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Xerox® B410 Service Manual

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Publication Information

Xerox® B410 Printer

Service Manual

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Prepared by

Xerox Corporation

800 Phillips Road

Webster, NY 14580

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Notices, conventions, and safety information

Laser Notice

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, Chapter I, Subchapter J for Class I (1) laser products, and elsewhere is certified as a Class I consumer laser product conforming to the requirements of IEC 60825-1: 2014, EN 60825-1:2014+A11:2021, and EN 50689:2021.

Class I laser products are not considered to be hazardous. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service conditions. The printer has a non-serviceable printhead assembly that contains a laser with the following specifications:

Class: IIIb (3b) AlGaInP

Nominal output power (milliwatts): 15

Wavelength (nanometers): 650–670

Avis Relatif À L'utilisation Du Laser

Cette imprimante est certifiée conforme aux exigences de la réglementation des Etats-Unis relative aux produits laser de classe I (1) (DHHS 21 CFR, Chapitre I, Sous-chapitre J). Pour les autres pays, elle est certifiée conforme aux exigences des normes CEI 60825-1:2014 relatives aux produits laser de classe I.

Les produits laser de classe I ne sont pas considérés comme dangereux. Le système laser ainsi que l'imprimante ont été conçus de manière à ce que personne ne soit jamais exposé à des radiations laser dépassant le niveau de classe I dans le cadre d'un fonctionnement normal, de l'entretien par l'utilisateur ou de la maintenance. L'imprimante dispose d'un ensemble de têtes d'impression non réparable contenant un laser doté des caractéristiques suivantes :

Class: IIIb (3b) AlGaInP

Nominal output power (milliwatts): 15

Wavelength (nanometers): 650–670

Aviso De Láser

Esta impresora se ha certificado en EE.UU. cumpliendo con los requisitos de DHHS 21 CFR, capítulo I, subcapítulo J para los productos láser de Clase I (1) y en otros países está certificada como un producto láser de Clase I de acuerdo con los requisitos de IEC 60825-1: 2014.

Los productos láser de Clase I no se consideran peligrosos. El sistema láser y la impresora se han diseñado para que el ser humano no acceda nunca a las radiaciones láser por encima del nivel de Clase I durante su uso normal, ni en tareas de mantenimiento o intervenciones de servicio técnico prescritas. El conjunto de cabezal de impresión de la impresora no se puede reparar y contiene un láser con las siguientes especificaciones:

Class: IIIb (3b) AlGaInP

Nominal output power (milliwatts): 15

Wavelength (nanometers): 650–670

Laser-hinweis

Der Drucker wurde in den USA zertifiziert und entspricht den Anforderungen der Vorschriften DHHS 21 CFR Kapitel I für Laserprodukte der Klasse I (1), andernorts ist er als Laserprodukt der Klasse I zertifiziert, das den Anforderungen von IEC 60825-1 entspricht: 2014.

Laserprodukte der Klasse I werden nicht als gefährlich betrachtet. Das Lasersystem und der Drucker sind so konstruiert, dass unter normalen Betriebsbedingungen, bei der Wartung durch den Benutzer oder bei den vorgeschriebenen Wartungsbedingungen Menschen keiner Laserstrahlung ausgesetzt sind, die die Werte für Klasse I überschreitet. Der Drucker verfügt über eine Druckkopfeinheit, die nicht gewartet werden kann und mit einem Laser mit den folgenden Spezifikationen ausgestattet ist.

Class: IIIb (3b) AlGaInP

Nominal output power (milliwatts): 15

Wavelength (nanometers): 650–670

Conventions

Note : A *note* identifies information that could help you.

Warning : A *warning* identifies something that could damage the product hardware or software.

CAUTION : A *caution* indicates a potentially hazardous situation that could injure you.

Different types of caution statements include:

CAUTION—POTENTIAL INJURY: Indicates a risk of injury.

CAUTION—SHOCK HAZARD: Indicates a risk of electrical shock.

CAUTION—HOT SURFACE: Indicates a risk of burn if touched.

CAUTION—TIPPING HAZARD: Indicates a crush hazard.

CAUTION—PINCH HAZARD: Indicates a risk of being caught between moving parts.

Conventions

Remarque : Une *Remarque* fournit des informations pouvant vous être utiles.

Avertissement : Un *Avertissement* signale un danger susceptible d'endommager le logiciel ou le matériel.

ATTENTION : La mention *Attention* vous signale un risque de blessure corporelle.

Il existe différentes mises en garde :

ATTENTION—RISQUE DE BLESSURE :Signale un risque de blessure.

ATTENTION—RISQUE D'ELECTROCUTION : Signale un risque d'électrocution.

ATTENTION—SURFACE CHAUDE : Signale un risque de brûlure de contact.

ATTENTION—RISQUE DE BASCULEMENT : Signale un risque d'écrasement.

ATTENTION : RISQUE DE PINCEMENT : Signale un risque de pincement entre des pièces mobiles.

Convenciones

Nota : Las *notas* señalan información que puede serle útil.

Aviso : Las *advertencias* indican algo que podría dañar el software o el hardware del producto.

PRECAUCIÓN : Las *precauciones* indican una situación de posible peligro que puede implicar lesiones para el usuario.

Estos son los tipos de avisos de precaución que existen:

PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: Indica que existe riesgo de lesiones.

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Indica que existe riesgo de descarga eléctrica.

PRECAUCIÓN: SUPERFICIE CALIENTE: Indica que existe riesgo de sufrir quemaduras por contacto.

PRECAUCIÓN: RIESGO DE CAÍDA: Indica que existe peligro de aplastamiento.

PRECAUCIÓN: PELIGRO DE ATRAPAMIENTO: Existe riesgo de atrapamiento entre las piezas en movimiento.

Konventionen

Hinweis: Ein *Hinweis* enthält nützliche Informationen.

Warnung: Durch eine *Warnung* werden Sie auf einen Umstand hingewiesen, durch den die Produkthardware oder -software beschädigt werden könnte.

VORSICHT : *Vorsicht* weist auf eine mögliche gefährliche Situation hin, die ein Verletzungsrisiko birgt.

Verschiedene Vorsichtshinweise:

VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Weist auf ein Verletzungsrisiko hin.

VORSICHT – STROMSCHLAGGEFAHR: Weist auf das Risiko eines elektrischen Schlags hin.

VORSICHT – HEISSE OBERFLÄCHE: Weist auf das Risiko von Verbrennungen bei Berührung hin.

VORSICHT – KIPPGEFAHR: Weist auf Quetschgefahr hin.

VORSICHT – QUETSCHGEFAHR: Weist auf das Risiko hin, zwischen beweglichen Komponenten eingequetscht zu werden.

Safety Information

- The safety of this product is based on testing and approvals of the original design and specific components. The manufacturer is not responsible for safety in the event of use of unauthorized replacement parts.
- The maintenance information for this product has been prepared for use by a professional service person and is not intended to be used by others.
- There may be an increased risk of electrical shock and personal injury during disassembly and servicing of this product. Professional service personnel should understand this risk and take necessary precautions.
- CAUTION—SHOCK HAZARD: When you see this symbol on the product, there is a danger from hazardous voltage in the area of the product where you are working. Unplug the product before you begin, or use caution if the product must receive power in order to perform the task.
- CAUTION—POTENTIAL INJURY: The lithium battery in this product is not intended to be replaced. There is a danger of explosion if a lithium battery is incorrectly replaced. Do not recharge, disassemble, or incinerate a lithium battery. Discard used lithium batteries according to the manufacturer's instructions and local regulations.
- CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.
- CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, use only the power cord provided with this product or the manufacturer's authorized replacement.
- CAUTION—POTENTIAL INJURY: Do not use this product with extension cords multioutlet power strips, multioutlet extenders, or UPS devices. The power capacity of these types of accessories can be easily overloaded by a laser printer and may result in a risk of fire, property damage, or poor printer performance.
- CAUTION—POTENTIAL INJURY: Only a Xerox Inline Surge Protector that is properly connected between the printer and the power cord provided with the printer may be used with this product. The use of non-Xerox surge protection devices may result in a risk of fire,property damage, or poor printer performance.
- CAUTION—POTENTIAL INJURY: If the printer weight is greater than 20 kg (44 lb), then it may require two or more people to lift it safely.

Consignes De Sécurité

- La sécurité de ce produit est basée sur des tests et certifications de sa conception d'origine et de ses composants spécifiques. Le fabricant décline toute responsabilité en cas d'utilisation de pièces de rechange non autorisées.
- Les informations de maintenance de ce produit sont destinées à des professionnels qualifiés et ne sont pas conçues pour être utilisées par d'autres personnes.
- Il existe un risque potentiel de choc électrique et de blessures lors du démontage et de la maintenance de ce produit. Le personnel professionnel de maintenance doit comprendre les risques et prendre les précautions nécessaires.
- ATTENTION—RISQUE D'ELECTROCUTION : Ce symbole indique un danger lié à des niveaux de tension dangereux dans la zone du produit à manipuler. Débranchez le produit avant de commencer, ou agissez avec prudence si le produit doit être alimenté pour effectuer l'opération.
- ATTENTION—RISQUE DE BLESSURE : La batterie lithium de ce produit n'est pas destinée à être remplacée. Si vous ne respectez pas les instructions de remplacement de la batterie, vous risquez de provoquer une explosion. Ne rechargez pas, ne désassemblez pas et ne brûlez pas la batterie au lithium Mettez les batteries lithium usagées au rebut selon les instructions du fabricant et les réglementations locales.
- ATTENTION—RISQUE DE BLESSURE : Pour éviter tout risque d'électrocution ou d'incendie, branchez le câble d'alimentation directement à une prise électrique répondant aux exigences requises et correctement mise à la terre, proche du produit et facile d'accès.
- ATTENTION—RISQUE DE BLESSURE : Pour éviter tout risque d'incendie ou d'électrocution, utilisez uniquement le câble d'alimentation fourni avec ce produit ou un câble de remplacement autorisé par le fabricant.
- ATTENTION—RISQUE DE BLESSURE : Ce produit ne doit pas être utilisé avec des rallonges, des barres multiprises, des rallonges multiprises ou des périphériques UPS. La capacité de ces types d'accessoires peut être facilement dépassée par une imprimante laser, d'où un risque de dégâts matériels, d'incendie ou de performances d'impression amoindries.
- ATTENTION—RISQUE DE BLESSURE : Utilisez uniquement un parasurtenseur correctement raccordé à l'imprimante et au câble d'alimentation fourni avec la machine. L'utilisation de parasurtenseurs non fabriqués par Xerox comporte un risque d'incendie et de dégâts matériels, et peut amoindrir les performances de l'imprimante.
- ATTENTION—RISQUE DE BLESSURE : Si votre imprimante pèse plus de 20 kg (44 lb), l'intervention d'au moins deux personnes est nécessaire pour la soulever sans risque.

Información De Seguridad

- La seguridad de este producto se basa en las pruebas y comprobaciones del diseño original y los componentes específicos. El fabricante no se hace responsable de la seguridad en caso de uso de piezas de repuesto no autorizadas.
- La información de mantenimiento de este producto se ha preparado para su uso por parte de un profesional de asistencia técnica y no está diseñada para su uso por parte de otros usuarios.
- Es posible que haya un mayor riesgo de descarga eléctrica y daños personales durante el desmontaje y el mantenimiento de este producto. El personal de asistencia profesional debe conocer este riesgo y tomar las precauciones necesarias.
- PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Cuando vea este símbolo en el producto, existe peligro de tensiones peligrosas en el área del producto en la que está trabajando. Desconecte el producto antes de empezar o tenga cuidado si el producto debe recibir alimentación a fin de realizar la tarea.
- PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: La batería de litio de este producto no debe reemplazarse. Existe riesgo de explosión si se sustituye incorrectamente una batería de litio. No recargue, desmonte ni incinere una batería de litio. Deseche las baterías de litio usadas según las instrucciones del fabricante y las normativas locales.
- PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: Para evitar el riesgo de incendio o descarga eléctrica, conecte el cable de alimentación a una toma de corriente debidamente conectada a tierra con la potencia adecuada que se encuentre cerca del dispositivo y resulte fácilmente accesible.
- PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: Para evitar el riesgo de incendio o descarga eléctrica, utilice exclusivamente el cable de alimentación que se suministra junto con este producto o el repuesto autorizado por el fabricante.
- PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: No utilice este producto con cables alargadores, regletas de varias tomas, cables alargadores de varias tomas o sistemas de alimentación ininterrumpida. La potencia de este tipo de accesorios puede sobrecargarse fácilmente si se utiliza una impresora láser, lo que puede dar lugar a que el rendimiento de la impresora sea bajo, a daños materiales o a posibles incendios.
- PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: Solo debe usarse con este producto un protector de sobretensión insertable Xerox debidamente conectado entre la impresora y el cable de alimentación que con ella se suministra. El uso de protectores de sobretensión de marcas distintas a Xerox puede dar lugar a que el rendimiento de la impresora sea bajo, a daños materiales o a posibles incendios.
- PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: si el peso de la impresora es superior a 20 kg (44 lb), pueden ser necesarias dos o más personas para levantarla de forma segura.

Sicherheitshinweise

- Die Sicherheit dieses Produkts basiert auf Tests und Zulassungen des Originaldesigns und der spezifischen Komponenten. Sofern nicht autorisierte Ersatzteile eingesetzt werden, übernimmt der Hersteller keinerlei Verantwortung in Bezug auf die Sicherheit dieses Produkts.
- Die Wartungsinformationen für dieses Produkt wurden für ausgebildete Servicemitarbeiter zusammengestellt und dürfen nicht von anderen verwendet werden.
- Möglicherweise besteht bei der Demontage und Wartung dieses Produkts eine erhöhte Stromschlag- und Verletzungsgefahr. Ausgebildete Servicemitarbeiter sollten sich dieser Gefahr bewusst sein und die notwendigen Vorsichtsmaßnahmen ergreifen.
- VORSICHT – STROMSCHLAGGEFAHR: Wenn Sie dieses Symbol sehen, besteht eine Gefahr durch gefährliche Spannungen in dem Produktbereich, in dem Sie arbeiten. Trennen Sie das Produkt von seiner Stromverbindung, bevor Sie beginnen, oder gehen Sie vorsichtig vor, wenn das Produkt für die Durchführung der Aufgabe mit Strom versorgt werden muss.
- VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Die Lithiumbatterie in diesem Produkt darf nicht ausgetauscht werden. Wird eine Lithiumbatterie nicht ordnungsgemäß ausgetauscht, besteht Explosionsgefahr. Lithiumbatterien dürfen auf keinen Fall wieder aufgeladen, auseinander genommen oder verbrannt werden. Befolgen Sie zum Entsorgen verbrauchter Lithiumbatterien die Anweisungen des Herstellers und die örtlichen Bestimmungen.
- VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Um Feuer- und Stromschlaggefahr zu vermeiden, schließen Sie das Netzkabel direkt an eine ordnungsgemäß geerdete Steckdose an, die sich in der Nähe des Geräts befindet und leicht zugänglich ist.
- VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Um das Risiko eines Feuers oder elektrischen Schlags zu vermeiden, verwenden Sie ausschließlich das diesem Produkt beiliegende Netzkabel bzw. ein durch den Hersteller zugelassenes Ersatzkabel.
- VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Verwenden Sie das Produkt nicht mit Verlängerungskabeln, Mehrfachsteckdosen, Mehrfachverlängerungen oder Geräten für unterbrechungsfreie Stromversorgung. Die Belastbarkeit solcher Zubehörteile kann durch Laserdrucker schnell überschritten werden, was zu Brandgefahr, Beschädigung von Eigentum oder einer eingeschränkten Druckerleistung führen kann.
- VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Mit diesem Produkt darf nur ein Xerox Inline Surge Protector verwendet werden, der vorschriftsgemäß zwischen dem Drucker und dem mitgelieferten Netzkabel angeschlossen ist. Die Verwendung von nicht von Xerox stammenden Überspannungsschutzgeräten kann zu Brandgefahr, Beschädigung von Eigentum oder einer eingeschränkten Druckerleistung führen.
- VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Wenn der Drucker mehr als 20 kg wiegt, sind zum sicheren Anheben mindestens zwei Personen notwendig.

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: 585-422-2249.

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 in the following location:

- GSN Library 1789

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Change History

Change History

3

General Information

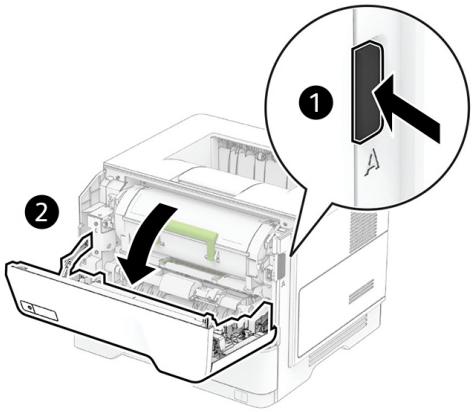
Printer Model Configurations

The Xerox B410 printer is a small, monochrome, network-capable, laser printer.

Model	Configurations
B410	Monochrome with 4.3-inch touch-screen display, duplex print, networking and hard disk support, optional tray support, wireless module support

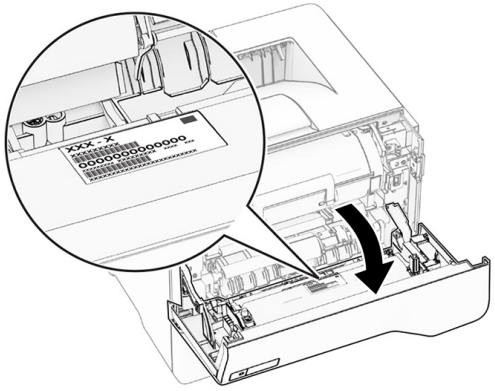
Locating the Printer Serial Number

- Open door A.



B410S_4139

- Locate the serial number.



B410S_4140

Selecting paper

Paper guidelines

Use the appropriate paper to prevent jams and help ensure trouble-free printing.

- Always use new, undamaged paper.
- Before loading paper, know the recommended printable side of the paper. This information is usually indicated on the paper package.
- Do not use paper that has been cut or trimmed by hand.
- Do not mix paper sizes, types, or weights in the same tray; mixing results in jams.
- Do not use coated papers unless they are specifically designed for electrophotographic printing.

For more information, see the Paper and Specialty Media Guide.

Paper characteristics

The following paper characteristics affect print quality and reliability. Consider these factors before printing on them.

Weight

Trays can feed paper of varying weights. Paper lighter than 60 g/m^2 (16 lb) may not be stiff enough to feed properly, and may cause jams. For more information, see Supported Paper Weights.

Curl

Curl is the tendency for paper to curl at its edges. Excessive curl can cause paper feeding problems. Curl can occur after the paper passes through the printer, where it is exposed to high temperatures. Storing paper unwrapped in hot, humid, cold, or dry conditions can contribute to paper curling before printing and can cause feeding problems.

Smoothness

Paper smoothness directly affects print quality. If paper is too rough, toner cannot fuse to it properly. If paper is too smooth, it can cause paper feeding or print quality issues. We recommend the use of paper with 50 Sheffield points.

Moisture content

The amount of moisture in paper affects both print quality and the printer ability to feed the paper correctly. Leave paper in its original wrapper until you use it. Exposure of paper to moisture changes can degrade its performance.

Before printing, store paper in its original wrapper for 24 to 48 hours. The environment in which the paper is stored must be the same as the printer . Extend the time several days if the storage or transportation environment is very different from the printer environment. Thick paper may also

require a longer conditioning period.

Grain direction

Grain refers to the alignment of the paper fibers in a sheet of paper. Grain is either *grain long* which runs the length of the paper, or *grain short* which runs the width of the paper. For recommended grain direction, see Supported Paper Weights.

Fiber content

Most high-quality xerographic paper is made from 100 percent chemically treated pulped wood. This content provides the paper with a high degree of stability, resulting in fewer paper feeding problems and better print quality. Paper containing fibers such as cotton can negatively affect paper handling.

Unacceptable paper

The following paper types are not recommended for use with the printer:

- Chemically treated papers that are used to make copies without carbon paper. They are also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper.
- Preprinted papers with chemicals that may contaminate the printer.
- Preprinted papers that can be affected by the temperature in the printer fuser.
- Preprinted papers that require a registration (the precise print location on the page) greater than ±2.3 mm (±0.09 in.). For example, optical character recognition (OCR) forms.

  Sometimes, registration can be adjusted with a software app to print successfully on these forms.
- Coated papers (erasable bond), synthetic papers, or thermal papers.
- Rough-edged, rough or heavily textured surface papers, or curled papers.
- Recycled papers that fail EN12281:2002 (European).
- Paper weighing less than 60 g/m^2 (16 lb).
- Multiple-part forms or documents.

Storing paper

Use these paper storage guidelines to help avoid jams and uneven print quality:

- Store paper in its original wrapper in the same environment as the printer for 24 to 48 hours before printing.
- Extend the time several days if the storage or transportation environment is very different from the printer environment. Thick paper may also require a longer conditioning period.
- For best results, store paper where the temperature is 21°C (70°F) and the relative humidity is 40 percent.
- Most label manufacturers recommend printing in a temperature range of 18–24°C (65–75°F) with relative humidity between 40 and 60 percent.
- Store paper in cartons, on a pallet or shelf, rather than on the floor.

- Store individual packages on a flat surface.
- Do not store anything on top of individual paper packages.
- Take paper out of the carton or wrapper only when you are ready to load it in the printer. The carton and wrapper help keep the paper clean, dry, and flat.

Selecting preprinted forms and letterhead

- Use grain long paper.
- Use only forms and letterhead printed using an offset lithographic or engraved printing process.
- Avoid paper with rough or heavily textured surfaces.
- Use inks that are not affected by the resin in toner. Inks that are oxidation-set or oil-based generally meet these requirements; latex inks might not.
- Print samples on preprinted forms and letterheads considered for use before buying large quantities. This action determines whether the ink in the preprinted form or letterhead affects print quality.
- When in doubt, contact your paper supplier.
- When printing on letterhead, load the paper in the proper orientation for your printer. For more information, see the Paper and Specialty Media Guide.

Supported Paper Sizes

Paper size	Standard 550-sheet tray	Optional 550-sheet tray	Multipurpose feeder	Two-sided printing
A4 210 x 297 mm (8.27 x 11.7 in.)	✓	✓	✓	✓
A5 Portrait (SEF) 148 x 210 mm (5.83 x 8.27 in.)	✓	✓	✓	X
A5 Landscape (LEF) [1] 210 x 148 mm (8.27 x 5.83 in.)	✓	✓	✓	X
A6 105 x 148 mm (4.13 x 5.83 in.)	✓	✓	✓	X
JIS B5 182 x 257 mm (7.17 x 10.1 in.)	✓	✓	✓	X

Paper size	Standard 550-sheet tray	Optional 550-sheet tray	Multipurpose feeder	Two-sided printing
Oficio (Mexico) 216 x 340 mm (8.5 x 13.4 in.)	✓	✓	✓	✓
Hagaki 100 x 148 mm (3.93 x 5.83 in.)	X	X	✓	X
Statement 139.7 x 215.9 mm (5.5 x 8.5 in.)	✓	✓	✓	X
Executive 184.2 x 266.7 mm (7.25 x 10.5 in.)	✓	✓	✓	X
Letter 215.9 x 279.4 mm (8.5 x 11 in.)	✓	✓	✓	✓
Legal 215.9 x 355.6 mm (8.5 x 14 in.)	✓	✓	✓	✓
Folio 215.9 x 330.2 mm (8.5 x 13 in.)	✓	✓	✓	✓
Universal [2] 105 x 148 mm to 215.9 x 359.92 mm (4.13 x 5.83 in. to 8.5 x 14.17 in.)	✓	✓	X	✓[3]
Universal [2] 76.2 x 127 mm to 215.9 x 359.92 mm (3 x 5.83 in. to 8.5 x 14.17 in.)	X	X	✓	X
Universal [2] 25.4 x 25.4 mm to 215.9 x 355.6 mm	X	X	X	X

Paper size	Standard 550-sheet tray	Optional 550-sheet tray	Multipurpose feeder	Two-sided printing
(1 x 1 in. to 8.5 x 14 in.)				
7 3/4 Envelope 98.4 x 190.5 mm (3.875 x 7.5 in.)	X	X	✓	X
9 Envelope 98.4 x 225.4 mm (3.875 x 8.9 in.)	X	X	✓	X
10 Envelope 104.8 x 241.3 mm (4.12 x 9.5 in.)	X	X	✓	X
DL Envelope 110 x 220 mm (4.33 x 8.66 in.)	X	X	✓	X
C5 Envelope 162 x 229 mm (6.38 x 9.01 in.)	X	X	✓	X
B5 Envelope 176 x 250 mm (6.93 x 9.84 in.)	X	X	✓	X
Other Envelope 76.2 x 127 mm to 215.9 x 359.92 mm (3 x 5.83 in. to 8.5 x 14.17 in.)	X	X	✓	X

[1] The default support is short-edge feed.

[2] When Universal is selected, the page is formatted for 215.90 x 355.60 mm (8.5 x 14 in.) unless specified by the application.

[3] Paper must at least be 210 mm (8.27in.) wide and 279.4 mm (11 in.) long for two-sided printing.

Supported Paper Types

Paper type	Standard 550-sheet tray	Optional 550-sheet tray	Multipurpose feeder	Two-sided printing
Plain paper	✓	✓	✓	✓
Card stock	X	X	✓	X
Recycled	✓	✓	✓	✓
Paper labels*	✓	✓	✓	X
Bond	✓	✓	✓	✓
Letterhead	✓	✓	✓	✓
Preprinted	✓	✓	✓	✓
Colored Paper	✓	✓	✓	✓
Light Paper	✓	✓	✓	✓
Heavy Paper	✓	✓	✓	✓
Rough/Cotton	✓	✓	✓	✓
Envelope	X	X	✓	X
Rough envelope	X	X	✓	X

* One-sided paper labels are supported for occasional use of less than 20 pages per month. Vinyl, pharmacy, or two-sided labels are not supported.

Supported Paper Weights

Standard 550-sheet tray	Optional 550-sheet tray	Multipurpose feeder	Two-sided printing*
60–120 g/m² (16–32 lb. bond)	60–120 g/m² (16–32 lb. bond)	60–216 g/m² (16–58 lb. bond)	60–120 g/m² (16–24 lb. bond)

* Does not support card stock, labels, or envelopes.

Tools Required For Service

- Flat-blade screwdrivers, various sizes
- #1 Phillips screwdriver, magnetic
- #2 Phillips screwdriver, magnetic
- #2 Phillips screwdriver, magnetic short-blade
- Torx screwdriver (T20 head)
- Needle-nose pliers
- Diagonal side cutters
- Spring hook
- Feeler gauges
- Analog or digital multimeter
- 3-mm ball hex wrench
- Toner vacuum
- Flashlight

Change Tags

Change Tag Introduction

This section describes tags associated with the printer, as well as multinational applicability, classification codes, and permanent or temporary modification information. Important modifications to the printer are identified by a tag number which is recorded on a tag matrix inside the front door.

Classification Codes

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 non-volatile 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.

Classification Code	Description
M	Mandatory tag.
N	Tag not installed in the field.
O	Optional tag.
R	Repair tag.

The Change Tag location is available in MPF access cover.

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4

Diagnostic Information

Troubleshooting Precautions

CAUTION—SHOCK HAZARD: When you see this symbol on the product, there is a danger from hazardous voltage in the area of the product where you are working. Unplug the product before you begin, or use caution if the product must receive power in order to perform the task.

CAUTION—SHOCK HAZARD: This product uses an electronic power switch. It does not physically disconnect the input AC voltage. To avoid the risk of electrical shock, always remove the power cord from the printer when removal of the input AC voltage is required.

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock while troubleshooting with covers removed or doors open, do not touch the exposed wires or circuits while the printer is connected to an electrical outlet.

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock and to prevent damage to the printer, remove the power cord from the electrical outlet and disconnect all connections to any external devices before you connect or disconnect any cable, electronic board, or assembly.

CAUTION—HOT SURFACE: The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.

CAUTION—PINCH HAZARD: To avoid the risk of a pinch injury, use caution in areas marked with this label. Pinch injuries may occur around moving parts, such as gears, doors, trays, and covers.

Précautions de dépannage

ATTENTION—RISQUE D'ELECTROCUTION : Ce symbole indique un danger lié à des niveaux de tension dangereux dans la zone du produit à manipuler. Débranchez le produit avant de commencer, ou agissez avec prudence si le produit doit être alimenté pour effectuer l'opération.

ATTENTION—RISQUE D'ELECTROCUTION : Ce produit utilise un commutateur d'alimentation électronique. Il ne déconnecte pas physiquement la tension d'alimentation CA. Pour éviter tout risque d'électrocution, débranchez toujours le cordon d'alimentation de l'imprimante lorsque vous devez déconnecter la tension d'alimentation CA.

ATTENTION—RISQUE D'ELECTROCUTION : Pour éviter tout risque d'électrocution lors du dépannage de l'imprimante avec les capots retirés ou les portes ouvertes, prenez garde de ne pas toucher les fils ou circuits dénudés si l'imprimante est connectée à une prise électrique.

ATTENTION—RISQUE D'ELECTROCUTION : Pour éviter tout risque d'électrocution et éviter d'endommager l'imprimante, débranchez le cordon d'alimentation de la prise électrique et déconnectez toute connexion à tout périphérique externe avant de brancher ou débrancher des câbles ou circuits et assemblages électroniques.

ATTENTION—SURFACE CHAUDE : L'intérieur de l'imprimante risque d'être brûlant. pour réduire le risque de brûlure, laissez la surface ou le composant refroidir avant d'y toucher.

ATTENTION : RISQUE DE PINCEMENT : Pour éviter tout risque de blessure par pincement, agissez avec précaution au niveau des zones signalées par cette étiquette. Les blessures par pincement peuvent se produire autour des pièces mobiles telles que les engrenages, portes, tiroirs et capots.

Precauciones durante la solución de problemas

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Cuando vea este símbolo en el producto, existe peligro de tensiones peligrosas en el área del producto en la que está trabajando. Desconecte el producto antes de empezar o tenga cuidado si el producto debe recibir alimentación a fin de realizar la tarea.

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Este producto utiliza un interruptor de corriente electrónico. No desconecta físicamente la entrada de voltaje de CA. Para evitar el riesgo de descarga eléctrica, desenchufe siempre el cable de alimentación de la impresora cuando sea necesario retirar la entrada de voltaje de CA.

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Para evitar el riesgo de descarga eléctrica al solucionar problemas sin las cubiertas o con las puertas abiertas, no toque los cables ni los circuitos expuestos mientras la impresora está conectada a una toma de corriente.

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Para evitar el riesgo de descargas eléctricas y daños en la impresora, retire el cable de alimentación de la toma eléctrica y desconecte todas las conexiones a dispositivos externos antes de conectar o desconectar cualquier cable, placa electrónica o conjunto.

PRECAUCIÓN: SUPERFICIE CALIENTE: El interior de la impresora podría estar caliente. Para evitar el riesgo de heridas producidas por el contacto con un componente caliente, deje que la superficie se enfríe antes de tocarlo.

PRECAUCIÓN: PELIGRO DE ATRAPAMIENTO: Para evitar el riesgo de lesión por atrapamiento, preste atención en las áreas marcadas con esta etiqueta. Las lesiones por atrapamiento se pueden producir en torno a partes móviles, tales como engranajes, puertas, bandejas y cubiertas.

Vorsichtsmaßnahmen bei der Fehlerbehebung

VORSICHT – STROMSCHLAGGEFAHR: Wenn Sie dieses Symbol sehen, besteht eine Gefahr durch gefährliche Spannungen in dem Produktbereich, in dem Sie arbeiten. Trennen Sie das Produkt von seiner Stromverbindung, bevor Sie beginnen, oder gehen Sie vorsichtig vor, wenn das Produkt für die Durchführung der Aufgabe mit Strom versorgt werden muss.

VORSICHT – STROMSCHLAGGEFAHR: Dieses Produkt verwendet einen elektronischen Leistungsschalter. Er trennt die Eingangswechselspannung nicht physikalisch. Um das Risiko eines elektrischen Schlags zu vermeiden, ziehen Sie stets das Netzkabel vom Drucker ab, wenn eine Abtrennung der Eingangswechselspannung erforderlich ist.

VORSICHT – STROMSCHLAGGEFAHR: Um die Gefahr eines Stromschlags während der Fehlerbehebung bei entfernten Abdeckungen oder offenen Klappen zu vermeiden, berühren Sie die freiliegenden Drähte oder Stromkreise nicht, wenn der Drucker an eine Steckdose angeschlossen ist.

VORSICHT – STROMSCHLAGGEFAHR: Um das Risiko eines elektrischen Schlags und Schäden am Drucker zu vermeiden, ziehen Sie das Netzkabel aus der Steckdose und trennen Sie alle Verbindungen zu jeglichen externen Geräten, bevor Sie Kabel, Elektronikplatinen oder Baugruppen einstecken oder abziehen.

VORSICHT – HEISSE OBERFLÄCHE: Das Innere des Druckers kann sehr heiß sein. Vermeiden Sie Verletzungen, indem Sie heiße Komponenten stets abkühlen lassen, bevor Sie ihre Oberfläche berühren.

VORSICHT – QUETSCHGEFAHR: Um das Risiko einer Quetschung zu vermeiden, gehen Sie in Bereichen, die mit diesem Etikett gekennzeichnet sind, mit Vorsicht vor. Quetschungen können im Bereich von beweglichen Komponenten auftreten, wie z. B. Zahnrädern, Klappen, Fächern und Abdeckungen.

Troubleshooting overview

Performing The Initial Troubleshooting Check

Before you start the troubleshooting procedures, perform the following checks:

- Use genuine Xerox supplies and parts for the best results. Third-party supplies or parts may affect the performance, reliability, or life of the printer and its imaging components.
- With the power cord unplugged from the electrical outlet, check that the cord is free from the breakage, short circuits, disconnected wires, or incorrect connections.
- Make sure the printer is properly grounded. Check the power cord ground terminal.
- Make sure the power supply line voltage is within 10% of the rated line voltage.
- Make sure the machine is securely installed on a level surface in a well-ventilated area.
- Make sure the room temperature is between 16 and 32°C (60 and 90°F) and that the relative humidity is between 20 and 80%.
- Avoid sites generating ammonia gas, high temperature, high humidity (near water faucets, kettles, humidifiers), cold spaces, near open flames, and dusty areas.
- Avoid sites exposed to direct sunlight.
- Make sure the paper is the recommended paper for this printer.
- Make a trial print with paper from a newly opened package, and check the result.

Power-on Reset (POR) Sequence

When you turn on the printer, it performs a POR sequence.

Check for correct POR functioning of the base printer by observing the following:

1. The control panel indicator light turns on.
2. The control panel display turns on.
3. A splash screen appears on the display.
4. The cooling fan turns on.
5. The fuser heater turns on.

Note: The fuser takes longer to warm up from a cold start than from a warm start.

6. The main drive motor turns on.
7. The EP drive assembly drives the developer shaft located in the imaging unit.
8. The exit rollers turn.
9. The control panel indicator light blinks.
10. Ready appears on the display.

Using Safe Mode

Safe Mode lets the printer continue to operate in a special limited mode in which it attempts to continue offering as much functionality as possible despite known issues.

Warning—Potential Damage: Safe Mode is intended as a short-term workaround and should be used only in the case of a non-critical error when a print job must be completed before service can be arranged to repair the printer. The printer must be returned to standard operating mode before diagnostics can be run or full-function printing can continue.

You can enter Safe Mode in one of the following ways:

- Enable Safe Mode from the Configuration menu, and then POR the printer.
- Press the **Stop** and **Back** keys, and then POR the printer.

Return the printer to standard operating mode to service the printer and return to full-function printing.

Safe Mode Print Behavior

The following table outlines the behavior for this printer model while in Safe Mode:

Safe Mode engine features	Engine behavior	Control panel behavior
Simplex printing only	Will report that no duplexer is installed.	Duplex print option will not be selectable.
Ignore duplex sensor		
Ignore bin full sensor	Bin full messages will not be reported.	Bin full messages will not occur.
Print at narrow media operating point	Pages will be printed slower.	N/A
Ignore narrow media sensor	Narrow media will print without restrictions.	N/A
Ignore all input options	Will report that only Tray 1 is installed.	Only Tray 1 and the MPF will be selectable.
Ignore all output options	Will not report any installed finishing options.	Finishing options will not be selectable.
Use large interpage gaps	Pages will have large interpage gaps.	N/A

Replace cartridge, printer region mismatch

To correct this problem, purchase a cartridge with the correct region that matches the printer region, or purchase a worldwide cartridge.

1. The first number in the message after 42 indicates the region of the printer.
2. The second number in the message after 42 indicates the region of the cartridge.

Table 4.1 Printer and toner cartridge regions

Region	Numeric code
Worldwide or Undefined region	0
DMO	4
NA/XE	9

Note: To find the region settings of the printer and toner cartridge, print the print quality test pages. From the home screen, **touch Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Non-Xerox Supply

The printer has detected a non-Xerox supply or part installed in the printer.

The Xerox printer is designed to function best with genuine Xerox supplies and parts. Use of third-party supplies or parts may affect the performance, reliability, or life of the printer and its imaging components.

All life indicators are designed to function with Xerox supplies and parts and may deliver unpredictable results if third-party supplies or parts are used. Imaging component usage beyond the intended life may damage the Xerox printer or associated components.

Warning: Use of third-party supplies or parts can affect warranty coverage. Damage caused by the use of third-party supplies or parts may not be covered by the warranty

To accept any and all of these risks and to proceed with the use of non-genuine supplies or parts in your printer, instruct the customer to touch and hold the error message on the display using two fingers for 15 seconds. When a confirmation dialog box appears, touch **Continue**.

If the customer does not want to accept these risks, then remove the third-party supply or part from the printer and install a genuine Xerox supply or part.

If the printer does not print after clearing the error message, then instruct the customer to reset the supply usage counter.

1. From the control panel, navigate to:

   Settings > **Device** > **Maintenance** > **Configuration Menu** > **Supply Usage And Counters** .
2. Select the part or supply to reset.
3. Read the warning message, and then select **Continue**.
4. Using two fingers, touch the display for 15 seconds to clear the message.

Metered Supply Installed in Printer Configured For Sold

The printer has detected a metered supply installed in the printer configured to use sold supply.

The printers ship with worldwide neutral toner cartridges. Initial installation of these cartridges sets the printer to worldwide neutral configuration. The first toner cartridge replacement sets the geographic differentiation code and toner cartridge type in NVM to that of the replacement cartridge. To change these NVM, a supplies plan conversion code (non-PagePack) or activation code (PagePack) code is required.

See Supplies Used to Resolve Print Quality Issues for part numbers.

If an incorrect type of toner cartridge is installed, an error code is generated indicating toner incompatibility.

Changing The Service Plan (Non-PagePack)

Contact the relevant OpCo to obtain a conversion code:

- **US:** Provide the printer Serial Number and Total Meter Read using the email template provided in community section of ProLibro. A conversion PIN code is provided within 10 minutes. For any service plan conversion issues or special requests, phone Xerox Corporate Licensing Systems (XDSS), 1–800–890–3260.
- **Xerox Business Solutions (XBS):** All requests for service plan conversions must be approved by the XBS VP of Service. Request your field service manager to contact your XBS company VP of Service for direction. The XBS Core Company VP of Service will require authorization to convert the printer from sold to metered, and will provide a status of your request. Do not phone Field Engineering to request a conversion code.
- **US Authorized Service Provider (ASP):** Provide the printer Serial Number and Total Meter Read using the email template provided in community section of ProLibro. A conversion PIN code is provided within 10 minutes. For any service plan conversion issues or special requests, phone Xerox Corporate Licensing Systems (XDSS), 1–800–890–3260.
- **Canada:** Provide the printer Serial Number and Total Meter Read using the email template provided in community section of ProLibro. A conversion PIN code is provided within 10 minutes. For any service plan conversion issues or special requests, phone Customer Delivery Organization (CDO) field support, 1–800–647–1331.

Note: The service plan conversion code must be entered within 500 Total Impression counts. If this count is exceeded, a new code is required.

Using The Control Panel

1. From the control panel, navigate to **Settings > Supplies Plan > Plan Conversion**.
2. Record the **Total Impressions** and **Device Serial Number**.
3. Contact the relevant OpCo to obtain the conversion code.
4. After receiving the conversion code, on the control panel, navigate to **Supplies Plan > Plan Conversion > Conversion Code**.

5. Enter the conversion code provided, then select **Convert Plan**.
6. Navigate to **Supplies Plan > Plan Conversion > Current Plan** to confirm the conversion is successful.

Using The Embedded Web Server

1. Open a web browser, and then type the printer IP address. If necessary, ask the customer to enter the Admin password.
2. From the home page, navigate to **Settings > Supplies Plan > Plan Conversion**.
3. Record the **Total Impressions** and **Device Serial Number**.
4. Contact the relevant OpCo to obtain the conversion code.
5. After receiving the conversion code, on the embedded web server, navigate to **Settings > Supplies Plan > Plan Conversion > Conversion Code**.
6. Enter the conversion code provided, then click **Convert Plan**.
7. Check the **Current Plan** status to confirm the conversion is successful.

Changing The Service Plan (PagePack)

Contact the relevant OpCo to obtain an activation code. Provide the Sequence Number and Device Serial Number.

- **EMEA (XE):** Email office.europe.page.pack.pin@xerox.com
- **EMEA (DMO-E):** Follow your local process.
- **LATAM (Latin America):** Follow your local process.

Note: The service plan activation code must be entered within 1000 Total Impression counts. If this count is exceeded, a new code is required.

Using The Control Panel

1. From the control panel, navigate to **Supplies Plan** > **Plan Activation**.
2. Record the **Sequence Number** and **Device Serial Number**
3. Contact the relevant OpCo to obtain the activation code.
4. After receiving the activation code, on the control panel, navigate to **Settings** > **Supplies Plan** > **Plan Activation** > **Activation Code**.
5. Enter the activation code provided, then select **Activate Plan**.

Using The Embedded Web Server

1. Open a web browser, and then type the printer IP address. If necessary, ask the customer to enter the Admin password.
2. From the home page, navigate to **Settings** > **Supplies Plan** > **Plan Activation.**
3. Record the **Sequence Number** and **Device Serial Number**.

4. Contact the relevant OpCo to obtain the activation code.
5. After receiving the activation code, on the embedded web server, navigate to **Settings** > **Supplies Plan** > **Plan Activation** > **Activation Code.**
6. Enter the activation code provided, then click **Activate Plan**.

Securing the printer

Resetting the Printer without Admin Credentials

Notes:

- Resetting the printer or replacing the controller board deletes all security settings.
- Before changing the security settings, ask permission from your administrator.

1. Perform an Out of Service Erase to reset the printer to factory defaults without using admin credentials. For more information, see Erasing Printer Memory.Warning—Potential Damage: This method makes the device vulnerable to hacking because it allows the creation of an admin account afterwards. By default, newer firmware versions restrict Out of Service Erase to admin users only, making the printer more secure and remembering the admin password more important.
2. If Out of Service Erase is unavailable, then use the security reset jumper to reset the printer to factory defaults. For more information, see Using the Security Reset Jumper.
3. If the effect of the jumper reset is disabled, then replace the controller board. For more information, see Controller Board Removal.

Using the Security Reset Jumper

The security reset jumper is on the controller board. It can be used if the admin password is lost or forgotten, and Out of Service Erase is not available.

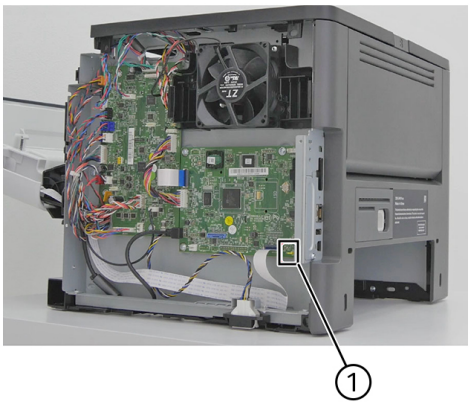
Notes:

Note:

- To enable the effect of the security reset jumper, from the home screen navigate to: **Security** > **Miscellaneous** > **Security Reset Jumper** > **Enable "Guest" Access**.
- To disable the effect of the jumper, select **No Effect** from the Security Reset Jumper section in the Security menu. If the password is forgotten or lost, perform an Out of Service Erase or replace the controller board. See Resetting the Printer without Admin Credentials.

1. Turn off the printer.
2. Remove the controller board shield.

3. Locate the security jumper (1) on the controller board.



security reset jumper

4. Move the jumper to cover the middle and exposed prongs.

Note: The movement of the jumper triggers the reset, not the jumper position.

5. Attach the controller board shield.
6. Turn on the printer.

Note:

- The security framework remains in place after the reset. Public permissions are reset to default and now include Out of Service Erase as an option.
- If LDAP is used to authenticate the copy function in MFPs, then the LDAP configuration and copy function are no longer protected.
- If Enable Audit is activated in the Security Audit Log, then the printer logs a message each time the jumper is reset.
- Physical access to the printer is required to use the jumper, making it more secure against hacking. To prevent tampering of the jumper, secure the controller board cage with a Kensington lock.

Fixing print quality issues

Initial Print Quality Check

Before troubleshooting print problems, do the following:

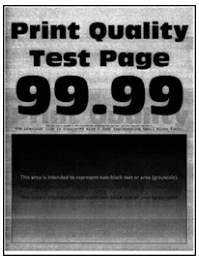
- Make sure that the printer is in an area that follows the recommended operating environment and power requirement specifications.
- Check the status of the supplies. Replace supplies that are low or empty.
- Load 20–21 lb bond (75–80 g/m²) plain letter or A4 paper. Make sure that the paper guides are properly set and locked. From the home screen, set the paper size and type to match the paper loaded in the tray.
- From the home screen, touch **Settings** >**Troubleshooting** > **Print Quality Test Pages**.
- Print and keep the Menu Settings Page. The original page is used to restore the custom settings if necessary. From the home screen, touch **Settings** > **Reports** >**Menu Settings Page**.
- On the printed Menu Settings Page, check if the print resolution is set to 1200 IQ and the toner darkness is set to 8.
- Check the toner cartridge for damage, and replace if necessary.
- Make sure that the correct print driver is installed. If the wrong print driver is installed, then incorrect characters could print and the copy may not fit the page correctly.
- Make sure that the paper loaded is from a fresh package. Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it.

Supplies Used to Resolve Print Quality Issues

For this family of printers, the following supplies are available to resolve print quality issues:

Supply Item	P/N
Standard-Capacity Toner Cartridge (6K) NA/XE Sold	006R04725
High-Capacity Toner Cartridge (14K) NA/XE Sold	006R04726
Extra High-Capacity Toner Cartridge (25K) NA/XE Sold	006R04727
Standard-Capacity Toner Cartridge (6K) DMO Sold	006R04728
High-Capacity Toner Cartridge (14K) DMO Sold	006R04729
Extra High-Capacity Toner Cartridge (25K) DMO Sold	006R04730
World Wide Metered Toner Cartridge (25K)	006R04731
World Wide Regular Toner Cartridge (25K) **Note:** Not widely distributed. For specific accounts only	006R04732
Imaging Kit (75K) Universal World Wide	013R00702

Gray Background or Toner Fog

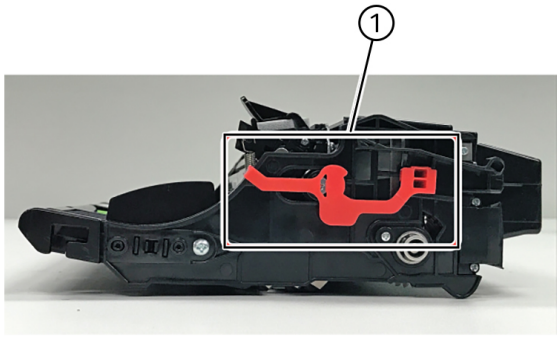


Note: Before doing this print quality check, see Initial Print Quality Check.

1. Restart the printer.
2. From the home screen, do the following:
   - Increase the toner darkness in the Quality menu. Touch **Settings** > **Print** > **Quality**. Note: 8 is the factory default setting.
   - Set the paper type, texture, and weight in the Paper menu to match the paper loaded. Touch **Settings** > **Paper**.
3. Check if the printer is using a genuine and supported Xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

4. Check for any packing material left on the imaging unit, including the red plastic separator plastic (1).



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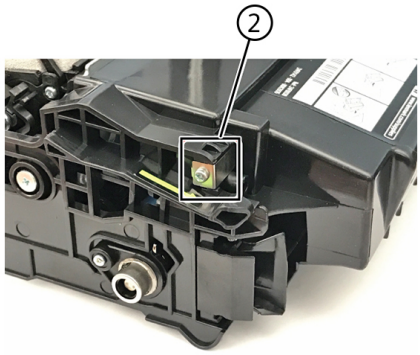
Note: You may need a pair of pliers to remove a piece of broken plastic inside the imaging unit.

