on copy/scanned image, Figure 1.

Figure 1 Ghost image

Initial Actions

- Confirm the problem is only observed on copies.
- Enable/Disable Auto Background Suppression in Copy Feature, then check if the copy improves.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Ghost image on copies

Probable Cause	Solution
Light weight paper being used causing to show-through from side-2 image.	Use the correct media, refer to GP 5.
Over exposed light causing to show-through from side-2 image	Install a new contact image sensor, PL 14.10 Item 3.

IQ26 Blank Page on Copy/Scanned Image

No visible image anywhere on the output, Figure 1.

Figure 1 Blank page

Initial Actions

- Confirm the problem is only observed on copies.
- Perform GP 14 Shading & Print Routine to confirm result(s)
- If the problem persists, go to Table 1.

Procedure

WARNING

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

WARNING

Do not touch the fuser while it is hot.

Table 1 Blank Page

Probable Cause	Solution
Scanner flat ribbon video cable, PL 14.10 Item 12 is disconnected between CIS Unit and Main PWB	Reseat the cable on both ends – contact image sensor, PL 14.10 Item 3 and the Main PWB, PL 1.10 Item 3.
The CIS Unit is defective.	Install a new contact image sensor, PL 14.10 Item 3.

4 Repairs and Adjustments

REP 1.1 Switching Mode Power Supply (SMPS) and SMPS Fan

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 Lethal voltage

WARNING

Wait 5 minutes before performing the repair procedure. The power supply takes 5 minutes to discharge. Electricity can cause death or injury.

Figure 2 ESD Symbol

CAUTION

Observe ESD procedures during this procedure.

1. Switch off the device, GP 4, then disconnect the power cord.
2. Remove the rear cover, REP 28.1.
3. Remove the SMPS fan, Figure 3.

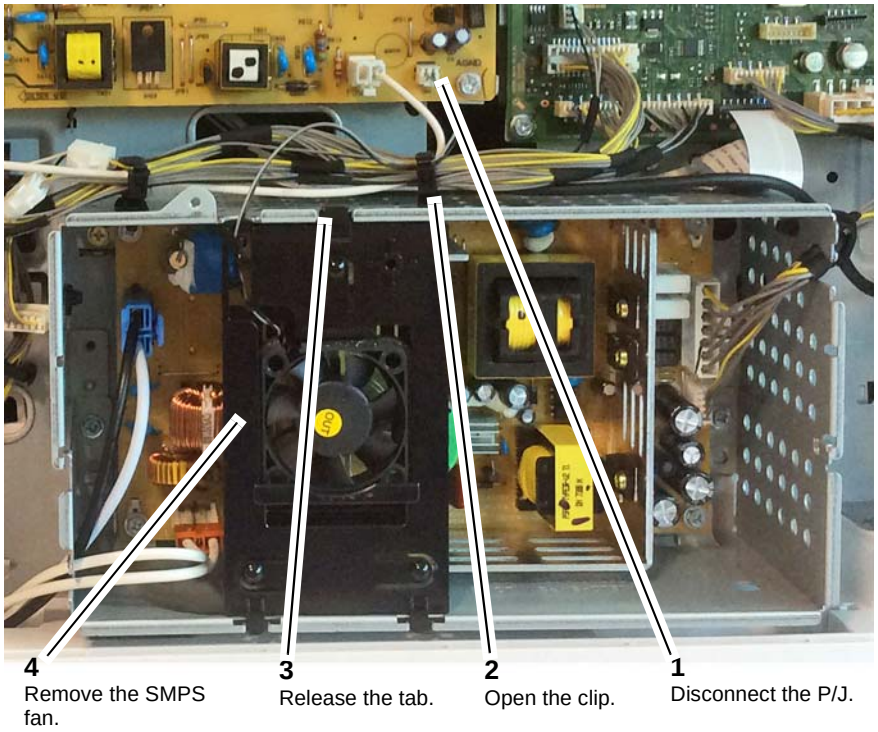


Figure 3 SMPS Fan

4. Remove the SMPS, Figure 4.

NOTE: *Do not use excessive force to disconnect CON 2 on the SMPS. CON 2 can be a tight fit and difficult to disconnect. If necessary, first remove the SMPS from the housing to gain better access to this connector.*

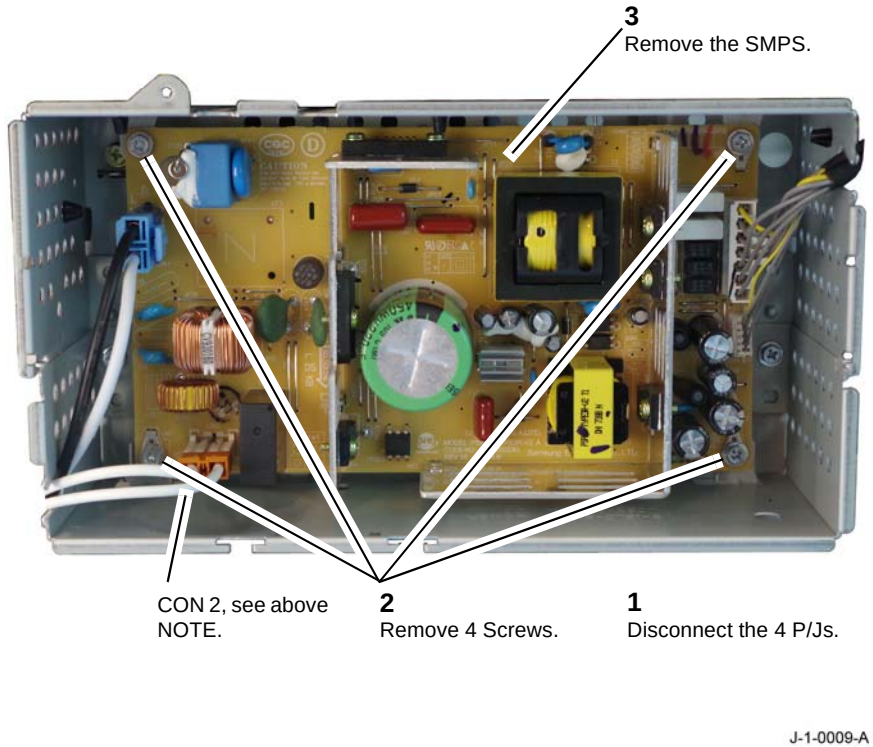


Figure 4 SMPS removal

Replacement

The replacement is the reverse of the removal procedure.

REP 1.2 Front Cover Switch

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *The front cover switch is not an individual item. The front cover switch is part of the Front cover switch, drum cartridge and exit switch harness.*

1. Remove the toner cartridge, REP 9.1.
2. Remove the drum cartridge, REP 9.2.
3. Remove the front inner cover, REP 28.4.
4. Remove the front top cover, REP 28.8.
5. Remove the rear cover, REP 28.1.
6. Disconnect the harness from the main PWB, Figure 1.

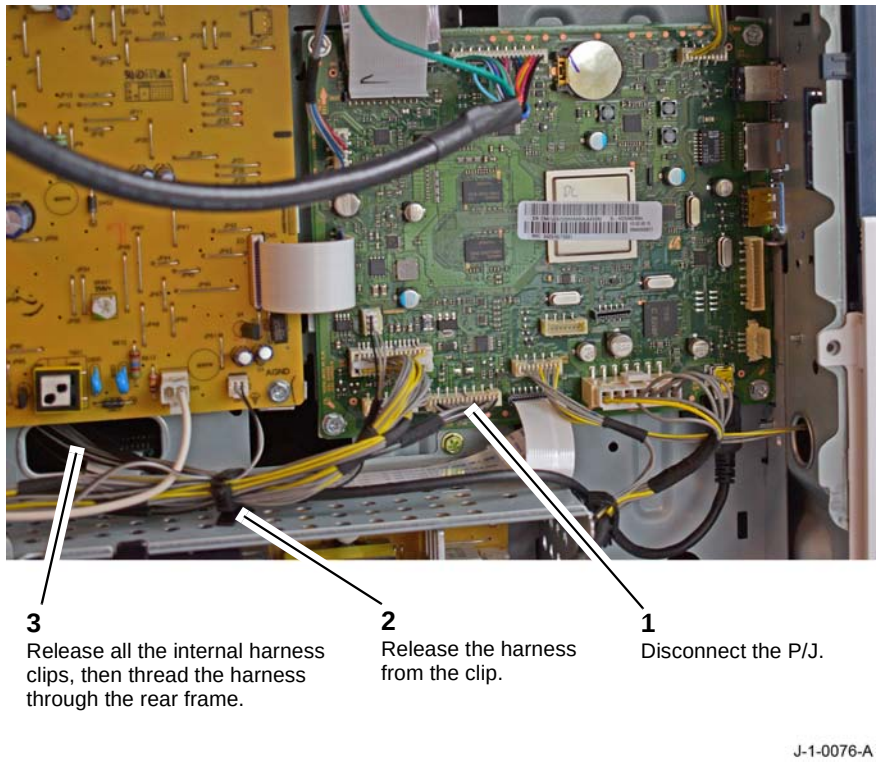


Figure 1 Main PWB connection

7. Remover the front cover switch, Figure 2.

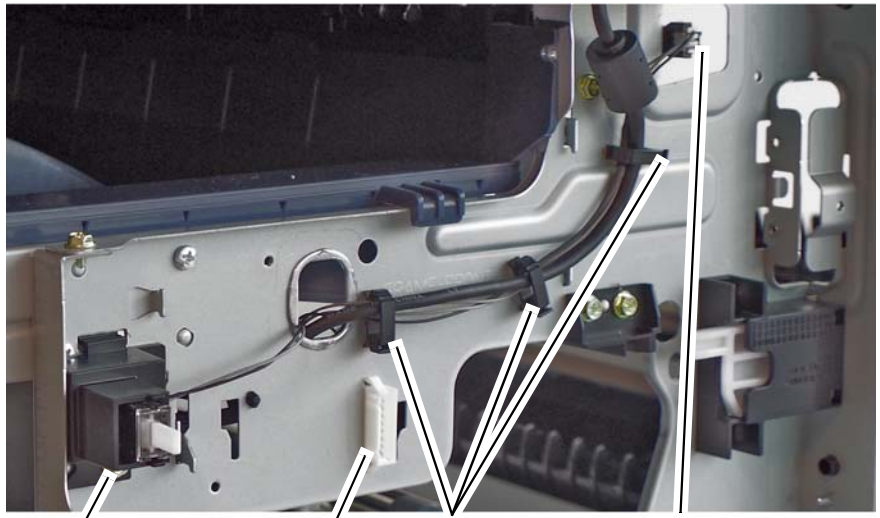


Figure 2 Release the harness

8. Remove the front cover switch, Figure 3.

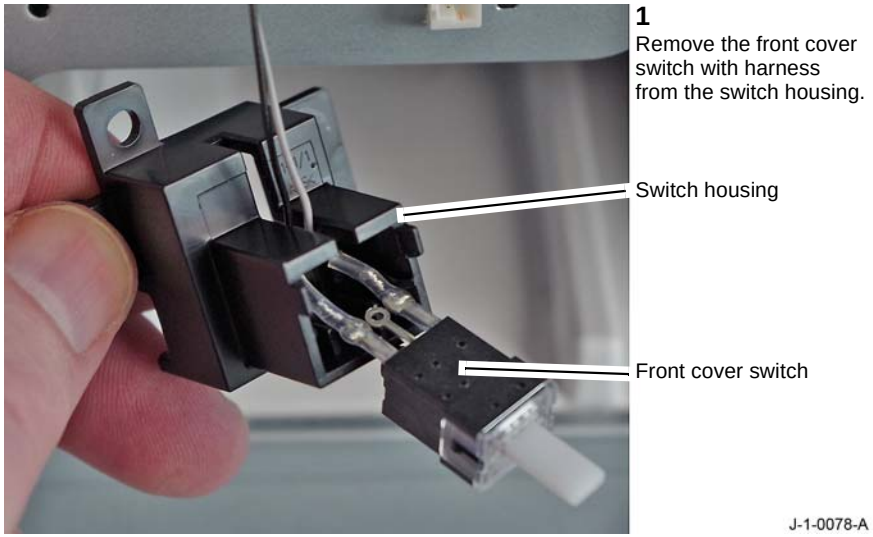


Figure 3 Switch removal

Replacement

The replacement is the reverse of the removal procedure.

REP 1.3 High Voltage Power Supply (HVPS)

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Observe ESD procedures during this procedure.

1. Switch off the device, GP 4, then disconnect the power cord.
2. Remove the rear cover, REP 28.1.
3. Remove the scanner rear cover, REP 28.5 with document cover, REP 28.6 with DADF.
4. Remove the HVPS, Figure 2.

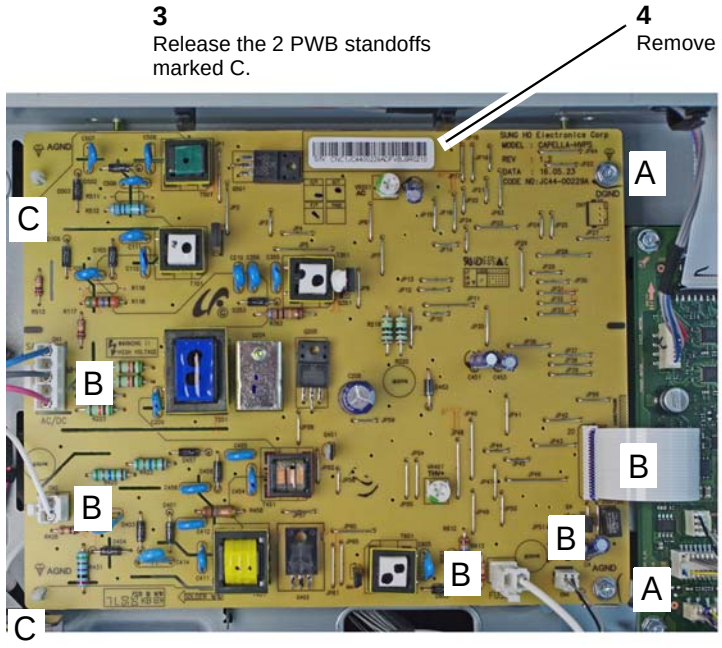


Figure 2 HVPS removal

Replacement

The replacement is the reverse of the removal procedure.

REP 1.4 Main PWB

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Observe ESD procedures during this procedure.

1. If a new main PWB is to be installed clone the device configuration settings, GP 7.
2. If a new main PWB is to be installed export the Address Book, Email contacts & Device User Database:
   a. In CWIS select the Address Book tab, on the pull down menu select Export, then click on the Export button.
   b. In CWIS select the Properties tab. Log in as an administrator, GP 8. Select Login/ Permissions, select Device User Database, then click on the Export to File button.
3. Switch off the device, GP 4, then disconnect the power cord.
4. Remove the rear cover, REP 28.1.

   NOTE: *Although Figure 2 depicts a B1025 type Main PWB the removal procedure is common for B1022 devices.*

5. If installed remove the Fax module, PL 20.10.
6. If installed disconnect network, USB and telephone/fax cables.
7. Remove the Main PWB, Figure 2.

1
Disconnect all P/J and flat cable connectors.

2
Remove 4 screws marked A.

3
Remove the main PWB.

J-1-0011-A

Figure 2 Main PWB

Replacement

The replacement is the reverse of the removal procedure.

- Perform the Shading and Print Routine, GP 14.

REP 1.5 High Voltage Connector

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Take care during this procedure. Sharp edges may be present that can cause injury.

1. Remove the rear cover, REP 28.1.
2. Disconnect the high voltage connector, Figure 1.

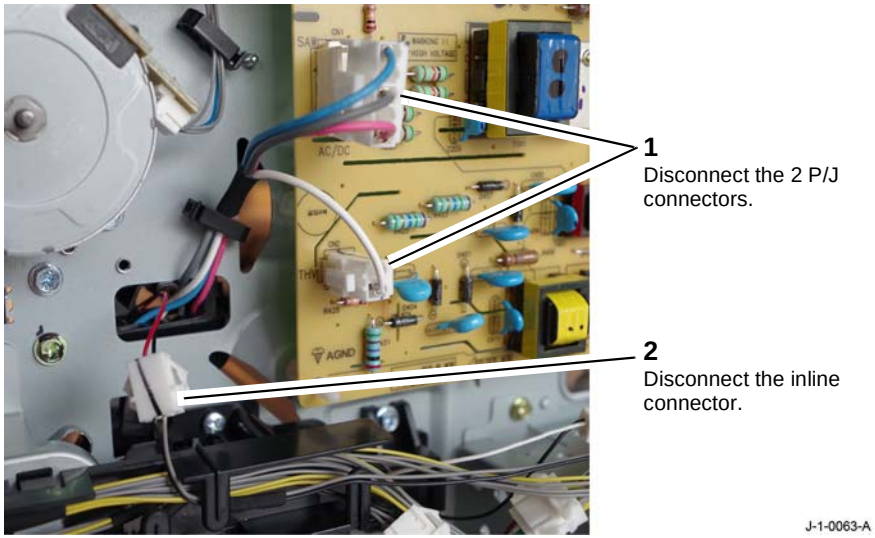


Figure 1 High voltage connector PJs

3. Remove the exit cover, REP 28.8.
4. Remove the drum cartridge, REP 9.2.
5. Prepare to remove the high voltage connector, Figure 2.

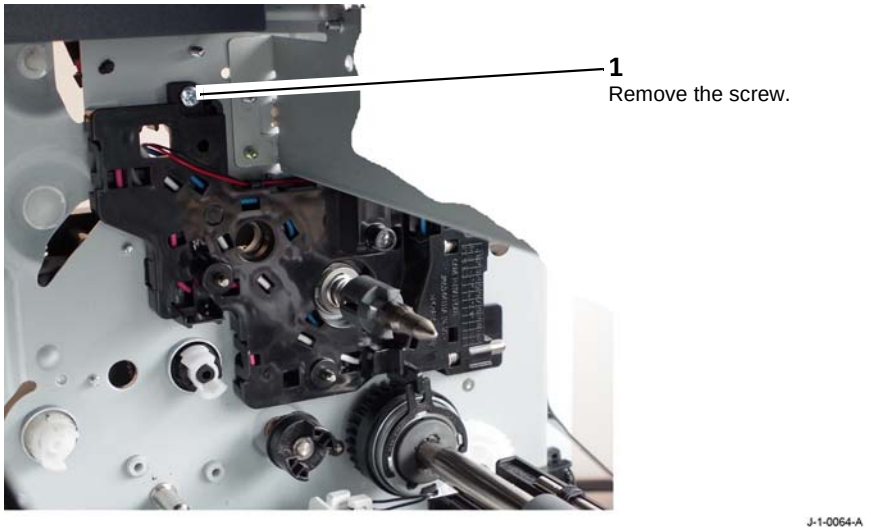


Figure 2 High voltage connector screw

6. Remove the high voltage connector, Figure 3.

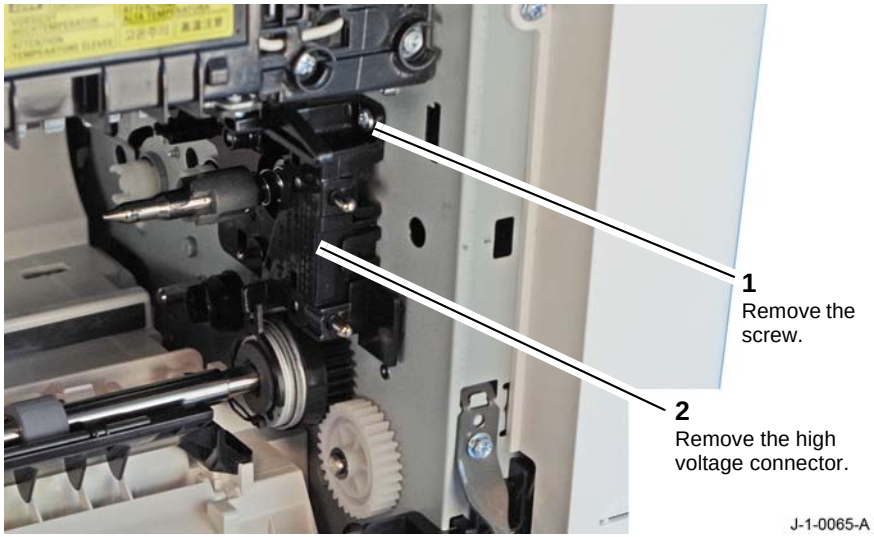


Figure 3 High voltage connector removal

Replacement

The replacement is the reverse of the removal procedure.

REP 1.6 Front USB Host Cable

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, REP 28.1.
2. Remove the drum cartridge, REP 9.2.
3. Remove the front inner cover, REP 28.4.
4. Remove the front top cover, REP 28.8.
5. Disconnect the USB host cable, Figure 1.

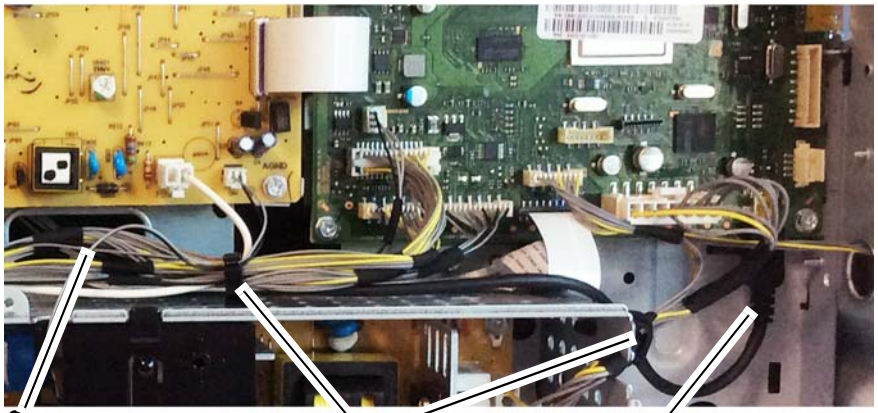


Figure 1 Disconnect the USB host cable

6. Release the USB host cable assembly, Figure 2.

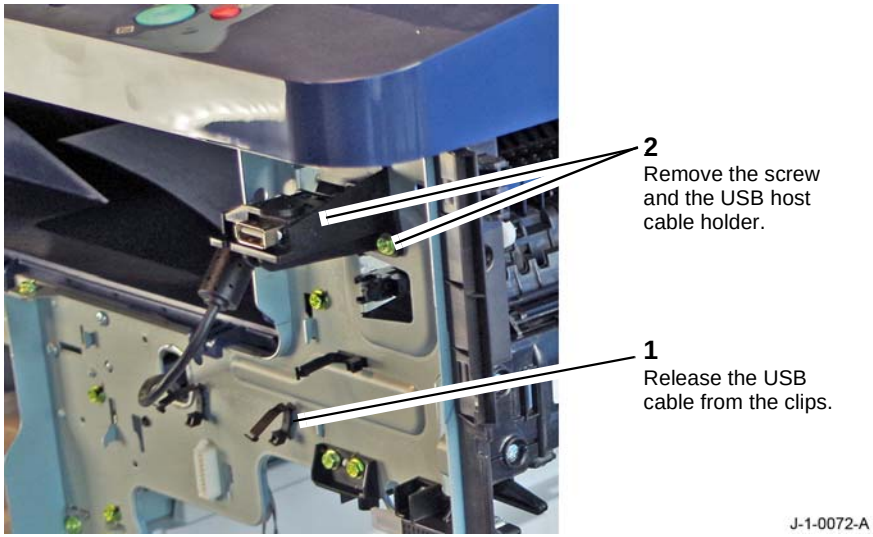


Figure 2 USB socket

7. Remove the USB cable, Figure 3.

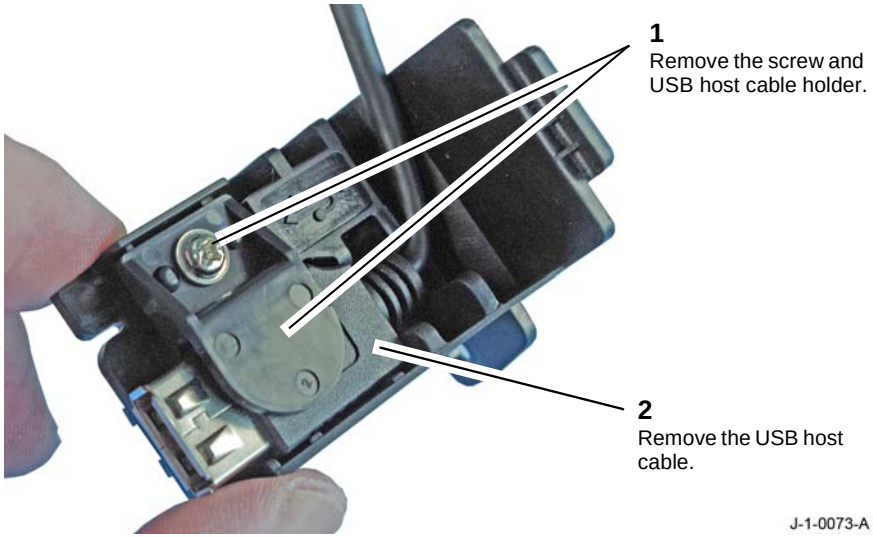


Figure 3 USB host cable removal

Replacement

The replacement is the reverse of the removal procedure.

REP 1.7 Side Cover Interlock Switch and harness assembly

Parts List on PL 1.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *The side cover interlock switch is not an individual item. The side cover interlock switch is part of a harness assembly that connects the following components to the main PWB, PL 1.10 Item 3.*

- *Side cover interlock switch, PL 1.10 Item 14.*
- *Main BLDC motor, PL 4.10 Item 11.*
- *Bypass paper empty sensor, PL 7.10 Item 6.*
- *Tray 1 paper empty sensor, PL 7.10 Item 6.*
- *Bypass feed clutch, PL 7.10 Item 12.*
- *Registration clutch, PL 8.30 Item 4.*
- *Registration sensor, PL 8.30 Item 9.*
- *Fuser fan, PL 10.10 Item 3.*
- *Tray 1 pick-up clutch, PL 4.10 Item 8.*

1. Remove the rear cover, REP 28.1.
2. Remove the fuser fan, REP 10.5.
3. Prepare to remove the side cover interlock switch, Figure 1.

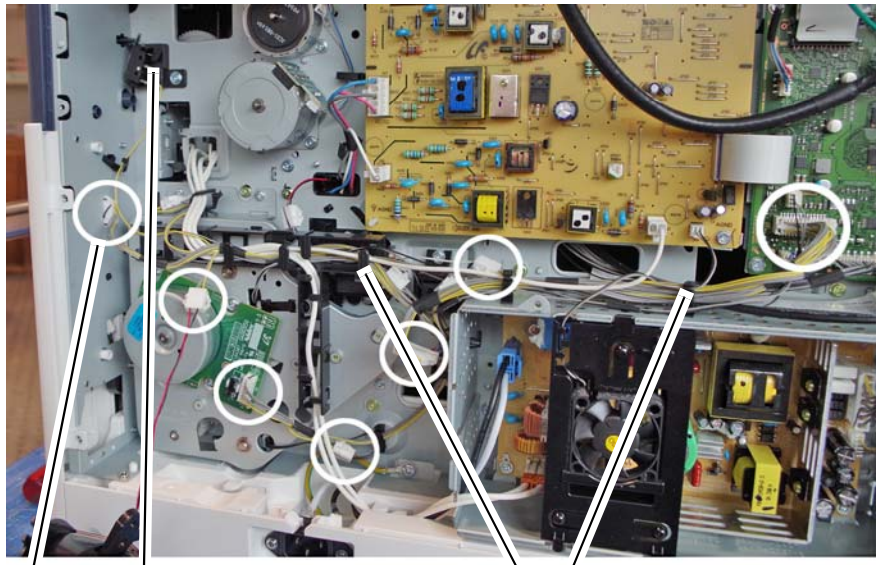


Figure 1 Interlock switch harness

4. Remove the side cover interlock switch, Figure 2.

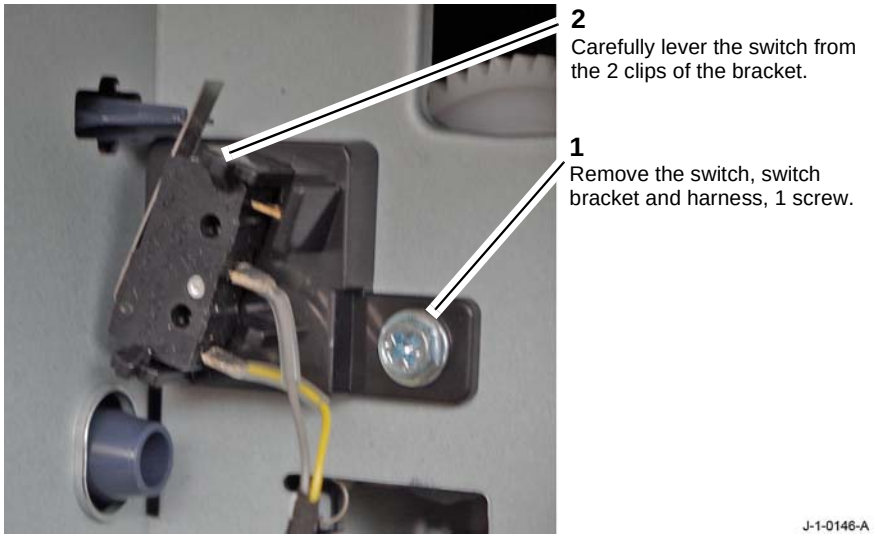


Figure 2 Side cover interlock switch

Replacement

The replacement is the reverse of the removal procedure.

REP 2.1 User Interface B1022

Parts List on PL 2.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Observe ESD procedures during this procedure.

1. Remove the left scanner cover, REP 28.7.
2. Prepare to remove the user interface, Figure 2.

2
The user interface is a snap fit. Use a flat bladed screwdriver to carefully lever the user interface off the scanner lower cover.

1
Carefully lever off the screw cover, then remove the screw.

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Figure 2 B1022 user interface

3. Remove the user interface, Figure 3.

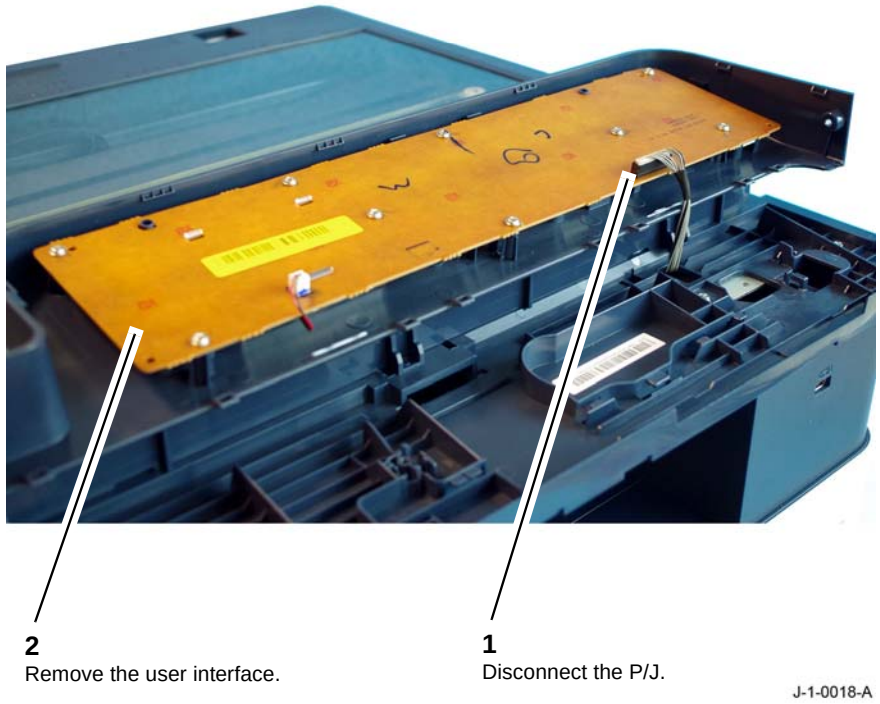

Figure 3 Disconnect the UI PWB

Replacement

The replacement is the reverse of the removal procedure.

REP 2.2 User Interface B1025

Parts List on PL 2.15

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Observe ESD procedures during this procedure.

1. Remove the left scanner cover, REP 28.7.
2. Prepare to remove the user interface, Figure 2.

Figure 2 B1025 user interface

3. Remove the user interface, Figure 3.

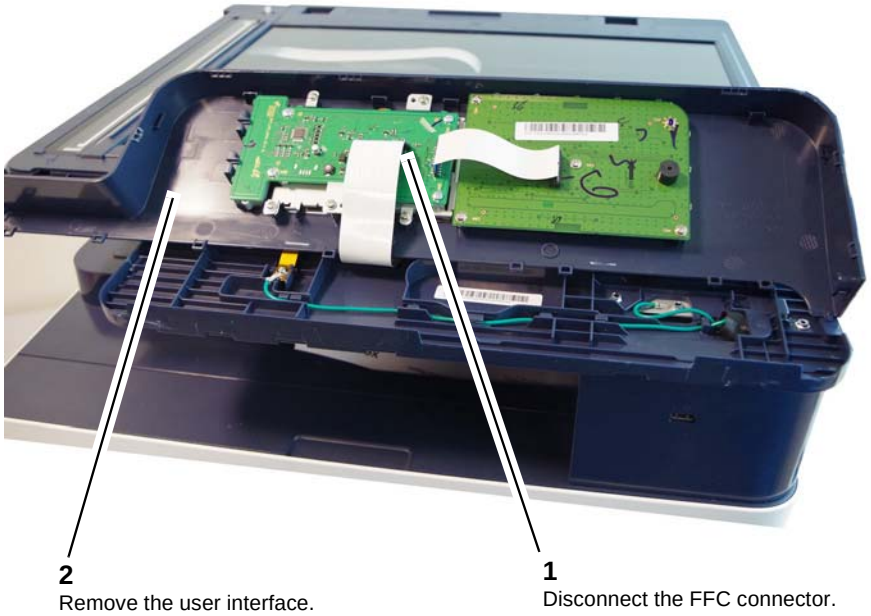

Figure 3 Disconnect the UI PWB

Replacement

The replacement is the reverse of the removal procedure.

REP 4.1 Main BLDC Motor

Parts List on PL 4.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, REP 28.1.
2. Remove the main BLDC motor, Figure 1.

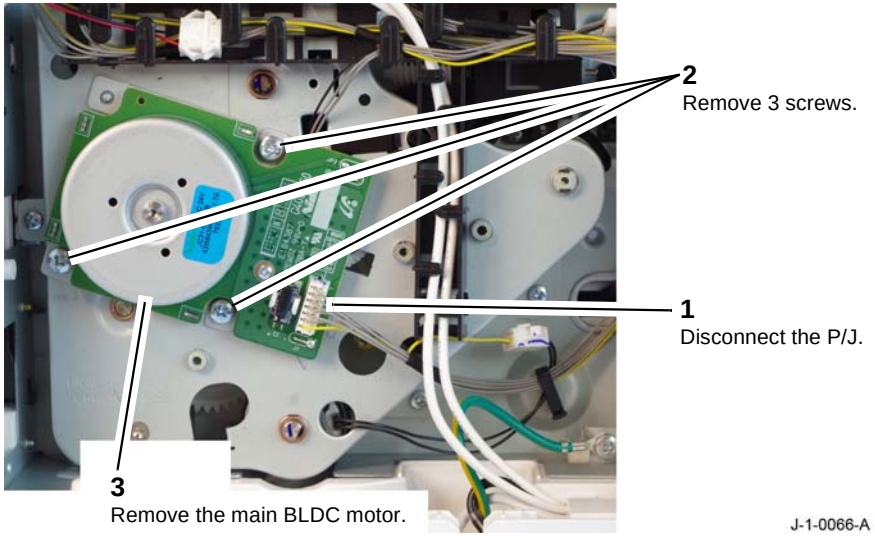

Figure 1 Main BLDC motor

Replacement

The replacement is the reverse of the removal procedure.

REP 5.1 DADF

Parts List on PL 5.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the scanner rear cover, REP 28.6.
2. Disconnect the DADF.

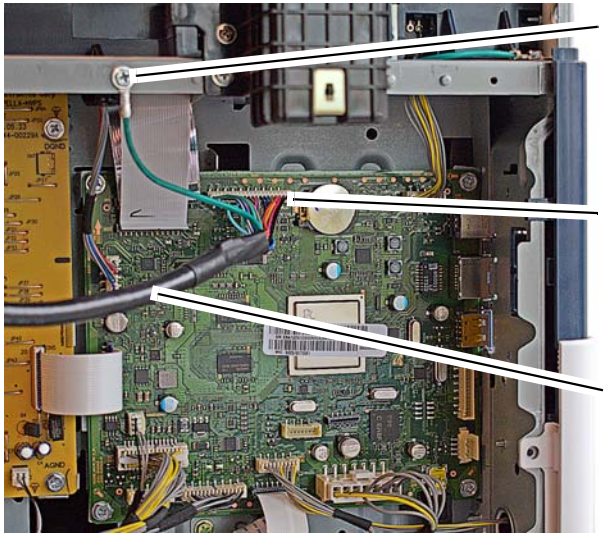

Figure 1 DADF harness

3. Fully raise the DADF into the upright position.
4. Lift the DADF in an upwards direction, clear of the right and left hinge holders, PL 5.10.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.2 Document Cover Assembly

Parts List on PL 5.50

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Fully raise the document cover assembly, PL 5.50.
2. Lift and simultaneously tilt the document cover assembly backwards to release the hinges from the scanner top cover, PL 14.10.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.3 DADF Feed Assembly

Parts List on PL 5.25 Item 6

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF feed assembly, PL 5.25 Item 6, Figure 1.

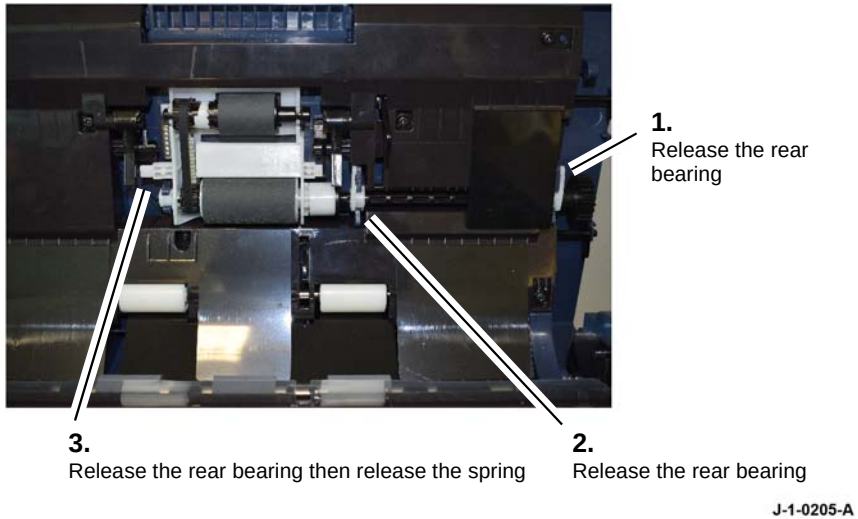

Figure 1 Remove the DADF feed assembly

Replacement

1. Install the front baring.
2. Install the spring.
3. Install the centre and rear bearings.

REP 5.4 DADF PWB

Parts List on PL 5.15 Item 3

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF rear cover, REP 5.11.
2. Disconnect eight connectors from the DADF PWB, Figure 1.

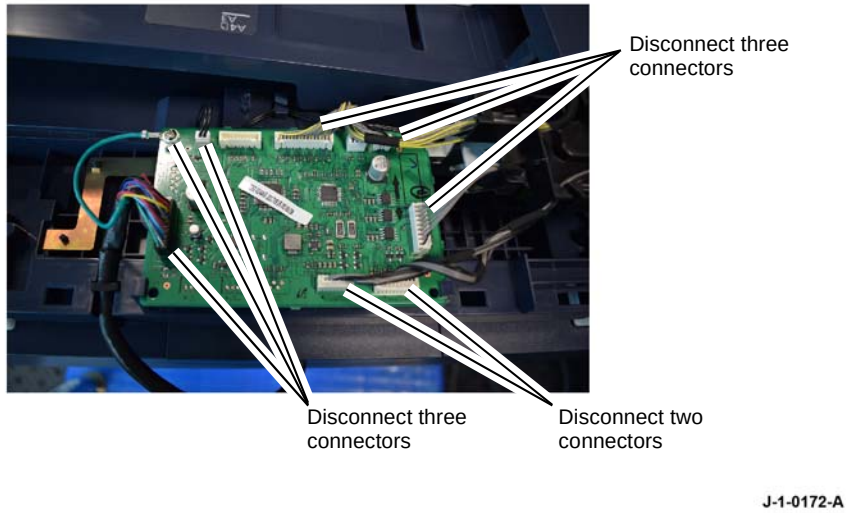

Figure 1 Disconnect the DADF PWB

3. Remove one remaining screw to remove the DADF PWB, PL 5.15 Item 3.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.5 DADF Motor

Parts List on PL 5.35 Item 2

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF rear cover, REP 5.11.
2. Remove the DADF transport assembly, REP 5.16.
3. Remove the DADF motor, PL 5.35 Item 2, Figure 1.

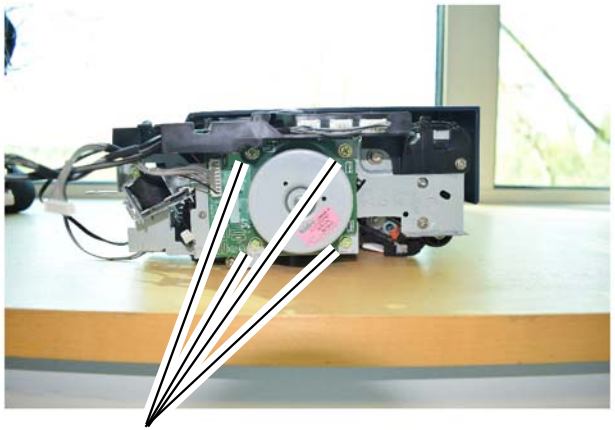

Figure 1 Remove the motor

Replacement

Replacement is the reverse of the removal procedure.

REP 5.6 DADF Exit Solonoid

Parts List on PL 5.35 Item 3

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF rear cover, REP 5.11.
2. Disconnect the pickup solonoid harness, Figure 1.

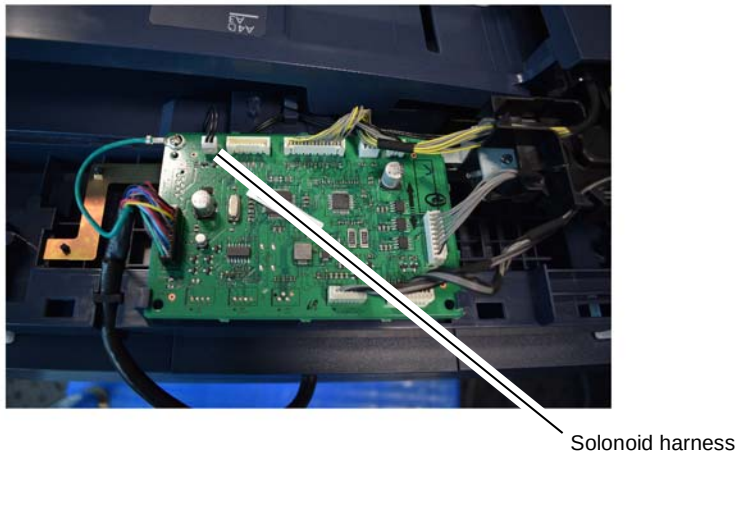

Figure 1 Disconnect the solonoid

3. Remove the pickup solonoid, Figure 2.

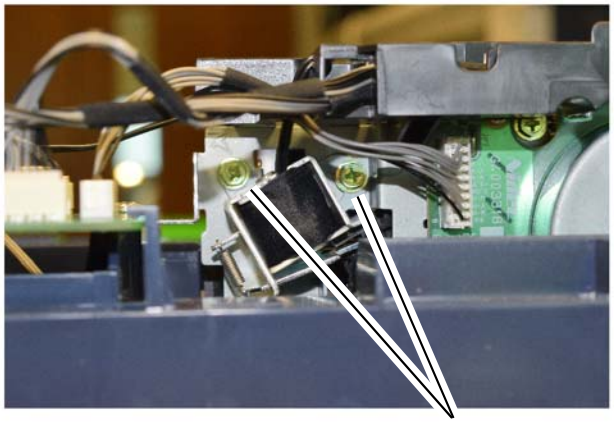

Figure 2 Remove the solonoid

Replacement

Replacement is the reverse of the removal procedure.

REP 5.7 DADF Document Pad

Parts List on PL 5.10 Item 2

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Raise the DADF to fully upright position.
2. Peel the DADF document pad, PL 5.10 Item 2, away from the DADF base, PL 5.15 Item 4. Remove any residual double sided tape from the DADF base.

Replacement

Replacement is the reverse of the removal procedure.

1. Place the new DADF document pad facedown on the scanner top cover, PL 14.10 Item 1, Figure 1.

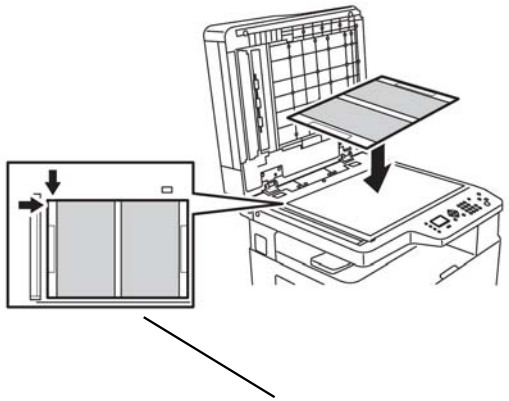

Figure 1 Position the DADF document pad

2. Peel the double sided tape from the DADF document pad, Figure 2.

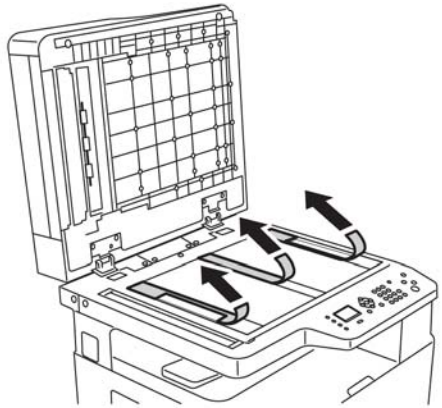

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Figure 2 Peel the backing from adhesive tape

3. Close the DADF onto the DADF document pad and lift the DADF and document pad together.

REP 5.8 Exit Nip Open Sensor

Parts List on PL 5.30 Item 9

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF rear cover, REP 5.11.
2. Remove the DADF transport assembly, REP 5.16.
3. Remove the exit nip open sensor, PL 5.30 Item 9, Figure 1.

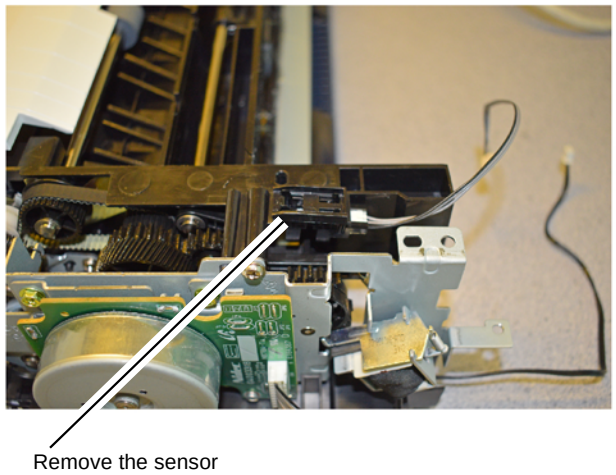

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Figure 1 Remove the sensor

Replacement

Replacement is the reverse of the removal procedure.

REP 5.9 Document Registration Sensor, Cover Open Sensor, Document Detect Sensor

Parts List on PL 5.35

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF rear cover, REP 5.11.
2. Remove the sensor, Figure 1.

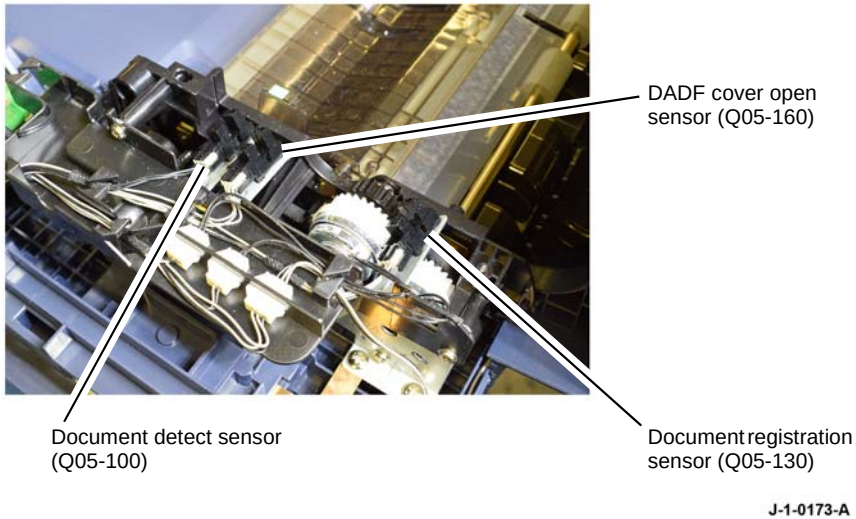

Figure 1 Drive assembly sensors

Replacement

Replacement is the reverse of the removal procedure.

REP 5.10 DADF Paper Size Sensors

Parts List on PL 5.40

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the DADF cover assembly, PL 5.20 Item 1.
2. Gently lift the input tray assembly at the end of the tray. The hinge will flex slightly and the hinge will allow the input tray to fold backonto the DADF cover assembly, Figure 1.

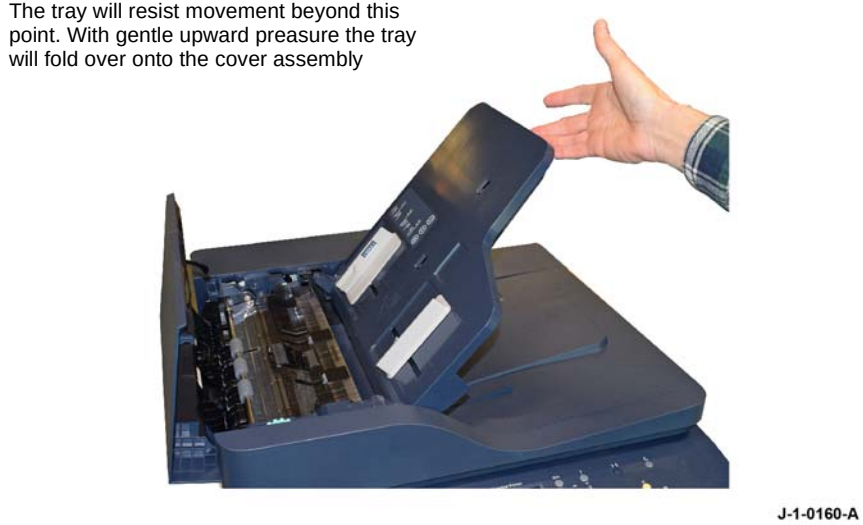

Figure 1 Lift the input tray assembly

3. Remove five screws to remove the DADF input tray lower guide from the input tray upper guide, Figure 2.

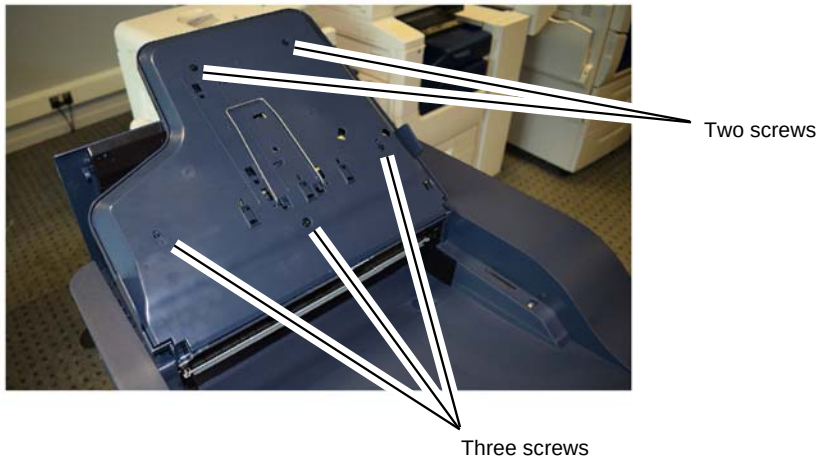

Figure 2 Remove five screws

4. Remove the sensor, Figure 3.

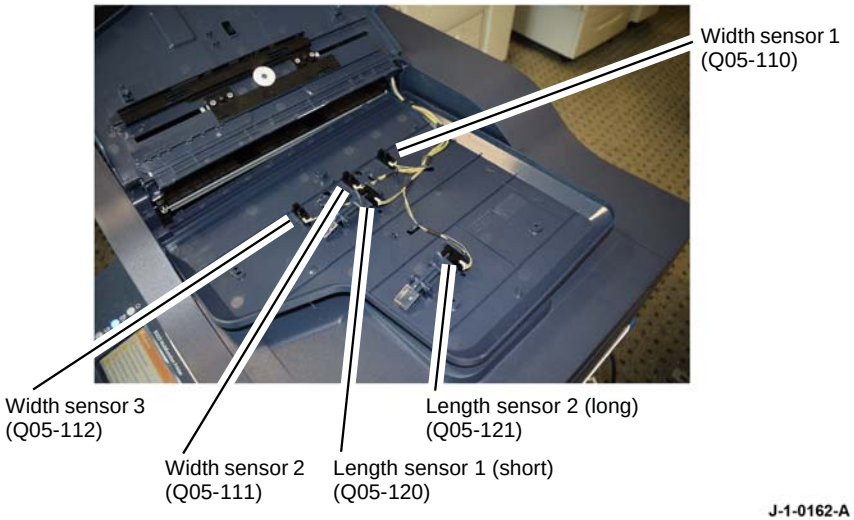

Figure 3 DADF paper size sensors

Replacement

Replacement is the reverse of the removal procedure.

REP 5.11 DADF Rear Cover

Parts List on PL 5.15 Item 2

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Fully raise the DADF to the vertical position, PL 5.10 Item 1.
2. Remove two screws, Figure 1.

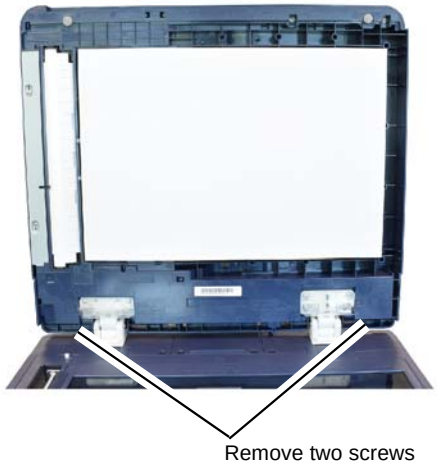

Figure 1 Remove two screws

3. Close the DADF.
4. Open the DADF top cover assembly, PL 5.15 Item 1.

5. Remove one screw, Figure 2.

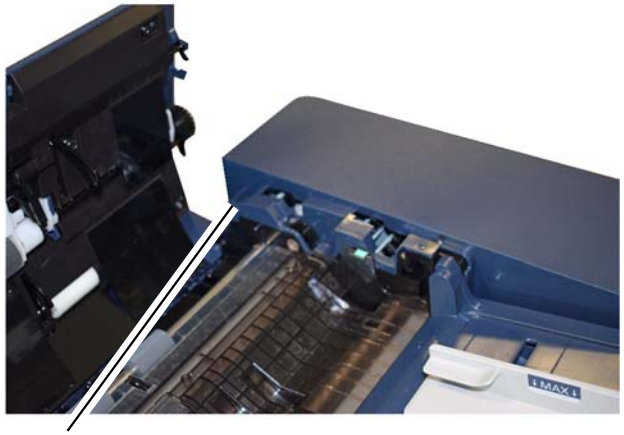

Figure 2 Remove one screw

6. Lift the DADF input tray assembly., refer to REP 5.10.

7. Remove one screw, Figure 3.

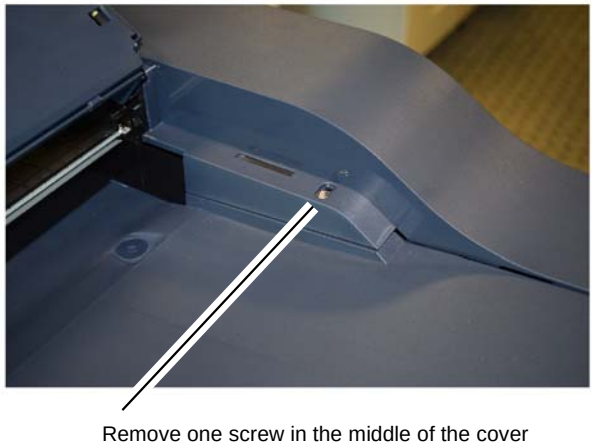

Figure 3 Remove one screw

8. Remove the DADF rear cover, PL 5.15 Item 4, Figure 4.

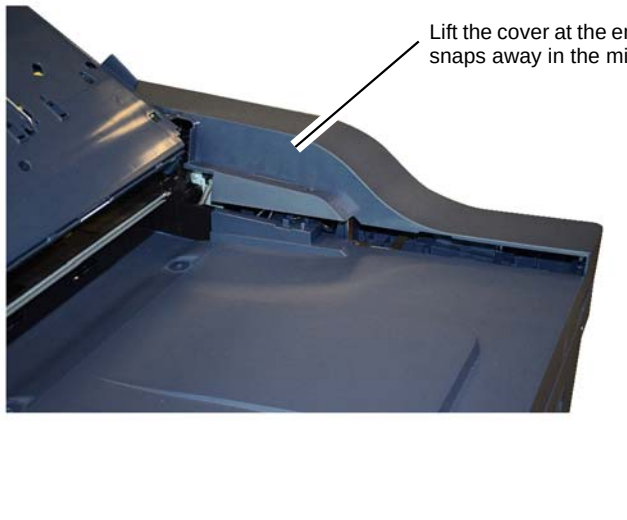

Figure 4 Lift the DADF rear cover

Replacement

Replacement is the reverse of the removal procedure.

REP 5.12 DADF Front Cover

Parts List on PL 5.15 Item 7

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Fully raise the DADF to the vertical position, PL 5.10 Item 1.
2. Remove two screws, Figure 1.

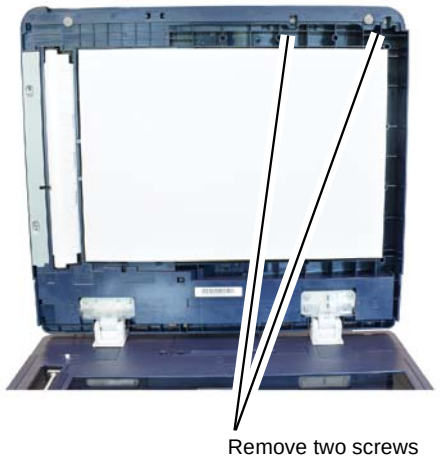

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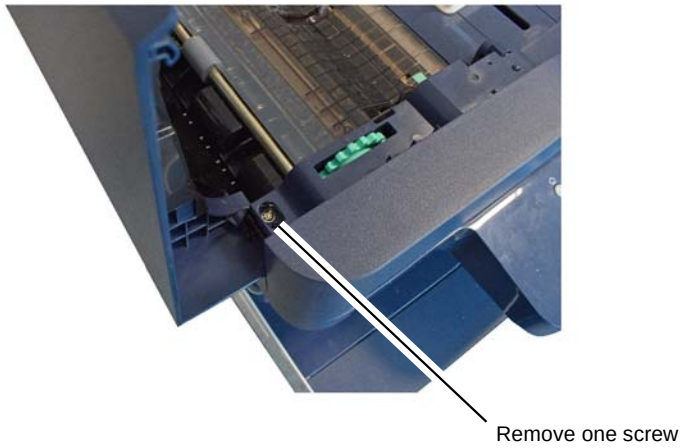
Figure 1 Remove two screws

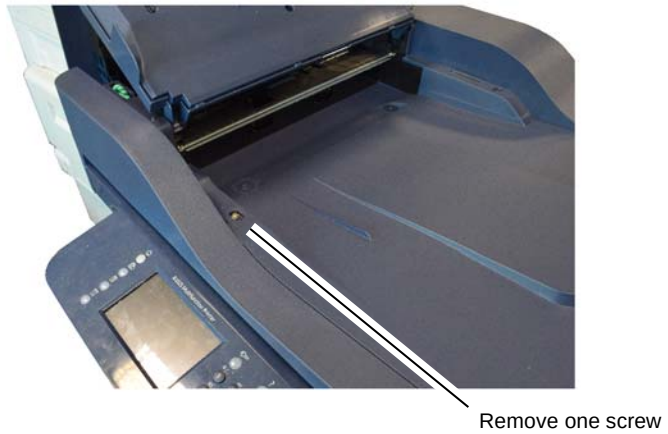
3. Open the DADF cover assembly, PL 5.25 Item 1.
4. Remove one screw, Figure 2.



J-1-0169-A

Figure 2 Remove one screw

5. Lift the DADF input tray assembly. Refer to REP 5.10.
6. Remove 1 screw, Figure 3.



J-1-0168-A

Figure 3 Remove one screw

7. Flex the DADF front cover at the right, then centre, then push the left corner to the left and remove the DADF front cover.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.13 DADF Input Tray Assembly

Parts List on PL 5.20 Item 4

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF rear cover, REP 5.11.
2. Remove the DADF front cover, REP 5.12.
3. Disconnect the DADF input tray assembly harness from the DADF PWB, Figure 1.

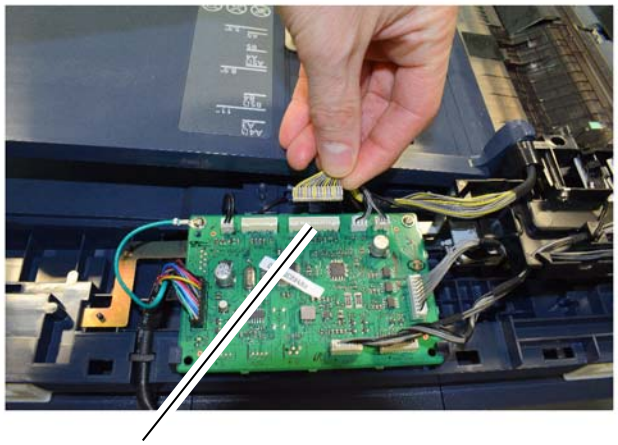


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Figure 1 Disconnect the harness

4. Flex the outboard hinge to release the DADF input tray assembly, Figure 2.

J-1-0171-A

Figure 2 Release the input tray from the hinge

5. Pass the harness through the slot in the inboard hinge to remove the DADF input tray assembly.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.14 DADF Exit Sensor

Parts List on PL 5.45 Item 2

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF transport assembly, REP 5.16.
2. Disconnect the DADF exit sensor, PL 5.45 Item 2, Figure 1.

Figure 1 DADF exit idle sensor

3. Fully raise the DADF to the vertical position.
4. Carefully peel back the top left corner of the DADF cover pad, PL 5.10 Item 2, to remove the DADF exit isensor, Figure 2.

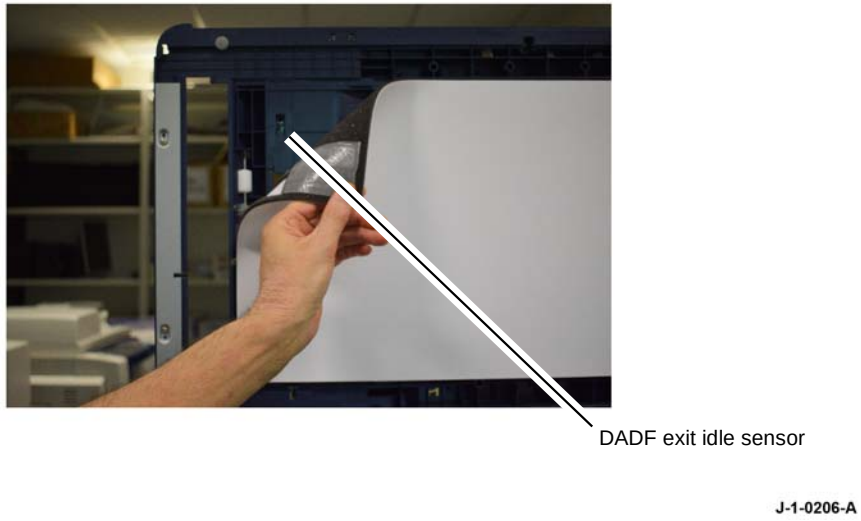


Figure 2 Pull back the DADF cover pad

Replacement

Replacement is the reverse of the removal procedure.

REP 5.15 DADF Scan Start Sensor

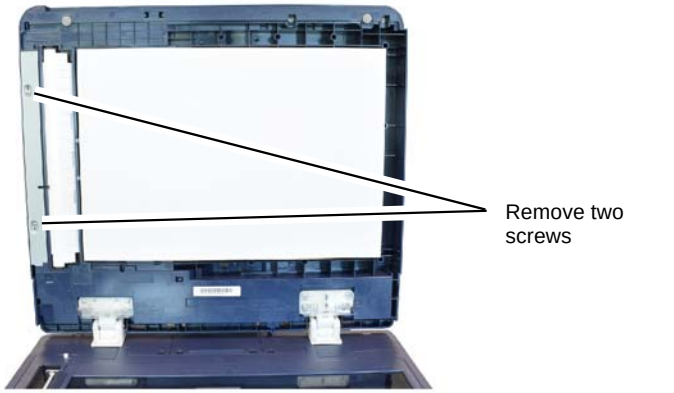
Parts List on PL 5.45 Item 2

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

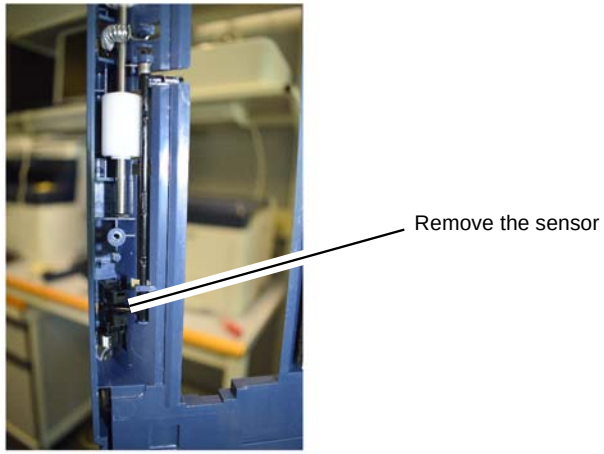
1. Fully raise the DADF to the vertical position.
2. Remove two screws, Figure 1.



J-1-0176-A

Figure 1 Remove two screws

3. Remove the DADF transport assembly, REP 5.16.
4. Remove the DADF Exit Sensor, PL 5.45 Item 2, Figure 2.



J-1-0189-A

Figure 2 Remove the sensor

Replacement

Replacement is the reverse of the removal procedure.

REP 5.16 DADF Transport Assembly

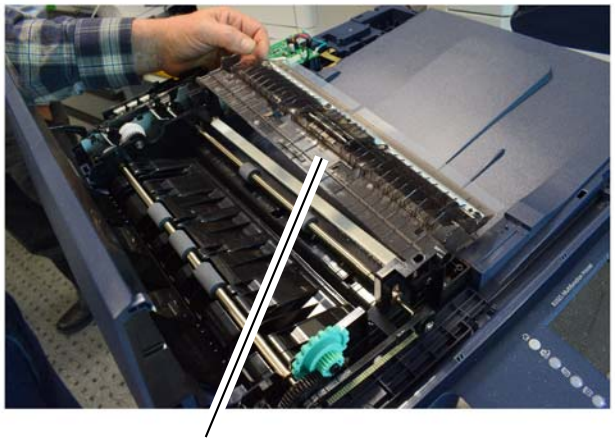
Parts List on PL 5.20 Item 2

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

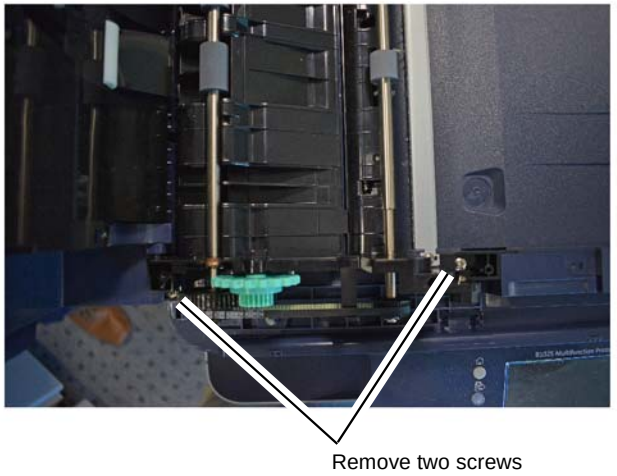
1. Remove the DADF rear cover, REP 5.11.
2. Remove the DADF input tray assembly, REP 5.13.
3. Remove the pickup guide, PL 5.30 Item 4, Figure 1.