5. Check the charge roller contact (2) on the right side of the imaging unit for damage and contamination.



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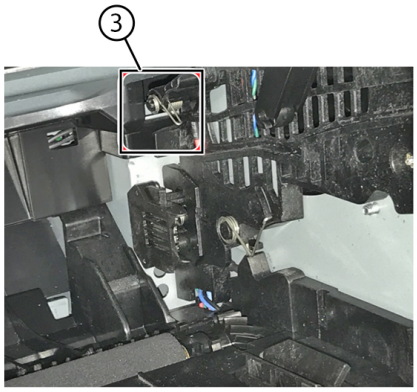
6. Make sure that the connections between the controller board and the power supply are properly connected.
7. Check the photoconductor charge contact (3) on the right side of the printer frame for contamination.



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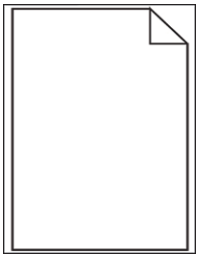
Note: Poor electrical contact to the photoconductor is the most likely source of a full-page background defect.

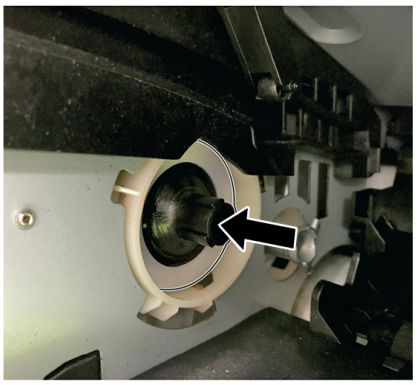
8. Check if the photoconductor charge contact is bent, damaged, or not in proper contact with the imaging unit.

Blank Pages



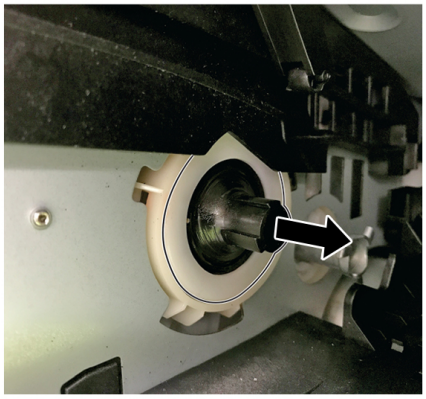
Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge. Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.
2. Check the imaging unit for the following:
   a. Residual packing material
   b. Damage and improper installation
3. Firmly shake the imaging unit to redistribute the toner, and then reinstall it.
4. With the imaging unit removed, do the following to check if the coupler is stuck.
   a. While slowly closing the door, observe if the coupler moves inward.



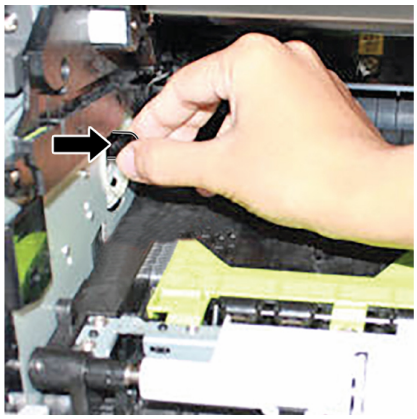
B410S_3012

b. While slowly opening the door, observe if the coupler moves outward.



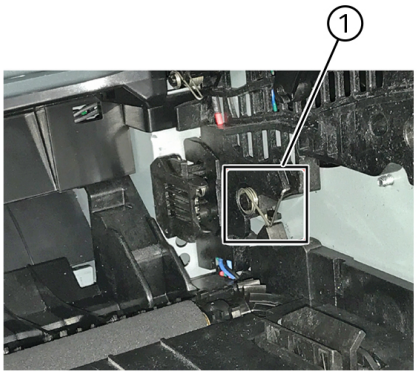
B410S_3026

If the couple is stuck, then reach inside the printer and manually reposition the coupler as shown.



B410S_3027

5. Check if the imaging unit contact (1) is bent, damaged, or not in proper contact with the imaging unit.



B410S_3028

6. Make sure that the connections between the controller board and power supply are properly connected.
7. Check the transfer roller for the following:
   a. Improper installation

b. Contamination and damage

c. Damage on the transfer roller left contact spring in the transfer roller left arm

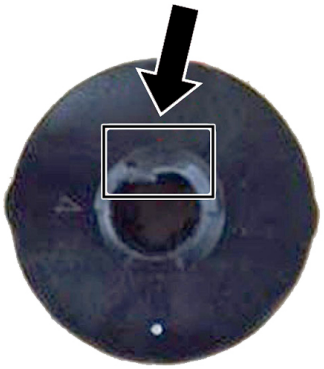
For more information, see Transfer Roller Removal

8. Check the coupler for signs of damage. The coupler is on the main drive motor.

- Coupler in good condition

VLB625S_3016

- Coupler in bad condition



VLB625S_3015

For more information, see Main Drive Gearbox Removal.

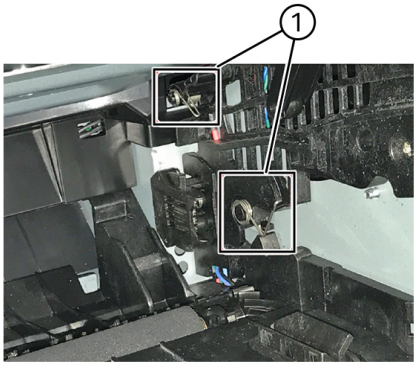
9. Make sure that the connections on the controller board and printhead are properly connected.

10. Check the printhead for damage and improper installation. For more information, see Printhead Removal.

Print Is Too Dark

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge. Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.
2. Restart the printer.
3. From the home screen, do the following:
   - Decrease the toner darkness. Touch **Settings** > **Print** > **Quality** > **Toner Darkness**. Note: 8 is the factory default setting.
   - Set the paper type, texture, and weight in the Paper menu to match the paper loaded. Touch **Settings** > **Paper**.
   - Depending on the operating system, specify the paper type from Printing Preferences or Print dialog.
4. Check if the imaging unit contacts (1) are bent, damaged, or not in proper contact with the imaging unit.



B410S_3029

5. Make sure that the connections between the controller board and the power supply are properly connected.
6. Check the power supply for damage and improper installation. For more information, see Power Supply Removal.

Print is Too Light

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

   Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Restart the printer.
3. From the home screen, do the following:
   - Increase the toner darkness. Touch **Settings** > **Paper** > **Quality** > **Toner Darkness**.Note: 8 is the factory default setting.
   - Set the paper type, texture, and weight in the Paper menu to match the paper loaded. Touch **Settings** > **Paper**.
4. Push either side of the transfer roller to check if it depresses and bounces back into place.
   If the transfer roller does not depress and bounce back into place, then reinstall it by doing the following:
   a. Pull up the blue gear on the transfer roller.
   b. Pull out the blue gear from the right side to the left.

   For more information, see Transfer Roller Removal.
5. Check the imaging unit for the following:
   a. Damage to the shutter Note: The shutter opens to receive toner from the toner cartridge.
   b. Status of the imaging unit
      1. From the home screen, touch **Status/supplies**.
      2. Touch **View Supplies**.
   c. Damage, contamination, and improper installation
6. Firmly shake the imaging unit to redistribute the toner, and then reinstall it.
7. Clean the printhead lens. For more information, see Cleaning the printhead lenses.
8. Check the power supply for damage, contamination, and improper installation. For more information, see Power Supply Removal.
9. Make sure that the connections between the controller board and the cartridge gearbox are properly connected.
10. Check the cartridge gearbox for damage and improper installation. For more information, see Cartridge Gearbox Removal.

11. Check the controller board for damage, contamination, and improper installation. For more information, see Controller Board Removal.

Paper Curl

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

   Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Make sure that the guides in the tray are in the correct position for the paper loaded.
3. From the home screen, do the following:
   a. Set the paper size, type, and weight in the Paper menu to match the paper loaded. Touch **Settings** > **Paper**.
   b. Depending on the operating system, specify the paper size from Printing Preferences or Print dialog.

Folded or Wrinkled Paper

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

   Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Check if the toner cartridge is compatible with the imaging unit.
3. Make sure that the fuser entry guide is free of waste toner and dust.

   Warning—Potential Damage: Clean the fuser entry guide with a toner vacuum and cloth. Do not use compressed air.

4. Check if the fuser has reached end of life.

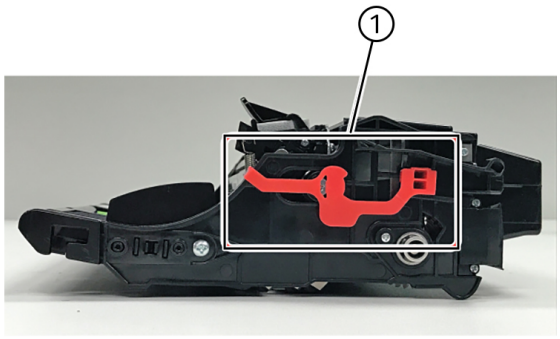
Solid Black Pages

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

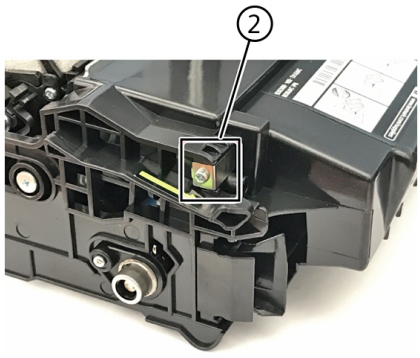
2. Check for any packing material left on the imaging unit, including the red plastic separator (1).



B410S_3004

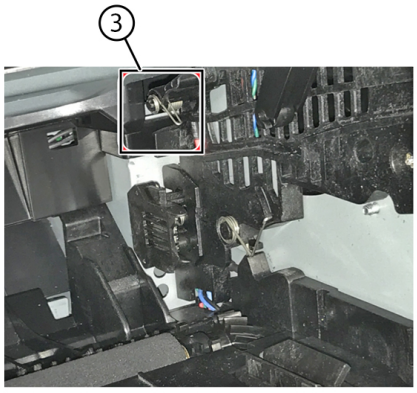
Note: You may need a pair of pliers to remove a piece of broken plastic inside the imaging unit.

3. Check the charge roller contact (2) on the right side of the imaging unit for damage and contamination.



B410S_3007

4. Check if the imaging unit contact (3) is contaminated, broken, or bent out of proper position.



B410S_3010

5. Check the high voltage metal contacts on the imaging unit for damage.
6. Make sure that the connections between the controller board and the power supply are properly connected.

Repeating Defects

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Using the Print Quality Test Pages, check if the distance between the repeating defects is equal to any of the following:

- 97 mm (3.82 in.)
- 47 mm (1.85 in.)
- 38 mm (1.5 in.)

If the distance between the repeating defects is equal to the listed measurements, then check the imaging unit for damage, contamination, and improper installation.

2. Check if the distance between the repeating defects is equal to 3.15 inches (85 mm). If the distance between the repeating defects is equal to 3.15 inches (85 mm), then check the fuser for damage, contamination, and improper installation. For more information, see Fuser Removal.
3. Check the transfer roller for damage, contamination, and improper installation. For more information, see Transfer Roller Removal.

Skewed Print

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Make sure that the guides in the tray are in the correct position for the paper loaded.
2. Check the tray pick roller or MPF pick roller for wear, damage, and contamination. For more information, see Pick Roller Removal MPF Pick Roller and Separator Pad Removal.
3. Do a print test. Enter the Diagnostics menu, and then touch **PRINT TESTS** > **Tray [x]**. Note: [x] refers to the tray where the skewed prints are printed come from.
4. Adjust the margins. Enter the Diagnostics menu, and then touch **REGISTRATION**.
5. Perform the paper skew adjustment. See Printhead Assembly Adjustment.

Streaked Vertical Lines appear on Prints

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Check the imaging unit for damage, contamination, and improper installation.
3. Check the fuser for the following:
   a. Damage, contamination and improper installation.
   b. Debris on the rollers and belts.

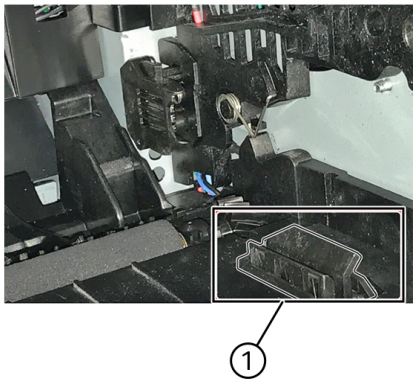
Horizontal Light Bands

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge. Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Restart the printer.
3. Check the imaging unit contact block (1), including the white and red wires, for damage and improper installation.



4. Check the power supply for damage, contamination, and improper installation. For more information, see Power Supply Removal.

Vertical Light Bands

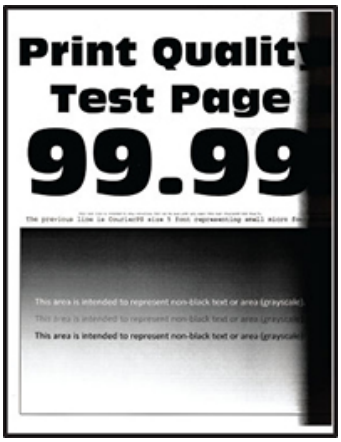
Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Check the printhead for the following:
   a. Clean the printhead lens. See Cleaning the printhead lenses.
   b. Check for damage, contamination, and improper installation. For more information, see the Printhead Removal.
3. Check the imaging unit for damage, contamination, and improper installation.

Vertical Dark Bands

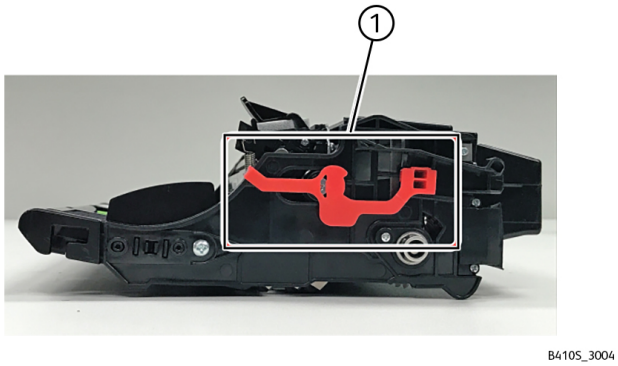


Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Check the imaging unit for damage, contamination, and improper installation.
3. Check for any packing material left on the imaging unit, including the red plastic separator (1).



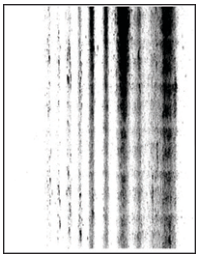
B410S_3004

Note: You may need a pair of pliers to remove a piece of broken plastic inside the imaging unit.

4. Make sure to block the bright light from entering the right side of the printer.

Note: In cases where the printer cannot be moved or relocated, add a cover to the fan inlet vent to block the light from entering the printer, or contact the next level of support.

Vertical Dark Streaks with Print Missing

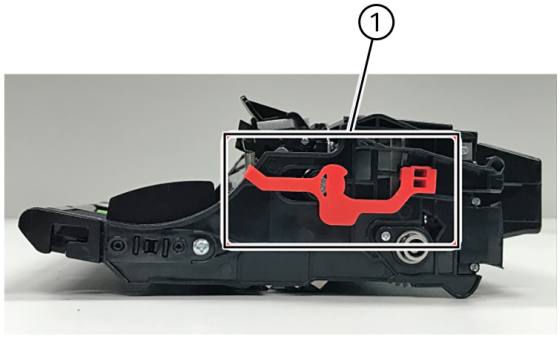


Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

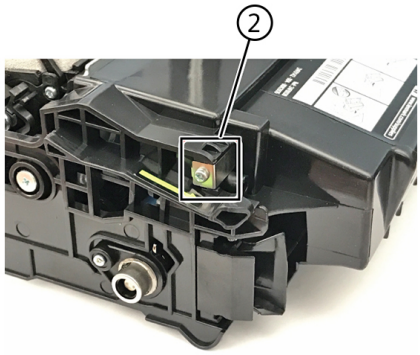
2. Check for any packing material left on the imaging unit, including the red plastic separator (1).



B410S_3004

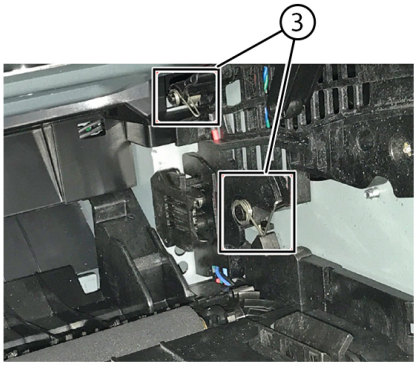
Note: You may need a pair of pliers to remove a piece of broken plastic inside the imaging unit.

3. Check the charge roller contact (2) on the right side of the imaging unit for damage and contamination.



B410S_3007

4. Check if the imaging unit contacts (3) are contaminated or bent out of proper position.



B410S_3032

5. Check the imaging unit for damage, contamination, and improper installation.
6. Make sure that the connections between the controller board and the power supply are properly connected.
7. Check the power supply for damage, contamination, and improper installation. For more information, see Power Supply Removal.

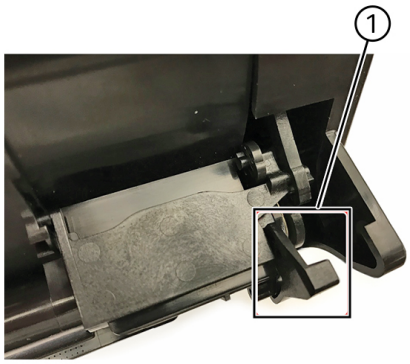
White Streaks and Voided Areas

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

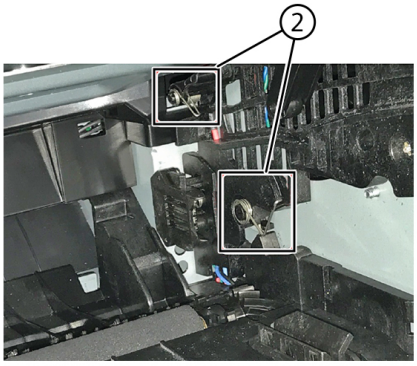
   Note: If the printer is using a third-party toner cartridge, do not replace the imaging unit. Refer the users to their supplier.

2. From the home screen, do the following:
   - Set the paper type and weight in the Paper menu to match the paper loaded. Touch **Settings** > **Paper**.
   - Update the firmware to the latest version available.
   - Enter the Diagnostics menu, and then change the EngSetting 14 value to 48. Note: You can also change the setting through a bundle file or NPA command.
   - Set the Quiet Mode to **Off**. Touch **Settings** > **Device** > **Maintenance** > **Configuration Menu**.
   - Review the Event Log Summary sheets and check if either error code 31.46 or 31.66 occurred for the imaging unit. If they did, check if they also occurred for the toner cartridge.
3. Check the shutter tab (1) on the toner cartridge for signs of damage.



B410S_3040

4. Check if the imaging unit contacts (B) are contaminated or bent out of proper position.



B410S_3039

5. Check the toner cartridge and imaging unit for damage, contamination, and improper installation.
6. Make sure that the connections between the controller board and the power supply are properly connected.

7. Check the power supply for damage, contamination, and improper installation. For more information, see Power Supply Removal.
8. Clean the printhead lens. For more information, see Cleaning the printhead lenses.
9. Check the printhead for damage, contamination, and improper installation. For more information, see Printhead Removal.

Fine Lines such as Chinese Characters are not Printed Correctly

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. From the home screen, do the following:
   a. Touch **Settings** > **Print** > **Quality** > **Pixel Boost** > **Fonts**.
   b. Increase the toner darkness to 7. Touch **Settings** > **Print** > **Quality** > **Toner Darkness**. Note: Adjusting the Toner Darkness setting to 7 results in a slightly lighter print.

Note: You may leave the Toner Darkness value at 8 in order to maintain the darkness that you are used to, but this will result in decreased toner yield.

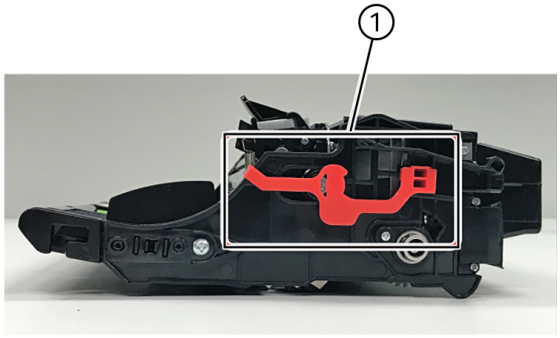
Text or Images Cut Off

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

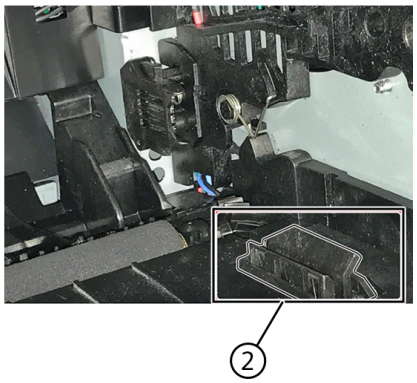
2. Check for any packing material left on the imaging unit, including the red plastic separator (1).



B410S_3004

Note: You may need a pair of pliers to remove a piece of broken plastic inside the imaging unit.

3. Check the imaging unit contact block (2) for damage and improper installation.



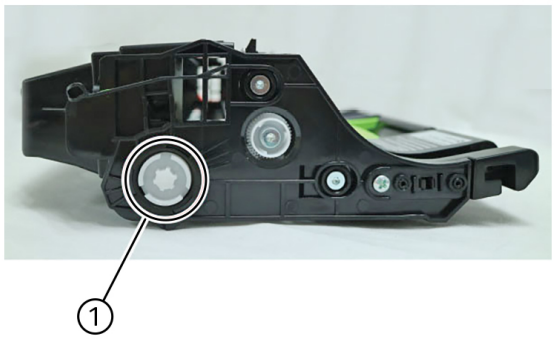
B410S_3041

4. Check the imaging unit for damage, contamination, and improper installation.

Compressed Images appear on Prints

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Make sure that the white photoconductor coupler (1) is firmly connected to the imaging unit and does not freely rotate.



B410S_3042

2. Check the imaging unit for damage, contamination, and improper installation.
3. Check the main drive gearbox for damage, contamination, and improper installation. For more information, see Main Drive Gearbox Removal

Incorrect Margins on Prints

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Make sure that the guides in the tray are in the correct position for the paper loaded.
2. From the home screen, do the following:
   - Set the paper size in the Paper menu to match the paper loaded.
   - Change the paper loaded to match the paper size specified in the tray settings.
   - Depending on the operating system, specify the paper size from Printing Preferences or Print dialog.
   - Adjust the margins as necessary. Enter the Diagnostics menu, and then touch **Registration**.

Toner Rubs Off

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

   Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. From the home screen, set the paper type, texture, and weight in the Paper menu to match the paper loaded.
3. Check the fuser for damage, contamination, and improper installation. For more information, see Fuser Removal.
4. Make sure that the connections between the controller board and the power supply are properly connected.
5. Check the power supply for damage, contamination, and improper installation. For more information, see Power Supply Removal.

Molted Prints or Dots

Note: Before doing this print quality check, see Initial Print Quality Check.

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

   Note: If the printer is using a third-party toner cartridge, then refer the users to their supplier.

2. Check the status of the imaging unit.
   a. From the home screen, touch **Status/supplies**.
   b. Touch **View Supplies**.
3. Check the imaging unit for damage, contamination, and improper installation.
4. Using an approved toner vaccum cleaner, completely clean the printer, toner cartridge, and imaging unit of toner contamination.

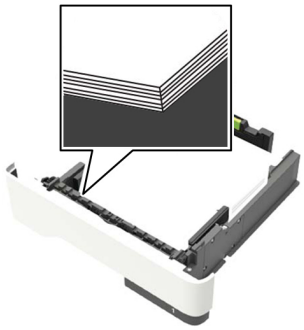
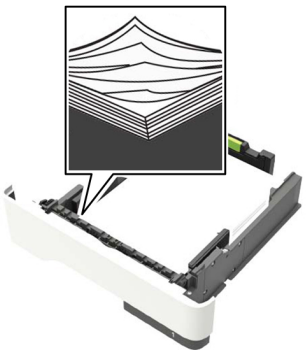
5. Check the transfer roller for damage, contamination, and improper installation. For more information, see Transfer Roller Removal.

Paper jams

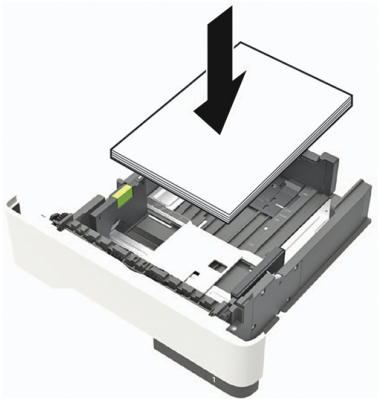
Avoiding jams

Load Paper Properly

- Make sure that the paper lies flat in the tray.

Correct loading of paper	Incorrect loading of paper
 B410S_3018	 VLB625S_3020

- Do not load or remove a tray while the printer is printing.
- Do not load too much paper. Make sure that the stack height is below the maximum paper fill indicator.
- Do not slide paper into the tray. Load paper as shown in the illustration.

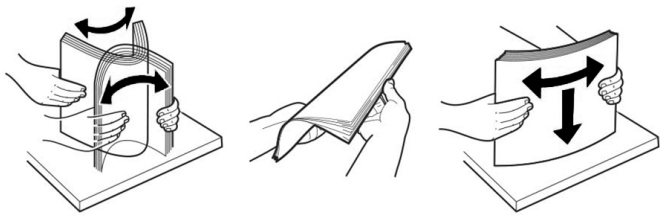


VLB625S_3034

- Make sure that the paper guides are positioned correctly and are not pressing tightly against the paper or envelopes.
- Push the tray firmly into the printer after loading paper.

Use Recommended Paper

- Use only recommended paper or specialty media.
- Do not load paper that is wrinkled, creased, damp, bent, or curled.
- Flex, fan, and align the paper edges before loading.



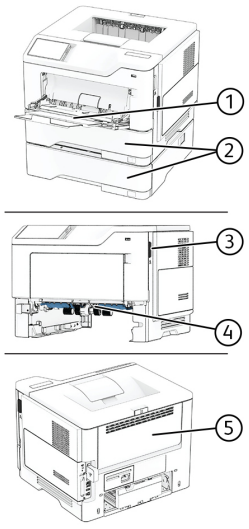
VLB625S_3019

- Do not use paper that has been cut or trimmed by hand.
- Do not mix paper sizes, weights, or types in the same tray.
- Make sure that the paper size and type are set correctly on the computer or printer control panel.
- Store paper according to manufacturer recommendations.

Identifying Jam Locations

Note:

- When Jam Assist is set to On, the printer flushes blank pages or pages with partial prints after a jammed page has been cleared. Check your printed output for blank pages.
- When Jam Recovery is set to On, the printer reprints jammed pages.



	Jam locations
1	Multipurpose feeder
2	Trays
3	Door A
4	Duplex unit
5	Door B

200 paper jams

200 Paper Jam Messages

Error code	Description	Action
200.03	Paper fed from the MPF was detected later than expected or was never detected at the sensor (input).	See Sensor (input): Paper Failed to Arrive from the MPF Jam Service Check.
200.04	Paper fed from the MPF cleared the sensor (input) earlier than expected.	See Sensor (input): Paper Cleared too Early from the MPF Jam Service Check.
200.05	Paper fed from the MPF never cleared the sensor (input).	See Sensor (input): Paper Failed to Clear from the MPF Jam Service Check.
200.06	Paper fed from the MPF was detected later than expected or was never detected at the sensor (input).	See Sensor (input): Paper Failed to Arrive from the MPF Jam Service Check.
200.12	Paper fed from tray 1 was detected earlier than expected at the sensor (input).	See Sensor (input): Paper Arrived too Early or Failed to Arrive Jam Service Check.
200.13	Paper fed from tray 1 was detected later than expected or was never detected at the sensor (input).	
200.14	Paper fed from tray 1 cleared the sensor (input) earlier than expected.	See Sensor (input): Paper Cleared Too Early Jam Service Check.
200.15	Paper fed from tray 1 never cleared the sensor (input).	See Sensor (input): Paper Failed to Clear Jam Service Check.
200.16	Paper fed from tray 1 was picked but it never reached the sensor (input).	See Tray 1 Pick Error Service Check.
200.22	Paper fed from tray 2 was detected earlier than expected at the sensor (input).	See Sensor (input): Paper Arrived Too Early from Optional Tray Jam Service Check.
200.23	Paper fed from tray 2 was detected later than expected or was never detected at the sensor (input).	See Sensor (input): Paper Failed to Arrive from Optional Tray Jam Service Check.
200.24	Paper fed from tray 2 cleared the sensor (input) earlier than expected.	See Sensor (input): Paper Cleared too Early from Optional Tray Jam Service Check.

Error code	Description	Action
200.25	Paper fed from tray 2 never cleared the sensor (input).	See Sensor (input): Paper Failed to Clear from Optional Tray Jam Service Check.
200.32	Paper fed from tray 3 was detected earlier than expected at the sensor (input).	See Sensor (input): Paper Arrived Too Early from Optional Tray Jam Service Check.
200.33	Paper fed from tray 3 was detected later than expected or was never detected at the sensor (input).	See Sensor (input): Paper Failed to Arrive from Optional Tray Jam Service Check.
200.34	Paper fed from tray 3 cleared the sensor (input) earlier than expected.	See Sensor (input): Paper Cleared too Early from Optional Tray Jam Service Check.
200.35	Paper fed from tray 3 never cleared the sensor (input).	See Sensor (input): Paper Failed to Clear from Optional Tray Jam Service Check.
200.42	Paper fed from tray 4 was detected earlier than expected at the sensor (input).	See Sensor (input): Paper Arrived Too Early from Optional Tray Jam Service Check.
200.43	Paper fed from tray 4 was never detected at the sensor (input).	See Sensor (input): Paper Failed to Arrive from Optional Tray Jam Service Check.
200.44	Paper fed from tray 4 cleared the sensor (input) earlier than expected.	See Sensor (input): Paper Cleared too Early from Optional Tray Jam Service Check.
200.45	Paper fed from tray 4 never cleared the sensor (input).	See Sensor (input): Paper Failed to Clear from Optional Tray Jam Service Check.
200.91	Paper remains detected at the sensor (input) after the printer is turned on.	See Sensor (input): Static Jam Service Check.
200.95	Unexpected page showed up when flushing the paper path.	

Tray 1 Pick Error Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs only when using tray 1, then do the following:
   a. Check the pick roller for wear, damage, contamination, and improper installation.

b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.

6. Check the pick arm and pick roller for damage and improper installation. For more information, see Pick Roller Removal.
   a. Check the tray insert for damage and improper installation.
   b. Check the tray guides for damage and improper operation.
   c. Check the lift plate for damage and improper operation.
   d. Check the tray gears for wear and damage.

Sensor (input): Paper Failed to Arrive from the MPF Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs only when using the MPF, then do the following:
   a. Check the MPF pick roller and separator roller for wear, damage, and contamination.
   b. Make sure that the MPF solenoid is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**.
      2. Select **MPF pick**.
   c. Check the MPF gearbox for wear, damage, and improper mesh. For more information, see MPF Gearbox Removal.
6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Identify the location of the leading edge of the paper.
   b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.
   c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. Fore more information, see Fuser Removal.

Sensor (input): Paper Cleared too Early from the MPF Jam Service Check

1. Set the paper size in the Paper menu to match the paper loaded. From the home screen, touch **Settings** > **Paper**.
2. Make sure that paper is supported and loaded properly. See Avoiding jams.
3. Make sure that the paper is free of debris and obstructions.
4. Perform a POR.

5. Check if the paper jam error occurs when using other trays.
6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Check the input sensor actuator for damage, and improper installation.
   b. Make sure that the sensor (duplex and input) is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
      2. Find the sensor (duplex and input).
   c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.
   d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.

Sensor (input): Paper Failed to Clear from the MPF Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs only when using the MPF, then do the following:
   a. Check the MPF pick roller and separator roller for wear, damage, and contamination.
   b. Make sure that the MPF solenoid is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**.
      2. Select **MPF pick**.
   c. Check the MPF gearbox for wear, damage, and improper mesh. For more information, see MPF Gearbox Removal.
6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Identify the location of the leading edge of the paper.
   b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.
   c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. Fore more information, see Fuser Removal.

Sensor (input): Paper Arrived too Early or Failed to Arrive Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.

3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. Check the pick arm and pick roller for damage and improper installation. For more information, see Pick Roller Removal.
6. Make sure that the pick/lift motor gearbox is functional. Do the following:
    1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**.
    2. Select **Motor (tray 1 pick/lift)**.
7. Make sure that the connections between the motor (pick/lift) and the controller board are properly connected.
8. Check the pick/lift motor gearbox for damage, contamination, and improper installation. For more information, see Pick/lift Motor Gearbox Removal.

Sensor (input): Paper Cleared Too Early Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. Check the pick roller for wear, damage, contamination, and improper installation. For more information, see Pick Roller Removal.
6. Make sure that the reverse solenoid is functional. Do the following:
    a. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**.
    b. Select **Redrive solenoid**.
7. Check the reverse solenoid and its actuator for wear, damage, and improper operation. For more information, see Reverse Solenoid Removal.
8. Check the redrive assembly for wear, damage, and improper mesh. For more information, see Redrive Assembly Removal.

Sensor (input): Paper Failed to Clear Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs only when using tray 1, then do the following:

a. Check the pick roller for wear, damage, contamination, and improper installation. For more information, see Pick Roller Removal

b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.

6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Check the input sensor actuator for damage, and improper installation.
   b. Make sure that the sensor (duplex and input) is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
      2. Find the sensor (duplex and input).
   c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.
   d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.
7. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Identify the location of the leading edge of the paper.
   b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.
   c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. Fore more information, see Fuser Removal.

Sensor (input): Paper Arrived Too Early from Optional Tray Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Check the input sensor actuator for damage, and improper installation.
   b. Make sure that the sensor (duplex and input) is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
      2. Find the sensor (duplex and input).
   c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.
   d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.

6. Check the pick arm and pick roller for damage and improper installation. For more information, see Pick Roller Removal.
7. Make sure that the pick/lift motor gearbox is functional. Do the following:
    1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**.
    2. Select **Motor (tray 1 pick/lift)**.
8. Make sure that the connections between the motor (pick/lift) and the controller board are properly connected.
9. Check the pick/lift motor gearbox for damage, contamination, and improper installation. For more information, see Pick/lift Motor Gearbox Removal.

Sensor (input): Paper Failed to Arrive from Optional Tray Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs when using optional trays (tray 2 to tray 4), then do the following:
    a. Check the pick roller for wear, damage, contamination, and improper installation.
    b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.
    c. Check the paper path above the tray for debris and foreign object.
6. If the paper jam error occurs regardless of the source tray, then do the following:
    a. Check the input sensor actuator for damage, and improper installation.
    b. Make sure that the sensor (duplex and input) is functional. Do the following:
        1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
        2. Find the sensor (duplex and input).
    c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.
    d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.
7. If the paper jam error occurs regardless of the source tray, then do the following:
    a. Identify the location of the leading edge of the paper.
    b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.
    c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. Fore more information, see Fuser Removal.

Sensor (input): Paper Cleared too Early from Optional Tray Jam Service Check

1. Set the paper size in the Paper menu to match the paper loaded. From the home screen, touch **Settings** > **Paper**.
2. Make sure that paper is supported and loaded properly. See Avoiding jams.
3. Make sure that the paper is free of debris and obstructions.
4. Perform a POR.
5. Check if the paper jam error occurs when using other trays.
6. If the paper jam error occurs when using optional trays (tray 2 to tray 4), then do the following:
   a. Check the pick roller for wear, damage, contamination, and improper installation.
   b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.
   c. Check the paper path above the tray for debris and foreign object.

Sensor (input): Paper Failed to Clear from Optional Tray Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs when using optional trays (tray 2 to tray 4), then do the following:
   a. Check the pick roller for wear, damage, contamination, and improper installation.
   b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.
   c. Check the paper path above the tray for debris and foreign object.
6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Check the input sensor actuator for damage, and improper installation.
   b. Make sure that the sensor (duplex and input) is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
      2. Find the sensor (duplex and input).
   c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.
   d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.
7. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Identify the location of the leading edge of the paper.

b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.

c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. Fore more information, see Fuser Removal.

Sensor (input): Static Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Check the input sensor actuator for damage, and improper installation.
   b. Make sure that the sensor (duplex and input) is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
      2. Find the sensor (duplex and input).
   c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.
   d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.

202 paper jams

202 Paper Jam Messages

Error code	Description	Action
202.03	Paper fed from the MPF never reached the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Arrive from MPF Jam Service Check.
202.05	Paper fed from the MPF never cleared the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Clear Jam Service Check.
202.13	Paper fed from tray 1 never reached the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Arrive Jam Service Check.
202.15	Paper fed from tray 1 never cleared the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Clear Jam Service Check.
202.23	Paper fed from tray 2 never reached the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Arrive from Optional Tray Jam Service Check.
202.25	Paper fed from tray 2 never cleared the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Clear from Optional Tray Jam Service Check.
202.33	Paper fed from tray 3 never reached the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Arrive from Optional Tray Jam Service Check.
202.35	Paper fed from tray 3 never cleared the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Clear from Optional Tray Jam Service Check.
202.43	Paper fed from tray 4 never reached the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Arrive from Optional Tray Jam Service Check.
202.45	Paper fed from tray 4 never cleared the sensor (fuser exit).	See Sensor (fuser exit): Paper Failed to Clear from Optional Tray Jam Service Check.
202.91	Paper remains detected at the sensor (fuser exit) after the printer is turned on.	See Sensor (fuser exit): Static Jam Service Check.
202.93	The sensor (fuser exit) detected a jam during or after a flush action.	
202.95	Paper fed from an unknown tray never cleared the sensor (fuser exit).	

Sensor (fuser exit): Paper Failed to Arrive from MPF Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs only when using the MPF, then do the following:
   a. Check the MPF pick roller and separator roller for wear, damage, and contamination.
   b. Make sure that the MPF solenoid is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**.
      2. Select **MPF pick**.
   c. Check the MPF gearbox for wear, damage, and improper mesh. For more information, see MPF Gearbox Removal.
6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Identify the location of the leading edge of the paper.
   b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.
   c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. Fore more information, see Fuser Removal.

Sensor (fuser exit): Paper Failed to Arrive Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs only when using the tray 1, then do the following:
   a. Check the pick roller for wear, damage, and contamination, and improper installation. For more information, see Pick Roller Removal
   b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.
6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Identify the location of the leading edge of the paper.
   b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.

c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. Fore more information, see Fuser Removal.

Sensor (fuser exit): Paper Failed to Clear Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Make sure that the fuser is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
      2. Find the sensor (fuser).
   b. Make sure that the connections between the fuser and the controller board are properly connected.
   c. Check the fuser for wear, damage, and improper installation. For more information, see Fuser Removal.
   d. Check the fuser actuator for wear, damage, and improper installation. For more information, see Fuser Actuator Removal.
   e. Check the redrive assembly for wear, damage, and improper mesh. For more information, see Redrive Assembly Removal.

Sensor (fuser exit): Paper Failed to Arrive from Optional Tray Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs when using optional trays (tray 2 to tray 4), then do the following:
   a. Check the pick roller for wear, damage, contamination, and improper installation.
   b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.
   c. Check the paper path above the tray for debris and foreign object.
6. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Check the input sensor actuator for damage, and improper installation.

b. Make sure that the sensor (duplex and input) is functional. Do the following:

1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
2. Find the sensor (duplex and input).

c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.

d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.

7. If the paper jam error occurs regardless of the source tray, then do the following:

a. Identify the location of the leading edge of the paper.

b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.

c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. For more information, see Fuser Removal.

Sensor (fuser exit): Paper Failed to Clear from Optional Tray Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs when using optional trays (tray 2 to tray 4), then do the following:

a. Check the pick roller for wear, damage, contamination, and improper installation.

b. Check the separator pad or separator roller for wear, damage, contamination, and improper installation.

c. Check the paper path above the tray for debris and foreign object.

6. If the paper jam error occurs regardless of the source tray, then do the following:

a. Check the input sensor actuator for damage, and improper installation.

b. Make sure that the sensor (duplex and input) is functional. Do the following:

1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
2. Find the sensor (duplex and input).

c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.

d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.

7. If the paper jam error occurs regardless of the source tray, then do the following:

a. Identify the location of the leading edge of the paper.

b. If the leading edge of the paper did not reach the fuser, then check the imaging unit and transfer roller for damage and improper installation. For more information, see Transfer Roller Removal.

c. If the leading edge of the paper reached the fuser, then check the fuser for wear, damage, and improper installation. For more information, see Fuser Removal.

Sensor (fuser exit): Static Jam Service Check

1. Turn off the printer.
2. Check the optional tray for improper installation.
3. Remove the optional tray, and then check the connectors on the printer and optional tray for damage and improper connection.
4. Reinstall the optional tray, and then turn on the printer.
5. Remove the tray insert.
6. Check the tray insert and its lift plate gears for damage and improper operation.
7. Make sure that the following motors are functional:
   - Motor (pick (tray (x))
   - Motor (pass-through (tray(x))

   Do the following:

   a. Enter the Diagnostics menu, and then touch **Additional input tray diagnostics** > **Motors tests**.

   b. Select **Pick (tray [x])** and **Pass-through (tray [x])**.
8. Make sure that the connections between the motors and the controller board are properly connected.
9. Check the motors for damage, and improper installation.

230 paper jams

230 Paper Jam Messages

Error code	Description	Action
230.03	Paper fed from the MPF never reached the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Arrive Jam Service Check.
230.05	Paper fed from the MPF never cleared the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Clear Jam Service Check.
230.13	Paper fed from tray 1 never reached the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Arrive Jam Service Check.
230.15	Paper fed from tray 1 never cleared the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Clear Jam Service Check.
230.23	Paper fed from tray 2 never reached the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Arrive Jam Service Check.
230.25	Paper fed from tray 2 never cleared the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Clear Jam Service Check.
230.33	Paper fed from tray 3 never reached the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Arrive Jam Service Check.
230.35	Paper fed from tray 3 never cleared the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Clear Jam Service Check.
230.43	Paper fed from tray 4 never reached the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Arrive Jam Service Check.
230.45	Paper fed from tray 4 never cleared the sensor (duplex).	See Sensor (redrive): Paper (duplex job) Failed to Clear Jam Service Check.
230.91	Paper remains detected at the sensor (duplex) after the printer is turned on.	N/A

Sensor (redrive): Paper (duplex job) Failed to Arrive Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.

3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. Make sure that the reverse solenoid is functional. Do the following:
   a. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**
   b. Select **Redrive solenoid**
6. Check the reverse solenoid and its actuator for wear, damage, and improper operation. For more information, see Reverse Solenoid Removal.
7. Check the redrive assembly for wear, damage, and improper mesh. For more information, see Redrive Assembly Removal.
8. Check the printed page count.
   a. Enter the Diagnostics menu, and then touch **Printer Setup**.
   b. If the page count is near 400K, then replace the duplex. For more information, see Duplex Removal.
9. Check the duplex paper path for jammed paper, debris, and obstructions.
10. Check the duplex rollers for debris, wear, damage, contamination, and improper installation.
11. Check the duplex linkage and belt for damage and improper installation. For more information, see Duplex Removal.

Sensor (redrive): Paper (duplex job) Failed to Clear Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. If the paper jam error occurs regardless of the source tray, then do the following:
   a. Check the input sensor actuator for damage, and improper installation.
   b. Make sure that the sensor (duplex and input) is functional. Do the following:
      - Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Sensor tests**.
      - Find the sensor (duplex and input).
   c. Make sure that the connections between the sensor (duplex and input) and the controller board are properly connected.
   d. Check the sensor (duplex and input) for damage and improper installation. For more information, see Sensors (duplex and input) Removal.
6. Check the printed page count.
   a. Enter the Diagnostics menu, and then touch **Printer Setup**.

b. If the page count is near 400K, then replace the duplex. For more information, see Duplex Removal.

7. Check the duplex paper path for jammed paper, debris, and obstructions.
8. Check the duplex rollers for debris, wear, damage, contamination, and improper installation.
9. Check the duplex linkage and belt for damage and improper installation. For more information, see Duplex Removal.
10. Check the isolation roller for wear, damage, and contamination.

232 paper jams

232 Paper Jam Messages

Error code	Description	Action
232.03	Paper fed from the MPF was detected later than expected or was never detected the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Arrive Jam Service Check.
232.05	Paper fed from the MPF never cleared the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Clear Jam Service Check.
232.13	Paper fed from tray 1 was detected later than expected or was never detected the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Arrive Jam Service Check.
232.15	Paper fed from tray 1 never cleared the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Clear Jam Service Check.
232.23	Paper fed from tray 2 was detected later than expected or was never detected the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Arrive Jam Service Check.
232.25	Paper fed from tray 2 never cleared the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Clear Jam Service Check.
232.33	Paper fed from tray 3 never reached the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Arrive Jam Service Check.
232.35	Paper fed from tray 3 never cleared the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Clear Jam Service Check.
232.43	Paper fed from tray 4 never reached the sensor (pass-through) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Arrive Jam Service Check.
232.45	Paper fed from tray 4 never cleared the sensor (pass-through) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Clear Jam Service Check.

Error code	Description	Action
232.93	Paper fed from an unknown tray was detected later than expected or was never detected at the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Arrive Jam Service Check.
232.95	Paper fed from an unknown tray never cleared the sensor (input) during a duplex print job.	See Sensor (input): Paper (duplex job) Failed to Clear Jam Service Check.

Sensor (input): Paper (duplex job) Failed to Arrive Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. Check the printed page count.
   a. Enter the Diagnostics menu, and then touch **Printer Setup**.
   b. If the page count is near 400K, then replace the duplex. For more information, see Duplex Removal.
6. Check the duplex paper path for jammed paper, debris, and obstructions.
7. Check the duplex rollers for debris, wear, damage, contamination, and improper installation.
8. Check the duplex linkage and belt for damage and improper installation. For more information, see Duplex Removal.

Sensor (input): Paper (duplex job) Failed to Clear Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. Check the printed page count.
   a. Enter the Diagnostics menu, and then touch **Printer Setup**.
   b. If the page count is near 400K, then replace the duplex. For more information, see Duplex Removal.
6. Check the duplex paper path for jammed paper, debris, and obstructions.
7. Check the duplex rollers for debris, wear, damage, contamination, and improper installation.

8. Check the duplex linkage and belt for damage and improper installation. For more information, see Duplex Removal.
9. Check the isolation roller for wear, damage, and contamination.

241 paper jams

241 Paper Jam Messages

Error code	Description	Action
241.82	The motor (tray 1 pick) has stalled or did not reach the expected speed.	See Motor (tray 1 pick) Jam Service Check.
241.83	The motor (tray 1 pick) has stalled or did not reach the expected speed.	
241.84	The motor (tray 1 pick) has stalled or did not reach the expected speed.	

Motor (tray 1 pick) Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Make sure that the paper is free of debris and obstructions.
3. Perform a POR.
4. Check if the paper jam error occurs when using other trays.
5. Make sure that the pick/lift motor gearbox is functional. Do the following:
    1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests**.
    2. Select **Motor (tray 1 pick/lift)**.
    a. Make sure that the pick/lift motor gearbox is functional. Do the following:
    b. Make sure that the connections between the motor (pick/lift) and the controller board are properly connected.
    c. Check the pick/lift motor gearbox for damage, contamination, and improper installation. For more information, see Pick/lift Motor Gearbox Removal.
6. Check the pick arm and pick roller for damage and improper installation. For more information, see Pick Roller Removal.

242–244 paper jams

242 Paper Jam Messages

Error code	Description	Action
242.21	Paper fed from tray 2 remains detected at the sensor (tray 2 pass-through) or at the sensor (tray 2 trailing edge) after the printer is turned on.	See Optional Tray Sensors Jam Service Check.
242.26	Paper fed from tray 2 was picked but it never reached the sensor (input).	
242.31	Paper fed from tray 3 remains detected at the sensor (tray 2 pass-through) or sensor (tray 2 trailing edge) after the printer is turned on.	
242.33	Paper fed from tray 3 never reached the sensor (tray 2 pass-through).	
242.35	Paper fed from tray 3 cleared the sensor (tray 2 pass-through) later than expected.	
242.37	Paper fed from tray 3 never cleared the sensor (tray 2 pass-through).	
242.41	Paper fed from tray 4 remains detected at the sensor (tray 2 pass-through) or sensor (tray 2 trailing edge) after the printer is turned on.	
242.43	Paper fed from tray 4 never reached the sensor (tray 2 pass-through).	
242.45	Paper fed from tray 4 cleared the sensor (tray 2 pass-through) or sensor (tray 2 trailing edge) later than expected.	
242.47	Paper fed from tray 4 never cleared the sensor (tray 2 pass-through).	
242.70	Motor (tray 2 transport) does not turn on.	See Optional Tray Motors Jam Service Check.

Error code	Description	Action
242.71	Motor (tray 2 transport) does not turn off.	
242.72	Motor (550-sheet tray 2 transport) speed did not ramp up to expected level.	
242.73	Motor (550-sheet tray 2 transport) stalled.	
242.74	Motor (tray 2 transport) ran too slow.	
242.75	Motor (tray 2 transport) ran too fast.	
242.76	Motor (550-sheet tray 2 transport) ran too long.	
242.80	Motor (tray 2) did not turn on	
242.81	Motor (tray 2) did not turn off.	
242.82	Motor (tray 2) speed did not ramp up to expected level.	
242.83	Motor (tray 2) has stalled.	
242.84	Motor (tray 2) ran too slow.	
242.85	Motor (tray 2) ran too fast.	
242.86	Motor (tray 2) ran too long.	
242.91	Paper remains detected at the sensor (tray 2 pass-through) after the printer is turned on.	See Optional Tray Sensors Jam Service Check.
242.93	Paper fed from an unknown tray never arrived at the sensor (tray 2 pass-through).	
242.95	Paper fed from an unknown tray cleared the sensor (tray 2 pass-through) or sensor (tray 2 trailing edge) later than expected.	
242.96	Paper fed from an unknown tray was picked but it never arrived at the sensor (input).	
242.97	Paper fed from an unknown tray never cleared the sensor (tray 2 pass-through).	

243 Paper Jam Messages

Error code	Description	Action
243.36	Paper fed from tray 3 was picked but it never arrived at the sensor (tray 2 pass-through).	See Optional Tray Sensors Jam Service Check.
243.41	Paper fed from tray 4 remains detected at the sensor (tray 3 pass-through) or sensor (tray 3 trailing edge) after the printer is turned on.	
243.43	Paper fed from tray 4 never reached the sensor (tray 3 pass-through).	
243.45	Paper fed from tray 4 cleared the sensor (tray 3 pass-through) or sensor (tray 3 trailing edge) later than expected.	
243.47	Paper fed from tray 4 never cleared the sensor (tray 3 pass-through).	
243.70	Motor (550-sheet tray 3 transport) does not turn on.	See Optional Tray Motors Jam Service Check.
243.71	Motor (550-sheet tray 3 transport) does not turn off.	
243.72	Motor (550-sheet tray 3 transport) speed did not ramp up to expected level.	
243.73	Motor (550-sheet tray 3 transport) has stalled.	
243.74	Motor (tray 3 transport) ran too slow.	
243.75	Motor (tray 3 transport) ran too fast.	
243.76	Motor (550-sheet tray 3 transport) ran too long.	
243.80	Motor (550-sheet tray 3 pick/lift) does not turn on.	
243.81	Motor (550-sheet tray 3 pick/lift) does not turn on.	
243.82	Motor (550-sheet tray 3 pick/lift) does not turn off.	
243.83	Motor (550-sheet tray 3 pick/lift) has stalled.	

Error code	Description	Action
243.84	Motor (550-sheet tray 3 pick/lift) ran too slow.	
242.85	Motor (550-sheet tray 3 pick/lift) ran too fast.	
242.86	Motor (550-sheet tray 3 pick/lift) ran too long.	
243.91	Paper remains detected at the sensor (tray 3 pass-through) after the printer is turned on.	See Optional Tray Sensors Jam Service Check.
243.92	Paper fed from an unknown tray was detected earlier than expected at the sensor (tray 3 pass-through) or sensor (tray 3 trailing edge).	
243.93	Paper fed from an unknown tray never reached the sensor (tray 2 pass-through).	
243.95	Paper fed from an unknown tray cleared the sensor (tray 3 pass-through) or sensor (tray 3 trailing edge) later than expected.	
243.96	Paper fed from an unknown tray was picked but it never reached the sensor (tray 3 pass-through).	
243.97	Paper fed from an unknown tray never cleared the sensor (tray 3 pass-through).	

244 Paper Jam Messages

Error code	Description	Action
244.46	Paper fed from tray 4 was picked but it never reached the sensor (tray 4 trailing edge).	See Optional Tray Sensors Jam Service Check.
244.70	Motor (550-sheet tray 4 transport) does not turn on.	See Optional Tray Motors Jam Service Check.
244.71	Motor (550-sheet tray 4 transport) does not turn off.	
244.72	Motor (550-sheet tray 4 transport) speed did not ramp up to expected level.	
244.73	Motor (550-sheet tray 4 transport) has stalled.	

Error code	Description	Action
244.74	Motor (550-sheet tray 4 transport) ran too slow.	
244.75	Motor (550-sheet tray 4 transport) ran too fast.	
244.76	Motor (550-sheet tray 4 transport) ran too long.	
244.80	Motor (550-sheet tray 4 pick/lift) does not turn on.	
244.81	Motor (550-sheet tray 4 pick/lift) does not turn off.	
244.82	Motor (550-sheet tray 4 pick/lift) speed did not ramp up to expected level.	
244.83	Motor (550-sheet tray 4 pick/lift) has stalled.	
244.84	Motor (550-sheet tray 4 pick/lift) ran too slow.	
244.85	Motor (550-sheet tray 4 pick/lift) ran too fast.	
244.86	Motor (550-sheet tray 4 pick/lift) ran too long.	
244.91	Paper remains detected at the sensor (tray 4 pass-through) or sensor (tray 4 trailing edge) after the printer is turned on.	See Optional Tray Sensors Jam Service Check.

Optional Tray Sensors Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Perform a POR.
3. Identify the tray that causes the paper jam error. Place the affected tray insert at the bottom. For example, If tray 2 is causing the paper jam error in a 4-tray configuration, then swap tray 2 and tray 4.
4. Make sure the following sensors are functional:
   - Sensor (pass-through)
   - Sensor (index)
   - Sensor (trailing edge)
   - Sensor (media present)

   Do the following:

a. Enter the Diagnostics menu, and then touch **Additional input tray diagnostics** > **Sensor tests**.

b. Find the listed sensors.

5. Make sure that the connections between the listed sensors and the controller board are properly connected.
6. Check the sensors and its actuators for damage and improper installation.
7. Check the tray insert for damage and improper installation.
8. Check the tray guides for damage and improper operation.
9. Check the lift plate for damage and improper operation.

Optional Tray Motors Jam Service Check

1. Make sure that paper is supported and loaded properly. See Avoiding jams.
2. Perform a POR.
3. Identify the tray that causes the paper jam error. Place the affected tray insert at the bottom. For example, If tray 2 is causing the paper jam error in a 4-tray configuration, then swap tray 2 and tray 4.
4. Remove the tray insert.
5. Check the tray insert and its lift plate gears for damage and improper operation.
6. Make sure that the following motors are functional:
   - Motor (pick (tray (x))
   - Motor (pass-through (tray(x))

   Do the following:

   a. Enter the Diagnostics menu, and then touch **Additional input tray diagnostics** > **Motors tests**.

   b. Select **Pick (tray [x])** and **Pass-through (tray [x])**.
7. Make sure that the connections between the motors and the controller board are properly connected.
8. Check the motors for damage, and improper installation.

User attendance messages

0y user attendance errors

2–9 User Attendance Messages

Error code	Description	Action
2.01	A supply is needed for a job.	N/A
8.00	A door was detected as open.	See Undetected door service check
8.01	Door A was detected as open.	
8.02	Door B was detected as open.	
9.00	A problem caused the printer to restart automatically.	Auto reboot error service check

Undetected door service check

1. Check the doors for the following:
   a. Obstructions
   b. Damage
   c. Improper operation
2. Close the doors properly.

Note: Make sure that there is no gap between the door and the printer.

3. Make sure that the door links and hinges are properly interlocked and the sensor actuator is not damaged.
4. Press the power button to turn off the printer, and then disconnect the power cord from the electrical outlet.
5. Wait for 30 seconds to make sure that all electrical charges have dissipated from the printer.
6. Connect the power cord to the electrical outlet, and then press the power button to turn on the printer.
7. Wait for the printer to completely boot up and initialize all its components before sending the print job again.
8. Check the sensor (door interlock) actuator for damage and improper installation.
9. Make sure that the sensor (door interlock) is functional, do the following:
   a. Enter the Diagnostics menu, and then touch **Printer diagnostics and adjustments** > **Sensor tests**.
   b. Find the sensor (door interlock).

10. Make sure that the connections between the controller board and sensor (door interlock) are properly connected.

Auto reboot error service check

1. Clear the intervention message, and then send the print job again.
2. Press the power button to turn off the printer, and then disconnect the power cord from the electrical outlet.
3. Wait for 30 seconds to make sure that all electrical charges have dissipated from the printer.
4. Connect the power cord to the electrical outlet, and then press the power button to turn on the printer.
5. Wait for the printer to completely boot up and initialize all its components before sending the print job again.

1y user attendance errors

11–12 User Attendance Messages

Error code	Description	Action
11.11	A wrong paper type or size was detected on tray 1.	Mismatched paper size and paper printer setting error service check
11.12	A wrong paper type, size, or orientation was detected on tray 1.	
11.21	A wrong paper type or size was detected on tray 2.	
11.22	A wrong paper type, size, or orientation was detected on tray 2.	
11.31	A wrong paper type or size was detected on tray 3.	
11.32	A wrong paper type, size, or orientation was detected on tray 3.	
11.41	A wrong paper type or size was detected on tray 4.	
11.42	A wrong paper type, size, or orientation was detected on tray 4.	
11.71	An unsupported orientation was detected for an envelope loaded.	
11.81	A wrong paper type or size was detected on the MPF.	

Error code	Description	Action
11.82	A wrong paper type, size, or orientation was detected on the MPF.	
11.91	A wrong paper type or size was detected on the MPF.	
11.92	A wrong paper type, size, or orientation was detected on the MPF.	
12.11	A wrong setting for paper type or size was detected on tray 1.	Mismatched paper size and paper printer setting error service check
12.12	A wrong setting for paper type, size, or orientation was detected on tray 1.	
12.21	A wrong setting for paper type or size was detected on tray 2.	
12.22	A wrong setting for paper type, size, or orientation was detected on tray 2.	
12.31	A wrong setting for paper type or size was detected on tray 3.	
12.32	A wrong setting for paper type, size, or orientation was detected on tray 3.	
12.41	A wrong setting for paper type or size was detected on tray 4.	
12.42	A wrong setting for paper type, size, or orientation was detected on tray 4.	
12.81	A wrong setting for paper type or size was detected on the MPF.	
12.82	A wrong setting for paper type, size, or orientation was detected on the MPF.	
12.91	A wrong setting for paper type or size was detected on the MPF.	
12.92	A wrong setting for paper type, size, or orientation was detected on the MPF.	

Mismatched paper size and paper printer setting error service check

1. Set the paper size in the Paper menu to match the paper loaded. From the home screen, touch **Settings** > **Paper** > **Tray Configuration**.
2. Adjust the paper guides in the tray to correct position for the paper loaded. Make sure that the guides fit snugly against the paper.
3. Replace with correct paper type or size.

2y user attendance errors

29 User Attendance Messages

Error code	Description	Action
29.00	Packing material present on supplies.	See Removing the packing material from the supplies
29.08		

Removing the packing material from the supplies

1. Make sure to remove all packing materials such as tape, foam, or plastic.
2. Check all areas of the printer for packing materials.
3. Remove all supplies, and then check for any packing material left.

3y user attendance errors

31 User Attendance Error Messages

Error code	Description	Action
31.00	An MICR print cartridge is required.	See MICR supplies service check
31.40	The toner cartridge is missing or unresponsive.	See Toner cartridge (K) error service check
31.40A	A black toner cartridge smart chip or sensor communication error was detected.	
31.40AN		
31.40B	A black toner cartridge smart chip or sensor communication error was detected.	
31.40C	A black toner cartridge smart chip or sensor communication error was detected.	
31.40CN		

Error code	Description	Action
31.40D	A black toner cartridge smart chip or sensor communication error was detected.	
31.40E	A black toner cartridge smart chip or sensor communication error was detected.	
31.40F 31.40FN	A black toner cartridge smart chip or sensor communication error was detected.	
31.40G 31.40GN	A black toner cartridge smart chip or sensor communication error was detected.	
31.40H	A black toner cartridge smart chip or sensor communication error was detected.	
31.40K	A black toner cartridge smart chip or sensor communication error was detected.	
31.40R	A black toner cartridge smart chip or sensor communication error was detected.	
31.40Y	A black toner cartridge smart chip or sensor communication error was detected.	
31.60	The imaging unit is missing or unresponsive.	See Imaging unit (K) error service check
31.60A 31.60AN	A black imaging unit smart chip or sensor communication error was detected.	
31.60B	A black imaging unit smart chip or sensor communication error was detected.	
31.60C 31.60CN	A black imaging unit smart chip or sensor communication error was detected.	
31.60D	A black imaging unit smart chip or sensor communication error was detected.	
31.60E	A black imaging unit smart chip or sensor communication error was detected.	
31.60F	A black imaging unit smart chip or sensor communication error was detected.	

Error code	Description	Action
31.60G	A black imaging unit smart chip or sensor communication error was detected.	
31.60H	A black imaging unit smart chip or sensor communication error was detected.	
31.60Q	A black imaging unit smart chip or sensor communication error was detected.	
31.60R	A black imaging unit smart chip or sensor communication error was detected.	
31.60T	A black imaging unit smart chip or sensor communication error was detected.	
31.60U	A black imaging unit smart chip or sensor communication error was detected.	
31.60V	A black imaging unit smart chip or sensor communication error was detected.	
31.60Z	A black imaging unit smart chip or sensor communication error was detected.	

32 User Attendance Error Messages

Error code	Description	Action
32.40	The toner cartridge is unsupported.	See Toner cartridge (K) error service check
32.40A	The black toner cartridge is unsupported—Unsupported memory map version in the smart chip.	
32.40B	The black toner cartridge is unsupported—Failed capacity class/model compatibility check.	
32.40C	The black toner cartridge is unsupported—Failed OEM check.	
32.40D	The black toner cartridge is unsupported—Failed SWE marriage check.	

Error code	Description	Action
32.40E	The black toner cartridge is unsupported—The supply is on the revoked list.	
32.40F	The black toner cartridge is unsupported—The print cartridge is MICR, and the release does not support MICR.	
32.40G	The black toner cartridge is unsupported.	
32.40H	The black toner cartridge is unsupported.	
32.40I	The black toner cartridge is unsupported.	
32.40J	The black toner cartridge is unsupported.	
32.40K	The black toner cartridge is unsupported.	
32.40L	The black toner cartridge is unsupported.	
32.40M	The black toner cartridge is unsupported.	
32.40Z	The black toner cartridge is unsupported.	
32.60	The imaging unit is unsupported.	See Imaging unit (K) error service check
32.60A	The black imaging unit is unsupported.	
32.60AN		
32.60B	The black imaging unit is unsupported.	
32.60C	The black imaging unit is unsupported.	
32.60D	The black imaging unit is unsupported.	
32.60E	The black imaging unit is unsupported.	
32.60F	The black imaging unit is unsupported.	

33 User Attendance Error Messages

Note: For more information, see Non-Xerox supply Non-Xerox Supply.

Error code	Description	Action
33.40	An inauthentic black toner cartridge was detected.	See Toner cartridge (K) error service check
33.40A	An inauthentic black toner cartridge was detected.	
33.40AN		
33.40BN	An inauthentic black toner cartridge was detected.	
33.60	An inauthentic black imaging unit was detected.	See Imaging unit (K) error service check
33.60A	An inauthentic black imaging unit was detected.	
33.60AN		
33.60B	An inauthentic black imaging unit was detected.	
33.60BN		
33.60C	An inauthentic black imaging unit was detected.	

37–39 User Attendance Messages

Error code	Description	Action
37.01	The memory is insufficient to collate the job.	See Insufficient memory service check
37.03		
38.01	The memory is full.	
39.01	The page is too complex to print. The printer memory is not enough for the details on the page.	
39.02		

MICR supplies service check

1. Make sure that the toner cartridge and imaging unit are not damaged, not leaking, genuine, and support MICR supplies.
2. Make sure that the imaging unit or imaging kit and the toner cartridge are free of toner buildup. Using an approved toner vacuum cleaner, completely clean the supplies.
3. Press the power button to turn off the printer, and then disconnect the power cord from the electrical outlet.
4. Wait for 30 seconds to make sure that all electrical charges have dissipated from the printer.
5. Connect the power cord to the electrical outlet, and then press the power button to turn on the printer.
6. Wait for the printer to completely boot up and initialize all its components before sending the print job again.

Toner cartridge (K) error service check

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

   Note: If the printer is using a third-party toner cartridge, then refer the users to the supplier.

2. Make sure that the cartridge region matches the printer region.
3. Make sure that the toner cartridge is not damage and not leaking
4. Make sure that the toner cartridge is free of toner buildup. Using an approved toner vacuum cleaner, completely clean the supplies.
5. When installing a genuine after market supply for the first time and a supplies message error occurs, install the latest firmware version available for your printer.
6. Clean the toner cartridge contacts for any toner contamination.
7. Check the toner cartridge contacts for damage.
8. Make sure that the connections between the controller board and the toner cartridge are properly connected.

Imaging unit (K) error service check

1. Check if the printer is using a genuine and supported Xerox imaging unit or imaging kit.

   Note: If the printer is using a third-party imaging unit or imaging kit, then refer the users to the supplier.

2. Check the imaging unit or imaging kit for damage.
3. Make sure that the imaging unit or imaging kit is free of toner buildup. Using an approved toner vacuum cleaner, completely clean the supplies.
4. When installing a genuine after market supply for the first time and a supplies message error occurs, install the latest firmware version available for your printer.
5. Clean the toner cartridge contacts for any toner contamination.
6. Check the toner cartridge contacts for damage.
7. Make sure that the connections between the controller board and the toner cartridge are properly connected.

Insufficient memory service check

1. Erase the printer memory. Do the following:
   a. Turn off the printer, and then disconnect the power cord from the electrical outlet.
   b. Wait for a few minutes, connect the power cord to the electrical outlet, and then turn on the printer.
2. Reduce the complexity of the print job. Do any of the following:
   a. Lower the print quality.
   b. Reduce the number of pages being printed at once.
3. If the file format is causing the issue, then convert the file to a different format that is more efficient in printing such as PDF.

4. Use a different driver, such as PostScript driver, to handle the print job more efficiently. Some printer drivers may be more efficient at handling large or complex print jobs than others.
5. Upgrade the printer memory by adding additional RAM.

Non-Xerox Supply

The printer has detected a non-Xerox supply or part installed in the printer.

The Xerox printer is designed to function best with genuine Xerox supplies and parts. Use of third-party supplies or parts may affect the performance, reliability, or life of the printer and its imaging components.

All life indicators are designed to function with Xerox supplies and parts and may deliver unpredictable results if third-party supplies or parts are used. Imaging component usage beyond the intended life may damage the Xerox printer or associated components.

Warning: Use of third-party supplies or parts can affect warranty coverage. Damage caused by the use of third-party supplies or parts may not be covered by the warranty

To accept any and all of these risks and to proceed with the use of non-genuine supplies or parts in your printer, instruct the customer to touch and hold the error message on the display using two fingers for 15 seconds. When a confirmation dialog box appears, touch **Continue**.

If the customer does not want to accept these risks, then remove the third-party supply or part from the printer and install a genuine Xerox supply or part.

If the printer does not print after clearing the error message, then instruct the customer to reset the supply usage counter.

1. From the control panel, navigate to:

   Settings > **Device** > **Maintenance** > **Configuration Menu** > **Supply Usage And Counters** .
2. Select the part or supply to reset.
3. Read the warning message, and then select **Continue**.
4. Using two fingers, touch the display for 15 seconds to clear the message.

4y user attendance errors

41 User Attendance Messages

Error code	Description	Action
41.60	The imaging unit and toner cartridge are mismatched or incompatible.	N/A
41.60A	The imaging unit and toner cartridge are mismatched or incompatible—Toner type mismatch.	
41.60AN		

42 User Attendance Messages

Error code	Description	Action
42.04	The toner cartridge and printer regions are mismatched.	See Mismatched supplies service check
42.09	The toner cartridge and printer regions are mismatched.	
42.40	The toner cartridge and printer regions are mismatched.	
42.49	The toner cartridge and printer regions are mismatched.	
42.90	The toner cartridge and printer regions are mismatched.	
42.94	The toner cartridge and printer regions are mismatched.	

42.xy:

- X y —X is the printer region (error values 1 to 9, and 0 always matches)
- x Y —Y is the cartridge region (values 0 to 9, and 0 always matches)
- 0 0 —Region 0: Worldwide. supports any printer or cartridge. Should never post as an error.
- 1 1 —Not used
- 2 2 —Not used
- 3 3 —Not used
- 4 4 —Region 4: DMO Sold
- 5 5 —Not used
- 6 6 —Not used
- 7 7 —Not used
- 8 8 —Not used
- 9 9 —Region 4: NA/XE Sold – North America and Europe

Examples:

- 42.49–Printer is DMO region. Toner Cartridge is NA/XE region.
- 42.94–Printer is NA/XE region. Toner Cartridge is DMO region.

43 User Attendance Error Messages

Error code	Description	Action
43.40	A toner cartridge sensor error was detected.	See Toner meter card error service check

Error code	Description	Action
43.40Y	A black toner cartridge toner meter cycle error was detected.	
43.40Z		

Mismatched supplies service check

1. Check if the printer is using a genuine and supported Xerox toner cartridge.

   Note: If the printer is using a third-party toner cartridge, then refer the users to the supplier.

2. Make sure that the cartridge region matches the printer region.
3. Make sure that the toner cartridge is not damage and not leaking.
4. Make sure that the toner cartridge is free of toner buildup. Using an approved toner vacuum cleaner, completely clean the supplies.
5. When installing a genuine after market supply for the first time and a supplies message error occurs, install the latest firmware version available for your printer.

Toner meter card error service check

1. Make sure that the toner meter card is properly installed.
2. Check the sensor (toner meter) for contamination.
3. Make sure that the printer is free of toner buildup. Using an approved toner vacuum cleaner, completely clean the supplies.
4. Make sure that the sensor (toner meter) is functional. Do the following:
   a. Enter the Diagnostics menu, and then touch **Printer diagnostics and adjustments** > **Sensor tests**.
   b. Find the sensor (toner meter).

5y user attendance errors

55–59 User Attendance Error Messages

Error code	Description	Action
55.1	An unsupported USB device was detected.	Remove the flash drive to continue.
55.2	An unsupported USB hub was detected.	
58.00	Too many optional trays and finishers were detected.	Remove excess optional trays or finishers.
58.00A	Too many optional trays were detected.	1 Turn off the printer, and then unplug the power cord from the electrical outlet.

Error code	Description	Action
58.00B	Too many optional trays were detected.	2 Remove one or more trays. 3 Connect the power cord to the electrical outlet, and then turn on the printer.
58.00C	Too many optional trays were detected.	
58.00D	Too many optional trays were detected.	
59.00	An unsupported option was detected. The option software version is not supported by the engine.	1 Turn off the printer, and then unplug the power cord from the electrical outlet. 2 Remove the indicated tray. 3 Connect the power cord to the electrical outlet, and then turn on the printer.
59.00C	An unsupported option was detected.	
59.00D	An unsupported option was detected.	

6y user attendance errors

61–66 User Attendance Error Messages

Error code	Description	Action
61.00	The hard disk is defective.	Replace the defective storage drive.
62.00	The hard disk is full.	Try one or more of the following: • Touch **Continue** to clear the message. • Delete fonts, macros, and other data stored in the printer hard disk. • Install a printer hard disk.
63.00	The hard disk is not formatted.	To format the storage drive later, do the following: 1 From the home screen, touch **Settings** > **Device** > **Maintenance** > **Out of Service Erase**. 2 Touch **Erase Intelligent Storage Drive**, and then touch **ERASE**.
64.00	The hard disk format is unsupported.	- -
66.00	The hard disk needs to be formatted.	- -

7y user attendance errors

71–72 User Attendance Error Messages

Error code	Description	Action
71.01	The fax station name is not set up.	N/A
71.02	The fax station number is not set up.	
71.03	The analog phone line is not found.	N/A
71.04	The analog phone line is incorrectly connected.	
71.05	An invalid FoIP license was detected.	
71.06	The fax server is not found.	
71.07	The printer is not registered to HTTPS Fax Server.	Register the printer to HTTPS Fax server.
71.12	The printer cannot print faxes because the fax memory is full.	N/A
71.13	The printer cannot send faxes because the fax memory is full.	
71.20	The fax partition is not working.	
72.01	The SMTP server is not set up.	N/A
72.02	The Web Link server is not set up.	Contact system administrator.
72.04	The Fax server to Format is not set up.	Contact system administrator.

8y user attendance errors

80 User Attendance Error Messages

Error code	Description	Action
80.00	The maintenance kit is nearly low.	Touch **Continue** to clear the message.
80.01	The maintenance kit is nearly low. The backup roll or fuser page count threshold has been reached.	
80.03	The maintenance kit is nearly low.	

Error code	Description	Action
80.09	The maintenance kit is nearly low. The user-selected EWS set point has been reached.	
80.11	The maintenance kit is low. The backup roll or fuser page count threshold has been reached.	
80.13	The maintenance kit is low.	
80.19	The maintenance kit is low. The user-selected EWS set point has been reached.	
80.21	The maintenance kit is very low. The backup roll or fuser page count threshold has been reached.	
80.23	The maintenance kit is very low.	
80.29	The maintenance kit is very low. The user-selected EWS set point has been reached.	
80.31	Replace the maintenance kit. The backup roll or fuser page count threshold has been reached. The fuser may continue to function beyond end of life.	
80.33	Replace the maintenance kit.	
80.39	Replace the maintenance kit. The user-selected EWS set point has been reached. The fuser may continue to function beyond end of life.	

84 User Attendance Error Messages

Error code	Description	Action
84.00	The black imaging unit is nearly low.	Touch **Continue** to clear the message.
84.01	The black imaging unit is nearly low.	
84.02	The black imaging unit is nearly low.	
84.03	The black imaging unit is nearly low. The side count set point has been reached.	

Error code	Description	Action
84.09	The black imaging unit is nearly low. The user-selected EWS set point has been reached.	
84.11	The black imaging unit is low.	
84.12	The black imaging unit is low.	
84.13	The black imaging unit is low. The side count set point has been reached.	
84.19	The black imaging unit is low. The user-selected EWS set point has been reached.	
84.20	The black imaging unit is very low.	
84.21	The black imaging unit is very low.	
84.22	The black imaging unit is very low.	
84.23	The black imaging unit is very low. The side count set point has been reached.	
84.29	The black imaging unit or CMY imaging kit is very low. The user-selected EWS set point has been reached.	
84.30	The black imaging unit has reached end-of-life.	See Replacing the imaging unit
84.31	The black imaging unit has reached end-of-life.	
84.32	The black imaging unit has reached end-of-life.	
84.33	The black imaging unit has reached end-of-life.	
84.41	The black imaging unit has reached beyond end-of-life.	
84.42	The black imaging unit has reached beyond end-of-life.	
84.43	The black imaging unit has reached beyond end-of-life.	

88 User Attendance Error Messages

Error code	Description	Action
88.00	The black toner cartridge is nearly low.	Touch **Continue** to clear the message
88.01	The black toner cartridge is nearly low.	
88.08	The black toner cartridge quanta error has occurred.	
88.09	The black toner cartridge is nearly low. The user-selected EWS set point has been reached.	
88.10	The black toner cartridge is low.	
88.18	The black toner cartridge is low.	
88.19K	The black toner cartridge is low. The user-selected EWS set point has been reached.	
88.20K	The black toner cartridge is very low.	
88.28K	The black toner cartridge is very low.	
88.29K	The black toner cartridge is very low. The user-selected EWS set point has been reached.	
88.30K	The black toner cartridge is at end-of-life.	See Replacing the toner cartridge
88.37K	The black toner cartridge is at end-of-life.	
88.38K	The black toner cartridge is at end-of-life.	
88.40K	The black toner cartridge is beyond end-of-life.	
88.47K	The black toner cartridge is beyond end-of-life.	
88.48K	The black toner cartridge is beyond end-of-life.	

Printer hardware errors

111 errors

111 Error Messages

Error code	Description	Action
111.20	Printhead error (mirror motor lock) was detected before the motor was turned on.	See Printhead Error Service Check .
111.21	No printhead power (+5 V) when the laser servo started.	
111.30	The printhead failed during power-on tests.	
111.30A	The printhead failed during power-on tests—Old engine code.	
111.30B	The printhead failed during power-on tests—Boost failure.	
111.30C	The printhead failed during power-on tests—Capture time incorrect.	
111.30D	The printhead failed during power-on tests—Unknown.	
111.30E	The printhead failed during power-on tests—Every test has produced HSYNCs.	
111.30F	The printhead failed during power-on tests—Failure to produce HSYNCs.	
111.30G	The printhead failed during power-on tests—Diode A failure.	
111.30H	The printhead failed during power-on tests—Diode B failure.	
111.30L	The printhead failed during power-on tests—Lpow failure.	
111.31	Printhead error (no first HSYNC) was detected.	
111.32	Printhead error (lost HSYNC) was detected.	
111.33	Printhead error (lost HSYNC) was detected during servo.	
111.35	Printhead error (mirror motor never got first lock) was detected.	

Error code	Description	Action
111.36	Printhead error (mirror motor never stabilized) was detected.	
111.37	Paper reached the sensor (input) but the mirror motor was not locked.	
111.38	Paper reached the sensor (input) but the printhead startup was not incomplete.	
111.40	The printhead installed is incorrect.	
111.91	Printhead error (bad facet time reading).	

Printhead Error Service Check

1. Perform a POR.
2. Make sure that the connections between the controller board and the printhead are properly connected.
3. Check the printhead for damage, contamination, and improper installation. For more information, see Printhead Removal .

121 errors

121 Error Messages

Error code	Description	Action
121.00	Fuser did not reach the required temperature.	See Fuser Error Service Check.
121.01	During an attempt to heat up, the fuser was not detected.	
121.02	Fuser went over the required temperature (during EWC/line voltage detection).	
121.10	Fuser did not reach the required temperature (during start of EWC/ line voltage detection).	
121.11	Fuser reached the required temperature (during final EWC/ line voltage detection) too late.	
121.12	Fuser did not reach the required temperature (during final EWC/ line voltage detection).	

Error code	Description	Action
121.13	Fuser reached the required temperature (during final EWC/ line voltage detection) too fast.	
121.14	Fuser is heating too fast.	
121.20	Fuser did not reach the required temperature during steady state control. This can occur during printing or in standby mode.	
121.22	Open fuser relay was detected.	See Fuser Error Service Check.
121.23	Fuser relay was turned off but the feed back to the engine code indicated that it was still open.	
121.24	Fuser did not reach the required temperature during the final EWC/ line voltage detection.	
121.28	Fuser did not reach the required temperature during EP warm-up.	
121.32	Fuser did not reach the required temperature at 100 % power.	
121.33	Fuser did not reach the required temperature while page is in the fuser.	
121.34	Fuser did not reach the required temperature during steady state control.	
121.50	Fuser went over the required temperature during global over-temp check.	
121.52	Main thermistor temperature is out of range.	
121.53	Main thermistor temperature change rate is out of range.	
121.71	Open fuser main heater thermistor was detected.	

Fuser Error Service Check

1. Make sure that the printer is placed in a location with the following temperature and humidity:
   - 60˚F to 90˚F temperature range
   - 8 % to 80 % relative humidity
2. If the printer needs to be placed in a below freezing environment, then do the following:

a. Remove the fuser, and then allow it to slowly warm above freezing temperature.

b. Reinstall the fuser, and then turn on the printer.

c. Increase the timeout value for sleep mode to 114. From the home screen, touch **Settings** > **Device** >**Power Management** > **Timeouts**> **Sleep Mode** .

Note: 114 minutes is the maximum acceptable timeout value.

3. Make sure that the printer is plugged into a into an appropriate rate and properly grounded electrical out let or supported Inline Surge Protector.
4. Perform a POR.
5. Make sure that the cooling fan is functional. Do the following:

   a. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests** .

   b. Select **Fan (main)** .
6. Make sure that the connections between the cooling fan and the controller boar are properly connected.
7. Check the cooling fan for damage, contamination, and improper installation. For more information, see Fan Removal .
8. Make sure that the correct voltage is supplied to the fuser from the power supply.
9. Make sure that the connections between the controller board and the fuser are properly connected.
10. Check the fuser for damage, contamination, and improper installation. For more information, see Fuser Removal .

126 errors

126 Error Messages

Error code	Description	Action
126.01	Line frequency has gone outside the operating range.	See LVPS Error Service Check .
126.05	The LVPS power dropped but the printer was not in sleep mode.	
126.06	LVPS 25 V line error was detected.	
126.07	LVPS 5 V rail was down during power-on.	
126.10	No line frequency was detected.	
126.11	Line frequency has exceeded the operating range.	
126.12	LVPS mismatch was detected.	
126.13	LVPS mismatch was detected.	

Error code	Description	Action
126.14	LVPS relay is stuck or closed.	

LVPS Error Service Check

1. Make sure that the printer is plugged into a into an appropriate rate and properly grounded electrical out let or supported Inline Surge Protector.
2. Perform a POR.
3. Make sure that the connections between the controller board and the LVPS are properly connected.
4. Make sure that the printer is plugged into a supported power strip or uninterruptable power supply (UPS).
5. Make sure that voltage output of the electrical outlet matches the voltage rating of the printer.
   Note: A poor power source may trigger a false fuser error.

128 errors

128 Error Messages

Error code	Description	Action
128.01	TDS baseline is too low.	See Sensor (toner density) Error Service Check .
128.02	TDS baseline is too high.	
128.03	TDS baseline range is excessive.	
128.16	TDS calibration is at maximum.	
128.17	TDS calibration is too low.	
128.18	TDS calibration is too close to baseline.	
128.32	Photoconductor drum measurement is too high.	
128.33	Photoconductor drum measurement is too different from calibration.	
128.34	Photoconductor drum measurement is too close to baseline.	
128.35	Photoconductor drum measurement data is not enough.	

Sensor (toner density) Error Service Check

1. Check if the printer is using a genuine and supported Xerox toner cartridge. Note: If the printer is using a third-party toner cartridge, then refer the user to their supplier.
2. Check the imagine unit and toner cartridge for damage and leakage.
3. Make sure that the imaging unit and the toner cartridge are free of toner buildup. using an approved toner vacuum cleaner, completely clean the supplies.
4. Perform a POR.
5. Check the cleaning mechanism actuator for improper operation and damage.
6. Clear the area under the transfer roller of dust and toner contamination. For more information, see Transfer Roller Removal .
7. Remove tray 1, and then manually actuate the toner density sensor wiper my moving the pick roller up and down.
8. Make sure the connections between the controller board and sensor (toner density) are properly connected.
9. Check the pick roller cam for damage. Note: The rotation of the pick roller cam triggers the movement of the wiper bracket.
10. Check the sensor (toner density) and its wiper bracket for damage, contamination, and improper installation. For more information, see Sensor (toner density) and Media Present Sensor Flag Removal .

133 errors

133 Error Messages

Error code	Description	Action
133.04	CTLS timeout was detected at the imaging unit.	See Imaging Unit CTLS Error Service Check
133.05	CTLS reading at the imaging unit is above the maximum expected value.	
133.06	CTLS reading at the imaging unit is below the minimum expected value.	
133.08	Excessive CTLS noise was detected at the imaging unit.	

Imaging Unit CTLS Error Service Check

1. Check the imaging unit for damage, contamination, and improper installation.
2. Check the imaging unit contacts for contamination.
3. Perform a POR.

4. Make sure that the connections between the controller board and the imaging unit are properly connected.

140 errors

140 Error Messages

Error code	Description	Action
140.80	Motor (main) does not turn on.	See Motor (main) Error Service Check .
140.81	Motor (main) does not turn off.	
140.82	Motor (main) speed did not ramp up to the required level.	
140.83	Motor (main) stalled.	
140.84	Motor (main) ran too slow.	
140.85	Motor (main) ran too fast.	
140.86	Motor (main) ran too long.	

Motor (main) Error Service Check

1. Check if the error occurs only after printing. If yes, then check the imaging unit for damage, contamination, and improper installation.
2. Perform a POR.
3. Make sure that the motor (main) is functional. Do the following:
   a. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests** .
   b. Select **Transport** .
4. Make sure that the connections between the motor (main) and the controller board are properly connected.
5. Check the main drive gearbox for damage, contamination, and improper installation. For more information, see Main Drive Gearbox Removal.

155 errors

155 Error Messages

Error code	Description	Action
155.80	Motor (cartridge) does not turn on.	See Cartridge Drive Error Service Check .
155.81	Motor (cartridge) does not turn off.	

Error code	Description	Action
155.82	Motor (cartridge) speed did not ramp up to the required level.	
155.83	Motor (cartridge) has stalled.	
155.84	Motor (cartridge) ran too slow.	
155.85	Motor (cartridge) ran too fast.	
155.86	Motor (cartridge) ran too long.	

Cartridge Drive Error Service Check

1. Check if the printer is using a genuine and supported Xerox toner cartridge. Note: If the printer is using a third-party toner cartridge, then refer the user to their supplier.
2. Check the toner cartridge for damage and improper installation.
3. Manually turn the cartridge gear, and then make sure it is not stuck.
4. Open the front access door, and then check if the cartridge plunger is damaged.
5. Make sure that the toner cartridge is free of toner buildup. Using an approved toner vacuum cleaner, completely clean the toner cartridge.
6. Make sure that the connections between the toner cartridge and the controller board are properly connected.
7. Perform a POR.
8. Make sure that the motor (main) is functional. Do the following:
   a. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests** .
   b. Select **Transport** .
9. Make sure that the connections between the motor (main) and the controller board are properly connected.
10. Check the main drive gearbox for damage, contamination, and improper installation. For more information, see Main Drive Gearbox Removal.

16y errors

161 Error Messages

Error code	Description	Action
161.80	The motor (tray 1 pick/lift) does not turn on.	See Motor (tray 1 pick/lift) Error Service Check .
161.81	The motor (tray 1 pick/lift) does not turn off.	

Error code	Description	Action
161.82	The motor (tray 1 pick/lift) speed did not ramp up to the required level.	
161.83	The motor (tray 1 pick/lift) stalled.	
161.84	The motor (tray 1 pick/lift) ran too slow.	
161.85	The motor (tray 1 pick/lift) ran too fast.	
161.86	The motor (tray 1 pick/lift) ran too long.	

162–164 Error Messages

Error code	Description	Action
162.80	The motor (tray 2 pick) does not turn on.	See Optional Tray Pick Drive Error Service Check .
162.81	The motor (tray 2 pick) does not turn off.	
162.82	The motor (tray 2 pick) speed did not ramp up to the required level.	
162.83	The motor (tray 2 pick) stalled.	
162.84	The motor (tray 2 pick) ran too slow.	
162.85	The motor (tray 2 pick) ran too fast.	
162.86	The motor (tray 2 pick) ran too long.	
163.80	The motor (tray 3 pick) does not turn on.	See Optional Tray Motor Error Service Check .
163.81	The motor (tray 3 pick) does not turn off.	
163.82	The motor (tray 3 pick) speed did not ramp up to the required level.	
163.83	The motor (tray 3 pick) stalled.	
163.84	The motor (tray 3 pick) ran too slow.	
163.85	The motor (tray 3 pick) ran too fast.	
163.86	The motor (tray 3 pick) ran too long.	

Error code	Description	Action
164.80	The motor (tray 4 pick) does not turn on.	
164.81	The motor (tray 4 pick) does not turn off.	
164.82	The motor (tray 4 pick) speed did not ramp up to the required level.	
164.83	The motor (tray 4 pick) stalled.	
164.84	The motor (tray 4 pick) ran too slow.	
164.85	The motor (tray 4 pick) ran too fast.	
164.86	The motor (tray 4 pick) ran too long.	

166–168 Error Messages

Error code	Description	Action
166.80	The motor (tray 2 transport) does not turn on.	See Optional Tray Motor Error Service Check .
166.81	The motor (tray 2 transport) does not turn off.	
166.82	The motor (tray 2 transport) speed did not ramp up to the required level.	
166.83	The motor (tray 2 transport) stalled.	
166.84	The motor (tray 2 transport) ran too slow.	
166.85	The motor (tray 2 transport) ran too fast.	
166.86	The motor (tray 2 transport) ran too long.	
167.80	The motor (tray 3 transport) does not turn on.	
167.81	The motor (tray 3 transport) does not turn off.	
167.82	The motor (tray 3 transport) speed did not ramp up to the required level.	
167.83	The motor (tray 3 transport) stalled.	

Error code	Description	Action
167.84	The motor (tray 3 transport) ran too slow.	
167.85	The motor (tray 3 transport) ran too fast.	
167.86	The motor (tray 3 transport) ran too long.	
168.80	The motor (tray 4 transport) does not turn on.	
168.81	The motor (tray 4 transport) does not turn off.	
168.82	The motor (tray 4 transport) speed did not ramp up to the required level.	
168.83	The motor (tray 4 transport) stalled.	
168.84	The motor (tray 4 transport) ran too slow.	
168.85	The motor (tray 4 transport) ran too fast.	
168.86	The motor (tray 4 transport) ran too long.	

Motor (tray 1 pick/lift) Error Service Check

1. Check the tray insert for damage and improper installation.
2. Check the tray guides for damage and improper operation.
3. Check the lift plate for damage and improper operation.
4. Perform a POR.
5. The following instruction applies to only the MS62x, MX52x, and MS62x printer models.
   a. Make sure that the pick/lift motor gearbox is functional. Do the following:
      1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests** .
      2. Select **Motor (tray 1 pick/lift)** .
   b. Make sure that the connections between the motor (pick/lift) and the controller board are properly connected.
   c. Check the pick/lift motor gearbox for damage, contamination, and improper installation. For more information, see Pick/lift Motor Gearbox Removal .
6. Check the pick roller assembly for damage and improper operation. For more information, see Pick Roller Removal .

Optional Tray Motor Error Service Check

1. Make sure that the printer is placed in a location with the recommend airflow, ventilation, and clearance around the printer. For more information, see Selecting A Location For The Printer .
2. Make sure that the cooling fan is functional. Do the following:
   a. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments** > **Motors tests** .
   b. Select **Fan (main)** .
3. Make sure that the connections between the cooling fan and the controller boar dare properly connected.
4. Check the cooling fan for damage, contamination, and improper installation. For more information, see Fan Removal .

Optional Tray Pick Drive Error Service Check

1. Turn off the printer.
2. Check the optional tray for improper installation.
3. Remove the optional tray, and then check the connectors on the printer and optional tray for damage and improper connection.
4. Reinstall the optional tray, and then turn on the printer.
5. Remove the tray insert.
6. Check the tray insert and its lift plate gears for damage and improper operation.
7. Make sure that the following motors are functional:
   - Motor (pick (tray (x))
   - Motor (pass-through (tray(x))

   Do the following:
   a. Enter the Diagnostics menu, and then touch **Additional input tray diagnostics** > **Motors tests**.
   b. Select **Pick (tray [x])** and **Pass-through (tray [x])** .
8. Make sure that the connections between the motors and the controller board are properly connected.
9. Check the motors for damage, and improper installation.

171 errors

171 Error Messages

Error code	Description	Action
171.82	The main fan speed did not ramp up to the required level.	N/A

Error code	Description	Action
171.83	The main fan stalled.	
171.84	The main fan ran too slow.	
171.85	The main fan ran too fast.	

6yy errors

600–680 Error Messages

Error code	Description	Action
600.01	Toner tally from the RIP was not received.	See Printhead Error Service Check .
600.02	Video did not start.	
600.03	Transfer Servo never started.	
600.04	Duplex page was not picked.	
600.05	Invalid PH NVRAM Type error was detected.	
600.06	Paper port driver is unresponsive.	
600.07	Page is at image point before EP is ready.	
600.07A		
600.07B	Page is at input sensor before EP is ready.	
600.07C	Page is at image point before EP is ready.	
600.09	EP update error was detected.	
600.10	EP late run-in error was detected.	
600.95	RIP intentionally declared a jam error, usually to prevent a kiosk user from printing free pages.	
602.29	Tray 2 was unable to be ready for picking.	N/A
602.39	Tray 3 was unable to be ready for picking.	N/A
602.49	Tray 4 was unable to be ready for picking.	N/A
611.02	An Input ISR error occurred and the printhead was not ready.	See Printhead Error Service Check .

Error code	Description	Action
611.32	Lost Hsync errors were detected. Laser safety interlock system may be the cause.	
611.33	Lost Hsync errors were detected during servo.	
611.34	A mirror motor lock error was detected.	
611.35	The mirror motor never got first lock.	
611.36	The mirror motor never stabilized.	
611.37	Paper reached the sensor (input) but the mirror motor was not locked.	
611.38	Paper reached the sensor (input) but the printhead startup was incomplete.	
621.01	Fuser heater was too cold when paper entered the fuser nip.	See Fuser Error Service Check.
655.80	Motor (cartridge) does not turn on.	See Cartridge Drive Error Service Check .
655.81	Motor (cartridge) does not turn off.	
655.82	Motor (cartridge) speed did not ramp up to the required level.	
655.83	Motor (cartridge) has stalled.	
655.84	Motor (cartridge) ran too slow.	
655.85	Motor (cartridge) ran too fast.	
655.86	Motor (cartridge) ran too long.	
661.13	The tray 1 lift plate failed to lift.	See Motor (tray 1 pick/lift) Error Service Check .
661.80	Motor (tray 1 pick/lift) does not turn on.	
661.81	Motor (tray 1 pick/lift) does not turn off.	
661.82	Motor (tray 1 pick/lift) speed did not ramp up to the required level.	
661.83	Motor (tray 1 pick/lift) has stalled.	
661.84	Motor (tray 1 pick/lift) ran too slow.	
661.85	Motor (tray 1 pick/lift) ran too fast.	

Error code	Description	Action
661.86	Motor (tray 1 pick/lift) ran too long.	
662.23	The tray 2 lift plate failed to lift.	See Optional Tray Pick Drive Error Service Check .
662.80	Motor (tray 2 pick) does not turn on.	
662.81	Motor (tray 2 pick) does not turn off.	
662.82	Motor (tray 2 pick) speed did not ramp up to the required level.	
662.83	Motor (tray 2 pick) has stalled.	
662.84	Motor (tray 2 pick) ran too slow.	
662.85	Motor (tray 2 pick) ran too fast.	
662.86	Motor (tray 2 pick) ran too long.	
663.23	The tray 3 lift plate failed to lift.	See Optional Tray Motor Error Service Check .
663.80	Motor (tray 3 pick) does not turn on.	
663.81	Motor (tray 3 pick) does not turn off.	
663.82	Motor (tray 3 pick) speed did not ramp up to the required level.	
663.83	Motor (tray 3 pick) has stalled.	
663.84	Motor (tray 3 pick) ran too slow.	
663.85	Motor (tray 3 pick) ran too fast.	
663.86	Motor (tray 3 pick) ran too long.	
664.43	The tray 4 lift plate failed to lift.	
664.80	Motor (tray 4 pick) does not turn on.	
664.81	Motor (tray 4 pick) does not turn off.	
664.82	Motor (tray 4 pick) speed did not ramp up to the required level.	
664.83	Motor (tray 4 pick) has stalled.	
664.84	Motor (tray 4 pick) ran too slow.	
664.85	Motor (tray 4 pick) ran too fast.	
664.86	Motor (tray 4 pick) ran too long.	

Error code	Description	Action
666.80	The motor (tray 2 pass-through) did not turn on.	
666.81	The motor (tray 2 pass-through) did not turn off.	
666.82	The motor (tray 2 pass-through) speed did not ramp up to the required level.	
666.83	The motor (tray 2 pass-through) has stalled.	
666.84	The motor (tray 2 pass-through) ran too slow.	
666.85	The motor (tray 2 pass-through) ran too fast.	
666.86	The motor (tray 2 pass-through) ran too long.	
667.80	The motor (tray 3 pass-through) did not turn on.	
667.81	The motor (tray 3 pass-through) did not turn off.	
667.82	The motor (tray 3 pass-through) speed did not ramp up to the required level.	
667.83	The motor (tray 3 pass-through) has stalled.	
667.84	The motor (tray 3 pass-through) ran too slow.	
667.85	The motor (tray 3 pass-through) ran too fast.	
667.86	The motor (tray 3 pass-through) ran too long.	
668.80	The motor (tray 4 pass-through) did not turn on.	
668.81	The motor (tray 4 pass-through) did not turn off.	
668.82	The motor (tray 4 pass-through) speed did not ramp up to the required level.	
668.83	The motor (tray 4 pass-through) has stalled.	
668.84	The motor (tray 4 pass-through) ran too slow.	

Error code	Description	Action
668.85	The motor (tray 4 pass-through) ran too fast.	
668.86	The motor (tray 4 pass-through) ran too long.	
680.50	An imagepip error/prohibited image error has been detected.	N/A

Procedure before Starting the 9yy Service Checks

Retrieve certain information that helps your next level of support in diagnosing the problem before replacing the controller board.

Warning—Potential Damage: Do not replace the controller board unless instructed by your next level of support.

1. Collect the history information and firmware logs (Fwdebug and logs.tar.gz) from the SE menu.
2. Collect the settings from the Menu Settings Page.
3. Collect information from the user.

Note: Not all of the items are retrievable from the printer that you are working on.

A. Collecting the history information from the SE Menu

Note: Make sure that your printer is connected to a network or to a print server.