J-1-0178-A

Figure 1 Remove the pickup guide

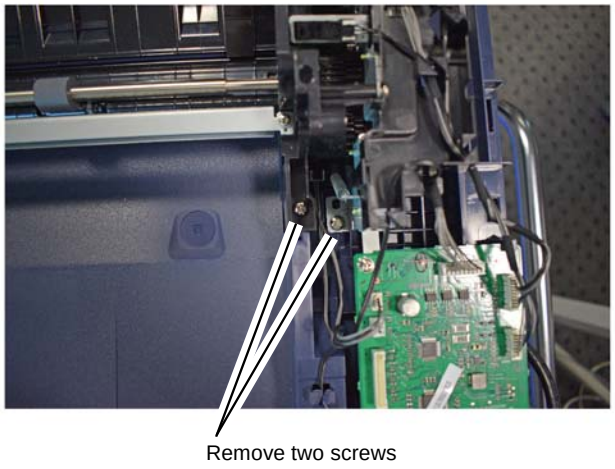
4. Remove two screws from the front of the DADF transport assembly, Figure 2.



J-1-0179-A

Figure 2 Remove two screws

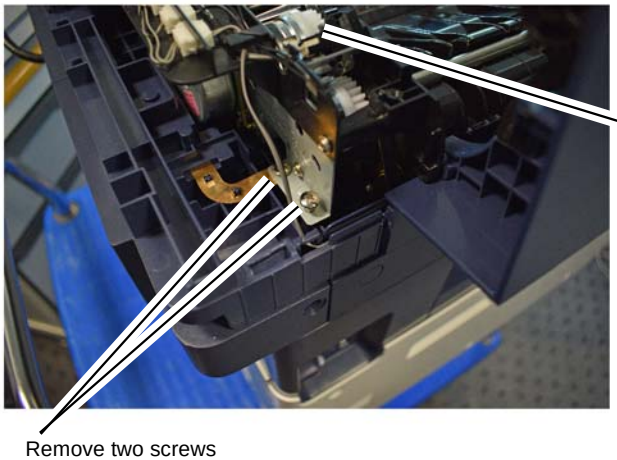
5. Remove two screws from the rear of the DADF transport assembly, Figure 3.



J-1-0180-A

Figure 3 Remove two screws

6. remove two screws and disconnect one connector at the rear of the DADF transport assembly, Figure 4.



J-1-0181-A

Figure 4 Remove two screws and one connector

NOTE: *The DADF PWB can be losened and moved clear of the DADF transport assembly fixing screw.*

7. Remove the DADF PWB, REP 5.4.
8. Remove the DADF transport assembly.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.17 DADF Base and Hinges

Parts List on PL 5.15

Removal

WARNING

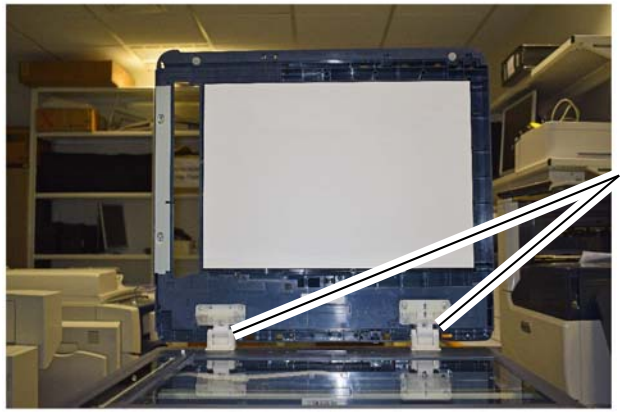
Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF transport assembly, REP 5.16.

WARNING

Do not remove the DADF while the DADF is lowered. In the lowered position the counterbalance springs are compressed and can cause injury when released.

2. Lift the DADF base and hinges clear of the machine, Figure 1.



J-1-0190-A

Figure 1 Lift the DADF base clear of the machine

3. Remove the hinges, PL 5.15 Item 5 and PL 5.15 Item 6, from the DADF base, PL 5.15 Item 4, Figure 2.

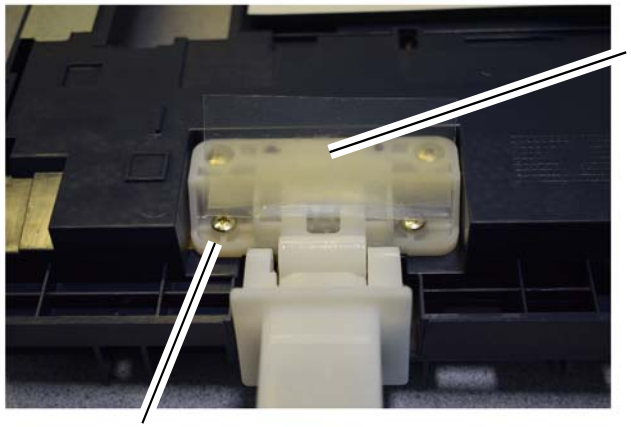


Figure 2 DADF left hinge, the right hinge is similar

4. If the DADF base is to be replaced remove the DADF exit sensor, REP 5.14, and the DADF scan start sensor, REP 5.15.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.18 Document Cover Pad

Parts List on PL 5.50 Item 5

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the document cover assembly, REP 5.2.
2. Peel the document cover pad, PL 5.50 Item 5, away from the document cover assembly, PL 5.50 Item 1. Remove any residual double sided tape from the document cover.

Replacement

1. Install the document cover, REP 5.2. Leave the document cover in the upright position.
2. Place the new document cover pad facedown on the scanner top cover, PL 14.10 Item 1, Figure 1.

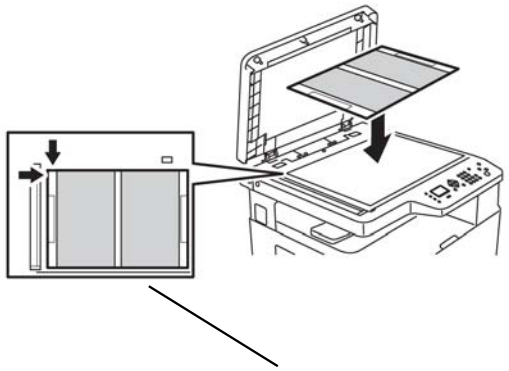
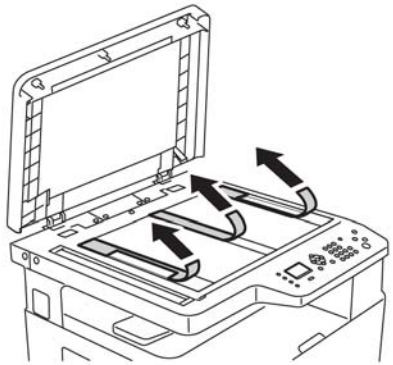


Figure 1 Position the document cover pad

3. Peel the double sided tape from the document cover pad, PL 5.50 Item 5, Figure 2.



J-1-0204-A

Figure 2 Peel the backing from adhesive tape

4. Lower the document cover onto the document cover pad and press gently on the document cover. Lift the document cover assembly with the document pad attached.

REP 5.19 Friction Pad Assembly and Friction Pad

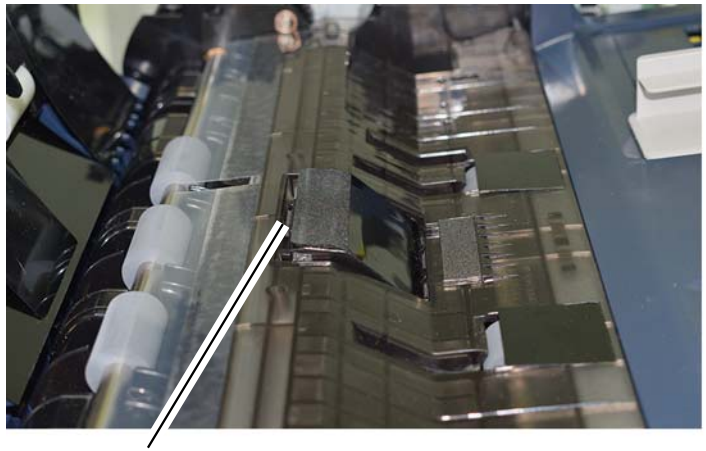
Parts List on PL 5.30

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the friction pad assembly, PL 5.30 Item 2, Figure 1.



Lift the friction pad assembly under the upper edge, allow it to hinge back and lift it clear.

J-1-0207-A

Figure 1 Friction pad assembly

2. If required remove the DADF friction pad, PL 5.30 Item 3, from the friction pad assembly.

Replacement

Replacement is the reverse of the removal procedure.

REP 5.20 Document Cover Assembly Hinges

Parts List on PL 5.50 Item 3

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the document cover assemply, REP 5.2.
2. Remove two screws to remove the document cover assembly hinges.

Replacement

Replacement is the reverse of the removal procedure.

REP 6.1 Laser Scan Unit (LSU)

Parts List on PL 1.10.

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

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.

WARNING

Avoid exposure to laser beam. Invisible laser radiation.

Figure 1 Laser Beam Warning Symbol

1. Remove the exit cover and front top cover, REP 28.8.

   NOTE: *A short, crosshead screwdriver is required to remove the 3 screws that secure the LSU. If the screwdriver is not available, the DADH or document cover and scanner assembly, must be removed.*

2. If necessary remove the scanner assembly, REP 14.1.

3. Remove the LSU, Figure 1.

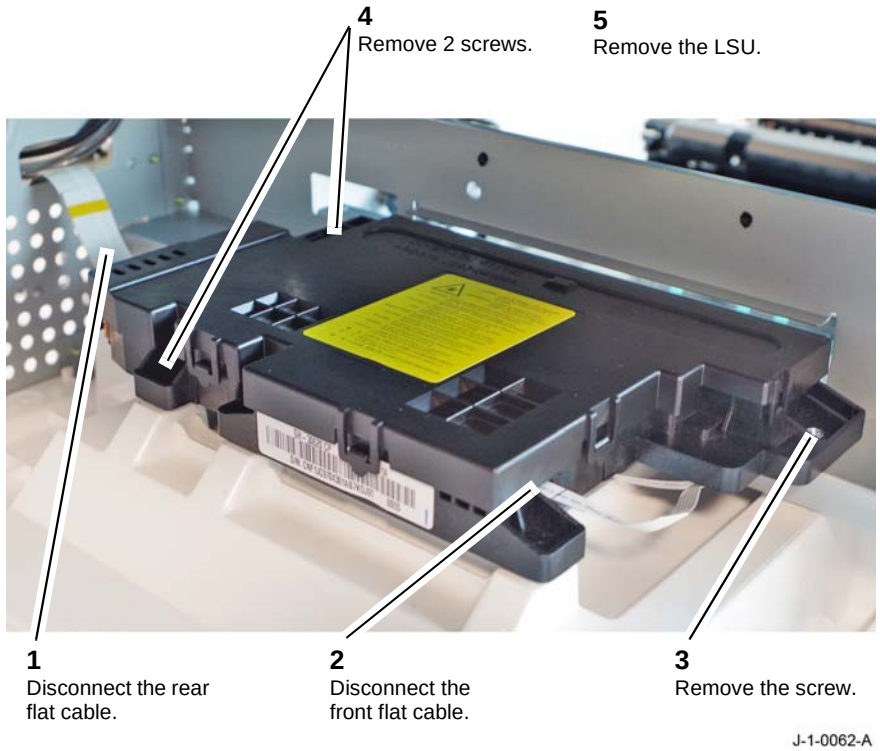


Figure 2 LSU Removal

Replacement

The replacement is the reverse of the removal procedure.

REP 7.1 Tray 1 & Tray 2 Paper Empty Sensor

Parts List on PL 7.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Use safe handling procedures when removing the module. Refer to GP 15. The module is heavy.

WARNING

Mandatory safety warning. This procedure must be performed by 2 people. The module is heavy.

NOTE: *The weight of the B1022 is 26kg (58lb). The weight of the B1025 is 31kg (69lb).*

NOTE: *The procedure that follows is also similar for the tray 2 paper empty sensor.*

1. Remove the toner cartridge, REP 9.1.
2. Remove the drum cartridge, REP 9.2.
3. Remove tray 1, PL 7.15 Item 1.
4. Secure or remove as appropriate:
   - DADF, REP 5.1.
   - Document cover assembly, REP 5.2.
5. Lift, then rotate and rest the device on the rear cover.
6. Remove the tray 1 paper empty sensor, Figure 1.

Figure 1 Paper empty sensor

Replacement

The replacement is the reverse of the removal procedure.

REP 7.2 Bypass Paper Empty Sensor

Parts List on PL 7.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Use safe handling procedures when removing the module. Refer to GP 15. The module is heavy.

WARNING

Mandatory safety warning. This procedure must be performed by 2 people. The module is heavy.

NOTE: *The weight of the B1022 is 26kg (58lb). The weight of the B1025 is 31kg (69lb).*

1. Remove the toner cartridge, REP 9.1.
2. Remove the drum cartridge, REP 9.2.
3. Remove tray 1, PL 7.15 Item 1.
4. Secure or remove as appropriate:
   - DADF, REP 5.1
   - Document cover assembly, REP 5.2.
5. If installed remove the optional tray 2 and frame assembly, REP 7.8.
6. Lift, then rotate and rest the device on the rear cover.
7. Remove the bypass paper empty sensor, Figure 1.

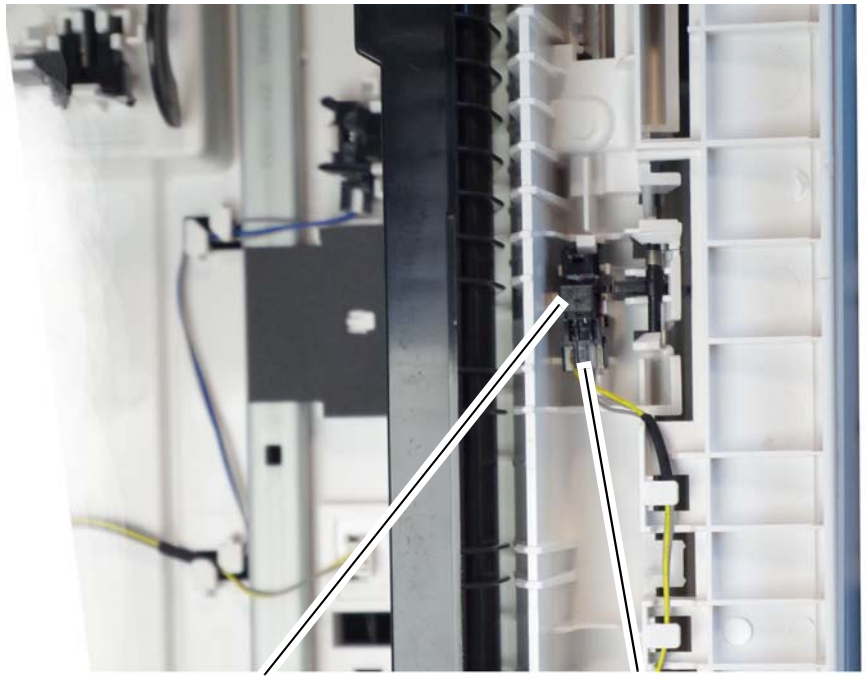


Figure 1 Bypass paper empty sensor

Replacement

The replacement is the reverse of the removal procedure.

REP 7.3 Bypass Pick-Up Roll, Clutch and Retard Pad

Parts List on PL 7.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove side cover assembly, REP 8.1.
2. Remove the bypass paper guide, Figure 1.

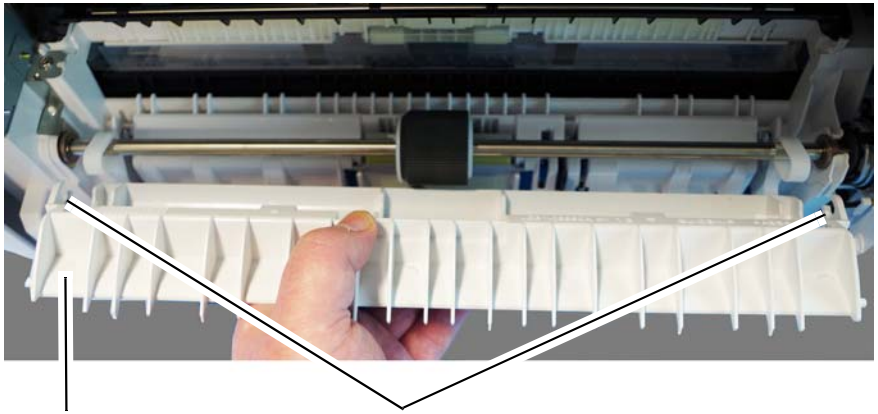


Figure 1 Bypass paper guide

3. Prepare to remove the pick-up roll shaft, Figure 2.

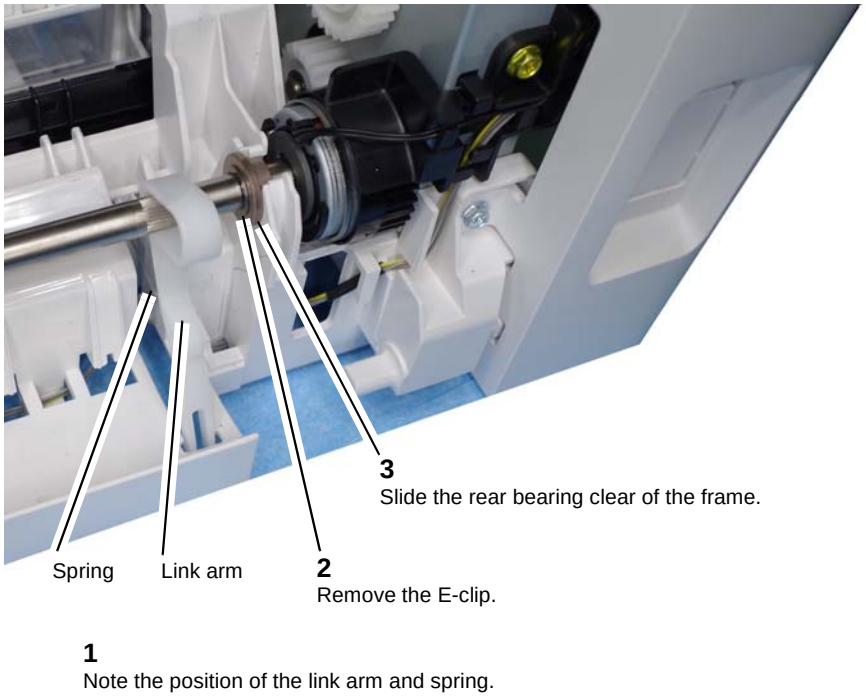


Figure 2 Rear bearing

4. Prepare to remove the pick-up roll shaft, Figure 3.

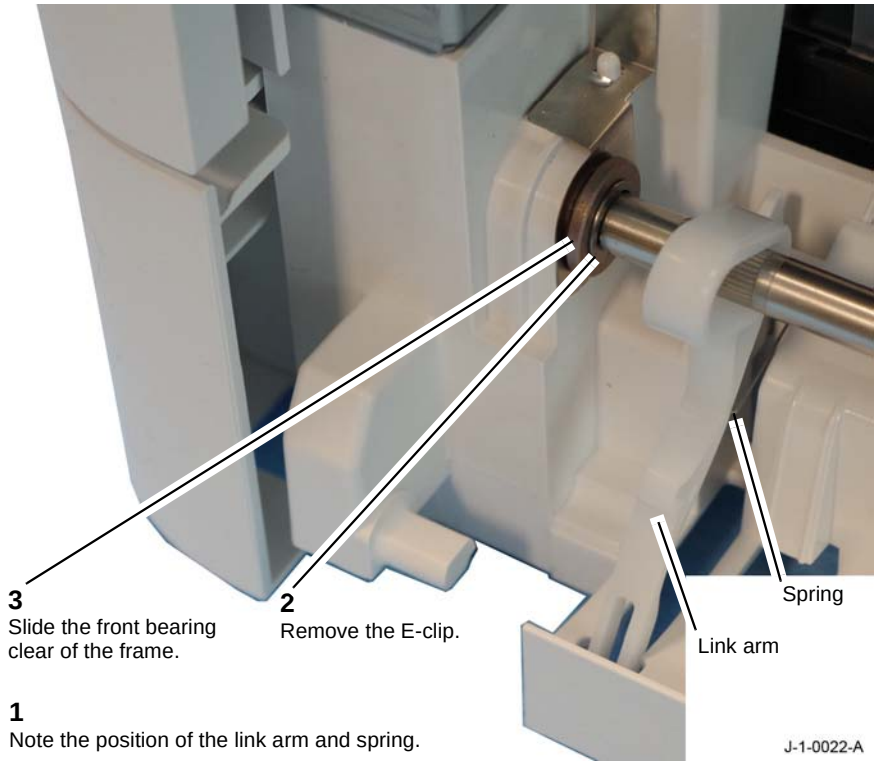


Figure 3 Front bearing

5. Remove 2 screws, then remove the right lower cover, PL 28.10 Item 10.

6. Remove the harness holder, Figure 4.

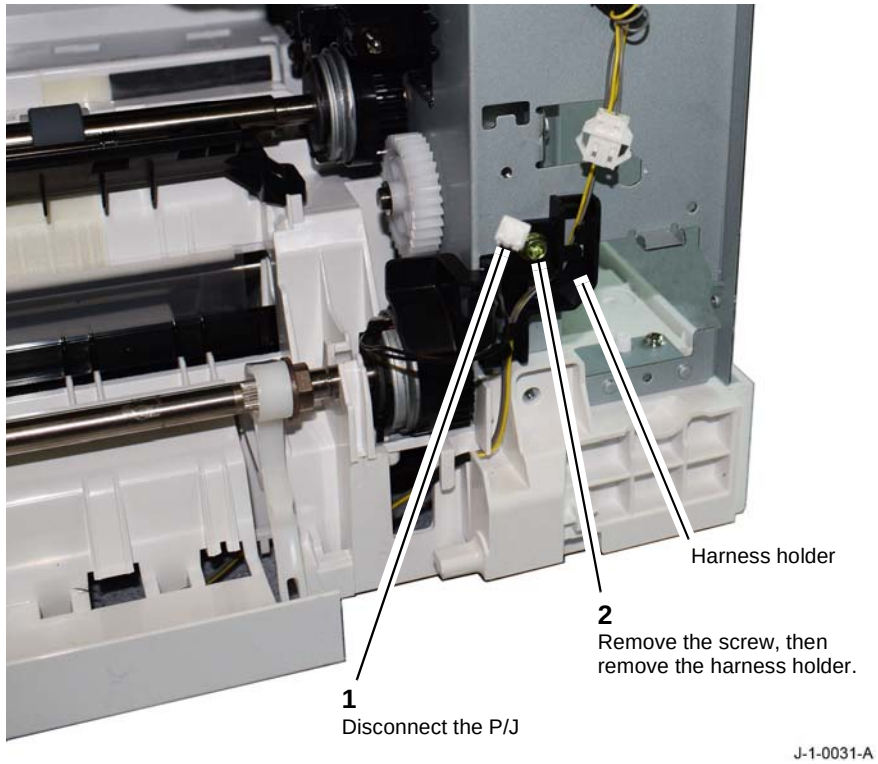
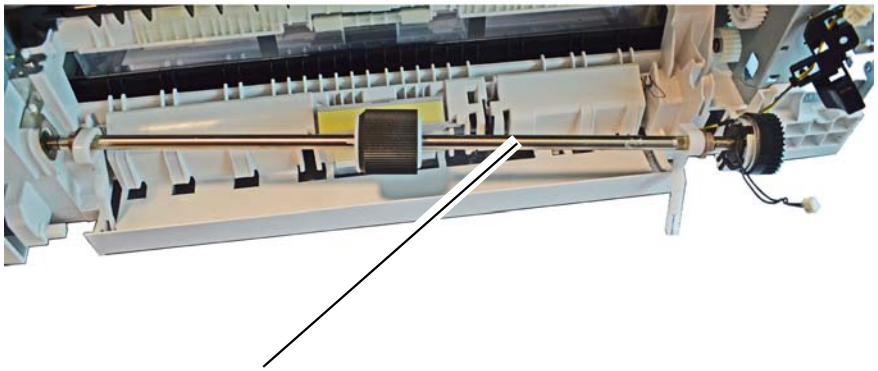


Figure 4 Harness holder

7. Remove the pick-up roll assembly, Figure 5.

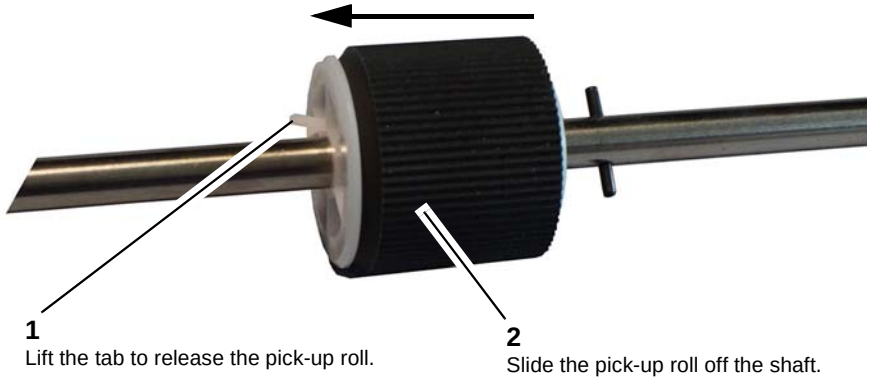


1
Bias the pick-up roll assembly clear of the frame.

J-1-0032-A

Figure 5 Pick-up roll assembly

8. Remove the pick-up roll, Figure 6.



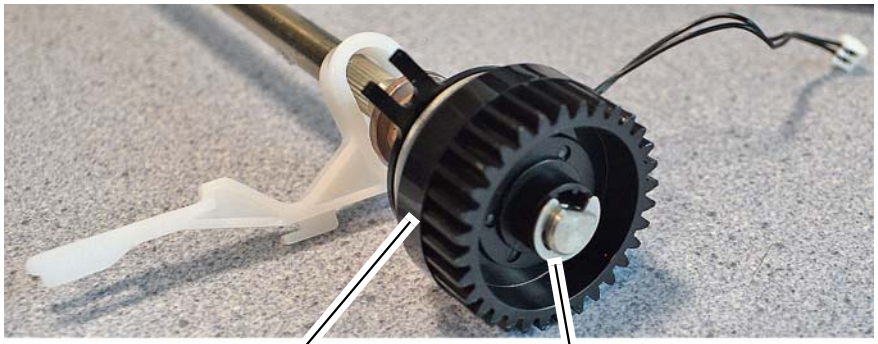
1
Lift the tab to release the pick-up roll.

2
Slide the pick-up roll off the shaft.

J-1-0033-A

Figure 6 Pick-up roll

9. Remove the bypass roll feed clutch, Figure 7.



2
Remove the bypass roll feed clutch.

1
Remove the E-clip.

J-1-0034-A

Figure 7 Feed clutch

10. Remove the retard pad, Figure 8.

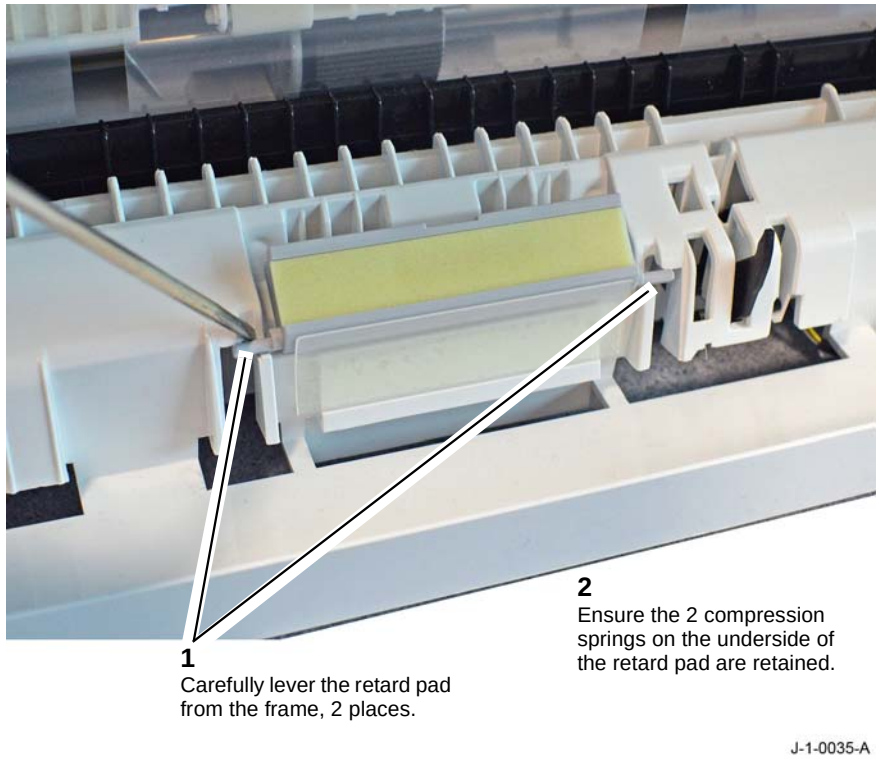


Figure 8 Retard pad

Replacement

The replacement is the reverse of the removal procedure.

1. Ensure the 2 compression springs are reinstalled, refer to Figure 8.

REP 7.4 Tray 1 Pick-Up Clutch

Parts List on PL 7.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, REP 28.1.
2. Prepare to remove the T1 Pick-up clutch, Figure 1.

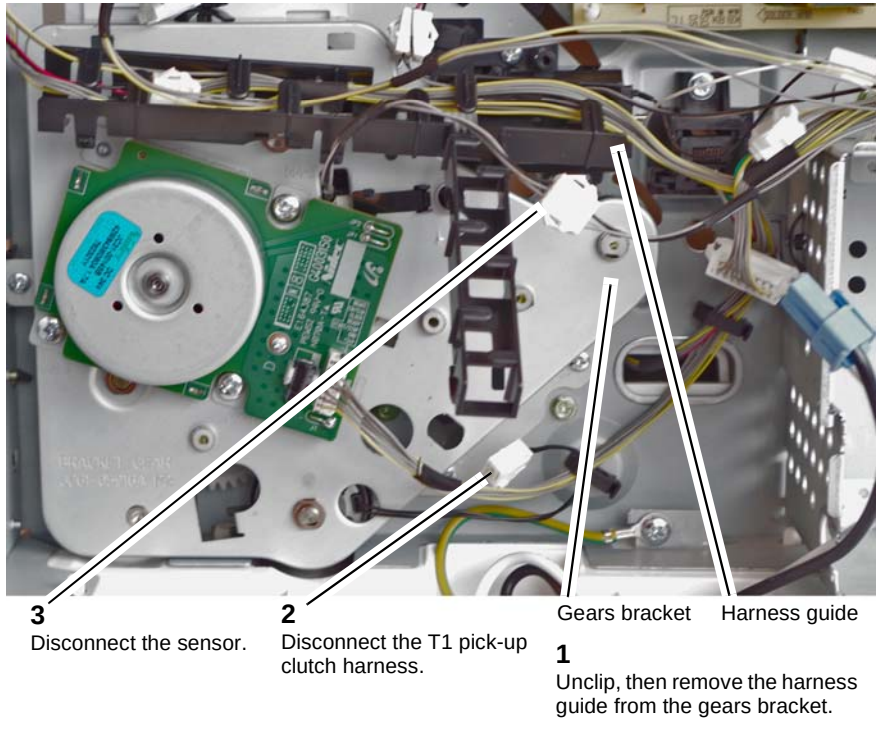
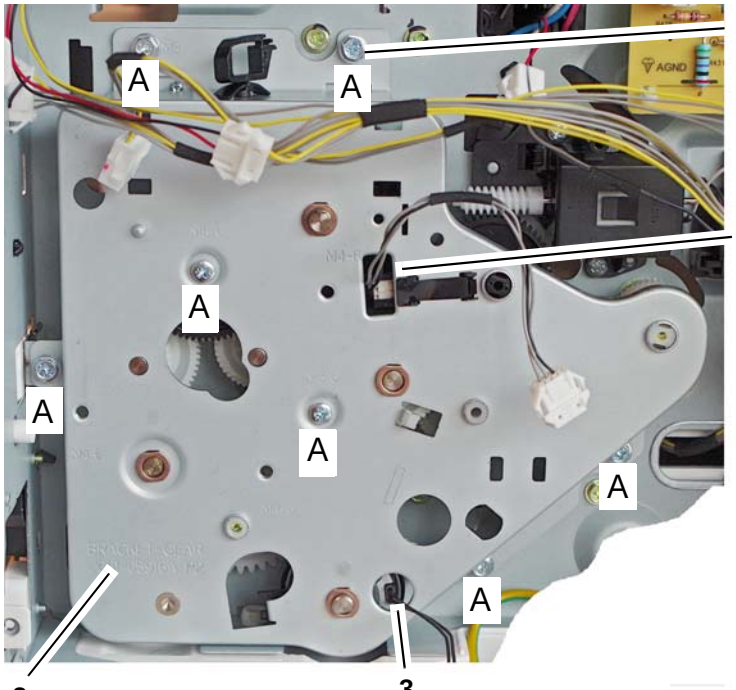


Figure 1 Harness guide and PJs

3. Remove the main BLDC motor, REP 4.1.

4. Remove the gears bracket, Figure 2. Remove the bracket slowly and be prepared for some gears to disengage and fall from their positions.



1
Remove the 7 screws marked A.

4
Thread the sensor wires through as the bracket is removed.

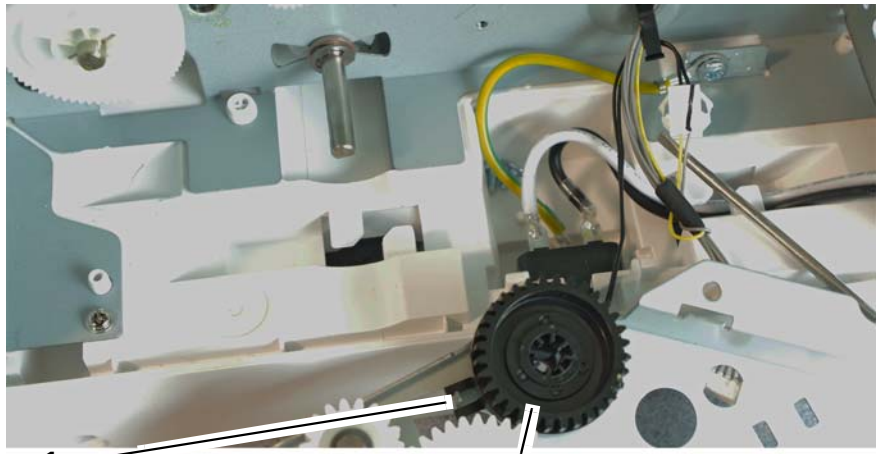
2
Carefully remove the gears bracket.

3
Thread the T1 Pick-up clutch wires through as the bracket is removed.

J-1-0068-A

Figure 2 Gears bracket

5. Remove the T1 pick-up clutch, Figure 3.



1
Note the position of the T1 Pick-up clutch and the locator tab on the gears bracket.

2
Remove the T1 Pick-up clutch.

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Figure 3 Pick-up clutch

Replacement

The replacement is the reverse of the removal procedure.

1. Figure 4 shows the location of the gears and T1 pick-up clutch.

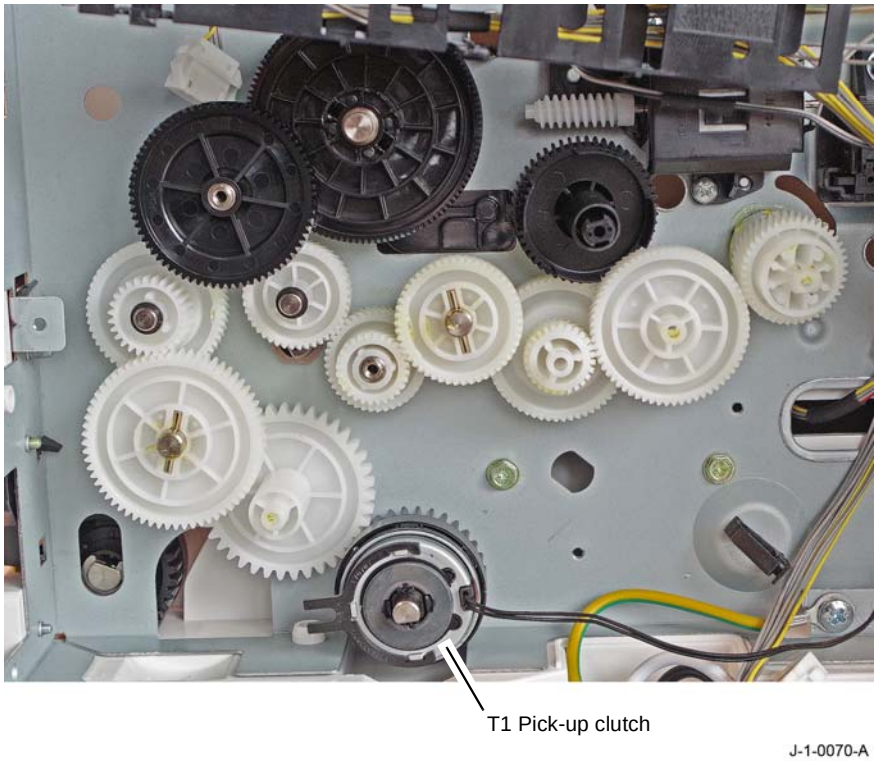


Figure 4 Location of gears and clutch

2. Check the alignment of the T1 Pick-up clutch and the location tab on the gears bracket, Figure 5.

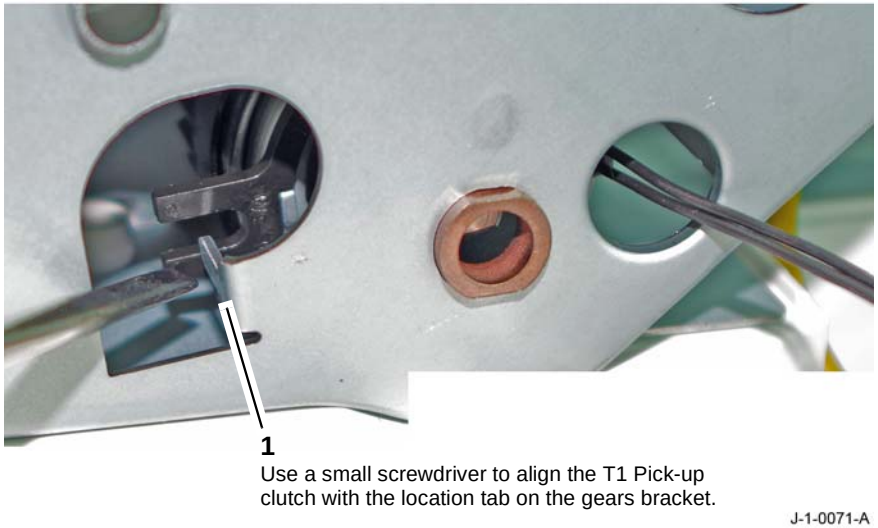


Figure 5 Clutch alignment

REP 7.5 Optional Tray 2 Rear Cover and Tray 2 PWB

Parts List on PL 7.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Figure 1 ESD Symbol

CAUTION

Observe ESD procedures during this procedure.

1. Remove the tray 2 rear cover, Figure 2.

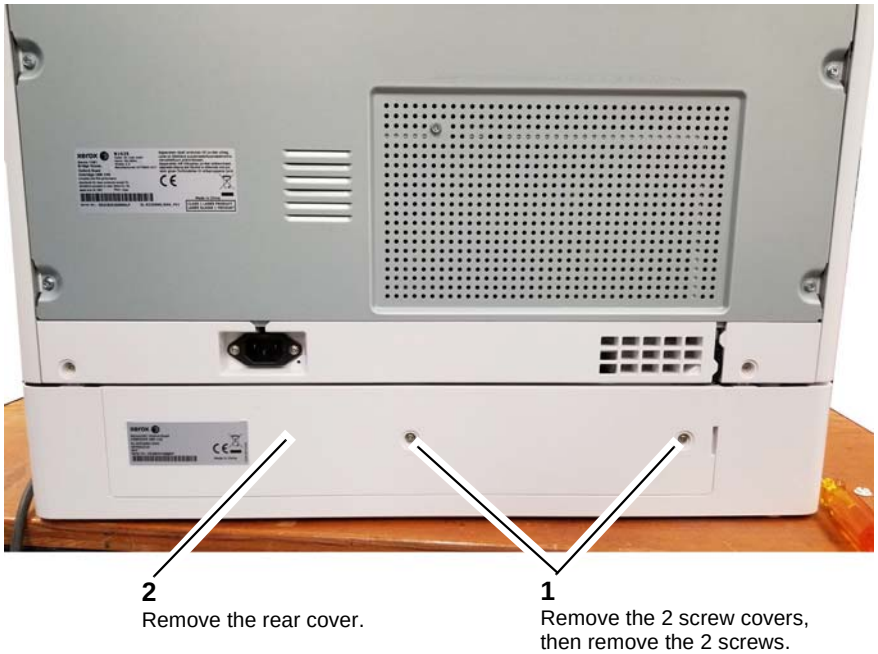


Figure 2 Tray 2 rear cover

2. Remove the Tray 2 PWB, Figure 3.

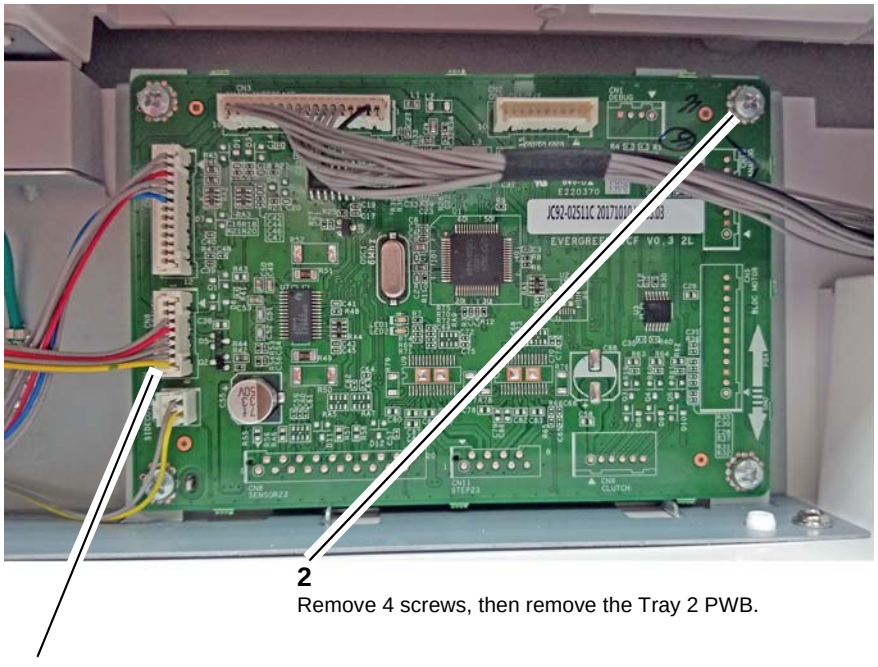


Figure 3 Tray 2 PWB

Replacement

The replacement is the reverse of the removal procedure.

REP 7.6 Tray 2 Drive Unit

Parts List on PL 7.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the tray 2 rear cover, REP 7.5.
2. Remove the E-clip, then the pick-up idle gear, PL 7.20 Item 7.
3. Remove the E-clip, then the bearing from the feed roll assembly, PL 7.20 Item 2.
4. Disconnect the 2 P/Js on the T2 feed motor assembly, PL 7.20 Item 4.
5. Remove 5 screws, then remove the T2 feed motor assembly, PL 7.20 Item 4.

NOTE: *Note the position of the green earth wire. Ensure that the earth wire is reconnected during installation of the* T2 feed motor assembly.

Replacement

The replacement is the reverse of the removal procedure.

REP 7.7 Tray 2 Feed Roll

Parts List on PL 7.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the tray 2 drive unit, REP 7.6.
2. Remove the 2 E-clips, PL 7.20.
3. Slide the feed roll assembly forward to remove, PL 7.20 Item 2.

Replacement

The replacement is the reverse of the removal procedure.

REP 7.8 Optional Tray 2 and Frame Assembly

Parts List on PL 7.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Use safe handling procedures when removing the module. Refer to GP 15. The module is heavy.

WARNING

Mandatory safety warning. This procedure must be performed by 2 people. The module is heavy.

NOTE: *The weight of the B1022 is 26kg (58lb). The weight of the B1025 is 31kg (69lb).*

1. Remove tray 1, PL 7.15 Item 1 and tray 2, PL 7.20 Item 1.
2. Remove the tray 2 frame rear cover, REP 7.5.

3. Prepare to remove the optional tray 2 frame assembly, Figure 1.

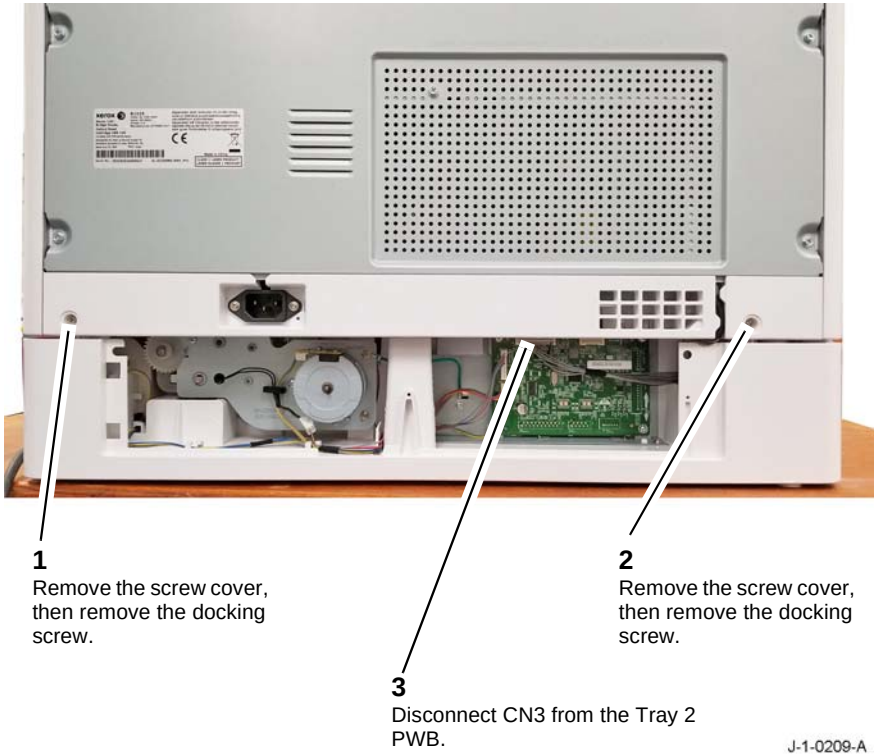


Figure 1 Option tray rear fixing screws

4. Remove the optional tray 2 frame assembly, Figure 2.

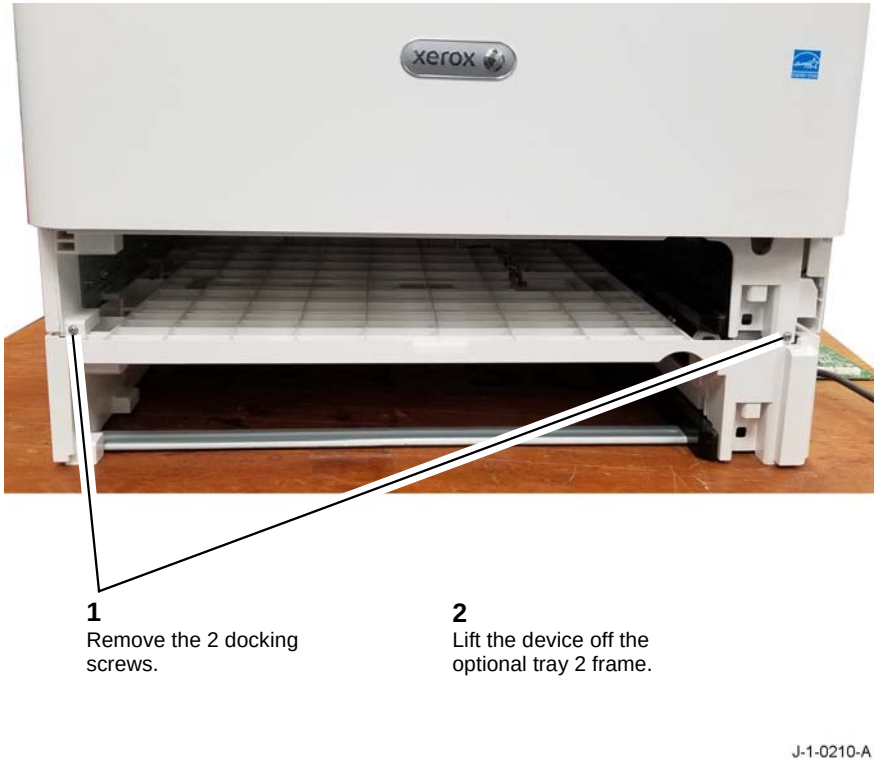


Figure 2 Remove the option tray

Replacement

The replacement is the reverse of the removal procedure.

REP 8.1 Side Cover Assembly

Parts List on PL 8.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the side cover assembly, PL 8.10 Item 5.
2. Remove the side cover assembly, Figure 1.

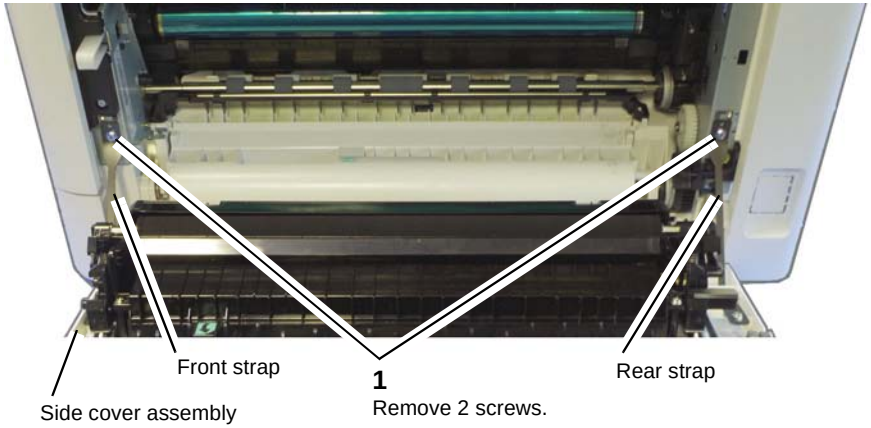


Figure 1 Side cover assembly

Replacement

The replacement is the reverse of the removal procedure.

REP 8.2 Registration Sensor

Parts List on PL 8.30

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Use safe handling procedures when removing the module. Refer to GP 15. The module is heavy.

WARNING

Mandatory safety warning. This procedure must be performed by 2 people. The module is heavy.

NOTE: *The weight of the B1022 is 26kg (58lb). The weight of the B1025 is 31kg (69lb).*

1. Remove the toner cartridge, REP 9.1.
2. Remove the drum cartridge, REP 9.2.
3. Remove tray 1, PL 7.15 Item 1.
4. Secure or remove as appropriate:
   - DADF, REP 5.1
   - Document cover assembly, REP 5.2.
5. Lift, then rotate and rest the device on the rear cover.

6. Remove the registration sensor, Figure 1.

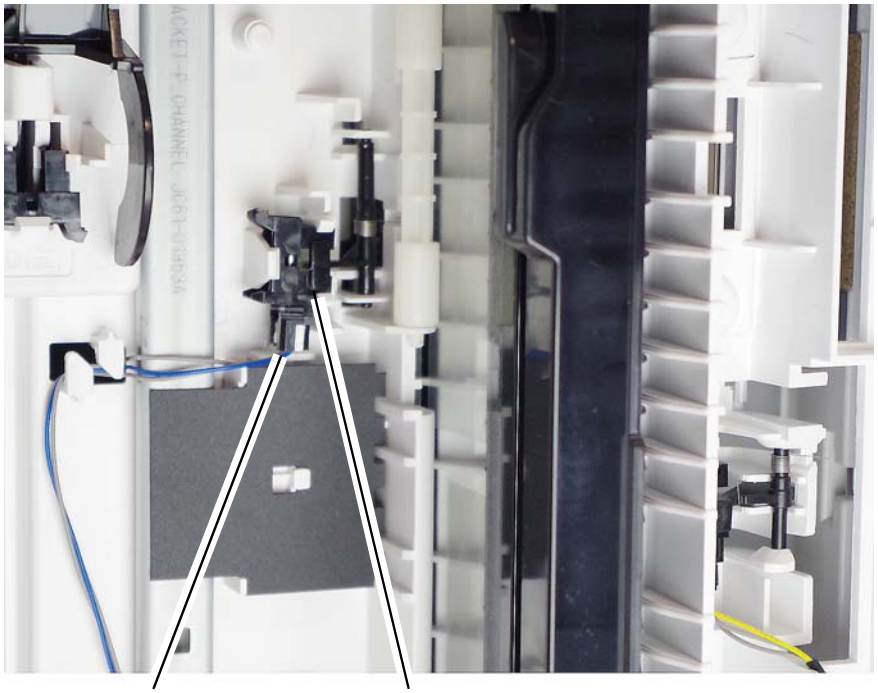


Figure 1 Registration sensor

Replacement

The replacement is the reverse of the removal procedure.

REP 8.3 Registration Feed Roll and Clutch

Parts List on PL 8.30

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the toner cartridge, REP 9.1.
2. Remove the drum cartridge, REP 9.2.
3. Open the side cover assembly, PL 8.10 Item 5.
4. Release the front bearing, Figure 1.

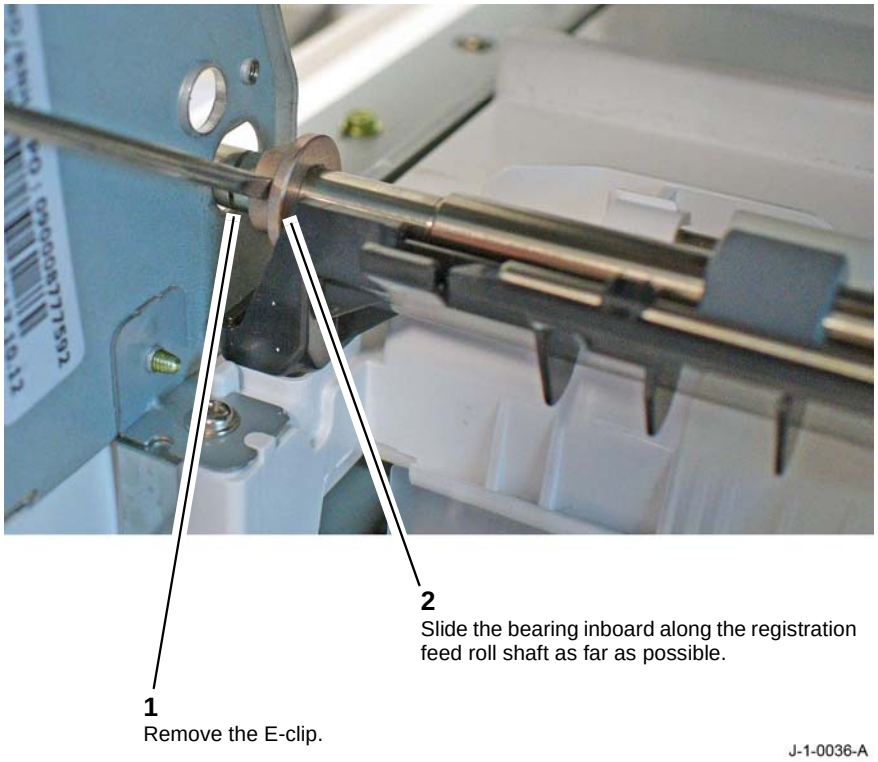
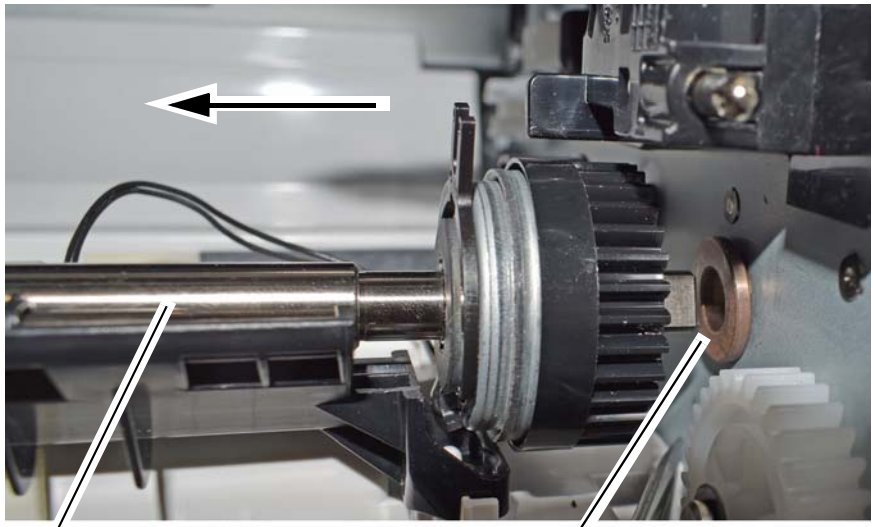


Figure 1 Front bearing retainer

5. Prepare to remove the registration feed roll and clutch assembly, Figure 2.



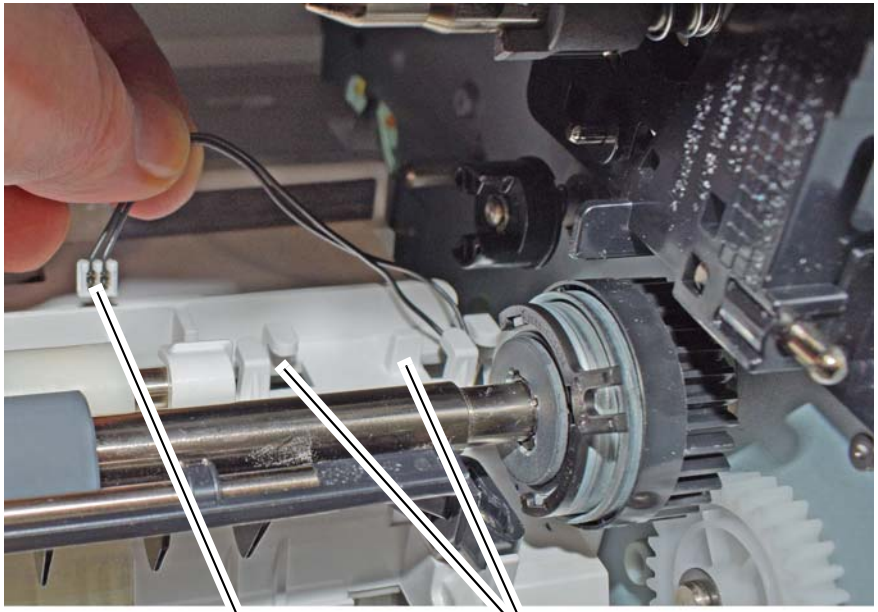
1
Slide the registration feed roll and clutch assembly through the front bearing hole as far as possible.

2
Use a small screwdriver to hold the rear bearing in the frame as the shaft is removed.

J-1-0037-A

Figure 2 Disengage the clutch

6. Disconnect the clutch, Figure 3.



2
Disconnect the P/J.

1
Release the harness from the guide.

J-1-0038-A

Figure 3 Disconnect the clutch

7. Remove the registration feed roll and clutch assembly, Figure 4.

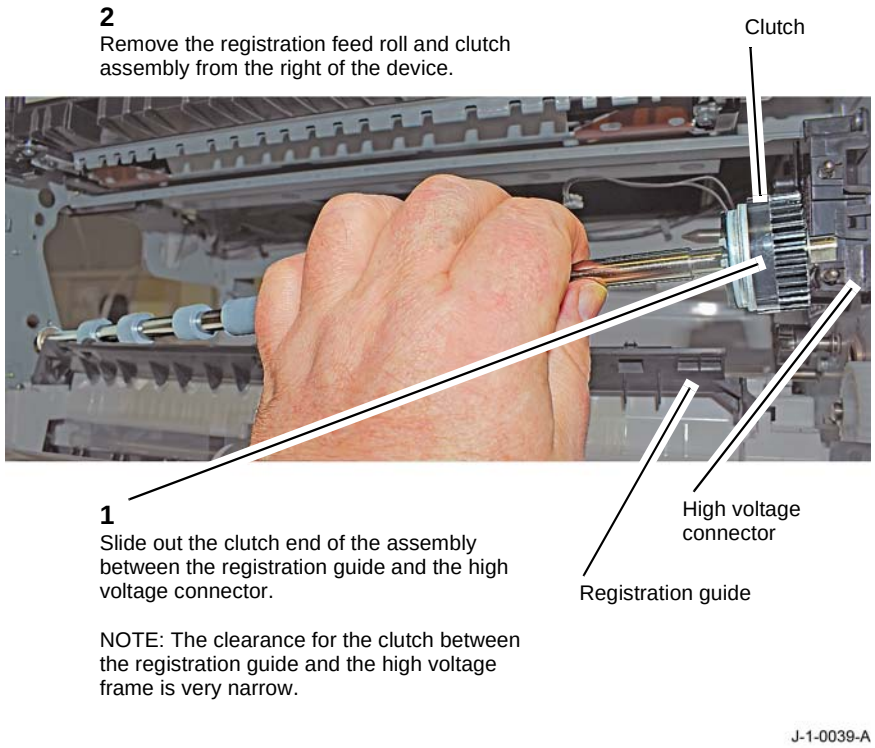


Figure 4 Registration clutch

Replacement

The replacement is the reverse of the removal procedure.

1. Ensure the clutch is correctly located with the high voltage connector, Figure 5.

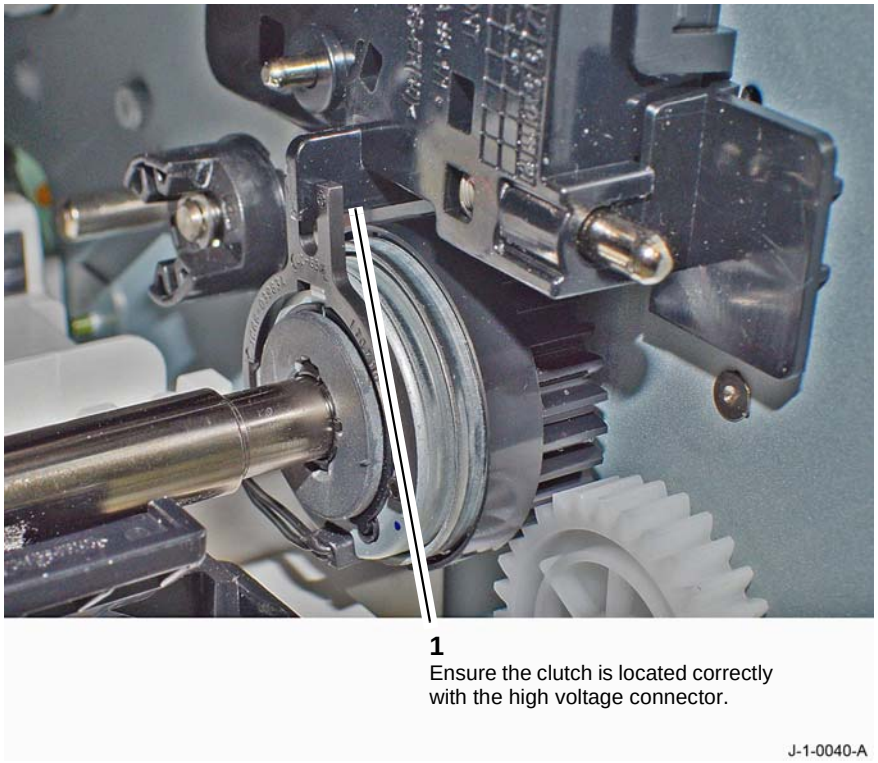


Figure 5 Clutch locator

REP 8.4 Registration Idler Roll Dust Cleaner

Parts List on PL 8.30 Item 10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the front cover, PL 28.10 Item 2.
2. Remove the toner cartridge, REP 9.1.
3. Remove the drum cartridge, REP 9.2. Store the drum cartridge in black bag to prevent light fatigue.
4. Remove the paper dust cleaning unit, PL 8.30 Item 10, Figure 1.

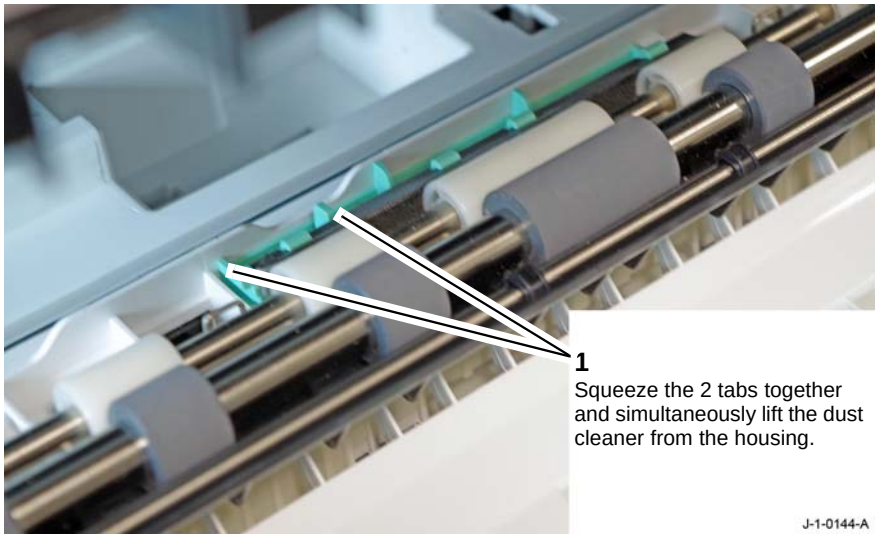


Figure 1 Paper dust clear

5. Use a brush to clean the paper dust from the paper dust cleaner.

Replacement

Replacement is the reverse of the removal procedure.

REP 9.1 Toner Cartridge

Parts List on PL 9.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not tilt the toner cartridge. The spillage of toner can cause damage. Place the toner cartridge on a plastic sheet to protect the customer's property.

1. Remove the toner cartridge, Figure 1.

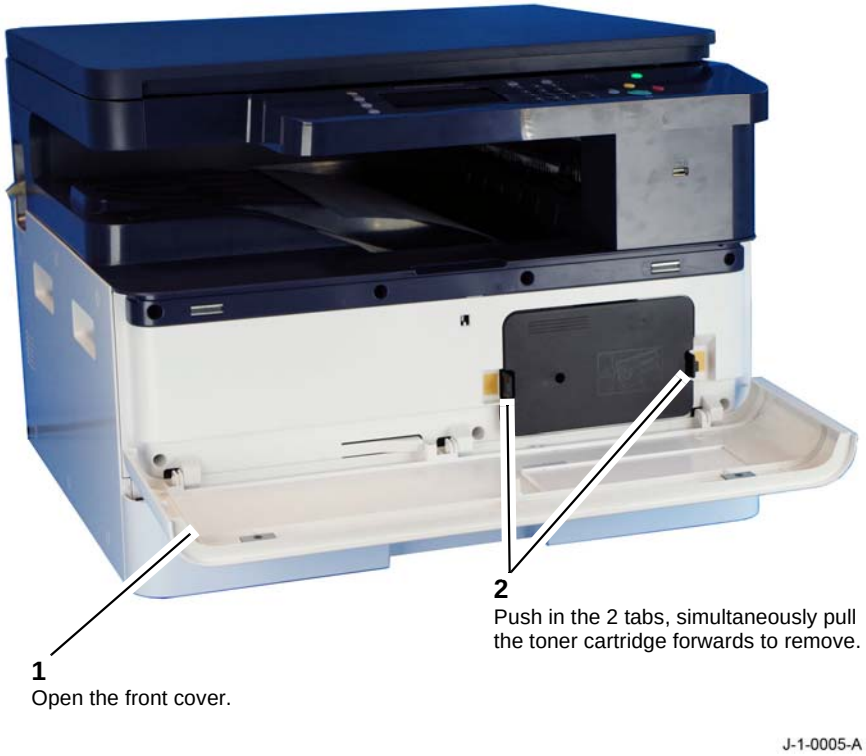


Figure 1 Toner Cartridge

Replacement

The replacement is the reverse of the removal procedure. If a new toner cartridge is installed enter dC135 HFSI and reset the toner cartridge counter.

REP 9.2 Drum Cartridge

Parts List on PL 9.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Do not tilt the drum cartridge. The spillage of toner can cause damage. Place the drum cartridge on a plastic sheet to protect the customer's property.