1. Open a web browser, type http://printer_IP_address/se , and then press **Enter** .
   Notes:
   - printer_IP_address is the TCP/IP address of the printer.
   - se is required to access the printer diagnostic information.
2. Click **History Information** , copy all information, and then save it as a text file.
3. E-mail the text file to your next level of support.

B. Collecting The Firmware Logs (fwdebug and Logs.tar.gz) From The SE Menu

Note:

- Make sure that your printer is connected to a network or to a print server.
- Some printers are designed to restart automatically after a 9yy error. On these printers, you can retrieve the secondary crash code information using the SE menu.

1. Open a web browser, type http://printer_IP_address/se , and then press **Enter** .
2. Click **Logs Gzip Compressed** . Note: A logs.tar.gz file is saved to the Downloads folder. The file may take several minutes to save. You may rename the file if a logs.tar.gz already exists in the Downloads folder.

3. E-mail the logs to your next level of support. Note: To download the FWdebug log to a flash drive, see General SE .

C. Collecting The Settings From The Menu Settings Page

Note: The Menu Settings Page is different for each printer. For more information, see the *User's Guide*. Your next level of support will tell you which page they want to see.

Copying the Menu Settings Page from the Embedded Web Server (EWS)

Note: Make sure that your printer is connected to a network or to a print server.

1. Open a web browser, type printer_ip_address, and then press **Enter**.
2. Click Settings, and then select one of the settings pages from the links shown on the page.
3. Copy all the information, and then save it as a text file.
4. E-mail the text file to your next level of support.

Printing the Menu Settings Page

1. From the home screen, navigate to:
   Reports > **Menu Settings Page**

D. Collecting Information from the User

Ask the user for information about the following:

- Print job being run
- Operating system being used
- Print driver being used
- Other information on what was happening when the 9yy error occurred

900-901 errors

900-901 Errors

900 Error Service Check

1. Clear all jobs in the printer and computer print queue.
2. Perform a POR.
3. Turn off the printer.
4. Disconnect the USB cable, fax line, and network cable from the printer.
5. Turn on the printer.
6. If the error does not occur, then install each cable one at a time and perform a POR after each cable installation.

7. Make sure that the printer is running the latest firmware version. If the printer cannot connect to the network due to a 900 error, then do the following:
   a. Enter Recovery mode. For more information, see Entering Recovery Mode
   b. Flash the firmware code through a USB cable that is directly connected to a computer.
8. Turn off the printer.
9. Remove all electronic options (hard disk, wireless module, and memory options).
10. Turn on the printer.
11. If the error does not occur, then install the electronic options one at a time and perform a POR after each electronic option installation.
12. Replace the electronic option that causes the error.
13. Make sure that the connections between the engine board and the controller board are properly connected.
14. Check the controller board for the following:
    - Foreign debris (dust, dirt, or any accumulated material)
    - Circuit board expansion due to heat and humidity
    - Damaged pins, burnt-out components, and signs of overheating and bulging
    - Missing components and solder joint connection issues
    - Contamination issues (corrosion, degradation, metallization, and chemical leakage)
    - Incorrect input or output voltages. See the wiring diagram.

    For more information, see Controller Board Removal.

912 errors

912 Error Messages

Error code	Description	Action
912.00	An engine software error has occurred.	See 900 Error Service Check .
912.01	An engine error occurred.	Resend the print job. If the problem remains, then contact the next level of support.
912.02	An engine error occurred.	
912.04	An engine error occurred.	
912.05	An engine error occurred.	
912.06	An engine error occurred.	
912.07	An engine error occurred.	See 900 Error Service Check .
912.08	An engine error occurred.	Resend the print job. If the problem remains, then contact the next level of support.
912.09	An engine error occurred.	

Error code	Description	Action
912.13	An engine error occurred.	
912.14	An engine error occurred.	
912.15	An engine error occurred.	
912.16	An engine error occurred.	
912.17	An engine error occurred.	
912.18	An engine error occurred.	
612.19	An engine error occurred.	
912.20	An engine error occurred.	
912.21	An engine error occurred.	
912.28	An engine error occurred.	
912.30	An engine error occurred.	Resend the print job. If the problem remains, then contact the next level of support.
912.31	An engine error occurred.	
912.32	An engine error occurred.	
912.33	An engine error occurred.	
912.34	An engine error occurred.	
912.36	An engine error occurred.	
912.38	An engine error occurred.	See 900 Error Service Check .
912.39	An engine error occurred.	Resend the print job. If the problem remains, then contact the next level of support.
912.40	An engine error occurred.	
912.42	An engine error occurred.	
912.43	An engine error occurred.	
912.44	An engine error occurred.	
912.45	An engine error occurred.	
912.46	An engine error occurred.	
912.48	An engine error occurred.	
912.49	An engine error occurred.	
912.50	An engine error occurred.	See 900 Error Service Check .
912.51	An engine error occurred.	Resend the print job. If the problem remains, then contact the next level of support.
912.53	An engine error occurred.	
912.54	An engine error occurred.	

Error code	Description	Action
912.55	An engine error occurred.	
912.56	An engine error occurred.	
912.57	An engine error occurred.	
912.58	An engine error occurred.	
912.60	An engine error occurred.	
912.61	An engine error occurred.	
912.64	An engine error occurred.	
912.65	An engine error occurred.	
912.66	An engine error occurred.	
912.69	An engine error occurred.	Resend the print job. If the problem remains, then contact the next level of support.
912.70	An engine error occurred.	
912.72	An engine error occurred.	
912.73	An engine error occurred.	
912.74	An engine error occurred.	
912.75	An engine error occurred.	
912.77	An engine error occurred.	
912.79	An engine error occurred.	See 900 Error Service Check .
912.85	An engine error occurred.	
912.86	An engine error occurred.	Resend the print job. If the problem remains, then contact the next level of support.
912.88	An engine error occurred.	See 900 Error Service Check .
912.99	RIP command interface issue to the engine.	

938-958 errors

938–958 Error Messages

Error code	Description	Action
938.01	An unknown card type was detected by the thick engine code.	See 900 Error Service Check .
938.04	The supplies security is disabled.	Restart the printer. If the problem remains, then contact the next level of support.
938.05	A bad cal cap on the system cap.	N/A
940.00	Controller to engine communication error has occurred.	See 900 Error Service Check .
941.03	An engine communication error has occurred.	
950.10	An NVRAM mismatch error occurred—Non-generic FRU installed.	
953.99	An NVRAM chip failure with mirror part.	
958.99	A controller board NAND error has occurred..	

980-992 errors

980–992 Error Messages

Error code	Description	Action
980.01	An option communication error has occurred.	See 900 Error Service Check .
980.02	An option communication error has occurred.	
980.03	An option communication error has occurred.	
980.04	An option communication error has occurred.	
980.05	An option communication error has occurred.	
980.11	An option communication error has occurred.	
980.13	An option communication error has occurred.	

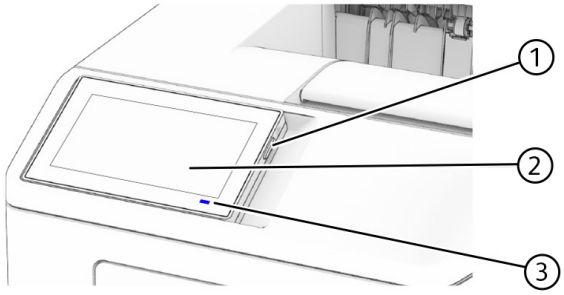
Error code	Description	Action
980.14	An option communication error has occurred.	
980.15	An option communication error has occurred.	
981.91	An invalid paper port protocol error has occurred.	
982.92	A paper port error occurred.	
982.94	A paper port error occurred.	
982.95	A paper port error occurred.	
982.96	A paper port error occurred.	
982.97	A paper port error occurred.	
983.98	An unsupported paper port command error has occurred.	
984.99	An invalid paper port parameter error has occurred.	
992.00	An option device software error has occurred.	
992.01	An option device software error has occurred.	

5

Service Menus

Understanding the printer control panel

Using The Control Panel



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S.no.	Control panel part	Function
1	Power button	• Turn on or turn off the printer. **Note:** To turn off the printer, press and hold the power button for five seconds. • Set the printer to Sleep mode. • Wake the printer from Sleep or Hibernate mode.
2	Display	• View the printer messages and supply status. • Set up and operate the printer.
3	Indicator light	Check the status of the printer.

Understanding the status of the indicator light

Indicator light	Printer status
Off	The printer is off.
Solid blue	The printer is ready.
Blinking blue	The printer is printing or processing data.
Blinking red	The printer requires user intervention.
Solid amber	The printer is in Sleep mode.
Blinking amber	The printer is in Deep Sleep or Hibernate mode.

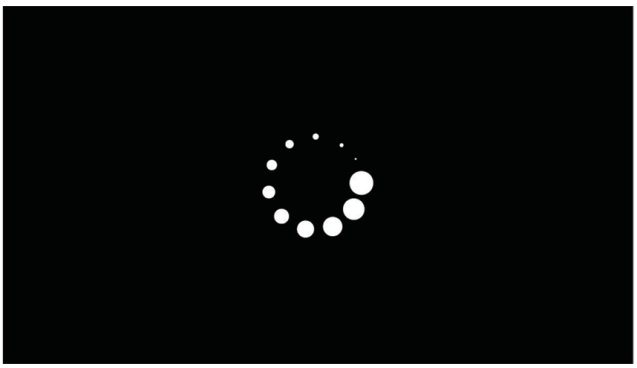
Diagnostics menu

Entering the Diagnostics Menu

The Diagnostics Menu contains tests that are used to help isolate printer issues.

- To access the menu from POST, do the following:
  1. Unplug the power cord from the electrical outlet.
  2. Open tray 1.
  3. Connect the power cord to the electrical outlet.

     When the display shows the following icon, close tray 1.



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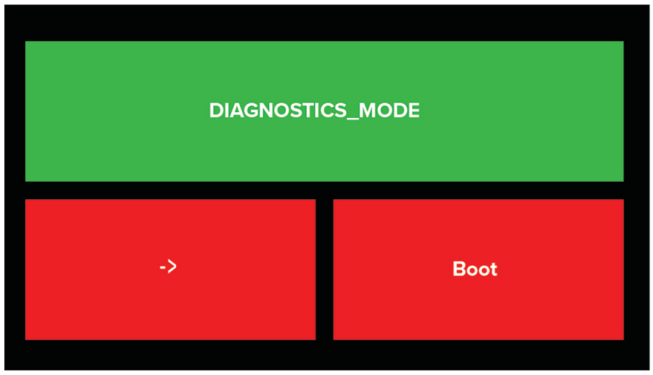
  4. From the menu that appears on the display, select **Diagnostics_Mode** .



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     Notes:

     - Make sure that the selected menu turns green.
     - If the **Diagnostics_Mode** option does not show on the display, touch **->** repeatedly until it appears.

  5. Select **Boot** .

- To access the Diagnostics Menu from a 4.3-in. touch screen display, do the following:
  1. From the home screen, touch

     .
  2. Touch ****36** , and then touch the start button.

Reports

Device Settings

This report lists all the current printer settings.

Enter the Diagnostics menu, and then navigate to:

Reports > Device > Device Settings

Installed Licenses

This setting lists all the installed licenses and their feature data.

Enter the Diagnostics menu, and then navigate to:

Reports > Licenses > Installed Licenses

Advanced Print Quality Samples

This setting prints a list of the printer settings and sample pages to check print quality.

Enter the Diagnostics menu, and then navigate to:

Advanced Print Quality Samples

Event Log

Display Log

This setting displays the message text that appears when a printer event occurs.

1. Enter the Diagnostics menu, and then navigate to:**Event Log** > **Display Log**
2. Select a log to print.

Print Log

This setting lists an extended version of the various printer events.

1. Enter the Diagnostics menu, and then navigate to:**Event Log** > **Print Log**
2. Touch **Print Log**.

Note: The events that appear in the report vary depending on the operational history of the printer.

Print Log Summary

This setting lists a brief summary of the various printer events.

1. Enter the Diagnostics menu, and then navigate to:**Event Log** > **Print Log Summary**
2. Touch **Print Log Summary**.

Note: The events that appear in the report vary depending on the operational history of the printer.

Mark Log

This setting allows you to create a service, maintenance, or custom log entry. Each log entry is added in the printer event log.

1. Enter the Diagnostics menu, and then navigate to:
   Event Log > **Mark Log**
2. Select a log that you want to create.

Input Tray Quick Print

This setting lets you print a single or continuous Quick Test page in either duplex or simplex mode.

1. Enter the Diagnostics menu, and then touch **Input tray quick print**.
2. Select where you want to print the pages from.
3. Select whether to print a single or continuous test page, and then touch **Start**.

Output Bin Quick Feed

This setting lets you send a single or continuous test page to a bin.

1. Enter the Diagnostics menu, and then touch **Output bin quick feed**.
2. Select the bin to send the test page to.
3. Select whether to send a single or continuous test page.

Printer Setup

Printed Page Count

This setting displays the amount of pages printed.

1. Enter the Diagnostics menu, and then touch **Printer Setup**.
2. View the printed page count.

Permanent Page Count

This setting displays the total number of pages printed. After all the print tests are completed, this value resets to zero.

1. Enter the Diagnostics menu, and then touch **Printer Setup**.
2. View the permanent page count.

Enable edge-to-edge (printing)

This setting shifts all four margins to the physical edges of the page.

1. Enter the Diagnostics menu, and then navigate to:
   Printer Setup > **Enable edge-to-edge (printing)**
2. Select a setting to adjust.

   Note: This feature does not work in PPDS emulation.

Processor ID

This setting indicates the ID of the processor on the controller board.

1. Enter the Diagnostics menu, and then touch **Printer Setup**.
2. View the processor ID.

Serial Number

This setting displays a read-only value of the serial number.

1. Enter the Diagnostics menu, and then touch **Printer Setup**.
2. View the serial number.

Model Name

This setting displays the model name of the printer.

1. Enter the Diagnostics menu, and then touch **Printer Setup**.
2. View the model name.

Engine Setting [x]

Warning-Potential Damage: Do not change this setting without specific instructions from the next level of support.

This setting allows you to select a printer engine setting. Possible values are 0–255. 0 is the default.

1. Enter the Diagnostics menu, and then navigate to:
   Printer Setup > **Engine setting [x]**
2. Select a setting, enter a value, and then touch **OK**.

EP Setup

Warning-Potential Damage: Do not change this setting without specific instructions from the next level of support.

1. Enter the Diagnostics menu, and then navigate to:
   Printer Setup > **EP setup**
2. Select a setting.

Printer diagnostics and adjustments

Sensor Tests

1. Enter the Diagnostics menu, and then navigate to:
   Printer diagnostics & adjustments > **Sensor tests**
2. Select a sensor.
3. Find, and then manually toggle the sensor.
   - The sensor status on the screen toggles between **1** and **0** when the sensor is properly working.
   - If a sensor test fails, the test failure may not indicate a failed sensor. Further troubleshooting may be required. Check the boards and cables for possible issues.
   - For the fuser exit sensor actuator, toggle it toward the rear door.

List Of Sensor Tests

Test
MPF media present
Pick roller index (tray 1)
Media out (tray 1)
Input
Narrow media
Fuser exit
Duplex path 1
Output bin full
Door interlock
Trailing edge

Motor Tests

1. Enter the Diagnostics menu, and then navigate to:
   Printer diagnostics & adjustments > **Motor tests**

2. Select a motor.

   Notes:

   - If the motor is activated, then it is properly working.
   - Some motors require automatic deactivation to avoid secondary issues such as possible damage and contamination.
   - Some tests require a special action to activate a motor such as removing a major component.
   - If the motor fails, the test failure may not indicate a failed motor. Further troubleshooting may be required. Check the boards and cables for possible issues.
   - To stop a running motor in non-touch-screen printer models, touch **OK** .

List Of Motor Tests

Test
MPF pick
Pick (tray 1)
Duplex solenoid
Redrive solenoid
K toner add
Transport
Fan (main)

Registration Adjust

This setting lets you adjust the skew and margins. You can also perform a Quick test after the adjustment.

1. Enter the Diagnostics menu, and then navigate to:
   Printer diagnostics & adjustments > **Registration adjust**
2. Select a setting.

Margin Offset

This setting lets you adjust the margin offset and to print or reset the default settings.

1. Enter the Diagnostics menu, and then navigate to:
   Printer diagnostics & adjustments > **Margin Offset**
2. Select a setting.

Universal Override

This setting lets you feed custom paper sizes to a Custom Media Tray.

1. Enter the Diagnostics menu, and then navigate to:
   Printer diagnostics & adjustments > **Universal Override**
2. Select a paper source, and then adjust the settings.

Additional input tray diagnostics

Sensor Tests

1. Enter the Diagnostics menu, and then navigate to:
   Printer diagnostics & adjustments > **Sensor tests**
2. Select a sensor.
3. Find, and then manually toggle the sensor.
   - The sensor status on the screen toggles between **1** and **0** when the sensor is properly working.
   - If a sensor test fails, the test failure may not indicate a failed sensor. Further troubleshooting may be required. Check the boards and cables for possible issues.
   - For the fuser exit sensor actuator, toggle it toward the rear door.

List Of Sensor Tests

Test
Pick roller index (tray [x])
Media out (tray [x])
Pass-through (tray [x])
Trailing edge (tray [x])

Motor Test

1. Enter the Diagnostics menu, and then navigate to:
   Additional input tray diagnostics > **Motor tests**
2. Select a motor.
   Notes:
   - If the motor is activated, then it is properly working.
   - Some motors require automatic deactivation in order to avoid secondary issues such as possible damage and contamination.
   - Some tests require a special action to activate a motor such as removing a major component.

- If the motor fails, the test failure may not indicate a failed motor. Further troubleshooting may be required. Check the boards and cables for possible issues.

Test
Pass-through (tray [x])

Entering The Configuration Menu

From the home screen, touch **Settings** > **Device** > **Maintenance** > **Configuration Menu**.

Configuration Menu

Menu item	Description
USB Configuration USB PnP 1* 2	Change the USB driver mode of the printer to improve its compatibility with a personal computer.
USB Configuration USB Speed Full Auto*	Set the USB port to run at full speed and disable its high-speed capabilities.
Tray Configuration Tray Linking Automatic* Off	Set the printer to link the trays that have the same paper type and paper size settings.
Tray Configuration Show Tray Insert Message Off Only for unknown sizes* Always	Display a message that lets the user change the paper size and paper type settings after inserting the tray.
Tray Configuration A5 Loading Short Edge* Long Edge	Determine the default loading orientation for the A5 size paper in all paper sources.
Tray Configuration Paper Prompts Auto* Multipurpose Feeder Manual Paper	Set the paper source that the user fills when a prompt to load paper appears. Note: For Multi purpose Feeder to appear, in the Paper menu, set Configure MP to Cassette.
Tray Configuration Envelope Prompts Auto* Multipurpose Feeder Manual Envelope	Set the paper source that the user fills when a prompt to load envelope appears. Note: For Multi purpose Feeder to appear, in the Paper menu, set Configure MP to Cassette.

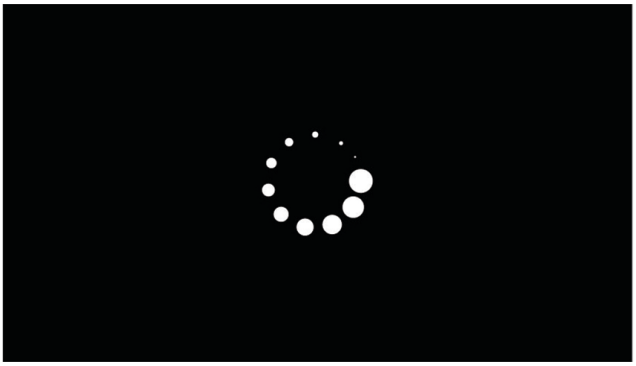
Tray Configuration Action for Prompts Prompt user* Continue Use current	Set the printer to resolve paper- or envelope-related change prompts.
Tray Configuration Multiple Universal Sizes Off* On	Set the tray to support multiple universal sizes.
Reports Menu Settings Page Event Log Event Log Summary	Print reports about printer menu settings, status, and event logs.
Supply Usage And Counters Clear Supply Usage History	Reset the supply usage history to the factory default level.
Printer Emulations PPDS Emulation Off* On	Set the printer to recognize and use the PPDS data stream.
Printer Emulations PS Emulation Off On*	Set the printer to recognize and use the PS data stream.
Printer Emulations Enable Formsmerge Off* On	Activate Forms Merge to store the forms into the hard disk or intelligent storage drive (ISD). Note: A hard disk or an ISD must be installed.
Printer Emulations Enable Prescribe Off* On	Activate Prescribe. Note: The Prescribe license must be installed.
Printer Emulations Emulator Security Page Timeout (60 minutes*) Reset Emulator After Job (Off*)	Configure the security settings of the printer during emulation mode.

Disable Printer Message Access (On*)	
Print Configuration Font Sharpening 0–150 (24*)	Set a text point-size value below which the high-frequency screens are used when printing font data. For example, if the value is 24, then all fonts sized 24 points or less use the high-frequency screens.
Print Configuration Print Density Disabled 1–5 (3*)	Adjust the toner density when printing documents.
Device Operations Quiet Mode Off* On	Set the printer to operate in Quiet Mode. Note: Enabling this setting slows down the overall performance of the printer.
Device Operations Safe Mode Off* On	Set the printer to operate in a special mode, in which it attempts to continue offering as much functionality as possible, despite known issues. For example, when set to On, and the duplex motor is nonfunctional, the printer performs one-sided printing of the documents even if the job is two-sided printing.
Device Operations Clear Custom Status	Erase user-defined strings for the Default or Alternate custom messages.
Device Operations Clear all remotely-installed messages	Erase messages that were remotely installed.
Device Operations Automatically Display Error Screens Off On*	Show existing error messages on the display after the printer remains inactive on the home screen for a length of time.
App Configuration LES Applications Off On*	Enable Xerox Embedded Solutions (LES) applications. Note: This menu item is available only in some printer models.
Note: An asterisk (*) nextto a value indicates the factory default setting.	

Entering Invalid Engine Mode

This mode lets the printer load the correct firmware code. For more information, see Updating The Printer Firmware

1. Unplug the power cord from the electrical outlet.
2. Open tray 1.
3. Connect the power cord to the electrical outlet.
4. When the display shows the following icon, close tray 1.



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5. Touch **->** to navigate the menu that appears on the display, and then select **ENGINE_FLASH**.
6. Touch **ENGINE_FLASH** only once.

Note: The selected menu turns green.

7. Touch **Boot**.

Entering Recovery Mode

This mode allows the printer to boot from a secondary set of instructions and flash firmware code. While in this mode, you can only flash firmware code through a USB cable directly connected to a PC.

Depending on your printer model, do any of the following:

For 4.3 inch displays without number pads

1. Turn off the printer.
2. Open tray 1.

   Note: Make sure that paper is loaded in the tray.

3. Turn on the printer.
4. When an ellipses appears on the upper-left corner of the display, close tray 1.

   Note: If tray 1 is not closed, then the printer boots normally.

Service Engineer menu

Entering the SE Menu

For touch-screen display

1. From the home screen, touch the on-screen keypad.
2. Type ****411**.
3. Touch **OK**.

General SE

- Capture Logs to USB Drive

Note: This setting allows you to save a log file to a USB drive.

- Capture Logs to Internal Storage
- Code Versions
- Debug Level

Network SE

Enter the SE menu, and then select **Network SE Menu**

Note: Use these settings as directed by the next level of support.

Top-level menu	Intermediate menu
HISTORY	• Print • Mark
MAC	• Set Card Speed • LAA • Keep Alive
NPAP	Print
TCP/IP	• DHCP Request Options • Run netstat • Run arp • Allow SNMP Set • MTU • Meditech Mode • RAW LPR Mode • Garp Interval
Wireless Settings	• Wireless Performance Enhancement • Unset Wireless Region

Top-level menu	Intermediate menu
	• Disable Wireless 11n • Disable PMF
Ping Test	• Ping Address • Attempts • Packet Size • Run ping
Other Actions	• Run ifconfig • Run iptables • Run ip6tables • Run ipsecutils
Enable DHCPCD Debugging	N/A
Enable wpa-supplicant Debugging	N/A
Enable Ethernet Gigabit	N/A
Enable Dual-NIC	N/A
Enable BLE	N/A
Netconfig Debug Level	N/A
IPP ICONS	• Delete intermediate icons • Delete current icons

6

Parts Removal

Removal Precautions

CAUTION—SHOCK HAZARD: The low-voltage power supply (LVPS) and the high-voltage power supply (HVPS) may have residual voltage present. To avoid the risk of electrical shock, do not touch their circuit components or the solder side of the board. Only handle them by their outer edges or metal housing.

CAUTION—SHOCK HAZARD: This product uses an electronic power switch. It does not physically disconnect the input AC voltage. To avoid the risk of electrical shock, always remove the power cord from the printer when removal of the input AC voltage is required.

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock and to prevent damage to the printer, remove the power cord from the electrical outlet and disconnect all connections to any external devices before you connect or disconnect any cable, electronic board, or assembly.

CAUTION—HOT SURFACE: The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.

CAUTION—PINCH HAZARD: To avoid the risk of a pinch injury, use caution in areas marked with this label. Pinch injuries may occur around moving parts, such as gears, doors, trays, and covers.

Précautions De Retrait

ATTENTION—RISQUE D'ELECTROCUTION : Une tension résiduelle peut être présente dans le bloc d'alimentation basse tension (LVPS) et le bloc d'alimentation haute tension (HVPS). Pour éviter tout risque d'électrocution, ne touchez pas les composants du circuit ou le côté soudure de la carte. Tenezles uniquement par leurs extrémités ou le boîtier en métal.

ATTENTION—RISQUE D'ELECTROCUTION : Ce produit utilise un commutateur d'alimentation électronique. Il ne déconnecte pas physiquement la tension d'alimentation CA. Pour éviter tout risque d'électrocution, débranchez toujours le cordon d'alimentation de l'imprimante lorsque vous devez déconnecter la tension d'alimentation CA.

ATTENTION—RISQUE D'ELECTROCUTION : Pour éviter tout risque d'électrocution et éviter d'endommager l'imprimante, débranchez le cordon d'alimentation de la prise électrique et déconnectez toute connexion à tout périphérique externe avant de brancher ou débrancher des câbles ou circuits et assemblages électroniques.

ATTENTION—SURFACE CHAUDE : L'intérieur de l'imprimante risque d'être brûlant. pour réduire le risque de brûlure, laissez la surface ou le composant refroidir avant d'y toucher.

ATTENTION : RISQUE DE PINCEMENT : Pour éviter tout risque de blessure par pincement, agissez avec précaution au niveau des zones signalées par cette étiquette. Les blessures par pincement peuvent se produire autour des pièces mobiles telles que les engrenages, portes, tiroirs et capots.

Precauciones Durante La Extracción

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: La fuente de alimentación de bajo voltaje (LVPS) y la fuente de alimentación de alto voltaje (HVPS) pueden presentar voltaje residual. Para evitar el riesgo de descarga eléctrica, no toque los componentes del circuito ni el lateral soldado de la placa. Manipule solo los bordes exteriores o la carcasa metálica.

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Este producto utiliza un interruptor de corriente electrónico. No desconecta físicamente la entrada de voltaje de CA. Para evitar el riesgo de descarga eléctrica, desenchufe siempre el cable de alimentación de la impresora cuando sea necesario retirar la entrada de voltaje de CA.

PRECAUCIÓN: PELIGRO DE DESCARGAS ELÉCTRICAS: Para evitar el riesgo de descargas eléctricas y daños en la impresora, retire el cable de alimentación de la toma eléctrica y desconecte todas las conexiones a dispositivos externos antes de conectar o desconectar cualquier cable, placa electrónica o conjunto.

PRECAUCIÓN: SUPERFICIE CALIENTE: El interior de la impresora podría estar caliente. Para evitar el riesgo de heridas producidas por el contacto con un componente caliente, deje que la superficie se enfríe antes de tocarlo.

PRECAUCIÓN: PELIGRO DE ATRAPAMIENTO: Para evitar el riesgo de lesión por atrapamiento, preste atención en las áreas marcadas con esta etiqueta. Las lesiones por atrapamiento se pueden producir en torno a partes móviles, tales como engranajes, puertas, bandejas y cubiertas.

Vorsichtsmaßnahmen Bei Der Demontage

VORSICHT – STROMSCHLAGGEFAHR: Im Niederspannungsnetzteil (LVPS) und Hochspannungsnetzteil (HVPS) liegt unter Umständen Restspannung vor. Um das Risiko eines elektrischen Schlags zu vermeiden, berühren Sie keine umliegenden Bauteile oder die Lötseite der Platine. Fassen Sie sie nur an den Außenkanten oder am Metallgehäuse an.

VORSICHT – STROMSCHLAGGEFAHR: Dieses Produkt verwendet einen elektronischen Leistungsschalter. Er trennt die Eingangswechselspannung nicht physikalisch. Um das Risiko eines elektrischen Schlags zu vermeiden, ziehen Sie stets das Netzkabel vom Drucker ab, wenn eine Abtrennung der Eingangswechselspannung erforderlich ist.

VORSICHT – STROMSCHLAGGEFAHR: Um das Risiko eines elektrischen Schlags und Schäden am Drucker zu vermeiden, ziehen Sie das Netzkabel aus der Steckdose und trennen Sie alle Verbindungen zu jeglichen externen Geräten, bevor Sie Kabel, Elektronikplatinen oder Baugruppen einstecken oder abziehen.

VORSICHT – HEISSE OBERFLÄCHE: Das Innere des Druckers kann sehr heiß sein. Vermeiden Sie Verletzungen, indem Sie heiße Komponenten stets abkühlen lassen, bevor Sie ihre Oberfläche berühren.

VORSICHT – QUETSCHGEFAHR: Um das Risiko einer Quetschung zu vermeiden, gehen Sie in Bereichen, die mit diesem Etikett gekennzeichnet sind, mit Vorsicht vor. Quetschungen können im Bereich von beweglichen Komponenten auftreten, wie z. B. Zahnrädern, Klappen, Fächern und Abdeckungen.

Data security notice

Identifying Printer Memory

- **Volatile memory**—The printer uses standard random access memory (RAM) to buffer user data temporarily during simple print and copy jobs.
- **Nonvolatile memory**—The printer may use two forms of nonvolatile memory: EEPROM and NAND (flash memory). Both types are used to store the operating system, printer settings, network information, bookmark settings, and embedded solutions.
- **Hard disk memory**—Some printers have a hard disk drive installed. The hard disk is designed for printer-specific functionality and cannot be used for long-term storage of data that is not print-related. The hard disk does not let users extract information, create folders, create disk or network file shares, or transfer FTP information directly from a client device. The hard disk can retain buffered user data from complex print jobs, form data, and font data.

The following parts can store memory:

- Engine board
- User interface controller card (UICC)
- Controller board
- Optional hard disks

Note: The printer engine board and controller board contain NVRAM.

Erasing Printer Memory

To erase volatile memory, turn off the printer.

To erase nonvolatile memory, do the following:

1. From the control panel, navigate to **Settings** > **Device** > **Maintenance** > **Out of Service Erase** > **Sanitize all information on nonvolatile memory**.
2. Select **Sanitize all information on nonvolatile memory**, and then select **ERASE**.

3. Follow the instructions on the screen.

   To erase hard disk memory, do the following:

   1. From the control panel, navigate to **Settings** > **Device** > **Maintenance** > **Out of Service Erase** > **Sanitize all information on hard disk**.
   2. Select **Sanitize all information on hard disk**, and then select **ERASE**.
   3. Follow the instructions on the screen.

   Note: This process can take from several minutes to more than an hour, making the printer unavailable for other tasks.

   If a hard disk is replaced, then do the following:

   1. Remove the hard disk, and then return it to the customer.
   2. Request the customer to sign the Customer Retention form. Note: You can get printed copies of the form from your Xerox partner manager.
   3. Take a photo of the signed form, and then upload it to the Service Request debrief tool.
   4. Fax or e-mail the signed form to the number or e-mail address shown at the bottom of the form.

Handling ESD-sensitive Parts

Many electronic products use parts that are known to be sensitive to electrostatic discharge (ESD). To prevent damage to ESD-sensitive parts, do the following:

- Turn off the printer before removing logic boards.
- Keep the parts in their original packing material until you are ready to install them into the printer.
- Make the least possible movements with your body to prevent an increase of static electricity from clothing fibers, carpets, and furniture.
- Put the ESD wrist strap on your wrist. Connect the wrist band to the system ground point. This action discharges any static electricity in your body to the printer.
- Hold the parts by their edge connector shroud. Do not touch its pins. If you are removing a pluggable module, then use the correct tool.
- If possible, keep all parts in a grounded metal cabinet.
- Do not place the parts on the printer cover or on a metal table. If you need to put down the parts, then put them into their packing material.
- Prevent parts from being accidentally touched by other personnel. Cover the printer when you are not working on it.
- Be careful while working with the parts when cold-weather heating is used. Low humidity increases static electricity.

Critical Information for Controller Board or Engine Board Replacement

CAUTION—POTENTIAL INJURY: The lithium battery in this product is not intended to be replaced.

There is a danger of explosion if a lithium battery is incorrectly replaced. Do not recharge, disassemble, or incinerate a lithium battery. Discard used lithium batteries according to the manufacturer's instructions and local regulations.

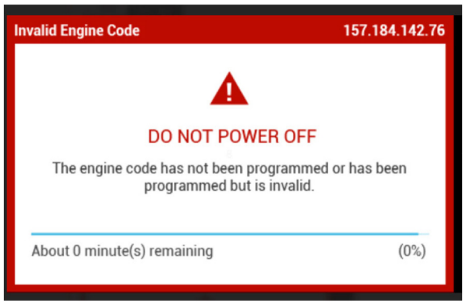
ATTENTION—RISQUE DE BLESSURE : La batterie lithium de ce produit n'est pas destinée à être remplacée. Il existe un risque d'explosion si une batterie lithium est placée de façon incorrecte. Ne rechargez pas, ne démontez pas et n'incinérez pas une batterie lithium. Mettez les batteries lithium usagées au rebut selon les instructions du fabricant et les réglementations locales.

PRECAUCIÓN: POSIBLES DAÑOS PERSONALES: La batería de litio de este producto no debe reemplazarse. Existe riesgo de explosión si se sustituye incorrectamente una batería de litio. No recargue, desmonte ni incinere una batería de litio. Deseche las baterías de litio según las instrucciones del fabricante y las normativas locales.

VORSICHT – MÖGLICHE VERLETZUNGSGEFAHR Die Lithiumbatterie in diesem Produkt darf nicht ausgetauscht werden. Wird eine Lithiumbatterie nicht ordnungsgemäß ausgetauscht, besteht Explosionsgefahr. Lithiumbatterien dürfen auf keinen Fall wieder aufgeladen, auseinander genommen oder verbrannt werden. Befolgen Sie zum Entsorgen verbrauchter Lithiumbatterien die Anweisungen des Herstellers und die örtlichen Bestimmungen.

Read the following instructions carefully before performing them. Practice accessing DIAGNOSTICS_MODE first before replacing the part. See Entering the Diagnostics Menu.

Warning—Potential Damage: An invalid engine code error occurs if the controller board and engine board are not on the same firmware level. Resolve the error shown with firmware updates. For more information, see Entering Invalid Engine Mode and Updating The Printer Firmware



Warning—Potential Damage: To avoid NVRAM mismatch issues, replace only one of the following components at a time:

- Engine board
- Controller board

To replace a component and to test whether the problem is resolved:

1. Replace the affected component.
   Warning—Potential Damage: Do not perform a Power-On Reset (POR) until the problem is resolved. If a POR is performed at this point, then the replacement part can no longer be used in another printer and must be returned to the manufacturer.
2. Enter the diagnostics Menu using POST entry method. Entering the Diagnostics Menu using POST entry method allows you to temporarily use the replacement part without permanently syncing the board to the device.
   Warning—Potential Damage: Printers will perform a POR automatically if the Diagnostics Menu using POST entry method is not opened within five seconds. If a POR is performed at this point, then the replacement part can no longer be used in another printer and must be returned as an unserviceable part.
3. Use the Diagnostics Menu to test the replacement part. Do a feed test to check if the problem is resolved.
   - If the problem is not resolved—Turn off the printer, and then reinstall the old part.
   - If the problem is resolved—Perform a POR.

Restoring the Printer Configuration

Restore the printer to its correct configuration. Contact your Hardware Support Line to obtain the applicable zip file. Flash the printer settings and embedded solutions.

Extract the contents of the zip file.

1. Perform the install instructions on the Readme file in the exact order shown. Restart the printer only if the file says so.
2. For more information on how to flash the downloaded files, see Updating The Printer Firmware
3. To load the zip file, see Restoring Solutions, Licenses, and Configuration Settings

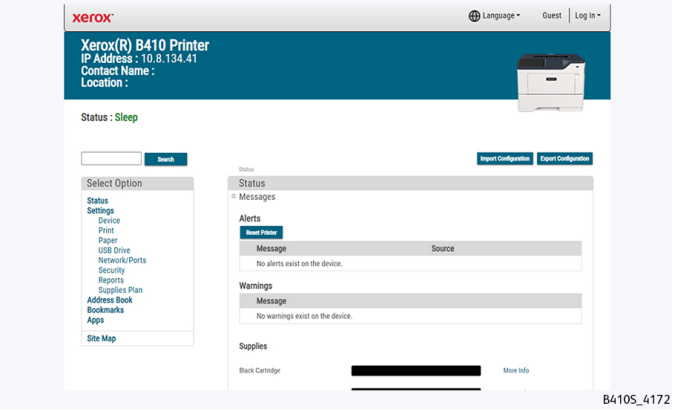
After performing the installation instructions in the Readme file, confirm that the printer is restored.

1. If you are unable to access the administrative menus to verify that the printer is restored, then ask the customer for access rights.
2. If a 10.00 error appears after you restart the printer, then contact the next level of support.

Restoring Solutions, Licenses, and Configuration Settings

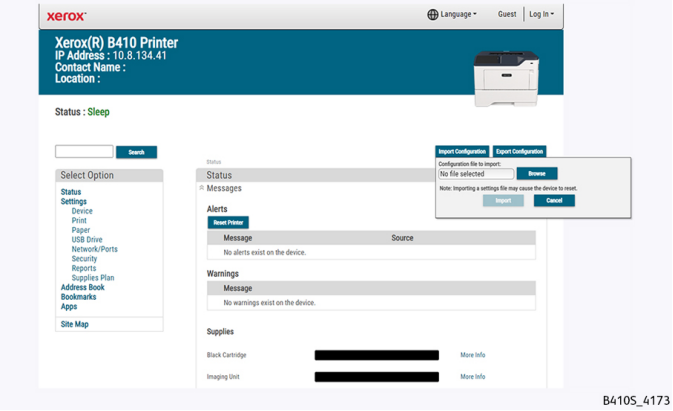
To load the zip files that you received from Hardware Support, do the following:

1. Open a web browser, and then type the printer IP address.



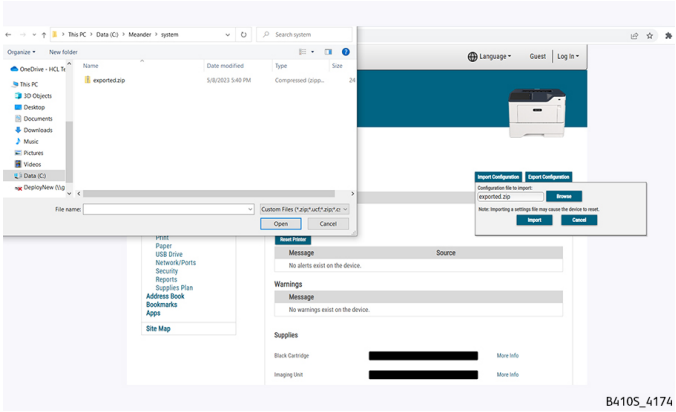
B410S_4172

2. Click **Import Configuration**, and then click **Browse**.



B410S_4173

3. Navigate to the folder containing the extracted the zip files from Hardware Support.



B410S_4174

4. Select the file to import, and then click **Import**.
5. Repeat step 2 through step 4 for the other files that are included in the extracted zip file.

Updating The Printer Firmware

Warning—Potential Damage: Before updating the printer firmware, ask the next level of support for the correct code. Using an incorrect code level may damage the printer.

Using A Flash Drive

Note: The printer must be in ready state to update the firmware.

This option is available only in printer models with front USB port.

1. Insert the flash drive into the USB port.
2. Depending on the printer model, do any of the following:
   - From the control panel, navigate to **USB Menu: Print from USB** > **Accept** or **OK**, and then select the file that you need to flash.
   - Select the firmware file.

Note: Do not turn off the printer while the update is going on.

Using a network computer

Using the File Transfer Protocol (FTP)

Note: The printer must be in ready state to update the firmware.

1. Turn on the printer.
2. Obtain the IP address from the home screen.
3. From the command prompt of a network computer, open an FTP session to the printer IP address.
4. Use a PUT command to place the firmware file on the printer.
   The printer performs a POR sequence and terminates the FTP session.

Using the Embedded Web Server

Note: The printer must be in ready state to update the firmware.

1. Open a web browser, and then type the printer IP address.
2. Click **Settings** > **Device** > **Update Firmware**.
3. Select the file to use.
   The printer performs a POR sequence and terminates the EWS session.

Using a USB Cable Connection

Note: Make sure that the cable is connected to the rear USB port.

Using USB Flash Utility

1. Go to support.xerox.com, and then download USB Flash Utility.
2. Extract, and then run the utility.
3. Click **Browse Files**, and then browse to the firmware file directory.
4. Select the firmware file.
5. Select the source printer.
6. Click **Start**.

Using USButil

1. Go to support.xerox.com,, and then download USButil.
2. Extract, and then drag and drop the firmware file onto the USButil icon.
3. A command prompt window appears briefly.

Note: Make sure to disconnect other USB devices when using USButil.

Backing up eSF Solutions and Settings

Note: Export the eSF solutions and settings from the printer before replacing the controller board.

Exporting eSF Solutions and Settings File

1. Reset the printer into Invalid engine mode. See Entering Invalid Engine Mode
2. Open a web browser, and then type the printer IP address.

Note: If the web page cannot be accessed or an error occurs when starting the printer into Invalid engine mode, then data backup is not an option. Inform the customer that the data cannot be saved.

3. From the Home page, select **Export Configuration** > **All settings.**
4. Save the exported file

Importing eSF Solutions and Settings File

After replacing the controller board, import back to the printer the eSF solutions and settings that were exported.

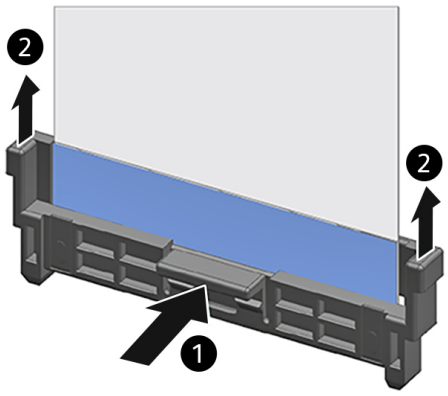
1. Reset the printer into Invalid engine mode. See Entering Invalid Engine Mode.
2. Open a web browser, and then type the printer IP address.

Note: If the web page cannot be accessed or an error occurs when starting the printer into Invalid engine mode, then data backup is not an option. Inform the customer that the data cannot be saved.

3. From the Home page, click **Import Configuration**.
4. Browse to the saved exported file.
5. Click **Import**.

Disconnecting Ribbon Cables

Warning—Potential Damage: The ribbon cable and its socket may get it is not properly disconnected. When disconnecting the cable, hold its connector and press its tab before unplugging it.



Ribbon cable connectors

Zero Insertion Force (ZIF) Connectors

Zero Insertion Force (ZIF) connectors are used on the boards and cards used in this printer. Before inserting or removing a cable from these connectors, read this entire section. Great care must be taken to avoid damaging the connector or cable when inserting or removing the cable.

Warning—Potential Damage: Do not insert the cable so that the contacts are facing the locking actuator. The contacts always face away from the actuator.

Warning—Potential Damage: Do not insert the cable diagonally into the ZIF socket. This can cause damage to the contacts on the cable.

Warning—Potential Damage: Avoid using a fingernail, or sharp object to open the locking mechanism. This could damage the cable.

Warning—Potential Damage: Avoid pressing against the cable when opening the locking mechanism. This can also damage the cable.

These are the types of ZIF connectors used in this printer:

- Horizontal top contact connector
- Horizontal bottom contact connector
- Vertical mount contact connector
- Horizontal sliding connector

Horizontal Top Contact Connector

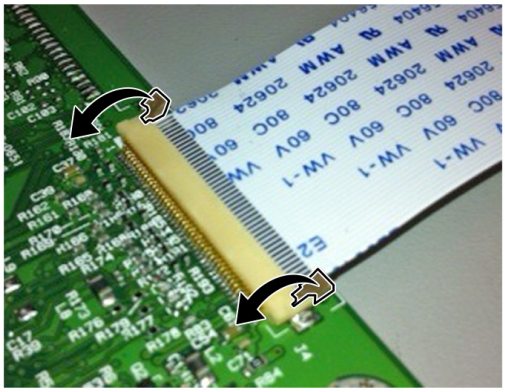
This FRU contains a horizontal top contact cable connector. Read the instructions before proceeding.

The horizontal top contact connector uses a back flip locking actuator to lock the ribbon cable into the Zero Insertion Force (ZIF) connector. The cable is inserted horizontally into the connector.

Warning—Potential Damage: When opening or closing this type of actuator, gently lift or close the two tabs located on each end of the actuator. The two tabs should be moved simultaneously. Do not close the actuator from the center of the actuator.

Removing a Cable from the Horizontal Top Contact Connector

1. Place a finger at each end of the locking actuator, and then gently lift the actuator to the unlocked position.

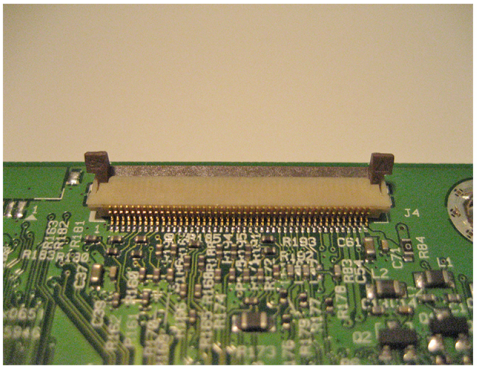


B410S_4008

2. Slide the cable out of the connector.

Inserting a Cable into the Horizontal Top Contact Connector

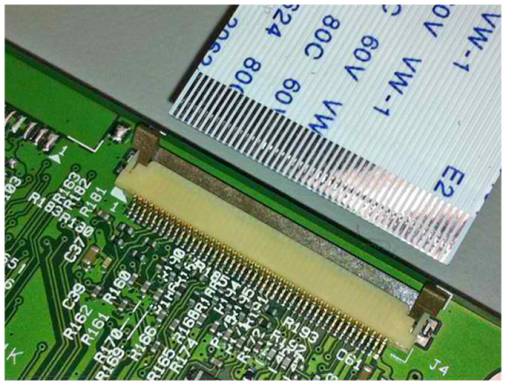
1. When installing the cable, check the locking actuator to ensure it is in the unlocked position. The tabs on the ends of the actuator are vertical when the actuator is unlocked.



B410S_4009

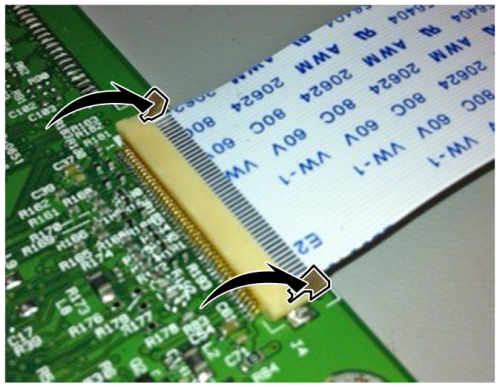
2. Insert the cable with the contacts on the cable facing up. Insert the cable on top of the actuator.

Note: Verify that the cable is installed squarely into the connector. If the cable is not squarely installed, then intermittent failures could occur.



B410S_4010

3. Rotate the locking actuator to the locked position. The cable should not move while this step is performed. If the cable moves, open the actuator, reposition the cable, and then close the actuator to the down position.



B410S_4011

Horizontal Bottom Contact Connector

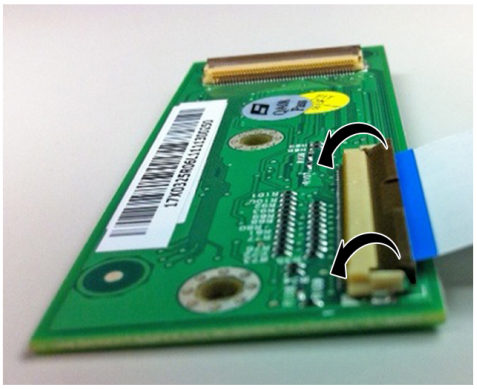
This FRU contains a horizontal bottom contact cable connector. Read the instructions before proceeding.

The horizontal bottom contact connector uses a flip locking actuator to lock the ribbon cable into the Zero Insertion Force (ZIF) connector. The cable is inserted horizontally into the connector.

Warning—Potential Damage: When opening or closing this type of actuator, gently lift the center of the actuator using your finger. Do not use a fingernail or screwdriver to open the actuator. This could damage the ribbon cable. Do not close the actuator from the ends of the actuator.

Removing a Cable from the Horizontal Bottom Contact Connector

1. Place two fingers towards each end of the locking actuator, and then gently lift the actuator to the unlocked position.

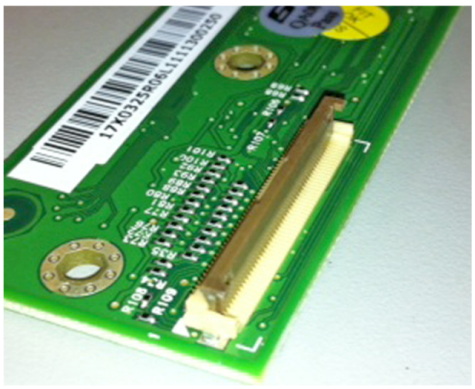


B410S_4012

2. Slide the cable out of the connector.

Inserting a Cable into the Horizontal Bottom Contact Connector

1. Check the actuator to verify it is in the open position.



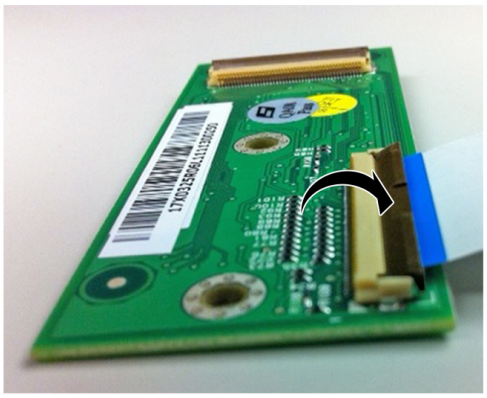
B410S_4013

2. Insert the cable into the ZIF connector with the contacts facing downward and away from the locking actuator. The cable needs to be inserted below the actuator.

Note: Verify that the cable is installed squarely into the connector. If the cable is not squarely installed, then intermittent failures could occur.

B410S_4014

3. Place your finger in the middle of the actuator, and then rotate the locking actuator to the locked position.



B410S_4015

Vertical Mount Contact Connector

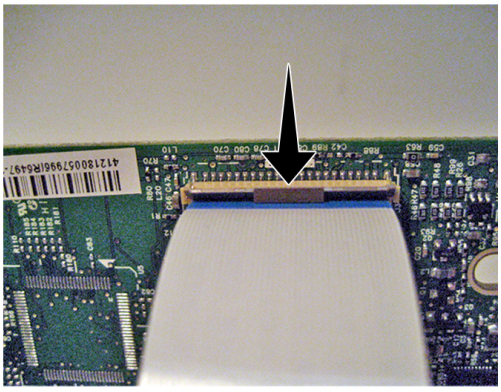
This FRU contains a vertical mount contact connector. Read the instructions before proceeding.

The vertical mount contact connector uses a back flip locking actuator to lock the ribbon cable into the Zero Insertion Force (ZIF) connector. The cable is inserted vertically into the connector.

Warning—Potential Damage: When opening or closing this type of actuator, gently lift the center of the actuator using your finger. Do not use a fingernail or screwdriver to open the actuator. This could damage the ribbon cable. Do not close the actuator from the ends of the actuator.

Removing a Cable from the Vertical Mount Contact Connector

1. Gently rotate the locking actuator from the center of the actuator to the unlocked position.



B410S_4016

2. Slide the cable out of the connector.

Inserting a Cable into the Vertical Mount Contact Connector

1. When installing the cable, check the locking actuator to verify it is in the open position.

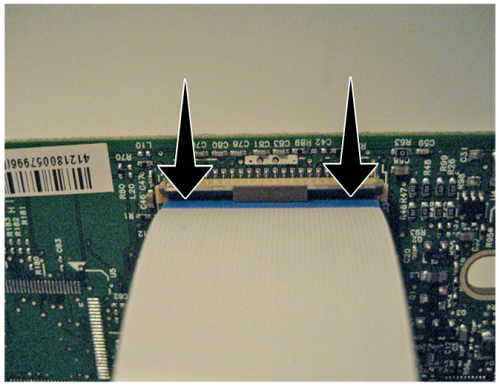
B410S_4017

2. Insert the cable with the contacts on the cable away from the locking actuator. Insert the cable on top of the actuator.

Note: Verify that the cable is installed squarely into the connector. If the cable is not squarely installed, then intermittent failures could occur.

B410S_4018

3. Rotate the locking actuator to the locked position by pressing down on both ends of the actuator. The cable should not move when this step is performed. If the cable moves, open the actuator, reposition the cable, and then close the actuator to the down position.



B410S_4019

Horizontal Sliding Contact Connector

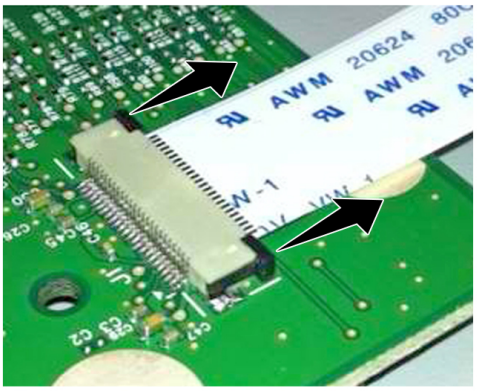
This FRU contains a horizontal sliding contact connector. Read the instructions before proceeding.

The horizontal sliding contact connector uses a slide locking actuator to lock the ribbon cable into the Zero Insertion Force (ZIF) connector. The cable is inserted horizontally into the connector.

Warning—Potential : When opening or closing this type of actuator, gently push or pull the two tabs located on each end of the actuator. Do not close the actuator from the center of the actuator. Do not use a screwdriver to open or close the actuator. Damage to the cable or connector could occur.

Removing a Cable from the Horizontal Sliding Contact Connector

1. Simultaneously slide the two tabs located on the ends of the locking actuator away from the connector.

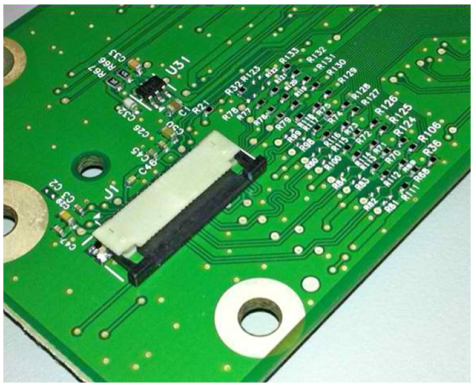


B410S_4020

2. Slide the cable out of the connector.

Inserting a Cable into the Horizontal Sliding Contact Connector

1. When installing the cable, check the locking actuator to verify it is in the open position. If you are opening the connector, pull back on both end tabs using equal force to avoid breaking the connector.

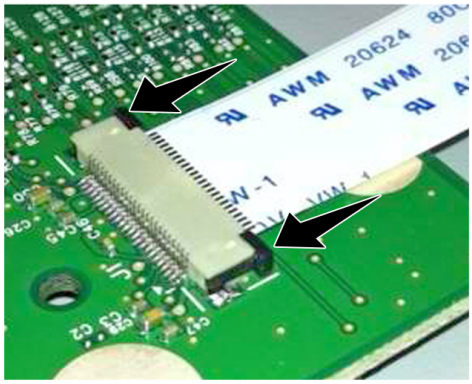


B410S_4021

2. Insert the cable with the contacts on the cable facing away from the locking actuator. Insert the cable on top of the actuator.

B410S_4022

3. Slide the locking actuator towards the connector, locking the cable into place. The cable should not move when this step is performed. If the cable moves, open the actuator, reposition the cable, and then close the actuator to the down position.



B410S_4023

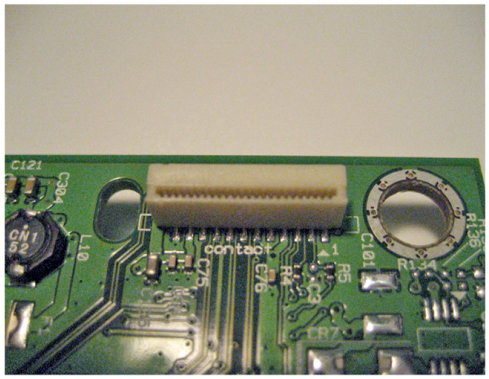
Low Insertion Force (LIF) Connector

This FRU contains a Low Insertion Force (LIF) connector. Read the instructions before proceeding.

Warning—Potential Damage: When installing a cable into an LIF connector, care must be taken to avoid bending the edges of the cables and damaging the contacts on the cables.

Inserting a Cable into the LIF Connector

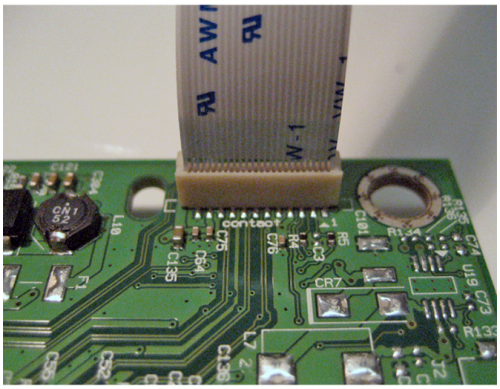
1. Looking at the connector, take note on which side the contacts are located. Many boards will have the word “contacts” stamped on them to indicate which side of the LIF has the contacts. When looking at the board, take note that the contacts from the board to the connector are located on the side of the connector with the contacts.



B410S_4024

2. Insert the cable squarely into the connector.

Note: Verify that the cable is installed straight into the connector. If the cable is not installed properly, then intermittent failures could occur.

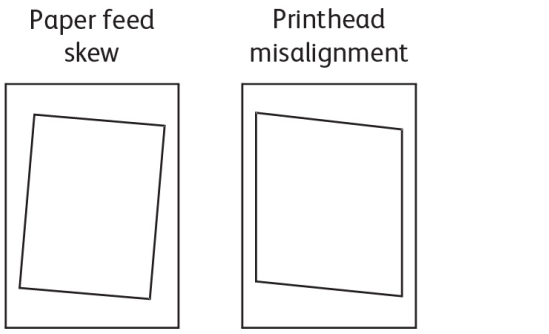


B410S_4025

Printhead Assembly Adjustment

A printhead must be correctly positioned after it has been removed. Use a sharp pencil or a small, flat-blade screwdriver to mark the location of the old printhead on the printer frame. Align the new printhead relative to the location of the old printhead.

Note: Skew is caused by a sheet being fed through the printer while misaligned. The entire image is rotated relative to the sheet edges. However, a mechanically misaligned printhead causes the horizontal lines to appear skewed, while the vertical lines remain parallel to the vertical edges. The skew cannot be adjusted. Check the pick tires for wear, the paper path for obstructions, the fuser for proper setting, and the tray paper guides for proper setting.



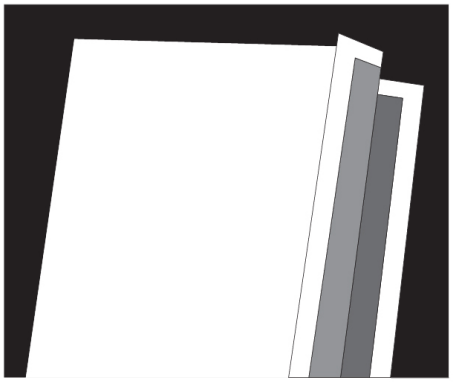
B410S_4026

To adjust the printhead:

1. Perform a POR.
2. Enter the Diagnostics menu, and then print a Quick test page:

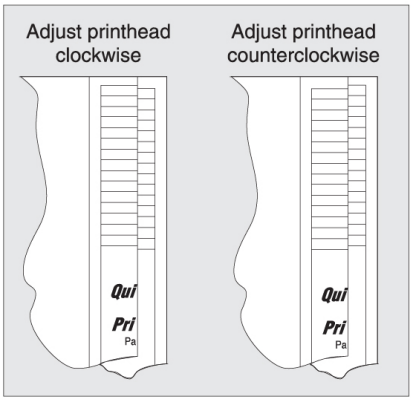
   Diagnostics Menu > Print Tests > Tray 1 > Single

3. Fold the printed test page on the left side so that a few millimeters of grid lines wrap around the outside of the fold.
4. Make a second vertical fold near the center so that the left side top edge aligns with the right side top edge.



B410S_4027

5. If the grid lines of the right flap align below the corresponding lines on the left side, then adjust the printhead clockwise relative to the printer, and recheck. If the grid lines of the left flap align below the corresponding lines of the right side, then adjust the printhead counterclockwise.



B410S_4028

6. Print another Quick test page, and check if adjustments are still needed.
7. After obtaining a properly adjusted image on the paper, tighten all the screws.

Note: If necessary, print a Quick test page again and perform the Registration adjust procedure to correct the skew and misalignments. See Registration Adjust.

Removal procedures

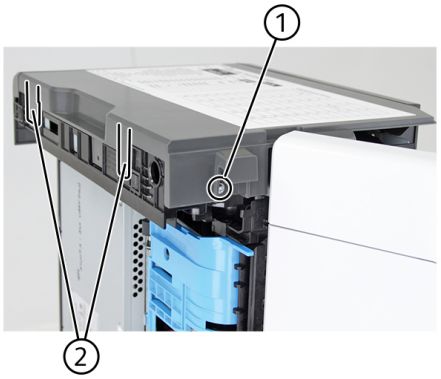
Keep the following tips in mind as you replace parts:

- Some removal procedures require removing cable ties. You must replace cable ties during reassembly to avoid pinching wires, obstructing the paper path, or restricting mechanical movement.
- Remove the toner cartridges, imaging kit, and trays before removing other printer parts. The imaging kit must be carefully set on a clean, smooth, and flat surface. It must also be protected from light while out of the printer.
- Disconnect all external cables from the printer to prevent possible damage during service.
- Unless otherwise stated, reinstall the parts in reverse order of removal.
- When reinstalling a part held with several screws, start all screws before the final tightening.
- For printers that have a electronic power switch, make sure to unplug the power cord after powering off.

Left side removals

Left Cover Removal

1. Open the front door.
2. Position the printer on its right side.
3. Remove the screw (1).
4. Release the latches (2).



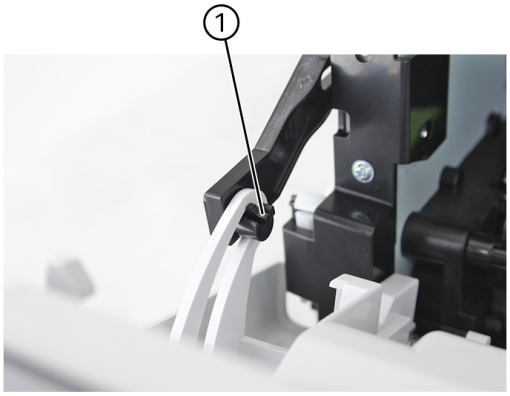
B410S_4029

5. Remove the left cover.

Note: The front cover hinders the removal.

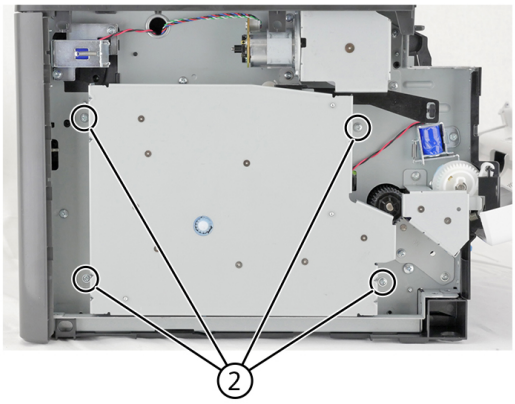
Main Drive Gearbox Removal

1. Remove the left cover. See Left Cover Removal
2. Release the latch (1), and then detach the link.



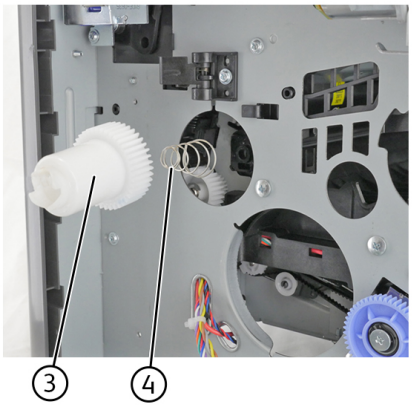
B410S_4030

3. Remove the four screws (2).



B410S_4031

4. Disconnect the cable from the main drive gearbox.
5. Remove the gearbox. Warning—Potential Damage: Do not lose the fuser gear (3) and spring (4).

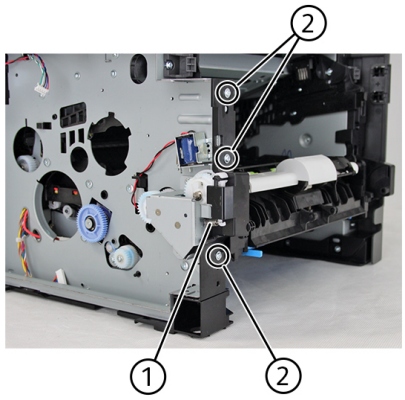


B410S_4032

MPF Gearbox Removal

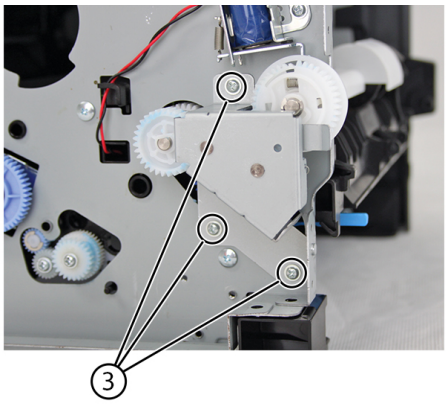
1. Remove the front door. See MPF with Front Access Cover Removal
2. Remove the left cover. See Left Cover Removal
3. Remove the main drive gearbox. See Main Drive Gearbox Removal
4. Disconnect the spring (1).

5. Remove the three screws (2).



B410S_4033

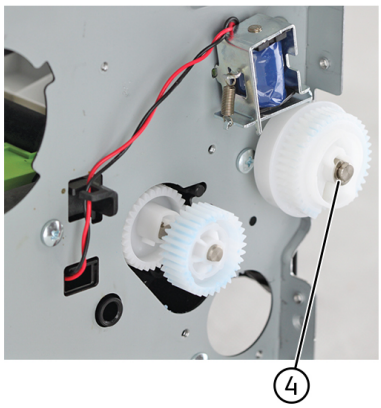
6. Remove the three screws (3).



B410S_4034

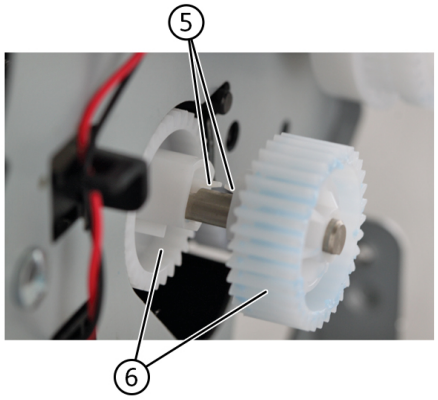
7. Remove the E-clip (4), and then remove the gear.

Note: The solenoid hinders the removal.



B410S_4035

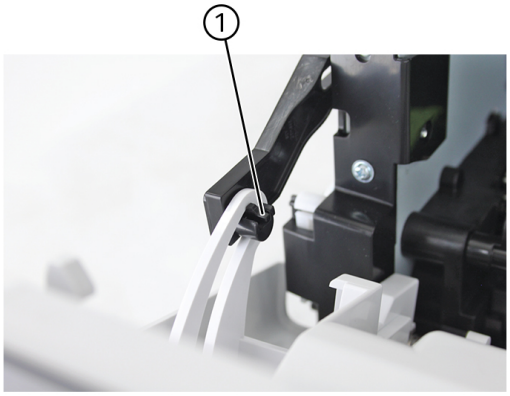
8. Release the two latches (5), and then remove the gears (6).



B410S_4036

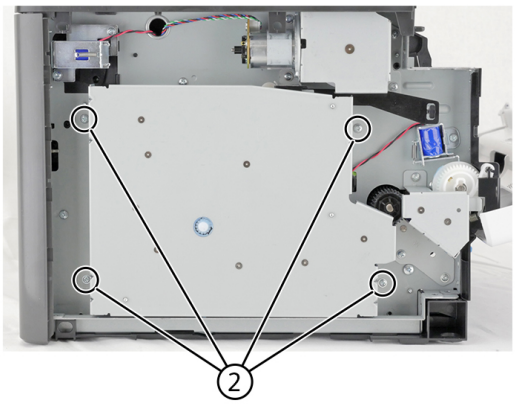
Fuser Actuator Removal

1. Remove the left cover. See Left Cover Removal.
2. Release the latch (1), and then detach the link.



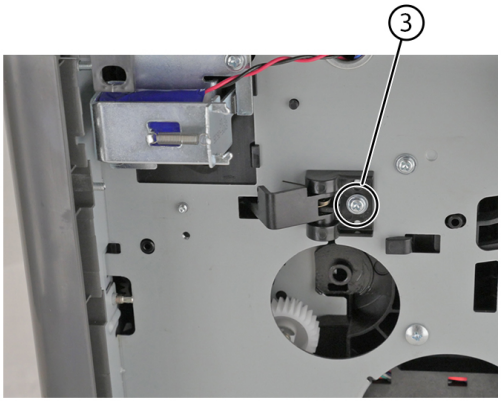
B410S_4030

3. Remove the four screws (2).

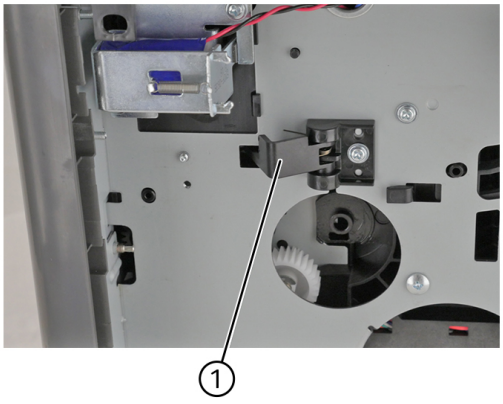


B410S_4031

4. Remove the screw (3).



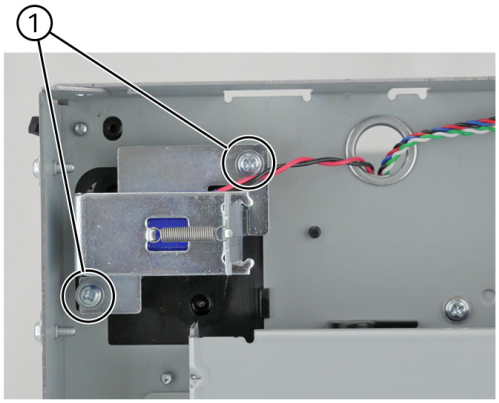
5. Remove the fuser actuator.
   Installation note: To test if the actuator is properly installed, push, and then release the actuator (1). The actuator should bounce back.



Reverse Solenoid Removal

1. Remove the right cover. See Right Cover Removal.
2. Remove the left cover. See Left Cover Removal.
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Remove the top cover. See Top Cover Removal.
5. Disconnect the cable JDUPSOL1 from the controller board.

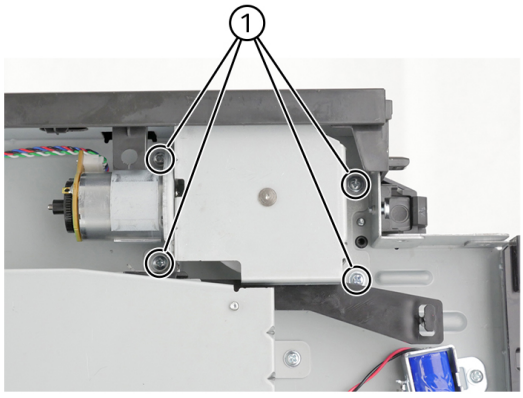
6. Remove the two screws (1).



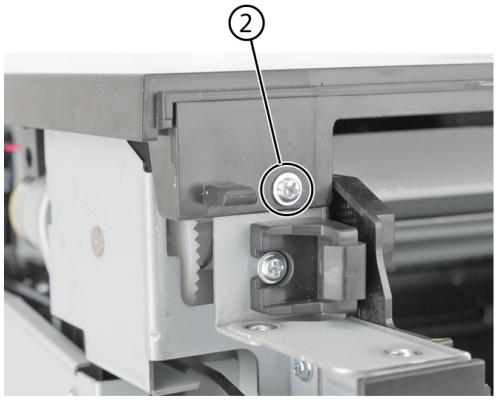
7. Remove the solenoid.

Cartridge Gearbox Removal

1. Remove the left cover. See Left Cover Removal
2. Remove the four screws (1).



3. Remove the screw (2).

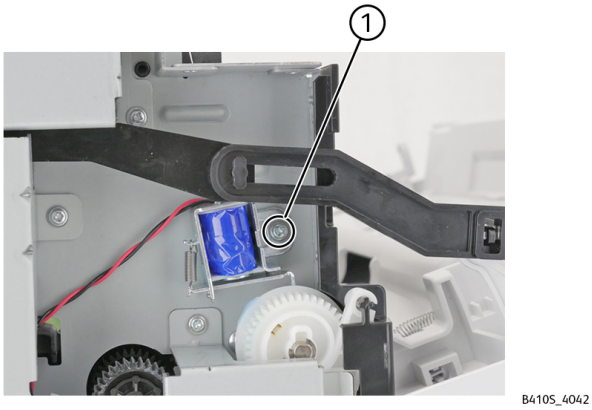


4. Lift the top cover enough to remove the cartridge gearbox.

5. While lifting the cover, disconnect the cable from the gearbox, and then remove the gearbox.

MPF Solenoid Removal

1. Remove the left cover. See Left Cover Removal.
2. Remove the screw (1).



3. Cut the cable, and then remove the solenoid.
4. Remove the rear cover. See Rear Door and Cover Removal.
5. Remove the power supply. See Power Supply Removal.
6. Remove the duplex . See Duplex Removal.
7. Release the cut cable.

Note: Pay attention to the cable route.

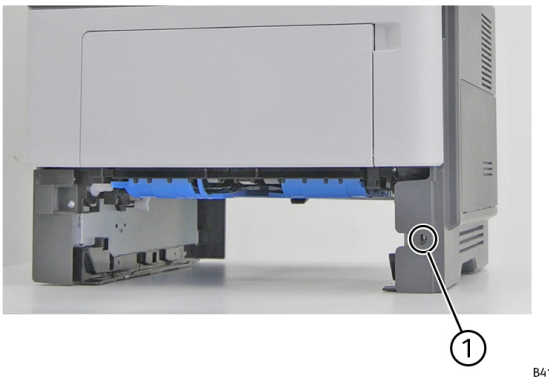
8. Open the controller board access cover, and then disconnect the cable.

Right side removals

Right Cover Removal

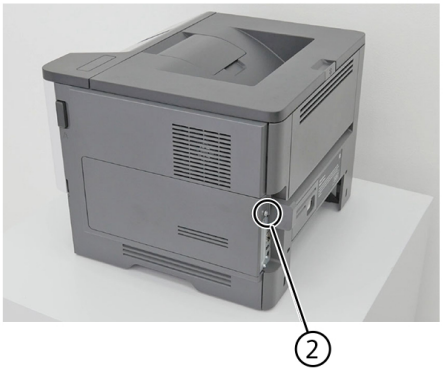
Note: For a video demonstration, see Right cover removal.

1. Remove the screw (1).



B410S_4045

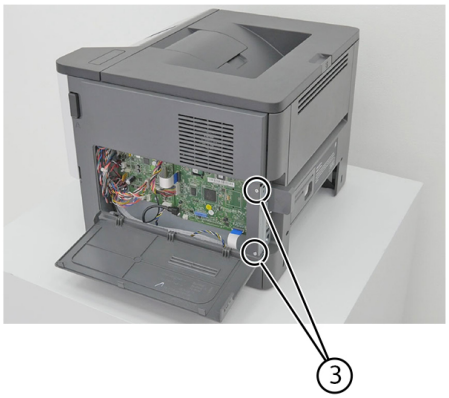
2. Remove the screw (2).



B410S_4046

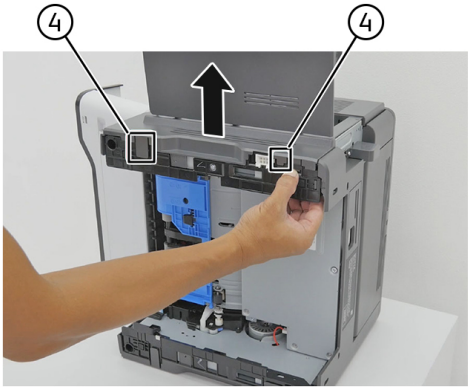
3. Open the right door, and then remove the screws (3).

Note: The number of screws varies depending on the printer model.



B410S_4047

4. Place the printer on its left side, and then remove the right cover.

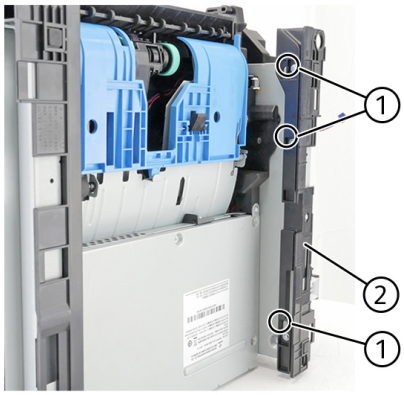


B410S_4048

Interconnect Cable Removal

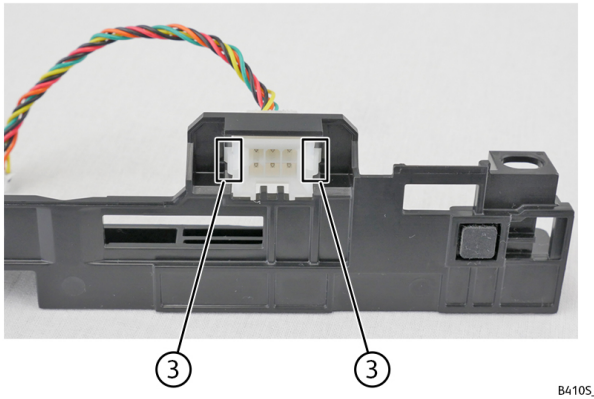
1. Remove the right cover. See Right Cover Removal.
2. Position the printer on its rear side.
3. Disconnect the cable JOPT1 from the controller board.
4. Remove the three screws (1).

5. Detach the right foot (2).



B410S_4049

6. Release the two latches (3).



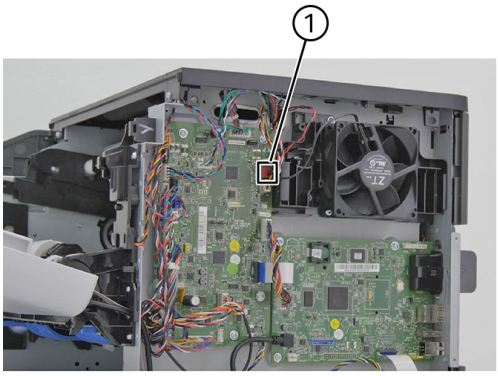
B410S_4050

7. Remove the cable.

Fan Removal

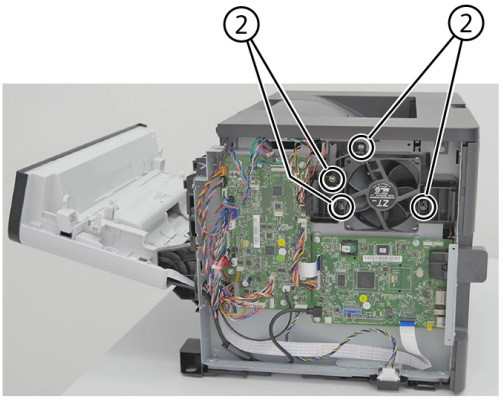
Note: For a video demonstration, see Fan removal

1. Remove the right cover. See Right Cover Removal.
2. Disconnect the connector (1)



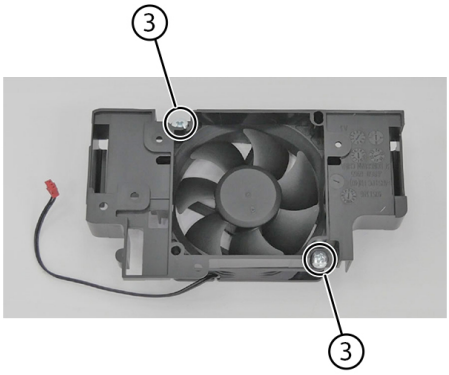
B410S_4052

3. Remove the screws (2).



B410S_4053

4. Remove the screws (3).



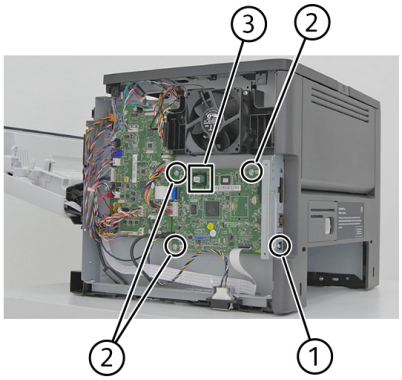
B410S_4054

5. Remove the fan from the housing.
   Installation note: Pay attention to the correct orientation of the fan.

Controller Board Removal

1. Remove the right cover. See Right Cover Removal.
2. Remove the wireless module. See Wireless Module Removal.
3. Disconnect the connectors on the board, and then remove the screw (1).
4. Remove the screws (2).

5. Remove the TPM (Trusted Platform Module) to be installed on the new controller board.



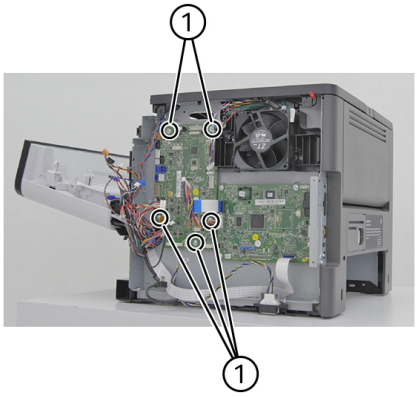
B410S_4055

6. Remove the controller board.

Engine Board Removal

Note: For a video demonstration, see Engine board removal.

1. Remove the right cover. See Right Cover Removal.
2. Disconnect the connectors on the engine board.
3. Remove the screws (1).



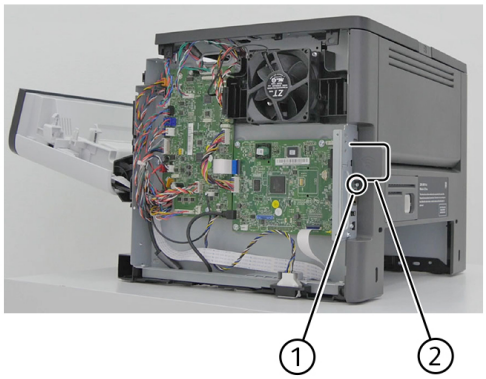
B410S_4056

4. Remove the engine board.

Wireless Module Removal

1. Remove the right cover. See Right Cover Removal.
2. Remove the screw (1).

3. Remove the cover (2).

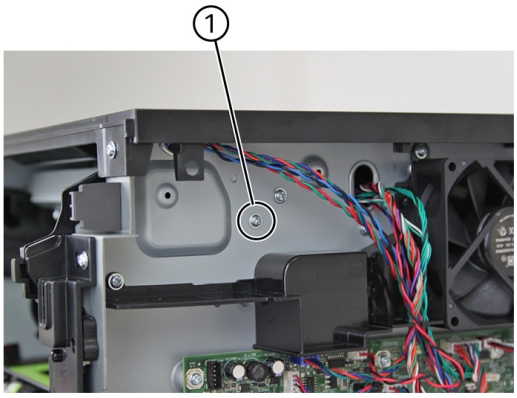


B410S_4057

4. Release the wireless module from the guide, and then remove it.

Toner Cartridge Smart Chip Contact Removal

1. Remove the top cover. See Top Cover Removal.
2. Remove the right cover. See Right Cover Removal.
3. Disconnect the cable JBARR1 from the controller board.
4. Remove the screw (1).



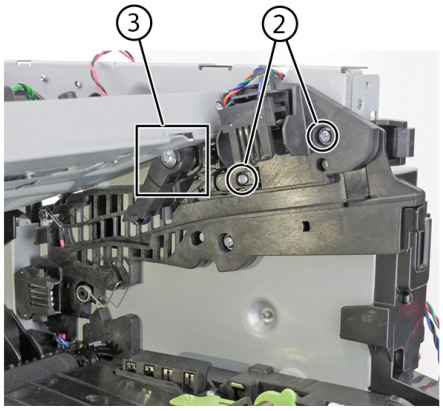
B410S_4058

5. Remove the two screws (2), and then lower the right cartridge guide.

6. Slightly pull the right cartridge guide to detach it.

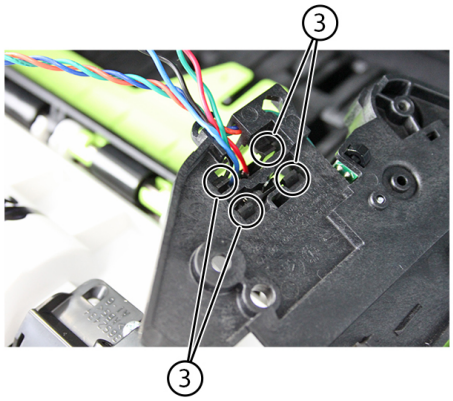
Note: The laser scanning unit frame(3) hinders the detachment.

Warning—Potential Damage: To avoid damaging the right cartridge guide, do not cut or disconnect the cable at the rear of the cartridge guide. Leave the cartridge guide dangling.



B410S_4059

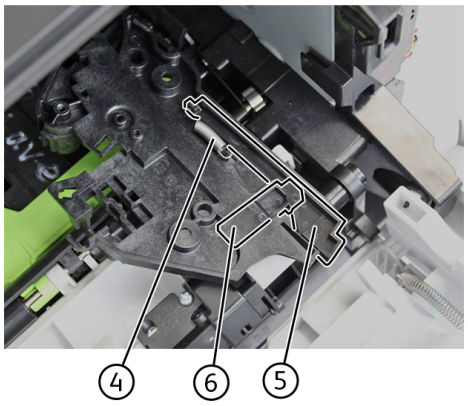
7. Release the four latches (5).



B410S_4060

8. Remove the toner cartridge smart chip contact.

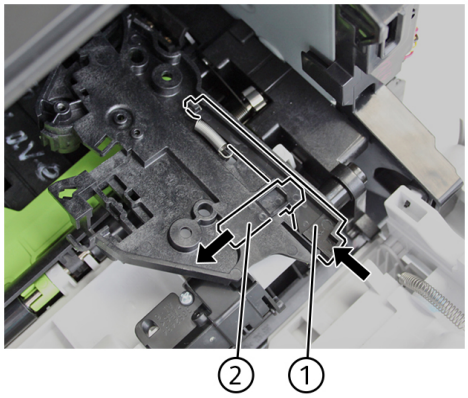
Note: Pay attention to the original position of the spring (6), actuator (7), and lock (8).



B410S_4061

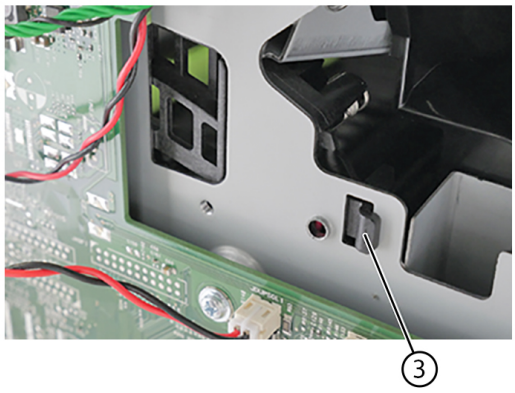
Installation notes:

- To test if the spring and actuator are properly installed, press the actuator (1). The lock (2) should move up.



B410S_4062

- Make sure that the tab (3) at the back of the cartridge guide is properly installed as shown.

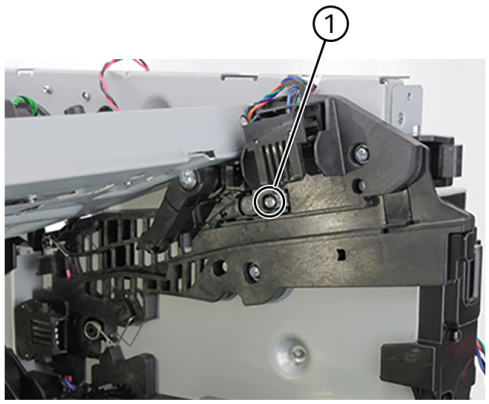


B410S_4063

Cartridge Barrel Shutter Sensor Kit Removal

1. Remove the top cover. See Top Cover Removal.
2. Remove the right cover. See Right Cover Removal.
3. Disconnect the cable JCVR1 from the controller board.

4. Remove the screw (1), and then remove the bracket, actuator, spring, and sensor.

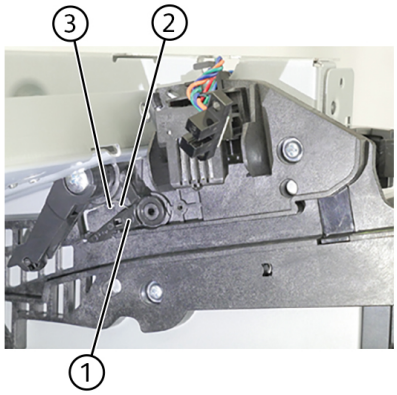


B410S_4064

Installation notes:

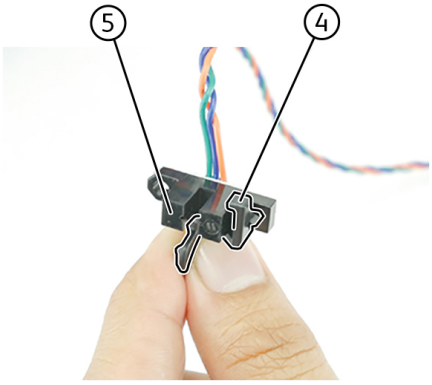
1. Install the sensor (cartridge barrel shutter) actuator (1) as shown.

Note: Make sure that the spring (2) is behind the boss (3).



B410S_4065

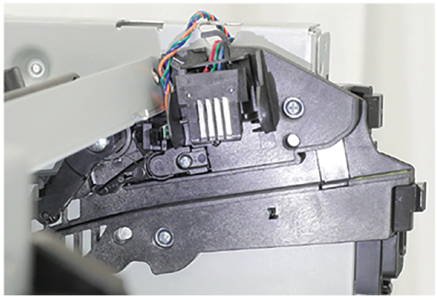
2. Install the bracket (4) to the sensor (5) as shown.



B410S_4066

3. Install the sensor and bracket as shown.

Note: Make sure that sensor is aligned with the actuator.

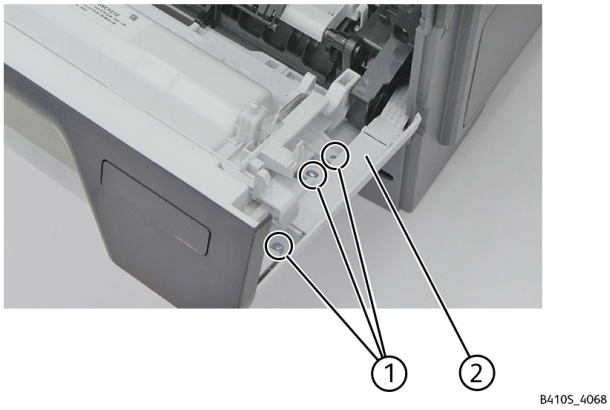


B410S_4067

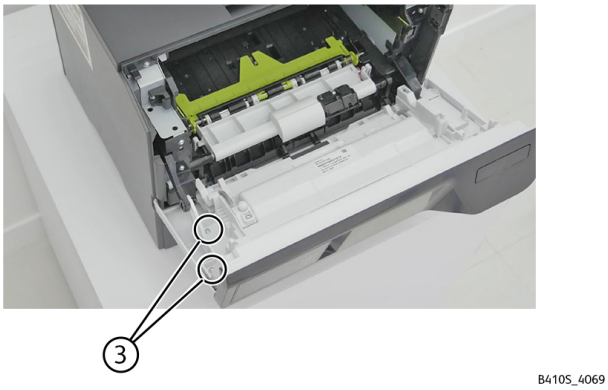
Front removals

Front Cover Removal

1. Open the front door, and then remove the screws (1).
2. Remove the cover (2).



3. Remove the screws (3).

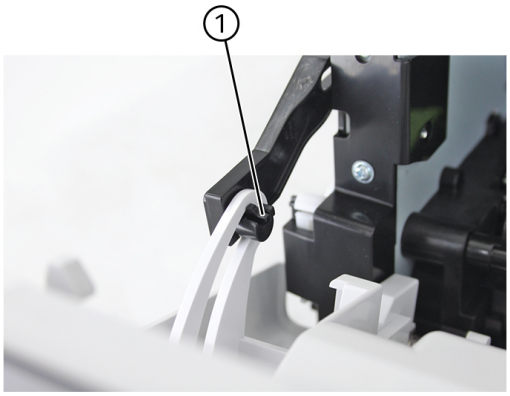


4. Remove the front cover.

MPF with Front Access Cover Removal

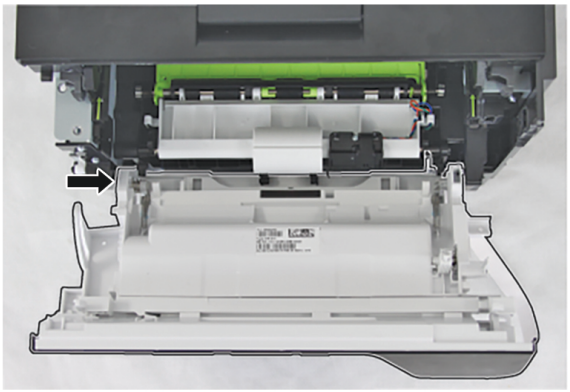
1. Remove the nameplate. See Front Cover Removal.
2. Remove the right cover. See Right Cover Removal.

3. Release the latch (1), and then detach the link.

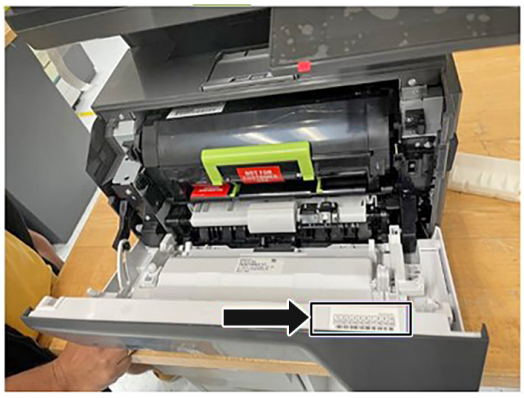


B410S_4030

4. On the controller board, disconnect the control panel cable and remove the ground screw.
5. Push the MPF with front access cover to the right, and then remove it.



B410S_4071



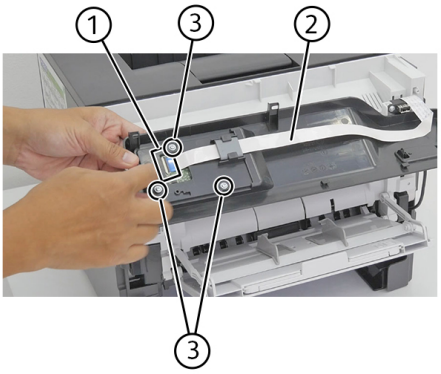
B410S_4178

Note: The Tag Matrix on the new MPF with front Access Cover needs to be marked off with any tags that were marked off on the old MPF with front Access Cover.

Control Panel Removal

1. Remove the front cover. See Front Cover Removal.
2. Remove the top front cover. See Top Front Cover Removal.

3. Disconnect the connector (1).
4. Unroute the cable (2).
5. Remove the screws (3).



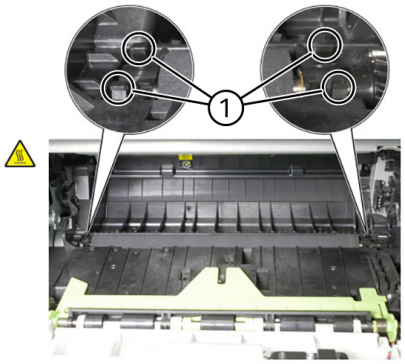
B410S_4072

6. Remove the control panel.

Transfer Roller Removal

Note: For a video demonstration, see Transfer roller removal

1. Open the front door.
2. Release the two latches (1) on each end of the transfer roller.



B410S_4073

3. Remove the roller.

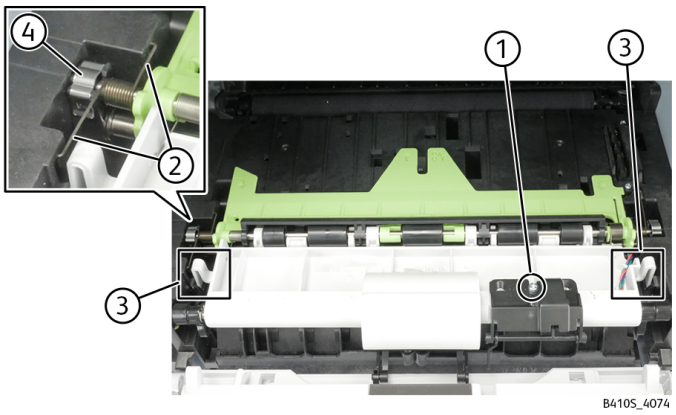
Note: For a video demonstration, see Transfer roller removal .