1. Remove the toner cartridge, REP 9.1.
2. Remove the drum cartridge, Figure 1.

***NOTE:** Do not touch the drum surface.*

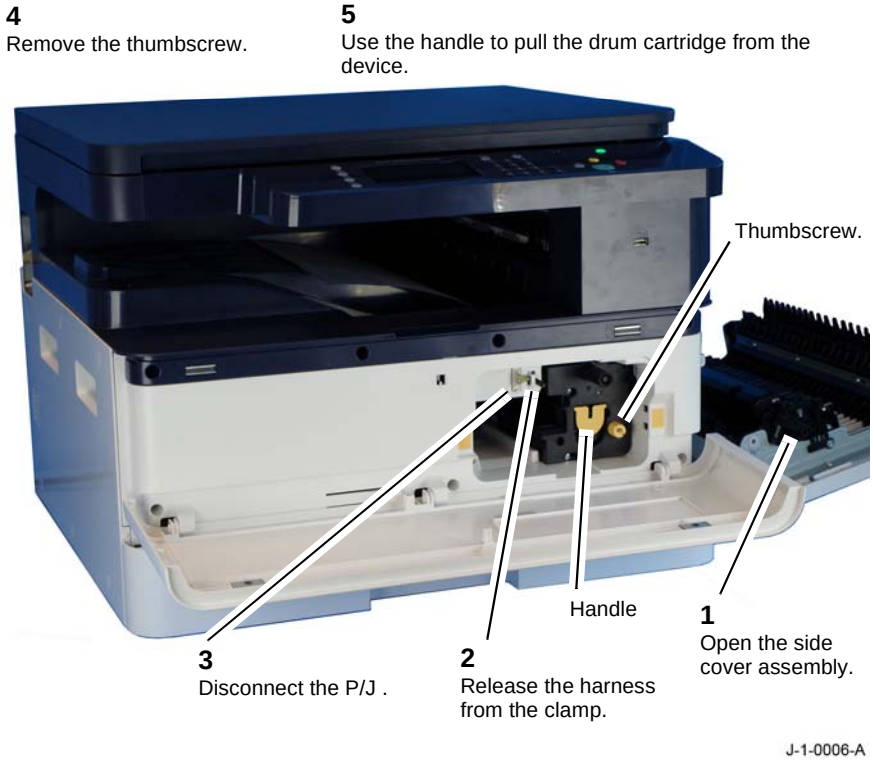


Figure 1 Drum Cartridge

3. Store the drum cartridge in a black bag to prevent light fatigue.

Replacement

The replacement is the reverse of the removal procedure. If a new drum cartridge is installed enter dC135 HFSI and reset the drum cartridge counter.

REP 9.3 Transfer Assembly

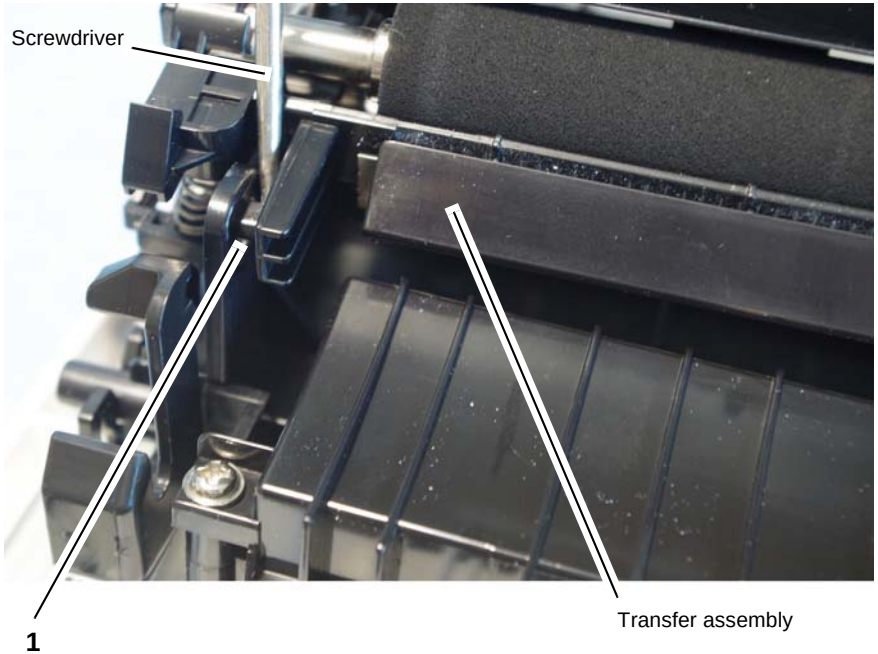
Parts List on PL 8.25

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Open the side cover assembly, PL 8.10 Item 5.
2. Release the outboard fixing of the transfer assembly, Figure 1.

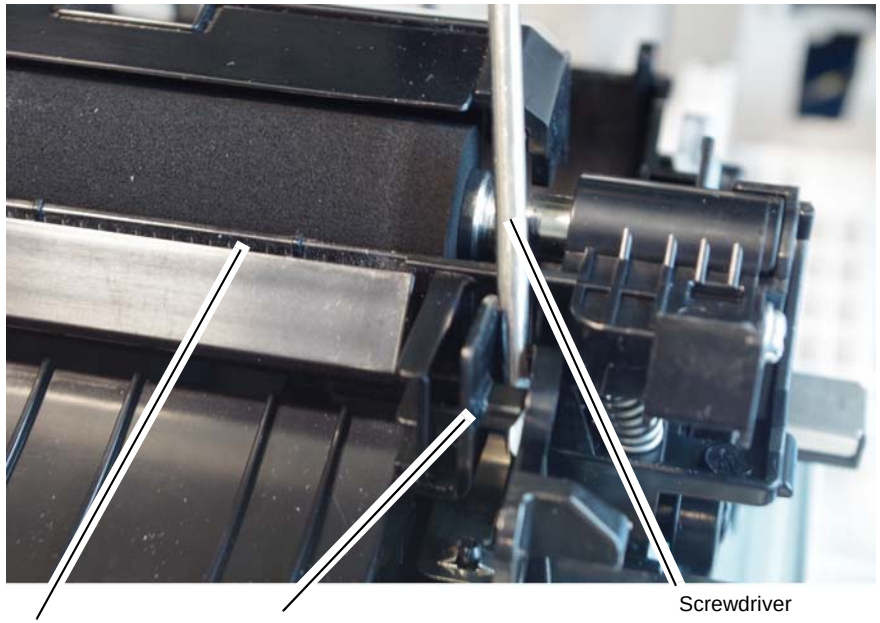


1
Use a flat bladed screwdriver to carefully lever the locator pin on the transfer assembly from the location hole on the paper feed guide.

J-1-0026-A

Figure 1 Transfer assembly outboard

3. Release the inboard fixing of the transfer assembly, Figure 2.



1
Use a flat bladed screwdriver to carefully lever the locator pin on the transfer assembly from the location hole on the paper feed guide.

J-1-0027-A

Figure 2 Transfer assembly inboard

4. Remove the transfer assembly, Figure 3.

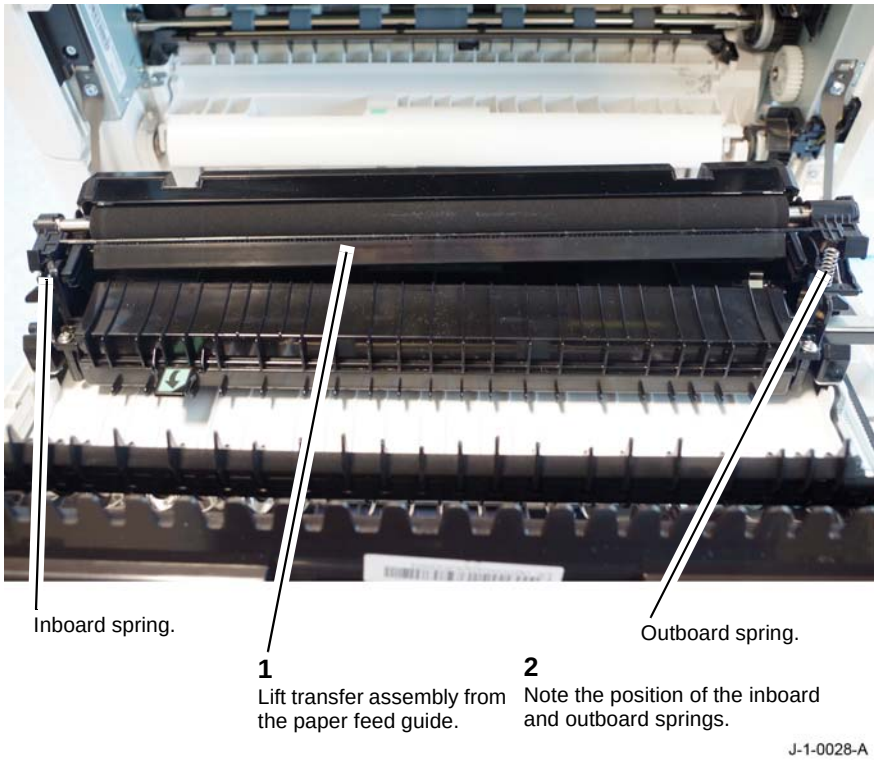


Figure 3 Transfer assembly

Replacement

The replacement is the reverse of the removal procedure.

REP 9.4 Temperature sensor

Parts List on PL 7.40

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the left cover, REP 28.3.
2. Remove the temperature sensor, Figure 1.

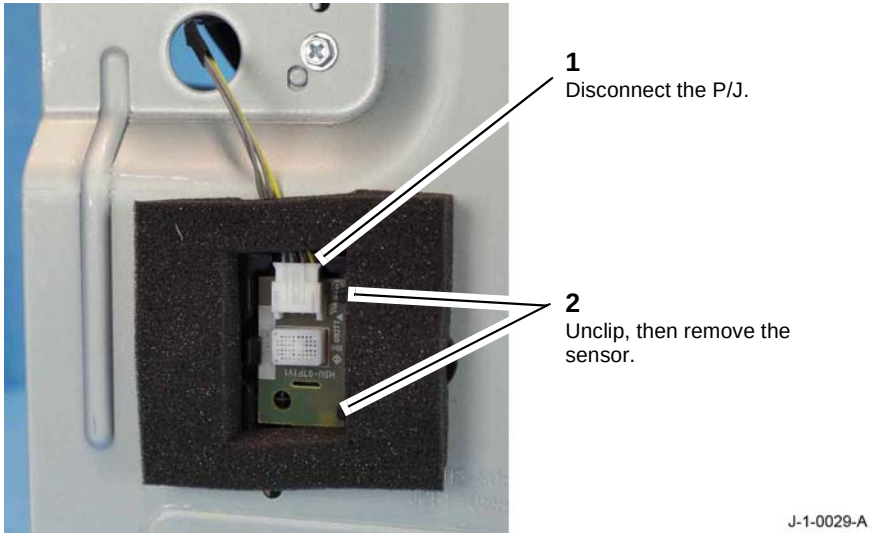


Figure 1 Temperature sensor

REP 10.1 Fuser Assembly

Parts List on PL 10.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

WARNING

Do not touch the fuser while it is hot.

Figure 1 Hot Surface Symbol

1. Remove the rear cover, REP 28.1
2. Open the side cover assembly, PL 8.10 Item 5.
3. Disconnect the fuser harnesses, Figure 2.

NOTE: *Do not use excessive force to disconnect connector CON 2 on the SMPS. CON 2 can be a tight fit and difficult to disconnect. If necessary first remove the SMPS REP 1.1, then disconnect CON 2.*

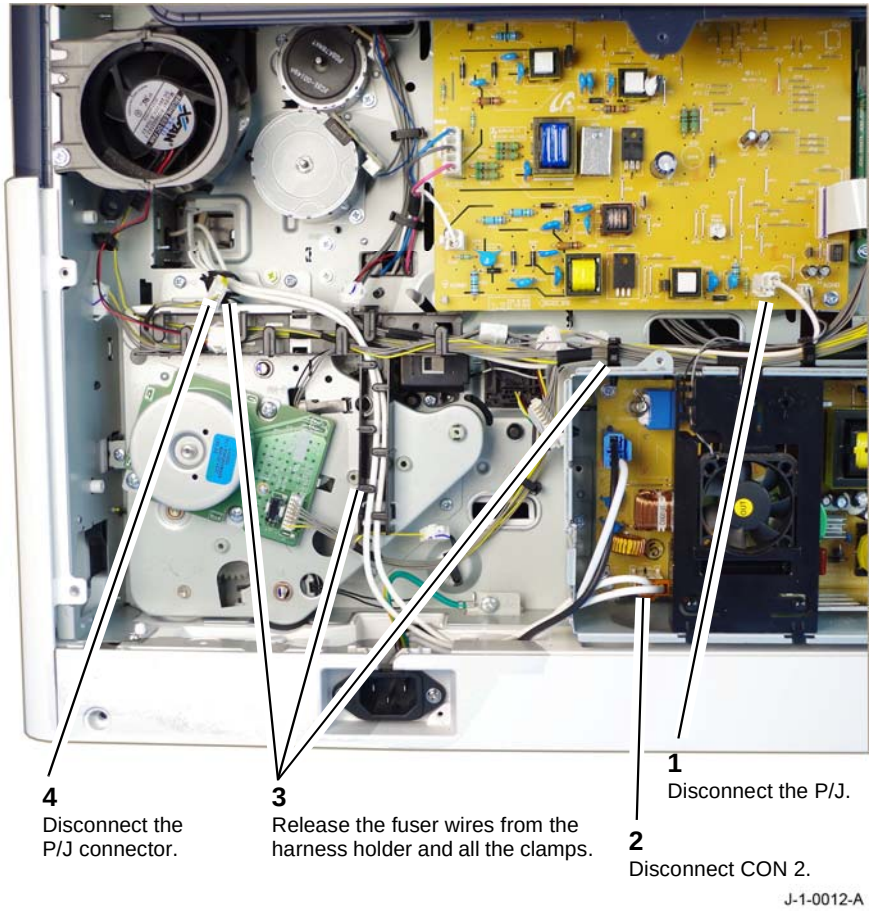
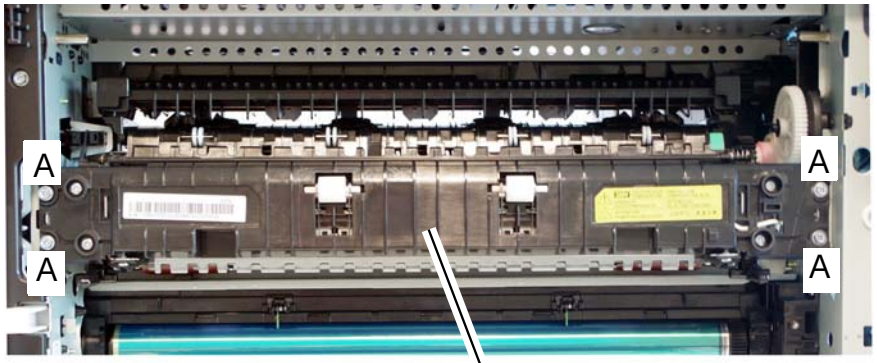


Figure 2 Fuser P/J connections

4. Remove the fuser assembly, Figure 3.



1
Remove 4 screws marked A.

2
Remove the fuser assembly.

J-1-0013-A

Figure 3 Fuser removal

Replacement

The replacement is the reverse of the removal procedure.

REP 10.2 Exit Assembly

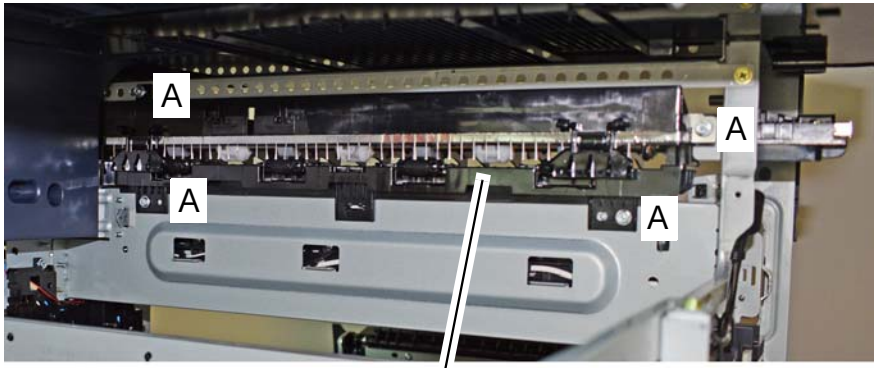
Parts List on PL 10.20

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the exit cover, REP 28.8.
2. Remove the exit assembly, Figure 1.



1
Remove 4 screws marked A.

2
Remove the exit assembly.

J-1-0075-A

Figure 1 Exit assembly

Replacement

The replacement is the reverse of the removal procedure.

REP 10.3 Exit Motor

Parts List on PL 10.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, REP 28.1.
2. Remove the scanner rear cover, REP 28.5 with document cover, REP 28.6 with DADF.
3. Remove the exit motor, Figure 1.

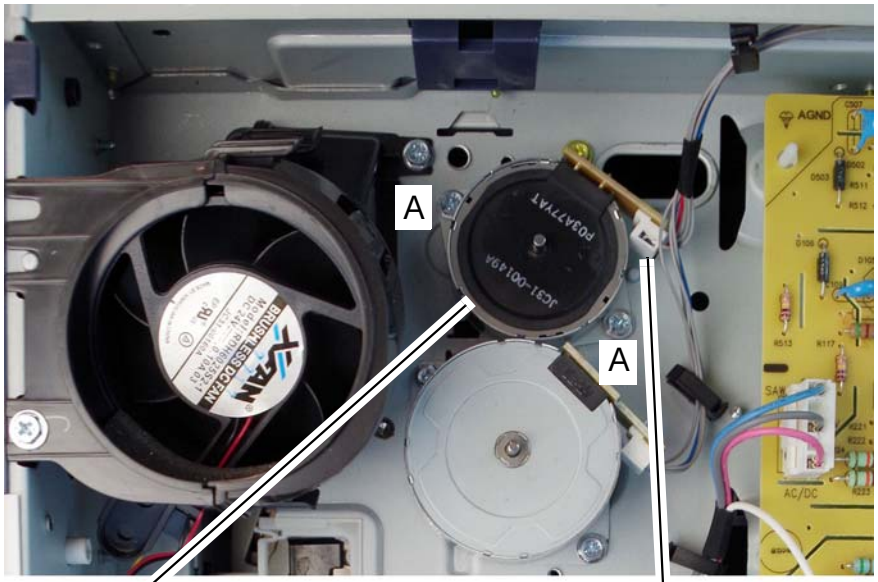


Figure 1 Exit Motor

Replacement

The replacement is the reverse of the removal procedure.

REP 10.4 Fuser Motor

Parts List on PL 10.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, REP 28.1.
2. Remove the fuser motor, Figure 1.

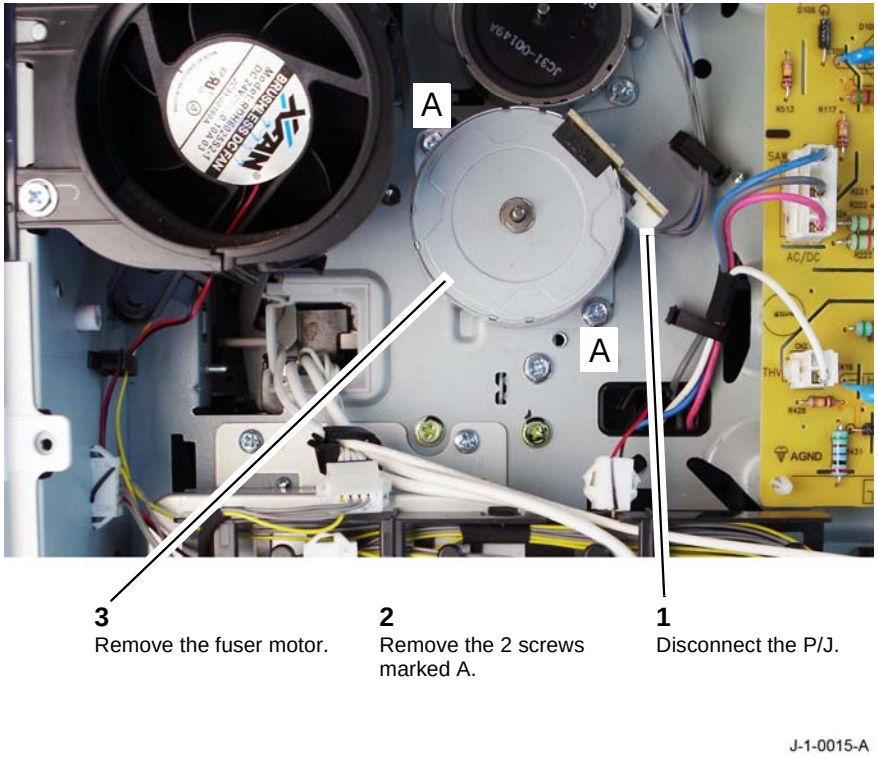


Figure 1 Fuser motor

Replacement

The replacement is the reverse of the removal procedure.

REP 10.5 Fuser Fan

Parts List on PL 10.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, REP 28.1.
2. Remove the scanner rear cover, PL 28.10.
3. Remove the fuser fan, Figure 1.

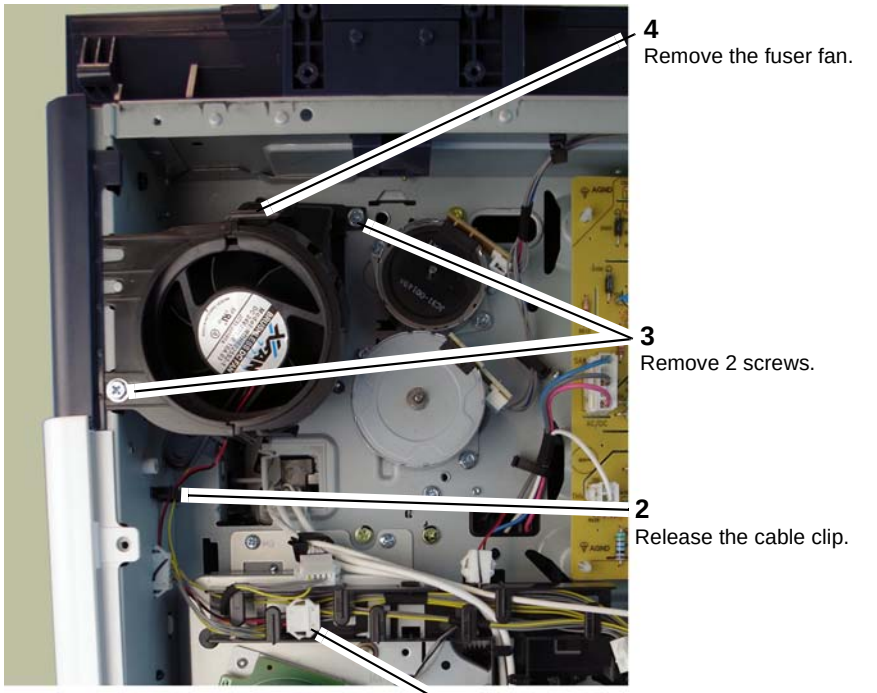


Figure 1 Fuser fan

Replacement

The replacement is the reverse of the removal procedure.

REP 14.1 Scanner Assembly

Parts List on PL 14.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

CAUTION

Take care on removal of the scanner assembly. The machine frame has sharp edges that can cause injury and damage the Flexible Flat Cables (FFC) and wires.

1. Remove the scanner rear cover, with document cover REP 28.5 or with DADF REP 28.6.
2. Remove the scanner left cover, REP 28.7.
3. Remove the user interface assembly, B1022 REP 2.1 or B1025, REP 2.2.
4. Remove the right side fixing screws, Figure 1.

Figure 1 Scanner right side

5. Remove the left side fixing screws, Figure 2.

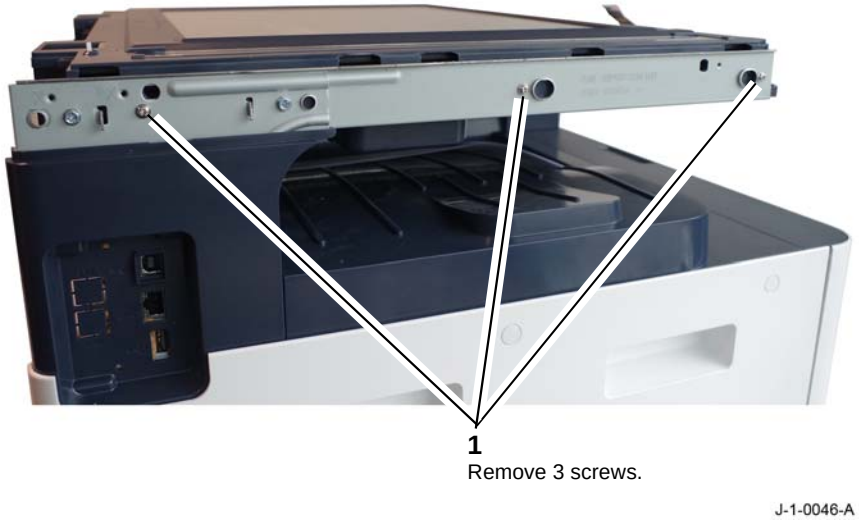


Figure 2 Scanner left side

6. Remove the rear fixing screws, Figure 3.

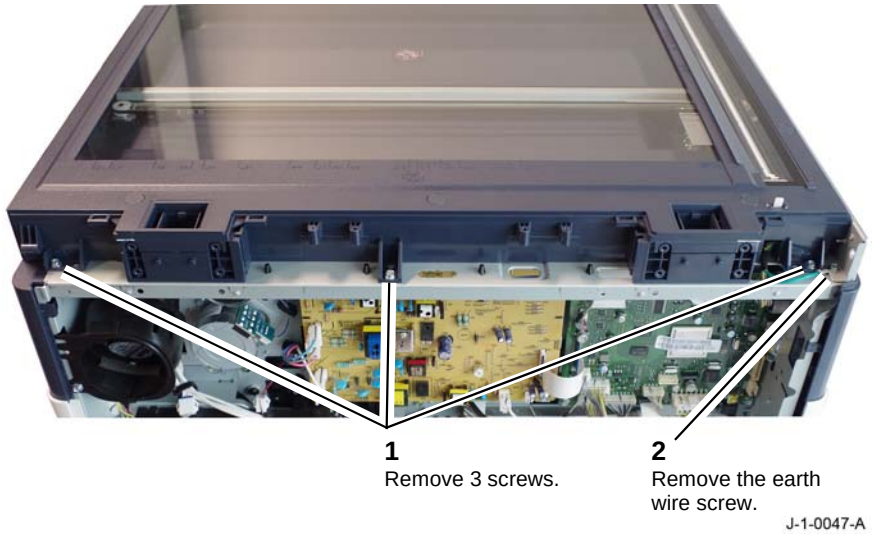


Figure 3 Scanner rear fixings

7. Remove the front fixing screws, Figure 4.

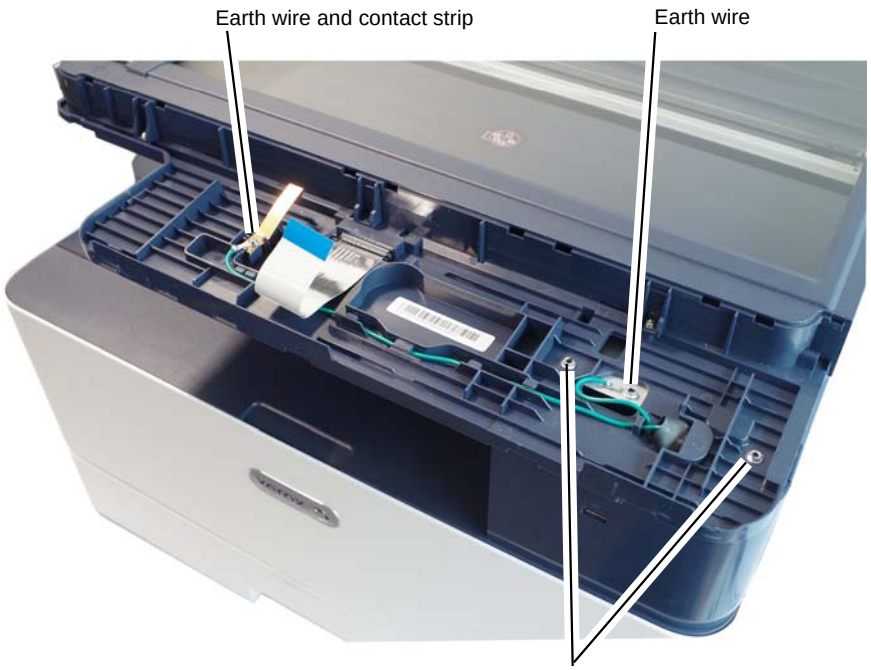


Figure 4 Scanner front fixings

8. Disconnect the scanner assembly, Figure 5.

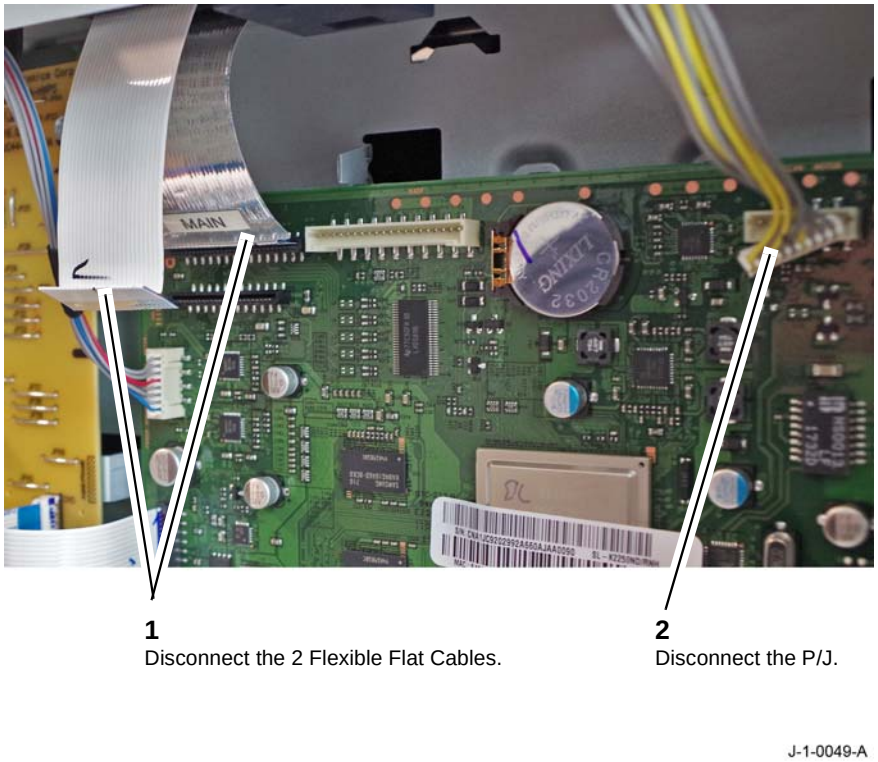
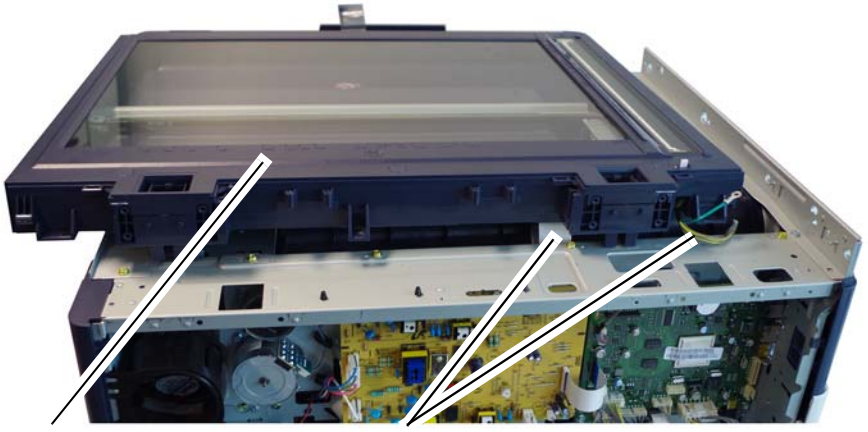


Figure 5 Electrical connections

9. Remove the scanner assembly, Figure 6.



1
Remove the scanner assembly.

2
Ensure the FFCs and wires do not snag on the machine frame.

J-1-0050-A

Figure 6 Scanner removal

Replacement

The replacement is the reverse of the removal procedure.

1. Ensure the earth wires and contact strip are reconnected, refer to Figure 3 and Figure 4.

REP 14.2 Scanner Top Cover

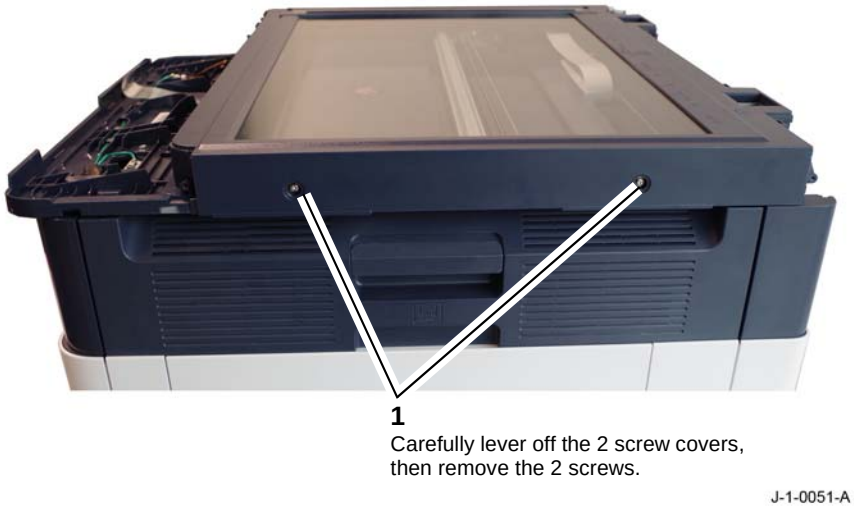
Parts List on PL 14.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the scanner rear cover, with document cover REP 28.5 or with DADF REP 28.6.
2. Remove the user interface assembly B1022, REP 2.1 or user interface assembly B1025, REP 2.2.
3. Remove the right side fixing screws, Figure 1.



1
Carefully lever off the 2 screw covers, then remove the 2 screws.

J-1-0051-A

Figure 1 Scanner right side

4. Remove the top fixing screws, Figure 2.

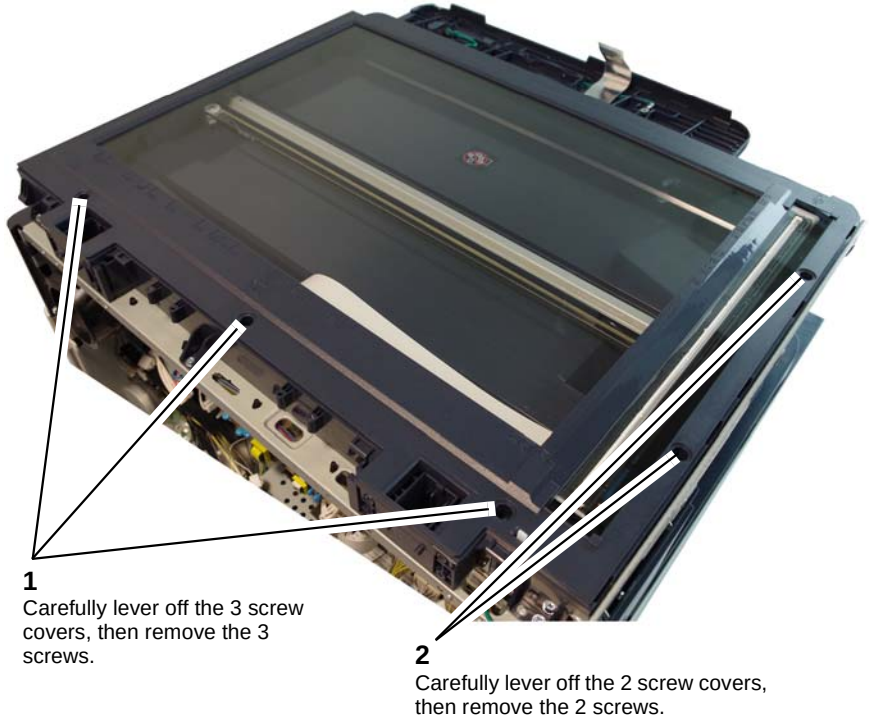


Figure 2 Top fixing screws

5. Remove the front fixing screws, Figure 3.

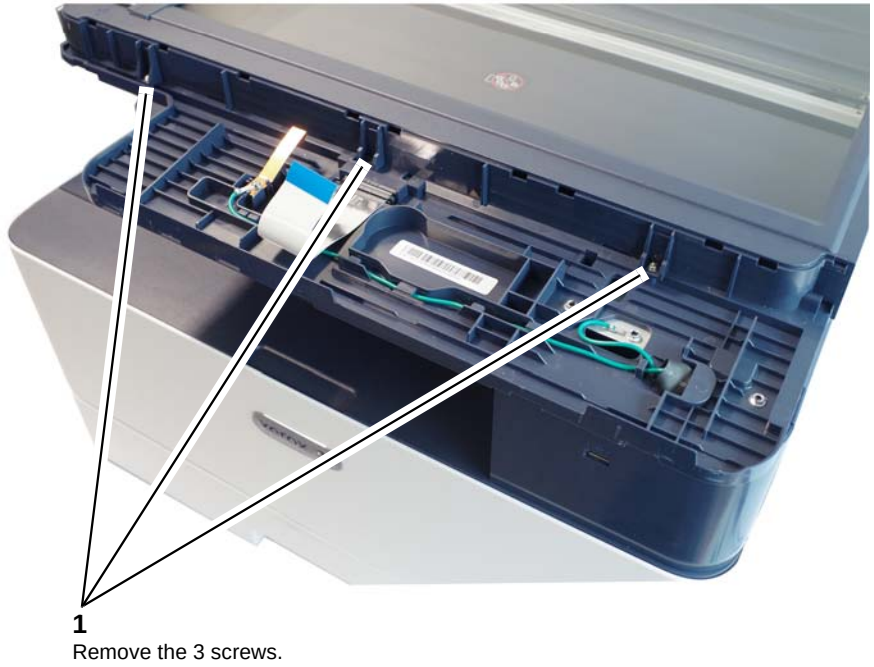


Figure 3 Front fixing screws

6. Prepare to remove the scanner top cover, Figure 4.

1
Carefully lever the left side of the scanner top cover from the scanner base.

J-1-0054-A

Figure 4 Left side separation

7. Remove the scanner top cover, Figure 5.

2
Lift the top cover off the device.

1
Carefully lever the right side of the scanner top cover from the scanner base.

J-1-0055-A

Figure 5 Scanner top cover removal

Replacement

The replacement is the reverse of the removal procedure.

- Perform the Shading and Print Routine, GP 14.

REP 14.3 Contact Image Sensor (CIS)

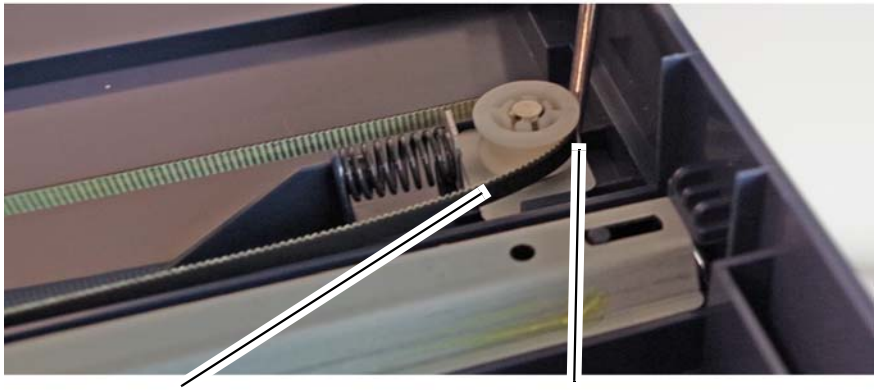
Parts List on PL 14.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the scanner top cover, REP 14.2.
2. Release the scan carriage drive belt, Figure 1.



2 Slip the belt off the pulley.

1 Lever the belt tensioner to release the tension on the belt.

J-1-0056-A

Figure 1 Belt tensioner

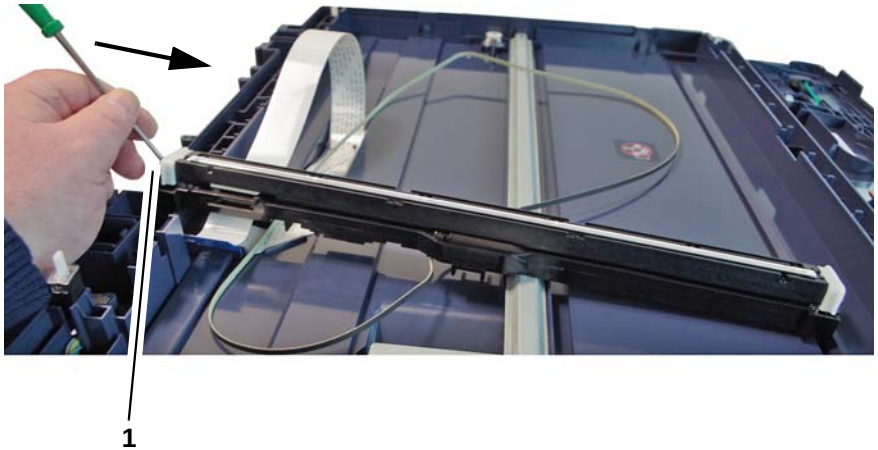
3. Disconnect the Flexible Flat Cable (FFC), Figure 2.

1 Pull the blue tab to disconnect the FFC.

J-1-0057-A

Figure 2 Contact image sensor FFC

4. Remove the CIS, Figure 3.



1 Carefully lever the CIS from the scan carriage in the direction of the arrow.

J-1-0058-A

Figure 3 CIS Removal

5. If necessary remove the spacer guides, PL 14.10 Item 10.

Replacement

The replacement is the reverse of the removal procedure.

- Perform the Shading and Print Routine, GP 14.

REP 28.1 Rear Cover

Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, Figure 1.

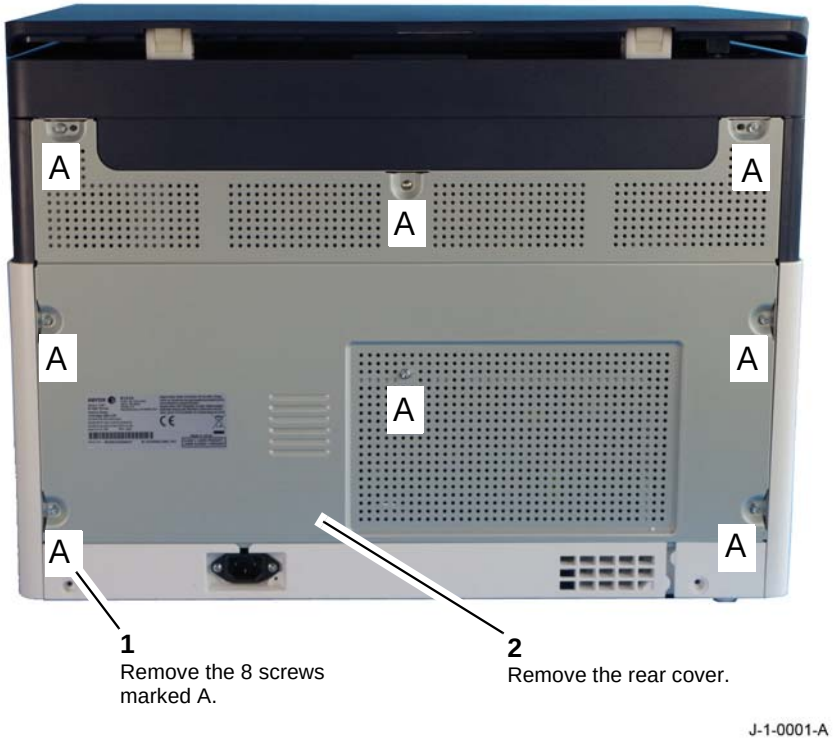


Figure 1 Rear cover

Replacement

The replacement is the reverse of the removal procedure.

REP 28.2 Front Cover

Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the front cover, Figure 1.

Figure 1 Front cover

Replacement

The replacement is the reverse of the removal procedure.

REP 28.3 Left Cover

Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the rear cover, REP 28.1.
2. Remove the left cover, Figure 1.

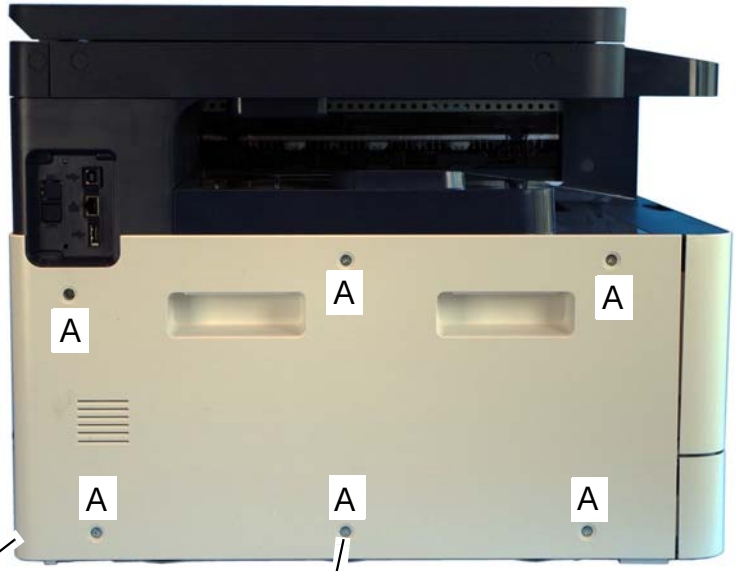


Figure 1 Left cover

Replacement

The replacement is the reverse of the removal procedure.

REP 28.4 Front Inner Cover

Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the toner cartridge, REP 9.1.
2. Remove the drum cartridge, REP 9.2.
3. Remove the front cover, REP 28.2.
4. Remove the front inner cover, Figure 1.

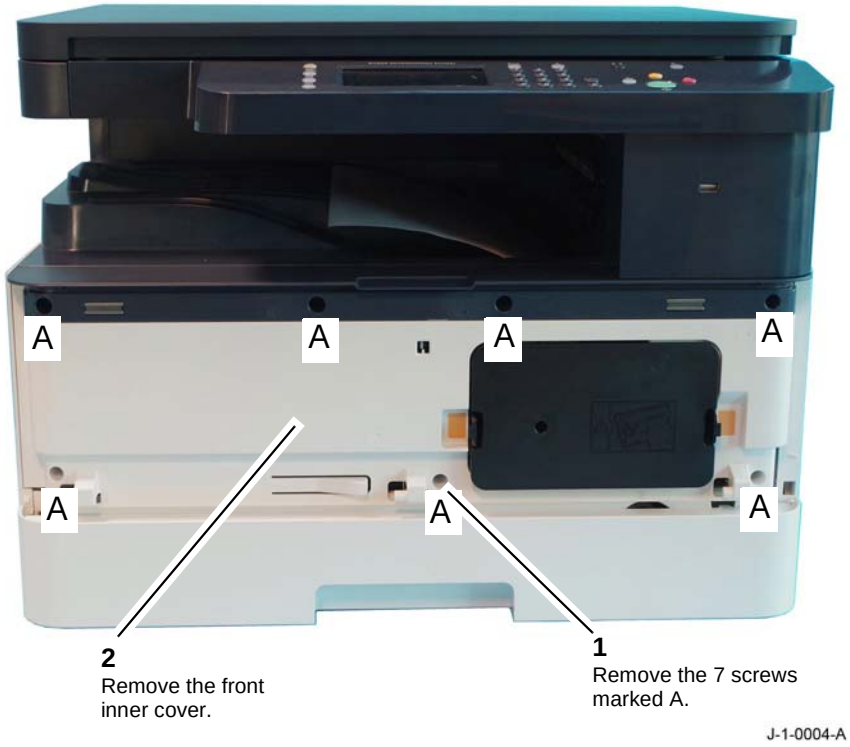


Figure 1 Front inner cover

Replacement

The replacement is the reverse of the removal procedure.

REP 28.5 Scanner Rear Cover with Document Cover

Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the document cover, REP 5.2.
2. Remove the rear cover, REP 28.1.
3. Remove the scanner rear cover, Figure 1.

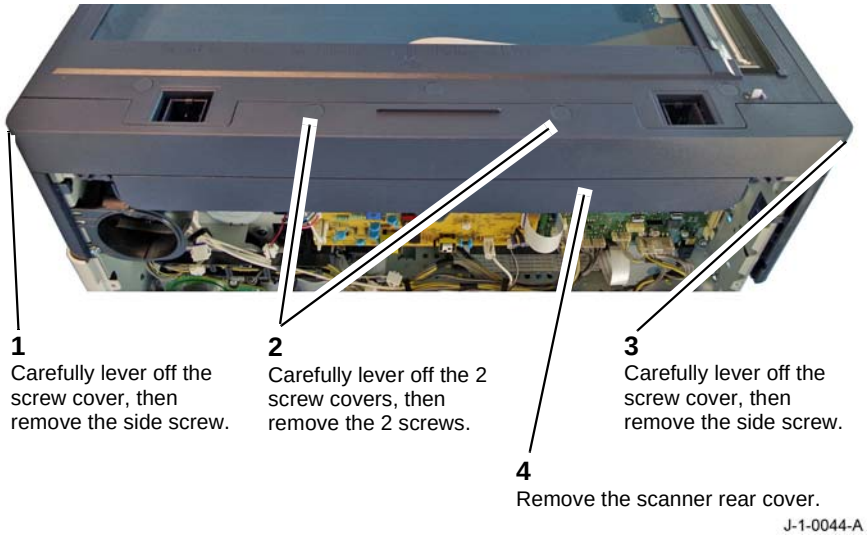


Figure 1 Scanner rear cover with doc cover

REP 28.6 Scanner Rear Cover with DADF

Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Raise the DADF, PL 5.10 Item 1.
2. Remove the rear cover, REP 28.1.
3. Prepare to remove the scanner rear cover, Figure 1.

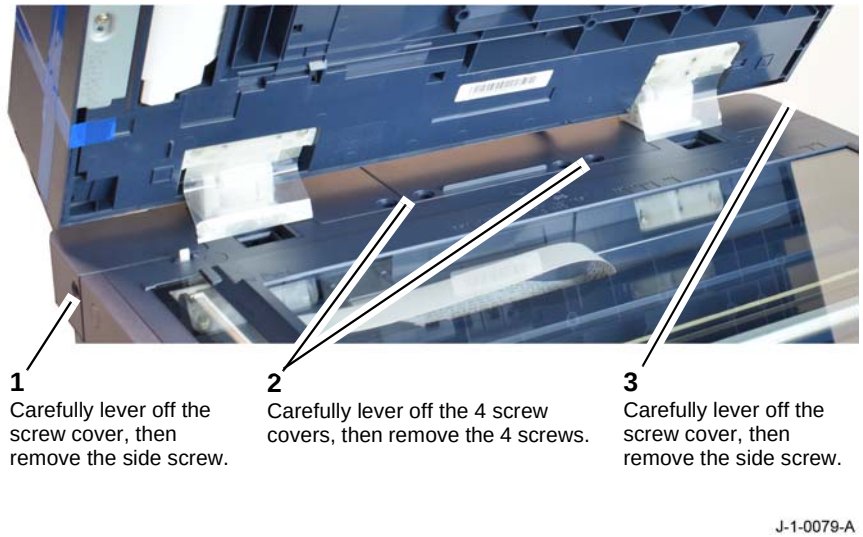
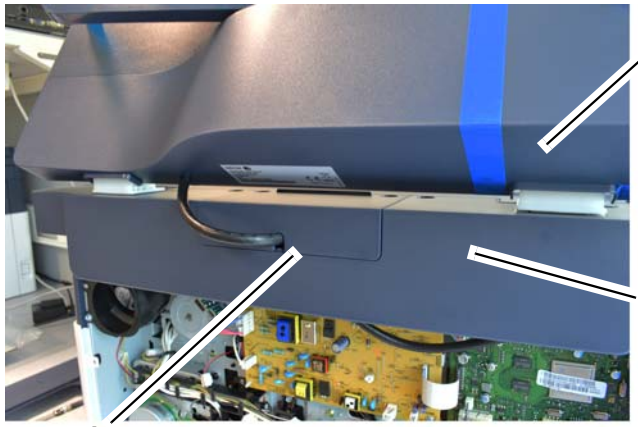


Figure 1 Scanner rear cover with DADF

Replacement

The replacement is the reverse of the removal procedure.

4. Remove the scanner rear center cover, Figure 2.



2
Lift the DADF just enough to take the weight of the DADF off the scanner rear cover.

3
Remove the scanner rear cover.

1
The scanner rear center cover is a snap fit. Use a flat bladed screwdriver to carefully lever off the scan rear center cover.

J-1-0080-A

Figure 2 Scanner rear covers

Replacement

The replacement is the reverse of the removal procedure.

REP 28.7 Scanner Left Cover

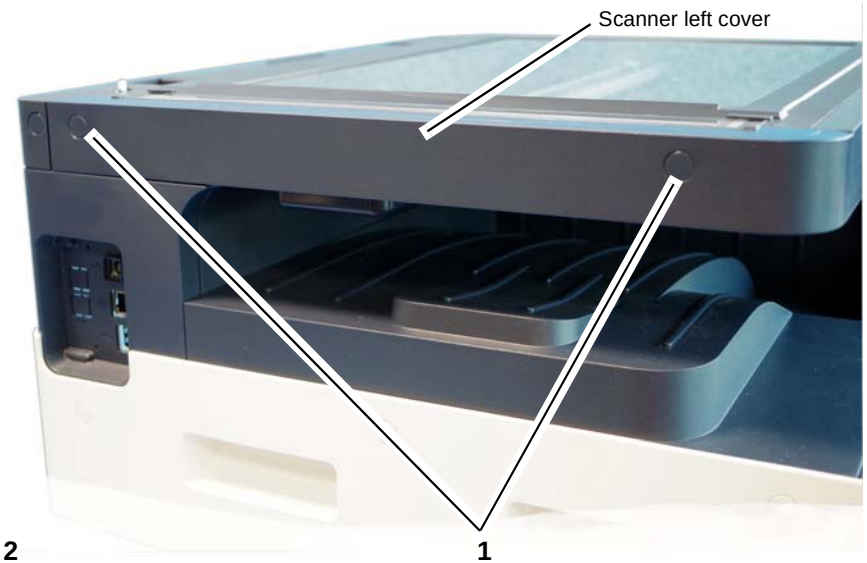
Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Remove the DADF, REP 5.1 or document cover, REP 5.2.
2. Remove the scanner left cover, Figure 1.



2
The scanner left cover is a snap fit. Use a flat bladed screwdriver to carefully lever off the scanner left cover.

1
Carefully lever off the 2 screw covers, then remove the 2 screws.

J-1-0016-A

Figure 1 Scanner left cover

Replacement

The replacement is the reverse of the removal procedure.

REP 28.8 Front Top Cover and Exit Cover

Parts List on PL 28.10

Removal

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

NOTE: *The Figures that follow show the device with the scanner assembly removed for pictorial clarity only. It is not necessary to remove the scanner assembly to perform this procedure.*

1. Remove the front top cover, Figure 1.

Figure 1 Front top cover

2. Remove the front inner cover, REP 28.4.
3. Remove the left cover, REP 28.3.
4. Prepare to remove the exit cover, Figure 2.

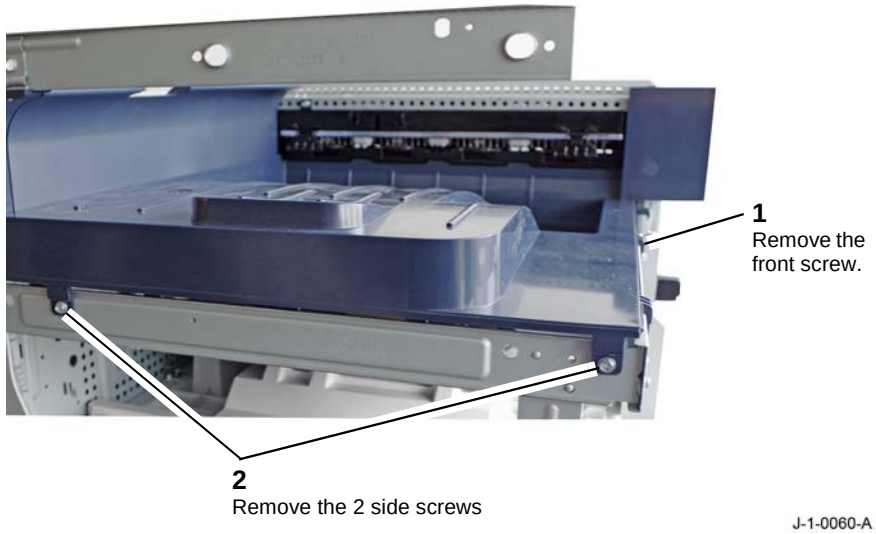


Figure 2 Exit cover fixings

5. Remove the exit cover, Figure 3.

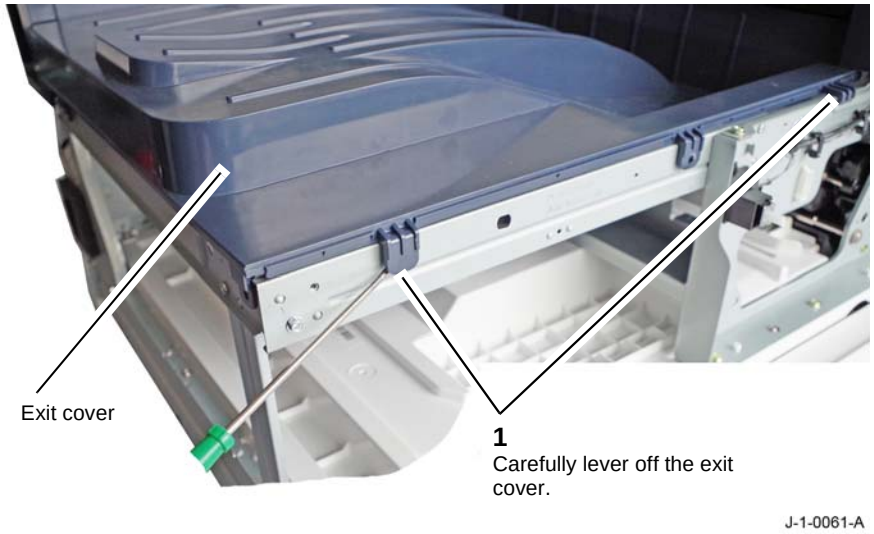


Figure 3 Exit cover removal

Replacement

The replacement is the reverse of the removal procedure.

ADJ 5.1 DADF Skew

Parts List on PL PL 5.15

Purpose

To correct document feed skew induced by the DADF.

Preparation

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

1. Clean the CVT glass. Refer to ADJ 5.2 DADF Cleaning.
2. Check the document path for obstructions or foreign objects.
3. Perform the Skew Check.

Skew Check

1. Open the DADF until it is fully vertical.
2. Slightly loosen the 4 screws securing the right hinge unit, Figure 1.

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Figure 1 DADF hinge

3. Adjust the hinge unit down. (1 scale => 0.9 mm skew adjustment), Figure 2.

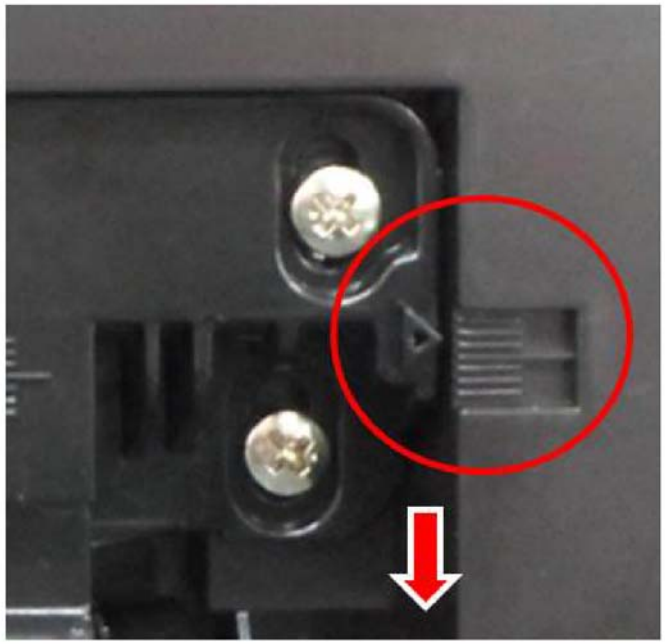

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Figure 2 Hinge adjustment

4. Detach, then reattach the DADF document pad after adjusting the skew, refer to REP 5.7, Figure 3.

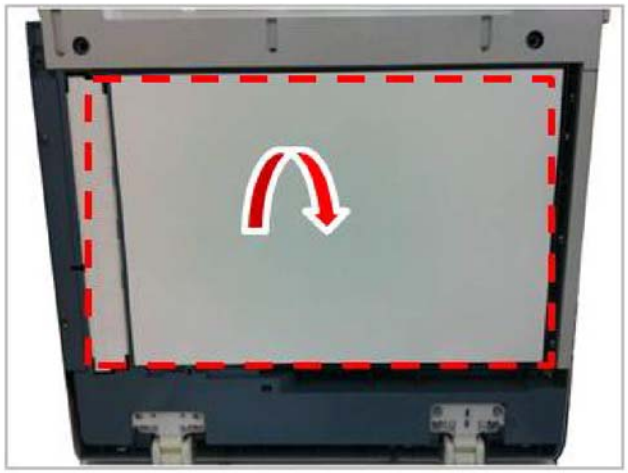

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Figure 3 DADF document pad

ADJ 5.2 DADF Cleaning

Parts List on PL 5.10

Purpose

To clean the DADF

Procedure

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

Perform the steps that follow:

CAUTION

Take care when cleaning the underside of the input tray. Do not damage the input tray wire guide, PL 5.40 Item 10.

1. Clean the DADF input tray assembly, PL 5.20 Item 4, and the exit area below the input tray with a micro fiber wiper damped with lens/mirror cleaner, PL 26.10 Item 1.
2. Use a brush to clean the paper size sensors, PL 5.40 Item 9.
3. Open the DADF cover assembly, PL 5.25 Item 1.
4. Use a dry micro fiber wiper or brush to clean the document path area, top and bottom. Remove all loose material.
5. Clean the upper document path rollers and idlers with a micro fiber wiper damped with mineral free water (distilled water).
6. Remove the DADF feed assembly, PL 5.25 Item 6. Clean the DADF friction pad assembly, PL 5.30 Item 2, with a micro fiber wiper damped with mineral free water (distilled water). Use a brush to clean the paper dust from the feed assembly. Reinstall the DADF feed assembly.
7. Clean the sensors beneath the DADF rear cover, PL 5.35 Item 7.
8. Raise the DADF assembly.
9. Clean the area around the white bar guide, PL 5.30 Item 21, with a micro fiber wiper damped with mineral free water (distilled water).
10. Clean the DADF cover pad, PL 5.10 Item 2, with a micro fiber wiper damped with mineral free water (distilled water).
11. Lower the DADF assembly.
12. Clean the CVT glass and the document glass, PL 14.10 Item 1. Refer to ADJ 6.1 Scanner Cleaning Procedure.

ADJ 6.1 Scanner Cleaning Procedure

Parts List on PL 14.10

Procedure

Clean the top and bottom surface of the platen glass, CVT glass, PL 14.10 Item 1 and contact image sensor window, PL 14.10 Item 3 with a micro fiber wiper damped with mineral free water (distilled water), then dry with a soft, lint-free cloth.

If necessary, use a lint free lightly damped cloth with Xerox formula A cleaner, PL 26.10 Item 2 or with lens/mirror cleaner, PL 26.10 Item 1 to clean the platen glass and CVT glass, PL 14.10 Item 1, then dry with a soft, lint-free cloth.

ADJ 9.1 Altitude Adjustment

Purpose

Atmospheric pressure, determined by altitude, can affect print quality. If the device is located at an elevation greater than 1000 m (3280 ft.) use the following procedure to adjust for the appropriate altitude level.

Adjustment

- For B1025 machines.
- For B1022 machines.

WARNING

Switch off the electricity to the machine. Refer to GP 4. Disconnect the power cord from the customer supply while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

B1025

1. Login as an administrator, GP 8.
2. At the control panel, press the **Machine Status** button.
3. Touch **Device Settings** > **General** > **Altitude Adjustment**.
4. Select a mode:
   - **Normal**: Select this mode for altitudes below 1000 m (3280 ft.).
   - **High 1**, **High 2**, **High 3**, or **High 4**: Select one of these modes for altitudes levels above 1000 m (3280 ft.), refer to Table 1.
5. Touch OK.

B1022

1. Login to **System Setup** as an administrator, GP 8.
2. Scroll with the down arrow button to highlight **Machine Setup**, then press the **OK** button.
3. Scroll with the down arrow button to highlight **Altitude Adjustment**, then press the **OK** button.
4. Scroll with the down arrow button to highlight one of the modes that follow ; **High 1**, **High 2**, **High 3**, or **High 4,** for altitudes levels above 1000 m (3280 ft.), refer to Table 1.
5. Press the **OK** button.
6. Press the **STOP** button.
7. Select **Yes**, then press the **OK** button to exit **Admin** mode.

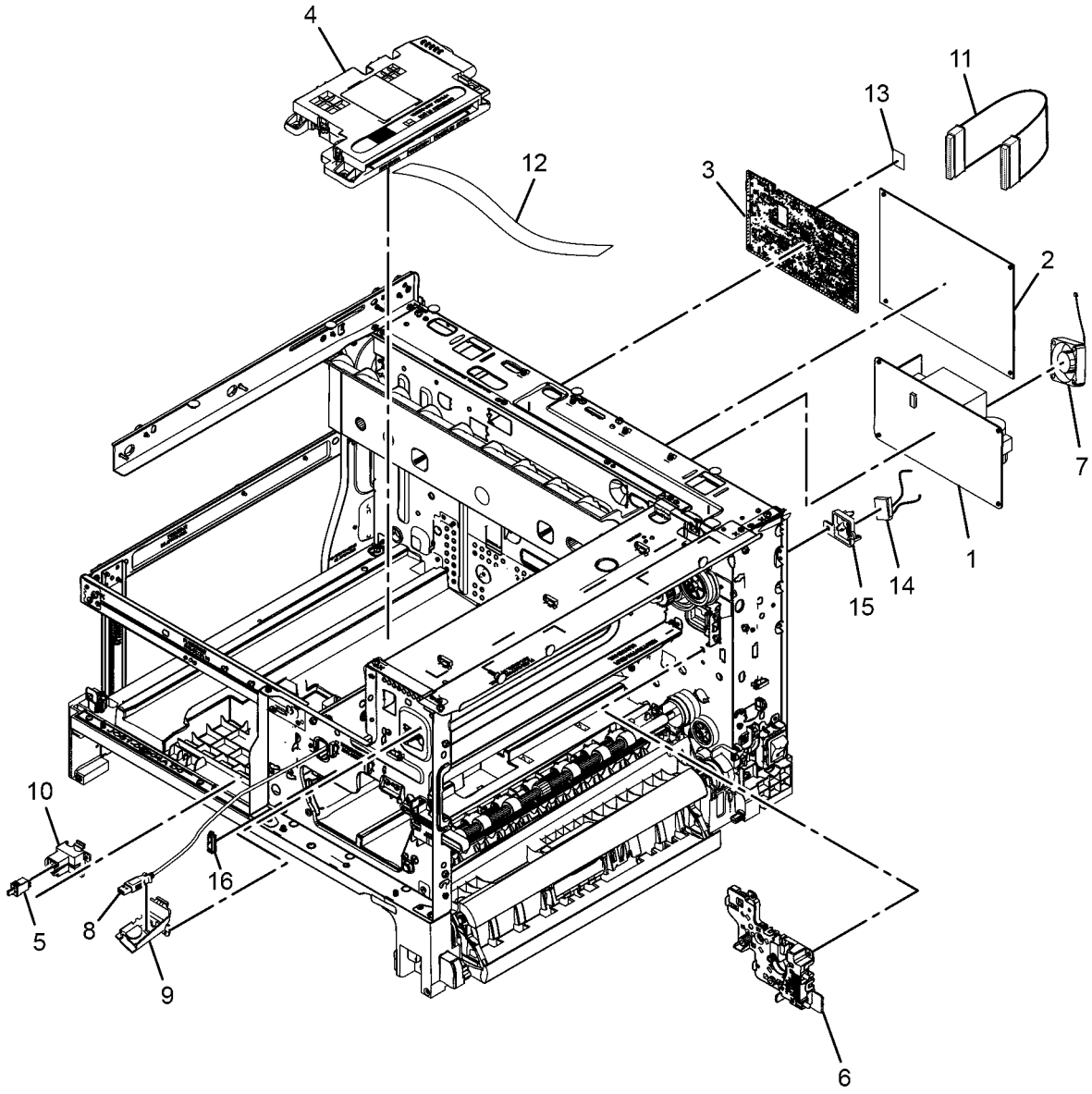
Table 1 Altitude Levels

Mode	Altitude	Description
High 1	5000 m (16404 ft)	Height above sea level.
High 2	4000 m (13123 ft)	Height above sea level.
High 3	3000 m (9842 ft)	Height above sea level.
High 4	2000 m (6561 ft)	Height above sea level.