Jam Access Cover Removal

1. Open the front door.
2. Remove the screw (1), and then release the cable from the jam access cover.
3. Push down, and then pull the two ends (2) of the springs to remove them.
4. Repeat step 3 for the other side.

5. Release the two latches (3).
6. Remove the clip (4).

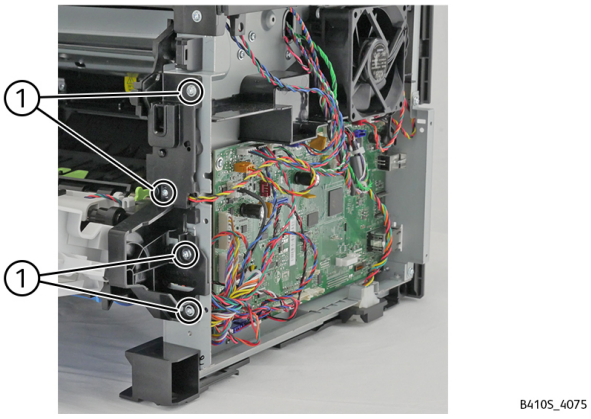
Note: Some models do not have the clip (4) installed.



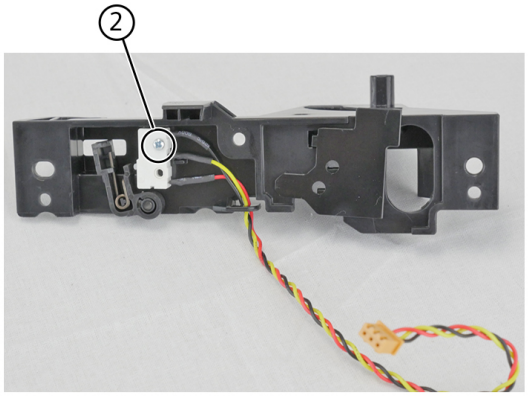
7. Remove the cover.

Sensor (front door) Removal

1. Remove the nameplate. See Front Cover Removal
2. Remove the right cover. See Right Cover Removal
3. Disconnect the JCVR1 and control panel cables from the controller board.
4. Remove the four screws (1).



5. Using a #1 Phillips screwdriver, remove the screw (2).



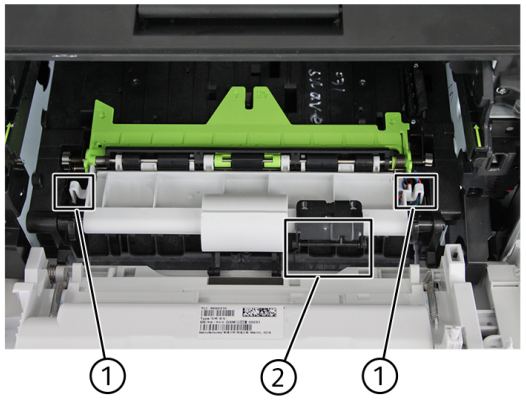
B410S_4076

6. Remove the sensor.

MPF Pick Roller and Separator Pad Removal

1. Open the front door.
2. Press the latches (1), and then open the cover.

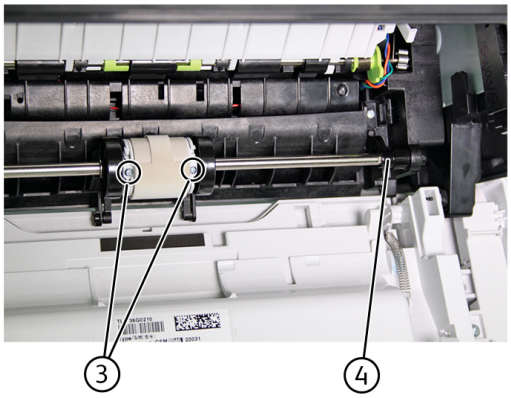
   Warning—Potential Damage: Avoid damaging the MPF sensor flag (2) when removing the cover.



B410S_4077

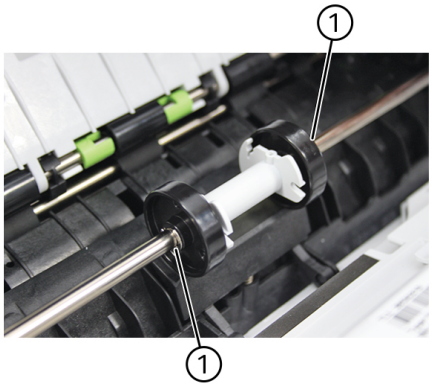
3. Using a #1 Phillips screwdriver, remove the two screws (3).

4. Hold the end of the shaft (4), and then pull out the roller to remove it.



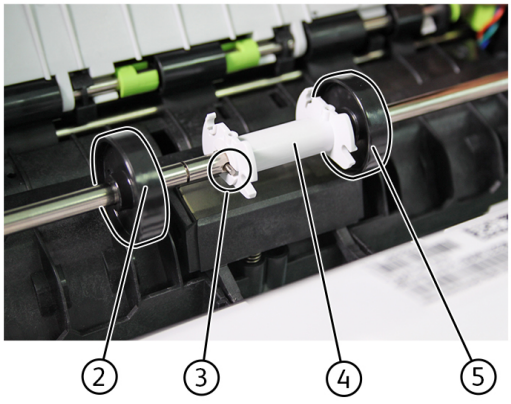
B410S_4078

5. Remove the two E-clips (1).



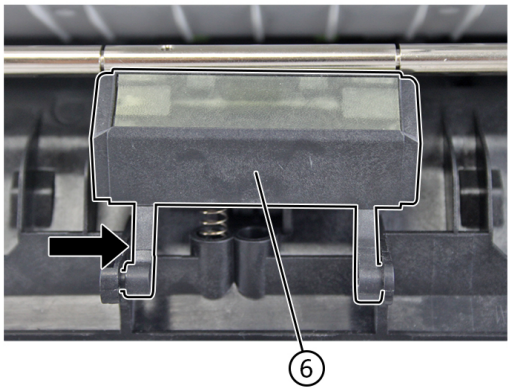
B410S_4079

6. Move the roller (2) to the left, and then remove the pin (3).
7. Move the hub (4) and roller (5) to the right.



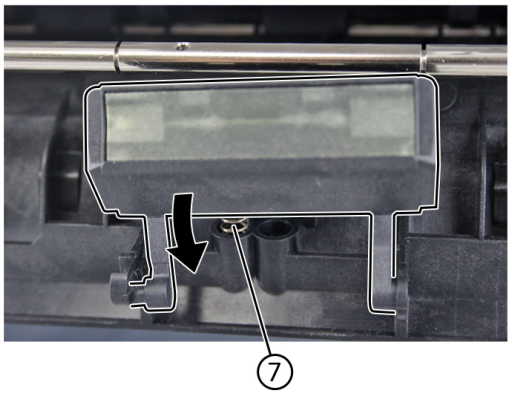
B410S_4080

8. Push the separator pad (6) to the right.



B410S_4081

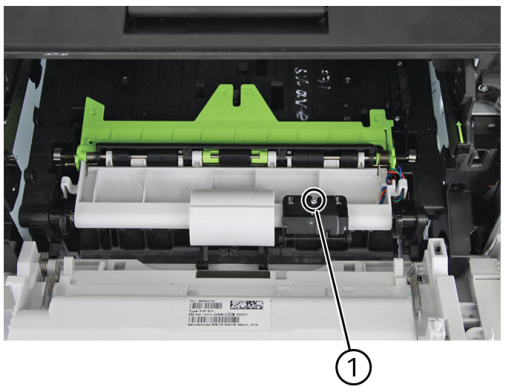
9. Push down the pad to remove it.
Warning—Potential Damage: Do not lose the spring (7).



B410S_4082

Sensor (MPF paper present) Removal

1. Open the front door.
2. Remove the screw (1).



B410S_4083

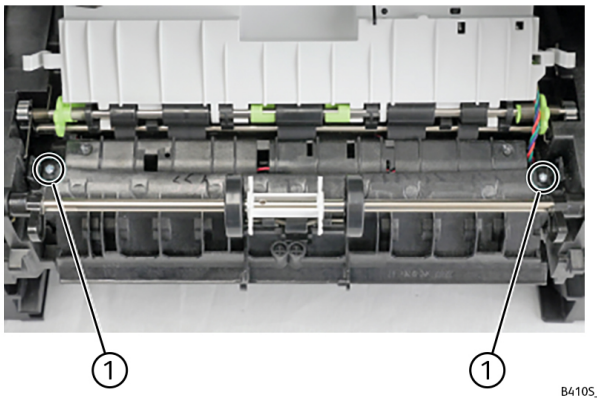
3. Open the controller board access cover, disconnect the cable JMPFPP1, and then release the cable.

4. Remove the sensor.

   Installation note: Pay attention to the position of the MPF sensor flag when installing the sensor.

Front Input Guide Removal

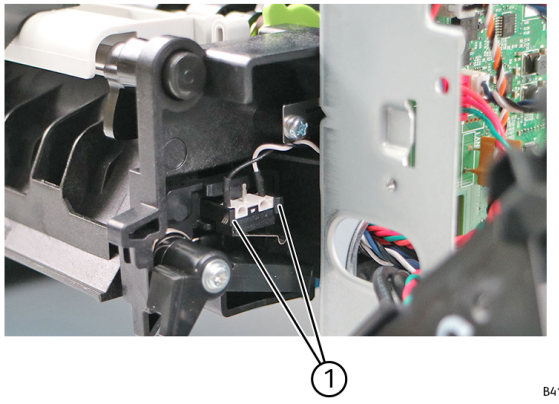
1. Remove the MPF with front access cover. See MPF with Front Access Cover Removal.
2. Remove the MPF pick roller and separator pad. See MPF Pick Roller and Separator Pad Removal.
3. Remove the two screws (1).



4. Remove the input guide.

Sensor (tray present) Removal

1. Remove the nameplate. See Front Cover Removal.
2. Remove the MPF with front access cover. See MPF with Front Access Cover Removal
3. Release the three latches (1), and then pry to remove the sensor.

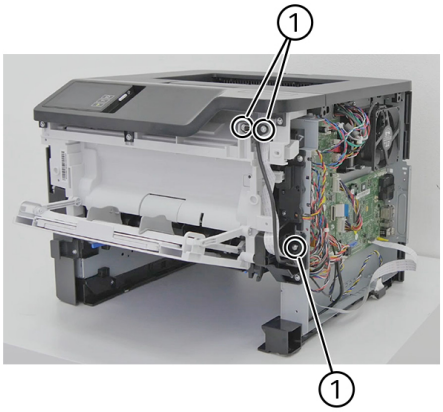


4. Unroute and disconnect the cables.

USB cable removal

1. Remove the front cover. See Front Cover Removal

2. Remove the screws (1).



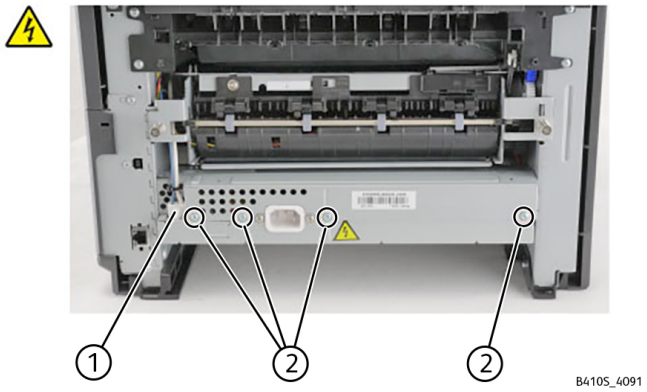
B410S_4090

3. Unroute the cable, and then remove it.

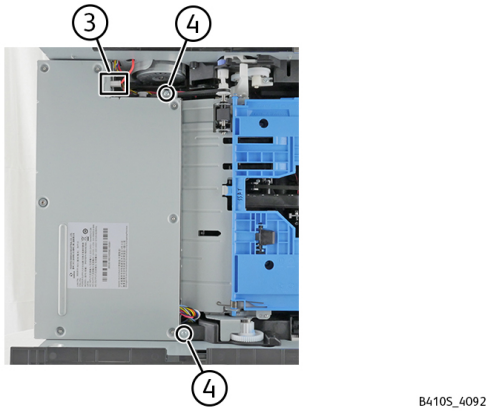
Bottom removals

Power Supply Removal

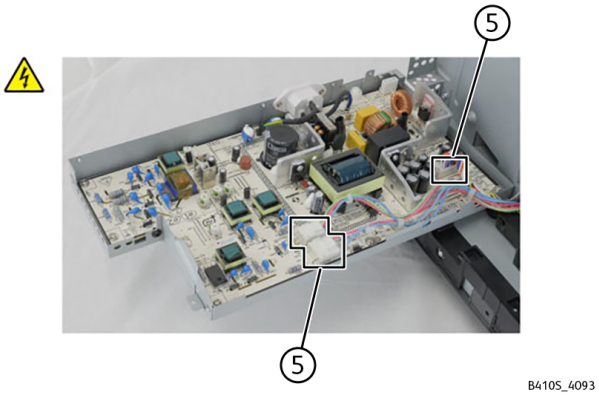
1. Remove the rear cover. See Rear Door and Cover Removal.
2. Disconnect the cable (1), and then remove the screws (2).



3. Disconnect the cable (3) under the printer, and then remove the two screws (4).



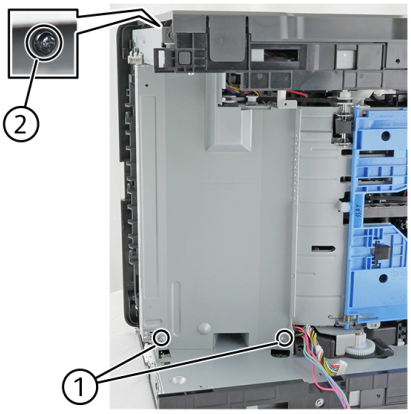
4. Disconnect the three cables (5).



5. Remove the power supply.

Duplex Removal

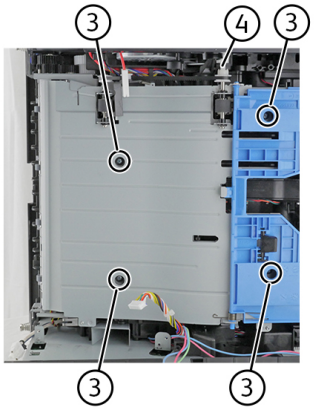
1. Remove the rear cover. See Rear Door and Cover Removal.
2. Remove the power supply. See Power Supply Removal.
3. Position the printer on its right side.
4. Remove the two screws (1) and the screw (2) on the left side of the printer.



B410S_4094

5. Remove the power supply shield.
6. Remove the four screws (3).
7. Remove the duplex.

Note: Make sure that the duplex link (4) stays attached to the duplex.

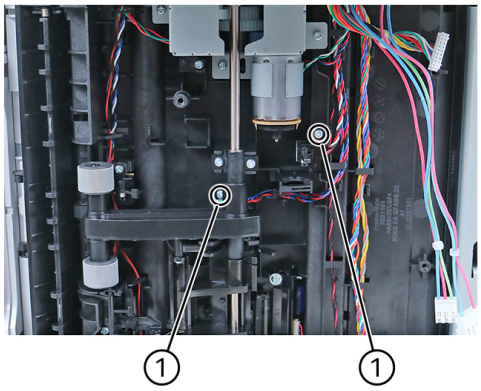


B410S_4095

Sensors (duplex and input) Removal

1. Remove the rear cover. See Rear Door and Cover Removal.
2. Remove the power supply. See Power Supply Removal.
3. Remove the duplex. See Duplex Removal.
4. Remove the two screws (1).

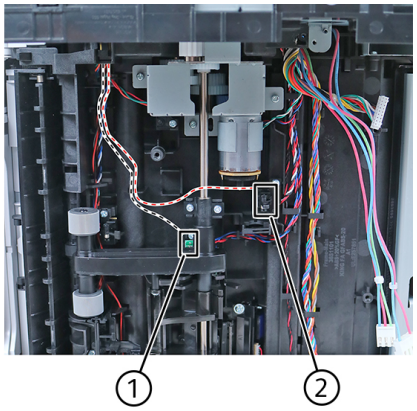
5. Disconnect the connector (2).
6. Cut the cable near the frame, and then remove the sensors.



B410S_4096

7. Open the controller board access cover, and then disconnect the cable JDUPPI1.
8. Remove the cables.

   Installation note: Route the sensor (input) cable (1) and sensor (duplex) cable (2) as shown.

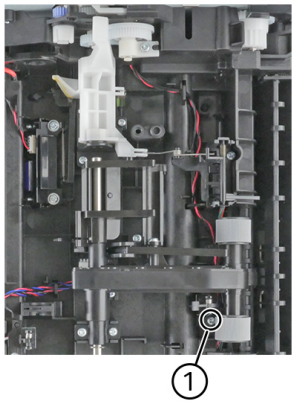


B410S_4097

Sensor (index) Removal

1. Remove the rear cover. See Rear Door and Cover Removal.
2. Remove the power supply. See Power Supply Removal.
3. Remove the duplex. See Duplex Removal.
4. Remove the right cover. See Right Cover Removal.
5. Disconnect the cable JINDEX1.

6. Remove the screw (1).

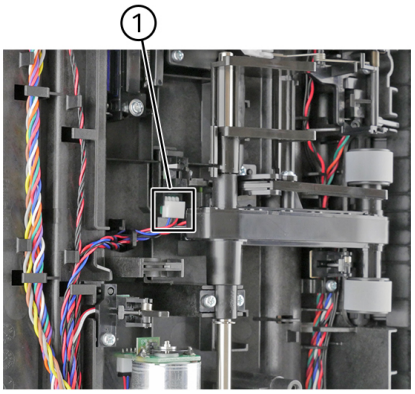


B410S_4098

7. Remove the sensor.

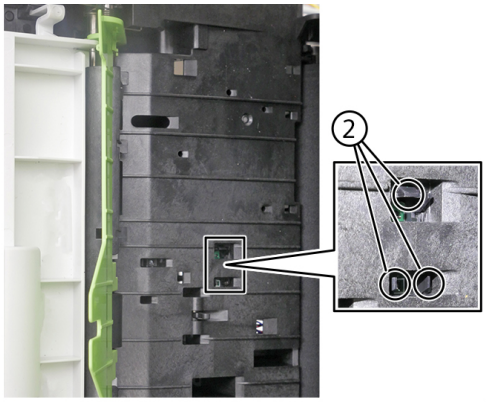
Sensor (Paper Present) Removal

1. Remove the rear cover. See Rear Door and Cover Removal.
2. Remove the power supply. See Power Supply Removal.
3. Remove the duplex. See Duplex Removal.
4. Disconnect the cable from the sensor (1).



B410S_4099

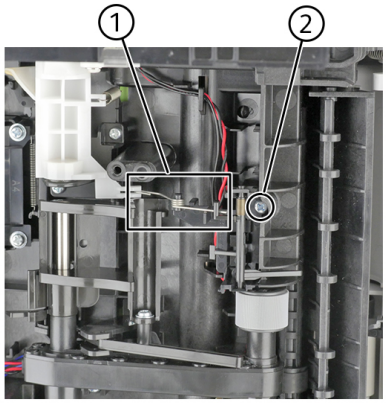
5. Release the three latches (2).



B410S_4100

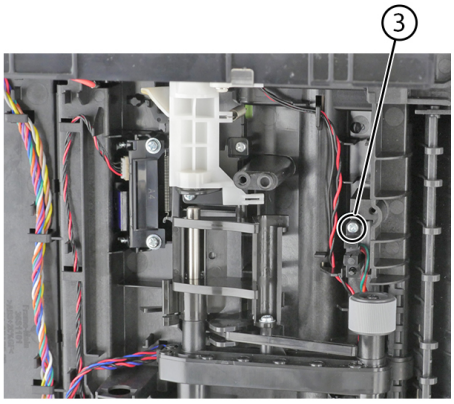
Sensor (trailing edge) Removal

1. Remove the rear cover. See Rear Door and Cover Removal.
2. Remove the power supply. See Power Supply Removal.
3. Remove the duplex. See Duplex Removal.
4. Open the controller board access cover, and then disconnect the cable JACM1.
5. Detach the spring (1), and then remove the screw (2) and sensor flag.



B410S_4101

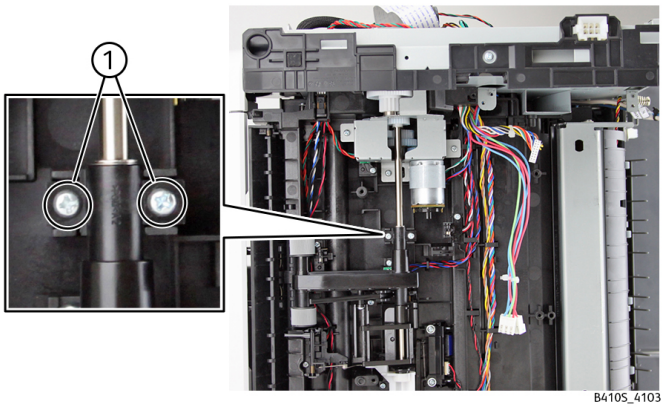
6. Remove the screw (3) and sensor.



B410S_4102

Pick Roller Removal

1. Remove the left cover. See Left Cover Removal
2. Remove the right cover. See Right Cover Removal.
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Position the printer on its left side.
5. Remove the power supply. See Power Supply Removal
6. Remove the duplex. See Duplex Removal
7. Remove the two screws (1).



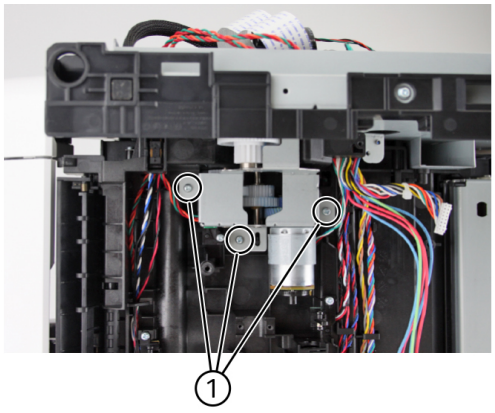
B410S_4103

8. Remove the assembly.
   Installation note: Pay attention to the correct position of the arm (1) when installing the assembly.

B410S_4104

Motor (pick) Assembly Removal

1. Remove the left cover. See Left Cover Removal.
2. Remove the right cover. See Right Cover Removal.
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Disconnect the cable (pick motor) from the controller board.
5. Position the printer on its left side.
6. Remove the power supply. See Power Supply Removal.
7. Remove the duplex. See Duplex Removal.
8. Remove the pick roller. See Pick Roller Removal.
9. Remove the three screws (1).

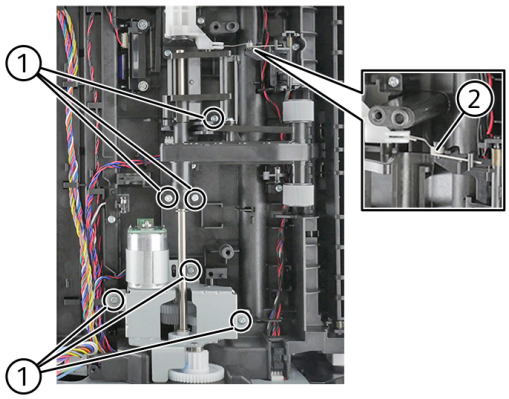


B410S_4107

10. Disconnect the cable (pick motor) from the assembly.
11. Remove the motor.

Pick/lift Motor Gearbox Removal

1. Remove the rear cover. See Rear Door and Cover Removal.
2. Remove the power supply. See Power Supply Removal.
3. Remove the duplex. See Duplex Removal.
4. Remove the six screws (1).
5. Detach the spring (2).



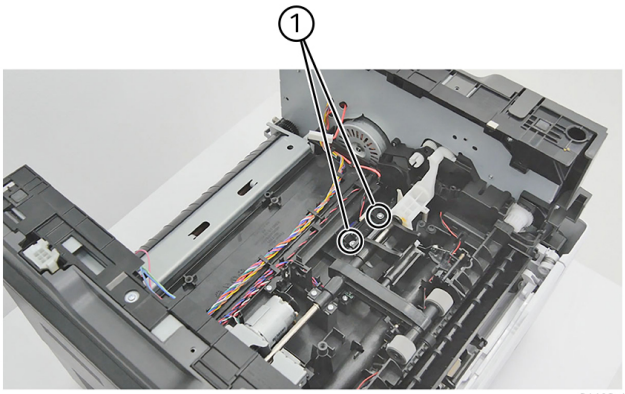
B410S_4105

6. Lift the pick roller.
7. Disconnect the cable from the gearbox.
8. Remove the gearbox.

Sensor (toner density) and Media Present Sensor Flag Removal

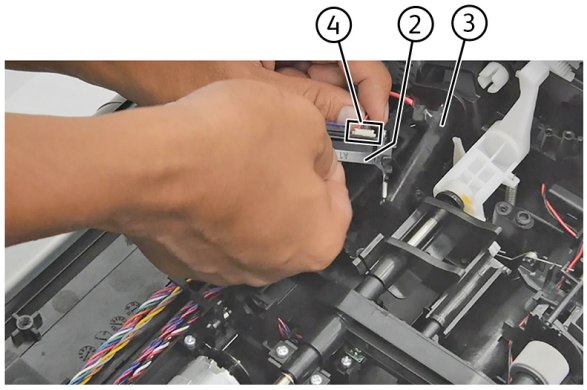
1. Remove the toner cartridge, and then remove the imaging unit.
2. Remove the tray insert.
3. Remove the rear door and cover. See Rear Door and Cover Removal.
4. Remove the power supply. See Power Supply Removal.
5. Remove the duplex. See Duplex Removal.

6. Remove the screws (1).



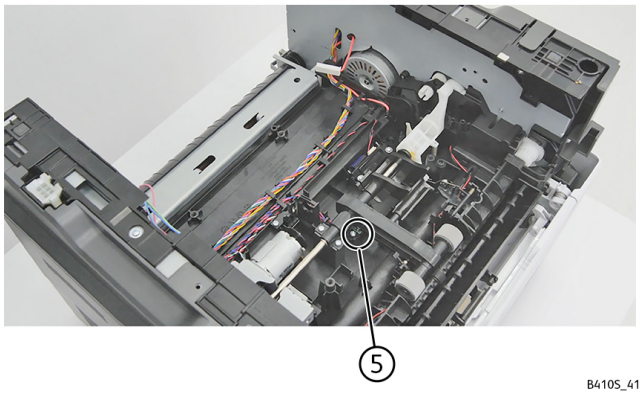
B410S_4108

7. Remove the sensor (2), and then remove the wiper (3).
8. Disconnect the connector (4).



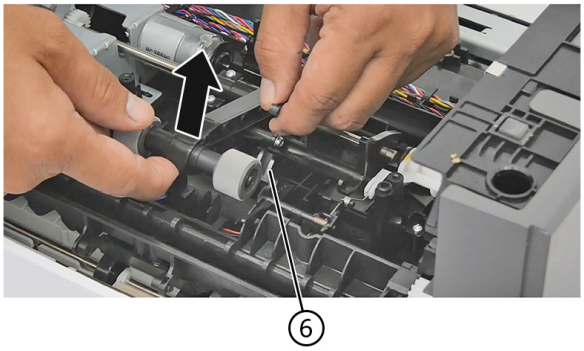
B410S_4109

9. Remove the screw (5).



B410S_4110

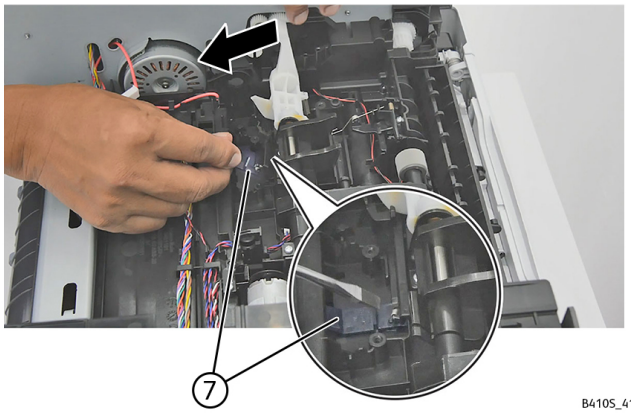
10. Lift the pick roller and then remove the sensor flag and bracket (6).



B410S_4111

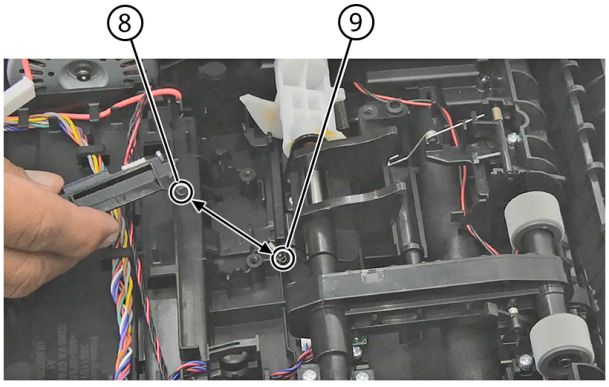
Installation note: Refer to the following procedures when installing the toner density sensor and media present sensor flag:

1. Pull down the actuator, and then place the wiper (7) in position.



B410S_4112

2. Attach the sensor bracket (8) and the spring (9).



B410S_4113

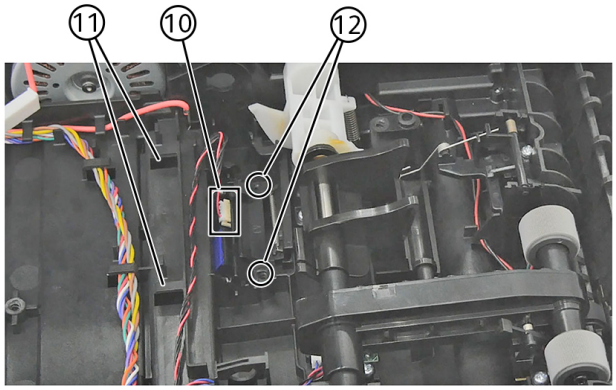
3. Connect the connector (10) to the sensor, and then route the cable on the harness (11).

Note: Before securing the sensor bracket using screws, do the following:

a. Lift the actuator.

b. If the wiper goes along with the actuator, then the sensor bracket is properly engaged with the wiper.

4. Secure the sensor bracket using screws (12).



B410S_4114

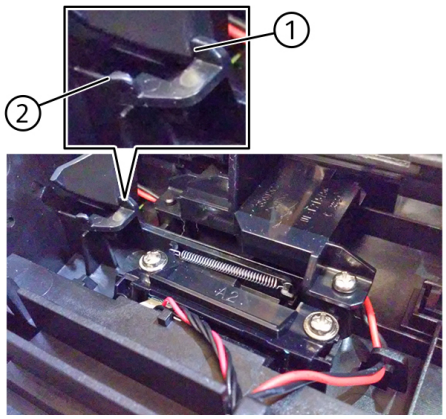
Note: After securing the sensor bracket using screws, do the following:

a. Apply RheoGel 793 to the top and bottom of the shutter blade extension.

B410S_4115

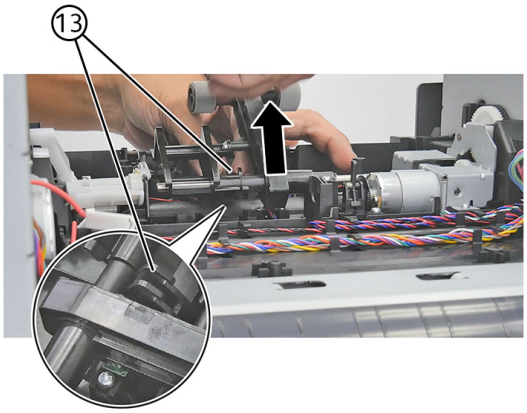
b. Apply RheoGel 793 to the point of contact between the bracket (1) and cam.

c. Apply RheoGel 793 to the point of contact to the lower edge (2) where the wiper bracket glides.



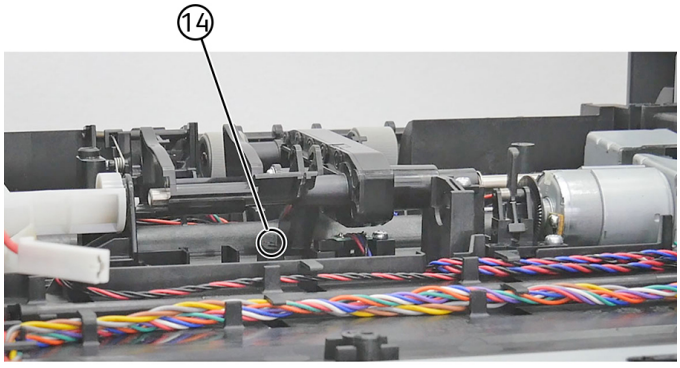
B410S_4116

5. Lift the pick roller, and then place the bracket (13) in position.



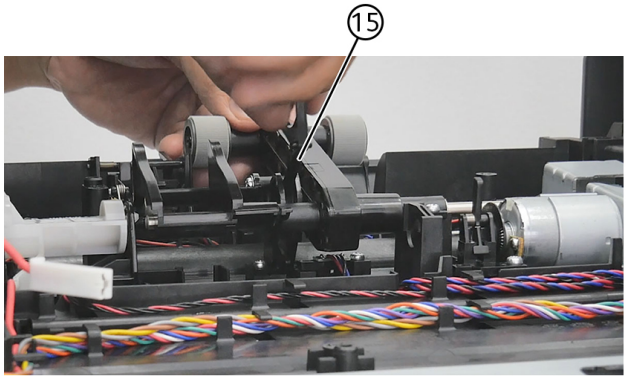
B410S_4117

6. Secure the bracket in place using screws (14).



B410S_4118

7. Install the sensor flag (15) into the bracket.



B410S_4119

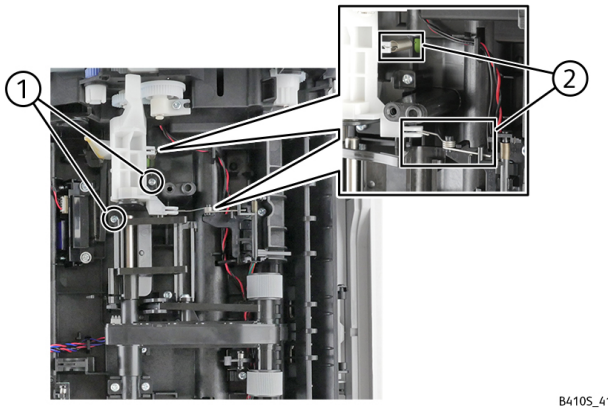
Note: To check if the sensor flag is properly installed, do the following:

a. Lift the pick roller assembly.

b. If the sensor flag goes along with the pick roller assembly when lifted, then the sensor flag is properly installed.

Lift Cam Removal

1. Remove the left cover. See Left Cover Removal.
2. Remove the main drive gearbox. See Main Drive Gearbox Removal.
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Remove the power supply. See Power Supply Removal.
5. Remove the duplex. See Duplex Removal.
6. Remove the two screws (1).
7. Release the two springs (2).

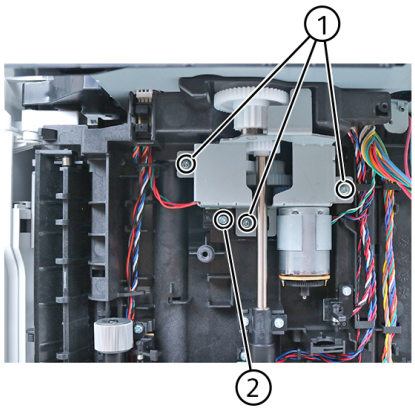


B410S_4106

8. Remove the cam.

Sensor (narrow media) Removal

1. Remove the left cover. See Left Cover Removal.
2. Remove the right cover. See Right Cover Removal.
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Position the printer on its left side.
5. Remove the power supply. See Power Supply Removal.
6. Remove the duplex. See Duplex Removal.
7. Remove the screws (1) to access the sensor under the motor bracket.
8. Remove the screw (2), and then release the sensor.



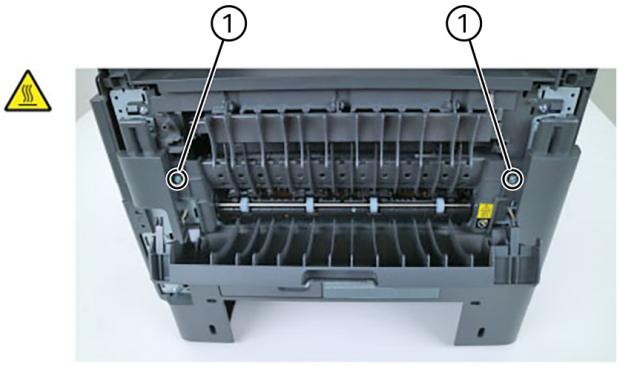
B410S_4120

9. Disconnect the sensor cable from the controller board.
10. Remove the sensor.

Rear side removals

Rear Door and Cover Removal

1. Open the rear door.
2. Remove the two screws (1).



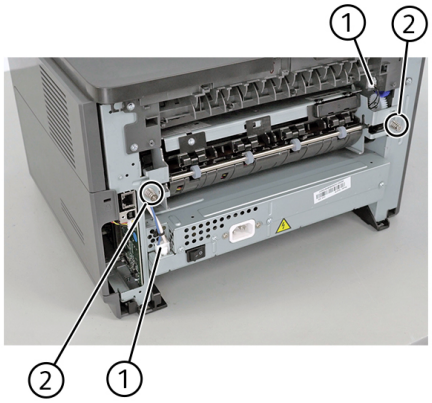
B410S_4121

3. Remove the rear door and cover.

Fuser Removal

Note: For a video demonstration, see Fuser removal.

1. Remove the rear cover. See Rear Door and Cover Removal.
2. Disconnect the cable JEXIT1.
3. Disconnect the two cables (1), and then remove the two screws (2).

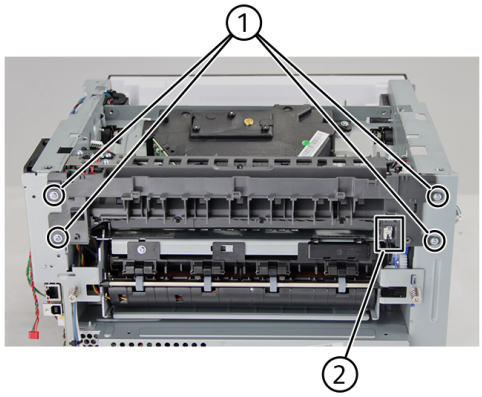


B410S_4122

4. Remove the fuser.
   Installation note: Open the front door before installing the fuser. To check if the fuser is properly installed, open and close the front door and check if the fuser shutter moves to the left and right.

Redrive Assembly Removal

1. Remove the right cover. See Right Cover Removal.
2. Remove the left cover. See Left Cover Removal
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Remove the top cover. See Top Cover Removal.
5. Disconnect the cables JNRW1 and JFUTHM1 from the controller board.
6. Remove the four screws (1) and the cable (2).



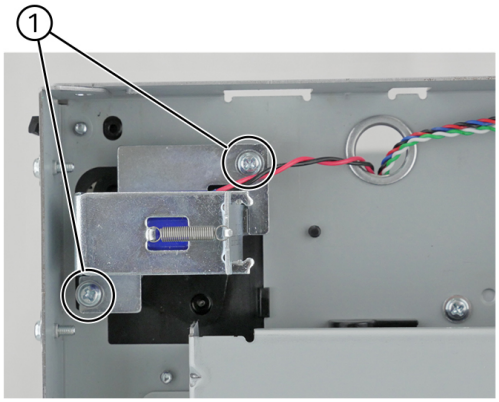
B410S_4124

7. Remove the redrive assembly.

Redrive Gear Plate Removal

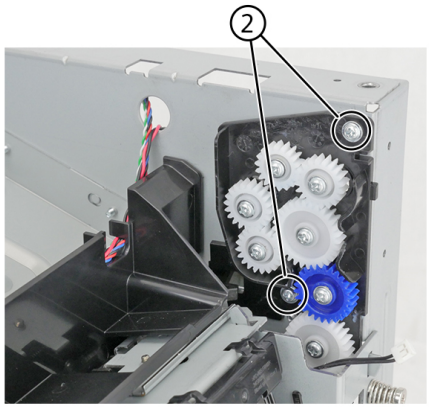
1. Remove the top cover. See Top Cover Removal.
2. Remove the left cover. See Left Cover Removal.
3. Remove the redrive assembly. See Redrive Assembly Removal.
4. Remove the two screws (1), and then detach the reverse solenoid.

Note: Do not disconnect the reverse solenoid cable from the controller board.



B410S_4039

5. Remove the two screws (2).

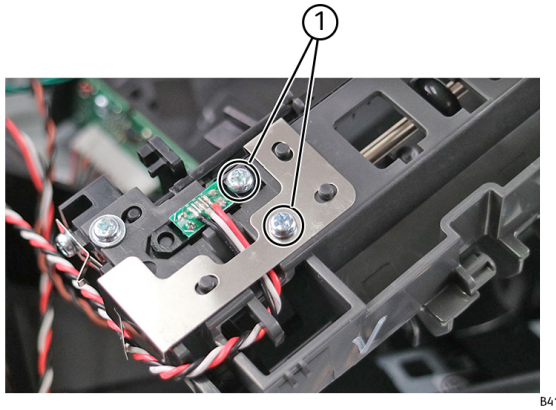


B410S_4125

6. Remove the redrive gear plate.

Sensor (bin full) Removal

1. Remove the right cover. See Right Cover Removal.
2. Remove the left cover. See Left Cover Removal
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Remove the top cover. See Top Cover Removal.
5. Remove the redrive assembly. See Redrive Assembly Removal.
6. Remove the two screws (1), and then remove the plate.



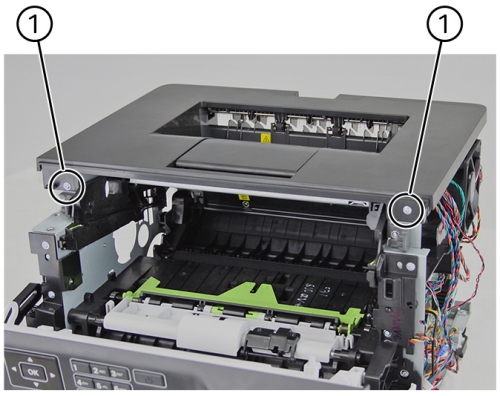
B410S_4175

7. Remove the sensor.

Top side removals

Top Cover Removal

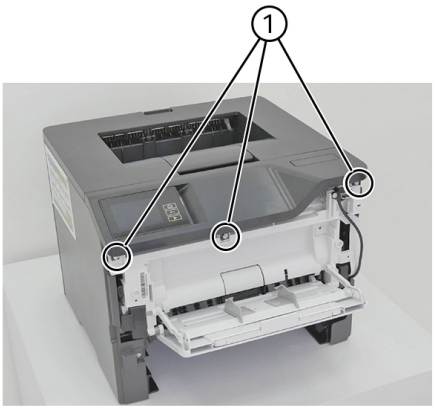
1. Remove the right cover. See Right Cover Removal.
2. Remove the left cover. See Left Cover Removal.
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Open the front door.
5. Remove the two screws (1).



6. Pull, and then lift the top cover to remove it.

Top Front Cover Removal

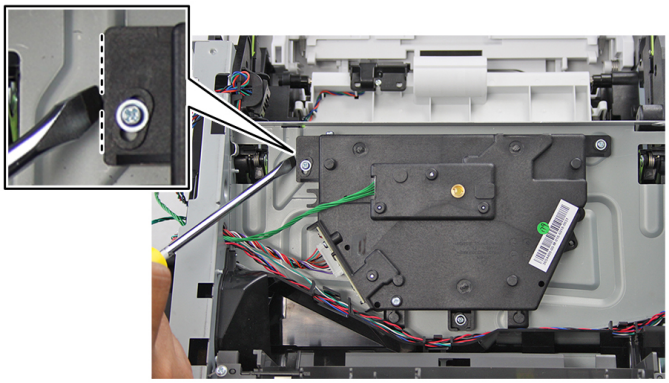
1. Remove the front cover. See Front Cover Removal.
2. Remove the screws (1).



3. Remove the control panel. See Control Panel Removal.
4. Remove the top front cover.

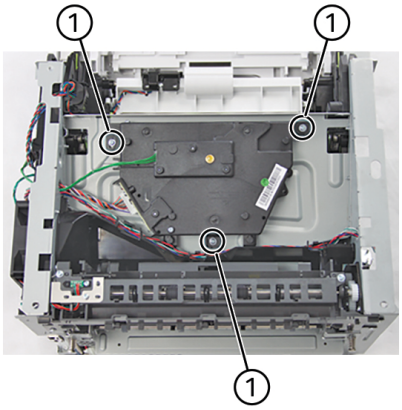
Printhead Removal

1. Remove the right cover. See Right Cover Removal.
2. Remove the left cover. See Left Cover Removal.
3. Remove the rear cover. See Rear Door and Cover Removal.
4. Remove the top cover. See Top Cover Removal.
5. Using a small, flat-blade screwdriver or a sharp pencil, mark the location of the printhead on the printer frame.