5 Parts Lists

PL 1.10 Power and Control Assembly

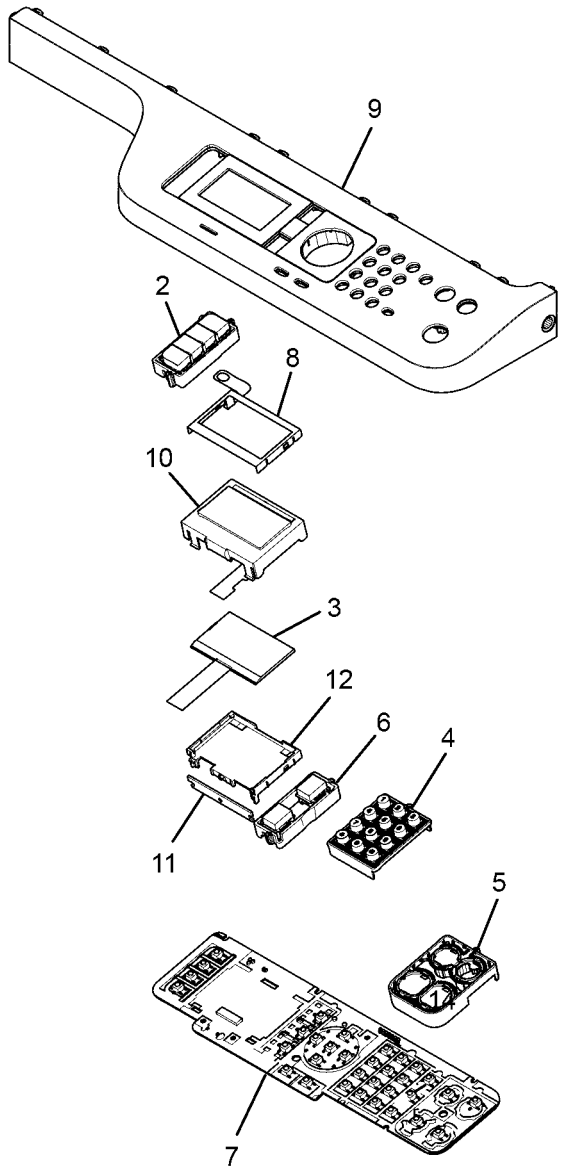
Item	Part	Description
1	105N02346	SMPS (110V), (REP 1.1)
–	105N02345	SMPS (220V), (REP 1.1)
2	105N02347	HVPS (REP 1.3)
3	140N63846	Main PWB - B1025 (REP 1.4)
–	140N63845	Main PWB - B1022 (REP 1.4)
4	062N00308	Laser scan unit (LSU), (REP 6.1)
5	110N01551	Front cover switch (Q01-100), (REP 1.2)
6	007N01837	High voltage connector (REP 1.5)
7	127N07834	SMPS fan (MOT09-500), (REP 1.1)
8	113N01337	Front USB host cable (REP 1.6)
9	–	Front USB host cable housing
10	–	Front cover switch housing
11	152N11928	HVPS I/F flat cable
12	152N11926	LSU flat cable
13	144N00225	Memory Card (Only B1025), (P/O PL 1.10 Item 3)
14	152N11932	Side cover interlock switch and harness assembly (REP 1.7)
15	–	Side cover interlock switch holder
16	–	Drum cartridge connector



PL 2.10 User Interface - B1022

Item	Part	Description
1	109N00838	User interface assembly - B1022 (REP 2.1)
2	–	Function key pad (P/O PL 2.10 Item 1)
3	–	LCD (P/O PL 2.10 Item 1)
4	–	Numerical key pad (P/O PL 2.10 Item 1)
5	–	Key holder (P/O PL 2.10 Item 1)
6	–	Mode key pad (P/O PL 2.10 Item 1)
7	–	User interface PWB (P/O PL 2.10 Item 1)
8	–	LCD ground (P/O PL 2.10 Item 1)
9	–	User interface cover (P/O PL 2.10 Item 1)
10	–	LCD cover (P/O PL 2.10 Item 1)
11	–	Backlight PWB for 4 line LCD (P/O PL 2.10 Item 1)
12	–	LCD holder (P/O PL 2.10 Item 1)

1 { 2 - 12



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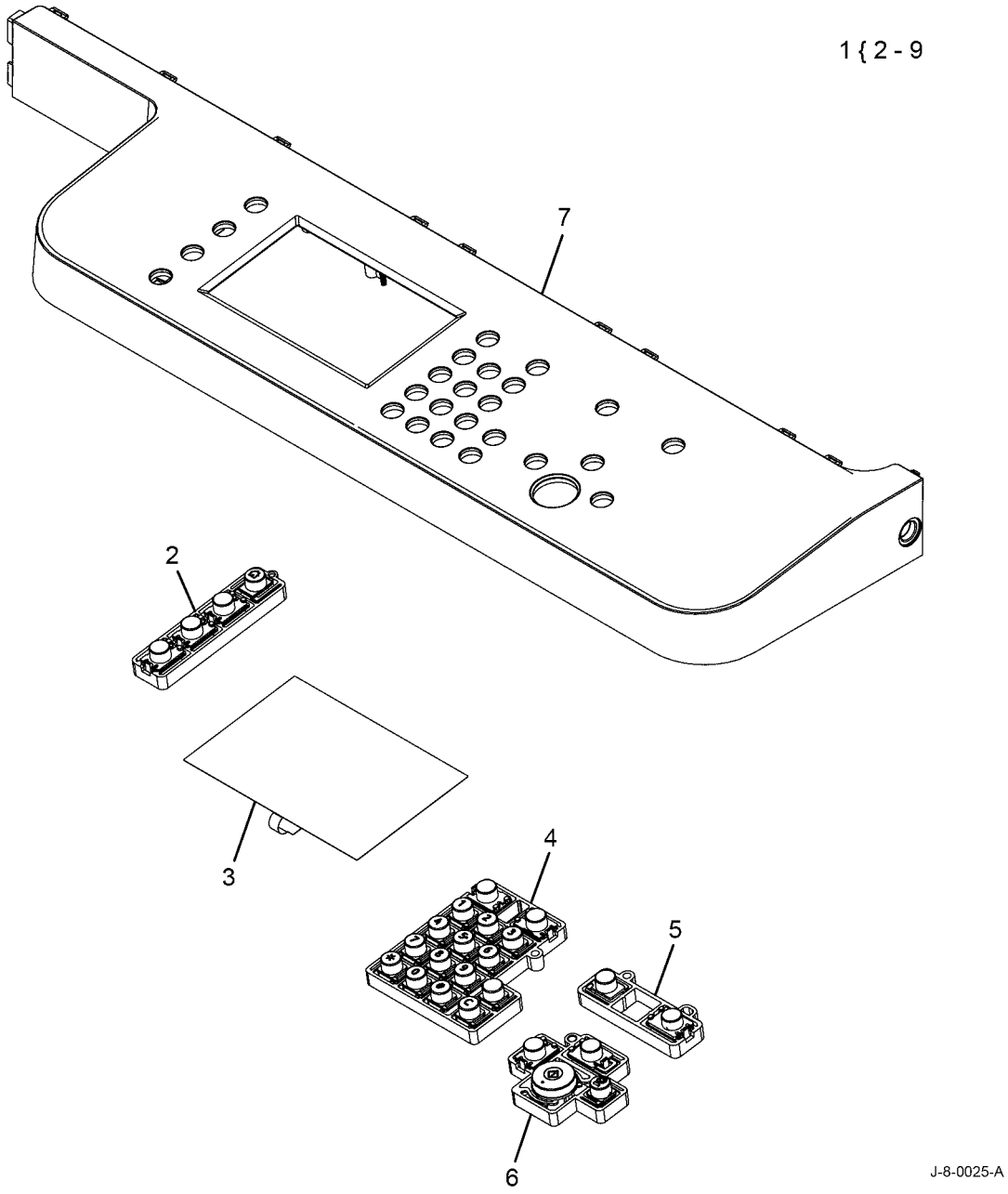
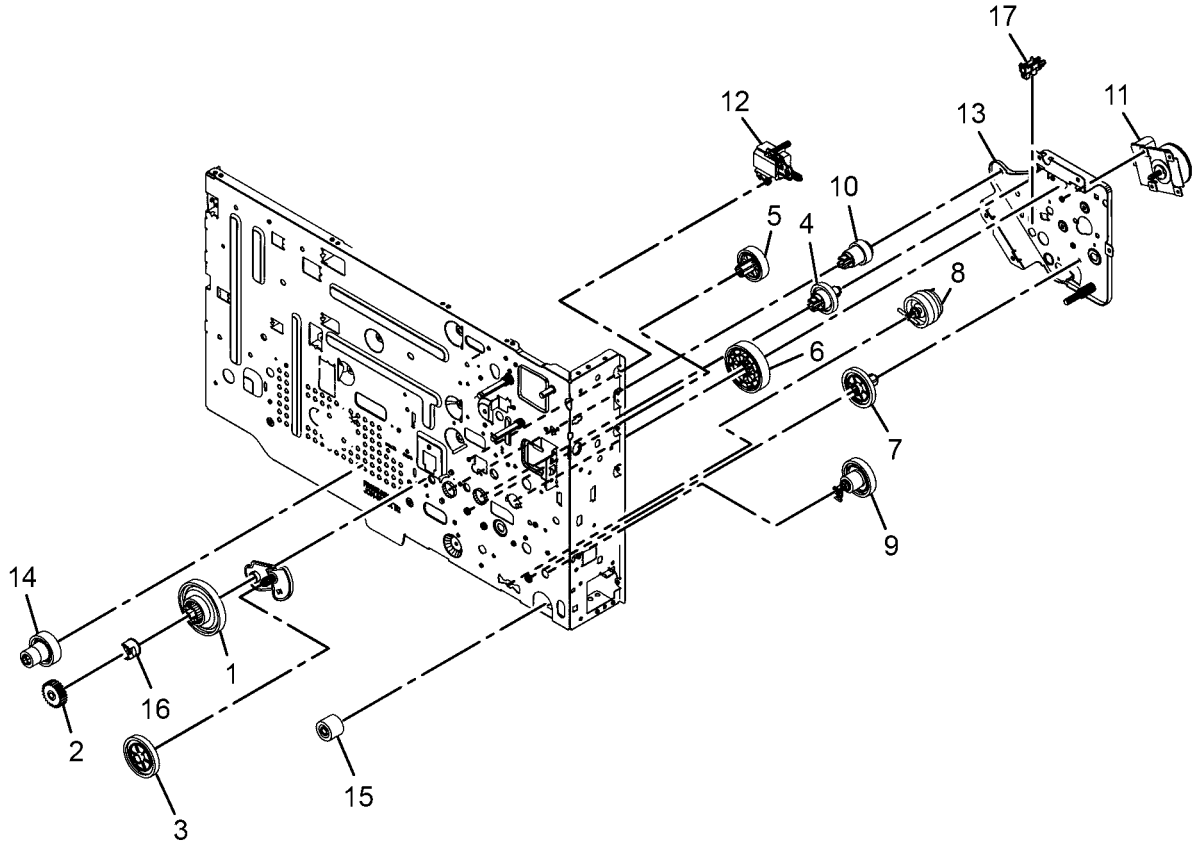
PL 2.15 User Interface - B1025

Item	Part	Description
1	109N00839	User interface assembly - B1025 (REP 2.2)
2	–	Function key pad (P/O PL 2.15 Item 1)
3	–	LCD (P/O PL 2.15 Item 1)
4	–	Numerical key pad (P/O PL 2.15 Item 1)
5	–	Mode key pad (P/O PL 2.15 Item 1)
6	–	Key pad (P/O PL 2.15 Item 1)
7	–	User interface cover (P/O PL 2.15 Item 1)
8	–	User interface PWB (Not shown) (P/O PL 2.15 Item 1)
9	–	FFC cable for 4.3 inch LCD (Not shown)



PL 4.10 Main Drives

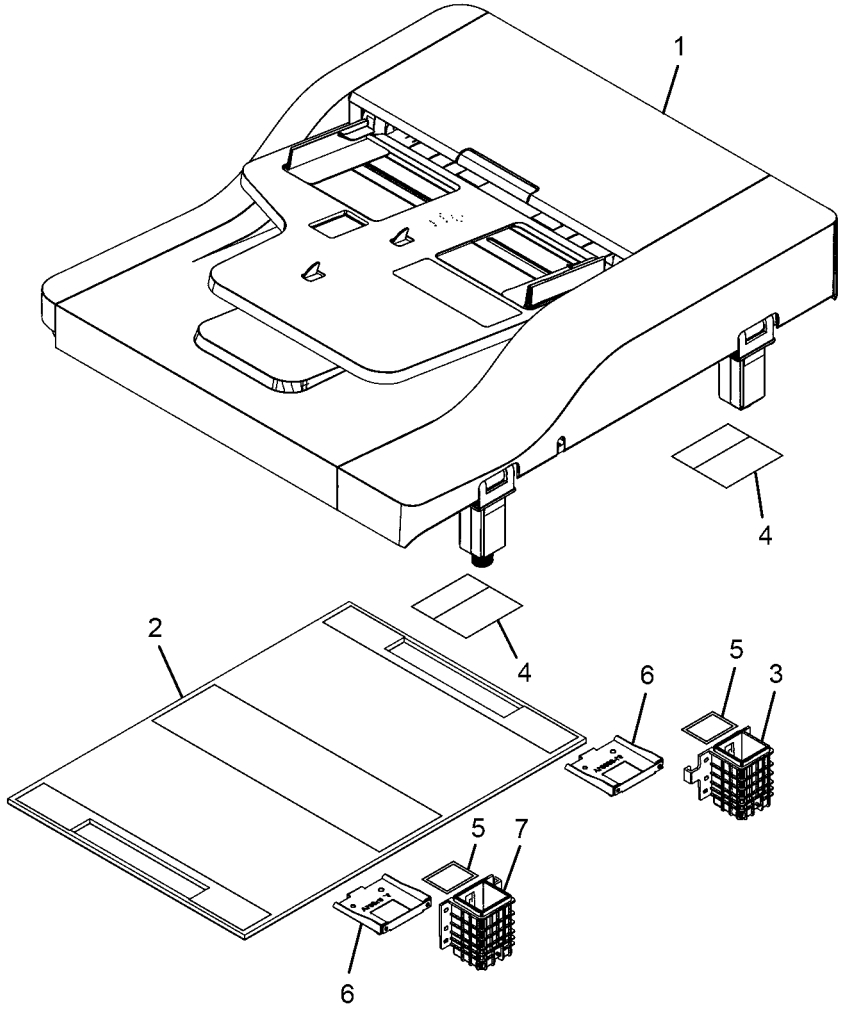
Item	Part	Description
1	007N01839	Fuser gear
2	007N01834	RDCN fuser gear
3	007N01836	Duplex drive gear
4	–	Toner cartridge supply gear
5	–	Gear
6	–	Gear
7	–	Pickup idle gear
8	121N01266	Tray 1 pick-up clutch (CL08-810)
9	–	Registration drive in gear
10	–	Gear
11	127N07937	Main BLDC motor (MOT04-100) (REP 4.1)
12	127N07587	Toner dispense motor (MOT09-600)
13	–	Gears bracket
14	–	Exit RDCN gear
15	–	Bypass drive gear
16	121N01267	Gear-hub clutch
17	130N01574	Toner dispense motor sensor (Q09-700)



J-8-0017-A

PL 5.10 DADF (1 of 2)

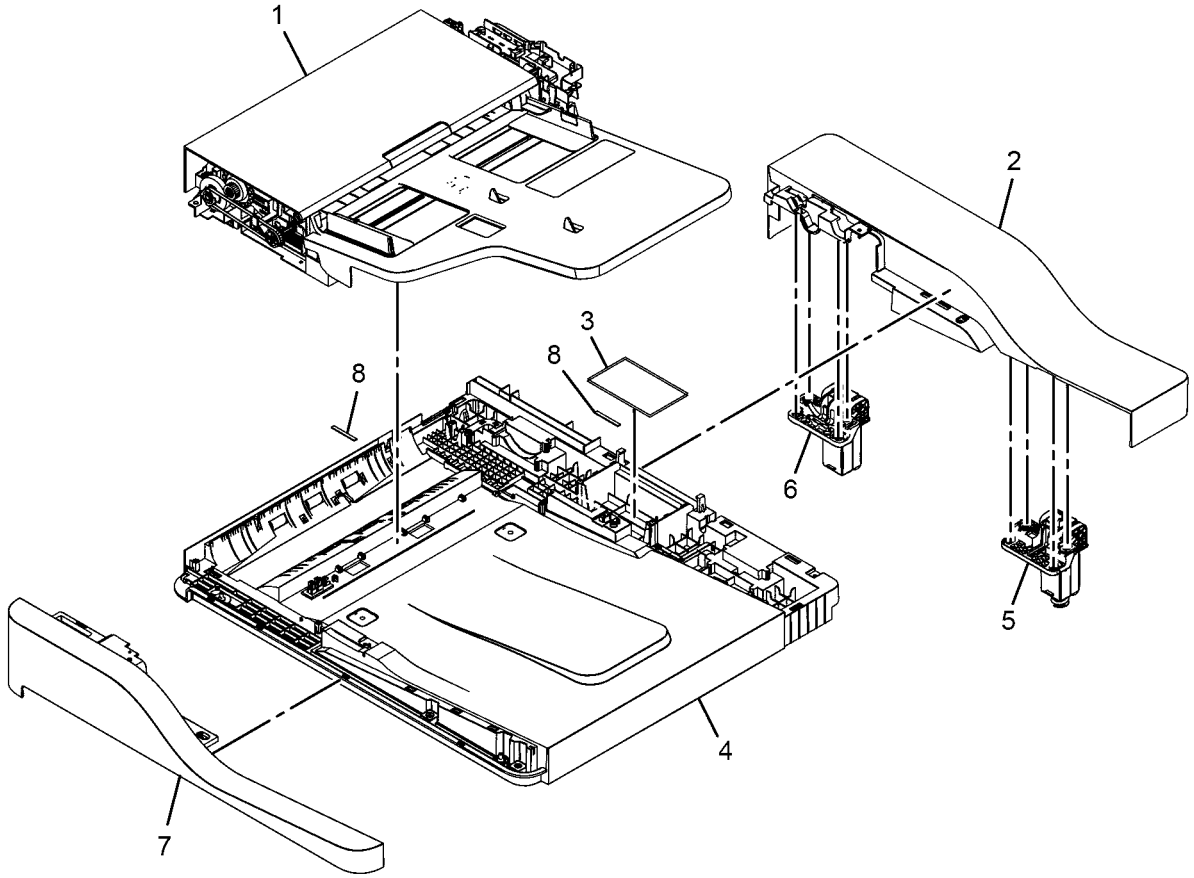
Item	Part	Description
1	–	DADF (REP 5.1, ADJ 5.1)
2	019N01131	DADF document pad (REP 5.7, ADJ 5.2)
3	–	Left hinge holder
4	–	Hinge sheet cover
5	–	Hinge sheet
6	–	Scan rear support plate
7	–	Right hinge holder



J-8-0011-A

PL 5.15 DADF (2 of 2)

Item	Part	Description
1	–	DADF cover assembly
2	–	DADF rear cover (REP 5.11)
3	140N63847	DADF PWB (REP 5.4)
4	015N00686	DADF base (REP 5.17)
5	003N01168	Right hinge (REP 5.17)
6	003N01169	Left hinge (REP 5.17)
7	–	DADF front cover (REP 5.12)
8	–	Stacker damper



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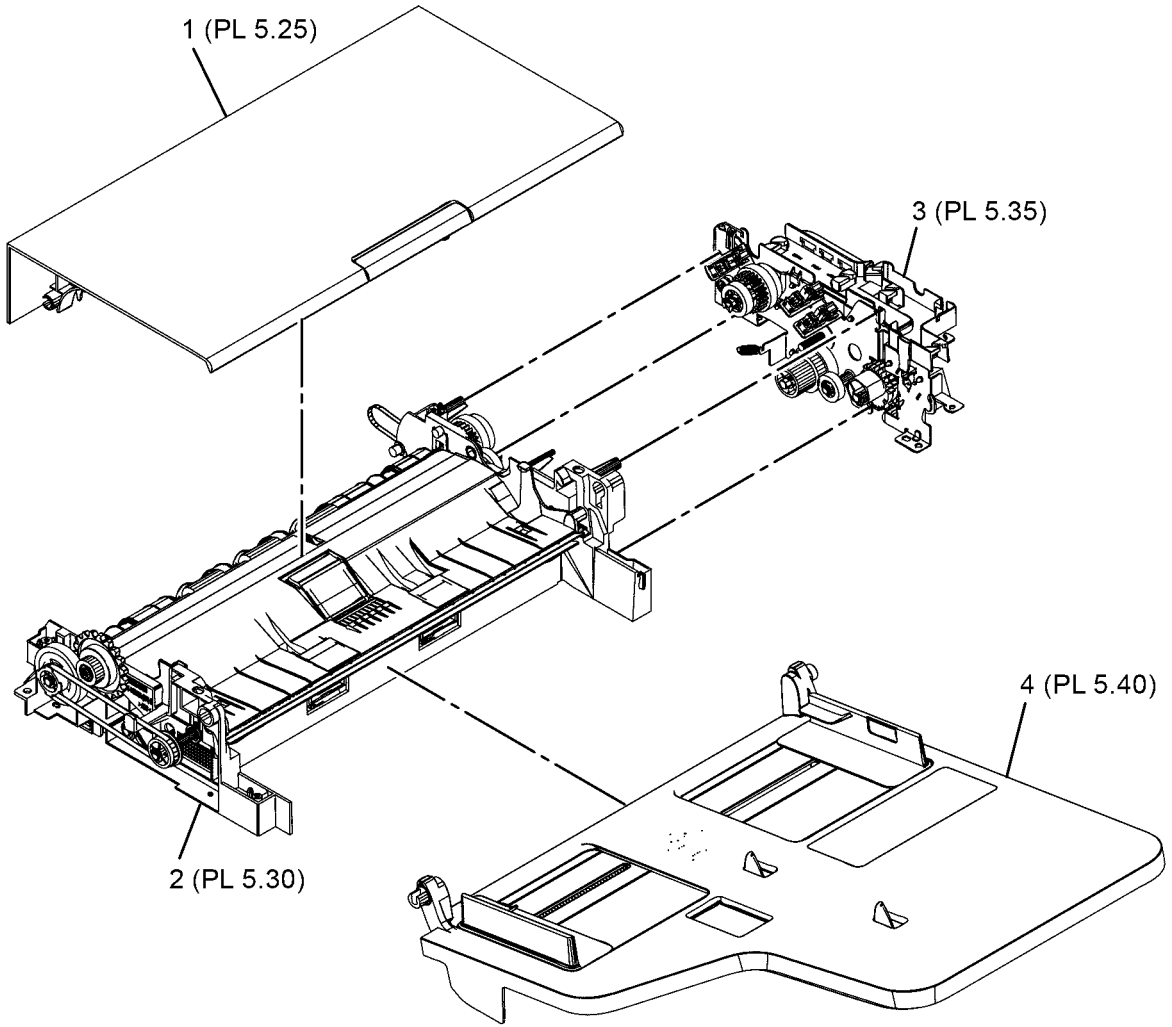
PL 5.20 Transport and Drive Assembly

Item	Part	Description
1	–	DADF cover assembly
2	–	DADF transport assembly (P/O PL 5.20 Item 5) (REP 5.16)
3	–	DADF drive assembly (P/O PL 5.20 Item 5)
4	050N00698	DADF input tray assembly (REP 5.13)
5	022N02875	DADF feed sub

5 { 2, 3



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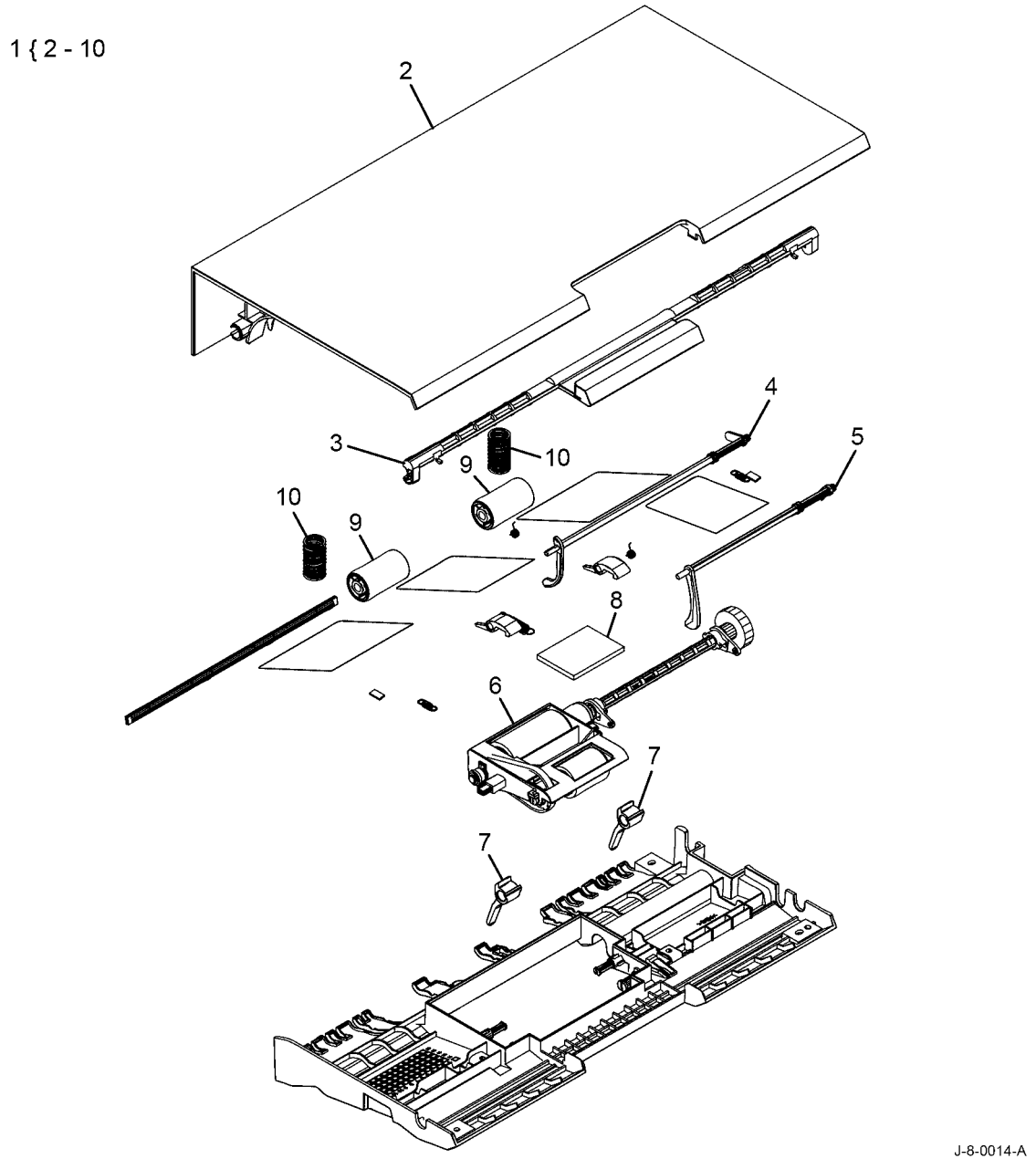
PL 5.25 DADF Cover Assembly

Item	Part	Description
1	–	DADF cover assembly
2	–	Cover (P/O PL 5.25 Item 1)
3	–	Cover handle (P/O PL 5.25 Item 1)
4	–	Registration actuator (P/O PL 5.25 Item 1)
5	–	Document present actuator (P/O PL 5.25 Item 1)
6	022N02874	DADF feed assembly (See NOTE) (REP 5.3)
7	–	Paper stopper (P/O PL 5.25 Item 1)
8	–	Open cover sponge (P/O PL 5.25 Item 1)
9	–	Take away idle roller (P/O PL 5.25 Item 1)
10	–	Spring (P/O PL 5.25 Item 1)

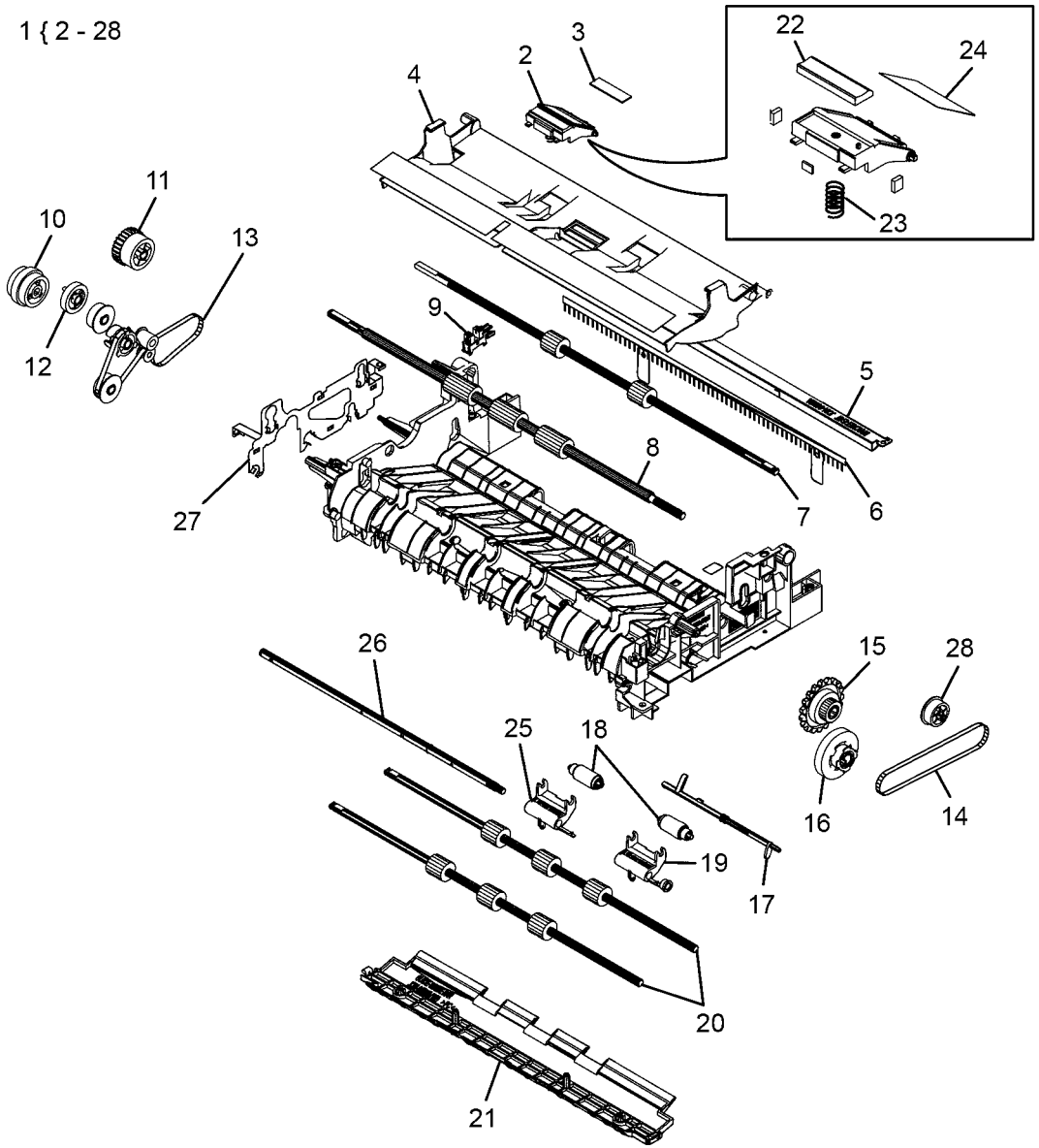
NOTE: *HFSI. To reset the HFSI count, refer to dC135*



PL 5.30 DADF Transport Assembly

Item	Part	Description
1	–	DADF transport assembly
2	019N01132	DADF friction pad assembly (See NOTE), (REP 5.19, ADJ 5.2)
3	019N01133	DADF friction pad (REP 5.19)
4	–	Pickup guide (P/O PL 5.30 Item 1)
5	–	Exit bracket (P/O PL 5.30 Item 1)
6	–	Antistatic brush (P/O PL 5.30 Item 1)
7	–	Exit roller
8	–	Registration roller
9	130N01574	Exit nip open sensor (Q05-171) (REP 5.8)
10	–	DADF Regi clutch (CL05-310), (P/O PL 5.30 Item 1)
11	–	Exit gear (P/O PL 5.30 Item 1)
12	–	Idle clutch gear (P/O PL 5.30 Item 1)
13	–	Timing gear belt
14	–	Timing gear belt
15	–	Knob gear (P/O PL 5.30 Item 1)
16	–	Reduction knob gear (P/O PL 5.30 Item 1)
17	–	Exit actuator (P/O PL 5.30 Item 1)
18	–	Exit idle roller (P/O PL 5.30 Item 1)
19	–	Front exit idle holder (P/O PL 5.30 Item 1)
20	–	Feed roller
21	–	White bar guide (P/O PL 5.30 Item 1), (ADJ 5.2)
22	–	ADF rubber (P/O PL 5.30 Item 2)
23	–	Spring (P/O PL 5.30 Item 2)
24	–	Guide pad sheet (P/O PL 5.30 Item 2)
25	–	Rear exit idle holder
26	–	Exit idle rod
27	–	Bracket
28	–	Gear

NOTE: *HFSI. To reset the HFSI count, refer to dC135*



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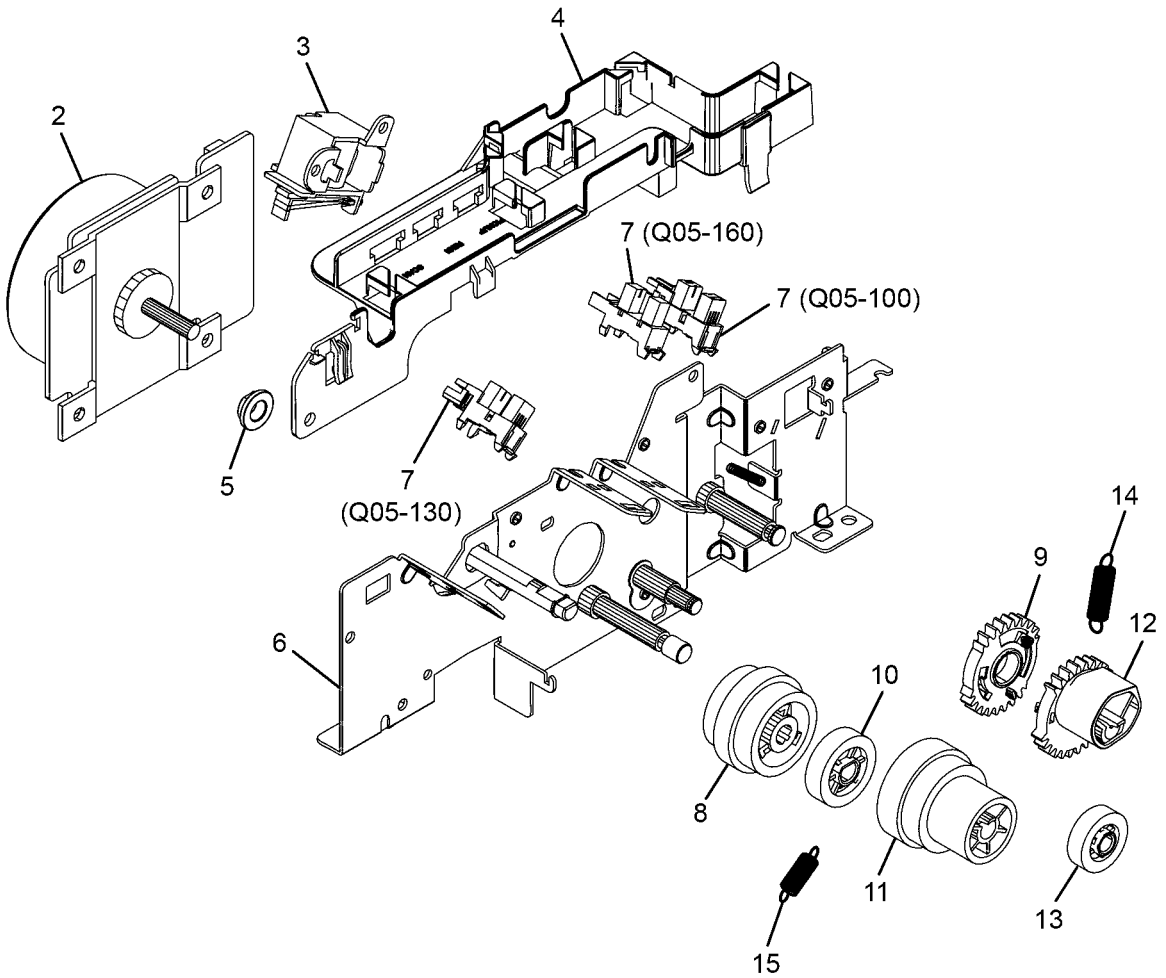
PL 5.35 DADF Drive Assembly

Item	Part	Description
1	–	DADF drive assembly
2	127N07942	DADF motor (MOT05-200), (REP 5.5)
3	022N01486	DADF Exit solenoid (SOL05-330) (REP 5.6)
4	–	Harness holder (P/O PL 5.35 Item 1)
5	–	Exit bush (P/O PL 5.35 Item 1)
6	–	Motor bracket (P/O PL 5.35 Item 1)
7	130N01574	Document detect sensor (Q05-100) (REP 5.9)/Document registration sensor (Q05-130), (REP 5.9)/Cover open sensor (Q05-160), (REP 5.9), (ADJ 5.2)
8	–	Pickup clutch (CL05-300) (P/O PL 5.35 Item 1)
9	–	CAM outer gear (P/O PL 5.35 Item 1)
10	–	Pickup idle gear (P/O PL 5.35 Item 1)
11	–	Reduction gear (P/O PL 5.35 Item 1)
12	–	CAM inner gear (P/O PL 5.35 Item 1)
13	–	Exit idle gear (P/O PL 5.35 Item 1)
14	–	Spring (P/O PL 5.35 Item 1)
15	–	Spring (P/O PL 5.35 Item 1)

1 { 2 - 15



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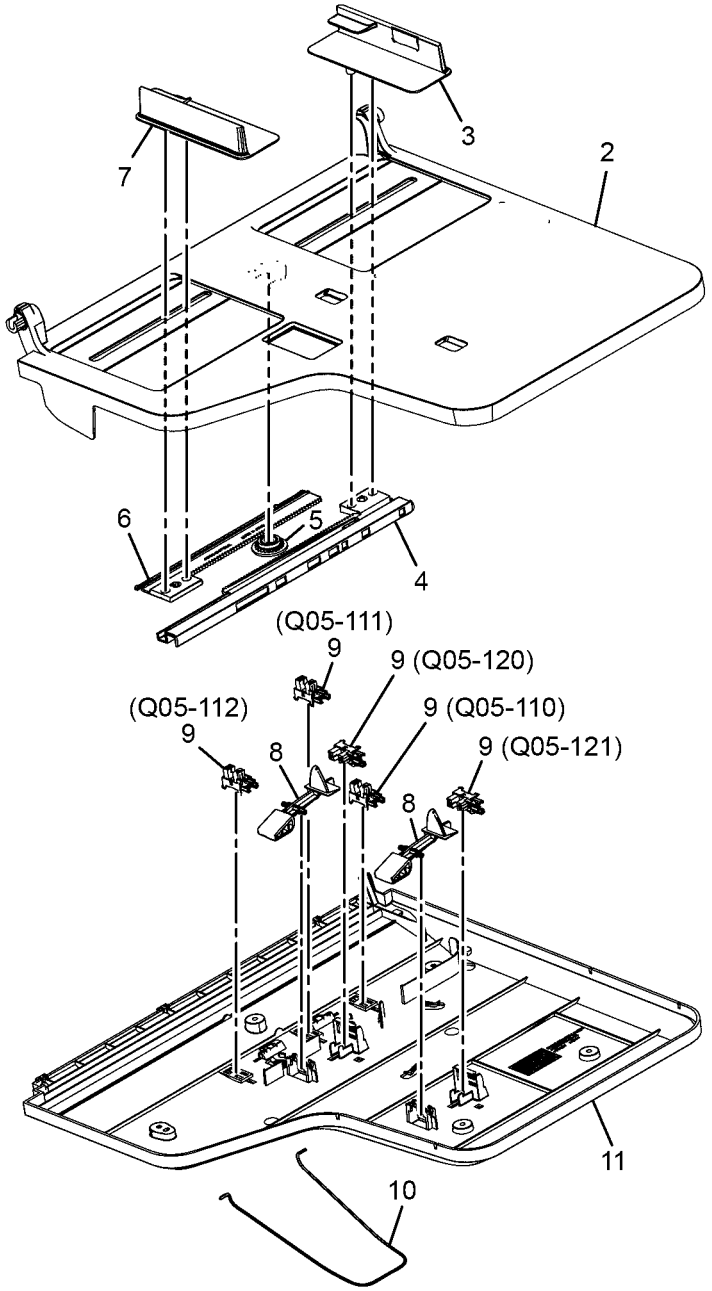
PL 5.40 DADF Input Tray Assembly

Item	Part	Description
1	–	DADF input tray assembly
2	–	Input tray upper guide (P/O PL 5.40 Item 1)
3	–	Rear document guide (P/O PL 5.40 Item 1)
4	–	Rear rack gear guide (P/O PL 5.40 Item 1)
5	–	Gear (P/O PL 5.40 Item 1)
6	–	Front rack gear guide (P/O PL 5.40 Item 1)
7	–	Front document guide (P/O PL 5.40 Item 1)
8	–	Paper length actuator (P/O PL 5.40 Item 1)
9	130N01574	Width sensor 1 (Q05-110) (REP 5.10)/Width sensor 2 (Q05-111) (REP 5.10)/Width sensor 3 (Q05-112) (REP 5.10)/Length sensor 1 (Q05-120) (REP 5.10)/Length sensor 2 (Q05-121) (REP 5.10), (ADJ 5.2)
10	–	Input tray wire guide (P/O PL 5.40 Item 1)
11	–	Input tray lower guide (P/O PL 5.40 Item 1)

1 { 2 - 11



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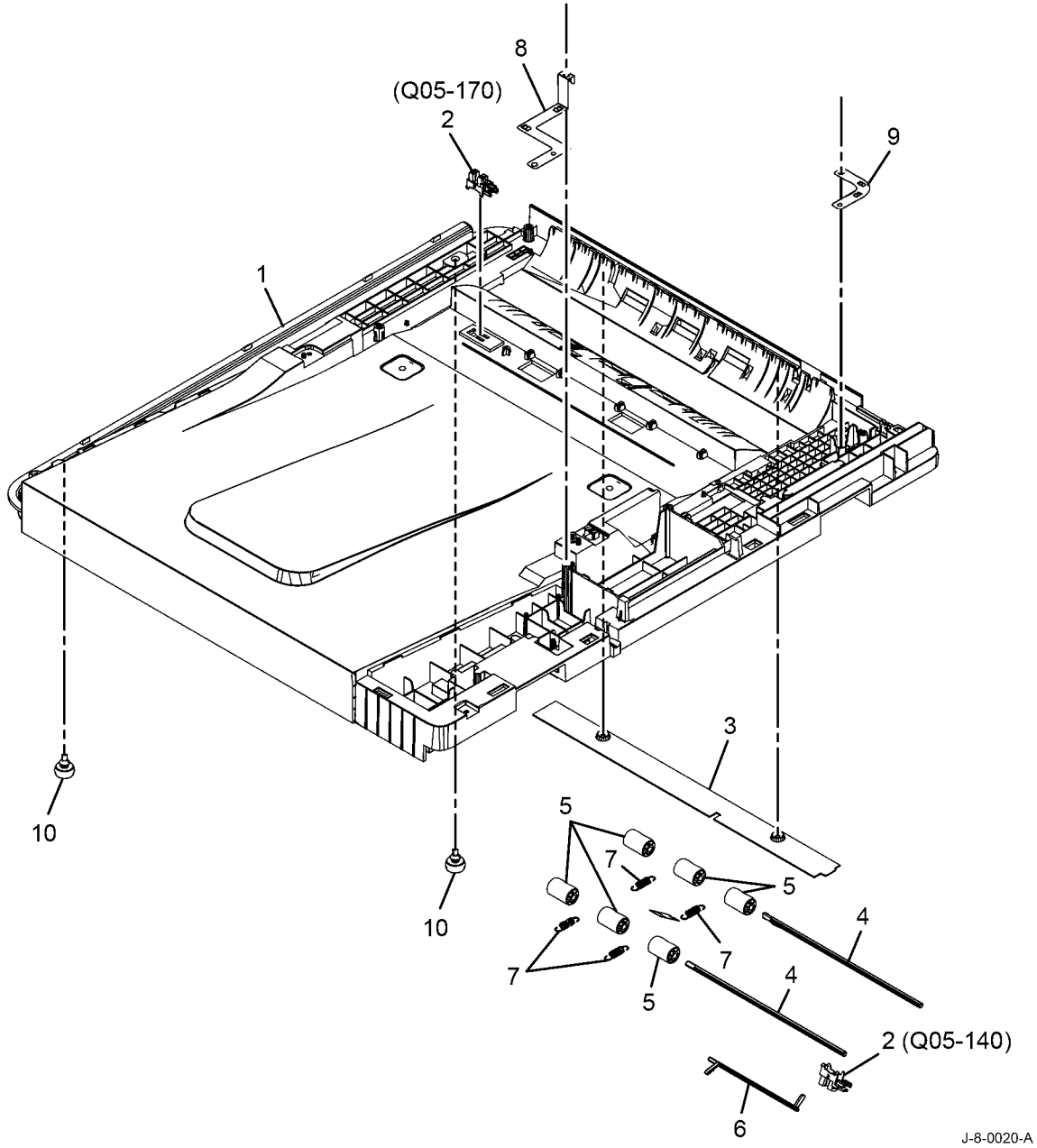
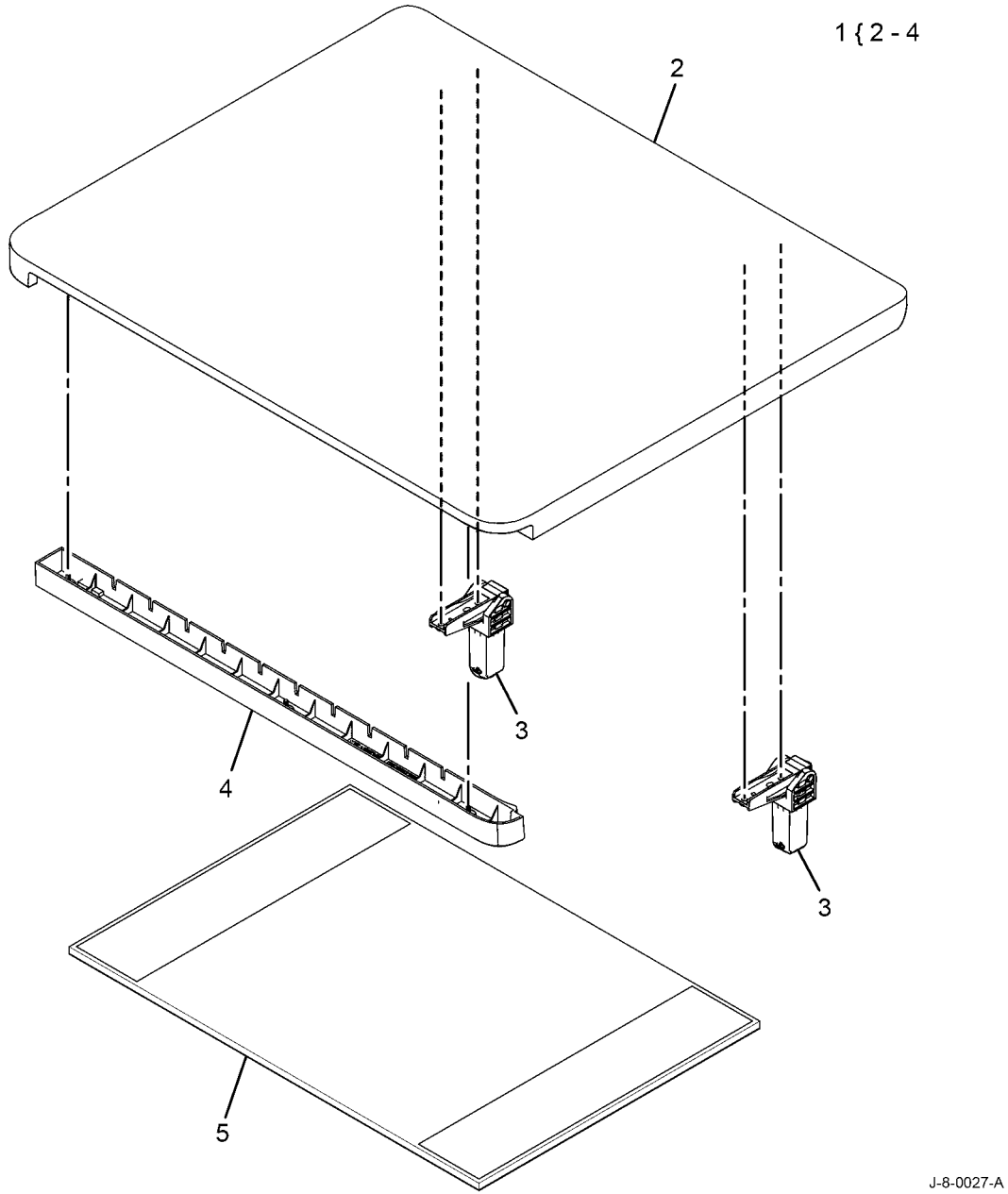
PL 5.45 DADF Base

Item	Part	Description
1	–	DADF base
2	130N01574	DADF exit sensor (Q05-170), (REP 5.14)/DADF scan start sensor (Q05-140), (REP 5.15)
3	–	Platen bracket
4	–	Idle feed shaft
5	–	SCF idle roller
6	–	Scan actuator
7	–	Spring
8	–	Right hinge ground
9	–	Frame hinge ground
10	–	Rubber foot



PL 5.50 Document Cover Assembly

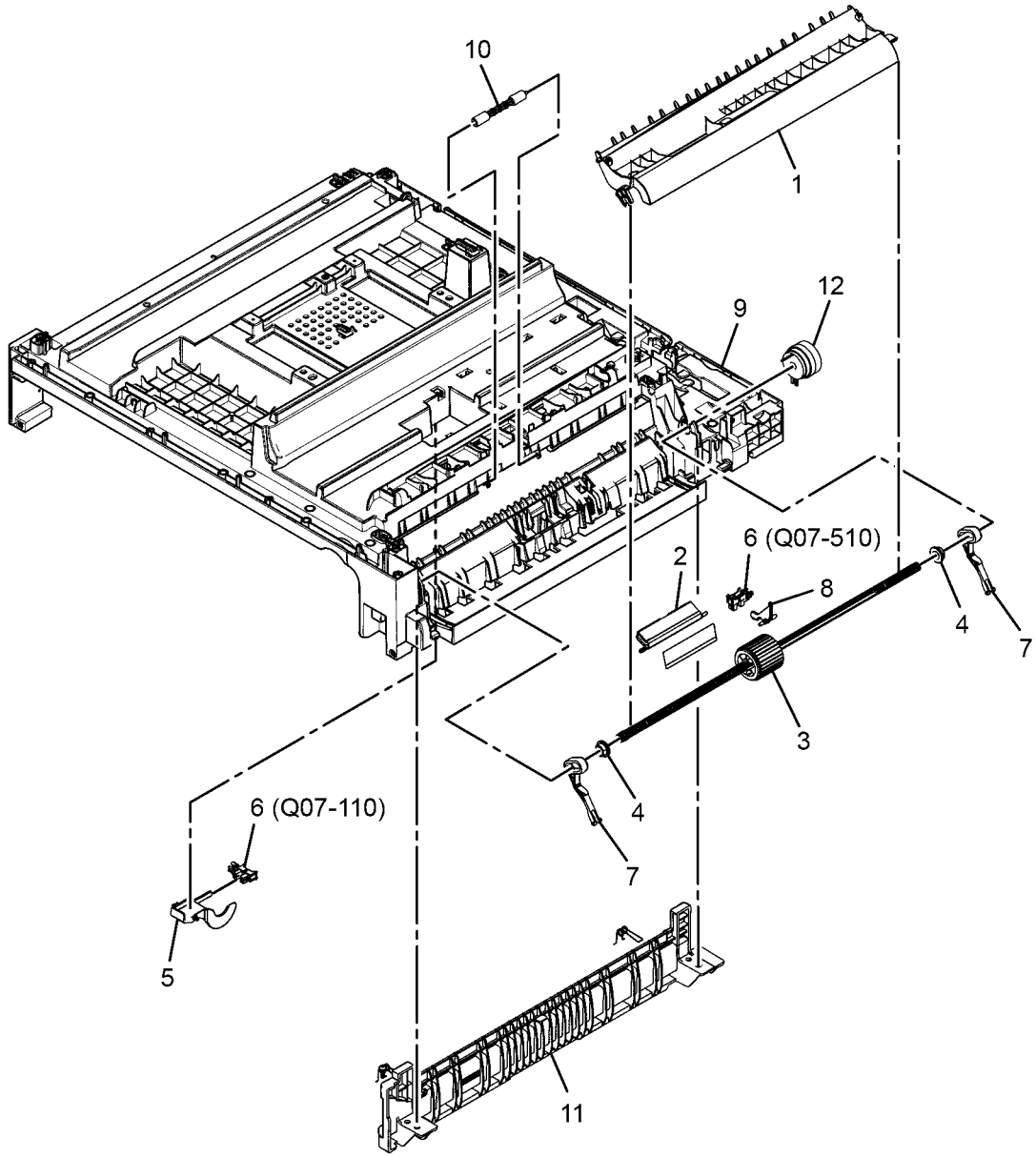
Item	Part	Description
1	–	Document cover assembly (REP 5.2)
2	–	Document cover (P/O PL 5.50 Item 1)
3	003N01167	Hinge (REP 5.20)
4	–	Bottom cover (P/O PL 5.50 Item 1)
5	019N01129	Document cover pad (REP 5.18)



PL 7.10 Tray 1 Frame Assembly

Item	Part	Description
1	–	Bypass guide
2	019N01130	Bypass retard pad (See NOTE) (REP 7.3)
3	–	Bypass pick-up roll (REP 7.3)
4	–	Bush
5	–	Tray 1 paper empty sensor actuator
6	130N01574	Tray 1 paper empty sensor (Q07-110), (REP 7.1)/Bypass tray paper empty sensor (Q07-510), (REP 7.2)
7	–	Knockup lock lever
8	–	Bypass tray paper empty sensor actuator
9	–	Base frame
10	–	Roll
11	–	Frame
12	–	Bypass feed clutch (CL08-800) (REP 7.3)

NOTE: *HFSI. To reset the HFSI count, refer to dC135*



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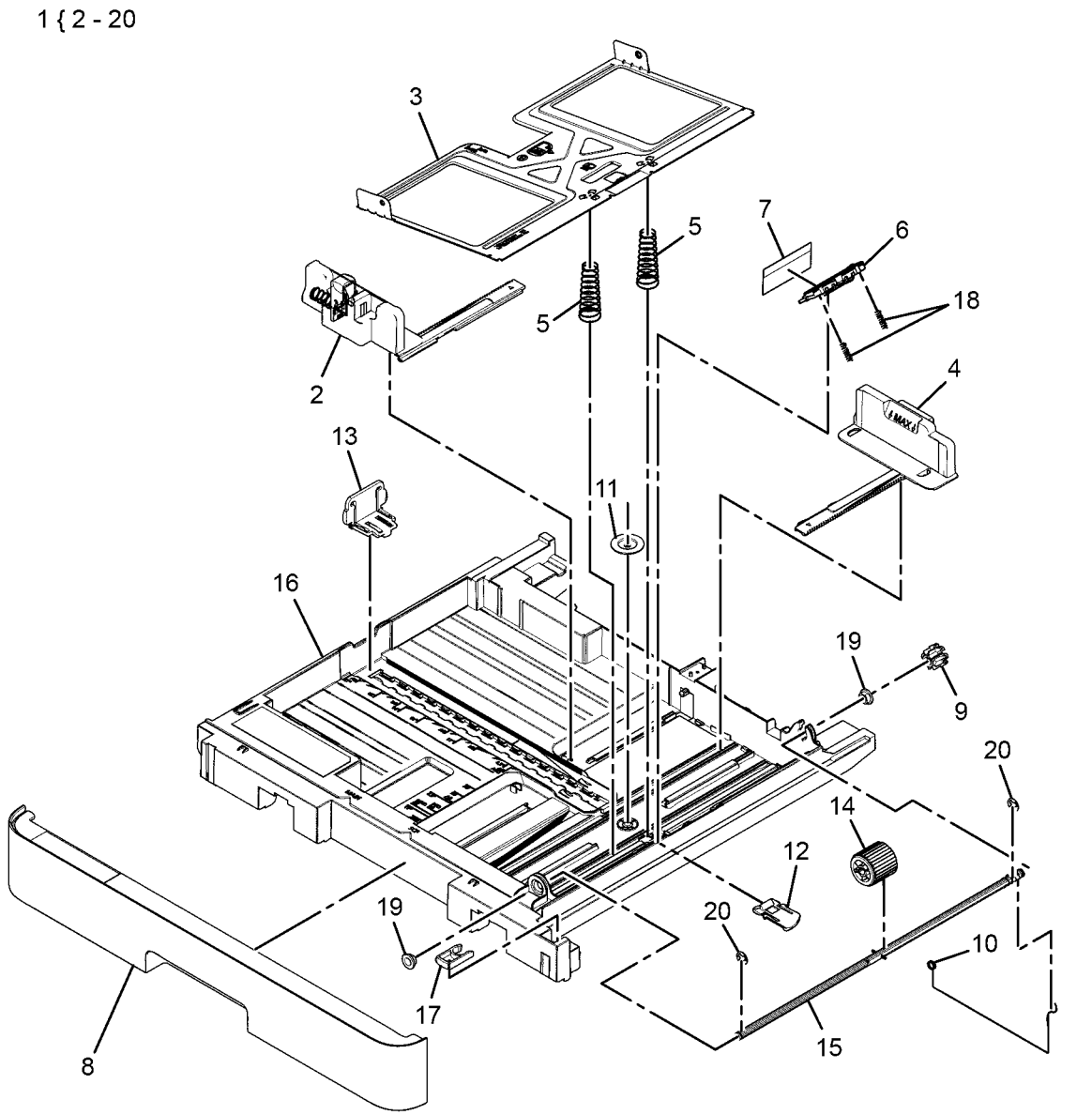
PL 7.15 Tray 1

Item	Part	Description
1	050N00696	Tray 1
2	032N00551	Tray front guide
3	–	Knock up plate (P/O PL 7.15 Item 1)
4	032N00549	Tray rear guide
5	–	Spring (P/O PL 7.15 Item 1)
6	019N01135	Tray 1 friction pad holder
7	019N01134	Tray 1 friction pad (See NOTE)
8	–	Tray front cover (P/O PL 7.15 Item 1)
9	007N01840	Tray 1 pick-up clutch coupler (REP 7.4)
10	–	Spring (P/O PL 7.15 Item 1)
11	007N01526	Pinion gear
12	–	Tray locker (P/O PL 7.15 Item 1)
13	032N00550	Tray Left guide
14	022N02877	Tray 1 roller (See NOTE)
15	–	Roller shaft (P/O PL 7.15 Item 1)
16	–	Tray frame (P/O PL 7.15 Item 1)
17	–	Bracket (P/O PL 7.15 Item 1)
18	–	Spring (P/O PL 7.15 Item 1)
19	–	Bush (P/O PL 7.15 Item 1)
20	–	E-ring (P/O PL 7.15 Item 1)

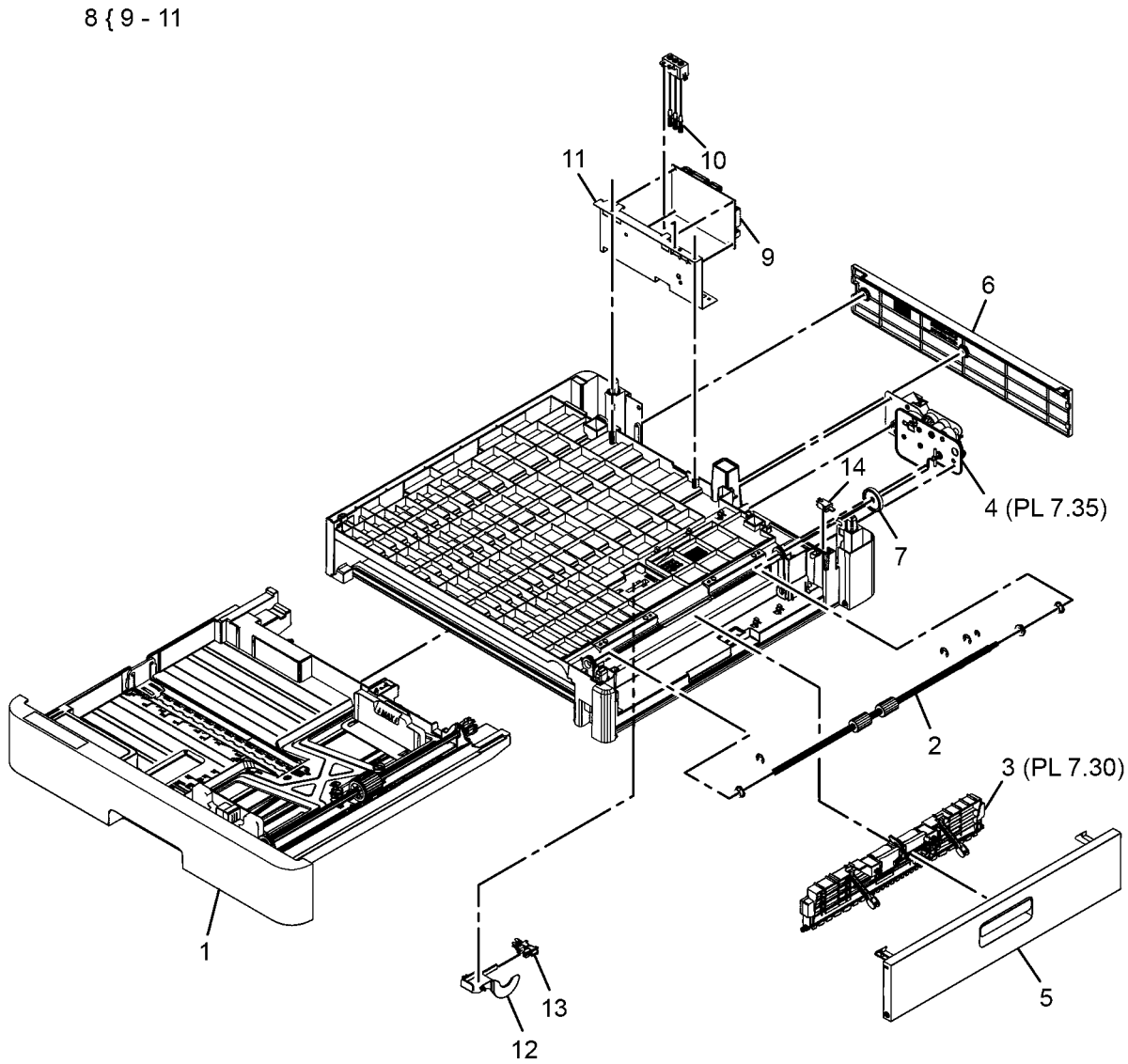
NOTE: *HFSI. To reset the HFSI count, refer to dC135*



PL 7.20 Tray 2 Frame Assembly (Optional)

Item	Part	Description
1	050N00699	Tray 2
2	022N02876	Feed roll assembly
3	055N00328	Tray 2 exit baffle
4	–	Tray 2 feed motor assembly (MOT08-920), (REP 7.6)
5	–	Cover
6	–	Rear cover
7	–	Pickup idle gear
8	–	Tray 2 PWB assembly
9	140N63848	Tray 2 main PWB (REP 7.5)
10	–	Unit terminal MEA (P/O PL 7.20 Item 8)
11	–	Main PWB bracket (P/O PL 7.20 Item 8)
12	–	Tray 2 paper empty sensor actuator
13	130N01574	Tray 2 paper empty sensor (Q07-210), (REP 7.1)
14	110N01553	Tray 2 door open sensor (Q08-210)

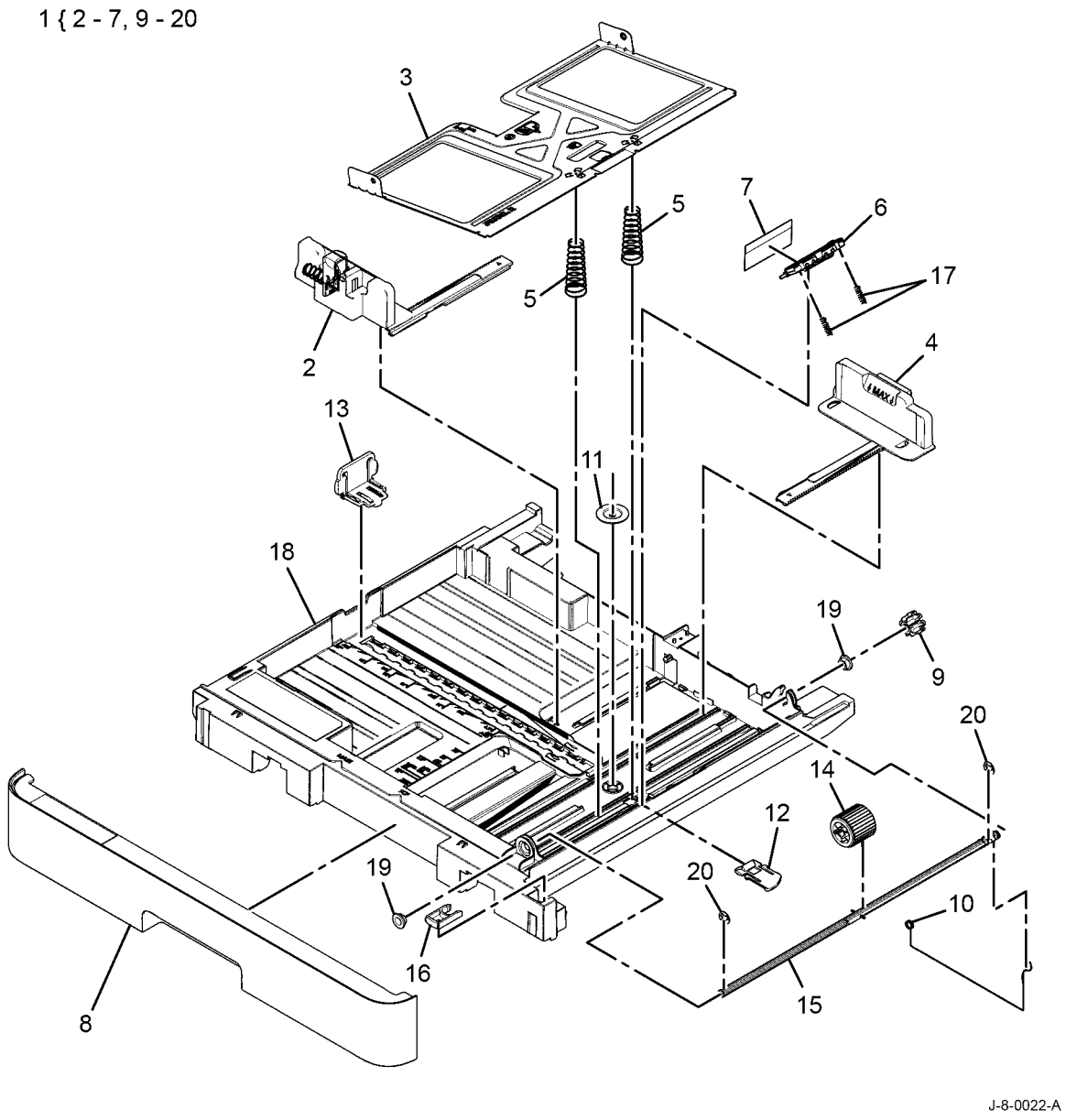
NOTE: *HFSI. To reset the HFSI count, refer to dC135*



PL 7.25 Tray 2

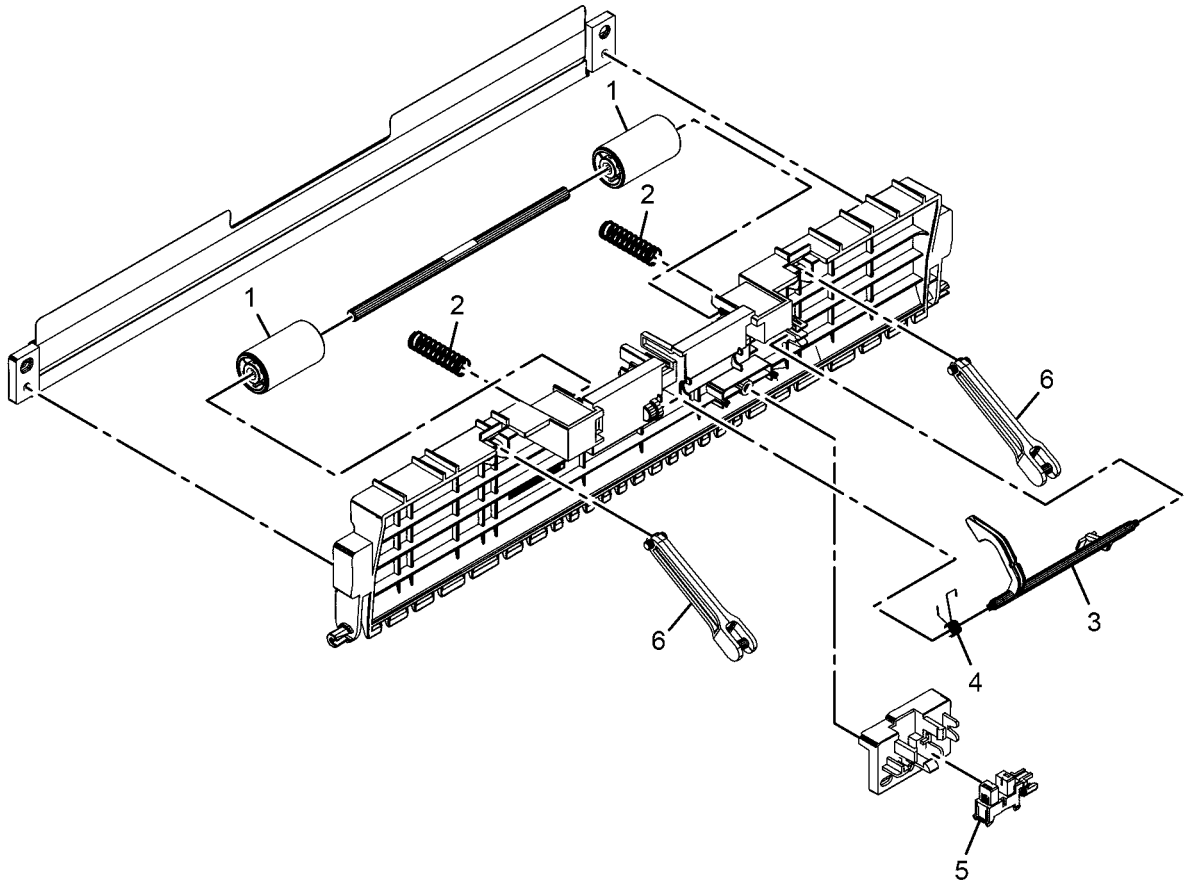
Item	Part	Description
1	–	Tray frame assembly
2	032N00551	Tray front guide
3	–	Knock up plate (P/O PL 7.25 Item 1)
4	032N00549	Tray rear guide
5	–	Spring (P/O PL 7.25 Item 1)
6	019N01135	Tray 2 friction pad holder
7	019N01134	Tray 2 friction pad (See NOTE)
8	–	Tray front cover
9	007N01840	Tray 2 pick-up clutch coupler
10	–	Spring (P/O PL 7.25 Item 1)
11	007N01526	Pinion gear
12	–	Tray locker (P/O PL 7.25 Item 1)
13	032N00550	Tray left guide
14	022N02877	Tray 2 roller
15	–	Roller shaft (P/O PL 7.25 Item 1)
16	–	Bracket (P/O PL 7.25 Item 1)
17	–	Spring (P/O PL 7.25 Item 1)
18	–	Tray frame (P/O PL 7.25 Item 1)
19	–	Bush (P/O PL 7.25 Item 1)
20	–	E-ring (P/O PL 7.25 Item 1)

NOTE: *HFSI. To reset the HFSI count, refer to dC135*



PL 7.30 Tray 2 Exit Baffle

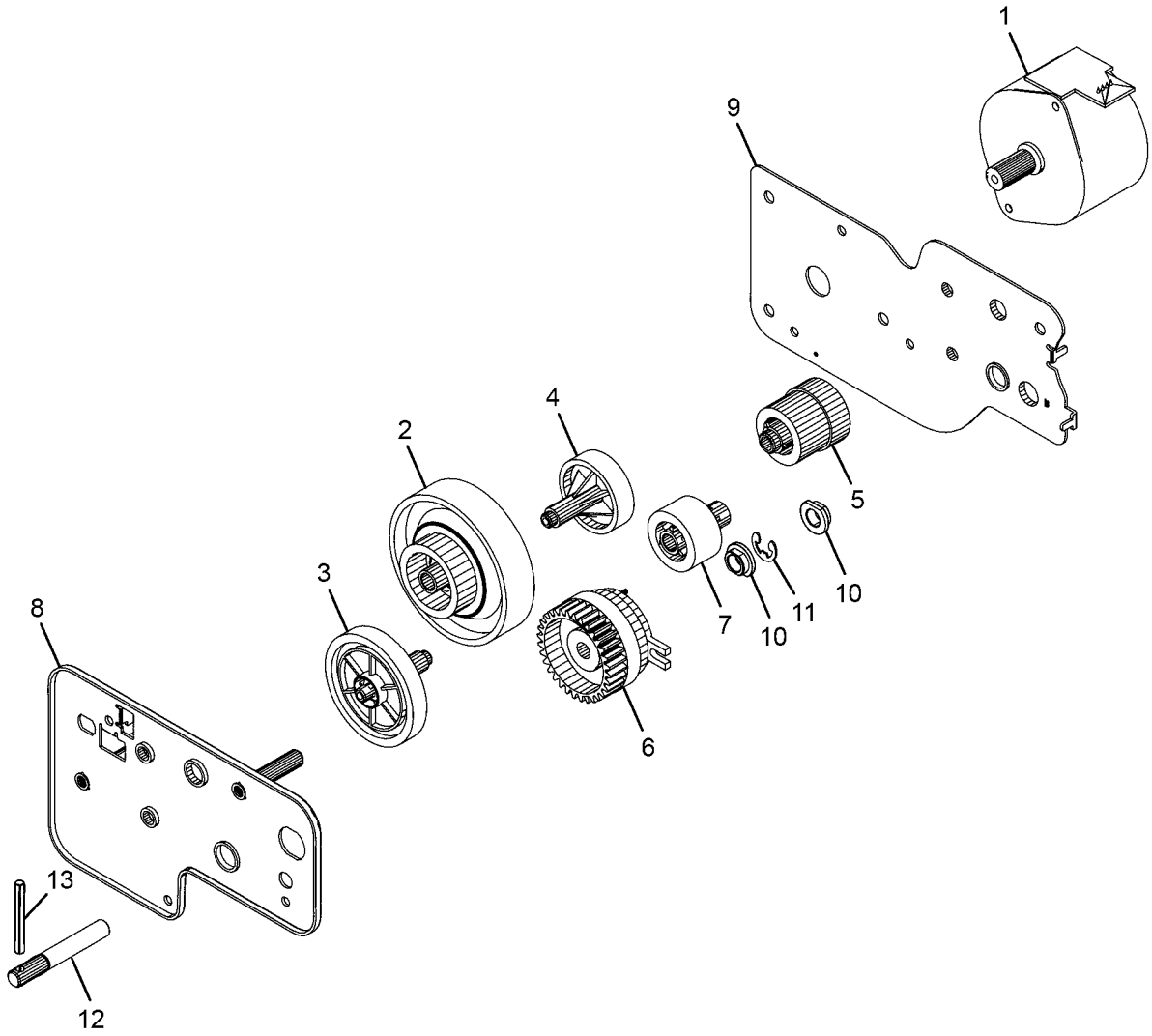
Item	Part	Description
1	–	Takeaway idle roller (P/O PL 7.20 Item 3)
2	–	Spring (P/O PL 7.20 Item 3)
3	120N00560	Sensor actuator
4	009N01741	Actuator spring
5	130N01574	Tray 2 feed sensor (Q08-200)
6	–	Takeaway link (P/O PL 7.20 Item 3)



J-8-0023-A

PL 7.35 Tray 2 Feed Motor Assembly

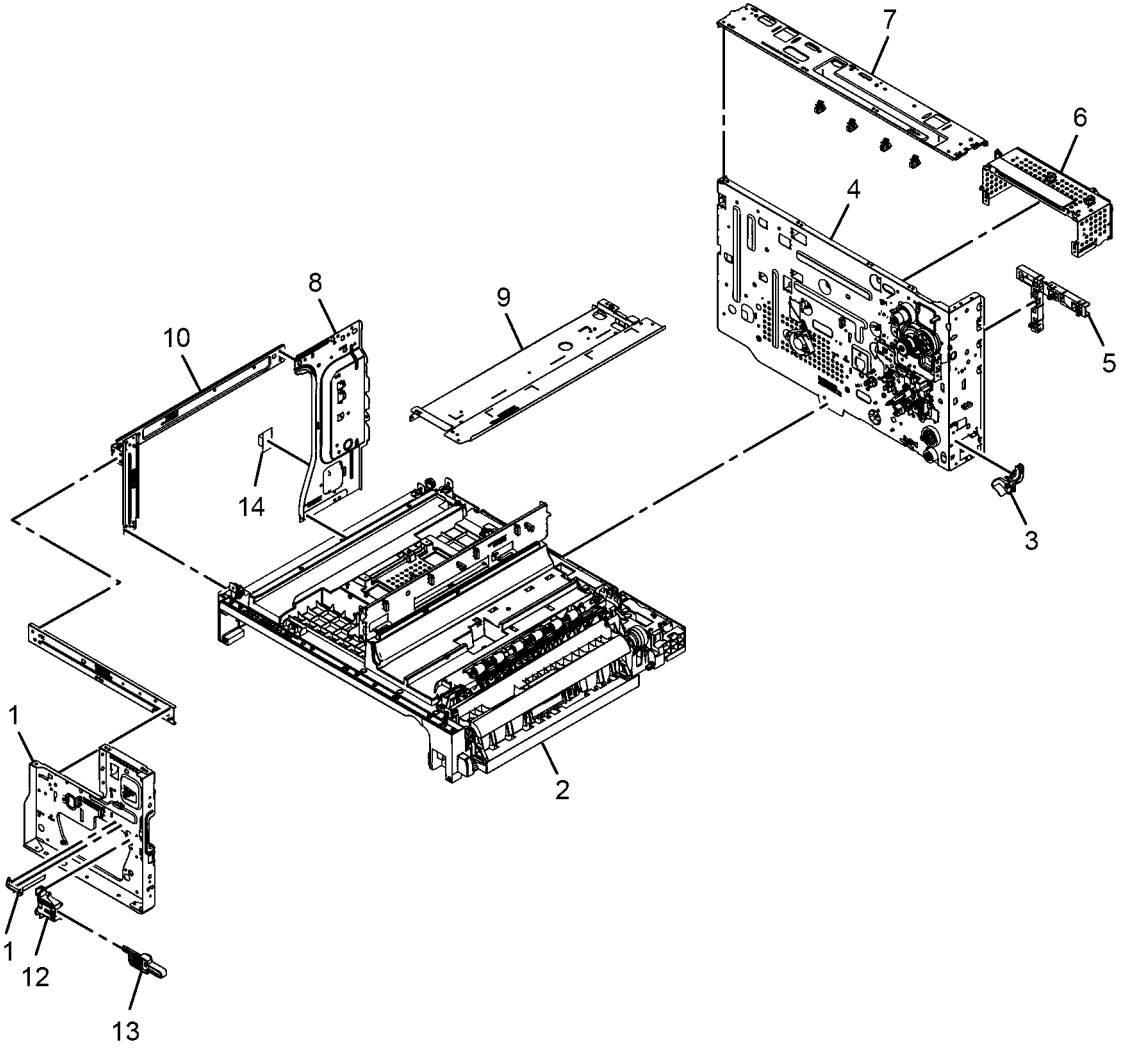
Item	Part	Description
1	127N07943	Tray 2 feed motor
2	–	Gear (P/O PL 7.20 Item 4)
3	–	Idle gear (P/O PL 7.20 Item 4)
4	–	Feeder idle gear 1 (P/O PL 7.20 Item 4)
5	–	Feeder gear (P/O PL 7.20 Item 4)
6	121N01266	Tray 2 pick-up clutch (CL08-820)
7	–	Feeder idle gear 2 (P/O PL 7.20 Item 4)
8	–	Front bracket (P/O PL 7.20 Item 4)
9	–	Rear bracket (P/O PL 7.20 Item 4)
10	–	Bush (P/O PL 7.20 Item 4)
11	–	E-ring (P/O PL 7.20 Item 4)
12	–	Shaft (P/O PL 7.20 Item 4)
13	–	Lock pin (P/O PL 7.20 Item 4)



J-8-0024-A

PL 7.40 Frame Assembly

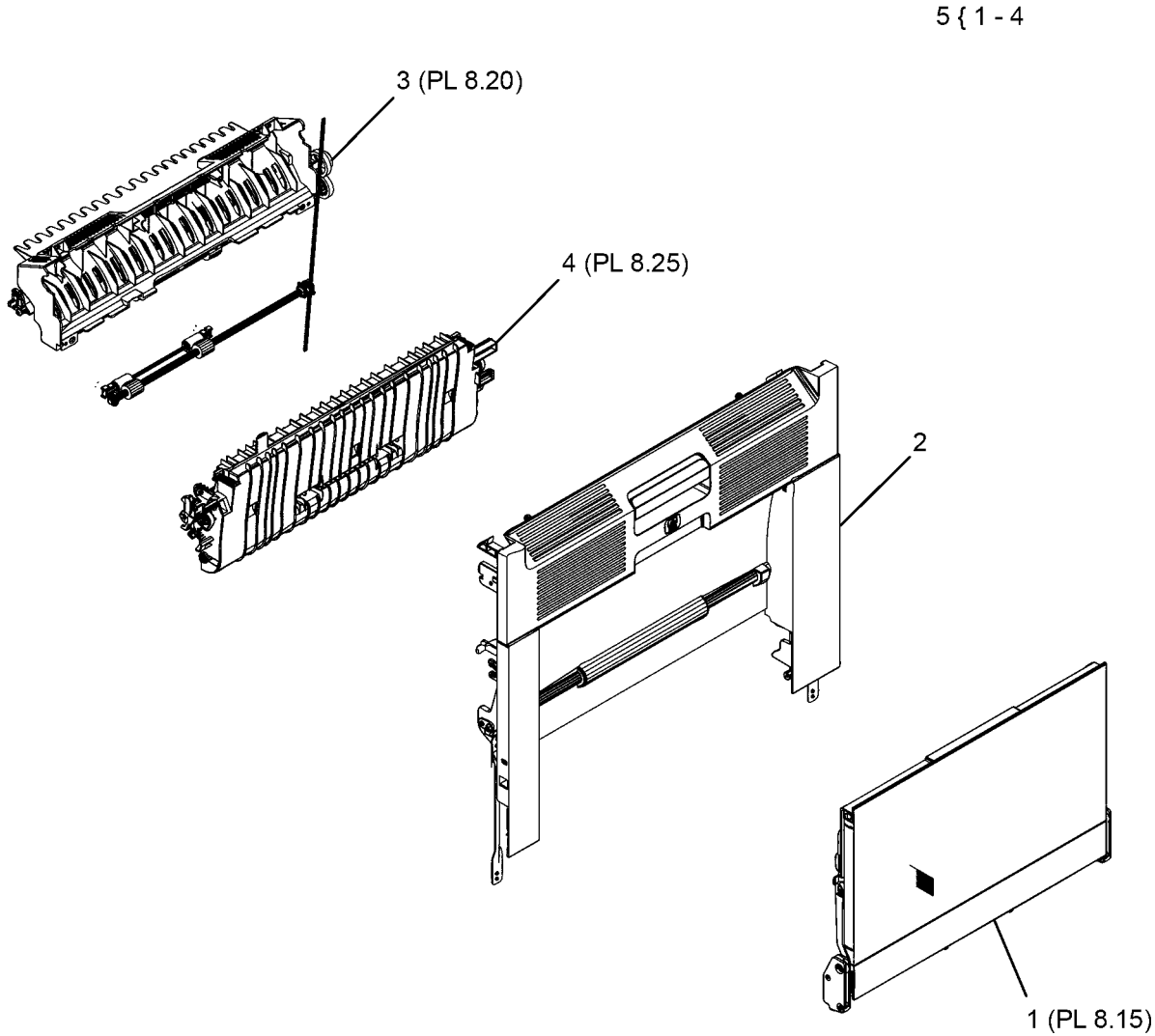
Item	Part	Description
1	–	Front frame
2	–	Base frame
3	–	Bypass harness holder
4	–	Rear frame
5	–	Harness holder
6	–	SMPS frame
7	–	Rear upper frame
8	–	Left front scan support plate
9	–	Right scan support plate
10	–	Left frame
11	–	Drum cartridge upper guide
12	–	Lever slide cover
13	–	Drum cartridge lock lever
14	–	Temperature sensor (REP 9.4)



J-8-0028-A

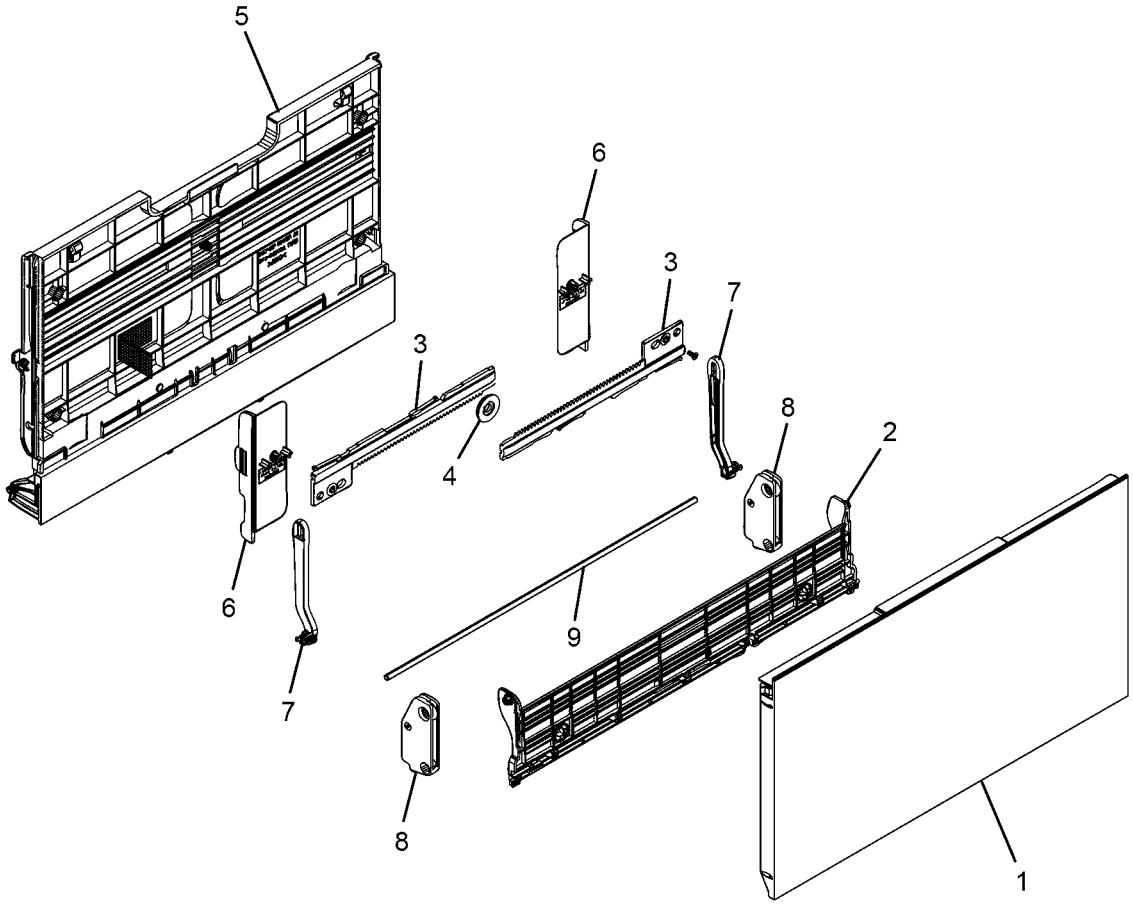
PL 8.10 Side Cover Assembly

Item	Part	Description
1	050N00697	Bypass tray assembly
2	–	Side cover (P/O PL 8.10 Item 5)
3	–	Duplex assembly (P/O PL 8.10 Item 5)
4	–	Duplex guide and transfer assembly (P/O PL 8.10 Item 5)
5	–	Side cover assembly (REP 8.1)



PL 8.15 Bypass Tray Assembly

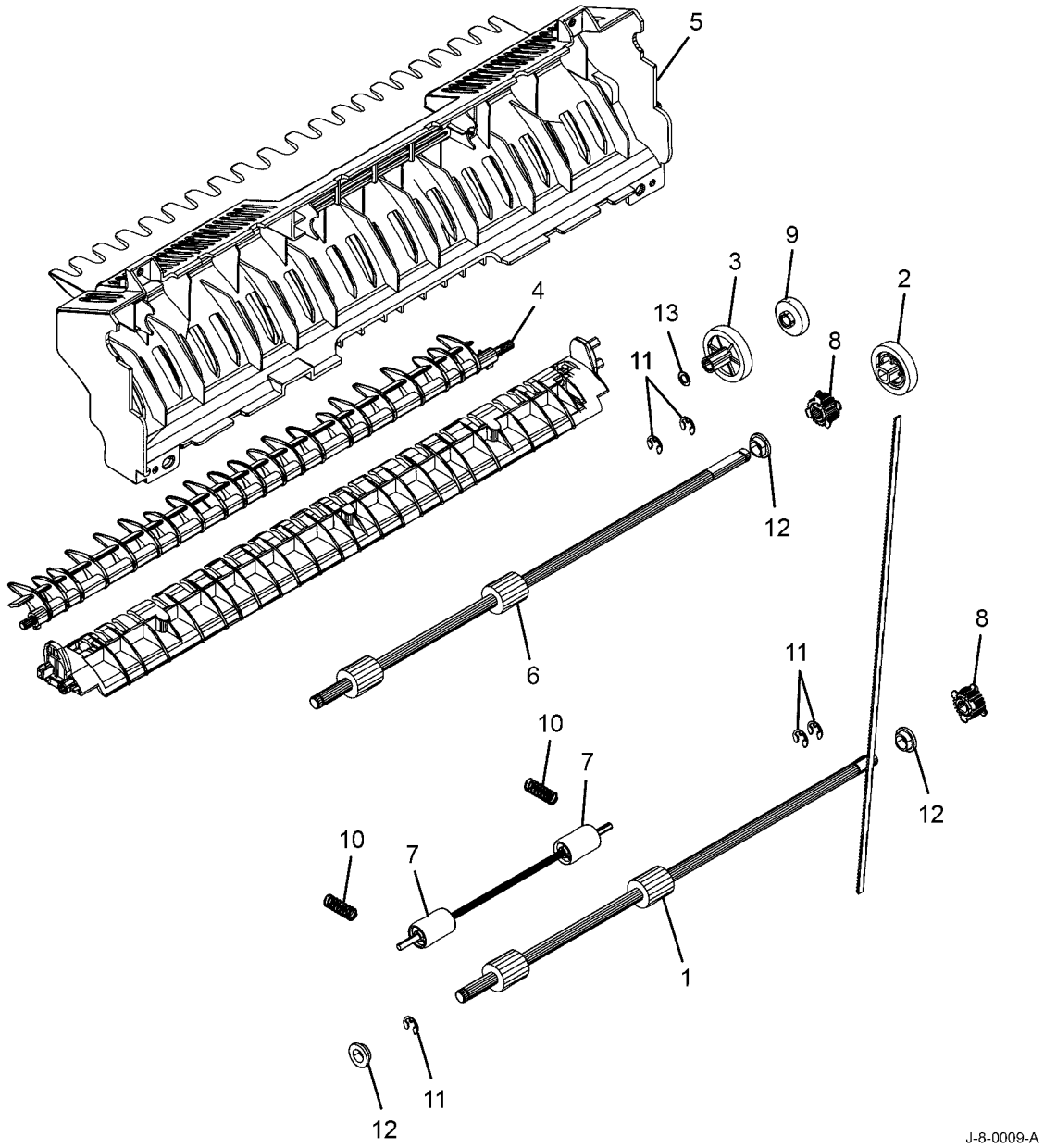
Item	Part	Description
1	–	Lower bypass tray (P/O PL 8.10 Item 1)
2	–	Knock up plate (P/O PL 8.10 Item 1)
3	–	Rack gear
4	007N01178	Pinion gear
5	–	Upper bypass Tray (P/O PL 8.10 Item 1)
6	–	Bracket (P/O PL 8.10 Item 1)
7	–	Holder (P/O PL 8.10 Item 1)
8	–	Cover (P/O PL 8.10 Item 1)
9	–	Rod (P/O PL 8.10 Item 1)



J-8-0008-A

PL 8.20 Duplex Assembly

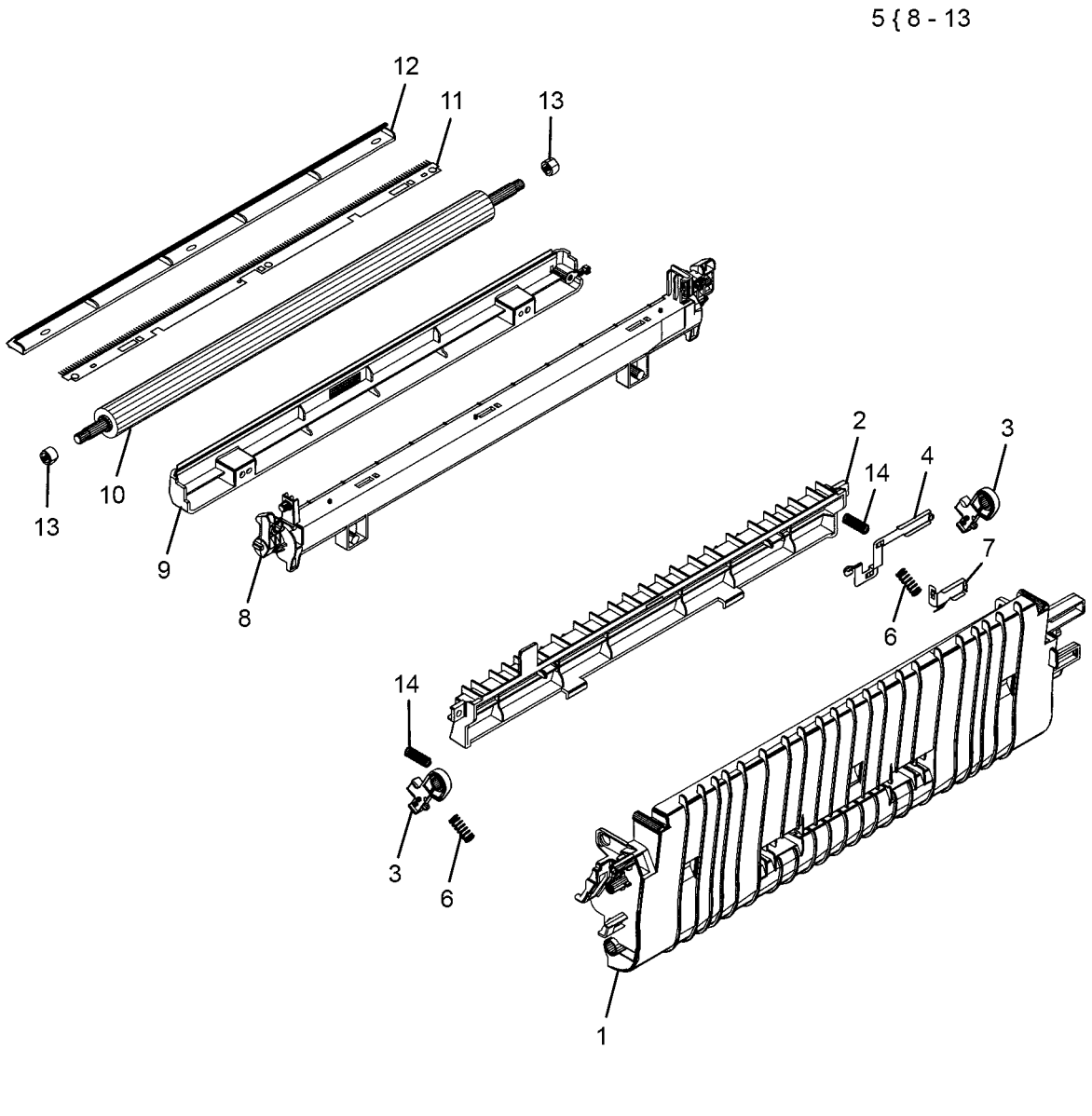
Item	Part	Description
1	022N02872	Duplex feed roller
2	–	Duplex drive out gear (P/O PL 8.10 Item 3)
3	–	Duplex drive in gear (P/O PL 8.10 Item 3)
4	–	Gate guide (P/O PL 8.10 Item 3)
5	–	Duplex upper guide (P/O PL 8.10 Item 3)
6	022N02873	Duplex drive roll
7	–	Idle roller (P/O PL 8.10 Item 3)
8	–	Duplex pulley (P/O PL 8.10 Item 3)
9	–	Gear (P/O PL 8.10 Item 3)
10	–	Spring (P/O PL 8.10 Item 3)
11	–	E-ring (P/O PL 8.10 Item 3)
12	–	Bush (P/O PL 8.10 Item 3)
13	–	Washer (P/O PL 8.10 Item 3)



PL 8.25 Duplex Guide and Transfer Assembly

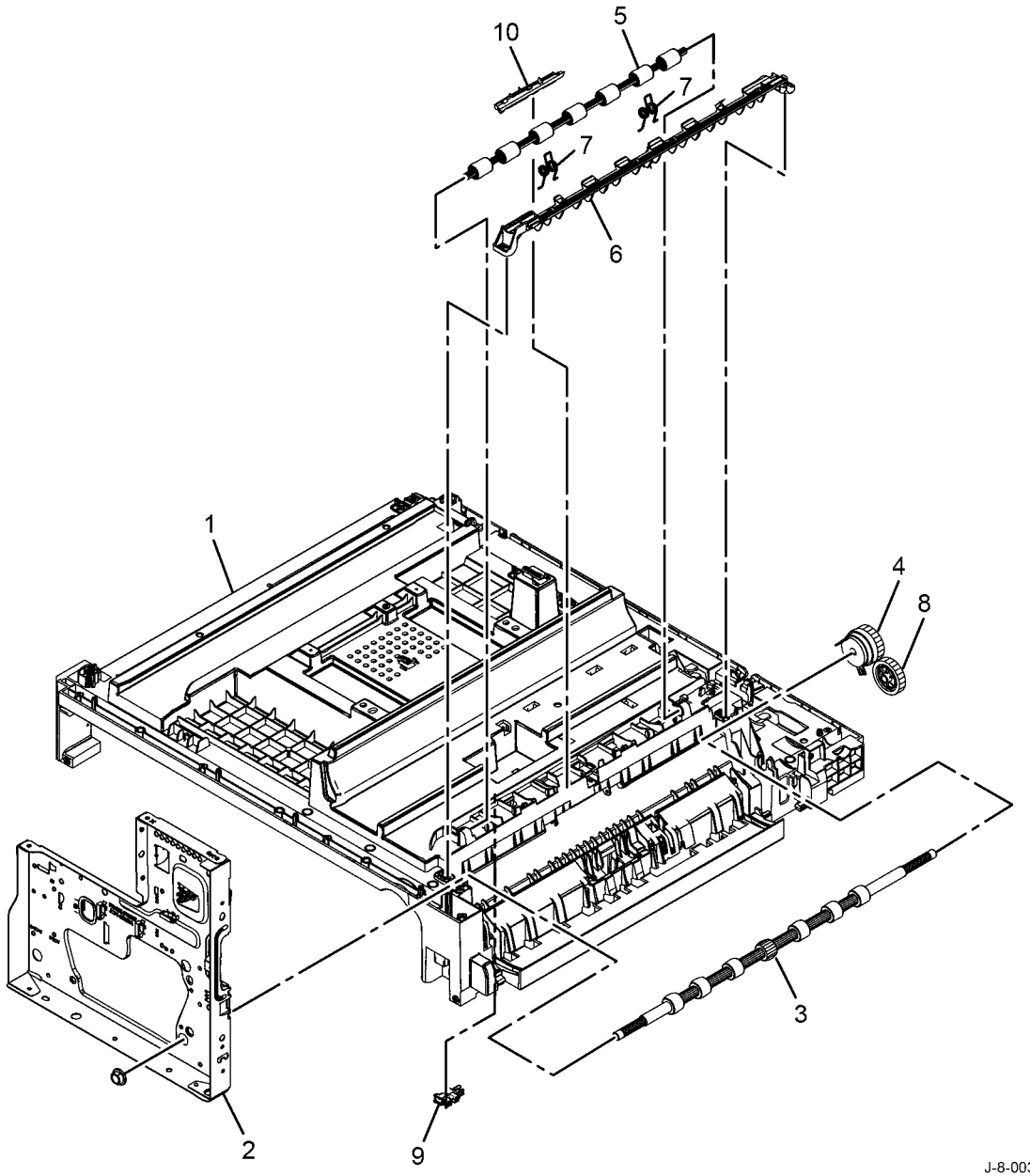
Item	Part	Description
1	–	Feed guide (P/O PL 8.10 Item 4)
2	–	Transfer side guide (P/O PL 8.10 Item 4)
3	–	Link (P/O PL 8.10 Item 4)
4	–	Lower saw ground (P/O PL 8.10 Item 4)
5	022N02871	Transfer roll assembly (See NOTE)
6	–	Spring (P/O PL 8.10 Item 4)
7	–	Feed guide (P/O PL 8.10 Item 4)
8	–	Transfer frame (P/O PL 8.25 Item 5)
9	–	Transfer lower guide (P/O PL 8.25 Item 5)
10	–	Transfer roller (P/O PL 8.25 Item 5)
11	–	Saw plate (P/O PL 8.25 Item 5)
12	–	Saw plate holder (P/O PL 8.25 Item 5)
13	–	Nut (P/O PL 8.25 Item 5)
14	–	Spring (P/O PL 8.10 Item 4)

NOTE: *HFSI. To reset the HFSI count, refer to dC135*



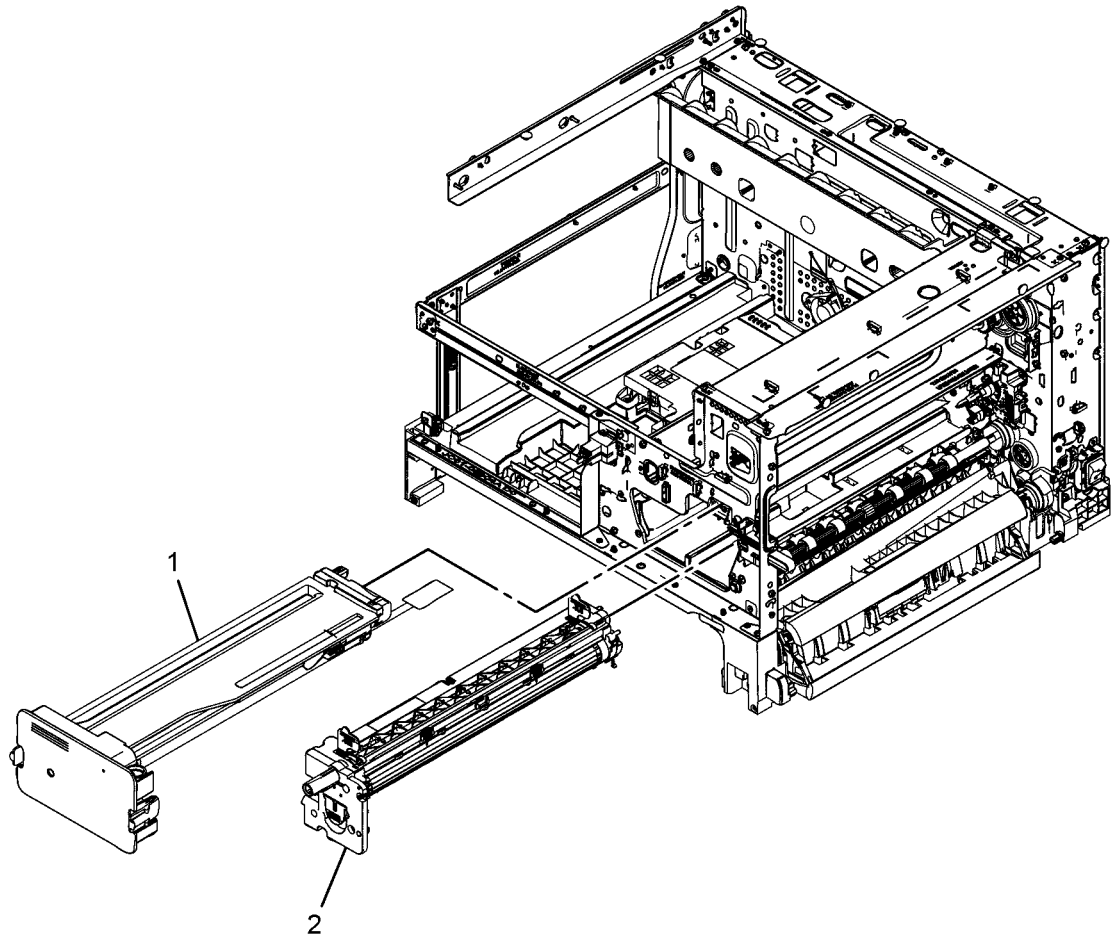
PL 8.30 Registration

Item	Part	Description
1	–	Base frame
2	–	Front frame
3	022N02870	Registration feed roll (REP 8.3)
4	121N01268	Registration clutch (CL08-850) (REP 8.3)
5	–	Registration idle roller
6	–	Registration guide
7	009N01740	Roller spring
8	007N01835	Registration drive gear
9	130N01574	Registration sensor (Q08-500) (REP 8.2)
10	042N00176	Paper dust cleaner (REP 8.4)



PL 9.10 Xerographics

Item	Part	Description
1	006R01731	Toner cartridge (REP 9.1)
2	013R00679	Drum cartridge (REP 9.2)

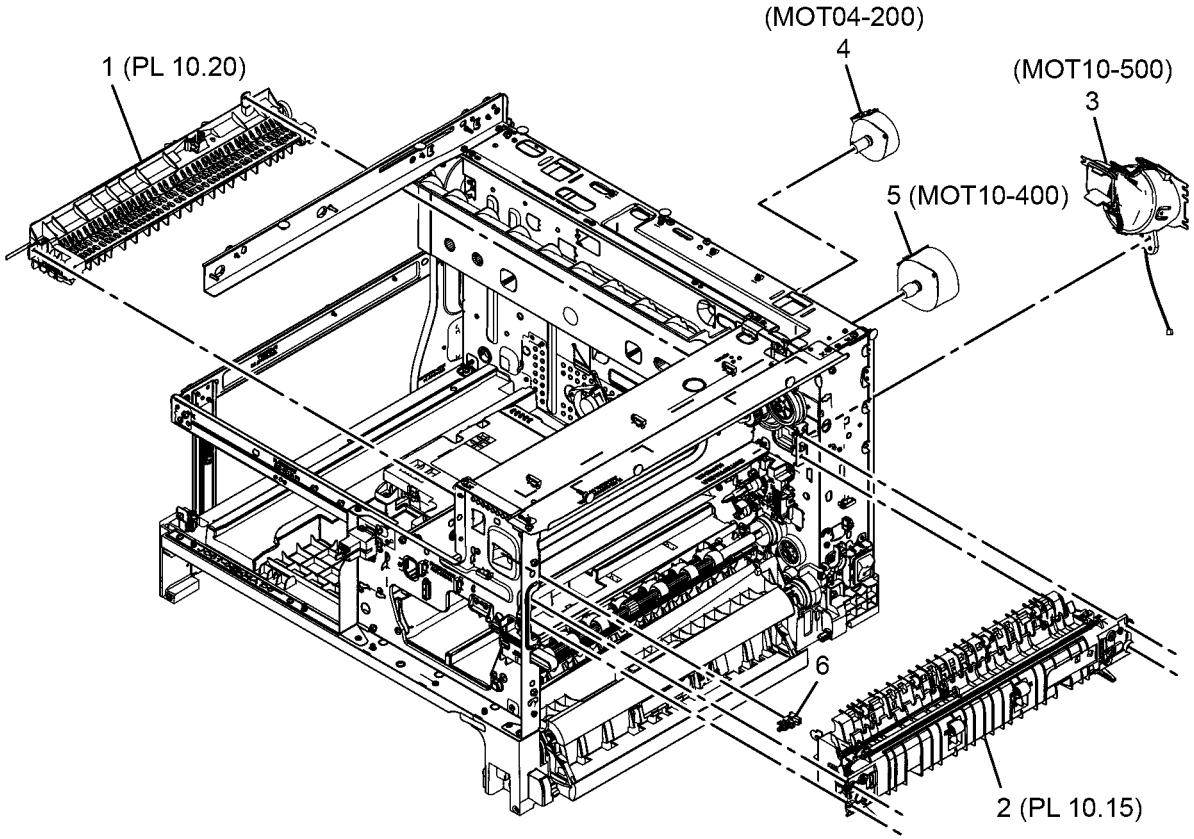


J-8-0030-A

PL 10.10 Fusing and Copy Exit Assembly

Item	Part	Description
1	038N00582	Exit assembly (REP 10.2)
2	126N00440	Fuser assembly (220V) (See NOTE) (REP 10.1)
–	126N00441	Fuser assembly (110V) (See NOTE) (REP 10.1)
3	127N07941	Fuser fan (MOT10-500) (REP 10.5)
4	127N07940	Exit motor (MOT04-200) (REP 10.3)
5	127N07939	Fuser motor (MOT10-400) (REP 10.4)
6	130N01574	Exit Sensor (Q08-600)

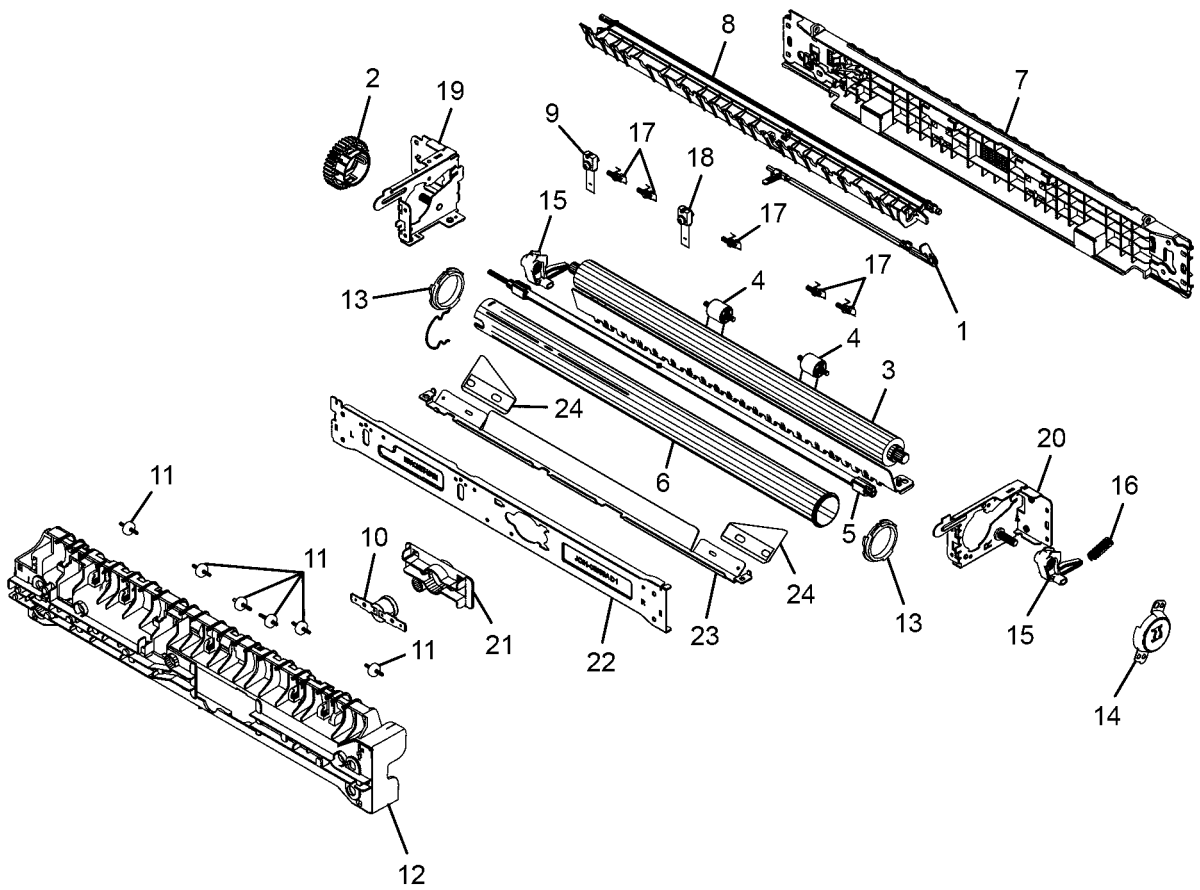
NOTE: *HFSI. To reset the HFSI count, refer to dC135*



J-8-0029-A

PL 10.15 Fusing Assembly

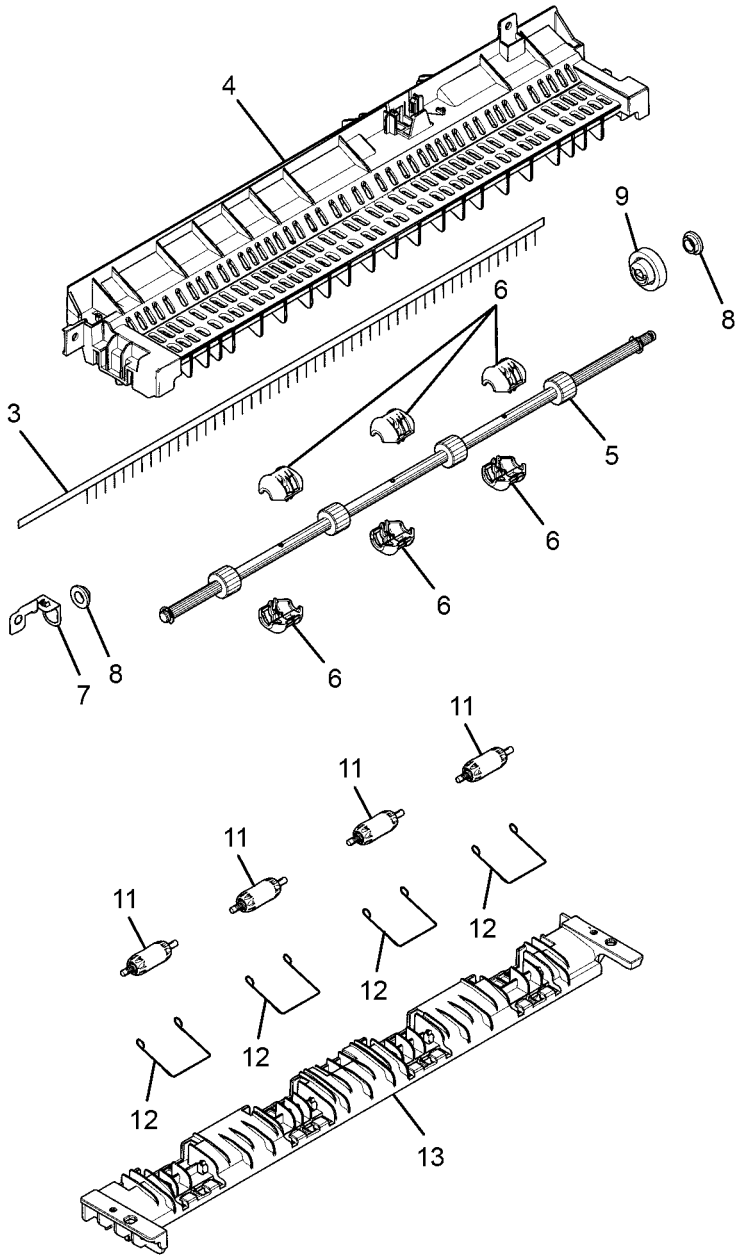
Item	Part	Description
1	–	Exit actuator (P/O PL 10.10 Item 2)
2	–	Fuser gear (P/O PL 10.10 Item 2)
3	–	Pressure roller (P/O PL 10.10 Item 2)
4	–	Idle feed roller (P/O PL 10.10 Item 2)
5	–	Halogen lamp (P/O PL 10.10 Item 2)
6	–	Heat roller (P/O PL 10.10 Item 2)
7	–	Lower frame (P/O PL 10.10 Item 2)
8	–	Output guide (P/O PL 10.10 Item 2)
9	–	Thermistor assembly (P/O PL 10.10 Item 2)
10	–	Thermostat (P/O PL 10.10 Item 2)
11	–	Idle roller (P/O PL 10.10 Item 2)
12	–	Upper frame (P/O PL 10.10 Item 2)
13	–	Bush (P/O PL 10.10 Item 2)
14	–	Lamp cap (P/O PL 10.10 Item 2)
15	–	Jam release lever (P/O PL 10.10 Item 2)
16	–	Spring (P/O PL 10.10 Item 2)
17	–	Claw guide (P/O PL 10.10 Item 2)
18	–	Thermistor (P/O PL 10.10 Item 2)
19	–	Pressure roller left bracket (P/O PL 10.10 Item 2)
20	–	Pressure roller right bracket (P/O PL 10.10 Item 2)
21	–	Thermostat holder (P/O PL 10.10 Item 2)
22	–	Frame (P/O PL 10.10 Item 2)
23	–	Baffle (P/O PL 10.10 Item 2)
24	–	Bracket (P/O PL 10.10 Item 2)



J-8-0003-A

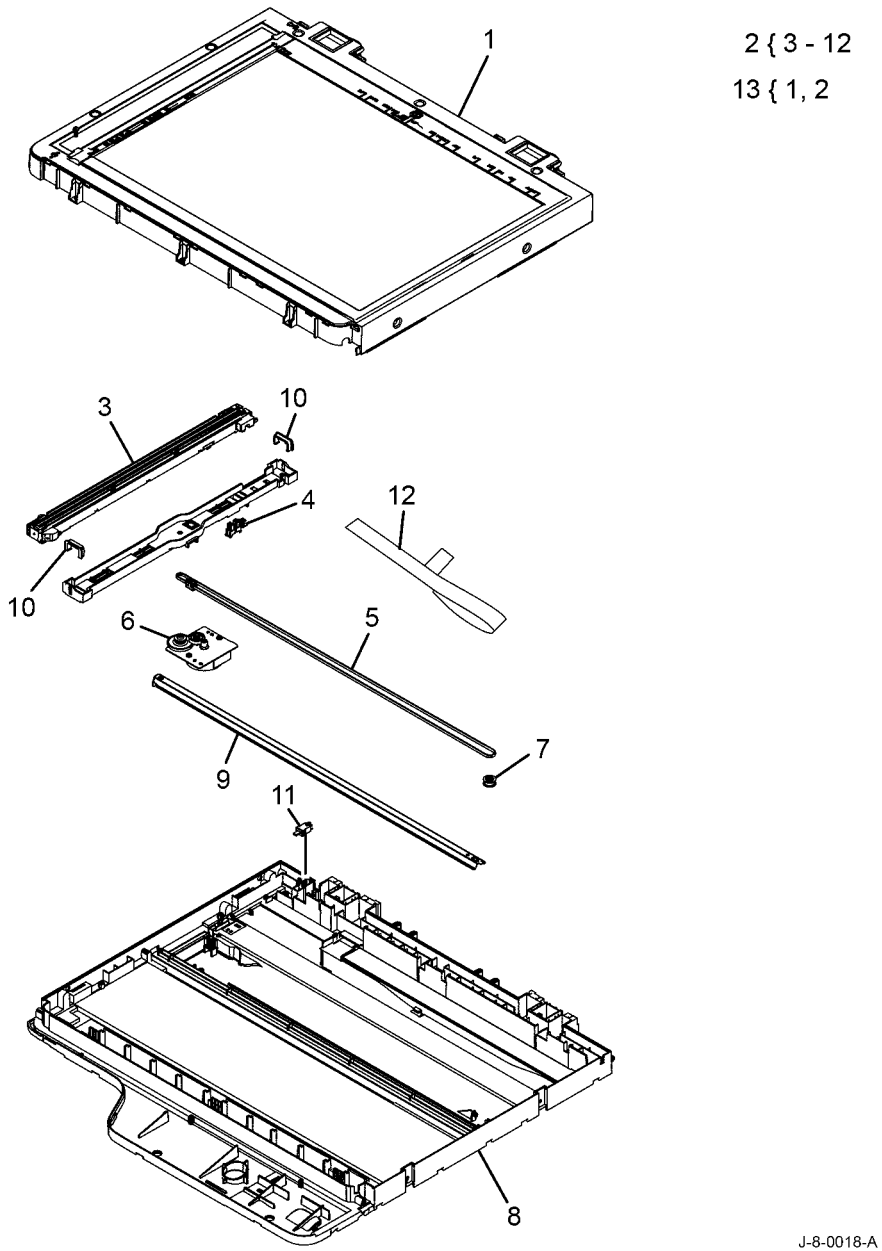
PL 10.20 Exit Assembly

Item	Part	Description
1	038N00582	Exit assembly
2	–	Upper exit guide assembly (P/O PL 10.20 Item 1)
3	–	Antistatic brush (P/O PL 10.20 Item 2)
4	–	Upper exit guide (P/O PL 10.20 Item 2)
5	–	Face down exit roller (P/O PL 10.20 Item 2)
6	–	Decurl exit roller (P/O PL 10.20 Item 2)
7	–	Link (P/O PL 10.20 Item 2)
8	–	Bush (P/O PL 10.20 Item 2)
9	–	Gear (P/O PL 10.20 Item 2)
10	–	Lower exit guide assembly (P/O PL 10.20 Item 1)
11	–	Idle wave exit roller (P/O PL 10.20 Item 10)
12	–	Spring (P/O PL 10.20 Item 10)
13	–	Lower exit guide (P/O PL 10.20 Item 10)



PL 14.10 Platen

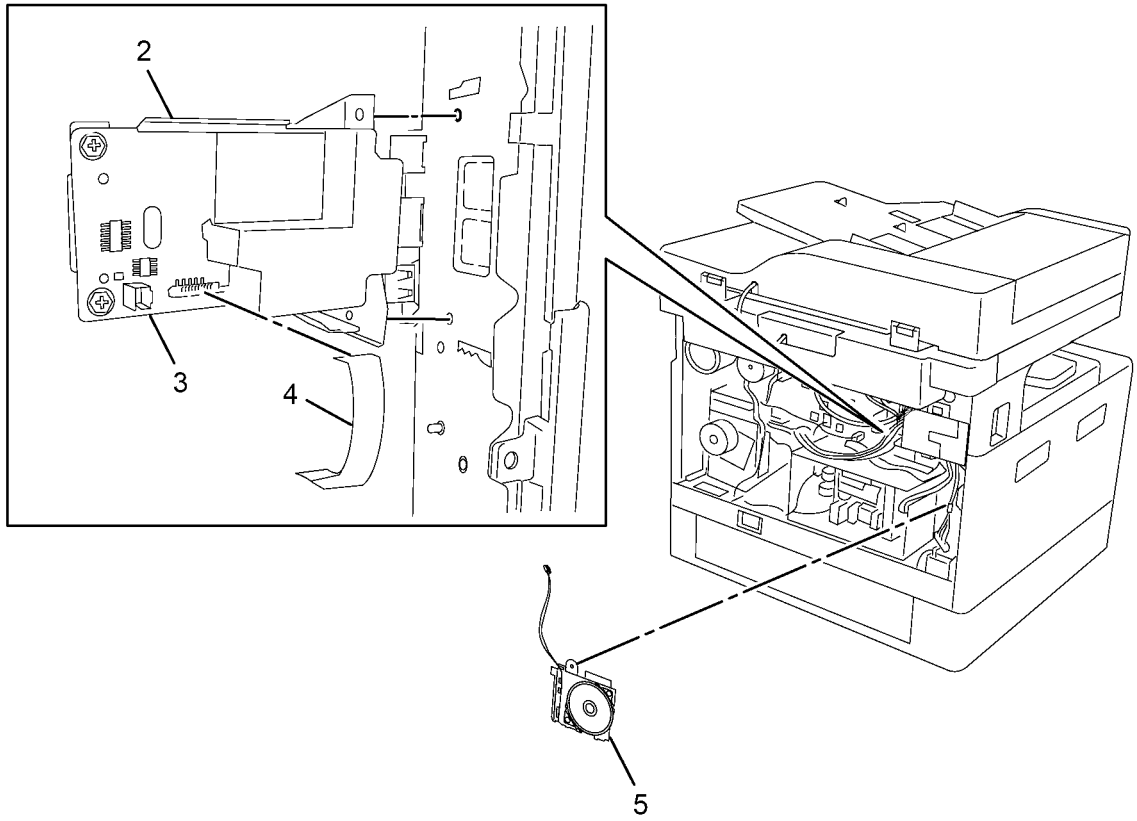
Item	Part	Description
1	090N00190	Scanner top cover (REP 14.2, ADJ 6.1)
2	–	Lower platen
3	062N00309	Contact image sensor (REP 14.3)
4	130N01574	CIS home sensor
5	007N01838	Belt - Timing gear
6	127N07938	Platen motor (MOT05-700)
7	–	Idle pulley (P/O PL 14.10 Item 2)
8	–	Lower cover (P/O PL 14.10 Item 2)
9	–	Plate rail bracket (P/O PL 14.10 Item 2)
10	014N00509	Spacer guide (P/O PL 14.10 Item 2), (REP 14.3)
11	110N01552	Cover open sensor (Q05-400)
12	152N11933	Scanner flat cable
13	–	Scanner assembly (REP 14.1)



PL 20.10 Fax Module

Item	Part	Description
1	–	Fax kit (optional)
2	–	Fax PWB bracket (P/O PL 20.10 Item 1)
3	140N63726	Fax PWB
4	152N11929	Fax flat cable
5	–	Speaker (P/O PL 20.10 Item 1)

1 { 2 - 5



J-8-0032-A

PL 26.10 Consumables

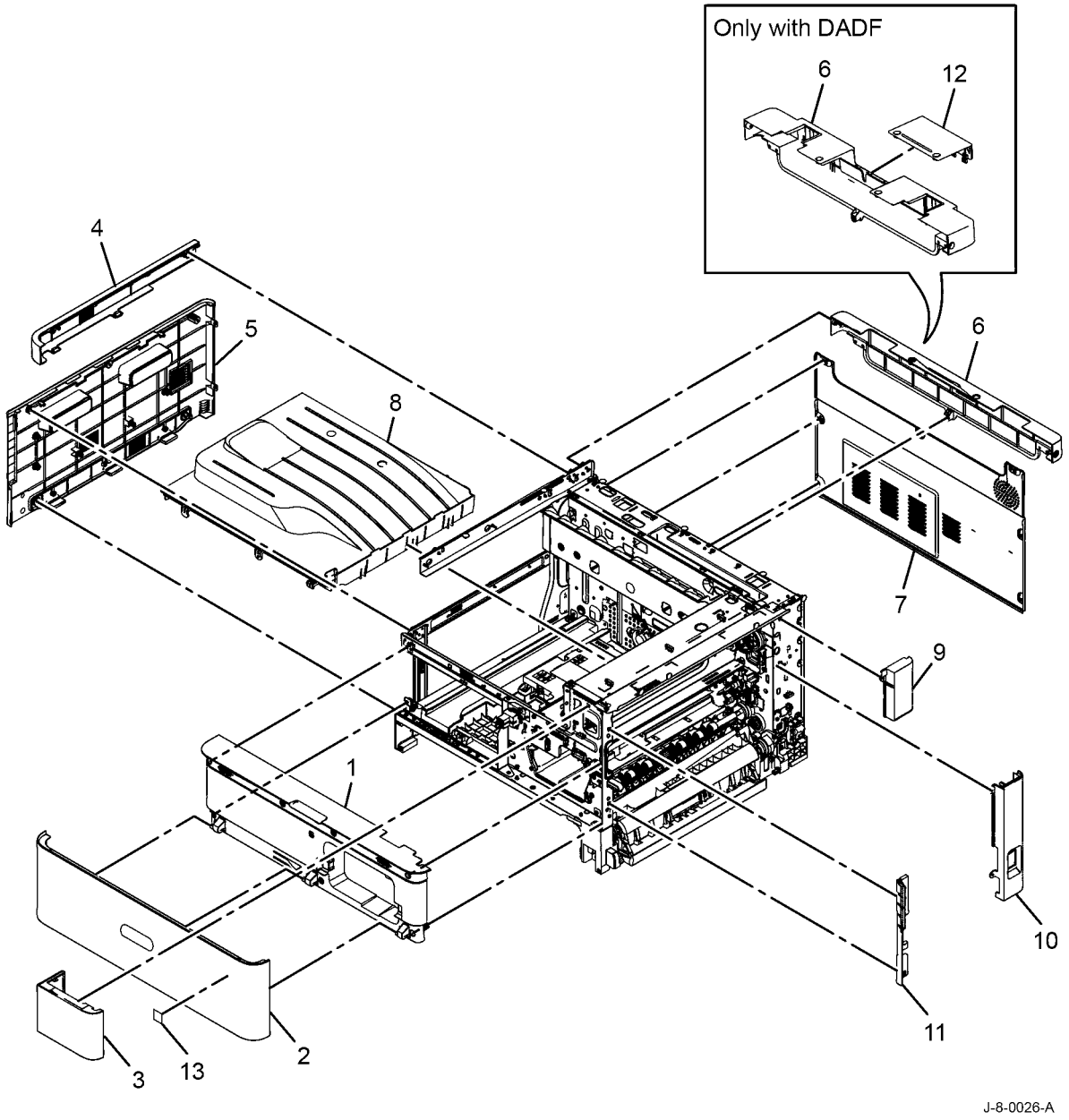
Item	Part	Description
1	043P00081	Lens/Mirror cleaner
2	043P00048	Xerox formula A cleaner
3	019P03025	Lint-free (white) cleaning cloth

NO EXPLODED VIEW PROVIDED

J-8-0033-A

PL 28.10 Covers

Item	Part	Description
1	–	Front inner cover (REP 28.4)
2	002N03340	Front cover (REP 28.2)
3	–	Front top cover (REP 28.8)
4	–	Scanner left cover (REP 28.7)
5	–	Left cover (REP 28.3)
6	–	Scanner rear cover (with document cover REP 28.5, with DADF REP 28.6)
7	–	Rear cover (REP 28.1)
8	–	Exit cover (REP 28.8)
9	–	Right top cover
10	–	Right bottom cover
11	–	Inner frame cover
12	–	Scanner rear center cover (Only with DADF), (REP 28.6)
13	091N80345	E-star label



6 General Procedures and Information

GP 1 Service Mode

Purpose

This procedure describes how to enter and exit diagnostics and the available service routines.

How to Enter Diagnostics and Service Routines

The B1022 Diagnostics and the B1025 Diagnostics screens contain different diagnostics procedures and service routines.

B1022 Diagnostics

1. To enter diagnostics refer to Figure 1.

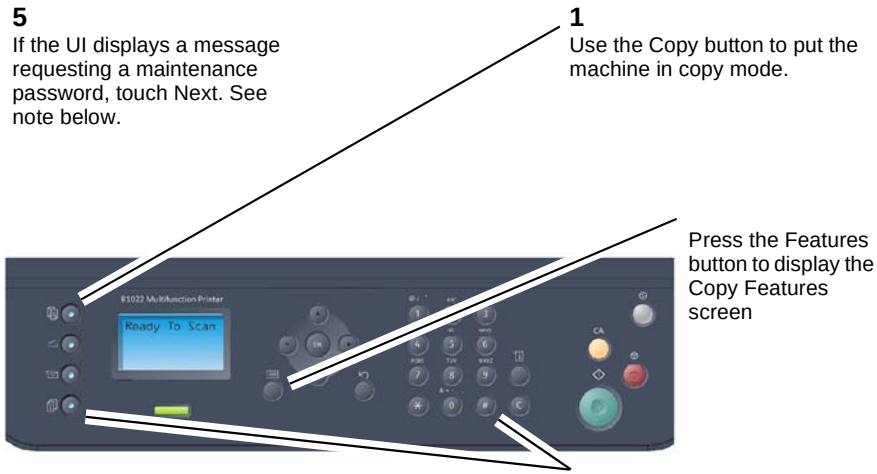


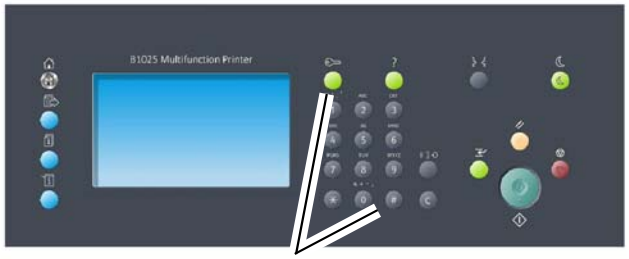
Figure 1 Xerox B1022

2. Scroll up and down to make selections from the Diagnostics menu, refer to B1022 Diagnostic Routines.
   - **Information**

     Generates the following reports
     - Configuration
     - Supplies Information
     - Usage Counter
     - Error Information
   - **Maintenance Counters**
     - Clear Counts
   - **Diagnostics**
     - Engine
       - dC132 NVM Initialization
       - dC131 NVM Read/Write
       - dC330 Component Control
     - Scanner
       - dC330 Component Control
       - Shading Test
       - Scan Aging
     - Adjustments
       - Print Adjustments
       - Copy Adjustments
       - Adjustment Report
       - Clear Settings
     - System
       - Switch Test (UI test)
   - **Service Functions**
     - Clear Memory
     - Clear Admin Password
     - Wrap Jam Clear
     - F/W Upgrade
     - Parts Replacement Alert
     - TC Init
     - Low Toner Alert
     - Capture Log
     - Log Backup (On/Off)
     - AJR (ON/Off)
     - SFO# (Special Feature Options)
     - Serial Number
   - **Exit Diagnostics**
     - Yes or No
     - [Reboot] Yes or No

B1025 Diagnostics

1. When the machine is ready, press and hold the **key** button and the # button, Figure 2.



1
Press and hold the key button then press the # button.

2
On the Diagnostics Entry screen enter the pass-code 1934, then touch the start arrow.

3
If the UI displays a message requesting a maintenance pass-word, touch Next. See note below.

J-1-0116-A

Figure 2 Xerox B1025

2. Scroll up and down to make selections from the Diagnostics menu, refer to B1025 Diag-nostic Routines.
   - **General Information** describes the following:
     - Serial Number
     - Images since last call
     - System Software Version
     - IP Address
   - **Service Information** gives access to:
     - dC104 Usage Counters
     - dC108 Software Version
     - dC109 FAx Protocol Report
     - dC120 Fault Counters
     - dC122 Fault History
     - dC135 HFSI (High Frequency Service Items)
     - Configuration Sheet
     - Supplies Report
     - Low Alert Level
     - Wrap Jam Clear
     - TC Initialisation
     - Part Replacement Alert
   - **Copier Diagnostics**
     - dC131 NVM Read/Write
     - dC132 NVM Initialization
     - dC305 UI Test
     - dC330 Component Control
     - dC612 Print Test pattern
     - Format Hard Drive
     - Scanner
     - Memory Clear
     - Shading Test
     - Serial Number Reset
     - Adjustment
   - **FAX & NW Diagnostics**
     - dC131 NVM Read/Write-Fax
     - dC132 NVM Initialization-Fax
     - dC330 Component Control
     - dC132 NVM Initialization-NW
   - **Log Backup**
   - **Debug Log**

GP 2 Fault Codes and History Files

Purpose

To describe access to fault history information and explain the fault code structure.

Fault Data Available from Diagnostics

Service Mode (GP 1) gives access to the fault history options that follow:

- (B1025 only) For information on the number of occurrences of a fault, refer to dC120 Fault Counter.
- For information on current machine faults, refer to dC122 Fault History.

Function, Fault, Component Codes

Refer to Table 1 for a description of some of the function and fault code prefixes.

Table 1 Function and fault code prefixes

Chain Code	Function
001	Standby power
002	User interface
003	Machine run control
04X	Main drives
005	Document transportation
06X	Image creation
07X (X = tray number)	Paper supply (paper trays and bypass)
008	Paper transport
009	Xerographics
010	Fusing and copy/print transportation
014	Scanner
015	System control
017	Network controller
020	Fax

GP 3 How to Change the System Administrator Password

Purpose

To change the System Administrator password.

Changing the System Administrator Password

Xerox recommends that you change the default system administrator password after you configure the printer. Be sure to store the password in a secure location. The default password is 1111.

1. Open Internet Explorer.
2. Enter the IP address of the device in the address line, then select Go.
3. When the CentreWare Internet Services window opens select the Properties tab.
4. Under the Maintenance menu select Administrator Password.
5. The Administrator Accounts window is displayed. Type a new password, then type the password again to verify.
6. Touch the Select to save a new password check box.

NOTE: *If the admin password is not 1111, ask the customer for the current password.*

GP 4 How to Power On the Device or Power Off the Device

Purpose

To show how to power off or power on the device, without the loss of customer data or damage to the system hardware.