B410S_4129

6. Disconnect the printhead cable from the controller board.
7. Remove the three screws (1).



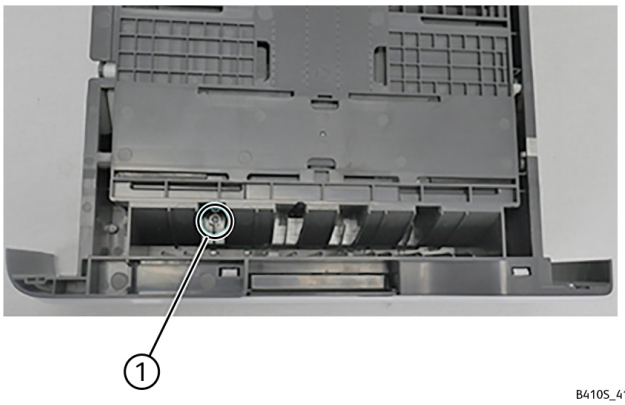
B410S_4130

8. Remove the printhead.

Optional 550-sheet tray removals

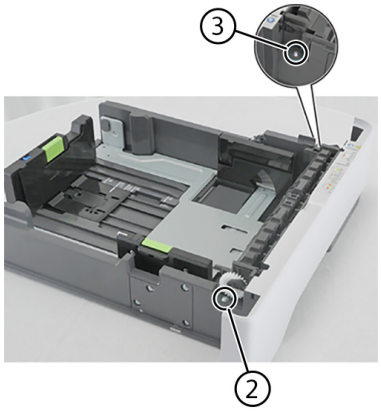
Separator Roller Assembly Removal

1. Remove the tray insert.
2. Under the tray, remove the screw (1).



B410S_4131

3. Remove the screw (2) on the left side. Do the same for the screw (3) on the opposite side.



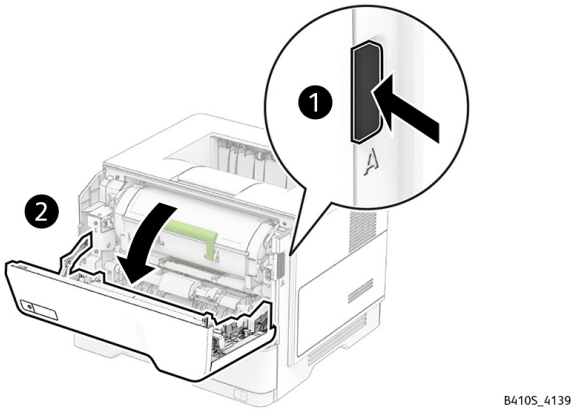
B410S_4132

4. Remove the roller assembly.

Replacing parts and supplies

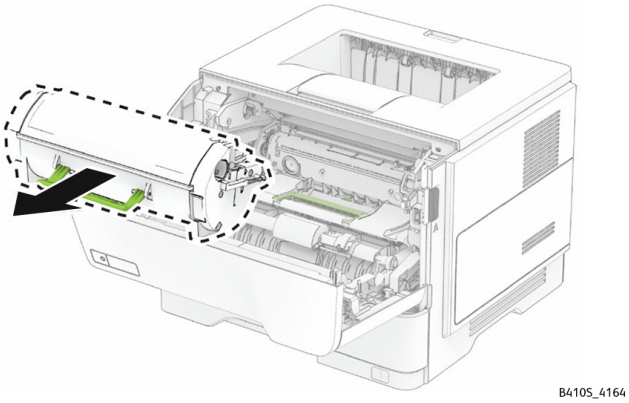
Replacing the toner cartridge

1. Open door A.



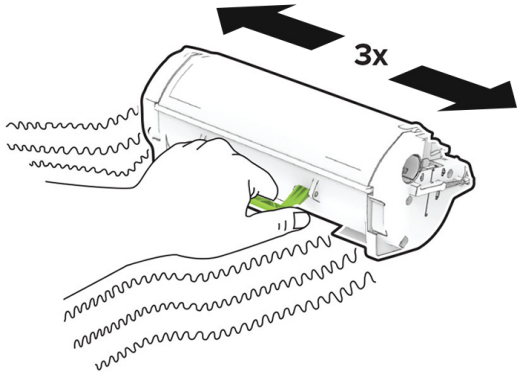
B410S_4139

2. Remove the used toner cartridge.



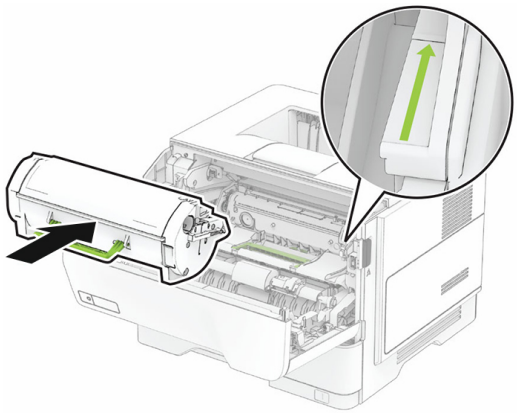
B410S_4164

3. Unpack the new toner cartridge.
4. Shake the toner cartridge to redistribute the toner.



B410S_4166

5. Insert the new toner cartridge.

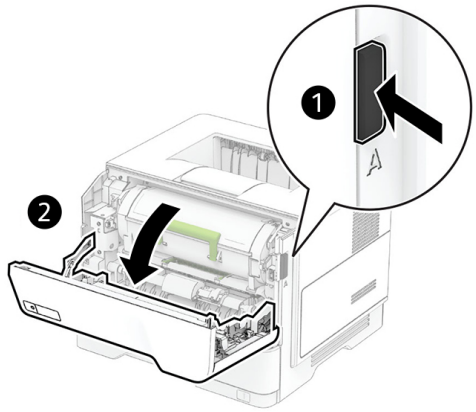


B410S_4163

6. Close door A.

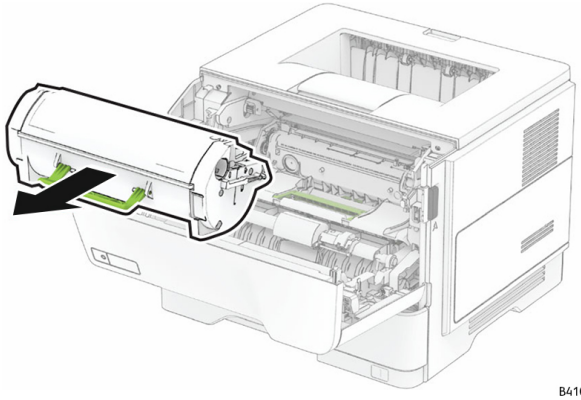
Replacing the imaging unit

1. Open door A.



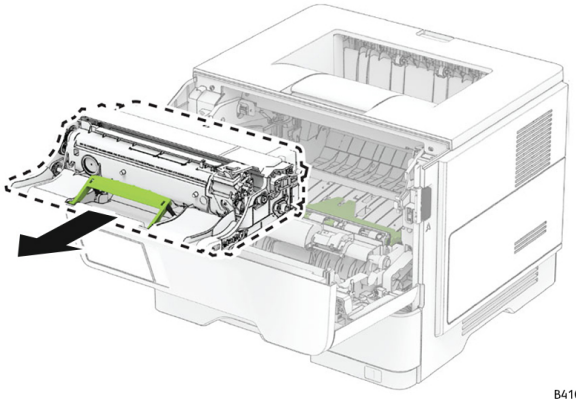
B410S_4139

2. Remove the toner cartridge.



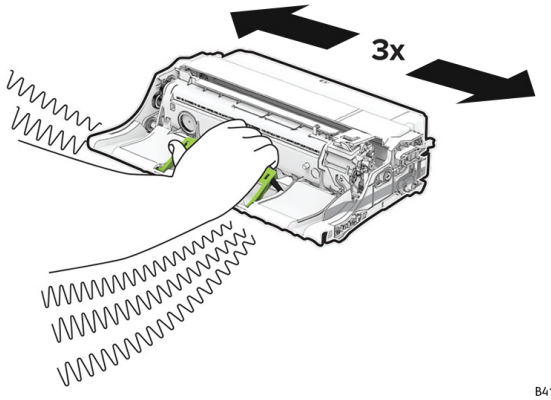
B410S_4165

3. Remove the used imaging unit.



B410S_4152

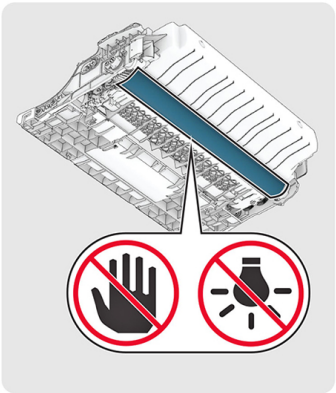
4. Unpack the new imaging unit.
5. Shake the imaging unit to redistribute the toner.



B410S_4153

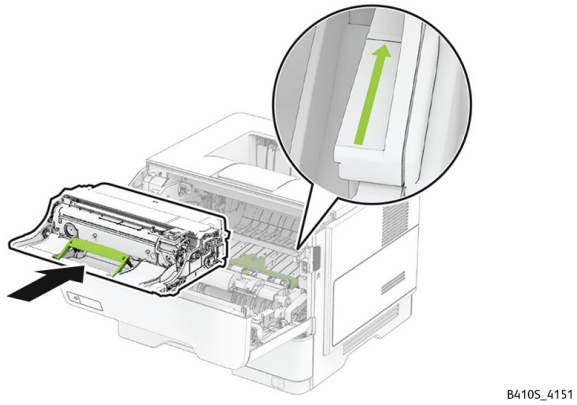
Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.

Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the quality of future print jobs.

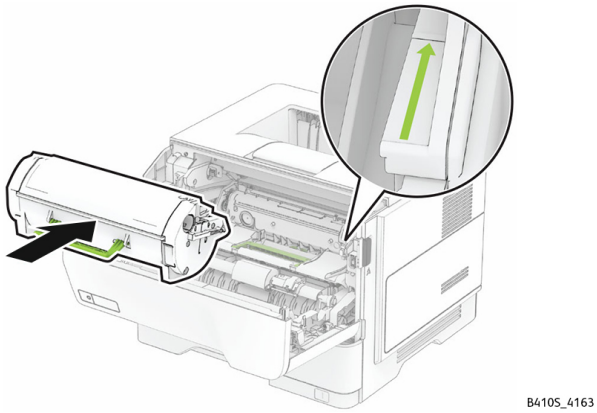


B410S_4157

6. Insert the new imaging unit.



7. Insert the toner cartridge.



8. Close door A.

Replacing MarkNet N8450 Wireless Print Server

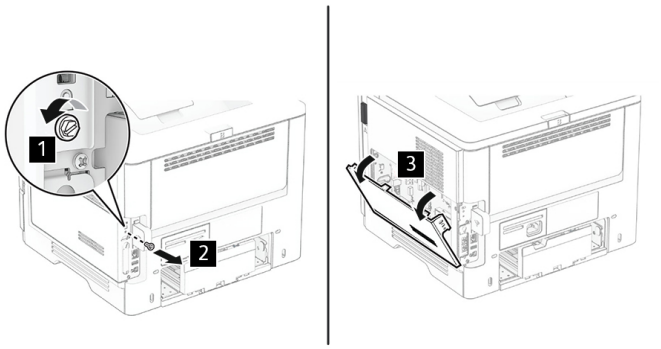
CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

Note: This task requires a flat-head screwdriver.

1. Turn off the printer.
2. Unplug the power cord from the electrical outlet, and then from the printer.

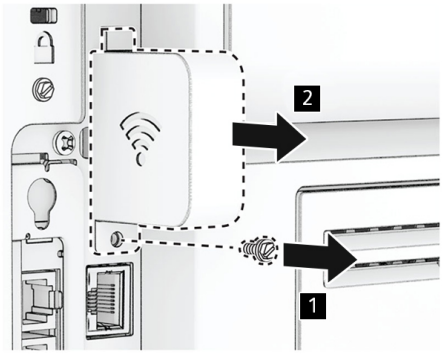
3. Open the controller board access cover.

   Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board components or connectors.



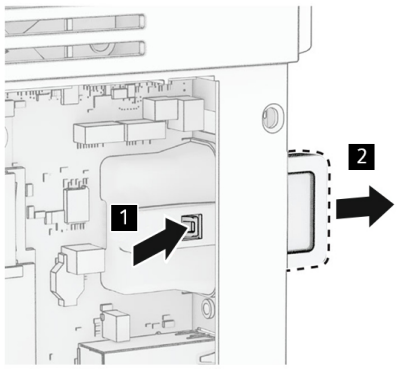
B410S_4150

4. Remove the wireless print server cover.



B410S_4170

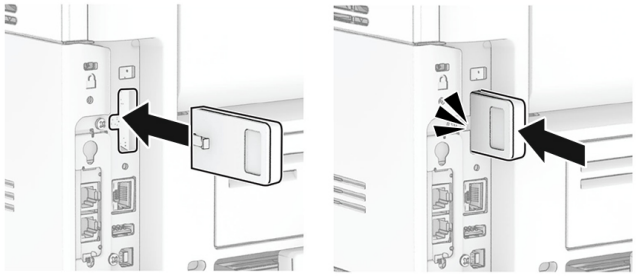
5. Remove the used wireless print server.



B410S_4171

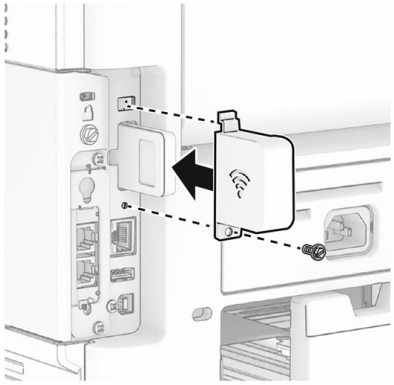
6. Unpack the new wireless print server.

7. Insert the new wireless print server until it clicks into place.



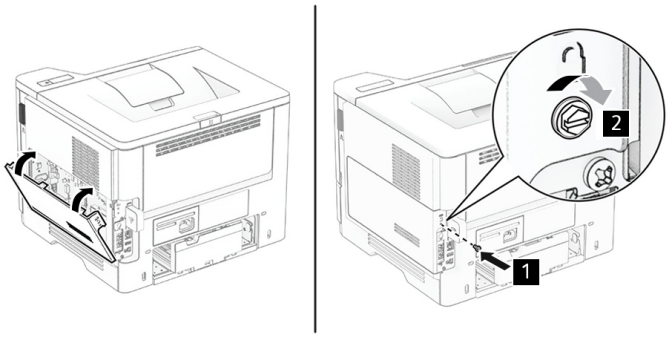
B410S_4168

8. Attach the wireless print server cover, and then install the screw.



B410S_4169

9. Close the controller board access cover, and then install the screw.



B410S_4149

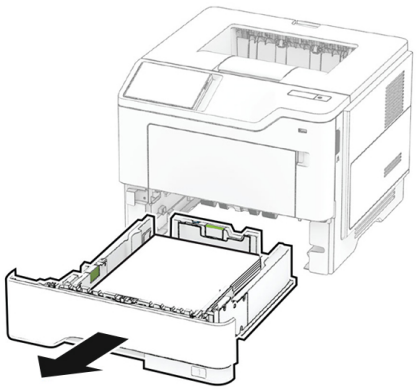
10. Connect the power cord to the printer, and then to the electrical outlet.

    CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

11. Turn on the printer.

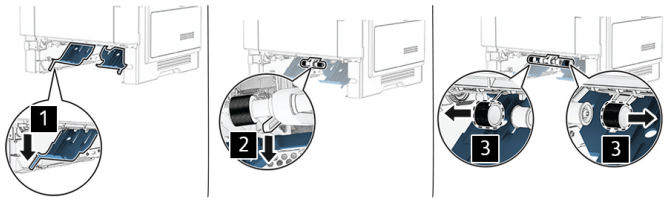
Replacing the pick tires

1. Turn off the printer.
2. Unplug the power cord from the electrical outlet, and then from the printer.
3. Remove the tray.



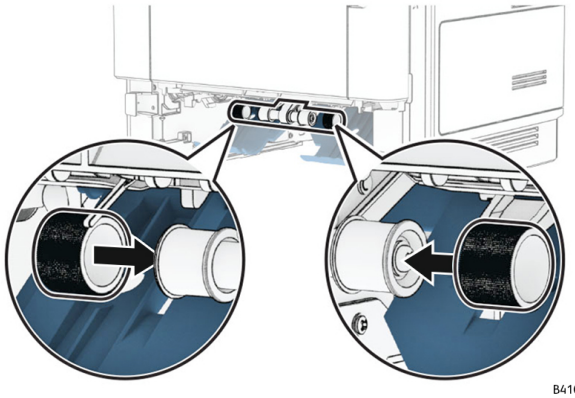
B410S_4167

4. Remove the used pick tires.



B410S_4158

5. Unpack the new pick tires.



B410S_4159

6. Insert the new pick tires.

7. Insert the tray.
8. Connect the power cord to the printer, and then to the electrical outlet.

   CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.
9. Turn on the printer.

Resetting the supply usage counters

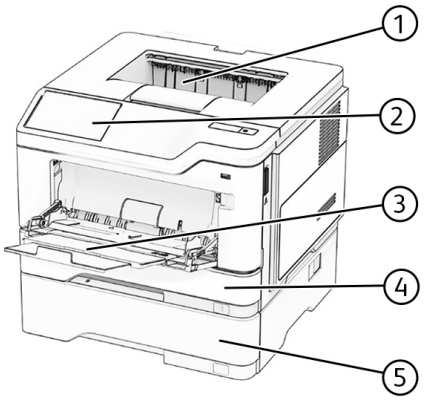
1. From the home screen, touch **Settings** > **Device** > **Maintenance** > **Configuration Menu** > **Supply Usage And Counters**.
2. Select the counter that you want to reset.

Warning—Potential Damage: Supplies and parts without Return Program agreement terms may be reset and remanufactured. However, the manufacturer's warranty does not cover any damage caused by non-genuine supplies or parts. Resetting counters on the supply or part without proper remanufacturing can cause damage to your printer. After resetting the supply or part counter, your printer may display an error indicating the presence of the reset item.

7

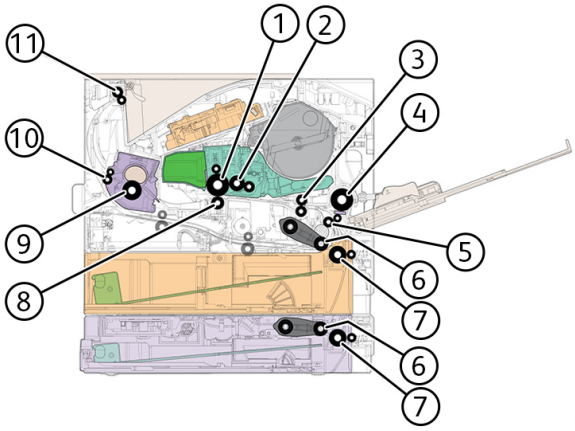
Component Locations

Printer Configuration



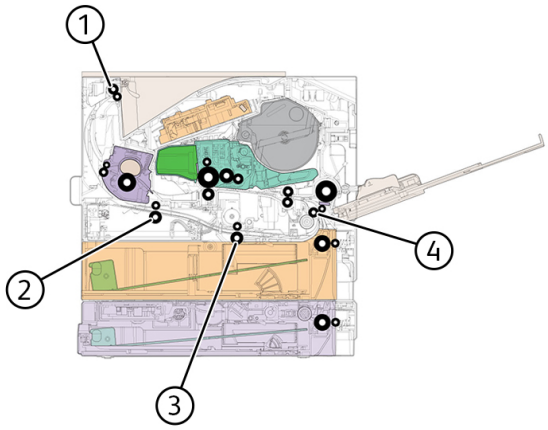
1	Standard bin
2	Control panel
3	Multipurpose feeder
4	Standard 550-sheet tray
5	Optional 550-sheet tray

Printer roller locations



B410S_4134

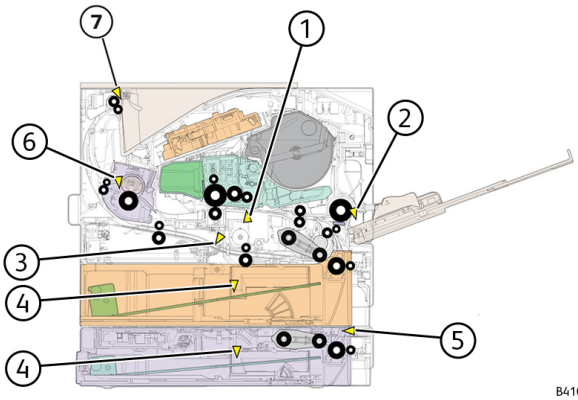
1	Photoconductor drum
2	Developer roller
3	First input roller
4	MPF pick roller
5	Second input roller
6	Pick roller
7	Separator roller
8	Transfer roller
9	Fuser roller
10	Fuser exit roller
11	Paper exit roller



B410S_4135

1	Paper exit roller
2	Duplex rear roller
3	Duplex front roller
4	Second input roller

Printer sensor locations



#	Sensor
1	Sensor (input)
2	Sensor (MPF paper present)
3	Sensor (duplex)
4	Sensor (media present)
5	Sensor (pass-through)
6	Sensor (fuser exit)
7	Sensor (narrow media/bin full)

8

Maintenance

Inspection guide

The purpose of this inspection guide is to aid you in identifying the intervals, based on page count, at which parts must be inspected (for visible physical damage), cleaned, or replaced.

If any unsafe conditions exist, find out how serious the hazard could be and if you can continue before you correct the hazard.

As you service the machine, check for the following:

- Damaged, missing, or altered parts, especially in the area of the On/Off switch and the power supply
- Damaged, missing, or altered covers, especially in the area of the top cover and the power supply cover
- Possible safety exposure from any non-Xerox attachments

Use the following table to determine when specified parts should be inspected:

PART	EVERY SERVICE CALL
Fuser	Inspect
MPF pick roller and separator pad	Inspect
Pick tires	Inspect
Separator roller assembly	Inspect
Transfer roller	Inspect

Scheduled maintenance

The control panel displays an 80.xx error when it reaches a preset number of page counts. It is necessary to install the appropriate maintenance kit to maintain the print quality and reliability of the printer.

Maintenance kits

Part number and kit	Contents	Maintenance interval
Maintenance Kit (110 V) **Note:** Kit contents to be ordered individually.	• Fuser (110 V) • MPF pick roller and separator pad • Pick tires • Separator roller • Transfer roller	200 K
Maintenance Kit (220 V) **Note:** Kit contents to be ordered individually.	• Fuser (220 V) • MPF pick roller and separator pad • Pick tires • Separator roller • Transfer roller	200 K

When performing the 200 K scheduled maintenance procedure, the following areas should be cleaned of media dust and toner contamination:

- Media trays
- Imaging unit area
- Transfer roller area
- Duplex area
- Standard bin

Cleaning the printer

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock when cleaning the exterior of the printer, unplug the power cord from the electrical outlet and disconnect all cables from the printer before proceeding.

CAUTION—SHOCK HAZARD: Para evitar el riesgo de descarga eléctrica al limpiar el exterior de la impresora, desconecte el cable de alimentación de la toma eléctrica y desconecte todos los cables de la impresora antes de realizar la operación.

CAUTION—SHOCK HAZARD: Pour éviter tout risque d'électrocution lors du nettoyage de l'extérieur de l'imprimante, débranchez le cordon d'alimentation électrique de la prise et déconnectez tous les câbles de l'imprimante avant de continuer.

CAUTION—SHOCK HAZARD: Um das Risiko eines elektrischen Schlags beim Reinigen des Druckergehäuses zu vermeiden, ziehen Sie das Netzkabel aus der Steckdose, und ziehen Sie alle Kabel vom Drucker ab, bevor Sie fortfahren.

Note:

- Perform this task after every few months.
- Damage to the printer caused by improper handling is not covered by the printer warranty.

1. Turn off the printer, and then unplug the power cord from the electrical outlet.
2. Remove paper from the standard bin and multipurpose feeder.
3. Remove any dust, lint, and pieces of paper around the printer using a soft brush or vacuum.
4. Wipe the outside of the printer with a damp, soft, lint-free cloth.

Note:

- Do not use household cleaners or detergents, as they may damage the finish of the printer.
- Make sure that all areas of the printer are dry after cleaning.

5. Connect the power cord to the electrical outlet, and then turn on the printer.

Cleaning the touch screen

CAUTION—SHOCK HAZARD: To avoid the risk of electric shock when cleaning the exterior of the printer, unplug the power cord from the electrical outlet and disconnect all cables from the printer before proceeding.

CAUTION—SHOCK HAZARD: Para evitar el riesgo de descarga eléctrica al limpiar el exterior de la impresora, desconecte el cable de alimentación de la toma eléctrica y desconecte todos los cables de la impresora antes de realizar la operación.

CAUTION—SHOCK HAZARD: Pour éviter tout risque d'électrocution lors du nettoyage de l'extérieur de l'imprimante, débranchez le cordon d'alimentation électrique de la prise et déconnectez tous les câbles de l'imprimante avant de continuer.

CAUTION—SHOCK HAZARD: Um das Risiko eines elektrischen Schlags beim Reinigen des Druckergehäuses zu vermeiden, ziehen Sie das Netzkabel aus der Steckdose, und ziehen Sie alle Kabel vom Drucker ab, bevor Sie fortfahren.

1. Turn off the printer, and then unplug the power cord from the electrical outlet.
2. Using a damp, soft, lint-free cloth, wipe the touch screen.

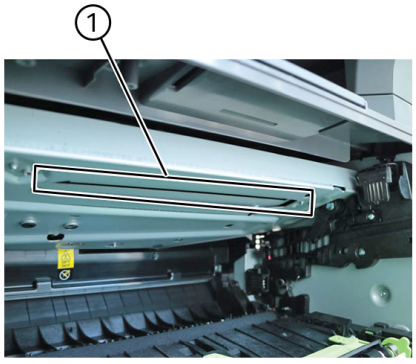
Note:

- Do not use household cleaners or detergents, as they may damage the touch screen.
- Make sure that the touch screen is dry after cleaning.

3. Connect the power cord to the electrical outlet, and then turn on the printer.

Cleaning the printhead lenses

1. Open the front door.
2. Remove the toner cartridge and imaging unit.
3. From the printhead access opening (1) in the top of the frame at the front of the printer, find the printhead lens.



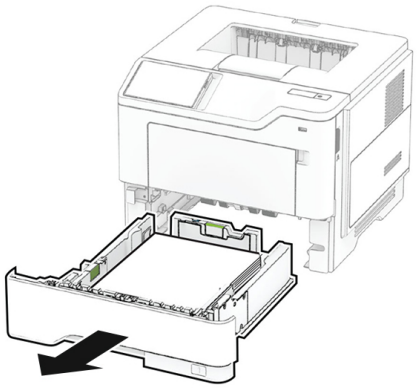
B410S_4138

4. Insert a soft, lint-free cloth in the opening, and gently move the cloth back and forth along the surface of the lens to clean it.
5. Repeat step 4.
6. Reinstall the imaging unit and toner cartridge.
7. Close the front door.

Loading trays

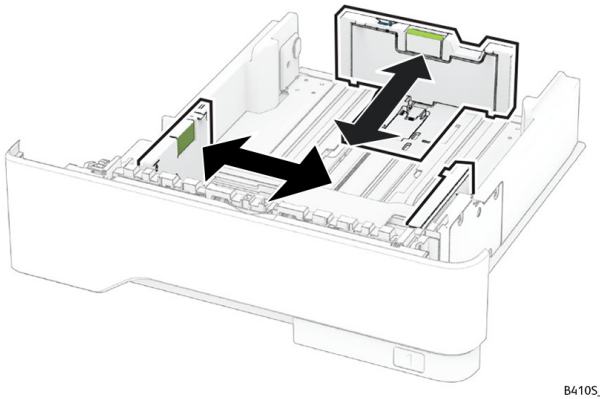
1. Remove the tray.

Note: To avoid paper jams, do not remove the tray while the printer is busy.



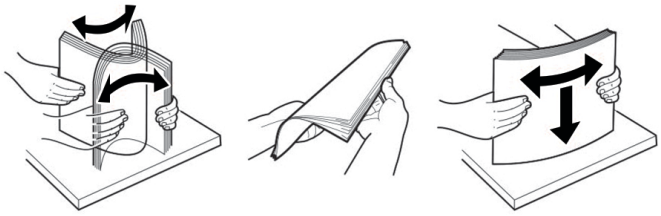
B410S_4167

2. Adjust the guides to match the size of the paper that you are loading.



B410S_4162

3. Flex, fan, and align the paper edges before loading.

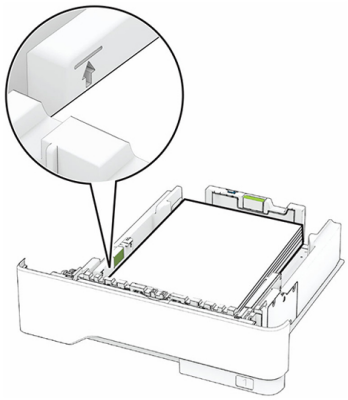


B410S_4156

4. Load the paper stack with the printable side facedown, and then make sure that the guides fit snugly against the paper.

Note:

1. Load letterhead facedown with the header toward the front of the tray for one-sided printing.
2. Load letterhead faceup with the header toward the back of the tray for two-sided printing.
3. Do not slide paper into the tray.
4. To avoid paper jams, make sure that the stack height is below the maximum paper fill indicator.

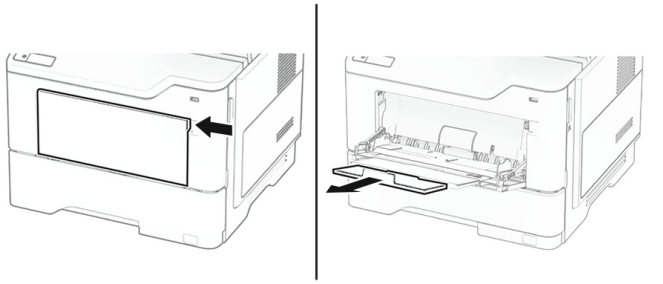


B410S_4161

5. Insert the tray. If necessary, set the paper size and paper type from the control panel to match the paper loaded.

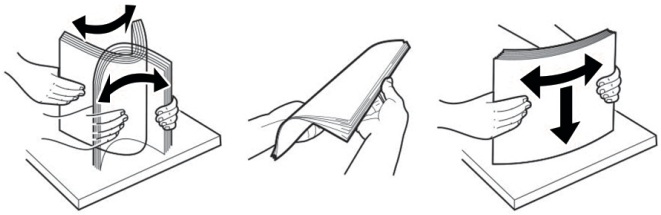
Loading the multipurpose feeder

1. Open the multipurpose feeder.



B410S_4155

2. Flex, fan, and align the paper edges before loading.



B410S_4156

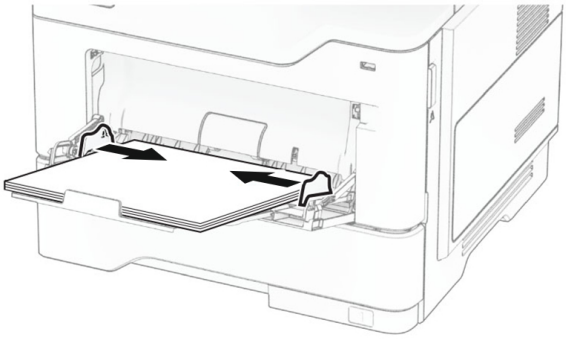
3. Load paper with the printable side faceup.

Note:

1. Load letterhead faceup with the header toward the rear of the printer for one-sided printing.
2. Load letterhead facedown with the header toward the front of the printer for two-sided printing.
3. Load envelopes with the flap facedown on the left side.

Warning—Potential Damage: Do not use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives.

4. Adjust the guide to match the size of the paper that you are loading.



B410S_4154

5. From the control panel, set the paper size and paper type to match the paper loaded.

9

Parts Catalog

Legend

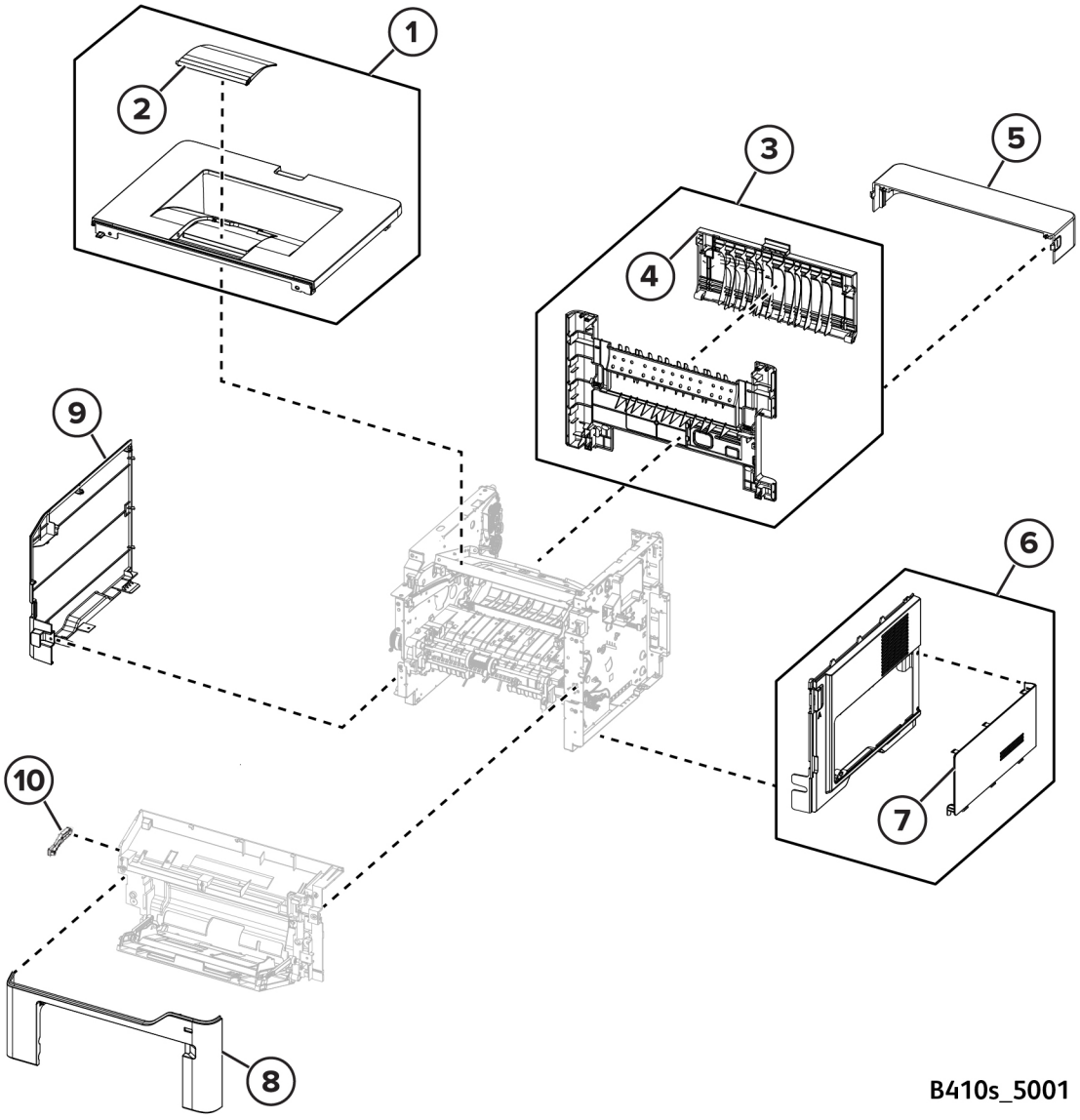
The following column headings are used in the parts catalog:

- **Asm-index**—Identifies the item in the illustration.
- **Part number**—Identifies the unique number that correlates with the part.
- **Units/mach**—Refers to the number of units actually used in the base machine or product.
- **Units/FRU**—Refers to the number of units in a particular FRU.
- **Description**—Describes the part.

The following abbreviations are used in the parts catalog:

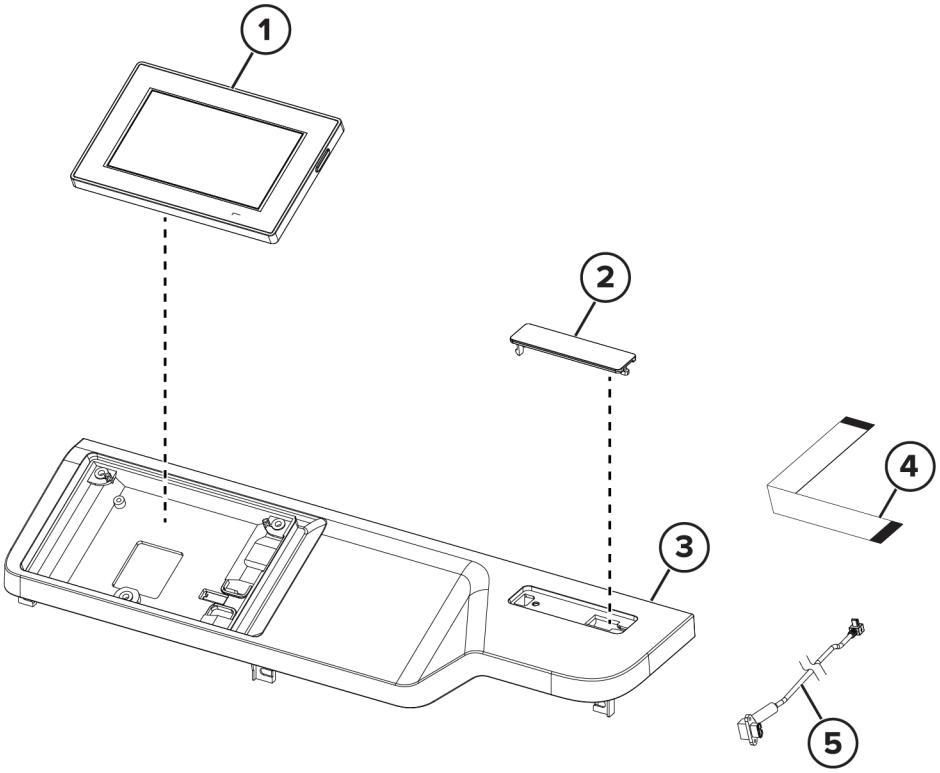
- **NS** (not shown) in the Asm-index column indicates that the part is procurable but is not pictured in the illustration.
- **PP** (parts packet) in the Description column indicates that the part is contained in a parts packet.

Assembly 1: Covers



Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	002N03762	1	1	Top cover	Top Cover Removal
2	019N01172	1	1	Output extender	--
3	002N03766	1	1	Rear door and cover	Rear Door and Cover Removal
4	002N03769	1	1	Rear door	--
5	002N03755	1	1	Dust cover	--
6	002N03763	1	1	Right cover	Right Cover Removal
7	002N03764	1	1	Controller board cover	--
8	002N03761	1	1	Front cover	Front Cover Removal
9	002N03768	1	1	Left cover	Left Cover Removal
10	012N00552	1	1	Access cover link	--

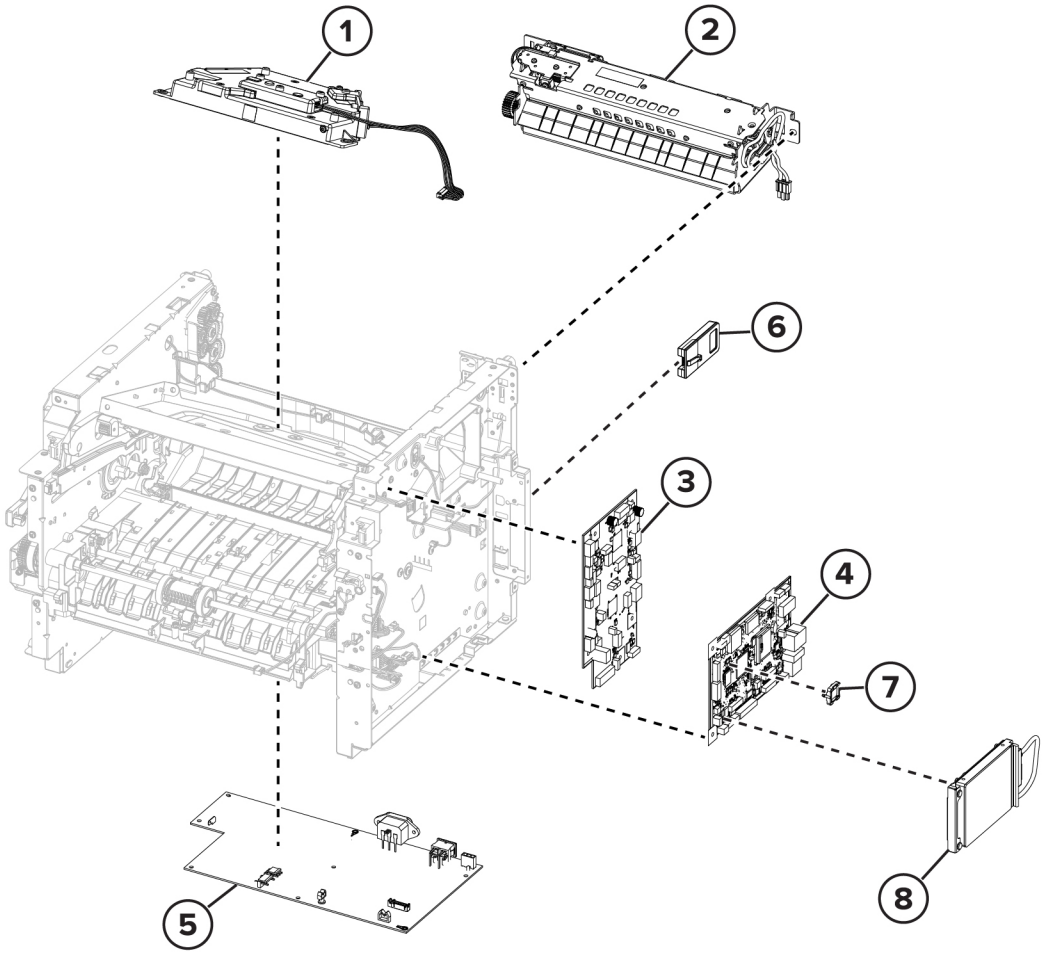
Assembly 2: Control panel



B410S_5003

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	123N00294	1	1	Control panel display	--
2	056N00282	1	1	Bezel (B410)	--
3	002N03738	1	1	Control panel front cover	--
4	117N02417	1	1	Control panel FFC	--
5	117N02416	1	1	Front USB cable	--

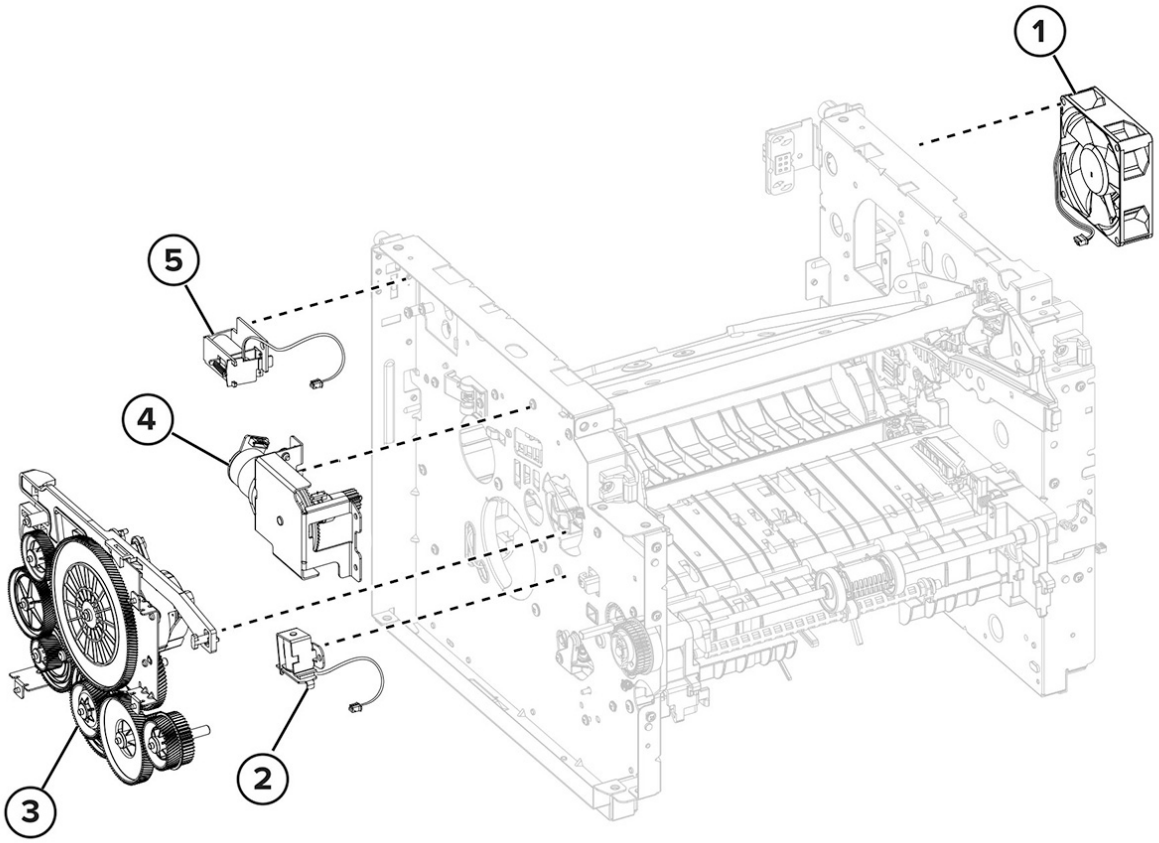
Assembly 3: Electronics



B410s_5004

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	046N00248	1	1	Printhead	Printhead Removal
2	126N00516	1	1	Fuser, 110 V	Fuser Removal
2	126N00517	1	1	Fuser, 220 V	Fuser Removal
3	140N63969	1	1	Engine board (Drive PWB)	--
4	109N00921	1	1	Controller board	--
5	105N02416	1	1	Power supply, (110 V)	--
5	105N02415	1	1	Power supply, (220 V)	--
6	–	1	1	Optional wireless network adapter	--
7	133N23278	1	1	Trusted platform module	--
8	–	1	1	Optional 500 +GB HDD	--

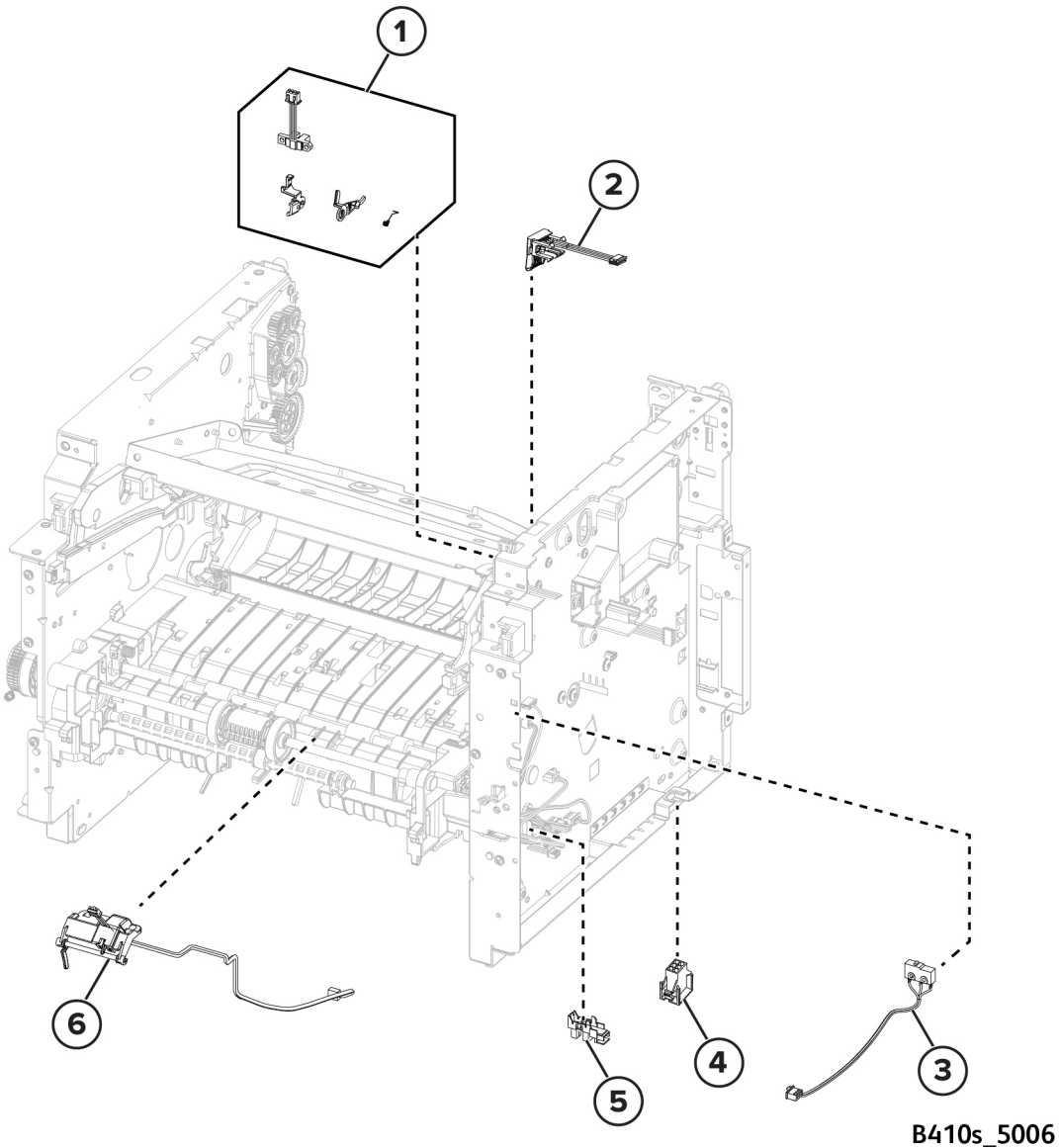
Assembly 4: Motors



B410S_5005

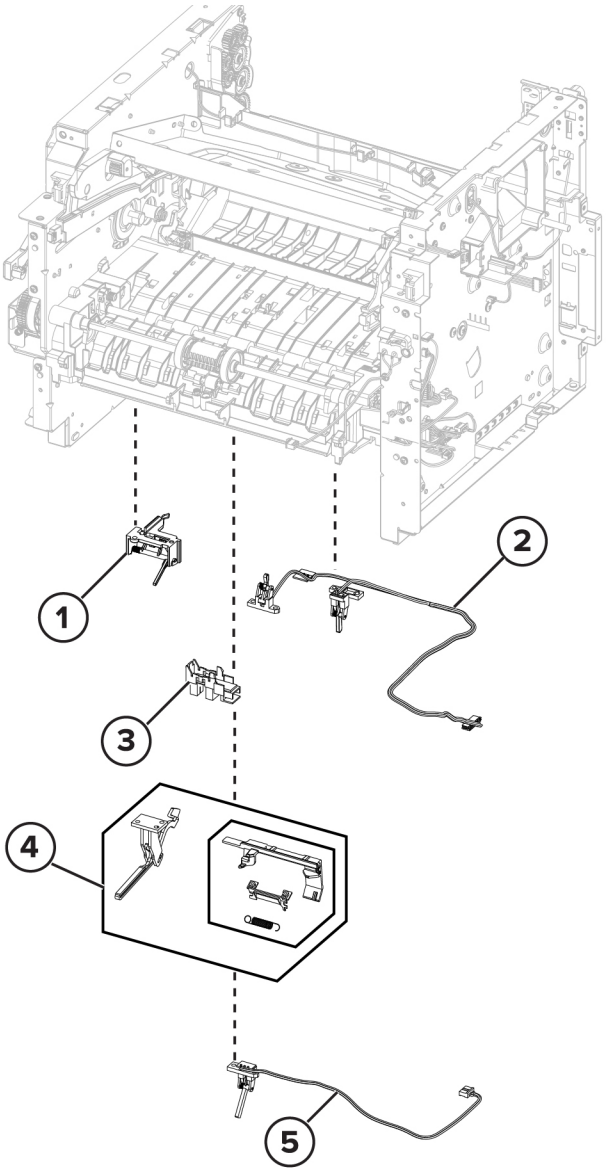
Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	127N08078	1	1	Cooling fan	Fan Removal
2	121N01282	1	1	MPF solenoid	MPF Solenoid Removal
3	007N01927	1	1	Main drive gearbox	Main Drive Gearbox Removal
4	007N01928	1	1	Cartridge gearbox	Cartridge Gearbox Removal
5	121N01283	1	1	Reverse solenoid	Reverse Solenoid Removal