CAUTION

To prevent a device malfunction, do not plug or unplug the power cord while the device is powered on.

Refer to

- Switch On Procedure
- Switch off procedure

Switch On Procedure

1. Ensure the power cord is plugged into the device.
2. Press the power saver button.

Switch off procedure

1. Press the power saver button.
2. Touch **Power Down** on the touch screen.

   NOTE: *When all control panel lights are off, the device power-off sequence is complete.*

3. If required, the power cord may now be unplugged.

GP 5 Paper and Media Size Specifications

Purpose

The media trays accommodate most sizes and types of paper or other specialty media. To ensure the best print quality and to avoid jams, adhere to the guidelines in this section.

Recommended Media

A list of paper and media recommended for the B1022 and B1025 devices is available in Table 1.

Media that May Damage to the Printer

The printer can use a variety of media for print jobs. However, some media can cause poor output quality, increased jams, or damage. Unacceptable media includes:

- Rough, plastic, or porous media
- Ink jet paper
- Non-laser glossy or coated paper
- Transparency
- Paper with cutouts or perforations
- Paper that has been stapled, folded, photocopied, or wrinkled
- Envelopes with windows, metal clasps, padding, side seams or adhesives with release strips
- CD labels
- Media from the bypass tray that is less than 60 g/m2 or more than 163 g/m2
- Media from tray 1 or tray 2 that is less than 60 g/m2 or more than 140 g/m2

Media Storage Guidelines

If media handling problems are common, review these storage guidelines with the customer.

- Store media in dark, cool, relatively dry locations. Most media is susceptible to damage from ultraviolet (UV) and visible light. UV radiation, emitted by the sun and fluorescent bulbs, is particularly damaging to media. The intensity and length of exposure to visible light should be reduced as much as possible.
- Maintain constant temperatures and relative humidity
- Avoid attics, kitchens, garages, and basements. Inside walls are drier than outside walls where moisture can collect.
- Store flat. Media should be stored on pallets, cartons, shelves, or in cabinets.
- Do not open sealed packages until needed. Leave media in the original packaging. For most commercial grades, the wrapper's inner lining protects the media.

Tray Capacity

For media capacity of the input modules refer to the Product Technical Overview section Paper Supply and Feed, Overview.

Table 1 Media Input types and weights

Media specification by input module	Media Types	Sizes	Weights
Tray 1 and Tray 2	Plain, Heavy-weight, Thin Cardstock Light-weight, Preprinted, Recycled, Bond, Archive, LetterHead, Punched	A4, A5 (SEF), Letter, Executive, A3, B4(JIS), B5(JIS), Ledger, 11x17, Legal, Folio 8.5x13, Mex-ican oficio 8.5x13.4	16~38lb 60~140 g/m2
	Custom	Minimum: 148x182mm (5.84x7.16 inch) Maximum: 297x432mm (11.68x17 inch)	
Bypass tray	Plain, Heavy-weight, Thin Cardstock Light-weight, Preprinted, Recycled, Bond, Archive, LetterHead, Punched	A4, A5(LEF), Letter, Executive, A3, B4(JIS), B5(JIS), Ledge, 11x17, Legal, Folio 8.5x13,Mexi-can oficio 8.5x13.4 ,Statement , PostCard 4x6(LEF)	16~43lb 60~163 g/m2
	Custom	Minimum: 125x102mm (4.92x4.0 inch) Maximum: 297x432mm (11.68x17 inch)	
Duplex	Plain, Heavy-weight, Thin Cardstock Light-weight, Preprinted, Recycled,Bond, Archive, LetterHead, Punched	A4, A5 (SEF), Letter, Executive, A3, B4(JIS), B5(JIS), Ledge, 11x17, Legal, Folio 8.5x13, Mex-ican oficio 8.5x13.4	16~38lb 60~140 g/m2
	Custom	Minimum: 130x182mm (5.12x7.16 inch) Maximum: 297x432mm (11.68x17 inch)	

GP 6 Installation Space Requirements

Purpose

To give information on the weight, size and normal installation space requirement for the B1022 and B1025 devices.

Refer to the sections that follow:

- Dimensions and Weight of the B1022.
- Dimensions and Weight of the B1025.

Dimensions and Weight of the B1022

B1022 weight = 25.5 kg (56.9 lb).

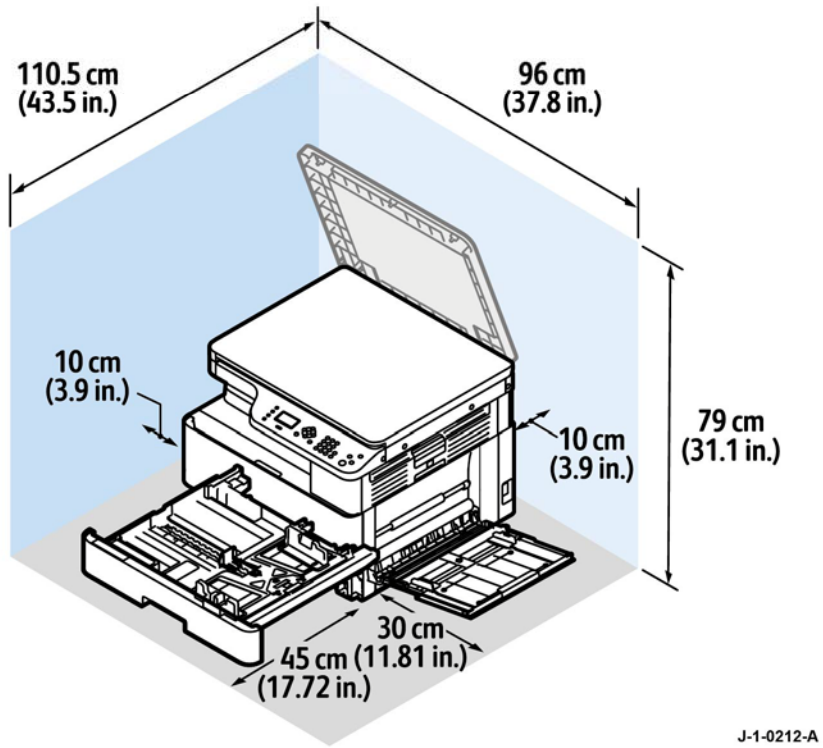


Figure 1 B1022 installation space

NOTE: *When the optional tray 2 is installed, the overall height is increased by 9.8 cm (3.9 in).*

Dimensions and Weight of the B1025

B1022 weight = 30.4 kg (67 lb)

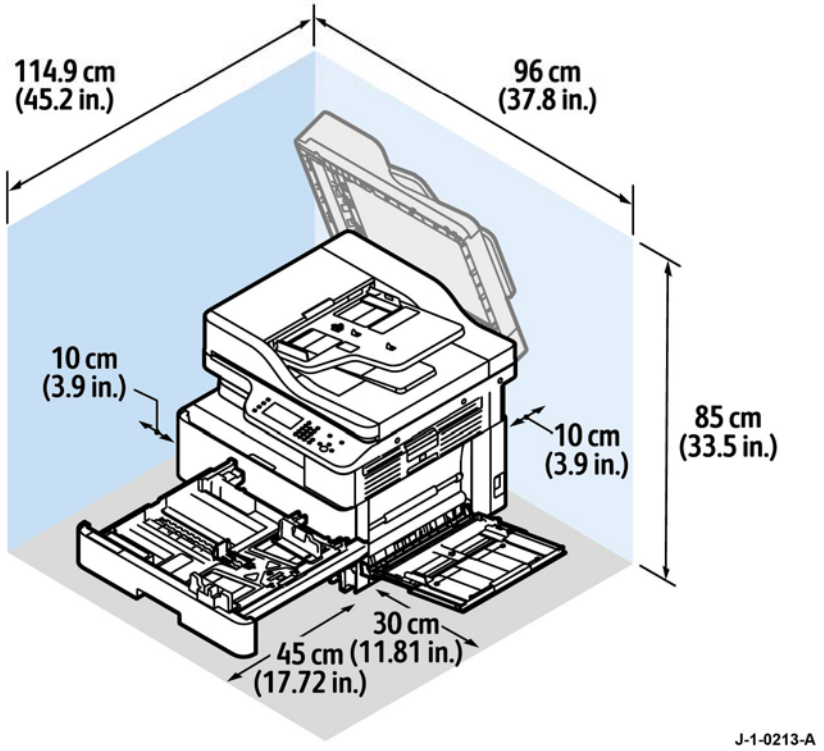


Figure 2 B1025 installation space

NOTE: *When the optional tray 2 is installed, the overall height is increased by 9.8 cm (3.9 in).*

GP 7 Network Clone Procedure

Purpose

To create a copy of network configuration settings and then distribute these settings to multiple devices on the network. This cloning process can also be used to backup and restore network settings lost during a software reload.

Creating the Clone File

1. Open Internet Explorer
2. Enter the IP address of the device in the address line, then select Go.
3. When the CentreWare Internet Services window opens select the Properties tab.
4. Under the General Setup menu select Cloning.
5. Follow the on screen instructions to select the features to clone from the device.
6. Click on Clone.
7. If prompted enter the Administrator Username ‘admin’ (default setting) and Password in the Authentication window, refer to GP 8 Administrator Log In.
8. Click on Cloning.dlm.
9. If prompted, save the clone file to a location that you can remember easily when you need the file for installation. If you are not prompted to save the file, look for it in the Downloads folder on your computer.

GP 8 Administrator Log In

Purpose

To access to the control panel as a system administrator.

NOTE: *If the admin password is not 1111, ask the customer for the current password.*

NOTE: *To change the system administrator password, go to GP 3.*

B1025 Administrator Log in

1. At the printer control panel, press the **Log In/Out** button.
2. Type **admin**, then touch the **Next** arrow.
3. Type the administrator password, then touch **OK**. The default password is 1111.

B1022 Administrator Log in

1. At the printer control panel, press the **Machine Status** button.
2. Select an administrator function, **System Setup**, **Print Setup**, or **Network Settings**.

   NOTE: *To select an administrator function, use the Up or Down arrow buttons.*

3. Press **OK**.
4. Enter the administrator password, use the control panel numeric keypad. To advance after pressing each number, press the right arrow button. The default password is 1111.
5. Press **OK**.

GP 9 Obtaining a Device Debug Log File

Purpose

To enable and then obtain a device Debug log file for investigation by 2nd level service support, refer to the appropriate procedure: B1022 Procedure or B1025 Procedure.

B1022 Procedure

Enable the capture of Debug logs in service mode:

1. Enter Service Mode, GP 1.
2. Scroll the UI screen, then select **Service Functions**.
3. Select **Log Backup On/Off**.
4. Select **Level 2**.
5. Press the **OK button**.
6. Exit diagnostics, GP 1.

Capture of Debug logs in service mode:

1. Enter Service Mode, GP 1.
2. Scroll the UI screen, then select **Service Functions**.
3. Insert a USB Flash drive in the front device port.
4. Scroll the UI screen, then select **Capture logs**.
5. Press the **OK** button. The *Exporting* message will display on the UI screen.
6. Remove the USB Flash drive when the *succeeded* message is displayed.
7. Exit diagnostics, GP 1.

A folder file titled DBGLOG is generated, then stored on the USB Flash drive. Forward this files to 2nd level support for investigation.

B1025 Procedure

Enable the capture of Debug logs in service mode:

1. Enter Service Mode, GP 1.
2. Scroll the UI screen, then touch **Debug Log**.
3. Touch **Level 2**.
4. Touch **OK**.
5. Exit diagnostics, GP 1.

Capture of Debug logs in service mode:

1. Enter Service Mode, GP 1.
2. Scroll the UI screen, then touch **Log Backup**.
3. Insert a USB Flash drive in the front device port.
4. Touch **Capture logs**. The *Do you want to run Capture Log?* message will display on the UI screen.
5. Touch **OK**. The *Local UI will process logs and capture them to the USB* message will display on the UI screen.
6. Remove the USB Flash drive when the *Capture log is succeeded* message is displayed.
7. Exit diagnostics, GP 1.

Two files are generated, then stored on the USB Flash drive: a folder file titled DBGLOG and a file in the format, Time_456789_Date_UI.zip. Forward both the files to 2nd level support for investigation.

GP 10 Miscellaneous Checks

Purpose

To indicate which types of problems to look for when checking or inspecting parts of the machine.

Procedure

1. Assess the fault. Check if the part is broken, too loose or too tight. Check if it needs cleaning or lubricating.
2. Check the following components as appropriate:
   - Actuators
   - Bearings
   - Drive Belts
   - Gears
   - Harnesses and Wiring
   - Rollers
   - Shafts

Actuators

- Free movement.
- Damage
- Contamination.

Bearings

- Wear.
- Damage.
- Contamination.

Drive Belts

- Wear.
- Damaged teeth.
- Correct tension.
- Contamination of tension rollers and support shafts.

Gears

- Contamination.
- Chips or cracks.
- Wear.
- Misalignment.

Harnesses and Wiring

- Continuity.
- Short-circuits caused by physical damage or contamination of conductors, terminals or connectors.
- Overheated insulation.
- Damaged insulation near moving parts and sharp edges.
- Pin and receptacle damage on connectors.

Rollers

- Flats.
- Tears.
- Contamination.
- Secure E-clips and other retainers.

Shafts

- Contamination.
- Misalignment.
- Rotates without binding.

GP 11 Restriction of Hazardous Substances

Purpose

To give information on the RoHS Directive.

The RoHS Directive restricts the use of certain hazardous substances in electrical and electronic equipment. It applies to equipment placed in the European Union (EU) market. The directive takes effect from 1st July 2006.

NOTE: *Currently these restrictions are only for the European Union (EU) market and some associated countries. For more information go to www.Xerox.com. However, Xerox has mandated that all Xerox® B1022 and B1025 devices must be maintained as RoHS compliant.*

The hazardous substances are:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent Chromium (Cr 6+, Cr [VI])
- Polybrominated Diphenyl Ethers (PBDE's)
- Polybrominated Biphenyls (PBB's)

Identification of a RoHS Compliant Device

Xerox will maintain a central list of RoHS compliant devices.

All Xerox® VersaLink® *B1022* and *B1025* devices are RoHS compliant at time of manufacture.

Procedure

CAUTION

Failure to comply with RoHS guidelines can result in product recalls, imprisonment, fines or penalties.

Use only spares that are listed in the Xerox® B1022 and B1025 Spare Parts List. Do not use spare parts from other similar devices, even if the parts look identical. All Xerox® VersaLink® B1022 and B1025 devices are RoHS compliant at time of manufacture and must be maintained as RoHS compliant.

GP 12 Firmware Upgrade

Purpose

To upgrade the firmware using one of two methods. Refer to the product technical overview, Software Upgrade Methods:

- via Xerox CentreWare Internet Services (CWIS) upgrade, remote upgrade.
- via USB upgrade, local upgrade.

Xerox CentreWare Internet Services (CWIS) upgrade

Download the latest software update. From the Xerox Support website at www.xerox.com/office/B1022_B1025support, select the .hd file.

1. Open an internet web browser.
2. Obtain the IP address for the machine to be upgraded. This can be found by printing a Configuration Report. Enter the printer's IP address into the browser's address box and press return.
3. After the CentreWare Services Window opens, touch the **Properties Tab** then touch **Maintenance**.
4. Enable firmware upgrades, touch **Upgrade Management**, then enter the administrator username (admin) and password (1111 default), touch **OK** then touch **Enabled**.
5. While still on the Properties Tab, touch **Maintenance**, then touch **Firmware Upgrade**.
6. Browse to the location of the firmware upgrade file, then select the file.
7. Open the file.
8. Touch **Install Software**. The printer automatically initializes after the upgrade is complete.
9. Check the firmware version level to confirm the upgrade was successful (print a Configuration Report).

   NOTE: *Disable Firmware Upgrades to secure the printer following the upgrade procedure.*

USB upgrade

Download the latest software update. From the Xerox Support website at www.xerox.com/office/B1022_B1025support, select the .hd file.

1. Load the firmware onto a USB Flash drive.
2. Install the USB Flash drive in the Flash drive port of the device.
3. Select **Print from USB** on the Control Panel.
4. Select the firmware file from the list displayed on the Control Panel.
5. Select **YES** to Firmware Upgrade, then touch **OK** to start the download. A Printing progress screen is displayed followed by an Upgrade progress display on the Control Panel. The printer reboots after the firmware upgrade is complete.
6. Check the firmware version level to confirm the upgrade was successful (print a Configuration Report).

GP 13 Glossary of Terms, Acronyms and Abbreviations

Where possible unit designations as appear in ISO 1000 (International Organization for Standardization) and Xerox Standard MN2-905 have been used. All measurements appear in ISO units followed by any conversion in brackets e.g.; 22.5mm (0.885 inches)

Refer to Table 1.

Table 1 Glossary

Term	Definition
802.11	A set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).
802.11b/g/n	802.11b/g/n can share same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps, 802.11n supports bandwidth up to 150 Mbps. 802.11b/g/n devices may occasionally suffer interference from microwave ovens, cordless telephones, and Bluetooth devices.
Access point	Access Point or Wireless Access Point (AP or WAP) is a device that connects wireless communication devices together on wireless local area networks (WLAN), and acts as a central transmitter and receiver of WLAN radio signals.
AppleTalk	AppleTalk is a proprietary suite of protocols developed by Apple, Inc for computer networking. It was included in the original Macintosh (1984) and is now deprecated by Apple in favor of TCP/IP networking.
BIT Depth	A computer graphics term describing the number of bits used to represent the color of a single pixel in a bitmapped image. Higher color depth gives a broader range of distinct colors. As the number of bits increases, the number of possible colors becomes impractically large for a color map. 1-bit color is commonly called as monochrome or black and white
BMP	A bitmapped graphics format used internally by the Microsoft Windows graphics subsystem (GDI), and used commonly as a simple graphics file format on that platform.
BOOTP	Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assign the IP address from a pool of addresses to each client. BOOTP enables 'diskless workstation' computers to obtain an IP address prior to loading any advanced operating system.
CCD	Charge Coupled Device (CCD) is a hardware which enables the scan job. CCD Locking mechanism is also used to hold the CCD module to prevent any damage when you move the machine.
CIS	Contact Image Sensor (CIS) is a device to read the document on the platen glass.
Collation	A process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.
Control Panel	A control panel is a flat, typically vertical, area where control or monitoring instruments are displayed. They are typically found on the front of the machine.

Table 1 Glossary

Term	Definition
Coverage	The printing term used for a toner usage measurement on printing. For example, 5% coverage means that an A4 sided paper has about 5% image or text on it. So, if the image has complicated images or lots of text on it, the coverage will be higher, therefore toner usage will also be higher.
CSV	Comma Separated Values (CSV). A type of file format, CSV is used to exchange data between disparate applications. The file format, as it is used in Microsoft Excel, has become a de facto standard throughout the industry, even among non-Microsoft platforms.
DADF	A Duplex Automatic Document Feeder (DADF) is a document feeder that will automatically feed and turn over an original document so that the device can scan on both sides.
Default	The value or setting that is in effect when taking a printer out of its box state, reset, or initialized.
DHCP	A Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. DHCP also provides a mechanism for allocation of IP addresses to client hosts.
DIMM	Dual Inline Memory Module (DIMM), a small circuit board that holds memory. DIMM stores all the data within the machine like printing data, received fax data.
DLNA	The Digital Living Network Alliance (DLNA) is a standard that allows devices on a home network to share information with each other across the network.
DNS	The Domain Name Server (DNS) is a system that stores information associated with domain names in a distributed database on networks, such as the Internet.
Dot Matrix Printer	A dot matrix printer refers to a type of computer printer with a print head that runs back and forth on the page and prints by impact, striking an ink-soaked cloth ribbon against the paper, much like a typewriter.
DPI	Dots Per Inch (DPI) is a measurement of resolution that is used for scanning and printing. Generally, higher DPI results in a higher resolution, more visible detail in the image, and a larger file size.
DRPD	Distinctive Ring Pattern Detection. Distinctive Ring is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers.
Duplex	A mechanism that will automatically turn over a sheet of paper so that the machine can print (or scan) on both sides of the paper. A printer equipped with a Duplex Unit can print on both sides of paper during one print cycle.

Table 1 Glossary

Term	Definition
Duty Cycle	Duty cycle is the page quantity which does not affect printer performance for a month. Generally the printer has the lifespan limitation such as pages per year. The lifespan means the average capacity of print-outs, usually within the warranty period. For example, if the duty cycle is 48,000 pages per month assuming 20 working days, a printer limits 2,400 pages a day.
EAP	Extensible Authentication Protocol is a protocol for wireless networks that expands on authentication methods used by the Point-to-Point Protocol (PPP), a protocol often used when connecting a computer to the Internet. EAP can support multiple authentication mechanisms, such as token cards, smart cards, certificates, one-time passwords, and public key encryption authentication.
ECM	Error Correction Mode (ECM) is an optional transmission mode built into Class 1 fax machines or fax modems. It automatically detects and corrects errors in the fax transmission process that are sometimes caused by telephone line noise.
Emulation	Emulation is a technique of one machine obtaining the same results as another. An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior, which is in contrast to simulation, which concerns an abstract model of the system being simulated, often considering its internal state.
Ethernet	Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/ data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. It has become the most widespread LAN technology in use during the 1990s to the present.
EtherTalk	A suite of protocols developed by Apple Computer for computer networking. It was included in the original Macintosh (1984) and is now deprecated by Apple in favor of TCP/IP networking.
FDI	Foreign Device Interface (FDI) is a device installed inside the machine to allow a third party device such as a coin operated device or a card reader. Those devices allow the pay-for-print service the machine.
FTP	A File Transfer Protocol (FTP) is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet).
Fuser Unit	The part of a printer that fuses the toner onto the print media. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to ensure that the toner stays on the paper permanently.
Gateway	A connection between computer networks, or between a computer network and a telephone line. It is very popular, as it is a computer or a network that allows access to another computer or network.
Grayscale	Shades of gray that represent light and dark portions of an image when color images are converted to grayscale; colors are represented by various shades of gray.

Table 1 Glossary

Term	Definition
Halftone	An image type that simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.
HDD	Hard Disk Drive (HDD), commonly referred to as a hard drive or hard disk, is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.
IEEE	The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.
IEEE 1284	The 1284 parallel port standard was developed by the Institute of Electrical and Electronics Engineers (IEEE). The term "1284-B" refers to a specific connector type on the end of the parallel cable that attaches to the peripheral (for example, a printer).
Intranet	A private network that uses Internet Protocols, network connectivity, and possibly the public telecommunication system to securely share part of an organization's information or operations with its employees. Sometimes the term refers only to the most visible service, the internal website.
IP address	An Internet Protocol (IP) address is a unique number that devices use in order to identify and communicate with each other on a network utilizing the Internet Protocol standard.
IPM	The Images Per Minute (IPM) is a way of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete within one minute.
IPP	The Internet Printing Protocol (IPP) defines a standard protocol for printing as well as managing print jobs, media size, resolution, and so forth. IPP can be used locally or over the Internet to hundreds of printers, and also supports access control, authentication, and encryption, making it a much more capable and secure printing solution than older ones.
IPX/SPX	IPX/SPX stands for Internet Packet Exchange/Sequenced Packet Exchange. It is a networking protocol used by the Novell NetWare operating systems. IPX and SPX both provide connection services similar to TCP/IP, with the IPX protocol having similarities to IP, and SPX having similarities to TCP. IPX/SPX was primarily designed for local area networks (LANs), and is a very efficient protocol for this purpose (typically its performance exceeds that of TCP/IP on a LAN).
ISO	The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. It produces world-wide industrial and commercial standards.
ITU-T	The International Telecommunication Union is an international organization established to standardize and regulate international radio and telecommunications. Its main tasks include standardization, allocation of the radio spectrum, and organizing interconnection arrangements between different countries to allow international phone calls. A -T out of ITU-T indicates telecommunication.

Table 1 Glossary

Term	Definition
ITU-T No. 1 chart	Standardized test chart published by ITU-T for document facsimile transmissions.
JBIG	Joint Bi-level Image Experts Group (JBIG) is an image compression standard with no loss of accuracy or quality, which was designed for compression of binary images, particularly for faxes, but can also be used on other images.
JPEG	Joint Photographic Experts Group (JPEG) is a most commonly used standard method of lossy compression for photographic images. It is the format used for storing and transmitting photographs on the World Wide Web.
LDAP	The Lightweight Directory Access Protocol (LDAP) is a networking protocol for querying and modifying directory services running over TCP/IP.
LED	A Light-Emitting Diode (LED) is a semiconductor device that emits light.
MAC addres	Media Access Control (MAC) address is a unique identifier associated with a network adapter. MACaddress is a unique 48-bit identifier usually written as 12 hexadecimal characters grouped in pairs (e. g., 00-00-0c-34-11-4e). This address is usually hard-coded into a Network Interface Card (NIC) by its manufacturer, and used as an aid for routers trying to locate machines on large networks.
MFP	Multi Function Peripheral (MFP) is an office machine that includes the following functionality in one physical body, so as to have a printer, a copier, a fax, a scanner and etc.
MH	Modified Huffman (MH) is a compression method for decreasing the amount of data that needs to be transmitted between the fax machines to transfer the image recommended by ITU-T T.4. MH is a codebook-based run-length encoding scheme optimized to efficiently compress white space. As most faxes consist mostly of white space, this minimizes the transmission time of most faxes.
MMR	Modified READ (MMR) is a compression method recommended by ITU-T T.6.
Modem	A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.
MR	Modified Read (MR) is a compression method recommended by ITUT T.4. MR encodes the first scanned line using MH. The next line is compared to the first, the differences determined, and then the differences are encoded and transmitted.
NetWare	A network operating system developed by Novell, Inc. It initially used cooperative multitasking to run various services on a PC, and the network protocols were based on the archetypal Xerox XNS stack. Today NetWare supports TCP/IP as well as IPX/SPX.
OPC	Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer, and it is usually green or rust colored and has a cylindrical shape.

Table 1 Glossary

Term	Definition
Originals	The first example of something, such as a document, photograph or text, etc, which is copied, reproduced or translated to produce others, but which is not itself copied or derived from something else.
OSI	Open Systems Interconnection (OSI) is a model developed by the International Organization for Standardization (ISO) for communications. OSI offers a standard, modular approach to network design that divides the required set of complex functions into manageable, self-contained, functional layers. The layers are, from top to bottom, Application, Presentation, Session, Transport, Network, Data Link and Physical.
PABX	A private automatic branch exchange (PABX) is an automatic telephone switching system within a private enterprise.
PCL	Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol and has become an industry standard. Originally developed for early inkjet printers, PCL has been released in varying levels for thermal, dot matrix printer, and laser printers.
PDF	Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems for representing two dimensional documents in a device independent and resolution independent format.
PostScript(PS)	A page description language and programming language used primarily in the electronic and desktop publishing areas. - that is run in an interpreter to generate an image.
Printer Driver	A program used to send commands and transfer data from the computer to the printer.
Print Media	Paper, envelopes, labels, and transparencies which can be used in a printer, a scanner, or copier.
PPM	Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.
PRN file	An interface for a device driver, this allows software to interact with the device driver using standard input/output system calls, which simplifies many tasks.
Protocol	A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.
PSTN	The Public-Switched Telephone Network (PSTN) is the network of the world's public circuit-switched telephone networks which, on industrial premises, is usually routed through the switchboard.
RADIUS	Remote Authentication Dial In User Service (RADIUS) is a protocol for remote user authentication and accounting. RADIUS enables centralized management of authentication data such as usernames and passwords using an AAA (authentication, authorization, and accounting) concept to manage network access.
Resolution	The sharpness of an image, measured in Dots Per Inch (DPI). The higher the dpi, the greater the resolution.

Table 1 Glossary

Term	Definition
SMB	Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network. It also provides an authenticated Interprocess communication mechanism.
SMP	Software Maintenance Package (SMP) is a software release after the initial launch of a platform. This can contain both bug fixes and new features.
SMTP	Simple Mail Transfer Protocol (SMTP) is the standard for e-mail transmissions across the Internet. SMTP is a relatively simple, text based protocol, where one or more recipients of a message are specified, and then the message text is transferred. It is a client server protocol, where the client transmits an email message to the server.
SSID	Service Set Identifier (SSID) is a name of a wireless local area network (WLAN). All wireless devices in a WLAN use the same SSID in order to communicate with each other. The SSIDs are case-sensitive and have a maximum length of 32 characters.
Subnet Mask	The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.
TCP/IP	The Transmission Control Protocol (TCP) and the Internet Protocol (IP); the set of communications protocols that implement the protocol stack on which the Internet and most commercial networks run.
TCR	Transmission Confirmation Report (TCR) provides details of each transmission such as job status, transmission result and number of pages sent. This report can be set to print after each job or only after failed transmissions.
TIFF	Tagged Image File Format (TIFF) is a variable-resolution bitmapped image format. TIFF describes image data that typically come from scanners. TIFF images make use of tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.
Toner Cartridge	A container used in a machine like a printer which contains toner. Toner is a powder used in laser printers and photocopiers, which forms the text and images on the printed paper.
TWAIN	An industry standard for scanners and software. By using a TWAINcompliant scanner with a TWAIN-compliant program, a scan can be initiated from within the program. It is an image capture API for Microsoft Windows and Apple Macintosh operating systems.
UNC Path	Uniform Naming Convention (UNC) is a standard way to access network shares in Window NT and other Microsoft products. The format of a UNC path is: \\<servername>\<sharename>\<Additional directory>
URL	Uniform Resource Locator (URL) is the global address of documents and resources on the Internet. The first part of the address indicates what protocol to use, the second part specifies the IP address or the domain name where the resource is located.

Table 1 Glossary

Term	Definition
USB	Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.
Watermark	A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282; they have been used by papermakers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.
WEP	Wired Equivalent Privacy (WEP) is a security protocol specified in IEEE 802.11 to provide the same level of security as that of a wired LAN. WEP provides security by encrypting data over radio so that it is protected as it is transmitted from one end point to another.
WIA	Windows Imaging Architecture (WIA) is an imaging architecture that is originally introduced in Windows Me and Windows XP. A scan can be initiated from within these operating systems by using a WIAcompliant scanner.
WPA	Wi-Fi Protected Access (WPA) is a class of systems to secure wireless (Wi-Fi) computer networks, which was created to improve upon the security features of WEP.
WPA-PSK	WPA Pre-Shared Key is special mode of WPA for small business or home users. A shared key, or password, is configured in the wireless access point (WAP) and any wireless laptop or desktop devices. WPA-PSK generates a unique key for each session between a wireless client and the associated WAP for more advanced security.
WPS	The Wi-Fi Protected Setup (WPS) is a standard for establishing a wireless home network. If your wireless access point supports WPS, you can configure the wireless network connection easily without a computer.
XPS	XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format, which has benefits for portable document and electronic document, developed by Microsoft. It is an XML-based specification, based on a new print path and a vector-based device-independent document format.

GP 14 Shading and Print Routine

Purpose

To create a CCD calibration profile on the CIS unit if:

- any of the Applicable Component Replacement items on the scanner have been replaced.
- Image defects appear on copied or scanned images.

Refer to the IQ1 Image Quality Entry RAP for image defect recognition.

Applicable Component Replacement

- Scanner Top Cover, PL 14.10 Item 1.
- Contact Image Sensor, PL 14.10 Item 3.
- Spacer Guide, PL 14.10 Item 10.
- Main PWB, PL 1.10 Item 3.

The Shading and Print Routine measures each CCD values of darkness and whiteness on the white reference strip, and calibrates the CCD video channels of R (Red), G (Green), B (Blue) and K (Black) of each CCD on the CIS for white reference.

Go to the appropriate procedure:

- B1022 Shading and Print
- B1025 Shading and Print

B1022 Shading and Print

1. Enter Service Mode, GP 1.
2. Select **Copier Diagnostics**.
3. Select **Scanner**.
4. Select **Shading**.
5. Use the keys to select **Yes**. A print will be produced, Figure 1.
6. Refer to Figure 1, then confirm that the bottom left of the print indicates **OK**.
7. Use the **Back** button to return to the Copier Diagnostics screen.
8. Select **Scanner**.
9. Select **Print**.
10. Use the keys to select **Yes**. A print will be produced, Figure 1.
11. Refer to Figure 1, then confirm that the bottom left of the print indicates **OK**.
12. Exit diagnostics, GP 1.

B1025 Shading and Print

1. Enter Service Mode, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **Shading Test**.
   The Shading Test dialog box is displayed.
4. Touch **Flatbed Shade and Print**. A print will be produced, Figure 1.
5. Refer to Figure 1, then confirm that the bottom left of the print indicates **OK**.
6. Touch **X** to return to the Copier Diagnostics screen.
7. Touch **Shading Test**.
   The Shading Test dialog box is displayed.
8. Touch **Print Last Flatbed**. A print will be produced, Figure 1.
9. Refer to Figure 1, then confirm that the bottom left of the print indicates **OK**.

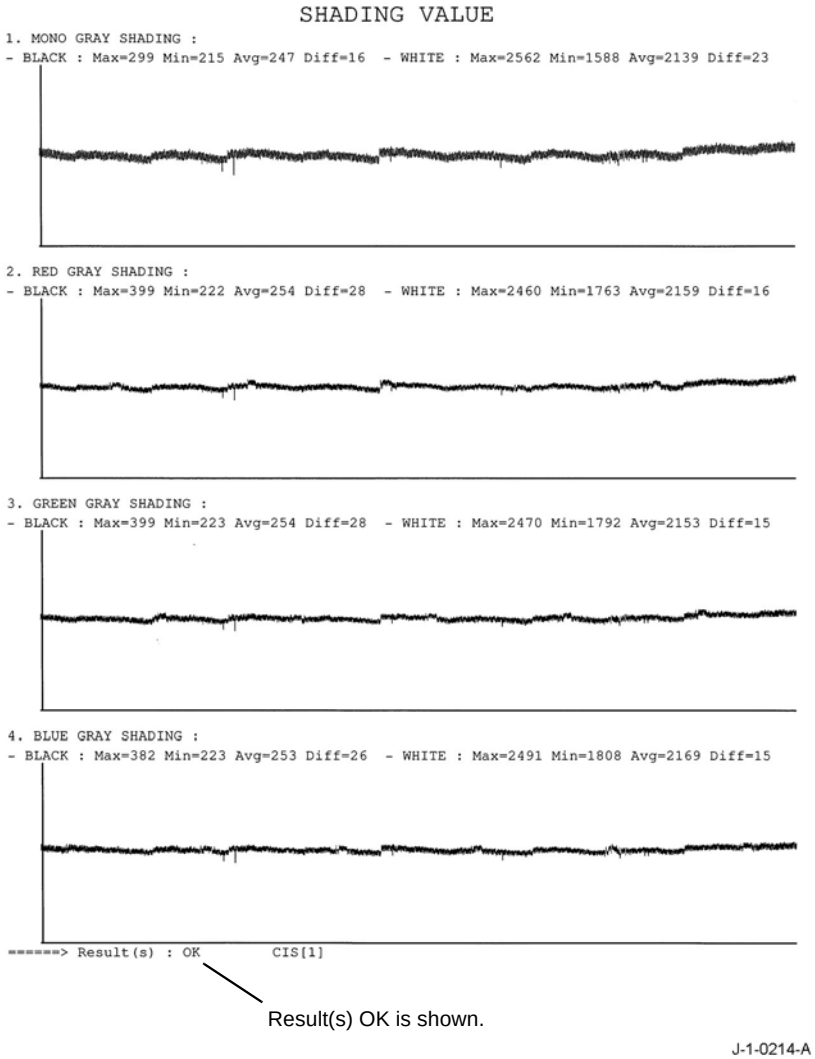


Figure 1 Shading and print output

10. Exit diagnostics, GP 1.

Mathematics of *Diff*

Diff (%) = (Max ? Min) / (Max + Min)*100

GP 15 How to Safely Lift or Move Heavy Modules

Purpose

Use this procedure when lifting a device or moving heavy modules.

Procedure

The instructions that follow must be observed:

1. Ensure that a suitable stable surface to support the device or module after removal is located in close proximity.

   NOTE: *Other parts of a machine are not a suitable stable surface.*

2. Ensure that the height of the support surface is between 750mm and 1000mm (30 inches and 39 inches).
3. Ensure that there are no hazards or obstacles between the device and the support surface.
4. If instructed to remove a module toward the rear of a device and only 1 person is available, the module must be removed while standing at the rear of the device. If 2 people are available, the module may be removed while standing at the front of the device.
5. Two people are required if the device or module is to be lifted onto the floor or lifted from the floor.

General 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 product servicing.

Go to the appropriate section:

- B1025 Diagnostic Routines
- B1022 Diagnostic Routines

B1025 Diagnostic Routines

The following Diagnostic Programs will be used to display machine information and can be used to run some machine components to help isolate faults and failures.

Service Information Routines

Table 1 Service Information Diagnostic Routines

dC Routine	Purpose
dC104 Usage Counters	The purpose of this routine is to provide information regarding images sent, hours of use, total impressions, and types of impressions printed.
dC108 Software Version	The purpose of this routine is to provide information regarding the software versions of modules within the B1025 MFP.
dC109 Fax Protocol Report	The purpose of this routine is to print out the Fax protocol report. The protocol report contains the protocol information about the last fax transmissions.
dC120 Fault Counters	The purpose of this routine is to display the number of occurrences of a fault.
dC122 Fault History	The purpose of this routine is to provide a list of fault that have occurred on the machine, the component that was affected, and the number of times that fault code has occurred.
dC135 HFSI	The purpose of this routine is to view the status of High Frequency Service Items and the counter value for each item.
Configuration Sheet	The purpose of this routine is to print the copier configuration report.
Supplies Report	The purpose of this routine is to print the copier supplies report.
Low Alert Level	The purpose of this routine is to set the alert level in percentage for consumables.
Wrap Jam Clear	The purpose of this routine is to clear wrap jams in the paper path.
TC Initialization	The purpose of this routine is to initialize Toner Concentration.
Part Replacement Alert	The purpose of this routine is to enable or disable providing the customer with an alert when a part is approaching end of life.

Copier Diagnostic Routines

Table 2 Copier Diagnostic Routines

dC Routine	Purpose
dC131 NVM Read/Write	dC131 NVM Read/Write is used to review and modify values within the machine configuration and control parameters stored in NVM.
dC132 NVM Initialization	dC 132 NVM Initialization is used to reset the values of all applicable NVM parameters to default.
dC305 UI Test	UI Test.
dC330 Component Control	dC 330 Component Control shows the status of input components e.g. sensors, and to run or energize output components e.g. motors, solenoids.
dC612 Print Test Pattern	The purpose of this routine is to provide a way for the CSE to print out one of four test patterns from Tray 1 or from the Bypass Tray, in simplex or duplex mode.
Format Hard Drive	The purpose of this routine is to format the memory card.

Table 2 Copier Diagnostic Routines

dC Routine	Purpose
Memory Clear	The purpose of this routine is to clear memory including customer set information.
Shading Test	The purpose of this routine is to check the K, R, G, and B settings in the scanner, refer to GP 14 Shading and Print Routine.
Serial Number Reset	The purpose of this routine is to enter or change the copier serial number.
Adjustment	The purpose of this routine is to adjust the image position on the paper.

Fax and Network Diagnostic Routines

Table 3 Fax and Network Diagnostic Routines (B1025 Only)

dC Routine	Purpose
dC131 NVM Read/ Write - Fax	The purpose of this routine is to review and modify values within the machine configuration and control parameters stored in Fax NVM.
dC132 NVM Initialization - Fax	The purpose of this routine is to reset the values of all applicable FAX NVM parameters to default.
dC330 Component Control - Fax	The purpose of this routine is to show the status of input components and to run or energize output components.
dC132 NVM Initialization - Network	The purpose of this routine is to reset the values of all applicable Network NVM parameters to default.

dC104 Usage Counters

Purpose

This routine provides information regarding images sent, hours of use, total impressions, and types of impressions printed.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **dC104 Usage Counter**.
4. The following counters are displayed:
   - Email Images Sent
   - Network Scanning Images Sent
   - Images Sent
   - Total Impressions
   - Black Impressions
   - Large Impressions
   - Black Large Impressions
   - Black Printed Impressions
   - Sheets
   - 2-Sided Sheets
   - Large Sheets
   - Black Large Sheets
   - Printed Sheets
   - Printed 2-Sided Sheets
   - Black Printed Sheets
   - Black Printed 2-Sided Sheets
   - Single Impressions
   - Black Single Impressions
   - A4 Equivalent Impressions
   - Black A4 Equivalent Impressions
   - Maintenance Impressions
   - Black Maintenance Impressions
   - Black Copied Impressions
   - Copied Sheets
   - Copied 2-Sided Sheets
   - Black Copied Sheets
   - Black 2-Sided Copied Sheets
5. Touch **Refresh** to update the counters.
6. Touch **Print** to print the Billing/Counters Report.
7. Touch **X** to return to the Service Information screen.
8. Exit diagnostics, GP 1.

dC108 Software Version

Purpose

This routine provides information regarding the software versions of modules within the B1025 MFP

B1025 Only

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **dC108 Software Version**.
4. The following Modules are displayed:
   - System Firmware
   - Main Controller
   - Image Output Terminal
   - User Interface
   - Document Feeder
   - PrintCms
   - CopyCms
   - ScanCms
   - IpCore
   - Ep
   - Fuser
   - Pcl5e
   - Toner
   - Tr
   - Tray1
   - MobilePrint
   - Up
   - Margin
   - CopyItem
5. Touch **X** to return to the Service Information screen.
6. Exit diagnostics, GP 1.

dC109 Fax Protocol Report

Purpose

This routine provides a way to print out the Fax protocol report. The protocol report contains the protocol information about the last fax transmissions. The protocol report contains the following:

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **dC109 Fax Protocol Report**.
   The Fax Protocol Report will be printed.
4. Touch **X** to return to the Service Information screen.
5. Exit diagnostics, GP 1.

dC120 Fault Counters

Purpose

To view the faults raised by the machine. dC120 Fault Counters records the number of occurrences of a fault. B1025 Only

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **dc120 Fault Counter**.
4. The dc 120 Fault Counters screen is displayed. It lists the particular **Fault Code**, C**omponent Name** and **Occurrence** (number of occurrences) of that fault code
5. Touch **Fault Code** to sort the faults in ascending or descending order.
6. Touch **X** to return to the Service Information screen.
7. Exit diagnostics, GP 1.

dC122 Fault History

Purpose

This routine provides a list of fault that have occurred on the machine, the component that was affected, and the number of times that fault code has occurred.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch dC122 Fault Counters.
4. The **dc122 Last 40 Error Log** screen is displayed. It lists the following for each of the last 40 machine faults that have occurred:
   - Fault Code
   - Component Name
   - Date/Time
5. Touch **Fault Code** to sort the faults in ascending or descending order.
6. Touch **X** to return to the Service Information screen.
7. Exit diagnostics, GP 1.

dC131 NVM Read/Write

Purpose

To review and modify values within the machine configuration and control parameters stored in NVM.

Description

Each NVM item is identified using an NVM chain link number in the form XX-XXX.

Procedure

1. Enter Diagnostics, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **dC131 NVM Read/Write**.
4. To read the NVM value, scroll through the list to the NVM location.
5. To write NVM:
   a. Touch the NVM location button.
   b. Using the keypad, enter a new value.
   c. Touch **Save** to save the new value or **Reset** to cancel the change.
   d. Touch **Yes**. The new value will be displayed in the NVM location button or the value will be reset to the original value.
6. Touch **X** to return to the Copier Diagnostics screen.
7. Exit diagnostics, GP 1.

Table 1 NVM Locations

Location	Component	NVM Name	NVM Description	Value	Default
05-700	Scan [DADF]	ADF Roller Life Page Counter	Number of pages since last ADF Roller replacement.	Read Only	Read Only
05-110	Scan [DADF]	ADF Rubber Pad Life Page Counter	Number of pages since last ADF Rubber Pad replacement.	Read Only	Read Only
07-900	Engine[Print Margin]	Regi Curl Length	Regi Curl On: Buckle control	0 to 16 (-8 to +8 mm.)	8
07-901	Engine[Print Margin]	Duplex Curl Length	Duplex Regi Curl On: Buckle control	0 to 16 (-8 to +8 mm.)	8
08-100	Engine[Print Margin]	Pick up roller Life Page Counter	Number of pages since last Pick-Up Roller replacement.	Read Only	Read Only
08-130	Engine[Print Margin]	Tray2 Pick-Up Roller Life Page Counter	Number of pages since last Tray2 Pick-Up Roller replacement.	Read Only	Read Only
08-155	Engine[Print Margin]	Tray5 Pick-Up Roller Life Page Counter	Number of pages since last Tray5 Pick-Up Roller replacement.	Read Only	Read Only
08-160	Engine[Print Margin]	Bypass Rubber Pad Life Page Counter	Number of pages since last Bypass Rubber Pad replacement.	Read Only	Read Only
09-100	Engine[Developer]	LD Power Black (LD Light Level Black)	600dpi Laser Light Level, Value in PWM	1 degree interval (1 degree = PWM 22) Index 0 to 20 =ADC Offset -220 to +220	10
09-110	Engine[Developer]	MHV DC Black (MVH Bias Control)	Main Charge Bias Control. Basic of Value(HVPS Setting is Value), Value in PWM.	1 degree interval (1 degree = PWM 6) Index 0 to 20 = PWM Offset -60 to +60	10
09-120	Engine[Developer]	THV Control Bias Control	Transfer Bias Control Basic of Value(HVPS Setting is Value), Value in PWM	1 degree interval (1 degree = 5 pwm) Index 0 to 20 = PWM Offset -50 to +50	10

Table 1 NVM Locations

Location	Component	NVM Name	NVM Description	Value	Default
09-121	Engine[Developer]	THV Control Bias Control (Duplex Black)	Transfer Bias Control Duplex Black Basic of Value(HVPS Setting is Value), Value in PWM	1 degree interval(1 degree = 5 pwm) Index 0 to 20 = PWM Offset -50 to +50	10
09-130	Engine[Developer]	Deve Bias Control	DEVE Bias Control Basic of Value(HVPS Setting is Value), Value in PWM Standard Voltage: -500V(PWM 522)	1 degree interval (1 degree = PWM 9) Index 0 to 20 = PWM Offset -90 to +90	10
09-135	Engine[Developer]	Deve VPP Black	Deve VPP Black	1 degree interval (1 degree = PWM 36) Index 0 to 20 = PWM Offset -360 to +360	10
09-140	Engine[Developer]	Detack Bias Control	Basic of Value(HVPS Setting is Value), Value in PWM Standard Voltage: -1800V	1 degree interval(1 degree = 30 PWM) Index 0 to 20 = PWM Offset -300 to +300	10
09-170	Engine[Developer]	Toner Target Black	Black Toner TC Target Value	1 degree interval (1 degree = ADC 19) Index 0 to 20 = ADC Offset -190 to +190	10
09-171	Engine[Developer]	Toner Vcon Black	Toner Vcon Black	1 degree interval (1 degree = PWM 8) Index 0 to 20 = PWM Offset -80 to +80	11
09-200	Engine[Developer]	Drum Life Page Counter	Number of pages since last Drum replacement.	Read Only	Read Only
09-210	Engine[Developer]	Toner Cartridge Life Page Counter	Number of pages since last Toner Cartridge replacement.	Read Only	Read Only
09-230	Engine[Developer]	Transfer Roller Life Page Counter	Number of pages since last Transfer Roller replacement.	Read Only	Read Only
09-320	Engine[Developer	Transfer 2 High Voltage	Transfer 2 High Voltage (TH V2)	0 to 20 (increment 1)	10
09-330	Engine[Developer]	Transfer 2 High Voltage Duplex	Transfer 2 High Voltage (TH V2) Duplex	0 to 20 (increment 1)	10
09-340	Engine[Developer]	Transfer 1 High Voltage	Transfer 1 High Voltage (TH V)Duplex Black (TH V Bias Control.....)	0 to 20mm (increment 1mm)	10

dC132 NVM Initialization

Purpose

To reset the values of all applicable NVM parameters to default.

Procedure

1. Enter Diagnostics, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **dc132 Initialize NVM**.
4. Touch **Initialize All NVM**.
   Yes and No selections will be displayed.
5. To initialize all NVM, touch **Yes**.
   When the message NVM Initialization Success is displayed, touch **Close**.
6. Touch **X** to return to the Copier Diagnostics screen.
7. Exit diagnostics, GP 1.

dC135 HFSI

Purpose

To view the status of High Frequency Service Items (HFSI) and the counter value for each item.

Procedure

1. Enter Diagnostics, GP 1.
2. Touch **Service Information**.
3. Touch **dc135 HFSI**.
4. The following information will be displayed for HFSI Items:
   - **Item** (name of component)
   - **Status** (of component)
   - **Actual/Max life** (values in number of impressions)
5. Touch an item in the table.
6. Touch **Reset** to reset the counter or touch **Close** to not clear the value in the counter.
7. Touch **X** to return to the Service Information screen.
8. Exit diagnostics, GP 1.

dC305 UI Test

Purpose

To test the LEDs, touch screen, and audio functions of the user interface.

Procedure

1. Enter Diagnostics, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **dC305 UI Test**.
4. Touch one of the following:
   - UI Touch Screen Test
   - Display Pixel Test
   - LED Indicator Test
   - UI Panel Button Test
   - Audio Tone Test
   - Video Memory
   - Application Checksum Verification
5. Touch **X** to return to the Copier Diagnostics screen.
6. Exit diagnostics, GP 1.

UI Touch Screen Test

1. Press the **Start** button to begin the test.
2. Touch multiple areas of the UI touch screen. All areas touched should turn black.
3. Press the **Stop** button to end the test.
4. Touch **X** to return to the dC305 Diagnostics screen.

Display Pixel Test

1. Press the **Start** button to begin the test.
   A grid will be displayed on the UI touch screen.
2. Touch all squares of the grid on the UI touch screen. All areas touched should turn green.
3. Touch **X** to return to the dC305 Diagnostics screen.

LED Indicator Test

1. Press the **Start** button to begin the test.
   All LEDs on the UI will turn on, then turn off one at a time.
2. Press the **Stop** button to end the test.
3. Touch **X** to return to the dC305 Diagnostics screen.

UI Panel Button Test

1. Press the **Start** button to begin the test.
2. Press all buttons on the UI. A tone should sound when each button is pressed.

   NOTE: *Be sure to test the* ***Stop*** *button last.*

3. Press the **Stop** button to end the test.
4. Touch **X** to return to the dC305 Diagnostics screen.

Audio Tone Test

1. Press the **Start** button to begin the test.
2. Touch **Volume**. The volume can be set to:
   - Off
   - Low
   - Medium
   - High
3. Touch **Test** for the **Tone Type** to be tested. A tone with the specified volume and pattern will be heard:
   - Fault
   - Conflict
   - Selection
4. Touch **X** to return to the dC305 Diagnostics screen.

Video Memory

1. Press the **Start** button to begin the test.
2. The message Video Memory Test was Completed Successfully will be displayed if the test passes.
3. Touch **X** to return to the dC305 Diagnostics screen.

Application Checksum Verification

1. Press the **Start** button to begin the test.
2. The message, Application Software Test was Completed Successfully, will be displayed and the **Stored Value** and the **Actual Value** will match if the test passes.
3. Touch **X** to return to the dC305 Diagnostics screen.

dC330 Component Control

Purpose

To show the status of input components e.g. sensors, and to run or energize output components e.g. motors, solenoids.

Description

Output and input component codes are entered into the Component Control Table on the UI, and then checked individually or in permitted groups. The codes in the tables are grouped in function chain order.

Go to the appropriate procedure:

- Input Components
- Output Components

Input Components

When the appropriate code is entered, the status of the component is shown on the UI.

The displayed status of the input component can be changed by causing the component status to change, e.g. operating a sensor with a sheet of paper.

Go to the appropriate table:

- Table 1 Input Codes Chain 05 (DADF)
- Table 2 Input Codes Chain 01, Chain 04 and Chain 06
- Table 3 Input Codes Chain 07 and Chain 08
- Table 4 Input Codes Chain 09 and Chain 10

Output Components

When the appropriate code is entered, the component runs or energizes for a set time. The default timeout for most components is set at 90 seconds, but can be as short as 5 seconds. Some components require that other components are run or energized at the same time. It is possible to enter and run or energize up to 6 component control codes, but only in permitted groups. If illegal combinations of codes are entered, the components do not run or energize.

Go to the appropriate table:

- Table 5 Output Codes Chain 05 (DADF)
- Table 6 Output Codes Chain 04 and Chain 06
- Table 7 Output Codes Chain 08
- Table 8 Output Codes Chain 09 and Chain 10

Procedure

NOTE: *The Cyclic Motion function does not work.*

1. Enter Diagnostics, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **dC330 Component Control**.

   To access Scanner Component Control, touch **Scanner**, then touch **dC330 Component Control**.

CAUTION

Check the component control tables for components that will damage the machine if run together.

4. Touch **Chain-Link**.
5. Enter the relevant Chain-Link number.
6. Touch **OK**.
7. Touch **Start**. The component will operate and the screen will display the information that follows:
   - Chain-Link number of the component.
   - Input or output code clarification.
   - The component status.
   - Operation counter.
8. Touch **Stop All** to stop component operation.
9. Touch **Close** to return to the Diagnostics screen.
10. Exit diagnostics, GP 1.

Input Codes

NOTE: *At the time of the launch of the B1022 and B1025 devices this component control code was discovered to be inoperative. A post launch SMP fix to resolve the problem is under consideration.*

Table 1 Input Codes Chain 05

Code	Displayed Name	Description	General
05-100	Detect Sensor	The Document detect sensor (Q05-100) detects documents in the DADF input tray.	High = document present
05-110	Width Sen1	The Width sensor 1 (Q05-110) detects the position of the Rear document guide and the Front document guide.	High = Width Guide at Sensor 1
05-111	Width Sen2	The Width sensor 2 (Q05-111) detects the position of the Rear document guide and the Front document guide.	High = Width Guide at Sensor 2
05-112	Width Sen3	The Width sensor 2 (Q05-112) detects the position of the Rear document guide and the Front document guide.	High = Width Guide at Sensor 3
05-120 See above NOTE	Length Sen1	Detects document at Length sensor 1 (Q05-120) actuator.	High = Document at Sensor 1
05-121 See above NOTE	Length Sen2	Detects document at Length sensor 2 (Q05-121) actuator.	High = Document at Sensor 2
05-130 See above NOTE	Sim. RegiSen	The Document registration sensor (Q05-130) detects correctly registered documents in the DADF input tray.	High= Document at Simplex Scan sensor
05-140 See above NOTE	Scan Sen	The DADF scan start sensor (Q05-140) detects the lead edge of documents entering the scan area.	High = Document at Scan sensor
05-160 See above NOTE	Cov Open Sen	The Cover open sensor (Q05-160) detects the position of the cover (open/closed)	High =Cover open
05-170 See above NOTE	DADF Exit Sensor	The DADF exit sensor (Q05-170) detects documents as they exit the document path.	High = document present

Table 1 Input Codes Chain 05

Code	Displayed Name	Description	General
05-171 See above NOTE	Exit Nip Open Sensor	The exit nip open sensor (Q05-171) detects the position of the exit nip (open/closed)	High = Nip open

Table 2 Input Codes Chain 01, Chain 04 and Chain 06

Code	Displayed Name	Description	General
01-100	Front Cover Switch	Detects when the Front cover switch is open.	High = Cover open
04-110	Main BLDC Motor Ready	Detects if the Main BLDC Motor runs at normal speed.	High= Motor is at normal speed
06-110	LSU Motor Ready	Detects if the LSU motor runs at normal speed.	High= Motor is at normal speed
06-400	LSU HSync	Detects LSU HSync signal	High=LSU HSync signal

Table 3 Input Codes Chain 07 and Chain 08

Code	Displayed Name	Description	General
07-110	T1 Paper Empty Sensor	Tray 1 paper empty sensor (Q07-110).	High = No paper detected
07-210	T2 Paper Empty Sensor	Tray 2 paper empty sensor (Q07-5210)	High = Paper Detected
07-510	Bypass Paper Empty Sensor	Bypass tray paper empty sensor (Q07-510)	High = Paper Detected
08-500	Paper Sensor	Registration sensor (Q08-500)	High = Paper Detected
08-600	Exit Sensor	Exit sensor (Q08-600)	High = Paper Detected

Table 4 Input Codes Chain 09 and Chain 10

Code	Displayed Name	Description	General
09-110	Black MVH Bias Read	Detects the MVH Bias voltage on the MVH Roller.	xxx volts
09-310	Black THV Bias Read	Detects the MVH Bias voltage on the THV Roller.	xxx volts
09-700	Toner Sensor Black	Detects toner in the developer tank (Q9-700).	High = Toner detected
10-200	Fuser Temperature A	Detects the temperature of Fuser A	Degrees C
10-210	Fuser Temperature B	Detects the temperature of Fuser B	Degrees C
10-214	Humidity	Detects the ambient humidity (Q7-214)	% Humidity
10-215	Outer Temperature	Detects the ambient temperature (Q8-215)	Degrees C

Output Codes

NOTE: *At the time of the launch of the B1022 and B1025 devices this component control code was discovered to be inoperative. A post launch SMP fix to resolve the problem is under consideration.*

Table 5 Output Codes Chain 05 DADF

Code	Displayed Name	Description	General
05-200 See above NOTE	Mot Fwd	Runs the DADF motor (MOT05-200) at process speed forward.	On/off
05-210 See above NOTE	Mot Bwd	Runs the DADF motor (MOT05-210) at process speed in reverse.	On/off
05-300 See above NOTE	Pickup Clutch	Energizes the Pickup clutch (SOL05-300)	On/off
05-310 See above NOTE	Regi Clutch	Energizes the DADF Regi clutch (SOL05-310)	On/off
05-330 See above NOTE	Exit Solenoid	Energizes the Exit solenoid (SOL05-330)	On/off
05-600 See above NOTE	Jig Low Sim	Performs simplex test scan job slow.	On/off
05-610 See above NOTE	Jig Low Dup	Performs simplex test scan job fast.	On/off
05-620 See above NOTE	Jig High Sim	Performs duplex test scan job slow.	On/off
05-630 See above NOTE	Jig Sim Dup	Performs duplex test scan job fast.	On/off
05-700	Plat Mot Fwd	Runs the Platen motor (MOT05-700) in the forward direction.	On/off
05-710	Plat Mot Bwd	Runs the Platen motor (MOT05-700) in the reverse direction.	On/off

Table 5 Output Codes Chain 05 DADF

Code	Displayed Name	Description	General
05-720	Motor Forward and Backward	Runs the Platen motor (MOT05-700) in the forward direction and in reverse direction.	On/off

Table 6 Output Codes 04 and 06

Code	Displayed Name	Description	General
04-100	Main BLDC Motor	Runs the Main BLDC motor (MOT04100) at process speed.	On/off
04-101	Main BLDC Motor Slow	Runs the Main BLDC motor (MOT04-100) at low speed.	On/off
04-200	Exit Motor Forward Fast	Runs the Exit motor (MOT04-200) at fast speed.	On/off
04-210	Exit Motor Forward Slow	Runs the Exit motor (MOT04-200) at low speed.	On/off
04-220	Exit Motor Backward	Runs the Exit motor (MOT04-200) in the reverse direction.	On/off
04-222	Exit Motor Backward Slow	Runs the Exit motor (MOT04-200) in the reverse direction at low speed.	On/off
06-100	LSU Motor Run	Runs the LSU Motor (MOT06-100) at process speed.	On/off
06-200	LSU LD Power	Switches on LD 1/2 Power	On/off

Table 7 Output Codes Chain 08

Code	Displayed Name	Description	General
08-800	Bypass Feed Clutch	Energizes the Bypass feed clutch (CL08-800).	On/off
08-810	T1 Pickup Clutch	Energizes the Tray 1 pick-up clutch (CL08-810).	On/off
08-820	T2 Pickup Clutch	Energizes the Tray 2 pick-up clutch (CL08-820)	On/off
08-850	Registration Clutch	Engages the Registration clutch (CL08-850).	On/off
08-920	T2 Feed Motor	Runs the Tray 2 feed motor (MOT08-920) at process speed.	On/off
08-921	T2 Feed Motor Slow	Runs the Tray 2 feed motor (MOT08-920) at low speed.	On/off

Table 8 Output Codes Chain 09 and Chain 10

Code	Displayed Name	Description	General
09-100	Black MVH Bias	MVH Bias voltage on at normal drive level.	On/off
09-200	Black Dev Bias	Dev Bias voltage on at normal drive level.	On/off

Table 8 Output Codes Chain 09 and Chain 10

Code	Displayed Name	Description	General
09-222	SMPS Fan Run	Runs the SMPS Fan Motor (M09-222) at normal speed.	On/off
09-400	BlackTHV (-) Bias	THV minus bias voltage on at normal drive level.	On/off
09-500	SMPS Fan Run	Runs the Dev Fan Motor (MOT09-500) at normal speed.	On/off
09-600	Toner Dispense Motor Black	Runs the Toner dispense motor (MOT9-600).	On/off
09-800	Detack Bias	Detack Bias voltage on at normal drive level.	On/off
09-950	Erase Lamp	Energizes Eraselamp 1.	On/off
10-400	Fuser Motor Forward	Runs the Fuser motor (M10-400) at process speed.	On/off
10-401	Fuser Motor Forward Slow	Runs the Fuser motor (MOT10-401) at low speed	On/off
10-500	Fuser Fan Run	Runs the Fuser fan (M10-500) at normal speed.	On/off

dC612 Print Test Pattern

Purpose

The purpose is to allow the CSE to print out one of four test patterns from Tray 1 or from the Bypass Tray, in simplex or duplex mode.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **dC612 Print Test Pattern**.
4. The dc612 Print Test Pattern screen is displayed. It contains the following selections:
   a. **Test Pattern**
      - S600 Pattern (A3)
      - S600 Pattern (A4)
      - S600 Pattern (Ledger)
      - S600 Pattern (8.5 x 11)
   b. **Tray**: Tray 1 or Bypass Tray
   c. **Plex Mode:** Simplex or Duplex
5. Select the Test Pattern, Tray, and Plex Mode.
6. Select **Start** to print the test pattern.
7. Touch **X** to return to the Copier Diagnostics screen.
8. Exit diagnostics, GP 1.

Configuration Sheet

Purpose

The purpose of this routine is to print the copier configuration report.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **Configuration Sheet**.
4. Touch **Print** to print the configuration sheet or select **Close** to return to the Service Information screen.
5. Exit diagnostics, GP 1.

Supplies Report

Purpose

The purpose of this routine is to print the copier supplies report.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **Supplies Report**.

   The Supplies Report screen is displayed. It lists the Supplies Item, Measure and Counter.
4. Touch **Print** to print the Supplies Report or select **Close** to return to the Service Information screen.
5. Exit diagnostics, GP 1.

Low Alert Level

Purpose

The purpose of this routine is to set the alert level in percentage for consumables.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **Low Alert Level**.

   The Low Alert Level screen is displayed. It lists the Items that provide a low alert to the customer.
4. Touch an item to adjust the item's alert level (in %). Touch the arrows to raise or lower the %, or use the keypad to enter a value.
5. Touch **X** to return to the Service Information screen.
6. Exit diagnostics, GP 1.

Wrap Jam Clear

Purpose

The purpose of this routine is to clear wrap jams in the paper path.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **Wrap Jam Clear**.

   The message, Do you want to clear Wrap Jam, is displayed.
4. Touch **OK** to clear the Wrap jam or touch **Close** to close the dialog box.
5. If **OK** is touched and the Wrap Jam is cleared, the message **Wrap Jam Cleared Successfully** will be displayed.
6. Touch **OK**, then touch **Close**.
7. Touch **X** to return to the Service Information screen.
8. Exit diagnostics, GP 1.

TC Initialization

Purpose

The purpose of this routine is to initialize Toner Concentration.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Touch **Initialize Now**.

   The message, Do you want to start TC Initialization?, is displayed.
4. Touch **OK** to perform TC Initialization or touch **Close** to close the dialog box.
5. If **OK** is touched, the message **TC Initialization is Successful**, will be displayed if the initialization completes successfully.
6. Touch **OK**, then touch **Close**.
7. Touch **X** to return to the Service Information screen.
8. Exit diagnostics, GP 1.

Part Replacement Alert

Purpose

The purpose of this routine is to enable or disable providing the customer with an alert when a part is approaching end of life.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Service Information**.
3. Select the part from the list.
4. In the dialog box touch **On** to raise an alert when the part requires replacement or touch **Off** to close the dialog box.
5. Touch **OK**, then touch **X** to return to the Service Information screen.
6. Exit diagnostics, GP 1.

Format Hard Drive

Purpose

The purpose of this routine is to format the Image Drive.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **Hard Drive**, then touch **Format**.
   The message, Do you want to format the Hard Drive?, is displayed.
4. Touch **Yes** to format the Hard Drive or touch **No** to close the dialog box.
5. Touch **X** to return to the Copier Diagnostics screen.
6. The machine will reboot if Yes was selected.
7. Exit diagnostics, GP 1.

Memory Clear

Purpose

The purpose of this routine is to clear memory including customer set information.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **Memory Clear**.
   The message, Do you want to clear the memory?, is displayed.
4. Touch **Yes** to clear the memory or touch **No** to close the dialog box.
5. Touch **X** to return to the Copier Diagnostics screen.
6. Exit diagnostics, GP 1.

Scan Aging

Purpose

DO NOT USE THIS DIAGNOSTIC TEST

Shading Test

Purpose

The purpose of this routine is to check the K, R, G, and B settings in the scanner, refer to GP 14 Shading and Print Routine.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **Shading Test**.

   The Shading Test dialog box is displayed.
4. Touch **Flatbed Shade and Print**.

   A print will be produced that shows the gray shading values for mono, red, green, and blue. When the previous shading values are needed, touch **Print Last Flatbed.**
5. Touch **X** to return to the Copier Diagnostics screen.
6. Exit diagnostics, GP 1.

Serial Number Reset

Purpose

The purpose of this routine is to enter or change the copier serial number.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **Serial Number Reset**.
   The Serial Number Reset dialog box is displayed.
4. Use the soft keys to enter the copier serial number.
5. Touch **Save** to set the serial number or touch **XXXX** to close the dialog box.
6. Touch **X** to return to the Copier Diagnostics screen.
7. Exit diagnostics, GP 1.

Adjustment

Purpose

The purpose of this routine is to adjust the image position on the paper.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Copier Diagnostics**.
3. Touch **Adjustment**.
   The following adjustments are available:
   - Print Adjustment
   - Copy Adjustment
   - Scan Area Adjustment (Platen)
   - RADF Adjustment (DADF)
   - Clear Settings
   - Adjustment Report
4. Touch **X** to return to the Copier Diagnostics screen.
5. Exit diagnostics, GP 1.

Print Adjustment

1. Touch **Print Adjustment**.
2. Touch **Image Position**.
3. Touch **All**, **Tray 1**, or **Bypass Tray**.
4. Touch the arrows to increase or decrease the Simplex Leading Edge and the Simplex Side Edge in mm (-.5 to +.5).
5. Touch **OK** to save the settings or touch **X** to close the dialog box.
6. Touch **X** to return to the Adjustment screen.
7. Touch **X** to return to the Copier Diagnostics screen.
8. Exit diagnostics, GP 1.

Copy Adjustment

1. Touch **Copy Adjustment**.
2. Touch **Image Position**.
3. Touch **All**, **Tray 1**, or **Bypass Tray**.
4. Touch the arrows to increase or decrease the Simplex Leading Edge and the Simplex Side Edge in mm (-.5 to +.5).
5. Touch **OK** to save the settings or touch **X** to close the dialog box.
6. Touch **X** to return to the Adjustment screen.
7. Touch **X** to return to the Copier Diagnostics screen.
8. Exit diagnostics, GP 1.

Scan Area Adjustment

1. Touch **Scan Area Adjustment**.
2. Touch **Manual Adjustment**.
   When Manual Adjustment is selected, the Manual Adjustment dialog box is displayed. Touch the arrows to adjust Leading Edge, Side Edge, and Magnification.Touch **OK** to save the settings or touch **X** to return to close the dialog box.

3. Touch **X** to return to the Adjustment screen.
4. Touch **X** to return to the Copier Diagnostics screen.
5. Exit diagnostics, GP 1.

RADF Adjustment

1. Touch **RADF Adjustment**.
2. Touch **Manual Adjustment**.

   When Manual Adjustment is selected, the Manual Adjustment dialog box is displayed. Touch the arrows to adjust Leading Edge, Side Edge, and Magnification.Touch **OK** to save the settings or touch **X** to return to close the dialog box.
3. Touch **X** to return to the RADF Adjustment screen.
4. Touch **X** to return to the Copier Diagnostics screen.
5. Exit diagnostics, GP 1.

Clear Settings

1. Touch **Clear Settings**.
2. Touch **Clear Settings**.

   The Clear Settings dialog box will be displayed and the message, Do you want to clear settings? is displayed.
3. Touch **OK** to clear settings or touch **X** to close the dialog box.

   If **OK** is touched, all settings will be returned to their default value. The message Clear Settings is successful will be displayed. Touch **Close** to return to the Clear Settings screen.
4. Touch **X** to return to the Adjustment screen.
5. Touch **X** to return to the Copier Diagnostics screen.
6. Exit diagnostics, GP 1.

Adjustment Report

1. Touch **Adjustment Report**.
2. Touch **Print** to print the report or touch **Close** to close the dialog box.

   If **Print** is touched, a report will be pointed. Touch Close to return to the Adjustment screen.

   The report shows the settings for Print Image Position (Bypass Tray and Tray 1), the Copy Image Position (Bypass Tray and Tray 1), the Scan Area (platen) Adjustment (Image position and Magnification), and the Scan Area (document scanner) Adjustment (Image position and Magnification).
3. Touch **X** to return to the Copier Diagnostics screen.
4. Exit diagnostics, GP 1.

Call Closeout

Purpose

To exit diagnostics and return the copier to the print mode.

Procedure

1. Touch **Call Closeout**.
2. Touch **Reset Count** to clear all fault counters.
3. Touch **Exit Only** or **Exit and Reboot**.

dC131 NVM Read/ Write - Fax

Purpose

This routine is used to review and modify values within the machine configuration and control parameters stored in NVM

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Fax & NW Diagnostics**.
3. Touch **dc131 NVM Read/ Write - Fax**.
4. To read the NVM value, scroll through the list to the NVM location.
5. To write NVM:
   a. Touch the NVM location button.
   b. Using the keypad, enter a new value.
   c. Touch **Save** to save the new value or **Reset** to cancel the change.
   d. Touch **Yes**. The new value will be displayed in the NVM location button or the value will be reset to the original value.
6. Touch **X** to return to the Fax & NW Diagnostics screen.
7. Touch **X** to return to the Diagnostics.screen.
8. Exit diagnostics, GP 1.

Table 1 Fax NVM Locations

Location	NVM Name	NVM Description	Value	Default
20-100	Redial Attempts	Redial Attempt Count (times)	7 to 13	Country value
20-110	Redial Interval	Redial Interval Time (minute)	1 to 15	Country value
20-200	Pause Dial Time	Pause Time (value * 1000ms)	0 to 200	Country value
20-300	Ring On Time	Ring On Time (ms)	90ms to 800 ms	Country value
20-300	Ring Off Time	Ring Off Time (ms)	90ms to 800 ms	Country value
20-320	Ring Detection Freq	Sets the Call Indication frequency range that will be detected by LIU	1=12-80hz 2=16-55hz 3=20-55hz 4=22-55hz	1=12-80hz
20-400	DTMF High-Freq Level	DTMF High-Freq. Level (dBm)	0 to 15 dBm	Country value
20-410	DTMF Low-Freq Level	DTMF Low-Freq. Level (dBm)	0 to 15 dBm	Country value
20-420	DTMF Timing	DTMF duration of on/off output (ms)	1=80/80 2=70/70 3=70/150 4=60/60 5=80/100 6=150/50 7=150/240	Country value
20-500	Dial Mode	Select Tone / Pulse	Tone or Pulse	Country value
20-210	Dial Pulse M/B ratio	Dial Pulse M/B ratio	60/40, 67/33, 64/37, 50/50	Country value
20-220	Auto Dial Start Pause Time	Pause time before auto-dialing (seconds)	0 to 10 seconds	Country value
20-510	ECM Mode	ECM On / Off	0=Off 1=On	Country value
20-520	Dial Tone Detect	Adjust Error Rate (Off / 5% / 10% / 20%)	Off, 5, 10, 20	Country value
20-530	Dial Tone Detect	Detect dial tone prior to sending	0=Off 1=On	Country value
20-540	Loop Current Detect	Detect if loop current is present prior to sending	0=Off 1=On	0=Off
20-550	Busy Signal Detect	Detect busy signal to allow redials	0=Off 1=On	Country value

Table 1 Fax NVM Locations

Location	NVM Name	NVM Description	Value	Default
20-700	Line Monitor Setting	Audio Line Monitor (Off / On / Comm.)	0=Always Off 1= Always On 2= on until Fax Connection	0 = Off
20-800	Modem Speed	Select Modem Start Speed	MODEM_V21_300BPS MODEM_V27_2400BPS MODEM_V27_4800BPS MODEM_V29_7200BPS MODEM_V29_9600BPS MODEM_V33_12000BPS MODEM_V33_14400BPS MODEM_V17_7200BPS MODEM_V17_9600BPS MODEM_V17_12000BPS MODEM_V17_14400BPS MODEM_V34_2400BPS MODEM_V34_4800BPS MODEM_V34_7200BPS MODEM_V34_9600BPS MODEM_V34_12000BPS MODEM_V34_14400BPS MODEM_V34_16800BPS MODEM_V34_19200BPS MODEM_V34_21600BPS MODEM_V34_24000BPS MODEM_V34_26400BPS MODEM_V34_28800BPS MODEM_V34_31200BPS MODEM_V34_33600BPS	Country value
20-810	Fax Transmission Level	Adjust Fax Transmission Level (dBm)	0 to 15 dBm	Country value
20-830	Auto Dial Timeout	Adjust Auto Dial Timeout (seconds)	30 to 150 seconds	0
20-900	FAX Total Sent Counter	Fax Total Sent (pages)	Read Only	0
20-910	FAX Total Receive Counter	Fax Total Received (pages)	Read Only	0
20-840	FAX Batch Send Enable	FAX Batch Send Enable	0=Diabled 1=Enabled	0

dC132 NVM Initialization - Fax

Purpose

This routine is used to reset the values of all applicable FAX NVM parameters to default.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Fax & NW Diagnostics**.
3. Touch **dc132 NVM Initialization - Fax**.
4. Touch **Initialize All NVM-Fax**.

   The Confirm Initialize all NVM - Fax dialog box will be displayed.
5. Touch **Yes** to initialize all Fax NVM locations to their default values or touch **No** to close the dialog box.

   When the message NVM Initialization Success is displayed, touch **Close**.
6. Touch **X** to return to the Fax & NW Diagnostics screen.
7. Touch **X** to return to the Diagnostics.screen.
8. Exit diagnostics, GP 1.

dC330 Component Control - Fax

Purpose

This routine is used to show the status of input components and to run or energize output components.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Fax & NW Diagnostics**.
3. Touch **dc330 Component Control - Fax**.
4. Touch **Chain-Link**.
5. Enter the relevant Chain-Link number. Refer to Table 1.
6. Touch **OK**.
7. Touch **Start**. The component will operate and the screen will display the information that follows:
   - Chain-Link number of the component.
   - Output code clarification.
   - The component status.
8. Touch **Stop All** to stop component operation.
9. Touch **Close** to return to the Diagnostics screen.
10. Exit diagnostics, GP 1.

Table 1 Output codes Chain 20 Fax

Code	Displayed Name	Description	General
20-012	Sngl Tone 1100Hz Ln1	Emits single tone 1100Hz on line 1	On/Off
20-014	Sngl Tone 1650Hz Ln1	Emits single tone 1650Hz on line 1	On/Off
20-015	Sngl Tone 1850Hz Ln1	Emits single tone 1850Hz on line 1	On/Off
20-016	Sngl Tone 12100Hz Ln1	Emits single tone 2100Hz on line 1	On/Off
20-020	DTMF # Line1	Emits DTMF # on line 1	On/Off
20-021	DTMF * Line1	Emits DTMF * on line 1	On/Off
20-022	DTMF 0 Line1	Emits DTMF 0 on line 1	On/Off
20-023	DTMF 1 Line1	Emits DTMF 1 on line 1	On/Off
20-024	DTMF 2 Line1	Emits DTMF 2 on line 1	On/Off
20-025	DTMF 3 Line1	Emits DTMF 3 on line 1	On/Off
20-026	DTMF 4 Line1	Emits DTMF 4 on line 1	On/Off
20-027	DTMF 5 Line1	Emits DTMF 5 on line 1	On/Off
20-028	DTMF 6 Line1	Emits DTMF 6 on line 1	On/Off
20-029	DTMF 7 Line1	Emits DTMF 7 on line 1	On/Off
20-030	DTMF 8 Line1	Emits DTMF 8 on line 1	On/Off
20-031	DTMF 9 Line1	Emits DTMF 9 on line 1	On/Off
20-040	V.21 300 bps Line1	Emits V.21 300 bps Line1	On/Off
20-041	V.27ter 2400 bps Line1	Emits V.27ter 2400 bps Line1	On/Off
20-042	V.27ter 4800 bps Line1	Emits V.27ter 4800 bps Line1	On/Off
20-043	V.29 7200 bps Line 1	Emits V.29 7200 bps Line1	On/Off

Table 1 Output codes Chain 20 Fax

Code	Displayed Name	Description	General
20-044	V.29 9600 bps Line 1	Emits V.29 9600 bps Line1	On/Off
20-045	V.17 7200 bps Line 1	Emits V.17 7200 bps Line1	On/Off
20-046	V.17 9600 bps Line 1	Emits V.17 9600 bps Line1	On/Off
20-047	V.17 12000 bps Line 1	Emits V.17 1200 bps Line1	On/Off
20-048	V.34 2400 bps Line 1	Emits V.34 2400 bps Line1	On/Off
20-049	V.34 4800 bps Line 1	Emits V.34 4800 bps Line1	On/Off
20-050	V.34 9600 bps Line 1	Emits V.34 9600 bps Line1	On/Off
20-051	V.34 12000 bps Line 1	Emits V.34 12000 bps Line1	On/Off
20-052	V.34 9600 bps Line 1	Emits V.34 9600 bps Line1	On/Off
20-053	V.34 12000 bps Line 1	Emits V.34 12000 bps Line1	On/Off
20-054	V.34 14400 bps Line 1	Emits V.34 14400 bps Line1	On/Off
20-055	V.34 19200 bps Line1	Emits V.34 19200 bps Line1	On/Off
20-056	V.34 21600 bps Line1	Emits V.34 21600 bps Line1	On/Off
20-057	V.34 24000 bps Line1	Emits V.34 24000 bps Line1	On/Off
20-058	V.34 26400 bps Line1	Emits V.34 26400 bps Line1	On/Off
20-059	V.34 28800 bps Line1	Emits V.34 28800 bps Line1	On/Off
20-060	V.34 21600 bps Line1	Emits V.34 21600 bps Line1	On/Off
20-061	V.34 31200 bps Line1	Emits V.34 31200 bps Line1	On/Off
20-062	V.34 33600 bps Line1	Emits V.34 33600 bps Line1	On/Off
20-063	On Line Quiet State	The line will be connected but no signal will be on the line	On/Off

dC132 NVM Initialization - Network

Purpose

This routine is used to reset the values of all applicable Network NVM parameters to default.

Procedure

1. Enter Service Mode, GP 1.
2. Touch **Fax & NW Diagnostics**.
3. Touch **dc132 NVM Initialization - Network**.
4. Touch **Initialize All NVM-Network**.
   The Confirm NVM Network Initialization dialog box will be displayed.
5. Touch **Yes** to initialize all Network NVM locations to their default values or touch **No** to close the dialog box.
   When the message NVM Initialization Success is displayed, touch **Close**.
6. Touch **X** to return to the Fax & NW Diagnostics screen.
7. Touch **X** to return to the Diagnostics.screen.
8. Exit diagnostics, GP 1.

B1022 Diagnostic Routines

The following Diagnostic Programs are used to display machine information, print reports, make changes in machine settings, and run machine components to help isolate faults and failures.

To use the diagnostic routines, navigation is done by using the buttons on the UI (Figure 1).

- Use Up and Down buttons to scroll through listed items on the UI screen.
- Use the OK button to select items on the UI screen or to confirm and action.
- Use the Left button to delete a value in NVM
- Use the Start button to begin a test, print a report, or energize, monitor, run a component in dC330.
- Use the Stop button to stop a test or to deenergize or stop a component in dC330.
- Use the keypad to enter [Chain] and [Link] in dC330 or to enter a value in dC131.

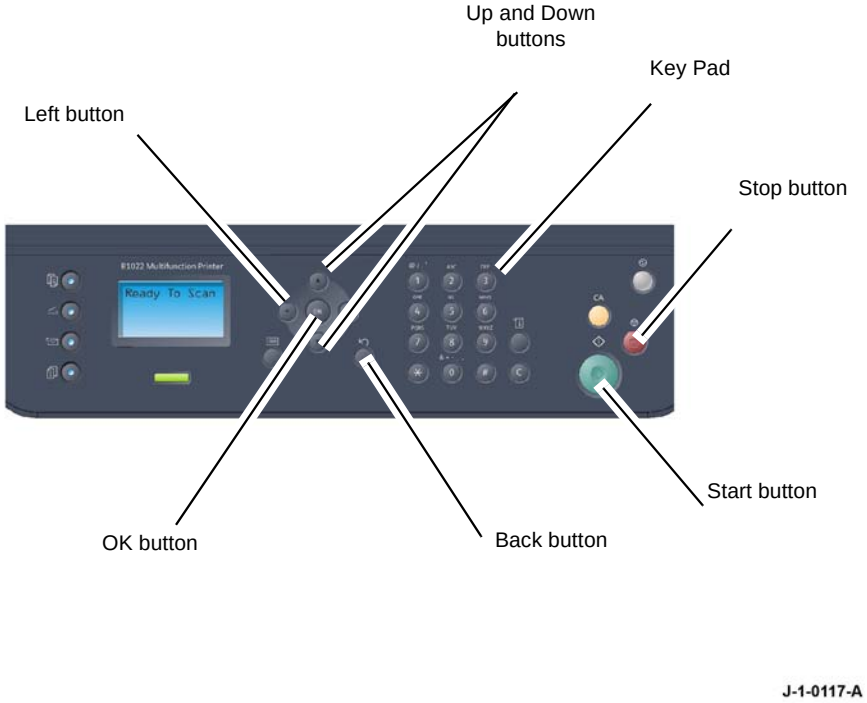


Figure 1 Xerox B1022 User Interface

Tech Menu

Table 1 Tech Menu Selections

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Information
Information	Report	Configuration: To print, select **Yes**, then press **OK**.		The Configuration Report shows Device Profile, Installed Options, Device Setup, Network Setup, Network Authentication Setup, and POPO count.
		Supplies: To print, select **Yes**, then press **OK**.		The Supplies Information report shows General Information, Toner Information, Drum Information, Developer Information, Advance Information (coverage % and page count), and Other Consumables Life.
		Usage Counter: To print, select **Yes**, then press **OK**.		The Billing/Counters Report shows billing information (impressions, sheets, images sent, images emailed, scanning images sent)
		Error: To print, select **Yes**, then press **OK**.		The Error Message Report shows current machine faults codes and fault name, the number of occurrences, and date and time for each fault.
Maintenance Counts	Clear Counts Enter Code **1934**, then press the **OK** button	Developer: To clear the counter, select **Yes**, then press **OK**.		This routine is used to clear the usage counter when the Developer has been replaced.
		Fuser: To clear the counter, select **Yes**, then press **OK**.		This routine is used to clear the usage counter when the Fuser has been replaced.
		Transfer Roller: To clear the counter, select **Yes**, then press **OK**.		This routine is used to clear the usage counter when the Transfer Roller has been replaced.
		Tray 1 Roller: To clear the counter, select **Yes**, then press **OK**.		This routine is used to clear the usage counter when the Tray 1 Roller has been replaced.
		Tray 1 Friction Pad: To clear the counter, select **Yes**, then press **OK**.		This routine is used to clear the usage counter when the Tray 1 Friction Pad has been replaced.
		Bypass Roller: To clear the counter, select **Yes**, then press **OK**.		This routine is used to clear the usage counter when the Bypass Roller has been replaced.
		Bypass Friction Pad: To clear the counter, select **Yes**, then press **OK**.		This routine is used to clear the usage counter when the Bypass Friction Pad has been replaced.

Table 1 Tech Menu Selections

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Information
Diagnostics	Engine	dc132 NVM Initialize		This routine is used to reset the values of all applicable NVM parameters to default. Refer to Engine > dC132.
		dc131 NVM Read Write		This routine is used to review and modify values within the machine configuration and control parameters stored in NVM. Refer to.Engine > dC131
		dc330 Component Control		The purpose of this routine is to show the status of input components e.g. sensors, and to run or energize output components e.g. motors, solenoids. Refer to Engine > dC330.
	Scanner	dc330 Component Control		The purpose of this routine is to show the status of input components e.g. sensors, and to run or energize output components e.g. motors, solenoids. Refer to Scanner > dC330.
		Shading Test		The purpose of this routine is to print the Shading Value report. The report shows the gray shading value for mono, red, green, and blue. If the test passes, the Result(s) status will be OK, refer to GP 14 Shading and Print Routine.
	Adjustment	Print Adjustment	Manual	Go to B1022 Print Adjustment.
		Copy Adjustment	Manual	Go to B1022 Copy Adjustment.
		Scan Area Adjustment	Manual	Go to B1022 Scan Area Adjustment.
		RADF Adjustment	Manual	Go to B1022 RADF Adjustment.
		Magnification Adjustment	Magnification	1. Select **Vertical Direction**. 2. Use the **Up** button and the **Down** button to adjust the magnification in % (99.5 to 101.5). 3. Press the **OK** button to save changes.
			Image Position	1. Select one of the following: • **Leading Edge** • **Side Edge** 2. Use the **Up** button and the **Down** button to adjust the position in mm. 3. Press the **OK** button to save changes.
		Adjustment Report: Select **Yes**, then press the **OK** button.		The Adjustment Information report shows the current values for Print Adjustment, Copy Adjustment, and Scan Area Adjustment.
		Clear Settings: Select **Yes**, then press the **OK** button.		The purpose of this routine is to set all adjustment values to zero for Print Adjustment, Copy Adjustment, and Scan Area Adjustment.
	Switch Test			Go to System > Switch Test.

Table 1 Tech Menu Selections

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Information
Service Functions	Clear All Memory	To clear all memory, select **Yes**, then press the **OK** button.		The purpose of this routine is to clear the memory including customer set information.
	Clear Admin Password	To clear the Admin password, select **Yes**, then press the **OK** button.		The purpose of this routine is to clear the administrator password and set it to the default value.
	Wrap Jam Clear	Yes No		The purpose of this routine is to clear wrap jams in the Fuser.
	F/W Upgrade	Off On		Enables / disables Firmware upgrade.
	Part Replacement Alert	OPC Unit: To enable an alert, select **On**.		This routine is used to set an alert when the OPC Unit needs to be replaced.
		Developer: To enable an alert, select **On**.		This routine is used to set an alert when the Developer needs to be replaced.
	TC Init	Initialize		The purpose of this routine is to initialize Toner Concentration.
	Low Level Alert	Toner: Select 1 to 50%		This routine is used to set the percent of toner remaining before the Toner Cartridge needs to be replaced.
		OPC Unit: Select 1 to 15%		This routine is used to set the percent of life remaining before the OPC Unit needs to be replaced.
	Capture Log			This routine is used to copy the machine logs to a USB drive. Machine logs are used by second level support engineering when problems are escalated, refer to GP 9.
	Log Backup OnOff	Off		If Log Backup is set to **Off**, automatic machine log backup is disabled.
		Level 1		If Log Backup is set to **Level 1**, automatic machine log backup is enabled.
		Level 2		If Log Backup is set to **Level 2**, automatic machine log backup is enabled
	AJR	Off On		If AJR upgrade is set to **On**, Automatic Jam Recovery is enabled.
	SFO: Select 0 to 99			This routine is used to enable Special Feature Options.
	Serial Number			This routine is used to display the machine serial number.
Exit Diagnostics	Yes	Exit		This routine is used to return the machine to customer mode.
		Exit and Reboot		This routine is used to reboot the machine and return it to customer mode.
	No			Selecting No, will leave the machine in diagnostic mode.

B1022 Print Adjustment

1. Select **Print Adjustment** > **Image Position**
2. Select **All**, **Tray 1**, or **Bypass Tray**.
3. Use the **Up** button or **Down** button to adjust the Simplex Leading Edge and the Simplex Side Edge in mm (-.5 to +.5).
4. Press the **OK** button to save the changes.
5. Press the **Back** button to return to the Adjustment screen.

B1022 Copy Adjustment

1. Select **Copy Adjustment** > **Image Position**.
2. Select **All**, **Tray 1**, or **Bypass Tray**.
3. Use the **Up** button or **Down** button to adjust the Simplex Leading Edge and the Simplex Side Edge in mm (-.5 to +.5).
4. Press the **OK** button to save the changes.
5. Press the **Back** button to return to the Adjustment screen.

B1022 Scan Area Adjustment

1. Select **Scan Area Adjustment**.
2. Select **Manual Adjustment**.
3. Run the Manual Adjustment routine, select one of the following:
   - Simplex Leading Edge
   - Simplex Side Edge
   - Duplex Leading Edge
   - Duplex Side Edge
4. Use the **Up** button or **Down** button to adjust the scanning distance from the edge in mm.
5. Press the **OK** button to save the changes.
6. Press the **Back** button to return to the Adjustment screen.

B1022 RADF Adjustment

1. Select **Manual Adjustment**.
2. Select **RADF Adjustment**.
3. Run the Manual Adjustment routine, select one of the following:
   - Image Position: This adjusts the leading edge or side edge of the image. (Range : -6.0~6.0 mm / Unit : 0.1 mm).
   - Magnification: This adjusts the image size to vertical direction. (Range : 98.5~101.5%).
4. Use the **Up** button or **Down** button to adjust the values.
5. Press the **OK** button to save the changes.
6. Press the **Back** button to return to the Adjustment screen.

System > Switch Test

1. Press the **OK** button to start the test. Refer to Figure 2 for buttons used in this test.
2. When the message, Press Any key to Start LED Test, is displayed, press any button.
   The UI screen will turn black from left to right.
3. When the UI screen is completely black, press the **Stop** button.
   When the message COPY MODE 00 PRESS COPY MODE BUTTON is displayed, press the **Copy Mode** button.
4. Follow the prompts on the screen, pressing each button as directed.
   When the last button is pressed, the LEDs on the four buttons to the left of the screen will be lit.
5. Press the **Stop** button four times to switch off the LEDs.
6. Press the **Back** button to return to the System screen.

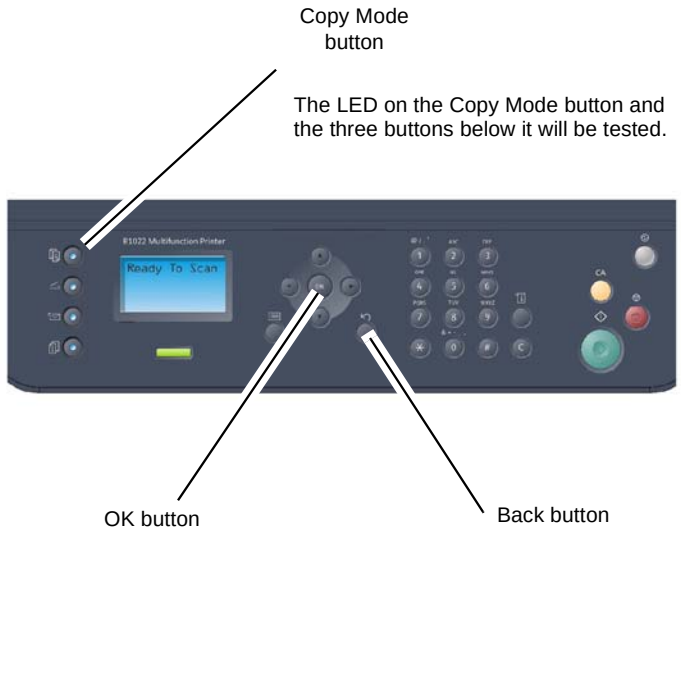


Figure 2 Xerox B1022 User Interface Switch Test

Engine > dC330

1. Scroll to the component to be tested by pressing the **Up** and **Down** buttons.
2. Press the **OK** button to select the component.
3. Press the **Start** button to monitor input components (Table 3, Table 4, Table 5) or to run or energize output components (Table 7, Table 8, Table 9)
4. Press the **Stop** button to stop the component test.
5. Press the **Back** button to return to the dC330 screen.

Engine > dC131

1. Scroll to the NVM Location to be viewed/modified using the **Up** and **Down** buttons.
2. Press the **OK** button to select the NVM Location (Table 2).
3. Press the **Left** button to delete the NVM Value

4. Use the keypad to enter a new value.
5. Press the **OK** button to save the new NVM value.
6. Press the **Back** button to return to the Tech Menu screen.

Engine > dC132

1. Press the **OK** button to Initialize Engine NVM
   Once the NVM is initialized, the Engine Diagnostics screen will be displayed.
2. Press the **Back** button to return to the Tech Menu screen.

Scanner > dC330

1. Scroll to the component to be tested by pressing the **Up** and **Down** buttons.
2. Press the **OK** button to select the component.
3. Press the **Start** button to monitor input components or to run or energize output components (Table 6)
4. Press the **Stop** button to stop the component test.
5. Press the **Back** button to return to the dC330 screen.

Table 2 Engine NVM Locations

Location	NVM Name	NVM Description	Value	Default
07-900	Regi Curl On	Regi Curl On: Buckle control	0 to 16 (-8 to +8 mm.)	8
07-901	Dup Curl On	Duplex Regi Curl On: Buckle control	0 to 16 (-8 to +8 mm.)	8
09-100	LD Power K	600dpi Laser Light Level, Value in PWM	1 degree interval (1 degree = PWM 22) Index 0 to 20 =ADC Offset -220 to +220	10
09-110	MHV DC K	Main Charge Bias Control. Basic of Value(HVPS Setting is Value), Value in PWM.	1 degree interval (1 degree = PWM 6) Index 0 to 20 = PWM Offset -60 to +60	10
09-120	THV K	Transfer Bias Control Basic of Value(HVPS Setting is Value), Value in PWM	1 degree interval (1 degree = 5 pwm) Index 0 to 20 = PWM Offset -50 to +50	10
09-121	THV K_Dup	Transfer Bias Control Duplex Black Basic of Value(HVPS Setting is Value), Value in PWM	1 degree interval(1 degree = 5 pwm) Index 0 to 20 = PWM Offset -50 to +50	10
09-130	Dev DC K	DEVE Bias Control Basic of Value(HVPS Setting is Value), Value in PWM Standard Voltage: -500V(PWM 522)	1 degree interval (1 degree = PWM 9) Index 0 to 20 = PWM Offset -90 to +90	10
09-135	Dev VPP K	Deve VPP Black	1 degree interval (1 degree = PWM 36) Index 0 to 20 = PWM Offset -360 to +360	10
09-140	Saw Plate	Basic of Value (HVPS Setting is Value), Value in PWM Standard Voltage: -1800V	1 degree interval(1 degree = 30 PWM) Index 0 to 20 = PWM Offset -300 to +300	10
09-170	Toner Tgt K	Black Toner TC Target Value	1 degree interval (1 degree = ADC 19) Index 0 to 20 = ADC Offset -190 to +190	10
09-171	Toner Vcon K	Toner Vcon Black	1 degree interval (1 degree = PWM 8) Index 0 to 20 = PWM Offset -80 to +80	10
09-320	THV2 Bias	Transfer 2 High Bias Voltage	0 to 20	10
09-330	THV2 Bias Duplex	Transfer 2 High Bias Voltage Duplex	0 to 20	10
09-340	TH V K Off	THV K Off Time	0 to 20	10

Table 3 Engine Input Codes Chain 04 and Chain 06

Code	Displayed Name	Description	General
04-110	Main BLDC Rdy	Detects if the Main BLDC Motor runs at normal speed.	High/Low
06-110	LSU Mot1 Ready	Detects if the LSU Motor runs at normal speed.	High/Low
06-400	LSU HSync4	Detects LSU HSync signal	High/Low

Table 4 Engine Input Codes Chain 07 and Chain 08

Code	Displayed Name	Description	General
07-110	Tray1 Empty	The Tray 1 empty sensor (Q07-110) detect when there paper is in Tray 1.	High = Paper Detected
07-210	Tray2 Empty	The Tray 2 empty sensor (Q07-210) detect when there paper is in Tray 2.	High = Paper Detected
07-510	Bypass Empty	The Bypass tray paper empty sensor (Q07-510) detects when paper is the Bypass tray.	High = Paper Detected

Table 4 Engine Input Codes Chain 07 and Chain 08

Code	Displayed Name	Description	General
08-200	T2 Feed Sensor	The Tray 2 feed sensor (Q08-200) etects when paper is at the feed position.	High = Paper Detected
08-210	Tray2 Door	The Tray 2 door open sensor (Q08-210) detects when the Tray 2 door is open.	High = Door Open
08-500	Regi Sens	The Registration sensor (Q08-500) detects when a sheet of paper is in the registration area.	High = Paper Detected
08-600	Exit Sens	The Exit sensor (Q08-600) detects when a sheet of paper exits the paper path.	High = Paper Detected

Table 5 Engine Input Codes Chain 09 and Chain 10

Code	Displayed Name	Description	General
09-110	K MVH Bias Read	Detects the MVH Bias voltage on the MVH Roller.	VAC
09-310	K THV Bias Read	Detects the MVH Bias voltage on the THV Roller.	VAC
09-700	K Toner Sensor	Detects toner in the developer tank (Q9-700).	0 = Toner present
10-200	Temp A	Detects the temperature of Fuser A	Degrees C
10-210	Temp B	Detects the temperature of Fuser B	Degrees C
10-215	Outer Temp	Detects the ambient temperature (Q8-215)	Degrees C

NOTE: *At launch of the B1022 and B1025 devices this component control code was discovered to be inoperative. A post launch SMP fix to resolve the problem is under consideration.*

Table 6 Scanner Input Codes and Output Codes

Code	Displayed Name	Description	General
05-400 See above NOTE	Cov Open Sen1	Cover open sensor 1 (Q05-400)	Low = Cover Open
05-700 See above NOTE	Plat Mot Fwd	Runs the Platen motor (MOT05-700) in the forward direction.	On/Off
05-710 See above NOTE	Plat Mot Bwd	Runs the Platen motor (MOT05-700) in the reverse direction.	On/Off

Table 6 Scanner Input Codes and Output Codes

Code	Displayed Name	Description	General
05-720 See above NOTE	Plat Mot Fwd Bwd	Cycles the Platen motor (MOT05-700) in the forward direction/reverse direction	On/Off

Table 7 Engine Output Codes Chain 04 and Chain 06

Code	Displayed Name	Description	General
04-100	Main BLDC	Runs the Main BLDC motor (MOT04-100) at process speed.	On/off
04-101	Main Slow	Runs the Main BLDC motor (MOT04-100) at low speed.	On/off
04-200	Exit Mot Fwd	Runs the Exit motor (MOT04-200) at process speed.	On/off
04-210	Exit Mot Slow	Runs the Exit motor (MOT04-200) at low speed.	On/off
04-220	Exit Mot Bwd	Runs the Exit motor (MOT04-200) in the reverse direction.	On/off
04-222	Exit Mot Bwd Slow	Runs the Exit motor (MOT04-200) in the reverse direction at low speed.	On/off
06-100	LSU Mot1 Run	Runs the LSU motor (MOT06-100) at process speed.	On/off
06-200	LSU LD Power4	Switches on LD 1/2 Power	On/off

Table 8 Engine Output Codes Chain 08

Code	Displayed Name	Description	General
08-800	Bypass Feed Clutch	Energizes the Bypass feed clutch (CL08-800).	On/off
08-810	Tray 1 Pickup	Energizes the Tray 1 Pick-up clutch (CL08-810).	On/off
08-820	Tray 2 Pickup	Energizes the Tray 2 Pick-up clutch (CL08-820).	On/off
08-850	Registration	Engages the Registration clutch (CL08-850).	On/off
08-920	T2 Feed Mot	Runs the Tray 2 feed motor (MOT08-920) at process speed.	On/off
08-921	T2 Feed Mot Slow	Runs the Tray 2 feed motor (MOT08-920) at low speed.	On/off

Table 9 Engine Output Codes Chain 09 and Chain 10

Code	Displayed Name	Description	General
09-100	K MVH Bias	MVH Bias voltage on at normal drive level.	On/off

Table 9 Engine Output Codes Chain 09 and Chain 10

Code	Displayed Name	Description	General
09-200	Dev Bias	Dev Bias voltage on at normal drive level.	On/off
09-500	SMPS Fan Run	Runs the Dev Fan Motor (MOT09-500) at normal speed.	On/off
09-600	Toner Dispense Motor Black	Runs the Toner dispense motor (MOT9-600).	On/off
09-800	Detack Bias	Detack Bias voltage on at normal drive level.	On/off
09-950	Erase Lamp 1	Energizes Erase lamp 1	On/off
10-400	Fuser Motor Fwd	Runs the Fuser motor (MOT10-400) at process speed.	On/off
10-401	Fuser Mot Fwd Slow	Runs the Fuser motor (MOT10-400) at low speed	On/off
10-500	Fuser Fan Run	Runs the Fuser fan (M10-500) at normal speed.	On/off

Change Tags

Purpose

To provide a list of all the tag numbers used together with a description of each of the machine modifications.

Change Tag Introduction

This section describes tags associated with the device, as well as multinational applicability, classification codes, and permanent or temporary modification information. Important modifications to the device are identified by a tag number which is recorded on a tag matrix.

A tag number may be required to identify differences between parts that cannot be interchanged or differences in diagnostic, repair, installation, or adjustment procedures.

A tag number may also be required to identify the presence of optional hardware, special nonvolatile memory programming, or whether mandatory modifications have been installed. Each tag number is given a classification code to identify the type of change that the tag has made. The classification codes and their descriptions are listed in Table 1.

Tag Information

Information that may be included with each TAG item is as follows:

- TAG - gives the control number for the tag.
- CLASS - gives the classification codes as listed in Table 1.
- USE - indicates the multinational operating markets affected by the modification.
- MFG SERIAL NUMBERS- gives the serial number of the factory built machines with the modification installed.
- NAME - gives the name of the part or modification.
- PURPOSE - gives a brief description of the modification.
- KIT NUMBER- gives the part number of the kit or part required to install the modification.
- REFERENCE or PARTS LIST ON- indicates the parts list where the kit or modification part can be found.

Mod / Tag Plate Location

The tag matrix for the IOT is affixed to the front inner cover, PL 28.10 Item 1.

Classification Codes

The Class or Classification code can be explained as follows:

Table 1 Classification codes

NASG code	XE code	Description
-	1	Safety: Install this tag immediately.
M	2	Mandatory: Install this tag at the next opportunity.
R	3	Repair: Install this tag as a repair, at the failure of a component.
O	4	Optional: Install as a customer option or a field engineering decision.
S	4	Situational: Install as the situation demands.
N	5	Manufacturing: Cannot be installed in the field.
	6	Refurbishing only.

Change Tags

NOTE: *There are no Change Tags currently in effect for this product.*

TAG:

CLASS: 4

USE:

MFG SERIAL NUMBERS:

NAME:

PURPOSE:

KIT NUMBER:

PARTS LIST ON:

7 Wiring Data

PWB Connector Locations

Location Figures for PWB Connectors

To locate a PWB connector go to PWB Figures.

The pin out values for each PWB connector are shown on the appropriate wiring diagram.

- Wiring Diagram 2 B1025 Machines.
- Wiring Diagram 1 B1022 Machines.

PWB Figures

NOTE: *The Main PWBs Figure 1 and Figure 9 have no printed CN or CON numbering.*

NOTE: *Part list references are given with each figure.*

1. Main PWB B1022, Figure 1.
2. SMPS, Figure 2.
3. HVPS, Figure 3.
4. Fax PWB, Figure 4.
5. UI PWB B1022, Figure 5.
6. UI PWB B1025, Figure 6.
7. DADF PWB, Figure 7.
8. Tray 2 PWB, Figure 8.
9. Main PWB B1025, Figure 9.

Main PWB

Location: PL 1.10 Item 3

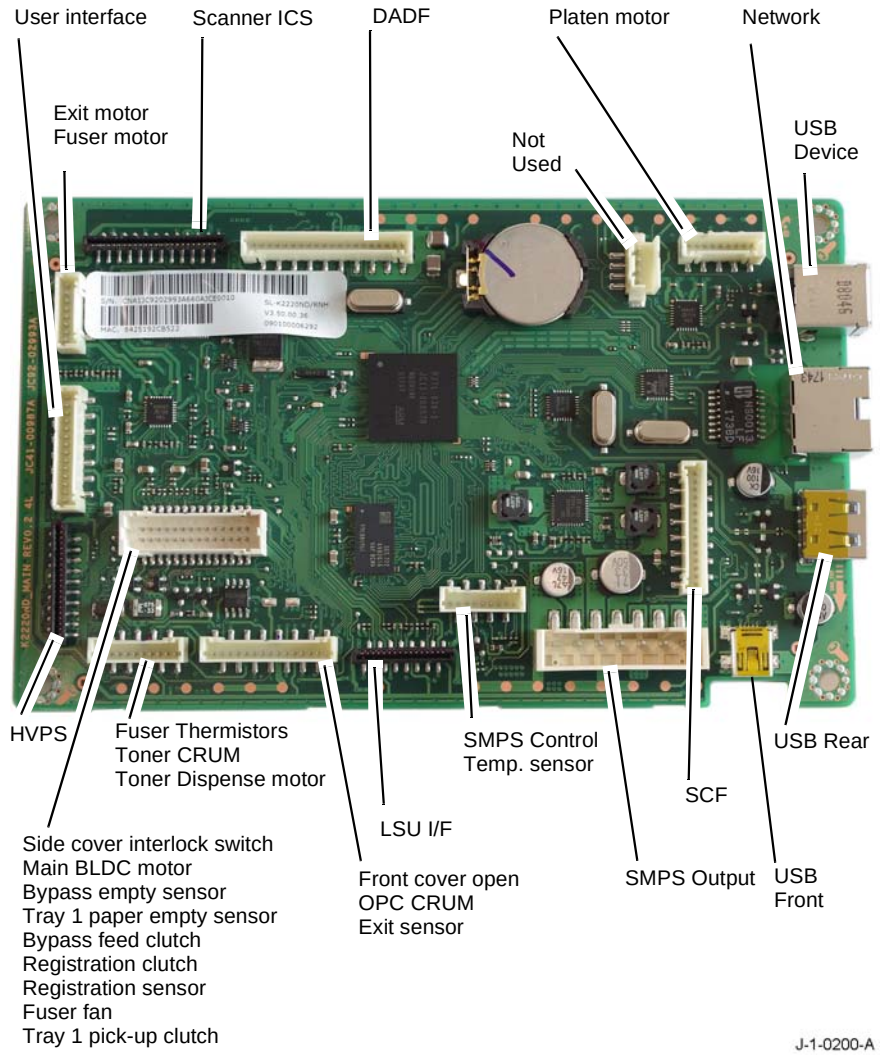


Figure 1 Main PWB B1022

SMPS

Location: PL 1.10 Item 1

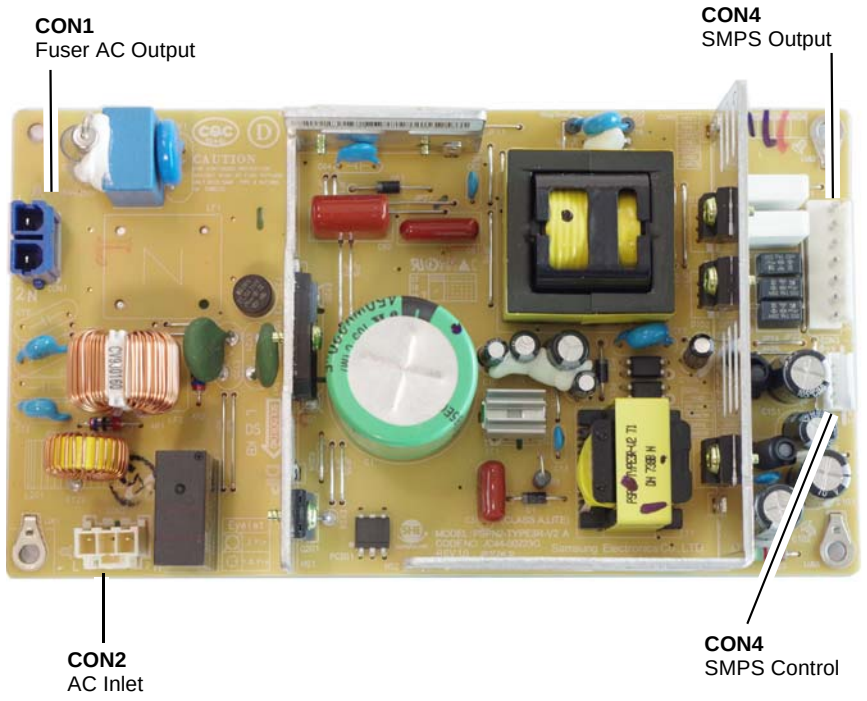


Figure 2 SMPS

HVPS

Location: PL 1.10 Item 2

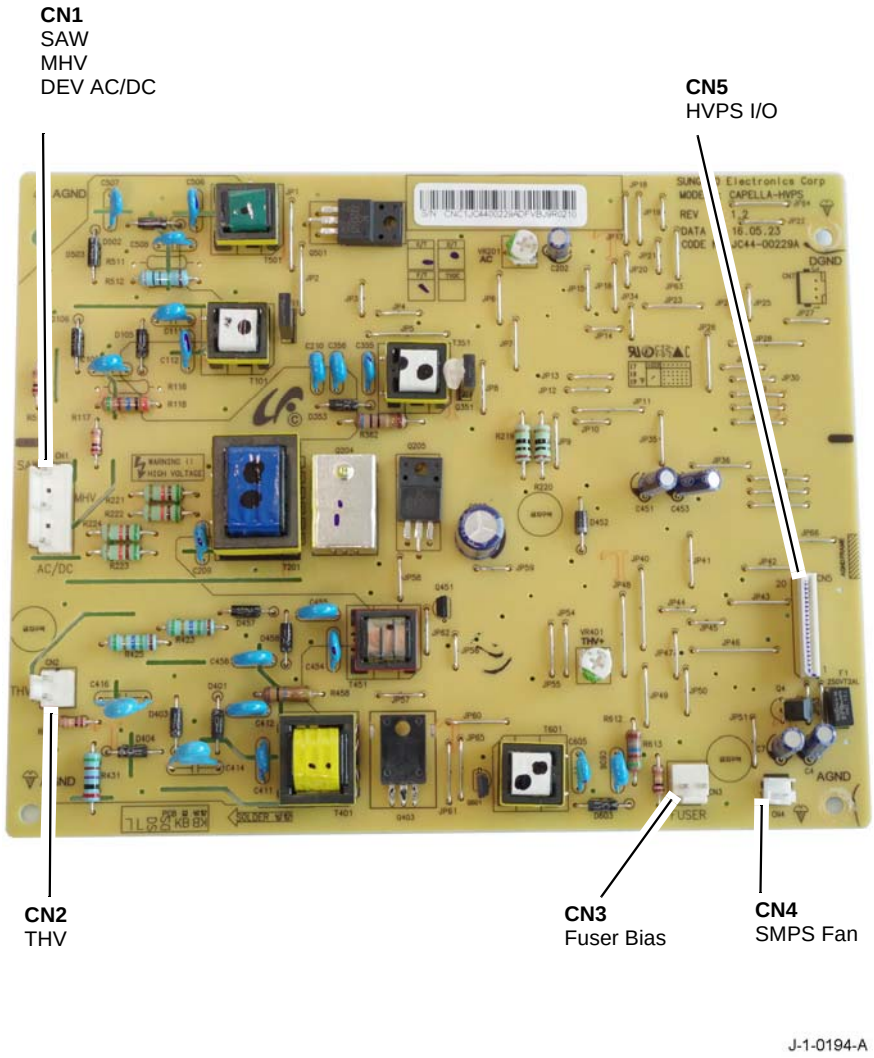


Figure 3 HVPS

Fax PWB

Location: PL 20.10 Item 2

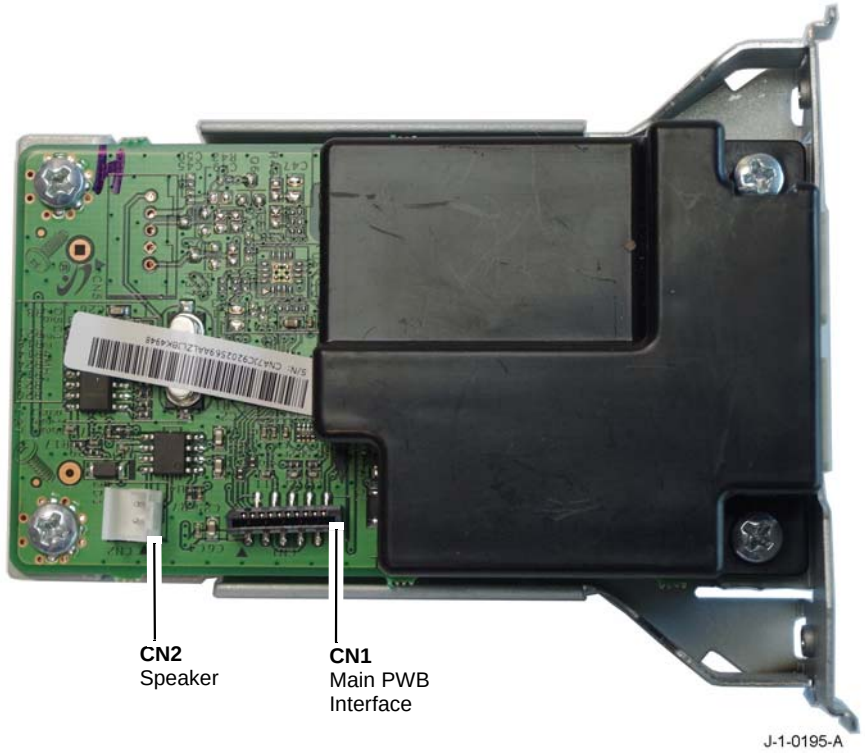


Figure 4 Fax PWB

User Interface PWB B1022

Location: PL 2.10 Item 7

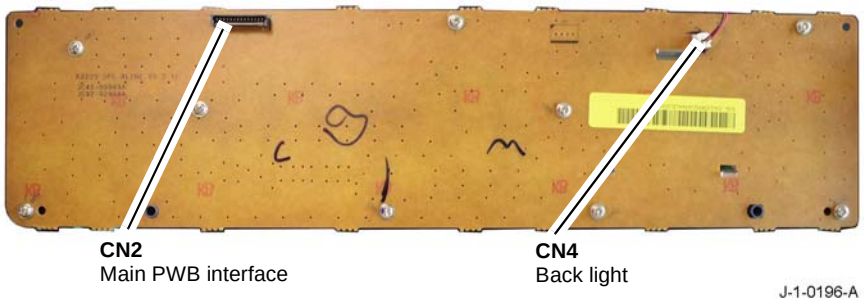


Figure 5 User Interface PWB B1022

User Interface PWB B1025

Location: PL 2.15 Item 8

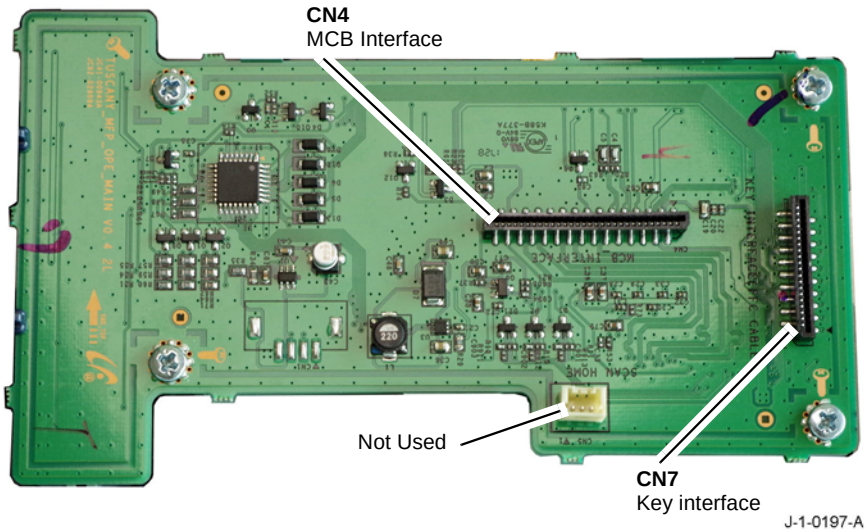


Figure 6 User Interface PWB B1025

DADF PWB

Location: PL 5.15 Item 3

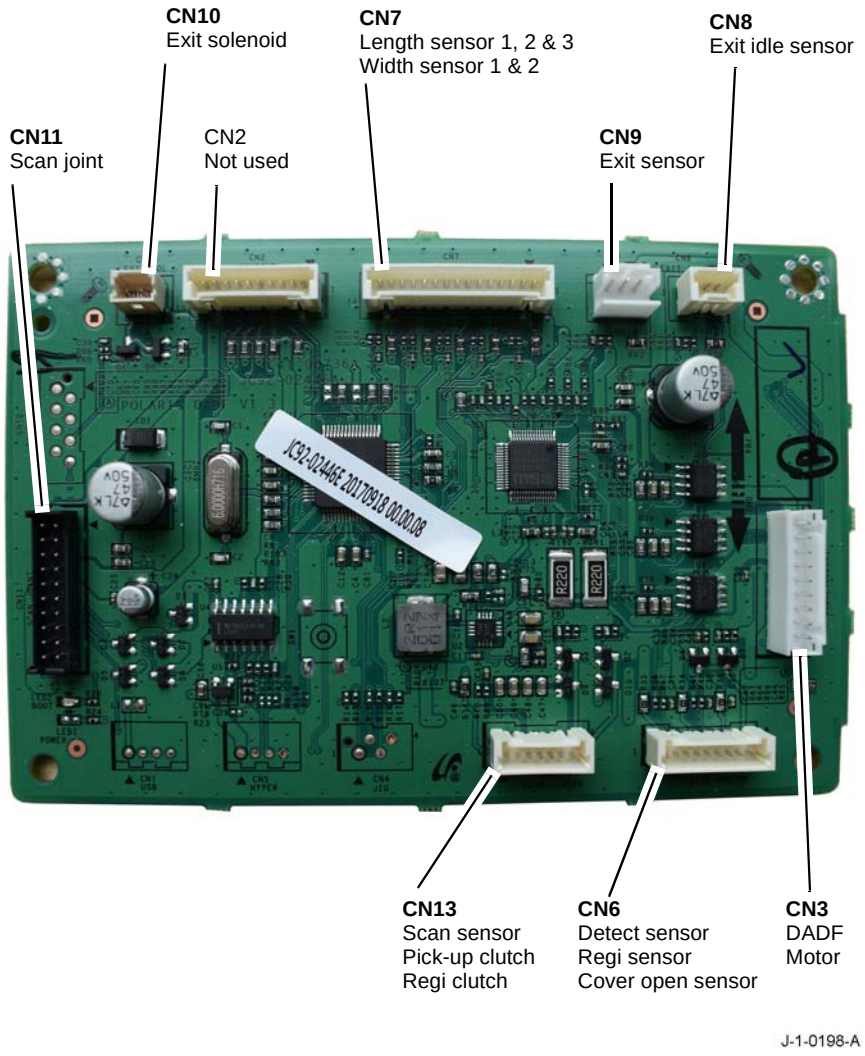


Figure 7 DADF PWB

Tray 2 PWB

Location: PL 7.20 Item 9

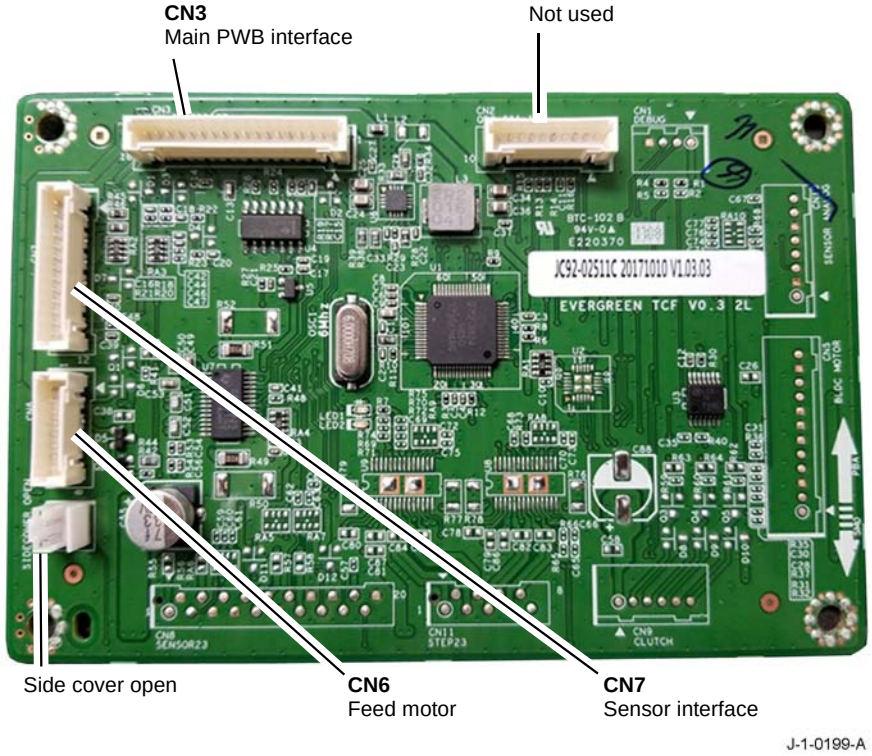


Figure 8 Tray 2 PWB

Main PWB B1025

Location: PL 1.10 Item 3

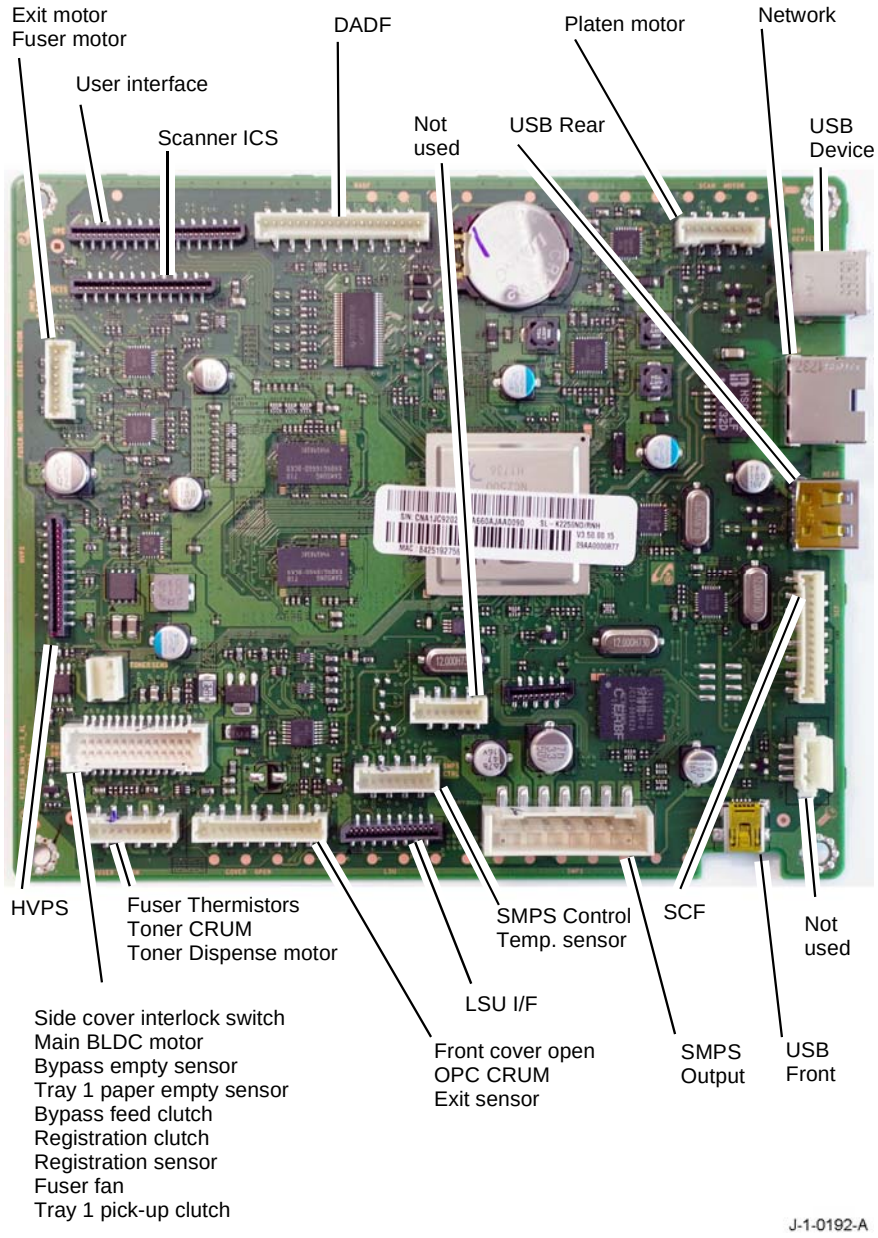


Figure 9 Main PWB B1025

Wiring Diagrams

Purpose

Wiring diagrams are an aid to trace wiring faults.

Introduction

Refer to the appropriate wiring diagram.

- Wiring Diagram 1 B1022 Machines.
- Wiring Diagram 2 B1025 Machines.

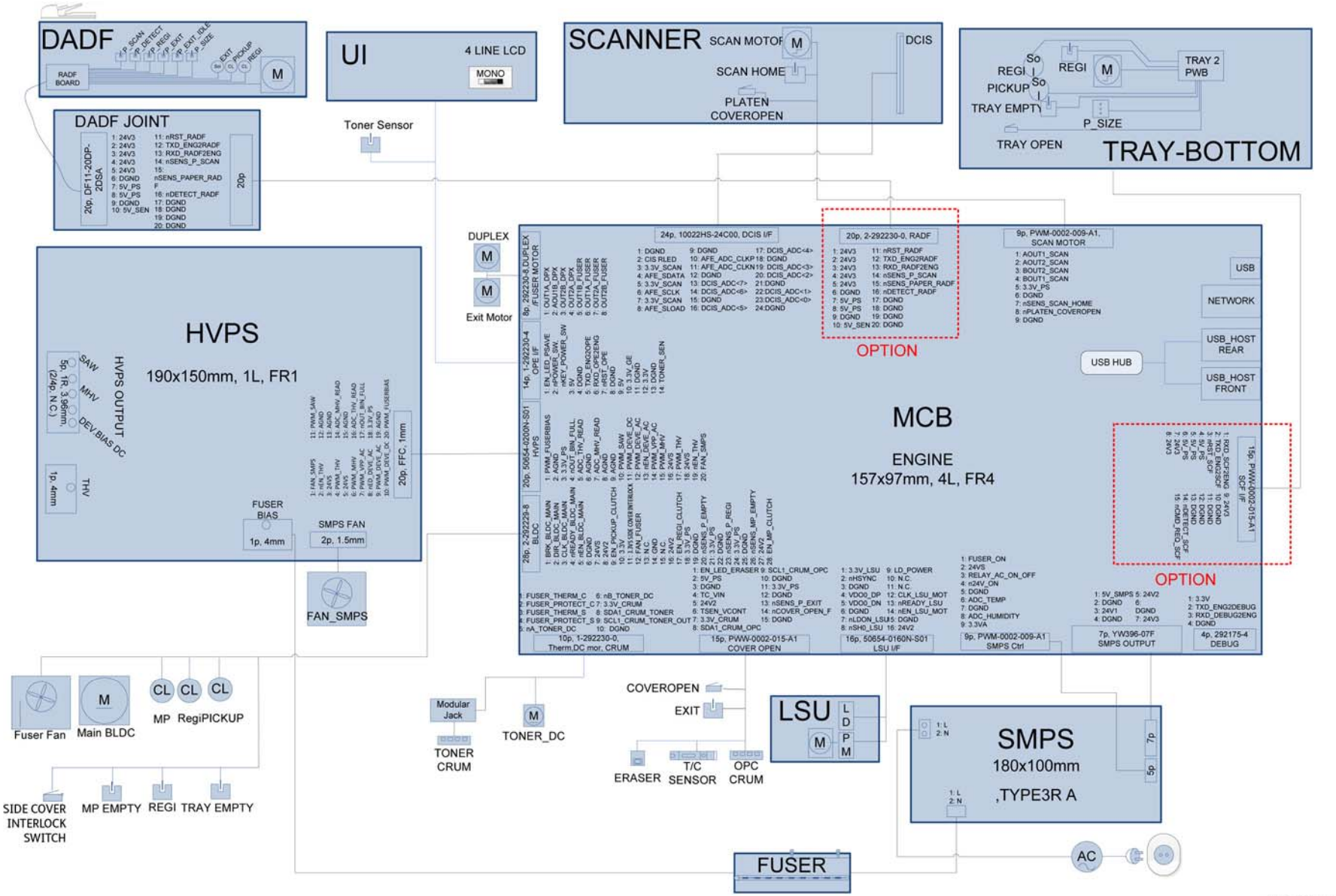


Figure 1 Wiring diagram B1022

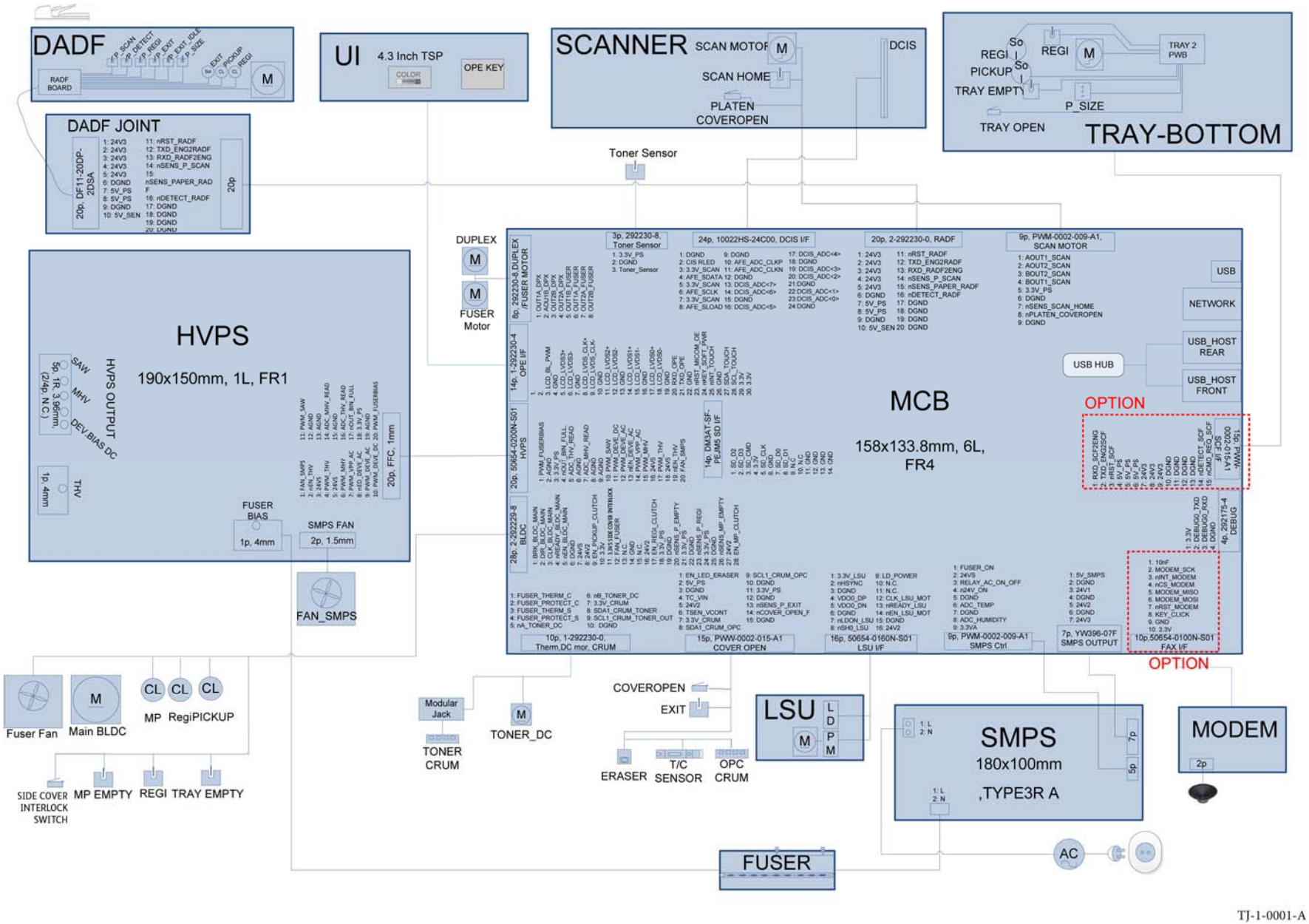


Figure 2 Wiring diagram B1025

8 Product Technical Overview

Machine Overview

Configuration Options

The Xerox® B1022 Multifunction Printer (MFP) and Xerox® B1025 MFP are monochrome machines. The standard configuration includes tray 1 and the bypass tray.

Xerox® B1022 MFP

The B1022 MFP is a 22 ppm printer, available in the configurations that follow:

- 220V with a document cover, Figure 1.
- An optional duplex automatic document feeder (DADF) is available.
- Optional kits also include Tray 2 and the wireless network adapter kit.

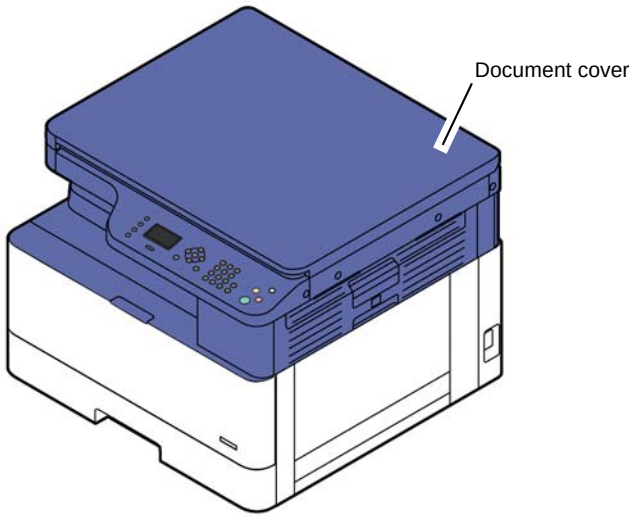


Figure 1 Xerox® B1022 MFP with document cover

Xerox® B1025 MFP

The B1025 MFP is a 25 page per minute (ppm) monochrome printer, available in the configurations that follow:

- 220V with a duplex automatic document feeder (DADF), Figure 2.
- 110V with a DADF
- 220V with a document cover

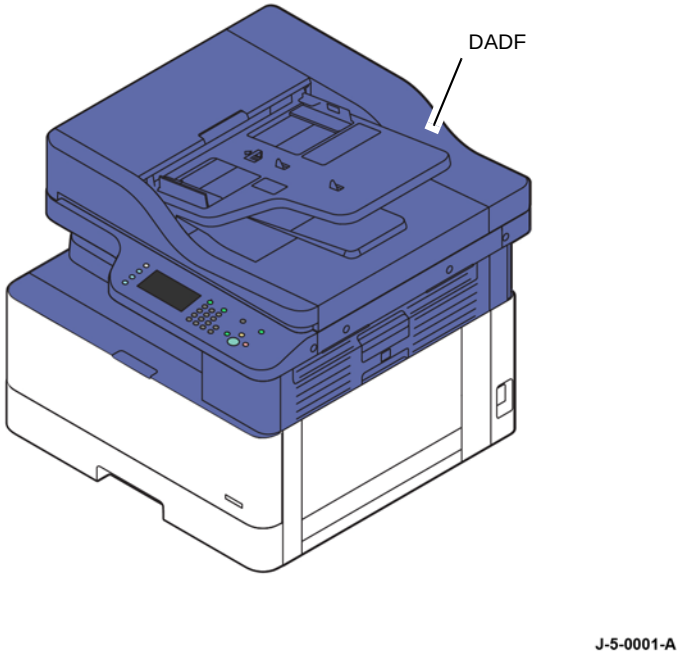


Figure 2 Xerox® B1025 MFP with DADF

Accessories and Kits

- Tray 2
- DADF
- Wireless network adapter kit
- Fax kit (available for the Xerox® B1025 only)

Standard Features available for all Configurations

- Copy
- Network Print
- Color Scan
- Local Print from PC
- USB: Print from and Scan To
- Scan to PC (TWAIN/WIA)
- Tray 1
- Bypass tray

General

For installation space requirements refer to GP 6.

Paper Supply and Paper Handling Options

- Optional 100 sheet duplex automatic document feeder (DADF)
- 250 sheet paper tray (designated Tray 1)
- Optional second 250 sheet paper tray (designated Tray 2)
- 100 sheet bypass tray

For paper and media size specifications refer to GP 5.

Consumables and Billing

There are two types of consumables:

- Toner cartridge
- Drum cartridge.

For billing information, refer to the System Administrator Guide.

Registration

The machines are registered as follows:

- Scanning:
  - Centre registered document guides are used when the document is scanned through the DADF.
  - Edge registered when the document is manually placed on the platen glass.
- Paper trays use centre registered paper guides.

Power

Power Generation and Distribution

System Operating Modes

In order to comply with the environmental agency requirements the machine must have different power states called operating modes. Each mode has different levels of power consumption and system functionality.

Power Save Mode

The machine will be ready for the first copy out time (FCOT) from power save mode as follows:

- B1022 MFP: less than 24 seconds.
- B1025 MFP: less than 28 seconds.