Assembly 5: Sensors 1



Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	130N02015	1	1	Sensor (cartridge barrel)	Cartridge Barrel Shutter Sensor Kit Removal
2	115N00947	1	1	Toner cartridge smart chip contact	Toner Cartridge Smart Chip Contact Removal
3	130N02012	1	1	Sensor (front door)	Sensor (front door) Removal
4	117N02418	1	1	Interconnect cable	Interconnect Cable Removal
5	130N02019	1	1	Sensor (tray present)	Sensor (tray present) Removal
6	130N02013	1	1	Sensor (MPF paper present)	Sensor (MPF paper present) Removal

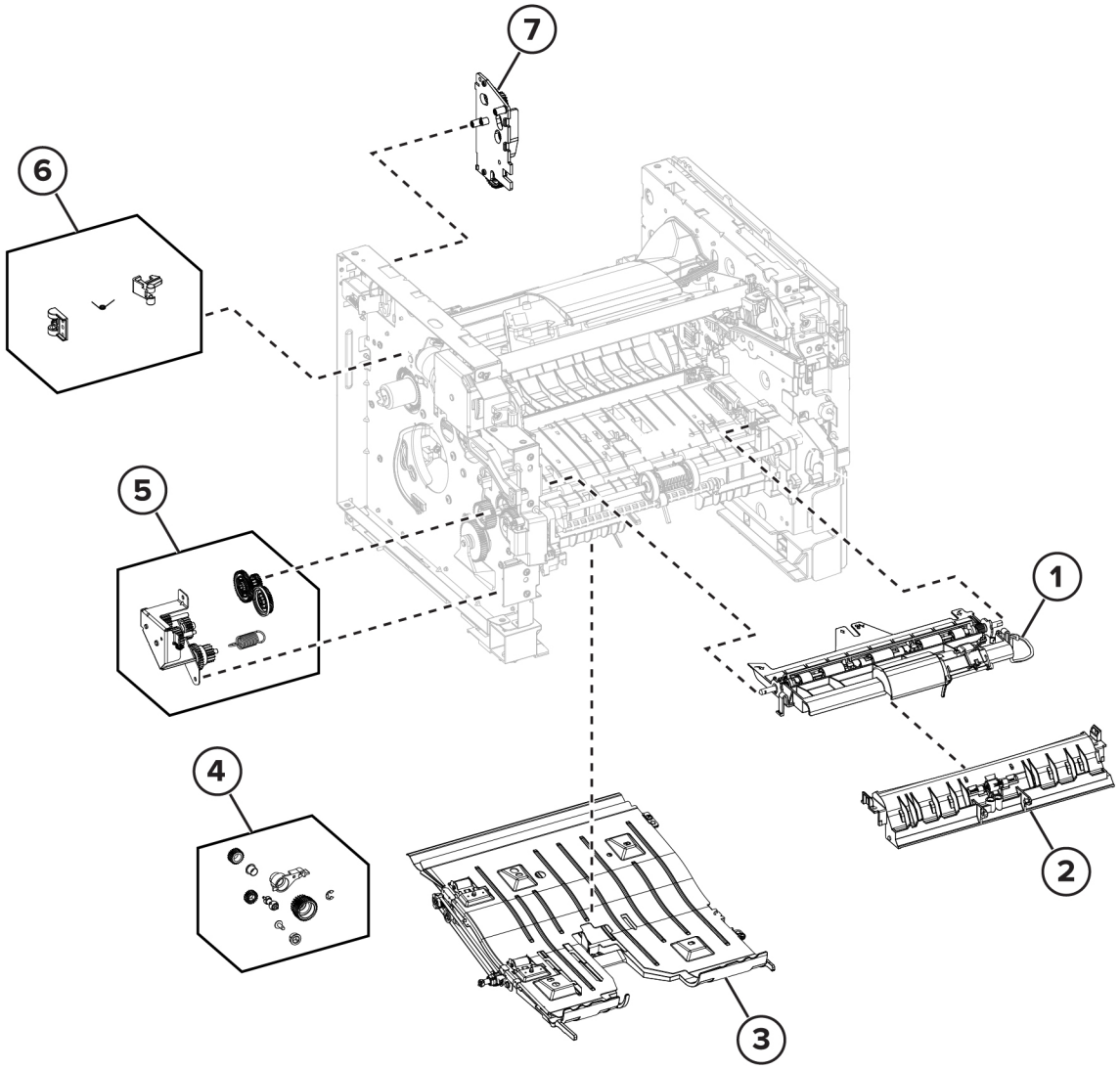
Assembly 6: Sensors 2



B410s_5007

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	130N02011	1	1	Sensor (trailing edge)	Sensor (trailing edge) Removal
2	130N02018	1	1	Sensor (duplex and input)	--
3	130N02014	1	1	Sensor (paper present)	Sensor (Paper Present) Removal
4	130N02017	1	1	Paper present sensor flag parts kit • Paper present flag and bracket • Toner density sensor and bracket • Spring • Screw • Grease	Sensor (toner density) and Media Present Sensor Flag Removal
5	130N02010	1	1	Sensor (index)	Sensor (index) Removal

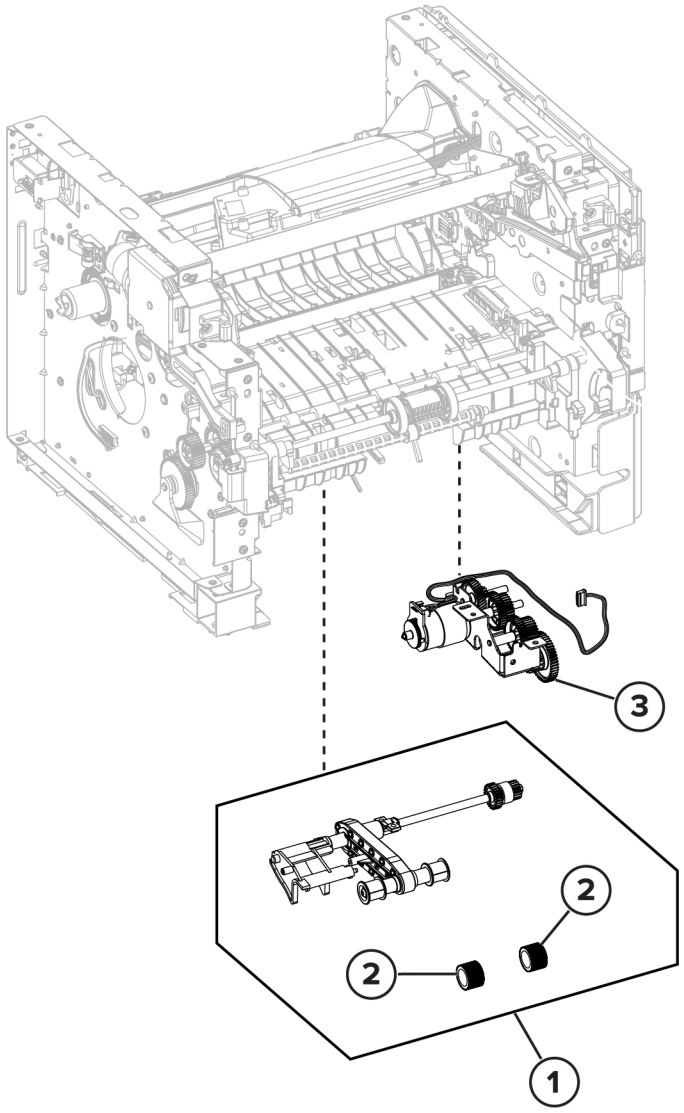
Assembly 7: Paper feed



B410s_5008

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	002N03756	1	1	Jam access cover	Jam Access Cover Removal
2	032N00587	1	1	Front input guide	Front Input Guide Removal
3	152N11964	1	1	Duplex unit	Duplex Removal
4	007N01930	1	1	Duplex gear kit	--
5	007N01926	1	1	MPF gearbox	MPF Gearbox Removal
6	120N00593	1	1	Fuser actuator	Fuser Actuator Removal
7	015N00724	1	1	Redrive gear plate	Redrive Assembly Removal

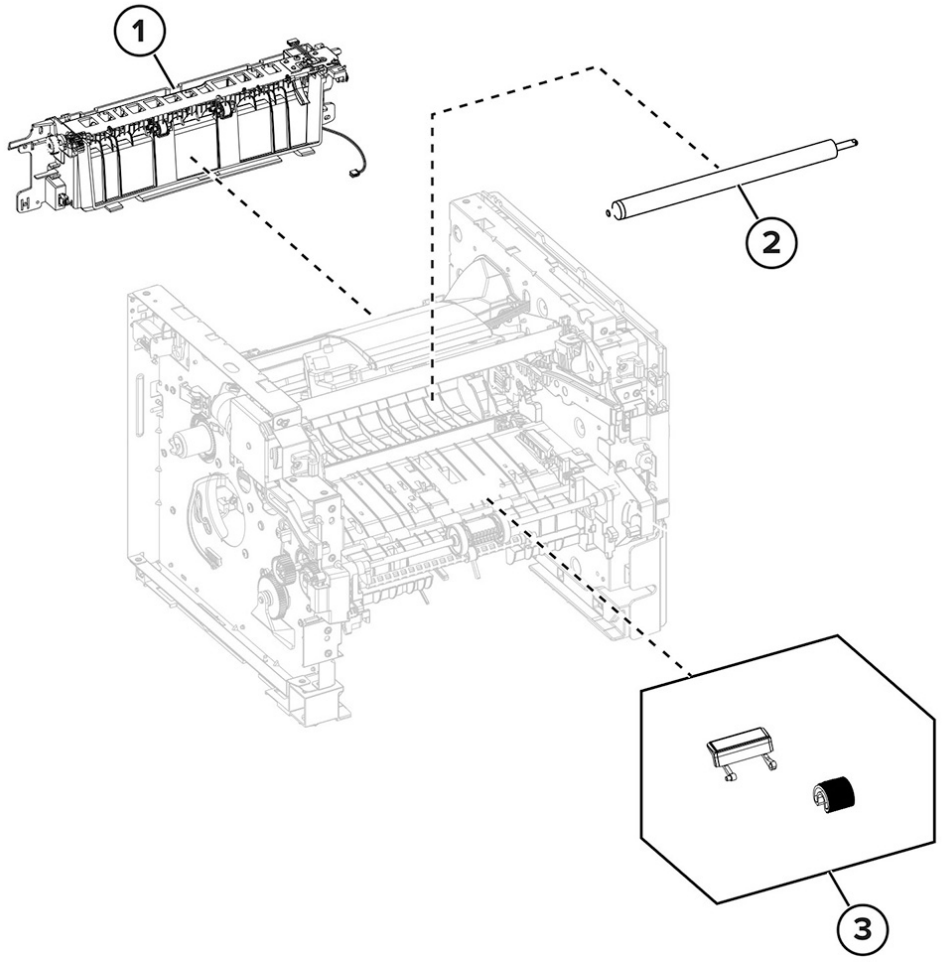
Assembly 8: Paper pick



B410s_5010

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	022N02980	1	1	Pick roller assembly	Pick Roller Removal
2	022N02983	1	1	Pick tires (Set of 2)	–
3	007N01929	1	1	Pick/lift motor gearbox	Pick/lift Motor Gearbox Removal

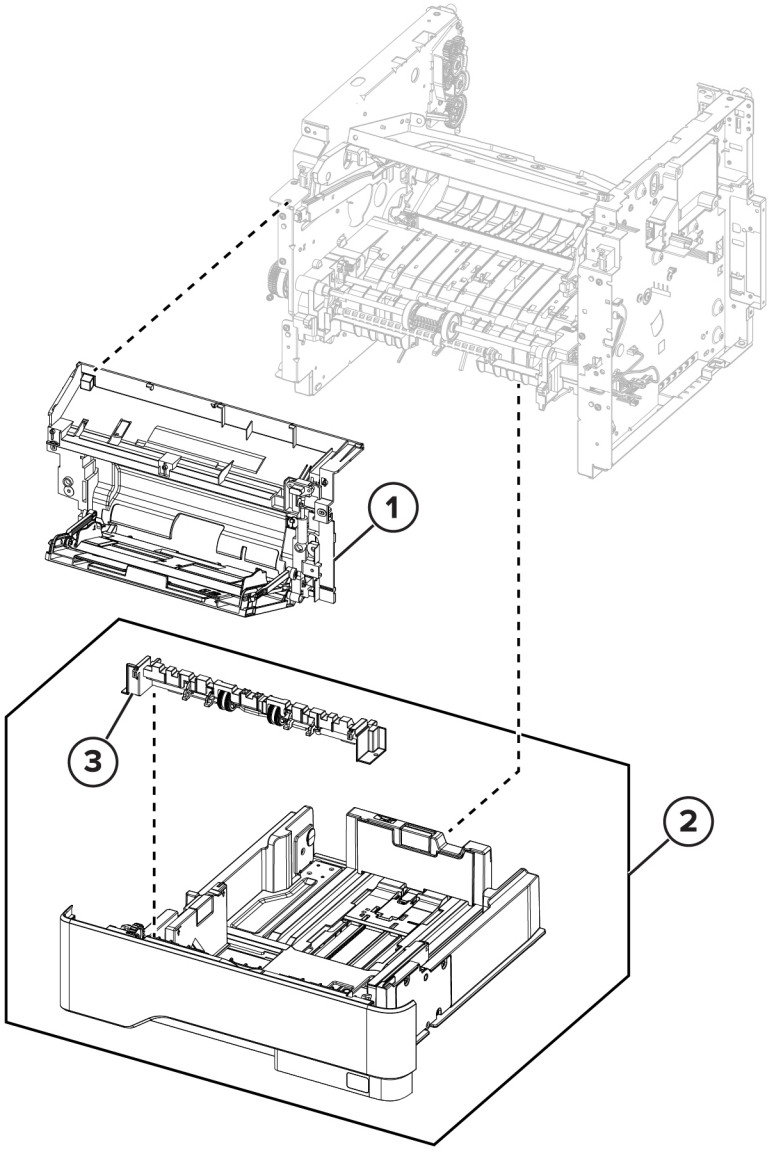
Assembly 9: Rollers



B410S_5011

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	152N11963	1	1	Redrive	--
2	022N02979	1	1	Transfer roller	Transfer Roller Removal
3	022N02981	1	1	MPF pick roller and separator pad	MPF Pick Roller and Separator Pad Removal

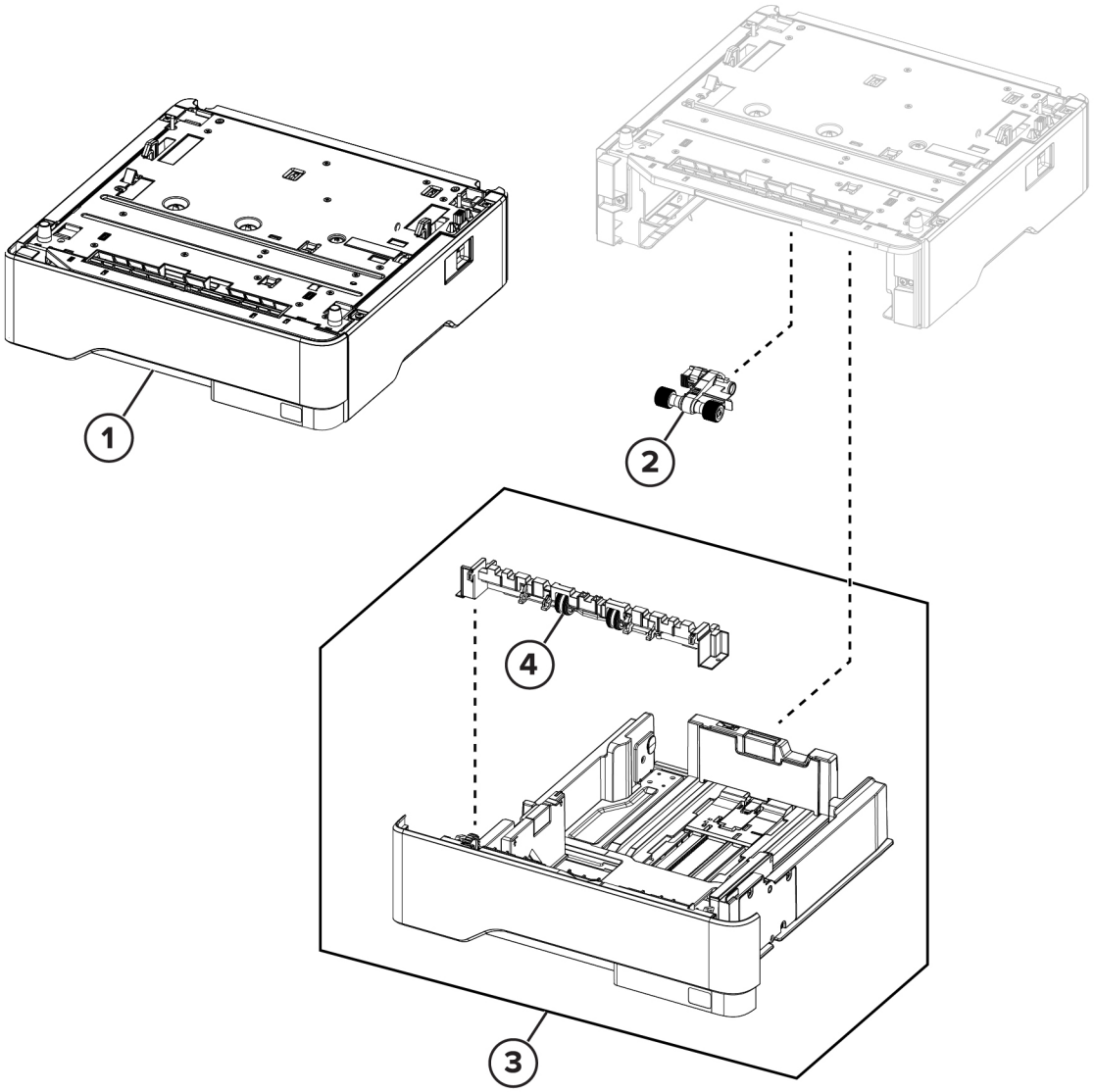
Assembly 10: MPF and standard tray



B410s_5012

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	002N03737	1	1	MPF with front cover	--
2	050N00769	1	1	Standard 550-sheet tray insert	--
3	014N00527	1	1	Separator roller assembly	--

Assembly 11: Optional trays



B410s_5014

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	–	1	1	Optional 550 Sheet Tray	--
2	022N02982	1	1	Pick roller	--
3	050N00768	1	1	550-sheet tray insert (optional tray)	--
4	014N00527	1	1	Separator roller assembly	Separator Roller Assembly Removal

Assembly 12: Accessories

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
NS	497N07994	1	1	Adjustable Printer Stand	--
NS	017N00320	1	1	Adjustable stand non-locking caster	--
NS	017N00319	1	1	Adjustable stand locking caster	--
NS	097S05244	1	1	Printer Stand	--
NS	097N02470	1	1	Wireless Network Adapter	--
NS	097N02467	1	1	500+GB HDD	--
NS	097N02469	1	1	550-Sheet Tray	--

Assembly 13: Consumables

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	006R04725	1	1	Std-Capacity NA/XE Sold	--
2	006R04726	1	1	High-Capacity NA/XE Sold	--
3	006R04727	1	1	Extra High-Capacity NA/XE Sold	--
4	006R04728	1	1	Std-Capacity DMO Sold	--
5	006R04729	1	1	High-Capacity DMO Sold	--
6	006R04730	1	1	Extra High-Capacity DMO Sold	--
7	006R04731	1	1	WW Metered	--
8	006R04732	1	1	WW Sold (See Note)	--
9	013R00702	1	1	Imaging Kit	--

Note: Not widely distributed. For specific accounts only.

10

Printer Specifications

Product Power Consumption

The following table documents the power consumption characteristics of the product.

Mode	Description	Power consumption (Watts)
Printing	The product is generating hard-copy output from electronic inputs.	One-sided: 669 Two-sided: 417
Ready	The product is waiting for a print job.	7.7
Sleep Mode	The product is in a high-level energy-saving mode.	1.0
Hibernate	The product is in a low-level energy-saving mode.	0.1
Off	The product is plugged into an electrical outlet, but the power switch is turned off.	0.1

The power consumption levels listed in the previous table represent time-averaged measurements. Instantaneous power draws may be substantially higher than the average.

Values are subject to change. See www.xerox.com for current values.

Sleep Mode

This product is designed with an energy-saving mode called *Sleep Mode*. The Sleep Mode saves energy by lowering power consumption during extended periods of inactivity. The Sleep Mode is automatically engaged after this product is not used for a specified period of time, called the *Sleep Mode Timeout*.

Factory default Sleep Mode Timeout for this product (in minutes):	15

By using the configuration menus, the Sleep Mode Timeout can be modified between 1 minute and 120 minutes. Setting the Sleep Mode Timeout to a low value reduces energy consumption, but may increase the response time of the product. Setting the Sleep Mode Timeout to a high value maintains a fast response, but uses more energy.

Hibernate Mode

This product is designed with an ultra-low power operating mode called *Hibernate mode*. When operating in Hibernate Mode, all other systems and devices are powered down safely.

The Hibernate mode can be entered in any of the following methods:

- Using the Hibernate Timeout
- Using the Schedule Power modes

Factory default Hibernate Timeout for this product in all countries or regions	3 days

The amount of time the printer waits after a job is printed before it enters Hibernate mode can be modified between one hour and one month.

Off Mode

If this product has an off mode which still consumes a small amount of power, then to completely stop product power consumption, disconnect the power supply cord from the electrical outlet.

Total Energy Usage

It is sometimes helpful to calculate the total product energy usage. Since power consumption claims are provided in power units of Watts, the power consumption should be multiplied by the time the product spends in each mode in order to calculate energy usage. The total product energy usage is the sum of each mode's energy usage

Applicability of Regulation (EU) 2019/2015 and (EU) 2019/2020

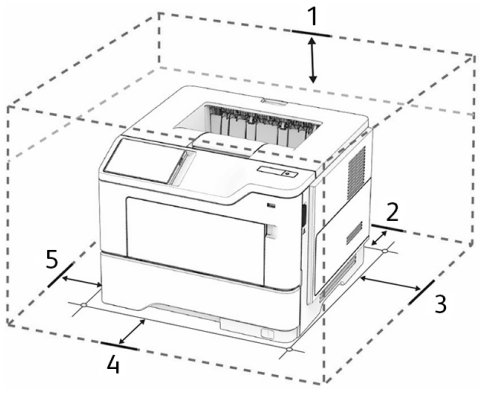
Per Commission Regulation (EU) 2019/2015 and (EU) 2019/2020, the light source contained within this product or its component is intended to be used for Image Capture or Image Projection only, and is not intended for use in other applications.

Selecting A Location For The Printer

- Leave enough room to open trays, covers, and doors and to install hardware options.
- Set up the printer near an electrical outlet.
- Make sure that airflow in the room meets the latest revision of the ASHRAE 62 standard or the CEN Technical Committee 156 standard.
- Provide a flat, sturdy, and stable surface.
- Keep the printer:
  - Clean, dry, and free of dust.
  - Away from stray staples and paper clips.
  - Away from the direct airflow of air conditioners, heaters, or ventilators.
  - Free from direct sunlight and humidity extremes.
- Observe the recommended temperatures and avoid fluctuations:

Ambient temperature	10 to 32.2°C (50 to 90°F)
Storage temperature	15.6 to 32.2°C (60 to 90°F)

- Allow the following recommended amount of space around the printer for proper ventilation:



B410S_6001

1	Top	305 mm (12 in.)
2	Rear	100 mm (3.94 in.)
3	Right side	76.2 mm (3 in.)
4	Front	305 mm (12 in.) **Note:** The minimum space needed in front of the printer is 76 mm (3 in.).
5	Left side	110 mm (4.33 in.)

Noise Emission Levels

The following measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296.

1-meter average sound pressure, dBA	
Printing	One-sided: 56 Two-sided: 55
Copying	59
Ready	14

Values are subject to change. See www.xerox.com for current values.

Temperature Information

Ambient operating temperature	10 to 32.2˚C (50 to 90˚F)
Shipping temperature	-40 to 40˚C (-40 to 104˚F)
Storage temperature and relative humidity	-40 to 40˚C (-40 to 104˚F) 8 to 80% RH

11

Options and features

Installing optional trays

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

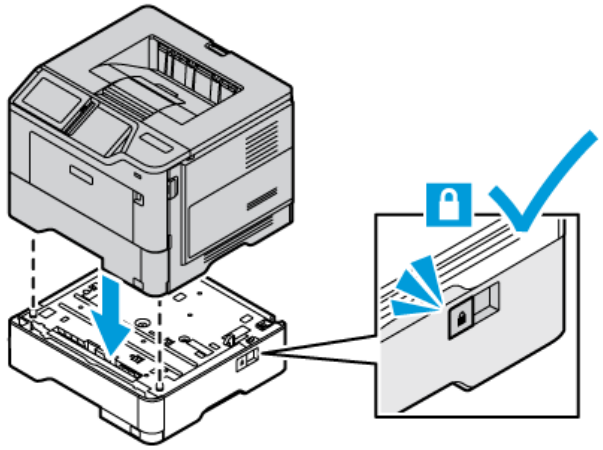
CAUTION—POTENTIAL INJURY: If the printer weight is greater than 20 kg (44 lb), then it may require two or more people to lift it safely

CAUTION—POTENTIAL INJURY: Si el peso de la impresora es superior a 20 kg (44 lb), pueden ser necesarias dos o más personas para levantarla de forma segura.

CAUTION—POTENTIAL INJURY: Si votre imprimante pèse plus de 20 kg (44 lb), l'intervention d'au moins deux personnes est nécessaire pour la soulever sans risque.

CAUTION—POTENTIAL INJURY: Wenn der Drucker mehr als 20 kg wiegt, sind zum sicheren Anheben unter Umständen mindestens zwei Personen notwendig.

1. Turn off the printer.
2. Unplug the power cord from the electrical outlet, and then from the printer.
3. Unpack the optional tray, and then remove all packing material.
4. Align the printer with the optional tray, and then lower the printer into place.



5. Connect the power cord to the printer, and then to the electrical outlet.
6. Turn on the printer.

Add the tray in the print driver to make it available for print jobs. For more information, see Adding available options in the print driver.

Adding available options in the print driver

For Windows users

1. Open the printers folder.
2. Select the printer you want to update, and then do either of the following:
   a. For Windows 7 or later, select **Printer properties**.
   b. For earlier versions, select **Properties**.
3. Navigate to the Configuration tab, and then select **Update Now - Ask Printer**.
4. Apply the changes.

For Macintosh users

1. From System Preferences in the Apple menu, navigate to your printer, and then select **Options & Supplies**.
2. Navigate to the list of hardware options, and then add any installed options.
3. Apply the changes.

12

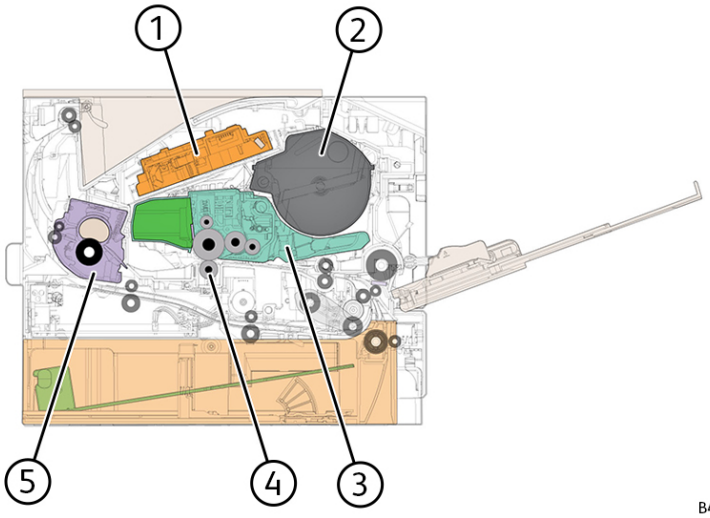
Theory of Operation

POR Sequence

As the printer is turned on, the engine code goes through a series of tests to verify hardware integrity. If a hardware failure is detected, then it is reported to the printer. If the POR sequence cannot be completed successfully, then the printer may post an error message. The message states that service may be needed.

Print cycle operation

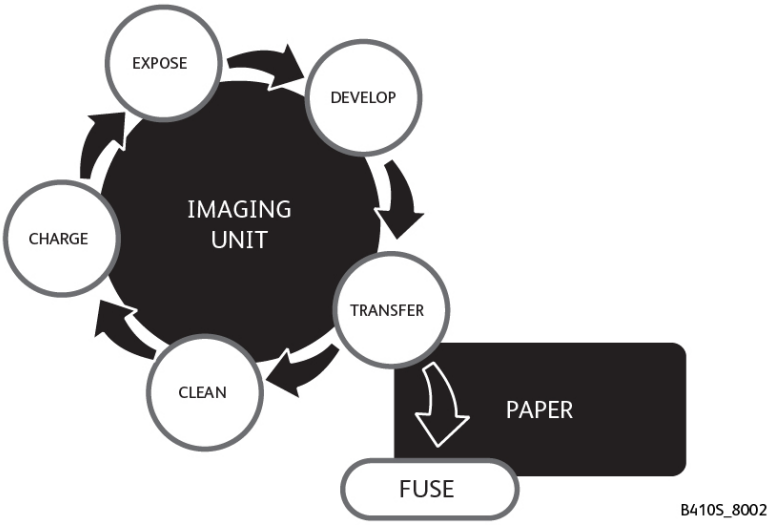
Print Engine Layout



B410S_8001

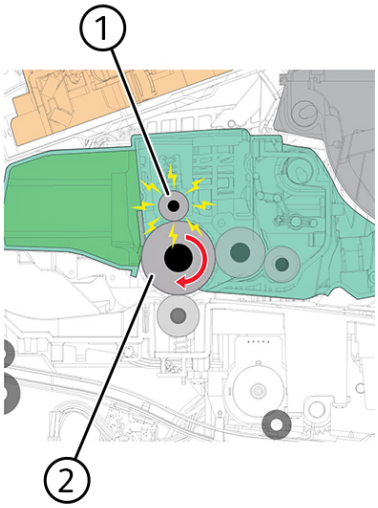
1	Printhead
2	Toner cartridge
3	Imaging unit
4	Transfer roller
5	Fuser

Flowchart


EXPOSE
DEVELOP
IMAGING UNIT
CHARGE
TRANSFER
CLEAN
PAPER
FUSE
B410S_8002

EP process

Charge



B410S_8003

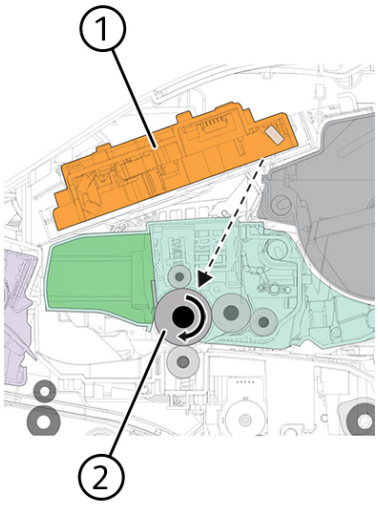
1	Charge roller
2	Photoconductor drum

The charge roller applies a uniform negative electrical charge to the surface of the photoconductor drum. The photoconductive properties of the surface material allow it to hold the charge as long as it is not exposed to light.

Service tips

- If the surface of the charge roller is damaged, such as having a nick or pit, then the charge on the photoconductor drum is uneven. A repeating mark may appear on the printed page. For more information, see Repeating Defects
- If the charge roller is severely damaged, then the surface of the photoconductor drum is not properly charged. Excessive amounts of toner particles are deposited on the photoconductor drum. The printed page becomes saturated with 100 % of the color from the supply with the defective charge roller. The affected imaging unit or kit must be replaced immediately.

Expose



B410S_8004

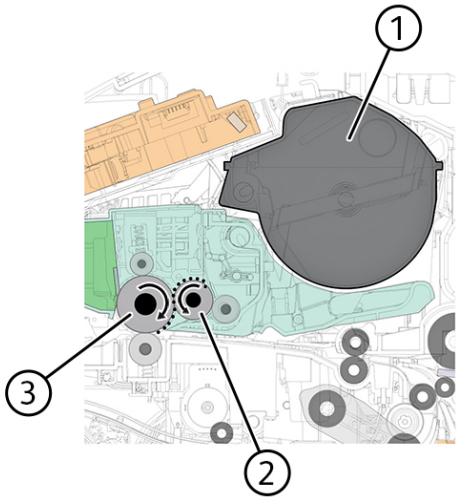
1	Printhead
2	Photoconductor drum

The printhead laser emits the light that contacts the surface of the photoconductor drum. An invisible image, called *digital latent image*, is written as the light turns on or off. The light causes areas of the photoconductor drum surface to lose charge, resulting in a relative opposite polarity.

Service tips

- Do not touch the surface of the photoconductor drum with your bare hand. The oil from your skin may cause a charge disparity on the surface, and the toner may no longer stick properly. The result can be repeating blotches or voids on the printed page or patches of light print. The affected imaging unit or kit may need to be replaced.
- The surface of the photoconductor drum is coated with an organic substance that makes it sensitive to light. Make sure to cover the photoconductor drum when you are working on the printer. If it is exposed to light for too long, then light or dark print quality problems may occur. The imaging unit or imaging kit may need to be replaced.
- Toner particles or dirt that get stuck on the printhead lens may obstruct the path of the laser beam. The result can be vertical light streaks on the printed page. If cleaning is not possible, then the printhead may need to be replaced.

Develop



B410S_8005

1	Toner cartridge
2	Developer roller
3	Photoconductor drum

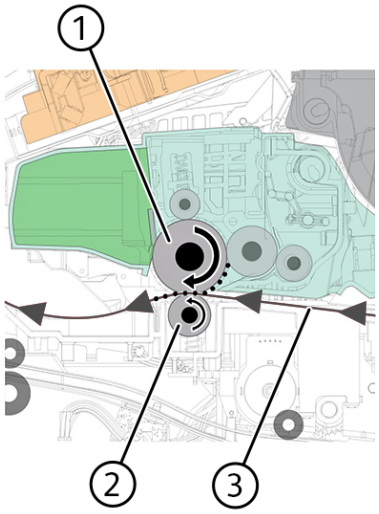
The developer roller applies the toner from the toner cartridge to the photoconductor drum. The relative opposite polarity in charge causes the toner particles to attract to the photoconductor drum areas which were exposed to light.

This process is similar to using glue to write on a can, and then rolling the can over glitter. The glitter sticks to the glue but does not stick to the rest of the can.

Service tips

- Do not touch the surface of the developer roller with your bare hand. The oil from your skin may cause a charge disparity on the surface, and the toner may no longer stick properly. The result can be repeating blotches or voids on the printed page or patches of light print. The affected cartridge may need to be replaced.
- If the developer roller is damaged, then it cannot contact the surface of the photoconductor drum properly. The result can be repeating marks, thin vertical voids, or thin vertical lines on the printed page. Check the surface of the developer roller for damage. For more information, see Repeating Defects .

Transfer



B410S_8006

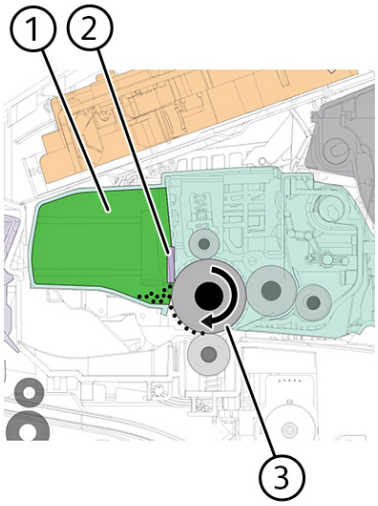
1	Photoconductor drum
2	Transfer roller
3	Paper

The transfer roller applies a positive charge to the paper, which is pressed between the transfer roller and the photoconductor drum. The charge on the paper received from the transfer roller is positive. The charge on the photoconductor drum received from the charge roller is negative. The relative opposite polarities between the two charges result in the charge attracting the toner onto the paper.

Service tips

- Do not touch the surface of the transfer roller with your bare hand. The oil from your skin may cause a charge disparity on the surface, and the toner may no longer stick properly. The result can be repeating blotches or voids on the printed page or patches of light print. The transfer roller may need to be replaced. For more information, see Repeating Defects.
- Do not use solvents or other cleaners to clean the transfer roller surface. Their chemicals may result to scratches or charge disparities. Voids on the printed page or blotches of light print may occur. The transfer roller may need to be replaced.
- Sharp and hard objects can damage the transfer roller surface. Be careful when using a screwdriver or prying tool near the transfer roller. If the transfer roller has tears or cracks, then the transfer roller may need to be replaced.

Clean

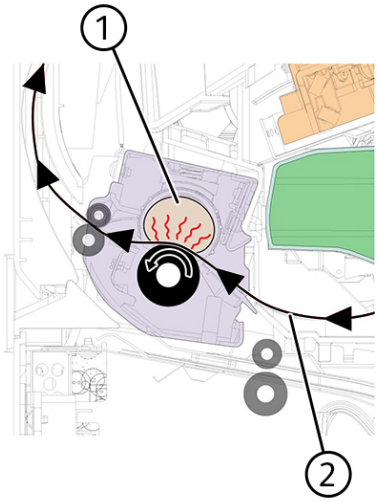


B410S_8007

1	Waste toner bottle
2	Cleaning blade
3	Photoconductor drum

The cleaning blade removes the toner residue from the photoconductor drum. The cycle (charge, expose, develop, transfer, and clean) repeats until the whole image is transferred to the paper.

Fuse



B410S_8008

1	Fuser
2	Paper

Even if the toner image is already on the paper, the toner particles are not yet permanently bonded to the surface. Paper is transported from the transfer roller to the fuser where heat and pressure are

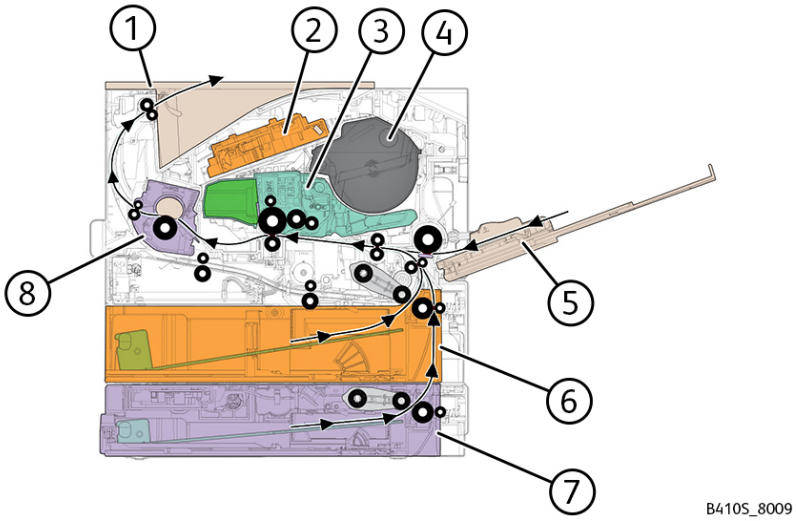
applied to it. As a result, the toner particles melt and permanently fuse with the paper, completing the print process. The cycle repeats for the succeeding pages.

Service tips

- If the fuser is damaged, then the toner may rub off the page. Paper jams may also occur.
- Toner rubbing off a printed page indicates a malfunctioning fuser or an incorrect paper type setting. Always check the paper type setting before replacing the fuser. A common mistake is to print on heavier paper, such as card stock, with the paper type set to plain paper.
- If possible, never pull paper with unfused toner through the fuser. Try to pull out the jammed paper from the fuser in the opposite direction it was traveling.

Printer operation

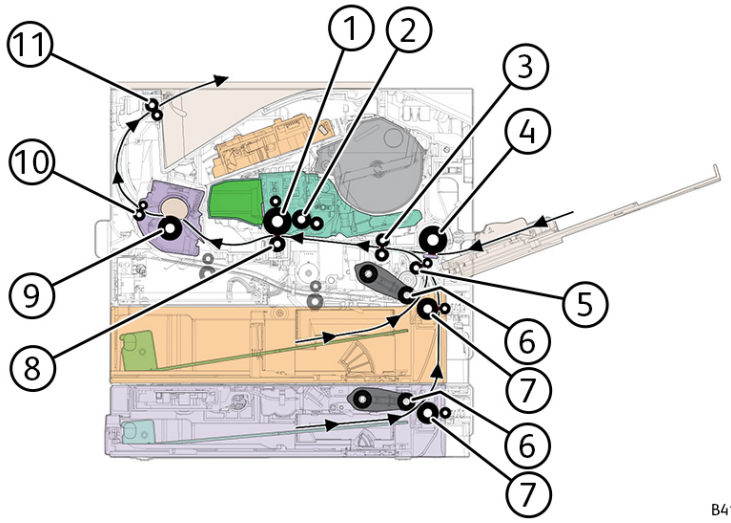
Printer Sections



1	Bin
2	Printhead
3	Imaging unit
4	Toner cartridge
5	MPF
6	Standard tray
7	Optional tray
8	Fuser

Printer paper path

One-sided print job



1	Photoconductor drum
2	Developer roller
3	First input roller
4	MPF pick roller
5	Second input roller
6	Pick roller
7	Separator roller
8	Transfer roller
9	Fuser roller
10	Fuser exit roller
11	Paper exit roller

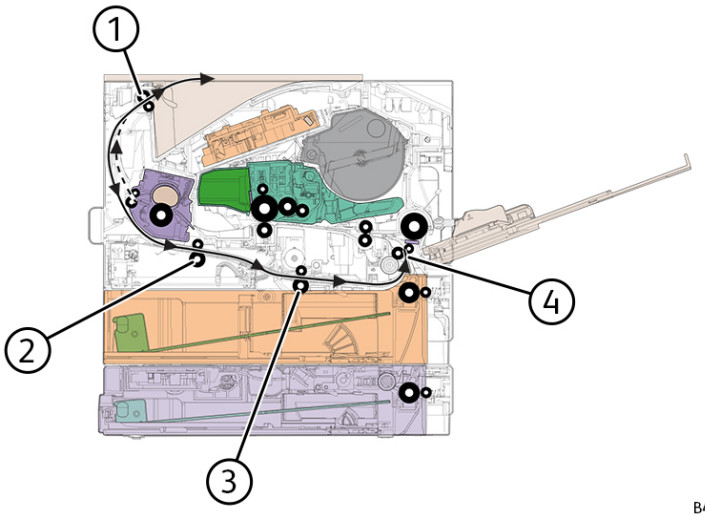
The pick roller picks and feeds the paper to the separator roller. The separator roller feeds the paper to the second input roller, which feeds it to the first input roller. For MPF print jobs, the MPF pick roller picks and feeds the paper to the first input roller.

The first input roller feeds the paper to the transfer roller. At the transfer roller, the photoconductor drum transfers the developed image to the paper to create the printed image.

As the paper passes the fuser, heat and pressure are applied to permanently bond the toner to the paper.

After printing, the printer ejects the paper by the paper exit roller.

Two-sided print job



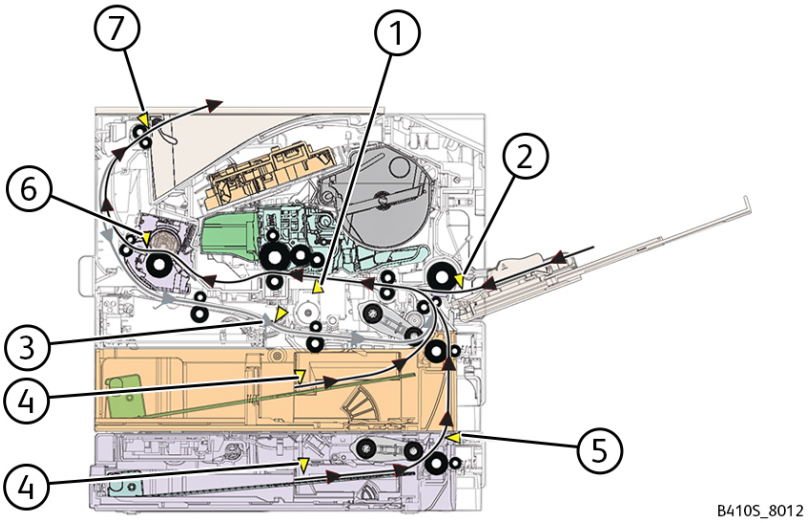
B410S_8011

1	Paper exit roller
2	Duplex rear roller
3	Duplex front roller
4	Second input roller

After the first side is printed, the paper reverses direction to get its opposite page printed.

The paper travels along the duplex path until it reenters the second input roller. From there, the paper continues its path until the print job is done.

Printer Paper Path Sensors



#	Sensor	Function
1	Sensor (input)	Detects the paper traveling between the first input roller and the transfer roller
2	Sensor (MPF paper present)	Detects paper presence in the MPF tray
3	Sensor (duplex)	Detects the paper traveling along the duplex path
4	Sensor (media present)	Detects if paper is in the tray. **Note:** The sensor in the standard tray is supported only in some printer models
5	Sensor (pass-through)	Detects paper that is fed from tray 2
6	Sensor (fuser exit)	Detects the paper that is exiting the fuser
7	Sensor (narrow media/bin full)	Detects if the paper is narrow and the bin is full

13

Acronyms

Acronyms

ASIC	Application-Specific Integrated Circuit
BLDC	Brushless DC Motor
BOR	Black Only Retract
CCD	Charge Coupled Device
CCP	Carbonless Copy Paper
CIS	Contact Image Sensors
CRC	Cyclic Redundancy Check
CSU	Customer Setup
CTLS	Capacitance Toner Level Sensing
DIMM	Dual Inline Memory Module
DRAM	Dynamic Random Access Memory
EDO	Enhanced Data Out
EP	Electrophotographic Process
EPROM	Erasable Programmable Read-Only Memory
ESD	Electrostatic Discharge
FRU	Field Replaceable Unit
GB	Gigabyte
HCF	High-Capacity Feeder
HCIT	High-Capacity Input Tray
HCOF	High-Capacity Output Finisher
HVPS	High Voltage Power Supply
K	Black
LCD	Liquid Crystal Display
LDAP	Lightweight Directory Access Protocol
LED	Light-Emitting Diode
LVPS	Low Voltage Power Supply
MB	Megabyte
MFP	Multifunction Printer
MPF	Multipurpose Feeder
MROM	Masked Read Only Memory

MS	Microswitch
NVM	Non-volatile Memory
NVRAM	Non-volatile Random Access Memory
OEM	Original Equipment Manufacturer
OPT	Optical Sensor
PC	Photoconductor
pel, pixel	Picture element
POR	Power-On Reset
POST	Power-On Self Test
PSD	Position Sensing Device
PWM	Pulse Width Modulation
RIP	Raster Imaging Processor
ROM	Read Only Memory
SDRAM	Synchronous Dual Random Access Memory
SIMM	Single Inline Memory Module
SRAM	Static Random Access Memory
TPS	Toner Patch Sensing
UICC	User Interface Controller Card
UPR	Used Parts Return
V ac	Volts alternating current
V dc	Volts direct current
VTB	Vacuum Transport Belt

14

Part Name Index

Part Name Index

P/N	Part Name
007N01928	Cartridge gearbox
127N08078	Cooling fan
152N11964	Duplex unit
002N03761	Front cover
032N00587	Front input guide
120N00593	Fuser actuator
126N00516	Fuser, 110 V
126N00517	Fuser, 220 V
117N02418	Interconnect cable
002N03756	Jam access cover
002N03768	Left cover
007N01927	Main drive gearbox
007N01926	MPF gearbox
022N02981	MPF pick roller and separator pad
121N01282	MPF solenoid
130N02017	Paper present sensor flag parts kit • Paper present flag and bracket • Toner density sensor and bracket • Spring • Screw • Grease
022N02980	Pick roller assembly
007N01929	Pick/lift motor gearbox
046N00248	Printhead
002N03766	Rear door and cover
015N00724	Redrive gear plate
121N01283	Reverse solenoid
002N03763	Right cover
130N02016	Sensor (bin full)
130N02012	Sensor (front door)
130N02010	Sensor (index)
130N02013	Sensor (MPF paper present)
130N02014	Sensor (paper present)
130N02011	Sensor (trailing edge)

P/N	Part Name
130N02019	Sensor (tray present)
130N02015	Sensor (cartridge barrel)
014N00527	Separator roller assembly
115N00947	Toner cartridge smart chip contact
002N03762	Top cover
022N02979	Transfer roller

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Wiring Diagram

Wiring Diagram

WIRING DIAGRAM