Standby Mode

The machine will be ready to copy from standby mode as follows, measured by ISO 29183 standard. Refer to Table 1:

Table 1 - FCOT in Standby Mode

Model	B1022 MFP	B1025 MFP
Platen	7.8 seconds	7.6 seconds
DADF	12.2 seconds	12 seconds

Power Consumption

Refer to Table 2.

Table 2 - Power Consumption

Model	B1022 MFP	B1025 MFP
Ready	80W	80W
Normal Operation	550W	650W
Max/Peak	1.1 Kw	1.1 Kw
Sleep / Power Off	Less than 1W / 0.2W	Less than 1.5W / 0.2W
Total Energy Consumption (TEC)	Max 1.2 kWh/Week	Max 1.65 kWh/Week

Switches

The side cover interlock switch PL 1.10 Item 14 detects that the side cover is open and cuts the 24V supply to all motors and clutches.

The front cover switch PL 1.10 Item 5 detects that the front cover is open but does not function as an interlock switch.

Switching Mode Power Supply

The switching mode power supply (SMPS) supplies DC power to the system. The SMPS receives 220V and supplies +5V and +24VDC electrical power to the main printed wiring board (PWB) and the DADF PWB. The SMPS is the power source for the entire system and is an independent module. The SMPS has safety protection modes for over current and overload. Refer to Table 3.

Table 3 - SMPS

Description	Value
Output channels	+5.1V and +24V
Input voltage	AC 110V~127V(V1), AC 220V ~ 240V(V2)
Rated frequency	50/60 Hz
Line and load regulation	+24VDC: 24.0V ± 10% (21.6 ~ 26.4V) +5.1VDC: 5.1V ± 5% (4.845 ~ 5.355V)
Over current protect	+24VDC: over 8.4 A (@ V1 110V~127V, V2 220V~240V) Fuse Protection or Voltage Drop (Trip -10%) or Shutdown +5.1VDC: Fuse Protection or Voltage Drop (Trip -5%) or Shut-down
Ripple noise	+24VDC: 500mV peak to peak +5.1VDC: 100mV peak to peak
Power switch	Not applicable

High Voltage Power Supply

The high voltage power supply (HVPS) supplies high voltage for the fusing and image transfer process. The HVPS takes 24V and outputs the high voltage of THV/THV-/MHV/Dev/Saw/ Fuser Bias. The high voltage output is supplied to the transfer roller and fuser. Refer to Table 4.

Table 4 - HVPS Control Signals

Signal	Description	Input / Output Voltage
THV+	Transfer high voltage	Input Voltage: 24 V DC ± 10% Output Voltage: 10uA ± 3% (Duty Variable) Line Regulation: under ±3% (fluctuation input 21.6V ~ 27.6V) Output Voltage Rising Time: 100ms Max Output Voltage Falling Time: 100ms Max Fluctuating transfer voltage with environmental various: 0 V~ 5 KV
THV-	Cleaning voltage	-1150V ± 15% The (+) Transfer Voltage is not outputted because the THV PWM is controlled with high. The (-) Transfer Voltage is outputted because the THV-Enable Signal is controlled with low

Table 4 - HVPS Control Signals

Signal	Description	Input / Output Voltage
MHV	Charging voltage	Input Voltage: 24 V DC ± 10% Output Voltage: -1200V DC ± 3% Output Voltage Rising Time: 50ms Max Output Voltage Falling Time: 50ms Max Output Control Signal (MHV-PWM): CPU is HV output when PWM is low
DEV	Developing voltage	Input Voltage: 24 V DC ± 10% Output Voltage: DEV DC : -495V DC ± 3% DEV AC : -207V± 3%(AC-DC JIG) (Freq : 6kHz) (Output Range : 0V~1.5kVpp) Output Voltage Fluctuation Method: PWM Control Line Regulation: under ±3% (fluctuation input 21.6V ~ 27.6V) Load Regulation: Under ±3% Output Voltage Rising Time: 50ms Max Output Voltage Falling Time: 50ms Max Output Control Signal (DEV-PWM): the CPU output is HV output when PWM is low
SAW	Detack saw voltage	Input Voltage: 24 V DC ± 10% Output Voltage: -995V DC ± 3% Output Voltage Fluctuation Method: PWM Control Line Regulation: under ±3% (fluctuation input 21.6V ~ 27.6V) Load Regulation: Under ±3% Output Voltage Rising Time: 50ms Max Output Voltage Falling Time: 50ms Max Output Control Signal (SAW-PWM): the CPU output is HV output when PWM is low
Fuser	Fuser voltage	Input Voltage: 24 V DC ± 10% Output Voltage: 455V DC ± 3% Output Voltage Fluctuation Method: PWM Control Line Regulation: under ±3% (fluctuation input 21.6V ~ 27.6V) Load Regulation: Under ±3% Output Voltage Rising Time: 50ms Max Output Voltage Falling Time: 50ms Max Output Control Signal (FUSER-PWM): the CPU output is HV output when PWM is low

Transfer High Voltage (THV+)

- Environment Recognition Control Method: The THV-PWM ACTIVE is a transfer active signal. It detects the resistance by recognizing the voltage value, F/B, while permitting the environmental recognition voltage.
- Output Voltage Control Method: Transfer Output Voltage is outputted and controlled by changing duty of THVPWM signal.

Cleaning Voltage (THV-)

- The output fluctuation range is large because there is no feedback control and connection resistor.

Fuser AC Power Control

The fuser heat roller is heated using a lamp heating method. This unit is controlled by information provided by the main PWB. Refer to Table 5.

Table 5 - Fuser AC Power Control

Description	Value
Input voltage	AC 110V~127V(V1), AC 220V ~ 240V(V2)
Rated frequency	50/60Hz
Output power	Max 850 [W]

User Interface

Overview

Xerox® B1022 MFP

The Xerox® B1022 MFP has a user interface (UI) installed with a 4-line liquid crystal display (LCD) and a status LED, Figure 1.

Figure 1 Xerox® B1022 MFP control panel and UI

Status LED

The color of the LED indicates the machine's current status.

Table 1 - Status LEDs

LED	Status	Description
Status	Off	The machine is offline or in power save mode.
	Green - Blinking	When the backlight blinks, the machine is receiving or printing data.
	Green - On	The machine is online and can be used.
	Red - Blinking	• A minor error has occurred and the machine is waiting for the error to be cleared. Check the display message. When the problem is cleared, the machine resumes. • A small amount of toner is left in the cartridge. Prepare a new cartridge for replacement. Redistribute the toner to temporarily increase the printing quality.

Table 1 - Status LEDs

LED	Status	Description
	Red - On	• The toner cartridge has reached its estimated life. It is recommended to replace the toner cartridge. • The cover is open. Close the cover. • There is no paper in the tray. Load paper in the tray. • The machine has stopped due to a major error. Check the display message. • A paper jam has occurred. • The drum cartridge has reached its estimated life. It is recommended to replace the drum cartridge.
Power/ Wake Up	Blue - On	The machine is in power save mode.
	Blue - Off	The machine is in ready mode or the power is off.

User Interface PWBA

The user interface (UI) PWB PL 2.10 Item 7 controls the Xerox® B1022 MFP UI. The UI PWB consists of the status LED, power LED, navigation LED and the 4-line LCD. The UI PWB and main PWB use Universal Asynchronous Receiver Transmitter (UART) for communication. The main PWB controls the power LED. The UI PWB is contained in the user interface assembly.

The UI PWB contains the interface to the backlight PWBA. The backlight PWBA controls the backlight function for the 4-line LCD.

Xerox® B1025 MFP

The Xerox® B1025 MFP has a UI installed with a keypad and 4.3 inch touch screen, Figure 2.

User Interface PWBA

The User Interface (UI) PWB PL 2.15 Item 8 controls the Xerox® B1025 MFP. The UI PWB displays the status of the system using the LCD touch screen display, in response to user actions or the main PWB.

USB Connection

An external USB connector is also mounted below the display on both models.

UI Buttons

Power Saver Button

The machine is turned on and off via the power saver button mounted on the UI assembly. When the machine is first connected to power, the machine can power on automatically. If the machine does not power on automatically, press the power saver button.

Once the machine is fully powered up, it can be switched off by a single press of the power saver button. This initiates a power down option menu on the UI screen. The user can select power saver or power down. An option to cancel power off is also provided. If the power off sequence is not functioning properly, disconnect the power cable, then reconnect the power cable. The machine powers on. If the machine does not power on, press the power saver button.

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Figure 2 Xerox® B1025 MFP control panel and UI

Machine Run Control

Overview

Refer to Figure 1. The machine consists of:

- Main PWB
- User interface PWB
- HVPS
- SMPS
- DADF PWB (when the optional DADF is installed)
- Tray 2 main PWB (when the optional Tray 2 is installed)

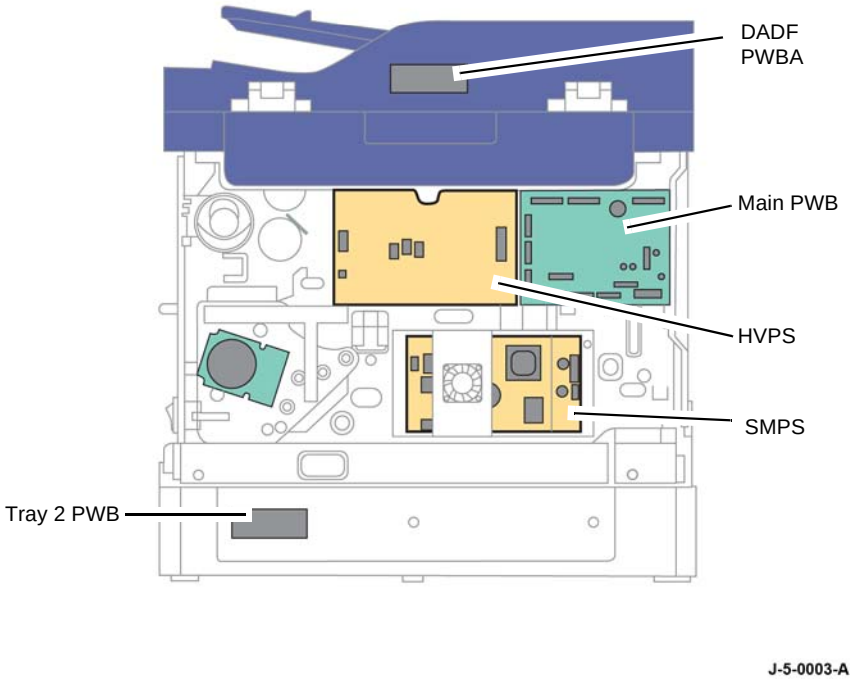

Figure 1 Circuit Board Locations

Main PWB

The main PWB PL 1.10 Item 3 is the system board, and consists of:

- **Engine controller:** the main PWB controls all modules required for printing, including the laser scan unit (LSU), HVPS, fan and fuser. The main PWB communicates with the video control block in the CPU and interfaces with all video signals to print the video data. The main PWB also consists of the circuits which drive paper feed and paper path motors, clutches and fans. The paper feed jam sensor and paper empty sensor signals are sent to the main PWB.
- **Video controller:** the main PWB receives print data from the host through the network or USB port and generates printable video bitmap data. The main PWB also receives copy data from the scan controller. The video bitmap data is sent to the engine controller.

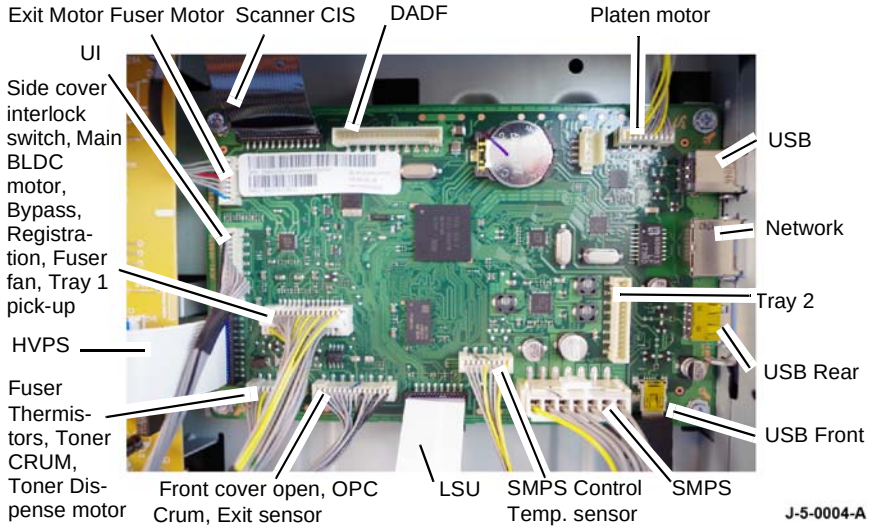

Figure 2 Xerox® B1022 MFP main PWB connections

Main PWB Interfaces

Refer to Figure 2. The main PWB interfaces with:

- Scanner
- DADF, when installed
- Network
- USB
- Tray 2, when installed
- SMPS
- LSU
- Toner
- HVPS
- UI PWB
- Fuser

- Exit motor
- Main BLDC motor

NOTE: *There are differences between the Xerox® B1022 and Xerox® B1025 main PWB interfaces. The B1025 interfaces with the optional fax PWB, when installed. The B1025 main PWB also includes an SD card.*

Memory

- The machine uses NAND Flash as program memory which stores the system program. The program memory can be upgraded through the USB device interface.
- The program memory capacity is 128MB (Xerox® B1022) and 512MB (Xerox® B1025).
- The machine uses DDR3 SDRAM 1333MHz, 16bit for printing and scanning as system working memory area.
- The working memory capacity is DDR3 256MB (Xerox® B1022) and DDR3 1.5GB (Xerox® B1025).
- The Xerox® B1025 includes an 8GB SD memory card mounted on the main PWB.

Network Interface

- Ethernet 10/100 Base TX wired LAN, 10/100Mhz LAN port.
- Wireless 802.11 b/g/n 2.4GHz (optional).

USB Interface

- The machine supports one high speed USB 2.0 type B port, located in the main PWB interface. The port supports PC direct printing and requires a 6ft USB cable which is not supplied with the machine.
- The machine also supports two USB type A ports. One port is located at the front of the machine and the other is contained in the main PWB interface [PL 1.10]. These ports support firmware upgrade, print from and scan to USB functions.

Fax Kit (Option)

- The main PWB accommodates an interface to the fax PWB PL 20.10 Item 3. A flat printed circuit (FPC) cable provides the electrical interface. The kit provides 1 telephone line serviced by a fax modem.

User Interface PWBA

The user interface (UI) PWBA is contained in the user interface assembly, Figure 3. The UI PWBA board displays the status of the system using the LCD screen display in response to user actions or the main controller.

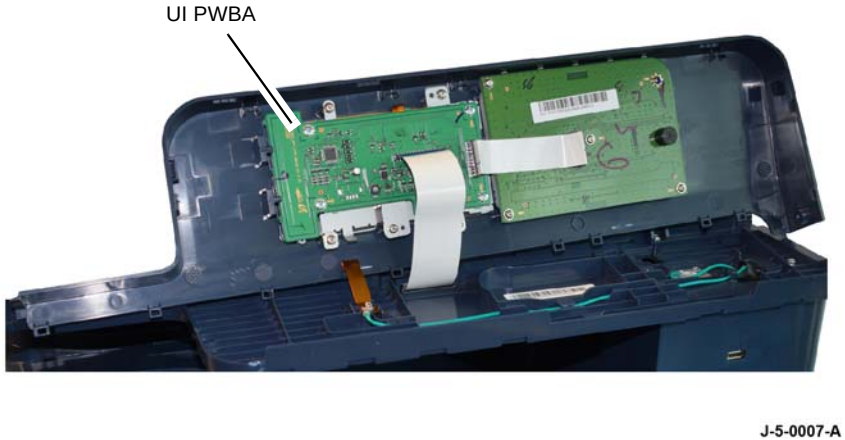

Figure 3 Xerox® B1025 MFP UI PWBA

SMPS

The SMPS is the power source for the machine and supplies DC power to the system and AC power to the fuser.

DADF PWB

The DADF PWB provides the interface between the optional DADF and the main PWB.

Tray 2 Main PWB

The tray 2 main PWB is installed with the optional tray 2. The tray 2 main PWB contains a serial UART interface.

Main Drives and Cooling

Overview

The main drives are located behind the rear cover, Figure 1:

- Main BLDC motor PL 4.10 Item 11 (developer/drum/feeding/registration)
- Fuser motor PL 10.10 Item 5 (fixing/exit feeding)
- Exit motor PL 10.10 Item 4 (exit feeding/duplex)
- Toner dispense motor PL 4.10 Item 12

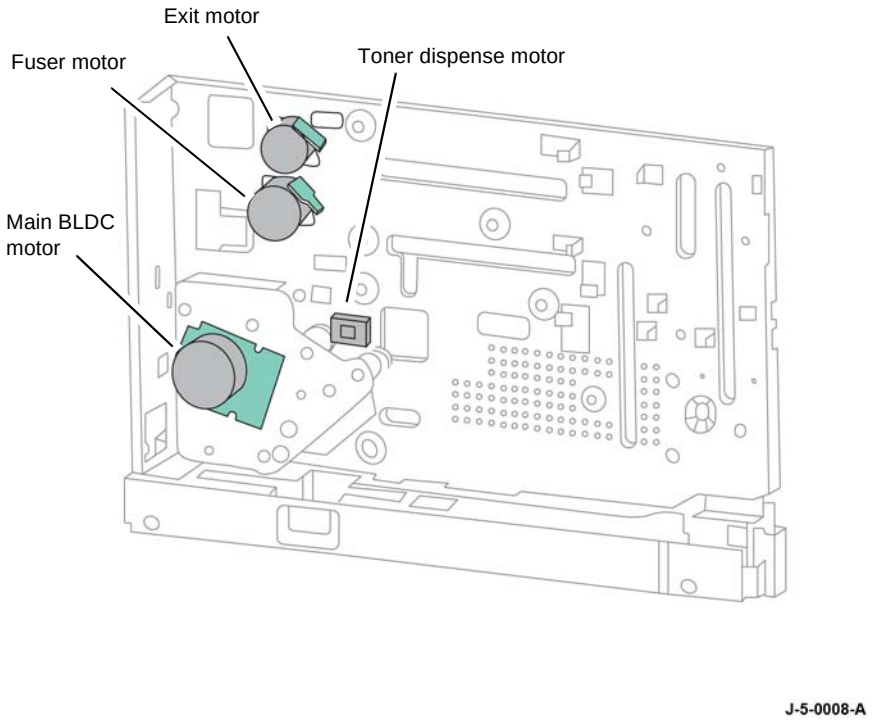

Figure 1 Main Drive Locations

Drive System

Main BLDC Motor

The Main BLDC motor is a brushless DC motor, and provides drive to:

- Drum, developer, registration roll, bypass pick up roll and tray 1 pick up roll, Figure 2.
- Final drive to the registration roll, bypass pick up roll and tray 1 pick up roll is engaged by 1 of 3 independent electric clutches which drive the registration, bypass and pick up engages, Figure 3.

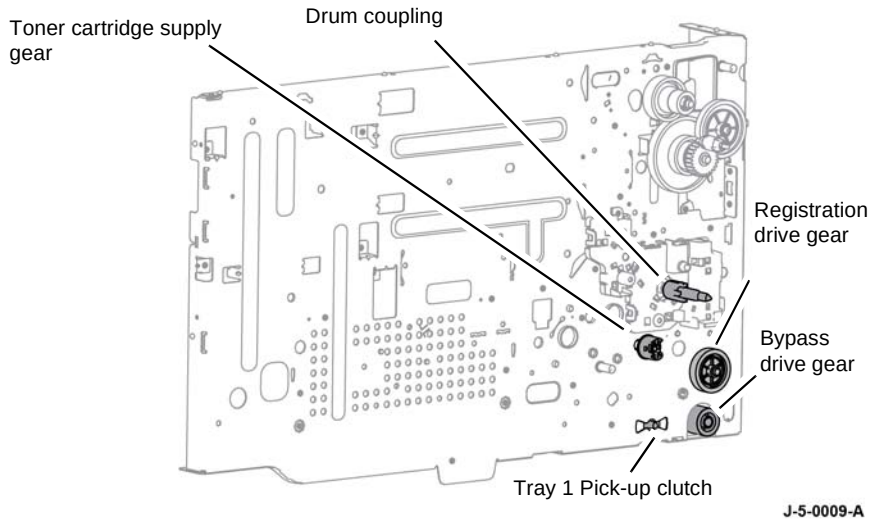

Figure 2 Main Drive Unit Component Locations

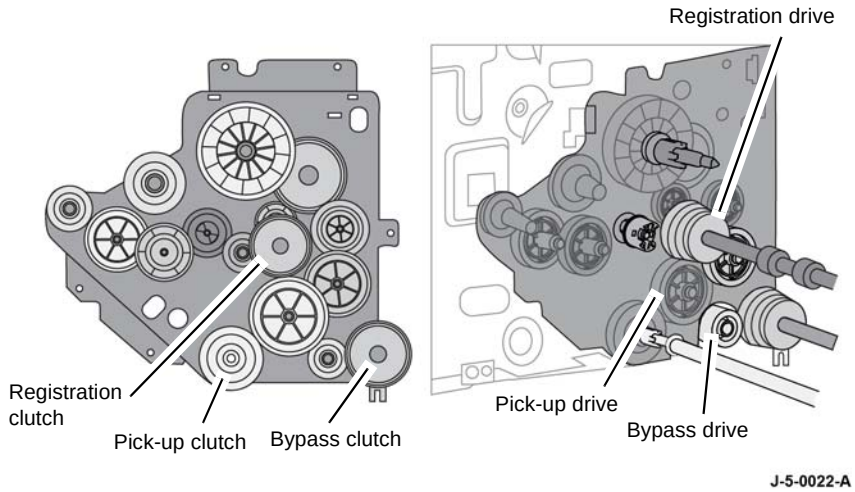

Figure 3 Main Drive

Fuser Motor

The fuser motor is a step motor which performs fuser and exit driving for the machine and duplex transport.

Exit Motor

The exit motor is a step motor which drives media to the duplex assembly PL 8.10 Item 3 or exit assembly PL 10.20 Item 1.

Toner Dispense Motor

The toner dispense motor is a DC motor which drives the toner supply from the toner cartridge to the drum unit.

Cooling

The SMPS fan PL 1.10 Item 7 removes hot air from the SMPS and interfaces with the HVPS.

The fuser fan PL 10.10 Item 3 is located at the rear to provide fuser cooling and remove hot air from the xerographic subsystem. Fans are driven by the main PWB.

DADF

Overview

The duplex automatic document feeder (DADF) is mounted above the platen scanner. The DADF allows a user to scan original documents of various sizes and original types to enable either the system copy or system scan functionality.

The DADF is a center registered automatic document feeder, that will separate and feed up to 100 (face up) original documents of 80gsm individually in 1 to N order. The DADF is optional and is installed by the CSE.

Media is conveyed by the pick up roller in the DADF feed assembly, and driven through the registration rolls and paper path by the feed roller. When the sheet reaches the scanner home position, side 1 is scanned. If a two sided scan is required, the sheet is held in the exit rollers, then reversed and side 2 is scanned. When the scan completes, the sheet is ejected to the exit tray by the exit roller, refer to Figure 1.

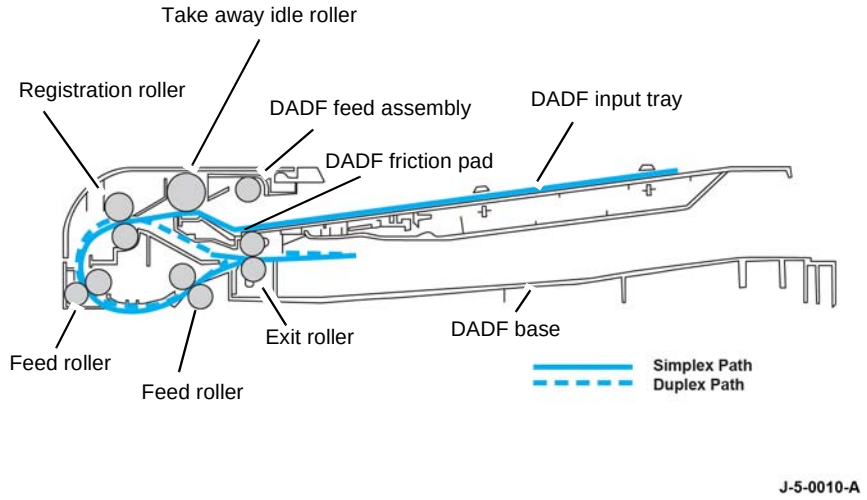

Figure 1 DADF Overview

Table 1 DADF Overview

Part	Function
Registration roller PL 5.30 Item 8	Aligns the leading edge of the paper for registration.
Take away idle roller PL 5.25 Item 9	Separates an original from the tray and transfers it to the paper path.
DADF friction pad PL 5.30 Item 3	Prevents multi-feeding.
DADF feed assembly PL 5.25 Item 6	Picks up an original from the tray.
DADF input tray PL 5.40 Item 1	Paper input tray.
DADF base PL 5.15 Item 4	Paper output tray.

Table 1 DADF Overview

Part	Function
Exit roller PL 5.30 Item 7	Sends an original to the DADF platen (output tray) and forms the duplex reverse path.
Feed roller PL 5.30 Item 20	Transfers originals to the exit roller.

DADF Input Tray Assembly

Documents are placed into the DADF input tray assembly face up, 1 to N order. Moveable tray guides for the document width are provided. Correct adjustment by the operator is imperative for reliable feeding and auto paper select. The DADF supports these specifications:

- Input tray capacity: 100 originals of 80gsm (20lb) weight.
- Minimum size original: A5 or 5.5”x8.5”.
- Maximum size original: A3 or 11”x17”.
- Document Weight: 60-128gsm.
- Auto Detected Size Sensing: A5 (LEF), Letter or A4 (SEF), Legal (SEF), A3 (SEF).

DADF Power

The SMPS supplies +5.1V and +24V power to the DADF board via the main PWB. The DADF PWB then controls the output of power to all the components in the DADF.

Document Size Sensing and Selection

Document size sensing and selection is achieved by a combination of:

- Width sensing
- Length sensing

Width Sensing

Three paper width sensors determine the width of the original document.

Length Sensing

Two document length sensors determine the length of the original document, length sensor 1 and length sensor 2.

Drives

The DADF consists of one motor and two clutches to transfer the paper. The DADF motor provides the drive for both simplex and duplex jobs. The pickup clutch and registration clutch control the drive on/off. The cam outer gear and DADF exit solenoid drives the duplex reverse.

DADF Drive Assembly

The DADF motor provides drive to the pickup clutch, to pick up the paper. The paper is transferred to the registration roller.

Registration Drive Assembly

The registration drive uses the clutch to drive the registration roller and transfer the paper to the feed roller.

DADF Transport Assembly

The power from the DADF motor is transferred to the exit gear and roller exit to transfer the paper to the exit.

At duplex mode, the DADF motor rotates inversely. The DADF exit solenoid is on and drives the cam outer gear and gear exit. The gear exit rotates and the DADF exit solenoid drives the cam outer gear to make a space between the roller exit and idle roller.

Scanning Process

1. The document present actuator PL 5.25 Item 5 detects that a document has been loaded onto the input tray.
2. The size of the document is calculated by a combination of signals from width sensor 1, width sensor 2, width sensor 3, and length sensor 1 and length sensor 2.
3. The clutch drives the DADF roller to pick up the paper. The pickup roller in the DADF feed assembly moves down and contacts an original in the tray. The DADF roller and pickup roller are connected by a belt.
4. The paper is transferred to the registration roller. When the registration sensor detects the paper, the pickup clutch stops.
5. The DADF registration drive assembly uses the clutch to drive the registration roller and transfer the paper to roller feed.
6. The registration roller aligns the leading edge of the document. When the document reaches the nip, the registration roller is not rotating, causing the original to buckle slightly in the space of the paper path. This buckle ensures the lead edge of the original is in full contact with the registration nip. The registration roll then rotates to feed the registered original towards the scanner. The clutch turns off and on to align each document.
7. The gear knob and gear reduction use the belt to provide the pulley connecting roller exit with the power. This structure allows the user to remove paper in case of a jam.
8. The DADF motor drives the belt timing gear and feed roller in the DADF feed assembly to transfer the paper through interlocking the roller feed in and roller feed out.
9. The DADF motor drives the exit gear and exit roller to transfer the paper to the exit. The exit gear and exit roller are part of the DADF transport drive assembly.
10. If a simplex job has been requested, the document is transferred to the exit. If a duplex job has been requested, the roller exit rotates inversely. At duplex mode, the DADF solenoid drives the cam outer gear and exit gear to make a space between the exit roller and idle roller.
11. When the detect actuator detects the DADF input tray is empty, the motor stops and the machine enters stand-by status.

DADF Sensors

There are several sensors located throughout the document path to detect the position of the document. The signals from these sensors initiate operations within the DADF, and also assist with jam detection.

Sensor Types and Locations

Paper Width Sensors

The paper width sensors are located in the DADF Input Tray Assembly.

Registration sensor

The registration sensor is located in the DADF Drive Assembly.

DADF Exit idle sensor

The DADF Exit idle sensor is located in the DADF Transport Assembly.

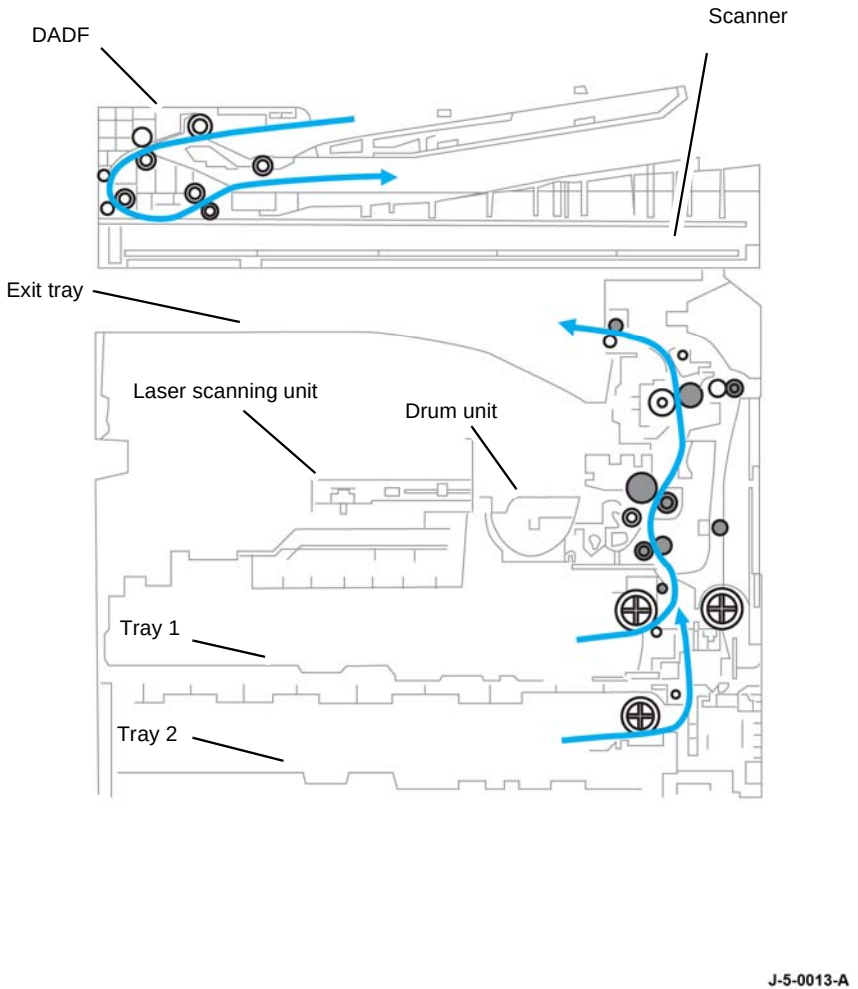

Figure 2 System Layout

Scanner

Overview

The scanner is designed to support monochrome copying and color or greyscale scan operations, and conversion of the optical image into a digitised video signal that is then sent for image processing.

The scanner automatically detects the size of the original placed on the platen. Both inch and metric size paper will be detected without changing any machine settings. Document registration on the document glass is from the left rear corner of the glass. Documents up to A3 (11x17 inches) can be accommodated.

During the scanning process, the surface of a document is exposed to direct light. The reflected light is sent to the contact image sensor (CIS) that converts the optical image data into an electrical (analog) signal. The analog signal is changed to a digital signal, which then undergoes various corrective processes necessary for image formation. Arithmetic operations are performed on the digital signal, which is then transmitted to the data writing processor.

The machine uses the 3 ch-D-CIS for this process. The CIS is arranged in a row and reads the document image by turning on R/G/B LEDs sequentially.

Contact Image Sensor (CIS)

The CIS reads the document on the scanning glass, Figure 1. The CIS consists of an R/G/B light source, subminiature lens array, and sensor. The light illuminates the document through the scan glass. This reflected light is sent to the lens array. The CIS sensor converts the signal to a color or mono electrical signal.

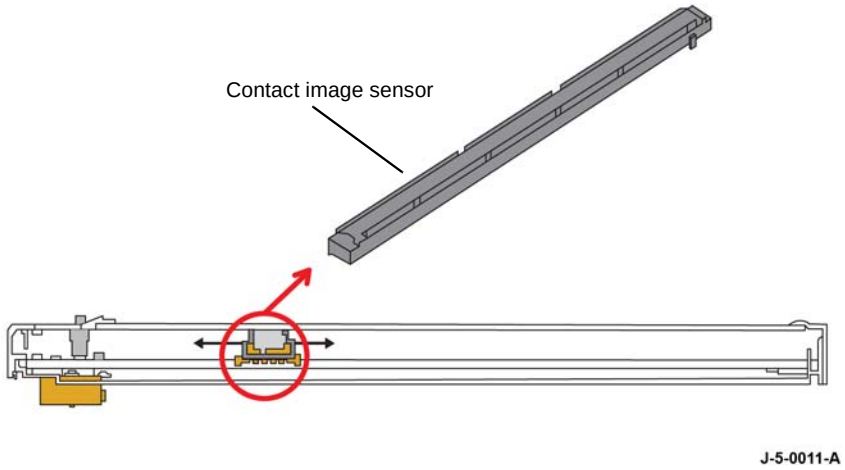

Figure 1 Contact image sensor

Platen

The platen consists of the CIS, platen motor and belt - timing gear. The platen motor drives the belt - timing gear and moves the CIS along the plate rail bracket. The document image is scanned by the CIS movement. The CIS home sensor detects the position of the CIS, Figure 2.

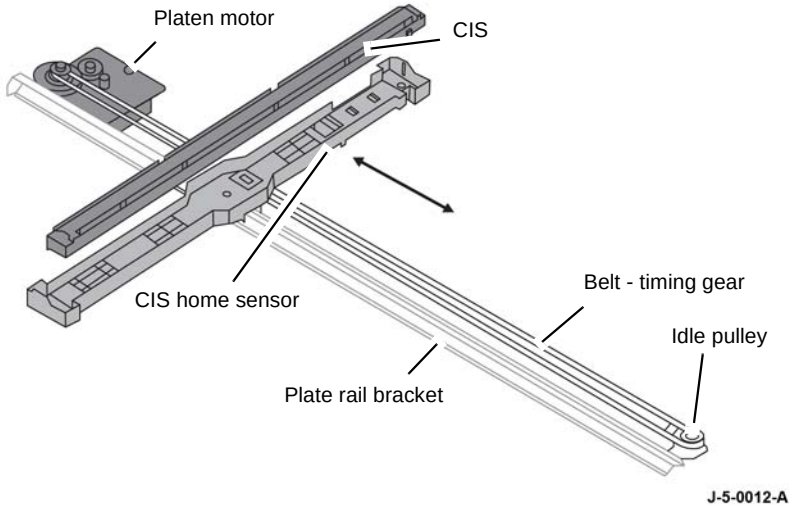

Figure 2 Platen

Imaging

Overview

The function of the laser scan unit (LSU) is to expose the photoreceptor in the required pattern as constructed by the image processing electronics. The resultant latent image is then developed, transferred and fixed onto the print media to form the required hard copy output.

The drum is charged with a negative voltage and is exposed by the light from the LSU. The light produced by the laser creates a latent image by selectively discharging the surface of the drum. The negatively charged toner is attracted to the latent image. The toner image on the drum is then transferred to the print media by the positive bias applied to the transfer roller.

Laser Scan Unit (LSU)

The LSU scans the video data received from the video controller with laser beam by using the rotation principle of the polygon mirror to create the latent image on the drum. The drum rotates at the same speed as the paper feeding speed. It creates the Hsync signal and sends it to the engine when the laser beam of the LSU reaches the end of the polygon mirror. The engine detects the Hsync signal to arrange the vertical line of the image on the paper. After detecting the Hsync signal, the image data is sent to the LSU to arrange its margin on the paper.

The LSU is the core part of the IOT that converts video data received from the controller into the electrostatic latent image on the drum, using a modulated laser beam reflected from the rotating polygon mirror, exposing the main charge on the drum. The drum is rotated at the same rate as the media feeding speed.

The LSU consists of a polygon motor and an LD unit. To form a latent image on the surface of the drum the LSU uses a collimating lens, a cylindrical lens and the F-Theta lens on an optical path. The LSU also contains cover glass to protect the glass on the optical path from contamination. The LD PBA interfaces with the machine. The LSU is controlled by the main PWB. There are no serviceable parts inside the LSU.

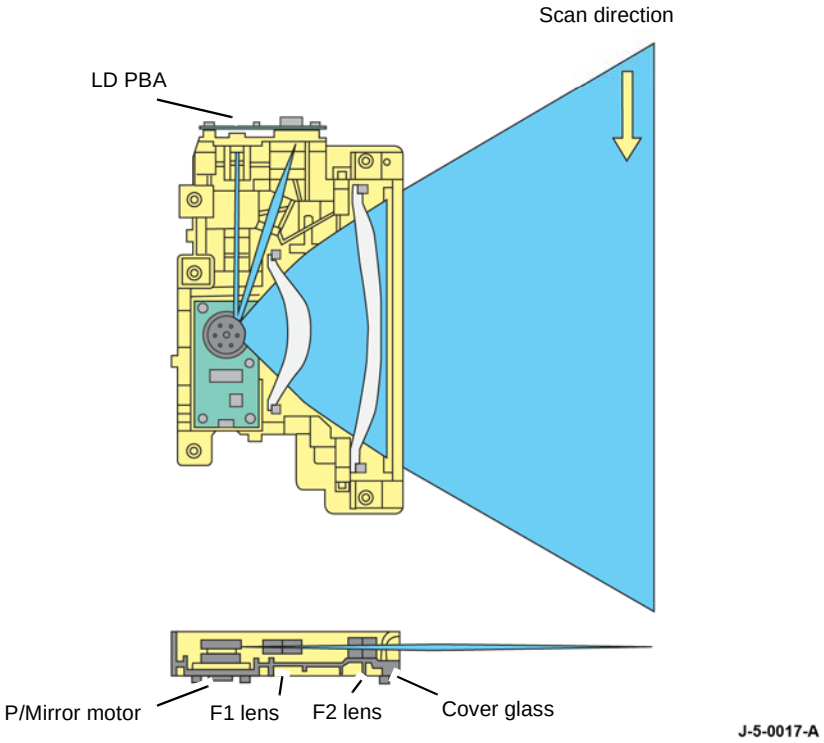

Figure 1 Laser Scan Unit

Laser Scanning Function

The LSU contains the beam detector sensor board (PD PBA) The PD PBA detects the beam at the scanning start point and creates the horizontal sync signal (Hsync). The polygon motor emits a laser beam directly to the drum. The F1 Lens and F2 Lens determine the scanning line and image position, Figure 1. This is adjusted at the factory.

The Hsync signal is created when the laser beam from the LSU reaches the end of the polygon mirror face as it rotates, and the signal is sent to the controller, which uses this to synchronize each scan line the laser makes in the horizontal axis by adjusting the image data sent to the LSU. Each face of the polygon mirror is used for one scan line on the drum.

Paper Supply and Feed

Overview

The modules within the IOT used to supply paper are as follows:

- Tray 1
- Tray 2 (optional)
- Bypass Tray

Tray 1

The base configuration provides 1 internal paper tray with a capacity of 250 sheets.

Paper Loading

Tray 1 is adjustable to paper sizes between A5 (5.5 x 8.5 inches) LEF to A3 (11 x 17 inches) SEF. The paper stack is positioned in the centre of the tray. The tray front and tray rear guides are moved to support the paper stack.

Paper Feed

When the tray is closed, the tray locker is released. The springs located below the knock up plate, raise. The surface of the paper contacts the tray 1 roller and a single sheet of paper is fed by the roller rotation. The tray 1 friction pad ensures paper is separated to avoid two pieces of paper being fed at the same time. The paper is transported to the registration area.

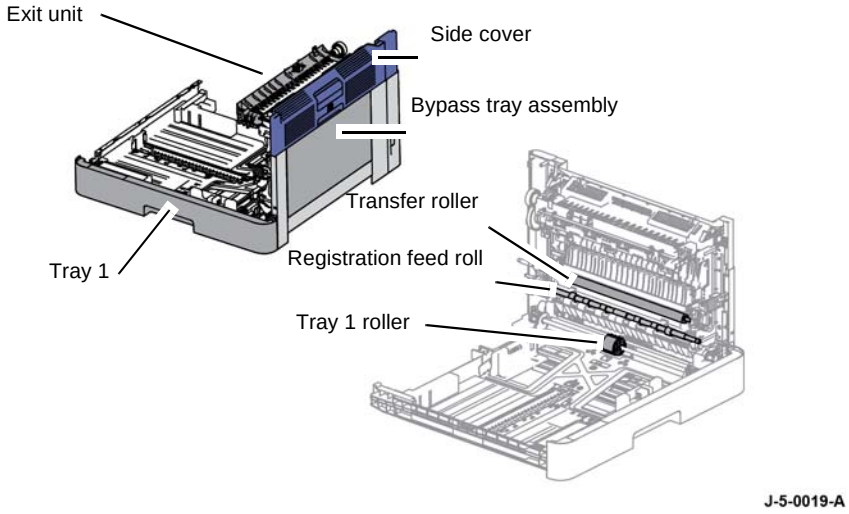

Figure 1 Paper supply and feed

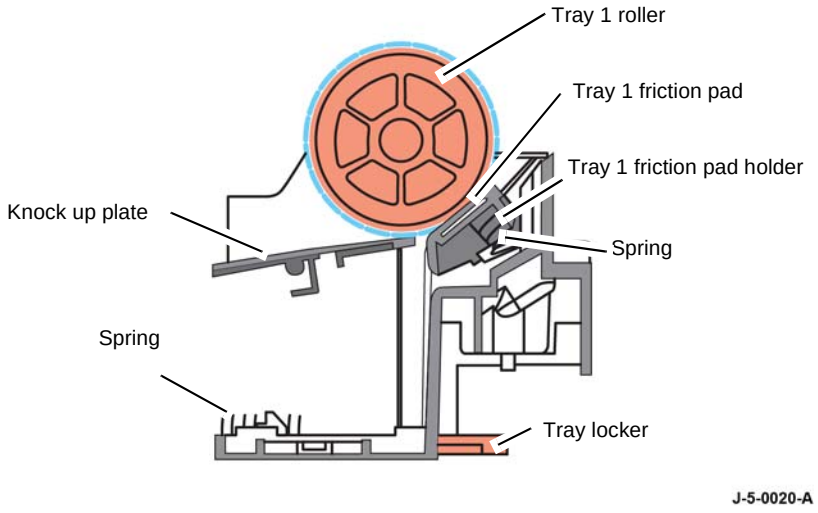

Figure 2 Pickup roller and friction pad

Tray 1 Empty Sensing

When the tray is empty, the tray 1 paper empty sensor actuator covers the tray 1 paper empty sensor to signify that paper needs to be added to the tray. The tray 1 paper empty sensor is located on the tray 1 frame assembly, PL 7.10 Item 6.

Tray 2

When the optional tray is installed, it becomes tray 2. Tray 2 has a 250 page capacity, a separate driving mechanism, and uses the same design as tray 1.

Paper Feed

When tray 2 is closed, the tray locker is released. The springs located below the knock up plate raise. The surface of the paper contacts the pick up roller and a single sheet of paper is fed by the pick up roller rotation. The friction pad ensures paper is separated to avoid two pieces of paper being fed at the same time. The tray 2 feed roller activates to feed the paper to the registration roller. Paper feeding from tray 2 is detected by the tray 2 feed sensor. Tray 2 feed motor drives tray 2 operation.

Bypass Tray

The bypass tray assembly is located in the side cover assembly. The bypass tray allows feeding of special media, cardstock, envelopes and custom size paper.

The bypass tray supports:

- Capacity: 100 sheets (80gsm).
- Media Size: Maximum 11.7” x 17” (297x432mm) / Minimum 6”x4” (152.4x101.6mm).
- Media Weight: Plain paper 60 - 163 gsm.
- Speed: 20 ppm Letter / A4 LEF.

The bypass tray assembly consists of:

- Lower bypass tray
- Knock up plate
- Upper bypass tray

The tray 1 frame assembly consists of these bypass tray components:

- Bypass guide
- Bypass friction pad
- Bypass roller
- Bypass tray paper empty sensor
- Bypass tray paper empty sensor actuator

Paper Feed

The bypass drive gear engages the bypass feed clutch PL 7.10 Item 12. When the clutch is energized the bypass pick up roll rotates which feeds the paper in the bypass tray. The bypass friction pad ensures that only a single piece of paper is moved to the paper path. The bypass drive gear is driven by the main bldc motor.

The media path from tray 1 and the bypass tray are the same.

Bypass Tray Paper Empty Sensing

The bypass tray paper empty actuator actuates the bypass tray paper empty sensor to detect a lack of paper in the tray.

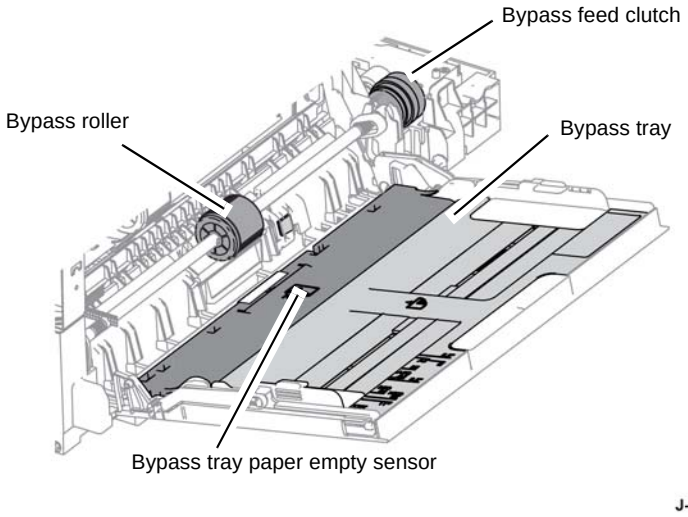

Figure 3 Bypass Tray

Paper Transport

Overview

This subsystem receives the paper that has been fed from the paper trays and transports the paper from the registration area to the xerographic subsystem.

The main components and functions are shown in Figure 1 and Table 1 below.

Sheet Transport from Tray 1 to the Registration Roller

The tray 1 pick-up clutch drives the tray 1 roller to transport the paper to the registration nip.

Registration

When a sheet is fed from the tray to the toner transfer section, the registration of the sheet may not be correctly maintained due to misalignment of the lead edges in the tray. To avoid this problem, the lead edge position needs to be aligned at the registration rollers before the sheet is fed to the transfer area. By pressing the edge of the sheet against the locked registration roller, the lead edge position of the sheet is corrected.

The registration feed roll is driven by the main BLDC motor, using the registration drive gear and registration clutch. The registration clutch is located on the registration roller. The registration clutch controls the registration feed roll to match paper and image on the drum at a predetermined registration point.

The registration sensor detects a jam in the registration area.

Paper Dust Cleaning

A paper dust cleaner PL 8.30 Item 10 is located to clean the registration idle roller as paper is fed from the trays.

Table 1 - Paper transportation and registration components

Item	Function
Tray 1 pick-up clutch	Controls the Tray 1 roller operation.
Tray 2 pick-up clutch	Controls the Tray 2 roller operation.
Tray 2 feed motor	Controls the tray 2 operation.
Tray 2 feed sensor	Detects a jam on the tray 2 path.
Pickup clutch	Controls the Bypass pickup roller operation.
Main BLDC motor	Drives the bypass roller, pick up roller, registration and duplex rollers.
Exit sensor	Detects a jam on the exit path.
Exit motor	Controls the exit roller operation.
Registration clutch	Controls the registration feed roll operation.
Registration sensor	Detects the paper just prior to the registration transport

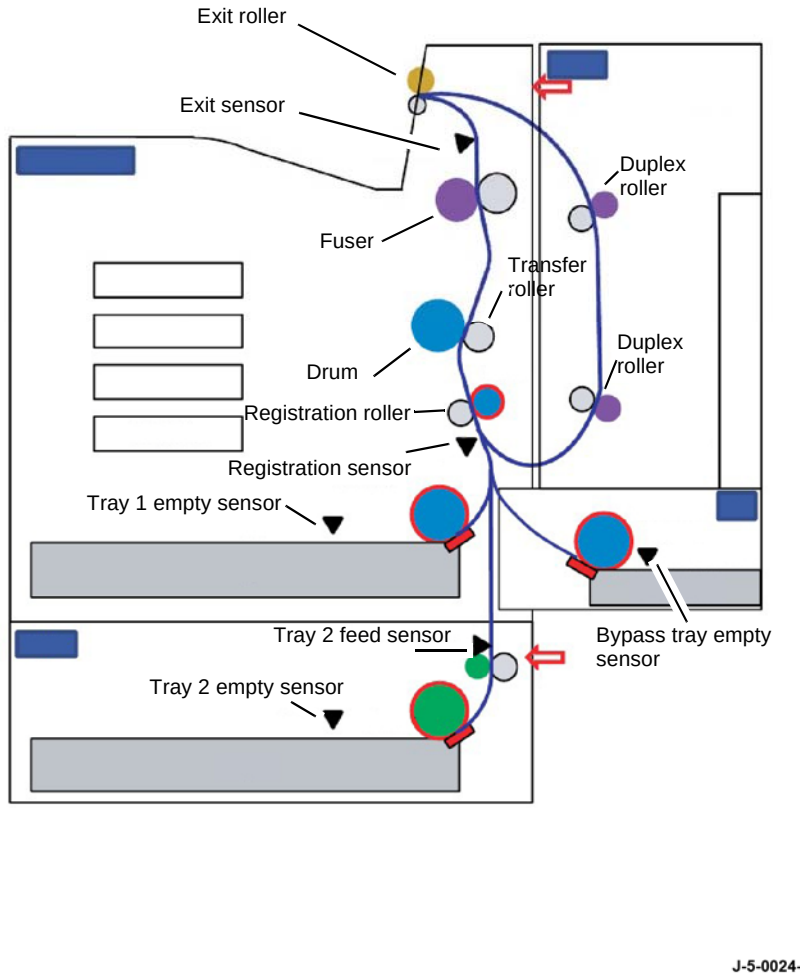

Figure 1 Paper transportation and registration components

Image Transfer and Fusing

The registration feed roll transports the paper to the drum cartridge and transfer roller, where image transfer occurs.

The drum transports the paper to the fuser where the image is fused. The fuser transports the paper to the exit roller.

Invert to Duplex

If the job is 2-sided, the exit guide moves position. The fuser motor drives to transport the paper to the exit assembly. Once the trail edge of the sheet is above the lower exit guide the trail edge of the paper then flips up above the exit guide. The exit motor then transports the paper to the duplex area.

Duplex

The duplex assembly is located in the side cover assembly.

The paper is transported to the duplex drive roll PL 8.20 Item 6 and then to the duplex feed roller PL 8.20 Item 1. The fuser motor and duplex drive gear PL 4.10 Item 3 drives the duplex assembly PL 8.10 Item 3. Paper is then transported to the registration roller and to the transfer area where side 2 is imaged.

Xerographics

Overview

The Xerographic subsystem consists of:

- Toner cartridge (CRU)
- Drum cartridge (CRU)
- Transfer roller
- Environmental sensor to measure ambient temperature and relative humidity.

Toner Cartridge

The toner cartridge PL 9.10 Item 1, consists of toner powder and a waste toner bin. The toner cartridge transfers the toner supply to the developer unit in the drum cartridge for development. The toner cartridge is a customer replaceable unit. The starter toner prints approximately 2.5k prints. The standard toner prints approximately 13.7k prints. Toner yield is measured by the ISO/IEC 19752 standard. The toner is non magnetic 2 element pulverization toner.

A CRU monitor (CRUM) is affixed to the outside of the toner cartridge. The CRUM detects the installation of the toner cartridge and measures residual toner. The toner cartridge, drum cartridge and CRUM interfaces with the main PWB.

Toner Delivery

The toner dispense motor PL 4.10 Item 12, drives the toner cartridge supply gear to supply toner to two mixing augers in the drum cartridge. The mixing augers supply toner to the magnetic roller. The toner concentration (TC) sensor on the developer unit controls the operating range of toner density. Waste toner is collected in the cleaning frame by the cleaning blade.

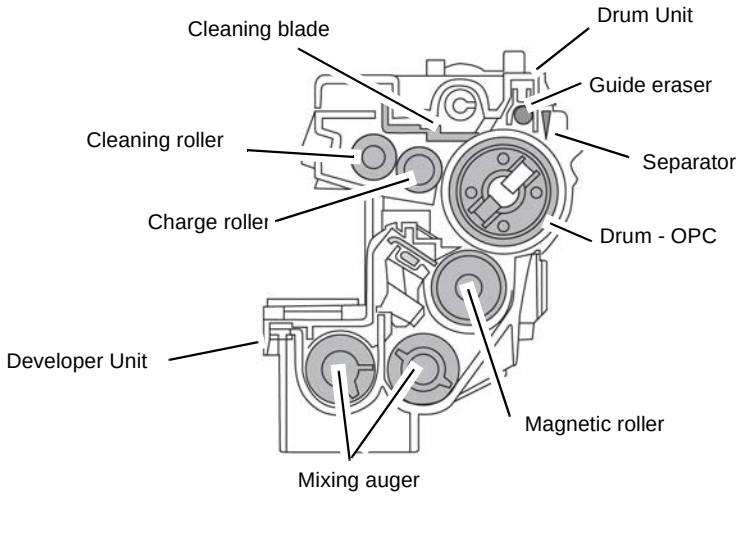

Figure 1 Drum cartridge overview

Development

Drum Cartridge

The drum cartridge PL 9.10 Item 2 is shipped with the machine but is not installed. The drum cartridge is a CRU with thumbscrews for customer replacement, and has a life of 80k prints. The drum cartridge consists of the drum unit and the developer unit.

Drum Unit

The drum unit consists of the OPC drum, charging roller and cleaning blade. The diameter of the drum is 30 mm with a circumference of about 94.2mm. The drum also consists of an ID chip which stores the count information and other data.

Developer Unit

The developer unit consist of the magnetic roller, metering blade and auger. The machine uses a dual component development system. The development unit contains 255g of toner carrier that is supplied to the magnetic roller by two mixing augers. The diameter of the magnetic roller is 18.2mm and has a lifespan of approximately 200K prints.

Mixing Auger

Two mixing augers circulate the developer forward and backward to agitate the developer and mix it with the toner. This process occurs:

- During the process control self-checking.
- During the toner supply job.
- During the development job.

Drum Drive

The OPC drum and magnetic roller are driven by the main BLDC motor and supplied with power from the coupling. The drive shaft is directly inserted into the OPC drum to fix the drum unit. This structure provides stable printing quality.

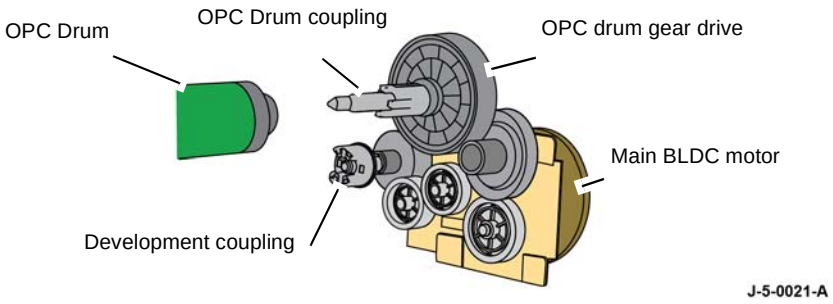

Figure 2 Drum drive

Transfer

The transfer roller PL 8.25 Item 10 transfers toner from the OPC drum to the paper, and is located in the side cover assembly PL 8.10 Item 5. Drive for the transfer roller is accomplished by the transfer roller being in direct contact with the OPC drum. The HVPS supplies high voltage to the transfer roller. The transfer roller has a life of approximately 100k prints.

Xerographic Process

There are 7 xerographic processing steps:

1. Charge: The charging roller applies a negative charge to the OPC drum.
2. Exposure: The laser scan unit (LSU) produces light through lenses and mirrors to form a latent image on the drum.
3. Development: The magnetic roller carries negatively charged toner to the latent image on the drum surface to form the toner image.
4. Transfer: As the paper passes the transfer area, the transfer roller transfers the toner image from the drum to the paper.
5. Cleaning: The cleaning blade removes the remaining toner on the drum surface after the image is transferred to the paper.
6. Drum quenching: A cleaning lamp illuminates the drum to perform discharge cleaning at the end of every job.
7. Fusing: The fuser fixes the toner image to the media using heat and pressure.

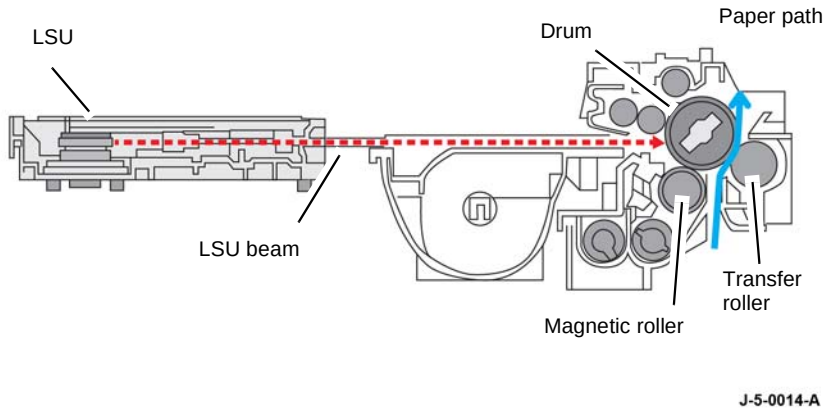

Figure 3 Printing Process Overview

Environmental Sensor

The temperature and humidity sensor measures ambient temperature and relative humidity, and is located at the rear of the machine.

Fusing and Copy Transportation

Fusing

The primary function of the fuser assembly is to fix the toner to the media and to transport that media to the exit transport with no damage or excessive curl. Fixing the toner to the media is done by a combination of heat and pressure. The machine uses a 2-roller fusing system and the thinner heat roller to improve the warm up time.

Heat warning labels and flocking are used to prevent the customer from contacting high temperature surfaces.

The fuser motor drives the fuser module. After the toner image is transferred to the paper, the paper passes through the fuser. The pressure roller is pressed against the heat roller to melt the toner and bond the image to the paper.

The fuser module is an engineer replaceable unit (ERU). The average life of the fuser module is 100,000 prints.

There are two fuser assembly configurations PL 10.10 Item 2:

- Fuser assembly (220V)
- Fuser assembly (110V)

Fuser Components

The fuser consists of a halogen lamp, heat roller, pressure roller, thermistor and thermostat, Figure 1.

Halogen Lamp

The fuser contains one 850W halogen lamp that is mounted inside the heat roller.

Heat Roller

The heat roller is heated by the halogen lamp, and contacts the pressure roller to form a nip through which the media is transported. The toner is melted by the heat roller and pressed into the media by the pressure of the roll. To prevent the heat roller from sticking to the toner, its surface is applied with PFA coating. Drive for the fuser assembly is provided by the fuser motor, fuser gear and RDCN fuser gear.

The heat roller is 0.9mm thick.

Pressure Roller

The pressure roller is a rubber roller which ensures proper nip width between the pressure roller and heat roller. Springs are used to force the heat roller and pressure roller together. This pressure bonds the melted toner to the paper.

The pressure roller is 5.0mm thick.

Thermistor

The thermistor is a temperature detecting sensor. The thermistor detects the temperature on the surface of the heat roller and controls the halogen lamp.

Temperature resistance: 7k ohms 180 degrees centigrade.

Thermostat

The thermostat is a non-contact type. The thermostat cuts off the AC power to the halogen lamp to prevent the heat roller overheating. The thermostat cuts off the power supply to the halogen lamp by opening the circuit when the heat roller becomes abnormally hot as a result of problems such as thermistor malfunction. The thermostat is used to prevent abnormal operation. When the thermostat is triggered, it must be replaced, as well as other damaged parts of the fuser assembly.

The control temperature is 195 degrees centigrade plus or minus 5 degrees centigrade.

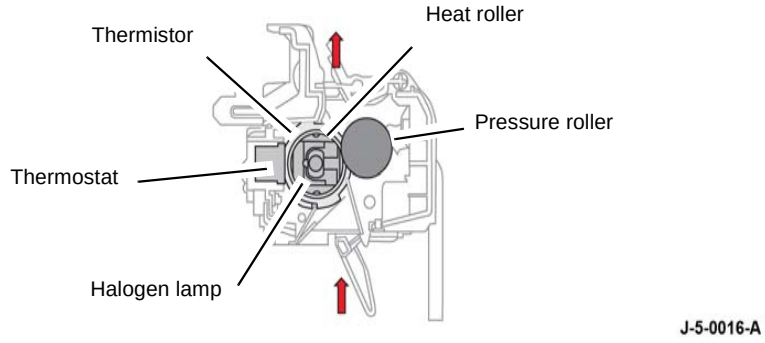

Figure 1 Fuser unit overview

Temperature Control

When the machine is powered on, the CPU turns on the halogen lamp. The lamp stays on until the contact thermistors detect the standby temperature. The CPU raises the temperature to the printing temperature. The temperature of the fuser is controlled by various temperatures, according to four conditions: environment, media type, printing mode and length of time the machine is powered on.

When the machine is in power save mode, the fuser turns off after one minute.

Fuser Cooling

The fuser fan PL 10.10 Item 3, part of the fusing and copy exit assembly, provides cooling for the fuser. The fan is driven by the main PWB.

Overheat Protection

The system temperature setting is set for overheating if the fuser reaches 220 degrees centigrade. These actions occur if the machine overheats:

1. 1st protecting device: the thermostat cuts off the AC power to the halogen lamp.
2. 2nd protecting device: the software cuts off.
3. 3rd protecting device: the thermostat cuts the power.

Fuser Safety

The machine includes fuser safety strategies:

- The fuser power is cut when the front cover is opened.
- Overheating protection, as detailed above.
- The surface temperature of the fuser cover is below 80 degrees centigrade.

Copy Transportation

The function of the copy transportation subsystem is to transport imaged sheets after they have been fused, to either:

- The exit tray
- The duplex transport for side 2 imaging

NOTE: *The duplex assembly is located in the side cover assembly.*

Fuser Motor

The fuser motor drives the fuser assembly to transport paper to the exit assembly.

Exit Motor

The exit motor drives the exit roller to transport paper to the exit, or to the duplex transport.

Exit Assembly

The exit assembly consists of the upper exit guide assembly and lower exit guide assembly PL 10.20 Item 10.

Exit Tray

By default, the machine will deliver sheets to the exit tray face down. The exit tray can stack up to 250 sheets of 80gsm paper.

FAX

Overview

The B1025 MFP supports an optional analog 1-line fax kit. The fax kit is not customer installable and must be installed by the CSE.

The fax kit contains the fax bracket and fax PWB, fax flat cable PL 20.10 Item 4 and speaker. An RJ 11 cable is also provided. Customers are required to provide fax cables for any unique country requirements. The fax PWB provides the fax interface to the machine. Fax functionality is selected and controlled by the UI.

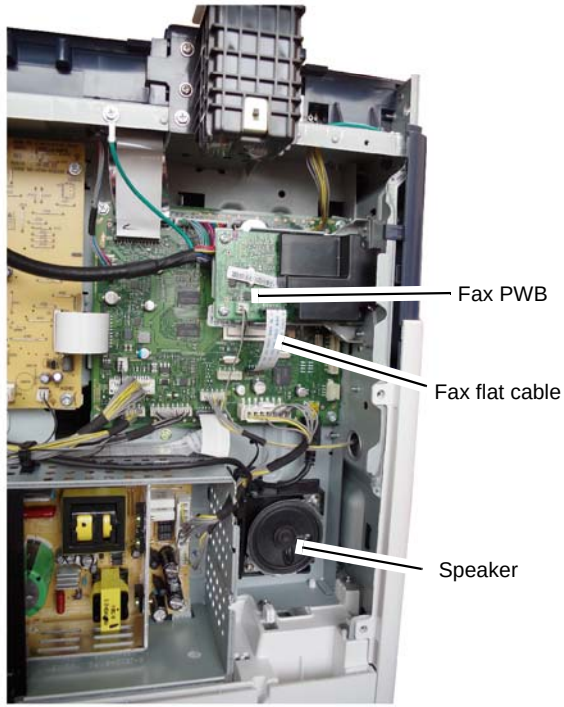

Figure 1 Fax location

Fax Specifications

Refer to Table 1:

Table 1 - Fax specifications

Characteristic	Specifications
Communication mode	ITU T.30
Communication system	PSTN / PABX (RJ11)

Table 1 - Fax specifications

Characteristic	Specifications
Modem speed	33.6 kbps
ITU document speed	3 seconds (ECM/MMR) @ 33.6 kbps
Compression	MH/MR/MMR/JBIG/JPEG
Standard resolution	200 x 100 dpi
Fine resolution	200 x 100 dpi
Superfine resolution	600 x 100 dpi

Software Loading

Overview

Software loading can be performed as part of a repair procedure or as a customer upgrade. Software upgrades can include software fixes, firmware upgrades, enhancements or maintenance.

Software Upgrade Methods

There are various methods to upgrade the software:

- The customer (system administrator) can submit the upgrade via USB or CentreWare Internet Services (CWIS).
- The CSE can submit the upgrade via USB or CWIS.

NOTE: *Software upgrade needs to be enabled in CWIS.*

For further information, refer to GP 12.

The B1022 MFP and B1025 MFP contain unique software. An upgrade file specific to each machine model must be used for the software upgrade process.

Software Upgrade Process

HD file - The system administrator sends the upgrade file containing all machine software to the machine, using the USB port or network. The upgrade file uses the format .hd. The machine receives the hd file as a print job, recognizes the file as an upgrade and extracts the file. The hd file then updates the machine.

USB upgrade - a software upgrade can be performed locally by downloading a .hd upgrade file from a USB drive to the device. This feature allows non-connected devices to have system upgrades without requiring a network drop.

CWIS upgrade - A software upgrade can be performed over the network, by sending the upgrade file using the Software Upgrade feature in CWIS.

NOTE: *The USB and CWIS upgrade process does not erase all of the data on the hard disk.*

Software Upgrade Enablement

The system administrator enables software upgrade in CWIS.

Software Upgrade Progress

During the software upgrade, the percentage complete progress is displayed on the UI screen. At completion of the software upgrade, the machine automatically reboots.

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for Incidents Involving a Xerox Product

For incidents in Canada: PIPEDA consent given ☐ YES ☐ NO	**EH&S Office Use ONLY** EH&S Incident Reference Number:
PIPEDA is the Canadian "Personal Information Protection and Electronic Documents Act."	
For incidents in the EU: Safe Harbour Complaint ☐ YES ☐ NO	

***Date Of Incident** (mm / dd / yyyy):

Product Description

***Model No. or Product Name**:

Product Serial Number:	**Serial Number(s) of Accessory (ies):**
Installation Date:	**Total Copy Meter**:

Date of last service maintenance:

List damaged and affected part(s) of the machine by description and part number:

*Description	Part Number

***Location of product and affected part(s):**

Customer Identification

***Customer Name:**	***Name of Customer Contact Person**:	
***Address:**	**E-mail:**	***Telephone**:
		Fax:

Customer Service Engineer Identification

***Name** (required for Xerox serviced equipment):	**Employee**:	**E-mail**:
Location:	***Phone** (required for Xerox serviced equipment):	

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Details of Incident

***Description Of Incident:** **(Check all that apply)**

☐ Smoke

Describe quantity and duration of smoke:

☐ Fire with open flames seen

☐ Electric shock to operator or service representative

☐ Physical injury/illness to operator or service representative

Describe:

☐ Other, describe:

MANDATORY DESCRIPTION (above): Provide a detailed description of all valid factors that may have contributed to the incident. Hardware involved in the incident should be preserved and retained for further investigation should investigation be deemed necessary by EH&S.

LIST INCIDENT DESCRIPTIONS AND SUPPORT DIAGRAMS/DATA INCLUDED OR ATTACHED:

***Any damage to customer property?** No ☐ Yes ☐ Describe:

***Did external emergency response provider(s) such as a fire department, ambulance, etc. respond?**

No ☐ Yes ☐ Identify: (i.e., source, names of individuals)

Apparent cause of incident (identify part that is suspected to be responsible for the incident)

***Preliminary actions taken to mitigate incident:**

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